CITY OF PALO ALTO

Parking Structure at 375 Hamilton Avenue

(Downtown Parking Garage)

Draft Environmental Impact Report

State Clearinghouse No. 2017052040



City of Palo Alto

Prepared by

May 2018

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Prepared For

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Acronyms and Abbreviations

µg/m3	micrograms per cubic meter
ACY	Acres Feet per Year
ADA	Americans with Disabilities Act of 1990
ADAAG	Americans with Disabilities Act Accessibility Guidelines for Buildings and Services
AEP	Association of Environmental Professionals
AST	Aboveground Storage Tank
BAAQMD	Bay Area Air Quality Management District
BACT	Best Available Control Technology
BAWSCA	Bay Area Water Supply and Conservation Agency
BMPs	Best Management Practices
CAA	Clean Air Act
CAAQS	California Ambient Air Quality Standards
CalEEMod	California Emissions Estimator Model
CalEPA	California Environmental Protection Agency
CALGreen	California Green Building Standards Code
Cal/OSHA	California Occupational Safety and Health Administration
Caltrans	California Department of Transportation
CAP	Clean Air Plan
CAP	Coordinated Area Plan
CARB	California Air Resources Board
CARE	Community Air Risk Evaluation
CC	Community Commercial
CCAA	California Clean Air Act
CD-C(P)	Downtown Commercial
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CESA	California Endangered Species Act
CGP	Construction General Permit
CH_4	methane
CIWMB	California Integrated Waste Management Board
CNDDB	California Natural Diversity Database
CNEL	Community Noise Equivalent Level
CO	carbon monoxide
CO_2	carbon dioxide
CPAU	City of Palo Alto Utilities
CPT	Cone Penetrating Test
CPUC	California Public Utilities Commission
CWA	Clean Water Act
cy	Cubic Yards

dB	decibels
dBA	A-weighted sound pressure level
Draft EIR	Draft Environmental Impact Report
DWR	Department of Water Resources
EPA	Environmental Protection Agency
ESA	Endangered Species Act
ESA	Environmental Site Assessment
EV	Electric Vehicle
FEMA	Federal Emergency Management Agency
FIRM	Flood Insurance Rate Map
FTA	Federal Transit Administration
GHG	Greenhouse Gas
gpd	Gallons per day
gpm	Gallons per minute
HCM	Highway Capacity Manual
HFCs	hydrofluorocarbons
HMP	Hydromodification Management Plan
HVAC	Heating, Ventilation, Air Conditioning equipment
HWCA	Hazardous Waste Control Act
I	Interstate
IS	Initial Study
Ldn	24-hour noise level
Leq	Equivalent Sound Level
LID	Low Impact Development
LOS	Level of Service
LUST	Leaking Underground Storage Tank
MBTA	Migratory Bird Treaty Act
MGD	million gallons per day
MM	Mitigation Measure
MS4	Municipal Separate Storm Sewer Systems
Mw	Moment Magnitude
NAAQS	National Ambient Air Quality Standards
NAHC	Native American Heritage Commission
NFHL	National Flood Hazard Layer
NFIP	National Flood Insurance Act
NHPA	National Historic Preservation Act
NMFS	National Marine Fisheries Service
NO_2	nitrogen dioxide
NOC	Notice of Completion
NOP	Notice of Preparation
NO_X	nitrogen oxides
NPDES	National Pollutant Discharge Elimination System

NRHP	National Register of Historic Places
NWIC	Northwestern Information Center (of the California Historical Resources Information Center)
OEHHA	Office of Environmental Health Hazard Assessment
OPR	Office of Planning and Research
OSHA	Occupational Safety and Health Administration
PACL	Palo Alto City Library
PAFD	Palo Alto Fire Department
PAMC	Palo Alto Municipal Code
PAPD	Palo Alto Police Department
PAUSD	Palo Alto Unified School District
Pb	Lead
PF	Public Facilities
PFC	perfluorocarbons
PM	particulate matter
$PM_{2.5}$	particulate matter 2.5 microns in diameter or less
PM_{10}	particulate matter 10 microns in diameter or less
PPV	peak particle velocity
PTC	Planning and Transportation Commission
RCRA	Resource Conservation and Recovery Act
REC	Recognized Environmental Concern
RM	Multiple family Residential
ROG	reactive organic gases
RPS	Renewable Portfolio Standard
RWD	Report of Waste Discharge
RWQCB	Regional Water Quality Control Board
RWQCP	Regional Water Quality Control Plant
SCVURPPP	Santa Clara Valley Urban Runoff Pollution Prevention Program
SCVWD	Santa Clara Valley Water District
SB	Senate Bill
SF_6	sulfur hexafluoride
SFBAAB	San Francisco Bay Area Air Basin
SFPUC	San Francisco Public Utilities Commission
SHMA	Seismic Hazards Mapping Act
SHPO	State Historic Preservation Officer
SIP	State Implementation Plan
SO_2	sulfur dioxide
SWPPP	Storm Water Pollution Prevention Plan
TAC	Toxic Air Contaminants
TCM	Traffic Control Measures
TIA	Transportation Impact Analysis
TIRE	Traffic Infusion on Residential Environment

TMA	Transportation Management Association
TPH	Total Petroleum Hydrocarbons
TPZ	Tree Protection Zone
UFAS	Uniform Federal Accessibility Standards
USFWS	United States Fish and Wildlife Service
UST	Underground Storage Tanks
UV	Ultraviolet
UWMP	Urban Water Management Plan
V/C	Volume-to-Capacity Ratio
VdB	Vibration decibels
VOC	volatile organic compound
VTA	Valley Transportation Authority
WIRP	Water Integrated Resources Plan
WQRCB	Water Quality Resources Control Board

EXECUTIVE SUMMARY

This Draft Environmental Impact Report (Draft EIR) has been prepared in accordance with the provisions of the California Environmental Quality Act (CEQA) to evaluate the potential environmental impacts of the proposed City of Palo Alto Parking Structure at 375 Hamilton Avenue, also known as the Downtown Parking Garage.

Project Overview

The City of Palo Alto proposes to construct a new public parking garage consisting of five aboveground parking levels and one basement parking level. The parking garage will replace the existing City-owned surface parking facility on the western corner of Hamilton Avenue and Waverley Street. The structure would have a height of nearly 50 feet to the top of the fifth deck, not including the structure to support future solar panels, which would reach a structure height of approximately 56 feet, and would provide approximately 325 parking stalls, including eight accessible spaces and nine electric vehicle-charging station stalls. An approximately 585-square-foot bicycle parking area with approximately 50 bicycle parking stalls and space for bicycle trailers and child carriers would also be provided. In addition, the project includes an approximately 2,000-square-foot space fronting Waverley Street, to be used as commercial retail space. The building would also be designed with infrastructure to allow for the future installation of photovoltaic panels mounted above the uppermost parking deck. A detailed description of the proposed project is provided in *Chapter 2*, *Project Description*.

The project is scheduled to begin construction in 2019 and estimated to be operational in 2020.

Project Objectives

The project objectives are as follows:

1. To increase the number of parking spaces within the downtown to maximize the accessibility and convenience to downtown visitors and workers
2. To provide a parking structure that includes neighborhood-serving retail and street frontage to contribute to the economic vitality of the downtown and the City
3. To provide a parking structure that incorporates a pedestrian- and bike-friendly layout
4. To provide a parking structure that is visually appealing and compatible with the downtown character and nearby historic buildings

Project Approach

CEQA Guidelines Section 15126.6 requires that an EIR evaluate a reasonable range of alternatives that would meet the project's basic objectives, but would avoid or substantially lessen any of the significant environmental impacts of the proposed project. The City's previous feasibility study and council directive

of potential downtown parking sites clarified that Parking Lot D was the preferred option for development. Chapter 4 of this EIR provides further discussion of the selection of the preferred alternative.

Four alternatives to the proposed project are evaluated in this Draft EIR, including a No Project alternative and three action alternatives:

- **Alternative 1: No Project**: Under the No-Project Alternative, the site will remain in its existing condition. The site would continue to be used as a surface parking facility with the existing 86 automobile parking spaces. Parking would continue to be limited to two-hour parking, with no permit parking provided.
- **Alternative 2: Parking Garage with 5 above-grade levels, one basement level, no retail:** This alternative would be constructed on the same site with similar design concept to the project but without the retail space, allowing for seven more automobile parking spaces on the ground floor for a total of 332 automobile parking spaces. The total square footage of the garage would be approximately 139,961 square feet.
- **Alternative 3: Parking Garage with 5 above-grade levels and retail, without basement level:** This alternative will be constructed on the same site with a similar design concept to the proposed project, including an approximately 3,040-square-foot retail space, but without basement parking. The square footage of the garage would be approximately 114,048 square feet. Alternative 3 would provide 267 automobile parking spaces, of which 12 automobile parking spaces would be required by code[1] to serve the retail space.
- **Alternative 4: Parking Garage with 4 above-grade levels, one basement level and retail:** This alternative would be constructed on the same site with a similar design concept to the proposed project, including an approximately 2,000-square-foot retail space, but with one fewer above-grade parking level. Alternative 4 would provide 266 automobile parking spaces, of which eight automobile parking spaces would be required by code[2] to serve the retail space. The total square footage of the garage would be approximately 114,459 square feet.

Summary of Impacts and Level of Significance

Table 1 provides a summary of the potential impacts of the project and the three action alternatives (Alternatives 2, 3 and 4), by resource topic. The table also lists the anticipated level of significance on resources, and the actions and measures taken to reduce any significant impact to a level of less than significant. The No-Project Alternative (Alternative 1) would maintain existing conditions and is not anticipated to result in any impact on the environment. A comparison of the proposed project with the four alternatives is included in Chapter 4, *Other CEQA Requirements*.

[1] Downtown Assessment District "blended rate" of one parking space per 250 square feet gross floor area.
[2] Ibid.

Table 1: Summary of Project Impacts and Mitigation Measures

Impact Topic	Potential Impact Statement	Phase (Construction or Operation)	Potential Project Impacts with Standard Project Provisions	Level of Significance	Mitigation Measures
Topic 1 - Aesthetics					
AES-a	Substantial adverse effect on a scenic vista.	Construction and Operation	No scenic vistas within project area defined in the Comprehensive Plan.	No impact.	No mitigation needed.
AES-b	Substantial damage to scenic resources within a State Scenic Highway.	Construction	No State Scenic Highway Designation.	No impact.	No mitigation needed.
AES-c	Substantial degradation of the visual character or quality of the project site and its surroundings.	Construction	The project is designed to be compatible with the surrounding visual character and quality. No impacts to visual character and quality of the site with the implementation of measures per the City of Palo Alto, Tree Technical Manual – Standard & Specification.	Less than significant.	No mitigation needed.
AES-d	Create new source of light and glare which would adversely affect day or nighttime views in area.	Construction and Operation	Lighting would be limited to internal safety lights and illumination of retail spaces. Vehicles can cause temporary glare. Construction BMPs.	Less than significant.	No mitigation needed.
Topic 2 - Air Quality					
AQ-a	Conflict with or obstruct implementation of an applicable air quality plan.	Construction	The Project would not conflict with the implementation of the Bay Area 2017 Clean Air Plan.	Less than significant.	No mitigation needed.
AQ-b	Violate any air quality standard or contribute substantially to an existing or project air quality violation.	Construction	BAAQMD significance thresholds for pollutants of concern would not be exceeded.	Less than significant.	No mitigation needed.
AQ-c	Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is a non-attainment area under an applicable federal or state ambient air quality standard (including releasing emissions that exceed quantitative thresholds for ozone precursors)?	Construction	Construction BMPs.	Less than significant.	No mitigation needed.
AQ-d	Expose sensitive receptors to pollutant concentrations	Construction and Operation	There are no sensitive receptors located adjacent to the project site. Multi-family residential units are sporadically located within a quarter-mile of the project site.	Less than significant.	No mitigation needed.
AQ-e	Create objectionable odors affecting a substantial number of people	Construction and Operation	Any objectionable odors in the area will be short term, and will occur only during the construction phase. Construction BMPs.	Less than significant.	No mitigation needed.
Topic 3 - Biological Resources					
BIO-a	Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service.	Construction	Project site does not have habitat supporting the sensitive, candidate, or special status species that occur in the habitat vicinity, nor does the project modify any existing habitat according to California Department of Fish and Wildlife, U.S. Fish and Wildlife Service.	Less than significant.	No mitigation needed.

Impact Topic	Potential Impact Statement	Phase (Construction or Operation)	Potential Project Impacts with Standard Project Provisions	Level of Significance	Mitigation Measures
BIO-b	Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife Service.	Construction and Operation	Since the project site is completely urbanized, there are no riparian habitats within the project area that will be impacted.	No impact.	No mitigation needed.
BIO-c	Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	Construction and Operation	There are no records of wetlands or waters per the National Wetland Inventory for the project area. CWA Section 404.	No impact.	No mitigation needed.
BIO-d	Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.	Construction and Operation	The only wildlife that is anticipated to be present within the project area is wildlife associated with the built urban environment such as rodents, other small animals, and native and migratory birds. These small animals are not restricted by the type of developments in the project area. Tree removal activities have the potential to disturb resident and migratory birds resulting in a short-term reduction in potential nesting and foraging habitat as well as directly destroying active nests; however, it is anticipated that resident and migratory bird species would resume nesting and foraging behavior once the construction is complete, and would utilize existing nearby nesting and foraging habitat during construction. In addition, implementation of standard measures will avoid impacts on existing active nests, if any was found prior to beginning of construction. Migratory Bird Treaty Act, California Fish and Game Code.	Less than significant with mitigation.	**MM BIO-1 Nesting Bird Surveys and Avoidance.** Construction of the project and any other site disturbing activities that would involve vegetation or tree removal, shall be prohibited during the general avian nesting season (February 1 to August 31), if feasible. If nesting season avoidance is not feasible, the applicant shall retain a qualified biologist, as approved by the City of Palo Alto, to conduct a preconstruction nesting bird survey to determine the presence/absence, location, and activity status of any active nests on or adjacent to the project site. The extent of the survey buffer area surrounding the site shall be established by the qualified biologist to ensure that direct and indirect effects to nesting birds are avoided. To avoid the destruction of active nests and to protect the reproductive success of birds protected by the MBTA and CFGC, nesting bird surveys shall be performed not more than 14 days prior to scheduled vegetation clearance and structure demolition. In the event that active nests are discovered, a suitable buffer (typically a minimum buffer of 50 feet for passerines and a minimum buffer of 250 feet for raptors) shall be established around such active nests and no construction shall be allowed within the buffer areas until a qualified biologist has determined that the nest is no longer active (i.e., the nestlings have fledged and are no longer reliant on the nest). No ground disturbing activities shall occur within this buffer until the qualified biologist has confirmed that breeding/nesting is completed and the young have fledged the nest. Nesting bird surveys are not required for construction activities occurring between August 31 and February 1.
BIO-e	Conflict with any local policies or ordinances protecting biological resources, such as tree preservation policy or ordinance.	Construction	One of the existing trees, of the species Coast Live Oak (*Quercus agrifolia*), is protected under the City of Palo Alto's Tree Regulations. Although it is designated as a protected tree, this tree will be removed from the site due to previous imprecise pruning leaving it in poor condition and with the potential for breakage. As a replacement, three new trees will be planted on site. A total of nine trees would be planted on the project site as part of the landscaping plan. There will be no loss of trees. City of Palo Alto Tree Regulations.	Less than significant with mitigation.	**MM BIO-2 Tree Preservation and Protection Plan**. To avoid disturbance and injury to onsite trees, the recommendations for tree preservation in the Arborist Report dated May 2017 shall be implemented. These recommendations include, but are not limited to, tree protection fencing to enclose as much of the TPZ as feasible around City trees on the sidewalks, no grading encroachments closer than 6 inches to the tree trunk diameter, and periodic inspections by the Site Arborist during construction activities. A total of nine trees would be planted on the project site as part of the landscaping plan. Two Gingko Biloba trees would be planted on Waverley Street and four Gingko Biloba trees and three Quercus Agrifolia tree would be planted along Hamilton Avenue. There would be no net loss of trees, and Palo Alto's Urban Forest Master Plan policy[3] for "no net loss of canopy" would be met with the project via standard conditions of approval requiring replacement of lost canopy within 15 years of planting with the provision of adequate soil volume at the planting sites. Replacement ratios can be adjusted due to the condition of the existing tree as long as the minimum replacement for any live tree is 2:1. To ensure "no net loss of canopy" new trees replacing the site's

[3] Urban Forest Master Plan Policy 1.G, "Strive for no net loss in canopy cover." (page 142)

Impact Topic	Potential Impact Statement	Phase (Construction or Operation)	Potential Project Impacts with Standard Project Provisions	Level of Significance	Mitigation Measures
					non-protected trees to be removed will be addressed through the City's implementation of standard approval conditions. **MM BIO-3 Tree Replacement.** The removal of protected Coast Live Oak tree (Tree #8 in the Arborist Report prepared for the project) is subject to the City of Palo Alto's tree removal ordinance in Palo Alto Municipal Code Chapter 8.10. Trees removed will be replaced according to replacement tree mitigation measures using the Tree Canopy Replacement Standard in the Tree Technical Manual, Section 3.00 (see table below). The replacement standards outlined in the Tree Technical Manual will be utilized to achieve no net loss of canopy per Policy 1.G of the Urban Forest Master Plan. Site preparation and soil volume requirements apply so that newly planted trees have the potential to mature to desired size and thrive. As determined by the City's Urban Forester, the planting of three native oaks in the Hamilton Avenue right of way at the project site is appropriate as mitigation to replace the loss of the one Coast Live Oak on site, subject to the standard requirement to provide adequate soil conditions to ensure the replacement trees will thrive.
BIO-f	Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved, local, regional, or State habitat conservation plan.	Construction and Operation	For this site, there is no Habitat Conservation Plan, Natural Community Conservation Plan, or any other adopted habitat conservation plan that is applicable to the site.	No impact.	No mitigation needed.
<u>Topic 4 - Cultural, Paleontological, and Tribal Cultural Resource</u>					
CTR-a	Adversely affect a historic resource listed or eligible for listing on the National and/or California Register, or listed on the City's Historic Inventory.	Construction and Operation	It is not anticipated that the project would affect the historic Post Office building or the Sport Shop building. Other adjacent buildings are more than 50 years old and are therefore potentially eligible for listing. NHPA.	Less than significant.	Continued consultation to incorporate context sensitive design elements to assure that the new facility represents an appropriate and compatible addition to the built environment. Including elements to minimize potential adverse effects to the setting of adjacent historic properties.
CTR-b	Directly or indirectly destroy a local cultural resource that is recognized by City Council resolution	Construction and Operation	The project would not destroy any recognized cultural resources directly or indirectly.	Less than significant.	The project will not require the removal of any cultural resource, and will not affect directly or indirectly the value of cultural resources.
CTR-c	Eliminate important examples of major period of California history or prehistory.	Construction	Due to excavation of a significant depth being a necessity to construct the basement of the project, there is a potential to disrupt, alter, or eliminate undiscovered archeological resources including those of human remains. NHPA.	Less than significant with mitigation.	**MM CTR-1 Resource Recovery Procedures.** In the event that archaeological or paleontological resources are unearthed during project construction, all earth disturbing work within the vicinity of the find must be temporarily suspended or redirected until an archaeologist or paleontologist has evaluated the nature and significance of the find. After the find has been appropriately mitigated, work in the area may resume. A Native American representative shall be retained to monitor any mitigation work associated with Native American cultural material. **MM CTR-2 Human Remains Recovery Procedures.** If human remains are unearthed, State Health and Safety Code Section 7050.5 requires that no further disturbance shall occur until the County Coroner has made the necessary findings as to the origin and disposition pursuant to the Public Resources Code Section 5097.98. If the remains are determined to be of Native American descent, the coroner has 24 hours to notify the Native American Heritage Commission. Additional surveys will be required if the project changes to include unsurveyed areas.

Impact Topic	Potential Impact Statement	Phase (Construction or Operation)	Potential Project Impacts with Standard Project Provisions	Level of Significance	Mitigation Measures
CTR-d	Cause a substantial adverse change in the significance of an archeological resource pursuant to 15064.5.	Construction	Due to excavation of a significant depth being a necessity to construct the basement of the project, there is a potential to disrupt, alter, or eliminate undiscovered archeological resources including those of human remains.	Less than significant with mitigation.	See **MM CTR-1 Resource Recovery Procedures** and **MM CTR-2 Human Remains Recovery Procedures** in *Section 3.4 Cultural, Paleontological, and Tribal Cultural Resource, CTR-c.*
CTR-e	Disturb any human remains, including those interred outside of dedicated cemeteries.	Construction	Due to excavation of a significant depth being a necessity to construct the basement of the project, there is a potential to disrupt, alter, or eliminate undiscovered archeological resources including those of human remains.	Less than significant with mitigation.	See **MM CTR-2 Human Remains Recovery Procedures** in *Section 3.4 Cultural, Paleontological, and Tribal Cultural Resource, CTR-c.*
CTR-f	Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.	Construction	There are no known paleontological resources or unique geologic features in the project site.	Less than significant with mitigation.	See **MM CTR-1 Resource Recovery Procedures** and **MM CTR-2 Human Remains Recovery Procedures** in *Section 3.4 Cultural, Paleontological, and Tribal Cultural Resource, CTR-c.*
CTR-g	Cause a substantive adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, or cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American Tribe, and that is: i. a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American Tribe, that is listed or eligible for listing on the California Register of Historical Resources, or on a local register or historical resources as defined in Public Resources Code section 5020.1(k) or ii. a resource determined by a lead agency, in its discretion and supported by substantial evidence, to be significant according to the historical register criteria in Public Resources Code section 5024.1 (c), and considering the significance of the resource to a California Native American tribe.	Construction	There are no known Cultural, Paleontological, and Tribal Cultural Resource in the project area. No Native American tribal representatives have contacted the Planning Department to request consultation. Department staff has determined that the proposed project would not be expected to affect tribal cultural resources, including prehistoric archeological resources.	Less than significant with mitigation.	**MM CTR-3 Unanticipated Discovery of Tribal Cultural Resources.** If cultural resources of Native American origin are identified during construction, all earth disturbing work within the vicinity of the find must be temporarily suspended or redirected until an archaeologist has evaluated the nature and significance of the find and an appropriate Native American representative, based on the nature of the find, is consulted. If the City determines that the resource is a tribal cultural resource and thus significant under CEQA, a mitigation plan shall be prepared and implemented in accordance with state guidelines and in consultation with Native American groups. The plan would include avoidance of the resource or, if avoidance of the resource is infeasible, the plan would outline the appropriate treatment of the resource in coordination with the archeologist and the appropriate Native American tribal representative.
<u>Topic 5 - Geology and Soil</u>					
GEO-a	Would the project expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?.	Operations	The project site is not located within an Alquist-Priolo Earthquake Fault Zone, and no active or potentially active faults exist on or in the immediate vicinity of the sites. The closest active faults are within 15 miles of the site. The nearest active fault is the San Andreas Fault, which is located approximately 7.6 miles west of the project site. No components of the proposed project would cause or worsen rupture of any known or unknown earthquake fault.	Less than significant.	No mitigation needed.

Impact Topic	Potential Impact Statement	Phase (Construction or Operation)	Potential Project Impacts with Standard Project Provisions	Level of Significance	Mitigation Measures
GEO-b	Would the project expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking, seismic-related ground failure, including liquefaction?	Operations	Development of the proposed project would involve the construction and occupancy of a new building in a location where strong seismic ground shaking can be expected to occur over the life of the project. The building would be constructed on foundations designed to withstand seismic activity. In addition, the northern part of the project site is located within a State-designated Liquefaction Hazard Zone as well as Santa Clara County Liquefaction Hazard Zone. With implementation of the recommendation of the geotechnical report, the construction of the proposed project would not expose people or structures to adverse effects involving strong seismic ground shaking.	Less than significant with mitigation.	**MM GEO-1 Geotechnical Investigation for Basement Structure.** Building foundations shall be designed to tolerate total and differential settlements due to static loads and liquefaction-induced settlement in accordance with the recommendations of the geotechnical report. The current geotechnical report includes recommendation for a no-basement building only. The project sponsor shall retain the service of a qualified state licensed engineering and geology specialist to include site-specific recommendation to mitigate the potential for risks associated with seismic ground shaking, seismic-related ground failure and liquefaction for the foundation of a building with basement. The updated report would include design requirements for the construction of the foundation for the basement option.
GEO-c	Would the project expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving landslides	Construction	The construction of the proposed project would require excavation and fill placement, there would be some potential for constructed (cut and fill) slopes to fail if there are improperly designed or constructed. The excavation of the project site for the basement level of the building would increase the exposure of onsite construction workers to hazards associated with slope failure. The geotechnical report prepared for the project includes site-specific design requirements to mitigate the potential for risks associated with landslide during construction.	Less than significant with mitigation.	**MM GEO-2 Temporary Shoring, Slopes and Cut.** The contractor is responsible for maintaining all temporary slopes and providing temporary shoring where required. Temporary shoring, bracing and cuts/fills would be performed in accordance with the strictest government safety standards. Excavation during site demolition and fill removal should be sloped at 3:1 (horizontal: vertical) within the upper 5 feet. For excavation extending more than 5 feet below building subgrade, excavations should be sloped in accordance with the OSHA soil classification. The contractor is responsible for selecting the shoring method according to their judgment and experience considering adjacent improvements such as foundation loads, utilities and pavement. The qualified state licensed engineering and geology specialist in charge of the geotechnical report shall review the shoring design prior to implementation. Recommendations of the geotechnical report for temporary shoring are soldier beams and tie-backs, braced excavation, or other potential methods. The contractor is responsible or using best management practices to maintain all temporary slopes and providing temporary shoring where required.
GEO-d	Result in substantial soil erosion or the loss of topsoil?	Construction	The proposed project would not result in the loss of topsoil. Site preparation and excavation activities would disturb soils on the project site, creating the potential for wind and water-borne soil erosion. The project would implement construction best management practices to prevent erosion and the discharge of sediment into construction site storm water runoff.	Less than significant.	No mitigation needed.
GEO-e	Location of structure on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	Construction	Impacts related to the potential for settlement and subsidence due to construction on soil that is unstable or could become unstable as a result of the project. Compliance with state and local building code requirements would ensure that the project sponsor includes analysis of the potential for unstable soils as part of the design-level geotechnical investigation prepared for the proposed project.	Less than significant.	No mitigation needed.

Impact Topic	Potential Impact Statement	Phase (Construction or Operation)	Potential Project Impacts with Standard Project Provisions	Level of Significance	Mitigation Measures
GEO-f	Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code, creating substantial risks to life or property?	Operations	The geotechnical engineer performed a plasticity and expansion potential test of the surficial soils and indicating low expansion potential to wetting and drying cycle. Furthermore, the building department would review the application and plans for concurrence with recommendations of the geotechnical report and compliance with the codes, reducing potential impacts to less than significant.	Less than significant.	No mitigation needed.
GEO-g	Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	Operations	The proposed project would be connected to the local wastewater treatment system. Septic systems would not be used.	No impact.	No mitigation needed.
Topic 6 - Greenhouse Gas Emissions					
GHG-a	Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment.	Construction and Operation	Emissions are below BAAQMD significance thresholds for pollutants of concern.	Less than significant.	No mitigation needed.
GHG-b	Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases.	Operation	Emissions are below BAAQMD significance thresholds for pollutants of concern.	No impact.	No mitigation needed.
Topic 7 - Hazardous Waste and Material					
HAZ-a	Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.	Construction	Construction activities would require the use of limited quantities of hazardous materials such as fuels, oils, solvents, paints, and other common construction materials. The project sponsor and its contractor would implement BMPs which would reduce the hazards associated with short-term construction-related transport, and use and disposal of hazardous materials to less than significant levels. Implementation of the proposed project would result in the use of relatively small amounts of hazardous materials, those typically used by parking structure and commercial land uses such as disinfectants, cleaners, fertilizers, and other types of hazardous materials. Because the materials are labeled to inform users of potential adverse effects as well as proper handling and care, it is unlikely that the use of such materials would create a significant hazard. Construction BMPs, Phase 1 ESA.	Less than significant.	No mitigation needed.
HAZ-b	Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.	Operation	The Phase 1 ESA was prepared to determine the potential for site contamination and level of exposure risk associated with the project. Pursuant to the Phase 1 ESA, there are no recognized environmental conditions (i.e., no soil or groundwater contamination) on the project sites.	Less than significant.	No mitigation needed.

Impact Topic	Potential Impact Statement	Phase (Construction or Operation)	Potential Project Impacts with Standard Project Provisions	Level of Significance	Mitigation Measures
HAZ-c	Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	Construction	No schools exist within a 0.25-mile radius of the project area.	No impact.	No mitigation needed.
HAZ-d	Create a significant hazard to the public or the environment from existing hazardous materials contamination by exposing future occupants or users of the site to contamination either in excess of ground soil and groundwater cleanup goals developed for the site or from the location on listed hazardous materials sites compiled pursuant to Government Code section 65962.5?	Construction	Possible that some construction activities such as ground disturbance from excavation may come into contact with contamination that has migrated from other sites.	Less than significant with mitigation.	**MM HAZ-1 Health and Safety Plan.** The project sponsor will implement the following standard measures to avoid and minimize impacts from hazardous material to construction workers and the general public during construction. 1) In the event of exposing hazardous material during construction, the City will implement standard measures required by the federal, state, and local regulations for the collection, transport, and disposal of the material to prevent the exposure of workers and the public to such material. 2) The City will require the contractor to prepare and implement Health and Safety Plan that include a Hazardous Materials Management and Spill Prevention and Control Plan prior to commencement of construction. The plan will include the project-specific related hazardous materials and waste operations.
HAZ-e	For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	Construction and Operation	Project is not located within two miles from or on land used for airport purposes.	No impact.	No mitigation needed.
HAZ-f	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.	Construction	Project would not create physical changes that would interfere with emergency response or evacuation plans.	Less than significant.	No mitigation needed.
Topic 8 - Hydrology and Water Quality					
WQ-a	Would the project violate any water quality standards or waste discharge requirements, create or contribute runoff water that would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff or otherwise substantially degrade water quality?	Construction and Operation	The existing impervious surface area is 28,600 square feet. The proposed project and would be reduce impervious surface area by 2,250 square feet to 26,350 square feet. Storm water runoff quantities would be reduced from 0.84 cubic feet per second to 0.76 cubic feet per second. Storm water currently surface flows toward the street. The proposed storm water drainage would convey rainwater into bio-retention planters for treatment. The treated water will then be conveyed to a storm drain main along Waverley Street. There would be a reduction in storm water into the existing storm water drainage systems. Thus, the storm water generated by the project site would not exceed storm water drainage capacity. The project will implement standard BMPs during construction and would conform to the City of Palo Alto Public Works code. The project will also implement year-round water quality BMPs.	Less than significant.	No mitigation needed.

Impact Topic	Potential Impact Statement	Phase (Construction or Operation)	Potential Project Impacts with Standard Project Provisions	Level of Significance	Mitigation Measures
WQ-b	Would the project substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering or the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level that would not support existing land uses or planned uses for which permits have been granted)?	Operation	While the insertion of support and foundation structures in the groundwater basin could reduce the storage capacity, the displaced volume would not be substantial relative to the volume of the Santa Clara Valley Groundwater Basin which has a surface area of 153,600 acres. Likewise, the volume of water used during construction for dust control and other uses would be nominal, and would be unlikely to include groundwater unless encountered during excavation and reused as a water conservation measure; therefore, construction activities would not substantially deplete groundwater supplies The proposed project would involve a reduction in impervious surface by 2,250 square feet. Since the project would decrease the area of impervious surfaces, the proposed project would have no impact on groundwater recharge within this basin.	Less than significant.	No mitigation needed.
WQ-c	Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	Operation	The proposed project would reduce the impervious surface to 90 percent and would reduce the quantity of water discharged into the storm water drain (0.84 cubic-feet per second to 0.76-cubic-feet per second). Therefore, the proposed project would not alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site.	Less than significant.	No mitigation needed.
WQ-d	Would the project place housing in a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary, Flood Insurance Rate Map, or other flood hazard delineation map?	Operation	Housing is not part of the proposed project.	No impact.	No mitigation needed.
WQ-e	Would the project be placed in a 100-year flood hazard area structures that would impede or redirect flood flows?	Operation	The proposed project is not located in a 100-year flood hazard area. The project would not place structures that could impede or redirect flood flows.	No impact.	No mitigation needed.
WQ-f	Would the project expose people or structures to a significant risk of loss, injury or death involve flooding by placing housing or other development within a 100-year flood hazard area or a levee or dam failure inundation area?	Operation	The site is not located in a 100-year flood hazard zone and does not involve housing development.	No impact.	No mitigation needed.
WQ-g	Would the project result in inundation by seiche, tsunami, or mudflow?	Construction	The proposed project would not include new construction placing persons or structures at significant risk due to mudflow and debris flow.	No impact	No mitigation needed.

Impact Topic	Potential Impact Statement	Phase (Construction or Operation)	Potential Project Impacts with Standard Project Provisions	Level of Significance	Mitigation Measures
Topic 9 - Land Use and Planning					
LU-a	Physically divide an existing community.	Construction and Operation	The proposed project would not alter the established street grid, permanently close any streets, or impede pedestrian or other travel through the neighborhood. Although the sidewalk may be closed during construction, it would be temporary. The proposed project would intensify the use of the project site, but would not alter the general land use pattern of the immediate area, which already includes mix of commercial, institutional and residential uses that characterizes the surrounding established community.	Less than significant.	No mitigation needed.
LU-b	Conflict with any applicable City land use plan, policy, or regulation (including but not limited to the Comprehensive Plan, CAP, or the City's Zoning Ordinances adopted for the purpose of avoiding or mitigating an environmental affect.	Operations	The project is compatible with existing land use designation (e.g.: community commercial), but would require an amendment to the zoning code to allow for a greater intensity of use authorized under the Public Facilities zoning designation. An amendment to the Public Facilities zone district regulations is pending. It is not anticipated to change the type and intensity of existing or planned land use patterns in the surrounding area.	Less than significant.	No mitigation needed.
LU-c	Conflict with an applicable habitat conservation or natural community conservation plan	Construction and Operation	No habitat conservation plan or natural community conservation plan exists for this area.	No impact.	No mitigation needed.
Topic 10 - Noise and Vibration					
NOI-a	Expose people to noise levels in excess of standards established in the local comprehensive plan or noise ordinance, or applicable standards of other agencies	Construction	The main noise sources on the project site would be project construction and general vehicle traffic. Project construction would result in groundborne vibration and noise levels from ground disturbing activities such as excavation and grading that is necessary for construction. Impacts would be temporary and for short durations of time, anticipated to last about 2 to 3 months. Activities such as demolition would result in the highest noise levels. Noise from construction equipment such as a wood chipper used in the removal of onsite trees would also be expected for at least a week in duration.	Less than significant.	No mitigation needed.
NOI-b	Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels	Construction	Construction would adhere to the City of Palo Alto's Noise Ordinance which limits construction to Monday-Friday from 8:00 A.M.-6:00 P.M. and on Saturdays from 9:00 A.M. – 6:00 P.M. In accordance with the ordinance, no construction would be held on Sundays or on any holidays.	Less than significant	No mitigation needed.
NOI-c	A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project	Operation	The traffic noise levels without the proposed project would be considered ambient. The traffic noise levels with the proposed project is predicted to be the same as without the proposed project. Therefore, the proposed project traffic noise is predicted not to impact the nearby noise sensitive receivers.	Less than significant	No mitigation needed.
NOI-d	For a project located in an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels	Operation	Project is not located in an airport land use plan, including Airport Influence Area of Palo Alto Airport.	No impact	No mitigation needed.

Impact Topic	Potential Impact Statement	Phase (Construction or Operation)	Potential Project Impacts with Standard Project Provisions	Level of Significance	Mitigation Measures
NOI-e	For a project near a private airstrip, would it expose people residing or working in the project area to excessive noise	Operation	Project is not located near a private airstrip.	No impact	No mitigation needed.
Topic 11 - Public Services					
PUB-a	Would the project result in an adverse physical impact from the construction of additional school facilities in order to maintain acceptable performance standards?	Construction and Operation	Because the proposed project would not involve a population increase or a corresponding increase in school-aged children, and the project would not affect access to any school or construct a new school, there would be no impact on school facilities.	No impact.	No mitigation needed.
PUB-b	Would the project result in an adverse physical impact from the construction of additional fire protection facilities in order to maintain acceptable performance standards?	Construction and Operation	During the construction of the project, emergency access would be maintained. During the operation of the parking structure, the project would not introduce residential development and thus, would not indirectly increase the population of the area which could affect the Fire Department's ability to maintain acceptable service ratios, response time or other performance objectives. The intensification of the lot's use would not significantly affect the capability of the Fire Department to provide fire protection service to the project site and would not significantly impact the performance standards.	Less than significant.	No mitigation needed.
PUB-c	Would the project result in an adverse physical impact from the construction of additional police protection facilities in order to maintain acceptable performance standards?	Operation	The intensification of the lot's use would not significantly affect the capability of PAPD to provide police protection service to the project site and would not significantly impact the performance standards.	Less than significant.	No mitigation needed.
PUB-d	Would the project result in an adverse physical impact from the construction of additional parks and recreation facilities in order to maintain acceptable performance standards	Operation	The project would not affect any existing or planned public recreation facilities. The construction of the parking garage would not increase the demand for recreational facilities, and would not require the expansion of existing recreational facilities or construction of new facilities.	No impact.	No mitigation needed.
PUB-e	Would the project result in an adverse physical impact from the construction of additional library facilities in order to maintain acceptable performance standards	Construction	The project would not affect access to libraries or other public facility or result in the construction of a new public library. The project does not include residential development. The need for additional library facilities or community center is generally associated in an increase in residential population.	No impact.	No mitigation needed.

Impact Topic	Potential Impact Statement	Phase (Construction or Operation)	Potential Project Impacts with Standard Project Provisions	Level of Significance	Mitigation Measures
Topic 12 - Transportation					
TRA-a	Would the project conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	Construction and Operation	Construction activities would generate construction-related truck and employee trips that could create a temporary increase in localized traffic. Implementation of **MM TR-1** Traffic Control Plan would reduce the potential of traffic disruption to less than significant. During the operation of the parking structure, several measures would be implemented to optimize the operation of the parking structure and avoid vehicles queuing on Hamilton Avenue. At this time, it is not decided if the parking structure would be a paid parking structure or not. If it is a paid parking structure, gates would be required and could slow the flow of the traffic. To ensure that queues from the parking garage do not back up onto Hamilton Avenue, the **MM TR-2** is required.	Less than significant with mitigation.	**MM TR-1 Construction Traffic Control Plan.** Prior to the excavation, the construction contractor shall develop the traffic control plan in accordance with City's policies, coordinate with VTA and submit for City approval. The plan shall be implemented throughout the course of the project construction and may include, but not limited to, the following elements: • Limit truck access to the project site during peak commute times (7:00 A.M. to 9:00 A.M. and 4:00 P.M. to 6:00 P.M.). • Restrict construction truck routes to truck routes designated by the City. • Contractor will provide adequate parking or carpool strategy for construction employees near the construction site, as approved by the City. • Require traffic control in the project entrance driveway, including flag persons wearing bright orange or red vests and using "Stop/Slow" Paddle to control oncoming traffic. • Coordinate with VTA to temporarily relocate the bus stop to ensure minimal impacts during sidewalk closure, if needed. • Maintain bicycle and pedestrian access and circulation during project construction. If construction encroaches on a sidewalk, a safe detour will be provided for pedestrian at the nearest crosswalk. • Repair or restore the road right-of-way to its original condition or better upon completion of the work. • Provide access for emergency vehicles at all time. **MM TR-2 Vehicle Queuing Analysis.** In the event the project includes a paid parking component; and, therefore, includes a parking gate, the project must prepare and submit a queuing study that shows, to the satisfaction of the Transportation Division, that queuing into Hamilton Avenue would be avoided. Queuing includes a line of two or more vehicles waiting to enter the structure, which could block traffic on Hamilton. The study will consider the configuration and the anticipated volume of vehicles accessing the parking garage during the peak hour. The provisional gates must process vehicles efficiently such that vehicles do not have to wait to turn into the parking facility.
TRA-b	Would the project conflict with an applicable congestion management program, including but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	Construction and Operation	All study intersections operate at acceptable levels of service. No significant impacts are expected to occur.	Less than significant.	No mitigation needed.
TRA-c	Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks.	Operations	The Airport Influence Area does not include the project site.	No impact.	No mitigation needed.
TRA-d	Substantially increase hazards due to a design feature (e.g. sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).	Operations	Entries and exits of trucks and heavy constructions vehicles from the project site in the downtown area could impact bicyclists and the pedestrians. Implementation of MM TR-1 would reduce construction impacts on transit, pedestrian, bicycle facilities to less than significant with mitigation. **MM TR-3** would ensure safety for	Less than significant with mitigation	See **MM TR-1 Construction Traffic Control Plan** *in Section 3.12 Transportation and Traffic, Impact TRA-a.* **MM TR-3 Parking Structure Access and Exit Safety Improvement:** The following improvement shall be implemented to improve safety in accessing and exiting the proposed parking structure: • The City will install a stop sign at the intersection of Lane 21 and Bryant Street.

Impact Topic	Potential Impact Statement	Phase (Construction or Operation)	Potential Project Impacts with Standard Project Provisions	Level of Significance	Mitigation Measures
			exiting Lane 21. The proposed project would not include incompatible uses in the downtown Palo Alto area.		
TRA-e	Would the project result in inadequate emergency access?	Construction and Operation	No resulting inadequate emergency access.	Less than significant with mitigation.	See **MM TR-1 Construction Traffic Control Plan** *in Section 3.12 Transportation and Traffic, Impact TRA-a.*
TRA-f	Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities or otherwise decrease the performance or safety of such facilities.	Construction	The proposed project could involve a temporary closure of the sidewalk on Hamilton Avenue or Waverley Street. There is a bus stop on Hamilton Avenue in front of the project site. Service would be relocated from this location as determined by the VTA. Furthermore, entries and exits of trucks and heavy constructions vehicles from the project site in the downtown area could impact the bicyclists and the pedestrians. The proposed project would not conflict with adopted policies, plans, or program regarding public transit, bicycle or pedestrian facilities or decrease their performance.	Less than significant with mitigation.	See **MM TR-1 Construction Traffic Control Plan** *in Section 3.12 Transportation and Traffic, Impact TRA-a.*
TRA-g	Would the project create the potential demand for through traffic to use local residential streets or cause any change in traffic that would increase the Traffic Infusion on Residential Environment (TIRE) index by 0.1 or more?	Operations	Freestanding parking structures do not generate trips, but instead redirect traffic generated by surrounding land uses within a given area such as downtown Palo Alto. The project will have less than significant impact on nearby local residential streets. The project would not generate trips that would not create the potential demand for through traffic to use local residential streets and would instead redirect traffic generated by surrounding land uses within a given area such as downtown Palo Alto.	Less than significant.	No mitigation needed.
<u>Topic 13 - Utilities and Service System</u>					
UT-a	Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.	Operation and Construction	Since the proposed project would have sufficient water supply available from existing water supply, it would not require new water supply or water treatment facilities. During the construction of the proposed project, the contractor would implement best management practices as required by the City of Palo Alto.	Less than Significant	No mitigation needed.
UT-b	Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.	Operations	The proposed project would not exceed wastewater treatment requirements.	Less than significant.	No mitigation needed.

Impact Topic	Potential Impact Statement	Phase (Construction or Operation)	Potential Project Impacts with Standard Project Provisions	Level of Significance	Mitigation Measures
UT-c	Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments.	Construction and Operation	As shown in **Table 35**, p.170, the proposed project would generate a net increase of approximately 3,875 gallons of wastewater per day for Alternative 3 and 4 (with retail) and 3,575 gallons of wastewater per day for Alternative 2 (without retail). This increase would be approximately less than 0.01 percent of the existing unused capacity of the RWQCP. Therefore, there would be sufficient wastewater capacity to serve the project site.	Less than significant.	No mitigation needed.
UT-d	Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs.	Operation	Although the proposed project would incrementally increase total waste generation by adding a new retail space (Alternative 3) to the existing downtown area, the increasing diversion rate through recycling and composting would result in a decreasing share of total waste that requires deposition into the landfill. For these reasons, the solid waste generated by the proposed project during construction and operation would not result in the landfill exceeding its permitted capacity, construction and operation of the proposed project would comply with all applicable statutes and regulations related to solid waste.	No impact.	No mitigation needed.
UT-d	Comply with federal, state, and local statutes and regulations related to solid waste.	Construction	The Construction and Demolition Debris Diversion Ordinance requires a minimum of 75 percent of all construction and demolition debris to be recycled and diverted from landfills. Accordingly, the contractor would be required to divert construction and demolition. Vegetal debris resulting from the landscaping removal, landfill resulting from the excavation of the basement level and asphalt concrete from the existing surface parking would be sent to a registered facility that would process and divert these materials according to applicable local and state regulation.	Less than significant.	No mitigation needed.
Topic 14 - Energy Conservation					
ENE-a	Would the project result in energy impacts regarding the amount and fuel type used during each stage of the project?	Construction and Operation	The project could consume incrementally more energy compared to existing conditions for construction, operation and maintenance. These expanded and new uses would not result in the use of a large amount of fuel, water, or energy. The project's energy demand would be typical for a development of this scope and nature. The project would comply with current state and local codes concerning energy consumption described in the Regulatory Setting.	Less than significant.	No mitigation needed.
ENE-b	Would the project result in impacts on local and regional energy supplies and on requirements for additional capacity, result in impacts to energy resources or result in impacts on peak and base period demands for electricity and other forms of energy?	Operation	The demand for electricity and other forms of energy generated by the proposed project would be negligible in the context of overall demand within the Bay Area and the State. The project would not in and of itself require a major expansion of power facilities and/or results in impacts on peak and base period demands.	Less than significant.	No mitigation needed.
ENE-c	Would the project have impacts resulting from the project's projected transportation energy use requirements?	Operation	Also, as discussed in *Section 3.12, Transportation and Traffic*, the parking structure does not generate new trips, but redirect traffic generated by surrounding land uses in Palo Alto.	Less than significant.	No mitigation needed.

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CHAPTER 1.0 INTRODUCTION

CEQA requires that all state and local government agencies consider and disclose the environmental consequences of their proposed discretionary projects before taking an action to approve and implement the project. In compliance with CEQA requirements and guidelines (California Public Resources Code, Sections 21000 et seq., and California Code of Regulations Title 14 Section 15000 et seq.), the City of Palo Alto, as the CEQA lead agency, is preparing an EIR for this project. Per CEQA guidance, the Draft EIR will provide an assessment of the potential environmental consequences of the proposed project, and identify policies, programs, ordinances, and mitigation measures that would avoid or reduce significant impacts. This assessment is intended to inform the City's decision makers, other responsible agencies, and the public at large of the nature of the proposed project and any potential effect on the environment.

1.1 EIR Process

1.1.1 NOP and Scoping

In accordance with Sections 15082(a), 15103, and 15375 of the CEQA Guidelines, the City prepared the Notice of Preparation (NOP) for a Draft EIR with an Initial Study (IS) Checklist for this project. The NOP with the IS Checklist was circulated to local, state, and federal agencies and other interested parties for 30 days, beginning on May 12, 2017. A copy of the full NOP was made available to be reviewed at the Development Center, at 285 Hamilton Avenue, Palo Alto, CA. 94301. A notice of the NOP availability was published in Palo Alto Weekly on May 12, 2017. The completed NOP was also posted on the City of Palo Alto's website (http://www.cityofpaloalto.org/civicax/filebank/documents/57978) in advance of the circulation period. The NOP with the IS provided a description of the proposed project and a map of the project, and a brief discussion of anticipated potential impacts. Appendix A includes the NOP with the IS Checklist, scoping period notices, Notice of Completion (NOC) of the NOP, and copies of the comment letters received during the scoping period.

In addition, the City held a public scoping meeting for the project as part of the Planning and Transportation Commission (PTC)'s regularly scheduled meeting on May 31, 2017, at 6:00 P.M., in City of Palo Alto Council Chambers, located in City Hall at 250 Hamilton Avenue. The meeting provided the public additional opportunity to comment on the environmental issues and concerns. The meeting agenda was posted to the City's website (http://www.cityofpaloalto.org/civicax/filebank/documents/58046).

Public comments provided during the public meeting on May 31, 2017, can be viewed in the Planning and Transportation Commission meeting minutes available on the City website (http://www.cityofpaloalto.org/civicax/filebank/documents/58628). Following is a summary of the comments received during the scoping period:

Demand for Parking:

- Additional information is needed to show that there is additional demand for parking in the commercial core of the City of Palo Alto and the neighboring residential areas. Considerations should be given to the recommendations of the Downtown Parking Management Study that is being conducted by the City, and actions taken by the Transportation Management Association (TMA) to reduce the demand for parking.

Context Sensitive Solutions:

- Compatibility of the parking garage with the existing adjacent buildings regarding architectural contexts and the number of the proposed stories of the structure.
- Compatibility with adjacent historic buildings, especially the historic Post Office across Hamilton Avenue and the church across Waverley Street.
- Loss of natural air and light due to shadows from the new parking structure located south and west of the building on Lot 85.
- Preserve or replace existing protected California Oak trees. Preserve and/or replace other existing trees.

Other Design Elements:

- Consideration of new technologies that help reduce the need for large parking structures, delays and idling time during entering and exiting the structure.
- Maintaining vehicular access to Lot 84 and Lot 85 which faces Waverley Street, this proposes to consider allowing space and structural accommodations in the basement of the downtown parking garage and the potential need to expand the building in the future.
- Maintain access by providing a delivery zone on Waverley Street.
- Maintain or improve the existing pedestrian walkways between the parking structure and Lot 85.

Construction Impacts:

- Effect of the loss of the existing parking spaces while the proposed project is being constructed.

1.1.2 Draft EIR

The Draft EIR provides a description of the proposed project, the environmental setting, evaluation of the project impacts, and mitigation measures for impacts determined to be significant, including direct, indirect, and cumulative impacts. The Draft EIR addresses environmental resources that were determined to have potential impacts according to the prepared IS Checklist consistent with Appendix G of the CEQA Guidelines (see Appendix B for a copy of the Initial Study Checklist). Resources that were determined to have "No Impacts" from the project will not be further evaluated in this report. The following is a list and description of the resources with a determination of "No Impact":

- **Agricultural and Forestry Resources.** According to the California Resources Agency Farmland Mapping and Monitoring Program maps, the project is located in an area designated as Urban and Built-Up Land.[4] The project site is zoned and used as Downtown Commercial District (Pedestrian Shopping). The project does not conflict with any zoning for agricultural use or Williamson Act contract. The project does not conflict with any zoning of forest land (as defined in Public Resources Code section 12220(g)), or timberland and timberland production (as defined by Public Resources Code section 4526). The proposed project does not involve any changes that would directly or indirectly result in conversion of farmland to non-agricultural use or conversion of forest land to non-forest use.
- **Mineral Resource.** The project is in an area developed as Downtown Commercial District. It is not part of mineral resources recovery site delineated on a local comprehensive plan specific plan or any other land use plan. The project would not result in the loss of land with known mineral resources, or loss of availability of locally important minerals.
- **Population and Housing.** The proposed project accommodates the need for additional parking in a built-out area that includes businesses and other public facilities. The project does not propose improvements that would result in population growth either directly or indirectly. The project would not result in any changes to the existing employment and housing conditions.
- **Recreation.** The project would not affect any existing or planned public recreation facilities. The construction of the parking garage would not increase the demand for recreational facilities, and would not require the expansion of existing recreational facilities or construction of new facilities.

In review of the significance of impacts, the Draft EIR will compare the effects of the proposed project with the existing baseline conditions, as described in detail in each section of the Environmental Analysis (Chapter 3). The analysis of impacts would be based on significance thresholds identified by professional practices as approved or adopted by the City, and significance criteria identified in the CEQA Guidelines Appendix G (14 CCR et seq.).

1.1.2.1 Organization of the Draft EIR

The Draft EIR is organized in the chapters and appendices described as follows:

- **Chapter 1, Introduction:** Includes a brief overview of the project, the environmental review process, and the content of the Draft EIR.
- **Chapter 2, Project Description:** Includes a description of the project background, location, existing facility, objectives of the project, and description of the proposed facility and construction details.
- **Chapter 3, Environmental Setting, Impacts, and Mitigation:** Provides environmental setting and analysis of project impacts, and identifies standard requirements and mitigation measures needed to avoid or lessen impacts for the various resource areas.

[4] California Important Farmland Finder https://maps.conservation.ca.gov/dlrp/ciff/ accessed on January 28, 2018.

- **Chapter 4, Other CEQA Requirements:** Provides analysis of cumulative impacts, growth-inducing impacts, and comparison of the project alternatives.
- **Chapter 5, List of Preparers:** Lists the staff who contributed to the preparation of the Draft EIR and various technical reports associated with the Draft EIR.
- **Chapter 6, References:** Lists references used in preparing the Draft EIR.

1.1.2.2 Public Review of the Draft EIR

Upon completion of the Draft EIR, the City of Palo Alto filed a Notice of Completion (NOC) of the Draft EIR with the State Office of Planning and Research to begin the 45-day public review period (Public Resources Code, Section 21161). Concurrent with the NOC, this Draft EIR has been distributed to responsible and trustee agencies, other affected agencies, surrounding cities, and interested parties, as well as all parties requesting a copy of the EIR in accordance with Public Resources Code 21092(b)(3). During the public review period, the Draft EIR is available for review at the City's main office, located at the address provided below, or online at http://www.cityofpaloalto.org.

Written comments on this Draft EIR should be addressed to:

City of Palo Alto
250 Hamilton Avenue
Palo Alto, California 94301
Attention: Amy French

Within this 45-day review period, the City will conduct at least one public meeting, to receive comments and provide information about this Draft EIR. The public will be notified by mailers, website, and notice of possible projects.

1.1.3 Final EIR

Upon completion of the public review period, written responses to comments will be prepared and made available for review at least 10 days prior to the public hearing before the certification of the Final EIR is considered by the City Council. Upon EIR certification, Council will consider whether to approve the project as described.

CHAPTER 2.0 PROJECT DESCRIPTION

2.1 Project Background

2.1.1 Feasibility Study

In 2014, the City Council authorized the City's staff to proceed with several parking strategies aimed at improving parking supply for the University Avenue (Downtown Palo Alto) and California Avenue Business Districts. Since then, the City has taken multiple steps to address the maximization of the uses of existing off-street parking facilities, address spill-over impacts into adjacent residential neighborhoods, and reduce overall parking demand via establishment of a TMA. These measures did not fully succeed in addressing the parking demand in the two areas listed above[5].

Thus, in order to address additional parking demand within the City of Palo Alto Downtown Area, the City undertook a study to analyze the feasibility of constructing a parking garage on existing surface parking lots. The feasibility study analyzed six existing surface lots:

- Lot D, located on the western corner of Hamilton Avenue and Waverley Street;
- Lot E, located along the western side of Gilman Street between Hamilton Avenue and Forest Avenue;
- Lot G, located along the western side of Gilman Street between Hamilton Avenue and Forest Avenue;
- Lot O, abutting High Street and Emerson Street between Lytton Avenue and University Avenue;
- Lot P, located along the eastern side of High Street between University Avenue and Hamilton Avenue; and
- Lot U, located along Urban Lane immediately east of University Circle.

All existing lots analyzed during the feasibility study are City-owned with the exception of Lot U, which is owned by Stanford University and leased to Caltrain. The study included three main elements: preliminary feasibility analysis, three-dimensional (3D) model analysis, and a comparison of constructability factors. A comparison matrix was developed using a rating system that focused on eight site constraints listed in Table 2 below.

[5] City of Palo Alto, City Council Staff Report, *Direction on Downtown Parking Garage Size,* April 11, 2017, http://www.cityofpaloalto.org/civicax/filebank/documents/56784, accessed on November 5, 2017.

Table 2: List of Site Constraints

	Constraint	*Description*
1	Access Points	Number of potential access points to and from the site.
2	Construction and Staging Impacts	Potential for impacts to surrounding businesses and other facilities during construction.
3	Adjacent Land Use	Type of land use of surrounding building.
4	Adjacent Property Impacts	Impacts to surrounding facilities resulting from the construction of a proposed parking garage.
5	Site Utility Impacts	Existing utility lines/structure required to be rerouted/relocated prior to construction of a structure.
6	Net Space Gain	Quantity of parking spaces gained by constructing a structure compared to the existing parking lot space count.
7	Cost per Space	Cost per parking space in proposed garage.
8	Site Potential for Development	Potential of site to be developed for an alternative land use.

Source: City of Palo Alto Downtown Parking Structure Feasibility Study, January 20, 2014, p.3.

Alternatives considered included subterranean parking levels, a valet component, transit elements, and commercial space incorporated into the proposed structures. Not all alternatives were evaluated for each lot. Lot D (Hamilton/Waverley) and Lot G were determined to be the best candidate sites for construction of the new parking garage among the site analyzed. On December 12, 2016, the City Council approved the Lot D location for the planning and design of the parking structure, as well as a contract for design and environmental assessment services. Section 4.4.1 below describes the process and criteria used for alternative sites considered but eliminated from further consideration.

2.1.2 Parking Management

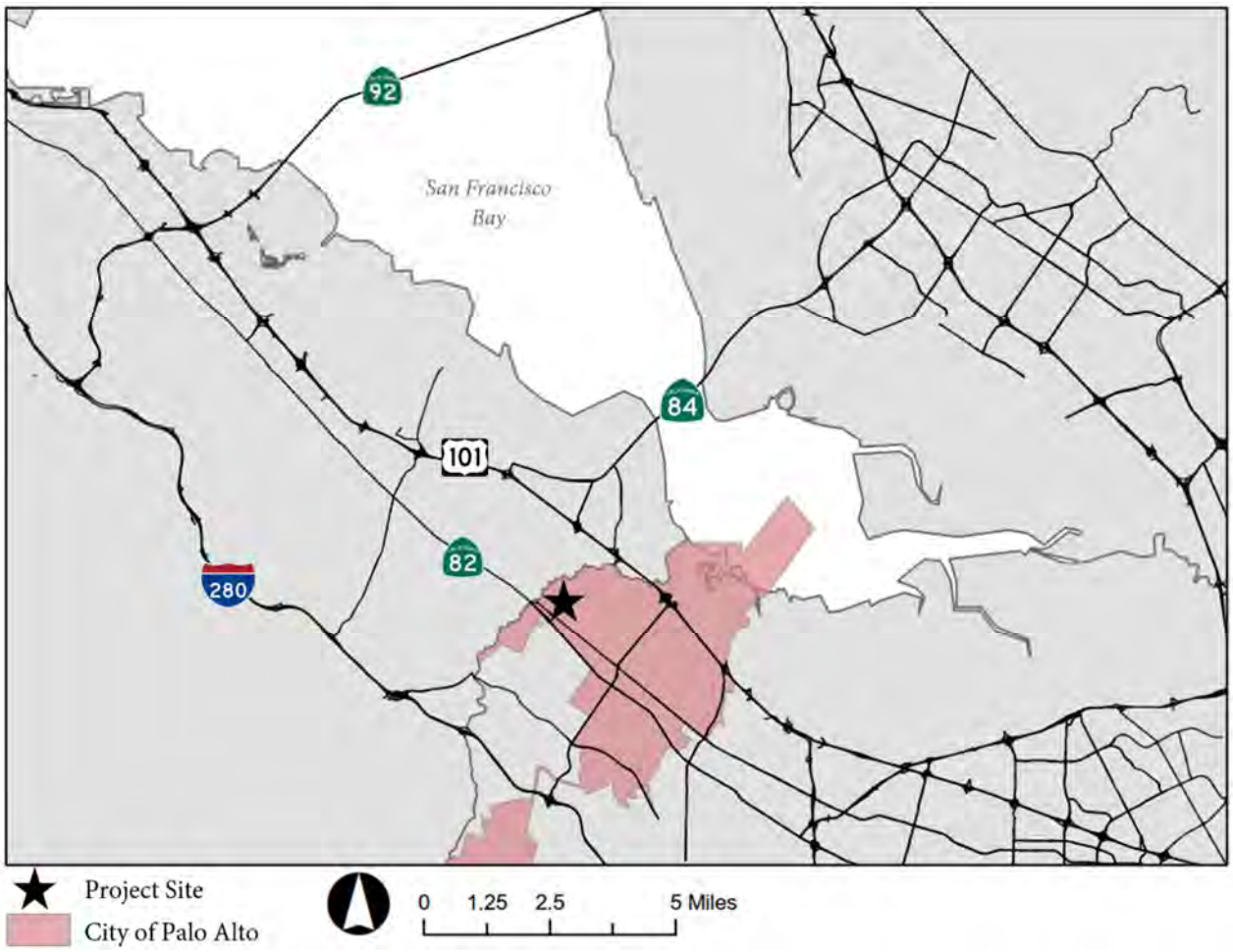
The City of Palo Alto has been actively monitoring the Downtown parking supply since 2010 with semi-annual parking occupancy counts of both on-street parking and off-street parking facilities within the Downtown area. Per the City Council Staff Report (ID #7155, Meeting Date: 4/11/2017), community interest and concern regarding parking supply has been expressed during several stakeholders meeting, in person interviews, and online parking surveys that were conducted as part of the City Downtown Parking Management Study. In addition, the study results show that parking occupancy rates are extremely high and parking turnover is not keeping up with the commercial area needs. Lack of sufficient parking spaces has the potential to cause localized congestion due to additional driving to look for vacant parking spaces. Concerns were also expressed that the lack of parking spaces would discourage the use of local businesses and affect their viability.

2.2 Location of Project

The proposed project is located in the City of Palo Alto, California, as shown on **Figure 1**, **p.23**. The site is in the University Avenue area, also known as the Downtown area (per the City of Palo Alto Comprehensive Plan). The project site is located north of State Route 82 (El Camino Real) and south of U.S. Highway 101. The Palo Alto Caltrain Station is located approximately 2,000 feet southwest of the project site and Stanford University is approximately 0.5-mile southwest of the project site. The project vicinity is shown on **Figure 2, p.24**.

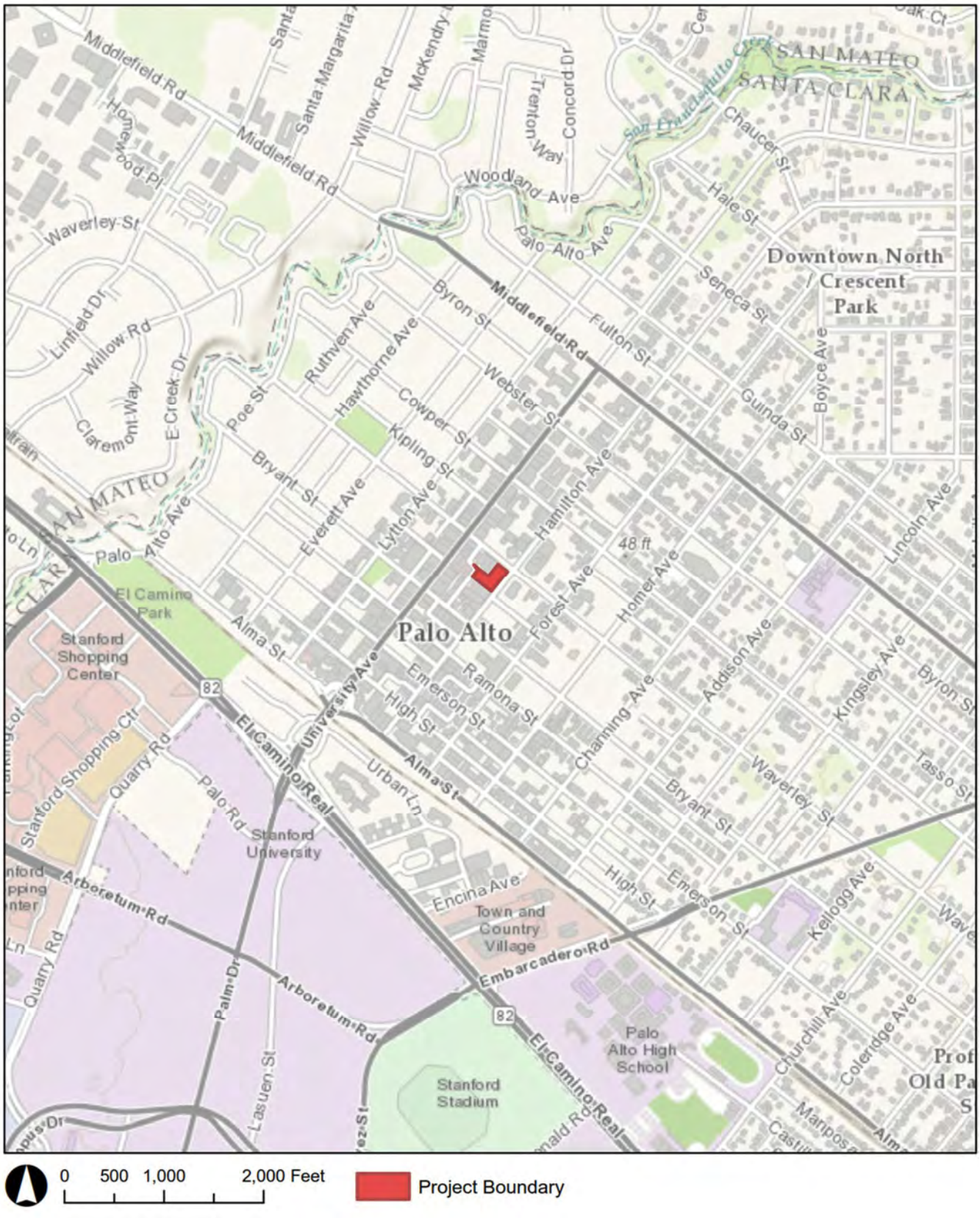
Lot D is occupied by an existing surface parking lot and is located on the western corner of Hamilton Avenue and Waverley Street. It is located a block east of University Avenue. **Figure 3**, **p.25** shows a view of the Downtown Palo Alto area within the location of the project site.

Figure 1: Regional Map



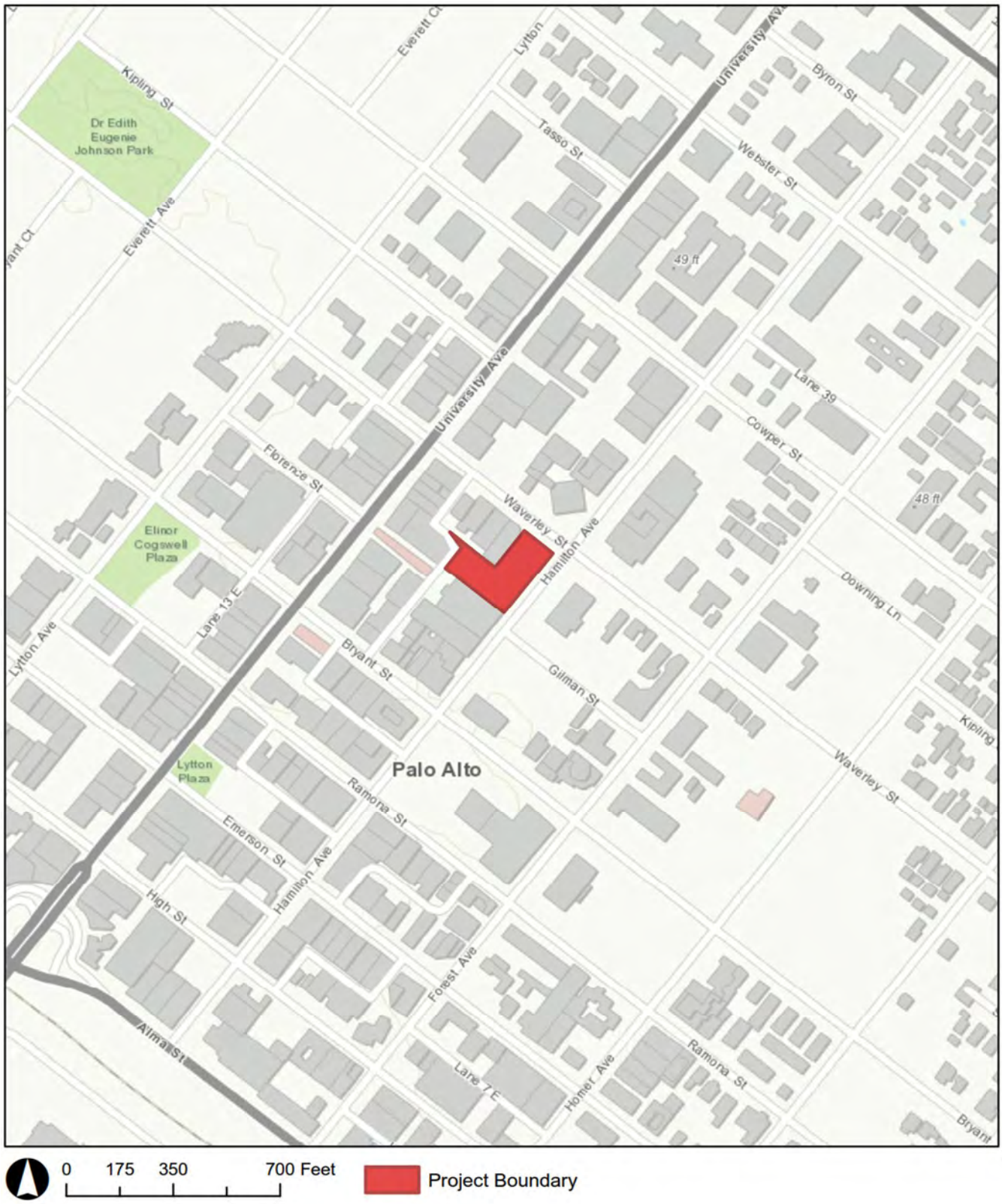
Source: City of Palo Alto GIS data and MTC Open Data Library. Map created by WSP USA, July 2017.

Figure 2: Project Vicinity



Source: ESRI Open Source Topographic Base map, map created by WSP USA, July 2017

Figure 3: Project Location



Source: ESRI Open Source Topographic Base map, created by WSP USA, July 2017

2.3 Existing Facility

2.3.1 Project Site

The project site is located on the western corner of Hamilton Avenue and Waverley Street. The proposed project would be located on a parcel with Assessor Parcel Number 120-15-86. The lot is situated on a generally flat area and has an "L"-shaped configuration with 205 feet of frontage to the south on Hamilton Avenue, 100 feet of frontage to the east on Waverley Street and 62 feet of frontage to the north on Lane 21. The total area of the project site is 29,200 square feet (0.67 acres).

The site is occupied by a surface parking that contains 86 existing parking spaces. The layout of the lot includes angled parking stalls with a one-way drive aisle for circulation. A paid public restroom facility is located on the eastern corner of the lot. The surface parking is currently limited to hourly parking, with no permit parking provided. Figure 4, p.27, shows the actual configuration of the lot.

The project site is located within the PF zoning district according to the City of Palo Alto Zoning Map and has a Comprehensive Plan Land Use Designation of Community Commercial (CC).

2.3.2 Access Points

There are three separate access points for ingress and egress to and from the project site along Hamilton Avenue, Waverley Street, and Lane 21 in the back of the lot for a total of six existing access points.

2.3.3 Adjacent Land Uses

The project site is abutted by four developed sites identified on Figure 5, p.28. These include:

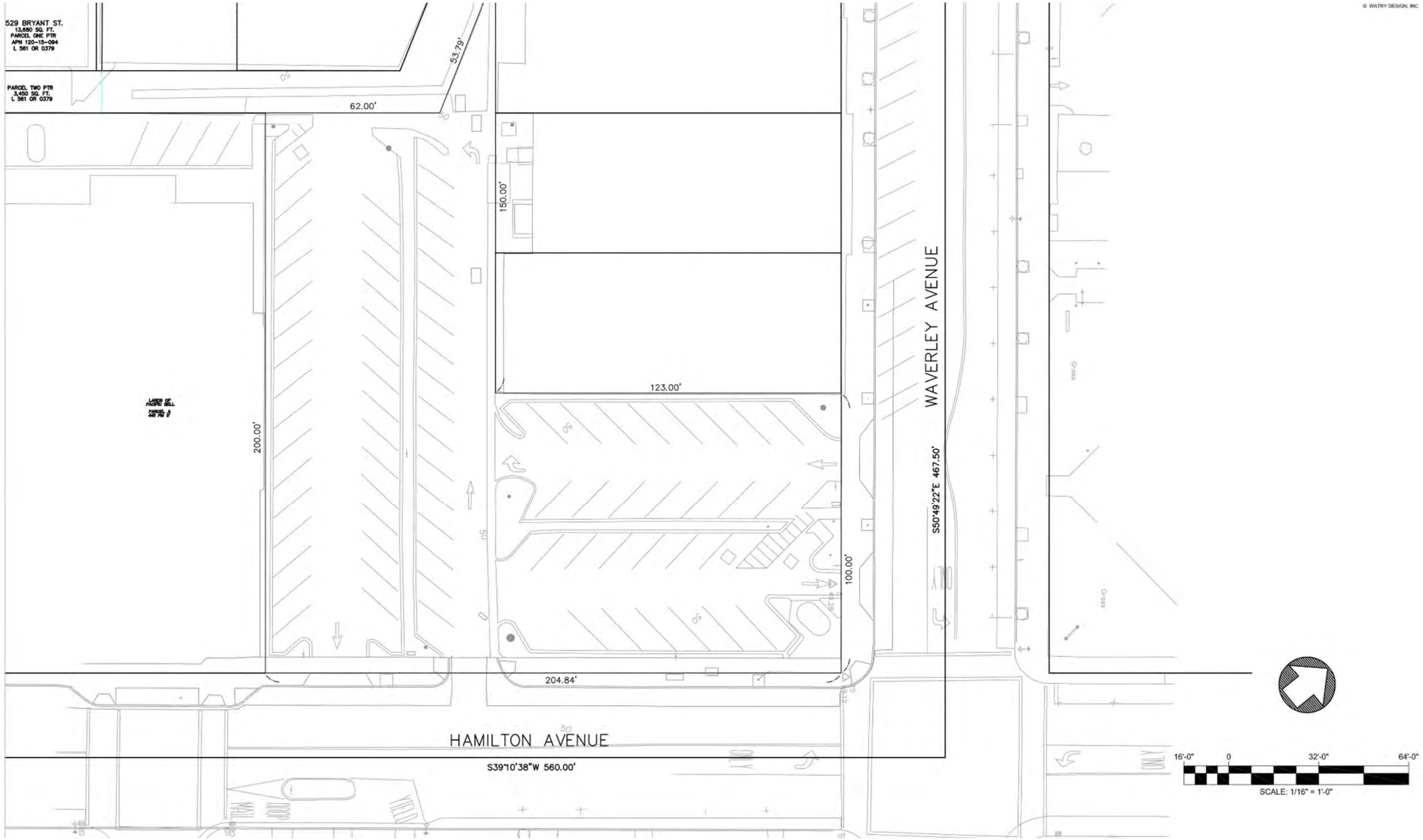
- Lot 102 (or 345 Hamilton Avenue), a building constructed in 1958 and occupied by AT&T and Excel Aviation at time of EIR publication;
- Lot 83 (or 526 Waverley Street), a building constructed in 1928, and Category 3 historic resource most recently occupied by retail use (Palo Alto Sport Shop and Toy World Inc.);
- Lot 84 (or 550-552 Waverley Street), a building occupied by the Prolific Oven retail bakery and Day One retail store; and
- Lot 85 (or 558-560 Waverley Street), a two-story building constructed in 1938, housing the Tai Pan Restaurant on the ground floor and office space on the second floor.

The existing parking lot serves restaurant and retail uses along Waverley Street and provides rear-entry parking to the CVS Pharmacy to the west (352 University Avenue) via Lane 21.

2.3.4 Existing Utilities

The project site contains four street light poles and active high voltage electric, street light, and fiber optics lines running north-south through the site. There is active electric, water, gas, and sewer lines to the south and active water, gas, sewer, and storm drain to the east.

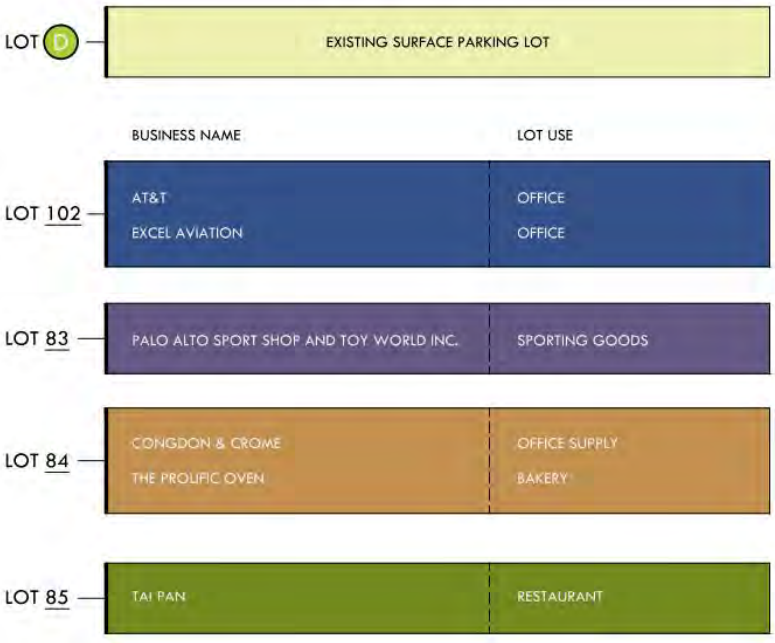
Figure 4: Existing Site Survey



Source: Watry Design, March 2018

Figure 5: Existing Conditions and Adjacent Uses





Source: City of Palo Alto, Downtown Parking Structure Feasibility Study, January 20, 2014.

2.4 Project Objectives

The following are the project objectives:

1. To increase the number of parking spaces within the downtown to maximize the accessibility and convenience to downtown visitors and workers
2. To provide a parking structure that includes neighborhood-serving retail and street frontage to contribute to the economic vitality of the downtown and the City
3. To provide a parking structure that incorporates a pedestrian- and bike-friendly layout
4. To provide a parking structure that is visually appealing and compatible with the downtown character and nearby historic buildings

2.5 Project Description

2.5.1 Building Characteristics

The proposed project consists of:

- A four-story public parking garage consisting of five above ground parking levels and one basement level. The uppermost level would provide parking spaces on the roof. The structure would reach a height of 49 feet-10 inches to the top of the rail of the fifth deck, continuing to a height of 63 feet at the top of the elevator penthouse.
- The public parking garage footprint would cover 23,490 square feet and the overall square footage would be 114,048 square feet (of above-grade floor area).
- A 585-square-foot bicycle parking area would provide approximately 50 bicycle parking spaces and would be located near the entrance to the structure along Hamilton Avenue.
- A total of 325 parking stalls would be available within the structure. Approximately eight stalls will be Americans with Disabilities Act (ADA) accessible, 82 are planned to be designated for electric vehicles (with 17 being installed with charging stations), and nine stalls designated specifically for the retail area use[6].
- 25 percent of the parking spaces would be designed with infrastructure to allow the future installation of charging stations for electric vehicles, per the City of Palo Alto Green Building Code[7]. Initially, 5 percent, or approximately 19 stalls, of the parking spaces would be equipped with a charging station.
- The building would be designed to accommodate the future installation of photovoltaic panels and their associated structure above the building's uppermost deck. The top level of the photovoltaic structure installation, at 56 feet above grade, would be below the top of the elevator penthouse, at 63 feet above grade.

[6] Building Code require 1 space per 250 square feet of non-residential use within the Downtown Assessment District.
[7] City of Palo Alto, Ordinance No. 5263, Amendment to the California Green Building Standards Code, August 4, 2014, https://www.cityofpaloalto.org/civicax/filebank/documents/43818, accessed on November 6, 2017.

- The building would be designed with a 3-foot setback from the property line on the south side of the building along Hamilton Avenue.
- The building would include an approximately 2,000-square-foot single- or dual-tenant commercial shell-space building fronting Waverley Street, to be used as commercial retail space for new or existing businesses.
- The trash enclosure would include area for trash and recycling from two adjacent properties on Waverley Street (Lots 84 and 85), and for the retail area in the proposed project.

Table 3 below presents a comparison of the proposed project.

Table 3: Summary of the Characteristics of the Proposed Project

Use/Characteristics	*Amount/Description*	*Proposed Project*
Parking	325 stalls	127,612 sf
Commercial		1,955 sf
Circulation	Elevator lobbies, ramp, stairs	4,644 sf
Utilities		1,679 sf
Bike Parking	50 spaces, plus child trailer storage	585 sf
Trash		441 sf
Total area		**136,595 sf**
Height to rail		49'-10"
Height to solar		56'-0"
Height to penthouse		63'-0"

Note: sf = square feet

Source: Watry Design, May 2018.

Figure 6, p.34 to Figure 8, p.36, show the floor plans of the proposed project. Figure 10, p.38 and Figure 12, p.40 shows the elevations and sections of the proposed building.

2.5.2 Building Design

The proposed building would extend 4 feet into the existing setback along Hamilton Avenue (providing a 3 foot setback from the property line) and Waverley Street edge as well as the interior side lot line shared with the adjacent AT&T building. At the property line shared with the southeastern side of Lot 85 (or 560 Waverley Street), the edge of the garage would be set back ten feet from the property line, allowing openings for natural ventilation into the parking garage, as well as light to reach the existing windows of the property at 560 Waverley Street. This necessary setback would also create an opportunity for a pedestrian walkway, which would be ADA-accessible, leading to the secondary stairway. At the property line shared with Lot 84 and the southwestern side of Lot 85, the garage would be set back 16 feet to maintain access for utilities, service, and a secondary means of egress for the existing buildings fronting Waverley Street. Vehicle access would be restricted in this alley to those needed to service the adjacent properties. Additionally, the alley would be enhanced with architectural paving, new plantings, benches, and lighting so that it can be a usable space.

The project's façade design is intended to be compatible with the surrounding architectural context, and to reflect the character of Palo Alto's Downtown. Potential locations for the integration of public art have also been identified on the building. These locations are the shear wall element that would face Hamilton Avenue and the perforation pattern of the stair cladding proposed at the corner of Hamilton Avenue and Waverley Street.

The primary construction material would be poured-in-place concrete columns, slabs, and walls. Along the street edges, the two-story base would be sandblasted concrete in a natural color, similar to the All Saints Episcopal Church to the north (across Waverley Street), with subtle details used to define the corners and architrave of the building. Metal flat bars painted a dark bronze color would be used to infill the first-floor openings to create screening for pedestrians. The metalwork would continue along the runs and landings of the stair, celebrating the metalwork found in the Post Office to the east (across Hamilton Street) and other Spanish Revival buildings. Lighted from the inside, a perforated metal scrim would wrap the main corner stair, creating a lantern element to serve as a wayfinding device. This element could also be the focus of the public art program for the building. Metal fins would wrap the upper stories in panels outlined by metal channels that would define the cornice of the building as the channels rise to the upper story. The fins would serve to create a body to the building while allowing for the required garage ventilation. The fin color is intended to be reminiscent of the terracotta colors found in the Downtown.

Figure 13, p.41 shows the rendering of the proposed design for the parking structure.

2.5.3 Access Points

The proposed parking garage can be accessed by vehicles via an entrance and exit on Hamilton Avenue and another one on Lane 21. Lane 21 would continue to be one-way circulation, with the entrance on Waverley Street and the exit on Bryant Street. City Council has not yet decided whether the facility would be a paid parking lot and thus, there is space reserved to accommodate the provisional gates at the entrance and exit. Gates and access points are shown on the ground floor plan (Figure 6, p.34).

2.5.4 Utilities

The construction of the parking garage would require the relocation of the existing fiber optic and high voltage electric lines. Existing utility transformers will be housed below ground in the alleyway adjacent to the trash enclosure. The new parking structure does not include replacing the public restroom due to safety and maintenance concerns.

2.5.5 Transportation

Improvements for the safety of the pedestrians at the intersection of Waverley Street and Hamilton Avenue would be part of the proposed project. The project would include the construction of new bulb-outs adjacent to the parking structure along both Hamilton Avenue and Waverley Street. It would also include new signal priority for pedestrians.

2.5.6 Landscaping

Due to the planned footprint of the parking structure, the seven existing trees would need to be removed from the project site to accommodate the construction of the structure. One of the existing trees, of the species Coast Live Oak (*Quercus agrifolia*), is protected under the City of Palo Alto's Tree Technical Manual. Although this tree is protected, the arborist's report indicates that previous, imprecise pruning has resulted in the poor condition of the tree and a potential for breakage. One street tree will be removed and replaced with four gingko trees and three oak trees along Hamilton and two gingko trees along Waverley in enlarged, 4-foot by 7-foot tree wells to help ensure healthy growth of these new ginkgo trees, which reflect the existing species of the street trees to be retained on Waverley Street.

All tree removals on this project require replacement. The replacement standards outlined in the Tree Technical Manual (as described in the Draft EIR) will be utilized to achieve no net loss of canopy per Policy 1.G of the Urban Forest Master Plan[8]. Site preparation and soil volume requirements apply so that newly planted trees have the potential to mature to desired size and thrive.

The corner of the parking structure will feature a small plaza area featuring decorative pavers, which are also used in the pedestrian access alleyways. In the pedestrian walkway, decorative pervious pavement, generous benches, landscaped storm water treatment planters, and pedestrian-scaled lighting will be used to invite pedestrian use. The storm water planters will be at grade level even with the walkway, and will feature a combination of low-growing, knee-high foliage and flowering plants that provide year-round interest and function; to cleanse storm water directed from the parking structure deck. As width allows, columnar gingko trees similar to the surrounding street trees are introduced to further enhance the pedestrian environment and create a pleasant atmosphere for what may become a well-used passageway.

2.5.7 Foundation and Excavation

Existing slabs, foundations, fills, and pavement would be removed before the excavation of the basement. Existing surface pavement consist of generally 2 to 3 inches of asphalt concrete over 3 to 4 inches of an aggregate base. Most of this existing pavement will be removed, and the underlying sands and clays will be excavated and removed from the site.

Approximately 13,500 cubic yards of soil would be excavated for the basement and will be transported off-site by the excavation subcontractor using two 10-yard dump trucks. Minor cuts and fills into the subgrade at a depth range of 13 to 16 feet are anticipated for setting the foundation. Design of the foundation is expected to be a one-basement level structure. At the time this report was written, specific structural loads are not yet known, but are anticipated to be typical of this type of structure.

A site survey determined that the site elevation ranges between 49 and 51 feet below sea level. No ground improvement or piling is expected. There is a potential for hydrostatic pressures on the basement slab,

[8] City of Palo Alto, Urban Forest Master Plan Policy 1.G, "Strive for no net loss in canopy cover.", p.142, May 2015, https://www.cityofpaloalto.org/civicax/filebank/documents/36187 (accessed on April 16, 2018)

even though it does not appear that the one-level below grade basement would extend below the design ground water depth. There is a potential for short duration perched water events, which could result in uplift pressures on the basement slab. It is recommended to design the slab for 2 to 4 feet of hydrostatic uplift pressure over the full width of the below-grade portion of the building[9].

2.5.8 Construction

2.5.8.1 Schedule

Construction of the parking structure is expected to last 15 months, excluding possible delays due to weather, underground issues, etc. Construction is scheduled to begin in Spring 2019 and be complete by Summer 2020.

Construction would be separated in the following phases:

- ∂ Utility relocations are expected to last three to four months, with the collaboration of the utility service providers such as the City of Palo Alto Utilities (CPAU) for electric and wastewater, AT&T for data, and others to be determined further in the design
- ∂ Demolition, excavation, and shoring of the site is anticipated to last approximately two to four months and would occur simultaneously with the utility relocations
- ∂ Excavation for the basement is expected to last three months
- ∂ Construction of the structure is expected to last eight months

Construction days and hours will be in accordance with the City of Palo Alto's Noise Ordinance, as follows:

- ∂ Monday through Friday: 8:00 A.M. to 6:00 P.M.
- ∂ Saturday: 9:00 A.M. to 6:00 P.M.
- ∂ Sundays and Holidays: Construction prohibited.

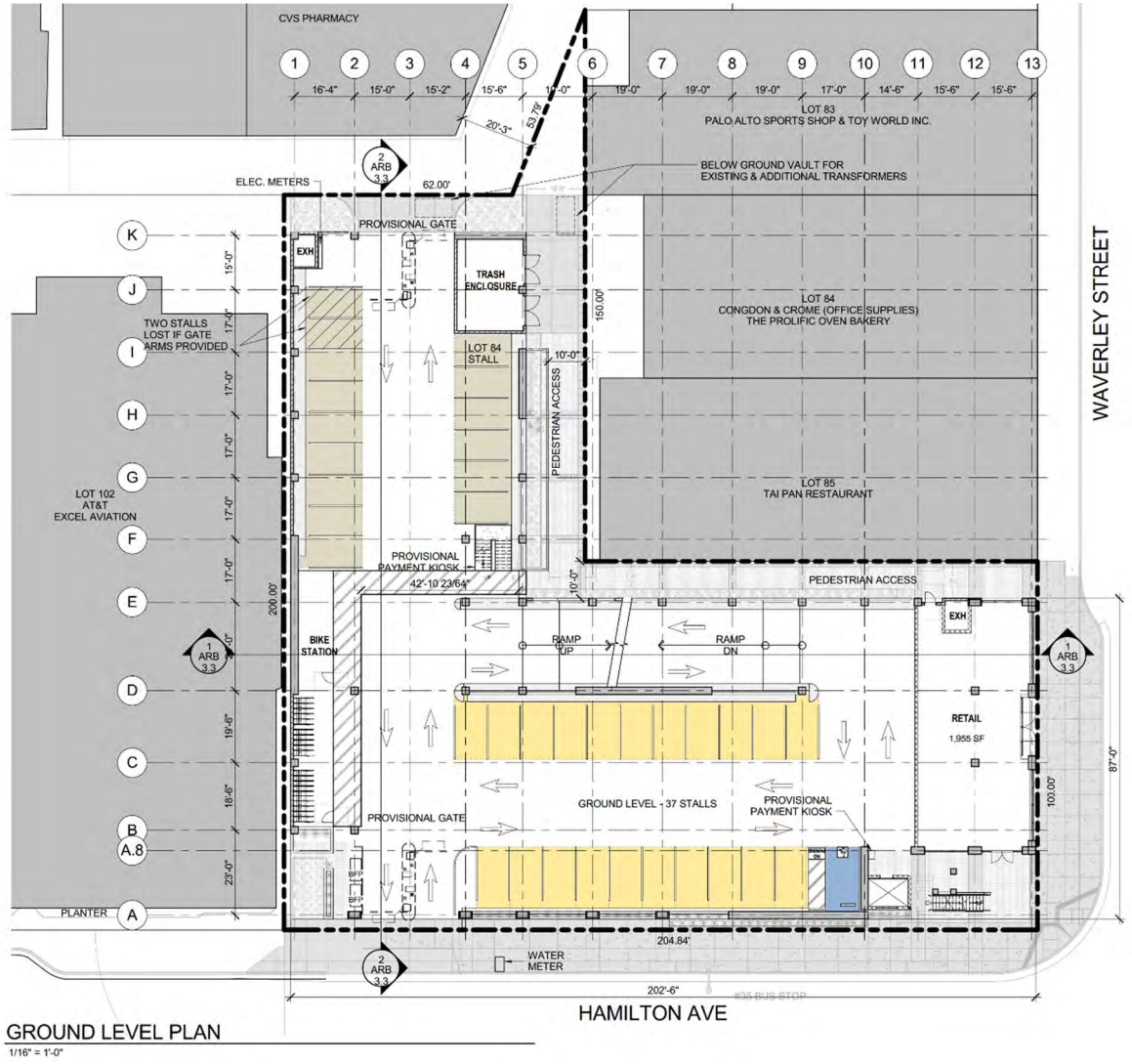
2.5.8.2 Staging and Storage Area

There is limited space for staging and storage on the project site. Staging and storage would be kept on the parcel and rotated as construction progresses. The intent of keeping staging and storage onsite is to maintain sidewalk access to pedestrians.

The project construction would result in sidewalk closures during some stages of construction to facilitate the sidewalk improvements and bulb outs. Pedestrians would be diverted across the street during sidewalk improvement work. Road narrowing and possible temporary road restrictions may be required while street improvement work is carried out.

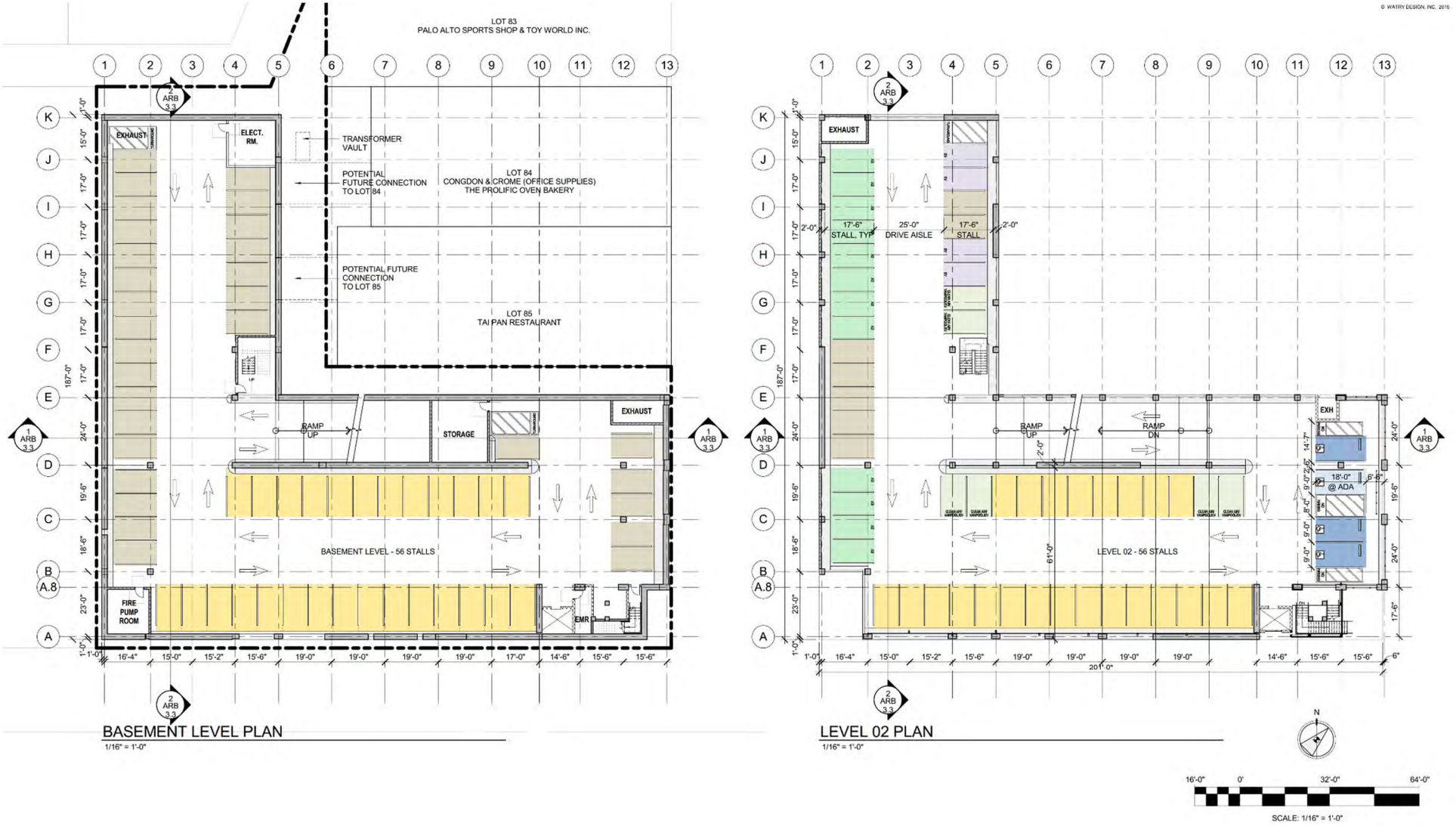
[9] Gordon Knowles, Senior Project Manager, Watry Design, email correspondence with Lyne-Marie Bouvet, Environmental Planner, WSP, April 12, 2018.

Figure 6: Parking Structure Ground Level



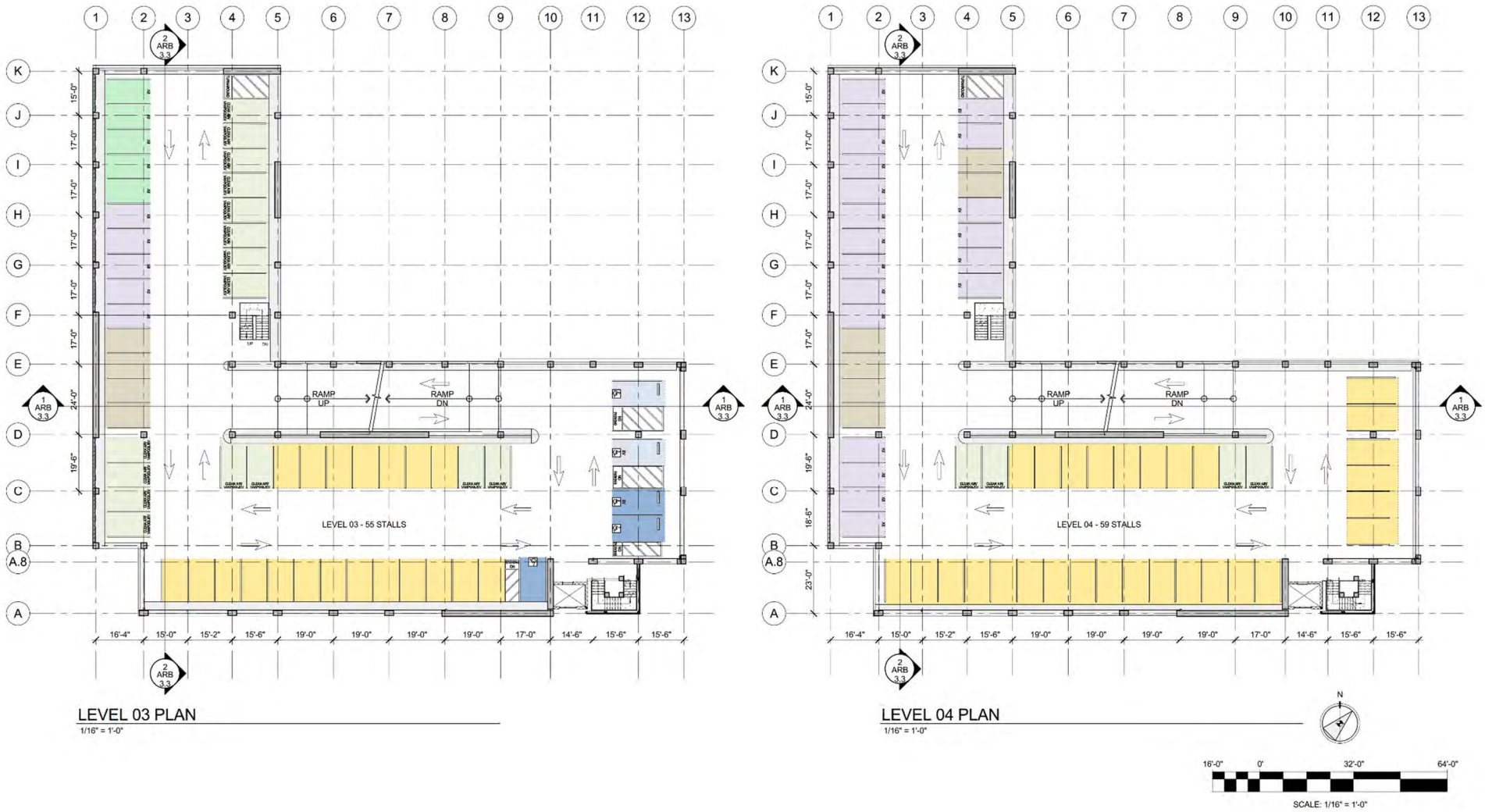
Source: Watry Design, May 2018.

Figure 7: Basement Level Floor Plan and Level 02 Floor Plan



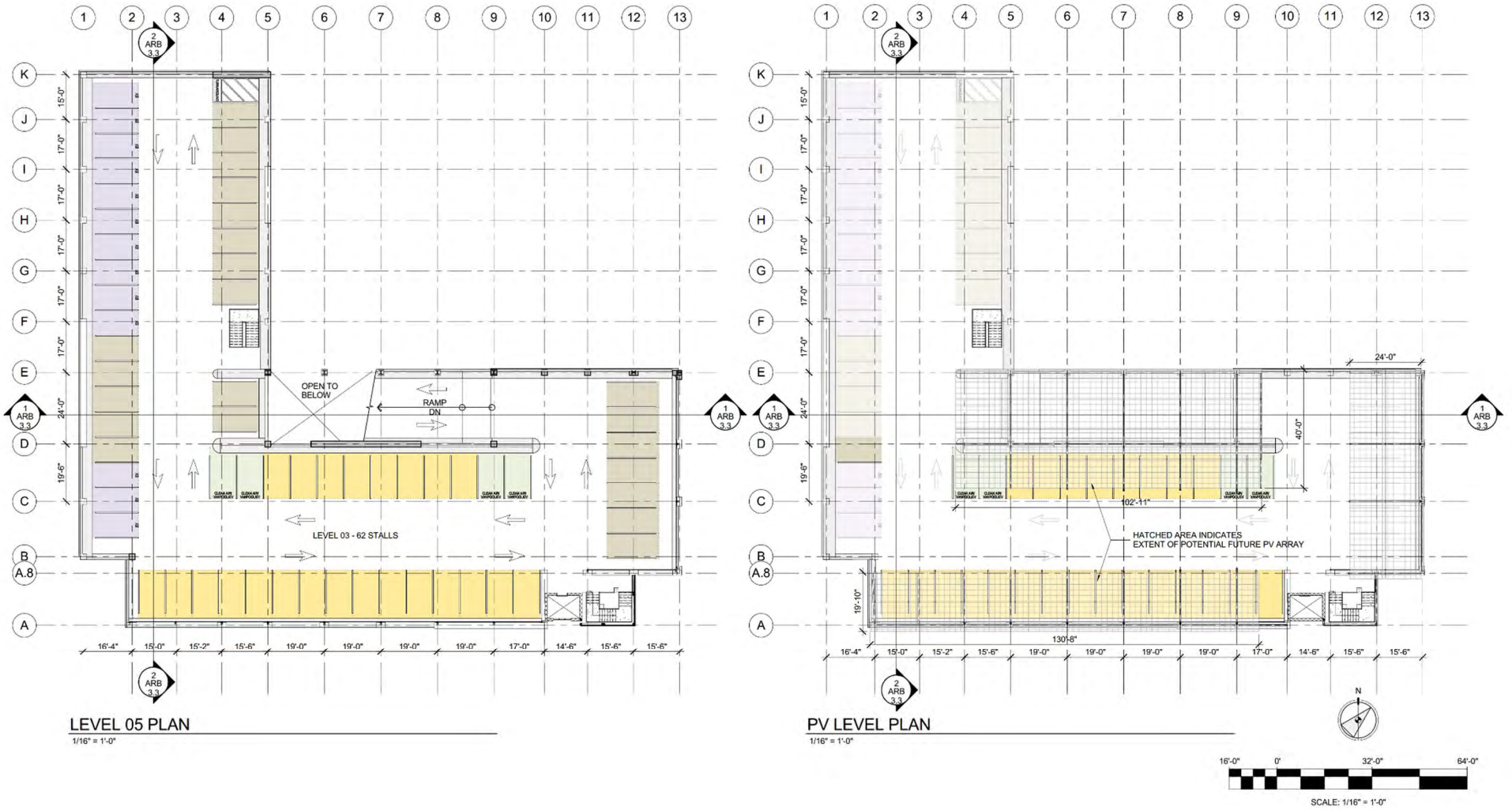
Source: Watry Design, May 2018.

Figure 8: Level 03 and Level 04 Floor Plan



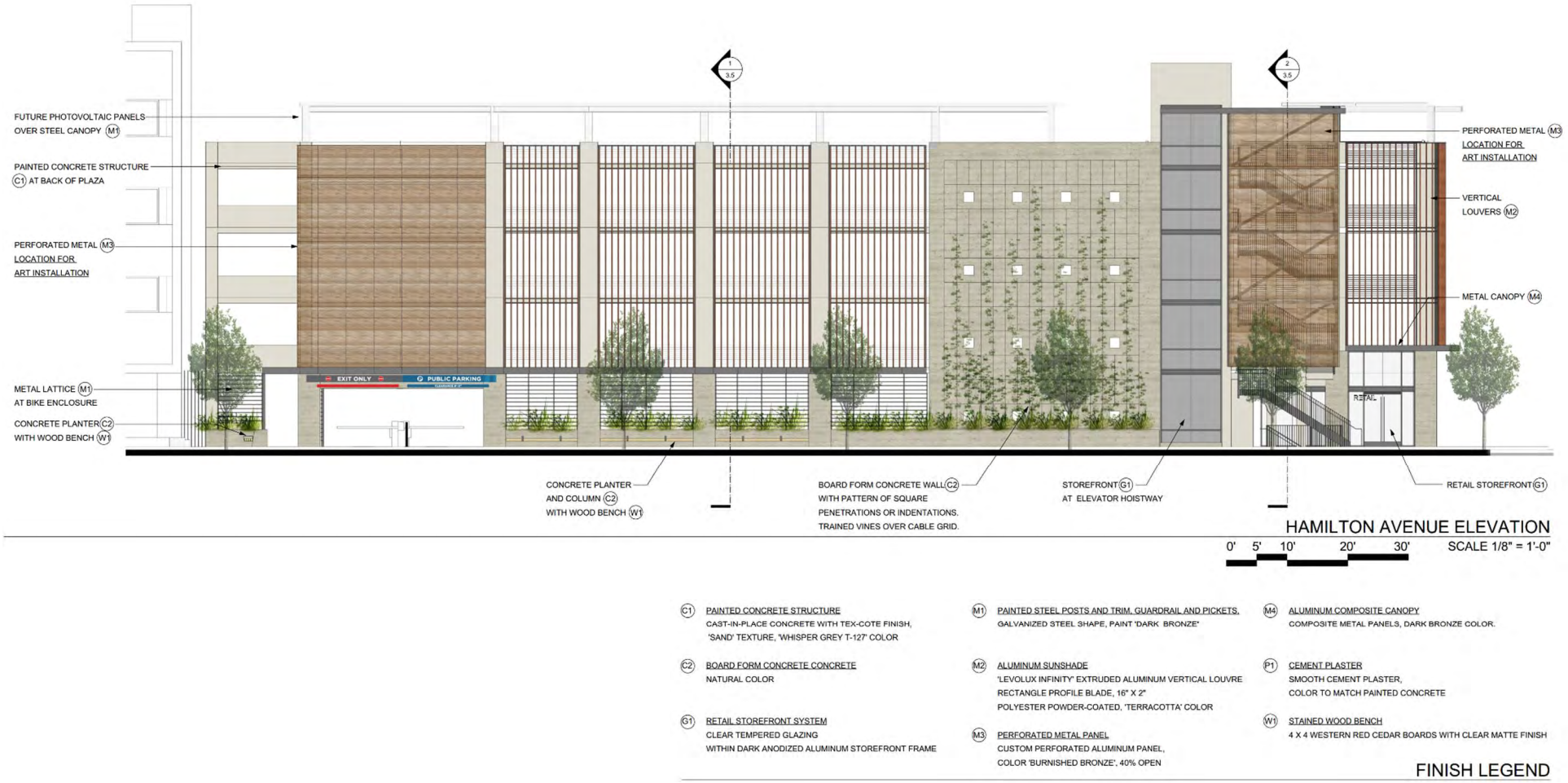
Source: Watry Design, May 2018.

Figure 9: Level 05 and PV Level Plan



Source: Watry Design, May 2018.

Figure 10: Elevations of Proposed Parking Structure from Hamilton Avenue



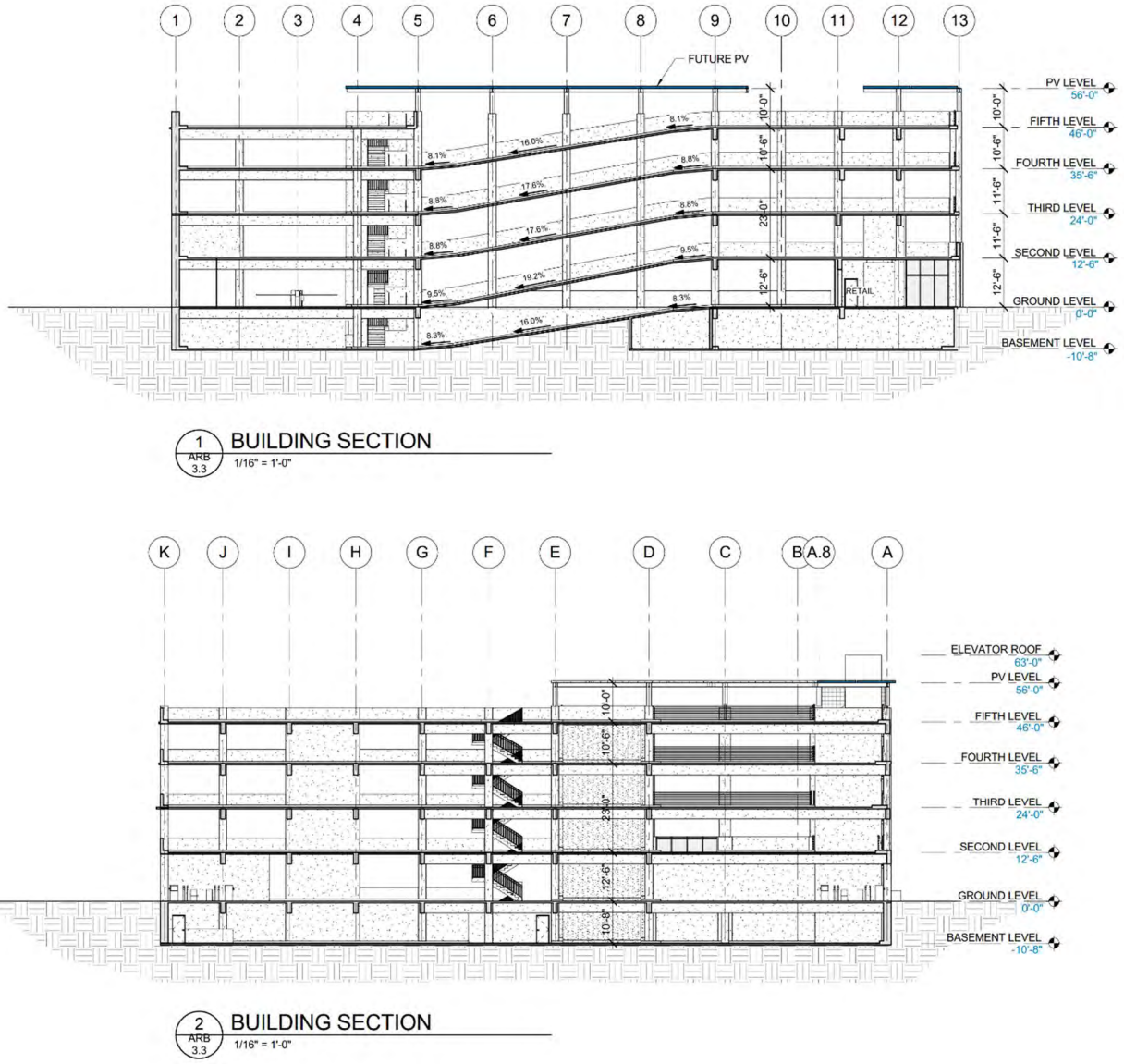
Source: Watry Design, May 2018.

Figure 11: Elevations of Proposed Parking Structure from Waverley Street



Source: Watry Design, May 2018.

Figure 12: Sections of Proposed Parking Structure



Source: Watry Design, May 2018.

Figure 13: Proposed Renderings for Proposed Parking Structure



AERIAL VIEW AT WAVERLEY WITHOUT PHOTOVOLTAIC PANELS 4



AERIAL VIEW AT CORNER WITHOUT PHOTOVOLTAIC PANELS 2



AERIAL VIEW AT WAVERLEY 2



AERIAL VIEW AT CORNER OF HAMILTON AND WAVERLEY 1

Source: Watry Design, May 2018.

2.6 Alternatives Analysis

According to CEQA Guidelines Section 15126.6, an EIR must describe a reasonable range of alternatives to a proposed project that could feasibly attain most of the basic project objectives, and would avoid or substantially lessen any of the proposed project's effects. Additionally, a "No-Project" alternative must be analyzed. An EIR must evaluate the comparative merits of the alternatives. *Section 4.4 Alternatives* presents the analysis of the different environmental effects of the alternatives.

Four alternatives are evaluated for the proposed project in this EIR and are list below:

1. Alternative 1: No Project
2. Alternative 2: Parking Garage with 5 above grade levels, one basement level and without retail.
3. Alternative 3: Parking Garage with 5 above grade levels and retail, no basement.
4. Alternative 4: Parking Garage with 4 above grade levels, one basement level and retail.

Because Alternative 1 does not include the construction of the proposed project, the following discussion presents only the characteristics of Alternatives 2, 3 and 4 (build alternatives).

Common characteristics between the proposed project and the three build alternatives are the following:

- The public parking garage footprint would cover 23,490 square feet.
- A 585-square-foot bicycle parking area would provide approximately 50 bicycle parking spaces and allow space for bike trailers and child carriers. The bike store will be located near the entrance to the structure along Hamilton Avenue.
- 25 percent of the parking spaces would be designed with infrastructure to allow the future installation of charging stations for electric vehicles, per the City of Palo Alto Green Building Code[10]. Initially, 5 percent of the parking spaces would be equipped with a charging station.
- The building structure would be designed to allow for future installation of photovoltaic panels and mounted supporting structure above the uppermost parking deck.
- The building would be designed with a 3 feet setback on the south side of the building along Hamilton Avenue.
- The trash enclosure would provide space for trash and recycling from two adjacent properties on Waverley Street (Lots 84 and 85), and for the retail area (for Alternatives 3 and 4).
- Material and architecture style would not vary between alternatives.

[10] City of Palo Alto, Ordinance No. 5263, Amendment to the California Green Building Standards Code, August 4, 2014, https://www.cityofpaloalto.org/civicax/filebank/documents/43818, accessed on November 6, 2017.

Variations in characteristics of the alternatives are the following:

- Alternative 2 would remove the retail facility. Overall stall count would be increased to 332. The bike parking area would remain the same as the proposed project as well as the trash enclosure, the circulation area, and the utilities area. Alternative 2 would include a basement level and five above-ground parking levels. 332 vehicle parking spaces would be offered which is a gain of seven parking spaces compared to the proposed project.
- Alternative 3 would remove the basement level while maintaining the five above grade parking levels. Overall stall count would be reduced to approximately 267, which is a loss of 58 vehicle parking spaces in comparison to the proposed project. Alternative 3 would include a provision of a retail space of approximately 3,040 square feet and increase allocation of parking spaces dedicated to the retail to 12 stalls. The increase in retail is enabled due to the removal of the ramps leading to the basement. The bike parking area would remain the same as the proposed project as well as the trash enclosure, and the utilities area.
- Alternative 4 reduces the number of above grade levels to four while maintaining a basement level. The building height would be reduced to 39'-4" to top of rail and 50'-6" to top of elevator penthouse. Overall stall count would be reduced to 266, which is a loss of 59 vehicle parking spaces in comparison to the proposed project. Provision of retail and supporting parking would remain the same as the proposed project as well as the bike parking area, the trash enclosure, and utilities area.

A summary of the main characteristics for each alternative is presented in the table below.

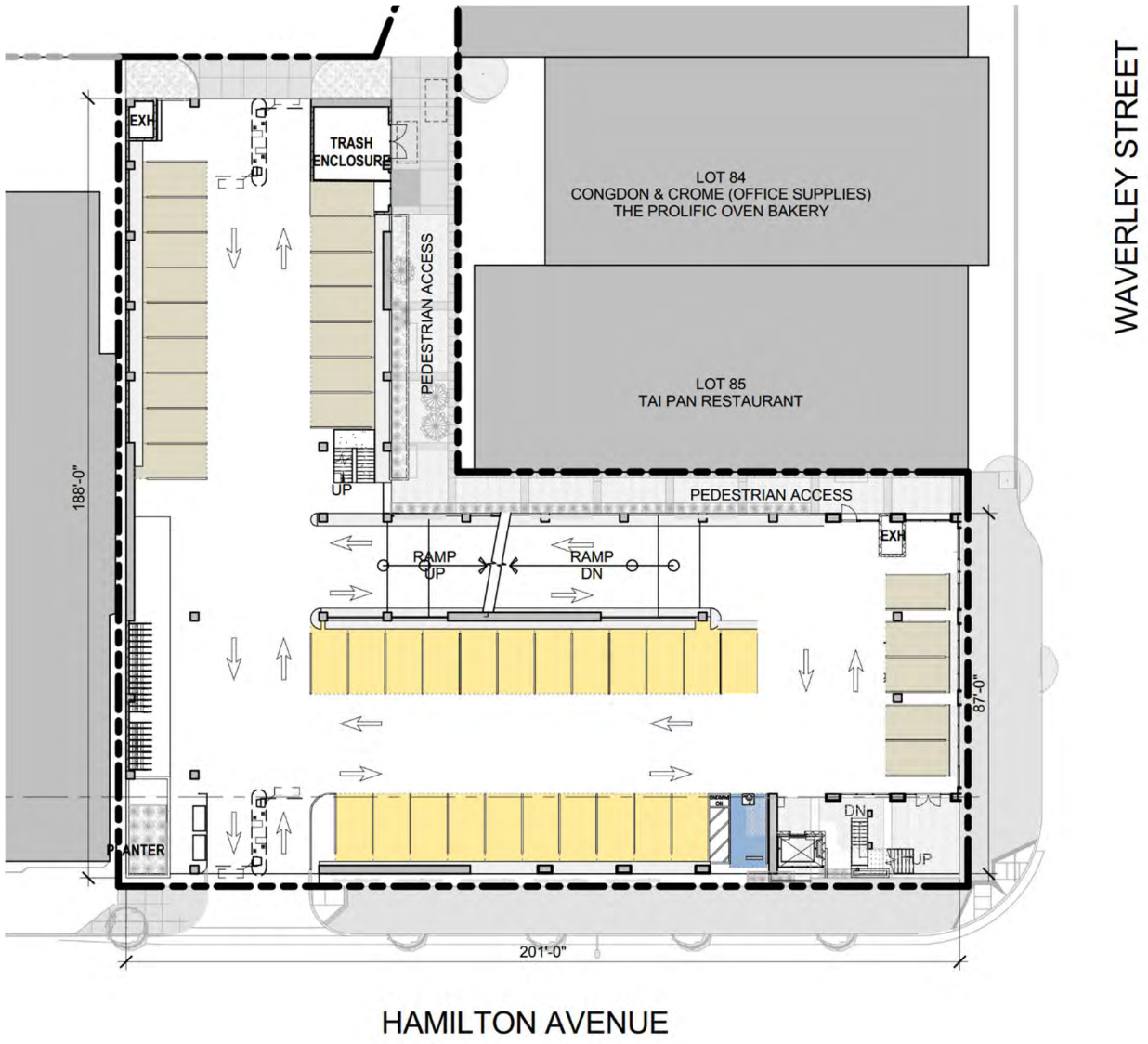
Table 4: Summary of the Characteristics of the Alternatives Compared to the Proposed Project

	Unit	*Proposed project*	*Alternative 1*	*Alternative 2*	*Alternative 3*	*Alternative 4*
Parking	Square feet	128,369	n/a	132,761	104,984	105,696
Commercial	Square feet	1,955	n/a	0	3,040	2,188
Circulation	Square feet	4,644	n/a	4,644	3,870	3,870
Utilities	Square feet	1,679	n/a	1,679	1,569	1,679
Bike area	Square feet	585	n/a	585	585	585
Trash	Square feet	441	n/a	292	441	441
Total area	**Square feet**	**136,595**	**n/a**	**139,961**	**114,048**	**114,459**
Parking stalls	Unit	325	86	332	267	266
Bike parking	Unit	50	0	50	50	50
Height to rail	Feet	49'-10"	n/a	49'-10"	49'-10"	39'-4"
Height to Solar Panel	Feet	56'-0"		56'-0"	56'-0"	45'-6"
Height to penthouse	Feet	63'-0"	n/a	63'-0"	63'-0"	50'-6"
Number of above-ground parking level	Levels	5	n/a	5	5	4
Number of below-ground parking levels	Levels	1	n/a	1	0	1

Source: Watry Design, May 2018.

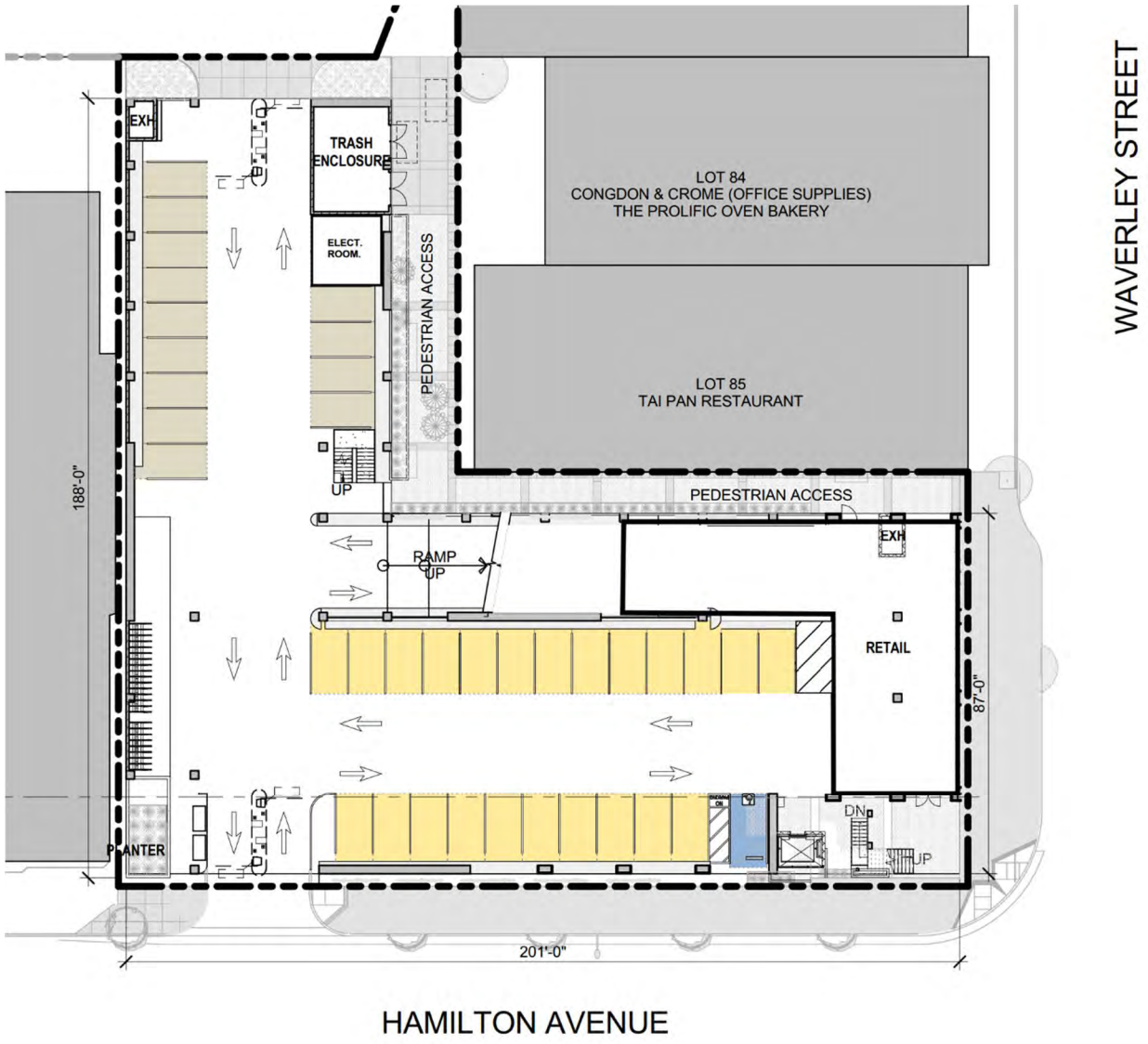
Figure 14 to Figure 18, pp. 45-49, show the differences between the three build alternatives.

Figure 14: Alternative 2 – Floor Plan



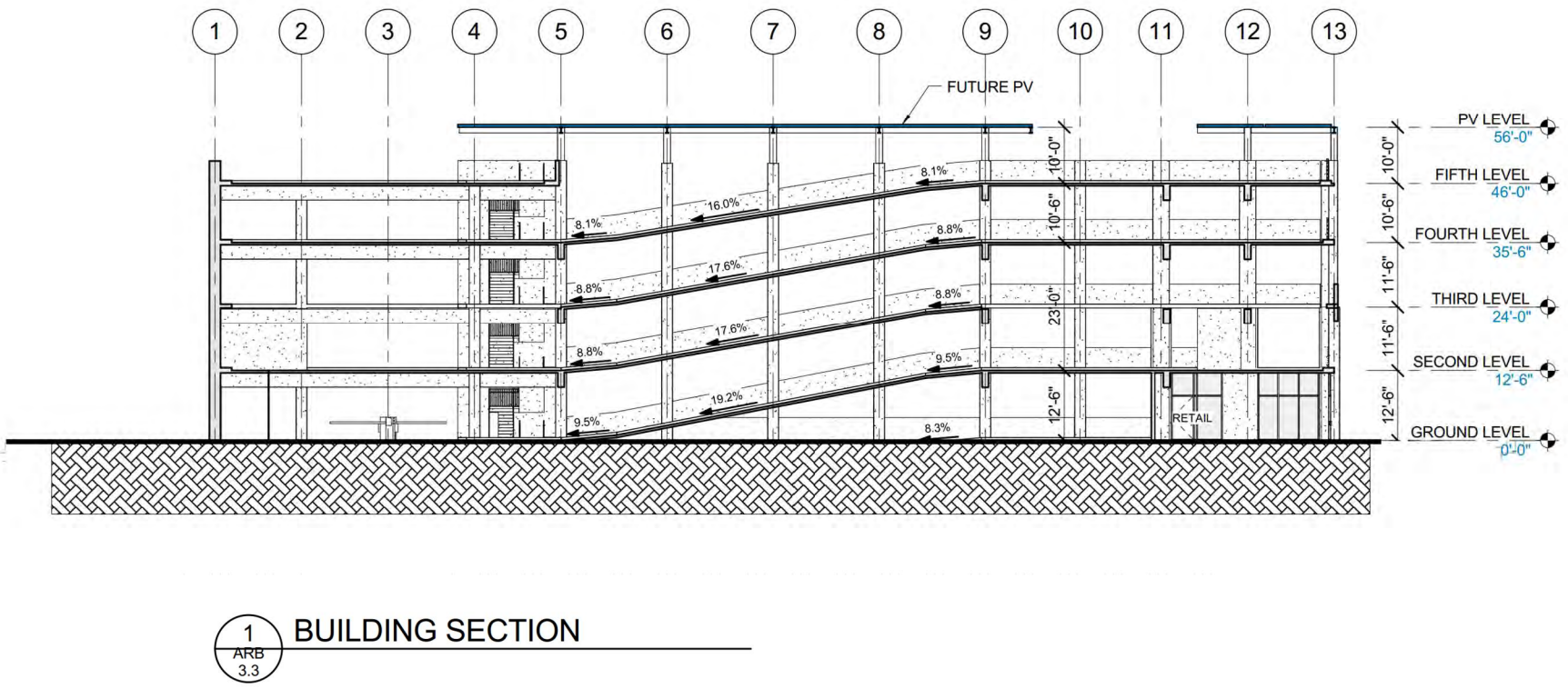
Source: Watry Design, March 2018

Figure 15: Alternative 3 – Floor Plan



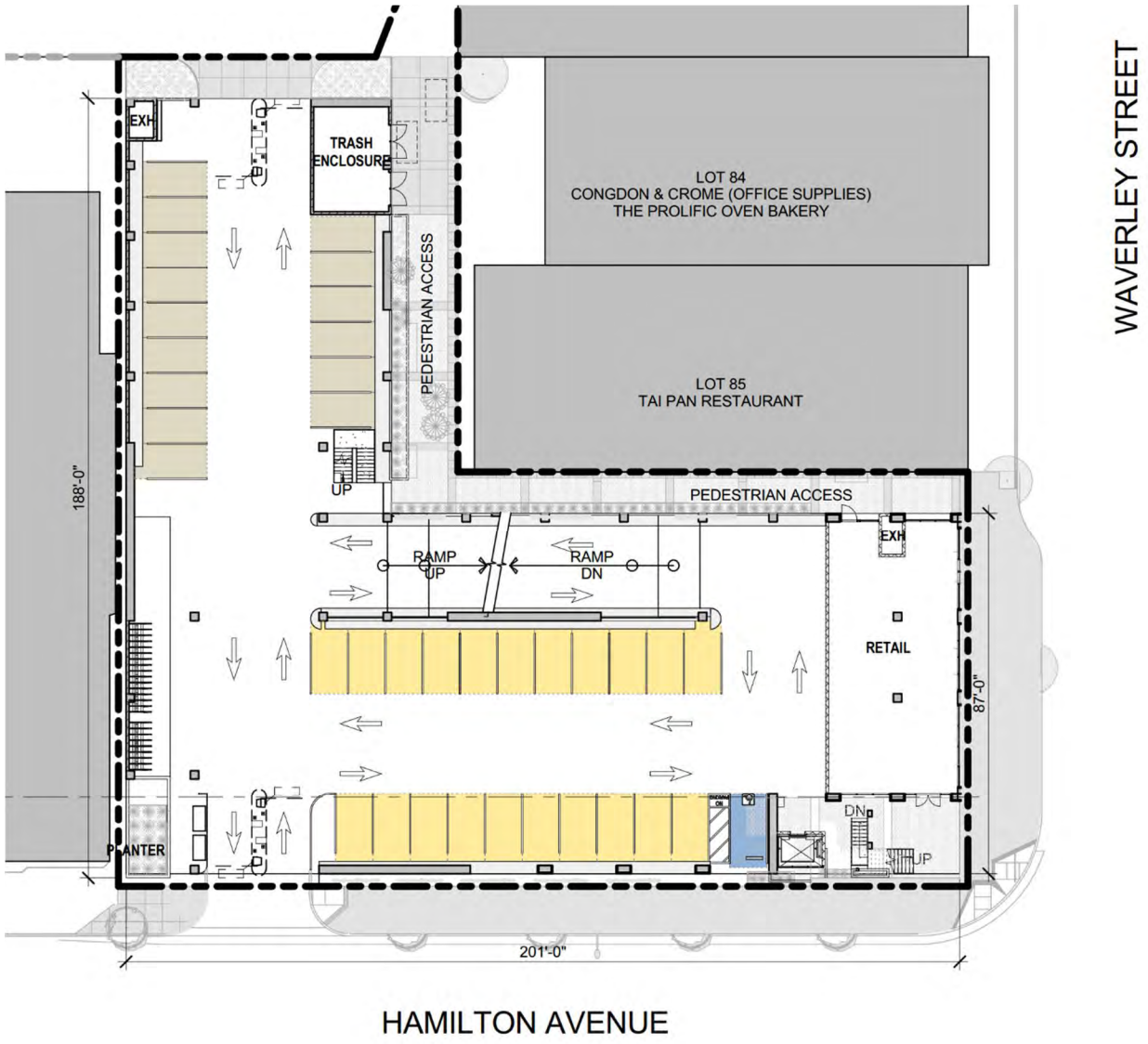
Source: Watry Design, March 2018.

Figure 16: Alternative 3 – Cross Section



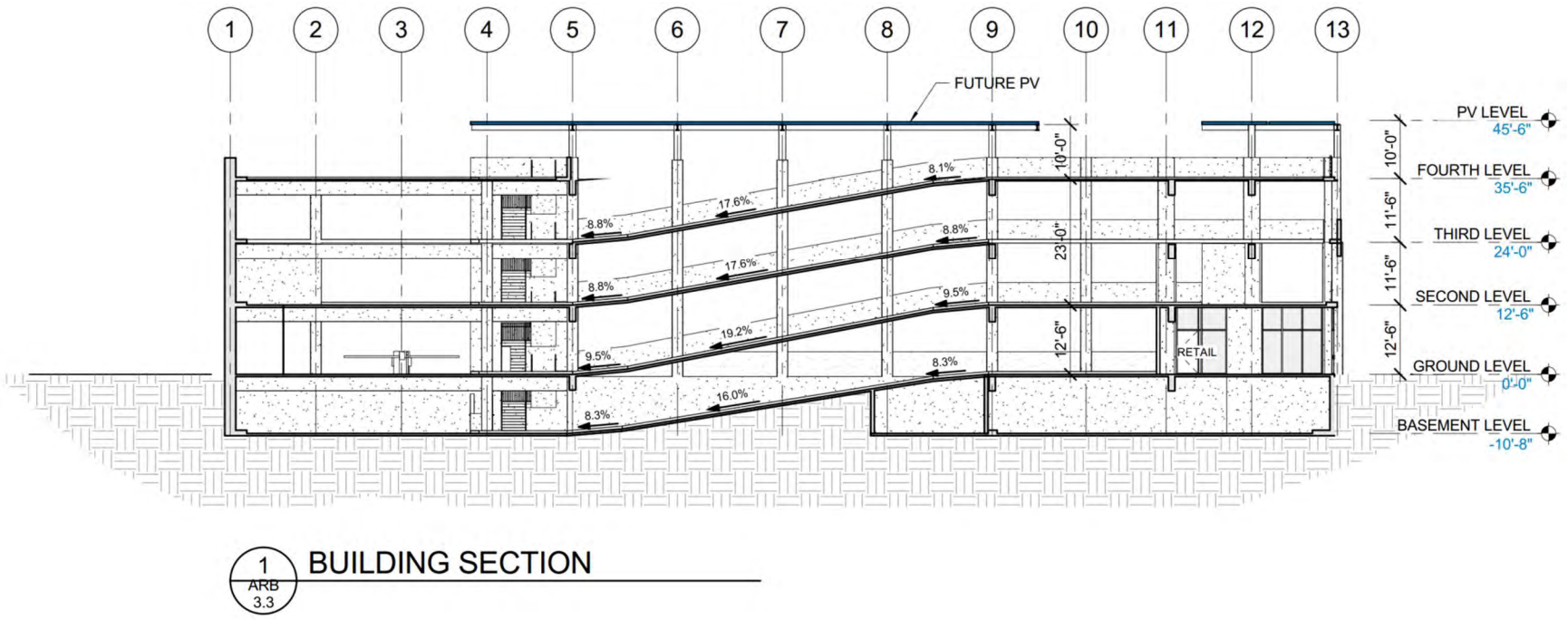
Source: Watry Design, March 2018.

Figure 17: Alternative 4 – Floor Plan



Source: Watry Design, March 2018.

Figure 18: Alternative 4 – Cross Section



Source: Watry Design, March 2018.

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CHAPTER 3.0 ENVIRONMENTAL SETTING, IMPACTS, AND MITIGATION

The following environmental analyses provide information relative to 14 environmental topics as they pertain to the proposed 375 Hamilton Avenue Parking Structure (proposed project). Each section of this chapter describes the topic's applicable regulatory setting including the CEQA significance determination thresholds, as well as the existing conditions, and analysis of impacts including the criteria and methodology used to determine the impact level of significance. If applicable, the analysis will identify standard requirements that will be implemented with the project, mitigation measures, and the significance of impacts after mitigation has been applied.

3.1 Aesthetics

This section summarizes the potential visual and aesthetic impacts that would result from construction and operation of the project. The analysis includes a review of existing conditions, a summary of applicable policies and regulations related to aesthetics, and where feasible, mitigation measures to reduce potential impacts.

This section was prepared with reference to the Initial Study/Environmental Assessment prepared for this project, the City of Palo Alto's Comprehensive Plan, Municipal Code, and Downtown Urban Design Guide, City of Palo Alto's Planning & Community Environment and Public Works Departments, Architectural Drawings and Design Concepts prepared by Watry Design, and the CEQA Environmental Checklist, Section I, Aesthetics.

3.1.1 Regulatory Setting

3.1.1.1 State

The CEQA requires each local government entity to regulate activities that have the potential to affect the quality of the environment, including the visual environment. The State of California Office of Planning and Research (OPR) provides guidelines for applying CEQA and evaluating a project's effects related to aesthetics. The Guidelines, found in the California Code of Regulations, Title 14, Chapter 3, provide a systematic approach for evaluating project impacts in the form of an Environmental Checklist. Section I of the Checklist considers the Aesthetic effects of a project undertaking.

3.1.1.2 Local

Comprehensive Plan

The City's Comprehensive Plan Land Use and Community Design Element was updated in 2017 and includes programs and policies to guide the forces behind the physical form of the city[11]. Table 5 lists the programs and policies applicable to the proposed project.

Table 5: Palo Alto Comprehensive Plan Land Use Element Policies Related to Urban Design

Program/Policy	*Guidance*
Policy L-2.9	Preserve ground-floor retail, limit the displacement of existing retail from neighborhood centers and explore opportunities to expand retail.
Policy L-2.12	Encourage new development and redevelopment to incorporate greenery and natural features such as green rooftops, pocket parks, plazas and rain gardens.
Policy L-1.3	Infill development in the urban service area should be compatible with its surroundings and the overall scale and character of the city to ensure a compact, efficient development pattern.
Policy L-3.2	Ensure that new or remodeled structures are compatible with the neighborhood and adjacent structures.
Policy L-4.2	Encourage street frontages that contribute to retail vitality in all Centers. Reinforce street corners in a way that enhances the pedestrian realm or that form corner plazas. Include trees and landscaping.
Policy L-4.3	Ensure all Regional Centers and Multi-Neighborhood Centers provide centrally located gathering spaces that create a sense of identity and encourage economic revitalization. Encourage public amenities such as benches, street trees, kiosks, restrooms and public art.
Policy L-4.5	Maintain and enhance the University Avenue/Downtown area as a major commercial center of the City, with a mix of commercial, civic, cultural, recreational and residential uses. Promote quality design that recognizes the regional and historical importance of the area and reinforces its pedestrian character.
Policy L-4.6	Ensure that University Avenue/Downtown is pedestrian-friendly and supports bicycle use. Use public art, trees, bicycle racks and other amenities to create an environment that is inviting to pedestrians and bicyclists.
Policy L-6.1	Promote high-quality design and site planning that is compatible with surrounding development and public spaces.
Policy L-6.4	In areas of the City having a historic or consistent design character, encourage the design of new development to maintain and support the existing character.
Policy L-6.6	Design buildings to complement streets and public spaces; to promote personal safety, public health and well-being; and to enhance a sense of community safety.

[11] City of Palo Alto. Comprehensive Plan. Our Palo Alto 2030. November 2017, accessed on March 15, 2018. https://www.cityofpaloalto.org/civicax/filebank/documents/62915

Program/Policy	*Guidance*
Program L6.6.1	Modify design standards for mixed use projects to promote a pedestrian-friendly relationship to the street, including elements such as screened parking or underground parking, street-facing windows and entries, and porches, windows, bays and balconies along public ways, and landscaping, and trees along the street. Avoid blank or solid walls at street level.
Policy L-7.5	To reinforce the scale and character of University Avenue/Downtown, promote the preservation of significant historic buildings.
Policy L-9.2	Encourage development that creatively integrates parking into the project, including by locating it behind buildings or underground wherever possible, or by providing for shared use of parking areas. Encourage other alternatives to surface parking lots that minimize the amount of land devoted to parking while still maintaining safe streets, street trees, a vibrant local economy and sufficient parking to meet demand.
Policy L-9.8	Incorporate the goals of the Urban Forest Master Plan, as periodically amended, into the Comprehensive Plan by reference in order to assure that new land uses recognize the many benefits of trees in the urban context and foster a healthy and robust tree canopy throughout the City.
Policy L-9.11	Design public infrastructure, including paving, signs, utility structures, parking garages and parking lots to meet high-quality urban design standards and embrace technological advances. Look for opportunities to use art and artists in the design of public infrastructure. Remove or mitigate elements of existing infrastructure that are unsightly or visually disruptive.
Policy N-7.5	Encourage energy efficient lighting that protects dark skies and promotes energy conservation by minimizing light and glare from development while ensuring public health and safety.

Source: City of Palo Alto. Comprehensive Plan. Our Palo Alto 2030. November 2017.
https://www.cityofpaloalto.org/civicax/filebank/documents/62915 accessed on March 15, 2018.

Comprehensive Plan

The Comprehensive Plan evaluates the aesthetic and visual impacts of increased density and development, as well as the cumulative effects of growth within the City combined with regional growth. The analysis contained in the updated Comprehensive Plan adopted in 2017 is consistent with the approach used for the impact discussions in the August 2017 City of Palo Alto Comprehensive Plan Update Final EIR. The conclusions of the Comprehensive Plan Final EIR determined that with appropriate mitigation and implementation of applicable design guidelines and development standards focused on high-quality design, use compatibility, appropriate scale and character, preservation and protection, and enhancement potential aesthetic impacts would be reduced for all future development. Existing regulations applicable to the proposed project include:

- Palo Alto Municipal Code, Chapter 18.76. Architectural Review Findings
- Palo Alto Municipal Code, Title 8. Trees Vegetation
- Palo Alto Municipal Code, Title 18. Zoning
- Palo Alto Municipal Code, Chapter 18.23.030, Lighting
- Palo Alto Municipal Code, Chapter 18.23.050, Visual, Screening, and Landscaping

- Palo Alto Municipal Code, Chapter 18.40.130, Landscaping
- South of Forest Avenue Coordinated Area Plan
- Downtown Urban Design Guide
- Public Art and Private Development Ordinance

Downtown Urban Design Guide

The goal of the Downtown Urban Design Guide is to enhance the quality of the downtown area and provide a guide for future development and/or redevelopment. The proposed project is located within the Retail Core Element of the downtown area as identified in the Design Guide. The focus of the Retail Core Element is to reinforce University Avenue as the retail core of the Downtown by concentrating ground floor retail uses along University Avenue and allowing for pedestrian friendly uses. The guiding principles of the Design Guide are shown in Table 6.

Table 6: Downtown Urban Design Guiding Principles

Principle	*Guidance*
An Active Place	Downtown Palo Alto will be an exciting, active and friendly place both during the day and night.
A Place to Live and Work	Downtown will be an inviting, clean and safe place for people to live, shop, work and recreate.
A Good Neighbor	The residential character of neighborhoods adjacent to the downtown will be protected from encroachment by commercial downtown uses.
A Sense of Local History	Preservation of historical structures and places will be emphasized. Future projects can draw from historic buildings and social characteristics of Palo Alto for inspiration.
The Pedestrian Environment	The existing building pattern of storefronts or structural bays create the human scale of Downtown. Attractive and easily recognizable pedestrian and auto entries welcome people. Creatively designed, clean and functional alleys, sidewalks and streets further enhance the pedestrian scale and experience.
An Outdoor Place	Advantage will be taken of the temperate climate by providing outdoor amenities, such as attractive street furniture, news racks, benches, lighting, restrooms, for beautiful, useful open spaces, preferably designed by artists, architects, and landscape architects. These design elements encourage a stronger sense of community. Abundant and well maintained landscaping will provide Downtown with rich, urban greenspace and outdoor spaces.
Easy Access and Orientation	A clearly defined and developed "city center," downtown "edges" and landmarks will provide a sense of orientation for the Downtown. Varied transportation methods including automobiles, bicycles, buses and trains will increase ease of access. Adequate and useable parking will be available where it is most needed.
Cultural Amenities	Downtown will celebrate and emphasize cultural amenities which contribute to the richness and diversity of Palo Alto. We will also recognize and nurture the cultural relationship and influence of Stanford University by reestablishing and promoting the historic physical connection of Downtown to the University.

Source: City of Palo Alto, Downtown Urban Design Guiding Principles, https://www.cityofpaloalto.org/civicax/filebank/documents/61487, accessed on January 28, 2018.

3.1.2 Existing Conditions

The site for the proposed project is located on the western corner of Hamilton Avenue and Waverley Street within the City's downtown area. The site is approximately 29,164 square feet and is currently occupied by a surface parking lot accommodating 86 vehicles and a public restroom located on the corner of Waverley Street and Hamilton Avenue. The site adjoins an alley (Lane 21), which is used by occupants of adjacent structures to access the backs of their buildings and to pick up trash and recycling. The site is surrounded by a mix of downtown retail, office, commercial, and multi-story parking lots (similar to the proposed project). Just southwest of the site is the four-story AT&T Central Office. Northwest of the site are several one- and two-story retail buildings. Southeast of the site across Hamilton Avenue is the two-story U.S. Post Office. The All Saints Episcopal Church is located northeast of the project site, across Waverley Street.

The site is more than 150-feet from any residentially zoned properties so increased zoning restrictions do not apply. The site is located in a district zoned PF (Public Facilities). The zoning district has a 50-foot height limit. There is a required special setback of 7 feet along the Hamilton Avenue property line. The site hosts eight trees on the property, including one protected Coast Live Oak, and three street trees. There are no scenic routes or resources located in the project area and the site is not within a designated historic district. However, there are several historic buildings within the Downtown area and in proximity to the site, including the nearby U.S. Post Office (across Hamilton Avenue), which is a Category 1 historic building listed on the National Register of Historic Places (NRHP), 526 Waverley (Category 3 historic building), and 510 Waverley Street (Category 2 historic building).

3.1.3 Impact Analysis

3.1.3.1 Significance Criteria

The following significance criteria are based on Appendix G of the CEQA Guidelines (14 CCR 15000 et seq.) and are used by the City to determine the significance of impacts. Impacts would be significant if the proposed project would:

a. Have a substantial adverse effect on a scenic vista.
b. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway.
c. Substantially degrade the existing visual character or quality of the site and its surroundings.
d. Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.

3.1.3.2 Impacts and Measures

The proposed project would replace a surface parking lot with a parking structure. The structure would have five levels above ground, one basement level, and provide 1,955 square feet of retail space. The main entry to the structure would be from Hamilton Avenue. Access would also be provided from Lane 21; however, this would generally be an exit only with entry only if the Hamilton Avenue access is restricted.

The parking structure would be 49 feet-10 inches to the top of rail on the fifth deck with an elevator penthouse continuing to 63 feet. The height of the structure would be lower than the adjacent 75-foot tall AT&T building to the west. The structure would include infrastructure to support the future installation of photovoltaic panels, which would be mounted above the top (fifth) level parking deck. The structure would maximize the amount of parking while allowing for retail storefronts, with the primary intent of consistency with the context of the downtown area. The parking structure would have a zero setback, extending to the property line, at the Hamilton Avenue and Waverley Street edges, as well as the interior side lot line shared with the AT&T building. The ground-floor retail space would open to the Waverley Street frontage. Along the northern property line, the parking structure would be set back 10 feet from the property line to allow natural ventilation into the structure and light to the existing windows at 560 Waverley Street. The 10-foot setback would also provide for a pedestrian walkway leading to a secondary stair, as well as a visual connection to the All Saints Episcopal Church. The main stair and elevator for the structure would be located at the corner of Waverley Street and Hamilton Avenue and would include a pedestrian court with access to the ground floor retail. Construction of the parking structure would require removal of the existing onsite trees and one street tree.

a) Have a substantial adverse effect on a scenic vista?

Map L-4 of the adopted Comprehensive Plan identifies scenic vistas, including major view corridors, scenic routes, and gateways within the City of Palo Alto[12]. There are no scenic vistas within the project area; therefore, construction and operation of the proposed project would have ***no impact*** on scenic vistas.

NO IMPACT

b) Have a substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

There are no state scenic highways within the project area; therefore, construction and operation of the proposed project would not damage any resources within a state scenic highway. There would be ***no impact*** and no mitigation is required.

NO IMPACT

c) Substantially degrade the existing visual character or quality of the site and its surroundings?

Construction

During construction, the site would be fenced primarily for safety purposes. The fence limits visibility of the site and construction activities. Large-scale equipment used to hoist and/or excavate materials would be visible to surrounding areas and passersby. Signage for safety and informational purposes would also be visible. Best Management Practices (BMPs) such as good housekeeping activities (street sweeping, material

[12] City of Palo Alto, Comprehensive Plan, Map L-4, https://www.cityofpaloalto.org/civicax/filebank/documents/62915 accessed on April 16, 2018.

organization, etc.), stockpile management, and careful placement of construction staging areas would be implemented to prevent injuries, minimize vandalism, and reduce visibility of equipment and materials. Use of BMPs would help minimize the visual clutter associated with construction.

Operations

The proposed structure would be constructed primarily of poured-in-place concrete. The two-story base would be sandblasted concrete in a natural color, similar to the All Saints Episcopal Church, with subtle details used to define the corners and architecture of the building. Metal flat bars painted a dark bronze color would be used to infill the first-floor openings and create screening for pedestrians. The metalwork would continue the rails and landings of the stair to mimic the metalwork found in the Post Office and other Spanish Revival buildings. The structure would have substantially open sides to provide natural ventilation and a façade scaled to the local streets. Metal fins wrapping the upper stories serve to create a body to the building while allowing for the required garage ventilation. The color of the fins would mimic the terracotta colors found in the downtown area. The proposed architectural design of the structure is intended to reflect elements and materials of the Post Office and surrounding buildings and to be consistent with the character of the downtown area. In addition, two elements of the structure have the potential for integration of public art. The two locations are the shear wall element facing Hamilton Avenue and the perforation pattern to the stair cladding at the corner of Hamilton Avenue and Waverley Street. The corner of the parking structure would feature a small plaza area with decorative pavers similar to what would also be used in the pedestrian access alleyway. The alleyway would also be visually enhanced with decorative paving, plantings, benches and decorative lighting to encourage pedestrian use of these spaces. To invite people to explore and use the alley, decorative pervious pavement, generous benches, landscaped storm water treatment planters, and pedestrian-scaled lighting would be used. The storm water treatment planters would be at-grade and even with the walkway. The planters would feature a combination of low growing knee-high foliage and flowering plants to provide year-round interest, as well as functionality for cleansing storm water directed from the parking structure roof.

The parking structure landscaping would be designed to enhance the pedestrian environment of downtown Palo Alto and encourage positive social interaction. Walkways would be replaced and widened to provide more room for circulation along the proposed retail space on Waverley Street and for enjoying the built-in benches and raised planters on Hamilton Avenue. The proposed project would include replacement of the one removed street tree (a Maidenhair tree) with four new Maidenhair (*Ginkgo biloba)* trees and three new Coast Live Oak (*Quercus Agrfolia*) trees. Two new Maidenhair will be planted on Waverley Street. The Maidenhair trees reflect the existing species of the preserved street trees on Waverley Street. The new trees will be placed in 4-feet by 7-feet tree wells to help ensure healthy growth. The preserved Maidenhair trees, noted as located on Waverley Street within the public right-of-way and 30 feet of the project site, would require tree protection measures, despite their good health and structural stability, to assure their survival during construction. The project would also include the addition of vines trained to grow on the parking structure façade, which would help to visually soften the new structure. In all options, landscaping

will be installed along Hamilton Avenue, Waverley Street, and along the pedestrian walkway in the form of planted areas, green walls, and new street trees. The intent of the landscaping is to enhance the pedestrian environment and provide vegetative relief in lieu of replacement trees.

A shade/shadow study was conducted to evaluate the daylight effects of the parking structure on adjacent uses[13]. Four time points for the solstices (June 21st and December 21st) and equinoxes (March 21st and September 21st) were selected to demonstrate the effects of the structure's shade/shadow pattern on surrounding uses. The parking structure was modeled both with and without the photovoltaic panels. The structure would have limited effects on surrounding buildings, particularly the Post Office and church, during most of the daylight timeframes. The longest shadows are thrown in the early morning (9:00 A.M.) and late afternoon (4:00 P.M.). During those timeframes, the parking structure, as well as adjacent buildings and the Post Office throw shadows onto structures immediately next to them, as well as across adjacent streets. The longest shade/shadow effect is at 4:00 P.M. in December when the parking structure, as well as other tall buildings in the area, create shade/shadow effects on surrounding uses. The proposed parking structure would have similar effects on adjacent uses as other existing buildings/structures within the localized area. The effects would be consistent with what currently occurs during certain times of the day and months of the year.

The proposed project would be consistent with local policies calling for the preservation of local history, creation of a downtown core, enhancement of the pedestrian environment, incorporation of landscaping to create an aesthetically-pleasing street network, and minimization of the negative effects of parking lots through opportunities for open space and outdoor amenities.

The parking structure would be similar in scale and character to existing uses and surrounding structures within the downtown area. Compatible building materials and landscaping would be used to match the character, scale, and aesthetics of the surrounding area and adjacent buildings. While the proposed parking structure would be a more intense use of the site than what currently exists, the new structure would incorporate elements to enhance the aesthetics of the site and create a more vibrant and pedestrian-oriented use. Therefore, the project would not substantially degrade the existing visual character or quality of the site and its surroundings and impacts would be ***less than significant***. No mitigation measures are required.

LESS THAN SIGNIFICANT IMPACT

d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

Construction

During construction, some lighting would be needed to illuminate work areas and for security purposes. The lighting would be directed downward and focused on work site activities and areas. Some signage,

[13] Watry Design, Downtown Parking Garage, Solar Study, October 12, 2017. Appendix I

equipment, and staged construction materials may have the potential to reflect light during certain times of the day; however, the effects would be limited and temporary in duration.

Operations

During daytime operations, the new structure would have limited lighting consisting primarily of internal lights for safety purposes and illumination of retail spaces. Retail spaces, parked vehicles, light-colored concrete and street furniture, as well as other reflective elements could have the potential to create glare during daytime operations; however, these effects would be limited and temporary in duration. During nighttime operations, the structure would be lit from the inside, as well as along pedestrian walkways and public sidewalks. A perforated metal scrim wrapping around the main corner stair would create a lantern element from the internal lighting and would serve as a wayfinding device. Lighting along walkways and sidewalks would include pedestrian-scaled light fixtures that would be directed downward to illuminate a safe travel path.

Impacts associated with construction lighting and potential glare would be short-term and limited in their effects. Lighting associated with operation of the proposed structure would be similar in character and nature to the surrounding retail, commercial, and business uses.

Therefore, the project would not create a new source of substantial light or glare which could adversely affect day or nighttime views in the area and impacts under this criterion would be ***less than significant***.

LESS THAN SIGNIFICANT IMPACT

3.2 Air Quality

This section describes the regulatory setting, existing conditions, and impact analysis for the affected environment due to implementation of the project as it relates to the air quality of the site. It also details the impact reduction that may be achieved through mitigation measures designed for this project.

Sources of information that were used in the preparation of this section include the Initial Study for this project (May 2017), the Air Quality Report (November 2017), the Traffic Assessment Study (October 2017), the Bay Area Air Quality Management District (BAAQMD)'s *CEQA Air Quality Guidelines* (May 2017), BAAQMD's *Federal and State Ambient Air Quality Standards* (January 2017), BAAQMD's *Clean Air Plan* (April 2017), the California Air Resources Board (CARB)'s *Air Designation Maps* (October 2017) and the City of Palo Alto's *Comprehensive Plan Update Air Quality Draft Existing Conditions Report* (August 2014).

3.2.1 Regulatory Setting

3.2.1.1 Criteria Pollutants

Federal

The federal Clean Air Act (CAA), promulgated in 1963 and amended several times thereafter, including the 1990 CAA amendments, establishes the framework for modern air pollution control. The act directed EPA to establish National Ambient Air Quality Standards (NAAQS) for the six criteria pollutants: ozone, CO, lead (Pb), nitrogen dioxide (NO_2), sulfur dioxide (SO_2), and particulate matter (PM), which consists of PM that measures 10 microns in diameter or less (PM_{10}) and PM that measures 2.5 microns in diameter or less ($PM_{2.5}$). The NAAQS are divided into primary and secondary standards. The former are set to protect human health with an adequate margin of safety, and the latter are set to protect environmental values, such as plant and animal life. The CAA requires states to submit a State Implementation Plan (SIP) for areas that are in nonattainment status with respect to the federal standards. The SIP, which is reviewed and approved by EPA, must demonstrate how the federal standards would be achieved. Failing to submit a plan or secure approval can lead to denial of federal funding and permits. In cases where the SIP is submitted by the state but fails to demonstrate achievement of the standards, EPA is directed to prepare a federal implementation plan.

State

In 1988, the state legislature adopted the California Clean Air Act (CCAA), which established a statewide air pollution control program. CCAA requires all air districts in the state to endeavor to meet the CAAQS by the earliest practical date. Unlike the federal CAA, the CCAA does not set precise attainment deadlines. Instead, the CCAA establishes increasingly stringent requirements for areas that require more time to achieve the standards. CAAQS are generally more stringent than the NAAQS and incorporate additional standards for sulfate particles, hydrogen sulfide, and vinyl chloride, and visibility-reducing particles. CARB and local air districts bear the responsibility for achieving California's air quality standards, which are to be achieved through district-level air quality management plans that are incorporated into the SIP. In California, EPA

has delegated authority to prepare SIPs to CARB, which, in turn, has delegated that authority to individual air districts. Traditionally, CARB has established state air quality standards and maintained oversight authority with respect to air quality planning, developing programs for reducing emissions from motor vehicles, developing air emissions inventories, collecting air quality and meteorological data, and approving SIPs. The CCAA adds substantially to the authority and responsibilities of air districts. The CCAA designates air districts as lead air quality planning agencies, requires air districts to prepare air quality plans, and grants air districts the authority to implement transportation control measures. The CCAA also emphasizes the control of "indirect and area-wide sources" of air pollutant emissions. The CCAA gives local air pollution control districts explicit authority to regulate indirect sources of air pollution and establish traffic control measures (TCMs).

Clean Air Plan

The project area is located within the San Francisco Bay Area Air Basin (SFBAAB), within the San Francisco County boundary lines. BAAQMD has local air quality jurisdiction over projects in Santa Clara County. The air quality district is responsible for establishing and enforcing local air quality rules and regulations that address the requirements of federal and state air quality laws and ensuring that the NAAQS and CAAQS are met. The Bay Area 2017 Clean Air Plan (CAP) provides a plan to improve Bay Area air quality and protect public health as well as the climate. The legal impetus for the CAP was to update the most recent ozone plan, the 2010 Clean Air Plan, to comply with state air quality planning requirements as codified in the California Health & Safety Code.

In 2006, the EPA tightened the national 24-hour $PM_{2.5}$ standard regarding short-term exposure to fine particulate matter from 65 µg/m3 (micro-grams per cubic meter) to 35 µg/m3. Based on air quality monitoring data for years 2006-2008 showing that the region was slightly above the standard, U.S. EPA designated the Bay Area as non-attainment for the 24-hour national standard in December 2008. This triggered the requirement for the Bay Area to prepare a SIP submittal to demonstrate how the region would attain the standard. However, data for both the 2008-2010 and the 2009-2011 cycles showed that Bay Area $PM_{2.5}$ levels currently meet the standard. On October 29, 2012, the EPA issued a proposed rule-making to determine that the Bay Area now attains the 24-hour $PM_{2.5}$ national standard. Based on this, the Bay Area is required to prepare an abbreviated SIP submittal which includes an emission inventory for primary (directly-emitted) $PM_{2.5}$, as well as precursor pollutants that contribute to formation of secondary PM in the atmosphere; and amendments to the BAAQMD New Source Review to address $PM_{2.5}$ (adopted December 2012).[14] However, key SIP requirements to demonstrate how a region will achieve the standard (i.e. the requirement to develop a plan to attain the standard) will be suspended as long as monitoring data continues to show that the Bay Area attains the standard.

[14] PM is made up of particles that are emitted directly, such as soot and fugitive dust, as well as secondary particles that are formed in the atmosphere from chemical reactions involving precursor pollutants such as oxides of nitrogen (NO_x), sulfur oxides (SO_x), VOC, and ammonia (NH_3).

In addition to preparing the "abbreviated" SIP submittal, the BAAQMD has prepared a report entitled "Understanding Particulate Matter: Protecting Public Health in the San Francisco Bay Area" (2012). The report will help to guide the BAAQMD's on-going efforts to analyze and reduce PM in the Bay Area to better protect public health. The Bay Area will continue to be designated as "non-attainment" for the national 24-hour $PM_{2.5}$ standard until the Air District elects to submit a "redesignation request" and a "maintenance plan" to the EPA, and the EPA approves the proposed redesignation.

3.2.1.2 Toxic Air Contaminants

Toxic air contaminants (TAC) are a class of pollutants that includes hundreds of individual airborne chemical species hazardous to human health. Many TACs are commonly present in urban environments. Reducing emissions of TACs and population exposure to these pollutants is a key priority for the Air District.

Local community risk and hazard impacts are associated with TACs and $PM_{2.5}$ because emissions of these pollutants can have significant health impacts at the local level. These thresholds from BAAQMD's 2017 *CEQA Air Quality Guidelines* are intended to apply to projects that would site new permitted or non-permitted sources in proximity to receptors and for projects that would site new sensitive receptors in proximity to permitted or non-permitted sources of TAC or $PM_{2.5}$ emissions. Therefore, analysis for both scenarios is included; however, impacts would only be considered significant under CEQA if there is:

- ∂ Non-compliance with a qualified risk reduction plan; or
- ∂ An excess cancer risk level of more than 10 in one million, or a non-cancer (i.e., chronic or acute) hazard index greater than 1.0 would be a cumulatively considerable contribution; or
- ∂ An incremental increase of greater than 0.3 µg/m3 annual average $PM_{2.5}$ would be a cumulatively considerable contribution.

Table 7 summarizes the quantitative health-based thresholds from BAAQMD's 2017 *CEQA Guidelines.*

Table 7: BAAQMD Air Quality Significance Thresholds: Risk and Hazards

Pollutant	*Operational-Related*
Risk and Hazards for new sources and receptors (Individual Project/Source)	Compliance with Qualified Community Risk Reduction Plan OR Increased cancer risk of > 10.0 in 1 million Increased non-cancer risk of > 1.0 Hazard Index (Chronic or Acute) Ambient $PM_{2.5}$ increase > 0.3 µg/m^3 annual average Zone of Influence: 1,000-foot radius from property line of source or receptor
Risk and Hazards for new sources and receptors (Cumulative Threshold)	Compliance with Qualified Community Risk Reduction Plan OR Cancer: > 100 in 1 million (from all local sources) Non-cancer: > 10.0 Hazard Index (from all local sources) (Chronic) $PM_{2.5:}$ > 0.8 µg/m^3 annual average (from all local sources) Zone of Influence: 1,000-foot radius from property line of source or receptor

Source: BAAQMD CEQA Guidelines, 2017

3.2.1.3 Local Air Quality

Air Quality Management

The project site is located in the BAAQMD's jurisdictional boundary of Santa Clara County. The BAAQMD develops local air quality/pollutant regulations and prepared air quality plans that set goals and measures for achieving attainment status with ambient air quality standards. It also develops emission inventories, collects air monitoring data, and performs dispersion modeling simulations to establish strategies to reduce emissions and improve air quality. Local air regulations and air quality plans include measures to reduce air pollutant emissions from industrial facilities, commercial processes, motor vehicles, and other sources.

The City of Palo Alto has determined that the BAAQMD's significance thresholds in the updated May 2017 BAAQMD CEQA Guidelines for project operations in the Basin are the most appropriate thresholds for use in determining air quality impacts of the proposed project. Table 8 presents the significance thresholds for construction and operational-related criteria air pollutant and precursor emissions being used for the purposes of this analysis. These represent the levels at which a project's individual emissions of criteria air pollutants or precursors would result in a cumulatively considerable contribution to the Basin's existing air quality conditions. For the purposes of this analysis, the proposed project would result in a significant impact if construction or operational emissions would exceed any of the thresholds shown in Table 8 below.[15]

Table 8: BAAQMD Air Quality Thresholds of Significance

	Construction-Related Thresholds	*Operation-Related Thresholds*	
Pollutant/ Precursor	*Average Daily Emissions (pounds per day)*	*Average Daily Emissions (pounds per day)*	*Maximum Annual Emissions (tons per year)*
ROG	54	54	10
NO_X	54	54	10
PM_{10}	82 (exhaust)	82	15
$PM_{2.5}$	54 (exhaust)	54	10

Notes: ROG = reactive organic gases; NO_X = oxides of nitrogen; $PM_{2.5}$ = fine particulate matter with an aerodynamic resistance diameter of 2.5 micrometers or less; PM_{10} = respirable particulate matter with an aerodynamic resistance diameter of 10 micrometers or less.
Source: BAAQMD CEQA Air Quality Guidelines, Table 2-1 - Air Quality CEQA Thresholds of Significance, p.2-3, May 2017.

[15] Note the thresholds for PM10 and PM2.5 apply to construction exhaust emissions only.

In addition, a significant air quality impact would occur if the project design or project construction does not incorporate control measures recommended by the BAAQMD to control emissions during construction[16].

Comprehensive Plan

The City's Natural Environment Element was updated in 2017 and includes programs and policies to guide the forces behind the management of open land and natural resources of the city as well as for the protection of life and property from natural hazards. Table 9 lists the programs and policies applicable to the proposed project.

Table 9: Palo Alto Comprehensive Plan Natural Environment Element Related to Air Quality

Program/Policy	*Guidance*
Program N5.1.3	Implement BAAQMD recommended standards for the design of buildings near heavily traveled roads, in order to minimize exposure to auto-related emissions.
Program N5.1.4	Explore adopting new standards that target the reduction of very fine particulate matter ($PM_{2.5}$), which is associated with increased impacts on health.
Policy N-5.3	Reduce emissions of particulates from, manufacturing, dry cleaning, construction activity, grading, wood burning, landscape maintenance, including leaf blowers and other sources.
Policy N-5.4	All potential sources of odor and/or toxic air contaminants shall be adequately buffered, or mechanically or otherwise mitigated to avoid odor and toxic impacts that violate relevant human health standards.

Source: City of Palo Alto, Our Palo Alto 2030, Natural Environment Element, http://www.paloaltocompplan.org/plan-contents/natural-environment-element/ accessed on January 28, 2018.

3.2.2 Existing Conditions

The BAAQMD uses the federal and state ambient air quality standards to identify if they have reached attainment for their jurisdictions. The following table uses data from air quality monitoring to describe the pollutant type and Bay Area attainment status with state and federal standards:

[16] As listed in Table 8-1 of the BAAQMD CEQA Guidelines.

Table 10: BAAQMD Air Quality Monitoring Standards

Pollutant	Average Time	*California Standards* Attainment Status	*National Standards* Attainment Status
Ozone	8 hour	N	N
	1 hour	N	--
Carbon Monoxide	8 hour	A	A
	1 hour	A	A
Nitrogen Dioxide	I hour	A	--
	Annual Arithmetic Mean	--	A
Sulfur Dioxide	24 hour	A	--
	1 hour	A	--
	Annual Arithmetic Mean	--	--
Particulate Matter	Annual Arithmetic Mean	N	--
(PM_{10})	24 hour	N	U
Particulate Matter	Annual Arithmetic Mean	N	U/A
($PM_{2.5}$)	24 hour	--	N
Sulfates	24 hour	A	--
Lead	30 day average	--	A
	Calendar Quarter	--	A
	Rolling Month Average	--	--
Hydrogen Sulfide	1 hour	U	--
Visibility Reducing Particles	8 hour	U	--

A=Attainment N=Nonattainment U=Unclassified (Insufficient data to determine) =N/A

Source: BAAQMD, Air Quality Standard and Attainment Status http://www.baaqmd.gov/research-and-data/air-quality-standards-and-attainment-status#five , accessed on November 6, 2017

The region continues to be designated as non-attainment for both the one-hour and eight-hour state ozone standards as noted previously.

Through its Community Air Risk Evaluation (CARE) program, the Air District compiled estimates of TAC emissions within the Bay Area for all major source categories including oil refineries, power plants, landfills, dry-cleaners, gasoline stations, on-road vehicles, off-road vehicles and equipment, ships and trains. The Air District's cancer-risk weighted emissions inventory, developed based upon California Environmental Protection Agency's (CalEPA's) Office of Environmental Health Hazard Assessment (OEHHA) health risk estimates, shows that a small subset of TACs account for approximately 95 percent of the total cancer risk from air pollutants in the Bay Area, and that diesel PM greatly dominates the cancer risk from TACs. The cancer risk related to diesel PM, which accounts for most of the cancer risk from TACs, has declined substantially over the past 15–20 years as a result of ARB regulations and Air District programs to reduce emissions from diesel engines.

Table 11: Health Effects Associated with Non-Attainment Criteria Pollutants

Pollutant	*Adverse Effects*
Ozone	(1) Short-term exposures: (a) pulmonary function decrements and localized lung edema in humans and animals and (b) risk to public health implied by alterations in pulmonary morphology and host defense in animals; (2) long-term exposures: risk to public health implied by altered connective tissue metabolism and altered pulmonary morphology in animals after long-term exposures and pulmonary function decrements in chronically exposed humans; (3) vegetation damage; and (4) property damage.
Suspended particulate matter (PM_{10})	(1) Excess deaths from short-term and long-term exposures; (2) excess seasonal declines in pulmonary function, especially in children; (3) asthma exacerbation and possibly induction; (4) adverse birth outcomes including low birth weight; (5) increased infant mortality; (6) increased respiratory symptoms in children such as cough and bronchitis; and (7) increased hospitalization for both cardiovascular and respiratory disease (including asthma).[a]
Suspended particulate matter ($PM_{2.5}$)	(1) Excess deaths from short- and long-term exposures; (2) excess seasonal declines in pulmonary function, especially in children; (3) asthma exacerbation and possibly induction; (4) adverse birth outcomes, including low birth weight; (5) increased infant mortality; (6) increased respiratory symptoms in children, such as cough and bronchitis; and (7) increased hospitalization for both cardiovascular and respiratory disease, including asthma.[a]

Note: More detailed discussions on the health effects associated with exposure to suspended particulate matter can be found in the following documents: EPA, Air Quality Criteria for Particulate Matter, October 2004
Source: U.S. EPA, Criteria Air Pollutant, https://www.epa.gov/criteria-air-pollutants accessed on January 28, 2018.

Sensitive Receptors

BAAQMD generally defines a sensitive receptor as a facility or land use that houses or attracts members of the population who are particularly sensitive to the effects of air pollutants, such as children, the elderly, and people with illnesses. The project site is located within a commercial zoned area at the south-west intersection of Hamilton Avenue and Waverley Street. There are no sensitive receptors located adjacent to the project site; however, multi-family residential units are sporadically located within a quarter-mile of the project site.

3.2.3 Impact Analysis

This section describes the assessment method used to determine the impacts of the project and lists thresholds that were used to determine the level of impact.

Assessment of impacts to air quality used such sources as the state and national ambient air quality standards, attainment status and minoring data of the Bay Area, the guiding CEQA criteria for air quality impacts, and aid from the Air Quality Report prepared for this project.

3.2.3.1 Criteria of Significance

The following significance criteria are based on Appendix G of the CEQA Guidelines (14 CCR 15000 et seq.) and are used by the City to determine the significance of impacts. Impacts to would be significant if the proposed project would:

a. Conflict with or obstruct implementation of the applicable air quality plan (such as the Bay Area Clean Air Plan)?
b. Violate an air quality standard or contribute substantially to an existing or projected air quality violation?
c. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?
d. Expose sensitive receptors to substantial pollutant concentrations?
e. Create objectionable odors affecting a substantial number of people?

3.2.3.2 Impact Analysis

a) Would the project conflict with or obstruct implementation of the applicable air quality plan?

The applicable air quality plan is the Bay Area 2017 CAP. The Plan focuses on two closely-related goals: protecting public health and protecting the climate. Consistent with the GHG reduction targets adopted by the State of California, the plan lays the groundwork for a long-term effort to reduce Bay Area GHG emissions 40 percent below 1990 levels by 2030 and 80 percent below 1990 levels by 2050. A project that would not result in significant and unavoidable air quality impacts may be considered consistent with the Bay Area 2017 CAP. The BAAQMD proposed thresholds are included in **Table 8**, p.63, for comparison purposes. As seen in the modeled data in **Table 12,** p. 69, construction emissions would not exceed the proposed thresholds for the proposed project. Therefore, the proposed project would not conflict with or obstruct implementation of the Bay Area 2017 CAP. Impacts would then considered be ***less than significant***. No mitigation is required.

LESS THAN SIGNIFICANT IMPACT

b) Would the project violate any air quality standard or contribute substantially to an existing or projected air quality violation?

The proposed project would result in a significant impact if the estimated construction or operational emissions exceed the BAAQMD thresholds shown in **Table 8,** p.63. The estimated daily project emissions generated during construction and operation of the proposed project are summarized in **Table 12,** p.69, and **Table 13**, p.69. As shown in these tables, emission estimates from the proposed project would not exceed BAAQMD thresholds and impacts will be ***less than significant***. The project would not violate any air

quality standard or contribute significantly to an existing or projected air quality violation. No mitigation is required.

LESS THAN SIGNIFICANT IMPACT

c) Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions that exceed quantitative thresholds for ozone precursors)?

Construction Emission

Construction of the project would generate temporary air pollutant emissions. Emissions associated with the project were estimated using the California Emissions Estimator Model (CalEEMod) version 2016.3.2. Complete CalEEMod results and assumptions can be viewed in Appendix C. These impacts are primarily associated with fugitive dust (PM_{10} and $PM_{2.5}$) and exhaust emissions from heavy construction vehicles.

The proposed project would be required to comply with all BAAQMD rules and regulations regarding construction emission control measures. These include using equipment with Best Available Control Technology (BACT) and using low volatile organic compound (VOC) architectural coatings. Although required, CalEEMod was run without using equipment with BACT and used default VOC architectural coatings. Thus, the modeling results provide a conservative estimate of emissions. In addition, in accordance with Program N5.1.2 identified in the Natural Resources Element of the Comprehensive Plan, the project would implement the BAAQMD's recommended BMPs for construction emissions, which are recommended for all projects. These include BMPs such as watering down the dirt prior to excavation, covering excavated dirt piles on the site and on transportation vehicles, limiting these activities to smaller disturbed areas at a time, limiting the speed at which vehicles coming in and out of the site, and providing wet vacuum street sweepers on adjacent public roads once a day in order to decrease dust in the air.

Construction emissions were estimated using all CalEEMod default assumptions generated from the land use entries for each alternative. Based on the number of parking spaces and the square footage of retail space, CalEEMod provided defaults for construction phasing, off-road equipment, dust from material movement, demolition, trips and VMT, on-road fugitive dust, and architectural coatings. A detailed CalEEMod worksheet that shows all assumptions used for the proposed project is provided after the summary CalEEMod worksheets in Appendix C[17].

[17] WSP USA, Palo Alto Parking Structure 375 Hamilton Avenue Air Quality Technical Memorandum, January 16, 2018. Appendix C.

Table 12: Construction Emissions

	Maximum Daily Emissions (lbs./day)					
Alternative	*ROG*	*NO_X*	*CO*	*PM_{10} (exhaust)*	*$PM_{2.5}$ (exhaust)*	*SO_X*
Proposed Project	4.7	48.3	23.1	20.8	12.3	<0.1
BAAQMD Thresholds	54	54	N/A	82	54	N/A
Threshold Exceeded?	No	No	N/A	No	No	N/A

Note: See Table 2.0 "Peak Daily Construction Emissions-Unmitigated". CalEEMod worksheets in Appendix C.
N/A = not applicable; no BAAQMD threshold for CO or SOX
Source: BAAQMD CEQA Air Quality, May 2017.

Operation

The project would generate minor emissions from the building's equipment operation. However, these emissions would be limited to minor energy use for lighting. Parking lots themselves do not generate vehicle trips; therefore, although more trips would be accessing the site than under the current conditions, it is assumed that these trips are merely being redistributed from other nearby parking options, including nearby residential streets. The nominal emissions from operation of the parking garage are summarized in Table 13. These activities do not exceed the BAAQMD significant thresholds for pollutants of concern. These pollutants include PM_{10}, $PM_{2.5}$, reactive organic gases (ROG) and nitrogen oxides (NO_X), which are precursors to ozone.

Table 13: Operation Emissions

	Maximum Daily Emissions (lbs./day)					
Alternative	*ROG*	*NO_X*	*CO*	*PM_{10} (exhaust)*	*$PM_{2.5}$ (exhaust)*	*SO_X*
Proposed Project	0.3	0.6	1.5	0.3	<0.1	<0.1
BAAQMD Thresholds	54	54	N/A	82	54	N/A
Threshold Exceeded?	No	No	N/A	No	No	N/A

Note: See Table 2.0 "Peak Daily Operational Emissions". CalEEMod worksheets in Appendix C.
N/A = not applicable; no BAAQMD threshold for CO or SOX.
Source: BAAQMD CEQA Air Quality, May 2017.

To ensure safe levels of local carbon monoxide (CO) emissions, CAAQS sets the following thresholds for CO:

- 9.0 ppm (8-hour average)
- 20.0 ppm (1-hour average)

BAAQMD provides a preliminary screening methodology to conservatively determine whether a proposed project would exceed CO thresholds. If the following criteria are met, a project would result in a less than significant impact related to local CO concentrations:

- ∂ Project is consistent with an applicable congestion management program established by the county congestion management agency for designated roads or highways, regional transportation plan, and local congestion management agency plans.
- ∂ The project traffic would not increase traffic volumes at affected intersections to more than 44,000 vehicles per hour.
- ∂ The project traffic would not increase traffic volumes at affected intersections to more than 24,000 vehicles per hour where vertical and/or horizontal mixing is substantially limited (e.g., tunnel, parking garage, bridge underpass, natural or urban street canyon, below-grade roadway).

The proposed project meets all three criteria listed above. *Section 3.12 Transportation and Traffic, p. 147*, indicates that the project is consistent with the County Congestion Management Program. The Transportation Impact Analysis includes figures that show a maximum hourly volume of 1,040 at any of the studied intersections. As a result, the project would have a less than significant impact on local CO concentrations.

Because the project would be in compliance with BAAQMD criteria pollutant thresholds and CAAQS CO thresholds the project would not violate any air quality standards, contribute substantially to an existing or projected air quality violation, or result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions that exceed quantitative thresholds for ozone precursors). Impacts from construction and operation of the proposed project under these criteria would be ***less than significant***. No mitigation is required.

LESS THAN SIGNIFICANT IMPACT

d) Would the project expose sensitive receptors to substantial pollutant concentrations?

The nearest sensitive receptors include a childcare facility about 200 feet from the project site and a surgery center about 600 feet from the project site. Sensitive receptors in the project vicinity will not be exposed to increases in criteria air pollutants as a result of fugitive dust and increased equipment use in the area. These emissions will be short term, and will occur only during the construction phase. All operational and construction emissions are estimated to be below BAAQMD thresholds. Regardless of distance to the project site, BAAQMD CEQA Guidelines state if daily average emissions of construction-related criteria air pollutants or precursors would not exceed any of the thresholds, the project would result in a ***less than significant*** impact to air quality.

LESS THAN SIGNIFICANT IMPACT

e) Would the project create objectionable odors affecting a substantial number of people?

Odors are typically associated with industrial projects involving the use of chemicals, solvents, petroleum products, and other strong-smelling elements used in manufacturing processes, as well. It is not anticipated that the added number of vehicles using the site for parking would create an increase in objectionable odors affecting people in and around the site. Any objectionable odors in the area will be short term, and will occur only during the construction phase. Therefore, there would be ***less than significant*** impacts. No mitigation is required.

LESS THAN SIGNIFICANT IMPACT

3.3 Biological Resources

This section describes the affected environment and regulatory setting for Biological Resources. It also details the impacts that could result from implementation of the project and the reduction that may be achieved through mitigation measures designed for this project.

Key sources of information used in the preparation of this section include the arborist tree survey report[18] and tree survey location map[19], the City of Palo Alto's tree regulation[20], and the California Natural Diversity Database (CNDDB)[21].

3.3.1 Regulatory Setting

3.3.1.1 Federal

Endangered Species Act

The federal Endangered Species Act (ESA) (42 USC 4321 et seq.) and subsequent amendments provide guidance for conserving federally listed species and the ecosystems upon which they depend. Section 7 (Interagency Consultation and Biological Assessments) requires federal agencies to consult with the U.S. Fish and Wildlife Service (USFWS) or the National Marine Fisheries Service (NMFS) as appropriate to ensure that actions they authorize, fund, or carry out are not likely to jeopardize the continued existence of threatened or endangered species or result in the destruction or adverse modification of critical habitat. Section 9 (Prohibited Acts) prohibits the take of any plant, fish, or wildlife species listed under the federal ESA as endangered, unless otherwise authorized by federal regulations.

Migratory Bird Treaty Act

The Migratory Bird Treaty Act (16 USC 703-712) (MBTA) protects selected species of birds that cross international boundaries (i.e. species that occur in more than one country at some point during their annual life cycle). The law applies to the removal of nests, eggs, and feathers. Executive Order 13186 directs each federal agency taking actions that have or may have adverse impacts on migratory bird populations to work with USFWS to develop a memorandum of understanding that will promote the conservation of migratory bird populations. The Migratory Bird Treaty Act and the Bald and Golden Eagle Protection Act prohibit the take of migratory birds (or any part, nest, or eggs of any such bird) and the take and commerce of eagles. EO 13168 requires that any project with federal involvement address impacts of federal actions of migratory birds.

[18] SBCA Tree Consulting, *Palo Alto Downtown Parking Lot D Tree Survey,* May 31, 2017. Appendix D.
[19] SBCA Tree Consulting, *Palo Alto Downtown Parking Lot D Tree Survey, Tree Location Map, May 31, 2017. Appendix D*
[20] City of Palo Alto. *Regulated Trees.* http://www.cityofpaloalto.org/gov/depts/pwd/trees/regulated.asp, accessed on October 30, 2017.
[21] California Department of Fish and Wildlife. *CNDDB Maps and Data*. https://www.wildlife.ca.gov/data/cnddb/maps-and-data, accessed on October 30, 2017.

3.3.1.2 State

California Endangered Species Act

The California Endangered Species Act (CESA) (Sections 2050 to 2085) mandates that State agencies do not approve a project that would jeopardize the continued existence of these species if reasonable and prudent alternatives are available that would avoid a jeopardy finding.

California Fish and Game Code

The California Fish and Game Code (Sections 3503 and 3503.5) protects bird nesting and state that it is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird, except as otherwise provided by the code or any regulation made pursuant thereto.

California Native Plant Protection Act

The California Native Plant Protection Act (Sections 1900 to 1913) requires all state agencies to utilize their authority to carry out programs to conserve endangered and rare native plants. It gives the California Department of Fish and Wildlife (CDFW) the power to designate native plants as endangered or rare and to protect endangered and rare plants from take.

3.3.1.3 Local

City of Palo Alto's Tree Ordinance

The Tree Ordinance is part of Title 8 of the Palo Alto Municipal Code and is regulated and maintained by the Public Works Urban Forestry Section. Removal of protected street trees, designated trees, public trees, and trees under or near utilities, are regulated under the City of Palo Alto's tree ordinance. The City defines its regulated trees by the three following categories:

- **Category 1 – Protected Trees:** All Coast Live Oak (*Quercus agrifolia)* and Valley Oak (*Quercus lobata)* trees that are 11.5-inches or greater in diameter (36-inches in circumference measured at 54-inches above natural grade) and Coast Redwood (*Sequoia sempervirens)* trees that are 18-inches or greater in diameter (57 inches in circumference measured at 54 inches above natural grade) and Heritage Trees, individual trees or any size or species designated as such by the City Council. Property owners may nominate a tree that has distinctive characteristics such as being of great age or size, unique form or other historical significance.
- **Category 2 – Street Trees:** All trees growing within the street right-of-way (publicly-owned), outside of private property. In some cases, property lines lie several feet behind the sidewalks. A permit from the Public Works Department is required prior to any work on or within the dripline of any "street-tree".

- **Category 3 – Designated Trees:** All trees, when associated with a development project, that are specifically designated by the City to be saved and protected on a public or private property which is subject to a discretionary development review. Tree removal is considered a minor change to the existing site plan- and requires review approval from the Planning Division. For example, a tree planted or growing in a commercial zone landscape or parking lot tree.

The purpose of the City of Palo Alto Tree Preservation Ordinance (Palo Alto Municipal Code, Chapter 8.10) is to promote the health, safety, welfare, and quality of property within the city, and the establishment of standards for removal, maintenance, and planting of trees. In establishing these procedures and standards, it is the City's intent to encourage the preservation of trees.

Under the Tree Preservation and Management Ordinance, discretionary development approvals for property containing protected trees will include appropriate conditions providing for the protection of such trees during construction and for maintenance of the trees thereafter. "Protected tree" is defined as any tree of the species Coast Live Oak, Valley Oak (greater than 11.5 inches in diameter), and Coast Redwood (greater than 16 inches in diameter).

No Habitat Conservation Plans, Natural Community Conservation Plans, or any other adopted habitat conservation plans are applicable to this site.

Comprehensive Plan

The City's Natural Environment Element was updated in 2017 and includes programs and policies to guide the forces behind the management of open land and natural resources of the city as well as for the protection of life and property from natural hazards. **Table 14** lists the programs and policies applicable to the proposed project.

Table 14: Palo Alto Comprehensive Plan Natural Environment Element Related to Biological Resources

Program/Policy	*Guidance*
Policy N-1.1	Preserve, protect and enhance public and private open space and ecosystems of Palo Alto from the foothills to the bay lands. Respect the role that natural and landscaped areas within the urbanized part of the city play in a resilient ecological continuum.
Policy N-1.4	Protect special-status species and plant communities, including those listed by State ar federal agencies and recognized organizations from the impacts of development and incompatible activities.
Program N1.4.1	Periodically review CEQA thresholds of significance regarding special status species to identify changes in listed species recommended by professionally recognized scientific experts.

Program/Policy	*Guidance*
Program N2.1	Recognize the importance of the urban forest as a vital part of the city's natural and green infrastructure network that contributes to public health, resiliency, habitat values, appreciation of natural systems and an attractive visual character which must be protected and enhanced.
Program N2.1.1	Explore ways to prevent and ameliorate damage to trees and tree roots by above and below ground infrastructure and buildings.
Policy N-2.2	Use the UFMP, as periodically amended, to guide City decisions related to all elements of Palo Alto's urban forest, from its understory habitat to canopy cover.
Program N-2.2.1	Periodically update the UFMP and Tree Protection Ordinance to ensure policies and regulations set leading standards for tree health practices.
Policy N-2.3	Enhance the ecological resilience of the urban forest by increasing and diversifying native species in the public right-of-way, protecting the health of soils and understory vegetation, encouraging property owners to do the same and discouraging the planting of invasive species.
Policy N-2.4	Protect soils in both urban and natural areas as the foundation of a healthy urban forest. Recognize that healthy soils are necessary to filter air and water, sustain plants and animals and support buildings and infrastructure.
Program N2.4.1	Promote landscape design that optimizes soil volume, porosity, structure and health, as well the location, shape and configuration of soil beds.
Policy N-2.5	Enhance tree health and the appearance of streets and other public spaces through regular maintenance as well as tree and landscape planting and care of the existing canopy.
Policy N-2.9	Minimize removal of, and damage to, trees due to construction-related activities such as trenching, excavation, soil compacting and release of toxins.
Policy N-2.10	Preserve and protect Regulated Trees, such as native oaks and other significant trees, on public and private property, including landscape trees approved as part of a development review process and consider strategies for expanding tree protection in Palo Alto.
Program N2.10.1	Continue to require replacement of trees, including street trees lost to new development.

Source: City of Palo Alto, Our Palo Alto 2030, Natural Environment Element, http://www.paloaltocompplan.org/plan-contents/natural-environment-element/ accessed on January 28, 2018.

3.3.2 Existing Conditions

3.3.2.1 Biological Setting

The project area is in a dense urban area, bounded by paved streets and existing commercial buildings. The entire site is an existing surface parking lot that is paved with asphalt and has existing small areas of landscaping for the trees.

3.3.2.2 Tree Survey

The existing site has one species of tree that is protected by the City of Palo Alto's Tree Ordinance, a Coast Live Oak (*Quercus agrifolia*). It is located in one of the landscaping areas of the project site.

Six non-protected trees located on the existing site include the species of Canary Island Pine, Maidenhair (*Ginkgo biloba)*, Holly Oak (*Quercus ilex*), and Shiny Xylosma (*Xylosma congestum*). Three street trees of the species Maidenhair lie about 30-feet from the project site on the sidewalks bounding the site.

3.3.2.3 Sensitive Species

Based on a CNDDB dataset search for sensitive species within a 1-mile radius of the project site, the following species were identified:

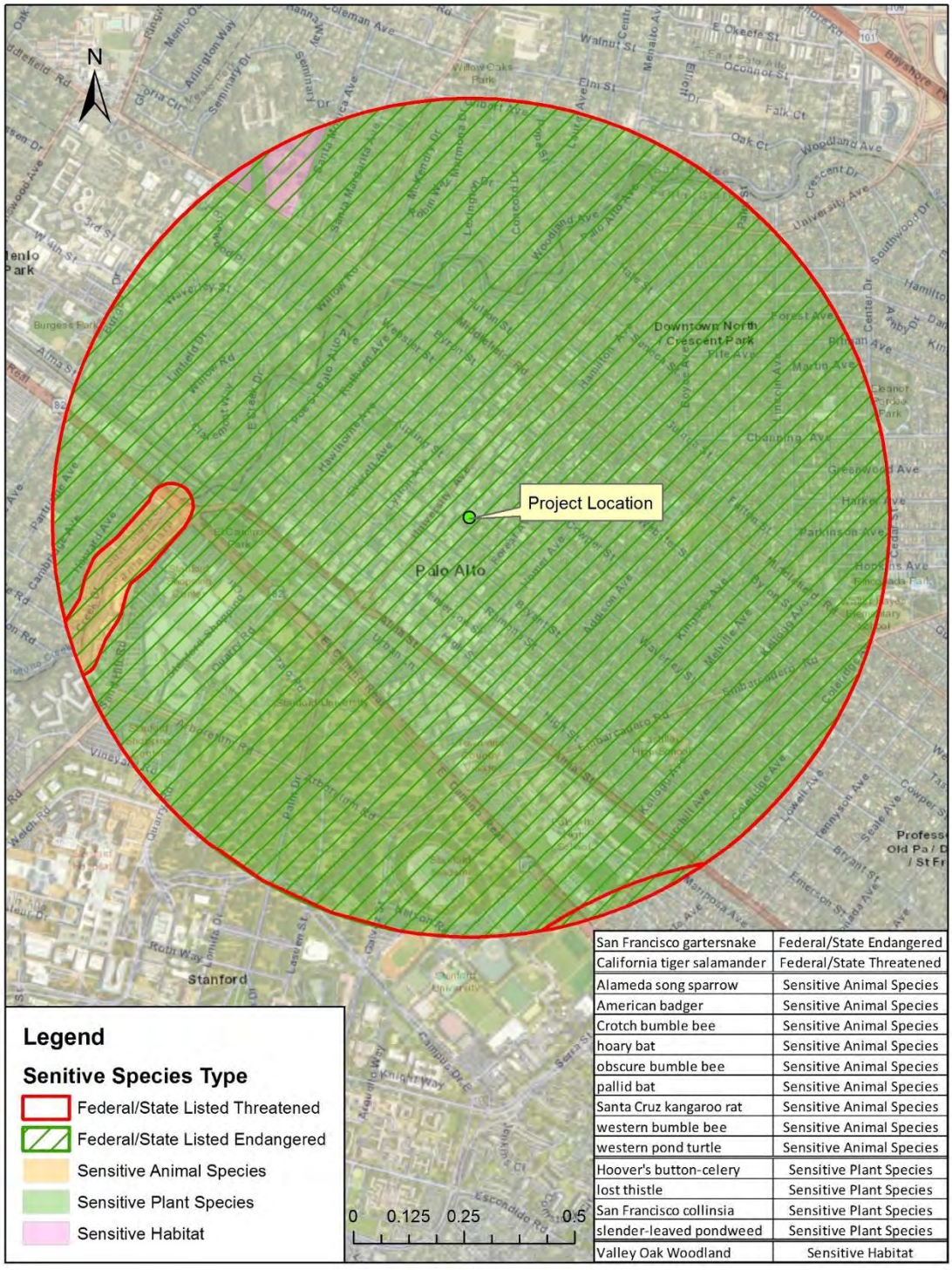
Table 15: List of Sensitives Species in a 1-mile Radius of the Project Site

Common Name	*Scientific Name*	*Federal List*	*State List*	*Sensitive Species Type*
San Francisco Garter snake	*Thamnophis sirtalis tetrataenia*	Endangered	Endangered	Animal
California Tiger Salamander	*Ambystoma californiense*	Threatened	Threatened	Animal
Alameda Song Sparrow	*Melospiza melodia pusillula*	None	None	Animal
American Badger	*Taxidea taxus*	None	None	Animal
Crotch Bumble Bee	*Bombus crotchii*	None	None	Animal
Hoary Bat	*Lasiurus cinereus*	None	None	Animal
Obscure Bumble Bee	*Bombus caliginosus*	None	None	Animal
Pallid Bat	*Antrozous pallidus*	None	None	Animal
Santa Cruz Kangaroo Rat	*Dipodomys venustus*	None	None	Animal
Western Bumble Bee	*Bombus occidentalis*	None	None	Animal
Western Pond Turtle	*Emys marmorata*	None	None	Animal
Hoover's Button-Celery	*Eryngium aristulatum var. hooveri*	None	None	Plant
Lost Thistle	*Cirsium praeteriens*	None	None	Plant
San Francisco Collinsia	*Collinsia multicolor*	None	None	Plant
Slender-Leaved Pondweed	*Stuckenia filiformis ssp. alpina*	None	None	Plant

Source: California Natural Diversity Database (CNDDB), October 2017.

The Valley Oak Woodland sensitive habitat also exists within a 1-mile radius.

Figure 19: Sensitive Species in a 1-Mile Radius around Project Site



San Francisco gartersnake	Federal/State Endangered
California tiger salamander	Federal/State Threatened
Alameda song sparrow	Sensitive Animal Species
American badger	Sensitive Animal Species
Crotch bumble bee	Sensitive Animal Species
hoary bat	Sensitive Animal Species
obscure bumble bee	Sensitive Animal Species
pallid bat	Sensitive Animal Species
Santa Cruz kangaroo rat	Sensitive Animal Species
western bumble bee	Sensitive Animal Species
western pond turtle	Sensitive Animal Species
Hoover's button-celery	Sensitive Plant Species
lost thistle	Sensitive Plant Species
San Francisco collinsia	Sensitive Plant Species
slender-leaved pondweed	Sensitive Plant Species
Valley Oak Woodland	Sensitive Habitat

Source: California Natural Diversity Database (CNDDB), October 2017 and map produced by WSP USA, 2017

3.3.3 Impact Analysis

3.3.3.1 Significance Criteria

The following significance criteria are based on Appendix G of the CEQA Guidelines (14 CCR 15000 et seq.) and are used by the City to determine the significance of impacts. Impacts to would be significant if the proposed project would:

a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?
b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife Service?
c. Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?
d. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?
e. Conflict with any local policies or ordinances protecting biological resources, such as tree preservation policy or ordinance?
f. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved, local, regional, or State habitat conservation plan?

According to the City's CEQA thresholds, a significant impact would occur if the project would conflict with the City's Tree Preservation Ordinance.

3.3.3.2 Impacts and Measures

a) Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

The project site is located in an urbanized area of Palo Alto and is currently developed with a surface parking lot and landscaping. The project site does not include riparian habitat, wetlands or streams or other sensitive natural communities identified in local or regional plans, policies, and regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service.

A search of the California Natural Diversity Database, maintained by the CDFW, as well as the official species list from the USFWS yielded a list of threatened, endangered, proposed and candidate species, and critical

habitat that may occur within the general vicinity of the proposed project.[22,23] A total of 15 species were evaluated for their potential to occur in the project area and are listed in **Table 15,** p.76. It was determined that the project site does not provide habitat for any of these listed plant or animal species nor is there designated critical habitat located in the project vicinity.

Habitats for candidate, sensitive, special-status species, or other species of concern that exist within one-mile of the project site include the Valley Oak Woodland and any urban areas where these sensitive species have adapted to survive. The project area is disturbed and is being used as a parking lot. As a result, the proposed project site does not have the habitat supporting these species and the proposed project would not modify existing habitat that supports candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service. Therefore, there would be ***less than significant*** impacts. No mitigation is required.

LESS THAN SIGNIFICANT IMPACT

b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife Service?

Since the project site is completely urbanized, there are no riparian habitats within the project area that would be impacted. Therefore, there would be ***no impact*** on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations. No mitigation is required.

NO IMPACT

c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

Wetlands are areas that are periodically or permanently covered with groundwater and support vegetation adapted to life in saturated soils. There are no records of wetlands or waters according to the National Wetland Inventory for the project area. Therefore, there would be ***no impact*** on federally protected wetlands as defined by Section 404 of the Clean Water Act. No mitigation is required.

NO IMPACT

[22] California Department of Fish and Wildlife BIOS, *California Natural Diversity Database*, https://map.dfg.ca.gov/bios/?tool=cnddbQuick, accessed on November 6, 2017.
[23] US Fish and Wildlife Service, *IPaC Information for Planning and Conservation*, https://ecos.fws.gov/ipac/, accessed on November 6, 2017.

d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

The project is not located within a known regional wildlife movement corridor or any other sensitive biological area, as indicated by the USFWS Critical Habitat portal[24] or CDFW BIOS[25]. However, landscaped areas within urban environments provide habitat and refuge for resident birds and migratory birds passing through the area. Migratory birds, nesting birds, nests and eggs of any bird are protected by California Fish and Game Code (Sections 3503, 3503.5, and 3513) and the federal MBTA (Section 703 et seq.). Wildlife anticipated to be present within the project area is wildlife associated with the built urban environment such as rodents, other small animals, and native and migratory birds. Trees in the project area may provide nesting habitats for native and migratory birds.

There are seven trees on the project site and one of them is a protected tree per the City of Palo Alto Tree Ordinance. There are also three street trees. The proposed project would remove a total of seven trees located in the project footprint and one street tree to allow for the construction of the parking structure. The other trees would be protected during construction with appropriate methods. After the construction of the proposed project, there would be five new street trees planted on Hamilton Avenue.

Tree removal activities have the potential to disturb resident and migratory birds resulting in a short-term reduction in potential nesting and foraging habitat as well as directly destroying active nests; however, it is anticipated that resident and migratory bird species would resume nesting and foraging behavior once the construction is complete, and would utilize existing nearby nesting and foraging habitat during construction. Direct impacts to active nests or nesting birds would be a significant impact. The following mitigation measure would be required to avoid or reduce the project's potentially significant impacts to nesting birds and their nests.

> MM BIO-1 Nesting Bird Surveys and Avoidance. Construction of the project and any other site disturbing activities that would involve vegetation or tree removal, shall be prohibited during the general avian nesting season (February 1 to August 31), if feasible. If nesting season avoidance is not feasible, the applicant shall retain a qualified biologist, as approved by the City of Palo Alto, to conduct a preconstruction nesting bird survey to determine the presence/absence, location, and activity status of any active nests on or adjacent to the project site. The extent of the survey buffer area surrounding the site shall be established by the qualified biologist to ensure that direct and indirect effects to nesting birds are avoided. To avoid the destruction of active nests and to protect the reproductive success of birds protected by the MBTA and CFGC, nesting bird surveys shall be performed not more than 14 days prior to scheduled vegetation clearance and structure

[24] U.S. Fish & Wildlife Service, ECOS Environmental Conservation Online System, Critical Habitat for Threatened & Endangered Species, https://fws.maps.arcgis.com/home/webmap/viewer.html?webmap=9d8de5e265ad4fe09893cf75b8dbfb77 accessed on January 28, 2018.

[25] Biogeographic Information and Observation System, https://map.dfg.ca.gov/bios/ accessed on January 28, 2018.

demolition. In the event that active nests are discovered, a suitable buffer (typically a minimum buffer of 50 feet for passerines and a minimum buffer of 250 feet for raptors) shall be established around such active nests and no construction shall be allowed within the buffer areas until a qualified biologist has determined that the nest is no longer active (i.e., the nestlings have fledged and are no longer reliant on the nest). No ground disturbing activities shall occur within this buffer until the qualified biologist has confirmed that breeding/nesting is completed and the young have fledged the nest. Nesting bird surveys are not required for construction activities occurring between August 31 and February 1.

With implementation of MM BIO-1, the project would have a ***less than significant*** impact on these wildlife species and their movements in the area.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

e) Conflict with any local policies or ordinances protecting biological resources, such as tree preservation policy or ordinance?

Due to the planned footprint of the parking structure, seven onsite trees and one street tree would be removed to allow for project construction. One of the onsite trees, of the species Coast Live Oak (*Quercus agrifolia*), is a "protected tree" under the City of Palo Alto's Tree Regulations. However, this tree is considered to be in poor condition with the potential for breakage due to previous imprecise pruning and will be removed from the project site. Three Maidenhair (*Ginkgo biloba)* trees located within 30-feet of the project site in the public right of way (one tree on Hamilton and two trees on Waverley Street) are "regulated trees"; these would require tree protection measures to assure their survival during construction, despite their good health and structural stability. Implementation of MM BIO-2 Tree Preservation and Protection Plan would avoid significant impact to existing trees.

> MM BIO-2 Tree Preservation and Protection Plan. To avoid disturbance and injury to onsite trees, the recommendations for tree preservation in the Arborist Report dated May 2017[26] shall be implemented. These recommendations include, but are not limited to, tree protection fencing to enclose as much of the TPZ as feasible around City trees on the sidewalks, no grading encroachments closer than 6 inches to the tree trunk diameter, and periodic inspections by the Site Arborist during construction activities.

A total of nine trees would be planted on the project site as part of the landscaping plan. Two trees would be planted on Waverley Street and seven street trees would be planted along Hamilton Avenue. There would be no net loss of trees, and Palo Alto's Urban Forest Master Plan policy[27] for "no net loss of canopy" would be met with the project via standard conditions of approval requiring replacement of lost canopy

[26] SBCA Tree Consulting, Tree Survey Parking Lot D, May 31 2017. Appendix D.

[27] Urban Forest Master Plan Policy 1.G, "Strive for no net loss in canopy cover", p.142, May 2015, https://www.cityofpaloalto.org/civicax/filebank/documents/36187 accessed on April 16, 2018

within 15 years of planting with the provision of adequate soil volume at the planting sites. Replacement ratios can be adjusted due to the condition of the existing tree as long as the minimum replacement for any live tree is 2:1. To ensure "no net loss of canopy" new trees replacing the site's non-protected trees to be removed will be addressed through the City's implementation of standard approval conditions. To address removal of the protected Coast Live Oak, implementation of MM BIO-3 Tree Replacement would be required.

MM BIO-3 Tree Replacement. The removal of protected Coast Live Oak tree (Tree #8 in the Arborist Report prepared for the project) is subject to the City of Palo Alto's tree removal ordinance in Palo Alto Municipal Code Chapter 8.10. Trees removed will be replaced according to replacement tree mitigation measures using the Tree Canopy Replacement Standard in the Tree Technical Manual, Section 3.00 (see table below). The replacement standards outlined in the Tree Technical Manual will be utilized to achieve no net loss of canopy per Policy 1.G of the Urban Forest Master Plan. Site preparation and soil volume requirements apply so that newly planted trees have the potential to mature to desired size and thrive. As determined by the City's Urban Forester, the planting of three native oaks in the Hamilton Avenue right of way at the project site is appropriate as mitigation to replace the loss of the one Coast Live Oak on site, subject to the standard requirement to provide adequate soil conditions to ensure the replacement trees will thrive.

Figure 20: Tree Canopy Replacement Standards

C. Size and Number

Often it is not possible to replace a large, older tree with a single equivalent tree. In such cases, the following tree canopy replacement ratio shall be used:

TABLE 3-1

Tree Canopy - Replacement Standard

COLUMN 1	COLUMN 2	COLUMN 3
Canopy of the Removed Tree (Avg. dist. across the canopy*)	Replacement Trees	Alternative Tree
4'-9'	Two 24" Box Size (minimum)	One 36" Box Size
10'-27'	Three 24" Box Size	Two 36" Box Size
28'-40'	Four 24" Box Size	Two 48" Box Size
40'-56'	Six 24" Box Size	Two 48" Box & Two 36" Box Size
56'-60'	Two 24" Box & Two 36" Box + Two 48" Box Size	**
60'+	**	**

*Add half of the difference between the two to the narrowest measurement for the average canopy.
** Replace the tree with a combination of both Tree Canopy and Tree Value Standards.

Note: Basis of this table is determined by the growth of one 24" box size tree, growing at a rate equivalent to 9 feet of canopy over the course of ten years.

Source: City of Palo Alto, Tree Technical Manual, Section 3.00: Tree Canopy Replacement Standard, June 2001, accessed on March 15, 2018, https://www.cityofpaloalto.org/civicax/filebank/documents/6436

With implementation of mitigation measure MM BIO-3, the project would not conflict with local policies or ordinances protecting biological resources, such as tree preservation policy or ordinance; therefore impacts under this criterion would be ***less than significant with mitigation incorporated***.

LESS THAN SIGNIFICANT IMPACT WITH MITIGATION

f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved, local, regional, or State habitat conservation plan?

The project site is not located in a Habitat Conservation Plan, Natural Community Conservation Plan, or any other adopted habitat conservation plan that is applicable to the site. Therefore, the project would not conflict with any adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved, local, regional, or State habitat conservation plan. There would be ***no impacts***. No mitigation is required.

NO IMPACT

3.4 Cultural, Paleontological, and Tribal Cultural Resources

This section describes the affected environment and regulatory setting for Cultural, Paleontological, and Tribal Cultural Resource. It also describes impacts on these resources due to implementation of the project, and mitigation measures that would reduce those impacts.

The key sources used in preparation of this section include the Palo Alto Comprehensive Plan[28] and the City of Palo Alto's Historic Inventory.[29]

3.4.1 Regulatory Setting

3.4.1.1 Federal

National Historic Preservation Act of 1966

The National Historic Preservation Act (NHPA) of 1966 was enacted to encourage the preservation and wise use of the country's historic resources, and establishes the policy of the federal government regarding historic preservation. The NHPA defines historic preservation to include "the protection, rehabilitation, restoration, and reconstruction of districts, sites, buildings, structures, and objects significant in American history, architecture, archeology, or culture". The NHPA includes several key provisions, including the establishment of the NRHP. Section 106 of the NHPA requires federal agencies and those they fund and have approved authority over to consider the effects of their actions of properties that may be eligible for listing, or are listed in the NRHP. To determine whether an undertaking could affect NRHP-eligible properties, cultural resources (including archeological, historical, and architectural properties) must be inventoried and evaluated for listing in the NRHP. Although compliance with Section 106 is the responsibility of the lead federal agency, others can undertake the work necessary to comply.

National Register of Historic Places

The NHPA authorized the Department of the Interior to establish, maintain, and expand the NRHP, the official federal list of significant historic resources. The National Park Service administers the NRHP in conjunction with the State Historic Preservation Officer (SHPO). The NRHP includes buildings, structures, sites, objects, and districts that possess historic, architectural, engineering, archeological, or cultural significance at the national, state, or local level.

[28] City of Palo Alto. *Comprehensive Plan.* May 2011.
[29] Palo Alto Stanford Heritage. *Historic Buildings Inventory, accessed on October 30, 2017,* http://www.pastheritage.org/inventory.html

The NRHP includes four criteria under which a structure, site, building, district, or object can be considered significant for listing.[30]

A. That are associated with events that have made a significant contribution to the broad patterns of our history; or
B. That are associated with the lives of significant persons in our past; or
C. That embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
D. That have yielded or may be likely to yield, information important in history or prehistory.

A resource may be considered eligible for listing in the NRHP if it meets one or more of the above listed criteria for significance and if it possesses historic integrity. Historic properties must retain sufficient historic integrity to convey their significance. The assessment of historic integrity must be grounded in an understanding of the resource's physical features and how they relate to its significance. The NRHP recognizes seven aspects or qualities that define historic integrity[31]:

1) Location
2) Design
3) Setting
4) Materials
5) Workmanship
6) Feeling
7) Association

Historic Sites Act

The Historic Sites Act of 1935 establishes a national registry of natural landmarks and protects "outstanding examples of major geological features". These include paleontological resources.

3.4.1.2 State

National Historic Preservation Act (Section 106)

Should any previously undiscovered historic or prehistoric archaeological deposits be discovered during construction, work shall stop within 50 feet of the discovery, until such time that the discovery can be evaluated by a qualified archaeologist and appropriate mitigation action taken as determined necessary in consultation with the lead federal agency for NHPA Section 106 compliance, in accordance with 36 CFR Part 800.13, and the City. Measures might include preserving in situ the archaeological resource or an

[30] U.S. Department of the Interior, National Park Service. *National Register Criteria for Evaluation, accessed on March 15, 2018* https://www.nps.gov/nr/publications/bulletins/nrb15/nrb15_2.htm
[31] U.S. Department of Interior, National Park Service. *VIII. How to Evaluate the Integrity of a Property.* https://www.nps.gov/nr/publications/bulletins/nrb15/nrb15_8.htm#sevenaspects accessed on April 16, 2018

archaeological monitoring or data recovery program. Prehistoric archaeological site indicators include chipped chert and obsidian tools, tool manufacturing waste flakes, grinding implements such as mortars and pestles, and darkened soil that contains dietary debris such as bone fragments and shellfish remains. Historic site indicators include, but are not limited to, ceramics, glass, wood, bone, and metal remains.

California Health and Safety Code

Section 7050.5(b) of the California Health and Safety code will be implemented in the event that human remains, or possible human remains, are located during project-related construction excavation. Section 7050.5(b) states: In the event of discovery or recognition of any human remains in any location other than a dedicated cemetery, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains until the coroner of the county in which the human remains are discovered has determined, in accordance with Chapter 10 (commencing with Section 27460) of Part 3 of Division 2 of Title 3 of the Government Code, that the remains are not subject to the provisions of Section 27492 of the Government Code or any other related provisions of law concerning investigation of the circumstances, manner and cause of death, and the recommendations concerning treatment and disposition of the human remains have been made to the person responsible for the excavation, or to his or her authorized representative, in the manner provided in Section 5097.98 of the Public Resources Code.

The County Coroner, upon recognizing the remains as being of Native American origin, is responsible for contacting the Native American Heritage Commission (NAHC) within 24 hours. The Commission has various powers and duties to provide for the ultimate disposition of any Native American remains, as does the assigned Most Likely Descendant. Sections 5097.98 and 5097.99 of the Public Resources Code also call for protection from inadvertent destruction. To achieve this goal, the construction personnel on the project would be instructed as to the potential for discovery of cultural or human remains, the need for proper and timely reporting of such finds, and the consequences of failure thereof.

California Environmental Quality Act

CEQA Section 21074.2 requires the lead agency to consider the effects of a project on tribal cultural resources. As defined in Section 21074, tribal cultural resources are sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are listed, or determined to be eligible for listing, on the national, State, or local register of historical resources. Based on discussions with Native American tribal representatives in San Francisco, prehistoric archeological resources are presumed to be potential tribal cultural resources. A tribal cultural resource is adversely affected when a project causes a substantial adverse change in the resource's significance.

Pursuant to CEQA Section 21080.3.1(d), within 14 days of a determination that an application for a project is complete or a decision by a public agency to undertake a project, the Lead Agency is required to contact the Native American tribes that are culturally or traditionally affiliated with the geographic area in which the project is located. Notified tribes have 30 days to request consultation with the Lead Agency to discuss potential impacts on tribal cultural resources and measures for addressing those impacts.

3.4.1.3 Local

Comprehensive Plan[32]

The City's Comprehensive Plan Land Use and Community Design Element was updated in 2017 and includes programs and policies to guide the forces behind the physical form of the city. Table 16 lists the programs and policies applicable to the proposed project.

Table 16: Palo Alto Comprehensive Plan Land Use Element Policies Related to Cultural, Paleontological, and Tribal Cultural Resource

Program/Policy	*Guidance*
Policy L-7.1	Encourage public and private upkeep and preservation of resources that have historic merit, including residences listed in the City's Historic Resource Inventory, the California Register of Historical Resources, or the National Register of Historic Places.
Policy L-7.5	To reinforce the scale and character of University Avenue/Downtown, promote the preservation of significant historic buildings.
Policy L-7.15	Continue to consult with tribes as required by California Government Code Section 65352.3. In doing so, use appropriate procedures to accommodate tribal concerns when a tribe has a religious prohibition against revealing precise information about the location or previous practice at a particular sacred site.
Policy L-7.16	Assess the need for archaeological surveys and mitigation plans on a project-by-project basis, consistent with the California Environmental Quality Act and the National Historic Preservation Act.

Source: City of Palo Alto, Our Palo Alto 2030, Land Use and Community Design Element, http://www.paloaltocompplan.org/plan-contents/land-use-element/ accessed on January 28, 2018.

3.4.2 Existing Conditions

The existing conditions for cultural resources were identified based on the public literature relative to the history of the San Francisco Bay region, along with a review of the current conditions in the study area.

The study area is developed, since it is located in the heart of the downtown district. According to the City of Palo Alto's Comprehensive Plan Update regarding Cultural Resources, the project site falls within a moderate sensitivity resource area[33]. The historic resources map L-5 in the Comprehensive Plan also identifies a scattering of historic structures on the project boundary[34]. The project boundary is defined by Lytton Avenue, Cowper Street, Bryant Street, and Forest Avenue.

[32] City of Palo Alto, Comprehensive Plan. Our Palo Alto 2030, November 2017. http://www.paloaltocompplan.org/plan-contents/ accessed on January 28, 2018.
[33] City of Palo Alto, Comprehensive Plan Update, Cultural Resources, Existing Conditions, Figure 4-1 Archeologically Sensitive Areas, August 2014, http://www.paloaltocompplan.org/wp-content/uploads/2017/01/DECR_4_CulturalResources.pdf accessed on January 28, 2017.
[34] City of Palo Alto, Our Palo Alto 2030, Land Use and Community Design Element, Map L-5: Historic Resources, p.L-16, http://www.paloaltocompplan.org/plan-contents/land-use-element/ accessed on January 28, 2018.

3.4.2.1 Historic Properties

A comprehensive record search was conducted for the project by the Northwestern Information Center (NWIC) of the California Historical Resources Information Center in December 2017. This data indicated that there are only two previously identified historic resources that have been evaluated for the NRHP: U.S. Post Office (P-43-000388) and the President Hotel (P-43-002261). These are identified in **Table 17** and mapped in **Figure 21**, p.89. The U.S. Post Office (listed on the NRHP) is located on the other side of Hamilton Avenue, while the President Hotel (eligible) is located 617.9-feet (188.3 Meters) to the north.

Table 17: National Register of Historic Places Properties in Project Boundary (Distance to Proposed Garage)

Identifier	*Resources Name*	*Address*	*Resource*	*Code*	*NRHP Status*	*Distance (ft.)*	*Distance (m)*
P-43-000463	United States Post Office	380 Hamilton Avenue	Historic Structure	1S	Listed	106.2	32.4
P-43-002261	President Hotel	488 University Avenue	Historic Structure	5S2	Locally Eligible	617.9	188.3

Source: National Register of Historic Places, December 2017

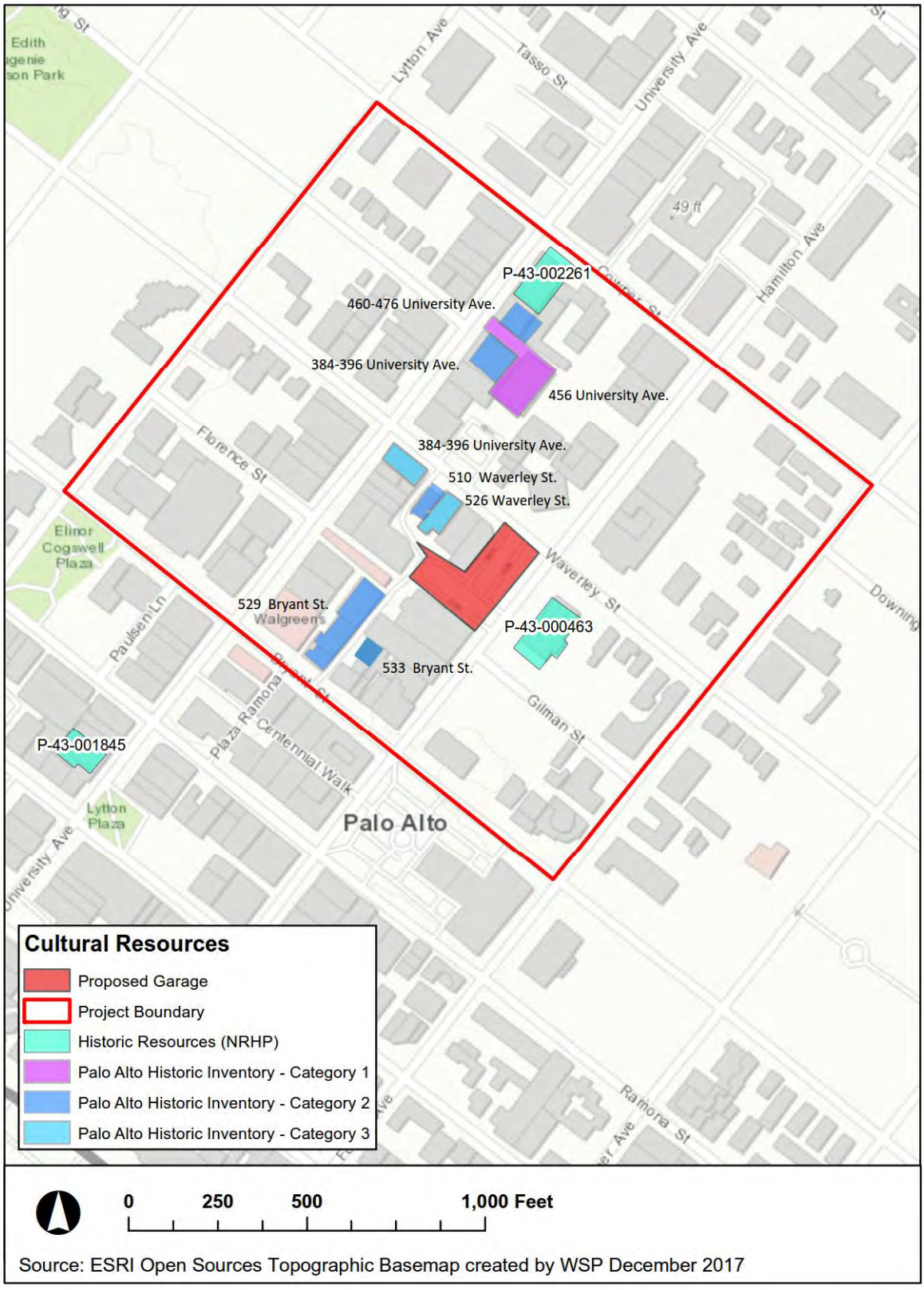
The City of Palo Alto Inventory of the downtown area shows several historic buildings on the adjacent blocks to the proposed project location (**Table 18** and **Figure 21**, p.89). As previously noted, the U.S. Post Office is listed on the NRHP and is a Category 1 historic building on the City's Historic Inventory. The adjacent building located at 526 Waverley Street is listed on the City's Historic Inventory as a Category 3 historic resource and is currently used as the Palo Alto Sport Shop. A Queen Anne residential home that has been converted to retail is a Category 2 on the local Inventory and is located at 510 Waverley Street next to the Palo Alto Sport Shop. On the south side of the site, 529 Bryant Street, a Category 2 on the local Inventory, is used as an office building. 533 Bryant, a Category 2 on the local Inventory, is located across the alley from 529 Bryant. 541 Bryant, a one-story commercial building, has been determined to be eligible for the NRHP. At the corner of University Avenue and Waverley Street on 396 University Avenue, a historic building category 2, is used as a commercial center.

Table 18: Palo Alto Historic Inventory Properties on Adjacent Blocks (Distance to Proposed Project)

Address	*Resource*	*Local Historic Inventory*	*Distance (ft.)*	*Distance (m)*
529 Bryant Street	Historic Structure	Historic Category 2	83.2	25.4
533 Bryant Street	Historic Structure	Historic Category 2	124.6	37.9
510 Waverley Street	Historic Structure	Historic Category 2	183.6	55.9
526 Waverley Street	Historic Structure	Historic Category 3	198.8	60.6
384-396 University Avenue	Historic Structure	Historic Category 3	262.8	80.1
436-452 University Avenue	Historic Structure	Historic Category 2	508.3	154.9
460-476 University Avenue	Historic Structure	Historic Category 2	519.4	158.3
456 University Avenue	Historic Structure	Historic Category 1	297.9	90.8

Source: City of Palo Alto, Master list of structure of the Historic Inventory, July 2012, accessed on January 28, 2018, https://www.cityofpaloalto.org/civicax/filebank/documents/3504

Figure 21: Cultural Resources within Project Boundary



3.4.2.2 Historical Context

At the time of the European contact, the Santa Clara Valley was occupied by a group of Native Americans referred to by ethnographers as the Ohlone or Costanoans. Their territory extended along the coast from the Golden Gate in the north to just beyond Carmel in the south, and as much as 60 miles inland, encompassing a lengthy coastline and several inland valleys. The Palo Alto, Menlo Park, and Mountain View areas were inhabited by the Puichon tribe, whose territory encompassed the west shore of the San Francisco Bay between the lower San Francisco Creek and lower Stevens Creek.

Spanish colonization of California began in the late 1700's in order to convert the native populations to Catholicism to gain control of land and natural resources and create economically self-sufficient colonial communities through a system of missions. When Mexico won its independence from Spain in 1824, they redistributed the land the missions had held for cattle raising. These land grants were considered invalid after the United States won the Mexican-American War in 1848, and the land was subject to sale to those arriving in California in search of gold. The demand for fresh produce resulted in farms and orchards dominating the area until the late 1870's. Stanford University was founded in 1885 on the Palo Alto Stock Farm by Leland Stanford Sr.

The City's development was closely related to the establishment of Stanford University in 1885. Palo Alto saw significant growth following World War II, when the college town grew into a world center for high technology. Much of this growth included the development of residential units, with the downtown area as the core of its economic center. Cartographic analysis completed for the project, indicate that there does not appear to be intensive utilization of the proposed garage location until the late nineteenth century. The 1895 Sanborn Fire Insurance Map shows structures on the other lots on the block, but none in the northeast corner where the garage is proposed.

The 1902 USGS Santa Cruz topographic map also shows no structures on this corner of the block. There seems to be a dearth of detailed historic mapping in the 1910-1940s, but the 1943 USGS Palo Alto map appears to show numerous structures in this location. Aerial photographs obtained from Environmental Data Resources and used in the preparation of the ESA report of this project, indicates that the site was occupied in the 1940's with small structures, several trees, and surrounded by a mixture of residential and commercial structures. Based on additional historical information, a church was constructed on the northeast part of the project site in 1905, and a dwelling unit and detached garage was constructed on the southwest part of the site that existed along with the church until 1955. Since the middle of the 1950's, photos show that the site was cleared of structures and was being used as a parking lot, while the areas surrounding the project site continued to be developed.

3.4.3 Impact Analysis

3.4.3.1 Significance Criteria

The following significance criteria are based on Appendix G of the CEQA Guidelines (14 CCR 15000 et seq.) and are used by the City to determine the significance of impacts. Impacts to would be significant if the proposed project would:

a. Adversely affect a historic resource listed or eligible for listing on the National and/or California Register, or listed on the City's Historic Inventory.
b. Eliminate important examples of major period of California history or prehistory.
c. Cause a substantial adverse change in the significance of an archeological resource pursuant to 15064.5.
d. Disturb any human remains, including those interred outside of dedicated cemeteries.
e. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.
f. Directly or indirectly destroy a local cultural resource that is recognized by City Council resolution.
g. Cause a substantive adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, or cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American Tribe, and that is:
    i a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American Tribe, that is listed or eligible for listing on the California Register of Historical Resources, or on a local register or historical resources as defined in Public Resources Code section 5020.1(k) or
    ii a resource determined by a lead agency, in its discretion and supported by substantial evidence, to be significant according to the historical register criteria in Public Resources Code section 5024.1 (c), and considering the significance of the resource to a California Native American tribe.

3.4.3.2 Impacts

a. Would the project adversely affect a historic resource listed or eligible for listing on the National and/or California Register, or listed on the City's Historic Inventory?

b. Directly or indirectly destroy a local cultural resource that is recognized by City Council resolution?

There is no historic building listed or eligible for listing on the National and/or California Register, or listed on the City's Historic Inventory on the proposed project site. The City of Palo Alto inventory of the downtown area shows several historic buildings within proximity to the project area. The most prominent building is the U.S. Post Office located across the street from the project site, which is listed on the National Register of Historic Places. The adjacent building located at 526 Waverley Street is listed on the City's Historic Inventory as a Category 3 historic resource and is currently used as the Palo Alto Sport Shop. It is

not anticipated that the project would affect the post office building, the Sport Shop or any other historic building.

The design of the proposed garage incorporates several architectural elements intended to make it an appropriate and compatible addition to the Palo Alto downtown area. This includes consideration of the total building height, the character of the ground floor façades and building setbacks. The garage will include a sub-grade level that will allow for additional parking while limiting the overall building height. The proposed parking structure will be 49 feet 10 inches to the top of rail on the fifth deck, below the city-wide 50-foot height limits. The proposed building will also have a lower height than the existing building to the west, which is 75 feet tall.

While the proposed design attempts to maximize parking capacity, it also incorporates ground floor storefront facades in keeping with the character of the surrounding retail and entertainment neighborhood. In addition, the visual impact of the proposed garage will be softened by a 10-foot setback along Waverley Street and a 7-foot setback from Hamilton Avenue. The selection of exterior materials also reflects an attempt to include design element from surrounding structures, with a neutral sandblasted concrete and bronze painted metal panels. The exterior treatments employ a color palette that echoes the natural adobe-colored walls and terracotta roof tiles of the city's Spanish Revival buildings (including the adjacent U.S. Post Office). There is also a commitment to preserve or replace existing street trees and to incorporate additional appropriate landscaping.

The proposed project would not directly demolish, destroy, relocate, touch, or alter any historic resources listed or eligible for listing on the National and/or California Register, or listed on the City's Historic Inventory. Furthermore, given the restrained height and compatible design, the garage design avoids or minimizes potential adverse impacts on the historic resources in the project area. The proposed project would not indirectly destroy a local cultural resource that is recognized by City Council resolution. Therefore, impacts would be ***less than significant***. No mitigation is required.

LESS THAN SIGNIFICANT IMPACT

c. Would the project eliminate important examples of major period of California history or prehistory?
d. Would the project cause a substantial adverse change in the significance of an archeological resource pursuant to 15064.5?
e. Would the project disturb any human remains, including those interred outside of dedicated cemeteries?
f. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Based on information obtained from NWIC, there are no previously identified archaeological sites within the project boundaries. The closest archaeological site was identified on the grounds of the historic property which is located over 1,000 feet (304.8 meters) from the project boundaries. There have been numerous archaeological survey efforts in the area, but none of them included the proposed garage

locations. The proposed project would excavate to a depth of approximately 11 feet below surface for the construction of the basement level of the parking structure.

As previously noted in the Archaeologically Sensitive Areas Map in the Cultural Resources Element, the project site is within a moderately sensitivity area[35], although there is an area of higher sensitivity to the east. Archaeological sensitivity models are based on generalized predictive factors (such as distance to a permanent freshwater source), and only distinguishes between extreme and moderate sensitivity. Given the distance to San Francisquito Creek, which lies approximately 3,005 feet (916.0 meters) to the west, the project location could reasonably be considered to have a moderate potential for prehistoric sites.

Cartographic research did not uncover any evidence of intensive use of the northeast corner of this block until after 1902. There is limited cartographic information regarding the period between 1902 and 1934, when several small single-story structures were built in this portion of the block. However, by 1943 there were several small structures covering most of the footprint of the proposed garage. Given the land use history of the area, the garage location is likely to have a relatively low potential for prehistoric archaeological deposits. Given the size of the structures, they would appear to have been secondary structures of relatively light frame construction, and as such may not have left substantial structural remains. Subsequent ground disturbance associated with the construction of several structures in the early twentieth century would have resulted in the disturbance and loss of integrity to prehistoric resources. Additional soil disturbance related to the demolition of these structures, the paving of the parking lot, and installation of subsurface utilities all would have decreased the potential preservation of any early archeological features or deposits. The potential for historic period archaeological resources also would be considered low.

Given the relatively late occupation of the northeast corner of the block, historic period archaeological remains would seem likely to be of limited research value. Consequently, archaeological investigation of limits of disturbance for the garage would not seem to be warrant, although provisions will be made for the evaluation of any unanticipated archaeologically sensitive materials uncovered during construction that could result in a significant impact on archeological resources.

The following mitigation measures would reduce impacts to less than significant regarding disrupting intact archaeological resources, paleontological resources, and human remains to a less than significant level.

> MM CTR-1 Resource Recovery Procedures. In the event that archaeological or paleontological resources are unearthed during project construction, all earth disturbing work within the vicinity of the find must be temporarily suspended or redirected until an archaeologist or paleontologist has evaluated the nature and significance of the find. After the find has been appropriately

[35] City of Palo Alto, Comprehensive Plan Update, Cultural Resources, Existing Conditions, Figure 4-1 Archeologically Sensitive Areas, August 2014, http://www.paloaltocompplan.org/wp-content/uploads/2017/01/DECR_4_CulturalResources.pdf accessed on January 28, 2017.

mitigated, work in the area may resume. A Native American representative shall be retained to monitor any mitigation work associated with Native American cultural material.

MM CTR-2 Human Remains Recovery Procedures. If human remains are unearthed, State Health and Safety Code Section 7050.5 requires that no further disturbance shall occur until the County Coroner has made the necessary findings as to the origin and disposition pursuant to the Public Resources Code Section 5097.98. If the remains are determined to be of Native American descent, the coroner has 24 hours to notify the Native American Heritage Commission. Additional surveys will be required if the project changes to include unsurvey areas.

Therefore, the project would not eliminate important examples of major period of California history or prehistory, cause substantial adverse change in the significance of an archeological resource pursuant to 15064.5, disturb any human remains, or directly or indirectly destroy a unique paleontological resource or site or unique geologic feature. Implementation of MM CTR-1 and MM CTR-2 would reduce impacts to ***less than significant with mitigation incorporated***. No further mitigation is required.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

g. Cause a substantive adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, or cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American Tribe, and that is:
   i a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American Tribe, that is listed or eligible for listing on the California Register of Historical Resources, or on a local register or historical resources as defined in Public Resources Code section 5020.1(k) or
   ii a resource determined by a lead agency, in its discretion and supported by substantial evidence, to be significant according to the historical register criteria in Public Resources Code section 5024.1(c), and considering the significance of the resource to a California Native American tribe.

There are no known tribal cultural resources in the project area. In May 2016, the City of Palo Alto received a single request from a tribe to be contacted in accordance with AB 52. However, through subsequent correspondence with the tribe, it was concluded that the tribe had contacted the City of Palo Alto in error and did not wish to be contacted regarding future projects within the City's jurisdiction. The tribe, the Torres Martinez Desert Cahuilla Indians, is not traditionally or culturally affiliated with the geographic area within the City of Palo Alto. Because no other tribes have requested to be contacted, no notices in accordance with AB 52 were sent and no further action is required.

In addition, the results of the Sacred Lands File (SLF) search conducted through the NAHC were negative for the proposed project area. Although no tribal cultural resources are expected to be present on-site, new ground disturbance would be below the level of past disturbance. As a result, there is the possibility

of encountering undisturbed subsurface tribal cultural resources. The proposed excavation of the project site could potentially result in adverse effects on unanticipated tribal cultural resources. However, impacts from the unanticipated discovery of tribal cultural resources during construction would be less than significant with MM CTR-3.

> MM CTR-3 Unanticipated Discovery of Tribal Cultural Resources. If cultural resources of Native American origin are identified during construction, all earth disturbing work within the vicinity of the find must be temporarily suspended or redirected until an archaeologist has evaluated the nature and significance of the find and an appropriate Native American representative, based on the nature of the find, is consulted. If the City determines that the resource is a tribal cultural resource and thus significant under CEQA, a mitigation plan shall be prepared and implemented in accordance with state guidelines and in consultation with Native American groups. The plan would include avoidance of the resource or, if avoidance of the resource is infeasible, the plan would outline the appropriate treatment of the resource in coordination with the archeologist and the appropriate Native American tribal representative.

MM CTR-3 would reduce impacts regarding disrupting tribal cultural resources to ***a less than significant level with mitigation***. No further mitigation is required.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

3.5 Geology and Soils

This section describes the affected environment and regulatory setting for Geology and Soils. It also describes the impacts on Geology and Soils that would result from implementation of the project and describes mitigation measures that would reduce these impacts.

The key source of information used in the preparation of the Geology and Soils section is the geotechnical investigation prepared by Cornerstone Earth Group[36].

3.5.1 Regulatory Setting

3.5.1.1 State

Alquist-Priolo Earthquake Fault Zoning Act

California's Alquist-Priolo Earthquake Fault Zoning Act ("Alquist-Priolo Act") was passed in 1972 to mitigate the hazard of surface faulting to structures for human occupancy and is intended to reduce the risk to life and property from surface fault rupture during earthquake. The main purpose is to prevent the construction of buildings used for human occupancy on the surface trace of active faults. Before a new project is permitted, cities and counties require a geologic investigation to demonstrate that proposed buildings will not be constructed on active faults[37].

Seismic Hazards Mapping Act

Similar to the Alquist-Priolo Act, the Seismic Hazards Mapping Act of 1990 (PRC Sections 2690–2699.6) is intended to reduce damage resulting from earthquakes. Although the Alquist-Priolo Act addresses surface fault rupture, the Seismic Hazards Mapping Act addresses other earthquake-related hazards, including strong ground shaking, liquefaction, and seismically induced landslides. Its provisions are similar in concept to those of the Alquist-Priolo Act (i.e., the state is charged with identifying and mapping areas at risk of strong ground shaking, liquefaction, landslides, and other corollary hazards, and cities and counties are required to regulate development within mapped seismic hazard zones).

A primary purpose of the Seismic Hazards Mapping Act is to assist cities and counties in preparing the safety elements of their comprehensive plans and encourage land use management policies and regulations that reduce seismic hazards.

3.5.1.2 Local

Comprehensive Plan[38]

The City's Comprehensive Plan Safety Element was updated in 2017 and includes programs and policies to address larger safety topics that are relevant to all cities, and focuses on hazards, both natural and human-

[36] Cornerstone Earth Group, *Geotechnical Investigation Palo Alto Parking Structure Lot D*, March 17 2017, 63 p.
[37] State of California Department of Conservation, http://www.conservation.ca.gov/cgs/rghm/ap/Pages/main.aspx, accessed on October 27, 2017
[38] City of Palo Alto. Comprehensive Plan. Our Palo Alto 2030. November 2017. http://www.paloaltocompplan.org/plan-contents/

caused, that are important to the City of Palo Alto. Table 19 lists the programs and policies applicable to the proposed project.

Table 19: Palo Alto Comprehensive Plan Safety Element Policies Related to Natural Hazards

Program/Policy	*Guidance*
Policy S-2.2	Focus efforts to reduce exposure to natural hazards in areas of the city identified as vulnerable to the greatest risks, as shown on the maps in this Element.
Policy S-2.5	Minimize exposure of people and structures to geologic hazards, including slope stability, subsidence and expansive soils, and to seismic hazards including ground shaking, fault rupture, liquefaction and landslides

Source: City of Palo Alto. Comprehensive Plan. Our Palo Alto 2030. accessed on March 15, 2018 https://www.cityofpaloalto.org/civicax/filebank/documents/62915

3.5.2 Existing Conditions

Palo Alto is located in a seismically active area. The San Andreas Fault passes through the community. The Fault is believed to be capable of producing a magnitude 8.4 earthquake. This would cause very violent ground shaking in much of Palo Alto, with fault rupture possible along the San Andreas, Monte Vista, and Hermit Faults, and other fault traces around the Stanford Campus.

Past land use decisions in Palo Alto have not always taken such hazards into consideration. Moreover, older buildings and infrastructure reflect the construction and engineering standards of their era which in most cases fall short of current standards for seismic safety. As a result, a significant portion of the city would be at risk in the event of a major earthquake. The primary risks are building damage or collapse; disruption of lifelines, including water, sewer, gas, electric, and telephone; fire or explosion; and damage to transportation infrastructure.

Probably the greatest hazards are associated with fault rupture and ground shaking, although liquefaction hazards are significant in the area east of Highway 101 due to the porous nature and high water content of the soil. Liquefaction occurs when ground shaking causes water saturated soil to become fluid and lose its strength.

Other geologic hazards in Palo Alto may or may not be associated with seismic events. Landslides may result from heavy rain, erosion, removal of vegetation, or human activities. It is a common hazard in the foothills and its severity depends on slope, soil, and underlying geology. Landslide hazards are increased during earthquakes, particularly if the ground is saturated. Settlement and subsidence due to groundwater withdrawal has historically been a problem in south and east Palo Alto but has been largely halted by groundwater recharge efforts and reduced pumping. Seismically-induced flooding is a hazard due to the possibility of dam failure at Felt Lake, Searsville Lake, and Lagunita Reservoir, and the potential for levee failure near the Bay.

3.5.2.1 Geological Setting

The project site is located within the Santa Clara Valley, which is a broad alluvial plane between the Santa Cruz Mountains to the southwest and west, and the Diablo Range to the northeast. The San Andreas Fault system, including the Monte Vista-Shannon Fault, exists within the Santa Cruz Mountains and the Hayward and Calaveras Fault systems exist within the Diablo Range. Alluvial soil thicknesses in the area of the site range from about 300 to 400 feet.

3.5.2.2 Field Exploration

Field exploration were performed on February 8 and 9, 2017 and consisted of two borings. The borings were drilled to depths of approximately 79 ¾- and 89 ¼-feet.

3.5.2.3 Subsurface conditions

The project site is underlain by stiff to hard lean clays with variable amounts of sand at a depth of approximately 30 to 34 ½ feet. A dense clayey sand with gravel layer was encountered in one of the borings and interbedded within the lean clays at a depth of 7 to 14 feet. The lean clays are generally underlain by medium dense to very dense silty sand, clayey sand with gravel and poorly graded sand with silt and gravel at a depth of approximately 65 ½- to 69- feet. These sandy layers are known to have frequent cobbles up to about 18 to 24 inches in diameter as well as significant gravels greater than 3 inches in diameter. Some stiff to very stiff lean clays with sand were interbedded within the sands generally at a depth of about 50 to 55 feet. Beneath the sands, generally very stiff to hard lean clays with variable amounts of sand were encountered to a depth of about 78 to 88 feet followed by very dense silty to poorly graded sands or hard silt with sand to the maximum depths explored.

3.5.2.4 Groundwater

Groundwater was encountered in the borings at depths of 33 and 35 feet. Historic high groundwater levels are 20 to 30 feet below current grades. In general, fluctuations in groundwater levels occur due to many factors including seasonal fluctuation, underground drainage patterns, and regional fluctuations.

3.5.2.5 Seismicity

Surface Fault Rupture and Ground Shaking

The San Francisco Bay area region is one of the most active areas in the country. While seismologists cannot predict earthquake events, geologists from the U.S Geological Survey estimate the probability of one or more magnitudes 6.7 earthquakes to occur somewhere in the San Francisco Bay Area to 72 percent for the period 2014 to 2043. The faults in the region with the highest estimate probability of generating damaging earthquakes during that period are the Hayward Fault (33 percent), Rodgers Creek (33 percent). Calaveras (26 percent) and San Andreas (22 percent). The table below presents the State-considered active faults within a 15-mile radius of the project site.

Table 20: Approximate Fault Distance from the Project Site

Fault Name	*Distance (miles)*
Monte Vista-Shannon	5.0
San Andreas	7.6
Hayward	13.3
Hayward (Southeast Extension)	14.5

Source: Cornerstone Earth Group, Geotechnical Investigation Palo Alto Parking Structure Lot D, March 17 2017, Table 1 p. 3.

Liquefaction

Liquefaction is a phenomenon in which saturated granular sediments temporarily lose their shear strength during periods of strong earthquake-induced ground shaking. The susceptibility of a site to liquefaction is a function of the depth, density, and water content of the granular sediments and the magnitude of the earthquakes that are likely to affect the site. Saturated, unconsolidated silts, sands, silty sands, and gravels within 50-feet of the ground surface are most susceptible to liquefaction. Liquefaction-related phenomena include vertical settlement from densification, lateral spreading, ground oscillation, flow failures, loss of bearing strength, subsidence, and buoyancy effects.

The northern part of the project site is located within a State-designated Liquefaction Hazard Zone as well as Santa Clara County Liquefaction Hazard Zone.

3.5.2.6 Landslide Hazards

The topography of the project site and its surrounding is flat to nearly flat. The California Geological Survey and Santa Clara County classify this area as having low landslide incidence.

3.5.3 Impact Analysis

In the *California Building Industry Association v. Bay Area Air Quality Management District* case decided in 2015,[39] the California Supreme Court held that CEQA does not generally require lead agencies to consider how existing hazards or conditions might impact a project's users or residents, except where the project would exacerbate an existing environmental hazard. Accordingly, hazards resulting from a project that places development in an existing or future seismic hazard area or an area with unstable soils are not considered impacts under CEQA unless the project would exacerbate the seismic hazard or unstable soil conditions. Thus, the analysis below evaluates whether the proposed project would exacerbate future seismic hazards or unstable soils at the project site and result in a substantial risk of loss, injury, or death. The impact is considered significant if the proposed project would exacerbate existing or future seismic

[39] *California Building Industry Association v. Bay Area Air Quality Management District,* 62 Cal.4th 369. Opinion Filed December 17, 2015.

hazards or unstable soils by increasing the severity of these hazards that would occur or be present without the project.

3.5.3.1 Significance Criteria

For this analysis, an impact pertaining to Geology and Soil was considered significant under CEQA if it would result in any of the following environmental effects, which are based on professional practice and State CEQA Guidelines:

a. Exposure of people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:
    i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.
    ii. Strong seismic ground shaking?
    iii. Seismic-related ground failure, including liquefaction?
    iv. Landslides?
b. Result in substantial soil erosion or the loss of topsoil?
c. Location of structure on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?
d. Location of structure on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?
e. Location of structure on soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?

3.5.3.2 Impacts and Measures

a. Would the project expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?

The project site is not located within an Alquist-Priolo Earthquake Fault Zone, and no active or potentially active faults exist on or in the immediate vicinity of the project site. The nearest active fault is the San Andreas Fault, which is located approximately 7.6 miles west of the project site. Further, no components of the proposed project would cause or worsen rupture of any known or unknown earthquake fault.

Therefore, the potential for surface rupture is low for the project site, and this impact would be ***less than significant***. No mitigation is required.

LESS THAN SIGNIFICANT IMPACT

b. Would the project expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking, seismic-related ground failure, including liquefaction?

Development of the proposed project would involve the construction and occupancy of a new building in a location where strong seismic ground shaking can be expected to occur over the life of the project. The building would be constructed on foundations designed to withstand seismic activity. The intensity of seismic shaking, or strong ground motion, at the project site during an earthquake is dependent on the distance between the site and the epicenter of the earthquake, the magnitude of the earthquake, and the geologic conditions underlying and surrounding the sites. The magnitude of an earthquake is characterized by Moment magnitude (M_w).[40] Earthquakes occurring on faults closest to the site would likely generate the largest ground motions. Nearby active faults are listed in the Existing Conditions section.

As stated above, the northern part of the project site is located within a State-designated Liquefaction Hazard Zone as well as Santa Clara County Liquefaction Hazard Zone. The geotechnical investigation tested potentially liquefiable layers to a depth of at least 50 feet and performed visual classification on sampled material, evaluated Cone Penetrating Test (CPT) data and performed various tests to classify the soil property. The geotechnical report concludes that several layers could potentially experience liquefaction starting at a depth of about 31 feet below the existing surface level. The analysis indicates that liquefaction-induced differential settlements could be on the order of 0.5 to 0.66 inch between independent foundation elements which could lead to significant impacts.

MM GEO-1 Geotechnical Investigation for Basement Structure would reduce the impacts to less than significant.

> MM GEO-1 Geotechnical Investigation for Basement Structure. Building foundations shall be designed to tolerate total and differential settlements due to static loads and liquefaction-induced settlement in accordance with the recommendations of the geotechnical report. The current geotechnical report includes recommendation for a no-basement building only. The project sponsor shall retain the service of a qualified state licensed engineering and geology specialist to include site-specific recommendation to mitigate the potential for risks associated with seismic ground shaking, seismic-related ground failure and liquefaction for the foundation of a building with basement. The updated report would include design requirements for the construction of the

[40] Moment magnitude is an energy-based scale and provides a physically meaningful measure of the size of a faulting event. Moment magnitude is directly related to average slip and fault rupture.

foundation for the basement option, which shall be incorporated into the building permit plans and/or implemented during construction, as appropriate.

With implementation of MM GEO-1, the construction of the proposed project would not expose people or structures to adverse effects involving strong seismic ground shaking. Therefore, the impacts would be ***less than significant with mitigation incorporated***.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

c. Would the project expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving landslides?

Earthquakes can trigger landslides that may cause injuries and damage. The construction of the proposed project would require excavation and fill placement; there would be a potential for constructed (cut and fill) slopes to fail if they are improperly designed or constructed. The excavation of the project site for the basement level of the building would increase the exposure of onsite construction workers to hazards associated with slope failure which could lead to significant impacts.

The geotechnical report prepared for the proposed project includes site-specific recommendations to mitigate the potential for risks associated with landslide during construction which are included in mitigation measure MM GEO-2 Temporary Shoring, Slopes and Cut.

> MM GEO-2 Temporary Shoring, Slopes and Cut. The contractor is responsible for maintaining all temporary slopes and providing temporary shoring where required. Temporary shoring, bracing and cuts/fills would be performed in accordance with the strictest government safety standards. Excavation during site demolition and fill removal should be sloped at 3:1 (horizontal: vertical) within the upper 5 feet. For excavation extending more than 5 feet below building subgrade, excavations should be sloped in accordance with the OSHA soil classification.
>
> The contractor is responsible for selecting the shoring method according to their judgment and experience considering adjacent improvements such as foundation loads, utilities and pavement. The qualified state licensed engineering and geology specialist in charge of the geotechnical report shall review the shoring design prior to implementation. Recommendations of the geotechnical report for temporary shoring are soldier beams and tie-backs, braced excavation, or other potential methods. The contractor is responsible for using best management practices to maintain all temporary slopes and providing temporary shoring where required.

With implementation of the MM GEO-2, the construction of the proposed project would not expose people or structures to adverse effects involving strong seismic ground shaking. Therefore, the impacts would be *less than significant with mitigation incorporated*.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

d. Result in substantial soil erosion or the loss of topsoil?

The project site is covered with impervious surfaces, including an at-grade parking and sidewalks. Current site grades range from approximately Elevation 53- to 54- feet. Some landscaping areas with mature trees are also scattered throughout the parking lot. Therefore, the proposed project would not result in the loss of topsoil. Site preparation and excavation activities would disturb soils on the project site, creating the potential for wind and water-borne soil erosion. However, the project would implement construction best management practices to prevent erosion and the discharge of sediment into construction site storm water runoff, as described in *Section 3.8, Hydrology and Water Quality, p.117.* Impacts related to the loss of topsoil and soil erosion would be ***less than significant***.

LESS THAN SIGNIFICANT IMPACT

e. Would the project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?

With the review of the building permit application for compliance with state and local building codes, as well as conformance with the project-specific design-level geotechnical report, impacts related to the potential for settlement and subsidence due to construction on soil that is unstable or could become unstable as a result of the project, would be ***less than significant***. No further mitigation is required.

LESS THAN SIGNIFICANT IMPACT

f. Would the project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code, creating substantial risks to life or property?

Typically, soils that exhibit expansive characteristics are found within the upper –five feet of ground surface. With long-term exposure to wetting and drying cycles, expansive soils can experience volumetric changes. The effects of expansive soils could damage foundations of above-ground structures, paved roads and streets, and concrete slabs. Expansion and contraction of soils, depending on the seasons and the amount of surface water infiltration, could exert enough pressure on structures to result in cracking, settlement, and uplift. The geotechnical investigation performed a plasticity and expansion potential test of the surficial soils and indicating low expansion potential to wetting and drying cycle.

Furthermore, the building department would review the application and plans for concurrence with recommendations of the geotechnical report and compliance with the codes. Therefore, the proposed project would not create substantial risks to life or property and impacts are ***less than significant***. No mitigation is required.

LESS THAN SIGNIFICANT IMPACT

g. Would the project have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?

The proposed project would be connected to the existing municipal sewer system for wastewater and thus, a septic system would not be used. ***No impact*** would occur.

NO IMPACT

3.6 Greenhouse Gas Emissions

This section describes the affected environment and regulatory setting for Green House Gas (GHG) Emissions and Climate Change. It also describes the impacts on GHG emissions that would result from implementation of the project, and mitigation measures that could reduce these impacts.

The emissions resulting from the project could cumulatively contribute to climate change, taken in consideration with the aggregate of existing and future sources of emissions. As such, this section analyzes impacts this project may have on both local areas and its potential contributions to the significant cumulative impact of climate change resulting from GHG emissions.

3.6.1 Regulatory Setting

Climate change is the observed increase in the average temperature of the Earth's atmosphere and oceans along with other substantial changes in climate (such as wind patterns, precipitation, and storms) over an extended period of time. Climate change is the result of numerous, cumulative sources of GHGs, gases that trap heat in the atmosphere, analogous to the way in which a greenhouse retains heat. Common GHGs include water vapor, carbon dioxide (CO_2), methane (CH_4), NOx, fluorinated gases, and ozone. GHGs are emitted by both natural processes and human activities. Of these gases, CO_2 and CH_4 are emitted in the greatest quantities from human activities. Emissions of CO_2 are largely by-products of fossil fuel combustion, whereas CH_4 results from off-gassing associated with agricultural practices and landfills. Man-made GHGs, many of which have greater heat-absorption potential than CO_2, include fluorinated gases, such as hydrofluorocarbons (HFCs), perfluorocarbons (PFC), and sulfur hexafluoride (SF_6) (CalEPA 2015).

The accumulation of GHGs in the atmosphere regulates the earth's temperature. Without the natural heat trapping effect of GHGs, Earth's surface would be about 34° C cooler (CalEPA 2015). However, it is believed that emissions from human activities, particularly the consumption of fossil fuels for electricity production and transportation, have elevated the concentration of these gases in the atmosphere beyond the level of naturally occurring concentrations.

Pursuant to the requirements of SB 97, the Resources Agency adopted amendments to the CEQA Guidelines for the feasible mitigation of GHG emissions and analysis of the effects of GHG emissions. The adopted CEQA Guidelines provide regulatory guidance on the analysis and mitigation of GHG emissions in CEQA documents, while giving lead agencies the discretion to set quantitative or qualitative thresholds for the assessment and mitigation of GHGs and climate change impacts.

The vast majority of individual projects do not generate sufficient GHG emissions to directly influence climate change. However, physical changes caused by a project can contribute incrementally to cumulative effects that are significant, even if individual changes resulting from a project are limited. The issue of climate change typically involves an analysis of whether a project's contribution towards an impact would be cumulatively considerable. "Cumulatively considerable" means that the incremental effects of an

individual project are significant when viewed in connection with the effects of past projects, other current projects, and probable future projects (CEQA Guidelines, Section 15064[h][1]).

In late 2015, the California Supreme Court's Newhall Ranch decision confirmed that there are multiple potential pathways for evaluating GHG emissions consistent with CEQA, depending on the circumstances of a given project (Center for Biological Diversity v. Department of Fish and Wildlife (2015) 62 Cal. 4th 204). The decision also identified the need to analyze both near term and post-2020 emissions, as applicable, stating that an "EIR taking a goal-consistency approach to CEQA significance may in the near future need to consider the project's effects on meeting longer term emissions reduction targets." While not legally binding on local land use agencies, SB 32 extends the statewide AB 32 reduction goal, requiring the State to further reduce GHGs to 40 percent below 1990 levels by 2030, and Executive Order S-03-05 has set forth a long-term reduction target to reduce GHG emissions in California by 80 percent below 1990 levels by the year 2050.

While the State has adopted the AB 32 Scoping Plan and multiple regulations to achieve the AB 32 year 2020 target, there is no currently adopted State plan to meet post-2020 GHG reduction goals. ARB is currently working to update the Scoping Plan to provide a framework for achieving the 2030 target set forth by SB 32 (ARB 2015). As a result, state reduction strategies cannot be applied to the project to achieve long-term reductions. Achieving these long-term GHG reduction policies will require State and federal plans and policies for achieving post-2020 reduction goals. Placing the entire burden of meeting long-term reduction targets on local government or individual new development projects would be disproportionate and likely ineffective.

Given the recent legislative attention and judicial action regarding post-2020 goals and the scientific evidence that additional GHG reductions are needed through the year 2050, the Association of Environmental Professionals' (AEP) Climate Change Committee published a white paper in 2015 recommending that CEQA analyses for most land use development projects may continue to rely on current adopted thresholds for the immediate future (AEP 2015). As such, for project GHG impacts, this analysis evaluates future conditions based on consistency with the BAAQMD recommended threshold of 1,100 MT CO_2e.

3.6.2 Existing Conditions

The current operations of surface parking have estimated production of 73.1 MT CO_2e.

3.6.3 Impact Analysis

GHG analysis would be determined by comparing the existing parking lot operations versus the future build conditions with the new parking garage.

3.6.3.1 Significance Criteria

The following significance criteria are based on Appendix G of the CEQA Guidelines (14 CCR 15000 et seq.) and are used by the City to determine the significance of impacts. Impacts would be significant if the proposed project would:

a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?
b. Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

3.6.3.2 Impacts

a) Would the project generate gas emissions, either directly or indirectly, that may have a significant impact on the environment?

b) Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Construction

The project's proposed construction activities, energy use, daily operational activities, and mobile sources (traffic) would generate GHG emissions. The annual GHG emissions resulting from construction of the facility is estimated to be 442.2 MT CO_2e.

Operational

The addition of parking does not generate trips; nearby retail, commercial, and residential uses generate trips. The new parking structure is anticipated to provide an alternate parking option to those currently parking in other areas, particularly on nearby residential streets. The parking garage could reduce vehicle emissions and congestion by eliminating the need for additional travel time to search for a parking space. Therefore, there would be no net increase in greenhouse gas emissions as a result of parking garage operations. However, up to approximately 2,000 square feet of retail space along Waverley Street is also proposed as part of the project, which would generate minimal additional trips. Operation of the parking garage and retail facilities requires energy use for equipment such as elevators and lights. The annual GHG emission as a result from the operation of the facility is estimated to be 73.1 MT CO_2e. The BAAQMD has identified thresholds for GHG emissions generated from construction and operation of the parking facility.

The GHG emissions generated from construction and operation of the parking facility is estimated to be 515.3 MT CO_2e which is below BAAQMD recommended threshold of 1,100 MT CO_2e. No GHG impacts are anticipated as a result from the construction and operation of the parking facility. Therefore, the project would not generate gas emission that would have significant impact on the environment and would not conflict with any applicable plan, policy or regulation. Thus, impacts under this criterion would be ***less than significant***. No mitigation is required.

LESS THAN SIGNIFICANT IMPACTS

3.7 Hazards and Hazardous Materials

This section describes the regulatory setting, affected site, impacts from implementing the project, and mitigation measures that may reduce any impacts that are anticipated to result.

This section draws information from a Phase 1 Environmental Site Assessment (ESA)[41] prepared for the project and the City of Palo Alto Comprehensive Plan[42].

3.7.1 Regulatory Setting

3.7.1.1 Federal

Comprehensive Environmental Response, Compensation, and Liability Act

The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), also called the Superfund Act (42 U.S.C. Sec. 9601 et seq.), is intended to protect the public and the environment from the effects of prior hazardous waste disposal and new hazardous material spills. Under CERCLA, EPA has the authority to seek the parties responsible for hazardous materials releases and to assure their cooperation in site remediation. CERCLA also provides federal funding for the remediation of hazardous materials contamination. When potentially responsible parties cannot be identified or located, or when responsible parties fail to act, EPA has the authority to remediate abandoned and/or historical sites where hazardous materials contamination is known to exist or pose a human health hazard.

Resource Conservation and Recovery Act

The Resource Conservation and Recovery Act (RCRA) (42 USC Sec.6901 et seq.) was enacted in 1976 to address the nationwide generation of municipal and industrial solid waste. RCRA gives EPA authority to control the generation, transportation, treatment, storage, and disposal of hazardous waste, including underground storage tanks (USTs) storing hazardous substances. RCRA also establishes a framework for the management of nonhazardous wastes. It addresses only active and future facilities, not abandoned or historical sites, which are covered by CERCLA.

Code of Federal Regulation Title 29

The federal Occupational Safety and Health Administration (OSHA) and the California Occupational Safety and Health Administration (Cal/OSHA) are the agencies responsible for ensuring worker safety in the handling and use of chemicals in the workplace. The federal regulations in CFR Title 29 (Section 1910.146) pertain to worker safety and provide for standards for safe workplaces and practices, including standards relating to hazardous materials handling.

[41] WSP. *Phase 1 Environmental Site Assessment*. September 12, 2017.
[42] City of Palo Alto. Comprehensive Plan. Our Palo Alto 2030. November 2017, access on March 15, 2018, https://www.cityofpaloalto.org/civicax/filebank/documents/62915

3.7.1.2 State

The Hazardous Waste Control Act (HWCA) created the State hazardous waste management program and is implemented by regulations contained in 26 CCR, which describes the key aspects of hazardous waste management, including: identification and classification, sources, transport, design and permitting of recycling, treatment, storage, and disposal facilities, treatment standards, operation of facilities, closure of facilities, and liability issues.

3.7.1.3 Local

The City of Palo Alto Comprehensive Plan, Natural Environment element provides the basis for protecting the environment as related to issues of hazardous waste and hazardous material in development of the city. Goal N-6 of the Comprehensive Plan list applicable policies and programs related to creating an environment free of the damaging effects of chemical hazardous material.[43]

The City of Palo Alto Comprehensive Guidelines for Potential Soil or Groundwater Contamination and Proposed Projects provides information on the process to address as early as possible the potential concerns that may arise from the presence of hazardous material within a project location. The City of Palo Alto Fire Department requires that every project completes a hazardous material disclosure checklist.

Comprehensive Plan

The City's Comprehensive Plan[44] Safety Element was updated in 2017 and includes programs and policies to address larger safety topics that are relevant to all cities, and focuses on hazards, both natural and human-caused, that are important to the City of Palo Alto. **Table 21** lists the programs and policies applicable to the proposed project.

Table 21: Palo Alto Comprehensive Plan Safety Element Policies Related to Hazardous Materials

Program/Policy	*Guidance*
Policy S-3.1	Minimize the use of toxic and hazardous materials in Palo Alto. Promote the use of alternative materials and practices that are environmentally benign.
Policy S-3.3	Support public health by requiring as part of development review, property owners and private entities to disclose the presence of contaminated soil or groundwater, identify potential health impacts, prevent vapor intrusion and remediate contamination.

Source: City of Palo Alto. Comprehensive Plan. Our Palo Alto 2030. November 2017, http://www.paloaltocompplan.org/plan-contents/safety-element/

3.7.2 Existing Conditions

According to the most recent USGS topographic map of Palo Alto, the site is approximately 50 feet above sea level located in an area of relatively flat surface topography. Soils in this site are well drained and have

[43] The City of Palo Alto Comprehensive Plan http://www.cityofpaloalto.org/gov/city_information/projects/landuse/compplan.asp
[44] City of Palo Alto. Comprehensive Plan. Our Palo Alto 2030. November 2017.2017. http://www.paloaltocompplan.org/plan-contents/safety-element/

relatively high permeability. There are no undisturbed soils existing on the site; the soils present in the landscaped island within the existing parking lot appear to be gravelly loam.

The project site itself is currently a surface parking lot and no structures have existed on the site in the last few decades. Based on historical information, a church was constructed on the northeast part of the project site in 1905, and a dwelling unit and detached garage were constructed on the southwest part of the site. These structures existed until 1955 when they were demolished and the existing parking lot constructed. The project site receives water, sewer, natural gas, and electrical utilities from the City of Palo Alto, but does not currently use them. No records regarding contamination, water supply well-log records and septic permits exist for the site from the Santa Clara County Health Department.

Based on the geology of the site and general area, contaminants leaked or spilled on the project site have a moderately high potential to migrate vertically to underlying water-bearing zones. The uppermost water-bearing zone is moderately to highly permeable; thus, lateral groundwater movement and contaminant migration from potentially impacted areas are expected to be moderately fast.

Several data sources were reviewed in the effort to identify any potential hazardous material that may be present within the project area. These sources include federal and state regulatory agencies records, local agencies records, aerial photographs, street directory listings, and fire insurance maps. Through a regulatory agency file and records review, these facilities that may pose a hazardous waste risk were identified in the project area:

CVS Pharmacy #9915

Located on 352 University Avenue, immediately northwest of the project site, this facility is listed in the RCRA-LQG database. This facility generated a variety of wastes beginning in 1988 including ignitable waste, corrosive waste, chromium, mercury, selenium, m-cresol, P001 and P075 wastes, and wastes in the U002. U129, U165, and U205 categories. No violations were identified in connection with the waste generation.

Switch & Data/PAIX

This office building located at 529 Bryant Street is approximately 50 -feet west-southwest of the project site. This facility generated ignitable waste, undefined waste, benzene, and/or toluene beginning in 1981 although no violations were identified in connection with the waste generation. A 1,500-gallon heating oil underground storage tank (UST) system was installed in front of the building beneath the sidewalk in 1929, and was reported to have leaked during removal in 1993. A 2,000-gallon UST was removed in 1979 from behind the property at 333 Hamilton Avenue which may have been a source of petroleum contamination. The direction of groundwater flow on the property in October of 1990 was south-southwest and was present approximately 35-feet below ground surface, which is different from the general eastward direction towards San Francisco Bay. Low concentrations of petroleum hydrocarbons were found in the soil, and the soil was excavated and removed from the property. Total Petroleum Hydrocarbons (TPH) was found at low concentrations in an up-gradient well located near the northeast corner of the building, and

it was concluded that contamination here may have originated from an off-site location. The facility reportedly has a 2,150-gallon aboveground storage tank (AST) which is associated with a backup generator.

Walgreens #13596

Located at 300 University Avenue, this facility is approximately 200-feet west-southwest of the Site. This facility was conditionally exempt small quantity generator of D001 ignitable waste in 2005. Additional waste generation occurred through at least 2014, with wastes in the D001, D002 categories, chromium, mercury, selenium, m-cresol, P001, and P705 categories. No violations were identified in connection with the waste generation.

Pacific Bell

Also known as the AT&T/SBC, and Pershas Rug and Carpet facility at 345 Hamilton Avenue, it is immediately southwest of the project site. It is listed in the leaking underground storage tank (LUST) and UST databases. The facility had a 10,000-gallon diesel UST that was installed in the alley behind the building in 1967 and removed in 1993 which resulted in a release. The facility investigation received a Closure/No Further Action letter in 1995.

Varsity Theatre

This facility is located at 456 University Avenue and is approximately 300 feet north of the project site. It is listed in the LUST database and records indicate that a 1,500-gallon UST containing "bunker oil", (a heavy, vicious hydrocarbon mixture) was located near the southeastern corner of the building and installed in 1927. A release was reported from the UST in 1995 during removal activities. A total of 270 gallons of liquid were removed from the UST, and 20 cubic yards of contaminated soil were removed from beneath the UST piping. The facility received a Closure/No Further Action letter in 1998.

In addition to information from the standard environmental records sources, supplemental databases were researched to identify existing or historic facilities within the project area that have the potential to result in hazardous waste and contamination. No records were found to identify the presence of additional sources of potential contaminations.

Site reconnaissance did not identify the presence of any hazardous substances or petroleum products, or any signs of potential contaminants. A pad-mounted transformer along the northeast edge of the Site, a second near the south corner of the Site, and a third on the northwest part of the Site were observed. However, there was no evidence of leakage or staining on any of the transformers or on the ground around the transformers. Based on their appearance, the transformers are not a REC. No pits, ponds, or lagoons, stained soil or pavement, stressed vegetation, or solid waste (e.g. fill soil, debris, trash, etc.) were observed.

3.7.3 Impact Analysis

Use of data records and historical information about surrounding land uses both past and present and the geologic characteristics of the project area aid in analyzing the potential impacts of hazardous waste from implementation of this project. The data search gives insight to what hazardous waste may be present in

or near the site and what may have migrated onto the site. This analysis was conducted to the best of the specialist's ability with available resources and data but is not an exhaustive assessment.

3.7.3.1 Significance Criteria

The following significance criteria are based on Appendix G of the CEQA Guidelines (14 CCR 15000 et seq.) and are used by the City to determine the significance of impacts. Impacts would be significant if the proposed project would:

a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?
b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?
c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?
d. Create a significant hazard to the public or the environment from existing hazardous materials contamination by exposing future occupants or users of the site to contamination either in excess of ground soil and groundwater cleanup goals developed for the site or from the location on listed hazardous materials sites compiled pursuant to Government Code section 65962.5?
e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?
f. For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?
g. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

3.7.3.2 Impacts and Measures

a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

Construction activities would require the use of limited quantities of hazardous materials such as fuels, oils, solvents, paints, and other common construction materials. If spilled, these substances could pose a risk to the environment and to human health. However, the transport, storage, use, or disposal of hazardous materials would be subject to federal, state, and local regulations pertaining to the transport, use, storage, and disposal of hazardous materials, which would assure that risks associated with hazardous materials are minimized. The transport of any hazardous materials would be subject to federal, state, and local regulations, which would assure that risks associated with the transport of hazardous materials are minimized to a less than significant level. In addition as detailed above, the project sponsor prepared a Phase 1 ESA. The Phase 1 ESA was prepared to determine the potential for site contamination and level of exposure risk associated with the project. Pursuant to the Phase 1, there are no recognized environmental

conditions (i.e., no soil or groundwater contamination) on the project site that could result in a reasonably foreseeable release of hazardous materials through project construction.

There were three nearby/adjacent facilities that were identified as RECs because of the potential that contamination originating on those properties could have migrated and impacted the project site. Therefore, project construction activities could encounter contaminants in the subsurface originating from these facilities. Construction related impacts associated with creating a significant hazard to public or the environment through the routine transport, use, or disposal of hazardous materials or through reasonably foreseeable upset and accident conditions would be ***less than significant***.

Operation of the proposed project would result in the use of relatively small amounts of hazardous materials, those typically used by parking structure and commercial land uses such as disinfectants, cleaners, fertilizers, and other types of hazardous materials. Because the materials are labeled to inform users of potential adverse effects as well as proper handling and care, it is unlikely that the use of such materials would create a significant hazard. Additionally, most of the hazardous components of disinfectants, cleaners, fertilizers, and other types of hazardous materials are consumed through use, resulting in little waste. Therefore, hazardous materials used during project operation would not pose any substantial public health or safety hazards related to hazardous materials and impacts during operations would be ***less than significant***. No mitigation is required.

LESS THAN SIGNIFICANT IMPACT

b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

As detailed above, the project sponsor prepared a Phase 1 ESA to determine the potential for site contamination and level of exposure risk associated with the project. Pursuant to the Phase 1, there are no recognized environmental conditions (i.e., no soil or groundwater contamination) on the project sites.

There were three nearby/adjacent facilities that were identified as RECs because of the potential that contamination originating on those properties could have migrated and impacted the project site. Therefore, project construction activities could encounter contaminants in the subsurface originating from these facilities. Construction related impacts associated with creating a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials or through reasonably foreseeable upset and accident conditions would be ***less than significant***. No mitigation is required.

LESS THAN SIGNIFICANT IMPACT

c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

No schools are within a quarter mile of the project area. Therefore, there would be ***no impacts*** on schools.

NO IMPACT

d. Create a significant hazard to the public or the environment from existing hazardous materials contamination by exposing future occupants or users of the site to contamination either in excess of ground soil and groundwater cleanup goals developed for the site or from the location on listed hazardous materials sites compiled pursuant to Government Code section 65962.5?

The proposed project is not listed on a hazardous materials site compiled pursuant to Government Code Section 65962.5. In addition, no ground soil or groundwater cleanup goals have been developed for the site. However, since the project is located in an area that has been developed with various commercial land uses that have had a history of generating or disposing of hazardous waste, it is possible that construction activities such as ground disturbance from excavation may come into contact with contamination that has migrated from other sites. Former structures that existed and have since been demolished may have left subsurface contaminants such as heavy metals, lead based paint, and/or asbestos containing materials which would require proper disposal if encountered during construction excavation.

In addition, based on the evaluation of the nearby and adjacent properties, the Phase 1 has revealed no evidence of recognized environmental conditions about the property except for the following:

- Pacific Bell facility (e.g.: AT&T/SBC and Pershas Rug & Carpet) at 345 Hamilton Avenue is immediately southwest of the Site. This facility had a 10,000-gallon diesel underground storage tank (UST) that was situated in the alley behind the building within about 40 feet of the project site. This tank leaked; although records indicated that contamination was minimal. It appears that groundwater contamination may have originated from this tank which was present in a monitoring well approximately 20 feet southwest of the tank. Soil contamination could also be present at depth, and could extend onto the project site. Therefore, this facility is a recognized environmental concern (REC) to the project site.
- Gate Cleaners at 439 Hamilton Avenue is approximately 260 feet northeast of the Site. This facility performs cleaning on the premises, and has been in operation since 1969. Although no contamination is known to be associated with this facility, accidental spillage and/or equipment leakage is common in dry cleaning operations, and in some cases, spent solvent is improperly disposed of "out the back door" to avoid disposal costs. Due to the relatively close proximity of the facility to the project site and because the direction of groundwater flow in the area is believed to be south-southwest toward the project site, this facility is a REC to the project site.
- Economy Cleaners at 430 Hamilton Avenue was approximately 140 feet east of the Site at the location of the Wells Fargo facility in the 1970s and early 1980s. This facility subsequently moved to its current location at 486 Hamilton Avenue, approximately 520 feet northeast of the Site.

Although no contamination is known to be associated with this facility, accidental spillage and/or equipment leakage is common in dry cleaning operations, and in some cases, spent solvent is improperly disposed of "out the back door" to avoid disposal costs. This property (former address of 605 Waverley Street) was also occupied by C & E Oil Co. No 4 gas in 1955, and Lucky Seven Service Gas in 1960. Due to the close proximity of the facility to the Site and because the direction of groundwater flow in the area is believed to be south-southwest generally toward the project site, WSP believes that this facility is a REC to the Site.

To ensure the safety of workers and the general public in the event that hazardous materials are encountered in the soil or groundwater, implementation of mitigation measure MM HZ-1 Health and Safety Plan would reduce the impact to less than significant.

MM HAZ-1 Health and Safety Plan. The project sponsor will implement the following standard measures to avoid and minimize impacts from hazardous material to construction workers and the general public during construction.

1) The city will require the contractor to prepare and implement a Health and Safety Plan that includes a Hazardous Materials Management and a Spill Prevention and Control Plan prior to commencement of construction.
2) In the event of exposing hazardous material during construction, the city will implement standard measures required by the federal, state, and local regulations for the collection, transport, and disposal of the material to prevent the exposure of workers and the public to such material. The specific measures will be outlined in the Health and Safety Plan, Hazardous Materials Management and Spill Prevention and Control Plans.

With implementation of MM HAZ-1 Health and Safety Plan, the proposed project would not create a significant hazard to the public or the environment from existing hazardous materials contamination. Because any contaminated soil or groundwater, if encountered, would be properly disposed of, there would be no impact to future users of the site. Therefore, impacts would be ***less than significant with mitigation incorporated***.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport or within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?

The project site is not located within two miles from land designated or used for airport purposes. Therefore, there would be ***no impact*** in a safety hazard for people residing or working in the project area.

NO IMPACT

f. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

The project would not result in changes to the roadway and transportation systems that are in place and would not create any physical changes that would interfere with emergency response or evacuation plans. Traffic control measures would be adopted during the project construction as part of the Public Works Engineering Department's required logistics plan to ensure that emergency access is maintained in all directions. Construction activities would not affect emergency response plans.

In addition, the fire department and building department reviews final building plans to ensure conformance with these provisions. In this way, potential fire hazards, including those associated with hydrant water pressures and emergency access, would be mitigated during the permit review process. Compliance with fire safety regulations would ensure that the proposed project would not impair implementation of, or physically interfere with an adopted emergency response or emergency evacuation plan or expose people or structures to a significant risk of loss, injury or death involving fires. This impact would be ***less than significant.*** No mitigation is required.

LESS THAN SIGNIFICANT IMPACT

3.8 Hydrology and Water Quality

This section describes the affected environment and regulatory setting for Hydrology and Water Quality. It also describes the impacts on Hydrology and Water Quality that would result from implementation of the project, and mitigation measures that would reduce these impacts.

3.8.1 Regulatory Setting

3.8.1.1 Federal

Clean Water Act Section 401 – Water Quality Certification

Section 401 of the Clean Water Act (CWA) requires that an applicant pursuing a federal permit to conduct an activity that may result in a discharge of a pollutant obtain a Water Quality Certification or waiver. A Water Quality Certification requires the evaluation of water quality considerations associated with dredging or placement of fill materials into water of the United States. These are issued by the Water Quality Resources Control Board (WQRCB).

Clean Water Act Section 402 – National Pollutant Discharge Elimination System

The National Pollutant Discharge Elimination System (NPDES) permit program controls the discharges of pollutants from point source discharges. NPDES is the primary federal program that regulates point-source and non-point source discharges to waters of the United States.

Federal Emergency Management Agency National Flood Insurance Act Mapping

The National Flood Insurance Program (NFIP), established by the National Flood Insurance Act of 1968, seeks to reduce the need for large, publicly funded, flood control structures and disaster relief by restricting development on floodplains. The Federal Emergency Management Agency (FEMA) administers the NFIP through preparing Flood Insurance Rate Maps (FIRM), an official map of a community to delineate both the special flood hazard areas and the flood risk premium zones applicable to the community.

3.8.1.2 State

California Water Code Sections 13000 et seq.: Porter-Cologne Water Quality Act

The Porter-Cologne Act is established and implemented by the State Water Board and nine Regional Water Quality Control Boards (RWQCBs). The State Water Board is the primary state agency responsible for protecting the quality of the state's surface and groundwater supplies, or "waters of the state". Waters of the state are defined more broadly than "waters of the United States" and are defined as any surface water or groundwater within the boundaries of the state. This includes waters in both natural and artificial channels. It also includes all surface waters that are not waters of the United States or non-jurisdictional wetlands, which are essentially distinguished by whether they are navigable or not. If waters are not navigable, then they are considered to be isolated and therefore only fall under the jurisdiction of the Porter-Cologne Act and not the CWA.

The Act authorizes the State Water Board to draft state policies regarding water quality and requires projects that are discharging, or proposing to discharge, wastes that could affect the quality of the state's water to file a Report of Waste Discharge (RWD) with the appropriate RWQCB. It also requires the State Water Board or an RWQCB to adopt a basin plan for the protection of water quality.

San Francisco Bay Regional Water Quality Control Board Storm Water NPDES

The San Francisco Bay RWQCB is responsible for the protection of beneficial uses of water resources in the San Francisco Bay area, which includes Alameda, Contra Costa, San Francisco, Santa Clara, San Mateo, Martin, Sonoma, Napa, and Solano counties.

The SWRCB is advancing Low Impact Development (LID) in California as a means of complying with municipal storm water permits. LID incorporates site design, including among other things the use of vegetated swales and retention basins and minimizing impermeable surfaces, to manage storm water to maintain a site's predevelopment runoff rates and volumes. The City of Palo Alto, along with other cities in Santa Clara County, is currently subject to the San Francisco Bay Region Municipal Regional Storm Water NPDES Permit No. CAS612008 (Order No. R2-2015-0049-DWQ) (San Francisco Bay MS4 Permit) with the San Francisco Bay Regional Water Board, most recently adopted on November 18, 2015.

NPDES General Municipal Storm Water Permit

CWA Section 402 mandates permits for municipal storm water discharges, which are regulated under the NPDES General Permit for Municipal Separate Storm Sewer Systems (MS4) (MS4 Permit). Phase 1 MS4 regulations cover municipalities with populations greater than 100,000, certain industrial processes, or construction activities disturbing an area of 5 acres or more. Phase 2 (Small MS4) regulations require that storm water management plans be developed by municipalities with populations smaller than 100,000 and construction activities disturbing one or more acres of land area. MS4 permits require that cities and counties develop and implement programs and measures to reduce the discharge of pollutants in storm water discharges to the maximum extent possible, including management practices, control techniques, system design and engineering methods, and other measures as appropriate. As part of permit compliance, these permit holders have created storm water management plans for their respective locations. These plans outline the requirements for municipal operations, industrial and commercial businesses, construction sites, and planning and land development. These requirements may include multiple measures to control pollutants in storm water discharge. During implementation of specific projects under the program, project applicants will be required to follow the guidance contained in the storm water management plans as defined by the permit holder in that location.

NPDES General Construction Storm Water Permit

The General NPDES Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Order 2009-0009-DWQ) (Construction General Permit) regulates storm water discharges for construction activities CWA Section 402. Dischargers whose projects disturb one or more acres of soil, or whose projects disturb less than one acre but are part of a larger common plan of development that in

total disturbs one or more acres, are required to obtain coverage under the Construction General Permit (CGP). The CGP requires the development and implementation of a Storm Water Pollution Prevention Plan (SWPPP). The SWPPP must list BMPs that the discharger will use to protect storm water runoff and document the placement and maintenance of those BMPs. Additionally, the SWPPP must contain a visual monitoring program; a chemical monitoring program for "non-visible" pollutants, to be implemented in case of a BMP failure; and a monitoring plan for turbidity and pH for projects that meet defined risk criteria (California State Water Resources Control Board 2011b). The requirements of the SWPPP are based on the construction design specifications detailed in the final design plans of a project and the hydrology and geology of the site expected to be encountered during construction. The City of Palo Alto requires proof of coverage under the CGP prior to building permit issuance. The SWPPP is submitted to the State Water Resources Board, and a copy is kept at the jobsite where it is updated during different phases of construction. The SWPPP must be available for inspection and review upon request.

3.8.1.3 Local

The City of Palo Alto has also established various policies that contain directives pertaining to hydrology and water quality. Each policy provides a clear statement of principle and guiding actions that provide the path for implementation.

Ahwahnee Water Principles for Resource Efficient Land Use.

This policy encourages community development principles to improve the reliability and quality of water resources, including community design that is compact, mixed use, and transit-oriented with open space; preservation of natural resources as valuable assets for flood protection, water quality improvement, and groundwater recharge; water detention facilities to recharge groundwater and reduce runoff; energy efficient irrigation and landscaping to reduce water demand, retain runoff, decrease flooding, and recharge groundwater; permeable surfaces for hardscape; grey water systems; maximizing the use of recycled water; and other urban water conservation technologies.

Basement Exterior Drainage Policy

To protect public safety and health by preventing the continual discharge of groundwater into the City's gutters and streets, the Department of Public Works will not permit the use of basement exterior drainage systems consisting of perforated pipes located on the exterior of the basement walls or underneath the slab that collect water, which is then pumped to the surface of the ground for discharge, either onsite or off-site for all City parcels northeast of the Foothill Expressway (i.e., bay side). The City does not allow permanent drains around basement foundations for the continuous pumping and removal of groundwater; basements must be constructed to be waterproof.

Dewatering During Construction of Below Ground Structures Ordinance (Ordinance No. 5425)

On January 22, 2018, City Council adopted a revision to the requirements for dewatering during construction of below ground structures and developed guidelines. The overall goal is to minimize the discharge of groundwater from basement construction dewatering. The requirements fall into four categories:

1) Fill stations are required so that others may fill water trucks or connect garden hoses for irrigation;
2) Use plans are required to demonstrate that the applicant/builder is arranging for use of as much of the pumped water as possible and minimizing storm drain discharge;
3) A Geotechnical Study is required to determine any potential effects and needed avoidance measures; and
4) Street Work/Dewatering permits are required (and are issued after requirements #1, #2 and #3 are completed).

Santa Clara Valley Urban Runoff Pollution Prevention Program

The Santa Clara Valley Urban Runoff Pollution Prevention Program (SCVURPPP) is an association of 13 cities and towns in the Santa Clara Valley, Santa Clara County, and the District that share a common NPDES permit (Permit No. CAS612008) pertaining to the discharge storm water to south San Francisco Bay. As a participant in the SCVURPPP, in accordance with NPDES permit requirements, the City implements control measures to reduce storm water pollutants from construction sites, areas of new development, or areas of significant redevelopment to the maximum extent practicable. These requirements are enforced by the City during development review. The SCVURPPP Hydromodification Management Plan (HMP) complies with the San Francisco Bay Region MS4 permit. The HMP delineates areas where increases in runoff are most likely to affect channel health and water quality and provides management options to maintain pre-project runoff patterns. It is designed to prevent erosion in watersheds where new projects as well as redevelopment projects are located. Storm water treatment and site design measures may include non-mechanical water quality improvement techniques (e.g., grassy swales, bioretention, detention in landscaping), or may be storm water detention systems. The non-mechanical water quality improvement techniques are generally preferred to promote “natural” water quality improvements. The project is located in an area that is exempt from HMP requirement. HMP controls will not be required for the project. The project would also be exempt from HMP if it would create less than one acre of impervious surface.

City of Palo Alto Municipal Code Chapter 16.11 – Storm Water Pollution Prevention

Palo Alto Municipal Code Chapter 16.11, specifies requirements for permanent storm water pollution prevention measures, hydromodification management measures, limitations on use of infiltration devices and other storm water requirements associated with the San Francisco Bay MS4 Permit requirements.

City of Palo Alto Municipal Code Section 18.40.150, Storm Water Quality Protection

The purpose of this section is to preserve and enhance storm water quality by reducing pollutants discharged to streams and the San Francisco Bay. Projects are encouraged to incorporate site design measures to reduce storm water pollution by decreasing or slowing storm water runoff or interrupting the flow of runoff across a series of contiguous impervious surfaces into land development projects.

City of Palo Alto Recycled Water Ordinance

On May 12, 2008, the City Council adopted an ordinance to promote the use of recycled water (CMR 203:08, Ordinance No. 5002) for irrigation, toilet and urinal flushing and floor trap priming (also Chapter 16.12, Recycled Water, of the City of Palo Alto Municipal Code). The City recognizes that potable water is a scarce, natural resource and is dedicated to conserving the potable water supply. Because recycled water is a sustainable water source that reduces potable water consumption and is not subject to rationing during drought, "the City of Palo Alto has determined that recycled water shall be used within the boundaries of the Recycled Water Project Areas for construction, toilet and urinal flushing and irrigation purposes whenever it is available and beneficial to the customer." Per the Ordinance, all recycled water users must comply with the California Department of Public Health regulations and with the City of Palo Alto Water Reuse Rules and Regulations. In addition, all users must obtain a Recycled Water Permit from the City, which specifies the applicant's use of recycled water. Section 16.12.050 of the Municipal Code also establishes an exemption process if recycled water has an adverse effect on the applicant's landscaping; specifically, "[r]equests for an exemption or adjustment may be made consistent with state law and shall be based on the finding by the Director of Public Works that the use of recycled water demonstrates an adverse effect to the applicant's landscaping installed prior to the effective date of the ordinance codified herein." The exemption process is an appropriate forum for property owners to establish that the record demonstrates the use of recycled water would harm salt-sensitive species at specific sites[45].

Comprehensive Plan

The City's Natural Environment Element and Safety Element were updated in 2017 and include programs and policies to guide the forces behind the management of open land and natural resources of the city as well as for the protection of life and property from natural hazards. Table 22 lists the programs and policies applicable to the proposed project.

[45] City of Palo Alto Recycled Water Ordinance, May 12, 2008, accessed on March 15, 2018, https://www.cityofpaloalto.org/civicax/filebank/documents/19503

Table 22: Palo Alto Comprehensive Plan Natural Environment Element Related to Hydrology and Water Quality

Program/Policy	*Guidance*
Policy N-4.6	Retain and utilize rainwater on site to the extent possible.
Policy N-4.8	Conserve and maintain subsurface water resources by exploring ways to reduce the impacts of residential basement dewatering and other excavation activities.
Program N4.8.1	Research and promote new construction techniques and recharge strategies developed to reduce subsurface and surface water impacts and comply with City dewatering policies.
Program N4.9.1	Reduce pollution in urban runoff from residential, commercial, industrial, municipal, and transportation land uses and activities.
Program N4.9.1	Monitor and implement practices for reducing water pollution. Examples include state-of-the-art BMPs, land use planning approaches and construction of modern storm water management facilities.
Program N4.12.2	Develop and implement a green storm water infrastructure plan with the goal to treat and infiltrate storm water.
Policy S-2.8	Minimize exposure to flood hazards by protecting existing development from flood events and adequately reviewing proposed development in flood prone areas.
Program S2.8.1	Implement flood mitigation requirements of FEMA in Special Flood Hazard Areas as illustrated on the Flood Insurance Rate Maps.

Source: City of Palo Alto, Comprehensive Plan Update, November 2017, http://www.paloaltocompplan.org/plan-contents/natural-environment-element/ accessed on January 28, 2018.

3.8.2 Existing Conditions

The project site is within an urban area served by utility service systems, including water, wastewater and storm water collection and treatment, and solid waste collection and disposal. Water service, wastewater and storm water collection and treatment are managed by CPAU.

3.8.2.1 Surface Hydrology

Watershed

The project site is located in the San Francisco Bay Watershed. There are four smaller watersheds in the City of Palo Alto. The project site is located in the San Francisquito Creek Watershed[46]. The Santa Clara Valley Water District (SCVWD) oversees County-wide programs for flood protection and storm water management.

Groundwater Basin

The Santa Clara sub basin occupies a structural trough parallel to the northwest trending Coast Ranges. The Diablo Range bounds it on the west and the Santa Cruz Mountains form the basin boundary on the east. It extends from the northern border of Santa Clara County to the groundwater divide near the town of

[46] City of Palo Alto, *Storm Drain Watersheds within the City of Palo Alto*, http://www.cityofpaloalto.org/civicax/filebank/documents/2816 accessed on October 29, 2017.

Morgan Hill. The dominant geohydrologic feature is a large inland valley (Fio and Leighton 1995). The valley is drained to the north by tributaries to San Francisco Bay including Coyote Creek, the Guadalupe River, and Los Gatos Creek.

Natural recharge of the Santa Clara Valley occurs principally as infiltration from streambeds that exit the upland areas within the drainage basin and from direct percolation of precipitation that falls on the basin floor.[47]

3.8.2.2 Climate and Precipitation

San Francisquito Creek has a Mediterranean climate, with warm, dry summer and mild wet winters. Annual precipitation for the Santa Clara basin ranges from less than 16 inches in the valley to more than 28 inches in the upland areas.[48]

3.8.2.3 Flood Zone

According to FEMA, the project site is located in a 500-year flood zone (0.2 percent annual chance of flood hazard) as is most of the City of Palo Alto.

3.8.3 Impact Analysis

The following significance criteria are based on Appendix G of the CEQA Guidelines (14 CCR 15000 et seq.) and are used by the City to determine the significance of impacts. Impacts would be significant if the proposed project would:

a. Violate any water quality standards or waste discharge requirements?
b. Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?
c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?
d. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?
e. Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff?
f. Otherwise substantially degrade water quality?

[47] California Department of Water Resources, Santa Clara Valley Groundwater Basin, Santa Clara Subbasin, California's Groundwater Bulletin 118, http://www.water.ca.gov/groundwater/bulletin118/basindescriptions/2-09.02.pdf accessed on November 7, 2017.
[48] Ibid.

g. Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?
h. Place within a 100-year flood hazard area structures which would impede or redirect flood flows?
i. Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?
j. Inundation by seiche, tsunami, or mudflow?

3.8.3.1 Impacts and Measures

a. Would the project violate any water quality standards or waste discharge requirements
e. Would the project create or contribute runoff water that would exceed the capacity of existing or planned storm water drainage systems?
f. Would the project otherwise substantially degrade water quality?

During construction, pollution sources include mortars, concrete, paint chips, and other debris that can discharge into storm drains. Thus, if these toxic pollutants are discharged to local lakes and the ocean, water quality degradation can be triggered. Further, during site preparation and construction, disturbed soils are susceptible to high rates of erosion from wind and rain, resulting in sediment transport via storm water runoff from the proposed project area. Sediment can clog storm drains and reduce capacity which can contribute to allowing storm water and wastewater to spill onto the streets, causing property damage and exposure to the public. Sediments are also abrasive, and can degrade sewers, treatment plants and pump stations.

During construction, contractors are required to implement year-round storm water BMPs. Runoff from streets and other paved areas is a major source of pollution to San Francisco Bay. Construction activities can directly affect the health of the Bay unless contractors and crews plan ahead to keep construction dirt, debris, and other pollutants out of storm drains and local creeks. These requirements under the NPDES would ensure that the project is in compliance with City of Palo Alto Municipal Ordinance requirements[49]. The proposed project would not violate any water quality standards or waste discharge requirements.

Per the geotechnical report prepared for the proposed project, passive groundwater control with local dewatering may be necessary for those areas where seeping perched water may be encountered. Excavation activities could require removal of groundwater from excavations during construction if groundwater is encountered. If temporary excavations require dewatering, pollutants could be discharged through pumping of the excess water into storm drains. Therefore, if dewatering is expected, the contractor would be required to fully conform to the requirements specified in the dewatering guideline of the City of Palo Alto and specified in PAMC Section 16.28.155, additional requirements for temporary construction-

[49] City of Palo Alto, *Pollution Prevention – It's part of the Plan*, http://www.cityofpaloalto.org/civicax/filebank/documents/2732, accessed on November 7, 2017.

related dewatering. Compliance with these regulations would ensure that the proposed project would not create a source of polluted runoff or otherwise substantially degrade water quality.

The existing impervious surface area is 28,600 square feet and would be reduced to 26,350 square feet. Storm water runoff quantities would be reduced from 0.84-cubic-feet per second to 0.76-cubic-feet per second. Storm water currently surface flows toward the street. Proposed storm water drainage would collect rainwater to convey into bio retention planters for treatment. The treated water will then be conveyed to storm drain main along Waverley Street.

There would be a reduction in storm water into the existing storm water drainage systems. Thus, the storm water generated by the project site would not exceed storm water drainage capacity.

With implementation of year-round BMPs and NPDES requirements, the project impacts would be ***less than significant.***

LESS THAN SIGNIFICANT IMPACT

b. Would the project substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level that would not support existing land uses or planned uses for which permits have been granted)?

During the geotechnical investigation, groundwater was encountered in the borings at depths of 33 and 35 feet. Historic high groundwater levels are 20 to 30 feet below current grades. In general, fluctuations in groundwater levels occur due to many factors including seasonal fluctuation, underground drainage patterns, and regional fluctuations. Therefore, during construction, excavation and other activities could potentially encounter groundwater. As excavation occurs, shoring would be installed to prevent soil collapse or groundwater seepage into the excavation area. Dewatering methods would be required during construction. If the water is found to be contaminated it would be promptly removed and disposed of. If it is not contaminated, the water would be collected and reused.

While the insertion of support and foundation structures in the groundwater basin could reduce the storage capacity, the displaced volume would not be substantial relative to the volume of the Santa Clara Valley Groundwater Basin which has a surface area of 153,600 acres. Likewise, the volume of water used during construction for dust control and other uses would be nominal, and would be unlikely to include groundwater unless encountered during excavation and reused as a water conservation measure; therefore, construction activities would not substantially deplete groundwater supplies.

As described above, natural recharge of the Santa Clara Valley occurs principally as infiltration from streambeds that exit the upland areas within the drainage basin and from direct percolation of precipitation that falls on the basin floor. The proposed project would involve a reduction in impervious surface of 2,550 square feet. Since the project would decrease the area of impervious surfaces, the proposed project

would have no impact on groundwater recharge within this basin. Therefore, impacts to groundwater supply and recharge during construction and operation of the proposed project would be ***less than significant***. No mitigation is required.

LESS THAN SIGNIFICANT IMPACT

c. Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?

d. Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?

Development of the proposed project would occur on an already developed site within an existing urban watershed and there are no streams or creeks on the project site. The proposed project site is already mostly covered with impervious surface (99 percent). The proposed project would reduce the impervious surface to 90 percent and would reduce the quantity of water discharged into the storm water drain (0.84-cubic-feet per second to 0.76-cubic-feet per second). Therefore, the proposed project would not alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on-site or off-site or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on-site or off-site. Impacts would be **less than significant**. No mitigation is required.

LESS THAN SIGNIFICANT IMPACT

g. Would the project place housing in a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary, Flood Insurance Rate Map, or other flood hazard delineation map?

Housing is not part of the proposed project. The project would not involve placing housing within a 100-year flood hazard area. Therefore, there would be ***no impact***. No mitigation is required.

NO IMPACT

h. Would the project be placed in a 100-year flood hazard area structures that would impede or redirect flood flows?

The proposed project is not located in a 100-year flood hazard area and would be located in an entirely urban environment that is almost one-half mile from the nearest creek, where it would not impede or redirect flood flows. Therefore, there would be ***no impact.*** No mitigation is required.

NO IMPACT

i. Would the project expose people or structures to a significant risk of loss, injury or death involve flooding by placing housing or other development within a 100-year flood hazard area or a levee or dam failure inundation area?

The proposed project is not located in a 100-year flood hazard area and does not involve housing development. Therefore, the project would not expose people or structures to a significant risk of loss, injury or death involving flooding by placing housing or other development within a 100-year flood hazard area or a levee or dam failure inundation area. Therefore, there would be ***no impact.*** No mitigation is required.

NO IMPACT

j. Would the project result in inundation by seiche, tsunami, or mudflow?

The proposed project would not include new construction placing persons or structures at significant risk due to mudflow and debris flow. The project is not located in the vicinity of any water bodies that could be subject to seiche or tsunami. The San Francisco Bay, closest to the shoreline near the Palo Alto Airport, is located approximately 2.77 miles from the project site. Therefore, there would be ***no impact***.

NO IMPACT

3.9 Land Use and Planning

This section describes the affected environment and regulatory setting for Land Use and Planning. It also describes the analysis on impacts that would result from implementation of the project on the site and surrounding area. Mitigation measures are provided as necessary.

The sources of information used in the preparation for this section include the City of Palo Alto's Comprehensive Plan, Zoning Map, Noise Ordinance, and Land Use Designation Map.

3.9.1 Regulatory Setting

3.9.1.1 State

All cities and counties are required by the State to adopt a comprehensivel plan establishing goals and policies for long-term development, protection from environmental hazards, and conservation of identified natural resources (California Government Code 65300).

California Government Code 65302 lists seven elements of chapters that cities and counties must include in their comprehensive plans: land use, circulation, housing, conservation, open space, noise, and safety. The land use element typically has a description of housing, businesses, industry, and open space, which includes agriculture, natural resources, recreation, and enjoyment of scenic beauty; education, public buildings and grounds, waste facilities, and other public and private use of land.

3.9.1.2 Local

City of Palo Alto's Comprehensive Plan

The City of Palo Alto's Comprehensive Plan was last updated in November 2017 and provides a vision, policies, and implementation programs guided by themes such as building community and neighborhoods, enhancing community character, reducing reliance on automobiles, meeting housing supply challenges, protecting and repairing natural features, meeting residential and commercial needs, and providing responsive governance and regional leadership. Table 23 lists the programs and policies applicable to the proposed project.

Table 23: Palo Alto Comprehensive Plan Land Use and Community Design Element Related to Land Use and Planning

Program/Policy	*Guidance*
Policy L-1.2	Maintain and strengthen Palo Alto's varied residential neighborhoods while sustaining the vitality of its commercial areas and public facilities.
Policy L-1.3	Infill development in the urban service area should be compatible with its surroundings and the overall scale and character of the city to ensure a compact, efficient development pattern.
Policy L-1.4	Regulate land uses in Palo Alto according to the land use definitions in this Element and Map L-6.

Program/Policy	*Guidance*
Policy L-1.5	Encourage land uses that address the needs of the community and manage change and development to benefit the community.
Policy L-2.2	Enhance connections between commercial and mixed use centers and the surrounding residential neighborhoods by promoting walkable and bikeable connections and a diverse range of retail and services that caters to the daily needs of residents.
Policy L-2.9	Preserve ground-floor retail, limit the displacement of existing retail from neighborhood centers and explore opportunities to expand retail.
Policy L-2.12	Encourage new development and redevelopment to incorporate greenery and natural features such as green rooftops, pocket parks, plazas and rain gardens.
Policy L-4.5	Maintain and enhance the University Avenue/Downtown area as a major commercial center of the City, with a mix of commercial, civic, cultural, recreational and residential uses. Promote quality design that recognizes the regional and historical importance of the area and reinforces its pedestrian character.
Policy L-4.6	Ensure that University Avenue/Downtown is pedestrian-friendly and supports bicycle use. Use public art, trees, bicycle racks and other amenities to create an environment that is inviting to pedestrians and bicyclists.

Source: City of Palo Alto. Comprehensive Plan. Our Palo Alto 2030. November 2017. https://www.cityofpaloalto.org/civicax/filebank/documents/62915 accessed on January 28, 2018.

3.9.2 Existing Conditions

The project is located within the commercially developed University Avenue/ Downtown area of the City of Palo Alto and is bounded by the University Park, Professorville, and Downtown North neighborhoods as designated on the City of Palo Alto's L-5 map of the Comprehensive Plan. The project site boundary includes zoning designations of regional/community/commercial, multifamily residential, and SOFA I Coordinated Area Plan (CAP) which refers to the City's long term plan defining future land uses in an approximately 9-block portion of the City to increase housing and office and retail space. The project parcel itself lies completely in a regional/community commercial land use designation.

Land uses immediately surrounding the project site are mainly commercial buildings, institutional buildings (e.g.: church, post office, City Hall) within the community commercial land use designation. University Avenue is considered the main street of the downtown area of Palo Alto. Buildings have moderate scale of two to three stories and uses are predominantly services, including restaurants and boutiques, on the ground level and offices on the other level. Buildings on Waverley Street have similar size and uses as on Hamilton Avenue. On Hamilton Avenue, there are also institutional use buildings in addition to these service and office uses. In the larger area of Downtown Palo Alto, there is a mix of sizes with some higher and larger buildings.

3.9.3 Impact Analysis

3.9.3.1 Significance Criteria

The following significance criteria are based on Appendix G of the CEQA Guidelines (14 CCR 15000 et seq.) and are used by the City to determine the significance of impacts. Impacts would be significant if the proposed project would:

a. Physically divide an existing community?

b. Conflict with any applicable City land use plan, policy, or regulation (including but not limited to the Comprehensive Plan, CAP, or the City's Zoning Ordinances adopted for the purpose of avoiding or mitigating an environmental affect.

c. Conflict with an applicable habitat conservation or natural community conservation plan?

3.9.3.2 Impacts and Measures

a. Would the proposed project divide an existing community?

The division of an established community would typically involve the construction of a physical barrier to neighborhood access, such as a new freeway or the removal of a means of access, such as a bridge or a roadway. The proposed project would be incorporated into the existing street configuration and would incorporate pedestrian access to connect Lane 21 and Waverley Street. The proposed project would not alter the established street grid, permanently close any streets, or impede pedestrian or other travel through the neighborhood. Although the sidewalk may be closed during construction, it would be temporary and an alternative route would be provided for pedestrians.

The project would increase the number of parking spaces available in the downtown area to meet the existing need for parking and would incorporate retail on the ground level to fit neighborhood properties. The proposed project would intensify the use of the project site, but would not alter the general land use pattern of the immediate area, which already includes a mix of commercial, institutional and residential uses that characterizes the surrounding established community. The proposed project would include retail space on the ground level that would blend with the mix of uses that characterize the downtown area. The surrounding uses and activities would remain and they would interrelate with each other as they do currently. They would not be affected substantially by the proposed project.

Accordingly, the proposed project would not disrupt or physically divide an established community. Therefore, the project would have a ***less than significant impact*** with respect to physically dividing an established community. No mitigation is required.

LESS THAN SIGNIFICANT IMPACT

b. Would the project conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including but not limited to the comprehensive plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?

Land use impacts are considered to be significant if the proposed project would conflict with any plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect.

The project is compatible with the existing land use designation (e.g.: community commercial), but seeks an amendment to the zoning code to allow for a greater intensity of use authorized under the Public Facilities zoning designation. An amendment to the Public Facilities zone district regulations in the Zoning Code is proposed to allow modifications to the applicable development standards in the PF Zone, including reducing the special setback on Hamilton Avenue, increasing the maximum allowable building height, and allowing for an increased floor area ratio. Encroachment into the special setback along Hamilton Avenue, requested for this project, could also be considered through a Variance approval process or an ordinance amending the special setback map. Although the ordinance would allow an increase in height and floor area at the project site; these code amendments are not anticipated to change the type and intensity of existing or planned land use patterns in the project area. Other buildings within the area exceed the required height limit, including the immediately adjacent 75-foot-tall AT&T building, and are of a similar intensity of use. It should also be noted that the parking garage itself does not generate vehicle trips. The surrounding retail/commercial/offices uses generate trips. The parking garage would provide an alternate parking option for vehicles coming to the area for those adjacent uses. The minor amount of retail added on site would generate new trips; however, the total amount of new trips generated would be very minor in comparison to the trips generated by existing uses in the area. Therefore, this project is consistent with both the design and intent of use of the policies outlined in the Comprehensive Plan Land Use Element as well as the land use designation in the Comprehensive Plan. With approval of the Zoning Code text amendment, the project would comply with the zoning ordinance.

The building height and character of the building has been designed to reflect the character of the surrounding area through the design of the façade and the materials chosen to build this structure. It has been designed to be incorporated into the surrounding character through its reflection of elements from the historic post office across the street, has its exterior façade mimic colors and materials of surrounding buildings, and has incorporated landscaping and greenery to soften the edges of the building. The project does not conflict with the commercial uses of the surrounding area.

Therefore, the proposed project would not conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project and thus, there would be a ***less than significant*** impact. No mitigation is required.

LESS THAN SIGNIFICANT IMPACT

c. Would the project conflict with an applicable habitat conservation plan or natural community conservation plan?

No habitat conservation plan or natural community conservation plan exists for this area, and therefore, ***no impacts*** to those natural resources are anticipated. No mitigation is required.

NO IMPACT

3.10 Noise and Vibration

This section summarizes the potential noise impacts that would result from the construction and operation of the project. The analysis includes a review of the existing conditions, a summary of applicable policies and regulations related to noise, and where feasible, mitigation measures to reduce the level of impact.

This section was prepared with reference to the Initial Study/Environmental Assessment prepared for this project, the City of Palo Alto's Comprehensive Plan and Municipal Code.

3.10.1 Regulatory Setting

3.10.1.1 State

In accordance with Government Code Section 65040.2, California requires each local government entity to implement a noise element as part of its comprehensive plan. The State of California General Plan Guidelines provides guidance for evaluating the compatibility of various land uses as a function of community noise exposure. Based on these guidelines, the City of Palo Alto has developed noise standards as part of the comprehensive plan.

3.10.1.2 Local

Comprehensive Plan

The City's Comprehensive Plan Natural Environment Element includes goals and policies related to noise. This element establishes land use compatibility categories for community noise exposure (see Table 24).

Table 24: Palo Alto Land Use Compatibility for Community Noise Environment

	Exterior Noise Exposure Ldn or CNEL or dB		
Land Use Category	*Normally Acceptable*	*Conditionally Acceptable*	*Unacceptable*
Residential, Hotel and Motels	50-60	60-75	75+
Outdoor Sports and Recreation, Neighborhood Parks and Playgrounds	50-65	65-80	80+
Schools, Libraries, Museums, Hospitals, Personal Care, Meeting Halls, Churches	50-60	60-75	75+
Office Buildings, Business Commercial, and Professional	50-70	70-80	80+
Auditoriums, Concert Halls, and Amphitheaters	N/A	50-75	75+
Industrial, Manufacturing, Utilities, and Agriculture	50-70	75+	N/A

Source: City of Palo Alto Comprehensive Plan Update Noise Draft Existing Conditions Report, August 29, 2014

The PAMC regulates noise primarily through the Noise Ordinance, which comprises Chapter 9.10 of the Code, under Title 9, Public Peace, Morals and Safety. The Municipal Code contains additional specific and general provisions relating to noise. Per PAMC Section 9.10.030, noise can be generated by any land use that is more than 6 dBA above the local ambient noise level at a residential property.

The City's Natural Environment Element was updated in 2017 and includes programs and policies regarding noise standard compatibility with land uses. Table 25 lists the programs and policies applicable to the proposed project.

Table 25: Palo Alto Comprehensive Plan Natural Environment Element Related to Noise

Program/Policy	*Guidance*
Policy N-6.1	Encourage the location of land uses in areas with compatible noise environments. Use the guidelines in Table N-1 to evaluate the compatibility of proposed land uses with existing noise environments when preparing, revising, or reviewing development proposals.
Policy N-6.2	Noise exposure(s) can be determined from (a) the noise contour map included in this plan, (b) more detailed noise exposure studies, or (c) on area-specific or project-specific noise measurements, as appropriate.
Policy N-6.6	Apply site planning and architectural design techniques that reduce overall noise pollution and reduce noise impacts on proposed and existing projects within Palo Alto and surrounding communities.
Policy N-6.8	The City may require measures to reduce noise impacts of new development on adjacent properties through appropriate means including, but not limited to, the following: ∂ Screen and control noise sources such as parking lots, outdoor activities and mechanical equipment, including HVAC equipment.
Policy N-6.11	Continue to prioritize construction noise limits around sensitive receptors, including through limiting construction hours and individual and cumulative noise from construction equipment.

Source: City of Palo Alto, Comprehensive Plan Update, November 2017, http://www.paloaltocompplan.org/plan-contents/natural-environment-element/ accessed on January 28, 2018.

3.10.2 Existing Conditions

The existing ambient noise environment in the study area is characteristic of an urban environment (e.g. local traffic, aircraft overflights, and commercial and industrial noise sources).

Residential, education and medical uses are more sensitive to noise than are commercial and industrial activities. Noise sensitive uses ("sensitive receptors") are defined as those facilities including, but not limited to, areas containing residences, schools, hospitals, rest homes, long-term medical or mental care facilities, or any other land use areas deemed noise sensitive by the local jurisdiction. The nearest sensitive receptor is the All Saints Episcopal Church on Waverley Street, across the street from the project. The nearest residents are 250 feet southeast on Waverley Street.

Figure 22: Proposed Project Location and Nearby Noise Sensitive Receptors



Source: WSP USA, January 2018.

3.10.3 Impact Analysis

Noise is unwanted sound that disturbs human activity. Environmental noise levels typically fluctuate over time, and different types of noise descriptors are used to account for this variability. Noise level measurements include intensity, frequency, and duration, as well as time of occurrence. Noise level (or volume) is generally measured in decibels (dB) using the A-weighted sound pressure level (dBA). The A-weighting scale is an adjustment to the actual sound power levels to be consistent with that of human hearing response, which is most sensitive to frequencies around 4,000 Hertz (about the highest note on a piano) and less sensitive to low frequencies (below 100 Hertz).

Because of the logarithmic scale of the decibel unit, sound levels cannot be added or subtracted arithmetically. If the physical intensity of a sound is doubled, the sound level increases by 3-dBA, regardless of the initial sound level. For example, 60 dBA plus 60 dBA equals 63 dBA. Where ambient noise levels are high in comparison to a new noise source, the change in noise level would be less than 3 dBA. For example, when 70 dBA ambient noise levels are combined with a 60 dBA noise source, the resulting noise level equals 70.4 dBA.

Noise that is experienced at any receptor can be attenuated by distance or the presence of noise barriers or intervening terrain. Sound from a single source (i.e., a point source) radiates uniformly outward as it travels away from the source in a spherical pattern. The sound level attenuates (or drops off) at a rate of 6 dBA for each doubling of distance. For acoustically absorptive, or soft, sites (i.e., sites with an absorptive ground surface, such as soft dirt, grass, or scattered bushes and trees), ground attenuation of about 1.5 dBA per doubling of distance normally occurs. A large object or barrier in the path between a noise source and a receiver can substantially attenuate noise levels at the receiver. The amount of attenuation provided by this shielding depends on the size of the object, proximity to the noise source and receiver, surface weight, solidity, and the frequency content of the noise source. Natural terrain features (such as hills and dense woods) and human-made features (such as buildings and walls) can substantially reduce noise levels. Walls are often constructed between a source and a receiver specifically to reduce noise. A barrier that breaks the line of sight between a source and a receiver will typically result in at least 5 dBA of noise reduction.

Vibration is a unique form of noise because its energy is carried through buildings, structures, and the ground, whereas noise is simply carried through the air. Thus, vibration is generally felt rather than heard. Some vibration effects can be caused by noise; e.g., the rattling of windows from passing trucks. This phenomenon is caused by the coupling of the acoustic energy at frequencies that are close to the resonant frequency of the material being vibrated. Typically, groundborne vibration generated by manmade activities attenuates rapidly as distance from the source of the vibration increases. The ground motion caused by vibration is measured as particle velocity in inches per second and is referenced as vibration decibels (VdB) in the U.S.

Most perceptible indoor vibration is caused by sources within buildings such as operation of mechanical equipment, movement of people, or the slamming of doors. Typical outdoor sources of perceptible

groundborne vibration are construction equipment, steel wheeled trains, and traffic on rough roads. The City of Palo Alto has not adopted specific numerical thresholds for groundborne vibration impacts. Therefore, this analysis uses the Federal Transit Administration (FTA)'s vibration impact thresholds to determine whether groundborne vibration would be "excessive." A vibration velocity level of 75 VdB is the approximate dividing line between barely perceptible and distinctly perceptible levels, where many people find transit vibration at this level annoying. Consequently, the FTA recommends a 72 VdB threshold for frequent events at residences and buildings where people normally sleep (e.g., the residences 250 feet away from the project site). The FTA does not consider most commercial and industrial uses to be vibration-sensitive (except for those that depend on quiet as an important part of operations, such as sound recording studios) and therefore does not recommend thresholds for groundborne vibration impacts to such uses. However, the FTA does recommend a 75 VdB threshold for frequent events for institutional land uses with primarily daytime use. In terms of groundborne vibration impacts on structures, the FTA states that groundborne vibration levels in excess of 100 VdB would damage fragile buildings and levels in excess of 95 VdB would damage extremely fragile historic buildings.

3.10.3.1 Future Traffic Noise Levels

Future noise levels, with and without the proposed project, were calculated using the Peak Hour Traffic volumes from the Fehr & Peers 2017 Traffic Study and the 2011 Federal Transit Administration (FTA) Noise Impact Assessment Spreadsheet. The 2017 Traffic Study found that the traffic levels were the same for the three build alternatives. The FTA spreadsheet calculated the traffic noise levels at the noise sensitive receivers using peak hour volumes, vehicle speed, and distance.

The peak one-hour traffic noise equivalent sound level (L_{10}) was used to assess the potential noise impacts at the sensitive receivers instead of the Community Noise Equivalent Levels (dBA, CNEL). The CNEL is a 24-hour weighted noise average with 5 dBA add to evening hours and 10 dBA add to nighttime hours, the penalties are intended to account for greater sensitivity to noise during these hours. The CNEL is most appropriate for analysis of project that could generate substantial noise during evening and nighttime hours. The peak one-hour noise level is used because the largest increase in traffic is predicted to occur during morning or afternoon peak hours.

Table 26: Typical A-Weighted Noise Levels

Common Outdoor Activities	Noise Level (dBA)	Common Indoor Activities
	— 110 —	Rock band
Jet fly-over at 1000 feet		
	— 100 —	
Gas lawn mower at 3 feet		
	— 90 —	
Diesel truck at 50 feet at 50 mph		Food blender at 3 feet
	— 80 —	Garbage disposal at 3 feet
Noisy urban area, daytime		

Common Outdoor Activities	Noise Level (dBA)	Common Indoor Activities
Gas lawn mower, 100 feet	— 70 —	Vacuum cleaner at 10 feet
Commercial area		Normal speech at 3 feet
Heavy traffic at 300 feet	— 60 —	
		Large business office
Quiet urban daytime	— 50 —	Dishwasher next room
Quiet urban nighttime	— 40 —	Theater, large conference room (background)
Quiet suburban nighttime		
	— 30 —	Library
Quiet rural nighttime		Bedroom at night, concert hall (background)
	— 20 —	
		Broadcast/recording studio
	— 10 —	
Lowest threshold of human hearing	— 0 —	Lowest threshold of human hearing

Source: Caltrans 2013.

3.10.3.2 Significance Criteria

The following significance criteria are based on Appendix G of the CEQA Guidelines (14 CCR 15000 et seq.) and are used by the City to determine the significance of impacts. Impacts would be significant if the proposed project would:

a. Expose people to noise levels in excess of standards established in the local comprehensive plan or noise ordinance, or applicable standards of other agencies?
b. Exposure of persons to or generation of excessive groundbourne vibration or groundbourne noise levels?
c. A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?
d. A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?
e. For a project located in an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?
f. For a project near a private airstrip, would it expose people residing or working in the project area to excessive noise?

3.10.3.3 Impacts and Measures

a. Would the proposed project expose people to noise levels in excess of standards established in the local comprehensive plan or noise ordinance, or applicable standards of other agencies?

Construction

Activities such as demolition would result in the highest noise levels. Noise from construction equipment such as a wood chipper used in the removal of on-site trees would also be expected for at least a week in duration. Other construction equipment that are anticipated to be used include the following: front end loader, boom truck, wood chipper, backhoes, generators, 10-wheel dump truck, 18 wheel trailers, concrete delivery trucks and pumps, and gas powered man lifts.

Construction would comply with the City of Palo Alto's Noise Ordinance which limits construction to Monday-Friday from 8:00 A.M. to 6:00 P.M. and on Saturdays from 9:00 A.M. to 6:00 P.M. No construction would be allowed on Sundays or on any holidays.

Due to complying with these ordinances, noise level increase from construction would not cause excessive exposure to persons outside of the limits of the City of Palo Alto's Noise Ordinance. Operational noise levels would not increase as traffic noise is anticipated to remain at the same level as existing levels according to the traffic study conducted. Therefore, construction noise levels would not exceed the requirements outlined in the municipal code and would be ***less than significant.***

Operational

The City of Palo Alto noise ordinance does not address general vehicle noise but does state that no person should produce, suffer or allow a noise level more than six decibels (dBA) above the local ambient at any point outside the property plane. The traffic noise levels without the proposed project would be considered the ambient. The traffic noise levels with the proposed project is predicted to be the same as without the proposed project. Therefore, operational noise would be ***less than significant***.

LESS THAN SIGNIFICANT IMPACT

b. Would the project result in exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?

Construction

Construction of the project over an anticipated 15 month period would intermittently generate vibration on and adjacent to the project site. It is assumed that a hoe ramp, which may be used for demolition, would generate the highest groundborne vibration and noise levels. A hoe ramp is anticipated to generate an estimated peak particle velocity level of 0.089 and would generate a groundborne vibration of 87 dBA at 25 feet. The nearest vibration sensitive building is the All Saints Episcopal Church at 80 feet from the nearest edge of construction. Due to soil attenuation, at this distance the vibration levels for the hoe ramp drop would be reduced to a peak particle velocity (PPV) level of 0.03 and a VdB level of 72. The nearest residents are 250 feet southeast on Waverley Street, which, given the more than doubling of distance, would experience much lower levels due to soil attenuation. Compliance with Section 9.10.060 of the PAMC would restrict vibration-generating construction activity to daytime hours that are outside of normal sleeping hours, i.e., 8:00 A.M. to 6:00 P.M. Monday through Friday and 9 A.M. to 6 P.M. on Saturday. Although

groundborne vibration is anticipated to be well below 72VdB during daytime hours at residences, this timing restriction would further ensure that the FTA threshold would not be exceeded. Although the All Saints Episcopal Church is not an institutional land use, the FTA's criterion of 75 VdB for nearby institutional land uses with primarily daytime use is the most applicable identified threshold. The anticipated noise level of 72 VdB would not exceed the FTA's criterion of 75 VdB for institutional land uses with primarily daytime use. In addition, vibration levels also would not exceed 95 VdB at any fragile historic buildings and, therefore, would not damage such buildings.

Operation

Groundbourne vibration would not increase due to the operations of the parking structure. Since the source of vibrations is roadway traffic, which will not increase according to the traffic study, and no new vibrations sources are being added, no historic structures in the vicinity will be impacted.

Therefore, groundborne vibration and groundborne noise level impacts would be ***less than significant***. No mitigation measures are required.

LESS THAN SIGNIFICANT IMPACT

c. Would the project result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?
d. Would the project result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?

Future noise levels with and without the proposed project were calculated using the 2011 FTA Noise spreadsheet, with the P.M. hour traffic volumes from the Fehr & Peers Traffic Study. Table 27 shows the future peak hour noise levels with and without the proposed project. The proposed project does not result in an increase in traffic noise levels along Waverley Street and Hamilton Avenue, and thus would not cause permanent, temporary, or periodic increases in traffic noise impacts to the noise sensitive receivers in the area or to the project vicinity in general.

Table 27: Change in Future Peak Hour Traffic Noise Levels

Street	*Noise Sensitive Receivers*	*Future Peak Hour Traffic Noise Levels without the Project at 50 feet (Leq)*	*Future Peak Hour Traffic Noise Levels with the Project at 50 feet (Leq)*	*Change in Future Peak Hour Traffic (with the Project) (Leq)*
Hamilton Avenue North of Waverley Street	All Saints Episcopal Church	62 dBA	62 dBA	0
Waverley Street – between Forest Drive and Hamilton Avenue	Residences	56 dBA	56 dBA	0
Waverley Street – between University and Hamilton Avenue	All Saints Episcopal Church	56 dBA	56 dBA	0

Therefore, the proposed project traffic ambient noise impacts are predicted to be ***less than significant***.

LESS THAN SIGNIFICANT IMPACT

e. For a project located in an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

The project is not located in an airport land use plan. Therefore, the project would not expose people residing or working in the project to excessive noise levels. ***No impacts*** are anticipated and no mitigation is required.

NO IMPACT

f. For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise?

The Palo Alto Airport is the closest airport to the project site. The proposed project is located 2.50 miles away from the airport. The airport primarily serves small general aviation aircraft. The project site is located outside the Airport Influence Area of Palo Alto Airport[50]. Therefore, ***no impacts*** are anticipated and no mitigation is required.

NO IMPACT

[50] Santa Clara County, Department of Planning and Development, *Comprehensive Land Use Plan: Palo Alto Airport*, https://www.sccgov.org/sites/dpd/DocsForms/Documents/ALUC_PAO_CLUP.pdf (accessed on October 29, 2017)

3.11 Public Services

This section describes the affected environment and regulatory setting for Public Services. It also describes impacts to Public Services that would result from implementation of the project.

3.11.1 Regulatory Setting

3.11.1.1 Local

Comprehensive Plan[51]

The City's Comprehensive Plan Safety Element was updated in 2017 and includes programs and policies to address larger safety topics that are relevant to all cities, and focuses on hazards, both natural and human-caused, that are important to the City of Palo Alto. **Table 28** lists the programs and policies applicable to the proposed project.

Table 28: Palo Alto Comprehensive Plan Safety Element Policies Related to Public Services

Program/Policy	*Guidance*
Policy S-2.14	Provide emergency fire and medical services consistent with the response time standards set forth in the Fire Department's annual budget.

Source: City of Palo Alto. Comprehensive Plan. Our Palo Alto 2030. November 2017. https://www.cityofpaloalto.org/civicax/filebank/documents/62915 accessed on January 28, 2018.

3.11.2 Existing Conditions

The project site is located in the City of Palo Alto. Service providers include the Palo Alto Police Department (PAPD), the Palo Alto Fire Department (PAFD), and the Palo Alto Unified School District (PAUSD). The main sources of information used for the preparation of this section includes the City of Palo Alto's website and the PAUSD website.

3.11.2.1 Schools

Palo Alto is served by the PAUSD. PAUSD serves approximately 12,000 students and consists of 12 elementary schools (kindergarten through grade 5), three middle schools (grades 6 to 8) and two high schools (grades 9 to 12). The closest PAUSD school to the project site is Addison Elementary School (650 Addison Avenue, Palo Alto), located approximately 2,700 feet east of the project site[52].

3.11.2.2 Fire Protection

The PAFD provides fire protection, fire suppression, paramedic ambulance service, search and rescue, fire prevention inspections/permits, public fire education programs, emergency preparedness planning, and other services based on community needs. PAFD staffs six full time stations located throughout the City. To

[51] City of Palo Alto. Comprehensive Plan. Our Palo Alto 2030. November 2017. http://www.paloaltocompplan.org/plan-contents/
[52] Palo Alto Unified School District, https://www.pausd.org/explore-pausd/our-district (accessed on October 19, 2017)

provide coverage in the lightly developed hillside areas, an additional fire station in the foothills is operated during the summer months when fire danger is high. The closest Fire Station to the project site is the Fire Station 1 (301 Alma Street, Palo Alto) located approximately 2,000 feet west of the project site[53].

3.11.2.3 Police Protection

The PAPD provides police protection. PAPD responded to approximately 60,000 calls annually for service annually and has 169 personnel[54]. The closest police department is located at 275 Forest Avenue in Palo Alto, approximately 750 feet south of the project site.

3.11.2.4 Libraries and Other Facilities

The City of Palo Alto is managing a total of five public libraries. The closest public library from the project site is the Downtown Library (270 Forest Avenue) located 850-feet south of the project site.

In addition to fire protection services, police services, schools, parks, and libraries, the City of Palo Alto provides child cares services (through the Palo Alto Community Child Care Organization), senior services (through the Senior Coordinating Council of the Palo Alto Area), services for people with disabilities (through the City's Community Services Department), and cultural arts (through Palo Alto's Arts and Culture Division)[55].

3.11.3 Impact Analysis

Impacts on Public Services were analyzed qualitatively based on a review of service providers' websites and the City of Palo Alto Comprehensive Plan.

3.11.3.1 Significance Criteria

For this analysis, an impact relating to Public Services was considered significant under CEQA if it would result in any of the following environmental effects which are based on professional practice and the 2017 CEQA Guidelines.

a. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:
    i. Schools
    ii. Fire Protection

[53] City of Palo Alto Fire Department, http://www.cityofpaloalto.org/gov/depts/fir/default.asp (accessed on October 19, 2017)
[54] City of Palo Alto Police Department, available online: http://www.cityofpaloalto.org/gov/depts/pol/default.asp (accessed on October 20, 2017)
[55] City of Palo Alto Community Services Department, available online: http://www.cityofpaloalto.org/gov/depts/csd/default.asp (access on October 20, 2017)

iii. Police Protection

iv. Other Public Facilities [56.]

3.11.3.2 Impacts and Measures

a. Would the project result in an adverse physical impact from the construction of additional school facilities in order to maintain acceptable performance standards?

The project does not include residential development. The need for school is generally associated with increases in residential populations, since households may contain school-aged children. The addition of retail to the project would generate a small number of retail jobs that are primarily part-time opportunities and, therefore, will most likely be filled by job seekers already living in the area. In addition, the project would not affect access to schools. Because the proposed project would not involve a population increase or an increase in job opportunities that will attract persons from outside the local area, or a corresponding increase in school-aged children, and the project would not affect access to any school, there would be ***no impact*** on school facilities. No mitigation is required.

NO IMPACT

b. Would the project result in an adverse physical impact from the construction of additional fire protection facilities in order to maintain acceptable performance standards?

As described above, the PAFD provides fire protection, fire suppression, paramedic ambulance service, search and rescue, fire prevention inspections/permits, public fire education programs, emergency preparedness planning, and other services based on community needs.

During the construction of the project, emergency access would be maintained, in accordance with the construction logistics plan required by Public Works Engineering. Furthermore, site plans would be subject to review by the City of Palo Alto Building Division and the PAFD to ensure adequate emergency access to the site and to the buildings in the vicinity of the project.

The proposed building would comply with regulations of the California Fire Code, which establishes requirements pertaining to fire protection systems, including the provision of state mandated alarms, fire alarms and sprinkler systems, fire extinguishers, appropriate building access and emergency response notification systems.

During operation of the parking structure, the project would not introduce residential development and thus, would not indirectly increase the population of the area which could affect the Fire Department's ability to maintain acceptable service ratios, response time or other performance objectives. The proposed project would involve an increase in the daily use by adding approximately 2,000 square feet retail space

[56] Association of Environmental Professionals, CEQA Guidelines Appendix G Environmental Checklist Form, https://www.califaep.org/images/ceqa/statute-guidelines/2017/CEQA_Handbook_2017_with_covers.pdf (accessed on October 20, 2017)

and an additional 325 parking spaces in the building. The intensification of the lot's use would not significantly affect the capability of the Fire Department to provide fire protection service to the project site and would not significantly impact the performance standards. Furthermore, the building would be in compliance with the local and state regulations. Therefore, implementation of the project would result in a ***less than significant*** impact on fire protection. No mitigation is required.

LESS THAN SIGNIFICANT IMPACT

c. Would the project result in an adverse physical impact from the construction of additional police protection facilities in order to maintain acceptable performance standards? (Less than Significant)

The project site is currently served by PAPD and the closest police station is located 750 -feet south of the project site.

Implementation of the project would not introduce residential development into Palo Alto and therefore would not directly generate an increase in population that could affect PAPD's ability to maintain acceptable service ratios, response times or other performance objectives. The proposed project would involve an increase in the daily use by adding a new approximately 2,000 square feet retail space and an additional to 325 parking spaces in the building. The intensification of the lot's use would not significantly affect the capability of PAPD to provide police protection to the project site and would not significantly impact the performance standards. Therefore, implementation of the project would result in a ***less than significant*** impact on police protection. No mitigation is required.

LESS THAN SIGNIFICANT IMPACT

d. Would the project result in an adverse physical impact from the construction of additional parks and recreation facilities in order to maintain acceptable performance standards?

The project would not affect any existing or planned public recreation facilities. The construction of the parking garage would not increase the demand for recreational facilities, and would not require the expansion of existing recreational facilities or construction of new facilities. There would be ***no impact*** on parks and recreation facilities. No mitigation is required.

NO IMPACT

e. Would the project result in an adverse physical impact from the construction of additional library facilities in order to maintain acceptable performance standards? (No Impact)

As described above, the Palo Alto City Library (PACL) provides library services to the City of Palo Alto. The project does not include residential development. The need for additional library facilities or community center is generally associated in an increase in residential population. In addition, the project would not affect access to library or other public facility. Because the proposed project would not involve a population

increase, and the project would not affect access to any public facility, there would be ***no impact***. No mitigation is required.

NO IMPACT

3.12 Transportation

This section describes the affected environment and regulatory setting for Transportation. The information is based on the Transportation Impact Analysis (TIA) prepared for this Draft EIR by Fehr & Peers (Appendix J). The study was conducted for the purpose of identifying potential traffic impacts related to the proposed development. Potential impacts to intersections, local roadway segments, highways, transit, bicycle, and pedestrian facilities were evaluated following the local standards, methodologies and significance criteria[57]. The TIA also describes the impacts on transportation that would result from implementation of the project.

3.12.1 Regulatory Setting

Federal, state and local laws, regulations, orders and plans applicable to transportation affected by the project are presented below. The project will be implemented in compliance with all federal, state, and local regulations, as applicable.

3.12.1.1 Federal

Americans with Disabilities Act

The Americans with Disabilities Act of 1990 (ADA), Title II, covers public entities, including local government and any of its "departments, agencies, or other instrumentalities". This act requires public entities to follow either the Uniform Federal Accessibility Standards (UFAS) or Americans with Disabilities Act Accessibility Guidelines for Buildings and Services (ADAAG) in design standards for new construction and alterations. Both UFAS and ADAAG require new construction, alterations, and additions include ADA-compliant access to entrances, routes, common areas, drinking fountains, and restrooms.

3.12.1.2 State

There are no relevant state regulations applicable to transportation affected by the project.

3.12.1.3 Local

City of Palo Alto Comprehensive Plan

The Comprehensive Plan is focused on the physical form of the City and lays out the City's official land use and community design, transportation, community services, and other policies. The land use and community design element describes the goals, policies and programs covering growth and development topics. The community services and facilities element emphasizes the importance of providing responsive, efficient, and cost-effective community services. The transportation element calls for providing facilities, services, and programs that encourage and promote walking and bicycling[58]. The following goals and policies are relevant to the project:

[57] Fehr & Peers, *Palo Alto Parking Structure Focused Transportation Impact Analysis Report*, October 5, 2017, 50p.
[58] City of Palo Alto, http://www.cityofpaloalto.org/gov/topics/projects/landuse/compplan.asp (accessed on October 30, 2017)

Table 29: Palo Alto Comprehensive Plan Transportation Element

Program/Policy	*Guidance*
Goal T-1	Create a sustainable transportation system, complemented by a mix of land uses, that emphasizes walking, bicycling, use of public transportation and other methods to reduce GHG emissions and the use of single-occupancy motor vehicles.
Policy T-1.1	Take a comprehensive approach to reducing single-occupant vehicle trips by involving those who live, work and shop in Palo Alto in developing strategies that make it easier and more convenient not to drive.
Policy T-1.3	Reduce GHG and pollutant emissions associated with transportation by reducing VMT and per-mile emissions through increasing transit options and through the use of zero-emission vehicle technologies to meet City and State goals for GHG reductions by 2030.
Policy T-1.4	Ensure that electric vehicle charging infrastructure, including infrastructure for charging e-bikes, is available citywide.
Policy T-1.5	Support the introduction of autonomous, shared, clean motor vehicles with the goals of improving roadway safety (especially for vulnerable road users), improving traffic operations, supporting core mass transit routes, reducing air pollution and GHG emissions, enhancing transportation opportunities for the disadvantaged and reclaiming valuable land dedicated to motor vehicle transportation and parking.
Policy T-1.19	Provide facilities that encourage and support bicycling and walking.
Program T-4.2.1	Identify specific improvements that can be used to discourage drivers from using local, neighborhood streets to bypass traffic congestion on arterials.
Program T-1.2	Collaborate with Palo Alto employers and business owners to develop, implement and expand comprehensive programs like the TMA to reduce single-occupant vehicle commute trips, including through incentives.
Program T-9	Support the development of regional on-line transportation services to provide current information on transit, parking, and roadway conditions, as well as computerized trip planning. Provide information kiosks at locations such as University and California Avenues.
Goal T-3	Facilities, Services, and Programs that Encourage and Promote Walking and Bicycling.
Policy T-19	Improve and add attractive, secure bicycle parking at both public and private facilities, including multi-modal transit stations, on transit vehicles, in City parks, in private developments, and at other community destinations.
Program T3.10.1	Support increased public transit, traffic management and parking solutions to ensure safe, convenient access to and from the Stanford Shopping Center/Medical Center area.
Goal T-7	Mobility For People With Special Needs.
Policy T-7.2	Utilize the principles of Universal Design, and local and State design standards, to guide the planning and implementation of transportation and parking improvement projects to ensure the needs of community members with limited mobility, including some seniors and people with disabilities, are addressed.
Goal T-8	Attractive, Convenient Public and Private Parking Facilities.
Policy T-45	Provide sufficient parking in the University Avenue/Downtown and California Avenue business districts to address long-range needs.
Program T-50	Continue working with merchants, the Chamber of Commerce, neighbors, and a parking consultant to explore options for constructing new parking facilities or using existing parking more efficiently.
Program T-51	Work with merchants to designate dedicated employee parking areas.
Program T5.2.3	Implement Council-adopted recommendations from the parking management study for the Downtown area, which address the feasibility of removing color-coded parking zones, and dynamic pricing and management policies to prioritize short- term parking spaces closest to the commercial core for customers, garage parking for employees and neighborhood parking for residents.

Program/Policy	*Guidance*
Policy T-5.5	Minimize the need for employees to park in and adjacent to commercial centers, employment districts and schools.
Policy T-47	Protect residential areas from the parking impacts of nearby business districts.
Policy T-5.2	Continue to implement a comprehensive program of parking supply and demand management strategies citywide to optimize the use of existing parking spaces.
Program T-5.2.1	Use technology to help identify parking availability and make it easy to pay any parking fees.
Program T-5.2.2	Study and implement pricing strategies for public parking in commercial districts, taking into consideration both employee parking demand and the needs of retailers and customers. Use pricing to encourage short term parking on street, long term parking in parking garages and the use of alternative modes of transportation.
Program T-5.2.3	Implement Council-adopted recommendations from the parking management study for the Downtown area, which address the feasibility of removing color-coded parking zones, and dynamic pricing and management policies to prioritize short- term parking spaces closest to the commercial core for customers, garage parking for employees and neighborhood parking for residents.
Policy T-5.6	Strongly encourage the use of below-grade or structured parking, and explore mechanized parking instead of surface parking for new developments of all types while minimizing negative impacts including on groundwater and landscaping where feasible.
Policy T-5.7	Require new or redesigned parking lots to optimize pedestrian and bicycle safety.
Policy T-5.8	Promote vehicle parking areas designed to reduce storm water runoff, increase compatibility with street trees and add visual interest to streets and other public locations. Encourage the use of photovoltaic panel or tree canopies in parking lots or on top of parking structures to provide cover, consistent with the Urban Forest Master Plan.
Policy T-5.9	Promote safety for pedestrians in City-owned parking lots by adopting standards for landscaping, signage, walkways and lighting that reduce crime and ensure a safe and orderly flow of traffic.
Policy T-5.10	Encourage the use of adaptive design strategies in new parking facilities in order to facilitate reuse in the future if and when conditions warrant.
Policy T-5.11	Work to protect residential areas from parking impacts of nearby businesses and uses, recognizing that fully addressing some existing intrusions may take time.
Policy T-5.12	To promote bicycle use, increase the number of safe, attractive and well-designed bicycle parking spaces available in the city, including spots for bicycle trailers, prioritizing heavily travelled areas such as commercial and retail centers, employment districts, recreational/cultural facilities, multi-modal transit facilities and ride share stops for bicycle parking infrastructure.
Program T5.12.2	Install secure electronic bike lockers such as the BikeLink system, at high-theft locations, including transit stations and parking garages.
Program T5.12.3	Assess the need to provide additional bicycle parking in City-owned parking lots and rights-of-way.
Program T6.6.6	Improve pedestrian crossings by creating protected areas and better pedestrian and traffic visibility. Use a toolbox including bulb outs, small curb radii, high-visibility crosswalks and landscaping

Source: City of Palo Alto, Comprehensive Plan Update, November 2017, http://www.paloaltocompplan.org/ accessed on January 28, 2018.

Downtown Parking Master Plan

The parking master plan provides parking for visitors and customers in the downtown area. It covers both on-street parking and off-street parking in parking lots and garages. The plan restricts on-street parking to two hours and off-street parking to three hours during weekdays between 8:00 A.M. and 5:00 P.M. Short-term parking spaces, commercial loading zones, passenger loading zones, and disability-designated spaces are exempt from the color zone parking requirements. The master plan provides long-term parking for

employees of businesses in the downtown area. Similarly, the Downtown Palo Alto Residential Preferential Parking program provides residents with a permit to park on the street for longer durations[59].

City of Palo Alto Downtown Urban Design

This plan was intended to serve as a master plan to guide public improvements and art in public spaces. The plan recognizes that parking is a crucial element to the success of a downtown commercial area. The public includes a guideline to develop a master sign program to improve directional signage to public parking to increase the ease of locating and using the parking lots.

The plan supports the district goal to promote Hamilton Avenue as an active mixed use district which comfortably accommodates larger scale commercial office, civic and institutional buildings. It also supports the goal to maintain Hamilton Avenue as a pleasing, tree-lined pedestrian environment with complimentary outdoor amenities to offset the urban intensity which results from the provision of transit service and convenient surface parking. The plan proposes provision of pedestrian links from Hamilton Avenue to University Avenue in conjunction with development of the alleys and parking lots.

City of Palo Alto Bicycle + Pedestrian Transportation Plan

The 2012 City of Palo Alto Bicycle + Pedestrian Transportation Plan guides public and private investments in non-motorized transportation facilities and related programs. The plan includes policy vision, design guidance, and specific recommendations to increase walking and biking rates. The plan is consistent with the City's Comprehensive Plan. It reinforces the Municipal Code requirement that all bicycle parking areas shall be located at street floor level, or equivalent in a parking garage[60].

3.12.2 Existing Conditions

This section discusses the existing conditions for all the major transportation facilities in the vicinity of the project site, including the roadway network, transit service, and bicycle/pedestrian facilities.

3.12.2.1 Roadway Network

Regional access to the project site is provided via El Camino Real. Local circulation within the transportation study area is provided by a variety of roadways. These facilities are described below.

Major Street

El Camino Real – El Camino Real is a state route between San Francisco and Santa Clara counties, and parallels both U.S. 101 and Interstate 280. In Palo Alto, El Camino Real is six lanes wide (3 in each direction) and is located 2,300 -feet south of the project site. Access to the project site from El Camino Real is provided from University Avenue.

[59] City of Palo Alto, Parking Guide, accessed on October 30, 2017, http://paloalto.parkingguide.com/

[60] City of Palo Alto, City of Palo Alto Bicycle + Pedestrian Transportation Plan, July 2012, http://www.cityofpaloalto.org/civicax/filebank/documents/31928 (Accessed on October 30, 2017)

Local Streets

Waverley Street – Waverley Street is a local street. It runs approximately north-south and extends from Palo Alto Avenue north of the project site to East Meadow Drive south of the project site. Waverley Street provides a direct access to the proposed project.

Hamilton Avenue – Hamilton Avenue is a local street. It runs approximately east-west and extends from Alma Street east of the project site to Greer Road south of the project site. North of Hale Street, Hamilton Avenue changes direction until Greer Road. Hamilton Avenue provides a direct access to the proposed project.

University Avenue – University Avenue parallels Hamilton Avenue and provides a direct connection to U.S. 101 from the project site. University Avenue runs through the heart of the downtown area of Palo Alto and adjacent land uses are predominantly characterized as commercial (e.g., restaurants and small boutiques).

3.12.2.2 Bicycle Facilities

Bicycle facilities can be divided into three classes, as follows:

- **Bike Paths (Class I)** are paved facilities designated for bicycle use that are physically separated from roadways by spaces or physical barrier. There are no Class I bike paths in the vicinity of the project site.
- **Bike Lanes (Class II)** are lanes on the outside edge of roadways reserved for the exclusive use of bicycles. The nearest Class II bike lane is located on Lytton Avenue, two blocks, or approximately 900 feet, north of the project site. It is an east-west bike route connection.
- **Bike Route (Class III)** are roadways recommended for bicycle use and often connected to bike lanes and bike paths. Hamilton Avenue is a Class III bike path and runs along the south side of the project site.

3.12.2.3 Transit Network

The project site is served directly by the Valley Transportation Authority (VTA) bus line 35 that links downtown Mountain View and the Stanford Shopping Center with various stops in Downtown Palo Alto. Other bus services are available in the study area[61]. The Palo Alto Caltrain Station provides connection to SamTrans buses and other VTA buses. The City of Palo Alto also provides a free shuttle that provides crosstown services and connects the University Avenue/Downtown to South Palo Alto at Charleston Road. The Crosstown Shuttle traverses several residential neighborhoods, schools, senior residences, libraries, recreation centers, and commercial districts helping to link public service areas within the community[62].

[61] VTA, 35 Downtown Mountain View to Stanford Shopping Center, http://www.vta.org/routes/rt35 (accessed on October 30, 2017)
[62] City of Palo Alto, Shuttle Information, http://www.cityofpaloalto.org/civicax/filebank/documents/53492 (accessed on October 30, 2017)

3.12.2.4 Site Access Review

The ground level plan (**Figure 6, p.34**) shows the location of the project driveways and the circulation system for vehicle and pedestrian traffic. The project has two vehicle driveways; one located at the south side of the site on Hamilton Avenue and another located at the northwest side of the project connecting to Bryant Street and Waverley Street. Pedestrian access points are included at several locations along the perimeter of the parking facility via the open space between the columns at ground level. The parking facility is accessible for pedestrians from Hamilton Avenue sidewalks, as well as sidewalks that run along the parking facility connecting to Waverley Street and the Waverley Street/Bryant Street driveway. The project also includes a pedestrian access point for the retail land use on Waverley Street, as well as a pedestrian access point to the bike station near the vehicle driveway off Hamilton Avenue. In addition, there are two pedestrian access points to the trash enclosure at the northwest end of the parking facility.

3.12.2.5 Existing Intersection Conditions

Intersections analyzed in the Transportation Impact Analysis are shown on **Figure 23** and are listed below:

1. Gilman Street / Hamilton Avenue
2. Project Driveway / Hamilton Avenue
3. Waverley Street / Hamilton Avenue

Figure 23: Location of Intersections Analyzed in the TIA



Source: Fehr & Peers, Palo Alto Parking Structure Focused Transportation Impact Analysis Report, October 5, 2017, Figure 2.

3.12.3 Methodology and Threshold

3.12.3.1 Level of Service Methodology

Level of Service (LOS) is a qualitative index of the performance of an element of the transportation system. LOS is a rating scale running from A to F, with LOS A indicating no congestion, and LOS F indicating unacceptable congestion and delay. For this study, LOS describes the operating conditions for signalized and unsignalized intersections.

The Highway Capacity Manual (HCM) is a standard reference published by the Transportation Research Board, and contains specific criteria and methods for assessing LOS. Traffic software was used in the TIA to calculate LOS per City requirements. HCM 2000 methodology is included in Appendix A of the TIA.

3.12.3.2 Intersection Operations Analysis

Signalized Intersections

Per City of Palo Alto standards, a project generating increased motor vehicle traffic is considered to have a significant impact:

- If intersection operations degrade from an acceptable level (LOS D or better) to an unacceptable level (LOS E or F); or
- If the critical delay increases by more than four seconds and the volume-to-capacity (V/C) ratio increases by 0.01 or more at intersections with unacceptable operations (LOS E or F).

Unsignalized Intersection

LOS D is used as the minimum acceptable operation level at unsignalized intersections. Project-generated increases in traffic are considered to have a significant impact if intersection operations degrade to LOS E or F from acceptable operations and the intersection satisfies a peak hour signal warrant from the California Manual on Uniform Traffic Control Devices.

The City of Palo Alto considers a significant impact to be satisfactorily mitigated when an implemented measure would restore LOS to baseline conditions or better.

CMP Intersections

A project-generated increase in traffic is considered to have significant impact on Congestion Management Plan (CMP) intersections:

- If intersection operation degrades from an acceptable level (LOS E or better) to an unacceptable level (LOS F)
- If the critical delay increases by more than four seconds and the V/C ratio increases by 0.01 or more at intersection with unacceptable operations (LOS F)

3.12.3.3 Pedestrian and Bicycle Impact Criteria

The City of Palo Alto Comprehensive Plan describes related policies necessary to ensure that pedestrian and bicycle facilities are safe and effective for City residents. Based on the Comprehensive Plan, significant impacts to these facilities would occur when a project or an element of a project:

- Creates a hazardous condition that currently does not exist for pedestrians and bicyclists, or otherwise interferes with pedestrian or bicycle accessibility to the site and adjoining areas
- Conflicts with an existing or planned pedestrian or bicycle facility

- ∂ Conflicts with policies related to bicycle and pedestrian activity adopted by the City of Palo Alto, Santa Clara County, VTA, or California Department of Transportation (Caltrans) for their respective facilities in the study area

3.12.3.4 Transit Impact Criteria

Significant impacts to transit service would occur if the project or any part of the project:

- ∂ Creates demand for public transit services above the capacity which is provided or planned
- ∂ Disrupts existing transit services or facilities including disruptions caused by proposed project driveways on transit streets, impacts to transits stops/shelters, and impacts to transit operations from traffic improvements proposed or resulting from a project
- ∂ Conflicts with an existing or planned transit facility
- ∂ Conflicts with transit policies adopted by the City of Palo Alto, Santa Clara County, VTA, or Caltrans for their respective facilities in the study area

3.12.3.5 Trip Generation

Freestanding parking structures do not generate trips, but instead redirect traffic generated by surrounding land uses within a given area such as downtown Palo Alto. To estimate the traffic redirected by the proposed project during peak hours, Fehr & Peers obtained morning (7:00 A.M. to 10:00 A.M.) and evening (4:00 P.M. to 7:00 P.M.) peak period traffic counts at the access points of two existing downtown Palo Alto parking facilities. These facilities include:

- ∂ Bryant Street Parking Garage located between Lytton Avenue and University Avenue
- ∂ Parking Lot D (site of the future parking structure) located at the intersection of Hamilton Avenue and Waverley Street

These traffic counts were collected on Thursday August 3, 2017 and Thursday August 10, 2017. Due to ongoing construction in the study area, field observations were made on these days to ensure there was no roadway construction at the count locations during peak periods. Using the traffic data, Fehr & Peers calculated the following vehicle trip rates for each of the existing parking facilities, presented in Table 30. Vehicular volumes entering and exiting each of the parking facilities are also presented.

Table 30: Parking Trip Rate

	Size (Parking		*A.M. Peak Hour (7:30 A.M.)*			*P.M. Peak Hour (4:30 P.M.)*		
Parking Location	*Spaces)*	*Unit[1]*	*In*	*Out*	*Total*	*In*	*Out*	*Total*
Bryant Street	688	Vehicles	88	5	93	91	99	190
Parking Garage		Trip Rate	0.13	0.01	0.14	0.13	0.14	0.28
Parking Lot D	86	Vehicles	17	19	36	68	70	138
		Trip Rate	0.20	0.22	0.42	0.79	0.81	1.60

Notes: 1) ksf = 1,000 square feet
Source: Fehr & Peers, September 2017.

The trip rates are considerably different for the two existing parking facilities in Table 30 due to the following operational characteristics:

- ∂ Parking Lot D's location supports higher parking turnover than the Bryant Street garage, with more restaurants and 'quick stop' land uses immediately adjacent to Lot D.
- ∂ The Bryant Street parking deck has permit parking as well as 3-hour parking, compared to Lot D which is only 2-hour parking. This supports lower parking turnovers at the Bryant Street garage versus Lot D.

To incorporate these operational characteristics, the TIA uses a mix of the measured parking trip rates to estimate the proposed parking structure's trip generation. The Lot D rates (high turnover) were used for the first 90 spaces (corresponding to the existing Lot D's 86 spaces) and the Bryant Street garage rates (permit parking) were used for the remaining parking spaces. In doing so, we capture the high turnover rate of the existing ground level parking lot D, but also capture the lower turnover nature of the multi-level Bryant street parking deck.

Parking trip rates from Table 30 were used to determine the trip generation for a parking structure with the following characteristics:

- ∂ 340 parking spaces and 2,300 square feet of retail

The resulting trip generation estimates are presented in the following table for each of the two proposed parking structure options. These estimates include trip deductions for the removal of existing parking lot D in order to estimate the net diverted trips for the proposed parking structure.

Table 31: Parking Trip Generation

Land Use	ITE Land Use	ITE Code	Unit[1]	Size	A.M. Peak Hour (7:30 A.M.)			P.M. Peak Hour (4:30 P.M.)		
					In	*Out*	*Total*	*In*	*Out*	*Total*
Proposed Parking Structure										
Parking	N/A	N/A	Parking Spaces	340	51	22	73	105	109	214
Retail		820	325	2.30	2	1	3	5	4	9
Existing Lot D										
Parking	N/A	N/A	Parking Spaces	86	18	19	37	68	70	138
Net Diverted Vehicle Trips					35	4	39	42	43	85

Notes: 1) ksf = 1,000 square feet
Source: Fehr & Peers, September 2017.

3.12.3.6 Analysis Scenarios

- ∂ **Existing Conditions -** This scenario describes existing transportation conditions in the study area based on the current roadway and sidewalk network characteristics, transit service, field observations and intersection counts conducted on October 4, 2016.
- ∂ **Existing plus Project Conditions -** This scenario is similar to Existing Conditions but with the proposed site modifications and net new trips generated by the project.
- ∂ **Near-Term Conditions** - This scenario evaluates transportation conditions based on the addition of traffic volumes from approved but not-yet-completed developments in the area.
- ∂ **Near-Term plus Project Conditions -** This scenario is similar to Background Conditions but with the inclusion of net new trips that would be generated by the project. The Background plus Project Conditions analysis provides an assessment of project impacts that takes into account other projects that would be completed within a similar timeframe as the project.
- ∂ **Cumulative (2035) Conditions** - This scenario evaluates future transportation conditions based on forecasted travel volumes for Year 2035 without the project.
- ∂ **Cumulative (2035) plus Project Conditions -** This scenario is similar to Cumulative Conditions but with the inclusion of net new trips that be generated by the project. The Cumulative plus Project Conditions analysis provides an assessment of project.

The Cumulative (2035) and Cumulative (2035) Plus Project Conditions were not analyzed as part of the TIA since the project is not in close vicinity of a highway.

3.12.4 Impact Analysis

This section describes the impact analysis relating to Traffic and Transportation for the project. It describes the methods used to determine the impacts resulting from the implementation of the project and lists the thresholds used to conclude whether an impact would be significant. Measures to mitigate (i.e., avoid, minimize, rectify, reduce, eliminate, or compensate for) significant impacts accompany each impact discussion.

3.12.4.1 Significance Criteria

Environmental impacts may include:

a. Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?

b. Conflict with an applicable congestion management program, including, but not limited to LOS standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?

c. Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?
d. Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?
e. Result in inadequate emergency access?
f. Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?

3.12.4.2 Impacts and Measures

a) Would the project conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?

Construction

Project construction is expected to begin in Spring 2019 and last approximately 15 months. Construction activities would generate construction-related truck and employee trips that could create a temporary increase in localized traffic. The demolition of the existing parking area, the excavation of the soil for the basement and construction of the foundation are the activities expected to generate the highest amount of daily trucks. These activities would last approximately six to eight months and would increase the amount of heavy truck traffic in the downtown area and could potentially disrupt traffic flows. Disruption of the traffic flows could be caused by slow moving trucks on the road and creating potential conflict with other users (vehicles, bicyclists). Furthermore, closure of the sidewalk could be required during construction. A bus stop for VTA line 35 is located on the project site on Hamilton Avenue and would need to be relocated. Sidewalk closure would also require a safe detour for pedestrians. Although construction impacts would be temporary, it could cause significant impacts in the project vicinity. Implementation of **MM TR-1 Construction Traffic Control Plan** would reduce the potential of traffic disruption to less than significant.

MM TR-1 Construction Traffic Control Plan. Prior to excavation, the construction contractor shall develop the traffic control plan in accordance with City's policies, coordinate with VTA and submit for City approval. The plan shall be implemented throughout the course of the project construction and will include, but is not limited to, the following elements:

- Limit truck access to the project site during peak commute times (7:00 A.M. to 9:00 A.M. and 4:00 P.M. to 6:00 P.M.);
- Restrict construction truck routes to truck routes designated by the City of Palo Alto[63];
- Provide adequate parking or carpool option for construction employees near the construction site;

[63] City of Palo Alto, California, Truck Route Map, Chapter 10.48 P.A.M.C, August 22, 2002.

- ∂ Require traffic control in the project entrance driveway, including flag persons wearing bright orange or red vests and using "Stop/Slow" Paddle to control oncoming traffic.
- ∂ Coordinate with VTA to temporarily relocate the bus stop to ensure minimal impacts during sidewalk closure, if needed.
- ∂ Maintain bicycle and pedestrian access and circulation during project construction. If construction encroaches on a sidewalk, a safe detour will be provided for pedestrian at the nearest crosswalk;
- ∂ Repair or restore the road right-of-way to its original condition or better upon completion of the work;
- ∂ Provide access for emergency vehicles at all time.

Operation

During the operation of the parking structure, several measures would be implemented to optimize the operation of the parking structure. The proposed parking structures would include parking and wayfinding signage and guidance systems consistent with the Downtown Parking Wayfinding Signage Guidance Systems.

At this time, the City has not decided if the parking structure would be a paid parking structure or not. If it is a paid parking structure, gates would be required and could slow the flow of the traffic. MM TR-2 Vehicle Queuing Analysis would ensure that queues from the parking garage do not back up onto Hamilton Avenue.

> MM TR-2 Vehicle Queuing Analysis. In the event the project includes a paid parking component and, therefore, includes a parking gate, the project must prepare and submit a queuing study that shows, to the satisfaction of the Transportation Division, that queuing into Hamilton Avenue would be avoided. Queuing includes a line of two or more vehicles waiting to enter the structure, which could block traffic on Hamilton. The study will consider the configuration and the anticipated volume of vehicles accessing the parking garage during the peak hour. The provisional gates must process vehicles efficiently such that vehicles do not have to wait to turn into the parking facility.

Incorporation of MM TR-1 and MM TR-2 would ensure that the project would not conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system. Therefore, the project would have a ***less than significant impact with mitigation incorporated***.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

b) Would the project conflict with an applicable congestion management program, including but not limited to LOS standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?

Existing Plus Project Conditions

Table 32 shows the LOS levels at the study intersections under existing conditions. Each of the study intersections operate at acceptable levels (LOS D or better) under existing conditions. With the addition of project trips, all study intersections would continue operating at the same LOS as observed under existing

conditions. Therefore, the projects impact on traffic LOS under Existing plus Project conditions is less than significant.

Table 32: Existing and Existing Plus Project Conditions Intersection Level of Service

Intersection Name		Intersection Control[1]	LOS Standards[2]	Peak Hour[3]	Existing		Existing Plus Project			
					Delay[4]	*LOS[5]*	*Delay[4]*	*LOS[5]*	*Change in Critical V/C[6]*	*Change in Average Critical Delay[7]*
#1	Gilman Street and Hamilton Avenue	Signal	D	A.M. P.M.	3.4 4.2	A A	3.4 4.2	A A	0.007 0.009	0.0 0.0
#2	Project Driveway and Hamilton Avenue	SSSC	D	A.M. P.M.	10.1 12.4	B B	10.3 14.0	B B	N/A	N/A
#3	Waverley Street and Hamilton Avenue	Signal	D	A.M. P.M.	9.6 8.3	A A	9.6 8.4	A A	0.004 0.016	0.2 0.1

Notes:

1. Signal = Signalized Intersection; SSSC = Side-Street Stop Controlled Intersection.
2. LOS Standard of intersection's jurisdiction.
3. A.M. = morning peak hour (between 7:30 and 8:30 A.M.), P.M. = evening peak hour (between 4:30 and 5:30 P.M.).
4. Whole intersection weighted average control delay expressed in seconds per vehicle for signalized intersections. Total control delay for the worst movement is presented for side-street stop-controlled intersections.
5. LOS = Level of Service calculations conducted using the TRAFFIX level of service analysis software package, which applies the methodology described in the 2000 HCM.
6. Change in critical volume-to-capacity ratio (V/C) between No Project and Plus Project Conditions.
7. Change in critical movement delay between No Project and Plus Project Conditions.

Source: Fehr & Peers, October 2017.

Background Plus Project Conditions

Background conditions include the addition of anticipated traffic that would be generated by other approved developments in the project vicinity that have not yet been constructed or occupied. As shown in **Table 33,** under Background Plus Project Conditions Intersection Level of Service, all study intersections would continue to operate at an acceptable LOS during both peak hours during background plus project conditions. Therefore, impacts would be ***less than significant*** and no mitigation measures are required.

LESS THAN SIGNIFICANT

Table 33: Background Plus Project Conditions Intersection Level of Service

Intersection Name		Intersection Control[1]	LOS Standards[2]	Peak Hour[3]	Near-Term		Near-Term Plus Project			
					Delay[4]	*LOS[5]*	*Delay[4]*	*LOS[5]*	*Change in Critical V/C[6]*	*Change in Average Critical Delay[7]*
#1	Gilman Street and Hamilton Avenue	Signal	D	A.M. P.M.	3.5 4.3	A A	3.5 4.3	A A	0.007 0.009	0.0 0.0
#2	Project Driveway and Hamilton Avenue	SSSC	D	A.M. P.M.	10.3 13.2	B B	10.6 15.1	B C	N/A	N/A
#3	Waverley Street and Hamilton Avenue	Signal	D	A.M. P.M.	9.7 8.5	A A	9.7 8.5	A A	0.004 0.016	0.1 0.1

Notes:

1. *Signal = Signalized Intersection; SSSC = Side-Street Stop Controlled Intersection.*
2. *LOS Standard of intersection's jurisdiction.*
3. *A.M. = morning peak hour (between 7:30 and 8:30 A.M.), P.M. = evening peak hour (between 4:30 and 5:30 P.M.).*
4. *Whole intersection weighted average control delay expressed in seconds per vehicle for signalized intersections. Total control delay for the worst movement is presented for side-street stop-controlled intersections.*
5. *LOS = Level of Service calculations conducted using the TRAFFIX level of service analysis software package, which applies the methodology described in the 2000 HCM.*
6. *Change in critical volume-to-capacity ratio (V/C) between No Project and Plus Project Conditions.*
7. *Change in critical movement delay between No Project and Plus Project Conditions.*

Source: Fehr & Peers, October 2017.

c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks

The Palo Alto Airport is the closest airport to the project site. The airport primarily serves small general aviation aircraft. The project site is located outside the Airport Influence Area of Palo Alto Airport[64]. Therefore, the project would have ***no impact*** air traffic patterns that could result in substantial safety risks.

NO IMPACT

d) Substantially increase hazards due to a design feature (e.g. sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

The project would not introduce physical features that would introduce safety hazard for vehicle, pedestrians, bicyclists or transit users. The design of the parking structure would comply with the Palo Alto Building Code, the California Building Code and any federal, state and local regulations. The proposed project would not include incompatible uses in the downtown Palo Alto area.

[64] Santa Clara County, Department of Planning and Development, *Comprehensive Land Use Plan: Palo Alto Airport*, https://www.sccgov.org/sites/dpd/DocsForms/Documents/ALUC_PAO_CLUP.pdf (accessed on October 29, 2017)

The proposed project design includes sufficient space for vehicles turning around the corners as they enter or exit the parking structure. The project sponsor also performed a turning radius analysis for delivery and garbage trucks using Lane 21. The analysis concludes that the trucks would have sufficient space to operate in the lane as they are currently doing and thus, it would not create hazards.

Access to the stairway would be from the pedestrian path (on the north side) and from the sidewalk at the intersection of Waverley Street and Hamilton Avenue and would not create conflict between vehicles and pedestrian. Therefore, it would not create any hazards to pedestrian accessing or exiting the parking structure.

Therefore, there would not be a substantially increase hazards due to a design feature (e.g. sharp curves or dangerous intersections) or incompatible uses, and thus, impact is ***less than significant***. No mitigation is required.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

e) Would the project result in inadequate emergency access?

There would be no permanent impact to emergency access at the project site. Temporary access would be maintained as stated in mitigation measure **MM TR-1**. Therefore, impacts under this criterion would be ***less than significant with mitigation incorporated***. No further mitigation would be required.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities or otherwise decrease the performance or safety of such facilities?

Construction impacts on active transportation modes (e.g.: bicycle and pedestrian facilities) and public transit typically include temporary blocking of a lane or a bicycle or pedestrian pathway or otherwise require bicyclists and pedestrians to share the route with heavy construction vehicles. The proposed project could involve a temporary closure of the sidewalk on either Hamilton Avenue or Waverley Street. There is a bus stop on Hamilton Avenue in front of the project site; therefore, service would need to be moved to another location if a temporary lane closure occurred. Furthermore, entries and exits of trucks and heavy constructions vehicles from the project site in the downtown area could impact bicyclists and the pedestrians. Implementation of **MM TR-1 Construction Traffic Plan** would reduce construction impacts on transit, pedestrian, bicycle facilities to less than significant with mitigation incorporated. Any impacts during construction would be temporary.

The building would comply with any federal, state and local regulations regarding ADA compliance. Furthermore, the proposed project would include 50 bicycle parking spaces at the ground level in the downtown area, consistent with the City's requirements for bicycle parking. Therefore, the proposed project would not conflict with adopted policies regarding inclusion of bicycle parking.

The intersection of Waverley Street and Hamilton Avenue is identified in the City of Palo Alto 2012 Bicycle and Pedestrian Transportation Plan as a "high frequency collision location". Bulb outs are specifically recommended as a "priority pedestrian treatment"[65] at this intersection. The proposed project would include safety improvements to the intersection at Waverley Street and Hamilton Avenue. Improvement includes modification of the traffic signal equipment at the northwest corner to include pedestrian signal heads, countdown clocks and accessible pedestrian push buttons and extension of the curb line 6 or 7 feet from the existing face of curb at the northwest corner of the Waverley Street and Hamilton Avenue intersection. Furthermore, MM TR-3 Parking Structure Access and Exit Safety Improvement would ensure safety for exiting Lane 21.

MM TR-3 Parking Structure Access and Exit Safety Improvement

The following improvement shall be implemented to improve safety in accessing and exiting the proposed parking structure:

- The City will install a stop sign at the intersection of Lane 21 and Bryant Street.

With the implementation of MM TR-1 and MM TR-3, the proposed project would not conflict with adopted policies, plans, or program regarding public transit, bicycle or pedestrian facilities or decrease their performance Therefore, the project would have ***less than significant impact with mitigation incorporated.***

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

g) Would the project create the potential demand for through traffic to use local residential streets or cause any change in traffic that would increase the TIRE index by 0.1 or more?

Residential neighborhoods are often sensitive to traffic increases, which can cause an impact on the livability of the neighborhood. Developments can cause an influx of new vehicle trips that create more neighborhood pass-through traffic on local, previously unused residential streets. As specified in the Staff Report presented to the City Council regarding the parking structure in the Palo Alto downtown area, the City has been dealing with a parking problem over the last several years. Due to a high parking demand in the downtown area, there has been a spill-over impact into adjacent residential neighborhood.[66] One of the purposes of the project is to reduce the spill-over and limit traffic impacts on nearby residential neighborhoods. The project would not generate trips that would create the potential demand for through traffic to use local residential streets. Instead, it would redirect traffic generated by surrounding land uses within a given area such as downtown Palo Alto. The project will have ***less than significant impact*** on nearby local residential streets.

LESS THAN SIGNIFICANT IMPACT

[65] City of Palo Alto, City of Palo Alto Bicycle + Pedestrian Transportation Plan, July 2012, p. 4-18 and 6-17, http://www.cityofpaloalto.org/civicax/filebank/documents/31928 (Accessed on October 30, 2017)

[66] City of Palo Alto, City Council Staff Report, *Direction on Downtown Parking Garage Size,* April 11, 2017, http://www.cityofpaloalto.org/civicax/filebank/documents/56784, accessed on November 5, 2017.

3.13 Utilities and Service Systems

This section describes the affected environment and regulatory setting for Utilities and Service Systems. It also describes the impacts on Utilities and Service Systems that would result from implementation of the project, and mitigation measures that would reduce these impacts.

3.13.1 Regulatory Setting

3.13.1.1 Federal

Regulations relevant to water quality are described in *Section 3.8, Hydrology and Water Quality, p.117.* There are no additional federal regulations relevant to utilities and services systems.

3.13.1.2 State

Regulations relevant to water quality are described in *Section 3.8, Hydrology and Water Quality, p.117.* Other state regulations relevant to utilities and services systems are summarized below.

Urban Water Management Planning Act

In 1983, the California Legislature enacted the Urban Water Management Planning Act (California Water Code Sections 10610 through 10656). The act has been modified over the years in response to factors such as the State's water shortages and droughts. Significant amendments were made in 2009, after the drought of 2007-2009, and to answer the governor's call for a 20 percent statewide reduction in urban water use by 2020.

The act requires urban water suppliers that provide water to more than 3,000 customers, or that provide over 3,000 acre-feet of water annually, to prepare an Urban Water Management Plan (UWMP) to support long-term water resource planning and ensure adequate water supplies are available to meet existing and future water demands over a 20-year planning horizon[67]. CPAU is the urban water supplier for Palo Alto. UWMP's are required to be updated every five years. The last update for the City of Palo Alto was in 2015 and the plan was adopted in June 2016.

Water Conservation Act of 2009 (Senate Bill X7-7)

The Water Conservation Act of 2009 requires the State to set a goal of reducing urban water use by 20 percent by 2020 and requiring all water suppliers to increase water use efficiency. The State shall make incremental progress towards this goal by reducing per capita water use by at least ten percent by 2015. Each retail urban water supplier must determine baseline water use during their baseline period and must also specify water use targets for the years 2015 and 2020 to help the State achieve the reduction.

[67] California Department of Water Resources, Urban Water Management, http://www.water.ca.gov/urbanwatermanagement/ (accessed on October 29, 2017)

Water Supply Assessment (Senate Bill 610)

Senate Bill 610 (water Code Sections 10910 through 10915), effective January 1, 2002, requires cities and counties to confirm that sufficient water supply sources are available before specified large development projects are approved Confirmation is provided in at Water Supply Assessment that must be prepared for projects that include:

1) The equivalent demand of 500 residential units;
2) A shopping center or business establishment that employs more than 1,000 persons or has a floor space of more than 500,000 square-feet; or
3) A commercial office building that employs more than 1,000 persons or has a floor space of more than 250,000 square-feet.

The Water Supply Assessment for a proposed project must be included in that project's CEQA document. The proposed project does not meet any of the criteria and thus, does not require a Water Supply Assessment.

California Green Building Standards Code (California Code of Regulations Title 24, Part 11)

The California Green Building Standards also known as CalGreen or Title 24 is the established minimum standard for the design and construction of buildings and structure in California. It was last updated in 2016 (effective on January 1, 2017). The purpose of Title 24 is to improve public health, welfare and safety by enhancing building design and construction and to encourage sustainable practices. One of the category associated with Title 24 is water efficiency and conservation and it includes mandatory measures to reduce indoor and it includes mandatory measures to reduce indoor and outdoor water use.

California Integrated Waste Management Act (Assembly Bill 939)

In 1989, Assembly Bill 939 was passed to address waste stream increases and limited landfill capacity. A disposal reporting system oversight by the California Integrated Waste Management Board (CIWMB) was established, along with required facility and program planning. The bill mandates a reduction in waste disposal and jurisdiction were required to meet diversion goals of 25 percent by 1995 and 50 percent by 2000. The bill also established and integrated framework for program implementation, solid waste planning, and solid waste facility and landfill compliance. The new Assembly Bill 341, approved in October 2011, established a state goal of 75 percent of solid waste generated be source reduced, recycled or composted by 2020[68].

The City of Palo Alto is working to maintain the waste diversion goal of 50 percent set by state law and adopted a goal of 73 percent waste diversion by 2011 and zero waste by 2021[69].

[68] CalRecycle, Mandatory Commercial Recycling, http://www.calrecycle.ca.gov/recycle/commercial/ (accessed on October 29, 2017)
[69] City of Palo Alto, *About Zero Waste Palo Alto* http://www.cityofpaloalto.org/gov/depts/pwd/zerowaste/about/mission.asp (accessed on October 29, 2017)

3.13.1.3 Local

City of Palo Alto Comprehensive Plan

The Palo Alto Comprehensive Plan is the primary tool guiding the development of the City; it was first adopted in 2007, and updated in 2015 and 2017. Chapter 5 of the comprehensive plan includes provisions regarding Natural Environment:

Table 34: Palo Alto Comprehensive Plan Policies Related to the Natural Environment

Program/Policy	*Guidance*
Policy N-19	*Secure a reliable, long-term supply of water for Palo Alto.*
Policy N-20	*Maximize the conservation and efficient use of water in new and existing residences, businesses and industries.*
Policy N-23	*Reduce the discharge of toxic materials into the City's sanitary sewer collection system by promoting the use of Best Management Practices*
Policy N-25	*Reduce pollutant levels in City wastewater discharges*

Source: City of Palo Alto, Comprehensive Plan Update, November 2017, http://www.paloaltocompplan.org/plan-contents/natural-environment-element/ accessed on January 28, 2018.

City of Palo Alto Urban Water Management Plan

The City of Palo Alto's Urban Water Management Plan (UWMP) was updated in May of 2016. The UWMP includes an assessment of the reliability of the City's water sources, an analysis of water demand, identification of alternative water supply sources, a description of water conservation efforts, and a water shortage contingency plan. Every five years, an UWMP is prepared and submitted as required to the California Department of Water Resources (DWR), per the Urban Water Management Planning Act.

Palo Alto Public Works Strategic Plan

This plan requires completion of Green Infrastructure work plan that includes Low Impact Design (LID) for drainage feature in parking lots to reduce adverse water quality impacts of development and urban runoff[70].

Construction and Demolition Debris Diversion Ordinance

The City passed a Construction and Demolition Debris Diversion Ordinance in 2004, and updated the ordinance in 2009. The ordinance requirements are currently enforced through the City's Green Building Program and require projects to salvage, and/or divert at least 75 percent of project debris from landfill[71].

[70] City of Palo Alto Department of Public Works Strategic Plans, FY 2016-2018, http://www.cityofpaloalto.org/civicax/filebank/documents/50085 (accessed on October 29, 2017)
[71] City of Palo Alto, Zero-Waste, http://www.cityofpaloalto.org/gov/depts/pwd/zerowaste/whatgoeswhere/debris.asp (accessed on October 29, 2017)

Zero Waste Strategic Plan and Zero Waste Operational Plan

On November 15, 2004, the City Council directed staff to develop a zero-waste policy and implementation plan for the Palo Alto community. In January 2005, a task force composed of Palo Alto residents and businesses was formed to assist in the creation of a zero-waste policy and the development of a Zero Waste Strategic Plan to act as a framework to guide City officials in the planning and decision making process towards achieving zero waste goals.

Based on input from the community, businesses, and industry experts, the resulting Zero Waste Strategic Plan identified the key objectives and strategies needed to reach zero waste. This included developing policies and incentives designed to eliminate waste at the source, and maximizing recycling through expanded collection programs, processing facilities, education, outreach, and technical assistance. In October 2005, the Council approved the Strategic Plan and adopted the goals of 73 percent waste diversion by 2011 and zero waste by 2021 (CMR:382:05). Council also directed staff to develop a Zero Waste Operational Plan to identify the policies, programs and facilities needed to achieve these goals[72].

3.13.2 Existing Conditions

The project site is within an urban area served by utility service systems, including water, wastewater and storm water collection and treatment, and solid waste collection and disposal. Water service, wastewater and storm water collection and treatment are managed by CPAU and solid waste collection and disposal is provided by GreenWaste of Palo Alto.

3.13.2.1 Water

The City of Palo Alto is a member of the Bay Area Water Supply and Conservation Agency (BAWSCA). The City receives most of its water supply from the City and County of San Francisco's regional systems, which are operated by the San Francisco Public Utilities Commission (SFPUC). Although this water supply is predominantly from the Sierra Nevada, delivered through the Hetch Hetchy aqueducts, it also includes treated water produced by the SFPUC from its local watersheds and facilities in Alameda and San Mateo counties[73].

Existing water uses at the project site, including surface parking and the public restroom, are considered negligible. Water supply for the project site is provided by the City of Palo Alto.

3.13.2.2 Wastewater

Municipal wastewater contains sewage and greywater. The CPAU oversees a wastewater collection system consisting of over 208 miles of sewer lines. The City operates the Regional Water Quality Control Plant (RWQCP), which has primary treatment (bar screening and primary sedimentation), secondary treatment

[72] City of Palo Alto, *About Zero Waste Palo Alto* http://www.cityofpaloalto.org/gov/depts/pwd/zerowaste/about/mission.asp (accessed on October 29, 2017)
[73] City of Palo Alto, *Urban Water Management Plan*, http://www.cityofpaloalto.org/gov/depts/utl/eng/water/watermgmt.asp (accessed on October 29, 2017)

(fixed film reactors, conventional activated sludge, clarification and filtration), and tertiary treatment (filtration through a sand and coal filter and ultraviolet (UV) disinfection). Wastewater is routed to RWQCP, where it is treated prior to discharge into the San Francisco Bay. While the CPAU is responsible for the wastewater collection system, the Palo Alto Public Works Department is responsible for the collection/conveyance of sewage collected and delivered to the RWQCP.

The RWQCP is designed to have an average dry weather flow capacity of 39 million gallons per day (MGD) with full tertiary treatment, and a peak wet weather flow capacity of 80 MGD with full secondary treatment. Current average flows are approximately 22 MGD. Therefore, the current available capacity of the RWQCP is 17 MGD. The plant capacity is sufficient for current dry and wet weather loads and for future load projections. The RWQCP does not experience any major treatment system constraints and has no planned capacity expansions. Approximately 220,000 people live in the RWQCP service area. Of the wastewater flow to the RWQCP, about 60 percent is estimated to come from residences, 10 percent from industries, and 30 percent from commercial businesses and institutions. The RWQCP treats 21 MGD of effluent from all the partner cities. All the wastewater treated at the RWQCP can be recycled. The plant already has some capability to produce recycled water that meets the Title 22 unrestricted use standard (approximately 4.5 MGD of capacity of which 4.5 MGD is presently available[74].

There is a 15-inch sewer main on Waverley Street and a 10-inch sewer main on Hamilton Avenue.

3.13.2.3 Storm water

The Department of Public Works Storm Drain Management Program is responsible for the approval, construction, and maintenance of the storm drain system in Palo Alto. Storm drains are separate from the sanitary sewers and storm water flows directly to creeks and San Francisco Bay without treatment[75]. There are four smaller watersheds in the City of Palo Alto. The project site is located in the San Francisquito Creek Watershed[76]. The SCVWD oversees County-wide programs for flood protection and storm water management. For local lines that connect to the creeks, the City maintains a Storm Drain Master Plan that recommends improvements to be made over a 30-year horizon.

The existing surface parking is mainly impervious surfaces with scattered landscaping. 28,900 square feet out of 29,164 square feet of the lot is covered with impervious surfaces which represents 99 percent of the lot. Storm water currently flows on the surface toward the street to the City's drainage system without treatment or retention system.

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[74] City of Palo Alto, Urban Water Management Plan (UWMP), http://www.cityofpaloalto.org/civicax/filebank/documents/51985 (accessed on October 29, 2017)

[75] City of Palo Alto Department of Public Works Storm Drain Management, *Storm Drain System Facts and Figures*, Program http://www.cityofpaloalto.org/civicax/filebank/documents/2806 (accessed on October 29, 2017)

[76] City of Palo Alto, *Storm Drain Watersheds within the City of Palo Alto*, http://www.cityofpaloalto.org/civicax/filebank/documents/2816 (accessed on October 29, 2017)

3.13.2.4 Solid Waste

Currently, the City is contracted with GreenWaste of Palo Alto for collection of garbage, recycling, and composting services in the City, and with Waste Management, Inc., to use the Kirby Canyon Landfill for waste disposal. As of July 31, 2015, the Kirby Canyon Landfill has a remaining capacity of roughly 22,000,000 tons. The daily permitted capacity of Kirby Canyon Landfill is up to 2,600 tons per day[77]. According to the latest Disposal Facility Inspection Report in 2010, the peak tonnage is 2,094 tons per day. Therefore, the landfill has a remaining daily capacity of 506 tons per day.

3.13.3 Impact Analysis

3.13.3.1 Significance Criteria

For this analysis, an impact pertaining to the Utilities and Service System was considered significant under CEQA if it would result in any of the following environmental effects, which are based on the State CEQA Guidelines:

a. Exceed wastewater treatment requirements of the applicable RWQCB?
b. Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?
c. Require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?
d. Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?
e. Result in a determination by the wastewater treatment provider which serves or may serve the project that it has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments?
f. Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?
g. Comply with federal, state, and local statutes and regulations related to solid waste?

[77] CalRecycle, Facility/Site Summary Details: Kirby Canyon Recycle & Disp. Facility (43-AN-0008), July 2015, Available online: http://www.calrecycle.ca.gov/SWFacilities/Directory/43-AN-0008/Detail/ (accessed on May 7, 2018)

3.13.3.2 Impacts and Measures

a. Would the project exceed wastewater treatment requirements of the applicable RWQCB?
b. Would the project require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?
e. Would the project result in a determination by the wastewater treatment provider which serves or may serve the project that it has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

The RWQCP is designed to have an average dry weather flow capacity of 39 MGD with full tertiary treatment, and a peak wet weather flow capacity of 80 MGD with full secondary treatment. Current average flows are approximately 22 MGD. Therefore, the current available capacity of the RWQCP is 17 MGD.

The proposed project would introduce an increase in parking spaces and would add approximately 2,000 square feet of retail use to the project site. Palo Alto Utilities' UWMP does not list wastewater generation factors. Therefore, wastewater generation rates from the City of Los Angeles were used to estimate the amount of wastewater that would be generated by the proposed project. As shown in Table 35, the proposed project would generate a net increase of approximately 2,580 gallons of wastewater per day. This increase would be approximately less than 0.01 percent of the existing unused capacity of the RWQCP. Therefore, there would be sufficient wastewater treatment capacity to serve the project site.

Table 35: Estimated Wastewater Generation

Type of Use	Quantity	Generation Factor (Per Day)	Amount (gallons per day)
Existing Uses			
Surface Parking	29,164 sf	25 gallons/1,000 sf	(729)
Public Restroom	1 restroom	100 gallons/restroom	(100)
		Existing Conditions Subtotal	*(829)*
Proposed Project			
Retail	2,000 sf	100 gallons / 1,000 sf	200
Parking Structure	128,369 sf	25 gallons/1,000 sf	3,209
		Proposed Project Subtotal	*3,409*
Total Net Increase in Wastewater Generation (Proposed Project)			***2,580 gpd***

Notes: gpd= gallons per day, sf=square feet, ( ) denotes subtraction
Source: Los Angeles wastewater design flow rates (2016) (ISA NCAC 02H 0105)

The proposed project would not exceed wastewater treatment requirements or require or result in the construction of wastewater treatment facilities or expansion of existing facilities. The proposed project

would not result in a substantial physical deterioration of public wastewater facilities. Therefore, impacts would be ***less than significant***. No mitigation is required.

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c. Would the project require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

Development projects are required by NPDES to manage stormwater (rainwater) runoff to protect local waterways during and after construction. The Santa Clara County Water District implements the NPDES requirements through its development review process to ensure local waterways meet pollution prevention and flow management requirements[78]. Projects that include uncovered parking lots that create and/or replace 5,000 square feet or more of impervious surface on the project site and that are located in the San Francisco Bay watershed must file the appropriate request to the County of Santa Clara and must comply with the stormwater requirements. Since the proposed building would replace more than 5,000 square feet of impervious surface on the site and the site is located in the San Francisco Bay watershed, it would need to comply with the County's storm water requirements. The proposed project would follow the appropriate storm water guide.

The proposed project would include several measures to limit the quantity of stormwater to be discharged into the drainage facilities. As stated above, 99 percent of the lot is now covered with impervious surfaces. The proposed project would reduce the quantity of impervious surface to approximatively 90 percent by integrating landscaping and pervious surface. Furthermore, area drains and building connections would collect rainwater to convey into bioretention planters for treatment. The treated water will then be conveyed to a storm drain main along Waverley Street. The proposed project would not generate an increase in storm water. The existing quantity of stormwater generated by the project site is 0.84 cubic feet per second and the project would decrease to 0.76 cubic feet per second.

Therefore, the proposed project would not require or result in the construction of new stormwater drainage facilities or expansion of existing facilities nor would it cause substantial physical deterioration of the storm water drainage facility or require construction of new or expanded storm water facilities due to increase use as a result of the project. Thus, impacts to storm water facilities would be ***less than significant.***

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[78] Santa Clara County Water District, Storm Water Management https://www.sccgov.org/sites/dpd/Programs/Stormwater/Pages/Stormwater.aspx (accessed on October 30, 2017)

d. Would the project have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?

Since 1962, the City of Palo Alto's potable water supply has come from the SFPUC. In 1999, the City began to prepare a new Water Integrated Resources Plan (WIRP) which was adopted in 2003. In January 2017, the City of Palo Alto adopted the 2017 WIRP.

In mid-2003, the WIRP concluded, based on available information, that supplies from the SFPUC are adequate in normal years, but additional supplies are needed in drought years to avoid shortages. At this time, no decision has been made regarding whether or not to use groundwater as a supplemental supply in droughts, though the City is proceeding with the Emergency Water Supply and Storage project that would provide the City the flexibility to rely on groundwater during a drought if necessary. In 2017, the plan has been updated with an expanded description of the short and long term threats to SFPUC water supply availability. The City is also a participating agency on the BAWSCA's Long-Term Reliable Water Supply Strategy to meet the projected water needs of its member agencies and their customers through 2035 and to increase their water supply reliability under normal and drought conditions.

The City of Palo Alto attempts to address issues of water supply in its UWMP. According to the UWMP, the City of Palo Alto has analyzed three different hydrological conditions to determine the reliability of water supplies for the City: average/normal water year, single dry water year, and multiple-dry water year period. In each of the three hydrological conditions, the projected water demand was calculated considering growth in billing data, water conservation efforts, and demographics. The UWMP states that the City of Palo Alto can reliably meet the projected water demand in each of the hydrological conditions through 2035[79].

Table 36: City of Palo Alto Water Supply Demand Balance (Acres Feet per Year (AFY))

	2015	*2020*	*2025*	*2030*	*2035*
Projected SFPUC Demand	10,724	11,883	11,411	11,132	10,879
Individual Supply Guarantee	19,118	19,118	19,118	19,118	19,118
Difference	8,394	7,235	7,707	7,986	8,239

Source: City of Palo Alto Urban Water Management Plan, Table 26, June 2016

According to the EIR for the comprehensive plan update for the City of Palo Alto, the growth in water demand for the horizon 2030 would range between 782 AFY to 758 AFY which represent 9.3 percent of the available supply guarantee by SFPUC[80].

[79] City of Palo Alto, Urban Water Management Plan, 2016.

[80] City of Palo Alto, Palo Alto Comprehensive Plan Update Supplement to the Draft EIR, February 10, 2017, https://www.cityofpaloalto.org/gov/depts/pln/long_range_planning/2030_comprehensive_plan/default.asp (accessed on April 12, 2018).

Activities requiring water uses associated with the proposed project for the operation are the retail use and the landscaping. As the proposed project would accommodate a new retail space of approximately 2,000 square feet and new landscaping, the average water use would increase compared to existing conditions. The average water consumption for both indoor and outdoor uses would be approximately 3,409 gpd. The existing water consumption of the site is approximately 829 gpd generated by the existing surface parking and the toilet[81]. Therefore, the total new water demand for the proposed project would be 2,580 gpd which would account for 0.001 percent of the 9.3 percent projected retail-demand increase for the City of Palo Alto[82]. Therefore, while the project would incrementally increase the demand for water in Palo Alto, the estimated increase in demand could be accommodated within anticipated water supply forecasts.

Project construction would require the use of water for mixing concrete, washing equipment and vehicles, controlling dust and other activities. Water from dewatering would be used for dust control, irrigation or another on-sit purpose to the greatest extent possible as stated in the Palo Alto Best Management Practices and in Section 3.8 Hydrology and Water Quality which would reduce the use of water. Accordingly, the water used daily during construction would be minimal and impacts would be ***less than significant***.

Since the proposed project's water demand would be accommodated by the existing and planned supply and infrastructure, no expansion or construction of new water supply facilities would be required. The CPAU has sufficient water supply available to serve the proposed project from existing entitlements and resources as identify in Table 36. The proposed project would be designed to incorporate water-conserving measures, such as low-flush toilets and urinals, as required by the Title 24 of the California Code of Regulations. Since the proposed project would have sufficient water supply available from existing water supply, it would not require new water supply or water treatment facilities, and this impact would be ***less than significant***. No mitigation is required.

LESS THAN SIGNIFICANT IMPACT

f. Would the proposed project be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?

g. Would the project comply with federal, state, and local statues and regulations related to solid waste?

As described above, the City is contracted with GreenWaste of Palo Alto for collection of garbage, recycling, and composting services in the City and with Waste Management Inc. to use the Kirby Canyon Landfill for waste disposal. As of July 31, 2015, the Kirby Canyon Landfill has a remaining capacity of roughly 22,000,000 tons and the landfill has a remaining daily capacity of 506 tons per day.

[81] Water consumption is based on the wastewater flow estimation shown in Table 35 of the draft EIR. Gordon Knowles, Senior Project Manager, Watry Design, Inc., email correspondence with Lyne-Marie Bouvet, Environmental Planner, WSP, April 16, 2018.

[82] Calculation of the percentage water demand: $\left(\frac{2{,}580\ gpd}{782\ AFY \times \frac{325\ 851\ gpd}{1\ AFY}}\right) = 0.001\%$ or $\left(\frac{2{,}580\ gpd}{758\ AFY \times \frac{325\ 851\ gpd}{1\ AFY}}\right) = 0.001\%$

The Construction and Demolition Debris Diversion Ordinance requires a minimum of 75 percent of all construction and demolition debris to be recycled and diverted from landfills. Accordingly, the contractor would be required to divert construction and demolition. Vegetation debris resulting from the landscaping removal, landfill resulting from the excavation of the basement level and asphalt concrete from the existing surface parking would be sent to a registered facility that would process and divert these materials according to applicable local and state regulation.

In Palo Alto, recycling, composting and waste reduction efforts are expected to increasingly divert waste from landfill. In 2005, the Palo Alto City Council adopted a goal of Zero Waste by 2021. The proposed project would provide spaces to accommodate separate containers for recycling, compost, and landfill. During operation of the proposed project, occupants of the building would be expected to participate in the City's Recycling and Composting programs and other efforts to reduce the solid waste disposal stream.

Although the proposed project would incrementally increase total waste generation by adding a new retail space to the existing downtown area, the increasing diversion rate through recycling and composting would result in a decreasing share of total waste that requires disposal into the landfill. For these reasons, the solid waste generated by the proposed project during construction and operation would not result in the landfill exceeding its permitted capacity. In addition, the construction and operation of the proposed project would comply with all applicable statutes and regulations related to solid waste and the impact would be ***less than significant***. No mitigation is required.

LESS THAN SIGNIFICANT IMPACT

3.14 Energy Conservation

This section describes the affected environment and regulatory setting for Energy Conservation. It also describes the impacts on Energy Conservation that would result from implementation of the project, and mitigation measures that would reduce these impacts.

3.14.1 Regulatory Setting

The project would be subject to energy conservation requirements in the California Energy Code (Title 24, Part 6, of the California Code of Regulations, California's Energy Efficiency Standards for Residential and Nonresidential Buildings) and the California Green Building Standards Code (also known as CALGreen, Title 24, Part 11 of the California Code of Regulations), as embodied in enforceable conditions of approval. The last update of the code was done in 2016 and is a major step towards meeting the Zero Net Energy goal by the year 2020.

3.14.1.1 State

California Energy Code

The Building Energy Efficiency Standards were first adopted in 1976 and have been updated periodically since then. The Standards contain energy and water efficiency requirements (and indoor air quality requirements) for newly constructed buildings, additions to existing buildings, and alterations to existing buildings. The goal is to reduce energy costs for owners, increase reliability and availability of electricity for the State, improve building occupant comfort, and reduce environmental impact.

California Green Building Standards Code (Cal. Code Regs., Title 24, Part 11)[83]

The California Green Building Standards Code was developed to:

1) Reduce GHG from buildings;
2) Promote environmentally responsible, cost-effective, healthier places to live and work;
3) Reduce energy and water consumption; and
4) Respond to the environmental directives of the administration.

A voluntary CALGreen Code was published in 2008 and had an effective date of August 2009. The first mandatory measures were adopted in the 2010 triennial code publication, which went into effect in January 2011.

The initial 2008 publication identified Administration, Definitions and Green Building chapters and established the categories of planning and design, energy efficiency, water efficiency and conservation, material conservation and resource efficiency, environmental air quality, referenced standards, installer and inspector qualifications, and appendices for residential, nonresidential and referenced standards.

[83] California Building Standards Commission, Guide to the 2016 California Green Building Standards Non-Residential, https://www.documents.dgs.ca.gov/bsc/CALGreen/CALGreen-Guide-2016-FINAL.pdf (accessed on October 28, 2017)

CALGreen 2016 addresses new clean air vehicles and increased requirements for electric vehicle charging infrastructure. Article 5.106.5.2 of CALGreen 2016 states:

> *In new projects or additions or alterations that add 10 or more vehicular parking spaces, provide designated parking for any combination of low-emitting, fuel-efficient and carpool/van pool vehicles as follows:*

Total Number of Parking Spaces	*Number of Required Spaces*
201 and over	At least 8 percent

3.14.1.2 Renewable Portfolio Standard (RPS)

In 2015, California adopted one of the most aggressive Renewable Portfolio Standard (RPS) policies in the country, requiring that all utilities in the state supply 50 percent of their retail electric sales from eligible renewable energy resources by 2030. However, the City of Palo Alto has been pursuing renewable resources for over a decade and is on track to exceed the 50 percent RPS level in 2017. The City is also pursuing energy efficiency measures in order to reduce its total electricity consumption, and thus reduce the volume of renewable energy purchases that are needed to satisfy its RPS requirements[84].

3.14.1.3 Local

Green Building and Energy Ordinance

The Goal of the Palo Alto Green Building initiatives is to design, build, and operate a new generation of efficient, environmentally responsible, and healthy buildings in the City of Palo Alto. The Green Building requirements are based on the California Green Building Code.

Comprehensive Plan

The City's Comprehensive Plan Natural Environment Element was updated in 2017 and includes programs and policies to guide the forces behind the management of open land and natural resources of the city as well as for the protection of life and property from natural hazards. Table 37 lists the programs and policies applicable to the proposed project.

Table 37: Palo Alto Comprehensive Plan Natural Environment Element Related to Energy Conservation

Program/Policy	*Guidance*
Policy N-7.3	Prioritize the identification and implementation of cost-effective, reliable and feasible energy efficiency and demand reduction opportunities
Program N7.4.2	Incorporate cost-effective energy conservation measures into construction, maintenan and City operation and procurement practices.

[84] City of Palo Alto, Electric Renewable Standard (RPS)

Program/Policy	*Guidance*
Program N7.6.1	Explore changes to building and zoning codes to incorporate solar energy, energy storage and other energy efficiency measures into major development projects, including City-owned projects.
Program N7.6.2	Promote use of the top floors of new and existing structured automobile garages for installation of photovoltaic panels and green roofs.

Source: City of Palo Alto, Comprehensive Plan Update, November 2017, http://www.paloaltocompplan.org/plan-contents/natural-environment-element/ accessed on January 28, 2018.

3.14.2 Existing Conditions

CPAU manages its own utilities including electricity, fiber optic, natural gas, water and wastewater. The California Public Utilities Commission (CPUC) regulates investor-owned utilities operating in California.

As described in the Chapter 2 Project Description, the existing uses of the project site are a surface parking and a public restroom which involve limited energy consumption.

3.14.3 Impact Analysis

The goal of conserving energy implies the wise and efficient use of energy. The means of achieving this goal include:

1) Decreasing overall per capita energy consumption,
2) Decreasing reliance on fossil fuels such as coal, natural gas and oil, and
3) Increasing reliance on renewable energy sources.

3.14.3.1 Significance Criteria

Environmental impacts may include:

a. The project's energy requirements and its energy use efficiencies by amount and fuel type for each stage of the project including construction, operation, maintenance and/or removal. If appropriate, the energy intensiveness of materials maybe discussed.
b. The effects of the project on local and regional energy supplies and on requirements for additional capacity.
c. The effects of the project on peak and base period demands for electricity and other forms of energy.
d. The degree to which the project complies with existing energy standards.
e. The effects of the project on energy resources.

3.14.3.2 Impacts and Measures

a. Would the project result in energy impacts regarding the amount and fuel type used during each stage of the project?

The proposed project would include the expansion of an existing use (parking) and the addition of a new use (retail) on a lot located in an already built environment. It could consume incrementally more energy compared to existing conditions for every stage of the project which are the construction, operation, and maintenance. These expanded and new uses would not result in the use of a large amount of fuel, water, or energy.

During the construction of the building, energy consumption would be typical of a project of this scale and size and would comply with current state and local codes. During the operation of the building, energy would be required for ventilation of the basement level of the parking structure and the operation of the retail. To reduce energy consumption of the parking structure, the garage would have substantially open sides to provide natural ventilation for all levels except the basement level that would be mechanically ventilated. Energy would also be required for the electrical vehicles charging station. The City of Palo requires that 25 percent of parking places in new building are for electrical vehicles. For the proposed project, there will be 86 spaces designed to accommodate electrical vehicle charging stations. Initially, 19 electric vehicle charging stations would be installed. The energy consumption represents a shift from fuel consumption of standard vehicle to electrical energy. The building will also be designed with infrastructure to allow for the future installation of a photovoltaic panels mounted above the top parking deck.

The project's energy demand would be typical for a development of this scope and nature and would comply with current state and local codes concerning energy consumption described in the Regulatory Setting. Therefore, energy impacts regarding the amount and fuel type used during each stage of the project would be ***less than significant***. No mitigation is required.

LESS THAN SIGNIFICANT IMPACT

b. Would the project result in impacts on local and regional energy supplies and on requirements for additional capacity, result in impacts to energy resources or result in impacts on peak and base period demands for electricity and other forms of energy?

The California Energy Commission and local government siting authorities consider applications for the development of new power-generating facilities in the Bay Area, and elsewhere in the State on an ongoing basis. These facilities could supply additional energy to the power supply "grid" within the next few years. The CPUC uses an ongoing series of proceedings (Long Term Procurement Plan, Resource Adequacy, and RPS-related proceedings) to plan for an adequate long-term electricity supply with an increasing proportion of renewable electricity. The demand for electricity and other forms of energy generated by the proposed project would be negligible in the context of overall demand within the Bay Area and the State, and would

not in and of itself require a major expansion of power facilities and/or results in impacts on peak and base period demands. Therefore, the energy demand associated with the proposed project would be ***less than significant***. No mitigation is required.

LESS THAN SIGNIFICANT IMPACT

c. Would the project have impacts resulting from the project's projected transportation energy use requirements?

During the construction of the proposed project, the project energy demand during the construction generated by the trucks and machineries would be typical for a development of this scope and nature.

During the operation of the proposed project, as discussed in Impact A, the proposed project would include charging stations for electrical vehicles. Installation of public charging stations is part of an initiative of the City of Palo Alto to reduce the carbon footprint of the City.

Also, as discussed in *Section 3.12, Transportation and Traffic, p. 147,* a parking structure does not generate new trips, but redirects traffic generated by surrounding land uses, in this case, by the Downtown Palo Alto. Therefore, the impact resulting from the project transportation energy use would be ***less than significant***. No mitigation is required.

LESS THAN SIGNIFICANT IMPACT

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CHAPTER 4.0 OTHER CEQA REQUIREMENTS

4.1 Introduction

Analysis in this section provides a summary of CEQA requirements regarding the project cumulative impacts (CEQA Guidelines 15130), the potential growth-inducing impacts (CEQA Guidelines 15126.2(d)), and the significant environmental effects which cannot be avoided or mitigated to level less than significant, if any (CEQA Guidelines 15126.2(b)).

4.2 Cumulative Impacts

Section 15130 of the CEQA Guidelines requires that an EIR discuss cumulative impacts of a project when the project's incremental effect is cumulatively considerable, as defined in section 15065(c). State CEQA Guidelines (14 CCR 15130) require a reasonable analysis of the significant cumulative impacts of a proposed project. Section 15355 of the State CEQA Guidelines defines "cumulative impacts" as two or more individual effects that, when considered together, are either considerable or compound other environmental impacts. The cumulative impacts from several projects are the change in the environment which results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time (State CEQA Guidelines, Section 15355[b]). An EIR should not discuss impacts that do not result in part from the project evaluated in the EIR.

This analysis will not address cumulative impacts if the resource has no impacts due to the project. The focus of analysis is on the identified or potential impacts to which the related projects contribute.

4.2.1 Related Projects

Related projects considered in the cumulative impact analysis of this project included land development and infrastructure improvements. Land development proposals were identified within a 0.5-mile radius of this parking garage project. The study area is bounded by University Avenue, Bryant Street, Homer Avenue, and Cowper Street. A list of the development proposals that completed the review process by the City were considered and are provided in Table 38. City planned infrastructure projects to upgrade the downtown area include water pipes and gas pipe upgrades, and street improvements including parking enhancement. Figure 24 shows the location of the City of Palo Alto Upgrade Downtown Planned Projects.

Table 38: Proposed Land Development Projects

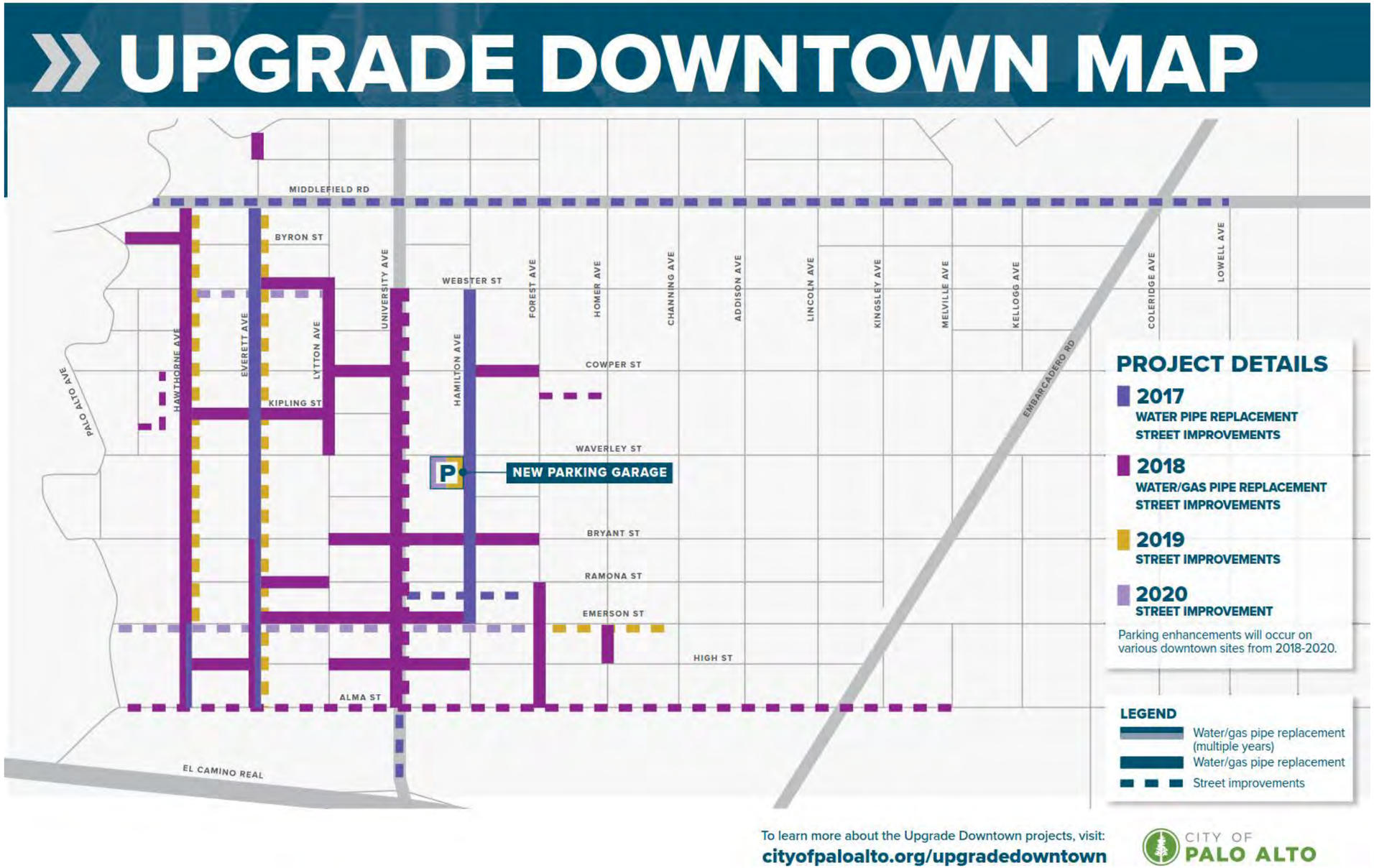
Proposed Development Location	Development Type	Development Description	Status of Proposal Review
Downtown Palo Alto (See Upgrade Downtown Map)	Utilities	Water/Gas Pipe Replacements and street Improvements (parking enhancements).	Approved
520 Webster Street	Utilities	Architectural review of the installation of solar support structure and PV panels on the top level of existing parking garage owned by the City.	Review Complete 2/22/17
565 Hamilton Avenue	Mixed Uses	Request for preliminary major architectural review to allow the demolition of three existing buildings totaling about 8,800 square feet and the creation of one mixed-use building totaling about 29,900 square feet.	In Review 2/16/18
515-519 Webster Street	Residential	Parcel Map Submittal for the development which includes a two-unit residential condominium duplex.	Review Complete 7/25/17
550 Hamilton Avenue	Mixed Uses	Pre-Screening review by City Council for proposed rezoning from a PC zone, with an existing office building, to standard CD-C(P) zoning that would allow the development of a mixed-use project with 57,475 square feet of office and 35-50 residential units.	Review Complete 5/16/16
640 Waverley Street	Mixed-Use	Preliminary Architectural Review to allow for the review of a new 9,733-square-foot, 3-story mixed-use building.	Review Complete 7/20/17
240 Hamilton Avenue	Mixed-Use (Commercial and Residential)	Request for a Parcel Map for the creation of four condominium units (2 commercial, 2 residential) in a new 4-story, 15,000-square-foot mixed-use building.	Review Complete 1/24/18
425 Middlefield Road	Residential	Individual review to allow for the demolition of the existing one-story house and the construction of a new 3,561-square-foot residence.	Review Complete 1/26/18
445 Bryant Street	Utilities	Architectural review of a trellis structure supporting a 220-kW rooftop solar development on top of the City's parking structure.	Review Complete 2/13/17

Proposed Development Location	Development Type	Development Description	Status of Proposal Review
233 University Avenue	Commercial	Preliminary architectural review of proposed development at an existing 9,481 square foot commercial building.	Review Complete 12/19/16
190 Channing Avenue	Mixed-Use (Office and Residential)	Major architectural review to allow the demolition of an existing 1,951-square-foot office building and construction of a new three-story approximately 8,769-square-foot mixed-use development comprised of ground floor office, second and third floor residential (four residential units in total), and a below-grade parking level.	In Review 3/5/18
846 Cowper Street	Residential	Individual review to allow for the demolition of an approximately 980-square foot one-story single family residence and an approximately 192-square-foot detached garage, and construct a new approximately 2,436-square-foot two-story single family residence with an approximately 226-square-foot attached garage and an approximately 1,550-square-foot basement.	Review Complete 10/5/17
740 Guinda Street	Residential	Individual review to allow demolition of an existing single story residence and construction of a new two story single-family residence with a detached garage.	Review Complete 8/19/17

Source: City of Palo Alto Development Projects, March 19, 2018. https://paloalto.buildingeye.com/planning *and* http://upgradedowntownpa.com/project-maps/

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Figure 24: City of Palo Alto Upgrade Downtown Planned Projects



Source: City of Palo Alto Upgrade Downtown Map. http://www.cityofpaloalto.org/civicax/filebank/documents/57938

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4.2.2 Impact Analysis

Aesthetics

During construction large scale equipment will be used in the construction activities. The site will be visible to the surrounding areas and passersby but would be fenced, reducing visibility of the equipment and activities to the public. Aesthetic impacts resulting from the construction activities would be temporary and can be minimized with the implementation of BMPs, such as good housekeeping activities and management of stockpiles.

The proposed structure would be constructed with material that is natural in color, and matches to the extent possible the nearby prominent buildings. The design of the building will have substantially open sides for natural ventilation and a façade is scaled to the local streets. The proposed architecture design and landscaping will contribute to the enhancement of the project aesthetics, and to the pedestrian friendly environment of the Palo Alto downtown area. Light and glare impacts would be limited and would not contribute considerably to the existing levels. The project would have a less than significant impact on the aesthetics and visual character and quality of the surrounding area, and with the proposed architecture features and landscaping, as well as implementation of MM BIO-2 Tree Preservation and Protection Plan and MM BIO-3 Tree Replacement to protect, preserve, and replace trees, the project would not contribute to cumulative adverse impacts.

Air Quality

Emissions from past, present, and future projects contribute to any regional adverse air quality on a cumulative basis. No single project by itself would be sufficient in size to result in regional non-attainment of ambient air quality standards. Instead, a project's individual emissions would contribute to any existing cumulative adverse air quality impacts[85]. The project-level thresholds for criteria air pollutants are based on levels by which new sources are not anticipated to contribute to an air quality violation or result in a considerable net increase in criteria air pollutants. BAAQMD CEQA Guidelines indicates that if the project has significant air quality impacts, the project will result in cumulatively significant impacts. In accordance with the BAAQMD's guidelines, a project would have a cumulative considerable impact if the aggregate total of all past, present, and foreseeable future sources within a 1,000-foot radius from the fence line of a source plus the contribution from the project, exceeds the following[86]:

- Non-compliance with a qualified risk reduction plan; or
- An excess cancer risk levels of more than 100 in one million or a chronic non-cancer hazard
- Index (from all local sources) greater than 10.0; or
- 0.8 µg/m^3 annual average $PM_{2.5}$.

[85] Bay Area Air Quality Management District, CEQA Air Quality Guidelines, May 2017, page 2-1.
[86] Ibid.

A lead agency should enlarge the 1,000-foot radius on a case-by-case basis if an unusually large source or sources of risk or hazard emissions that may affect a proposed project is beyond the recommended radius.

Therefore, because the proposed project's construction and operational emissions would not exceed the project-level thresholds for criteria air pollutants, the proposed project would not be considered to result in a cumulatively considerable contribution to regional air quality impacts. Due to the limited and short term nature of construction activities, and compliance of construction equipment with regulations, and implementation of BMPs, air quality impacts during construction would not be considerable and would not exceed the thresholds identified by BAAQMD. As discussed in *Section 3.2 Air Quality, p. 60,* the proposed project would not exceed any of the above thresholds from the BAAQMD CEQA Guidelines. In addition, the project would not violate any air quality standard or contribute to any existing or projected air quality violations. Therefore, the project is not considered to have a significant impact on air quality, and the project's contribution to the air quality impacts would not be cumulatively considerable.

Biological Resources

The cumulative area for biological resources includes the project site and other projects in the vicinity. The project is in an area that is mostly developed. Similar to the project area, the project vicinity does not include riparian habitat or other sensitive natural communities. With the exception of trees (primarily street trees) and landscaped areas, the area does not support or provide habitat for any known rare or endangered species. Projects identified in Table 38 either replace existing facilities or involve land development. These development projects in the surrounding area may also result in the removal of existing trees and vegetation. Cumulative impacts on biological resources associated with this project and related project could occur as a result of protected tree trimming or removal and effects on nesting birds during the nesting season. Cumulative impacts on these biological resources are considered significant. However, the project sponsor would be required to implement standard mitigation measures MM BIO-1 Nesting Bird Surveys and Avoidance, MM BIO-2 Tree Preservation and Protection Plan and MM BIO-3 Tree Replacement. With implementation of these measures to reduce impacts associated with protected tree removal and impacts to nesting birds during construction to less than significant, the project's contribution to the potential cumulative impacts would not be significant.

Cultural, Paleontological, and Tribal Cultural Resources

Project-related impacts on unknown archeological resources, tribal cultural resources, and human remains that may be discovered during project construction are site-specific and generally limited to a project's construction area. Cumulative projects identified in the vicinity of the project site are assumed to cause some degree of ground disturbance during construction and have the potential to cumulatively have significant impacts on undiscovered archeological resources, tribal resources and human remains. It is anticipated that with the implementation of the standard measures MM CTR-1 Resource Recovery Procedures, MM CTR-2 Human Remains Recovery Procedures and MM CTR-3 Unanticipated Discovery of Tribal Cultural Resources, the project would have a less than significant impact on these resources.

Therefore, the project's contribution to the potential cumulative impact on undiscovered resources will be less than significant.

Geology and Soils

Since the City of Palo Alto is located within a seismically active area due to active faults located within 15 miles, and the project area is subject to effects by strong seismic ground shaking and liquefaction, all new construction is required to adhere to strict foundations design to withstand seismic activities. With implementation of the recommendation of MM GEO-1 Geotechnical Investigation for Basement Structure, MM GEO-2 Temporary Shoring, Slopes and Cut and compliance with the building code, the construction of the proposed project would have less than significant impacts on people or structures. Furthermore, geology and soils impacts are generally site-specific and localized and do not result in considerable contribution related to cumulative impacts. Therefore, the project's contribution to potential cumulative impacts due to seismic activities and soil conditions would not be considerable.

Greenhouse Gas Emissions

Individual projects contribute to the cumulative effects of climate change by directly or indirectly emitting GHGs during construction and operational phases. Direct operational emissions include GHG emissions from new vehicle trips and area sources (natural-gas combustion). Indirect emissions include emissions from electricity providers; energy required to pump, treat, and convey water; and emissions associated with waste removal, disposal, and landfill operations. Construction activities would also result in temporary increases in GHG emissions. However, the GHG emissions generated from construction and operation of the parking facility would be below BAAQMD thresholds. Therefore, the project would not contribute to cumulative impacts on GHG emissions.

Hazards and Hazardous Materials

Impacts from hazards are generally site-specific, and typically do not result in cumulative impacts. Since the project is located in an area that has been developed with various commercial land uses that have a history of generating or disposing of hazardous waste, it is possible that construction activities such as ground disturbance may come into contact with contamination that has migrated from other sites. The City would require the construction contractor to prepare and implement a Health and Safety Plan, as described in standard measures MM HAZ-1 Health and Safety Plan, to handle emergency events resulting from accidents spills, discovery of hazardous material, and any hazard that may result from the construction activities.

Implementation of these measures would reduce the project's impacts due to hazards and hazardous material to less than significant; therefore, the project's contribution to the potential cumulative impacts on hazards and hazardous materials would be less than significant with incorporation of mitigation measure MM HAZ-1 Health and Safety Plan.

Hydrology and Water Quality

During construction, impacts associated with pollutant runoff from construction on water quality would be reduced to a less than significant impact with the implementation of year-round storm water BMPs as well as requirements under the NPDES. The built project would result in less impervious surface than the existing conditions. Storm water would be collected and conveyed into bio-retention planters for treatment before releasing into the City storm drain during operations, as required in accordance with the County's storm water treatment requirements. Therefore, the project's impact on hydrology and water quality is negligible and would not contribute to cumulative impacts on hydrology or water quality. Impacts are less than significant.

Land Use and Planning

The project is consistent with existing land use designation (e.g.: community commercial). However, this project seeks an amendment to the zoning code and setback ordinance to allow for additional height and floor area than would typically be allowed under the Public Facilities zoning designation. The amendment of the zoning code would be consistent with the City Comprehensive Plan's Land Use policies and goals for the development in the downtown area. Table 38 shows the cumulative development projects in the vicinity of the project site. Developing these projects would intensify land uses within the project vicinity. Although these development projects would introduce new infill, residential, commercial, and institutional uses in the project vicinity, these uses currently exist in this area. Therefore, the proposed project, as well as nearby cumulative development projects would not introduce any incompatible uses that would divide an established community. The project is consistent with both design and intent of the designated land use and will not contribute to cumulative impact to land use and planning goals and policies.

Noise

Project construction would result in groundborne vibration and noise from ground disturbing activities such as excavation and grading. Increased groundborne vibration and noise would occur temporarily while these activities take place and would not exceed thresholds identified by FTA for groundborne vibrations as described in *Section 3.10, Noise and Vibration, p.133*. In addition, construction would comply with the City ordinance which limits construction to weekdays and Saturdays during day time and limits noise levels from on-site construction activities. Therefore, the anticipated construction methods and equipment would not cause an increase in groundbourne vibration levels that would impact historic resources or sensitive receptors.

Traffic noise from the operation of the garage structure is predicted to be the same as without the project and would have a less than significant impact to the nearby noise sensitive receivers. The project would not contribute to cumulative impacts to noise from construction activities and operation of the facility. Existing groundbourne vibration will not change due to the operations of the parking structure. Since the source of vibrations is roadway traffic, which will not increase according to the traffic study conducted for

this project, and no new vibrations sources are being added, no historic structures in the vicinity will be impacted.

Public Services

The proposed project would not require new or expanded fire protection, police, school or other public facilities. The cumulative impact of the proposed project would be less than significant on public services.

Transportation and Circulation

The project construction activities have the potential to result in temporary significant impacts to the local traffic, including bicycle, pedestrian and bus routes. Implementation of MM TR-1 Traffic Control Plan would reduce these impacts to less than significant. Coordination of construction schedules with the City infrastructure improvement projects would ensure that construction impacts to the local circulation system would not be exasperated. The traffic analysis indicates that local streets and intersections in the project area will continue to operate at acceptable levels of service with the operation of the project. In addition, the project design includes safety improvements to the intersection at Waverley Street and Hamilton Avenue and MM TR-3 Parking Structure Access and Exit Safety Improvement would ensure safe condition while exiting the parking structure via Lane 21; therefore, the project would not result in safety hazards.

The proposed parking structure would include parking and wayfinding signage and guidance systems consistent with the Downtown Parking Wayfinding Signage Guidance Systems. However, if the facility would be paid parking, a gate will be installed and the project would result in an impact on the local circulation system due to the queuing of vehicles onto Hamilton Avenue. Improvements would be implemented according to the results of the analysis required under MM TR-2 Vehicle Queuing Analysis. The queuing study will be conducted to evaluate the queuing impacts to inform the decisions on facilitating the use of the paid parking without significant impact on the circulation system.

With the implementation of the mitigation measures, the project would result in less than significant impacts, and would not contribute to the cumulative impact on transportation and the circulation system.

Utilities and Service System

The cumulative impact to utilities and service system would be the result of the construction and operation of other future projects in the area that would collectively increase demand on utilities and the service systems, including water, wastewater, storm water and solid waste. The City of Palo Alto has accounted for such increases in the Comprehensive Plan EIR[87]. The proposed project and the cumulative projects identified in Table 38 are expected to use BMP to reduce adverse impacts to water quality of water runoffs. Furthermore, the proposed project and the cumulative projects would be designed to incorporate water-conserving measures, such as low-flush toilets and urinals, as required by the Title 24 of the California Code

[87] City of Palo Alto, Palo Alto Comprehensive Plan Update Supplement to the Draft EIR, February 10, 2017, https://www.cityofpaloalto.org/gov/depts/pln/long_range_planning/2030_comprehensive_plan/default.asp (accessed on April 12, 2018).

of Regulations. Although the proposed project and the cumulative projects would incrementally increase total solid waste generation by adding a new retail space to the existing downtown area, the increasing diversion rate through recycling and composting would result in a decreasing share of total waste that requires deposition into the landfill. Therefore, the proposed project would have less than significant cumulative impacts to public utilities and service systems. The project impact on utilities and service system would not be cumulatively considerable.

Energy Conservation

The proposed project would consume incrementally more energy compared to existing conditions for every stage of the project which are the construction, operation, and maintenance. The project's energy demand would be typical for a development of this scope and nature and would comply with current state and local codes concerning energy consumption described in the Regulatory Setting. The cumulative development projects and all land use development projects in the city of Palo Alto would be required to conform with California Code of Regulations Title 24 regarding minimizing the use of large amounts of fuel, water, or energy by, for instance, installing energy efficient appliances and water-efficient fixtures, which would preclude cumulative significant impacts on fuel, water, or energy.

The parking structure would comply with all rules and regulations regarding conservation of energy and would result in less than significant impact. Therefore, the proposed project would not contribute to cumulative impact on energy conservation.

4.3 Growth-Inducing Impacts

The CEQA Guidelines definition of indirect impacts includes growth-inducing effects and other effects related to induced changes in the pattern of land use, population density, or growth rate, and related effects on air and water and other natural systems, including ecosystems [CEQA Section 15358(a)(2)].

Section 15126.2(d) of the CEQA Guidelines states that a growth-inducing impact could occur if the project fosters economic or population growth or includes construction of additional housing, resulting in the need to impact community facilities and requiring the construction of additional facilities, thus resulting in an impact on the environment.

The proposed garage will be utilized as part of a City congestion management strategy that would potentially provide short and long term parking, permitted parking, and paid parking spaces. The parking garage would meet demands for parking and reduce spillover to the nearby residential neighborhoods. The project will not result in changes in land use and population growth directly or indirectly, and will not result in the need for additional housing or community services and facilities.

The retail would further the City policies and objectives regarding utilizing street frontages to contribute to the development of retail pedestrian friendly use of street frontages, and economic vitality of the City. The project's contribution to the economic vitality of the downtown area will not result in considerable growth

of the population and employment in the City and will not place pressure on the City's facilities and services in a manner that will affect environmental resources.

Potential indirect growth-inducing effects of the proposed project would be less than significant and no mitigation is required.

4.4 Alternatives

4.4.1 Site Alternatives Considered but Eliminated from Further Analysis

The Downtown Parking Structure Feasibility Study evaluated several location alternatives for the construction of a parking garage facility that would meet the project objectives. Table 39 below describes the alternative sites and provides information that aided in scoring these sites for development potential. The criteria were developed to evaluate the overall benefits and constraints of constructing a parking structure at the site. All the evaluated sites are currently used as surface parking lots. They are all zoned Public Facilities (PF) and require amendment of the development standards in the zoning ordinance to accommodate the proposed project. The City owns all the evaluated lots except Lot U, which is owned by Stanford University with a lease to Caltrain. Evaluation criteria included impacts on adjacent properties particularly historic and residential properties; availability of feasible access points to the facilities; and constructability and construction impacts. Following is a detailed description of the constraint criteria:

1) Adjacent Property Impacts. The adjacent property impacts constraint evaluated the post-construction impacts on the neighboring parcels. Potential impacts included loss of natural light/view, loss/reduction of access to facility, loss/reduction of loading facilities. The scoring methodology ranged from a score of 10 for no impacts to a score of 2 for significant impacts to multiple neighboring parcels.

2) Construction and Staging Impacts. The Construction and Staging Impacts constraint evaluated criteria related to potential impacts during construction of a parking structure. These included proximities of construction staging to the lot, and loss of overall parking. A score of 10 was assigned to lots with no impacts and a score of 2 was assigned to lots with limited staging options available in the nearby vicinity and a loss of "high-demand" parking during construction.

3) Access Points. The access point constraint was used to identify whether the existing lot allowed for a single or multiple access points as well as whether any road constraints were present that may impact access (i.e., proximity to intersection, ease of turning movements, etc.). A score of 10 was assigned to lots with multiple access points and no road constraints, while a score of 2 was assigned to lots with a single access point and significant road constraints.

4) Adjacent Land Use. The adjacent land use constraint evaluated the neighboring parcels in terms of quantity of parcels and variability in type of uses. Lots with a high variability in neighboring uses scored higher than lots with limited variability in this category.

5) **Site Utility Impacts**. Site utility impacts identified in this analysis range from limited impacts to site exclusive utilities (i.e., power for onsite lighting) to significant impacts to multiple transmission utilities (i.e., high voltage power and communication lines serving numerous neighboring facilities). A score of 10, indicates no utility impacts.

6) **Net Stall Gain**. Net stall gain compared the percentage increase of stalls between the existing surface lot and proposed parking structure. A score of 10 was assigned to a gain of 235 percent to 250 percent, while a score of 1 was assigned to a score of 114 percent or less. Scores within the 234 percent to 115 percent range are divided into 15 percent increments.

7) **Total Parking Supply**. Total stall gain analyzes the overall stall count provided with the proposed parking structure. A score of 10 was assigned to facilities with 350 or more total stalls. The scores were reduced incrementally by 2 for every 75 stalls.

8) **Site Potential for Development**. Site potential for development looked to evaluate any site-specific features that would make each lot desirable for development. After review of each lot, it was determined that the general location within Palo Alto provides a baseline of desirability for each lot. A score of 5 was applied for this constraint for all lots evaluated.

According to the evaluation criteria, Lot G had the highest score followed by Lot D (see **Table 40** below for Sites Scores). The study report recommended the consideration of Lot G for the project. However, after further consideration of the constraints, Lot G was determined to have considerable impacts on community resources, and was eliminated from further consideration. Following are the factors for eliminating Lot G from further consideration:

- Downtown Farmer's Market is currently held at Lot G and would be displaced if the site was selected for the project.
- Concerns regarding the parking structure spanning over Gilman Avenue, and the incompatibility of the size of the structure with the surrounding buildings.
- Lot G is located directly behind the U.S. Post Office. The proposed project may result in adverse impact to the historic resource due to proximity.

Table 39: Location Alternatives Considered but Eliminated from Further Analysis

Lot Alternative	*Lot Size*	*Existing Stall Count*	*Proposed Stall Count (P1-5)*	*Increase in Spaces*	*Access Points*	*Estimate Cost*	*Shape of Lot*	*Zoning*	*Proposed Size (sf)*	*Location*	*Adjacent Land Use*	*Construction Impacts*	*Adjacent Property Impacts*
Lot D	29,200	86	300	214	4	$13 million	L	PF - 50' height limit with no setbacks	119,107	Hamilton/ Waverley	AT&T and Excel Aviation, Palo Alto Sport Shop, Toy World, Congdon & Crome, The Prolific Oven, Tai Pan Restaurant	Parking displacement, Alley access for loading & unloading to adjacent businesses impacted. Public restroom facility removed permanently	Limited blockage of natural light; Access maintained to existing transformers, trash area, and loading zone; adjacent structures divert storm water into Lot D
Lot E	11,500	34	75	41	2	$2.4 million	Square	CD-C (P) and PF	49,452	Gilman/ Bryant	Chocolate Garage, Holbrook Global Strategies, Parking Lot (Private), Chase Bank, Globespan Capital Partners, parking lot, WCC Services	Privately owned parking lot adjacent to Lot E would lose access.	Natural light & ventilation limited due to greater height of parking structure; views from windows of adjacent structures would be obstructed; mature tree on adjacent lot will not be able to be trimmed sufficiently to maintain health.
Lot G	16,875	53	166	113	3	$6.68 million.	Rectangular	PF	74,818	Gilman/ Waverley	U.S. Post Office facility, residential properties, Cambria Corporation, Better Chinese Restaurant, Stanford Financial Co. Relators, High Gear Media, Aufmuth Law Corp., California Land Management Lot	Loss of parking.	Natural light & ventilation limited; views obstructed; storm water drain redirected from Lot 62; required lowered foundations (unless new garage has basement) for proposed garage due to post office grade separation that is lower than Lot G to accommodate truck loading dock.
Lot E/G	28,375	87	166	181	5	---	---	---	136,963	Gilman/ Bryant/ Waverley	See Columns for Lot G & E.	See Columns for Lot G & E.	See Columns for Lot G & E.
Lot O	22,500	78	223	145	4	$8.8 million	Rectangular	PF	95,112	Emerson/ High	Landmark Aquarius Theatre, Lavanda Restaurant & Wine Bar, Palo Alto Bicycles & Commercenet, T-Mobile, Loving Hut, Lanza Technology Ventures, Edward Jones, Shazam Entertainment, Vacant office, Kingdom Hall of Jehovah's Witnesses	Rear-entry to adjacent businesses would be denied. Impact trash enclosure access.	Natural light & ventilation limited, views obstructed by wall, need to maintain access to switchgear enclosures & transformers, public right of way needs to be maintained in Lot 32, maintain access to alley between Lot 26 & Lot 29.
Lot P	15,982	51	140	89	2	$5.4 million	Rectangular	PF	70,700	High/ Hamilton	Amber Dhara, Palantir Technologies, Livegreene, Black Diamond Sports, Selix Formal Wear Lot, Sprout Café, Jungle Digital Imaging, Michael Patrick Partners Inc., Shalon Ventures, Mac's Smoke Shop, Inc., Bell's College Bookstore, Kim's Nail Care, Gravity Bistro, Lyfe Kitchen, Vivo Ventures, LLC., Nikkei, Firelake Capital Management, LLC., vacant office building.	Restricted access for loading activities to adjacent restaurants & retail uses along Emerson Street.	Access to alley along east side of Lot P needs to be maintained for vehicular & pedestrian access, natural light & ventilation limited, views obstructed, unprotected upper level windows on Lot 85.

Lot Alternative	*Lot Size*	*Existing Stall Count*	*Proposed Stall Count (P1-5)*	*Increase in Spaces*	*Access Points*	*Estimate Cost*	*Shape of Lot*	*Zoning*	*Proposed Size (sf)*	*Location*	*Adjacent Land Use*	*Construction Impacts*	*Adjacent Property Impacts*
Lot U	63,598	164	478	314	2	$19.1 million.	Rectangular	PF	---	University Circle/ Urban Lane/ Palo Alto Medical Foundation	Palo Alto Sheraton, Caltrain Station & tracks, Palo Alto Medical Foundation.	Caltrain park-&-Ride would be temporarily unavailable, Unavailable access connection between Palo Alto Medical Foundation & University Avenue, Stanford University currently uses Lot U as layover parking for Marguerite Shuttles.	Set back to allow for unprotected openings that require natural ventilation, constrains parking garage size which will limit natural ventilation & potentially require mechanized ventilation.

Table 40: Rating Scores for the Evaluated Sites

Lot Alternative	*Adjacent Property Impacts*	*Construction & Staging Impacts*	*Access Points*	*Adjacent Land Use*	*Site Utility Impacts*	*Net Space Gain*	*Cost/Space*	*Site Potential for Development*	*Total Weighted Site Constraint Points/100*
Lot D	7	5	10	5	5	10	9	5	71*
Lot E	9	5	7	5	10	2	3	5	57
Lot G	9	5	7	10	10	7	6	5	74*
Lot E/G	9	7	7	10	10	10	7	7	85
Lot O	2	3	10	10	5	7	9	5	66
Lot P	4	1	5	10	3	5	8	5	52
Lot U	10	3	6	10	1	10	4	5	63

**Rated best scenario in feasibility study*

Source: City of Palo Alto Downtown Parking Structure Feasibility Study, January 20, 2014.

4.4.2 Comparison of Considered Alternatives

CEQA Guidelines Section 15126.6 requires Environmental Impact Reports to evaluate a range of reasonable alternatives to a project, or to the location of a project that would feasibly attain most of the basic project objectives and avoid or substantially lessen significant project impacts. The lead agency is responsible for selecting a range of project alternatives for examination and to publicly disclose the reasoning for selecting the alternatives. Alternatives may take the form of no project, reduced project size, different project design, or suitable alternative project sites. In addition, CEQA requires that the agency evaluate the No-Project Alternative, as well as to identify alternatives that were considered by the lead agency but rejected and explain the reasons for their elimination from further analysis. A discussion of alternatives that were considered by the City but rejected and eliminated from further analysis is provided in Section 4.4.1 above. The environmental evaluation of alternatives is not required to be presented to the same level of detail as the proposed project. Criteria used in assessing alternatives include:

- ∂ The ability of the alternative to meet the objectives of the proposed project
- ∂ The ability of alternatives to reduce or avoid the significant impacts
- ∂ The potential to result in unavoidable significant impact.

The analysis in the Draft EIR indicates that the proposed project would not result in any potentially significant and unavoidable impacts after mitigation; therefore, an avoidance alternative was not developed for the project. However, three build alternatives were developed and evaluated for the potential of reduced potential impacts. The following provides a comparison of these alternatives relative to the project.

4.4.2.1 Summary of Alternatives

As discussed in Section 2.6 Alternatives Analysis, p.42, the alternatives evaluated are the following:

1. Alternative 1: No project
2. Alternative 2: Parking Garage with 5 above grade levels, one basement level and without retail.
3. Alternative 3: Parking Garage with 5 above grade levels and retail, no basement.
4. Alternative 4: Parking Garage with 4 above grade levels, one basement level and retail.

Alternative 1: No-Project Alternative

The No-Project alternative will not result in any changes to the existing conditions. The site will continue to be used as a surface parking facility with the existing 86 parking spaces. Parking will continue to be mostly limited to two-hour parking, with no permit parking provided. There will be no environmental impact resulting from this alternative. However, this alternative will not help alleviate the parking needs, and will not address the project purpose to meet the demand for parking in downtown Palo Alto. Localized roadway congestions would continue to occur due to high parking occupancy. The lack of available parking could result in a reduction of economic support of this commercial district.

Alternative 2: Parking Garage with 5 above grade levels, one basement level and without retail.

This alternative would be constructed on the same site with a similar design concept. However, it will provide 332 vehicle parking spaces. This alternative would not provide retail space as part of the proposed project. Even though the parking only alternative would provide an optimum number of parking stalls, this alternative does not respond to the project objectives regarding the creation of a retail and pedestrian friendly mixed-use, and the use of the building street frontage for the economic vitalization of downtown commercial district.

Alternative 3: Parking Garage with 5 above grade levels and retail, no basement

This alternative would remove the basement level while maintaining the five above grade parking levels. Overall stall count would be reduced to approximately 267 which is a loss of 58 vehicle parking spaces in comparison with the proposed project. Alternative 3 would include provision of a retail space of approximately 3,040 square feet and increase allocation of parking spaces dedicated to the retail to 12 stalls. The increase in retail is enabled due to the removal of the ramps leading to the basement. The bike parking area would remain the same as the proposed project as well as the trash enclosure and the utilities area.

Alternative 4: Parking Garage with 4 above grade levels, one basement level and retail.

This alternative would reduce the number of above grade levels to four while maintaining a basement level. The building height would be reduced to 39'-4" at top of rail. Overall stall count would be reduced to 266 which is a loss of 59 vehicle parking spaces. Provision of retail and supporting parking would remain the same as the proposed project as well as the bike parking area, the trash enclosure and utilities area.

4.4.2.2 Project Objectives Analysis

The alternatives were compared to the project objectives. The table below identifies if yes or no, the alternatives meet the project objectives.

Table 41: Analysis of the Alternatives in Comparison with the Project Objectives

	Project Objectives	Alternative 1	Alternative 2	Alternative 3	Alternative 4
1	To increase the number of parking spaces within the downtown to maximize the accessibility and convenience to downtown visitors and workers	No, would neither maximize or increase the number of parking spaces in the downtown area	Yes, more parking spaces than the project	Yes, less parking spaces than the project but would still increase the number of parking spaces in the downtown area	Yes, less parking spaces than the project but would still increase the number of parking spaces in the downtown area

	Project Objectives	Alternative 1	Alternative 2	Alternative 3	Alternative 4
2	To provide a parking structure that includes neighborhood-serving retail and street frontage to contribute to the economic vitality of the downtown and the City	No, would not include any retail along the street frontage	No, would not include any retail along the street frontage	Yes, includes retail space on Waverley Street	Yes, includes retail space on Waverley Street
3	To provide a parking structure that incorporates a pedestrian- and bike-friendly layout	No, would not include street frontage which is more attractive for pedestrians. Would not include bicycle parking or a pedestrian alley.	No, would not include street frontage which is more attractive for pedestrian use but would include bicycle parking and a pedestrian alley.	Yes, would improve the pedestrian environment along the street frontage, add bicycle parking, and include a pedestrian alley.	Yes, would improve the pedestrian environment along the street frontage, add bicycle parking, and include a pedestrian alley.
4	To provide a parking structure that is visually appealing and compatible with downtown character and nearby historic buildings	No	Yes, but would not include the retail to activate the street frontage. Retail would be more consistent with the downtown character.	Yes, same as the proposed project visually.	Yes, smaller scale than proposed project.

Source: WSP USA, 2018

4.4.2.3 Environment Resources Impacts Analysis

Table 42 compares the proposed project and the alternatives. For every environmental resource, it states if the alternatives have less, similar, or more impacts than the proposed project.

Table 42: Environment Resource Impacted Compared to Proposed Project

Environmental Resource Impacted	Alternative 1	Alternative 2	Alternative 3	Alternative 4
Aesthetics	Less than proposed project.	More than proposed project.	Same as proposed project.	Less than proposed project.
Air Quality	Less than proposed project.	Same as proposed project.	Less than proposed project.	Less than proposed project.
Biological Resources	Less than proposed project.	Same as proposed project.	Same as proposed project.	Same as proposed project.

Environmental Resource Impacted	Alternative 1	Alternative 2	Alternative 3	Alternative 4
Cultural and Tribal Resources	Less than proposed project.	Same as proposed project.	Less than proposed project.	Same as proposed project.
Geology/Soils	Less than proposed project.	Same as proposed project.	Less than proposed project.	Same as proposed project.
Greenhouse Gases Emissions	Less than proposed project.	Same as proposed project.	Less than proposed project.	Less than proposed project.
Hazardous Materials	Less than proposed project.	Same as proposed project.	Less than proposed project.	Same as proposed project.
Hydrology & Water Quality	Less than proposed project.	Same as proposed project.	Less than proposed project.	Same as proposed project.
Land Use	Same as proposed project.	Same as proposed project.	Same as proposed project.	Same as proposed project.
Noise	Less than proposed project.	Same as proposed project.	Less than proposed project.	Less than proposed project.
Public Services	Less than proposed project.	Same as proposed project.	Same as proposed project.	Same as proposed project.
Transportation	Less than proposed project.	Less than proposed project.	Same as proposed project.	Same as proposed project.
Utilities and Services Systems	Less than proposed project.	Less than proposed project.	Less than proposed project	Less than proposed project
Energy Conservation	Less than proposed project.	Less than proposed project.	Same as proposed project.	Same as proposed project.

Note: Differences in impact between the proposed project and the alternatives are minor.

Source: WSP USA, 2018

Aesthetics

Under the No-Project Alternative, there would neither be a temporary nor any permanent change to current visual character or quality of the site. Therefore, impacts on aesthetics would be less than the proposed project.

Alternative 2 is the only alternative that would result in a greater impact than the proposed project because it would likely be less aesthetically pleasing given that it would not be as pedestrian oriented than the other build alternatives and could degrade the existing visual character or quality of the site and its surroundings. Therefore, impacts on Aesthetics would be greater than from the proposed project.

Alternative 3 proposed five above-grade levels of parking with retail on Waverley Street and without a basement. Visually, this alternative will be the same as the proposed project. Therefore, impacts on Aesthetics would be the same as the proposed project

Under Alternative 4, the parking structure would be four-above-grade levels compared to five above grade levels for the proposed project. There would be less impact on the visual character of the site. Therefore, impacts on Aesthetics would be less than the proposed project.

Construction Emission

As shown on Table 43, all four alternatives would have less construction emissions than the proposed project and all alternatives would not exceed the BAAQMD thresholds like the proposed project.

No construction would occur under the No-Project Alternative. As a result, none of the temporary construction related emissions resulting from the anticipated development would occur under this alternative. The No-Project Alternative would reduce the impact from less than significant to no impact on air quality.

For Alternative 2, the construction emissions would be similar to the proposed project. Therefore, temporary impacts on Air Quality would be the same as the proposed project.

There would be no basement built under Alternative 3. Thus, earthwork and excavation would be less than under the proposed project which would reduce the construction emissions compared to the proposed project. Therefore, temporary impacts on Air Quality would be less than the proposed project.

Under Alternative 4, the parking structure would be four above-grade levels compared to five above-grade levels for the proposed project which would reduce the construction emissions compared to the proposed project. Therefore, temporary impacts on Air Quality would be fewer than the proposed project.

Table 43: Construction Emissions of the Alternatives

	Maximum Daily Emissions (lbs./day)					
Alternative	*ROG*	*NO_X*	*CO*	*PM_{10} (exhaust)*	*$PM_{2.5}$ (exhaust)*	*SO_X*
Alternative 1	0	0	0	0	0	0
Alternative 2	4.4	45.6	22.6	20.6	12.2	<0.1
Alternative 3	8.2	22.8	17.3	7.7	4.4	<0.1
Alternative 4	7.2	22.8	17.3	7.7	4.4	<0.1
Proposed Project	4.7	48.3	23.1	20.8	12.3	<0.1
BAAQMD Thresholds	54	54	N/A	82	54	N/A
Threshold Exceeded?	No	No	N/A	No	No	N/A

Note: See Table 2.0 "Peak Daily Construction Emissions-Unmitigated". CalEEMod worksheets in Appendix C.
N/A = not applicable; no BAAQMD threshold for CO or SOX

Operation

As shown on Table 44, operation emissions would be the same as the proposed project and would not exceed the BAAQMD thresholds. Therefore, permanent impacts on Air Quality would be similar to the proposed project.

Table 44: Operation Emissions of the Alternatives

	Maximum Daily Emissions (lbs./day)					
Alternative	*ROG*	*NO_X*	*CO*	*PM_{10} (exhaust)*	*$PM_{2.5}$ (exhaust)*	*SO_X*
Alternative 1	0	0	0	0	0	0
Alternative 2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alternative 3	0.3	0.8	2.0	0.4	0.1	<0.1
Alternative 4	0.3	0.6	1.4	0.3	<0.1	<0.1
Proposed Project	0.3	0.6	1.5	0.3	<0.1	<0.1
BAAQMD Thresholds	54	54	N/A	82	54	N/A
Threshold Exceeded?	No	No	N/A	No	No	N/A

Note: See Table 2.0 "Peak Daily Operational Emissions", CalEEMod worksheets in Appendix C.
N/A = not applicable; no BAAQMD threshold for CO or SOX

Biological Resources

The No-Project Alternative would avoid impacts related to tree preservation and potential disturbance to nesting birds and, therefore, impacts on Biological Resources under the no build alternative would be less than the proposed project.

All build alternatives would result in the same impacts to nesting bird and tree preservation. Mitigation measures identified in *Section 3.3 Biological Resources, p. 72*, would still apply. Therefore, impacts on Biological Resources would be the same as the proposed project.

Cultural, Paleontological, and Tribal Cultural Resource

Under the no build alternative, the potential disruption to unknown historic, archeological, and paleontological resources would not occur with this alternative because there would be no ground disturbance. Therefore, the impacts on Cultural Resources would be less than the proposed project.

Under Alternatives 2 and 4, subsurface construction of the basement would have the same potential to unknown cultural resources than the proposed project. Mitigation measures identified in *Section 3.4, Cultural, Paleontological, and Tribal Cultural Resources, p.84*, would still apply. Therefore, impacts on Cultural Resources would be the same as the proposed project.

Alternative 3 would not include construction of a basement but would still require grading and excavation for the foundation but at less depth than the proposed project. Therefore, impacts on Cultural Resources would be slightly less the proposed project.

Geology and Soils

The No-Project Alternative would avoid impacts associated with seismic ground shaking and seismic-related ground failure, including liquefaction and landslides. Therefore, impacts on Geology and Soils under the no build alternative would be less than the proposed project. Mitigation measures are identified in the Draft

EIR that would reduce potential geology and soils impacts to less than significant level. The No-Project Alternative would not require those mitigation measures. Therefore, the impacts and Geology and Soils would be less than the proposed project.

Under Alternatives 2 and 4, the potential for geologic hazards and conditions of the soil would be the same since it would involve the construction of a basement level. Mitigation measures identified in *Section 3.5, Geology and Soils, p.96* would still apply. Therefore, impacts on Geology and Soils would be the same as the proposed project.

Alternative 3 does not involve the construction of a basement. The potential for geologic hazards and conditions of the soil would be fewer than the proposed project and would not require the implementation of the mitigation measure identified in *Section 3.5, Geology and Soils, p.96.* Therefore, impacts on Geology and Soils would be less than the proposed project.

Greenhouse Gases Emissions

Table 45 shows the differences between the proposed project GHG emissions and the alternatives.

Table 45: Greenhouse Gases Emissions Comparison of Alternatives

Alternative	Parking Area (number of stalls)	Commercial Space (square feet)	Construction CO2e Emissions (MT/year)	Operational CO2e Emissions (MT/year)
Proposed Project	325	1,955	411.3	61.1
Alternative 1	86	0	0	<1
Alternative 2	332	0	442.2	<1
Alternative 3	267	3,040	366.2	83.8
Alternative 4	266	2,188	365.4	61.1

Source: Watry Design, March 2018 and WSP USA, January 2018.

No construction would occur under the No-Project Alternative. As a result, there would be no construction CO2e emissions under this alternative. The No-Project Alternative would reduce the temporary impact from less than significant to no impact on greenhouse gas emissions.

For Alternative 2, the construction emissions would be higher than the proposed project because of the increase number of parking stall and the operational emissions would be less than the proposed project. Therefore, temporary impacts on greenhouse gases emission would be slightly more than the proposed project and permanent impacts would be slightly less.

There would be no basement built under Alternative 3. Thus, earthwork and excavation would be less than under the proposed project which would reduce the construction emissions compared to the proposed project. Since the retail space would be larger (3,040 square feet compared to 1,955 square feet) than the proposed project, the operational emission would be slightly higher than the proposed project. Therefore, temporary impacts on greenhouse gases emission would be slightly less than the proposed project and permanent impacts would be slightly more.

Under Alternative 4, the parking structure would be four above-grade levels compared to five above- grade levels for the proposed project, which would reduce the construction emission compared to the proposed project. Therefore, temporary impacts on greenhouse gases emission would be fewer than the proposed project. Permanent impacts would be the same as the proposed project.

Hazardous Materials

Under the No-Project alternative, there would be no ground disturbance. Therefore, construction workers would not be exposed to potentially hazardous materials and would not require the implementation of the mitigation measures. Therefore, impacts related to Hazardous Materials would be less than from the proposed project.

Alternative 2 and 4 would result in similar ground disturbance as the proposed project. Therefore, the project and Alternative 2 and 4 have a similar potential to encounter hazardous materials. Mitigation measure MM HAZ-1 Health and Safety Plan, identified in *Section 3.7 Hazards and Hazardous Materials, p.108,* would still apply. Therefore, impacts related to Hazardous Materials would be the same as the proposed project.

Alternative 3 would result in less ground disturbance than the proposed project. Potential to encounter hazardous material could still happen during grading and excavation operations. Mitigation measure MM HAZ-1 Health and Safety Plan identified in *Section 3.7 Hazards and Hazardous Materials, p.108,* would still apply. Therefore, impacts related to Hazardous Materials would be the same as the proposed project.

Hydrology & Water Quality

Under the No-Project Alternative and Alternative 3, dewatering would not be required because it would not involve the construction of a basement. Therefore, impacts would less than the proposed project.

All the build alternatives would result in similar impermeable surfaces than the proposed project. Therefore, impacts related to Hydrology and Water Quality would be the same as the proposed project.

Land Use

Like the proposed project, the No-Project alternative and the build alternatives would not divide an existing community, conflict with any applicable land use plan, policy or regulation and habitat conservation plan. Impacts related to Land Use would be the same as the proposed project.

Noise

With the No-Project Alternative, there would be no construction noise impacts. Therefore, impacts related to Noise would be less than the proposed project.

Alternative 2 would have similar construction noise impacts than the proposed project. In general, impacts related to Noise would be like the proposed project for the build alternatives.

For Alternative 3 that would not have a basement and Alternative 4 that would have four-above grade levels instead of five, there would be slightly less construction noise impact.

Public Services

Like the proposed project, the No-Project Alternative and the build alternatives would not result in substantial increase in demand for any public services. Therefore, impact on Public Services under these alternatives would be like the proposed project.

Transportation

The No-Project Alternative would not generate any construction transportation impacts and therefore, temporary impacts would be less than the proposed project.

The No-Project Alternative and Alternative 2 would generate fewer permanent vehicle trips than the proposed project since the project would not involve any retail space. However, there were no operational impacts associated with the proposed project and under these alternatives that conclusion would not change.

Alternative 3 would involve less trucking during construction due to excavation since this alternative does not have a basement. Therefore, temporary impacts would be less than the proposed project. Permanent impacts would be like the proposed project.

Alternative 4 would have similar temporary and permanent impacts than the proposed project.

Utilities and Service Systems

Under the No-Project Alternative and Alternative 3, dewatering would not be required because it would not involve the construction of a basement. Therefore, there would be less temporary impact than the proposed project.

Table 46 shows the differences between the proposed project wastewater generation and the alternatives. Wastewater generation and water demand would be similar to the proposed project for every build alternatives. Therefore, permanent impacts related to Utilities and Service Systems would be similar to the proposed project except for the no built alternatives where wastewater generation and water demand would be less than the proposed project.

Table 46: Wastewater Generation Comparison of Alternative

Type of Use	Quantity	Generation Factor (Per Day)	Amount (gallons per day)
Existing Uses			
Surface Parking	29,164 sf	25 gallons/1,000 sf	(729)
Public Restroom	1 restroom	100 gallons/restroom	(100)
		Existing Conditions Subtotal	*(829)*
Proposed Project			
Retail	1,955 sf	100 gallons / 1,000 sf	200
Parking Structure	128,369 sf	25 gallons/1,000 sf	3,209
		Proposed Project Subtotal	*3,409*
Alternative 2			
Parking Structure	132,761 sf	25 gallons/1,000 sf	3,319
		Alternative 2 Subtotal	*3,319*
Alternative 3			
Retail	3,040 sf	100 gallons/1,000 sf	304
Parking Structure	109,048 sf	25 gallons/1,000 sf	2,726
		Alternative 3 Subtotal	*3,030*
Alternative 4			
Retail	2,188 sf	100 gallons/1,000 sf	219
Parking Structure	105,696 sf	25 gallons/1,000 sf	2,642
		Alternative 3 Subtotal	*2,861*
Total Net Increase in Wastewater Generation (Proposed Project)			**2,580**
Total Net Increase in Wastewater Generation (Alternative 1)			**0**
Total Net Increase in Wastewater Generation (Alternative 2)			**2,490**
Total Net Increase in Wastewater Generation (Alternative 3)			**2,201**
Total Net Increase in Wastewater Generation (Alternative 4)			**2,032**

Notes: gpd= gallons per day, sf=square feet, ( ) denotes subtraction
Source: Watry Design, March 2018, Los Angeles wastewater design flow rates (2016) (ISA NCAC 02H 0105)

Energy Conservation

Similar to the proposed project, the build alternatives would not result in substantial increase the demand in energy. Therefore, impact on Energy Conservation would be similar to the proposed project.

4.4.2.4 Environmentally Superior Alternative

CEQA Guidelines (Section 15126.6(e)(2)) require that an environmentally superior alternative be identified among the alternatives considered. The environmentally superior alternative is generally defined as the alternative which would result in the least adverse environmental impacts to the project site and

surrounding area. If the No-Project Alternative is found to be the environmentally superior alternative, the document must identify an environmentally superior alternative among the other alternatives.

The identification of the environmentally superior alternative results from a comparison of the impacts associated with each alternative to the proposed project as shown in Table 42, p.199. As shown in this table, the No-Project Alternative would be environmentally superior because it would have the least environmental impact. However, the No-Project Alternative would not fulfill any of the project objectives as shown in Table 41, p.198. As required by CEQA, another alternative must be identified as the environmentally superior alternative.

Alternative 4 which is the option that includes four above grade levels, one basement level and retail would lessen the most permanent impacts generated by the proposed project while meeting the project objectives. Alternative 4 would reduce permanent impacts to Aesthetics due to the reduced building height, as well as other temporary impacts like air quality, greenhouse gases, and noise. Alternative 3 which is the option without a basement was not selected as the environmentally superior alternatives because it was reducing temporary impacts slightly, but and not permanent impacts as would Alternative 4. Therefore, Alternative 4 is considered the environmentally superior alternative.

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CHAPTER 6.0 REFERENCES

Association of Environmental Professionals. CEQA Guidelines Appendix G Environmental Checklist Form, https://www.califaep.org/images/ceqa/statuteguidelines/2017/CEQA_Handbook_2017_with_covers.pdf Accessed on October 20, 2017.

Bay Area Air Quality Management District (BAAQMD), Air Quality Standard and Attainment Status http://www.baaqmd.gov/research-and-data/air-quality-standards-and-attainment-status#five. Accessed on November 6, 2017.

California Building Industry Association v. Bay Area Air Quality Management District, 62 Cal.4th 369. Opinion Filed December 17, 2015.

California Building Standards Commission, Guide to the 2016 California Green Building Standards Non Residential, https://www.documents.dgs.ca.gov/bsc/CALGreen/CALGreen-Guide-2016-FINAL.pdf. Accessed on October 28, 2017.

California Department of Conservation. Important Farmland Finder http://maps.conservation.ca.gov/ciff/ciff.html

California Department of Fish and Wildlife. BIOS, California Natural Diversity Database, https://map.dfg.ca.gov/bios/?tool=cnddbQuick Accessed on November 6, 2017.

California Department of Fish and Wildlife. CNDDB Maps and Data. https://www.wildlife.ca.gov/data/cnddb/maps-and-data Accessed on October 30, 2017.

California Department of Water Resources. Urban Water Management, http://www.water.ca.gov/urbanwatermanagement/ Accessed on October 29, 2017.

California Natural Diversity Database (CNDDB). October 2017 and map produced by WSP USA, 2017

CalRecycle. Mandatory Commercial Recycling, http://www.calrecycle.ca.gov/recycle/commercial/ Accessed on October 29, 2017.

City of Palo Alto. Parking Guide. http://paloalto.parkingguide.com/ Accessed on October 30, 2017.

City of Palo Alto. Community Services Department, http://www.cityofpaloalto.org/gov/depts/csd/default.asp Accessed on October 20, 2017.

City of Palo Alto. Comprehensive Plan. Our Palo Alto 2030, November 2017. http://www.paloaltocompplan.org/plan-contents/ Accessed on January 11, 2018.

City of Palo Alto. Department of Public Works Storm Drain Management, Storm Drain System Facts and Figures, Program http://www.cityofpaloalto.org/civicax/filebank/documents/2806 Accessed on October 29, 2017.

City of Palo Alto. Downtown Urban Design Guiding Principles, https://www.cityofpaloalto.org/civicax/filebank/documents/61487, accessed on January 28, 2018.

City of Palo Alto. Department of Public Works Strategic Plans, FY 2016-2018,

City of Palo Alto. Development Projects, https://paloalto.buildingeye.com/planning

City of Palo Alto. Fire Department, http://www.cityofpaloalto.org/gov/depts/fir/default.asp Accessed on October 19, 2017.

City of Palo Alto. Police Department, http://www.cityofpaloalto.org/gov/depts/pol/default.asp Accessed on October 20, 2017.

City of Palo Alto Upgrade Downtown Map. http://www.cityofpaloalto.org/civicax/filebank/documents/57938

City of Palo Alto Urban Water Management Plan. Table 26, June 2016

City of Palo Alto. About Zero Waste Palo Alto
http://www.cityofpaloalto.org/gov/depts/pwd/zerowaste/about/mission.asp Accessed on October 29, 2017.

City of Palo Alto. California, Truck Route Map, Chapter 10.48 P.A.M.C, August 22, 2002.

City of Palo Alto. City Council Staff Report, Direction on Downtown Parking Garage Size, April 11, 2017,
http://www.cityofpaloalto.org/civicax/filebank/documents/56784 Accessed on November 5, 2017.

City of Palo Alto. City Council Staff Report, Receive Results of a Downtown Parking Management Study and Provide Direction to Staff on Next Steps, ID # 7155, April 11, 2017,
http://www.cityofpaloalto.org/civicax/filebank/documents/56789 Accessed on November 5, 2017.

City of Palo Alto. City of Palo Alto Bicycle + Pedestrian Transportation Plan, July 2012,
http://www.cityofpaloalto.org/civicax/filebank/documents/31928 Accessed on October 30, 2017.

City of Palo Alto. http://www.cityofpaloalto.org/gov/topics/projects/landuse/compplan.asp Accessed on October 30, 2017.

City of Palo Alto. Ordinance No. 5263, Amendment to the California Green Building Standards Code, August 4, 2014,
https://www.cityofpaloalto.org/civicax/filebank/documents/43818 Accessed on November 6, 2017.

City of Palo Alto. Shuttle Information, http://www.cityofpaloalto.org/civicax/filebank/documents/53492 Accessed on October 30, 2017.

City of Palo Alto. Storm Drain Watersheds within the City of Palo Alto,
http://www.cityofpaloalto.org/civicax/filebank/documents/2816 Accessed on October 29, 2017.

City of Palo Alto. Urban Water Management Plan (UWMP),
http://www.cityofpaloalto.org/civicax/filebank/documents/51985 Accessed on October 29, 2017.

City of Palo Alto. Urban Water Management Plan,
http://www.cityofpaloalto.org/gov/depts/utl/eng/water/watermgmt.asp Accessed on October 29, 2017.

City of Palo Alto. Zero-Waste, http://www.cityofpaloalto.org/gov/depts/pwd/zerowaste/whatgoeswhere/debris.asp Accessed on October 29, 2017.

City of Palo Alto. Master List of Structures on Historic Inventory. July 24, 2012.
http://www.cityofpaloalto.org/civicax/filebank/documents/3504

City of Palo Alto. Regulated Trees. http://www.cityofpaloalto.org/gov/depts/pwd/trees/regulated.asp, Accessed on October 30, 2017.

City of Palo Alto. Electric Renewable Standard (RPS)

Cornerstone Earth Group. Geotechnical Investigation Palo Alto Parking Structure Lot D, March 17, 2017, 63 p.

Fehr & Peers. Palo Alto Parking Structure Focused Transportation Impact Analysis Report, October 5, 2017, 50p.

Palo Alto Stanford Heritage. Historic Buildings Inventory. http://www.pastheritage.org/inventory.html Accessed October 30, 2017.

Palo Alto Unified School District. https://www.pausd.org/explore-pausd/our-district Accessed on October 19, 2017.

Santa Clara County Water District, Storm Water Management. https://www.sccgov.org/sites/dpd/Programs/StormWater/Pages/Storm Water.aspx Accessed on October 30, 2017.

Santa Clara County, Department of Planning and Development. Comprehensive Land Use Plan: Palo Alto Airport,
https://www.sccgov.org/sites/dpd/DocsForms/Documents/ALUC_PAO_CLUP.pdf Accessed on October 29, 2017.

Santa Clara County, Department of Planning and Development. Comprehensive Land Use Plan: Palo Alto Airport, https://www.sccgov.org/sites/dpd/DocsForms/Documents/ALUC_PAO_CLUP.pdf Accessed on October 29, 2017.

Santa Clara Valley Transportation Authority (VTA). 35 Downtown Mountain View to Stanford Shopping Center, http://www.vta.org/routes/rt35 Accessed on October 30, 2017.

SBCA Tree Consulting. Palo Alto Downtown Parking Lot D Tree Survey Appendix 1 Tree Location Map, May 31, 2017.

SBCA Tree Consulting. Palo Alto Downtown Parking Lot D Tree Survey, May 31, 2017.

Stanford University. *A History of Stanford.* https://www.stanford.edu/about/history/

State of California Department of Conservation. http://www.conservation.ca.gov/cgs/rghm/ap/Pages/main.aspx Accessed on October 27, 2017.

U.S. Department of the Interior, National Park Service. *National Register Criteria for Evaluation.* https://www.nps.gov/nr/publications/bulletins/nrb15/nrb15_2.htm

U.S. Department of Interior, National Park Service. *VIII. How to Evaluate the Integrity of a Property.* https://www.nps.gov/nr/publications/bulletins/nrb15/nrb15_8.htm#seven aspects

U.S. EPA. http://www.epa.gov/airquality/urbanair/ Accessed on November 6, 2017.

U.S. Fish and Wildlife Service. IPaC Information for Planning and Conservation, https://ecos.fws.gov/ipac/ Accessed on November 6, 2017.

WSP USA. Air Quality Report, Palo Alto Parking Structure 375 Hamilton Ave. January, 2018.

WSP USA. Phase 1 Environmental Site Assessment, Proposed Palo Alto Parking Structure, 375 Hamilton Avenue, Palo Alto, California 94301. September 12, 2017.

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Appendix A: NOP & Scoping Comments

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City of Palo Alto

Department of Planning & Community Environment

California Environmental Quality Act

NOTICE OF PREPARATION

TO: Responsible Agencies, Trustee Agencies, and Other Interested Parties

FROM: City of Palo Alto
250 Hamilton Avenue
Palo Alto, CA 94301

SUBJECT: Notice of Preparation (NOP) of a Draft Environmental Impact Report (EIR) for a proposed City of Palo Alto Downtown Parking Garage at 375 Hamilton Avenue at the Northwest corner of Hamilton Avenue and Waverley Street.

The City of Palo Alto will be the lead agency under the California Environmental Quality Act (CEQA) and will prepare a project EIR for the proposed project, identified below.

AGENCIES: The City of Palo Alto requests that public agencies provide comments regarding the scope and content of the EIR as it relates to an agency's statutory responsibilities in connection with the proposed project in accordance with California Code of Regulation, Title 14, Section 15082(b), if the agency will need to use the EIR prepared by the City of Palo Alto when considering any permit or other approval for the project.

ORGANIZATION AND INTERESTED PARTIES: The City of Palo Alto requests comments and concerns from organizations and interested parties regarding the environmental issues associated with construction and operation of the proposed project.

PROJECT TITLE: City of Palo Alto Downtown Parking Garage

PROJECT LOCATION: 375 Hamilton Avenue; Northwest corner of Hamilton Avenue and Waverley Street, within the City of Alto Palo, Santa Clara County, California.

PROJECT DESCRIPTION: The City of Palo Alto (City/project applicant) proposes to construct a parking garage on an existing City-owned surface Parking Lot D to provide a net increase of 205 to 329 public parking stalls to address additional parking demand within the City's Downtown Area. The subject site is 29,200 SF in area, and has 86 existing parking spaces. Parking is currently limited to two-hour hourly parking with no permit parking provided. There are four existing access points from adjacent streets. The EIR prepared for the project would evaluate build alternatives for replacing the existing surface lot parking.

The Project includes the following primary elements:

- A new five level above ground public parking garage over one basement parking level, providing approximately 291-415 spaces, and associated site improvements.
- An approximately 3,800 SF or less single-tenant commercial shell space building fronting Waverley Street, to be used as commercial retail space for new or existing businesses.
- Other proposed options being considered include incorporating a bike station, mechanical parking system, and a photovoltaic system.

Further details about the project design are included in the Initial Study, which is available for review at the City of Palo Alto website: http://www.cityofpaloalto.org/downtowngarage.

The project site's land use designation is Community Commercial (CC) in the Palo Alto Comprehensive Plan. The site is zoned as Public Facilities (PF) and is located in the Downtown Business District.

Implementation of the proposed project will require approval from the City Council. As currently planned, the proposed parking garage will require changes to the zoning district ordinance to allow for the planned lot coverage, floor area, height and setbacks.

POTENTIAL ENVIRONMENTAL EFFECTS: The following areas of potential significant environmental impact will be analyzed in the Draft EIR: Aesthetics, Air Quality, Biological Resources, Cultural Resources, Geology and Soil, Greenhouse Gas Emissions, Hazards and Hazardous Materials, Hydrology and Water Quality, Land Use and Planning, Noise, Public Services, Transportation, Utilities and Service System, and Energy. Potential cumulative impacts an alternative, including the No Project Alternative, will be evaluated. An Initial Study evaluating the project's environmental effect is available for review at the City of Palo Alto website, as noted above.

SCOPING MEETING: The City of Palo Alto will hold a scoping meeting as part of the Planning and Transportation Commission (PTC)'s regularly scheduled meeting on May 31, 2017. The meeting will start at 6:00 PM and will be held at the City of Palo Alto Council Chambers, located in City Hall at 250 Hamilton Avenue. The meeting agenda will be posted to the City's website: http://www.cityofpaloalto.org/gov/boards/ptc/default.asp.

Interested parties are welcome to attend and present environmental information or concerns that you believe should be addressed in the EIR.

The NOP and related CEQA documents for this project will be available for review on the web. You can view this NOP and the Initial Study electronically at: http://www.cityofpaloalto.org/downtowngarage.

If you require additional project information, please contact Holly Boyd, Senior Engineer, Department of Public Works, at Holly.Boyd@cityofpaloalto.org .

PUBLIC REVIEW PERIOD: This Notice of Preparation is available for public review and comment pursuant to California Code of Regulations, Title 14, Section 15082(b), for 30 days. The comment period for the NOP begins May 12, 2017 and ends on June 10, 2017. Due to the limits mandated by state law, your response must be sent at the earliest possible date but not later than 30 days after receipt of this notice.

RESPONSES AND COMMENTS: Please indicate a contact person for your agency and send your

responses and comments to:

Amy French
Planning & Community Environment Department
City of Palo Alto
250 Hamilton Avenue
Palo Alto, California 94301
Telephone: (650) 329-2442
Fax: (650) 329-2154
Email: Amy.French@cityofpaloalto.org

Project Planner

5/4/17
Date

PUBLIC COMMENTS – PALO ALTO DOWNTOWN PARKING GARAGE

PLANNING AND TRANSPORTATION COMMISSION EMAILS (5/31/17)

Vehicular access:

- Loss of vehicular access to buildings (more particularly Lot 85) facing Waverley Avenue. Owner want to add 2-3 residences to this building in the future, with terraces, exterior doors and windows. It will require up to 6 on-site parking spaces with access from the west side of the building fronting the proposed parking structure. The pedestrian access path running north-south needs to allow vehicles to go through to provide such access. *(E.Wong, 4/7/17)*
- Lot 85 is home to a restaurant on the ground floor and offices above. In addition to placing trash and recycling dumpsters at the rear of the building, vehicular access to lot 85 and an off-street loading area are essential to evacuate the grease trap, and for daily deliveries of food and supplies. *(E.Wong, 4/7/17)*
- Ensure that the pedestrian walkways shown between the parking structure and Lot 85 are retained. Provide vehicular access to the rear of lot 85 for services, deliveries and future on-site parking. The rear walkway is currently shown as 16' wide and should be increased to 20' wide driveway to allow cars and pedestrian to use it safely. *(E.Wong, 4/7/17)*

Shadows:

- Loss of natural air and light because of the new parking structure located south and west of the building on lot 85. The building is receiving abundant fresh air and natural light on its side (south) and rear (west) exposures and the rooftop is a natural candidate for future installation of solar panels. *(E.Wong, 4/7/17)*

Historical Building

- Compatibility with existing adjacent neighbors, in addition to the 1-2 story structures lining on Waverley Avenue, some of which are historic buildings, there are the historic Birge Clark Post Office immediately across Hamilton Avenue and the church structure across Waverley Street to consider. *(E.Wong, 4/7/17)*

Retail

- On the Waverley Street frontage, we encourage small retail on the ground level. *(E.Wong, 4/7/17)*
- The amount of retail shown on the drawing marked "Retail Option" seems large. *(E.Wong, 4/7/17)*

Solar Panel

-

Parking Demand

-

Suggestion of Modification to Project Design

- Construction of 2 levels of underground parking to maximize the parking options in Downtown. An additional underground level will increase the number of parking stalls by 60 spaces. *(E.Wong, 4/7/17)*

WSP USA
17th Floor
425 Market Street
San Francisco, CA 94105

Tel.: +1 415 243 4600
Fax: +1 916 243-9501
wsp.com

- A 4-story building would fit best and be more compatible at this location compared to a structure 5-stories above ground which would loom over the existing adjacent neighbors and whose shadow would limit the sunlight, air and privacy. With or without the solar canopy the final height of the elevator shaft will be at least 60'-6'. In contrast, a 4-story structure will end at 38'-6" at the safety rail, 44'-6" at the solar panels and 49' or more at the top of the elevator shaft. *(E.Wong, 4/7/17)*

From: Elizabeth Wong
To: Planning Commission
Subject: Garage D at Hamilton and Waverley Sts
Date: Friday, May 26, 2017 11:36:03 AM
Attachments: PkgD ltr 04072017.pdf

Dear Commission Members,

Please include the attached letter in your consideration of Garage D.

Thank you.

Elizabeth Wong

[redacted]

From: Neilson Buchanan
To: Planning Commission
Cc: Norman H. Beamer; Jacqueline Lee; Gennady Sheyner; Jen Nowell; Elaine Uang; John Guislin; Brand, Richard; Architectural Review Board; Michael Hodos
Subject: Public Submission 1.0 regarding 375 Hamilton Garage
Date: Wednesday, May 31, 2017 1:03:51 PM

May 31, 2017
Buchanan Submission 1.0
On behalf of resident stakeholders

Please accept the following information regarding Preparation of an Environmental Impact Report.

Please discuss the lack of coherent information on the demand for parking spaces created by projects within the area to be served by the garage at 375 Hamilton garage.

See forwarded city report below. In fact, since 2011 multiple discussions between residents and city staff indicate unwillingness to create parking space forecasts.

To my knowledge there is no regular or systematic reporting of demand for parking spaces from the following categories of University Avenue area properties.
1. Existing properties occupied
2. Existing properties unoccupied
3. Approved projects under construction
4. Projects in early stage discussion with city staff

Neilson Buchanan
[redacted]
Palo Alto, CA 94301

3170 Porter

---

636 Waverley

This project is a new 10,299 square foot, 4-story mixed-use building with a 20 space parking garage. The commercial space will be located on the ground floor. Residential units will be on the upper two floors. Office space on level 2.

Currently, Windows and roof are complete, while exterior guardrails and light fixtures are not installed. Interior finishes have begun where able.

The project is approximately 80% complete.

This project replaces an existing building of approximately 1316 sf.

636 Waverley

---

300 Pasteur - Stanford Parking Garage

300 Pasteur

This project is a new 5-level parking garage that includes an auditorium at the roof level. Two of the five levels of parking are located below grade with 970 parking spaces.

Currently, Waterproofing of the P3 Level planters is ongoing on the south side of the building. Administration Building and Assembly Building roller shades are being installed. Final cleaning will start this week. The Restroom volume is substantially complete. Elevator 2 & 3 plaster work will start this week. Air handlers 1 and 2 have been stated up. Level P0 Employee Lockers and Bathrooms are substantially .

The project is approximately 88% complete.

This does not replace existing building sf.

---

500 University Ave

This project consists of a new three story office/retail building with occupied roof deck and two split levels of below grade parking with 62 parking spaces.

Currently, Stone, aluminum panels, site work.

The project is approximately 80% complete.

500 University

405 Curtner Avenue

405 Curtner

A 3-story, six (6) unit townhouse building. All six units have the same square footage. Area per unit is 1237 square feet of habitable space and 460 square feet of garage. There will be 14 parking spaces at this site.

Currently, interior painting & finishes, and utilities in progress.

This project is approximately 83% complete.

1501 California: Mayfield California Ave Multi Family

1501 California Ave - Multi

This project consists of two condominium buildings, a fitness building 1720 square feet, a community building 2700 square feet, and 68 new homes. Condo Building 1 contains 58 units 116,356 square feet and Condo Building 2 contains 54 new units 122,817 square feet. The project also includes site utilities and about 4000 linear feet of retaining walls throughout the development.

Currently, Building 1 is receiving trim and finishes, except for a few areas, and exterior cladding is nearly complete, and siding painted. All the windows are installed. Building 2 framing and exterior is complete at all levels, and the trades are 80% complete with rough-in. Almost all the windows are in and the roof is complete.

Percentage of Project Completed: Project progress: Building 1 is at 60%; Building 2 is at 50%.

1501 California: Mayfield California Ave Single Family Detached

1501 California Ave - Single

This project consists of two condominium buildings, a fitness building 1720 square feet, a community building 2700 square feet, and 68 new homes. Condo Building 1 contains 58 units 116,356 square feet and Condo Building 2 contains 54 new units 122,817 square feet. The project also includes site utilities and about 4000 linear feet of retaining walls throughout the development.

Currently; Of the 68 single family dwellings, there are 10 duplex-type residences. Four have their siding, and finishes are underway. While the

roof covering is not installed yet, they have their underlayment installed to protect the interior. Four more are completely framed out, and the trades are complete. To date, 40 lots have yet to begin construction. The retaining walls are partially complete. The Community Building foundational walls are complete, and structural framing is soon to begin. The Fitness Building framing is underway. Site utilities are still in progress, also performed ahead of other activities on site. Streets are less than 50% paved.

Percentage of Project Completed: Utilities/roads: 65%; retaining walls: 40%; houses: 12 are at 80%, while 7 are at 60%, and 9 at 45%. There are 40 lots that have not started any work.

---

908 Arastradero Road - VMware CSG Building

This is a new 2-story commercial structure with approximately 100,000 square feet of office space with a gym.

Currently, working on Site Drainage, Foundations & Grade Beams, Underground Conduit, Underground Plumbing.

The project is approximately 3% complete.

908 Arastradero



2100 El Camino Real

2100 El Camino



The project includes a podium structure with 2 levels of underground parking, two 3-story commercial buildings connected by a walkway 52,504 square feet, and a 2 story eight unit multifamily building 5304 square feet.

Currently, Applied for TCO, waiting for approval from City of Palo Alto.

The project is approximately 0% complete.

****Tenant Improvements Underway****

2500 El Camino Real

New four story mixed use building 80,748 square feet that consists of two buildings connected by a walkway. The project contains 70 residential units and has 145 parking spaces.

Currently, the building shell has TCO to allow tenants to occupy residential units. The two commercial space tenant improvements are underway.

2500 El Camino

The project is approximately 95% complete.

Tenant Improvements Underway

1450 Page Mill

1450 Page Mill

This project is a new 77,634 square foot, 2-story mixed-use building with 41,260 square foot below ground parking.

Currently, Tenant Improvement work has yet to begin.

The project is approximately 0% complete.

Tenant Improvements Underway

1050 Page Mill

1050 Page Mill

Office park consisting of four, two-story office buildings, with existing buildings being replaced, one of which includes a cafeteria. One of the original buildings remains in use by employees during construction. Each of the four buildings are similar in scope and design, occupying 46,493, 46,514, 54,134, and 54,234 square feet, respectively, each having its own underground parking. Campus tenant is Machine Zone, a developer of massively multiplayer online gaming.

Currently, The existing Building 1 remains in use, and will be demolished at a later date. Buildings 2 & 3 are under construction, in close proximity and to each other on campus as well as schedule. Both have nearly complete roofs, and exterior glazing preparation begun. Some of the framing, plumbing, electrical, and mechanical has been completed in the core areas. Site infrastructure is in progress. Temporary electrical has recently been approved so the contractor can eliminate the use of large generators. Buildings 1 & 4 have not started..

The project is approximately 10% complete.

Tenant Improvements Underway

3421 Hillview Avenue - VMware HTG Building

This is a new 2-story commercial structure with approximately

3241 Hill View

86,000 square feet of office space with a commercial kitchen.

Currently, Performing Site Surveying.

The project is approximately 0% complete.

2555 Park Blvd

A new 23,853 square foot, 3-story LEED Silver office building with covered surface parking at grade and one level of machine parking below grade. The project will park 82 cars on site and provide Caltrain GoPasses for eligible full time employees for the life of the building through a TDM program.

2555 Park Blvd

Currently, the existing structure has been demolishes.

The project is approximately 0% complete.

PROJECTS IN PLAN CHECK

3181 Porter Drive

3181 Porter Dr

Stanford redevelopment project includes construction of new 2-story commercial building 99,578sf with basement parking 86,548sf. Proposed project has 248 below grade parking and 78 spaces at grade. The project replaces 3 commercial structures located at 3181, 3221 and 3215 Porter Dr. The construction permit is in plan check and demo permits issued.

Project is in plan check with 0 of 9 departments approved.

3225 El Camino Real

Two new commercial buildings (connected by a walkway)above a podium parking garage. "Building A" is a 4-story mixed use building (27,226 sf) with retail on the first floor (7,098 sf), four (4) apartments on the second floor (6,034 sf total), and four (4) two story condos on the 3rd and 4th floors (10,069 sf total). "Building B" is a 2-story commercial building (4,886 sf) with retail on the first floor (2,265 sf) and office on the second floor (2,265 sf), the podium parking garage (24,030 sf) is one level of underground parking. Office and retail spaces are submitted as a cold shell and the residential units are fully built out.

3225 ECR

Project is in plan check with 0 of 9 departments approved.

777 Welch Rd

777 Welch



New 3 story warm shell 11,550 square feet for future medical dental office with 80 parking spaces. Project is in plan check with 9 of 9 departments approved.

Permit is ready to issue.

441 Page Mill Road

Construction of a new 3-story mixed use building (71,075 sf) with one level of underground parking. Retail on the first floor, offices on the second floor, and sixteen apartments on the second and third floors. There are 91 onsite parking spaces: 34 at grade and 57 in the parking garage. The project is in plan check with 7 of 9 departments approved.

441 PageMill



2747 Park Blvd

2747 Park Blvd



Construction of a new 3-story office building (33,323 SF) with one level of underground parking (11,839 SF). There are 134 onsite parking spaces: 108 at grade and 26 in the parking garage. The project is in initial plan check with 5 of 8 departments approved.



The City has a variety of e-news topics that may be of interest to you. Join other e-news topics, update your subscriptions, modify your password or e-mail address, or stop subscriptions at any time on your Subscriber Preferences Page. You will need to use your e-mail address to log in. If you have questions or problems with the subscription service, please contact subscriberhelp.govdelivery.com .
This service is provided to you at no charge by the City of Palo Alto.

--
Neilson Buchanan

[redacted]
Palo Alto CA 94301
[redacted]

From: Neilson Buchanan
To: Planning Commission
Cc: John Guislin; Norman H. Beamer; Gabrielle Layton; Michael Hodos; Brand, Richard; Elaine Uang; Architectural Review Board; Jen Nowell; Jacqueline Lee; Gennady Sheyner
Subject: Public Submission 2.0 regarding 375 Hamilton Garage
Date: Wednesday, May 31, 2017 1:05:00 PM

May 31, 2017
Buchanan Submission 2.0
On behalf of resident stakeholders and John Guislin

Please accept the following information regarding Preparation of an Environmental Impact Report.

John Guislin is out of town and unable to make comments for the Planning Commission tonight.

For over 7 years John and I have been involved with University Avenue commercial core parking spillover into the adjacent residential neighborhoods. We had planned to present an update and history on the current University Avenue Area RPP and its 10 parking zones.

The number of permits currently sold and their distribution will be a material finding in the upcoming Environmental Impact Report. We just learned on May 30 that our May 16 public information request for this information would be delayed until June 9.

Please see the May 30 email below from Palo Alto Public Records Center.

We were surprised and disappointed to learn that the management systems for permit issuance cannot easily

produce basic reports on the number of permits sold by the ten residential zones.

This information is the fundamental data to justify the need for a garage and understand impact. If the demand for non-resident permits should be changing, then the design and size of the garage relative to other needs can be reconsidered.

Furthermore, the funding source of Hamilton Street garage is worthy of reconsideration because many other city priorities are being held in abeyance. City Council has been directing that the garage be financed without full discussion of funding to be borne directly and solely by property owners who are creating the demand for parking in the commercial core and adjacent neighborhoods.

The Council's Finance Committee has full and very current oversight of the following projects and costs. Currently City Staff and Council are using the best available estimates but actual costs are still uncertain in today's hyperactive construction conditions.

1. Public Safety Building
2. California Avenue Garages
3. Unfunded Pension Liabilities
4. Unfunded Retiree Health Care Insurance
5. Caltrain Grade Crossing

Bottom Line: Funding decisions for the garage may fall

outside consideration of Environment Impact. However, additional burden of traffic is within the scope of impact analysis.

Furthermore the decision to promote traffic with a garage is inconsistent with alternative uses of the proposed garage site.

For example, what is the environmental impact of housing?

For example, what is the environment impact of deferring construction of a garage on a marginally efficient L-shaped lot? Would deferral and more innovative leadership for a more efficient site with mixed use have less negative environmental impact?

I am sure that the Palo Alto Process is designed to keep PTC on a very narrow focus. I am not advocating that the PTC deviate from its official responsibilities. The purpose of these two submissions is to enter issues into the public records as early as possible.

Neilson Buchanan
[redacted]
Palo Alto, CA 94301

[redacted]

Print Form

Appendix C

Notice of Completion & Environmental Document Transmittal

Mail to: State Clearinghouse, P.O. Box 3044, Sacramento, CA 95812-3044 (916) 445-0613
For Hand Delivery/Street Address: 1400 Tenth Street, Sacramento, CA 95814

SCH #

Project Title: City of Palo Alto Parking Structures at 375 Hamilton Avenue (aka Downtown Parking Garage)

Lead Agency: City of Palo Alto — Contact Person: Amy French, AICP
Mailing Address: 250 Hamilton Avenue — Phone: 650-329-2612
City: Palo Alto — Zip: 94301 — County: Santa Clara

Project Location: County: Santa Clara — City/Nearest Community: Palo Alto
Cross Streets: Hamilton Avenue and Waverley Street — Zip Code: 94301
Longitude/Latitude (degrees, minutes and seconds): 37 ° 26 ' 46.5 " N / 122 ° 09 ' 34.4 " W Total Acres: 0.67
Assessor's Parcel No.: 120-15-086 — Section: _____ Twp.: _____ Range: _____ Base: _____
Within 2 Miles: State Hwy #: SR-82 (2,200 ft) — Waterways: San Francisquito Creek (2,500 ft)
Airports: None. — Railways: Caltrain — Schools: See list attached

Document Type:

CEQA: ☒ NOP ☐ Draft EIR — NEPA: ☐ NOI — Other: ☐ Joint Document
☐ Early Cons ☐ Supplement/Subsequent EIR ☐ EA ☐ Final Document
☐ Neg Dec (Prior SCH No.) _____ ☐ Draft EIS ☐ Other: _____
☐ Mit Neg Dec Other: _____ ☐ FONSI

Local Action Type:

☐ General Plan Update ☐ Specific Plan ☒ Rezone ☐ Annexation
☐ General Plan Amendment ☐ Master Plan ☐ Prezone ☐ Redevelopment
☐ General Plan Element ☐ Planned Unit Development ☐ Use Permit ☐ Coastal Permit
☐ Community Plan ☒ Site Plan ☐ Land Division (Subdivision, etc.) ☐ Other: _____

Development Type:

☐ Residential: Units _____ Acres _____
☐ Office: Sq.ft. _____ Acres _____ Employees _____
☒ Commercial: Sq.ft. 3,800 Acres _____ Employees _____
☐ Industrial: Sq.ft. _____ Acres _____ Employees _____
☐ Educational: _____
☐ Recreational: _____
☐ Water Facilities: Type _____ MGD _____
☐ Transportation: Type _____
☐ Mining: Mineral _____
☐ Power: Type _____ MW _____
☐ Waste Treatment: Type _____ MGD _____
☐ Hazardous Waste: Type _____
☒ Other: Parking structure (291-415 spaces)

Project Issues Discussed in Document:

☒ Aesthetic/Visual ☐ Fiscal ☐ Recreation/Parks ☐ Vegetation
☐ Agricultural Land ☒ Flood Plain/Flooding ☒ Schools/Universities ☒ Water Quality
☒ Air Quality ☐ Forest Land/Fire Hazard ☐ Septic Systems ☒ Water Supply/Groundwater
☒ Archeological/Historical ☒ Geologic/Seismic ☒ Sewer Capacity ☐ Wetland/Riparian
☐ Biological Resources ☐ Minerals ☒ Soil Erosion/Compaction/Grading ☐ Growth Inducement
☐ Coastal Zone ☒ Noise ☒ Solid Waste ☒ Land Use
☒ Drainage/Absorption ☐ Population/Housing Balance ☒ Toxic/Hazardous ☒ Cumulative Effects
☐ Economic/Jobs ☒ Public Services/Facilities ☒ Traffic/Circulation ☒ Other: Energy

Present Land Use/Zoning/General Plan Designation:

Surface Parking / Public Facilities (PF) / Regional/Community Commercial

Project Description: *(please use a separate page if necessary)*

The City of Palo Alto proposes to construct a parking garage on an existing City-owned surface parking to address additional parking demand within the City Downtown Area. The EIR prepared for the project would evaluate build alternatives for replacing the existing surface lot parking. The proposed project would requires changes to the zoning district or changes to the text of the zoning ordinance. The Project would include:

- A new five-level public parking garage over one basement parking level, providing approximately 291-415 spaces;
- An approximately 3,800 SF or less single-tenant commercial shell space building fronting Waverley Street;
- Other options being considered include incorporating a bike station, mechanical parking system, and a photovoltaic system.

Note: The State Clearinghouse will assign identification numbers for all new projects. If a SCH number already exists for a project (e.g. Notice of Preparation or previous draft document) please fill in.

Reviewing Agencies Checklist

Lead Agencies may recommend State Clearinghouse distribution by marking agencies below with and "X".
If you have already sent your document to the agency please denote that with an "S".

____	Air Resources Board	X	Office of Historic Preservation
____	Boating & Waterways, Department of	____	Office of Public School Construction
____	California Emergency Management Agency	____	Parks & Recreation, Department of
X	California Highway Patrol	____	Pesticide Regulation, Department of
X	Caltrans District #4	X	Public Utilities Commission
X	Caltrans Division of Aeronautics	X	Regional WQCB #2
____	Caltrans Planning	____	Resources Agency
____	Central Valley Flood Protection Board	____	Resources Recycling and Recovery, Department of
____	Coachella Valley Mtns. Conservancy	X	S.F. Bay Conservation & Development Comm.
____	Coastal Commission	____	San Gabriel & Lower L.A. Rivers & Mtns. Conservancy
____	Colorado River Board	____	San Joaquin River Conservancy
____	Conservation, Department of	____	Santa Monica Mtns. Conservancy
____	Corrections, Department of	X	State Lands Commission
____	Delta Protection Commission	____	SWRCB: Clean Water Grants
____	Education, Department of	____	SWRCB: Water Quality
____	Energy Commission	____	SWRCB: Water Rights
X	Fish & Game Region #3	____	Tahoe Regional Planning Agency
____	Food & Agriculture, Department of	____	Toxic Substances Control, Department of
____	Forestry and Fire Protection, Department of	____	Water Resources, Department of
____	General Services, Department of		
____	Health Services, Department of	X	Other: OES (Office of Emergency Services)
____	Housing & Community Development	____	Other:
X	Native American Heritage Commission		

Local Public Review Period (to be filled in by lead agency)

Starting Date Friday, May 12, 2017 Ending Date Saturday, June 10, 2017

Lead Agency (Complete if applicable):

Consulting Firm: WSP USA
Address: 425 Market Street, 17th Floor
City/State/Zip: San Francisco, CA 94105
Contact: Lorraine Ahlquist
Phone: 619-321-4185

Applicant: City of Palo Alto
Address: 250 Hamilton Avenue
City/State/Zip: Palo Alto, CA 94301
Phone: 650-329-2612

Signature of Lead Agency Representative: _____ **Date:** 5/10/17

Authority cited: Section 21083, Public Resources Code. Reference: Section 21161, Public Resources Code.

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Appendix B: Initial Study

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City of Palo Alto

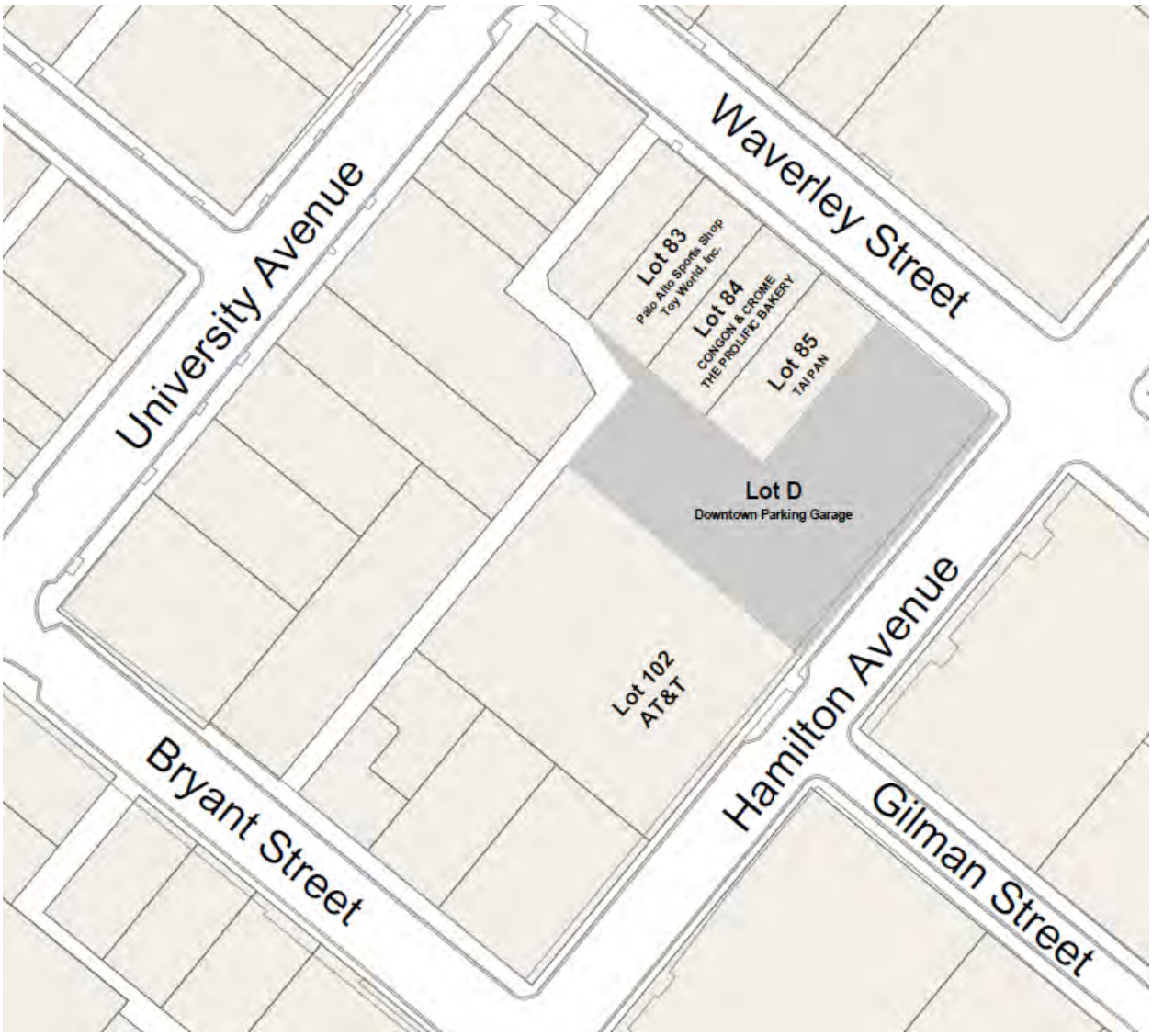
Department of Planning & Community Environment

California Environmental Quality Act

CITY OF PALO ALTO
INITIAL STUDY AND ENVIRONMENTAL CHECKLIST FORM

1.	**Project Title:**	City of Palo Alto Parking Structure at 375 Hamilton Avenue (aka Downtown Parking Garage)
2.	**Lead Agency Name and Address:**	City of Palo Alto 250 Hamilton Avenue Palo Alto, California 94301
3.	**Contact Person and Phone Number:**	Holly Boyd, Senior Engineer Department of Public Works Telephone: (650) 329-2612 Fax: (650) 329-2154 Email: Holly.Boyd@cityofpaloalto.org
4.	**Project Location:**	375 Hamilton Avenue in the Downtown Business District, Northeast corner of Hamilton Avenue and Waverley Street, within the city of Palo Alto, Santa Clara County, California. See Figure 1.
5.	**Project Sponsor's Name and Address:**	City of Palo Alto 250 Hamilton Avenue Palo Alto, California 94301
6.	**General Plan Designation:**	Community Commercial (CC)
7.	**Zoning:**	Public Facilities (PF)
8.	**Existing Plan Area Land Uses:**	The project lot is abutted by four separate parcels. These include AT&T and Excel Aviation (Lot 102), Palo Alto Sport Shop and Toy World Inc. (Lot 83), Congdon & Crome and the Prolific Oven (Lot 84), and the Tai Pan Restaurant (Lot 85). (Shown on Figure 1) The existing parking lot serves restaurant and retail uses along Waverley Street and provides rear-entry parking to the CVS market.

Figure 1. Downtown Parking Garage Site at 375 Hamilton Avenue



9. Description of Project:

The City of Palo Alto (City/project applicant) proposes to construct a parking garage on an existing City-owned surface parking lot D located on the North East corner of Hamilton Avenue and Waverley Street in downtown Palo Alto. The purpose of the project is to address additional parking demand within the City Downtown Area. The proposed lot is 29,200 SF in area, and has 86 existing parking spaces. Parking is currently limited to tow-hour hourly parking with no permit parking provided. There are four existing access points from adjacent street. The EIR prepared for the project would evaluate build alternatives for replacing the existing surface lot parking.

The Project includes the following primary elements:

- A new five level public parking garage over one basement parking level, providing approximately 291-330 spaces, and associated site improvements.

- An approximately 3,800 SF or less single-tenant commercial shell space building fronting Waverley Street, to be used as commercial retail space for new or existing businesses.

- Other proposed options being considered include incorporating a bike station, mechanical parking system, and a photovoltaic system.

10. Required Approvals:

The proposed project is within the City's jurisdiction and will require approval from the City Council. As currently planned, the proposed parking garage will require changes to the zoning district (from Public Facilities to another zone) or changes to the text of the zoning ordinance to allow for the planned lot coverage, Floor Area Ratio (FAR), height, and setbacks in the Public Facilities zone.

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

☒ Aesthetics	☒ Greenhouse Gas Emissions	☒ Public Services
☐ Agricultural and Forestry Resources	☒ Hazards & Hazardous Materials	☐ Recreation
☒ Air Quality	☒ Hydrology/Water Quality	☒ Transportation/Traffic
☐ Biological Resources	☒ Land Use/Planning	☒ Utilities/Service Systems
☒ Cultural Resources	☐ Mineral Resources	☒ Energy
☒ Geology/Soils	☒ Noise	☒ Mandatory Findings of Significance
	☐ Population/Housing	

DETERMINATION:

On the basis of this initial evaluation:

☐ I find that the proposed project **COULD NOT** have a significant effect on the environment, and a **NEGATIVE DECLARATION** will be prepared.

☐ I find that although the proposed project **COULD** have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A **MITIGATED NEGATIVE DECLARATION** will be prepared.

☒ I find that the proposed project **MAY** have a significant effect on the environment, and an **ENVIRONMENTAL IMPACT REPORT** is required.

☐ I find that the proposed project **MAY** have a "potentially significant impact" or "potentially

pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, **nothing further** is required.

Prepared by:

Signature:  Date: 5/4/17

Lorraine Ahlquist, Environmental Manager
WPS/ Parsons Brinckerhoff

Reviewed by:

Signature:  Date: 5/4/17

Amy French, Chief Planning Official
City of Palo Alto

	Potentially Significant Impact	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*

ENVIRONMENTAL IMPACTS:

I. **AESTHETICS.** *Would the project:*

a) Substantially degrade the existing visual character or quality of the area and its surroundings? The project site and immediate vicinity include commercial buildings and parking lots similar to the proposed project. There are no impacts anticipated on visual characteristics or scenic quality of surrounding area.	☐	☐	☐	☒
b) Significantly alter public viewsheds or view corridors or scenic resources (such as trees, rocks, outcroppings or historic buildings) along a scenic highway? There are no scenic routes or resources located in the project area. The project is located in the City downtown area in an area with similar land use. The project will not demolish or replace existing buildings. There are no impacts anticipated on public viewsheds, scenic resources or historic buildings.	☐	☐	☐	☒
c) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area? It is not anticipated that the project would result in the addition of lights and glare as a result of the vehicles head lights and interior building lights. It is anticipated that light and glare from the project would be less than significant.	☐	☐	☒	☐
d) Substantially shadow public open space (other than public streets and adjacent sidewalks) between 9:00 a.m. and 3:00 p.m. from September 21 to March 21? The project would replace a surface parking lot with a five story parking garage building. There are not any open spaces within the project area. The project would not result in shadow impact on the public open space.	☐	☐	☐	☒

	Potentially Significant Impact	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*

II. **AGRICULTURAL AND FORESTRY RESOURCES.** *(In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board.) Would the project:*

a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use? As documented on the California Resources Agency Farmland Mapping and Monitoring Program maps, the project is located in an area designated as Urban and Built-Up Land. The project would not convert any Farmland to non-agricultural use.	☐	☐	☐	☒
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract? The project site is zoned and used as Downtown Commercial District (Pedestrian Shopping). The project does not conflict with any zoning for agricultural use or Williamson Act contract.	☐	☐	☐	☒
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland	☐	☐	☐	☒

		Potentially Significant Impact	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
	Production (as defined by Government Code section 51104(g))? The project site is zoned and used as Downtown Commercial District (Pedestrian Shopping). The project does not conflict with any zoning of forest land, or timberland and timberland production.				
	d) Result in the loss of forest land or conversion of forest land to non-forest use? There is no forest land in the project area. The project coverts existing parking lot to a parking garage, and would not result in the conversion of forest land to non-forest use.	☐	☐	☐	☒
	e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use? There is no farmland or forest land within or near the project site. The proposed project does not involve any changes which would directly or indirectly result in conversion of farmland to non-agricultural use or conversion of forest land to non-forest use.	☐	☐	☐	☒
III.	**AIR QUALITY.** *(Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations.) Would the project:*				
	a) Conflict with or obstruct implementation of the applicable air quality plan? (such as the Bay Area Clean Air Plan) There is a potential for air quality impacts as a result of the project. The consistency of the proposed project implementation with adopted, applicable air quality plans will be evaluated in the EIR.	☒	☐	☐	☐
	b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☒	☐	☐	☐

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
	There is a potential for increased emissions from the project activities and uses such as increased vehicle traffic, and building equipment operation. These activities could result in exceeding Bay Area Air Quality Management District (BAAQMD) significant thresholds for pollutants of concern such as particulate matter 10 microns or smaller in diameter (PM10) and 2.5 microns or smaller in diameter (PM2.5). The project may also result in emission of reactive organic gases (ROG) and nitrogen oxides (NOX), which are precursors to ozone. There are also potential air quality impacts as a result of project construction activities. The potential of the project to violate air quality standards or contribute to existing or projected air quality violation due to construction activities and operation will be addressed in the EIR.				
c)	*Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?* The EIR will address individual and cumulative impacts on criteria pollutants for which the project region is non-attainment as described under question III.b above.	☒	☐	☐	☐
d)	*Expose sensitive receptors to substantial pollutant concentrations?* The project has the potential to expose sensitive receptors, if the air quality analysis determined that the project would contribute to substantial increase in pollutants in the project area. Impacts on sensitive receptors will be addressed in the EIR.	☒	☐	☐	☐
e)	*Create objectionable odors affecting a substantial number of people?* It is not anticipated that the added number of	☐	☐	☒	☐

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

vehicles using the site for parking would create minimal increase in objectionable odors affecting people. Construction equipment may create objectionable odors for short periods that would affect people in the immediate vicinity of the project area. The project is not anticipated to create objectionable odors affecting substantial number of people.

IV. **BIOLOGICAL RESOURCES.** *Would the project:*

a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	☒	☐	☐	☐

The project will be constructed on a site that consists of a paved parking lot. However, few mature trees may be removed to allow for the construction of the garage building. Trees could provide nesting habitat for raptors and other migratory birds. The EIR would evaluate the project area to identify the presence of any bird species that are considered as candidates, sensitive, or special status species by the CDFG, and USFWS. The EIR would also evaluate the project compliance with the state and federal Endangered Species Act, as well as, and also species protection under the federal Migratory Bird Treaty Act and further protection of raptor nests under Section 3503.5 of the California Fish and Game Code.

b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	☐	☐	☐	☒

There are no riparian habitats well as, and also species protection under the federal Migratory Bird Treaty Act and further protection of raptor nests under Section

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
3503.5 of the California Fish and Game Code.				
c) *Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?* Wetlands are areas that periodically or permanently covered with ground water and support vegetation adapted to life in saturated soil. Wetlands could support fish and wildlife, function as stormwater storage and flood areas, and potentially ground water recharge. According to the National Wetland Inventory for surface waters and wetlands, there are no waters or wetlands within the project area. There are no wetlands within the project area, and it is anticipated that the project would not have impacts on wetlands in any means.	☐	☐	☐	☒
d) *Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?* The only wildlife anticipated to be present within the project area is wildlife associated with built urban environment for commercial uses. Wildlife may include rodents, and other small animals not restricted by the type of developments in the project area. Trees in the project area provide nesting habitats for native and migratory birds. It is anticipated that the project would have less than significant impacts as a result of interference with wildlife movement.	☐	☐	☒	☐
e) *Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?* *The project would be subject to the City tree removal ordinances. A survey of the affected trees would be completed for the EIR. The EIR*	☐	☐	☒	☐

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
	would include applicable tree preservation/ replacement measures as required by regulations.				
f)	*Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved, local, regional, or State habitat conservation plan?* *There is no Habitat Conservation Plan, Natural Community Conservation Plan, or other adopted habitat conservation plan applicable to the project site.*	☐	☐	☐	☒
V.	**CULTURAL RESOURCES.** *Would the project:*				
a)	*Adversely affect a historic resource listed or eligible for listing on the National and/or California Register, or listed on the City's Historic Inventory?* The City of Palo Alto inventory of downtown area shows several historic buildings within close proximity of the project area. The most prominent building is the U.S Post Office located across the street from the project site, which is listed on the National Register for Historic Places. However, it is not anticipated that the project would affect the post office building. The EIR would address the proximity of the historic properties and any required measures to avoid impacts to these resources.	☐	☐	☐	☒
b)	*Eliminate important examples of major periods of California history or prehistory?* Excavation would be required for the construction of the project. Alternative C would require excavation of significant depth. Previous construction at the project site and nearby sites would likely have disturbed archeological sites. However, considering the depth of excavation required for the project, there is a potential to disrupt, alter, or eliminate undiscovered archeological resources. The EIR would address any measures required to avoid impacts on	☐	☐	☒	☐

		Potentially Significant Impact	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
	potential archeological resources.				
c)	*Cause a substantial adverse change in the significant of an archaeological resource pursuant to 15064.5?* See response to question V.b above.	☐	☐	☒	☐
d)	*Disturb any human remains, including those interred outside of dedicated cemeteries?* The project could potentially disrupt, alter, or eliminate undiscovered archaeological resources, potentially including Native American remains. The EIR would evaluate this issue to address necessary measures for the potential of the project disturbing any human remains.	☐	☐	☒	☐
e)	*Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?* Previous land development of the site would likely have disturbed or removed paleontological resources that may have existed. However, due to the excavation work required for the construction of the project, the project could have the potential to disrupt, alter, or eliminate as-yet undiscovered paleontological resources. The EIR would evaluate this issue to address necessary measures for the potential of the project disturbing or destroying any paleontological resources.	☐	☐	☒	☐
f)	*Directly or indirectly destroy a local cultural resource that is recognized by City Council resolution?* See response to question V.b above.	☐	☐	☐	☒
g)	*Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, or cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with*	☐	☐	☒	☐

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
cultural value to a California Native American Tribe, and that is: 1) a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American Tribe, that is listed or eligible for listing on the California Register of Historical Resources, or on a local register of historical resources as defined in Public Resources Code section 5020.1(k), or 2) a resource determined by a lead agency, in its discretion and supported by substantial evidence, to be significant according to the historical register criteria in Public Resources Code section 5024.1 (c), and considering the significance of the resource to a California Native American tribe.				
VI. **GEOLOGY AND SOILS.** *Would the project:*				
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? (Refer to Division of Mines and Geology Special Publication 42.) According to Alquist-Priolo Earthquake Fault Zoning Map for the Palo Alto 7.5 Minute Quadrangle Map, there are no mapped faults within or adjacent to the project site, nor is the project site within fault zone. The closest fault is the San Andreas Fault, located approximately over 5 miles southwest of the project site.	☐	☐	☐	☒
ii) Strong seismic ground shaking? Due to the presence of nearby active faults, the project area is likely to experience moderate to strong	☒	☐	☐	☐

	Potentially Significant Impact	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
earthquakes during the design life of the project. Settlements caused by ground shaking are non-uniformly distributed and can result in damage to buildings and structures. Degrees of settlements resulting from seismic ground shaking are related to magnitude and distance of earth quakes. Buildings are required to be designed and constructed to avoid risks of seismic ground shaking to people and properties. The EIR would evaluate the potential risks at the project location and measures to avoid and minimize the potential impacts.				
iii) Seismic-related ground failure, including liquefaction?	☒	☐	☐	☐
Liquefaction is a phenomenon in which the strength and stiffness of a soil are reduced (behaves like a liquid) by earthquake shaking of significant duration or other rapidly applied loading. Liquefaction and related types of ground failure are of greatest concern under conditions with loose to medium dense cohesionless soils, shallow groundwater (typically within 50 feet of ground surface) and sustained ground shaking. The EIR would evaluate potential impacts that could be caused by liquefaction and seismic-related ground failure factors. The EIR will identify potential impacts and mitigation measures to avoid and minimize impacts.				
iv) Landslides?	☐	☒	☐	☐
The topography within the project area is flat. Landslide considerations are limited to stability of excavations for construction of the project. This issue will be evaluated for the various project alternatives and addressed in the EIR and during the design phase of the project.				
v) Expansive soils?	☐	☒	☐	☐

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
A study of the characterization and consideration of site-specific geologic and soils conditions would be prepared for the project and addressed in the EIR. Project specific soil test would be performed to provide information regarding subsurface geology, ground-water levels, and the engineering characteristics of soils in the project area. State and local planning, building, and engineering regulations will also be considered in addressing structures, excavation, foundations, retaining walls, and grading activities. The EIR will describe recommendations to mitigate effects of soils types and related factors in the design of the project.				
b) *Result in substantial soil erosion or the loss of topsoil?* Project construction would involve grading, excavation, or other activities that could temporarily expose disturbed soils to erosion. The EIR will address the potential for erosion that could occur during construction activities, and applicable best management practices according to the City and state regulations. Best management will also be implemented as part of measures to avoid and minimize effects of soil erosion on water quality. See Hydrology and Water Quality section.	☐	☒	☐	☐
c) *Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?* See response to question VI.a. and VI.a.v. above.	☐	☒	☐	☐
d) *Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?*	☐	☒	☐	☐

	Potentially Significant Impact	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
See response to question VI.a.v above.				
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater? No use of septic tanks or alternative wastewater disposal systems is proposed for the project site. The proposed project would have no impact related to the capacity of local soils to effectively accommodate septic systems.	☐	☐	☐	☒
f) Expose people or property to major geologic hazards that cannot be mitigated through the use of standard engineering design and seismic safety techniques? It is not anticipated that the project would expose people and property to major geological hazards that cannot be mitigated with consideration of all applicable engineering design and seismic safety techniques	☐	☒	☐	☐
VII. **GREENHOUSE GAS EMISSIONS.** *Would the project:*				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment? Greenhouse gas emissions would increase at as a result of new traffic attracted to the area by the parking the facility. The greenhouse gases emission as a result of the project would be evaluated to determine if the project would result in exceedance of BAAQMA significant thresholds.	☒	☐	☐	☐
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases? The project exceedance of greenhouse gas emissions will be evaluated to determine	☐	☒	☐	☐

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
impacts on applicable plans and policies adopted for the reduction of greenhouse gases. The EIR would evaluate measures that can be adopted as part of the project in order to minimize impacts.				
VIII. **HAZARDS AND HAZARDOUS MATERIALS.** *Would the project:*				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☐	☒
The project would not result in routine transport, use, or disposal of hazardous substances.				
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	☐	☒
See response to question VIII.a above.				
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☐	☒
There are no schools within one quarter mile of the project area. In addition, the project would not result in the emission or the need to handle hazardous material.				
d) Create a significant hazard to the public or the environment from existing hazardous materials contamination by exposing future occupants or users of the site to contamination either in excess of ground soil and groundwater cleanup goals developed for the site or from the location on listed hazardous materials sites complied pursuant to Government Code section 65962.5?	☐	☒	☐	☐
The project is located in an area that has been developed with various commercial land uses. The EIR will investigate the presence of existing hazardous material and				

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
	potential contamination of soil and ground water in the project area. If contamination is identified, the EIR will address all necessary measures to avoid exposure of the public or the environment to hazardous material.				
e)	*For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?* The project is not located within, or two miles from land designated or used as airport land.	☐	☐	☐	☒
f)	*For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?* See response to question VIII.d above.	☐	☐	☐	☒
g)	*Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?* The project would not result in changes to the roadway and transportation system and would not create physical changes that would interfere with emergency response or evacuation plans. The EIR would evaluate impacts on traffic and potential road closures during construction, as well as measures to avoid impacts to emergency services.	☐	☐	☒	☐
h)	*Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?* According to the Santa Clara County Fire Hazards Map, the City of Palo Alto is not in a moderate, high, or very high fuel hazard zone. The project site and vicinity are built	☐	☐	☐	☒

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

environments largely devoid of wildfire-prone vegetation.

IX. **HYDROLOGY AND WATER QUALITY.** *Would the project:*

a) Violate any water quality standards or waste discharge requirements?	☐	☒	☐	☐

The existing site for the proposed project is a paved parking lot. It is not anticipated that the project would have a significant increase to impervious surface subject to storm water impacts. A stormwater control plan will be prepared to address existing untreated storm water and any potential future effects on storm water facilities. The plan would identify required measures to meet standards and requirements of the NPDES permit. The plan would address the operation and maintenance of the stormwater facilities.

The proposed project would be constructed on a lot size less than one acre. If the construction activities would disturb more than one acre, the project would require submitting a Notice of Intent (NOI) to the RWQB before start of construction. This would also require the implementation of Storm Water Pollution Prevention Plan (SWPPP) containing Best Management Practices (BMPs) during construction. The EIR will evaluate potential impacts on water quality as a result of the operation and construction of the project.

b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	☐	☐	☐	☒

The project does not result in the use of groundwater and would not affect groundwater recharge.

		Potentially Significant Impact	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
c)	*Substantially alter the existing drainage pattern (increase the rate, volume, or flow duration of storm water runoff) of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in new or increased flooding on or off-site?* It is not anticipated that the project would increase the rate, volume or flow duration of stormwater runoffs. The project does not propose to alter courses of streams or rivers.	☐	☐	☐	☒
d)	*Result in stream bank instability?* The project site is not located near a stream.	☐	☐	☐	☒
e)	*Significantly alter the existing drainage pattern (increase the rate, volume, or flow duration) of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?* The project would not result in significant increase in rate, volume, or flow duration of stormwater runoff. The stormwater system in the project area would be evaluated to address needed drainage improvements and potential for on- or off-site flooding.	☐	☒	☐	☐
f)	*Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?* See response to questions IX.a and IX.e above.	☐	☒	☐	☐
g)	*Provide substantial additional sources of pollutants associated with urban runoff or otherwise substantially degrade water quality?* See response to questions IX.a and IX.e above.	☐	☒	☐	☐

		Potentially Significant Impact	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
h)	*Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?* Although Palo Alto contains no areas within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map, the EIR would evaluate adequacy of the storm drains to handle potential localized flooding during storm events. In addition, due to the proximity of the project area to the San Francisco Bay region, the EIR will address potential impacts on the project from global climate change on the rise of sea levels.	☒	☐	☐	☐
i)	*Place within a 100-year flood hazard area structures which would impede or redirect flood flows?* The project is not located in 100-year flood hazard area, and does not propose the construction of a structure that would impede or direct flows.	☐	☐	☐	☒
j)	*Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?* The project does not propose the construction of housing or other developments within a 100-years flood hazard area. According to the EIR prepared for the Palo Alto Comprehensive Plan Update, the project area is within Dam Inundation area for Lake Lagunita, and possibly Searsville Lake. The EIR will address potential impacts from dams failure on inundation area.	☒	☐	☐	☐
k)	*Result in inundation by seiche, tsunami, or mudflow?* A seiche is a tidal change in an enclosed or semi-enclosed water body caused by sustained high winds or an earthquake. A tsunami is a series of waves created when a	☐	☐	☐	☒

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
body of water such as an ocean is rapidly displaced on a massive scale, most commonly as the result of an earthquake. Palo Alto is not in a tsunami/seiche area or area susceptible to a mudflow. There is no impact anticipated on the project area from seiche, tsunami or mudflow.				
X. **LAND USE AND PLANNING.** *Would the project:*				
a) Physically divide an established community?	☐	☐	☐	☒
The project is located within the commercially developed downtown area of the City and does not include residential use. It is anticipated that the project would physically divide an established community				
b) Conflict with any applicable City land use plan, policy, or regulation (including not limited to the Comprehensive Plan, CAP, or the City's Zoning Ordinances adopted for the purpose of avoiding or mitigating an environmental effect.	☐	☐	☐	☒
i) Substantially adversely change the type of intensity of existing o planned land use patterns in area?				
The project would increase the number of parking spaces available in the downtown area to meet the existing need for parking. The project is compatible with existing land use and zoning designation, and is not anticipated to change the type and intensity of existing or planned land use pattern in the area. The EIR would evaluate the project plans in relationship to the City adopted comprehensive plan to demonstrate compatibility with the City plan for the project and surrounding area.				
ii) Be incompatible with adjacent land uses or with the general character of the surrounding area, including density and building height.				
See response to question Xb and XJ.i above.				

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
iii) Conflict with established residential, recreational, religious, or scientific uses of an area? The project provides additional parking facilities to accommodate commercial and other facilities and services available in the project area.				
c) Conflict with an applicable habitat conversation or natural community conversation plan? There is no habitat conservation plan or natural community conservation plan in this project area.	☐	☐	☐	☒
XI. **MINERAL RESOURCES.** *Would the project:*				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state? The project is located in an area developed and designated for commercial land use. The project would not result in the loss of land with known mineral resources.	☐	☐	☐	☒
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan? See response to question XI.a above.	☐	☐	☐	☒
XII. **NOISE.** *Would the project result in:*				
a) Exposure of persons to or generation of excessive ground borne vibrations or ground borne noise levels? Construction activities would result in excessive ground born vibration and noise levels. Impacts would be temporary and for short periods during equipment operation for construction activities such as and demolition and excavation.	☐	☒	☐	☐

	Potentially Significant Impact	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
b) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or the municipal code, State standards, or applicable standards of other agencies, including but not limited to:	☐	☐	☐	☒
i) Result in indoor noise levels for residential development to exceed an Ldn of 45 dB? There is no residential development within the project area. The project would not have noise impacts on residents.				
ii) Result in instantaneous noise levels of 50dB or more in a bedroom or 55 dB or more measures from other rooms inside a house? The project site and surrounding area is developed as commercial properties, and would not have noise impacts on houses.				
c) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project, including:	☐	☐	☐	☒
i) Cause the average 24-hour noise level (Ldn) to increase by 5.0 decibels (dB) or more in an existing residential area, even if the Ldn would remain below 60 dB? *ii) Cause the Ldn to increase by three dB or more in an existing residential area, thereby causing the Ldn in the area to exceed 60 dB?* *iii) Cause an increase of three dB or more in an existing residential area where the Ldn currently exceeds 60 dB?* See response to questions XII.b above.				
d) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project. See response to questions XII.b above.	☐	☐	☐	☒

		Potentially Significant Impact	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
e)	*For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?*	☐	☐	☐	☒
	The project is not located within, or two miles from land designated or used as airport land.				
f)	*For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?*	☐	☐	☐	☒
	See response to question XII.d above.				
XIII.	**POPULATION AND HOUSING.** *Would the project:*				
a)	*Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?*	☐	☐	☐	☒
	The proposed project accommodates the need for additional parking in a built out area that includes businesses and other public facilities. The project does not propose improvements that would result in population growth either directly or indirectly.				
b)	*Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?*	☐	☐	☐	☒
	The project is replacing an existing parking lot. The project would not result in displacing any number of houses or requires the construction of replacement housing.				
c)	*Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?*	☐	☐	☐	☒
	See response to question XIII.a and XII.b above.				
d)	*Create a substantial imbalance between employed residents and jobs?*	☐	☐	☐	☒

	Potentially Significant Impact	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
The project improvements would not result in any changes to the existing employment and housing conditions, and would not create imbalance between employed residents and jobs.				
XIV. **PUBLIC SERVICES.** *Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:*				
a) Result in an adverse physical impact from the construction of additional school facilities in order to maintain acceptable performance standards?	☐	☐	☐	☒
Construction and operation of a new parking garage would not require the construction of new school facilities, parks, recreational facilities, or library facilities.				
b) Result in an adverse physical impact from the construction of additional fire protection facilities in order to maintain acceptable performance standards?	☐	☐	☐	☒
The project will increase the retail space and parking facilities. However, this increase is not anticipated to result in the need to construct additional fire protection facilities in order to maintain acceptable performance standards. The project would not have impact on the environment from the construction additional fires protection facilities.				
c) Result in an adverse physical impact from the construction of additional police protection facilities in order to maintain acceptable performance standards?	☐	☐	☐	☒
Construction and operation of a new parking garage would not require the construction of				

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
additional police protection facilities.				
d) *Result in an adverse physical impact from the construction of additional parks and recreation facilities in order to maintain acceptable performance standards?*	☐	☐	☐	☒
See response to question XIV.a above.				
XV. ***RECREATION.***				
a) *Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?*	☐	☐	☐	☒
The construction the parking garage would not result in increase of demand on recreational facilities such as regional parks or other public recreational facilities.				
b) Does the project include recreational facilities, or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☐	☒
The project does not include the construction of recreational facilities or require the expansion of existing recreational facilities.				
XVI. **TRANSPORTATION/TRAFFIC.** *Would the project:*				
a) *Cause an intersection to drop below its level of service standard, or if it is already operating at a substandard level of service, deteriorate by more than a specified amount?* Construction and operation of the project could increase traffic congestion and cause intersections to operate below the desired Level of Service (LOS) at local roads providing access to the facility. The EIR will evaluate potential traffic impacts at the local roads and intersections in the vicinity of the project area for peak hours, under existing conditions, existing plus project, and future conditions with and without the project. Analysis of future conditions would also consider cumulative impacts with and	☒	☐	☐	☐

		Potentially Significant Impact	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
	without the project.				
b)	Cause a roadway segment to drop below its level of service standard, or deteriorate operations that already operate at a substandard level of service*?* See response to question XVI.a above.	☒	☐	☐	☐
c)	*Cause a freeway segment or ramp to operate at LOS F or contribute traffic in excess of 1 percent of segment capacity to a freeway segment or ramp already operating at LOS F?* The project is not located near a freeway, and would not generate additional trips that might contribute to any segments of freeway traffic.	☐	☐	☐	☒
d)	*Impede the development or function of planned pedestrian or bicycle facilities?* It is not anticipated that the project would impede the development of function of planned pedestrian or bicycle facilities. The project. The project would impact the existing facilities during construction. This impact would be evaluated in the EIR.	☐	☒	☐	☐
e)	*Increase demand for pedestrian and bicycle facilities that cannot be met by current or planned services.* It is not anticipated that the project would increase demand for pedestrian and bicycle facilities that cannot be met by current services.	☐	☐	☒	☐
f)	*Impede the operation of a transit system as a result of congestion or otherwise decrease the performance of safety of such facilities?* The project is located approximately half a mile from the Palo Alto Transit Center/ Station. The EIR would evaluate impacts on the operation of the transit system.	☐	☐	☒	☐

		Potentially Significant Impact	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
g)	*Create demand for transit services that cannot be met by current or planned services?* The project would not generate new demand for transit services.	☐	☐	☐	☒
h)	*Create the potential demand for through traffic to use local residential streets?* As part of the evaluation of traffic impacts, the EIR will evaluate potential impacts on roadways and intersections located in residential areas close to the project area.	☐	☐	☒	☐
i)	*Cause any change in traffic that would increase the Traffic Infusion on Residential Environment (TIRE) index by 0.1 or more?* See response to question XVI.h above.	☐	☐	☒	☐
j)	*Create an operational safety hazard?* The EIR will evaluate the project impact of traffic and circulation in relation to potential effects on operational safety hazards.	☐	☐	☒	☐
k)	*Result in inadequate emergency access?* See response to question XVI.j.	☐	☐	☒	☐
l)	*Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?* It is anticipated that the project would not have impacts on air traffic.	☐	☐	☐	☒
m)	*Cause queuing impacts based on a comparative analysis between the design queue length and the available queue storage capacity? Queuing impacts include, but are not limited to, spillback queues at project access locations; queues at turn lanes at intersections that block through traffic; queues at lane drops; queues at one intersection that extend back to impact other intersections, and spillback queues on ramps.* The EIR will evaluate potential queuing	☒	☐	☐	☐

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
impacts resulting from the project.				
XVII. **UTILITIES AND SERVICE SYSTEMS.** *Would the project:*				
a) Need new or expanded entitlements to water supply? The project would connect to the existing City facilities and would not result in new or expanded entitlements to water supply.	☐	☐	☐	☒
b) Result in adverse physical impacts from new or expanded utility facilities due to increased use as a result of the project? The project would connect to the existing City facilities and would not result in new or expanded utility facilities.	☐	☐	☒	☐
c) Result in a substantial physical deterioration of a utility facility due to increased use as a result of the project? It is not anticipated that the project would result in deterioration of utility facilities due increased use.	☐	☐	☐	☒
d) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board? It is not anticipated that the project would result in exceeding wastewater treatment requirements. The construction and operation of the project would be subject to all applicable regional and local water quality standards and regulations.	☐	☐	☐	☒
e) Result in a determination by the wastewater treatment provider that it has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments? See response to question XVII.d above.	☐	☐	☒	☐
f) Would the project require or result in the construction of new water or wastewater treatment facilities or expansion of existing	☐	☒	☐	☐

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
	facilities, the construction of which could cause significant environmental effects? The project may result in the design and construction of new storm water drainage facilities. It is not however, anticipated that the redesign and construction of the facilities would cause significant effect on the environment.				
g)	*Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?* The project may result in the design and construction of new storm water drainage facilities. It is not however, anticipated that the redesign and construction of the facilities would cause significant effect on the environment.	☐	☒	☐	☐
h)	*Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?* The operation of the parking garage would not result in significant impacts that would affect capacity of landfills in order to accommodate the project. Construction of the project may result in one time need to dispose of material resulting from excavation and pavement removal of the existing parking lot. The construction impact on landfills will be addressed in the EIR.	☐	☐	☒	☐
i)	*Comply with federal, state, and local statutes and regulations related to solid waste?* The proposed project would comply with all federal, State, and local statues and regulations related to solid waste.	☐	☐	☐	☒
j)	*Result in a substantial increase in natural gas and electrical service demands that would require the new construction of energy supply facilities and distribution infrastructure or capacity enhancing alterations to existing*	☐	☐	☒	☐

	Potentially Significant Impact	*Less Than Significant with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
facilities? The project proposes to include accommodations for the use of vehicles run by natural gas or electricity. The additional demand of electrical and natural gas demand and impact on energy consumption created by the project would be evaluated in the EIR.				
XVIII. **ENERGY**				
a) Have an energy impact? Energy impacts may include: *i) Impacts resulting from amount and fuel type used for each stage of the project* *ii) Impacts on local and regional energy supplies and on requirements for additional capacity* *iii) Impacts on peak and base period demands for electricity and other forms of energy* *iv) Impacts to energy resources* *v) Impacts resulting from the project's projected transportation energy use requirements* See response to question XVII.j above.	☐	☐	☒	☐
XIX. ***MANDATORY FINDINGS OF SIGNIFICANCE.***				
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?	☐	☐	☒	☐
b) Does the project have impacts that are individually limited, but cumulatively	☒	☐	☐	☐

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?				
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☒	☐	☐	☐

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Appendix C: Air Quality Technical Data

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Palo Alto Parking Structure 375 Hamilton Ave - Alternative 2

Bay Area AQMD, Summary Report

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking with Elevator	344.00	Space	3.10	137,600.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	64
Climate Zone	5			**Operational Year**	2020
Utility Company					
CO2 Intensity (lb/MWhr)	0	**CH4 Intensity (lb/MWhr)**	0	**N2O Intensity (lb/MWhr)**	0

1.3 User Entered Comments

Only CalEEMod defaults were used.

Project Characteristics -

Land Use -

Construction Phase -

2.0 Peak Daily Emissions

Peak Daily Construction Emissions

Palo Alto Parking Structure 375 Hamilton Ave - Alternative 2 - Bay Area AQMD Air District, Summary Report

Peak Daily Construction Emissions

		Unmitigated						Mitigated					
		ROG	NOX	CO	SO2	PM10	PM2.5	ROG	NOX	CO	SO2	PM10	PM2.5
Year	Phase	lb/day											
2019	Demolition	3.5737 W	35.8272 W	22.5073 S	0.0401 S	1.9189 S	1.7031 S	3.5737 W	35.8272 W	22.5073 S	0.0401 S	1.9189 S	1.7031 S
2019	Site Preparation	4.4074 W	45.6257 W	22.5997 S	0.0395 S	20.6055 S	12.1699 S	4.4074 W	45.6257 W	22.5997 S	0.0395 S	20.6055 S	12.1699 S
2019	Grading	2.6408 W	28.3922 W	16.7407 S	0.0309 S	8.0737 S	4.6865 S	2.6408 W	28.3922 W	16.7407 S	0.0309 S	8.0737 S	4.6865 S
2019	Building Construction	2.7061 W	24.1610 W	19.5975 W	0.0382 S	1.9454 W	1.4062 W	2.7061 W	24.1610 W	19.5975 W	0.0382 S	1.9454 W	1.4062 W
2020	Building Construction	2.4248 W	21.9873 W	19.0299 S	0.0380 S	1.7653 W	1.2369 W	2.4248 W	21.9873 W	19.0299 S	0.0380 S	1.7653 W	1.2369 W
2020	Paving	1.2572 W	11.8535 W	12.8189 S	0.0206 S	0.8162 S	0.6451 S	1.2572 W	11.8535 W	12.8189 S	0.0206 S	0.8162 S	0.6451 S
2020	Architectural Coating	3.4752 W	1.7150 W	2.1534 S	3.9600e-003 S	0.2102 S	0.1377 S	3.4752 W	1.7150 W	2.1534 S	3.9600e-003 S	0.2102 S	0.1377 S
	Peak Daily Total	4.4074 W	45.6257 W	22.5997 S	0.0401 S	20.6055 S	12.1699 S	4.4074 W	45.6257 W	22.5997 S	0.0401 S	20.6055 S	12.1699 S
	Air District Threshold												
	Exceed Significance?												

Peak Daily Operational Emissions

Peak Daily Operational Emissions

Palo Alto Parking Structure 375 Hamilton Ave - Alternative 2 - Bay Area AQMD Air District, Summary Report

		Unmitigated						Mitigated					
		ROG	NOX	CO	SO2	PM10	PM2.5	ROG	NOX	CO	SO2	PM10	PM2.5
	Operational Activity	lb/day											
On-Site	Area	0.0678 S	3.3000e-004 S	0.0354 S	0.0000 S	1.3000e-004 S	1.3000e-004 S	0.0678 S	3.3000e-004 S	0.0354 S	0.0000 S	1.3000e-004 S	1.3000e-004 S
On-Site	Energy	0.0000 S	0.0000 S	0.0000 S	0.0000 S	0.0000 S	0.0000 S	0.0000 S	0.0000 S	0.0000 S	0.0000 S	0.0000 S	0.0000 S
Off-Site	Mobile	0.0000 S	0.0000 S	0.0000 S	0.0000 S	0.0000 S	0.0000 S	0.0000 S	0.0000 S	0.0000 S	0.0000 S	0.0000 S	0.0000 S
	Peak Daily Total	0.0678 S	3.3000e-004 S	0.0354 S	0.0000 S	1.3000e-004 S	1.3000e-004 S	0.0678 S	3.3000e-004 S	0.0354 S	0.0000 S	1.3000e-004 S	1.3000e-004 S
	Air District Threshold												
	Exceed Significance?												

3.0 Annual GHG Emissions

Annual GHG

Annual GHG

		Unmitigated				Mitigated			
		CO2	CH4	N2O	CO2e	CO2	CH4	N2O	CO2e
GHG Activity	Year	MT/yr							
Construction	2019	440.0236	0.0861	0.0000	442.1772	440.0233	0.0861	0.0000	442.1768
Construction	2020	22.3463	5.4600e-003	0.0000	22.4829	22.3463	5.4600e-003	0.0000	22.4829
Operational	2020	6.1500e-003	2.0000e-005	0.0000	6.5600e-003	6.1500e-003	2.0000e-005	0.0000	6.5600e-003
	Total								
	Significance Threshold								
	Exceed Significance?								

Palo Alto Parking Structure 375 Hamilton Ave - Proposed Project

Bay Area AQMD, Summary Report

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking with Elevator	338.00	Space	3.04	135,200.00	0
Strip Mall	2.19	1000sqft	0.05	2,188.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	64
Climate Zone	5			**Operational Year**	2020
Utility Company					
CO2 Intensity (lb/MWhr)	0	**CH4 Intensity (lb/MWhr)**	0	**N2O Intensity (lb/MWhr)**	0

1.3 User Entered Comments

Only CalEEMod defaults were used.

Project Characteristics -

Land Use -

Construction Phase -

2.0 Peak Daily Emissions

Palo Alto Parking Structure 375 Hamilton Ave - Proposed Project - Bay Area AQMD Air District, Summary Report

Peak Daily Construction Emissions

Peak Daily Construction Emissions

		Unmitigated						Mitigated					
		ROG	NOX	CO	SO2	PM10	PM2.5	ROG	NOX	CO	SO2	PM10	PM2.5
Year	Phase	lb/day											
2018	Demolition	3.7858 W	38.3729 W	22.8066 S	0.0401 S	2.0626 S	1.8383 S	3.7858 W	38.3729 W	22.8066 S	0.0401 S	2.0626 S	1.8383 S
2018	Site Preparation	4.6429 W	48.2593 W	23.0793 S	0.0396 S	20.7920 S	12.3416 S	4.6429 W	48.2593 W	23.0793 S	0.0396 S	20.7920 S	12.3416 S
2018	Grading	2.8401 W	30.7230 W	17.0795 S	0.0310 S	8.2277 S	4.8281 S	2.8401 W	30.7230 W	17.0795 S	0.0310 S	8.2277 S	4.8281 S
2018	Building Construction	3.0579 W	26.6636 W	20.2718 W	0.0383 S	2.1508 W	1.6047 W	3.0579 W	26.6636 W	20.2718 W	0.0383 S	2.1508 W	1.6047 W
2019	Building Construction	2.7021 W	24.1580 W	19.5693 W	0.0381 S	1.9371 W	1.4039 W	2.7021 W	24.1580 W	19.5693 W	0.0381 S	1.9371 W	1.4039 W
2019	Paving	1.3483 W	12.8193 W	12.9094 S	0.0206 S	0.8850 S	0.7083 S	1.3483 W	12.8193 W	12.9094 S	0.0206 S	0.8850 S	0.7083 S
2019	Architectural Coating	4.7116 W	1.8678 W	2.1693 S	3.9100e-003 S	0.2197 S	0.1533 S	4.7116 W	1.8678 W	2.1693 S	3.9100e-003 S	0.2197 S	0.1533 S
	Peak Daily Total	4.7116 W	48.2593 W	23.0793 S	0.0401 S	20.7920 S	12.3416 S	4.7116 W	48.2593 W	23.0793 S	0.0401 S	20.7920 S	12.3416 S
	Air District Threshold												
	Exceed Significance?												

Peak Daily Operational Emissions

Peak Daily Operational Emissions

Palo Alto Parking Structure 375 Hamilton Ave - Proposed Project - Bay Area AQMD Air District, Summary Report

		Unmitigated						Mitigated					
		ROG	NOX	CO	SO2	PM10	PM2.5	ROG	NOX	CO	SO2	PM10	PM2.5
	Operational Activity	lb/day											
On-Site	Area	0.1197 S	3.2000e-004 S	0.0350 S	0.0000 S	1.3000e-004 S	1.3000e-004 S	0.1197 S	3.2000e-004 S	0.0350 S	0.0000 S	1.3000e-004 S	1.3000e-004 S
On-Site	Energy	3.0000e-004 S	2.7000e-003 S	2.2700e-003 S	2.0000e-005 S	2.1000e-004 S	2.1000e-004 S	3.0000e-004 S	2.7000e-003 S	2.2700e-003 S	2.0000e-005 S	2.1000e-004 S	2.1000e-004 S
Off-Site	Mobile	0.1580 S	0.6104 W	1.4156 W	4.0900e-003 S	0.3217 W	0.0891 W	0.1580 S	0.6104 W	1.4156 W	4.0900e-003 S	0.3217 W	0.0891 W
	Peak Daily Total	0.2780 S	0.6134 W	1.4529 W	4.1100e-003 S	0.3221 W	0.0894 W	0.2780 S	0.6134 W	1.4529 W	4.1100e-003 S	0.3221 W	0.0894 W
	Air District Threshold												
	Exceed Significance?												

3.0 Annual GHG Emissions

Annual GHG

Annual GHG

		Unmitigated				Mitigated			
		CO2	CH4	N2O	CO2e	CO2	CH4	N2O	CO2e
GHG Activity	Year	MT/yr							
Construction	2018	409.2529	0.0810	0.0000	411.2785	409.2525	0.0810	0.0000	411.2782
Construction	2019	58.0348	0.0120	0.0000	58.3341	58.0347	0.0120	0.0000	58.3341
Operational	2020	60.1500	0.0355	1.3000e-004	61.0776	60.1500	0.0355	1.3000e-004	61.0776
	Total								
	Significance Threshold								
	Exceed Significance?								

Palo Alto Parking Structure 375 Hamilton Ave - Alternative 3

Bay Area AQMD, Summary Report

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking with Elevator	284.00	Space	2.56	113,600.00	0
Strip Mall	3.00	1000sqft	0.07	3,003.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	64
Climate Zone	5			**Operational Year**	2020
Utility Company					
CO2 Intensity (lb/MWhr)	0	**CH4 Intensity (lb/MWhr)**	0	**N2O Intensity (lb/MWhr)**	0

1.3 User Entered Comments

Only CalEEMod defaults were used.

Project Characteristics -

Land Use -

Construction Phase -

2.0 Peak Daily Emissions

Palo Alto Parking Structure 375 Hamilton Ave - Alternative 3 - Bay Area AQMD Air District, Summary Report

Peak Daily Construction Emissions

Peak Daily Construction Emissions

		Unmitigated						Mitigated					
		ROG	NOX	CO	SO2	PM10	PM2.5	ROG	NOX	CO	SO2	PM10	PM2.5
Year	Phase	lb/day											
2019	Demolition	2.3473 W	22.7133 W	15.2820 S	0.0252 S	1.3938 S	1.2307 S	2.3473 W	22.7133 W	15.2820 S	0.0252 S	1.3938 S	1.2307 S
2019	Site Preparation	1.7879 W	21.5622 W	12.1529 S	0.0252 S	2.5106 S	0.9750 S	1.7879 W	21.5622 W	12.1529 S	0.0252 S	2.5106 S	0.9750 S
2019	Grading	2.0689 W	22.7738 W	10.4500 S	0.0215 S	7.7080 S	4.3769 S	2.0689 W	22.7738 W	10.4500 S	0.0215 S	7.7080 S	4.3769 S
2019	Building Construction	2.8474 W	21.4596 W	17.2955 W	0.0345 S	1.6406 W	1.2071 W	2.8474 W	21.4596 W	17.2955 W	0.0345 S	1.6406 W	1.2071 W
2019	Paving	1.3056 W	12.6126 W	12.2980 S	0.0191 S	0.8541 S	0.7062 S	1.3056 W	12.6126 W	12.2980 S	0.0191 S	0.8541 S	0.7062 S
2019	Architectural Coating	8.1778 W	1.8648 W	2.1395 S	3.8200e-003 S	0.2115 S	0.1511 S	8.1778 W	1.8648 W	2.1395 S	3.8200e-003 S	0.2115 S	0.1511 S
2020	Architectural Coating	8.1501 W	1.7098 W	2.0997 S	3.7900e-003 S	0.1936 S	0.1332 S	8.1501 W	1.7098 W	2.0997 S	3.7900e-003 S	0.1936 S	0.1332 S
	Peak Daily Total	8.1778 W	22.7738 W	17.2955 W	0.0345 S	7.7080 S	4.3769 S	8.1778 W	22.7738 W	17.2955 W	0.0345 S	7.7080 S	4.3769 S
	Air District Threshold												
	Exceed Significance?												

Peak Daily Operational Emissions

Peak Daily Operational Emissions

Palo Alto Parking Structure 375 Hamilton Ave - Alternative 3 - Bay Area AQMD Air District, Summary Report

		Unmitigated						Mitigated					
		ROG	NOX	CO	SO2	PM10	PM2.5	ROG	NOX	CO	SO2	PM10	PM2.5
	Operational Activity	lb/day											
On-Site	Area	0.1288 S	2.7000e-004 S	0.0295 S	0.0000 S	1.1000e-004 S	1.1000e-004 S	0.1288 S	2.7000e-004 S	0.0295 S	0.0000 S	1.1000e-004 S	1.1000e-004 S
On-Site	Energy	4.1000e-004 S	3.7100e-003 S	3.1200e-003 S	2.0000e-005 S	2.8000e-004 S	2.8000e-004 S	4.1000e-004 S	3.7100e-003 S	3.1200e-003 S	2.0000e-005 S	2.8000e-004 S	2.8000e-004 S
Off-Site	Mobile	0.2168 S	0.8378 W	1.9429 W	5.6200e-003 S	0.4416 W	0.1222 W	0.2168 S	0.8378 W	1.9429 W	5.6200e-003 S	0.4416 W	0.1222 W
	Peak Daily Total	0.3461 S	0.8417 W	1.9755 W	5.6400e-003 S	0.4420 W	0.1226 W	0.3461 S	0.8417 W	1.9755 W	5.6400e-003 S	0.4420 W	0.1226 W
	Air District Threshold												
	Exceed Significance?												

3.0 Annual GHG Emissions

Annual GHG

Annual GHG

		Unmitigated				Mitigated			
		CO2	CH4	N2O	CO2e	CO2	CH4	N2O	CO2e
GHG Activity	Year	MT/yr							
Construction	2019	364.6191	0.0629	0.0000	366.1908	364.6188	0.0629	0.0000	366.1904
Construction	2020	1.2982	9.0000e-005	0.0000	1.3004	1.2982	9.0000e-005	0.0000	1.3004
Operational	2020	82.5503	0.0486	1.8000e-004	83.8207	82.5503	0.0486	1.8000e-004	83.8207
	Total								
	Significance Threshold								
	Exceed Significance?								

Palo Alto Parking Structure 375 Hamilton Ave - Alternative 4

Bay Area AQMD, Summary Report

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking with Elevator	279.00	Space	2.51	111,600.00	0
Strip Mall	2.19	1000sqft	0.05	2,188.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	64
Climate Zone	5			**Operational Year**	2020
Utility Company					
CO2 Intensity (lb/MWhr)	0	**CH4 Intensity (lb/MWhr)**	0	**N2O Intensity (lb/MWhr)**	0

1.3 User Entered Comments

Only CalEEMod defaults were used.

Project Characteristics -

Land Use -

Construction Phase -

2.0 Peak Daily Emissions

Palo Alto Parking Structure 375 Hamilton Ave - Alternative 4 - Bay Area AQMD Air District, Summary Report

Peak Daily Construction Emissions

Peak Daily Construction Emissions

		Unmitigated						Mitigated					
		ROG	NOX	CO	SO2	PM10	PM2.5	ROG	NOX	CO	SO2	PM10	PM2.5
Year	Phase	lb/day											
2019	Demolition	2.3473 W	22.7133 W	15.2820 S	0.0252 S	1.3938 S	1.2307 S	2.3473 W	22.7133 W	15.2820 S	0.0252 S	1.3938 S	1.2307 S
2019	Site Preparation	1.7879 W	21.5622 W	12.1529 S	0.0252 S	2.5106 S	0.9750 S	1.7879 W	21.5622 W	12.1529 S	0.0252 S	2.5106 S	0.9750 S
2019	Grading	2.0689 W	22.7738 W	10.4500 S	0.0215 S	7.7080 S	4.3769 S	2.0689 W	22.7738 W	10.4500 S	0.0215 S	7.7080 S	4.3769 S
2019	Building Construction	2.8434 W	21.4567 W	17.2674 W	0.0344 S	1.6324 W	1.2049 W	2.8434 W	21.4567 W	17.2674 W	0.0344 S	1.6324 W	1.2049 W
2019	Paving	1.3056 W	12.6126 W	12.2980 S	0.0191 S	0.8541 S	0.7062 S	1.3056 W	12.6126 W	12.2980 S	0.0191 S	0.8541 S	0.7062 S
2019	Architectural Coating	7.2438 W	1.8648 W	2.1395 S	3.8200e-003 S	0.2115 S	0.1511 S	7.2438 W	1.8648 W	2.1395 S	3.8200e-003 S	0.2115 S	0.1511 S
2020	Architectural Coating	7.2161 W	1.7098 W	2.0997 S	3.7900e-003 S	0.1936 S	0.1332 S	7.2161 W	1.7098 W	2.0997 S	3.7900e-003 S	0.1936 S	0.1332 S
	Peak Daily Total	7.2438 W	22.7738 W	17.2674 W	0.0344 S	7.7080 S	4.3769 S	7.2438 W	22.7738 W	17.2674 W	0.0344 S	7.7080 S	4.3769 S
	Air District Threshold												
	Exceed Significance?												

Peak Daily Operational Emissions

Peak Daily Operational Emissions

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		Unmitigated						Mitigated					
		ROG	NOX	CO	SO2	PM10	PM2.5	ROG	NOX	CO	SO2	PM10	PM2.5
	Operational Activity	lb/day											
On-Site	Area	0.1081 S	2.7000e-004 S	0.0289 S	0.0000 S	1.0000e-004 S	1.0000e-004 S	0.1081 S	2.7000e-004 S	0.0289 S	0.0000 S	1.0000e-004 S	1.0000e-004 S
On-Site	Energy	3.0000e-004 S	2.7000e-003 S	2.2700e-003 S	2.0000e-005 S	2.1000e-004 S	2.1000e-004 S	3.0000e-004 S	2.7000e-003 S	2.2700e-003 S	2.0000e-005 S	2.1000e-004 S	2.1000e-004 S
Off-Site	Mobile	0.1581 S	0.6110 W	1.4169 W	4.1000e-003 S	0.3220 W	0.0891 W	0.1581 S	0.6110 W	1.4169 W	4.1000e-003 S	0.3220 W	0.0891 W
	Peak Daily Total	0.2665 S	0.6139 W	1.4481 W	4.1200e-003 S	0.3223 W	0.0895 W	0.2665 S	0.6139 W	1.4481 W	4.1200e-003 S	0.3223 W	0.0895 W
	Air District Threshold												
	Exceed Significance?												

3.0 Annual GHG Emissions

Annual GHG

Annual GHG

		Unmitigated				Mitigated			
		CO2	CH4	N2O	CO2e	CO2	CH4	N2O	CO2e
GHG Activity	Year	MT/yr							
Construction	2019	363.8328	0.0629	0.0000	365.4040	363.8325	0.0629	0.0000	365.4037
Construction	2020	1.2982	9.0000e-005	0.0000	1.3004	1.2982	9.0000e-005	0.0000	1.3004
Operational	2020	60.2029	0.0355	1.3000e-004	61.1305	60.2029	0.0355	1.3000e-004	61.1305
	Total								
	Significance Threshold								
	Exceed Significance?								

Palo Alto Parking Structure 375 Hamilton Ave - Alternative 3

Bay Area AQMD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking with Elevator	284.00	Space	2.56	113,600.00	0
Strip Mall	3.00	1000sqft	0.07	3,003.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	64
Climate Zone	5			**Operational Year**	2020
Utility Company					
CO2 Intensity (lb/MWhr)	0	**CH4 Intensity (lb/MWhr)**	0	**N2O Intensity (lb/MWhr)**	0

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase -

Table Name	Column Name	Default Value	New Value

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2019	0.3578	2.7519	2.1589	4.2000e-003	0.0804	0.1432	0.2236	0.0262	0.1366	0.1628	0.0000	364.6191	364.6191	0.0629	0.0000	366.1908
2020	0.0326	6.8300e-003	8.3100e-003	1.0000e-005	3.2000e-004	4.5000e-004	7.6000e-004	8.0000e-005	4.5000e-004	5.3000e-004	0.0000	1.2982	1.2982	9.0000e-005	0.0000	1.3004
Maximum	**0.3578**	**2.7519**	**2.1589**	**4.2000e-003**	**0.0804**	**0.1432**	**0.2236**	**0.0262**	**0.1366**	**0.1628**	**0.0000**	**364.6191**	**364.6191**	**0.0629**	**0.0000**	**366.1908**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2019	0.3578	2.7519	2.1589	4.2000e-003	0.0804	0.1432	0.2236	0.0262	0.1366	0.1628	0.0000	364.6188	364.6188	0.0629	0.0000	366.1904
2020	0.0326	6.8300e-003	8.3100e-003	1.0000e-005	3.2000e-004	4.5000e-004	7.6000e-004	8.0000e-005	4.5000e-004	5.3000e-004	0.0000	1.2982	1.2982	9.0000e-005	0.0000	1.3004
Maximum	**0.3578**	**2.7519**	**2.1589**	**4.2000e-003**	**0.0804**	**0.1432**	**0.2236**	**0.0262**	**0.1366**	**0.1628**	**0.0000**	**364.6188**	**364.6188**	**0.0629**	**0.0000**	**366.1904**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

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Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	1-1-2019	3-31-2019	0.7893	0.7893
2	4-1-2019	6-30-2019	0.7876	0.7876
3	7-1-2019	9-30-2019	0.7962	0.7962
4	10-1-2019	12-31-2019	0.7263	0.7263
5	1-1-2020	3-31-2020	0.0352	0.0352
		Highest	0.7962	0.7962

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0233	2.0000e-005	2.6500e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	5.1300e-003	5.1300e-003	1.0000e-005	0.0000	5.4700e-003
Energy	7.0000e-005	6.8000e-004	5.7000e-004	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005	0.0000	0.7372	0.7372	1.0000e-005	1.0000e-005	0.7415
Mobile	0.0312	0.1375	0.3041	8.8000e-004	0.0699	1.0000e-003	0.0709	0.0188	9.4000e-004	0.0197	0.0000	81.0981	81.0981	3.5600e-003	0.0000	81.1871
Waste						0.0000	0.0000		0.0000	0.0000	0.6394	0.0000	0.6394	0.0378	0.0000	1.5841
Water						0.0000	0.0000		0.0000	0.0000	0.0705	0.0000	0.0705	7.2400e-003	1.7000e-004	0.3025
Total	**0.0546**	**0.1382**	**0.3073**	**8.8000e-004**	**0.0699**	**1.0600e-003**	**0.0709**	**0.0188**	**1.0000e-003**	**0.0198**	**0.7099**	**81.8404**	**82.5503**	**0.0486**	**1.8000e-004**	**83.8207**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0233	2.0000e-005	2.6500e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	5.1300e-003	5.1300e-003	1.0000e-005	0.0000	5.4700e-003
Energy	7.0000e-005	6.8000e-004	5.7000e-004	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005	0.0000	0.7372	0.7372	1.0000e-005	1.0000e-005	0.7415
Mobile	0.0312	0.1375	0.3041	8.8000e-004	0.0699	1.0000e-003	0.0709	0.0188	9.4000e-004	0.0197	0.0000	81.0981	81.0981	3.5600e-003	0.0000	81.1871
Waste						0.0000	0.0000		0.0000	0.0000	0.6394	0.0000	0.6394	0.0378	0.0000	1.5841
Water						0.0000	0.0000		0.0000	0.0000	0.0705	0.0000	0.0705	7.2400e-003	1.7000e-004	0.3025
Total	**0.0546**	**0.1382**	**0.3073**	**8.8000e-004**	**0.0699**	**1.0600e-003**	**0.0709**	**0.0188**	**1.0000e-003**	**0.0198**	**0.7099**	**81.8404**	**82.5503**	**0.0486**	**1.8000e-004**	**83.8207**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

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Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2019	1/28/2019	5	20	
2	Site Preparation	Site Preparation	1/29/2019	1/31/2019	5	3	
3	Grading	Grading	2/1/2019	2/8/2019	5	6	
4	Building Construction	Building Construction	2/9/2019	12/13/2019	5	220	
5	Paving	Paving	12/14/2019	12/27/2019	5	10	
6	Architectural Coating	Architectural Coating	12/28/2019	1/10/2020	5	10	

Acres of Grading (Site Preparation Phase): 4.5

Acres of Grading (Grading Phase): 3

Acres of Paving: 2.56

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 4,505; Non-Residential Outdoor: 1,502; Striped Parking Area: 6,816 (Architectural Coating – sqft)

OffRoad Equipment

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Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	1	8.00	9	0.56
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Site Preparation	Graders	1	8.00	187	0.41
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Forklifts	2	7.00	89	0.20
Site Preparation	Scrapers	1	8.00	367	0.48
Paving	Pavers	1	8.00	130	0.42
Paving	Rollers	2	8.00	80	0.38
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Generator Sets	1	8.00	84	0.74
Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Paving	Paving Equipment	1	8.00	132	0.36
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	5	13.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	8	49.00	19.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0230	0.2268	0.1489	2.4000e-004		0.0129	0.0129		0.0120	0.0120	0.0000	21.4161	21.4161	5.4500e-003	0.0000	21.5524
Total	**0.0230**	**0.2268**	**0.1489**	**2.4000e-004**		**0.0129**	**0.0129**		**0.0120**	**0.0120**	**0.0000**	**21.4161**	**21.4161**	**5.4500e-003**	**0.0000**	**21.5524**

3.2 Demolition - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.7000e-004	3.5000e-004	3.5600e-003	1.0000e-005	1.0300e-003	1.0000e-005	1.0300e-003	2.7000e-004	1.0000e-005	2.8000e-004	0.0000	0.9292	0.9292	2.0000e-005	0.0000	0.9298
Total	**4.7000e-004**	**3.5000e-004**	**3.5600e-003**	**1.0000e-005**	**1.0300e-003**	**1.0000e-005**	**1.0300e-003**	**2.7000e-004**	**1.0000e-005**	**2.8000e-004**	**0.0000**	**0.9292**	**0.9292**	**2.0000e-005**	**0.0000**	**0.9298**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0230	0.2268	0.1489	2.4000e-004		0.0129	0.0129		0.0120	0.0120	0.0000	21.4161	21.4161	5.4500e-003	0.0000	21.5524
Total	**0.0230**	**0.2268**	**0.1489**	**2.4000e-004**		**0.0129**	**0.0129**		**0.0120**	**0.0120**	**0.0000**	**21.4161**	**21.4161**	**5.4500e-003**	**0.0000**	**21.5524**

3.2 Demolition - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.7000e-004	3.5000e-004	3.5600e-003	1.0000e-005	1.0300e-003	1.0000e-005	1.0300e-003	2.7000e-004	1.0000e-005	2.8000e-004	0.0000	0.9292	0.9292	2.0000e-005	0.0000	0.9298
Total	**4.7000e-004**	**3.5000e-004**	**3.5600e-003**	**1.0000e-005**	**1.0300e-003**	**1.0000e-005**	**1.0300e-003**	**2.7000e-004**	**1.0000e-005**	**2.8000e-004**	**0.0000**	**0.9292**	**0.9292**	**2.0000e-005**	**0.0000**	**0.9298**

3.3 Site Preparation - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.3900e-003	0.0000	2.3900e-003	2.6000e-004	0.0000	2.6000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.6300e-003	0.0323	0.0179	4.0000e-005		1.2800e-003	1.2800e-003		1.1800e-003	1.1800e-003	0.0000	3.3020	3.3020	1.0400e-003	0.0000	3.3281
Total	**2.6300e-003**	**0.0323**	**0.0179**	**4.0000e-005**	**2.3900e-003**	**1.2800e-003**	**3.6700e-003**	**2.6000e-004**	**1.1800e-003**	**1.4400e-003**	**0.0000**	**3.3020**	**3.3020**	**1.0400e-003**	**0.0000**	**3.3281**

3.3 Site Preparation - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-005	3.0000e-005	3.3000e-004	0.0000	9.0000e-005	0.0000	1.0000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0858	0.0858	0.0000	0.0000	0.0858
Total	**4.0000e-005**	**3.0000e-005**	**3.3000e-004**	**0.0000**	**9.0000e-005**	**0.0000**	**1.0000e-004**	**3.0000e-005**	**0.0000**	**3.0000e-005**	**0.0000**	**0.0858**	**0.0858**	**0.0000**	**0.0000**	**0.0858**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.3900e-003	0.0000	2.3900e-003	2.6000e-004	0.0000	2.6000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.6300e-003	0.0323	0.0179	4.0000e-005		1.2800e-003	1.2800e-003		1.1800e-003	1.1800e-003	0.0000	3.3020	3.3020	1.0400e-003	0.0000	3.3281
Total	**2.6300e-003**	**0.0323**	**0.0179**	**4.0000e-005**	**2.3900e-003**	**1.2800e-003**	**3.6700e-003**	**2.6000e-004**	**1.1800e-003**	**1.4400e-003**	**0.0000**	**3.3020**	**3.3020**	**1.0400e-003**	**0.0000**	**3.3281**

3.3 Site Preparation - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-005	3.0000e-005	3.3000e-004	0.0000	9.0000e-005	0.0000	1.0000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0858	0.0858	0.0000	0.0000	0.0858
Total	**4.0000e-005**	**3.0000e-005**	**3.3000e-004**	**0.0000**	**9.0000e-005**	**0.0000**	**1.0000e-004**	**3.0000e-005**	**0.0000**	**3.0000e-005**	**0.0000**	**0.0858**	**0.0858**	**0.0000**	**0.0000**	**0.0858**

3.4 Grading - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0197	0.0000	0.0197	0.0101	0.0000	0.0101	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.0900e-003	0.0682	0.0305	6.0000e-005		3.2200e-003	3.2200e-003		2.9600e-003	2.9600e-003	0.0000	5.5554	5.5554	1.7600e-003	0.0000	5.5993
Total	**6.0900e-003**	**0.0682**	**0.0305**	**6.0000e-005**	**0.0197**	**3.2200e-003**	**0.0229**	**0.0101**	**2.9600e-003**	**0.0131**	**0.0000**	**5.5554**	**5.5554**	**1.7600e-003**	**0.0000**	**5.5993**

3.4 Grading - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.1000e-004	8.0000e-005	8.2000e-004	0.0000	2.4000e-004	0.0000	2.4000e-004	6.0000e-005	0.0000	6.0000e-005	0.0000	0.2144	0.2144	1.0000e-005	0.0000	0.2146
Total	**1.1000e-004**	**8.0000e-005**	**8.2000e-004**	**0.0000**	**2.4000e-004**	**0.0000**	**2.4000e-004**	**6.0000e-005**	**0.0000**	**6.0000e-005**	**0.0000**	**0.2144**	**0.2144**	**1.0000e-005**	**0.0000**	**0.2146**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0197	0.0000	0.0197	0.0101	0.0000	0.0101	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.0900e-003	0.0682	0.0305	6.0000e-005		3.2200e-003	3.2200e-003		2.9600e-003	2.9600e-003	0.0000	5.5554	5.5554	1.7600e-003	0.0000	5.5993
Total	**6.0900e-003**	**0.0682**	**0.0305**	**6.0000e-005**	**0.0197**	**3.2200e-003**	**0.0229**	**0.0101**	**2.9600e-003**	**0.0131**	**0.0000**	**5.5554**	**5.5554**	**1.7600e-003**	**0.0000**	**5.5993**

3.4 Grading - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.1000e-004	8.0000e-005	8.2000e-004	0.0000	2.4000e-004	0.0000	2.4000e-004	6.0000e-005	0.0000	6.0000e-005	0.0000	0.2144	0.2144	1.0000e-005	0.0000	0.2146
Total	**1.1000e-004**	**8.0000e-005**	**8.2000e-004**	**0.0000**	**2.4000e-004**	**0.0000**	**2.4000e-004**	**6.0000e-005**	**0.0000**	**6.0000e-005**	**0.0000**	**0.2144**	**0.2144**	**1.0000e-005**	**0.0000**	**0.2146**

3.5 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2814	2.0801	1.6780	2.7500e-003		0.1199	0.1199		0.1149	0.1149	0.0000	230.7297	230.7297	0.0480	0.0000	231.9297
Total	**0.2814**	**2.0801**	**1.6780**	**2.7500e-003**		**0.1199**	**0.1199**		**0.1149**	**0.1149**	**0.0000**	**230.7297**	**230.7297**	**0.0480**	**0.0000**	**231.9297**

3.5 Building Construction - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	9.8800e-003	0.2647	0.0679	5.7000e-004	0.0137	1.8200e-003	0.0155	3.9600e-003	1.7400e-003	5.7000e-003	0.0000	55.0767	55.0767	3.0500e-003	0.0000	55.1529
Worker	0.0195	0.0145	0.1476	4.3000e-004	0.0426	2.9000e-004	0.0429	0.0113	2.7000e-004	0.0116	0.0000	38.5261	38.5261	1.0300e-003	0.0000	38.5519
Total	**0.0294**	**0.2792**	**0.2155**	**1.0000e-003**	**0.0563**	**2.1100e-003**	**0.0584**	**0.0153**	**2.0100e-003**	**0.0173**	**0.0000**	**93.6028**	**93.6028**	**4.0800e-003**	**0.0000**	**93.7049**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2814	2.0801	1.6780	2.7500e-003		0.1199	0.1199		0.1149	0.1149	0.0000	230.7295	230.7295	0.0480	0.0000	231.9294
Total	**0.2814**	**2.0801**	**1.6780**	**2.7500e-003**		**0.1199**	**0.1199**		**0.1149**	**0.1149**	**0.0000**	**230.7295**	**230.7295**	**0.0480**	**0.0000**	**231.9294**

3.5 Building Construction - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	9.8800e-003	0.2647	0.0679	5.7000e-004	0.0137	1.8200e-003	0.0155	3.9600e-003	1.7400e-003	5.7000e-003	0.0000	55.0767	55.0767	3.0500e-003	0.0000	55.1529
Worker	0.0195	0.0145	0.1476	4.3000e-004	0.0426	2.9000e-004	0.0429	0.0113	2.7000e-004	0.0116	0.0000	38.5261	38.5261	1.0300e-003	0.0000	38.5519
Total	**0.0294**	**0.2792**	**0.2155**	**1.0000e-003**	**0.0563**	**2.1100e-003**	**0.0584**	**0.0153**	**2.0100e-003**	**0.0173**	**0.0000**	**93.6028**	**93.6028**	**4.0800e-003**	**0.0000**	**93.7049**

3.6 Paving - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	6.2300e-003	0.0628	0.0593	9.0000e-005		3.6500e-003	3.6500e-003		3.3600e-003	3.3600e-003	0.0000	7.9208	7.9208	2.4600e-003	0.0000	7.9823
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**6.2300e-003**	**0.0628**	**0.0593**	**9.0000e-005**		**3.6500e-003**	**3.6500e-003**		**3.3600e-003**	**3.3600e-003**	**0.0000**	**7.9208**	**7.9208**	**2.4600e-003**	**0.0000**	**7.9823**

3.6 Paving - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.7000e-004	2.0000e-004	2.0500e-003	1.0000e-005	5.9000e-004	0.0000	6.0000e-004	1.6000e-004	0.0000	1.6000e-004	0.0000	0.5361	0.5361	1.0000e-005	0.0000	0.5364
Total	**2.7000e-004**	**2.0000e-004**	**2.0500e-003**	**1.0000e-005**	**5.9000e-004**	**0.0000**	**6.0000e-004**	**1.6000e-004**	**0.0000**	**1.6000e-004**	**0.0000**	**0.5361**	**0.5361**	**1.0000e-005**	**0.0000**	**0.5364**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	6.2300e-003	0.0628	0.0593	9.0000e-005		3.6500e-003	3.6500e-003		3.3600e-003	3.3600e-003	0.0000	7.9208	7.9208	2.4600e-003	0.0000	7.9823
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**6.2300e-003**	**0.0628**	**0.0593**	**9.0000e-005**		**3.6500e-003**	**3.6500e-003**		**3.3600e-003**	**3.3600e-003**	**0.0000**	**7.9208**	**7.9208**	**2.4600e-003**	**0.0000**	**7.9823**

3.6 Paving - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.7000e-004	2.0000e-004	2.0500e-003	1.0000e-005	5.9000e-004	0.0000	6.0000e-004	1.6000e-004	0.0000	1.6000e-004	0.0000	0.5361	0.5361	1.0000e-005	0.0000	0.5364
Total	**2.7000e-004**	**2.0000e-004**	**2.0500e-003**	**1.0000e-005**	**5.9000e-004**	**0.0000**	**6.0000e-004**	**1.6000e-004**	**0.0000**	**1.6000e-004**	**0.0000**	**0.5361**	**0.5361**	**1.0000e-005**	**0.0000**	**0.5364**

3.7 Architectural Coating - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	7.8700e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.7000e-004	1.8400e-003	1.8400e-003	0.0000		1.3000e-004	1.3000e-004		1.3000e-004	1.3000e-004	0.0000	0.2553	0.2553	2.0000e-005	0.0000	0.2559
Total	**8.1400e-003**	**1.8400e-003**	**1.8400e-003**	**0.0000**		**1.3000e-004**	**1.3000e-004**		**1.3000e-004**	**1.3000e-004**	**0.0000**	**0.2553**	**0.2553**	**2.0000e-005**	**0.0000**	**0.2559**

3.7 Architectural Coating - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-005	3.0000e-005	2.7000e-004	0.0000	8.0000e-005	0.0000	8.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0715	0.0715	0.0000	0.0000	0.0715
Total	**4.0000e-005**	**3.0000e-005**	**2.7000e-004**	**0.0000**	**8.0000e-005**	**0.0000**	**8.0000e-005**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**0.0715**	**0.0715**	**0.0000**	**0.0000**	**0.0715**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	7.8700e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.7000e-004	1.8400e-003	1.8400e-003	0.0000		1.3000e-004	1.3000e-004		1.3000e-004	1.3000e-004	0.0000	0.2553	0.2553	2.0000e-005	0.0000	0.2559
Total	**8.1400e-003**	**1.8400e-003**	**1.8400e-003**	**0.0000**		**1.3000e-004**	**1.3000e-004**		**1.3000e-004**	**1.3000e-004**	**0.0000**	**0.2553**	**0.2553**	**2.0000e-005**	**0.0000**	**0.2559**

3.7 Architectural Coating - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-005	3.0000e-005	2.7000e-004	0.0000	8.0000e-005	0.0000	8.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0715	0.0715	0.0000	0.0000	0.0715
Total	**4.0000e-005**	**3.0000e-005**	**2.7000e-004**	**0.0000**	**8.0000e-005**	**0.0000**	**8.0000e-005**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**0.0000**	**0.0715**	**0.0715**	**0.0000**	**0.0000**	**0.0715**

3.7 Architectural Coating - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0315					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.7000e-004	6.7400e-003	7.3300e-003	1.0000e-005		4.4000e-004	4.4000e-004		4.4000e-004	4.4000e-004	0.0000	1.0213	1.0213	8.0000e-005	0.0000	1.0233
Total	**0.0325**	**6.7400e-003**	**7.3300e-003**	**1.0000e-005**		**4.4000e-004**	**4.4000e-004**		**4.4000e-004**	**4.4000e-004**	**0.0000**	**1.0213**	**1.0213**	**8.0000e-005**	**0.0000**	**1.0233**

3.7 Architectural Coating - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.3000e-004	9.0000e-005	9.8000e-004	0.0000	3.2000e-004	0.0000	3.2000e-004	8.0000e-005	0.0000	9.0000e-005	0.0000	0.2769	0.2769	1.0000e-005	0.0000	0.2771
Total	**1.3000e-004**	**9.0000e-005**	**9.8000e-004**	**0.0000**	**3.2000e-004**	**0.0000**	**3.2000e-004**	**8.0000e-005**	**0.0000**	**9.0000e-005**	**0.0000**	**0.2769**	**0.2769**	**1.0000e-005**	**0.0000**	**0.2771**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0315					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.7000e-004	6.7400e-003	7.3300e-003	1.0000e-005		4.4000e-004	4.4000e-004		4.4000e-004	4.4000e-004	0.0000	1.0213	1.0213	8.0000e-005	0.0000	1.0233
Total	**0.0325**	**6.7400e-003**	**7.3300e-003**	**1.0000e-005**		**4.4000e-004**	**4.4000e-004**		**4.4000e-004**	**4.4000e-004**	**0.0000**	**1.0213**	**1.0213**	**8.0000e-005**	**0.0000**	**1.0233**

3.7 Architectural Coating - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.3000e-004	9.0000e-005	9.8000e-004	0.0000	3.2000e-004	0.0000	3.2000e-004	8.0000e-005	0.0000	9.0000e-005	0.0000	0.2769	0.2769	1.0000e-005	0.0000	0.2771
Total	**1.3000e-004**	**9.0000e-005**	**9.8000e-004**	**0.0000**	**3.2000e-004**	**0.0000**	**3.2000e-004**	**8.0000e-005**	**0.0000**	**9.0000e-005**	**0.0000**	**0.2769**	**0.2769**	**1.0000e-005**	**0.0000**	**0.2771**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0312	0.1375	0.3041	8.8000e-004	0.0699	1.0000e-003	0.0709	0.0188	9.4000e-004	0.0197	0.0000	81.0981	81.0981	3.5600e-003	0.0000	81.1871
Unmitigated	0.0312	0.1375	0.3041	8.8000e-004	0.0699	1.0000e-003	0.0709	0.0188	9.4000e-004	0.0197	0.0000	81.0981	81.0981	3.5600e-003	0.0000	81.1871

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Enclosed Parking with Elevator	0.00	0.00	0.00		
Strip Mall	133.09	126.25	61.35	187,678	187,678
Total	133.09	126.25	61.35	187,678	187,678

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Enclosed Parking with Elevator	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Strip Mall	9.50	7.30	7.30	16.60	64.40	19.00	45	40	15

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Enclosed Parking with Elevator	0.573139	0.040894	0.193976	0.114604	0.017740	0.005371	0.017133	0.024527	0.002545	0.002442	0.005942	0.000877	0.000812
Strip Mall	0.573139	0.040894	0.193976	0.114604	0.017740	0.005371	0.017133	0.024527	0.002545	0.002442	0.005942	0.000877	0.000812

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Mitigated	7.0000e-005	6.8000e-004	5.7000e-004	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005	0.0000	0.7372	0.7372	1.0000e-005	1.0000e-005	0.7415
NaturalGas Unmitigated	7.0000e-005	6.8000e-004	5.7000e-004	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005	0.0000	0.7372	0.7372	1.0000e-005	1.0000e-005	0.7415

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Strip Mall	13813.8	7.0000e-005	6.8000e-004	5.7000e-004	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005	0.0000	0.7372	0.7372	1.0000e-005	1.0000e-005	0.7415
Total		**7.0000e-005**	**6.8000e-004**	**5.7000e-004**	**0.0000**		**5.0000e-005**	**5.0000e-005**		**5.0000e-005**	**5.0000e-005**	**0.0000**	**0.7372**	**0.7372**	**1.0000e-005**	**1.0000e-005**	**0.7415**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Strip Mall	13813.8	7.0000e-005	6.8000e-004	5.7000e-004	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005	0.0000	0.7372	0.7372	1.0000e-005	1.0000e-005	0.7415
Total		**7.0000e-005**	**6.8000e-004**	**5.7000e-004**	**0.0000**		**5.0000e-005**	**5.0000e-005**		**5.0000e-005**	**5.0000e-005**	**0.0000**	**0.7372**	**0.7372**	**1.0000e-005**	**1.0000e-005**	**0.7415**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Enclosed Parking with Elevator	665696	0.0000	0.0000	0.0000	0.0000
Strip Mall	31471.4	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Enclosed Parking with Elevator	665696	0.0000	0.0000	0.0000	0.0000
Strip Mall	31471.4	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0233	2.0000e-005	2.6500e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	5.1300e-003	5.1300e-003	1.0000e-005	0.0000	5.4700e-003
Unmitigated	0.0233	2.0000e-005	2.6500e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	5.1300e-003	5.1300e-003	1.0000e-005	0.0000	5.4700e-003

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	3.9400e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0191					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.5000e-004	2.0000e-005	2.6500e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	5.1300e-003	5.1300e-003	1.0000e-005	0.0000	5.4700e-003
Total	**0.0233**	**2.0000e-005**	**2.6500e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**	**0.0000**	**5.1300e-003**	**5.1300e-003**	**1.0000e-005**	**0.0000**	**5.4700e-003**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	3.9400e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0191					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.5000e-004	2.0000e-005	2.6500e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	5.1300e-003	5.1300e-003	1.0000e-005	0.0000	5.4700e-003
Total	**0.0233**	**2.0000e-005**	**2.6500e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**	**0.0000**	**5.1300e-003**	**5.1300e-003**	**1.0000e-005**	**0.0000**	**5.4700e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.0705	7.2400e-003	1.7000e-004	0.3025
Unmitigated	0.0705	7.2400e-003	1.7000e-004	0.3025

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Strip Mall	0.222218 / 0.136198	0.0705	7.2400e-003	1.7000e-004	0.3025
Total		**0.0705**	**7.2400e-003**	**1.7000e-004**	**0.3025**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Strip Mall	0.222218 / 0.136198	0.0705	7.2400e-003	1.7000e-004	0.3025
Total		**0.0705**	**7.2400e-003**	**1.7000e-004**	**0.3025**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.6394	0.0378	0.0000	1.5841
Unmitigated	0.6394	0.0378	0.0000	1.5841

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Strip Mall	3.15	0.6394	0.0378	0.0000	1.5841
Total		**0.6394**	**0.0378**	**0.0000**	**1.5841**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Strip Mall	3.15	0.6394	0.0378	0.0000	1.5841
Total		**0.6394**	**0.0378**	**0.0000**	**1.5841**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Palo Alto Parking Structure 375 Hamilton Ave - Proposed Project

Bay Area AQMD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking with Elevator	338.00	Space	3.04	135,200.00	0
Strip Mall	2.19	1000sqft	0.05	2,188.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	64
Climate Zone	5			**Operational Year**	2020
Utility Company					
CO2 Intensity (lb/MWhr)	0	**CH4 Intensity (lb/MWhr)**	0	**N2O Intensity (lb/MWhr)**	0

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase -

Table Name	Column Name	Default Value	New Value

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2018	0.3743	3.3851	2.4399	4.5500e-003	0.1356	0.1901	0.3257	0.0558	0.1783	0.2340	0.0000	409.2529	409.2529	0.0810	0.0000	411.2785
2019	0.0852	0.4098	0.3590	6.5000e-004	9.1200e-003	0.0228	0.0319	2.4700e-003	0.0214	0.0238	0.0000	58.0348	58.0348	0.0120	0.0000	58.3341
Maximum	**0.3743**	**3.3851**	**2.4399**	**4.5500e-003**	**0.1356**	**0.1901**	**0.3257**	**0.0558**	**0.1783**	**0.2340**	**0.0000**	**409.2529**	**409.2529**	**0.0810**	**0.0000**	**411.2785**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2018	0.3743	3.3851	2.4399	4.5500e-003	0.1356	0.1901	0.3257	0.0558	0.1783	0.2340	0.0000	409.2525	409.2525	0.0810	0.0000	411.2782
2019	0.0852	0.4098	0.3590	6.5000e-004	9.1200e-003	0.0228	0.0319	2.4700e-003	0.0214	0.0238	0.0000	58.0347	58.0347	0.0120	0.0000	58.3341
Maximum	**0.3743**	**3.3851**	**2.4399**	**4.5500e-003**	**0.1356**	**0.1901**	**0.3257**	**0.0558**	**0.1783**	**0.2340**	**0.0000**	**409.2525**	**409.2525**	**0.0810**	**0.0000**	**411.2782**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Palo Alto Parking Structure 375 Hamilton Ave - Proposed Project - Bay Area AQMD Air District, Annual

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	1-30-2018	4-29-2018	1.1503	1.1503
2	4-30-2018	7-29-2018	0.9627	0.9627
3	7-30-2018	10-29-2018	0.9743	0.9743
4	10-30-2018	1-29-2019	0.9469	0.9469
5	1-30-2019	4-29-2019	0.2071	0.2071
		Highest	1.1503	1.1503

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0215	3.0000e-005	3.1500e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	6.0800e-003	6.0800e-003	2.0000e-005	0.0000	6.4900e-003
Energy	5.0000e-005	4.9000e-004	4.1000e-004	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	0.5371	0.5371	1.0000e-005	1.0000e-005	0.5403
Mobile	0.0228	0.1002	0.2215	6.4000e-004	0.0509	7.3000e-004	0.0516	0.0137	6.9000e-004	0.0144	0.0000	59.0885	59.0885	2.5900e-003	0.0000	59.1533
Waste						0.0000	0.0000		0.0000	0.0000	0.4669	0.0000	0.4669	0.0276	0.0000	1.1567
Water						0.0000	0.0000		0.0000	0.0000	0.0515	0.0000	0.0515	5.2900e-003	1.2000e-004	0.2208
Total	**0.0444**	**0.1007**	**0.2251**	**6.4000e-004**	**0.0509**	**7.8000e-004**	**0.0517**	**0.0137**	**7.4000e-004**	**0.0144**	**0.5183**	**59.6316**	**60.1500**	**0.0355**	**1.3000e-004**	**61.0776**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0215	3.0000e-005	3.1500e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	6.0800e-003	6.0800e-003	2.0000e-005	0.0000	6.4900e-003
Energy	5.0000e-005	4.9000e-004	4.1000e-004	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	0.5371	0.5371	1.0000e-005	1.0000e-005	0.5403
Mobile	0.0228	0.1002	0.2215	6.4000e-004	0.0509	7.3000e-004	0.0516	0.0137	6.9000e-004	0.0144	0.0000	59.0885	59.0885	2.5900e-003	0.0000	59.1533
Waste						0.0000	0.0000		0.0000	0.0000	0.4669	0.0000	0.4669	0.0276	0.0000	1.1567
Water						0.0000	0.0000		0.0000	0.0000	0.0515	0.0000	0.0515	5.2900e-003	1.2000e-004	0.2208
Total	**0.0444**	**0.1007**	**0.2251**	**6.4000e-004**	**0.0509**	**7.8000e-004**	**0.0517**	**0.0137**	**7.4000e-004**	**0.0144**	**0.5183**	**59.6316**	**60.1500**	**0.0355**	**1.3000e-004**	**61.0776**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Palo Alto Parking Structure 375 Hamilton Ave - Proposed Project - Bay Area AQMD Air District, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/30/2018	2/26/2018	5	20	
2	Site Preparation	Site Preparation	2/27/2018	3/5/2018	5	5	
3	Grading	Grading	3/6/2018	3/15/2018	5	8	
4	Building Construction	Building Construction	3/16/2018	1/31/2019	5	230	
5	Paving	Paving	2/1/2019	2/26/2019	5	18	
6	Architectural Coating	Architectural Coating	2/27/2019	3/22/2019	5	18	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 4

Acres of Paving: 3.04

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 3,282; Non-Residential Outdoor: 1,094; Striped Parking Area: 8,112 (Architectural Coating – sqft)

OffRoad Equipment

Palo Alto Parking Structure 375 Hamilton Ave - Proposed Project - Bay Area AQMD Air District, Annual

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Demolition	Excavators	3	8.00	158	0.38
Grading	Excavators	1	8.00	158	0.38
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Cement and Mortar Mixers	2	6.00	9	0.56
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	2	6.00	132	0.36
Paving	Rollers	2	6.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Palo Alto Parking Structure 375 Hamilton Ave - Proposed Project - Bay Area AQMD Air District, Annual

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	57.00	23.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	8	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	11.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0372	0.3832	0.2230	3.9000e-004		0.0194	0.0194		0.0181	0.0181	0.0000	35.1241	35.1241	9.6800e-003	0.0000	35.3660
Total	**0.0372**	**0.3832**	**0.2230**	**3.9000e-004**		**0.0194**	**0.0194**		**0.0181**	**0.0181**	**0.0000**	**35.1241**	**35.1241**	**9.6800e-003**	**0.0000**	**35.3660**

3.2 Demolition - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.0000e-004	4.6000e-004	4.6300e-003	1.0000e-005	1.1900e-003	1.0000e-005	1.1900e-003	3.2000e-004	1.0000e-005	3.2000e-004	0.0000	1.1053	1.1053	3.0000e-005	0.0000	1.1061
Total	**6.0000e-004**	**4.6000e-004**	**4.6300e-003**	**1.0000e-005**	**1.1900e-003**	**1.0000e-005**	**1.1900e-003**	**3.2000e-004**	**1.0000e-005**	**3.2000e-004**	**0.0000**	**1.1053**	**1.1053**	**3.0000e-005**	**0.0000**	**1.1061**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0372	0.3832	0.2230	3.9000e-004		0.0194	0.0194		0.0181	0.0181	0.0000	35.1240	35.1240	9.6800e-003	0.0000	35.3660
Total	**0.0372**	**0.3832**	**0.2230**	**3.9000e-004**		**0.0194**	**0.0194**		**0.0181**	**0.0181**	**0.0000**	**35.1240**	**35.1240**	**9.6800e-003**	**0.0000**	**35.3660**

3.2 Demolition - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.0000e-004	4.6000e-004	4.6300e-003	1.0000e-005	1.1900e-003	1.0000e-005	1.1900e-003	3.2000e-004	1.0000e-005	3.2000e-004	0.0000	1.1053	1.1053	3.0000e-005	0.0000	1.1061
Total	**6.0000e-004**	**4.6000e-004**	**4.6300e-003**	**1.0000e-005**	**1.1900e-003**	**1.0000e-005**	**1.1900e-003**	**3.2000e-004**	**1.0000e-005**	**3.2000e-004**	**0.0000**	**1.1053**	**1.1053**	**3.0000e-005**	**0.0000**	**1.1061**

3.3 Site Preparation - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0452	0.0000	0.0452	0.0248	0.0000	0.0248	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0114	0.1205	0.0562	1.0000e-004		6.4400e-003	6.4400e-003		5.9300e-003	5.9300e-003	0.0000	8.6900	8.6900	2.7100e-003	0.0000	8.7576
Total	**0.0114**	**0.1205**	**0.0562**	**1.0000e-004**	**0.0452**	**6.4400e-003**	**0.0516**	**0.0248**	**5.9300e-003**	**0.0308**	**0.0000**	**8.6900**	**8.6900**	**2.7100e-003**	**0.0000**	**8.7576**

3.3 Site Preparation - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.8000e-004	1.4000e-004	1.3900e-003	0.0000	3.6000e-004	0.0000	3.6000e-004	9.0000e-005	0.0000	1.0000e-004	0.0000	0.3316	0.3316	1.0000e-005	0.0000	0.3318
Total	**1.8000e-004**	**1.4000e-004**	**1.3900e-003**	**0.0000**	**3.6000e-004**	**0.0000**	**3.6000e-004**	**9.0000e-005**	**0.0000**	**1.0000e-004**	**0.0000**	**0.3316**	**0.3316**	**1.0000e-005**	**0.0000**	**0.3318**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0452	0.0000	0.0452	0.0248	0.0000	0.0248	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0114	0.1205	0.0562	1.0000e-004		6.4400e-003	6.4400e-003		5.9300e-003	5.9300e-003	0.0000	8.6900	8.6900	2.7100e-003	0.0000	8.7576
Total	**0.0114**	**0.1205**	**0.0562**	**1.0000e-004**	**0.0452**	**6.4400e-003**	**0.0516**	**0.0248**	**5.9300e-003**	**0.0308**	**0.0000**	**8.6900**	**8.6900**	**2.7100e-003**	**0.0000**	**8.7576**

3.3 Site Preparation - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.8000e-004	1.4000e-004	1.3900e-003	0.0000	3.6000e-004	0.0000	3.6000e-004	9.0000e-005	0.0000	1.0000e-004	0.0000	0.3316	0.3316	1.0000e-005	0.0000	0.3318
Total	**1.8000e-004**	**1.4000e-004**	**1.3900e-003**	**0.0000**	**3.6000e-004**	**0.0000**	**3.6000e-004**	**9.0000e-005**	**0.0000**	**1.0000e-004**	**0.0000**	**0.3316**	**0.3316**	**1.0000e-005**	**0.0000**	**0.3318**

3.4 Grading - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0262	0.0000	0.0262	0.0135	0.0000	0.0135	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0111	0.1227	0.0663	1.2000e-004		6.2100e-003	6.2100e-003		5.7100e-003	5.7100e-003	0.0000	10.8428	10.8428	3.3800e-003	0.0000	10.9271
Total	**0.0111**	**0.1227**	**0.0663**	**1.2000e-004**	**0.0262**	**6.2100e-003**	**0.0324**	**0.0135**	**5.7100e-003**	**0.0192**	**0.0000**	**10.8428**	**10.8428**	**3.3800e-003**	**0.0000**	**10.9271**

3.4 Grading - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.4000e-004	1.8000e-004	1.8500e-003	0.0000	4.7000e-004	0.0000	4.8000e-004	1.3000e-004	0.0000	1.3000e-004	0.0000	0.4421	0.4421	1.0000e-005	0.0000	0.4425
Total	**2.4000e-004**	**1.8000e-004**	**1.8500e-003**	**0.0000**	**4.7000e-004**	**0.0000**	**4.8000e-004**	**1.3000e-004**	**0.0000**	**1.3000e-004**	**0.0000**	**0.4421**	**0.4421**	**1.0000e-005**	**0.0000**	**0.4425**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0262	0.0000	0.0262	0.0135	0.0000	0.0135	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0111	0.1227	0.0663	1.2000e-004		6.2100e-003	6.2100e-003		5.7100e-003	5.7100e-003	0.0000	10.8427	10.8427	3.3800e-003	0.0000	10.9271
Total	**0.0111**	**0.1227**	**0.0663**	**1.2000e-004**	**0.0262**	**6.2100e-003**	**0.0324**	**0.0135**	**5.7100e-003**	**0.0192**	**0.0000**	**10.8427**	**10.8427**	**3.3800e-003**	**0.0000**	**10.9271**

3.4 Grading - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.4000e-004	1.8000e-004	1.8500e-003	0.0000	4.7000e-004	0.0000	4.8000e-004	1.3000e-004	0.0000	1.3000e-004	0.0000	0.4421	0.4421	1.0000e-005	0.0000	0.4425
Total	**2.4000e-004**	**1.8000e-004**	**1.8500e-003**	**0.0000**	**4.7000e-004**	**0.0000**	**4.8000e-004**	**1.3000e-004**	**0.0000**	**1.3000e-004**	**0.0000**	**0.4421**	**0.4421**	**1.0000e-005**	**0.0000**	**0.4425**

3.5 Building Construction - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2773	2.4209	1.8196	2.7900e-003		0.1552	0.1552		0.1459	0.1459	0.0000	246.0891	246.0891	0.0603	0.0000	247.5964
Total	**0.2773**	**2.4209**	**1.8196**	**2.7900e-003**		**0.1552**	**0.1552**		**0.1459**	**0.1459**	**0.0000**	**246.0891**	**246.0891**	**0.0603**	**0.0000**	**247.5964**

3.5 Building Construction - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0125	0.3190	0.0847	6.6000e-004	0.0156	2.4500e-003	0.0181	4.5100e-003	2.3400e-003	6.8600e-003	0.0000	63.1558	63.1558	3.6400e-003	0.0000	63.2468
Worker	0.0237	0.0181	0.1823	4.8000e-004	0.0466	3.3000e-004	0.0469	0.0124	3.0000e-004	0.0127	0.0000	43.4721	43.4721	1.2800e-003	0.0000	43.5042
Total	**0.0362**	**0.3371**	**0.2669**	**1.1400e-003**	**0.0622**	**2.7800e-003**	**0.0650**	**0.0169**	**2.6400e-003**	**0.0196**	**0.0000**	**106.6280**	**106.6280**	**4.9200e-003**	**0.0000**	**106.7510**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2773	2.4209	1.8196	2.7900e-003		0.1552	0.1552		0.1459	0.1459	0.0000	246.0888	246.0888	0.0603	0.0000	247.5961
Total	**0.2773**	**2.4209**	**1.8196**	**2.7900e-003**		**0.1552**	**0.1552**		**0.1459**	**0.1459**	**0.0000**	**246.0888**	**246.0888**	**0.0603**	**0.0000**	**247.5961**

3.5 Building Construction - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0125	0.3190	0.0847	6.6000e-004	0.0156	2.4500e-003	0.0181	4.5100e-003	2.3400e-003	6.8600e-003	0.0000	63.1558	63.1558	3.6400e-003	0.0000	63.2468
Worker	0.0237	0.0181	0.1823	4.8000e-004	0.0466	3.3000e-004	0.0469	0.0124	3.0000e-004	0.0127	0.0000	43.4721	43.4721	1.2800e-003	0.0000	43.5042
Total	**0.0362**	**0.3371**	**0.2669**	**1.1400e-003**	**0.0622**	**2.7800e-003**	**0.0650**	**0.0169**	**2.6400e-003**	**0.0196**	**0.0000**	**106.6280**	**106.6280**	**4.9200e-003**	**0.0000**	**106.7510**

3.5 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0272	0.2424	0.1974	3.1000e-004		0.0148	0.0148		0.0140	0.0140	0.0000	27.0370	27.0370	6.5900e-003	0.0000	27.2016
Total	**0.0272**	**0.2424**	**0.1974**	**3.1000e-004**		**0.0148**	**0.0148**		**0.0140**	**0.0140**	**0.0000**	**27.0370**	**27.0370**	**6.5900e-003**	**0.0000**	**27.2016**

3.5 Building Construction - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.2500e-003	0.0335	8.5900e-003	7.0000e-005	1.7300e-003	2.3000e-004	1.9600e-003	5.0000e-004	2.2000e-004	7.2000e-004	0.0000	6.9702	6.9702	3.9000e-004	0.0000	6.9799
Worker	2.3800e-003	1.7600e-003	0.0180	5.0000e-005	5.1800e-003	4.0000e-005	5.2200e-003	1.3800e-003	3.0000e-005	1.4100e-003	0.0000	4.6853	4.6853	1.3000e-004	0.0000	4.6885
Total	**3.6300e-003**	**0.0353**	**0.0265**	**1.2000e-004**	**6.9100e-003**	**2.7000e-004**	**7.1800e-003**	**1.8800e-003**	**2.5000e-004**	**2.1300e-003**	**0.0000**	**11.6556**	**11.6556**	**5.2000e-004**	**0.0000**	**11.6683**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0272	0.2424	0.1974	3.1000e-004		0.0148	0.0148		0.0140	0.0140	0.0000	27.0370	27.0370	6.5900e-003	0.0000	27.2016
Total	**0.0272**	**0.2424**	**0.1974**	**3.1000e-004**		**0.0148**	**0.0148**		**0.0140**	**0.0140**	**0.0000**	**27.0370**	**27.0370**	**6.5900e-003**	**0.0000**	**27.2016**

3.5 Building Construction - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.2500e-003	0.0335	8.5900e-003	7.0000e-005	1.7300e-003	2.3000e-004	1.9600e-003	5.0000e-004	2.2000e-004	7.2000e-004	0.0000	6.9702	6.9702	3.9000e-004	0.0000	6.9799
Worker	2.3800e-003	1.7600e-003	0.0180	5.0000e-005	5.1800e-003	4.0000e-005	5.2200e-003	1.3800e-003	3.0000e-005	1.4100e-003	0.0000	4.6853	4.6853	1.3000e-004	0.0000	4.6885
Total	**3.6300e-003**	**0.0353**	**0.0265**	**1.2000e-004**	**6.9100e-003**	**2.7000e-004**	**7.1800e-003**	**1.8800e-003**	**2.5000e-004**	**2.1300e-003**	**0.0000**	**11.6556**	**11.6556**	**5.2000e-004**	**0.0000**	**11.6683**

3.6 Paving - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0114	0.1148	0.1108	1.7000e-004		6.4800e-003	6.4800e-003		5.9700e-003	5.9700e-003	0.0000	15.0501	15.0501	4.6300e-003	0.0000	15.1658
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0114**	**0.1148**	**0.1108**	**1.7000e-004**		**6.4800e-003**	**6.4800e-003**		**5.9700e-003**	**5.9700e-003**	**0.0000**	**15.0501**	**15.0501**	**4.6300e-003**	**0.0000**	**15.1658**

3.6 Paving - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.5000e-004	4.8000e-004	4.9300e-003	1.0000e-005	1.4200e-003	1.0000e-005	1.4300e-003	3.8000e-004	1.0000e-005	3.9000e-004	0.0000	1.2866	1.2866	3.0000e-005	0.0000	1.2875
Total	**6.5000e-004**	**4.8000e-004**	**4.9300e-003**	**1.0000e-005**	**1.4200e-003**	**1.0000e-005**	**1.4300e-003**	**3.8000e-004**	**1.0000e-005**	**3.9000e-004**	**0.0000**	**1.2866**	**1.2866**	**3.0000e-005**	**0.0000**	**1.2875**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0114	0.1148	0.1108	1.7000e-004		6.4800e-003	6.4800e-003		5.9700e-003	5.9700e-003	0.0000	15.0501	15.0501	4.6300e-003	0.0000	15.1658
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0114**	**0.1148**	**0.1108**	**1.7000e-004**		**6.4800e-003**	**6.4800e-003**		**5.9700e-003**	**5.9700e-003**	**0.0000**	**15.0501**	**15.0501**	**4.6300e-003**	**0.0000**	**15.1658**

3.6 Paving - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.5000e-004	4.8000e-004	4.9300e-003	1.0000e-005	1.4200e-003	1.0000e-005	1.4300e-003	3.8000e-004	1.0000e-005	3.9000e-004	0.0000	1.2866	1.2866	3.0000e-005	0.0000	1.2875
Total	**6.5000e-004**	**4.8000e-004**	**4.9300e-003**	**1.0000e-005**	**1.4200e-003**	**1.0000e-005**	**1.4300e-003**	**3.8000e-004**	**1.0000e-005**	**3.9000e-004**	**0.0000**	**1.2866**	**1.2866**	**3.0000e-005**	**0.0000**	**1.2875**

3.7 Architectural Coating - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0396					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.4000e-003	0.0165	0.0166	3.0000e-005		1.1600e-003	1.1600e-003		1.1600e-003	1.1600e-003	0.0000	2.2979	2.2979	1.9000e-004	0.0000	2.3028
Total	**0.0420**	**0.0165**	**0.0166**	**3.0000e-005**		**1.1600e-003**	**1.1600e-003**		**1.1600e-003**	**1.1600e-003**	**0.0000**	**2.2979**	**2.2979**	**1.9000e-004**	**0.0000**	**2.3028**

3.7 Architectural Coating - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.6000e-004	2.7000e-004	2.7100e-003	1.0000e-005	7.8000e-004	1.0000e-005	7.9000e-004	2.1000e-004	0.0000	2.1000e-004	0.0000	0.7076	0.7076	2.0000e-005	0.0000	0.7081
Total	**3.6000e-004**	**2.7000e-004**	**2.7100e-003**	**1.0000e-005**	**7.8000e-004**	**1.0000e-005**	**7.9000e-004**	**2.1000e-004**	**0.0000**	**2.1000e-004**	**0.0000**	**0.7076**	**0.7076**	**2.0000e-005**	**0.0000**	**0.7081**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0396					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.4000e-003	0.0165	0.0166	3.0000e-005		1.1600e-003	1.1600e-003		1.1600e-003	1.1600e-003	0.0000	2.2979	2.2979	1.9000e-004	0.0000	2.3028
Total	**0.0420**	**0.0165**	**0.0166**	**3.0000e-005**		**1.1600e-003**	**1.1600e-003**		**1.1600e-003**	**1.1600e-003**	**0.0000**	**2.2979**	**2.2979**	**1.9000e-004**	**0.0000**	**2.3028**

3.7 Architectural Coating - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.6000e-004	2.7000e-004	2.7100e-003	1.0000e-005	7.8000e-004	1.0000e-005	7.9000e-004	2.1000e-004	0.0000	2.1000e-004	0.0000	0.7076	0.7076	2.0000e-005	0.0000	0.7081
Total	**3.6000e-004**	**2.7000e-004**	**2.7100e-003**	**1.0000e-005**	**7.8000e-004**	**1.0000e-005**	**7.9000e-004**	**2.1000e-004**	**0.0000**	**2.1000e-004**	**0.0000**	**0.7076**	**0.7076**	**2.0000e-005**	**0.0000**	**0.7081**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0228	0.1002	0.2215	6.4000e-004	0.0509	7.3000e-004	0.0516	0.0137	6.9000e-004	0.0144	0.0000	59.0885	59.0885	2.5900e-003	0.0000	59.1533
Unmitigated	0.0228	0.1002	0.2215	6.4000e-004	0.0509	7.3000e-004	0.0516	0.0137	6.9000e-004	0.0144	0.0000	59.0885	59.0885	2.5900e-003	0.0000	59.1533

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Enclosed Parking with Elevator	0.00	0.00	0.00		
Strip Mall	96.97	91.98	44.70	136,743	136,743
Total	96.97	91.98	44.70	136,743	136,743

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Enclosed Parking with Elevator	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Strip Mall	9.50	7.30	7.30	16.60	64.40	19.00	45	40	15

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Enclosed Parking with Elevator	0.573139	0.040894	0.193976	0.114604	0.017740	0.005371	0.017133	0.024527	0.002545	0.002442	0.005942	0.000877	0.000812
Strip Mall	0.573139	0.040894	0.193976	0.114604	0.017740	0.005371	0.017133	0.024527	0.002545	0.002442	0.005942	0.000877	0.000812

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Mitigated	5.0000e-005	4.9000e-004	4.1000e-004	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	0.5371	0.5371	1.0000e-005	1.0000e-005	0.5403
NaturalGas Unmitigated	5.0000e-005	4.9000e-004	4.1000e-004	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	0.5371	0.5371	1.0000e-005	1.0000e-005	0.5403

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Strip Mall	10064.8	5.0000e-005	4.9000e-004	4.1000e-004	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	0.5371	0.5371	1.0000e-005	1.0000e-005	0.5403
Total		**5.0000e-005**	**4.9000e-004**	**4.1000e-004**	**0.0000**		**4.0000e-005**	**4.0000e-005**		**4.0000e-005**	**4.0000e-005**	**0.0000**	**0.5371**	**0.5371**	**1.0000e-005**	**1.0000e-005**	**0.5403**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Strip Mall	10064.8	5.0000e-005	4.9000e-004	4.1000e-004	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	0.5371	0.5371	1.0000e-005	1.0000e-005	0.5403
Total		**5.0000e-005**	**4.9000e-004**	**4.1000e-004**	**0.0000**		**4.0000e-005**	**4.0000e-005**		**4.0000e-005**	**4.0000e-005**	**0.0000**	**0.5371**	**0.5371**	**1.0000e-005**	**1.0000e-005**	**0.5403**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Enclosed Parking with Elevator	792272	0.0000	0.0000	0.0000	0.0000
Strip Mall	22930.2	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Enclosed Parking with Elevator	792272	0.0000	0.0000	0.0000	0.0000
Strip Mall	22930.2	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0215	3.0000e-005	3.1500e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	6.0800e-003	6.0800e-003	2.0000e-005	0.0000	6.4900e-003
Unmitigated	0.0215	3.0000e-005	3.1500e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	6.0800e-003	6.0800e-003	2.0000e-005	0.0000	6.4900e-003

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	3.9600e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0173					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	3.0000e-004	3.0000e-005	3.1500e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	6.0800e-003	6.0800e-003	2.0000e-005	0.0000	6.4900e-003
Total	**0.0215**	**3.0000e-005**	**3.1500e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**	**0.0000**	**6.0800e-003**	**6.0800e-003**	**2.0000e-005**	**0.0000**	**6.4900e-003**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	3.9600e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0173					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	3.0000e-004	3.0000e-005	3.1500e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	6.0800e-003	6.0800e-003	2.0000e-005	0.0000	6.4900e-003
Total	**0.0215**	**3.0000e-005**	**3.1500e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**	**0.0000**	**6.0800e-003**	**6.0800e-003**	**2.0000e-005**	**0.0000**	**6.4900e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.0515	5.2900e-003	1.2000e-004	0.2208
Unmitigated	0.0515	5.2900e-003	1.2000e-004	0.2208

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Strip Mall	0.162219 / 0.0994244	0.0515	5.2900e-003	1.2000e-004	0.2208
Total		**0.0515**	**5.2900e-003**	**1.2000e-004**	**0.2208**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Strip Mall	0.162219 / 0.0994244	0.0515	5.2900e-003	1.2000e-004	0.2208
Total		**0.0515**	**5.2900e-003**	**1.2000e-004**	**0.2208**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.4669	0.0276	0.0000	1.1567
Unmitigated	0.4669	0.0276	0.0000	1.1567

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Strip Mall	2.3	0.4669	0.0276	0.0000	1.1567
Total		**0.4669**	**0.0276**	**0.0000**	**1.1567**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Strip Mall	2.3	0.4669	0.0276	0.0000	1.1567
Total		**0.4669**	**0.0276**	**0.0000**	**1.1567**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Appendix D: Arborist Report (Tree Study)

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SBCA TREE CONSULTING

1534 Rose Street, Crockett, CA 94525
Phone: (510) 787-3075
Fax: (510) 787-3065
Website: www.sbcatree.com

Steve Batchelder, Consulting Arborist
WC ISA Certified Arborist #228
CUFC Certified Urban Forester #134
CA Contractor License #(C-27) 53367
E-mail: steve@sbcatree.com

Molly Batchelder, Consulting Arborist
WC ISA Certified Arborist #9613A
ISA Tree Risk Assessment Qualified
E-mail: molly@sbcatree.com

Date: May 31, 2017

To: Nick Johnson
Merrill-Morris Partners

Project: Palo Alto Downtown Parking Lot D

Subject: Tree Survey

Assignment: *Arborists were requested to survey all trees on the proposed project site. Trees located within thirty feet of the proposed development site have been noted by species and location but were not surveyed.*

City of Palo Alto

8.10.020 Definitions.

(j) "Protected tree" means:

(1) Any tree of the species *Quercus agrifolia* (Coast Live Oak) or *Quercus lobata* (Valley Oak) which is eleven and one-half inches in diameter (thirty-six inches in circumference) or more when measured four and one-half feet (fifty-four inches) above natural grade; and

(2) Any Redwood tree (species *Sequoia sempervirens*) that is eighteen inches in diameter (fifty-seven inches in circumference) or more when measured four and one-half feet (fifty-four inches) above natural grade.

(3) A heritage tree designated by the city council in accordance with the provisions of this chapter.

8.10.040 Disclosure of information regarding existing trees.

(a) Any application for discretionary development approval, or for a building or demolition permit where no discretionary development approval is required, shall be accompanied by a statement by the property owner or authorized agent which discloses whether any protected trees exist on the property which is the subject of the application, and describing each such tree, its species, size, dripline area, and location. This requirement shall be met by including the information on plans submitted in connection with the application.

(b) In addition, the location of all other trees on the site and in the adjacent public right of way which are within thirty feet of the area proposed for development, and trees located on adjacent property with canopies overhanging the project site, shall be shown on the plans, identified by species.

8.10.070 Care of protected trees.

(a) All owners of property containing protected trees shall follow the maintenance standards in the Tree Technical Manual.

(b) The standards for protection of trees during construction contained in the Tree Technical Manual shall be followed during any development on property containing protected trees.

(Ord. 4568 § 1 (part), 1999)

Survey Procedure

Data recorded – Arborists recorded data on tree species, diameter (DBH[1]), tree height, health and structural conditions. Notes were recorded to provide commentary on general conditions and located in Table 1 of this report.

Trees numbers – Each tree is tagged and identified with a number listed in *Appendix 1-Tree Location Map* which corresponds to those used in Table 1. Trees located within 30 feet of the property were located in Appendix 1 with species noted but were not assigned numbers or survey data.

Summary

All trees within the project boundaries are expected to be removed to accommodate the proposed structure. Trees located within 30 feet of the project site will require tree protection measures to assure their survival.

- Total trees
  - Arborist survey identifies eight trees within the property.
  - One tree, the Coast Live Oak, qualifies as "Protected Tree" by City of Palo Alto tree ordinance.
  - Three Maidenhair *(Ginkgo biloba)* were identified as street trees located within 30 feet of the property.

- Species diversity – Five different tree species were identified. These include Holly Oak *(Quercus ilex)*, Coast Live Oak *(Quercus agrifolia),* Canary Island Pine *(Pinus canariensis)*, Shiny Xylosma *(Xylosma congestum),* and *Ginkgo biloba.*

- Tree Condition

  - **Oaks** – The three Holly Oaks and one Coast Live Oak tree were determined to be in good health condition. The trees are in need of appropriate pruning to reduce heavy end weight. Poor pruning in the past has contributed to Fair structures.

  - **Pine** –The Canary Island Pine displays codominant limbs with included bark, a significant structural defect. Signs indicated there is likely an internal crack within the attachment. This tree is considered to be structurally problematic.

  - ***Gingko*** – One *Ginkgo* is located on the site and three *Ginkgo* are located within 30 feet of the project site. All are in good health and have good structural qualities.

[1] **DBH** is tree diameter measured at 54 inches above soil grade.

Table 1 – The table below provides survey data recorded.

COLUMN HEADING DESCRIPTIONS

Tree# - Indicates tree number corresponding to Tree Location Map
Species - Scientific name
Common Name – Vernacular name
DBH - Diameter measured in inches at 4.5 feet above soil grade, unless otherwise indicated
Height - In feet
Spread - In feet
Health -Tree Health: E is Excellent, G is Good, F is Fair, P is Poor, D is Dead or Dying
Structure- Tree Structural Safety: E is Excellent, G is Good, F is Fair, P is Poor, H is Hazardous
Protected? - Attaining City of Palo Alto Protected Tree Status: Y is Yes, N is No
Notes - See below

DEFINITIONS

Notes

Included Bark - This is a structural defect where bark is included between the branch attachment.

Codominant – A tree with two or more stems which are of equal diameter and relative amounts of leaf area.

Codominant w/ Embedded Bark - When bark is embedded between codominant stems, failure potential is very high and pruning to mitigate the defect is recommended.

Lion Tailing- The improper practice of removing all or most secondary and tertiary branches from the interior portion of the crown, leaving most live foliage at the edge of the canopy.

Tree #	Species	Common Name	DBH	Height	Health	Structure	Protected ?	Notes
1	*Pinus canariensis*	Canary Island Pine	26	85	G	P	N	Codominant w included bark with likely internal crack, curb displacement
2	*Ginkgo biloba*	Maidenhair	8	30	G	G	N	Large trunk wound
3	*Quercus ilex*	Holly Oak	29.5	55	G	F-G	N	Lions-tailed, heavy end weight, dead branches over parking lot, truck damage to upper scaffold
4	*Quercus ilex*	Holly Oak	14	30	G	F	N	Heavy end weight over parking lot and sidewalk, under canopy of #4
5	*Quercus ilex*	Holly Oak	15	30	F	F	N	Dieback on one side, curb displacement
6	*Xylosma congestum*	Shiny Xylosma	13	25	G	F	N	Raised planter
7	*Quercus ilex*	Holly Oak	26	55	G	F-G	N	Codominant, heavy end weight
8	*Quercus agrifolia*	Coast Live Oak	13	30	F	P	Y	Recent lions-tailing, included bark in canopy, old large trunk wound closed over

Report Submitted By:



Molly Batchelder, Consulting Arborist
WC ISA Certified Arborist #9613A
Tree Risk Assessment Qualified (TRAQ)

Appendix material

1. Tree Location Map

Photo Supplement



Photo 1. *Photo to the left shows the defective attachment between codominant stems of the Canary Island Pine tree #1. Arrow points to a bulging area, indicating the tree maybe putting on wood to counter an expanding internal crack. Such branch defects are known to experience failure.*



Photo 2. *Photo to the right shows Holly Oak #3. The tree was lions tailed, likely for clearance for the parking lot.*

SBCA Tree Consulting
1534 Rose St. Crockett, CA 94525
steve@sbcatree.com

Phone (510) 787-3075
Fax (510) 787-3065
www.sbcatree.com

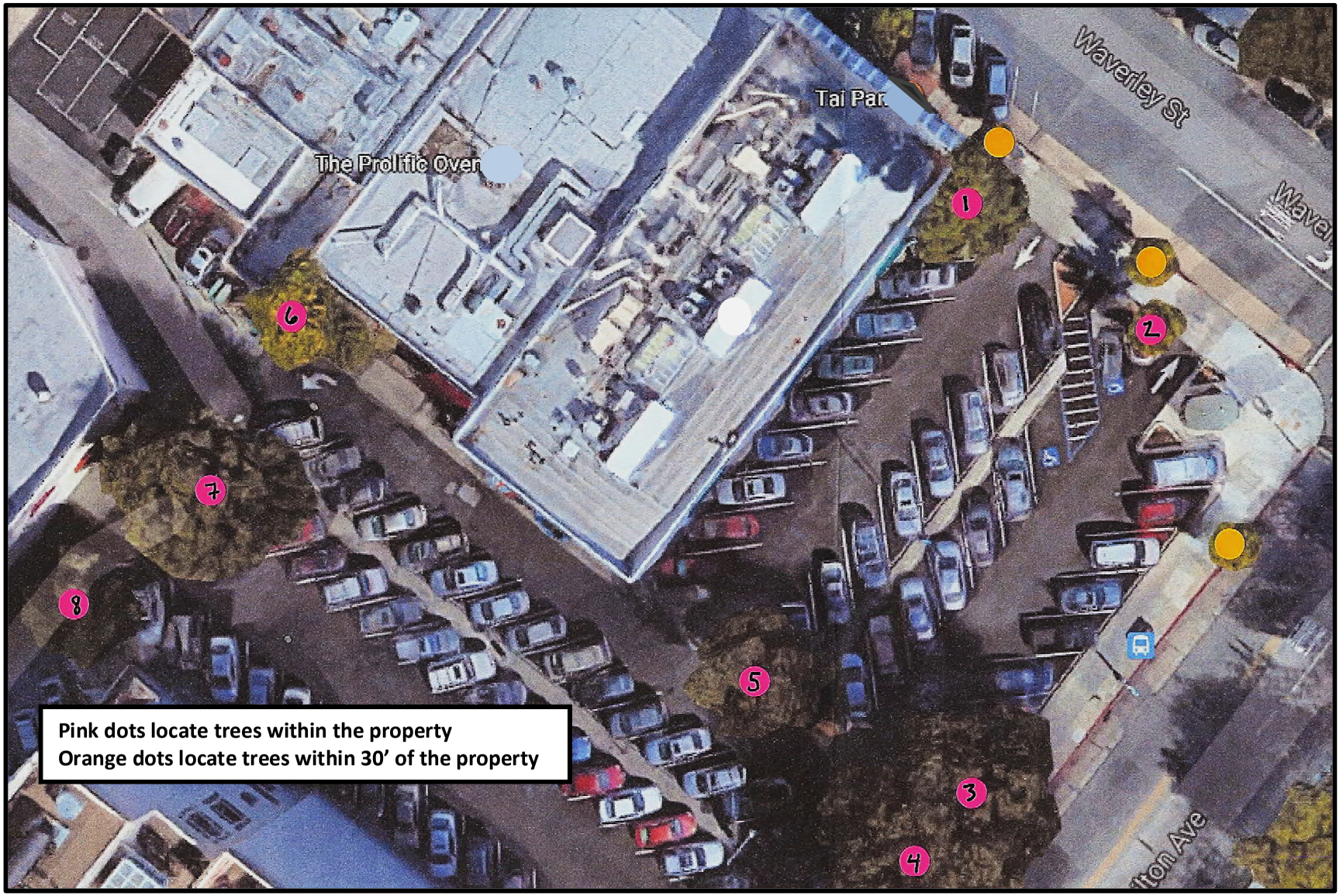


Photo 3. *Photo to the left shows Coast Live Oak #8, the only City Protected Tree. The tree has also been lions tailed, and displays a large wound on the trunk.*

End Photo Supplement

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Appendix E: CHRIS Search Results

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CALIFORNIA HISTORICAL RESOURCES INFORMATION SYSTEM

ALAMEDA
COLUSA
CONTRA COSTA
DEL NORTE
HUMBOLDT
LAKE
MARIN
MENDOCINO
MONTEREY
NAPA
SAN BENITO
SAN FRANCISCO
SAN MATEO
SANTA CLATA
SANTA CRUZ
SOLANO
SONOMA
YOLO

Northwest Information Center
Sonoma State University
150 Professional Center Drive, Suite E
Rohnert Park, California 94928-3609
Tel: 707.588.8455
nwic@sonoma.edu
http://www.sonoma.edu/nwic

12/1/2017 NWIC File No.: 17-1420

Herbert Henry Ward IV
WSP USA
1 East Pratt Street, Suite 300
Baltimore, MD 21202

re: City of Palo Alto Downtown Garage

The Northwest Information Center received your record search request for the project area referenced above, located on the Palo Alto USGS 7.5' quad. The following reflects the results of the records search for the project area and a 0.5 mile radius:

Resources within project area:	None
Resources within 0.5 mile radius:	C-432 (C#s are assigned to reported and unrecorded resources); P-43-463, 593, 388, 397, 551, 1138, 1845, 2204, 2205, 2206, 2261, 2808, 2809, 2868, 2869, 3137, 3692, 3694, 3701, 3702, 3703, & 3706.
Reports within project area:	S-41536 & 20523.
Reports within 0.5 mile radius:	See enclosed spreadsheet.
Other Reports within records search radius:	S-848, 5272, 7483, 8728, 9462, 9583, 15529, 16394, 17852, 18217, 20395, 30204, 32596, 33600, 46375, & 48927. These reports are classified as Other Reports; reports with little or no field work or missing maps. The electronic maps do not depict study areas for these reports, however a list of these reports has been provided. In addition, you have not been charged any fees associated with these studies.

Resource Database Printout (list):	☐ enclosed	☒ not requested	☐ nothing listed
Resource Database Printout (details):	☐ enclosed	☒ not requested	☐ nothing listed
Resource Digital Database Records:	☒ enclosed	☐ not requested	☐ nothing listed
Report Database Printout (list):	☐ enclosed	☒ not requested	☐ nothing listed
Report Database Printout (details):	☐ enclosed	☒ not requested	☐ nothing listed
Report Digital Database Records:	☒ enclosed	☐ not requested	☐ nothing listed
Resource Record Copies:	☒ enclosed	☐ not requested	☐ nothing listed
Report Copies:	☐ enclosed	☒ not requested	☐ nothing listed

OHP Historic Properties Directory:	☒ enclosed	☐ not requested	☐ nothing listed
Archaeological Determinations of Eligibility:	☐ enclosed	☐ not requested	☒ nothing listed
CA Inventory of Historic Resources (1976):	☐ enclosed	☒ not requested	☐ nothing listed
Caltrans Bridge Survey:	☐ enclosed	☒ not requested	☐ nothing listed
Ethnographic Information:	☐ enclosed	☒ not requested	☐ nothing listed
Historical Literature:	☐ enclosed	☒ not requested	☐ nothing listed
Historical Maps:	☐ enclosed	☒ not requested	☐ nothing listed
Local Inventories:	☐ enclosed	☒ not requested	☐ nothing listed
GLO and/or Rancho Plat Maps:	☐ enclosed	☒ not requested	☐ nothing listed
Shipwreck Inventory:	☐ enclosed	☒ not requested	☐ nothing listed

*Notes:

** Current versions of these resources are available on-line:

Caltrans Bridge Survey: http://www.dot.ca.gov/hq/structur/strmaint/historic.htm

Soil Survey: http://www.nrcs.usda.gov/wps/portal/nrcs/surveylist/soils/survey/state/?stateId=CA

Shipwreck Inventory: http://www.slc.ca.gov/Info/Shipwrecks.html

Please forward a copy of any resulting reports from this project to the office as soon as possible. Due to the sensitive nature of archaeological site location data, we ask that you do not include resource location maps and resource location descriptions in your report if the report is for public distribution. If you have any questions regarding the results presented herein, please contact the office at the phone number listed above.

The provision of CHRIS Data via this records search response does not in any way constitute public disclosure of records otherwise exempt from disclosure under the California Public Records Act or any other law, including, but not limited to, records related to archeological site information maintained by or on behalf of, or in the possession of, the State of California, Department of Parks and Recreation, State Historic Preservation Officer, Office of Historic Preservation, or the State Historical Resources Commission.

Due to processing delays and other factors, not all of the historical resource reports and resource records that have been submitted to the Office of Historic Preservation are available via this records search. Additional information may be available through the federal, state, and local agencies that produced or paid for historical resource management work in the search area. Additionally, Native American tribes have historical resource information not in the CHRIS Inventory, and you should contact the California Native American Heritage Commission for information on local/regional tribal contacts.

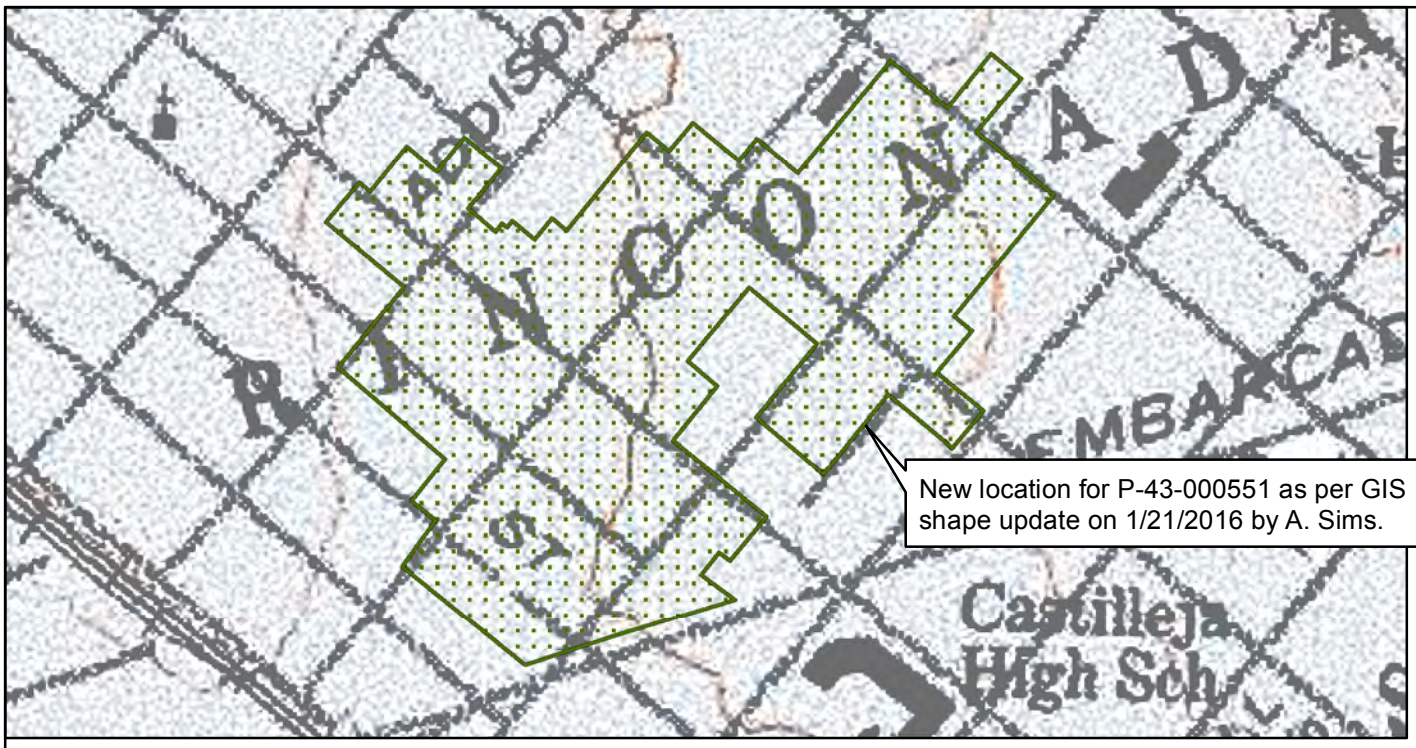
Should you require any additional information for the above referenced project, reference the record search number listed above when making inquiries. Requests made after initial invoicing will result in the preparation of a separate invoice.

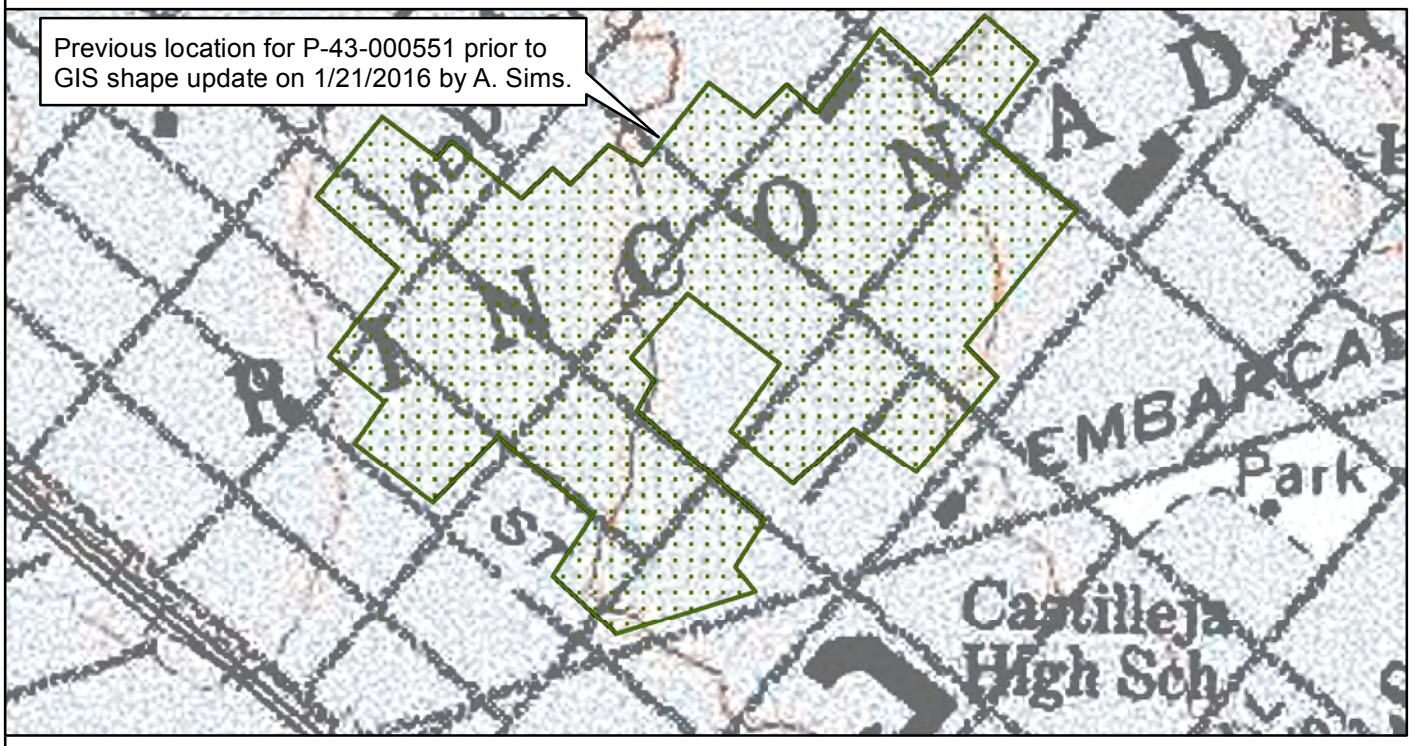
Thank you for using the California Historical Resources Information System (CHRIS).

Sincerely,

Lisa C. Hagel
Researcher

GIS Shape Update of P-43-000551
This shape was previously mapped incorrectly in GIS.





Northwest Information Center

1/21/2016 A. Sims

May depict confidential cultural resource locations.
Do not distribute.

Feet: 0, 175, 350, 525, 700
Meters: 0, 30, 60, 90, 120, 150

N

Palo Alto 7.5"
Santa Clara County

Resource districts

P-43-000551

This site formerly designated 379H cg 6/12/84

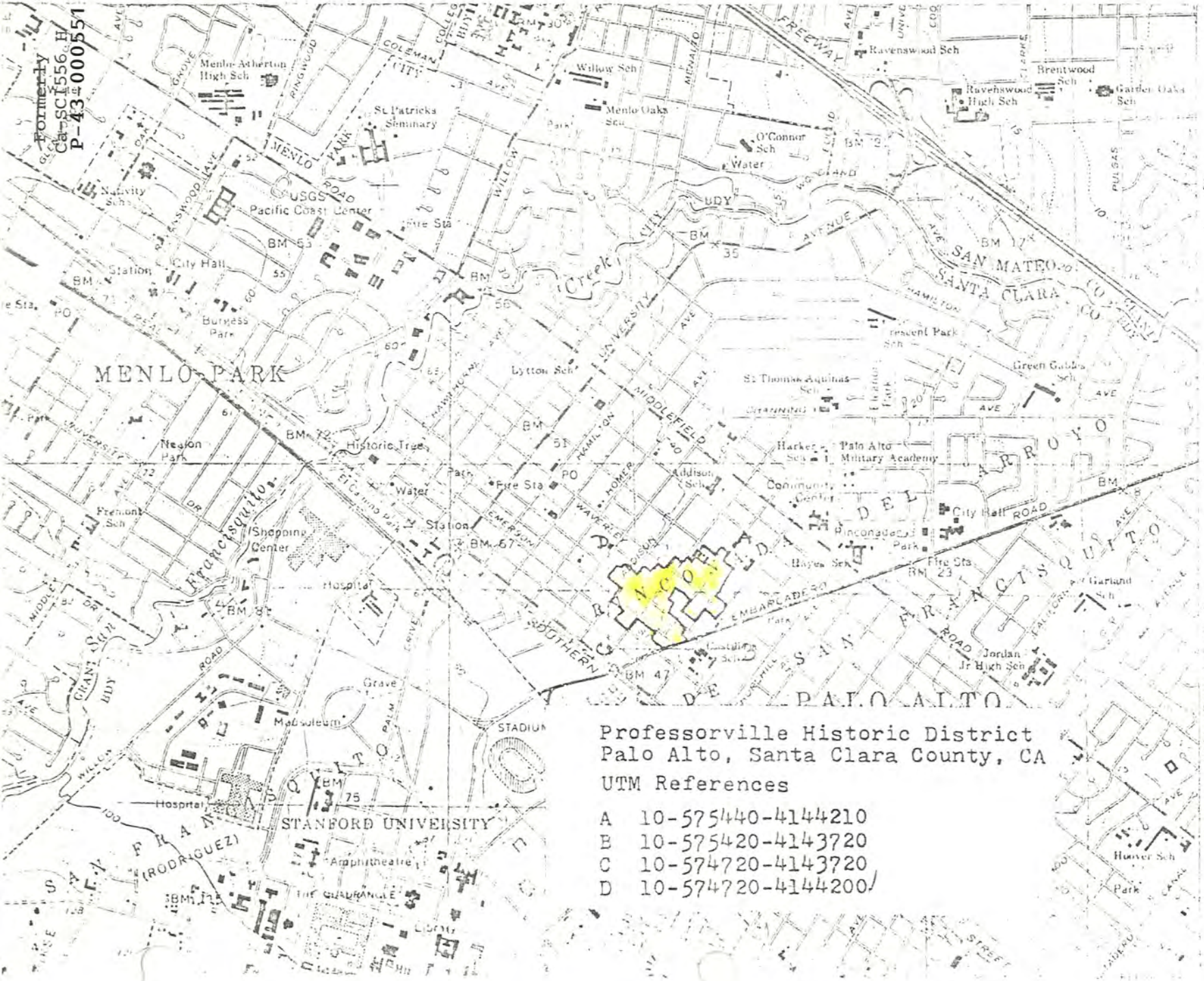
CABRILLO COLLEGE ARCHAEOLOGICAL SITE SURVEY RECORD

SCL-556H

1. Temporary Site No. Ca-SCl-556 H California State Site Designation CA-SCL-3
2. Map Palo Alto (428C) (1980) 3. County Santa Clar
4. Twn 6 S Range 3 W ; ___ ¼ of ___ ¼ of Sec. ___
5. Location An area roughly bounded by Addison, Cowper, Embarcadero, Emerson, and Ramona Streets, Palo Alto, California (UTM: 574780, 4144120) (575270, 4144180) (574910, 4143760) ~~(575260, 4143910)~~
NW 747/442 NE 753/448
U.T.M.G. Coordinate NW 747/437 SE 753/438 6. Contour elevation (40ft.)
7. Previous designations for site ___
8. Owner Multiple ownership 9. Address ___
10. Previous owners, dates ___
11. Present tenant ___
12. Attitude toward excavation ___
13. Description of site The Professorville Historic District is characterized by residential structures that range in style from Colonial Revival to Craftsman Construction dates from 1890 to mid 2
14. Area approximately 40 acres 15. Depth ___ 16. Height ___
17. Vegetation ___ 18. Nearest water ___
19. Soil of site ___ 20. Surrounding soil ___
21. Previous excavation ___
22. Cultivation ___ 23. Erosion ___
24. Building, roads, etc. ___
25. Possibility of destruction ___
26. House pits ___
27. Other features ___
28. Burials ___
29. Artifacts ___
30. Remarks Site Survey record filled out from National Register Nomination form prepared by Paula Bagherian and John Beach April 17, 1974
31. Published references ___
32. Photos ___ 33. Sketch map ___
34. Site f[illegible] 35. Recorded by [illegible]

e

Formerly - CA-SCl556 H
P-43-000551

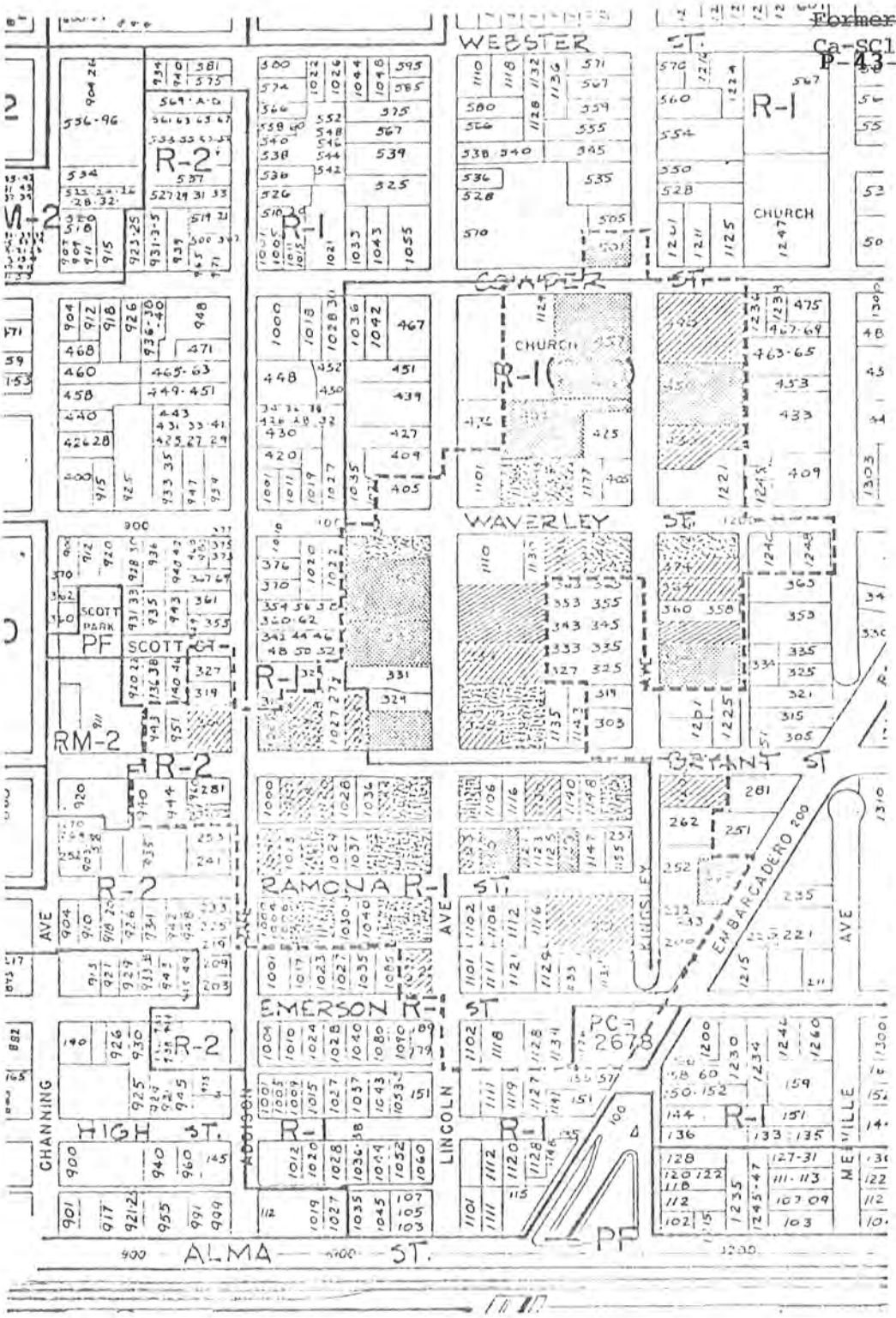


Professorville Historic District
Palo Alto, Santa Clara County, CA

UTM References

A 10-575440-4144210
B 10-575420-4143720
C 10-574720-4143720
D 10-574720-4144200

~~Formerly~~ ~~CA-SCL-379H~~
Ca-SCl-556 H
P-43-000551



PROPOSED PROFESSORVILLE HISTORIC DISTRICT

Important buildings indicated in categories

Palo Alto
S-14429 e

Form No. 10-300 REV. (9/77)

P-43-000551 (E-903 SCL)

UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

NATIONAL REGISTER OF HISTORIC PLACES INVENTORY -- NOMINATION FORM

FOR NPS ONLY	
RECEIVED	8396
DATE ENTERED	

SEE INSTRUCTIONS IN *HOW TO COMPLETE NATIONAL REGISTER FORMS*
TYPE ALL ENTRIES -- COMPLETE APPLICABLE SECTIONS

RECEIVED
by C.A.S.
DEC 1980
Archaeological Regional Research Center
Cabrillo College

1 NAME

HISTORIC
Professorville Historic District

AND/OR COMMON
same

2 LOCATION

STREET & NUMBER The District comprises an area roughly bounded by Addison, Cowper, Embarcadero, Emerson and Ramona Streets. (Please see map and list of included addresses) NOT FOR PUBLICATION

CITY, TOWN
Palo Alto — VICINITY OF

CONGRESSIONAL DISTRICT
12

STATE
California — CODE 06

COUNTY
Santa Clara — CODE 085

3 CLASSIFICATION

CATEGORY	OWNERSHIP	STATUS	PRESENT USE	
X DISTRICT	__PUBLIC	X OCCUPIED	__AGRICULTURE	__MUSEUM
__BUILDING(S)	X PRIVATE	__UNOCCUPIED	__COMMERCIAL	__PARK
__STRUCTURE	__BOTH	__WORK IN PROGRESS	__EDUCATIONAL	X PRIVATE RESIDENCE
__SITE	**PUBLIC ACQUISITION**	**ACCESSIBLE**	__ENTERTAINMENT	__RELIGIOUS
__OBJECT	__IN PROCESS	__YES: RESTRICTED	__GOVERNMENT	__SCIENTIFIC
	__BEING CONSIDERED	X YES: UNRESTRICTED	__INDUSTRIAL	__TRANSPORTATION
		__NO	__MILITARY	__OTHER:

4 OWNER OF PROPERTY

NAME
Multiple ownership

STREET & NUMBER

CITY, TOWN — VICINITY OF

STATE

5 LOCATION OF LEGAL DESCRIPTION

COURTHOUSE, REGISTRY OF DEEDS, ETC.
Santa Clara County Clerk's Office

STREET & NUMBER
191 North First Street

CITY, TOWN
San Jose

STATE
California

6 REPRESENTATION IN EXISTING SURVEYS

TITLE
Point of Historical Interest No. SCI-001

DATE
1975 — __FEDERAL X STATE __COUNTY __LOCAL

DEPOSITORY FOR SURVEY RECORDS
Office of Historic Preservation

CITY, TOWN
Sacramento

STATE
California

Location: NW- 747/442 NE- 753/442
SW -747/437 SE- 753/438

Palo Alto

Sites- CA-SCL-379H

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DESCRIPTION

P-43-000551 E-903 SCL

CONDITION		CHECK ONE	CHECK ONE
X EXCELLENT	DETERIORATED	X UNALTERED	X ORIGINAL SITE
GOOD	RUINS	X ALTERED	X MOVED DATE
FAIR	UNEXPOSED		

DESCRIBE THE PRESENT AND ORIGINAL (IF KNOWN) PHYSICAL APPEARANCE

The Professorville Historic District comprises roughly the area bounded by Ramona, Addison, Embarcadero, and Waverley Streets.

The area is characterized by abundant and mature landscaping, and residential structures that range in style from Colonial Revival to Craftsman. Some examples of the later Spanish Colonial Revival and Period Revival modes also occur and while stylistically different, become related to the earlier buildings through their residential scale, design quality, and ample, mature landscaping. Construction dates of structures within the proposed district essentially range from the late 1890's to the mid 1920's. Houses range from one to two and a half stories in height with differences in size often diminished or obscured by plant materials.

The District is composed of 113 structures, 6 of which are considered to be intrusions. The district is shaped irregularly, with a cut-out in the center to exclude several buildings of more recent date and unsympathetic architectural style. Numerous other structures of almost like-character and quality surround the proposed district but are excluded due to their lesser overall building quality, greater degree of alterations, or intrusions that interrupt their inclusion as structures contiguous to the District.

Buildings and sites contributing to the character of the district:

1. 271-3 Addison: Vernacular cottage, c. 1890, one and a half story, shiplap, minimal bargeboard decoration, some alterations.

2. 281 Addison: Colonial Revival/Classical Revival, c. 1900, two stories, asbestos siding, porch with Tuscan columns and dentil course.

3. 301 Addisonn: Colonial Revival, c. 1904, one and a half story, shingle, parapetted porch with Tuscan columns, glassed in porch.

4. 940 Bryant: Colonial Revival, c. 1900, one story, clapboard, hipped dormered roof and slanted bay windows, unusual corner at porch.

5. 943 Bryant: Colonial Revival, c. 1900, two stories, shingle and shiplap, porch supported by columns, hip roof.

6. 944 Bryant: Craftsman, c. 1900, one story, shingle, hip roof with skylight facing East, casement windows.

7. 951 Bryant: Colonial Revival/Shingle, c. 1900, two stories, shingle, palladian windows, tree trunk section columns support overhang of house that forms porch.

8. Frank Angell House, 1005 Bryant: Colonial Revival with Shingle style characteristics, 1892, two and a half stories, shingle, gambrel roof, triple columns support building overhang that forms Porch, unusual patterned brick work.

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9. 1010 Bryant: Colonial Revival, c. 1907, one and a half stories, shingled steeply gabled roof with long street-facing dormer, entrance gate with posts and finials.

10. 1017-23 Bryant: Colonial Revival/Shingle, c. 1893, two stories, shingle, twin gambrel-roofed dormers framing rectangular dormer, columns support overhang of building creating porch.

11. 1020 Bryant: Colonial Revival, c. 1907, two stories, shingle, symmetrical format with square second floor projections, flared at the belt course.

12. 1027 Bryant: Colonial Revival/Queen Anne/Craftsman, c. 1898, two stories, shiplap, shingle, decorative arches in porch.

13. 1028 Bryant: Colonial Revival, c. 1900, one story, shiplap, hip roof, slanted bay, Tuscan porch columns.

14. 1033 Bryant: Colonial Revival, 1899, two stories, shingle, fluted pilasters with capitals, gambrel roof, some alterations.

15. 1036 Bryant: Colonial Revival, c. 1915, one story, stucco, gabled roof, slightly arched porch with doubled columns, material and style differ from neighborhood standard.

16. Varian House, 1044 Bryant: Craftsman, 1902, one and a half story, shingle, hip roof with dormer, cantilevered square bay, house is important historically: the Varian brothers invented the Klystron tube.

17. 1052 Bryant: Craftsman/Colonial Revival, c. 1910, one story, narrow clapboard, large veranda on two sides of house, shallow hip roof with carved rafter ends.

18. Sun-bonnet House, 1061 Bryant: Colonial Revival, 1899, two stories, shingle, designed by Bernard Maybeck, gambrel roof.

19. 1100 Bryant: Craftsman, c. 1904, two story with one story wing to street, shingle, very thin roof overhang and eave members, slanted bay by entrance.

20. 1106 Bryant: Colonial Revival, c. 1910, one story, asbestos siding, hip roof with dormer, Tuscan porch columns.

21. 1116 Bryant: Colonial Revival, c. 1900, one and a half story, clapboard and shingles, hipped and gabled roof forms with flared eaves, dormer with geometric mullion pattern.

22. Castilleja Hall, later Nardyne Apartments, 1121 Bryant: Colonial Revival/Classical Revival, c. 1892, two stories, shingle, rectangular block format primary details are two entry columns, was once used as a school.

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23. 1130 Bryant: Craftsman Chalet, c. 1915, two story, clapboard, broad street facing gable, cantilevered balcony with jigsaw balustrade, elaborate window facings.

24. 1135 Bryant: Craftsman, c. 1910, one story, stucco with shingled lower half of structure.

25. 1140 Bryant: Colonial Revival, c. 1905, one story, shingle, hip roof with soffited eave and arched recessed entry, bland but not unsupportive component of neighborhood.

26. 1143 Bryant: Prairie, c. 1915, two story, stucco, the heavily hooded entry detail is unusual in this style.

27. 1148 Bryant: Craftsman/Colonial Revival, c. 1905, one and a half story, shingle, symmetrical, hip roofed building with tripartite ground floor windows.

28. 1160 Bryant: Colonial Revival, c. 1914, two and a half story, wide clapboard, gabled roof, ribbon-banded casement windows, integral auto and pedestrian gates at north side.

29. 1200 Bryant: Colonial Revival, 1904, one and a half story, stucco, symmetrical half timber design, with large gabled dormers.

30. 235 Embarcadero: Craftsman, c. 1907, three story, shingle, shallow hip roof, curved porch brackets, casement windows, very large wisteria vines, aviary.

31. 251 Embarcadero: Colonial Revival, c. 1900, two story, shingle.

32. 200 Kingsley: Craftsman, c. 1910, one story, shingle, massive hip roof, wrap-around verandah, French doors, double-hung windows with x-shaped muntin pattern.

33. Fowler Residence, 221 Kingsley: Colonial Revival with Craftsman influences, 1900, shingle, widows walk, large enclosed garden, Point of Historical Interest SCI-006.

34. 222 Kingsley, Colonial Revival, c. 1905, one and a half story, shingle, steeply gabled roof with tiny shed dormer, sawtooth shingle pattern, Tuscan columns at porch.

35. 252 Kingsley, Craftsman, c. 1910, two story, shingle, gabled roof, pedimented porch with square posts, side lights at entry, leaded window.

36. 257 Kingsley: Craftsman, c. 1905, one and a half stories, shingle, two kinds of shingles, - smaller on upper portion, larger size on lower portion.

37. 262 Kingsley: Craftsman, c. 1910, two story, shingle and clapboard, surface texture differentiation between first and second floor, banded leaded diamond-pane casement windows on second floor.

38. 334 Kingsley: Classical Revival, 1903, two story, narrow clapboard, formal, symmetrical house with slanted bays, turned ball finials, balustrades above porch, bay.

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39. 356 Kingsley: Vernacular, c. 1893, two story, shiplap, gabled roof with soffited eave, fishscale shingles in gable ends, entry with side- and fan lights, some alterations to fenestration.

40. 360 Kingsley: Colonial Revival variant, c. 1900, two story, clapboard, gabled roof with wide overhang, second floor overhang supported by square posts, leaded casement doors facing street.

41. 364 Kingsley: Craftsman, c. 1899, one story, shingle, shallow hip roof, informal composition, part of complex with 374.

42. 374 Kingsley: Craftsman, c. 1905, one story, shingle, shallow hip roof, informal composition, part of complex with 364.

43. 405 Kingsley: Spanish Colonial Revival, one story, stucco and tile, patio entry, varied roof levels.

44. 430 Kingsley: Colonial Revival, 1902, two story, shingle, hip roof with soffited eaves, entry at side, flare at second floor level.

45. Hutchinson House, 433 Kingsley: Colonial Revival, c. 1899, two story, shingle and shiplap, gambrel roof, circular entrance canopy supported by columns.

46. 450 Kingsley: Colonial Revival/Shingle style, c. 1902, two and a half story, shiplap and shingle, gambrel roof with blind arch in end gable, palladian window, wrap-around verandah with paired columns.

47. 457 Kingsley: Tudor, 1914, half-timbered, with stucco, two and a half story, interesting English half timber work.

48. 490 Kingsley: Spanish Colonial Revival, c. 1915, two story, stucco, hip tile toof, dentils and classical moldings at eave, porch with classical revival detail.

49. Fleugel Residence, 501 Kingsley: Colonial Revival, 1897, two and a half story, clapboard, gambrel roof, semicircular porch, later addition to each end.

50. 225 Lincoln: Craftsman, c. 1905, one story, vertical board and batten, additive composition with irregular, rambling form, extensively planted grounds.

51. 251 Lincoln: Colonial Revival/Craftsman, c. 1908, two story, shingle, alterations to entry and addition to rear.

52. 308 Lincoln: Colonial Revival, 1900, two story, shingle, hip roof with dormer, Tuscan columns supporting overhanging porch.

53. 318 Lincoln: Colonial Revival, 1901, one and a half story, shingle, wide slanted bay window, double gable dormer, squatly proportioned Tuscan columns at porch.

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54. 331 Lincoln: Colonial Revival, c. 1900, two and a half story, shingle, porch altered.

55. 334 Lincoln: Colonial Revival, 1896, two and a half story, shingle, and shiplap, bay window in second story, large first floor porch with Tuscan columns.

56. 345 Lincoln: Colonial Revival, 1893, two story, clapboard and shingle, columned capitals support incised entrance opening and balconied gable above, gambrel roof, water tower at rear.

57. 356 Lincoln: Craftsman, 1896, one story, shingle, sawtooth course at heading level, series of linked pyramidally roofed pavillions, pedimented porch, exceptional planting.

58. 365 Lincoln: Craftsman/Shingle, 1896, two and a half story, shingles, circular balcony, porch detail.

59. 381 Lincoln, Craftsman, 1894, two story, shingled, L-shaped porch, supported by posts, hedge forms entrance arch.

60. 405 Lincoln: Spanish Colonial Revival, c. 1925, one story, stucco, Spanish tile roof, arched entry, some porticoes with flat roof.

61. 1000 Ramona: Craftsman, c. 1910, one story, shingle, carved beam ends, porch and fenestration altered.

62. 1001 Ramona: Craftsman, 1908, two story, shingle, wide porch with arched paned window enclosing the end.

63. 1004 and 1006 Ramona, vernacular, c. 1910, two story, clapboard, no ornamentation, structure is hidden doesn't contribute because unseen.

64. 1020 Ramona: Craftsman, c. 1915, one and a half story, clapboard, upper story altered.

65. 1021 Ramona: Colonial Revival, c. 1905, two story, shingle and clapboard, same plan as 1029, end of porch enclosed with windows, hip roof.

66. 1024 Ramona: Craftsman, c. 1908, one and a half story, shingle, gable roof with dormer.

67. 1029 Ramona: Colonial Revival, c. 1910, two story, shingle and clapboard, columns support porch that extends across front, square/cubic format, end of porch windowed in, same plan as 1021, hip roof.

68. 1037 Ramona: Colonial Revival, 1908, one story, clapboard, decorative frieze in porch column and elegant balusters are porch details and primary ornamentation, hip roof.

69. 1040 Ramona: Craftsman, c. 1915, two story, shingle, belt course at second floor sill level, wide overhangs.

70. 1047 Ramona: Classical Revival, c. 1905, two story, clapboard, hip roof with dormer, symmetrical format, Tuscan columns at porch.

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71. 1048 Ramona: Colonial Revival, c. 1903, one and a half story, clapboard, porch with Tuscan columns, miniature balcony at second floor, decorative gable vent.

72. 1057 Ramona: Craftsman/Colonial Revival, c. 1905, two story, shingle, tripartite window in gable, Tuscan columns at porch, porch partially enclosed.

73. 1102 Ramona: Colonial Revival variant, c. 1910, two story, shingle and clapboard, hip roof with dormer, later addition at entry.

74. 1103 Ramona: Colonial Revival, c. 1905, one and a half story, shingle, dentils, long dormer across front, porch altered.

75. 1106 Ramona: Craftsman, c. 1915, one and a half story, shingle, recessed entry, shed-roofed square bays, some alterations at entrance.

76. 1112 Ramona: Craftsman, c. 1910, one story, shingle, recessed entry, hip roof with dormer.

77. 1115 Ramona: Colonial Revival, 1903, two and a half story, shingle, gambrel roof with ridge parallel to street, two tiers of running dormers.

78. 1116 Ramona: Craftsman/Colonial Revival, c. 1910, two story, shingle and clapboard, square bay, recessed entry porch.

79. 1125 Ramona: Colonial Revival, c. 1900, one and a half story, shingle, gable street front with gambrel side elevations.

80. 1132,1140,1166 Ramona: (one building) Craftsman, 1910, one story, shingle, hip roof, originally an outbuilding to 221 Kingsley.

81. 1139 Ramona: Colonial Revival, c. 1905, one and a half story, shingle, gambrel roof, shallow bay.

82. 1147 Ramona: Craftsman, c. 1910, one and a half story, shingle, side entrance, hip roof with jerkin head dormers.

83. 1155 Ramona: Vernacular/Craftsman, c. 1910, one and a half story, shingle.

84. 1101 Waverley: Colonial Revival/Period Revival, 1925, two story, stucco, columned entrance is primary detail.

85. 1110 Waverley: Craftsman, c. 1910, two story, shingle, shallow hip roof with wide overhangs.

86. 1135 Waverley: Colonial Revival, c. 1925, two story, shingles, brick fireplace unusual, formal gabled entry with columns.

87. 1136 Waverley: Colonial Revival, c. 1893, two and a half story, calpboard, steep gambrel roof, large verandah with thin columns.

88. 1146 Waverley: Queen Anne, 1893, two story, clapboard and shingle, half timbered gable, chamfered entry corner.

89. 1155 Waverley: Spanish Colonial Revival, c. 1935, one and two story composition, stucco, arched entry and windows.

90. 1177 Waverley: Mediterranean Revival, 1935, stucco and tile, two story, arched entry.

91. 1220 Waverley: Craftsman, c. 1900, one story, shingle, shallow hip roof, casement windows, lattice work at porches.

92. 1221 Waverley: altered Colonial Revival, c. 1910, two story, stucco and shingle, grounds important as an anchor to district corner.

93. 1240 Waverley: Classical Revival, c. 1910, two story, clapboard, soffited eave with brackets, overscaled porch pediment.

94. 1248 Waverley: Colonial Revival, c. 1910, two story, shingle, simplified Classical Revival porch.

95. 1101 Emerson: Colonial Revival, c. 1912, one and a half story, shingle.

96. 1102 Emerson: Spanish Colonial Revival, c. 1925, one story, stucco.

97. 1111 Emerson: Colonial Revival, c. 1910, one and a half story, shiplap.

98. 1118 Emerson: Colonial Revival/Craftsman/Prairie, c. 1920, two story, shingle.

99. 1121 Emerson: Colonial Revival, c. 1915, two story, shingle.

100. 1128 Emerson: English Cottage, c. 1915-18, one and a half story, stucco.

101. 1129 Emerson: Craftsman, c. 1910-15, one and a half story, shingle.

102. 1134 Emerson: Prairie/Craftsman, c. 1915, two story, shingle.

103. 1176 Emerson: Spanish Colonial Revival, c. 1930, two story, stucco.

104. 319 Addison: Craftsman, c. 1910 with recent second story addition and alterations to entry and second story, shingle.

105. 327 Addison: Craftsman/Colonial Revival, c. 1905, one and one half stories, shingle.

Historical instrusions but environmentally compatible structures

106. 1133 Emerson: Contemporary Shingle, c. 1977, two story, shingle

107. 1135 Emerson: Contemporary Shingle, c. 1977, two story, shingle

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Nonconforming intrusi s detracting from the int rity of the district;

108. 303 Kingsley: California Ranch; c. 1963, one story, stucco box.

109. 425 Kingsley: Contemporary, 1975, one and two story in part, shingle, placement too forward for neighborhood.

110. 329 Lincoln: originally Colonial Revival, date indeterminable due to alterations, two story, wood siding, possible carriage house.

111. 1013 Ramona: stylistic affinities obscured by alterations, c. 1905, two story, stucco, alterations on surface and porch, intrusion in material, angled bay and pedimented entry altered.

112. 1030 Ramona: California Ranch, c. 1950, one story, vertical board and batten, intrusion in style, date, and siting.

113. 1130 Waverley: Rustic bungalow, c. 1950, one story, vertical board and batten, intrusion in style, quality of design and use of materials.

8 SIGNIFICANCE

P-43-000591 E. 903 SCL

PERIOD	AREAS OF SIGNIFICANCE -- CHECK AND JUSTIFY BELOW				
PREHISTORIC	_ARCHEOLOGY-PREHISTORIC	_COMMUNITY PLANNING	_LANDSCAPE ARCHITECTURE	_RELIGION	
1400-1499	_ARCHEOLOGY-HISTORIC	_CONSERVATION	_LAW	_SCIENCE	
1500-1599	_AGRICULTURE	_ECONOMICS	_LITERATURE	_SCULPTURE	
_1600-1699	_ARCHITECTURE	_EDUCATION	_MILITARY	_SOCIAL/HUMANITARIAN	
_1700-1799	_ART	_ENGINEERING	_MUSIC	_THEATER	
X 1800-1899	_COMMERCE	_EXPLORATION/SETTLEMENT	_PHILOSOPHY	_TRANSPORTATION	
X 1900-	_COMMUNICATIONS	_INDUSTRY	_POLITICS/GOVERNMENT	_OTHER (SPECIFY)	
		_INVENTION			

SPECIFIC DATES c.1895-1979 BUILDER/ARCHITECT varied

STATEMENT OF SIGNIFICANCE

The Professorville Historic District is significent due to both its historic associations and its architectural/environmental vaulues. The district was one of the earliest residential areas in Palo Alto, housing a large proportion of the first professors to instruct at the fledling University. As such its residents helped to shape note only the standards, directions, and intellectual atmosphere of the University, but those of the community as well.

The primary values of the district lie, however, in its visual contributions due to the consistent character and high quality of the buildings and streetscapes that comprise it. Landscaping qualities contribute strongly to the character and ambience of the area, as do the Colonial Revival and Craftsman shingle covered structures which largely constitute the architectural makeup of the district.

The city of Palo Alto was created subsequent to the founding of Stanford University, essentially to serve as a university town. Construction of the University began on May 14, 1887, on land that had been the Leland Stanford farm. Early founders desired the presence of a town near the University but the two existing nearby towne of Mayfield and Menlo Park did not seem suitable to them. The founders wanted the town that would provide the University with housing and community services to prohibit the sale of alcoholic beverages. Since neither of the two existing town met this requirement or seemed willing to give up their saloon businesses, Leland Stanford, in 1887, acquired 740 acres to create a new townsite. The City of Palo Alto was founded with the attitude of wholesomeness, and when liquor finally came to the town through annexed areas, there were many who resisted, asserting that a town without alcohol attracted families seeking a superior environment for their children.

Because of the specifics of Palo alto's origins, its beginning was abrupt rather than evolutionary. It sprang fullgrown, or almost so, as an adjunct to Stanford University, and the presence of Stanford influenced the layout and image of the new city very strongly. Many of Stanford's early faculty shared their expertise with the forming city and many innovative civic functions such as municipal ownership of utilities and subsidized health care can be credited to their input.

Professorville, as its name implies, was to be the home of the Stanford University faculty. In 1889, Timothy Hopkins subdivided the land for Leland Stanford and opened it up for development. Several of Stanford's first faculty members built houses in this new section of town, as it had easy access to the campus by way of Embarcadero Street. The lots are large and the substantial houses indicate ample academic salaries.

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The University recruited many of its faculty from the East; those people naturally imported the current tastes and fashions of their origins. Thus there is a distinctive visual character to this area of the city which relates it as strongly to Eastern and Midwestern cities as it does to California. This no doubt accounts for the American Colonial Revival influence, popular at the time in California, but not to the degree indicated by the frequency of the style in Palo Alto. Landscaping in the area too, tends to be traditional rather than exotic, as if ideas of garden design had been formed and set without reference to the special qualities of the California landscape.

The buildings which give the Proffessorville area its strongest image are the brown-shingled houses whose stylistic allegiance ranges from the Colonial Revival to the Craftsman. The ample yards and mature plantings are as important a part of the area as the buildings themselves; sometimes, indeed, the vegetation overpowers the buildings. There are, in the area, designs by many nationally, and even internationally, known architects.

The Sun-Bonnet House, also referred to as the "Kellogg House" at 1061 Bryant, is a key structure within the district. The corner siting of this large structure adds to its prominence within the District. Its distinctive design is the work of the nationally known Bay Area architect Bernard Maybeck. While its materials, style, and scale express the themes of the surrounding neighborhood, the structure's outstanding design at the hand of a master architect make it a key structure within the city as well as the District.

The Castilleja Hall at 1121 Bryant was formerly one of the first girl's preparatory schools in the area. Originally located at 319 Kingsley, the building was moved to its present location in the early 1900's, where classes were conducted until the present Castillejo School complex at 1310 Bryant was built about 1910. Although an unusual building form for a residential district, the structure's historic and unusual architectural values make it a focal point of the area.

The large Colonial Revival structure at 221 Kingsley, known as the Fowler Residence, has a strong Craftsman/oriental character to its design. Built for the widow of Joshua Fowler, a Spanish American War Officer, it served as the home of her son and his bride, the daughter of Stanford University's second president. True to the Professorville tradition, it became the home of Professor Karl Brandt, an agricultural economist, in 1938. With its large grounds and imposing size and design, the structure was known as the "mansion" of the neighborhood. Historically and architecturally it is a key District structure.

The structure at 450 Kingsley is a very sophisticated interpretation of the Queen Anne mode, designed by Frank McMurray of Chicago. Its considerable size and clarity of form lend it prominence as does its amply landscaped, generaously proportioned physical setting. It gains historic importance as the house of one of the original fifteen Stanford professors.

The large Tudor Revival house with its half timber design at 457 Kingsley is a particularly fine rendition of the style. Its imposing size is rather shielded from the streetscape due to tall hedges at the sidewalk. However, its woodsy Medieval character is most compatible with the essentially Colonial Revival/Craftsman image of the District. Its strong design statement and considerable size make it a focal structure of the neighborhood.

The unusual variant of the Colonial Revival style at 345 Lincoln was designed by Professor A.B. Clark in 1893. Clark was an early head of the Stanford University Art Department whose son, Birge Clark, became a major local architect and designer. Charles Wing, for whom the struc-

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ture was designed, served as an important civic leader for the city and was a noted engineer, having desgined and built the STanford Stadium and the Big Basin State Park. The structure is an important architectural and historical focal point of the area, whose design and background reflect the essence of the District.

The Professorville Historic District is particularly expressive of one of Palo Alto's strongest visual characteristic modes, the shingled Colonial Revival variants that contribute so much to the quality of the city's architectural environment. The scale of the structures and the abundant planting also contribute strongly to the character of the entire area.

The District reflects the unique background of the area's origins and its early ties to the founding of both the University and Palo Alto itself. As such, the Professorville Historic Distorict creates a strong sense of place and time expressive of Palo Alto's intrinsic character and heritage.

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9 MAJOR BIBLIOGRAPHICAL REFERENCES

E-903 SCL

American Association of Women, Palo Alto Branch, Gone Tomorrow?, 1971
Butler, Phyllis, Valley of Santa Clara, 1975
Cogswell, Elinor V., "Palo Alto Its Backgrounds, Beginnings and Growth", The Tall Tree, Vol. 1, No. 10, March 1960
"From Portola to Palo Alto", The Tall Tree, Vol. III, No. 10, March 1960
Professorville Walking Tour Brochure, Palo Alto AAUW publishers

10 GEOGRAPHICAL DATA

ACREAGE OF NOMINATED PROPERTY 34.43 (app.)

QUADRANGLE NAME Palo Alto QUADRANGLE SCALE 7½'

UTM REFERENCES

	ZONE	EASTING	NORTHING
A	10	575440	4144210
B	10	575420	4143720
C	10	574720	4144310
D	10	574720	4144200
E			
F			
G			
H			

VERBAL BOUNDARY DESCRIPTION

The area bounded by the alley between Emerson and Ramona Streets to Addison, then NE to the SW boundaries of 271-73, 281, Addison, NW to include 944, 940 Bryant, N & NE to include 943, 951 Bryant, 319, 327 Addison

LIST ALL STATES AND COUNTIES FOR PROPERTIES OVERLAPPING STATE OR COUNTY BOUNDARIES

STATE	CODE	COUNTY	CODE
no overlapping boundaries			
STATE	CODE	COUNTY	CODE

11 FORM PREPARED BY

NAME / TITLE: Paula Boghosian/ John Beach

ORGANIZATION: Historic Environment Consultants

DATE: April 17, 1979

STREET & NUMBER: 2306 J St.

TELEPHONE: (916) 44602447

CITY OR TOWN: Sacramento

STATE: California

12 STATE HISTORIC PRESERVATION OFFICER CERTIFICATION

THE EVALUATED SIGNIFICANCE OF THIS PROPERTY WITHIN THE STATE IS:

NATIONAL ___ STATE ___ LOCAL ___

As the designated State Historic Preservation Officer for the National Historic Preservation Act of 1966 (Public Law 89-665), I hereby nominate this property for inclusion in the National Register and certify that it has been evaluated according to the criteria and procedures set forth by the National Park Service.

STATE HISTORIC PRESERVATION OFFICER SIGNATURE

TITLE DATE

FOR NPS USE ONLY

I HEREBY CERTIFY THAT THIS PROPERTY IS INCLUDED IN THE NATIONAL REGISTER

DATE

KEEPER OF THE NATIONAL REGISTER

ATTEST: DATE

CHIEF OF REGISTRATION

GPO 921-803

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P-43-000571

E-903 SCL

Santa Clara County Resources Inventory, published by the County Heritage Commission, 1975, now being revised
Birge Clark Professional Work Inventory
Sanborn Fire Insurance Maps: 1895, 1897, 1901, 1904, 1908, 1924

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from that point, cross Addison to the northerly boundary of 1005 Bryant, SE along the northerlyboundaries of 1005, 1017-23, 1027, 1033 Bryant Street, then north east along the rear (northeast) boundaries of 331, 345, 381, and 405 Lincoln; then southeast to include 1101, 1135, 1155 Waverley, then east to Cowper Street; north-east along Cowper to include 501 Kingsley, continuing southeast along Cowper, the southwest along the southeast boundaries of 490, 450, 430 Kingsley, and 1221 Waverley, to Waverley, then south to Melville, southwest to the westerly boundary of 1240 and 1248 Waverley, then southwest along that boundary, Whitman Court; from that point northwest along westerly boundary of 334 Kingsley, and along that boundary to Kingsley Street, from that point NE to 365 Kingsley, and then NW, SW, SE, and SW to exclude 303, 319, 325, 333, 335, 343, 353, 355, 363, 365 Kingsley and 1201, 1225 Bryant; east along Bryant, and then south along the east boundary of 251 and 281 Embarcadero to Embarcadero Street; then SW along Embarcadero to the southern boundary of 1176 Emerson, then NW along the SE boundaries of and indluding 1176, 1134, 1128, 1118, 1102 Emerson, and thence NE along Lincoln St. to Emerson; then NW to the SE boundary of 1085 Emerson, and thence to the alley between Emerson and Ramona, then NW along that alley to Addison.

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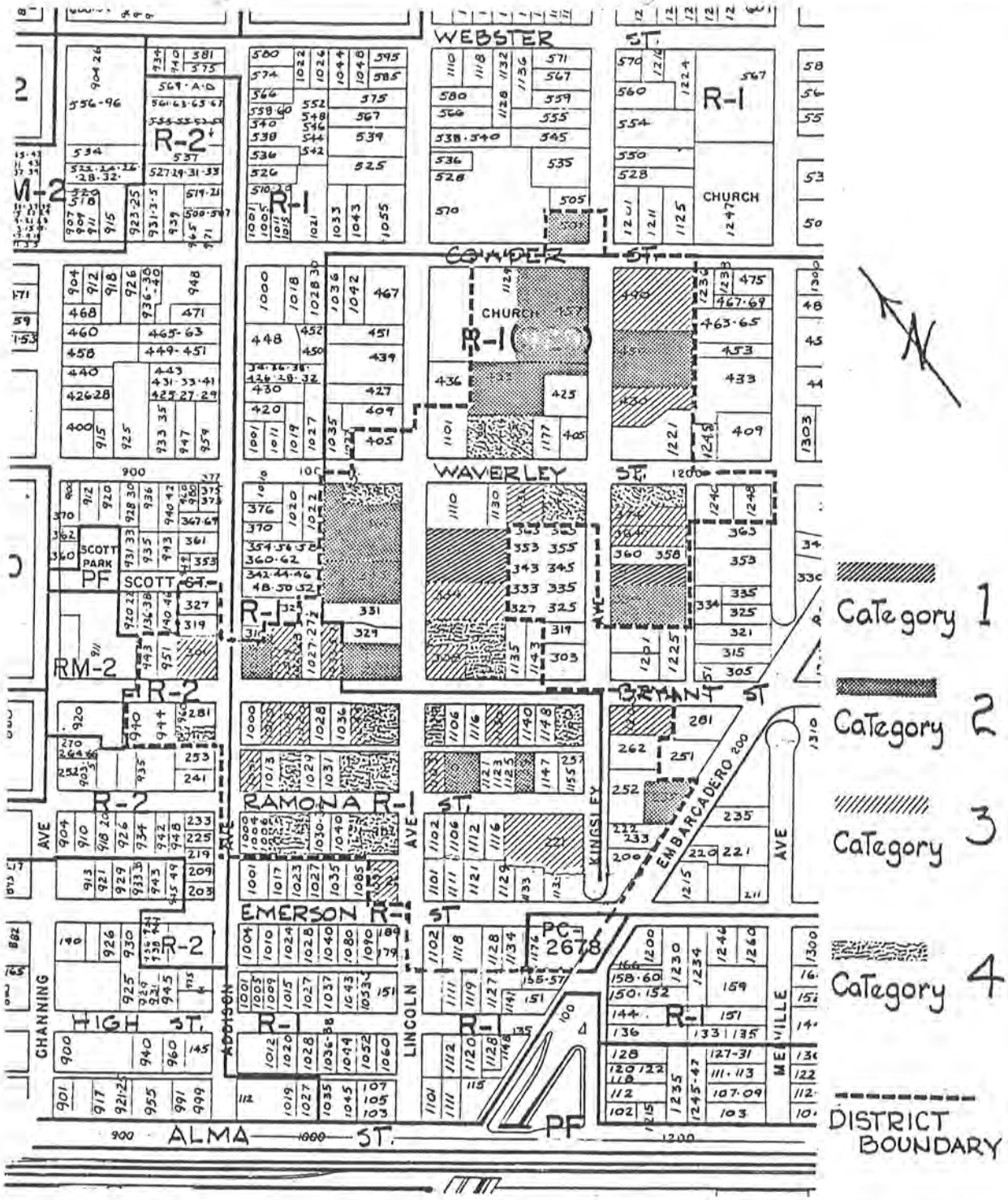
E-903 SCL

CABRILLO COLLEGE ARCHAEOLOGICAL SITE SURVEY RECORD

1. Temporary Site No. _____ California State Site Designation CA-SCL-37[illegible] H
2. Map Palo Alto 3. County Santa Clara
4. Twn 6 S Range 3 W ; _____ ¼ of _____ ¼ of Sec. _____
5. Location An area roughly bounded by Addison, Cowper, Embarcadero, Emerson, and Ramona Streets, Palo Alto, California
U.T.M.G. Coordinate NW - 747/442 NE - 753/448 SW - 747/437 SE - 753/438 6. Contour elevation _____
7. Previous designations for site _____
8. Owner Multiple ownership 9. Address _____
10. Previous owners, dates _____
11. Present tenant _____
12. Attitude toward excavation _____
13. Description of site The Professorville Historic District is characterized by residential structures that range in style from Colonial Revival to Craftsman. Construction dates from 1890 to mid 20
14. Area approximately 40 acres 15. Depth _____ 16. Height _____
17. Vegetation _____ 18. Nearest water _____
19. Soil of site _____ 20. Surrounding soil _____
21. Previous excavation _____
22. Cultivation _____ 23. Erosion _____
24. Building, roads, etc. _____
25. Possibility of destruction _____
26. House pits _____
27. Other features _____
28. Burials _____
29. Artifacts _____
30. Remarks Site survey record filled out from National Register Nomination form prepared by Paula Boghosian and John Beach April 17, 1979
31. Published references _____
32. Photos _____ 33. Sketch map _____
34. Date February 24, 1981 35. Recorded by T. McGregor

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E-903 SCL



PROPOSED PROFESSORVILLE HISTORIC DISTRICT

Important buildings indicated in categories

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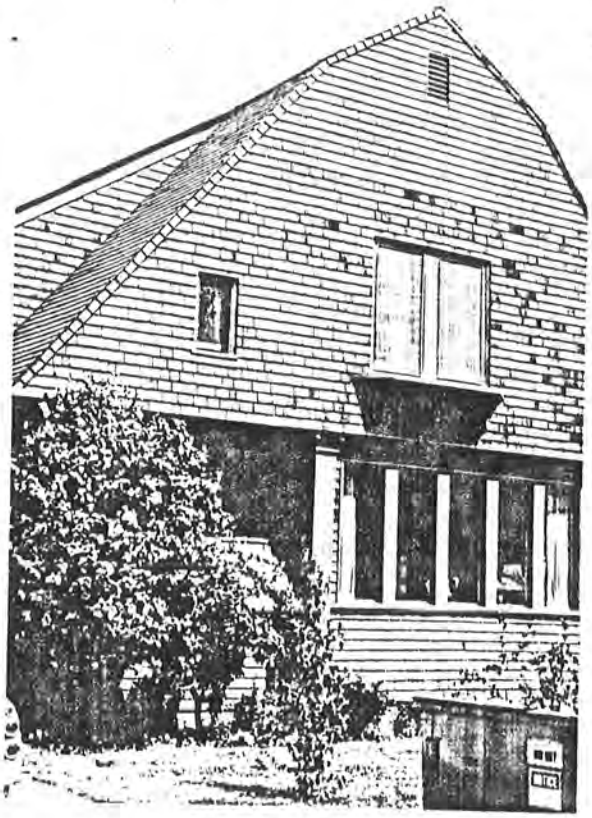
E-903 SCL

Palo Alto

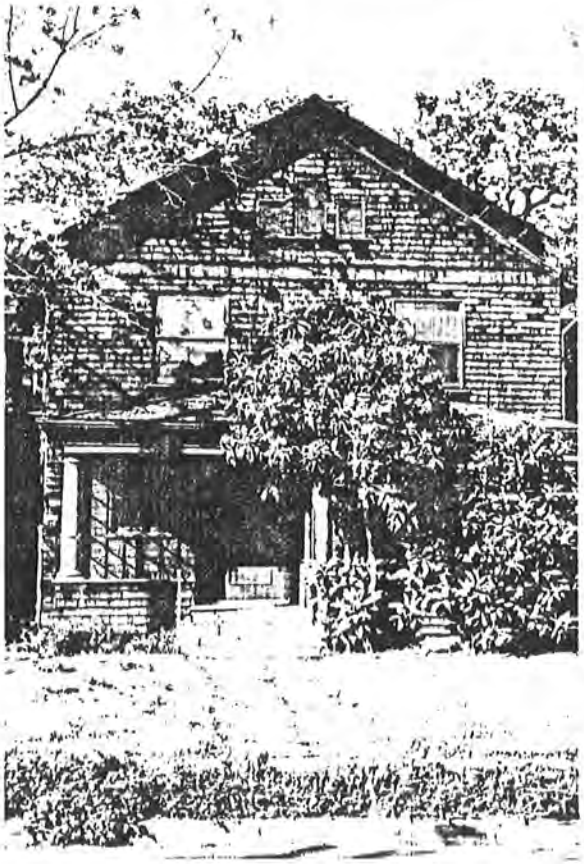
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E-903 3CL

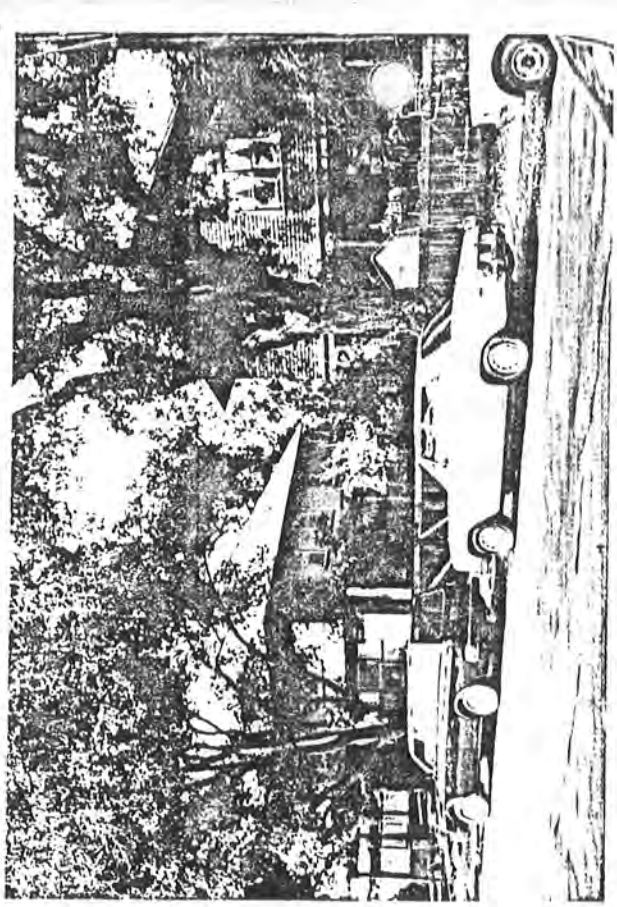


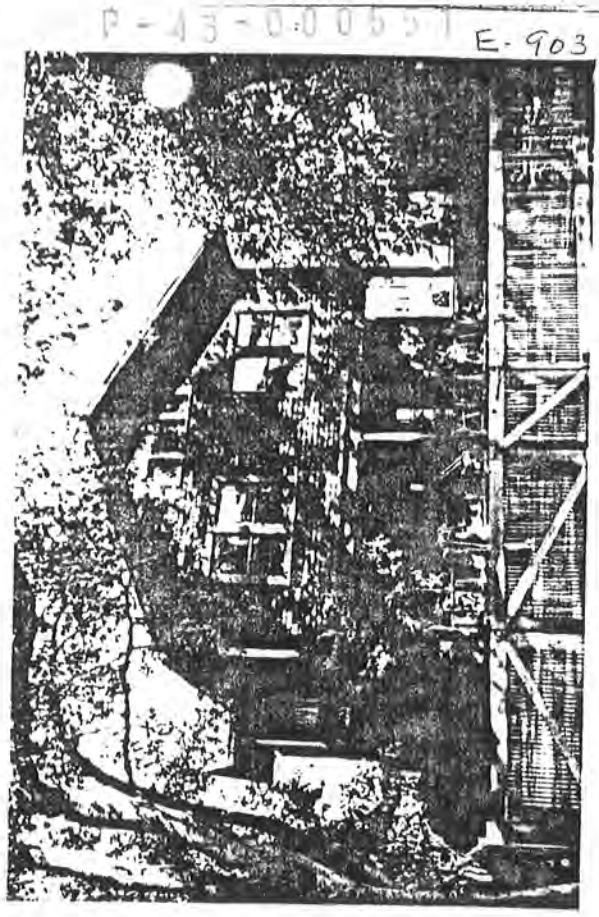


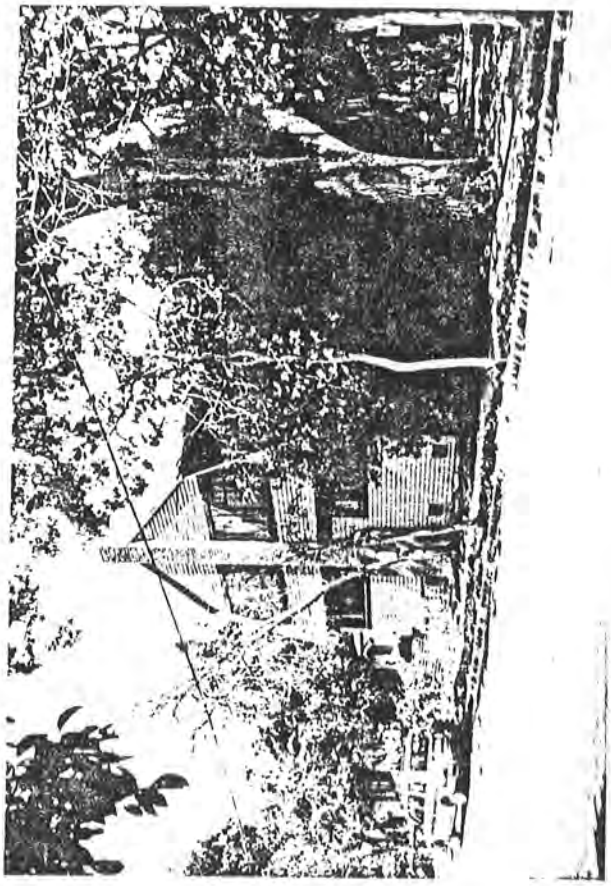


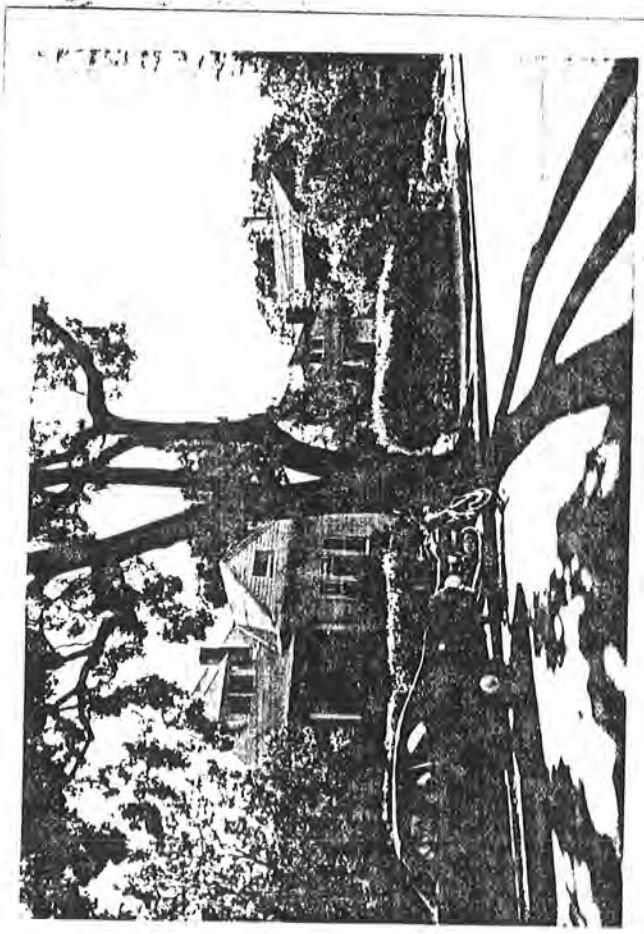
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P-43-00051 E-903 SGL





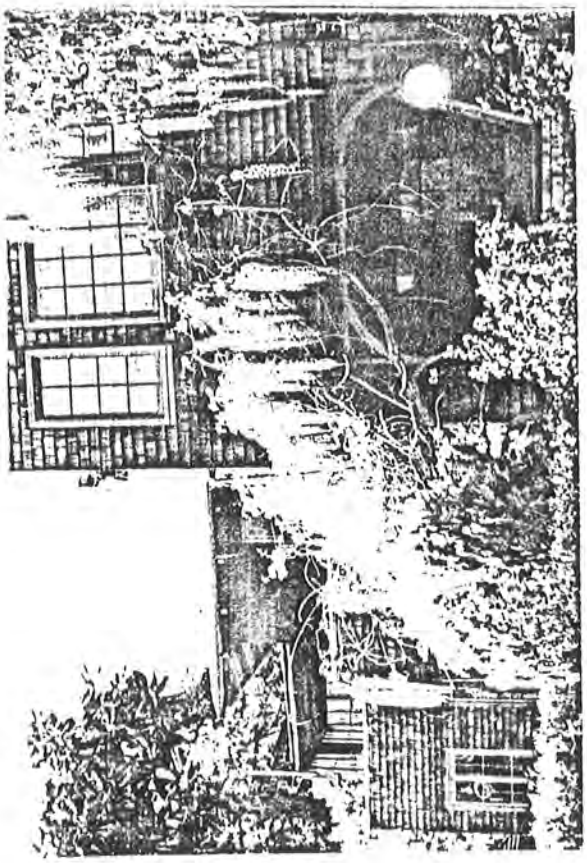


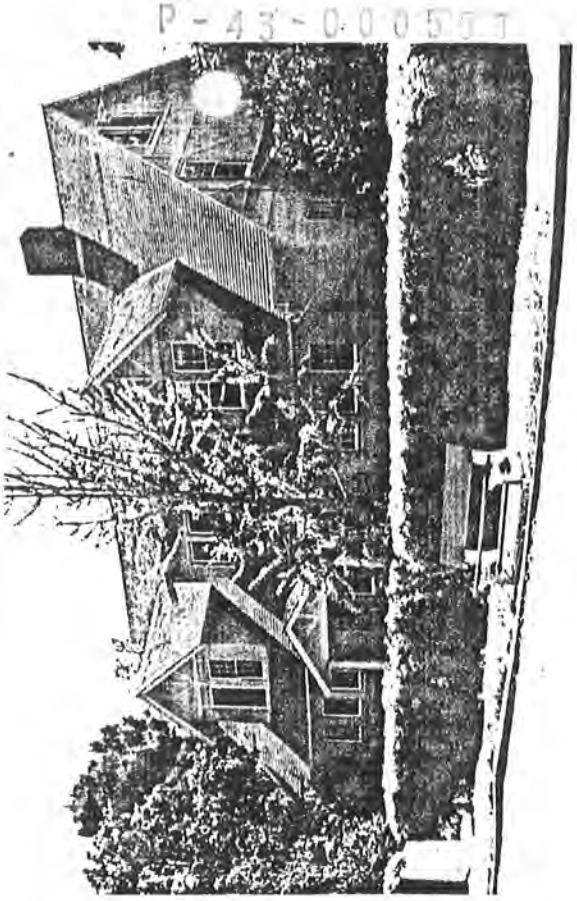


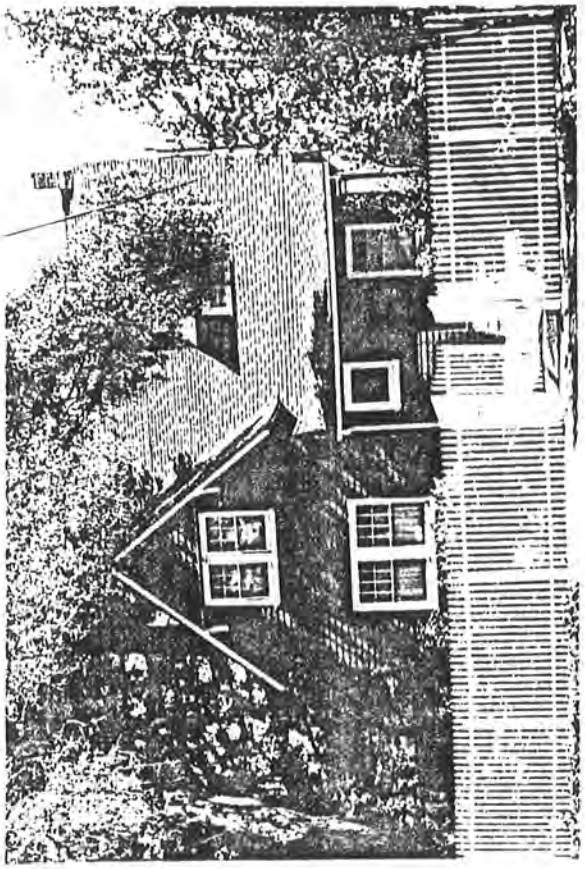
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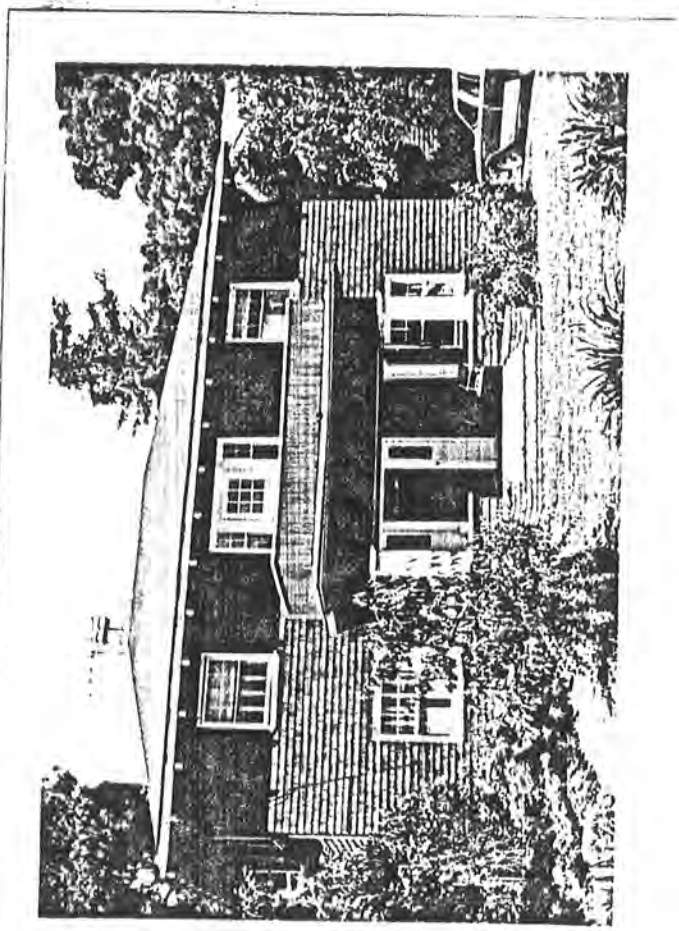
P-43-000511

E-903 sel









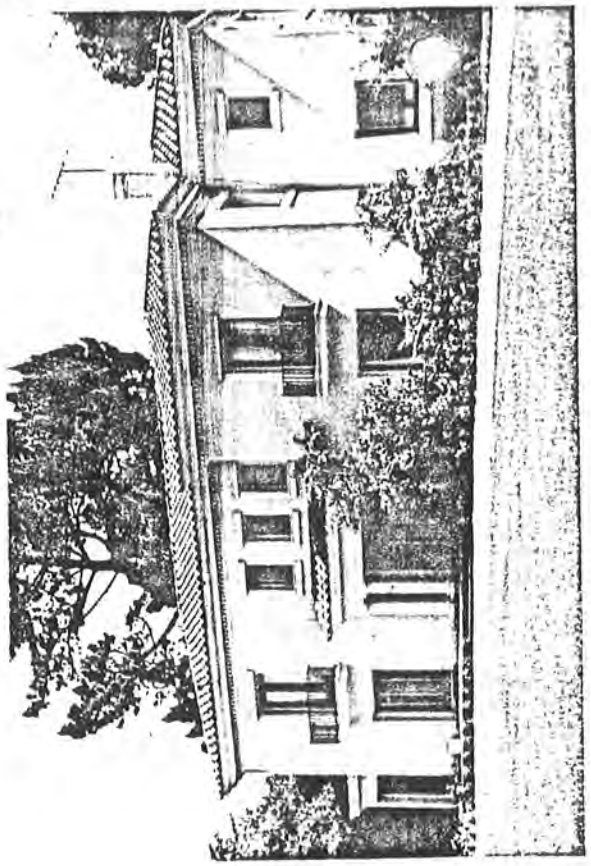
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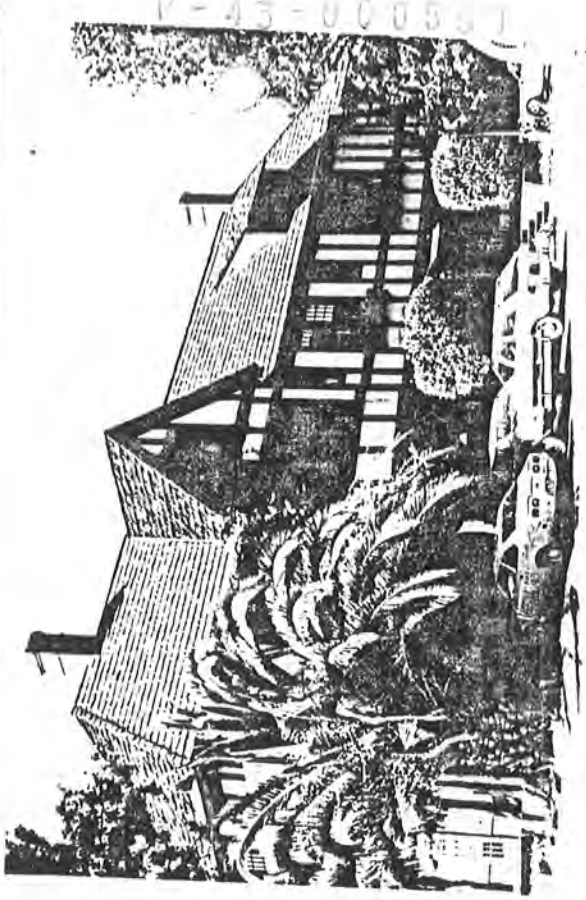
P-43-000551 E-903 SOL

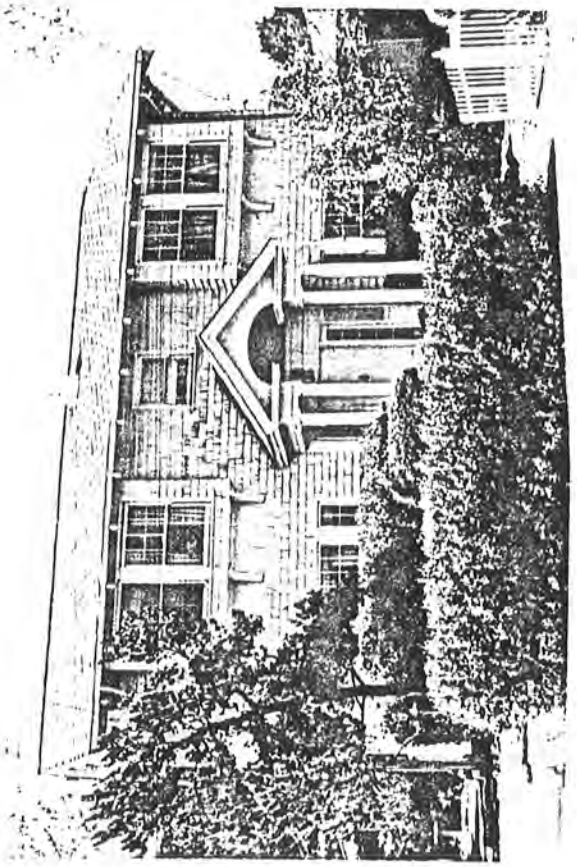
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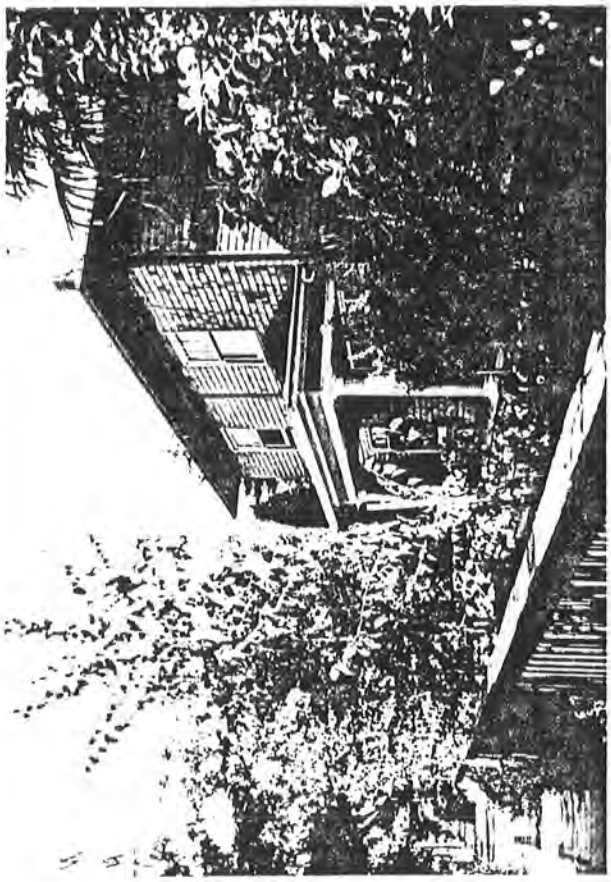
P-43-000531

E-903 SCL



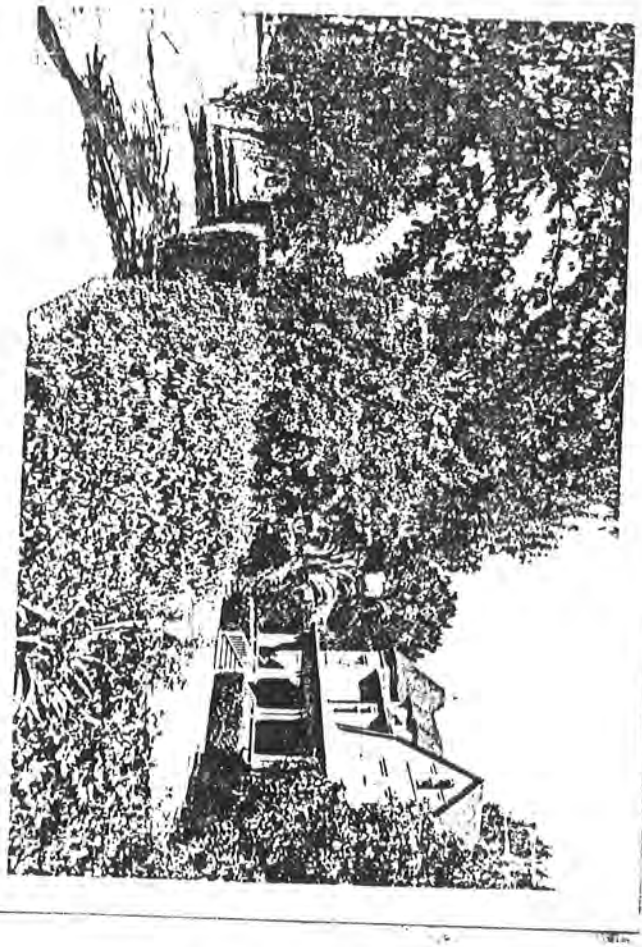


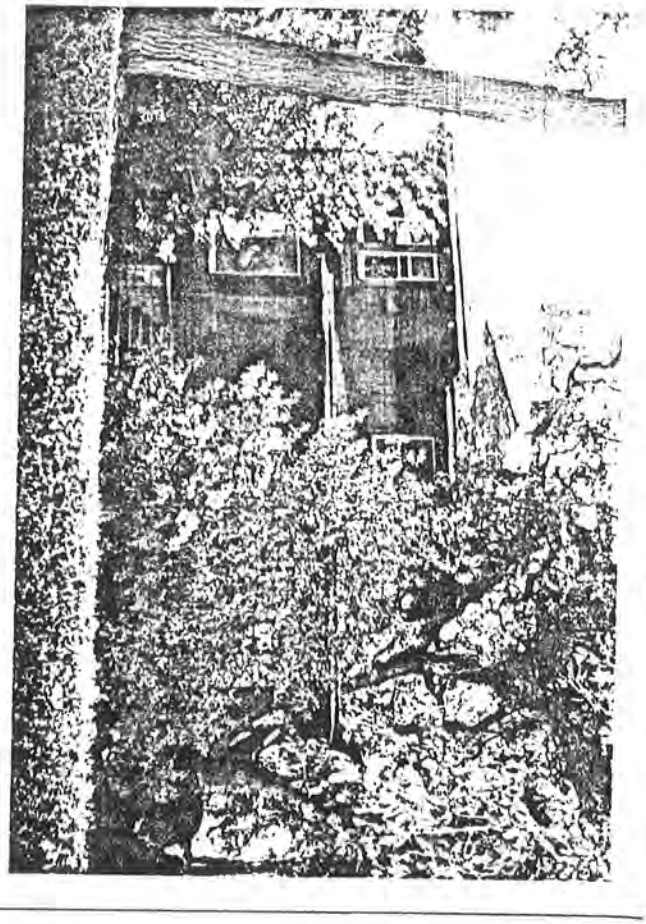


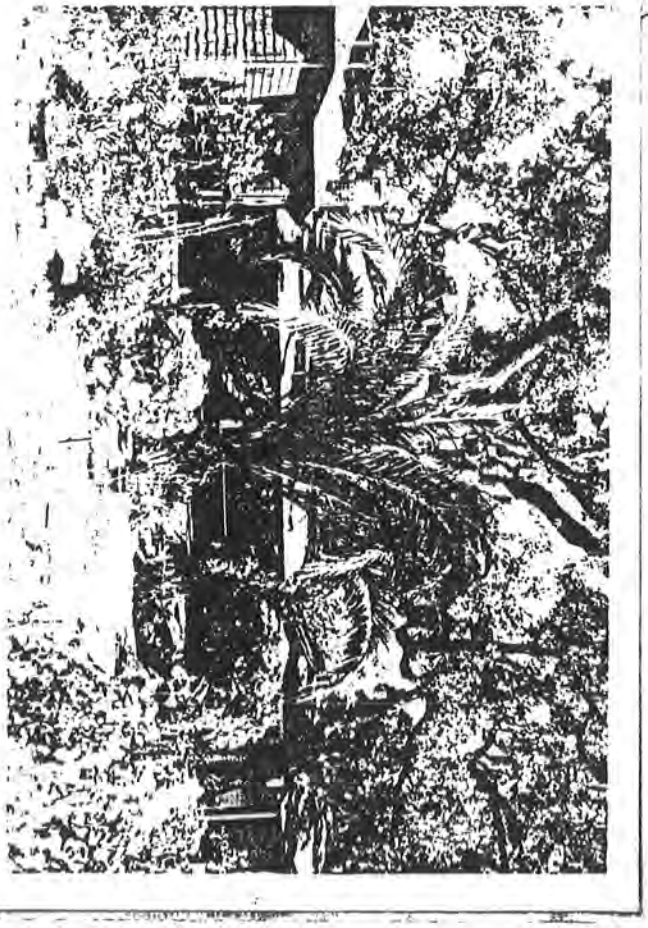


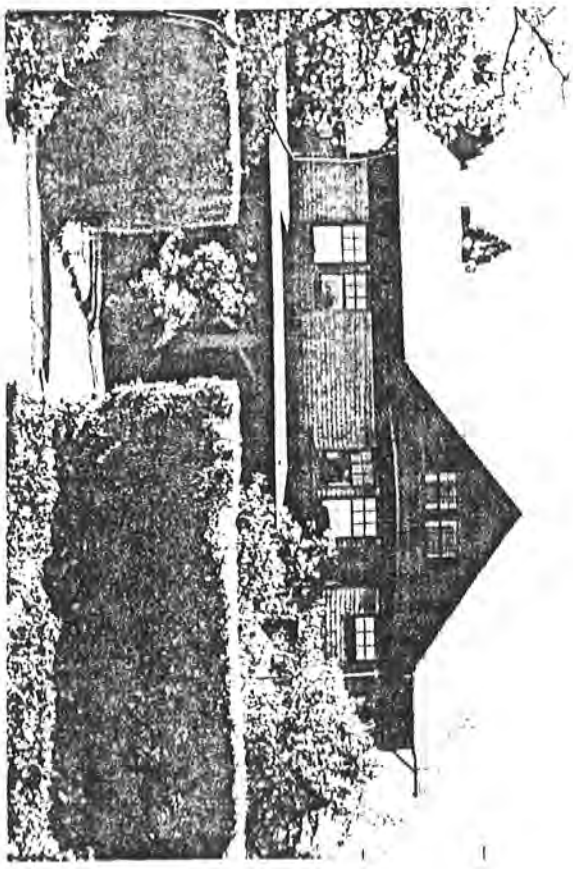
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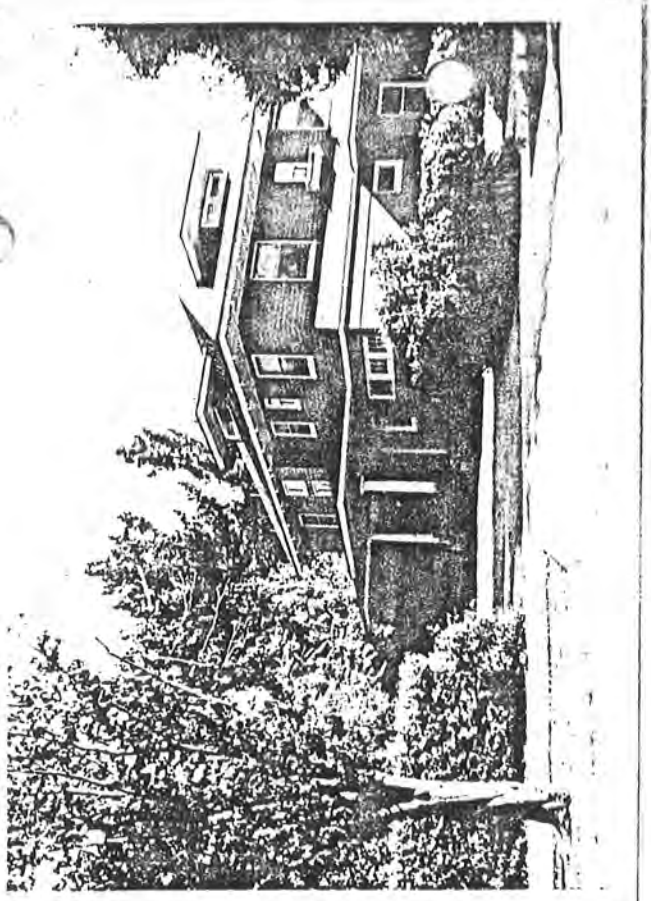


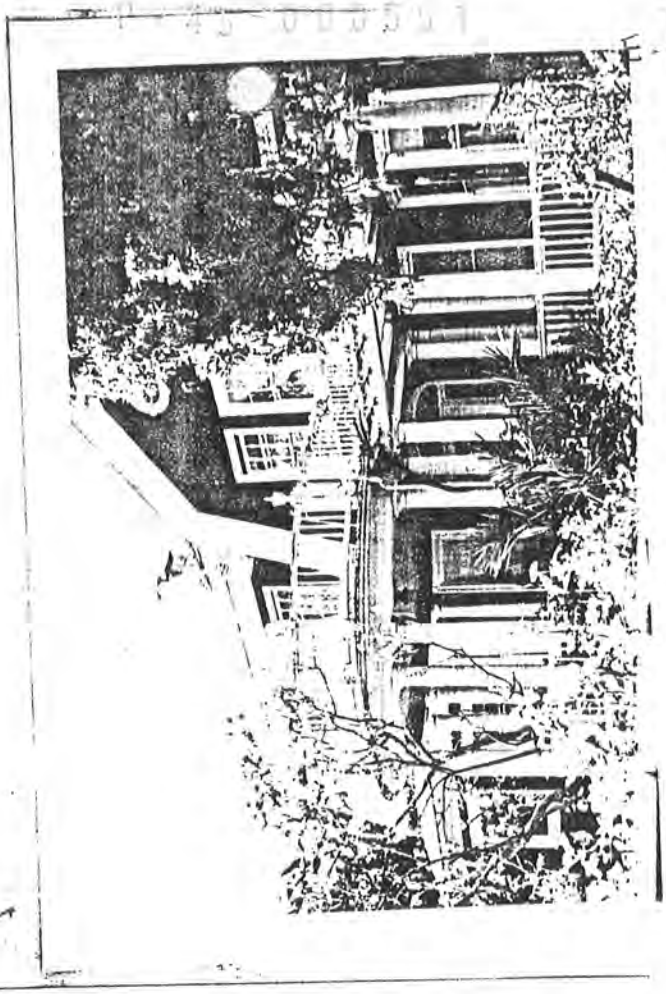


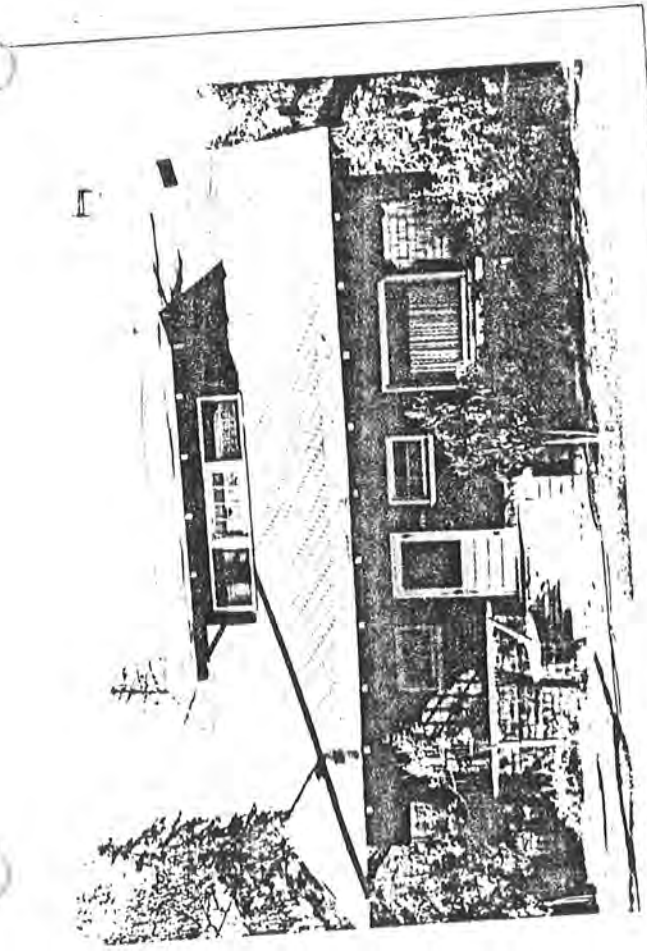


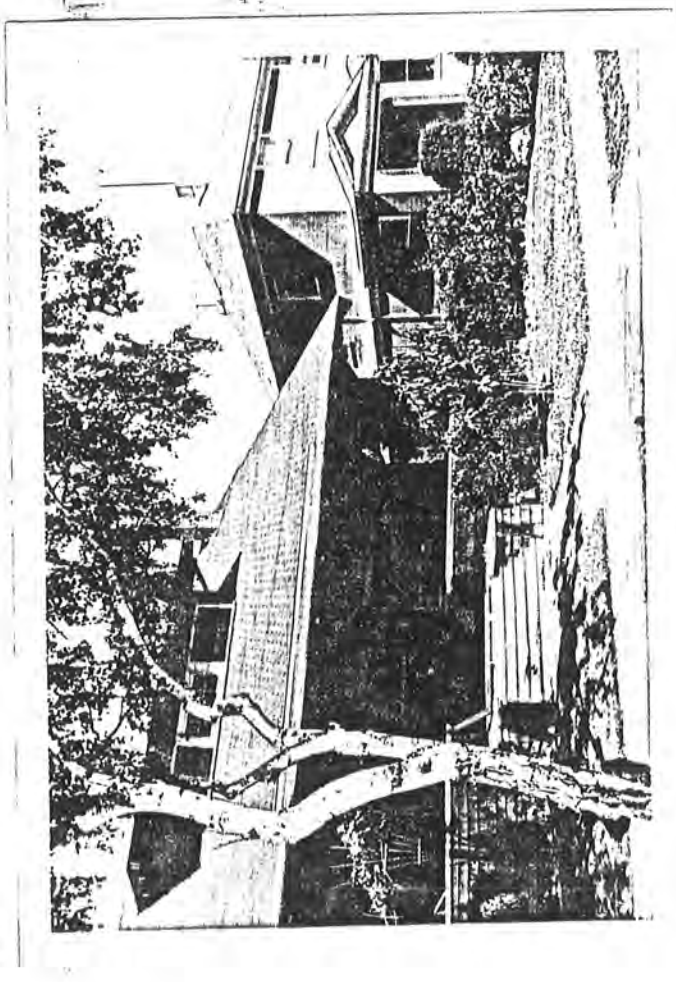


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E-903SeL

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P-43-000551

E-903 SCL

PROFESSORVILLE LIST

*These names and addresses are are also included on the Historical Survey list.

Parks Dept.
Santa Clara Co.

Palo Alto Medical Clinic, Ltd. 300 Homer Palo Alto, CA 94301	271 Addison	4
Mrs. Frances Lyke 281 Addison Palo Alto, CA 94301	281 Addison	
John & Margaret Woodworth 301 Addison Palo Alto, CA 94301	301 Addison	3
R. G. & Shirley Wilkerson 940 Bryant Palo Alto, CA 94301	940, 944 Bryant	
Vincent Wickwar 943 Bryant Palo ALto, CA 94301	943 Bryant	
Paul T. Engel 951 Bryant Palo Alto, CA 94301	951 Bryant	
No such number listed in Realdex or City Directory	~~1000 Bryant~~	
Robert & Joan Jack 1005 Bryant Palo Alto, CA 94301	1005 Bryant	2*
Josephine Elliot 1010 Bryant Palo Alto, CA 94301	1010 Bryant	3
American Friends Service Comm. Inc. 1017-23 Bryant Palo Alto, CA 94301	1017-23 Bryant	3
John & Dorothy Reed 1020 Bryant Palo Alto, CA 94301	1020 Bryant	3
Gisela Josephson Calfornia State University Fullerton, CA 92534	1027 Bryant	
Steven A. Hadland 1028 Bryant Palo Alto, CA 94301	1028 Bryant	
Richard Waldinger 1033 Bryant Palo Alto, CA 94301	1033 Bryant	3

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P-43-000551

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Jeanine L. Florance 1036 Bryant Palo Alto, CA 94301	1036 Bryant	
Gwendolyn G. Grechin 890 S. Springer Road Los Altos, Ca 94022	1044 Bryant	3
Francis M. Hall 1052 Bryant Palo Alto, CA 94301	1052 Bryant	4
Joseph & Viola Campton 1061 Bryant Palo Alto, CA 94301	1061 Bryant	2*
Zelma Teicher 3150 Middlefield Road Palo Alto, CA 94301	1100 Bryant	4
Anne Marie Koenemann 2640 Baker St. San Francisco, CA 94123	1106 Bryant	
Katherine Meyer 2040 Cowper Palo Alto, CA 94301	1116 Bryant	
Ronald E. Jorasch 14555 Bebell Road Los Altos Hills, CA 94022	1121 Bryant	4
Linda R. Brickman 1130 Bryant Palo Alto, CA 94301	1130 Bryant	3
Richard Cabrera 1135 Bryant Palo Alto, CA 94301	1135 Bryant	
Mrs. Martha Puff 1140 Bryant Palo ALto, CA 94301	1140 Bryant	
Stephen R. Postle 1143 Bryant Palo ALto, CA 94301	1143 Bryant	
Roy Smith 1148 Bryant Palo Alto, CA 94301	1148 Bryant	
Eward & Janet Estes 1160 Bryant Palo Alto, CA 94301	1160 Bryant	4

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Enid Pearson 1019 Forest Court Palo Alto, CA 94301	1200 Bryant	3
No such number listed in Realdex or City Directory	251 ~~233~~ Embarcadero	
Duncan K. Foley, et al 235 Embarcadero Road Palo Alto, CA 94301	235 Embarcadero Rd.	2*
F.W.L. Inc. P.O. Box 72 Menlo Park, CA 94025	1091 Emerson	
Julien Sherman 200 Kingsley Palo Alto, CA 94301	200 Kingsley	
John & Sybille Pflunke 221 Kingsley Palo Alto, CA 94301	221 Kingsley	2*
Mrs. Von Der Groeuen 222 Kingsley Palo Alto, CA 94301	222 Kingsley	
David D. Kennedy 252 Kingsley Palo Alto, Ca 94301	252 Kingsley	
Thos Conn 257 Kingsley Palo Alto, CA 94301	257 Kingsley	
Peter Sylvester 262 Kingsley Palo Alto, CA 94301	262 Kingsley	
John & Merle Keesling 334 Kingsley Palo Alto, CA 94301	334 Kingsley	2*
Walter & Paula Weber 356 Kingsley Palo Alto, CA 94301	356 Kingsley	1*
Mrs. Roy George 360 Kingsley Palo Alto, CA 94301	360 Kingsley	
Chester Fairclough 364 Kingsley Palo Alto, CA 94301	364 Kingsley	3

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E-903 SCL

Loren R. & Susan Sorenson 374 Kingsley Palo Alto, CA 94301	374 Kingsley	3
Gene M. Phillips 405 Kingsley Palo Alto, CA 94301	405 Kingsley	
Fowler A. Biggs 425 Kingsley Palo Alto, CA 94301	425 Kingsley	
Henry & Pauline Parker 430 Kingsley Palo ALto, CA 94301	430 Kingsley	3
Kenneth & Dorothy Last 433 Kingsley Palo Alto, CA 94301	433 Kingsley	2*
Wm. & Rosanne Saussotte 450 Kingsley Palo Alto, CA 94301	450 Kingsley	2*
First Presbyterian Church 1140 Cowper Street Palo Alto, CA 94301	457 Kingsley	2*
Mary C. Wilbur 490 Kingsley Palo Alto, CA 94301	490 Kingsley	3
David & Shulamith Rubenstein 501 Kingsley Palo Alto, CA 94301	501 Kingsley	2*
R.W.I. Inc. P.O.Box 72 Menlo Park, CA 94025	225 Lincoln	3
Sara Phillips 251 Lincoln Palo Alto, CA 94301	251 Lincoln	4
Lydia Morse 308 Lincoln Palo Alto, CA 94301	308 Lincoln	3
Jess & Esther Wilson 318 Lincoln Palo Alto, CA 94301	318 Lincoln	4

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E-903 SCL

Robert B. Textor 329 Lincoln Palo Alto, Ca 94301	329 Lincoln	
David & Frances Stevenson P.O. Box 5305 Palo Alto, CA 94301	331 Lincoln	
Richard & Chris Helm 334 Lincoln Palo Alto, CA 94301	334 Lincoln	3
Harian & Jennette Remmel 345 Lincoln Palo Alto, CA 94301	345 Lincoln	2*
Barbara M. Given 356 Lincoln Palo ALto, CA 94301	356 Lincoln	1*
James & Margaret Stone 365 LIncoln Palo ALto, CA 94301	365 Lincoln	2*
Estate of Lauretta Cecil 381 Lincoln Palo Alto, CA 94301	381 Lincoln	4
John Duryea 405 Lincoln Palo ALto, CA 94301	405 Lincoln	
Michael Pleshakov 1000 Ramona Palo ALto, Ca 94301	1000 Ramona	
Myrtle Appy 1001 Ramona Palo Alto, CA 94301	1001-07 Ramona	3
No such numbers listed in Realdex.	1004-06 Ramona	
Bryan R. Carlisle, et al 1013 Ramona Palo Alto, CA 94301	1013 Ramona	
Novia Dood P.O. Box 11007 Reno, Nevada 89510	1020 Ramona	
Lewis Morrow 1024 Ramona Palo Alto, CA 94301	1024 Ramona	4

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E-903 SCL

Jerome & Sandra Peters 1021 Ramona Palo Alto, Ca 94301	1021 Ramona	4
Richard Beckett 1029 Ramona Palo Alto, CA 94301	1029 Ramona	
~~No such number listed in Realdex or City Directory~~	1037 Ramona	
Emma N. Delaney 164 Bella Vista Dr. Hillsborough, CA 94010	1032 Ramona	
Carol J. Schwarzott 955 Everett St. Menlo Park, CA 94025	1040 Ramona	
Arthur & Jane Holland 1047 Ramona Palo Alto, Ca 94301	1047 Ramona	4
Robt. & Linda Mathews 1048 Ramona Palo Alto, CA 94301	1048 Ramona	4
John & Johanna Dunn 1057 Ramona Plao Alto, CA 94301	1057 Ramona	4
Harry Lewenstein 1102 Ramona Palo Alto, Ca 94301	1102 Ramona	
James & Jane MItchell 1103 Ramona Palo Alto, CA 94301	1103 Ramona	3
A.R. Saint Angelo 1106 Ramona Palo Alto, CA 94301	1106 Ramona	
Gerald A. Tucker 1112 Ramona Palo Alto, CA 94301	1112 Ramona	
William & Betty Wallace 1115 Ramona Palo Alto, CA 94301	1115 Ramona	2*
Ernest T. Becker 1116 Ramona Palo Alto, CA 94301	1116 Ramona	

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E-903 3cL

Wilber W. Bolten 707 Bryant #101 Palo Alto, CA 94301	1125 Ramona	
No number listed in Realdex	1132 Ramona	
Ruth Dearborn 1139 Ramona Palo Alto, Ca 94301	1139 Ramona	2*
No such number listed in REaldex	1140 Ramona	
Peter L. Greenberg 1147 Ramona Palo Alto, CA 94301	1147 Ramona	
Evelyn D. George 1155 Ramona Palo Alto, CA 94301	1155 Ramona	
No such number listed in Realdex	1166 Ramona	
Ralph Montana 1101 Waverley Palo Alto, CA 94301	1101 Waverley	
James D. & Joyce Hoey 457 W. Meadow Drive PAlo Alto, CA 94307	1110 Waverley	
George H. Abrahamson 1130 Waverley Palo Alto, CA 94301	1130 Waverley	
Lloyd & Shirley West 1135 Waverley Palo ALto, CA 94301	1135 Waverley	4
Melvin & Saisie Pratt 1136 Waverley Palo Alto, CA 94301	1136 Waverley	3
Patricia Sherwood 1146 Waverley Palo Alto, CA 94301	1146 Waverley	4
Robert & F.P. Scarlett 1155 Waverley Palo Alto, CA 94301	1155 Waverley	4

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E-903 SCL

Richard C. Gregorson 1177 Waverley Palo Alto, Ca 94301	1177 Waverley
Mrs. Bertha Bull 1220 Waverley Palo Alto, CA 94301	1220 Waverley
David Dorosin 1221 Waverley Palo Alto, CA 94301	1221 Waverley
Wm. R. Yeaman 1245 Waverley Palo Alto, CA 94301	1245 Waverley
Perrin L. French 1240 Waverley Palo Alto, CA 94301	1240 Waverley
Christopher Arnold 1248 Waverley Palo Alto, CA 94301	1248 Waverley

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E-903 SCL

Addition to Professorville list 7/26/79

Mathias M Hennenberg 319 Addison Palo Alto, CA 94301	319 Addison
George Varian 327 Addison Palo Alto, CA 94301	327 Addison
Vera Fedoruv 148 Dermott Lane Somerset, N. J. 08873	1101 Emerson
David & Michell Rubin, et al 1102 Emerson Palo Alto, CA 94301	1102 Emerson
Samuel W. Stewart 1111 Emerson Palo Alto, CA 94301	1111 Emerson
Mrs. Jule Gerbode 1118 Emerson Palo Alto, CA 94301	1118 Emerson
Marshall Deitsch 1121 Emerson Palo Alto, CA 94301	1121 Emerson
James T. Watkins 1128 Emerson Palo Alto, CA 94301	1128 Emerson
Hugh D. Smith 1129 Emerson Palo Alto, CA 94301	1129 Emerson
Glen O. Toney 1133 Emerson Palo Alto, CA 94301	1133 Emerson
Kenneth M. Glazer, Jr. 1134 Emerson Palo Alto, CA 94301	1134 Emerson
Guy Crosby 1135 Emerson Palo Alto, CA 94301	1135 Emerson
Wm. E. Hoffman 820 American Street San Carlos, CA 94070	1176 Emerson

City of Palo Alto
Professorville Historic District

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UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

NATIONAL REGISTER OF HISTORIC PLACES INVENTORY -- NOMINATION FORM

FOR NPS USE ONLY
RECEIVED
DATE ENTERED

SEE INSTRUCTIONS IN *HOW TO COMPLETE NATIONAL REGISTER FORMS*
TYPE ALL ENTRIES -- COMPLETE APPLICABLE SECTIONS

1 NAME

HISTORIC
Professorville Historic District

AND/OR COMMON
same

2 LOCATION

STREET & NUMBER The District comprises an area roughly bounded by Addison, Cowper, Embarcadero, Emerson and Ramona Streets. (Please see map and list of included addresses) NOT FOR PUBLICATION

CITY, TOWN
Palo Alto ___ VICINITY OF

CONGRESSIONAL DISTRICT
12

STATE
California

CODE
06

COUNTY
Santa Clara

CODE
085

3 CLASSIFICATION

CATEGORY	OWNERSHIP	STATUS	PRESENT USE	
X DISTRICT	___ PUBLIC	X OCCUPIED	___ AGRICULTURE	___ MUSEUM
___ BUILDING(S)	X PRIVATE	___ UNOCCUPIED	___ COMMERCIAL	___ PARK
___ STRUCTURE	___ BOTH	___ WORK IN PROGRESS	___ EDUCATIONAL	X PRIVATE RESIDENCE
___ SITE	**PUBLIC ACQUISITION**	**ACCESSIBLE**	___ ENTERTAINMENT	___ RELIGIOUS
___ OBJECT	___ IN PROCESS	___ YES: RESTRICTED	___ GOVERNMENT	___ SCIENTIFIC
	___ BEING CONSIDERED	X YES: UNRESTRICTED	___ INDUSTRIAL	___ TRANSPORTATION
		___ NO	___ MILITARY	___ OTHER:

4 OWNER OF PROPERTY

NAME
Multiple ownership

STREET & NUMBER

CITY, TOWN ___ VICINITY OF

STATE

5 LOCATION OF LEGAL DESCRIPTION

COURTHOUSE, REGISTRY OF DEEDS, ETC.
Santa Clara County Clerk's Office

STREET & NUMBER
191 North First Street

CITY, TOWN
San Jose

STATE
California

6 REPRESENTATION IN EXISTING SURVEYS

TITLE
Point of Historical Interest No. SCI-001

DATE
1975 ___ FEDERAL X STATE ___ COUNTY ___ LOCAL

DEPOSITORY FOR SURVEY RECORDS
Office of Historic Preservation

CITY, TOWN
Sacramento

STATE
California

ESCRIPTION

CONDITION		CHECK ONE	CHECK ONE
X EXCELLENT	DETERIORATED	X UNALTERED	X ORIGINAL SITE
GOOD	RUINS	X ALTERED	X MOVED DATE_____
FAIR	UNEXPOSED		

DESCRIBE THE PRESENT AND ORIGINAL (IF KNOWN) PHYSICAL APPEARANCE

The Professorville Historic District comprises roughly the area bounded by Ramona, Addison, Embarcadero, and Waverley Streets.

The area is characterized by abundant and mature landscaping, and residential structures that range in style from Colonial Revival to Craftsman. Some examples of the later Spanish Colonial Revival and Period Revival modes also occur and while stylistically different, become related to the earlier buildings through their residential scale, design quality, and ample, mature landscaping. Construction dates of structures within the proposed district essentially range from the late 1890's to the mid 1920's. Houses range from one to two and a half stories in height with differences in size often diminished or obscured by plant materials.

The District is composed of 113 structures, 6 of which are considered to be intrusions. The district is shaped irregularly, with a cut-out in the center to exclude several buildings of more recent date and unsympathetic architectural style. Numerous other structures of almost like-character and quality surround the proposed district but are excluded due to their lesser overall building quality, greater degree of alterations, or intrusions that interrupt their inclusion as structures contiguous to the District.

5101-85-1 to 113

Buildings and sites contributing to the character of the district:

1. 271-3 Addison: Vernacular cottage, c. 1890, one and a half story, shiplap, minimal bargeboard decoration, some alterations.

2. 281 Addison: Colonial Revival/Classical Revival, c. 1900, two stories, asbestos siding, porch with Tuscan columns and dentil course.

3. 301 Addison: Colonial Revival, c. 1904, one and a half story, shingle, parapetted porch with Tuscan columns, glassed in porch.

4. 940 Bryant: Colonial Revival, c. 1900, one story, clapboard, hipped dormered roof and slanted bay windows, unusual corner at porch.

5. 943 Bryant: Colonial Revival, c. 1900, two stories, shingle and shiplap, porch supported by columns, hip roof.

6. 944 Bryant: Craftsman, c. 1900, one story, shingle, hip roof with skylight facing East, casement windows.

7. 951 Bryant: Colonial Revival/Shingle, c. 1900, two stories, shingle, palladian windows, tree trunk section columns support overhang of house that forms porch.

8. Frank Angell House, 1005 Bryant: Colonial Revival with Shingle style characteristics, 1892, two and a half stories, shingle, gambrel roof, triple columns support building overhang that forms porch, unusual patterned brick work.

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9. 1010 Bryant: Colonial Revival, c. 1907, one and a half stories, shingled steeply gabled roof with long street-facing dormer, entrance gate with posts and finials.

10. 1017-23 Bryant: Colonial Revival/Shingle, c. 1893, two stories, shingle, twin gambrel-roofed dormers framing rectangular dormer, columns support overhang of building creating porch.

11. 1020 Bryant: Colonial Revival, c. 1907, two stories, shingle, symmetrical format with square second floor projections, flared at the belt course.

12. 1027 Bryant: Colonial Revival/Queen Anne/Craftsman, c. 1898, two stories, shiplap, shingle, decorative arches in porch.

13. 1028 Bryant: Colonial Revival, c. 1900, one story, shiplap, hip roof, slanted bay, Tuscan porch columns.

14. 1033 Bryant: Colonial Revival, 1899, two stories, shingle, fluted pilasters with capitals, gambrel roof, some alterations.

15. 1036 Bryant: Colonial Revival, c. 1915, one story, stucco, gabled roof, slightly arched porch with doubled columns, material and style differ from neighborhood standard.

16. Varian House, 1044 Bryant: Craftsman, 1902, one and a half story, shingle, hip roof with dormer, cantilevered square bay, house is important historically: the Varian brothers invented the Klystron tube.

17. 1052 Bryant: Craftsman/Colonial Revival, c. 1910, one story, narrow clapboard, large veranda on two sides of house, shallow hip roof with carved rafter ends.

18. Sun-bonnet House, 1061 Bryant: Colonial Revival, 1899, two stories, shingle, designed by Bernard Maybeck, gambrel roof.

19. 1100 Bryant: Craftsman, c. 1904, two story with one story wing to street, shingle, very thin roof overhang and eave members, slanted bay by entrance.

20. 1106 Bryant: Colonial Revival, c. 1910, one story, asbestos siding, hip roof with dormer, Tuscan porch columns.

21. 1116 Bryant: Colonial Revival, c. 1900, one and a half story, clapboard and shingles, hipped and gabled roof forms with flared eaves, dormer with geometric mullion pattern.

22. Castilleja Hall, later Nardyne Apartments, 1121 Bryant: Colonial Revival/Classical Revival, c. 1892, two stories, shingle, rectangular block format primary details are two entry columns, was once used as a school.

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23. 1130 Bryant: Craftsman Chalet, c. 1915, two story, clapboard, broad street facing gable, cantilevered balcony with jigsaw balustrade, elaborate window facings.

24. 1135 Bryant: Craftsman, c. 1910, one story, stucco with shingled lower half of structure.

25. 1140 Bryant: Colonial Revival, c. 1905, one story, shingle, hip roof with soffited eave and arched recessed entry, bland but not unsupportive component of neighborhood.

26. 1143 Bryant: Prairie, c. 1915, two story, stucco, the heavily hooded entry detail is unusual in this style.

27. 1148 Bryant: Craftsman/Colonial Revival, c. 1905, one and a half story, shingle, symmetrical, hip roofed building with tripartite ground floor windows.

28. 1160 Bryant: Colonial Revival, c. 1914, two and a half story, wide clapboard, gabled roof, ribbon-banded casement windows, integral auto and pedestrian gates at north side.

29. 1200 Bryant: Colonial Revival, 1904, one and a half story, stucco, symmetrical half timber design, with large gabled dormers.

30. 235 Embarcadero: Craftsman, c. 1907, three story, shingle, shallow hip roof, curved porch brackets, casement windows, very large wisteria vines, aviary.

31. 251 Embarcadero: Colonial Revival, c. 1900, two story, shingle.

32. 200 Kingsley: Craftsman, c. 1910, one story, shingle, massive hip roof, wrap-around verandah, French doors, double-hung windows with x-shaped muntin pattern.

33. Fowler Residence, 221 Kingsley: Colonial Revival with Craftsman influences, 1900, shingle, widows walk, large enclosed garden.

34. 222 Kingsley, Colonial Revival, c. 1905, one and a half story, shingle, steeply gabled roof with tiny shed dormer, sawtooth shingle pattern, Tuscan columns at porch.

35. 252 Kingsley, Craftsman, c. 1910, two story, shingle, gabled roof, pedimented porch with square posts, side lights at entry, leaded window.

36. 257 Kingsley: Craftsman, c. 1905, one and a half stories, shingle, two kinds of shingles, - smaller on upper portion, larger size on lower portion.

37. 262 Kingsley: Craftsman, c. 1910, two story, shingle and clapboard, surface texture differentiation between first and second floor, banded leaded diamond-pane casement windows on second floor.

38. 334 Kingsley: Classical Revival, 1903, two story, narrow clapboard, formal, symmetrical house with slanted bays, turned ball finials, balustrades above porch, bay.

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39. 356 Kingsley: Vernacular, c. 1893, two story, shiplap, gabled roof with soffited eave, fishscale shingles in gable ends, entry with side- and fan lights, some alterations to fenestration.

40. 360 Kingsley: Colonial Revival variant, c. 1900, two story, clapboard, gabled roof with wide overhang, second floor overhang supported by square posts, leaded casement doors facing street.

41. 364 Kingsley: Craftsman, c. 1899, one story, shingle, shallow hip roof, informal composition, part of complex with 374.

42. 374 Kingsley: Craftsman, c. 1905, one story, shingle, shallow hip roof, informal composition, part of complex with 364.

43. 405 Kingsley: Spanish Colonial Revival, one story, stucco and tile, patio entry, varied roof levels.

44. 430 Kingsley: Colonial Revival, 1902, two story, shingle, hip roof with soffited eaves, entry at side, flare at second floor level.

45. Hutchinson House, 433 Kingsley: Colonial Revival, c. 1899, two story, shingle and shiplap, gambrel roof, circular entrance canopy supported by columns.

46. 450 Kingsley: Colonial Revival/Shingle style, c. 1902, two and a half story, shiplap and shingle, gambrel roof with blind arch in end gable, palladian window, wrap-around verandah with paired columns.

47. 457 Kingsley: Tudor, 1914, half-timbered, with stucco, two and a half story, interesting English half timber work.

48. 490 Kingsley: Spanish Colonial Revival, c. 1915, two story, stucco, hip tile toof, dentils and classical moldings at eave, porch with classical revival detail.

49. Fleugel Residence, 501 Kingsley: Colonial Revival, 1897, two and a half story, clapboard, gambrel roof, semicircular porch, later addition to each end.

50. 225 Lincoln: Craftsman, c. 1905, one story, vertical board and batten, additive composition with irregular, rambling form, extensively planted grounds.

51. 251 Lincoln: Colonial Revival/Craftsman, c. 1908, two story, shingle, alterations to entry and addition to rear.

52. 308 Lincoln: Colonial Revival, 1900, two story, shingle, hip roof with dormer, Tuscan columns supporting overhanging porch.

53. 318 Lincoln: Colonial Revival, 1901, one and a half story, shingle, wide slanted bay window, double gable dormer, squatly proportioned Tuscan columns at porch.

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54. 331 Lincoln: Colonial Revival, c. 1900, two and a half story, shingle, porch altered.

55. 334 Lincoln: Colonial Revival, 1896, two and a half story, shingle, and shiplap, bay window in second story, large first floor porch with Tuscan columns.

56. 345 Lincoln: Colonial Revival, 1893, two story, clapboard and shingle, columned capitals support incised entrance opening and balconied gable above, gambrel roof, water tower at rear.

57. 356 Lincoln: Craftsman, 1896, one story, shingle, sawtooth course at heading level, series of linked pyramidally roofed pavillions, pedimented porch, exceptional planting.

58. 365 Lincoln: Craftsman/Shingle, 1896, two and a half story, shingles, circular balcony, porch detail.

59. 381 Lincoln, Craftsman, 1894, two story, shingled, L-shaped porch supported by posts, hedge forms entrance arch.

60. 405 Lincoln: Spanish Colonial Revival, c. 1925, one story, stucco, Spanish tile roof, arched entry, some porticoes with flat roof.

61. 1000 Ramona: Craftsman, c. 1910, one story, shingle, carved beam ends, porch and fenestration altered.

62. 1001 Ramona: Craftsman, 1908, two story, shingle, wide porch with arched paned window enclosing the end.

63. 1004 and 1006 Ramona, vernacular, c. 1910, two story, clapboard, no ornamentation, structure is hidden doesn't contribute because unseen.

64. 1020 Ramona: Craftsman, c. 1915, one and a half story, clapboard, upper story altered.

65. 1021 Ramona: Colonial Revival, c. 1905, two story, shingle and clapboard, same plan as 1029, end of porch enclosed with windows, hip roof.

66. 1024 Ramona: Craftsman, c. 1908, one and a half story, shingle, gable roof with dormer.

67. 1029 Ramona: Colonial Revival, c. 1910, two story, shingle and clapboard, columns support porch that extends across front, square/cubic format, end of porch windowed in, same plan as 1021, hip roof.

68. 1037 Ramona: Colonial Revival, 1908, one story, clapboard, decorative frieze in porch column and elegant balusters are porch details and primary ornamentation, hip roof.

69. 1040 Ramona: Craftsman, c. 1915, two story, shingle, belt course at second floor sill level, wide overhangs.

70. 1047 Ramona: Classical Revival, c. 1905, two story, clapboard, hip roof with dormer, symmetrical format, Tuscan columns at porch.

71. 1048 Ramona: Colonial Revival, c. 1903, one and a half story, clapboard, porch with Tuscan columns, miniature balcony at second floor, decorative gable vent.

72. 1057 Ramona: Craftsman/Colonial Revival, c. 1905, two story, shingle, tripartite window in gable, Tuscan columns at porch, porch partially enclosed.

73. 1102 Ramona: Colonial Revival variant, c. 1910, two story, shingle and clapboard, hip roof with dormer, later addition at entry.

74. 1103 Ramona: Colonial Revival, c. 1905, one and a half story, shingle, dentils, long dormer across front, porch altered.

75. 1106 Ramona: Craftsman, c. 1915, one and a half story, shingle, recessed entry, shed-roofed square bays, some alterations at entrance.

76. 1112 Ramona: Craftsman, c. 1910, one story, shingle, recessed entry, hip roof with dormer.

77. 1115 Ramona: Colonial Revival, 1903, two and a half story, shingle, gambrel roof with ridge parallel to street, two tiers of running dormers.

78. 1116 Ramona: Craftsman/Colonial Revival, c. 1910, two story, shingle and clapboard, square bay, recessed entry porch.

79. 1125 Ramona: Colonial Revival, c. 1900, one and a half story, shingle, gable street front with gambrel side elevations.

80. 1132,1140,1166 Ramona: (one building) Craftsman, 1910, one story, shingle, hip roof, originally an outbuilding to 221 Kingsley.

81. 1139 Ramona: Colonial Revival, c. 1905, one and a half story, shingle, gambrel roof, shallow bay.

82. 1147 Ramona: Craftsman, c. 1910, one and a half story, shingle, side entrance, hip roof with jerkin head dormers.

83. 1155 Ramona: Vernacular/Craftsman, c. 1910, one and a half story, shingle.

84. 1101 Waverley: Colonial Revival/Period Revival, 1925, two story, stucco, columned entrance is primary detail.

85. 1110 Waverley: Craftsman, c. 1910, two story, shingle, shallow hip roof with wide overhangs.

86. 1135 Waverley: Colonial Revival, c. 1925, two story, shingles, brick fireplace unusual, formal gabled entry with columns.

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87. 1136 Waverley: Colonial Revival, c. 1893, two and a half story, calpboard, steep gambrel roof, large verandah with thin columns.

88. 1146 Waverley: Queen Anne, 1893, two story, clapboard and shingle, half timbered gable, chamfered entry corner.

89. 1155 Waverley: Spanish Colonial Revival, c. 1935, one and two story composition, stucco, arched entry and windows.

90. 1177 Waverley: Mediterranean Revival, 1935, stucco and tile, two story, arched entry.

91. 1220 Waverley: Craftsman, c. 1900, one story, shingle, shallow hip roof, casement windows, lattice work at porches.

92. 1221 Waverley: altered Colonial Revival, c. 1910, two story, stucco and shingle, grounds important as an anchor to district corner.

93. 1240 Waverley: Classical Revival, c. 1910, two story, clapboard, soffited eave with brackets, overscaled porch pediment.

94. 1248 Waverley: Colonial Revival, c. 1910, two story, shingle, simplified Classical Revival porch.

95. 1101 Emerson: Colonial Revival, c. 1912, one and a half story, shingle.

96. 1102 Emerson: Spanish Colonial Revival, c. 1925, one story, stucco.

97. 1111 Emerson: Colonial Revival, c. 1910, one and a half story, shiplap.

98. 1118 Emerson: Colonial Revival/Craftsman/Prairie, c. 1920, two story, shingle.

99. 1121 Emerson: Colonial Revival, c. 1915, two story, shingle.

100. 1128 Emerson: English Cottage, c. 1915-18, one and a half story, stucco.

101. 1129 Emerson: Craftsman, c. 1910-15, one and a half story, shingle.

102. 1134 Emerson: Prairie/Craftsman, c. 1915, two story, shingle.

103. 1176 Emerson: Spanish Colonial Revival, c. 1930, two story, stucco.

104. 319 Addison: Craftsman, c. 1910 with recent second story addition and alterations to entry and second story, shingle.

105. 327 Addison: Craftsman/Colonial Revival, c. 1905, one and one half stories, shingle.

Historical instrusions but environmentally compatible structures

106. 1133 Emerson: Contemporary Shingle, c. 1977, two story, shingle

107. 1135 Emerson: Contemporary Shingle, c. 1977, two story, shingle

Nonconforming intrus(is detracting from the int rity of the district;

108. ✓ 303 Kingsley: California Ranch, c. 1963, one story, stucco box.

109. ✓ 425 Kingsley: Contemporary, 1975, one and two story in part, shingle, placement too forward for neighborhood.

110. ✓ 329 Lincoln: originally Colonial Revival, date indeterminable due to alterations, two story, wood siding, possible carriage house.

111. ✓ 1013 Ramona: stylistic affinities obscured by alterations, c. 1905, two story, stucco, alterations on surface and porch, intrusion in material, angled bay and pedimented entry altered.

112. ✓ 1030 Ramona: California Ranch, c. 1950, one story, vertical board and batten, intrusion in style, date, and siting.

113. 1130 Waverley: Rustic bungalow, c. 1950, one story, vertical board and batten, intrusion in style, quality of design and use of materials

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NIFICANCE

ERIOD — AREAS OF SIGNIFICANCE -- CHECK AND JUSTIFY BELOW

ERIOD	AREAS OF SIGNIFICANCE -- CHECK AND JUSTIFY BELOW			
EHISTORIC	_ARCHEOLOGY-PREHISTORIC	_COMMUNITY PLANNING	_LANDSCAPE ARCHITECTURE	_RELIGION
0-1499	_ARCHEOLOGY-HISTORIC	_CONSERVATION	_LAW	_SCIENCE
0-1599	_AGRICULTURE	_ECONOMICS	_LITERATURE	_SCULPTURE
00-1699	_ARCHITECTURE	_EDUCATION	_MILITARY	_SOCIAL/HUMANITARIAN
00-1799	_ART	_ENGINEERING	_MUSIC	_THEATER
00-1899	_COMMERCE	_EXPLORATION/SETTLEMENT	_PHILOSOPHY	_TRANSPORTATION
00-	_COMMUNICATIONS	_INDUSTRY	_POLITICS/GOVERNMENT	_OTHER (SPECIFY)
		_INVENTION		

CIFIC DATES c.1895-1979 BUILDER/ARCHITECT varied

TEMENT OF SIGNIFICANCE

The Professorville Historic District is significent due to both its historic associations and its architectural/environmental vaulues. The district was one of the earliest residential areas in Palo Alto, housing a large proportion of the first professors to instruct at the fledgling University. As such its residents helped to shape note only the standards, directions, and intellectual atmosphere of the University, but those of the community as well.

The primary values of the district lie, however, in its visual contributions due to the consistent character and high quality of the buildings and streetscapes that comprise it. Landscaping qualities contribute strongly to the character and ambience of the area, as do the Colonial Revival and Craftsman shingle covered structures which largely constitute the architectural makeup of the district.

The city of Palo Alto was created subsequent to the founding of Stanford University, essentially to serve as a university town. Construction of the University began on May 14, 1887, on land that had been the Leland Stanford farm. Early founders desired the presence of a town near the University but the two existing nearby towne of Mayfield and Menlo Park did not seem suitable to them. The founders wanted the town that would provide the University with housing and community services to prohibit the sale of alcoholic beverages. Since neither of the two existing town met this requirement or seemed willing to give up their saloon businesses, Leland Stanford, in 1887, acquired 740 acres to create a new townsite.[1] The City of Palo Alto was founded with the attitude of wholesomeness, and when liquor finally came to the town through annexed areas, there were many who resisted, asserting that a town without alcohol attracted families seeking a superior environment for their children.

Because of the specifics of Palo alto's origins, its beginning was abrupt rather than evolutionary. It sprang fullgrown, or almost so, as an adjunct to Stanford University, and the presence of Stanford influenced the layout and image of the new city very strongly. Many of Stanford's early faculty shared their expertise with the forming city and many innovative civic functions such as municipal ownership of utilities and subsidized health care can be credited to their input.

Professorville, as its name implies, was to be the home of the Stanford University faculty. In 1889, Timothy Hopkins subdivided the land for Leland Stanford and opened it up for development. Several of Stanford's first faculty members built houses in this new section of town, as it had easy access to the campus by way of Embarcadero Street.

The University recruited many of its faculty from the East; those people naturally imported the current tastes and fashions of their origins. Thus there is a distinctive visual character to this area of the city which relates it as strongly to Eastern and Midwestern cities as it does to California. This no doubt accounts for the American Colonial Revival influence, popular at the time in California, but not to the degree indicated by the frequency of the style in Palo Alto. Landscaping in the area too, tends to be traditional rather than exotic, as if ideas of garden design had been formed and set without reference to the special qualities of the California landscape.

The buildings which give the Professorville area its strongest image are the brown-shingled houses whose stylistic allegiance ranges from the Colonial Revival to the Craftsman. The ample yards and mature plantings are as important a part of the area as the buildings themselves; sometimes, indeed, the vegetation overpowers the buildings. There are, in the area, a number of buildings designed by prominent architects of the period.

The Sun-Bonnet House, also referred to as the "Kellogg House" at 1061 Bryant, is a key structure within the district. The corner siting of this large structure adds to its prominence within the District. Its distinctive design is the work of the nationally known Bay Area architect Bernard Maybeck. While its materials, style, and scale express the themes of the surrounding neighborhood, the structure's outstanding design at the hand of a master architect make it a key structure within the city as well as the District.

The Castilleja Hall at 1121 Bryant was formerly one of the first girl's preparatory schools in the area. Originally located at 319 Kingsley, the building was moved to its present location in the early 1900's, where classes were conducted until the present Castilleja School complex at 1310 Bryant was built about 1910. It is an unusual building form for a residential district.

The large Colonial Revival structure at 221 Kingsley, known as the Fowler Residence, has a strong Craftsman/oriental character to its design. It was the home of the widow of Joshua Fowler, a Spanish American War Officer, it served as the home of her son and his bride, the daughter of Stanford University's second president. True to the Professorville tradition, it became the home of Professor Karl Brandt, an agricultural economist, in 1938. With its large grounds and imposing size and design, the structure was known as the "mansion" of the neighborhood. Historically and architecturally it is a key District structure.

The structure at 450 Kingsley is a very sophisticated interpretation of the Queen Anne mode, designed by Frank McMurray of Chicago. Its considerable size and clarity of form lend it prominence as does its amply landscaped, generaously proportioned physical setting. It gains historic importance as the house of one of the original fifteen Stanford professors, aProfessor Sandford in the Physics department.

The large Tudor Revival house with its half timber design at 457 Kingsley is a particularly fine rendition of the style. Its imposing size is rather shielded from the streetscape due to tall hedges at the sidewalk. However, its woodsy Medieval character is most compatible with the essentially Colonial Revival/Craftsman image of the District. Its strong design statement and considerable size make it a focal structure of the neighborhood.

The unusual variant of the Colonial Revival style at 345 Lincoln was designed by Professor A.B. Clark in 1893. Clark was an early head of the Stanford University Art Department whose son, Birge Clark, became a major local architect and designer. Charles Wing, for whom the struc-

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ture was designed, served as an important civic leader for the city and was a noted engineer, having desgined and built the STanford Stadium. The structure is an important architectural and historical focal point of the area, whose design and background reflect the essence of the District.

The Professorville Historic District is particularly expressive of one of Palo Alto's strongest visual characteristic modes, the shingled Colonial Revival variants that contribute so much to the quality of the city's architectural environment. The scale of the structures and the abundant planting also contribute strongly to the character of the entire area.

The District reflects the unique background of the area's origins and its early ties to the founding of both the University and Palo Alto itself. As such, the Professorville Historic Distorict creates a strong sense of place and time expressive of Palo Alto's intrinsic character and heritage.

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[1]There is some question as to who owned the property. Dorothy Regnery of the Palo Alto Historical Society said that the deed was in Timothy Hopkins name. Whereas Elinor V. Cogswell printed in the Tall Tree, published by the Palo Alto Historical Society the following:

> Neither Mayfield not Menlo Park met the requirements, so in 1887 acquired, through Timothy Hopkins, some 740 acres of Seale and Greer holdings.

[2]Material provided by the Palo Alto Historical Society said that the house was built in 1893 for Professor Copeland and was purchased by Mrs. Fowler in 1902.

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MAJOR BIBLIOGRAPHICAL REFERENCES

American Association of Women, Palo Alto Branch, [illegible]ne Tomorrow?, 1971
Butler, Phyllis, Valley of Santa Clara, 1975
Cogswell, Elinor V., "Palo Alto Its Backgrounds, Beginnings and Growth", The Tall Tree, Vol. 1, No. 10, March 1960
"From Portola to Palo Alto", The Tall Tree, Vol. III, No. 10, March 1960
Professorville Walking Tour Brochure, Palo Alto AAUW publishers

10 GEOGRAPHICAL DATA

ACREAGE OF NOMINATED PROPERTY 34.43 (app.)

QUADRANGLE NAME Palo Alto QUADRANGLE SCALE 7½'

UTM REFERENCES

	ZONE	EASTING	NORTHING
A	10	57,544,0	4,144,210
B	10	57,542,0	4,143,720
C	10	57,472,0	4,143,720
D	10	57,472,0	4,144,200
E			
F			
G			
H			

VERBAL BOUNDARY DESCRIPTION

The area bounded by the alley between Emerson and Ramona Streets to Addison, then NE to the SW boundaries of 271-73, 281 Addison, NW to include 944, 940 Bryant, N & NE to include 943, 951 Bryant, 319, 327 Addison

LIST ALL STATES AND COUNTIES FOR PROPERTIES OVERLAPPING STATE OR COUNTY BOUNDARIES

STATE	CODE	COUNTY	CODE
no overlapping boundaries			
STATE	CODE	COUNTY	CODE

11 FORM PREPARED BY

NAME / TITLE

Paula Boghosian/ John Beach

ORGANIZATION
Historic Environment Consultants

DATE
April 17, 1979

STREET & NUMBER
2306 J St.

TELEPHONE
(916) 44602447

CITY OR TOWN
Sacramento

STATE
California

12 STATE HISTORIC PRESERVATION OFFICER CERTIFICATION

THE EVALUATED SIGNIFICANCE OF THIS PROPERTY WITHIN THE STATE IS:

NATIONAL ___ STATE ___ LOCAL X

As the designated State Historic Preservation Officer for the National Historic Preservation Act of 1966 (Public Law 89-665), I hereby nominate this property for inclusion in the National Register and certify that it has been evaluated according to the criteria and procedures set forth by the National Park Service.

STATE HISTORIC PRESERVATION OFFICER SIGNATURE Kenneth Allen

TITLE

DATE April 22 1980

FOR NPS USE ONLY

I HEREBY CERTIFY THAT THIS PROPERTY IS INCLUDED IN THE NATIONAL REGISTER

DATE

KEEPER OF THE NATIONAL REGISTER

ATTEST:

DATE

CHIEF OF REGISTRATION

GPO 921-803

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Santa Clara County Resources Inventory, published by the County Heritage Commission, 1975, now being revised
Birge Clark Professional Work Inventory
Sanborn Fire Insurance Maps: 1895, 1897, 1901, 1904, 1908, 1924

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from that point, cross Addison to the northerly boundary of 1005 Bryant, SE along the northerlyboundaries of 1005, 1017-23, 1027, 1033 Bryant Street, then north east along the rear (northeast) boundaries of 331, 345, 381, and 405 Lincoln; then southeast to include 1101, 1135, 1155 Waverley, then east to Cowper Street; north-east along Cowper to include 501 Kingsley, continuing southeast along Cowper, the southwest along the southeast boundaries of 490, 450, 430 Kingsley, and 1221 Waverley, to Waverley, then south to Melville, southwest to the westerly boundary of 1240 and 1248 Waverley, then southwest along that boundary, Whitman Court; from that point northwest along westerly boundary of 334 Kingsley, and along that boundary to Kingsley Street, from that point NE to 365 Kingsley, and then NW, SW, SE, and SW to exclude 303, 319, 325, 333, 335, 343, 353, 355, 363, 365 Kingsley and 1201, 1225 Bryant; east along Bryant, and then south along the east boundary of 251 and 281 Embarcadero to Embarcadero Street; then SW along Embarcadero to the southern boundary of 1176 Emerson, then NW along the SE boundaries of and including 1176, 1134, 1128, 1118, 1102 Emerson, and thence NE along Lincoln St. to Emerson; then NW to the SE boundary of 1085 Emerson, and thence to the alley between Emerson and Ramona, then NW along that alley to Addison.

The boundaries of the district were drawn based upon the integrity of building type, style and era of the included structures.

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all pictures & descriptions are back to back,

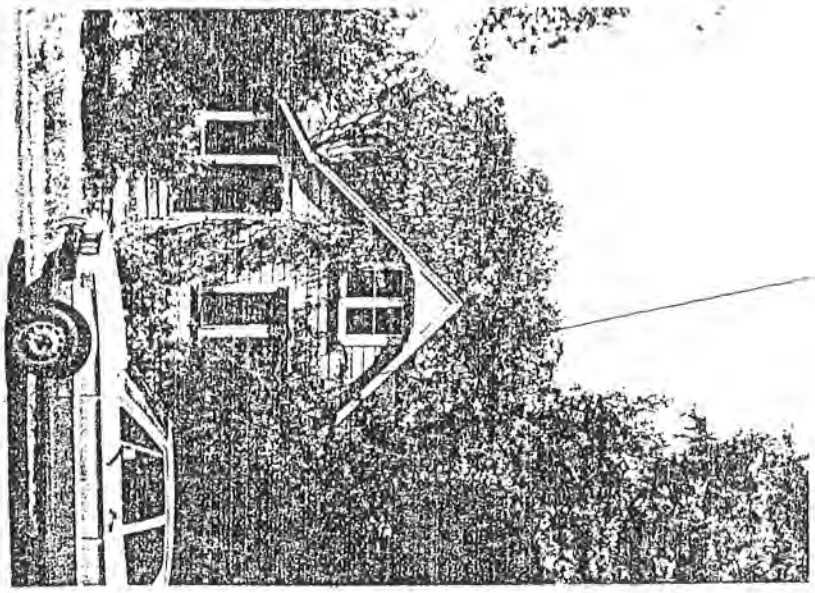
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...Addison, Palo Alto, Santa Clara
County, CA
...ula Boghosian, January 1979
...06 J Street, Sacramento, CA
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271-3 Addison, Palo Alto, Santa Clara
County, CA
...ula Boghosian
January 1979
2306 J Street, Sacramento, CA
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Professorville Historic District
943 Bryant, Palo Alto, Santa Clara
County, CA
Paula Boghosian, January 1979
2306 J Street, Sacramento, CA
Front facade, to the NE
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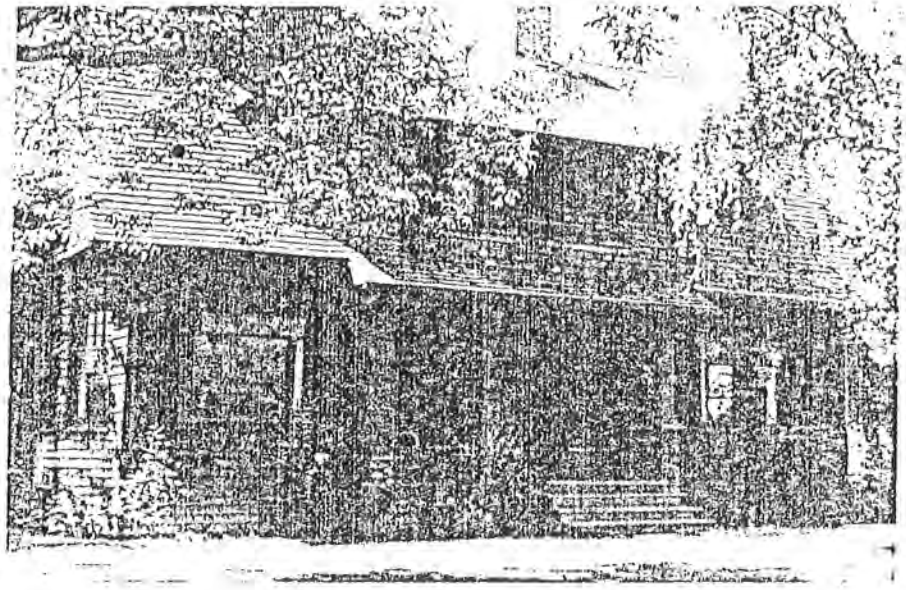
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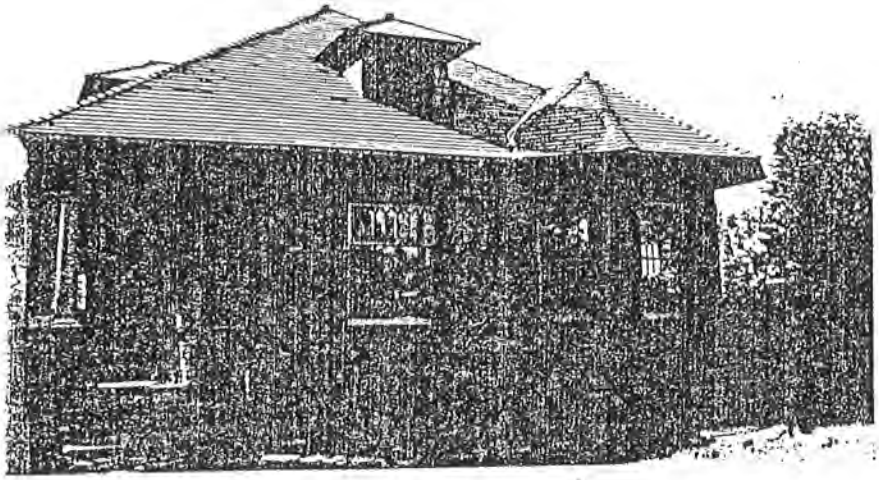
ofessorville Historic District
49 Bryant; Palo Alto, Santa Clara
County, CA
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ont facade, to the SW
5of 113 4

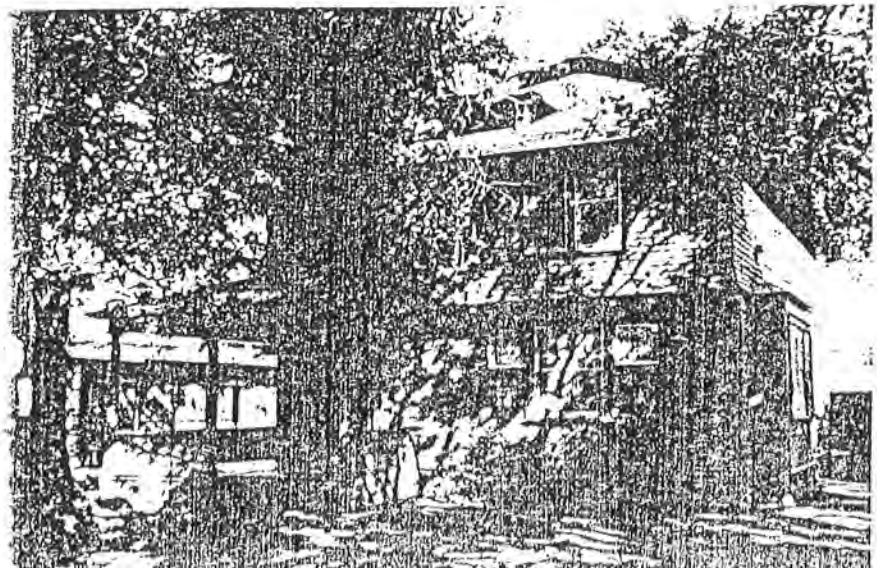
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ofessorville Historic District
27 Addison, Palo Alto, Santa Clara
County, CA
ula Boghosian, May 1979
06 J Street, Sacramento, CA
ont facade, to the NW
of 113
105

c







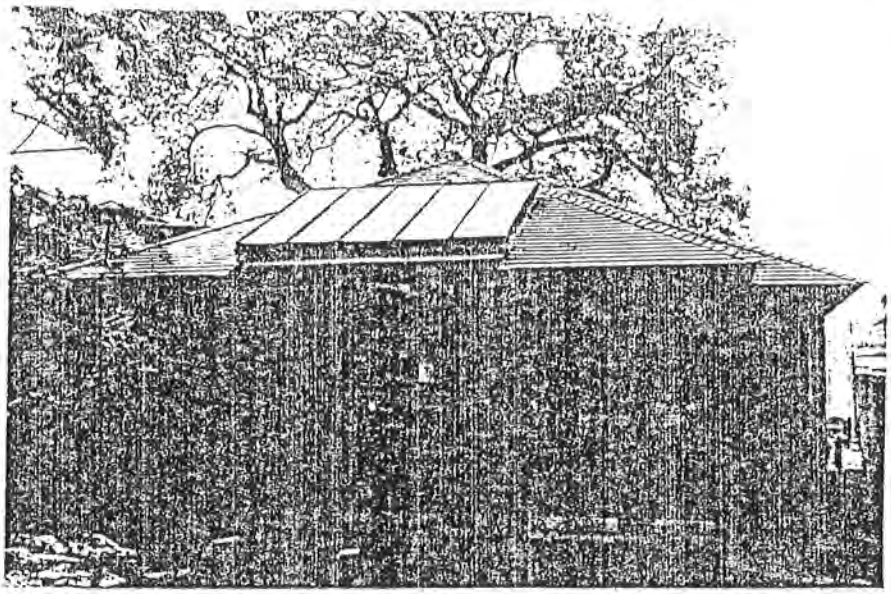
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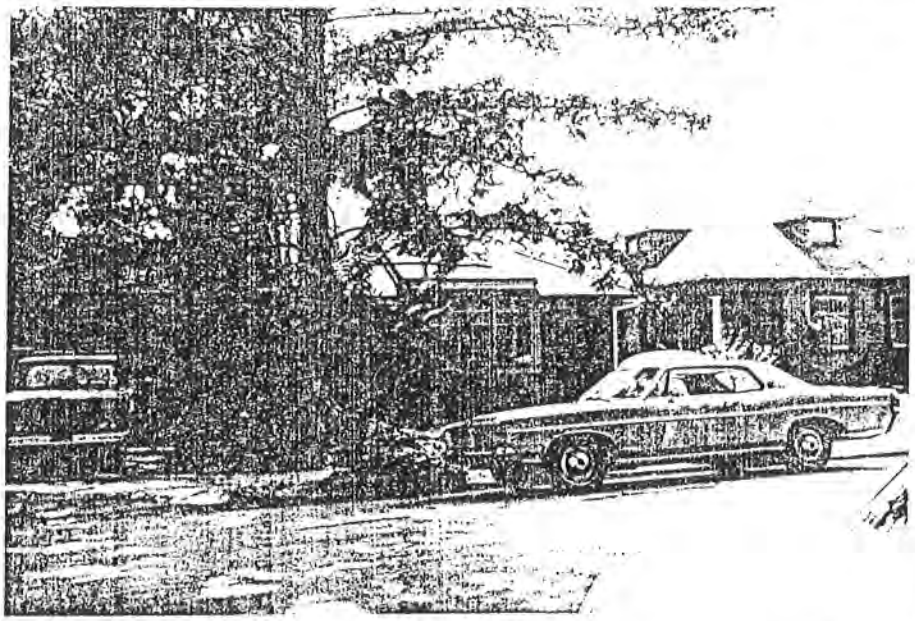
Professorville Historic District
1118 Emerson, Palo Alto
Santa Clara County, CA
Paula Boghosian, February 1979
2306 J Street, Sacramento, CA
front facade, to the SW
36 of 113 95

Professorville Historic District
1111 Emerson, Palo Alto
Santa Clara County, CA
Paula Boghosian, February 1979
2306 J Street, Sacramento, CA
front facade, to the NE
35 of 113 97

Professorville Historic District
1102 Emerson, Palo Alto, Santa Clara
County, CA
Paula Boghosian, February 1979
2306 J Street, Sacramento, CA
front facade, to the South
34 of 113 96

c







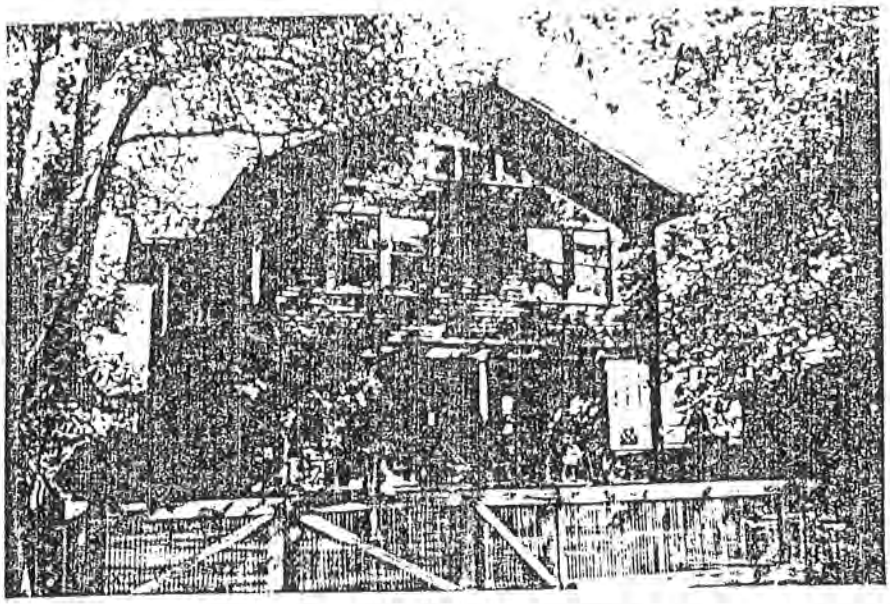
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Professorville Historic District
1101 Emerson, Palo Alto, Santa Clara
County, CA
Paula Boghosian, February 1979
2306 J Street, Sacramento, CA P-43-000551
front facade, to the NE
33 of 113

Professorville Historic District
251 Embarcadero, Palo Alto,
Santa Clara County, CA
Paula Boghosian, January 1979
2306 J Street, Sacramento, CA
front facade, to the NW
32 of 113

Professorville Historic District
235 Embarcadero, Palo Alto,
Santa Clara County, CA
Paula Boghosian, January 1979
2306 J Street, Sacramento, CA
front facade, to the NW
31 of 113

c







C

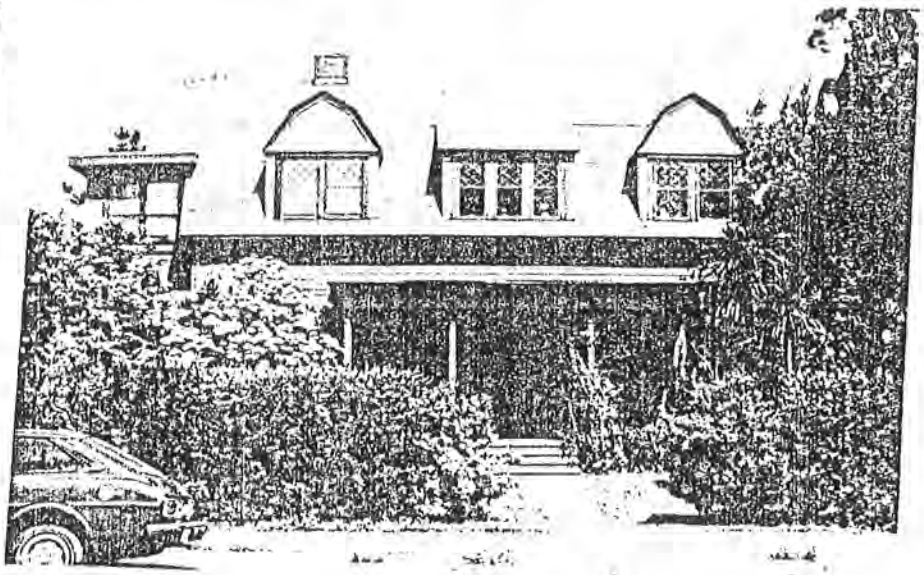
Professorville Historic District - 11 00054
1200 Bryant, Palo Alto, Santa Clara
County, CA
Paula Boghosian, January 1979
2306 J Street, Sacramento, CA
front facade and east side, to the SW
30 of 113 29

Professorville Historic District
1148 Bryant, Palo Alto, Santa Clara
County, CA
Paula Boghosian, January 1979
2306 J Street, Sacramento, CA
front facade, to the SW
29 of 113 27

Professorville Historic District
1135 Bryant, Palo Alto, Santa Clara
County, CA
Paula Boghosian, January 1979
2306 J Street, Sacramento, CA
front facade, to the NE
28 of 113 24

c







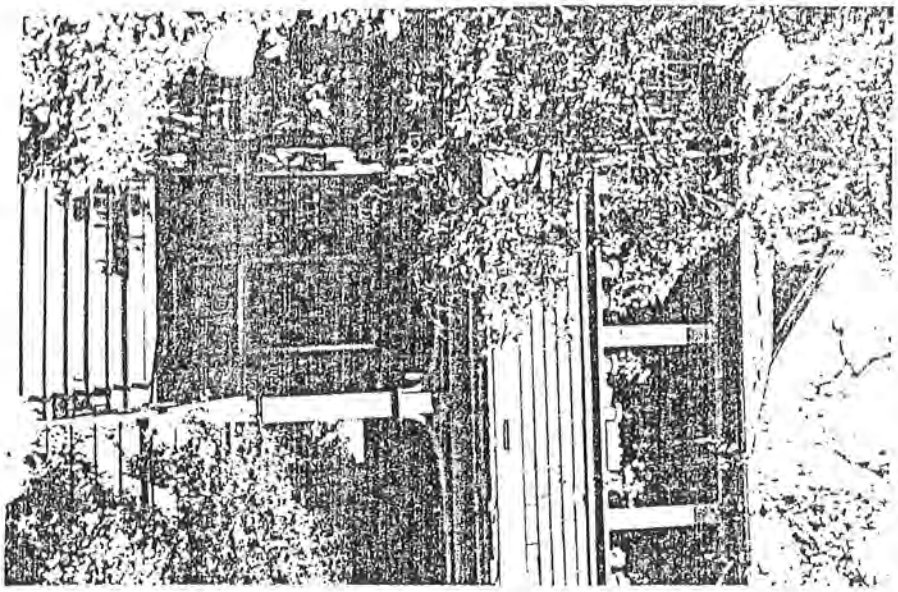
c

Professorville Historic District
1140 Bryant, Palo Alto, Santa Cla-
County, CA'
Paula Boghosian, January 1979
2306 J Street, Sacramento, CA
front facade, to the SW
27 of 113

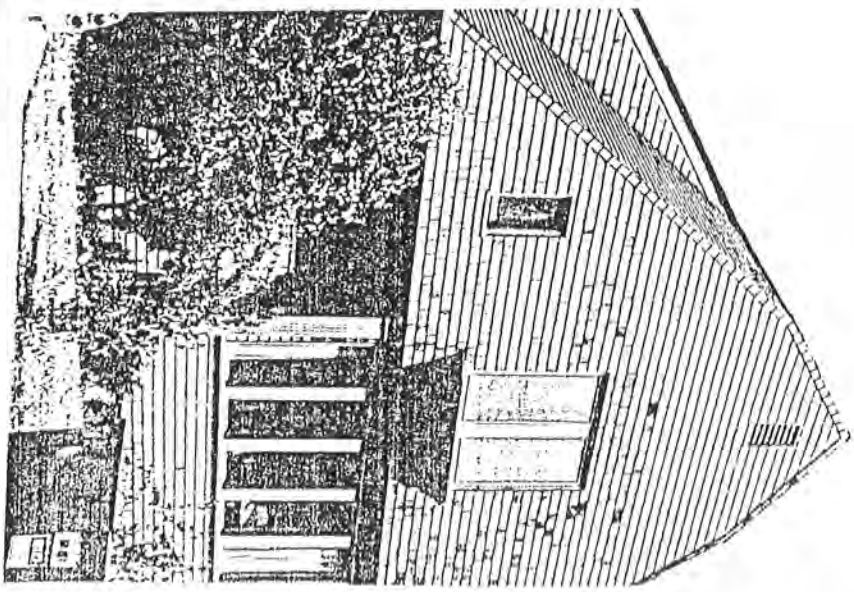
Professorville Historic District
1130 & 1140 Bryant, Palo Alto
Santa Clara County, CA
Paula Boghosian, January 1979
2306 J Street, Sacramento, CA
front facades and west side, to the S.
26 of 113

Professorville Historic District
1130 Bryant, Palo Alto, Santa Clara
County, CA
Paula Boghosian, January 1979
2306 J Street, Sacramento, CA
front facade, to the SW
25 of 113

c







c

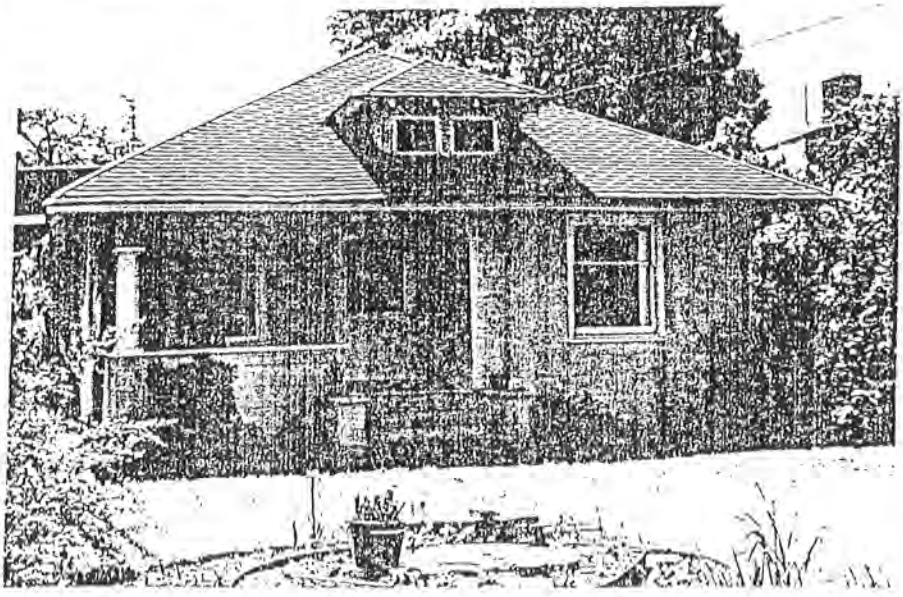
Castilleja Hall, later Ravenna Apts.
Professorville Historic District
1121 Bryant, Palo Alto, Santa Clara
County, CA
Paula Boghosian, January 1979
front facade, to the North
24 of 113

Professorville Historic District
1116 Bryant, Palo Alto, Santa Clara
County, CA
Paula Boghosian, January 1979
2306 J Street, Sacramento, CA
front facade, to the S
23 of 113

Professorville Historic District
1106 & 1116 Bryant, Palo Alto,
Santa Clara County, CA
Paula Boghosian, January 1979
2306 J Street, Sacramento, CA
front facades, to the South
22 of 113


97

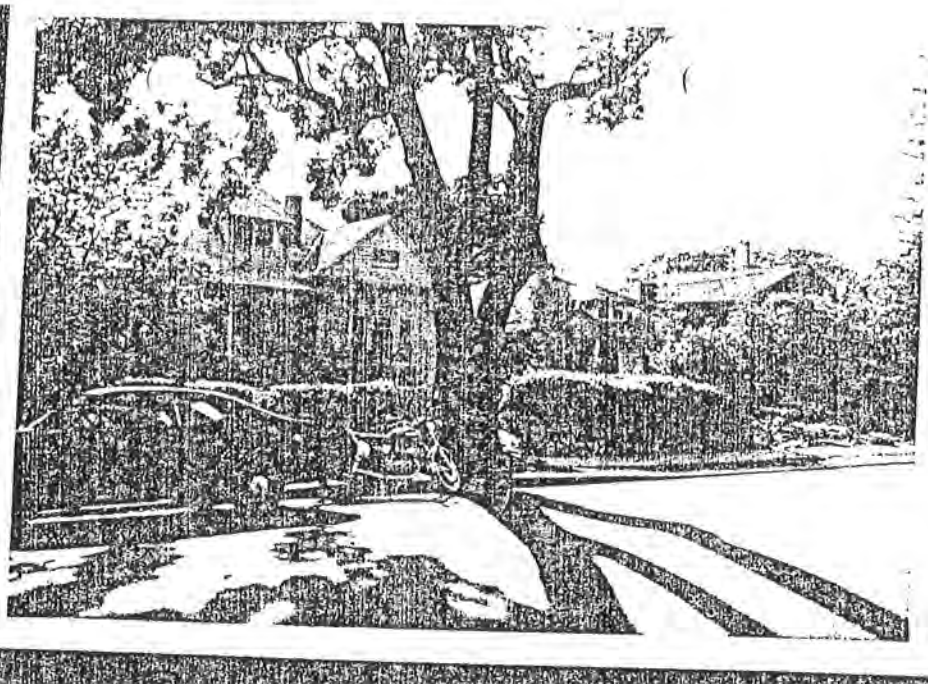




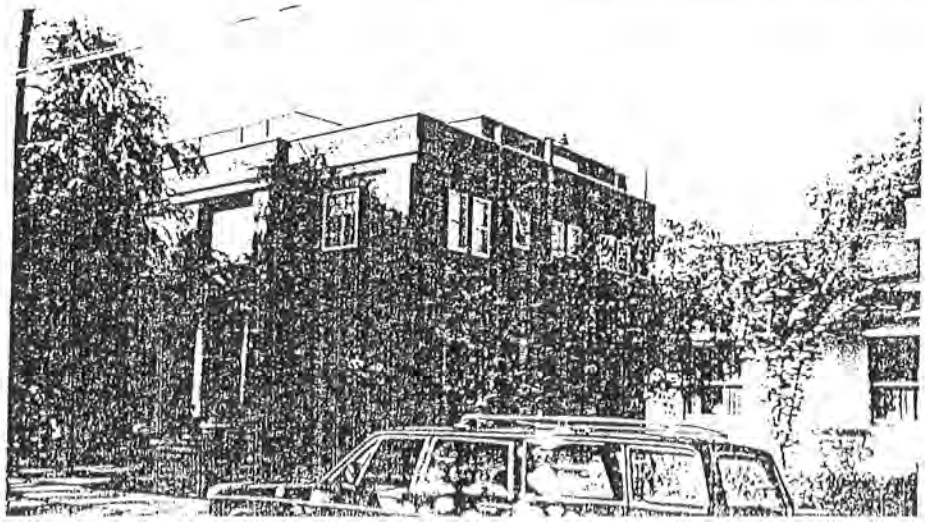
1106 Bryant, Palo Alto, Santa Clara
County, CA
Paula Boghosian, January 1979
2306 J Street, Sacramento, CA
front facade, to the SW
21 of 113

Varian House
Professorville Historic District
1044 Bryant, Palo Alto, Santa Clara
County, CA
Paula Boghosian, January 1979
2306 J Street, Sacramento, CA
front facade, to the SW
20 of 113

Professorville Historic District
1028 & 1036 Bryant, Palo Alto,
Santa Clara County, CA
Paula Boghosian, January 1979
2306 J Street, Sacramento, CA
front facades and east side, to the SW
19 of 113





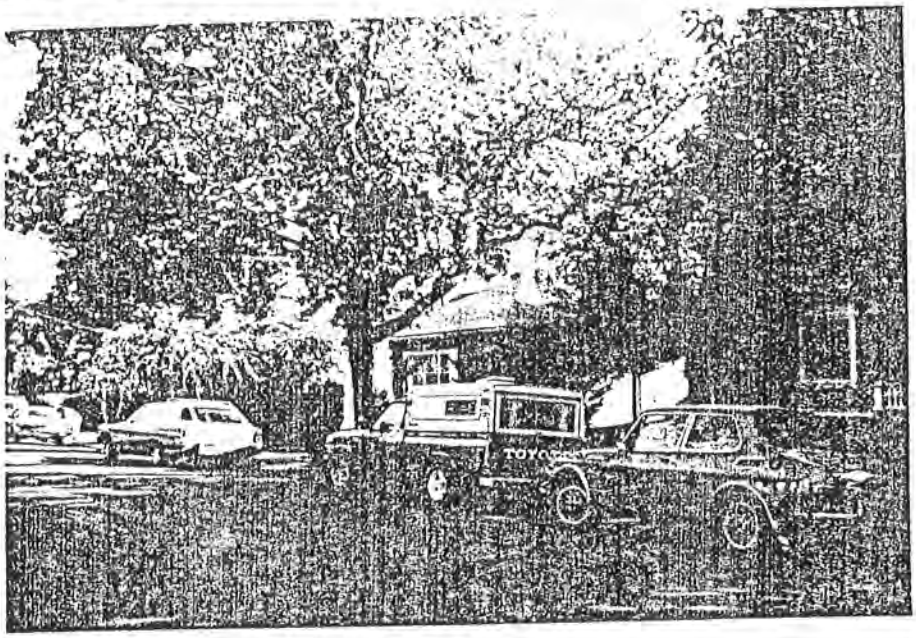


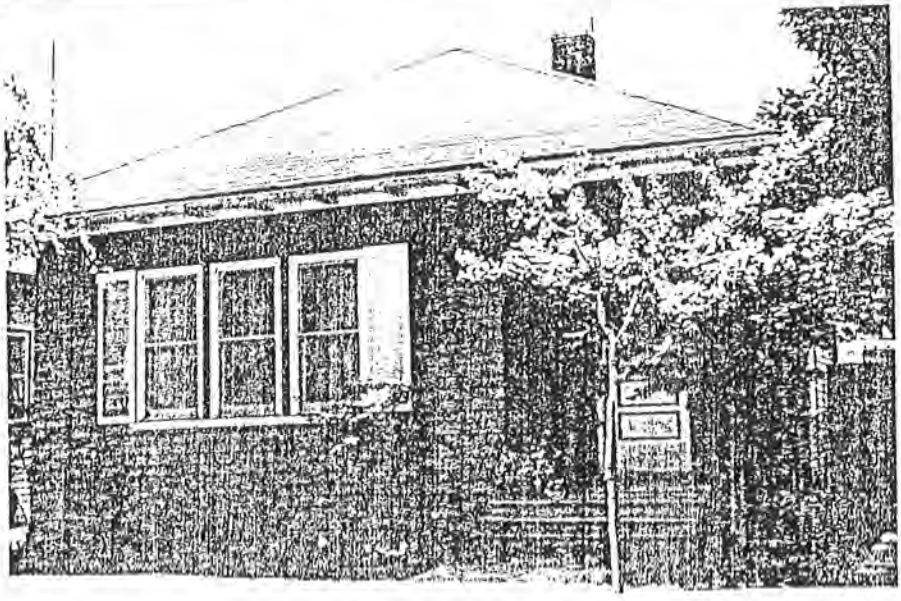
Professorville Historic District
1033 Bryant, Palo Alto, Santa Clara
County, CA
Paula Boghosian, January 1979
2306 J Street, Sacramento, CA
front facade, to the NE
18 of 113 18

Professorville Historic District
1028 Bryant, Palo Alto, Santa Clara
County, CA
Paula Boghosian, January 1979
2306 J Street, Sacramento, CA
front facade, to the SW
17 of 113 13

Professorville Historic District
1027 Bryant, Palo Alto, Santa Clara
County, CA
Paula Boghosian, January 1979
2306 J Street, Sacramento, CA
front facade, to the NE
16 of 113 12



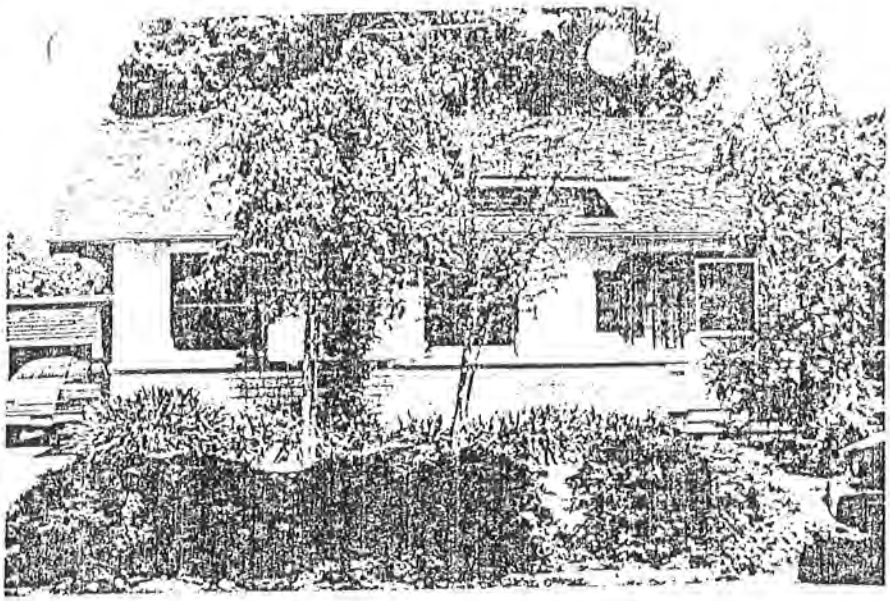


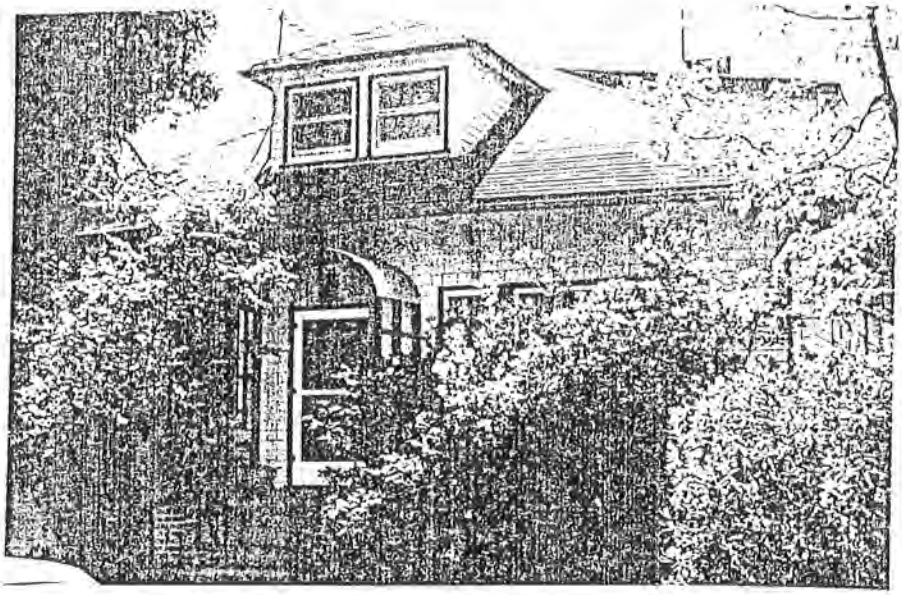


Professorville Historic District
1020 Bryant, Palo Alto, Santa Clara
County, CA
Paula Boghosian, January 1979
2306 J Street, Sacramento, CA
front facade to the SW
15 of 113

Professorville Historic District
1017-23 Bryant, Palo Alto, Santa Clara
County, CA
Paula Boghosian, January 1979
2306 J Street, Sacramento, CA
front facade, to the NE
14 of 113

Professorville Historic District
1010 Bryant, Palo Alto, Santa Clara
County, CA
Paula Boghosian, January 1979
2306 J Street, Sacramento, CA
front facade, to the SW
13 of 113



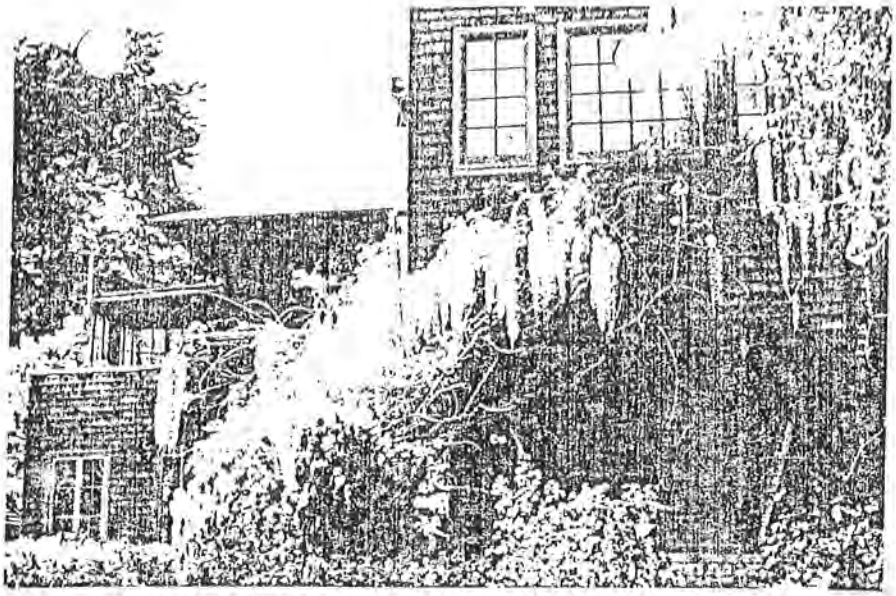


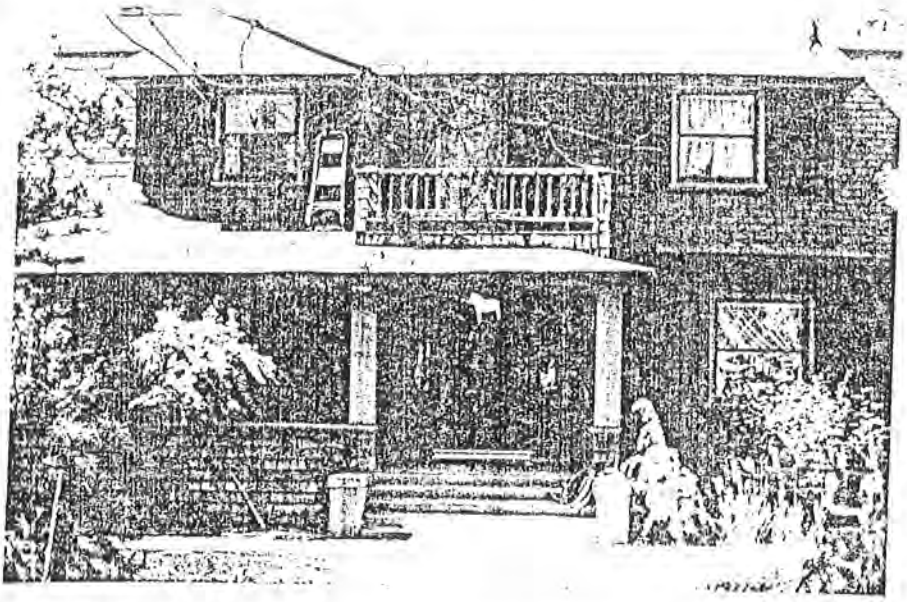


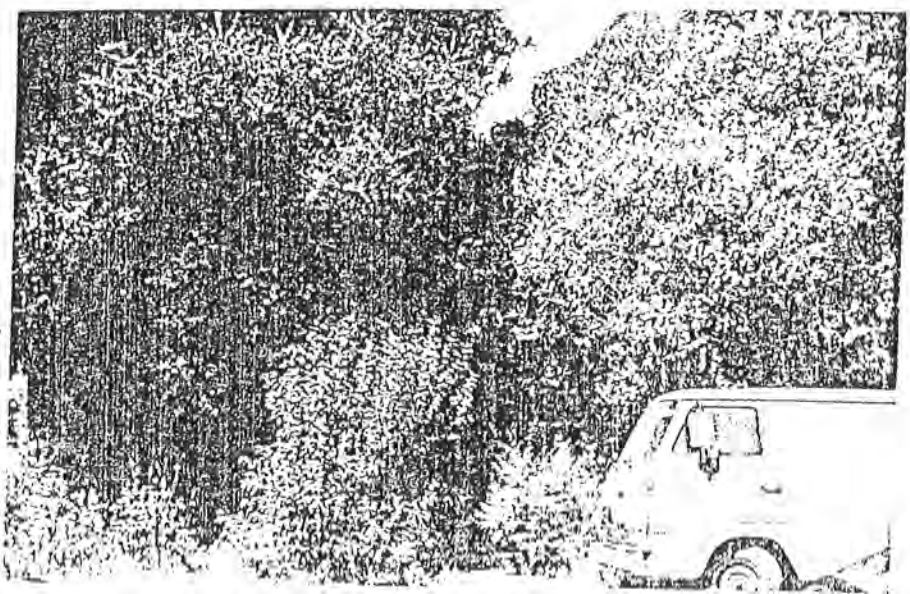
Frank Angell House
Professorville Historic District
1005 Bryant, Palo Alto, Santa Clara
County, CA
Paula Boghosian, January 1979
2306 J Street, Sacramento, CA
front facade, to the N
12 of 113 S

Frank Angell House
Professorville Historic District
1005 Bryant, Palo Alto, Santa Clara
County, CA
Paula Boghosian, January 1979
2306 J Street, Sacramento, CA
west side, to the NE
11 of 113

Professorville Historic District
951 Bryant, Palo Alto, Santa Clara
County, CA
Paula Boghosian, January 1979
2306 J Street, Sacramento, CA
front facade to the NE
10 of 113



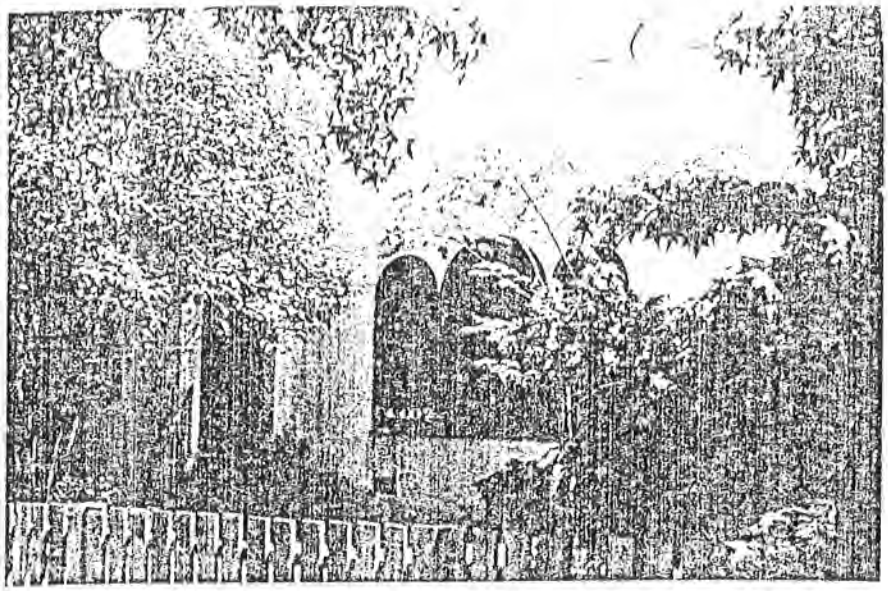


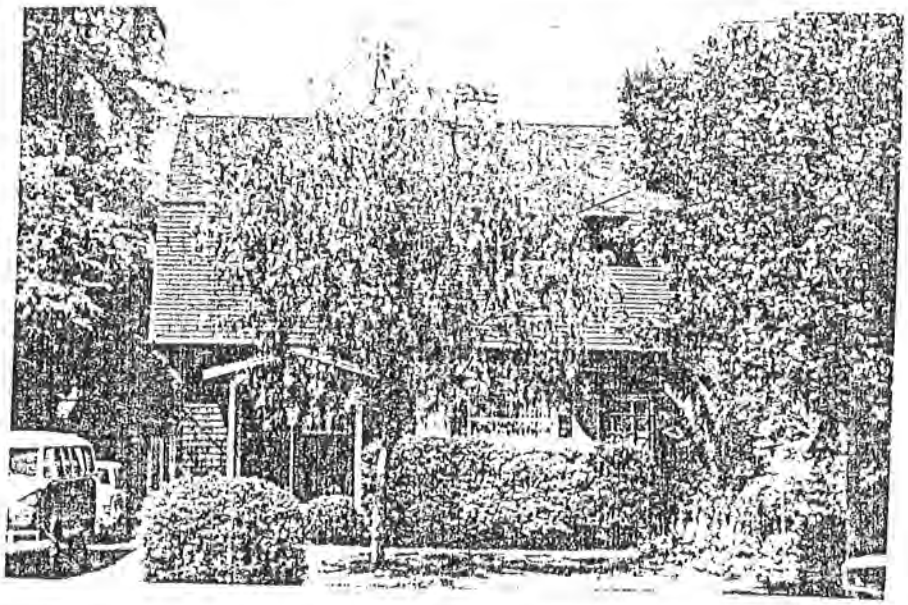


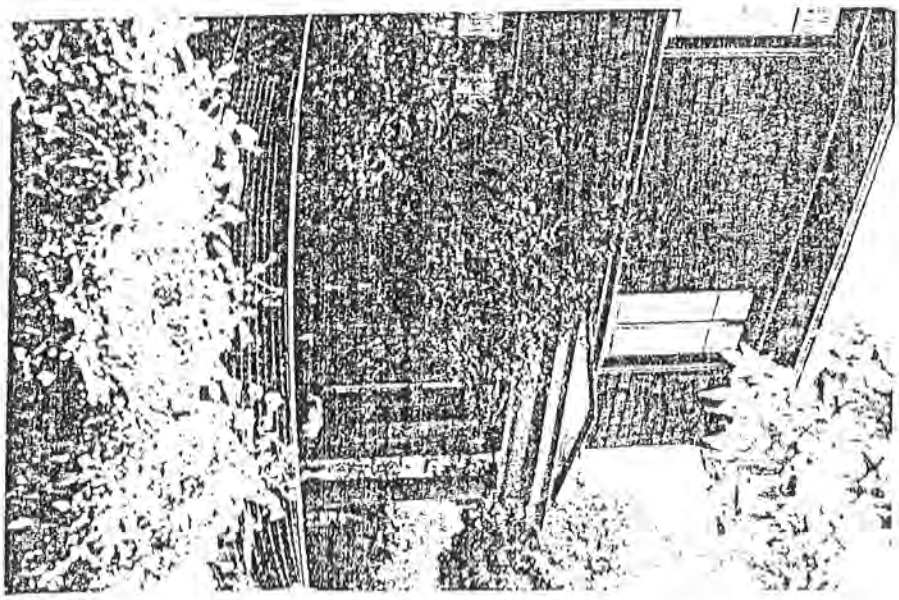
2306 J Street, Sacramento, CA
front facades and east side, to the NE
7 of 113

Professorville Historic District
944 Bryant, Palo Alto, Santa Clara
County, CA
Paula Boghosian, January 1979
2306 J Street, Sacramento, CA
front facade, to the SW
8 of 113

Professorville Historic District
944 Bryant, Palo Alto, Santa Clara
County, CA
Paula Boghosian, January 1979
2306 J Street, Sacramento, CA
front facade to the SW
9 of 113





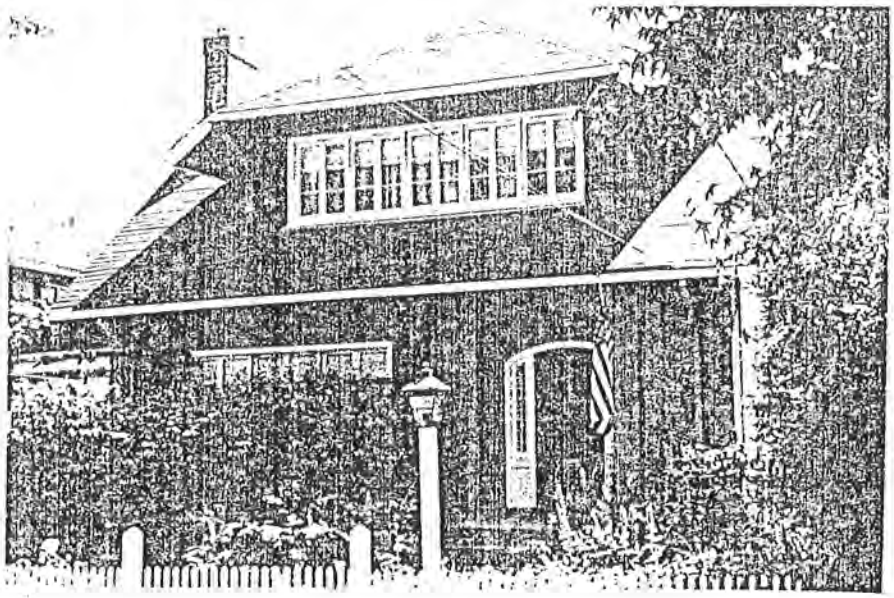


Professorville Historic District
1129 Emerson, Palo Alto
Santa Clara County, CA
Paula Boghosian, February 1979
2306 J Street, Sacramento, CA
front facade, to the North
39 of 113

Professorville Historic District
1128 Emerson, Palo Alto
Santa Clara County, CA
Paula Boghosian, February 1979
2306 J Street, Sacramento, CA
front facade, to the SW
38 of 113

Professorville Historic District
1121 Emerson, Palo Alto
Santa Clara County, CA
Paula Boghosian, February 1979
2306 J Street, Sacramento, CA
front facade, to the NE
37 of 113





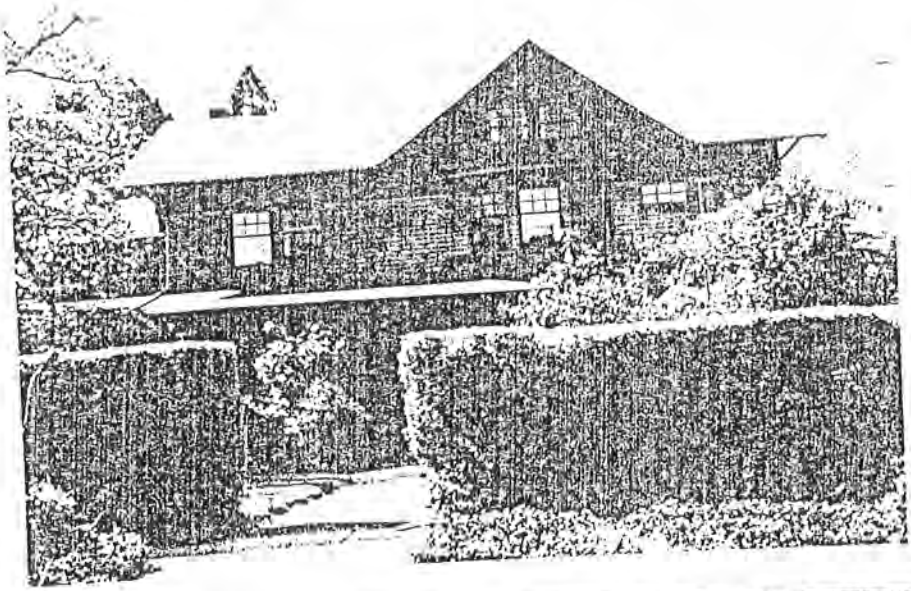


Professorville Historic District
1000 block of Ramona, Palo Alto
Santa Clara County, CA
Paula Boghosian, January 1979
2306 J Street, Sacramento, CA
streetscape, to the NE
110 of 113

Professorville Historic District
365 Lincoln, Palo Alto
Santa Clara County, CA
Paula Boghosian, January 1979
2306 J Street, Sacramento, CA
front facade, to the NW
109 of 113

Sunbonnet House
Professorville Historic District
1061 Bryant, Palo Alto
Santa Clara County, CA
Paula Boghosian, January 1979
2306 J Street, Sacramento, CA
side and front view, to the NE
108 of 113



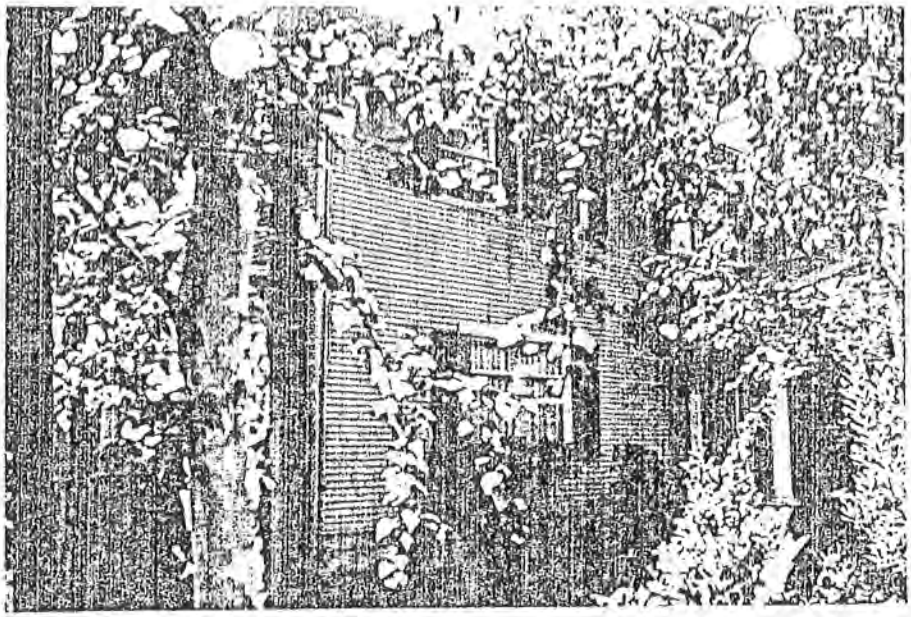




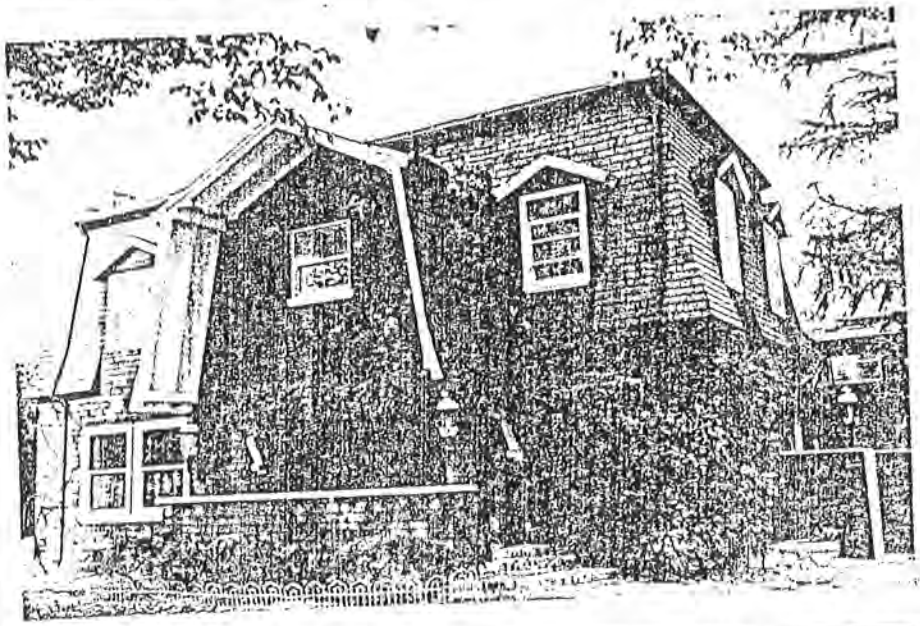
Sunbonnet House
Professorville Historic District
1061 Bryant, Palo Alto
Santa Clara County, CA
Paula Boghosian, January 1979
2306 J Street, Sacramento, CA
front and side view, to the North
107 of 113 (2

Professorville Historic District
1248 Waverley, Palo Alto
Santa Clara County, CA
Paula Boghosian, January 1979
2306 J Street, Sacramento, CA
front and side view, to the SE
106 of 113 (1)

Professorville Historic District
1240 Waverley, Palo Alto
Santa Clara County, CA
Paula Boghosian, January 1979
2306 J Street, Sacramento, CA
front and side view, to the SE
105 of 113 (3



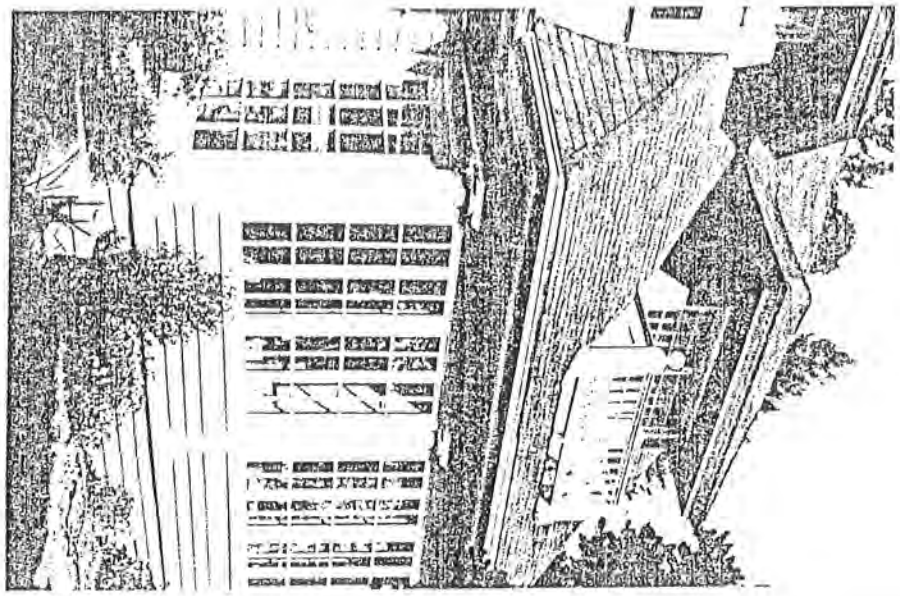


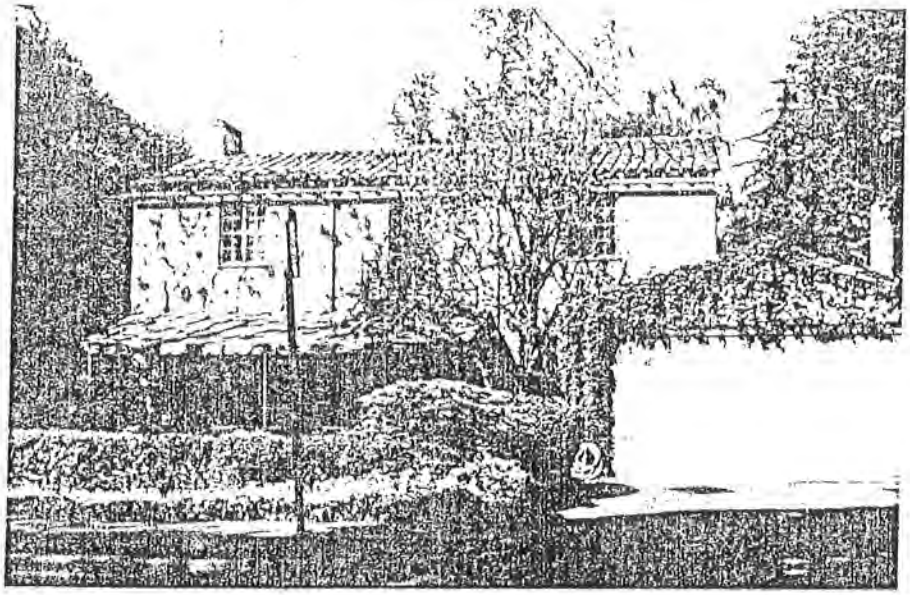


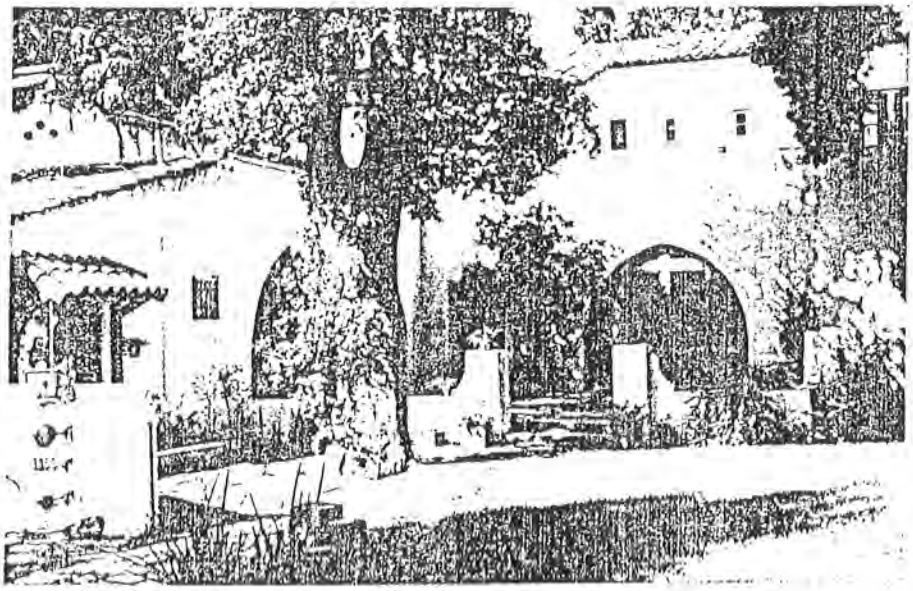
Professorville Historic District
1155 Waverley, Palo Alto
Santa Clara County, CA
Paula Boghosian, January 1979
2306 J Street, Sacramento, CA
front view, to the NW
103 of 113

Professorville Historic District
1177 Waverley, Palo Alto
Santa Clara County, CA
Paula Boghosian, January 1979
2306 J Street, Sacramento, CA
front view, to the NW
104 of 113

Professorville Historic District
1221 Waverley, Palo Alto
Santa Clara County, CA
Paula Boghosian, January 1979
2306 J Street, Sacramento, CA
front and side view, to the NW
104 of 113



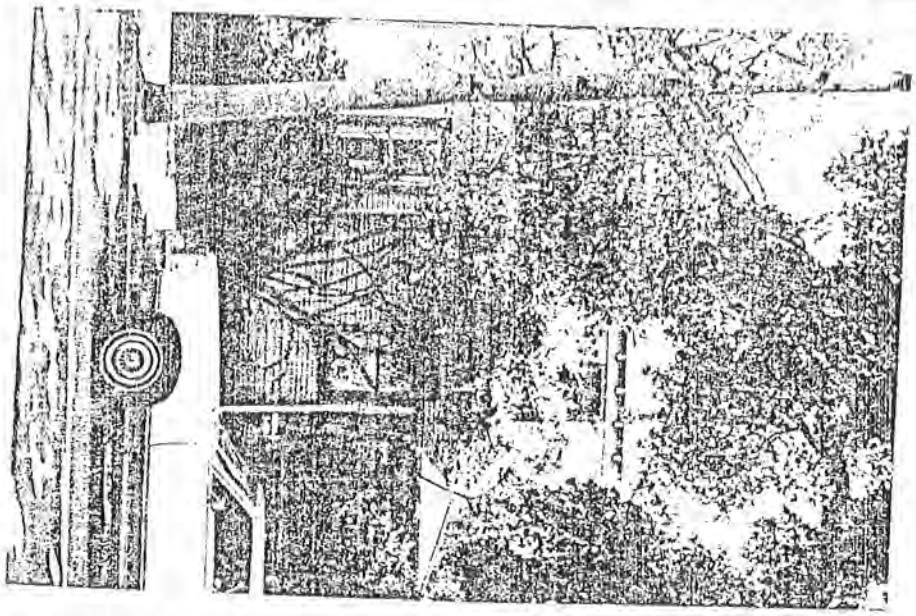


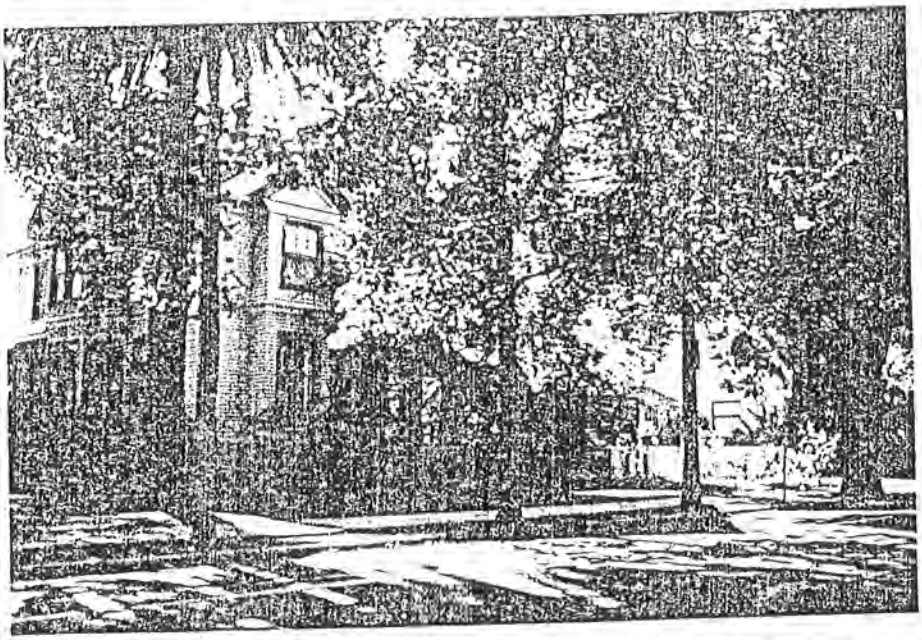


Professorville Historic District
1136 Waverley, Palo Alto
Santa Clara County, CA
Paula Boghosian, January 1979
2306 J Street, Sacramento, CA
front and side view, to the SE
100 of 113

Professorville Historic District
1146 Waverley, Palo Alto
Santa Clara County, CA
Paula Boghosian, January 1979
2306 J Street, Sacramento, CA
front and side view, to the SE
101 of 113

Professorville Historic District
1146 Waverley, Palo Alto
Santa Clara County, CA
Paula Boghosian, January 1979
2306 J Street, Sacramento, CA
front facade, to the East
102 of 113



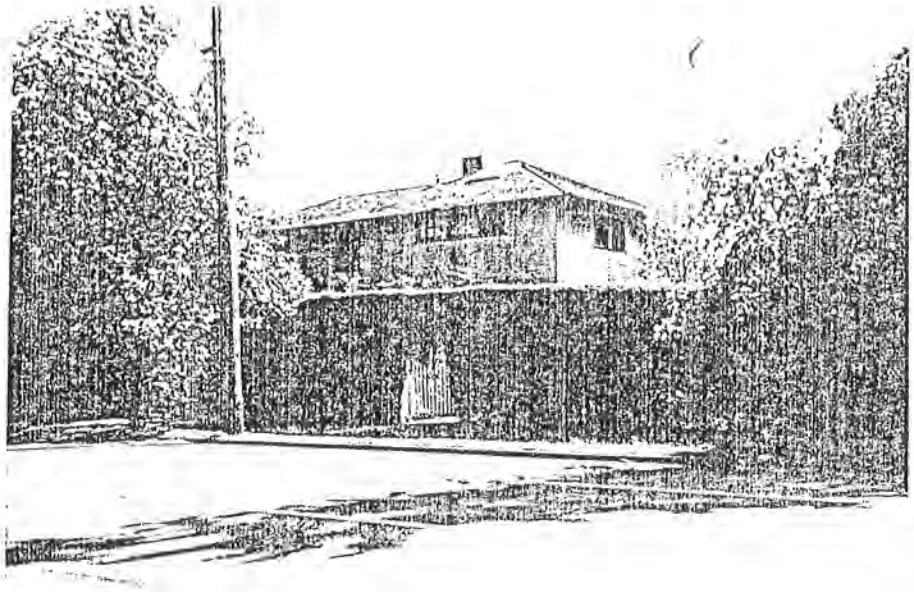




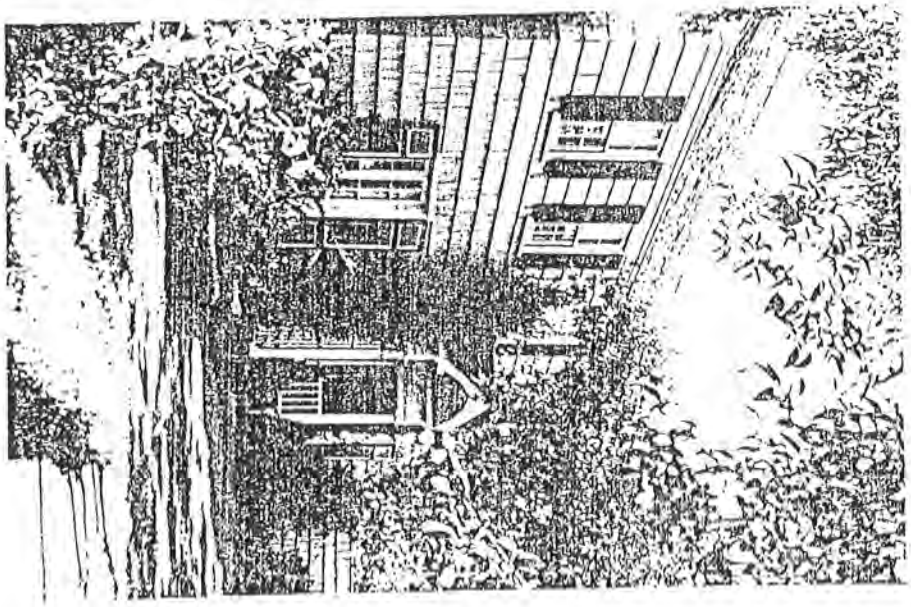
Professorville Historic District
1135 Waverley, Palo Alto
Santa Clara County, CA
Paula Boghosian, January 1979
2306 J Street, Sacramento, CA
front facade, to the NW
99 of 113

Professorville Historic District
1130 Waverley, Palo Alto
Santa Clara County, CA
Paula Boghosian, January 1979
2306 J Street, Sacramento, CA
front facade, to the SE
98 of 113

Professorville Historic District
1110 Waverley, Palo Alto
Santa Clara County, CA
Paula Boghosian, January 1979
2306 J Street, Sacramento, CA
side view, to the East
97 of 113





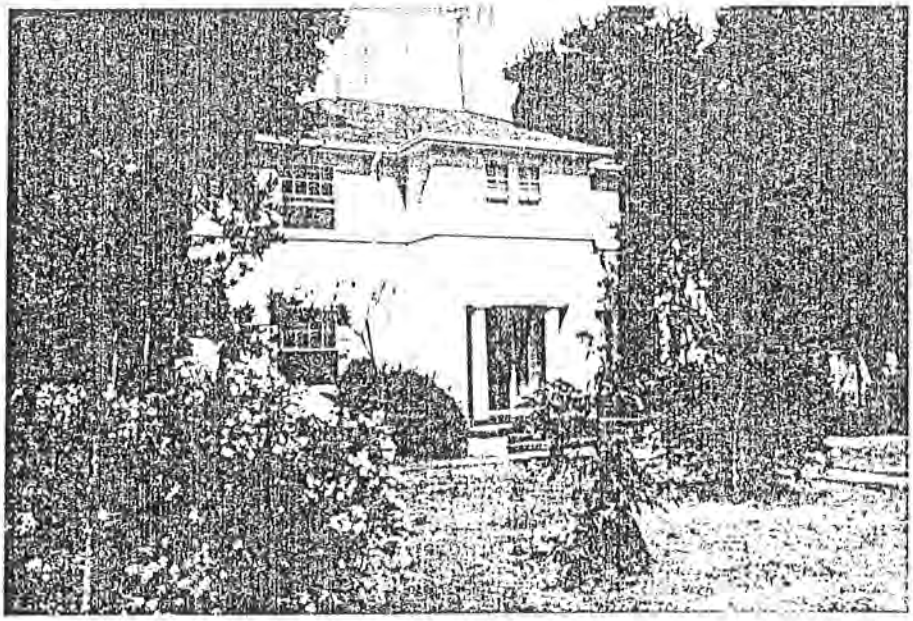


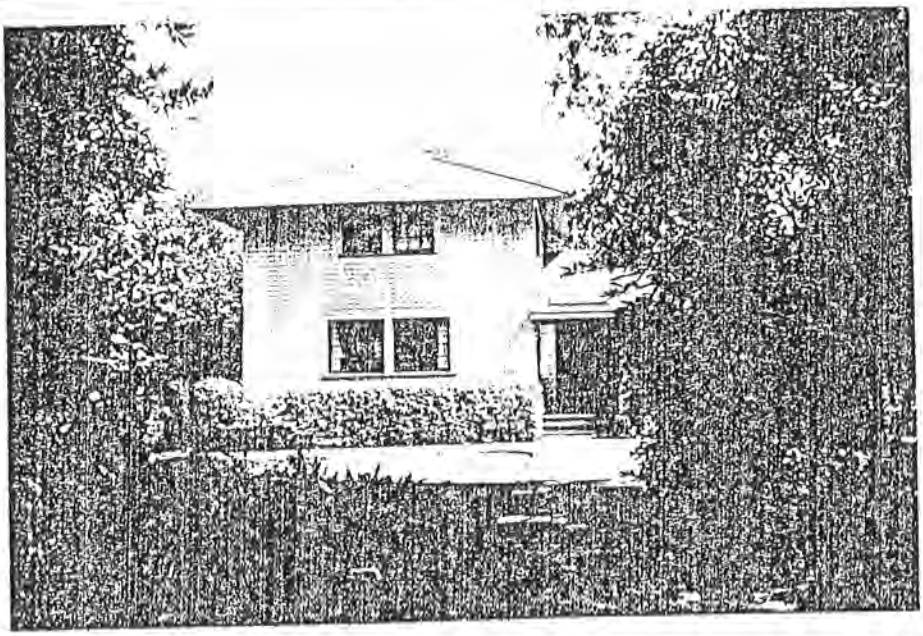
Professorville Historic District
1110 Waverley, Palo Alto
Santa Clrra County, CA
Paula Boghosian, January 1979
2306 J Street, Sacramento, CA
front facade, to the SE
96 of 113 95

Professorville Historic District
1101 Waverley, Palo Alto
Santa Clara County, CA
Paula Boghosian, January 1979
2306 J Street, Sacramento, CA
front facade, to the NE
95 of 113 94

Professorville Historic District
1147 Ramona, Palo Alto
Santa Clara County, CA.
Paula Boghosian, January 1979
2306 J Street, Sacramento, CA
side view, to the NW
94 of 113 93



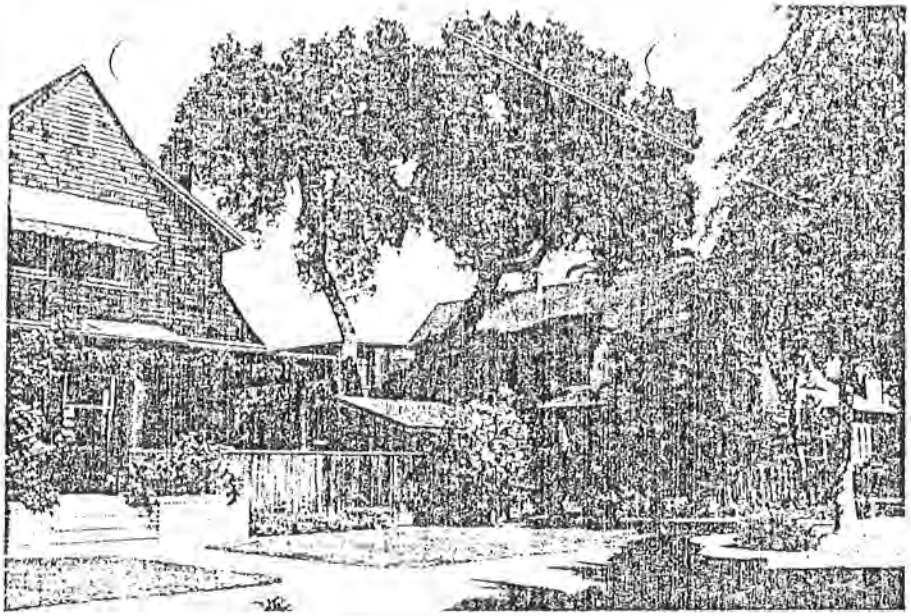


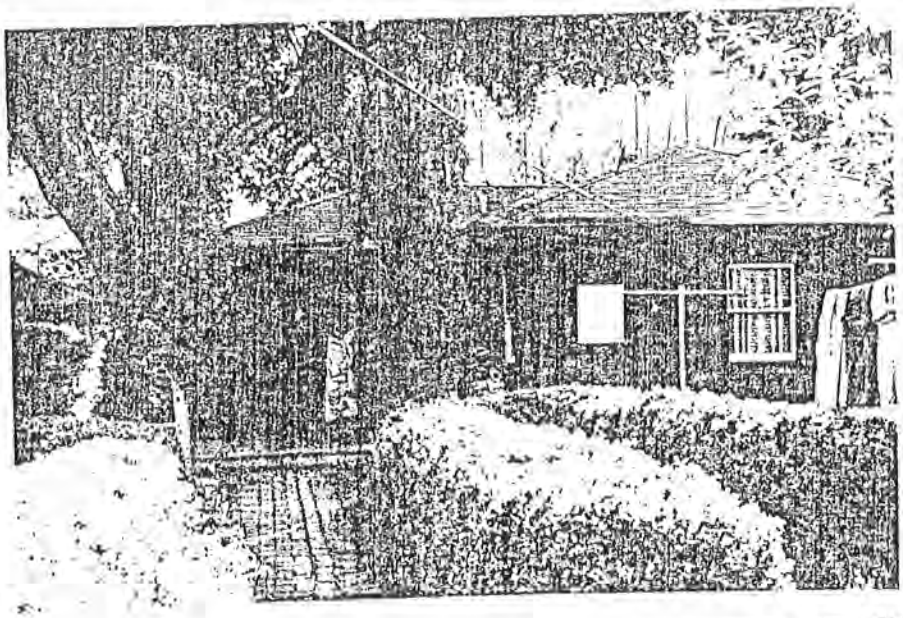


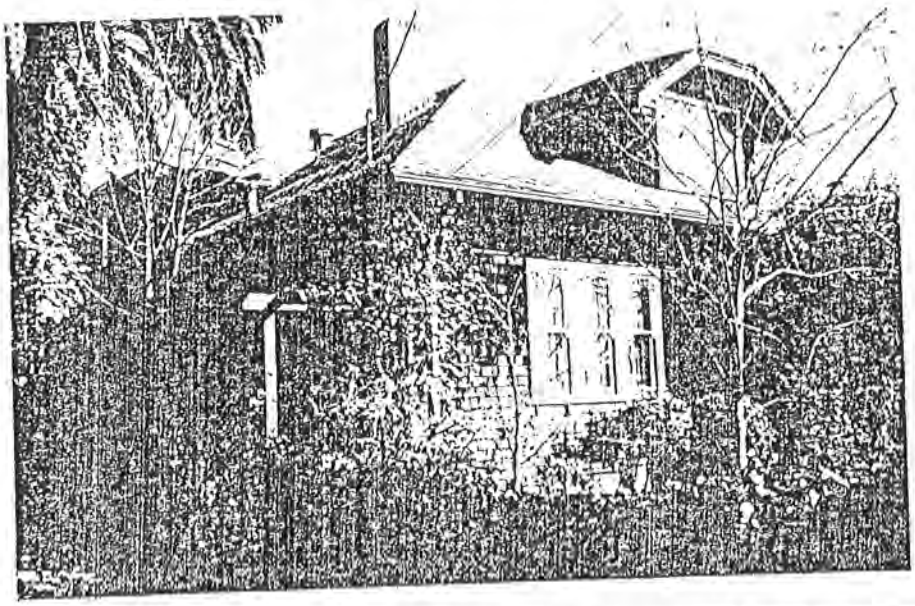
Professorville Historic District
1147 Ramona, Palo Alto
Santa Clara County, CA
Paula Boghosian, January 1979
2306 J Street, Sacramento, CA
front facade, to the NE
93 of 113

Professorville Historic District
1132, 1140, 1166 Ramona, Palo Alto
Santa Clara County, CA
Paula Boghosian, January 1979
2306 J Street, Sacramento, CA
front facade, to the SW
92 of 113

Professorville Historic District
1125 & 1139 Ramona, Palo Alto
Santa Clara County, CA
Paula Boghosian, January 1979
2306 J Street, Sacramento, CA
front and side views, to the NE
91 of 113



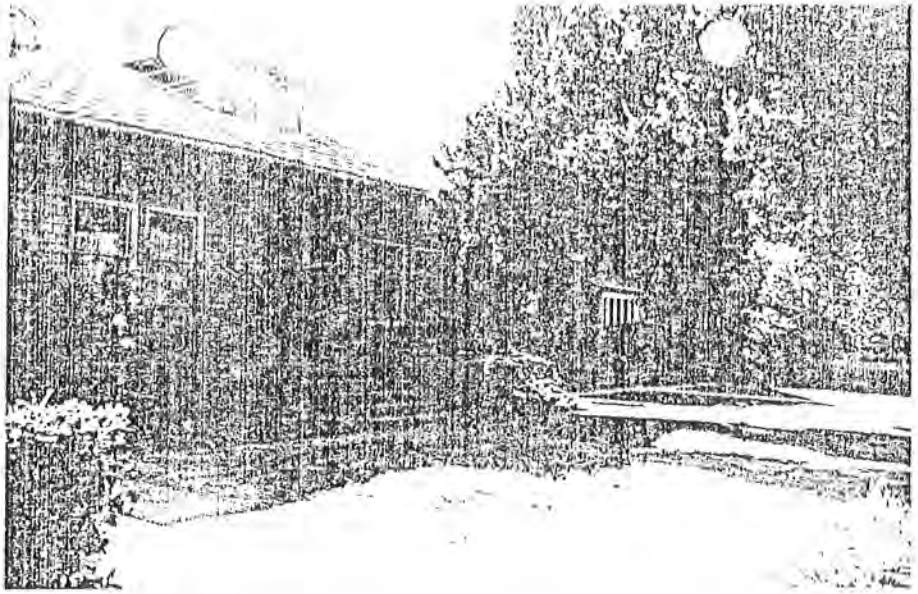


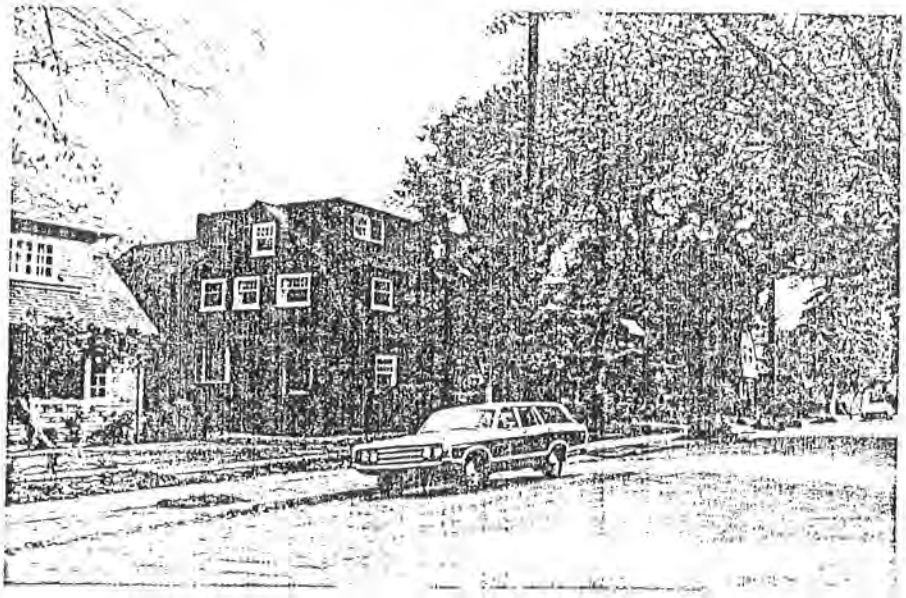


Professorville Historic District
1115 Ramona, Palo Alto
Santa Clara County, CA
Paula Boghosian, January 1979
2306 J Street, Sacramento, CA
front facade, to the NE
90 of 113

Professorville Historic District
1103, 1115, 1125, 1139 Ramona, Palo Alto
Santa Clara County, CA
Paula Boghosian, January 1979
2306 J Street, Sacramento, CA
streetscape view, to the East
89 of 113

Professorville Historic District
1112 Ramona, Palo Alto
Santa Clara County, CA
Paula Boghosian, January 1979
2306 J Street, Sacramento, CA
front facade, to the SW
88 of 113



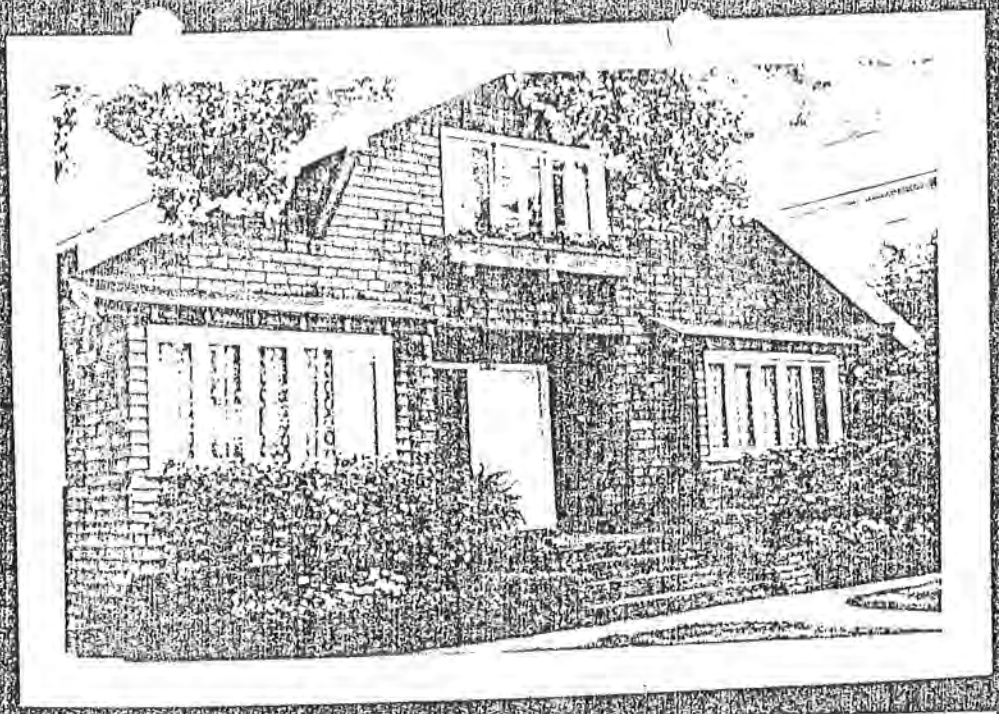


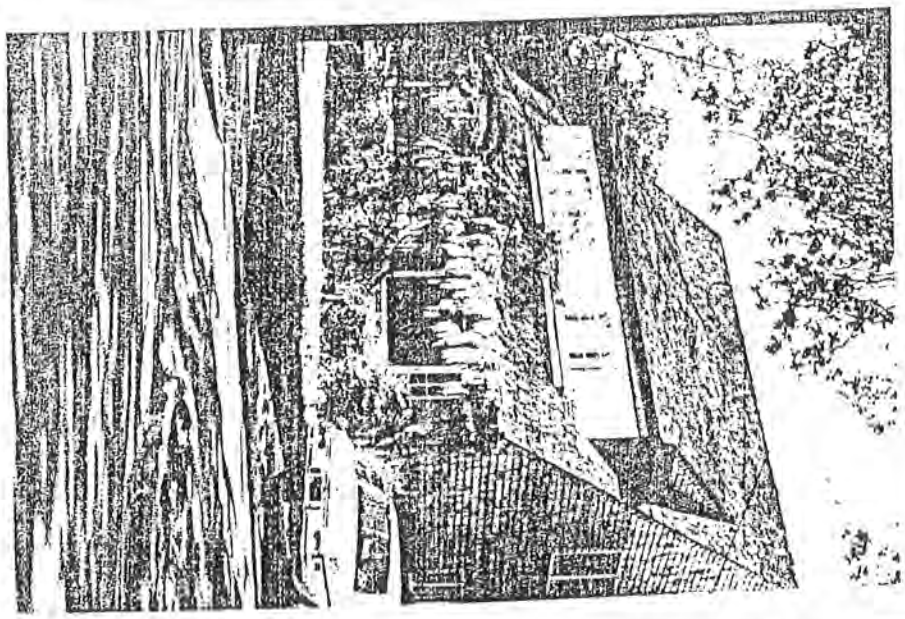


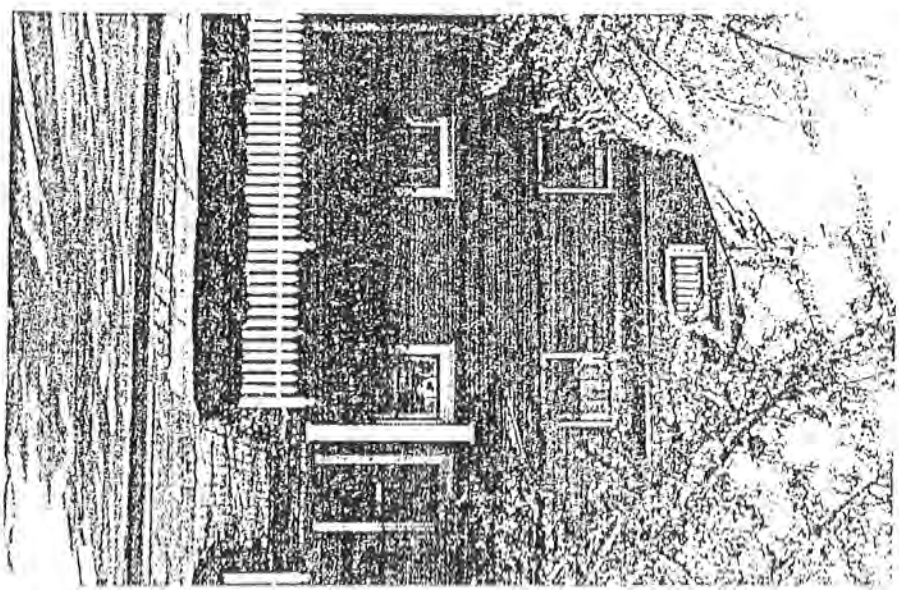
Professorville Historic District
1102 Ramona, Palo Alto
Santa Clara County, CA
Paula Boghosian, January 1979
2306 J Street, Sacramento, CA
front facade, to the SW
85 of 113

Professorville Historic District
1103 Ramona, Palo Alto
Santa Clara County, CA
Paula Boghosian, January 1979
2306 J Street, Sacramento, CA
front facade, to the NE
86 of 113

Professorville Historic District
1106 Ramona, Palo Alto
Santa Clara County, CA
Paula Boghosian, January 1979
2306 J Street, Sacramento, CA
front facade, to th NW
87 of 113





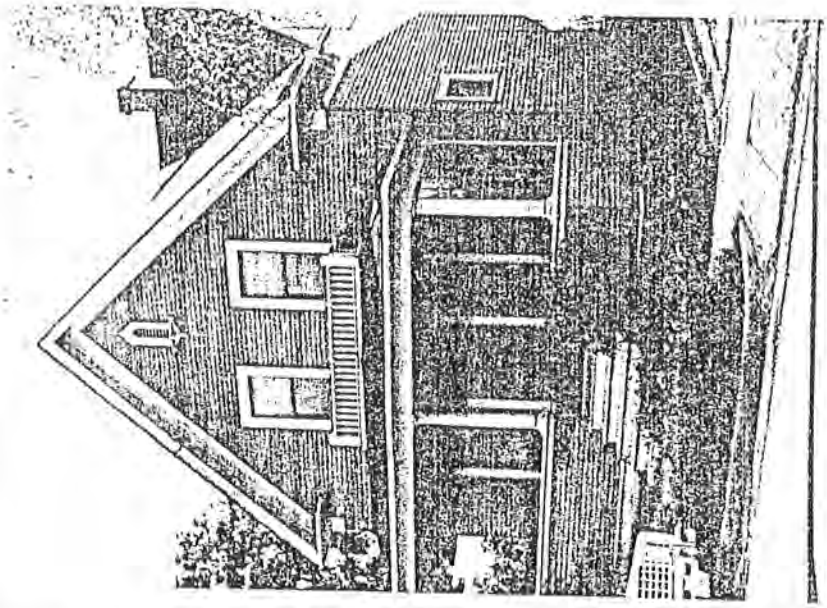


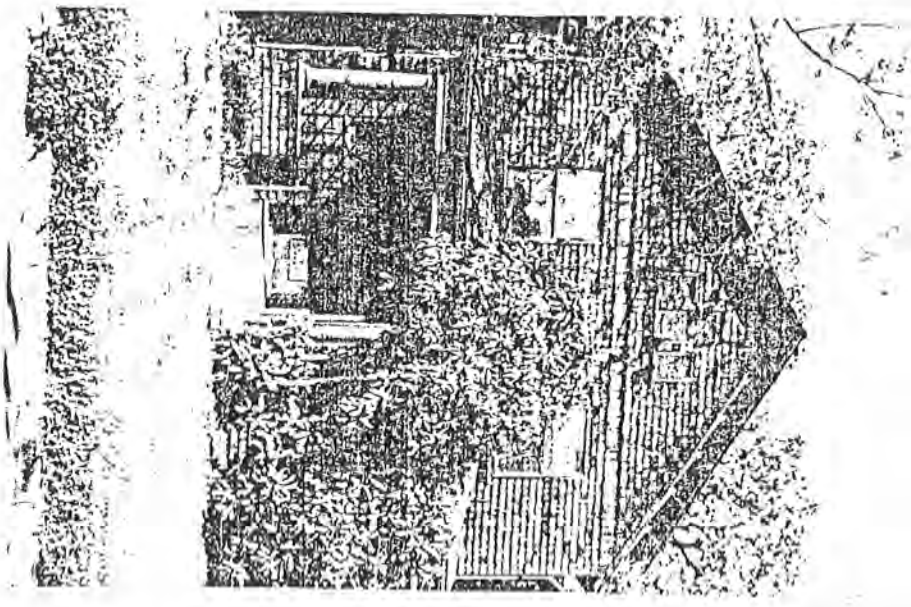
Professorville Historic District
1057 Ramona, Palo Alto
Santa Clara County, CA
Paula Boghosian, January 1979
2306 J Street, Sacramento, CA
front facade, to the NE
84 of 113 '72

Professorville Historic District
1048 Ramona, Palo Alto
Santa Clara County, CA
Paula Boghosian, January 1979
2306 J Street, Sacramento, CA
front facade, to the South
83 of 113 '71

Professorville Historic District
1047 Ramona, Palo Alto
Santa Clara County, CA
Paula Boghosian, January 1979
2306 J Street, Sacramento, CA
front facade, to the NE
82 of 113 '72



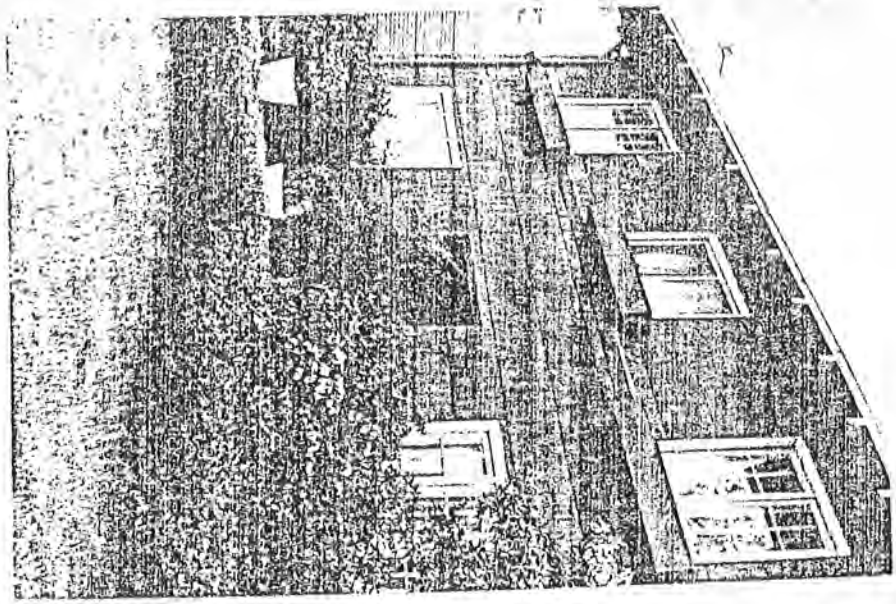


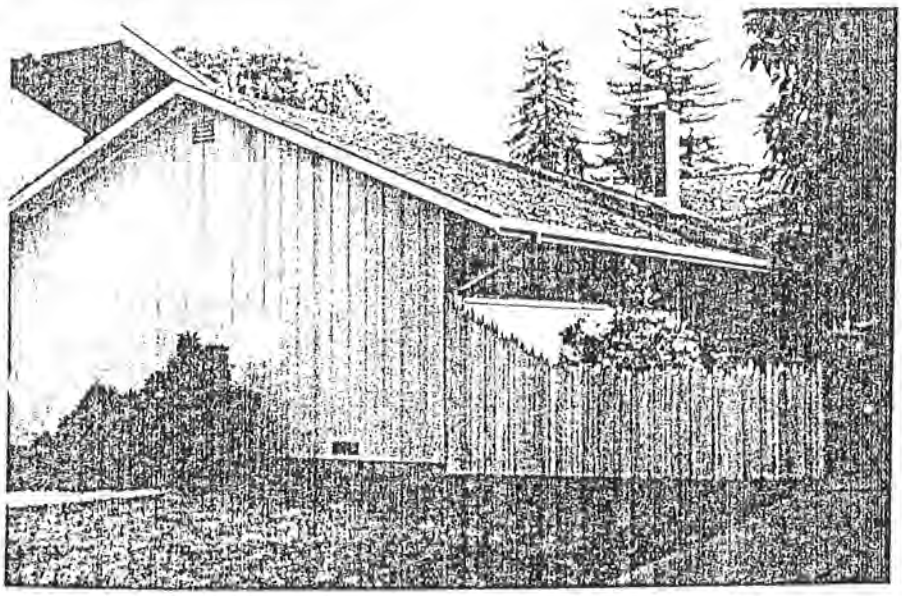


Professorville Historic District
1029 Ramona, Palo Alto
Santa Clara County, CA
Paula Boghosian, January 1979
2306 J Street, Sacramento, CA
front and side view, to the NE
79 of 113 #7

Professorville Historic District
1030 Ramona, Palo Alto
Santa Clara County, CA
Paula Boghosian, January 1979
2306 J Street, Sacramento, CA
front and side view, to the NE
80 of 113 #8

Professorville Historic District
1040 Ramona, Palo Alto
Santa Clara County, CA
Paula Boghosian, January 1979
2306 J Street, Sacramento, CA
front facade, to the South
81 of 113 #9





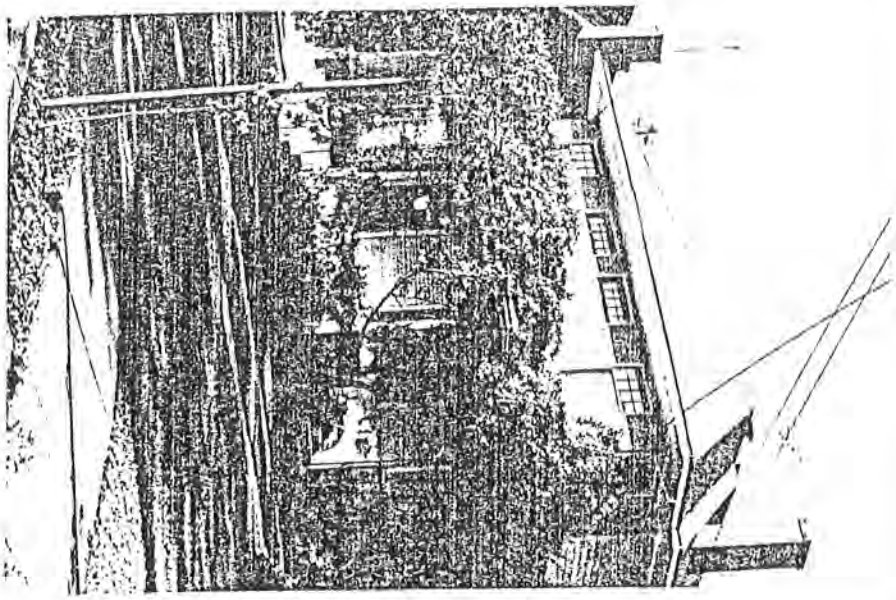


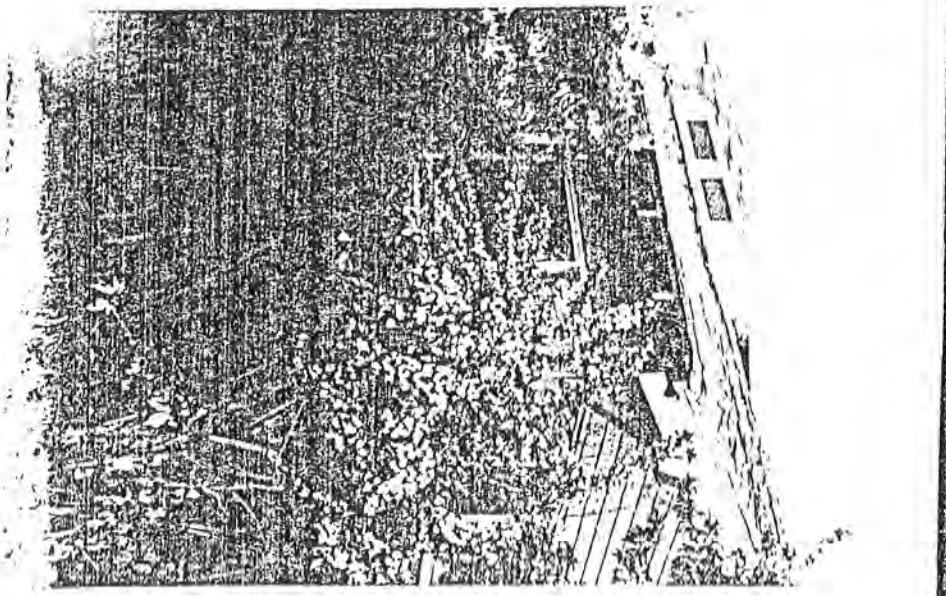
Professorville Historic District
1024 Ramona, Palo Alto
Santa Clara County, CA
Paula Boghosian, January 1979
2306 J Street, Sacramento, CA
front and partial side view, to the SW
78 of 113

Professorville Historic District
1021 Ramona, Palo Alto
Santa Clara County, CA
Paula Boghosian, January 1979
2306 J Street, Sacramento, CA
front and partial side view, to the NE
77 of 113

Professorville Historic District
1020 & 1024 Ramona, Palo Alto
Santa Clara County, CA
Paula Boghosian, January 1979
2306 J Street, Sacramento, CA
front and side views, to the SE
76 of 113







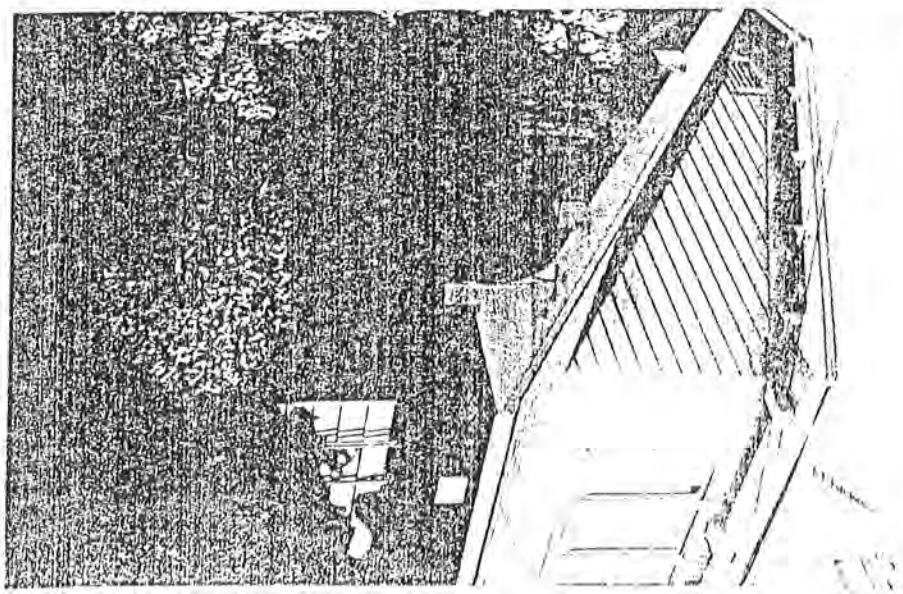
Professorville Historic District
1020 Ramona, Palo Alto
Santa Clara County, CA
Paula Boghosian, January 1979
2306 J Street, Sacramento, CA
front and side view, to the SW
75 of 113 #4

Professorville Historic District
1013 Ramona, Palo Alto
Santa Clara County, CA
Paula Boghosian, January 1979
2306 J Street, Sacramento, CA
front facade, to the NE
74 of 113 #1

Professorville Historic District
1001 Ramona & 1013 Ramona, Palo Alto
Santa Clara County, CA
Paula Boghosian, January 1979
2306 J Street, Sacramento, CA
front and side views, to the East
73 of 113



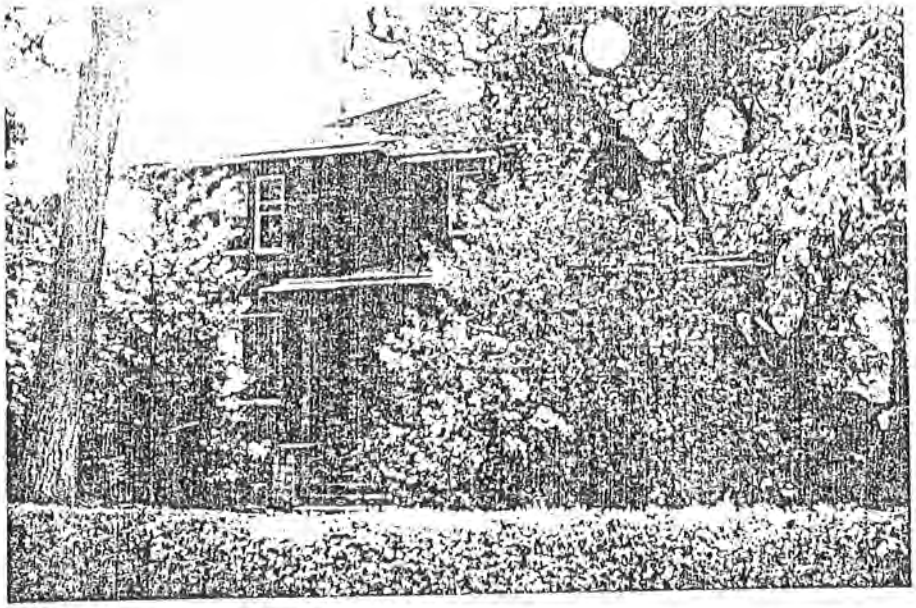


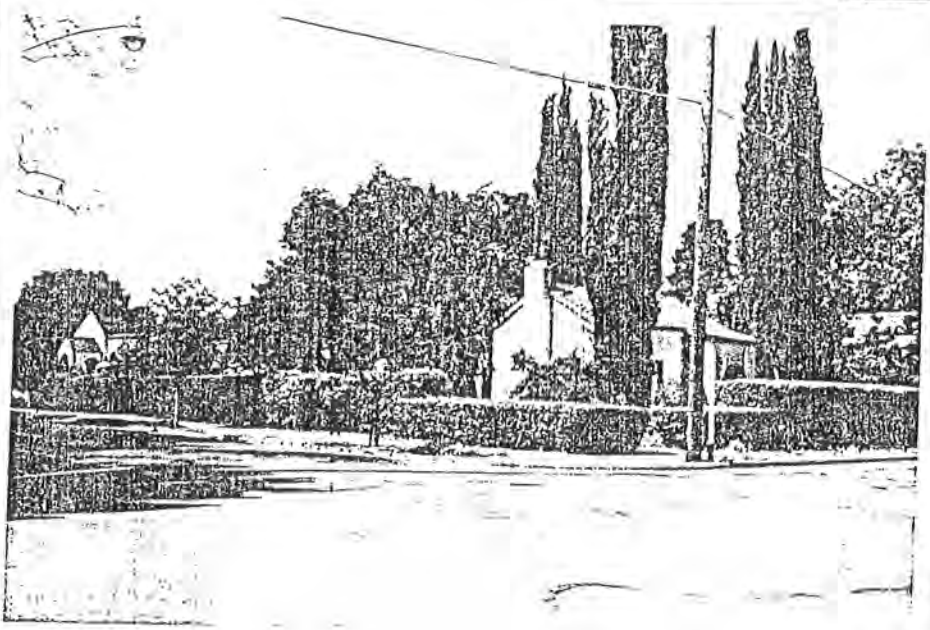


Professorville Historic District
1001 Ramona, Palo Alto
Santa Clara County, CA
Paula Boghosian, January 1979
2306 J Street, Sacramento, CA
front facade, to the NE
72 of 113 42

Professorville Historic District
405 Lincoln, Palo Alto
Santa Clara County, CA
Paula Boghosian, January 1979
2306 J Street, Sacramento, CA
front and side view, to the NW
71 of 113 42

Professorville Historic District
381 Lincoln, Palo Alto
Santa Clara County, CA
Paula Boghosian, January 1979
2306 J Street, Sacramento, CA
front facade, to the West
70 of 113 42





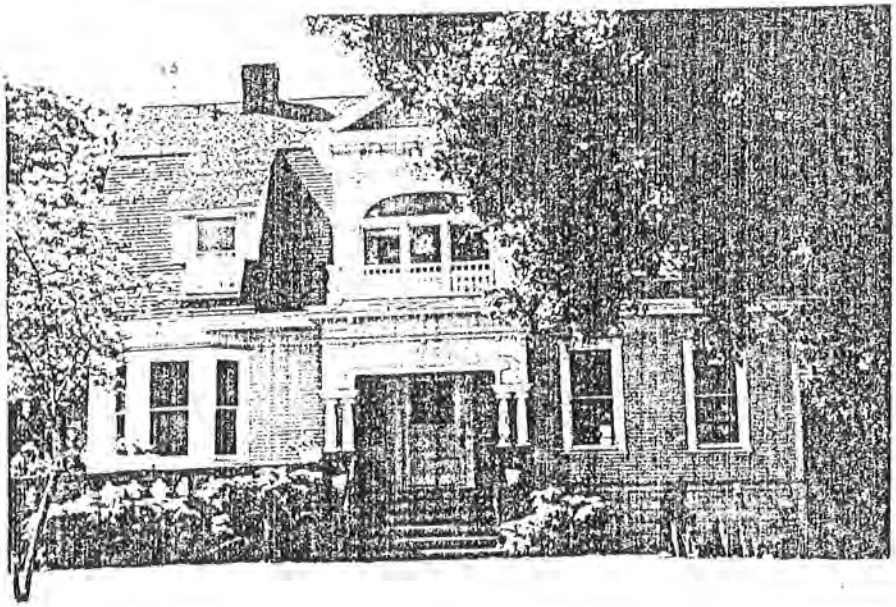


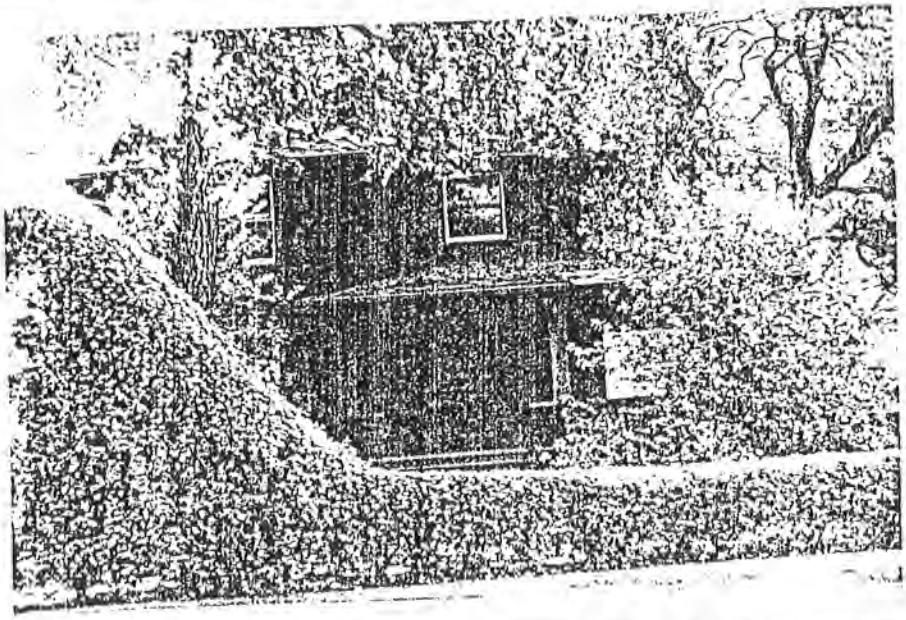
Professorville Historic District
381 Lincoln, Palo Alto
Santa Clara County, CA
Paula Boghosian, January 1979
2306 J Street, Sacramento, CA
front facade, to the NW
69 of 113 54

Professorville Historic District
345 Lincoln, Palo Alto
Santa Clara County, CA
Paula Boghosian, January 1979
2306 J Street, Sacramento, CA
front facade, to the NW
68 of 113 56

Professorville Historic District
334 Lincoln, Palo Alto
Santa Clara County, CA
Paula Boghosian, January 1979
2306 J Street, Sacramento, CA
front facade, to the SE
67 of 113 55



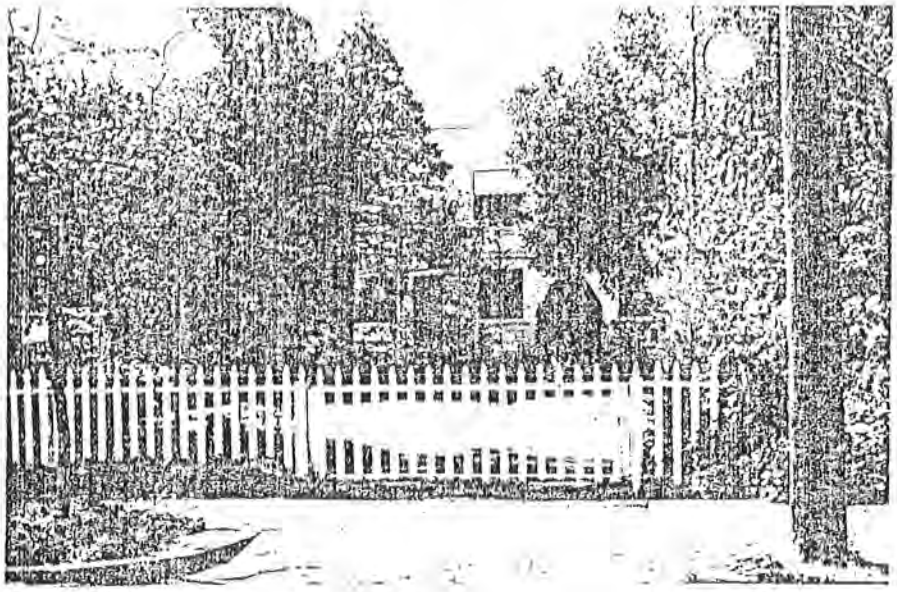




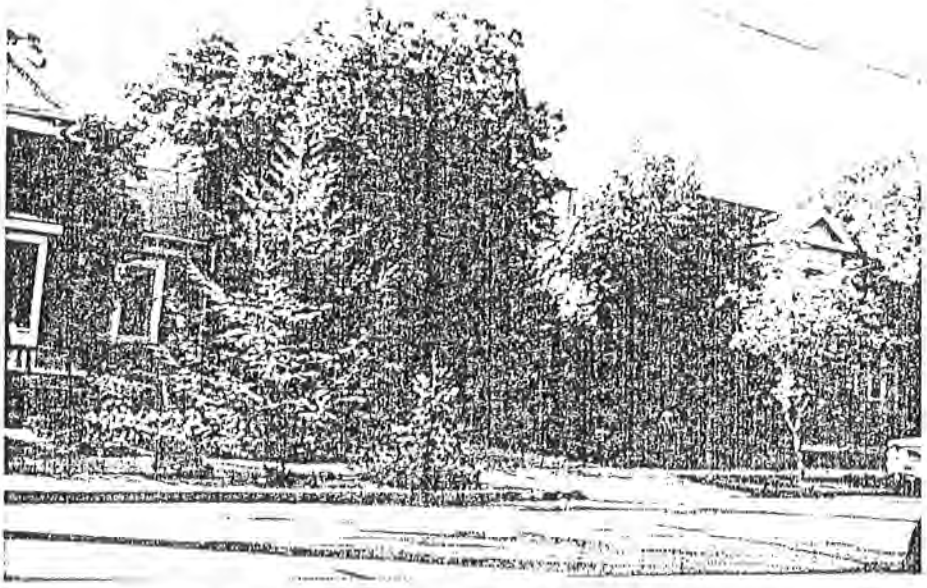
Professorville Historic District
331 & 345 Lincoln, Palo Alto
Santa Clara County, CA
Paula Boghosian, January 1979
2306 J Street, Sacramento, CA
front facades & side view, to the NW
66 of 113

Professorville Historic District
331 Lincoln, Palo Alto
Santa Clara County, CA
Paula Boghosian, January 1979
2306 J Street, Sacramento, CA
front facade, to the NW
65 of 113

Professorville Historic District
329 Lincoln, Palo Alto
Santa Clara County, CA
Paula Boghosian, January 1979
2306 J Street, Sacramento, CA
front facade, to the NW
64 of 113





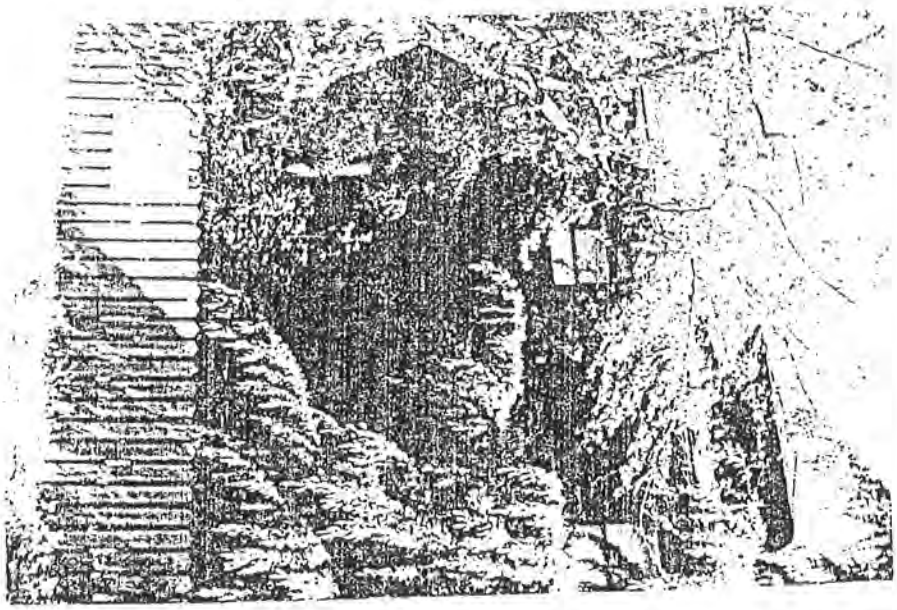


Professorville Historic District
251 Lincoln, Palo Alto
Santa Clara County, CA
Paula Boghosian, January 1979
2306 J Street, Sacramento, CA
front facade, to the SW
61 of 113

Professorville Historic District
308 Lincoln, Palo Alto
Santa Clara County, CA
Paula Boghosian, January 1979
2306 J Street, Sacramento, CA
front facade, to the SE
62 of 113

Professorville Historic District
318 Lincoln, Palo Alto
Santa Clara County, CA
Paula Boghosian, January 1979
2306 J Street, Sacramento, CA
front facade, to the SE
63 of 113





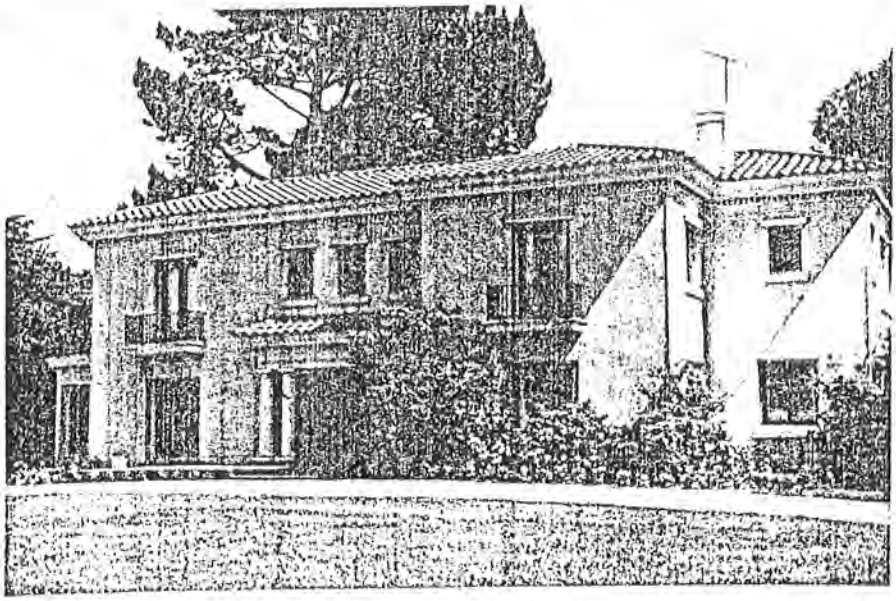


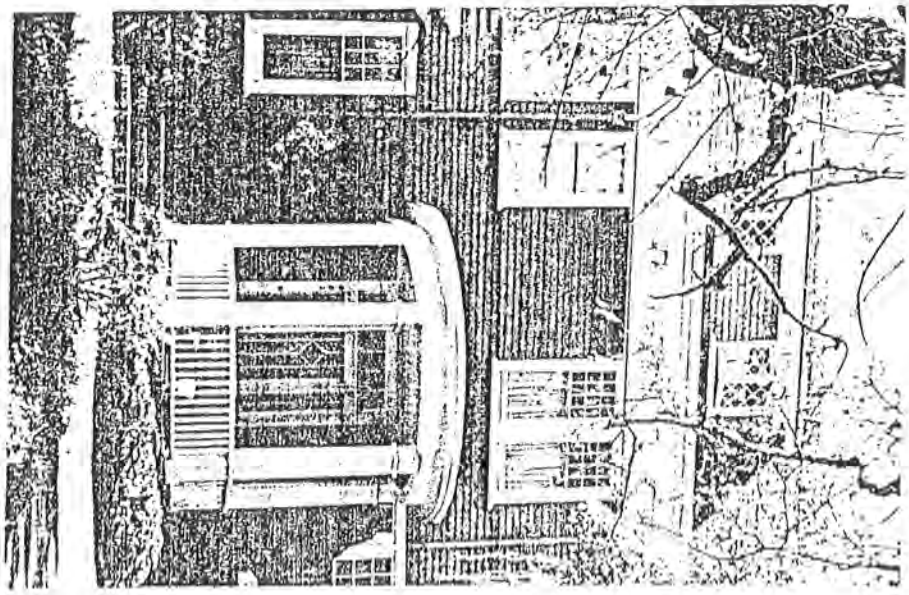
Fleugel Residence
Professorville Historic District
501 Kingsley, Palo Alto
Santa Clara County, CA
Paula Boghosian, January 1979
2306 J Street, Sacramento, CA
front facade, to the NW
60 of 113 #4

Professorville Historic District
490 Kingsley, Palo Alto
Santa Clara County, CA
Paula Boghosian, January 1979
2306 J Street, Sacramento, CA
front facade, to the SE
59 of 113 #5

Professorville Historic District
457 Kingsley, Palo Alto
Santa Clara County, CA
Paula Boghosian, January 1979
2306 J Street, Sacramento, CA
front facade, to the NW
58 of 113 #7



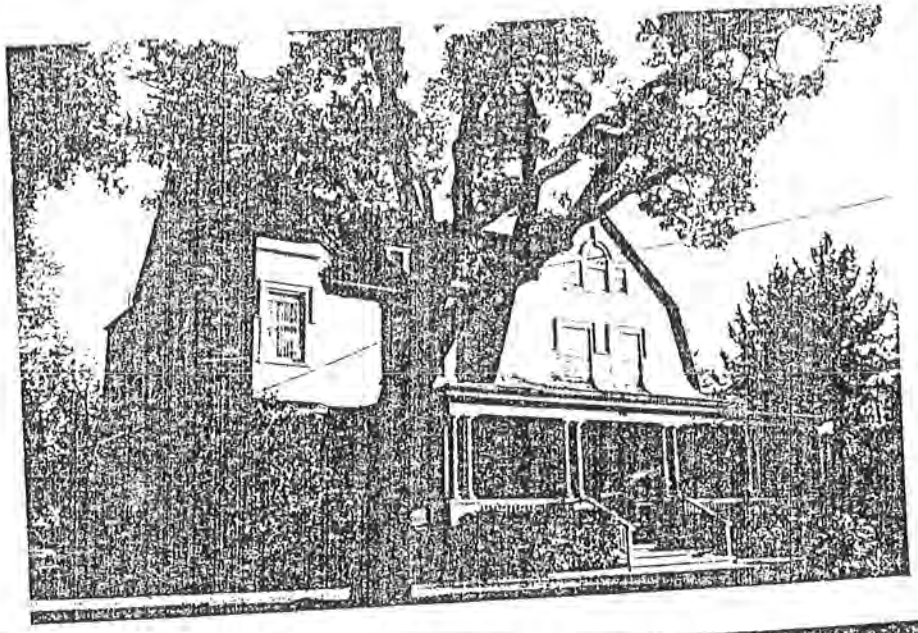




Professorville Historic District
430 Kingsley, Palo Alto
Santa Clara County, CA
Paula Boghosian, January 1979
2306 J Street, Sacramento, CA
front and side view, to the SE
55 of 113

Hutchinson House
Professorville Historic District
433 Kingsley, Palo Alto
Santa Clara County, CA
Paula Boghosian, January 1979
2306 J Street, Sacramento, CA
front view, to the NE
56 of 113

Professorville Historic District
450 Kingsley, Palo Alto
Santa Clara County, CA
Paula Boghosian, January 1979
2306 J Street, Sacramento, CA
front and side view, to the SE
57 of 113



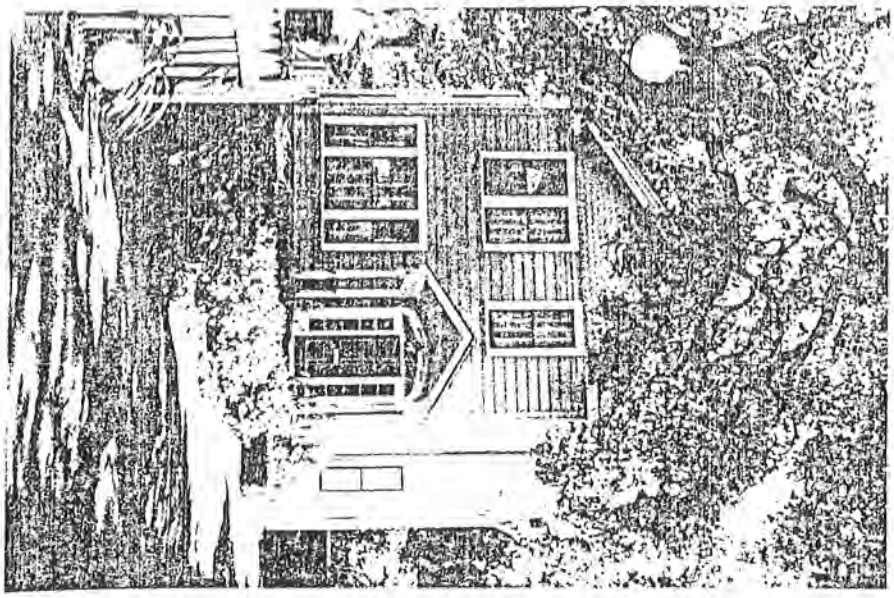




Professorville Historic District
360 Kingsley, Palo Alto
Santa Clara County, CA
Paula Boghsian, January 1979
2306 J Street, Sacramento, CA
front facade, to the NE
53 of 113

Professorville Historic District
364-374 Kingsley, Palo Alto
Santa Clara County, CA
Paula Boghosian, January 1979
2306 J Street, Sacramento, CA
front facades, and side views, to the
Northeast
54 of 113

Professorville Historic District
356 Kingsley, Palo Alto
Santa Clara County, CA
Paula Boghosian, January 1979
2306 J Street, Sacramento, CA
front facade, to the SE
52 of 113







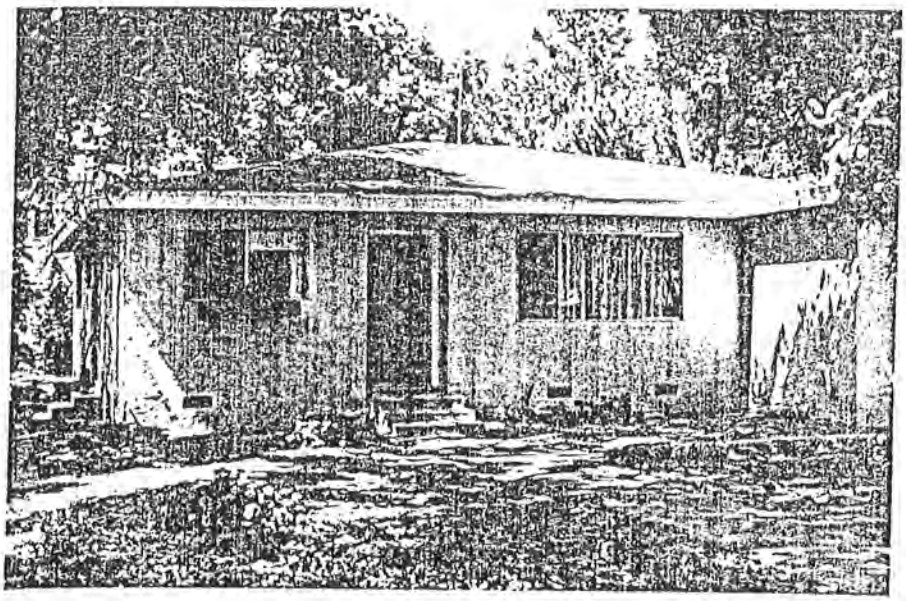
Professorville Historic District
334 Kingsley, Palo Alto
Santa Clara County, CA
Paula Boghosian, January 1979
2306 J Street, Sacramento, CA
front facade, to the SE
51 of 113

52 (ent)

Professorville Historic District
303 Kingsley, Palo Alto
Santa Clara County, CA
Paula Boghosian, January 1979
2306 J Street, Sacramento, CA
front facade, to the NW
50 of 113

Professorville Historic District
262 Kingsley, Palo Alto
Santa Clara County, CA
Paula Boghosian, January 1979
2306 J Street, Sacramento, CA
front facade, to the SE
49 of 113





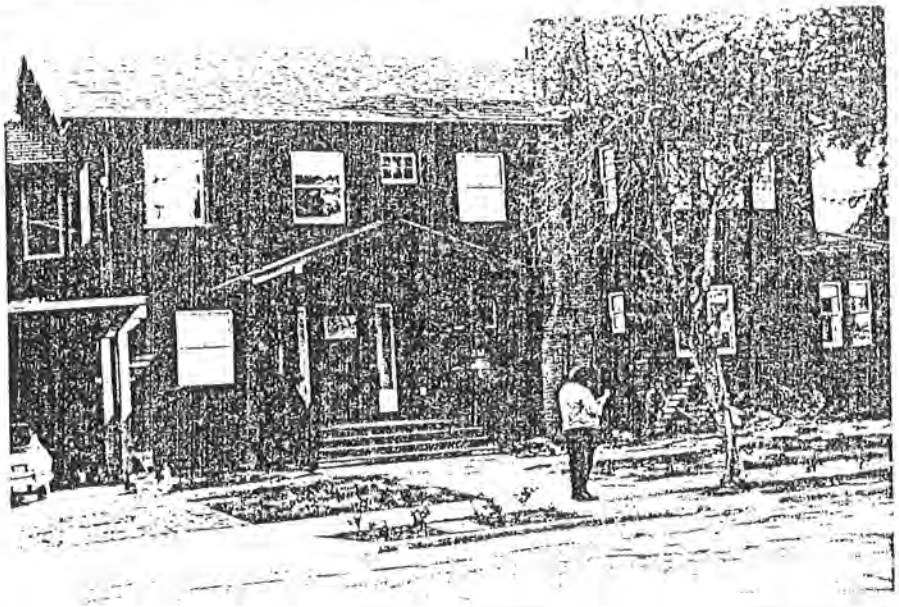


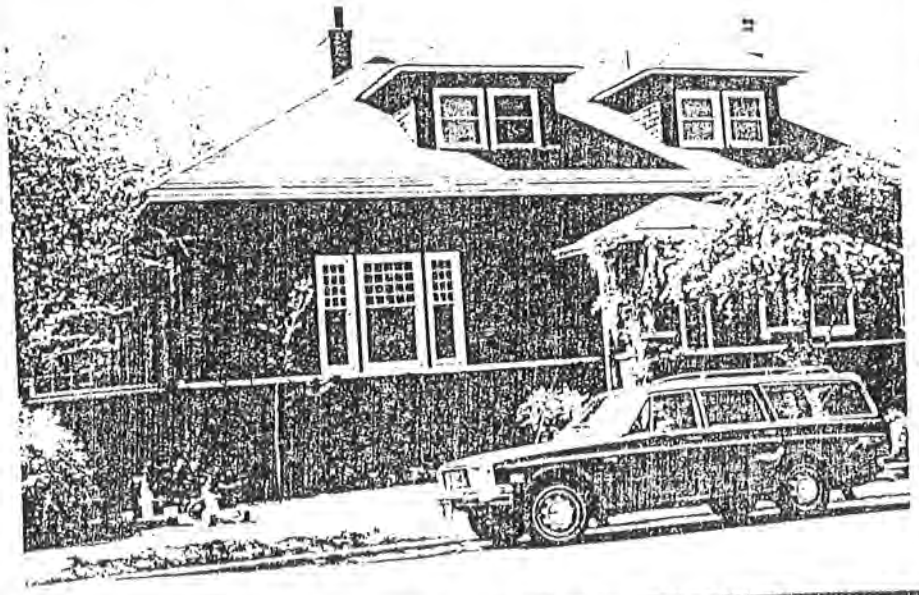
Professorville Historic District
257 Kingsley, Palo Alto
Santa Clara County, CA
Paula Boghosian, January 1979
2306 J Street, Sacramento, CA
front facade, to the NW
48 of 113

Professorville Historic District
252 Kingsley, Palo Alto
Santa Clara County, CA
Paula Boghosian, January 1979
2306 J Street, Sacramento, CA
front facade, to the SE
47 of 113

Professorville Historic District
222 Kingsley, Palo Alto
Santa Clara County, CA
Paula Boghosian, January 1979
2306 J Street, Sacramento, CA
front facade, to the SE
46 of 113





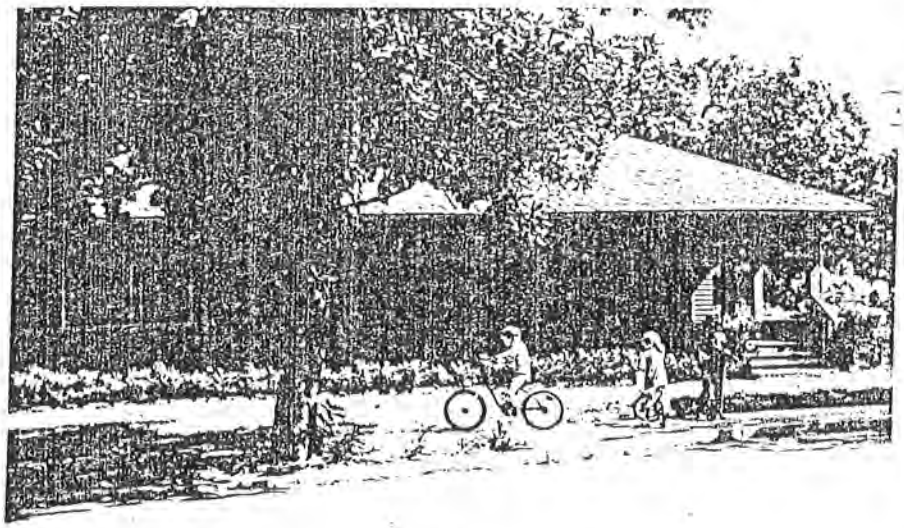


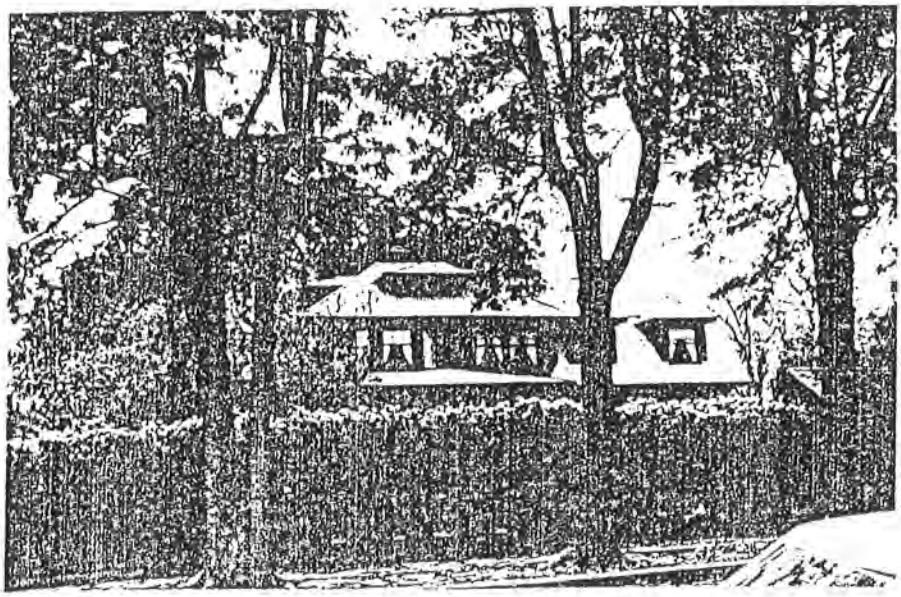
Fowler Residence
Professorville Historic District
221 Kingsley, Palo Alto
Santa Clara County, CA
Paula Boghosian, January 1979
2306 J Street, Sacramento, CA
front facade to the NW
45 of 113

Professorville Historic District
200 Kingsley, Palo Alto
Santa Clara County, CA
Paula Boghosian, January 1979
2306 J Street, Sacramento, CA
front facade, to the SE
44 of 113

Professorville Historic District
1176 Emerson, Palo Alto
Santa Clara County, CA
Paula Boghosian, February 1979
2306 J Street, Sacramento, CA
front facade, to the NW
43 of 113



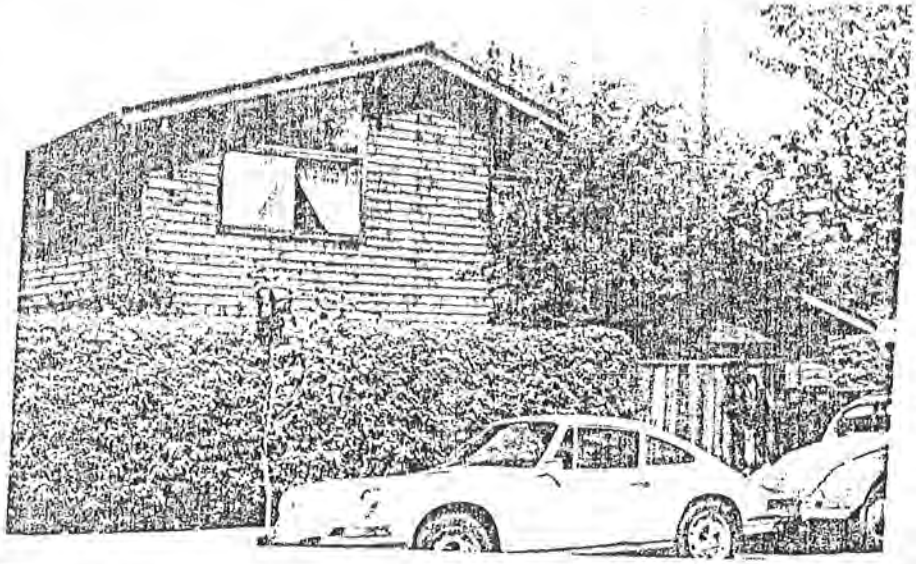


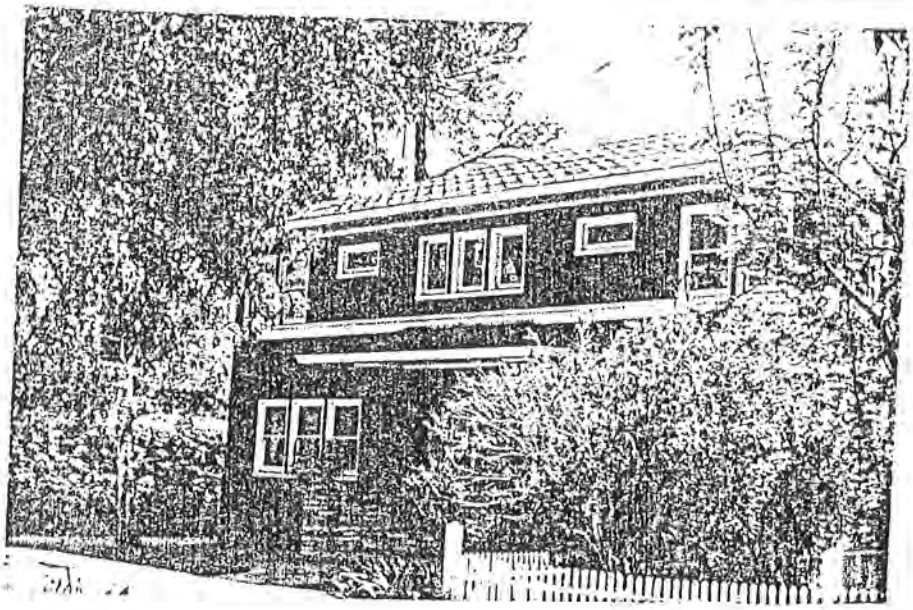


Professorville Historic District
1133 Emerson, Palo Alto
Santa Clara County, CA
Paula Boghosian, February 1979
2306 J Street, Sacramento, CA
front facade, to the NE
40 of 113

Professorville Historic District
1134 Emerson, Palo Alto
Santa Clara County, CA
Paula Boghosian, February 1979
2306 J Street, Sacramento, CA
front facade, to the South
41 of 113

Professorville Historic District
1135 Emerson, Palo Alto
Santa Clara County, CA
Paula Boghosian, February 1979
2306 J Street, Sacramento, CA
front facade, to the NE
42 of 113







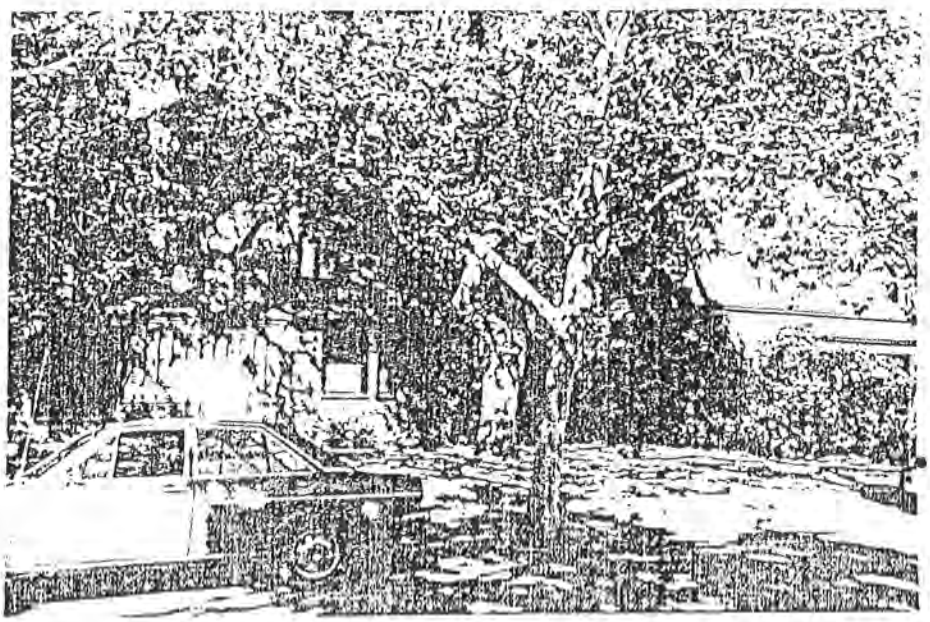
Professorville Historic District
1000 block of Bryant, Palo Alto
Santa Clara County, CA
Paula Boghosian, January 1979
2306 J Street, Sacramento, CA
streetscape, to the North
111 of 113

Professorville Historic District
200 block of Kingsley, Palo Alto
Santa Clara County, CA
Paula Boghosian, January 1979
2306 J Street, Sacramento, CA
streetscape, to the SE
112 of 113

Professorville Historic District
400 block of Kinsley, Palo Alto
Santa Clara County, CA
Paula Boghosian, January 1979
2306 J Street, Sacramento, CA
streetscape, view to the NE
113 of 113







PROFESSORVILLE LIST

*These names and addresses are are also included on the Historical Survey list.

Pr
Sou

Palo Alto Medical Clinic, Ltd. 300 Homer Palo Alto, CA 94301	271 Addison	4
Mrs. Frances Lyke 281 Addison Palo Alto, CA 94301	281 Addison	
John & Margaret Woodworth 301 Addison Palo Alto, CA 94301	301 Addison	3
R. G. & Shirley Wilkerson 940 Bryant Palo Alto, CA 94301	940, 944 Bryant	
Vincent Wickwar 943 Bryant Palo ALto, CA 94301	943 Bryant	
Paul T. Engel 951 Bryant Palo Alto, CA 94301	951 Bryant	
No such number listed in Realdex or City Directory	~~1000 Bryant~~	
Robert & Joan Jack 1005 Bryant Palo Alto, CA 94301	1005 Bryant	2*
Josephine Elliot 1010 Bryant Palo Alto, CA 94301	1010 Bryant	3
American Friends Service Comm. Inc. 1017-23 Bryant Palo Alto, CA 94301	1017-23 Bryant	3
John & Dorothy Reed 1020 Bryant Palo Alto, CA 94301	1020 Bryant	3
Gisela Josephson Calfornia State University Fullerton, CA 92534	1027 Bryant	
Steven A. Hadland 1028 Bryant Palo Alto, CA 94301	1028 Bryant	
Richard Waldinger 1033 Bryant Palo Alto, CA 94301	1033 Bryant	3

c

Jeanine L. Florance 1036 Bryant Palo Alto, CA 94301	1036 Bryant	
Gwendolyn G. Grechin 890 S. Springer Road Los Altos, Ca 94022	1044 Bryant	3
Francis M. Hall 1052 Bryant Palo Alto, CA 94301	1052 Bryant	4
Joseph & Viola Campton 1061 Bryant Palo Alto, CA 94301	1061 Bryant	2*
Zelma Teicher 3150 Middlefield Road Palo Alto, CA 94301	1100 Bryant	4
Anne Marie Koenemann 2640 Baker St. San Francisco, CA 94123	1106 Bryant	
Katherine Meyer 2040 Cowper Palo Alto, CA 94301	1116 Bryant	
Ronald E. Jorasch 14555 Bebell Road Los Altos Hills, CA 94022	1121 Bryant	4
Linda R. Brickman 1130 Bryant Palo Alto, CA 94301	1130 Bryant	3
Richard Cabrera 1135 Bryant Palo Alto, CA 94301	1135 Bryant	
Mrs. Martha Puff 1140 Bryant Palo ALto, CA 94301	1140 Bryant	
Stephen R. Postle 1143 Bryant Palo ALto, CA 94301	1143 Bryant	
Roy Smith 1148 Bryant Palo Alto, CA 94301	1148 Bryant	
Eward & Janet Estes 1160 Bryant Palo Alto, CA 94301	1160 Bryant	4

Enid Pearson 1019 Forest Court Palo Alto, CA 94301	1200 Bryant	3
No such number listed in Realdex or City Directory	251 ~~233~~ Embarcadero	
Duncan K. Foley, et al 235 Embarcadero Road Palo Alto, CA 94301	235 Embarcadero Rd.	2*
F.W.L. Inc. P.O. Box 72 Menlo Park, CA 94025	1091 Emerson	
Julien Sherman 200 Kingsley Palo Alto, CA 94301	200 Kingsley	
John & Sybille Pflunke 221 Kingsley Palo Alto, CA 94301	221 Kingsley	2*
Mrs. Von Der Groeuen 222 Kingsley Palo Alto, CA 94301	222 Kingsley	
David D. Kennedy 252 Kingsley Palo Alto, Ca 94301	252 Kingsley	
Thos Conn 257 Kingsley Palo Alto, CA 94301	257 Kingsley	
Peter Sylvester 262 Kingsley Palo Alto, CA 94301	262 Kingsley	
John & Merle Keesling 334 Kingsley Palo Alto, CA 94301	334 Kingsley	2*
Walter & Paula Weber 356 Kingsley Palo Alto, CA 94301	356 Kingsley	1*
Mrs. Roy George 360 Kingsley Palo Alto, CA 94301	360 Kingsley	
Chester Fairclough 364 Kingsley Palo Alto, CA 94301	364 Kingsley	3

c

Loren R. & Susan Sorenson 374 Kingsley Palo Alto, CA 94301	374 Kingsley	3
Gene M. Phillips 405 Kingsley Palo Alto, CA 94301	405 Kingsley	
Fowler A. Biggs 425 Kingsley Palo Alto, CA 94301	425 Kingsley	
Henry & Pauline Parker 430 Kingsley Palo ALto, CA 94301	430 Kingsley	3
Kenneth & Dorothy Last 433 Kingsley Palo Alto, CA 94301	433 Kingsley	2*
Wm. & Rosanne Saussotte 450 Kingsley Palo Alto, CA 94301	450 Kingsley	2*
First Presbyterian Church 1140 Cowper Street Palo Alto, CA 94301	457 Kingsley	2*
Mary C. Wilbur 490 Kingsley Palo Alto, CA 94301	490 Kingsley	3
David & Shulamith Rubenstein 501 Kingsley Palo Alto, CA 94301	501 Kingsley	2*
R.W.I. Inc. P.O.Box 72 Menlo Park, CA 94025	225 Lincoln	3
Sara Phillips 251 Lincoln Palo Alto, CA 94301	251 Lincoln	4
Lydia Morse 308 Lincoln Palo Alto, CA 94301	308 Lincoln	3
Jess & Esther Wilson 318 Lincoln Palo Alto, CA 94301	318 Lincoln	4

Robert B. Textor 329 Lincoln Palo Alto, Ca 94301	329 Lincoln	
David & Frances Stevenson P.O. Box 5305 Palo Alto, CA 94301	331 Lincoln	
Richard & Chris Helm 334 Lincoln Palo Alto, CA 94301	334 Lincoln	3
Harian & Jennette Remmel 345 Lincoln Palo Alto, CA 94301	345 Lincoln	2*
Barbara M. Given 356 Lincoln Palo ALto, CA 94301	356 Lincoln	1*
James & Margaret Stone 365 LIncoln Palo ALto, CA 94301	365 Lincoln	2*
Estate of Lauretta Cecil 381 Lincoln Palo Alto, CA 94301	381 Lincoln	4
John Duryea 405 Lincoln Palo ALto, CA 94301	405 Lincoln	
Michael Pleshakov 1000 Ramona Palo ALto, Ca 94301	1000 Ramona	
Myrtle Appy 1001 Ramona Palo Alto, CA 94301	1001-07 Ramona	3
No such numbers listed in Realdex.	1004-06 Ramona	
Bryan R. Carlisle, et al 1013 Ramona Palo Alto, CA 94301	1013 Ramona	
Novia Dood P.O. Box 11007 Reno, Nevada 89510	1020 Ramona	
Lewis Morrow 1024 Ramona Palo Alto, CA 94301	1024 Ramona	4

c

Jerome & Sandra Peters 1021 Ramona Palo Alto, Ca 94301	1021 Ramona	4
Richard Beckett 1029 Ramona Palo Alto, CA 94301	1029 Ramona	
~~No such number listed in Realdex or City Directory~~	1037 Ramona	
Emma N. Delaney 164 Bella Vista Dr. Hillsborough, CA 94010	1032 Ramona	
Carol J. Schwarzott 955 Everett St. Menlo Park, CA 94025	1040 Ramona	
Arthur & Jane Holland 1047 Ramona Palo Alto, Ca 94301	1047 Ramona	4
Robt. & Linda Mathews 1048 Ramona Palo Alto, CA 94301	1048 Ramona	4
John & Johanna Dunn 1057 Ramona Plao Alto, CA 94301	1057 Ramona	4
Harry Lewenstein 1102 Ramona Palo Alto, Ca 94301	1102 Ramona	
James & Jane MItchell 1103 Ramona Palo Alto, CA 94301	1103 Ramona	3
A.R. Saint Angelo 1106 Ramona Palo Alto, CA 94301	1106 Ramona	
Gerald A. Tucker 1112 Ramona Palo Alto, CA 94301	1112 Ramona	
William & Betty Wallace 1115 Ramona Palo Alto, CA 94301	1115 Ramona	2*
Ernest T. Becker 1116 Ramona Palo Alto, CA 94301	1116 Ramona	

c

Wilber W. Bolten 707 Bryant #101 Palo Alto, CA 94301	1125 Ramona	
No number listed in Realdex	1132 Ramona	
Ruth Dearborn 1139 Ramona Palo Alto, Ca 94301	1139 Ramona	2*
No such number listed in REaldex	1140 Ramona	
Peter L. Greenberg 1147 Ramona Palo Alto, CA 94301	1147 Ramona	
Evelyn D. George 1155 Ramona Palo Alto, CA 94301	1155 Ramona	
No such number listed in Realdex	1166 Ramona	
Ralph Montana 1101 Waverley Palo Alto, CA 94301	1101 Waverley	
James D. & Joyce Hoey 457 W. Meadow Drive PAlo Alto, CA 94307	1110 Waverley	
George H. Abrahamson 1130 Waverley Palo Alto, CA 94301	1130 Waverley	
Lloyd & Shirley West 1135 Waverley Palo ALto, CA 94301	1135 Waverley	4
Melvin & Saisie Pratt 1136 Waverley Palo Alto, CA 94301	1136 Waverley	3
Patricia Sherwood 1146 Waverley Palo Alto, CA 94301	1146 Waverley	4
Robert & F.P. Scarlett 1155 Waverley Palo Alto, CA 94301	1155 Waverley	4

c

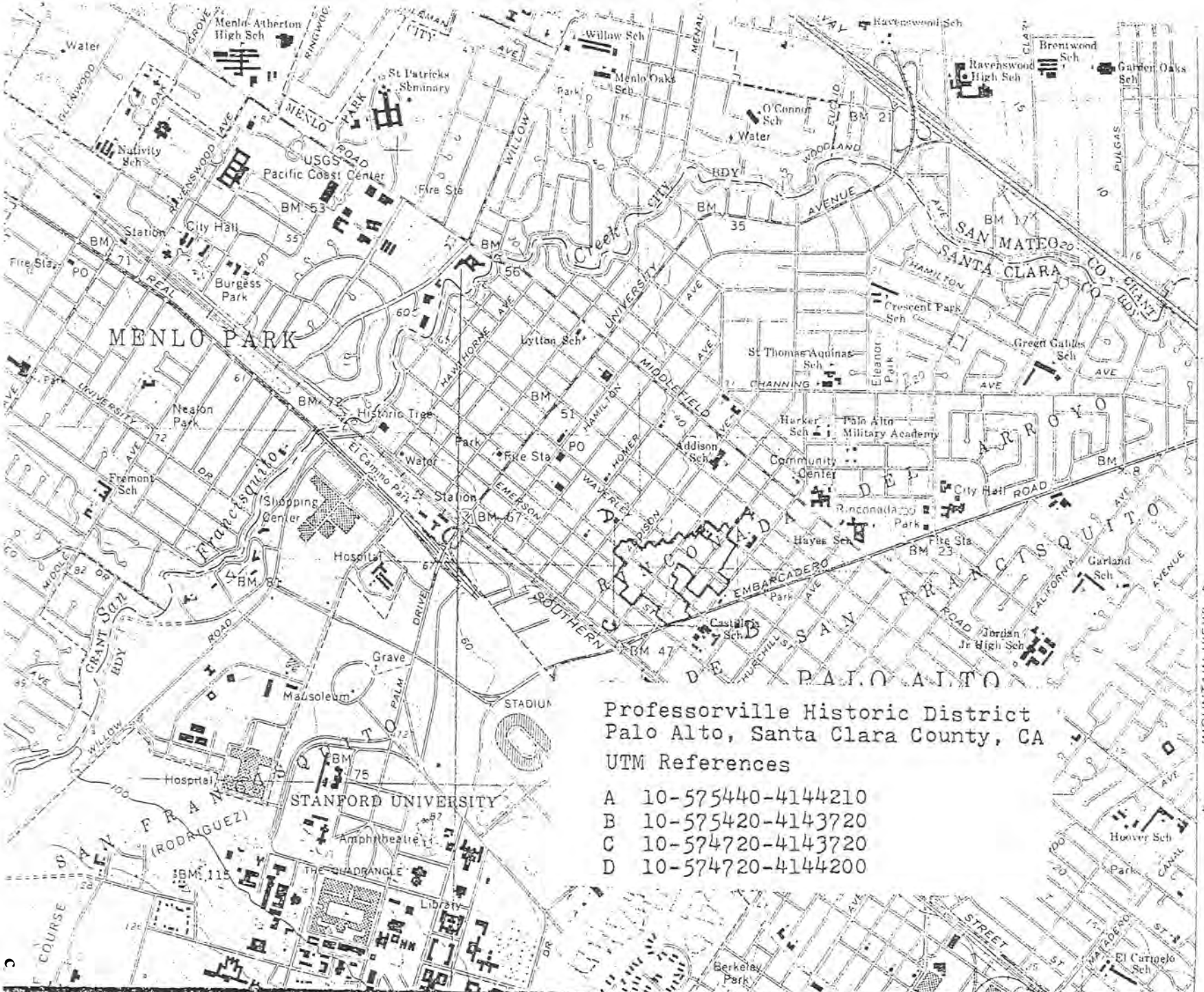
Richard C. Gregorson 1177 Waverley Palo Alto, Ca 94301	1177 Waverley
Mrs. Bertha Bull 1220 Waverley Palo Alto, CA 94301	1220 Waverley
David Dorosin 1221 Waverley Palo Alto, CA 94301	1221 Waverley
Wm. R. Yeaman 1245 Waverley Palo Alto, CA 94301	1245 Waverley
Perrin L. French 1240 Waverley Palo Alto, CA 94301	1240 Waverley
Christopher Arnold 1248 Waverley Palo Alto, CA 94301	1248 Waverley

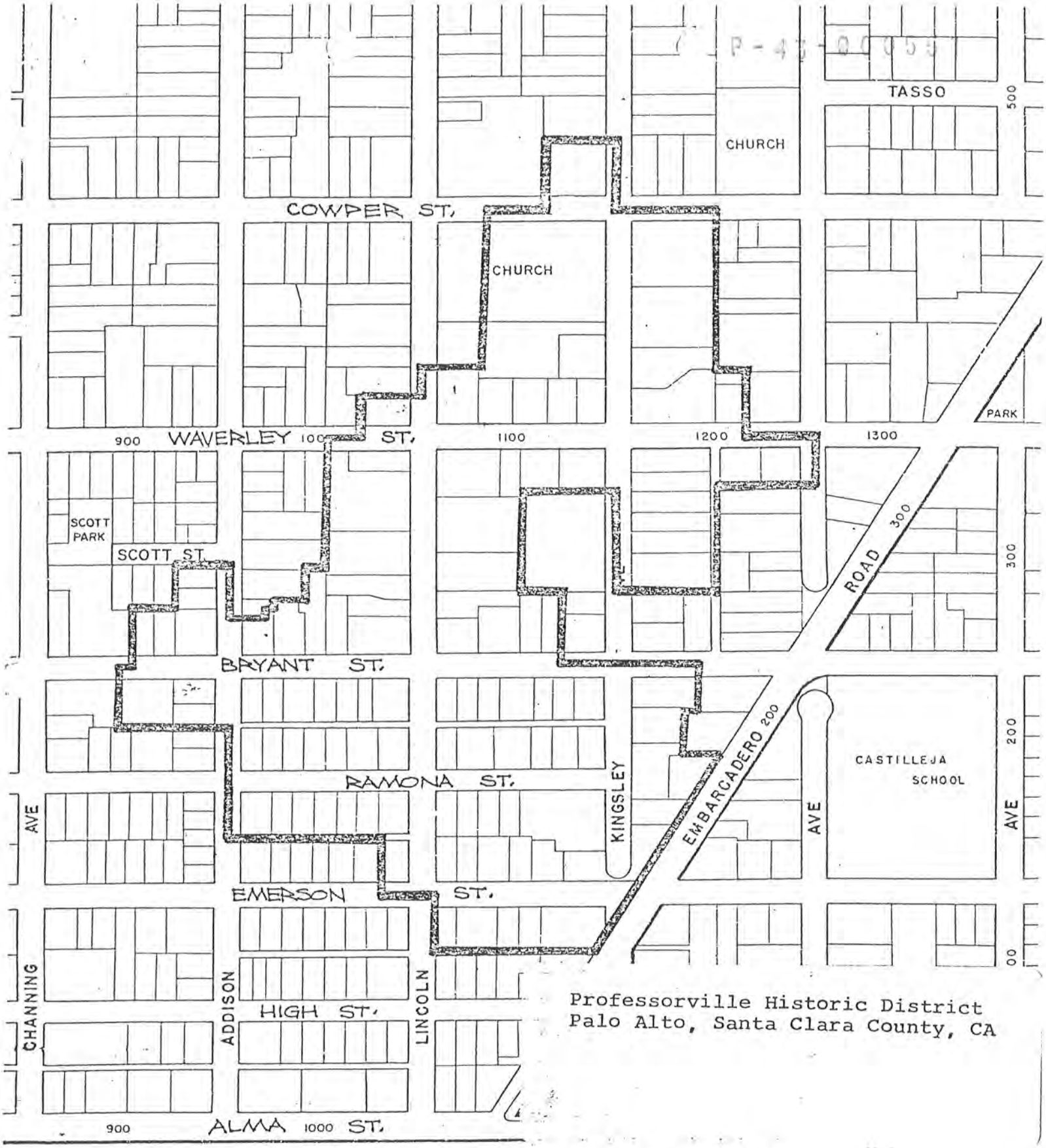
c

Addition to Professorville list 7/26/79

Mathias M Hennenberg 319 Addison Palo Alto, CA 94301	319 Addison
George Varian 327 Addison Palo Alto, CA 94301	327 Addison
Vera Fedoruv 148 Dermott Lane Somerset, N. J. 08873	1101 Emerson
David & Michell Rubin, et al 1102 Emerson Palo Alto, CA 94301	1102 Emerson
Samuel W. Stewart 1111 Emerson Palo Alto, CA 94301	1111 Emerson
Mrs. Jule Gerbode 1118 Emerson Palo Alto, CA 94301	1118 Emerson
Marshall Deitsch 1121 Emerson Palo Alto, CA 94301	1121 Emerson
James T. Watkins 1128 Emerson Palo Alto, CA 94301	1128 Emerson
Hugh D. Smith 1129 Emerson Palo Alto, CA 94301	1129 Emerson
Glen O. Toney 1133 Emerson Palo Alto, CA 94301	1133 Emerson
Kenneth M. Glazer, Jr. 1134 Emerson Palo Alto, CA 94301	1134 Emerson
Guy Crosby 1135 Emerson Palo Alto, CA 94301	1135 Emerson
Wm. E. Hoffman 820 American Street San Carlos, CA 94070	1176 Emerson

City of Palo Alto
Professorville Historic District


Professorville Historic District
Palo Alto, Santa Clara County, CA
UTM References
A 10-575440-4144210
B 10-575420-4143720
C 10-574720-4143720
D 10-574720-4144200
MENLO PARK
PALO ALTO
STANFORD UNIVERSITY
SAN FRANCISQUITO CREEK
ARROYO DE LA LAGUNA
SAN MATEO CO.
SANTA CLARA CO.
27'30"
4144
4143
(MOUNTAIN VIEW)
1558 I NE



Professorville Historic District
Palo Alto, Santa Clara County, CA

PROFESSORVILLE HISTORIC DISTRICT
PALO ALTO, CALIFORNIA

——— HISTORIC DISTRICT BOUNDARY

NORTH

0 200 400

9-18-79

c

No. 10-300 REV. (9 77)

UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

NATIONAL REGISTER OF HISTORIC PLACES INVENTORY -- NOMINATION FORM

P-43-000551 CA-SCL-556H

FOR NPS ONLY
RECEIVED P-43-000551
DATE ENTERED

RECEIVED
APR 14 1993

SEE INSTRUCTIONS IN *HOW TO COMPLETE NATIONAL REGISTER FORMS*
TYPE ALL ENTRIES -- COMPLETE APPLICABLE SECTIONS

1 NAME

HISTORIC: Professorville Historic District

OHP 4302-0001-9999

AND/OR COMMON: same

1 thru 113

2 LOCATION

STREET & NUMBER: The District comprises an area roughly bounded by Addison, Cowper, Embarcadero, Emerson and Ramona Streets. (Please see map and list of included addresses) NOT FOR PUBLICATION

CITY, TOWN: Palo Alto ___ VICINITY OF

CONGRESSIONAL DISTRICT: 12

STATE: California CODE: 06 COUNTY: Santa Clara CODE: 085

3 CLASSIFICATION

CATEGORY	OWNERSHIP	STATUS	PRESENT USE	
X DISTRICT	___ PUBLIC	X OCCUPIED	___ AGRICULTURE	___ MUSEUM
___ BUILDING(S)	X PRIVATE	___ UNOCCUPIED	___ COMMERCIAL	___ PARK
___ STRUCTURE	___ BOTH	___ WORK IN PROGRESS	___ EDUCATIONAL	X PRIVATE RESIDENCE
___ SITE	PUBLIC ACQUISITION	ACCESSIBLE	___ ENTERTAINMENT	___ RELIGIOUS
___ OBJECT	___ IN PROCESS	___ YES: RESTRICTED	___ GOVERNMENT	___ SCIENTIFIC
	___ BEING CONSIDERED	X YES: UNRESTRICTED	___ INDUSTRIAL	___ TRANSPORTATION
		___ NO	___ MILITARY	___ OTHER:

4 OWNER OF PROPERTY

NAME: Multiple ownership

STREET & NUMBER:

CITY, TOWN: STATE:

___ VICINITY OF

APR 6 2 13 PM '93

5 LOCATION OF LEGAL DESCRIPTION

COURTHOUSE, REGISTRY OF DEEDS, ETC.: Santa Clara County Clerk's Office

STREET & NUMBER: 191 North First Street

CITY, TOWN: San Jose STATE: California

6 REPRESENTATION IN EXISTING SURVEYS

TITLE: Point of Historical Interest No. SCI-001

DATE: 1975 ___ FEDERAL X STATE ___ COUNTY ___ LOCAL

DEPOSITORY FOR SURVEY RECORDS: Office of Historic Preservation

CITY, TOWN: Sacramento STATE: California

b

DESCRIPTION

P-43-000551
CA-SCL-556H

CONDITION		CHECK ONE	CHECK ONE
X EXCELLENT	DETERIORATED	X UNALTERED	X ORIGINAL SITE
GOOD	RUINS	X ALTERED	X MOVED DATE
X FAIR	UNEXPOSED		

DESCRIBE THE PRESENT AND ORIGINAL (IF KNOWN) PHYSICAL APPEARANCE

The Professorville Historic District comprises roughly the area bounded by Ramona, Addison, Embarcadero, and Waverley Streets.

The area is characterized by abundant and mature landscaping, and residential structures that range in style from Colonial Revival to Craftsman. Some examples of the later Spanish Colonial Revival and Period Revival modes also occur and while stylistically different, become related to the earlier buildings through their residential scale, design quality, and ample, mature landscaping. Construction dates of structures within the proposed district essentially range from the late 1890's to the mid 1920's. Houses range from one to two and a half stories in height with differences in size often diminished or obscured by plant materials.

The District is composed of 113 structures, 6 of which are considered to be intrusions. The district is shaped irregularly, with a cut-out in the center to exclude several buildings of more recent date and unsympathetic architectural style. Numerous other structures of almost like-character and quality surround the proposed district but are excluded due to their lesser overall building quality, greater degree of alterations, or intrusions that interrupt their inclusion as structures contiguous to the District.

Buildings and sites contributing to the character of the district:

1. 271-3 Addison: Vernacular cottage, c. 1890, one and a half story, shiplap, minimal bargeboard decoration, some alterations.

2. 281 Addison: Colonial Revival/Classical Revival, c. 1900, two stories, asbestos siding, porch with Tuscan columns and dentil course.

3. 301 Addison: Colonial Revival, c. 1904, one and a half story, shingle, parapetted porch with Tuscan columns, glassed in porch.

4. 940 Bryant: Colonial Revival, c. 1900, one story, clapboard, hipped dormered roof and slanted bay windows, unusual corner at porch.

5. 943 Bryant: Colonial Revival, c. 1900, two stories, shingle and shiplap, porch supported by columns, hip roof.

6. 944 Bryant: Craftsman, c. 1900, one story, shingle, hip roof with skylight facing East, casement windows.

7. 951 Bryant: Colonial Revival/Shingle, c. 1900, two stories, shingle, palladian windows, tree trunk section columns support overhang of house that forms porch.

8. Frank Angell House, 1005 Bryant: Colonial Revival with Shingle style characteristics, 1892, two and a half stories, shingle, gambrel roof, triple columns support building overhang that forms porch, unusual patterned brick work.

b

9. 1010 Bryant: Colonial Revival, c. 1907, one and a half stories, shingled steeply gabled roof with long street-facing dormer, entrance gate with posts and finials.

10. 1017-23 Bryant: Colonial Revival/Shingle, c. 1893, two stories, shingle, twin gambrel-roofed dormers framing rectangular dormer, columns support overhang of building creating porch.

11. 1020 Bryant: Colonial Revival, c. 1907, two stories, shingle, symmetrical format with square second floor projections, flared at the belt course.

12. 1027 Bryant: Colonial Revival/Queen Anne/Craftsman, c. 1898, two stories, shiplap, shingle, decorative arches in porch.

13. 1028 Bryant: Colonial Revival, c. 1900, one story, shiplap, hip roof, slanted bay, Tuscan porch columns.

14. 1033 Bryant: Colonial Revival, 1899, two stories, shingle, fluted pilasters with capitals, gambrel roof, some alterations.

15. 1036 Bryant: Colonial Revival, c. 1915, one story, stucco, gabled roof, slightly arched porch with doubled columns, material and style differ from neighborhood standard.

16. Varian House, 1044 Bryant: Craftsman, 1902, one and a half story, shingle, hip roof with dormer, cantilevered square bay, house is important historically: the Varian brothers invented the Klystron tube.

17. 1052 Bryant: Craftsman/Colonial Revival, c. 1910, one story, narrow clapboard, large veranda on two sides of house, shallow hip roof with carved rafter ends.

18. Sun-bonnet House, 1061 Bryant: Colonial Revival, 1899, two stories, shingle, designed by Bernard Maybeck, gambrel roof.

19. 1100 Bryant: Craftsman, c. 1904, two story with one story wing to street, shingle, very thin roof overhang and eave members, slanted bay by entrance.

20. 1106 Bryant: Colonial Revival, c. 1910, one story, asbestos siding, hip roof with dormer, Tuscan porch columns.

21. 1116 Bryant: Colonial Revival, c. 1900, one and a half story, clapboard and shingles, hipped and gabled roof forms with flared eaves, dormer with geometric mullion pattern.

22. Castilleja Hall, later Nardyne Apartments, 1121 Bryant: Colonial Revival/Classical Revival, c. 1892, two stories, shingle, rectangular block format primary details are two entry columns, was once used as a school.

b

23. 1130 Bryant: Craftsman Chalet, c. 1915, two story, clapboard, broad street facing gable, cantilevered balcony with jigsaw balustrade, elaborate window facings.

24. 1135 Bryant: Craftsman, c. 1910, one story, stucco with shingled lower half of structure.

25. 1140 Bryant: Colonial Revival, c. 1905, one story, shingle, hip roof with soffited eave and arched recessed entry, bland but not unsupportive component of neighborhood.

26. 1143 Bryant: Prairie, c. 1915, two story, stucco, the heavily hooded entry detail is unusual in this style.

27. 1148 Bryant: Craftsman/Colonial Revival, c. 1905, one and a half story, shingle, symmetrical, hip roofed building with tripartite ground floor windows.

28. 1160 Bryant: Colonial Revival, c. 1914, two and a half story, wide clapboard, gabled roof, ribbon-banded casement windows, integral auto and pedestrian gates at north side.

29. 1200 Bryant: Colonial Revival, 1904, one and a half story, stucco, symmetrical half timber design, with large gabled dormers.

30. 235 Embarcadero: Craftsman, c. 1907, three story, shingle, shallow hip roof, curved porch brackets, casement windows, very large wisteria vines, aviary.

31. 251 Embarcadero: Colonial Revival, c. 1900, two story, shingle.

32. 200 Kingsley: Craftsman, c. 1910, one story, shingle, massive hip roof, wrap-around verandah, French doors, double-hung windows with x-shaped muntin pattern.

33. Fowler Residence, 221 Kingsley: Colonial Revival with Craftsman influences, 1900, shingle, widows walk, large enclosed garden, Point of Historical Interest SCI-006.

34. 222 Kingsley, Colonial Revival, c. 1905, one and a half story, shingle, steeply gabled roof with tiny shed dormer, sawtooth shingle pattern, Tuscan columns at porch.

35. 252 Kingsley, Craftsman, c. 1910, two story, shingle, gabled roof, pedimented porch with square posts, side lights at entry, leaded window.

36. 257 Kingsley: Craftsman, c. 1905, one and a half stories, shingle, two kinds of shingles, - smaller on upper portion, larger size on lower portion.

37. 262 Kingsley: Craftsman, c. 1910, two story, shingle and clapboard, surface texture differentiation between first and second floor, banded leaded diamond-pane casement windows on second floor.

38. 334 Kingsley: Classical Revival, 1903, two story, narrow clapboard, formal, symmetrical house with slanted bays, turned ball finials, balustrades above porch, bay. b

b

39. 356 Kingsley: Vernacular, c. 1893, two story, shiplap, gabled roof with soffited eave, fishscale shingles in gable ends, entry with side- and fan lights, some alterations to fenestration.

40. 360 Kingsley: Colonial Revival variant, c. 1900, two story, clapboard, gabled roof with wide overhang, second floor overhang supported by square posts, leaded casement doors facing street.

41. 364 Kingsley: Craftsman, c. 1899, one story, shingle, shallow hip roof, informal composition, part of complex with 374.

42. 374 Kingsley: Craftsman, c. 1905, one story, shingle, shallow hip roof, informal composition, part of complex with 364.

43. 405 Kingsley: Spanish Colonial Revival, one story, stucco and tile, patio entry, varied roof levels.

44. 430 Kingsley: Colonial Revival, 1902, two story, shingle, hip roof with soffited eaves, entry at side, flare at second floor level.

45. Hutchinson House, 433 Kingsley: Colonial Revival, c. 1899, two story, shingle and shiplap, gambrel roof, circular entrance canopy supported by columns.

46. 450 Kingsley: Colonial Revival/Shingle style, c. 1902, two and a half story, shiplap and shingle, gambrel roof with blind arch in end gable, palladian window, wrap-around verandah with paired columns.

47. 457 Kingsley: Tudor, 1914, half-timbered, with stucco, two and a half story, interesting English half timber work.

48. 490 Kingsley: Spanish Colonial Revival, c. 1915, two story, stucco, hip tile toof, dentils and classical moldings at eave, porch with classical revival detail.

49. Fleugel Residence, 501 Kingsley: Colonial Revival, 1897, two and a half story, clapboard, gambrel roof, semicircular porch, later addition to each end.

50. 225 Lincoln: Craftsman, c. 1905, one story, vertical board and batten, additive composition with irregular, rambling form, extensively planted grounds.

51. 251 Lincoln: Colonial Revival/Craftsman, c. 1908, two story, shingle, alterations to entry and addition to rear.

52. 308 Lincoln: Colonial Revival, 1900, two story, shingle, hip roof with dormer, Tuscan columns supporting overhanging porch.

53. 318 Lincoln: Colonial Revival, 1901, one and a half story, shingle, wide slanted bay window, double gable dormer, squatly proportioned Tuscan columns at porch.

b

54. 331 Lincoln: Colonial Revival, c. 1900, two and a half story, shingle, porch altered.

55. 334 Lincoln: Colonial Revival, 1896, two and a half story, shingle, and shiplap, bay window in second story, large first floor porch with Tuscan columns.

56. 345 Lincoln: Colonial Revival, 1893, two story, clapboard and shingle, columned capitals support incised entrance opening and balconied gable above, gambrel roof, water tower at rear.

57. 356 Lincoln: Craftsman, 1896, one story, shingle, sawtooth course at heading level, series of linked pyramidally roofed pavillions, pedimented porch, exceptional planting.

58. 365 Lincoln: Craftsman/Shingle, 1896, two and a half story, shingles, circular balcony, porch detail.

59. 381 Lincoln, Craftsman, 1894, two story, shingled, L-shaped porch supported by posts, hedge forms entrance arch.

60. 405 Lincoln: Spanish Colonial Revival, c. 1925, one story, stucco, Spanish tile roof, arched entry, some porticoes with flat roof.

61. 1000 Ramona: Craftsman, c. 1910, one story, shingle, carved beam ends, porch and fenestration altered.

62. 1001 Ramona: Craftsman, 1908, two story, shingle, wide porch with arched paned window enclosing the end.

63. 1004 and 1006 Ramona, vernacular, c. 1910, two story, clapboard, no ornamentation, structure is hidden doesn't contribute because unseen.

64. 1020 Ramona: Craftsman, c. 1915, one and a half story, clapboard, upper story altered.

65. 1021 Ramona: Colonial Revival, c. 1905, two story, shingle and clapboard, same plan as 1029, end of porch enclosed with windows, hip roof.

66. 1024 Ramona: Craftsman, c. 1908, one and a half story, shingle, gable roof with dormer.

67. 1029 Ramona: Colonial Revival, c. 1910, two story, shingle and clapboard, columns support porch that extends across front, square/cubic format, end of porch windowed in, same plan as 1021, hip roof.

68. 1037 Ramona: Colonial Revival, 1908, one story, clapboard, decorative frieze in porch column and elegant balusters are porch details and primary ornamentation, hip roof,

69. 1040 Ramona: Craftsman, c. 1915, two story, shingle, belt course at second floor sill level, wide overhangs.

70. 1047 Ramona: Classical Revival, c. 1905, two story, clapboard, hip roof with dormer, symmetrical format, Tuscan columns at porch.

b

71. 1048 Ramona: Colonial Revival, c. 1903, one and a half story, clapboard, porch with Tuscan columns, miniature balcony at second floor, decorative gable vent.

72. 1057 Ramona: Craftsman/Colonial Revival, c. 1905, two story, shingle, tripartite window in gable, Tuscan columns at porch, porch partially enclosed.

73. 1102 Ramona: Colonial Revival variant, c. 1910, two story, shingle and clapboard, hip roof with dormer, later addition at entry.

74. 1103 Ramona: Colonial Revival, c. 1905, one and a half story, shingle, dentils, long dormer across front, porch altered.

75. 1106 Ramona: Craftsman, c. 1915, one and a half story, shingle, recessed entry, shed-roofed square bays, some alterations at entrance.

76. 1112 Ramona: Craftsman, c. 1910, one story, shingle, recessed entry, hip roof with dormer.

77. 1115 Ramona: Colonial Revival, 1903, two and a half story, shingle, gambrel roof with ridge parallel to street, two tiers of running dormers.

78. 1116 Ramona: Craftsman/Colonial Revival, c. 1910, two story, shingle and clapboard, square bay, recessed entry porch.

79. 1125 Ramona: Colonial Revival, c. 1900, one and a half story, shingle, gable street front with gambrel side elevations.

80. 1132,1140,1166 Ramona: (one building) Craftsman, 1910, one story, shingle, hip roof, originally an outbuilding to 221 Kingsley.

81. 1139 Ramona: Colonial Revival, c. 1905, one and a half story, shingle, gambrel roof, shallow bay.

82. 1147 Ramona: Craftsman, c. 1910, one and a half story, shingle, side entrance, hip roof with jerkin head dormers.

83. 1155 Ramona: Vernacular/Craftsman, c. 1910, one and a half story, shingle.

84. 1101 Waverley: Colonial Revival/Period Revival, 1925, two story, stucco, columned entrance is primary detail.

85. 1110 Waverley: Craftsman, c. 1910, two story, shingle, shallow hip roof with wide overhangs.

86. 1135 Waverley: Colonial Revival, c. 1925, two story, shingles, brick fireplace unusual, formal gabled entry with columns.

b

87. 1136 Waverley: Colonial Revival, c. 1893, two and a half story, calpboard, steep gambrel roof, large verandah with thin columns.

88. 1146 Waverley: Queen Anne, 1893, two story, clapboard and shingle, half timbered gable, chamfered entry corner.

89. 1155 Waverley: Spanish Colonial Revival, c. 1935, one and two story composition, stucco, arched entry and windows.

90. 1177 Waverley: Mediterranean Revival, 1935, stucco and tile, two story, arched entry.

91. 1220 Waverley: Craftsman, c. 1900, one story, shingle, shallow hip roof, casement windows, lattice work at porches.

92. 1221 Waverley: altered Colonial Revival, c. 1910, two story, stucco and shingle, grounds important as an anchor to district corner.

93. 1240 Waverley: Classical Revival, c. 1910, two story, clapboard, soffited eave with brackets, overscaled porch pediment.

94. 1248 Waverley: Colonial Revival, c. 1910, two story, shingle, simplified Classical Revival porch.

95. 1101 Emerson: Colonial Revival, c. 1912, one and a half story, shingle.

96. 1102 Emerson: Spanish Colonial Revival, c. 1925, one story, stucco.

97. 1111 Emerson: Colonial Revival, c. 1910, one and a half story, shiplap.

98. 1118 Emerson: Colonial Revival/Craftsman/Prairie, c. 1920, two story, shingle.

99. 1121 Emerson: Colonial Revival, c. 1915, two story, shingle.

100. 1128 Emerson: English Cottage, c. 1915-18, one and a half story, stucco.

101. 1129 Emerson: Craftsman, c. 1910-15, one and a half story, shingle.

102. 1134 Emerson: Prairie/Craftsman, c. 1915, two story, shingle.

103. 1176 Emerson: Spanish Colonial Revival, c. 1930, two story, stucco.

104. 319 Addison: Craftsman, c. 1910 with recent second story addition and alterations to entry and second story, shingle.

105. 327 Addison: Craftsman/Colonial Revival, c. 1905, one and one half stories, shingle.

Historical instrusions but environmentally compatible structures

106. 1133 Emerson: Contemporary Shingle, c. 1977, two story, shingle b

107. 1135 Emerson: Contemporary Shingle, c. 1977, two story, shingle

a.

Nonconforming intrus ns detracting from the in grity of the district;

108. 303 Kingsley: California Ranch; c. 1963, one story, stucco box.

109. 425 Kingsley: Contemporary, 1975, one and two story in part, shingle, placement too forward for neighborhood.

110. 329 Lincoln: originally Colonial Revival, date indeterminable due to alterations, two story, wood siding, possible carriage house.

111. 1013 Ramona: stylistic affinities obscured by alterations, c. 1905, two story, stucco, alterations on surface and porch, intrusion in material, angled bay and pedimented entry altered.

112. 1030 Ramona: California Ranch, c. 1950, one story, vertical board and batten, intrusion in style, date, and siting.

113. 1130 Waverley: Rustic bungalow, c. 1950, one story, vertical board and batten, intrusion in style, quality of design and use of materials

b

d

8 SIGNIFICANCE

P-43-000551
CA-SCL-556H

PERIOD	AREAS OF SIGNIFICANCE -- CHECK AND JUSTIFY BELOW				
__PREHISTORIC	__ARCHEOLOGY-PREHISTORIC	__COMMUNITY PLANNING	__LANDSCAPE ARCHITECTURE	__RELIGION
__1400-1499	__ARCHEOLOGY-HISTORIC	__CONSERVATION	__LAW	__SCIENCE
__1500-1599	__AGRICULTURE	__ECONOMICS	__LITERATURE	__SCULPTURE
__1600-1699	__ARCHITECTURE	__EDUCATION	__MILITARY	__SOCIAL/HUMANITARIAN
__1700-1799	__ART	__ENGINEERING	__MUSIC	__THEATER
__1800-1899	__COMMERCE	__EXPLORATION/SETTLEMENT	__PHILOSOPHY	__TRANSPORTATION
__1900-	__COMMUNICATIONS	__INDUSTRY	__POLITICS/GOVERNMENT	__OTHER (SPECIFY)
		__INVENTION		

SPECIFIC DATES c.1895-1979 BUILDER/ARCHITECT varied

STATEMENT OF SIGNIFICANCE

The Professorville Historic District is significent due to both its historic associations and its architectural/environmental vaulues. The district was one of the earliest residential areas in Palo Alto, housing a large proportion of the first professors to instruct at the fledling University. As such its residents helped to shape note only the standards, directions, and intellectual atmosphere of the University, but those of the community as well.

The primary values of the district lie, however, in its visual contributions due to the consistent character and high quality of the buildings and streetscapes that comprise it. Landscaping qualities contribute strongly to the character and ambience of the area, as do the Colonial Revival and Craftsman shingle covered structures which largely constitute the architectural makeup of the district.

The city of Palo Alto was created subsequent to the founding of Stanford University, essentially to serve as a university town. Construction of the University began on May 14, 1887, on land that had been the Leland Stanford farm. Early founders desired the presence of a town near the University but the two existing nearby towne of Mayfield and Menlo Park did not seem suitable to them. The founders wanted the town that would provide the University with housing and community services to prohibit the sale of alcoholic beverages. Since neither of the two existing town met this requirement or seemed willing to give up their saloon businesses, Leland Stanford, in 1887, acquired 740 acres to create a new townsite. The City of Palo Alto was founded with the attitude of wholesomeness, and when liquor finally came to the town through annexed areas, there were many who resisted, asserting that a town without alcohol attracted families seeking a superior environment for their children.

Because of the specifics of Palo alto's origins, its beginning was abrupt rather than evolutionary. It sprang fullgrown, or almost so, as an adjunct to Stanford University, and the presence of Stanford influenced the layout and image of the new city very strongly. Many of Stanford's early faculty shared their expertise with the forming city and many innovative civic functions such as municipal ownership of utilities and subsidized health care can be credited to their input.

Professorville, as its name implies, was to be the home of the Stanford University faculty. In 1889, Timothy Hopkins subdivided the land for Leland Stanford and opened it up for development. Several of Stanford's first faculty members built houses in this new section of town, as it had easy access to the campus by way of Embarcadero Street. The lots are large and the substantial houses indicate ample academic salaries.

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The University recruited many of its faculty from the East; those people naturally imported the current tastes and fashions of their origins. Thus there is a distinctive visual character to this area of the city which relates it as strongly to Eastern and Midwestern cities as it does to California. This no doubt accounts for the American Colonial Revival influence, popular at the time in California, but not to the degree indicated by the frequency of the style in Palo Alto. Landscaping in the area too, tends to be traditional rather than exotic, as if ideas of garden design had been formed and set without reference to the special qualities of the California landscape.

The buildings which give the Proffessorville area its strongest image are the brown-shingled houses whose stylistic allegiance ranges from the Colonial Revival to the Craftsman. The ample yards and mature plantings are as important a part of the area as the buildings themselves; sometimes, indeed, the vegetation overpowers the buildings. There are, in the area, designs by many nationally, and even internationally, known architects.

The Sun-Bonnet House, also referred to as the "Kellogg House" at 1061 Bryant, is a key structure within the district. The corner siting of this large structure adds to its prominence within the District. Its distinctive design is the work of the nationally known Bay Area architect Bernard Maybeck. While its materials, style, and scale express the themes of the surrounding neighborhood, the structure's outstanding design at the hand of a master architect make it a key structure within the city as well as the District.

The Castilleja Hall at 1121 Bryant was formerly one of the first girl's preparatory schools in the area. Originally located at 319 Kingsley, the building was moved to its present location in the early 1900's, where classes were conducted until the present Castillejo School complex at 1310 Bryant was built about 1910. Although an unusual building form for a residential district, the structure's historic and unusual architectural values make it a focal point of the area.

The large Colonial Revival structure at 221 Kingsley, known as the Fowler Residence, has a strong Craftsman/oriental character to its design. Built for the widow of Joshua Fowler, a Spanish American War Officer, it served as the home of her son and his bride, the daughter of Stanford University's second president. True to the Professorville tradition, it became the home of Professor Karl Brandt, an agricultural economist, in 1938. With its large grounds and imposing size and design, the structure was known as the "mansion" of the neighborhood. Historically and architecturally it is a key District structure.

The structure at 450 Kingsley is a very sophisticated interpretation of the Queen Anne mode, designed by Frank McMurray of Chicago. Its considerable size and clarity of form lend it prominence as does its amply landscaped, generaously proportioned physical setting. It gains historic importance as the house of one of the original fifteen Stanford professors.

The large Tudor Revival house with its half timber design at 457 Kingsley is a particularly fine rendition of the style. Its imposing size is rather shielded from the streetscape due to tall hedges at the sidewalk. However, its woodsy Medieval character is most compatible with the essentially Colonial Revival/Craftsman image of the District. Its strong design statement and considerable size make it a focal structure of the neighborhood.

The unusual variant of the Colonial Revival style at 345 Lincoln was designed by Professor A.B. Clark in 1893. Clark was an early head of the Stanford University Art Department whose son, Birge Clark, became a major local architect and designer. Charles Wing, for whom the struc-

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ture was designed, served as an important civic leader for the city and was a noted engineer, having desgined and built the STanford Stadium and the Big Basin State Park. The structure is an important architectural and historical focal point of the area, whose design and background reflect the essence of the District.

The Professorville Historic District is particularly expressive of one of Palo Alto's strongest visual characteristic modes, the shingled Colonial Revival variants that contribute so much to the quality of the city's architectural environment. The scale of the structures and the abundant planting also contribute strongly to the character of the entire area.

The District reflects the unique background of the area's origins and its early ties to the founding of both the University and Palo Alto itself. As such, the Professorville Historic Distorict creates a strong sense of place and time expressive of Palo Alto's intrinsic character and heritage.

9 MAJOR BIBLIOGRAPHICAL REFERENCES

P-43-000551 CA-SCL-556H

American Associatic of Women, Palo Alto Branc Gone Tomorrow?, 1971
Butler, Phyllis, Valley of Santa Clara, 1975
Cogswell, Elinor V., "Palo Alto Its Backgrounds, Beginnings and Growth", The Tall Tree, Vol. 1, No. 10, March 1960
"From Portola to Palo Alto", The Tall Tree, Vol. III, No. 10, March 1960
Professorville Walking Tour Brochure, Palo Alto AAUW publishers

10 GEOGRAPHICAL DATA

ACREAGE OF NOMINATED PROPERTY 34.43 (app.)

QUADRANGLE NAME Palo Alto QUADRANGLE SCALE 7½'

UTM REFERENCES

	ZONE	EASTING	NORTHING
A	10	574400	4144210
B	10	574200	4143720
C	10	574720	4143720
D	10	574720	4144200
E			
F			
G			
H			

VERBAL BOUNDARY DESCRIPTION

The area bounded by the alley between Emerson and Ramona Streets to Addison; then NE to the SW boundaries of 271-73, 281, Addison, NW to include 944, 940 Bryant, N & NE to include 943, 951 Bryant, 319, 327 Addison

LIST ALL STATES AND COUNTIES FOR PROPERTIES OVERLAPPING STATE OR COUNTY BOUNDARIES

STATE	CODE	COUNTY	CODE
no overlapping boundaries			
STATE	CODE	COUNTY	CODE

11 FORM PREPARED BY

NAME / TITLE

Paula Boghosian/ John Beach

ORGANIZATION: Historic Environment Consultants

DATE: April 17, 1979

STREET & NUMBER: 2306 J St.

TELEPHONE: (916) 44602447

CITY OR TOWN: Sacramento

STATE: California

12 STATE HISTORIC PRESERVATION OFFICER CERTIFICATION

THE EVALUATED SIGNIFICANCE OF THIS PROPERTY WITHIN THE STATE IS:

NATIONAL ___ STATE ___ LOCAL ___

As the designated State Historic Preservation Officer for the National Historic Preservation Act of 1966 (Public Law 89-665), I hereby nominate this property for inclusion in the National Register and certify that it has been evaluated according to the criteria and procedures set forth by the National Park Service.

STATE HISTORIC PRESERVATION OFFICER SIGNATURE

TITLE DATE

FOR NPS USE ONLY

I HEREBY CERTIFY THAT THIS PROPERTY IS INCLUDED IN THE NATIONAL REGISTER

DATE

KEEPER OF THE NATIONAL REGISTER

ATTEST: DATE

CHIEF OF REGISTRATION

GPO 921-603

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Santa Clara County Resources Inventory, published by the County Heritage Commission, 1975, now being revised
Birge Clark Professional Work Inventory
Sanborn Fire Insurance Maps: 1895, 1897, 1901, 1904, 1908, 1924

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P-43-000551
CA-SCL-556H



PROPOSED PROFESSORVILLE HISTORIC DISTRICT

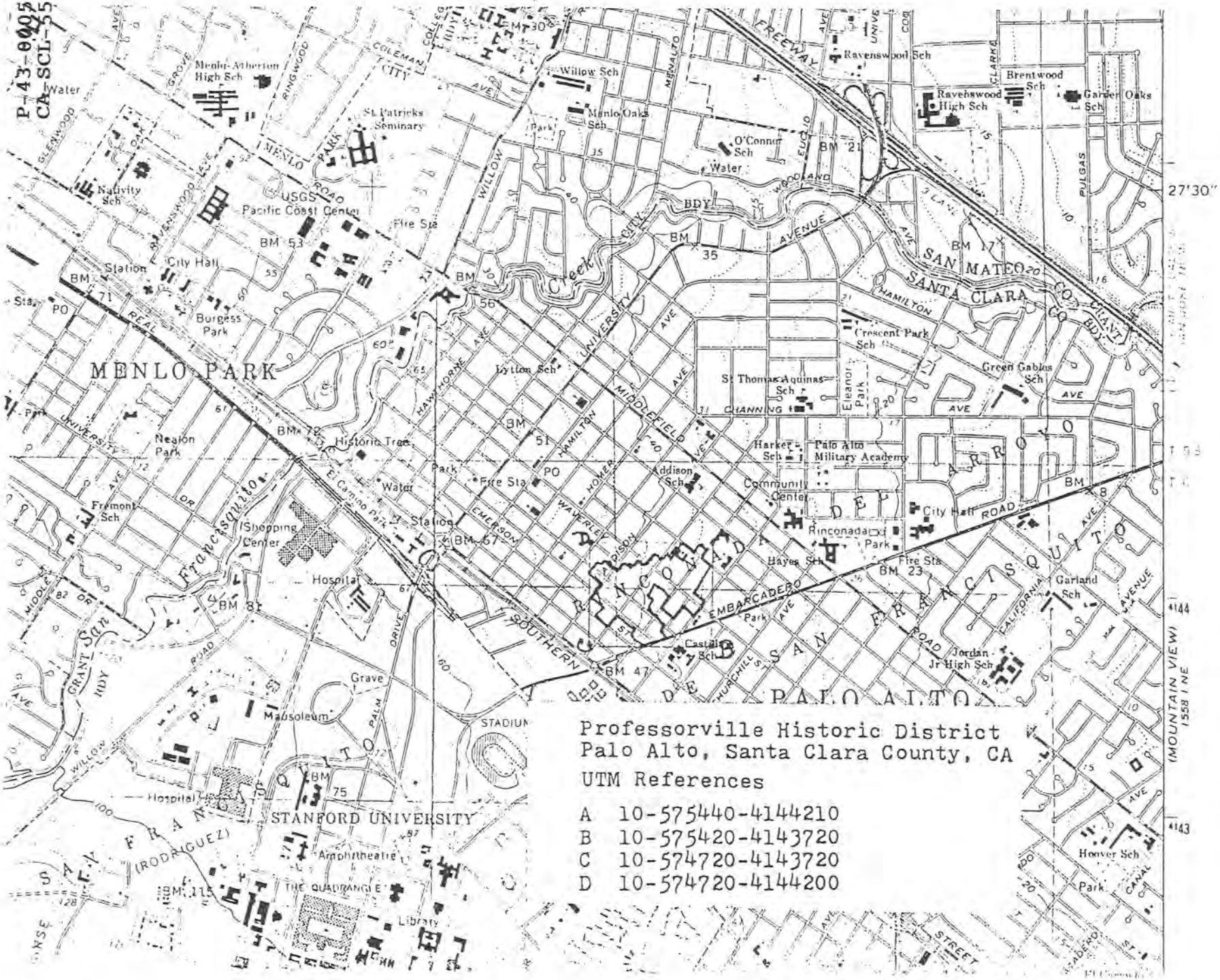
Important buildings indicated in categories

b

a

P-43-000551
CA-SCL-556H

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Professorville Historic District
Palo Alto, Santa Clara County, CA

UTM References

A 10-575440-4144210
B 10-575420-4143720
C 10-574720-4143720
D 10-574720-4144200

DESCRIPTION

P-43-000551
CA-SCL-556H

CONDITION		CHECK ONE	CHECK ONE
_EXCELLENT	__DETERIORATED	X__UNALTERED	X ORIGINAL SITE
GOOD	__RUINS	X__ALTERED	X__MOVED DATE_____
_FAIR	__UNEXPOSED		

DESCRIBE THE PRESENT AND ORIGINAL (IF KNOWN) PHYSICAL APPEARANCE

The Professorville Historic District comprises roughly the area bounded by Ramona, Addison, Embarcadero, and Waverley Streets.

The area is characterized by abundant and mature landscaping, and residential structures that range in style from Colonial Revival to Craftsman. Some examples of the later Spanish Colonial Revival and Period Revival modes also occur and while stylistically different, become related to the earlier buildings through their residential scale, design quality, and ample, mature landscaping. Construction dates of structures within the proposed district essentially range from the late 1890's to the mid 1920's. Houses range from one to two and a half stories in height with differences in size often diminished or obscured by plant materials.

The District is composed of 113 structures, 6 of which are considered to be intrusions. The district is shaped irregularly, with a cut-out in the center to exclude several buildings of more recent date and unsympathetic architectural style. Numerous other structures of almost like-character and quality surround the proposed district but are excluded due to their lesser overall building quality, greater degree of alterations, or intrusions that interrupt their inclusion as structures contiguous to the District.

Buildings and sites contributing to the character of the district:

1. 271-3 Addison: Vernacular cottage, c. 1890, one and a half story, shiplap, minimal bargeboard decoration, some alterations.

2. 281 Addison: Colonial Revival/Classical Revival, c. 1900, two stories, asbestos siding, porch with Tuscan columns and dentil course.

3. 301 Addison: Colonial Revival, c. 1904, one and a half story, shingle, parapetted porch with Tuscan columns, glassed in porch.

4. 940 Bryant: Colonial Revival, c. 1900, one story, clapboard, hipped dormered roof and slanted bay windows, unusual corner at porch.

5. 943 Bryant: Colonial Revival, c. 1900, two stories, shingle and shiplap, porch supported by columns, hip roof.

6. 944 Bryant: Craftsman, c. 1900, one story, shingle, hip roof with skylight facing East, casement windows.

7. ~~951~~ Bryant: Colonial Revival/Shingle, c. 1900, two stories, shingle, palladian windows, tree trunk section columns support overhang of house that forms porch.

8. Frank Angell House, 1005 Bryant: Colonial Revival with Shingle style characteristics, 1892, two and a half stories, shingle, gambrel roof, triple columns support building overhang that forms Porch, unusual patterned brick work.

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9. 1010 Bryant: Colonial Revival, c. 1907, one and a half stories, shingled steeply gabled roof with long street-facing dormer, entrance gate with posts and finials.

10. 1017-23 Bryant: Colonial Revival/Shingle, c. 1893, two stories, shingle, twin gambrel-roofed dormers framing rectangular dormer, columns support overhang of building creating porch.

11. 1020 Bryant: Colonial Revival, c. 1907, two stories, shingle, symmetrical format with square second floor projections, flared at the belt course.

12. 1027 Bryant: Colonial Revival/Queen Anne/Craftsman, c. 1898, two stories, shiplap, shingle, decorative arches in porch.

13. 1028 Bryant: Colonial Revival, c. 1900, one story, shiplap, hip roof, slanted bay, Tuscan porch columns.

14. 1033 Bryant: Colonial Revival, 1899, two stories, shingle, fluted pilasters with capitals, gambrel roof, some alterations.

15. 1036 Bryant: Colonial Revival, c. 1915, one story, stucco, gabled roof, slightly arched porch with doubled columns, material and style differ from neighborhood standard.

16. Varian House, 1044 Bryant: Craftsman, 1902, one and a half story, shingle, hip roof with dormer, cantilevered square bay, house is important historically: the Varian brothers invented the Klystron tube.

17. 1052 Bryant: Craftsman/Colonial Revival, c. 1910, one story, narrow clapboard, large veranda on two sides of house, shallow hip roof with carved rafter ends.

18. Sun-bonnet House, 1061 Bryant: Colonial Revival, 1899, two stories, shingle, designed by Bernard Maybeck, gambrel roof.

19. 1100 Bryant: Craftsman, c. 1904, two story with one story wing to street, shingle, very thin roof overhang and eave members, slanted bay by entrance.

20. 1106 Bryant: Colonial Revival, c. 1910, one story, asbestos siding, hip roof with dormer, Tuscan porch columns.

21. 1116 Bryant: Colonial Revival, c. 1900, one and a half story, clapboard and shingles, hipped and gabled roof forms with flared eaves, dormer with geometric mullion pattern.

22. Castilleja Hall, later Nardyne Apartments, 1121 Bryant: Colonial Revival/Classical Revival, c. 1892, two stories, shingle, rectangular block format primary details are two entry columns, was once used as a school.

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✓23. 1130 Bryant: Craftsman Chalet, c. 1915, two story, clapboard, broad street facing gable, cantilevered balcony with jigsaw balustrade, elaborate window facings.

24. 1135 Bryant: Craftsman, c. 1910, one story, stucco with shingled lower half of structure.

25. 1140 Bryant: Colonial Revival, c. 1905, one story, shingle, hip roof with soffited eave and arched recessed entry, bland but not unsupportive component of neighborhood.

26. 1143 Bryant: Prairie, c. 1915, two story, stucco, the heavily hooded entry detail is unusual in this style.

27. 1148 Bryant: Craftsman/Colonial Revival, c. 1905, one and a half story, shingle, symmetrical, hip roofed building with tripartite ground floor windows.

✓28. 1160 Bryant: Colonial Revival, c. 1914, two and a half story, wide clapboard, gabled roof, ribbon-banded casement windows, integral auto and pedestrian gates at north side.

✓29. 1200 Bryant: Colonial Revival, 1904, one and a half story, stucco, symmetrical half timber design, with large gabled dormers.

✓30. 235 Embarcadero: Craftsman, c. 1907, three story, shingle, shallow hip roof, curved porch brackets, casement windows, very large wisteria vines, aviary.

31. 251 Embarcadero: Colonial Revival, c. 1900, two story, shingle.

32. 200 Kingsley: Craftsman, c. 1910, one story, shingle, massive hip roof, wrap-around verandah, French doors, double-hung windows with x-shaped muntin pattern.

✓33. Fowler Residence, 221 Kingsley: Colonial Revival with Craftsman influences, 1900, shingle, widows walk, large enclosed garden, ~~Point of Historical Interest SCI-006.~~

34. 222 Kingsley, Colonial Revival, c. 1905, one and a half story, shingle, steeply gabled roof with tiny shed dormer, sawtooth shingle pattern, Tuscan columns at porch.

35. 252 Kingsley, Craftsman, c. 1910, two story, shingle, gabled roof, pedimented porch with square posts, side lights at entry, leaded window.

36. 257 Kingsley: Craftsman, c. 1905, one and a half stories, shingle, two kinds of shingles, - smaller on upper portion, larger size on lower portion.

37. 262 Kingsley: Craftsman, c. 1910, two story, shingle and clapboard, surface texture differentiation between first and second floor, banded leaded diamond-pane casement windows on second floor.

✓38. 334 Kingsley: Classical Revival, 1903, two story, narrow clapboard, formal, symmetrical house with slanted bays, turned ball finials, balustrades above porch bay.

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39. 356 Kingsley: Vernacular, c. 1893, two story, shiplap, gabled roof with soffited eave, fishscale shingles in gable ends, entry with side- and fan lights, some alterations to fenestration.

40. 360 Kingsley: Colonial Revival variant, c. 1900, two story, clapboard, gabled roof with wide overhang, second floor overhang supported by square posts, leaded casement doors facing street.

41. 364 Kingsley: Craftsman, c. 1899, one story, shingle, shallow hip roof, informal composition, part of complex with 374.

42. 374 Kingsley: Craftsman, c. 1905, one story, shingle, shallow hip roof, informal composition, part of complex with 364.

43. 405 Kingsley: Spanish Colonial Revival, one story, stucco and tile, patio entry, varied roof levels.

44. 430 Kingsley: Colonial Revival, 1902, two story, shingle, hip roof with soffited eaves, entry at side, flare at second floor level.

45. Hutchinson House, 433 Kingsley: Colonial Revival, c. 1899, two story, shingle and shiplap, gambrel roof, circular entrance canopy supported by columns.

46. 450 Kingsley: Colonial Revival/Shingle style, c. 1902, two and a half story, shiplap and shingle, gambrel roof with blind arch in end gable, palladian window, wrap-around verandah with paired columns.

47. 457 Kingsley: Tudor, 1914, half-timbered, with stucco, two and a half story, interesting English half timber work.

48. 490 Kingsley: Spanish Colonial Revival, c. 1915, two story, stucco, hip tile toof, dentils and classical moldings at eave, porch with classical revival detail.

49. Fleugel Residence, 501 Kingsley: Colonial Revival, 1897, two and a half story, clapboard, gambrel roof, semicircular porch, later addition to each end.

50. 225 Lincoln: Craftsman, c. 1905, one story, vertical board and batten, additive composition with irregular, rambling form, extensively planted grounds.

51. 251 Lincoln: Colonial Revival/Craftsman, c. 1908, two story, shingle, alterations to entry and addition to rear.

52. 308 Lincoln: Colonial Revival, 1900, two story, shingle, hip roof with dormer, Tuscan columns supporting overhanging porch.

53. 318 Lincoln: Colonial Revival, 1901, one and a half story, shingle, wide slanted bay window, double gable dormer, squatly proportioned Tuscan columns at porch.

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54. 331 Lincoln: Colonial Revival, c. 1900, two and a half story, shingle, porch altered.

55. 334 Lincoln: Colonial Revival, 1896, two and a half story, shingle, and shiplap, bay window in second story, large first floor porch with Tuscan columns.

56. 345 Lincoln: Colonial Revival, 1893, two story, clapboard and shingle, columned capitals support incised entrance opening and balconied gable above, gambrel roof, water tower at rear.

57. 356 Lincoln: Craftsman, 1896, one story, shingle, sawtooth course at heading level, series of linked pyramidally roofed pavillions, pedimented porch, exceptional planting.

58. 365 Lincoln: Craftsman/Shingle, 1896, two and a half story, shingles, circular balcony, porch detail.

59. 381 Lincoln, Craftsman, 1894, two story, shingled, L-shaped porch, supported by posts, hedge forms entrance arch.

60. 405 Lincoln: Spanish Colonial Revival, c. 1925, one story, stucco, Spanish tile roof, arched entry, some porticoes with flat roof.

61. 1000 Ramona: Craftsman, c. 1910, one story, shingle, carved beam ends, porch and fenestration altered.

62. 1001 Ramona: Craftsman, 1908, two story, shingle, wide porch with arched paned window enclosing the end.

63. 1004 and 1006 Ramona, vernacular, c. 1910, two story, clapboard, no ornamentation, structure is hidden doesn't contribute because unseen.

64. 1020 Ramona: Craftsman, c. 1915, one and a half story, clapboard, upper story altered.

65. 1021 Ramona: Colonial Revival, c. 1905, two story, shingle and clapboard, same plan as 1029, end of porch enclosed with windows, hip roof.

66. 1024 Ramona: Craftsman, c. 1908, one and a half story, shingle, gable roof with dormer.

67. 1029 Ramona: Colonial Revival, c. 1910, two story, shingle and clapboard, columns support porch that extends across front, square/cubic format, end of porch windowed in, same plan as 1021, hip roof.

68. 1037 Ramona: Colonial Revival, 1908, one story, clapboard, decorative frieze in porch column and elegant balusters are porch details and primary ornamentation, hip roof.

69. 1040 Ramona: Craftsman, c. 1915, two story, shingle, belt course at second floor sill level, wide overhangs.

70. 1047 Ramona: Classical Revival, c. 1905, two story, clapboard, hip roof with dormer, symmetrical format, Tuscan columns at porch.

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71. 1048 Ramona: Colonial Revival, c. 1903, one and a half story, clapboard, porch with Tuscan columns, miniature balcony at second floor, decorative gable vent.

72. 1057 Ramona: Craftsman/Colonial Revival, c. 1905, two story, shingle, tripartite window in gable, Tuscan columns at porch, porch partially enclosed.

73. 1102 Ramona: Colonial Revival variant, c. 1910, two story, shingle and clapboard, hip roof with dormer, later addition at entry.

74. 1103 Ramona: Colonial Revival, c. 1905, one and a half story, shingle, dentils, long dormer across front, porch altered.

75. 1106 Ramona: Craftsman, c. 1915, one and a half story, shingle, recessed entry, shed-roofed square bays, some alterations at entrance.

76. 1112 Ramona: Craftsman, c. 1910, one story, shingle, recessed entry, hip roof with dormer.

77. 1115 Ramona: Colonial Revival, 1903, two and a half story, shingle, gambrel roof with ridge parallel to street, two tiers of running dormers.

78. 1116 Ramona: Craftsman/Colonial Revival, c. 1910, two story, shingle and clapboard, square bay, recessed entry porch.

79. 1125 Ramona: Colonial Revival, c. 1900, one and a half story, shingle, gable street front with gambrel side elevations.

80. 1132,1140,1166 Ramona: (one building) Craftsman, 1910, one story, shingle, hip roof, originally an outbuilding to 221 Kingsley.

81. 1139 Ramona: Colonial Revival, c. 1905, one and a half story, shingle, gambrel roof, shallow bay.

82. 1147 Ramona: Craftsman, c. 1910, one and a half story, shingle, side entrance, hip roof with jerkin head dormers.

83. 1155 Ramona: Vernacular/Craftsman, c. 1910, one and a half story, shingle.

84. 1101 Waverley: Colonial Revival/Period Revival, 1925, two story, stucco, columned entrance is primary detail.

85. 1110 Waverley: Craftsman, c. 1910, two story, shingle, shallow hip roof with wide overhangs.

86. 1135 Waverley: Colonial Revival, c. 1925, two story, shingles, brick fireplace unusual, formal gabled entry with columns.

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87. 1136 Waverley: Colonial Revival, c. 1893, two and a half story, calpboard, steep gambrel roof, large verandah with thin columns.

88. 1146 Waverley: Queen Anne, 1893, two story, clapboard and shingle, half timbered gable, chamfered entry corner.

89. 1155 Waverley: Spanish Colonial Revival, c. 1935, one and two story composition, stucco, arched entry and windows.

90. 1177 Waverley: Mediterranean Revival, 1935, stucco and tile, two story, arched entry.

91. 1220 Waverley: Craftsman, c. 1900, one story, shingle, shallow hip roof, casement windows, lattice work at porches.

92. 1221 Waverley: altered Colonial Revival, c. 1910, two story, stucco and shingle, grounds important as an anchor to district corner.

93. 1240 Waverley: Classical Revival, c. 1910, two story, clapboard, soffited eave with brackets, overscaled porch pediment.

94. 1248 Waverley: Colonial Revival, c. 1910, two story, shingle, simplified Classical Revival porch.

95. 1101 Emerson: Colonial Revival, c. 1912, one and a half story, shingle.

96. 1102 Emerson: Spanish Colonial Revival, c. 1925, one story, stucco.

97. 1111 Emerson: Colonial Revival, c. 1910, one and a half story, shiplap.

98. 1118 Emerson: Colonial Revival/Craftsman/Prairie, c. 1920, two story, shingle.

99. 1121 Emerson: Colonial Revival, c. 1915, two story, shingle.

100. 1128 Emerson: English Cottage, c. 1915-18, one and a half story, stucco.

101. 1129 Emerson: Craftsman, c. 1910-15, one and a half story, shingle.

102. 1134 Emerson: Prairie/Craftsman, c. 1915, two story, shingle.

103. 1176 Emerson: Spanish Colonial Revival, c. 1930, two story, stucco.

104. 319 Addison: Craftsman, c. 1910 with recent second story addition and alterations to entry and second story, shingle.

105. 327 Addison: Craftsman/Colonial Revival, c. 1905, one and one half stories, shingle.

Historical instrusions but environmentally compatible structures

106. 1133 Emerson: Contemporary Shingle, c. 1977, two story, shingle

107. 1135 Emerson: Contemporary Shingle, c. 1977, two story, shingle

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STATE OF CALIFORNIA—RESOURCES AGENCY
DEPARTMENT OF PARKS AND RECREATION

POINT OF HISTORICAL INTEREST

P-43-000551

DO NOT WRITE IN THIS BLOCK
Reg. No. SC1-001
Date August 29, 1969
By

County Santa Clara | Name "Professorville"

Location Palo Alto: Bounded by Lincoln and Kingsley Avenues and Waverley and Ramona Streets.

Historical Significance:

During the first three decades of the Twentieth Century the area bounded approximately by Lincoln and Kingsley Avenues and Waverley and Ramona Streets was known as "Professorville." Here were built, and still stand, many of the earliest homes of professors at the then-fledgling Leland Stanford Junior University. These sturdy frame homes epitomize the dignity and hospitality of "Turn of the Century" architecture. Many of them predate both the Earthquake of 1906, and all but the earliest professors' homes on the Stanford campus itself. "Professorville" is the oldest substantial surviving residential section in Palo Alto today, and retains the serene atmosphere now sadly lacking in most of the remainder of downtown Palo Alto.

Submitted by: Robert B. Textor, Professor of Education and Anthropology, Stanford University

THIS POINT OF HISTORICAL INTEREST IS NOT A STATE REGISTERED HISTORICAL LANDMARK.

RECOMMENDED:	APPROVED:
Signature—Chairman, County Board of Supervisors	R. Coke Wood Signature—Chairman, Historical Landmarks Advisory Committee
Date 5/29/69	Date August 29 1969

DPR-147 (4-66)

68355-768 4-66 5M TRIP ③ OSP

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707 Bryant Street
Palo Alto, California 94301
October 29, 1975

Mr. Arthur Ogilvie, Associate Planner
Santa Clara Planning Department
70 West Hedding, Room 314
San Jose, California 95110

Dear Mr. Ogilvie:

Please find enclosed the application form with the news clippings that appe
at the time the house was built. Also included is a letter drafted by Mrs.
Woolley of the Palo Alto Historical Association indicating the association's
regarding the value of the structure.

Although, as of this date, no official time scale for demolition has been s
has there been any official action requested on approval of plans for redev
of the property, the fact that the stained-glass windows have been removed
demolition contractor has looked over the building would seem to indicate t
moval plans are real enough. Unofficially, the development plans will "get
way around the first of the year."

Thank you for your continued interest. Those of us who live in the buildin
have come to care for it as well as many Palo Alto residents to whom the bu
has been a landmark all their lives will be greatly appreciative of any eff
you are able to make on behalf of the building or any guidance you can lend

Sincerely,

Kenneth Campbell

Kenneth Campbell

Other tenants:

Anna M. Joe
Lori Young
Gerard G. Watkins
Ralph Perucci, Jr.
Reginald Eugene Benn, Jr.
Michael Berman
Bill Perry
Christi Stoll
Ron Elving
Belle Elving

a



Palo Alto Historical Association

P.O. BOX 193
PALO ALTO, CALIFORNIA 94302

October 28, 1975

To the Chairmen of the County Heritage Commission:

As President of the Palo Alto Historical Association, I would like to express my interest in the house at 707 Bryant, Palo Alto.

Historically, the house goes back to the times when Stanford and Palo Alto were very close, and both students and faculty lived in town. 707 Bryant was built as the Delta Tau Delta fraternity house. The Greek letters are still in the tile of the front step.

More important, however, are its architectural qualities. Because Palo Alto is a comparatively new town (1890), fewer Victorians were built here than in other peninsula towns. Most of these were located in what became the commercial area and have been torn down. Only two, large important Victorians remain

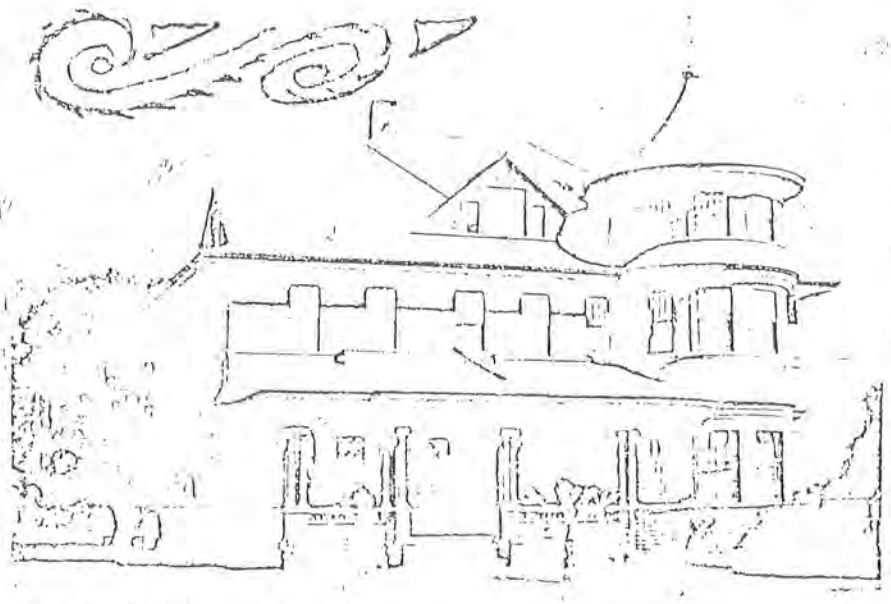
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in the downtown area: 706 Cooper, listed on the National Register, but in precarious condition, and this one.

Therefore, I believe 704 Bryant is unique and worthy of the Point of Historical Interest designation.

Sincerely,
Dick C. Woolley



Delta Tau Delta fraternity house.

At 707 Bryant stands the former Delta Tau Delta fraternity house. It was built in 1897 at a cost of $6500. *The Palo Alto Live Oak* called it "one of the handsomest and best finished buildings" in town. It is in the popular 1890 style of architecture known as Queen Anne. The round corner tower with the helmet cap and finial is the most easily identified characteristic of that style. The irregularity produced by the several gables, dormers and bays is also typical. The brackets and dentil (single row of tooth-like ornaments) under the eaves, the carving at the peak of the side gable, and the colonnettes of the porch increase

one of the handsomest and best finished buildings in Palo Alto. 9/15/97

Live O

TESDAY, SEPTEMBER 29, 1897.

THE DELTA TAU DELTA.

A Handsome Club Building That Has Just Been Completed.

The Delta Tau Delta club house has been finished and is now occupied by the members of the fraternity. The building is three stories in height above the basement and the exterior appearance is especially pleasing, there being a tower on one corner, art glass windows, etc., and the whole painted in harmonious colors.

A large porch runs along the front and side and the main entrance leads to the reception hall, a spacious room handsomely finished in Washington fir. The walls and ceilings are in panels, there is a fine fireplace, and the entire room is a most attractive one.

The parlor and library are entered from the reception hall, and both are finished in the same style as the hall. The dining room is especially pleasant and is finished partly in pine, but having a wainscoating of linerusta-walton. The kitchen and pantries are beyond the dining hall and are provided with all the modern conveniences.

On the second floor are seven private rooms, a hall, and two bath rooms, while on the third floor are two private rooms, a hall, a dark room for photographic work and the fraternity hall. The latter is fitted up particularly for the initiatory work, the room being

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Appendix F: Geotechnical Report

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CORNERSTONE EARTH GROUP

TYPE OF SERVICES	Geotechnical Investigation
PROJECT NAME	Palo Alto Parking Structure Lot D
LOCATION	Hamilton Avenue and Waverley Street Palo Alto, California
CLIENT	Watry Design, Inc.
PROJECT NUMBER	949-1-1
DATE	March 17, 2017



CORNERSTONE EARTH GROUP

Type of Services	**Geotechnical Investigation**
Project Name	**Palo Alto Parking Structure Lot D**
Location	**Hamilton Avenue and Waverley Street Palo Alto, California**
Client	**Watry Design, Inc.**
Client Address	**2099 Gateway Place, Suite 550 San Jose, California**
Project Number	**949-1-1**
Date	**March 17, 2017**



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CORNERSTONE EARTH GROUP

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Type of Services	**Geotechnical Investigation**
Project Name	**Palo Alto Parking Structure Lot D**
Location	**Hamilton Avenue and Waverley Street Palo Alto, California**

SECTION 1: INTRODUCTION

This geotechnical report was prepared for the sole use of Watry Design, Inc. for the Palo Alto Parking Structure Lot D project in Palo Alto, California. The location of the site is shown on the Vicinity Map, Figure 1. For our use, we were provided a set of proposed site plans titled "City of Palo Alto Lot D" with sheet names "Retail Option," "Base Option," and "Basement Option," prepared by Watry Design, Inc., emailed February 17, 2017.

1.1 PROJECT DESCRIPTION

The project site is currently an at-grade parking lot located at Lot D on the northwest corner of Hamilton Avenue and Waverley Street in Palo Alto, California. The project will consist of redeveloping the site with a new parking structure with an approximately 24,500-square-foot footprint. The project is in early planning stages and currently three development options are being proposed, including: 1) 5-level on-grade parking structure, 2) 5-level on-grade parking structure including retail and potential mechanical parking (assuming puzzle parking system with 7-foot pits, locations of pits within structure are unknown), and 3) 5-level above-grade structure with up to 3-levels below-grade. It is our understanding that at the time of this report, the first two on-grade options are the most likely development choices. Appurtenant utilities, flatwork, and other improvements necessary for site development are also planned.

Structural loads are not know at this time, however, we expect structural loads to be typical of this type of structure. We anticipate minor cuts and fills on the order of 1 to 3 feet being required for the on-grade structure options with cuts up to about 7 to 10 feet for the puzzle parking system with pits option. For the up to 3-levels below-grade structure option, we anticipate cuts on the order of 40 to 45 feet being required.

1.2 SCOPE OF SERVICES

Our scope of services was presented in our proposal dated October 21, 2016, and consisted of field and laboratory programs to evaluate physical and engineering properties of the subsurface soils, engineering analysis to prepare recommendations for site work and grading, building

foundations, retaining walls, and preparation of this report. Brief descriptions of our exploration and laboratory programs are presented below.

1.3 EXPLORATION PROGRAM

Field exploration consisted of two borings drilled on February 8 and 9, 2017, with truck-mounted, hollow-stem auger drilling equipment and two Cone Penetration Tests (CPTs) advanced on February 7, 2017. The borings were drilled to depths of approximately 79¾ and 89¼ feet; the CPTs were advanced to depths of approximately 91 feet each; practical refusal was encountered in both CPTs at that depth. Seismic shear wave velocity measurements were collected from CPT-2. Boring EB-1 was advanced adjacent to CPT-2 for direct evaluation of physical samples to correlated soil behavior.

The borings and CPTs were backfilled with cement grout in accordance with local requirements; exploration permits were obtained as required by local jurisdictions.

The approximate locations of our exploratory borings and CPTs are shown on the Site Plan, Figure 2. Details regarding our field program are included in Appendix A.

1.4 LABORATORY TESTING PROGRAM

In addition to visual classification of samples, the laboratory program focused on obtaining data for foundation design and seismic ground deformation estimates. Testing included moisture contents, dry densities, grain size analyses, washed sieve analyses, Plasticity Index tests, undrained triaxial shear tests, and a consolidation test. Details regarding our laboratory program are included in Appendix B.

1.5 ENVIRONMENTAL SERVICES

Environmental services were not requested for this project. If environmental concerns are determined to be present during future evaluations, the project environmental consultant should review our geotechnical recommendations for compatibility with the environmental concerns.

SECTION 2: REGIONAL SETTING

2.1 GEOLOGICAL SETTING

The site is located within the Santa Clara Valley, which is a broad alluvial plane between the Santa Cruz Mountains to the southwest and west, and the Diablo Range to the northeast. The San Andreas Fault system, including the Monte Vista-Shannon Fault, exists within the Santa Cruz Mountains and the Hayward and Calaveras Fault systems exist within the Diablo Range. Alluvial soil thicknesses in the area of the site range from about 300 to 400 feet (Rogers & Williams, 1974).

2.2 REGIONAL SEISMICITY

The San Francisco Bay area region is one of the most seismically active areas in the Country. While seismologists cannot predict earthquake events, geologists from the U.S. Geological Survey have recently updated earlier estimates from their 2015 Uniform California Earthquake Rupture Forecast (Version 3) publication. The estimated probability of one or more magnitude 6.7 earthquakes (the size of the destructive 1994 Northridge earthquake) expected to occur somewhere in the San Francisco Bay Area has been revised (increased) to 72 percent for the period 2014 to 2043 (Aagaard et al., 2016). The faults in the region with the highest estimated probability of generating damaging earthquakes between 2014 and 2043 are the Hayward (33%), Rodgers Creek (33%), Calaveras (26%), and San Andreas Faults (22%). In this 30-year period, the probability of an earthquake of magnitude 6.7 or larger occurring is 22 percent along the San Andreas Fault and 33 percent for the Hayward or Rodgers Creek Faults.

The faults considered capable of generating significant earthquakes are generally associated with the well-defined areas of crustal movement, which trend northwesterly. The table below presents the State-considered active faults within 25 kilometers of the site.

Table 1: Approximate Fault Distances

Fault Name	Distance	
	(miles)	(kilometers)
Monte Vista-Shannon	5.0	8.1
San Andreas	7.6	12.3
Hayward	13.3	21.4
Hayward (Southeast Extension)	14.5	23.3

A regional fault map is presented as Figure 3, illustrating the relative distances of the site to significant fault zones.

SECTION 3: SITE CONDITIONS

3.1 SURFACE DESCRIPTION

The site is located at the west corner of Hamilton Avenue and Waverley Street and is in an area of commercial developments. An at-grade parking lot currently occupies the site. Some landscaping areas with mature trees are also scattered throughout the parking lot. Based on Google Earth (2016), current site grades range from approximately Elevation 53 to 54 feet.

Surface pavements generally consisted of 2 to 3 inches of asphalt concrete over 3 to 4 inches of aggregate base. Based on visual observations, the existing pavements appear in fair condition with some minor cracking.

3.2 SUBSURFACE CONDITIONS

Below the surface pavements, our explorations generally encountered stiff to hard lean clays with variable amounts of sand to depths ranging from about 30 to 34½ feet. A dense clayey sand with gravel layer was interbedded within the lean clays in Boring EB-2 at a depth from 7 to 14 feet. Beneath the lean clays, generally medium dense to very dense silty sand, clayey sand with gravel, and poorly graded sand with silt and gravel were encountered to a depth of 65½ to 69 feet. These sandy layers are known to have frequent cobbles up to about 18 to 24 inches in diameter, as well as a significant percentage of gravels greater than 3 inches in diameter. Some stiff to very stiff lean clays with sand were interbedded within the sands generally at a depth of about 50 to 55 feet. Beneath the sands, generally very stiff to hard lean clays with variable amounts of sand were encountered to a depth of about 78 to 88 feet followed by very dense silty to poorly graded sands or hard silt with sand to the maximum depths explored of about 80 to 91 feet.

3.2.1 Plasticity/Expansion Potential

We performed two Plasticity Index (PI) tests on representative samples. One test was performed on a surficial sample from a depth of approximately 2 feet below existing grade to evaluate the expansion potential of the surficial soils. The test resulted in a PI of 12, indicating low expansion potential to wetting and drying cycles. One test was performed on a sample at a greater depth of approximately 19 feet below existing grade. This test resulted in a PI of 18, indicating low to moderate expansion potential to wetting and drying cycles.

3.2.2 In-Situ Moisture Contents

Laboratory testing indicated that the in-situ moisture contents within the upper 30 feet range from a few percent below optimum to about 5 to 7 percent over the estimated laboratory optimum moisture.

3.2.3 Sulfate Contents

Laboratory testing indicated that the soluble sulfate contents were 85 to 245 parts per million (ppm), indicating negligible corrosion potential to buried concrete.

3.2.4 Soil Grain Size Distribution

Soil grain size analyses, including one gradation and three #200 sieve washes, were performed to help classify the soils. The percent finer than the #200 sieve is shown on the boring logs, and the gradation is attached in Appendix B of this report. Please note that due to the sampler diameter, gravels larger than about 2½ inches in diameter were not sampled, but larger particle sizes were noted in the soil cuttings during drilling, as well as anticipated from our previous experience in the area.

3.3 GROUND WATER

Ground water was encountered in our borings at depths of 33 and 35 feet below existing grades corresponding to approximately Elevations 18 to 21 feet based on site elevations provided by Google Earth®. Ground water was inferred at depths of approximately 29 and 32½ feet below current grades based on pore pressure dissipation tests. All measurements were taken at the time of drilling and may not represent the stabilized levels that can differ from the initial levels encountered. Historic high ground water levels are mapped at depths of approximately 20 to 30 feet below current grades (CGS, Palo Alto 7.5 Minute Quadrangle, 2006). In general, fluctuations in ground water levels occur due to many factors including seasonal fluctuation, underground drainage patterns, regional fluctuations, and other factors. Based on the above information, we anticipate a high ground water level of 20 feet below existing grades and recommend a ground water level of 20 feet be used for design.

3.4 CORROSION SCREENING

We tested four samples collected at depths ranging from approximately 1½ to 7½ feet for resistivity, pH, soluble sulfates, and chlorides. The laboratory test results are summarized in Table 2A.

Table 2A: Summary of Corrosion Test Results

Boring/Sample	Depth (feet)	Soil pH[1]	Resistivity[2] (ohm-cm)	Chloride[3,5] (mg/kg)	Sulfate[4,5] (mg/kg)
EB-1/1A	1½	7.5	1,386	20	114
EB-1/3A	5½	7.5	1,252	24	85
EB-2/2A	3½	7.4	1,208	4	245
EB-2/4A	7½	7.5	1,048	7	185

Notes: [1]ASTM G51
[2]ASTM G57 - 100% saturation
[3]ASTM D4327/Cal 422 Modified
[4]ASTM D4327/Cal 417 Modified
[5]1 mg/kg = 0.0001% by dry weight

Many factors can affect the corrosion potential of soil including moisture content, resistivity, permeability, and pH, as well as chloride and sulfate concentration. Typically, soil resistivity, which is a measurement of how easily electrical current flows through a medium (soil and/or water), is the most influential factor. In addition to soil resistivity, chloride and sulfate ion concentrations, and pH also contribute in affecting corrosion potential.

Based on the laboratory test results summarized in Table 2A and published correlations between resistivity and corrosion potential, the soils may be considered severely corrosive to buried metallic improvements (Chaker and Palmer, 1989).

In accordance with the 2016 CBC Section 1904.1, alternative cementitious materials shall be determined in accordance with ACI 318-14 Table 19.3.1.1, Table R19.3.1, and Table 19.3.2.1. Based on the laboratory sulfate test results, no cement type restriction is required, although, in

our opinion, it is generally a good idea to include some sulfate resistance and to maintain a relatively low water-cement ratio. We have summarized applicable design values and parameters from ACI 318-14, Chapter 19 below in Table 2B.

We recommend the structural engineer and a corrosion engineer be retained to confirm the information provided and for additional recommendations, as required.

Table 2B: ACI Sulfate Soil Corrosion Design Values and Parameters

Category	Water-Soluble Sulfate (SO4) in Soil (% by weight)	Sulfate (S) Class	Cementitious Materials (2)
S, Sulfate	< 0.10	S0	no type restriction

Notes: (1) above values and parameters are from on ACI 318-14, Table 19.3.1.1, Table R19.3.1, and Table 19.3.2.1
(2) cementitious materials are in accordance with ASTM C150, ASTM C595, and ASTM C1157

SECTION 4: GEOLOGIC HAZARDS

4.1 FAULT RUPTURE

As discussed above several significant faults are located within 25 kilometers of the site. The site is not located within a State-designated Alquist Priolo Earthquake Fault Zone or a Santa Clara County Fault Hazard Zone. As shown in Figure 3, no known surface expression of fault traces is thought to cross the site; therefore, fault rupture hazard is not a significant geologic hazard at the site.

4.2 ESTIMATED GROUND SHAKING

Moderate to severe (design-level) earthquakes can cause strong ground shaking, which is the case for most sites within the Bay Area. A peak ground acceleration (PGA) was estimated for analysis using a value equal to $F_{PGA} \times$ PGA, as allowed in the 2016 edition of the California Building Code. For our analysis we used a PGA_M of 0.612g.

4.3 LIQUEFACTION POTENTIAL

The northern approximately two-thirds of the site is within a State-designated Liquefaction Hazard Zone (CGS, Palo Alto Quadrangle, 2006) as well as a Santa Clara County Liquefaction Hazard Zone (Santa Clara County, 2006). Our field and laboratory programs addressed this issue by testing and sampling potentially liquefiable layers to depths of at least 50 feet, performing visual classification on sampled materials, evaluating CPT data, and performing various tests to further classify soil properties.

4.3.1 Background

During strong seismic shaking, cyclically induced stresses can cause increased pore pressures within the soil matrix that can result in liquefaction triggering, soil softening due to shear stress loss, potentially significant ground deformation due to settlement within sandy liquefiable layers

as pore pressures dissipate, and/or flow failures in sloping ground or where open faces are present (lateral spreading) (NCEER 1998). Limited field and laboratory data is available regarding ground deformation due to settlement; however, in clean sand layers settlement on the order of 2 to 4 percent of the liquefied layer thickness can occur. Soils most susceptible to liquefaction are loose, non-cohesive soils that are saturated and are bedded with poor drainage, such as sand and silt layers bedded with a cohesive cap.

4.3.2 Analysis

As discussed in the "Subsurface" section above, several sand layers were encountered below the design ground water depth of 20 feet. Following the liquefaction analysis framework in the 2008 monograph, *Soil Liquefaction During Earthquakes* (Idriss and Boulanger, 2008), incorporating updates in *CPT and SPT Based Liquefaction Triggering Procedures* (Boulanger and Idriss, 2014), and in accordance with CDMG Special Publication 117A guidelines (CDMG, 2008) for quantitative analysis, these layers were analyzed for liquefaction triggering and potential post-liquefaction settlement. These methods compare the ratio of the estimated cyclic shaking (Cyclic Stress Ratio - CSR) to the soil's estimated resistance to cyclic shaking (Cyclic Resistance Ratio - CRR), providing a factor of safety against liquefaction triggering. Factors of safety less than or equal to 1.3 are considered to be potentially liquefiable and capable of post-liquefaction re-consolidation (i.e. settlement).

The CSR for each layer quantifies the stresses anticipated to be generated due to a design-level seismic event, is based on the peak horizontal acceleration generated at the ground surface discussed in the "Estimated Ground Shaking" section above, and is corrected for overburden and stress reduction factors as discussed in the procedure developed by Seed and Idriss (1971) and updated in the 2008 Idriss and Boulanger monograph.

The soil's CRR is estimated from the in-situ measurements from CPTs and laboratory testing on samples retrieved from our borings. SPT "N" values obtained from hollow-stem auger borings were not used in our analyses, as the "N" values obtained are less reliable in sands below ground water. The tip pressures are corrected for effective overburden stresses, taking into consideration both the ground water level at the time of exploration and the design ground water level, and stress reduction versus depth factors. The CPT method utilizes the soil behavior type index (I_C) to estimate the plasticity of the layers.

In estimating post-liquefaction settlement at the site, we have implemented a depth weighting factor proposed by Cetin (2009). Following evaluation of 49 high-quality, cyclically induced, ground settlement case histories from seven different earthquakes, Cetin proposed the use of a weighting factor based on the depth of layers. The weighting procedure was used to tune the surface observations at liquefaction sites to produce a better model fit with measured data. Aside from the better model fit it produced, the rationale behind the use of a depth weighting factor is based on the following: 1) upward seepage, triggering void ratio redistribution, and resulting in unfavorably higher void ratios for the shallower sublayers of soil layers; 2) reduced induced shear stresses and number of shear stress cycles transmitted to deeper soil layers due to initial liquefaction of surficial layers; and 3) possible arching effects due to nonliquefied soil

layers. All these may significantly reduce the contribution of volumetric settlement of deeper soil layers to the overall ground surface settlement (Cetin, 2009).

As discussed, three options for the proposed structure are being considered at this time. Two options generally include an on-grade structure while the third option includes up to a 3-level below-grade basement. As we understand the on-grade building options (including option with 7-foot pits for puzzle parking system) are preferred at this time, we have included our CPT analyses results (CPT-1 and CPT-2) on Figures 4A and 4B accordingly for the on-grade building options.

4.3.3 Summary

Our analyses indicate that several layers could potentially experience liquefaction triggering that could result in post-liquefaction total settlement beneath an on-grade structure ranging from approximately ½ to ⅔ inch based on the Yoshimine (2006) method. As discussed in Special Publication 117A, differential movement for level ground sites over deep soil sites will be up to about two-thirds of the total settlement between independent foundation elements. In our opinion, differential settlements are anticipated to be on the order of ½-inch between independent foundation elements for an on-grade structure.

Based on our analyses, liquefaction settlement is anticipated starting at depths of about 31 feet below the existing surface. If a parking structure with basement is constructed, liquefaction settlement estimates are anticipated to be larger than the above mentioned settlements as the depth weighting factor (discussed above in Section 4.3.2) is reduced as the depth of the basement increases beneath the surface. On a preliminary basis, if the bottom of basement is assumed at a depth of 30 feet beneath existing site grades, post-liquefaction total settlements are estimated to be approximately ¾- to 1-inch based on the Yoshimine (2006) method with about ⅔ inch of differential settlement between independent foundation elements. Based on the above, if the basement option is selected, we should review the planned basement depth and provide liquefaction estimates accordingly.

4.3.4 Ground Rupture Potential

The methods used to estimate liquefaction settlements assume that there is a sufficient cap of non-liquefiable material to prevent ground rupture or sand boils. For ground rupture to occur, the pore water pressure within the liquefiable soil layer will need to be great enough to break through the overlying non-liquefiable layer, which could cause significant ground deformation and settlement. The work of Youd and Garris (1995) indicates that the 31-foot thick layer of non-liquefiable cap is sufficient to prevent ground rupture; therefore the above total settlement estimates are reasonable.

4.4 LATERAL SPREADING

Lateral spreading is horizontal/lateral ground movement of relatively flat-lying soil deposits towards a free face such as an excavation, channel, or open body of water; typically lateral spreading is associated with liquefaction of one or more subsurface layers near the bottom of

the exposed slope. As failure tends to propagate as block failures, it is difficult to analyze and estimate where the first tension crack will form.

There are no open faces within a distance considered susceptible to lateral spreading; therefore, in our opinion, the potential for lateral spreading to affect the site is low.

4.5 SEISMIC SETTLEMENT/UNSATURATED SAND SHAKING

Loose unsaturated sandy soils can settle during strong seismic shaking. As the soils encountered at the site above the design ground water depth of 24 feet below the existing ground surface were predominantly stiff to hard clays and dense clayey sands, in our opinion, the potential for significant differential seismic settlement affecting the proposed structure is low.

4.6 FLOODING

Based on our internet search of the Federal Emergency Management Agency (FEMA) flood map public database, the site is located within Zone X described as “Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood.” We recommend the project civil engineer be retained to confirm this information and verify the base flood elevation, if appropriate.

SECTION 5: CONCLUSIONS

5.1 SUMMARY

From a geotechnical viewpoint, the project is feasible provided the concerns listed below are addressed in the project design. Descriptions of each concern with brief outlines of our recommendations follow the listed concerns.

- Potential for liquefaction-induced settlements
- Below-grade retaining wall and slab design
- Proximity of below-grade excavations to adjacent improvements
- Differential movement from on-grade to on-structure transitions for below-grade structure
- Presence of granular soils
- Soil corrosion potential

5.1.1 Potential for Liquefaction-Induced Settlements

As discussed, our liquefaction analysis indicates that there is a potential for liquefaction of localized sand layers during a significant seismic event. For an on-grade structure, our analysis indicates that liquefaction-induced differential settlements could be on the order of ½ inch between independent foundation elements. Building foundations will need to be designed to

tolerate total and differential settlements due to static loads and liquefaction-induced settlement. Detailed foundation recommendations are presented in the "Foundations" section.

Additionally, for a structure with a basement, on a preliminary basis and assuming the basement extends to a depth of 30 feet below existing site grades, our analysis indicates that liquefaction-induced differential settlements could be on the order of ⅔ inch between independent foundation elements.

As discussed, we understand that at this time the proposed structure will most likely be an on-grade structure. As such, if a structure with basement is to be constructed, we should be consulted to provide additional liquefaction settlement estimates based on the actual basement depth. Additionally, as liquefiable layers are present starting at a depth of about 31 feet beneath existing site grades, depending on the proposed basement depth, the appropriate foundation type and subgrade support should be evaluated. Due to these potentially liquefiable soils and depending on the basement depth, additional soil stabilization may also be required beneath basement foundations. Due to the above concerns, we have not provided foundation recommendations for a basement and we should be consulted to provide foundation recommendations and additional subgrade support recommendation if a basement is to be constructed.

5.1.2 Below-Grade Retaining Wall and Slab Design

As mentioned, the proposed structure may include below-grade pits for puzzle parking or an up to 3-level below-grade basement. The project is within the City of Palo Alto and will be subject to their jurisdiction. As stated in the directive/memorandum, dated October 1, 2006, the City of Palo Alto Department of Public Works "will not permit the use of basement drainage systems…for all City of Palo Alto parcels to the northeast (Bay side) of Foothill Expressway."

As previously discussed in the "Ground Water" section, we estimate a design ground water of 20 feet below the existing grades. Depending on the depth of below-grade basement, the basement slab may extend below the design ground water and need to be designed for hydrostatic uplift from permanent water pressures. This may result in supporting a below-grade structure on spread footings with a thickened, reinforced slab-on-grade or a reinforced concrete mat foundation. Perched ground water conditions (such as sourced from broken utility lines, or migration of infiltrated water after significant periods of heavy rains) could potentially develop during the life of the structure. To mitigate potential impacts to the structure due to perched water accumulation, all below-grade walls (whether extending below design ground water or not) will need to be designed for hydrostatic pressure (an additional 40 pcf of fluid pressure) and waterproofed.

As a perimeter foundation drain system to on-site detention will not be allowed by the City of Palo Alto, we recommend designing below-grade slabs that do not extend below the design ground water depth for some amount of transient hydrostatic uplift pressure. As the issue is the potential for short duration perched water events and not long term water table rises, the choice of the amount of uplift pressure is difficult to predict, if it will even occur over the life of the structure. Therefore, the design could proceed based on a risk versus cost basis. For a lower

risk, we judge 4 feet of hydrostatic pressure to be reasonable, as measured from the below-grade slab finished floor. To lower slab cost, at somewhat higher risk, 2 feet can be used. The maximum amount of hydrostatic uplift to design for is an owner's decision. The hydrostatic uplift pressure would be applied over the full width of the below-grade portion of the building.

In addition to the above, below-grade excavations may extend to depths near or below ground water. Ground water could impact grading and the underground construction. Impacts typically consist of potentially wet and unstable subgrade, difficulty achieving compaction, and difficult underground utility installation. Dewatering may be required in isolated areas of the excavation. Recommendations addressing unstable conditions resulting from saturated materials or materials with high moisture contents are presented in the "Earthwork" section of this report.

5.1.3 Proximity of Below-Grade Excavations to Adjacent Improvements

Based on the site plans provided, the proposed building appears to extend to within a few feet of adjacent structures and property lines. As mentioned, the proposed structure may include below-grade pits for puzzle parking (locations of pits within structure are unknown) or an up to 3-level below-grade basement. Below-grade excavations will likely need to be supported by temporary shoring. The design of shoring for below-grade excavations will need to incorporate surcharge loads from adjacent buildings or underpinning of the adjacent structures will likely be required. Temporary shoring should support adjacent improvements (buildings, existing utilities within Hamilton Avenue and Waverley Street, etc.) without distress. Existing improvements should be monitored for settlement and distress and inclinometers may need to be installed at critical areas to monitor shoring deflection. Recommendations for temporary shoring are provided in this report. If the final proposed development dictates, we can provide further information for underpinning elements.

5.1.4 Differential Movement from On-grade to On-Structure Transitions for Below-grade Structure

As discussed, the proposed structure may include below-grade pits for puzzle parking or a basement. If below-grade pits or a basement are constructed, some flatwork areas will likely transition from on-grade support to overlying the below-grade pit or basement (on-structure support). These transition areas typically experience increased differential movement due to a variety of causes, including difficulty in achieving compaction of retaining wall backfill closest to the wall, or settlement of backfill placed behind shoring when the excavation is not cut neat or there is raveling, requiring backfill behind lagging.

We anticipate that below-grade excavations will likely be shored with temporary shoring and that temporary slopes will not be utilized. We do not anticipate significant sections of retaining wall backfill surrounding the below-grade excavations and therefore sub-slabs at the wall transitions will likely not be required. However, where improvements transition from on-grade to on-structure support, some differential movement can be expected. Therefore, we recommend consideration be given to including dowelled or hinge connections at transitions in high traffic areas (garage entry) and/or other sensitive improvement areas to limit differential movement at these transition areas.

However, if areas of deep retaining wall backfill are required, we recommend consideration be given to including sub-slabs at these transition areas that cantilever at least 3 feet out from the wall to limit the increased differential movement due to a variety of causes as discussed above.

5.1.5 Presence of Granular Soils

Granular soils with variable amounts of fines were encountered generally beneath a depth of 30 feet and at a depth of about 7 to 14 feet in Boring EB-1. Additionally, the sandy layers beneath a depth of 30 feet are known to have frequent cobbles up to about 18 to 24 inches in diameter, as well as a significant percentage of gravels greater than 3 inches in diameter. Grading contractors should consider this as part of the evaluation of sites to accept export volume (if proposed excavations will extend to these sand layers), as well as working with excavated soil as part of on-site backfill operations. Cobbles will only be allowed to be reused as general fill in certain conditions.

Contractors should also plan on forming foundation excavations within the zones where sands with low fines contents are encountered, as well as preparation of slab-on-grade subgrade just prior to concrete placement, and other similar construction issues as relates to temporary shoring, utility excavations, and granular material at the base of below-grade excavations. These issues are discussed further within the “Earthwork” and “Foundations” sections of this report.

5.1.6 Soil Corrosion Potential

Preliminary soil corrosion data was collected based on the results of the analytical tests on four samples of the near-surface soils. In general, we conclude that the use of sulfate resistant concrete is not required for buried concrete; however, the corrosion potential for buried metallic structures, such as metal pipes, is considered severely corrosive. Special requirements will likely be required for corrosion control on any proposed buried metallic structures. We recommend that a corrosion engineering specialist be retained for corrosion protection recommendations.

5.2 PLANS AND SPECIFICATIONS REVIEW

We recommend that we be retained to review the geotechnical aspects of the project structural, civil, and landscape plans and specifications, allowing sufficient time to provide the design team with any comments prior to issuing the plans for construction.

5.3 CONSTRUCTION OBSERVATION AND TESTING

As site conditions may vary significantly between the small-diameter borings performed during this investigation, we also recommend that a Cornerstone representative be present to provide geotechnical observation and testing during earthwork and foundation construction. This will allow us to form an opinion and prepare a letter at the end of construction regarding contractor compliance with project plans and specifications, and with the recommendations in our report. We will also be allowed to evaluate any conditions differing from those encountered during our

investigation, and provide supplemental recommendations as necessary. For these reasons, the recommendations in this report are contingent of Cornerstone providing observation and testing during construction. Contractors should provide at least a 48-hour notice when scheduling our field personnel.

SECTION 6: EARTHWORK

6.1 SITE DEMOLITION, CLEARING AND PREPARATION

6.1.1 Site Stripping

The site should be stripped of all surface vegetation, and surface and subsurface improvements within the proposed development area. Demolition of existing improvements is discussed in detail below. A detailed discussion of removal of existing fills is provided later in this report. Surface vegetation and topsoil should be stripped to a sufficient depth to remove all material greater than 3 percent organic content by weight.

6.1.2 Tree and Shrub Removal

Trees and shrubs designated for removal should have the root balls and any roots greater than ½-inch diameter removed completely. Mature trees are estimated to have root balls extending to depths of 2 to 4 feet, depending on the tree size. Significant root zones are anticipated to extend to the diameter of the tree canopy. Grade depressions resulting from root ball removal should be cleaned of loose material and backfilled in accordance with the recommendations in the "Compaction" section of this report.

6.1.3 Demolition of Existing Slabs, Foundations and Pavements

All slabs, foundations, and pavements should be completely removed from within planned building areas. A discussion of recycling existing improvements is provided later in this report.

6.1.4 Abandonment of Existing Utilities

All utilities should be completely removed from within planned building areas. For any utility line to be considered acceptable to remain within building areas, the utility line must be completely backfilled with grout or sand-cement slurry (sand slurry is not acceptable), the ends outside the building area capped with concrete, and the trench fills either removed and replaced as engineered fill with the trench side slopes flattened to at least 1:1, or the trench fills are determined not to be a risk to the structure. The assessment of the level of risk posed by the particular utility line will determine whether the utility may be abandoned in place or needs to be completely removed. The contractor should assume that all utilities will be removed from within building areas unless provided written confirmation from both the owner and the geotechnical engineer.

Utilities extending beyond the building area may be abandoned in place provided the ends are plugged with concrete, they do not conflict with planned improvements, and that the trench fills do not pose significant risk to the planned surface improvements.

The risks associated with abandoning utilities in place include the potential for future differential settlement of existing trench fills, and/or partial collapse and potential ground loss into utility lines that are not completely filled with grout. In general, the risk is relatively low for single utility lines less than 4 inches in diameter, and increases with increasing pipe diameter.

6.2 REMOVAL OF EXISTING FILLS

While fills were not encountered in our borings, any fills encountered during site grading should be completely removed from within building areas and to a lateral distance of at least 5 feet beyond the building footprint or to a lateral distance equal to fill depth below the perimeter footing, whichever is greater. Provided the fills meet the "Material for Fill" requirements below, the fills may be reused when backfilling the excavations. If materials are encountered that do not meet the requirements, such as debris, wood, trash, those materials should be screened out of the remaining material and be removed from the site. Backfill of excavations should be placed in lifts and compacted in accordance with the "Compaction" section below.

Fills extending into planned pavement and flatwork areas beyond any below-grade garage limits may be left in place provided they are determined to be a low risk for future differential settlement and that the upper 12 to 18 inches of fill below pavement subgrade is re-worked and compacted as discussed in the "Compaction" section below.

6.3 TEMPORARY CUT AND FILL SLOPES

The contractor is responsible for maintaining all temporary slopes and providing temporary shoring where required. Temporary shoring, bracing, and cuts/fills should be performed in accordance with the strictest government safety standards. On a preliminary basis, the upper 15 feet at the site may be classified as OSHA Soil Type C materials. Recommended soil parameters for temporary shoring are provided in the "Temporary Shoring" section of this report.

Excavations performed during site demolition and fill removal should be sloped at 3:1 (horizontal:vertical) within the upper 5 feet below building subgrade. Excavations extending more than 5 feet below building subgrade and excavations in pavement and flatwork areas should be sloped in accordance with the OSHA soil classification.

6.4 BELOW-GRADE EXCAVATIONS

If a below-grade option is chosen, below-grade excavations may be constructed with temporary slopes in accordance with the "Temporary Cut and Fill Slopes" section above if space allows. Alternatively, temporary shoring may support planned cuts up to 40 to 45 feet. We have provided geotechnical parameters for shoring design in the section below. If the final proposed development dictates, we can provide further information for underpinning elements.

The choice of shoring method should be left to the contractor's judgment based on experience, economic considerations and adjacent improvements such as utilities, pavements, and foundation loads. Temporary shoring should support adjacent improvements without distress and should be the contractor's responsibility. A pre-condition survey including photographs and installation of monitoring points for existing site improvements should be included in the contractor's scope. We should be provided the opportunity to review the geotechnical parameters of the shoring design prior to implementation; the project structural engineer should be consulted regarding support of adjacent structures.

6.4.1 Temporary Shoring

Based on the site conditions encountered during our investigation, the cuts may be supported by soldier beams and tie-backs, braced excavations, or potentially other methods. Restrained shoring will most likely be required to limit detrimental lateral deflections and settlement behind the shoring. In addition to soil earth pressures, the shoring system will need to support adjacent loads such as construction vehicles and incidental loading, existing structure foundation loads, and street loading. We recommend that heavy construction loads (cranes, etc.) and material stockpiles be kept at least 15 feet behind the shoring. Where this loading cannot be set back, the shoring will need to be designed to support the loading. The shoring designer should provide for timely and uniform mobilization of soil pressures that will not result in excessive lateral deflections. Minimum suggested geotechnical parameters for shoring design are provided in the table below.

Table 3: Suggested Temporary Shoring Design Parameters

Design Parameter	Design Value
Minimum Lateral Wall Surcharge (upper 5 feet)	120 psf
Cantilever Wall – Triangular Earth Pressure	40 pcf (2)
Restrained Wall – Trapezoidal Earth Pressure	Increase from 0 to 25H psf at ¼ H from top of shoring (1) (2)
Passive Pressure – Starting at 2 feet below the bottom of the adjacent excavation(3)	400 pcf up to 2,000 psf maximum uniform pressure

(1) H equals the height of the excavation; passive pressures are assumed to act over twice the soldier pile diameter
(2) The cantilever and restrained pressures are for drained designs with dewatering. If undrained shoring is designed, an additional 40 pcf should be added for hydrostatic pressures.
(3) Bottom of adjacent excavation is bottom of mass excavation or bottom of footing excavation, whichever is deeper directly adjacent to the shoring element.

Drainage panels should not be used as part of the temporary shoring system or waterproofing protection.

We performed our explorations with small diameter cone and hollow-stem auger equipment and as such were not able to evaluate the potential for caving soils, which can create difficult conditions during soldier beam, tie-back, or soil nail installation; caving soils can also be problematic during excavation and lagging placement. The contractor is responsible for

evaluating excavation difficulties prior to construction. Where relatively clean sands (especially encountered below ground water) or difficult drilling or cobble conditions were encountered during our exploration, pilot holes performed by the contractor may be desired to further evaluate these conditions prior to the finalization of the shoring budget.

In addition to anticipated deflection of the shoring system, other factors such as voids created by soil sloughing, and erosion of granular layers due to perched water conditions can create adverse ground subsidence and deflections. The contractor should attempt to cut the excavation as close to neat lines as possible; where voids are created they should be backfilled as soon as possible with sand, gravel, or grout.

As previously mentioned, we recommend that a monitoring program be developed and implemented to evaluate the effects of the shoring on adjacent improvements. All sensitive improvements should be located and monitored for horizontal and vertical deflections and distress cracking based on a pre-construction survey. For multi-level excavations, the installation of inclinometers at critical areas may be desired for more detailed deflection monitoring. The monitoring frequency should be established and agreed to by the project team prior to start of shoring construction.

The above recommendations are for the use of the design team; the contractor in conjunction with input from the shoring designer should perform additional subsurface exploration they deem necessary to design the chosen shoring system. A California-licensed civil or structural engineer must design and be in responsible charge of the temporary shoring design. The contractor is responsible for means and methods of construction, as well as site safety.

6.4.2 Construction Dewatering

At this time, we do not know how deep below-grade excavations will extend. As such, below-grade excavations may extend below ground water depths and therefore require temporary dewatering. Design, selection of the equipment and dewatering method, and construction of temporary dewatering should be the responsibility of the contractor. Modifications to the dewatering system are often required in layered alluvial soils and should be anticipated by the contractor. The dewatering plan, including planned dewatering well filter pack materials, should be forwarded to our office for review prior to implementation.

The dewatering design should maintain ground water at least 5 feet below the bottom of the mass excavation, and at least 2 feet below localized excavations such as deepened footings, elevator shafts, and utilities. If the dewatering system was to shut down for an extended period of time, destabilization and/or heave of the excavation bottom requiring over-excavation and stabilization, flooding and softening, and/or shoring failures could occur; therefore, we recommend that a backup power source be considered.

Temporary draw down of the ground water table can cause subsidence outside the excavation area, causing settlement of adjacent improvements and structures. As mentioned, the depth of excavations are not known at this time. If below-grade excavations are proposed and will extend near or below the design ground water level, we should be consulted to provide

estimates for potential settlements on adjacent improvements resulting from temporary ground water draw down.

Depending on the ground water quality and previous environmental impacts to the site and surrounding area, settlement and storage tanks, particulate filtration, and environmental testing may be required prior to discharge, either into storm or sanitary, or trucked to an off-site facility.

6.5 SUBGRADE PREPARATION

After site clearing and demolition is complete, and prior to backfilling any excavations resulting from fill removal or demolition, the excavation subgrade and subgrade within areas to receive additional site fills, slabs-on-grade and/or pavements should be scarified to a depth of 6 inches, moisture conditioned, and compacted in accordance with the "Compaction" section below.

If a basement is constructed, the subgrade for any slab or mat foundation extending to or below ground water for the basement should generally be cut to the desired grades, including the thickness for any subgrade stabilization, as discussed below.

6.6 SUBGRADE STABILIZATION MEASURES

Soil subgrade and fill materials, especially soils with high fines contents such as clays and silty soils, can become unstable due to high moisture content, whether from high in-situ moisture contents or from winter rains. As the moisture content increases over the laboratory optimum, it becomes more likely the materials will be subject to softening and yielding (pumping) from construction loading or become unworkable during placement and compaction.

As discussed in the "Subsurface" section in this report, the in-situ moisture contents range from a few percent below optimum to about 5 to 7 percent over the estimated laboratory optimum in the upper 30 feet of the soil profile. The contractor should anticipate needing to dry some soils prior to reusing them as fill. In addition, repetitive rubber-tire loading may de-stabilize the soils.

There are several methods to address potentially unstable soil conditions and facilitate fill placement and trench backfill. Some of the methods are briefly discussed below. Implementation of the appropriate stabilization measures should be evaluated on a case-by-case basis according to the project construction goals and the particular site conditions.

6.6.1 Scarification and Drying

The subgrade may be scarified to a depth of 12 inches and allowed to dry to near optimum conditions, if sufficient dry weather is anticipated to allow sufficient drying. More than one round of scarification may be needed to break up the soil clods.

6.6.2 Removal and Replacement

As an alternative to scarification, the contractor may choose to over-excavate the unstable soils and replace them with dry on-site or import materials. A Cornerstone representative should be

present to provide recommendations regarding the appropriate depth of over-excavation, whether a geosynthethic (stabilization fabric or geogrid) is recommended, and what materials are recommended for backfill.

6.6.3 Chemical Treatment

Where the unstable area exceeds about 5,000 to 10,000 square feet and/or site winterization is desired, chemical treatment with quicklime (CaO), kiln-dust, or cement may be more cost-effective than removal and replacement. Recommended chemical treatment depths will typically range from 12 to 18 inches depending on the magnitude of the instability.

6.6.4 Below-Grade Excavation Stabilization

If a basement is constructed and extends near or below the design ground water level, we recommend that the contractor plan for stabilization of the excavation bottom where construction traffic is planned. This may include chemical treatment of 12 to 18 inches of the subgrade, depending on the method of mass excavation and disturbance to the excavation bottom, or alternatively excavating 12 to 18 inches below subgrade and placing a layer of clean, crushed rock. The final thickness of crushed rock needed should be based on the judgment of the contractor and the type of equipment and material loading that is likely to occur. The crushed rock should be consolidated in place with light vibratory equipment. Rubber-tired equipment should not be allowed to operate on unstabilized subgrade.

A Cornerstone representative should observe the excavation bottom, including potentially observing proof rolling, prior to placing a rat slab and waterproofing to provide more detailed stabilization and subgrade repair recommendations. Stabilization measures in excavations extending below ground water should not proceed until dewatering has been fully implemented.

6.7 MATERIAL FOR FILL

6.7.1 Re-Use of On-site Soils

On-site soils with an organic content less than 3 percent by weight may be reused as general fill. General fill should not have lumps, clods or cobble pieces larger than 6 inches in diameter; 85 percent of the fill should be smaller than 2½ inches in diameter. Minor amounts of oversized material (smaller than 12 inches in diameter) may be allowed provided the oversized pieces are not allowed to nest together and the compaction method will allow for loosely placed lifts not exceeding 12 inches.

6.7.2 Re-Use of On-Site Site Improvements

We anticipate that asphalt concrete (AC) grindings and aggregate base (AB) will be generated during site demolition. If the AC grindings are mixed with the underlying AB to meet Class 2 AB specifications, they may be reused within the new pavement and flatwork structural sections. AC/AB grindings may not be reused beneath the habitable areas. Laboratory testing will be required to confirm the grindings meet project specifications.

6.7.3 Potential Import Sources

Imported and non-expansive material should be inorganic with a Plasticity Index (PI) of 15 or less, and not contain recycled asphalt concrete where it will be used within the habitable building areas. To prevent significant caving during trenching or foundation construction, imported material should have sufficient fines. Samples of potential import sources should be delivered to our office at least 10 days prior to the desired import start date. Information regarding the import source should be provided, such as any site geotechnical reports. If the material will be derived from an excavation rather than a stockpile, potholes will likely be required to collect samples from throughout the depth of the planned cut that will be imported. At a minimum, laboratory testing will include PI tests. Material data sheets for select fill materials (Class 2 aggregate base, ¾-inch crushed rock, quarry fines, etc.) listing current laboratory testing data (not older than 6 months from the import date) may be provided for our review without providing a sample. If current data is not available, specification testing will need to be completed prior to approval.

Environmental and soil corrosion characterization should also be considered by the project team prior to acceptance. Suitable environmental laboratory data to the planned import quantity should be provided to the project environmental consultant; additional laboratory testing may be required based on the project environmental consultant's review. The potential import source should also not be more corrosive than the on-site soils, based on pH, saturated resistivity, and soluble sulfate and chloride testing.

6.8 COMPACTION REQUIREMENTS

All fills, and subgrade areas where fill, slabs-on-grade, and pavements are planned, should be placed in loose lifts 8 inches thick or less and compacted in accordance with ASTM D1557 (latest version) requirements as shown in the table below. In general, clayey soils should be compacted with sheepsfoot equipment and sandy/gravelly soils with vibratory equipment; open-graded materials such as crushed rock should be placed in lifts no thicker than 18 inches and consolidated in place with vibratory equipment. Each lift of fill and all subgrade should be firm and unyielding under construction equipment loading in addition to meeting the compaction requirements to be approved. The contractor (with input from a Cornerstone representative) should evaluate the in-situ moisture conditions, as the use of vibratory equipment on soils with high moistures can cause unstable conditions. General recommendations for soil stabilization are provided in the "Subgrade Stabilization Measures" section of this report.

Table 4: Compaction Requirements

Description	Material Description	Minimum Relative[1] Compaction (percent)	Moisture[2] Content (percent)
General Fill (within upper 5 feet)	On-Site Soils	90	>1
General Fill (below a depth of 5 feet)	On-Site Soils	95	>1
Basement Wall Backfill	Without Surface Improvements	90	>1
Basement Wall Backfill	With Surface Improvements	95[4]	>1
Trench Backfill	On-Site Soils	90	>1
Trench Backfill (upper 6 inches of subgrade)	On-Site Soils	95	>1
Crushed Rock Fill	¾-inch Clean Crushed Rock	Consolidate In-Place	NA
Non-Expansive Fill	Imported Non-Expansive Fill	90	Optimum
Flatwork Subgrade	On-Site Soils	90	>1
Flatwork Aggregate Base	Class 2 Aggregate Base[3]	90	Optimum
Pavement Subgrade	On-Site Soils	95	>1
Pavement Aggregate Base	Class 2 Aggregate Base[3]	95	Optimum
Asphalt Concrete	Asphalt Concrete	95	NA

1 – Relative compaction based on maximum density determined by ASTM D1557 (latest version)
2 – Moisture content based on optimum moisture content determined by ASTM D1557 (latest version)
3 – Class 2 aggregate base shall conform to Caltrans Standard Specifications, latest edition, except that the relative compaction should be determined by ASTM D1557 (latest version)
4 – Using light-weight compaction or walls should be braced

6.9 TRENCH BACKFILL

Utility lines constructed within public right-of-way should be trenched, bedded and shaded, and backfilled in accordance with the local or governing jurisdictional requirements. Utility lines in private improvement areas should be constructed in accordance with the following requirements unless superseded by other governing requirements.

All utility lines should be bedded and shaded to at least 6 inches over the top of the lines with crushed rock (⅜-inch-diameter or greater) or well-graded sand and gravel materials conforming to the pipe manufacturer's requirements. Open-graded shading materials should be consolidated in place with vibratory equipment and well-graded materials should be compacted to at least 90 percent relative compaction with vibratory equipment prior to placing subsequent backfill materials.

General backfill over shading materials may consist of on-site native materials provided they meet the requirements in the "Material for Fill" section, and are moisture conditioned and compacted in accordance with the requirements in the "Compaction" section.

Where utility lines will cross perpendicular to strip footings, the footing should be deepened to encase the utility line, providing sleeves or flexible cushions to protect the pipes from anticipated foundation settlement, or the utility lines should be backfilled to the bottom of footing with sand-cement slurry or lean concrete. Where utility lines will parallel footings and will extend below the "foundation plane of influence," an imaginary 1:1 plane projected down from the bottom edge of the footing, either the footing will need to be deepened so that the pipe is above the foundation plane of influence or the utility trench will need to be backfilled with sand-cement slurry or lean concrete within the influence zone. Sand-cement slurry used within foundation influence zones should have a minimum compressive strength of 75 psi.

6.10 SITE DRAINAGE

Ponding should not be allowed adjacent to building foundations, slabs-on-grade, or pavements. Hardscape surfaces should slope at least 2 percent towards suitable discharge facilities; landscape areas should slope at least 3 percent towards suitable discharge facilities. Roof runoff should be directed away from building areas in closed conduits, to approved infiltration facilities, or on to hardscaped surfaces that drain to suitable facilities. Retention, detention or infiltration facilities should be spaced at least 10 feet from buildings, and preferably at least 5 feet from slabs-on-grade or pavements. However, if retention, detention or infiltration facilities are located within these zones, we recommend that these treatment facilities meet the requirements in the Storm Water Treatment Design Considerations section of this report.

6.11 LOW-IMPACT DEVELOPMENT (LID) IMPROVEMENTS

The Municipal Regional Permit (MRP) requires regulated projects to treat 100 percent of the amount of runoff identified in Provision C.3.d from a regulated project's drainage area with low impact development (LID) treatment measures onsite or at a joint stormwater treatment facility. LID treatment measures are defined as rainwater harvesting and use, infiltration, evapotranspiration, or biotreatment. A biotreatment system may only be used if it is infeasible to implement harvesting and use, infiltration, or evapotranspiration at a project site.

Technical infeasibility of infiltration may result from site conditions that restrict the operability of infiltration measures and devices. Various factors affecting the feasibility of infiltration treatment may create an environmental risk, structural stability risk, or physically restrict infiltration. The presence of any of these limiting factors may render infiltration technically infeasible for a proposed project. To aid in determining if infiltration may be feasible at the site, we provide the following site information regarding factors that may aid in determining the feasibility of infiltration facilities at the site.

- The near-surface soils at the site are clayey, and categorized as Hydrologic Soil Group D, and are expected to have infiltration rates of less than 0.2 inches per hour. In our opinion, these clayey soils will significantly limit the infiltration of stormwater.

- Locally, seasonal high ground water is mapped at a depth of 20 to 30 feet, and therefore is expected to be at least 10 feet below the base of the infiltration measure.

- Infiltration measures, devices, or facilities may conflict with the location of existing or proposed underground utilities or easements. Infiltration measures, devices, or facilities should not be placed on top of or very near to underground utilities such that they discharge to the utility trench, restrict access, or cause stability concerns.

6.11.1 Storm Water Treatment Design Considerations

If storm water treatment improvements, such as shallow bio-retention swales, basins or pervious pavements, are required as part of the site improvements to satisfy Storm Water Quality (C.3) requirements, we recommend the following items be considered for design and construction.

6.11.1.1 General Bioswale Design Guidelines

- If possible, avoid placing bioswales or basins within 10 feet of the building perimeter or within 5 feet of exterior flatwork or pavements. If bioswales must be constructed within these setbacks, the side(s) and bottom of the trench excavation should be lined with 10-mil visqueen to reduce water infiltration into the surrounding clay.

- Bioswales constructed within 3 feet of proposed buildings may be within the foundation zone of influence for perimeter wall loads. Therefore, where bioswales will parallel foundations and will extend below the "foundation plane of influence," an imaginary 1:1 plane projected down from the bottom edge of the foundation, the foundation will need to be deepened so that the bottom edge of the bioswale filter material is above the foundation plane of influence.

- The bottom of bioswale or detention areas should include a perforated drain placed at a low point, such as a shallow trench or sloped bottom, to reduce water infiltration into the surrounding soils near structural improvements, and to address the low infiltration capacity of the on-site clay soils.

6.11.1.2 Bioswale Infiltration Material

- Gradation specifications for bioswale filter material, if required, should be specified on the grading and improvement plans.

- Compaction requirements for bioswale filter material in non-landscaped areas or in pervious pavement areas, if any, should be indicated on the plans and specifications to satisfy the anticipated use of the infiltration area.

- If required by governing agencies, field infiltration testing should be specified on the grading and improvement plans. The appropriate infiltration test method, duration and frequency of testing should be specified in accordance with local requirements. Prior to the field infiltration testing, the bioswales should be pre-soaked to pre-consolidate the material.

- Due to the relatively loose consistency and/or high organic content of many bioswale filter materials, long-term settlement of the bioswale medium should be anticipated. To reduce initial volume loss, bioswale filter material should be wetted in 12 inch lifts during placement to pre-consolidate the material. Mechanical compaction should not be allowed, unless specified on the grading and improvement plans, since this could significantly decrease the infiltration rate of the bioswale materials.

- It should be noted that the volume of bioswale filter material may decrease over time depending on the organic content of the material. Additional filter material may need to be added to bioswales after the initial exposure to winter rains and periodically over the life of the bioswale areas, as needed.

6.11.1.3 Bioswale Construction Adjacent to Pavements

If bio-infiltration swales or basins are considered adjacent to proposed parking lots or exterior flatwork, we recommend that mitigative measures be considered in the design and construction of these facilities to reduce potential impacts to flatwork or pavements. Exterior flatwork, concrete curbs, and pavements located directly adjacent to bio-swales may be susceptible to settlement or lateral movement, depending on the configuration of the bioswale and the setback between the improvements and edge of the swale. To reduce the potential for distress to these improvements due to vertical or lateral movement, the following options should be considered by the project civil engineer:

- Improvements should be setback from the vertical edge of a bioswale such that there is at least 1 foot of horizontal distance between the edge of improvements and the top edge of the bioswale excavation for every 1 foot of vertical bioswale depth, or

- Concrete curbs for pavements, or lateral restraint for exterior flatwork, located directly adjacent to a vertical bioswale cut should be designed to resist lateral earth pressures in accordance with the recommendations in the “Retaining Walls” section of this report, or concrete curbs or edge restraint should be adequately keyed into the native soil or engineered to reduce the potential for rotation or lateral movement of the curbs.

SECTION 7: FOUNDATIONS

7.1 SUMMARY OF RECOMMENDATIONS

In our opinion, a proposed on-grade structure may be supported on shallow foundations provided the recommendations in the “Earthwork” section and the sections below are followed.

As discussed, the up to 3-level below-grade basement structure is currently the least likely option and the depth of basement is not known at this time. Foundation recommendations for a structure with basement will be dependent on the final basement depth due to various affects from ground water, liquefaction, and other soil conditions at the bottom of proposed basement depth. On a preliminary basis, if a basement extends below the design ground water depth, a mat foundation will likely be required. Foundation recommendations have not been provided for

a structure with basement and we should be consulted to provide additional recommendations if this option is to be pursued.

7.2 SEISMIC DESIGN CRITERIA

The 2016 California Building Code (CBC) provides criteria for the seismic design of buildings in Chapter 16. The "Seismic Coefficients" used to design buildings are established based on a series of tables and figures addressing different site factors, including the soil profile in the upper 100 feet below grade and mapped spectral acceleration parameters based on distance to the controlling seismic source/fault system. Shear wave velocity measurements performed at CPT-2 to a depth of approximately 90 feet resulted in an average shear wave velocity of 939 feet per second (or 286 meters per second). Based on our review of the local geology, we anticipate the average shear wave velocity to remain consistent down to 100 feet with the value mentioned above. Therefore, we have classified the site as Soil Classification D. The mapped spectral acceleration parameters S_S and S_1 were calculated using the USGS computer program *U.S. Seismic Design Maps*, located at http://earthquake.usgs.gov/designmaps/us/application.php, based on the site coordinates presented below and the site classification. The table below lists the various factors used to determine the seismic coefficients and other parameters.

Table 5: 2016 CBC Site Categorization and Site Coefficients

Classification/Coefficient	Design Value
Site Class	D
Site Latitude	37.44612°
Site Longitude	-122.15977°
0.2-second Period Mapped Spectral Acceleration[1], S_S	1.522g
1-second Period Mapped Spectral Acceleration[1], S_1	0.697g
Short-Period Site Coefficient – Fa	1.0
Long-Period Site Coefficient – Fv	1.5
0.2-second Period, Maximum Considered Earthquake Spectral Response Acceleration Adjusted for Site Effects - S_{MS}	1.522g
1-second Period, Maximum Considered Earthquake Spectral Response Acceleration Adjusted for Site Effects – S_{M1}	1.046g
0.2-second Period, Design Earthquake Spectral Response Acceleration – S_{DS}	1.015g
1-second Period, Design Earthquake Spectral Response Acceleration – S_{D1}	0.697g
Mapped MCE Geometric Mean Peak Ground Acceleration – PGA_M	0.612g
Site Coefficient Based on PGA and Site Class - F_{PGA}	1.0

[1]For Site Class B, 5 percent damped.

7.3 SHALLOW FOUNDATIONS – ON-GRADE STRUCTURE

7.3.1 Spread Footings

Spread footings should bear entirely on natural, undisturbed soil or engineered fill, be at least 18 inches wide, and extend at least 24 inches below the lowest adjacent grade. Lowest adjacent grade is defined as the deeper of the following: 1) bottom of the adjacent interior slab-on-grade, or 2) finished exterior grade, excluding landscaping topsoil.

Footings constructed to the above dimensions and in accordance with the "Earthwork" recommendations of this report are capable of supporting maximum allowable bearing pressures of 3,000 psf for dead loads, 4,500 psf for combined dead plus live loads, and 6,000 psf for all loads including wind and seismic. These pressures are based on factors of safety of 3.0, 2.0, and 1.5 applied to the ultimate bearing pressure for dead, dead plus live, and all loads, respectively. These pressures are net values; the weight of the footing may be neglected for the portion of the footing extending below grade (typically, the full footing depth). Top and bottom reinforcing steel should be included in continuous footings to help span irregularities and differential settlement.

7.3.2 Footing Settlement

Structural loads were not provided to us at the time this report was prepared; therefore, we assumed a typical interior column load of 500 to 700 kips. Based on the this assumed loading and the allowable bearing pressures presented above, we estimate that the total static footing settlement will be on the order of ¾-inches, with about ½-inch of post-construction differential settlement between adjacent foundation elements. In addition we estimate that differential seismic movement will be on the order of ½-inch between independent foundation elements, resulting in a total estimated differential footing movement of about 1-inch between independent foundation elements. As our footing loads were assumed, we recommend we be retained to review the final footing layout and loading, and verify the settlement estimates above.

7.3.3 Lateral Loading

Lateral loads may be resisted by friction between the bottom of footing and the supporting subgrade, and also by passive pressures generated against footing sidewalls. An ultimate frictional resistance of 0.45 applied to the footing dead load, and an ultimate passive pressure based on an equivalent fluid pressure of 450 pcf may be used in design. The structural engineer should apply an appropriate factor of safety to the ultimate values above. Where footings are adjacent to landscape areas without hardscape, the upper 12 inches of soil should be neglected when determining passive pressure capacity.

7.3.4 Spread Footing Construction Considerations

Where utility lines will cross perpendicular to strip footings, the footing should be deepened to encase the utility line, providing sleeves or flexible cushions to protect the pipes from anticipated foundation settlement, or the utility lines should be backfilled to the bottom of footing with sand-

cement slurry or lean concrete. Where utility lines will parallel footings and will extend below the "foundation plane of influence," an imaginary 1:1 plane projected down from the bottom edge of the footing, either the footing will need to be deepened so that the pipe is above the foundation plane of influence or the utility trench will need to be backfilled with sand-cement slurry or lean concrete within the influence zone. Sand-cement slurry used within foundation influence zones should have a minimum compressive strength of 75 psi.

Footing excavations should be filled as soon as possible or be kept moist until concrete placement by regular sprinkling to prevent desiccation. Additionally, depending on the footing depths, footings may be in sandier soils that may not stand vertical and may have a potential for sloughing. Excavation sidewalls may need to be sloped to a minimum 1:1 inclination where footings are located in sands or Stay-Form or similar may need to be placed within footing excavations as they are excavated during construction of the foundation elements. In addition, depending on how the excavations are cut, if the footing subgrade is loosened the footing bottoms will need to be re-compacted in place. A Cornerstone representative should observe all footing excavations prior to placing reinforcing steel and concrete. If there is a significant schedule delay between our initial observation and concrete placement, we may need to re-observe the excavations and cleaning of the excavations may be necessary.

SECTION 8: CONCRETE SLABS AND PEDESTRIAN PAVEMENTS

8.1 ON-GRADE INTERIOR SLABS-ON-GRADE

As the Plasticity Index (PI) of the surficial soils is 15 or less, the proposed slabs-on-grade may be supported directly on subgrade prepared in accordance with the recommendations in the "Earthwork" section of this report. If moisture-sensitive floor coverings are planned, the recommendations in the "Interior Slabs Moisture Protection Considerations" section below may be incorporated in the project design if desired. If significant time elapses between initial subgrade preparation and slab-on-grade construction, the subgrade should be proof-rolled to confirm subgrade stability, and if the soil has been allowed to dry out, the subgrade should be re-moisture conditioned to near optimum moisture content.

The structural engineer should determine the appropriate slab reinforcement for the loading requirements and considering the expansion potential of the underlying soils. Consideration should be given to limiting the control joint spacing to a maximum of about 2 feet in each direction for each inch of concrete thickness.

8.2 GARAGE SLABS-ON-GRADE – ON-GRADE STRUCTURE

The garage slab-on-grade for an on-grade structure should be at least 5 inches thick and if constructed with minimal reinforcement intended for shrinkage control only, should have a minimum compressive strength of 3,000 psi. If the slab will have heavier reinforcing because the slab will also serve as a structural diaphragm, the compressive strength may be reduced to 2,500 psi at the structural engineer's discretion. The garage slab should also be supported on subgrade prepared in accordance with the recommendations in the "Earthwork" section of this report, and at least 4 inches of either Class 2 aggregate base or ¾-inch clean, crushed rock

placed and compacted in accordance with the "Compaction" section of this report. If there will be areas within the garage that are moisture sensitive, such as equipment and elevator rooms, the recommendations in the "Interior Slabs Moisture Protection Considerations" section below may be incorporated in the project design if desired. Consideration should be given to limiting the control joint spacing to a maximum of about 2 feet in each direction for each inch of concrete thickness.

8.3 INTERIOR SLABS MOISTURE PROTECTION CONSIDERATIONS

The following general guidelines for concrete slab-on-grade construction where floor coverings are planned are presented for the consideration by the developer, design team, and contractor. These guidelines are based on information obtained from a variety of sources, including the American Concrete Institute (ACI) and are intended to reduce the potential for moisture-related problems causing floor covering failures, and may be supplemented as necessary based on project-specific requirements. The application of these guidelines or not will not affect the geotechnical aspects of the slab-on-grade performance.

- Place a minimum 10-mil vapor retarder conforming to ASTM E 1745, Class C requirements or better directly below the concrete slab; the vapor retarder should extend to the slab edges and be sealed at all seams and penetrations in accordance with manufacturer's recommendations and ASTM E 1643 requirements. A 4-inch-thick capillary break, consisting of ½- to ¾-inch crushed rock with less than 5 percent passing the No. 200 sieve, should be placed below the vapor retarder and consolidated in place with vibratory equipment.

- The concrete water:cement ratio should be 0.45 or less. Mid-range plasticizers may be used to increase concrete workability and facilitate pumping and placement.

- Water should not be added after initial batching unless the slump is less than specified and/or the resulting water:cement ratio will not exceed 0.45.

- Polishing the concrete surface with metal trowels is not recommended.

- Where floor coverings are planned, all concrete surfaces should be properly cured.

- Water vapor emission levels and concrete pH should be determined in accordance with ASTM F1869 and F710 requirements and evaluated against the floor covering manufacturer's requirements prior to installation.

8.4 EXTERIOR FLATWORK

At-grade exterior concrete flatwork subject to pedestrian traffic only should be at least 4 inches thick and supported on at least 4 inches of Class 2 aggregate base overlying subgrade prepared in accordance with the "Earthwork" recommendations of this report. Flatwork that will be subject to heavier or frequent vehicular loading should be designed in accordance with the recommendations in the "Vehicular Pavements" section below. To help reduce the potential for

uncontrolled shrinkage cracking, adequate expansion and control joints should be included. Consideration should be given to limiting the control joint spacing to a maximum of about 2 feet in each direction for each inch of concrete thickness. Flatwork should be isolated from adjacent foundations or retaining walls except where limited sections of structural slabs are included to help span irregularities in retaining wall backfill at the transitions between at-grade and on-structure flatwork.

SECTION 9: VEHICULAR PAVEMENTS

9.1 ASPHALT CONCRETE

The following asphalt concrete pavement recommendations tabulated below are based on the Procedure 608 of the Caltrans Highway Design Manual, estimated traffic indices for various pavement-loading conditions, and on a design R-value of 5. The design R-value was chosen based on engineering judgment considering the surface conditions.

Table 5: Asphalt Concrete Pavement Recommendations, Design R-value = 5

Design Traffic Index (TI)	Asphalt Concrete (inches)	Class 2 Aggregate Base* (inches)	Total Pavement Section Thickness (inches)
4.0	2.5	7.5	10.0
4.5	2.5	9.5	12.0
5.0	3.0	10.0	13.0
5.5	3.0	12.0	15.0
6.0	3.5	13.0	16.5
6.5	4.0	14.0	18.0

*Caltrans Class 2 aggregate base; minimum R-value of 78

Frequently, the full asphalt concrete section is not constructed prior to construction traffic loading. This can result in significant loss of asphalt concrete layer life, rutting, or other pavement failures. To improve the pavement life and reduce the potential for pavement distress through construction, we recommend the full design asphalt concrete section be constructed prior to construction traffic loading. Alternatively, a higher traffic index may be chosen for the areas where construction traffic will be use the pavements.

9.2 PORTLAND CEMENT CONCRETE

The exterior Portland Cement Concrete (PCC) pavement recommendations tabulated below are based on methods presented in the Portland Cement Association (PCA) design manual (PCA, 1984). Recommendations for garage slabs-on-grade were provided in the “Concrete Slabs and Pedestrian Pavements” section above. We have provided a few pavement alternatives as an anticipated Average Daily Truck Traffic (ADTT) was not provided. An allowable ADTT should be chosen that is greater than what is expected for the development.

Table 6: PCC Pavement Recommendations

Allowable ADTT	Minimum PCC Thickness (inches)
13	5.5
130	6.0

The PCC thicknesses above are based on a concrete compressive strength of at least 3,500 psi, supporting the PCC on at least 6 inches of Class 2 aggregate base compacted as recommended in the "Earthwork" section, and laterally restraining the PCC with curbs or concrete shoulders. Adequate expansion and control joints should be included. Consideration should be given to limiting the control joint spacing to a maximum of about 2 feet in each direction for each inch of concrete thickness, as well as structurally tying the on-grade pavement to the structure with a limited structural slab section to help span irregularities in retaining wall backfill at the transitions between at-grade and on-structure.

9.3 TRASH ENCLOSURES

On-grade trash enclosures and the associated stress pads should be supported on at least 8 inches of Portland cement concrete (PCC) over at least 8 inches of Class 2 aggregate base, where the aggregate base should be compacted to 95 percent relative compaction. The top 6 inches of the underlying subgrade should be moisture conditioned and compacted according to the "Compaction" section of this report. The compressive strength and construction details should be consistent with the above recommendations for PCC pavements.

SECTION 10: RETAINING WALLS

10.1 STATIC LATERAL EARTH PRESSURES

The structural design of any site retaining wall should include resistance to lateral earth pressures that develop from the soil behind the wall, any undrained water pressure, and surcharge loads acting behind the wall. As discussed, the City of Palo Alto does not allow the installation of subdrains for hydrostatic protection of retaining structures; therefore, we recommend that the walls with level backfill be designed for the following pressures plus an additional equivalent fluid pressure of 40 pcf. Basement walls should be designed as restrained walls.

Table 7: Recommended Lateral Earth Pressures

Wall Condition	Lateral Earth Pressure*	Additional Surcharge Loads
Unrestrained – Cantilever Wall	45 pcf	⅓ of vertical loads at top of wall
Restrained – Braced Wall	45 pcf + 8H** psf	½ of vertical loads at top of wall

* Lateral earth pressures are based on an equivalent fluid pressure for level backfill conditions
** H is the distance in feet between the bottom of footing and top of retained soil

10.2 SEISMIC LATERAL EARTH PRESSURES

The 2016 California Building Code (CBC) states that lateral pressures from earthquakes should be considered in the design of basements and retaining walls. As discussed, an on-grade structure may include 7-foot pits for puzzle parking. We developed seismic earth pressures for proposed 7-foot pits using interim recommendations generally based on refinement of the Mononobe-Okabe method (Lew et al., SEAOC 2010). We checked the result of the total seismic increment when added to the recommended active earth pressure against the recommended fixed (restrained) wall earth pressures. Because the wall is restrained, or will act as a restrained wall, and will be designed for 45 pcf (equivalent fluid pressure) plus a uniform earth pressure of 8H psf, based on current recommendations for seismic earth pressures, it appears that active earth pressures plus a seismic increment do not exceed the fixed wall earth pressures. Therefore, an additional seismic increment above the design earth pressures for proposed 7-foot pits for puzzle parking is not required as long as the walls are designed for the restrained wall earth pressures recommended above in accordance with the CBC.

As mentioned, a basement may be constructed, however the depth of basement is not known. If a basement extending greater than 10 feet below grade is to be constructed, we should be consulted to evaluate whether the walls should be designed for an additional seismic increment.

10.3 WALL DRAINAGE

10.3.1 At-Grade Site Walls

Adequate drainage should be provided by a subdrain system behind all walls. This system should consist of a 4-inch minimum diameter perforated pipe placed near the base of the wall (perforations placed downward). The pipe should be bedded and backfilled with Class 2 Permeable Material per Caltrans Standard Specifications, latest edition. The permeable backfill should extend at least 12 inches out from the wall and to within 2 feet of outside finished grade. Alternatively, ½-inch to ¾-inch crushed rock may be used in place of the Class 2 Permeable Material provided the crushed rock and pipe are enclosed in filter fabric, such as Mirafi 140N or approved equivalent. The upper 2 feet of wall backfill should consist of compacted on-site soil. The subdrain outlet should be connected to a free-draining outlet or sump.

Miradrain, Geotech Drainage Panels, or equivalent drainage matting can be used for wall drainage as an alternative to the Class 2 Permeable Material or drain rock backfill. Horizontal strip drains connecting to the vertical drainage matting may be used in lieu of the perforated

pipe and crushed rock section. The vertical drainage panel should be connected to the perforated pipe or horizontal drainage strip at the base of the wall, or to some other closed or through-wall system such as the TotalDrain system from AmerDrain. Sections of horizontal drainage strips should be connected with either the manufacturer's connector pieces or by pulling back the filter fabric, overlapping the panel dimples, and replacing the filter fabric over the connection. At corners, a corner guard, corner connection insert, or a section of crushed rock covered with filter fabric must be used to maintain the drainage path.

Drainage panels should terminate 18 to 24 inches from final exterior grade. The Miradrain panel filter fabric should be extended over the top of and behind the panel to protect it from intrusion of the adjacent soil.

10.3.2 Below-Grade Walls

As discussed, the City of Palo Alto does not allow for subdrains to provide hydrostatic protection of below-grade walls; therefore, below-grade walls will need to be designed for hydrostatic pressure.

We recommend that a water proofing specialist be retained to aid in water proofing design, as desired.

10.4 BACKFILL

Where surface improvements will be located over the retaining wall backfill, backfill placed behind the walls should be compacted to at least 95 percent relative compaction using light compaction equipment. Where no surface improvements are planned, backfill should be compacted to at least 90 percent. If heavy compaction equipment is used, the walls should be temporarily braced.

As discussed previously, consideration should be given to the transitions from on-grade to on-structure. Providing subslabs or other methods for reducing differential movement of flatwork or pavements across this transition should be included in the project design.

10.5 FOUNDATIONS

Retaining walls with foundations up to about 10 feet below existing site grades may be supported on a continuous spread footing designed in accordance with the recommendations presented in the "Foundations" section of this report. We should be consulted to provide additional recommendations for foundations of basement walls extending to depths greater than about 10 feet.

SECTION 11: LIMITATIONS

This report, an instrument of professional service, has been prepared for the sole use of Watry Design, Inc. specifically to support the design of the Palo Alto Parking Structure Lot D project in Palo Alto, California. The opinions, conclusions, and recommendations presented in this report

have been formulated in accordance with accepted geotechnical engineering practices that exist in Northern California at the time this report was prepared. No warranty, expressed or implied, is made or should be inferred.

Recommendations in this report are based upon the soil and ground water conditions encountered during our subsurface exploration. If variations or unsuitable conditions are encountered during construction, Cornerstone must be contacted to provide supplemental recommendations, as needed.

Watry Design, Inc. may have provided Cornerstone with plans, reports and other documents prepared by others. Watry Design, Inc. understands that Cornerstone reviewed and relied on the information presented in these documents and cannot be responsible for their accuracy.

Cornerstone prepared this report with the understanding that it is the responsibility of the owner or his representatives to see that the recommendations contained in this report are presented to other members of the design team and incorporated into the project plans and specifications, and that appropriate actions are taken to implement the geotechnical recommendations during construction.

Conclusions and recommendations presented in this report are valid as of the present time for the development as currently planned. Changes in the condition of the property or adjacent properties may occur with the passage of time, whether by natural processes or the acts of other persons. In addition, changes in applicable or appropriate standards may occur through legislation or the broadening of knowledge. Therefore, the conclusions and recommendations presented in this report may be invalidated, wholly or in part, by changes beyond Cornerstone's control. This report should be reviewed by Cornerstone after a period of three (3) years has elapsed from the date of this report. In addition, if the current project design is changed, then Cornerstone must review the proposed changes and provide supplemental recommendations, as needed.

An electronic transmission of this report may also have been issued. While Cornerstone has taken precautions to produce a complete and secure electronic transmission, please check the electronic transmission against the hard copy version for conformity.

Recommendations provided in this report are based on the assumption that Cornerstone will be retained to provide observation and testing services during construction to confirm that conditions are similar to that assumed for design, and to form an opinion as to whether the work has been performed in accordance with the project plans and specifications. If we are not retained for these services, Cornerstone cannot assume any responsibility for any potential claims that may arise during or after construction as a result of misuse or misinterpretation of Cornerstone's report by others. Furthermore, Cornerstone will cease to be the Geotechnical-Engineer-of-Record if we are not retained for these services.

SECTION 12: REFERENCES

Aagaard, B.T., Blair, J.L., Boatwright, J., Garcia, S.H., Harris, R.A., Michael, A.J., Schwartz, D.P., and DiLeo, J.S., 2016, Earthquake outlook for the San Francisco Bay region 2014–2043 (ver. 1.1, August 2016): U.S. Geological Survey Fact Sheet 2016–3020, 6 p., http://dx.doi.org/10.3133/fs20163020.

American Concrete Institute, 2014, Building Code Requirements for Structural Concrete and Commentary, ACI 318-14.

Boulanger, R.W. and Idriss, I.M., 2004, Evaluating the Potential for Liquefaction or Cyclic Failure of Silts and Clays, Department of Civil & Environmental Engineering, College of Engineering, University of California at Davis.

Boulanger, R.W. and Idriss, I.M., 2014, CPT and SPT Based Liquefaction Triggering Procedures, Department of Civil & Environmental Engineering, College of Engineering, University of California at Davis, Report No. UCD/GCM-14/01, April 2014.

California Building Code, 2016, Structural Engineering Design Provisions, Vol. 2.

California Department of Conservation Division of Mines and Geology, 1998, Maps of Known Active Fault Near-Source Zones in California and Adjacent Portions of Nevada, International Conference of Building Officials, February, 1998.

California Division of Mines and Geology (2008), “Guidelines for Evaluating and Mitigating Seismic Hazards in California, Special Publication 117A, September.

California Geological Survey, 2006, State of California Seismic Hazard Zones, Palo Alto 7.5-Minute Quadrangle, California: Seismic Hazard Zone Report 111.

Cetin, K.O., Bilge, H.T., Wu, J., Kammerer, A.M., and Seed, R.B., Probablilistic Model for the Assessment of Cyclically Induced Reconsolidation (Volumetric) Settlements, ASCE Journal of Geotechnical and Geoenvironmental Engineering, Vo. 135, No. 3, March 1, 2009.

Federal Emergency Management Administration (FEMA), 2009, FIRM City of Palo Alto, California, Community Panel #0603480010H.

Idriss, I.M., and Boulanger, R.W., 2008, Soil Liquefaction During Earthquakes, Earthquake Engineering Research Institute, Oakland, CA, 237 p.

Ishihara, K., 1985, Stability of Natural Deposits During Earthquakes: Proceedings Eleventh International Conference on Soil Mechanics and Foundation Engineering, San Francisco.

Ishihara, K. and Yoshimine, M., 1992, Evaluation of Settlements in Sand Deposits Following Liquefaction During Earthquakes, Soils and Foundations, 32 (1): 173-188.

Lew, M. et al, 2010, Seismic Earth Pressures on Deep Building Basements, Proceedings, SEAOC Convention, Indian Wells, CA.

Portland Cement Association, 1984, Thickness Design for Concrete Highway and Street Pavements: report.

Ritter, J.R., and Dupre, W.R., 1972, Map Showing Areas of Potential Inundation by Tsunamis in the San Francisco Bay Region, California: San Francisco Bay Region Environment and Resources Planning Study, USGS Basic Data Contribution 52, Misc. Field Studies Map MF-480.

Rogers, T.H., and J.W. Williams, 1974 Potential Seismic Hazards in Santa Clara County, California, Special Report No. 107: California Division of Mines and Geology.

Seed, H.B. and I.M. Idriss, 1971, A Simplified Procedure for Evaluation soil Liquefaction Potential: JSMFC, ASCE, Vol. 97, No. SM 9, pp. 1249 – 1274.

Seed, H.B. and I.M. Idriss, 1982, Ground Motions and Soil Liquefaction During Earthquakes: Earthquake Engineering Research Institute.

Seed, Raymond B., Cetin, K.O., Moss, R.E.S., Kammerer, Ann Marie, Wu, J., Pestana, J.M., Riemer, M.F., Sancio, R.B., Bray, Jonathan D., Kayen, Robert E., and Faris, A., 2003, Recent Advances in Soil Liquefaction Engineering: A Unified and Consistent Framework., University of California, Earthquake Engineering Research Center Report 2003-06.

Southern California Earthquake Center (SCEC), 1999, Recommended Procedures for Implementation of DMG Special Publication 117, Guidelines for Analyzing and Mitigating Liquefaction Hazards in California, March.

United States Geological Survey, 2014, U.S. Seismic Design Maps, revision date June 23, available at http://geohazards.usgs.gov/designmaps/us/application.php.

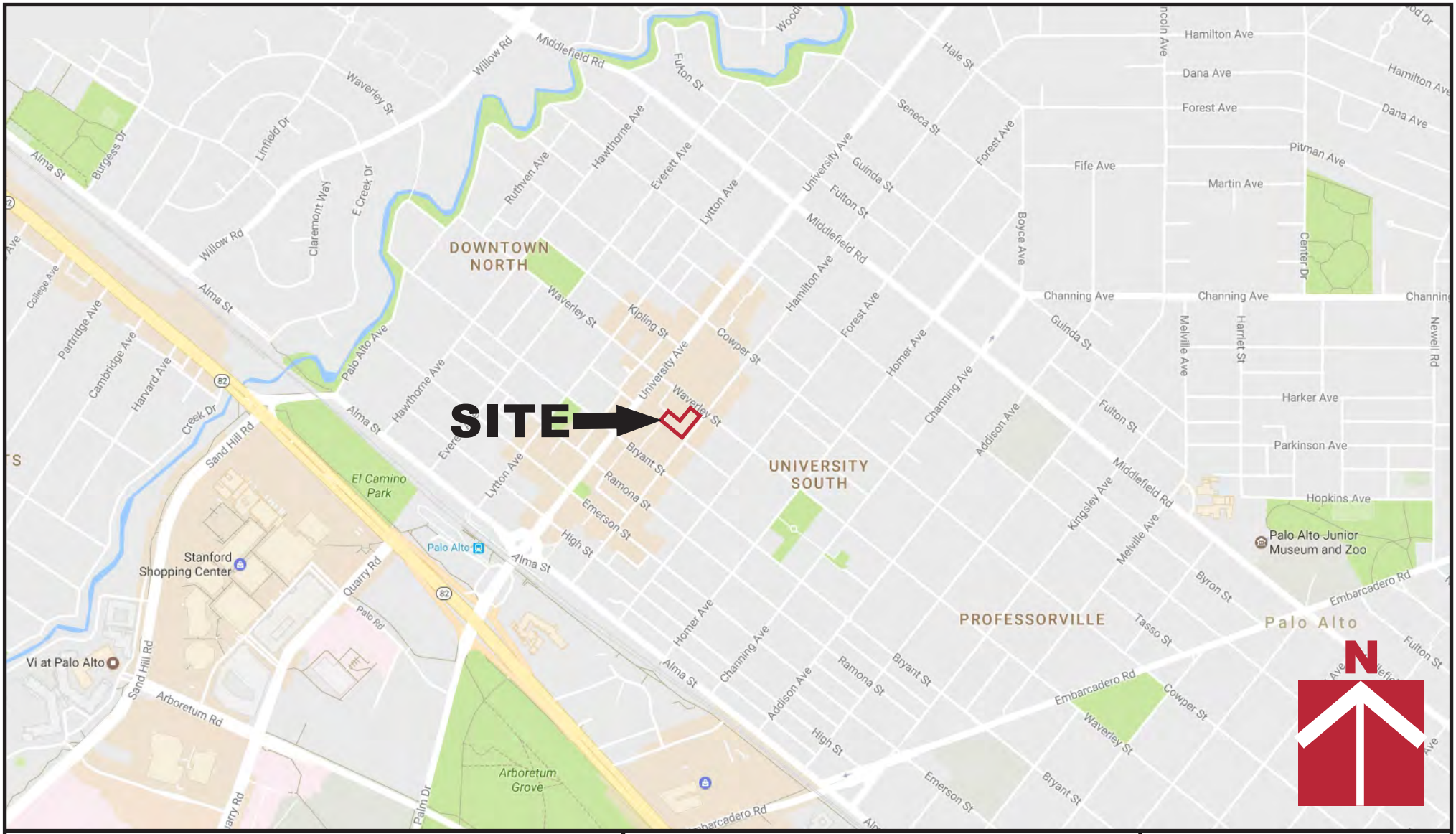
Working Group on California Earthquake Probabilities, 2015, The Third Uniform California Earthquake Rupture Forecast, Version 3 (UCERF), U.S. Geological Survey Open File Report 2013-1165 (CGS Special Report 228). KMZ files available at: www.scec.org/ucerf/images/ucerf3_timedep_30yr_probs.kmz

Yoshimine, M., Nishizaki, H., Amano, KI, and Hosono, Y., 2006, Flow Deformation of Liquefied Sand Under Constant Shear Load and Its Application to Analysis of Flow Slide in Infinite Slope, Soil Dynamics and Earthquake Eng. 26, 253-264.

Youd, T.L. and C.T. Garris, 1995, Liquefaction-Induced Ground-Surface Disruption: Journal of Geotechnical Engineering, Vol. 121, No. 11, pp. 805 - 809.

Youd, T.L. and Idriss, I.M., et al, 1997, Proceedings of the NCEER Workshop on Evaluation of Liquefaction Resistance of Soils: National Center for Earthquake Engineering Research, Technical Report NCEER - 97-0022, January 5, 6, 1996.

Youd et al., 2001, “Liquefaction Resistance of Soils: Summary Report from the 1996 NCEER and 1998 NCEER/NSF Workshops on Evaluation of Liquefaction Resistance of Soils,” ASCE Journal of Geotechnical and Geoenvironmental Engineering, Vo. 127, No. 10, October, 2001.



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Vicinity Map

Palo Alto Parking Structure Lot D
Palo Alto, CA

Project Number	949-1-1
Figure Number	Figure 1
Date	March 2017
Drawn By	RRN



Legend

Approximate location of exploratory boring (EB)

Approximate location of cone penetration test (CPT)

0 30 60

APPROXIMATE SCALE (FEET)

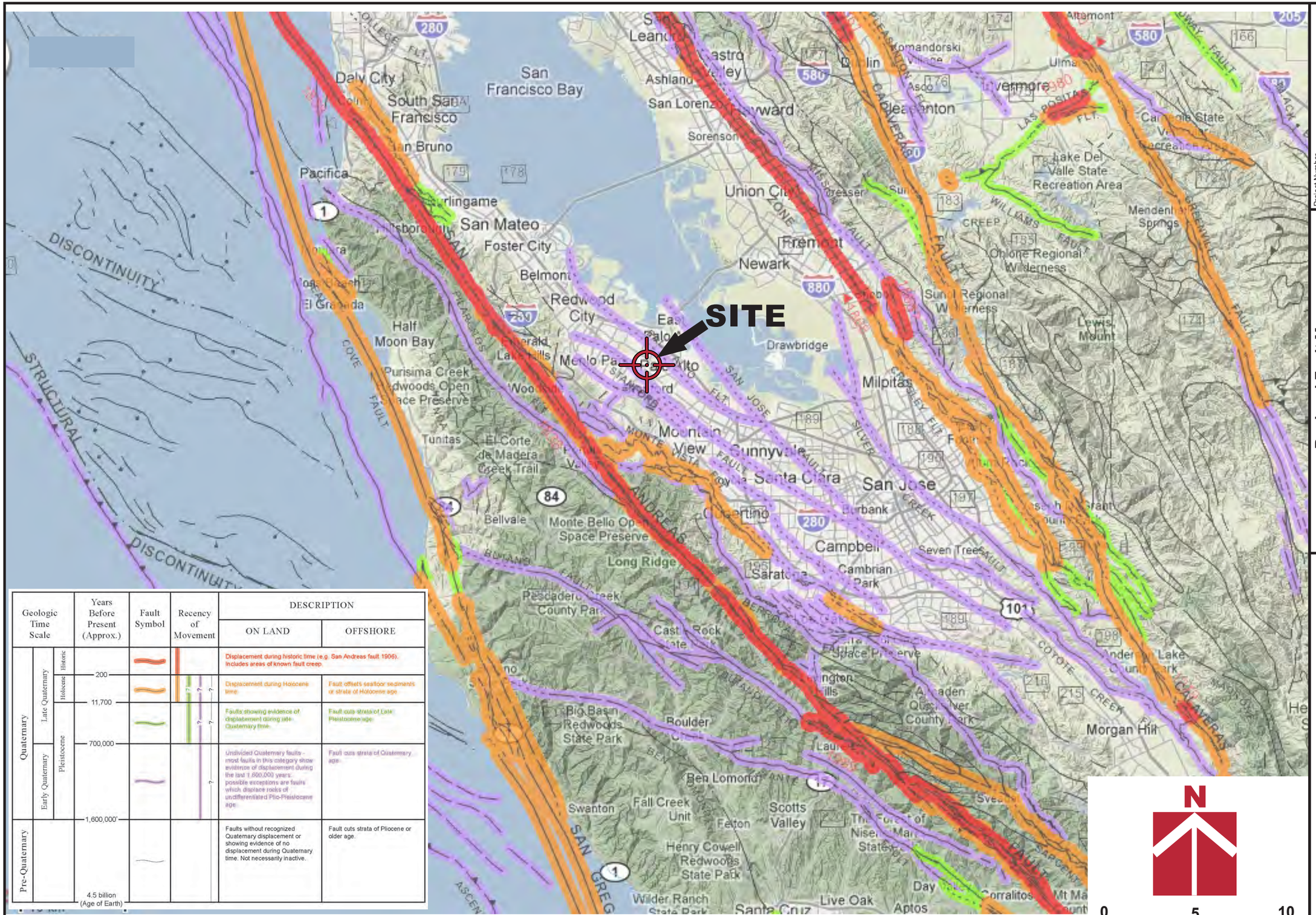
Base by Google Maps, dated 2017
Overlay by Watry Design, Inc., Site Plan With Level 1, undated

Project Number	949-1-1
Figure Number	Figure 2
Date	March 2017
Drawn By	RRN

Site Plan

Palo Alto Parking Structure Lot D
Palo Alto, CA

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Geologic Time Scale			Years Before Present (Approx.)	Fault Symbol	Recency of Movement	DESCRIPTION	
						ON LAND	OFFSHORE
Quaternary	Late Quaternary	Historic	200			Displacement during historic time (e.g. San Andreas fault 1906). Includes areas of known fault creep.	
		Holocene	11,700		? ?	Displacement during Holocene time.	Fault offsets seafloor sediments or strata of Holocene age.
	Pleistocene	Late Quaternary	700,000		? ?	Faults showing evidence of displacement during late Quaternary time.	Fault cuts strata of Late Pleistocene age.
		Early Quaternary	1,600,000'		?	Undivided Quaternary faults - most faults in this category show evidence of displacement during the last 1,600,000 years; possible exceptions are faults which displace rocks of undifferentiated Plio-Pleistocene age.	Fault cuts strata of Quaternary age.
Pre-Quaternary			4.5 billion (Age of Earth)			Faults without recognized Quaternary displacement or showing evidence of no displacement during Quaternary time. Not necessarily inactive.	Fault cuts strata of Pliocene or older age.

Base by California Geological Survey - 2010 Fault Activity Map of California (Jennings and Bryant, 2010)

Project Number 949-1-1

Figure Number Figure 3

Date March 2017

Drawn By RRN

Regional Fault Map

Palo Alto Parking Structure Lot D
Palo Alto, CA

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FIGURE 4A

CPT NO. 1

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PROJECT/CPT DATA

Project Title	**Palo Alto Parking Structure Lot D**
Project No.	**949-1-1**
Project Manager	**MJS**

SEISMIC PARAMETERS

Controlling Fault	**San Andreas**	
Earthquake Magnitude (Mw)	**7.9**	
PGA (Amax)	**0.612**	(g)

SITE SPECIFIC PARAMETERS

Ground Water Depth at Time of Drilling (feet)	**32.5**
Design Water Depth (feet)	**20**
Ave. Unit Weight Above GW (pcf)	**125**
Ave. Unit Weight Below GW (pcf)	**120**

CPT ANALYSIS RESULTS

DRY SAND SETTLEMENT FROM	20	FEET
	0.00	(Inches)
LIQUEFACTION SETTLEMENT FROM	50	FEET
	0.52	(Inches)
TOTAL SEISMIC SETTLEMENT	**0.5**	**INCHES**

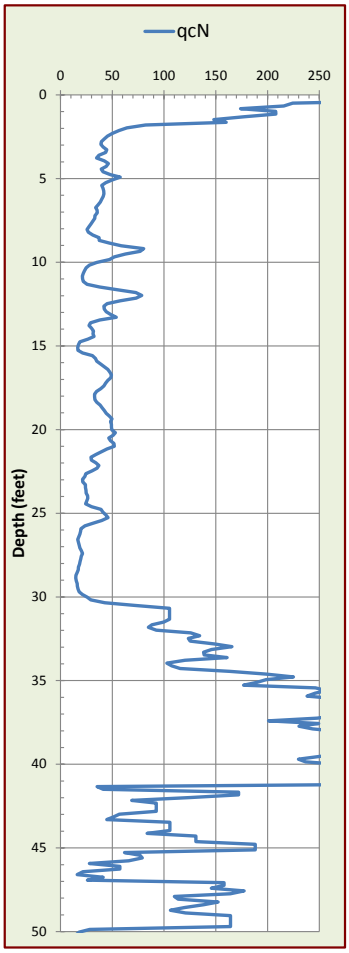
POTENTIAL LATERAL DISPLACEMENT

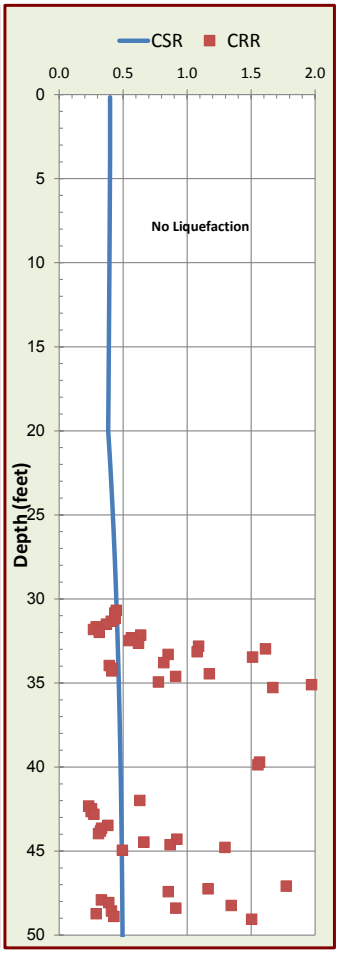
LDI[2]	0.14	L/H	130.0
LDI[1] Corrected for Distance	0.02	(4 < L/H < 40)	

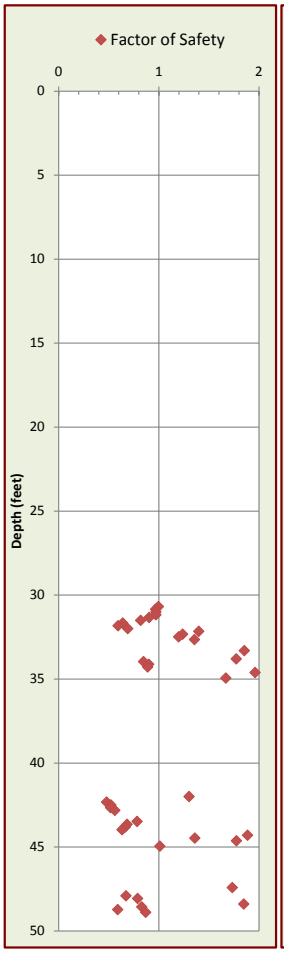
EXPECTED RANGE OF DISPLACEMENT

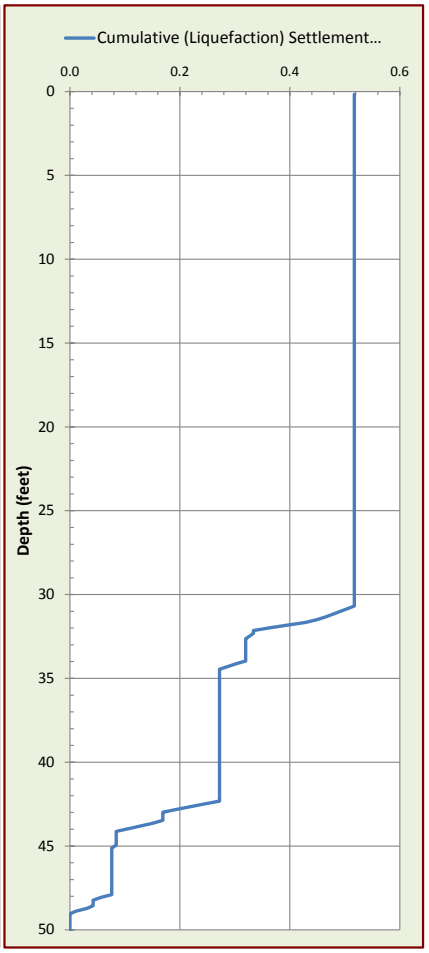
0.0 to **0.0** feet

[1]Not Valid for L/H Values < 4 and > 40.
[2]LDI Values Only Summed to 2H Below Grade.









CORNERSTONE EARTH GROUP

FIGURE 4B

CPT NO. 2

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PROJECT/CPT DATA

Project Title	**Palo Alto Parking Structure Lot D**
Project No.	**949-1-1**
Project Manager	**MJS**

SEISMIC PARAMETERS

Controlling Fault	**San Andreas**	
Earthquake Magnitude (Mw)	**7.9**	
PGA (Amax)	**0.612**	(g)

SITE SPECIFIC PARAMETERS

Ground Water Depth at Time of Drilling (feet)	**33**
Design Water Depth (feet)	**20**
Ave. Unit Weight Above GW (pcf)	**125**
Ave. Unit Weight Below GW (pcf)	**120**

CPT ANALYSIS RESULTS

DRY SAND SETTLEMENT FROM	20	FEET
	0.00	(Inches)
LIQUEFACTION SETTLEMENT FROM	50	FEET
	0.68	(Inches)
TOTAL SEISMIC SETTLEMENT	**0.7**	**INCHES**

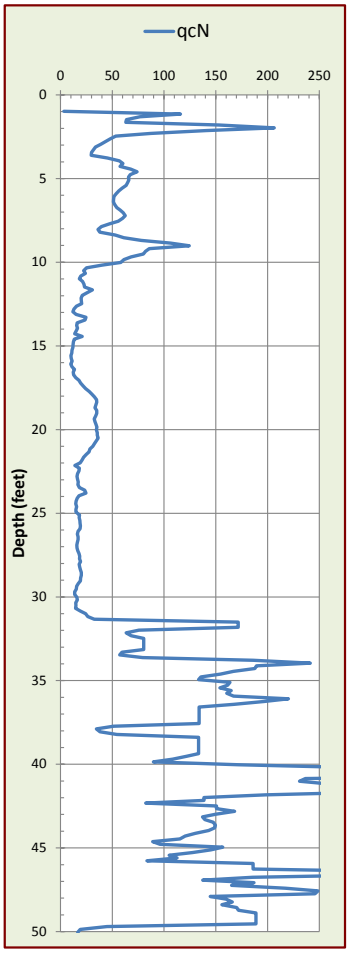
POTENTIAL LATERAL DISPLACEMENT

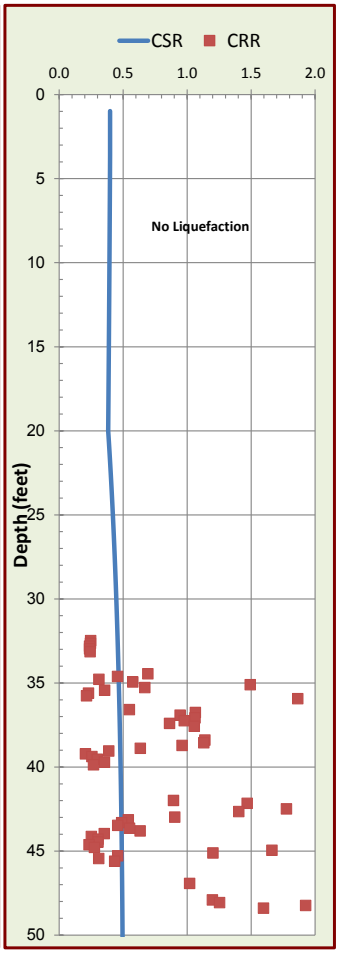
LDI[2]	0.38	L/H	130.0
LDI[1] Corrected for Distance	0.05	(4 < L/H < 40)	

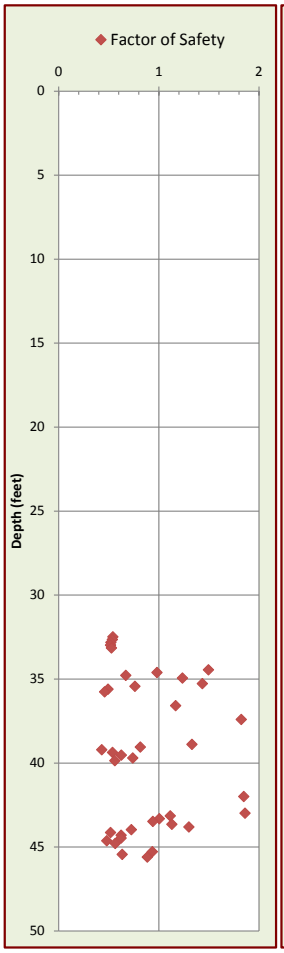
EXPECTED RANGE OF DISPLACEMENT

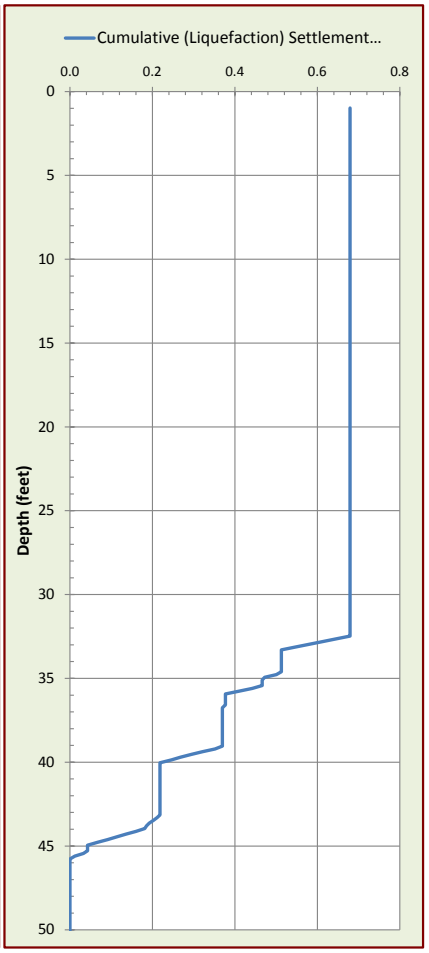
0.0 to **0.1** feet

[1]Not Valid for L/H Values < 4 and > 40.
[2]LDI Values Only Summed to 2H Below Grade.









APPENDIX A: FIELD INVESTIGATION

The field investigation consisted of a surface reconnaissance and a subsurface exploration program using truck-mounted, hollow-stem auger drilling equipment and 20-ton truck-mounted Cone Penetration Test equipment. Two 8-inch-diameter exploratory borings were drilled on February 8 and 9, 2017, to depths of 79¾ to 89¼ feet. Two CPT soundings were also performed in accordance with ASTM D 5778-95 (revised, 2002) on February 7, 2017, to depths of approximately 91 feet each. The approximate locations of exploratory borings and CPTs are shown on the Site Plan, Figure 2. The soils encountered were continuously logged in the field by our representative and described in accordance with the Unified Soil Classification System (ASTM D2488). Boring logs, as well as a key to the classification of the soil, are included as part of this appendix.

Boring and CPT locations were approximated using existing site boundaries and other site features as references. Boring elevations were based on Google Earth®. The locations and elevations of the borings and CPTs should be considered accurate only to the degree implied by the method used.

Representative soil samples were obtained from the borings at selected depths. All samples were returned to our laboratory for evaluation and appropriate testing. The standard penetration resistance blow counts were obtained by dropping a 140-pound hammer through a 30-inch free fall. The 2-inch O.D. split-spoon sampler was driven 18 inches and the number of blows was recorded for each 6 inches of penetration (ASTM D1586). 2.5-inch I.D. samples were obtained using a Modified California Sampler driven into the soil with the 140-pound hammer previously described. Relatively undisturbed samples were also obtained with 2.875-inch I.D. Shelby Tube sampler which were hydraulically pushed. Unless otherwise indicated, the blows per foot recorded on the boring log represent the accumulated number of blows required to drive the last 12 inches. The various samplers are denoted at the appropriate depth on the boring logs.

The CPT involved advancing an instrumented cone-tipped probe into the ground while simultaneously recording the resistance at the cone tip (q_c) and along the friction sleeve (f_s) at approximately 5-centimeter intervals. Based on the tip resistance and tip to sleeve ratio (R_f), the CPT classified the soil behavior type and estimated engineering properties of the soil, such as equivalent Standard Penetration Test (SPT) blow count, internal friction angle within sand layers, and undrained shear strength in silts and clays. A pressure transducer behind the tip of the CPT cone measured pore water pressure (u_2). Graphical logs of the CPT data is included as part of this appendix.

Field tests included an evaluation of the unconfined compressive strength of the soil samples using a pocket penetrometer device. The results of these tests are presented on the individual boring logs at the appropriate sample depths.

Attached boring and CPT logs and related information depict subsurface conditions at the locations indicated and on the date designated on the logs. Subsurface conditions at other locations may differ from conditions occurring at these boring and CPT locations. The passage of time may result in altered subsurface conditions due to environmental changes. In addition,

any stratification lines on the logs represent the approximate boundary between soil types and the transition may be gradual.

UNIFIED SOIL CLASSIFICATION (ASTM D-2487-98)

MATERIAL TYPES	CRITERIA FOR ASSIGNING SOIL GROUP NAMES			GROUP SYMBOL	SOIL GROUP NAMES & LEGEND
COARSE-GRAINED SOILS >50% RETAINED ON NO. 200 SIEVE	GRAVELS >50% OF COARSE FRACTION RETAINED ON NO 4. SIEVE	CLEAN GRAVELS <5% FINES	Cu>4 AND 1<Cc<3	GW	WELL-GRADED GRAVEL
			Cu>4 AND 1>Cc>3	GP	POORLY-GRADED GRAVEL
		GRAVELS WITH FINES >12% FINES	FINES CLASSIFY AS ML OR CL	GM	SILTY GRAVEL
			FINES CLASSIFY AS CL OR CH	GC	CLAYEY GRAVEL
	SANDS >50% OF COARSE FRACTION PASSES ON NO 4. SIEVE	CLEAN SANDS <5% FINES	Cu>6 AND 1<Cc<3	SW	WELL-GRADED SAND
			Cu>6 AND 1>Cc>3	SP	POORLY-GRADED SAND
		SANDS AND FINES >12% FINES	FINES CLASSIFY AS ML OR CL	SM	SILTY SAND
			FINES CLASSIFY AS CL OR CH	SC	CLAYEY SAND
FINE-GRAINED SOILS >50% PASSES NO. 200 SIEVE	SILTS AND CLAYS LIQUID LIMIT<50	INORGANIC	PI>7 AND PLOTS>"A" LINE	CL	LEAN CLAY
			PI>4 AND PLOTS<"A" LINE	ML	SILT
		ORGANIC	LL (oven dried)/LL (not dried)<0.75	OL	ORGANIC CLAY OR SILT
	SILTS AND CLAYS LIQUID LIMIT>50	INORGANIC	PI PLOTS >"A" LINE	CH	FAT CLAY
			PI PLOTS <"A" LINE	MH	ELASTIC SILT
		ORGANIC	LL (oven dried)/LL (not dried)<0.75	OH	ORGANIC CLAY OR SILT
HIGHLY ORGANIC SOILS		PRIMARILY ORGANIC MATTER, DARK IN COLOR, AND ORGANIC ODOR		PT	PEAT

OTHER MATERIAL SYMBOLS

- Poorly-Graded Sand with Clay
- Clayey Sand
- Sandy Silt
- Artificial/Undocumented Fill
- Poorly-Graded Gravelly Sand
- Topsoil
- Well-Graded Gravel with Clay
- Well-Graded Gravel with Silt
- Sand
- Silt
- Well Graded Gravelly Sand
- Gravelly Silt
- Asphalt
- Boulders and Cobble

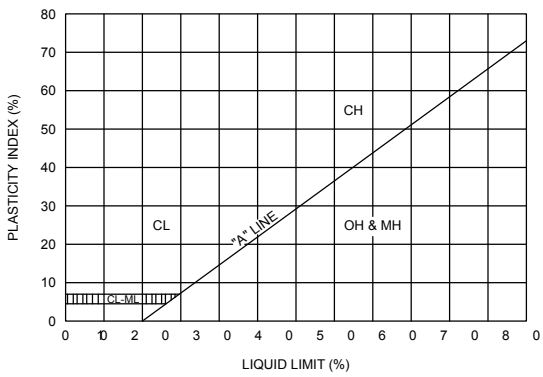
SAMPLER TYPES

- SPT
- Modified California (2.5" I.D.)
- Rock Core
- Shelby Tube
- No Recovery
- Grab Sample

ADDITIONAL TESTS

CA	-	CHEMICAL ANALYSIS (CORROSIVITY)	PI	-	PLASTICITY INDEX
CD	-	CONSOLIDATED DRAINED TRIAXIAL	SW		SWELL TEST
CN	-	CONSOLIDATION	TC	-	CYCLIC TRIAXIAL
CU	-	CONSOLIDATED UNDRAINED TRIAXIAL	TV	-	TORVANE SHEAR
DS	-	DIRECT SHEAR	UC	-	UNCONFINED COMPRESSION
PP	-	POCKET PENETROMETER (TSF)	(1.5)	-	(WITH SHEAR STRENGTH IN KSF)
(3.0)	-	(WITH SHEAR STRENGTH IN KSF)		-	
RV	-	R-VALUE	UU		UNCONSOLIDATED UNDRAINED TRIAXIAL
SA	-	SIEVE ANALYSIS: % PASSING #200 SIEVE		-	
▼	-	WATER LEVEL			

PLASTICITY CHART



PENETRATION RESISTANCE
(RECORDED AS BLOWS / FOOT)

SAND & GRAVEL		SILT & CLAY		
RELATIVE DENSITY	BLOWS/FOOT*	CONSISTENCY	BLOWS/FOOT*	STRENGTH** (KSF)
VERY LOOSE	0 - 4	VERY SOFT	0 - 2	0 - 0.25
LOOSE	4 - 10	SOFT	2 - 4	0.25 - 0.5
MEDIUM DENSE	10 - 30	MEDIUM STIFF	4 - 8	0.5 - 1.0
DENSE	30 - 50	STIFF	8 - 15	1.0 - 2.0
VERY DENSE	OVER 50	VERY STIFF	15 - 30	2.0 - 4.0
		HARD	OVER 30	OVER 4.0

* NUMBER OF BLOWS OF 140 LB HAMMER FALLING 30 INCHES TO DRIVE A 2 INCH O.D. (1-3/8 INCH I.D.) SPLIT-BARREL SAMPLER THE LAST 12 INCHES OF AN 18-INCH DRIVE (ASTM-1586 STANDARD PENETRATION TEST).

** UNDRAINED SHEAR STRENGTH IN KIPS/SQ. FT. AS DETERMINED BY LABORATORY TESTING OR APPROXIMATED BY THE STANDARD PENETRATION TEST, POCKET PENETROMETER, TORVANE, OR VISUAL OBSERVATION.

CORNERSTONE EARTH GROUP

LEGEND TO SOIL DESCRIPTIONS

Figure Number A-1

BORING NUMBER EB-1

CORNERSTONE EARTH GROUP

PROJECT NAME Palo Alto Parking Structure Lot D
PROJECT NUMBER 949-1-1
PROJECT LOCATION Palo Alto, CA

DATE STARTED 2/9/17 **DATE COMPLETED** 2/9/17
GROUND ELEVATION 54 FT +/- **BORING DEPTH** 79.8 ft.
DRILLING CONTRACTOR Exploration Geoservices, Inc. **LATITUDE** 37.446002° **LONGITUDE** -122.159259°
DRILLING METHOD Mobile B-61, 8 inch Hollow-Stem Auger **GROUND WATER LEVELS:**
LOGGED BY DL **AT TIME OF DRILLING** 33 ft.
NOTES **AT END OF DRILLING** 37.5 ft.

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ELEVATION (ft)	DEPTH (ft)	DESCRIPTION	N-Value (uncorrected) blows per foot	SAMPLES TYPE AND NUMBER	DRY UNIT WEIGHT PCF	NATURAL MOISTURE CONTENT	PLASTICITY INDEX, %	PERCENT PASSING No. 200 SIEVE	UNDRAINED SHEAR STRENGTH, ksf
54.0	0	3 inches asphalt concrete over 3 inches aggregate base							
53.8									
53.5		**Sandy Lean Clay (CL)** hard, moist, dark brown to brown, fine to medium sand, low plasticity	49	MC-1B	109	12			>4.5
			34	MC-2B	103	11			>4.5
	5		50/5.5"	MC-3B	108	15			>4.5
47.0		**Clayey Sand with Gravel (SC)** dense, moist, brown, fiine to coarse sand, fine to coarse subangular to subrounded gravel	55	MC-4B	115	11			
	10								
40.0		**Lean Clay with Sand (CL)** stiff, moist, brown, fine sand, moderate plasticity	28	MC-5B	102	21			
	15			ST-6	98	25			
		hard	60	MC-7B	111	17			>4.5
	20								
			39	MC-8B	103	20			
	25								
28.0									

UNDRAINED SHEAR STRENGTH, ksf
○ HAND PENETROMETER
△ TORVANE
● UNCONFINED COMPRESSION
▲ UNCONSOLIDATED-UNDRAINED TRIAXIAL
1.0 2.0 3.0 4.0

Continued Next Page

CORNERSTONE EARTH GROUP2 - CORNERSTONE 0812.GDT - 3/10/17 06:48 - P:\DRAFTING\GINT FILES\949-1-1 PALO ALTO PS LOT D.GPJ

BORING NUMBER EB-1

CORNERSTONE EARTH GROUP

PROJECT NAME Palo Alto Parking Structure Lot D

PROJECT NUMBER 949-1-1

PROJECT LOCATION Palo Alto, CA

This log is a part of a report by Cornerstone Earth Group, and should not be used as a stand-alone document. This description applies only to the location of the exploration at the time of drilling. Subsurface conditions may differ at other locations and may change at this location with time. The description presented is a simplification of actual conditions encountered. Transitions between soil types may be gradual.

ELEVATION (ft)	DEPTH (ft)	DESCRIPTION	N-Value (uncorrected) blows per foot	SAMPLES TYPE AND NUMBER	DRY UNIT WEIGHT PCF	NATURAL MOISTURE CONTENT	PLASTICITY INDEX, %	PERCENT PASSING No. 200 SIEVE
28.0		**Lean Clay with Sand (CL)** stiff, moist, brown, fine sand, moderate plasticity		ST-9	101	22		
24.0	30	**Silty Sand (SM)** medium dense to dense, moist, brown, fine to medium sand	44	MC-10B	114	12		16
			68	MC-11B	106	15		
20.5		**Poorly Graded Sand with Silt and Gravel (SP-SM)** dense to very dense, wet, brown, fine to coarse sand, fine to coarse subangular to subrounded gravel	64	MC-12B	117	11		5
	35							
			50/5"	NR				
	40							
12.0		**Clayey Sand with Gravel (SC)** medium dense, moist, brown, fiine to coarse sand, fine subangular to subrounded gravel	28	SPT-14		17		
	45							
7.0		**Poorly Graded Sand with Silt and Gravel (SP-SM)** very dense, wet, gray brown, fine to coarse sand, fine to coarse subangular to subrounded gravel	50/6"	MC-15B	120	14		
	50							
			80	SPT				
	55							
-2.0								

UNDRAINED SHEAR STRENGTH, ksf
- ○ HAND PENETROMETER
- △ TORVANE
- ● UNCONFINED COMPRESSION
- ▲ UNCONSOLIDATED-UNDRAINED TRIAXIAL

1.0 2.0 3.0 4.0

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CORNERSTONE EARTH GROUP2 - CORNERSTONE 0812.GDT - 3/10/17 06:48 - P:\DRAFTING\GINT FILES\949-1-1 PALO ALTO PS LOT D.GPJ

BORING NUMBER EB-1

CORNERSTONE EARTH GROUP

PROJECT NAME Palo Alto Parking Structure Lot D

PROJECT NUMBER 949-1-1

PROJECT LOCATION Palo Alto, CA

This log is a part of a report by Cornerstone Earth Group, and should not be used as a stand-alone document. This description applies only to the location of the exploration at the time of drilling. Subsurface conditions may differ at other locations and may change at this location with time. The description presented is a simplification of actual conditions encountered. Transitions between soil types may be gradual.

ELEVATION (ft)	DEPTH (ft)	DESCRIPTION	N-Value (uncorrected) blows per foot	SAMPLES TYPE AND NUMBER	DRY UNIT WEIGHT PCF	NATURAL MOISTURE CONTENT	PLASTICITY INDEX, %	PERCENT PASSING No. 200 SIEVE	UNDRAINED SHEAR STRENGTH, ksf
-2.0		**Poorly Graded Sand with Silt and Gravel (SP-SM)** very dense, wet, gray brown, fine to coarse sand, fine to coarse subangular to subrounded gravel							
	60		40	SPT-17		12			
-10.0		**Silty Sand (SM)** dense, moist, brown, fine to medium sand	50 4"	MC-18B	106	17			
	65		48	SPT					
-15.0		**Lean Clay with Sand (CL)** very stiff to hard, moist, gray with brown mottles, fine sand, moderate plasticity	50	MC-20B		29			3.0
	70								
			50 6"	MC-21B	97	25			3.0
	75			ST					>4.5
-24.0		**Silt with Sand (ML)** hard, moist, gray and brown mottled, fine sand, low plasticity	50 3"	MC-23	100	24			>4.5
-25.8	80	Bottom of Boring at 79.8 feet.							
	85								

UNDRAINED SHEAR STRENGTH, ksf
○ HAND PENETROMETER
△ TORVANE
● UNCONFINED COMPRESSION
▲ UNCONSOLIDATED-UNDRAINED TRIAXIAL
1.0 2.0 3.0 4.0

CORNERSTONE EARTH GROUP2 - CORNERSTONE 0812.GDT - 3/10/17 06:48 - P:\DRAFTING\GINT FILES\949-1-1 PALO ALTO PS LOT D.GPJ

BORING NUMBER EB-2

CORNERSTONE EARTH GROUP

PROJECT NAME Palo Alto Parking Structure Lot D
PROJECT NUMBER 949-1-1
PROJECT LOCATION Palo Alto, CA

DATE STARTED 2/8/17 **DATE COMPLETED** 2/8/17
GROUND ELEVATION 53 FT +/- **BORING DEPTH** 89.3 ft.
DRILLING CONTRACTOR Exploration Geoservices, Inc. **LATITUDE** 37.446347° **LONGITUDE** -122.159484°
DRILLING METHOD Mobile B-61, 8 inch Hollow-Stem Auger **GROUND WATER LEVELS:**
LOGGED BY AA ▽ **AT TIME OF DRILLING** 35 ft.
NOTES ▼ **AT END OF DRILLING** 40 ft.

This log is a part of a report by Cornerstone Earth Group, and should not be used as a stand-alone document. This description applies only to the location of the exploration at the time of drilling. Subsurface conditions may differ at other locations and may change at this location with time. The description presented is a simplification of actual conditions encountered. Transitions between soil types may be gradual.

ELEVATION (ft)	DEPTH (ft)	DESCRIPTION	N-Value (uncorrected) blows per foot	SAMPLES TYPE AND NUMBER	DRY UNIT WEIGHT PCF	NATURAL MOISTURE CONTENT	PLASTICITY INDEX, %	PERCENT PASSING No. 200 SIEVE
53.0	0	2 inches asphalt concrete over 4 inches aggregate base						
52.5		**Sandy Lean Clay (CL)** very stiff to hard, moist, brown, fine sand, low plasticity Liquid Limit = 27, Plastic Limit = 15	19	MC-1B	102	15	12	
			34	MC-2B	111	16		
	5		17	MC-3B	106	19		
			28	MC-4B	105	20		
	10							
41.0		**Lean Clay with Sand (CL)** stiff to very stiff, moist, gray with brown mottles, fine sand, moderate plasticity	31	MC-5B	97	26		
	15							
		Liquid Limit = 33, Plastic Limit = 15	60	MC-6B	112	17	18	
	20							
				ST				
	25		47	MC-8B	105	19		
25.5		*Continued Next Page*						

UNDRAINED SHEAR STRENGTH, ksf
○ HAND PENETROMETER
△ TORVANE
● UNCONFINED COMPRESSION
▲ UNCONSOLIDATED-UNDRAINED TRIAXIAL
1.0 2.0 3.0 4.0
>4.5

CORNERSTONE EARTH GROUP2 - CORNERSTONE 0812.GDT - 3/10/17 06:48 - P:\DRAFTING\GINT FILES\949-1-1 PALO ALTO PS LOT D.GPJ

BORING NUMBER EB-2

CORNERSTONE EARTH GROUP

PROJECT NAME Palo Alto Parking Structure Lot D

PROJECT NUMBER 949-1-1

PROJECT LOCATION Palo Alto, CA

This log is a part of a report by Cornerstone Earth Group, and should not be used as a stand-alone document. This description applies only to the location of the exploration at the time of drilling. Subsurface conditions may differ at other locations and may change at this location with time. The description presented is a simplification of actual conditions encountered. Transitions between soil types may be gradual.

ELEVATION (ft)	DEPTH (ft)	DESCRIPTION	N-Value (uncorrected) blows per foot	SAMPLES TYPE AND NUMBER	DRY UNIT WEIGHT PCF	NATURAL MOISTURE CONTENT	PLASTICITY INDEX, %	PERCENT PASSING No. 200 SIEVE
25.5		**Lean Clay with Sand (CL)** stiff to very stiff, moist, gray with brown mottles, fine sand, moderate plasticity	40	MC-9B	102	22		
	30							
20.0		**Sandy Lean Clay (CL)** medium stiff, moist, brown, fine to medium sand, low plasticity	35	MC-10B	104	19		
18.5	35	**Silty Sand (SM)** medium dense, moist, brown, fine to medium sand						
16.0		**Poorly Graded Sand with Silt and Gravel (SP-SM)** dense to very dense, wet, gray brown, fine to coarse sand, fine to coarse subangular to subrounded gravel	50/6"	SPT-11		18		6
	40							
			60	SPT				
	45							
4.2		**Lean Clay with Sand (CL)** stiff, moist, brown and gray mottled, fine sand, low plasticity	31	SPT				
	50			ST-14	106	23		
			50/6"	MC-15B	102	27		
-2.0	55	**Poorly Graded Sand with Silt and Gravel (SP-SM)** very dense, wet, gray brown, fine to coarse sand, fine to coarse subangular to subrounded gravel						
			50/6"	MC-16	120	14		
-6.2								

UNDRAINED SHEAR STRENGTH, ksf
- ○ HAND PENETROMETER
- △ TORVANE
- ● UNCONFINED COMPRESSION
- ▲ UNCONSOLIDATED-UNDRAINED TRIAXIAL

1.0 2.0 3.0 4.0

Continued Next Page

CORNERSTONE EARTH GROUP2 - CORNERSTONE 0812.GDT - 3/10/17 06:48 - P:\DRAFTING\GINT FILES\949-1-1 PALO ALTO PS LOT D.GPJ

BORING NUMBER EB-2

CORNERSTONE EARTH GROUP

PROJECT NAME Palo Alto Parking Structure Lot D

PROJECT NUMBER 949-1-1

PROJECT LOCATION Palo Alto, CA

This log is a part of a report by Cornerstone Earth Group, and should not be used as a stand-alone document. This description applies only to the location of the exploration at the time of drilling. Subsurface conditions may differ at other locations and may change at this location with time. The description presented is a simplification of actual conditions encountered. Transitions between soil types may be gradual.

ELEVATION (ft)	DEPTH (ft)	DESCRIPTION	N-Value (uncorrected) blows per foot	SAMPLES TYPE AND NUMBER	DRY UNIT WEIGHT PCF	NATURAL MOISTURE CONTENT	PLASTICITY INDEX, %	PERCENT PASSING No. 200 SIEVE
-6.2	60	**Poorly Graded Sand with Silt and Gravel (SP-SM)** very dense, wet, gray brown, fine to coarse sand, fine to coarse subangular to subrounded gravel	50/6"	SPT				
	65							
-14.0		**Lean Clay with Sand (CL)** very stiff, moist, gray, fine sand, moderate plasticity	81	SPT-18		22		
	70							
-19.0		**Lean Clay (CL)** very stiff, moist, dark gray, some fine sand, moderate plasticity	50/6"	MC-19A	103	23		
-21.5	75	**Sandy Lean Clay (CL)** very stiff, moist, brown, fine to medium sand, low plasticity						
-25.0		**Silty Sand (SM)** very dense, moist, brown, fine to medium sand	72	SPT-20		20		
	80							
		some coarse sand, some fine subangular to subrounded gravel	50/4"	SPT-21		21		
	85							
-36.3		Bottom of Boring at 89.3 feet.	50/4"	NR				
	90							

UNDRAINED SHEAR STRENGTH, ksf
- ○ HAND PENETROMETER
- △ TORVANE
- ● UNCONFINED COMPRESSION
- ▲ UNCONSOLIDATED-UNDRAINED TRIAXIAL

1.0 2.0 3.0 4.0

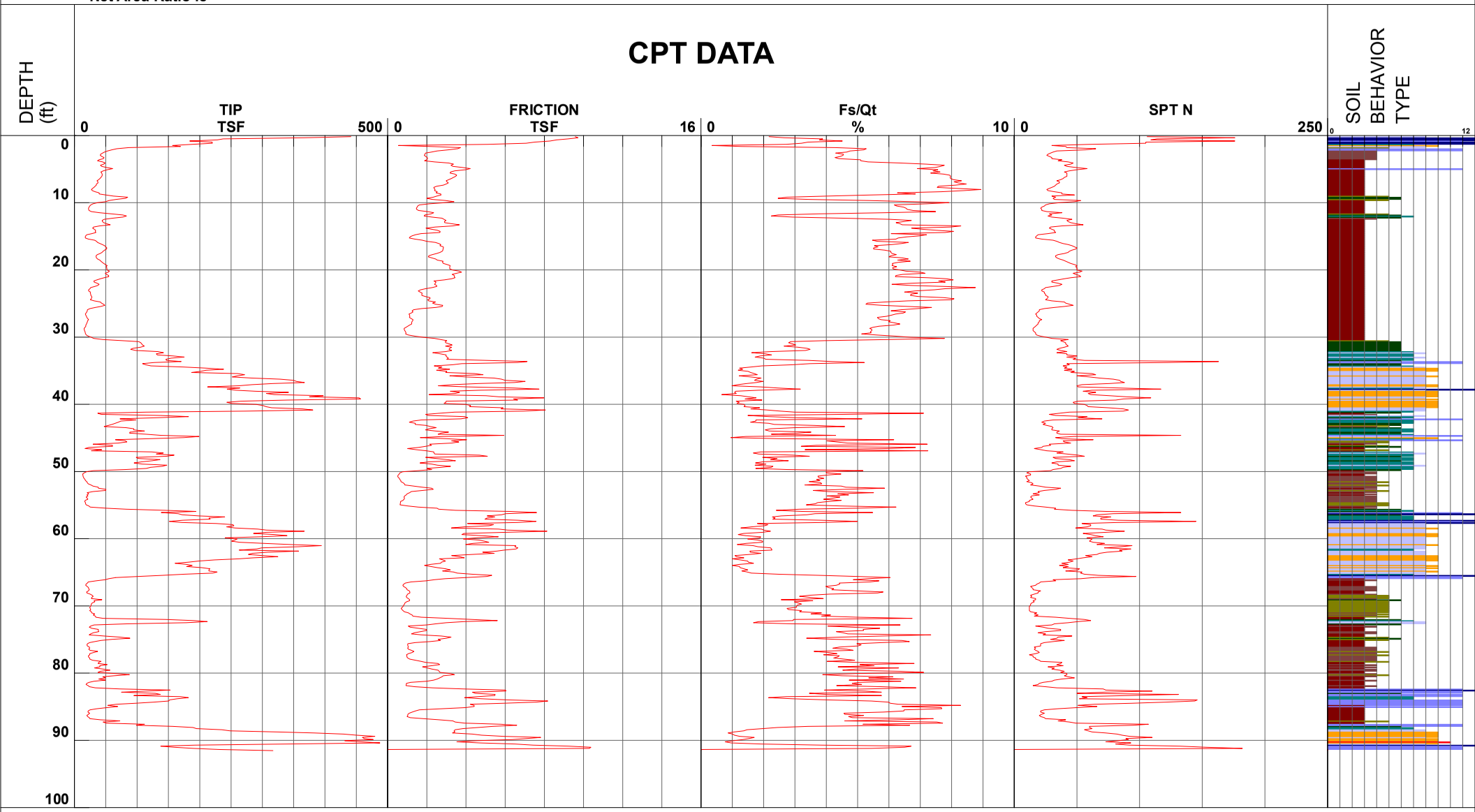
CORNERSTONE EARTH GROUP2 - CORNERSTONE 0812.GDT - 3/10/17 06:48 - P:\DRAFTING\GINT FILES\949-1-1 PALO ALTO PS LOT D.GPJ

Cornerstone Earth Group

Project	Palo Alto Parking Structure Lot D	Operator	RB KK	Filename	SDF(087).cpt
Job Number	P6772	Cone Number	DDG1333	GPS	
Hole Number	CPT-01	Date and Time	2/7/2017 3:58:26 PM	Maximum Depth	91.53 ft
EST GW Depth During Test		32.50 ft			

Net Area Ratio .8

CPT DATA



1 - sensitive fine grained
2 - organic material
3 - clay
4 - silty clay to clay
5 - clayey silt to silty clay
6 - sandy silt to clayey silt
7 - silty sand to sandy silt
8 - sand to silty sand
9 - sand
10 - gravelly sand to sand
11 - very stiff fine grained (*)
12 - sand to clayey sand (*)

Cone Size 10cm squared

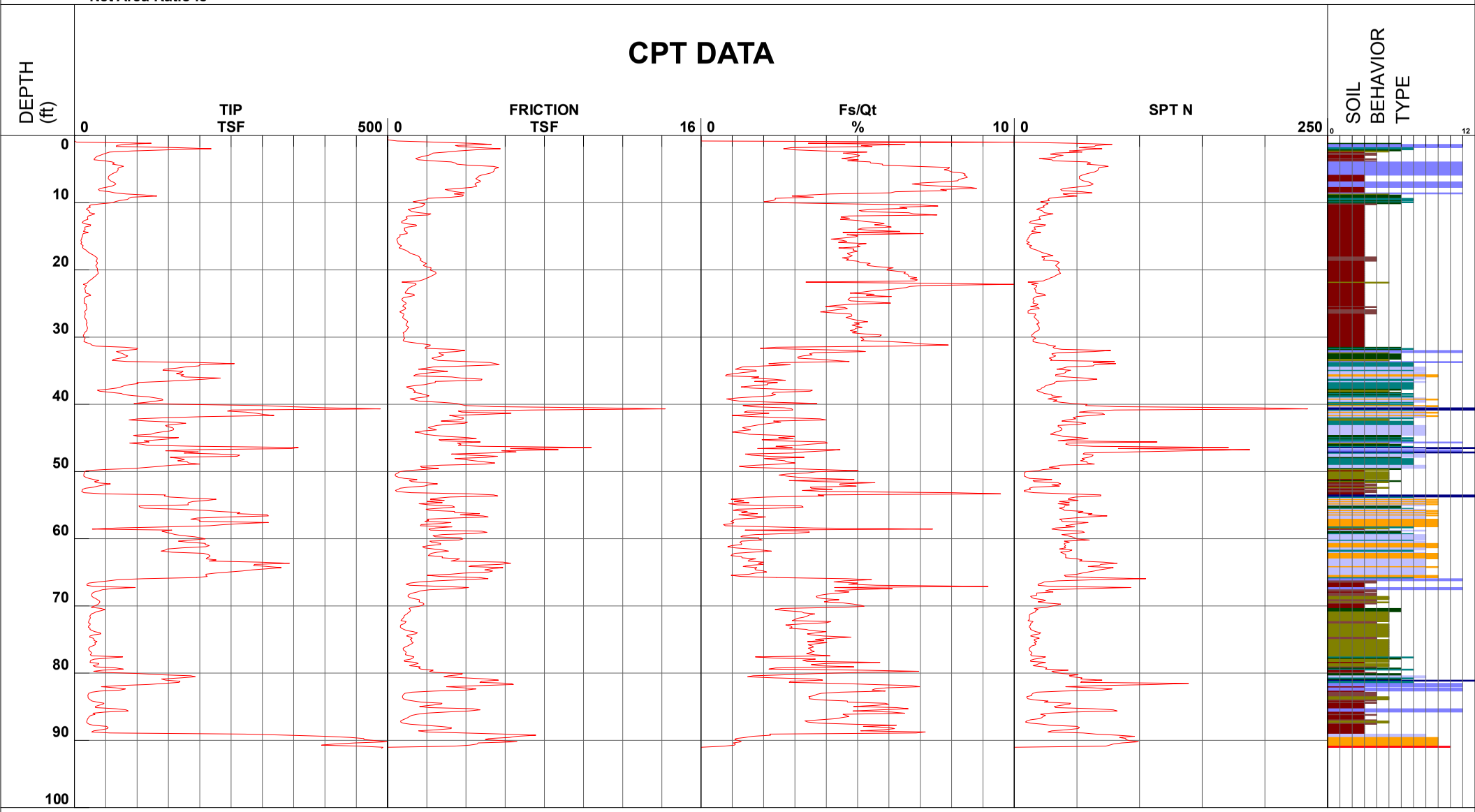
S*Soil behavior type and SPT based on data from UBC-1983

Cornerstone Earth Group

Project	Palo Alto Parking Structure Lot D	Operator	RB KK	Filename	SDF(086).cpt
Job Number	P6772	Cone Number	DDG1333	GPS	
Hole Number	CPT-02	Date and Time	2/7/2017 2:24:36 PM	Maximum Depth	91.21 ft
EST GW Depth During Test		29.10 ft			

Net Area Ratio .8

CPT DATA



1 - sensitive fine grained
2 - organic material
3 - clay
4 - silty clay to clay
5 - clayey silt to silty clay
6 - sandy silt to clayey silt
7 - silty sand to sandy silt
8 - sand to silty sand
9 - sand
10 - gravelly sand to sand
11 - very stiff fine grained (*)
12 - sand to clayey sand (*)

Cone Size 10cm squared

S*Soil behavior type and SPT based on data from UBC-1983

APPENDIX B: LABORATORY TEST PROGRAM

The laboratory testing program was performed to evaluate the physical and mechanical properties of the soils retrieved from the site to aid in verifying soil classification.

Moisture Content: The natural water content was determined (ASTM D2216) on 36 samples of the materials recovered from the borings. These water contents are recorded on the boring logs at the appropriate sample depths.

Dry Densities: In place dry density determinations (ASTM D2937) were performed on 29 samples to measure the unit weight of the subsurface soils. Results of these tests are shown on the boring logs at the appropriate sample depths.

Grain Size Analyses: The particle size distribution (ASTM D422) was determined on one sample of the subsurface soils to aid in the classification of the soil. Results of this test is shown on the boring logs at the appropriate sample depth.

Washed Sieve Analyses: The percent soil fraction passing the No. 200 sieve (ASTM D1140) was determined on three samples of the subsurface soils to aid in the classification of these soils. Results of these tests are shown on the boring logs at the appropriate sample depths.

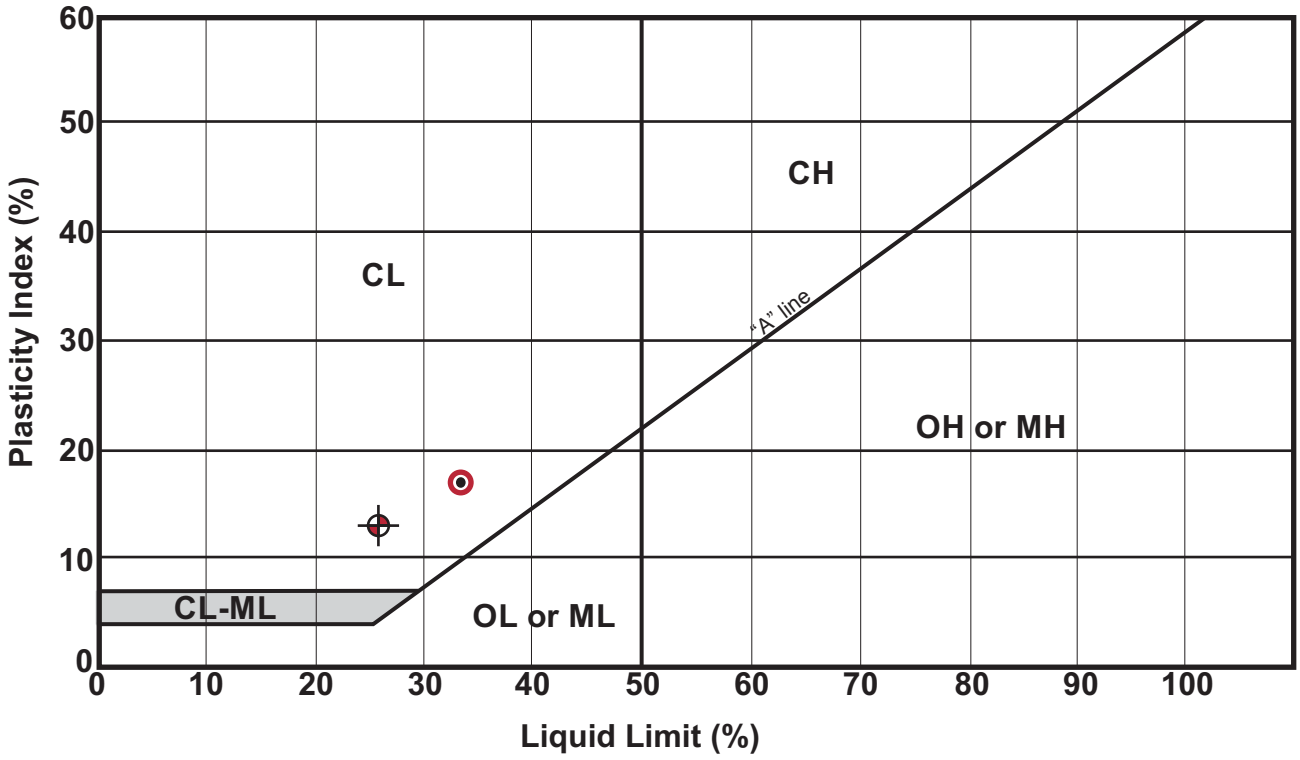
Plasticity Index: Two Plasticity Index determinations (ASTM D4318) were performed on samples of the subsurface soils to measure the range of water contents over which this material exhibits plasticity. The Plasticity Index was used to classify the soil in accordance with the Unified Soil Classification System and to evaluate the soil expansion potential. Results of these tests are shown on the boring logs at the appropriate sample depths.

Undrained-Unconsolidated Triaxial Shear Strength: The undrained shear strength was determined on two relatively undisturbed samples by unconsolidated-undrained triaxial shear strength testing (ASTM D2850). The results of these tests are included as part of this appendix.

Consolidation: One consolidation test (ASTM D2435) was performed on a relatively undisturbed sample of the subsurface clayey soils to assist in evaluating the compressibility property of this soil. Results of the consolidation test are presented graphically in this appendix.

Corrosion: Four soluble sulfate determinations (ASTM D4327), resistivity tests (ASTM G57), chloride determinations (ASTM D4327), and pH determinations (ASTM G51) were performed on four representative samples of the subsurface soils. Results of these tests are attached to this appendix.

Plasticity Index (ASTM D4318) Testing Summary



Symbol	Boring No.	Depth (ft)	Natural Water Content (%)	Liquid Limit (%)	Plastic Limit (%)	Plasticity Index	Passing No. 200 (%)	Group Name (USCS - ASTM D2487)
⊕	EB-2	2.0	15	27	15	12	—	Sandy Lean Clay (CL)
◉	EB-2	19.0	17	33	15	18	—	Lean Clay with Sand (CL)

Samples prepared in accordance with ASTM D421

CORNERSTONE EARTH GROUP

Plasticity Index Testing Summary

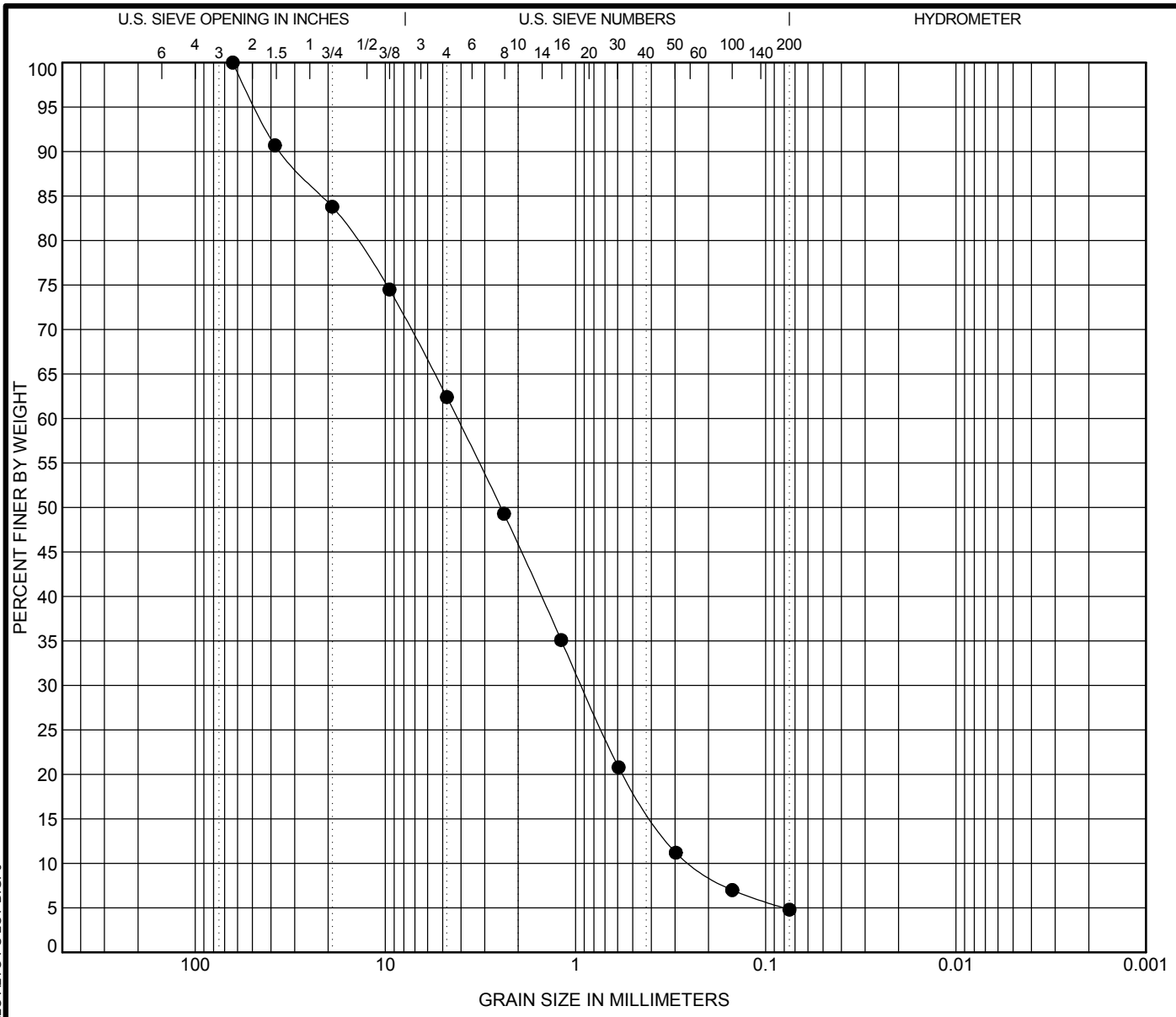
Palo Alto Parking Structure Lot D
Palo Alto, CA

Project Number: 949-1-1

Figure Number: Figure B1

Date: February 2017

Drawn By: FLL



COBBLES	GRAVEL		SAND			SILT OR CLAY
	coarse	fine	coarse	medium	fine	

	Specimen Identification		Classification	LL	PL	PI	Cc	Cu
●	**EB-1**	**33.5**	**Poorly Graded Sand with Silt and Gravel (SP-SM)**				**0.84**	**17.1**

	Specimen Identification		D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
●	**EB-1**	**33.5**	**63.5**	**4.185**	**0.929**	**0.244**	**37.6**	**57.6**	**4.8**	

CORNERSTONE EARTH GROUP

GRAIN SIZE DISTRIBUTION

Project: Palo Alto Parking Structure Lot D

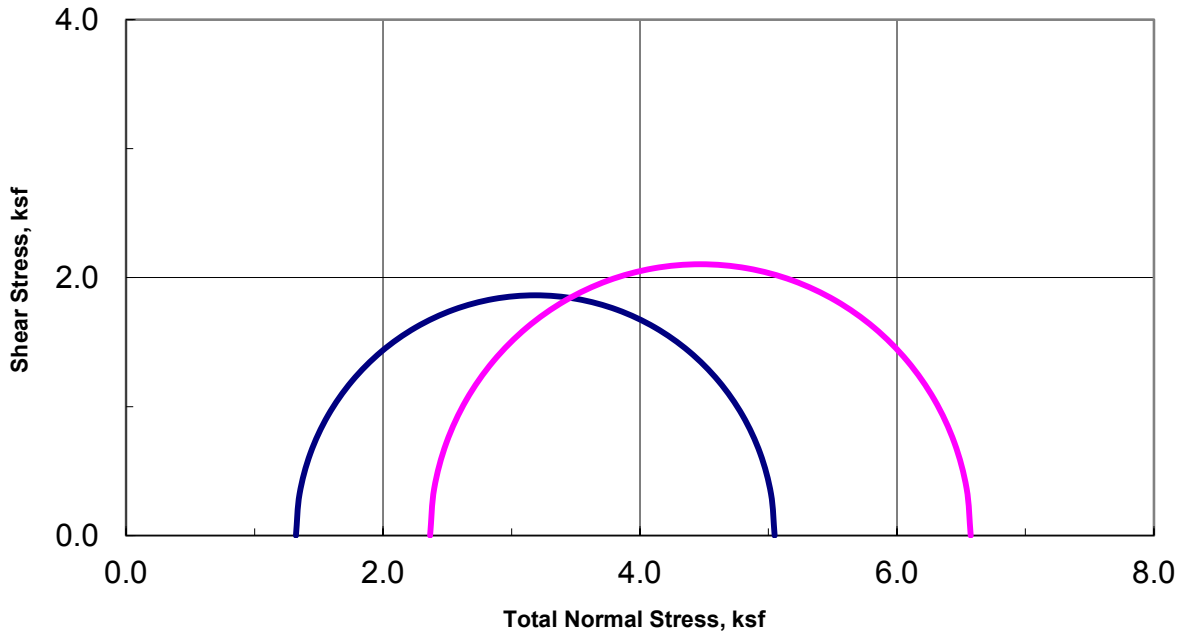
Location: Palo Alto, CA

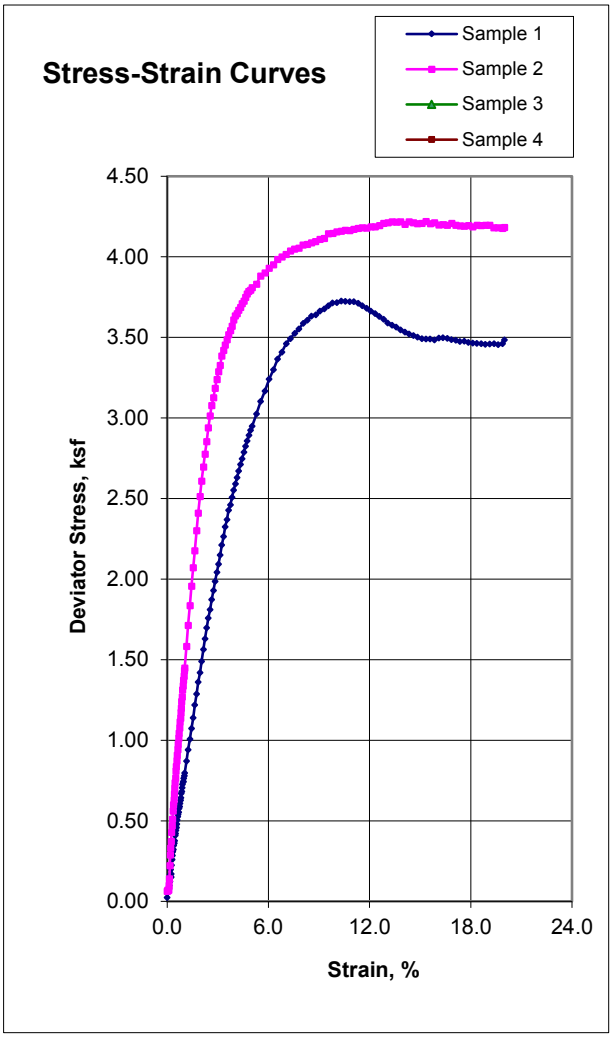
Number: 949-1-1

US_GRAIN_SIZE - CORNERSTONE 0812.GDT - 2/22/17 07:36 - P:\DRAFTING\GINT FILES\949-1-1 PALO ALTO PS LOT D.GPJ

Cooper Testing Labs, Inc.
937 Commercial Street
Palo Alto, CA 94303

Unconsolidated-Undrained Triaxial Test
ASTM D2850





Sample Data				
	1	2	3	4
Moisture %	24.8	22.2		
Dry Den,pcf	97.8	101.1		
Void Ratio	0.723	0.667		
Saturation %	92.6	89.8		
Height in	6.05	6.02		
Diameter in	2.88	2.88		
Cell psi	9.2	16.4		
Strain %	10.31	15.00		
Deviator, ksf	3.726	4.207		
Rate %/min	1.00	1.00		
in/min	0.060	0.060		
Job No.:	640-1090			
Client:	Cornerstone Earth Group			
Project:	PA Parking Structure D - 949-1-1			
Boring:	EB-1	EB-1		
Sample:	6	9		
Depth ft:	14.5	27.5(Tip-5")		

Visual Soil Description	
Sample #	
1	Olive Brown Sandy CLAY
2	Brown Clayey SAND/ Sandy CLAY
3	
4	

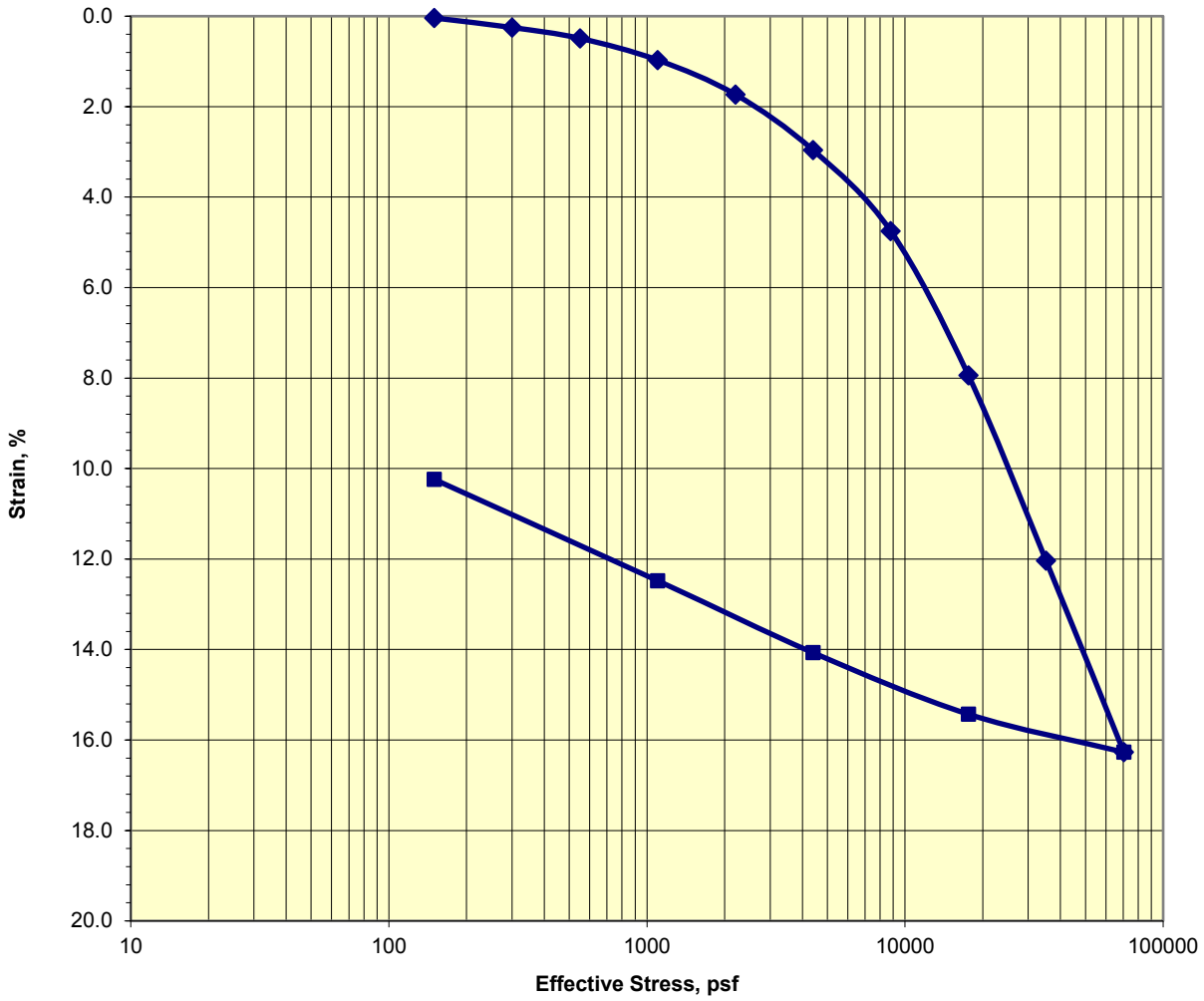
Remarks:

Note: Strengths are picked at the peak deviator stress or 15% strain which ever occurs first per ASTM D2850.

Consolidation Test
ASTM D2435

Job No.:	640-1090	**Boring:**	EB-1	**Run By:**	MD
Client:	Cornerstone Earth Group	**Sample:**	9	**Reduced:**	PJ
Project:	949-1-1	**Depth, ft.:**	27.5(Tip-3")	**Checked:**	PJ/DC
Soil Type:	Yellowish Brown Clayey SAND/Sandy CLAY			**Date:**	2/24/2017

Strain-Log-P Curve



Assumed Gs 2.7	Initial	Final
Moisture %:	22.4	19.1
Dry Density, pcf:	100.5	111.2
Void Ratio:	0.678	0.516
% Saturation:	89.3	100.0

Remarks:

Corrosivity Tests Summary

CTL # 640-1090 **Date:** 2/15/2017 **Tested By:** PJ **Checked:** PJ

Client: Cornerstone Earth Group **Project:** PA Parking Structure D **Proj. No:** 949-1-1

Remarks:

Sample Location or ID			Resistivity @ 15.5 °C (Ohm-cm)			Chloride	Sulfate		pH	ORP (Redox)		Sulfide	Moisture	Soil Visual Description
			As Rec.	Min	Sat.	mg/kg	mg/kg	%		E_H (mv)	At Test	Qualitative by Lead	At Test %	
						Dry Wt.	Dry Wt.	Dry Wt.						
Boring	Sample, No.	Depth, ft.	ASTM G57	Cal 643	ASTM G57	ASTM D4327	ASTM D4327	ASTM D4327	ASTM G51	ASTM G200	Temp °C	Acetate Paper	ASTM D2216	
EB-1	1A	1.5	-	-	1,386	20	114	0.0114	7.5	-	-	-	12.3	Dark Brown Sandy CLAY
EB-1	3A	5.5	-	-	1,252	24	85	0.0085	7.5	-	-	-	15.8	Yellowish Brown Sandy CLAY
EB-2	2A	3.5	-	-	1,208	4	245	0.0245	7.4	-	-	-	15.2	Yellowish Brown Sandy CLAY
EB-2	4A	7.5	-	-	1,048	7	185	0.0185	7.5	-	-	-	21.5	Yellowish Brown Sandy CLAY

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Appendix G: Noise Technical Report

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Noise Assessment Technical Report

Palo Alto Parking Structure, Palo Alto, California

Scope and Noise Study Methods

This report is a screening level assessment of the change in traffic noise on nearby noise sensitive receivers with and without the Proposed Project, a 279 to 334-car parking structure, depending on the final alternative chosen. The report also discusses the noise impacts due to construction of the Proposed Project.

Local Regulations

The City of Palo Alto's Comprehensive Plan Natural Environment Element includes goals and policies related to noise. This element establishes land use compatibility categories for community noise exposure (see Table).

Table 1: Palo Alto Land Use Compatibility for Community Noise Environment

	Exterior Noise Exposure Ldn or CNEL or dB		
Land Use Category	Normally Acceptable	Conditionally Acceptable	Unacceptable
Residential, Hotel and Motels	50-60	60-75	75+
Outdoor Sports and Recreation, Neighborhood Parks and Playgrounds	50-65	65-80	80+
Schools, Libraries, Museums, Hospitals, Personal Care, Meeting Halls, Churches	50-60	60-75	75+
Office Buildings, Business Commercial, and Professional	50-70	70-80	80+
Auditoriums, Concert Halls, and Amphitheaters	N/A	50-75	75+
Industrial, Manufacturing, Utilities, and Agriculture	50-70	75+	N/A

Source: City of Palo Alto Comprehensive Plan Update Noise Draft Existing Conditions Report, August 29, 2014

The Palo Alto Municipal Code (PAMC) regulates noise primarily through the Noise Ordinance, which comprises Chapter 9.10 of the Code, under Title 9, Public Peace, Morals and Safety. The Municipal Code contains additional specific and general provisions relating to noise. Per PAMC Section 9.10.030 noise can be generated by any land use that is more than 6 dBA above the local ambient noise level at a residential property.

Background

Noise is unwanted sound that disturbs human activity. Environmental noise levels typically fluctuate over time, and different types of noise descriptors are used to account for this variability. Noise level measurements include intensity, frequency, and duration, as well as time of occurrence. Noise level (or volume) is generally measured in decibels (dB) using the A-weighted sound pressure level (dBA). The A-weighting scale is an adjustment to the actual sound power levels to be consistent with that of human hearing response, which is most sensitive to frequencies around 4,000 Hertz (about the highest note on a piano) and less sensitive to low frequencies (below 100 Hertz). Table 2 shows common sound and noise levels for a typical urban area.

Because of the logarithmic scale of the decibel unit, sound levels cannot be added or subtracted arithmetically. If the physical intensity of a sound is doubled, the sound level increases by 3 dBA, regardless of the initial sound level. For example, 60 dBA plus 60 dBA equals 63 dBA. Where ambient noise levels are high in comparison to a new noise source, the change in noise level would be less than 3 dBA. For example, when 70 dBA ambient noise levels are combined with a 60 dBA noise source the resulting noise level equals 70.4 dBA.

Impact Analysis

There are three build and a no build alternative being studied.

Alternative 1: No-Project Alternative: Under the no-project alternative, the site will remain in existing condition. The site will continue to be used as a surface parking facility with the existing 86 automobile parking spaces.

Alternative 2: Parking Garage without Retail: This alternative will be constructed on the same site with similar design concept but without the retail space, allowing for six more automobile parking spaces on the ground floor for a total of 344 automobile parking spaces.

Alternative 3: Parking Garage with Retail without Basement Level Parking: This alternative will be constructed on the same site with similar design concept including a 2,188-square-foot retail space, but without basement parking. Alternative 3 would provide 279 automobile parking spaces.

Alternative 4: Parking Garage with Basement with one less Above-Grade Parking Level with retail (five parking levels, 4 above grade): This alternative will be constructed on the same site with similar design concept including a 2,188-square-foot retail space, but without basement parking. Alternative 4 would provide 338 automobile parking spaces.

Future noise levels, with and without the Proposed Project, were calculated using the Peak Hour Traffic volumes from the Fehr & Peers 2017 Traffic Study and the 2011 FTA Noise Impact Assessment Spreadsheet. The 2017 Traffic Study found that the traffic levels were the same for the three build alternatives. The FTA spreadsheet calculated the traffic noise levels at the noise sensitive receivers using peak hour volumes, vehicle speed, and distance.

The peak one-hour traffic noise (Leq) was used to assess the potential noise impacts at the sensitive receivers instead of the Community Equivalent Noise Levels (dBA, CNEL). The CNEL is a 24-hour weighted noise average with 5 dBA add to evening hours and 10 dBA add to nighttime hours, the penalties are intended to account for greater sensitive to noise during these hours. The CNEL is most appropriate for analysis of project that could generate substantial noise during evening and nighttime hours. The peak one-hour noise level is used because the largest increase in traffic is predicted to occur during morning or afternoon peak hours.

Table 2. Typical A-Weighted Noise Levels

Common Outdoor Activities	Noise Level (dBA)	Common Indoor Activities
	— 110 —	Rock band
Jet fly-over at 1000 feet		
	— 100 —	
Gas lawn mower at 3 feet		
	— 90 —	
Diesel truck at 50 feet at 50 mph		Food blender at 3 feet
	— 80 —	Garbage disposal at 3 feet
Noisy urban area, daytime		
Gas lawn mower, 100 feet	**— 70 —**	Vacuum cleaner at 10 feet
Commercial area		Normal speech at 3 feet
Heavy traffic at 300 feet	**— 60 —**	
		Large business office
Quiet urban daytime	**— 50 —**	Dishwasher next room
Quiet urban nighttime	**— 40 —**	Theater, large conference room (background)
Quiet suburban nighttime		
	— 30 —	Library
Quiet rural nighttime		Bedroom at night, concert hall (background)
	— 20 —	
		Broadcast/recording studio
	— 10 —	
Lowest threshold of human hearing	**— 0 —**	Lowest threshold of human hearing

Source: Caltrans 2013.

Noise Sensitive Receivers

Different land uses have different sensitivity to noise. Gas stations, store fronts, and parking areas are not considered noise sensitive. Schools, churches and residential areas are noise sensitive. The nearest sensitive receptor is the All Saints Episcopal Church, across the street from the project. The nearest residents are 250 feet east on Waverley Street.

The location and sensitive land uses are shown in Figure 1.

Figure 1. Proposed Project Location and Nearby Noise Sensitive Receptors



Future Traffic Noise Levels

Future noise levels with and without project were calculated using the 2011 Federal Transit Administration (FTA) Noise spreadsheet, with the PM hour traffic volumes from the Fehr & Peers Traffic Study. Table 2 shows the future peak hour noise levels with and without the Proposed Project. The Proposed Project does not result in an increase in the traffic noise levels along Waverly Street and Hamilton Avenue at the to the Nosie levels for either of the streets to the noise sensitive receivers.

Table 2: Change in Future Peak Hour Traffic Noise Levels

Street	Noise Sensitive Receivers	Future Peak Hour Traffic Noise Levels without the Project at 50 feet (Leq) (Alternative 1)	Future Peak Hour Traffic Noise Levels with the Project at 50 feet (Alternatives 2,3 and 4) (Leq)	Change in Future Peak Hour Traffic (with the Project) (Leq)
Hamilton Avenue North of Waverley Street	All Saints Episcopal Church	62 dBA	62 dBA	0
Waverley Street – between Forest Drive and Hamilton Avenue	Residences	56 dBA	56 dBA	0
Waverley Street – between University and Hamilton Avenue	All Saints Episcopal Church	56 dBA	56 dBA	0

Construction

Project construction would result in ground borne vibration and noise levels from ground disturbing activities such as excavation and grading that is necessary for construction. Impacts would be temporary and for short durations of time, anticipated to last about 2 to 3 weeks. Activities such as demolition would result in the highest noise levels. Noise from construction equipment such as a wood chipper used in the removal of on-site trees would also be expected for at least a week in duration. Other construction equipment that are anticipated to be used include the following: front end loader, boom truck, wood chipper, backhoes, generators, 10-wheel dump truck, 18 wheel trailers, concrete delivery trucks and pumps, and gas powered man lifts.

Construction would comply to the City of Palo Alto's Noise Ordinance which limits construction to Monday-Friday from 8:00 A.M. to 6:00 P.M. and on Saturdays from 9:00 A.M. to 6:00 P.M. No construction would be allowed on Sundays or on any holidays.

Project Impact

Construction will be done within the guidelines of the City of Palo Alto's Noise Ordinance. As such it is exempt for the city noise limits, so there is no construction related noise impacts.

The City of Palo Alto noise ordinance does not address general vehicle noise but does state that no person should produce, suffer or allow a noise level more than six decibels (dBA) above the local ambient at any point outside the property plane. The traffic noise levels without the Proposed Project would be considered the ambient. The traffic noise levels with the Proposed Project is predicted to be the same as without the Proposed Project. Therefore, the Proposed Project traffic noise is predicted not to impact the nearby noise sensitive receivers.

Reference

Caltrans. 2013. Transportation and Construction Vibration Guidance Manual. September. Sacramento, CA: Environmental Program, Noise, Air Quality, and Hazardous Waste Management Office. Sacramento, CA. Available: (http://www.dot.ca.gov/hq/env/noise/pub/TCVGM_Sep13_FINAL.pdf)

Federal Transit Administration. 2006. *Transit Noise and Vibration Impact Assessment.* (DOT-T-95-16.) Office of Planning, Washington, DC. Prepared by Harris Miller Miller & Hanson, Inc. Burlington, MA.

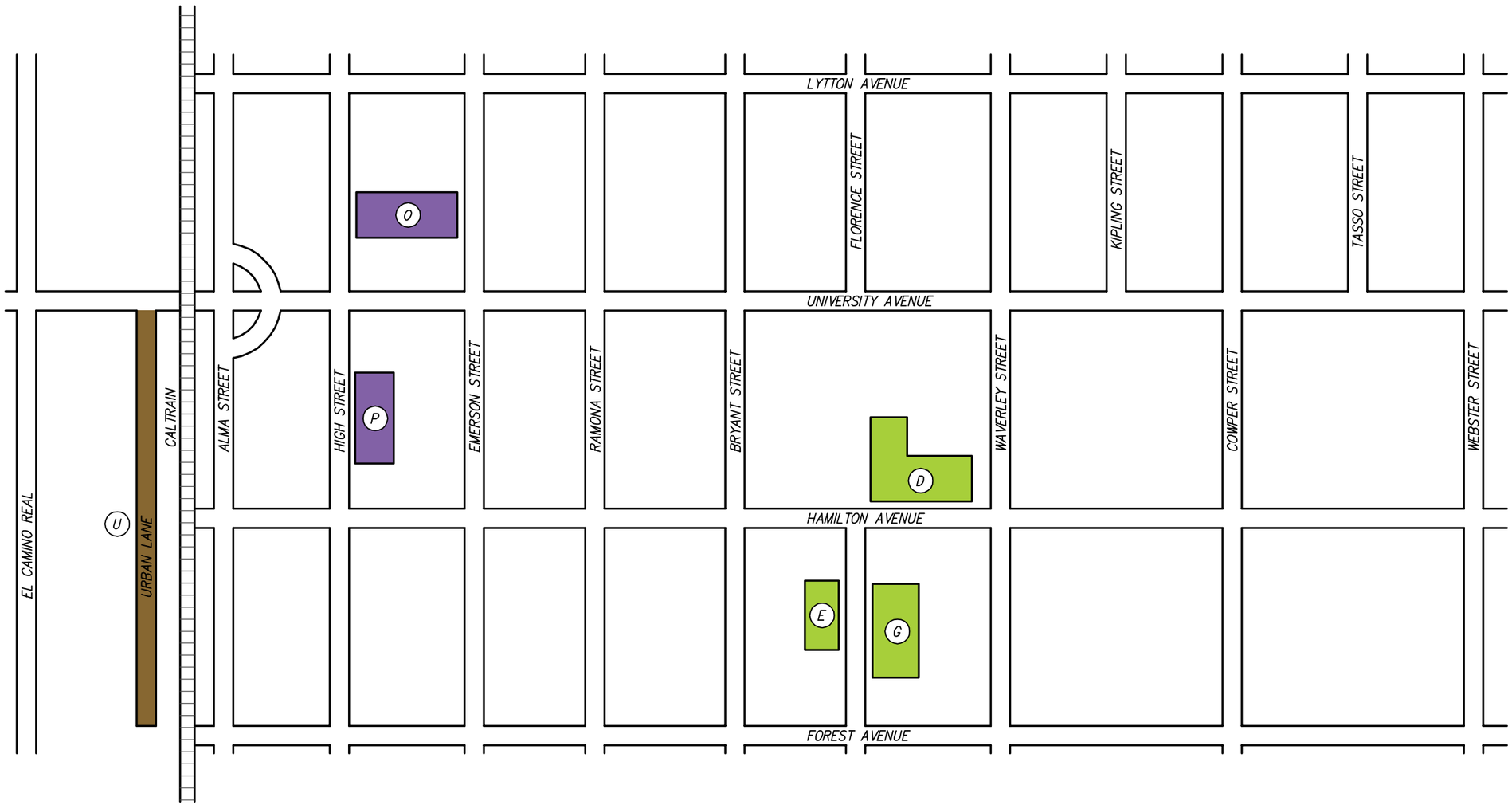
Fehr & Peers. Nov. 1, 2017. *Palo Alto Parking Structure Focused Transportation Impact Analysis Report Memorandum.* Fehr &Peers. Prepared by Sebastian Arias and Robert Eckols.

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Appendix H: Parking Feasibility Study

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CITY OF PALO ALTO
DOWNTOWN PARKING STRUCTURE
FEASIBILITY STUDY



SANDIS

- (D) HAMILTON/WAVERLEY LOT
- (E) GILMAN/BRYANT LOT
- (G) GILMAN/WAVERLEY LOT
- (O) EMERSON/HIGH LOT
- (P) HIGH/HAMILTON LOT
- (U) URBAN LANE LOT

City of Palo Alto
PALO ALTO, CALIFORNIA

City of Palo Alto SANDIS HNA/PACIFIC

January 20,2014
N.T.S.

T-1

City of Palo Alto
Parking Garage Feasibility Study

Executive Summary

In order to address additional parking demand within the City of Palo Alto Downtown Area, the City has requested a study to analyze the feasibility of constructing a parking garage on an existing surface parking lot. The six existing surface lots included in this analysis are as follows: Lot D, located on the northeast corner of Hamilton Ave and Waverly St; Lot E, located along the western side of Gilman St between Hamilton Ave and Forest Ave; Lot G, located along the western side of Gilman St between Hamilton Ave and Forest Ave; Lot O, abutting High St and Emerson St between Lytton Ave and University Ave; Lot P, located along the eastern side of High St between University Ave and Hamilton Ave; and Lot U, located along Urban Ln immediately east of University Circle. All existing lots are City-owned with the exception of Lot U, which is owned by Stanford with a lease to Caltrain.

The study included three main elements: A Preliminary Feasibility Analysis, 3D Model Analysis, and Constructability Factors Comparison. The Preliminary Feasibility Analysis involved the documentation of adjacent land uses, utility constraints, and development constraints. The 3D Model Analysis component created 3D models to help determine probable parking garage layouts and massing concepts to aid in decision making and budget analysis. Lastly, the Constructability Factors Comparison was prepared to aid in prioritizing construction of the parking structures. A comparison matrix was developed using a rating system that focused on eight site constraints. These constraints include: Access Points, Construction and Staging Impacts, Adjacent Land Use, Adjacent Property Impacts, Site Utility Impacts, Net Stall Gain, Cost per Stall, and Site Potential for Development.

Table 1 below provides a summary of the existing and proposed stall counts for each lot as well as additional alternatives evaluated as part of this study. These alternatives include subterranean parking levels, a valet component, transit elements, and commercial space incorporated into the proposed structures. Not all alternatives were evaluated for each lot. Based on the results of the feasibility study, Lot G was determined to be viable for construction of a parking structure and is recommended for design development. Lot U was also determined to be desirable for construction and further planning phases are recommended to further develop potential layouts. It should be noted that a structure developed on combined Lots E and G scored well and was determined to be desirable for construction, however, because of Council input at the May 2013 Study Session it is currently not being recommended for further analysis.

Table 1: Summary of Parking Spaces Counts within Each Parking Garage

	Lot D	Lot E	Lot G	Lot E/G	Lot O	Lot P	Lot U
Existing Surface Lot	86	34	53	87	78	51	164
Proposed Gargage (P-1 thru P-5)	300	75	166	268	223	140	478
Total Net Gain	214	41	113	181	145	89	314
% Increase of Parking	**249%**	**121%**	**213%**	**208%**	**186%**	**175%**	**191%**
Subterranean (B-1)*	60	-	30	30	45	55	-
ΔProposed w/ Commercial Space*	-	-	-	-23	-	-	-
Valet Parking*	68	37	44	88	52	42	-
Subterranean Valet Parking*	17	-	-	-	-	11	-
ΔValet w/ Commercial Space*	-	-	-	-10	-	-	-
Transit Substituted with Parking*	-	-	-	-	-	-	111
Total Max Net Gain*	359	78	187	299	242	197	425
% Increase of Parking*	**417%**	**229%**	**353%**	**344%**	**310%**	**386%**	**259%**

***Optional Parking Measure**

Table 1 Notes:
Existing Surface Lot: The number of parking spaces within the existing surface lot.
Proposed Garage (P-1 thru P-5): The number of parking spaces within the proposed parking garage.
Total Net Gain: The total number of additional parking spaces that the parking garage would provide over the existing parking lot.
% Increase of Parking: The percentage increase in the number of parking spaces provided by the parking garage over the existing parking lot.
Subterranean (B-1): The number of parking spaces within the three subterranean parking levels.
ΔProposed w/ Commercial Space: The number of parking spaces subtracted from the Proposed Garage parking count with the substitution of commercial space.
Valet Parking: The number of valet parking spaces added to the Proposed Garage parking count with the addition of valet parking.
Subterranean Valet Parking: The number of valet parking spaces added to the subterranean parking levels.
ΔValet w/ Commercial Space: The number of valet parking spaces removed due to the substitution of parking spaces with commercial space.
Transit Substituted with Parking: The number of parking spaces added to the original Proposed Garage parking count with the substitution of transit parking with vehicle parking.
Total Max Net Gain: The maximum amount of parking that can be achieved within the proposed parking garage.
% Increase of Parking: The percentage increase in the number of parking spaces.

Introduction

This Parking Garage Feasibility Study provides analysis of parking garage construction at existing surface parking lots in and around Downtown Palo Alto. In an effort to help prioritize parking supply projects, this study focuses on six parking garage site location options within the western and southern portions of Downtown Palo Alto. These areas were found to experience the highest parking permit demand based on parking permit sales and wait list durations. The six study sites include five existing City of Palo Alto surface parking lots (Lots D, E, G, O, and P) and one existing Caltrain parking lot (Lot U) on Urban Lane. See Figure 1 below. Lots E and G on Gilman Avenue are analyzed both individually and as a combined site—Lot E/G.



Figure 1. Map of Parking Lot Study Sites in Downtown Palo Alto

The Parking Garage Feasibility Study includes the following elements for each of the six study sites:

1) **Preliminary Feasibility Analysis**: To document adjacent land uses, utility constraints, and development constraints due to existing easements and zoning restrictions.

2) **3D Model Analysis**: To help determine likely parking garage layouts and massing concepts for the purposes of aiding in decision making and budget analysis.

3) **Constructability Factors Comparison**: To aid in prioritizing construction, a set of *Constructability Factors* was developed for direct comparison between the study sites to evaluate the short-term construction impacts and long-term operations of each site.

Overview

Eight constraints were utilized for evaluating the feasibility of constructing a parking garage on each of the existing surface lots included in this study. These specific constraints were chosen based on discussions with City Staff, review of existing sites, and input from City Council members during a Study Session held on May 20, 2013.

The information used in evaluating the existing sites for each constraint was collected from several sources including County Assessor's parcel information, as-built drawings/record documents, site surveys, traffic and parking studies, environmental assessment reports, geotechnical reports, and field visits to the existing sites. Below is a list of the eight constraints utilized for this study:

Access Points — Number of potential access points to and from the site.

Construction and Staging Impacts — Potential for impacts to surround businesses and other facilities during construction.

Adjacent Land Use Adjacent Property Impacts — Type of land use of surround building. Impacts to surrounding facilities resulting from the construction of a proposed parking garage.

Site Utility Impacts — Existing utility lines/structure required to rerouted/relocated prior to construction of a structure.

Net Space Gain — Quantity of parking spaces gained by constructing a structure compared to the existing parking lot space count.

Cost per Space — Cost per parking space in proposed garage.

Site Potential for Development — Potential of site to be developed for an alternative land use.

A Constructability Constraint Matrix has been developed that includes the eight constraints to which each lot has been evaluated. A rating system was developed using *1* as a low value and *10* as a high value in order to evaluate the strengths and weaknesses of each lot being considered for a garage. A constraint importance factor was also used to weight specific constraints dependent on which constraints the analysis determined to be more significant to the construction of a garage, see *Figure 2 - Site Constructability Constraint Matrix*. The matrix rates the study sites as following for construction of additional parking supply:

1. Lot G (Gilman/Waverly)
2. Lot D (Hamilton/Waverly)
3. Lot O (Emerson/High)
4. Lot U (Urban Lane)
5. Lot E (Gilman/Bryant)
6. Lot P (High/Hamilton)

	Constraint Scoring Methodology
1)	High (1) Medium (5) Low (10)
2)	High (1) Medium (5) Low (10)
3)	1 (5) 1-2 (7) 2 (10)
4)	Single (5) Mixed Use (10)
5)	High (1) Medium (5) Low (10)
6)	Based on Space Percent Increase
7)	High (1) Medium (5) Low (10)
8)	High (1) Medium (5) Low (10)

				Lot D Hamilton/Waverly	Lot E Gilman/Bryant	Lot G Gilman/Waverly	Lot O Emerson/High	Lot P High/Hamilton	Lot U Urban Lane	Lot E/G Gilman
A.	**Type of Construction**			Concrete or Steel	Concrete or Steel	Concrete or Steel	Concrete or Steel	Concrete or Steel	Concrete or Steel	Concrete or Steel
B.	**Lot Size**			29,200 SF	11,500 SF	16,875 SF	22,500 SF	15,982 SF	63,598 SF	28,375 SF
C.	**Existing Spaces**			86	34	53	78	51	164	87
D.	**Total Proposed Spaces**			300	75	166	223	140	478	268
E.	**Net Space Gain**			214	41	113	145	89	314	181
F.	**Space Gain %**			249%	121%	213%	186%	175%	191%	208%
G.	**Estimated Cost/Space**			$43,335	$33,210	$41,354	$39,501	$38,620	$39,907	$41,029
H.	**Cost/Space per added spaces***			$60,750	$60,750	$60,750	$60,750	$60,750	$60,750	$60,750
I.	**ROM Construction Cost***			$13,000,500	$2,490,750	$6,864,750	$8,808,750	$5,406,750	$19,075,000	$10,995,750
	Constraint	**Maximum Potential Constraint Value**	**Constraint Importance Factor**							
1)	**Adjacent Property Impacts**	10	1.3	7	9	9	3	4	10	9
2)	**Construction and Staging Impacts**	10	1.2	5	5	5	3	1	3	7
3)	**Access Points**	10	1.2	10	7	7	10	5	6	7
4)	**Adjacent Land Use**	10	1.3	5	5	10	10	10	10	10
5)	**Site Utility Impacts**	10	1.2	5	10	10	5	3	1	10
6)	**Net Space Gain**	10	1.5	10	2	7	7	5	10	10
7)	**Cost/Space**	10	1.3	9	3	6	9	8	4	7
8)	**Site Potential for Development**	10	1.0	5	5	5	5	5	5	7
	Total Weighted Site Constraint Points			**71**	**57**	**74**	**66**	**52**	**63**	**85**
	Maximum Weighted Value		**100**	*Construction Cost/Stall based on City of Palo Alto "Parking in Lieu" fee.						

FIGURE 2 - Site Constructability Constraint Matrix

Review of Figure 2 will indicate that Lot G (Gilman/Waverly) and Lot D (Hamilton/Waverly) rate the best out of the seven scenarios evaluated for feasibility of constructing a parking garage. Lot G has minimal impacts to existing utilities, adjacent properties, and provides an additional 113 parking spaces compared to the existing lot space count. Lot D has moderate impacts to existing utilities and minimal impacts to adjacent properties. The net space gain is estimated to be 214 spaces. It should also be noted that a parking garage on combined Lots E and G was rated the highest out of all seven scenarios evaluated. A combined Lot E/G parking garage would involve the construction of separate structures on Lots E and G that would connect with one another and span Gilman Street for levels three through five.

Site Constructability Constraints

Lot D (Hamilton/Waverly)



The existing Lot D is located on the north east corner of Hamilton and Waverley. The lot is 29,200ft^2 in area and has 86 existing parking spaces. The layout of the lot includes angled parking with a one-way drive aisle for circulation. A public restroom facility is located on the eastern corner of the lot. Lot D is currently limited to two-hour hourly parking, with no permit parking provided.

Access Points

There are two separate access points for ingress and egress along both Hamilton and Waverly for a total of four existing access points.

Construction and Staging Impacts

Lot D serves restaurant and retail uses along Waverly Street and provides rear-entry parking to the CVS market. During construction, parking would be displaced, along with alley access for loading and unloading, to the adjacent businesses. The public restroom facility would be permanently removed; however facilities could be incorporated into the future garage design.

Adjacent Land Use

Lot D is abutted by four separate parcels. These include AT&T and Excel Aviation (Lot 102), Palo Alto Sport Shop and Toy World Inc. (Lot 83), Congdon & Crome and The Prolific Oven (Lot 84), and the Tai Pan Restaurant (Lot 85).

Adjacent Property Impacts

Potential impacts to surrounding lots caused by the construction of a parking garage on Lot D include the following:

- The natural light passing through the glass block clearstory on the southwest corner of Lot 102, set back from the exterior wall plane at the first level, could potentially be limited by a solid, fire rated wall.
- The triangular area at the north end of the site adjacent to Lot 83 has existing transformers and a trash area that will need to have its access maintained.
- The back of Lot 85 has a rear door and some trash bins which will need their access maintained from the public right of way.
- The structures adjacent to Lot D have unprotected second story openings which could potentially have their natural light limited and views obstructed by a solid, fire rated wall. Specifically, Lot 85 has openings that natural light passes through, set back from the exterior face of the wall, which would likely be impacted by a parking garage's solid, fire rated walls. Existing surface mounted awnings at the second building level of Lot 85 may need to be removed.
- Roof drains for the adjacent structures discharge into the surface parking lot of Lot D. If a garage is constructed on Lot D then alternate paths to discharge the rainwater to the street gutter might need to be provided.

Site Utility Impacts

Lot D contains four street light poles and active high voltage electric, street light, and fiber optics lines running north-south through the site. The site is enclosed by active electric, water, gas, and sewer lines to the south and active water, gas, sewer, and storm drain to the east. The construction of a parking garage at this lot would require the relocation of the existing fiber optic and high voltage electric lines. See Exhibit D.U.1 for a schematic overview of the existing utilities present within the extents of Lot D.

Net Space Gain

Lot D currently has 86 parking spaces. Based on conceptual layouts prepared for this lot, a five-story garage would have a capacity of 300 spaces, yielding a net space gain of 214 spaces. See Exhibit DA.1 for an overview of this conceptual layout as well as a level by level breakdown of the space count within the garage. If three additional levels of subterranean parking were to be provided as part of a garage at this location, with 61 parking spaces per subterranean level, approximately 96 additional spaces could be realized for a possible net gain of 396 spaces. If further parking were to be required at this location, a parking attendant/valet program could be applied to this garage to provide an additional 17 parked vehicles per level, excluding the ground level, to realize a possible net gain of 368 spaces with the five-story garage. With a parking attendant/valet program and three additional subterranean levels, the possible maximum net parking gain would be 430 spaces.

Cost per Space

The rough order of magnitude (ROM) estimate of cost for the construction of a five-story garage is approximately $13 million.



SITE KEY PLAN

EXISTING CONDITIONS

LOT D — EXISTING SURFACE PARKING LOT

	BUSINESS NAME	LOT USE
LOT 102	AT&T	OFFICE
	EXCEL AVIATION	OFFICE
LOT 83	PALO ALTO SPORT SHOP AND TOY WORLD INC.	SPORTING GOODS
LOT 84	CONGDON & CROME	OFFICE SUPPLY
	THE PROLIFIC OVEN	BAKERY
LOT 85	TAI PAN	RESTAURANT



LOT D AREA / 29,200 SQ. FT. | PARCEL ZONING / PF | ADJACENT PARCEL ZONING / CD-C (GF), (P) & PF

- PF ZONE HAS A HEIGHT LIMIT OF 50' WITH NO SETBACKS [FRONT, REAR OR SIDE] REQUIRED NEXT TO THE ADJACENT CD-C ZONES
- THE "FAR" RESTRICTIONS ARE NOT APPLICABLE FOR THIS PROJECT



SITE KEY PLAN

SITE SPECIFIC CONSTRAINTS

LOT D

1. City of Palo Alto Special Setback - 7' wide along Hamilton Avenue.
2. Maintain existing alley at north end of site for vehicular and pedestrian access.
3. Proposed garage will need to be set back 2.5' from the alley to allow for unlimited/unprotected openings (10' to centerline alley). If the proposed garage is located on the property line then openings are limited to 10% per story for unprotected openings in non-sprinklered buildings and 25% per story for unprotected openings in sprinklered buildings.
4. Public restroom at corner of Hamilton Avenue and Waverley Street. Does this public restroom need to be replaced in the garage?
5. Existing mature pine tree at northwest corner of Lot D and Lot 85. Does this tree need to remain? If it does it may affect the garage design.
6. Existing trees along Hamilton Avenue (and interior to Lot D) will most likely need to be removed to allow for the proposed garage.

LOT 102

7. Need to establish where the property line is along the existing AT&T building. Building may be on property line since there are no openings on exterior wall plane (except see #6 below).
8. Where are the foundations for this building (do they extend beyond the face of building) and how low are they? Is there a basement for this building?
9. Southeast corner of existing building has glass block clearstory windows set back from the exterior wall plane at the first level that will potentially have natural light limited by a solid fire rated wall if the proposed garage wall is on the property line. Also need to check to see if these openings would still be allowed based on distance from property line if the surface lot was considered a yard.

LOT 83

10. Need to establish where the property line is along the existing building. Building may be on property line since there are no openings.
11. Where are the foundations for this building (do they extend beyond the face of building) and how low are they? Is there a basement for this building?
12. At the triangular area at the north end of the site adjacent to Lot 83 there are existing transformers and a trash area that potentially need to be maintained.

LOT 84

13. The existing building is set back from the surface parking lot, but there is a rear service yard behind this existing building that fronts two exterior doors and a trash area. Is this trash area required and is this also a loading area for the business? How is this going to be maintained if the proposed garage is located on the property line?
14. Are the rear doors in this service yard used for exiting? If so then an exit path to the public right of way might need to be maintained.

LOT 85 (WEST SIDE)

15. Need to establish where the property line is along the existing building. Building appears not to be on property line since there are openings and building does not align with the existing building on Lot 83.
16. There is a rear door to this business. Is this door used for exiting? If so then an exit path to the public right of way might need to be maintained.
17. There are trash bins located adjacent to the building. Does the trash need to be maintained and how does it get accessed? Is the door in this wall a service door and is the surface lot acting as a loading area for the business? How is this going to be maintained if the proposed garage is located on the property line?
18. There are unprotected second story openings that will potentially have natural light limited and look out into a solid fire wall if the proposed garage wall is on the property line. Also need to check to see if these openings would still be allowed based on distance from property line if the surface lot was considered a yard.
19. Roof drains appear to discharge into the surface parking lot. If a garage is constructed then alternate paths to discharge the rainwater to the street gutter might need to be provided.

LOT 85 (SOUTH SIDE)

20. Need to establish where the property line is along the existing building. Building appears not to be on property line since there are openings, but openings are set back from exterior face of wall. Openings appear to be both protected and unprotected depending on the distance from the exterior wall.
21. These openings will potentially have natural light limited and look out into a solid fire wall if the proposed garage wall is on the property line. Also need to check to see if these openings would still be allowed based on distance from property line if the surface lot was considered a yard.
22. Existing surface mounted awnings at the second level may need to be removed if the encroach over the property line.



City of Palo Alto
PALO ALTO, CALIFORNIA

Hamilton/Waverley Lot D

SITE KEY PLAN, SITE SPECIFIC CONSTRAINTS and AERIAL VIEW

City of Palo Alto | SANDIS | HNA/PACIFIC

Feb. 7, 2013

1" = 100'-0"

D.1



SITE KEY PLAN



PHOTO 1 View from Hamilton Avenue along AT&T Building.



PHOTO 2 View from Hamilton Avenue looking northerly.



PHOTO 3 View from Hamilton Avenue looking easterly.



PHOTO 4 View from Waverly Street looking northwest (south leg of lot).



PHOTO 5 View from Waverly Street looking west (south leg of lot).

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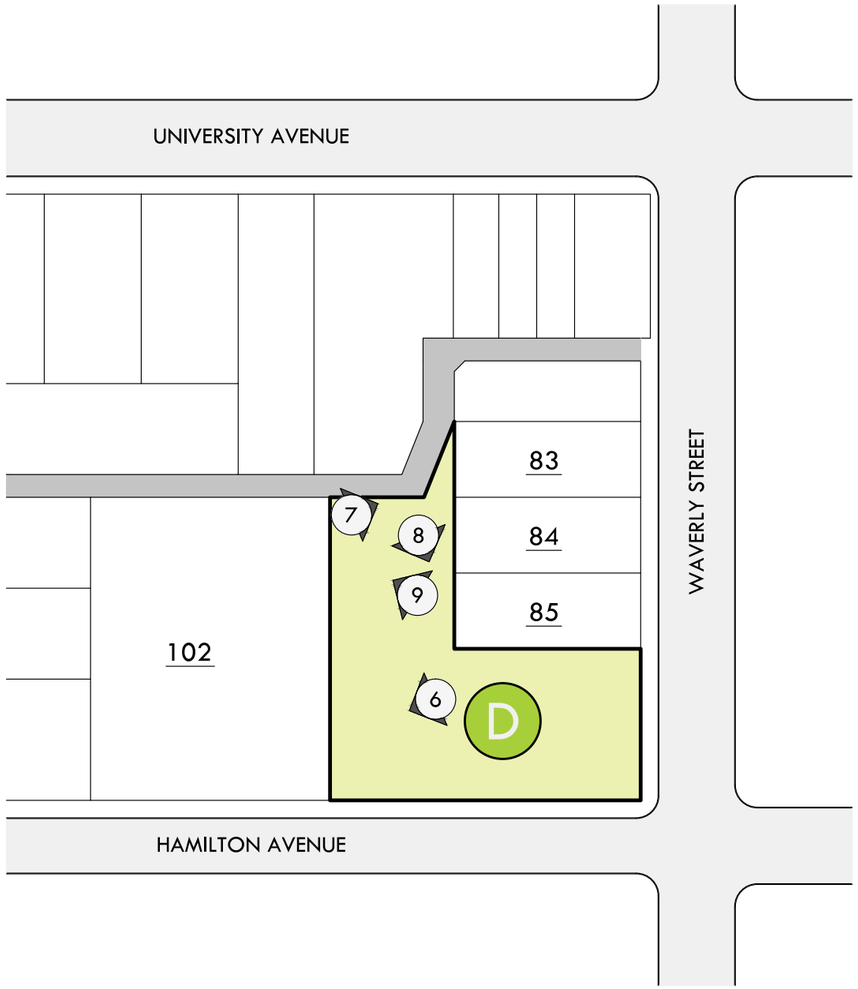
Hamilton/Waverley Lot D

SITE KEY PLAN and PHOTOS

Feb. 7, 2013

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D.2



SITE KEY PLAN



PHOTO 6

View looking at the AT&T Building.



PHOTO 8

View looking south along east side of Lot D (north leg).



PHOTO 7

Alley view looking east.

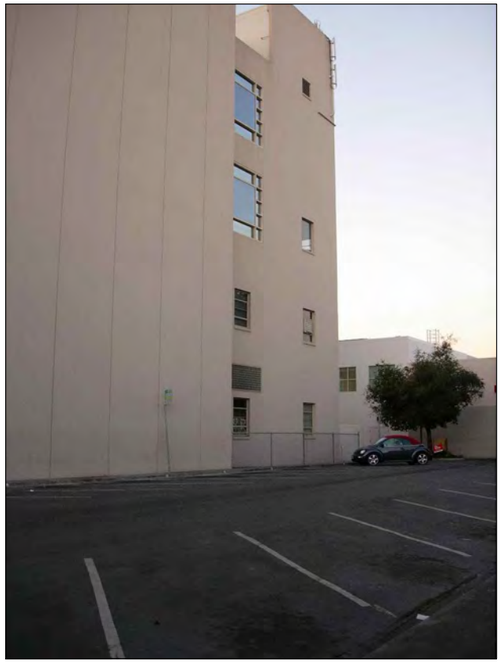


PHOTO 9

View looking at the AT&T Building.

City of Palo Alto
PALO ALTO, CALIFORNIA

Hamilton/Waverley Lot D

SITE KEY PLAN and PHOTOS

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Feb. 7, 2013

1" = 100'-0"

D.3



SITE KEY PLAN



PHOTO 10

Alley view looking west.

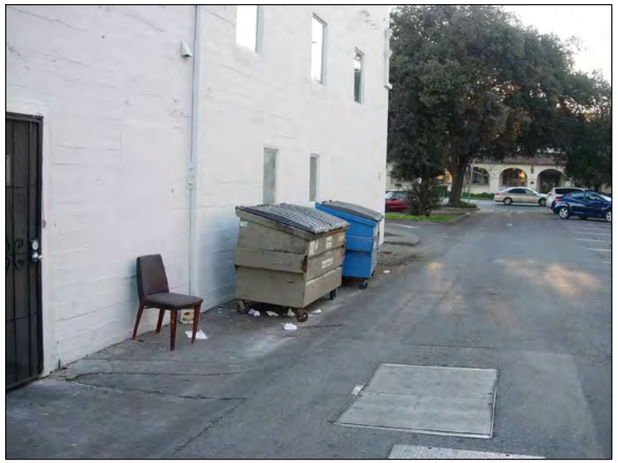


PHOTO 11

View looking north along east side of Lot D (north leg) - utility vaults.



PHOTO 12

View looking east along north side of Lot D (south leg) - existing building.

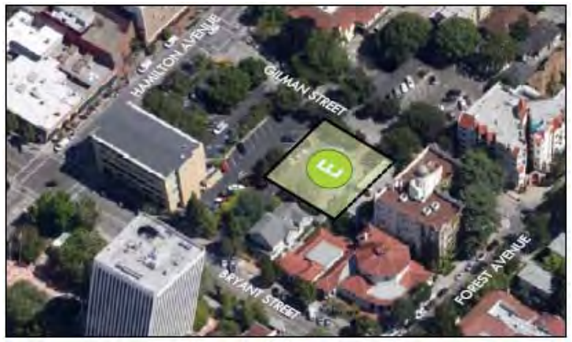


PHOTO 13

View looking west along north side of Lot D (south leg) - existing building.

Site Constructability Constraints

Lot E (Gilman/Bryant)



The existing Lot E is located along the western side of Gilman Street between Hamilton Avenue and Forest Avenue, across from Lot G (Gilman/Waverley). The lot is 11,500ft^2 in area and has 34 existing parking spaces. There are three one-way lanes with angled parking located on each side of the lanes. Lot E is currently restricted to permit holders between the hours of 8:00am – 5:00pm, Monday through Friday. Parking within this lot becomes open to the public outside of these hours.

Access Points

Lot E has two driveways, each driveway providing separated ingress and egress points to Gilman Street. A privately-owned parking lot with an access easement through Lot E, for egress operations, also provides access to the lot.

Construction and Staging Impacts

During construction the privately-owned parking lot adjacent to Lot E would lose its egress access during construction, impacting the operations of the privately-owned parking lot.

Adjacent Land Use

Lot E is abutted by four separate parcels. These include: The Chocolate Garage (Lot 32), Holbrook Global Strategies (Lot 35), a privately-owned parking lot (Lot 36), and Chase Bank, Globespan Capital Partners, a parking lot, and WCC Services (Lot 96). The adjacent parcel zoning types include CD-C (P) and PF.

Adjacent Property Impacts

The construction of a parking garage within the extents of Lot E has the potential to cause the following impacts to the neighboring parcels:

- Adjacent structures could potentially have their natural light and ventilation limited due to the greater height of an adjacent parking garage. In addition to this, the views from existing windows of the adjacent structures would likely be obstructed by a solid, fire rated wall.
- There is a mature tree on Lot 35 which will not be able to be trimmed sufficiently to maintain its health since the tree is located in close proximity of a common property line.

Site Utility Impacts

Lot E has several existing site light poles and lines within its extents. Development would require demolition of the existing light poles. Active water, fiber optic, sewer, electric, and street light lines, as well as active and abandoned gas lines run north-south along Gilman Street. The impacts to existing utilities caused by the construction of a garage would not be significant. See Exhibit E.U.1 for additional information.

Net Space Gain

Lot E currently has 34 parking spaces. Constructing a five-story parking garage within the lot extents would yield 75 total spaces. The net gain of parking spaces would be 41 spaces. Subterranean parking at this lot was not explored due to the limited lot size. If further parking were to be required at this location, a parking attendant/valet program could be applied to this garage to provide an additional 7 to 10 parked vehicles per level, excluding the ground level, to realize a possible net gain of 78 spaces with the five-story garage.

Cost per Space

The rough order of magnitude (ROM) estimate of construction costs for the construction of a five-story garage is approximately $2.5 million.

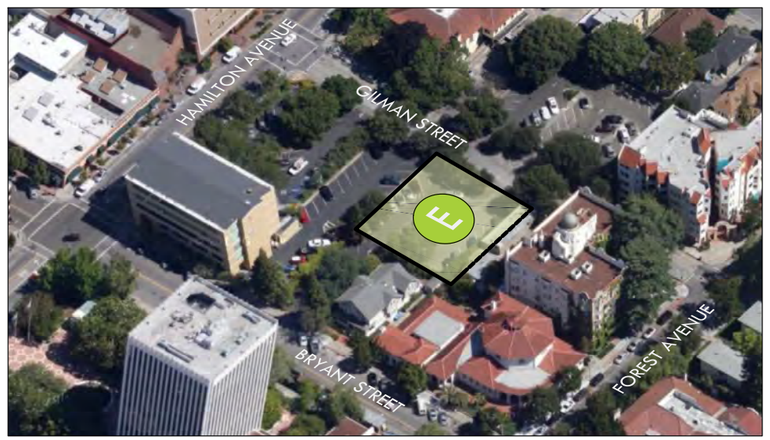


SITE KEY PLAN

EXISTING CONDITIONS

LOT E — EXISTING SURFACE PARKING LOT

	BUSINESS NAME	LOT USE
LOT 32	THE CHOCOLATE GARAGE	CHOCOLATE SHOP
LOT 35	HOLBROOK GLOBAL STRATEGIES	OFFICE
LOT 36	627 BRYANT STREET	PARKING LOT
LOT 96	300 HAMILTON AVENUE	PARKING LOT
	CHASE BANK	BANK
	GLOBESPAN CAPITAL PARTNERS	OFFICE
	WCC SERVICES	OFFICE



LOT E AREA / 11,500 SQ. FT.

PARCEL ZONING / PF

ADJACENT PARCEL ZONING / CD-C (P) & PF

- PF ZONE HAS A HEIGHT LIMIT OF 50' WITH NO SETBACKS [FRONT, REAR OR SIDE] REQUIRED NEXT TO THE ADJACENT CD-C ZONES
- THE "FAR" RESTRICTIONS ARE NOT APPLICABLE FOR THIS PROJECT

City of Palo Alto
PALO ALTO, CALIFORNIA

Gilman/Bryant Lot E

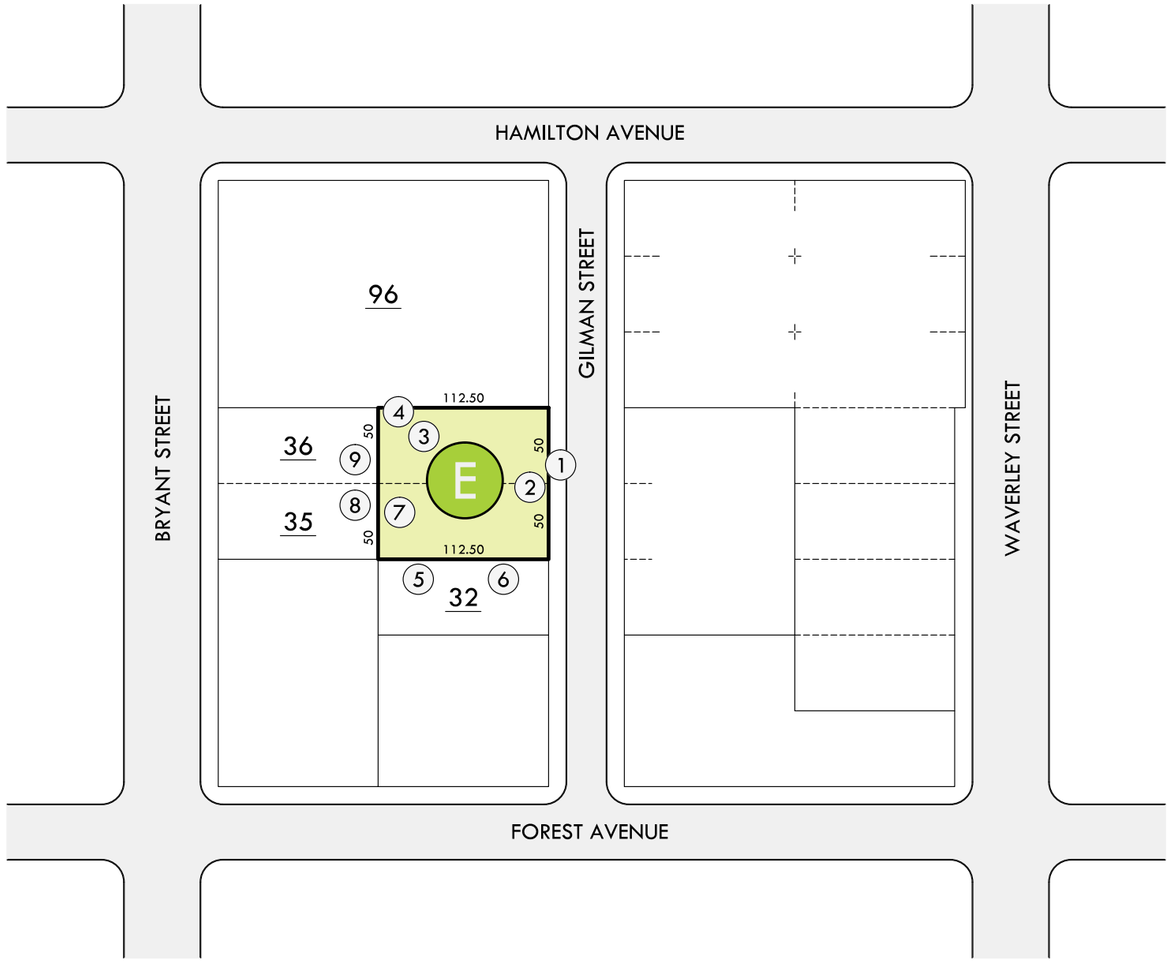
SITE KEY PLAN, EXISTING CONDITIONS and AERIAL VIEW

Feb. 7, 2013

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1" = 100'-0"

E



SITE KEY PLAN

SITE SPECIFIC CONSTRAINTS

LOT E

1. Will the street trees need to be maintained in place (requiring a proposed garage located on the property line facing the street to accommodate them) or can they be removed and/or relocated?
2. In addition to street trees along Gilman Street there are trees located on Lot E just inside the property line. Will any of these trees need to be maintained in place or can they all be removed and or relocated?
3. Any proposed garage will need to be set back from the property lines along the north, south, and west to allow for unprotected openings required for natural ventilation. To realistically achieve any functional efficiency the proposed garage could only be located the minimum 3' from the property line to allow for any openings then the proposed garage would need to be sprinklered and a maximum of 15% per story for unprotected openings would be allowed. This constraint effectively reduces the natural ventilation of the garage and if not sufficient in length and area to qualify as an "open parking garage" then the proposed garage might need to be considered an "enclosed garage" and mechanically ventilated.
4. At the northwest corner there are mature trees that will most likely need to be removed to allow for the proposed parking garage.

LOT 32

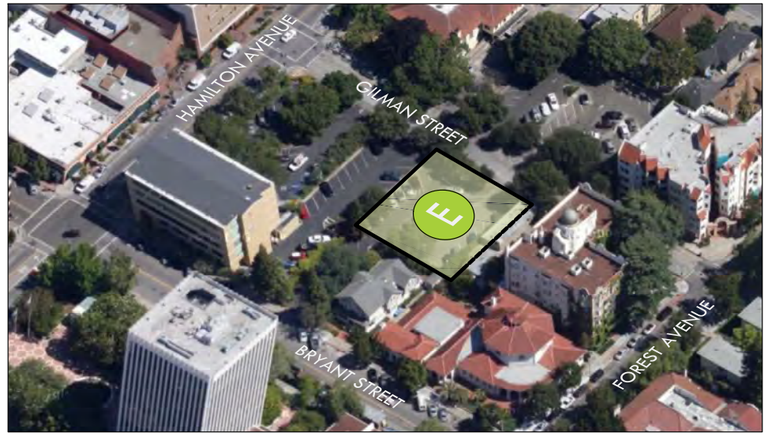
5. There is an existing single story office building adjacent to Lot E. This structure seems to be either close to or on the property line for a portion of the exterior wall. Where are the foundations for this building (do they extend beyond the face of building) and how low are they? Is there a basement for this building?
6. This existing structure will potentially have natural light and ventilation limited by a taller parking garage, and if there are any windows on the north face of the existing building they will look out onto a solid fire wall if the proposed garage wall is on (or near) the property line.

LOT 35

7. There is a mature tree on Lot 35. This tree has an extensive drip line encroachment into Lot E. This tree would probably not be able to be trimmed sufficiently to be healthy since the tree itself is located very close to the common property line. Does this tree need to be maintained? Is it protected by a tree ordinance?
8. There is an existing two story office building adjacent to Lot E. This structure is set back from the property line with a rear yard (this appears to have been a residence at one time). This existing structure will potentially have natural light and ventilation limited by a taller parking garage, and if there are any windows on the east face of the existing building they will look out onto a solid fire wall if the proposed garage wall is on (or near) the property line.

LOT 36

9. Existing one way surface parking located to the west on Lot 36 uses Lot E for egress. Does this arrangement need to be maintained for the surface parking of Lot 36 to function?





SITE KEY PLAN



PHOTO 1 View from Gilman Street looking southwesterly.

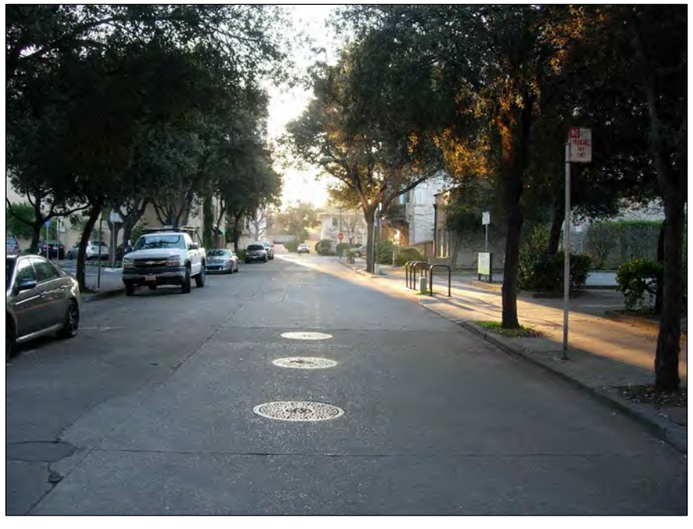


PHOTO 2 View from Gilman Street looking south from Hamilton Avenue at AT&T manholes in street.

City of Palo Alto
PALO ALTO, CALIFORNIA

Gilman/Bryant Lot E

SITE KEY PLAN and PHOTOS

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Feb. 7, 2013

1" = 100'-0"

E.2



SITE KEY PLAN



PHOTO 3

View of northern side of Lot from the west.



PHOTO 4

View of Lot looking southeasterly.



PHOTO 5

View of Lot southern end.



PHOTO 6

View of Lot southern property line.

City of Palo Alto
PALO ALTO, CALIFORNIA

Gilman/Bryant Lot

E

SITE KEY PLAN and PHOTOS

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Feb. 7, 2013

1" = 100'-0"

E.3



SITE KEY PLAN



PHOTO 7

View of Lot looking across Gilman Street from Lot G.

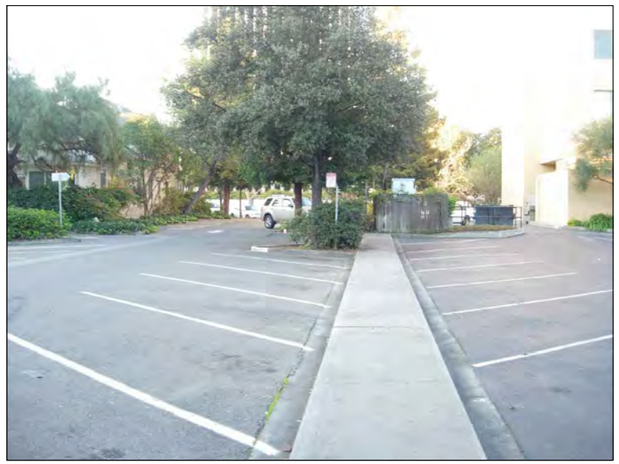


PHOTO 8

View of Lot at property line.



PHOTO 9

View of Lot looking across Gilman Street from Lot G.



PHOTO 10

View from Gilman Street Looking south across Lot.

Site Constructability Constraints

Lot G (Gilman/Waverley)



The existing Lot G is located along the eastern edge of Gilman, between Hamilton Avenue and Forest Avenue, across from Lot E (Gilman/Bryant). The lot is 16,875ft^2 in area and has 53 existing parking spaces. Lot G is currently restricted to permit holders between the hours of 8:00am – 5:00pm, Monday through Friday. Parking within this lot becomes open to the public outside of these hours.

Access Points

Lot G has three driveways fronting Gilman Street—two provide ingress access to the lot while the third provides egress access.

Construction and Staging Impacts

Lot G has limited construction and staging impacts except for the loss of parking during construction.

Adjacent Land Use

The Lot G parcel abuts five nearby parcels along its borders. These include: A United States Post Office facility (Lot 2), a residential property (Lot 21), Cambria Corporation (Lot 22), Better Chinese Restaurant (Lot 23), a residential property, Stanford Financial Co. Realtors, High Gear Media, Aufmuth Law Corporation, and California Land Management Lot (62).

Adjacent Property Impacts

Potential impacts to the existing neighboring properties include:

- Adjacent structures on Lots 21, 22, and 23 could potentially have their natural light and ventilation limited and their views obstructed by a solid, fire rated wall.
- Lot 62 has a storm water drain coming from the recreation/pool area that terminates onto Lot G which will need to be redirected or accommodated.
- The existing structure on Lot 2 could potentially have its natural light and ventilation limited. The residential units on the east face of the existing structure will also have their natural light and ventilation limited and views obstructed by a solid, fire rated wall if the proposed garage wall is on or near the property line.
- The adjacent post office to the north on Lot 2 has a grade separation that is lower than Lot G to accommodate a truck loading dock. This will require lowered foundations for the proposed parking garage, unless the proposed garage has a basement.

Site Utility Impacts

Lot G has several existing site light poles and lines within its extents which would need to be demolished as part of the development. Active water, fiber optic, sewer, electric, and street light lines, as well as active and abandoned gas lines run north-south along Gilman Street. The impacts to existing utilities caused by the construction of a parking garage would not be significant. See Exhibit G.U.1 for additional information.

Net Space Gain

There are currently 53 existing parking spaces within the extents of Lot G. Constructing a five-story parking garage on Lot G would provide a total of 166 parking spaces, yielding a net space gain of 113 spaces. If further parking were to be required at this location, a parking attendant/valet program could be applied to this garage to provide an additional 11 parked vehicles per level, excluding the ground level, to realize a possible net gain of 157 spaces with the five-story garage.

Cost per Space

The ROM cost for a five-story garage on Lot G is estimated to be approximately $6.86 Million.



SITE KEY PLAN

EXISTING CONDITIONS

LOT G — EXISTING SURFACE PARKING LOT

	BUSINESS NAME	LOT USE
LOT 2	US POST OFFICE	POST OFFICE
LOT 21	628 WAVERLEY STREET	RESIDENTIAL
LOT 22	CAMBRIA CORPORATION	OFFICE
LOT 23	BETTER CHINESE	PUBLISHER
LOT 62	365 FOREST AVENUE	RESIDENTIAL
	STANFORD FINANCIAL CO. REALTORS	REAL ESTATE OFFICE
	HIGH GEAR MEDIA	OFFICE
	AUFMUTH LAW CORPORATION	LAW OFFICE
	CALIFORNIA LAND MANAGEMENT	OFFICE



LOT G AREA / 16,875 SQ. FT.

PARCEL ZONING / PF

ADJACENT PARCEL ZONING / CD-C (P) & PF

- PF ZONE HAS A HEIGHT LIMIT OF 50' WITH NO SETBACKS [FRONT, REAR OR SIDE] REQUIRED NEXT TO THE ADJACENT CD-C ZONES
- THE "FAR" RESTRICTIONS ARE NOT APPLICABLE FOR THIS PROJECT

City of Palo Alto
PALO ALTO, CALIFORNIA

Gilman/Waverley Lot G

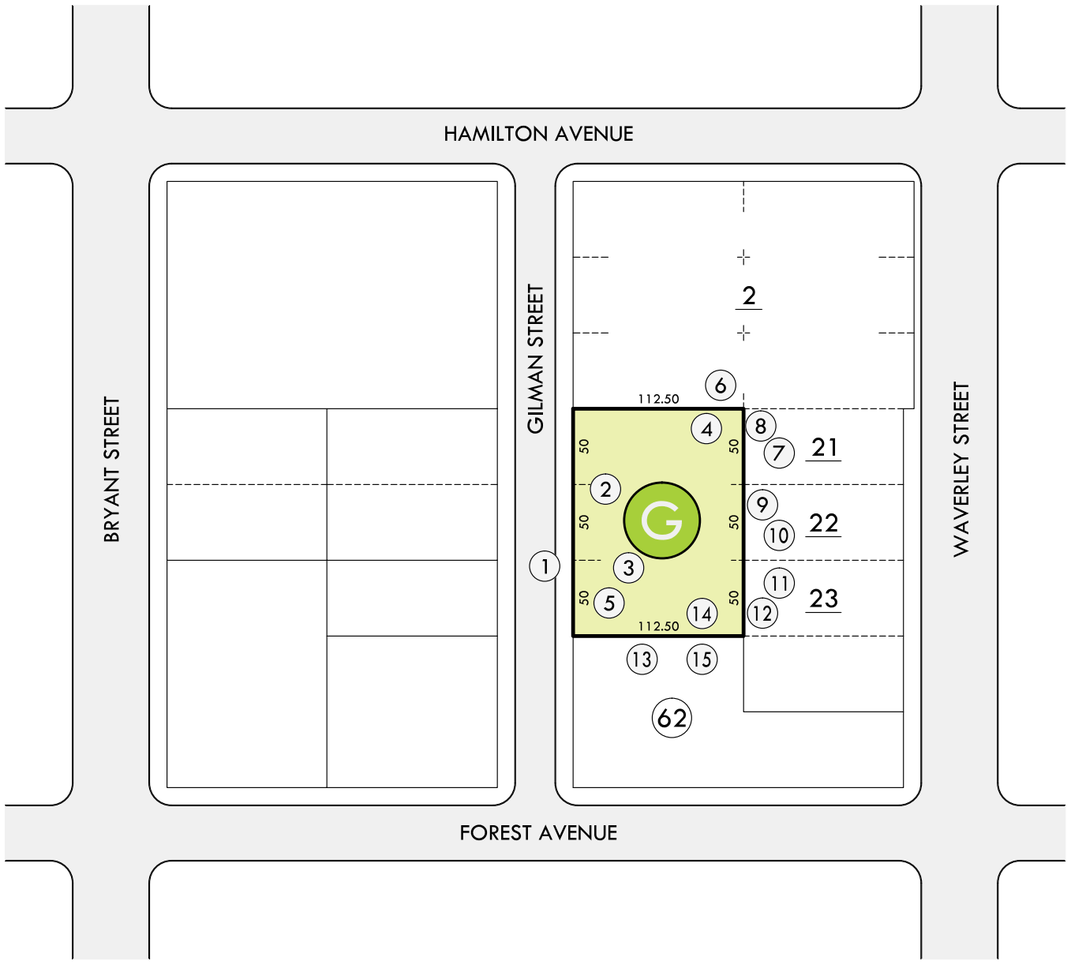
SITE KEY PLAN, EXISTING CONDITIONS and AERIAL VIEW

Feb. 7, 2013

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1" = 100'-0"

G



SITE KEY PLAN

SITE SPECIFIC CONSTRAINTS

LOT G

1. Will the street trees need to be maintained in place (requiring a proposed garage located on the property line facing the street to accommodate them) or can they be removed and/or relocated?
2. In addition to street trees along Gilman Street there are trees located on Lot G just inside the property line. Will any of these trees need to be maintained in place or can they all be removed and or relocated?
3. Any proposed garage will need to be set back from the property lines along the north, south, and east to allow for unprotected openings required for natural ventilation. To realistically achieve any functional efficiency the proposed garage could only be located the minimum 3' from the property line to allow for any openings then the proposed garage would need to be sprinklered and a maximum of 15% per story for unprotected openings would be allowed. This constraint effectively reduces the natural ventilation of the garage and if not sufficient in length and area to qualify as an "open parking garage" then the proposed garage might need to be considered an "enclosed garage" and mechanically ventilated.
4. There are two (2) mature trees located in the northeast corner of Lot G. Do these trees need to be maintained? Is it protected by a tree ordinance?
5. There is a mature tree located in the southeast corner of Lot G. Does this tree need to be maintained? It will most likely need to be removed for the construction of a proposed parking garage.
6. The adjacent post office to the north on Lot 2 has a grade change (lower) than Lot G to accommodate a truck loading dock. This will require lowered foundations for the proposed parking structure in this area (unless the proposed garage has a basement)

LOT 21

7. There is an existing single story office building adjacent to Lot G. This structure is set back from the property line with a rear yard (this appears to have been a residence at one time). This existing structure will potentially have natural light and ventilation limited by a taller parking garage, and if there are any windows on the west face of the existing building they will look out onto a solid fire wall if the proposed garage wall is on (or near) the property line.
8. There is an existing single story garage or storage structure located on or near the property line with Lot G. Where are the foundations for this building (do they extend beyond the face of building) and how low are they?

LOT 22

9. There is a mature tree on Lot 22. This tree has an extensive drip line encroachment into Lot G. Does this tree need to be maintained? Is it protected by a tree ordinance?
10. There is an existing single story office building adjacent to Lot G. This structure is set back from the property line with a rear yard (this appears to have been a residence at one time). This existing structure will potentially have natural light and ventilation limited by a taller parking garage, and if there are any windows on the west face of the existing building they will look out onto a solid fire wall if the proposed garage wall is on (or near) the property line.

LOT 23

11. There is an existing single story office building adjacent to Lot G. This structure is set back from the property line with a rear yard (this appears to have been a residence at one time). This existing structure will potentially have natural light and ventilation limited by a taller parking garage, and if there are any windows on the west face of the existing building they will look out onto a solid fire wall if the proposed garage wall is on (or near) the property line.
12. There is an existing single story garage or storage structure located on or near the property line with Lot G. Where are the foundations for this building (do they extend beyond the face of building) and how low are they?

LOT 62

13. There is an existing residential care facility adjacent to Lot G. This is a multi-story structure on or near the property line. Where are the foundations for this building (do they extend beyond the face of building) and how low are they? Is there a basement for this building?
14. The existing building appears to have storm water drain coming from the recreation/pool area that terminates onto Lot G. If a new parking structure is constructed this drain will need to be accommodated.
15. This existing building does not appear to have any openings (windows) on the wall itself, but at the southeastern corner of Lot G the existing structure steps down and residential units are visible perpendicular to Lot G. There is also a recreational deck/pool on this lower portion of the existing structure. This existing building will potentially have natural light and ventilation limited by a taller parking garage overlooking the recreational/pool deck. In addition the residential units on the east face of the existing building will also have natural light and ventilation limited by a taller parking garage and would be looking out at a solid fire wall if the proposed garage wall is on (or near) the property line.



City of Palo Alto
PALO ALTO, CALIFORNIA

Gilman/Waverley Lot G

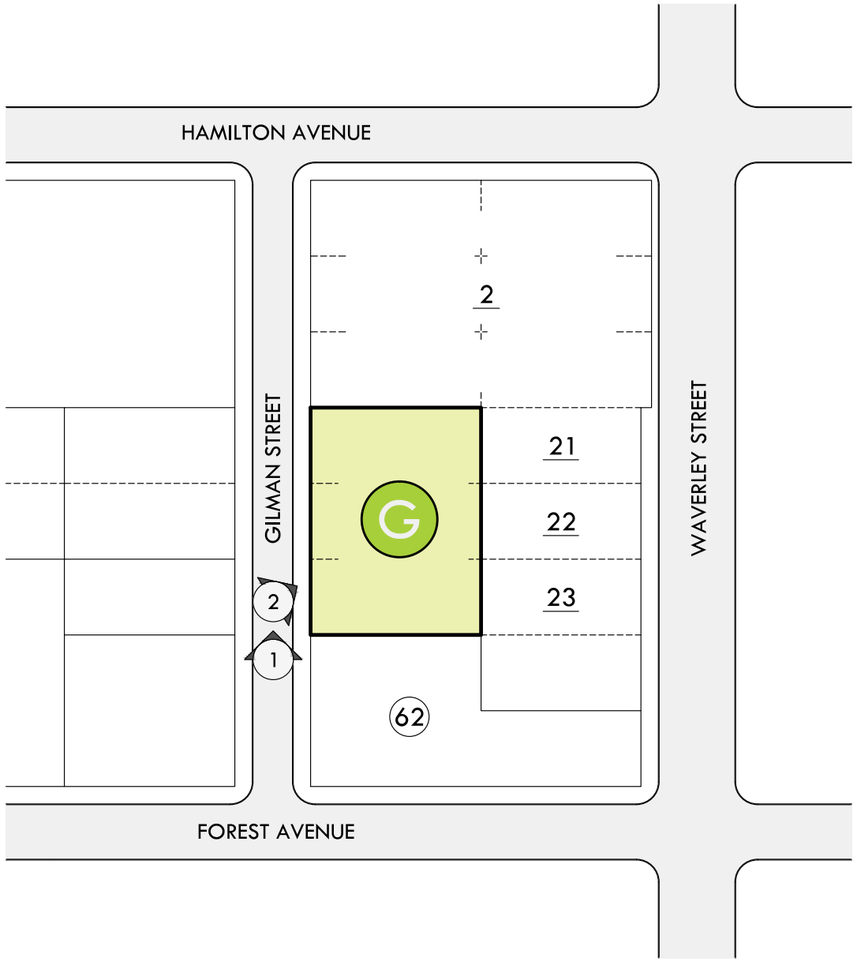
SITE KEY PLAN, SITE SPECIFIC CONSTRAINTS and AERIAL VIEW

City of Palo Alto | SANDIS | HNA/PACIFIC

Feb. 7, 2013

1" = 100'-0"

G.1



SITE KEY PLAN

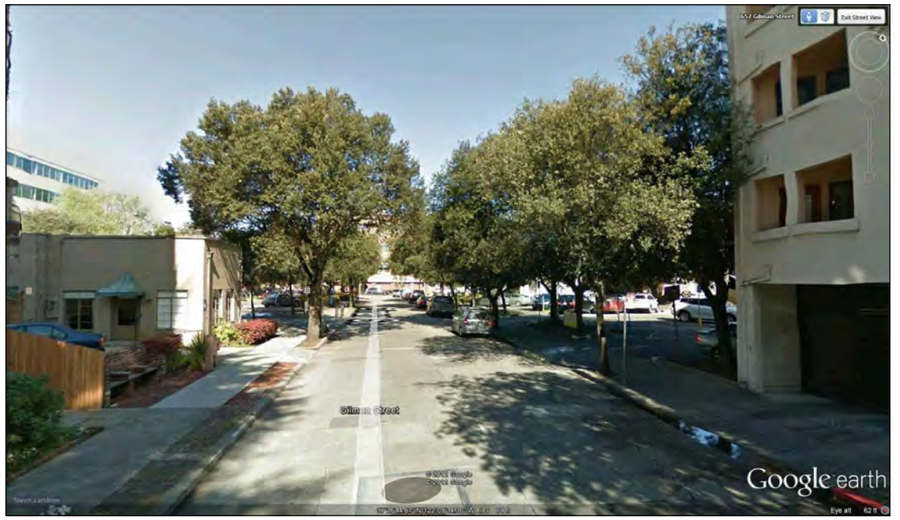


PHOTO 1 View of Gilman Street looking northerly.



PHOTO 2 View from Gilman Street looking northeasterly.

City of Palo Alto
PALO ALTO, CALIFORNIA

Gilman/Waverley Lot G

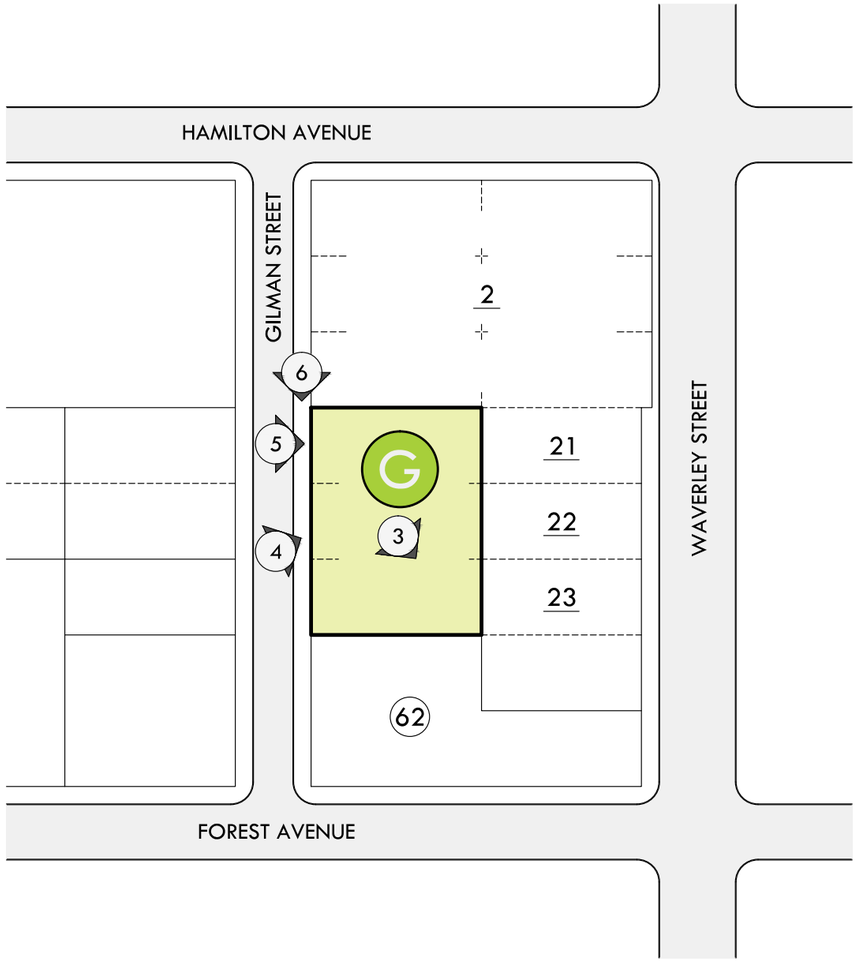
SITE KEY PLAN and PHOTOS

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Feb. 7, 2013

1" = 100'-0"

G.2



SITE KEY PLAN



PHOTO 3

View of southern end of Lot looking east.

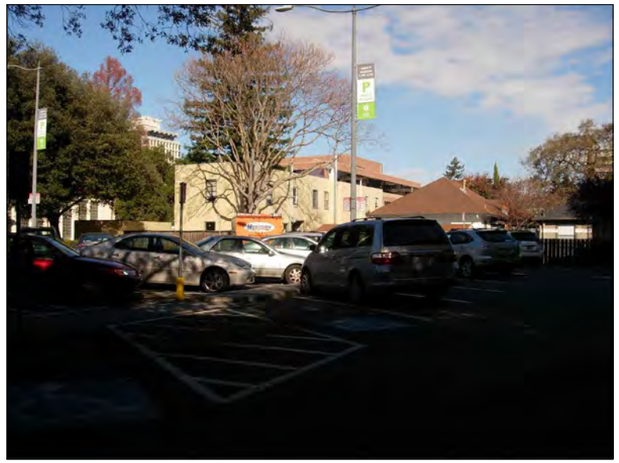


PHOTO 4

View of southern end of Lot looking east.

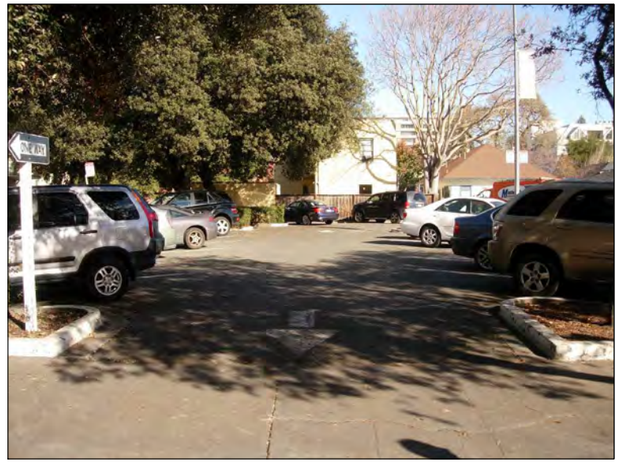


PHOTO 5

View of northern end of Lot looking east.

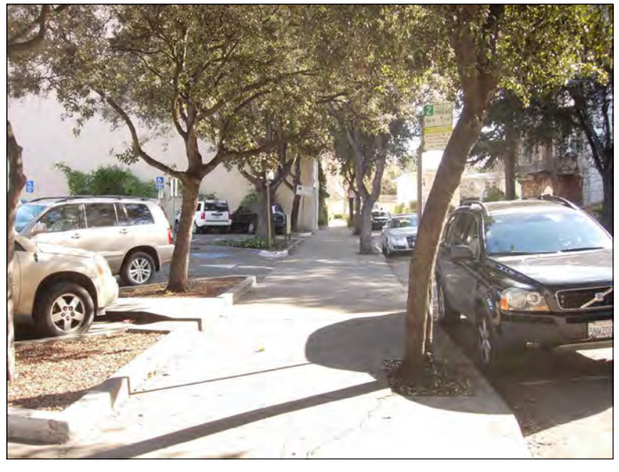


PHOTO 6

View of western edge of Lot along Gilman Street.

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PALO ALTO, CALIFORNIA

Gilman/Waverley Lot G

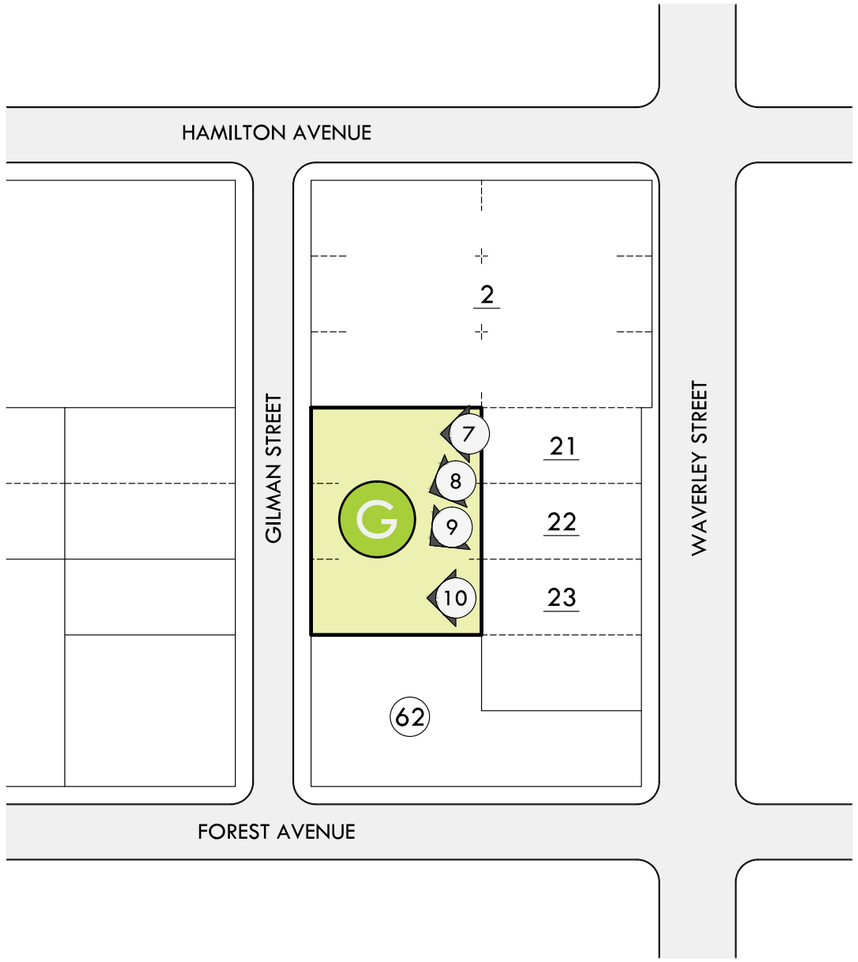
SITE KEY PLAN and PHOTOS

Feb. 7, 2013

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1" = 100'-0"

G.3



SITE KEY PLAN



PHOTO 7

View of western edge of Lot along Gilman Street.



PHOTO 8

View of Lot looking southwesterly.



PHOTO 9

View of eastern side of Lot looking south.



PHOTO 10

View of southern end of Lot looking west.

City of Palo Alto
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Gilman/Waverley Lot G

SITE KEY PLAN and PHOTOS

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1" = 100'-0"

G.4



SITE KEY PLAN



PHOTO 11

View of Lot looking northerly toward Lot 2 and Lot 21.



PHOTO 12

View from Post Office looking east toward Lot G.

Site Constructability Constraints

Lot O (Emerson/High)



Lot O abuts High Street and Emerson Street in between Lytton and University Avenue. The lot is 22,500ft^2 in area and has 78 existing parking spaces. There are two one-way drive aisles providing access to angled parking spaces located on both sides of each aisle. There is no internal circulation drive-aisle within Lot O. Drivers currently have to exit the parking lot, enter onto either Emerson or High before re-entering the parking lot. Lot O is currently limited to two-hour hourly parking, with no permit parking provided.

Access Points

There are separated ingress and egress points on both sides of the parking lot abutting Emerson Street and High Street, for a total of four access points to the existing lot.

Construction and Staging Impacts

Many of the adjacent parcels to Lot O include rear-entry access from the parking lot. During construction of a potential parking garage, rear-entry access to these businesses would be denied. Construction would also impact access to existing trash enclosures.

Adjacent Land Use

Lot O is abutted by six separate parcels. These include: Landmark Aquarius Theatre (Lot 26), Lavanda Restaurant and Wine Bar (Lot 28), Palo Alto Bicycles and Commercenet (Lot 29), T-Mobile, Loving Hut, Lanza Technology Ventures, Edward Jones, and Shazam Entertainment (Lot 30), a currently vacant office (Lot 31), the Kingdom Hall of Jehovah's Witnesses (Lot 32).

Adjacent Property Impacts

The development and construction of a parking garage on Lot O may potentially have the following impacts to neighboring parcels:

- The adjacent parcels all have rear doors, loading areas, and trash areas which may need their access to the public right-of-way maintained.
- Existing structures with unprotected openings on Lot 29 could potentially have their natural light limited and views obstructed by a solid, fire rated wall.
- Lot 31 has switchgear enclosures and transformers outside of the building adjacent to Lot O which will need to have their access maintained. There are existing structures with unprotected story openings on all four levels that could potentially have their natural light limited and views obstructed by a solid, fire rated wall.
- Lot 32 has a recessed alcove with a sliding gate that appears to be an emergency exit from the building as well as storage for cleaning supplies. Given this, public right of way access may need to be maintained to this area.
- There is a gap between the building on Lot 26 and Lot 29 used for storage and may contain electrical service equipment, which will need its accessed maintained.

Site Utility Impacts

Lot O contains active electric, street light, and fiber optic lines running east-west. An abandoned gas line runs through the southwest corner of the lot. There are also two light poles located within Lot O. The construction of a parking garage at this lot would require the relocation of the existing fiber optic and high voltage lines. See Exhibit O.U.1 for additional existing utility information.

Net Space Gain

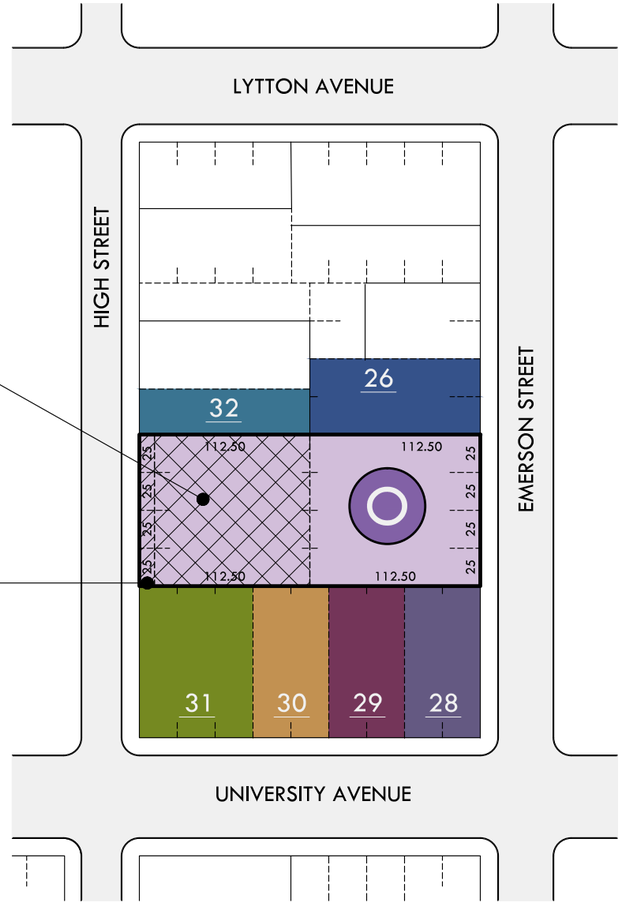
Lot O currently contains 78 existing parking spaces. Constructing a five-story parking garage on this lot would yield 223 spaces. The net gain of parking spaces at this site would be 145 spaces. If further parking were to be required at this location, a parking attendant/valet program could be applied to this garage to provide an additional 13 parked vehicles per level, excluding the ground level, to realize a possible net gain of 197 spaces with the five-story garage.

Cost per Space

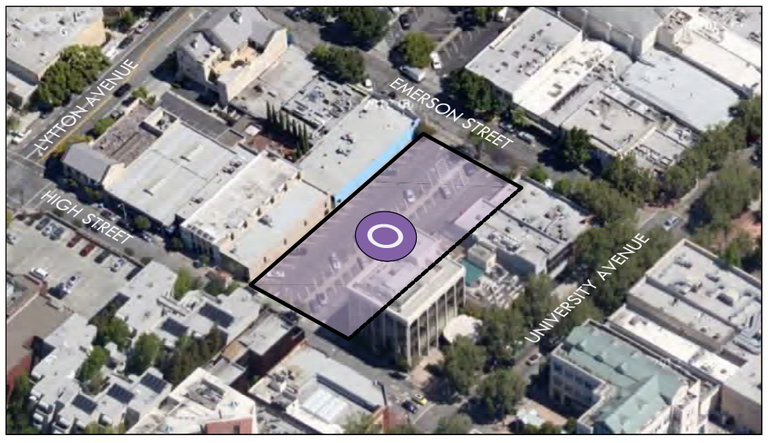
The rough order of magnitude (ROM) cost for constructing a parking garage on Lot O is estimated to be approximately $8.8 Million.

PF ZONE HAS A HEIGHT LIMIT OF 50' EXCEPT WHEN WITHIN 150' OF A RESIDENTIAL ZONE THE HEIGHT LIMIT IS 35'

NO SETBACKS [FRONT, REAR, OR SIDE] ARE REQUIRED NEXT TO THE ADJACENT CD-C ZONES, HOWEVER A 10' SETBACK IS REQUIRED OPPOSITE RESIDENTIAL (PC) ZONE



SITE KEY PLAN



EXISTING CONDITIONS

	BUSINESS NAME	LOT USE
LOT	EXISTING SURFACE PARKING LOT	
LOT 26	LANDMARK AQUARIUS THEATRE	MOVIE THEATER
LOT 28	LAVANDA RESTAURANT and WINE BAR	RESTAURANT
LOT 29	PALO ALTO BICYCLES	BICYCLE SHOP
	COMMERCENET	OFFICE
LOT 30	T-MOBILE	CELL PHONE PROVIDER
	LOVING HUT	RESTAURANT
	LANZA TECHNOLOGY VENTURES	OFFICE
	EDWARD JONES	OFFICE
	SHAZAM ENTERTAINMENT	OFFICE
LOT 31	151 UNIVERSITY AVENUE	VACANT OFFICE
LOT 32	KINGDOM HALL of JEHOVAH'S WITNESSES	CHURCH

LOT O AREA / 22,500 SQ. FT.

PARCEL ZONING / PF

ADJACENT PARCEL ZONING

CD-C (P) & CD-C (GF) (P) & PC-3429 WHERE WESTERN HALF OF LOT IS WITHIN 150' OF RESIDENTIAL

- THE "FAR" RESTRICTIONS ARE NOT APPLICABLE FOR THIS PROJECT

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Emerson/High Lot

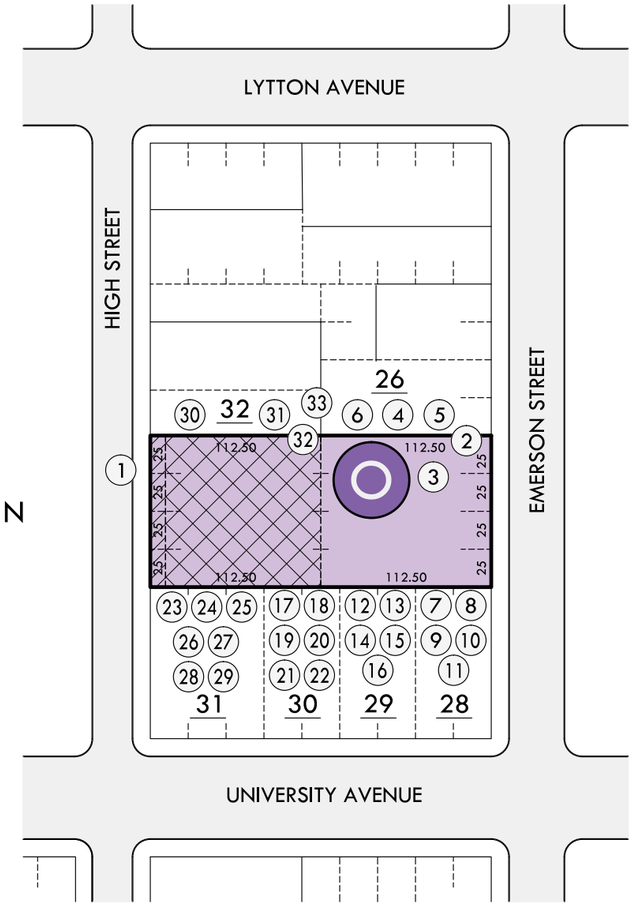
SITE KEY PLAN, EXISTING CONDITIONS and AERIAL VIEW

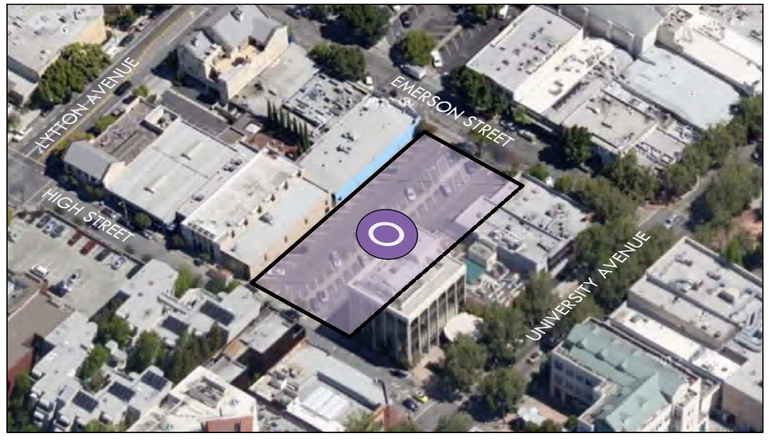
Feb. 7, 2013

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1" = 100'-0"

SITE
KEY PLAN





SITE SPECIFIC CONSTRAINTS

LOT O

1. Will the two small street trees on High Street need to be maintained in place (requiring a proposed garage located on the property line facing the street to accommodate them) or can they be removed and/or relocated? They are rather small, but as they grow larger they potentially will be impacted.
2. There is an existing tree in the northeast corner along Emerson Street that will most likely need to be removed to allow the construction of a proposed parking garage.
3. Any proposed garage will need to be set back from the property lines along the north and south to allow for unprotected openings required for natural ventilation. To realistically achieve any functional efficiency the proposed garage could only be located the minimum 3' from the property line to allow for any openings then the proposed garage would need to be sprinklered and a maximum of 15% per story for unprotected openings would be allowed. This constraint effectively reduces the natural ventilation of the garage and if not sufficient in length and area to qualify as an "open parking garage" then the proposed garage might need to be considered an "enclosed garage" and mechanically ventilated.

LOT 26

4. Need to establish where the property line is along the existing single story commercial building adjacent to Lot O. Building may be on property line since there are no openings on exterior wall plane (except see #5 below).
5. Where are the foundations for this building (do they extend beyond the face of building) and how low are they? Is there a basement for this building?
6. There are rear doors to this business located in a recessed alcove. Are these doors used for exiting? If so then an exit path to the public right of way might need to be maintained.

LOT 28

7. Need to establish where the property line is along the existing single story commercial building adjacent to Lot O. Building appears to be set back from the property line since there are door openings on the exterior wall plane along with a trash enclosure.
8. Where are the foundations for this building (do they extend beyond the face of building) and how low are they? Is there a basement for this building?
9. Are these doors used for exiting? If so then an exit path to the public right of way might need to be maintained.
10. Are the doors in this wall a service door and is the surface lot acting as a loading area for the business? How is this going to be maintained if the proposed garage is located on the property line?
11. Since there is a trash enclosure located adjacent to the building does the trash area need to be maintained and how does it get accessed?

LOT 29

12. Need to establish where the property line is along the existing two story commercial/office building adjacent to Lot O. Building appears to be set back from the property line since there are door openings and unprotected upper level windows on the exterior wall.
13. Where are the foundations for this building (do they extend beyond the face of building) and how low are they? Is there a basement for this building?
14. There is a glass door to this building. Is this door used for exiting? If so then an exit path to the public right of way might need to be maintained. The entrance also appears to be disabled accessible.
15. There are also solid doors located on to this building. Are these doors service doors and is the surface lot acting as a loading area for the business? How is this going to be maintained if the proposed garage is located on the property line? Are these doors access doors to electrical panels etc.? If so how is this service going to be maintained if the proposed garage is located on the property line?
16. There are unprotected second story openings that will potentially have natural light limited and look out into a solid fire wall if the proposed garage wall is on the property line. Also need to check to see if these openings would still be allowed based on distance from property line if the surface lot was considered a yard.

LOT 30

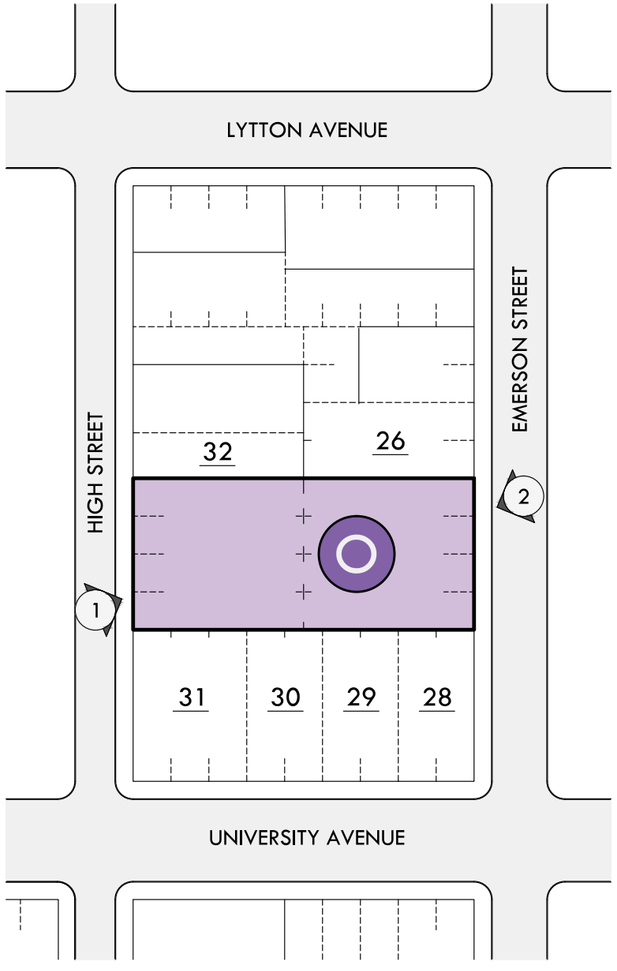
17. Need to establish where the property line is along the existing two story commercial/office building adjacent to Lot O. Building appears to be set back from the property line since there are door openings and unprotected upper level windows on the exterior wall.
18. Where are the foundations for this building (do they extend beyond the face of building) and how low are they? Is there a basement for this building?
19. There are entrance doors to this building. Are these doors used for exiting? If so then an exit path to the public right of way might need to be maintained.
20. Are the doors in this wall a service door and is the surface lot acting as a loading area for the business? How is this going to be maintained if the proposed garage is located on the property line?
21. Since there is a trash enclosure located adjacent to the building does the trash area need to be maintained and how does it get accessed?
22. There are unprotected second story openings that will potentially have natural light limited and look out into a solid fire wall if the proposed garage wall is on the property line. Also need to check to see if these openings would still be allowed based on distance from property line if the surface lot was considered a yard.

LOT 31

23. Need to establish where the property line is along the existing four story commercial/office building adjacent to Lot O. Building appears to be set back from the property line since there are door openings and unprotected upper level windows on the exterior wall.
24. Where are the foundations for this building (do they extend beyond the face of building) and how low are they? Is there a basement for this building?
25. There is an entrance doors to this building which appears to lead to an interior stair. Is this door used for exiting? If so then an exit path to the public right of way might need to be maintained.
26. There are entrance doors to this building which appear to lead to first floor commercial space. Is this door used for exiting? If so then an exit path to the public right of way might need to be maintained. If it is just used for convenience access does it still need to be maintained?
27. Is this also a service door and is the surface lot acting as a loading area for the building? How is this going to be maintained if the proposed garage is located on the property line?
28. There appear to be switchgear enclosures and transformers outside the building adjacent to Lot O. How is this electrical service going to be maintained if the proposed garage is located on the property line?
29. There are unprotected story openings on all four levels that will potentially have natural light limited and look out into a solid fire wall if the proposed garage wall is on the property line. Also need to check to see if these openings would still be allowed based on distance from property line if the surface lot was considered a yard.

LOT 32

30. Need to establish where the property line is along the existing single story commercial building adjacent to Lot O. Building may be on property line since there are no openings on exterior wall plane.
31. Where are the foundations for this building (do they extend beyond the face of building) and how low are they? Is there a basement for this building?
32. There is a recessed alcove with a sliding gate that appears to be an emergency exit from the building as well as a space for storing cleaning supplies. Is this door used for exiting? If so, then an exit path to the public right-of-way might need to be maintained.
33. There is a gap between the buildings on Lot 26 and Lot 29 that appears to be used for storage, but may contain electrical service equipment. Does this function and access need to be maintained? How is this going to be maintained if the proposed garage is located on the property line?



SITE KEY PLAN



PHOTO 1 View from High Street looking easterly.

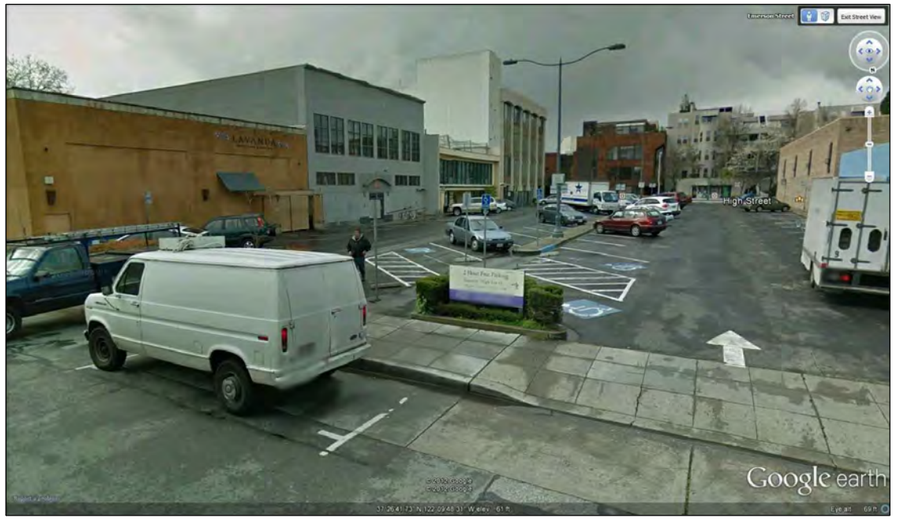


PHOTO 2 View from Emerson Street looking westerly.

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Emerson/High Lot

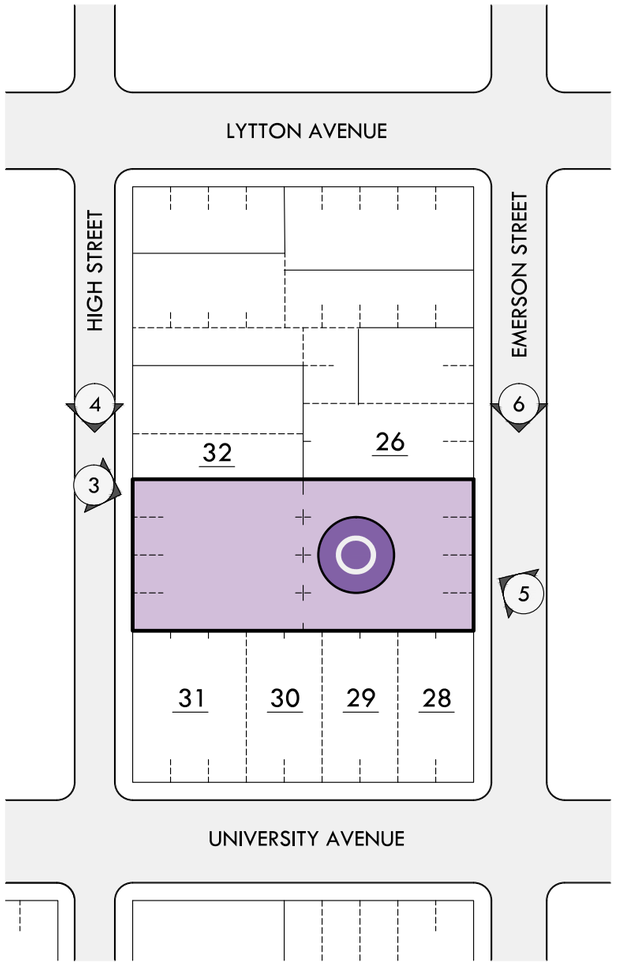
SITE KEY PLAN and PHOTOS

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Feb. 7, 2013

1" = 100'-0"

0.2



SITE KEY PLAN



PHOTO 3 View from High Street looking southeasterly.

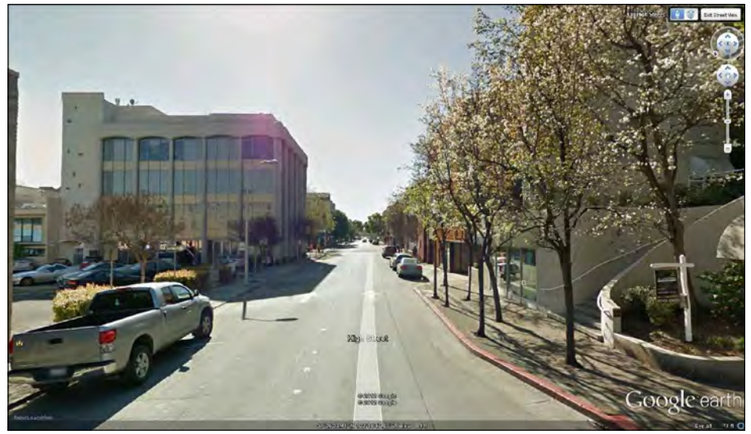


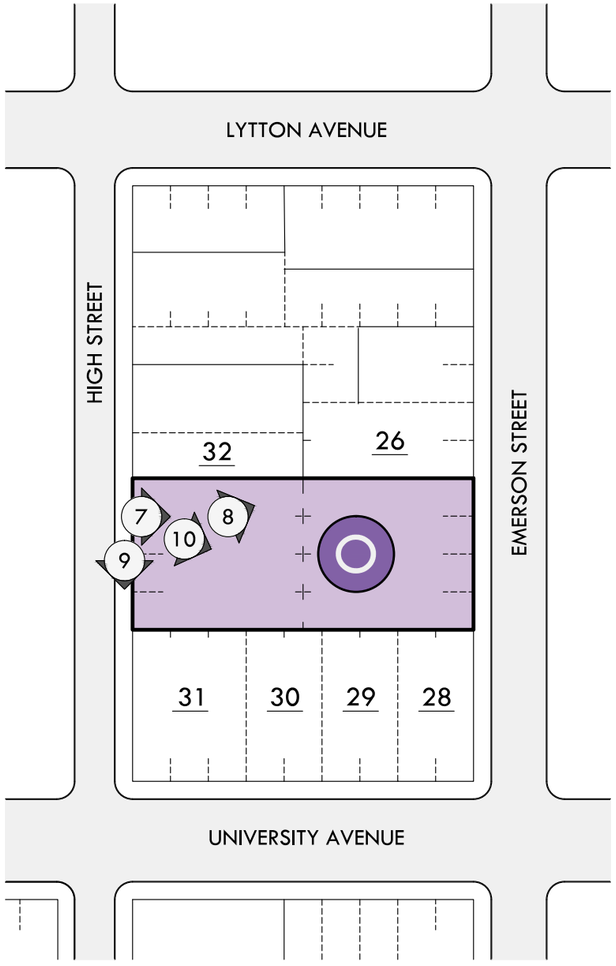
PHOTO 4 View of High Street looking southerly.



PHOTO 5 View from Emerson Street looking northwesterly.



PHOTO 6 View of Emerson Street looking southerly.



SITE KEY PLAN



PHOTO 7

View of Lot (northern half) looking east.



PHOTO 8

View of Lot (northern half) looking northeasterly.



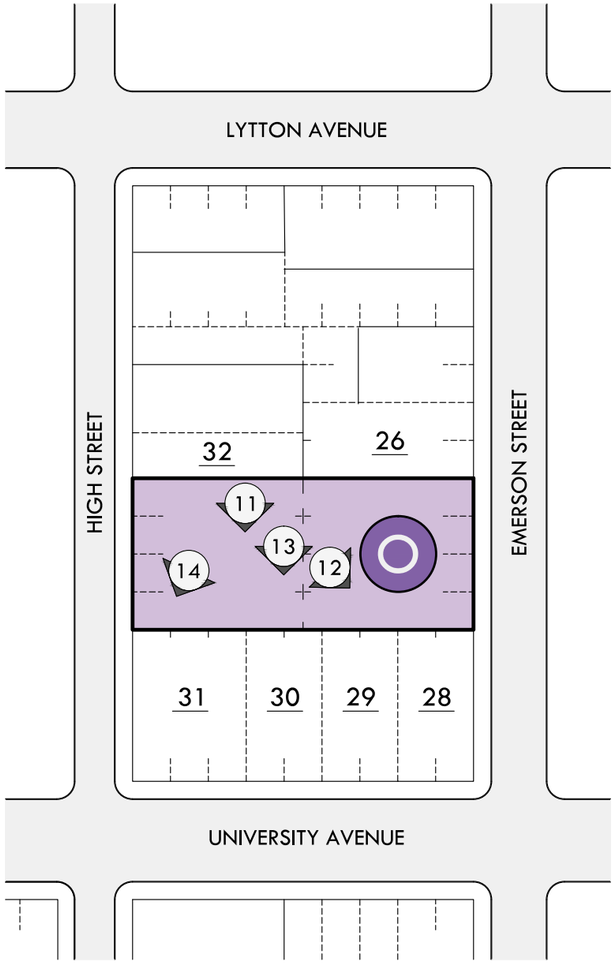
PHOTO 9

View of Lot (western edge) along High Street.



PHOTO 10

View of Lot (southern half) looking east.



SITE KEY PLAN

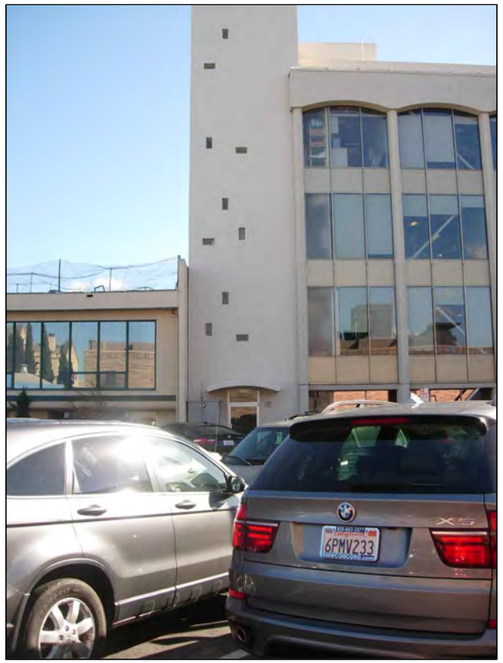


PHOTO 11

View of Lot looking south at Lot 31.



PHOTO 12

View of Lot looking southeasterly at Lot 29.

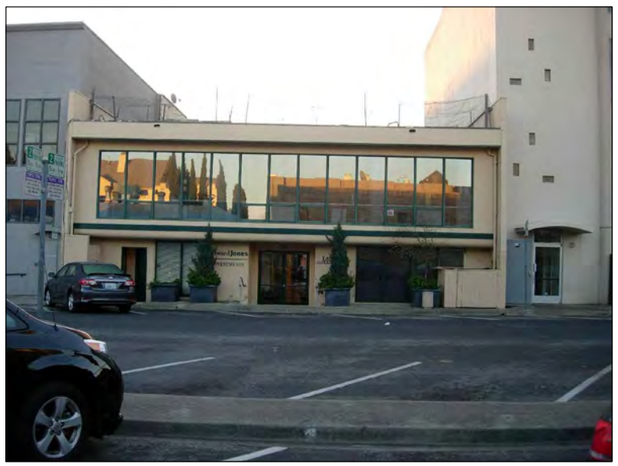


PHOTO 13

View of Lot looking southeasterly at Lot 30.



PHOTO 14

View of Lot looking southwesterly at Lot 31.

City of Palo Alto
PALO ALTO, CALIFORNIA

Emerson/High Lot

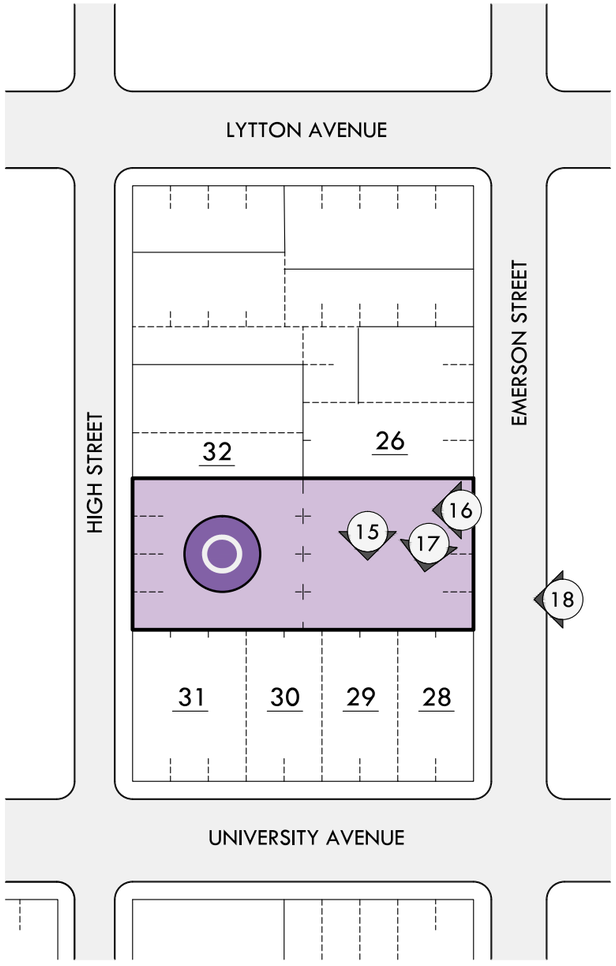
SITE KEY PLAN and PHOTOS

City of Palo Alto | SANDIS | HNA/PACIFIC

Feb. 7, 2013

1" = 100'-0"

0.5



SITE KEY PLAN

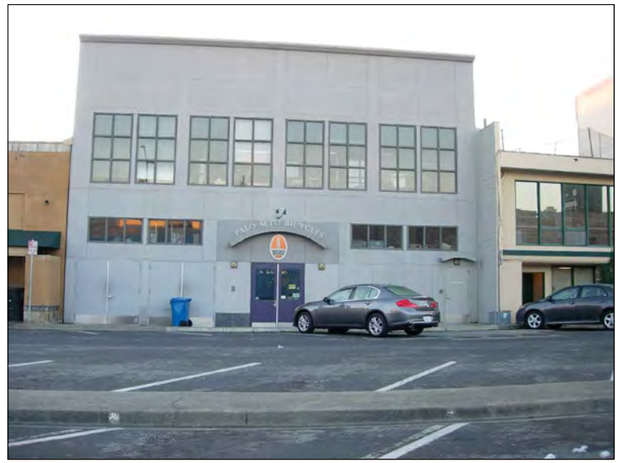


PHOTO 15

View of Lot looking southeasterly at Lot 29.



PHOTO 16

View of Lot (northern half) looking west.



PHOTO 17

View of Lot looking southeasterly at Lot 28 & 29.

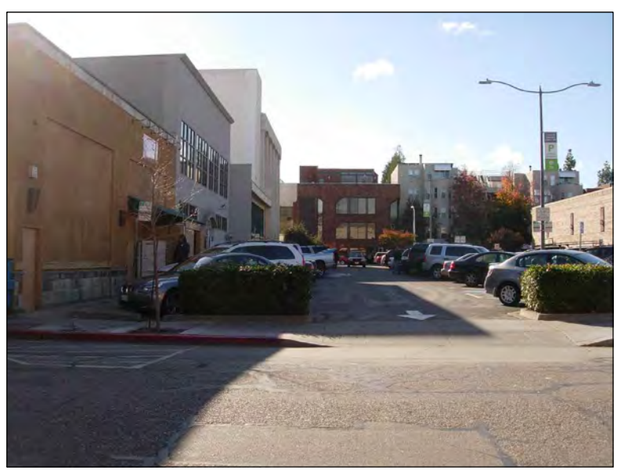
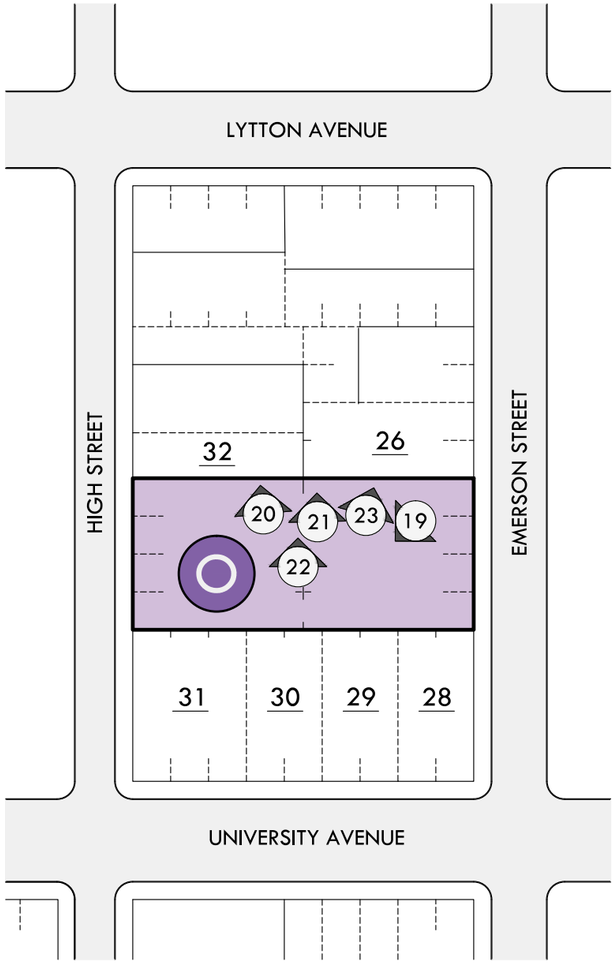


PHOTO 18

View of Lot (southern half) looking west.



SITE KEY PLAN



PHOTO 19

View of Lot looking southwesterly at Lot 31.



PHOTO 20

View of Lot 32 recesseed alcove.



PHOTO 21

View of Lot 26 recessed doorway alcove.



PHOTO 22

View of gap between buildings on Lot 26 and Lot 29.

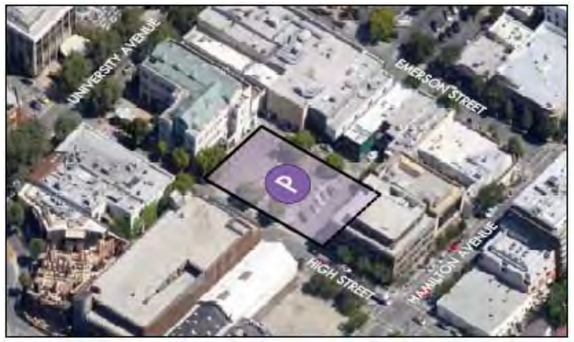


PHOTO 23

View of utility vaults adjacent to Lot 26.

Site Constructability Constraints

Lot P (High/Hamilton)



Lot P is located along High Street, in between University Avenue and Hamilton Avenue. The lot is 15,982ft^2 in area and has 51 existing parking spaces. There are three one-way drive aisles within the site, with angled parking on both sides of each aisle. Lot P is currently limited to two-hour hourly parking, with no permit parking provided.

Access Points

Lot P has two ingress points and one egress point along High Street.

Construction and Staging Impacts

Lot P provides rear-entry access for loading activities to adjacent restaurant and retail uses along Emerson Street, during construction loading activities in this area would be restricted.

Adjacent Land Use

Lot P is adjacent to 10 parcels. The facilities located on the parcels include: Amber Dhara, Palantir Technologies, Livegreene, Black Diamond Sports, Selix Formal Wear Lot (45), Sprout Café (Lot 46), Jungle Digital Imaging, Michael Patrick Partners, Inc., Shalon Ventures (Lot 79), Mac's Smoke Shop, Inc. (Lot 80), Bell's College Bookstore (Lot 81), Kim's Nail Care (Lot 82), Gravity Bistro (Lot 83), Lyfe Kitchen (Lot 85), Vivo Ventures, LLC., Nikkei, Firelake Capital Management, LLC.(Lot 86), and a vacant office building (Lot 97).

Adjacent Property Impacts

Impacts to parcels neighboring the Lot P parcel include the following:

- An existing 17ft-6in wide alley along the east side of Lot P, used for vehicular and pedestrian access for the existing commercial businesses in Lots 97, 79, 80, 81, 82, and 83, would be abutted by the proposed parking garage. Access to this alley would need to be maintained both during and after the construction of a parking garage.
- Lot 85 has an existing three level commercial office building adjacent to Lot P with door openings and unprotected upper level windows on the exterior wall plane along with a trash enclosure at the ground level.
- Openings on all three levels of the structure on Lot 85 that do not front the alley will potentially have their natural light limited and views obstructed by a solid, fire rated wall.
- Lot 86 has unprotected story openings on the upper two levels that could potentially have their natural light limited and view obstructed by a solid, fire rated wall.
- Lot 86 also has a fourth level patio deck on the north side facing Lot P. This patio will potentially have its natural light and ventilation limited and views obstructed by a solid fire wall.

Site Utility Impacts

There is an active gas line running north-south through the center of Lot P. Lot P contains three light poles and active street light electric lines. Active high voltage electric lines run through the northwest and southeast corners of the lot. Lot P is enclosed by active fiber optic and high voltage electric lines on the north and west sides, and fiber optic, electric, gas, water, and sewer lines on the south side. The construction of a parking garage on Lot P would require the removal of gas lines, and could potentially require the removal of high voltage and fiber optic lines depending on building setbacks. See Exhibit P.U.1 for additional information.

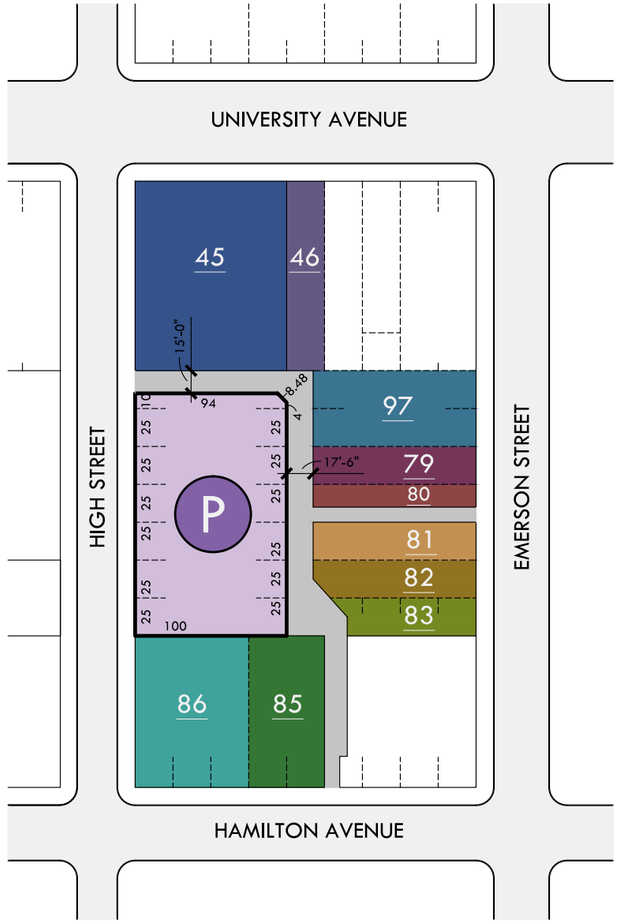
Net Space Gain

Lot P currently has 51 parking spaces. Based on conceptual layouts prepared for this lot, a five-story garage would have a capacity of 140 spaces, yielding a net space gain of 89 spaces. See Exhibit PA.1 for an overview of this conceptual layout as well as a level by level breakdown of the space count within the garage. If three additional levels of subterranean parking were to be provided as part of a garage at this location, with 27-28 parking spaces per subterranean level, 83 additional spaces could be realized for a possible net gain of 170 spaces. If further parking were to be required at this location, a parking attendant/valet program could be applied to this garage to provide an additional 9-11 parked vehicles per level, excluding the ground level, to realize a possible net gain of 182 spaces with the five-story garage. With a parking attendant/valet program and three additional subterranean levels, the possible maximum net parking gain would be 245 spaces.

Cost per Space

The rough order of magnitude (ROM) cost for a five-story parking garage on Lot P is estimated at $5.4 million.

EXISTING CONDITIONS



SITE KEY PLAN

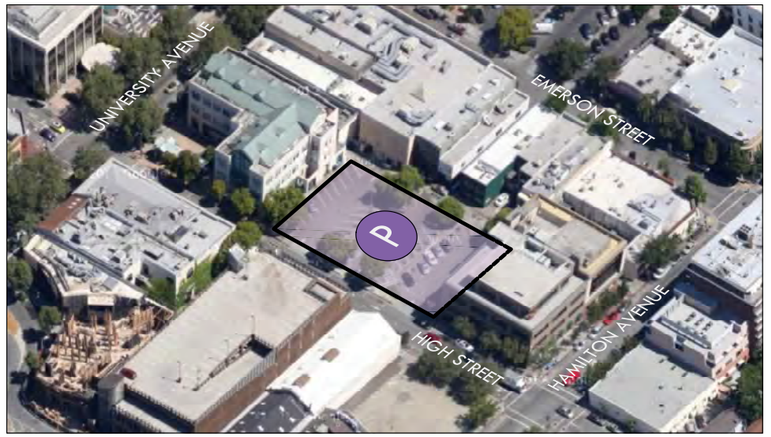
LOT G AREA / 15,982 SQ. FT.

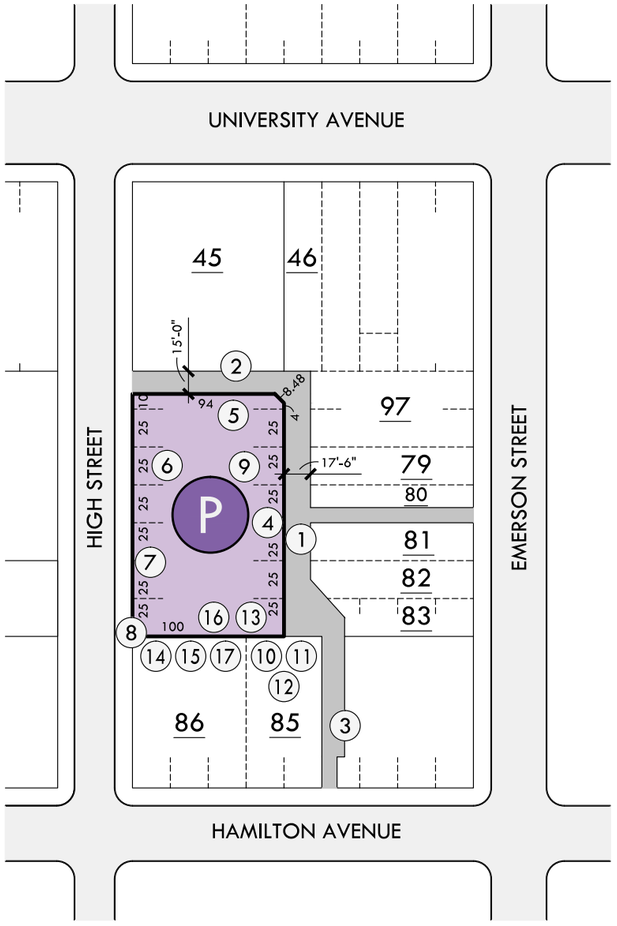
PARCEL ZONING / PF

ADJACENT PARCEL ZONING / CD-C (GF), (P) & PC-4612

- PF ZONE HAS A HEIGHT LIMIT OF 50' WITH NO SETBACKS [FRONT, REAR OR SIDE] REQUIRED NEXT TO THE ADJACENT CD-C & PC [NON-RESIDENTIAL] ZONES
- THE "FAR" RESTRICTIONS ARE NOT APPLICABLE FOR THIS PROJECT

	BUSINESS NAME	LOT USE
LOT P	EXISTING SURFACE PARKING LOT	
LOT 45	AMBER DHARA	RESTAURANT
	PALANTIR TECHNOLOGIES	OFFICE
	LIVEGREENE	RETAIL
	BLACK DIAMOND SPORTS	SPORTING GOODS
	SELIX FORMAL WEAR	CLOTHING
LOT 46	SPROUT CAFE	RESTAURANT
LOT 79	JUNGLE DIGITAL IMAGING	PRINTING
	MICHAEL PATRICK PARTNERS, INC.	OFFICE
	SHALON VENTURES	OFFICE
LOT 80	MAC'S SMOKE SHOP, INC.	RETAIL
LOT 81	BELL'S COLLEGE BOOKSTORE	BOOK STORE
LOT 82	KIM'S NAIL CARE	NAIL SALON
LOT 83	GRAVITY BISTRO	RESTAURANT
LOT 85	LYFE KITCHEN	RESTAURANT
LOT 86	VIVO VENTURES, LLC.	OFFICE
	NIKKEI	OFFICE
	FIRELAKE CAPITAL MANAGEMENT, LLC.	OFFICE
LOT 97	180 UNIVERSITY AVENUE	VACANT OFFICE





SITE KEY PLAN

SITE SPECIFIC CONSTRAINTS

LOT P

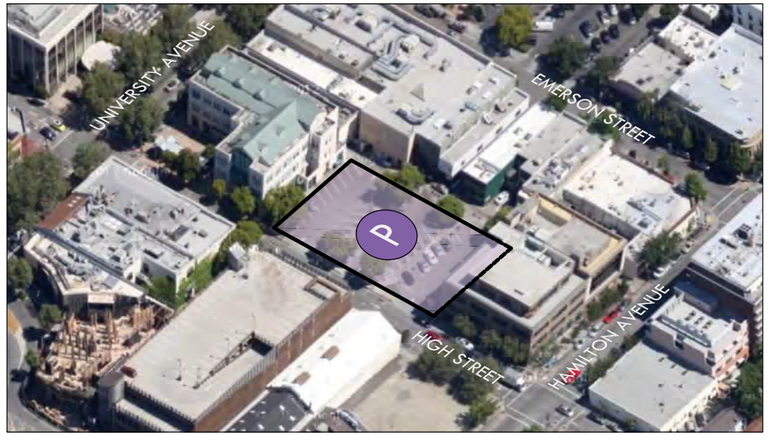
1. Maintain existing 17'-6" wide alley at east side of site for vehicular and pedestrian access for the existing commercial businesses in Lots 97, 79, 80, 81, 82, and 83. This alley appears to be used for loading activities for the businesses as well.
2. On the County Assessors Map there appears to be a 15' wide alley on the north end of the existing Lot P. This alley looks to have been absorbed into the surface parking lot with the parking aisle at the north acting as access to the alley that exists and is maintained at the eastern edge of the lot. In order for the existing building on Lot 45 to maintain access to its fire department connection, service and trash area and to maintain unprotected openings along the southern wall this alley will need to be maintained as part of any proposed garage for this lot.
3. Per the Assessors Parcel Maps the alley leading to Hamilton Avenue appears to be severely restricted in width (5') at the street right of way. Although it appears to be wide enough to accommodate a car this is most likely a product of an easement not a transfer of property to the City. If the existing Lot P was used for access to and from the alley on the east side of the lot then there is potential for restricted access to the 17'-6" alley and to those existing businesses if a garage is built on Lot P. The alley from Hamilton Avenue is currently one way northerly from Hamilton Avenue to Lot P and probably will not accommodate truck traffic because of its narrow width.
4. Proposed garage will need to be set back 2.5' from the alley on the east side to allow for unlimited/unprotected openings (10' to centerline alley). If the proposed garage is located on the property line then openings are limited to 10% per story for unprotected openings in non-sprinklered buildings and 25% per story for unprotected openings in sprinklered buildings.
5. Proposed garage will need to be set back 5' from the alley on the north side to allow for unlimited/unprotected openings (10' to centerline alley). If the proposed garage is located on the property line then openings are limited to 10% per story for unprotected openings in non-sprinklered buildings and 25% per story for unprotected openings in sprinklered buildings.
6. There are trees on the west and east sides of the lot as well as the southwest and southeast corners of the lot. These will need to be removed/relocated to allow for a proposed parking garage as they will not be able to be maintained in place.
7. Any proposed garage will need to be set back from the southern property line to allow for unprotected openings required for natural ventilation. To realistically achieve any functional efficiency the proposed garage could only be located the minimum 3' from the property line to allow for any openings then the proposed garage would need to be sprinklered and a maximum of 15% per story for unprotected openings would be allowed. This constraint effectively reduces the natural ventilation of the garage and if not sufficient in length and area to qualify as an "open parking garage" then the proposed garage might need to be considered an "enclosed garage" and mechanically ventilated.
8. There is an existing electrical transformer at the southwest corner of Lot P. Will this transformer need to remain in place? If so, it will affect the design of the proposed parking garage.
9. The existing surface parking lot appears to be used for unloading and staging of deliveries for nearby businesses. The construction of a new parking garage will impact this activity.

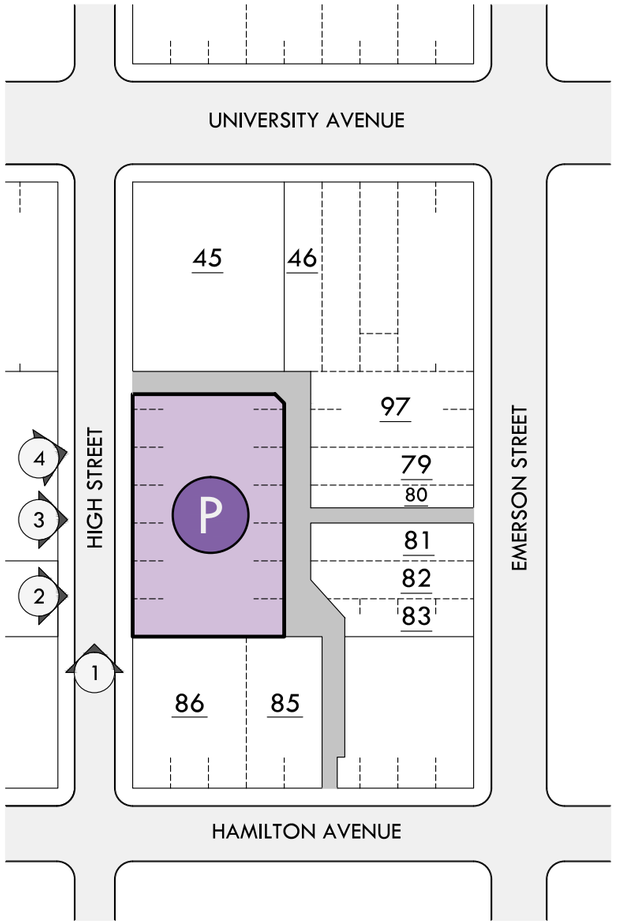
LOT 85

10. Need to establish where the property line is along the existing three level commercial/office building adjacent to Lot P. Building appears to be set back from the property line since at the northeast corner of the building there are door openings and unprotected upper level windows on the exterior wall plane along with a trash enclosure at the ground level. However these may front the 17'-6" wide alley and be allowed as the portion of the exterior wall immediately adjacent to Lot P does not have any openings in the wall from grade to parapet.
11. Where are the foundations for this building (do they extend beyond the face of building) and how low are they? Is there a basement for this building?
12. Is the door on the wall facing Lot P used for exiting? If so then an exit path to the public right of way (High Street) might need to be maintained if using the alley for that purpose does not suffice.
13. Openings on all three levels that do not actually front the alley will potentially have natural light limited and will look out onto a solid fire wall if the proposed garage wall is on the southern property line.

LOT 86

14. Need to establish where the property line is along the existing four story commercial/office building adjacent to Lot P. Building appears to be set back from the property line since there are unprotected upper level windows on the exterior wall plane.
15. Where are the foundations for this building (do they extend beyond the face of building) and how low are they? Is there a basement for this building?
16. There are unprotected story openings on the upper two levels that will potentially have natural light limited and look out into a solid fire wall if the proposed garage wall is on the property line. Also need to check to see if these openings would still be allowed based on distance from property line if the surface lot was considered a yard.
17. The fourth level of the existing building has a patio deck on the north side facing Lot P. This patio will potentially have natural light and ventilation limited and will look out onto a solid fire wall if the proposed garage wall is on the southern property line.





SITE KEY PLAN



PHOTO 1 View down High Street looking north.



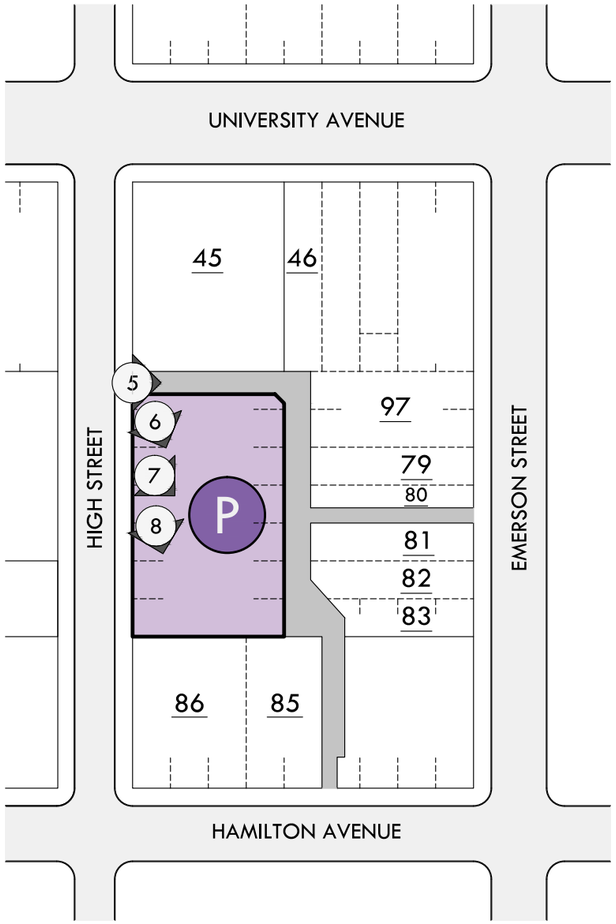
PHOTO 2 View from High Street looking east on southern end of Lot.



PHOTO 3 View from High Street looking east on middle section of Lot.



PHOTO 4 View from High Street looking east on northern end of Lot.



SITE KEY PLAN



PHOTO 5

View from High Street looking east on northern end of Lot.



PHOTO 6

View of Lot looking southeasterly.



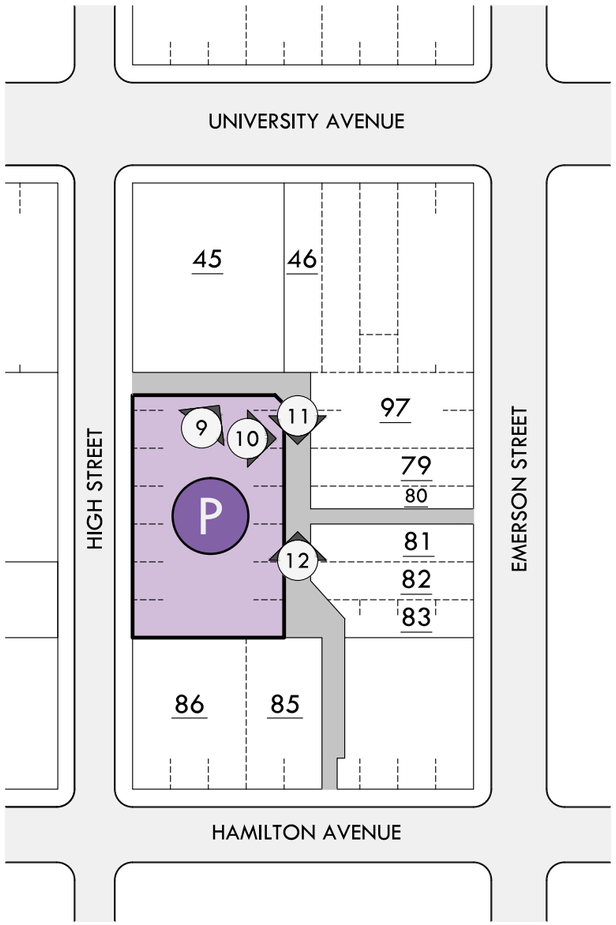
PHOTO 7

View of Lot looking southeasterly.



PHOTO 8

View of Lot looking southeasterly.



SITE KEY PLAN



PHOTO 9

View of northeast corner of Lot.

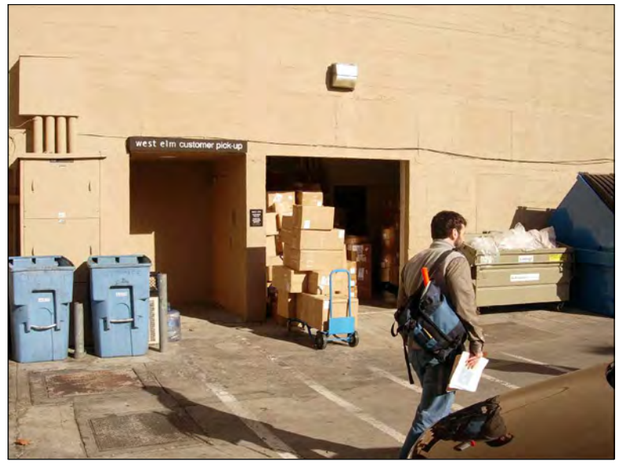


PHOTO 10

View of Lot 97 loading areas in existing alley.



PHOTO 11

View of eastern alley looking south.

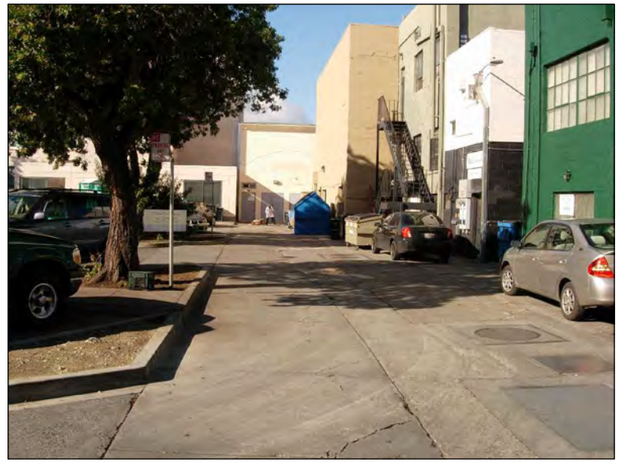
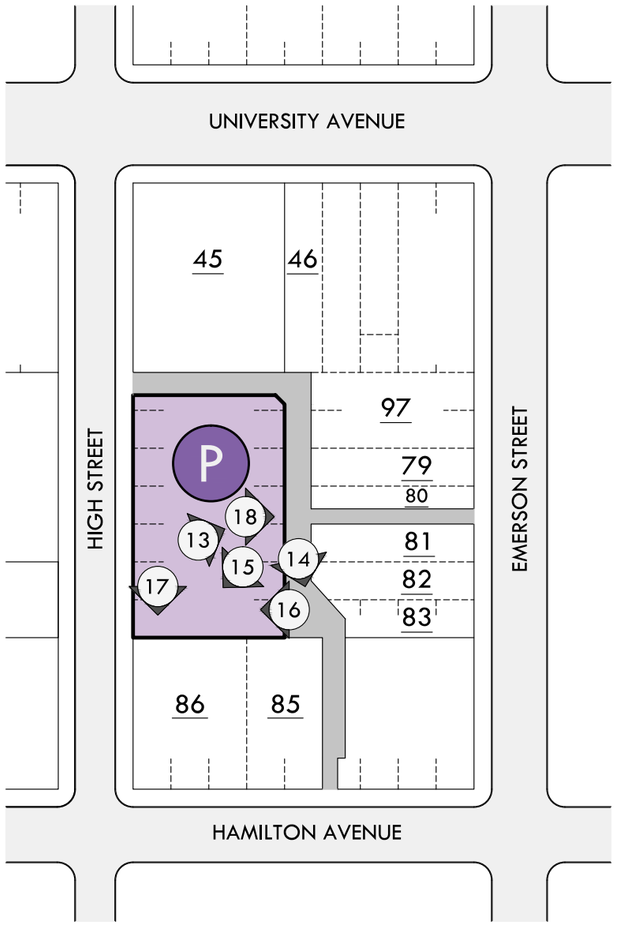


PHOTO 12

View of eastern alley looking north.



SITE KEY PLAN



PHOTO 13

View of Lot across eastern alley looking northeasterly.



PHOTO 14

View of eastern alley looking at southeast corner.



PHOTO 15

View of Lot 85 looking southwesterly.

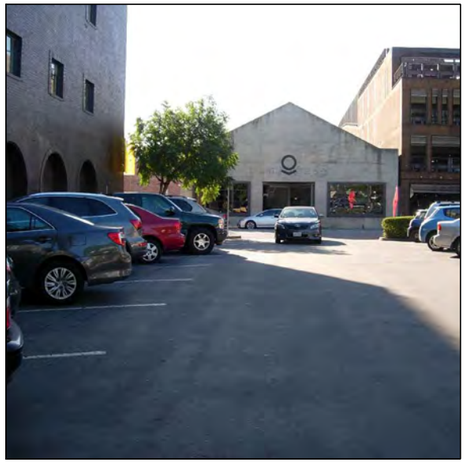


PHOTO 16

View towards High Street looking west from southern end of Lot.



PHOTO 17

View of electrical transformer in southwest corner of Lot D.



PHOTO 18

View of alley connecting to Emerson Street.

Site Constructability Constraints

Lot U (Urban/University)



Lot U is located along Urban Lane between University Circle and the Palo Alto Medical Foundation (PAMF). The lot runs adjacent to the Caltrain tracks to the north and the Palo Alto Sheraton property to the south. The Lot is 63,598ft^2 in area and has 164 existing parking spaces. There is a single two-way drive aisle running the extents of the lot with angled parking on each side of the aisle. Lot U provides park-and-ride parking for Caltrain users. The lot is operated and maintained by Caltrain through a long-term easement from Stanford University.

Access Points

There is a two-way access point at University Circle and Urban Lane.

Construction and Staging Impacts

During construction, the Caltrain park-and-ride lot would be temporarily unavailable. Lot U currently provides connection between PAMF and University Avenue that would be temporarily unavailable during construction, thus increasing demand to the El Camino Real & University Avenue interchange. Stanford University currently uses Lot U as layover parking for Marguerite Shuttles.

Adjacent Land Use

Facilities located on parcels adjacent to Lot U include: The Palo Alto Sheraton, Caltrain Station and tracks, and Palo Alto Medical Foundation (PAMF)

Adjacent Property Impacts

Impacts to parcels neighboring the Lot P parcel include the following:

- The proposed garage will need to be set back from the western property line to allow for unprotected openings that require natural ventilation. This would constrain the parking garage in length and width, reducing the natural ventilation of the garage. Without the requisite ventilation, the garage cannot qualify as an “open parking garage” and may need to be considered an “enclosed garage” and thus would require mechanical ventilation.
- The north and south ends will need to be at least 10ft from the property lines to allow for unprotected openings since neither property on these ends appear to be part of a public right of way.
- The west and south sides of Lot U have utility poles and overhead utility lines that located on or near the property. If these utilities remain in place, the possible area for a potential parking garage will be reduced. Relocating these utilities should be considered in an effort to maximize potential garage space.

Site Utility Impacts

Lot U contains active gas, water, and sewer lines running north-south in addition to active storm drain and overhead electric lines running east-west along the southern border. In addition, there are active water, gas, sewer, and storm drain lines as well as active overhead fiber optic lines running east-west immediately south of Lot U. A number of utilities, including the overhead fiber optic and electric lines would need to be relocated if a parking garage were to be constructed on this lot. See Figure U.U.1 for additional information.

Net Space Gain

Lot U currently has 164 existing parking spaces. The construction of a five-story parking garage would yield a total of 478 parking spaces for a net gain of 314 spaces. This proposed conceptual garage design includes 15 bus spaces on the ground floor to be utilized for transit loading, unloading, and layover. The 478 parking spaces would be located on Levels P-2 through P-5. Subterranean parking was not considered at this site due to concerns related to excessive loading of the structural elements from the heavy transit vehicle uses on the ground floor.

Cost per Space

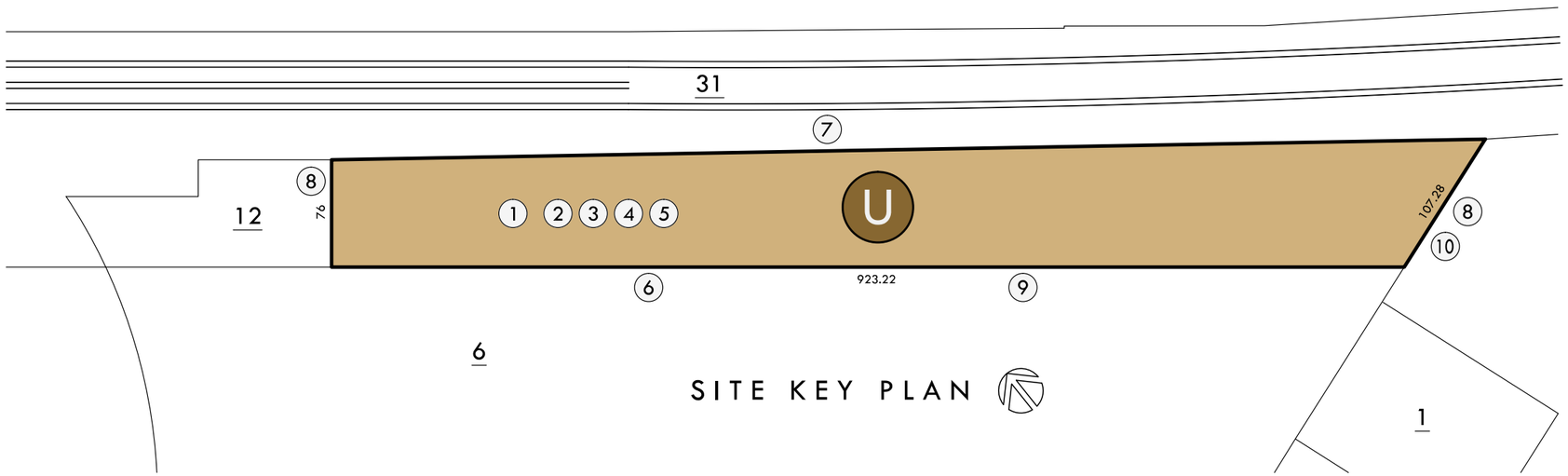
The rough order of magnitude (ROM) cost estimated for constructing a five-story parking garage on the Urban Lane site is $19.1 Million.

LOT U AREA / 1.46 ACRES

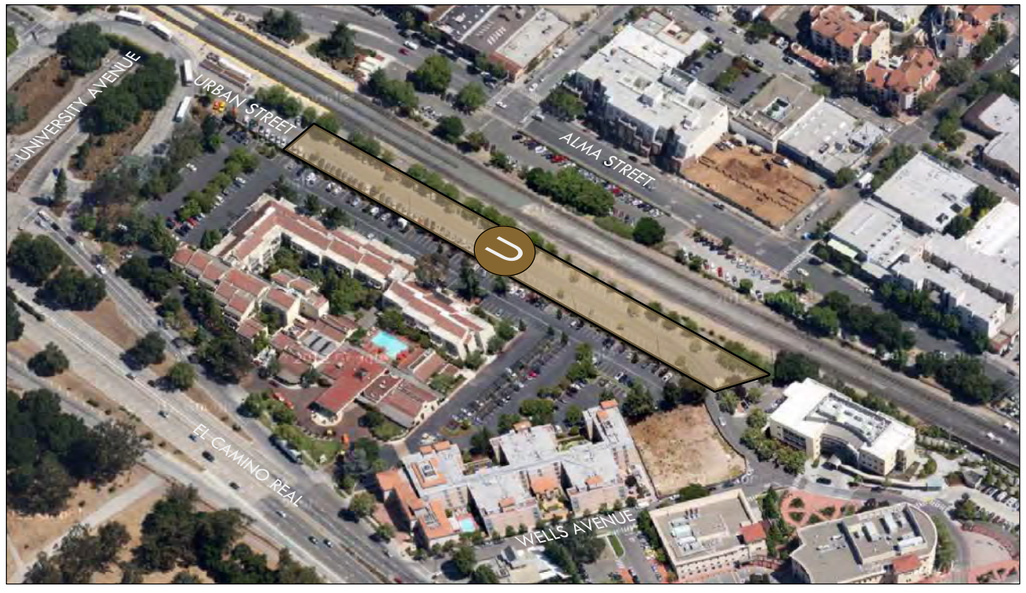
PARCEL ZONING / PF

ADJACENT PARCEL ZONING / PC-4812

- PF ZONE HAS A HEIGHT LIMIT OF 50' WITH NO SETBACKS [FRONT, REAR OR SIDE] REQUIRED NEXT TO THE ADJACENT CD-C & PC [NON-RESIDENTIAL] ZONES
- THE "FAR" RESTRICTIONS ARE NOT APPLICABLE FOR THIS PROJECT



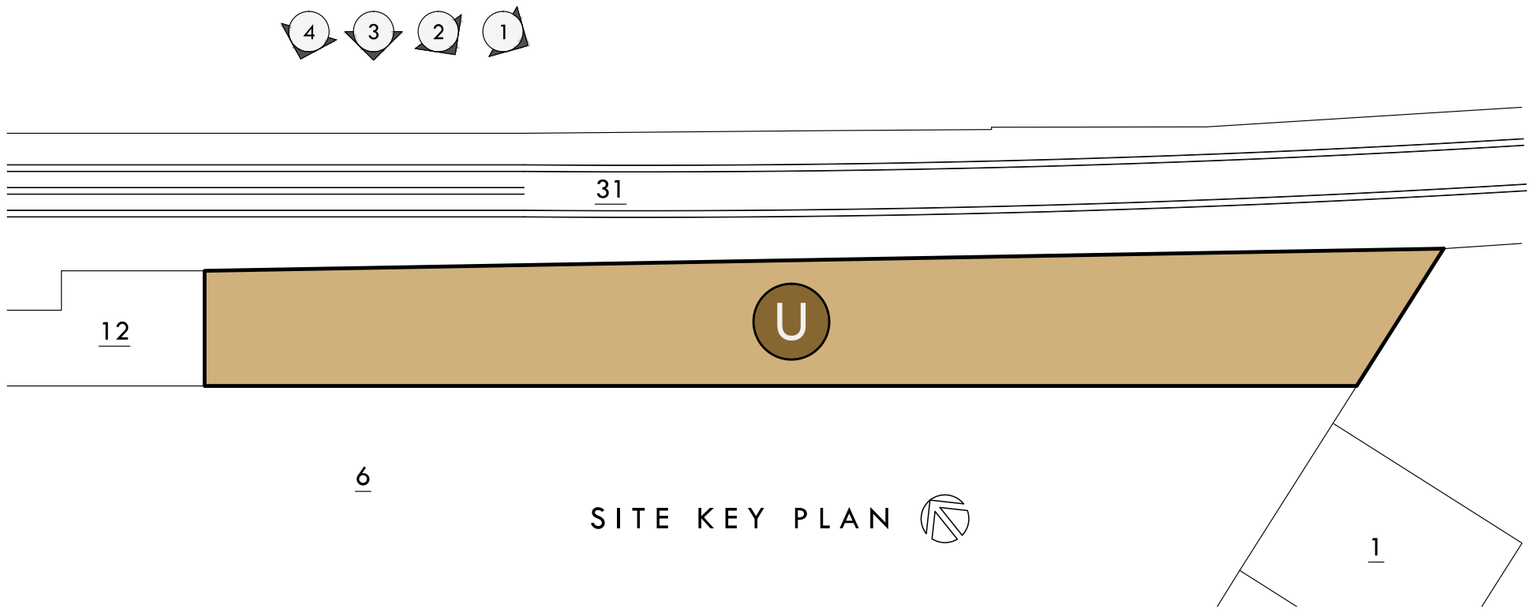
SITE KEY PLAN



LOT U

SITE SPECIFIC CONSTRAINTS

1. Is there a need to maintain normal vehicular traffic through lower level of garage. If so does this need to be designed per City street standards?
2. If considered meeting City street standards then clearance for bus and normal road traffic (Caltrans maximum vehicle height limit = 14'-0 clearance) for through traffic requires a high first floor. Does the project need to be designed for a higher clearance? (i.e. special fire department apparatus or trash trucks)
3. To not impede through traffic flow on the lower level then to ramp from the grade to the first elevated level will require straight run express ramping as there is not enough room on lot to provide helical ramp structure(s)
4. The long narrow lot is not conducive to efficient parking structure layout. At most one long double loaded parking module with a two way traffic flow drive aisle (90 degree or opposing angle parking) is all that can be expected. Recirculation also cannot be achieved with a single double loaded parking module which will create dead-end parking requiring turn-around spaces/areas on each end of the garage.
5. There is inadequate area for internal ramping from floor to floor so either exterior straight driving only ramps or helical ramps located on the ends can be utilized.
6. Any proposed garage will need to be set back from the western property line to allow for unprotected openings required for natural ventilation. To realistically achieve any functional efficiency the proposed garage could only be located the minimum 3' from the property line to allow for any openings then the proposed garage would need to be sprinklered and a maximum of 15% per story for unprotected openings would be allowed. This constraint effectively reduces the natural ventilation of the garage and if not sufficient in length and area to qualify as an “open parking garage” then the proposed garage might need to be considered an “enclosed garage” and mechanically ventilated.
7. The eastern side of the site is fronting a rail line. Is this right of way public land or a private right of way. If a private right of way it cannot be considered as a public right of way to determine the fire resistive exterior wall rating and percentages of exterior wall openings. Proposed garage will need to be set back 10' from the right of way to allow for unlimited/unprotected openings if not a public right of way. If it is considered a public right of way then the proposed garage can most likely be set on the northern property line and be allowed to be unrated exterior wall construction and unlimited unprotected openings.
8. The north and south ends of the garage need to be at least 10' from property lines to allow for unlimited/unprotected openings since neither property on these ends appear not to be part of a public right of way.
9. The west edge of the site has utility poles and overhead utility lines that appear on or near the property line. Unless these utilities can be relocated, minimum required distances would need to be established between these utility poles and overhead lines and the proposed parking garage. If the utilities were to remain in place the buildable structure width to the east would be reduced.
10. The south end of the site has utility poles and overhead utility lines crossing the Lot to the east side. Unless these utilities can be relocated, minimum required distances would need to be established between these utility poles and overhead lines and the proposed parking garage. If the utilities were to remain in place the buildable structure area along the south end of the site would be reduced.



SITE KEY PLAN



PHOTO 1

Looking across rail line southwesterly.



PHOTO 2

Looking across rail line to the west.



PHOTO 3

Looking across rail line to the west.



PHOTO 4

Looking across rail line northwesterly.

City of Palo Alto
PALO ALTO, CALIFORNIA

Urban Lane Lot U

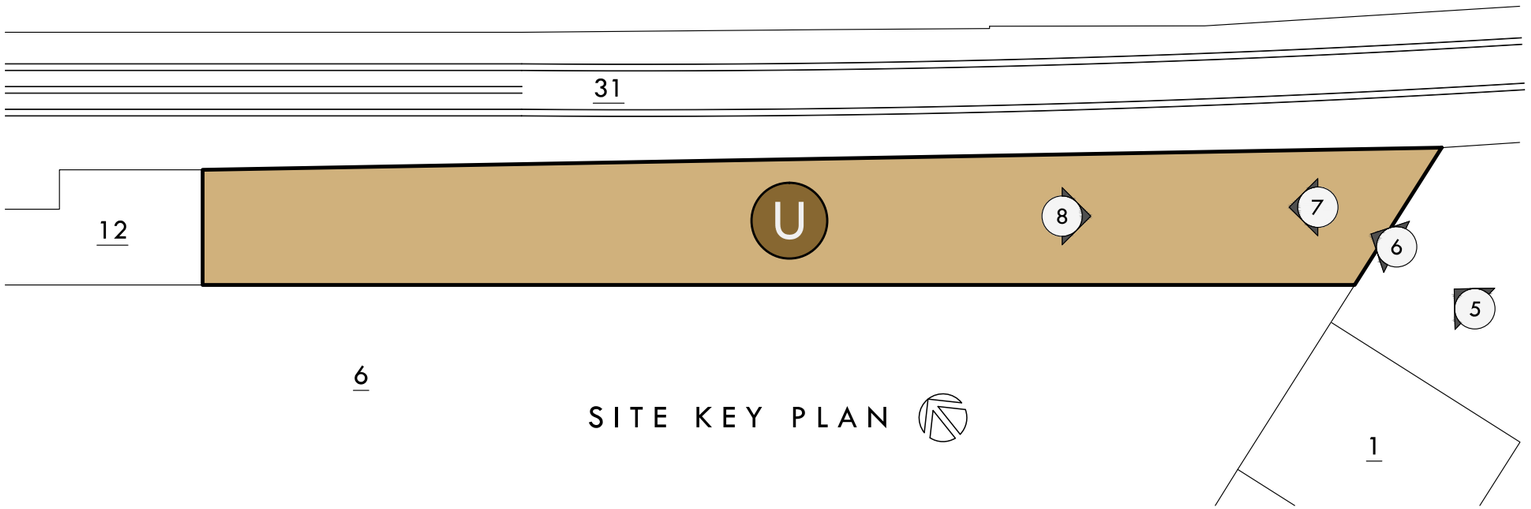
SITE KEY PLAN and PHOTOS

City of Palo Alto | SANDIS | HNA/PACIFIC

Feb. 7, 2013

1" = 100'-0"

U.2



SITE KEY PLAN



PHOTO 5

Looking northeasterly at the south end of the Lot.

PHOTO 6

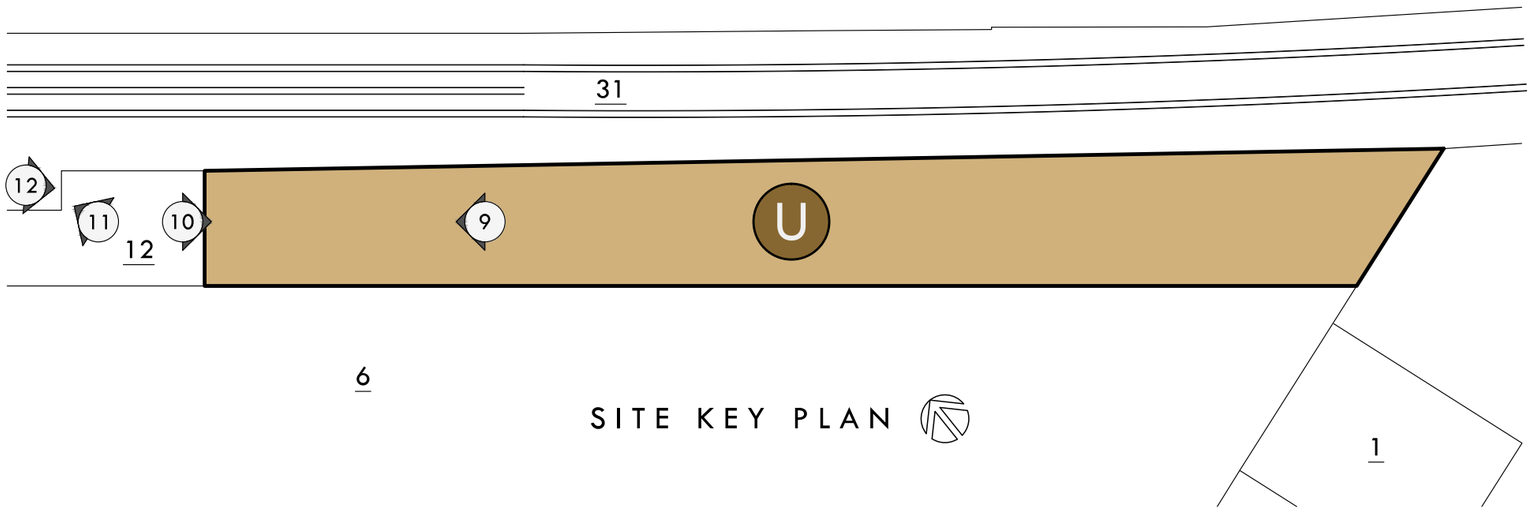
Looking northeasterly at the south end of the Lot.

PHOTO 7

Looking north from the south end of the Lot.

PHOTO 8

Looking south from the middle of the Lot.



SITE KEY PLAN



PHOTO 9

Looking north from the middle of the Lot.

PHOTO 10

Looking south from the north end of the Lot.

PHOTO 11

Looking northeasterly from north of the Lot.

PHOTO 12

Looking south from north of the Lot.

City of Palo Alto
PALO ALTO, CALIFORNIA

Urban Lane Lot U

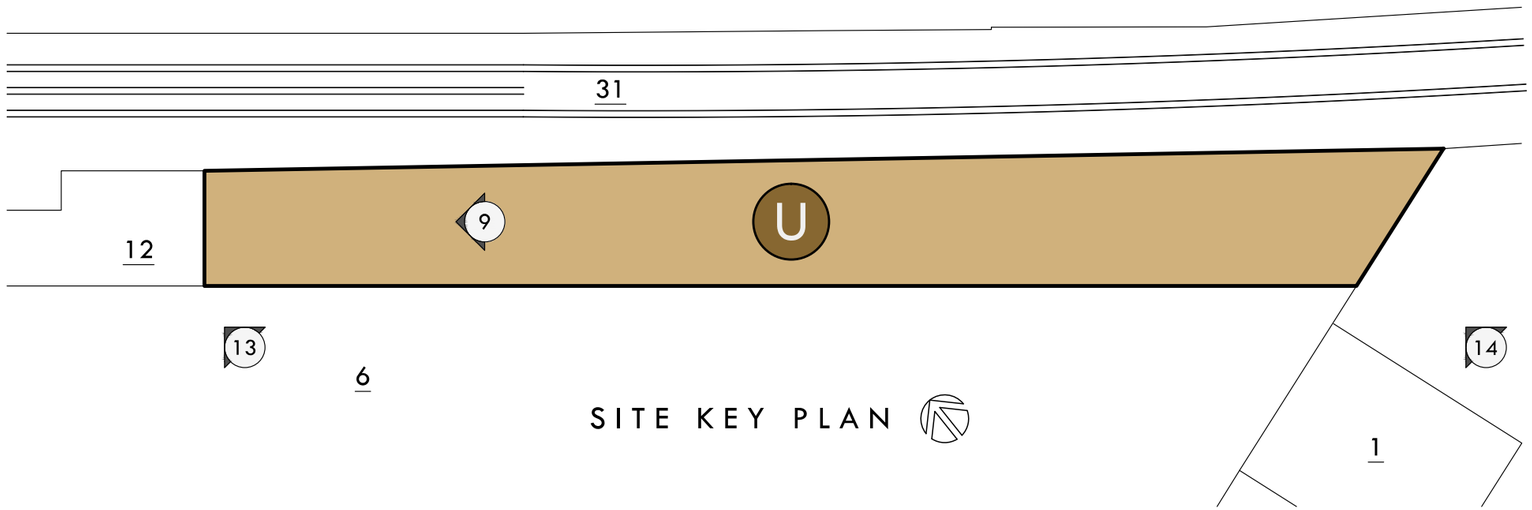
SITE KEY PLAN and PHOTOS

City of Palo Alto | SANDIS | HNA/PACIFIC

Feb. 7, 2013

1" = 100'-0"

U.4



SITE KEY PLAN

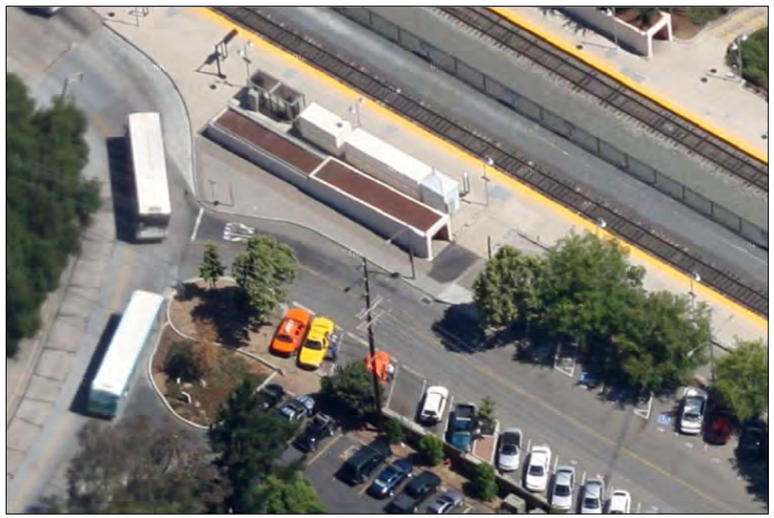


PHOTO 13

Aerial photo looking at north end of lot and overhead utility lines along property line.



PHOTO 14

Aerial photo looking at south end of lot and overhead utility lines crossing property.

Conceptual Garage Designs

This section of the report will provide an overview of the conceptual parking garage designs prepared for the five study sites (Lot D, Lot E, Lot G, Combined Lot E/G, Lot O, Lot P, and Lot U). The site constructability constraints described above were taken into consideration during the development of the conceptual designs described below.

Lot D

The conceptual parking garage on Lot D will be 119,107ft^2, consist of five levels, and provide 300 parking spaces (for a net gain of 214 spaces). Level P-1 will provide 14 standard spaces, seven ADA spaces, 15 electric vehicle spaces, and nine LEFE (Low Emission Fuel Efficient) vehicle spaces. There are also bicycle lockers, bicycle racks, a storage room, and an electrical room located on P-1. Levels P-2, P-3, and P-4 have identical floor plans and each provide 63 standard perpendicular parking spaces. Level P-5 (top level) has a similar floor plan and will provide an additional three spaces, for a total of 66 spaces, due to its lack of an up-ramp. Vehicular access points (ingress and egress) for the garage will be along Hamilton and Waverley.

A subterranean option for Lot D was also explored during this study. The basement, B-1, has a similar floor plan as the other levels and will provide an additional 61 parking spaces, bringing the net gain of 274 spaces. The basement level will include a storage room, an electrical room, and an intake and exhaust shaft. Public restroom facilities inside the parking garage will be located at the corner of Hamilton Avenue and Waverley Street. Stairs and elevators will be located within the garage at the corner of Hamilton/Waverley and the northern end of the garage.

The site constraints for Lot D, identified above, have been addressed in the conceptual design and are described below.

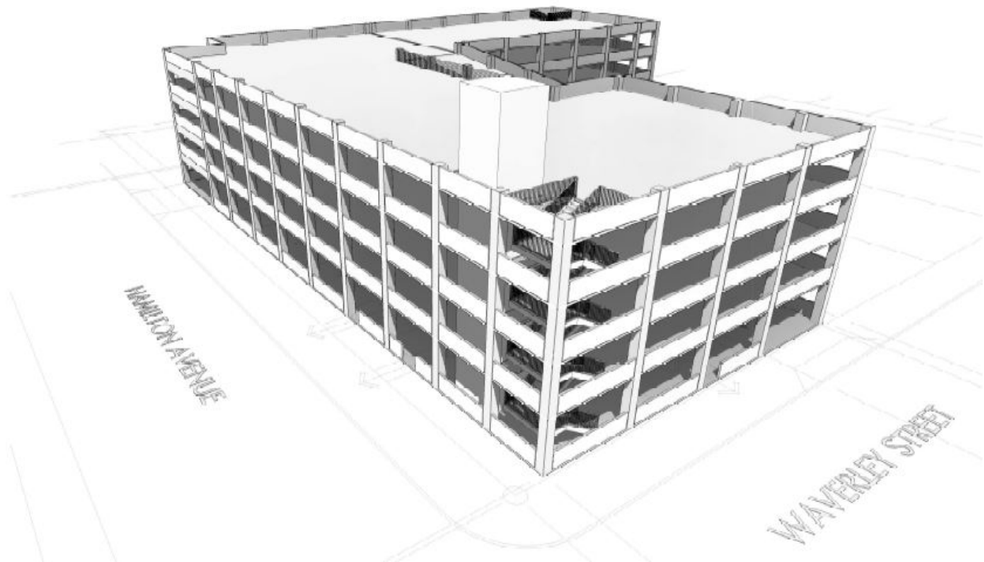
Existing vehicular and pedestrian access to the alley at the north end of the site will be maintained. To achieve this, the garage will be set back 2ft-6in from the alley (or 10ft from centerline of the alley) so as to allow the unprotected openings on the existing adjacent structures to retain their natural light and ventilation. This setback of the garage will increase the alley width to 17ft-6in along the length of the garage wall.

An existing mature pine tree at the northwest corner of Lot D and Lot 85 will need to be removed to allow for the construction of a proposed parking garage. Existing trees on Lot D along Hamilton Avenue will also need to be removed.

The proposed garage will need to be set back 2ft from the property line along Lot 102 (AT&T building) to allow for sufficient clearance between existing adjacent building foundations that might encroach into Lot D and thus allow for the proposed garage to have concentric foundations. The setback would also provide limited construction access between the existing and proposed buildings. No openings (unprotected or protected) are allowed due to this separation distance.

The garage will be set back 16ft from Lots 84 and 85 to allow for the creation of a service alley, which will double as a means of egress, connecting the existing businesses to the public right of way. The service alley will provide the 10ft of separation distance from the face of the parking garage such that the garage will be able to meet the required 10-25% of unprotected openings per story for the garage to remain naturally ventilated.

A 5ft setback of the proposed garage from Lot 85 will allow for an egress path to the public right of way from the rear of Lots 84 and 85, create enough space for the required 10-25% of unprotected openings in the structure of the garage as discussed above, allow natural light into the existing building, and should provide sufficient space for the garage to clear adjacent building foundations that might encroach into Lot D.





View looking west.



View looking southwest.



View looking north.



View looking south.

PROGRESS PRINT

City of Palo Alto
PALO ALTO, CALIFORNIA

Hamilton/Waverley Lot D

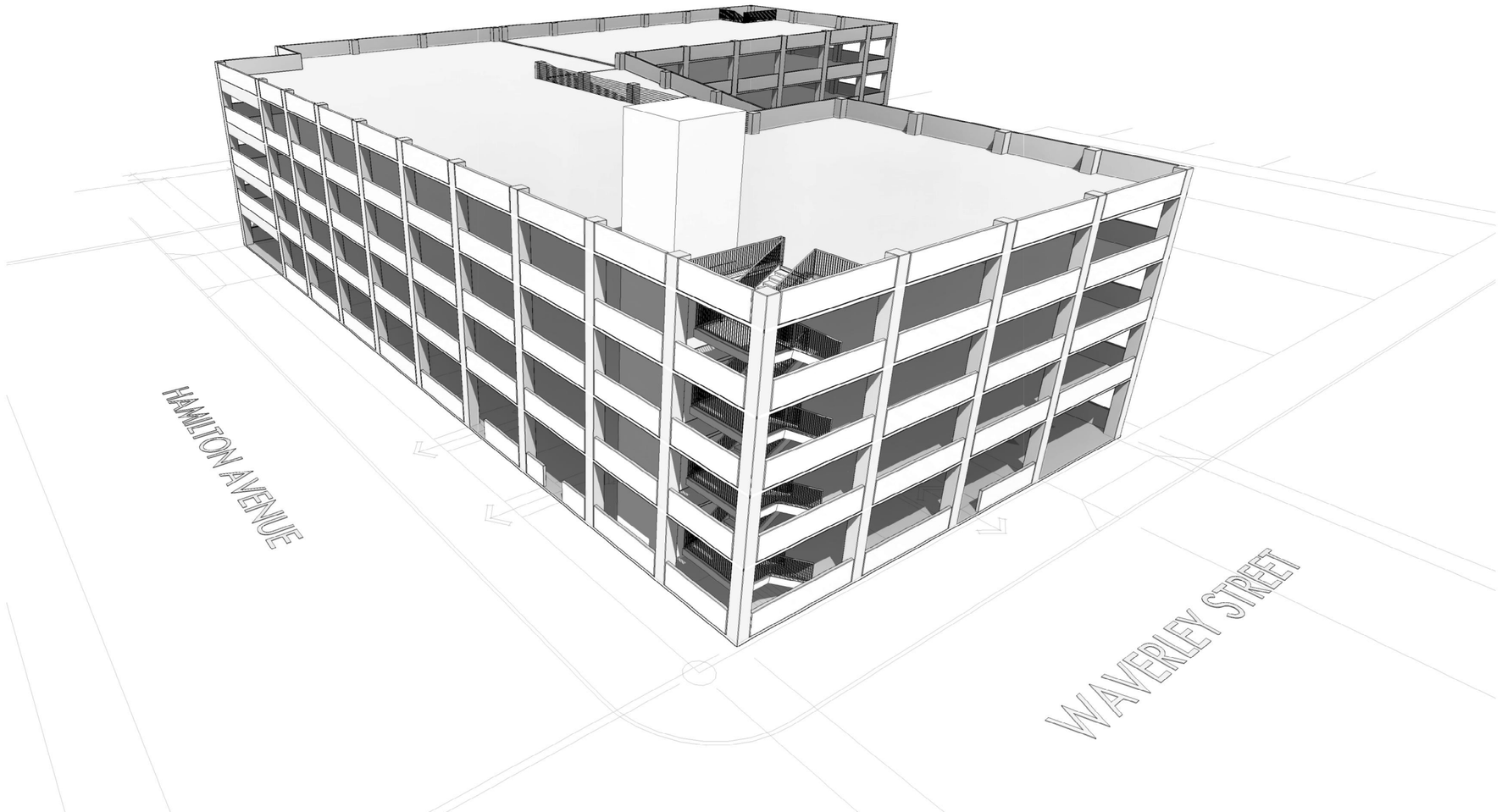
CONTEXTUAL PARKING GARAGE PERSPECTIVES

City of Palo Alto | SANDIS | HNA/PACIFIC

April 25, 2013

No Scale

DA.0



PROGRESS PRINT

City of Palo Alto
PALO ALTO, CALIFORNIA

Hamilton/Waverley Lot D

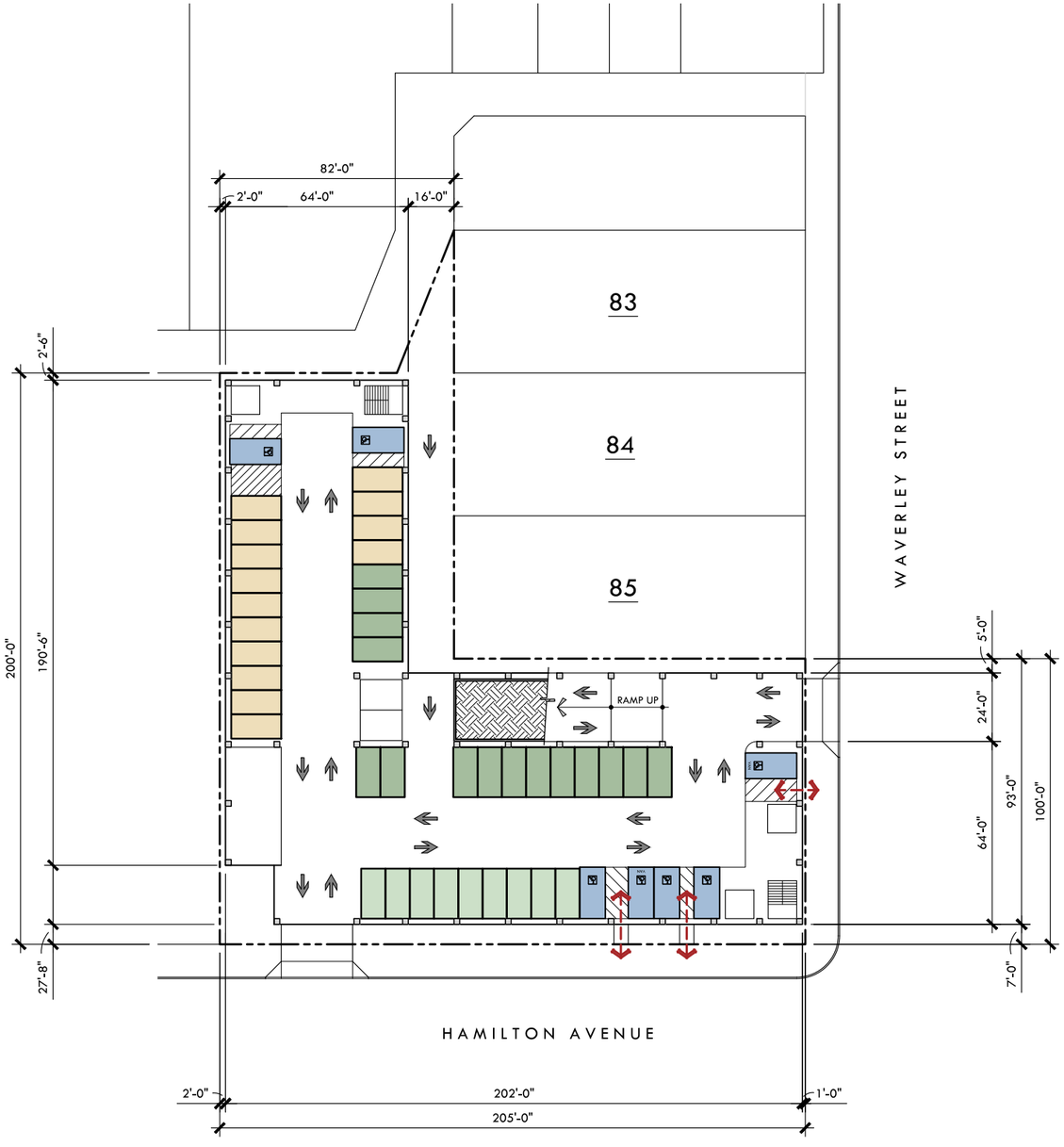
PARKING GARAGE PERSPECTIVE

City of Palo Alto | SANDIS | HNA/PACIFIC

April 25, 2013

No Scale

DA.01



PARKING GARAGE SITE PLAN

DESIGN PRECEPTS

(*as* RESPONSIVE *to* SITE CONSTRAINTS)

A. 7' wide City of Palo Alto Special Setback along Hamilton Avenue has been accommodated in the garage design.

B. Vehicular access to the garage is provided along Hamilton Avenue and Waverly Street.

C. The existing alley at north end of site is maintained for vehicular and pedestrian access to the garage.

D. Proposed garage is set back 2.5' from the alley (10' to centerline alley) to allow for unlimited unprotected openings for natural light and ventilation for the garage which also increases the alley width to 17'-6" along length of the garage wall.

E. Existing mature pine tree at northwest corner of Lot D and Lot 85 to be removed.

F. Existing trees on Lot D along Hamilton Avenue (and trees interior to Lot D) to be removed.

G. A public restroom at corner of Hamilton Avenue and Waverley Street is to be included in garage design.

H. Proposed garage is set back 2' from the property line along Lot 102 (existing AT&T building) to allow sufficient clearance any adjacent building foundations that might encroach into Lot D and will allow for the proposed garage to have concentric foundations as well as some access for construction between the existing and proposed buildings. No openings (unprotected or protected) are allowed at this separation distance.

I. Proposed garage is set back 16' from Lots 84 and 85 to allow for a service alley for the existing businesses as well as exiting egress to the public right of way. The 16' service alley will allow for the required 10' separation distance for unlimited unprotected openings for natural light and ventilation for the garage and 6' from the property line for the existing buildings separation distance that will allow for 10% to 25% (depending if the existing building is sprinklered) of unprotected openings per story on the existing buildings which should be sufficient to account for what is existing as doors and/or windows.

J. Proposed garage is set back 5' from Lot 85 to allow for an egress path to the public right of way for the rear of Lots 84 and 85 as well as to allow for 10% to 25% (depending if the garage is sprinklered) of unprotected openings per story on this wall line to allow for natural light and ventilation. This 5' setback will also allow natural light into the existing building.

K. The 5' setback should be sufficient to clear any adjacent building foundations that might encroach into Lot D.

FLOOR AREA SUMMARY (SQUARE FEET)

LEVEL P-5	22,033
LEVEL P-4	24,145
LEVEL P-3	24,145
LEVEL P-2	24,145
LEVEL P-1	24,639
TOTAL	119,107

HEIGHT OF BUILDING

TOP OF HOSTWAY (APPROXIMATE)	60'-0"
TOP OF HIGHEST SPANDREL	45'-7"
TOP OF HIGHEST FLOOR SLAB	41'-10"

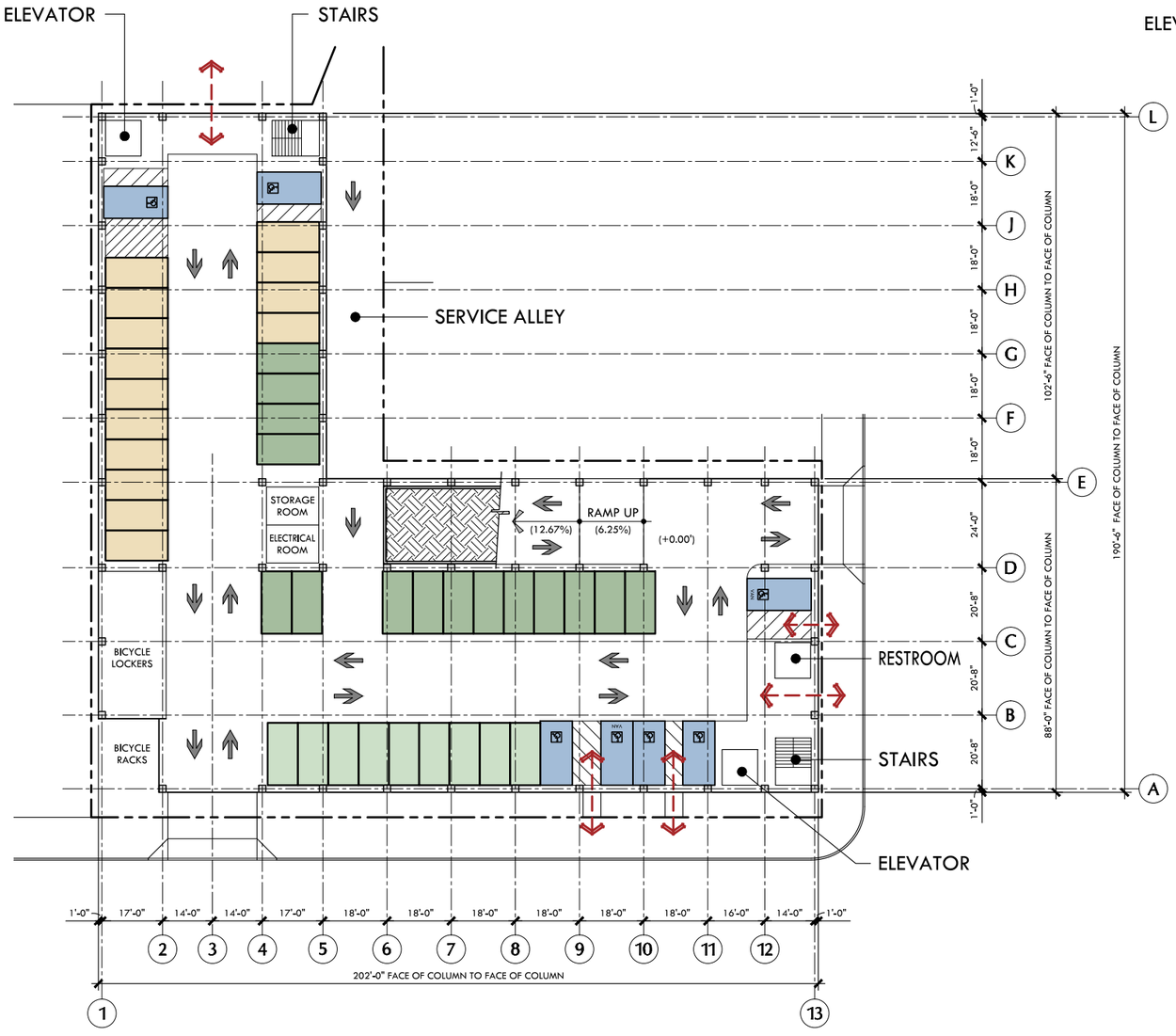
CAR COUNT SUMMARY

	STANDARD (8'-6" x 17'-6")	ACCESSIBLE (9'-0" x 18'-0")	ELECTRIC (8'-6" x 17'-6")	LEFE (8'-6" x 17'-6")	TOTAL
LEVEL P-5	66	---	---	---	66
LEVEL P-4	63	---	---	---	63
LEVEL P-3	63	---	---	---	63
LEVEL P-2	63	---	---	---	63
LEVEL P-1	14	7	15	9	45
TOTAL	269	7	15	9	300

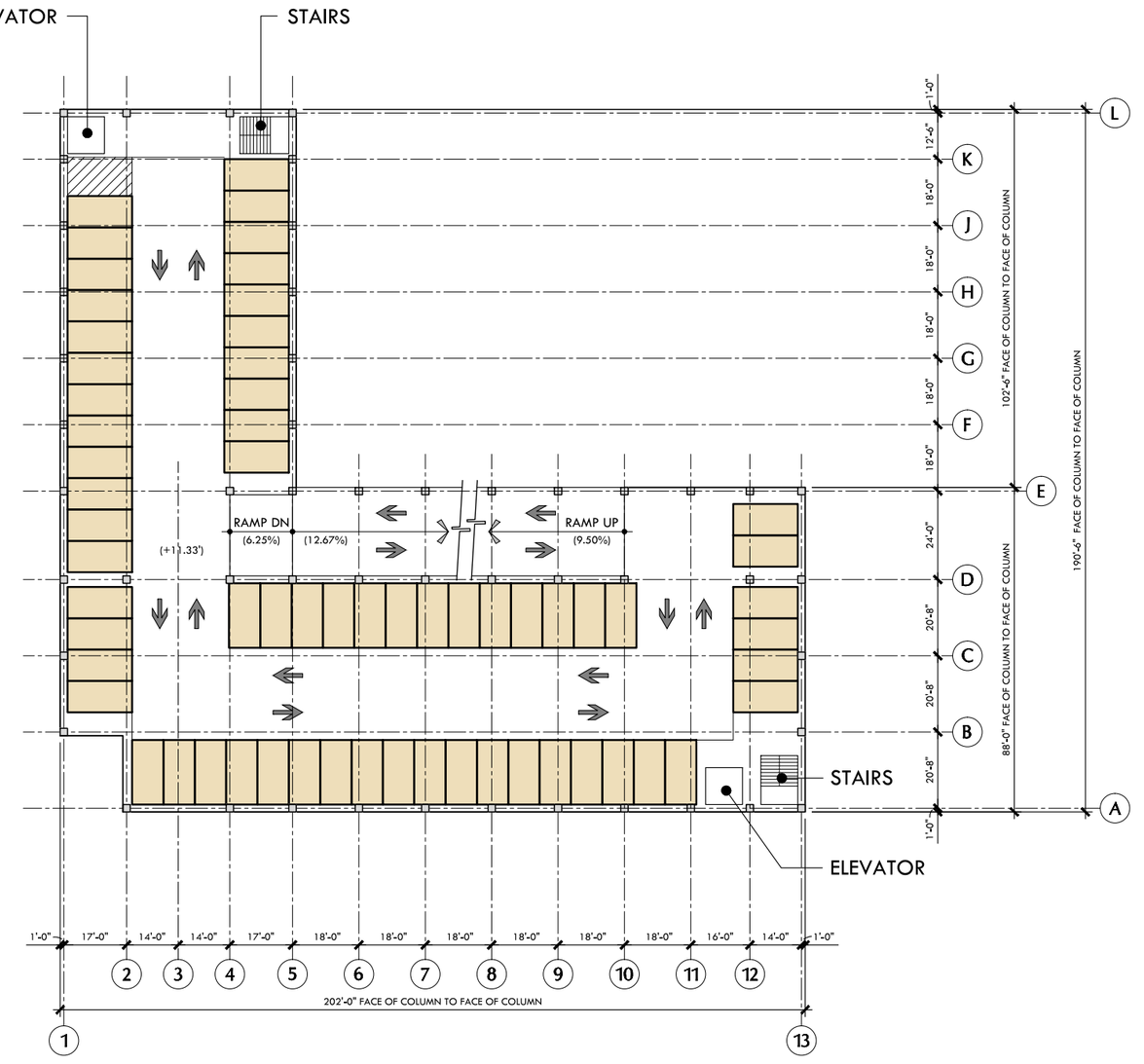
EXISTING SPACES DISPLACED 86

NET TOTAL PARKING SPACES 214

PROGRESS PRINT



LEVEL P-1 FLOOR PLAN



LEVEL P-2 FLOOR PLAN

PROGRESS PRINT

City of Palo Alto
PALO ALTO, CALIFORNIA

Hamilton/Waverley Lot D

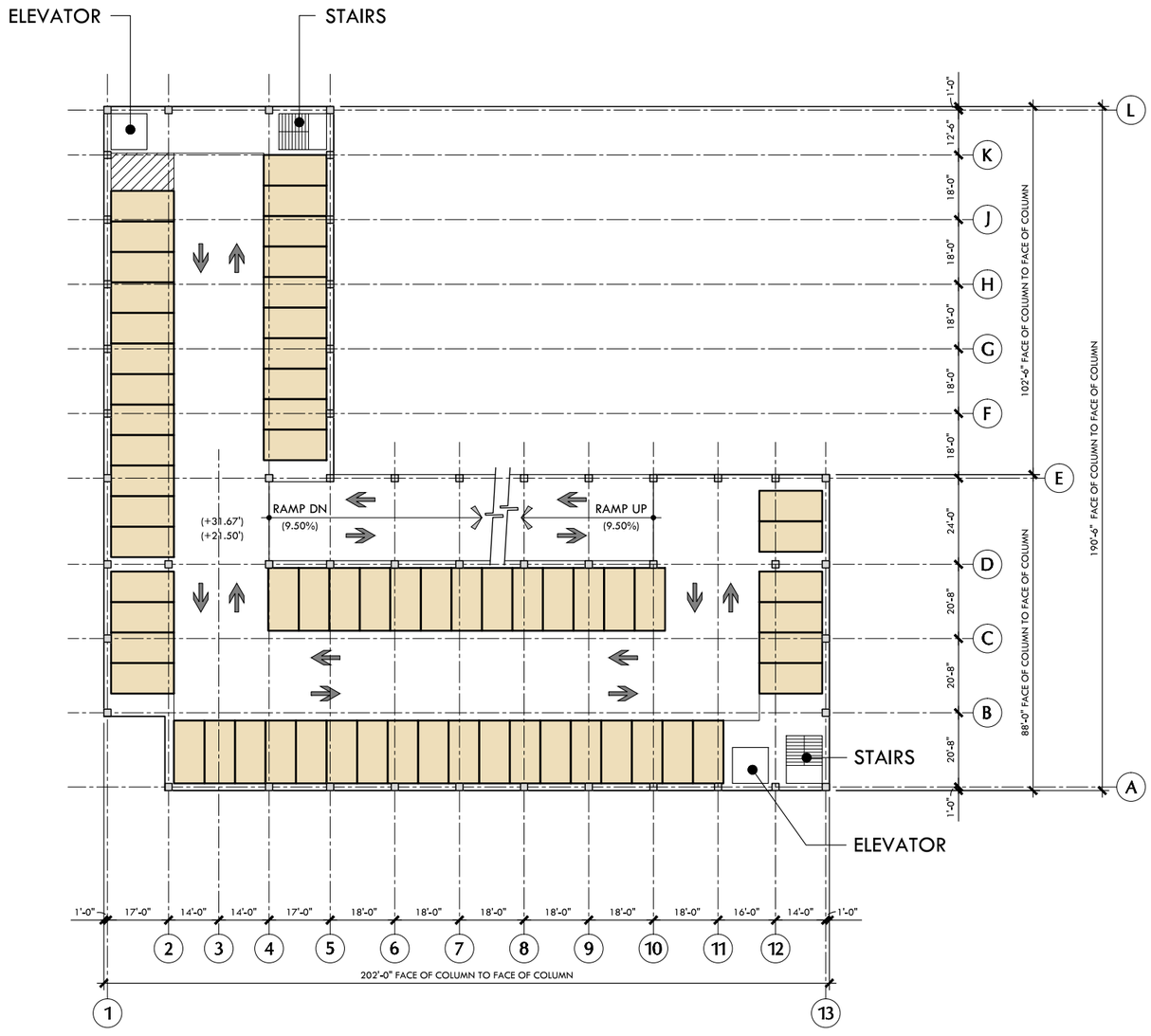
CONCEPTUAL PARKING GARAGE FLOOR PLANS

City of Palo Alto | SANDIS | HNA/PACIFIC

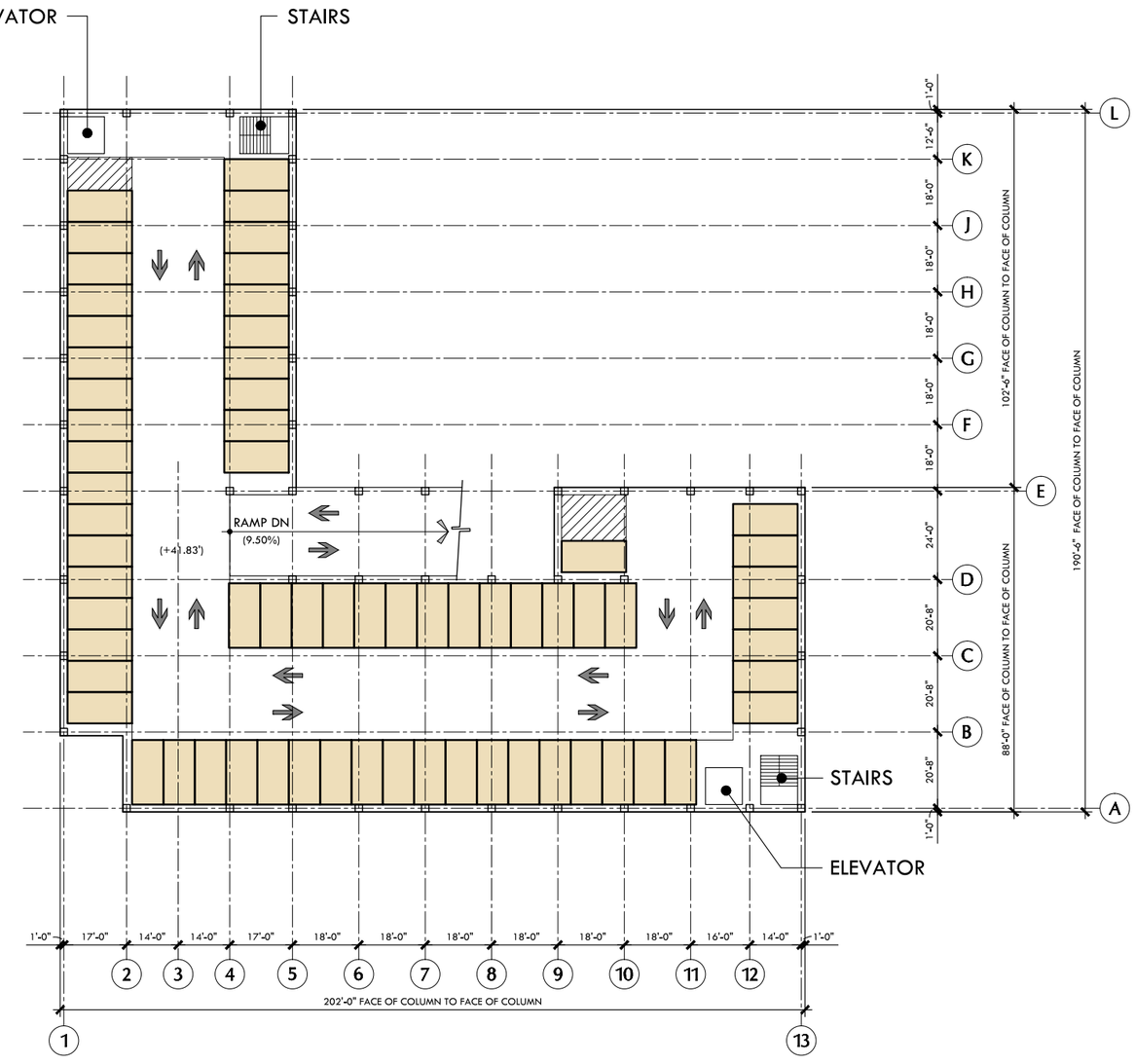
April 25, 2013

1" = 40'-0"

DA.2



LEVEL P-3/P-4 FLOOR PLAN



LEVEL P-5 FLOOR PLAN

PROGRESS PRINT

City of Palo Alto
PALO ALTO, CALIFORNIA

Hamilton/Waverley Lot D

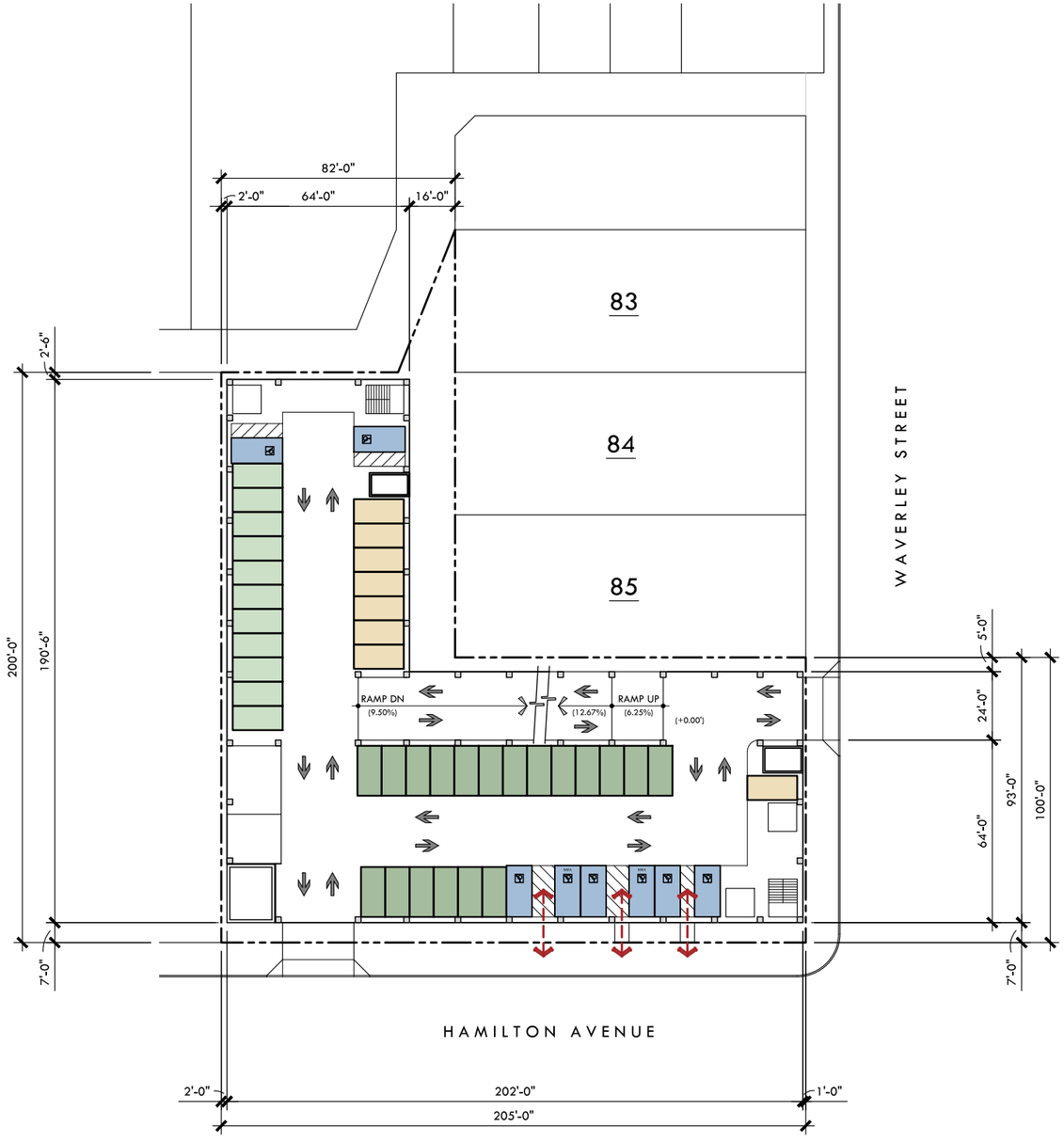
CONCEPTUAL PARKING GARAGE FLOOR PLANS

City of Palo Alto | SANDIS | HNA/PACIFIC

April 25, 2013

1" = 40'-0"

DA.3



PARKING GARAGE SITE PLAN

FLOOR AREA SUMMARY (SQUARE FEET)

LEVEL P-5	21,873
LEVEL P-4	23,985
LEVEL P-3	23,985
LEVEL P-2	23,985
LEVEL P-1	24,384
LEVEL B-1	24,878
TOTAL	143,090

HEIGHT OF BUILDING

TOP OF HOSTWAY (APPROXIMATE)	60'-0"
TOP OF HIGHEST SPANDREL	45'-7"
TOP OF HIGHEST FLOOR SLAB	41'-10"

CAR COUNT SUMMARY

	STANDARD (8'-6" x 17'-6")	ACCESSIBLE (9'-0" x 18'-0")	ELECTRIC (8'-6" x 17'-6")	LEFE (8'-6" x 17'-6")	TOTAL
LEVEL P-5	66	---	---	---	66
LEVEL P-4	63	---	---	---	63
LEVEL P-3	63	---	---	---	63
LEVEL P-2	61	---	---	---	61
LEVEL P-1	8	8	19	11	46
LEVEL B-1	61	---	---	---	61
TOTAL	322	8	19	11	360

EXISTING SPACES DISPLACED	86
NET TOTAL PARKING SPACES	274

OPTIONAL ADDED BASEMENT LEVELS

FLOOR AREA SUMMARY (SQUARE FEET)

	AREA ADDED PER LEVEL	TOTAL GARAGE AREA
LEVEL B-2	23,985	167,075
LEVEL B-3	23,985	191,060

CAR COUNT SUMMARY

	SPACES ADDED PER LEVEL	TOTAL GARAGE SPACES	NET TOTAL PARKING SPACES (LESS EXISTING SPACES DISPACED)
LEVEL B-2	61	421	335
LEVEL B-3	61	482	396

PROGRESS PRINT

City of Palo Alto
PALO ALTO, CALIFORNIA

Hamilton/Waverley Lot D

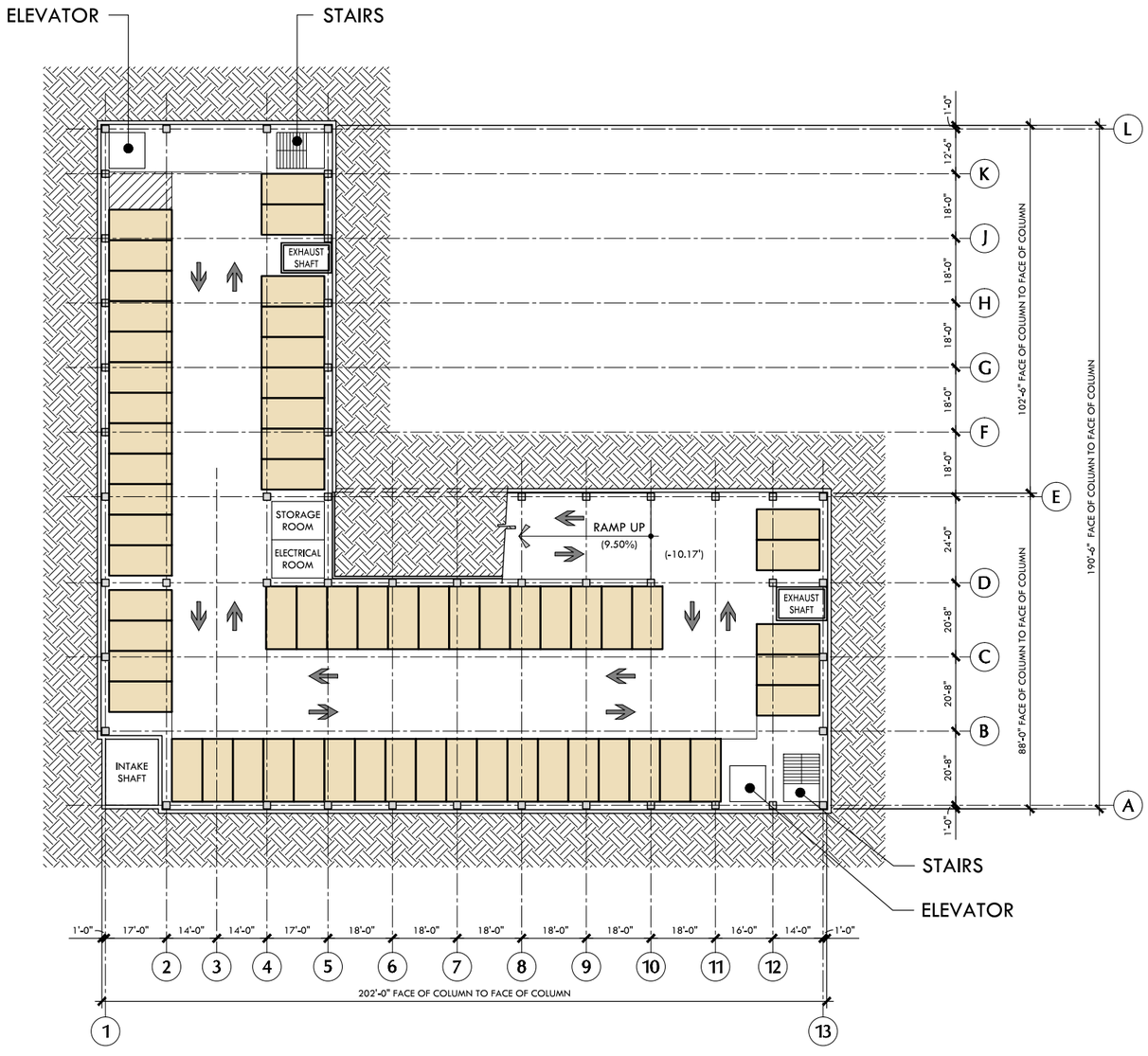
CONCEPTUAL PARKING GARAGE SITE PLAN *and* SUMMARIES

City of Palo Alto | SANDIS | HNA/PACIFIC

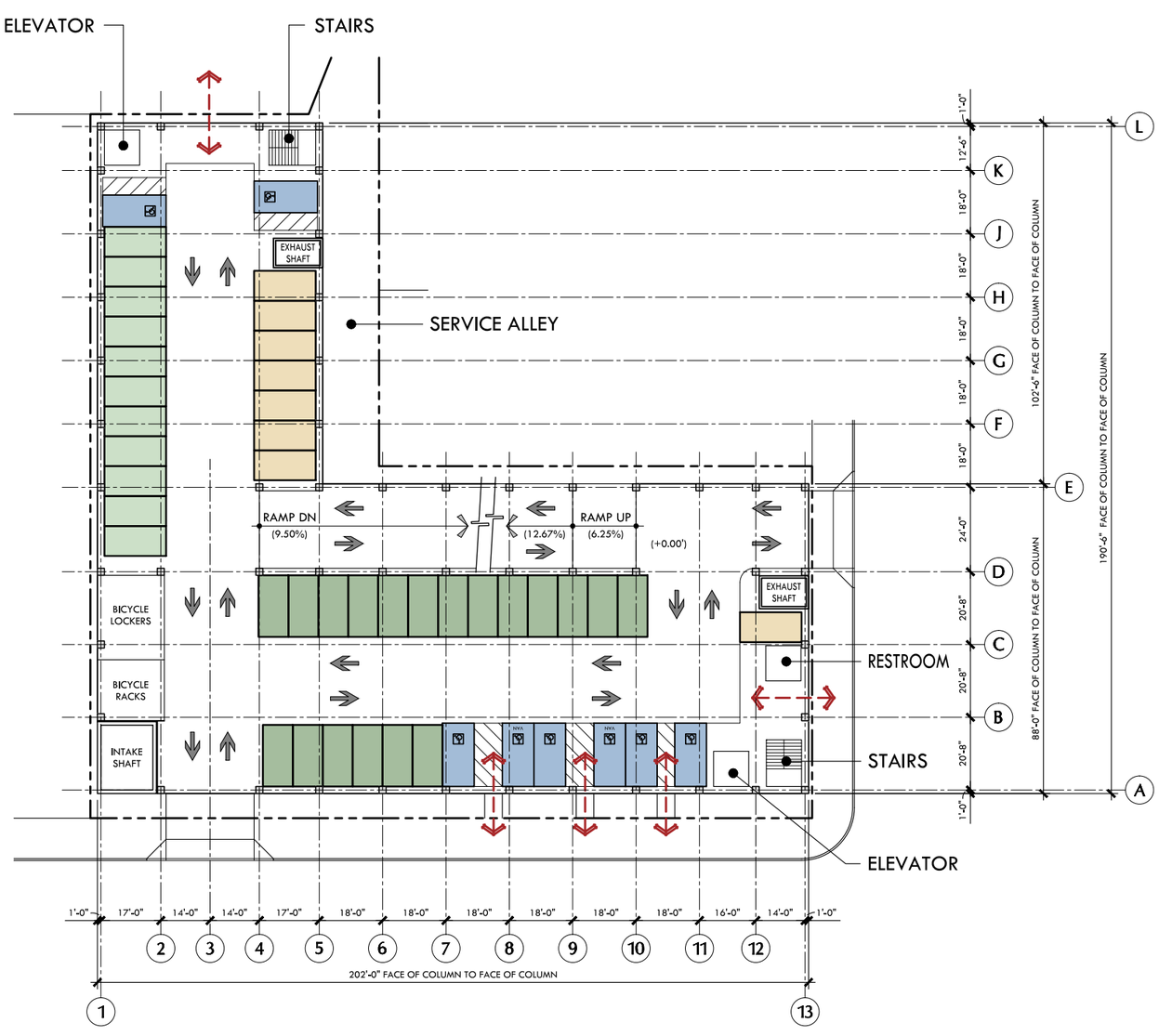
April 25, 2013

1" = 50'-0"

DBA.1



LEVEL B-1 FLOOR PLAN



LEVEL P-1 FLOOR PLAN

PROGRESS PRINT

City of Palo Alto
PALO ALTO, CALIFORNIA

Hamilton/Waverley Lot D

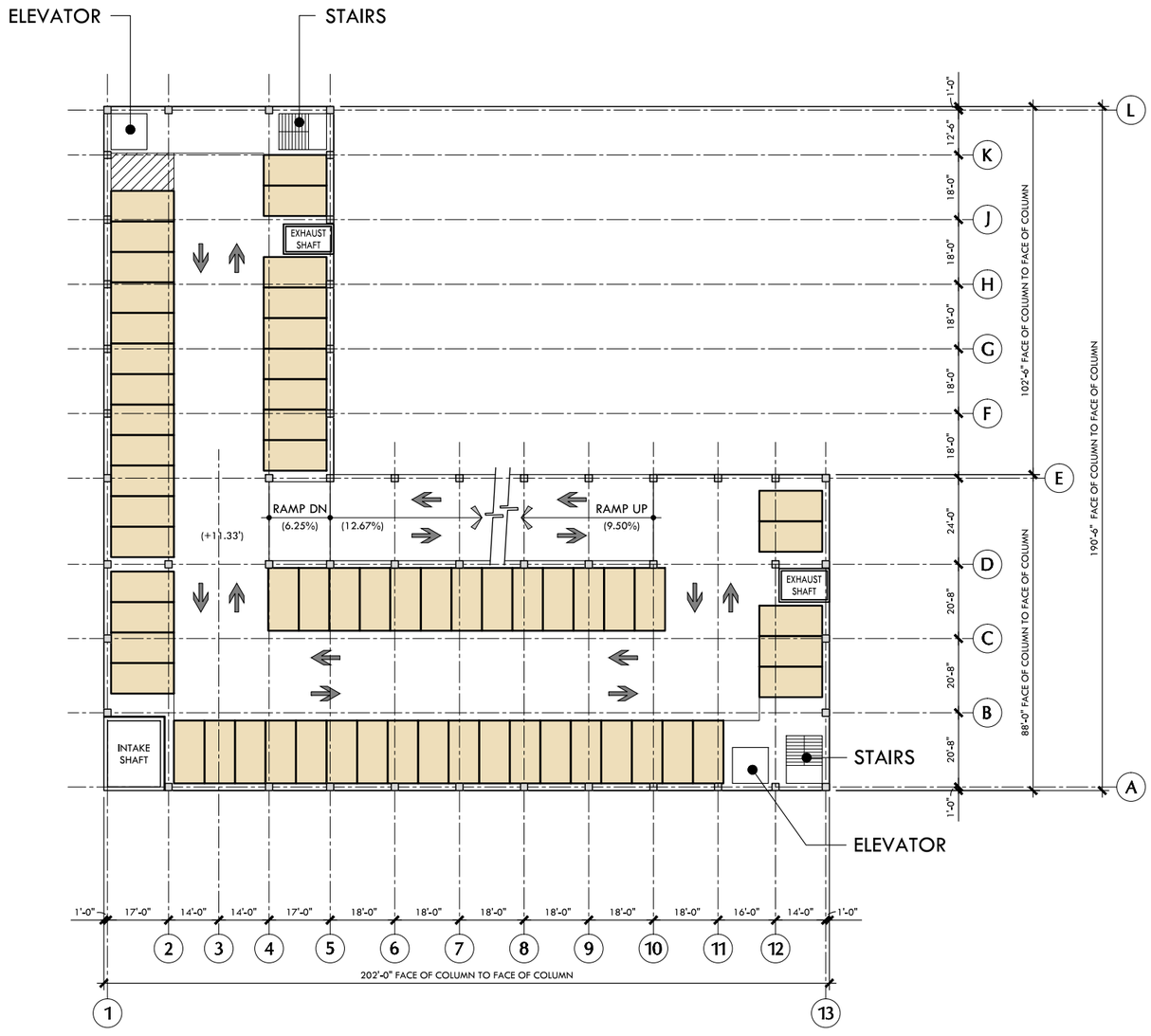
CONCEPTUAL PARKING GARAGE FLOOR PLANS

City of Palo Alto | SANDIS | HNA/PACIFIC

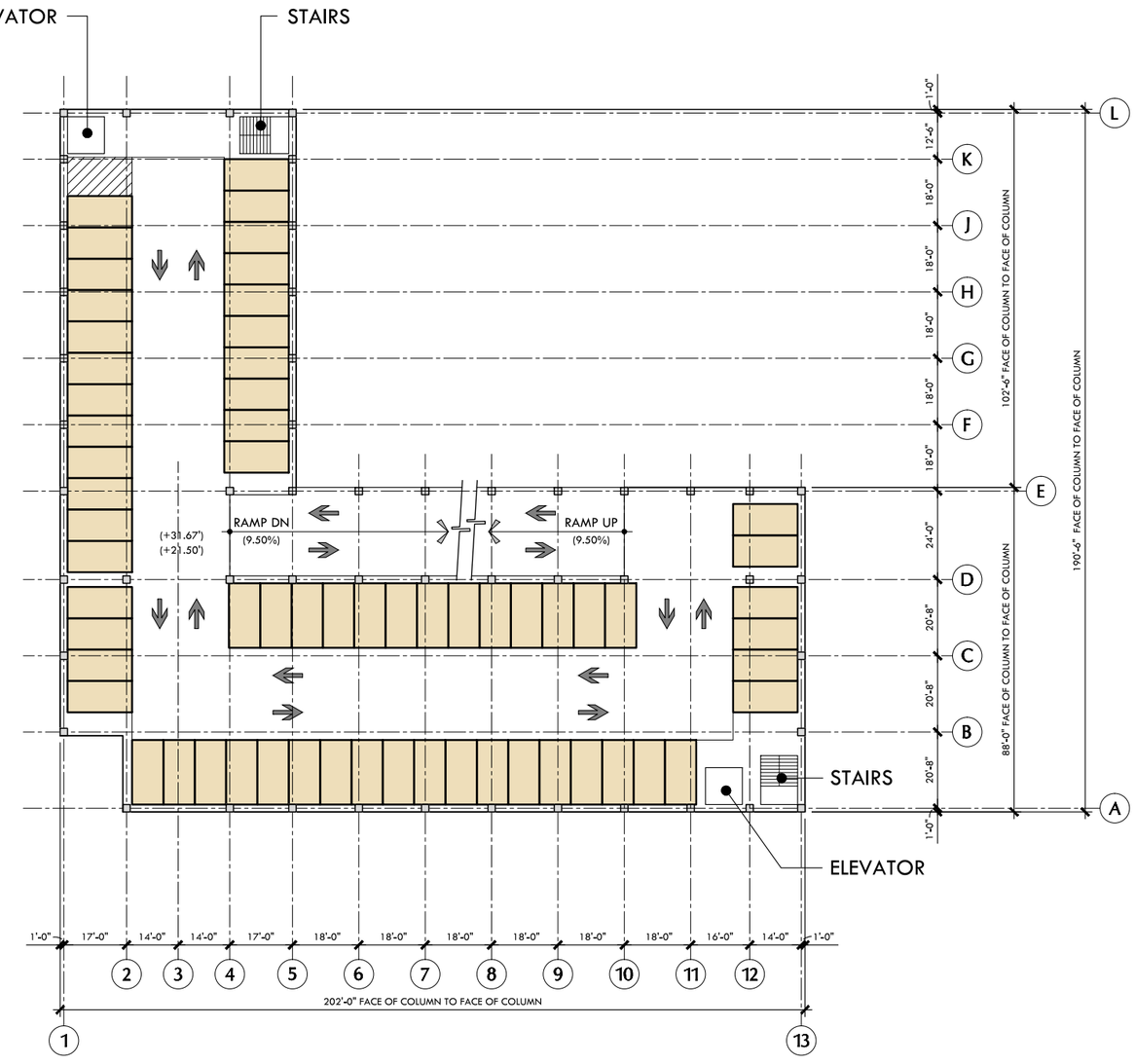
April 25, 2013

1" = 40'-0"

DBA.2



LEVEL P-2 FLOOR PLAN



LEVEL P-3 FLOOR PLAN

PROGRESS PRINT

City of Palo Alto
PALO ALTO, CALIFORNIA

Hamilton/Waverley Lot D

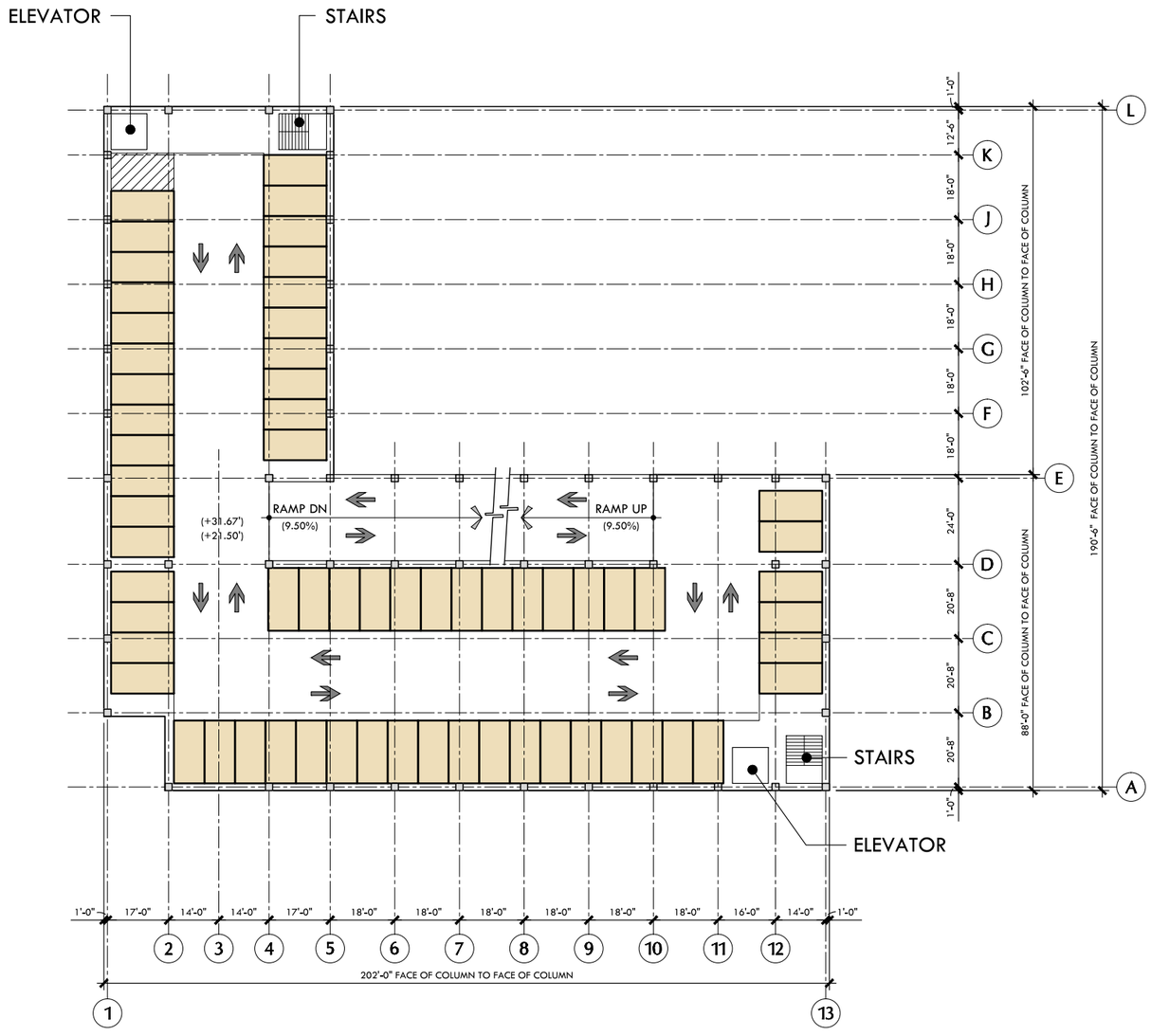
CONCEPTUAL PARKING GARAGE FLOOR PLANS

City of Palo Alto | SANDIS | HNA/PACIFIC

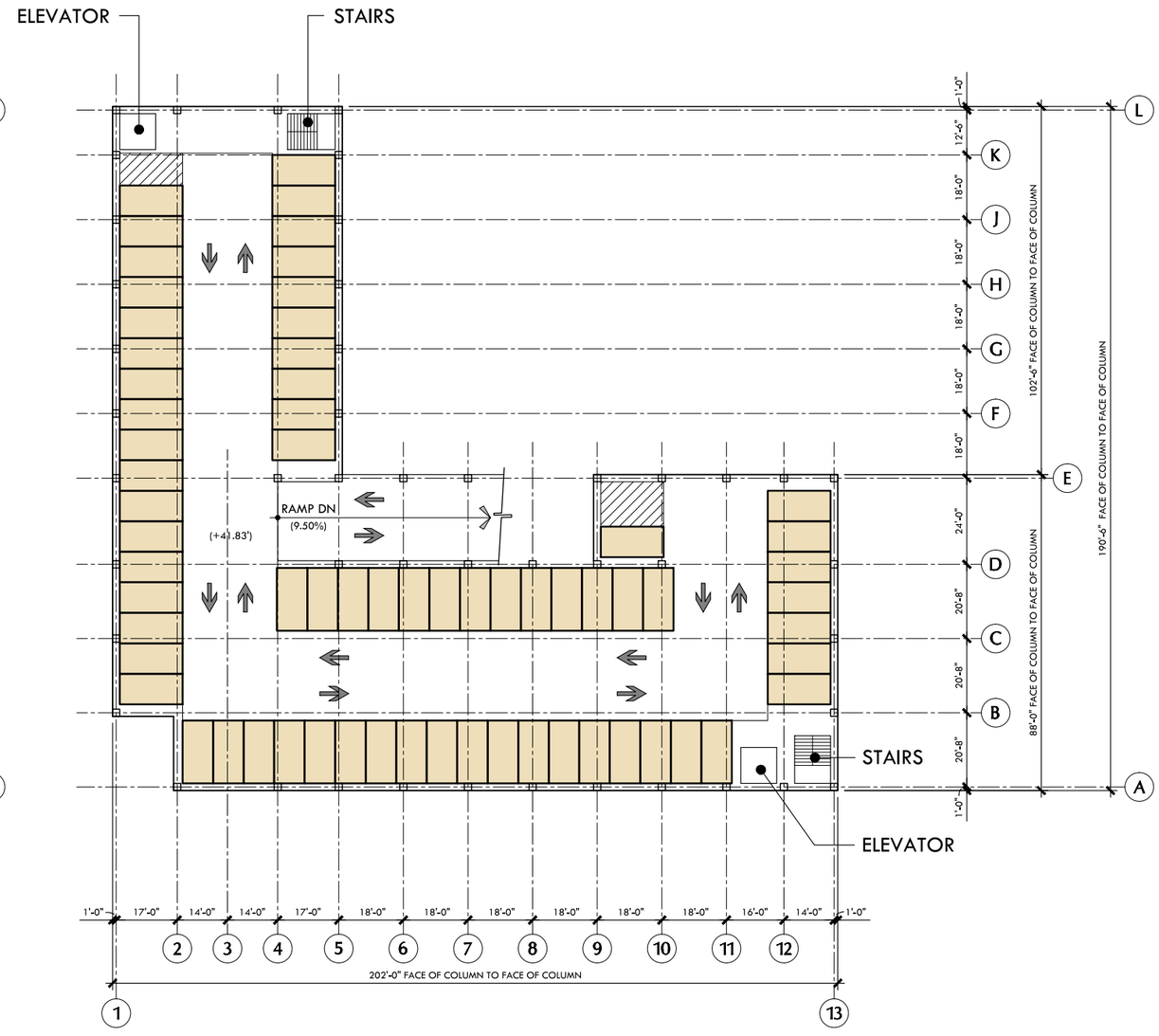
April 25, 2013

1" = 40'-0"

DBA.3



LEVEL P-4 FLOOR PLAN



LEVEL P-5 FLOOR PLAN

PROGRESS PRINT

City of Palo Alto
PALO ALTO, CALIFORNIA

Hamilton/Waverley Lot D

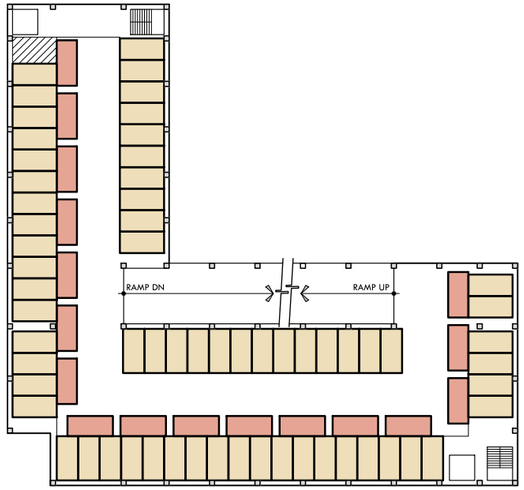
CONCEPTUAL PARKING GARAGE FLOOR PLANS

City of Palo Alto | SANDIS | HNA/PACIFIC

April 25, 2013

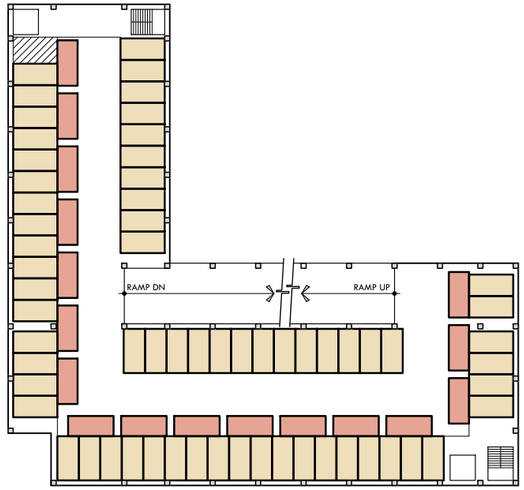
1" = 40'-0"

DBA.4



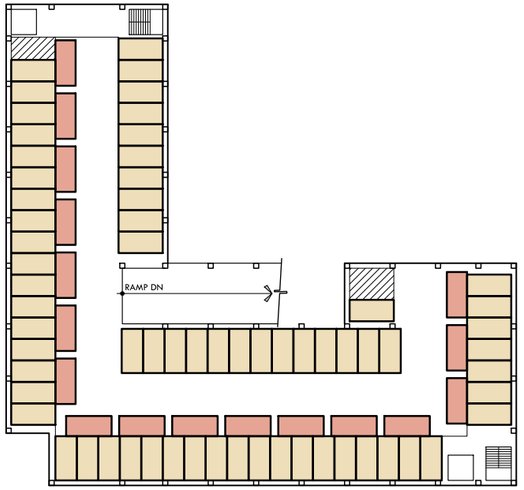
VALET SPACE / 17

LEVEL P-3 FLOOR PLAN



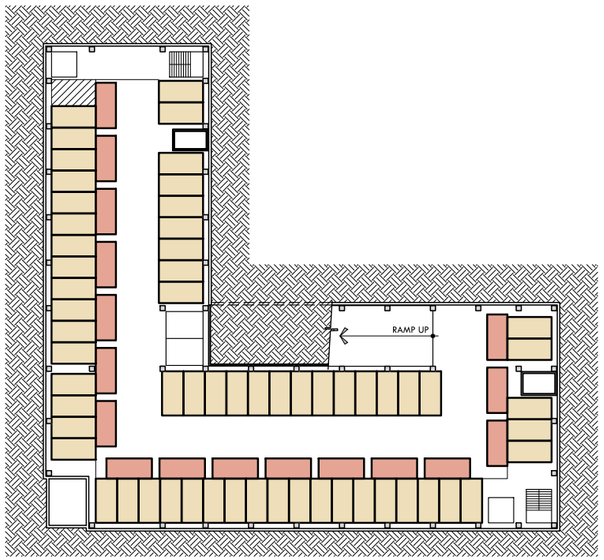
VALET SPACE / 17

LEVEL P-4 FLOOR PLAN



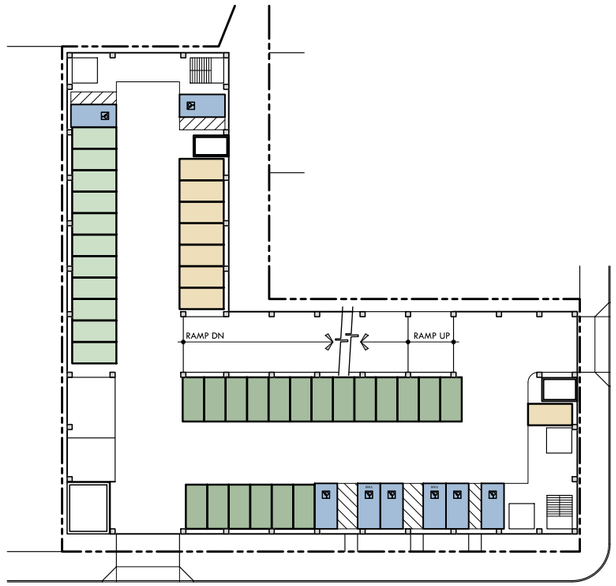
VALET SPACE / 17

LEVEL P-5 FLOOR PLAN

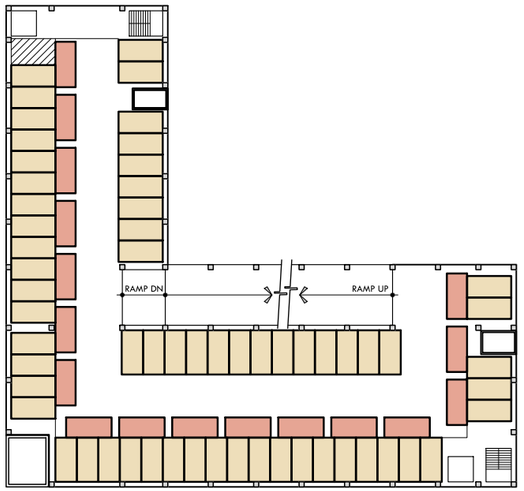


VALET SPACE / 17

LEVEL B-1 FLOOR PLAN



LEVEL P-1 FLOOR PLAN



VALET SPACE / 17

LEVEL P-2 FLOOR PLAN

PROGRESS PRINT

City of Palo Alto
PALO ALTO, CALIFORNIA

Hamilton/Waverley Lot D

CONCEPTUAL PARKING GARAGE FLOOR PLANS *with* VALET

City of Palo Alto | SANDIS | HNA/PACIFIC

April 25, 2013

1" = 60'-0"

DVA.1

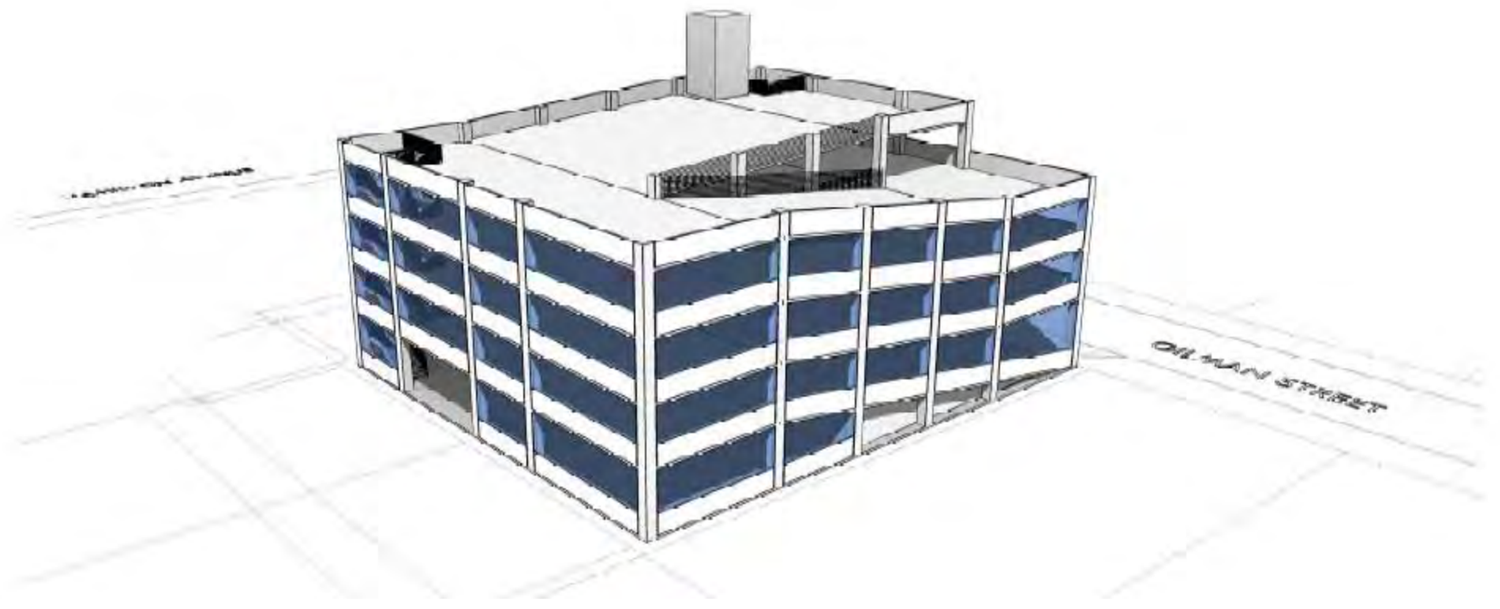
Lot E

The conceptual parking lot on Lot E will be 49,452ft^2, consist of five levels, and provide 75 parking spaces (with a net gain of 41 spaces). Two points of vehicular access to the garage will be located along Gilman Street. Level P-1 will consist of eight standard parking spaces, three ADA spaces, four electric vehicle spaces, and two LEFE vehicle spaces. Bicycle racks, bicycle lockers, a trash area, and an electrical room will be located toward the corner of the garage near Lots 35 and 32. The access point to the ramp will be located at the eastern side of the garage toward Forest Avenue. Levels P-2, P-3, and P-4 all share the same floor plan and will provide 14 spaces each. Level P-5 shares a similar floor plan to the levels below it and will provide 16 spaces.

The site constraints for Lot E, identified above, have been addressed in the conceptual design described below.

Existing trees on Lot E along Gilman Street and adjacent to Lot 96 will need to be removed. Existing street trees along Gilman Street will be able to remain if they do not substantially interfere with the construction of the garage. An existing mature tree in the southwest portion of Lot E near Lot 35 will need to be sufficiently trimmed or entirely removed if it proves to substantially interfere with the design and construction of the proposed garage.

The proposed garage will be set back 3ft from Lots 96, 36, 35, and 32 to allow for the required 10-25% of unprotected openings per story to encourage natural ventilation. The 3ft setback should be sufficient to clear adjacent building foundations that might encroach into Lot E allowing for the proposed garage to have concentric foundations as well as creating construction access between the existing and proposed buildings. Constructing the proposed garage with a 3ft setback instead of directly on the property line adjacent to Lot 32 will provide space to allow natural light to enter the existing building on Lot 32.





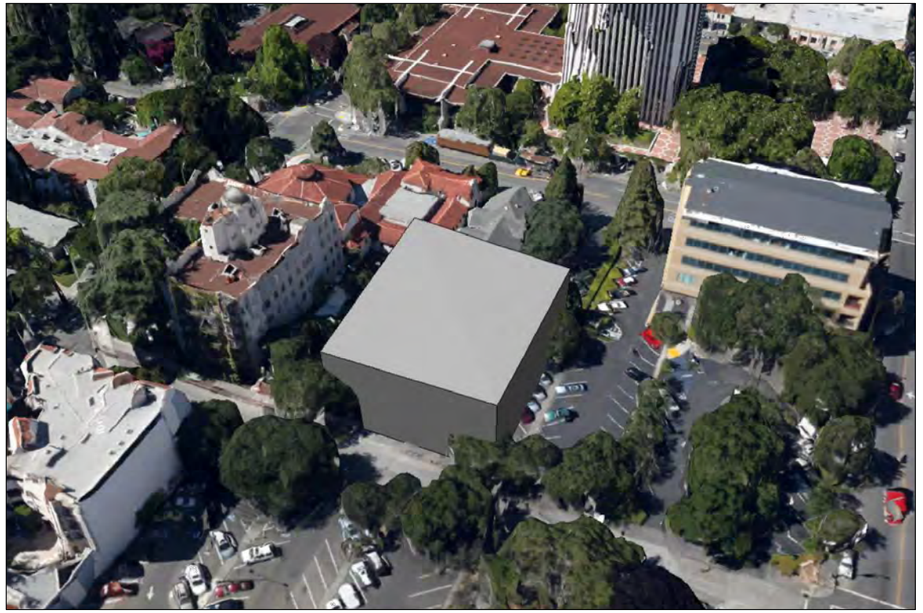
View looking south.



View looking north.



View looking north.



View looking south.

PROGRESS PRINT

City of Palo Alto
PALO ALTO, CALIFORNIA

Gilman/Bryant Lot

E

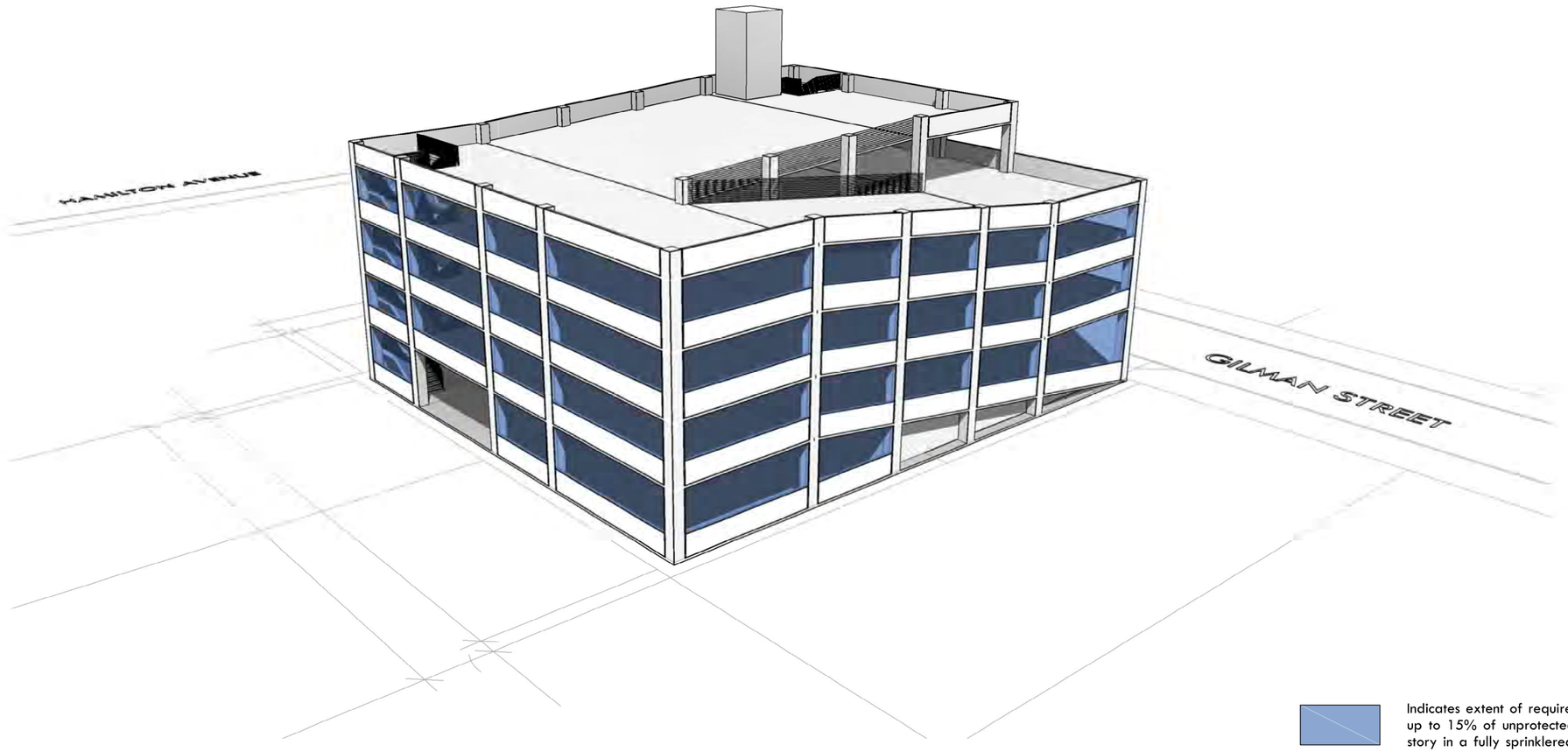
CONTEXTUAL PARKING GARAGE PERSPECTIVES

City of Palo Alto | SANDIS | HNA/PACIFIC

April 25, 2013

No Scale

EA.0



Indicates extent of required fire-resistive infill wall system allowing up to 15% of unprotected opening area of the exterior wall per story in a fully sprinklered parking garage. Infill walls are shown on top of fire resistive concrete spandrels acting as vehicular impact barriers as well as pedestrian guardrails.

The extent of the infill walls and the opening configuration combined to achieve the allowed percentage of area of the exterior wall per story will be dependent on the final design of the parking garage.

PROGRESS PRINT

City of Palo Alto
PALO ALTO, CALIFORNIA

Gilman/Bryant Lot

E

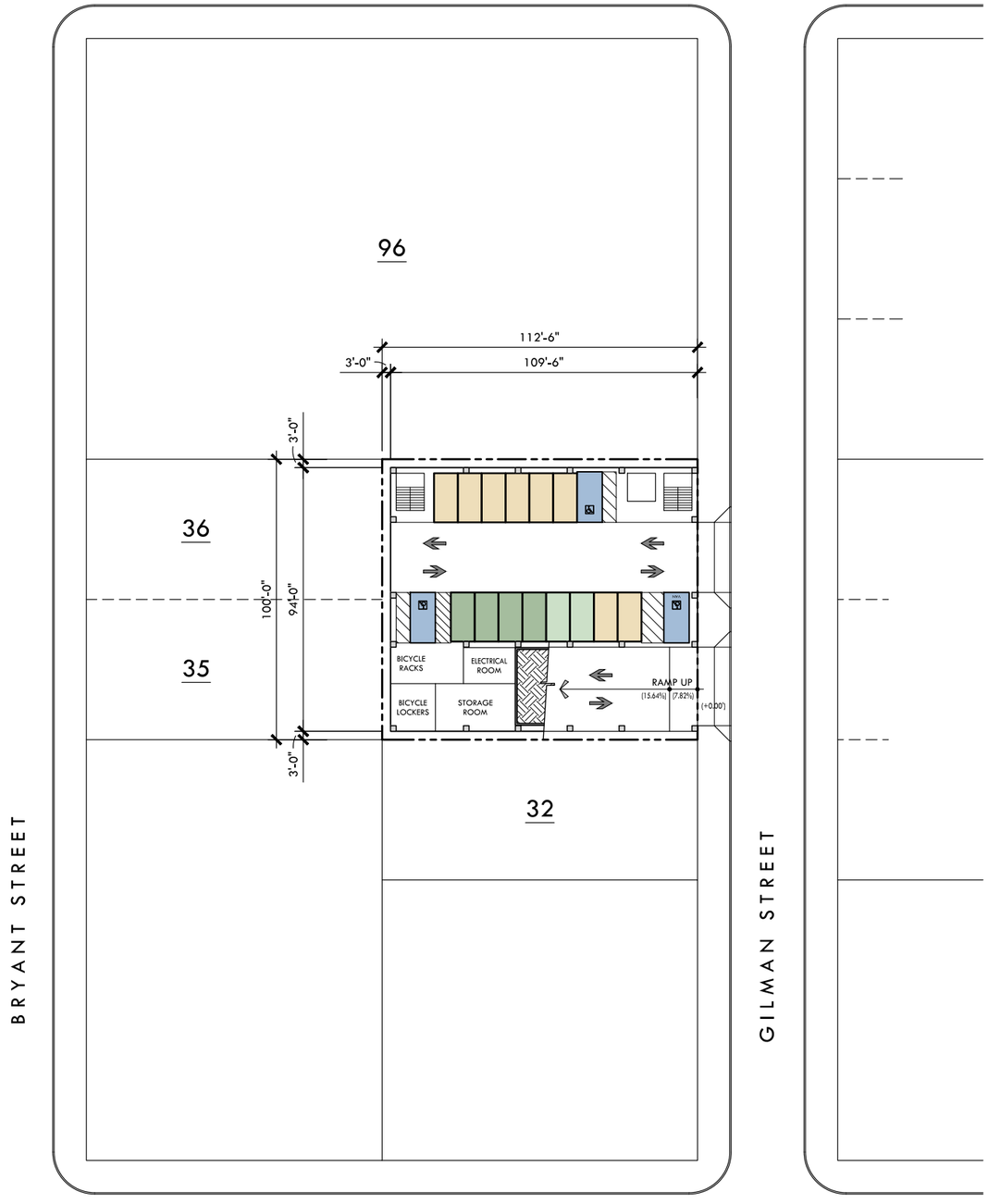
PARKING GARAGE PERSPECTIVE

City of Palo Alto | SANDIS | HNA/PACIFIC

April 25, 2013

No Scale

EA.01



PARKING GARAGE SITE PLAN

DESIGN PRECEPTS

(*as* RESPONSIVE *to* SITE CONSTRAINTS)

A. Vehicular access to the upper levels of the garage is provided along Gilman Street.

B. The existing vehicular egressing of the surface parking on Lot 36 is maintained through the lower level of the proposed garage through to Gillman Street.

C. Existing trees along Gilman Street on Lot E (and interior to Lot E adjacent on Lot 96) are to be removed to allow for the proposed garage.

D. Existing street trees along Gilman Street are to be maintained if reasonably possible to allow for the construction of the proposed garage.

E. The existing mature tree at southwest on Lot 35 is assumed to be able to be sufficiently trimmed to allow for the proposed garage (or if not it needs to be relocated or removed). If the tree is to remain and if the garage was to be designed and built around the tree then the proposed garage is most likely not viable.

F. In order for the proposed garage to qualify as an "open parking garage" it needs to be set back from the property lines along the north, south, and west to allow for some unprotected openings required for natural ventilation. To realistically achieve any functional efficiency the proposed garage can only be located the minimum 3' from the property line to allow for openings. In addition to allow for any openings the proposed garage needs to be sprinklered and if sprinklered a maximum of 15% per story for unprotected openings will be allowed. This constraint effectively reduces the natural ventilation of the garage however there can be enough openings located on the three sides (and the street side which is allowed to have unlimited unprotected openings) that would be sufficient in length and area to qualify as an "open parking garage".

G. The 3' setback should be sufficient to clear any adjacent building foundations that might encroach into Lot E and will allow for the proposed garage to have concentric foundations as well as some access for construction between the existing and proposed buildings.

H. The proposed garage in having been set back 3' from the property line adjacent to Lot 32 will allow for more natural light into the existing building that is located near the property line than would have been if the proposed garage was constructed on the property line.

FLOOR AREA SUMMARY (SQUARE FEET)

LEVEL P-5	7,818
LEVEL P-4	10,293
LEVEL P-3	10,293
LEVEL P-2	10,293
LEVEL P-1	10,845
TOTAL	49,542

HEIGHT OF BUILDING

TOP OF HOSTWAY (APPROXIMATE)	63'-2"
TOP OF HIGHEST SPANDREL	48'-11"
TOP OF HIGHEST FLOOR SLAB	45'-2"

CAR COUNT SUMMARY

	STANDARD (8'-6" x 17'-6")	ACCESSIBLE (9'-0" x 18'-0")	ELECTRIC (8'-6" x 17'-6")	LEFE (8'-6" x 17'-6")	TOTAL
LEVEL P-5	16	---	---	---	16
LEVEL P-4	14	---	---	---	14
LEVEL P-3	14	---	---	---	14
LEVEL P-2	14	---	---	---	14
LEVEL P-1	8	3	4	2	17
TOTAL	66	3	4	2	75

EXISTING SPACES DISPLACED 34

NET TOTAL PARKING SPACES 41

PROGRESS PRINT

City of Palo Alto
PALO ALTO, CALIFORNIA

Gilman/Bryant Lot

E

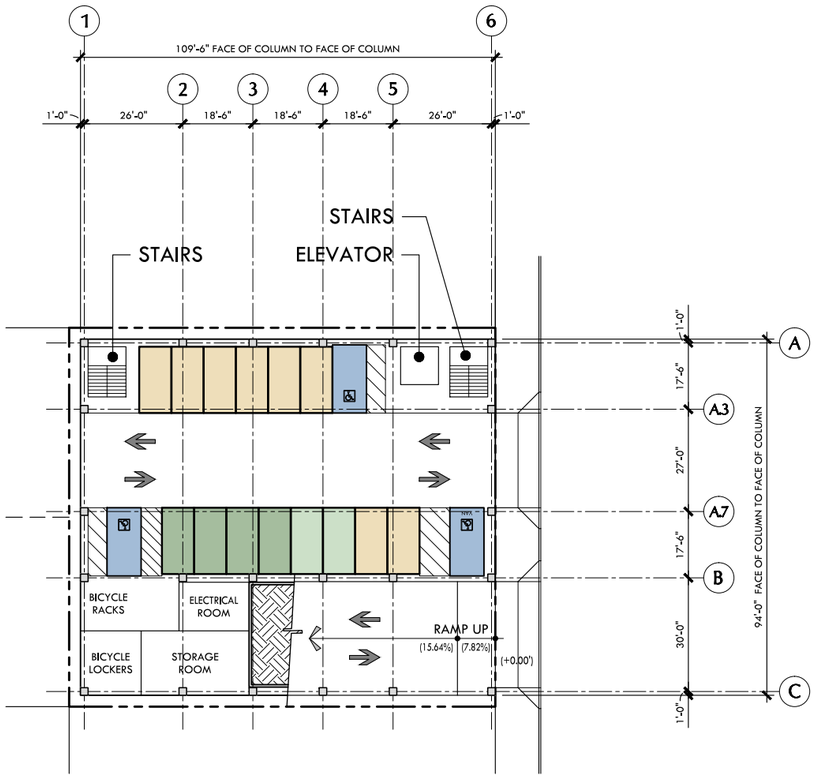
CONCEPTUAL PARKING GARAGE SITE PLAN, DESIGN PRECEPTS *and* SUMMARIES

City of Palo Alto | SANDIS | HNA/PACIFIC

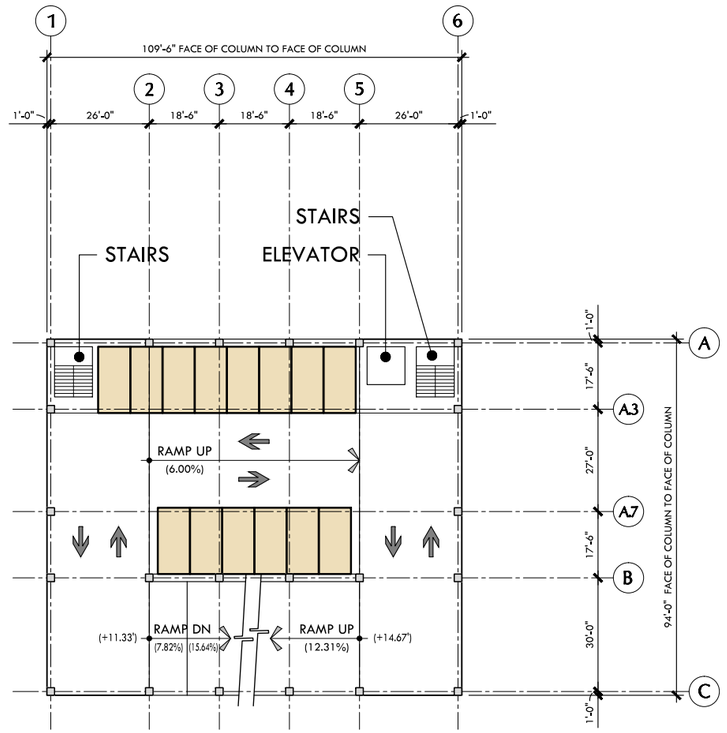
April 25, 2013

1" = 50'-0"

EA.1



LEVEL P-1 FLOOR PLAN



LEVEL P-2 FLOOR PLAN

PROGRESS PRINT

City of Palo Alto
PALO ALTO, CALIFORNIA

Gilman/Bryant Lot

E

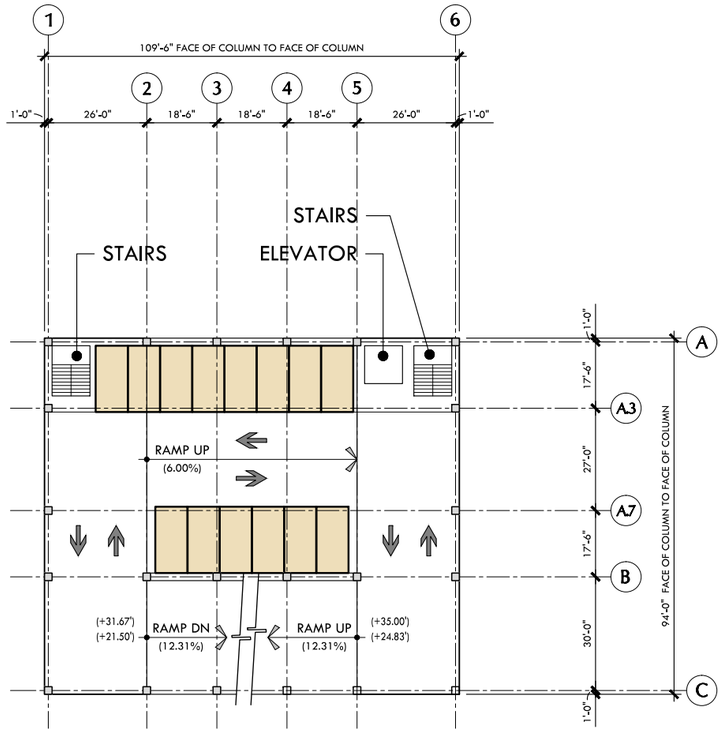
CONCEPTUAL PARKING GARAGE FLOOR PLANS

City of Palo Alto | SANDIS | HNA/PACIFIC

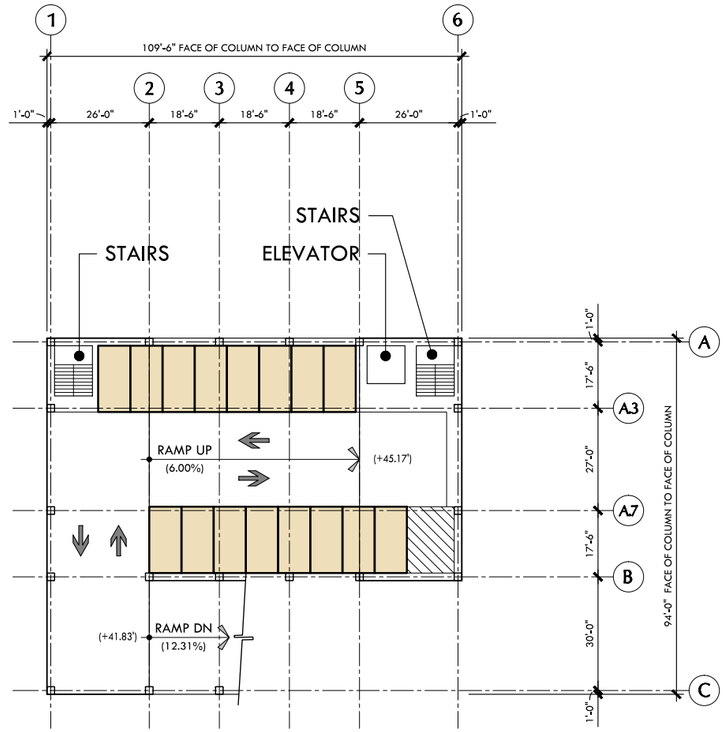
April 25, 2013

1" = 40'-0"

EA.2



LEVEL P-3/P-4 FLOOR PLAN



LEVEL P-5 FLOOR PLAN

PROGRESS PRINT

City of Palo Alto
PALO ALTO, CALIFORNIA

Gilman/Bryant Lot

E

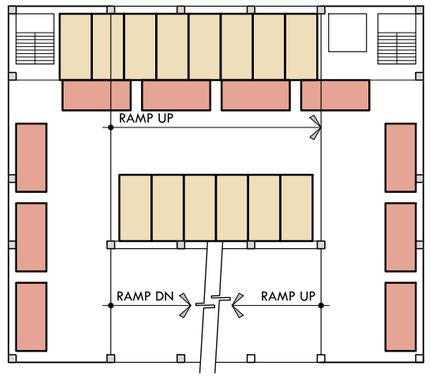
CONCEPTUAL PARKING GARAGE FLOOR PLANS

City of Palo Alto | SANDIS | HNA/PACIFIC

April 25, 2013

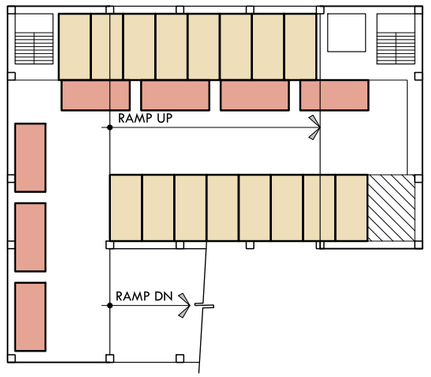
1" = 40'-0"

EA.3



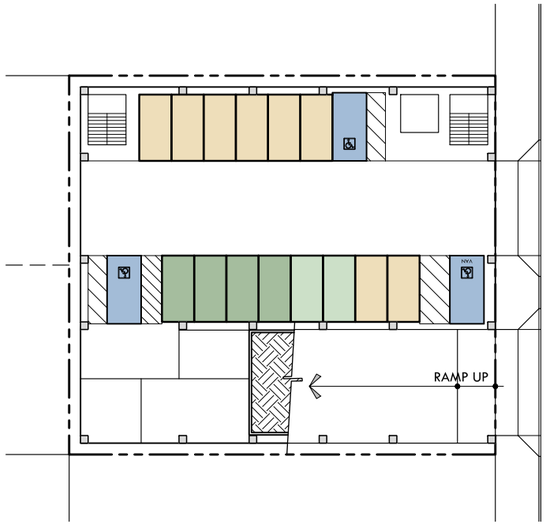
VALET SPACE / 10 (per level)

LEVEL P-3/P-4 FLOOR PLAN

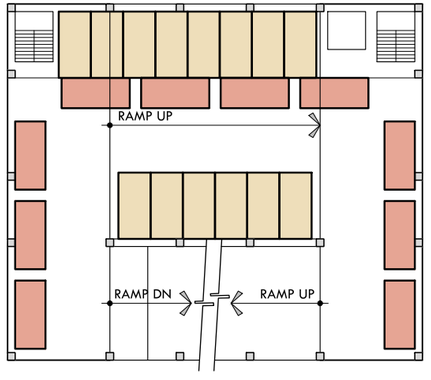


VALET SPACE / 7

LEVEL P-5 FLOOR PLAN



LEVEL P-1 FLOOR PLAN



VALET SPACE / 10

LEVEL P-2 FLOOR PLAN

PROGRESS PRINT

City of Palo Alto
PALO ALTO, CALIFORNIA

Gilman/Bryant Lot

E

CONCEPTUAL PARKING GARAGE FLOOR PLANS *with* VALET

City of Palo Alto | SANDIS | HNA/PACIFIC

April 25, 2013

1" = 40'-0"

EVA.1

Lot G

The conceptual parking lot on Lot G will be 74,818ft^2, consist of five levels, and provide 166 parking spaces (with a net gain of 113 spaces). One point of vehicular access to the garage will be located along Gilman Street. Level P-1 will consist of three standard parking spaces, six ADA spaces, nine electric vehicle spaces, and five LEFE vehicle spaces. Bicycle racks, bicycle lockers, and an electrical room will be located toward the corner of the garage near Lots 62 and 23. Levels P-2, P-3, and P-4 all share the same floor plan and will provide 37 spaces each. Level P-5 shares a similar floor plan to the levels below it and will provide 32 spaces.

The site constraints for Lot G, identified above, have been addressed in the conceptual design described below.

Existing trees on Lot G along Gilman Street will need to be removed. Existing street trees along Gilman Street will be able to remain if they do not substantially interfere with the construction of the garage. Two existing mature trees in the northeast portion of Lot G near Lot 35 will need to be removed to allow for the construction of the proposed garage. An existing mature tree on Lot 22 near Lot G will need to be sufficiently trimmed or entirely removed if it proves to substantially interfere with the design and construction of the proposed garage. A tree located in the southeast corner will need to be completely removed.

The proposed garage will be set back 3ft from Lots 2, 21, 22, 23, and 62 to allow for the required 10-25% of unprotected openings per story to encourage natural ventilation. The 3ft setback should be sufficient to clear adjacent building foundations that might encroach into Lot G allowing for the proposed garage to have concentric foundations as well as creating construction access between the existing and proposed buildings. Constructing the proposed garage with a 3ft setback instead of directly on the property line adjacent to the surrounding lots will provide space to allow natural light to enter the existing buildings.





View looking southeast.



View looking south.



View looking west.



View looking southeast.

PROGRESS PRINT

City of Palo Alto
PALO ALTO, CALIFORNIA

Gilman/Bryant Lot

E

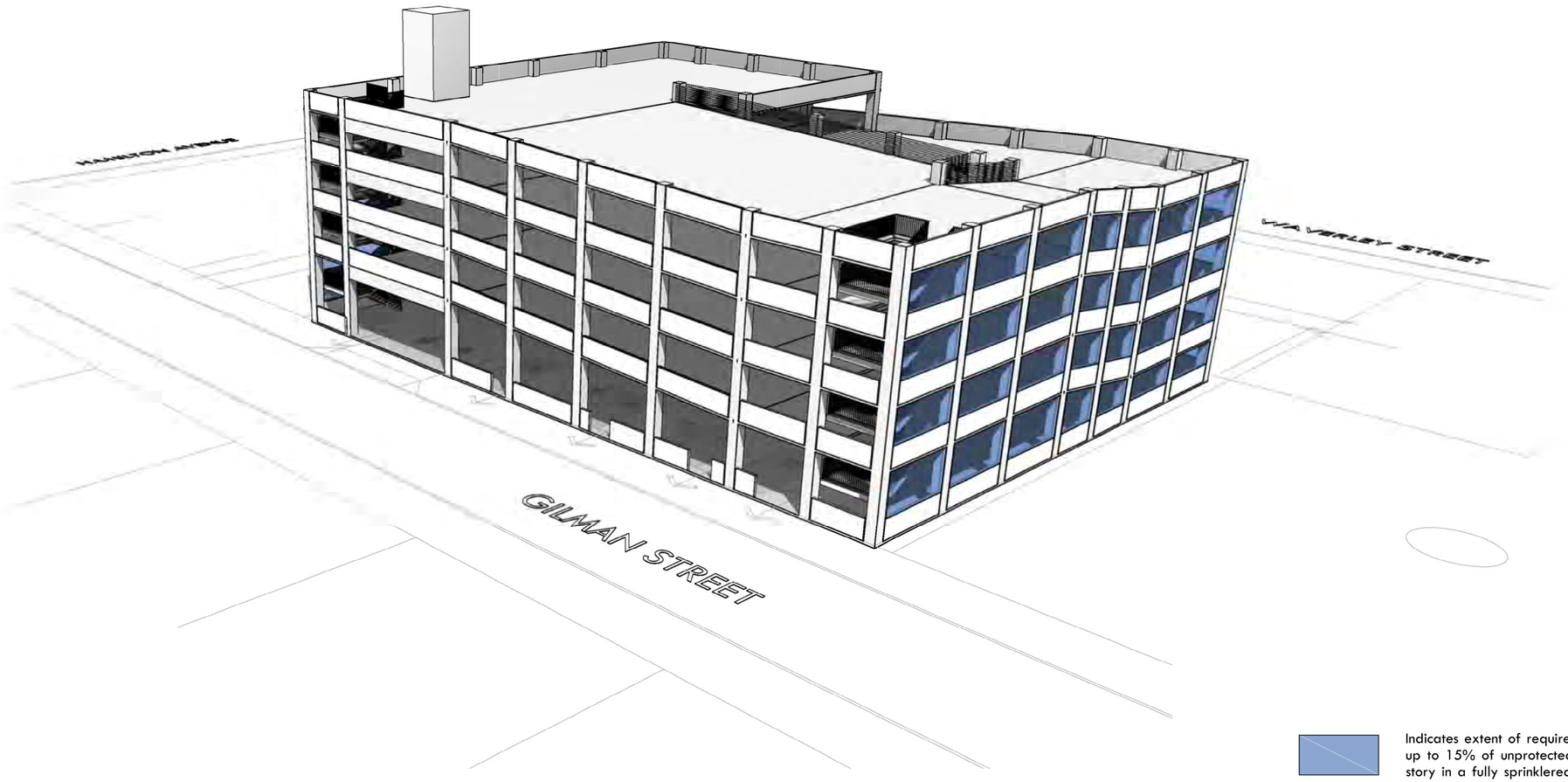
CONTEXTUAL PARKING GARAGE PERSPECTIVES

City of Palo Alto | SANDIS | HNA/PACIFIC

April 25, 2013

No Scale

GA.0



Indicates extent of required fire-resistive infill wall system allowing up to 15% of unprotected opening area of the exterior wall per story in a fully sprinklered parking garage. Infill walls are shown on top of fire resistive concrete spandrels acting as vehicular impact barriers as well as pedestrian guardrails.

The extent of the infill walls and the opening configuration combined to achieve the allowed percentage of area of the exterior wall per story will be dependent on the final design of the parking garage.

PROGRESS PRINT

City of Palo Alto
PALO ALTO, CALIFORNIA

Gilman/Bryant Lot

E

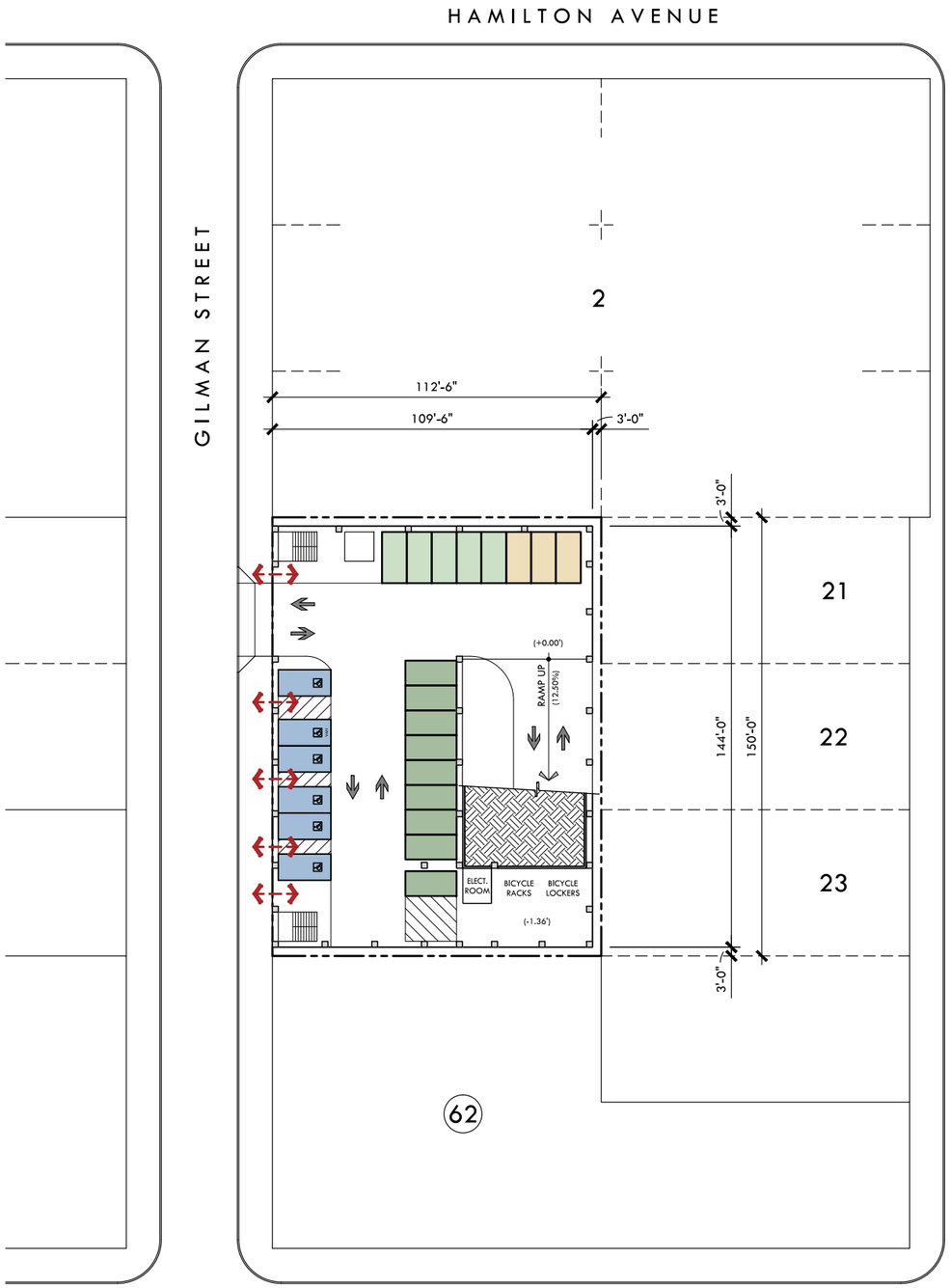
PARKING GARAGE PERSPECTIVE

City of Palo Alto | SANDIS | HNA/PACIFIC

April 25, 2013

No Scale

GA.01



PARKING GARAGE SITE PLAN

DESIGN PRECEPTS

(*as* RESPONSIVE *to* SITE CONSTRAINTS)

A. Vehicular access to the proposed garage is provided along Gilman Street.

B. The existing vehicular egressing of the surface parking on Lot 36 is maintained through the lower level of the proposed garage through to Gillman Street.

C. Existing trees along Gilman Street on Lot G (and interior to Lot G) are to be removed to allow for the proposed garage.

D. Existing street trees along Gilman Street are to be maintained if reasonably possible to allow for the construction of the proposed garage.

E. The two (2) mature trees located in the northeast corner of Lot G are to be removed to allow for the proposed garage.

F. Existing mature tree at east on Lot 22 is assumed to be able to be sufficiently trimmed to allow for the proposed garage (or if not it needs to be relocated or removed). If the tree is to remain and if the garage was to be designed and built around the tree then the proposed garage is most likely not viable.

G. The mature tree located in the southeast corner of Lot G is to be removed to allow for the proposed garage.

H. In order for the proposed garage to qualify as an "open parking garage" it needs to be set back from the property lines along the north, south, and west to allow for some unprotected openings required for natural ventilation. To realistically achieve any functional efficiency the proposed garage can only be located the minimum 3' from the property line to allow for openings. In addition to allow for any openings the proposed garage needs to be sprinklered and if sprinklered a maximum of 15% per story for unprotected openings will be allowed. This constraint effectively reduces the natural ventilation of the garage however there can be enough openings located on the three sides (and the street side which is allowed to have unlimited unprotected openings) that would be sufficient in length and area to qualify as an "open parking garage".

I. The 3' setback should be sufficient to clear any adjacent building foundations that might encroach into Lot E and will allow for the proposed garage to have concentric foundations as well as some access for construction between the existing and proposed buildings.

J. The proposed garage in having been set back 3' from the property line adjacent to Lots 21, 22, 23 and 62 will allow for more natural light into the existing buildings that are located near the property line than would have been if the proposed garage was constructed on the property line.

FLOOR AREA SUMMARY (SQUARE FEET)

LEVEL P-5	11,746
LEVEL P-4	15,768
LEVEL P-3	15,768
LEVEL P-2	15,768
LEVEL P-1	15,768
TOTAL	74,818

HEIGHT OF BUILDING

TOP OF HOSTWAY (APPROXIMATE)	63'-11"
TOP OF HIGHEST SPANDREL	49'-8"
TOP OF HIGHEST FLOOR SLAB	45'-11"

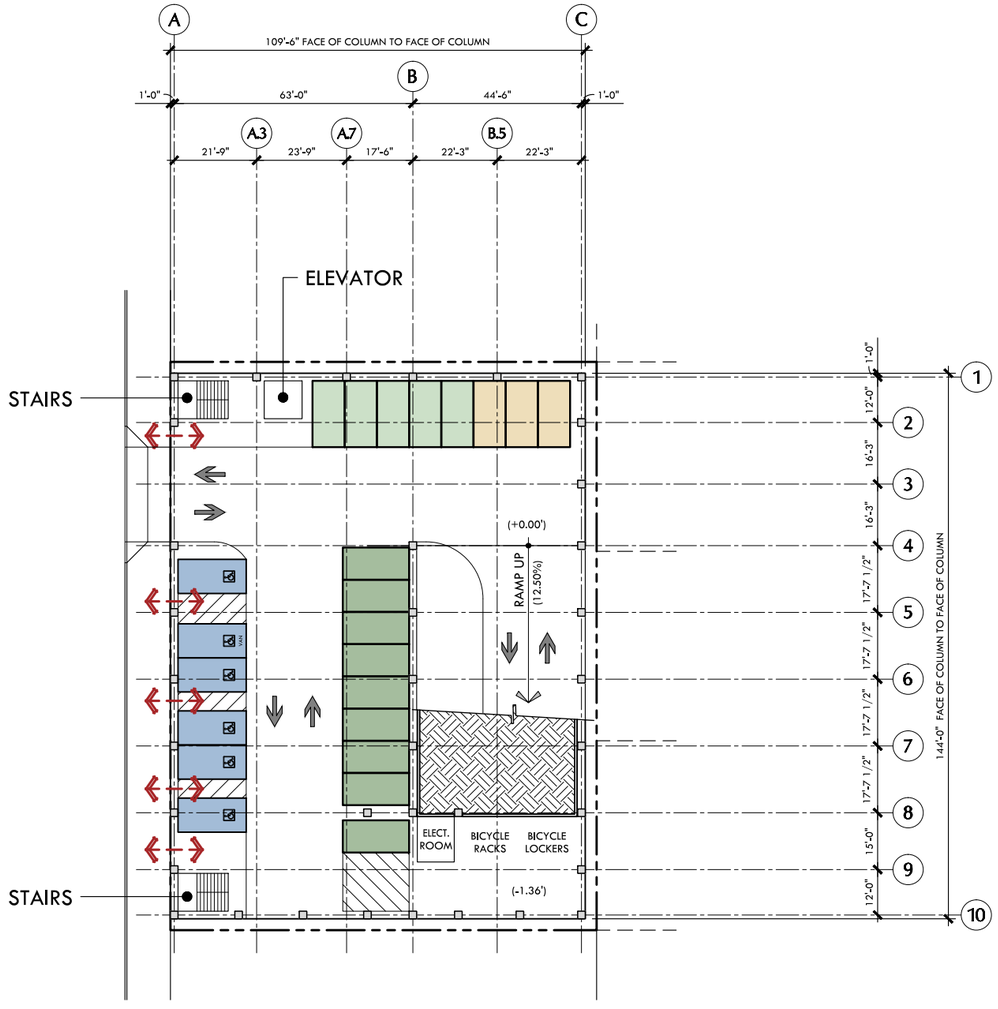
CAR COUNT SUMMARY

	STANDARD (8'-6" x 17'-6")	ACCESSIBLE (9'-0" x 18'-0")	ELECTRIC (8'-6" x 17'-6")	LEFE (8'-6" x 17'-6")	TOTAL
LEVEL P-5	32	---	---	---	32
LEVEL P-4	37	---	---	---	37
LEVEL P-3	37	---	---	---	37
LEVEL P-2	37	---	---	---	37
LEVEL P-1	3	6	9	5	23
TOTAL	146	6	9	5	166

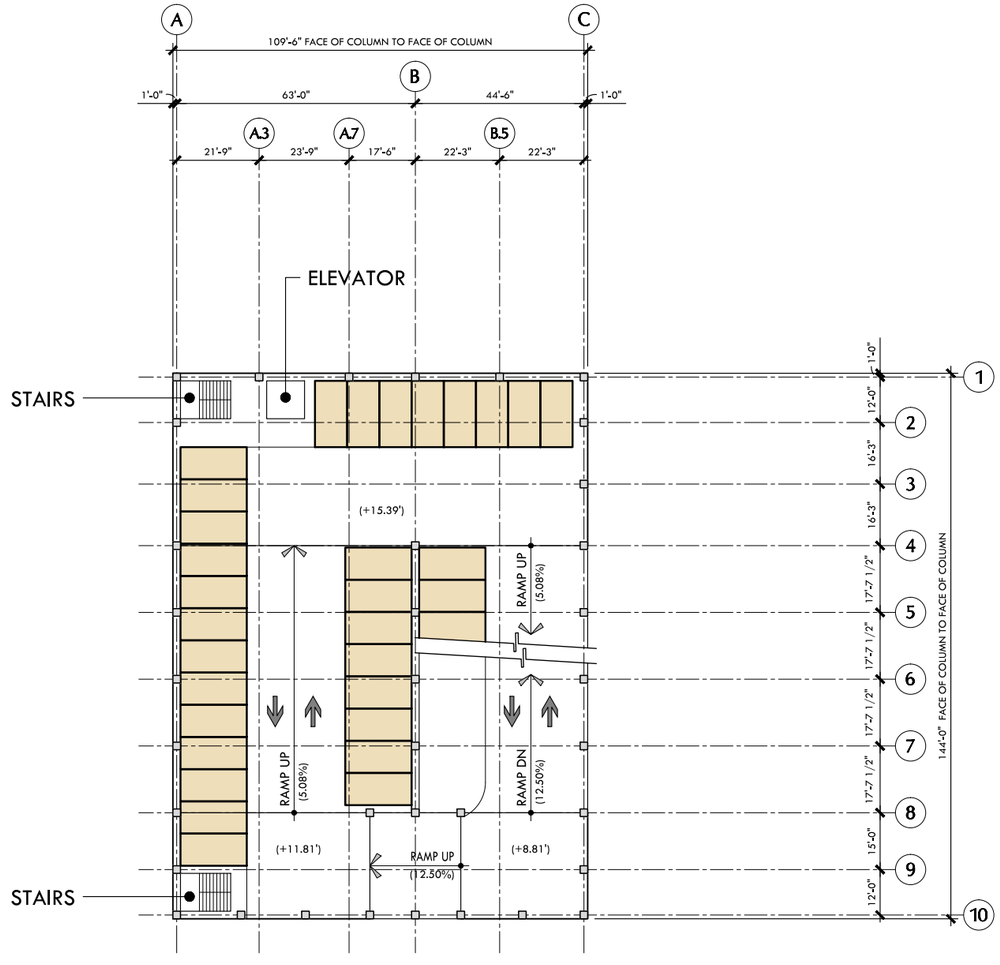
EXISTING SPACES DISPLACED 53

NET TOTAL PARKING SPACES 113

PROGRESS PRINT



LEVEL P-1 FLOOR PLAN



LEVEL P-2 FLOOR PLAN

PROGRESS PRINT

City of Palo Alto
PALO ALTO, CALIFORNIA

Gilman/Waverley Lot

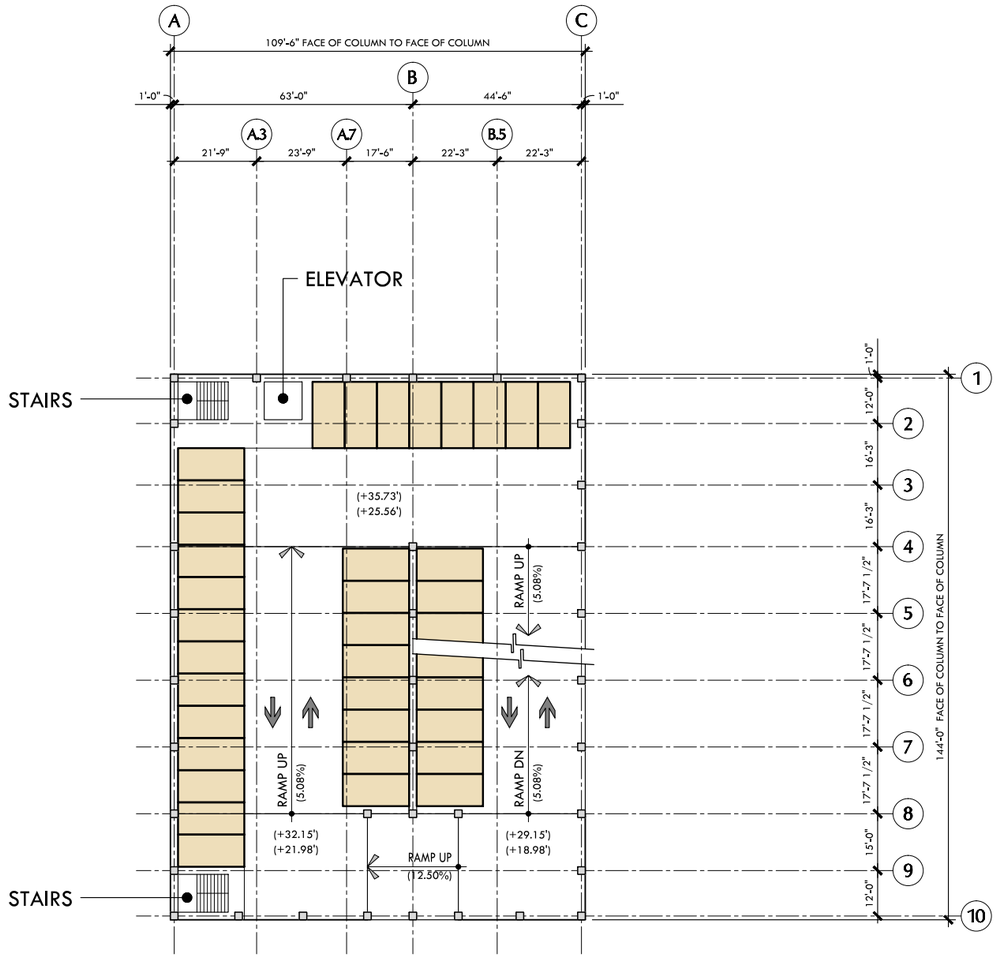
CONCEPTUAL PARKING GARAGE FLOOR PLANS

City of Palo Alto | SANDIS | HNA/PACIFIC

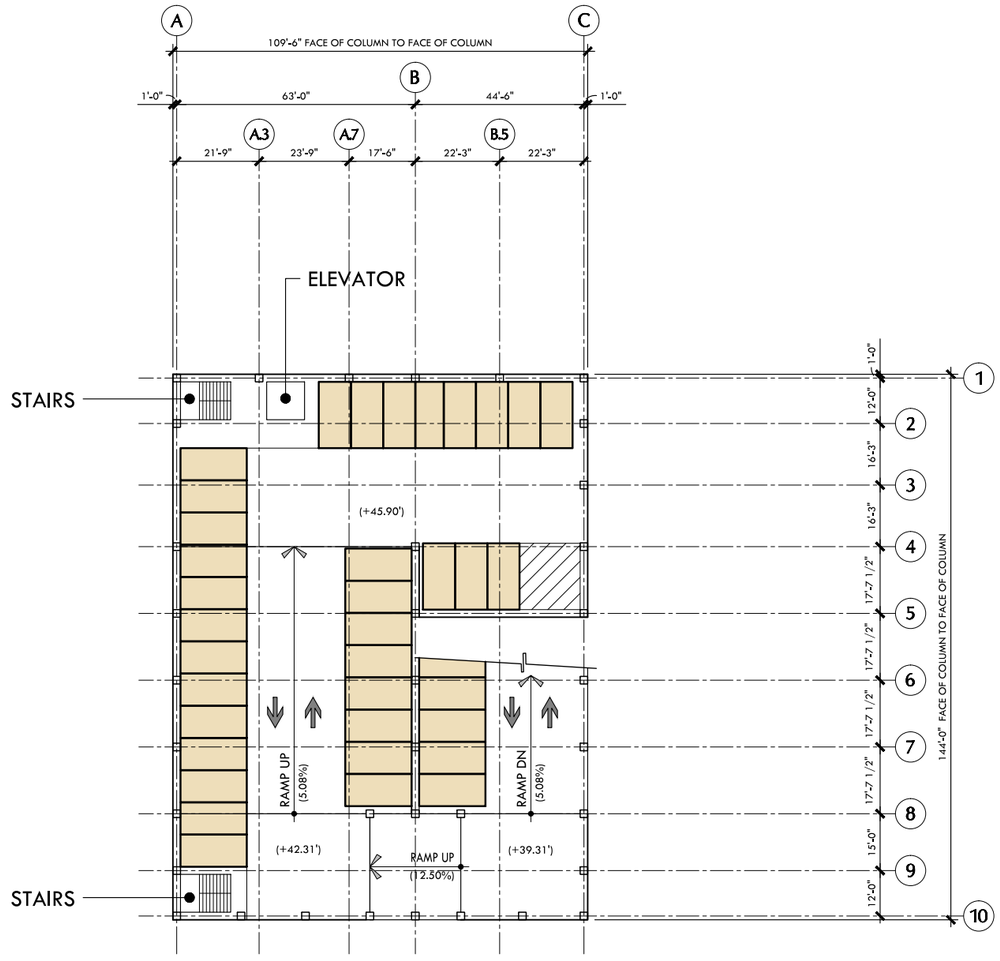
April 25, 2013

1" = 40'-0"

GA.2



LEVEL P-3/P-4 FLOOR PLAN



LEVEL P-5 FLOOR PLAN

PROGRESS PRINT

City of Palo Alto
PALO ALTO, CALIFORNIA

Gilman/Waverley Lot

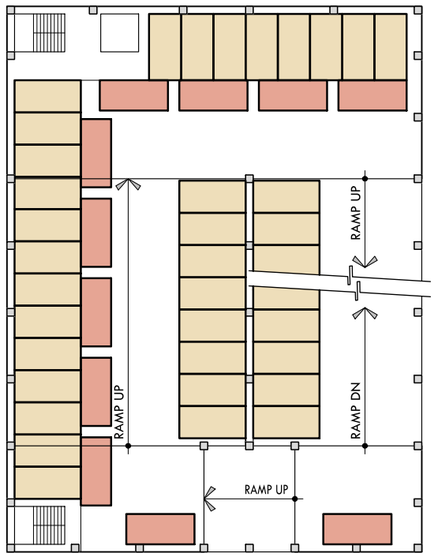
CONCEPTUAL PARKING GARAGE FLOOR PLANS

City of Palo Alto | SANDIS | HNA/PACIFIC

April 25, 2013

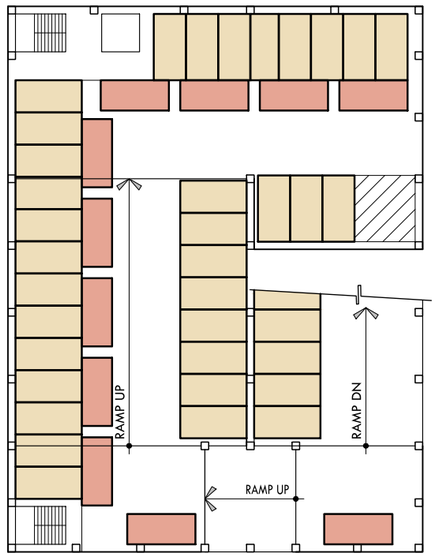
1" = 40'-0"

GA.3



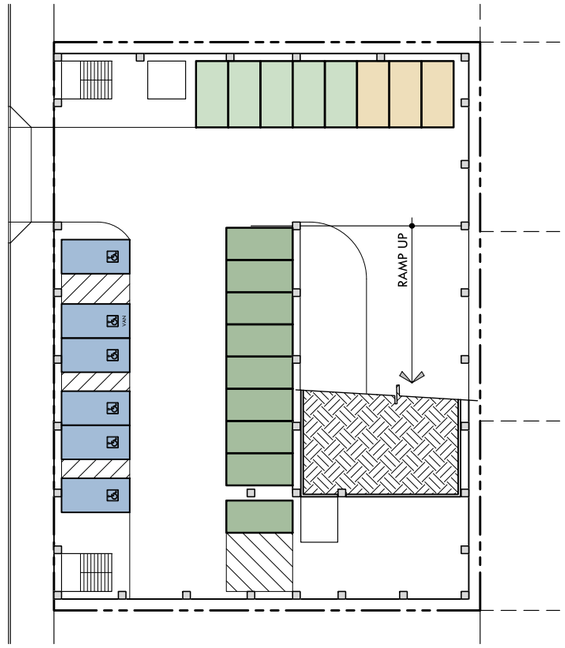
VALET SPACE / 11 (per level)

LEVEL P-3/P-4 FLOOR PLAN

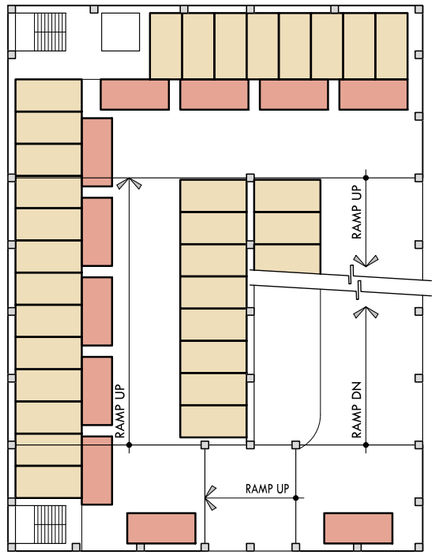


VALET SPACE / 11

LEVEL P-5 FLOOR PLAN



LEVEL P-1 FLOOR PLAN



VALET SPACE / 11

LEVEL P-2 FLOOR PLAN

PROGRESS PRINT

City of Palo Alto
PALO ALTO, CALIFORNIA

Gilman/Waverley Lot G

CONCEPTUAL PARKING GARAGE FLOOR PLANS *with* VALET

City of Palo Alto | SANDIS | HNA/PACIFIC

April 25, 2013

1" = 40'-0"

GVA.1

Lot E/G

After analyzing Lot E and Lot G independently, it was decided that the construction of a parking garage on the combined lots would be analyzed as well. For the first two levels, P-1 and P-2, the garage would be separated by the alleyway that bisects Lots E and G. Beginning at the third level, P-3, the garage would become one continuous structure up to the top floor, P-5.The proposed garage will be a total of 136,963ft^2, consist of five levels, and provide 268 parking spaces (for a net gain of 181 spaces).

Level P-1 will provide a total of nine standard parking spaces, nine ADA spaces, 14 electric vehicle spaces, and eight LEFE vehicle spaces. Of the spaces listed above, eight standard spaces, three ADA spaces, four electric spaces, and two LEFE spaces will be located on the Lot E side of Level P-1. There will be two vehicular access points on the Lot E side along Gilman Street. One access point will directly lead to a ramp up to the upper levels, while the other will lead to parking only on Level P-1. Bicycle racks, bicycle lockers, a storage room, and an electrical room will be located on P-1 of the parking garage. Stairs and an elevator will be located on the northern edge of the garage near Hamilton Avenue. The existing vehicular egress point of the parking on Lot 36 will be maintained through the lower level of the garage. On the Lot G side, there will be one vehicular two-way access point onto Gilman Street. Stairs and an elevator will be located at each end of the lot along Gilman Street.

Level P-2 of the parking garage will provide a total of 51 standard parking spaces. Of the 51 spaces, 14 spaces of will be located on the Lot E side of the garage. Levels P-3 and P-4 are identical to each other and will provide a total of 59 parking spaces each. Of those 59 spaces per level, 14 spaces will be located on Lot E, and another 10 spaces will be along the bridge connecting the two halves of the parking garage. Level P-5 of the garage will provide a total of 59 spaces .Of those 59 spaces, 14 spaces will be located on the Lot E side of the garage, and another 10 spaces will be along the bridge.

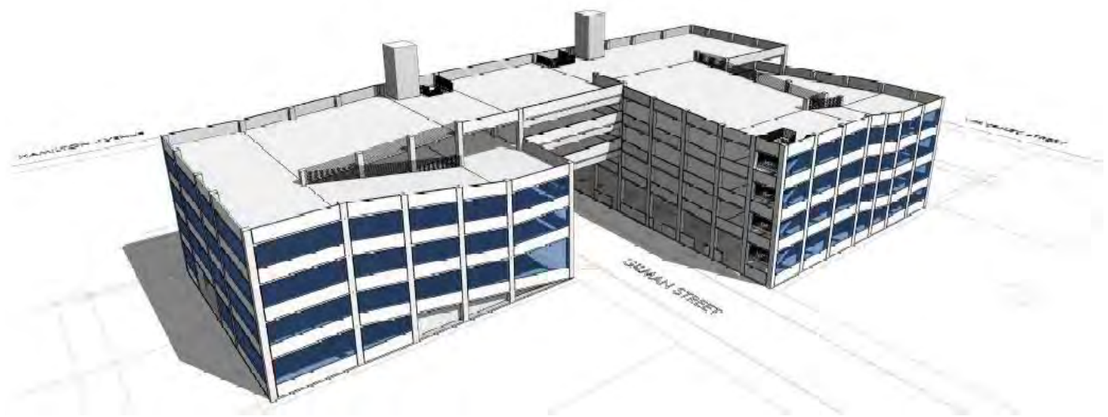
There is an option available to convert Level P-1 on Lot E into 6,200ft^2 of commercial space. This would displace 17 spaces and thus reduce the total net parking gain to 158 parking spaces for the combined Lot E/G.

The site constraints for Lot E/G, identified above, have been addressed in the conceptual design and are described below.

Existing trees within Lots E and G will need to be removed to make room for the proposed parking garage. However, existing trees along Gilman Street could potentially remain if their location does not substantially interfere with construction requirements. The existing mature tree in the southwest corner of Lot 35 will need to be sufficiently trimmed. Two more mature trees located in the northeast corner and one in the southeast corner of Lot G will need to be removed. An existing mature tree on the east of Lot 22 will need to be either sufficiently trimmed or completely removed depending on specific site conditions and construction requirements.

A setback distance of 3ft along the north, west, and south property lines will be required from the face of the parking garage such that the garage will have available space to meet the required 10-25% of unprotected openings per story for the garage to remain naturally ventilated. The 3ft setback should also be sufficient to clear adjacent building foundations that might encroach into Lot E and thus allow for the garage to have concentric foundations as well as providing some construction access between the existing and proposed buildings.

The portion of the garage on Lot E will be set back 3ft from the property line adjacent to Lot 32 to allow for more natural light to enter the existing building. The portion of the garage on Lot G will be set back 3ft from the property line adjacent to Lots 21, 22, 23, and 62 to allow for more natural light.

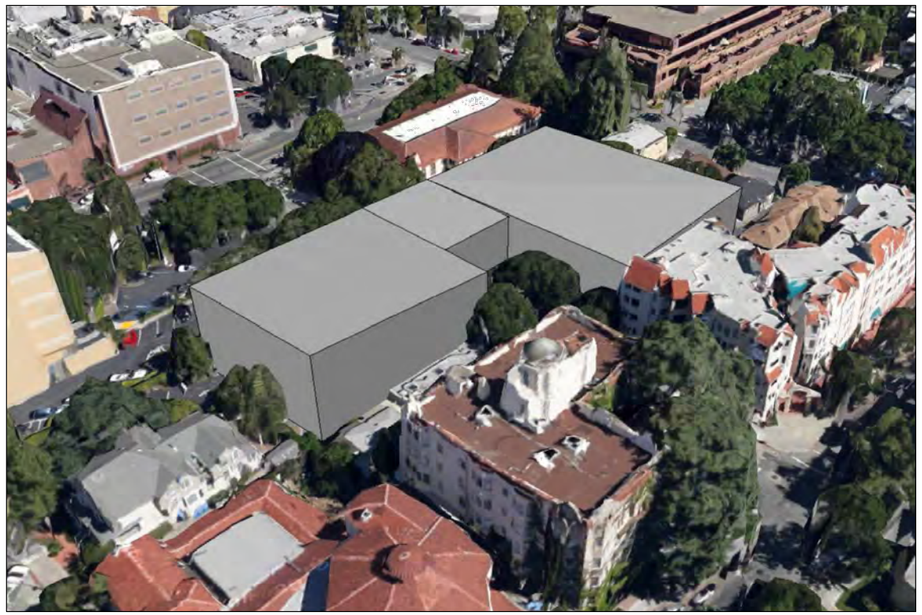




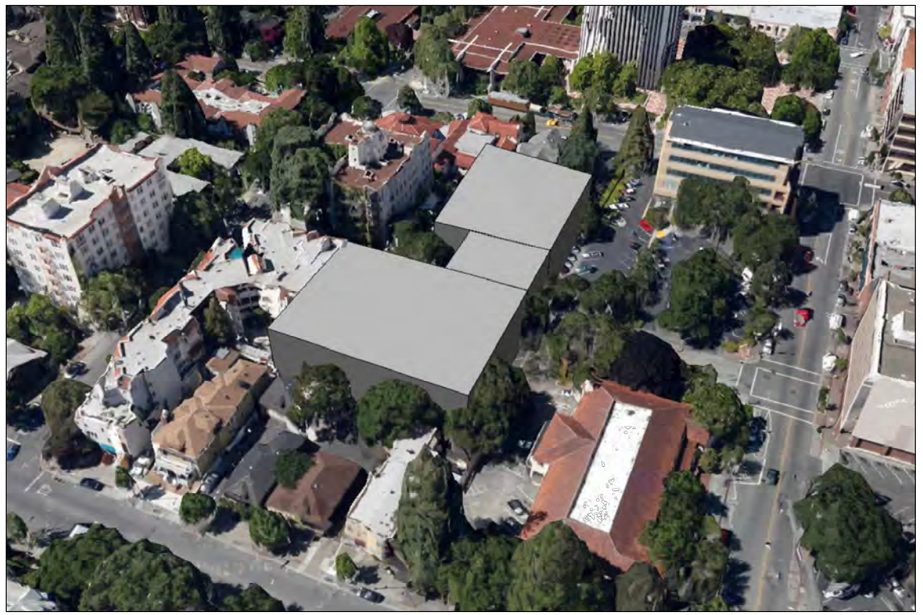
View looking southwest.



View looking north.



View looking north.



View looking south.

PROGRESS PRINT

City of Palo Alto
PALO ALTO, CALIFORNIA

Gilman/Bryant Lot E */Waverley Lot* G

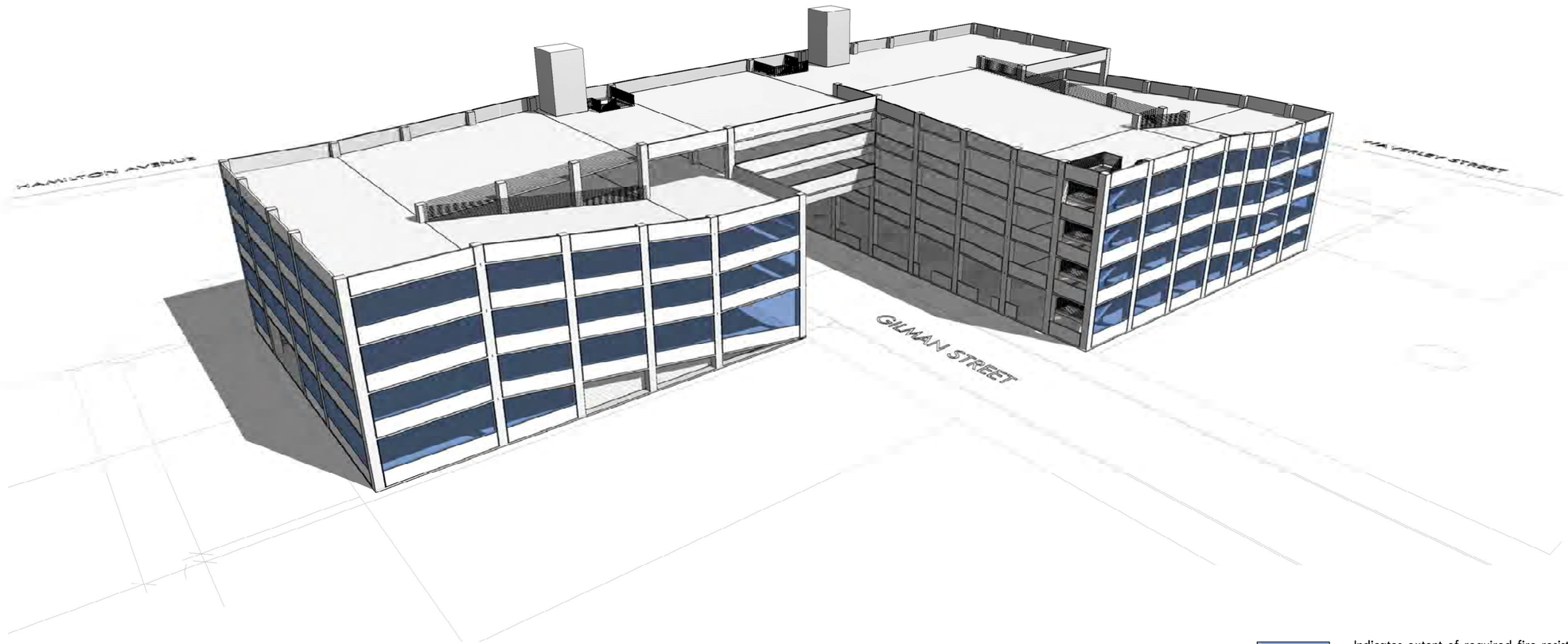
CONTEXTUAL PARKING GARAGE PERSPECTIVES

City of Palo Alto | SANDIS | HNA/PACIFIC

April 25, 2013

No Scale

EGA.0



Indicates extent of required fire-resistive infill wall system allowing up to 15% of unprotected opening area of the exterior wall per story in a fully sprinklered parking garage. Infill walls are shown on top of fire resistive concrete spandrels acting as vehicular impact barriers as well as pedestrian guardrails.

The extent of the infill walls and the opening configuration combined to achieve the allowed percentage of area of the exterior wall per story will be dependent on the final design of the parking garage.

PROGRESS PRINT

City of Palo Alto
PALO ALTO, CALIFORNIA

Gilman/Bryant Lot E */Waverley Lot* G

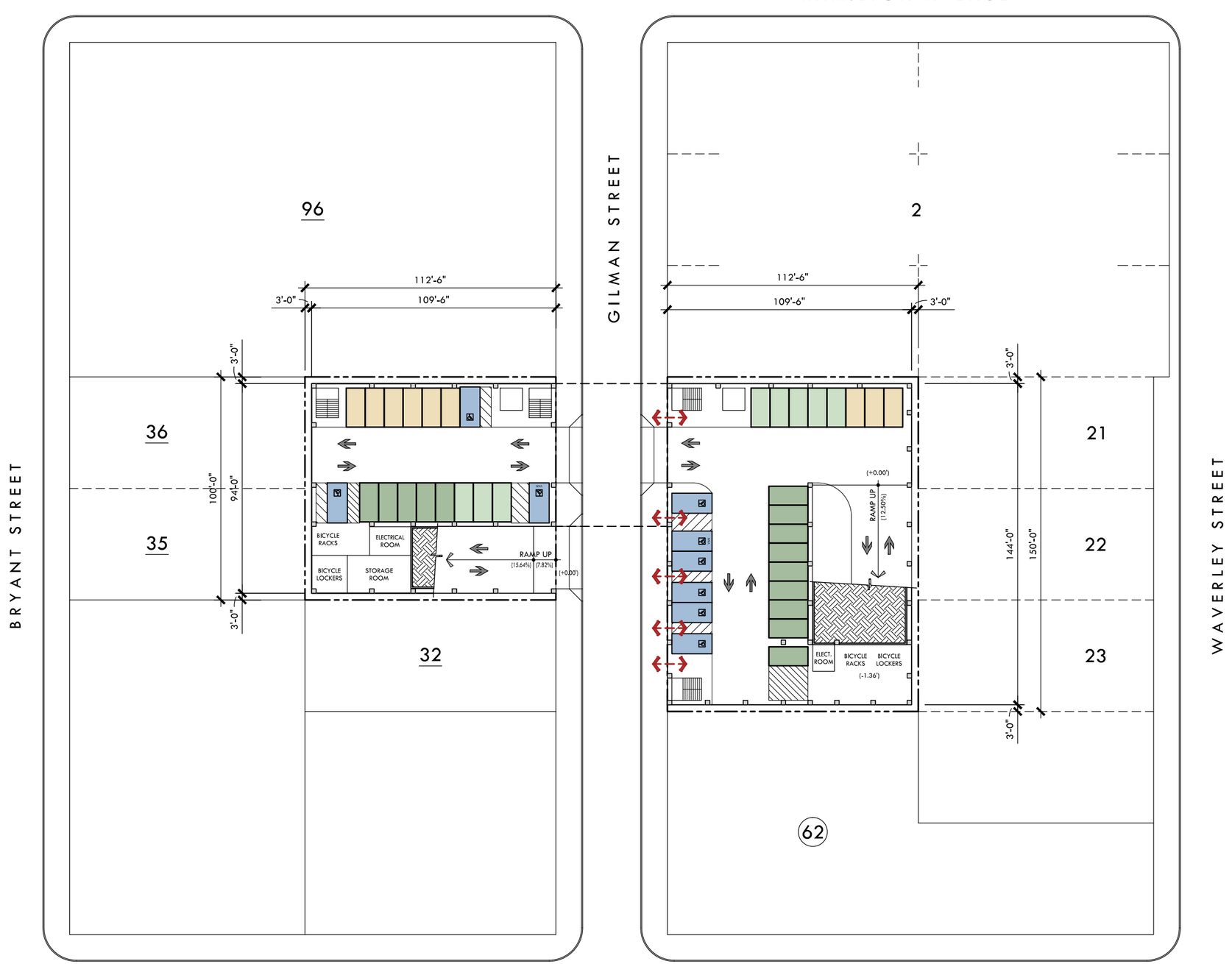
PARKING GARAGE PERSPECTIVE

City of Palo Alto | SANDIS | HNA/PACIFIC

April 25, 2013

No Scale

EGA.01



PARKING GARAGE SITE PLAN

FLOOR AREA SUMMARY (SQUARE FEET)

LEVEL P-5	22,764
LEVEL P-4	30,761
LEVEL P-3	30,761
LEVEL P-2	26,061
LEVEL P-1	26,616
TOTAL	136,963

HEIGHT OF BUILDING

TOP OF HOSTWAY (APPROXIMATE)	63'-2"
TOP OF HIGHEST SPANDREL	48'-11"
TOP OF HIGHEST FLOOR SLAB	45'-2"

CAR COUNT SUMMARY

	STANDARD (8'-6" x 17'-6")	ACCESSIBLE (9'-0" x 18'-0")	ELECTRIC (8'-6" x 17'-6")	LEFE (8'-6" x 17'-6")	TOTAL
LEVEL P-5	59	---	---	---	59
LEVEL P-4	59	---	---	---	59
LEVEL P-3	59	---	---	---	59
LEVEL P-2	51	---	---	---	51
LEVEL P-1	9	9	14	8	40
TOTAL	237	9	14	8	268

EXISTING SPACES DISPLACED 87

NET TOTAL PARKING SPACES 181

PROGRESS PRINT

City of Palo Alto
PALO ALTO, CALIFORNIA

Gilman/Bryant Lot E */Waverley Lot* G

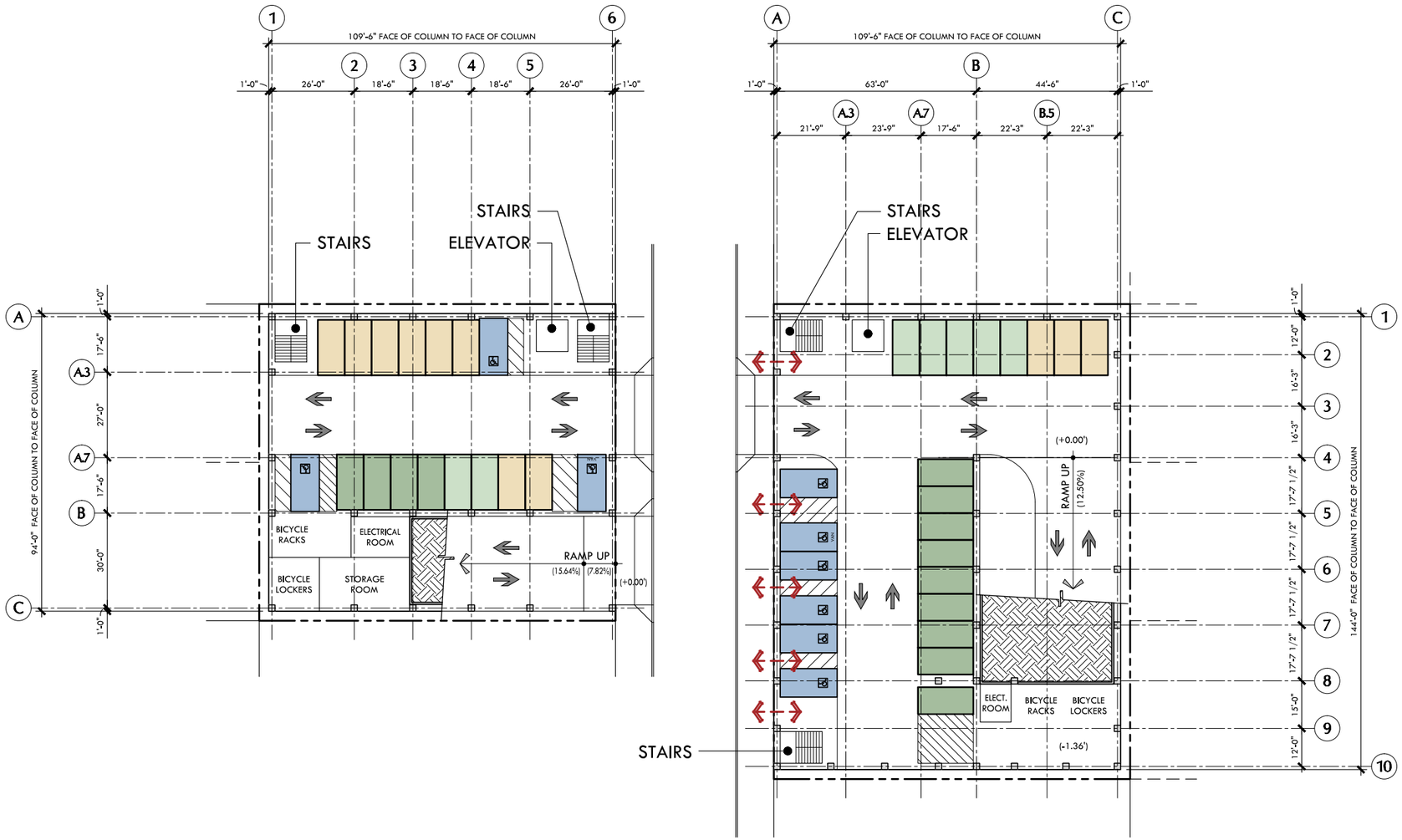
CONCEPTUAL PARKING GARAGE SITE PLAN *and* SUMMARIES

City of Palo Alto | SANDIS | HNA/PACIFIC

April 25, 2013

1" = 50'-0"

EGA.1



LEVEL P-1 FLOOR PLAN

PROGRESS PRINT

City of Palo Alto
PALO ALTO, CALIFORNIA

Gilman/Bryant Lot E */Waverley Lot* G

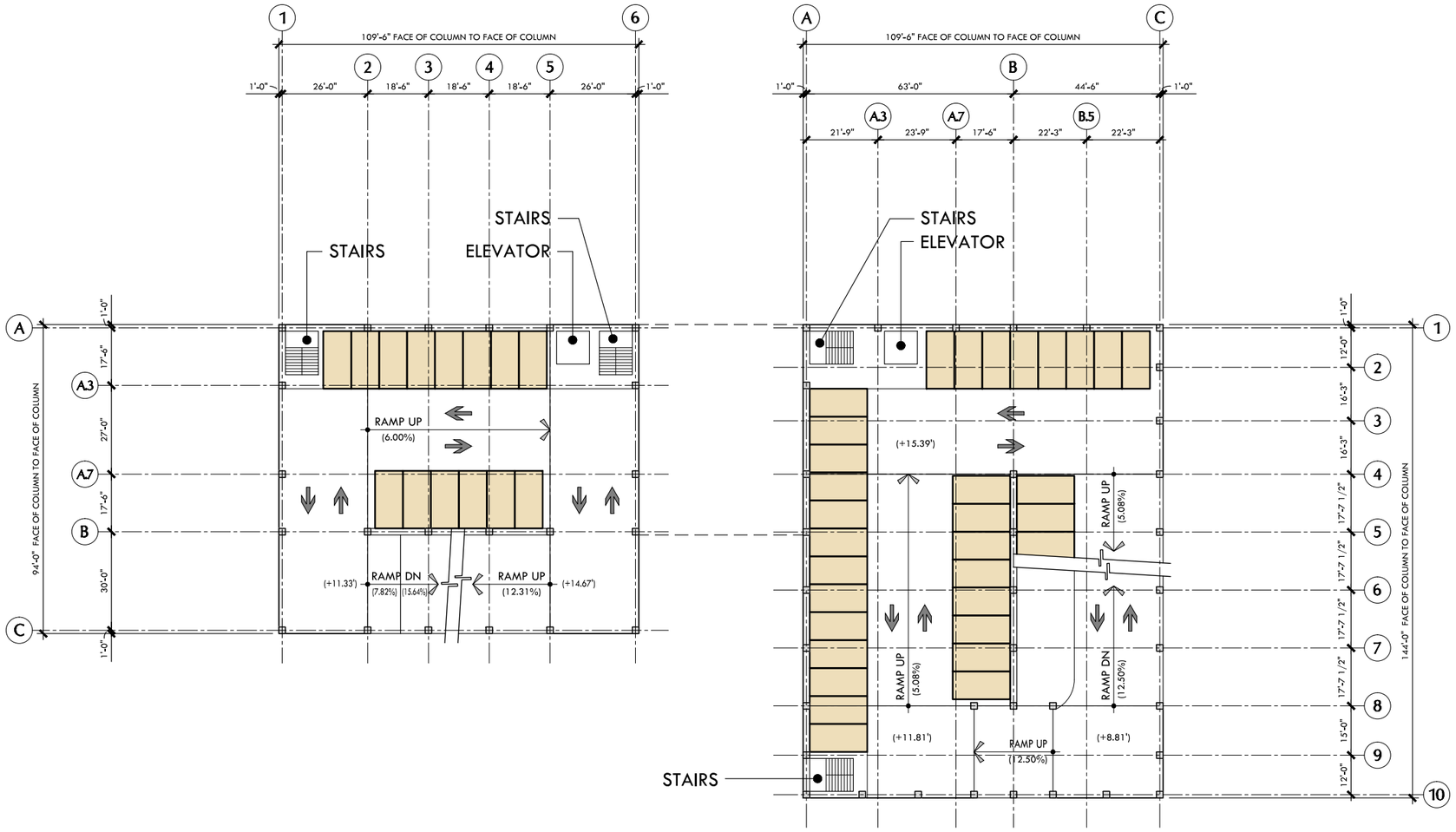
CONCEPTUAL PARKING GARAGE FLOOR PLAN

City of Palo Alto | SANDIS | HNA/PACIFIC

April 25, 2013

1" = 40'-0"

EGA.2



LEVEL P-2 FLOOR PLAN

PROGRESS PRINT

City of Palo Alto
PALO ALTO, CALIFORNIA

Gilman/Bryant Lot E */Waverley Lot* G

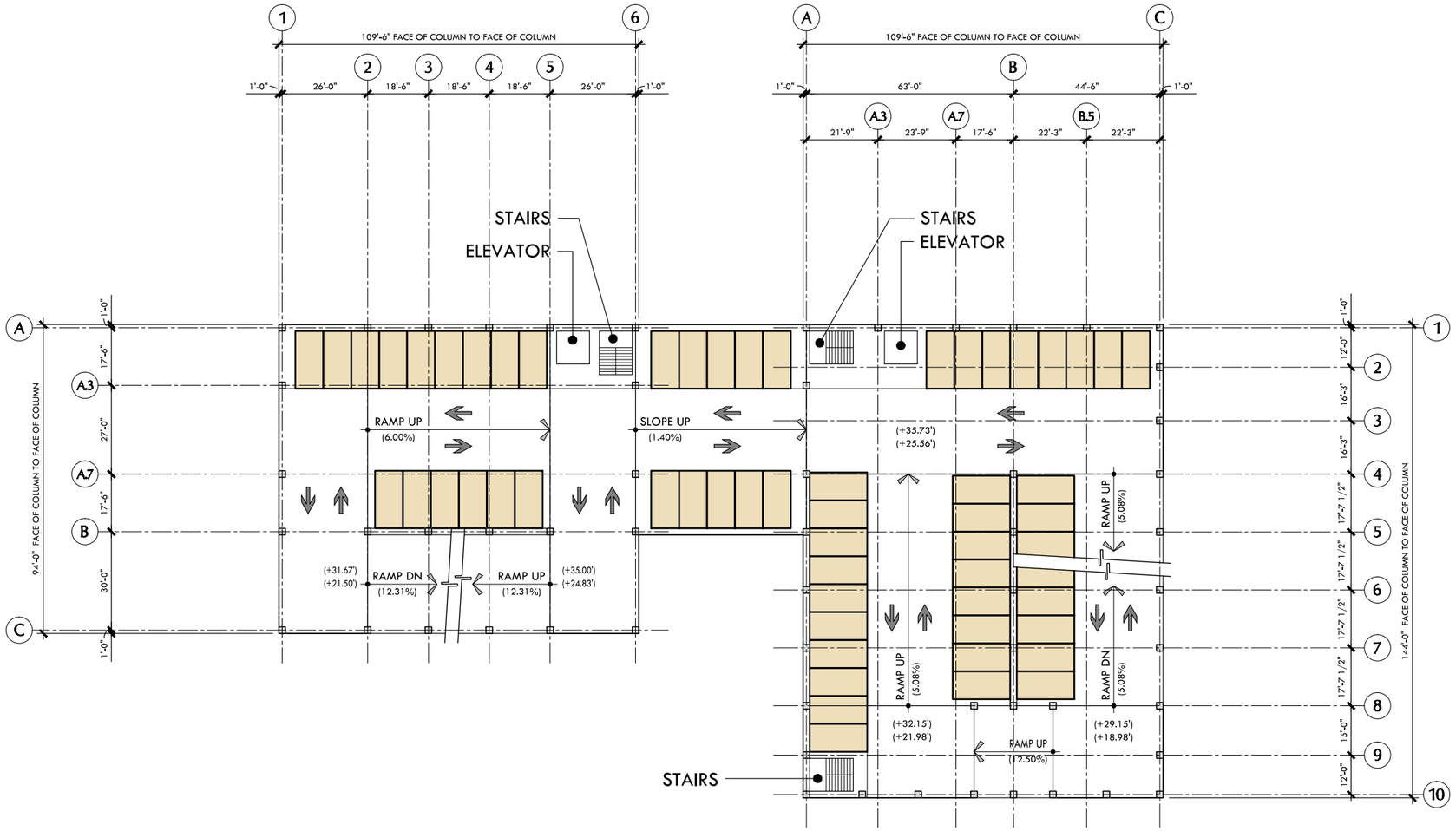
CONCEPTUAL PARKING GARAGE FLOOR PLAN

City of Palo Alto | SANDIS | HNA/PACIFIC

April 25, 2013

1" = 40'-0"

EGA.3



LEVEL P-3/P-4 FLOOR PLAN

PROGRESS PRINT

City of Palo Alto
PALO ALTO, CALIFORNIA

Gilman/Bryant Lot E */Waverley Lot* G

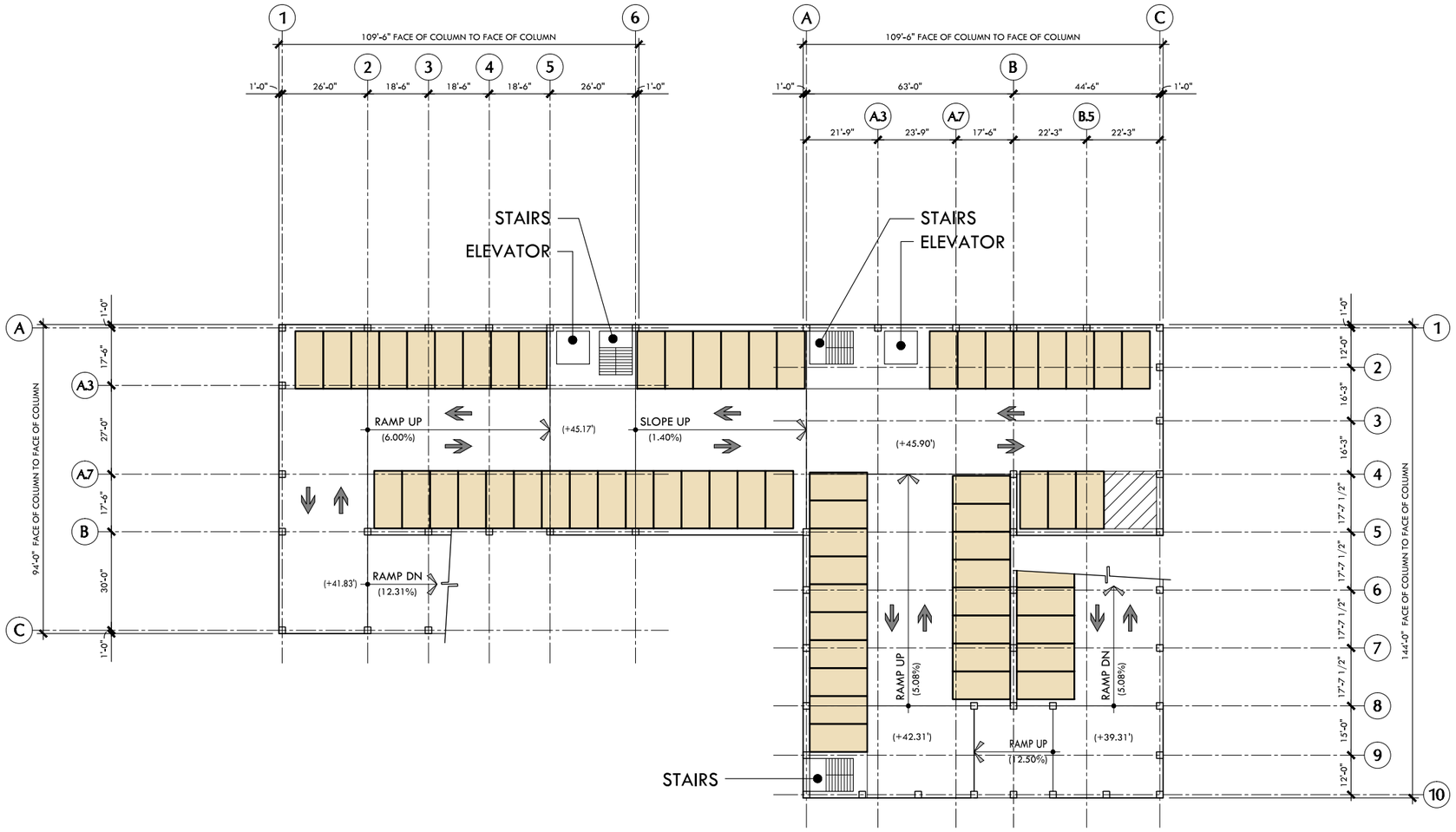
CONCEPTUAL PARKING GARAGE FLOOR PLANS

City of Palo Alto | SANDIS | HNA/PACIFIC

April 25, 2013

1" = 40'-0"

EGA.4



LEVEL P-5 FLOOR PLAN

PROGRESS PRINT

City of Palo Alto
PALO ALTO, CALIFORNIA

Gilman/Bryant Lot E */Waverley Lot* G

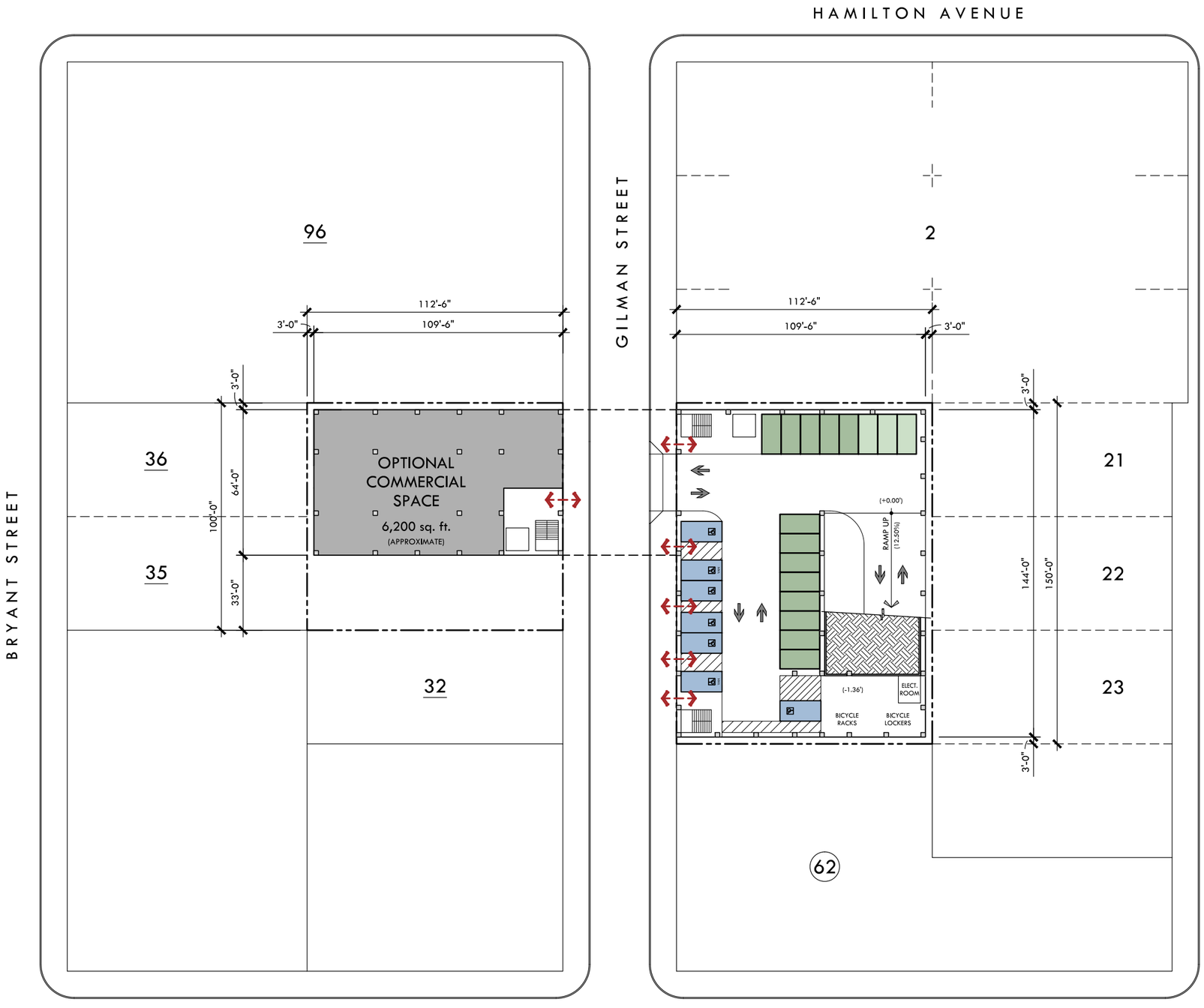
CONCEPTUAL PARKING GARAGE FLOOR PLAN

City of Palo Alto | SANDIS | HNA/PACIFIC

April 25, 2013

1" = 40'-0"

EGA.5



PARKING GARAGE SITE PLAN

FLOOR AREA SUMMARY (SQUARE FEET)

LEVEL P-5	21,954
LEVEL P-4	25,976
LEVEL P-3	25,976
LEVEL P-2	22,776
LEVEL P-1	22,776
TOTAL	119,458

HEIGHT OF BUILDING

TOP OF HOSTWAY (APPROXIMATE)	63'-2"
TOP OF HIGHEST SPANDREL	48'-11"
TOP OF HIGHEST FLOOR SLAB	45'-2"

CAR COUNT SUMMARY

	STANDARD (8'-6" x 17'-6")	ACCESSIBLE (9'-0" x 18'-0")	ELECTRIC (8'-6" x 17'-6")	LEFE (8'-6" x 17'-6")	TOTAL
LEVEL P-5	59	---	---	---	59
LEVEL P-4	63	---	---	---	63
LEVEL P-3	63	---	---	---	63
LEVEL P-2	33	---	---	4	37
LEVEL P-1	---	7	13	3	23
TOTAL	218	7	13	7	245

EXISTING SPACES DISPLACED 87

NET TOTAL PARKING SPACES 158

PROGRESS PRINT

City of Palo Alto
PALO ALTO, CALIFORNIA

Gilman/Bryant Lot E */Waverley Lot* G

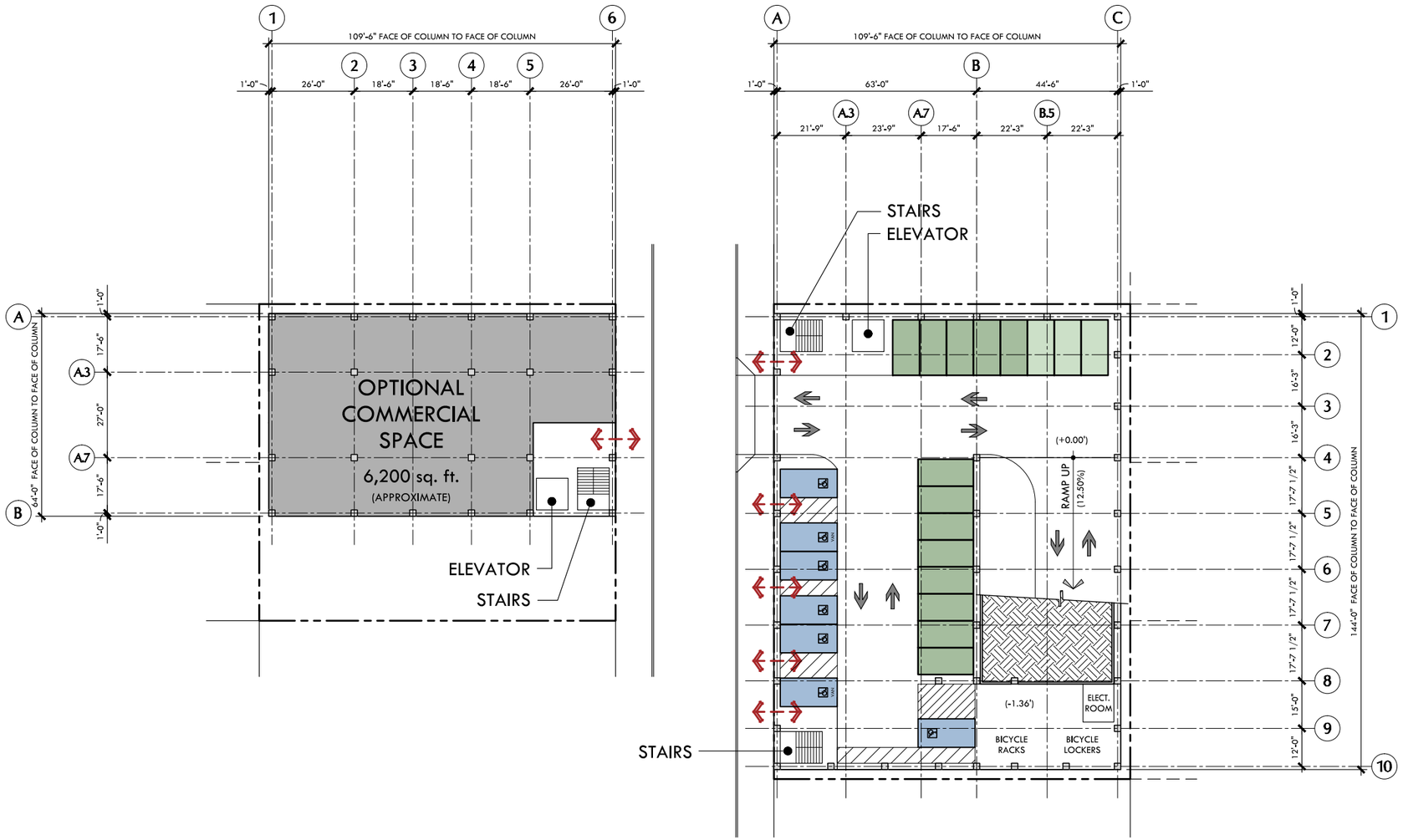
CONCEPTUAL PARKING GARAGE SITE PLAN *and* SUMMARIES

City of Palo Alto | SANDIS | HNA/PACIFIC

April 25, 2013

1" = 50'-0"

EGCA.1



LEVEL P-1 FLOOR PLAN

PROGRESS PRINT

City of Palo Alto
PALO ALTO, CALIFORNIA

Gilman/Bryant Lot E */Waverley Lot* G

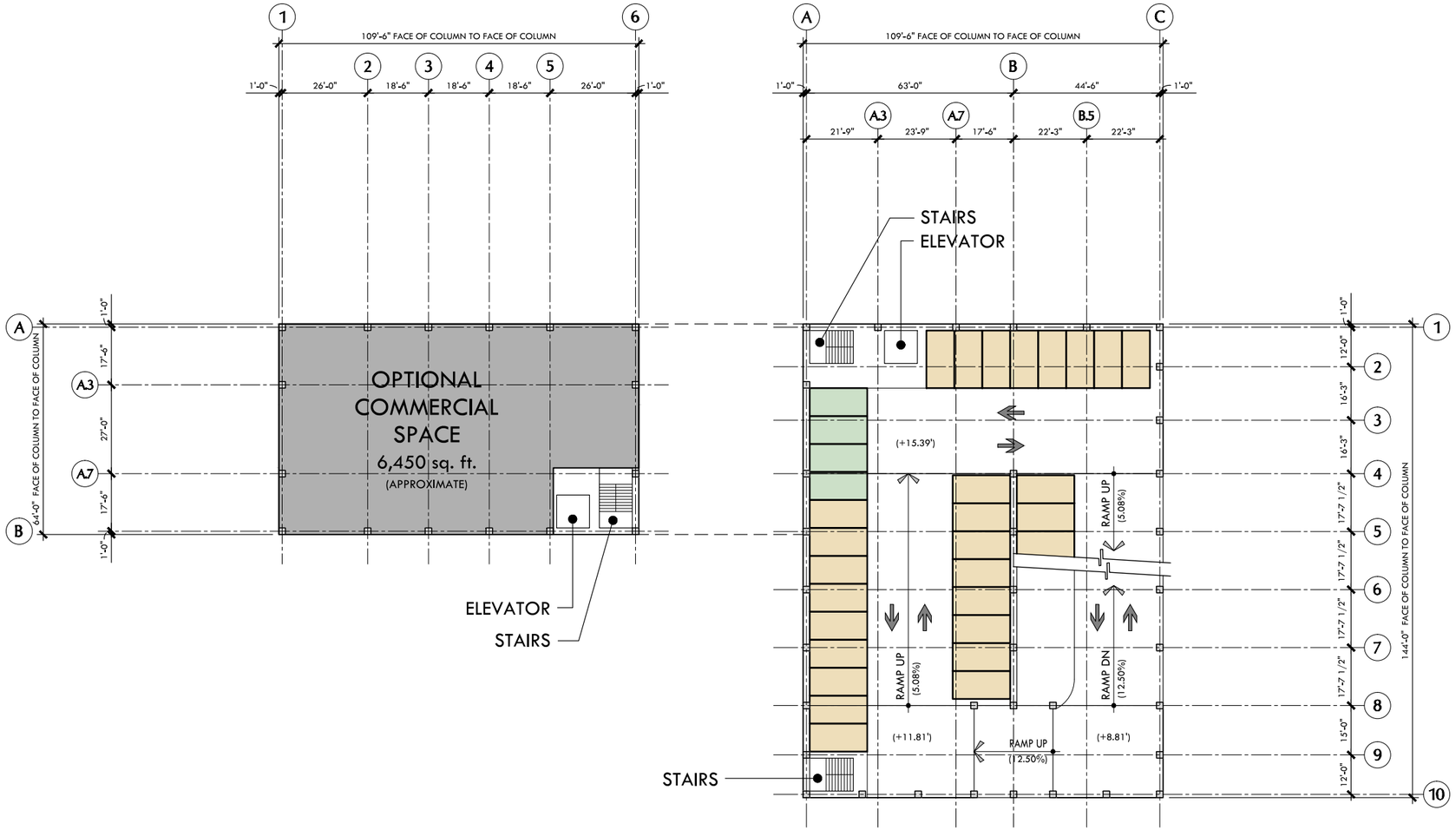
CONCEPTUAL PARKING GARAGE FLOOR PLAN

City of Palo Alto | SANDIS | HNA/PACIFIC

April 25, 2013

1" = 40'-0"

EGCA.2



LEVEL P-2 FLOOR PLAN

PROGRESS PRINT

City of Palo Alto
PALO ALTO, CALIFORNIA

Gilman/Bryant Lot E */Waverley Lot* G

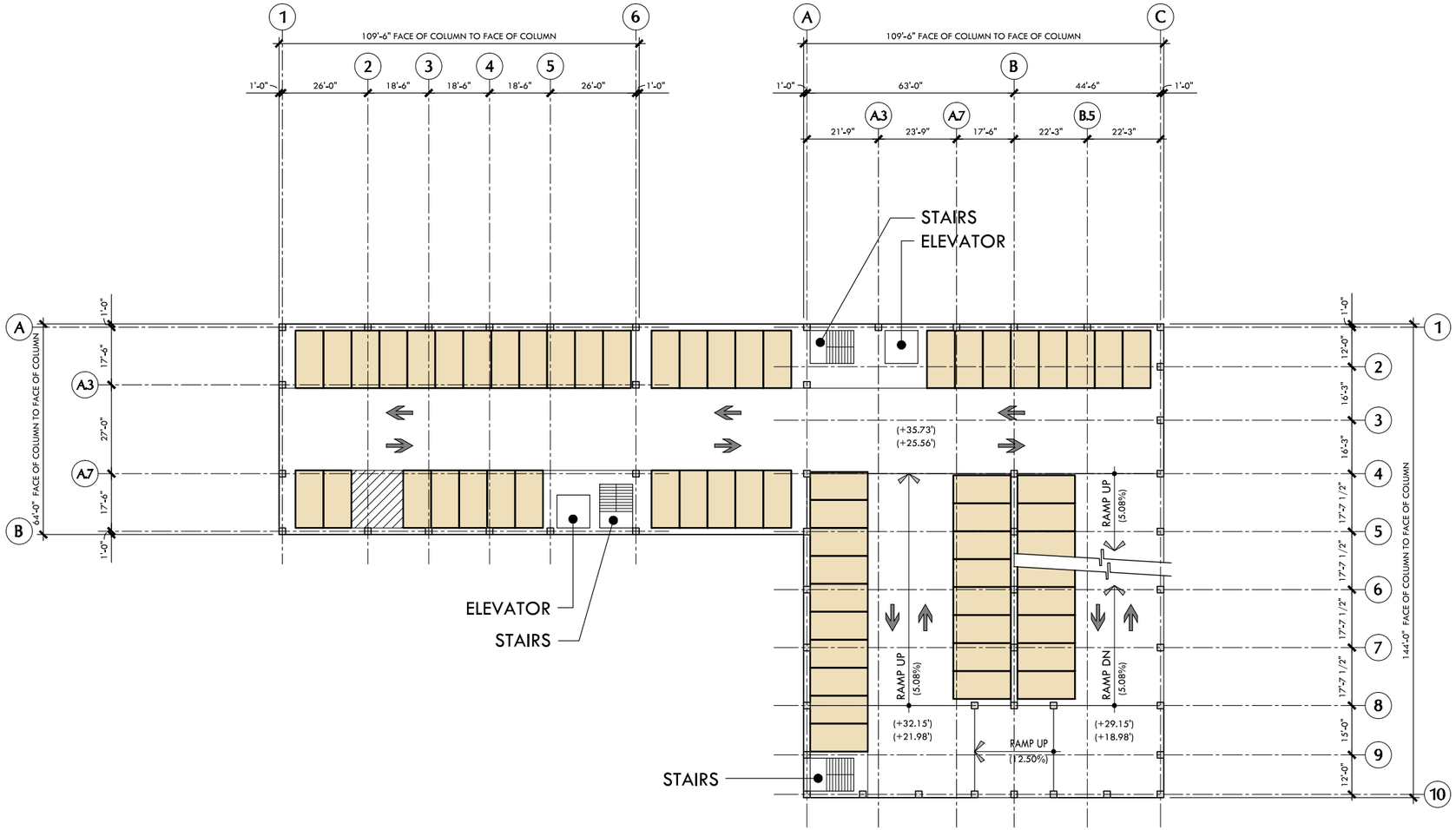
CONCEPTUAL PARKING GARAGE FLOOR PLAN

City of Palo Alto | SANDIS | HNA/PACIFIC

April 25, 2013

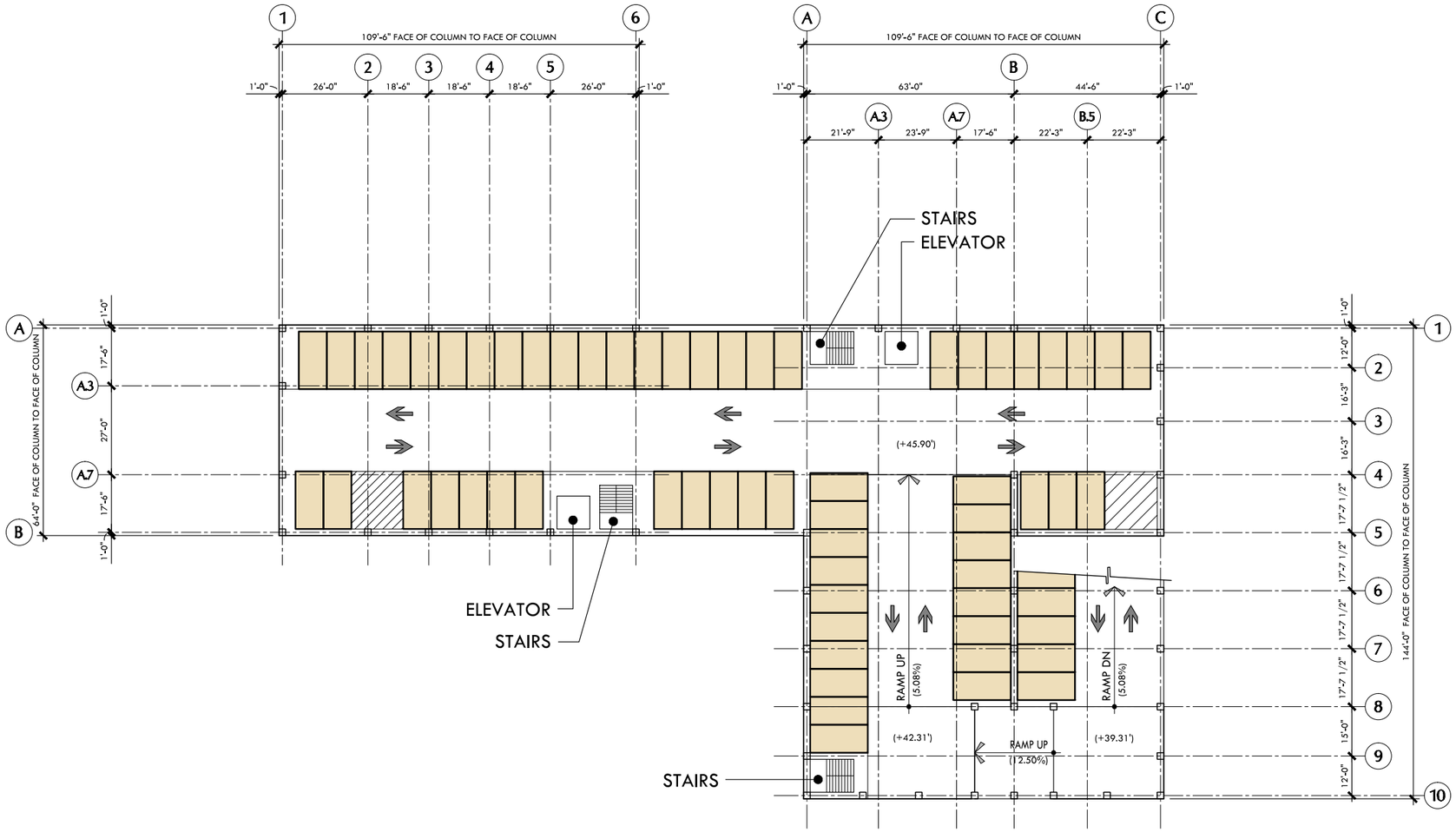
1" = 40'-0"

EGCA.3



LEVEL P-3/P-4 FLOOR PLAN

PROGRESS PRINT



LEVEL P-5 FLOOR PLAN

PROGRESS PRINT

City of Palo Alto
PALO ALTO, CALIFORNIA

Gilman/Bryant Lot E */Waverley Lot* G

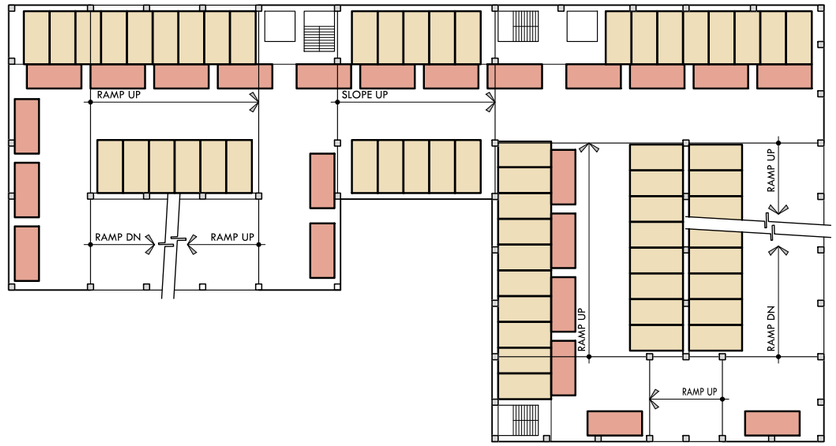
CONCEPTUAL PARKING GARAGE FLOOR PLAN

City of Palo Alto | SANDIS | HNA/PACIFIC

April 25, 2013

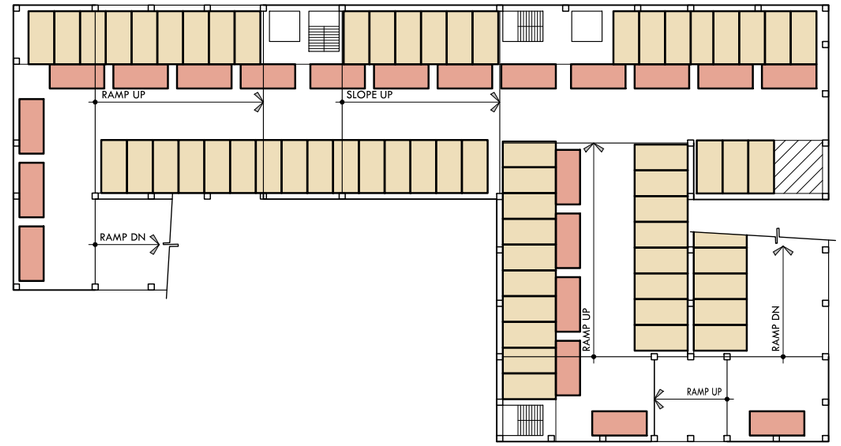
1" = 40'-0"

EGCA.5



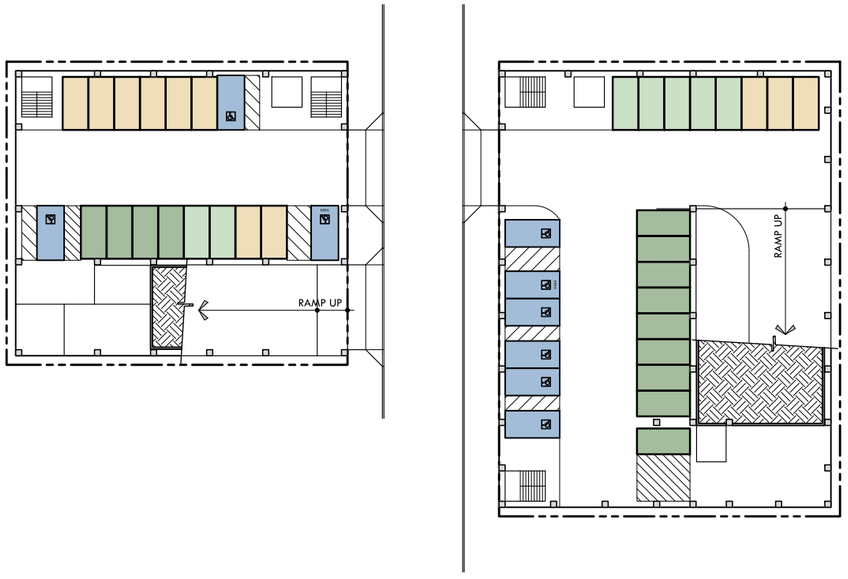
VALET SPACE / 23 (per level)

LEVEL P-3/P-4 FLOOR PLAN

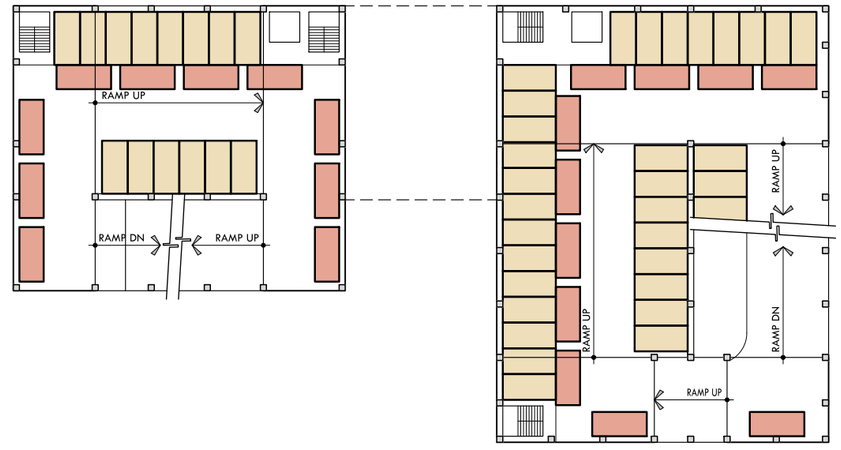


VALET SPACE / 21

LEVEL P-5 FLOOR PLAN



LEVEL P-1 FLOOR PLAN



VALET SPACE / 21

LEVEL P-2 FLOOR PLAN

PROGRESS PRINT

City of Palo Alto
PALO ALTO, CALIFORNIA

Gilman/Bryant Lot E */Waverley Lot* G

CONCEPTUAL PARKING GARAGE FLOOR PLANS *with* VALET

City of Palo Alto | SANDIS | HNA/PACIFIC

April 25, 2013

1" = 50'-0"

EGVA.1

Lot O

The Lot O garage will be 95,112ft^2, consist of five levels, and provide 223 parking spaces (with a net gain of 145 spaces). Vehicular access to the garage, along with stairs and elevators, will be located at both High Street and Emerson Street. Level P-1 will consist of 10 standard parking spaces, seven ADA spaces, 12 electric vehicle spaces, and seven LEFE vehicle spaces. Bicycle racks, bicycle lockers, a trash area, and an electrical room will be located toward the High Street access point. The ramps will be located on the northern side of the garage toward Lytton Avenue. There is a possibility of turning Level P-1 into a commercial/retail space. This would eliminate all potential parking spaces (including bicycle lockers and bicycle racks) on this level. Levels P-2, P-3, and P-4 all share the same floor plan and will provide 46 spaces each. Level P-5 shares a similar floor plan to the levels below it and will provide 49 spaces.

There is an option to build 5,000ft^2 of commercial space on the eastern side of Lot O toward Emerson Street. This, however, would reduce the number of parking spaces on Level P-1 to 23 spaces and reduce the net gain parking total to 132 spaces. Those 23 spaces would be composed of seven ADA spaces, 11 electric spaces, and seven LEFE spaces).

The site constraints for Lot O, identified above, have been addressed in the conceptual design described below.

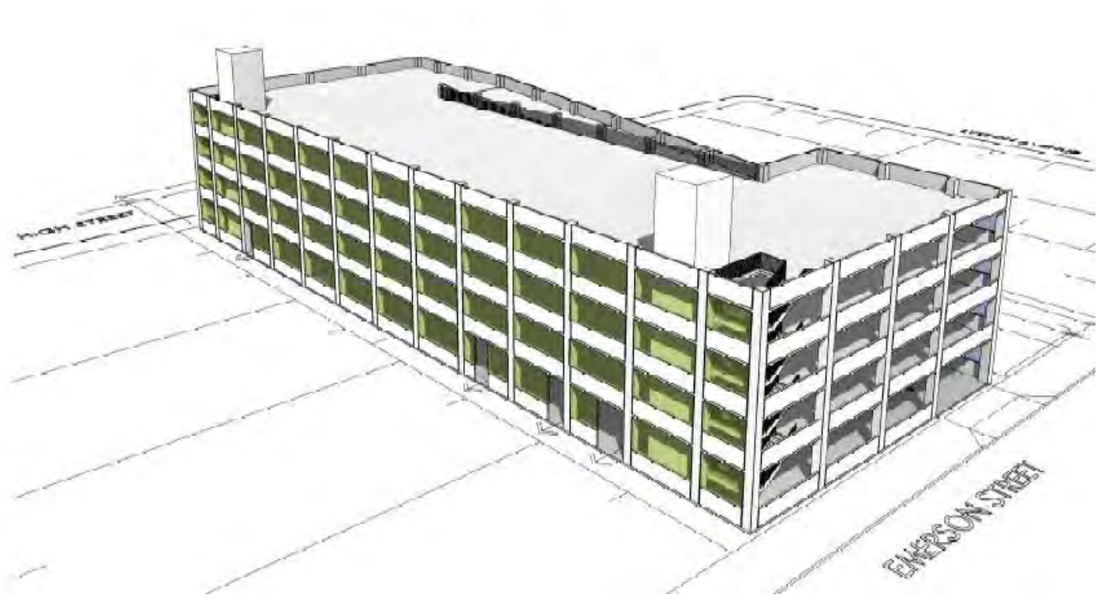
Existing trees on Lot O along High Street and Emerson Street will need to be removed. Existing street trees along High Street will be able to remain if they do not substantially interfere with the construction of the garage.

The proposed garage will be set back 5ft from Lots 26 and 32 to allow for an egress path to the public right of way from the existing building exits located in alcoves adjacent to Lot O at the center of the property. Setting the proposed garage 5ft from the property line will also allow for the required 10-25% of unprotected openings per story on this wall line to allow for natural light to enter the garage and encourage natural ventilation. This setback will also allow for access to the existing electrical meter service area between the existing buildings. The 5ft setback should be sufficient to clear adjacent building foundations that might encroach into Lot O allowing for the proposed garage to have concentric foundations as well as creating access for construction access between the existing and proposed buildings.

The proposed garage will be set back 7ft from Lots 28, 29, 30, and 31 to allow for the creation of a pedestrian alleyway providing access to the existing adjacent businesses. The walkway could double as exiting egress to the public right of way from the rear doors of those buildings as well as access to the businesses from the proposed parking garage. This setback will also create the space to allow for the required10-25% of unprotected openings per story on this wall line allowing natural light to enter the garage and encourage natural ventilation. It will also allow for more natural light and ventilation into the existing adjacent buildings. The 7ft setback should be sufficient to clear adjacent building foundations that might encroach into Lot O and will allow for the proposed garage to have concentric foundations as well as provide construction access between the existing and proposed buildings.

The pedestrian alleyway will unlikely be able to accommodate current trash, loading, and service areas from the rear doors of the existing businesses. A common trash area will be incorporated into the proposed garage design so these businesses have direct access from High Street. Access to this trash area will be from the 7ft alley way, into, and then through the proposed parking garage. A loading only zone should be created along either High Street or Emerson Street. Deliveries can utilize the 7ft pedestrian alley way leading to the rear of the existing businesses. The 7ft setback should be sufficient to maintain natural lighting and ventilation to the upper level openings on the existing buildings of Lots 29, 30, and 31.

Switchgear enclosures and transformers are currently located outside of the building on Lot 31. Depending on the access requirements, this electrical service equipment may or may not be able to remain in place if the proposed garage is located 7ft from the property line.





View looking east.



View looking southeast.

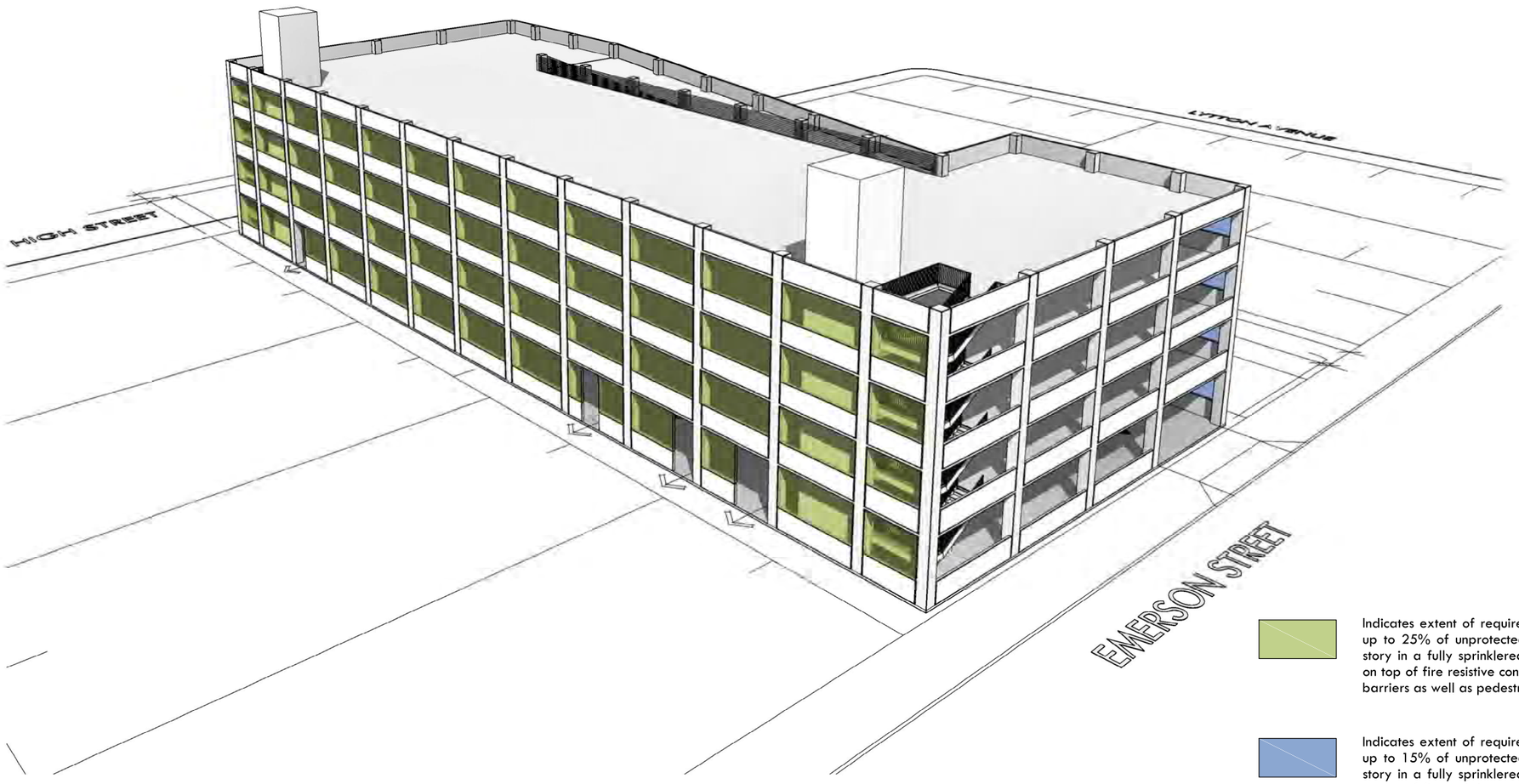


View looking east.



View looking north.

PROGRESS PRINT



Indicates extent of required fire-resistive infill wall system allowing up to 25% of unprotected opening area of the exterior wall per story in a fully sprinklered parking garage. Infill walls are shown on top of fire resistive concrete spandrels acting as vehicular impact barriers as well as pedestrian guardrails.

Indicates extent of required fire-resistive infill wall system allowing up to 15% of unprotected opening area of the exterior wall per story in a fully sprinklered parking garage. Infill walls are shown on top of fire resistive concrete spandrels acting as vehicular impact barriers as well as pedestrian guardrails.

The extent of the infill walls and the opening configuration combined to achieve the allowed percentage of area of the exterior wall per story will be dependent on the final design of the parking garage.

PROGRESS PRINT

City of Palo Alto
PALO ALTO, CALIFORNIA

Emerson/High Lot

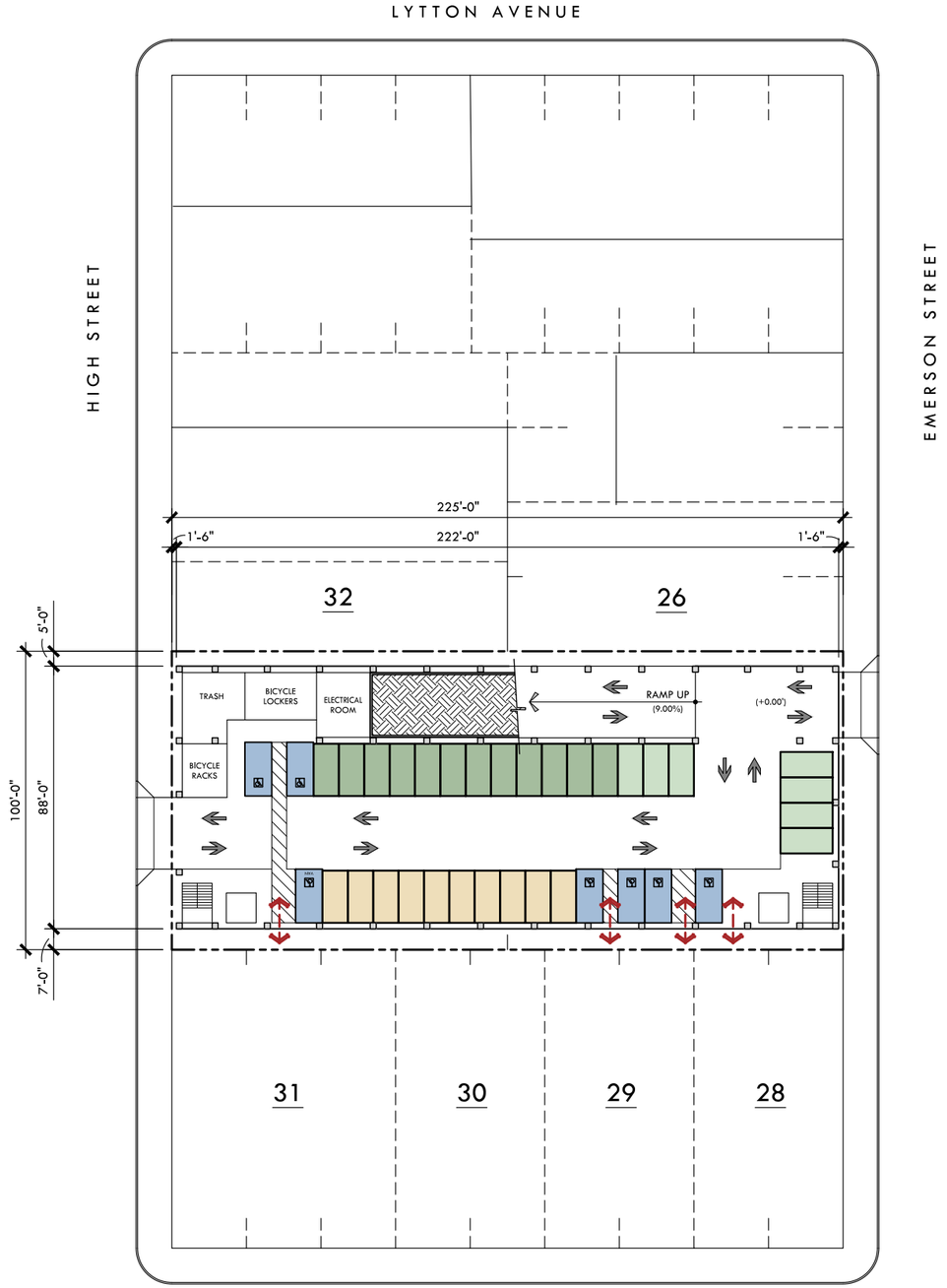
PARKING GARAGE PERSPECTIVE

City of Palo Alto | SANDIS | HNA/PACIFIC

April 25, 2013

No Scale

OA.01



PARKING GARAGE SITE PLAN

DESIGN PRECEPTS

(*as* RESPONSIVE *to* SITE CONSTRAINTS)

A Vehicular access to the garage is provided at both High Street and Emerson Street.

B Existing trees on Lot O along both High Street and Emerson Street (and trees interior to Lot O) to be removed.

C Existing street trees along High Street are to be maintained if reasonably possible to allow for the construction of the proposed garage.

D Proposed garage is set back 5' from Lots 26 and 32 to allow for an egress path to the public right of way from the existing building exits located in alcoves adjacent to Lot O at the center of the property. Setting the proposed garage 5' from the property line will also allow for 10% to 25% (depending if the garage is sprinklered) of unprotected openings per story on this wall line to allow for natural light and ventilation. This 5' setback will also allow for access to the existing electrical meter service area between the existing buildings.

E The 5' setback should be sufficient to clear any adjacent building foundations that might encroach into Lot O, and will allow for the proposed garage to have concentric foundations as well as access for construction between the existing and proposed buildings.

F Proposed garage is set back 7' from Lots 28, 28, 30 and 31 to allow for a pedestrian alleyway for the existing businesses. This 7' pedestrian walkway can double as exiting egress to the public right of way from the rear doors of those buildings as well as access to the businesses from the proposed parking garage.

G The 7' setback will allow for 10% to 25% (depending if the garage is sprinklered) of unprotected openings per story on this wall line to allow for natural light and ventilation.

H The 7' setback will also allow for more natural light and ventilation into the existing buildings that are located near the property line than would have been if the proposed garage was constructed on the property line.

I The 7' setback should be sufficient to clear any adjacent building foundations that might encroach into Lot O, and will allow for the proposed garage to have concentric foundations as well as access for construction between the existing and proposed buildings.

J The pedestrian alleyway will be likely unable to accommodate current trash areas or loading and service areas from the rear doors of the existing businesses. A common trash area has been incorporated into the garage for these businesses that has direct access from High Street. Access to this trash area is from the 7' alleyway and into and through the garage. A loading only zone should be created along High Street and/or Emerson Street to allow for loading and unloading on the street. Any deliveries etc. can utilize the 7' pedestrian alleyway leading to the rear of the existing businesses.

K The 7' setback should be sufficient to maintain the upper level openings on the existing buildings on Lots 29, 30 and 31 by providing extra separation distance if the existing Lot O was used as a yard to allow the openings in the existing building to be so close to the property line. Analyzing the new buildings using the current building codes could also yield additional latitude with the protection and size of these openings since the separation distances, percentages of unprotected openings and fire resistive exterior wall requirements have been reduced from previous more restrictive building codes.

L There are switchgear enclosures and transformers outside the building on Lot 31 adjacent to Lot O. It is assumed that this electrical service can be left in place if the proposed garage is located 7' from the property line. However service access to the electrical equipment may be compromised with the construction of the garage only 7' from the property line.

FLOOR AREA SUMMARY (SQUARE FEET)

LEVEL P-5	16,968
LEVEL P-4	19,536
LEVEL P-3	19,536
LEVEL P-2	19,536
LEVEL P-1	19,536
TOTAL	95,112

HEIGHT OF BUILDING

TOP OF HOSTWAY (APPROXIMATE)	60'-0"
TOP OF HIGHEST SPANDREL	45'-7"
TOP OF HIGHEST FLOOR SLAB	41'-10"

CAR COUNT SUMMARY

	STANDARD (8'-6" x 17'-6")	ACCESSIBLE (9'-0" x 18'-0")	ELECTRIC (8'-6" x 17'-6")	LEFE (8'-6" x 17'-6")	TOTAL
LEVEL P-5	49	---	---	---	49
LEVEL P-4	46	---	---	---	46
LEVEL P-3	46	---	---	---	46
LEVEL P-2	46	---	---	---	46
LEVEL P-1	10	7	12	7	36
TOTAL	197	7	12	7	223

EXISTING SPACES DISPLACED 78

NET TOTAL PARKING SPACES 145

PROGRESS PRINT

City of Palo Alto
PALO ALTO, CALIFORNIA

Emerson/High Lot O

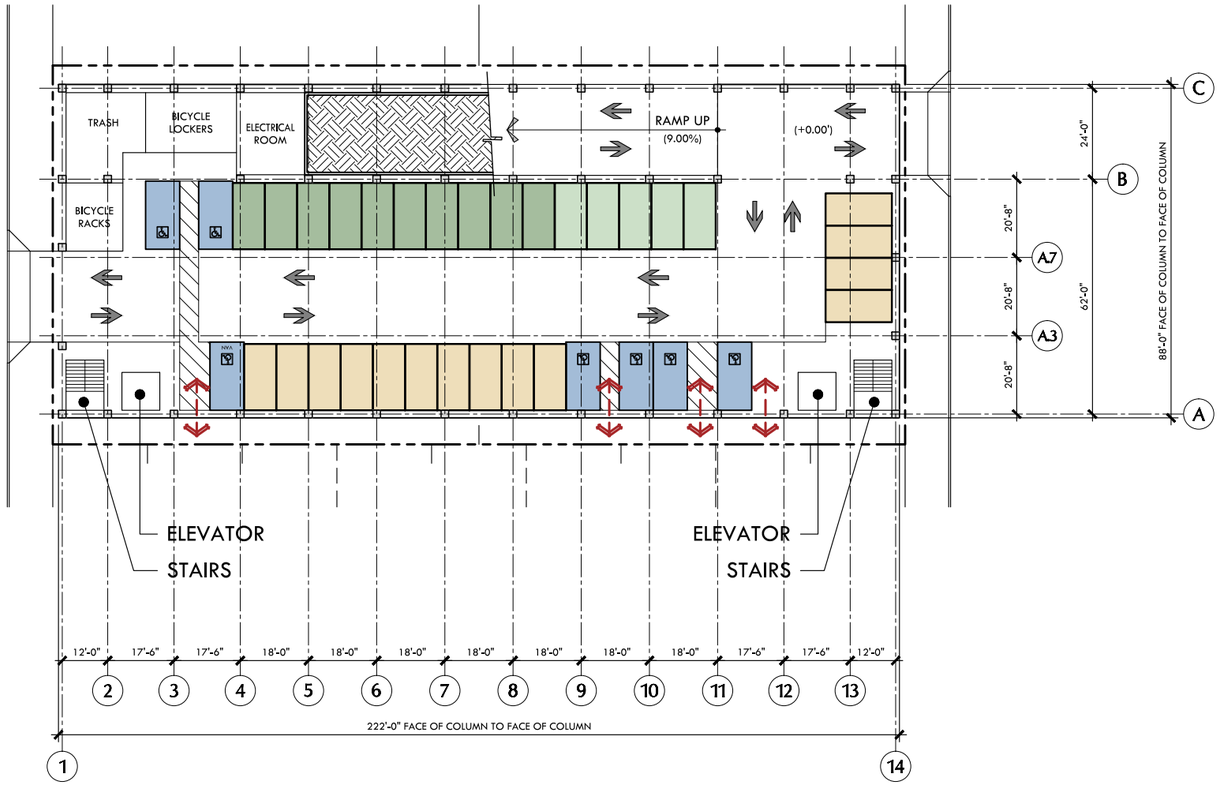
CONCEPTUAL PARKING GARAGE SITE PLAN, DESIGN PRECEPTS *and* SUMMARIES

City of Palo Alto | SANDIS | HNA/PACIFIC

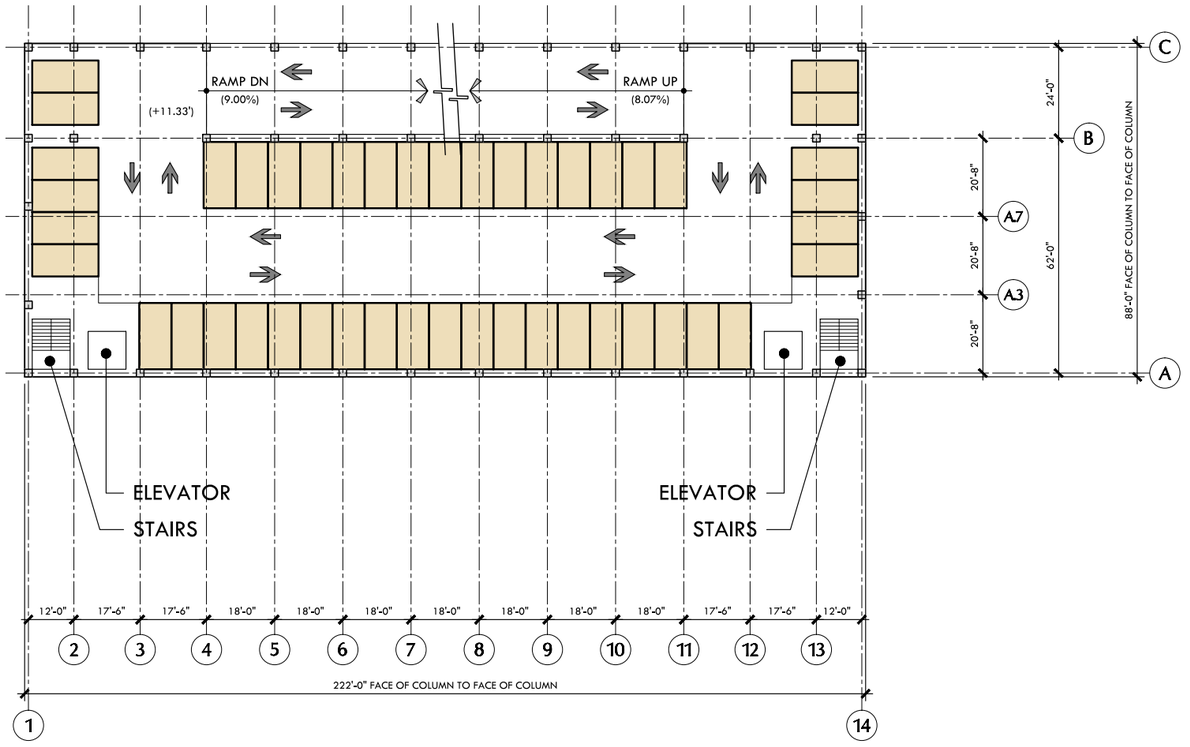
April 25, 2013

1" = 50'-0"

OA.1



LEVEL P-1 FLOOR PLAN



LEVEL P-2 FLOOR PLAN

PROGRESS PRINT

City of Palo Alto
PALO ALTO, CALIFORNIA

Emerson/High Lot

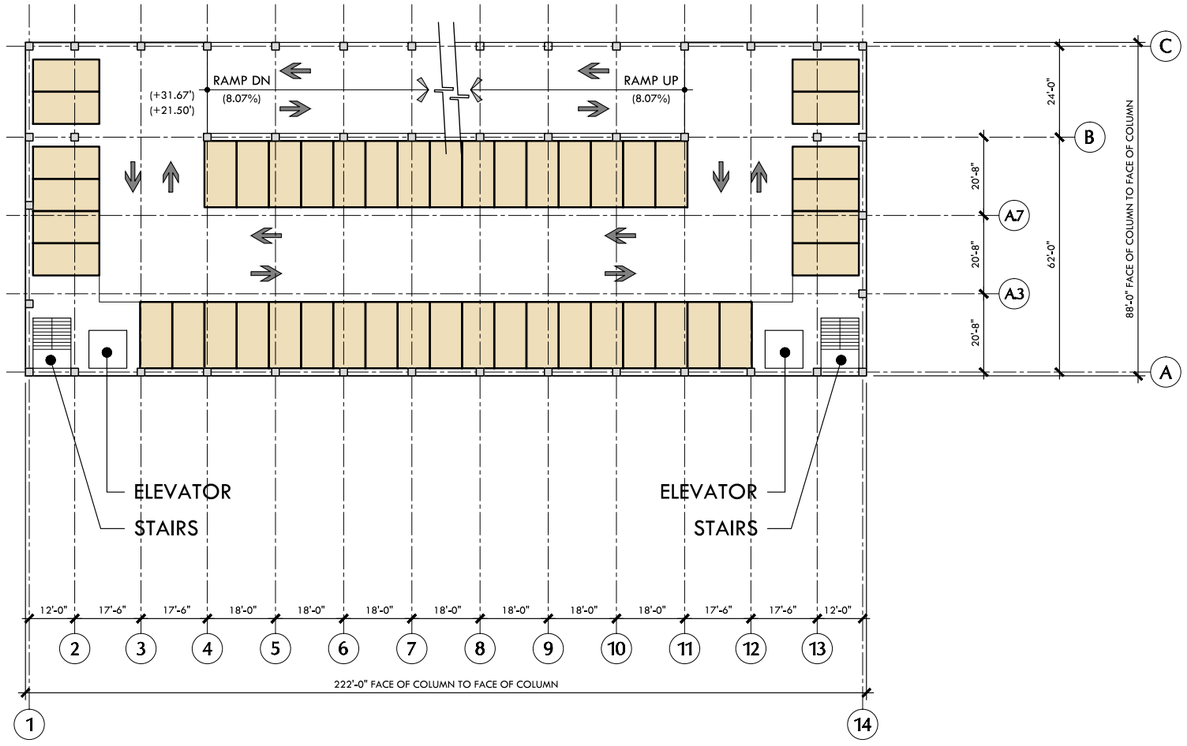
CONCEPTUAL PARKING GARAGE FLOOR PLANS

City of Palo Alto | SANDIS | HNA/PACIFIC

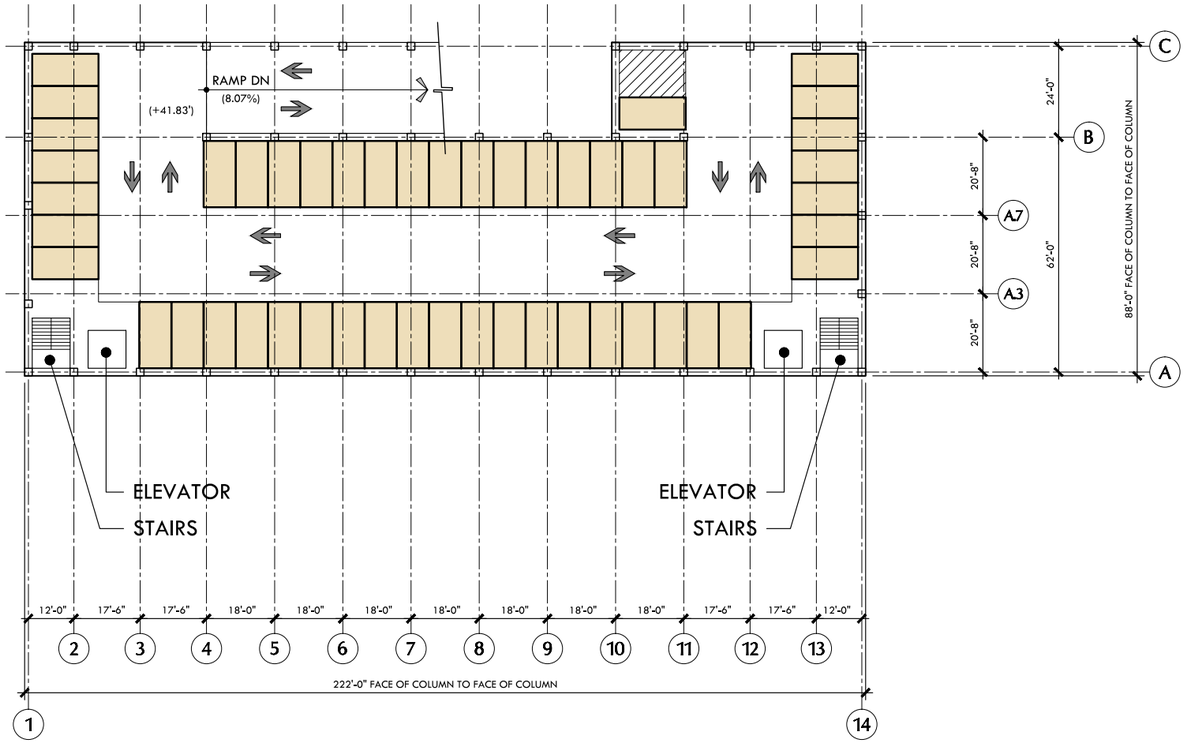
April 25, 2013

1" = 40'-0"

OA.2



LEVEL P-3/P-4 FLOOR PLAN



LEVEL P-5 FLOOR PLAN

PROGRESS PRINT

City of Palo Alto
PALO ALTO, CALIFORNIA

Emerson/High Lot

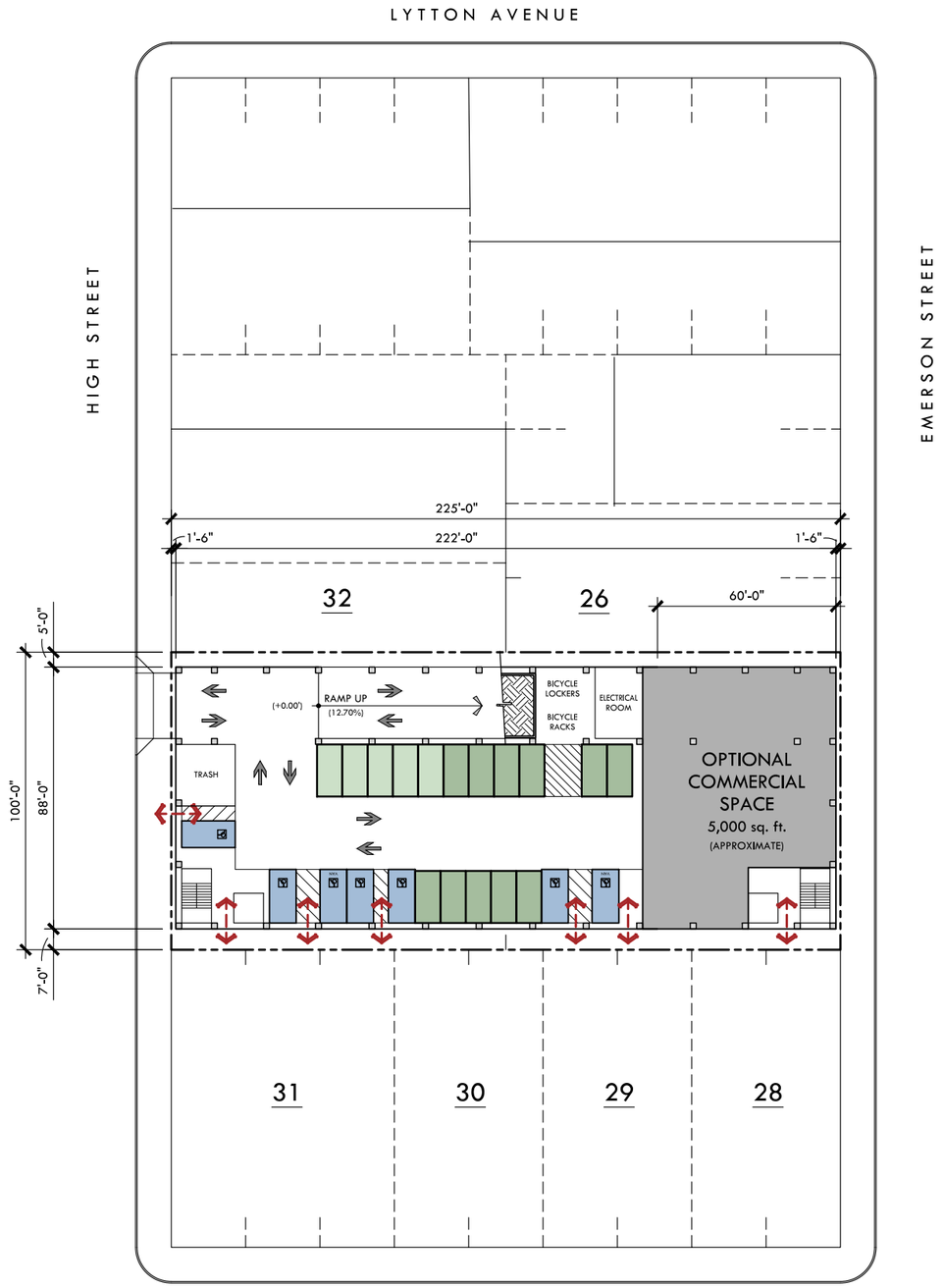
CONCEPTUAL PARKING GARAGE FLOOR PLANS

City of Palo Alto | SANDIS | HNA/PACIFIC

April 25, 2013

1" = 40'-0"

OA.3



PARKING GARAGE SITE PLAN

FLOOR AREA SUMMARY (SQUARE FEET)

LEVEL P-5	16,968
LEVEL P-4	19,536
LEVEL P-3	19,536
LEVEL P-2	19,536
LEVEL P-1	20,860
TOTAL	96,436

HEIGHT OF BUILDING

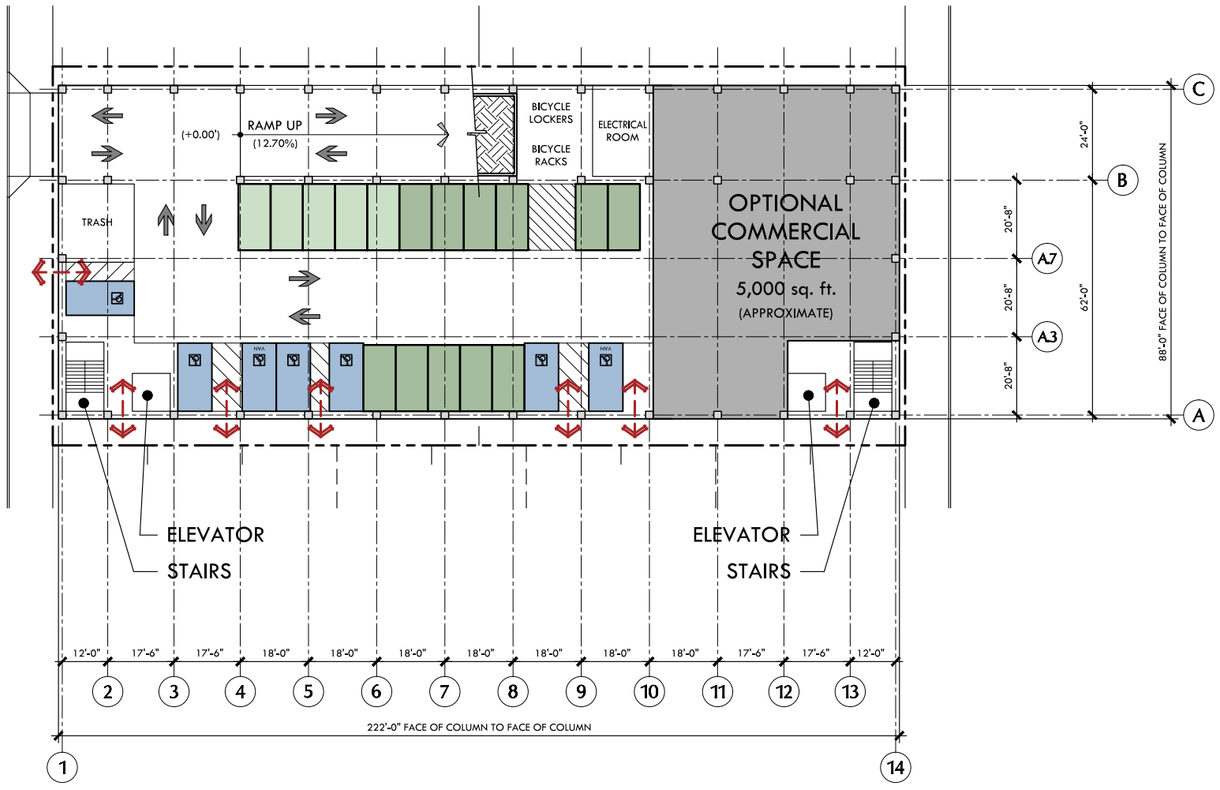
TOP OF HOSTWAY (APPROXIMATE)	67'-0"
TOP OF HIGHEST SPANDREL	52'-7"
TOP OF HIGHEST FLOOR SLAB	48'-10"

CAR COUNT SUMMARY

	STANDARD (8'-6" x 17'-6")	ACCESSIBLE (9'-0" x 18'-0")	ELECTRIC (8'-6" x 17'-6")	LEFE (8'-6" x 17'-6")	TOTAL
LEVEL P-5	49	---	---	---	49
LEVEL P-4	46	---	---	---	46
LEVEL P-3	46	---	---	---	46
LEVEL P-2	44	---	---	2	46
LEVEL P-1	---	7	11	5	23
TOTAL	185	7	11	7	210

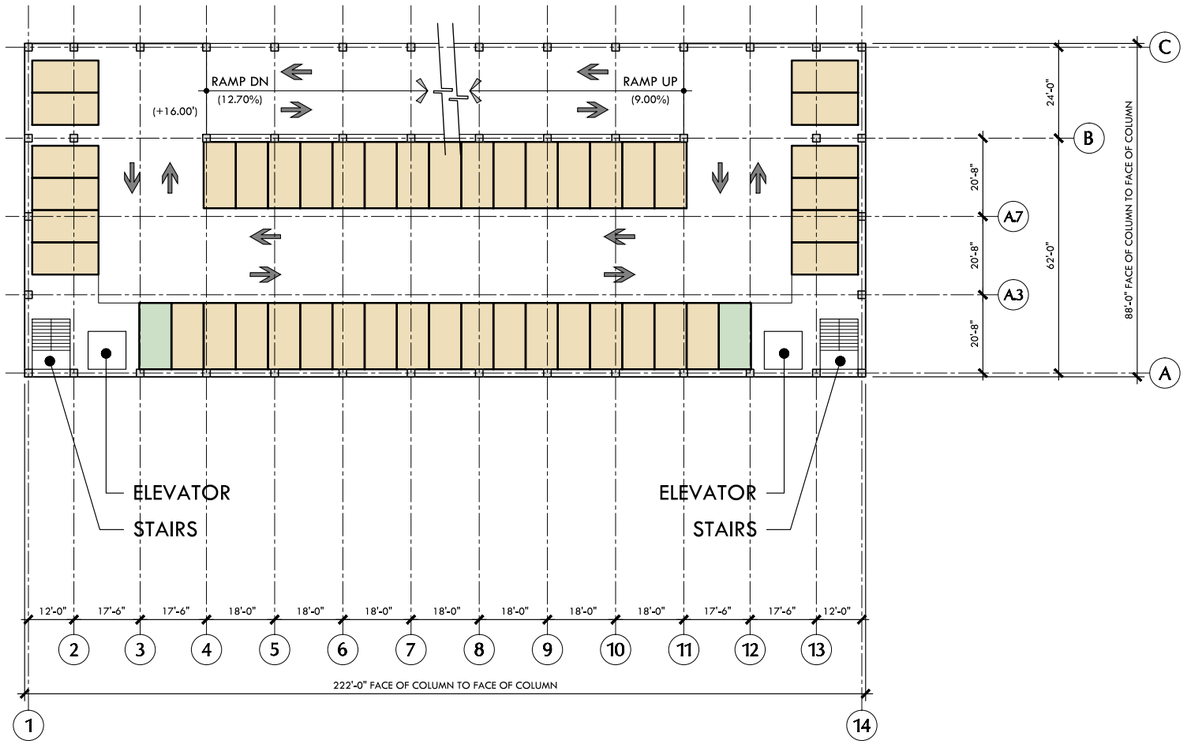
EXISTING SPACES DISPLACED	78
NET TOTAL PARKING SPACES	132

PROGRESS PRINT



LEVEL P-1 FLOOR PLAN

(Retail Option)



LEVEL P-2 FLOOR PLAN

PROGRESS PRINT

City of Palo Alto
PALO ALTO, CALIFORNIA

Emerson/High Lot

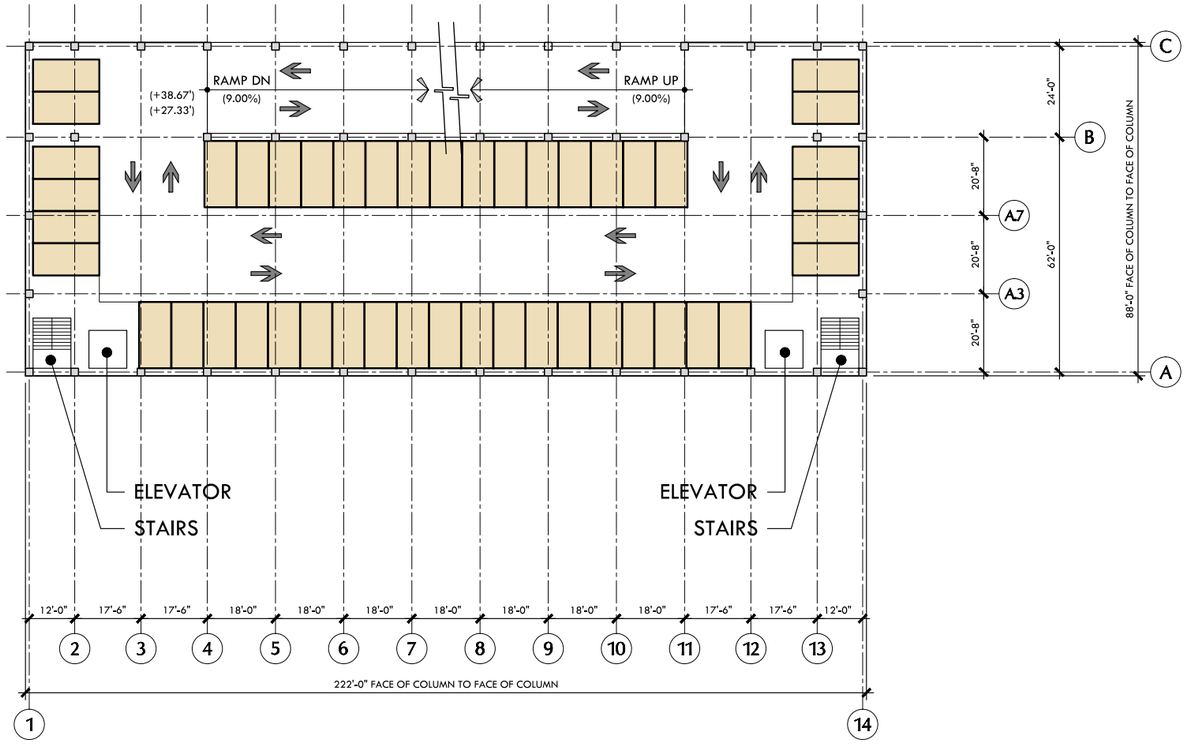
CONCEPTUAL PARKING GARAGE FLOOR PLANS

City of Palo Alto | SANDIS | HNA/PACIFIC

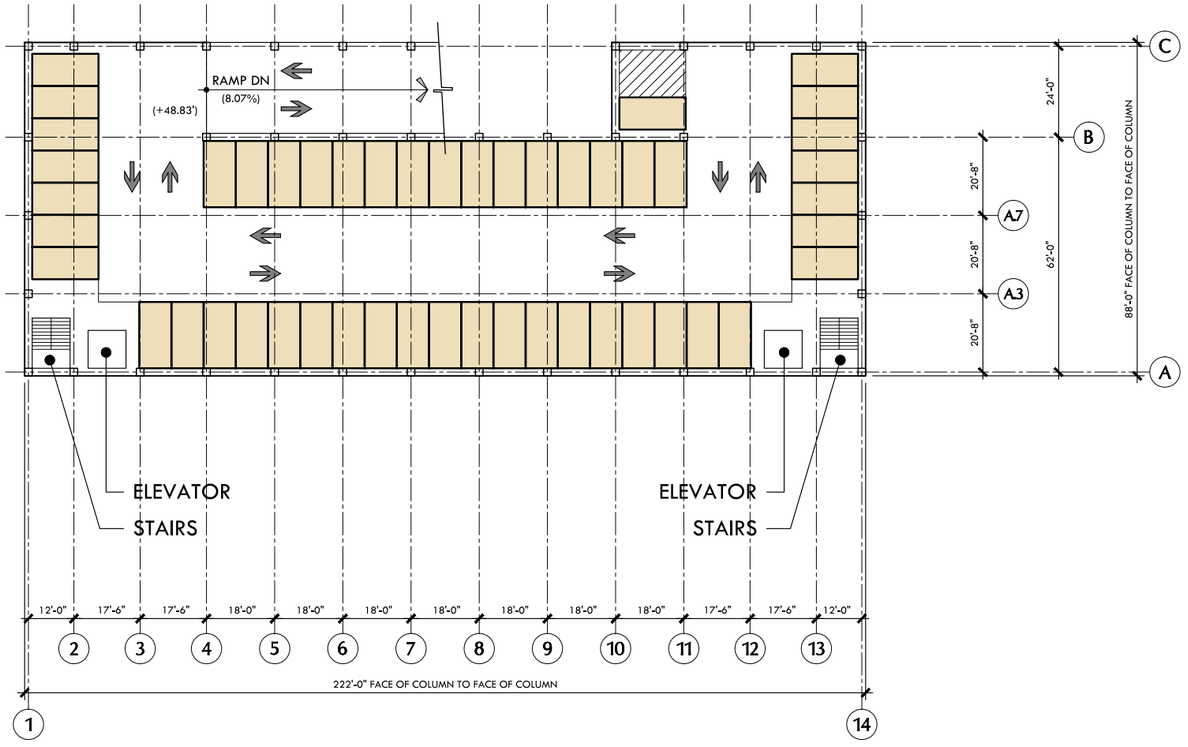
April 25, 2013

1" = 40'-0"

OCA.2



LEVEL P-3/P-4 FLOOR PLAN



LEVEL P-5 FLOOR PLAN

PROGRESS PRINT

City of Palo Alto
PALO ALTO, CALIFORNIA

Emerson/High Lot

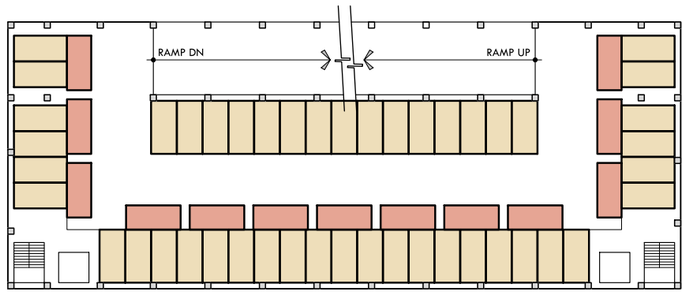
CONCEPTUAL PARKING GARAGE FLOOR PLANS

City of Palo Alto | SANDIS | HNA/PACIFIC

April 25, 2013

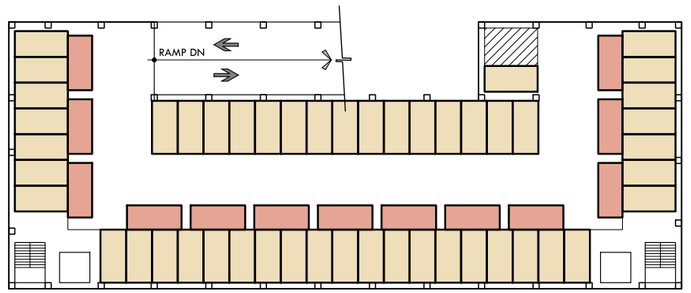
1" = 40'-0"

OCA.3



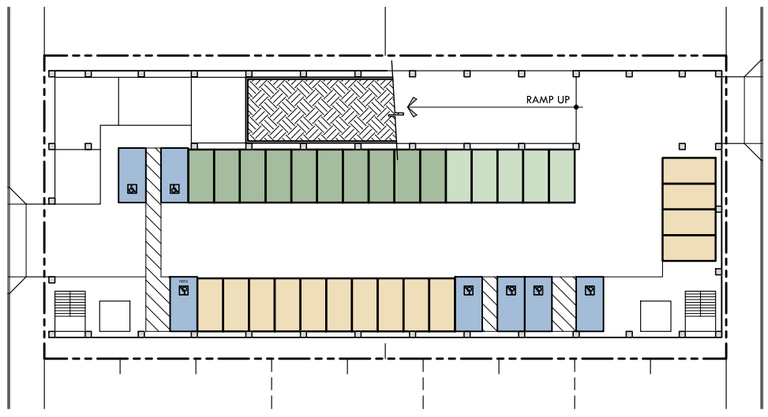
VALET SPACE / 13 (per level)

LEVEL P-3/P-4 FLOOR PLAN

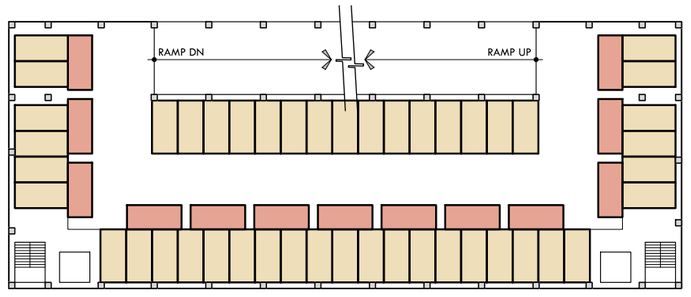


VALET SPACE / 13

LEVEL P-5 FLOOR PLAN



LEVEL P-1 FLOOR PLAN



VALET SPACE / 13

LEVEL P-2 FLOOR PLAN

PROGRESS PRINT

City of Palo Alto
PALO ALTO, CALIFORNIA

Emerson/High Lot

CONCEPTUAL PARKING GARAGE FLOOR PLANS *with* VALET

City of Palo Alto | SANDIS | HNA/PACIFIC

April 25, 2013

1" = 50'-0"

OVA.1

Lot P

The Lot P garage will be 70,700ft^2, consist of five levels, and provide 140 parking spaces (with a net gain of 89 spaces). Two way vehicular access will be provided on High Street with one ingress and one exit. Stairs will be located on both sides of the lot and an elevator on the northern end of High Street toward University. Level P-1 will provide five ADA spaces and eight electric vehicle spaces. Level P-2 will provide 25 standard spaces and four LEFE vehicle spaces. Levels P-3 and P-4 will each provide 32 standard space. Level P-5 will provide 34 standard spaces. Each level shares a similar floor plan with one ramp and two lanes going up and down on each level. Because Level P-5 will be the top floor, it will have no ramp running up to a level above it, thus allowing for two extra parking spaces.

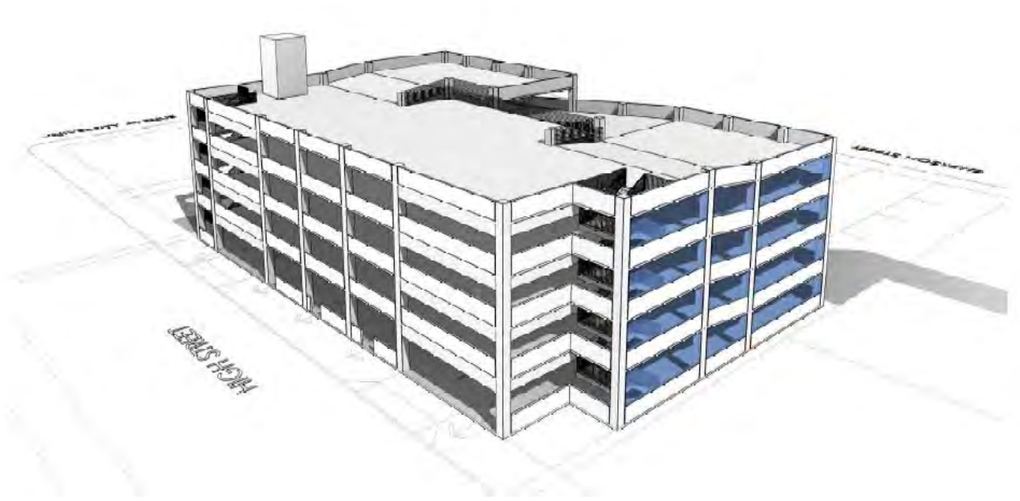
There is an option to build an additional basement, B-1, level. This level will have a similar floor plan as the other levels and provide 27 standard parking spaces, increasing the net gain to 114 spaces. Since Level B-1 will be underground and thus lacking natural ventilation, it will be required to have two exhaust shafts on each corner, one intake shaft, and an electrical room. Should more parking still be required at this location, two more basement levels could be constructed to provide 28 parking spaces per floor.

The site constraints for Lot P, identified above, have been addresses in the conceptual design described below.

A 15ft wide alley exists at the north end of the site that has been incorporated into the surface parking of Lot P and is not discernible without consulting the County Assessor's Map. This alley provides access to the existing 17ft-6in wide alley at the east side of the site that is maintained for services and pedestrian access to the existing businesses on Lots 97, 79, 80, 81, 82, and 83. The 15ft alley on the north is to be reclaimed to provide access to the existing east side alley as well as to provide the existing building on Lot 45 with access to its fire department connection, service and trash area, and to maintain unprotected openings along the southern wall of the existing building. The proposed parking garage will be set back on the north side of Lot P 5ft and on the east side of Lot P 2.5ft from the 15ft wide alley (10ft to centerline of the alley) to allow natural light to enter into and natural ventilation to flow past the unprotected openings of the garage which would increase the alley width to 20ft.

Setting the proposed garage 3ft from the property line on the south of Lot P will allow for the required 10-25% of unprotected openings per story on this wall line to allow for natural light to enter the garage and encourage natural ventilation. The 3ft setback should be sufficient to clear adjacent building foundations that might encroach into Lot P and will thus allow for the proposed garage to have concentric foundations as well as providing construction access between the existing and proposed buildings.

The 3ft setback should also be sufficient to maintain the upper level openings on the existing buildings on Lots 85 and 86.The existing trees along High Street and within Lot P will be removed. The garage will be required to be notched around an existing electrical transformer at the southwest corner of Lot P to allow it to remain in place.





View looking northeast.



View looking north.



View looking west.



View looking southeast.

PROGRESS PRINT

City of Palo Alto
PALO ALTO, CALIFORNIA

High/Hamilton Lot

P

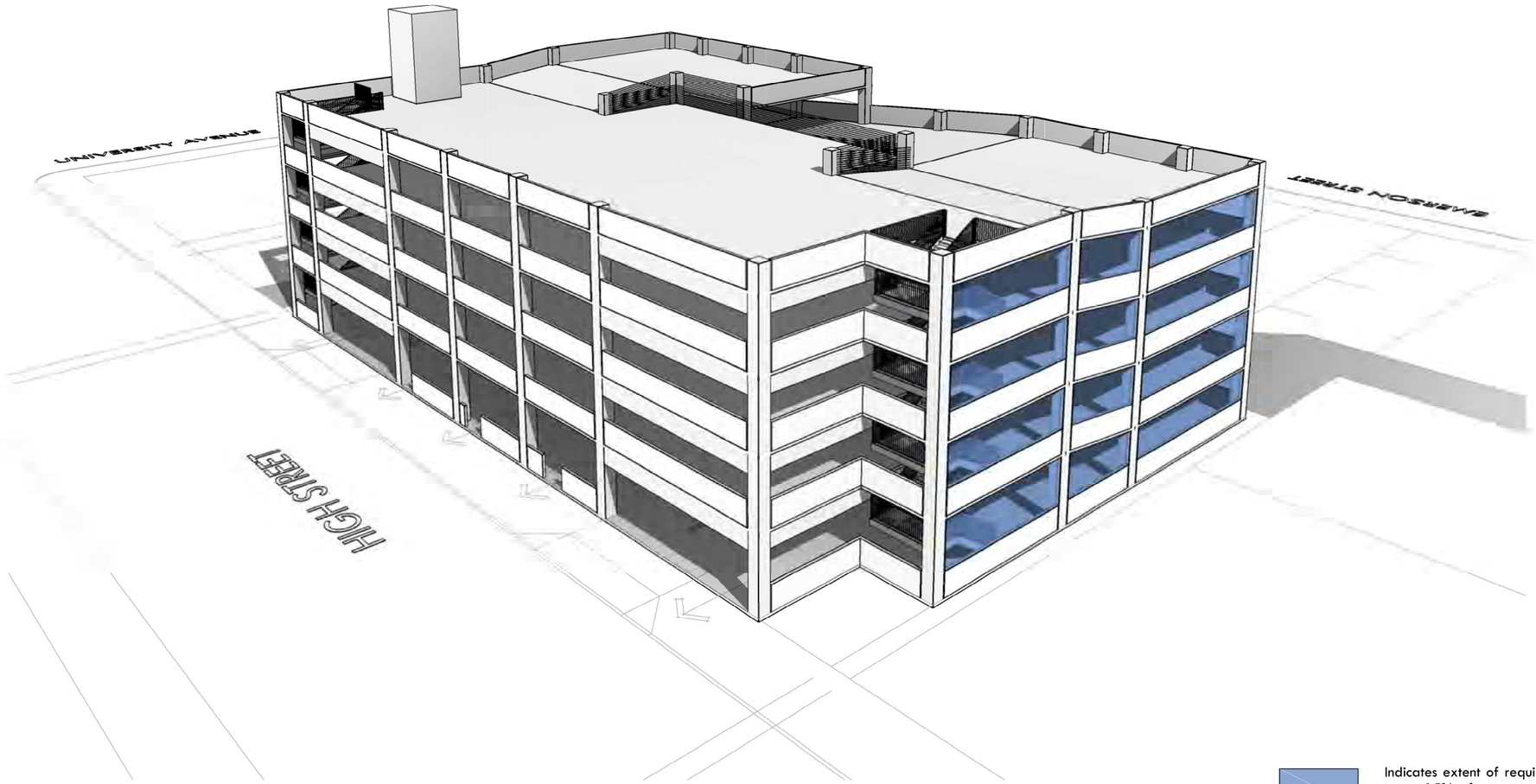
CONTEXTUAL PARKING GARAGE PERSPECTIVES

City of Palo Alto | SANDIS | HNA/PACIFIC

April 25, 2013

No Scale

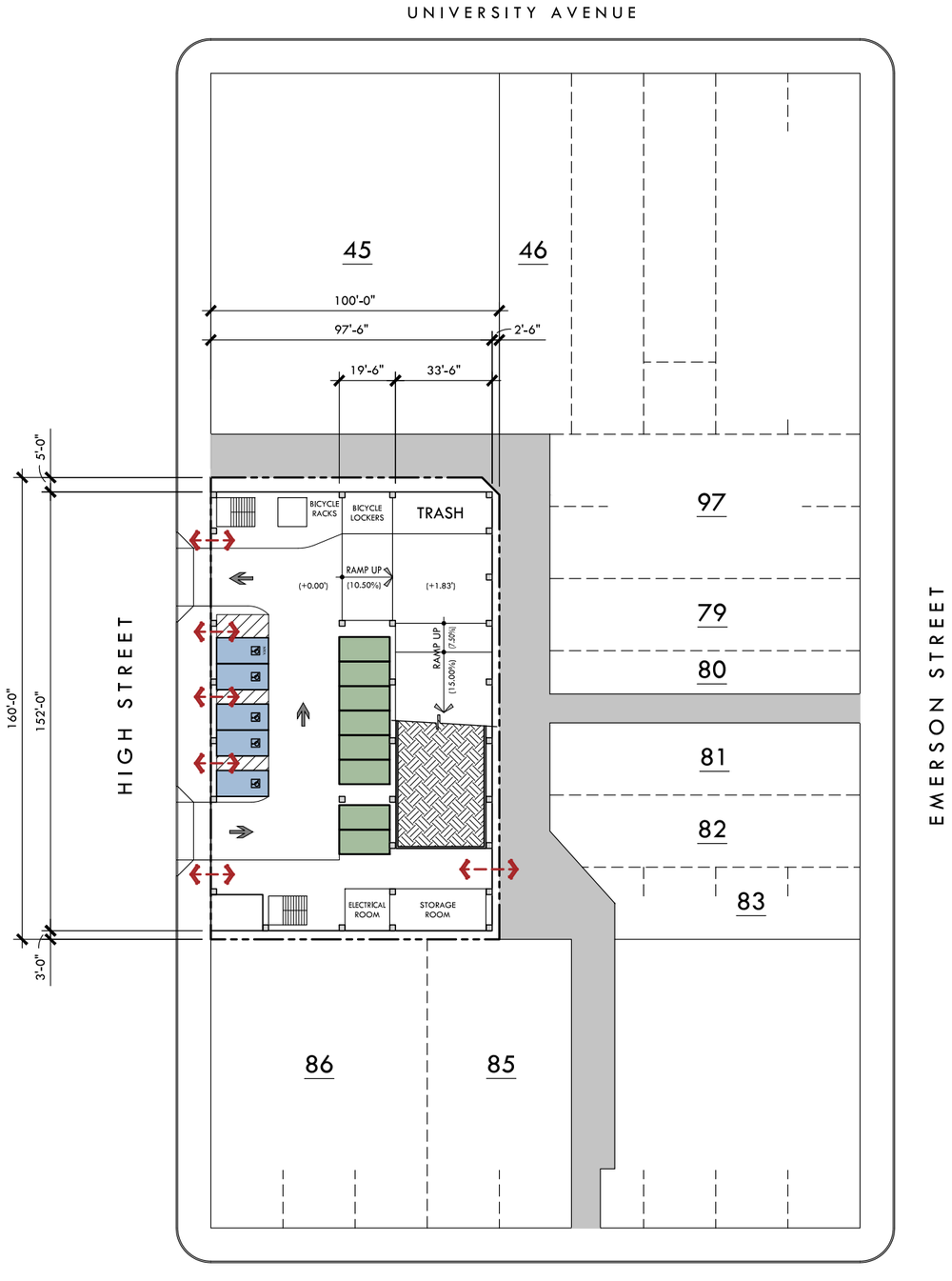
PA.0



Indicates extent of required fire-resistive infill wall system allowing up to 15% of unprotected opening area of the exterior wall per story in a fully sprinklered parking garage. Infill walls are shown on top of fire resistive concrete spandrels acting as vehicular impact barriers as well as pedestrian guardrails.

The extent of the infill walls and the opening configuration combined to achieve the allowed percentage of area of the exterior wall per story will be dependent on the final design of the parking garage.

PROGRESS PRINT



PARKING GARAGE SITE PLAN

DESIGN PRECEPTS

(*as* RESPONSIVE *to* SITE CONSTRAINTS)

A A 15' wide alley exists at the north end of the site that has been incorporated into the surface parking Lot P and is not discernible without consulting the County Assessors Map. This access provides access to the existing 17'-6" wide alley at the east side of the site that is maintained for services and pedestrian access to the existing businesses on Lots 97, 79, 80, 81, 82, and 83. The 15' alley on the north is to be reclaimed to provide access to the existing east side alley as well as to provide the existing building on Lot 45 with access to its existing fire department connection, its existing service and trash area and to maintain unprotected openings along the southern wall of the existing building.

B Proposed garage is set back on the north 5'-0" from the 15'-0" wide alley (10' to centerline alley) to allow for unlimited unprotected openings for natural light and ventilation for the garage which also increases the alley width to 20'-0".

C Proposed garage is set back on the east 2.5' from the alley (10' to centerline alley) to allow for unlimited unprotected openings for natural light and ventilation for the garage which also increases the alley width to 20'-0".

D Proposed garage to be set back 3' from the property line on the south end to potentially allow for openings (if desired or needed). To allow for any openings the proposed garage needs to be sprinklered and if sprinklered a maximum of 15% per story for unprotected openings will be allowed.

E The 3' setback should be sufficient to clear any adjacent building foundations that might encroach into Lot P and will allow for the proposed garage to have concentric foundations as well as some access for construction between the existing and proposed buildings.

F The 3' setback should be sufficient to maintain the upper level openings on the existing buildings on Lots 85 and 86 by providing extra separation distance if the existing Lot P was used as a yard to allow the openings in the existing building to be so close to the property line. Analyzing the new buildings using the current building codes could also yield additional latitude with the protection and size of these openings since the separation distances, percentages of unprotected openings and fire resistive exterior wall requirements have been reduced from previous more restrictive building codes.

G Existing trees along High Street on Lot P (and interior to Lot P) are to be removed to allow for the proposed garage.

H There is an existing electrical transformer at the southwest corner of Lot P. The garage has been notched around this existing transformer to allow it to remain in place.

FLOOR AREA SUMMARY (SQUARE FEET)

LEVEL P-5	10,838
LEVEL P-4	14,595
LEVEL P-3	14,595
LEVEL P-2	14,595
LEVEL P-1	16,077
TOTAL	70,700

HEIGHT OF BUILDING

TOP OF HOSTWAY (APPROXIMATE)	60'-9"
TOP OF HIGHEST SPANDREL	46'-6"
TOP OF HIGHEST FLOOR SLAB	42'-9"

CAR COUNT SUMMARY

	STANDARD (8'-6" x 17'-6")	ACCESSIBLE (9'-0" x 18'-0")	ELECTRIC (8'-6" x 17'-6")	LEFE (8'-6" x 17'-6")	TOTAL
LEVEL P-5	34	---	---	---	34
LEVEL P-4	32	---	---	---	32
LEVEL P-3	32	---	---	---	32
LEVEL P-2	25	---	---	4	29
LEVEL P-1	---	5	8	---	13
TOTAL	123	5	8	4	140

EXISTING SPACES DISPLACED 51

NET TOTAL PARKING SPACES 89

PROGRESS PRINT

City of Palo Alto
PALO ALTO, CALIFORNIA

High/Hamilton Lot P

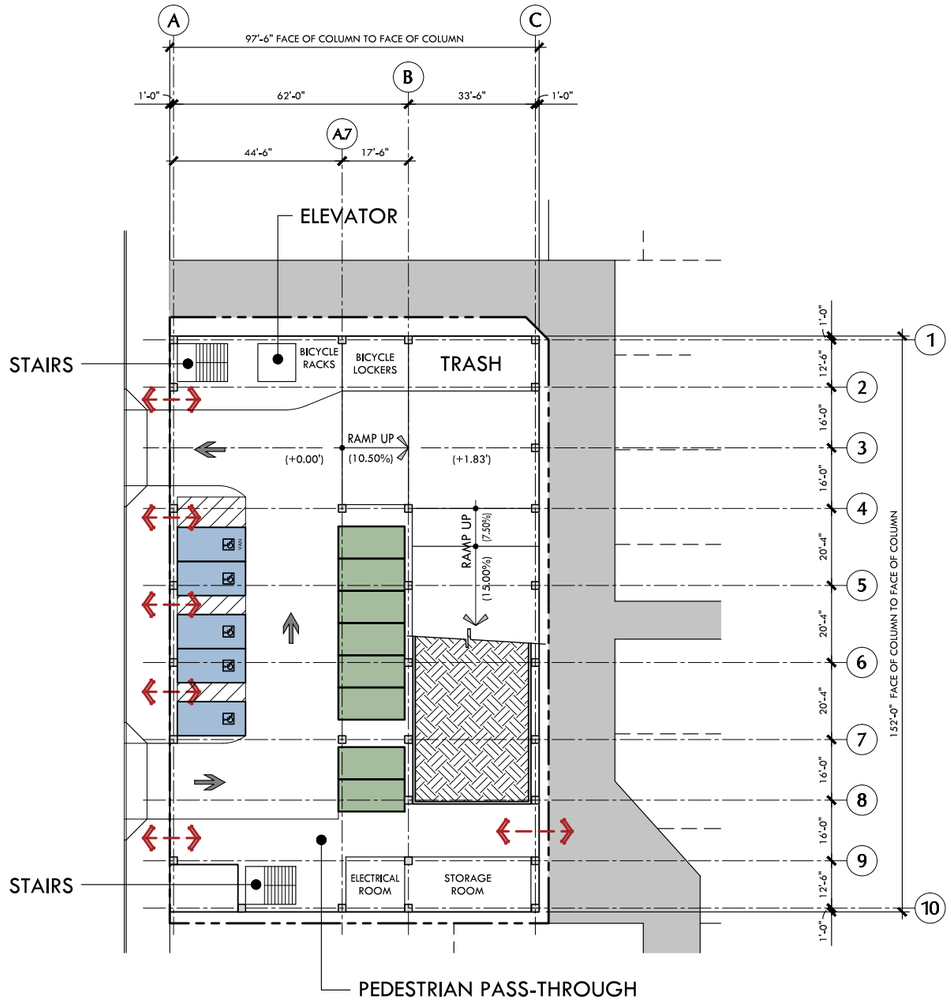
CONCEPTUAL PARKING GARAGE SITE PLAN, DESIGN PRECEPTS *and* SUMMARIES

City of Palo Alto | SANDIS | HNA/PACIFIC

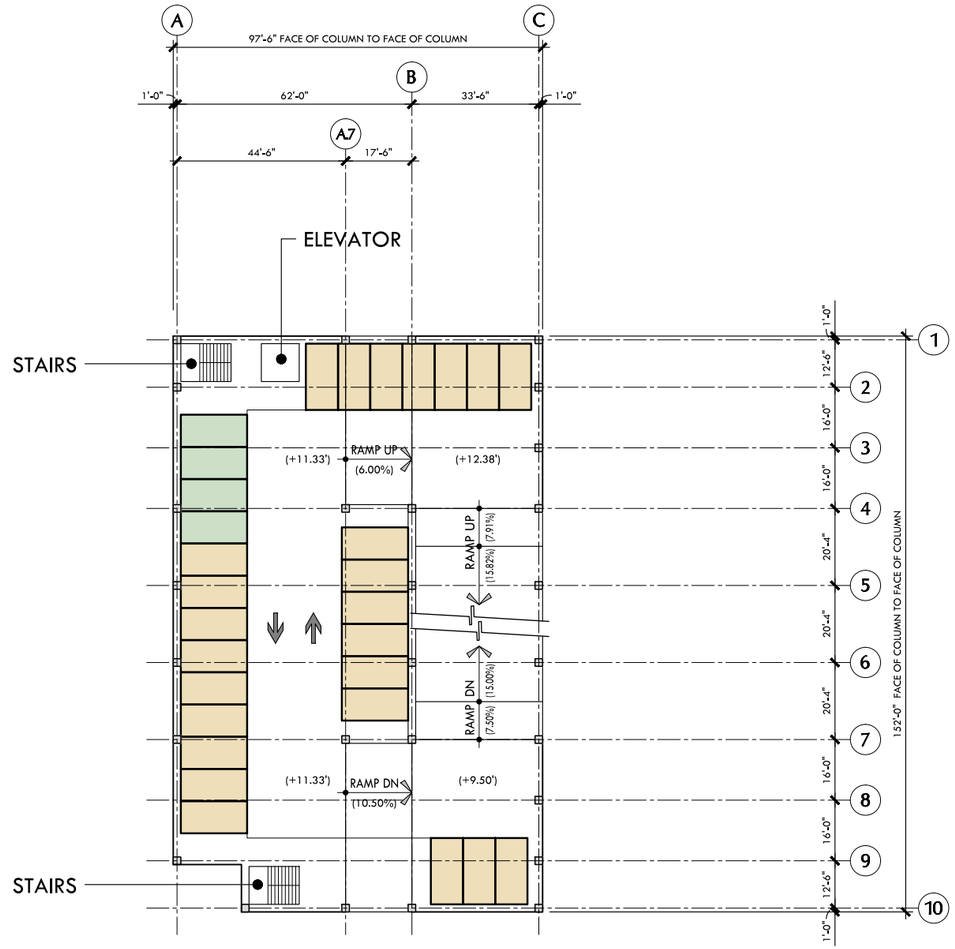
April 25, 2013

1" = 50'-0"

PA.1



LEVEL P-1 FLOOR PLAN



LEVEL P-2 FLOOR PLAN

PROGRESS PRINT

City of Palo Alto
PALO ALTO, CALIFORNIA

High/Hamilton Lot

P

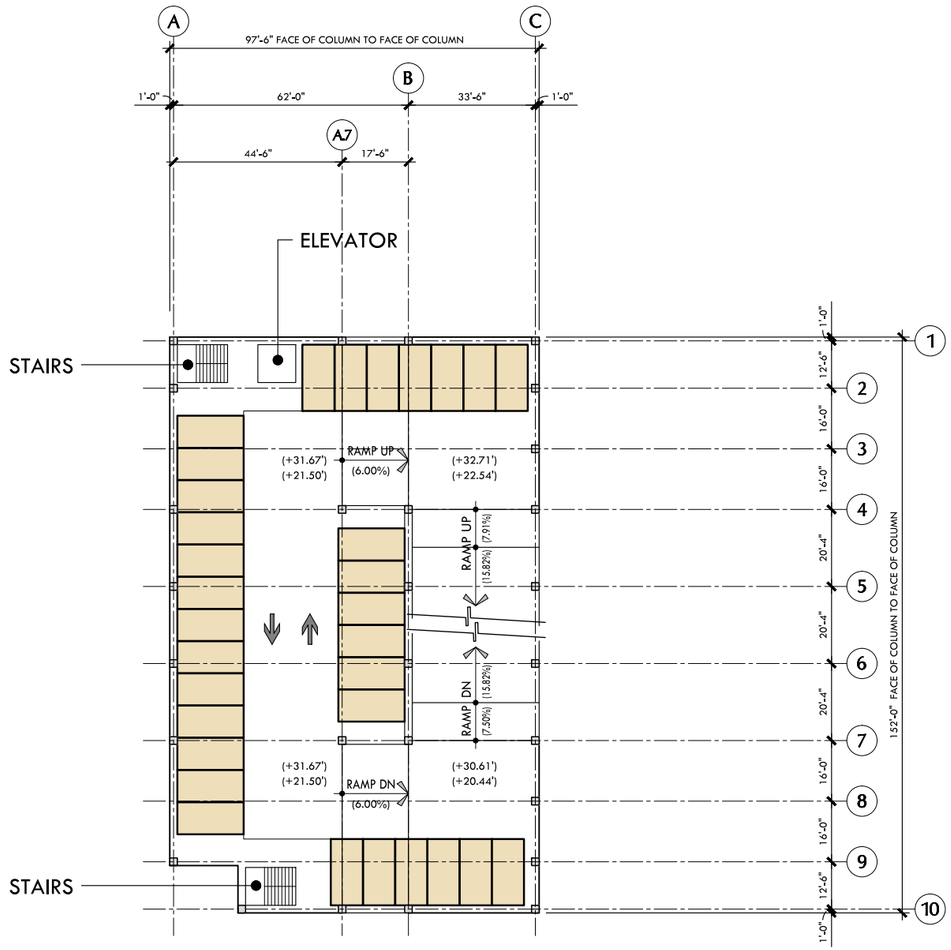
CONCEPTUAL PARKING GARAGE FLOOR PLANS

City of Palo Alto | SANDIS | HNA/PACIFIC

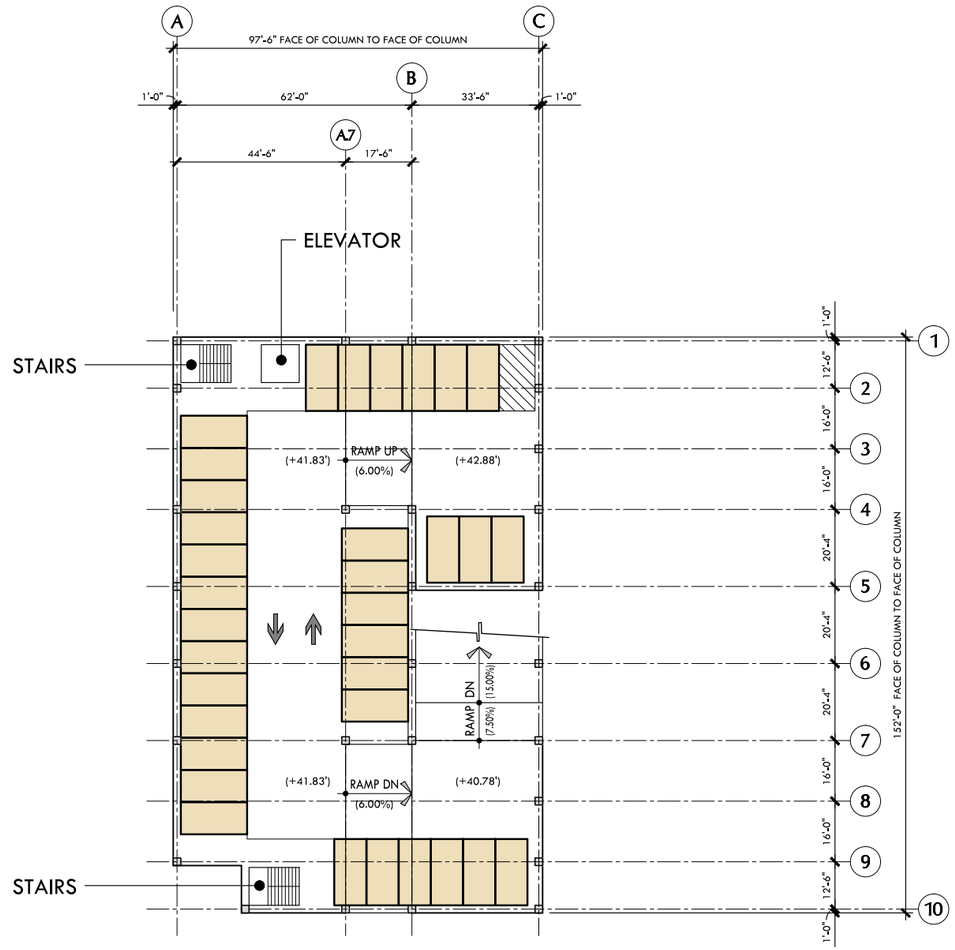
April 25, 2013

1" = 40'-0"

PA.2

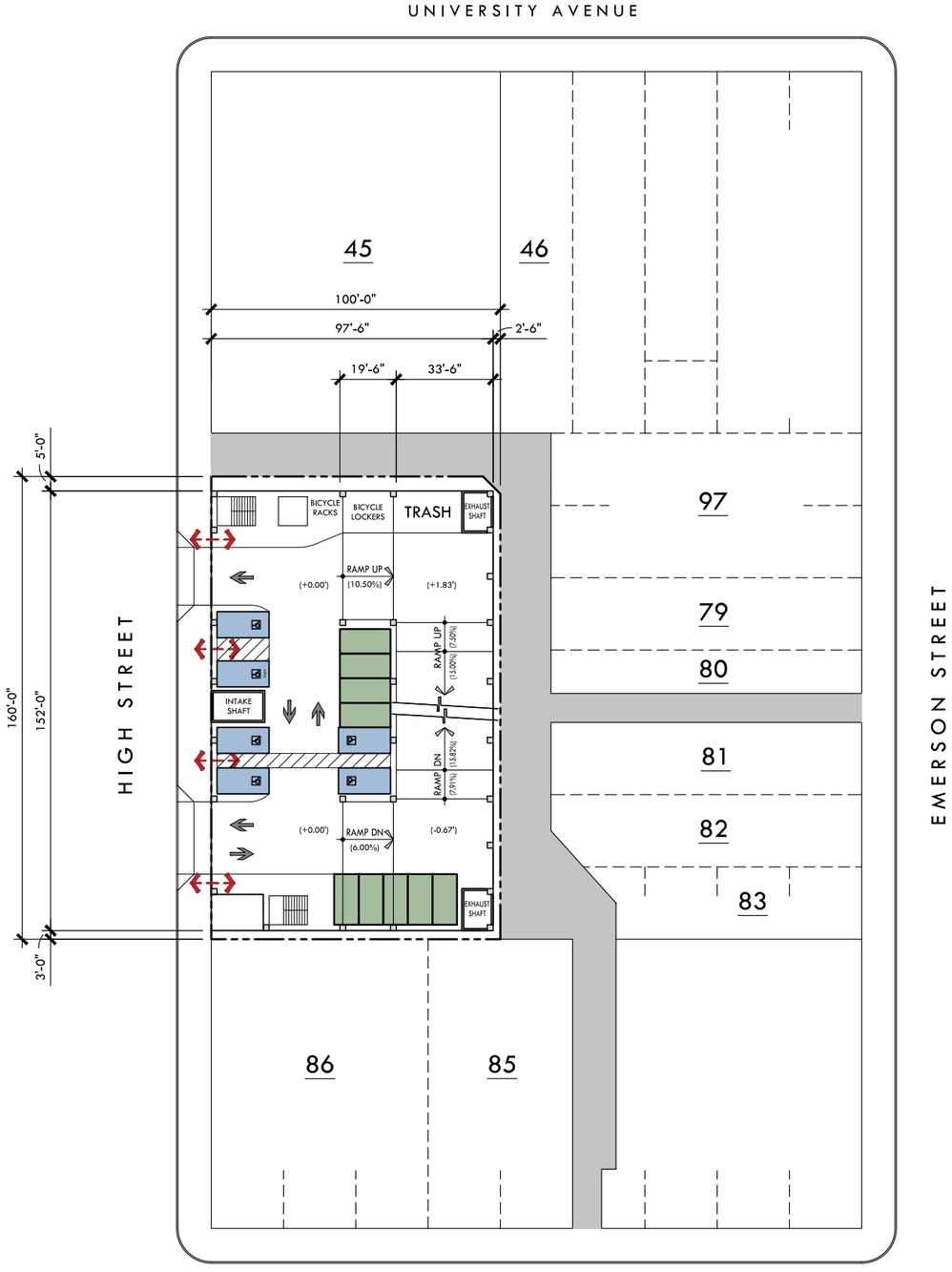


LEVEL P-3/P-4 FLOOR PLAN



LEVEL P-5 FLOOR PLAN

PROGRESS PRINT



PARKING GARAGE SITE PLAN

FLOOR AREA SUMMARY (SQUARE FEET)

LEVEL P-5	10,838
LEVEL P-4	14,595
LEVEL P-3	14,595
LEVEL P-2	14,595
LEVEL P-1	14,595
LEVEL B-1	16,900
TOTAL	86,118

HEIGHT OF BUILDING

TOP OF HOSTWAY (APPROXIMATE)	60'-9"
TOP OF HIGHEST SPANDREL	46'-6"
TOP OF HIGHEST FLOOR SLAB	42'-9"

CAR COUNT SUMMARY

	STANDARD (8'-6" x 17'-6")	ACCESSIBLE (9'-0" x 18'-0")	ELECTRIC (8'-6" x 17'-6")	LEFE (8'-6" x 17'-6")	TOTAL
LEVEL P-5	34	---	---	---	34
LEVEL P-4	32	---	---	---	32
LEVEL P-3	32	---	---	---	32
LEVEL P-2	20	---	---	5	25
LEVEL P-1	---	6	9	---	15
LEVEL B-1	27	---	---	---	27
TOTAL	145	6	9	5	165

EXISTING SPACES DISPLACED 51

NET TOTAL PARKING SPACES 114

OPTIONAL ADDED BASEMENT LEVELS

FLOOR AREA SUMMARY (SQUARE FEET)

	AREA ADDED PER LEVEL	TOTAL GARAGE AREA
LEVEL B-2	14,595	100,713
LEVEL B-3	14,595	115,308

CAR COUNT SUMMARY

	SPACES ADDED PER LEVEL	TOTAL GARAGE SPACES	NET TOTAL PARKING SPACES (LESS EXISTING SPACES DISPACED)
LEVEL B-2	28	193	142
LEVEL B-3	28	221	170

PROGRESS PRINT

City of Palo Alto
PALO ALTO, CALIFORNIA

High/Hamilton Lot

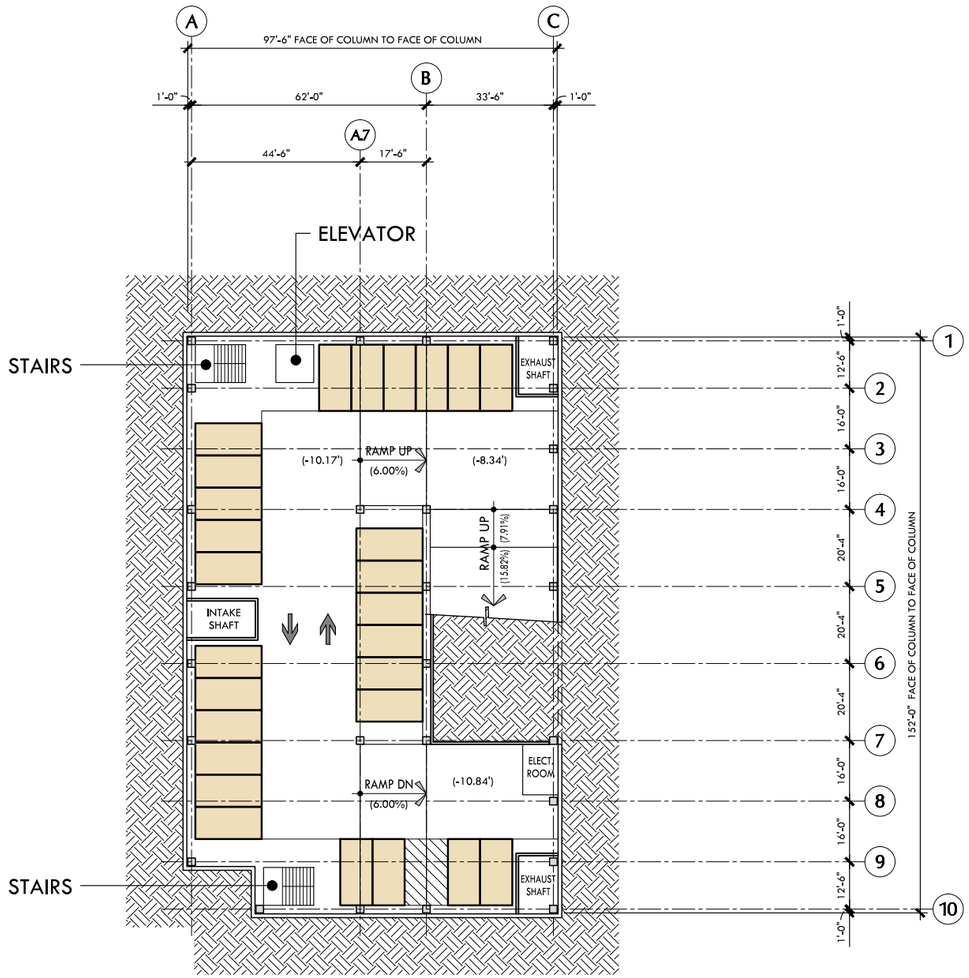
CONCEPTUAL PARKING GARAGE SITE PLAN *and* SUMMARIES

City of Palo Alto | SANDIS | HNA/PACIFIC

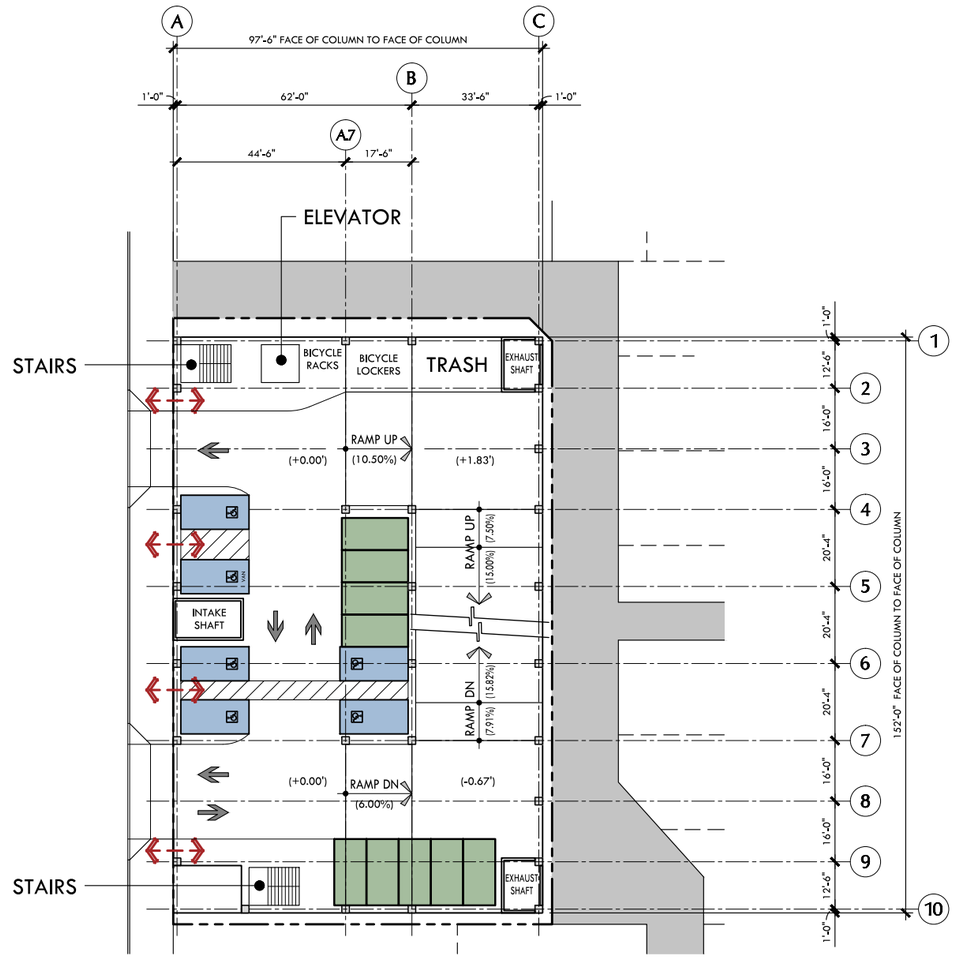
April 25, 2013

1" = 50'-0"

PBA.1

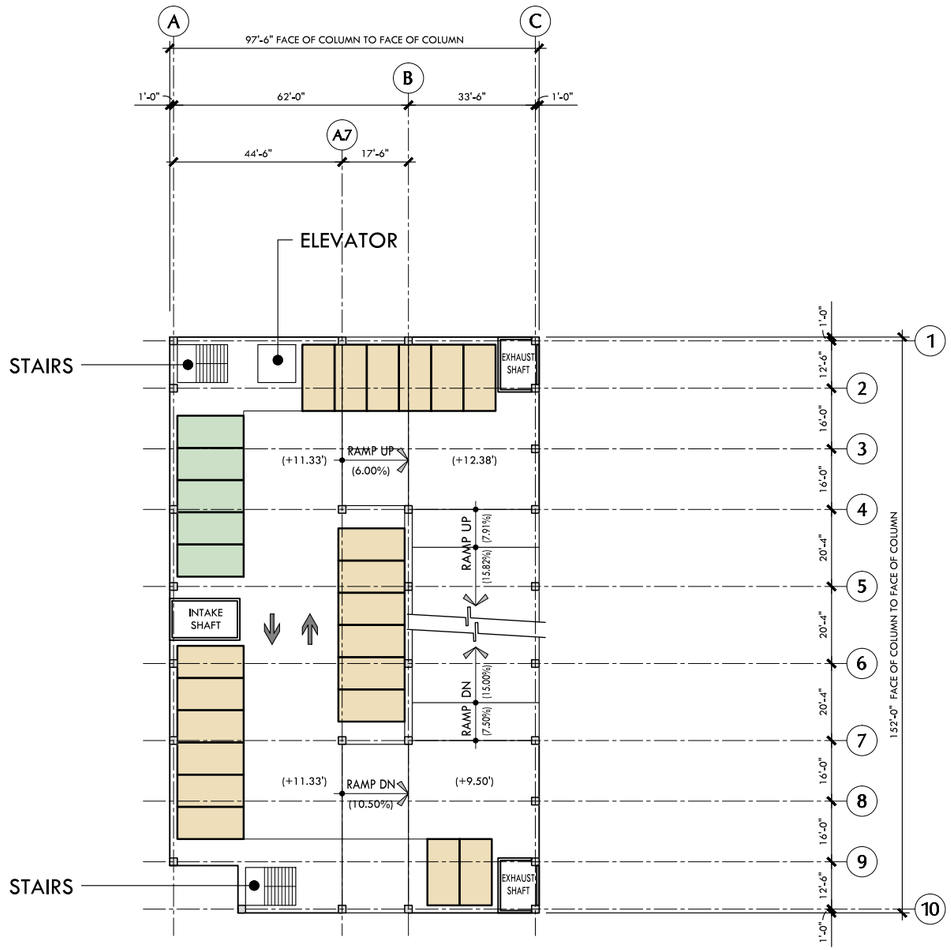


LEVEL B-1 FLOOR PLAN

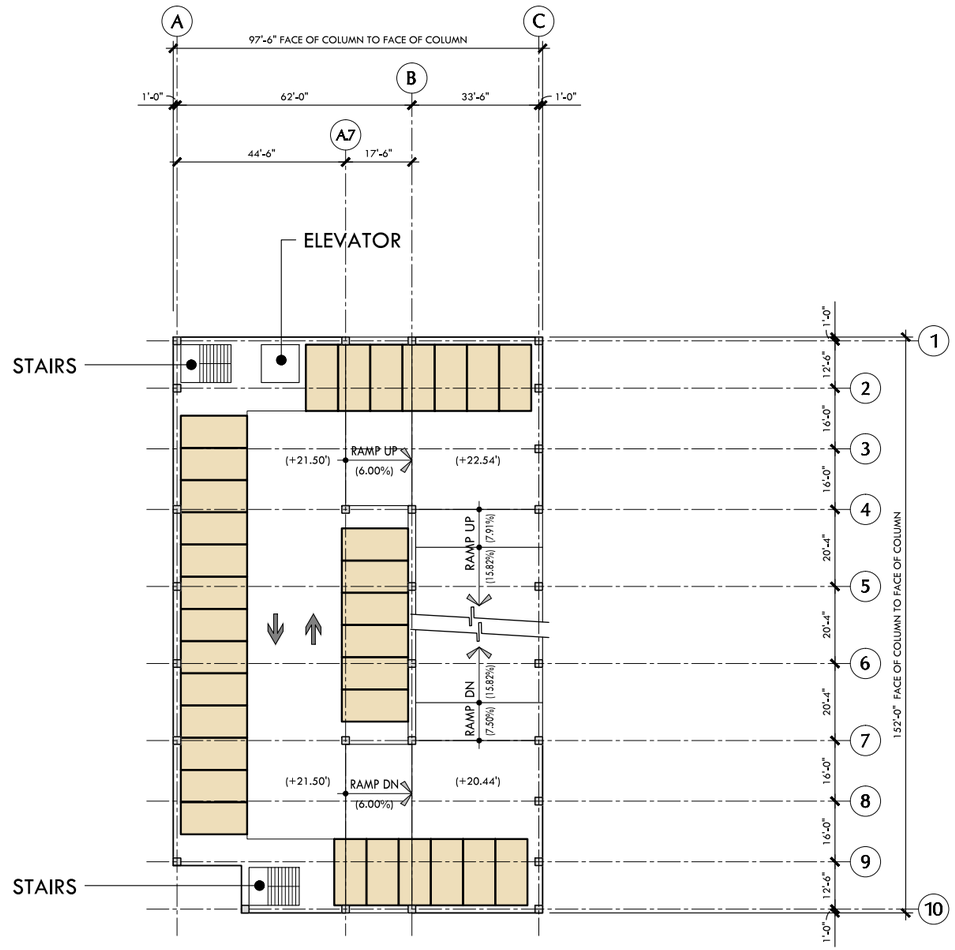


LEVEL P-1 FLOOR PLAN

PROGRESS PRINT



LEVEL P-2 FLOOR PLAN



LEVEL P-3 FLOOR PLAN

PROGRESS PRINT

City of Palo Alto
PALO ALTO, CALIFORNIA

High/Hamilton Lot

P

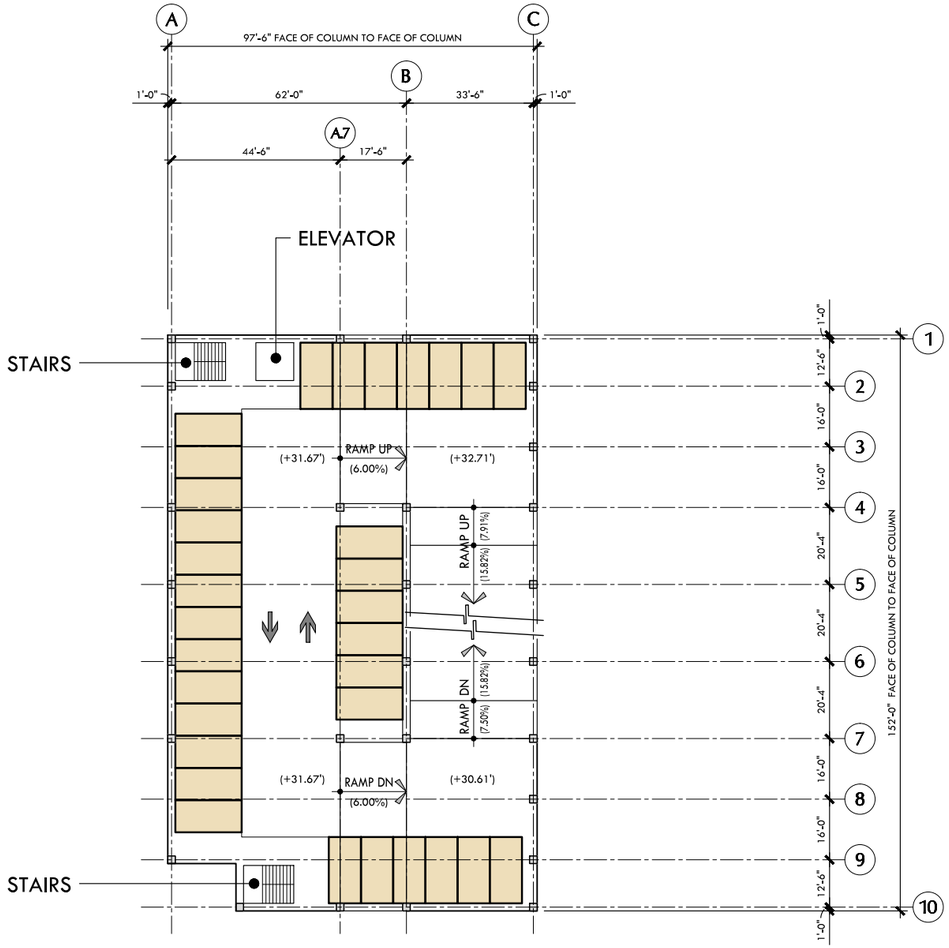
CONCEPTUAL PARKING GARAGE FLOOR PLANS

City of Palo Alto | SANDIS | HNA/PACIFIC

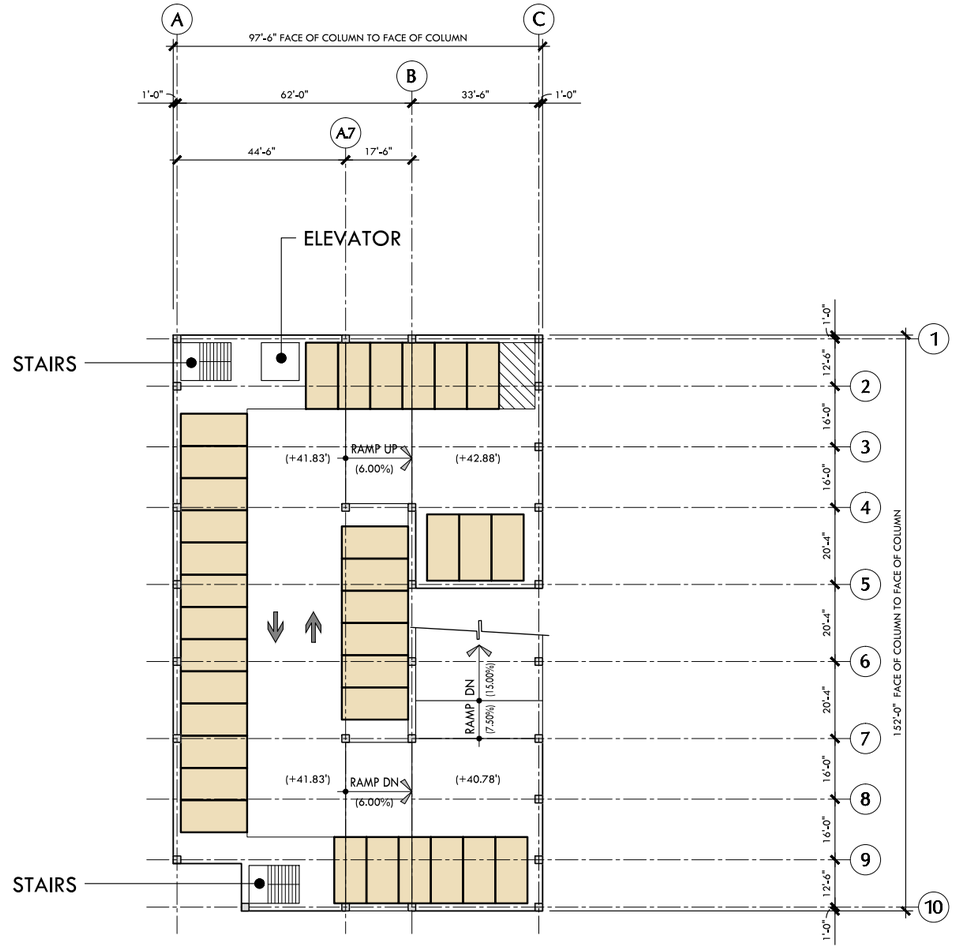
April 25, 2013

1" = 40'-0"

PBA.3



LEVEL P-4 FLOOR PLAN



LEVEL P-5 FLOOR PLAN

PROGRESS PRINT

City of Palo Alto
PALO ALTO, CALIFORNIA

High/Hamilton Lot

P

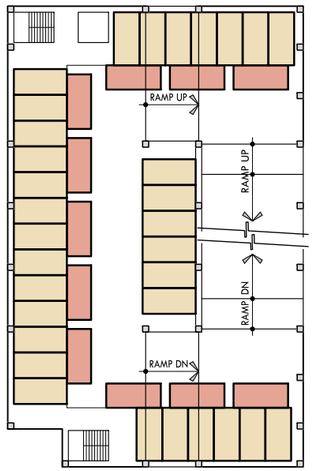
CONCEPTUAL PARKING GARAGE FLOOR PLANS

City of Palo Alto | SANDIS | HNA/PACIFIC

April 25, 2013

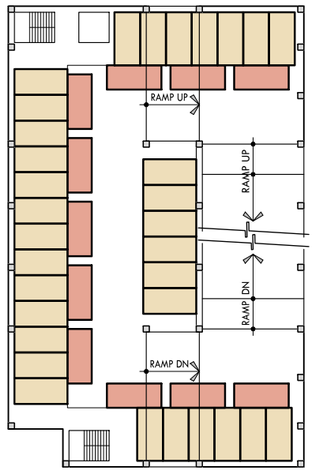
1" = 40'-0"

PBA.4



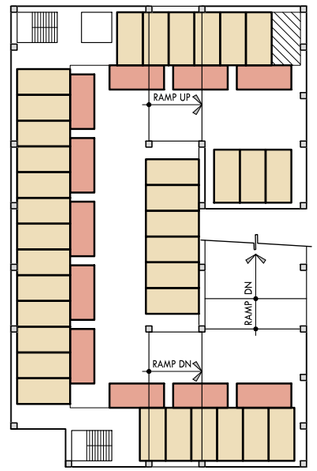
VALET SPACE / 11

LEVEL P-3 FLOOR PLAN



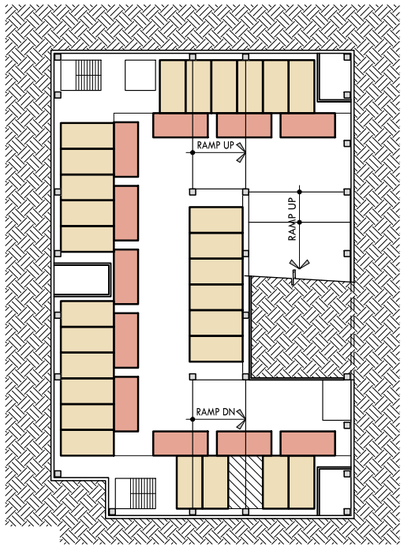
VALET SPACE / 11

LEVEL P-4 FLOOR PLAN



VALET SPACE / 11

LEVEL P-5 FLOOR PLAN

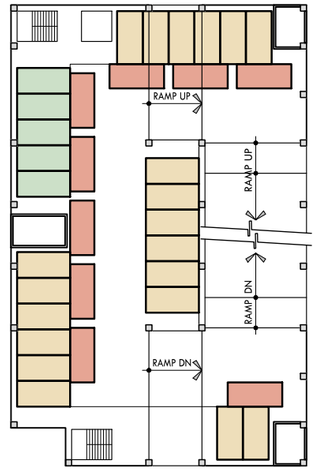


VALET SPACE / 11

LEVEL B-1 FLOOR PLAN



LEVEL P-1 FLOOR PLAN



VALET SPACE / 9

LEVEL P-2 FLOOR PLAN

PROGRESS PRINT

City of Palo Alto
PALO ALTO, CALIFORNIA

High/Hamilton Lot

P

CONCEPTUAL PARKING GARAGE FLOOR PLANS *with* VALET

City of Palo Alto | SANDIS | HNA/PACIFIC

April 25, 2013

1" = 50'-0"

PVA.1

Lot U

The Lot U garage will include five levels and provide a total of 551 parking spaces (with a net gain of 387 new spaces). Vehicular access will be located on the first level along Urban Lane.

There will be pedestrian access ways to the Caltrain station, University Avenue, the Homer Tunnel, and Downtown. Pedestrians will have access to stairs on both ends of the garage and elevators towards the west end of the garage near University Avenue. A covered walkway will be part of the proposed parking garage on the ground level running parallel to the garage. Each end of the garage will have a spiral ramp leading up to the next level. Level P-1 will accommodate nine angled bus loading/unloading spaces, with a potential for a bus layover area. Level P-2 will have one lane traveling in each direction and perpendicular parking along both sides of the garage. It will provide a total of 133 spaces. Levels P-3, P-4, and P-5 have similar floor plans. Levels P-3 and P-4 will both provide 138 spaces each and P-5 (top level, uncovered) will provide 142 spaces.

An alternative design was prepared such that the bus loading spaces in Level P-1 are replaced with 133 regular parking spaces. This change would increase the total number of parking spaces to 684 and a net gain of 520 spaces.





View looking south.



View looking south.

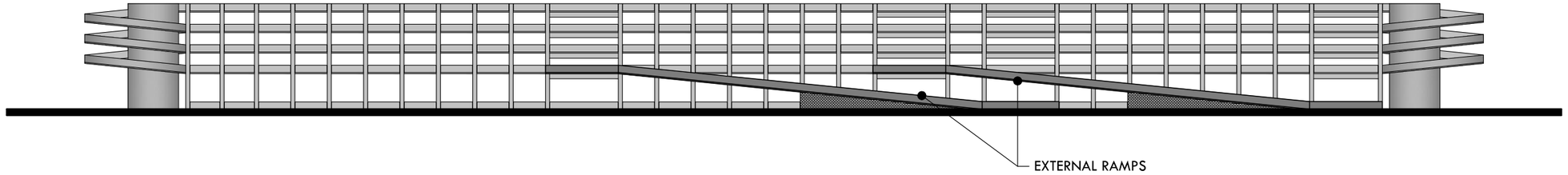


View looking east.

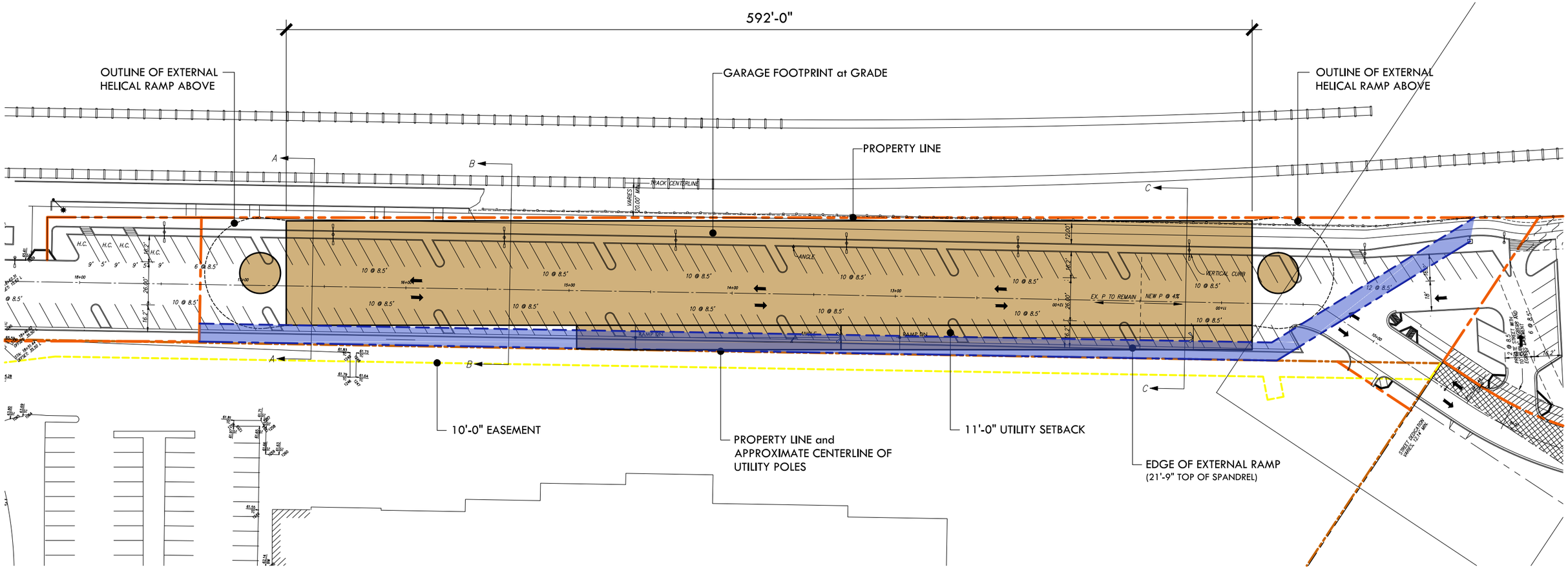


View looking west.

PROGRESS PRINT



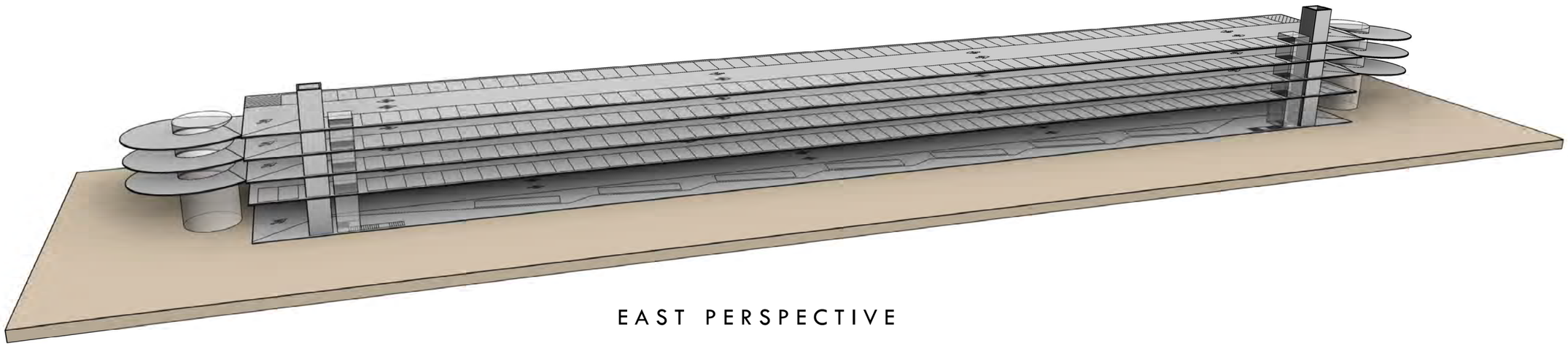
WEST BUILDING ELEVATION



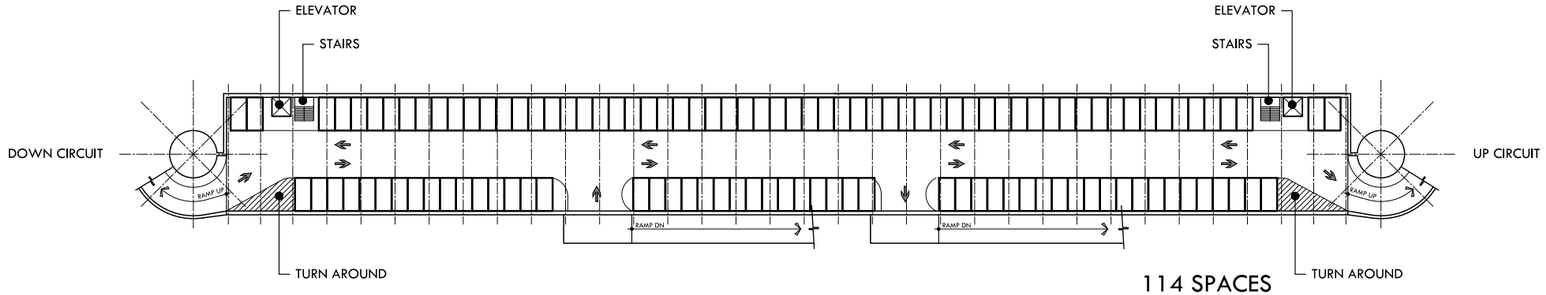
PARKING GARAGE SITE PLAN

PROGRESS PRINT

City of Palo Alto PALO ALTO, CALIFORNIA	*Urban Lane Lot* U	CONCEPTUAL PARKING GARAGE SITE PLAN *and* ELEVATION	May 13, 2013	UA.1
		City of Palo Alto SANDIS HNA/PACIFIC	1" = 60'-0"	

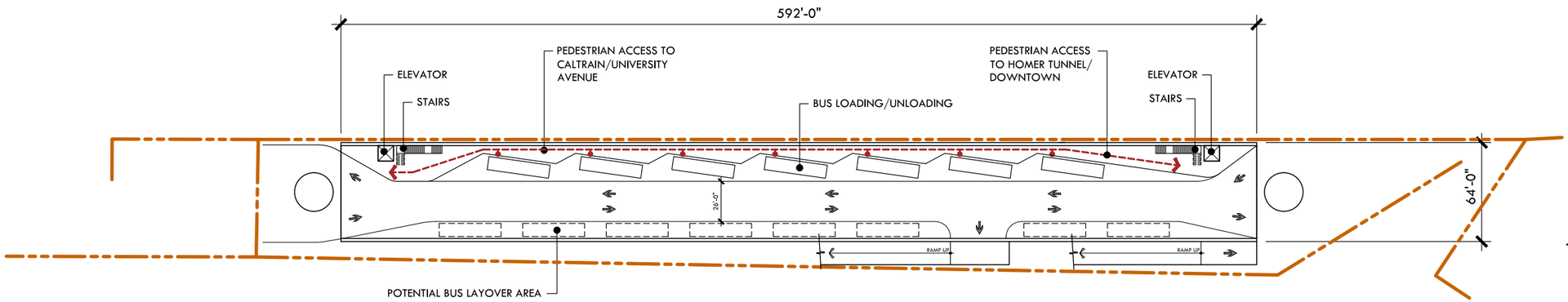


EAST PERSPECTIVE



114 SPACES

LEVEL P-2 FLOOR PLAN



LEVEL P-1 FLOOR PLAN

7 BUSES (loading/unloading)
8 BUSES (layover)

NUMBER OF EXISTING SPACES DISPLACED - 164

TOTAL PARKING GARAGE SPACES - 478

NET TOTAL PARKING SPACES - 314
PLUS 7 BUSES (LOADING/UNLOADING)
8 BUSES (LAYOVER)

PROGRESS PRINT

City of Palo Alto
PALO ALTO, CALIFORNIA

Urban Lane Lot U

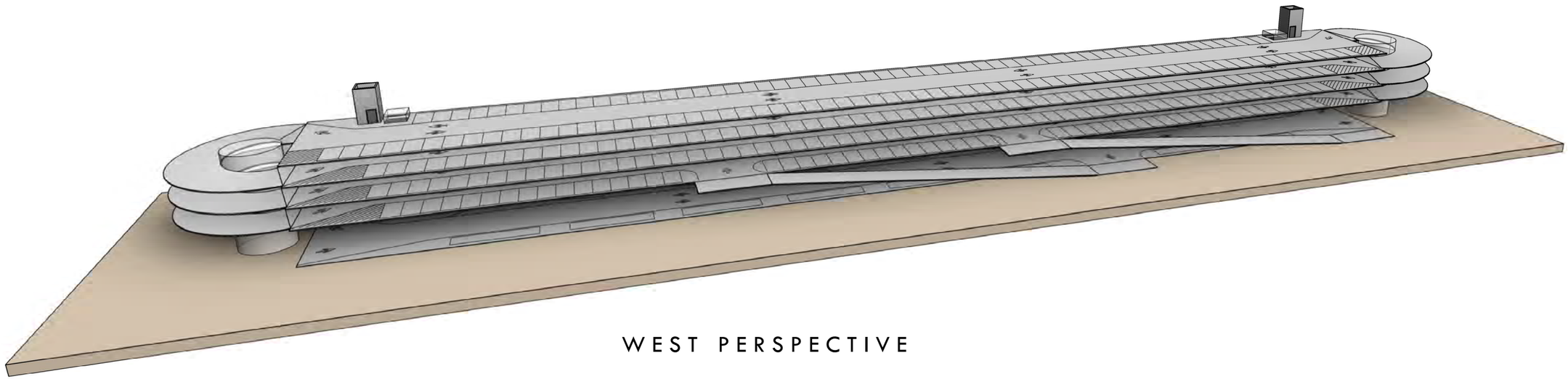
CONCEPTUAL PARKING GARAGE FLOOR PLANS *and* PERSPECTIVE

City of Palo Alto | SANDIS | HNA/PACIFIC

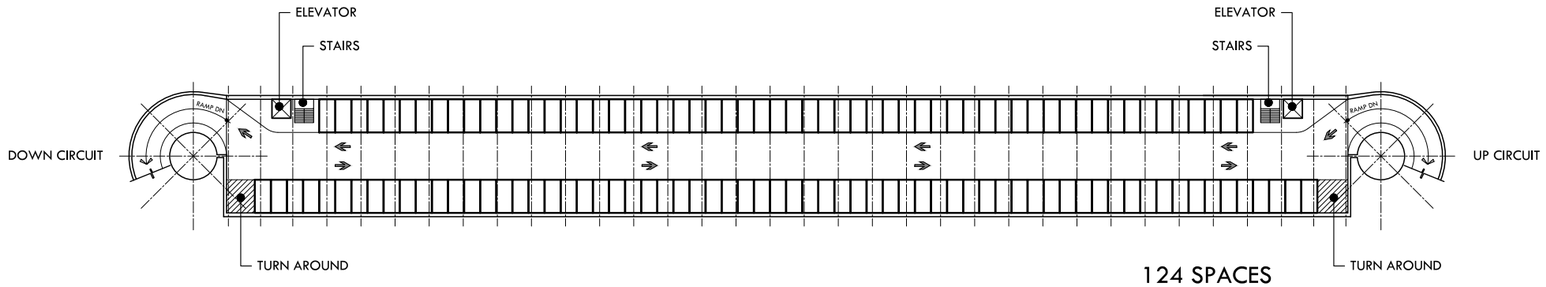
May 13, 2013

1" = 80'-0"

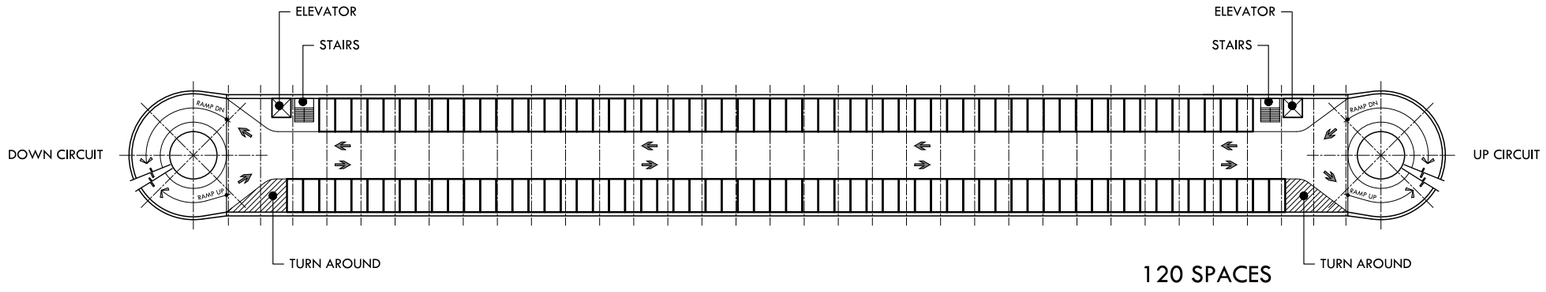
UA.2



WEST PERSPECTIVE



LEVEL P-5 FLOOR PLAN



LEVEL P-3 *and* LEVEL P-4 FLOOR PLAN

PROGRESS PRINT

City of Palo Alto
PALO ALTO, CALIFORNIA

Urban Lane Lot U

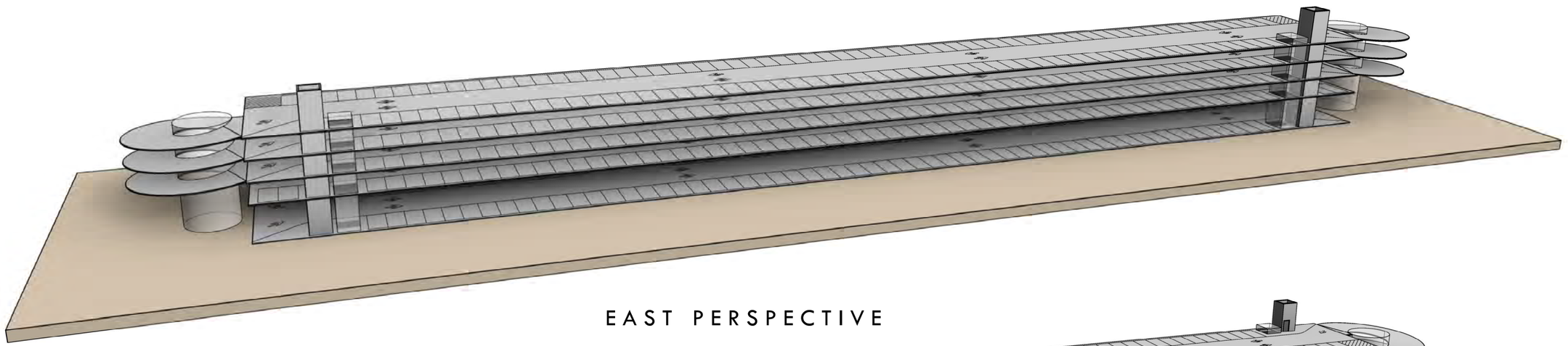
CONCEPTUAL PARKING GARAGE FLOOR PLANS *and* PERSPECTIVE

City of Palo Alto | SANDIS | HNA/PACIFIC

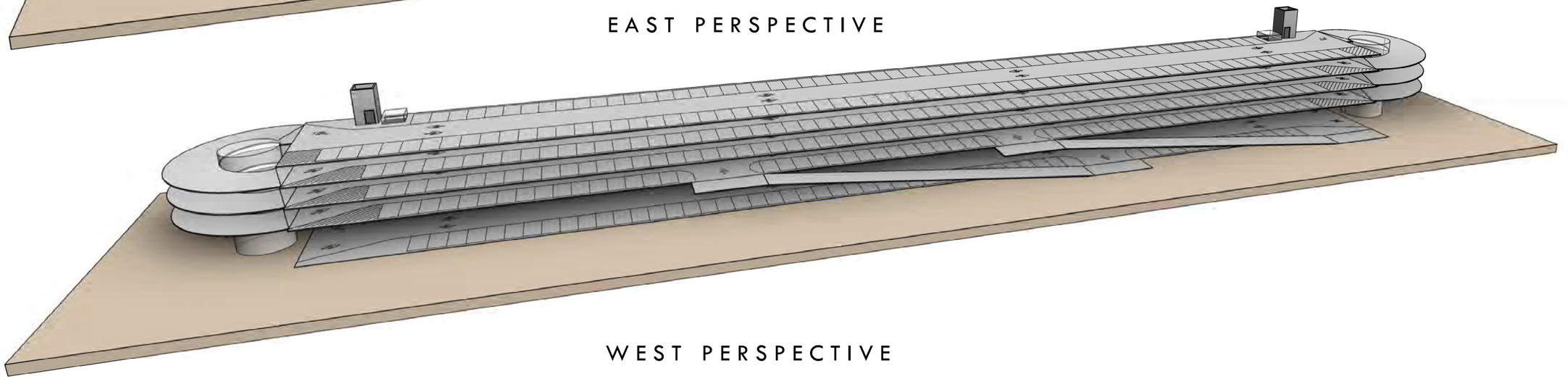
May 13, 2013

1" = 80'-0"

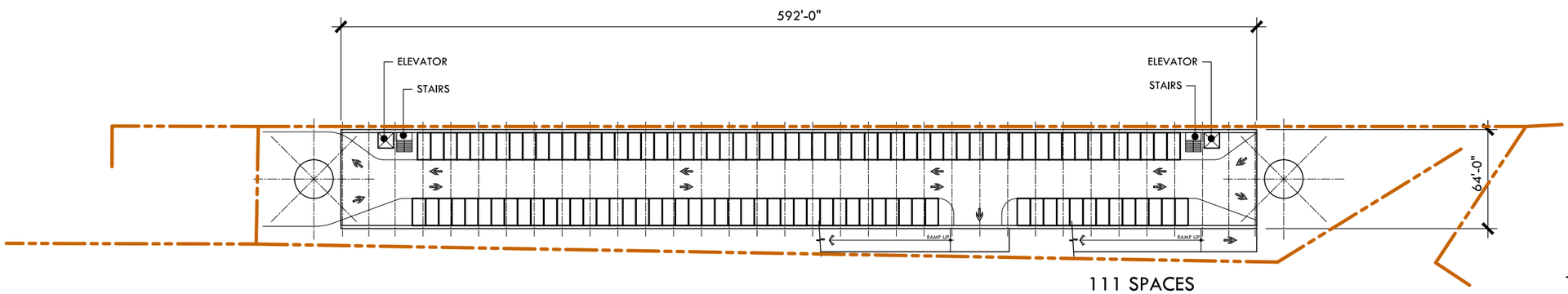
UA.3



EAST PERSPECTIVE



WEST PERSPECTIVE



111 SPACES

ALTERNATE LEVEL P-1 FLOOR PLAN
without BUSES

NUMBER OF EXISTING SPACES DISPLACED - 164

TOTAL PARKING GARAGE SPACES - 589

NET TOTAL PARKING SPACES - 425

PROGRESS PRINT

City of Palo Alto
PALO ALTO, CALIFORNIA

Urban Lane Lot U

CONCEPTUAL PARKING GARAGE FLOOR PLAN *and* PERSPECTIVES

City of Palo Alto | SANDIS | HNA/PACIFIC

May 13, 2013

1" = 80'-0"

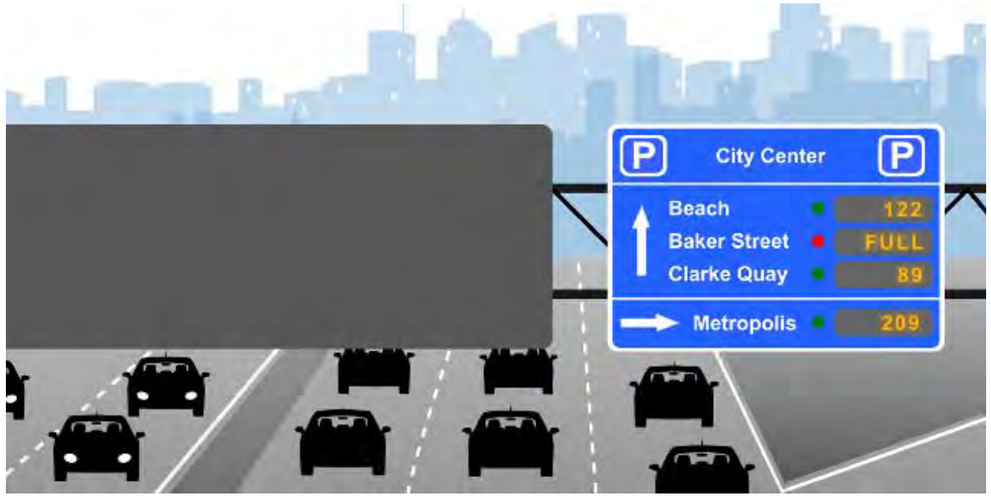
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Parking Management Systems

This section of the report will discuss potential parking management systems that may be implemented into the new parking garage and the different types of technology involved with these systems. Installing a parking management system can significantly lower the time spent on searching for available parking, thus reducing emissions. Parking data collected from these systems could also be analyzed to detect parking trends and thus used to make occupancy, planning, and financial decisions.

Parking Guidance System

The parking guidance system is a facility based parking management system designed to inform drivers of the number of spaces available in various parking facilities. Displays could provide specific numbers of available spaces or indicate whether they are full or open. The benefits of having such a system is that they provide drivers with more information to easily locate available parking, reduce vehicle miles traveled and emissions, and collect parking data in each facility which could be used to detect trends in the area. In order to implement this system, the locations of the displays need to first be identified. Some considerations include sight distances, potential for driver distraction, and reaction times. Next, a method for transmitting information onto the displays, the type of information displayed ("full/open", name of parking facility, parking rates), and the type of display technology need to be determined. The costs associated with this system include operations and maintenance costs, which are typically bundled with the O&M costs of the entire parking facility. Costs for external displays are limited to electricity used to power signs and occasional maintenance.



SWARCO North America, Parking Solutions – Approach



SWARCO North America, Parking Solutions – Structure Entry

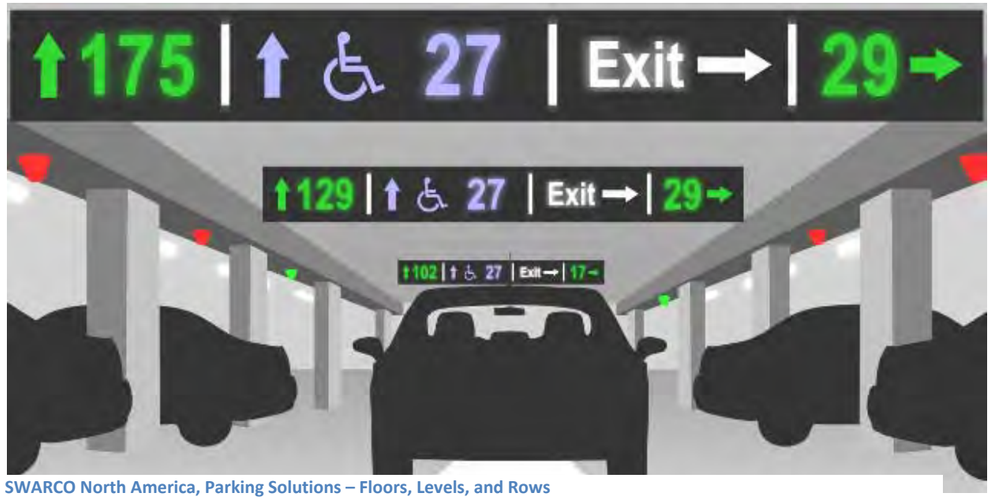
Space Availability by Level

The level based parking management system is designed to guide drivers to specific levels within a multi-level parking facility that have available spaces. Upon entering the parking garage, a display indicates the number of spaces available on each level. Entrances on each level also have displays that indicate the amount of availably spaces on that particular level. This system benefits the driver by reducing the amount of time spent looking for parking and vehicle miles traveled. Data collected could also be used to detect trends in the facility.

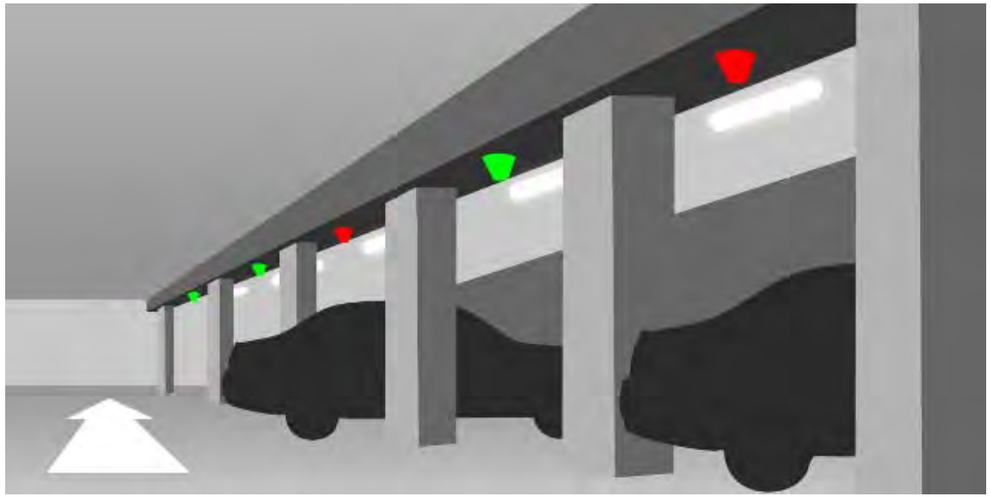
Implementation of such a system first requires a means to obtain information on parking availability. This is typically done using induction loop detectors embedded in the pavement at each entry and exit point on each level. The operation of the loop detectors should not be affected by either the reinforcing steel in the structure or vehicles passing by in nearby adjacent lanes. The preferred sensor technology should be installed during construction of the facility if possible to reduce costs. System displays should be located so that drivers will be able to see them at low speeds. Finally, the display technology needs to be selected. The cost of this system greatly depends on whether the system is to be installed as part of the construction of new garage or placed within an existing garage. The installation of vehicle detectors and induction loops approximately costs about $900-$1,100 per loop. Additional costs will be incurred due to the installation of other elements including connections to a central computer, displays, etc.

Space Availability by Aisle/Section

The aisle/section based parking management system will guide drivers of a particular level toward aisles with available parking within a multilevel parking facility. At the entrance to each level, displays indicate available spaces in each direction. At the beginning and end of each aisle, a display indicates available spaces in the aisle. The display could provide specific number of available spaces or green or red signal indicating whether space is available or occupied. This system will reduce the amount of time spent locating available parking. Data collected within the garage could be used to detect trends inside the facility and thus influence decision making with regards to occupancy, planning, and financial decisions. The cost of this system greatly depends on whether the system is to be installed as part of the construction of new garage or placed within an existing garage. Using a machine-vision system to detect parked cars will cost approximately $400 per space. There are also O&M costs to maintain detection equipment and display signs.



SWARCO North America, Parking Solutions – Floors, Levels, and Rows


SWARCO North America, Parking Solutions – Space Availability

Parking Availability by Space

The aisle based parking management system will guide drivers directly to the individual available parking space. Drivers entering a garage will be directed by a series of displays indicating available spaces on each level. Upon entering each level, the displays will indicate the available spaces in each direction. At each aisle, a display will indicate the number of available spaces in the aisle. Ceiling mounted lights above each space will indicate if the space is occupied (red), available (green), or ADA (blue). The information from individual space detectors update the availability information displayed at the entrance to garage, levels, and aisles. It will also allow the garage to have dead-end aisles, reducing the need for continuous circulation capabilities. Data collected could be used to identify trends inside the facility and thus influence decision making with regards to occupancy, planning, and financial decisions.

The costs will vary depending if the system is installed during construction or as part of an existing garage. The cost for individual space monitors and displays for aisles, zones, levels, and entrances and a conduit for data transmission connecting individual detectors is approximately $1,100 per space. There are also O&M costs to maintain detection equipment and display signs.

Parking Attendant Program

The parking attendant based parking management system will require drivers to leave their vehicle with a parking attendant, typically on the ground floor near the entrance of the garage, who will then park their vehicle either in open parking spaces or within the drive aisles throughout the garage. Parking attendant programs are utilized to ensure that the limited space within a garage is more efficiently used and to help make the commuter's parking experience more enjoyable

since they no longer need to spend their time searching for a parking space within the garage. Space on the ground floor will need to be provided for podiums, key lockers, and a loading/unloading zone for the vehicle owners to hand over their vehicle to the attendant.

The primary costs associated with a parking attendant program are the parking attendants themselves. Attendant staffing levels would depend on the size of the garage and specific parking demand. A parking attendant program can be applied to either existing or new garages with little to no difference in cost due to the relatively small amount of equipment the attendants need.

A separate report has been written (Downtown Valet Parking Feasibility Study prepared by SANDIS Civil Engineers) for the City of Palo Alto analyzing different existing parking garages throughout the downtown area of Palo Alto to determine the feasibility of providing a parking attendant program. The intent behind providing a parking attendant program to an existing garage is to increase the parking capacity without incurring large costs associated with the construction of new garages or expanding existing garages. A yearlong pilot program is currently under operation at Lot R testing the viability of a parking attendant program in an existing garage. It is understood at the time of this writing that the pilot program has received pricing for a potential expansion beyond Lot R.

Parking Management Technology

Cameras

One method of detecting and keeping track of cars inside of a parking garage is through the use of cameras. Video cameras can be used in conjunction with recognition software to count and recognize parked cars. This is beneficial because it requires minimal construction since one camera can provide information for a large area.

Sensors

- Motion sensors are placed at the entrance and exits of parking garages or above each parking space to monitor when a car enters, exits, or is parked in a specific space. These sensors require minimal construction.
- Either weight sensors or ground loop sensors are installed in the ground at the entrance and exits of parking garages, or in each parking space. They have the ability to accurately detect cars in individual parking spaces and entering and exiting.

Display Signs

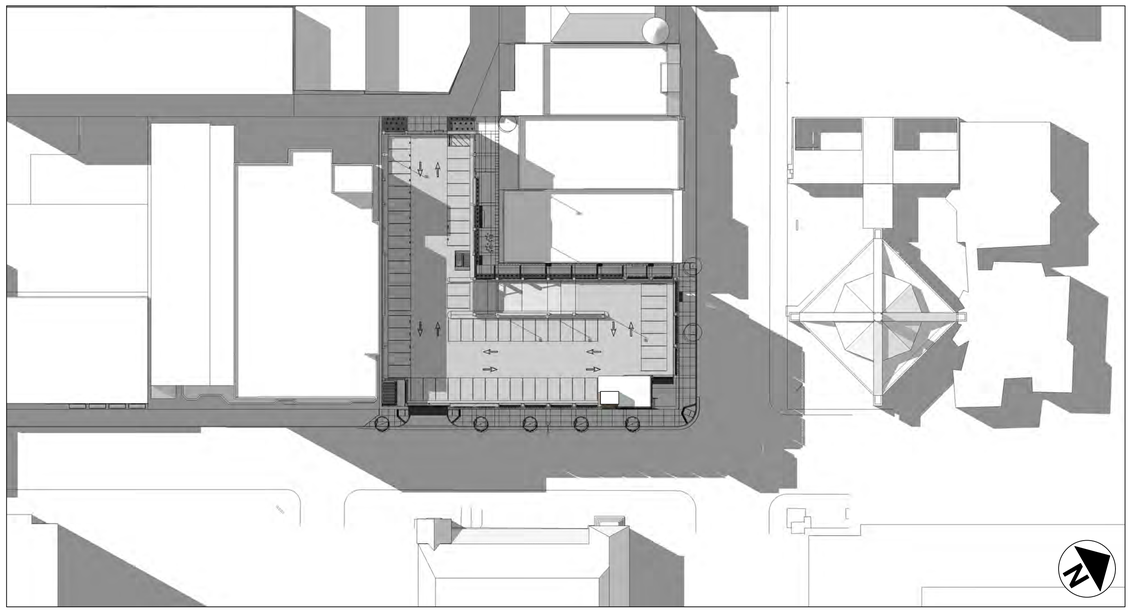
There are many ways to notify and direct drivers to available parking. Variable message signs at the entrance of the parking garage communicate to drivers if there are spaces available in the garage by displaying either “FULL” or “AVAILABLE”. Multi-level variable message signs at the entrance of a parking garage could be used to show the number of spaces available on each level of the garage.

Way finding arrows on each level of the parking garage can illuminate to direct drivers to where there are available parking spaces. This helps cars navigate through large parking garages directly to available spaces.

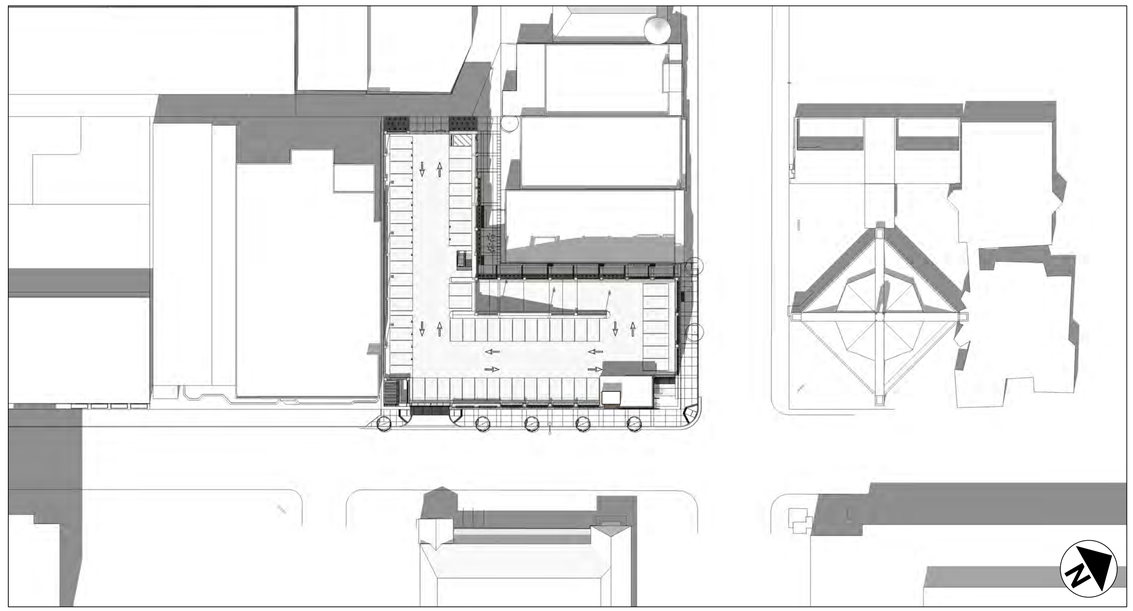
Appendix I: Shade Study

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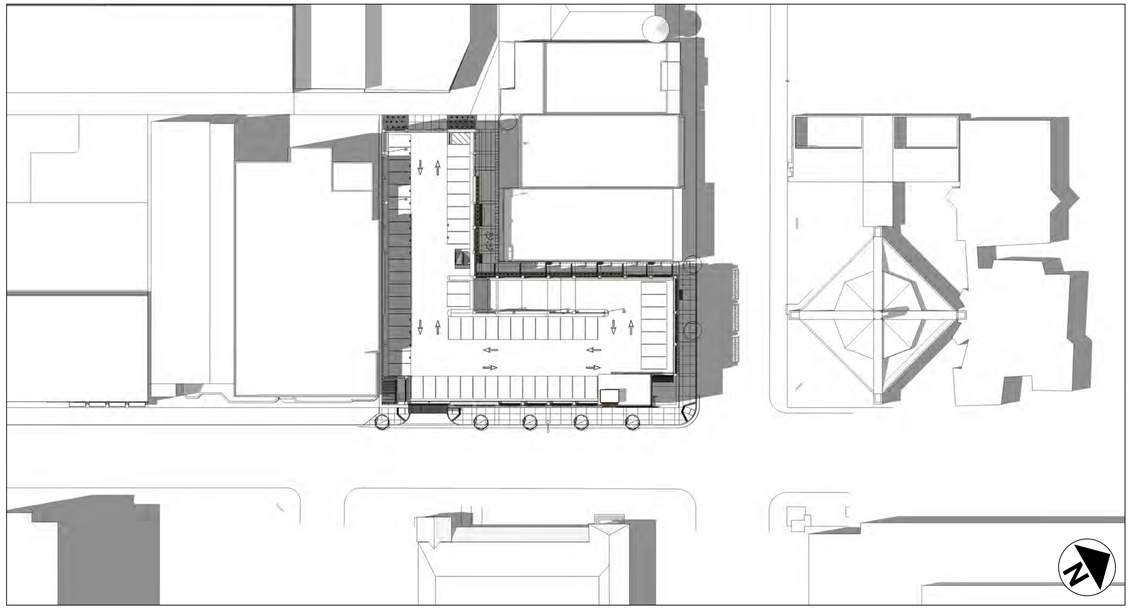
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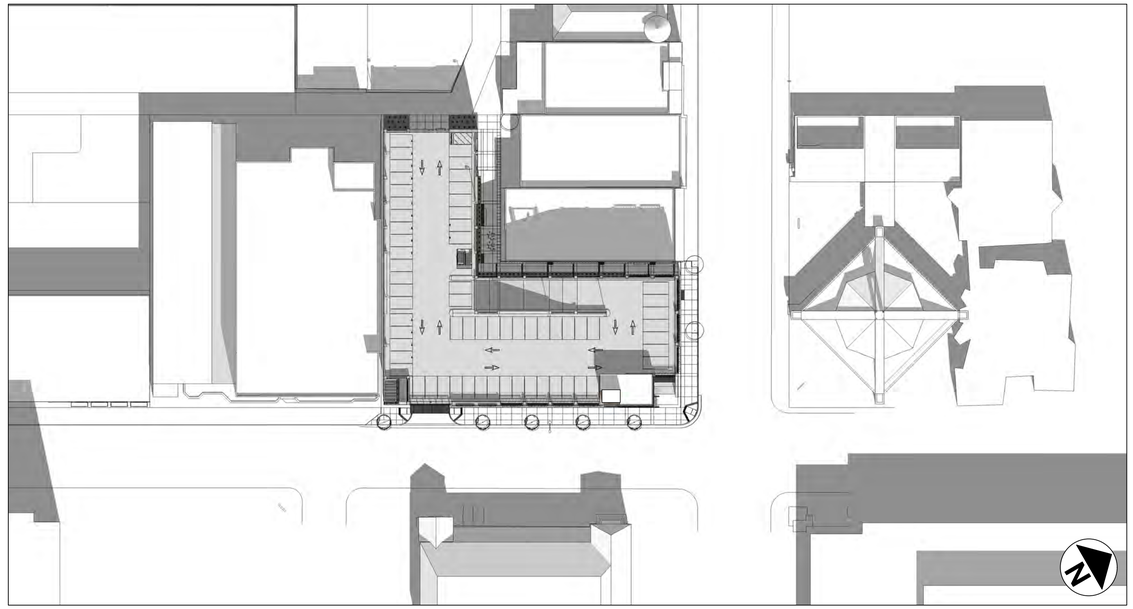
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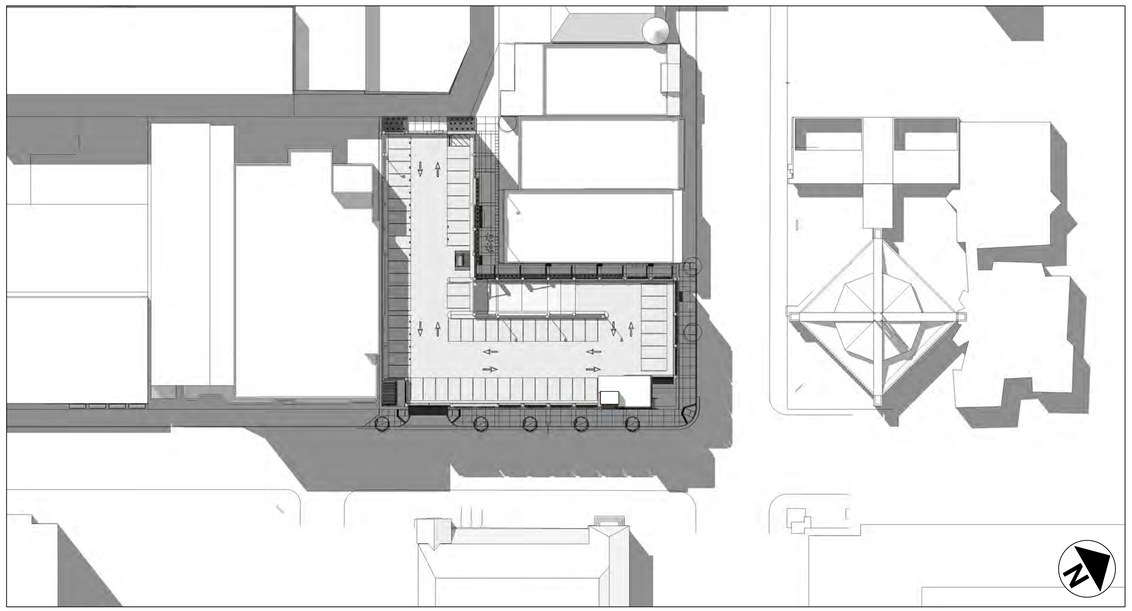
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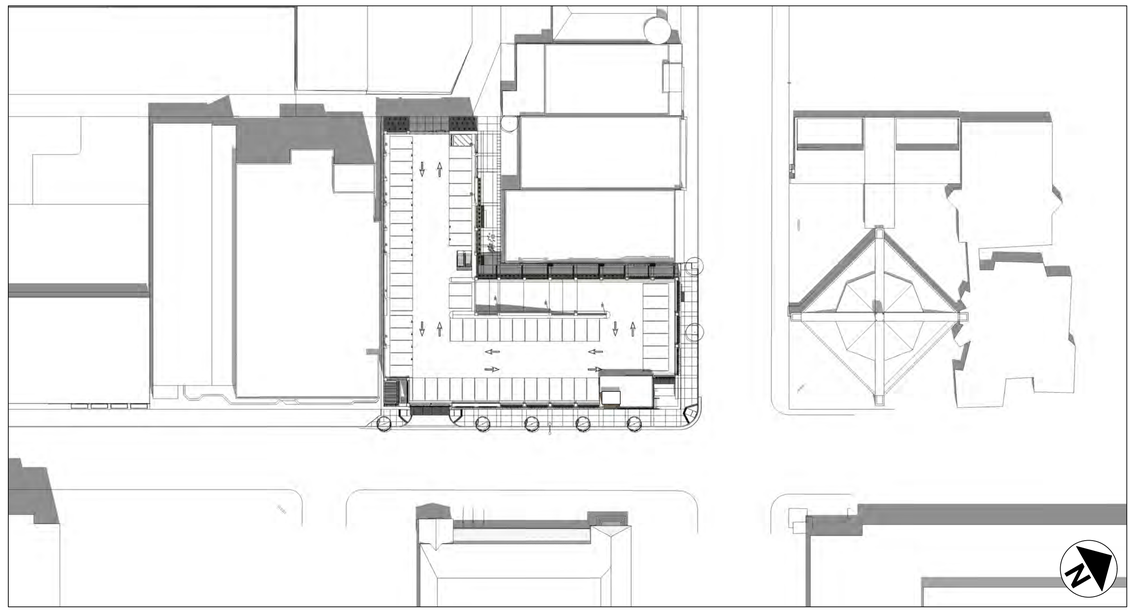
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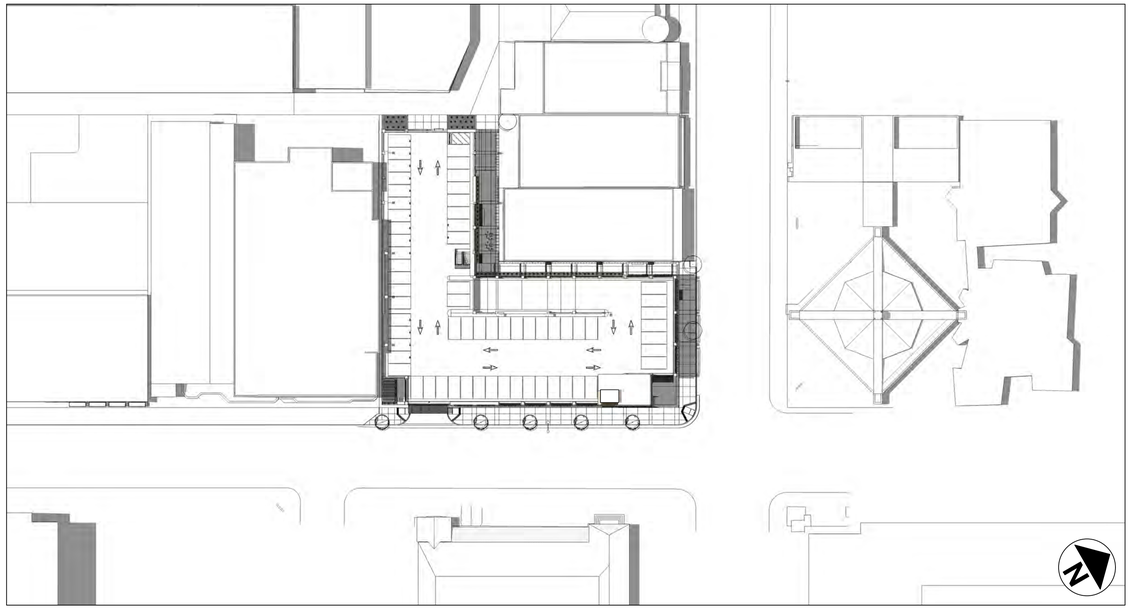
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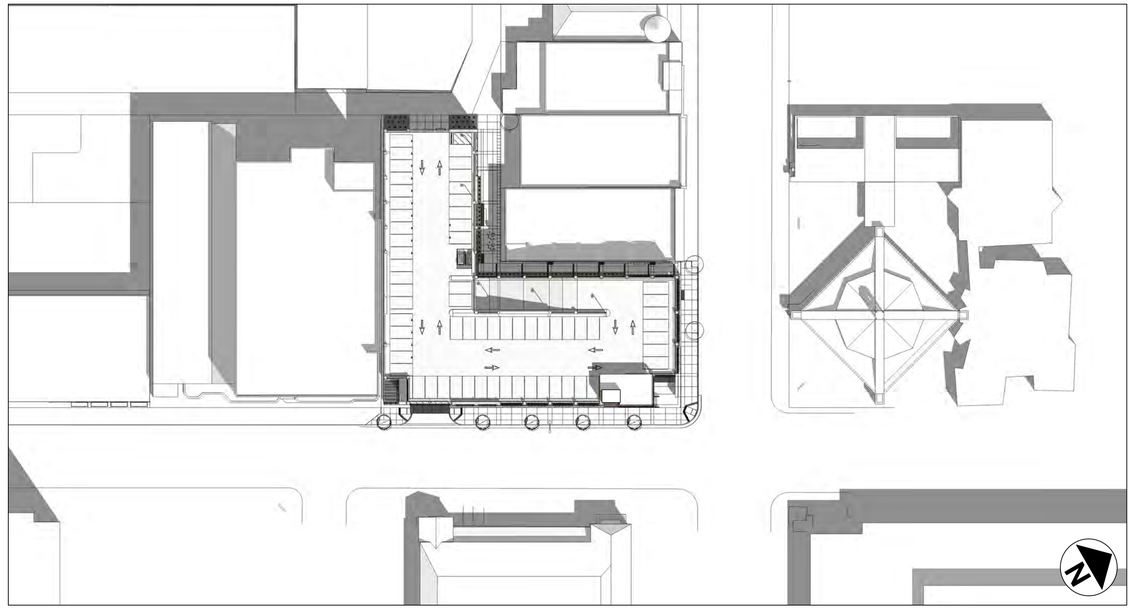
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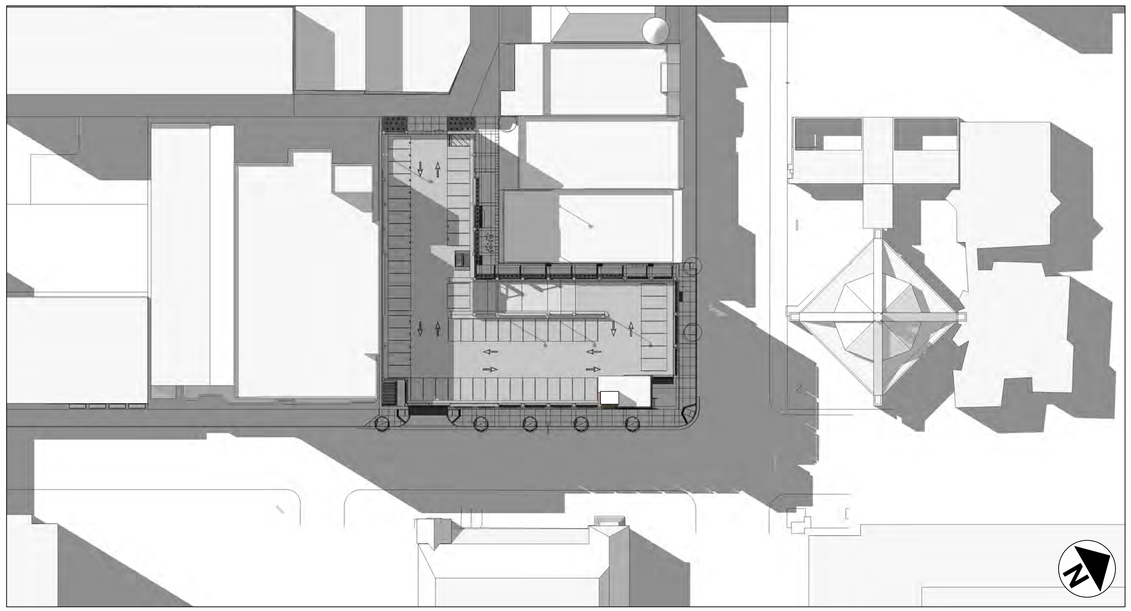
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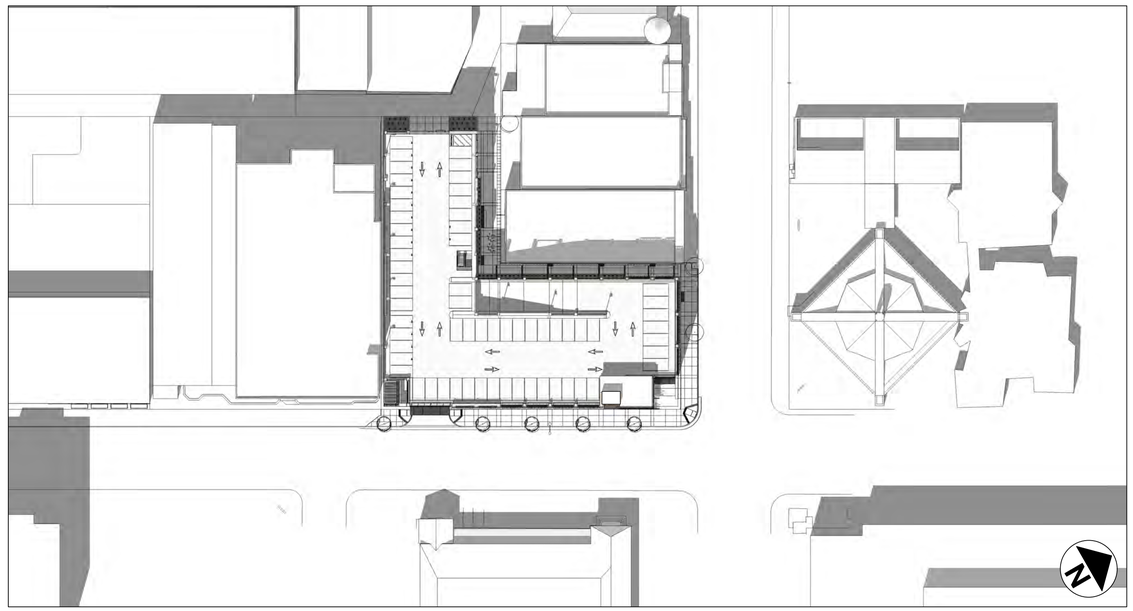
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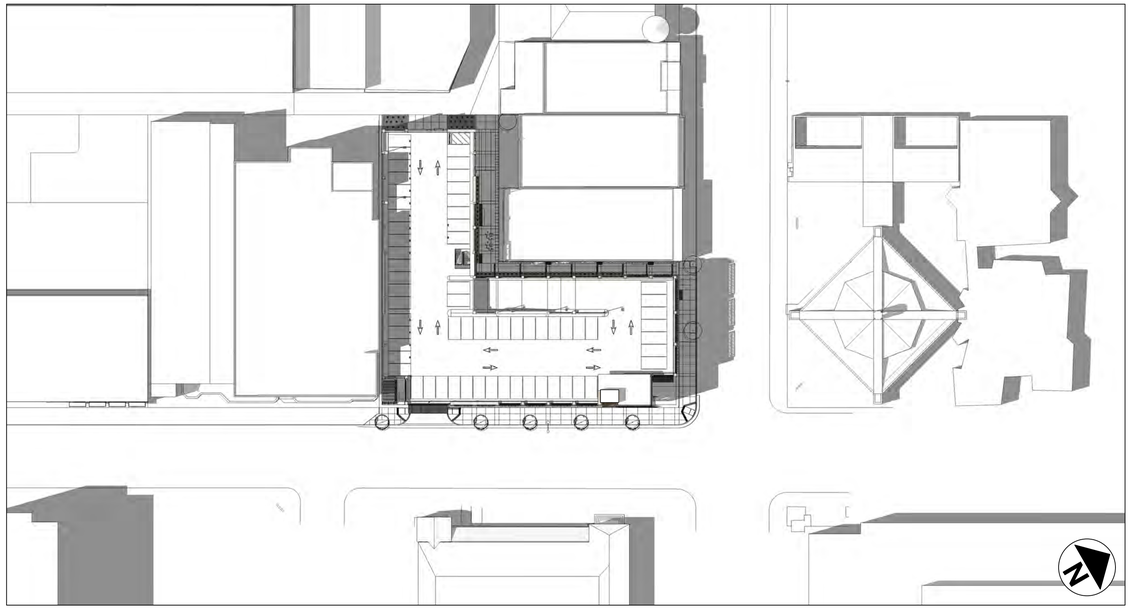
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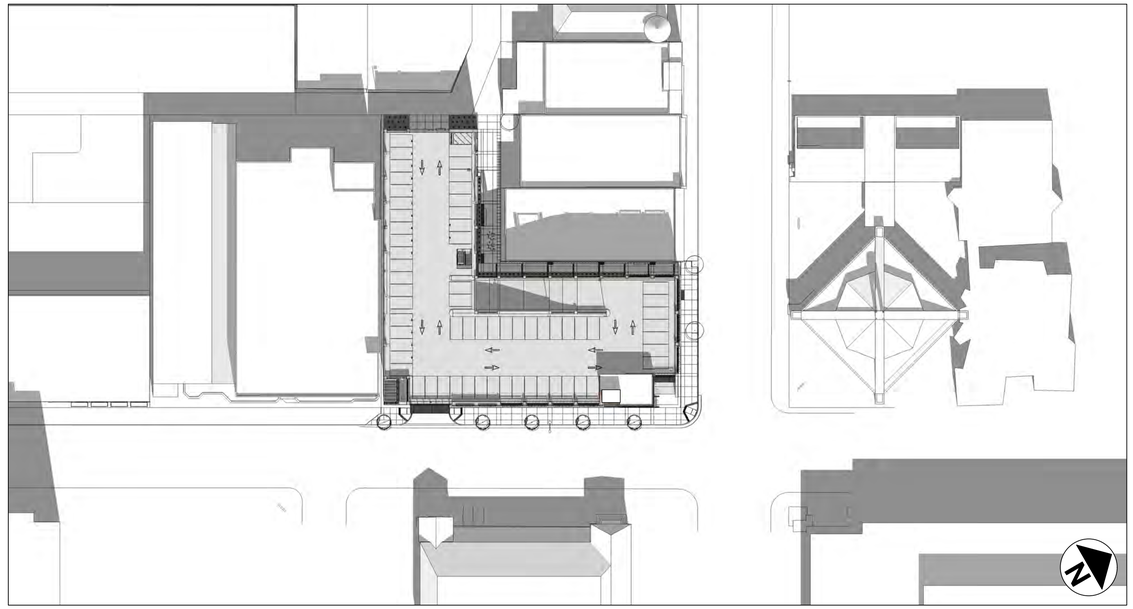
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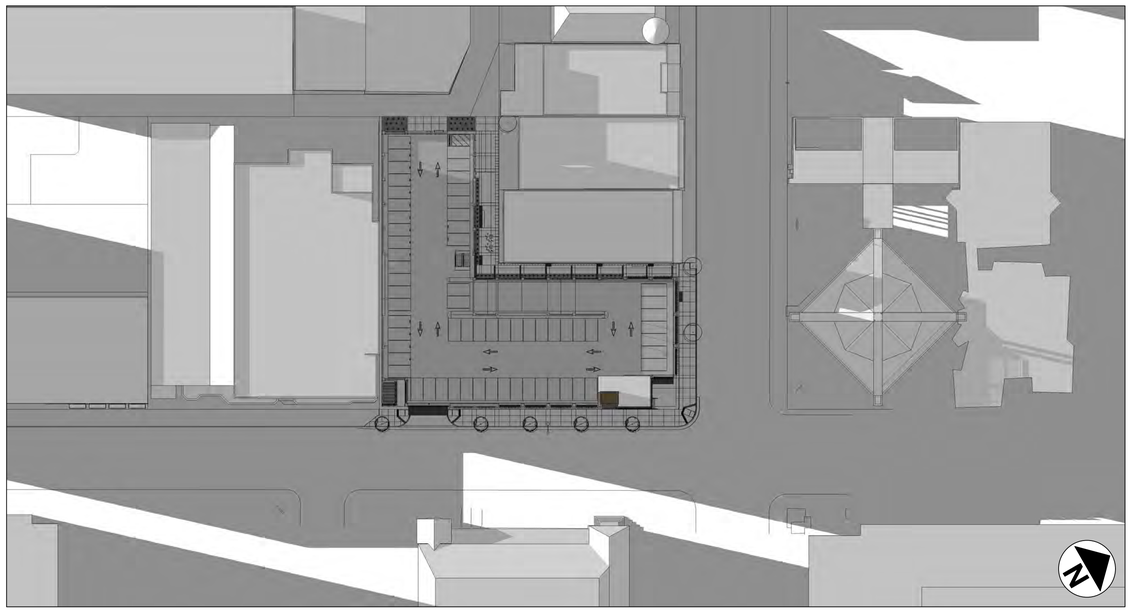
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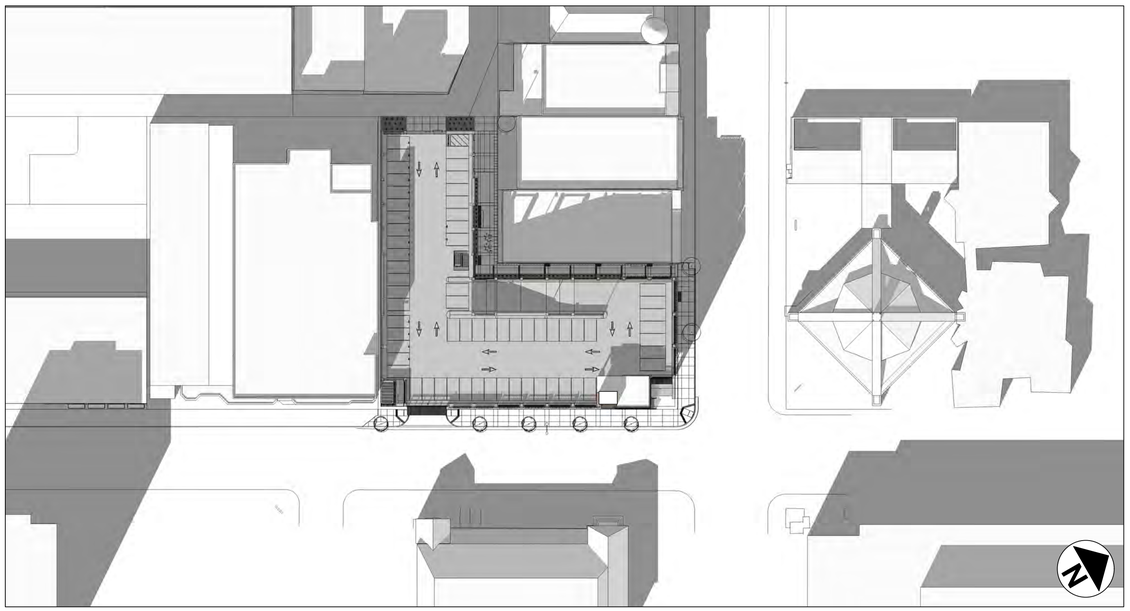
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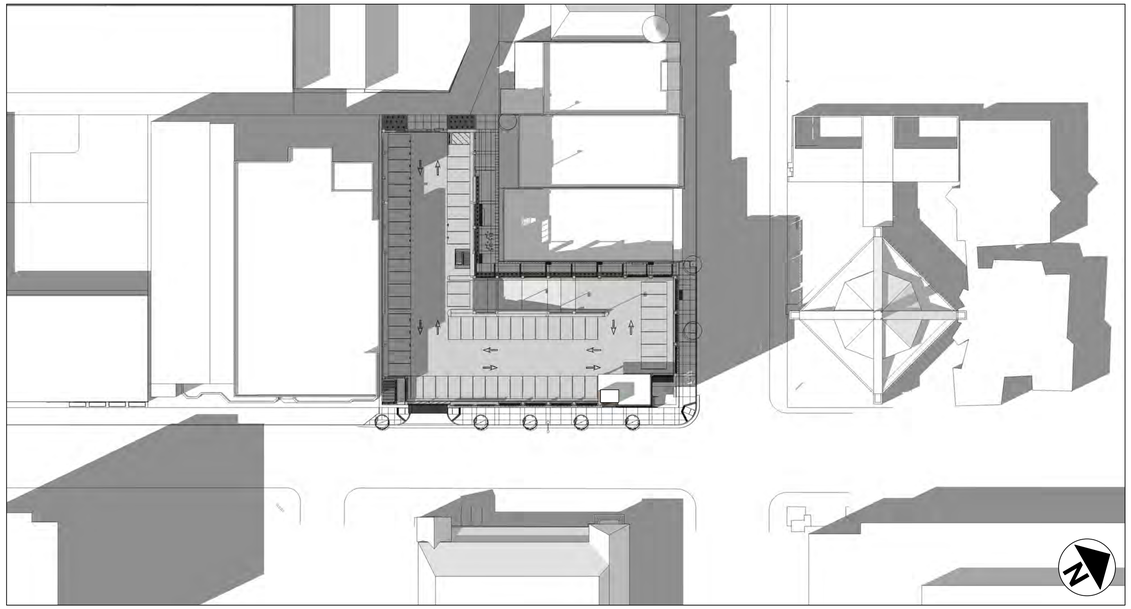
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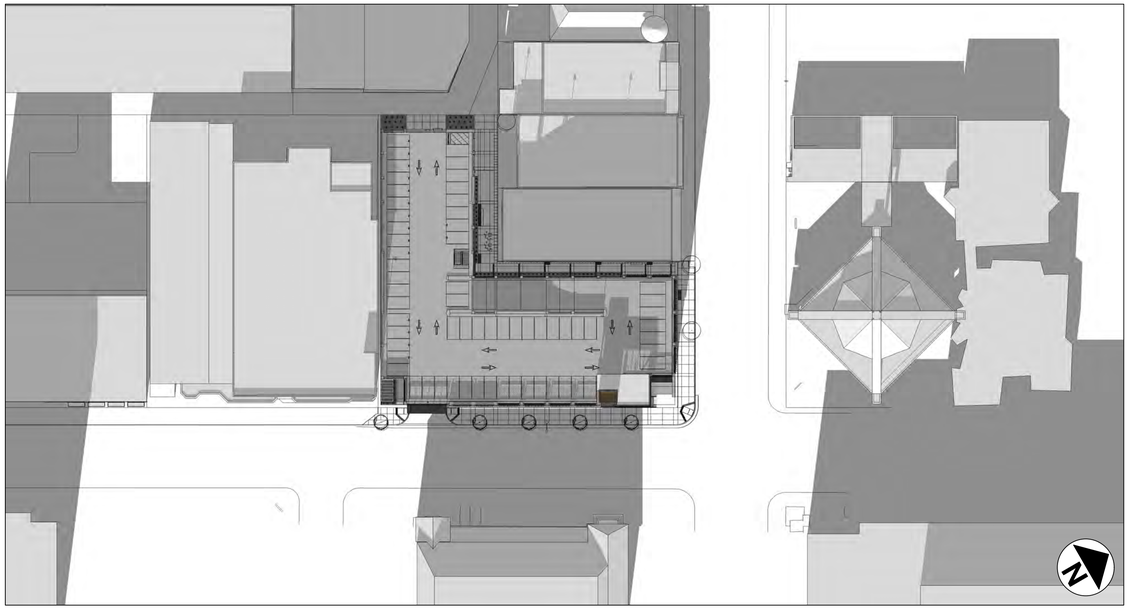
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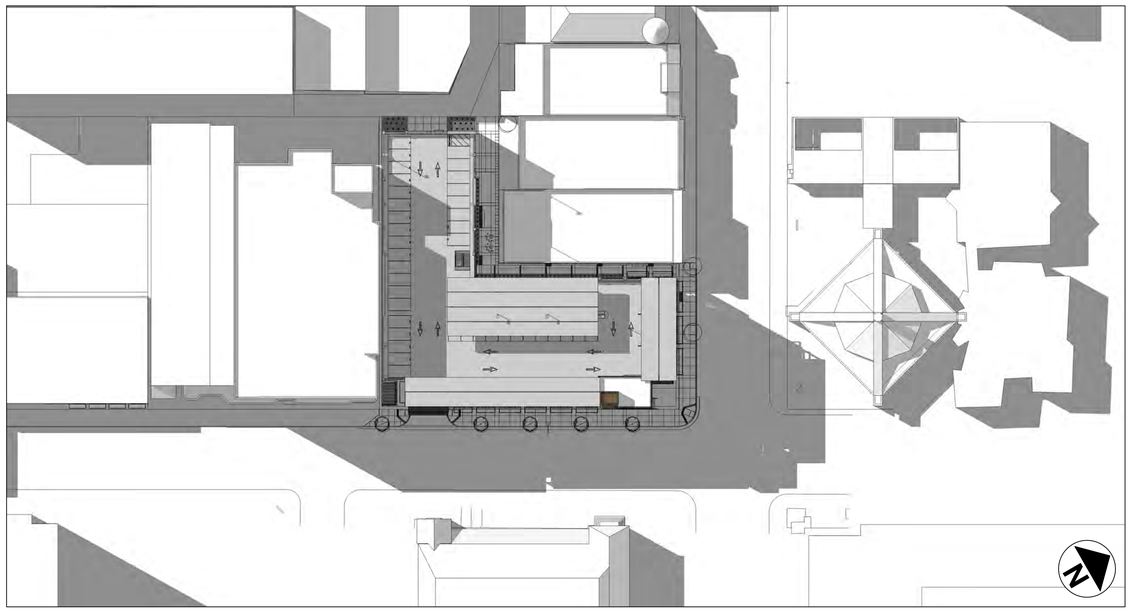
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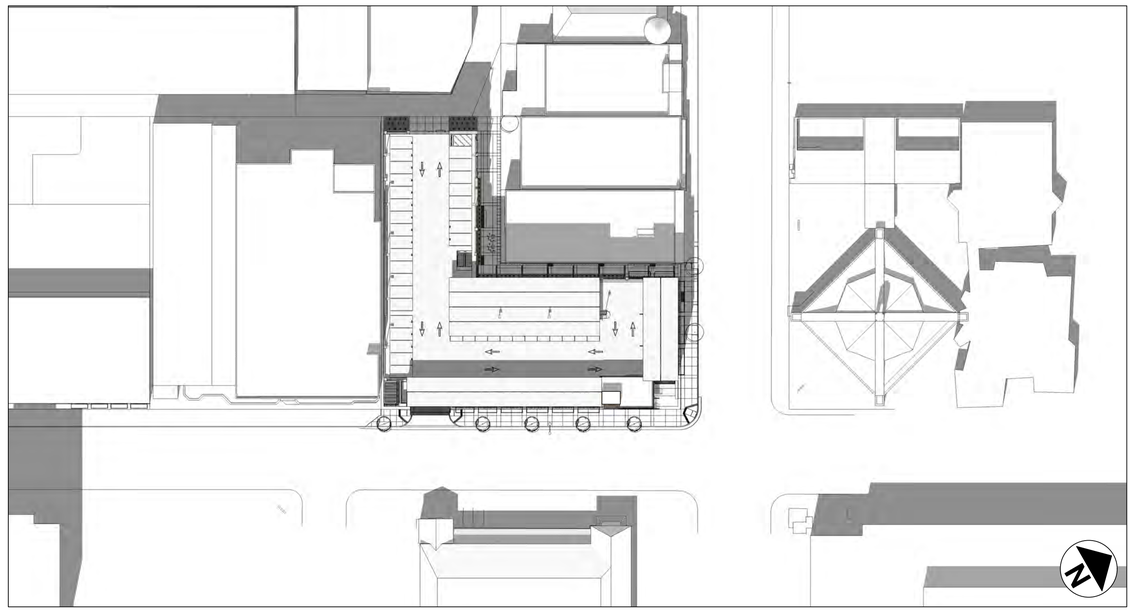
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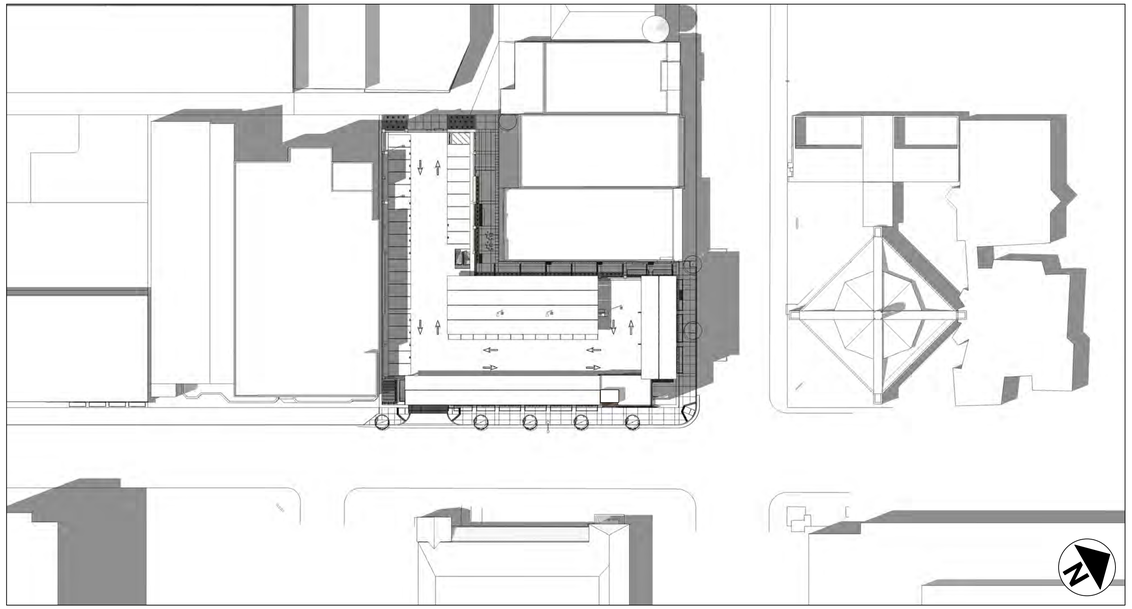
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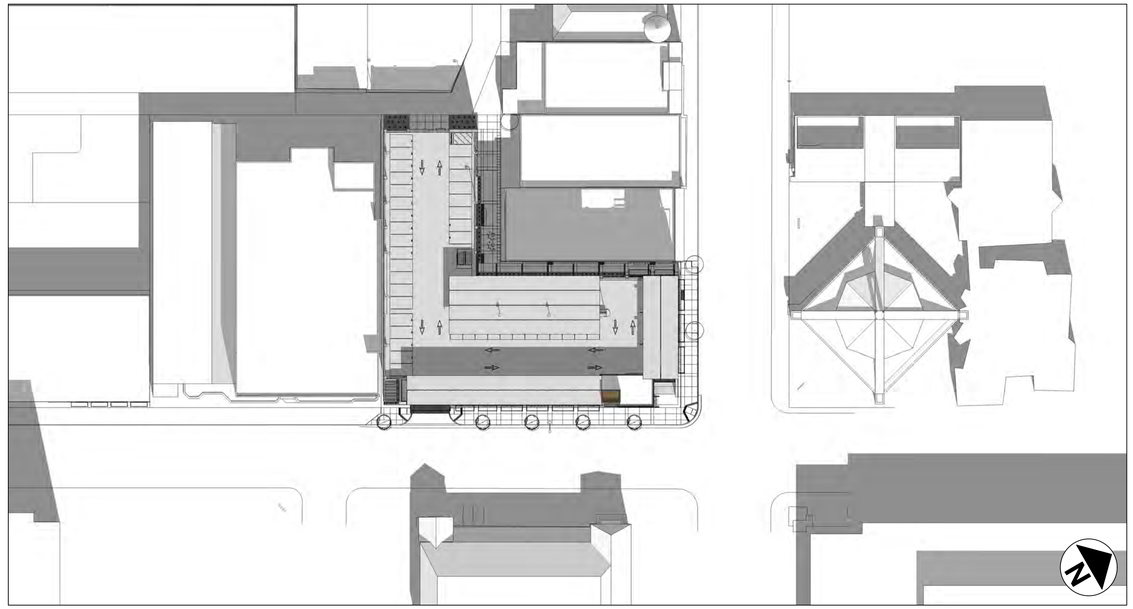
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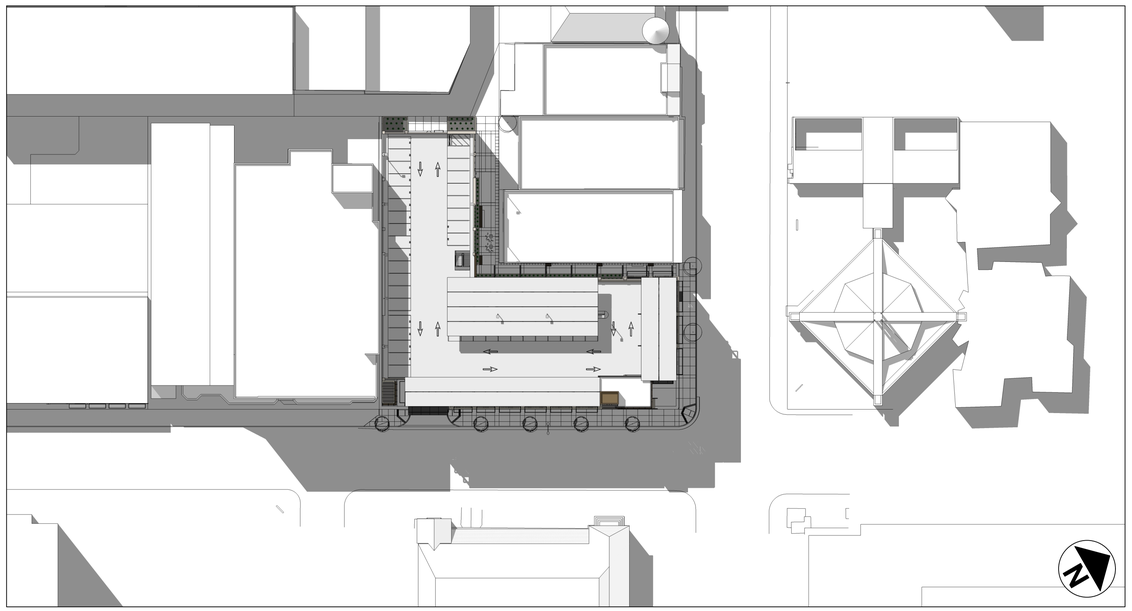
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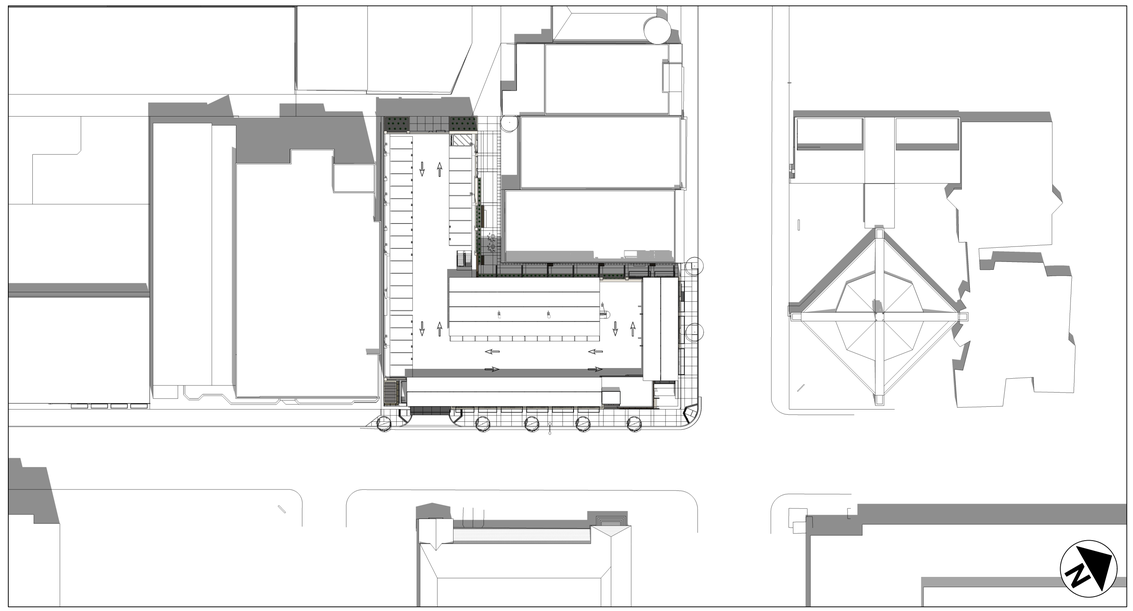
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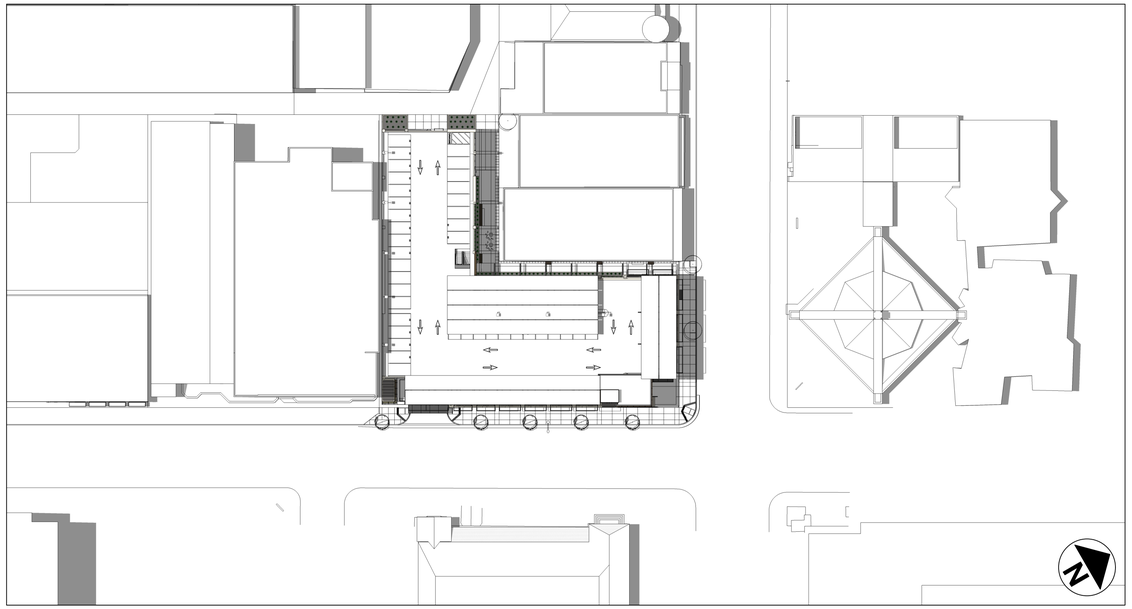
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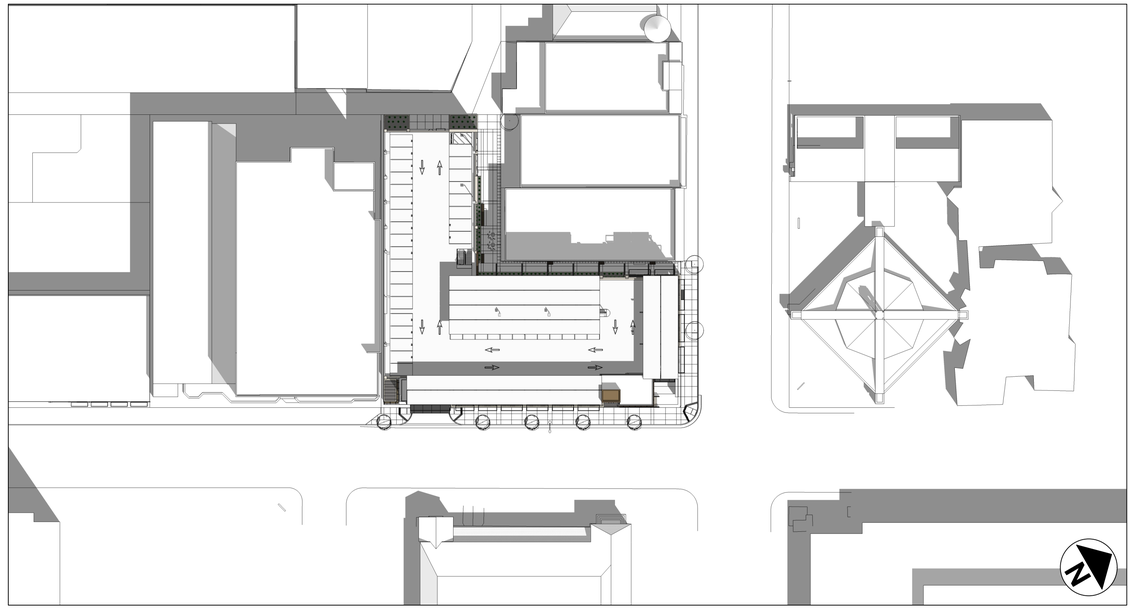
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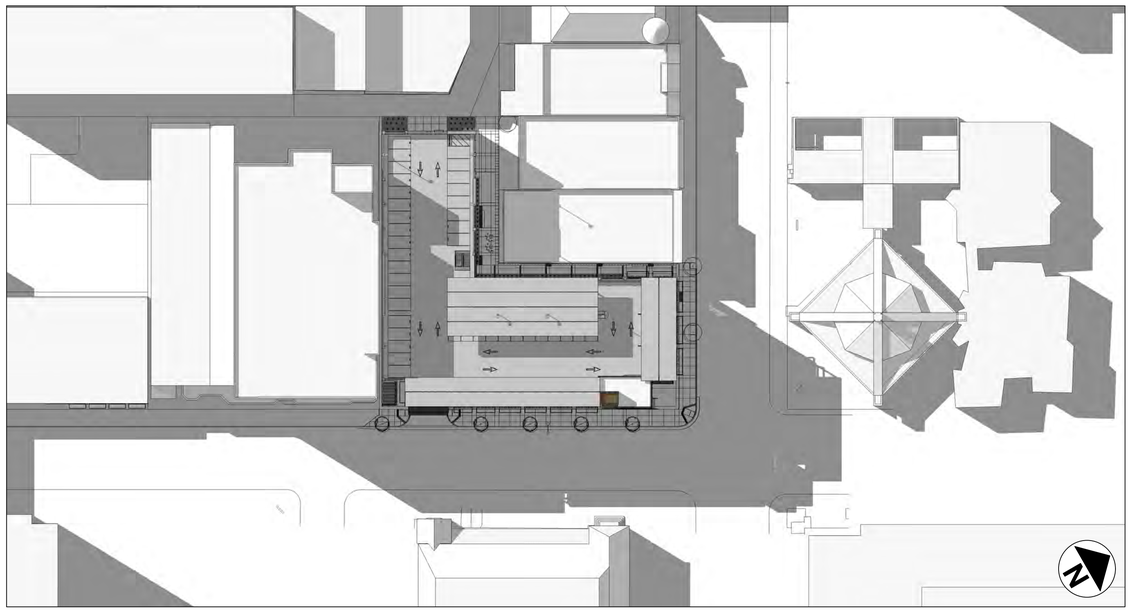
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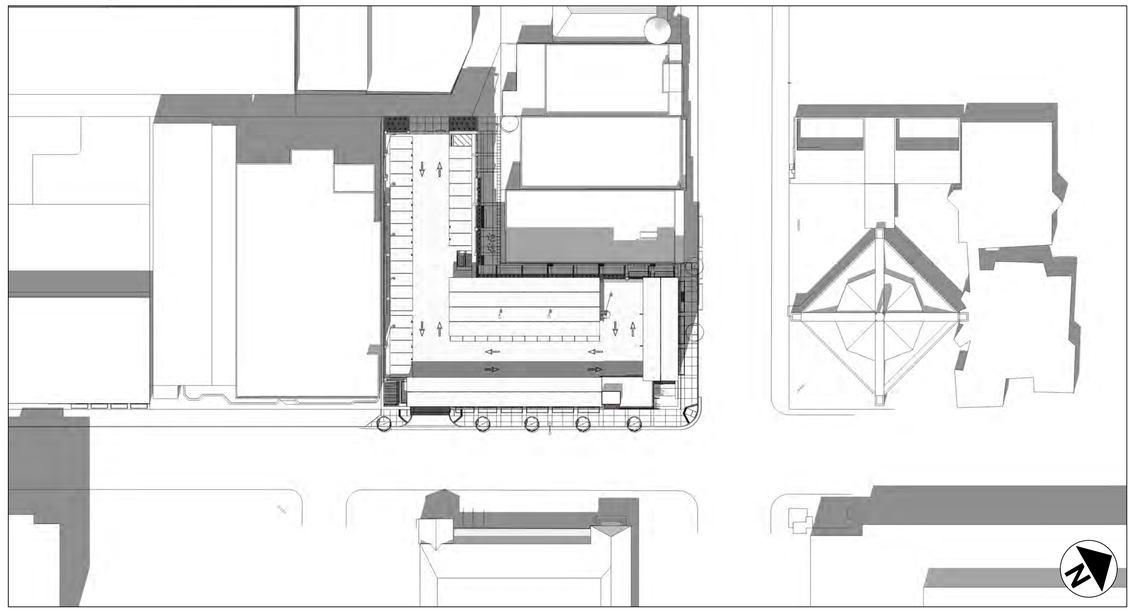
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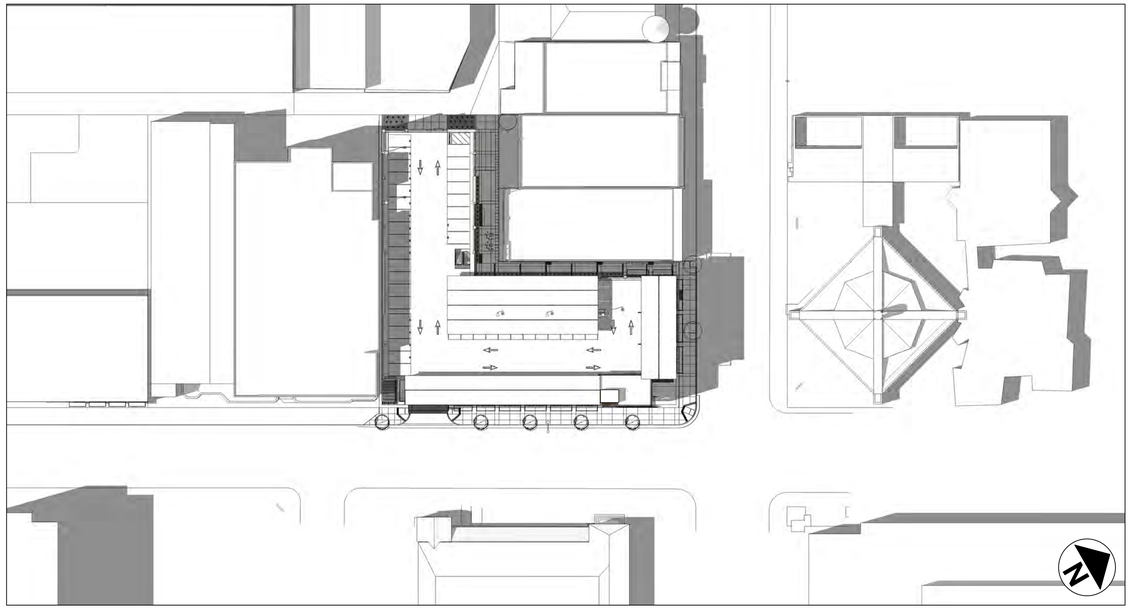
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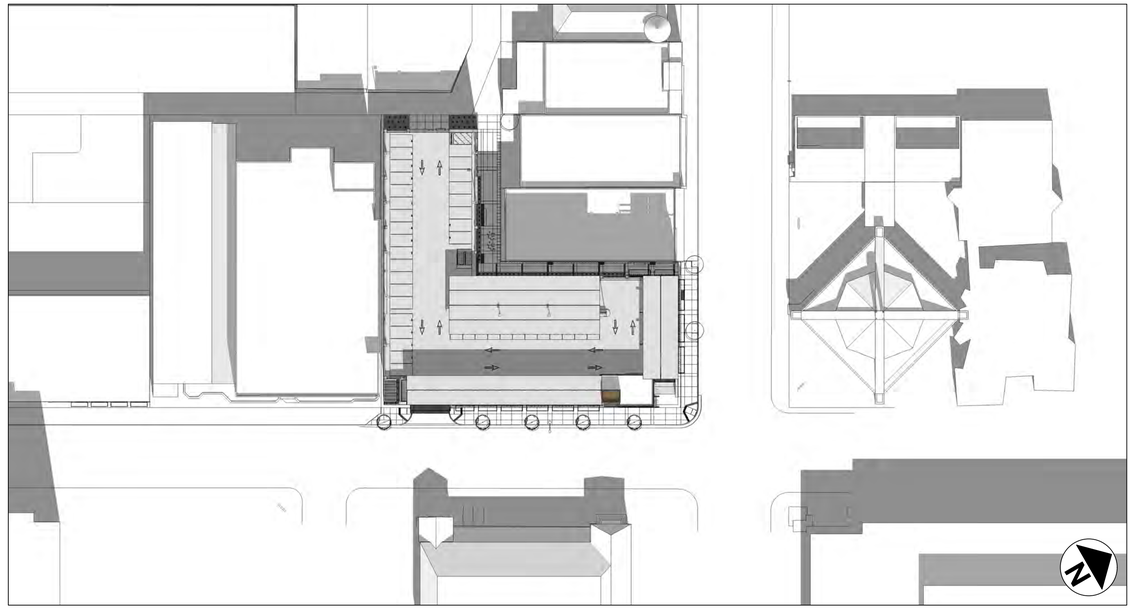
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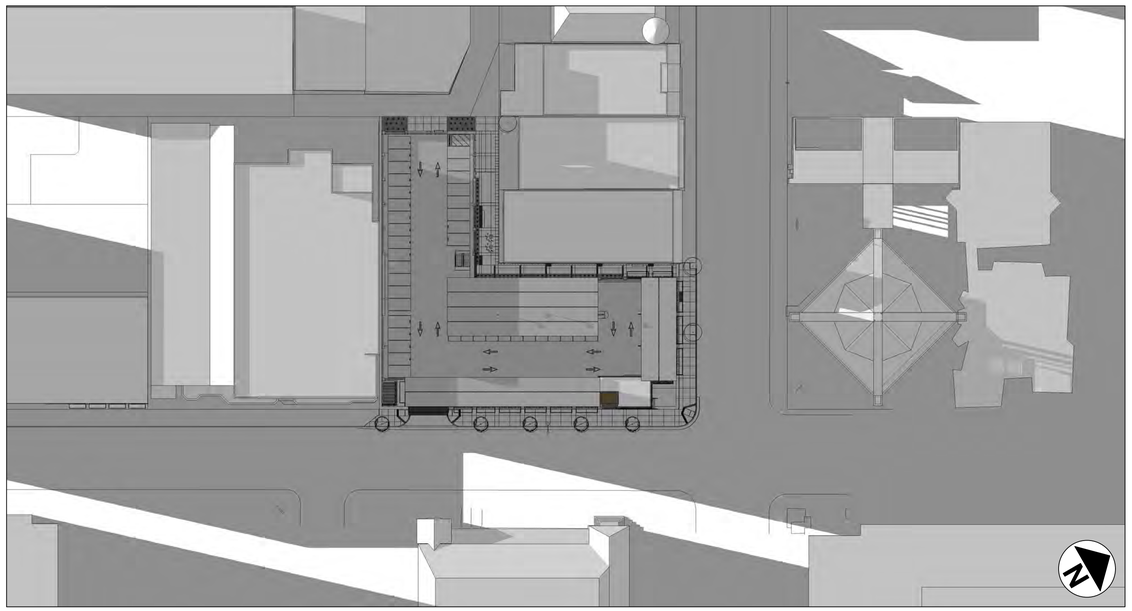
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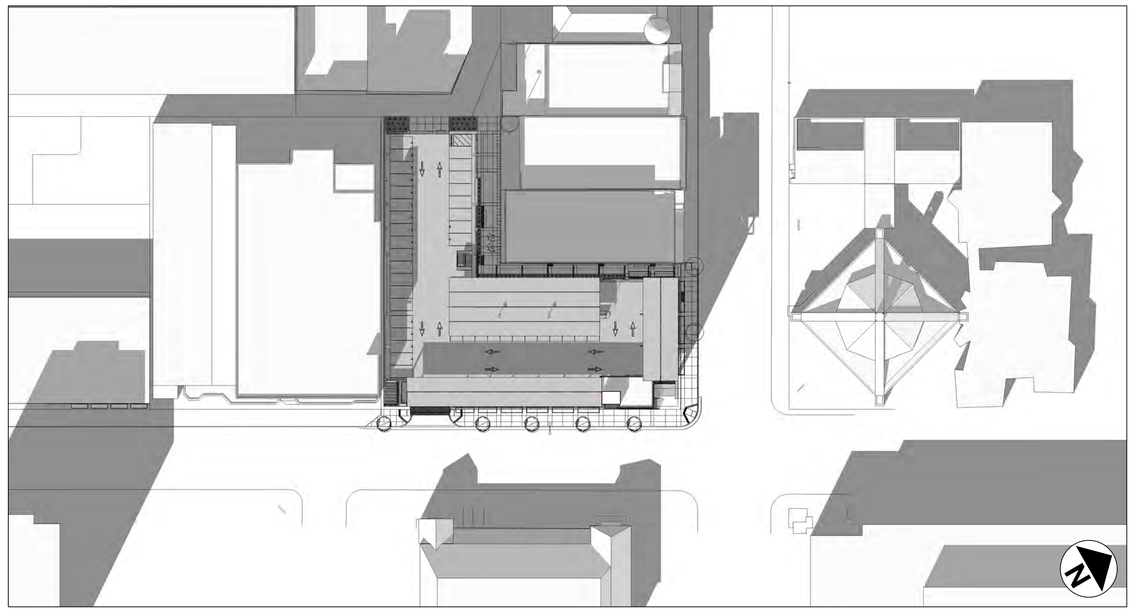
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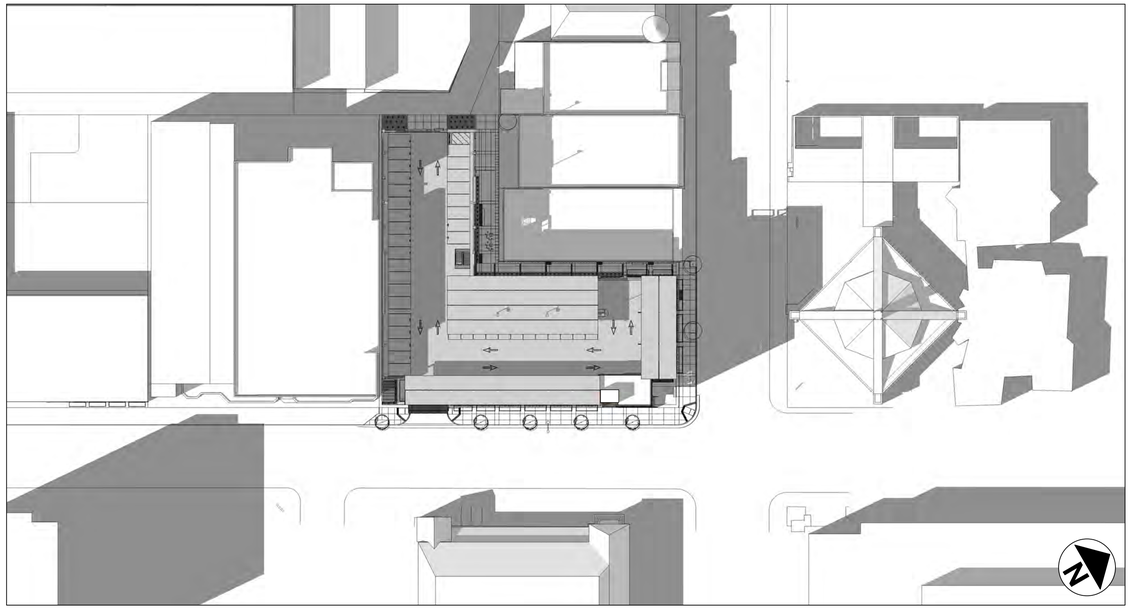
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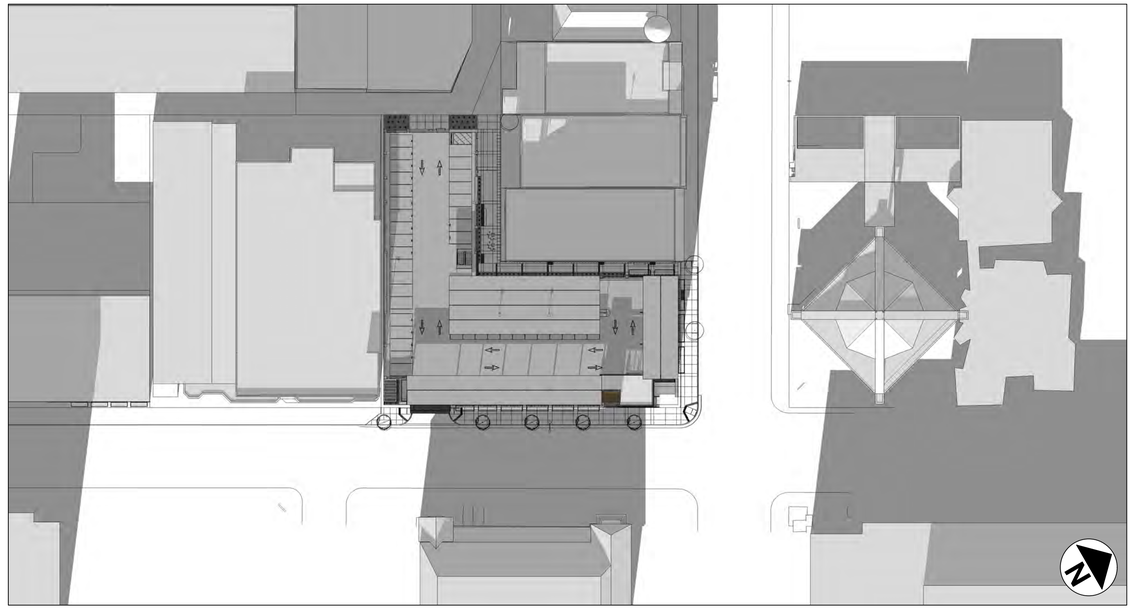
4:00 PM



10:30 AM



1:00 PM



9:00 AM

DECEMBER 21ST
GARAGE SHOWN WITH PHOTOVOLTAIC PANELS

WATRY DESIGN, INC.
Architects • Engineers • Parking Planners
HAYES GROUP ARCHITECTS

PROJECT NAME:	SHEET NAME:	CLIENT NAME:	DATE ISSUED:
DOWNTOWN PARKING GARAGE	ARB 3.17 - SOLAR STUDY 12.21	CITY OF PALO ALTO	10/12/2017

Appendix J: Transportation Impact Analysis

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FEHR PEERS

MEMORANDUM

Date: October 5, 2017

To: Lorraine Ahlquist, WSP

From: Sebastian Arias and Robert Eckols, Fehr & Peers

Subject: Palo Alto Parking Structure Focused Transportation Impact Analysis Report

SJ17-1740

INTRODUCTION

This memorandum presents the results of Fehr & Peers' focused Transportation Impact Analysis (TIA) for the proposed downtown Palo Alto parking structure project. This project is located at the existing Lot D, a surface parking lot on the west corner of the Hamilton Avenue / Waverley Street intersection in downtown Palo Alto, California. The project includes 340 parking spaces with 2,300 square feet of retail, with access points located off Hamilton Avenue and another at a driveway that connects to Waverley Street and Bryant Street.

The sections of this memorandum include trip generation, trip distribution, trip assignment, intersection operations analysis, and site access review. The trip generation, trip distribution and trip assignment sections incorporate information from Fehr & Peers' *Trip Generation, Distribution and Assignment Memorandum* dated August 31, 2017. The City of Palo Alto has provided comments on the memorandum, which are reflected in this *Focused TIA report*.

TRIP GENERATION

Freestanding parking structures do not generate trips, but instead redirect traffic generated by surrounding land uses within a given area such as downtown Palo Alto. To estimate the traffic redirected by the proposed project during peak hours, Fehr & Peers obtained morning (7:00 to 10:00 am) and evening (4:00 to 7:00 pm) peak period traffic counts at the access points of two existing downtown Palo Alto parking facilities. These facilities include:

- Bryant Street Parking Garage located between Lytton Avenue and University Avenue
- Parking Lot D (site of the future parking structure) located at the intersection of Hamilton Avenue and Waverley Street

These traffic counts were collected on Thursday August 3, 2017 and Thursday August 10, 2017. Due to ongoing construction in the study area, field observations were made on these days to ensure there was no roadway construction at the count locations during peak periods.

Using the traffic data, Fehr & Peers calculated the following vehicle trip rates for each of the existing parking facilities, presented in **Table 1**. Vehicular volumes entering and exiting each of the parking facilities are also presented.

TABLE 1: PARKING TRIP RATES

Parking Location	Size (Parking Spaces)	Unit[1,2]	AM Peak Hour (7:30 AM)			PM Peak Hour (4:30 PM)		
			In	Out	Total	In	Out	Total
Bryant Street Parking Garage	688	Vehicles	88	5	93	91	99	190
		Trip Rate	0.13	0.01	0.14	0.13	0.14	0.28
Parking lot D	86	Vehicles	17	19	36	68	70	138
		Trip Rate	0.20	0.22	0.42	0.79	0.81	1.60

Notes:
1. Trip rate represents vehicles trips per parking space
2. Vehicles represents the number of vehicles entering and exiting the parking facility.

The trip rates are considerably different for the two existing parking facilities in **Table 1** due to the following operational characteristics:

- Parking Lot D's location supports higher parking turnover than the Bryant Street garage, with more restaurants and 'quick stop' land uses immediately adjacent to Lot D.
- The Bryant Street parking deck has permit parking as well as 3-hour parking, compared to Lot D which is only 2 hour parking. This supports lower parking turnovers at the Bryant Street garage vs Lot D.

In order to incorporate these operational characteristics, Fehr & Peers uses a mix of the measured parking trip rates to estimate the proposed parking structure's trip generation. The Lot D rates (high turnover) were used for the first 90 spaces (corresponding to the existing Lot D's 86 spaces) and the Bryant Street garage rates (permit parking) were used for the remaining parking spaces. In

doing so, we capture the high turnover rate of the existing ground level parking lot D, but also capture the lower turnover nature of the multi-level Bryant street parking deck.

Fehr & Peers used the parking trip rates from **Table 1** to determine the trip generation for the two proposed parking structure alternatives presented by Watry Design, Inc. including:

- **Alternative 1**: 340 parking spaces and 2,300 square feet of retail
- **Alternative 2**: 347 parking spaces with no retail

The resulting trip generation estimates are presented in **Tables 2 - 3** for each of the two proposed parking structure alternatives. These estimates include trip deductions for the removal of existing parking lot D in order to estimate the net diverted trips for the proposed parking structure.

TABLE 2: ALTERNATIVE 1 PARKING TRIP GENERATION

Land Use	ITE Land Use	ITE Code	Units[1]	Size	AM Peak Hour			PM Peak Hour		
					In	Out	Total	In	Out	Total
Proposed Parking Structure										
Parking	N/A	N/A	Parking Spaces	340	51	22	73	105	109	214
Retail	Shopping Center	820	ksf	2.30	2	1	3	5	4	9
Existing Lot D										
Parking	N/A	N/A	Parking Spaces	86	18	19	37	68	70	138
Net Diverted Vehicle Trips					**35**	**4**	**39**	**42**	**43**	**85**

Notes:
1. ksf = 1000 square feet
Source: Fehr & Peers, September 2017.

TABLE 3: ALTERNATIVE 2 PARKING TRIP GENERATION

Land Use	ITE Land Use	ITE Code	Units[1]	Size	AM Peak Hour			PM Peak Hour		
					In	Out	Total	In	Out	Total
Proposed Parking Structure										
Parking	N/A	N/A	Parking Spaces	347	52	22	74	106	110	216
Existing Lot D										
Parking	N/A	N/A	Parking Spaces	86	18	19	37	68	70	138
Net Diverted Vehicle Trips					**34**	**3**	**37**	**38**	**40**	**78**

Notes:
1. ksf = 1000 square feet
Source: Fehr & Peers, September 2017.

Of the two alternatives, Alternative 1 has the greater number of diverted or new trips due to the addition of the retail uses. Therefore, this alternative was used for the traffic operations analysis and site plan review presented later in this memorandum.

TRIP DISTRIBUTION

Using data from the existing traffic counts, a trip distribution was prepared for the proposed parking facility and is presented on **Figure 1**.

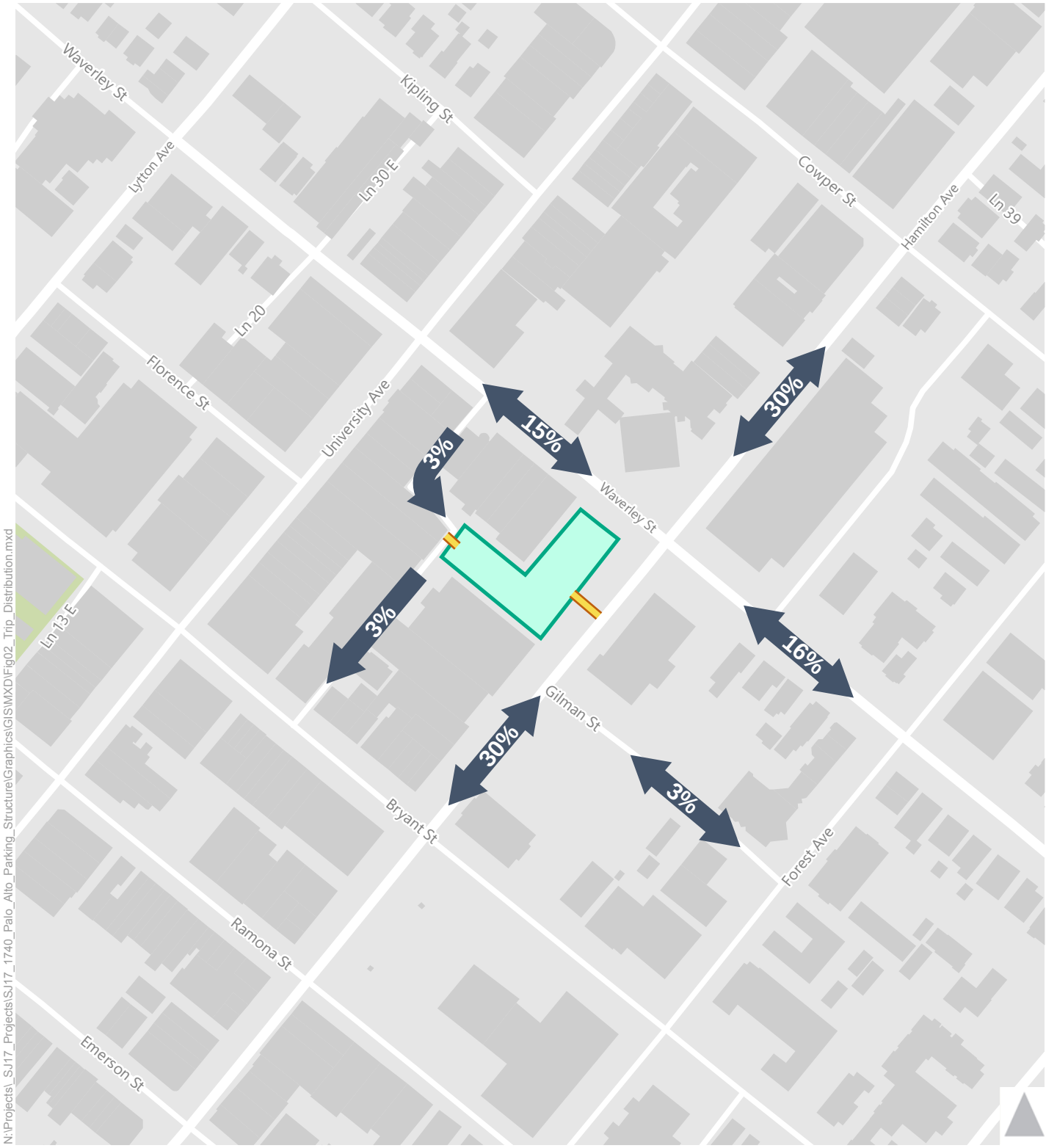


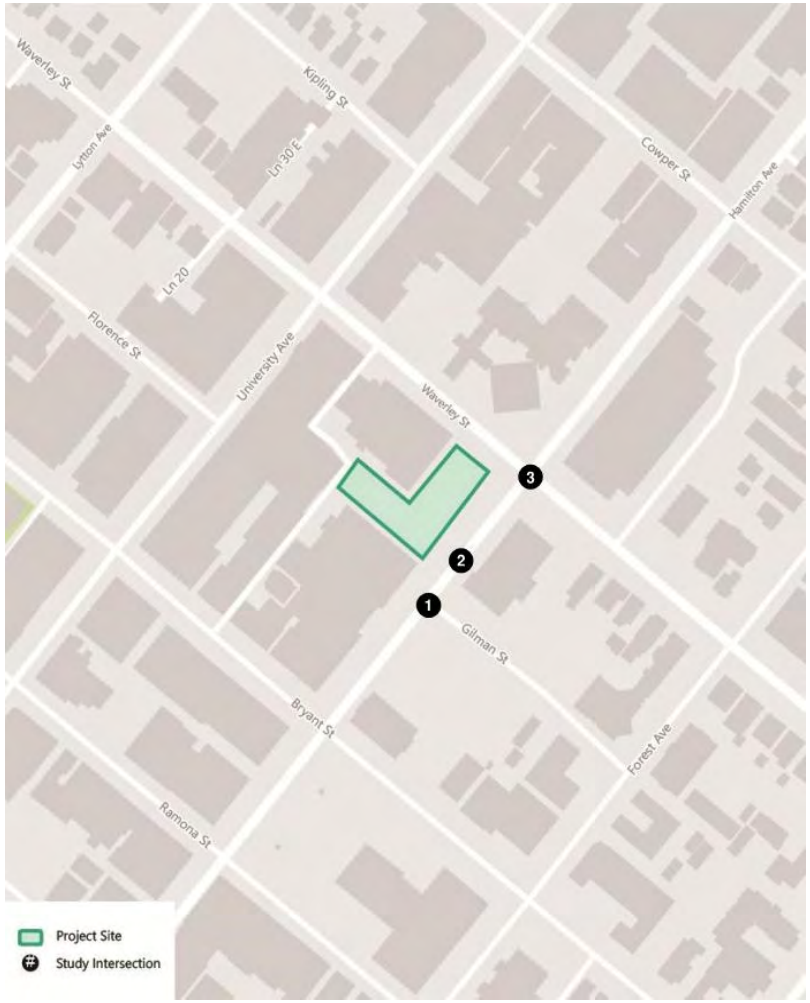
Figure 1

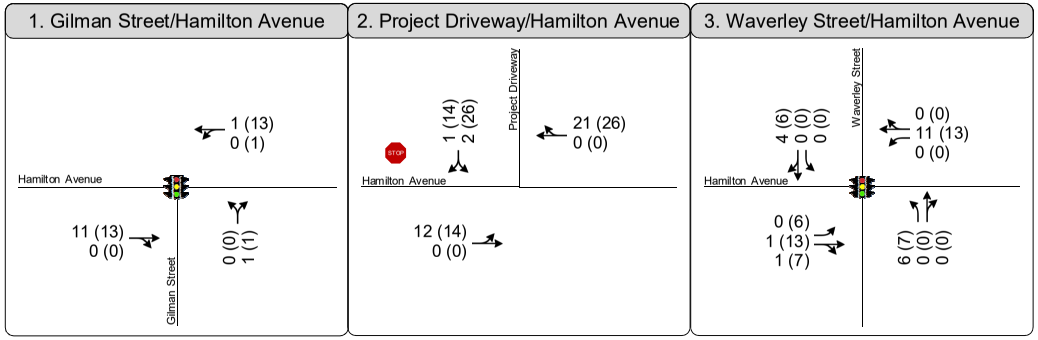
Trip Distribution

Based on the existing travel patterns and discussions with City staff, 15 percent of the trips are assumed to come from / go to the north on Waverley Street and 16 percent of the trips will come from / go to the south on Waverly Street. Approximately 60 percent of the trips will use Hamilton Avenue with 30 percent to / from the east and 30 percent to / from the west. A small portion of trips (6 percent) will enter / exit the structure via the one-way driveways at the north end of the project. Three (3) percent of the trips were assumed to use Gilman Street.

TRIP ASSIGNMENT

Once the project distribution was determined, the vehicle trips to and from the parking structure were assigned to the surrounding roadway network. **Figure 2** shows the project trips assigned to the study intersections.





(##) = AM Volumes (PM Volumes)

Figure 2

Project Peak Hour Volumes and Existing Lane Configurations

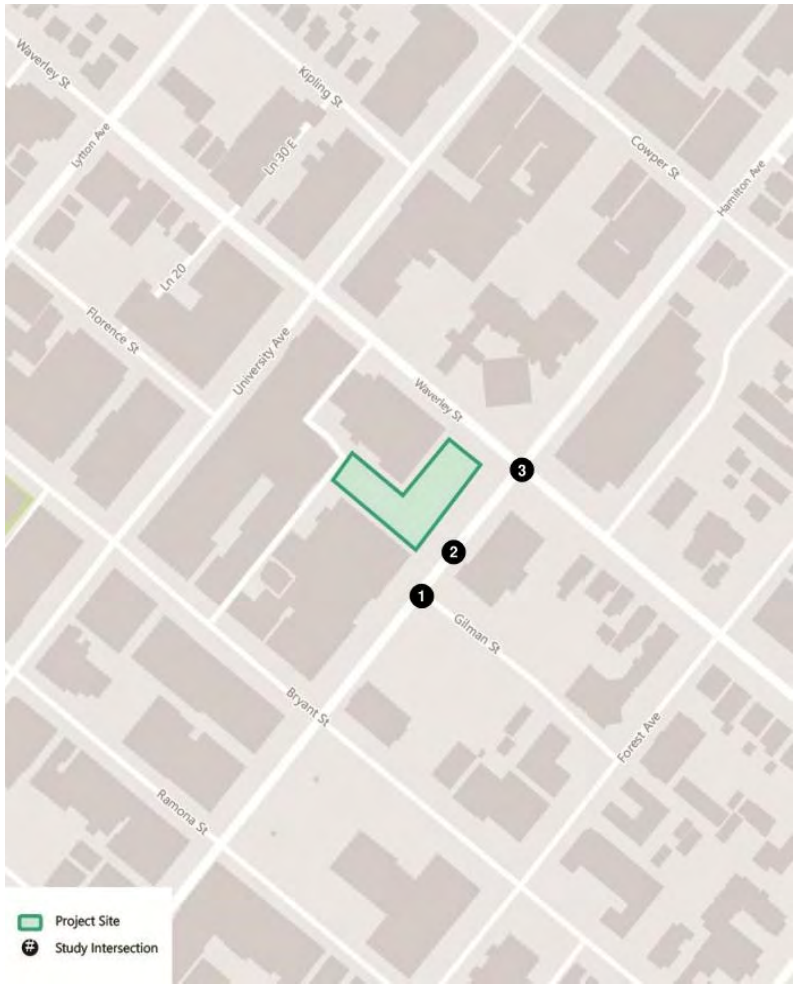
INTERSECTION OPERATIONS ANALYSIS

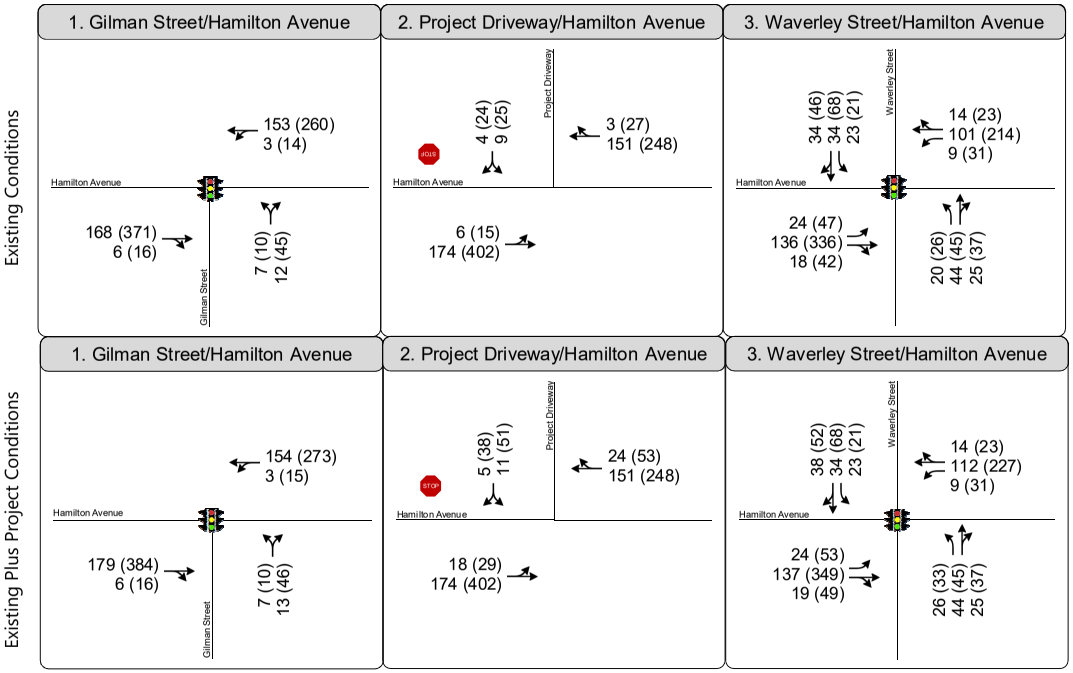
Intersection operations were evaluated using TRAFFIX software. This software provides level of service (LOS) results using user input information such as volume, lane geometries, signal timing and more. LOS is a measure of a driver's experience at an intersection and is based on the amount of delay they encounter. LOS values range from A to F, with A being the least vehicle delay for a driver and F being the greatest vehicle delay. LOS D and better are considered acceptable operating levels in the City of Palo Alto for non-Congestion Management Program (CMP) intersections. None of the study intersections are CMP intersections; therefore, the City of Palo Alto LOS standards apply. Detailed TRAFFIX results outputs with levels of service for signalized and unsignalized intersections are included in **Attachment A**.

Existing and Existing Plus Project Conditions

The Existing Conditions uses the existing intersection geometry, volumes and signal timing to estimate the LOS for current intersection operating conditions. Traffic volumes are based on counts collected on Thursday August 3 and Thursday August 10, 2017. Peak hour volumes for the morning (7:30 – 8:30 AM) and evening (4:30 – 5:30 PM) were used for the LOS analysis. Field observations were made on these days to ensure there was no roadway construction at the count locations during peak periods.

Figure 3 shows the existing turning movements at the study intersections and the result of the trip assignment that redirects traffic at each of the study intersections. The Existing Plus Project Conditions adds the redirected project trips to existing volumes as presented in **Figure 3**. Existing Plus Project Conditions represents volumes for Alternative 1: 340 parking spaces and 2,300 square feet of retail. The LOS results for both Existing Conditions and Existing Plus Project Conditions are presented in **Table 4**.





(##) = AM Volumes (PM Volumes)

Figure 3

Existing and Existing Plus Project Peak Hour Volumes and Lane Configurations

TABLE 4: EXISTING AND EXISTING PLUS PROJECT CONDITIONS INTERSECTION LEVEL OF SERVICE

	Intersection Name	Intersection Control[1]	LOS Standard[2]	Peak Hour[3]	Existing		Existing Plus Project			
					Delay[4]	LOS[5]	Delay[4]	LOS[5]	Change in Critical V/C[6]	Change in Average Critical Delay[7]
#1	Gilman Street / Hamilton Avenue	Signal	D	AM	3.4	A	3.4	A	0.007	0.0
				PM	4.2	A	4.2	A	0.009	0.0
#2	Project Driveway / Hamilton Avenue	SSSC	D	AM	10.1	B	10.3	B	N/A	N/A
				PM	12.4	B	14.0	B		
#3	Waverley Street / Hamilton Avenue	Signal	D	AM	9.6	A	9.6	A	0.004	0.2
				PM	8.3	A	8.4	A	0.016	0.1

Notes:
1. Signal = Signalized Intersection; SSSC = Side-Street Stop Controlled Intersection.
2. LOS Standard of intersection's jurisdiction.
3. AM = morning peak hour (between 7:30 and 8:30 AM), PM = evening peak hour (between 4:30 and 5:30 PM).
4. Whole intersection weighted average control delay expressed in seconds per vehicle for signalized intersections. Total control delay for the worst movement is presented for side-street stop-controlled intersections.
5. LOS = Level of Service calculations conducted using the TRAFFIX level of service analysis software package, which applies the methodology described in the *2000 HCM*.
6. Change in critical volume-to-capacity ratio (V/C) between No Project and Plus Project Conditions.
7. Change in critical movement delay between No Project and Plus Project Conditions.

Source: Fehr & Peers, September 2017.

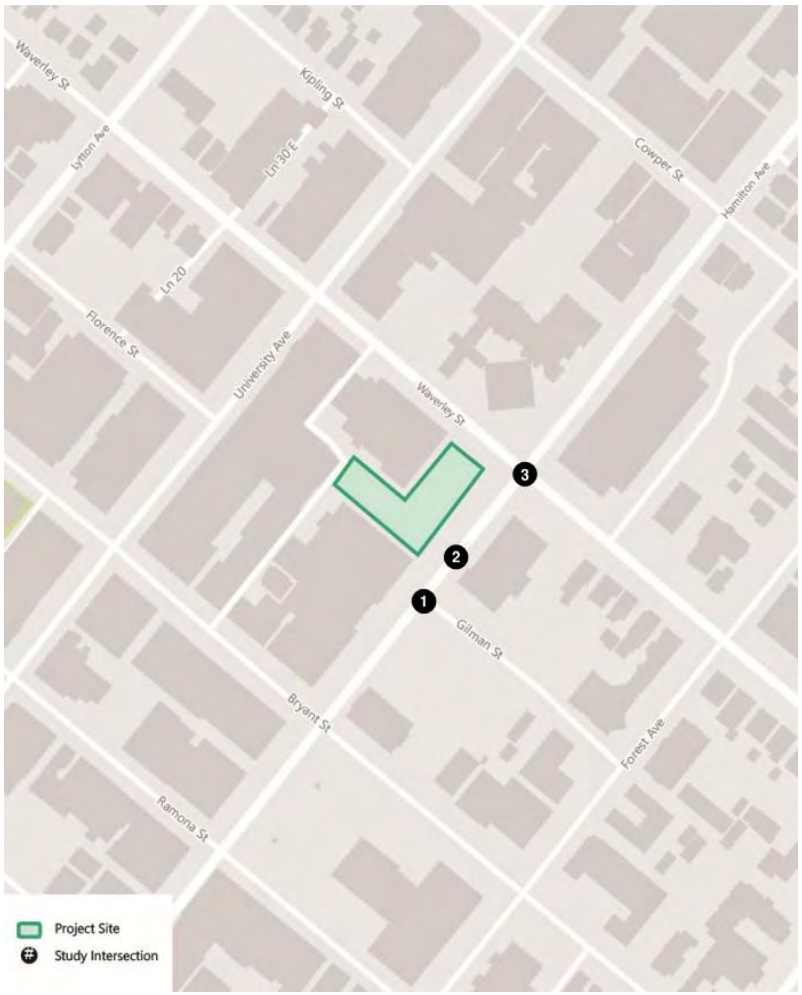
Under Existing Plus Project Conditions, **all study intersections operate at acceptable levels of service** and no mitigation measures are required.

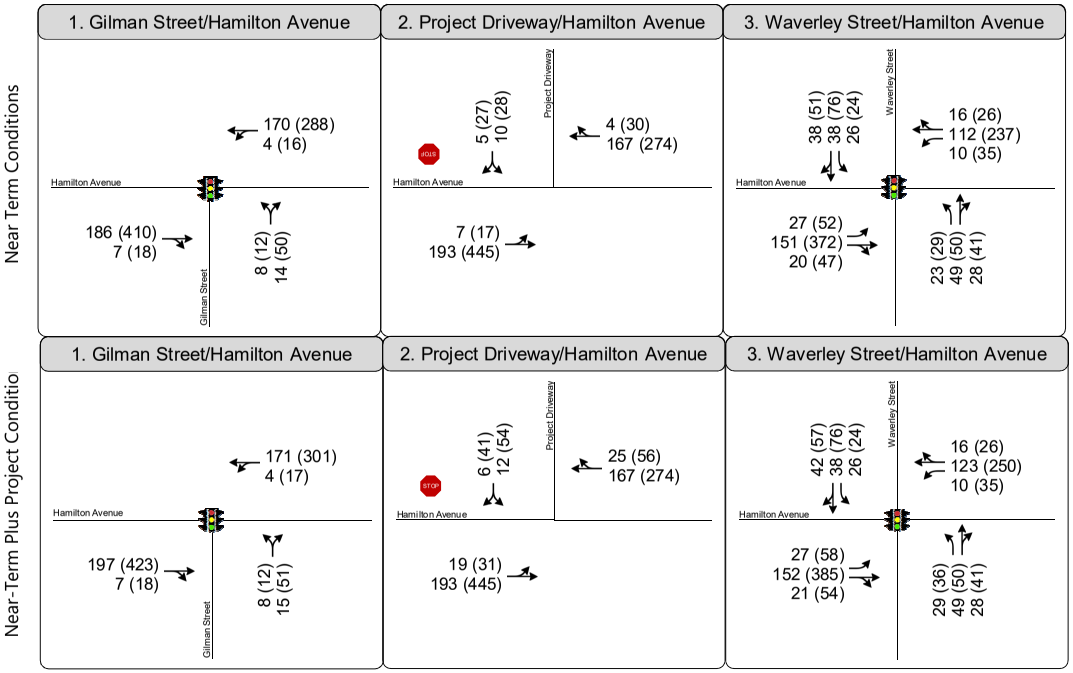
Near-Term and Near-Term Plus Project Conditions

The Near-Term scenarios use the existing volumes plus traffic from "approved but not yet built" and "not occupied" developments in the area, if any. This scenario also includes approved and funded intersection geometry improvements, if any, provided by City of Palo Alto staff. City staff confirmed that there are no any entitled projects within the downtown area that are estimated to generate more than ten peak period vehicle trips. In addition, the City stated that there are no planned or funded improvements at the study intersections. Therefore, no trips were added to existing volumes for near-term projects, and no intersection geometry changes were included in the near-term analysis.

To account for general volume increases in the near-term scenarios, a compounded one percent per year traffic volume increase was added to existing volumes over a ten-year horizon. This volume increase represents increases in traffic due to regional growth as well as small projects in the surrounding areas.

Near-Term Plus Project Conditions adds project trips to Near-Term traffic volumes. The Near-Term and Near-Term Plus Project volumes used for this analysis are presented in **Figure 4.** The LOS results for both Near-Term Conditions and Near-Term Plus Project Conditions are presented in **Table 5**.





(##) = AM Volumes (PM Volumes)

Figure 4

Near-Term and Near-Term Plus Project Peak Hour Volumes and Lane Configurations

TABLE 5: NEAR-TERM AND NEAR-TERM PLUS PROJECT CONDITIONS

INTERSECTION LEVEL OF SERVICE

	Intersection Name	Intersection Control[1]	LOS Standard[2]	Peak Hour[3]	Near-Term		Near-Term Plus Project			
					Delay[4]	LOS[5]	Delay[4]	LOS[5]	Change in Critical V/C[6]	Change in Average Critical Delay[7]
#1	Gilman Street / Hamilton Avenue	Signal	D	AM	3.5	A	3.5	A	0.007	0.0
				PM	4.3	A	4.3	A	0.009	0.0
#2	Project Driveway / Hamilton Avenue	SSSC	D	AM	10.3	B	10.6	B	N/A	N/A
				PM	13.2	B	15.1	C		
#3	Waverley Street / Hamilton Avenue	Signal	D	AM	9.7	A	9.7	A	0.004	0.1
				PM	8.5	A	8.5	A	0.016	0.1

Notes:
1. Signal = Signalized Intersection; SSSC = Side-Street Stop Controlled Intersection.
2. LOS Standard of intersection's jurisdiction.
3. AM = morning peak hour (between 7:30 and 8:30 AM), PM = evening peak hour (between 4:30 and 5:30 PM).
4. Whole intersection weighted average control delay expressed in seconds per vehicle for signalized intersections. Total control delay for the worst movement is presented for side-street stop-controlled intersections.
5. LOS = Level of Service calculations conducted using the TRAFFIX level of service analysis software package, which applies the methodology described in the *2000 HCM*.
6. Change in critical volume-to-capacity ratio (V/C) between No Project and Plus Project Conditions.
7. Change in critical movement delay between No Project and Plus Project Conditions.

Source: Fehr & Peers, September 2017.

Under Near-Term Plus Project Conditions, **all intersections operate at acceptable levels of service** and no mitigation measures are required.

SITE ACCESS REVIEW

The site plan included as **Attachment B** shows the location of the project driveways and the circulation system for vehicle and pedestrian traffic. The project has two vehicle driveways; one located off Hamilton Avenue and another located on the north-west side of the project connecting to Bryant Street and Waverley Street. Pedestrian access points are included at several locations along the perimeter of the parking facility via the open space between columns. The parking facility is accessible for pedestrians from Hamilton Avenue sidewalks, as well as sidewalks that run along the parking facility connecting to Waverley Street and the Waverley Street / Bryant Street driveways. The project also includes a pedestrian access point for the retail land use off Waverley Street, as well as a pedestrian access point to the bike station located near to the vehicle driveway off Hamilton Avenue. In addition, there are two pedestrian access points to the trash enclosure near the north-west end of the parking facility.

The design of the project adequately accommodates vehicle, bicyclist and pedestrian access to/from the site. Fehr & Peers recommends the following adjustments be made to the current project site plan in order to better accommodate vehicle, bicycle and pedestrian circulation. **Attachment A** includes a mark-up of these recommendations.

- The provisional gates for inbound vehicles at the Hamilton Avenue entrance should process vehicles efficiently such that vehicles do not queue onto Hamilton Avenue and into the Hamilton Avenue / Gilman Street intersection, as they wait to enter the parking facility.
- A stop sign should be considered at the end of the driveways to Bryant Street and Waverley Street, for vehicles exiting the project site onto Bryant Street and Waverley Street.
- If either driveway off Bryant Street / Waverley Street is planned to operate as a one-way street, one-way signs should be placed to inform drivers of the street's directionality.
- Vehicles entering/exiting the parking facility from the Waverley Street driveway at the north-west access point will have to make tight turns. The applicant should ensure there is sufficient space for vehicles turning as they enter/exit the parking facility.
- The applicant should consider extending the sidewalk along the north-west driveways to Bryant Street and Waverley Street. This will provide a direct connection for pedestrians and bicyclists coming from/going to Bryant Street and the north on Waverley Street.

The project driveway off Hamilton Avenue will be located approximately 30 feet from the Hamilton Avenue / Gilman Street intersection. This may cause a problem for vehicles exiting and entering the Hamilton Avenue project driveway. Under both Existing and Near-Term morning peak hour scenarios, the 95th percentile queue (using TRAFFIX software) for the west bound vehicles at the Hamilton Avenue / Gilman Street intersection is 2 vehicles (approximately 50 feet in length). For the Existing PM Peak Hour Scenario, the 95th percentile queue is 3 vehicles (75 feet), and 4 vehicles (100 feet) for Background PM Peak Hour Scenario. Field observations at the Hamilton Avenue / Gilman Street intersection confirm that little to no queues for the westbound approach exist during both morning and evening peak hours. When there were vehicles (1-3 vehicles sighted), the queues quickly dissipated with the green phase for that approach.

Even with the addition of project traffic, the LOS for the westbound approach at Hamilton Avenue / Gilman Street is LOS A for all studied scenarios (greatest delay is 2.5 seconds per vehicle under Background Plus Project PM Peak Hour Conditions). Therefore, if vehicles cannot immediately exit the Hamilton Avenue parking facility driveway due to queues from the Hamilton Avenue / Gilman Street intersection, the queue will dissipate during the westbound signal phase, creating space for vehicles to exit the parking facility. In addition, the project is estimated to add only one vehicle to this westbound approach during the morning peak hour, and 14 vehicles during the evening peak hour. Field observations confirm that there are no queuing problems for vehicles exiting the project

site for neither peak hour, thus the addition of project trips is not anticipated to create new operational problems. To reduce the westbound queue, the City could add a westbound through-left lane to the intersection. This would reduce the queues during the Background PM Peak Hour Scenario from 4 vehicles (100 feet) to 2 vehicles (50 feet). Alternatively, the City could add a slip lane for vehicles turning right out of the Hamilton Avenue driveway.

When the project is built, vehicles may queue as they wait to turn into the project site from Hamilton Avenue (making an eastbound left turn from Hamilton Avenue into the parking facility). For this reason, the provisional gates should process vehicles efficiently such that vehicles do not have to wait to turn into the parking facility. Alternatively, the provisional gate could be removed for the inbound direction at the Hamilton avenue access driveway. However, the project is estimated to add only 12 vehicles to this eastbound left turn movement during the morning peak hour, and 14 vehicles during the evening peak hour. Field observations confirmed that there are no queues for vehicles turning left from Hamilton Avenue into the project site for neither peak hour, and the addition of project trips is not anticipated to create new problems.

The existing mail drop lane on Hamilton Avenue is not expected to interfere with project access operations. This mail drop lane is located directly across from the proposed Hamilton Avenue Project Driveway, just northeast of the Hamilton Avenue / Gilman Street intersection. However, left turn movements from the mail drop lane into the parking facility should be restricted in order to prevent vehicles from turning left across bi-directional travel lanes. With the removal of on-street parking on the southeast side of Hamilton Avenue between Gilman Street and Waverley Street, the mail drop lane could be converted to an eastbound through lane, providing space for an eastbound left turn lane for vehicles entering the parking facility. However, no queueing problems are anticipated for this movement.

ATTACHMENTS

Attachment A: TRAFIX Output Sheets

Attachment B: Site Plan Mark-up

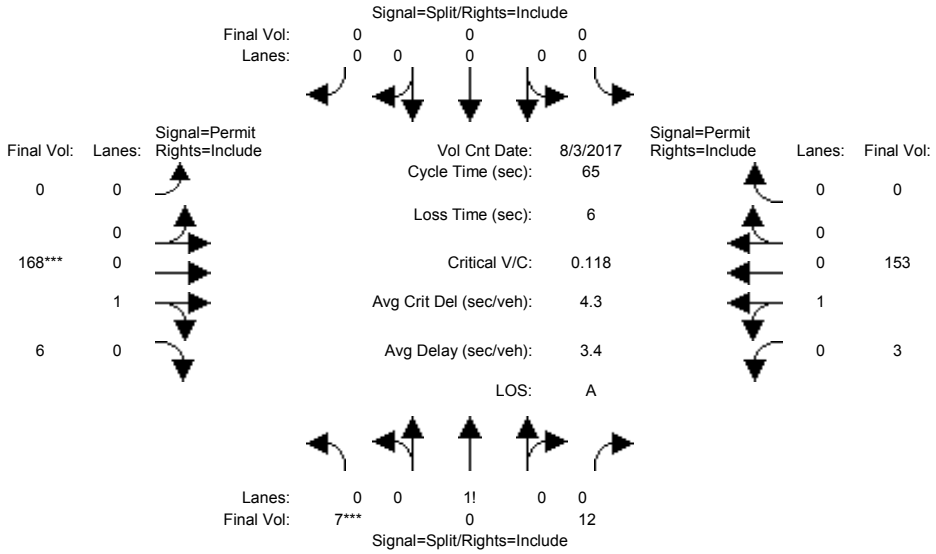
Attachment A:

TRAFFIX Output Sheets

Palo Alto Parking Structure
SJ17-1740

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing AM

Intersection #1: Gilman Street / Hamilton Avenue



Street Name:	Gilman Street						Hamilton Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Min. Green:	10	10	10	0	0	0	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	0.0	0.0	0.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 3 Aug 2017 << 07:30:00 AM												
Base Vol:	7	0	12	0	0	0	0	168	6	3	153	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	7	0	12	0	0	0	0	168	6	3	153	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	7	0	12	0	0	0	0	168	6	3	153	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	7	0	12	0	0	0	0	168	6	3	153	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	7	0	12	0	0	0	0	168	6	3	153	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	7	0	12	0	0	0	0	168	6	3	153	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.92	0.92	0.92	1.00	0.92	0.92	0.95	0.95	0.95	0.95	0.92
Lanes:	0.37	0.00	0.63	0.00	0.00	0.00	0.00	0.97	0.03	0.02	0.98	0.00
Final Sat.:	645	0	1105	0	0	0	0	1738	62	35	1765	0
Capacity Analysis Module:												
Vol/Sat:	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.10	0.10	0.09	0.09	0.00
Crit Moves:	****							****				
Green Time:	10.0	0.0	10.0	0.0	0.0	0.0	0.0	49.0	49.0	49.0	49.0	0.0
Volume/Cap:	0.07	0.00	0.07	0.00	0.00	0.00	0.00	0.13	0.13	0.11	0.11	0.00
Delay/Veh:	23.6	0.0	23.6	0.0	0.0	0.0	0.0	2.2	2.2	2.2	2.2	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	23.6	0.0	23.6	0.0	0.0	0.0	0.0	2.2	2.2	2.2	2.2	0.0
LOS by Move:	C	A	C	A	A	A	A	A	A	A	A	A
HCM2kAvgQ:	0	0	0	0	0	0	0	1	1	1	1	0

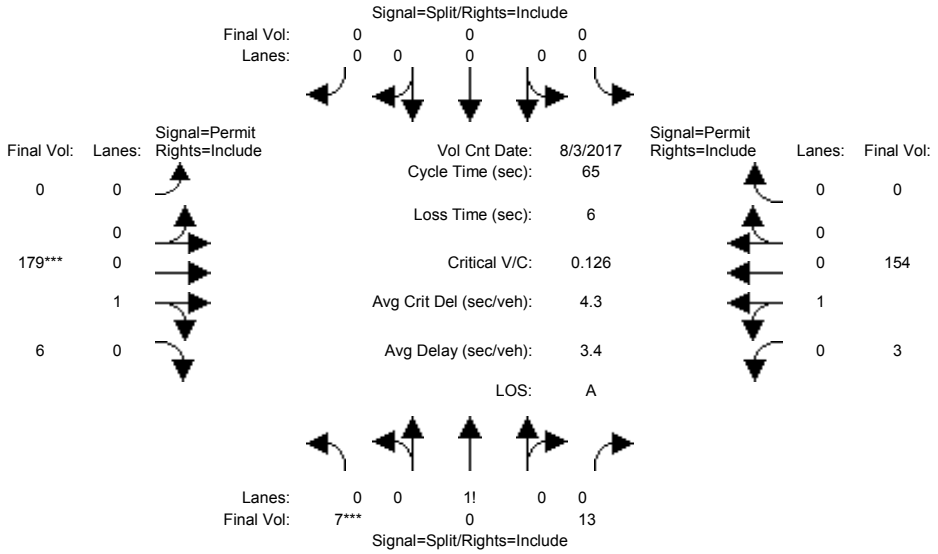
Note: Queue reported is the number of cars per lane.

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Palo Alto Parking Structure
SJ17-1740

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing AM PP

Intersection #1: Gilman Street / Hamilton Avenue



Street Name:	Gilman Street						Hamilton Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Min. Green:	10	10	10	0	0	0	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	0.0	0.0	0.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 3 Aug 2017 << 07:30:00 AM												
Base Vol:	7	0	12	0	0	0	0	168	6	3	153	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	7	0	12	0	0	0	0	168	6	3	153	0
Added Vol:	0	0	1	0	0	0	0	11	0	0	1	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	7	0	13	0	0	0	0	179	6	3	154	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	7	0	13	0	0	0	0	179	6	3	154	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	7	0	13	0	0	0	0	179	6	3	154	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	7	0	13	0	0	0	0	179	6	3	154	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.92	0.92	0.92	1.00	0.92	0.92	0.95	0.95	0.95	0.95	0.92
Lanes:	0.35	0.00	0.65	0.00	0.00	0.00	0.00	0.97	0.03	0.02	0.98	0.00
Final Sat.:	613	0	1138	0	0	0	0	1742	58	34	1766	0
Capacity Analysis Module:												
Vol/Sat:	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.10	0.10	0.09	0.09	0.00
Crit Moves:	****							****				
Green Time:	10.0	0.0	10.0	0.0	0.0	0.0	0.0	49.0	49.0	49.0	49.0	0.0
Volume/Cap:	0.07	0.00	0.07	0.00	0.00	0.00	0.00	0.14	0.14	0.12	0.12	0.00
Delay/Veh:	23.7	0.0	23.7	0.0	0.0	0.0	0.0	2.2	2.2	2.2	2.2	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	23.7	0.0	23.7	0.0	0.0	0.0	0.0	2.2	2.2	2.2	2.2	0.0
LOS by Move:	C	A	C	A	A	A	A	A	A	A	A	A
HCM2kAvgQ:	0	0	0	0	0	0	0	1	1	1	1	0

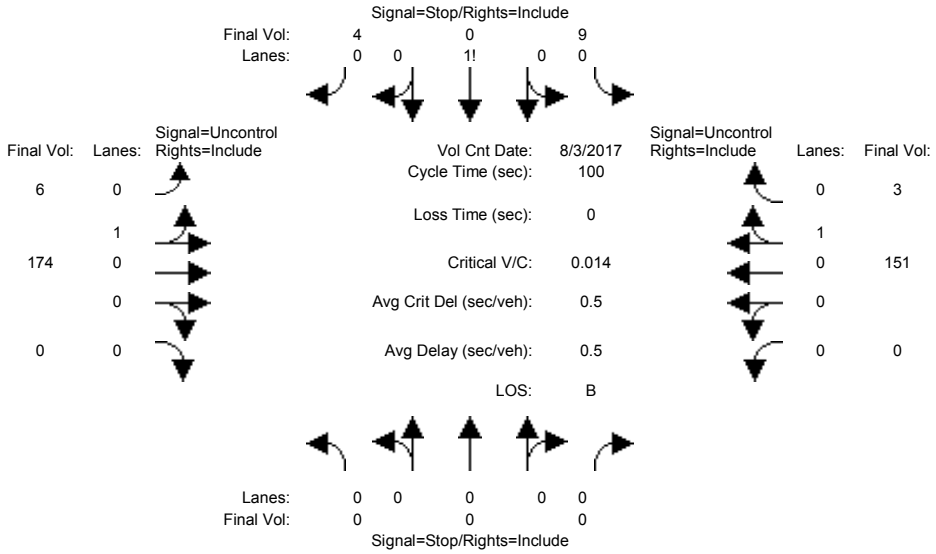
Note: Queue reported is the number of cars per lane.

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Palo Alto Parking Structure
SJ17-1740

Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Existing AM

Intersection #2: Project Driveway / Hamilton Avenue



Street Name:	Project Driveway						Hamilton Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Volume Module: >> Count Date: 3 Aug 2017 << 07:30:00 AM												
Base Vol:	0	0	0	9	0	4	6	174	0	0	151	3
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	9	0	4	6	174	0	0	151	3
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	9	0	4	6	174	0	0	151	3
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	9	0	4	6	174	0	0	151	3
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	0	9	0	4	6	174	0	0	151	3
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	6.4	6.5	6.2	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	339	339	153	154	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	661	586	899	1439	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	659	584	899	1439	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	0.01	0.00	0.00	0.00	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	A	*	*	*	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	718	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	0.1	xxxxx	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	10.1	xxxxx	7.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	B	*	A	*	*	*	*	*
ApproachDel:	xxxxxx			10.1			xxxxxx			xxxxxx		
ApproachLOS:	*			B			*			*		

Note: Queue reported is the number of cars per lane.

Peak Hour Delay Signal Warrant Report

****

Intersection #2 Project Driveway / Hamilton Avenue

****

Future Volume Alternative: Peak Hour Warrant NOT Met

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```
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Lanes:        0  0  0  0  0    0  0  1! 0  0    0  1  0  0  0    0  0  0  1  0
Initial Vol:    0    0     0     9    0     4     6  174     0     0  151     3
ApproachDel:    xxxxxx             10.1           xxxxxx           xxxxxx
------------|---------------||---------------||---------------||---------------|
Approach[southbound][lanes=1][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=0.0]
   FAIL - Vehicle-hours less than 4 for one lane approach.
Signal Warrant Rule #2: [approach volume=13]
   FAIL - Approach volume less than 100 for one lane approach.
Signal Warrant Rule #3: [approach count=3][total volume=347]
   FAIL - Total volume less than 650 for intersection
          with less than four approaches.
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
              Peak Hour Volume Signal Warrant Report [Urban]
********************************************************************************
Intersection #2 Project Driveway / Hamilton Avenue
********************************************************************************
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Lanes:        0  0  0  0  0    0  0  1! 0  0    0  1  0  0  0    0  0  0  1  0
Initial Vol:    0    0     0     9    0     4     6  174     0     0  151     3
------------|---------------||---------------||---------------||---------------|
Major Street Volume:             334
Minor Approach Volume:           13
Minor Approach Volume Threshold: 512
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

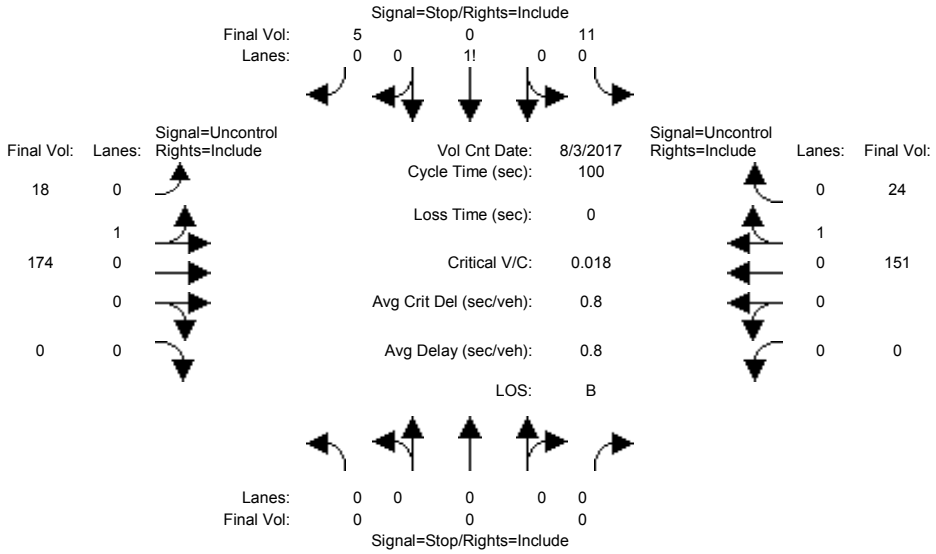
The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
```

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Palo Alto Parking Structure
SJ17-1740

Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Existing AM PP

Intersection #2: Project Driveway / Hamilton Avenue



Street Name:	Project Driveway						Hamilton Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module: >> Count Date: 3 Aug 2017 << 07:30:00 AM												
Base Vol:	0	0	0	9	0	4	6	174	0	0	151	3
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	9	0	4	6	174	0	0	151	3
Added Vol:	0	0	0	2	0	1	12	0	0	0	0	21
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	11	0	5	18	174	0	0	151	24
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	11	0	5	18	174	0	0	151	24
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	0	11	0	5	18	174	0	0	151	24
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	6.4	6.5	6.2	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	373	373	163	175	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	632	561	887	1414	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	626	553	887	1414	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	0.02	0.00	0.01	0.01	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.6	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	A	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	689	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	0.1	xxxxx	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	10.3	xxxxx	7.6	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	B	*	A	*	*	*	*	*
ApproachDel:	xxxxxx			10.3			xxxxxx			xxxxxx		
ApproachLOS:	*			B			*			*		

Note: Queue reported is the number of cars per lane.

Peak Hour Delay Signal Warrant Report

****

Intersection #2 Project Driveway / Hamilton Avenue

****

Future Volume Alternative: Peak Hour Warrant NOT Met

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Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Lanes:	0 0 0	0 0	0	0 0	1! 0	0	0 1	0 0	0	0 0	0 1	0
Initial Vol:	0	0	0	11	0	5	18	174	0	0	151	24
ApproachDel:	xxxxxx			10.3			xxxxxx			xxxxxx		

Approach[southbound][lanes=1][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=0.0]
FAIL - Vehicle-hours less than 4 for one lane approach.
Signal Warrant Rule #2: [approach volume=16]
FAIL - Approach volume less than 100 for one lane approach.
Signal Warrant Rule #3: [approach count=3][total volume=383]
FAIL - Total volume less than 650 for intersection with less than four approaches.

SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

Peak Hour Volume Signal Warrant Report [Urban]

****

Intersection #2 Project Driveway / Hamilton Avenue

****

Future Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Lanes:	0 0 0	0 0	0	0 0	1! 0	0	0 1	0 0	0	0 0	0 1	0
Initial Vol:	0	0	0	11	0	5	18	174	0	0	151	24

Major Street Volume: 367
Minor Approach Volume: 16
Minor Approach Volume Threshold: 487

SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

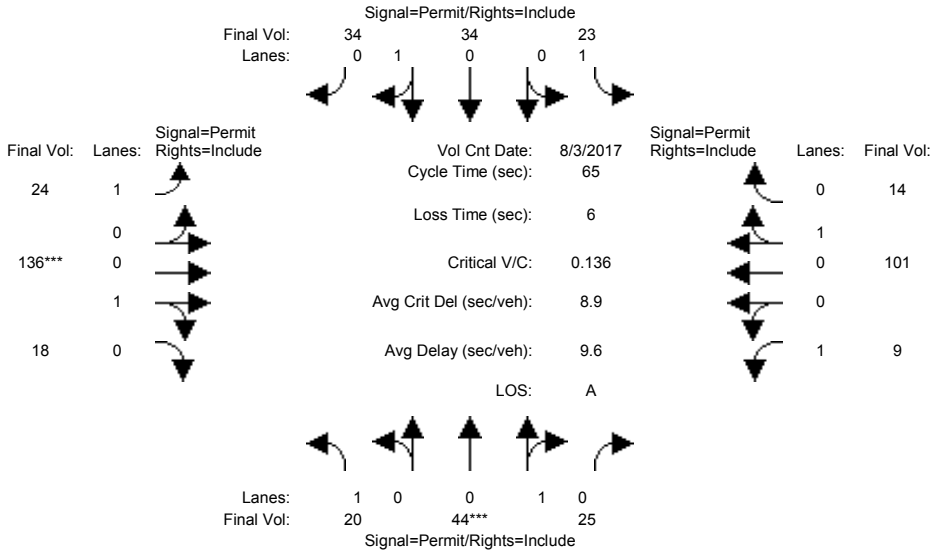
The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

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Palo Alto Parking Structure
SJ17-1740

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing AM

Intersection #3: Waverley Street / Hamilton Avenue



Street Name:	Waverley Street						Hamilton Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Min. Green:	10	10	10	10	10	10	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 3 Aug 2017 << 07:30:00 AM												
Base Vol:	20	44	25	23	34	34	24	136	18	9	101	14
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	20	44	25	23	34	34	24	136	18	9	101	14
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	20	44	25	23	34	34	24	136	18	9	101	14
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	20	44	25	23	34	34	24	136	18	9	101	14
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	20	44	25	23	34	34	24	136	18	9	101	14
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	20	44	25	23	34	34	24	136	18	9	101	14
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.95	0.95	0.92	0.95	0.95	0.92	0.95	0.95	0.92	0.95	0.95
Lanes:	1.00	0.64	0.36	1.00	0.50	0.50	1.00	0.88	0.12	1.00	0.88	0.12
Final Sat.:	1750	1148	652	1750	900	900	1750	1590	210	1750	1581	219
Capacity Analysis Module:												
Vol/Sat:	0.01	0.04	0.04	0.01	0.04	0.04	0.01	0.09	0.09	0.01	0.06	0.06
Crit Moves:		****						****				
Green Time:	18.3	18.3	18.3	18.3	18.3	18.3	40.7	40.7	40.7	40.7	40.7	40.7
Volume/Cap:	0.04	0.14	0.14	0.05	0.13	0.13	0.02	0.14	0.14	0.01	0.10	0.10
Delay/Veh:	17.0	17.6	17.6	17.1	17.6	17.6	4.6	5.0	5.0	4.6	4.9	4.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	17.0	17.6	17.6	17.1	17.6	17.6	4.6	5.0	5.0	4.6	4.9	4.9
LOS by Move:	B	B	B	B	B	B	A	A	A	A	A	A
HCM2kAvgQ:	0	1	1	0	1	1	0	1	1	0	1	1

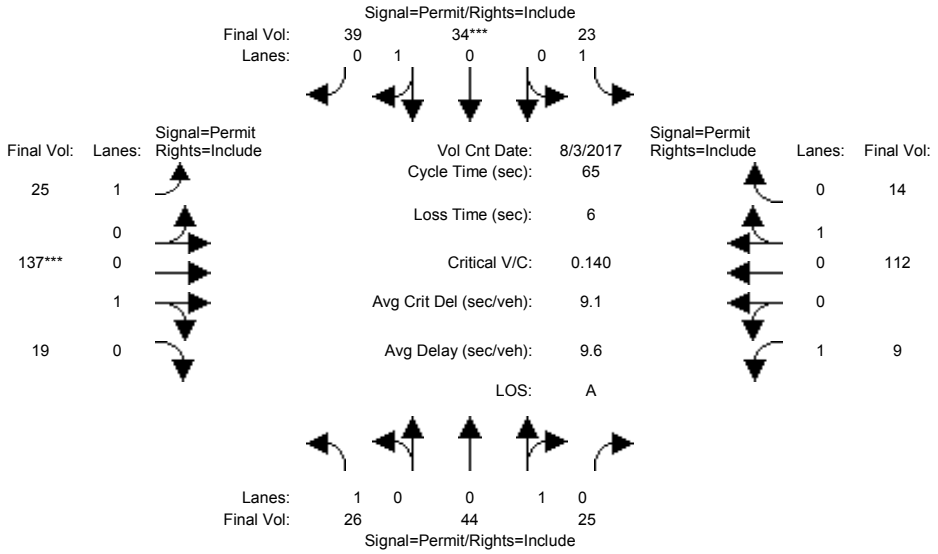
Note: Queue reported is the number of cars per lane.

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Palo Alto Parking Structure
SJ17-1740

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing AM PP

Intersection #3: Waverley Street / Hamilton Avenue



Street Name:	Waverley Street						Hamilton Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Min. Green:	10	10	10	10	10	10	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 3 Aug 2017 << 07:30:00 AM												
Base Vol:	20	44	25	23	34	34	24	136	18	9	101	14
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	20	44	25	23	34	34	24	136	18	9	101	14
Added Vol:	6	0	0	0	0	5	1	1	1	0	11	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	26	44	25	23	34	39	25	137	19	9	112	14
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	26	44	25	23	34	39	25	137	19	9	112	14
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	26	44	25	23	34	39	25	137	19	9	112	14
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	26	44	25	23	34	39	25	137	19	9	112	14
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.95	0.95	0.92	0.95	0.95	0.92	0.95	0.95	0.92	0.95	0.95
Lanes:	1.00	0.64	0.36	1.00	0.47	0.53	1.00	0.88	0.12	1.00	0.89	0.11
Final Sat.:	1750	1148	652	1750	838	962	1750	1581	219	1750	1600	200
Capacity Analysis Module:												
Vol/Sat:	0.01	0.04	0.04	0.01	0.04	0.04	0.01	0.09	0.09	0.01	0.07	0.07
Crit Moves:					****			****				
Green Time:	18.8	18.8	18.8	18.8	18.8	18.8	40.2	40.2	40.2	40.2	40.2	40.2
Volume/Cap:	0.05	0.13	0.13	0.05	0.14	0.14	0.02	0.14	0.14	0.01	0.11	0.11
Delay/Veh:	16.7	17.2	17.2	16.7	17.2	17.2	4.8	5.2	5.2	4.8	5.1	5.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	16.7	17.2	17.2	16.7	17.2	17.2	4.8	5.2	5.2	4.8	5.1	5.1
LOS by Move:	B	B	B	B	B	B	A	A	A	A	A	A
HCM2kAvgQ:	0	1	1	0	1	1	0	1	1	0	1	1

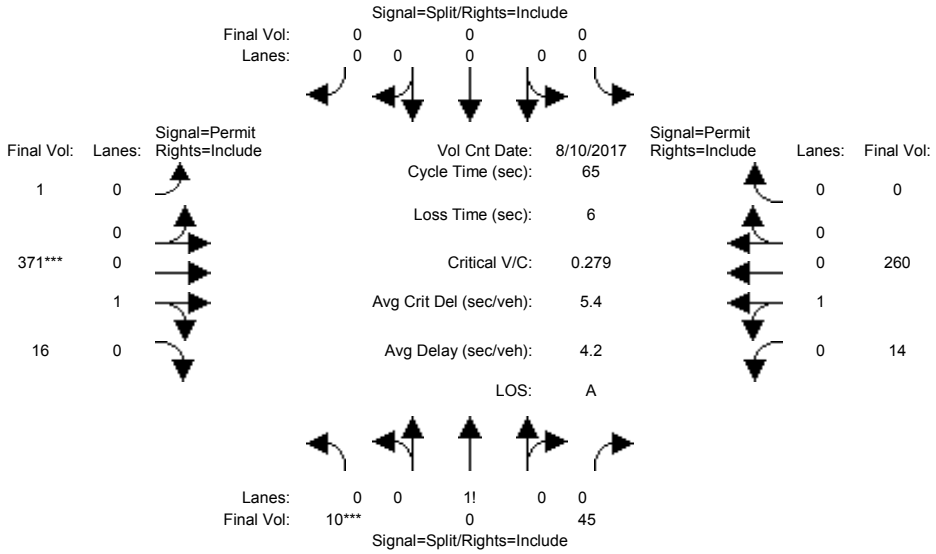
Note: Queue reported is the number of cars per lane.

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Palo Alto Parking Structure
SJ17-1740

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PM

Intersection #1: Gilman Street / Hamilton Avenue



Street Name:	Gilman Street						Hamilton Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Min. Green:	10	10	10	0	0	0	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	0.0	0.0	0.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 10 Aug 2017 << 04:30:00 PM												
Base Vol:	10	0	45	0	0	0	1	371	16	14	260	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	10	0	45	0	0	0	1	371	16	14	260	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	10	0	45	0	0	0	1	371	16	14	260	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	10	0	45	0	0	0	1	371	16	14	260	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	10	0	45	0	0	0	1	371	16	14	260	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	10	0	45	0	0	0	1	371	16	14	260	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.92	0.92	0.92	1.00	0.92	0.92	0.92	0.92	0.95	0.95	0.92
Lanes:	0.18	0.00	0.82	0.00	0.00	0.00	0.01	0.95	0.04	0.05	0.95	0.00
Final Sat.:	318	0	1432	0	0	0	5	1673	72	92	1708	0
Capacity Analysis Module:												
Vol/Sat:	0.03	0.00	0.03	0.00	0.00	0.00	0.22	0.22	0.22	0.15	0.15	0.00
Crit Moves:	****							****				
Green Time:	10.0	0.0	10.0	0.0	0.0	0.0	49.0	49.0	49.0	49.0	49.0	0.0
Volume/Cap:	0.20	0.00	0.20	0.00	0.00	0.00	0.29	0.29	0.29	0.20	0.20	0.00
Uniform Del:	24.0	0.0	24.0	0.0	0.0	0.0	2.5	2.5	2.5	2.3	2.3	0.0
IncremntDel:	0.4	0.0	0.4	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.0
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	1.00	0.00	1.00	0.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Delay/Veh:	24.4	0.0	24.4	0.0	0.0	0.0	2.7	2.7	2.7	2.4	2.4	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	24.4	0.0	24.4	0.0	0.0	0.0	2.7	2.7	2.7	2.4	2.4	0.0
LOS by Move:	C	A	C	A	A	A	A	A	A	A	A	A
HCM2kAvgQ:	1	0	1	0	0	0	3	3	3	2	2	0

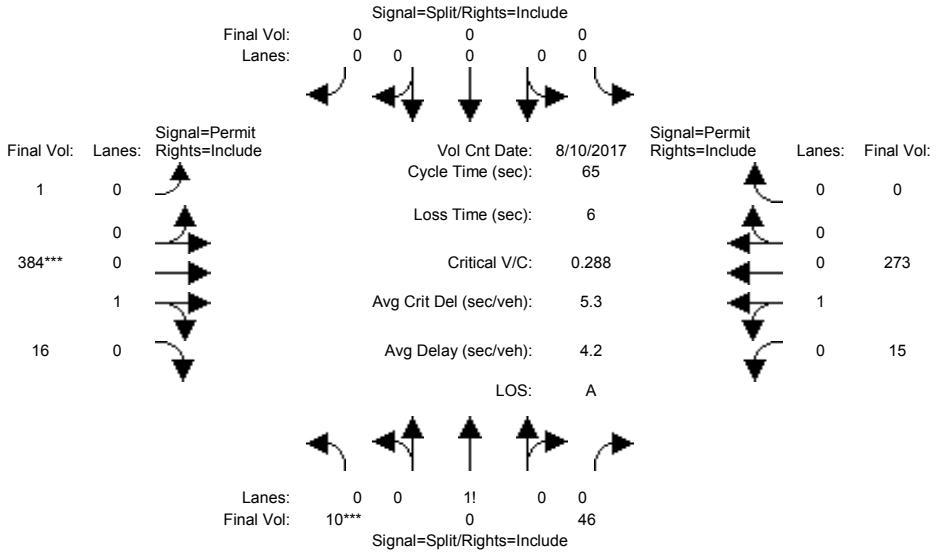
Note: Queue reported is the number of cars per lane.

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Palo Alto Parking Structure
SJ17-1740

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PM PP

Intersection #1: Gilman Street / Hamilton Avenue



Street Name:	Gilman Street						Hamilton Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Min. Green:	10	10	10	0	0	0	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	0.0	0.0	0.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 10 Aug 2017 << 04:30:00 PM												
Base Vol:	10	0	45	0	0	0	1	371	16	14	260	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	10	0	45	0	0	0	1	371	16	14	260	0
Added Vol:	0	0	1	0	0	0	0	13	0	1	13	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	10	0	46	0	0	0	1	384	16	15	273	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	10	0	46	0	0	0	1	384	16	15	273	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	10	0	46	0	0	0	1	384	16	15	273	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	10	0	46	0	0	0	1	384	16	15	273	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.92	0.92	0.92	1.00	0.92	0.92	0.92	0.92	0.95	0.95	0.92
Lanes:	0.18	0.00	0.82	0.00	0.00	0.00	0.01	0.95	0.04	0.05	0.95	0.00
Final Sat.:	313	0	1438	0	0	0	4	1676	70	94	1706	0
Capacity Analysis Module:												
Vol/Sat:	0.03	0.00	0.03	0.00	0.00	0.00	0.23	0.23	0.23	0.16	0.16	0.00
Crit Moves:	****							****				
Green Time:	10.0	0.0	10.0	0.0	0.0	0.0	49.0	49.0	49.0	49.0	49.0	0.0
Volume/Cap:	0.21	0.00	0.21	0.00	0.00	0.00	0.30	0.30	0.30	0.21	0.21	0.00
Delay/Veh:	24.4	0.0	24.4	0.0	0.0	0.0	2.7	2.7	2.7	2.4	2.4	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	24.4	0.0	24.4	0.0	0.0	0.0	2.7	2.7	2.7	2.4	2.4	0.0
LOS by Move:	C	A	C	A	A	A	A	A	A	A	A	A
HCM2kAvgQ:	1	0	1	0	0	0	3	3	3	2	2	0

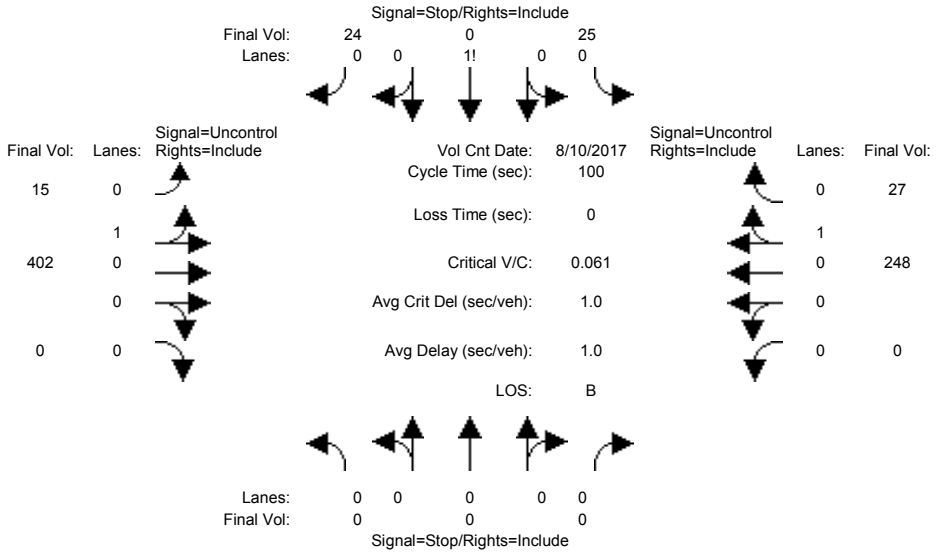
Note: Queue reported is the number of cars per lane.

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Palo Alto Parking Structure
SJ17-1740

Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Existing PM

Intersection #2: Project Driveway / Hamilton Avenue




```
Street Name:         Project Driveway                  Hamilton Avenue
Approach:       North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 10 Aug 2017 << 04:30:00 PM
Base Vol:       0    0     0    25    0    24    15  402     0     0  248    27
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:    0    0     0    25    0    24    15  402     0     0  248    27
Added Vol:      0    0     0     0    0     0     0    0     0     0    0     0
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:    0    0     0    25    0    24    15  402     0     0  248    27
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:     0    0     0    25    0    24    15  402     0     0  248    27
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
FinalVolume:    0    0     0    25    0    24    15  402     0     0  248    27
------------|---------------||---------------||---------------||---------------|
Critical Gap Module:
Critical Gp:xxxxx xxxx xxxxx   6.4  6.5   6.2   4.1 xxxx xxxxx xxxxx xxxx xxxxx
FollowUpTim:xxxxx xxxx xxxxx   3.5  4.0   3.3   2.2 xxxx xxxxx xxxxx xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol: xxxx xxxx xxxxx   694  694   262   275 xxxx xxxxx  xxxx xxxx xxxxx
Potent Cap.: xxxx xxxx xxxxx   412  369   782  1300 xxxx xxxxx  xxxx xxxx xxxxx
Move Cap.:   xxxx xxxx xxxxx   408  365   782  1300 xxxx xxxxx  xxxx xxxx xxxxx
Volume/Cap:  xxxx xxxx  xxxx  0.06 0.00  0.03  0.01 xxxx  xxxx  xxxx xxxx  xxxx
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
2Way95thQ:   xxxx xxxx xxxxx  xxxx xxxx xxxxx   0.0 xxxx xxxxx  xxxx xxxx xxxxx
Control Del:xxxxx xxxx xxxxx xxxxx xxxx xxxxx   7.8 xxxx xxxxx xxxxx xxxx xxxxx
LOS by Move:    *    *     *     *    *     *     A    *     *     *    *     *
Movement:     LT - LTR - RT    LT - LTR - RT    LT - LTR - RT    LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx  xxxx  533 xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
SharedQueue:xxxxx xxxx xxxxx xxxxx  0.3 xxxxx   0.0 xxxx xxxxx xxxxx xxxx xxxxx
Shrd ConDel:xxxxx xxxx xxxxx xxxxx 12.4 xxxxx   7.8 xxxx xxxxx xxxxx xxxx xxxxx
Shared LOS:     *    *     *     *    B     *     A    *     *     *    *     *
ApproachDel:    xxxxxx            12.4           xxxxxx           xxxxxx
ApproachLOS:         *              B                *                *
Note: Queue reported is the number of cars per lane.
                  Peak Hour Delay Signal Warrant Report
********************************************************************************
Intersection #2 Project Driveway / Hamilton Avenue
********************************************************************************
Future Volume Alternative: Peak Hour Warrant NOT Met
```

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Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Lanes:	0 0 0 0 0			0 0 1! 0 0			0 1 0 0 0			0 0 0 1 0		
Initial Vol:	0	0	0	25	0	24	15	402	0	0	248	27
ApproachDel:	xxxxxx			12.4			xxxxxx			xxxxxx		

Approach[southbound][lanes=1][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=0.2]
FAIL - Vehicle-hours less than 4 for one lane approach.
Signal Warrant Rule #2: [approach volume=49]
FAIL - Approach volume less than 100 for one lane approach.
Signal Warrant Rule #3: [approach count=3][total volume=741]
SUCCEED - Total volume greater than or equal to 650 for intersection with less than four approaches.

SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

Peak Hour Volume Signal Warrant Report [Urban]

****

Intersection #2 Project Driveway / Hamilton Avenue

****

Future Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Lanes:	0 0 0 0 0			0 0 1! 0 0			0 1 0 0 0			0 0 0 1 0		
Initial Vol:	0	0	0	25	0	24	15	402	0	0	248	27

Major Street Volume: 692
Minor Approach Volume: 49
Minor Approach Volume Threshold: 318

SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

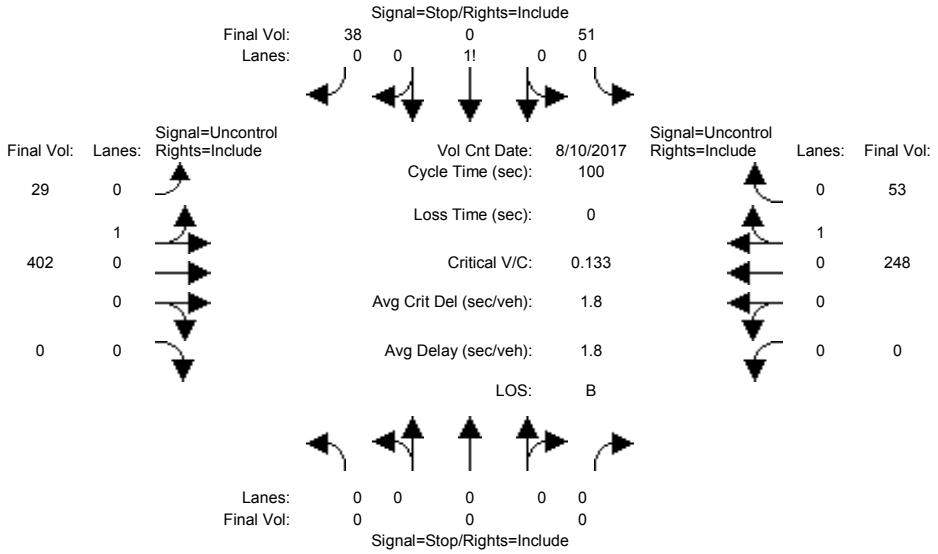
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Palo Alto Parking Structure
SJ17-1740

Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Existing PM PP

Intersection #2: Project Driveway / Hamilton Avenue



Street Name:	Project Driveway						Hamilton Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module: >> Count Date: 10 Aug 2017 << 04:30:00 PM												
Base Vol:	0	0	0	25	0	24	15	402	0	0	248	27
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	25	0	24	15	402	0	0	248	27
Added Vol:	0	0	0	26	0	14	14	0	0	0	0	26
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	51	0	38	29	402	0	0	248	53
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	51	0	38	29	402	0	0	248	53
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	0	51	0	38	29	402	0	0	248	53
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	6.4	6.5	6.2	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	735	735	275	301	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	390	350	769	1272	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	383	341	769	1272	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	0.13	0.00	0.05	0.02	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.1	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.9	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	A	*	*	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	488	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	0.7	xxxxx	0.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	14.0	xxxxx	7.9	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	B	*	A	*	*	*	*	*
ApproachDel:	xxxxxx			14.0			xxxxxx			xxxxxx		
ApproachLOS:	*			B			*			*		

Note: Queue reported is the number of cars per lane.

Peak Hour Delay Signal Warrant Report

****

Intersection #2 Project Driveway / Hamilton Avenue

****

Future Volume Alternative: Peak Hour Warrant NOT Met

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Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Lanes:	0 0	0 0	0	0 0	1! 0	0	0 1	0 0	0	0 0	0 1	0
Initial Vol:	0	0	0	51	0	38	29	402	0	0	248	53
ApproachDel:	xxxxxx			14.0			xxxxxx			xxxxxx		

Approach[southbound][lanes=1][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=0.3]
FAIL - Vehicle-hours less than 4 for one lane approach.
Signal Warrant Rule #2: [approach volume=89]
FAIL - Approach volume less than 100 for one lane approach.
Signal Warrant Rule #3: [approach count=3][total volume=821]
SUCCEED - Total volume greater than or equal to 650 for intersection with less than four approaches.

SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

Peak Hour Volume Signal Warrant Report [Urban]

****

Intersection #2 Project Driveway / Hamilton Avenue

****

Future Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Lanes:	0 0	0 0	0	0 0	1! 0	0	0 1	0 0	0	0 0	0 1	0
Initial Vol:	0	0	0	51	0	38	29	402	0	0	248	53

Major Street Volume: 732
Minor Approach Volume: 89
Minor Approach Volume Threshold: 303

SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

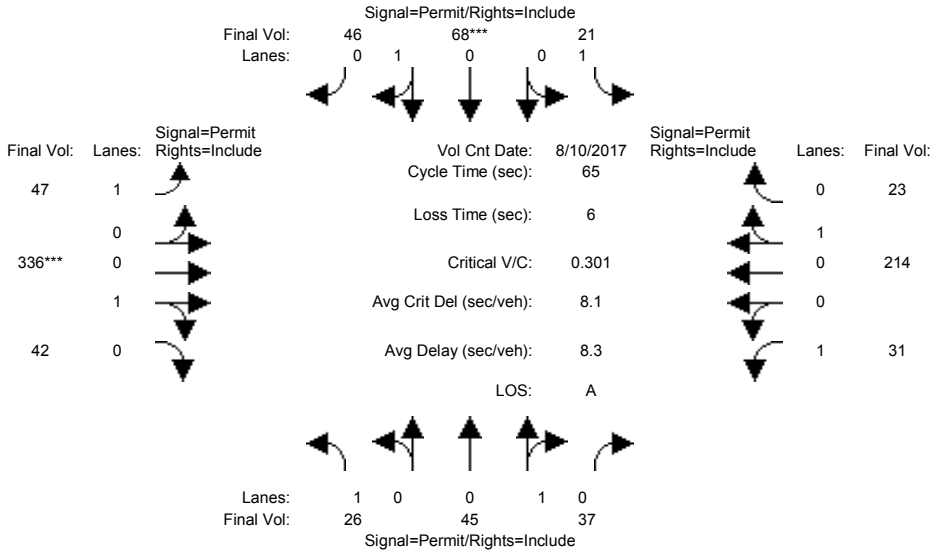
The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

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Palo Alto Parking Structure
SJ17-1740

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PM

Intersection #3: Waverley Street / Hamilton Avenue



Street Name:	Waverley Street						Hamilton Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Min. Green:	10	10	10	10	10	10	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 10 Aug 2017 << 04:30:00 PM												
Base Vol:	26	45	37	21	68	46	47	336	42	31	214	23
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	26	45	37	21	68	46	47	336	42	31	214	23
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	26	45	37	21	68	46	47	336	42	31	214	23
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	26	45	37	21	68	46	47	336	42	31	214	23
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	26	45	37	21	68	46	47	336	42	31	214	23
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	26	45	37	21	68	46	47	336	42	31	214	23
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.95	0.95	0.92	0.95	0.95	0.92	0.95	0.95	0.92	0.95	0.95
Lanes:	1.00	0.55	0.45	1.00	0.60	0.40	1.00	0.89	0.11	1.00	0.90	0.10
Final Sat.:	1750	988	812	1750	1074	726	1750	1600	200	1750	1625	175
Capacity Analysis Module:												
Vol/Sat:	0.01	0.05	0.05	0.01	0.06	0.06	0.03	0.21	0.21	0.02	0.13	0.13
Crit Moves:					****			****				
Green Time:	13.7	13.7	13.7	13.7	13.7	13.7	45.3	45.3	45.3	45.3	45.3	45.3
Volume/Cap:	0.07	0.22	0.22	0.06	0.30	0.30	0.04	0.30	0.30	0.03	0.19	0.19
Uniform Del:	20.6	21.2	21.2	20.5	21.6	21.6	3.1	3.8	3.8	3.0	3.4	3.4
IncremntDel:	0.1	0.3	0.3	0.1	0.5	0.5	0.0	0.1	0.1	0.0	0.1	0.1
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Delay/Veh:	20.7	21.5	21.5	20.6	22.1	22.1	3.1	3.9	3.9	3.0	3.5	3.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	20.7	21.5	21.5	20.6	22.1	22.1	3.1	3.9	3.9	3.0	3.5	3.5
LOS by Move:	C+	C+	C+	C+	C+	C+	A	A	A	A	A	A
HCM2kAvgQ:	0	2	2	0	2	2	0	3	3	0	2	2

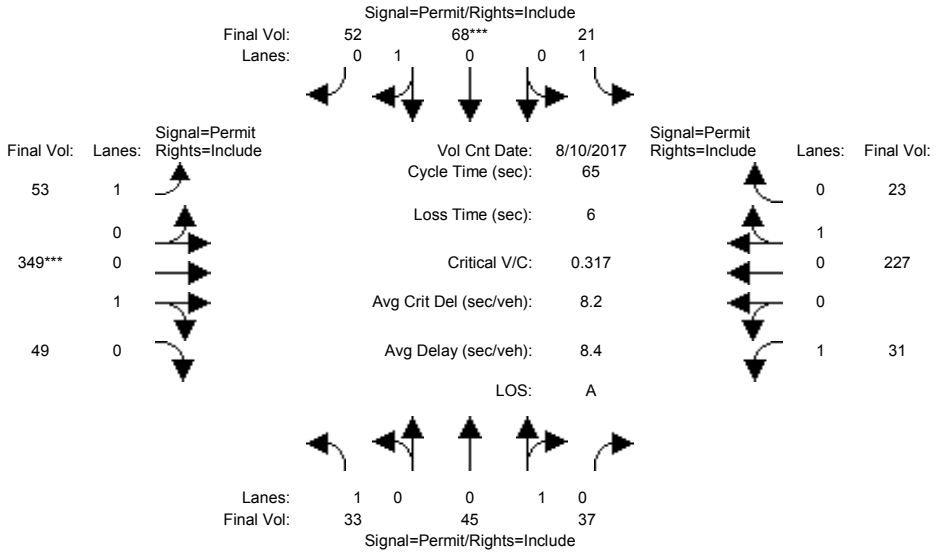
Note: Queue reported is the number of cars per lane.

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Palo Alto Parking Structure
SJ17-1740

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PM PP

Intersection #3: Waverley Street / Hamilton Avenue



Street Name:	Waverley Street						Hamilton Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Min. Green:	10	10	10	10	10	10	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 10 Aug 2017 << 04:30:00 PM												
Base Vol:	26	45	37	21	68	46	47	336	42	31	214	23
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	26	45	37	21	68	46	47	336	42	31	214	23
Added Vol:	7	0	0	0	0	6	6	13	7	0	13	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	33	45	37	21	68	52	53	349	49	31	227	23
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	33	45	37	21	68	52	53	349	49	31	227	23
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	33	45	37	21	68	52	53	349	49	31	227	23
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	33	45	37	21	68	52	53	349	49	31	227	23
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.95	0.95	0.92	0.95	0.95	0.92	0.95	0.95	0.92	0.95	0.95
Lanes:	1.00	0.55	0.45	1.00	0.57	0.43	1.00	0.88	0.12	1.00	0.91	0.09
Final Sat.:	1750	988	812	1750	1020	780	1750	1578	222	1750	1634	166
Capacity Analysis Module:												
Vol/Sat:	0.02	0.05	0.05	0.01	0.07	0.07	0.03	0.22	0.22	0.02	0.14	0.14
Crit Moves:					****			****				
Green Time:	13.7	13.7	13.7	13.7	13.7	13.7	45.3	45.3	45.3	45.3	45.3	45.3
Volume/Cap:	0.09	0.22	0.22	0.06	0.32	0.32	0.04	0.32	0.32	0.03	0.20	0.20
Delay/Veh:	20.8	21.5	21.5	20.6	22.2	22.2	3.1	4.0	4.0	3.0	3.5	3.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	20.8	21.5	21.5	20.6	22.2	22.2	3.1	4.0	4.0	3.0	3.5	3.5
LOS by Move:	C+	C+	C+	C+	C+	C+	A	A	A	A	A	A
HCM2kAvgQ:	1	2	2	0	2	2	0	3	3	0	2	2

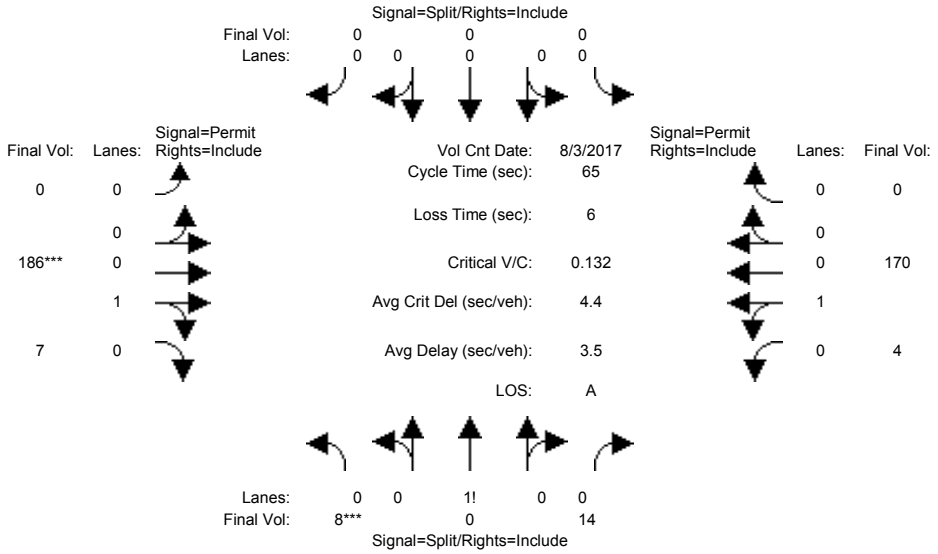
Note: Queue reported is the number of cars per lane.

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Palo Alto Parking Structure
SJ17-1740

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Background AM

Intersection #1: Gilman Street / Hamilton Avenue



Street Name:	Gilman Street						Hamilton Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Min. Green:	10	10	10	0	0	0	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	0.0	0.0	0.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 3 Aug 2017 << 07:30:00 AM												
Base Vol:	8	0	14	0	0	0	0	186	7	4	170	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	8	0	14	0	0	0	0	186	7	4	170	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	8	0	14	0	0	0	0	186	7	4	170	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	8	0	14	0	0	0	0	186	7	4	170	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	8	0	14	0	0	0	0	186	7	4	170	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	8	0	14	0	0	0	0	186	7	4	170	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.92	0.92	0.92	1.00	0.92	0.92	0.95	0.95	0.95	0.95	0.92
Lanes:	0.36	0.00	0.64	0.00	0.00	0.00	0.00	0.96	0.04	0.02	0.98	0.00
Final Sat.:	636	0	1114	0	0	0	0	1735	65	41	1759	0
Capacity Analysis Module:												
Vol/Sat:	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.11	0.11	0.10	0.10	0.00
Crit Moves:	****							****				
Green Time:	10.0	0.0	10.0	0.0	0.0	0.0	0.0	49.0	49.0	49.0	49.0	0.0
Volume/Cap:	0.08	0.00	0.08	0.00	0.00	0.00	0.00	0.14	0.14	0.13	0.13	0.00
Delay/Veh:	23.7	0.0	23.7	0.0	0.0	0.0	0.0	2.3	2.3	2.2	2.2	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	23.7	0.0	23.7	0.0	0.0	0.0	0.0	2.3	2.3	2.2	2.2	0.0
LOS by Move:	C	A	C	A	A	A	A	A	A	A	A	A
HCM2kAvgQ:	0	0	0	0	0	0	0	1	1	1	1	0

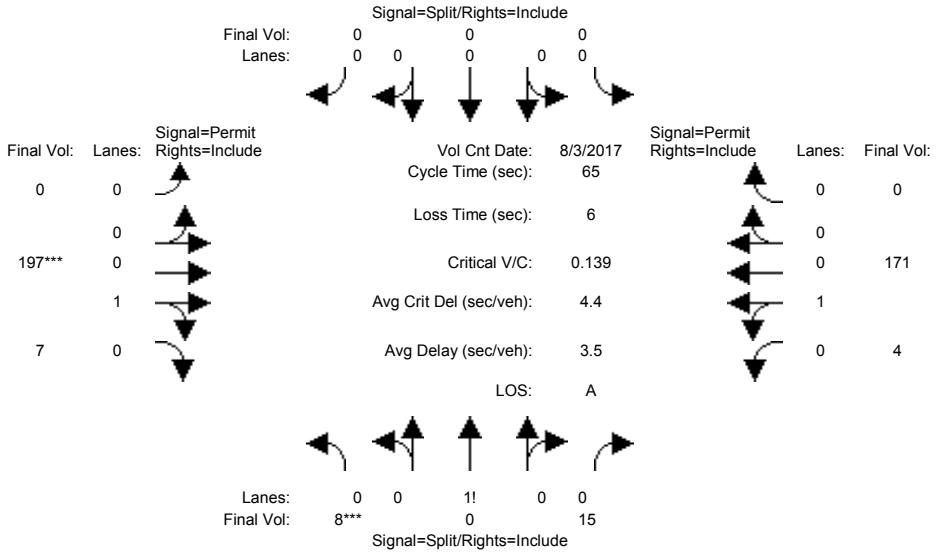
Note: Queue reported is the number of cars per lane.

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Palo Alto Parking Structure
SJ17-1740

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Background AM PP

Intersection #1: Gilman Street / Hamilton Avenue



Street Name:	Gilman Street						Hamilton Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Min. Green:	10	10	10	0	0	0	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	0.0	0.0	0.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 3 Aug 2017 << 07:30:00 AM												
Base Vol:	8	0	14	0	0	0	0	186	7	4	170	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	8	0	14	0	0	0	0	186	7	4	170	0
Added Vol:	0	0	1	0	0	0	0	11	0	0	1	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	8	0	15	0	0	0	0	197	7	4	171	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	8	0	15	0	0	0	0	197	7	4	171	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	8	0	15	0	0	0	0	197	7	4	171	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	8	0	15	0	0	0	0	197	7	4	171	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.92	0.92	0.92	1.00	0.92	0.92	0.95	0.95	0.95	0.95	0.92
Lanes:	0.35	0.00	0.65	0.00	0.00	0.00	0.00	0.97	0.03	0.02	0.98	0.00
Final Sat.:	609	0	1141	0	0	0	0	1738	62	41	1759	0
Capacity Analysis Module:												
Vol/Sat:	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.11	0.11	0.10	0.10	0.00
Crit Moves:	****							****				
Green Time:	10.0	0.0	10.0	0.0	0.0	0.0	0.0	49.0	49.0	49.0	49.0	0.0
Volume/Cap:	0.09	0.00	0.09	0.00	0.00	0.00	0.00	0.15	0.15	0.13	0.13	0.00
Delay/Veh:	23.7	0.0	23.7	0.0	0.0	0.0	0.0	2.3	2.3	2.2	2.2	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	23.7	0.0	23.7	0.0	0.0	0.0	0.0	2.3	2.3	2.2	2.2	0.0
LOS by Move:	C	A	C	A	A	A	A	A	A	A	A	A
HCM2kAvgQ:	0	0	0	0	0	0	0	1	1	1	1	0

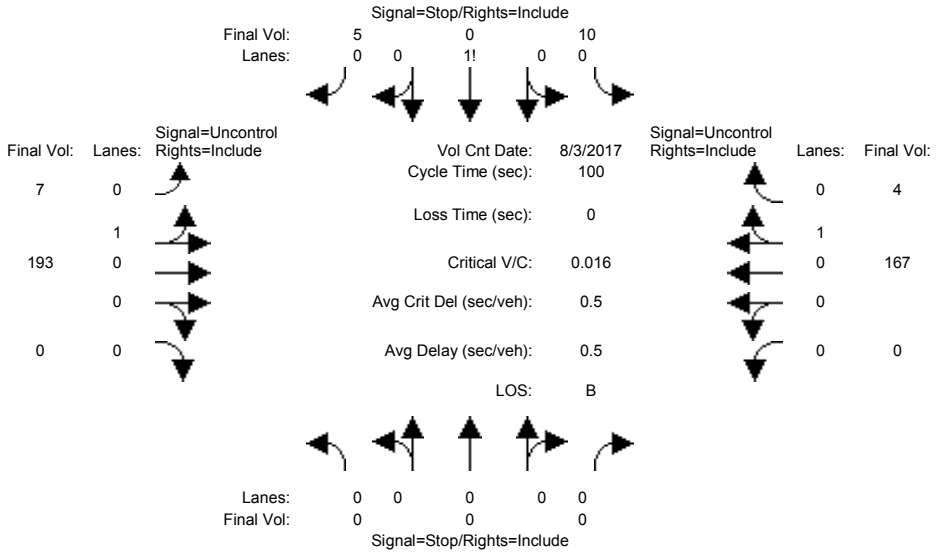
Note: Queue reported is the number of cars per lane.

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Palo Alto Parking Structure
SJ17-1740

Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Background AM

Intersection #2: Project Driveway / Hamilton Avenue



Street Name:	Project Driveway						Hamilton Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Volume Module: >> Count Date: 3 Aug 2017 << 07:30:00 AM												
Base Vol:	0	0	0	10	0	5	7	193	0	0	167	4
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	10	0	5	7	193	0	0	167	4
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	10	0	5	7	193	0	0	167	4
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	10	0	5	7	193	0	0	167	4
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	0	10	0	5	7	193	0	0	167	4
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	6.4	6.5	6.2	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	376	376	169	171	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	629	558	880	1418	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	627	556	880	1418	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	0.02	0.00	0.01	0.00	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.6	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	A	*	*	*	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	693	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	0.1	xxxxx	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	10.3	xxxxx	7.6	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	B	*	A	*	*	*	*	*
ApproachDel:	xxxxxx			10.3			xxxxxx			xxxxxx		
ApproachLOS:	*			B			*			*		

Note: Queue reported is the number of cars per lane.

Peak Hour Delay Signal Warrant Report

****

Intersection #2 Project Driveway / Hamilton Avenue

****

Future Volume Alternative: Peak Hour Warrant NOT Met

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```
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Lanes:        0  0  0  0  0    0  0  1! 0  0    0  1  0  0  0    0  0  0  1  0
Initial Vol:    0    0     0    10    0     5     7  193     0     0  167     4
ApproachDel:    xxxxxx             10.3           xxxxxx           xxxxxx
------------|---------------||---------------||---------------||---------------|
Approach[southbound][lanes=1][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=0.0]
   FAIL - Vehicle-hours less than 4 for one lane approach.
Signal Warrant Rule #2: [approach volume=15]
   FAIL - Approach volume less than 100 for one lane approach.
Signal Warrant Rule #3: [approach count=3][total volume=386]
   FAIL - Total volume less than 650 for intersection
          with less than four approaches.
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
              Peak Hour Volume Signal Warrant Report [Urban]
********************************************************************************
Intersection #2 Project Driveway / Hamilton Avenue
********************************************************************************
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Lanes:        0  0  0  0  0    0  0  1! 0  0    0  1  0  0  0    0  0  0  1  0
Initial Vol:    0    0     0    10    0     5     7  193     0     0  167     4
------------|---------------||---------------||---------------||---------------|
Major Street Volume:             371
Minor Approach Volume:           15
Minor Approach Volume Threshold: 484
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

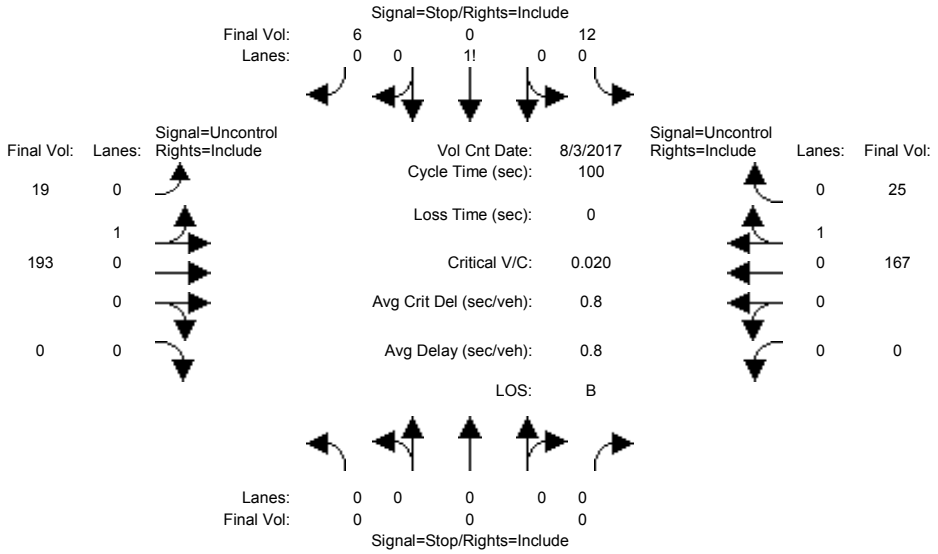
The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
```

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Palo Alto Parking Structure
SJ17-1740

Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Background AM PP

Intersection #2: Project Driveway / Hamilton Avenue



Street Name:	Project Driveway						Hamilton Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Volume Module: >> Count Date: 3 Aug 2017 << 07:30:00 AM												
Base Vol:	0	0	0	10	0	5	7	193	0	0	167	4
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	10	0	5	7	193	0	0	167	4
Added Vol:	0	0	0	2	0	1	12	0	0	0	0	21
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	12	0	6	19	193	0	0	167	25
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	12	0	6	19	193	0	0	167	25
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	0	12	0	6	19	193	0	0	167	25
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	6.4	6.5	6.2	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	411	411	180	192	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	601	534	869	1394	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	595	527	869	1394	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	0.02	0.00	0.01	0.01	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.6	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	A	*	*	*	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	665	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	0.1	xxxxx	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	10.6	xxxxx	7.6	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	B	*	A	*	*	*	*	*
ApproachDel:	xxxxxx			10.6			xxxxxx			xxxxxx		
ApproachLOS:	*			B			*			*		

Note: Queue reported is the number of cars per lane.

Peak Hour Delay Signal Warrant Report

****

Intersection #2 Project Driveway / Hamilton Avenue

****

Future Volume Alternative: Peak Hour Warrant NOT Met

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Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Lanes:	0 0	0 0	0	0 0	1! 0	0	0 1	0 0	0	0 0	0 1	0
Initial Vol:	0	0	0	12	0	6	19	193	0	0	167	25
ApproachDel:	xxxxxx			10.6			xxxxxx			xxxxxx		

Approach[southbound][lanes=1][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=0.1]
FAIL - Vehicle-hours less than 4 for one lane approach.
Signal Warrant Rule #2: [approach volume=18]
FAIL - Approach volume less than 100 for one lane approach.
Signal Warrant Rule #3: [approach count=3][total volume=422]
FAIL - Total volume less than 650 for intersection
with less than four approaches.

SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

Peak Hour Volume Signal Warrant Report [Urban]

****

Intersection #2 Project Driveway / Hamilton Avenue

****

Future Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Lanes:	0 0	0 0	0	0 0	1! 0	0	0 1	0 0	0	0 0	0 1	0
Initial Vol:	0	0	0	12	0	6	19	193	0	0	167	25

Major Street Volume: 404
Minor Approach Volume: 18
Minor Approach Volume Threshold: 461

SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

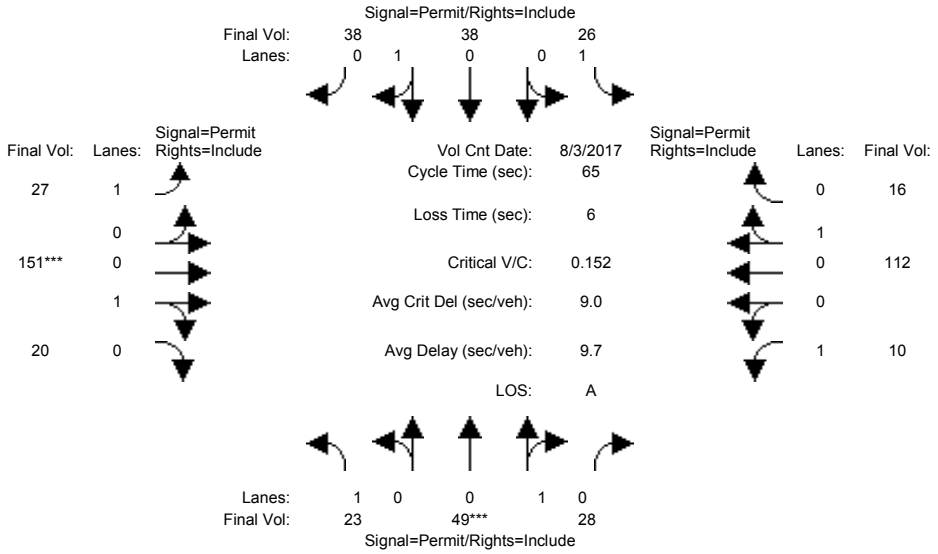
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Palo Alto Parking Structure
SJ17-1740

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Background AM

Intersection #3: Waverley Street / Hamilton Avenue



Street Name:	Waverley Street						Hamilton Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Min. Green:	10	10	10	10	10	10	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 3 Aug 2017 << 07:30:00 AM												
Base Vol:	23	49	28	26	38	38	27	151	20	10	112	16
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	23	49	28	26	38	38	27	151	20	10	112	16
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	23	49	28	26	38	38	27	151	20	10	112	16
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	23	49	28	26	38	38	27	151	20	10	112	16
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	23	49	28	26	38	38	27	151	20	10	112	16
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	23	49	28	26	38	38	27	151	20	10	112	16
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.95	0.95	0.92	0.95	0.95	0.92	0.95	0.95	0.92	0.95	0.95
Lanes:	1.00	0.64	0.36	1.00	0.50	0.50	1.00	0.88	0.12	1.00	0.87	0.13
Final Sat.:	1750	1145	655	1750	900	900	1750	1589	211	1750	1575	225
Capacity Analysis Module:												
Vol/Sat:	0.01	0.04	0.04	0.01	0.04	0.04	0.02	0.10	0.10	0.01	0.07	0.07
Crit Moves:		****						****				
Green Time:	18.3	18.3	18.3	18.3	18.3	18.3	40.7	40.7	40.7	40.7	40.7	40.7
Volume/Cap:	0.05	0.15	0.15	0.05	0.15	0.15	0.02	0.15	0.15	0.01	0.11	0.11
Delay/Veh:	17.0	17.7	17.7	17.1	17.6	17.6	4.6	5.1	5.1	4.6	4.9	4.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	17.0	17.7	17.7	17.1	17.6	17.6	4.6	5.1	5.1	4.6	4.9	4.9
LOS by Move:	B	B	B	B	B	B	A	A	A	A	A	A
HCM2kAvgQ:	0	1	1	0	1	1	0	1	1	0	1	1

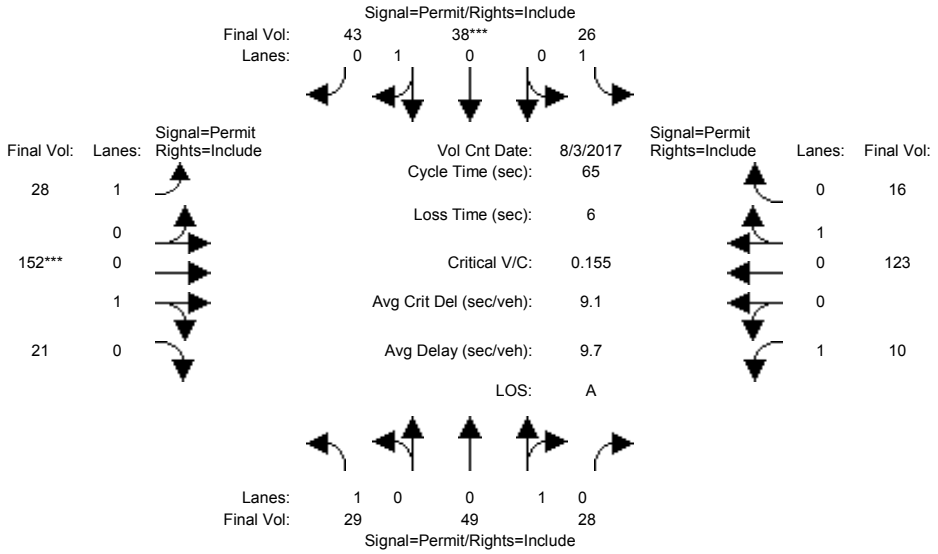
Note: Queue reported is the number of cars per lane.

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Palo Alto Parking Structure
SJ17-1740

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Background AM PP

Intersection #3: Waverley Street / Hamilton Avenue



Street Name:	Waverley Street						Hamilton Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Min. Green:	10	10	10	10	10	10	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 3 Aug 2017 << 07:30:00 AM												
Base Vol:	23	49	28	26	38	38	27	151	20	10	112	16
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	23	49	28	26	38	38	27	151	20	10	112	16
Added Vol:	6	0	0	0	0	5	1	1	1	0	11	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	29	49	28	26	38	43	28	152	21	10	123	16
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	29	49	28	26	38	43	28	152	21	10	123	16
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	29	49	28	26	38	43	28	152	21	10	123	16
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	29	49	28	26	38	43	28	152	21	10	123	16
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.95	0.95	0.92	0.95	0.95	0.92	0.95	0.95	0.92	0.95	0.95
Lanes:	1.00	0.64	0.36	1.00	0.47	0.53	1.00	0.88	0.12	1.00	0.88	0.12
Final Sat.:	1750	1145	655	1750	844	956	1750	1582	218	1750	1593	207
Capacity Analysis Module:												
Vol/Sat:	0.02	0.04	0.04	0.01	0.05	0.05	0.02	0.10	0.10	0.01	0.08	0.08
Crit Moves:					****			****				
Green Time:	18.8	18.8	18.8	18.8	18.8	18.8	40.2	40.2	40.2	40.2	40.2	40.2
Volume/Cap:	0.06	0.15	0.15	0.05	0.16	0.16	0.03	0.16	0.16	0.01	0.12	0.12
Delay/Veh:	16.7	17.3	17.3	16.7	17.3	17.3	4.8	5.3	5.3	4.8	5.2	5.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	16.7	17.3	17.3	16.7	17.3	17.3	4.8	5.3	5.3	4.8	5.2	5.2
LOS by Move:	B	B	B	B	B	B	A	A	A	A	A	A
HCM2kAvgQ:	0	1	1	0	1	1	0	2	2	0	1	1

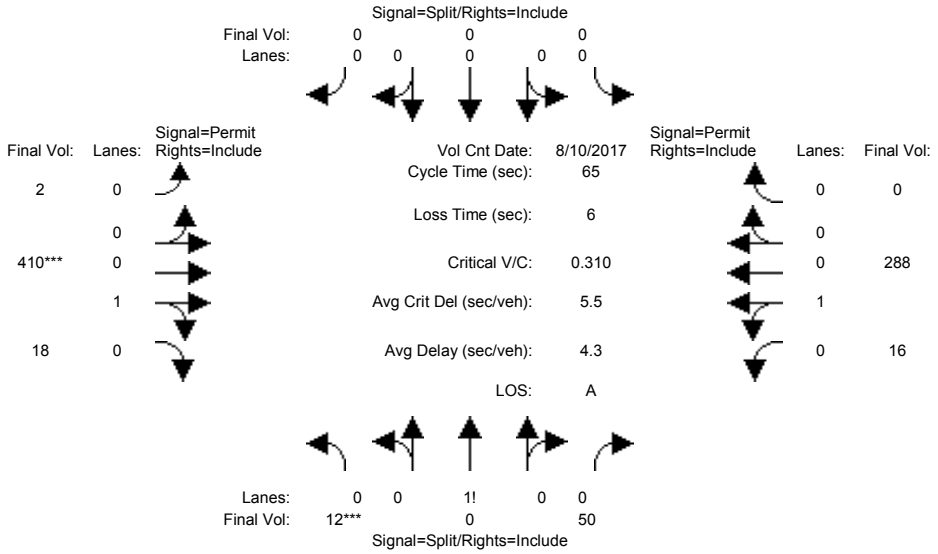
Note: Queue reported is the number of cars per lane.

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Palo Alto Parking Structure
SJ17-1740

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Background PM

Intersection #1: Gilman Street / Hamilton Avenue



Street Name:	Gilman Street						Hamilton Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Min. Green:	10	10	10	0	0	0	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	0.0	0.0	0.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 10 Aug 2017 << 04:30:00 PM												
Base Vol:	12	0	50	0	0	0	2	410	18	16	288	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	12	0	50	0	0	0	2	410	18	16	288	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	12	0	50	0	0	0	2	410	18	16	288	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	12	0	50	0	0	0	2	410	18	16	288	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	12	0	50	0	0	0	2	410	18	16	288	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	12	0	50	0	0	0	2	410	18	16	288	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.92	0.92	0.92	1.00	0.92	0.92	0.92	0.92	0.95	0.95	0.92
Lanes:	0.19	0.00	0.81	0.00	0.00	0.00	0.01	0.95	0.04	0.05	0.95	0.00
Final Sat.:	339	0	1411	0	0	0	8	1669	73	95	1705	0
Capacity Analysis Module:												
Vol/Sat:	0.04	0.00	0.04	0.00	0.00	0.00	0.25	0.25	0.25	0.17	0.17	0.00
Crit Moves:	****							****				
Green Time:	10.0	0.0	10.0	0.0	0.0	0.0	49.0	49.0	49.0	49.0	49.0	0.0
Volume/Cap:	0.23	0.00	0.23	0.00	0.00	0.00	0.33	0.33	0.33	0.22	0.22	0.00
Delay/Veh:	24.6	0.0	24.6	0.0	0.0	0.0	2.8	2.8	2.8	2.5	2.5	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	24.6	0.0	24.6	0.0	0.0	0.0	2.8	2.8	2.8	2.5	2.5	0.0
LOS by Move:	C	A	C	A	A	A	A	A	A	A	A	A
HCM2kAvgQ:	1	0	1	0	0	0	3	3	3	2	2	0

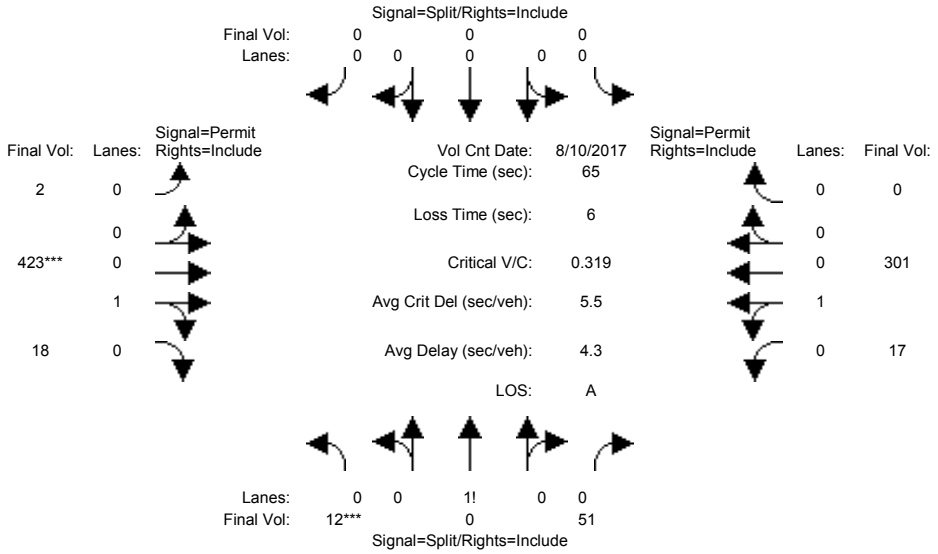
Note: Queue reported is the number of cars per lane.

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Palo Alto Parking Structure
SJ17-1740

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Background PM PP

Intersection #1: Gilman Street / Hamilton Avenue



Street Name:	Gilman Street						Hamilton Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Min. Green:	10	10	10	0	0	0	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	0.0	0.0	0.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 10 Aug 2017 << 04:30:00 PM												
Base Vol:	12	0	50	0	0	0	2	410	18	16	288	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	12	0	50	0	0	0	2	410	18	16	288	0
Added Vol:	0	0	1	0	0	0	0	13	0	1	13	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	12	0	51	0	0	0	2	423	18	17	301	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	12	0	51	0	0	0	2	423	18	17	301	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	12	0	51	0	0	0	2	423	18	17	301	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	12	0	51	0	0	0	2	423	18	17	301	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.92	0.92	0.92	1.00	0.92	0.92	0.92	0.92	0.95	0.95	0.92
Lanes:	0.19	0.00	0.81	0.00	0.00	0.00	0.01	0.95	0.04	0.05	0.95	0.00
Final Sat.:	333	0	1417	0	0	0	8	1671	71	96	1704	0
Capacity Analysis Module:												
Vol/Sat:	0.04	0.00	0.04	0.00	0.00	0.00	0.25	0.25	0.25	0.18	0.18	0.00
Crit Moves:	****							****				
Green Time:	10.0	0.0	10.0	0.0	0.0	0.0	49.0	49.0	49.0	49.0	49.0	0.0
Volume/Cap:	0.23	0.00	0.23	0.00	0.00	0.00	0.34	0.34	0.34	0.23	0.23	0.00
Delay/Veh:	24.6	0.0	24.6	0.0	0.0	0.0	2.8	2.8	2.8	2.5	2.5	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	24.6	0.0	24.6	0.0	0.0	0.0	2.8	2.8	2.8	2.5	2.5	0.0
LOS by Move:	C	A	C	A	A	A	A	A	A	A	A	A
HCM2kAvgQ:	1	0	1	0	0	0	3	3	3	2	2	0

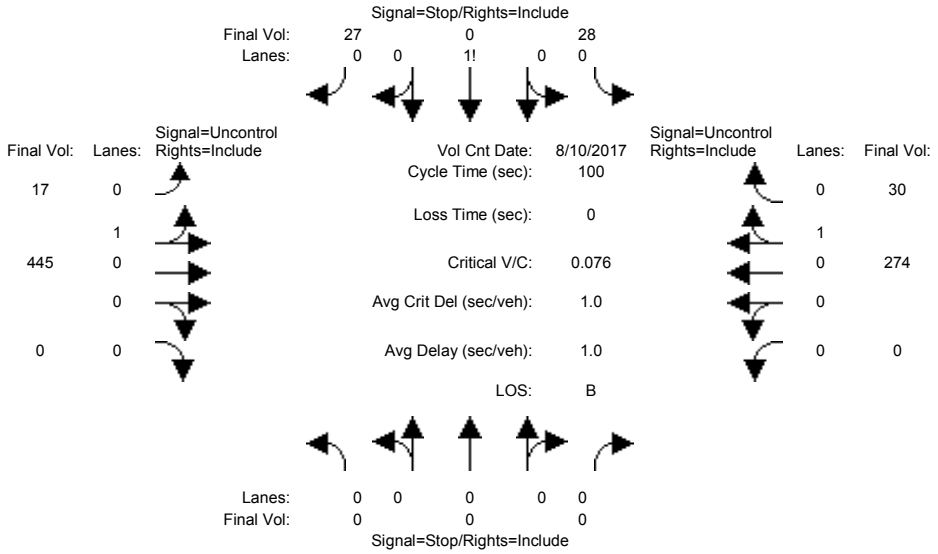
Note: Queue reported is the number of cars per lane.

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Palo Alto Parking Structure
SJ17-1740

Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Background PM

Intersection #2: Project Driveway / Hamilton Avenue




```
Street Name:         Project Driveway                  Hamilton Avenue
Approach:       North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Volume Module: >> Count Date: 10 Aug 2017 << 04:30:00 PM
Base Vol:       0    0     0    28    0    27    17  445     0     0  274    30
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:    0    0     0    28    0    27    17  445     0     0  274    30
Added Vol:      0    0     0     0    0     0     0    0     0     0    0     0
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:    0    0     0    28    0    27    17  445     0     0  274    30
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:     0    0     0    28    0    27    17  445     0     0  274    30
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
FinalVolume:    0    0     0    28    0    27    17  445     0     0  274    30
------------|---------------||---------------||---------------||---------------|
Critical Gap Module:
Critical Gp:xxxxx xxxx xxxxx   6.4  6.5   6.2   4.1 xxxx xxxxx xxxxx xxxx xxxxx
FollowUpTim:xxxxx xxxx xxxxx   3.5  4.0   3.3   2.2 xxxx xxxxx xxxxx xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol: xxxx xxxx xxxxx   768  768   289   304 xxxx xxxxx  xxxx xxxx xxxxx
Potent Cap.: xxxx xxxx xxxxx   373  334   755  1268 xxxx xxxxx  xxxx xxxx xxxxx
Move Cap.:   xxxx xxxx xxxxx   369  330   755  1268 xxxx xxxxx  xxxx xxxx xxxxx
Volume/Cap:  xxxx xxxx  xxxx  0.08 0.00  0.04  0.01 xxxx  xxxx  xxxx xxxx  xxxx
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
2Way95thQ:   xxxx xxxx xxxxx  xxxx xxxx xxxxx   0.0 xxxx xxxxx  xxxx xxxx xxxxx
Control Del:xxxxx xxxx xxxxx xxxxx xxxx xxxxx   7.9 xxxx xxxxx xxxxx xxxx xxxxx
LOS by Move:    *    *     *     *    *     *     A    *     *     *    *     *
Movement:     LT - LTR - RT    LT - LTR - RT    LT - LTR - RT    LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx  xxxx  492 xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
SharedQueue:xxxxx xxxx xxxxx xxxxx  0.4 xxxxx   0.0 xxxx xxxxx xxxxx xxxx xxxxx
Shrd ConDel:xxxxx xxxx xxxxx xxxxx 13.2 xxxxx   7.9 xxxx xxxxx xxxxx xxxx xxxxx
Shared LOS:     *    *     *     *    B     *     A    *     *     *    *     *
ApproachDel:    xxxxxx            13.2           xxxxxx           xxxxxx
ApproachLOS:         *              B                *                *
Note: Queue reported is the number of cars per lane.
                  Peak Hour Delay Signal Warrant Report
********************************************************************************
Intersection #2 Project Driveway / Hamilton Avenue
********************************************************************************
Future Volume Alternative: Peak Hour Warrant NOT Met
```

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Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Lanes:	0 0 0 0 0			0 0 1! 0 0			0 1 0 0 0			0 0 0 1 0		
Initial Vol:	0	0	0	28	0	27	17	445	0	0	274	30
ApproachDel:	xxxxxx			13.2			xxxxxx			xxxxxx		

Approach[southbound][lanes=1][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=0.2]
FAIL - Vehicle-hours less than 4 for one lane approach.
Signal Warrant Rule #2: [approach volume=55]
FAIL - Approach volume less than 100 for one lane approach.
Signal Warrant Rule #3: [approach count=3][total volume=821]
SUCCEED - Total volume greater than or equal to 650 for intersection with less than four approaches.

SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

Peak Hour Volume Signal Warrant Report [Urban]

****

Intersection #2 Project Driveway / Hamilton Avenue

****

Future Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Lanes:	0 0 0 0 0			0 0 1! 0 0			0 1 0 0 0			0 0 0 1 0		
Initial Vol:	0	0	0	28	0	27	17	445	0	0	274	30

Major Street Volume: 766
Minor Approach Volume: 55
Minor Approach Volume Threshold: 290

SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

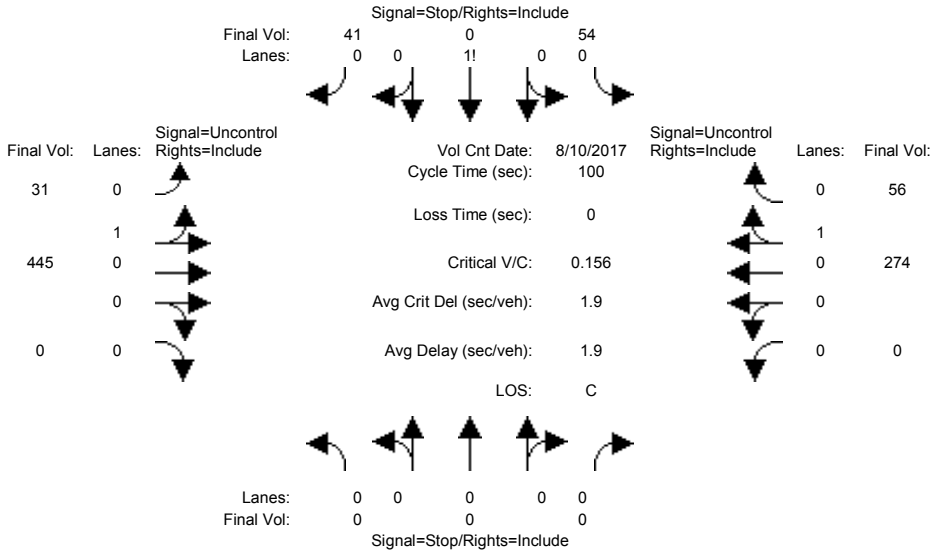
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Palo Alto Parking Structure
SJ17-1740

Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Background PM PP

Intersection #2: Project Driveway / Hamilton Avenue



Street Name:	Project Driveway						Hamilton Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Volume Module: >> Count Date: 10 Aug 2017 << 04:30:00 PM												
Base Vol:	0	0	0	28	0	27	17	445	0	0	274	30
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	28	0	27	17	445	0	0	274	30
Added Vol:	0	0	0	26	0	14	14	0	0	0	0	26
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	54	0	41	31	445	0	0	274	56
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	54	0	41	31	445	0	0	274	56
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	0	54	0	41	31	445	0	0	274	56
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	6.4	6.5	6.2	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	809	809	302	330	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	353	317	742	1241	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	346	309	742	1241	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	0.16	0.00	0.06	0.02	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.1	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	8.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	A	*	*	*	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	449	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	0.8	xxxxx	0.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	15.1	xxxxx	8.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	C	*	A	*	*	*	*	*
ApproachDel:	xxxxxx			15.1			xxxxxx			xxxxxx		
ApproachLOS:	*			C			*			*		

Note: Queue reported is the number of cars per lane.

Peak Hour Delay Signal Warrant Report

****

Intersection #2 Project Driveway / Hamilton Avenue

****

Future Volume Alternative: Peak Hour Warrant NOT Met

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Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Lanes:	0 0	0 0 0		0 0	1! 0		0 1	0 0 0		0 0	0 1	0
Initial Vol:	0	0	0	54	0	41	31	445	0	0	274	56
ApproachDel:	xxxxxx			15.1			xxxxxx			xxxxxx		

Approach[southbound][lanes=1][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=0.4]
FAIL - Vehicle-hours less than 4 for one lane approach.
Signal Warrant Rule #2: [approach volume=95]
FAIL - Approach volume less than 100 for one lane approach.
Signal Warrant Rule #3: [approach count=3][total volume=901]
SUCCEED - Total volume greater than or equal to 650 for intersection with less than four approaches.

SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

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Peak Hour Volume Signal Warrant Report [Urban]

****

Intersection #2 Project Driveway / Hamilton Avenue

****

Future Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Lanes:	0 0	0 0 0		0 0	1! 0		0 1	0 0 0		0 0	0 1	0
Initial Vol:	0	0	0	54	0	41	31	445	0	0	274	56

Major Street Volume: 806
Minor Approach Volume: 95
Minor Approach Volume Threshold: 277

SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

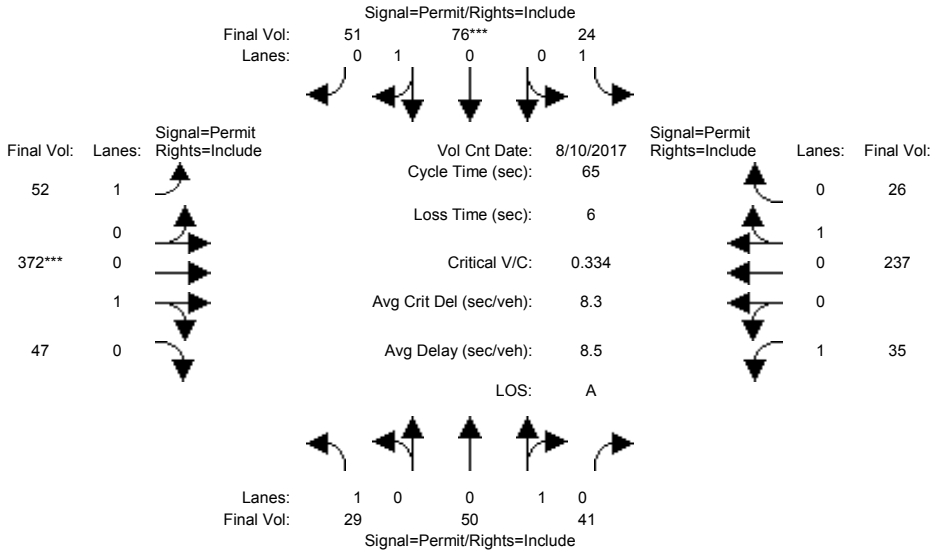
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Palo Alto Parking Structure
SJ17-1740

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Background PM

Intersection #3: Waverley Street / Hamilton Avenue



Street Name:	Waverley Street						Hamilton Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Min. Green:	10	10	10	10	10	10	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 10 Aug 2017 << 04:30:00 PM												
Base Vol:	29	50	41	24	76	51	52	372	47	35	237	26
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	29	50	41	24	76	51	52	372	47	35	237	26
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	29	50	41	24	76	51	52	372	47	35	237	26
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	29	50	41	24	76	51	52	372	47	35	237	26
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	29	50	41	24	76	51	52	372	47	35	237	26
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	29	50	41	24	76	51	52	372	47	35	237	26
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.95	0.95	0.92	0.95	0.95	0.92	0.95	0.95	0.92	0.95	0.95
Lanes:	1.00	0.55	0.45	1.00	0.60	0.40	1.00	0.89	0.11	1.00	0.90	0.10
Final Sat.:	1750	989	811	1750	1077	723	1750	1598	202	1750	1622	178
Capacity Analysis Module:												
Vol/Sat:	0.02	0.05	0.05	0.01	0.07	0.07	0.03	0.23	0.23	0.02	0.15	0.15
Crit Moves:					****			****				
Green Time:	13.7	13.7	13.7	13.7	13.7	13.7	45.3	45.3	45.3	45.3	45.3	45.3
Volume/Cap:	0.08	0.24	0.24	0.06	0.33	0.33	0.04	0.33	0.33	0.03	0.21	0.21
Delay/Veh:	20.7	21.6	21.6	20.6	22.3	22.3	3.1	4.1	4.1	3.1	3.6	3.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	20.7	21.6	21.6	20.6	22.3	22.3	3.1	4.1	4.1	3.1	3.6	3.6
LOS by Move:	C+	C+	C+	C+	C+	C+	A	A	A	A	A	A
HCM2kAvgQ:	1	2	2	0	3	3	0	3	3	0	2	2

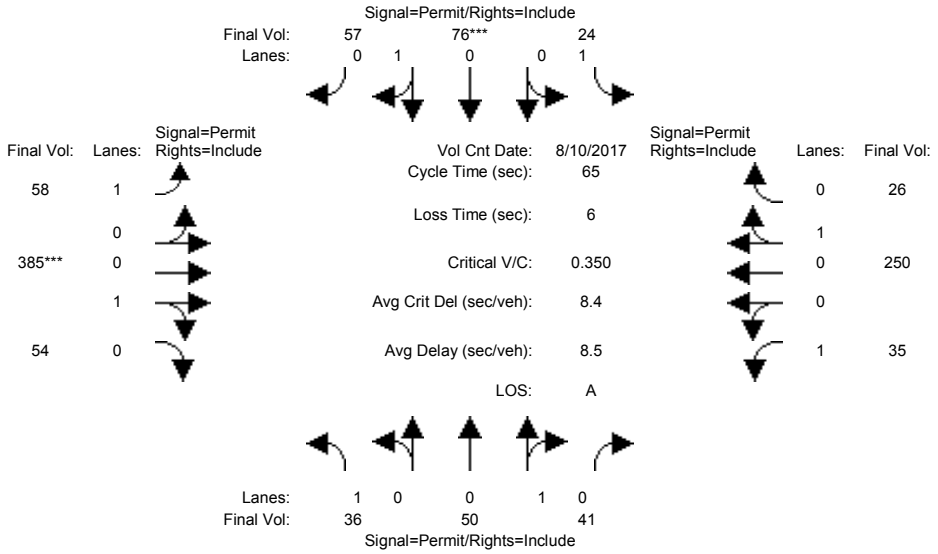
Note: Queue reported is the number of cars per lane.

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Palo Alto Parking Structure
SJ17-1740

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Background PM PP

Intersection #3: Waverley Street / Hamilton Avenue



Street Name:	Waverley Street						Hamilton Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Min. Green:	10	10	10	10	10	10	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 10 Aug 2017 << 04:30:00 PM												
Base Vol:	29	50	41	24	76	51	52	372	47	35	237	26
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	29	50	41	24	76	51	52	372	47	35	237	26
Added Vol:	7	0	0	0	0	6	6	13	7	0	13	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	36	50	41	24	76	57	58	385	54	35	250	26
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	36	50	41	24	76	57	58	385	54	35	250	26
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	36	50	41	24	76	57	58	385	54	35	250	26
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	36	50	41	24	76	57	58	385	54	35	250	26
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.95	0.95	0.92	0.95	0.95	0.92	0.95	0.95	0.92	0.95	0.95
Lanes:	1.00	0.55	0.45	1.00	0.57	0.43	1.00	0.88	0.12	1.00	0.91	0.09
Final Sat.:	1750	989	811	1750	1029	771	1750	1579	221	1750	1630	170
Capacity Analysis Module:												
Vol/Sat:	0.02	0.05	0.05	0.01	0.07	0.07	0.03	0.24	0.24	0.02	0.15	0.15
Crit Moves:					****			****				
Green Time:	13.7	13.7	13.7	13.7	13.7	13.7	45.3	45.3	45.3	45.3	45.3	45.3
Volume/Cap:	0.10	0.24	0.24	0.06	0.35	0.35	0.05	0.35	0.35	0.03	0.22	0.22
Delay/Veh:	20.8	21.6	21.6	20.6	22.4	22.4	3.1	4.1	4.1	3.1	3.6	3.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	20.8	21.6	21.6	20.6	22.4	22.4	3.1	4.1	4.1	3.1	3.6	3.6
LOS by Move:	C+	C+	C+	C+	C+	C+	A	A	A	A	A	A
HCM2kAvgQ:	1	2	2	0	3	3	0	4	4	0	2	2

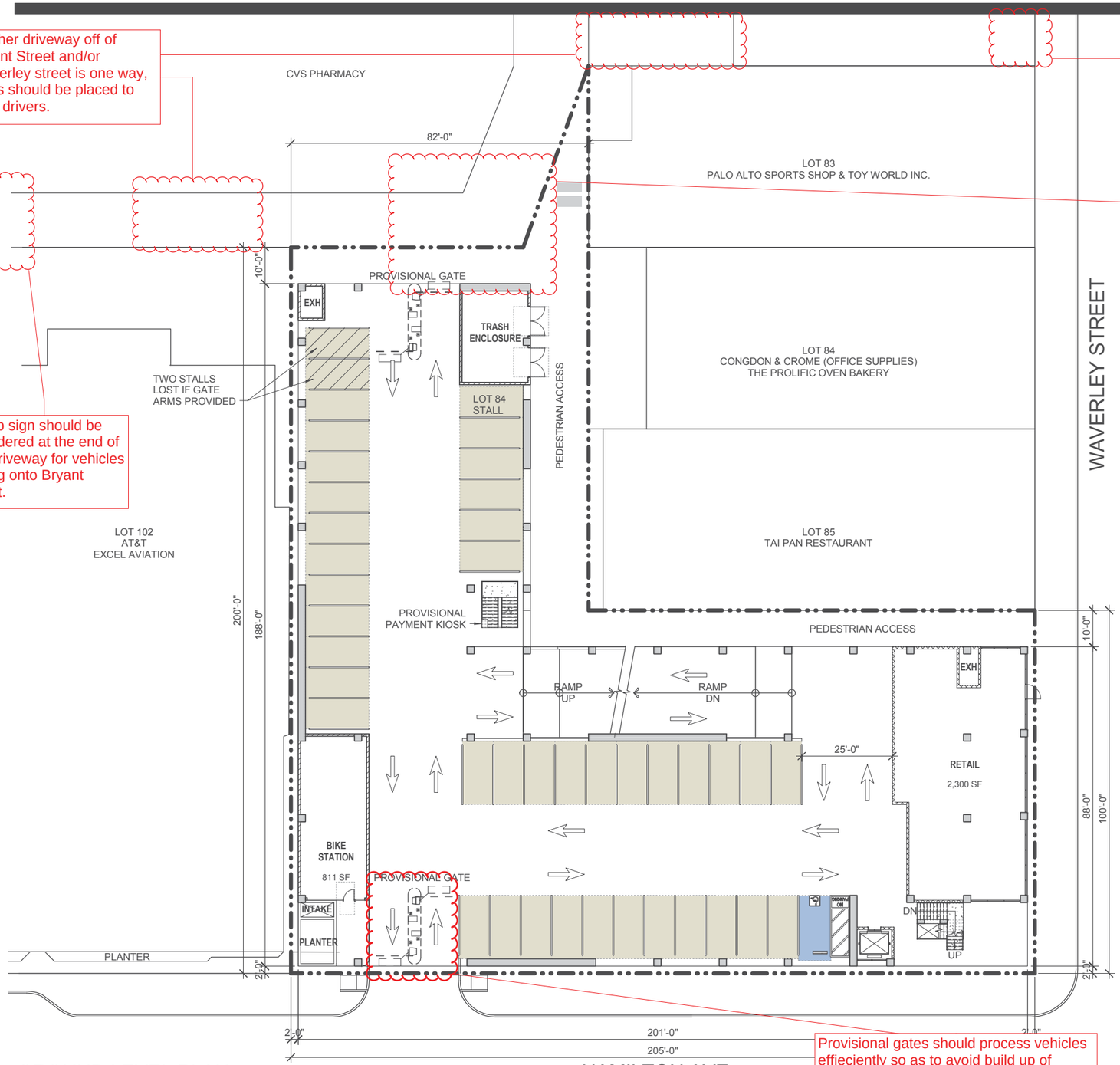
Note: Queue reported is the number of cars per lane.

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Attachment B:

Site Plan Mark-Up

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If either driveway off of Bryant Street and/or Waverley street is one way, signs should be placed to alert drivers.

A stop sign should be considered at the end of this driveway for vehicles exiting onto Bryant Street.

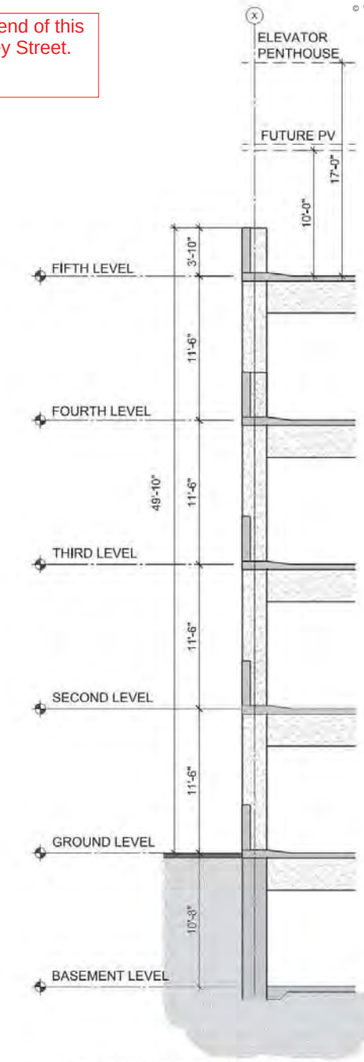
A stop sign should be considered at the end of this driveway for drivers exiting onto Waverley Street.

The applicant should ensure sufficient space at this location for vehicles turning around the corner as they enter/exit the parking facility. Applicant should also consider extending the sidewalks along the driveways to Bryant Street and Waverley Street.

Provisional gates should process vehicles effieciently so as to avoid build up of vehicles queues onto Hamilton Avenue for vehicles entering the parking facility.

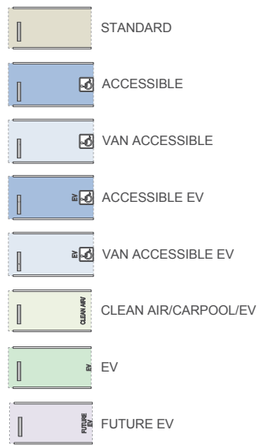
GROUND LEVEL PLAN

1/16" = 1'-0"



CONCEPT WALL SECTION

NOT TO SCALE



PARKING STALLS LEGEND

16'-0" 0' 32'-0" 64'-0"

SCALE: 1/16" = 1'-0"

WATRY DESIGN, INC.
Architects • Engineers • Parking Planners

HAYES GROUP ARCHITECTS

PROJECT NAME:	SHEET NAME:	CLIENT NAME:	DATE ISSUED:
DOWNTOWN PARKING GARAGE	PK2.1 GROUND LEVEL PLAN	CITY OF PALO ALTO	6/21/17

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Appendix K: Phase I ESA

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Phase I Environmental Site Assessment

Proposed Palo Alto Parking Structure

375 Hamilton Avenue
Palo Alto, California 94301

Prepared for:

The City of Palo Alto
250 Hamilton Avenue
Palo Alto, California 94301

September 12, 2017

Project # 13396B

WSP USA
6011 W. St. Joseph Hwy, Suite 400
Lansing, Michigan 48917
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Site Map

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1.0 EXECUTIVE SUMMARY

WSP USA (WSP) has performed a Phase I environmental site assessment (ESA) in conformance with the scope and limitations of 40 CFR Part 312 (Standards and Practices for All Appropriate Inquiries) and ASTM Method E 1527-13 (Standard Practice for Environmental Site Assessments) of the Parking Lot D property (the Site) at 375 Hamilton Avenue in Palo Alto, Santa Clara County, California for the City of Palo Alto. No party other than those listed in Section 2.8 may rely upon any information or opinion contained in this report. Any exceptions to, or deletions from, this practice are described in Section 2.5 of this report. This assessment has revealed no evidence of recognized environmental conditions in connection with the property except for the following:

1) The Pacific Bell facility (a.k.a. AT&T/SBC and Pershas Rug & Carpet) at 345 Hamilton Avenue is immediately southwest of the Site. This facility had a 10,000-gallon diesel UST that was situated in the alley behind the building within about 40 feet of the Site. This tank leaked; although records indicated that contamination was minimal, it appears as though groundwater contamination that may have originated from this tank was present in a monitoring well approximately 20 feet to the southwest of the tank. Soil contamination could also be present at depth, and could extend onto the Site. WSP therefore believes that this facility is a REC to the Site.

2) Gate Cleaners at 439 Hamilton Avenue is approximately 260 feet northeast of the Site. This facility performs cleaning on the premises, and has been in operation since 1969. Although no contamination is known to be associated with this facility, accidental spillage and/or equipment leakage is common in dry cleaning operations, and in some cases, spent solvent is improperly disposed of “out the back door” to avoid disposal costs. Due to the relatively close proximity of the facility to the Site and because the direction of groundwater flow in the area is believed to be south-southwest toward the Site, WSP believes that this facility is a REC to the Site.

3) Economy Cleaners at 430 Hamilton Avenue was approximately 140 feet east of the Site at the location of the Wells Fargo facility in the 1970s and early 1980s. This facility subsequently moved to its current location at 486 Hamilton Avenue, approximately 520 feet northeast of the Site. Although no contamination is known to be associated with this facility, accidental spillage and/or equipment leakage is common in dry cleaning operations, and in some cases, spent solvent is improperly disposed of “out the back door” to avoid disposal costs. This property (former address of 605 Waverley Street) was also occupied by C & E Oil Co. No 4 gas in

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1955, and Lucky Seven Serv gas in 1960. Due to the close proximity of the facility to the Site and because the direction of groundwater flow in the area is believed to be south-southwest generally toward the Site, WSP believes that this facility is a REC to the Site.

Although it made a good faith effort to gather the required information set forth in the ASTM and AAI standards, WSP was unable to ascertain whether debris from the structures formerly on the Site potentially remain in the subsurface before completing this report. The structures may have been burned or partially collapsed into basements, if present. The building materials could contain heavy metals, lead-based paint, and/or asbestos containing materials, which would require appropriate disposal. And while not an environmental concern, foundation materials from these former structures likely remain in the subsurface. WSP considers this incomplete information to be a data gap. WSP believes this data gap is significant since if building debris is present in the subsurface, it could impact potential construction costs and schedule, particularly if these materials require special disposal.

Based on the information gathered as part of this Phase I ESA, review of the relevant data, and understanding of the planned Site uses, WSP recommends the following activities be completed:

1) Soil borings should be drilled in the northeast part of the Site and the south part of the Site to evaluate whether debris from the former structures exists in the subsurface. If debris is found to be present, soil samples should be collected and analyzed for heavy metals (including lead) and asbestos.

2) Soil borings should be drilled along the northeast and southeast edge of the Site to evaluate whether contaminants originating from the nearby Gate Cleaners and former Economy Cleaners properties have migrated and impacted the Site. Groundwater samples should be collected from each of the borings and analyzed for volatile organic compounds, polynuclear aromatic hydrocarbons, and total petroleum hydrocarbons.

3) Soil borings should be drilled along the northwest edge of the Site to evaluate whether petroleum contaminants emanating from the adjacent Pacific Bell facility's leaking underground storage tank had migrated and impacted the Site. Soil and/or groundwater samples should be collected from the borings and analyzed for volatile organic compounds, polynuclear aromatic hydrocarbons, and total petroleum hydrocarbons.

4) The City of Palo Alto should review the User's Ongoing Responsibilities (included in Appendix N of this report) and comply with the provisions therein.

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This executive summary briefly describes the conclusions of this assessment. Reading it should not be considered a substitute for reading the entire report. Only the report in its entirety should be relied upon to provide complete information regarding WSP's observations when reviewing the environmental conditions for this Site.

2.0 INTRODUCTION

The work for this ESA was completed by Adam W. Heft, with assistance from Lorraine Ahlquist and Lyne-Marie Bouvet, and reviewed by David R. VanGoethem. All activities were completed by an Environmental Professional or under the supervision of an Environmental Professional. The qualifications of each individual involved in preparing this report are included in Appendix M.

2.1 Location and Legal Description

The Site is in Town 6S, Range 3W, Santa Clara County, California (Figure 1 in Appendix A), and has a street address of 375 Hamilton Avenue and is located at the west corner of the intersection of Hamilton Avenue and Waverley Street. It is composed of a 0.66-acre L-shaped parking lot, as illustrated in Figure 2 in Appendix A. The legal description for the Site, as obtained from the EDR lien search, is:

> "All that certain piece or parcel of land being a portion of Lot 3, Block 21, City of Palo Alto, filed 02/27/1889 in Book D of Maps, Page 69, situate and lying in the County of Santa Clara, State of California."

2.2 Owner, Site Manager and Occupant Information

The owner of the Site is the City of Palo Alto. The city maintains offices at 250 Hamilton Avenue in Palo Alto. The owner manages the Site; it is used for public parking. This parking lot is referred to as "Lot D" by the city.

2.3 Purpose of ESA

The goal of conducting a Phase I ESA is to identify recognized environmental conditions (RECs). The term RECs means the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to any release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment.

An "all appropriate inquiries" (AAI) assessment is a necessary component for persons seeking to establish either CERCLA's innocent landowner defense in 42 U.S.C. §9607(b)(3), the bona fide prospective purchaser defense in 42 U.S.C. §9607(r), or the contiguous property owner defense

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in 42 U.S.C. §9607(q). One component of all appropriate inquiries is completion of due diligence activities, which includes conducting a Phase I ESA. In addition to completing a Phase I ESA, the User has additional ongoing responsibilities, which must be complied with, and are also necessary to establish or maintain the above defenses; these ongoing responsibilities are summarized in Appendix N.

According to the rules promulgated by the U.S. EPA pursuant to CERCLA (at 40 CFR Part 312), the primary objectives of an ESA are to identify the following types of information about the Site prior to acquiring the property: (1) current and past property uses and occupancies, (2) current and past uses of hazardous substances, (3) waste management and disposal activities that could have caused releases or threatened releases of hazardous substances, (4) current and past corrective actions and response activities undertaken to address past and on-going releases of hazardous substances, (5) engineering controls, (6) institutional controls, and (7) properties adjoining or located near the Site that have environmental conditions indicative of releases or threatened releases of hazardous substances on, at, in, or to the Site. This information was gathered to evaluate the Site for evidence of conditions indicative of a release.

This ESA has also been conducted to meet ASTM Method E1527-13. The ASTM standards were written to not only satisfy the U.S. EPA's requirements for an AAI environmental site assessment, but also to evaluate "business environmental risk" associated with a parcel of commercial real estate. Accordingly, for this ESA, WSP evaluated the Site for evidence of hazardous substance disposal or releases from or onto the Site, environmental threats from adjacent properties, current RECs, controlled recognized environmental conditions (CRECs), and historic recognized environmental conditions (HRECs). WSP used this information to decide whether further environmental testing of the Site is warranted.

In the U.S. EPA's "Standards and Practices for All Appropriate Inquires," the phrase "conditions indicative of releases or threatened releases of hazardous substances on, at, in or to the property" was used. WSP considers a REC to be synonymous with this phrase. WSP elected to use the terms REC, CREC, and HREC in this report. Commonly used acronyms are defined in Section 9.0.

2.4 Detailed Scope-of-Work

2.4.1 Items Included in Scope of Work

The following sections describe the scope of work for this ESA.

Site Visit

WSP visited the Site to look for characteristics that suggested contamination may be present. WSP attempted to identify whether underground storage tanks were present, Site uses that could

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have contaminated soil or groundwater, and possible sources of contamination. Adjoining properties were also viewed from the Site and public rights-of-way to help identify off-site sources of contamination that could be impacting the Site. These neighboring properties were not entered unless WSP deemed it necessary and permission could be obtained from the property owner.

Interviews

The current owner(s) of the property, the current occupant(s) of the property (if a different entity than the owner), and previous owner/occupants of the property (if practical and deemed necessary) were interviewed to discover more information about the current and past uses of the Site and adjacent properties. These interviews focused on gathering information about possible sources of contamination.

Public Records Evaluation

WSP subcontracted with Environmental Data Resources (EDR) of Shelton, Connecticut to compile information about facilities that use or store chemicals, or that have suspected or known contamination from governmental databases. Using the information provided by this report, WSP evaluated the potential impact that identified facilities might have on the Site. When appropriate, WSP reviewed files and/or consulted with the state environmental agency, local health department, fire department, building department, and local governmental offices to clarify information provided by the EDR report.

Aerial Photographs

WSP checked aerial photographs that were available from public sources to identify whether these photographs contained evidence of potential contaminant sources.

Fire Insurance Map Review

WSP attempted to obtain historic fire insurance maps that show past uses of the Site and identify features such as the former existence of underground and aboveground storage tanks, which now are considered RECs.

City Directory Research and Review

WSP checked city directories that were available from public sources to identify whether these directories contained listings of potentially-contaminating businesses.

Title Records / Environmental Liens

WSP arranged to have a lien search compiled and reviewed it to identify past owners of the Site and whether any environmental liens, restrictive covenants, or institutional controls related to environmental issues had been filed against the property.

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2.4.2 Items Not Included in Scope of Work

The above services focused on identifying possible soil and/or groundwater contamination on the Site. The scope of work did not, however, include the collection or testing of soil, groundwater, surface water, or building materials. Examples of other activities not included in the Phase I ESA are:

- Asbestos Inspection
- Lead Paint Assessment
- Radon and Other Indoor Air Quality Evaluation
- PCB Evaluation
- Mold Survey
- Review or Analysis for Permit, Regulation, or Statute Violations
- Review of Zoning Restrictions
- Special Flood Hazard Area Determinations
- Cultural and Historic Resource Survey
- Industrial Hygiene Assessment
- Health and Safety Review
- Wetlands, Ecological Resources and Endangered Species Surveys
- High Voltage Power Lines Identification

2.5 Deviations

WSP did not deviate from the procedures in ASTM Standard E 1527-13 or 40 CFR Part 312.

2.6 Significant Assumptions

Certain information contained in this report was obtained from agencies, from the client, and through personal interviews. In preparing this report, WSP relied on the information provided by these sources unless WSP had actual knowledge the information was incorrect or believed that certain information was incorrect based on other information obtained while performing the ESA.

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Except as discussed in the report, WSP did not verify the accuracy of the information provided to it.

2.7 Special Terms and Conditions

In the professional judgment of WSP, the scope of this investigation was sufficient to determine whether further investigation is needed, given the nature and specific circumstances of the Site. WSP performed this ESA in conformance with the care and skill currently exercised by reputable environmental consulting firms practicing under similar conditions. No other warranty or representation of any kind, expressed or implied, at common law or created by statute, is extended, made or intended by WSP rendering of consulting services or furnishing oral and/or written reports of its findings.

Contaminants may be hidden in subsurface materials, having been intentionally covered, or because they were covered by foliage, water, snow, concrete, asphalt, or other materials. This contamination may not be present in predictable locations. The most that WSP could do is formulate a logical assessment program with reasonable time and cost limits to reduce, but not eliminate, the client's risk of later discovering previously unknown contamination. More extensive exploration could reduce the probability of finding contamination, if present; however, even after extensive exploration, WSP would be unable to say with total certainty that no RECs are present on this Site.

WSP conducted what it believes was an appropriate inquiry into possible conditions indicative of a release on the Site. This inquiry was not an exhaustive assessment. A point exists at which the cost of the information obtained or the time required to gather it outweighs the usefulness of the information and, in fact may be a material detriment to the orderly completion of the transaction. WSP attempted to balance the cost and time to perform this ESA with the need to reduce uncertainty about unknown conditions by obtaining additional information.

No warranty can be made that conditions observed were representative of areas not observed. Tests or data collected for this report were obtained only for the purposes stated in this report, and should not be used for reasons other than those intended.

This report does not constitute legal advice, nor does WSP purport to give legal advice. Environmental conditions and regulations are subject to constant change and reinterpretation.

It should not be assumed that current conditions and/or regulatory positions will remain constant. Furthermore, because the facts stated in this report are subject to professional interpretation, differing conclusions could be reached by other Environmental Professionals.

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To qualify for a defense from CERCLA liability, in addition to having this ESA conducted, the User of this report must comply with all ongoing responsibilities identified in Appendix N of this report.

2.8 Reliance

WSP has no obligation to any third party who intends to or will rely on this report and specifically disclaims such responsibility. WSP assumes no obligation for reporting any facts revealed by the ESA or contained in the report to any entity other than the City of Palo Alto. The City of Palo Alto may rely on the conclusions in this report.

3.0 USER-PROVIDED INFORMATION

3.1 Knowledge of the Site

WSP requested the client to provide any common, actual, or specialized knowledge it has that could help identify RECs on the Site. The information requested by WSP included the client's knowledge of the historic uses of the Site, the use or disposal of potential contaminants on the Site, the existence of environmental liens within the title records, or the possible presence of contamination on adjoining or nearby properties. WSP was informed that the City has used the property as a public parking lot for a long period of time.

3.2 Review of Title Records for Liens and AULs

WSP was provided a statement by the City that a search was made regarding whether any environmental liens or AULs were recorded against the Site, and that no environmental liens or AULs were discovered. A copy of this statement is included in Appendix B.

3.3 Reason for Significantly Lower Purchase Price

WSP was informed that the Site is not being purchased by another entity, and that a valuation reduction evaluation of a purchase price is therefore inapplicable for this ESA.

3.4 Reason for Performing the Phase I ESA

The client informed WSP that the Site will be redeveloped as a seven-level parking garage, one of which will be subsurface. The new construction will involve excavation of soil from the entire Site. The client intends to use this ESA to help check for RECs prior to commencing construction activities.

3.5 Prior Environmental Site Assessment Report

WSP was informed by the client that no prior ESAs have been conducted on the Site.

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4.0 RECORDS REVIEW

WSP searched for reasonably ascertainable documents and photographs to assist in compiling information about the historic use of the Site. These reasonably ascertainable items included aerial photographs, street directory listings, fire insurance maps, local governmental records, and regulatory agency records. WSP also obtained an EDR report that identified facilities included in governmental databases that are known to be contaminated or that use contaminating substances.

4.1 Standard Environmental Record Sources

4.1.1 Review of State and Federal Databases

Databases maintained by various state and federal agencies were reviewed for information regarding the Site and nearby properties. The compilation of data was performed by EDR. EDR uses computers to search governmental agency databases for information about contaminated properties and potentially contaminated properties within search ranges (specified in 40 CFR §312.26) around the Site. The search distances range from the Site boundary to one mile from the Site depending on the database. Information regarding the listed facilities is included in the EDR report in Appendix C.

EDR distinguishes between sites of higher and lower elevation when identifying facilities. Because of the minimal surface relief in the area, and the poor correlation between surface elevations and groundwater flow, WSP does not believe that this distinction is material when evaluating the potential for contaminants to migrate from other properties onto the Site.

WSP reviewed the information about the facilities in the databases to ascertain the potential impact of these facilities on the Site. While doing this review, WSP considered (a) the likely contaminating substances that were or could have been released, (b) the pathways these contaminants would likely follow to reach surface water or underlying groundwater, (c) the potential that groundwater or surface water would migrate from these facilities onto or beneath the Site, (d) the potential that pumping from water wells on the Site or in the area might influence the movement of groundwater and contaminants, and (e) the potential that contaminant vapors emanating from the facility could reach the Site.

When facilities were identified as being within the ASTM search distance, they were included and mapped in the EDR report. Several facilities in the EDR report are unmapped (referred to as “orphan” sites) because of an incomplete address, an inaccurate address, or a street address that could not be accurately identified. Where possible, WSP ascertained the locations of the

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unmapped sites and evaluated the potential impact of these sites for this assessment. A brief summary of each database and the facility listings is presented below.

NPL: National Priorities List

The National Priorities List (NPL) identifies the most serious hazardous waste sites regulated under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA). Sites on the NPL have been targeted by the U.S. EPA for priority cleanup. This database was searched for facilities within one mile of the Site, and was last updated in April 2017.

No NPL facilities were identified as being within the applicable search distance of the Site.

Delisted NPL: Delisted National Priorities List Sites

The National Priorities List (NPL) identifies the most serious hazardous waste sites as defined by CERCLA regulations. The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) allows the U.S. EPA to remove sites from the NPL when no further response is appropriate. This database was searched for facilities within one half mile of the Site, and was last updated in April 2017.

No Delisted NPL facilities were identified as being within the applicable search distance of the Site.

SEMS: Superfund Enterprise Management System

SEMS (Superfund Enterprise Management System) tracks hazardous waste sites, potentially hazardous waste sites, and remedial activities performed in support of EPA's Superfund Program across the United States. The list was formerly known as CERCLIS, renamed to SEMS by the EPA in 2015. The list contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). This dataset also contains sites which are either proposed to or on the National Priorities List (NPL) and the sites which are in the screening and assessment phase for possible inclusion on the NPL. This database was searched for facilities within one half mile of the Corridor, and was last updated in February 2017.

No SEMS facilities were identified as being within the applicable search distance of the Site.

SEMS-ARCHIVE: Superfund Enterprise Management System Archive

SEMS-ARCHIVE (Superfund Enterprise Management System Archive) tracks sites that have no further interest under the Federal Superfund Program based on available information. The list was formerly known as the CERCLIS-NFRAP, renamed to SEMS ARCHIVE by the EPA in 2015.

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EPA may perform a minimal level of assessment work at a site while it is archived if site conditions change and/or new information becomes available. Archived sites have been removed and archived from the inventory of SEMS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list the site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. The decision does not necessarily mean that there is no hazard associated with a given site; it only means that based upon available information, the location is not judged to be potential NPL site. This database was searched for facilities within one half mile of the Corridor, and was last updated in February 2017.

No CERCLIS-NFRAP facilities were identified as being within the applicable search distance of the Site.

CORRACTS: Corrective Action Report

The CORRACTS database includes facilities that handle hazardous wastes and at which RCRA corrective action has occurred. This database is maintained by the U.S. EPA, was searched for facilities within one mile of the Site, and was last updated by EDR in December 2016.

No CORRACTS facilities were identified as being within the applicable search distance of the Site.

RCRA-TSDF: Resource Conservation and Recovery Act - Treatment, Storage, or Disposal Facilities

The Resource Conservation and Recovery Act - Treatment, Storage, or Disposal Facility (RCRA-TSDF) database is obtained from the U.S. EPA's RCRA Information System (RCRIS). RCRIS contains data compiled for RCRA and the Hazardous and Solid Waste Amendments (HSWA) of 1984. TSDF sites are defined in 40 CFR 260.10 as facilities which treat, store, or dispose of RCRA hazardous waste. This database was searched for facilities within one half mile of the Site, and was last updated in December 2016.

No RCRA-TSDF facilities were identified as being within the applicable search distance of the Site.

RCRA Generators:

The Resource Conservation and Recovery Act – Generators Database contains data compiled in accordance with the 1984 Hazardous and Solid Waste Amendments (HSWA) to RCRA. RCRA Generator Facilities are divided into three categories: Fully Regulated Generators (FRGs) producing more than 1,000 kilograms of hazardous and/or one kilogram of acutely hazardous waste per month, Small Quantity Generators (SQGs) producing between 100 and 1,000 kilograms of hazardous and/or less than one kilogram of acutely hazardous waste per month, and Conditionally Exempt SQGs (CESQGs) producing less than 100 kilograms of hazardous waste

and less than one kilogram of acutely hazardous waste. This database was searched for facilities that include or are immediately adjacent to the Site, and was last updated in December 2016.

The facilities identified in the search did not include the Site; however, the listed CVS Pharmacy, Switch & Data/PAIX, and Walgreens #13596 (a.k.a. Premier Properties) facilities are immediately northwest, approximately 50 feet west-southwest, and 200 feet west-southwest of the Site, respectively. WSP's opinion of the potential impact of each facility to the Site is discussed in Section 7.2. WSP identified the locations of the other listed facilities and believes they are at distances that do not pose a risk of environmental contamination to the Site. Further information regarding all listed facilities is in the EDR report in Appendix C.

US ENG CONTROLS: Engineering Controls Sites List

The USEPA created this database, which lists facilities with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or affect human health. This database was searched only for listings that include the Site and was last updated in February 2017.

No US Engineering Controls facilities were identified as the Site.

US INST CONTROL: Sites with Institutional Controls

The U.S. EPA developed a listing of properties with institutional controls in place. The institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on the property. Deed restrictions are generally required as part of the institutional controls. This database was searched only for listings that include the Site and was last updated in February 2017.

No US Institutional Controls facilities were identified as the Site.

ERNS Spills: Emergency Response Notification System

The Emergency Response Notification System (ERNS) is a national database with information regarding releases of oil and hazardous substances. This database was searched only for listings that include the Site, and was last updated in September 2016.

No ERNS facilities were identified as the Site.

US Brownfields

Included in this listing are Brownfields properties that receive federal support through the U.S. EPA's Targeted Brownfields Assessment (TBA) program, and Cooperative Agreement Recipients and Brownfields properties addressed by Targeted Brownfields Assessments. This database was searched for facilities within one half mile of the Site, and was last updated in March 2017.

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No US Brownfields facilities were identified as being within the applicable search distance of the Site.

Response: State Response Sites

Identifies confirmed release sites where DTSC is involved in remediation, either in a lead or oversight capacity. These confirmed release sites are generally high-priority and high potential risk. This database was last updated in January 2017.

The facility identified in the search was neither the Site nor an immediately adjoining property. WSP identified the location of the listed facility and believes it is at a distance that does not pose a risk of environmental contamination to the Site. Further information regarding this facility is in the EDR report in Appendix C.

EnviroStor: EnviroStor Database

The Department of Toxic Substances Control's Site Mitigation and Brownfields Reuse Program's EnviroStor database identifies sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (NPL); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to the information that was available in Cal-Sites and provides additional site information, including, but not limited to, the identification of formerly contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites. This database was last updated in January 2017.

The facilities identified in the search did not include the Site or the immediately adjoining properties. WSP identified the locations of listed facilities and believes they are at distances that do not pose a risk of environmental contamination to the Site. Further information regarding these facilities is in the EDR report in Appendix C.

State Landfill (SWL/LF) Facilities

SWF/LF type records typically contain an inventory of solid waste disposal facilities or landfills in a particular state. Depending on the state, these may be active or inactive facilities or open dumps that failed to meet RCRA Subtitle D Section 4004 criteria for solid waste landfills or disposal sites. This database was searched for facilities within one half mile of the Site, and was last updated in February 2017.

No State landfill facilities were identified as being within the applicable search distance of the Site.

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SLIC: Statewide SLIC Cases

This database contains Cleanup Program Site (CPS; also known as Site Cleanups (SC), and formerly known as Spills, Leaks, Investigations, and Cleanup (SLIC) sites) included in GeoTracker. The program is designed to protect and restore water quality from spills, leaks, and similar discharges. This database was last updated in March 2017.

The facilities identified in the search did not include the Site or the immediately adjoining properties. WSP identified the locations of listed facilities and believes they are at distances that do not pose a risk of environmental contamination to the Site. Further information regarding these facilities is in the EDR report in Appendix C.

Leaking USTs: Leaking Underground Storage Tanks

LUST records contain an inventory of reported leaking underground storage tank incidents. The database contains information about the locations of leaking tanks, the identity of leaked material, and the status of site cleanup. Not all states maintain these records, and the information stored varies by state. This database was searched for facilities within one half mile of the Site, and was last updated in March 2017.

The facilities identified in the search did not include the Site; however, the listed Pacific Bell, Office Building, and Varsity Theatre facilities are immediately southwest, approximately 50 feet west-southwest, and 300 feet north of the Site, respectively. WSP's opinion of the potential impact of each facility to the Site is discussed in Section 7.2. WSP identified the locations of the other listed facilities and believes they are at distances that do not pose a risk of environmental contamination to the Site. Further information regarding all listed facilities is in the EDR report in Appendix C.

HIST LUST: Fuel Leak Site Activity Report

A listing of open and closed leaking underground storage tanks. This listing is no longer updated by the county. Leaking underground storage tanks are now handled by the Department of Environmental Health. This database was searched for facilities within one half mile of the Site, was last updated in March 2005, and no update is planned.

The facilities identified in the search did not include the Site; however, the listed Office Building and Varsity Theatre facilities are approximately 50 feet west-southwest and 300 feet north of the Site, respectively. WSP's opinion of the potential impact of each facility to the Site is discussed in Section 7.2. WSP identified the locations of the other listed facilities and believes they are at distances that do not pose a risk of environmental contamination to the Site. Further information regarding all listed facilities is in the EDR report in Appendix C.

UST: Underground Storage Tanks

UST's are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA) and must be registered with the state department responsible for administering the UST program. The information includes facility, owner and tank information as submitted on the registration forms.

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Available information varies by state program. This database was searched for facilities that include or are immediately adjacent to the Site, and was last updated in March 2017.

The facilities identified in the search did not include the Site; however, the listed AT&T/SBC facility is immediately southwest of the Site. WSP's opinion of its potential impact to the Site is discussed in Section 7.2. WSP identified the locations of the other listed facilities and believes they are at distances that do not pose a risk of environmental contamination to the Site. Further information regarding all listed facilities is in the EDR report in Appendix C.

ASTs: Aboveground Storage Tanks

The information includes facility, owner and tank information as submitted on registration forms. This database was searched for facilities that include or are immediately adjacent to the Site, and was last updated in July 2016.

The facilities identified in the search did not include the Site; however, the listed Switch and Data facility (listed twice) is approximately 50 feet west-southwest of the Site. WSP's opinion of its potential impact to the Site is discussed in Section 7.2. WSP identified the locations of the other listed facilities and believes they are at distances that do not pose a risk of environmental contamination to the Site. Further information regarding all listed facilities is in the EDR report in Appendix C.

VCP: Voluntary Cleanup Program Properties

The VCP database contains low threat level properties with either confirmed or unconfirmed releases and the project proponents have requested that DTSC oversee investigation and/or cleanup activities and have agreed to provide coverage for DTSC's costs. This database was searched for facilities within one half mile of the Corridor, and was last updated in January 2017.

The facilities identified in the search did not include the Site or the immediately adjoining properties. WSP identified the locations of listed facilities and believes they are at distances that do not pose a risk of environmental contamination to the Site. Further information regarding these facilities is in the EDR report in Appendix C.

Brownfields

A listing of sites the SWRCB considers to be Brownfields since these are sites have come to them through the memorandum of agreement process. This database was searched for facilities within one half mile of the Site, and was last updated in January 2017.

The facility identified in the search was neither the Site nor an immediately adjoining property. WSP identified the location of the listed facility and believes it is at a distance that does not pose a risk of environmental contamination to the Site. Further information regarding this facility is in the EDR report in Appendix C.

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The Indian UST database contains information regarding underground storage tanks on Indian lands. Information in this database is maintained by Region 5 of the U.S. EPA. This database was searched for facilities that include or are immediately adjacent to the Site, and was last updated in October 2016.

No Indian UST facilities were identified as being on or immediately adjacent to the Site.

4.2 Regulatory Agency File and Records Review

WSP reviewed or attempted to review agency file records for facilities that were identified in the standard environmental record sources listed above. These reviews were conducted for the Site and adjoining properties that were identified in one or more of the above standard databases. The purpose of the regulatory file review is to obtain sufficient information to assist the environmental professional in determining if a REC, HREC, CREC, or a *de minimis* condition exists at the property in connection with the listing.

A copy of relevant portions of the GeoTracker records is included in Appendix D.

4.2.1 CVS Pharmacy #9915

The CVS Pharmacy #9915 at 352 University Avenue is immediately northwest of the Site. It is listed in the RCRA-LQG database. No GeoTracker files were available for this facility.

This facility generated a variety of wastes beginning in 1988 including ignitable waste, corrosive waste, chromium, mercury, selenium, m-cresol, P001 and P075 wastes, and wastes in the U002, U129, U165, and U205 categories. No violations were identified in connection with the waste generation.

4.2.2 Switch & Data/PAIX

The Switch & Data/PAIX facility (a.k.a. Office Building) at 529 Bryant Street is approximately 50 feet west-southwest of the Site. It is listed in the RCRA-SQG, LUST, HIST LUST, AST, and HIST CORTESE databases.

This facility generated ignitable waste, undefined waste, benzene, and/or toluene beginning in 1981. No violations were identified in connection with the waste generation.

A 1,500-gallon heating oil UST was installed beneath the sidewalk in front of the building in 1929. A release was reported from the UST system at the facility in 1993 during removal activities. GeoTracker file information indicates that a 2,000-gallon UST was removed in 1979 from the alley behind the property at 333 Hamilton Avenue, which may have been a source of petroleum

contamination on the property. A Phase II investigation report in the files indicated that the direction of groundwater flow on the property in October 1990 was south-southwest; groundwater was reportedly present at approximately 35 feet below the ground surface. This direction of groundwater flow was different from other area reported flow direction which is generally eastward toward San Francisco Bay. Low concentrations of petroleum hydrocarbons were found in soil beneath the piping adjacent to footings in the basement; the impacted soil was excavated and removed from the property. The lithology on the property indicated that approximately 20 feet of brown silt and clay is present over at least 30 feet of brown sandy silt, which grades into silty sands and gravel. TPH was found at low concentrations in MW-4, an upgradient well located near the northeast corner of the building, and it was concluded that the contamination may have originated from an off-site location, possibly the UST associated with the Pacific Bell property. The contamination investigation received a "completed – case closed" designation in March 1996.

The facility reportedly has a 2,150-gallon AST, which presumably is associated with a backup generator.

4.2.3 Walgreens #13596

The Walgreens #13596 facility (a.k.a. Walgreens #12141 and Premier Properties) at 300 University Avenue is approximately 200 feet west-southwest of the Site. It is listed in the RCRA-CESQG database. No GeoTracker files were available for this facility.

This facility was a conditionally exempt small quantity generator of D001 ignitable waste in 2005. Additional waste generation occurred through at least 2014, with wastes in the D001, and D002 categories, chromium, mercury, selenium, m-cresol, P001, and P075 categories. No violations were identified in connection with the waste generation.

4.2.4 Pacific Bell

The Pacific Bell facility (a.k.a. AT&T/SBC and Pershas Rug & Carpet) at 345 Hamilton Avenue is immediately southwest of the Site. It is listed in the LUST and UST databases.

This facility had a 10,000-gallon diesel UST that was situated in the alley behind the building; it was installed in 1967 and removed in June 1993. Minimal information was available regarding the UST and the release, which was reported during the removal of the tank. The facility investigation received a closure/No Further Action letter in December 1995.

4.2.5 Varsity Theatre

The Varsity Theatre facility at 456 University Avenue is approximately 300 feet north of the Site. It is listed in the LUST database.

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GeoTracker records indicate that a 1,500-gallon UST containing "bunker oil" (a heavy, viscous hydrocarbon mixture) was located near the southeastern corner of the building. The tank was believed to have been installed when the building was constructed in about 1927. A release was reported from the UST in September 1995 during removal activities. A total of 270 gallons of liquid were removed from the UST, and 20 cubic yards of contaminated soil were removed from beneath the UST piping. The facility received a Closure/No Further Action letter in July 1998.

4.3 Additional Environmental Record Sources

In addition to the standard environmental database records described above, numerous supplemental databases were searched by EDR for facilities in the vicinity of the Site. When facilities were identified as being within the search distance for that database, they were included and mapped in the EDR report. The supplemental databases searched are listed in the EDR report in Appendix C; only those databases with identified facilities are discussed below.

In addition to the standard environmental record sources discussed above, WSP contacted additional agencies to provide supplemental information regarding the Site and surrounding properties.

4.3.1 Supplemental EDR Databases

RCRA-NonGen: RCRA Non Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste. This database was last updated in December 2016.

The facilities identified in the search did not include the Site or the immediately adjoining properties. WSP identified the locations of listed facilities and believes they are at distances that do not pose a risk of environmental contamination to the Site. Further information regarding these facilities is in the EDR report in Appendix C.

SWEEPS UST: SWEEPS UST Listing

The Statewide Environmental Evaluation and Planning System (SWEEPS) UST listing database was updated and maintained by a company contracted by the State Water Resources Control Board in the early 1990s. This database, last updated in June 1994, is no longer updated or maintained.

The facilities identified in the search did not include the Site; however, the listed Pacific Bell facility is immediately southwest of the Site. WSP's opinion of its potential impact to

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the Site is discussed in Section 7.2. WSP identified the locations of the other listed facilities and believes they are at distances that do not pose a risk of environmental contamination to the Site. Further information regarding all listed facilities is in the EDR report in Appendix C.

HIST UST: Hazardous Substance Storage Container Database

The Hazardous Substance Storage Container Database is a historical listing of UST sites. This database was last updated in October 1990, and no further update is planned.

The facilities identified in the search did not include the Site; however, the listed Pacific Bell facility is immediately southwest of the Site. WSP's opinion of its potential impact to the Site is discussed in Section 7.2. WSP identified the locations of the other listed facilities and believes they are at distances that do not pose a risk of environmental contamination to the Site. Further information regarding all listed facilities is in the EDR report in Appendix C.

CA FID UST: Facility Inventory Database

The Facility Inventory Database (FID) contains a historical listing of active and inactive underground storage tank locations from the State Water Resource Control Board. Refer to local/county source for current data. This database was last updated in September 1995, and no update is planned.

The facilities identified in the search did not include the Site or the immediately adjoining properties. WSP identified the locations of listed facilities and believes they are at distances that do not pose a risk of environmental contamination to the Site. Further information regarding these facilities is in the EDR report in Appendix C.

HISTORIC CORTESE: Hazardous Waste and Substance Site List

The sites on this list are designated by the State Water Resources Control Board, the Integrated Waste Board, and the Department of Toxic Substances Control. This database, last updated in April 2001, is no longer updated or maintained.

The facilities identified in the search did not include the Site; however, the listed Office Building and Varsity Theatre facilities are approximately 50 feet west-southwest and 300 feet north of the Site, respectively. WSP's opinion of the potential impact of each facility to the Site is discussed in Section 7.2. WSP identified the locations of the other listed facilities and believes they are at distances that do not pose a risk of environmental contamination to the Site. Further information regarding all listed facilities is in the EDR report in Appendix C.

CUPA Listing

CUPA Program Listing from the Environmental Health Services division. This database was last updated in September 2011.

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The facilities identified in the search did not include the Site; however, the listed Pacific Bell, CVS Pharmacy, Walgreens (listed twice), Holiday Cleaners, and Gate Cleaners facilities are immediately southwest, immediately northwest, approximately 200 feet west-southwest, 220 feet southwest, and 260 feet northeast of the Site, respectively. WSP's opinion of the potential impact of each facility to the Site is discussed in Section 7.2. WSP identified the locations of the other listed facilities and believes they are at distances that do not pose a risk of environmental contamination to the Site. Further information regarding all listed facilities is in the EDR report in Appendix C.

DRYCLEANERS: Drycleaner Establishments

A list of drycleaner related facilities that have EPA ID numbers. These are facilities with certain SIC codes: power laundries, family and commercial; garment pressing and cleaner's agents; linen supply; coin-operated laundries and cleaning; drycleaning plants, except rugs; carpet and upholster cleaning; industrial launderers; laundry and garment services. This database was last updated in March 2017.

The facilities identified in the search did not include the Site; however, the listed Holiday Cleaners and Gate Cleaners facilities are approximately 220 feet southwest and 260 feet northeast of the Site, respectively. WSP's opinion of the potential impact of each facility to the Site is discussed in Section 7.2. WSP identified the locations of the other listed facilities and believes they are at distances that do not pose a risk of environmental contamination to the Site. Further information regarding all listed facilities is in the EDR report in Appendix C.

EDR Historical Auto Stations

A proprietary database compiled by EDR researchers reviewing collections of business directories. This database includes categories of sources including gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, etc.

The facilities identified in the search did not include the Site; however, the listed Auto Tow facility is approximately 225 feet southwest of the Site. WSP's opinion of its potential impact to the Site is discussed in Section 7.2. WSP identified the locations of the other listed facilities and believes they are at distances that do not pose a risk of environmental contamination to the Site. Further information regarding all listed facilities is in the EDR report in Appendix C.

EDR Historical Cleaners

A proprietary database compiled by EDR researchers reviewing collections of business directories. This database includes categories of sources including dry cleaners, cleaners, laundry, Laundromat, cleaning/laundry, wash & dry, etc.

The facilities identified in the search did not include the Site; however, the listed Pershas Rug & Carpet, "Leather Specialists at D," Economy Cleaners, and Gate Cleaners facilities are immediately southwest, approximately 190 feet west, 140 feet east, and 260 feet northeast of the Site, respectively. WSP's opinion of the potential impact of each facility to the Site is discussed in Section 7.2. WSP identified the locations of the other

listed facilities and believes they are at distances that do not pose a risk of environmental contamination to the Site. Further information regarding all listed facilities is in the EDR report in Appendix C.

4.3.2 County Health Department Records

WSP requested file information regarding contamination, water supply well log records and septic system permits from the Santa Clara County Health Department for the Site on August 28, 2017. The Health Department responded to WSP's request, provided a statement that the Department has no records regarding the Site; a copy of this statement is included in Appendix D.

4.3.3 Assessor's Records

WSP searched the Assessor's Department website on August 28, 2017 to obtain records regarding the Site. The Assessor's Department website had a map depicting the Site and surrounding properties. A copy of the map obtained from the Assessor's Department is included in Appendix D.

4.3.4 Building Department Records

Since no structures exist on the Site, WSP believes that no useful information would likely be obtained by contacting the local building department. WSP requested EDR to conduct a search for building permits; EDR did not identify any records for the Site.

4.3.5 Site Utility Information

WSP learned from Ms. Holly Boyd of the City of Palo Alto, that the city of Palo Alto provides water, sewer, natural gas, and electrical utilities to the Site and surrounding properties, although the utilities are not in use at the Site.

4.4 Physical Setting Sources

4.4.1 Current USGS Topographic Map

WSP obtained and reviewed a copy of the most recent USGS topographic map of the Palo Alto, California Quadrangle for information regarding the Site. According to the topographic map, the Site is approximately 50 feet above mean sea level as shown on Figure 1 in Appendix A. The surface topography of the Site and the surrounding area is generally flat. The map shows that a post office is immediately southeast of the Site across Hamilton Avenue, and a church is immediately northeast of the Site across Waverley Street.

4.4.2 Surficial Soils

WSP reviewed the soil survey maps prepared by the U.S. Department of Agriculture, Natural Resources Conservation Services (formerly the Soil Conservation Service) for Santa Clara

County to obtain general information about the surficial soils on the Site. Where they were visible, WSP also viewed surficial soils to better identify the on-site soil characteristics. WSP did not dig any exploration holes as part of this ESA; thus, no subsurface soils were viewed.

The soil conservation maps show that soils on the Site fall within the Urban Land – Stevenscreek Complex, 0 to 2 percent slopes classification. The soils in this classification are well drained and have moderately high permeabilities. No undisturbed soil exists on the Site; however, the little soil present in the small landscaped islands within the parking lot appears to be a gravelly loam.

4.4.3 Soils Overlying the Bedrock Formation

The map, "2010 Geologic Map of California" (Gutierrez, et. al., 2010), shows that the uppermost geologic deposit on the Site is Early Pleistocene older alluvium, lake, playa, and terrace deposits.

WSP obtained information about the geology of the surrounding area while reviewing soil boring logs for the Switch & Data/PAIX facility, approximately 50 feet west-southwest of the Site. Approximately 20 feet of brown silt and clay is present over at least 30 feet of brown sandy silt, which grades into silty sands and gravel. Groundwater at the adjacent Switch & Data/PAIX facility was found to be approximately 35 feet below the ground surface.

4.4.4 Anticipated Susceptibility of Groundwater to Contamination

Based on the geology of the Site and the general area, WSP believes that contaminants leaked or spilled on the Site would have a moderately high potential to migrate vertically to underlying water-bearing zones. Information obtained by WSP suggests that the uppermost water-bearing zone is moderately to highly permeable; thus, lateral groundwater movement and contaminant migration from potentially impacted areas are expected to be moderately fast. Phase II testing would be needed to better identify the actual geology of the Site, the permeability of soils and water-bearing zones, and whether soil or groundwater has been impacted.

4.5 Historical Use Information

4.5.1 Aerial Photographs

Digital aerial photographs for the years 1939, 1943, 1948, 1956, 1958, 1963, 1968, 1974, 1982, 1991, 1998, 2005, 2009, 2010, and 2012 were obtained from EDR. A 2016 satellite aerial photograph was obtained from the Google Earth Pro website. No aerial photographs were available from before 1939. The aerial photographs are included in Appendix E. Portions of the aerial photographs containing the Site and surrounding properties were cropped and enlarged, and are included in Appendix E. The aerial photographs have been rated as to their clarity (i.e., poor, fair, good, or excellent).

1939 Aerial Photograph

The clarity of the photograph was fair. The Site contained two large structures on the southeast part of the property and one small structure on the northwest part of the property. Several trees were on the Site between the structures. The surrounding properties appeared to contain a mixture of residential and commercial structures; the properties to the north and northwest were commercial stores fronting University Avenue or Waverly Street. A large structure (post office) was southeast of the Site across Hamilton Avenue.

1943 Aerial Photograph

The clarity of the photograph was poor, and details could not be discerned; however, conditions on the Site and in the surrounding area appeared to be similar to those in the 1939 photograph.

1948 Aerial Photograph

The clarity of the photograph was fair. The conditions on the Site and in the surrounding area were similar to those in the 1939 and 1943 photographs.

1956 Aerial Photograph

The clarity of the photograph was poor. The Site appeared to have been cleared of all structures and trees, and may have been occupied by vehicles. Conditions in the surrounding area were similar to those in the 1948 photograph; however, a new structure was immediately southwest of the Site.

1958 Aerial Photograph

The clarity of the photograph was fair. The conditions on the Site and in the surrounding area were similar to those in the 1956 photograph. The Site was clearly a parking lot with numerous vehicles.

1963 Aerial Photograph

The clarity of the photograph was excellent. The conditions on the Site and in the surrounding area were similar to those in the 1958 photograph; however, a larger building was immediately southwest of the Site than had been present previously, and a large building was east of the Site across the Hamilton Avenue and Waverley Street intersection.

1968 Aerial Photograph

The clarity of the photograph was poor. The conditions on the Site and in the surrounding area were similar to those in the 1963 photograph; however, a new structure was northeast of the Site across Waverley Street, replacing the one previously present.

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1974 Aerial Photograph

The clarity of the photograph was very good. The conditions on the Site and in the surrounding area were similar to those in the 1968 photograph.

1982 Aerial Photograph

The clarity of the photograph was fair. The conditions on the Site and in the surrounding area were similar to those in the 1974 photograph.

1991 Aerial Photograph

The clarity of the photograph was fair. The conditions on the Site and in the surrounding area were similar to those in the 1982 photograph; however, the building at the east corner of the Hamilton Avenue and Waverley Street intersection had been replaced by a much larger structure.

1998 Aerial Photograph

The clarity of the photograph was fair. The conditions on the Site and in the surrounding area were similar to those in the 1991 photograph.

2005 Aerial Photograph

The clarity of the photograph was poor. The conditions on the Site and in the surrounding area were similar to those in the 1998 photograph.

2009 Aerial Photograph

The clarity of the photograph was fair. The conditions on the Site and in the surrounding area were similar to those in the 2005 photograph.

2010 Aerial Photograph

The clarity of the photograph was very good. The conditions on the Site and in the surrounding area were similar to those in the 2009 photograph.

2012 Aerial Photograph

The clarity of the photograph was fair. The conditions on the Site and in the surrounding area were similar to those in the 2010 photograph.

2016 Aerial Photograph

The clarity of the photograph was excellent. The conditions on the Site and in the surrounding area were similar to those in the 2012 photograph.

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4.5.2 Sanborn Maps

During the late 1800's and throughout much of the 1900's, the Sanborn Map Company periodically prepared detailed maps showing the locations and types of buildings, and uses of properties in areas of many towns and cities throughout the United States. Included on these maps are the locations of aboveground and underground storage tanks, and other features now recognized as RECs. Environmental Data Resources, Inc. (EDR) of Shelton, Connecticut now possesses the most complete archive of these maps.

WSP requested EDR to search for fire insurance maps for the Site. EDR identified and provided WSP with Sanborn maps for the years 1895, 1897, 1901, 1904, 1908, 1924, 1947, 1948, 1949, 1956, 1969, and 1978. A copy of the portion of the maps which includes the Site is in Appendix F. Details shown on the maps are discussed below.

1895 Sanborn Map

The 1895 Sanborn Map showed that the Site was a vacant property. The surrounding properties had a mixture of uses, including residential, churches, and vacant.

1897 Sanborn Map

The 1897 Sanborn Map showed that conditions on the Site and surrounding properties were similar to those depicted on the 1895 map.

1901 Sanborn Map

The 1901 Sanborn Map showed that conditions on the Site and surrounding properties were similar to those depicted on the 1897 map; however, additional dwellings were southeast of the Site across Hamilton Avenue.

1904 Sanborn Map

The 1904 Sanborn Map showed conditions on the Site and surrounding properties were similar to those depicted on the 1901 map; however, additional dwellings were south and east of the Site. A "water mill and tank house" was situated behind two dwellings approximately 200 feet east of the Site.

1908 Sanborn Map

The 1908 Sanborn Map showed that the 1st Congregational Church was situated on the northeast part of the Site at the west corner of the intersection of Waverly Street and Hamilton Avenue. The building had an electric hot air heater. Conditions on the surrounding properties were similar to those depicted on the 1904 map.

1924 Sanborn Map

The 1924 Sanborn Map showed that a dwelling and a detached garage were on the southern part of the Site. Numerous stores were northwest of the Site along University Avenue, including a market, hardware & paints, bakery, beauty parlor, variety, creamery, stationary, meats, and a cobbler. An auto sales and service facility was approximately 100 feet west of the Site.

1947 Sanborn Map

The 1947 Sanborn Map showed conditions on the Site were similar to those depicted on the 1924 map. A US Post Office (constructed in 1933) was southeast of the Site across Hamilton Avenue, replacing six dwellings. Most of the stores along University Avenue northwest of the Site were still present, but the use of the individual stores was mostly not indicated. The stores immediately northwest of the Site had been expanded toward the Site, and two areas were depicted as auto and storage use. Another new store was immediately northwest of the church on the Site, but was situated on the adjacent property.

1948 Sanborn Map

The 1948 Sanborn Map showed conditions on the Site and surrounding properties were similar to those depicted on the 1947 map.

1949 Sanborn Map

The 1949 Sanborn Map showed conditions on the Site and surrounding properties were similar to those depicted on the 1948 map.

1956 Sanborn Map

The 1956 Sanborn Map showed that the church, dwelling and garage on the Site were no longer present, and the entire Site was depicted as a parking lot. Several of the nearby stores along University Avenue appeared to have been consolidated into larger structures. The Pacific Telephone & Telegraph facility was southwest of the Site. The property east of the Site across the Hamilton Avenue and Waverley Street intersection contained a small office which was labeled "Gas & Oil" and there were three small unreadable markings along the east part of the building.

1969 Sanborn Map

The 1969 Sanborn Map showed conditions on the Site and surrounding properties were similar to those depicted on the 1956 map; however, Pacific Telephone & Telegraph telephone exchange occupied a large building immediately southwest of the Site in addition to its original building farther west-southwest of the Site. A bank was east of the Site across the Waverly Street and Hamilton Avenue intersection.

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1978 Sanborn Map

The 1978 Sanborn Map showed conditions on the Site and surrounding properties were similar to those depicted on the 1969 map.

4.5.3 Property Tax Maps

WSP requested EDR to search available property tax maps for the Site. EDR reported that no property tax maps were available. The document from EDR indicating there were no available property tax maps is included in Appendix G.

4.5.4 Title Records

WSP was not provided with title records by the client, and did not independently obtain them. WSP believes, however, that other information obtained by WSP was sufficient to identify the historical uses of the Site.

Activity and Use Limitations and Environmental Liens

WSP arranged to have a lien search conducted by EDR and reviewed it to identify whether any environmental liens, restrictive covenants, or institutional controls related to environmental issues had been filed against the property. No environmental liens or AULs were found. A copy of the EDR Lien Search Report is included in Appendix H.

4.5.5 Historic Topographic Maps

WSP obtained a copy of historic topographic maps for the years 1897, 1899, 1902, 1947, 1948, 1953, 1961, 1968, 1973, 1994, and 1999 from EDR. A copy of these historic topographic maps is included in Appendix I.

1897 Historic Topographic Map

The 1897 Historic Topographic map showed that the Site was an undeveloped property with no structures. The surrounding properties were mostly vacant with a few nearby dwellings. Hamilton Avenue and Waverly Street were both present, but unnamed on the map.

1899 Historic Topographic Map

The 1899 Historic Topographic map showed conditions on the Site and surrounding properties were similar to those depicted on the 1897 map.

1902 Historic Topographic Map

The 1902 Historic Topographic map showed conditions on the Site and surrounding properties were similar to those depicted on the 1899 map.

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1943 Historic Topographic Map

The 1943 Historic Topographic map showed that a church was on the Site. The map did not depict dwellings or commercial structures.

1947 Historic Topographic Map

The 1947 Historic Topographic map showed conditions on the Site and surrounding properties were similar to those depicted on the 1943 map; however, the map showed the area to be within the Palo Alto city limits (shaded red).

1948 Historic Topographic Map

The 1948 Historic Topographic map showed conditions on the Site and surrounding properties were similar to those depicted on the 1947 map.

1953 Historic Topographic Map

The 1953 Historic Topographic map showed conditions on the Site and surrounding properties were similar to those depicted on the 1948 map. A post office was labeled immediately southeast of the Site across Hamilton Avenue.

1961 Historic Topographic Map

The 1961 Historic Topographic map showed that no structures were on the Site. Waverly Road was labeled on the map as “Waverley” Road.

1968 Historic Topographic Map

The 1968 Historic Topographic map showed conditions on the Site and surrounding properties were similar to those depicted on the 1961 map.

1973 Historic Topographic Map

The 1973 Historic Topographic map showed conditions on the Site and surrounding properties were similar to those depicted on the 1968 map.

1994 Historic Topographic Map

The 1994 Historic Topographic map showed conditions on the Site and surrounding properties were similar to those depicted on the 1973 map.

1999 Historic Topographic Map

The 1999 Historic Topographic map showed conditions on the Site and surrounding properties were similar to those depicted on the 1994 map.

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4.5.6 Street Directories

WSP reviewed city directory information compiled by EDR. Haines Company Directory had coverage for the area for the Site and surrounding area from 2000 to 2014. Pacific Bell Directory had coverage for the Site and surrounding area from 1975 through1996. Polk's City Directory had coverage for the area for the Site and surrounding area from 1922 to 1974. No coverage for the area was available by address listing prior to 1922. Specifically, information was obtained from the 1922, 1925, 1926, 1930, 1931, 1935, 1936, 1940, 1942, 1945, 1946, 1950, 1955, 1957, 1960, 1962, 1963, 1964, 1965, 1966, 1968, 1970, 1974, 1975, 1978, 1980, 1982, 1985, 1986, 1991, 1996, 2000, 2001, 2006, 2010, and 2014 directories. A copy of the city directory information obtained from EDR is included in Appendix J.

Listings for the Site include 349 Hamilton Avenue from 1926 through 1946; this address was residential and occupied by multiple individuals during the period of coverage, although a tea room was also listed at the address in 1936. First Congregational Church was listed at 385 Hamilton Avenue from 1931 through 1946. Other addresses in the range for the Site include 353, 361, 371, and 391 Hamilton Avenue. Listings for these addresses were in the early 1980s, were residential, and do not appear to be correct since no structures were on the Site at this time.

Nearby and adjacent properties were a mix of residential, commercial, and religious properties during the entire period of coverage. Holiday Cleaners was listed at 595 Bryant Street in 1991 and 2001. Pershas Rug & Carpet Cleaning was listed at 345 Hamilton Avenue in 2010 and 2014. C & E Oil Co. No 4 gas was listed at 605 Waverley Street in 1955, and Lucky Seven Serv gas was listed at this address in 1960.

4.5.7 Palo Alto Historical Association

The Palo Alto Historical Association website had photographs of the First Congregational Church that was formerly located on the northeast portion of the Site. The information on the website indicated that the church was constructed in 1905. At that time, Hamilton Avenue was unpaved but sidewalks were present; however, a 1907 photograph showed it had been paved by that time. The church was constructed of wood and fieldstones, and in photographs from the 1920s and 1930s, it was partially covered with ivy.

4.6 Historic Use Information Regarding the Site

Based upon the foregoing historical information, it appears as though the Site was first developed in 1905 when a church was constructed on the northeast part of the Site. A dwelling was constructed on the southwest part of the Site and a detached garage was on the northwest part of the Site in about between 1908 and 1924. The Site was occupied by the church and dwelling

until about 1955 when the structures were demolished and the Site was turned into a parking lot. The Site has been used as a parking lot since that time.

4.6.1 Data Failures

Data failure occurs when all of the standard historical sources that are reasonably ascertainable and likely to be useful have been reviewed and yet the historical research objectives have not been met.

WSP believes that the historical research objectives have been met for this ESA, and that data failure has not occurred.

4.7 Historic Use Information Regarding the Adjoining and Surrounding Properties

Based upon the foregoing historical information, it appears as though the surrounding properties have been used for a mixture of residential, commercial, and religious purposes since at least 1895. An oil company was on the property east of the Site across the Hamilton Avenue and Waverley Street intersection during the late 1950s and early 1960s. Commercial stores were present northwest of the Site since the 1940s, and were enlarged and consolidated during the 1950s. Most development in the area appeared to have been complete by the 1980s.

5.0 SITE RECONNAISSANCE

5.1 Methodology and Limiting Conditions

Lorraine Ahlquist and Lyne-Marie Bouvet, the WSP staff members who performed the site walkover, conducted the reconnaissance on August 29, 2017 under the responsible charge of Adam Heft, who is an Environmental Professional. The qualifications of all individuals involved in this ESA are included in Appendix M. During the site walkover, WSP walked around the Site's perimeter to gather information about activities and potential contaminants on adjoining properties, and viewed all areas of the Site to learn about potential on-site contaminating activities. WSP's goal during the site walkover was to identify stains, stressed vegetation, and other evidence of RECs on the Site, and to gather information about activities and potential RECs on adjoining properties.

5.2 Photographs of the Site and Possible RECs

While performing its reconnaissance of the Site, WSP photographed the characteristics of the Site and surrounding properties and RECs that could be seen. A copy of selected photographs showing conditions on the Site is included in Appendix K.

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5.3 General Site Setting

5.3.1 Current Uses of the Site

The Site consists of a 0.66-acre parcel with no structures. The Site is an asphalt-paved parking lot with a few landscaped islands containing plants and trees.

5.3.2 Current Uses of Adjoining and Nearby Properties

The site investigation included a review of the conditions and uses of nearby and adjoining properties to identify potential environmental problems that might adversely impact the Site. WSP viewed these properties from either the Site boundary or readily accessible public rights-of-way. During its reconnaissance, WSP attempted to identify the current and historic activities on nearby and adjoining properties, and whether determine potentially contaminating substances were used as part of these activities. The following list includes properties immediately adjacent to the Site; along with nearby properties WSP believes could have stored or used potentially contaminating materials.

Adjacent and Nearby to the North:

- Tai Pan restaurant
- Prolific Oven bakery
- Palo Alto Sport Shop
- Waverley Street
- Episcopal church
- Gate Cleaners

Adjacent and Nearby to the East:

- Waverley Street
- Hamilton Avenue
- Wells Fargo
- Post Office

Adjacent and Nearby to the South:

- Hamilton Avenue

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- AT&T Building
- Curry Up Now (Restaurant)
- Bella Spa & Nails
- Holiday Cleaners
- Zola (restaurant)
- UPS store
- Charmelle 28 (lingerie)
- Tech services
- Timothy Adams Chocolates
- Dwelling
- Alley

Adjacent and Nearby to the West:

- PAIX Building
- Walgreens, JP Morgan
- Restaurants
- Apple, Inc.
- CVS Pharmacy
- Starbucks
- Decker Building

5.3.3 General Site Observations

WSP did not observe any hazardous substances or petroleum products, storage tanks, odors, pools of liquids, drums or containers (in connection with an identified use, unidentified use, or unidentified substances) during its walkover.

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5.3.4 Electrical Transformers and Capacitors

WSP observed one pad-mounted transformer along the northeast edge of the Site, a second near the south corner of the Site, and a third on the northwest part of the Site. No evidence of leakage or staining was evident on any of the transformers or on the ground around the transformers. Based on their appearance, WSP estimates that the transformers were installed approximately 20 years ago. WSP does not believe that the transformers are a REC.

5.4 Exterior Areas

The Site is an asphalt-paved public parking lot. Small landscaped islands with plants and trees are situated along some of the parking spaces and are bounded by concrete curb and gutters. Three transformers (discussed in Section 5.3.4) are on the Site. A roll-off trash dumpster is situated near the south corner of the Site.

WSP did not observe any pits, ponds, or lagoons, stained soil or pavement, stressed vegetation, or solid waste (e.g. fill soil, debris, trash, etc.) during its walkover.

5.5 Interior Areas

No structures are on the Site.

6.0 INTERVIEWS

WSP representative Adam Heft interviewed a representative of the Site owner about the Site's current and former uses. The information provided by this interview is discussed below and included in Appendix L.

6.1 Interview with Site Owner Representative

WSP interviewed Ms. Holly Boyd, a representative of the City of Palo Alto, regarding the current and historical use the Site. Ms. Boyd reported that the Site has been used for public parking for a long period of time. Ms. Boyd was unaware of any potential environmental issues, including environmental liens or AULs, in connection with the Site.

Ms. Boyd stated that the property is zoned PF (public facilities). The City of Palo Alto provides natural gas, electricity, drinking water (although these utilities aren't connected), and sewers to the Site and surrounding properties.

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7.0 EVALUATION

7.1 Findings

Through the activities described above, WSP identified the following potential RECs, CRECs, HRECs, and *de minimis* environmental conditions on the Site or in the surrounding area. WSP's opinion as to the potential impact of these issues on the Site is discussed in Section 7.2.

7.1.1 Former Structures

A church was formerly on the northeast part of the Site from 1905 until the mid-1950s, and a dwelling and detached garage were on the southwest and northwest part of the Site from between 1908 and 1924 until the mid-1950s when they were demolished.

7.1.2 Nearby and Adjacent Properties of Concern

Nine nearby and adjacent properties were listed in one or more governmental databases.

7.2 Opinion

Using information gathered as part of this ESA, WSP evaluated the potential RECs, CRECs, HRECs, and *de minimis* environmental conditions identified in Section 7.1 on both the Site and at nearby facilities as to their possible impact to the Site. To assess these issues, WSP used its best professional efforts to evaluate the possible contaminants that could be present, the toxicity and mobility of these contaminants, and geological factors that could influence the migration of possible contaminants.

7.2.1 Former Structures

A church was formerly on the northeast part of the Site from 1905 until the mid-1950s, and a dwelling and detached garage were on the southwest and northwest part of the Site from between 1908 and 1924 until the mid-1950s when they were demolished. No specific information was available regarding how the structures were demolished, including whether debris from the structures were buried on the property. The building materials could contain heavy metals, lead-based paint, and/or asbestos containing materials, which would require appropriate disposal. And while not an environmental concern, foundation materials from these former structures likely remain in the subsurface. WSP considers this incomplete information to be a data gap.

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7.2.2 Nearby and Adjoining Properties of Concern

Nine nearby and adjacent properties were listed in one or more governmental databases. WSP evaluated the potential impact to the Site from each of the nearby and adjoining properties identified below.

The Contiguous Property Owner defense in the federal Comprehensive Environmental Response and Liability Act (CERCLA) protects individuals or entities from liability when they purchase properties not known to be contaminated, but that could be contaminated by migration from adjacent properties owned by others. To satisfy the requirements of the defense, several requirements, described in Appendix N of this report, must be met.

CVS Pharmacy #9915

The CVS Pharmacy #9915 at 352 University Avenue is immediately northwest of the Site. It is listed in the RCRA-LQG and CUPA Listings databases. This facility generated a variety of wastes, but no violations were identified in connection with the waste generation. Although this facility is immediately northwest of the Site and generated a variety of wastes, no contamination is known to be associated with it. Therefore, WSP believes that this facility is not a REC to the Site.

Switch & Data/PAIX

The Switch & Data/PAIX facility (a.k.a. Office Building) at 529 Bryant Street is approximately 50 feet west-southwest of the Site. It is listed in the RCRA-SQG, LUST, HIST LUST, AST, and HIST CORTESE databases. This facility generated a variety of wastes, but no violations were identified in connection with the waste generation.

A 1,500-gallon heating oil UST was present beneath the sidewalk in front of the facility approximately 290 feet southwest of the Site. Low concentrations of soil and groundwater contamination were identified on the property; however, groundwater was found to flow south-southwest on the property. The impacted soil was excavated and removed from the property, and the facility received a “completed – case closed” designation in March 1996. Because the impacted soil was removed from the property and because groundwater was found to flow south-southwest away from the Site, WSP believes that this facility is not a REC to the Site.

Walgreens #13596

The Walgreens #13596 facility (a.k.a. Walgreens #12141 and Premier Properties) at 300 University Avenue is approximately 200 feet west-southwest of the Site. It is listed in the RCRA-CESQG and CUPA Listings databases. This facility generated a variety of wastes, but no violations were identified in connection with the waste generation. Because this facility is approximately 200 feet from the Site and because groundwater at a nearby property was found to

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flow south-southwest, contaminants associated with this facility (if present) would be carried away from the Site. WSP therefore believes that this facility is not a REC to the Site.

Pacific Bell

The Pacific Bell facility (a.k.a. AT&T/SBC and Pershas Rug & Carpet) at 345 Hamilton Avenue is immediately southwest of the Site. This facility had a 10,000-gallon diesel UST that was situated in the alley behind the building within about 40 feet of the Site. This tank leaked; although records indicated that contamination was minimal, it appears as though groundwater contamination that may have originated from this tank was present in a monitoring well approximately 20 feet to the southwest of the tank. Soil contamination could also be present at depth, and could extend onto the Site. WSP therefore believes that this facility is a REC to the Site.

Varsity Theatre

The Varsity Theatre facility at 456 University Avenue is approximately 300 feet north of the Site. It is listed in the LUST, HIST LUST, and HIST CORTESE databases. A 1,500-gallon UST containing "bunker oil" (a heavy hydrocarbon mixture) was located near the southeastern corner of the building approximately 260 feet from the Site. Minor soil contamination identified during the removal of the UST was excavated and disposed. Because of the limited amount of contamination identified on the property, the type of product stored in the UST, and the distance of the UST from the Site, WSP believes that this facility is not a REC to the Site.

Holiday Cleaners

Holiday Cleaners (a.k.a. Zeemen Inc.) at 595 Bryant Street is approximately 220 feet southwest of the Site. It is listed in the CUPA Listings, Drycleaners, and Historic Cleaners databases. This facility performs cleaning on the premises, and has been in operation since 1992. Although no contamination is known to be associated with this facility, accidental spillage and/or equipment leakage is common in dry cleaning operations, and in some cases, spent solvent is improperly disposed of "out the back door" to avoid disposal costs. Although soil and/or groundwater contamination may be present associated with the facility, the direction of groundwater flow reported at the nearby Switch & Data/PAIX facility was to the south-southwest, contamination would likely be carried away from the Site. WSP therefore believes that this facility is not a REC to the Site.

Gate Cleaners

Gate Cleaners at 439 Hamilton Avenue is approximately 260 feet northeast of the Site. This facility performs cleaning on the premises, and has been in operation since 1969. Although no contamination is known to be associated with this facility, accidental spillage and/or equipment leakage is common in dry cleaning operations, and in some cases, spent solvent is improperly disposed of "out the back door" to avoid disposal costs. Due to the relatively close proximity of

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the facility to the Site and because the direction of groundwater flow in the area is believed to be south-southwest toward the Site, WSP believes that this facility is a REC to the Site.

Auto Tow

The Auto Tow facility at 555 Bryant Street is approximately 225 feet southwest of the Site. It is listed in the Historic Auto Stations database, and was present from 2011 through 2014. No contamination is known to be associated with the facility. Because of the limited time this business was present, the distance from the Site, and the direction of groundwater flow in the area, WSP believes that this facility is not a REC to the Site.

Economy Cleaners

Economy Cleaners at 430 Hamilton Avenue was approximately 140 feet east of the Site at the location of the Wells Fargo facility. It is listed in the Historic Cleaners database. This facility was present in the 1970s and early 1980s; it subsequently moved to its current location at 486 Hamilton Avenue, approximately 520 feet northeast of the Site. Although no contamination is known to be associated with this facility, accidental spillage and/or equipment leakage is common in dry cleaning operations, and in some cases, spent solvent is improperly disposed of "out the back door" to avoid disposal costs.

This property (former address of 605 Waverley Street) was also occupied by C & E Oil Co. No 4 gas in 1955, and Lucky Seven Serv gas in 1960. Due to the close proximity of the facility to the Site and because the direction of groundwater flow in the area is believed to be south-southwest generally toward the Site, WSP believes that this facility is a REC to the Site.

7.3 Data Gaps

A data gap is a lack or inability to obtain information required by the ASTM and AAI standards, in spite of WSP's good faith efforts to obtain the information.

After completing its work, WSP believes that the following data gaps exist.

Although it made a good faith effort to gather the required information set forth in the ASTM and AAI standards, WSP was unable to ascertain whether debris from the structures formerly on the Site potentially remain in the subsurface before completing this report. The structures may have been burned or partially collapsed into basements, if present. The building materials could contain heavy metals, lead-based paint, and/or asbestos containing materials, which would require appropriate disposal. And while not an environmental concern, foundation materials from these former structures likely remain in the subsurface. WSP considers this incomplete information to be a data gap. WSP believes this data gap is significant since if building debris is present in the

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subsurface, it could impact potential construction costs and schedule, particularly if these materials require special disposal.

7.4 Conclusions

WSP USA (WSP) has performed a Phase I environmental site assessment (ESA) in conformance with the scope and limitations of 40 CFR Part 312 (Standards and Practices for All Appropriate Inquiries) and ASTM Method E 1527-13 (Standard Practice for Environmental Site Assessments) of the Parking Lot D property (the Site) at 375 Hamilton Avenue in Palo Alto, Santa Clara County, California for the City of Palo Alto. No party other than those listed in Section 2.8 may rely upon any information or opinion contained in this report. Any exceptions to, or deletions from, this practice are described in Section 2.5 of this report. This assessment has revealed no evidence of recognized environmental conditions in connection with the property except for the following:

1) The Pacific Bell facility (a.k.a. AT&T/SBC and Pershas Rug & Carpet) at 345 Hamilton Avenue is immediately southwest of the Site. This facility had a 10,000-gallon diesel UST that was situated in the alley behind the building within about 40 feet of the Site. This tank leaked; although records indicated that contamination was minimal, it appears as though groundwater contamination that may have originated from this tank was present in a monitoring well approximately 20 feet to the southwest of the tank. Soil contamination could also be present at depth, and could extend onto the Site. WSP therefore believes that this facility is a REC to the Site.

2) Gate Cleaners at 439 Hamilton Avenue is approximately 260 feet northeast of the Site. This facility performs cleaning on the premises, and has been in operation since 1969. Although no contamination is known to be associated with this facility, accidental spillage and/or equipment leakage is common in dry cleaning operations, and in some cases, spent solvent is improperly disposed of “out the back door” to avoid disposal costs. Due to the relatively close proximity of the facility to the Site and because the direction of groundwater flow in the area is believed to be south-southwest toward the Site, WSP believes that this facility is a REC to the Site.

3) Economy Cleaners at 430 Hamilton Avenue was approximately 140 feet east of the Site at the location of the Wells Fargo facility in the 1970s and early 1980s. This facility subsequently moved to its current location at 486 Hamilton Avenue, approximately 520 feet northeast of the Site. Although no contamination is known to be associated with this facility, accidental spillage and/or equipment leakage is common in dry cleaning operations, and in some cases, spent solvent is improperly

disposed of "out the back door" to avoid disposal costs. This property (former address of 605 Waverley Street) was also occupied by C & E Oil Co. No 4 gas in 1955, and Lucky Seven Serv gas in 1960. Due to the close proximity of the facility to the Site and because the direction of groundwater flow in the area is believed to be south-southwest generally toward the Site, WSP believes that this facility is a REC to the Site.

Although it made a good faith effort to gather the required information set forth in the ASTM and AAI standards, WSP was unable to ascertain whether debris from the structures formerly on the Site potentially remain in the subsurface before completing this report. The structures may have been burned or partially collapsed into basements, if present. The building materials could contain heavy metals, lead-based paint, and/or asbestos containing materials, which would require appropriate disposal. And while not an environmental concern, foundation materials from these former structures likely remain in the subsurface. WSP considers this incomplete information to be a data gap. WSP believes this data gap is significant since if building debris is present in the subsurface, it could impact potential construction costs and schedule, particularly if these materials require special disposal.

7.5 Additional Phase I Investigations

WSP believes that no additional Phase I ESA investigations are necessary to evaluate whether RECs exist in connection with the Site.

7.6 References

Professional Standards

40 CFR Part 312, Standards and Practices for All Appropriate Inquiries, 69 Fed. Reg. 52541, November 1, 2005.

"E 1527-13, Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process," American Society of Testing and Materials, West Conshohocken, PA, 2013.

Geology References

Jennings, Charles W., 1977, California Geologic Data Map No. 2, California Geological Survey. Updated version by Gutierrez, C. Bryant, W. Saucedo, G., and Wills, C., 2010.

State & Federal Database Report:

The EDR-Radius Map with GeoCheck®, Proposed Palo Alto Parking Structure Site, 375 Hamilton Avenue, California, 94301, Environmental Data Resources, Inc., Shelton, Connecticut, August 14, 2017.

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Sanborn Map Report:

Certified Sanborn® Map Report, Proposed Palo Alto Parking Structure Site, 375 Hamilton Avenue, California, 94301, Environmental Data Resources, Inc., Shelton, Connecticut, August 15, 2017, (1895, 1897, 1901, 1904, 1908, 1924, 1947, 1948, 1949, 1956, 1969, 1978).

Aerial Photographs:

The EDR Aerial Photo Decade Package, Proposed Palo Alto Parking Structure Site, 375 Hamilton Avenue, California, 94301, Environmental Data Resources, Inc., Shelton, Connecticut, August 15, 2017, (1939, 1943, 1948, 1956, 1958, 1963, 1968, 1974, 1982, 1991, 1998, 2005, 2009, 2010, 2012).

Google Earth Pro website, www.earth.google.com (2016).

Topographic Maps:

The EDR Historical Topographic Map Report, Proposed Palo Alto Parking Structure Site, 375 Hamilton Avenue, California, 94301, Environmental Data Resources, Inc., Shelton, Connecticut, August 14, 2017, (1897, 1899, 1902, 1943, 1947, 1948, 1953, 1961, 1968, 1973, 1994,1999, 2012).

Lien Search:

The *EDR Environmental LienSearch™, Proposed Palo Alto Parking Structure Site, 375 Hamilton Avenue, California*, 94301, Environmental Data Resources, Inc., Shelton, Connecticut, August 21, 2017.

Property Tax Maps:

The *EDR Property Tax Map Report, Proposed Palo Alto Parking Structure Site, 375 Hamilton Avenue, California*, 94301, Environmental Data Resources, Inc., Shelton, Connecticut, August 14, 2017.

Websites

EnviroStor: www.envirostor.dtsc.ca.gov.

GeoTracker: www.geotracker.waterboards.ca.gov.

NRCS on-line soil surveys: http://soils.usda.gov/survey/printed_surveys/.

Palo Alto Historical Association Photograph Collection: http://archives.pahistory.org/cdm4/results.php?CISOOP1=exact&CISOFIELD1=CISOSEARCHALL&CISOROOT=/PAHA&CISOBOX1=First+Congregational+Church+of+Palo+Alto.

Street Directories

The *EDR City Directory Abstract, Proposed Palo Alto Parking Structure Site, 375 Hamilton Avenue, California*, 94301, Environmental Data Resources, Inc., Shelton, Connecticut, August 21, 2017, (1922, 1925, 1926, 1930, 1931, 1935, 1936, 1940, 1942, 1945, 1946, 1950, 1955, 1957, 1960, 1962, 1963, 1964, 1965, 1966, 1968, 1970, 1974, 1975, 1978, 1980, 1982, 1985, 1986, 1991, 1996, 2000, 2001, 2006, 2010, 2014).

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Personal Interviews and Contacts:

Ms. Holly Boyd, City of Palo Alto, (650) 329-2612

Ms. Somira Pech, Santa Clara County Environmental Health Department, (408) 918-3423

7.7 Signatures of Environmental Professionals

We declare that, to the best of our professional knowledge and belief, we meet the definition of Environmental Professional as defined in §312.10 of 40 CFR Part 312. We have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the subject property. We have developed and performed the all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312.

Adam W. Heft, CPG[1]
Senior Geologist

David R. VanGoethem
Senior Environmental Engineer

[1] The certified professional geologist (CPG) designation is a nationally recognized qualification of the American Institute of Professional Geologists (AIPG); however, it does not represent state licensure, nor does the individual purport to be licensed in the State of California.

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8.0 NON-SCOPE SERVICES

WSP was not asked to complete other, non-scope investigations in conjunction with the Phase I ESA. WSP was, however, requested by the client to provide recommendations to evaluate the RECs.

8.1.1 Recommendations

Based on the information gathered as part of this Phase I ESA, review of the relevant data, and understanding of the planned Site uses, WSP recommends the following activities be completed:

1) Soil borings should be drilled in the northeast part of the Site and the south part of the Site to evaluate whether debris from the former structures exists in the subsurface. If debris is found to be present, soil samples should be collected and analyzed for heavy metals (including lead) and asbestos.

2) Soil borings should be drilled along the northeast and southeast edge of the Site to evaluate whether contaminants originating from the nearby Gate Cleaners and former Economy Cleaners properties have migrated and impacted the Site. Groundwater samples should be collected from each of the borings and analyzed for volatile organic compounds, polynuclear aromatic hydrocarbons, and total petroleum hydrocarbons.

3) Soil borings should be drilled along the northwest edge of the Site to evaluate whether petroleum contaminants emanating from the adjacent Pacific Bell facility's leaking underground storage tank had migrated and impacted the Site. Soil and/or groundwater samples should be collected from the borings and analyzed for volatile organic compounds, polynuclear aromatic hydrocarbons, and total petroleum hydrocarbons.

4) The City of Palo Alto should review the User's Ongoing Responsibilities (included in Appendix N of this report) and comply with the provisions therein.

9.0 GLOSSARY

This section of the report provides definitions of acronyms and special terms used in the report. It is not all inclusive.

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AAI: All Appropriate Inquiry. An investigation into the historical use and possible presence of contamination on a property that is a necessary component for persons seeking to establish one of the three CERCLA defenses as part of conducting due diligence.

ACM: Asbestos Containing Material. This is a material that contains more than one percent of an asbestos mineral. These materials are only identified in WSP's reports if an asbestos survey was performed prior to, or in conjunction with, WSP's environmental assessment.

AST: Aboveground Storage Tank. Any aboveground storage container larger than a 55-gallon drum, either empty or full.

ASTM: American Society of Testing Materials. This is the organization that creates standards for materials and testing; in this case, the standard for environmental site assessments, which is also based on the U.S. EPA standards for all appropriate inquiry.

AUL: Activity and Use Limitation. A legal mechanism that imposes land use controls (such as an ordinance barring the installation of water wells in a municipal area) or engineering controls (such as a deed restriction limiting a property's use to commercial zoning).

CERCLA: Comprehensive Environmental Response, Compensation, and Liability Act. Facilities regulated by this act are listed in the CERCLIS database.

CERCLIS: Comprehensive Environmental Response, Compensation, and Liability Information System. The CERCLIS database lists properties that are on or are proposed to be on the National Priorities List.

CFR: Code of Federal Regulations. The regulatory code developed by federal agencies pursuant to acts passed by the US Congress.

CREC: Controlled REC. A recognized environmental condition resulting from a past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority, with hazardous substances or petroleum products allowed to remain in place subject to the implementation of required controls.

Data Failure: Data failure occurs when all of the standard historical sources that are reasonably ascertainable and likely to be useful have been reviewed and yet the historical research objectives have not been met.

Data Gap: A data gap is a lack or inability to obtain information required by the ASTM and AAI standards, in spite of good faith efforts to obtain the information.

***de minimis*:** Conditions that generally do not present a material risk of harm to public health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies.

Due Diligence: The care a reasonable person should take before entering into a transaction with another party.

EDR: Environmental Data Resources. This company owns the Sanborn Fire Insurance Map Company holdings, and provides the governmental records search used in WSP's reports.

Environmental Professional: An individual who, as defined in the standards for all appropriate inquiry, possess the education and experience requirements to conduct and/or oversee certain aspects of environmental site assessments.

EPA: The U.S. Environmental Protection Agency.

ESA: Environmental Site Assessment.

Good Faith Effort: According to the AAI standards, good faith effort is "the absence of any intention to seek an unfair advantage or to defraud another party; an honest and sincere intention to fulfill one's obligations in the conduct or transaction concerned."

HREC: Historic Recognized Environmental Condition. A past release of any hazardous substances or petroleum products that has occurred in connection with the property and has been addressed to the satisfaction of the applicable regulatory authority or meeting unrestricted use criteria without subjecting the property to any required controls. HRECs are not considered to be RECs.

LUST: Leaking Underground Storage Tank.

NPL: National Priorities List. A list of contaminated properties whose cleanup is being overseen by the U.S. EPA.

PCB: Polychlorinated Biphenyls. A contaminant commonly found in old hydraulic equipment or electrical transformers.

RCRA: Resource Conservation and Recovery Act. The RCRA database includes selective information on facilities that generate, transport, store, treat and/or dispose of hazardous wastes.

REC: Recognized Environmental Condition. The presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose

a material threat of a future release to the environment. *De minimis* conditions are not recognized environmental conditions.

SHWS: State Hazardous Waste Sites. Properties included in the SHWS database have been identified by the State environmental regulatory agency as having been contaminated with hazardous wastes.

USC: U.S. Code. The full set of Laws passed by the U.S. Congress.

User: The individual or entity for which the Phase I environmental assessment has been prepared.

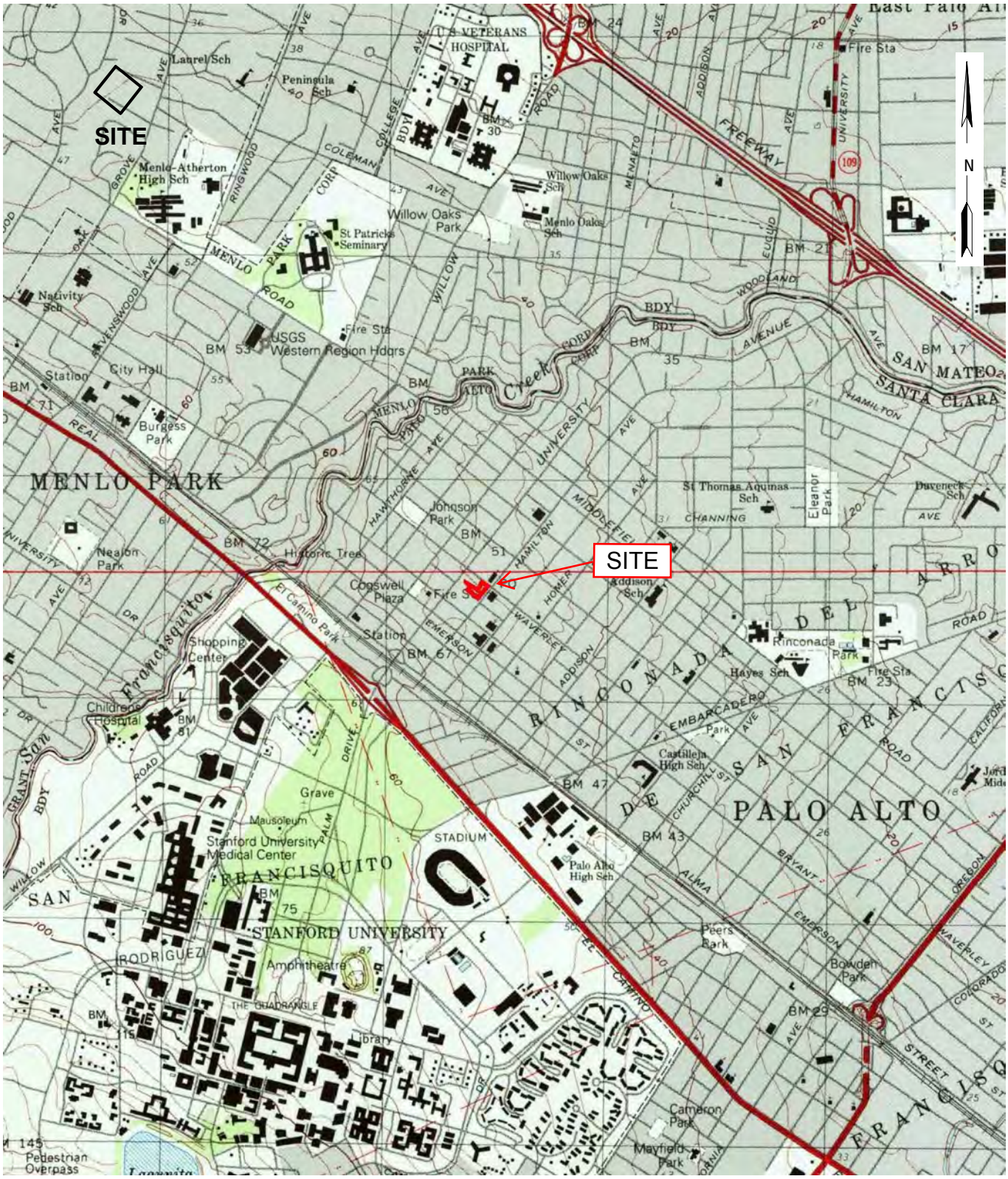
UST: Underground Storage Tank. Any buried storage container larger than a 55-gallon drum, either empty or full. Underground storage tanks do not include septic tanks.

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APPENDIX A: FIGURES

Site Location Map

Site Map



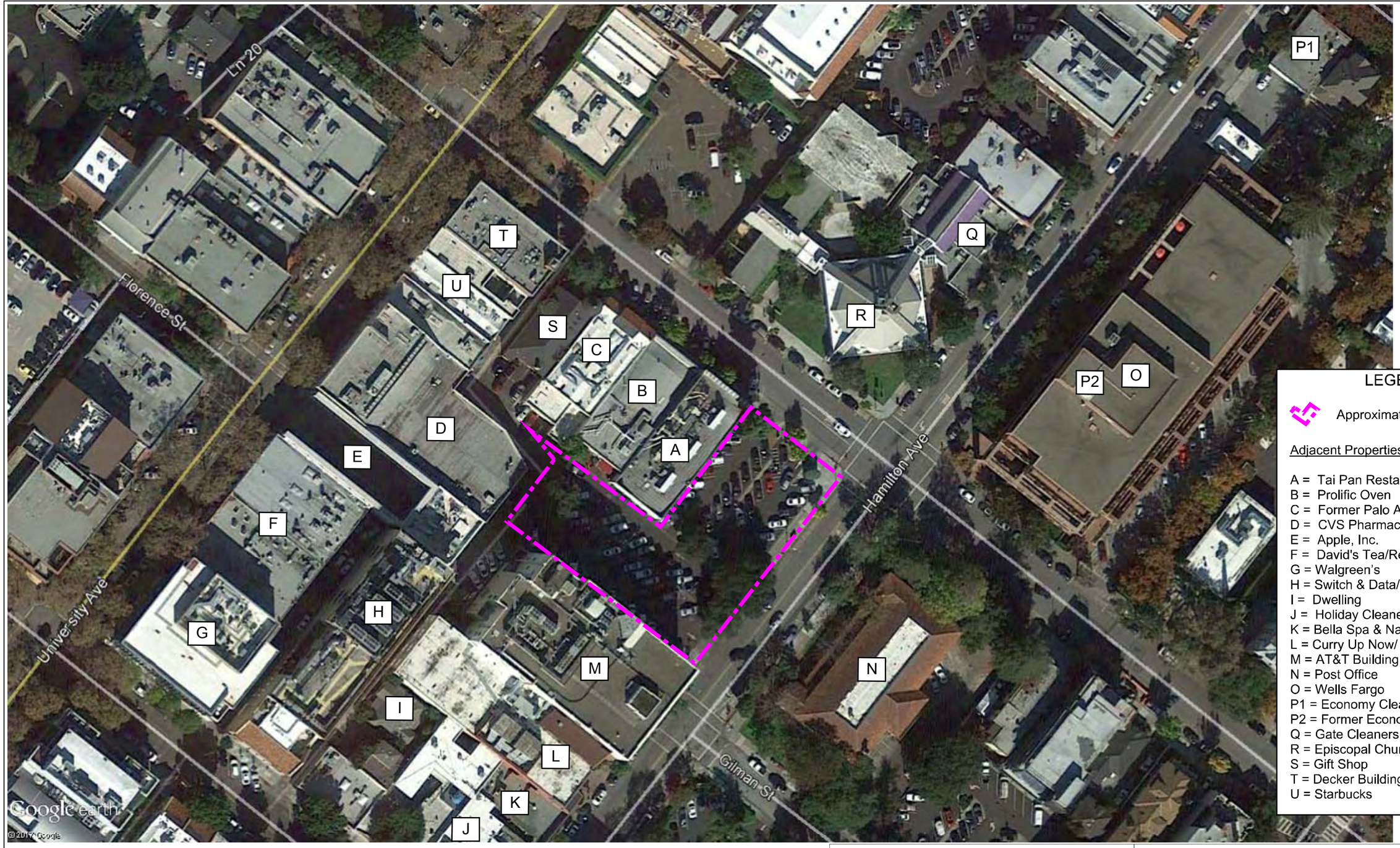
Proposed Parking Structure
375 Hamilton Avenue, Palo Alto, CA
Project Number 13396B

SITE LOCATION MAP

Adapted from USGS 7½ Minute Quadrangle Map:
Palo Alto, California, 1999
(Property lines are approximated)
Approximate Scale 1" = 2000'

FIGURE
1

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LEGEND

Approximate Site Boundary

Adjacent Properties:

A = Tai Pan Restaurant
B = Prolific Oven
C = Former Palo Alto Sport Shop
D = CVS Pharmacy
E = Apple, Inc.
F = David's Tea/Restaurants
G = Walgreen's
H = Switch & Data/PAIX (LUST)
I = Dwelling
J = Holiday Cleaners
K = Bella Spa & Nails
L = Curry Up Now/ NY Pizza
M = AT&T Building (LUST)
N = Post Office
O = Wells Fargo
P1 = Economy Cleaners
P2 = Former Economy Cleaners
Q = Gate Cleaners
R = Episcopal Church
S = Gift Shop
T = Decker Building
U = Starbucks

Proposed Parking Structure
375 Hamilton Avenue, Palo Alto, CA
Project No. 13396B

wsp

SITE MAP

Adapted, under license, from 2016 Google Earth imagery
Not to Scale

FIGURE
2

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APPENDIX B: USER PROVIDED INFORMATION

User Questionnaire

Property Name 375 Hamilton Ave

In order to qualify for one of the Landowner Liability Protections (LLPs) offered by CERCLA, the User must conduct the following inquiries. The User should provide the following information to the Environmental Professional. Failure to conduct these inquiries could result in a determination that "all appropriate inquiries" is not complete.

1. Did a search of recorded land title records (or judicial records, where appropriate) identify any environmental liens filed or recorded against the Site under federal, tribal, state, or local law?
   ☐ Yes ☒ No No environmental liens

2. Did a search of recorded land title records (or judicial records, where appropriate) identify any AULs, such as engineering controls, land use restrictions, or institutional controls that are in place at the property at/or have been filed or recorded against the Site under federal, tribal, state, or local law?
   ☒ Yes ☐ No Zone District: PF, Comp Plan: CC

3. Do you have any specialized knowledge or experience related to the property or nearby properties? For example, are you involved in the same line of business as the current or former occupants of the property or an adjoining property so that you would have specialized knowledge of the chemicals and processes used by this type of business? ☒ Yes ☐ No Current use of property is a surface parking lot.

4. Does the purchase price being paid for this property reasonably reflect the fair market value of the property? ☐ Yes ☐ No

   If you conclude that there is a difference, have you considered whether the lower purchase price is because contamination is known or believed to be present at the property?
   ☐ Yes ☐ No

5. Are you aware of commonly known or reasonably ascertainable information about the property that would help the environmental professional to identify conditions indicative of releases or threatened releases? For example, as user,

   (a.) Do you know the past uses of the property? ☒ Yes ☐ No

   (b.) Do you know of specific chemicals are present or once were present at the property?
   ☐ Yes ☒ No

   (c.) Do you know of spills or other chemical releases that had taken place at the property?
   ☐ Yes ☒ No

   (d.) Do you know of any environmental cleanups that have taken place at the property?
   ☐ Yes ☒ No

6. Based on your knowledge and experience related to the property are there any obvious indicators that point to the presence or likely presence of releases or contamination at the property?
   ☐ Yes ☒ No

7. Was the Site or were nearby properties used as a gasoline station, motor repair facility, commercial printing facility, dry cleaners, photo developing laboratory, junkyard or landfill, or as a waste treatment, storage, disposal, processing, or recycling facility (if yes, please identify which and how)?
   ☐ Yes ☒ No

8. Why is this Phase I ESA required?

- ☐ Purchase of property without new loan
- ☐ Purchase of property with new loan to user
- ☐ Property exchange
- ☐ Preparation for seller in anticipation of sale
- ☐ Lease of property
- ☐ Refinancing of property already owned by user
- ☐ Corporate merger or acquisition of assets of another business
- ☐ Assessment of potential environmental liabilities for Sarbanes Oxley compliance
- ☒ Other EIR for construction of new parking garage

9. Are you aware of the current or historic presence of any of the following features/items on the property?

- ☐ Automotive or industrial batteries
- ☐ Pesticide, fertilizer, agricultural chemical usage or storage
- ☐ Paint containers (> 50 gallon aggregate)
- ☐ Industrial drums (solvents, fuel or other chemicals)
- ☐ Fill dirt
- ☐ Pits, ponds, lagoons
- ☐ Stained soil
- ☐ Underground tanks
- ☐ Aboveground tanks
- ☐ Private wells
- ☐ Septic tanks
- ☐ Environmental liens, environmental law violations
- ☐ Waste dumping, landfilling, or burying
- ☐ Former buildings

---

10. Do you know whether any prior environmental studies been conducted in relation to the property?
☐ Yes ☒ No -- If yes, please provide.

Questionnaire Prepared by Holly Boyd Date 8/17/2017

APPENDIX C: ENVIRONMENTAL DATABASE SEARCH REPORT

Proposed Palo Alto Parking Structure
375 Hamilton Avenue
Palo Alto, CA 94301

Inquiry Number: 5021939.2s
August 14, 2017

The EDR Radius Map™ Report with GeoCheck®

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

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GEOCHECK ADDENDUM

Physical Setting Source Addendum	A-1
Physical Setting Source Summary	A-2
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Physical Setting Source Records Searched	PSGR-1

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-13) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

375 HAMILTON AVENUE
PALO ALTO, CA 94301

COORDINATES

Latitude (North):	37.4460950 - 37° 26' 45.94''
Longitude (West):	122.1597700 - 122° 9' 35.17''
Universal Tranverse Mercator:	Zone 10
UTM X (Meters):	574323.9
UTM Y (Meters):	4144488.0
Elevation:	54 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map:	5640620 PALO ALTO, CA
Version Date:	2012

AERIAL PHOTOGRAPHY IN THIS REPORT

Portions of Photo from:	20140608
Source:	USDA

MAPPED SITES SUMMARY

Target Property Address:
375 HAMILTON AVENUE
PALO ALTO, CA 94301

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
A1	PACIFIC BELL (P1-007	34 HAMILTON AVE	HIST UST, CUPA Listings	Higher	81, 0.015, SW
A2	PERSHAS RUG & CARPET	345 HAMILTON AVE	EDR Hist Cleaner	Higher	81, 0.015, SW
A3	PACIFIC BELL	345 HAMILTON AVE	LUST	Higher	81, 0.015, SW
A4	AT&T/SBC (P1-007)	345 HAMILTON AVE	UST	Higher	81, 0.015, SW
A5	PACIFIC BELL (P1-007	345 HAMILTON AVE	SWEEPS UST	Higher	81, 0.015, SW
A6	CVS PHARMACY NO 9915	352 UNIVERSITY AVE	RCRA-LQG, FINDS, ECHO	Higher	81, 0.015, WNW
A7	CVS PHARMACY #9915	352 UNIVERSITY AVE	CUPA Listings, HAZNET	Higher	81, 0.015, WNW
A8	WALGREENS #12141	328 UNIVERSITY AVE	CUPA Listings, HAZNET	Higher	196, 0.037, WNW
A9	AUTO TOW	555 BRYANT ST	EDR Hist Auto	Higher	223, 0.042, SW
B10	LEATHER SPCLSTS AT D	318 UNIVERSITY AVE	EDR Hist Cleaner	Higher	232, 0.044, West
C11	ECONOMY CLEANERS	430 HAMILTON AVE	EDR Hist Cleaner	Lower	234, 0.044, ENE
A12	SWITCH AND DATA CA N	529 BRYANT ST	AST	Higher	257, 0.049, WSW
C13	GATE CLEANERS	439 HAMILTON AVE	CUPA Listings, DRYCLEANERS	Lower	292, 0.055, NE
C14	GATE CLEANERS LLC	439 HAMILTON AVE	EDR Hist Cleaner	Lower	292, 0.055, NE
B15	PREMIER PROPERTIES M	300 UNIVERSITY AVE	RCRA-CESQG, HAZNET	Higher	293, 0.055, West
B16	WALGREENS #13596	300 UNIVERSITY AVE	RCRA-CESQG, FINDS, ECHO, CUPA Listings, HAZNET	Higher	293, 0.055, West
A17	SWITCH & DATA/PAIX.N	529 BRYANT ST	RCRA-SQG, FINDS, ECHO	Higher	304, 0.058, WSW
A18	OFFICE BUILDING	529 BRYANT	LUST, HIST LUST, HIST CORTESE	Higher	304, 0.058, WSW
A19	SWITCH AND DATA	529 BRYANT ST	AST	Higher	304, 0.058, WSW
D20	ZEEMEN INC	595 BRYANT ST	EDR Hist Cleaner	Higher	308, 0.058, South
D21	HOLIDAY CLEANERS	595 BRYANT ST	CUPA Listings, DRYCLEANERS	Higher	308, 0.058, South
E22	VARSITY THEATRE	456 UNIVERSITY AVE	LUST, HIST LUST, HIST CORTESE	Lower	404, 0.077, North
E23	ELITE CLEANERS	464 UNIVERSITY AVE	EDR Hist Cleaner	Lower	450, 0.085, North
E24	ELITE CLEANERS	435 UNIVERSITY AVE	EDR Hist Cleaner	Lower	458, 0.087, North
E25	ELITE CLEANERS	468 UNIVERSITY AVE	EDR Hist Cleaner	Lower	485, 0.092, North
F26	ECONOMY CLEANERS	486 HAMILTON AVE	DRYCLEANERS	Lower	514, 0.097, NE
G27	TOWN & COUNTRY CLEAN	855 EL CAMINO REAL 4	CUPA Listings	Lower	528, 0.100, East
G28	CVS PHARMACY #3935	855 EL CAMINO REAL 1	CUPA Listings	Lower	528, 0.100, East
G29	CVS PHARMACY #3935	855 EL CAMINO REAL S	RCRA-LQG, FINDS, ECHO	Lower	528, 0.100, East
G30	NAXCOR	855 EL CAMINO REAL N	RCRA-SQG, FINDS, ECHO	Lower	528, 0.100, East
G31	ONE HOUR MARTINIZING	855 EL CAMINO REAL #	RCRA-SQG, FINDS, ECHO, HAZNET	Lower	528, 0.100, East
G32	TOWN & COUNTRY CLEAN	855 EL CAMINO REAL	ENVIROSTOR, VCP, FINDS, EMI, HAZNET	Lower	528, 0.100, East
D33	PALO ALTO CIVIC CENT	250 HAMILTON AVE	LUST, HIST LUST, HIST CORTESE	Higher	536, 0.102, South
D34	CITY HALL	250 HAMILTON	HIST UST	Higher	536, 0.102, South
D35	CITY OF PALO ALTO CI	250 HAMILTON AVE	UST	Higher	536, 0.102, South
D36	CITY HALL	250 HAMILTON	LUST, SWEEPS UST, CA FID UST, CUPA Listings,...	Higher	536, 0.102, South
H37	PREMIER PROPERTIES	250 UNIVERSITY AVE	LUST, HIST LUST, HIST CORTESE	Higher	538, 0.102, WSW
H38	HEWLETT PACKARD UNIV	250 UNIVERSITY AVE	RCRA NonGen / NLR, FINDS, ECHO, HAZNET	Higher	538, 0.102, WSW
E39	MARTHA PAULINE SWAIN	451 UNIVERSITY AVE	RCRA-SQG, FINDS, ECHO, HAZNET	Lower	564, 0.107, North

MAPPED SITES SUMMARY

Target Property Address:
375 HAMILTON AVENUE
PALO ALTO, CA 94301

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
I40	SERRA OIL & GAS	419 WAVERLY ST	EDR Hist Auto	Higher	566, 0.107, NNW
I41	LEE PENNEL CHEVRON	390 LYTTON	EDR Hist Auto	Higher	577, 0.109, NW
I42	96226	390 LYTTON ST	HIST UST	Higher	577, 0.109, NW
I43	CUSA-	390 LYTTON AVE	SWEEPS UST, CA FID UST	Higher	577, 0.109, NW
I44	LEONARD ELY PROPERTY	390 LYTTON AVENUE	LUST, HIST UST	Higher	577, 0.109, NW
F45	MRS. E. C. FOULE	630 COWPER ST	SWEEPS UST, CA FID UST	Lower	591, 0.112, ENE
F46	MRS. E. C. FOULE	630 COWPER ST	HIST UST	Lower	591, 0.112, ENE
E47	PRESIDENTS HOTEL	498 UNIVERSITY AVE	LUST, HIST LUST, HIST CORTESE	Lower	616, 0.117, NNE
E48	PHOTO EXPRESS	479 UNIVERSITY AVE	RCRA-SQG, FINDS, ECHO	Lower	618, 0.117, North
H49	RITZ CAMERA CENTERS,	222 UNIVERSITY AVE	RCRA-LQG	Higher	703, 0.133, WSW
50	PACIFIC BELL	420 COWPER AVENUE	RCRA NonGen / NLR, FINDS, ECHO	Lower	810, 0.153, North
J51	AZEEM K LAKHA DMD	720 COWPER ST	CUPA Listings	Lower	827, 0.157, East
52	PALO ALTO OFFICE CEN	525 UNIVERSITY AVE	RCRA-SQG, FINDS, ECHO	Lower	871, 0.165, NNE
K53	CARDINAL DRIVE IN CL	203 FOREST	RCRA-SQG, SLIC, BROWNFIELDS, HAZNET	Higher	915, 0.173, South
J54	APT BLDG	725 COWPER ST	SWEEPS UST, CA FID UST	Lower	948, 0.180, East
J55	APT BLDG	725 COWPER ST	HIST UST	Lower	948, 0.180, East
K56	PALO ALTO TRANSMISSI	701 EMERSON ST	LUST, SWEEPS UST, CA FID UST	Higher	997, 0.189, South
K57	PALO ALTO TRANSMISSI	701 EMERSON	LUST, HIST LUST, HIST UST	Higher	997, 0.189, South
58	PALO ALTO MEDICAL CL	300 HOMER AVE	RCRA NonGen / NLR	Lower	1018, 0.193, SE
L59	PRIVATE RESIDENCE	PRIVATE RESIDENCE	LUST	Lower	1077, 0.204, SSE
M60	PALO ALTO MEDICAL FO	735 EMERSON	RCRA-SQG, LUST, HIST LUST, FINDS, ECHO, HAZNET,...	Lower	1083, 0.205, South
N61	SHICK RESIDENCE	505 HOMER AVE	LUST, HIST LUST	Lower	1112, 0.211, East
L62	CARDINAL FRENCH LAUN	260 HOMER AVE	SWEEPS UST, HIST UST, CA FID UST	Lower	1113, 0.211, SSE
L63	GRANDONA RESIDENCE	268 HOMER	LUST, HIST LUST, HIST CORTESE	Lower	1113, 0.211, SSE
K64	PALO ALTO TRANSMISSI	710 EMERSON	HIST CORTESE	Higher	1116, 0.211, South
65	SHEARER FAMILY TRUST	530 WEBSTER ST	LUST, HIST LUST, HIST CORTESE	Lower	1123, 0.213, NNE
O66	BNW SERVICE & REPAIR	400 ENERSON ST	SWEEPS UST, HIST UST, CA FID UST	Higher	1138, 0.216, WSW
O67	INDEPENDENT BMW	400 EMERSON ST	LUST, HIST LUST	Higher	1138, 0.216, WSW
O68	INDEPENDANT BMW	400 EMERSON	LUST, HIST CORTESE	Higher	1138, 0.216, WSW
O69	BNW SERVICE & REPAIR	400 EMERSON ST	HIST UST	Higher	1138, 0.216, WSW
L70	CARDINAL FRENCH LAUN	260 HOMER AVE	HIST UST	Lower	1142, 0.216, SSE
K71	PALO ALTO SPEEDOMETE	718 EMERSON ST	CUPA Listings	Higher	1148, 0.217, South
N72	PRIVATE RESIDENCE	PRIVATE RESIDENCE	LUST	Lower	1153, 0.218, East
L73	FRANK L ALTICK DDS	824 BRYANT ST	CUPA Listings, HAZNET	Lower	1176, 0.223, SSE
L74	PALO ALTO MEDICAL FO	820 RAMONA	RCRA NonGen / NLR, FINDS, ECHO, HAZNET	Lower	1202, 0.228, SSE
P75	FOX PHOTO	140 UNIVERSITY AVE	RCRA NonGen / NLR, FINDS, ECHO	Higher	1202, 0.228, SW
P76	CITY OF PALO ALTO PA	528 HIGH	LUST	Higher	1204, 0.228, SW
L77	CITY OF PARIS CLEANE	248 HOMER AVE	RCRA-SQG, LUST, FINDS, ECHO, HIST CORTESE	Lower	1209, 0.229, SSE
Q78	RENTED BY LUTZ FORD	160 FOREST AVE	HIST UST	Higher	1219, 0.231, South

MAPPED SITES SUMMARY

Target Property Address:
375 HAMILTON AVENUE
PALO ALTO, CA 94301

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
Q79	RENTED BY LUTZ FORD	160 FOREST AVE	SWEEPS UST, CA FID UST	Higher	1219, 0.231, South
R80	JUNGLECOPY	542 HIGH ST	RCRA-SQG, FINDS, ECHO	Higher	1221, 0.231, SW
M81	PADDLEFORD OLDS INC	7774 EMERSON STREET	RCRA NonGen / NLR, FINDS, ECHO	Lower	1221, 0.231, South
L82	PENINSULA PLATING WO	232 HOMER AVE	HIST UST	Lower	1237, 0.234, SSE
L83	PENINSULA PLATING WO	232 HOMER HILLS	HIST UST	Lower	1237, 0.234, SSE
M84	PADDLEFORD OLDSMOBIL	774 EMERSON ST	SWEEPS UST, HIST UST, CA FID UST, RCRA NonGen /...	Higher	1270, 0.241, South
M85	WHOLE FOODS MARKET -	774 EMERSON AV	HIST UST, CUPA Listings	Higher	1270, 0.241, South
R86	UNION AUTO REPAIR	122 HAMILTON AVE	HIST UST	Higher	1279, 0.242, SSW
R87	UNION AUTO REPAIR	122 HAMILTON AVE	SWEEPS UST, CA FID UST	Higher	1279, 0.242, SSW
P88	PENINSULA CORRIDOR P	RAILROAD RIGHT-OF-WA	ENVIROSTOR, VCP	Higher	1384, 0.262, SW
Q89	BILL'S AUTO GLASS	744 HIGH ST	LUST, HIST LUST, HIST CORTESE	Higher	1411, 0.267, South
S90	HEWLETT-PACKARD COMP	130 LYTTON AVENUE	SLIC, HIST LUST	Higher	1432, 0.271, WSW
S91	HEWLETT PACKARD LYTT	130 LYTTON AVENUE	LUST, RCRA NonGen / NLR, FINDS, ECHO, HAZNET	Higher	1432, 0.271, WSW
T92	KURT'S AUTO CARE	780 HIGH	LUST, HIST LUST, CUPA Listings, HIST CORTESE	Higher	1477, 0.280, South
R93	PALO ALTO MEDICAL FO	URBAN LANE	SLIC	Higher	1494, 0.283, SW
T94	KEENAN LAND CO	753 ALMA ST	LUST, HIST LUST, HAZNET, HIST CORTESE	Higher	1568, 0.297, South
T95	PENINSULA CREAMERY	800 HIGH ST	LUST	Lower	1615, 0.306, South
T96	PENINSULA CREAMERY	800 HIGH STREET	LUST	Lower	1615, 0.306, South
97	TIDY TOWN CLEANERS	163 EVERETT AVE	RCRA-SQG, LUST, HIST LUST, FINDS, ECHO, HIST...	Higher	1630, 0.309, West
T98	INDEPENDENT BMW	799 ALMA ST	LUST, HIST LUST, HIST UST, CUPA Listings, HIST...	Higher	1635, 0.310, South
U99	BILL YOUNG'S AUTOMOT	849 HIGH ST	LUST, HIST LUST	Lower	1653, 0.313, South
U100	BILL YOUNG'S AUTOMOT	849 HIGH ST	LUST, HIST CORTESE	Lower	1653, 0.313, South
V101	COMMUTER SHELL SERVI	355 ALMA ST	LUST, HIST LUST, UST, SWEEPS UST, HIST UST, HIST...	Higher	1694, 0.321, WSW
T102	HANSEN PLUMBING	50 HOMER AVE	LUST, HIST LUST, HIST CORTESE	Higher	1696, 0.321, South
W103	D & M AUTO REPAIR	190 CHANNING AVE	LUST	Lower	1768, 0.335, SSE
W104	D & M MOTORS	190 CHANNING AVE	LUST, HIST LUST, SWEEPS UST, HIST CORTESE, WIP	Lower	1768, 0.335, SSE
X105	STEVE'S FOREIGN AUTO	809 ALMA ST	LUST, HIST LUST, HIST CORTESE	Lower	1770, 0.335, South
V106	PALO ALTO FIRE STATI	301 ALMA ST	LUST, HIST LUST, CUPA Listings, HIST CORTESE	Higher	1837, 0.348, West
Y107	CITY OF PALO ALTO (S	291 ALMA ST	LUST, HIST LUST	Higher	1847, 0.350, West
Y108	COLDWELL BANKER	291 ALMA ST	LUST, HIST LUST, HIST CORTESE	Higher	1847, 0.350, West
X109	D&B AUTOMOTIVE	841 ALMA ST	LUST, HIST LUST, SWEEPS UST, HIST CORTESE	Lower	1853, 0.351, South
X110	LAWSON BROTHERS CLEA	853 ALMA ST	LUST, SLIC, HIST LUST, SWEEPS UST, HIST CORTESE	Lower	1868, 0.354, South
Y111	STANFORD B.M.W.	275 ALMA ST	LUST, HIST LUST, HIST CORTESE	Higher	1881, 0.356, West
W112	PENINSULA CREAMERY	900 HIGH	LUST, HIST LUST, HIST UST, HIST CORTESE	Lower	1975, 0.374, SSE
Z113	901 ALMA STREET	901 ALMA STREET	SLIC	Lower	2016, 0.382, South
114	KEENAN LAND COMPANY	975 HIGH ST	LUST, HIST LUST, HIST CORTESE	Lower	2090, 0.396, SSE
Z115	WINSTON TIRE COMPANY	955 ALMA ST	LUST, HIST LUST, HIST CORTESE	Lower	2185, 0.414, SSE
AA116	CHEVRON #9-0136	745 EL CAMINO REAL	LUST, HIST LUST, SWEEPS UST	Higher	2305, 0.437, SSW
AA117	CHEVRON #9-0136	745 EL CAMINO REAL	LUST, HIST UST	Higher	2305, 0.437, SSW

MAPPED SITES SUMMARY

Target Property Address:
375 HAMILTON AVENUE
PALO ALTO, CA 94301

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
AA118	CHEVRON	745 EL CAMINO REAL	HIST CORTESE	Higher	2305, 0.437, SSW
AA119	CHEVRON USA INC	745 EL CAMINO REAL	LUST, CA FID UST	Higher	2305, 0.437, SSW
120	MORRIS AUTO PARTS	999 ALMA	LUST, HIST LUST, HIST CORTESE	Lower	2356, 0.446, SSE
121	CLOUDBURST CAR WASH	841 EL CAMINO REAL	LUST, HIST LUST, SWEEPS UST, HIST UST, CA FID UST,...	Higher	2596, 0.492, South
122	PHOTOTIME, INC.	138 STANFORD SHOPPIN	ENVIROSTOR	Higher	3374, 0.639, West
123	CAMP FREMONT (J09CA0		RESPONSE, ENVIROSTOR	Higher	4250, 0.805, West

EXECUTIVE SUMMARY

TARGET PROPERTY SEARCH RESULTS

The target property was not listed in any of the databases searched by EDR.

DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the target property or within the search radius around the target property for the following databases:

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL ---------- National Priority List
Proposed NPL ---------- Proposed National Priority List Sites
NPL LIENS ---------- Federal Superfund Liens

Federal Delisted NPL site list

Delisted NPL ---------- National Priority List Deletions

Federal CERCLIS list

FEDERAL FACILITY ---------- Federal Facility Site Information listing
SEMS ---------- Superfund Enterprise Management System

Federal CERCLIS NFRAP site list

SEMS-ARCHIVE ---------- Superfund Enterprise Management System Archive

Federal RCRA CORRACTS facilities list

CORRACTS ---------- Corrective Action Report

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF ---------- RCRA - Treatment, Storage and Disposal

Federal institutional controls / engineering controls registries

LUCIS ---------- Land Use Control Information System
US ENG CONTROLS ---------- Engineering Controls Sites List
US INST CONTROL ---------- Sites with Institutional Controls

Federal ERNS list

ERNS ---------- Emergency Response Notification System

State and tribal landfill and/or solid waste disposal site lists

SWF/LF ---------- Solid Waste Information System

EXECUTIVE SUMMARY

State and tribal leaking storage tank lists

INDIAN LUST ---- Leaking Underground Storage Tanks on Indian Land

State and tribal registered storage tank lists

FEMA UST ---- Underground Storage Tank Listing
INDIAN UST ---- Underground Storage Tanks on Indian Land

State and tribal voluntary cleanup sites

INDIAN VCP ---- Voluntary Cleanup Priority Listing

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS ---- A Listing of Brownfields Sites

Local Lists of Landfill / Solid Waste Disposal Sites

WMUDS/SWAT ---- Waste Management Unit Database
SWRCY ---- Recycler Database
HAULERS ---- Registered Waste Tire Haulers Listing
INDIAN ODI ---- Report on the Status of Open Dumps on Indian Lands
DEBRIS REGION 9 ---- Torres Martinez Reservation Illegal Dump Site Locations
ODI ---- Open Dump Inventory
IHS OPEN DUMPS ---- Open Dumps on Indian Land

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL ---- Delisted National Clandestine Laboratory Register
HIST Cal-Sites ---- Historical Calsites Database
SCH ---- School Property Evaluation Program
CDL ---- Clandestine Drug Labs
Toxic Pits ---- Toxic Pits Cleanup Act Sites
US CDL ---- National Clandestine Laboratory Register

Local Land Records

LIENS ---- Environmental Liens Listing
LIENS 2 ---- CERCLA Lien Information
DEED ---- Deed Restriction Listing

Records of Emergency Release Reports

HMIRS ---- Hazardous Materials Information Reporting System
CHMIRS ---- California Hazardous Material Incident Report System
LDS ---- Land Disposal Sites Listing
MCS ---- Military Cleanup Sites Listing
SPILLS 90 ---- SPILLS 90 data from FirstSearch

Other Ascertainable Records

FUDS ---- Formerly Used Defense Sites

EXECUTIVE SUMMARY

DOD	Department of Defense Sites
SCRD DRYCLEANERS	State Coalition for Remediation of Drycleaners Listing
US FIN ASSUR	Financial Assurance Information
EPA WATCH LIST	EPA WATCH LIST
2020 COR ACTION	2020 Corrective Action Program List
TSCA	Toxic Substances Control Act
TRIS	Toxic Chemical Release Inventory System
SSTS	Section 7 Tracking Systems
ROD	Records Of Decision
RMP	Risk Management Plans
RAATS	RCRA Administrative Action Tracking System
PRP	Potentially Responsible Parties
PADS	PCB Activity Database System
ICIS	Integrated Compliance Information System
FTTS	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
MLTS	Material Licensing Tracking System
COAL ASH DOE	Steam-Electric Plant Operation Data
COAL ASH EPA	Coal Combustion Residues Surface Impoundments List
PCB TRANSFORMER	PCB Transformer Registration Database
RADINFO	Radiation Information Database
HIST FTTS	FIFRA/TSCA Tracking System Administrative Case Listing
DOT OPS	Incident and Accident Data
CONSENT	Superfund (CERCLA) Consent Decrees
INDIAN RESERV	Indian Reservations
FUSRAP	Formerly Utilized Sites Remedial Action Program
UMTRA	Uranium Mill Tailings Sites
LEAD SMELTERS	Lead Smelter Sites
US AIRS	Aerometric Information Retrieval System Facility Subsystem
US MINES	Mines Master Index File
ABANDONED MINES	Abandoned Mines
FINDS	Facility Index System/Facility Registry System
UXO	Unexploded Ordnance Sites
DOCKET HWC	Hazardous Waste Compliance Docket Listing
ECHO	Enforcement & Compliance History Information
FUELS PROGRAM	EPA Fuels Program Registered Listing
CA BOND EXP. PLAN	Bond Expenditure Plan
Cortese	"Cortese" Hazardous Waste & Substances Sites List
EMI	Emissions Inventory Data
ENF	Enforcement Action Listing
Financial Assurance	Financial Assurance Information Listing
HAZNET	Facility and Manifest Data
ICE	ICE
HWP	EnviroStor Permitted Facilities Listing
HWT	Registered Hazardous Waste Transporter Database
MINES	Mines Site Location Listing
MWMP	Medical Waste Management Program Listing
NPDES	NPDES Permits Listing
PEST LIC	Pesticide Regulation Licenses Listing
PROC	Certified Processors Database
Notify 65	Proposition 65 Records
SAN JOSE HAZMAT	Hazardous Material Facilities
UIC	UIC Listing
WASTEWATER PITS	Oil Wastewater Pits Listing
WDS	Waste Discharge System

EXECUTIVE SUMMARY

WIP---------- Well Investigation Program Case List

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP---------- EDR Proprietary Manufactured Gas Plants

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA LF---------- Recovered Government Archive Solid Waste Facilities List
RGA LUST---------- Recovered Government Archive Leaking Underground Storage Tank

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.
Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

STANDARD ENVIRONMENTAL RECORDS

Federal RCRA generators list

RCRA-LQG: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

A review of the RCRA-LQG list, as provided by EDR, and dated 12/12/2016 has revealed that there are 3 RCRA-LQG sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
CVS PHARMACY NO 9915	***352 UNIVERSITY AVE***	***WNW 0 - 1/8 (0.015 mi.)***	***A6***	***11***
RITZ CAMERA CENTERS,	222 UNIVERSITY AVE	WSW 1/8 - 1/4 (0.133 mi.)	H49	90
Lower Elevation	**Address**	**Direction / Distance**	**Map ID**	**Page**
CVS PHARMACY #3935	***855 EL CAMINO REAL S***	***E 0 - 1/8 (0.100 mi.)***	***G29***	***39***

EXECUTIVE SUMMARY

RCRA-SQG: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

A review of the RCRA-SQG list, as provided by EDR, and dated 12/12/2016 has revealed that there are 10 RCRA-SQG sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
SWITCH & DATA/PAIX.N	*529 BRYANT ST*	*WSW 0 - 1/8 (0.058 mi.)*	*A17*	*29*
CARDINAL DRIVE IN CL	*203 FOREST*	*S 1/8 - 1/4 (0.173 mi.)*	*K53*	*95*
JUNGLECOPY	*542 HIGH ST*	*SW 1/8 - 1/4 (0.231 mi.)*	*R80*	*136*
Lower Elevation	**Address**	**Direction / Distance**	**Map ID**	**Page**
NAXCOR	*855 EL CAMINO REAL N*	*E 0 - 1/8 (0.100 mi.)*	*G30*	*45*
ONE HOUR MARTINIZING	*855 EL CAMINO REAL #*	*E 0 - 1/8 (0.100 mi.)*	*G31*	*48*
MARTHA PAULINE SWAIN	*451 UNIVERSITY AVE*	*N 0 - 1/8 (0.107 mi.)*	*E39*	*78*
PHOTO EXPRESS	*479 UNIVERSITY AVE*	*N 0 - 1/8 (0.117 mi.)*	*E48*	*89*
PALO ALTO OFFICE CEN	*525 UNIVERSITY AVE*	*NNE 1/8 - 1/4 (0.165 mi.)*	*52*	*93*
PALO ALTO MEDICAL FO	*735 EMERSON*	*S 1/8 - 1/4 (0.205 mi.)*	*M60*	*108*
CITY OF PARIS CLEANE	*248 HOMER AVE*	*SSE 1/8 - 1/4 (0.229 mi.)*	*L77*	*131*

RCRA-CESQG: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Conditionally exempt small quantity generators (CESQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

A review of the RCRA-CESQG list, as provided by EDR, and dated 12/12/2016 has revealed that there are 2 RCRA-CESQG sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
PREMIER PROPERTIES M	*300 UNIVERSITY AVE*	*W 0 - 1/8 (0.055 mi.)*	*B15*	*22*
WALGREENS #13596	*300 UNIVERSITY AVE*	*W 0 - 1/8 (0.055 mi.)*	*B16*	*24*

State- and tribal - equivalent NPL

RESPONSE: Identifies confirmed release sites where DTSC is involved in remediation, either in a lead or oversight capacity. These confirmed release sites are generally high-priority and high potential risk.

A review of the RESPONSE list, as provided by EDR, has revealed that there is 1 RESPONSE site within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
CAMP FREMONT (J09CA0		*W 1/2 - 1 (0.805 mi.)*	*123*	*235*

Database: RESPONSE, Date of Government Version: 01/30/2017
Status: Inactive - Needs Evaluation
Facility Id: 80000016

State- and tribal - equivalent CERCLIS

ENVIROSTOR: The Department of Toxic Substances Control's (DTSC's) Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifes sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.

A review of the ENVIROSTOR list, as provided by EDR, and dated 01/30/2017 has revealed that there are 4 ENVIROSTOR sites within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
PENINSULA CORRIDOR P	***RAILROAD RIGHT-OF-WA***	***SW 1/4 - 1/2 (0.262 mi.)***	***P88***	***146***
Facility Id: 41400001				
Status: Inactive - Action Required				
PHOTOTIME, INC.	138 STANFORD SHOPPIN	W 1/2 - 1 (0.639 mi.)	122	234
Facility Id: 71003258				
Status: Inactive - Needs Evaluation				
CAMP FREMONT (J09CA0		***W 1/2 - 1 (0.805 mi.)***	***123***	***235***
Facility Id: 80000016				
Status: Inactive - Needs Evaluation				

Lower Elevation	Address	Direction / Distance	Map ID	Page
TOWN & COUNTRY CLEAN	***855 EL CAMINO REAL***	***E 0 - 1/8 (0.100 mi.)***	***G32***	***50***
Facility Id: 60001443				
Status: Active				

State and tribal leaking storage tank lists

LUST: Leaking Underground Storage Tank (LUST) Sites included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

A review of the LUST list, as provided by EDR, has revealed that there are 49 LUST sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
PACIFIC BELL	345 HAMILTON AVE	SW 0 - 1/8 (0.015 mi.)	A3	9
Database: LUST, Date of Government Version: 03/13/2017				
Status: Completed - Case Closed				
Global Id: T0608501799				
OFFICE BUILDING	***529 BRYANT***	***WSW 0 - 1/8 (0.058 mi.)***	***A18***	***31***
Database: LUST SANTA CLARA, Date of Government Version: 03/03/2014				
Database: LUST REG 2, Date of Government Version: 09/30/2004				
Database: LUST, Date of Government Version: 03/13/2017				

Status: Completed - Case Closed
Facility Status: Case Closed
Date Closed: 03/15/1996
Global Id: T0608501854
SCVWD ID: 06S3W02C04F
date9: 3/15/1996

PALO ALTO CIVIC CENT ***250 HAMILTON AVE*** ***S 0 - 1/8 (0.102 mi.)*** ***D33*** ***68***
Database: LUST REG 2, Date of Government Version: 09/30/2004
Database: LUST, Date of Government Version: 03/13/2017
Status: Completed - Case Closed
Facility Status: Case Closed
Global Id: T0608501023
date9: 1/25/1993

CITY HALL ***250 HAMILTON*** ***S 0 - 1/8 (0.102 mi.)*** ***D36*** ***71***
Database: LUST SANTA CLARA, Date of Government Version: 03/03/2014
Date Closed: 01/25/1993
SCVWD ID: 06S3W02B01F

PREMIER PROPERTIES ***250 UNIVERSITY AVE*** ***WSW 0 - 1/8 (0.102 mi.)*** ***H37*** ***72***
Database: LUST SANTA CLARA, Date of Government Version: 03/03/2014
Database: LUST REG 2, Date of Government Version: 09/30/2004
Database: LUST, Date of Government Version: 03/13/2017
Status: Completed - Case Closed
Facility Status: Case Closed
Date Closed: 05/21/1993
Global Id: T0608501068
SCVWD ID: 06S3W02C01F
date9: 5/21/1993

LEONARD ELY PROPERTY ***390 LYTTON AVENUE*** ***NW 0 - 1/8 (0.109 mi.)*** ***I44*** ***83***
Database: LUST, Date of Government Version: 03/13/2017
Status: Completed - Case Closed
Global Id: T10000007332

PALO ALTO TRANSMISSI ***701 EMERSON ST*** ***S 1/8 - 1/4 (0.189 mi.)*** ***K56*** ***100***
Database: LUST SANTA CLARA, Date of Government Version: 03/03/2014
Database: LUST, Date of Government Version: 03/13/2017
Status: Completed - Case Closed
Date Closed: 04/20/2000
Global Id: T0608501028
SCVWD ID: 06S3W02C02F

PALO ALTO TRANSMISSI ***701 EMERSON*** ***S 1/8 - 1/4 (0.189 mi.)*** ***K57*** ***104***
Database: LUST REG 2, Date of Government Version: 09/30/2004
Facility Status: Case Closed
date9: 4/20/2000

INDEPENDENT BMW ***400 EMERSON ST*** ***WSW 1/8 - 1/4 (0.216 mi.)*** ***O67*** ***118***
Database: LUST REG 2, Date of Government Version: 09/30/2004
Facility Status: Case Closed
date9: 3/6/1995

INDEPENDANT BMW ***400 EMERSON*** ***WSW 1/8 - 1/4 (0.216 mi.)*** ***O68*** ***119***
Database: LUST SANTA CLARA, Date of Government Version: 03/03/2014
Database: LUST, Date of Government Version: 03/13/2017
Status: Completed - Case Closed
Date Closed: 03/06/1995
Global Id: T0608500743

SCVWD ID: 06S3W02D02F

CITY OF PALO ALTO PA | 528 HIGH | SW 1/8 - 1/4 (0.228 mi.) | P76 | 129
Database: LUST SANTA CLARA, Date of Government Version: 03/03/2014
Database: LUST, Date of Government Version: 03/13/2017
Status: Completed - Case Closed
Date Closed: 11/24/2010
Global Id: T0608590580
SCVWD ID: 06S3W02C05F

BILL'S AUTO GLASS | ***744 HIGH ST*** | ***S 1/4 - 1/2 (0.267 mi.)*** | ***Q89*** | ***151***
Database: LUST SANTA CLARA, Date of Government Version: 03/03/2014
Database: LUST REG 2, Date of Government Version: 09/30/2004
Database: LUST, Date of Government Version: 03/13/2017
Status: Completed - Case Closed
Facility Status: Case Closed
Date Closed: 05/25/1995
Global Id: T0608501662
SCVWD ID: 06S3W02F08F
date9: 5/25/1995

HEWLETT PACKARD LYTT | ***130 LYTTON AVENUE*** | ***WSW 1/4 - 1/2 (0.271 mi.)*** | ***S91*** | ***154***
Database: LUST SANTA CLARA, Date of Government Version: 03/03/2014
SCVWD ID: 06S3W02D06F

KURT'S AUTO CARE | ***780 HIGH*** | ***S 1/4 - 1/2 (0.280 mi.)*** | ***T92*** | ***157***
Database: LUST SANTA CLARA, Date of Government Version: 03/03/2014
Database: LUST REG 2, Date of Government Version: 09/30/2004
Database: LUST, Date of Government Version: 03/13/2017
Status: Completed - Case Closed
Facility Status: Case Closed
Date Closed: 05/21/2003
Global Id: T0608501702
SCVWD ID: 06S3W02F06F
date9: 5/21/2003

KEENAN LAND CO | ***753 ALMA ST*** | ***S 1/4 - 1/2 (0.297 mi.)*** | ***T94*** | ***162***
Database: LUST SANTA CLARA, Date of Government Version: 03/03/2014
Database: LUST REG 2, Date of Government Version: 09/30/2004
Database: LUST, Date of Government Version: 03/13/2017
Status: Completed - Case Closed
Facility Status: Case Closed
Date Closed: 11/02/1995
Global Id: T0608501913
SCVWD ID: 06S3W02F11F
date9: 11/2/1995

TIDY TOWN CLEANERS | ***163 EVERETT AVE*** | ***W 1/4 - 1/2 (0.309 mi.)*** | ***97*** | ***166***
Database: LUST SANTA CLARA, Date of Government Version: 03/03/2014
Database: LUST REG 2, Date of Government Version: 09/30/2004
Database: LUST, Date of Government Version: 03/13/2017
Status: Completed - Case Closed
Facility Status: Case Closed
Date Closed: 02/11/1992
Global Id: T0608550716
SCVWD ID: 06S3W02D07F
date9: 2/11/1992

INDEPENDENT BMW | ***799 ALMA ST*** | ***S 1/4 - 1/2 (0.310 mi.)*** | ***T98*** | ***170***
Database: LUST SANTA CLARA, Date of Government Version: 03/03/2014
Database: LUST REG 2, Date of Government Version: 09/30/2004
Database: LUST, Date of Government Version: 03/13/2017

Status: Completed - Case Closed
Facility Status: Case Closed
Date Closed: 08/04/1995
Global Id: T0608502061
SCVWD ID: 06S3W02F10F
date9: 8/4/1995

COMMUTER SHELL SERVI ***355 ALMA ST*** ***WSW 1/4 - 1/2 (0.321 mi.)*** ***V101*** ***174***
Database: LUST SANTA CLARA, Date of Government Version: 03/03/2014
Database: LUST REG 2, Date of Government Version: 09/30/2004
Database: LUST, Date of Government Version: 03/13/2017
Status: Completed - Case Closed
Facility Status: Case Closed
Global Id: T0608501291
SCVWD ID: 06S3W02D05F
date9: 10/31/2000

HANSEN PLUMBING ***50 HOMER AVE*** ***S 1/4 - 1/2 (0.321 mi.)*** ***T102*** ***182***
Database: LUST SANTA CLARA, Date of Government Version: 03/03/2014
Database: LUST REG 2, Date of Government Version: 09/30/2004
Database: LUST, Date of Government Version: 03/13/2017
Status: Completed - Case Closed
Facility Status: Case Closed
Date Closed: 04/23/2001
Global Id: T0608500706
SCVWD ID: 06S3W02F07F
date9: 4/23/2001

PALO ALTO FIRE STATI ***301 ALMA ST*** ***W 1/4 - 1/2 (0.348 mi.)*** ***V106*** ***191***
Database: LUST SANTA CLARA, Date of Government Version: 03/03/2014
Database: LUST REG 2, Date of Government Version: 09/30/2004
Database: LUST, Date of Government Version: 03/13/2017
Status: Completed - Case Closed
Facility Status: Case Closed
Date Closed: 08/16/1993
Global Id: T0608501024
SCVWD ID: 06S3W02D04F
date9: 8/16/1993

CITY OF PALO ALTO (S ***291 ALMA ST*** ***W 1/4 - 1/2 (0.350 mi.)*** ***Y107*** ***193***
Database: LUST REG 2, Date of Government Version: 09/30/2004
Facility Status: Case Closed
date9: 10/2/2002

COLDWELL BANKER ***291 ALMA ST*** ***W 1/4 - 1/2 (0.350 mi.)*** ***Y108*** ***194***
Database: LUST SANTA CLARA, Date of Government Version: 03/03/2014
Database: LUST REG 2, Date of Government Version: 09/30/2004
Database: LUST, Date of Government Version: 03/13/2017
Status: Completed - Case Closed
Facility Status: Case Closed
Date Closed: 10/02/2002
Date Closed: 02/01/1996
Global Id: T0608502110
Global Id: T0608500441
SCVWD ID: 06S3W02D01F
SCVWD ID: 06S3W02D08F
date9: 2/1/1996

STANFORD B.M.W. ***275 ALMA ST*** ***W 1/4 - 1/2 (0.356 mi.)*** ***Y111*** ***205***
Database: LUST SANTA CLARA, Date of Government Version: 03/03/2014
Database: LUST REG 2, Date of Government Version: 09/30/2004
Database: LUST, Date of Government Version: 03/13/2017

Status: Completed - Case Closed
Facility Status: Case Closed
Date Closed: 03/26/1996
Global Id: T0608501364
SCVWD ID: 06S3W02D03F
date9: 3/26/1996

CHEVRON #9-0136 ***745 EL CAMINO REAL*** ***SSW 1/4 - 1/2 (0.437 mi.)*** ***AA116*** ***215***
Database: LUST REG 2, Date of Government Version: 09/30/2004
Facility Status: Post remedial action monitoring

CHEVRON #9-0136 ***745 EL CAMINO REAL*** ***SSW 1/4 - 1/2 (0.437 mi.)*** ***AA117*** ***217***
Database: LUST, Date of Government Version: 03/13/2017
Status: Completed - Case Closed
Global Id: T0608501568

CHEVRON USA INC ***745 EL CAMINO REAL*** ***SSW 1/4 - 1/2 (0.437 mi.)*** ***AA119*** ***227***
Database: LUST SANTA CLARA, Date of Government Version: 03/03/2014
Date Closed: 12/08/2004
SCVWD ID: 06S3W02F01F

CLOUDBURST CAR WASH ***841 EL CAMINO REAL*** ***S 1/4 - 1/2 (0.492 mi.)*** ***121*** ***229***
Database: LUST SANTA CLARA, Date of Government Version: 03/03/2014
Database: LUST REG 2, Date of Government Version: 09/30/2004
Database: LUST, Date of Government Version: 03/13/2017
Status: Completed - Case Closed
Facility Status: Case Closed
Date Closed: 01/25/2000
Global Id: T0608500433
SCVWD ID: 06S3W02L01F
date9: 1/25/2000

Lower Elevation	Address	Direction / Distance	Map ID	Page

VARSITY THEATRE ***456 UNIVERSITY AVE*** ***N 0 - 1/8 (0.077 mi.)*** ***E22*** ***35***
Database: LUST SANTA CLARA, Date of Government Version: 03/03/2014
Database: LUST REG 2, Date of Government Version: 09/30/2004
Database: LUST, Date of Government Version: 03/13/2017
Status: Completed - Case Closed
Facility Status: Case Closed
Date Closed: 07/09/1998
Global Id: T0608501967
SCVWD ID: 05S3W35Q02F
date9: 7/9/1998

PRESIDENTS HOTEL ***498 UNIVERSITY AVE*** ***NNE 0 - 1/8 (0.117 mi.)*** ***E47*** ***87***
Database: LUST SANTA CLARA, Date of Government Version: 03/03/2014
Database: LUST REG 2, Date of Government Version: 09/30/2004
Database: LUST, Date of Government Version: 03/13/2017
Status: Completed - Case Closed
Facility Status: Case Closed
Date Closed: 04/30/1999
Global Id: T0608502144
SCVWD ID: 05S3W35Q03F
date9: 4/30/1999

PRIVATE RESIDENCE PRIVATE RESIDENCE SSE 1/8 - 1/4 (0.204 mi.) L59 106
Database: LUST, Date of Government Version: 03/13/2017
Status: Completed - Case Closed

Global Id: T0608502132

PALO ALTO MEDICAL FO ***735 EMERSON*** ***S 1/8 - 1/4 (0.205 mi.)*** ***M60*** ***108***
Database: LUST SANTA CLARA, Date of Government Version: 03/03/2014
Database: LUST REG 2, Date of Government Version: 09/30/2004
Database: LUST, Date of Government Version: 03/13/2017
Status: Completed - Case Closed
Facility Id: 43S0544
Facility Status: Case Closed
Date Closed: 01/06/1998
Global Id: T0608546569
SCVWD ID: 06S3W02F12F
date9: 1/6/1998

SHICK RESIDENCE ***505 HOMER AVE*** ***E 1/8 - 1/4 (0.211 mi.)*** ***N61*** ***112***
Database: LUST SANTA CLARA, Date of Government Version: 03/03/2014
Database: LUST REG 2, Date of Government Version: 09/30/2004
Facility Status: Case Closed
Date Closed: 08/22/2002
SCVWD ID: 06S3W02A01F
date9: 8/22/2002

GRANDONA RESIDENCE ***268 HOMER*** ***SSE 1/8 - 1/4 (0.211 mi.)*** ***L63*** ***114***
Database: LUST SANTA CLARA, Date of Government Version: 03/03/2014
Database: LUST REG 2, Date of Government Version: 09/30/2004
Facility Status: Case Closed
Date Closed: 03/29/1999
SCVWD ID: 06S3W02G08F
date9: 3/29/1999

SHEARER FAMILY TRUST ***530 WEBSTER ST*** ***NNE 1/8 - 1/4 (0.213 mi.)*** ***65*** ***115***
Database: LUST SANTA CLARA, Date of Government Version: 03/03/2014
Database: LUST REG 2, Date of Government Version: 09/30/2004
Database: LUST, Date of Government Version: 03/13/2017
Status: Completed - Case Closed
Facility Status: Case Closed
Date Closed: 10/29/1997
Global Id: T0608501995
SCVWD ID: 05S3W35Q01F
date9: 10/29/1997

PRIVATE RESIDENCE PRIVATE RESIDENCE E 1/8 - 1/4 (0.218 mi.) N72 122
Database: LUST, Date of Government Version: 03/13/2017
Status: Completed - Case Closed
Global Id: T0608577375

CITY OF PARIS CLEANE ***248 HOMER AVE*** ***SSE 1/8 - 1/4 (0.229 mi.)*** ***L77*** ***131***
Database: LUST REG 2, Date of Government Version: 09/30/2004
Database: LUST, Date of Government Version: 03/13/2017
Status: Completed - Case Closed
Facility Id: 43-1757
Facility Status: Case Closed
Global Id: T0608501691
date9: 1/23/1997

PENINSULA CREAMERY 800 HIGH ST S 1/4 - 1/2 (0.306 mi.) T95 164
Database: LUST SANTA CLARA, Date of Government Version: 03/03/2014
Date Closed: 06/29/2005
SCVWD ID: 06S3W02G13F

PENINSULA CREAMERY 800 HIGH STREET S 1/4 - 1/2 (0.306 mi.) T96 165
Database: LUST, Date of Government Version: 03/13/2017

Status: Completed - Case Closed
Global Id: T0608564540

BILL YOUNG'S AUTOMOT ***849 HIGH ST*** ***S 1/4 - 1/2 (0.313 mi.)*** ***U99*** ***172***
Database: LUST REG 2, Date of Government Version: 09/30/2004
Facility Status: Case Closed
date9: 1/13/2000

BILL YOUNG'S AUTOMOT ***849 HIGH ST*** ***S 1/4 - 1/2 (0.313 mi.)*** ***U100*** ***173***
Database: LUST SANTA CLARA, Date of Government Version: 03/03/2014
Database: LUST, Date of Government Version: 03/13/2017
Status: Completed - Case Closed
Date Closed: 01/13/2000
Global Id: T0608573149
SCVWD ID: 06S3W02G09F

D & M AUTO REPAIR 190 CHANNING AVE SSE 1/4 - 1/2 (0.335 mi.) W103 185
Database: LUST, Date of Government Version: 03/13/2017
Status: Completed - Case Closed
Global Id: T0608501889

D & M MOTORS ***190 CHANNING AVE*** ***SSE 1/4 - 1/2 (0.335 mi.)*** ***W104*** ***186***
Database: LUST SANTA CLARA, Date of Government Version: 03/03/2014
Database: LUST REG 2, Date of Government Version: 09/30/2004
Facility Status: Case Closed
Date Closed: 06/09/1995
SCVWD ID: 06S3W02G07F
date9: 6/9/1995

STEVE'S FOREIGN AUTO ***809 ALMA ST*** ***S 1/4 - 1/2 (0.335 mi.)*** ***X105*** ***189***
Database: LUST SANTA CLARA, Date of Government Version: 03/03/2014
Database: LUST REG 2, Date of Government Version: 09/30/2004
Database: LUST, Date of Government Version: 03/13/2017
Status: Completed - Case Closed
Facility Status: Case Closed
Date Closed: 01/08/1992
Global Id: T0608501375
SCVWD ID: 06S3W02F04F
date9: 1/8/1992

D&B AUTOMOTIVE ***841 ALMA ST*** ***S 1/4 - 1/2 (0.351 mi.)*** ***X109*** ***199***
Database: LUST SANTA CLARA, Date of Government Version: 03/03/2014
Database: LUST REG 2, Date of Government Version: 09/30/2004
Database: LUST, Date of Government Version: 03/13/2017
Status: Completed - Case Closed
Facility Status: Case Closed
Date Closed: 06/22/1998
Global Id: T0608500485
SCVWD ID: 06S3W02F05F
date9: 6/22/1998

LAWSON BROTHERS CLEA ***853 ALMA ST*** ***S 1/4 - 1/2 (0.354 mi.)*** ***X110*** ***201***
Database: LUST SANTA CLARA, Date of Government Version: 03/03/2014
Database: LUST REG 2, Date of Government Version: 09/30/2004
Database: LUST, Date of Government Version: 03/13/2017
Status: Completed - Case Closed
Facility Status: Case Closed
Date Closed: 12/06/1996
Global Id: T0608500825
SCVWD ID: 06S3W02F02F

date9: 12/6/1996

PENINSULA CREAMERY ***900 HIGH*** ***SSE 1/4 - 1/2 (0.374 mi.)*** ***W112*** ***207***
Database: LUST SANTA CLARA, Date of Government Version: 03/03/2014
Database: LUST REG 2, Date of Government Version: 09/30/2004
Database: LUST, Date of Government Version: 03/13/2017
Status: Completed - Case Closed
Facility Status: Case Closed
Date Closed: 01/03/1997
Global Id: T0608501643
SCVWD ID: 06S3W02G06F
date9: 1/3/1997

KEENAN LAND COMPANY ***975 HIGH ST*** ***SSE 1/4 - 1/2 (0.396 mi.)*** ***114*** ***210***
Database: LUST SANTA CLARA, Date of Government Version: 03/03/2014
Database: LUST REG 2, Date of Government Version: 09/30/2004
Database: LUST, Date of Government Version: 03/13/2017
Status: Completed - Case Closed
Facility Status: Case Closed
Date Closed: 12/28/1995
Global Id: T0608500802
SCVWD ID: 06S3W02G04F
date9: 12/28/1995

WINSTON TIRE COMPANY ***955 ALMA ST*** ***SSE 1/4 - 1/2 (0.414 mi.)*** ***Z115*** ***212***
Database: LUST SANTA CLARA, Date of Government Version: 03/03/2014
Database: LUST REG 2, Date of Government Version: 09/30/2004
Database: LUST, Date of Government Version: 03/13/2017
Status: Completed - Case Closed
Facility Status: Case Closed
Date Closed: 10/30/1996
Global Id: T0608501595
SCVWD ID: 06S3W02G01F
date9: 10/30/1996

MORRIS AUTO PARTS ***999 ALMA*** ***SSE 1/4 - 1/2 (0.446 mi.)*** ***120*** ***227***
Database: LUST REG 2, Date of Government Version: 09/30/2004
Database: LUST, Date of Government Version: 03/13/2017
Status: Completed - Case Closed
Facility Status: Case Closed
Global Id: T0608500960
date9: 1/11/2000

SLIC: Cleanup Program Sites (CPS; also known as Site Cleanups [SC] and formerly known as Spills, Leaks, Investigations, and Cleanups [SLIC] sites) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

A review of the SLIC list, as provided by EDR, has revealed that there are 5 SLIC sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page

CARDINAL DRIVE IN CL ***203 FOREST*** ***S 1/8 - 1/4 (0.173 mi.)*** ***K53*** ***95***
Database: SLIC, Date of Government Version: 03/13/2017
Facility Status: Open - Inactive
Global Id: SL0608500919

HEWLETT-PACKARD COMP ***130 LYTTON AVENUE*** ***WSW 1/4 - 1/2 (0.271 mi.)*** ***S90*** ***153***
Database: SLIC, Date of Government Version: 03/13/2017

Facility Status: Completed - Case Closed
Global Id: T0608570350

PALO ALTO MEDICAL FO	URBAN LANE	SW 1/4 - 1/2 (0.283 mi.)	R93	162

Database: SLIC REG 2, Date of Government Version: 09/30/2004

Lower Elevation	Address	Direction / Distance	Map ID	Page
LAWSON BROTHERS CLEA	***853 ALMA ST***	***S 1/4 - 1/2 (0.354 mi.)***	***X110***	***201***

Database: SLIC REG 2, Date of Government Version: 09/30/2004
Facility Id: SLT2O198301

901 ALMA STREET	901 ALMA STREET	S 1/4 - 1/2 (0.382 mi.)	Z113	210

Database: SLIC, Date of Government Version: 03/13/2017
Facility Status: Completed - Case Closed
Global Id: T10000007686

HIST LUST: A listing of open and closed leaking underground storage tanks. This listing is no longer updated by the county. Leaking underground storage tanks are now handled by the Department of Environmental Health.

A review of the HIST LUST list, as provided by EDR, and dated 03/29/2005 has revealed that there are 34 HIST LUST sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
OFFICE BUILDING	***529 BRYANT***	***WSW 0 - 1/8 (0.058 mi.)***	***A18***	***31***
SCVWD ID: 06S3W02C04				
PALO ALTO CIVIC CENT	***250 HAMILTON AVE***	***S 0 - 1/8 (0.102 mi.)***	***D33***	***68***
SCVWD ID: 06S3W02B01				
PREMIER PROPERTIES	***250 UNIVERSITY AVE***	***WSW 0 - 1/8 (0.102 mi.)***	***H37***	***72***
SCVWD ID: 06S3W02C01				
PALO ALTO TRANSMISSI	***701 EMERSON***	***S 1/8 - 1/4 (0.189 mi.)***	***K57***	***104***
SCVWD ID: 06S3W02C02				
INDEPENDENT BMW	***400 EMERSON ST***	***WSW 1/8 - 1/4 (0.216 mi.)***	***O67***	***118***
SCVWD ID: 06S3W02D02				
BILL'S AUTO GLASS	***744 HIGH ST***	***S 1/4 - 1/2 (0.267 mi.)***	***Q89***	***151***
SCVWD ID: 06S3W02F08				
HEWLETT-PACKARD COMP	***130 LYTTON AVENUE***	***WSW 1/4 - 1/2 (0.271 mi.)***	***S90***	***153***
SCVWD ID: 06S3W02D06				
KURT'S AUTO CARE	***780 HIGH***	***S 1/4 - 1/2 (0.280 mi.)***	***T92***	***157***
SCVWD ID: 06S3W02F06				
KEENAN LAND CO	***753 ALMA ST***	***S 1/4 - 1/2 (0.297 mi.)***	***T94***	***162***
SCVWD ID: 06S3W02F11				
TIDY TOWN CLEANERS	***163 EVERETT AVE***	***W 1/4 - 1/2 (0.309 mi.)***	***97***	***166***
SCVWD ID: 06S3W02D07				
INDEPENDENT BMW	***799 ALMA ST***	***S 1/4 - 1/2 (0.310 mi.)***	***T98***	***170***
SCVWD ID: 06S3W02F10				
COMMUTER SHELL SERVI	***355 ALMA ST***	***WSW 1/4 - 1/2 (0.321 mi.)***	***V101***	***174***
SCVWD ID: 06S3W02D05				
HANSEN PLUMBING	***50 HOMER AVE***	***S 1/4 - 1/2 (0.321 mi.)***	***T102***	***182***

SCVWD ID: 06S3W02F07				
PALO ALTO FIRE STATI	***301 ALMA ST***	***W 1/4 - 1/2 (0.348 mi.)***	***V106***	***191***
SCVWD ID: 06S3W02D04				
CITY OF PALO ALTO (S	***291 ALMA ST***	***W 1/4 - 1/2 (0.350 mi.)***	***Y107***	***193***
SCVWD ID: 06S3W02D01				
COLDWELL BANKER	***291 ALMA ST***	***W 1/4 - 1/2 (0.350 mi.)***	***Y108***	***194***
SCVWD ID: 06S3W02D08				
STANFORD B.M.W.	***275 ALMA ST***	***W 1/4 - 1/2 (0.356 mi.)***	***Y111***	***205***
SCVWD ID: 06S3W02D03				
CHEVRON #9-0136	***745 EL CAMINO REAL***	***SSW 1/4 - 1/2 (0.437 mi.)***	***AA116***	***215***
SCVWD ID: 06S3W02F01				
CLOUDBURST CAR WASH	***841 EL CAMINO REAL***	***S 1/4 - 1/2 (0.492 mi.)***	***121***	***229***
SCVWD ID: 06S3W02L01				

Lower Elevation	Address	Direction / Distance	Map ID	Page
VARSITY THEATRE	***456 UNIVERSITY AVE***	***N 0 - 1/8 (0.077 mi.)***	***E22***	***35***
SCVWD ID: 05S3W35Q02				
PRESIDENTS HOTEL	***498 UNIVERSITY AVE***	***NNE 0 - 1/8 (0.117 mi.)***	***E47***	***87***
SCVWD ID: 05S3W35Q03				
PALO ALTO MEDICAL FO	***735 EMERSON***	***S 1/8 - 1/4 (0.205 mi.)***	***M60***	***108***
SCVWD ID: 06S3W02F12				
SHICK RESIDENCE	***505 HOMER AVE***	***E 1/8 - 1/4 (0.211 mi.)***	***N61***	***112***
SCVWD ID: 06S3W02A01				
GRANDONA RESIDENCE	***268 HOMER***	***SSE 1/8 - 1/4 (0.211 mi.)***	***L63***	***114***
SCVWD ID: 06S3W02G08				
SHEARER FAMILY TRUST	***530 WEBSTER ST***	***NNE 1/8 - 1/4 (0.213 mi.)***	***65***	***115***
SCVWD ID: 05S3W35Q01				
BILL YOUNG'S AUTOMOT	***849 HIGH ST***	***S 1/4 - 1/2 (0.313 mi.)***	***U99***	***172***
SCVWD ID: 06S3W02G09				
D & M MOTORS	***190 CHANNING AVE***	***SSE 1/4 - 1/2 (0.335 mi.)***	***W104***	***186***
SCVWD ID: 06S3W02G07				
STEVE'S FOREIGN AUTO	***809 ALMA ST***	***S 1/4 - 1/2 (0.335 mi.)***	***X105***	***189***
SCVWD ID: 06S3W02F04				
D&B AUTOMOTIVE	***841 ALMA ST***	***S 1/4 - 1/2 (0.351 mi.)***	***X109***	***199***
SCVWD ID: 06S3W02F05				
LAWSON BROTHERS CLEA	***853 ALMA ST***	***S 1/4 - 1/2 (0.354 mi.)***	***X110***	***201***
SCVWD ID: 06S3W02F02				
PENINSULA CREAMERY	***900 HIGH***	***SSE 1/4 - 1/2 (0.374 mi.)***	***W112***	***207***
SCVWD ID: 06S3W02G06				
KEENAN LAND COMPANY	***975 HIGH ST***	***SSE 1/4 - 1/2 (0.396 mi.)***	***114***	***210***
SCVWD ID: 06S3W02G04				
WINSTON TIRE COMPANY	***955 ALMA ST***	***SSE 1/4 - 1/2 (0.414 mi.)***	***Z115***	***212***
SCVWD ID: 06S3W02G01				
MORRIS AUTO PARTS	***999 ALMA***	***SSE 1/4 - 1/2 (0.446 mi.)***	***120***	***227***
SCVWD ID: 06S3W02G02				

State and tribal registered storage tank lists

UST: The Underground Storage Tank database contains registered USTs. USTs are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA). The data come from the State Water Resources Control Board's Hazardous Substance Storage Container Database.

A review of the UST list, as provided by EDR, has revealed that there are 2 UST sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
AT&T/SBC (P1-007) Database: UST, Date of Government Version: 03/12/2017 Facility Id: 43-006-000436	345 HAMILTON AVE	SW 0 - 1/8 (0.015 mi.)	A4	10
CITY OF PALO ALTO CI Database: UST, Date of Government Version: 03/12/2017 Facility Id: 43-006-000427	250 HAMILTON AVE	S 0 - 1/8 (0.102 mi.)	D35	70

AST: A listing of aboveground storage tank petroleum storage tank locations.

A review of the AST list, as provided by EDR, and dated 07/06/2016 has revealed that there are 2 AST sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
SWITCH AND DATA CA N	529 BRYANT ST	WSW 0 - 1/8 (0.049 mi.)	A12	20
SWITCH AND DATA	529 BRYANT ST	WSW 0 - 1/8 (0.058 mi.)	A19	33

State and tribal voluntary cleanup sites

VCP: Contains low threat level properties with either confirmed or unconfirmed releases and the project proponents have request that DTSC oversee investigation and/or cleanup activities and have agreed to provide coverage for DTSC's costs.

A review of the VCP list, as provided by EDR, and dated 01/30/2017 has revealed that there are 2 VCP sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
PENINSULA CORRIDOR P Status: Inactive - Action Required Facility Id: 41400001	***RAILROAD RIGHT-OF-WA***	***SW 1/4 - 1/2 (0.262 mi.)***	***P88***	***146***

Lower Elevation	Address	Direction / Distance	Map ID	Page
TOWN & COUNTRY CLEAN Status: Active Facility Id: 60001443	***855 EL CAMINO REAL***	***E 0 - 1/8 (0.100 mi.)***	***G32***	***50***

State and tribal Brownfields sites

BROWNFIELDS: A listing of sites the SWRCB considers to be Brownfields since these are sites have come to them through the MOA Process.

A review of the BROWNFIELDS list, as provided by EDR, and dated 01/03/2017 has revealed that there is 1 BROWNFIELDS site within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
CARDINAL DRIVE IN CL	***203 FOREST***	***S 1/8 - 1/4 (0.173 mi.)***	***K53***	***95***

ADDITIONAL ENVIRONMENTAL RECORDS

Local Lists of Registered Storage Tanks

SWEEPS UST: Statewide Environmental Evaluation and Planning System. This underground storage tank listing was updated and maintained by a company contacted by the SWRCB in the early 1990's. The listing is no longer updated or maintained. The local agency is the contact for more information on a site on the SWEEPS list.

A review of the SWEEPS UST list, as provided by EDR, and dated 06/01/1994 has revealed that there are 11 SWEEPS UST sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
PACIFIC BELL (P1-007 Status: A Tank Status: A Comp Number: 36908	345 HAMILTON AVE	SW 0 - 1/8 (0.015 mi.)	A5	10
CITY HALL Status: A Tank Status: A Comp Number: 55084	***250 HAMILTON***	***S 0 - 1/8 (0.102 mi.)***	***D36***	***71***
CUSA- Status: A Comp Number: 62861	***390 LYTTON AVE***	***NW 0 - 1/8 (0.109 mi.)***	***I43***	***81***
PALO ALTO TRANSMISSI Status: A Tank Status: A Comp Number: 59851	***701 EMERSON ST***	***S 1/8 - 1/4 (0.189 mi.)***	***K56***	***100***
BNW SERVICE & REPAIR Status: A Tank Status: A Comp Number: 49498	***400 ENERSON ST***	***WSW 1/8 - 1/4 (0.216 mi.)***	***O66***	***117***
RENTED BY LUTZ FORD Status: A Tank Status: A Comp Number: 50182	***160 FOREST AVE***	***S 1/8 - 1/4 (0.231 mi.)***	***Q79***	***135***
PADDLEFORD OLDSMOBIL	***774 EMERSON ST***	***S 1/8 - 1/4 (0.241 mi.)***	***M84***	***140***

Status: A
Tank Status: A
Comp Number: 13175

UNION AUTO REPAIR	***122 HAMILTON AVE***	***SSW 1/8 - 1/4 (0.242 mi.)***	***R87***	***146***

Status: A
Tank Status: A
Comp Number: 67770

Lower Elevation	Address	Direction / Distance	Map ID	Page
MRS. E. C. FOULE	***630 COWPER ST***	***ENE 0 - 1/8 (0.112 mi.)***	***F45***	***85***

Status: A
Tank Status: A
Comp Number: 21575

APT BLDG	***725 COWPER ST***	***E 1/8 - 1/4 (0.180 mi.)***	***J54***	***98***

Status: A
Tank Status: A
Comp Number: 4233

CARDINAL FRENCH LAUN	***260 HOMER AVE***	***SSE 1/8 - 1/4 (0.211 mi.)***	***L62***	***113***

Status: A
Tank Status: A
Comp Number: 8780

HIST UST: Historical UST Registered Database.

A review of the HIST UST list, as provided by EDR, and dated 10/15/1990 has revealed that there are 17 HIST UST sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
PACIFIC BELL (P1-007	***34 HAMILTON AVE***	***SW 0 - 1/8 (0.015 mi.)***	***A1***	***8***
CITY HALL	250 HAMILTON	S 0 - 1/8 (0.102 mi.)	D34	70
Facility Id: 00000055084				
96226	390 LYTTON ST	NW 0 - 1/8 (0.109 mi.)	I42	80
LEONARD ELY PROPERTY	***390 LYTTON AVENUE***	***NW 0 - 1/8 (0.109 mi.)***	***I44***	***83***
Facility Id: 00000062861				
PALO ALTO TRANSMISSI	***701 EMERSON***	***S 1/8 - 1/4 (0.189 mi.)***	***K57***	***104***
Facility Id: 00000059851				
BNW SERVICE & REPAIR	***400 ENERSON ST***	***WSW 1/8 - 1/4 (0.216 mi.)***	***O66***	***117***
BNW SERVICE & REPAIR	400 EMERSON ST	WSW 1/8 - 1/4 (0.216 mi.)	O69	121
Facility Id: 00000049498				
RENTED BY LUTZ FORD	160 FOREST AVE	S 1/8 - 1/4 (0.231 mi.)	Q78	135
Facility Id: 00000050182				
PADDLEFORD OLDSMOBIL	***774 EMERSON ST***	***S 1/8 - 1/4 (0.241 mi.)***	***M84***	***140***
Facility Id: 00000013175				
WHOLE FOODS MARKET -	***774 EMERSON AV***	***S 1/8 - 1/4 (0.241 mi.)***	***M85***	***144***
Facility Id: 00000064936				
UNION AUTO REPAIR	122 HAMILTON AVE	SSW 1/8 - 1/4 (0.242 mi.)	R86	145
Facility Id: 00000067770				

Lower Elevation	Address	Direction / Distance	Map ID	Page
MRS. E. C. FOULE	630 COWPER ST	ENE 0 - 1/8 (0.112 mi.)	F46	86

Facility Id: 00000021575				
APT BLDG Facility Id: 00000004233	725 COWPER ST	E 1/8 - 1/4 (0.180 mi.)	J55	99
CARDINAL FRENCH LAUN	***260 HOMER AVE***	***SSE 1/8 - 1/4 (0.211 mi.)***	***L62***	***113***
CARDINAL FRENCH LAUN Facility Id: 00000008780	260 HOMER AVE	SSE 1/8 - 1/4 (0.216 mi.)	L70	121
PENINSULA PLATING WO Facility Id: 00000001423	232 HOMER AVE	SSE 1/8 - 1/4 (0.234 mi.)	L82	139
PENINSULA PLATING WO	232 HOMER HILLS	SSE 1/8 - 1/4 (0.234 mi.)	L83	139

CA FID UST: The Facility Inventory Database contains active and inactive underground storage tank locations. The source is the State Water Resource Control Board.

A review of the CA FID UST list, as provided by EDR, and dated 10/31/1994 has revealed that there are 10 CA FID UST sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
CITY HALL Facility Id: 43005856 Status: A	***250 HAMILTON***	***S 0 - 1/8 (0.102 mi.)***	***D36***	***71***
CUSA- Facility Id: 43000916 Status: A	***390 LYTTON AVE***	***NW 0 - 1/8 (0.109 mi.)***	***I43***	***81***
PALO ALTO TRANSMISSI Facility Id: 43001096 Status: A	***701 EMERSON ST***	***S 1/8 - 1/4 (0.189 mi.)***	***K56***	***100***
BNW SERVICE & REPAIR Facility Id: 43012212 Status: A	***400 ENERSON ST***	***WSW 1/8 - 1/4 (0.216 mi.)***	***O66***	***117***
RENTED BY LUTZ FORD Facility Id: 43012213 Status: A	***160 FOREST AVE***	***S 1/8 - 1/4 (0.231 mi.)***	***Q79***	***135***
PADDLEFORD OLDSMOBIL Facility Id: 43002310 Status: A	***774 EMERSON ST***	***S 1/8 - 1/4 (0.241 mi.)***	***M84***	***140***
UNION AUTO REPAIR Facility Id: 43012218 Status: A	***122 HAMILTON AVE***	***SSW 1/8 - 1/4 (0.242 mi.)***	***R87***	***146***

Lower Elevation	Address	Direction / Distance	Map ID	Page
MRS. E. C. FOULE Facility Id: 43012202 Status: A	***630 COWPER ST***	***ENE 0 - 1/8 (0.112 mi.)***	***F45***	***85***
APT BLDG Facility Id: 43001676 Status: A	***725 COWPER ST***	***E 1/8 - 1/4 (0.180 mi.)***	***J54***	***98***
CARDINAL FRENCH LAUN Facility Id: 43012191	***260 HOMER AVE***	***SSE 1/8 - 1/4 (0.211 mi.)***	***L62***	***113***

Status: A

Other Ascertainable Records

RCRA NonGen / NLR: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

A review of the RCRA NonGen / NLR list, as provided by EDR, and dated 12/12/2016 has revealed that there are 7 RCRA NonGen / NLR sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
HEWLETT PACKARD UNIV	***250 UNIVERSITY AVE***	***WSW 0 - 1/8 (0.102 mi.)***	***H38***	***74***
FOX PHOTO	***140 UNIVERSITY AVE***	***SW 1/8 - 1/4 (0.228 mi.)***	***P75***	***128***
PADDLEFORD OLDSMOBIL	***774 EMERSON ST***	***S 1/8 - 1/4 (0.241 mi.)***	***M84***	***140***
Lower Elevation	**Address**	**Direction / Distance**	**Map ID**	**Page**
PACIFIC BELL	***420 COWPER AVENUE***	***N 1/8 - 1/4 (0.153 mi.)***	***50***	***91***
PALO ALTO MEDICAL CL	300 HOMER AVE	SE 1/8 - 1/4 (0.193 mi.)	58	105
PALO ALTO MEDICAL FO	***820 RAMONA***	***SSE 1/8 - 1/4 (0.228 mi.)***	***L74***	***125***
PADDLEFORD OLDS INC	***7774 EMERSON STREET***	***S 1/8 - 1/4 (0.231 mi.)***	***M81***	***137***

CUPA Listings: A listing of sites included in the county's Certified Unified Program Agency database. California's Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

A review of the CUPA Listings list, as provided by EDR, has revealed that there are 13 CUPA Listings sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
PACIFIC BELL (P1-007	***34 HAMILTON AVE***	***SW 0 - 1/8 (0.015 mi.)***	***A1***	***8***
Database: CUPA SANTA CLARA, Date of Government Version: 02/22/2017				
CVS PHARMACY #9915	***352 UNIVERSITY AVE***	***WNW 0 - 1/8 (0.015 mi.)***	***A7***	***15***
Database: CUPA SANTA CLARA, Date of Government Version: 02/22/2017				
WALGREENS #12141	***328 UNIVERSITY AVE***	***WNW 0 - 1/8 (0.037 mi.)***	***A8***	***17***
Database: CUPA SANTA CLARA, Date of Government Version: 02/22/2017				
WALGREENS #13596	***300 UNIVERSITY AVE***	***W 0 - 1/8 (0.055 mi.)***	***B16***	***24***
Database: CUPA SANTA CLARA, Date of Government Version: 02/22/2017				
HOLIDAY CLEANERS	***595 BRYANT ST***	***S 0 - 1/8 (0.058 mi.)***	***D21***	***34***
Database: CUPA SANTA CLARA, Date of Government Version: 02/22/2017				
CITY HALL	***250 HAMILTON***	***S 0 - 1/8 (0.102 mi.)***	***D36***	***71***
Database: CUPA SANTA CLARA, Date of Government Version: 02/22/2017				
PALO ALTO SPEEDOMETE	718 EMERSON ST	S 1/8 - 1/4 (0.217 mi.)	K71	122
Database: CUPA SANTA CLARA, Date of Government Version: 02/22/2017				
WHOLE FOODS MARKET -	***774 EMERSON AV***	***S 1/8 - 1/4 (0.241 mi.)***	***M85***	***144***
Database: CUPA SANTA CLARA, Date of Government Version: 02/22/2017				

Lower Elevation	Address	Direction / Distance	Map ID	Page
GATE CLEANERS	***439 HAMILTON AVE***	***NE 0 - 1/8 (0.055 mi.)***	***C13***	***21***
Database: CUPA SANTA CLARA, Date of Government Version: 02/22/2017				
TOWN & COUNTRY CLEAN	855 EL CAMINO REAL 4	E 0 - 1/8 (0.100 mi.)	G27	39
Database: CUPA SANTA CLARA, Date of Government Version: 02/22/2017				
CVS PHARMACY #3935	855 EL CAMINO REAL 1	E 0 - 1/8 (0.100 mi.)	G28	39
Database: CUPA SANTA CLARA, Date of Government Version: 02/22/2017				
AZEEM K LAKHA DMD	720 COWPER ST	E 1/8 - 1/4 (0.157 mi.)	J51	93
Database: CUPA SANTA CLARA, Date of Government Version: 02/22/2017				
FRANK L ALTICK DDS	***824 BRYANT ST***	***SSE 1/8 - 1/4 (0.223 mi.)***	***L73***	***124***
Database: CUPA SANTA CLARA, Date of Government Version: 02/22/2017				

DRYCLEANERS: A list of drycleaner related facilities that have EPA ID numbers. These are facilities with certain SIC codes: power laundries, family and commercial; garment pressing and cleaners' agents; linen supply; coin-operated laundries and cleaning; drycleaning plants except rugs; carpet and upholster cleaning; industrial launderers; laundry and garment services.

A review of the DRYCLEANERS list, as provided by EDR, and dated 03/09/2017 has revealed that there are 3 DRYCLEANERS sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
HOLIDAY CLEANERS	***595 BRYANT ST***	***S 0 - 1/8 (0.058 mi.)***	***D21***	***34***
EPA Id: CAL000200858				

Lower Elevation	Address	Direction / Distance	Map ID	Page
GATE CLEANERS	***439 HAMILTON AVE***	***NE 0 - 1/8 (0.055 mi.)***	***C13***	***21***
EPA Id: CAL000339058				
ECONOMY CLEANERS	486 HAMILTON AVE	NE 0 - 1/8 (0.097 mi.)	F26	38
EPA Id: CAL000372746				

HIST CORTESE: The sites for the list are designated by the State Water Resource Control Board [LUST], the Integrated Waste Board [SWF/LS], and the Department of Toxic Substances Control [CALSITES]. This listing is no longer updated by the state agency.

A review of the HIST CORTESE list, as provided by EDR, and dated 04/01/2001 has revealed that there are 32 HIST CORTESE sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
OFFICE BUILDING	***529 BRYANT***	***WSW 0 - 1/8 (0.058 mi.)***	***A18***	***31***
Reg Id: 43-2012				
PALO ALTO CIVIC CENT	***250 HAMILTON AVE***	***S 0 - 1/8 (0.102 mi.)***	***D33***	***68***
Reg Id: 43-1028				
PREMIER PROPERTIES	***250 UNIVERSITY AVE***	***WSW 0 - 1/8 (0.102 mi.)***	***H37***	***72***
Reg Id: 43-1076				
PALO ALTO TRANSMISSI	710 EMERSON	S 1/8 - 1/4 (0.211 mi.)	K64	115
Reg Id: 43-1033				
INDEPENDANT BMW	***400 EMERSON***	***WSW 1/8 - 1/4 (0.216 mi.)***	***O68***	***119***

Reg Id: 43-0716				
BILL'S AUTO GLASS Reg Id: 43-1726	***744 HIGH ST***	***S 1/4 - 1/2 (0.267 mi.)***	***Q89***	***151***
KURT'S AUTO CARE Reg Id: 43-1772	***780 HIGH***	***S 1/4 - 1/2 (0.280 mi.)***	***T92***	***157***
KEENAN LAND CO Reg Id: 43-2082	***753 ALMA ST***	***S 1/4 - 1/2 (0.297 mi.)***	***T94***	***162***
TIDY TOWN CLEANERS Reg Id: 43-1475	***163 EVERETT AVE***	***W 1/4 - 1/2 (0.309 mi.)***	***97***	***166***
INDEPENDENT BMW Reg Id: 43-2246	***799 ALMA ST***	***S 1/4 - 1/2 (0.310 mi.)***	***T98***	***170***
COMMUTER SHELL SERVI Reg Id: 43-1313	***355 ALMA ST***	***WSW 1/4 - 1/2 (0.321 mi.)***	***V101***	***174***
HANSEN PLUMBING Reg Id: 43-0675	***50 HOMER AVE***	***S 1/4 - 1/2 (0.321 mi.)***	***T102***	***182***
PALO ALTO FIRE STATI Reg Id: 43-1029	***301 ALMA ST***	***W 1/4 - 1/2 (0.348 mi.)***	***V106***	***191***
COLDWELL BANKER Reg Id: 43-0390 Reg Id: 43-2297	***291 ALMA ST***	***W 1/4 - 1/2 (0.350 mi.)***	***Y108***	***194***
STANFORD B.M.W. Reg Id: 43-1389	***275 ALMA ST***	***W 1/4 - 1/2 (0.356 mi.)***	***Y111***	***205***
CHEVRON Reg Id: 43-1613	745 EL CAMINO REAL	SSW 1/4 - 1/2 (0.437 mi.)	AA118	226
CLOUDBURST CAR WASH Reg Id: 43-0382	***841 EL CAMINO REAL***	***S 1/4 - 1/2 (0.492 mi.)***	***121***	***229***

Lower Elevation	Address	Direction / Distance	Map ID	Page
VARSITY THEATRE Reg Id: 43-2143	***456 UNIVERSITY AVE***	***N 0 - 1/8 (0.077 mi.)***	***E22***	***35***
PRESIDENTS HOTEL Reg Id: 43-2332	***498 UNIVERSITY AVE***	***NNE 0 - 1/8 (0.117 mi.)***	***E47***	***87***
PALO ALTO MEDICAL FO Reg Id: 43-2206	***735 EMERSON***	***S 1/8 - 1/4 (0.205 mi.)***	***M60***	***108***
GRANDONA RESIDENCE Reg Id: 43-2320	***268 HOMER***	***SSE 1/8 - 1/4 (0.211 mi.)***	***L63***	***114***
SHEARER FAMILY TRUST Reg Id: 43-2171	***530 WEBSTER ST***	***NNE 1/8 - 1/4 (0.213 mi.)***	***65***	***115***
CITY OF PARIS CLEANE Reg Id: 43-1757	***248 HOMER AVE***	***SSE 1/8 - 1/4 (0.229 mi.)***	***L77***	***131***
BILL YOUNG'S AUTOMOT Reg Id: 43-2347	***849 HIGH ST***	***S 1/4 - 1/2 (0.313 mi.)***	***U100***	***173***
D & M MOTORS Reg Id: 43-2053	***190 CHANNING AVE***	***SSE 1/4 - 1/2 (0.335 mi.)***	***W104***	***186***
STEVE'S FOREIGN AUTO Reg Id: 43-1400	***809 ALMA ST***	***S 1/4 - 1/2 (0.335 mi.)***	***X105***	***189***
D&B AUTOMOTIVE	***841 ALMA ST***	***S 1/4 - 1/2 (0.351 mi.)***	***X109***	***199***

Reg Id: 43-0435				
LAWSON BROTHERS CLEA Reg Id: 43-0808	***853 ALMA ST***	***S 1/4 - 1/2 (0.354 mi.)***	***X110***	***201***
PENINSULA CREAMERY Reg Id: 43-1701	***900 HIGH***	***SSE 1/4 - 1/2 (0.374 mi.)***	***W112***	***207***
KEENAN LAND COMPANY Reg Id: 43-0780	***975 HIGH ST***	***SSE 1/4 - 1/2 (0.396 mi.)***	***114***	***210***
WINSTON TIRE COMPANY Reg Id: 43-1643	***955 ALMA ST***	***SSE 1/4 - 1/2 (0.414 mi.)***	***Z115***	***212***
MORRIS AUTO PARTS Reg Id: 43-0955	***999 ALMA***	***SSE 1/4 - 1/2 (0.446 mi.)***	***120***	***227***

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR Hist Auto: EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

A review of the EDR Hist Auto list, as provided by EDR, has revealed that there are 3 EDR Hist Auto sites within approximately 0.125 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
AUTO TOW	555 BRYANT ST	SW 0 - 1/8 (0.042 mi.)	A9	19
SERRA OIL & GAS	419 WAVERLY ST	NNW 0 - 1/8 (0.107 mi.)	I40	80
LEE PENNEL CHEVRON	390 LYTTON	NW 0 - 1/8 (0.109 mi.)	I41	80

EDR Hist Cleaner: EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

A review of the EDR Hist Cleaner list, as provided by EDR, has revealed that there are 8 EDR Hist Cleaner sites within approximately 0.125 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
PERSHAS RUG & CARPET	345 HAMILTON AVE	SW 0 - 1/8 (0.015 mi.)	A2	8
LEATHER SPCLSTS AT D	318 UNIVERSITY AVE	W 0 - 1/8 (0.044 mi.)	B10	19

EXECUTIVE SUMMARY

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
ZEEMEN INC	595 BRYANT ST	S 0 - 1/8 (0.058 mi.)	D20	34

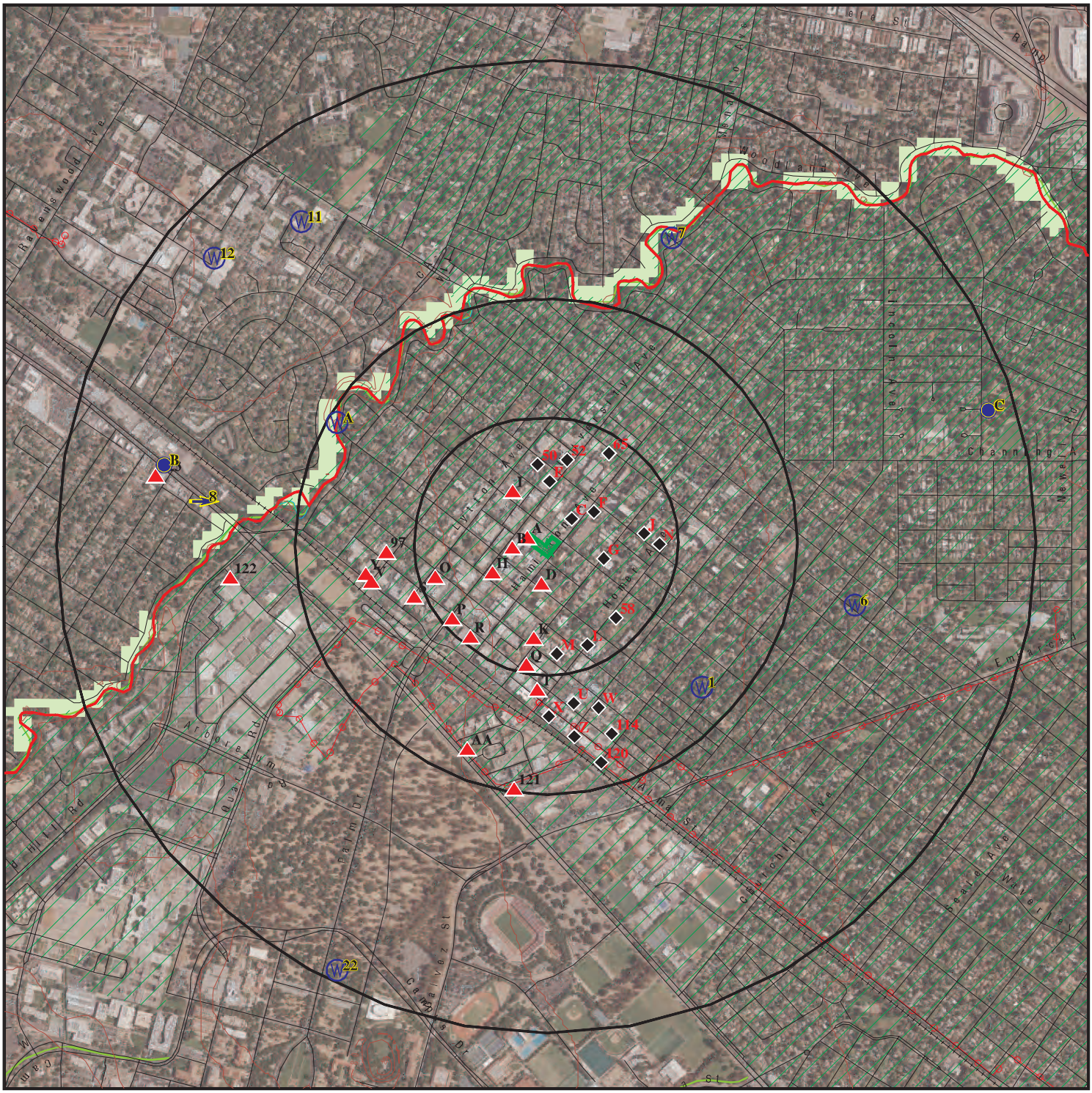
Lower Elevation	Address	Direction / Distance	Map ID	Page
ECONOMY CLEANERS	430 HAMILTON AVE	ENE 0 - 1/8 (0.044 mi.)	C11	20
GATE CLEANERS LLC	439 HAMILTON AVE	NE 0 - 1/8 (0.055 mi.)	C14	21
ELITE CLEANERS	464 UNIVERSITY AVE	N 0 - 1/8 (0.085 mi.)	E23	37
ELITE CLEANERS	435 UNIVERSITY AVE	N 0 - 1/8 (0.087 mi.)	E24	37
ELITE CLEANERS	468 UNIVERSITY AVE	N 0 - 1/8 (0.092 mi.)	E25	38

EXECUTIVE SUMMARY

Due to poor or inadequate address information, the following sites were not mapped. Count: 2 records.

Site Name	Database(s)
OREGON EXPWY UNDERPASS	SEMS-ARCHIVE
PENINSULA SPORTSMENS CLUB	SLIC

OVERVIEW MAP - 5021939.2S



0 1/4 1/2 1 Miles

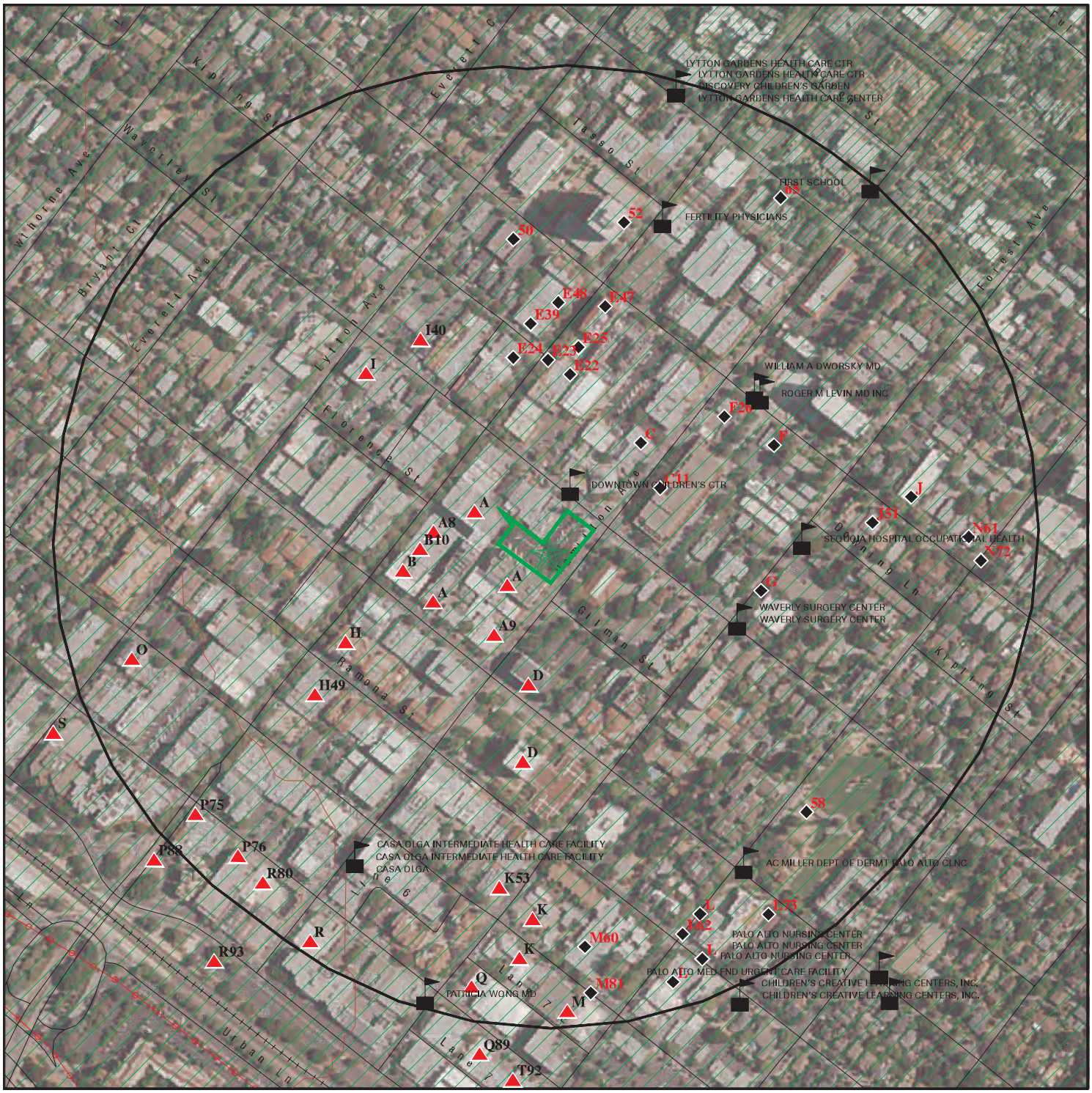
- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- County Boundary
- Power transmission lines
- 100-year flood zone
- 500-year flood zone
- National Wetland Inventory
- State Wetlands
- Upgradient Area
- Areas of Concern

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME:	Proposed Palo Alto Parking Structure	CLIENT:	Parsons Brinkerhoff
ADDRESS:	375 Hamilton Avenue Palo Alto CA 94301	CONTACT:	Adam Heft
LAT/LONG:	37.446095 / 122.15977	INQUIRY #:	5021939.2s
		DATE:	August 14, 2017 5:34 pm

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DETAIL MAP - 5021939.2S



Target Property

Sites at elevations higher than or equal to the target property

Sites at elevations lower than the target property

Manufactured Gas Plants

Sensitive Receptors

National Priority List Sites

Dept. Defense Sites

0 1/16 1/8 1/4 Miles

Indian Reservations BIA

Power transmission lines

100-year flood zone

500-year flood zone

Areas of Concern

N

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME:	Proposed Palo Alto Parking Structure	CLIENT:	Parsons Brinkerhoff
ADDRESS:	375 Hamilton Avenue Palo Alto CA 94301	CONTACT:	Adam Heft
LAT/LONG:	37.446095 / 122.15977	INQUIRY #:	5021939.2s
		DATE:	August 14, 2017 5:39 pm

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MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMENTAL RECORDS								
Federal NPL site list								
NPL	1.000		0	0	0	0	NR	0
Proposed NPL	1.000		0	0	0	0	NR	0
NPL LIENS	0.001		0	NR	NR	NR	NR	0
Federal Delisted NPL site list								
Delisted NPL	1.000		0	0	0	0	NR	0
Federal CERCLIS list								
FEDERAL FACILITY	0.500		0	0	0	NR	NR	0
SEMS	0.500		0	0	0	NR	NR	0
Federal CERCLIS NFRAP site list								
SEMS-ARCHIVE	0.500		0	0	0	NR	NR	0
Federal RCRA CORRACTS facilities list								
CORRACTS	1.000		0	0	0	0	NR	0
Federal RCRA non-CORRACTS TSD facilities list								
RCRA-TSDF	0.500		0	0	0	NR	NR	0
Federal RCRA generators list								
RCRA-LQG	0.250		2	1	NR	NR	NR	3
RCRA-SQG	0.250		5	5	NR	NR	NR	10
RCRA-CESQG	0.250		2	0	NR	NR	NR	2
Federal institutional controls / engineering controls registries								
LUCIS	0.500		0	0	0	NR	NR	0
US ENG CONTROLS	0.500		0	0	0	NR	NR	0
US INST CONTROL	0.500		0	0	0	NR	NR	0
Federal ERNS list								
ERNS	0.001		0	NR	NR	NR	NR	0
State- and tribal - equivalent NPL								
RESPONSE	1.000		0	0	0	1	NR	1
State- and tribal - equivalent CERCLIS								
ENVIROSTOR	1.000		1	0	1	2	NR	4
State and tribal landfill and/or solid waste disposal site lists								
SWF/LF	0.500		0	0	0	NR	NR	0
State and tribal leaking storage tank lists								
LUST	0.500		8	12	29	NR	NR	49

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
INDIAN LUST	0.500		0	0	0	NR	NR	0
SLIC	0.500		0	1	4	NR	NR	5
HIST LUST	0.500		5	6	23	NR	NR	34
State and tribal registered storage tank lists								
FEMA UST	0.250		0	0	NR	NR	NR	0
UST	0.250		2	0	NR	NR	NR	2
AST	0.250		2	0	NR	NR	NR	2
INDIAN UST	0.250		0	0	NR	NR	NR	0
State and tribal voluntary cleanup sites								
VCP	0.500		1	0	1	NR	NR	2
INDIAN VCP	0.500		0	0	0	NR	NR	0
State and tribal Brownfields sites								
BROWNFIELDS	0.500		0	1	0	NR	NR	1
ADDITIONAL ENVIRONMENTAL RECORDS								
Local Brownfield lists								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
Local Lists of Landfill / Solid Waste Disposal Sites								
WMUDS/SWAT	0.500		0	0	0	NR	NR	0
SWRCY	0.500		0	0	0	NR	NR	0
HAULERS	0.001		0	NR	NR	NR	NR	0
INDIAN ODI	0.500		0	0	0	NR	NR	0
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
ODI	0.500		0	0	0	NR	NR	0
IHS OPEN DUMPS	0.500		0	0	0	NR	NR	0
Local Lists of Hazardous waste / Contaminated Sites								
US HIST CDL	0.001		0	NR	NR	NR	NR	0
HIST Cal-Sites	1.000		0	0	0	0	NR	0
SCH	0.250		0	0	NR	NR	NR	0
CDL	0.001		0	NR	NR	NR	NR	0
Toxic Pits	1.000		0	0	0	0	NR	0
US CDL	0.001		0	NR	NR	NR	NR	0
Local Lists of Registered Storage Tanks								
SWEEPS UST	0.250		4	7	NR	NR	NR	11
HIST UST	0.250		5	12	NR	NR	NR	17
CA FID UST	0.250		3	7	NR	NR	NR	10
Local Land Records								
LIENS	0.001		0	NR	NR	NR	NR	0
LIENS 2	0.001		0	NR	NR	NR	NR	0
DEED	0.500		0	0	0	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
Records of Emergency Release Reports								
HMIRS	0.001		0	NR	NR	NR	NR	0
CHMIRS	0.001		0	NR	NR	NR	NR	0
LDS	0.001		0	NR	NR	NR	NR	0
MCS	0.001		0	NR	NR	NR	NR	0
SPILLS 90	0.001		0	NR	NR	NR	NR	0
Other Ascertainable Records								
RCRA NonGen / NLR	0.250		1	6	NR	NR	NR	7
FUDS	1.000		0	0	0	0	NR	0
DOD	1.000		0	0	0	0	NR	0
SCRD DRYCLEANERS	0.500		0	0	0	NR	NR	0
US FIN ASSUR	0.001		0	NR	NR	NR	NR	0
EPA WATCH LIST	0.001		0	NR	NR	NR	NR	0
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
TSCA	0.001		0	NR	NR	NR	NR	0
TRIS	0.001		0	NR	NR	NR	NR	0
SSTS	0.001		0	NR	NR	NR	NR	0
ROD	1.000		0	0	0	0	NR	0
RMP	0.001		0	NR	NR	NR	NR	0
RAATS	0.001		0	NR	NR	NR	NR	0
PRP	0.001		0	NR	NR	NR	NR	0
PADS	0.001		0	NR	NR	NR	NR	0
ICIS	0.001		0	NR	NR	NR	NR	0
FTTS	0.001		0	NR	NR	NR	NR	0
MLTS	0.001		0	NR	NR	NR	NR	0
COAL ASH DOE	0.001		0	NR	NR	NR	NR	0
COAL ASH EPA	0.500		0	0	0	NR	NR	0
PCB TRANSFORMER	0.001		0	NR	NR	NR	NR	0
RADINFO	0.001		0	NR	NR	NR	NR	0
HIST FTTS	0.001		0	NR	NR	NR	NR	0
DOT OPS	0.001		0	NR	NR	NR	NR	0
CONSENT	1.000		0	0	0	0	NR	0
INDIAN RESERV	0.001		0	NR	NR	NR	NR	0
FUSRAP	1.000		0	0	0	0	NR	0
UMTRA	0.500		0	0	0	NR	NR	0
LEAD SMELTERS	0.001		0	NR	NR	NR	NR	0
US AIRS	0.001		0	NR	NR	NR	NR	0
US MINES	0.250		0	0	NR	NR	NR	0
ABANDONED MINES	0.001		0	NR	NR	NR	NR	0
FINDS	0.001		0	NR	NR	NR	NR	0
UXO	1.000		0	0	0	0	NR	0
DOCKET HWC	0.001		0	NR	NR	NR	NR	0
ECHO	0.001		0	NR	NR	NR	NR	0
FUELS PROGRAM	0.250		0	0	NR	NR	NR	0
CA BOND EXP. PLAN	1.000		0	0	0	0	NR	0
Cortese	0.500		0	0	0	NR	NR	0
CUPA Listings	0.250		9	4	NR	NR	NR	13
DRYCLEANERS	0.250		3	0	NR	NR	NR	3
EMI	0.001		0	NR	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
ENF	0.001		0	NR	NR	NR	NR	0
Financial Assurance	0.001		0	NR	NR	NR	NR	0
HAZNET	0.001		0	NR	NR	NR	NR	0
ICE	0.001		0	NR	NR	NR	NR	0
HIST CORTESE	0.500		5	6	21	NR	NR	32
HWP	1.000		0	0	0	0	NR	0
HWT	0.250		0	0	NR	NR	NR	0
MINES	0.001		0	NR	NR	NR	NR	0
MWMP	0.250		0	0	NR	NR	NR	0
NPDES	0.001		0	NR	NR	NR	NR	0
PEST LIC	0.001		0	NR	NR	NR	NR	0
PROC	0.500		0	0	0	NR	NR	0
Notify 65	1.000		0	0	0	0	NR	0
SAN JOSE HAZMAT	0.250		0	0	NR	NR	NR	0
UIC	0.001		0	NR	NR	NR	NR	0
WASTEWATER PITS	0.500		0	0	0	NR	NR	0
WDS	0.001		0	NR	NR	NR	NR	0
WIP	0.250		0	0	NR	NR	NR	0
EDR HIGH RISK HISTORICAL RECORDS								
EDR Exclusive Records								
EDR MGP	1.000		0	0	0	0	NR	0
EDR Hist Auto	0.125		3	NR	NR	NR	NR	3
EDR Hist Cleaner	0.125		8	NR	NR	NR	NR	8
EDR RECOVERED GOVERNMENT ARCHIVES								
Exclusive Recovered Govt. Archives								
RGA LF	0.001		0	NR	NR	NR	NR	0
RGA LUST	0.001		0	NR	NR	NR	NR	0
- Totals --		0	69	68	79	3	0	219

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

A1 **PACIFIC BELL (P1-007)** **HIST UST** **S112833905**
SW **34 HAMILTON AVE** **CUPA Listings** **N/A**
< 1/8 **PALO ALTO, CA 94301**
0.015 mi.
81 ft. **Site 1 of 13 in cluster A**

Relative:
Higher

Actual:
55 ft.

HIST UST:

File Number:	000206B4
URL:	http://geotracker.waterboards.ca.gov/ustpdfs/pdf/000206B4.pdf
Region:	Not reported
Facility ID:	Not reported
Facility Type:	Not reported
Other Type:	Not reported
Contact Name:	Not reported
Telephone:	Not reported
Owner Name:	Not reported
Owner Address:	Not reported
Owner City,St,Zip:	Not reported
Total Tanks:	Not reported
Tank Num:	Not reported
Container Num:	Not reported
Year Installed:	Not reported
Tank Capacity:	Not reported
Tank Used for:	Not reported
Type of Fuel:	Not reported
Container Construction Thickness:	Not reported
Leak Detection:	Not reported

Click here for Geo Tracker PDF:

CUPA SANTA CLARA:

Region:	SANTA CLARA
PE#:	2399
Program Description:	UNDERGROUND STORAGE TANK PROGRAM RECORD
Latitude:	37.445671
Longitude:	-122.159961
Region:	SANTA CLARA
PE#:	2205
Program Description:	GENERATES 100 KG YR TO <5 TONS/YR
Latitude:	37.445671
Longitude:	-122.159961

A2 **PERSHAS RUG & CARPET CLEANING** **EDR Hist Cleaner** **1018575994**
SW **345 HAMILTON AVE** **N/A**
< 1/8 **PALO ALTO, CA 94301**
0.015 mi.
81 ft. **Site 2 of 13 in cluster A**

Relative:
Higher

Actual:
55 ft.

EDR Hist Cleaner

Year:	Name:	Type:
2007	PERSHAS RUG & CARPET CLEANING	Carpet And Upholstery Cleaning
2008	PERSHAS RUG & CARPET CLEANING	Carpet And Upholstery Cleaning
2009	PERSHAS RUG & CARPET CLEANING	Carpet And Upholstery Cleaning
2010	PERSHAS RUG & CARPET CLEANING	Carpet And Upholstery Cleaning
2011	PERSHAS RUG & CARPET CLEANING	Carpet And Upholstery Cleaning
2012	PERSHAS RUG & CARPET CLEANING	Carpet And Upholstery Cleaning

PERSHAS RUG & CARPET CLEANING (Continued) **1018575994**

2013	PERSHAS RUG & CARPET CLEANING	Carpet And Upholstery Cleaning
2014	PERSHAS RUG & CARPET CLEANING	Carpet And Upholstery Cleaning

---

A3 **PACIFIC BELL** **LUST** **S111760456**
SW **345 HAMILTON AVE** **N/A**
< 1/8 **PALO ALTO, CA 94301**
0.015 mi.
81 ft. **Site 3 of 13 in cluster A**

Relative:
Higher

Actual:
55 ft.

LUST:

Region:	STATE
Global Id:	T0608501799
Latitude:	37.445544
Longitude:	-122.159096
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	12/29/1995
Lead Agency:	SANTA CLARA COUNTY LOP
Case Worker:	UST
Local Agency:	SANTA CLARA COUNTY LOP
RB Case Number:	Not reported
LOC Case Number:	Not reported
File Location:	All Files are on GeoTracker or in the Local Agency Database
Potential Media Affect:	Soil
Potential Contaminants of Concern:	Diesel
Site History:	Not reported

Click here to access the California GeoTracker records for this facility:

Contact:

Global Id:	T0608501799
Contact Type:	Regional Board Caseworker
Contact Name:	Regional Water Board
Organization Name:	SAN FRANCISCO BAY RWQCB (REGION 2)
Address:	1515 CLAY ST SUITE 1400
City:	OAKLAND
Email:	Not reported
Phone Number:	Not reported

Global Id:	T0608501799
Contact Type:	Local Agency Caseworker
Contact Name:	UST CASE WORKER
Organization Name:	SANTA CLARA COUNTY LOP
Address:	1555 Berger Drive, Suite 300
City:	SAN JOSE
Email:	Not reported
Phone Number:	4089183400

Status History:

Global Id:	T0608501799
Status:	Completed - Case Closed
Status Date:	12/29/1995

Global Id:	T0608501799
Status:	Open - Case Begin Date
Status Date:	01/01/1993

PACIFIC BELL (Continued) **S111760456**

Regulatory Activities:

Global Id:	T0608501799
Action Type:	RESPONSE
Date:	12/29/1995
Action:	Other Report / Document
Global Id:	T0608501799
Action Type:	ENFORCEMENT
Date:	12/29/1995
Action:	Closure/No Further Action Letter
Global Id:	T0608501799
Action Type:	Other
Date:	01/01/1993
Action:	Leak Reported

A4 **AT&T/SBC (P1-007)** **UST** **U004186641**
SW **345 HAMILTON AVE** **N/A**
< 1/8 **PALO ALTO, CA 94301**
0.015 mi.
81 ft. **Site 4 of 13 in cluster A**

Relative:
Higher

Actual:
55 ft.

UST:

Facility ID:	43-006-000436
Permitting Agency:	Santa Clara County Environmental Health
Latitude:	37.271881
Longitude:	-119.270233
Facility ID:	43-006-000436
Permitting Agency:	PALO ALTO, CITY OF
Latitude:	37.44622433
Longitude:	-122.160532

A5 **PACIFIC BELL (P1-007)** **SWEEPS UST** **S106930320**
SW **345 HAMILTON AVE** **N/A**
< 1/8 **PALO ALTO, CA 94303**
0.015 mi.
81 ft. **Site 5 of 13 in cluster A**

Relative:
Higher

Actual:
55 ft.

SWEEPS UST:

Status:	Not reported
Comp Number:	36908
Number:	Not reported
Board Of Equalization:	44-031914
Referral Date:	Not reported
Action Date:	Not reported
Created Date:	Not reported
Owner Tank Id:	Not reported
SWRCB Tank Id:	43-006-036908-000001
Tank Status:	Not reported
Capacity:	10000
Active Date:	Not reported
Tank Use:	M.V. FUEL
STG:	PRODUCT
Content:	DIESEL

PACIFIC BELL (P1-007) (Continued) **S106930320**

Number Of Tanks: 1

Status: Active
Comp Number: 36908
Number: 1
Board Of Equalization: 44-031914
Referral Date: 10-10-93
Action Date: 03-04-94
Created Date: 02-29-88
Owner Tank Id: 1
SWRCB Tank Id: 43-006-036908-000002
Tank Status: A
Capacity: 10000
Active Date: 07-01-85
Tank Use: M.V. FUEL
STG: P
Content: DIESEL
Number Of Tanks: 2

Status: Active
Comp Number: 36908
Number: 1
Board Of Equalization: 44-031914
Referral Date: 10-10-93
Action Date: 03-04-94
Created Date: 02-29-88
Owner Tank Id: D-93-10K
SWRCB Tank Id: 43-006-036908-000003
Tank Status: A
Capacity: 10000
Active Date: 10-10-93
Tank Use: M.V. FUEL
STG: P
Content: DIESEL
Number Of Tanks: Not reported

A6 **CVS PHARMACY NO 9915** **RCRA-LQG 1016168132**
WNW **352 UNIVERSITY AVE** **FINDS CAR000240317**
< 1/8 **PALO ALTO, CA 94301** **ECHO**
0.015 mi.
81 ft. **Site 6 of 13 in cluster A**

Relative:
Higher

Actual:
54 ft.

RCRA-LQG:
Date form received by agency: 08/31/2016
Facility name: CVS PHARMACY #9915
Facility address: 352 UNIVERSITY AVE
PALO ALTO, CA 94301
EPA ID: CAR000240317
Mailing address: CVS DR
MAIL DROP 23062A
WOONSOCKET, RI 02895
Contact: NICOLE WILKINSON
Contact address: CVS DR MAIL CODE 2340
WOONSOCKET, RI 02895
Contact country: US
Contact telephone: (401) 770-7132
Contact email: NICOLE.WILKINSON@CVSHEALTH.COM
EPA Region: 09

CVS PHARMACY NO 9915 (Continued) **1016168132**

Classification: Large Quantity Generator
Description: Handler: generates 1,000 kg or more of hazardous waste during any calendar month; or generates more than 1 kg of acutely hazardous waste during any calendar month; or generates more than 100 kg of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month; or generates 1 kg or less of acutely hazardous waste during any calendar month, and accumulates more than 1 kg of acutely hazardous waste at any time; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates more than 100 kg of that material at any time

Owner/Operator Summary:

Owner/operator name: LONGS DRUG STORES CALIFORNIA LLC
Owner/operator address: Not reported
Not reported
Owner/operator country: US
Owner/operator telephone: Not reported
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: 10/22/2008
Owner/Op end date: Not reported

Owner/operator name: LONGS DRUG STORES CALIFORNIA, L.L.C
Owner/operator address: Not reported
Not reported
Owner/operator country: Not reported
Owner/operator telephone: Not reported
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: 10/22/2008
Owner/Op end date: Not reported

Owner/operator name: ALEXANDER AND WILLIAM STANKOVIC
Owner/operator address: PO BOX 620899
WOODSIDE, CA 94062
Owner/operator country: US
Owner/operator telephone: Not reported
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: 07/11/1988
Owner/Op end date: Not reported

Owner/operator name: ALEXANDER AND WILLIAM STANKOVIC
Owner/operator address: PO BOX 620899
WOODSIDE, CA 94062
Owner/operator country: US
Owner/operator telephone: 650-329-8868
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: 07/11/1988
Owner/Op end date: Not reported

Handler Activities Summary:

CVS PHARMACY NO 9915 (Continued) **1016168132**

U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

. Waste code: 122
. Waste name: 122

. Waste code: 141
. Waste name: 141

. Waste code: 214
. Waste name: 214

. Waste code: 311
. Waste name: 311

. Waste code: 331
. Waste name: 331

. Waste code: 352
. Waste name: 352

. Waste code: D001
. Waste name: IGNITABLE WASTE

. Waste code: D002
. Waste name: CORROSIVE WASTE

. Waste code: D007
. Waste name: CHROMIUM

. Waste code: D009
. Waste name: MERCURY

. Waste code: D010
. Waste name: SELENIUM

. Waste code: D024
. Waste name: M-CRESOL

. Waste code: P001
. Waste name: 2H-1-BENZOPYRAN-2-ONE, 4-HYDROXY-3-(3-OXO-1-PHENYLBUTYL)-, & SALTS, WHEN PRESENT AT CONCENTRATIONS GREATER THAN 0.3% (OR) WARFARIN, & SALTS, WHEN PRESENT AT CONCENTRATIONS GREATER THAN 0.3%

CVS PHARMACY NO 9915 (Continued) **1016168132**

. Waste code: P075
. Waste name: NICOTINE, & SALTS (OR) PYRIDINE, 3-(1-METHYL-2-PYRROLIDINYL)-,(S)-, & SALTS

. Waste code: U002
. Waste name: 2-PROPANONE (I) (OR) ACETONE (I)

. Waste code: U129
. Waste name: CYCLOHEXANE, 1,2,3,4,5,6-HEXACHLORO-, (1ALPHA, 2ALPHA, 3BETA, 4ALPHA, 5ALPHA, 6BETA)- (OR) LINDANE

. Waste code: U165
. Waste name: NAPHTHALENE

. Waste code: U205
. Waste name: SELENIUM SULFIDE (OR) SELENIUM SULFIDE SES2 (R,T)

Historical Generators:
Date form received by agency: 06/19/2013
Site name: CVS PHARMACY NO 9915
Classification: Large Quantity Generator

. Waste code: D001
. Waste name: IGNITABLE WASTE

. Waste code: D002
. Waste name: CORROSIVE WASTE

. Waste code: D009
. Waste name: MERCURY

. Waste code: D011
. Waste name: SILVER

. Waste code: P001
. Waste name: 2H-1-BENZOPYRAN-2-ONE, 4-HYDROXY-3-(3-OXO-1-PHENYLBUTYL)-, & SALTS, WHEN PRESENT AT CONCENTRATIONS GREATER THAN 0.3% (OR) WARFARIN, & SALTS, WHEN PRESENT AT CONCENTRATIONS GREATER THAN 0.3%

. Waste code: P042
. Waste name: 1,2-BENZENEDIOL, 4-[1-HYDROXY-2-(METHYLAMINO)ETHYL]-, (R)- (OR) EPINEPHRINE

. Waste code: P075
. Waste name: NICOTINE, & SALTS (OR) PYRIDINE, 3-(1-METHYL-2-PYRROLIDINYL)-,(S)-, & SALTS

. Waste code: P081
. Waste name: 1,2,3-PROPANETRIOL, TRINITRATE (R) (OR) NITROGLYCERINE (R)

Violation Status: No violations found

FINDS:

Registry ID: 110055522938

Environmental Interest/Information System

CVS PHARMACY NO 9915 (Continued) **1016168132**

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

STATE MASTER

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:

Envid:	1016168132
Registry ID:	110055522938
DFR URL:	http://echo.epa.gov/detailed-facility-report?fid=110055522938

A7 **CVS PHARMACY #9915** **CUPA Listings** **S103654858**
WNW **352 UNIVERSITY AVE** **HAZNET** **N/A**
< 1/8 **PALO ALTO, CA 94301**
0.015 mi.
81 ft. **Site 7 of 13 in cluster A**

Relative:
Higher

Actual:
54 ft.

CUPA SANTA CLARA:

Region:	SANTA CLARA
PE#:	LQ40
Program Description:	GENERATES < 10 GAL/YR (RCRA LQG)
Latitude:	37.446569
Longitude:	-122.160817

HAZNET:

envid:	S103654858
Year:	2015
GEPAID:	CAR000240317
Contact:	WENDY BRANT
Telephone:	4017651500
Mailing Name:	Not reported
Mailing Address:	1 CVS DR - MC 1160
Mailing City,St,Zip:	WOONSOCKET, RI 02895
Gen County:	Santa Clara
TSD EPA ID:	NVD980895338
TSD County:	99
Waste Category:	Other organic solids
Disposal Method:	Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons:	0.005
Cat Decode:	Other organic solids
Method Decode:	Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Facility County:	Santa Clara

envid:	S103654858
Year:	2015
GEPAID:	CAR000240317
Contact:	WENDY BRANT
Telephone:	4017651500

CVS PHARMACY #9915 (Continued) **S103654858**

Mailing Name: Not reported
Mailing Address: 1 CVS DR - MC 1160
Mailing City,St,Zip: WOONSOCKET, RI 02895
Gen County: Santa Clara
TSD EPA ID: NVD980895338
TSD County: 99
Waste Category: Unspecified solvent mixture
Disposal Method: Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons: 0.2465
Cat Decode: Unspecified solvent mixture
Method Decode: Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Facility County: Santa Clara

envid: S103654858
Year: 2015
GEPAID: CAR000240317
Contact: WENDY BRANT
Telephone: 4017651500
Mailing Name: Not reported
Mailing Address: 1 CVS DR - MC 1160
Mailing City,St,Zip: WOONSOCKET, RI 02895
Gen County: Santa Clara
TSD EPA ID: NVD980895338
TSD County: 99
Waste Category: Pharmaceutical waste
Disposal Method: Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons: 0.0045
Cat Decode: Pharmaceutical waste
Method Decode: Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Facility County: Santa Clara

envid: S103654858
Year: 2015
GEPAID: CAR000240317
Contact: WENDY BRANT
Telephone: 4017651500
Mailing Name: Not reported
Mailing Address: 1 CVS DR - MC 1160
Mailing City,St,Zip: WOONSOCKET, RI 02895
Gen County: Santa Clara
TSD EPA ID: NVD980895338
TSD County: 99
Waste Category: Off-specification, aged or surplus organics
Disposal Method: Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons: 0.254
Cat Decode: Off-specification, aged or surplus organics
Method Decode: Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Facility County: Santa Clara

envid: S103654858
Year: 2015

CVS PHARMACY #9915 (Continued) **S103654858**

GEPAID:	CAR000240317
Contact:	WENDY BRANT
Telephone:	4017651500
Mailing Name:	Not reported
Mailing Address:	1 CVS DR - MC 1160
Mailing City,St,Zip:	WOONSOCKET, RI 02895
Gen County:	Santa Clara
TSD EPA ID:	INR000110197
TSD County:	Not reported
Waste Category:	Pharmaceutical waste
Disposal Method:	Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons:	0.0185
Cat Decode:	Pharmaceutical waste
Method Decode:	Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Facility County:	Santa Clara

Click this hyperlink while viewing on your computer to access
23 additional CA_HAZNET: record(s) in the EDR Site Report.

A8 **WALGREENS #12141** **CUPA Listings** **S113151664**
WNW **328 UNIVERSITY AVE** **HAZNET** **N/A**
< 1/8 **PALO ALTO, CA 94301**
0.037 mi.
196 ft. **Site 8 of 13 in cluster A**

Relative:
Higher

Actual:
55 ft.

CUPA SANTA CLARA:

Region:	SANTA CLARA
PE#:	2202
Program Description:	GENERATES < 100 KG/YR
Latitude:	37.446179
Longitude:	-122.161125

HAZNET:

envid:	S113151664
Year:	2015
GEPAID:	CAL000329797
Contact:	KARINA ROMERO
Telephone:	7606028700
Mailing Name:	Not reported
Mailing Address:	3207 GREY HAWK CT., SUITE 200
Mailing City,St,Zip:	CARLSBAD, CA 920100000
Gen County:	Santa Clara
TSD EPA ID:	INR000110197
TSD County:	Not reported
Waste Category:	Pharmaceutical waste
Disposal Method:	Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons:	0.0005
Cat Decode:	Pharmaceutical waste
Method Decode:	Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Facility County:	Santa Clara

envid:	S113151664
Year:	2015

WALGREENS #12141 (Continued) **S113151664**

GEPAID:	CAL000329797
Contact:	KARINA ROMERO
Telephone:	7606028700
Mailing Name:	Not reported
Mailing Address:	3207 GREY HAWK CT., SUITE 200
Mailing City,St,Zip:	CARLSBAD, CA 920100000
Gen County:	Santa Clara
TSD EPA ID:	NVD980895338
TSD County:	99
Waste Category:	Pharmaceutical waste
Disposal Method:	Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons:	0.0035
Cat Decode:	Pharmaceutical waste
Method Decode:	Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Facility County:	Santa Clara

envid:	S113151664
Year:	2015
GEPAID:	CAL000329797
Contact:	KARINA ROMERO
Telephone:	7606028700
Mailing Name:	Not reported
Mailing Address:	3207 GREY HAWK CT., SUITE 200
Mailing City,St,Zip:	CARLSBAD, CA 920100000
Gen County:	Santa Clara
TSD EPA ID:	NVD980895338
TSD County:	99
Waste Category:	Pharmaceutical waste
Disposal Method:	Neutralization Only
Tons:	0.0015
Cat Decode:	Pharmaceutical waste
Method Decode:	Neutralization Only
Facility County:	Santa Clara

envid:	S113151664
Year:	2015
GEPAID:	CAL000329797
Contact:	KARINA ROMERO
Telephone:	7606028700
Mailing Name:	Not reported
Mailing Address:	3207 GREY HAWK CT., SUITE 200
Mailing City,St,Zip:	CARLSBAD, CA 920100000
Gen County:	Santa Clara
TSD EPA ID:	NVD980895338
TSD County:	99
Waste Category:	Off-specification, aged or surplus inorganics
Disposal Method:	Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons:	0.005
Cat Decode:	Off-specification, aged or surplus inorganics
Method Decode:	Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Facility County:	Santa Clara

envid:	S113151664

WALGREENS #12141 (Continued) **S113151664**

Year:	2014
GEPAID:	CAL000329797
Contact:	KARINA ROMERO
Telephone:	7606028700
Mailing Name:	Not reported
Mailing Address:	3207 GREY HAWK CT., SUITE 200
Mailing City,St,Zip:	CARLSBAD, CA 920100000
Gen County:	Santa Clara
TSD EPA ID:	INR000110197
TSD County:	Not reported
Waste Category:	Pharmaceutical waste
Disposal Method:	Not reported
Tons:	0.0005
Cat Decode:	Not reported
Method Decode:	Not reported
Facility County:	Santa Clara

Click this hyperlink while viewing on your computer to access
18 additional CA_HAZNET: record(s) in the EDR Site Report.

A9 **AUTO TOW** **EDR Hist Auto** **1021259576**
SW **555 BRYANT ST** **N/A**
< 1/8 **PALO ALTO, CA 94301**
0.042 mi.
223 ft. **Site 9 of 13 in cluster A**

Relative:
Higher

EDR Hist Auto

Actual:
56 ft.

Year:	Name:	Type:
2011	AUTO TOW	General Automotive Repair Shops
2012	AUTO TOW	General Automotive Repair Shops
2013	AUTO TOW	General Automotive Repair Shops
2014	AUTO TOW	General Automotive Repair Shops

B10 **LEATHER SPCLSTS AT D B GASKILL** **EDR Hist Cleaner** **1020025929**
West **318 UNIVERSITY AVE** **N/A**
< 1/8 **PALO ALTO, CA 94301**
0.044 mi.
232 ft. **Site 1 of 3 in cluster B**

Relative:
Higher

EDR Hist Cleaner

Actual:
55 ft.

Year:	Name:	Type:
1994	LEATHER SPCLSTS AT D B GASKILL	Drycleaning Plants, Except Rugs
2000	LEATHER SPCLSTS AT D B GASKILL	Drycleaning Plants, Except Rugs
2001	LEATHER SPCLSTS AT D B GASKILL	Drycleaning Plants, Except Rugs
2002	LEATHER SPCLSTS AT D B GASKILL	Drycleaning Plants, Except Rugs
2003	LEATHER SPCLSTS AT D B GASKILL	Drycleaning Plants, Except Rugs

C11 **ECONOMY CLEANERS** **EDR Hist Cleaner** **1019979928**
ENE **430 HAMILTON AVE** **N/A**
< 1/8 **PALO ALTO, CA 94301**
0.044 mi.
234 ft. **Site 1 of 3 in cluster C**

Relative: EDR Hist Cleaner
Lower

Actual: **51 ft.**

Year:	Name:	Type:
1975	ECONOMY CLEANERS	Drycleaning Plants, Except Rugs
1976	ECONOMY CLEANERS	Drycleaning Plants, Except Rugs
1977	ECONOMY CLEANERS	Drycleaning Plants, Except Rugs
1978	ECONOMY CLEANERS	Drycleaning Plants, Except Rugs
1979	ECONOMY CLEANERS	Drycleaning Plants, Except Rugs
1980	ECONOMY CLEANERS	Drycleaning Plants, Except Rugs
1982	ECONOMY CLEANERS	Drycleaning Plants, Except Rugs
1983	ECONOMY CLEANERS	Drycleaning Plants, Except Rugs

A12 **SWITCH AND DATA CA NINE LLC** **AST** **A100425067**
WSW **529 BRYANT ST** **N/A**
< 1/8 **PALO ALTO, CA 94301**
0.049 mi.
257 ft. **Site 10 of 13 in cluster A**

Relative: AST:
Higher

Actual: **56 ft.**

Certified Unified Program Agencies:	Not reported
Owner:	Switch and Data CA Nine LLC
Total Gallons:	Not reported
CERSID:	10078111
Facility ID:	FA0262814
Business Name:	Equinix LLC
Phone:	(650) 752-2800
Fax:	(650) 752-2819
Mailing Address:	529 Bryant Street
Mailing Address City:	Palo Alto
Mailing Address State:	CA
Mailing Address Zip Code:	94301
Operator Name:	Switch and Data CA Nine LLC
Operator Phone:	(650) 752-2800
Owner Phone:	(408) 394-9771
Owner Mail Address:	529 Bryant Street
Owner State:	CA
Owner Zip Code:	94301
Owner Country:	United States
Property Owner Name:	529 Bryant Street Partners LLC
Property Owner Phone:	(650) 326-9300
Property Owner Mailing Address:	2901 Tasman Drive #220
Property Owner City:	Santa Clara
Property Owner Stat :	CA
Property Owner Zip Code:	95054
Property Owner Country:	United States
EPAID:	CAL000366311

C13 **GATE CLEANERS** **CUPA Listings** **S109519673**
NE **439 HAMILTON AVE** **DRYCLEANERS** **N/A**
< 1/8 **PALO ALTO, CA 94301**
0.055 mi.
292 ft. **Site 2 of 3 in cluster C**

Relative:
Lower

Actual:
51 ft.

CUPA SANTA CLARA:

Region:	SANTA CLARA
PE#:	2202
Program Description:	GENERATES < 100 KG/YR
Latitude:	37.446883
Longitude:	-122.158779

DRYCLEANERS:

EPA Id:	CAL000339058
NAICS Code:	81232
NAICS Description:	Drycleaning and Laundry Services (except Coin-Operated)
SIC Code:	7211
SIC Description:	Power Laundries, Family and Commercial
Create Date:	12/18/2008
Facility Active:	No
Inactive Date:	06/30/2015
Facility Addr2:	Not reported
Owner Name:	BABAK KAHROBAIE
Owner Address:	439 HAMILTON AVE
Owner Address 2:	Not reported
Owner Telephone:	4088391173
Contact Name:	BABAK KAHROBAIE
Contact Address:	439 HAMILTON AVE
Contact Address 2:	Not reported
Contact Telephone:	6503267896
Mailing Name:	Not reported
Mailing Address 1:	439 HAMILTON AVE
Mailing Address 2:	Not reported
Mailing City:	PALO ALTO
Mailing State:	CA
Mailing Zip:	943011810
Owner Fax:	0000000000
Region Code:	2

C14 **GATE CLEANERS LLC** **EDR Hist Cleaner** **1018582821**
NE **439 HAMILTON AVE** **N/A**
< 1/8 **PALO ALTO, CA 94301**
0.055 mi.
292 ft. **Site 3 of 3 in cluster C**

Relative:
Lower

Actual:
51 ft.

EDR Hist Cleaner

Year:	Name:	Type:
1969	ROSENTHAL DAVID INC	Drycleaning Plants, Except Rugs
1970	ROSENTHAL DAVID INC	Drycleaning Plants, Except Rugs
1971	ROSENTHAL DAVID INC	Drycleaning Plants, Except Rugs
1972	ROSENTHAL DAVID INC	Drycleaning Plants, Except Rugs
1973	ROSENTHAL DAVID INC	Drycleaning Plants, Except Rugs
1974	ROSENTHAL DAVID INC	Drycleaning Plants, Except Rugs
1975	ROSENTHAL DAVID INC	Drycleaning Plants, Except Rugs
1987	ELCAMINL CLEANER INC	Coin-Operated Laundries And Cleaning
1988	ELCAMINL CLEANER INC	Coin-Operated Laundries And Cleaning
2005	GATE CLEANERS LLC	Drycleaning Plants, Except Rugs, NEC

GATE CLEANERS LLC (Continued) **1018582821**

2006	GATE CLEANERS LLC	Drycleaning Plants, Except Rugs, NEC
2007	GATE CLEANERS LLC	Drycleaning Plants, Except Rugs, NEC
2008	GATE CLEANERS LLC	Drycleaning Plants, Except Rugs, NEC
2009	GATE CLEANERS LLC	Drycleaning Plants, Except Rugs, NEC
2010	GATE CLEANERS LLC	Drycleaning Plants, Except Rugs, NEC
2011	GATE CLEANERS LLC	Drycleaning Plants, Except Rugs, NEC
2012	GATE CLEANERS LLC	Drycleaning Plants, Except Rugs, NEC
2013	GATE CLEANERS LLC	Drycleaning Plants, Except Rugs, NEC
2014	GATE CLEANERS LLC	Drycleaning Plants, Except Rugs, NEC

B15 **PREMIER PROPERTIES MANAGEMENT** **RCRA-CESQG** **1012175504**
West **300 UNIVERSITY AVE** **HAZNET** **CAC002620796**
< 1/8 **PALO ALTO, CA 94301**
0.055 mi.
293 ft. **Site 2 of 3 in cluster B**

Relative:
Higher

Actual:
56 ft.

RCRA-CESQG:

Date form received by agency:	06/17/2008
Facility name:	PREMIER PROPERTIES MANAGEMENT
Facility address:	300 UNIVERSITY AVE PALO ALTO, CA 94301
EPA ID:	CAC002620796
Mailing address:	172 UNIVERSITY AVE PALO ALTO, CA 94301
Contact:	ERIC C SORENSEN
Contact address:	Not reported Not reported
Contact country:	US
Contact telephone:	(650) 329-7986
Contact email:	ERIC@PRPROP.COM
EPA Region:	09
Classification:	Conditionally Exempt Small Quantity Generator
Description:	Handler: generates 100 kg or less of hazardous waste per calendar month, and accumulates 1000 kg or less of hazardous waste at any time; or generates 1 kg or less of acutely hazardous waste per calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste

Owner/Operator Summary:

Owner/operator name:	MILPITAS & DIXON
Owner/operator address:	24480 AMIGOS COURT LOS ALTOS HILLS, CA 94024
Owner/operator country:	US
Owner/operator telephone:	Not reported
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	04/30/2004
Owner/Op end date:	Not reported

PREMIER PROPERTIES MANAGEMENT (Continued) **1012175504**

Owner/operator name: ERIC SORENSEN
Owner/operator address: Not reported
Not reported
Owner/operator country: US
Owner/operator telephone: Not reported
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: 03/01/2005
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

. Waste code: D001
. Waste name: IGNITABLE WASTE

Violation Status: No violations found

HAZNET:
envid: 1012175504
Year: 2007
GEPAID: CAC002620796
Contact: ERIC SORENSEN
Telephone: 6503297986
Mailing Name: Not reported
Mailing Address: 172 UNIVERSITY AVE
Mailing City,St,Zip: PALO ALTO, CA 94301
Gen County: Not reported
TSD EPA ID: CAD028409019
TSD County: Not reported
Waste Category: Off-specification, aged or surplus organics
Disposal Method: Fuel Blending Prior To Energy Recovery At Another Site
Tons: 3.75
Cat Decode: Not reported
Method Decode: Not reported
Facility County: Santa Clara

B16
West
< 1/8
0.055 mi.
293 ft.

WALGREENS #13596
300 UNIVERSITY AVE
PALO ALTO, CA 94301

Site 3 of 3 in cluster B

RCRA-CESQG 1001227067
FINDS CAR000043109
ECHO
CUPA Listings
HAZNET

Relative:
Higher

Actual:
56 ft.

RCRA-CESQG:

Date form received by agency:	04/08/2016
Facility name:	WALGREENS #13596
Facility address:	300 UNIVERSITY AVE PALO ALTO, CA 94301
EPA ID:	CAR000043109
Mailing address:	GREYHAWK CT SUITE 200 CARLSBAD, CA 92010
Contact:	KARINA ROMERO
Contact address:	GREYHAWK CT SUITE 200 CARLSBAD, CA 92010
Contact country:	US
Contact telephone:	(760) 602-8700
Contact email:	REGULATORY@3ECOMPANY.COM
EPA Region:	09
Classification:	Conditionally Exempt Small Quantity Generator
Description:	Handler: generates 100 kg or less of hazardous waste per calendar month, and accumulates 1000 kg or less of hazardous waste at any time; or generates 1 kg or less of acutely hazardous waste per calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste

Owner/Operator Summary:

Owner/operator name:	MILPITAS & DIXON LLC
Owner/operator address:	ALMA ST PALO ALTO, CA 94301
Owner/operator country:	US
Owner/operator telephone:	(650) 279-6245
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	12/11/2009
Owner/Op end date:	Not reported
Owner/operator name:	WALGREEN CO.
Owner/operator address:	Not reported Not reported
Owner/operator country:	Not reported
Owner/operator telephone:	Not reported
Legal status:	Private
Owner/Operator Type:	Operator
Owner/Op start date:	04/14/2010
Owner/Op end date:	Not reported

WALGREENS #13596 (Continued) **1001227067**

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

. Waste code: 122
. Waste name: 122

. Waste code: 131
. Waste name: 131

. Waste code: 181
. Waste name: 181

. Waste code: 214
. Waste name: 214

. Waste code: 311
. Waste name: 311

. Waste code: D001
. Waste name: IGNITABLE WASTE

. Waste code: D002
. Waste name: CORROSIVE WASTE

. Waste code: D007
. Waste name: CHROMIUM

. Waste code: D009
. Waste name: MERCURY

. Waste code: D010
. Waste name: SELENIUM

. Waste code: D024
. Waste name: M-CRESOL

. Waste code: P001
. Waste name: 2H-1-BENZOPYRAN-2-ONE, 4-HYDROXY-3-(3-OXO-1-PHENYLBUTYL)-, & SALTS, WHEN PRESENT AT CONCENTRATIONS GREATER THAN 0.3% (OR) WARFARIN, & SALTS, WHEN PRESENT AT CONCENTRATIONS GREATER THAN 0.3%

. Waste code: P075
. Waste name: NICOTINE, & SALTS (OR) PYRIDINE, 3-(1-METHYL-2-PYRROLIDINYL)-,(S)-, &

WALGREENS #13596 (Continued) **1001227067**

SALTS

Historical Generators:
Date form received by agency: 03/01/2014
Site name: WALGREENS #13596
Classification: Conditionally Exempt Small Quantity Generator

. Waste code: D001
. Waste name: IGNITABLE WASTE

. Waste code: D002
. Waste name: CORROSIVE WASTE

. Waste code: D007
. Waste name: CHROMIUM

. Waste code: D009
. Waste name: MERCURY

. Waste code: D010
. Waste name: SELENIUM

. Waste code: D024
. Waste name: M-CRESOL

. Waste code: P001
. Waste name: 2H-1-BENZOPYRAN-2-ONE, 4-HYDROXY-3-(3-OXO-1-PHENYLBUTYL)-, & SALTS, WHEN PRESENT AT CONCENTRATIONS GREATER THAN 0.3% (OR) WARFARIN, & SALTS, WHEN PRESENT AT CONCENTRATIONS GREATER THAN 0.3%

. Waste code: P075
. Waste name: NICOTINE, & SALTS (OR) PYRIDINE, 3-(1-METHYL-2-PYRROLIDINYL)-,(S)-, & SALTS

. Waste code: U034
. Waste name: ACETALDEHYDE, TRICHLORO- (OR) CHLORAL

. Waste code: U165
. Waste name: NAPHTHALENE

Date form received by agency: 07/17/1998
Site name: WALGREENS 781
Classification: Small Quantity Generator

. Waste code: D000
. Waste name: Not Defined

. Waste code: D011
. Waste name: SILVER

Violation Status: No violations found

FINDS:

Registry ID: 110055664605

Environmental Interest/Information System

WALGREENS #13596 (Continued) **1001227067**

STATE MASTER

HAZARDOUS WASTE BIENNIAL REPORTER

Registry ID: 110002924104

Environmental Interest/Information System
California Hazardous Waste Tracking System - Datamart (HWTS-DATAMART) provides California with information on hazardous waste shipments for generators, transporters, and treatment, storage, and disposal facilities.

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:

Envid:	1001227067
Registry ID:	110002924104
DFR URL:	http://echo.epa.gov/detailed-facility-report?fid=110002924104

CUPA SANTA CLARA:

Region:	SANTA CLARA
PE#:	2205
Program Description:	GENERATES 100 KG YR TO <5 TONS/YR
Latitude:	37.445904
Longitude:	-122.161165

HAZNET:

envid:	1001227067
Year:	2015
GEPAID:	CAR000043109
Contact:	KARINA ROMERO
Telephone:	7606028700
Mailing Name:	Not reported
Mailing Address:	3207 GREY HAWK CT., SUITE 200
Mailing City,St,Zip:	CARLSBAD, CA 920100000
Gen County:	Santa Clara
TSD EPA ID:	NVD980895338
TSD County:	99
Waste Category:	Unspecified solvent mixture
Disposal Method:	Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons:	0.0575
Cat Decode:	Unspecified solvent mixture
Method Decode:	Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Facility County:	Santa Clara

WALGREENS #13596 (Continued) **1001227067**

envid: 1001227067
Year: 2015
GEPAID: CAR000043109
Contact: KARINA ROMERO
Telephone: 7606028700
Mailing Name: Not reported
Mailing Address: 3207 GREY HAWK CT., SUITE 200
Mailing City,St,Zip: CARLSBAD, CA 920100000
Gen County: Santa Clara
TSD EPA ID: NVD980895338
TSD County: 99
Waste Category: Pharmaceutical waste
Disposal Method: Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons: 0.0105
Cat Decode: Pharmaceutical waste
Method Decode: Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Facility County: Santa Clara

envid: 1001227067
Year: 2015
GEPAID: CAR000043109
Contact: KARINA ROMERO
Telephone: 7606028700
Mailing Name: Not reported
Mailing Address: 3207 GREY HAWK CT., SUITE 200
Mailing City,St,Zip: CARLSBAD, CA 920100000
Gen County: Santa Clara
TSD EPA ID: NVD980895338
TSD County: 99
Waste Category: Unspecified solvent mixture
Disposal Method: Neutralization Only
Tons: 0.0005
Cat Decode: Unspecified solvent mixture
Method Decode: Neutralization Only
Facility County: Santa Clara

envid: 1001227067
Year: 2015
GEPAID: CAR000043109
Contact: KARINA ROMERO
Telephone: 7606028700
Mailing Name: Not reported
Mailing Address: 3207 GREY HAWK CT., SUITE 200
Mailing City,St,Zip: CARLSBAD, CA 920100000
Gen County: Santa Clara
TSD EPA ID: NVD980895338
TSD County: 99
Waste Category: Other inorganic solid waste
Disposal Method: Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons: 0.0005
Cat Decode: Other inorganic solid waste
Method Decode: Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Facility County: Santa Clara

WALGREENS #13596 (Continued) **1001227067**

envid: 1001227067
Year: 2015
GEPAID: CAR000043109
Contact: KARINA ROMERO
Telephone: 7606028700
Mailing Name: Not reported
Mailing Address: 3207 GREY HAWK CT., SUITE 200
Mailing City,St,Zip: CARLSBAD, CA 920100000
Gen County: Santa Clara
TSD EPA ID: CAD980884183
TSD County: Sacramento
Waste Category: Unspecified solvent mixture
Disposal Method: Not reported
Tons: 0.007
Cat Decode: Unspecified solvent mixture
Method Decode: Not reported
Facility County: Santa Clara

Click this hyperlink while viewing on your computer to access
139 additional CA_HAZNET: record(s) in the EDR Site Report.

A17 **SWITCH & DATA/PAIX.NET** **RCRA-SQG 1000251152**
WSW **529 BRYANT ST** **FINDS CAT080019847**
< 1/8 **PALO ALTO, CA 94301** **ECHO**
0.058 mi.
304 ft. **Site 11 of 13 in cluster A**

Relative:
Higher

Actual:
56 ft.

RCRA-SQG:
Date form received by agency: 08/26/1999
Facility name: COMPAQ COMPUTER CORP ALTA VISTA
Facility address: 529 BRYANT STREET
PALO ALTO, CA 94301
EPA ID: CAT080019847
Mailing address: 5425 STEVENS CREEK BLVD
CAX 01 10
SANTA CLARA, CA 950517200
Contact: ROBERT TRUEDINGER
Contact address: 5425 STEVENS CREEK BLVD CAX 01 10
SANTA CLARA, CA 950517200
Contact country: US
Contact telephone: (408) 285-2130
Contact email: Not reported
EPA Region: 09
Classification: Small Small Quantity Generator
Description: Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:
Owner/operator name: THE PACIFIC TELEPHONE AND TELEGRAPH CO
Owner/operator address: NOT REQUIRED
NOT REQUIRED, ME 99999
Owner/operator country: Not reported
Owner/operator telephone: (415) 555-1212
Legal status: Private

SWITCH & DATA/PAIX.NET (Continued) **1000251152**

Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Owner/operator name: ALTA VISTA
Owner/operator address: 529 BRYANT STREET
PALO ALTO, CA 94301
Owner/operator country: Not reported
Owner/operator telephone: (650) 617-3292
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

. Waste code: D000
. Waste name: Not Defined

. Waste code: D001
. Waste name: IGNITABLE WASTE

. Waste code: U220
. Waste name: BENZENE, METHYL- (OR) TOLUENE

Historical Generators:
Date form received by agency: 09/01/1996
Site name: COMPAQ COMPUTER CORP ALTA VISTA
Classification: Small Quantity Generator

Date form received by agency: 01/19/1981
Site name: COMPAQ COMPUTER CORP ALTA VISTA
Classification: Large Quantity Generator

Violation Status: No violations found

FINDS:

Registry ID: 110055916950

Environmental Interest/Information System
STATE MASTER

SWITCH & DATA/PAIX.NET (Continued) **1000251152**

Registry ID: 110002948749

Environmental Interest/Information System
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:
Envid: 1000251152
Registry ID: 110002948749
DFR URL: http://echo.epa.gov/detailed-facility-report?fid=110002948749

A18 **OFFICE BUILDING** **LUST** **S102434611**
WSW **529 BRYANT** **HIST LUST** **N/A**
< 1/8 **PALO ALTO, CA 94301** **HIST CORTESE**
0.058 mi.
304 ft. **Site 12 of 13 in cluster A**

Relative:
Higher

Actual:
56 ft.

LUST:
Region: STATE
Global Id: T0608501854
Latitude: 37.445603
Longitude: -122.160225
Case Type: LUST Cleanup Site
Status: Completed - Case Closed
Status Date: 03/15/1996
Lead Agency: SANTA CLARA COUNTY LOP
Case Worker: UST
Local Agency: SANTA CLARA COUNTY LOP
RB Case Number: Not reported
LOC Case Number: Not reported
File Location: All Files are on GeoTracker or in the Local Agency Database
Potential Media Affect: Other Groundwater (uses other than drinking water)
Potential Contaminants of Concern: Diesel
Site History: Not reported

Click here to access the California GeoTracker records for this facility:

Contact:
Global Id: T0608501854
Contact Type: Regional Board Caseworker
Contact Name: Regional Water Board
Organization Name: SAN FRANCISCO BAY RWQCB (REGION 2)
Address: 1515 CLAY ST SUITE 1400
City: OAKLAND
Email: Not reported
Phone Number: Not reported

Global Id: T0608501854
Contact Type: Local Agency Caseworker
Contact Name: UST CASE WORKER

OFFICE BUILDING (Continued) **S102434611**

Organization Name: SANTA CLARA COUNTY LOP
Address: 1555 Berger Drive, Suite 300
City: SAN JOSE
Email: Not reported
Phone Number: 4089183400

Status History:
Global Id: T0608501854
Status: Completed - Case Closed
Status Date: 03/15/1996

Global Id: T0608501854
Status: Open - Case Begin Date
Status Date: 01/01/1993

Regulatory Activities:
Global Id: T0608501854
Action Type: RESPONSE
Date: 03/15/1996
Action: Other Report / Document

Global Id: T0608501854
Action Type: Other
Date: 01/01/1993
Action: Leak Reported

Global Id: T0608501854
Action Type: ENFORCEMENT
Date: 03/15/1996
Action: Closure/No Further Action Letter

LUST REG 2:
Region: 2
Facility Id: Not reported
Facility Status: Case Closed
Case Number: 06S3W02C04f
How Discovered: Not reported
Leak Cause: Not reported
Leak Source: Not reported
Date Leak Confirmed: Not reported
Oversight Program: LUST
Prelim. Site Assesment Wokplan Submitted: Not reported
Preliminary Site Assesment Began: Not reported
Pollution Characterization Began: Not reported
Pollution Remediation Plan Submitted: Not reported
Date Remediation Action Underway: Not reported
Date Post Remedial Action Monitoring Began: Not reported

LUST SANTA CLARA:
Region: SANTA CLARA
SCVWD ID: 06S3W02C04F
Date Closed: 03/15/1996
EDR Link ID: 06S3W02C04F

OFFICE BUILDING (Continued) **S102434611**

HIST LUST SANTA CLARA:
Region: SANTA CLARA
Region Code: 2
SCVWD ID: 06S3W02C04
Oversite Agency: SCVWD
Date Listed: 1994-08-29 00:00:00
Closed Date: 1996-03-15 00:00:00

HIST CORTESE:
Region: CORTESE
Facility County Code: 43
Reg By: LTNKA
Reg Id: 43-2012

A19 **SWITCH AND DATA** **AST** **A100337394**
WSW **529 BRYANT ST** **N/A**
< 1/8 **PALO ALTO, CA**
0.058 mi.
304 ft. **Site 13 of 13 in cluster A**

Relative:
Higher

Actual:
56 ft.

AST:
Certified Unified Program Agencies: Santa Clara County
Owner: SWITCH AND DATA
Total Gallons: 2,150
CERSID: Not reported
Facility ID: Not reported
Business Name: Not reported
Phone: Not reported
Fax: Not reported
Mailing Address: Not reported
Mailing Address City: Not reported
Mailing Address State: Not reported
Mailing Address Zip Code: Not reported
Operator Name: Not reported
Operator Phone: Not reported
Owner Phone: Not reported
Owner Mail Address: Not reported
Owner State: Not reported
Owner Zip Code: Not reported
Owner Country: Not reported
Property Owner Name: Not reported
Property Owner Phone: Not reported
Property Owner Mailing Address: Not reported
Property Owner City: Not reported
Property Owner Stat : Not reported
Property Owner Zip Code: Not reported
Property Owner Country: Not reported
EPAID: Not reported

D20 **ZEEMEN INC** **EDR Hist Cleaner** **1020124757**
South **595 BRYANT ST** **N/A**
< 1/8 **PALO ALTO, CA 94301**
0.058 mi.
308 ft. **Site 1 of 6 in cluster D**

Relative: EDR Hist Cleaner
Higher

Actual: **56 ft.**

Year:	Name:	Type:
1992	STANFORD HOLIDAY CLEANERS	Drycleaning Plants, Except Rugs
1993	STANFORD HOLIDAY CLEANERS	Drycleaning Plants, Except Rugs
1994	STANFORD HOLIDAY CLEANERS	Drycleaning Plants, Except Rugs
1995	STANFORD HOLIDAY CLEANERS	Drycleaning Plants, Except Rugs
1998	ZEEMEN INC	Drycleaning Plants, Except Rugs
2002	ZEEMEN INC	Drycleaning Plants, Except Rugs
2003	ZEEMEN INC	Drycleaning Plants, Except Rugs
2004	ZEEMEN INC	Drycleaning Plants, Except Rugs
2005	ZEEMEN INC	Drycleaning Plants, Except Rugs
2006	ZEEMEN INC	Drycleaning Plants, Except Rugs
2007	ZEEMEN INC	Drycleaning Plants, Except Rugs
2008	ZEEMEN INC	Drycleaning Plants, Except Rugs
2009	ZEEMEN INC	Drycleaning Plants, Except Rugs
2010	ZEEMEN INC	Drycleaning Plants, Except Rugs
2011	ZEEMEN INC	Drycleaning Plants, Except Rugs
2012	ZEEMEN INC	Drycleaning Plants, Except Rugs
2013	ZEEMEN INC	Drycleaning Plants, Except Rugs
2014	ZEEMEN INC	Drycleaning Plants, Except Rugs

D21 **HOLIDAY CLEANERS** **CUPA Listings** **S102823576**
South **595 BRYANT ST** **DRYCLEANERS** **N/A**
< 1/8 **PALO ALTO, CA 94301**
0.058 mi.
308 ft. **Site 2 of 6 in cluster D**

Relative: CUPA SANTA CLARA:
Higher

Actual: **56 ft.**

Region:	SANTA CLARA
PE#:	2202
Program Description:	GENERATES < 100 KG/YR
Latitude:	37.445220
Longitude:	-122.160393

DRYCLEANERS:

EPA Id:	CAL000200858
NAICS Code:	81232
NAICS Description:	Drycleaning and Laundry Services (except Coin-Operated)
SIC Code:	7211
SIC Description:	Power Laundries, Family and Commercial
Create Date:	07/08/1999
Facility Active:	No
Inactive Date:	06/30/2015
Facility Addr2:	Not reported
Owner Name:	HEA SOOK SUNG
Owner Address:	595 BRYANT ST
Owner Address 2:	Not reported
Owner Telephone:	6508636727
Contact Name:	HEASOOK SUNG-OWNER
Contact Address:	595 BRYANT ST
Contact Address 2:	Not reported
Contact Telephone:	6508636727

HOLIDAY CLEANERS (Continued) **S102823576**

Mailing Name:	Not reported
Mailing Address 1:	595 BRYANT ST
Mailing Address 2:	Not reported
Mailing City:	PALO ALTO
Mailing State:	CA
Mailing Zip:	943011704
Owner Fax:	0000000000
Region Code:	2

E22 **VARSITY THEATRE** **LUST** **S102440857**
North **456 UNIVERSITY AVE** **HIST LUST** **N/A**
< 1/8 **PALO ALTO, CA 94301** **HIST CORTESE**
0.077 mi.
404 ft. **Site 1 of 7 in cluster E**

Relative:
Lower

Actual:
52 ft.

LUST:

Region:	STATE
Global Id:	T0608501967
Latitude:	37.4476538
Longitude:	-122.1598662
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	07/09/1998
Lead Agency:	SANTA CLARA COUNTY LOP
Case Worker:	UST
Local Agency:	SANTA CLARA COUNTY LOP
RB Case Number:	Not reported
LOC Case Number:	Not reported
File Location:	All Files are on GeoTracker or in the Local Agency Database
Potential Media Affect:	Soil
Potential Contaminants of Concern:	Waste Oil / Motor / Hydraulic / Lubricating
Site History:	Not reported

Click here to access the California GeoTracker records for this facility:

Contact:

Global Id:	T0608501967
Contact Type:	Regional Board Caseworker
Contact Name:	Regional Water Board
Organization Name:	SAN FRANCISCO BAY RWQCB (REGION 2)
Address:	1515 CLAY ST SUITE 1400
City:	OAKLAND
Email:	Not reported
Phone Number:	Not reported

Global Id:	T0608501967
Contact Type:	Local Agency Caseworker
Contact Name:	UST CASE WORKER
Organization Name:	SANTA CLARA COUNTY LOP
Address:	1555 Berger Drive, Suite 300
City:	SAN JOSE
Email:	Not reported
Phone Number:	4089183400

Status History:

Global Id:	T0608501967
Status:	Completed - Case Closed
Status Date:	07/09/1998

VARSITY THEATRE (Continued) **S102440857**

Global Id: T0608501967
Status: Open - Case Begin Date
Status Date: 09/22/1995

Regulatory Activities:
Global Id: T0608501967
Action Type: RESPONSE
Date: 10/13/1995
Action: Tank Removal Report / UST Sampling Report

Global Id: T0608501967
Action Type: ENFORCEMENT
Date: 11/30/1995
Action: Unauthorized Release Form

Global Id: T0608501967
Action Type: Other
Date: 09/22/1995
Action: Leak Reported

Global Id: T0608501967
Action Type: ENFORCEMENT
Date: 07/09/1998
Action: Closure/No Further Action Letter

LUST REG 2:
Region: 2
Facility Id: Not reported
Facility Status: Case Closed
Case Number: 05S3W35Q02f
How Discovered: Not reported
Leak Cause: Not reported
Leak Source: Not reported
Date Leak Confirmed: Not reported
Oversight Program: LUST
Prelim. Site Assesment Wokplan Submitted: Not reported
Preliminary Site Assesment Began: Not reported
Pollution Characterization Began: Not reported
Pollution Remediation Plan Submitted: Not reported
Date Remediation Action Underway: Not reported
Date Post Remedial Action Monitoring Began: Not reported

LUST SANTA CLARA:
Region: SANTA CLARA
SCVWD ID: 05S3W35Q02F
Date Closed: 07/09/1998
EDR Link ID: 05S3W35Q02F

HIST LUST SANTA CLARA:
Region: SANTA CLARA
Region Code: 2
SCVWD ID: 05S3W35Q02
Oversite Agency: SCVWD
Date Listed: 1998-07-09 00:00:00

VARSITY THEATRE (Continued) **S102440857**

Closed Date: 1998-07-09 00:00:00

HIST CORTESE:
Region: CORTESE
Facility County Code: 43
Reg By: LTNKA
Reg Id: 43-2143

E23 **ELITE CLEANERS** **EDR Hist Cleaner** **1018955355**
North **464 UNIVERSITY AVE** **N/A**
< 1/8 **PALO ALTO, CA 94301**
0.085 mi.
450 ft. **Site 2 of 7 in cluster E**

Relative: EDR Hist Cleaner
Lower

Actual: **52 ft.**

Year:	Name:	Type:
1971	ELITE CLEANERS	Drycleaning Plants, Except Rugs
1972	ELITE CLEANERS	Drycleaning Plants, Except Rugs
1973	ELITE CLEANERS	Drycleaning Plants, Except Rugs
1974	ELITE CLEANERS	Drycleaning Plants, Except Rugs
1976	ELITE CLEANERS	Drycleaning Plants, Except Rugs
1985	ELITE CLEANERS	Drycleaning Plants, Except Rugs
1986	ELITE CLEANERS	Drycleaning Plants, Except Rugs
1987	ELITE CLEANERS	Drycleaning Plants, Except Rugs
1988	ELITE CLEANERS	Drycleaning Plants, Except Rugs
1989	ELITE CLEANERS	Laundry And Drycleaner Agents
1990	ELITE CLEANERS	Laundry And Drycleaner Agents
1991	ELITE CLEANERS	Laundry And Drycleaner Agents
1992	ELITE CLEANERS	Laundry And Drycleaner Agents
1993	ELITE CLEANERS	Laundry And Drycleaner Agents
1994	ELITE CLEANERS	Laundry And Drycleaner Agents
1995	ELITE CLEANERS	Laundry And Drycleaner Agents
1996	ELITE CLEANERS	Laundry And Drycleaner Agents

E24 **ELITE CLEANERS** **EDR Hist Cleaner** **1018639163**
North **435 UNIVERSITY AVE** **N/A**
< 1/8 **PALO ALTO, CA 94301**
0.087 mi.
458 ft. **Site 3 of 7 in cluster E**

Relative: EDR Hist Cleaner
Lower

Actual: **53 ft.**

Year:	Name:	Type:
1997	ELITE CLEANERS	Laundry And Drycleaner Agents
1998	ELITE CLEANERS	Laundry And Drycleaner Agents

E25 **ELITE CLEANERS** **EDR Hist Cleaner** **1018868000**
North **468 UNIVERSITY AVE** **N/A**
< 1/8 **PALO ALTO, CA 94301**
0.092 mi.
485 ft. **Site 4 of 7 in cluster E**

Relative: EDR Hist Cleaner
Lower

Actual: **52 ft.**

Year:	Name:	Type:
1999	ELITE CLEANERS	Laundry And Drycleaner Agents
2000	ELITE CLEANERS	Laundry And Drycleaner Agents
2001	ELITE CLEANERS	Laundry And Drycleaner Agents
2002	ELITE CLEANERS	Laundry And Drycleaner Agents
2003	ELITE CLEANERS	Laundry And Drycleaner Agents
2004	ELITE CLEANERS	Laundry And Drycleaner Agents
2005	ELITE CLEANERS	Laundry And Drycleaner Agents
2006	ELITE CLEANERS	Laundry And Drycleaner Agents
2007	ELITE CLEANERS	Laundry And Drycleaner Agents
2008	ELITE CLEANERS	Laundry And Drycleaner Agents
2009	ELITE CLEANERS	Laundry And Drycleaner Agents
2010	ELITE CLEANERS	Laundry And Drycleaner Agents
2011	ELITE CLEANERS	Laundry And Drycleaner Agents
2012	ELITE CLEANERS	Laundry And Drycleaner Agents
2013	ELITE CLEANERS	Laundry And Drycleaner Agents
2014	ELITE CLEANERS	Laundry And Drycleaner Agents

F26 **ECONOMY CLEANERS** **DRYCLEANERS** **S112225110**
NE **486 HAMILTON AVE** **N/A**
< 1/8 **PALO ALTO, CA 94301**
0.097 mi.
514 ft. **Site 1 of 3 in cluster F**

Relative: DRYCLEANERS:
Lower

Actual: **50 ft.**

EPA Id:	CAL000372746
NAICS Code:	81232
NAICS Description:	Drycleaning and Laundry Services (except Coin-Operated)
SIC Code:	7211
SIC Description:	Power Laundries, Family and Commercial
Create Date:	03/19/2012
Facility Active:	No
Inactive Date:	06/30/2013
Facility Addr2:	Not reported
Owner Name:	DONG SOO KYE
Owner Address:	486 HAMILTON AVE
Owner Address 2:	Not reported
Owner Telephone:	4083400923
Contact Name:	MICHELLE KYE
Contact Address:	486 HAMILTON AVE
Contact Address 2:	Not reported
Contact Telephone:	4083400923
Mailing Name:	Not reported
Mailing Address 1:	486 HAMILTON AVE
Mailing Address 2:	Not reported
Mailing City:	PALO ALTO
Mailing State:	CA
Mailing Zip:	943010000
Owner Fax:	0000000000
Region Code:	2

G27 **TOWN & COUNTRY CLEANERS** **CUPA Listings** **S112347007**
East **855 EL CAMINO REAL 42** **N/A**
< 1/8 **PALO ALTO, CA 94086**
0.100 mi.
528 ft. **Site 1 of 6 in cluster G**

Relative:
Lower

Actual:
51 ft.

CUPA SANTA CLARA:
Region: SANTA CLARA
PE#: 2205
Program Description: GENERATES 100 KG YR TO <5 TONS/YR
Latitude: 37.438746
Longitude: -122.161386

G28 **CVS PHARMACY #3935** **CUPA Listings** **S107148689**
East **855 EL CAMINO REAL 116** **N/A**
< 1/8 **PALO ALTO, CA 94301**
0.100 mi.
528 ft. **Site 2 of 6 in cluster G**

Relative:
Lower

Actual:
51 ft.

CUPA SANTA CLARA:
Region: SANTA CLARA
PE#: LQ40
Program Description: GENERATES < 10 GAL/YR (RCRA LQG)
Latitude: 37.438597
Longitude: -122.161406

G29 **CVS PHARMACY #3935** **RCRA-LQG** **1015740532**
East **855 EL CAMINO REAL SP 116** **FINDS** **CAR000232553**
< 1/8 **PALO ALTO, CA 94301** **ECHO**
0.100 mi.
528 ft. **Site 3 of 6 in cluster G**

Relative:
Lower

Actual:
51 ft.

RCRA-LQG:
Date form received by agency: 03/25/2014
Facility name: CVS PHARMACY #3935
Facility address: 855 EL CAMINO REAL SP 116
PALO ALTO, CA 94301
EPA ID: CAR000232553
Mailing address: CVS DR
CVS DR
WOONSOCKET, RI 02895
Contact: WENDY L BRANT
Contact address: CVS DR
WOONSOCKET, RI 02895
Contact country: Not reported
Contact telephone: (401) 770-7457
Contact email: WENDY.BRANT@CVSCAREMARK.COM
EPA Region: 09
Classification: Large Quantity Generator
Description: Handler: generates 1,000 kg or more of hazardous waste during any calendar month; or generates more than 1 kg of acutely hazardous waste during any calendar month; or generates more than 100 kg of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month; or generates 1 kg or less of acutely hazardous waste during any calendar month, and accumulates more than 1 kg of acutely hazardous waste at any time; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting

CVS PHARMACY #3935 (Continued) **1015740532**

from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates more than 100 kg of that material at any time

Owner/Operator Summary:

Owner/operator name:	CEP TOWN & COUNTRY INVESTORS LLC
Owner/operator address:	TOWN & COUNTRY VILLAGE
	PALO ALTO, CA 94301
Owner/operator country:	Not reported
Owner/operator telephone:	(650) 325-3266
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	07/18/2001
Owner/Op end date:	Not reported

Owner/operator name:	CEP TOWN AND COUNTRY INVESTORS LLC
Owner/operator address:	333 TOWN AND COUNTRY VILLAGE
	PALO ALTO, CA 94301
Owner/operator country:	US
Owner/operator telephone:	650-325-3266
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	07/18/2001
Owner/Op end date:	Not reported

Owner/operator name:	LONGS DRUG STORES CALIFORNIA LLC
Owner/operator address:	Not reported
	Not reported
Owner/operator country:	US
Owner/operator telephone:	Not reported
Legal status:	Private
Owner/Operator Type:	Operator
Owner/Op start date:	10/22/2008
Owner/Op end date:	Not reported

Owner/operator name:	LONGS DRUG STORES CA LLC
Owner/operator address:	Not reported
	Not reported
Owner/operator country:	Not reported
Owner/operator telephone:	Not reported
Legal status:	Private
Owner/Operator Type:	Operator
Owner/Op start date:	10/22/2008
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No

CVS PHARMACY #3935 (Continued) **1015740532**

User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

. Waste code: D001
. Waste name: IGNITABLE WASTE

. Waste code: D002
. Waste name: CORROSIVE WASTE

. Waste code: D004
. Waste name: ARSENIC

. Waste code: D005
. Waste name: BARIUM

. Waste code: D006
. Waste name: CADMIUM

. Waste code: D007
. Waste name: CHROMIUM

. Waste code: D008
. Waste name: LEAD

. Waste code: D009
. Waste name: MERCURY

. Waste code: D010
. Waste name: SELENIUM

. Waste code: D011
. Waste name: SILVER

. Waste code: D016
. Waste name: 2,4-D (2,4-DICHLOROPHENOXYACETIC ACID)

. Waste code: D018
. Waste name: BENZENE

. Waste code: D024
. Waste name: M-CRESOL

. Waste code: D027
. Waste name: 1,4-DICHLOROBENZENE

. Waste code: D035
. Waste name: METHYL ETHYL KETONE

. Waste code: D039
. Waste name: TETRACHLOROETHYLENE

. Waste code: P001
. Waste name: 2H-1-BENZOPYRAN-2-ONE, 4-HYDROXY-3-(3-OXO-1-PHENYLBUTYL)-, & SALTS, WHEN PRESENT AT CONCENTRATIONS GREATER THAN 0.3% (OR) WARFARIN, &

CVS PHARMACY #3935 (Continued) **1015740532**

SALTS, WHEN PRESENT AT CONCENTRATIONS GREATER THAN 0.3%

. Waste code: P012
. Waste name: ARSENIC OXIDE AS2O3 (OR) ARSENIC TRIOXIDE

. Waste code: P075
. Waste name: NICOTINE, & SALTS (OR) PYRIDINE, 3-(1-METHYL-2-PYRROLIDINYL)-,(S)-, & SALTS

. Waste code: P188
. Waste name: BENZOIC ACID, 2-HYDROXY-, COMPD. WITH (3AS-CIS)-1,2,3,3A,8,8A-HEXAHYDRO-1,3A,8-TRIMETHYLPYRROLO[2,3-B]INDOL--YL METHYLCARBAMATE ESTER (1:1) (OR) PHYSOSTIGMINE SALICYLATE

. Waste code: U002
. Waste name: 2-PROPANONE (I) (OR) ACETONE (I)

. Waste code: U010
. Waste name: AZIRINO [2',3':3,4]PYRROLO[1,2-A]INDOLE-4,7-DIONE, 6-AMINO-8-[[(AMINOCARBONYL)OXY]METHYL]-1,1A,2,8,8A,8B-HEXAHYDRO-8A-METOXY-5-METHYL-, [1AS-(1AALPHA, 8BETA, 8AALPHA, 8BALPHA)]- (OR) MITOMYCIN C

. Waste code: U031
. Waste name: 1-BUTANOL (I) (OR) N-BUTYL ALCOHOL (I)

. Waste code: U034
. Waste name: ACETALDEHYDE, TRICHLORO- (OR) CHLORAL

. Waste code: U035
. Waste name: BENZENEBUTANOIC ACID, 4-[BIS(2-CHLOROETHYL)AMINO]- (OR) CHLORAMBUCIL

. Waste code: U044
. Waste name: CHLOROFORM (OR) METHANE, TRICHLORO-

. Waste code: U058
. Waste name: 2H-1,3,2-OXAZAPHOSPHORIN-2-AMINE, N,N-BIS(2-CHLOROETHYL)TETRAHYDRO-, 2-OXIDE (OR) CYCLOPHOSPHAMIDE

. Waste code: U059
. Waste name: 5,12-NAPHTHACENEDIONE, 8-ACETYL-10-[(3-AMINO-2,3,6-TRIDEOXY)-ALPHA-L-LYXO-HEXOPYRANOSYL)OXY]-,8,9,10-TETRAHYDRO-6,8,11-TRIHYDROXY-1-METHOXY-, (8S-CIS)- (OR) DAUNOMYCIN

. Waste code: U070
. Waste name: BENZENE, 1,2-DICHLORO- (OR) O-DICHLOROBENZENE

. Waste code: U072
. Waste name: BENZENE, 1,4-DICHLORO- (OR) P-DICHLOROBENZENE

. Waste code: U089
. Waste name: DIETHYLSTILBESTEROL (OR) PHENOL, 4,4'-(1,2-DIETHYL-1,2-ETHENEDIYL)BIS, (E)-

. Waste code: U122
. Waste name: FORMALDEHYDE

CVS PHARMACY #3935 (Continued) **1015740532**

. Waste code: U129
. Waste name: CYCLOHEXANE, 1,2,3,4,5,6-HEXACHLORO-, (1ALPHA, 2ALPHA, 3BETA, 4ALPHA, 5ALPHA, 6BETA)- (OR) LINDANE

. Waste code: U132
. Waste name: HEXACHLOROPHENE (OR) PHENOL, 2,2'-METHYLENEBIS[3,4,6-TRICHLORO-

. Waste code: U150
. Waste name: L-PHENYLALANINE, 4-[BIS(2-CHLOROETHYL)AMINO]- (OR) MELPHALAN

. Waste code: U151
. Waste name: MERCURY

. Waste code: U154
. Waste name: METHANOL (I) (OR) METHYL ALCOHOL (I)

. Waste code: U165
. Waste name: NAPHTHALENE

. Waste code: U188
. Waste name: PHENOL

. Waste code: U200
. Waste name: RESERPINE (OR) YOHIMBAN-16-CARBOXYLIC ACID, 11,17-DIMETHOXY-18-[(3,4,5-TRIMETHOXYBENZOYL)OXY]-, METHYL ESTER, (3BETA, 16BETA, 17ALPHA, 18BETA, 20ALPHA)-

. Waste code: U201
. Waste name: 1,3-BENZENEDIOL (OR) RESORCINOL

. Waste code: U204
. Waste name: SELENIOUS ACID (OR) SELENIUM DIOXIDE

. Waste code: U205
. Waste name: SELENIUM SULFIDE (OR) SELENIUM SULFIDE SES2 (R,T)

. Waste code: U206
. Waste name: D-GLUCOSE, 2-DEOXY-2-[[(METHYLNITROSOAMINO)-CARBONYL]AMINO]- (OR) GLUCOPYRANOSE, 2-DEOXY-2-(3-METHYL-3-NITROSOUREIDO)-,D- (OR) STREPTOZOTOCIN

. Waste code: U210
. Waste name: ETHENE, TETRACHLORO- (OR) TETRACHLOROETHYLENE

. Waste code: U279
. Waste name: CARBARYL (OR) 1-NAPHTHALENOL, METHYLCARBAMATE

. Waste code: U411
. Waste name: PHENOL, 2-(1-METHYLETHOXY)-, METHYLCARBAMATE (OR) PROPOXUR

Historical Generators:
Date form received by agency: 10/25/2012
Site name: CVS PHARMACY NO 3935
Classification: Large Quantity Generator

. Waste code: D001
. Waste name: IGNITABLE WASTE

CVS PHARMACY #3935 (Continued) **1015740532**

. Waste code: D002
. Waste name: CORROSIVE WASTE

. Waste code: P001
. Waste name: 2H-1-BENZOPYRAN-2-ONE, 4-HYDROXY-3-(3-OXO-1-PHENYLBUTYL)-, & SALTS, WHEN PRESENT AT CONCENTRATIONS GREATER THAN 0.3% (OR) WARFARIN, & SALTS, WHEN PRESENT AT CONCENTRATIONS GREATER THAN 0.3%

. Waste code: P042
. Waste name: 1,2-BENZENEDIOL, 4-[1-HYDROXY-2-(METHYLAMINO)ETHYL]-, (R)- (OR) EPINEPHRINE

. Waste code: P075
. Waste name: NICOTINE, & SALTS (OR) PYRIDINE, 3-(1-METHYL-2-PYRROLIDINYL)-,(S)-, & SALTS

. Waste code: P081
. Waste name: 1,2,3-PROPANETRIOL, TRINITRATE (R) (OR) NITROGLYCERINE (R)

Violation Status: No violations found

FINDS:

Registry ID: 110055716685

Environmental Interest/Information System
STATE MASTER

Registry ID: 110054823740

Environmental Interest/Information System
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

HAZARDOUS WASTE BIENNIAL REPORTER

STATE MASTER

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:
Envid: 1015740532
Registry ID: 110054823740
DFR URL: http://echo.epa.gov/detailed-facility-report?fid=110054823740

G30
East
< 1/8
0.100 mi.
528 ft.

NAXCOR
855 EL CAMINO REAL NO 600
PALO ALTO, CA 94301

Site 4 of 6 in cluster G

RCRA-SQG | **1005415561**
FINDS | **CAR000112805**
ECHO

Relative:
Lower

Actual:
51 ft.

RCRA-SQG:

Date form received by agency:	02/26/2002
Facility name:	NAXCOR
Facility address:	855 EL CAMINO REAL NO 600 TOWN AND COUNTRY VILLAGE PALO ALTO, CA 94031
EPA ID:	CAR000112805
Contact:	LIZ LISON
Contact address:	855 EL CAMINO REAL NO 600 TOWN AND COUNTRY VILLAGE PALO ALTO, CA 94031
Contact country:	US
Contact telephone:	(650) 323-2693
Contact email:	Not reported
EPA Region:	09
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	PALO ALTO TOWN AND COUNTRY
Owner/operator address:	12 TOWN AND COUNTRY PALO ALTO, CA 94031
Owner/operator country:	Not reported
Owner/operator telephone:	(650) 325-3266
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

. Waste code:	D000
. Waste name:	Not Defined

NAXCOR (Continued) **1005415561**

. Waste code: D001
. Waste name: IGNITABLE WASTE

. Waste code: D002
. Waste name: CORROSIVE WASTE

. Waste code: D003
. Waste name: REACTIVE WASTE

. Waste code: D011
. Waste name: SILVER

. Waste code: D018
. Waste name: BENZENE

. Waste code: D019
. Waste name: CARBON TETRACHLORIDE

. Waste code: D022
. Waste name: CHLOROFORM

. Waste code: F002
. Waste name: THE FOLLOWING SPENT HALOGENATED SOLVENTS: TETRACHLOROETHYLENE, METHYLENE CHLORIDE, TRICHLOROETHYLENE, 1,1,1-TRICHLOROETHANE, CHLOROBENZENE, 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE, ORTHO-DICHLOROBENZENE, TRICHLOROFLUOROMETHANE, AND 1,1,2, TRICHLOROETHANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

. Waste code: F003
. Waste name: THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NONHALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS, AND A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

. Waste code: F005
. Waste name: THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: TOLUENE, METHYL ETHYL KETONE, CARBON DISULFIDE, ISOBUTANOL, PYRIDINE, BENZENE, 2-ETHOXYETHANOL, AND 2-NITROPROPANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, OR F004; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

. Waste code: F024
. Waste name: PROCESS WASTES INCLUDING, BUT NOT LIMITED TO, DISTILLATION RESIDUES, HEAVY ENDS, TARS, AND REACTOR CLEAN-OUT WASTES FROM THE PRODUCTION OF CERTAIN CHLORINATED ALIPHATIC HYDROCARBONS BY FREE RADICAL CATALYZED

NAXCOR (Continued) **1005415561**

PROCESSES. THESE CHLORINATED ALIPHATIC HYDROCARBONS ARE THOSE HAVING CARBON CHAIN LENGTHS RANGING FROM ONE TO, AND INCLUDING FIVE, WITH VARYING AMOUNTS AND POSITIONS OF CHLORINE SUBSTITUTION. (THIS LISTING DOES NOT INCLUDE WASTEWATERS, WASTEWATER TREATMENT SLUDGE, SPENT CATALYSTS, AND WASTES LISTED IN SECTIONS 261.31. OR 261.32)

. Waste code: F025
. Waste name: CONDENSED LIGHT ENDS, SPENT FILTERS AND FILTER AIDS, AND SPENT DESICCANT WASTES FROM THE PRODUCTION OF CERTAIN CHLORINATED ALIPHATIC HYDROCARBONS BY FREE RADICAL CATALYZED PROCESSES. THESE CHLORINATED ALIPHATIC HYDROCARBONS ARE THOSE HAVING CARBON CHAIN LENGTHS RANGING FROM ONE TO, AND INCLUDING FIVE, WITH VARYING AMOUNTS AND POSITIONS OF CHLORINE SUBSTITUTION.

. Waste code: K014
. Waste name: BOTTOMS FROM THE ACETONITRILE PURIFICATION COLUMN IN THE PRODUCTION OF ACRYLONITRILE.

. Waste code: K020
. Waste name: HEAVY ENDS FROM THE DISTILLATION OF VINYL CHLORIDE IN VINYL CHLORIDE MONOMER PRODUCTION.

. Waste code: K042
. Waste name: HEAVY ENDS OR DISTILLATION RESIDUES FROM THE DISTILLATION OF TETRACHLOROBENZENE IN THE PRODUCTION OF 2,4,5-T.

. Waste code: K105
. Waste name: SEPARATED AQUEOUS STREAM FROM THE REACTOR PRODUCT WASHING STEP IN THE PRODUCTION OF CHLOROBENZENES.

Violation Status: No violations found

FINDS:

Registry ID: 110012230415

Environmental Interest/Information System

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:

Envid: 1005415561
Registry ID: 110012230415
DFR URL: http://echo.epa.gov/detailed-facility-report?fid=110012230415

G31 **ONE HOUR MARTINIZING** **RCRA-SQG** **1000118217**
East **855 EL CAMINO REAL #42** **FINDS** **CAD982001828**
< 1/8 **PALO ALTO, CA 94301** **ECHO**
0.100 mi. **HAZNET**
528 ft. **Site 5 of 6 in cluster G**

Relative:
Lower

Actual:
51 ft.

RCRA-SQG:

Date form received by agency:	09/01/1996
Facility name:	ONE HOUR MARTINIZING
Facility address:	855 EL CAMINO REAL #42 PALO ALTO, CA 94301
EPA ID:	CAD982001828
Mailing address:	EL CAMINO REAL #42 PALO ALTO, CA 94301
Contact:	Not reported
Contact address:	Not reported Not reported
Contact country:	US
Contact telephone:	Not reported
Contact email:	Not reported
EPA Region:	09
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	STANLEY HONG
Owner/operator address:	NOT REQUIRED NOT REQUIRED, ME 99999
Owner/operator country:	Not reported
Owner/operator telephone:	(415) 555-1212
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Owner/operator name:	NOT REQUIRED
Owner/operator address:	NOT REQUIRED NOT REQUIRED, ME 99999
Owner/operator country:	Not reported
Owner/operator telephone:	(415) 555-1212
Legal status:	Private
Owner/Operator Type:	Operator
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No

ONE HOUR MARTINIZING (Continued) **1000118217**

Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Violation Status: No violations found

FINDS:

Registry ID: 110002772768

Environmental Interest/Information System
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:
Envid: 1000118217
Registry ID: 110002772768
DFR URL: http://echo.epa.gov/detailed-facility-report?fid=110002772768

HAZNET:
envid: 1000118217
Year: 1994
GEPAID: CAD982001828
Contact: Not reported
Telephone: 0000000000
Mailing Name: Not reported
Mailing Address: 855 EL CAMINO REAL #42
Mailing City,St,Zip: PALO ALTO, CA 943010000
Gen County: Not reported
TSD EPA ID: CAT000613893
TSD County: Not reported
Waste Category: Liquids with halogenated organic compounds >= 1,000 Mg./L
Disposal Method: Transfer Station
Tons: .3450
Cat Decode: Not reported
Method Decode: Not reported
Facility County: Santa Clara

envid: 1000118217
Year: 1993
GEPAID: CAD982001828
Contact: Not reported
Telephone: 0000000000
Mailing Name: Not reported
Mailing Address: 855 EL CAMINO REAL #42

ONE HOUR MARTINIZING (Continued) **1000118217**

Mailing City,St,Zip:	PALO ALTO, CA 943010000
Gen County:	Not reported
TSD EPA ID:	CAT000613893
TSD County:	Not reported
Waste Category:	Liquids with halogenated organic compounds >= 1,000 Mg./L
Disposal Method:	Not reported
Tons:	5.99999999999
Cat Decode:	Not reported
Method Decode:	Not reported
Facility County:	Santa Clara

envid:	1000118217
Year:	1993
GEPAID:	CAD982001828
Contact:	Not reported
Telephone:	0000000000
Mailing Name:	Not reported
Mailing Address:	855 EL CAMINO REAL #42
Mailing City,St,Zip:	PALO ALTO, CA 943010000
Gen County:	Not reported
TSD EPA ID:	CAT000613893
TSD County:	Not reported
Waste Category:	Liquids with halogenated organic compounds >= 1,000 Mg./L
Disposal Method:	Transfer Station
Tons:	0.93000000000
Cat Decode:	Not reported
Method Decode:	Not reported
Facility County:	Santa Clara

G32 **TOWN & COUNTRY CLEANERS** **ENVIROSTOR** **1006012242**
East **855 EL CAMINO REAL** **VCP** **N/A**
< 1/8 **PALO ALTO, CA 94301** **FINDS**
0.100 mi. **EMI**
528 ft. **Site 6 of 6 in cluster G** **HAZNET**

Relative:
Lower

Actual:
51 ft.

ENVIROSTOR:

Facility ID:	60001443
Status:	Active
Status Date:	03/10/2011
Site Code:	201906
Site Type:	Voluntary Cleanup
Site Type Detailed:	Voluntary Cleanup
Acres:	13
NPL:	NO
Regulatory Agencies:	SMBRP
Lead Agency:	SMBRP
Program Manager:	Nicole Yuen
Supervisor:	Mark Piros
Division Branch:	Cleanup Berkeley
Assembly:	24
Senate:	13
Special Program:	Not reported
Restricted Use:	NO
Site Mgmt Req:	NONE SPECIFIED
Funding:	Responsible Party
Latitude:	37.43859
Longitude:	-122.1614
APN:	NONE SPECIFIED

TOWN & COUNTRY CLEANERS (Continued) **1006012242**

Past Use: DRY CLEANING
Potential COC: Tetrachloroethylene (PCE
Confirmed COC: Tetrachloroethylene (PCE
Potential Description: IA, OTH, SOIL, SV
Alias Name: 201906
Alias Type: Project Code (Site Code)
Alias Name: 60001443
Alias Type: Envirostor ID Number

Completed Info:
Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Annual Oversight Cost Estimate
Completed Date: 09/26/2016
Comments: DTSC letter with oversight cost estimate for project activities scheduled for fiscal year 2016/2017.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Voluntary Cleanup Agreement
Completed Date: 01/05/2012
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Annual Oversight Cost Estimate
Completed Date: 10/21/2015
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Correspondence
Completed Date: 02/24/2015
Comments: DTSC sent an email concurring with the February 18, 2015 letter from IRC Environmental Consulting summarizing the February 17th project meeting.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Correspondence
Completed Date: 02/18/2015
Comments: Letter from IRC Environmental Consulting summarizing agreements made in project meeting on February 17, 2015.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Annual Oversight Cost Estimate
Completed Date: 10/02/2013
Comments: The estimated annual oversight cost for the 2013/14 fiscal year is $16,662.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Annual Oversight Cost Estimate
Completed Date: 09/24/2014
Comments: Cost estimate letter was complete and sent on 9/24/2014

Completed Area Name: PROJECT WIDE

TOWN & COUNTRY CLEANERS (Continued) **1006012242**

Completed Sub Area Name: Not reported
Completed Document Type: Pre-HARP Form
Completed Date: 10/17/2014
Comments: Pre-HARP form was completed and signed on 10/17/2014

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Post HARP Form
Completed Date: 10/22/2014
Comments: Post-HARP form was signed for a site visit that occurred on 10/21/14. No exposures to hazardous substances were noted.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Annual Oversight Cost Estimate
Completed Date: 10/15/2012
Comments: The estimated annual oversight cost for the 2012/13 fiscal year for the Palo Alto Town & Country Village Site is $15,317.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Application
Completed Date: 03/10/2011
Comments: DTSC was determined to be the appropriate lead agency.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Characterization Report
Completed Date: 02/29/2012
Comments: DTSC reviewed several Site investigation reports submitted by the proponent to determine if the Site has been adequately characterized and whether additional remedial action is required. DTSC determined that further site characterization to determine the lateral and vertical extent of volatile organic compound impacts to soil an groundwater is necessary at the Site. Further Site characterization activities will be conducted under DTSC oversight.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Preliminary Endangerment Assessment Workplan
Completed Date: 03/15/2013
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Characterization Report
Completed Date: 06/13/2013
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Characterization Report
Completed Date: 08/14/2013
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported

TOWN & COUNTRY CLEANERS (Continued) **1006012242**

Completed Document Type: Site Characterization Report
Completed Date: 01/03/2014
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Well Completion Report
Completed Date: 08/15/2014
Comments: Groundwater monitoring wells were installed and are being monitored to determine groundwater flow direction and characterize groundwater quality at the Site. DTSC finds that the monitoring wells were installed and located in accordance with the Work Plan and approved Report.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 09/16/2014
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 03/03/2015
Comments: The Groundwater Monitoring Report 4th Quarter 2014 presents the groundwater monitoring event that was conducted on the site on November 18, 2014, which was third event since the groundwater monitoring wells were installed in April and May 2014. DTSC approved a reduction to a semi-annual frequency of groundwater monitoring, with the semi-annual events occurring in the first quarter (March) and third quarter (September).

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Fieldwork
Completed Date: 04/23/2014
Comments: The groundwater monitoring well installation outlined in the Work Plan approved by DTSC on 2/7/2014 was completed.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Characterization Workplan
Completed Date: 02/07/2014
Comments: The Work Plan identifies the location of six groundwater monitoring wells to be installed at the Site and outlines the well installation, development, and sampling procedures. Additionally, the Work Plan outlines an initial round of soil gas sampling to be performed at the Site.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 09/26/2014
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported

TOWN & COUNTRY CLEANERS (Continued) **1006012242**

Completed Document Type:	Site Characterization Report
Completed Date:	05/18/2015
Comments:	The Groundwater Monitoring Report 1st Quarter 2015 presents the groundwater monitoring event that was conducted on the site on March 4, 2015 which was fourth event since the groundwater monitoring wells were installed in April and May 2014 and completed one annual cycle of monitoring events. Tetrachloroethylene was detected in four of the six monitoring wells at concentrations ranging from 0.7 to 43 micrograms per liter.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Site Characterization Report
Completed Date:	03/03/2015
Comments:	The Soil-Vapor Sampling Report document the soil-vapor sampling activities performed at the Site on October 20, 21, and 22, 2014. A total of 24 temporary soil-vapor sampling points were installed that consisted of the following: 1) six sub-slab points, with three points in Building 3 and three point within the footprint of the former Building 6; 2) nine points at a depth of approximately 7.5 feet below ground surface; and 3) nine points at a depth of approximately 22.5 feet below ground surface.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Fieldwork
Completed Date:	10/22/2014
Comments:	Soil gas probes were installed and sampled by the mobile lab. The work was performed as outlined in the Technical Memorandum, Work Plan for Groundwater Monitoring and Work Plan Addendum for Soil Gas Sampling approved by DTSC on February 7, 2014.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Technical Report
Completed Date:	05/12/2015
Comments:	The Investigation of Buildings 3 and 4 report documents the information that was obtained on the construction and ventilation of Buildings 3 and 4 at the Site.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Risk Assessment Workplan
Completed Date:	08/03/2015
Comments:	The Technical Memorandum, Work Plan for Human Health Risk Assessment summarizes the planned risk assessment methodology for the Site.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Risk Assessment Report
Completed Date:	11/13/2015
Comments:	Not reported
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Site Characterization Report
Completed Date:	10/16/2015

TOWN & COUNTRY CLEANERS (Continued) **1006012242**

Comments:	The Groundwater Monitoring Report 3rd Quarter 2015 Semi-Annual presents the groundwater monitoring event that was conducted on the site on September 1, 2015 which was fifth event since the groundwater monitoring wells were installed in April and May 2014. Tetrachloroethylene was detected in three of the six monitoring wells at concentrations ranging from 0.9 to 34 micrograms per liter.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Site Characterization Workplan
Completed Date:	02/04/2016
Comments:	The indoor air sampling work plan outlines additional indoor air sampling to be performed in Buildings 3, 4, and 5 to confirm the results of indoor air sampling in May 2011, where there were no significant detections of volatile organic compounds, and to provide indoor air data during the winter.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Site Characterization Workplan
Completed Date:	02/04/2016
Comments:	The Soil-Vapor Sampling Work Plan outlines additional soil vapor sampling that is to be performed to further delineate the lateral extent of impacts to soil vapor by PCE. Sampling locations are included along the northeastern boundary of the site to obtain more representative data for evaluating the potential risk to offsite residents.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Site Characterization Report
Completed Date:	04/18/2016
Comments:	Indoor air sampling report summarizes the results of the sampling event that took place on February 10, 2016. The PCE results for three suites in the shopping center exceeded published screening levels, possibly due to indoor sources of PCE. Re-sampling of the three suites in the warm season has been recommended.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Site Characterization Report
Completed Date:	08/04/2016
Comments:	Not reported
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Site Characterization Report
Completed Date:	08/04/2016
Comments:	Not reported
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Site Characterization Report
Completed Date:	01/19/2017
Comments:	Not reported
Completed Area Name:	PROJECT WIDE

TOWN & COUNTRY CLEANERS (Continued) **1006012242**

Completed Sub Area Name: Not reported
Completed Document Type: Site Characterization Report
Completed Date: 12/05/2016
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Characterization Report
Completed Date: 12/05/2016
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Characterization Workplan
Completed Date: 01/06/2017
Comments: Not reported

Future Area Name: PROJECT WIDE
Future Sub Area Name: Not reported
Future Document Type: Certification
Future Due Date: 2019
Future Area Name: PROJECT WIDE
Future Sub Area Name: Not reported
Future Document Type: Land Use Restriction
Future Due Date: 2019
Future Area Name: PROJECT WIDE
Future Sub Area Name: Not reported
Future Document Type: Public Notice
Future Due Date: 2018
Future Area Name: PROJECT WIDE
Future Sub Area Name: Not reported
Future Document Type: Preliminary Endangerment Assessment Report
Future Due Date: 2018
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

VCP:
Facility ID: 60001443
Site Type: Voluntary Cleanup
Site Type Detail: Voluntary Cleanup
Site Mgmt. Req.: NONE SPECIFIED
Acres: 13
National Priorities List: NO
Cleanup Oversight Agencies: SMBRP
Lead Agency: SMBRP
Lead Agency Description: DTSC - Site Cleanup Program
Project Manager: Nicole Yuen
Supervisor: Mark Piros
Division Branch: Cleanup Berkeley
Site Code: 201906
Assembly: 24
Senate: 13
Special Programs Code: Not reported
Status: Active

TOWN & COUNTRY CLEANERS (Continued) **1006012242**

Status Date:	03/10/2011
Restricted Use:	NO
Funding:	Responsible Party
Lat/Long:	37.43859 / -122.1614
APN:	NONE SPECIFIED
Past Use:	DRY CLEANING
Potential COC:	30022
Confirmed COC:	30022
Potential Description:	IA, OTH, SOIL, SV
Alias Name:	201906
Alias Type:	Project Code (Site Code)
Alias Name:	60001443
Alias Type:	Envirostor ID Number

Completed Info:

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Annual Oversight Cost Estimate
Completed Date:	09/26/2016
Comments:	DTSC letter with oversight cost estimate for project activities scheduled for fiscal year 2016/2017.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Voluntary Cleanup Agreement
Completed Date:	01/05/2012
Comments:	Not reported
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Annual Oversight Cost Estimate
Completed Date:	10/21/2015
Comments:	Not reported
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Correspondence
Completed Date:	02/24/2015
Comments:	DTSC sent an email concurring with the February 18, 2015 letter from IRC Environmental Consulting summarizing the February 17th project meeting.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Correspondence
Completed Date:	02/18/2015
Comments:	Letter from IRC Environmental Consulting summarizing agreements made in project meeting on February 17, 2015.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Annual Oversight Cost Estimate
Completed Date:	10/02/2013
Comments:	The estimated annual oversight cost for the 2013/14 fiscal year is $16,662.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported

TOWN & COUNTRY CLEANERS (Continued) **1006012242**

Completed Document Type: Annual Oversight Cost Estimate
Completed Date: 09/24/2014
Comments: Cost estimate letter was complete and sent on 9/24/2014

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Pre-HARP Form
Completed Date: 10/17/2014
Comments: Pre-HARP form was completed and signed on 10/17/2014

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Post HARP Form
Completed Date: 10/22/2014
Comments: Post-HARP form was signed for a site visit that occurred on 10/21/14. No exposures to hazardous substances were noted.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Annual Oversight Cost Estimate
Completed Date: 10/15/2012
Comments: The estimated annual oversight cost for the 2012/13 fiscal year for the Palo Alto Town & Country Village Site is $15,317.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Application
Completed Date: 03/10/2011
Comments: DTSC was determined to be the appropriate lead agency.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Characterization Report
Completed Date: 02/29/2012
Comments: DTSC reviewed several Site investigation reports submitted by the proponent to determine if the Site has been adequately characterized and whether additional remedial action is required. DTSC determined that further site characterization to determine the lateral and vertical extent of volatile organic compound impacts to soil an groundwater is necessary at the Site. Further Site characterization activities will be conducted under DTSC oversight.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Preliminary Endangerment Assessment Workplan
Completed Date: 03/15/2013
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Characterization Report
Completed Date: 06/13/2013
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Characterization Report

TOWN & COUNTRY CLEANERS (Continued) **1006012242**

Completed Date: 08/14/2013
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Characterization Report
Completed Date: 01/03/2014
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Well Completion Report
Completed Date: 08/15/2014
Comments: Groundwater monitoring wells were installed and are being monitored to determine groundwater flow direction and characterize groundwater quality at the Site. DTSC finds that the monitoring wells were installed and located in accordance with the Work Plan and approved Report.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 09/16/2014
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 03/03/2015
Comments: The Groundwater Monitoring Report 4th Quarter 2014 presents the groundwater monitoring event that was conducted on the site on November 18, 2014, which was third event since the groundwater monitoring wells were installed in April and May 2014. DTSC approved a reduction to a semi-annual frequency of groundwater monitoring, with the semi-annual events occurring in the first quarter (March) and third quarter (September).

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Fieldwork
Completed Date: 04/23/2014
Comments: The groundwater monitoring well installation outlined in the Work Plan approved by DTSC on 2/7/2014 was completed.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Characterization Workplan
Completed Date: 02/07/2014
Comments: The Work Plan identifies the location of six groundwater monitoring wells to be installed at the Site and outlines the well installation, development, and sampling procedures. Additionally, the Work Plan outlines an initial round of soil gas sampling to be performed at the Site.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report

TOWN & COUNTRY CLEANERS (Continued) **1006012242**

Completed Date: 09/26/2014
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Characterization Report
Completed Date: 05/18/2015
Comments: The Groundwater Monitoring Report 1st Quarter 2015 presents the groundwater monitoring event that was conducted on the site on March 4, 2015 which was fourth event since the groundwater monitoring wells were installed in April and May 2014 and completed one annual cycle of monitoring events. Tetrachloroethylene was detected in four of the six monitoring wells at concentrations ranging from 0.7 to 43 micrograms per liter.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Characterization Report
Completed Date: 03/03/2015
Comments: The Soil-Vapor Sampling Report document the soil-vapor sampling activities performed at the Site on October 20, 21, and 22, 2014. A total of 24 temporary soil-vapor sampling points were installed that consisted of the following: 1) six sub-slab points, with three points in Building 3 and three point within the footprint of the former Building 6; 2) nine points at a depth of approximately 7.5 feet below ground surface; and 3) nine points at a depth of approximately 22.5 feet below ground surface.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Fieldwork
Completed Date: 10/22/2014
Comments: Soil gas probes were installed and sampled by the mobile lab. The work was performed as outlined in the Technical Memorandum, Work Plan for Groundwater Monitoring and Work Plan Addendum for Soil Gas Sampling approved by DTSC on February 7, 2014.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Technical Report
Completed Date: 05/12/2015
Comments: The Investigation of Buildings 3 and 4 report documents the information that was obtained on the construction and ventilation of Buildings 3 and 4 at the Site.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Risk Assessment Workplan
Completed Date: 08/03/2015
Comments: The Technical Memorandum, Work Plan for Human Health Risk Assessment summarizes the planned risk assessment methodology for the Site.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Risk Assessment Report
Completed Date: 11/13/2015
Comments: Not reported

TOWN & COUNTRY CLEANERS (Continued) **1006012242**

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Characterization Report
Completed Date: 10/16/2015
Comments: The Groundwater Monitoring Report 3rd Quarter 2015 Semi-Annual presents the groundwater monitoring event that was conducted on the site on September 1, 2015 which was fifth event since the groundwater monitoring wells were installed in April and May 2014. Tetrachloroethylene was detected in three of the six monitoring wells at concentrations ranging from 0.9 to 34 micrograms per liter.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Characterization Workplan
Completed Date: 02/04/2016
Comments: The indoor air sampling work plan outlines additional indoor air sampling to be performed in Buildings 3, 4, and 5 to confirm the results of indoor air sampling in May 2011, where there were no significant detections of volatile organic compounds, and to provide indoor air data during the winter.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Characterization Workplan
Completed Date: 02/04/2016
Comments: The Soil-Vapor Sampling Work Plan outlines additional soil vapor sampling that is to be performed to further delineate the lateral extent of impacts to soil vapor by PCE. Sampling locations are included along the northeastern boundary of the site to obtain more representative data for evaluating the potential risk to offsite residents.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Characterization Report
Completed Date: 04/18/2016
Comments: Indoor air sampling report summarizes the results of the sampling event that took place on February 10, 2016. The PCE results for three suites in the shopping center exceeded published screening levels, possibly due to indoor sources of PCE. Re-sampling of the three suites in the warm season has been recommended.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Characterization Report
Completed Date: 08/04/2016
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Characterization Report
Completed Date: 08/04/2016
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Characterization Report

TOWN & COUNTRY CLEANERS (Continued) **1006012242**

Completed Date: 01/19/2017
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Characterization Report
Completed Date: 12/05/2016
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Characterization Report
Completed Date: 12/05/2016
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Characterization Workplan
Completed Date: 01/06/2017
Comments: Not reported

Future Area Name: PROJECT WIDE
Future Sub Area Name: Not reported
Future Document Type: Certification
Future Due Date: 2019
Future Area Name: PROJECT WIDE
Future Sub Area Name: Not reported
Future Document Type: Land Use Restriction
Future Due Date: 2019
Future Area Name: PROJECT WIDE
Future Sub Area Name: Not reported
Future Document Type: Public Notice
Future Due Date: 2018
Future Area Name: PROJECT WIDE
Future Sub Area Name: Not reported
Future Document Type: Preliminary Endangerment Assessment Report
Future Due Date: 2018
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

FINDS:

Registry ID: 110001161796

Environmental Interest/Information System
HAZARDOUS AIR POLLUTANT MAJOR

STATE MASTER

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

TOWN & COUNTRY CLEANERS (Continued) **1006012242**

EMI:

Year:	1990
County Code:	43
Air Basin:	SF
Facility ID:	4652
Air District Name:	BA
SIC Code:	7216
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	1
Reactive Organic Gases Tons/Yr:	0
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers and Smllr Tons/Yr:	0

Year:	1996
County Code:	43
Air Basin:	SF
Facility ID:	4652
Air District Name:	BA
SIC Code:	7216
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	0
Reactive Organic Gases Tons/Yr:	0
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers and Smllr Tons/Yr:	0

Year:	1997
County Code:	43
Air Basin:	SF
Facility ID:	4652
Air District Name:	BA
SIC Code:	7216
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	0
Reactive Organic Gases Tons/Yr:	0
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers and Smllr Tons/Yr:	0

Year:	1998
County Code:	43
Air Basin:	SF
Facility ID:	4652
Air District Name:	BA

TOWN & COUNTRY CLEANERS (Continued) **1006012242**

SIC Code:	7216
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	0
Reactive Organic Gases Tons/Yr:	0
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers and Smllr Tons/Yr:	0

Year:	1999
County Code:	43
Air Basin:	SF
Facility ID:	4652
Air District Name:	BA
SIC Code:	7216
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	1
Reactive Organic Gases Tons/Yr:	0
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers and Smllr Tons/Yr:	0

Year:	2000
County Code:	43
Air Basin:	SF
Facility ID:	4652
Air District Name:	BA
SIC Code:	7216
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	1
Reactive Organic Gases Tons/Yr:	0
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers and Smllr Tons/Yr:	0

Year:	2001
County Code:	43
Air Basin:	SF
Facility ID:	4652
Air District Name:	BA
SIC Code:	7216
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	0
Reactive Organic Gases Tons/Yr:	0

TOWN & COUNTRY CLEANERS (Continued) **1006012242**

Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers and Smllr Tons/Yr:	0

Year:	2002
County Code:	43
Air Basin:	SF
Facility ID:	4652
Air District Name:	BA
SIC Code:	7216
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	0
Reactive Organic Gases Tons/Yr:	0
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers and Smllr Tons/Yr:	0

Year:	2008
County Code:	43
Air Basin:	SF
Facility ID:	16068
Air District Name:	BA
SIC Code:	7216
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	.694
Reactive Organic Gases Tons/Yr:	.128
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers and Smllr Tons/Yr:	0

Year:	2009
County Code:	43
Air Basin:	SF
Facility ID:	16068
Air District Name:	BA
SIC Code:	7216
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	0.374
Reactive Organic Gases Tons/Yr:	0
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers and Smllr Tons/Yr:	0

TOWN & COUNTRY CLEANERS (Continued) **1006012242**

Year:	2010
County Code:	43
Air Basin:	SF
Facility ID:	16068
Air District Name:	BA
SIC Code:	7216
Air District Name:	BAY AREA AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	0.32000000000000001
Reactive Organic Gases Tons/Yr:	0.128
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers and Smllr Tons/Yr:	0

HAZNET:

envid:	1006012242
Year:	2015
GEPAID:	CAR000232553
Contact:	WENDY BRANT
Telephone:	4017651500
Mailing Name:	Not reported
Mailing Address:	1 CVS DR - MC 1160
Mailing City,St,Zip:	WOONSOCKET, RI 02895
Gen County:	Santa Clara
TSD EPA ID:	NVD980895338
TSD County:	99
Waste Category:	Alkaline solution without metals pH >= 12.5
Disposal Method:	Neutralization Only
Tons:	0.011
Cat Decode:	Alkaline solution without metals pH >= 12.5
Method Decode:	Neutralization Only
Facility County:	Santa Clara

envid:	1006012242
Year:	2015
GEPAID:	CAR000232553
Contact:	WENDY BRANT
Telephone:	4017651500
Mailing Name:	Not reported
Mailing Address:	1 CVS DR - MC 1160
Mailing City,St,Zip:	WOONSOCKET, RI 02895
Gen County:	Santa Clara
TSD EPA ID:	CAD980884183
TSD County:	Sacramento
Waste Category:	Off-specification, aged or surplus inorganics
Disposal Method:	Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons:	0.001
Cat Decode:	Off-specification, aged or surplus inorganics
Method Decode:	Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Facility County:	Santa Clara

envid: 1006012242

TOWN & COUNTRY CLEANERS (Continued) **1006012242**

Year:	2015
GEPAID:	CAR000232553
Contact:	WENDY BRANT
Telephone:	4017651500
Mailing Name:	Not reported
Mailing Address:	1 CVS DR - MC 1160
Mailing City,St,Zip:	WOONSOCKET, RI 02895
Gen County:	Santa Clara
TSD EPA ID:	CAD980884183
TSD County:	Sacramento
Waste Category:	Pharmaceutical waste
Disposal Method:	Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons:	0.0085
Cat Decode:	Pharmaceutical waste
Method Decode:	Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Facility County:	Santa Clara

envid:	1006012242
Year:	2015
GEPAID:	CAR000232553
Contact:	WENDY BRANT
Telephone:	4017651500
Mailing Name:	Not reported
Mailing Address:	1 CVS DR - MC 1160
Mailing City,St,Zip:	WOONSOCKET, RI 02895
Gen County:	Santa Clara
TSD EPA ID:	CAD980884183
TSD County:	Sacramento
Waste Category:	Off-specification, aged or surplus organics
Disposal Method:	Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons:	0.0985
Cat Decode:	Off-specification, aged or surplus organics
Method Decode:	Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Facility County:	Santa Clara

envid:	1006012242
Year:	2015
GEPAID:	CAR000232553
Contact:	WENDY BRANT
Telephone:	4017651500
Mailing Name:	Not reported
Mailing Address:	1 CVS DR - MC 1160
Mailing City,St,Zip:	WOONSOCKET, RI 02895
Gen County:	Santa Clara
TSD EPA ID:	NVD980895338
TSD County:	99
Waste Category:	Not reported
Disposal Method:	Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons:	0.028
Cat Decode:	Not reported
Method Decode:	Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)

TOWN & COUNTRY CLEANERS (Continued) **1006012242**

Facility County: Santa Clara

Click this hyperlink while viewing on your computer to access
21 additional CA_HAZNET: record(s) in the EDR Site Report.

D33 **PALO ALTO CIVIC CENTER** **LUST** **S100849892**
South **250 HAMILTON AVE** **HIST LUST** **N/A**
< 1/8 **PALO ALTO, CA 94301** **HIST CORTESE**
0.102 mi.
536 ft. **Site 3 of 6 in cluster D**

Relative:
Higher

Actual:
56 ft.

LUST:

Region:	STATE
Global Id:	T0608501023
Latitude:	37.444499
Longitude:	-122.159946
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	01/25/1993
Lead Agency:	SANTA CLARA COUNTY LOP
Case Worker:	UST
Local Agency:	SANTA CLARA COUNTY LOP
RB Case Number:	Not reported
LOC Case Number:	Not reported
File Location:	All Files are on GeoTracker or in the Local Agency Database
Potential Media Affect:	Soil
Potential Contaminants of Concern:	Diesel
Site History:	Not reported

Click here to access the California GeoTracker records for this facility:

Contact:

Global Id:	T0608501023
Contact Type:	Regional Board Caseworker
Contact Name:	Regional Water Board
Organization Name:	SAN FRANCISCO BAY RWQCB (REGION 2)
Address:	1515 CLAY ST SUITE 1400
City:	OAKLAND
Email:	Not reported
Phone Number:	Not reported

Global Id:	T0608501023
Contact Type:	Local Agency Caseworker
Contact Name:	UST CASE WORKER
Organization Name:	SANTA CLARA COUNTY LOP
Address:	1555 Berger Drive, Suite 300
City:	SAN JOSE
Email:	Not reported
Phone Number:	4089183400

Status History:

Global Id:	T0608501023
Status:	Completed - Case Closed
Status Date:	01/25/1993

Global Id:	T0608501023
Status:	Open - Case Begin Date
Status Date:	02/20/1986

PALO ALTO CIVIC CENTER (Continued) **S100849892**

Global Id: T0608501023
Status: Open - Site Assessment
Status Date: 06/24/1991

Regulatory Activities:
Global Id: T0608501023
Action Type: ENFORCEMENT
Date: 01/25/1993
Action: Closure/No Further Action Letter

Global Id: T0608501023
Action Type: Other
Date: 02/20/1986
Action: Leak Reported

Global Id: T0608501023
Action Type: RESPONSE
Date: 01/18/1991
Action: Other Report / Document

Global Id: T0608501023
Action Type: ENFORCEMENT
Date: 09/05/1990
Action: Notice of Responsibility - #40101

Global Id: T0608501023
Action Type: REMEDIATION
Date: 01/30/1986
Action: Excavation

LUST REG 2:
Region: 2
Facility Id: Not reported
Facility Status: Case Closed
Case Number: 06S3W02B01f
How Discovered: Not reported
Leak Cause: Not reported
Leak Source: Not reported
Date Leak Confirmed: Not reported
Oversight Program: LUST
Prelim. Site Assesment Wokplan Submitted: Not reported
Preliminary Site Assesment Began: 6/24/1991
Pollution Characterization Began: Not reported
Pollution Remediation Plan Submitted: Not reported
Date Remediation Action Underway: Not reported
Date Post Remedial Action Monitoring Began: Not reported

HIST LUST SANTA CLARA:
Region: SANTA CLARA
Region Code: 2
SCVWD ID: 06S3W02B01
Oversite Agency: SCVWD
Date Listed: 1987-01-01 00:00:00
Closed Date: 1993-01-25 00:00:00

PALO ALTO CIVIC CENTER (Continued) **S100849892**

HIST CORTESE:
Region: CORTESE
Facility County Code: 43
Reg By: LTNKA
Reg Id: 43-1028

D34 **CITY HALL** **HIST UST** **U001602185**
South **250 HAMILTON** **N/A**
< 1/8 **PALO ALTO, CA 94301**
0.102 mi.
536 ft. **Site 4 of 6 in cluster D**

Relative:
Higher

Actual:
56 ft.

HIST UST:
File Number: 0002D114
URL: http://geotracker.waterboards.ca.gov/ustpdfs/pdf/0002D114.pdf
Region: STATE
Facility ID: 00000055084
Facility Type: Other
Other Type: CITY HALL
Contact Name: TED KREBS
Telephone: 4153292335
Owner Name: CITY OF PALO ALTO
Owner Address: 250 HAMILTON AVE.
Owner City,St,Zip: PALO ALTO, CA 94301
Total Tanks: 0001

Tank Num: 001
Container Num: 1
Year Installed: 1970
Tank Capacity: 00008000
Tank Used for: PRODUCT
Type of Fuel: DIESEL
Container Construction Thickness: Not reported
Leak Detection: Stock Inventor

Click here for Geo Tracker PDF:

D35 **CITY OF PALO ALTO CIVIC CENTER** **UST** **U003879448**
South **250 HAMILTON AVE** **N/A**
< 1/8 **PALO ALTO, CA 94301**
0.102 mi.
536 ft. **Site 5 of 6 in cluster D**

Relative:
Higher

Actual:
56 ft.

UST:
Facility ID: 43-006-000427
Permitting Agency: PALO ALTO, CITY OF
Latitude: 37.44416783
Longitude: -122.15931

Facility ID: 43-006-000427
Permitting Agency: Santa Clara County Environmental Health
Latitude: 37.444515
Longitude: -122.160717

D36 **CITY HALL** **LUST** **S101630466**
South **250 HAMILTON** **SWEEPS UST** **N/A**
< 1/8 **PALO ALTO, CA 94301** **CA FID UST**
0.102 mi. **CUPA Listings**
536 ft. **Site 6 of 6 in cluster D** **HAZNET**

Relative:
Higher

Actual:
56 ft.

LUST SANTA CLARA:
Region: SANTA CLARA
SCVWD ID: 06S3W02B01F
Date Closed: 01/25/1993
EDR Link ID: 06S3W02B01F

SWEEPS UST:
Status: Active
Comp Number: 55084
Number: 4
Board Of Equalization: 44-026121
Referral Date: 07-01-85
Action Date: Not reported
Created Date: 02-29-88
Owner Tank Id: 1
SWRCB Tank Id: 43-006-055084-000001
Tank Status: A
Capacity: 8000
Active Date: 07-01-85
Tank Use: M.V. FUEL
STG: P
Content: DIESEL
Number Of Tanks: 1

CA FID UST:
Facility ID: 43005856
Regulated By: UTNKA
Regulated ID: 00055084
Cortese Code: Not reported
SIC Code: Not reported
Facility Phone: 4153292335
Mail To: Not reported
Mailing Address: 3201 E BAYSHORE
Mailing Address 2: Not reported
Mailing City,St,Zip: PALO ALTO 94301
Contact: Not reported
Contact Phone: Not reported
DUNs Number: Not reported
NPDES Number: Not reported
EPA ID: Not reported
Comments: Not reported
Status: Active

CUPA SANTA CLARA:
Region: SANTA CLARA
PE#: 2399
Program Description: UNDERGROUND STORAGE TANK PROGRAM RECORD
Latitude: 37.444578
Longitude: -122.160660

HAZNET:

CITY HALL (Continued) **S101630466**

envid:	S101630466
Year:	2015
GEPAID:	CAC002805054
Contact:	ELISE SBARBORI
Telephone:	6504966980
Mailing Name:	Not reported
Mailing Address:	PO BOX 10250
Mailing City,St,Zip:	PALO ALTO, CA 94303
Gen County:	Santa Clara
TSD EPA ID:	CAD981382732
TSD County:	Alameda
Waste Category:	Asbestos containing waste
Disposal Method:	Landfill Or Surface Impoundment That Will Be Closed As Landfill(To Include On-Site Treatment And/Or Stabilization)
Tons:	0.69
Cat Decode:	Asbestos containing waste
Method Decode:	Landfill Or Surface Impoundment That Will Be Closed As Landfill(To Include On-Site Treatment And/Or Stabilization)
Facility County:	Santa Clara

H37 **PREMIER PROPERTIES** **LUST** **S102435459**
WSW **250 UNIVERSITY AVE** **HIST LUST** **N/A**
< 1/8 **PALO ALTO, CA 94301** **HIST CORTESE**
0.102 mi.
538 ft. **Site 1 of 3 in cluster H**

Relative:
Higher

Actual:
57 ft.

LUST:

Region:	STATE
Global Id:	T0608501068
Latitude:	37.4452553952648
Longitude:	-122.161810398102
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	05/21/1993
Lead Agency:	SANTA CLARA COUNTY LOP
Case Worker:	UST
Local Agency:	SANTA CLARA COUNTY LOP
RB Case Number:	Not reported
LOC Case Number:	Not reported
File Location:	All Files are on GeoTracker or in the Local Agency Database
Potential Media Affect:	Other Groundwater (uses other than drinking water)
Potential Contaminants of Concern:	Waste Oil / Motor / Hydraulic / Lubricating
Site History:	Not reported

Click here to access the California GeoTracker records for this facility:

Contact:

Global Id:	T0608501068
Contact Type:	Regional Board Caseworker
Contact Name:	Regional Water Board
Organization Name:	SAN FRANCISCO BAY RWQCB (REGION 2)
Address:	1515 CLAY ST SUITE 1400
City:	OAKLAND
Email:	Not reported
Phone Number:	Not reported

Global Id:	T0608501068
Contact Type:	Local Agency Caseworker

PREMIER PROPERTIES (Continued) **S102435459**

Contact Name: UST CASE WORKER
Organization Name: SANTA CLARA COUNTY LOP
Address: 1555 Berger Drive, Suite 300
City: SAN JOSE
Email: Not reported
Phone Number: 4089183400

Status History:
Global Id: T0608501068
Status: Completed - Case Closed
Status Date: 05/21/1993

Global Id: T0608501068
Status: Open - Case Begin Date
Status Date: 06/23/1989

Global Id: T0608501068
Status: Open - Site Assessment
Status Date: 06/23/1989

Regulatory Activities:
Global Id: T0608501068
Action Type: RESPONSE
Date: 09/28/1989
Action: Other Report / Document

Global Id: T0608501068
Action Type: Other
Date: 09/13/1989
Action: Leak Reported

Global Id: T0608501068
Action Type: ENFORCEMENT
Date: 05/18/1993
Action: Closure/No Further Action Letter

Global Id: T0608501068
Action Type: ENFORCEMENT
Date: 11/30/1989
Action: Notice of Responsibility - #40102

Global Id: T0608501068
Action Type: REMEDIATION
Date: 08/03/1989
Action: Excavation

LUST REG 2:
Region: 2
Facility Id: Not reported
Facility Status: Case Closed
Case Number: 06S3W02C01f
How Discovered: Not reported
Leak Cause: Not reported
Leak Source: Not reported
Date Leak Confirmed: Not reported

PREMIER PROPERTIES (Continued) **S102435459**

Oversight Program: LUST
Prelim. Site Assesment Wokplan Submitted: Not reported
Preliminary Site Assesment Began: 6/23/1989
Pollution Characterization Began: 6/23/1989
Pollution Remediation Plan Submitted: Not reported
Date Remediation Action Underway: Not reported
Date Post Remedial Action Monitoring Began: Not reported

LUST SANTA CLARA:
Region: SANTA CLARA
SCVWD ID: 06S3W02C01F
Date Closed: 05/21/1993
EDR Link ID: 06S3W02C01F

HIST LUST SANTA CLARA:
Region: SANTA CLARA
Region Code: 2
SCVWD ID: 06S3W02C01
Oversite Agency: SCVWD
Date Listed: 1990-01-01 00:00:00
Closed Date: 1993-05-21 00:00:00

HIST CORTESE:
Region: CORTESE
Facility County Code: 43
Reg By: LTNKA
Reg Id: 43-1076

H38 **HEWLETT PACKARD UNIVERSITY AVE** **RCRA NonGen / NLR** **1005441343**
WSW **250 UNIVERSITY AVE** **FINDS** **CAR000118117**
< 1/8 **PALO ALTO, CA 94301** **ECHO**
0.102 mi. **HAZNET**
538 ft. **Site 2 of 3 in cluster H**

Relative: Higher

Actual: 57 ft.

RCRA NonGen / NLR:
Date form received by agency: 05/29/2002
Facility name: HEWLETT PACKARD UNIVERSITY AVE
Facility address: 250 UNIVERSITY AVE
PALO ALTO, CA 94301
EPA ID: CAR000118117
Mailing address: 1501 PAGE MILL ROAD M S 1129
PALO ALTO, CA 94304
Contact: SCOTT G JOHNSON
Contact address: 1501 PAGE MILL ROAD M S 1129
PALO ALTO, CA 94304
Contact country: US
Contact telephone: 650-857-5493
Contact email: Not reported
EPA Region: 09
Classification: Non-Generator
Description: Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:
Owner/operator name: HEWLETT PACKARD CO
Owner/operator address: 3000 HANOVER ST
PALO ALTO, CA 94304

HEWLETT PACKARD UNIVERSITY AVE (Continued) **1005441343**

Owner/operator country: Not reported
Owner/operator telephone: (650) 857-1501
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

. Waste code: D001
. Waste name: IGNITABLE WASTE

. Waste code: D002
. Waste name: CORROSIVE WASTE

. Waste code: D003
. Waste name: REACTIVE WASTE

. Waste code: D022
. Waste name: CHLOROFORM

. Waste code: F001
. Waste name: THE FOLLOWING SPENT HALOGENATED SOLVENTS USED IN DEGREASING: TETRACHLOROETHYLENE, TRICHLORETHYLENE, METHYLENE CHLORIDE, 1,1,1-TRICHLOROETHANE, CARBON TETRACHLORIDE AND CHLORINATED FLUOROCARBONS; ALL SPENT SOLVENT MIXTURES/BLENDS USED IN DEGREASING CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F002, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

. Waste code: F002
. Waste name: THE FOLLOWING SPENT HALOGENATED SOLVENTS: TETRACHLOROETHYLENE, METHYLENE CHLORIDE, TRICHLOROETHYLENE, 1,1,1-TRICHLOROETHANE, CHLOROBENZENE, 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE, ORTHO-DICHLOROBENZENE, TRICHLOROFLUOROMETHANE, AND 1,1,2, TRICHLOROETHANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

HEWLETT PACKARD UNIVERSITY AVE (Continued) **1005441343**

. Waste code: F003
. Waste name: THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NONHALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS, AND A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

. Waste code: F005
. Waste name: THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: TOLUENE, METHYL ETHYL KETONE, CARBON DISULFIDE, ISOBUTANOL, PYRIDINE, BENZENE, 2-ETHOXYETHANOL, AND 2-NITROPROPANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, OR F004; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

. Waste code: U002
. Waste name: 2-PROPANONE (I) (OR) ACETONE (I)

. Waste code: U003
. Waste name: ACETONITRILE (I,T)

. Waste code: U019
. Waste name: BENZENE (I,T)

. Waste code: U044
. Waste name: CHLOROFORM (OR) METHANE, TRICHLORO-

. Waste code: U134
. Waste name: HYDROFLUORIC ACID (C,T) (OR) HYDROGEN FLUORIDE (C,T)

. Waste code: U154
. Waste name: METHANOL (I) (OR) METHYL ALCOHOL (I)

. Waste code: U159
. Waste name: 2-BUTANONE (I,T) (OR) METHYL ETHYL KETONE (MEK) (I,T)

Violation Status: No violations found

FINDS:

Registry ID: 110012538209

Environmental Interest/Information System

California Hazardous Waste Tracking System - Datamart (HWTS-DATAMART) provides California with information on hazardous waste shipments for generators, transporters, and treatment, storage, and disposal facilities.

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA

HEWLETT PACKARD UNIVERSITY AVE (Continued) **1005441343**

program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:

Envid:	1005441343
Registry ID:	110012538209
DFR URL:	http://echo.epa.gov/detailed-facility-report?fid=110012538209

HAZNET:

envid:	1005441343
Year:	2002
GEPAID:	CAR000118117
Contact:	ANNA PAYNE/ENV PROGRAM MGR
Telephone:	6508573020
Mailing Name:	Not reported
Mailing Address:	1501 Page Mill Road M S 1129
Mailing City,St,Zip:	Palo Alto, CA 94304
Gen County:	Not reported
TSD EPA ID:	CAT080014079
TSD County:	Not reported
Waste Category:	Off-specification, aged or surplus inorganics
Disposal Method:	Transfer Station
Tons:	0.03
Cat Decode:	Not reported
Method Decode:	Not reported
Facility County:	Santa Clara

envid:	1005441343
Year:	2002
GEPAID:	CAR000118117
Contact:	ANNA PAYNE/ENV PROGRAM MGR
Telephone:	6508573020
Mailing Name:	Not reported
Mailing Address:	1501 Page Mill Road M S 1129
Mailing City,St,Zip:	Palo Alto, CA 94304
Gen County:	Not reported
TSD EPA ID:	CAT080014079
TSD County:	Not reported
Waste Category:	Unspecified organic liquid mixture
Disposal Method:	Transfer Station
Tons:	0.02
Cat Decode:	Not reported
Method Decode:	Not reported
Facility County:	Santa Clara

envid:	1005441343
Year:	2002
GEPAID:	CAR000118117
Contact:	ANNA PAYNE/ENV PROGRAM MGR
Telephone:	6508573020
Mailing Name:	Not reported
Mailing Address:	1501 Page Mill Road M S 1129

HEWLETT PACKARD UNIVERSITY AVE (Continued) **1005441343**

Mailing City,St,Zip:	Palo Alto, CA 94304
Gen County:	Not reported
TSD EPA ID:	CAT080014079
TSD County:	Not reported
Waste Category:	Off-specification, aged or surplus organics
Disposal Method:	Transfer Station
Tons:	0.52
Cat Decode:	Not reported
Method Decode:	Not reported
Facility County:	Santa Clara

E39 **MARTHA PAULINE SWAIN TRUSTEE** **RCRA-SQG** **1004676820**
North **451 UNIVERSITY AVE** **FINDS** **CAR000089946**
< 1/8 **PALO ALTO, CA 94301** **ECHO**
0.107 mi. **HAZNET**
564 ft. **Site 5 of 7 in cluster E**

Relative:
Lower

Actual:
53 ft.

RCRA-SQG:

Date form received by agency:	01/11/2001
Facility name:	MARTHA PAULINE SWAIN TRUSTEE
Facility address:	451 UNIVERSITY AVE PALO ALTO, CA 94301
EPA ID:	CAR000089946
Mailing address:	172 UNIVERSITY AVE C / O PREMIER PROPERTIES PALO ALTO, CA 94301
Contact:	BEVERLY FIELDS
Contact address:	172 UNIVERSITY AVE C / O PREMIER PROPERTIES PALO ALTO, CA 94301
Contact country:	US
Contact telephone:	(650) 329-7989
Contact email:	Not reported
EPA Region:	09
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	MARTHA PAULINE SWAIN TRUSTEE
Owner/operator address:	172 UNIVERSITY AVE PALO ALTO, CA 94301
Owner/operator country:	Not reported
Owner/operator telephone:	(650) 329-7977
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No

MARTHA PAULINE SWAIN TRUSTEE (Continued) **1004676820**

Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

. Waste code: D000
. Waste name: Not Defined

. Waste code: D008
. Waste name: LEAD

Historical Generators:
Date form received by agency: 01/11/2001
Site name: MARTHA PAULINE SWAIN TRUSTEE
Classification: Small Quantity Generator

Violation Status: No violations found

FINDS:

Registry ID: 110012226661

Environmental Interest/Information System
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:
Envid: 1004676820
Registry ID: 110012226661
DFR URL: http://echo.epa.gov/detailed-facility-report?fid=110012226661

HAZNET:
envid: 1004676820
Year: 2001
GEPAID: CAR000089946
Contact: --
Telephone: 6503297989
Mailing Name: Not reported
Mailing Address: 451 UNIVERSITY AVE
Mailing City,St,Zip: PALO ALTO, CA 943010000
Gen County: Not reported
TSD EPA ID: CAD028409019

MARTHA PAULINE SWAIN TRUSTEE (Continued) **1004676820**

TSD County: Not reported
Waste Category: Other inorganic solid waste
Disposal Method: Transfer Station
Tons: 0.12
Cat Decode: Not reported
Method Decode: Not reported
Facility County: Santa Clara

I40 **SERRA OIL & GAS** **EDR Hist Auto** **1022226530**
NNW **419 WAVERLY ST** **N/A**
< 1/8 **PALO ALTO, CA 94301**
0.107 mi.
566 ft. **Site 1 of 5 in cluster I**

Relative: EDR Hist Auto
Higher

Year:	Name:	Type:
1978	SERRA OIL & GAS	Gasoline Service Stations

Actual:
55 ft.

I41 **LEE PENNEL CHEVRON** **EDR Hist Auto** **1020618303**
NW **390 LYTTON** **N/A**
< 1/8 **PALO ALTO, CA 94301**
0.109 mi.
577 ft. **Site 2 of 5 in cluster I**

Relative: EDR Hist Auto
Higher

Year:	Name:	Type:
1978	LEE PENNEL CHEVRON	Gasoline Service Stations
1979	LEE PENNEL CHEVRON	Gasoline Service Stations
1980	LEE PENNEL CHEVRON	Gasoline Service Stations
1982	LEE PENNEL CHEVRON	Gasoline Service Stations
1983	LEE PENNEL CHEVRON	Gasoline Service Stations
1985	LEE PENNEL CHEVRON	Gasoline Service Stations
1986	LEE PENNEL CHEVRON	Gasoline Service Stations
1987	LEE PENNEL CHEVRON	Gasoline Service Stations
1988	LEE PENNEL CHEVRON	Gasoline Service Stations
1989	LEE PENNEL CHEVRON	Gasoline Service Stations

Actual:
57 ft.

I42 **96226** **HIST UST** **S118407130**
NW **390 LYTTON ST** **N/A**
< 1/8 **PALO ALTO, CA 94301**
0.109 mi.
577 ft. **Site 3 of 5 in cluster I**

Relative: HIST UST:
Higher

File Number: 0002D071
URL: http://geotracker.waterboards.ca.gov/ustpdfs/pdf/0002D071.pdf
Region: Not reported
Facility ID: Not reported
Facility Type: Not reported
Other Type: Not reported
Contact Name: Not reported
Telephone: Not reported
Owner Name: Not reported

Actual:
57 ft.

96226 (Continued) **S118407130**

Owner Address:	Not reported
Owner City,St,Zip:	Not reported
Total Tanks:	Not reported
Tank Num:	Not reported
Container Num:	Not reported
Year Installed:	Not reported
Tank Capacity:	Not reported
Tank Used for:	Not reported
Type of Fuel:	Not reported
Container Construction Thickness:	Not reported
Leak Detection:	Not reported

Click here for Geo Tracker PDF:

I43 **CUSA-** **SWEEPS UST** **S101594434**
NW **390 LYTTON AVE** **CA FID UST** **N/A**
< 1/8 **PALO ALTO, CA 94301**
0.109 mi.
577 ft. **Site 4 of 5 in cluster I**

Relative:
Higher

Actual:
57 ft.

SWEEPS UST:

Status:	Active
Comp Number:	62861
Number:	2
Board Of Equalization:	44-026136
Referral Date:	07-02-92
Action Date:	07-02-92
Created Date:	02-29-88
Owner Tank Id:	Not reported
SWRCB Tank Id:	Not reported
Tank Status:	Not reported
Capacity:	Not reported
Active Date:	Not reported
Tank Use:	Not reported
STG:	Not reported
Content:	Not reported
Number Of Tanks:	Not reported
Status:	Not reported
Comp Number:	62861
Number:	Not reported
Board Of Equalization:	44-026136
Referral Date:	Not reported
Action Date:	Not reported
Created Date:	Not reported
Owner Tank Id:	Not reported
SWRCB Tank Id:	43-006-062861-000001
Tank Status:	Not reported
Capacity:	10000
Active Date:	Not reported
Tank Use:	M.V. FUEL
STG:	PRODUCT
Content:	PRM UNLEADED
Number Of Tanks:	4
Status:	Not reported
Comp Number:	62861

CUSA- (Continued) **S101594434**

Number: Not reported
Board Of Equalization: 44-026136
Referral Date: Not reported
Action Date: Not reported
Created Date: Not reported
Owner Tank Id: Not reported
SWRCB Tank Id: 43-006-062861-000002
Tank Status: Not reported
Capacity: 10000
Active Date: Not reported
Tank Use: M.V. FUEL
STG: PRODUCT
Content: REG UNLEADED
Number Of Tanks: Not reported

Status: Not reported
Comp Number: 62861
Number: Not reported
Board Of Equalization: 44-026136
Referral Date: Not reported
Action Date: Not reported
Created Date: Not reported
Owner Tank Id: Not reported
SWRCB Tank Id: 43-006-062861-000003
Tank Status: Not reported
Capacity: 10000
Active Date: Not reported
Tank Use: M.V. FUEL
STG: PRODUCT
Content: LEADED
Number Of Tanks: Not reported

Status: Not reported
Comp Number: 62861
Number: Not reported
Board Of Equalization: 44-026136
Referral Date: Not reported
Action Date: Not reported
Created Date: Not reported
Owner Tank Id: Not reported
SWRCB Tank Id: 43-006-062861-000004
Tank Status: Not reported
Capacity: 1000
Active Date: Not reported
Tank Use: OIL
STG: WASTE
Content: WASTE OIL
Number Of Tanks: Not reported

CA FID UST:
Facility ID: 43000916
Regulated By: UTNKA
Regulated ID: 00062861
Cortese Code: Not reported
SIC Code: Not reported
Facility Phone: 4153231478
Mail To: Not reported

CUSA- (Continued) **S101594434**

Mailing Address: 543 BYRON ST
Mailing Address 2: Not reported
Mailing City,St,Zip: PALO ALTO 94301
Contact: Not reported
Contact Phone: Not reported
DUNs Number: Not reported
NPDES Number: Not reported
EPA ID: Not reported
Comments: Not reported
Status: Active

I44 **LEONARD ELY PROPERTY** **LUST** **U001595832**
NW **390 LYTTON AVENUE** **HIST UST** **N/A**
< 1/8 **PALO ALTO, CA 94301**
0.109 mi.
577 ft. **Site 5 of 5 in cluster I**

Relative:
Higher

Actual:
57 ft.

LUST:
Region: STATE
Global Id: T10000007332
Latitude: 37.44757
Longitude: -122.16163
Case Type: LUST Cleanup Site
Status: Completed - Case Closed
Status Date: 08/28/2015
Lead Agency: SAN FRANCISCO BAY RWQCB (REGION 2)
Case Worker: UUU
Local Agency: Not reported
RB Case Number: 43S0508
LOC Case Number: Not reported
File Location: Not reported
Potential Media Affect: Not reported
Potential Contaminants of Concern: Not reported
Site History: Not reported

Click here to access the California GeoTracker records for this facility:

Contact:
Global Id: T10000007332
Contact Type: Regional Board Caseworker
Contact Name: Regional Water Board
Organization Name: SAN FRANCISCO BAY RWQCB (REGION 2)
Address: 1515 CLAY ST SUITE 1400
City: OAKLAND
Email: Not reported
Phone Number: Not reported

Status History:
Global Id: T10000007332
Status: Completed - Case Closed
Status Date: 10/03/1997

Global Id: T10000007332
Status: Completed - Case Closed
Status Date: 08/28/2015

Global Id: T10000007332
Status: Open - Case Begin Date

LEONARD ELY PROPERTY (Continued) **U001595832**

Status Date: 06/25/1992

Global Id: T10000007332
Status: Open - Eligible for Closure
Status Date: 10/01/1997

Global Id: T10000007332
Status: Open - Eligible for Closure
Status Date: 10/01/1997

Global Id: T10000007332
Status: Open - Eligible for Closure
Status Date: 10/01/1997

Global Id: T10000007332
Status: Open - Eligible for Closure
Status Date: 10/01/1997

Global Id: T10000007332
Status: Open - Eligible for Closure
Status Date: 10/01/1997

Global Id: T10000007332
Status: Open - Eligible for Closure
Status Date: 10/01/1997

Global Id: T10000007332
Status: Open - Eligible for Closure
Status Date: 08/28/2015

Regulatory Activities:
Global Id: T10000007332
Action Type: ENFORCEMENT
Date: 10/03/1997
Action: Closure/No Further Action Letter - #43S0508

Global Id: T10000007332
Action Type: Other
Date: 06/25/1992
Action: Leak Discovery

Global Id: T10000007332
Action Type: Other
Date: 06/25/1992
Action: Leak Began

Global Id: T10000007332
Action Type: Other
Date: 08/22/1992
Action: Leak Reported

HIST UST:
File Number: Not reported
URL: Not reported
Region: STATE

LEONARD ELY PROPERTY (Continued) **U001595832**

Facility ID:	00000062861
Facility Type:	Gas Station
Other Type:	Not reported
Contact Name:	PENNEL,LEE W
Telephone:	4153273888
Owner Name:	CHEVRON U.S.A. INC.
Owner Address:	575 MARKET
Owner City,St,Zip:	SAN FRANCISCO, CA 94105
Total Tanks:	0004
Tank Num:	001
Container Num:	1
Year Installed:	Not reported
Tank Capacity:	00010000
Tank Used for:	PRODUCT
Type of Fuel:	Not reported
Container Construction Thickness:	0000370
Leak Detection:	Stock Inventor
Tank Num:	002
Container Num:	2
Year Installed:	Not reported
Tank Capacity:	00010000
Tank Used for:	PRODUCT
Type of Fuel:	Not reported
Container Construction Thickness:	0000370
Leak Detection:	Stock Inventor
Tank Num:	003
Container Num:	3
Year Installed:	Not reported
Tank Capacity:	00010000
Tank Used for:	PRODUCT
Type of Fuel:	Not reported
Container Construction Thickness:	0000370
Leak Detection:	Stock Inventor
Tank Num:	004
Container Num:	4
Year Installed:	Not reported
Tank Capacity:	00001000
Tank Used for:	WASTE
Type of Fuel:	Not reported
Container Construction Thickness:	0000370
Leak Detection:	Stock Inventor

F45 **MRS. E. C. FOULE** **SWEEPS UST S101623389**
ENE **630 COWPER ST** **CA FID UST N/A**
< 1/8 **PALO ALTO, CA 94302**
0.112 mi.
591 ft. **Site 2 of 3 in cluster F**

Relative:
Lower

Actual:
50 ft.

SWEEPS UST:

Status:	Active
Comp Number:	21575
Number:	9
Board Of Equalization:	44-026087
Referral Date:	07-01-85

MRS. E. C. FOULE (Continued) **S101623389**

Action Date:	Not reported
Created Date:	02-29-88
Owner Tank Id:	1
SWRCB Tank Id:	43-006-021575-000001
Tank Status:	A
Capacity:	Not reported
Active Date:	07-01-85
Tank Use:	OIL
STG:	W
Content:	WASTE OIL
Number Of Tanks:	1

CA FID UST:

Facility ID:	43012202
Regulated By:	UTNKA
Regulated ID:	00021575
Cortese Code:	Not reported
SIC Code:	Not reported
Facility Phone:	4153210461
Mail To:	Not reported
Mailing Address:	P O BOX
Mailing Address 2:	Not reported
Mailing City,St,Zip:	PALO ALTO 94302
Contact:	Not reported
Contact Phone:	Not reported
DUNs Number:	Not reported
NPDES Number:	Not reported
EPA ID:	Not reported
Comments:	Not reported
Status:	Active

F46 **MRS. E. C. FOULE** **HIST UST** **U001595856**
ENE **630 COWPER ST** **N/A**
< 1/8 **PALO ALTO, CA 94302**
0.112 mi.
591 ft. **Site 3 of 3 in cluster F**

Relative:
Lower

Actual:
50 ft.

HIST UST:

File Number:	Not reported
URL:	Not reported
Region:	STATE
Facility ID:	00000021575
Facility Type:	Other
Other Type:	PRIVATE USE
Contact Name:	Not reported
Telephone:	4153210461
Owner Name:	MRS. E. C. FOULE
Owner Address:	630 COWPER ST.
Owner City,St,Zip:	PALO ALTO, CA 96302
Total Tanks:	0001
Tank Num:	001
Container Num:	1
Year Installed:	Not reported
Tank Capacity:	00000000
Tank Used for:	WASTE
Type of Fuel:	WASTE OIL

MRS. E. C. FOULE (Continued) **U001595856**

Container Construction Thickness: Not reported
Leak Detection: None

E47 **PRESIDENTS HOTEL** **LUST** **S103891012**
NNE **498 UNIVERSITY AVE** **HIST LUST** **N/A**
< 1/8 **PALO ALTO, CA 94301** **HIST CORTESE**
0.117 mi.
616 ft. **Site 6 of 7 in cluster E**

Relative:
Lower

Actual:
51 ft.

LUST:
Region: STATE
Global Id: T0608502144
Latitude: 37.4483075
Longitude: -122.1592184
Case Type: LUST Cleanup Site
Status: Completed - Case Closed
Status Date: 04/30/1999
Lead Agency: SANTA CLARA COUNTY LOP
Case Worker: UST
Local Agency: SANTA CLARA COUNTY LOP
RB Case Number: Not reported
LOC Case Number: Not reported
File Location: All Files are on GeoTracker or in the Local Agency Database
Potential Media Affect: Soil
Potential Contaminants of Concern: Heating Oil / Fuel Oil
Site History: Not reported

Click here to access the California GeoTracker records for this facility:

Contact:
Global Id: T0608502144
Contact Type: Regional Board Caseworker
Contact Name: Regional Water Board
Organization Name: SAN FRANCISCO BAY RWQCB (REGION 2)
Address: 1515 CLAY ST SUITE 1400
City: OAKLAND
Email: Not reported
Phone Number: Not reported

Global Id: T0608502144
Contact Type: Local Agency Caseworker
Contact Name: UST CASE WORKER
Organization Name: SANTA CLARA COUNTY LOP
Address: 1555 Berger Drive, Suite 300
City: SAN JOSE
Email: Not reported
Phone Number: 4089183400

Status History:
Global Id: T0608502144
Status: Completed - Case Closed
Status Date: 04/30/1999

Global Id: T0608502144
Status: Open - Case Begin Date
Status Date: 04/26/1998

Global Id: T0608502144

PRESIDENTS HOTEL (Continued) **S103891012**

Status: Open - Site Assessment
Status Date: 04/26/1998

Regulatory Activities:
Global Id: T0608502144
Action Type: ENFORCEMENT
Date: 04/30/1999
Action: Closure/No Further Action Letter

Global Id: T0608502144
Action Type: Other
Date: 04/26/1999
Action: Leak Reported

Global Id: T0608502144
Action Type: RESPONSE
Date: 04/27/1999
Action: Other Report / Document

LUST REG 2:
Region: 2
Facility Id: Not reported
Facility Status: Case Closed
Case Number: 05S3W35Q03f
How Discovered: Not reported
Leak Cause: Not reported
Leak Source: Not reported
Date Leak Confirmed: Not reported
Oversight Program: LUST
Prelim. Site Assesment Wokplan Submitted: Not reported
Preliminary Site Assesment Began: 4/26/1998
Pollution Characterization Began: Not reported
Pollution Remediation Plan Submitted: Not reported
Date Remediation Action Underway: Not reported
Date Post Remedial Action Monitoring Began: Not reported

LUST SANTA CLARA:
Region: SANTA CLARA
SCVWD ID: 05S3W35Q03F
Date Closed: 04/30/1999
EDR Link ID: 05S3W35Q03F

HIST LUST SANTA CLARA:
Region: SANTA CLARA
Region Code: 2
SCVWD ID: 05S3W35Q03
Oversite Agency: SCVWD
Date Listed: 1999-04-30 00:00:00
Closed Date: 1999-04-30 00:00:00

HIST CORTESE:
Region: CORTESE
Facility County Code: 43
Reg By: LTNKA

PRESIDENTS HOTEL (Continued) **S103891012**

Reg Id: 43-2332

E48 **PHOTO EXPRESS** **RCRA-SQG 1000685875**
North **479 UNIVERSITY AVE** **FINDS CAD983625591**
< 1/8 **PALO ALTO, CA 94301** **ECHO**
0.117 mi.
618 ft. **Site 7 of 7 in cluster E**

Relative:
Lower

Actual:
52 ft.

RCRA-SQG:

Date form received by agency:	03/23/1992
Facility name:	PHOTO EXPRESS
Facility address:	479 UNIVERSITY AVE PALO ALTO, CA 94301
EPA ID:	CAD983625591
Contact:	SAM MISTRY
Contact address:	479 UNIVERSITY AVE PALO ALTO, CA 94301
Contact country:	US
Contact telephone:	(415) 327-0555
Contact email:	Not reported
EPA Region:	09
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	UNIVERSITY PHOTO INC
Owner/operator address:	479 UNIVERSITY AVE PALO ALTO, CA 94301
Owner/operator country:	Not reported
Owner/operator telephone:	(415) 327-0555
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Violation Status: No violations found

PHOTO EXPRESS (Continued) **1000685875**

FINDS:

Registry ID: 110002872384

Environmental Interest/Information System
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:
Envid: 1000685875
Registry ID: 110002872384
DFR URL: http://echo.epa.gov/detailed-facility-report?fid=110002872384

H49 **RITZ CAMERA CENTERS, INC. NO 1332** **RCRA-LQG** **1007200642**
WSW **222 UNIVERSITY AVE** **CAR000031294**
1/8-1/4 **PALO ALTO, CA 94301**
0.133 mi.
703 ft. **Site 3 of 3 in cluster H**

Relative: Higher

Actual: 58 ft.

RCRA-LQG:
Date form received by agency: 10/12/2000
Facility name: RITZ CAMERA CENTERS, INC. NO 1332
Site name: WOLF CAMERA STORE #954
Facility address: 222 UNIVERSITY AVE
PALO ALTO, CA 94301
EPA ID: CAR000031294
Mailing address: 4955 MARCONI DRIVE
ALPHARETTA, GA 30005
Contact: JAMES LEAGAN
Contact address: Not reported
Not reported
Contact country: US
Contact telephone: (678) 297-9653
Telephone ext.: 8897
Contact email: Not reported
EPA Region: 09
Classification: Large Quantity Generator
Description: Handler: generates 1,000 kg or more of hazardous waste during any calendar month; or generates more than 1 kg of acutely hazardous waste during any calendar month; or generates more than 100 kg of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month; or generates 1 kg or less of acutely hazardous waste during any calendar month, and accumulates more than 1 kg of acutely hazardous waste at any time; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates more than 100 kg of that material at any time

RITZ CAMERA CENTERS, INC. NO 1332 (Continued) **1007200642**

Handler Activities Summary:
- U.S. importer of hazardous waste: No
- Mixed waste (haz. and radioactive): No
- Recycler of hazardous waste: No
- Transporter of hazardous waste: No
- Treater, storer or disposer of HW: No
- Underground injection activity: No
- On-site burner exemption: No
- Furnace exemption: No
- Used oil fuel burner: No
- Used oil processor: No
- User oil refiner: No
- Used oil fuel marketer to burner: No
- Used oil Specification marketer: No
- Used oil transfer facility: No
- Used oil transporter: No

Violation Status: No violations found

50
North
1/8-1/4
0.153 mi.
810 ft.

PACIFIC BELL **RCRA NonGen / NLR** **1000250577**
420 COWPER AVENUE **FINDS** **CAD042342964**
PALO ALTO, CA 94301 **ECHO**

Relative:
Lower

Actual:
53 ft.

RCRA NonGen / NLR:
- Date form received by agency: 09/09/1997
- Facility name: PACIFIC BELL
- Facility address: 420 COWPER AVENUE
  PALO ALTO, CA 94301
- EPA ID: CAD042342964
- Mailing address: 2 NORTH SECOND ST ROOM 1125
  SAN JOSE, CA 95113
- Contact: ENVIRONMENTAL MANAGER
- Contact address: 420 COWPER AVENUE
  PALO ALTO, CA 94025
- Contact country: US
- Contact telephone: (408) 491-6029
- Contact email: Not reported
- EPA Region: 09
- Classification: Non-Generator
- Description: Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:
- Owner/operator name: THE PACIFIC TELEPHONE AND TELEGRAPH CO
- Owner/operator address: NOT REQUIRED
  NOT REQUIRED, ME 99999
- Owner/operator country: Not reported
- Owner/operator telephone: (415) 555-1212
- Legal status: Private
- Owner/Operator Type: Owner
- Owner/Op start date: Not reported
- Owner/Op end date: Not reported

- Owner/operator name: THE PACIFIC TELEPHONE AND TELEGRAPH CO
- Owner/operator address: NOT REQUIRED
  PALO ALTO, CA 94025
- Owner/operator country: Not reported

PACIFIC BELL (Continued) **1000250577**

Owner/operator telephone: (408) 491-6029
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Historical Generators:
Date form received by agency: 09/01/1996
Site name: PACIFIC BELL
Classification: Small Quantity Generator

Date form received by agency: 01/19/1981
Site name: PACIFIC BELL
Classification: Large Quantity Generator

Violation Status: No violations found

FINDS:

Registry ID: 110006467162

Environmental Interest/Information System
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:
Envid: 1000250577
Registry ID: 110006467162
DFR URL: http://echo.epa.gov/detailed-facility-report?fid=110006467162

J51 **AZEEM K LAKHA DMD** **CUPA Listings** **S108198509**
East **720 COWPER ST** **N/A**
1/8-1/4 **PALO ALTO, CA 94301**
0.157 mi.
827 ft. **Site 1 of 3 in cluster J**

Relative:
Lower

Actual:
49 ft.

CUPA SANTA CLARA:

Region:	SANTA CLARA
PE#:	2202
Program Description:	GENERATES < 100 KG/YR
Latitude:	37.446433
Longitude:	-122.156466

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52 **PALO ALTO OFFICE CENTER** **RCRA-SQG** **1000324044**
NNE **525 UNIVERSITY AVE** **FINDS** **CAD981375850**
1/8-1/4 **PALO ALTO, CA 94301** **ECHO**
0.165 mi.
871 ft.

Relative:
Lower

Actual:
51 ft.

RCRA-SQG:

Date form received by agency:	09/01/1996
Facility name:	PALO ALTO OFFICE CENTER
Facility address:	525 UNIVERSITY AVE PALO ALTO, CA 94301
EPA ID:	CAD981375850
Mailing address:	UNIVERSITY AVE PALO ALTO, CA 94301
Contact:	Not reported
Contact address:	Not reported Not reported
Contact country:	US
Contact telephone:	Not reported
Contact email:	Not reported
EPA Region:	09
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	CM CAPITAL CORP
Owner/operator address:	NOT REQUIRED NOT REQUIRED, ME 99999
Owner/operator country:	Not reported
Owner/operator telephone:	(415) 555-1212
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported
Owner/operator name:	NOT REQUIRED
Owner/operator address:	NOT REQUIRED NOT REQUIRED, ME 99999
Owner/operator country:	Not reported
Owner/operator telephone:	(415) 555-1212
Legal status:	Private
Owner/Operator Type:	Operator

PALO ALTO OFFICE CENTER (Continued) **1000324044**

Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Violation Status: No violations found

FINDS:

Registry ID: 110055717247

Environmental Interest/Information System
STATE MASTER

Registry ID: 110002685719

Environmental Interest/Information System
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

STATE MASTER

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:
Envid: 1000324044
Registry ID: 110002685719
DFR URL: http://echo.epa.gov/detailed-facility-report?fid=110002685719

K53 **CARDINAL DRIVE IN CLEANERS** **RCRA-SQG** **1000332904**
South **203 FOREST** **SLIC** **CAD981622699**
1/8-1/4 **PALO ALTO, CA 94301** **BROWNFIELDS**
0.173 mi. **HAZNET**
915 ft. **Site 1 of 5 in cluster K**

Relative:
Higher

Actual:
56 ft.

RCRA-SQG:

Date form received by agency:	09/06/1991
Facility name:	CARDINAL DRIVE IN CLEANERS
Facility address:	203 FOREST PALO ALTO, CA 94301
EPA ID:	CAD981622699
Contact:	DON CASEY
Contact address:	203 FOREST PALO ALTO, CA 94301
Contact country:	US
Contact telephone:	(415) 323-9025
Contact email:	Not reported
EPA Region:	09
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	CARDINAL DRIVE IN CLEANERS INC
Owner/operator address:	203 FOREST PALO ALTO, CA 94301
Owner/operator country:	Not reported
Owner/operator telephone:	(415) 323-9025
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Owner/operator name:	NOT REQUIRED
Owner/operator address:	NOT REQUIRED NOT REQUIRED, ME 99999
Owner/operator country:	Not reported
Owner/operator telephone:	(415) 555-1212
Legal status:	Private
Owner/Operator Type:	Operator
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No

CARDINAL DRIVE IN CLEANERS (Continued) **1000332904**

User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Violation Status: No violations found

SLIC:
Region: STATE
Facility Status: **Open - Inactive**
Status Date: 06/28/2016
Global Id: SL0608500919
Lead Agency: SAN FRANCISCO BAY RWQCB (REGION 2)
Lead Agency Case Number: Not reported
Latitude: 37.443381
Longitude: -122.160292
Case Type: Cleanup Program Site
Case Worker: MBR
Local Agency: Not reported
RB Case Number: 43S0950
File Location: Regional Board
Potential Media Affected: Indoor Air, Other Groundwater (uses other than drinking water), Soil, Soil Vapor
Potential Contaminants of Concern: Tetrachloroethylene (PCE)
Site History: Former dry cleaning facility that is not fully characterized.

Click here to access the California GeoTracker records for this facility:

BROWNFIELDS:
Global ID: SL0608500919
Latitude: 37.443381
Longitude: -122.160292
Project Type: Cleanup Program Site
Status: Open - Inactive
Status Date: 06/28/2016
Lead Agency: SAN FRANCISCO BAY RWQCB (REGION 2)
Last Correspondence Date: 08/10/2015
Release Type: Other Type of Release
Contaminant(s) of Concern: Tetrachloroethylene (PCE)
Media of Concern: Indoor Air, Other Groundwater (uses other than drinking water), Soil, Soil Vapor
Past Use(s) that Caused Contamination: DRY CLEANING
Human Health Exposure Controlled: INSUFFICIENT DATA
Human Health Exposure Controlled Date: 06/07/2016
Groundwater Migration Controlled: UNDETERMINED
Groundwater Migration Controlled Date: 06/07/2016
Primary Caseworker Name: MICHAEL ROCHETTE
Primary Caseworker Organization Name: SAN FRANCISCO BAY RWQCB (REGION 2)
Primary Caseworker Phone Number: 510-622-2411
Primary Caseworker Address: 1515 CLAY STREET; SUITE 1400
Primary Caseworker Address: OAKLAND
Primary Caseworker Address: CA
Primary Caseworker Email: mrochette@waterboards.ca.gov

HAZNET:
envid: 1000332904

CARDINAL DRIVE IN CLEANERS (Continued) **1000332904**

Year:	1999
GEPAID:	CAD981622699
Contact:	DON & EMMIT CASEY
Telephone:	4153239025
Mailing Name:	Not reported
Mailing Address:	203 FOREST AVE
Mailing City,St,Zip:	PALO ALTO, CA 943012511
Gen County:	Not reported
TSD EPA ID:	CA0000084517
TSD County:	Not reported
Waste Category:	Liquids with halogenated organic compounds >= 1,000 Mg./L
Disposal Method:	Transfer Station
Tons:	.0675
Cat Decode:	Not reported
Method Decode:	Not reported
Facility County:	Santa Clara

envid:	1000332904
Year:	1998
GEPAID:	CAD981622699
Contact:	DON & EMMIT CASEY
Telephone:	4153239025
Mailing Name:	Not reported
Mailing Address:	203 FOREST AVE
Mailing City,St,Zip:	PALO ALTO, CA 943012511
Gen County:	Not reported
TSD EPA ID:	CA0000084517
TSD County:	Not reported
Waste Category:	Liquids with halogenated organic compounds >= 1,000 Mg./L
Disposal Method:	Transfer Station
Tons:	.3000
Cat Decode:	Not reported
Method Decode:	Not reported
Facility County:	Santa Clara

envid:	1000332904
Year:	1997
GEPAID:	CAD981622699
Contact:	DON & EMMIT CASEY
Telephone:	4153239025
Mailing Name:	Not reported
Mailing Address:	203 FOREST AVE
Mailing City,St,Zip:	PALO ALTO, CA 943012511
Gen County:	Not reported
TSD EPA ID:	CA0000084517
TSD County:	Not reported
Waste Category:	Liquids with halogenated organic compounds >= 1,000 Mg./L
Disposal Method:	Transfer Station
Tons:	.4075
Cat Decode:	Not reported
Method Decode:	Not reported
Facility County:	Santa Clara

envid:	1000332904
Year:	1997
GEPAID:	CAD981622699
Contact:	DON & EMMIT CASEY

CARDINAL DRIVE IN CLEANERS (Continued) **1000332904**

Telephone:	4153239025
Mailing Name:	Not reported
Mailing Address:	203 FOREST AVE
Mailing City,St,Zip:	PALO ALTO, CA 943012511
Gen County:	Not reported
TSD EPA ID:	CA0000084517
TSD County:	Not reported
Waste Category:	Not reported
Disposal Method:	Transfer Station
Tons:	.0675
Cat Decode:	Not reported
Method Decode:	Not reported
Facility County:	Santa Clara

envid:	1000332904
Year:	1996
GEPAID:	CAD981622699
Contact:	DON & EMMIT CASEY
Telephone:	4153239025
Mailing Name:	Not reported
Mailing Address:	203 FOREST AVE
Mailing City,St,Zip:	PALO ALTO, CA 943012511
Gen County:	Not reported
TSD EPA ID:	CA0000084517
TSD County:	Not reported
Waste Category:	Liquids with halogenated organic compounds >= 1,000 Mg./L
Disposal Method:	Transfer Station
Tons:	.2700
Cat Decode:	Not reported
Method Decode:	Not reported
Facility County:	Santa Clara

Click this hyperlink while viewing on your computer to access
8 additional CA_HAZNET: record(s) in the EDR Site Report.

J54 **APT BLDG** **SWEEPS UST** **S101623373**
East **725 COWPER ST** **CA FID UST** **N/A**
1/8-1/4 **PALO ALTO, CA 94301**
0.180 mi.
948 ft. **Site 2 of 3 in cluster J**

Relative:
Lower

Actual:
49 ft.

SWEEPS UST:

Status:	Active
Comp Number:	4233
Number:	9
Board Of Equalization:	Not reported
Referral Date:	07-01-85
Action Date:	Not reported
Created Date:	02-29-88
Owner Tank Id:	1
SWRCB Tank Id:	43-006-004233-000001
Tank Status:	A
Capacity:	1000
Active Date:	07-01-85
Tank Use:	M.V. FUEL
STG:	P
Content:	DIESEL
Number Of Tanks:	1

APT BLDG (Continued) **S101623373**

CA FID UST:

Facility ID:	43001676
Regulated By:	UTNKA
Regulated ID:	00004233
Cortese Code:	Not reported
SIC Code:	Not reported
Facility Phone:	4159483600
Mail To:	Not reported
Mailing Address:	725 COWPER ST
Mailing Address 2:	Not reported
Mailing City,St,Zip:	PALO ALTO 94301
Contact:	Not reported
Contact Phone:	Not reported
DUNs Number:	Not reported
NPDES Number:	Not reported
EPA ID:	Not reported
Comments:	Not reported
Status:	Active

J55 **APT BLDG** **HIST UST** **U001595834**
East **725 COWPER ST** **N/A**
1/8-1/4 **PALO ALTO, CA 94301**
0.180 mi.
948 ft. **Site 3 of 3 in cluster J**

Relative:
Lower

Actual:
49 ft.

HIST UST:

File Number:	Not reported
URL:	Not reported
Region:	STATE
Facility ID:	00000004233
Facility Type:	Other
Other Type:	PERSONAL
Contact Name:	Not reported
Telephone:	4159483600
Owner Name:	JACK STOUT
Owner Address:	725 COWPER ST.
Owner City,St,Zip:	PALO ALTO, CA 94301
Total Tanks:	0001
Tank Num:	001
Container Num:	1
Year Installed:	1981
Tank Capacity:	00001000
Tank Used for:	PRODUCT
Type of Fuel:	DIESEL
Container Construction Thickness:	Not reported
Leak Detection:	Visual

K56 **PALO ALTO TRANSMISSION SERVICE** **LUST** **S101623384**
South **701 EMERSON ST** **SWEEPS UST** **N/A**
1/8-1/4 **PALO ALTO, CA 94301** **CA FID UST**
0.189 mi.
997 ft. **Site 2 of 5 in cluster K**

Relative:
Higher

Actual:
55 ft.

LUST:

Region:	STATE
Global Id:	T0608501028
Latitude:	37.443125
Longitude:	-122.159417
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	04/20/2000
Lead Agency:	SANTA CLARA COUNTY LOP
Case Worker:	UST
Local Agency:	SANTA CLARA COUNTY LOP
RB Case Number:	Not reported
LOC Case Number:	Not reported
File Location:	All Files are on GeoTracker or in the Local Agency Database
Potential Media Affect:	Soil
Potential Contaminants of Concern:	Waste Oil / Motor / Hydraulic / Lubricating
Site History:	Not reported

Click here to access the California GeoTracker records for this facility:

Contact:

Global Id:	T0608501028
Contact Type:	Regional Board Caseworker
Contact Name:	Regional Water Board
Organization Name:	SAN FRANCISCO BAY RWQCB (REGION 2)
Address:	1515 CLAY ST SUITE 1400
City:	OAKLAND
Email:	Not reported
Phone Number:	Not reported

Global Id:	T0608501028
Contact Type:	Local Agency Caseworker
Contact Name:	UST CASE WORKER
Organization Name:	SANTA CLARA COUNTY LOP
Address:	1555 Berger Drive, Suite 300
City:	SAN JOSE
Email:	Not reported
Phone Number:	4089183400

Status History:

Global Id:	T0608501028
Status:	Completed - Case Closed
Status Date:	04/20/2000

Global Id:	T0608501028
Status:	Open - Case Begin Date
Status Date:	08/08/1988

Global Id:	T0608501028
Status:	Open - Site Assessment
Status Date:	08/08/1988

PALO ALTO TRANSMISSION SERVICE (Continued) **S101623384**

Regulatory Activities:

Global Id:	T0608501028
Action Type:	ENFORCEMENT
Date:	04/20/2000
Action:	Closure/No Further Action Letter
Global Id:	T0608501028
Action Type:	RESPONSE
Date:	12/31/1998
Action:	Soil and Water Investigation Workplan
Global Id:	T0608501028
Action Type:	RESPONSE
Date:	09/09/1999
Action:	Soil and Water Investigation Report
Global Id:	T0608501028
Action Type:	RESPONSE
Date:	02/26/1999
Action:	Soil and Water Investigation Report
Global Id:	T0608501028
Action Type:	RESPONSE
Date:	10/07/1998
Action:	Soil and Water Investigation Report
Global Id:	T0608501028
Action Type:	RESPONSE
Date:	06/21/1999
Action:	Other Report / Document
Global Id:	T0608501028
Action Type:	RESPONSE
Date:	06/21/1999
Action:	Other Report / Document
Global Id:	T0608501028
Action Type:	RESPONSE
Date:	07/26/1991
Action:	Tank Removal Report / UST Sampling Report
Global Id:	T0608501028
Action Type:	RESPONSE
Date:	01/13/1998
Action:	Soil and Water Investigation Workplan
Global Id:	T0608501028
Action Type:	RESPONSE
Date:	01/06/2000
Action:	Soil and Water Investigation Report
Global Id:	T0608501028
Action Type:	RESPONSE
Date:	06/18/1999
Action:	Verbal Communication
Global Id:	T0608501028

PALO ALTO TRANSMISSION SERVICE (Continued) **S101623384**

Action Type: RESPONSE
Date: 02/19/2003
Action: Correspondence

Global Id: T0608501028
Action Type: ENFORCEMENT
Date: 03/28/1997
Action: Notice of Responsibility - #40103

Global Id: T0608501028
Action Type: ENFORCEMENT
Date: 10/21/1998
Action: Staff Letter - #29349

Global Id: T0608501028
Action Type: RESPONSE
Date: 01/13/1998
Action: Soil and Water Investigation Workplan

Global Id: T0608501028
Action Type: RESPONSE
Date: 09/28/1998
Action: Correspondence

Global Id: T0608501028
Action Type: RESPONSE
Date: 08/01/1992
Action: Other Report / Document

Global Id: T0608501028
Action Type: Other
Date: 08/08/1991
Action: Leak Reported

Global Id: T0608501028
Action Type: ENFORCEMENT
Date: 09/22/1998
Action: Staff Letter - #29347

Global Id: T0608501028
Action Type: ENFORCEMENT
Date: 07/14/1999
Action: Staff Letter - #29356

Global Id: T0608501028
Action Type: ENFORCEMENT
Date: 01/14/1999
Action: Staff Letter - #29351

LUST SANTA CLARA:
Region: SANTA CLARA
SCVWD ID: 06S3W02C02F
Date Closed: 04/20/2000
EDR Link ID: 06S3W02C02F

PALO ALTO TRANSMISSION SERVICE (Continued) **S101623384**

SWEEPS UST:
Status: Active
Comp Number: 59851
Number: 9
Board Of Equalization: Not reported
Referral Date: 07-01-85
Action Date: Not reported
Created Date: 02-29-88
Owner Tank Id: 1
SWRCB Tank Id: 43-006-059851-000001
Tank Status: A
Capacity: Not reported
Active Date: 07-01-85
Tank Use: OIL
STG: W
Content: WASTE OIL
Number Of Tanks: 3

Status: Active
Comp Number: 59851
Number: 9
Board Of Equalization: Not reported
Referral Date: 07-01-85
Action Date: Not reported
Created Date: 02-29-88
Owner Tank Id: 2
SWRCB Tank Id: 43-006-059851-000002
Tank Status: A
Capacity: Not reported
Active Date: 07-01-85
Tank Use: UNKNOWN
STG: W
Content: Not reported
Number Of Tanks: Not reported

Status: Active
Comp Number: 59851
Number: 9
Board Of Equalization: Not reported
Referral Date: 07-01-85
Action Date: Not reported
Created Date: 02-29-88
Owner Tank Id: 3
SWRCB Tank Id: 43-006-059851-000003
Tank Status: A
Capacity: Not reported
Active Date: 07-01-85
Tank Use: M.V. FUEL
STG: W
Content: UNKNOWN
Number Of Tanks: Not reported

CA FID UST:
Facility ID: 43001096
Regulated By: UTNKA
Regulated ID: 00059851

PALO ALTO TRANSMISSION SERVICE (Continued) **S101623384**

Cortese Code:	Not reported
SIC Code:	Not reported
Facility Phone:	4153274460
Mail To:	Not reported
Mailing Address:	701 EMERSON
Mailing Address 2:	Not reported
Mailing City,St,Zip:	PALO ALTO 94301
Contact:	Not reported
Contact Phone:	Not reported
DUNs Number:	Not reported
NPDES Number:	Not reported
EPA ID:	Not reported
Comments:	Not reported
Status:	Active

K57 **PALO ALTO TRANSMISSION SERVICE** **LUST** **U001595849**
South **701 EMERSON** **HIST LUST** **N/A**
1/8-1/4 **PALO ALTO, CA 94301** **HIST UST**
0.189 mi.
997 ft. **Site 3 of 5 in cluster K**

Relative:
Higher

Actual:
55 ft.

LUST REG 2:

Region:	2
Facility Id:	Not reported
Facility Status:	Case Closed
Case Number:	06S3W02C02f
How Discovered:	Not reported
Leak Cause:	Not reported
Leak Source:	Not reported
Date Leak Confirmed:	Not reported
Oversight Program:	LUST
Prelim. Site Assesment Wokplan Submitted:	Not reported
Preliminary Site Assesment Began:	8/8/1988
Pollution Characterization Began:	Not reported
Pollution Remediation Plan Submitted:	Not reported
Date Remediation Action Underway:	Not reported
Date Post Remedial Action Monitoring Began:	Not reported

HIST LUST SANTA CLARA:

Region:	SANTA CLARA
Region Code:	2
SCVWD ID:	06S3W02C02
Oversite Agency:	SCVWD
Date Listed:	1992-07-30 00:00:00
Closed Date:	2000-04-20 00:00:00

HIST UST:

File Number:	0002D20D
URL:	http://geotracker.waterboards.ca.gov/ustpdfs/pdf/0002D20D.pdf
Region:	STATE
Facility ID:	00000059851
Facility Type:	Other
Other Type:	TRANSMISSION REPAIR
Contact Name:	Not reported
Telephone:	4153274460
Owner Name:	CROCKER BANK
Owner Address:	301 UNIVERSITY AV.

PALO ALTO TRANSMISSION SERVICE (Continued) **U001595849**

Owner City,St,Zip:	PALO ALTO, CA 94301
Total Tanks:	0003
Tank Num:	001
Container Num:	1
Year Installed:	Not reported
Tank Capacity:	00000000
Tank Used for:	WASTE
Type of Fuel:	WASTE OIL
Container Construction Thickness:	Not reported
Leak Detection:	None
Tank Num:	002
Container Num:	2
Year Installed:	Not reported
Tank Capacity:	00000000
Tank Used for:	WASTE
Type of Fuel:	Not reported
Container Construction Thickness:	Not reported
Leak Detection:	None
Tank Num:	003
Container Num:	3
Year Installed:	Not reported
Tank Capacity:	00000000
Tank Used for:	WASTE
Type of Fuel:	06
Container Construction Thickness:	Not reported
Leak Detection:	None

Click here for Geo Tracker PDF:

58
SE
1/8-1/4
0.193 mi.
1018 ft.

PALO ALTO MEDICAL CLINIC **RCRA NonGen / NLR** **1000324043**
300 HOMER AVE **CAD981374911**
PALO ALTO, CA 94301

Relative:
Lower

Actual:
50 ft.

RCRA NonGen / NLR:

Date form received by agency:	09/28/2000
Facility name:	PALO ALTO MEDICAL CLINIC
Facility address:	300 HOMER AVE PALO ALTO, CA 94301
EPA ID:	CAD981374911
Contact:	DARREL DUMMETT
Contact address:	795 EL CAMINO REAL PALO ALTO, CA 94301
Contact country:	US
Contact telephone:	(650) 321-4121
Contact email:	Not reported
EPA Region:	09
Classification:	Non-Generator
Description:	Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:

Owner/operator name:	PALO ALTO CLINIC, LTD
Owner/operator address:	NOT REQUIRED

PALO ALTO MEDICAL CLINIC (Continued) **1000324043**

NOT REQUIRED, ME 99999
Owner/operator country: Not reported
Owner/operator telephone: (415) 555-1212
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Owner/operator name: NOT REQUIRED
Owner/operator address: NOT REQUIRED
NOT REQUIRED, ME 99999
Owner/operator country: Not reported
Owner/operator telephone: (415) 555-1212
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Historical Generators:
Date form received by agency: 09/01/1996
Site name: PALO ALTO MEDICAL CLINIC
Classification: Large Quantity Generator

Violation Status: No violations found

L59 **PRIVATE RESIDENCE** **LUST** **S110655414**
SSE **PRIVATE RESIDENCE** **N/A**
1/8-1/4 **PALO ALTO, CA 94301**
0.204 mi.
1077 ft. **Site 1 of 9 in cluster L**

Relative:
Lower

Actual:
51 ft.

LUST:
Region: STATE
Global Id: T0608502132
Latitude: 37.4431638
Longitude: -122.1582206
Case Type: LUST Cleanup Site
Status: Completed - Case Closed
Status Date: 03/29/1999
Lead Agency: SANTA CLARA COUNTY LOP
Case Worker: UST

PRIVATE RESIDENCE (Continued) **S110655414**

Local Agency: SANTA CLARA COUNTY LOP
RB Case Number: Not reported
LOC Case Number: Not reported
File Location: Stored on Microfiche
Potential Media Affect: Soil
Potential Contaminants of Concern: Gasoline
Site History: Not reported

Click here to access the California GeoTracker records for this facility:

Contact:
Global Id: T0608502132
Contact Type: Regional Board Caseworker
Contact Name: Regional Water Board
Organization Name: SAN FRANCISCO BAY RWQCB (REGION 2)
Address: 1515 CLAY ST SUITE 1400
City: OAKLAND
Email: Not reported
Phone Number: Not reported

Global Id: T0608502132
Contact Type: Local Agency Caseworker
Contact Name: UST CASE WORKER
Organization Name: SANTA CLARA COUNTY LOP
Address: 1555 Berger Drive, Suite 300
City: SAN JOSE
Email: Not reported
Phone Number: 4089183400

Status History:
Global Id: T0608502132
Status: Completed - Case Closed
Status Date: 03/29/1999

Global Id: T0608502132
Status: Open - Case Begin Date
Status Date: 02/28/1997

Global Id: T0608502132
Status: Open - Site Assessment
Status Date: 02/28/1997

Regulatory Activities:
Global Id: T0608502132
Action Type: RESPONSE
Date: 02/01/1999
Action: Soil and Water Investigation Workplan

Global Id: T0608502132
Action Type: RESPONSE
Date: 03/29/1999
Action: Other Report / Document

Global Id: T0608502132
Action Type: RESPONSE
Date: 03/15/1999
Action: Soil and Water Investigation Report

PRIVATE RESIDENCE (Continued) **S110655414**

Global Id: T0608502132
Action Type: Other
Date: 03/03/1997
Action: Leak Reported

Global Id: T0608502132
Action Type: ENFORCEMENT
Date: 12/10/1998
Action: Staff Letter - #29160

Global Id: T0608502132
Action Type: ENFORCEMENT
Date: 02/02/1999
Action: Staff Letter - #29162

Global Id: T0608502132
Action Type: ENFORCEMENT
Date: 03/29/1999
Action: Closure/No Further Action Letter

M60 **PALO ALTO MEDICAL FOUNDATION** **RCRA-SQG** **1000820113**
South **735 EMERSON** **LUST** **CAD983661372**
1/8-1/4 **PALO ALTO, CA 94301** **HIST LUST**
0.205 mi. **FINDS**
1083 ft. **Site 1 of 4 in cluster M** **ECHO**
HAZNET
Relative: **HIST CORTESE**
Lower

Actual: **53 ft.**

RCRA-SQG:
Date form received by agency: 03/08/1993
Facility name: PALO ALTO MEDICAL FOUNDATION
Facility address: 735 EMERSON
PALO ALTO, CA 94301
EPA ID: CAD983661372
Mailing address: HOMER AVE
PALO ALTO, CA 943012794
Contact: JOSEPH GREELY
Contact address: 300 HOMER AVE
PALO ALTO, CA 943012794
Contact country: US
Contact telephone: (415) 853-2885
Contact email: Not reported
EPA Region: 09
Classification: Small Small Quantity Generator
Description: Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:
Owner/operator name: PALO ALTO MEDICAL FOUNDATION
Owner/operator address: 300 HOMER AVE
PALO ALTO, CA 94301
Owner/operator country: Not reported
Owner/operator telephone: (415) 321-4121

PALO ALTO MEDICAL FOUNDATION (Continued) **1000820113**

Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Violation Status: No violations found

LUST:
Region: STATE
Global Id: T0608546569
Latitude: 37.44018
Longitude: -122.161143
Case Type: LUST Cleanup Site
Status: Completed - Case Closed
Status Date: 01/06/1998
Lead Agency: SAN FRANCISCO BAY RWQCB (REGION 2)
Case Worker: UUU
Local Agency: SANTA CLARA COUNTY LOP
RB Case Number: 43S0544
LOC Case Number: Not reported
File Location: All Files are on GeoTracker or in the Local Agency Database
Potential Media Affect: Soil
Potential Contaminants of Concern: Gasoline
Site History: Not reported

Click here to access the California GeoTracker records for this facility:

Contact:
Global Id: T0608546569
Contact Type: Regional Board Caseworker
Contact Name: Regional Water Board
Organization Name: SAN FRANCISCO BAY RWQCB (REGION 2)
Address: 1515 CLAY ST SUITE 1400
City: OAKLAND
Email: Not reported
Phone Number: Not reported

Global Id: T0608546569
Contact Type: Local Agency Caseworker
Contact Name: UST CASE WORKER
Organization Name: SANTA CLARA COUNTY LOP

PALO ALTO MEDICAL FOUNDATION (Continued) **1000820113**

Address: 1555 Berger Drive, Suite 300
City: SAN JOSE
Email: Not reported
Phone Number: 4089183400

Status History:
Global Id: T0608546569
Status: Completed - Case Closed
Status Date: 01/06/1998

Global Id: T0608546569
Status: Open - Case Begin Date
Status Date: 10/13/1997

Regulatory Activities:
Global Id: T0608546569
Action Type: ENFORCEMENT
Date: 06/23/2010
Action: Referral to Other State Agency

Global Id: T0608546569
Action Type: ENFORCEMENT
Date: 01/06/1998
Action: Closure/No Further Action Letter

Global Id: T0608546569
Action Type: Other
Date: 10/13/1997
Action: Leak Reported

Global Id: T0608546569
Action Type: RESPONSE
Date: 01/06/1998
Action: Other Report / Document

LUST REG 2:
Region: 2
Facility Id: 43S0544
Facility Status: Case Closed
Case Number: 06S3W02F12f
How Discovered: Not reported
Leak Cause: Not reported
Leak Source: Not reported
Date Leak Confirmed: Not reported
Oversight Program: LUST
Prelim. Site Assesment Wokplan Submitted: Not reported
Preliminary Site Assesment Began: Not reported
Pollution Characterization Began: Not reported
Pollution Remediation Plan Submitted: Not reported
Date Remediation Action Underway: Not reported
Date Post Remedial Action Monitoring Began: Not reported

LUST SANTA CLARA:
Region: SANTA CLARA

PALO ALTO MEDICAL FOUNDATION (Continued) **1000820113**

SCVWD ID: 06S3W02F12F
Date Closed: 01/06/1998
EDR Link ID: 06S3W02F12F

HIST LUST SANTA CLARA:
Region: SANTA CLARA
Region Code: 2
SCVWD ID: 06S3W02F12
Oversite Agency: SCVWD
Date Listed: 1998-01-06 00:00:00
Closed Date: 1998-01-06 00:00:00

FINDS:

Registry ID: 110002894119

Environmental Interest/Information System
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:
Envid: 1000820113
Registry ID: 110002894119
DFR URL: http://echo.epa.gov/detailed-facility-report?fid=110002894119

HAZNET:
envid: 1000820113
Year: 1993
GEPAID: CAD983661372
Contact: PALO ALTO MEDICAL FOUNDATION
Telephone: 4153214121
Mailing Name: Not reported
Mailing Address: 300 HOMER AVE
Mailing City,St,Zip: PALO ALTO, CA 943010000
Gen County: Not reported
TSD EPA ID: CAT000646117
TSD County: Not reported
Waste Category: Other empty containers 30 gallons or more
Disposal Method: Disposal, Land Fill
Tons: 0.125
Cat Decode: Not reported
Method Decode: Not reported
Facility County: Santa Clara

envid: 1000820113
Year: 1993
GEPAID: CAD983661372

PALO ALTO MEDICAL FOUNDATION (Continued) **1000820113**

Contact: PALO ALTO MEDICAL FOUNDATION
Telephone: 4153214121
Mailing Name: Not reported
Mailing Address: 300 HOMER AVE
Mailing City,St,Zip: PALO ALTO, CA 943010000
Gen County: Not reported
TSD EPA ID: CAD009452657
TSD County: Not reported
Waste Category: Unspecified organic liquid mixture
Disposal Method: Disposal, Other
Tons: 0.20849999999
Cat Decode: Not reported
Method Decode: Not reported
Facility County: Santa Clara

HIST CORTESE:
Region: CORTESE
Facility County Code: 43
Reg By: LTNKA
Reg Id: 43-2206

N61 **SHICK RESIDENCE** **LUST S105688890**
East **505 HOMER AVE** **HIST LUST N/A**
1/8-1/4 **PALO ALTO, CA 94301**
0.211 mi.
1112 ft. **Site 1 of 2 in cluster N**

Relative:
Lower

Actual:
48 ft.

LUST REG 2:
Region: 2
Facility Id: Not reported
Facility Status: Case Closed
Case Number: 06S3W02A01f
How Discovered: Tank Closure
Leak Cause: Corrosion
Leak Source: Tank
Date Leak Confirmed: Not reported
Oversight Program: LUST
Prelim. Site Assesment Wokplan Submitted: Not reported
Preliminary Site Assesment Began: Not reported
Pollution Characterization Began: Not reported
Pollution Remediation Plan Submitted: Not reported
Date Remediation Action Underway: Not reported
Date Post Remedial Action Monitoring Began: Not reported

LUST SANTA CLARA:
Region: SANTA CLARA
SCVWD ID: 06S3W02A01F
Date Closed: 08/22/2002
EDR Link ID: 06S3W02A01F

HIST LUST SANTA CLARA:
Region: SANTA CLARA
Region Code: 2
SCVWD ID: 06S3W02A01
Oversite Agency: SCVWD
Date Listed: 2002-08-13 00:00:00

SHICK RESIDENCE (Continued) **S105688890**

Closed Date: 2002-08-22 00:00:00

L62 **CARDINAL FRENCH LAUNDRY, INC** **SWEEPS UST** **S101623375**
SSE **260 HOMER AVE** **HIST UST** **N/A**
1/8-1/4 **PALO ALTO, CA 94301** **CA FID UST**
0.211 mi.
1113 ft. **Site 2 of 9 in cluster L**

Relative:
Lower

Actual:
51 ft.

SWEEPS UST:

Status:	Active
Comp Number:	8780
Number:	9
Board Of Equalization:	Not reported
Referral Date:	07-01-85
Action Date:	Not reported
Created Date:	02-29-88
Owner Tank Id:	1
SWRCB Tank Id:	43-006-008780-000001
Tank Status:	A
Capacity:	1000
Active Date:	07-01-85
Tank Use:	M.V. FUEL
STG:	P
Content:	DIESEL
Number Of Tanks:	2

Status:	Active
Comp Number:	8780
Number:	9
Board Of Equalization:	Not reported
Referral Date:	07-01-85
Action Date:	Not reported
Created Date:	02-29-88
Owner Tank Id:	2
SWRCB Tank Id:	43-006-008780-000002
Tank Status:	A
Capacity:	500
Active Date:	07-01-85
Tank Use:	M.V. FUEL
STG:	P
Content:	LEADED
Number Of Tanks:	Not reported

HIST UST:

File Number:	0002CF82
URL:	http://geotracker.waterboards.ca.gov/ustpdfs/pdf/0002CF82.pdf
Region:	Not reported
Facility ID:	Not reported
Facility Type:	Not reported
Other Type:	Not reported
Contact Name:	Not reported
Telephone:	Not reported
Owner Name:	Not reported
Owner Address:	Not reported
Owner City,St,Zip:	Not reported
Total Tanks:	Not reported

CARDINAL FRENCH LAUNDRY, INC (Continued) **S101623375**

Tank Num:	Not reported
Container Num:	Not reported
Year Installed:	Not reported
Tank Capacity:	Not reported
Tank Used for:	Not reported
Type of Fuel:	Not reported
Container Construction Thickness:	Not reported
Leak Detection:	Not reported

Click here for Geo Tracker PDF:

CA FID UST:

Facility ID:	43012191
Regulated By:	UTNKA
Regulated ID:	00008780
Cortese Code:	Not reported
SIC Code:	Not reported
Facility Phone:	4153234411
Mail To:	Not reported
Mailing Address:	260 HOMER AVE
Mailing Address 2:	Not reported
Mailing City,St,Zip:	PALO ALTO 94301
Contact:	Not reported
Contact Phone:	Not reported
DUNs Number:	Not reported
NPDES Number:	Not reported
EPA ID:	Not reported
Comments:	Not reported
Status:	Active

L63 **GRANDONA RESIDENCE** **LUST** **S103723203**
SSE **268 HOMER** **HIST LUST** **N/A**
1/8-1/4 **PALO ALTO, CA 94301** **HIST CORTESE**
0.211 mi.
1113 ft. **Site 3 of 9 in cluster L**

Relative:
Lower

Actual:
51 ft.

LUST REG 2:

Region:	2
Facility Id:	Not reported
Facility Status:	Case Closed
Case Number:	06S3W02G08f
How Discovered:	Not reported
Leak Cause:	Not reported
Leak Source:	Not reported
Date Leak Confirmed:	Not reported
Oversight Program:	LUST
Prelim. Site Assesment Wokplan Submitted:	Not reported
Preliminary Site Assesment Began:	2/28/1997
Pollution Characterization Began:	Not reported
Pollution Remediation Plan Submitted:	Not reported
Date Remediation Action Underway:	Not reported
Date Post Remedial Action Monitoring Began:	Not reported

LUST SANTA CLARA:

Region:	SANTA CLARA
SCVWD ID:	06S3W02G08F
Date Closed:	03/29/1999

GRANDONA RESIDENCE (Continued) **S103723203**

EDR Link ID: 06S3W02G08F

HIST LUST SANTA CLARA:
Region: SANTA CLARA
Region Code: 2
SCVWD ID: 06S3W02G08
Oversite Agency: SCVWD
Date Listed: 1998-11-02 00:00:00
Closed Date: 1999-03-29 00:00:00

HIST CORTESE:
Region: CORTESE
Facility County Code: 43
Reg By: LTNKA
Reg Id: 43-2320

K64 **PALO ALTO TRANSMISSION SE** **HIST CORTESE** **S104161919**
South **710 EMERSON** **N/A**
1/8-1/4 **PALO ALTO, CA 94301**
0.211 mi.
1116 ft. **Site 4 of 5 in cluster K**

Relative:
Higher

Actual:
55 ft.

HIST CORTESE:
Region: CORTESE
Facility County Code: 43
Reg By: LTNKA
Reg Id: 43-1033

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65 **SHEARER FAMILY TRUST** **LUST** **S103663810**
NNE **530 WEBSTER ST** **HIST LUST** **N/A**
1/8-1/4 **PALO ALTO, CA 94301** **HIST CORTESE**
0.213 mi.
1123 ft.

Relative:
Lower

Actual:
48 ft.

LUST:
Region: STATE
Global Id: T0608501995
Latitude: 37.449132
Longitude: -122.157648
Case Type: LUST Cleanup Site
Status: Completed - Case Closed
Status Date: 10/29/1997
Lead Agency: SANTA CLARA COUNTY LOP
Case Worker: UST
Local Agency: SANTA CLARA COUNTY LOP
RB Case Number: Not reported
LOC Case Number: Not reported
File Location: All Files are on GeoTracker or in the Local Agency Database
Potential Media Affect: Soil
Potential Contaminants of Concern: Heating Oil / Fuel Oil
Site History: Not reported

Click here to access the California GeoTracker records for this facility:

Contact:
Global Id: T0608501995

SHEARER FAMILY TRUST (Continued) **S103663810**

Contact Type: Regional Board Caseworker
Contact Name: Regional Water Board
Organization Name: SAN FRANCISCO BAY RWQCB (REGION 2)
Address: 1515 CLAY ST SUITE 1400
City: OAKLAND
Email: Not reported
Phone Number: Not reported

Global Id: T0608501995
Contact Type: Local Agency Caseworker
Contact Name: UST CASE WORKER
Organization Name: SANTA CLARA COUNTY LOP
Address: 1555 Berger Drive, Suite 300
City: SAN JOSE
Email: Not reported
Phone Number: 4089183400

Status History:
Global Id: T0608501995
Status: Completed - Case Closed
Status Date: 10/29/1997

Global Id: T0608501995
Status: Open - Case Begin Date
Status Date: 02/21/1997

Global Id: T0608501995
Status: Open - Site Assessment
Status Date: 02/21/1997

Regulatory Activities:
Global Id: T0608501995
Action Type: RESPONSE
Date: 06/19/1997
Action: Other Report / Document

Global Id: T0608501995
Action Type: Other
Date: 03/18/1997
Action: Leak Reported

Global Id: T0608501995
Action Type: ENFORCEMENT
Date: 10/29/1997
Action: Closure/No Further Action Letter

LUST REG 2:
Region: 2
Facility Id: Not reported
Facility Status: Case Closed
Case Number: 05S3W35Q01f
How Discovered: Not reported
Leak Cause: Not reported
Leak Source: Not reported
Date Leak Confirmed: Not reported

SHEARER FAMILY TRUST (Continued) **S103663810**

Oversight Program: LUST
Prelim. Site Assesment Wokplan Submitted: Not reported
Preliminary Site Assesment Began: 2/21/1997
Pollution Characterization Began: Not reported
Pollution Remediation Plan Submitted: Not reported
Date Remediation Action Underway: Not reported
Date Post Remedial Action Monitoring Began: Not reported

LUST SANTA CLARA:
Region: SANTA CLARA
SCVWD ID: 05S3W35Q01F
Date Closed: 10/29/1997
EDR Link ID: 05S3W35Q01F

HIST LUST SANTA CLARA:
Region: SANTA CLARA
Region Code: 2
SCVWD ID: 05S3W35Q01
Oversite Agency: SCVWD
Date Listed: 1997-05-30 00:00:00
Closed Date: 1997-10-29 00:00:00

HIST CORTESE:
Region: CORTESE
Facility County Code: 43
Reg By: LTNKA
Reg Id: 43-2171

O66 **BNW SERVICE & REPAIR** **SWEEPS UST** **S101623374**
WSW **400 ENERSON ST** **HIST UST** **N/A**
1/8-1/4 **PALO ALTO, CA 94301** **CA FID UST**
0.216 mi.
1138 ft. **Site 1 of 4 in cluster O**

Relative: Higher

Actual: 62 ft.

SWEEPS UST:
Status: Active
Comp Number: 49498
Number: 9
Board Of Equalization: 44-026115
Referral Date: 07-01-85
Action Date: Not reported
Created Date: 02-29-88
Owner Tank Id: 1
SWRCB Tank Id: 43-006-049498-000001
Tank Status: A
Capacity: Not reported
Active Date: 07-01-85
Tank Use: OIL
STG: W
Content: WASTE OIL
Number Of Tanks: 1

HIST UST:
File Number: 00020682
URL: http://geotracker.waterboards.ca.gov/ustpdfs/pdf/00020682.pdf
Region: Not reported

BNW SERVICE & REPAIR (Continued) **S101623374**

Facility ID:	Not reported
Facility Type:	Not reported
Other Type:	Not reported
Contact Name:	Not reported
Telephone:	Not reported
Owner Name:	Not reported
Owner Address:	Not reported
Owner City,St,Zip:	Not reported
Total Tanks:	Not reported
Tank Num:	Not reported
Container Num:	Not reported
Year Installed:	Not reported
Tank Capacity:	Not reported
Tank Used for:	Not reported
Type of Fuel:	Not reported
Container Construction Thickness:	Not reported
Leak Detection:	Not reported

Click here for Geo Tracker PDF:

CA FID UST:

Facility ID:	43012212
Regulated By:	UTNKA
Regulated ID:	00049498
Cortese Code:	Not reported
SIC Code:	Not reported
Facility Phone:	4153253818
Mail To:	Not reported
Mailing Address:	400 ENERSON ST
Mailing Address 2:	Not reported
Mailing City,St,Zip:	PALO ALTO 94301
Contact:	Not reported
Contact Phone:	Not reported
DUNs Number:	Not reported
NPDES Number:	Not reported
EPA ID:	Not reported
Comments:	Not reported
Status:	Active

O67 **INDEPENDENT BMW** **LUST S103472952**
WSW **400 EMERSON ST** **HIST LUST N/A**
1/8-1/4 **PALO ALTO, CA 94301**
0.216 mi.
1138 ft. **Site 2 of 4 in cluster O**

Relative:
Higher

Actual:
62 ft.

LUST REG 2:

Region:	2
Facility Id:	Not reported
Facility Status:	Case Closed
Case Number:	06S3W02D02f
How Discovered:	Not reported
Leak Cause:	Not reported
Leak Source:	Not reported
Date Leak Confirmed:	Not reported
Oversight Program:	LUST

Prelim. Site Assesment Wokplan Submitted: Not reported

INDEPENDENT BMW (Continued) **S103472952**

Preliminary Site Assesment Began: Not reported
Pollution Characterization Began: Not reported
Pollution Remediation Plan Submitted: Not reported
Date Remediation Action Underway: Not reported
Date Post Remedial Action Monitoring Began: Not reported

HIST LUST SANTA CLARA:
Region: SANTA CLARA
Region Code: 2
SCVWD ID: 06S3W02D02
Oversite Agency: SCVWD
Date Listed: 1989-01-01 00:00:00
Closed Date: 1995-03-06 00:00:00

O68 **INDEPENDANT BMW** **LUST** **S103880914**
WSW **400 EMERSON** **HIST CORTESE** **N/A**
1/8-1/4 **PALO ALTO, CA 94301**
0.216 mi.
1138 ft. **Site 3 of 4 in cluster O**

Relative:
Higher

Actual:
62 ft.

LUST:
Region: STATE
Global Id: T0608500743
Latitude: 37.445
Longitude: -122.1625
Case Type: LUST Cleanup Site
Status: Completed - Case Closed
Status Date: 03/06/1995
Lead Agency: SANTA CLARA COUNTY LOP
Case Worker: UST
Local Agency: SANTA CLARA COUNTY LOP
RB Case Number: Not reported
LOC Case Number: Not reported
File Location: All Files are on GeoTracker or in the Local Agency Database
Potential Media Affect: Soil
Potential Contaminants of Concern: Not reported
Site History: Not reported

Click here to access the California GeoTracker records for this facility:

Contact:
Global Id: T0608500743
Contact Type: Regional Board Caseworker
Contact Name: Regional Water Board
Organization Name: SAN FRANCISCO BAY RWQCB (REGION 2)
Address: 1515 CLAY ST SUITE 1400
City: OAKLAND
Email: Not reported
Phone Number: Not reported

Global Id: T0608500743
Contact Type: Local Agency Caseworker
Contact Name: UST CASE WORKER
Organization Name: SANTA CLARA COUNTY LOP
Address: 1555 Berger Drive, Suite 300
City: SAN JOSE
Email: Not reported
Phone Number: 4089183400

INDEPENDANT BMW (Continued) **S103880914**

Status History:
Global Id: T0608500743
Status: Completed - Case Closed
Status Date: 03/06/1995

Global Id: T0608500743
Status: Open - Case Begin Date
Status Date: 01/01/1988

Regulatory Activities:
Global Id: T0608500743
Action Type: Other
Date: 01/01/1988
Action: Leak Reported

Global Id: T0608500743
Action Type: ENFORCEMENT
Date: 03/06/1995
Action: Closure/No Further Action Letter

Global Id: T0608500743
Action Type: RESPONSE
Date: 01/01/1989
Action: Other Report / Document

Global Id: T0608500743
Action Type: RESPONSE
Date: 01/01/1989
Action: Other Report / Document

Global Id: T0608500743
Action Type: RESPONSE
Date: 01/01/1989
Action: Other Report / Document

LUST SANTA CLARA:
Region: SANTA CLARA
SCVWD ID: 06S3W02D02F
Date Closed: 03/06/1995
EDR Link ID: 06S3W02D02F

HIST CORTESE:
Region: CORTESE
Facility County Code: 43
Reg By: LTNKA
Reg Id: 43-0716

O69 **BNW SERVICE & REPAIR** **HIST UST** **U001595835**
WSW **400 EMERSON ST** **N/A**
1/8-1/4 **PALO ALTO, CA 94301**
0.216 mi.
1138 ft. **Site 4 of 4 in cluster O**

Relative:
Higher

Actual:
62 ft.

HIST UST:

File Number:	Not reported
URL:	Not reported
Region:	STATE
Facility ID:	00000049498
Facility Type:	Other
Other Type:	AUTO REPAIR
Contact Name:	Not reported
Telephone:	4153253818
Owner Name:	NILENKO DUGANZIC
Owner Address:	1336 HUDSON ST.
Owner City,St,Zip:	REDWOOD CITY, CA 94061
Total Tanks:	0001
Tank Num:	001
Container Num:	1
Year Installed:	Not reported
Tank Capacity:	00000000
Tank Used for:	WASTE
Type of Fuel:	WASTE OIL
Container Construction Thickness:	Not reported
Leak Detection:	None

L70 **CARDINAL FRENCH LAUNDRY, INC** **HIST UST** **U001595836**
SSE **260 HOMER AVE** **N/A**
1/8-1/4 **PALO ALTO, CA 94301**
0.216 mi.
1142 ft. **Site 4 of 9 in cluster L**

Relative:
Lower

Actual:
51 ft.

HIST UST:

File Number:	Not reported
URL:	Not reported
Region:	STATE
Facility ID:	00000008780
Facility Type:	Other
Other Type:	LAUNDRY
Contact Name:	LOUIS S. GRANDONA
Telephone:	4153234411
Owner Name:	CARDINAL FRENCH LAUNDRY, INC
Owner Address:	260 HOMER AVENUE
Owner City,St,Zip:	PALO ALTO, CA 94301
Total Tanks:	0000
Tank Num:	001
Container Num:	1
Year Installed:	Not reported
Tank Capacity:	00001000
Tank Used for:	PRODUCT
Type of Fuel:	DIESEL
Container Construction Thickness:	Not reported
Leak Detection:	None
Tank Num:	002
Container Num:	2

CARDINAL FRENCH LAUNDRY, INC (Continued) **U001595836**

Year Installed:	Not reported
Tank Capacity:	00000500
Tank Used for:	PRODUCT
Type of Fuel:	REGULAR
Container Construction Thickness:	Not reported
Leak Detection:	None

K71 **PALO ALTO SPEEDOMETER INC** **CUPA Listings** **S112346409**
South **718 EMERSON ST** **N/A**
1/8-1/4 **PALO ALTO, CA 94301**
0.217 mi.
1148 ft. **Site 5 of 5 in cluster K**

Relative:
Higher

Actual:
55 ft.

CUPA SANTA CLARA:

Region:	SANTA CLARA
PE#:	2240
Program Description:	GENERATES < 10 GAL/YR
Latitude:	37.442817
Longitude:	-122.160073

N72 **PRIVATE RESIDENCE** **LUST** **S110655477**
East **PRIVATE RESIDENCE** **N/A**
1/8-1/4 **PALO ALTO, CA 94301**
0.218 mi.
1153 ft. **Site 2 of 2 in cluster N**

Relative:
Lower

Actual:
48 ft.

LUST:

Region:	STATE
Global Id:	T0608577375
Latitude:	37.446045
Longitude:	-122.155353
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	08/22/2002
Lead Agency:	SANTA CLARA COUNTY LOP
Case Worker:	UST
Local Agency:	SANTA CLARA COUNTY LOP
RB Case Number:	Not reported
LOC Case Number:	Not reported
File Location:	All Files are on GeoTracker or in the Local Agency Database
Potential Media Affect:	Soil
Potential Contaminants of Concern:	Heating Oil / Fuel Oil
Site History:	Not reported

Click here to access the California GeoTracker records for this facility:

Contact:

Global Id:	T0608577375
Contact Type:	Regional Board Caseworker
Contact Name:	Regional Water Board
Organization Name:	SAN FRANCISCO BAY RWQCB (REGION 2)
Address:	1515 CLAY ST SUITE 1400
City:	OAKLAND
Email:	Not reported
Phone Number:	Not reported

Global Id:	T0608577375

PRIVATE RESIDENCE (Continued) **S110655477**

Contact Type: Local Agency Caseworker
Contact Name: UST CASE WORKER
Organization Name: SANTA CLARA COUNTY LOP
Address: 1555 Berger Drive, Suite 300
City: SAN JOSE
Email: Not reported
Phone Number: 4089183400

Status History:
Global Id: T0608577375
Status: Completed - Case Closed
Status Date: 08/22/2002

Global Id: T0608577375
Status: Open - Case Begin Date
Status Date: 06/14/2002

Regulatory Activities:
Global Id: T0608577375
Action Type: RESPONSE
Date: 08/14/2002
Action: Verbal Communication

Global Id: T0608577375
Action Type: RESPONSE
Date: 06/05/2003
Action: Correspondence

Global Id: T0608577375
Action Type: RESPONSE
Date: 08/20/2002
Action: Tank Removal Report / UST Sampling Report

Global Id: T0608577375
Action Type: RESPONSE
Date: 08/13/2002
Action: Tank Removal Report / UST Sampling Report

Global Id: T0608577375
Action Type: RESPONSE
Date: 08/22/2002
Action: Other Report / Document

Global Id: T0608577375
Action Type: RESPONSE
Date: 08/01/2002
Action: Tank Removal Report / UST Sampling Report

Global Id: T0608577375
Action Type: RESPONSE
Date: 08/13/2002
Action: Unauthorized Release Form

Global Id: T0608577375
Action Type: RESPONSE
Date: 08/29/2002

PRIVATE RESIDENCE (Continued) **S110655477**

Action: Other Report / Document

Global Id: T0608577375
Action Type: Other
Date: 06/14/2002
Action: Leak Stopped

Global Id: T0608577375
Action Type: Other
Date: 08/13/2002
Action: Leak Reported

Global Id: T0608577375
Action Type: ENFORCEMENT
Date: 08/22/2002
Action: Closure/No Further Action Letter

L73 **FRANK L ALTICK DDS** **CUPA Listings** **S112345808**
SSE **824 BRYANT ST** **HAZNET** **N/A**
1/8-1/4 **PALO ALTO, CA 94301**
0.223 mi.
1176 ft. **Site 5 of 9 in cluster L**

Relative:
Lower

Actual:
50 ft.

CUPA SANTA CLARA:
Region: SANTA CLARA
PE#: 2271
Program Description: SILVER WASTE ONLY <100 KG/MO
Latitude: 37.443198
Longitude: -122.157587

HAZNET:
envid: S112345808
Year: 2015
GEPAID: CAL000097636
Contact: FRANK L ALTICK
Telephone: 6503271787
Mailing Name: Not reported
Mailing Address: 824 BRYANT ST
Mailing City,St,Zip: PALO ALTO, CA 943010000
Gen County: Santa Clara
TSD EPA ID: CAD981429673
TSD County: Marin
Waste Category: Photochemicals/photoprocessing waste
Disposal Method: Metals Recovery Including Retoring,Smelting,Chemicals,Ect
Tons: 0.06255
Cat Decode: Photochemicals/photoprocessing waste
Method Decode: Metals Recovery Including Retoring,Smelting,Chemicals,Ect
Facility County: Santa Clara

L74 **PALO ALTO MEDICAL FOUNDATION** **RCRA NonGen / NLR** **1000472898**
SSE **820 RAMONA** **FINDS** **CAD982434896**
1/8-1/4 **PALO ALTO, CA 94301** **ECHO**
0.228 mi. **HAZNET**
1202 ft. **Site 6 of 9 in cluster L**

Relative:
Lower

Actual:
51 ft.

RCRA NonGen / NLR:

Date form received by agency:	09/28/2000
Facility name:	PALO ALTO MEDICAL FOUNDATION
Facility address:	820 RAMONA PALO ALTO, CA 94301
EPA ID:	CAD982434896
Mailing address:	300 HOMER AVE PALO ALTO, CA 94301
Contact:	DARREL DUMMETT
Contact address:	795 EL CAMINO REAL PALO ALTO, CA 94301
Contact country:	US
Contact telephone:	(650) 321-4121
Contact email:	Not reported
EPA Region:	09
Classification:	Non-Generator
Description:	Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:

Owner/operator name:	PALO ALTO MEDICAL FOUNDATION
Owner/operator address:	NOT REQUIRED NOT REQUIRED, ME 99999
Owner/operator country:	Not reported
Owner/operator telephone:	(415) 555-1212
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Owner/operator name:	NOT REQUIRED
Owner/operator address:	NOT REQUIRED NOT REQUIRED, ME 99999
Owner/operator country:	Not reported
Owner/operator telephone:	(415) 555-1212
Legal status:	Private
Owner/Operator Type:	Operator
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No

PALO ALTO MEDICAL FOUNDATION (Continued) **1000472898**

Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Violation Status: No violations found

FINDS:

Registry ID: 110002811271

Environmental Interest/Information System
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:
Envid: 1000472898
Registry ID: 110002811271
DFR URL: http://echo.epa.gov/detailed-facility-report?fid=110002811271

HAZNET:
envid: 1000472898
Year: 2000
GEPAID: CAD982434896
Contact: DARREL DUMMETT/DIR HMN RESRC
Telephone: 4158532953
Mailing Name: Not reported
Mailing Address: 795 EL CAMINO REAL
Mailing City,St,Zip: PALO ALTO, CA 943012726
Gen County: Not reported
TSD EPA ID: CAT080014079
TSD County: Not reported
Waste Category: Off-specification, aged or surplus organics
Disposal Method: Transfer Station
Tons: 0.04
Cat Decode: Not reported
Method Decode: Not reported
Facility County: Santa Clara

envid: 1000472898
Year: 2000
GEPAID: CAD982434896
Contact: DARREL DUMMETT/DIR HMN RESRC
Telephone: 4158532953
Mailing Name: Not reported
Mailing Address: 795 EL CAMINO REAL
Mailing City,St,Zip: PALO ALTO, CA 943012726
Gen County: Not reported
TSD EPA ID: CAT080014079
TSD County: Not reported

PALO ALTO MEDICAL FOUNDATION (Continued) **1000472898**

Waste Category: Other organic solids
Disposal Method: Transfer Station
Tons: 0.17
Cat Decode: Not reported
Method Decode: Not reported
Facility County: Santa Clara

envid: 1000472898
Year: 1999
GEPAID: CAD982434896
Contact: PALO ALTO MEDICAL FOUNDATION
Telephone: 4153214121
Mailing Name: Not reported
Mailing Address: 795 EL CAMINO REAL
Mailing City,St,Zip: PALO ALTO, CA 943012726
Gen County: Not reported
TSD EPA ID: CAD044429835
TSD County: Not reported
Waste Category: Oxygenated solvents (acetone, butanol, ethyl acetate, etc.)
Disposal Method: Recycler
Tons: 3.1938
Cat Decode: Not reported
Method Decode: Not reported
Facility County: Santa Clara

envid: 1000472898
Year: 1998
GEPAID: CAD982434896
Contact: PALO ALTO MEDICAL FOUNDATION
Telephone: 4153214121
Mailing Name: Not reported
Mailing Address: 795 EL CAMINO REAL
Mailing City,St,Zip: PALO ALTO, CA 943012726
Gen County: Not reported
TSD EPA ID: CAD044429835
TSD County: Not reported
Waste Category: Oxygenated solvents (acetone, butanol, ethyl acetate, etc.)
Disposal Method: Recycler
Tons: 2.8435
Cat Decode: Not reported
Method Decode: Not reported
Facility County: Santa Clara

envid: 1000472898
Year: 1998
GEPAID: CAD982434896
Contact: PALO ALTO MEDICAL FOUNDATION
Telephone: 4153214121
Mailing Name: Not reported
Mailing Address: 795 EL CAMINO REAL
Mailing City,St,Zip: PALO ALTO, CA 943012726
Gen County: Not reported
TSD EPA ID: CAD044429835
TSD County: Not reported
Waste Category: Oil/water separation sludge
Disposal Method: Recycler
Tons: .2085

PALO ALTO MEDICAL FOUNDATION (Continued) **1000472898**

Cat Decode: Not reported
Method Decode: Not reported
Facility County: Santa Clara

Click this hyperlink while viewing on your computer to access
11 additional CA_HAZNET: record(s) in the EDR Site Report.

P75 **FOX PHOTO** **RCRA NonGen / NLR** **1000857656**
SW **140 UNIVERSITY AVE** **FINDS** **CAD983670993**
1/8-1/4 **PALO ALTO, CA 94301** **ECHO**
0.228 mi.
1202 ft. **Site 1 of 3 in cluster P**

Relative:
Higher

Actual:
62 ft.

RCRA NonGen / NLR:
Date form received by agency: 05/07/1996
Facility name: FOX PHOTO
Facility address: 140 UNIVERSITY AVE
PALO ALTO, CA 94301
EPA ID: CAD983670993
Mailing address: WASHINGTON AVE
ST LOUIS, MO 63103
Contact: KEITH H MCCOY
Contact address: 1706 WASHINGTON AVE
ST LOUIS, MO 63103
Contact country: US
Contact telephone: (314) 231-1575
Contact email: Not reported
EPA Region: 09
Classification: Non-Generator
Description: Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:
Owner/operator name: FOX PHOTO INC
Owner/operator address: 1706 WASHINGTON AVE
ST LOUIS, MO 63103
Owner/operator country: Not reported
Owner/operator telephone: (314) 231-1575
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No

FOX PHOTO (Continued) **1000857656**

Used oil transporter: No

Violation Status: No violations found

FINDS:

Registry ID: 110002901138

Environmental Interest/Information System
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:
Envid: 1000857656
Registry ID: 110002901138
DFR URL: http://echo.epa.gov/detailed-facility-report?fid=110002901138

P76 **CITY OF PALO ALTO PARKING LOT** **LUST** **S107138395**
SW **528 HIGH** **N/A**
1/8-1/4 **PALO ALTO, CA 94301**
0.228 mi.
1204 ft. **Site 2 of 3 in cluster P**

Relative: Higher

Actual: 62 ft.

LUST:
Region: STATE
Global Id: T0608590580
Latitude: 37.443752
Longitude: -122.162797
Case Type: LUST Cleanup Site
Status: Completed - Case Closed
Status Date: 11/24/2010
Lead Agency: SANTA CLARA COUNTY LOP
Case Worker: GOR
Local Agency: SANTA CLARA COUNTY LOP
RB Case Number: 147-40
LOC Case Number: 06S3W02C05f
File Location: All Files are on GeoTracker or in the Local Agency Database
Potential Media Affect: Other Groundwater (uses other than drinking water), Soil
Potential Contaminants of Concern: Benzene, Other Solvent or Non-Petroleum Hydrocarbon, Toluene, Xylene, Chromium, Lead, Nickel, Other Metal, Diesel, Gasoline
Site History: Not reported

Click here to access the California GeoTracker records for this facility:

Contact:
Global Id: T0608590580
Contact Type: Local Agency Caseworker
Contact Name: Gerald O'Regan
Organization Name: SANTA CLARA COUNTY LOP
Address: 1555 BERGER DRIVE STE 300

CITY OF PALO ALTO PARKING LOT (Continued) **S107138395**

City: SAN JOSE
Email: gerald.o'regan@deh.sccgov.org
Phone Number: Not reported

Global Id: T0608590580
Contact Type: Regional Board Caseworker
Contact Name: Regional Water Board
Organization Name: SAN FRANCISCO BAY RWQCB (REGION 2)
Address: 1515 CLAY ST SUITE 1400
City: OAKLAND
Email: Not reported
Phone Number: Not reported

Status History:
Global Id: T0608590580
Status: Completed - Case Closed
Status Date: 11/24/2010

Global Id: T0608590580
Status: Open - Case Begin Date
Status Date: 09/24/2002

Global Id: T0608590580
Status: Open - Site Assessment
Status Date: 10/01/2002

Global Id: T0608590580
Status: Open - Site Assessment
Status Date: 10/03/2002

Regulatory Activities:
Global Id: T0608590580
Action Type: ENFORCEMENT
Date: 11/24/2010
Action: Closure/No Further Action Letter

Global Id: T0608590580
Action Type: RESPONSE
Date: 08/04/2005
Action: Correspondence

Global Id: T0608590580
Action Type: RESPONSE
Date: 10/18/2010
Action: Other Report / Document

Global Id: T0608590580
Action Type: ENFORCEMENT
Date: 10/18/2010
Action: Letter - Notice - #01028101

Global Id: T0608590580
Action Type: RESPONSE
Date: 05/08/2008
Action: Correspondence

CITY OF PALO ALTO PARKING LOT (Continued) **S107138395**

Global Id: T0608590580
Action Type: RESPONSE
Date: 10/18/2010
Action: Correspondence

Global Id: T0608590580
Action Type: RESPONSE
Date: 09/25/2003
Action: Unauthorized Release Form

Global Id: T0608590580
Action Type: RESPONSE
Date: 08/04/2005
Action: Other Report / Document

Global Id: T0608590580
Action Type: RESPONSE
Date: 03/30/2004
Action: Tank Removal Report / UST Sampling Report

Global Id: T0608590580
Action Type: Other
Date: 09/05/2002
Action: Leak Reported

Global Id: T0608590580
Action Type: ENFORCEMENT
Date: 07/27/2005
Action: Notice of Responsibility - #50727

Global Id: T0608590580
Action Type: Other
Date: 09/05/2002
Action: Leak Discovery

LUST SANTA CLARA:
Region: SANTA CLARA
SCVWD ID: 06S3W02C05F
Date Closed: 11/24/2010
EDR Link ID: 06S3W02C05F

L77 **CITY OF PARIS CLEANERS** **RCRA-SQG** **1000440544**
SSE **248 HOMER AVE** **LUST** **CAD981622756**
1/8-1/4 **PALO ALTO, CA 94301** **FINDS**
0.229 mi. **ECHO**
1209 ft. **Site 7 of 9 in cluster L** **HIST CORTESE**

Relative: Lower

Actual: 51 ft.

RCRA-SQG:
Date form received by agency: 09/01/1996
Facility name: CITY OF PARIS CLEANERS
Facility address: 248 HOMER AVE
PALO ALTO, CA 94301
EPA ID: CAD981622756
Mailing address: HOMER AVE
PALO ALTO, CA 94301
Contact: Not reported

CITY OF PARIS CLEANERS (Continued) **1000440544**

Contact address: Not reported
Not reported
Contact country: US
Contact telephone: Not reported
Contact email: Not reported
EPA Region: 09
Classification: Small Small Quantity Generator
Description: Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:
Owner/operator name: FUNDERBURK SAM
Owner/operator address: NOT REQUIRED
NOT REQUIRED, ME 99999
Owner/operator country: Not reported
Owner/operator telephone: (415) 555-1212
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Owner/operator name: NOT REQUIRED
Owner/operator address: NOT REQUIRED
NOT REQUIRED, ME 99999
Owner/operator country: Not reported
Owner/operator telephone: (415) 555-1212
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Violation Status: No violations found

LUST:
Region: STATE
Global Id: T0608501691
Latitude: 37.442708

CITY OF PARIS CLEANERS (Continued) **1000440544**

Longitude:	-122.158325
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	01/23/1997
Lead Agency:	SAN FRANCISCO BAY RWQCB (REGION 2)
Case Worker:	UUU
Local Agency:	SANTA CLARA COUNTY LOP
RB Case Number:	43-1757
LOC Case Number:	Not reported
File Location:	Not reported
Potential Media Affect:	Soil
Potential Contaminants of Concern:	Stoddard solvent / Mineral Spriits / Distillates
Site History:	Not reported

Click here to access the California GeoTracker records for this facility:

Contact:

Global Id:	T0608501691
Contact Type:	Regional Board Caseworker
Contact Name:	Regional Water Board
Organization Name:	SAN FRANCISCO BAY RWQCB (REGION 2)
Address:	1515 CLAY ST SUITE 1400
City:	OAKLAND
Email:	Not reported
Phone Number:	Not reported

Global Id:	T0608501691
Contact Type:	Local Agency Caseworker
Contact Name:	UST CASE WORKER
Organization Name:	SANTA CLARA COUNTY LOP
Address:	1555 Berger Drive, Suite 300
City:	SAN JOSE
Email:	Not reported
Phone Number:	4089183400

Status History:

Global Id:	T0608501691
Status:	Completed - Case Closed
Status Date:	01/23/1997

Global Id:	T0608501691
Status:	Open - Case Begin Date
Status Date:	06/29/1987

Regulatory Activities:

Global Id:	T0608501691
Action Type:	ENFORCEMENT
Date:	01/23/1997
Action:	Closure/No Further Action Letter - #2188.20

Global Id:	T0608501691
Action Type:	Other
Date:	12/07/1987
Action:	Leak Stopped

Global Id:	T0608501691
Action Type:	Other

CITY OF PARIS CLEANERS (Continued) **1000440544**

Date: 06/29/1987
Action: Leak Reported

Global Id: T0608501691
Action Type: Other
Date: 12/07/1987
Action: Leak Discovery

LUST REG 2:
Region: 2
Facility Id: 43-1757
Facility Status: Case Closed
Case Number: 43-1757
How Discovered: Tank Closure
Leak Cause: Other Cause
Leak Source: Tank
Date Leak Confirmed: Not reported
Oversight Program: LUST
Prelim. Site Assesment Wokplan Submitted: Not reported
Preliminary Site Assesment Began: Not reported
Pollution Characterization Began: Not reported
Pollution Remediation Plan Submitted: Not reported
Date Remediation Action Underway: Not reported
Date Post Remedial Action Monitoring Began: Not reported

FINDS:

Registry ID: 110002727390

Environmental Interest/Information System
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

STATE MASTER

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:
Envid: 1000440544
Registry ID: 110002727390
DFR URL: http://echo.epa.gov/detailed-facility-report?fid=110002727390

HIST CORTESE:
Region: CORTESE
Facility County Code: 43
Reg By: LTNKA
Reg Id: 43-1757

Q78 **RENTED BY LUTZ FORD** **HIST UST** **U001595853**
South **160 FOREST AVE** **N/A**
1/8-1/4 **PALO ALTO, CA 94301**
0.231 mi.
1219 ft. **Site 1 of 3 in cluster Q**

Relative:
Higher

Actual:
57 ft.

HIST UST:

File Number:	0002CEDA
URL:	http://geotracker.waterboards.ca.gov/ustpdfs/pdf/0002CEDA.pdf
Region:	STATE
Facility ID:	00000050182
Facility Type:	Other
Other Type:	PRESENTLY OFFICE SPA
Contact Name:	Not reported
Telephone:	4154936900
Owner Name:	BLEIBLER, LIEWER, CLIFFORD & K
Owner Address:	571 CHERRY AVE.
Owner City,St,Zip:	LOS ALTOS, CA 94022
Total Tanks:	0000
Tank Num:	001
Container Num:	1
Year Installed:	1930
Tank Capacity:	00000550
Tank Used for:	Not reported
Type of Fuel:	Not reported
Container Construction Thickness:	Not reported
Leak Detection:	None

Click here for Geo Tracker PDF:

Q79 **RENTED BY LUTZ FORD** **SWEEPS UST** **S101623387**
South **160 FOREST AVE** **CA FID UST** **N/A**
1/8-1/4 **PALO ALTO, CA 94301**
0.231 mi.
1219 ft. **Site 2 of 3 in cluster Q**

Relative:
Higher

Actual:
57 ft.

SWEEPS UST:

Status:	Active
Comp Number:	50182
Number:	9
Board Of Equalization:	44-026116
Referral Date:	07-01-85
Action Date:	Not reported
Created Date:	02-29-88
Owner Tank Id:	1
SWRCB Tank Id:	43-006-050182-000001
Tank Status:	A
Capacity:	550
Active Date:	07-01-85
Tank Use:	UNKNOWN
STG:	P
Content:	Not reported
Number Of Tanks:	1

CA FID UST:

Facility ID:	43012213
Regulated By:	UTNKA
Regulated ID:	00050182

RENTED BY LUTZ FORD (Continued) **S101623387**

Cortese Code:	Not reported
SIC Code:	Not reported
Facility Phone:	4154936900
Mail To:	Not reported
Mailing Address:	4180 EL CAMINO REAL
Mailing Address 2:	Not reported
Mailing City,St,Zip:	PALO ALTO 94301
Contact:	Not reported
Contact Phone:	Not reported
DUNs Number:	Not reported
NPDES Number:	Not reported
EPA ID:	Not reported
Comments:	Not reported
Status:	Active

R80 **JUNGLECOPY** **RCRA-SQG 1001459711**
SW **542 HIGH ST** **FINDS CAR000048769**
1/8-1/4 **PALO ALTO, CA 94301** **ECHO**
0.231 mi.
1221 ft. **Site 1 of 4 in cluster R**

Relative:
Higher

Actual:
62 ft.

RCRA-SQG:

Date form received by agency:	02/05/1999
Facility name:	JUNGLECOPY
Facility address:	542 HIGH ST PALO ALTO, CA 94301
EPA ID:	CAR000048769
Contact:	MARC DICKOW
Contact address:	542 HIGH ST PALO ALTO, CA 94301
Contact country:	US
Contact telephone:	(650) 326-7622
Contact email:	Not reported
EPA Region:	09
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	JUNGLECOPY
Owner/operator address:	542 HIGH ST PALO ALTO, CA 94301
Owner/operator country:	Not reported
Owner/operator telephone:	(650) 326-7622
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No

JUNGLECOPY (Continued) **1001459711**

Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

. Waste code: D000
. Waste name: Not Defined

. Waste code: D011
. Waste name: SILVER

Violation Status: No violations found

FINDS:

Registry ID: 110002926264

Environmental Interest/Information System

California Hazardous Waste Tracking System - Datamart (HWTS-DATAMART) provides California with information on hazardous waste shipments for generators, transporters, and treatment, storage, and disposal facilities.

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:
Envid: 1001459711
Registry ID: 110002926264
DFR URL: http://echo.epa.gov/detailed-facility-report?fid=110002926264

M81 **PADDLEFORD OLDS INC** **RCRA NonGen / NLR** **1000190066**
South **7774 EMERSON STREET** **FINDS** **CAD047896782**
1/8-1/4 **PALO ALTO, CA 94301** **ECHO**
0.231 mi.
1221 ft. **Site 2 of 4 in cluster M**

Relative:
Lower

Actual:
53 ft.

RCRA NonGen / NLR:
Date form received by agency: 06/03/1986
Facility name: PADDLEFORD OLDS INC
Facility address: 7774 EMERSON STREET
PALO ALTO, CA 94301
EPA ID: CAD047896782

PADDLEFORD OLDS INC (Continued) **1000190066**

Mailing address: 774 EMERSON ST
PALO ALTO, CA 93401
Contact: ENVIRONMENTAL MANAGER
Contact address: 7774 EMERSON STREET
PALO ALTO, CA 93401
Contact country: US
Contact telephone: (415) 326-4151
Contact email: Not reported
EPA Region: 09
Classification: Non-Generator
Description: Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:
Owner/operator name: G PADDLEFORD
Owner/operator address: NOT REQUIRED
NOT REQUIRED, ME 99999
Owner/operator country: Not reported
Owner/operator telephone: (415) 555-1212
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Owner/operator name: NOT REQUIRED
Owner/operator address: NOT REQUIRED
NOT REQUIRED, ME 99999
Owner/operator country: Not reported
Owner/operator telephone: (415) 555-1212
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Violation Status: No violations found

FINDS:

Registry ID: 110002707759

Environmental Interest/Information System

PADDLEFORD OLDS INC (Continued) **1000190066**

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:
Envid: 1000190066
Registry ID: 110002707759
DFR URL: http://echo.epa.gov/detailed-facility-report?fid=110002707759

L82 **PENINSULA PLATING WORKS** **HIST UST** **U001595852**
SSE **232 HOMER AVE** **N/A**
1/8-1/4 **PALO ALTO, CA 94301**
0.234 mi.
1237 ft. **Site 8 of 9 in cluster L**

Relative:
Lower

Actual:
51 ft.

HIST UST:
File Number: Not reported
URL: Not reported
Region: STATE
Facility ID: 00000001423
Facility Type: Other
Other Type: SILVER SMITHS
Contact Name: TOM HARRISON
Telephone: 4153267825
Owner Name: PENINSULA PLATING WORKS
Owner Address: 232 HOMER AVE
Owner City,St,Zip: PALO ALTO, CA 94301
Total Tanks: 0001

Tank Num: 001
Container Num: 1
Year Installed: Not reported
Tank Capacity: 00000100
Tank Used for: WASTE
Type of Fuel: Not reported
Container Construction Thickness: 5
Leak Detection: Visual

L83 **PENINSULA PLATING WORKS** **HIST UST** **S118413999**
SSE **232 HOMER HILLS** **N/A**
1/8-1/4 **PALO ALTO, CA 94301**
0.234 mi.
1237 ft. **Site 9 of 9 in cluster L**

Relative:
Lower

Actual:
51 ft.

HIST UST:
File Number: 000206F4
URL: http://geotracker.waterboards.ca.gov/ustpdfs/pdf/000206F4.pdf
Region: Not reported
Facility ID: Not reported

PENINSULA PLATING WORKS (Continued) **S118413999**

Facility Type:	Not reported
Other Type:	Not reported
Contact Name:	Not reported
Telephone:	Not reported
Owner Name:	Not reported
Owner Address:	Not reported
Owner City,St,Zip:	Not reported
Total Tanks:	Not reported
Tank Num:	Not reported
Container Num:	Not reported
Year Installed:	Not reported
Tank Capacity:	Not reported
Tank Used for:	Not reported
Type of Fuel:	Not reported
Container Construction Thickness:	Not reported
Leak Detection:	Not reported

Click here for Geo Tracker PDF:

M84 **PADDLEFORD OLDSMOBILE ISUZU** **SWEEPS UST** **1000190067**
South **774 EMERSON ST** **HIST UST** **CAD981442916**
1/8-1/4 **PALO ALTO, CA 94301** **CA FID UST**
0.241 mi. **RCRA NonGen / NLR**
1270 ft. **Site 3 of 4 in cluster M** **HAZNET**

Relative:
Higher

Actual:
54 ft.

SWEEPS UST:

Status:	Active
Comp Number:	13175
Number:	9
Board Of Equalization:	44-026067
Referral Date:	07-01-85
Action Date:	Not reported
Created Date:	02-29-88
Owner Tank Id:	#1
SWRCB Tank Id:	43-006-013175-000001
Tank Status:	A
Capacity:	2000
Active Date:	07-01-85
Tank Use:	M.V. FUEL
STG:	P
Content:	REG UNLEADED
Number Of Tanks:	2
Status:	Active
Comp Number:	13175
Number:	9
Board Of Equalization:	44-026067
Referral Date:	07-01-85
Action Date:	Not reported
Created Date:	02-29-88
Owner Tank Id:	#2
SWRCB Tank Id:	43-006-013175-000002
Tank Status:	A
Capacity:	Not reported
Active Date:	07-01-85
Tank Use:	OIL
STG:	W

PADDLEFORD OLDSMOBILE ISUZU (Continued) **1000190067**

Content: WASTE OIL
Number Of Tanks: Not reported

HIST UST:
File Number: 000206DA
URL: http://geotracker.waterboards.ca.gov/ustpdfs/pdf/000206DA.pdf
Region: STATE
Facility ID: 00000013175
Facility Type: Other
Other Type: AUTO DEALERSHIP
Contact Name: Not reported
Telephone: 4153282120
Owner Name: PADDLEFORD OLDSMOBILE, INC.
Owner Address: 774 EMERSON ST
Owner City,St,Zip: PALO ALTO, CA 94301
Total Tanks: 0002

Tank Num: 001
Container Num: #1
Year Installed: 1975
Tank Capacity: 00002000
Tank Used for: PRODUCT
Type of Fuel: UNLEADED
Container Construction Thickness: Not reported
Leak Detection: Stock Inventor

Tank Num: 002
Container Num: #2
Year Installed: Not reported
Tank Capacity: 00000000
Tank Used for: WASTE
Type of Fuel: WASTE OIL
Container Construction Thickness: Not reported
Leak Detection: None

Click here for Geo Tracker PDF:

CA FID UST:
Facility ID: 43002310
Regulated By: UTNKA
Regulated ID: 00013175
Cortese Code: Not reported
SIC Code: Not reported
Facility Phone: 4153282120
Mail To: Not reported
Mailing Address: 774 EMERSON ST
Mailing Address 2: Not reported
Mailing City,St,Zip: PALO ALTO 94301
Contact: Not reported
Contact Phone: Not reported
DUNs Number: Not reported
NPDES Number: Not reported
EPA ID: Not reported
Comments: Not reported
Status: Active

PADDLEFORD OLDSMOBILE ISUZU (Continued) **1000190067**

RCRA NonGen / NLR:
Date form received by agency: 09/09/1986
Facility name: PADDLEFORD OLDSMOBILE ISUZU
Facility address: 774 EMERSON ST
PALO ALTO, CA 94301
EPA ID: CAD981442916
Mailing address: EMERSON ST
PALO ALTO, CA 94301
Contact: ENVIRONMENTAL MANAGER
Contact address: 774 EMERSON ST
PALO ALTO, CA 94301
Contact country: US
Contact telephone: (415) 326-4151
Contact email: Not reported
EPA Region: 09
Classification: Non-Generator
Description: Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:
Owner/operator name: PADDLEFORD OLDSMOBILE INC
Owner/operator address: NOT REQUIRED
NOT REQUIRED, ME 99999
Owner/operator country: Not reported
Owner/operator telephone: (415) 555-1212
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Owner/operator name: NOT REQUIRED
Owner/operator address: NOT REQUIRED
NOT REQUIRED, ME 99999
Owner/operator country: Not reported
Owner/operator telephone: (415) 555-1212
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

PADDLEFORD OLDSMOBILE ISUZU (Continued) **1000190067**

Violation Status: No violations found

HAZNET:

envid:	1000190067
Year:	2015
GEPAID:	CAL000395814
Contact:	TRISTAM COFFIN
Telephone:	2013142987
Mailing Name:	Not reported
Mailing Address:	5980 HORTON STREET SUITE 200
Mailing City,St,Zip:	EMERYVILLE, CA 946084806
Gen County:	Santa Clara
TSD EPA ID:	CAD980884183
TSD County:	Sacramento
Waste Category:	Off-specification, aged or surplus organics
Disposal Method:	Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons:	0.1055
Cat Decode:	Off-specification, aged or surplus organics
Method Decode:	Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Facility County:	Santa Clara

envid:	1000190067
Year:	2015
GEPAID:	CAL000395814
Contact:	TRISTAM COFFIN
Telephone:	2013142987
Mailing Name:	Not reported
Mailing Address:	5980 HORTON STREET SUITE 200
Mailing City,St,Zip:	EMERYVILLE, CA 946084806
Gen County:	Santa Clara
TSD EPA ID:	NVD980895338
TSD County:	99
Waste Category:	Off-specification, aged or surplus organics
Disposal Method:	Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons:	0.3535
Cat Decode:	Off-specification, aged or surplus organics
Method Decode:	Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Facility County:	Santa Clara

envid:	1000190067
Year:	2015
GEPAID:	CAL000395814
Contact:	TRISTAM COFFIN
Telephone:	2013142987
Mailing Name:	Not reported
Mailing Address:	5980 HORTON STREET SUITE 200
Mailing City,St,Zip:	EMERYVILLE, CA 946084806
Gen County:	Santa Clara
TSD EPA ID:	NVD980895338
TSD County:	99
Waste Category:	Off-specification, aged or surplus organics
Disposal Method:	Neutralization Only
Tons:	0.045
Cat Decode:	Off-specification, aged or surplus organics

PADDLEFORD OLDSMOBILE ISUZU (Continued) **1000190067**

Method Decode:	Neutralization Only
Facility County:	Santa Clara
envid:	1000190067
Year:	2015
GEPAID:	CAL000395814
Contact:	TRISTAM COFFIN
Telephone:	2013142987
Mailing Name:	Not reported
Mailing Address:	5980 HORTON STREET SUITE 200
Mailing City,St,Zip:	EMERYVILLE, CA 946084806
Gen County:	Santa Clara
TSD EPA ID:	NVD980895338
TSD County:	99
Waste Category:	Unspecified solvent mixture
Disposal Method:	Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons:	0.0075
Cat Decode:	Unspecified solvent mixture
Method Decode:	Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Facility County:	Santa Clara
envid:	1000190067
Year:	2015
GEPAID:	CAL000395814
Contact:	TRISTAM COFFIN
Telephone:	2013142987
Mailing Name:	Not reported
Mailing Address:	5980 HORTON STREET SUITE 200
Mailing City,St,Zip:	EMERYVILLE, CA 946084806
Gen County:	Santa Clara
TSD EPA ID:	NVD980895338
TSD County:	99
Waste Category:	Alkaline solution without metals pH >= 12.5
Disposal Method:	Neutralization Only
Tons:	0.03
Cat Decode:	Alkaline solution without metals pH >= 12.5
Method Decode:	Neutralization Only
Facility County:	Santa Clara

Click this hyperlink while viewing on your computer to access
5 additional CA_HAZNET: record(s) in the EDR Site Report.

M85 **WHOLE FOODS MARKET - PALO ALTO** **HIST UST** **U001595840**
South **774 EMERSON AV** **CUPA Listings** **N/A**
1/8-1/4 **PALO ALTO, CA 94301**
0.241 mi.
1270 ft. **Site 4 of 4 in cluster M**

Relative:
Higher

Actual:
54 ft.

HIST UST:

File Number:	000206D9
URL:	http://geotracker.waterboards.ca.gov/ustpdfs/pdf/000206D9.pdf
Region:	STATE
Facility ID:	00000064936
Facility Type:	Other
Other Type:	AUTOMOBILE DEALER
Contact Name:	Not reported

WHOLE FOODS MARKET - PALO ALTO (Continued) **U001595840**

Telephone:	0000000000
Owner Name:	PADDLEFORD OLDSMOBILE
Owner Address:	774 EMERSON ST.
Owner City,St,Zip:	PALO ALTO, CA 94301
Total Tanks:	0001
Tank Num:	001
Container Num:	1
Year Installed:	1968
Tank Capacity:	00010000
Tank Used for:	PRODUCT
Type of Fuel:	REGULAR
Container Construction Thickness:	Not reported
Leak Detection:	None

Click here for Geo Tracker PDF:

CUPA SANTA CLARA:

Region:	SANTA CLARA
PE#:	2240
Program Description:	GENERATES < 10 GAL/YR
Latitude:	37.442357
Longitude:	-122.159307

R86 **UNION AUTO REPAIR** **HIST UST** **U001595855**
SSW **122 HAMILTON AVE** **N/A**
1/8-1/4 **PALO ALTO, CA 94301**
0.242 mi.
1279 ft. **Site 2 of 4 in cluster R**

Relative:
Higher

Actual:
62 ft.

HIST UST:

File Number:	Not reported
URL:	Not reported
Region:	STATE
Facility ID:	00000067770
Facility Type:	Other
Other Type:	AUTO REPAIR
Contact Name:	Not reported
Telephone:	4153275170
Owner Name:	HENRY W. BARNES SR.
Owner Address:	3070 MIDDLEFIELD RD
Owner City,St,Zip:	PALO ALTO, CA 94303
Total Tanks:	0001
Tank Num:	001
Container Num:	1
Year Installed:	1980
Tank Capacity:	00000060
Tank Used for:	WASTE
Type of Fuel:	5
Container Construction Thickness:	X
Leak Detection:	Visual

R87
SSW
1/8-1/4
0.242 mi.
1279 ft.

UNION AUTO REPAIR
122 HAMILTON AVE
PALO ALTO, CA 94301

Site 3 of 4 in cluster R

SWEEPS UST
CA FID UST

S101623388
N/A

Relative:
Higher

Actual:
62 ft.

SWEEPS UST:

Status:	Active
Comp Number:	67770
Number:	9
Board Of Equalization:	Not reported
Referral Date:	07-01-85
Action Date:	Not reported
Created Date:	02-29-88
Owner Tank Id:	1
SWRCB Tank Id:	43-006-067770-000001
Tank Status:	A
Capacity:	60
Active Date:	07-01-85
Tank Use:	OIL
STG:	W
Content:	WASTE OIL
Number Of Tanks:	1

CA FID UST:

Facility ID:	43012218
Regulated By:	UTNKA
Regulated ID:	00067770
Cortese Code:	Not reported
SIC Code:	Not reported
Facility Phone:	4153275170
Mail To:	Not reported
Mailing Address:	122 HAMILTON AVE
Mailing Address 2:	Not reported
Mailing City,St,Zip:	PALO ALTO 94301
Contact:	Not reported
Contact Phone:	Not reported
DUNs Number:	Not reported
NPDES Number:	Not reported
EPA ID:	Not reported
Comments:	Not reported
Status:	Active

P88
SW
1/4-1/2
0.262 mi.
1384 ft.

PENINSULA CORRIDOR PROJECT
RAILROAD RIGHT-OF-WAY
SAN CARLOS, CA 94070

Site 3 of 3 in cluster P

ENVIROSTOR
VCP

S105557593
N/A

Relative:
Higher

Actual:
64 ft.

ENVIROSTOR:

Facility ID:	41400001
Status:	Inactive - Action Required
Status Date:	05/13/2014
Site Code:	201435
Site Type:	Voluntary Cleanup
Site Type Detailed:	Voluntary Cleanup
Acres:	300
NPL:	NO
Regulatory Agencies:	SMBRP, RWQCB 2 - San Francisco Bay

PENINSULA CORRIDOR PROJECT (Continued) **S105557593**

Lead Agency: RWQCB 2 - San Francisco Bay
Program Manager: George Chow
Supervisor: Julie Pettijohn
Division Branch: Cleanup Berkeley
Assembly: 24
Senate: 13
Special Program: Voluntary Cleanup Program
Restricted Use: NO
Site Mgmt Req: NONE SPECIFIED
Funding: Responsible Party
Latitude: 37.44361
Longitude: -122.1638
APN: NONE SPECIFIED
Past Use: RAILROAD RIGHT OF WAY
Potential COC: Arsenic Lead Polynuclear aromatic hydrocarbons (PAHs TPH-diesel TPH-MOTOR OIL
Confirmed COC: Arsenic Lead Polynuclear aromatic hydrocarbons (PAHs TPH-diesel TPH-MOTOR OIL
Potential Description: SOIL
Alias Name: CALTRAIN
Alias Type: Alternate Name
Alias Name: PENINSULA CORRIDOR PROJECT
Alias Type: Alternate Name
Alias Name: 110033610518
Alias Type: EPA (FRS #)
Alias Name: 201435
Alias Type: Project Code (Site Code)
Alias Name: 41400001
Alias Type: Envirostor ID Number

Completed Info:
Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Letter - Demand
Completed Date: 01/24/2012
Comments: Demand letter #2

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Other Report
Completed Date: 04/11/2003
Comments: Approved Soil Management Plan

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Soils Management Plan
Completed Date: 09/13/2006
Comments: DTSC sent a letter to the Regional Water Quality Control Board (RWQCB) conveying concurrence with the document, with minor modifications, and recommending that RWQCB approve the document.

Completed Area Name: UP Right-of-Way adjacent to former MRI Tinmet Site
Completed Sub Area Name: Not reported
Completed Document Type: Other Report
Completed Date: 01/24/2006
Comments: Water Board accepted the removal action plan and sampling and analysis plan.

PENINSULA CORRIDOR PROJECT (Continued) **S105557593**

Completed Area Name: UP Right-of-Way adjacent to former MRI Tinmet Site
Completed Sub Area Name: Not reported
Completed Document Type: Fieldwork
Completed Date: 03/03/2006
Comments: Sampling activities completed on 3/3/06.

Completed Area Name: UP Right-of-Way adjacent to former MRI Tinmet Site
Completed Sub Area Name: Not reported
Completed Document Type: Fieldwork
Completed Date: 10/11/2006
Comments: Excavation of two 10-foot by 10-foot lead, hotspot areas was completed.

Completed Area Name: UP Right-of-Way adjacent to former MRI Tinmet Site
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Investigation Report
Completed Date: 08/24/2006
Comments: Concurrence letter from DTSC signed today.

Completed Area Name: UP Right-of-Way adjacent to former MRI Tinmet Site
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Action Completion Report
Completed Date: 01/03/2007
Comments: DTSC approved report documenting excavation of two 10-foot by 10-foot areas of lead-impacted soil.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Characterization Report
Completed Date: 12/01/2001
Comments: Report was provided to DTSC, although DTSC did not review and comment on report.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Soils Management Plan
Completed Date: 09/01/2011
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Voluntary Cleanup Agreement
Completed Date: 08/16/2002
Comments: Issued Voluntary Cleanup Agreement (VCA). The Joint Powers Board (JPB) and the San Francisco Regional Water Quality Control Board (SFRWQCB) entered into a Spills, Leaks, Investigation and Cleanup Program Reimbursement Process Regulatory Oversight on December 21, 2001. DTSC will provide consultative assistance to the SFRWQCB for the review of a Soil Management Plan and Risk Assessment. Soil along the right-of-way has been found to contain elevated levels of arsenic, lead, TPH and PAHs.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Letter - Demand
Completed Date: 12/22/2011
Comments: Demand letter #1

PENINSULA CORRIDOR PROJECT (Continued) **S105557593**

Future Area Name:	Not reported
Future Sub Area Name:	Not reported
Future Document Type:	Not reported
Future Due Date:	Not reported
Schedule Area Name:	Not reported
Schedule Sub Area Name:	Not reported
Schedule Document Type:	Not reported
Schedule Due Date:	Not reported
Schedule Revised Date:	Not reported

VCP:

Facility ID:	41400001
Site Type:	Voluntary Cleanup
Site Type Detail:	Voluntary Cleanup
Site Mgmt. Req.:	NONE SPECIFIED
Acres:	300
National Priorities List:	NO
Cleanup Oversight Agencies:	SMBRP, RWQCB 2 - San Francisco Bay
Lead Agency:	RWQCB 2 - San Francisco Bay
Lead Agency Description:	RWQCB 2 - San Francisco Bay
Project Manager:	George Chow
Supervisor:	Julie Pettijohn
Division Branch:	Cleanup Berkeley
Site Code:	201435
Assembly:	24
Senate:	13
Special Programs Code:	Voluntary Cleanup Program
Status:	Inactive - Action Required
Status Date:	05/13/2014
Restricted Use:	NO
Funding:	Responsible Party
Lat/Long:	37.44361 / -122.1638
APN:	NONE SPECIFIED
Past Use:	RAILROAD RIGHT OF WAY
Potential COC:	30001, 30013, 30019, 30024, 3002502
Confirmed COC:	30001,30013,30019,30024,3002502
Potential Description:	SOIL
Alias Name:	CALTRAIN
Alias Type:	Alternate Name
Alias Name:	PENINSULA CORRIDOR PROJECT
Alias Type:	Alternate Name
Alias Name:	110033610518
Alias Type:	EPA (FRS #)
Alias Name:	201435
Alias Type:	Project Code (Site Code)
Alias Name:	41400001
Alias Type:	Envirostor ID Number

Completed Info:

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Letter - Demand
Completed Date:	01/24/2012
Comments:	Demand letter #2
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported

PENINSULA CORRIDOR PROJECT (Continued) **S105557593**

Completed Document Type: Other Report
Completed Date: 04/11/2003
Comments: Approved Soil Management Plan

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Soils Management Plan
Completed Date: 09/13/2006
Comments: DTSC sent a letter to the Regional Water Quality Control Board (RWQCB) conveying concurrence with the document, with minor modifications, and recommending that RWQCB approve the document.

Completed Area Name: UP Right-of-Way adjacent to former MRI Tinmet Site
Completed Sub Area Name: Not reported
Completed Document Type: Other Report
Completed Date: 01/24/2006
Comments: Water Board accepted the removal action plan and sampling and analysis plan.

Completed Area Name: UP Right-of-Way adjacent to former MRI Tinmet Site
Completed Sub Area Name: Not reported
Completed Document Type: Fieldwork
Completed Date: 03/03/2006
Comments: Sampling activities completed on 3/3/06.

Completed Area Name: UP Right-of-Way adjacent to former MRI Tinmet Site
Completed Sub Area Name: Not reported
Completed Document Type: Fieldwork
Completed Date: 10/11/2006
Comments: Excavation of two 10-foot by 10-foot lead, hotspot areas was completed.

Completed Area Name: UP Right-of-Way adjacent to former MRI Tinmet Site
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Investigation Report
Completed Date: 08/24/2006
Comments: Concurrence letter from DTSC signed today.

Completed Area Name: UP Right-of-Way adjacent to former MRI Tinmet Site
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Action Completion Report
Completed Date: 01/03/2007
Comments: DTSC approved report documenting excavation of two 10-foot by 10-foot areas of lead-impacted soil.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Characterization Report
Completed Date: 12/01/2001
Comments: Report was provided to DTSC, although DTSC did not review and comment on report.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Soils Management Plan
Completed Date: 09/01/2011
Comments: Not reported

PENINSULA CORRIDOR PROJECT (Continued) **S105557593**

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Voluntary Cleanup Agreement
Completed Date: 08/16/2002
Comments: Issued Voluntary Cleanup Agreement (VCA). The Joint Powers Board (JPB) and the San Francisco Regional Water Quality Control Board (SFRWQCB) entered into a Spills, Leaks, Investigation and Cleanup Program Reimbursement Process Regulatory Oversight on December 21, 2001. DTSC will provide consultative assistance to the SFRWQCB for the review of a Soil Management Plan and Risk Assessment. Soil along the right-of-way has been found to contain elevated levels of arsenic, lead, TPH and PAHs.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Letter - Demand
Completed Date: 12/22/2011
Comments: Demand letter #1

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

Q89 **BILL'S AUTO GLASS** **LUST** **S101303792**
South **744 HIGH ST** **HIST LUST** **N/A**
1/4-1/2 **PALO ALTO, CA 94301** **HIST CORTESE**
0.267 mi.
1411 ft. **Site 3 of 3 in cluster Q**

Relative:
Higher

Actual:
58 ft.

LUST:
Region: STATE
Global Id: T0608501662
Latitude: 37.442047
Longitude: -122.159554
Case Type: LUST Cleanup Site
Status: Completed - Case Closed
Status Date: 05/25/1995
Lead Agency: SANTA CLARA COUNTY LOP
Case Worker: UST
Local Agency: SANTA CLARA COUNTY LOP
RB Case Number: Not reported
LOC Case Number: Not reported
File Location: All Files are on GeoTracker or in the Local Agency Database
Potential Media Affect: Soil
Potential Contaminants of Concern: Not reported
Site History: Not reported

Click here to access the California GeoTracker records for this facility:

Contact:
Global Id: T0608501662
Contact Type: Regional Board Caseworker

BILL'S AUTO GLASS (Continued) **S101303792**

Contact Name: Regional Water Board
Organization Name: SAN FRANCISCO BAY RWQCB (REGION 2)
Address: 1515 CLAY ST SUITE 1400
City: OAKLAND
Email: Not reported
Phone Number: Not reported

Global Id: T0608501662
Contact Type: Local Agency Caseworker
Contact Name: UST CASE WORKER
Organization Name: SANTA CLARA COUNTY LOP
Address: 1555 Berger Drive, Suite 300
City: SAN JOSE
Email: Not reported
Phone Number: 4089183400

Status History:
Global Id: T0608501662
Status: Completed - Case Closed
Status Date: 05/25/1995

Global Id: T0608501662
Status: Open - Case Begin Date
Status Date: 01/01/1991

Regulatory Activities:
Global Id: T0608501662
Action Type: Other
Date: 01/01/1991
Action: Leak Reported

Global Id: T0608501662
Action Type: RESPONSE
Date: 07/22/1992
Action: Other Report / Document

Global Id: T0608501662
Action Type: ENFORCEMENT
Date: 05/25/1995
Action: Closure/No Further Action Letter

LUST REG 2:
Region: 2
Facility Id: Not reported
Facility Status: Case Closed
Case Number: 06S3W02F08f
How Discovered: Not reported
Leak Cause: Not reported
Leak Source: Not reported
Date Leak Confirmed: Not reported
Oversight Program: LUST
Prelim. Site Assesment Wokplan Submitted: Not reported
Preliminary Site Assesment Began: Not reported
Pollution Characterization Began: Not reported
Pollution Remediation Plan Submitted: Not reported

BILL'S AUTO GLASS (Continued) **S101303792**

Date Remediation Action Underway: Not reported
Date Post Remedial Action Monitoring Began: Not reported

LUST SANTA CLARA:
Region: SANTA CLARA
SCVWD ID: 06S3W02F08F
Date Closed: 05/25/1995
EDR Link ID: 06S3W02F08F

HIST LUST SANTA CLARA:
Region: SANTA CLARA
Region Code: 2
SCVWD ID: 06S3W02F08
Oversite Agency: SCVWD
Date Listed: 1992-07-09 00:00:00
Closed Date: 1995-05-25 00:00:00

HIST CORTESE:
Region: CORTESE
Facility County Code: 43
Reg By: LTNKA
Reg Id: 43-1726

S90 **HEWLETT-PACKARD COMPANY** **SLIC S100234877**
WSW **130 LYTTON AVENUE** **HIST LUST N/A**
1/4-1/2 **PALO ALTO, CA 94301**
0.271 mi.
1432 ft. **Site 1 of 2 in cluster S**

Relative:
Higher

Actual:
64 ft.

SLIC:
Region: STATE
Facility Status: **Completed - Case Closed**
Status Date: 12/03/2004
Global Id: T0608570350
Lead Agency: SAN FRANCISCO BAY RWQCB (REGION 2)
Lead Agency Case Number: Not reported
Latitude: 37.444554
Longitude: -122.164511
Case Type: Cleanup Program Site
Case Worker: UUU
Local Agency: Not reported
RB Case Number: 43S0524
File Location: Not reported
Potential Media Affected: Not reported
Potential Contaminants of Concern: * Solvents
Site History: Not reported

Click here to access the California GeoTracker records for this facility:

HIST LUST SANTA CLARA:
Region: SANTA CLARA
Region Code: 2
SCVWD ID: 06S3W02D06
Oversite Agency: SFRWQCB
Date Listed: 1989-06-19 00:00:00
Closed Date: Not reported

S91 **HEWLETT PACKARD LYTTON AVE** **LUST** **1005441344**
WSW **130 LYTTON AVENUE** **RCRA NonGen / NLR** **CAR000118125**
1/4-1/2 **PALO ALTO, CA 94301** **FINDS**
0.271 mi. **ECHO**
1432 ft. **Site 2 of 2 in cluster S** **HAZNET**

Relative:
Higher

Actual:
64 ft.

LUST SANTA CLARA:
Region: SANTA CLARA
SCVWD ID: 06S3W02D06F
Date Closed: Not reported
EDR Link ID: 06S3W02D06F

RCRA NonGen / NLR:
Date form received by agency: 05/29/2002
Facility name: HEWLETT PACKARD LYTTON AVE
Facility address: 130 LYTTON AVE
PALO ALTO, CA 94301
EPA ID: CAR000118125
Mailing address: 1501 PAGE MILL RD M S 1129
PALO ALTO, CA 94304
Contact: SCOTT G JOHNSON
Contact address: 1501 PAGE MILL RD M S 1129
PALO ALTO, CA 94304
Contact country: US
Contact telephone: 650-857-5493
Contact email: Not reported
EPA Region: 09
Classification: Non-Generator
Description: Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:
Owner/operator name: HEWLETT PACKARD CO
Owner/operator address: 3000 HANOVER ST
PALO ALTO, CA 94304
Owner/operator country: Not reported
Owner/operator telephone: (650) 857-1501
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

HEWLETT PACKARD LYTTON AVE (Continued) **1005441344**

. Waste code: D001
. Waste name: IGNITABLE WASTE

. Waste code: D002
. Waste name: CORROSIVE WASTE

. Waste code: D003
. Waste name: REACTIVE WASTE

. Waste code: F003
. Waste name: THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NONHALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS, AND A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

. Waste code: U002
. Waste name: 2-PROPANONE (I) (OR) ACETONE (I)

. Waste code: U003
. Waste name: ACETONITRILE (I,T)

Violation Status: No violations found

FINDS:

Registry ID: 110012544906

Environmental Interest/Information System

California Hazardous Waste Tracking System - Datamart (HWTS-DATAMART) provides California with information on hazardous waste shipments for generators, transporters, and treatment, storage, and disposal facilities.

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

STATE MASTER

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:

Envid: 1005441344
Registry ID: 110012544906
DFR URL: http://echo.epa.gov/detailed-facility-report?fid=110012544906

HEWLETT PACKARD LYTTON AVE (Continued) **1005441344**

HAZNET:

envid:	1005441344
Year:	2002
GEPAID:	CAR000118125
Contact:	ANNA PAYNE/ENV PROGRAM MGR
Telephone:	6508573020
Mailing Name:	Not reported
Mailing Address:	1501 Page Mill Rd M S 1129
Mailing City,St,Zip:	Palo Alto, CA 94304
Gen County:	Not reported
TSD EPA ID:	CAT080014079
TSD County:	Not reported
Waste Category:	Off-specification, aged or surplus inorganics
Disposal Method:	Transfer Station
Tons:	0
Cat Decode:	Not reported
Method Decode:	Not reported
Facility County:	Santa Clara

envid:	1005441344
Year:	2002
GEPAID:	CAR000118125
Contact:	ANNA PAYNE/ENV PROGRAM MGR
Telephone:	6508573020
Mailing Name:	Not reported
Mailing Address:	1501 Page Mill Rd M S 1129
Mailing City,St,Zip:	Palo Alto, CA 94304
Gen County:	Not reported
TSD EPA ID:	CAT080014079
TSD County:	Not reported
Waste Category:	Liquids with halogenated organic compounds >= 1,000 Mg./L
Disposal Method:	Transfer Station
Tons:	0.04
Cat Decode:	Not reported
Method Decode:	Not reported
Facility County:	Santa Clara

envid:	1005441344
Year:	2002
GEPAID:	CAR000118125
Contact:	ANNA PAYNE/ENV PROGRAM MGR
Telephone:	6508573020
Mailing Name:	Not reported
Mailing Address:	1501 Page Mill Rd M S 1129
Mailing City,St,Zip:	Palo Alto, CA 94304
Gen County:	Not reported
TSD EPA ID:	CAT080014079
TSD County:	Not reported
Waste Category:	Off-specification, aged or surplus organics
Disposal Method:	Transfer Station
Tons:	0.77
Cat Decode:	Not reported
Method Decode:	Not reported
Facility County:	Santa Clara

T92 **KURT'S AUTO CARE** **LUST** **S101303793**
South **780 HIGH** **HIST LUST** **N/A**
1/4-1/2 **PALO ALTO, CA 94301** **CUPA Listings**
0.280 mi. **HIST CORTESE**
1477 ft. **Site 1 of 6 in cluster T**

Relative:
Higher

Actual:
56 ft.

LUST:

Region:	STATE
Global Id:	T0608501702
Latitude:	37.441839
Longitude:	-122.159216
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	05/21/2003
Lead Agency:	SANTA CLARA COUNTY LOP
Case Worker:	UST
Local Agency:	SANTA CLARA COUNTY LOP
RB Case Number:	Not reported
LOC Case Number:	Not reported
File Location:	All Files are on GeoTracker or in the Local Agency Database
Potential Media Affect:	Other Groundwater (uses other than drinking water)
Potential Contaminants of Concern:	Diesel
Site History:	Not reported

Click here to access the California GeoTracker records for this facility:

Contact:

Global Id:	T0608501702
Contact Type:	Regional Board Caseworker
Contact Name:	Regional Water Board
Organization Name:	SAN FRANCISCO BAY RWQCB (REGION 2)
Address:	1515 CLAY ST SUITE 1400
City:	OAKLAND
Email:	Not reported
Phone Number:	Not reported

Global Id:	T0608501702
Contact Type:	Local Agency Caseworker
Contact Name:	UST CASE WORKER
Organization Name:	SANTA CLARA COUNTY LOP
Address:	1555 Berger Drive, Suite 300
City:	SAN JOSE
Email:	Not reported
Phone Number:	4089183400

Status History:

Global Id:	T0608501702
Status:	Completed - Case Closed
Status Date:	05/21/2003

Global Id:	T0608501702
Status:	Open - Case Begin Date
Status Date:	01/29/1986

Global Id:	T0608501702
Status:	Open - Site Assessment
Status Date:	01/29/1986

Global Id:	T0608501702

KURT'S AUTO CARE (Continued) **S101303793**

Status: Open - Site Assessment
Status Date: 05/20/1991

Regulatory Activities:
Global Id: T0608501702
Action Type: RESPONSE
Date: 01/17/1996
Action: Monitoring Report - Quarterly

Global Id: T0608501702
Action Type: RESPONSE
Date: 06/05/1995
Action: Monitoring Report - Quarterly

Global Id: T0608501702
Action Type: RESPONSE
Date: 07/29/1996
Action: Monitoring Report - Quarterly

Global Id: T0608501702
Action Type: RESPONSE
Date: 08/21/1995
Action: Soil and Water Investigation Report

Global Id: T0608501702
Action Type: RESPONSE
Date: 08/02/1999
Action: Monitoring Report - Quarterly

Global Id: T0608501702
Action Type: RESPONSE
Date: 01/28/1997
Action: Monitoring Report - Quarterly

Global Id: T0608501702
Action Type: Other
Date: 05/21/1986
Action: Leak Reported

Global Id: T0608501702
Action Type: RESPONSE
Date: 07/12/1993
Action: Soil and Water Investigation Report

Global Id: T0608501702
Action Type: RESPONSE
Date: 08/30/2001
Action: Monitoring Report - Quarterly

Global Id: T0608501702
Action Type: RESPONSE
Date: 03/09/1995
Action: Monitoring Report - Quarterly

Global Id: T0608501702
Action Type: RESPONSE
Date: 12/02/1994

KURT'S AUTO CARE (Continued) **S101303793**

Action: Monitoring Report - Quarterly

Global Id: T0608501702
Action Type: RESPONSE
Date: 08/16/1994
Action: Monitoring Report - Quarterly

Global Id: T0608501702
Action Type: RESPONSE
Date: 05/09/1994
Action: Monitoring Report - Quarterly

Global Id: T0608501702
Action Type: RESPONSE
Date: 11/30/1993
Action: Monitoring Report - Quarterly

Global Id: T0608501702
Action Type: ENFORCEMENT
Date: 03/27/1991
Action: Notice of Violation - #40018

Global Id: T0608501702
Action Type: ENFORCEMENT
Date: 08/12/2002
Action: Warning Letter - #38423

Global Id: T0608501702
Action Type: ENFORCEMENT
Date: 02/22/1995
Action: Staff Letter - #29126

Global Id: T0608501702
Action Type: ENFORCEMENT
Date: 12/22/1994
Action: Staff Letter - #29124

Global Id: T0608501702
Action Type: ENFORCEMENT
Date: 10/31/1994
Action: Staff Letter - #29122

Global Id: T0608501702
Action Type: ENFORCEMENT
Date: 08/04/1994
Action: Staff Letter - #29120

Global Id: T0608501702
Action Type: ENFORCEMENT
Date: 05/04/1994
Action: Staff Letter - #29118

Global Id: T0608501702
Action Type: ENFORCEMENT
Date: 01/28/1994
Action: Staff Letter - #29116

KURT'S AUTO CARE (Continued) **S101303793**

Global Id: T0608501702
Action Type: ENFORCEMENT
Date: 10/29/1993
Action: Staff Letter - #29114

Global Id: T0608501702
Action Type: ENFORCEMENT
Date: 07/02/1993
Action: Staff Letter - #29112

Global Id: T0608501702
Action Type: ENFORCEMENT
Date: 05/20/1991
Action: Staff Letter - #29110

Global Id: T0608501702
Action Type: ENFORCEMENT
Date: 07/27/2001
Action: Staff Letter - #29140

Global Id: T0608501702
Action Type: ENFORCEMENT
Date: 07/30/1999
Action: Staff Letter - #29138

Global Id: T0608501702
Action Type: ENFORCEMENT
Date: 01/23/1997
Action: Staff Letter - #29136

Global Id: T0608501702
Action Type: ENFORCEMENT
Date: 07/26/1996
Action: Staff Letter - #29134

Global Id: T0608501702
Action Type: ENFORCEMENT
Date: 01/15/1996
Action: Staff Letter - #29132

Global Id: T0608501702
Action Type: ENFORCEMENT
Date: 08/17/1995
Action: Staff Letter - #29130

Global Id: T0608501702
Action Type: ENFORCEMENT
Date: 05/12/1995
Action: Staff Letter - #29128

Global Id: T0608501702
Action Type: RESPONSE
Date: 12/27/1994
Action: Soil and Water Investigation Workplan

Global Id: T0608501702
Action Type: RESPONSE

KURT'S AUTO CARE (Continued) **S101303793**

Date: 02/09/1994
Action: Monitoring Report - Quarterly

Global Id: T0608501702
Action Type: RESPONSE
Date: 05/20/1991
Action: Preliminary Site Assessment Report

LUST REG 2:
Region: 2
Facility Id: Not reported
Facility Status: Case Closed
Case Number: 06S3W02F06f
How Discovered: Not reported
Leak Cause: Not reported
Leak Source: Not reported
Date Leak Confirmed: Not reported
Oversight Program: LUST
Prelim. Site Assesment Wokplan Submitted: Not reported
Preliminary Site Assesment Began: 1/29/1986
Pollution Characterization Began: 5/20/1991
Pollution Remediation Plan Submitted: Not reported
Date Remediation Action Underway: Not reported
Date Post Remedial Action Monitoring Began: Not reported

LUST SANTA CLARA:
Region: SANTA CLARA
SCVWD ID: 06S3W02F06F
Date Closed: 05/21/2003
EDR Link ID: 06S3W02F06F

HIST LUST SANTA CLARA:
Region: SANTA CLARA
Region Code: 2
SCVWD ID: 06S3W02F06
Oversite Agency: SCVWD
Date Listed: 1987-01-01 00:00:00
Closed Date: 2003-05-21 00:00:00

CUPA SANTA CLARA:
Region: SANTA CLARA
PE#: 2202
Program Description: GENERATES < 100 KG/YR
Latitude: 37.441810
Longitude: -122.160071

HIST CORTESE:
Region: CORTESE
Facility County Code: 43
Reg By: LTNKA
Reg Id: 43-1772

R93 **PALO ALTO MEDICAL FOUNDATION** **SLIC** **S106234837**
SW **URBAN LANE** **N/A**
1/4-1/2 **PALO ALTO, CA**
0.283 mi.
1494 ft. **Site 4 of 4 in cluster R**

Relative:
Higher

Actual:
64 ft.

SLIC REG 2:

Region:	2
Facility ID:	Not reported
Facility Status:	Not reported
Date Closed:	Not reported
Local Case #:	Not reported
How Discovered:	Not reported
Leak Cause:	Not reported
Leak Source:	Not reported
Date Confirmed:	Not reported
Date Prelim Site Assmnt Workplan Submitted:	Not reported
Date Preliminary Site Assessment Began:	Not reported
Date Pollution Characterization Began:	Not reported
Date Remediation Plan Submitted:	Not reported
Date Remedial Action Underway:	Not reported
Date Post Remedial Action Monitoring Began:	Not reported

T94 **KEENAN LAND CO** **LUST** **S102432150**
South **753 ALMA ST** **HIST LUST** **N/A**
1/4-1/2 **PALO ALTO, CA 94301** **HAZNET**
0.297 mi. **HIST CORTESE**
1568 ft. **Site 2 of 6 in cluster T**

Relative:
Higher

Actual:
57 ft.

LUST:

Region:	STATE
Global Id:	T0608501913
Latitude:	37.441535
Longitude:	-122.159936
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	11/02/1995
Lead Agency:	SANTA CLARA COUNTY LOP
Case Worker:	UST
Local Agency:	SANTA CLARA COUNTY LOP
RB Case Number:	Not reported
LOC Case Number:	Not reported
File Location:	All Files are on GeoTracker or in the Local Agency Database
Potential Media Affect:	Soil
Potential Contaminants of Concern:	Diesel
Site History:	Not reported

Click here to access the California GeoTracker records for this facility:

Contact:

Global Id:	T0608501913
Contact Type:	Regional Board Caseworker
Contact Name:	Regional Water Board
Organization Name:	SAN FRANCISCO BAY RWQCB (REGION 2)
Address:	1515 CLAY ST SUITE 1400
City:	OAKLAND
Email:	Not reported
Phone Number:	Not reported

Global Id:	T0608501913

KEENAN LAND CO (Continued) **S102432150**

Contact Type: Local Agency Caseworker
Contact Name: UST CASE WORKER
Organization Name: SANTA CLARA COUNTY LOP
Address: 1555 Berger Drive, Suite 300
City: SAN JOSE
Email: Not reported
Phone Number: 4089183400

Status History:
Global Id: T0608501913
Status: Completed - Case Closed
Status Date: 11/02/1995

Global Id: T0608501913
Status: Open - Case Begin Date
Status Date: 07/21/1995

Regulatory Activities:
Global Id: T0608501913
Action Type: Other
Date: 07/21/1995
Action: Leak Reported

Global Id: T0608501913
Action Type: ENFORCEMENT
Date: 11/02/1995
Action: Closure/No Further Action Letter

Global Id: T0608501913
Action Type: RESPONSE
Date: 10/15/1993
Action: Other Report / Document

LUST REG 2:
Region: 2
Facility Id: Not reported
Facility Status: Case Closed
Case Number: 06S3W02F11f
How Discovered: Not reported
Leak Cause: Not reported
Leak Source: Not reported
Date Leak Confirmed: Not reported
Oversight Program: LUST
Prelim. Site Assesment Wokplan Submitted: Not reported
Preliminary Site Assesment Began: Not reported
Pollution Characterization Began: Not reported
Pollution Remediation Plan Submitted: Not reported
Date Remediation Action Underway: Not reported
Date Post Remedial Action Monitoring Began: Not reported

LUST SANTA CLARA:
Region: SANTA CLARA
SCVWD ID: 06S3W02F11F
Date Closed: 11/02/1995

KEENAN LAND CO (Continued) **S102432150**

EDR Link ID: 06S3W02F11F

HIST LUST SANTA CLARA:
Region: SANTA CLARA
Region Code: 2
SCVWD ID: 06S3W02F11
Oversite Agency: SCVWD
Date Listed: 1995-11-02 00:00:00
Closed Date: 1995-11-02 00:00:00

HAZNET:
envid: S102432150
Year: 2013
GEPAID: CAC002745431
Contact: JIM BRANDENBURG
Telephone: 6503219709
Mailing Name: Not reported
Mailing Address: 753 ALMA ST
Mailing City,St,Zip: PALO ALTO, CA 943012403
Gen County: Santa Clara
TSD EPA ID: CAD059494310
TSD County: Santa Clara
Waste Category: Not reported
Disposal Method: Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons: 0.3
Cat Decode: Not reported
Method Decode: Not reported
Facility County: Not reported

HIST CORTESE:
Region: CORTESE
Facility County Code: 43
Reg By: LTNKA
Reg Id: 43-2082

T95 **PENINSULA CREAMERY** **LUST** **S108217556**
South **800 HIGH ST** **N/A**
1/4-1/2 **PALO ALTO, CA**
0.306 mi.
1615 ft. **Site 3 of 6 in cluster T**

Relative:
Lower

Actual:
53 ft.

LUST SANTA CLARA:
Region: SANTA CLARA
SCVWD ID: 06S3W02G13F
Date Closed: 06/29/2005
EDR Link ID: 06S3W02G13F

T96 **PENINSULA CREAMERY** **LUST** **S107142301**
South **800 HIGH STREET** **N/A**
1/4-1/2 **PALO ALTO, CA 94301**
0.306 mi.
1615 ft. **Site 4 of 6 in cluster T**

Relative:
Lower

Actual:
53 ft.

LUST:

Region:	STATE
Global Id:	T0608564540
Latitude:	37.441739
Longitude:	-122.159621
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	06/29/2005
Lead Agency:	SANTA CLARA COUNTY LOP
Case Worker:	UST
Local Agency:	SANTA CLARA COUNTY LOP
RB Case Number:	Not reported
LOC Case Number:	Not reported
File Location:	Not reported
Potential Media Affect:	Soil
Potential Contaminants of Concern:	Waste Oil / Motor / Hydraulic / Lubricating
Site History:	Not reported

Click here to access the California GeoTracker records for this facility:

Contact:

Global Id:	T0608564540
Contact Type:	Regional Board Caseworker
Contact Name:	Regional Water Board
Organization Name:	SAN FRANCISCO BAY RWQCB (REGION 2)
Address:	1515 CLAY ST SUITE 1400
City:	OAKLAND
Email:	Not reported
Phone Number:	Not reported

Global Id:	T0608564540
Contact Type:	Local Agency Caseworker
Contact Name:	UST CASE WORKER
Organization Name:	SANTA CLARA COUNTY LOP
Address:	1555 Berger Drive, Suite 300
City:	SAN JOSE
Email:	Not reported
Phone Number:	4089183400

Status History:

Global Id:	T0608564540
Status:	Completed - Case Closed
Status Date:	06/29/2005

Global Id:	T0608564540
Status:	Open - Case Begin Date
Status Date:	03/23/2004

Global Id:	T0608564540
Status:	Open - Site Assessment
Status Date:	06/28/2005

PENINSULA CREAMERY (Continued) **S107142301**

Regulatory Activities:

Global Id:	T0608564540
Action Type:	RESPONSE
Date:	07/09/2004
Action:	Unauthorized Release Form
Global Id:	T0608564540
Action Type:	Other
Date:	07/14/2004
Action:	Leak Reported
Global Id:	T0608564540
Action Type:	Other
Date:	03/23/2004
Action:	Leak Discovery
Global Id:	T0608564540
Action Type:	ENFORCEMENT
Date:	06/29/2005
Action:	Closure/No Further Action Letter
Global Id:	T0608564540
Action Type:	REMEDIATION
Date:	03/23/2004
Action:	Excavation

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97 **TIDY TOWN CLEANERS** **RCRA-SQG** **1000440844**
West **163 EVERETT AVE** **LUST** **CAD981962079**
1/4-1/2 **PALO ALTO, CA 94301** **HIST LUST**
0.309 mi. **FINDS**
1630 ft. **ECHO**
HIST CORTESE

Relative:
Higher

Actual:
63 ft.

RCRA-SQG:

Date form received by agency:	01/21/1987
Facility name:	TIDY TOWN CLEANERS
Facility address:	163 EVERETT AVE PALO ALTO, CA 943011033
EPA ID:	CAD981962079
Contact:	BIGON DEHNAD
Contact address:	163 EVERETT AVE PALO ALTO, CA 943011033
Contact country:	US
Contact telephone:	(415) 326-2249
Contact email:	Not reported
EPA Region:	09
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	BIGON BEHNAB
Owner/operator address:	163 EVERETTE AVE

TIDY TOWN CLEANERS (Continued) **1000440844**

PALO ALTO, CA 94301
Owner/operator country: Not reported
Owner/operator telephone: (415) 326-2249
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Owner/operator name: NOT REQUIRED
Owner/operator address: NOT REQUIRED
NOT REQUIRED, ME 99999
Owner/operator country: Not reported
Owner/operator telephone: (415) 555-1212
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Violation Status: No violations found

LUST:
Region: STATE
Global Id: T0608550716
Latitude: 37.445698329669
Longitude: -122.165629863739
Case Type: LUST Cleanup Site
Status: Completed - Case Closed
Status Date: 02/11/1992
Lead Agency: SANTA CLARA COUNTY LOP
Case Worker: UST
Local Agency: SANTA CLARA COUNTY LOP
RB Case Number: Not reported
LOC Case Number: Not reported
File Location: All Files are on GeoTracker or in the Local Agency Database
Potential Media Affect: Soil
Potential Contaminants of Concern: Not reported
Site History: Not reported

Click here to access the California GeoTracker records for this facility:

TIDY TOWN CLEANERS (Continued) **1000440844**

Contact:
Global Id: T0608550716
Contact Type: Regional Board Caseworker
Contact Name: Regional Water Board
Organization Name: SAN FRANCISCO BAY RWQCB (REGION 2)
Address: 1515 CLAY ST SUITE 1400
City: OAKLAND
Email: Not reported
Phone Number: Not reported

Global Id: T0608550716
Contact Type: Local Agency Caseworker
Contact Name: UST CASE WORKER
Organization Name: SANTA CLARA COUNTY LOP
Address: 1555 Berger Drive, Suite 300
City: SAN JOSE
Email: Not reported
Phone Number: 4089183400

Status History:
Global Id: T0608550716
Status: Completed - Case Closed
Status Date: 02/11/1992

Global Id: T0608550716
Status: Open - Case Begin Date
Status Date: 01/01/1990

Regulatory Activities:
Global Id: T0608550716
Action Type: ENFORCEMENT
Date: 02/11/1992
Action: Closure/No Further Action Letter

Global Id: T0608550716
Action Type: Other
Date: 01/01/1990
Action: Leak Reported

Global Id: T0608550716
Action Type: RESPONSE
Date: 06/13/1991
Action: Other Report / Document

LUST REG 2:
Region: 2
Facility Id: Not reported
Facility Status: Case Closed
Case Number: 06S3W02D07f
How Discovered: Not reported
Leak Cause: Not reported
Leak Source: Not reported
Date Leak Confirmed: Not reported
Oversight Program: LUST

TIDY TOWN CLEANERS (Continued) **1000440844**

Prelim. Site Assesment Wokplan Submitted: Not reported
Preliminary Site Assesment Began: Not reported
Pollution Characterization Began: Not reported
Pollution Remediation Plan Submitted: Not reported
Date Remediation Action Underway: Not reported
Date Post Remedial Action Monitoring Began: Not reported

LUST SANTA CLARA:
Region: SANTA CLARA
SCVWD ID: 06S3W02D07F
Date Closed: 02/11/1992
EDR Link ID: 06S3W02D07F

HIST LUST SANTA CLARA:
Region: SANTA CLARA
Region Code: 2
SCVWD ID: 06S3W02D07
Oversite Agency: SCVWD
Date Listed: 1991-04-23 00:00:00
Closed Date: 1992-02-11 00:00:00

FINDS:

Registry ID: 110002756358

Environmental Interest/Information System
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

STATE MASTER

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:
Envid: 1000440844
Registry ID: 110002756358
DFR URL: http://echo.epa.gov/detailed-facility-report?fid=110002756358

HIST CORTESE:
Region: CORTESE
Facility County Code: 43
Reg By: LTNKA
Reg Id: 43-1475

T98 **INDEPENDENT BMW** **LUST** **S102431639**
South **799 ALMA ST** **HIST LUST** **N/A**
1/4-1/2 **PALO ALTO, CA 94306** **HIST UST**
0.310 mi. **CUPA Listings**
1635 ft. **Site 5 of 6 in cluster T** **HIST CORTESE**

Relative:
Higher

Actual:
56 ft.

LUST:

Region:	STATE
Global Id:	T0608502061
Latitude:	37.441423
Longitude:	-122.16025
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	08/04/1995
Lead Agency:	SANTA CLARA COUNTY LOP
Case Worker:	UST
Local Agency:	SANTA CLARA COUNTY LOP
RB Case Number:	Not reported
LOC Case Number:	Not reported
File Location:	All Files are on GeoTracker or in the Local Agency Database
Potential Media Affect:	Soil
Potential Contaminants of Concern:	Gasoline
Site History:	Not reported

Click here to access the California GeoTracker records for this facility:

Contact:

Global Id:	T0608502061
Contact Type:	Regional Board Caseworker
Contact Name:	Regional Water Board
Organization Name:	SAN FRANCISCO BAY RWQCB (REGION 2)
Address:	1515 CLAY ST SUITE 1400
City:	OAKLAND
Email:	Not reported
Phone Number:	Not reported

Global Id:	T0608502061
Contact Type:	Local Agency Caseworker
Contact Name:	UST CASE WORKER
Organization Name:	SANTA CLARA COUNTY LOP
Address:	1555 Berger Drive, Suite 300
City:	SAN JOSE
Email:	Not reported
Phone Number:	4089183400

Status History:

Global Id:	T0608502061
Status:	Completed - Case Closed
Status Date:	08/04/1995

Global Id:	T0608502061
Status:	Open - Case Begin Date
Status Date:	08/04/1995

Regulatory Activities:

Global Id:	T0608502061
Action Type:	ENFORCEMENT
Date:	08/04/1995
Action:	Closure/No Further Action Letter

INDEPENDENT BMW (Continued) **S102431639**

Global Id: T0608502061
Action Type: RESPONSE
Date: 10/25/1994
Action: Other Report / Document

LUST REG 2:
Region: 2
Facility Id: Not reported
Facility Status: Case Closed
Case Number: 06S3W02F10f
How Discovered: Not reported
Leak Cause: Not reported
Leak Source: Not reported
Date Leak Confirmed: Not reported
Oversight Program: LUST
Prelim. Site Assesment Wokplan Submitted: Not reported
Preliminary Site Assesment Began: Not reported
Pollution Characterization Began: Not reported
Pollution Remediation Plan Submitted: Not reported
Date Remediation Action Underway: Not reported
Date Post Remedial Action Monitoring Began: Not reported

LUST SANTA CLARA:
Region: SANTA CLARA
SCVWD ID: 06S3W02F10F
Date Closed: 08/04/1995
EDR Link ID: 06S3W02F10F

HIST LUST SANTA CLARA:
Region: SANTA CLARA
Region Code: 2
SCVWD ID: 06S3W02F10
Oversite Agency: SCVWD
Date Listed: 1901-01-01 00:00:00
Closed Date: 1995-08-04 00:00:00

HIST UST:
File Number: 0002099C
URL: http://geotracker.waterboards.ca.gov/ustpdfs/pdf/0002099C.pdf
Region: Not reported
Facility ID: Not reported
Facility Type: Not reported
Other Type: Not reported
Contact Name: Not reported
Telephone: Not reported
Owner Name: Not reported
Owner Address: Not reported
Owner City,St,Zip: Not reported
Total Tanks: Not reported

Tank Num: Not reported
Container Num: Not reported
Year Installed: Not reported
Tank Capacity: Not reported

INDEPENDENT BMW (Continued) **S102431639**

Tank Used for: Not reported
Type of Fuel: Not reported
Container Construction Thickness: Not reported
Leak Detection: Not reported

Click here for Geo Tracker PDF:

CUPA SANTA CLARA:
Region: SANTA CLARA
PE#: 2205
Program Description: GENERATES 100 KG YR TO <5 TONS/YR
Latitude: 37.441289
Longitude: -122.160310

HIST CORTESE:
Region: CORTESE
Facility County Code: 43
Reg By: LTNKA
Reg Id: 43-2246

U99 **BILL YOUNG'S AUTOMOTIVE** **LUST** **S105512841**
South **849 HIGH ST** **HIST LUST** **N/A**
1/4-1/2 **PALO ALTO, CA 94301**
0.313 mi.
1653 ft. **Site 1 of 2 in cluster U**

Relative:
Lower

Actual:
52 ft.

LUST REG 2:
Region: 2
Facility Id: Not reported
Facility Status: Case Closed
Case Number: 06S3W02G09f
How Discovered: Not reported
Leak Cause: Not reported
Leak Source: Not reported
Date Leak Confirmed: Not reported
Oversight Program: LUST
Prelim. Site Assesment Wokplan Submitted: Not reported
Preliminary Site Assesment Began: 7/12/1999
Pollution Characterization Began: Not reported
Pollution Remediation Plan Submitted: Not reported
Date Remediation Action Underway: Not reported
Date Post Remedial Action Monitoring Began: Not reported

HIST LUST SANTA CLARA:
Region: SANTA CLARA
Region Code: 2
SCVWD ID: 06S3W02G09
Oversite Agency: SCVWD
Date Listed: 2000-01-13 00:00:00
Closed Date: 2000-01-13 00:00:00

U100 **BILL YOUNG'S AUTOMOTIVE** **LUST** **1000275273**
South **849 HIGH ST** **HIST CORTESE** **N/A**
1/4-1/2 **PALO ALTO, CA 94301**
0.313 mi.
1653 ft. **Site 2 of 2 in cluster U**

Relative:
Lower

Actual:
52 ft.

LUST:

Region:	STATE
Global Id:	T0608573149
Latitude:	37.441404
Longitude:	-122.158746
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	01/13/2000
Lead Agency:	SANTA CLARA COUNTY LOP
Case Worker:	UST
Local Agency:	SANTA CLARA COUNTY LOP
RB Case Number:	Not reported
LOC Case Number:	Not reported
File Location:	All Files are on GeoTracker or in the Local Agency Database
Potential Media Affect:	Soil
Potential Contaminants of Concern:	Gasoline
Site History:	Not reported

Click here to access the California GeoTracker records for this facility:

Contact:

Global Id:	T0608573149
Contact Type:	Regional Board Caseworker
Contact Name:	Regional Water Board
Organization Name:	SAN FRANCISCO BAY RWQCB (REGION 2)
Address:	1515 CLAY ST SUITE 1400
City:	OAKLAND
Email:	Not reported
Phone Number:	Not reported

Global Id:	T0608573149
Contact Type:	Local Agency Caseworker
Contact Name:	UST CASE WORKER
Organization Name:	SANTA CLARA COUNTY LOP
Address:	1555 Berger Drive, Suite 300
City:	SAN JOSE
Email:	Not reported
Phone Number:	4089183400

Status History:

Global Id:	T0608573149
Status:	Completed - Case Closed
Status Date:	01/13/2000

Global Id:	T0608573149
Status:	Open - Case Begin Date
Status Date:	07/12/1999

Global Id:	T0608573149
Status:	Open - Site Assessment
Status Date:	07/12/1999

BILL YOUNG'S AUTOMOTIVE (Continued) **1000275273**

Regulatory Activities:

Global Id:	T0608573149
Action Type:	RESPONSE
Date:	06/10/1994
Action:	Other Report / Document
Global Id:	T0608573149
Action Type:	RESPONSE
Date:	07/12/1999
Action:	Soil and Water Investigation Report
Global Id:	T0608573149
Action Type:	Other
Date:	01/11/2000
Action:	Leak Reported
Global Id:	T0608573149
Action Type:	ENFORCEMENT
Date:	01/13/2000
Action:	Closure/No Further Action Letter

LUST SANTA CLARA:

Region:	SANTA CLARA
SCVWD ID:	06S3W02G09F
Date Closed:	01/13/2000
EDR Link ID:	06S3W02G09F

HIST CORTESE:

Region:	CORTESE
Facility County Code:	43
Reg By:	LTNKA
Reg Id:	43-2347

V101 **COMMUTER SHELL SERVICE** **LUST** **U001595839**
WSW **355 ALMA ST** **HIST LUST** **N/A**
1/4-1/2 **PALO ALTO, CA 94301** **UST**
0.321 mi. **SWEEPS UST**
1694 ft. **Site 1 of 2 in cluster V** **HIST UST**
HIST CORTESE

Relative:
Higher

Actual:
65 ft.

LUST:

Region:	STATE
Global Id:	T0608501291
Latitude:	37.444603765846
Longitude:	-122.165372371674
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	12/30/2014
Lead Agency:	SANTA CLARA COUNTY LOP
Case Worker:	AC
Local Agency:	SANTA CLARA COUNTY LOP
RB Case Number:	19-066
LOC Case Number:	06S3W02D05f
File Location:	Stored on Microfiche
Potential Media Affect:	Other Groundwater (uses other than drinking water)

COMMUTER SHELL SERVICE (Continued) **U001595839**

Potential Contaminants of Concern: Gasoline
Site History: Previous fuel leak case closed on 10/31/2000. Responsible party chose to retain 8 wells and continued groundwater monitoring through 2010. All wells were destroyed in 2010. Groundwater concentrations were <50 micrograms per liter (ug/L) Total Petroleum Hydrocarbons as gasoline (TPHg), <0.50 ug/L benzene, <1.0 ug/L toluene, <1.0 ug/L ethylbenzene, <1.0 ug/L xylenes, and <1.0 MTBE at that time. February 2011 Tank Removal: Paradiso Mechanical, Inc. (Paradiso) removed three 12,000-gallon gasoline USTs, three hydraulic lifts, product dispensers, and associated piping. Conestoga-Rovers & Associates (CRA) collected nine soil samples from the bottom of the UST excavation at depths of 15 to 16 fbg. TPHg and BTEX were not detected in any of the soil samples. January 2012 Phase I Environmental Site Assessment (Phase I ESA): Romig Engineers, Inc. conducted a Phase I ESA and advanced nine soil borings (RB-1 through RB-9). A maximum concentration of TPHg at 3,800 milligrams per kilogram (mg/kg) was detected in soil boring RB-5 at 29.5 to 30 fbg. Benzene was only detected in one soil boring, RB-5, at 39.5 to 40 fbg, at a concentration of 0.011 mg/kg. Maximum concentrations of MTBE and tertiary-butyl alcohol (TBA) were detected in soil boring RB-2 at 35 to 35.5 fbg, at 4.6 mg/kg and 2.5 mg/kg, respectively. Grab groundwater samples were collected from first-encountered groundwater in soil borings RB-5 and RB-9. A maximum concentration of TPHg at 1,600 ug/L was detected in boring RB-5. Up to 12 ug/L of benzene, 600 %ug/L of MTBE, and 190 ug/L of TBA were detected in first encountered groundwater from RB-5. April 2012 The fuel leak case was re-opened based on information provided to DEH in a meeting on March 15, 2012. A plan was discussed to remove the residual contamination by excavation. Erler & Kalinowski, Inc. (EKI) prepared a Soil Management Plan (SMP) to facilitate the development of the site during excavation activities. For off-site disposal pre-characterization, EKI advanced 4 depth-discrete soil borings (B-1 through B-4) and 16 composite samples (C-0-3 through C-33-38 and D-0-3 through D-28-33) and collected first-encountered grab groundwater from soil borings B-2 through B-4. Up to 406 mg/kg TPHg was detected in soil samples. No benzene, MTBE, or TBA was detected in any of the soil borings. Up to 13,400 ug/L TPHg was detected in grab groundwater from soil boring B-4. Up to 0.61 ug/L benzene was detected in soil boring B-2, and up to 1,390 ug/L of MTBE was detected in soil boring B-3. No TBA was detected in any of the grab groundwater samples. November 2013 Excavation Report: EKI submitted an excavation report summarizing excavation activities for the development of a two-story subgrade parking structure with an overlying four-story commercial building. Excavation activities occurred from August 7, 2012 through January 3, 2013. The excavation was to an approximate depth of 34 feet across the entire site and removed approximately 26,000 bank cubic yards of soil. No confirmation soil sampling was conducted. Due to the proximity of groundwater, a barrier will be installed prior to construction of the two-story underground parking garage. The site will be developed with first floor commercial with residential units above.

Click here to access the California GeoTracker records for this facility:

Contact:
Global Id: T0608501291
Contact Type: Local Agency Caseworker
Contact Name: AARON COSTA

COMMUTER SHELL SERVICE (Continued) **U001595839**

Organization Name: SANTA CLARA COUNTY LOP
Address: 1555 Berger Drive, Suite 300
City: SAN JOSE
Email: aaron.costa@cep.sccgov.org
Phone Number: 4089181954

Status History:
Global Id: T0608501291
Status: Completed - Case Closed
Status Date: 10/31/2000

Global Id: T0608501291
Status: Completed - Case Closed
Status Date: 12/30/2014

Global Id: T0608501291
Status: Open - Assessment & Interim Remedial Action
Status Date: 03/09/2012

Global Id: T0608501291
Status: Open - Case Begin Date
Status Date: 01/22/1987

Global Id: T0608501291
Status: Open - Eligible for Closure
Status Date: 02/17/2014

Global Id: T0608501291
Status: Open - Reopen Case
Status Date: 03/08/2012

Global Id: T0608501291
Status: Open - Site Assessment
Status Date: 09/29/1988

Regulatory Activities:
Global Id: T0608501291
Action Type: ENFORCEMENT
Date: 12/30/2014
Action: Closure/No Further Action Letter

Global Id: T0608501291
Action Type: ENFORCEMENT
Date: 03/16/2012
Action: Notice of Responsibility

Global Id: T0608501291
Action Type: ENFORCEMENT
Date: 10/31/2000
Action: Closure/No Further Action Letter

Global Id: T0608501291
Action Type: RESPONSE
Date: 09/10/2012
Action: Correspondence

COMMUTER SHELL SERVICE (Continued) **U001595839**

Global Id: T0608501291
Action Type: RESPONSE
Date: 04/26/2012
Action: Correspondence

Global Id: T0608501291
Action Type: RESPONSE
Date: 04/26/2012
Action: Verbal Communication

Global Id: T0608501291
Action Type: ENFORCEMENT
Date: 10/29/2014
Action: Notification - Public Notice of Case Closure

Global Id: T0608501291
Action Type: ENFORCEMENT
Date: 08/01/2012
Action: Staff Letter

Global Id: T0608501291
Action Type: RESPONSE
Date: 08/31/1996
Action: Monitoring Report - Quarterly

Global Id: T0608501291
Action Type: RESPONSE
Date: 03/20/2014
Action: Other Report / Document

Global Id: T0608501291
Action Type: RESPONSE
Date: 02/18/2011
Action: Unauthorized Release Form

Global Id: T0608501291
Action Type: ENFORCEMENT
Date: 02/18/2014
Action: Staff Letter

Global Id: T0608501291
Action Type: RESPONSE
Date: 10/30/2009
Action: Monitoring Report - Quarterly

Global Id: T0608501291
Action Type: RESPONSE
Date: 02/18/2014
Action: Correspondence

Global Id: T0608501291
Action Type: RESPONSE
Date: 03/03/2014
Action: Other Report / Document

Global Id: T0608501291
Action Type: RESPONSE

COMMUTER SHELL SERVICE (Continued) **U001595839**

Date: 07/30/2012
Action: Other Report / Document

Global Id: T0608501291
Action Type: RESPONSE
Date: 04/08/2011
Action: Tank Removal Report / UST Sampling Report

Global Id: T0608501291
Action Type: RESPONSE
Date: 12/16/2010
Action: Well Destruction Report

Global Id: T0608501291
Action Type: ENFORCEMENT
Date: 04/24/2012
Action: Staff Letter

Global Id: T0608501291
Action Type: RESPONSE
Date: 10/16/1989
Action: Other Workplan

Global Id: T0608501291
Action Type: RESPONSE
Date: 04/19/2012
Action: Soil and Water Investigation Workplan

Global Id: T0608501291
Action Type: RESPONSE
Date: 11/04/2013
Action: Other Report / Document

Global Id: T0608501291
Action Type: ENFORCEMENT
Date: 04/10/2014
Action: Staff Letter

Global Id: T0608501291
Action Type: Other
Date: 01/22/1987
Action: Leak Reported

Global Id: T0608501291
Action Type: RESPONSE
Date: 09/07/2012
Action: Remedial Progress Report - Regulator Responded

Global Id: T0608501291
Action Type: RESPONSE
Date: 08/02/2012
Action: Other Workplan - Regulator Responded

Global Id: T0608501291
Action Type: ENFORCEMENT
Date: 07/19/1991
Action: Notice of Responsibility - #40051

COMMUTER SHELL SERVICE (Continued) **U001595839**

Global Id: T0608501291
Action Type: ENFORCEMENT
Date: 08/29/1996
Action: Staff Letter - #29186

Global Id: T0608501291
Action Type: ENFORCEMENT
Date: 04/26/2012
Action: Notice of Responsibility

Global Id: T0608501291
Action Type: RESPONSE
Date: 04/04/2014
Action: Other Report / Document

Global Id: T0608501291
Action Type: RESPONSE
Date: 03/05/2014
Action: Request for Closure - Regulator Responded

Global Id: T0608501291
Action Type: RESPONSE
Date: 04/10/2014
Action: Other Report / Document

Global Id: T0608501291
Action Type: REMEDIATION
Date: 01/06/1987
Action: Excavation

LUST REG 2:
Region: 2
Facility Id: Not reported
Facility Status: Case Closed
Case Number: 06S3W02D05f
How Discovered: Not reported
Leak Cause: Not reported
Leak Source: Not reported
Date Leak Confirmed: Not reported
Oversight Program: LUST
Prelim. Site Assesment Wokplan Submitted: Not reported
Preliminary Site Assesment Began: 9/29/1988
Pollution Characterization Began: 9/29/1988
Pollution Remediation Plan Submitted: Not reported
Date Remediation Action Underway: Not reported
Date Post Remedial Action Monitoring Began: Not reported

LUST SANTA CLARA:
Region: SANTA CLARA
SCVWD ID: 06S3W02D05F
Date Closed: Not reported
EDR Link ID: 06S3W02D05F

HIST LUST SANTA CLARA:
Region: SANTA CLARA

COMMUTER SHELL SERVICE (Continued) **U001595839**

Region Code: 2
SCVWD ID: 06S3W02D05
Oversite Agency: SCVWD
Date Listed: 1988-01-01 00:00:00
Closed Date: 2000-10-31 00:00:00

UST:
Facility ID: 43-006-000018
Permitting Agency: Santa Clara County Environmental Health
Latitude: 37.444649
Longitude: -122.165359

Facility ID: 43-006-000018
Permitting Agency: PALO ALTO, CITY OF
Latitude: 37.44458939
Longitude: -122.16528

SWEEPS UST:
Status: Active
Comp Number: 6902
Number: 2
Board Of Equalization: 44-000074
Referral Date: 07-02-92
Action Date: 07-02-92
Created Date: 02-29-88
Owner Tank Id: 5802-0102-RU-1
SWRCB Tank Id: 43-006-006902-000001
Tank Status: A
Capacity: 12000
Active Date: 07-02-92
Tank Use: M.V. FUEL
STG: P
Content: REG UNLEADED
Number Of Tanks: 4

Status: Active
Comp Number: 6902
Number: 2
Board Of Equalization: 44-000074
Referral Date: 07-02-92
Action Date: 07-02-92
Created Date: 02-29-88
Owner Tank Id: 5802-0102-SU-1
SWRCB Tank Id: 43-006-006902-000002
Tank Status: A
Capacity: 12000
Active Date: 07-02-92
Tank Use: M.V. FUEL
STG: P
Content: PRM UNLEADED
Number Of Tanks: Not reported

Status: Active
Comp Number: 6902
Number: 2
Board Of Equalization: 44-000074

COMMUTER SHELL SERVICE (Continued) **U001595839**

Referral Date: 07-02-92
Action Date: 07-02-92
Created Date: 02-29-88
Owner Tank Id: 5802-0102-SR-1
SWRCB Tank Id: 43-006-006902-000003
Tank Status: A
Capacity: 12000
Active Date: 07-02-92
Tank Use: M.V. FUEL
STG: P
Content: REG UNLEADED
Number Of Tanks: Not reported

Status: Active
Comp Number: 6902
Number: 2
Board Of Equalization: 44-000074
Referral Date: 07-02-92
Action Date: 07-02-92
Created Date: 02-29-88
Owner Tank Id: 580201025W01
SWRCB Tank Id: 43-006-006902-000004
Tank Status: A
Capacity: 550
Active Date: 07-03-90
Tank Use: OIL
STG: W
Content: WASTE OIL
Number Of Tanks: Not reported

HIST UST:
File Number: Not reported
URL: Not reported
Region: STATE
Facility ID: 00000006902
Facility Type: Gas Station
Other Type: Not reported
Contact Name: HENRY:BLACK
Telephone: 4153273963
Owner Name: SHELL OIL COMPANY
Owner Address: P.O.BOX 4848
Owner City,St,Zip: ANAHEIM, CA 92803
Total Tanks: 0004

Tank Num: 001
Container Num: 1
Year Installed: 1971
Tank Capacity: 00010000
Tank Used for: PRODUCT
Type of Fuel: UNLEADED
Container Construction Thickness: 1/4
Leak Detection: Stock Inventor, 10

Tank Num: 002
Container Num: 2
Year Installed: 1971
Tank Capacity: 00008000

COMMUTER SHELL SERVICE (Continued) **U001595839**

Tank Used for:	PRODUCT
Type of Fuel:	PREMIUM
Container Construction Thickness:	1/4
Leak Detection:	Stock Inventor, 10

Tank Num:	003
Container Num:	3
Year Installed:	1971
Tank Capacity:	00010000
Tank Used for:	PRODUCT
Type of Fuel:	REGULAR
Container Construction Thickness:	1/4
Leak Detection:	Stock Inventor, 10

Tank Num:	004
Container Num:	4
Year Installed:	1971
Tank Capacity:	00000550
Tank Used for:	WASTE
Type of Fuel:	WASTE OIL
Container Construction Thickness:	1/2
Leak Detection:	Stock Inventor, 10

HIST CORTESE:

Region:	CORTESE
Facility County Code:	43
Reg By:	LTNKA
Reg Id:	43-1313

T102 **HANSEN PLUMBING** **LUST** **S101303796**
South **50 HOMER AVE** **HIST LUST** **N/A**
1/4-1/2 **PALO ALTO, CA 94301** **HIST CORTESE**
0.321 mi.
1696 ft. **Site 6 of 6 in cluster T**

Relative:
Higher

Actual:
54 ft.

LUST:

Region:	STATE
Global Id:	T0608500706
Latitude:	37.4402125725721
Longitude:	-122.161628007889
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	04/23/2001
Lead Agency:	SANTA CLARA COUNTY LOP
Case Worker:	UST
Local Agency:	SANTA CLARA COUNTY LOP
RB Case Number:	Not reported
LOC Case Number:	Not reported
File Location:	All Files are on GeoTracker or in the Local Agency Database
Potential Media Affect:	Soil
Potential Contaminants of Concern:	Gasoline
Site History:	Not reported

Click here to access the California GeoTracker records for this facility:

Contact:

Global Id:	T0608500706
Contact Type:	Regional Board Caseworker

HANSEN PLUMBING (Continued) **S101303796**

Contact Name: Regional Water Board
Organization Name: SAN FRANCISCO BAY RWQCB (REGION 2)
Address: 1515 CLAY ST SUITE 1400
City: OAKLAND
Email: Not reported
Phone Number: Not reported

Global Id: T0608500706
Contact Type: Local Agency Caseworker
Contact Name: UST CASE WORKER
Organization Name: SANTA CLARA COUNTY LOP
Address: 1555 Berger Drive, Suite 300
City: SAN JOSE
Email: Not reported
Phone Number: 4089183400

Status History:
Global Id: T0608500706
Status: Completed - Case Closed
Status Date: 04/23/2001

Global Id: T0608500706
Status: Open - Case Begin Date
Status Date: 01/29/1988

Global Id: T0608500706
Status: Open - Site Assessment
Status Date: 01/29/1988

Regulatory Activities:
Global Id: T0608500706
Action Type: RESPONSE
Date: 08/30/1992
Action: Soil and Water Investigation Report

Global Id: T0608500706
Action Type: RESPONSE
Date: 07/30/1990
Action: Soil and Water Investigation Workplan

Global Id: T0608500706
Action Type: RESPONSE
Date: 06/06/1997
Action: Other Report / Document

Global Id: T0608500706
Action Type: RESPONSE
Date: 02/01/1999
Action: Verbal Communication

Global Id: T0608500706
Action Type: RESPONSE
Date: 05/23/1997
Action: Other Report / Document

Global Id: T0608500706

HANSEN PLUMBING (Continued) **S101303796**

Action Type: RESPONSE
Date: 03/27/1990
Action: Unauthorized Release Form

Global Id: T0608500706
Action Type: RESPONSE
Date: 06/13/1997
Action: Preliminary Site Assessment Report

Global Id: T0608500706
Action Type: RESPONSE
Date: 02/02/1999
Action: Correspondence

Global Id: T0608500706
Action Type: RESPONSE
Date: 02/02/1999
Action: Correspondence

Global Id: T0608500706
Action Type: RESPONSE
Date: 06/30/1993
Action: Other Report / Document

Global Id: T0608500706
Action Type: Other
Date: 01/01/1989
Action: Leak Reported

Global Id: T0608500706
Action Type: ENFORCEMENT
Date: 10/23/1995
Action: Notice of Responsibility - #40019

Global Id: T0608500706
Action Type: ENFORCEMENT
Date: 06/03/1992
Action: Staff Letter - #29146

Global Id: T0608500706
Action Type: ENFORCEMENT
Date: 05/31/1990
Action: Staff Letter - #29143

Global Id: T0608500706
Action Type: ENFORCEMENT
Date: 04/23/2001
Action: Closure/No Further Action Letter

LUST REG 2:
Region: 2
Facility Id: Not reported
Facility Status: Case Closed
Case Number: 06S3W02F07f
How Discovered: Not reported
Leak Cause: Not reported

HANSEN PLUMBING (Continued) **S101303796**

Leak Source: Not reported
Date Leak Confirmed: Not reported
Oversight Program: LUST
Prelim. Site Assesment Wokplan Submitted: Not reported
Preliminary Site Assesment Began: 1/29/1988
Pollution Characterization Began: Not reported
Pollution Remediation Plan Submitted: Not reported
Date Remediation Action Underway: Not reported
Date Post Remedial Action Monitoring Began: Not reported

LUST SANTA CLARA:
Region: SANTA CLARA
SCVWD ID: 06S3W02F07F
Date Closed: 04/23/2001
EDR Link ID: 06S3W02F07F

HIST LUST SANTA CLARA:
Region: SANTA CLARA
Region Code: 2
SCVWD ID: 06S3W02F07
Oversite Agency: SCVWD
Date Listed: 1990-05-25 00:00:00
Closed Date: 2001-04-23 00:00:00

HIST CORTESE:
Region: CORTESE
Facility County Code: 43
Reg By: LTNKA
Reg Id: 43-0675

W103 **D & M AUTO REPAIR** **LUST** **S111760457**
SSE **190 CHANNING AVE** **N/A**
1/4-1/2 **PALO ALTO, CA 94301**
0.335 mi.
1768 ft. **Site 1 of 3 in cluster W**

Relative:
Lower

Actual:
50 ft.

LUST:
Region: STATE
Global Id: T0608501889
Latitude: 37.4413199782986
Longitude: -122.157754898071
Case Type: LUST Cleanup Site
Status: Completed - Case Closed
Status Date: 06/09/1995
Lead Agency: SANTA CLARA COUNTY LOP
Case Worker: UST
Local Agency: SANTA CLARA COUNTY LOP
RB Case Number: Not reported
LOC Case Number: Not reported
File Location: All Files are on GeoTracker or in the Local Agency Database
Potential Media Affect: Soil
Potential Contaminants of Concern: Gasoline
Site History: Not reported

Click here to access the California GeoTracker records for this facility:

D & M AUTO REPAIR (Continued) **S111760457**

Contact:
Global Id: T0608501889
Contact Type: Regional Board Caseworker
Contact Name: Regional Water Board
Organization Name: SAN FRANCISCO BAY RWQCB (REGION 2)
Address: 1515 CLAY ST SUITE 1400
City: OAKLAND
Email: Not reported
Phone Number: Not reported

Global Id: T0608501889
Contact Type: Local Agency Caseworker
Contact Name: UST CASE WORKER
Organization Name: SANTA CLARA COUNTY LOP
Address: 1555 Berger Drive, Suite 300
City: SAN JOSE
Email: Not reported
Phone Number: 4089183400

Status History:
Global Id: T0608501889
Status: Completed - Case Closed
Status Date: 06/09/1995

Global Id: T0608501889
Status: Open - Case Begin Date
Status Date: 01/01/1994

Regulatory Activities:
Global Id: T0608501889
Action Type: ENFORCEMENT
Date: 06/09/1995
Action: Closure/No Further Action Letter

Global Id: T0608501889
Action Type: Other
Date: 01/01/1994
Action: Leak Reported

Global Id: T0608501889
Action Type: RESPONSE
Date: 02/14/1995
Action: Other Report / Document

W104 **D & M MOTORS** **LUST** **S102428571**
SSE **190 CHANNING AVE** **HIST LUST** **N/A**
1/4-1/2 **PALO ALTO, CA 94301** **SWEEPS UST**
0.335 mi. **HIST CORTESE**
1768 ft. **Site 2 of 3 in cluster W** **WIP**

Relative:
Lower

Actual:
50 ft.

LUST REG 2:
Region: 2
Facility Id: Not reported
Facility Status: Case Closed
Case Number: 06S3W02G07f

D & M MOTORS (Continued) **S102428571**

How Discovered: Not reported
Leak Cause: Not reported
Leak Source: Not reported
Date Leak Confirmed: Not reported
Oversight Program: LUST
Prelim. Site Assesment Wokplan Submitted: Not reported
Preliminary Site Assesment Began: Not reported
Pollution Characterization Began: Not reported
Pollution Remediation Plan Submitted: Not reported
Date Remediation Action Underway: Not reported
Date Post Remedial Action Monitoring Began: Not reported

LUST SANTA CLARA:
Region: SANTA CLARA
SCVWD ID: 06S3W02G07F
Date Closed: 06/09/1995
EDR Link ID: 06S3W02G07F

HIST LUST SANTA CLARA:
Region: SANTA CLARA
Region Code: 2
SCVWD ID: 06S3W02G07
Oversite Agency: SCVWD
Date Listed: 1995-02-14 00:00:00
Closed Date: 1995-06-09 00:00:00

SWEEPS UST:
Status: Not reported
Comp Number: 4927
Number: Not reported
Board Of Equalization: Not reported
Referral Date: Not reported
Action Date: Not reported
Created Date: Not reported
Owner Tank Id: Not reported
SWRCB Tank Id: 43-006-004927-000001
Tank Status: Not reported
Capacity: 2000
Active Date: Not reported
Tank Use: M.V. FUEL
STG: PRODUCT
Content: PROBABLY GAS
Number Of Tanks: 4

Status: Not reported
Comp Number: 4927
Number: Not reported
Board Of Equalization: Not reported
Referral Date: Not reported
Action Date: Not reported
Created Date: Not reported
Owner Tank Id: Not reported
SWRCB Tank Id: 43-006-004927-000002
Tank Status: Not reported
Capacity: 2000
Active Date: Not reported

D & M MOTORS (Continued) **S102428571**

Tank Use: OIL
STG: WASTE
Content: WASTE OIL
Number Of Tanks: Not reported

Status: Not reported
Comp Number: 4927
Number: Not reported
Board Of Equalization: Not reported
Referral Date: Not reported
Action Date: Not reported
Created Date: Not reported
Owner Tank Id: Not reported
SWRCB Tank Id: 43-006-004927-000003
Tank Status: Not reported
Capacity: 2000
Active Date: Not reported
Tank Use: M.V. FUEL
STG: PRODUCT
Content: UNKNOWN
Number Of Tanks: Not reported

Status: Not reported
Comp Number: 4927
Number: Not reported
Board Of Equalization: Not reported
Referral Date: Not reported
Action Date: Not reported
Created Date: Not reported
Owner Tank Id: Not reported
SWRCB Tank Id: 43-006-004927-000004
Tank Status: Not reported
Capacity: 1
Active Date: Not reported
Tank Use: M.V. FUEL
STG: PRODUCT
Content: PROBABLY GAS
Number Of Tanks: Not reported

HIST CORTESE:
Region: CORTESE
Facility County Code: 43
Reg By: LTNKA
Reg Id: 43-2053

WIP:
Region: 4
File Number: 111.2014
File Status: Historical
Staff: JTANG
Facility Suite: 4

X105 **STEVE'S FOREIGN AUTO SERVICE** **LUST** **S102438112**
South **809 ALMA ST** **HIST LUST** **N/A**
1/4-1/2 **PALO ALTO, CA 94301** **HIST CORTESE**
0.335 mi.
1770 ft. **Site 1 of 3 in cluster X**

Relative:
Lower

Actual:
53 ft.

LUST:

Region:	STATE
Global Id:	T0608501375
Latitude:	37.4411325723277
Longitude:	-122.159535884857
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	01/08/1992
Lead Agency:	SANTA CLARA COUNTY LOP
Case Worker:	UST
Local Agency:	SANTA CLARA COUNTY LOP
RB Case Number:	Not reported
LOC Case Number:	Not reported
File Location:	All Files are on GeoTracker or in the Local Agency Database
Potential Media Affect:	Soil
Potential Contaminants of Concern:	Diesel
Site History:	Not reported

Click here to access the California GeoTracker records for this facility:

Contact:

Global Id:	T0608501375
Contact Type:	Regional Board Caseworker
Contact Name:	Regional Water Board
Organization Name:	SAN FRANCISCO BAY RWQCB (REGION 2)
Address:	1515 CLAY ST SUITE 1400
City:	OAKLAND
Email:	Not reported
Phone Number:	Not reported

Global Id:	T0608501375
Contact Type:	Local Agency Caseworker
Contact Name:	UST CASE WORKER
Organization Name:	SANTA CLARA COUNTY LOP
Address:	1555 Berger Drive, Suite 300
City:	SAN JOSE
Email:	Not reported
Phone Number:	4089183400

Status History:

Global Id:	T0608501375
Status:	Completed - Case Closed
Status Date:	01/08/1992

Global Id:	T0608501375
Status:	Open - Case Begin Date
Status Date:	05/30/1986

Global Id:	T0608501375
Status:	Open - Site Assessment
Status Date:	01/27/1991

STEVE'S FOREIGN AUTO SERVICE (Continued) **S102438112**

Regulatory Activities:

Global Id:	T0608501375
Action Type:	ENFORCEMENT
Date:	01/08/1992
Action:	Closure/No Further Action Letter

Global Id:	T0608501375
Action Type:	Other
Date:	05/30/1986
Action:	Leak Reported

Global Id:	T0608501375
Action Type:	RESPONSE
Date:	02/12/1986
Action:	Other Report / Document

Global Id:	T0608501375
Action Type:	ENFORCEMENT
Date:	10/22/1991
Action:	Notice of Responsibility - #40016

LUST REG 2:

Region:	2
Facility Id:	Not reported
Facility Status:	Case Closed
Case Number:	06S3W02F04f
How Discovered:	Not reported
Leak Cause:	Not reported
Leak Source:	Not reported
Date Leak Confirmed:	Not reported
Oversight Program:	LUST
Prelim. Site Assesment Wokplan Submitted:	Not reported
Preliminary Site Assesment Began:	1/27/1991
Pollution Characterization Began:	Not reported
Pollution Remediation Plan Submitted:	Not reported
Date Remediation Action Underway:	Not reported
Date Post Remedial Action Monitoring Began:	Not reported

LUST SANTA CLARA:

Region:	SANTA CLARA
SCVWD ID:	06S3W02F04F
Date Closed:	01/08/1992
EDR Link ID:	06S3W02F04F

HIST LUST SANTA CLARA:

Region:	SANTA CLARA
Region Code:	2
SCVWD ID:	06S3W02F04
Oversite Agency:	SCVWD
Date Listed:	1987-01-01 00:00:00
Closed Date:	1992-01-08 00:00:00

HIST CORTESE:

Region:	CORTESE

STEVE'S FOREIGN AUTO SERVICE (Continued) **S102438112**

Facility County Code: 43
Reg By: LTNKA
Reg Id: 43-1400

V106 **PALO ALTO FIRE STATION #1** **LUST** **S103880916**
West **301 ALMA ST** **HIST LUST** **N/A**
1/4-1/2 **PALO ALTO, CA 94304** **CUPA Listings**
0.348 mi. **HIST CORTESE**
1837 ft. **Site 2 of 2 in cluster V**

Relative:
Higher

Actual:
65 ft.

LUST:

Region:	STATE
Global Id:	T0608501024
Latitude:	37.4450850351804
Longitude:	-122.166059017181
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	08/16/1993
Lead Agency:	SANTA CLARA COUNTY LOP
Case Worker:	UST
Local Agency:	SANTA CLARA COUNTY LOP
RB Case Number:	Not reported
LOC Case Number:	Not reported
File Location:	All Files are on GeoTracker or in the Local Agency Database
Potential Media Affect:	Soil
Potential Contaminants of Concern:	Diesel
Site History:	Not reported

Click here to access the California GeoTracker records for this facility:

Contact:

Global Id:	T0608501024
Contact Type:	Regional Board Caseworker
Contact Name:	Regional Water Board
Organization Name:	SAN FRANCISCO BAY RWQCB (REGION 2)
Address:	1515 CLAY ST SUITE 1400
City:	OAKLAND
Email:	Not reported
Phone Number:	Not reported

Global Id:	T0608501024
Contact Type:	Local Agency Caseworker
Contact Name:	UST CASE WORKER
Organization Name:	SANTA CLARA COUNTY LOP
Address:	1555 Berger Drive, Suite 300
City:	SAN JOSE
Email:	Not reported
Phone Number:	4089183400

Status History:

Global Id:	T0608501024
Status:	Completed - Case Closed
Status Date:	08/16/1993

Global Id:	T0608501024
Status:	Open - Case Begin Date
Status Date:	03/31/1986

PALO ALTO FIRE STATION #1 (Continued) **S103880916**

Global Id: T0608501024
Status: Open - Site Assessment
Status Date: 06/24/1991

Regulatory Activities:
Global Id: T0608501024
Action Type: ENFORCEMENT
Date: 09/05/1990
Action: Notice of Responsibility - #40050

Global Id: T0608501024
Action Type: ENFORCEMENT
Date: 08/16/1993
Action: Closure/No Further Action Letter

Global Id: T0608501024
Action Type: Other
Date: 03/31/1986
Action: Leak Reported

Global Id: T0608501024
Action Type: RESPONSE
Date: 07/07/1993
Action: Other Report / Document

LUST REG 2:
Region: 2
Facility Id: Not reported
Facility Status: Case Closed
Case Number: 06S3W02D04f
How Discovered: Not reported
Leak Cause: Not reported
Leak Source: Not reported
Date Leak Confirmed: Not reported
Oversight Program: LUST
Prelim. Site Assesment Wokplan Submitted: Not reported
Preliminary Site Assesment Began: 6/24/1991
Pollution Characterization Began: Not reported
Pollution Remediation Plan Submitted: Not reported
Date Remediation Action Underway: Not reported
Date Post Remedial Action Monitoring Began: Not reported

LUST SANTA CLARA:
Region: SANTA CLARA
SCVWD ID: 06S3W02D04F
Date Closed: 08/16/1993
EDR Link ID: 06S3W02D04F

HIST LUST SANTA CLARA:
Region: SANTA CLARA
Region Code: 2
SCVWD ID: 06S3W02D04
Oversite Agency: SCVWD
Date Listed: 1987-01-01 00:00:00

PALO ALTO FIRE STATION #1 (Continued) **S103880916**

Closed Date: 1993-08-16 00:00:00

CUPA SANTA CLARA:
Region: SANTA CLARA
PE#: 2399
Program Description: UNDERGROUND STORAGE TANK PROGRAM RECORD
Latitude: 37.445041
Longitude: -122.166283

HIST CORTESE:
Region: CORTESE
Facility County Code: 43
Reg By: LTNKA
Reg Id: 43-1029

Y107 **CITY OF PALO ALTO (SIDEWALK)** **LUST** **S103474350**
West **291 ALMA ST** **HIST LUST** **N/A**
1/4-1/2 **PALO ALTO, CA 94301**
0.350 mi.
1847 ft. **Site 1 of 3 in cluster Y**

Relative:
Higher

Actual:
65 ft.

LUST REG 2:
Region: 2
Facility Id: Not reported
Facility Status: Case Closed
Case Number: 06S3W02D01f
How Discovered: Not reported
Leak Cause: Not reported
Leak Source: Not reported
Date Leak Confirmed: Not reported
Oversight Program: LUST
Prelim. Site Assesment Wokplan Submitted: Not reported
Preliminary Site Assesment Began: 11/10/1995
Pollution Characterization Began: 11/10/1995
Pollution Remediation Plan Submitted: Not reported
Date Remediation Action Underway: Not reported
Date Post Remedial Action Monitoring Began: Not reported

HIST LUST SANTA CLARA:
Region: SANTA CLARA
Region Code: 2
SCVWD ID: 06S3W02D01
Oversite Agency: SCVWD
Date Listed: 1988-01-01 00:00:00
Closed Date: 2002-10-02 00:00:00

Y108 **COLDWELL BANKER** **LUST** **S103950344**
West **291 ALMA ST** **HIST LUST** **N/A**
1/4-1/2 **PALO ALTO, CA 94301** **HIST CORTESE**
0.350 mi.
1847 ft. **Site 2 of 3 in cluster Y**

Relative:
Higher

Actual:
65 ft.

LUST:

Region:	STATE
Global Id:	T0608502110
Latitude:	37.445316
Longitude:	-122.166531
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	10/02/2002
Lead Agency:	SANTA CLARA COUNTY LOP
Case Worker:	UST
Local Agency:	SANTA CLARA COUNTY LOP
RB Case Number:	Not reported
LOC Case Number:	Not reported
File Location:	All Files are on GeoTracker or in the Local Agency Database
Potential Media Affect:	Soil
Potential Contaminants of Concern:	Gasoline
Site History:	Not reported

Click here to access the California GeoTracker records for this facility:

Contact:

Global Id:	T0608502110
Contact Type:	Regional Board Caseworker
Contact Name:	Regional Water Board
Organization Name:	SAN FRANCISCO BAY RWQCB (REGION 2)
Address:	1515 CLAY ST SUITE 1400
City:	OAKLAND
Email:	Not reported
Phone Number:	Not reported

Global Id:	T0608502110
Contact Type:	Local Agency Caseworker
Contact Name:	UST CASE WORKER
Organization Name:	SANTA CLARA COUNTY LOP
Address:	1555 Berger Drive, Suite 300
City:	SAN JOSE
Email:	Not reported
Phone Number:	4089183400

Status History:

Global Id:	T0608502110
Status:	Completed - Case Closed
Status Date:	10/02/2002

Global Id:	T0608502110
Status:	Open - Case Begin Date
Status Date:	12/23/1987

Global Id:	T0608502110
Status:	Open - Site Assessment
Status Date:	11/10/1995

COLDWELL BANKER (Continued) **S103950344**

Regulatory Activities:

Global Id:	T0608502110
Action Type:	RESPONSE
Date:	01/25/2002
Action:	Preliminary Site Assessment Workplan
Global Id:	T0608502110
Action Type:	RESPONSE
Date:	06/06/1994
Action:	Other Report / Document
Global Id:	T0608502110
Action Type:	RESPONSE
Date:	01/14/2002
Action:	Verbal Communication
Global Id:	T0608502110
Action Type:	RESPONSE
Date:	04/15/2002
Action:	Preliminary Site Assessment Report
Global Id:	T0608502110
Action Type:	RESPONSE
Date:	12/28/2001
Action:	Soil and Water Investigation Workplan
Global Id:	T0608502110
Action Type:	ENFORCEMENT
Date:	06/24/1996
Action:	Notice of Responsibility - #40104
Global Id:	T0608502110
Action Type:	RESPONSE
Date:	07/19/1989
Action:	Other Report / Document
Global Id:	T0608502110
Action Type:	RESPONSE
Date:	06/06/1994
Action:	Other Report / Document
Global Id:	T0608502110
Action Type:	RESPONSE
Date:	07/18/2002
Action:	Correspondence
Global Id:	T0608502110
Action Type:	RESPONSE
Date:	01/05/1996
Action:	Tank Removal Report / UST Sampling Report
Global Id:	T0608502110
Action Type:	RESPONSE
Date:	03/09/1995
Action:	Tank Removal Report / UST Sampling Report
Global Id:	T0608502110

COLDWELL BANKER (Continued) **S103950344**

Action Type: RESPONSE
Date: 03/24/1995
Action: Tank Removal Report / UST Sampling Report

Global Id: T0608502110
Action Type: RESPONSE
Date: 11/10/1995
Action: Tank Removal Report / UST Sampling Report

Global Id: T0608502110
Action Type: RESPONSE
Date: 08/20/1987
Action: Tank Removal Report / UST Sampling Report

Global Id: T0608502110
Action Type: RESPONSE
Date: 07/08/2002
Action: Soil and Water Investigation Report

Global Id: T0608502110
Action Type: RESPONSE
Date: 01/21/1999
Action: Correspondence

Global Id: T0608502110
Action Type: RESPONSE
Date: 09/27/1990
Action: Other Report / Document

Global Id: T0608502110
Action Type: RESPONSE
Date: 07/19/1989
Action: Other Report / Document

Global Id: T0608502110
Action Type: Other
Date: 12/23/1987
Action: Leak Reported

Global Id: T0608502110
Action Type: ENFORCEMENT
Date: 02/01/2002
Action: Staff Letter - #38193

Global Id: T0608502110
Action Type: ENFORCEMENT
Date: 09/18/2001
Action: Staff Letter - #29182

Global Id: T0608502110
Action Type: ENFORCEMENT
Date: 10/02/2002
Action: Closure/No Further Action Letter

Global Id: T0608502110
Action Type: REMEDIATION
Date: 11/10/1995

COLDWELL BANKER (Continued) **S103950344**

Action: Excavation

Region: STATE
Global Id: T0608500441
Latitude: 37.4453576111293
Longitude: -122.166509628296
Case Type: LUST Cleanup Site
Status: Completed - Case Closed
Status Date: 02/01/1996
Lead Agency: SANTA CLARA COUNTY LOP
Case Worker: UST
Local Agency: SANTA CLARA COUNTY LOP
RB Case Number: Not reported
LOC Case Number: Not reported
File Location: All Files are on GeoTracker or in the Local Agency Database
Potential Media Affect: Soil
Potential Contaminants of Concern: Waste Oil / Motor / Hydraulic / Lubricating
Site History: Not reported

Click here to access the California GeoTracker records for this facility:

Contact:
Global Id: T0608500441
Contact Type: Regional Board Caseworker
Contact Name: Regional Water Board
Organization Name: SAN FRANCISCO BAY RWQCB (REGION 2)
Address: 1515 CLAY ST SUITE 1400
City: OAKLAND
Email: Not reported
Phone Number: Not reported

Global Id: T0608500441
Contact Type: Local Agency Caseworker
Contact Name: UST CASE WORKER
Organization Name: SANTA CLARA COUNTY LOP
Address: 1555 Berger Drive, Suite 300
City: SAN JOSE
Email: Not reported
Phone Number: 4089183400

Status History:
Global Id: T0608500441
Status: Completed - Case Closed
Status Date: 02/01/1996

Global Id: T0608500441
Status: Open - Case Begin Date
Status Date: 01/01/1995

Regulatory Activities:
Global Id: T0608500441
Action Type: RESPONSE
Date: 02/01/1996
Action: Other Report / Document

Global Id: T0608500441

COLDWELL BANKER (Continued) **S103950344**

Action Type: Other
Date: 01/01/1995
Action: Leak Reported

Global Id: T0608500441
Action Type: ENFORCEMENT
Date: 02/01/1996
Action: Closure/No Further Action Letter

LUST REG 2:
Region: 2
Facility Id: Not reported
Facility Status: Case Closed
Case Number: 06S3W02D08f
How Discovered: Not reported
Leak Cause: Not reported
Leak Source: Not reported
Date Leak Confirmed: Not reported
Oversight Program: LUST
Prelim. Site Assesment Wokplan Submitted: Not reported
Preliminary Site Assesment Began: Not reported
Pollution Characterization Began: Not reported
Pollution Remediation Plan Submitted: Not reported
Date Remediation Action Underway: Not reported
Date Post Remedial Action Monitoring Began: Not reported

LUST SANTA CLARA:
Region: SANTA CLARA
SCVWD ID: 06S3W02D01F
Date Closed: 10/02/2002
EDR Link ID: 06S3W02D01F

Region: SANTA CLARA
SCVWD ID: 06S3W02D08F
Date Closed: 02/01/1996
EDR Link ID: 06S3W02D08F

HIST LUST SANTA CLARA:
Region: SANTA CLARA
Region Code: 2
SCVWD ID: 06S3W02D08
Oversite Agency: SCVWD
Date Listed: 1996-02-01 00:00:00
Closed Date: 1996-02-01 00:00:00

HIST CORTESE:
Region: CORTESE
Facility County Code: 43
Reg By: LTNKA
Reg Id: 43-0390

Region: CORTESE
Facility County Code: 43
Reg By: LTNKA

COLDWELL BANKER (Continued) **S103950344**

Reg Id: 43-2297

X109 **D&B AUTOMOTIVE** **LUST** **S101303765**
South **841 ALMA ST** **HIST LUST** **N/A**
1/4-1/2 **PALO ALTO, CA 94301** **SWEEPS UST**
0.351 mi. **HIST CORTESE**
1853 ft. **Site 2 of 3 in cluster X**

Relative:
Lower

Actual:
52 ft.

LUST:

Region:	STATE
Global Id:	T0608500485
Latitude:	37.440839
Longitude:	-122.158829
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	06/22/1998
Lead Agency:	SANTA CLARA COUNTY LOP
Case Worker:	UST
Local Agency:	SANTA CLARA COUNTY LOP
RB Case Number:	Not reported
LOC Case Number:	Not reported
File Location:	All Files are on GeoTracker or in the Local Agency Database
Potential Media Affect:	Soil
Potential Contaminants of Concern:	Waste Oil / Motor / Hydraulic / Lubricating
Site History:	Not reported

Click here to access the California GeoTracker records for this facility:

Contact:

Global Id:	T0608500485
Contact Type:	Regional Board Caseworker
Contact Name:	Regional Water Board
Organization Name:	SAN FRANCISCO BAY RWQCB (REGION 2)
Address:	1515 CLAY ST SUITE 1400
City:	OAKLAND
Email:	Not reported
Phone Number:	Not reported

Global Id:	T0608500485
Contact Type:	Local Agency Caseworker
Contact Name:	UST CASE WORKER
Organization Name:	SANTA CLARA COUNTY LOP
Address:	1555 Berger Drive, Suite 300
City:	SAN JOSE
Email:	Not reported
Phone Number:	4089183400

Status History:

Global Id:	T0608500485
Status:	Completed - Case Closed
Status Date:	06/22/1998

Global Id:	T0608500485
Status:	Open - Case Begin Date
Status Date:	10/29/1985

Global Id:	T0608500485
Status:	Open - Site Assessment

D&B AUTOMOTIVE (Continued) **S101303765**

Status Date: 10/29/1985

Global Id: T0608500485
Status: Open - Site Assessment
Status Date: 06/21/1998

Regulatory Activities:
Global Id: T0608500485
Action Type: Other
Date: 03/13/1987
Action: Leak Reported

Global Id: T0608500485
Action Type: ENFORCEMENT
Date: 07/12/1989
Action: Notice of Responsibility - #40017

Global Id: T0608500485
Action Type: ENFORCEMENT
Date: 06/22/1998
Action: Closure/No Further Action Letter

Global Id: T0608500485
Action Type: RESPONSE
Date: 06/22/1998
Action: Other Report / Document

Global Id: T0608500485
Action Type: REMEDIATION
Date: 10/29/1985
Action: Excavation

LUST REG 2:
Region: 2
Facility Id: Not reported
Facility Status: Case Closed
Case Number: 06S3W02F05f
How Discovered: Not reported
Leak Cause: Not reported
Leak Source: Not reported
Date Leak Confirmed: Not reported
Oversight Program: LUST
Prelim. Site Assesment Wokplan Submitted: Not reported
Preliminary Site Assesment Began: 10/29/1985
Pollution Characterization Began: 6/22/1998
Pollution Remediation Plan Submitted: Not reported
Date Remediation Action Underway: Not reported
Date Post Remedial Action Monitoring Began: Not reported

LUST SANTA CLARA:
Region: SANTA CLARA
SCVWD ID: 06S3W02F05F
Date Closed: 06/22/1998
EDR Link ID: 06S3W02F05F

D&B AUTOMOTIVE (Continued) **S101303765**

HIST LUST SANTA CLARA:
- Region: SANTA CLARA
- Region Code: 2
- SCVWD ID: 06S3W02F05
- Oversite Agency: SCVWD
- Date Listed: 1988-01-01 00:00:00
- Closed Date: 1998-06-22 00:00:00

SWEEPS UST:
- Status: Not reported
- Comp Number: 5888
- Number: Not reported
- Board Of Equalization: Not reported
- Referral Date: Not reported
- Action Date: Not reported
- Created Date: Not reported
- Owner Tank Id: Not reported
- SWRCB Tank Id: 43-006-005888-000001
- Tank Status: Not reported
- Capacity: 50
- Active Date: Not reported
- Tank Use: OIL
- STG: PRODUCT
- Content: OIL
- Number Of Tanks: 1

HIST CORTESE:
- Region: CORTESE
- Facility County Code: 43
- Reg By: LTNKA
- Reg Id: 43-0435

X110 **LAWSON BROTHERS CLEANERS** **LUST** **S101542318**
South **853 ALMA ST** **SLIC** **N/A**
1/4-1/2 **PALO ALTO, CA 94301** **HIST LUST**
0.354 mi. **SWEEPS UST**
1868 ft. **Site 3 of 3 in cluster X** **HIST CORTESE**

Relative:
Lower

Actual:
52 ft.

LUST:
- Region: STATE
- Global Id: T0608500825
- Latitude: 37.4408855364671
- Longitude: -122.159144282341
- Case Type: LUST Cleanup Site
- Status: Completed - Case Closed
- Status Date: 12/06/1996
- Lead Agency: SANTA CLARA COUNTY LOP
- Case Worker: UST
- Local Agency: SANTA CLARA COUNTY LOP
- RB Case Number: Not reported
- LOC Case Number: Not reported
- File Location: All Files are on GeoTracker or in the Local Agency Database
- Potential Media Affect: Other Groundwater (uses other than drinking water)
- Potential Contaminants of Concern: Stoddard solvent / Mineral Spriits / Distillates
- Site History: Not reported

LAWSON BROTHERS CLEANERS (Continued) **S101542318**

Click here to access the California GeoTracker records for this facility:

Contact:

Global Id:	T0608500825
Contact Type:	Regional Board Caseworker
Contact Name:	Regional Water Board
Organization Name:	SAN FRANCISCO BAY RWQCB (REGION 2)
Address:	1515 CLAY ST SUITE 1400
City:	OAKLAND
Email:	Not reported
Phone Number:	Not reported

Global Id:	T0608500825
Contact Type:	Local Agency Caseworker
Contact Name:	UST CASE WORKER
Organization Name:	SANTA CLARA COUNTY LOP
Address:	1555 Berger Drive, Suite 300
City:	SAN JOSE
Email:	Not reported
Phone Number:	4089183400

Status History:

Global Id:	T0608500825
Status:	Completed - Case Closed
Status Date:	12/06/1996

Global Id:	T0608500825
Status:	Open - Case Begin Date
Status Date:	09/28/1988

Global Id:	T0608500825
Status:	Open - Site Assessment
Status Date:	12/12/1988

Global Id:	T0608500825
Status:	Open - Site Assessment
Status Date:	09/26/1995

Regulatory Activities:

Global Id:	T0608500825
Action Type:	RESPONSE
Date:	12/06/1996
Action:	Other Report / Document

Global Id:	T0608500825
Action Type:	ENFORCEMENT
Date:	10/14/1993
Action:	Staff Letter - #43-0808

Global Id:	T0608500825
Action Type:	ENFORCEMENT
Date:	12/06/1996
Action:	Closure/No Further Action Letter

Global Id:	T0608500825
Action Type:	Other

LAWSON BROTHERS CLEANERS (Continued) **S101542318**

Date: 09/28/1988
Action: Leak Reported

Global Id: T0608500825
Action Type: RESPONSE
Date: 09/18/1995
Action: Preliminary Site Assessment Report

Global Id: T0608500825
Action Type: ENFORCEMENT
Date: 09/24/1991
Action: Notice of Violation - #40015

Global Id: T0608500825
Action Type: ENFORCEMENT
Date: 07/13/1995
Action: Staff Letter - #29097

Global Id: T0608500825
Action Type: ENFORCEMENT
Date: 11/21/1995
Action: Staff Letter - #29100

Global Id: T0608500825
Action Type: ENFORCEMENT
Date: 07/01/1996
Action: Staff Letter - #29104

Global Id: T0608500825
Action Type: ENFORCEMENT
Date: 12/05/1994
Action: Staff Letter - #43-0808

Global Id: T0608500825
Action Type: REMEDIATION
Date: 10/30/1990
Action: Excavation

LUST REG 2:
Region: 2
Facility Id: Not reported
Facility Status: Case Closed
Case Number: 06S3W02F02f
How Discovered: Not reported
Leak Cause: Not reported
Leak Source: Not reported
Date Leak Confirmed: Not reported
Oversight Program: LUST
Prelim. Site Assesment Wokplan Submitted: Not reported
Preliminary Site Assesment Began: 12/12/1988
Pollution Characterization Began: 9/26/1995
Pollution Remediation Plan Submitted: Not reported
Date Remediation Action Underway: Not reported
Date Post Remedial Action Monitoring Began: Not reported

LAWSON BROTHERS CLEANERS (Continued) **S101542318**

LUST SANTA CLARA:
Region: SANTA CLARA
SCVWD ID: 06S3W02F02F
Date Closed: 12/06/1996
EDR Link ID: 06S3W02F02F

SLIC REG 2:
Region: 2
Facility ID: SLT2O198301
Facility Status: Leak being confirmed
Date Closed: Not reported
Local Case #: Not reported
How Discovered: Not reported
Leak Cause: Not reported
Leak Source: Not reported
Date Confirmed: Not reported
Date Prelim Site Assmnt Workplan Submitted: Not reported
Date Preliminary Site Assessment Began: Not reported
Date Pollution Characterization Began: Not reported
Date Remediation Plan Submitted: Not reported
Date Remedial Action Underway: Not reported
Date Post Remedial Action Monitoring Began: Not reported

HIST LUST SANTA CLARA:
Region: SANTA CLARA
Region Code: 2
SCVWD ID: 06S3W02F02
Oversite Agency: SCVWD
Date Listed: 1989-01-01 00:00:00
Closed Date: 1996-12-06 00:00:00

SWEEPS UST:
Status: Not reported
Comp Number: 42397
Number: Not reported
Board Of Equalization: Not reported
Referral Date: Not reported
Action Date: Not reported
Created Date: Not reported
Owner Tank Id: Not reported
SWRCB Tank Id: 43-006-042397-000001
Tank Status: Not reported
Capacity: 600
Active Date: Not reported
Tank Use: UNKNOWN
STG: PRODUCT
Content: STODDARD SOL
Number Of Tanks: 3

Status: Not reported
Comp Number: 42397
Number: Not reported
Board Of Equalization: Not reported
Referral Date: Not reported
Action Date: Not reported

LAWSON BROTHERS CLEANERS (Continued) **S101542318**

Created Date:	Not reported
Owner Tank Id:	Not reported
SWRCB Tank Id:	43-006-042397-000002
Tank Status:	Not reported
Capacity:	1000
Active Date:	Not reported
Tank Use:	HAZARDOUS
STG:	PRODUCT
Content:	STODDARD SOL
Number Of Tanks:	Not reported

Status:	Not reported
Comp Number:	42397
Number:	Not reported
Board Of Equalization:	Not reported
Referral Date:	Not reported
Action Date:	Not reported
Created Date:	Not reported
Owner Tank Id:	Not reported
SWRCB Tank Id:	43-006-042397-000003
Tank Status:	Not reported
Capacity:	250
Active Date:	Not reported
Tank Use:	HAZARDOUS
STG:	PRODUCT
Content:	STODDARD SOL
Number Of Tanks:	Not reported

HIST CORTESE:

Region:	CORTESE
Facility County Code:	43
Reg By:	LTNKA
Reg Id:	43-0808

Y111 **STANFORD B.M.W.** **LUST** **S103880915**
West **275 ALMA ST** **HIST LUST** **N/A**
1/4-1/2 **PALO ALTO, CA 94301** **HIST CORTESE**
0.356 mi.
1881 ft. **Site 3 of 3 in cluster Y**

Relative:
Higher

Actual:
65 ft.

LUST:

Region:	STATE
Global Id:	T0608501364
Latitude:	37.4456812937789
Longitude:	-122.166359424591
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	03/26/1996
Lead Agency:	SANTA CLARA COUNTY LOP
Case Worker:	UST
Local Agency:	SANTA CLARA COUNTY LOP
RB Case Number:	Not reported
LOC Case Number:	Not reported
File Location:	All Files are on GeoTracker or in the Local Agency Database
Potential Media Affect:	Soil
Potential Contaminants of Concern:	Waste Oil / Motor / Hydraulic / Lubricating
Site History:	Not reported

STANFORD B.M.W. (Continued) **S103880915**

Click here to access the California GeoTracker records for this facility:

Contact:

Global Id:	T0608501364
Contact Type:	Regional Board Caseworker
Contact Name:	Regional Water Board
Organization Name:	SAN FRANCISCO BAY RWQCB (REGION 2)
Address:	1515 CLAY ST SUITE 1400
City:	OAKLAND
Email:	Not reported
Phone Number:	Not reported

Global Id:	T0608501364
Contact Type:	Local Agency Caseworker
Contact Name:	UST CASE WORKER
Organization Name:	SANTA CLARA COUNTY LOP
Address:	1555 Berger Drive, Suite 300
City:	SAN JOSE
Email:	Not reported
Phone Number:	4089183400

Status History:

Global Id:	T0608501364
Status:	Completed - Case Closed
Status Date:	03/26/1996

Global Id:	T0608501364
Status:	Open - Case Begin Date
Status Date:	01/01/1992

Regulatory Activities:

Global Id:	T0608501364
Action Type:	Other
Date:	01/01/1992
Action:	Leak Reported

Global Id:	T0608501364
Action Type:	ENFORCEMENT
Date:	03/26/1996
Action:	Closure/No Further Action Letter

Global Id:	T0608501364
Action Type:	RESPONSE
Date:	03/26/1996
Action:	Other Report / Document

LUST REG 2:

Region:	2
Facility Id:	Not reported
Facility Status:	Case Closed
Case Number:	06S3W02D03f
How Discovered:	Not reported
Leak Cause:	Not reported
Leak Source:	Not reported

STANFORD B.M.W. (Continued) **S103880915**

Date Leak Confirmed: Not reported
Oversight Program: LUST
Prelim. Site Assesment Wokplan Submitted: Not reported
Preliminary Site Assesment Began: Not reported
Pollution Characterization Began: Not reported
Pollution Remediation Plan Submitted: Not reported
Date Remediation Action Underway: Not reported
Date Post Remedial Action Monitoring Began: Not reported

LUST SANTA CLARA:
Region: SANTA CLARA
SCVWD ID: 06S3W02D03F
Date Closed: 03/26/1996
EDR Link ID: 06S3W02D03F

HIST LUST SANTA CLARA:
Region: SANTA CLARA
Region Code: 2
SCVWD ID: 06S3W02D03
Oversite Agency: SCVWD
Date Listed: 1993-01-01 00:00:00
Closed Date: 1996-03-26 00:00:00

HIST CORTESE:
Region: CORTESE
Facility County Code: 43
Reg By: LTNKA
Reg Id: 43-1389

W112 **PENINSULA CREAMERY** **LUST** **S104161920**
SSE **900 HIGH** **HIST LUST** **N/A**
1/4-1/2 **PALO ALTO, CA 94302** **HIST UST**
0.374 mi. **HIST CORTESE**
1975 ft. **Site 3 of 3 in cluster W**

Relative:
Lower

Actual:
51 ft.

LUST:
Region: STATE
Global Id: T0608501643
Latitude: 37.440697
Longitude: -122.157375
Case Type: LUST Cleanup Site
Status: Completed - Case Closed
Status Date: 01/03/1997
Lead Agency: SANTA CLARA COUNTY LOP
Case Worker: UST
Local Agency: SANTA CLARA COUNTY LOP
RB Case Number: Not reported
LOC Case Number: Not reported
File Location: All Files are on GeoTracker or in the Local Agency Database
Potential Media Affect: Other Groundwater (uses other than drinking water)
Potential Contaminants of Concern: Gasoline
Site History: Not reported

Click here to access the California GeoTracker records for this facility:

Contact:
Global Id: T0608501643

PENINSULA CREAMERY (Continued) **S104161920**

Contact Type: Regional Board Caseworker
Contact Name: Regional Water Board
Organization Name: SAN FRANCISCO BAY RWQCB (REGION 2)
Address: 1515 CLAY ST SUITE 1400
City: OAKLAND
Email: Not reported
Phone Number: Not reported

Global Id: T0608501643
Contact Type: Local Agency Caseworker
Contact Name: UST CASE WORKER
Organization Name: SANTA CLARA COUNTY LOP
Address: 1555 Berger Drive, Suite 300
City: SAN JOSE
Email: Not reported
Phone Number: 4089183400

Status History:
Global Id: T0608501643
Status: Completed - Case Closed
Status Date: 01/03/1997

Global Id: T0608501643
Status: Open - Case Begin Date
Status Date: 01/01/1992

Regulatory Activities:
Global Id: T0608501643
Action Type: RESPONSE
Date: 01/03/1997
Action: Other Report / Document

Global Id: T0608501643
Action Type: ENFORCEMENT
Date: 01/03/1997
Action: Closure/No Further Action Letter

Global Id: T0608501643
Action Type: Other
Date: 01/01/1992
Action: Leak Reported

LUST REG 2:
Region: 2
Facility Id: Not reported
Facility Status: Case Closed
Case Number: 06S3W02G06f
How Discovered: Not reported
Leak Cause: Not reported
Leak Source: Not reported
Date Leak Confirmed: Not reported
Oversight Program: LUST
Prelim. Site Assesment Wokplan Submitted: Not reported
Preliminary Site Assesment Began: Not reported
Pollution Characterization Began: Not reported

PENINSULA CREAMERY (Continued) **S104161920**

Pollution Remediation Plan Submitted: Not reported
Date Remediation Action Underway: Not reported
Date Post Remedial Action Monitoring Began: Not reported

LUST SANTA CLARA:
Region: SANTA CLARA
SCVWD ID: 06S3W02G06F
Date Closed: 01/03/1997
EDR Link ID: 06S3W02G06F

HIST LUST SANTA CLARA:
Region: SANTA CLARA
Region Code: 2
SCVWD ID: 06S3W02G06
Oversite Agency: SCVWD
Date Listed: 1993-08-24 00:00:00
Closed Date: 1997-01-03 00:00:00

HIST UST:
File Number: 000206F2
URL: http://geotracker.waterboards.ca.gov/ustpdfs/pdf/000206F2.pdf
Region: Not reported
Facility ID: Not reported
Facility Type: Not reported
Other Type: Not reported
Contact Name: Not reported
Telephone: Not reported
Owner Name: Not reported
Owner Address: Not reported
Owner City,St,Zip: Not reported
Total Tanks: Not reported

Tank Num: Not reported
Container Num: Not reported
Year Installed: Not reported
Tank Capacity: Not reported
Tank Used for: Not reported
Type of Fuel: Not reported
Container Construction Thickness: Not reported
Leak Detection: Not reported

Click here for Geo Tracker PDF:

HIST CORTESE:
Region: CORTESE
Facility County Code: 43
Reg By: LTNKA
Reg Id: 43-1701

Z113 **901 ALMA STREET** **SLIC** **S118172395**
South **901 ALMA STREET** **N/A**
1/4-1/2 **PALO ALTO, CA 94301**
0.382 mi.
2016 ft. **Site 1 of 2 in cluster Z**

Relative:
Lower

Actual:
52 ft.

SLIC:

Region:	STATE
Facility Status:	**Completed - Case Closed**
Status Date:	07/14/1997
Global Id:	T10000007686
Lead Agency:	SAN FRANCISCO BAY RWQCB (REGION 2)
Lead Agency Case Number:	Not reported
Latitude:	37.44042
Longitude:	-122.15868
Case Type:	Cleanup Program Site
Case Worker:	UUU
Local Agency:	Not reported
RB Case Number:	43S0910
File Location:	Not reported
Potential Media Affected:	Not reported
Potential Contaminants of Concern:	Not reported
Site History:	Not reported

Click here to access the California GeoTracker records for this facility:

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114 **KEENAN LAND COMPANY** **LUST** **S101309086**
SSE **975 HIGH ST** **HIST LUST** **N/A**
1/4-1/2 **PALO ALTO, CA 94301** **HIST CORTESE**
0.396 mi.
2090 ft.

Relative:
Lower

Actual:
50 ft.

LUST:

Region:	STATE
Global Id:	T0608500802
Latitude:	37.4403403509923
Longitude:	-122.157196998596
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	12/28/1995
Lead Agency:	SANTA CLARA COUNTY LOP
Case Worker:	UST
Local Agency:	SANTA CLARA COUNTY LOP
RB Case Number:	Not reported
LOC Case Number:	Not reported
File Location:	All Files are on GeoTracker or in the Local Agency Database
Potential Media Affect:	Soil
Potential Contaminants of Concern:	Gasoline
Site History:	Not reported

Click here to access the California GeoTracker records for this facility:

Contact:

Global Id:	T0608500802
Contact Type:	Regional Board Caseworker
Contact Name:	Regional Water Board
Organization Name:	SAN FRANCISCO BAY RWQCB (REGION 2)
Address:	1515 CLAY ST SUITE 1400
City:	OAKLAND
Email:	Not reported

KEENAN LAND COMPANY (Continued) **S101309086**

Phone Number: Not reported

Global Id: T0608500802
Contact Type: Local Agency Caseworker
Contact Name: UST CASE WORKER
Organization Name: SANTA CLARA COUNTY LOP
Address: 1555 Berger Drive, Suite 300
City: SAN JOSE
Email: Not reported
Phone Number: 4089183400

Status History:
Global Id: T0608500802
Status: Completed - Case Closed
Status Date: 12/28/1995

Global Id: T0608500802
Status: Open - Case Begin Date
Status Date: 01/01/1988

Regulatory Activities:
Global Id: T0608500802
Action Type: RESPONSE
Date: 12/28/1995
Action: Other Report / Document

Global Id: T0608500802
Action Type: ENFORCEMENT
Date: 12/28/1995
Action: Closure/No Further Action Letter

Global Id: T0608500802
Action Type: Other
Date: 01/01/1988
Action: Leak Reported

LUST REG 2:
Region: 2
Facility Id: Not reported
Facility Status: Case Closed
Case Number: 06S3W02G04f
How Discovered: Not reported
Leak Cause: Not reported
Leak Source: Not reported
Date Leak Confirmed: Not reported
Oversight Program: LUST
Prelim. Site Assesment Wokplan Submitted: Not reported
Preliminary Site Assesment Began: Not reported
Pollution Characterization Began: Not reported
Pollution Remediation Plan Submitted: Not reported
Date Remediation Action Underway: Not reported
Date Post Remedial Action Monitoring Began: Not reported

LUST SANTA CLARA:

KEENAN LAND COMPANY (Continued) **S101309086**

Region: SANTA CLARA
SCVWD ID: 06S3W02G04F
Date Closed: 12/28/1995
EDR Link ID: 06S3W02G04F

HIST LUST SANTA CLARA:
Region: SANTA CLARA
Region Code: 2
SCVWD ID: 06S3W02G04
Oversite Agency: SCVWD
Date Listed: 1989-01-01 00:00:00
Closed Date: 1995-12-28 00:00:00

HIST CORTESE:
Region: CORTESE
Facility County Code: 43
Reg By: LTNKA
Reg Id: 43-0780

Z115 **WINSTON TIRE COMPANY** **LUST** **S103472944**
SSE **955 ALMA ST** **HIST LUST** **N/A**
1/4-1/2 **PALO ALTO, CA 94301** **HIST CORTESE**
0.414 mi.
2185 ft. **Site 2 of 2 in cluster Z**

Relative:
Lower

Actual:
52 ft.

LUST:
Region: STATE
Global Id: T0608501595
Latitude: 37.440017
Longitude: -122.157464
Case Type: LUST Cleanup Site
Status: Completed - Case Closed
Status Date: 10/30/1996
Lead Agency: SANTA CLARA COUNTY LOP
Case Worker: UST
Local Agency: SANTA CLARA COUNTY LOP
RB Case Number: Not reported
LOC Case Number: Not reported
File Location: All Files are on GeoTracker or in the Local Agency Database
Potential Media Affect: Other Groundwater (uses other than drinking water)
Potential Contaminants of Concern: Gasoline
Site History: Not reported

Click here to access the California GeoTracker records for this facility:

Contact:
Global Id: T0608501595
Contact Type: Regional Board Caseworker
Contact Name: Regional Water Board
Organization Name: SAN FRANCISCO BAY RWQCB (REGION 2)
Address: 1515 CLAY ST SUITE 1400
City: OAKLAND
Email: Not reported
Phone Number: Not reported

Global Id: T0608501595
Contact Type: Local Agency Caseworker

WINSTON TIRE COMPANY (Continued) **S103472944**

Contact Name: UST CASE WORKER
Organization Name: SANTA CLARA COUNTY LOP
Address: 1555 Berger Drive, Suite 300
City: SAN JOSE
Email: Not reported
Phone Number: 4089183400

Status History:
Global Id: T0608501595
Status: Completed - Case Closed
Status Date: 10/30/1996

Global Id: T0608501595
Status: Open - Case Begin Date
Status Date: 03/01/1991

Global Id: T0608501595
Status: Open - Site Assessment
Status Date: 03/01/1991

Global Id: T0608501595
Status: Open - Verification Monitoring
Status Date: 10/27/1994

Regulatory Activities:
Global Id: T0608501595
Action Type: RESPONSE
Date: 11/15/1996
Action: Monitoring Report - Quarterly

Global Id: T0608501595
Action Type: RESPONSE
Date: 10/30/1996
Action: Other Report / Document

Global Id: T0608501595
Action Type: RESPONSE
Date: 02/15/1996
Action: Soil and Water Investigation Report

Global Id: T0608501595
Action Type: ENFORCEMENT
Date: 10/30/1996
Action: Closure/No Further Action Letter

Global Id: T0608501595
Action Type: Other
Date: 09/30/1996
Action: Leak Reported

Global Id: T0608501595
Action Type: ENFORCEMENT
Date: 09/30/1996
Action: Staff Letter - #29148

Global Id: T0608501595

WINSTON TIRE COMPANY (Continued) **S103472944**

Action Type: ENFORCEMENT
Date: 11/17/1995
Action: Staff Letter - #29150

Global Id: T0608501595
Action Type: ENFORCEMENT
Date: 09/27/1996
Action: Notice of Responsibility - #40020

Global Id: T0608501595
Action Type: REMEDIATION
Date: 05/04/1992
Action: Soil Vapor Extraction (SVE)

LUST REG 2:
Region: 2
Facility Id: Not reported
Facility Status: Case Closed
Case Number: 06S3W02G01f
How Discovered: Not reported
Leak Cause: Not reported
Leak Source: Not reported
Date Leak Confirmed: Not reported
Oversight Program: LUST
Prelim. Site Assesment Wokplan Submitted: Not reported
Preliminary Site Assesment Began: 3/1/1991
Pollution Characterization Began: 3/1/1991
Pollution Remediation Plan Submitted: Not reported
Date Remediation Action Underway: Not reported
Date Post Remedial Action Monitoring Began: 10/27/1994

LUST SANTA CLARA:
Region: SANTA CLARA
SCVWD ID: 06S3W02G01F
Date Closed: 10/30/1996
EDR Link ID: 06S3W02G01F

HIST LUST SANTA CLARA:
Region: SANTA CLARA
Region Code: 2
SCVWD ID: 06S3W02G01
Oversite Agency: SCVWD
Date Listed: 1997-01-01 00:00:00
Closed Date: 1996-10-30 00:00:00

HIST CORTESE:
Region: CORTESE
Facility County Code: 43
Reg By: LTNKA
Reg Id: 43-1643

AA116 **CHEVRON #9-0136** **LUST** **S105030614**
SSW **745 EL CAMINO REAL** **HIST LUST** **N/A**
1/4-1/2 **PALO ALTO, CA 94301** **SWEEPS UST**
0.437 mi.
2305 ft. **Site 1 of 4 in cluster AA**

Relative:
Higher

Actual:
60 ft.

LUST REG 2:

Region:	2
Facility Id:	Not reported
Facility Status:	Post remedial action monitoring
Case Number:	06S3W02F01f
How Discovered:	Not reported
Leak Cause:	Not reported
Leak Source:	Not reported
Date Leak Confirmed:	Not reported
Oversight Program:	LUST
Prelim. Site Assesment Wokplan Submitted:	Not reported
Preliminary Site Assesment Began:	8/7/1984
Pollution Characterization Began:	10/16/1989
Pollution Remediation Plan Submitted:	Not reported
Date Remediation Action Underway:	Not reported
Date Post Remedial Action Monitoring Began:	3/27/1997

HIST LUST SANTA CLARA:

Region:	SANTA CLARA
Region Code:	2
SCVWD ID:	06S3W02F01
Oversite Agency:	SCVWD
Date Listed:	1985-01-01 00:00:00
Closed Date:	2004-12-08 00:00:00

SWEEPS UST:

Status:	Not reported
Comp Number:	61730
Number:	Not reported
Board Of Equalization:	Not reported
Referral Date:	Not reported
Action Date:	Not reported
Created Date:	Not reported
Owner Tank Id:	Not reported
SWRCB Tank Id:	43-006-061730-000001
Tank Status:	Not reported
Capacity:	10000
Active Date:	Not reported
Tank Use:	M.V. FUEL
STG:	PRODUCT
Content:	MID GRADE UN
Number Of Tanks:	6

Status:	Not reported
Comp Number:	61730
Number:	Not reported
Board Of Equalization:	Not reported
Referral Date:	Not reported
Action Date:	Not reported
Created Date:	Not reported
Owner Tank Id:	Not reported
SWRCB Tank Id:	43-006-061730-000002

CHEVRON #9-0136 (Continued) **S105030614**

Tank Status: Not reported
Capacity: 10000
Active Date: Not reported
Tank Use: M.V. FUEL
STG: PRODUCT
Content: FRM UNLEADED
Number Of Tanks: Not reported

Status: Not reported
Comp Number: 61730
Number: Not reported
Board Of Equalization: Not reported
Referral Date: Not reported
Action Date: Not reported
Created Date: Not reported
Owner Tank Id: Not reported
SWRCB Tank Id: 43-006-061730-000003
Tank Status: Not reported
Capacity: 10000
Active Date: Not reported
Tank Use: M.V. FUEL
STG: PRODUCT
Content: REG UNLEADED
Number Of Tanks: Not reported

Status: Not reported
Comp Number: 61730
Number: Not reported
Board Of Equalization: Not reported
Referral Date: Not reported
Action Date: Not reported
Created Date: Not reported
Owner Tank Id: Not reported
SWRCB Tank Id: 43-006-061730-000004
Tank Status: Not reported
Capacity: 10000
Active Date: Not reported
Tank Use: M.V. FUEL
STG: PRODUCT
Content: LEADED
Number Of Tanks: Not reported

Status: Not reported
Comp Number: 61730
Number: Not reported
Board Of Equalization: Not reported
Referral Date: Not reported
Action Date: Not reported
Created Date: Not reported
Owner Tank Id: Not reported
SWRCB Tank Id: 43-006-061730-000005
Tank Status: Not reported
Capacity: 1000
Active Date: Not reported
Tank Use: OIL
STG: PRODUCT
Content: MOTOR OIL

CHEVRON #9-0136 (Continued) **S105030614**

Number Of Tanks: Not reported

Status: Not reported
Comp Number: 61730
Number: Not reported
Board Of Equalization: Not reported
Referral Date: Not reported
Action Date: Not reported
Created Date: Not reported
Owner Tank Id: Not reported
SWRCB Tank Id: 43-006-061730-000006
Tank Status: Not reported
Capacity: 1000
Active Date: Not reported
Tank Use: OIL
STG: PRODUCT
Content: MOTOR OIL
Number Of Tanks: Not reported

AA117 **CHEVRON #9-0136** **LUST** **U001595831**
SSW **745 EL CAMINO REAL** **HIST UST** **N/A**
1/4-1/2 **PALO ALTO, CA 94301**
0.437 mi.
2305 ft. **Site 2 of 4 in cluster AA**

Relative:
Higher

Actual:
60 ft.

LUST:
Region: STATE
Global Id: T0608501568
Latitude: 37.4399442371794
Longitude: -122.162706255913
Case Type: LUST Cleanup Site
Status: Completed - Case Closed
Status Date: 12/08/2004
Lead Agency: SANTA CLARA COUNTY LOP
Case Worker: UST
Local Agency: SANTA CLARA COUNTY LOP
RB Case Number: Not reported
LOC Case Number: Not reported
File Location: All Files are on GeoTracker or in the Local Agency Database
Potential Media Affect: Other Groundwater (uses other than drinking water)
Potential Contaminants of Concern: Gasoline
Site History: Not reported

Click here to access the California GeoTracker records for this facility:

Contact:
Global Id: T0608501568
Contact Type: Regional Board Caseworker
Contact Name: Regional Water Board
Organization Name: SAN FRANCISCO BAY RWQCB (REGION 2)
Address: 1515 CLAY ST SUITE 1400
City: OAKLAND
Email: Not reported
Phone Number: Not reported

Global Id: T0608501568
Contact Type: Local Agency Caseworker
Contact Name: UST CASE WORKER

CHEVRON #9-0136 (Continued) **U001595831**

Organization Name: SANTA CLARA COUNTY LOP
Address: 1555 Berger Drive, Suite 300
City: SAN JOSE
Email: Not reported
Phone Number: 4089183400

Status History:
Global Id: T0608501568
Status: Completed - Case Closed
Status Date: 12/08/2004

Global Id: T0608501568
Status: Open - Case Begin Date
Status Date: 07/24/1984

Global Id: T0608501568
Status: Open - Site Assessment
Status Date: 08/07/1984

Global Id: T0608501568
Status: Open - Site Assessment
Status Date: 10/16/1989

Global Id: T0608501568
Status: Open - Verification Monitoring
Status Date: 03/27/1997

Regulatory Activities:
Global Id: T0608501568
Action Type: RESPONSE
Date: 10/31/1999
Action: Monitoring Report - Quarterly

Global Id: T0608501568
Action Type: RESPONSE
Date: 01/30/1997
Action: Monitoring Report - Quarterly

Global Id: T0608501568
Action Type: RESPONSE
Date: 10/04/1996
Action: Remedial Progress Report

Global Id: T0608501568
Action Type: RESPONSE
Date: 07/30/1996
Action: Monitoring Report - Quarterly

Global Id: T0608501568
Action Type: RESPONSE
Date: 10/30/1996
Action: Monitoring Report - Quarterly

Global Id: T0608501568
Action Type: RESPONSE
Date: 04/30/1996

CHEVRON #9-0136 (Continued) **U001595831**

Action: Monitoring Report - Quarterly

Global Id: T0608501568
Action Type: RESPONSE
Date: 02/15/1996
Action: Other Report / Document

Global Id: T0608501568
Action Type: RESPONSE
Date: 01/11/1996
Action: Soil and Water Investigation Report

Global Id: T0608501568
Action Type: RESPONSE
Date: 08/23/1995
Action: Interim Remedial Action Plan

Global Id: T0608501568
Action Type: RESPONSE
Date: 12/19/1994
Action: Other Report / Document

Global Id: T0608501568
Action Type: RESPONSE
Date: 06/20/1994
Action: Soil and Water Investigation Report

Global Id: T0608501568
Action Type: RESPONSE
Date: 10/30/2002
Action: Monitoring Report - Quarterly

Global Id: T0608501568
Action Type: RESPONSE
Date: 01/30/2003
Action: Monitoring Report - Quarterly

Global Id: T0608501568
Action Type: RESPONSE
Date: 04/30/2003
Action: Monitoring Report - Quarterly

Global Id: T0608501568
Action Type: RESPONSE
Date: 07/31/2003
Action: Monitoring Report - Quarterly

Global Id: T0608501568
Action Type: RESPONSE
Date: 07/30/2002
Action: Monitoring Report - Quarterly

Global Id: T0608501568
Action Type: RESPONSE
Date: 01/30/1999
Action: Monitoring Report - Quarterly

CHEVRON #9-0136 (Continued) **U001595831**

Global Id: T0608501568
Action Type: RESPONSE
Date: 06/11/1993
Action: Soil and Water Investigation Report

Global Id: T0608501568
Action Type: RESPONSE
Date: 10/30/1998
Action: Monitoring Report - Quarterly

Global Id: T0608501568
Action Type: RESPONSE
Date: 08/28/1997
Action: Monitoring Report - Quarterly

Global Id: T0608501568
Action Type: RESPONSE
Date: 03/31/1997
Action: Corrective Action Plan / Remedial Action Plan

Global Id: T0608501568
Action Type: RESPONSE
Date: 03/06/1997
Action: Other Report / Document

Global Id: T0608501568
Action Type: RESPONSE
Date: 03/05/1997
Action: Other Report / Document

Global Id: T0608501568
Action Type: RESPONSE
Date: 03/03/1997
Action: Other Report / Document

Global Id: T0608501568
Action Type: RESPONSE
Date: 07/31/1999
Action: Soil and Water Investigation Report

Global Id: T0608501568
Action Type: RESPONSE
Date: 12/13/2001
Action: Monitoring Report - Quarterly

Global Id: T0608501568
Action Type: RESPONSE
Date: 04/30/1999
Action: Monitoring Report - Quarterly

Global Id: T0608501568
Action Type: RESPONSE
Date: 12/27/1993
Action: Interim Remedial Action Plan

Global Id: T0608501568
Action Type: RESPONSE

CHEVRON #9-0136 (Continued) **U001595831**

Date: 11/04/1993
Action: Other Report / Document

Global Id: T0608501568
Action Type: RESPONSE
Date: 08/11/1989
Action: Proposed Plan

Global Id: T0608501568
Action Type: RESPONSE
Date: 05/08/2001
Action: Soil and Water Investigation Workplan

Global Id: T0608501568
Action Type: RESPONSE
Date: 11/15/2004
Action: Well Destruction Report

Global Id: T0608501568
Action Type: RESPONSE
Date: 01/21/1999
Action: Correspondence

Global Id: T0608501568
Action Type: RESPONSE
Date: 11/22/2000
Action: Monitoring Report - Quarterly

Global Id: T0608501568
Action Type: ENFORCEMENT
Date: 05/01/1985
Action: Notice of Responsibility - #40052

Global Id: T0608501568
Action Type: ENFORCEMENT
Date: 09/26/1996
Action: Staff Letter - #29055

Global Id: T0608501568
Action Type: ENFORCEMENT
Date: 02/13/1996
Action: Staff Letter - #29049

Global Id: T0608501568
Action Type: ENFORCEMENT
Date: 12/01/1994
Action: Staff Letter - #29043

Global Id: T0608501568
Action Type: ENFORCEMENT
Date: 04/01/2002
Action: Staff Letter - #38286

Global Id: T0608501568
Action Type: ENFORCEMENT
Date: 09/04/1998
Action: Staff Letter - #29079

CHEVRON #9-0136 (Continued) **U001595831**

Global Id: T0608501568
Action Type: ENFORCEMENT
Date: 03/27/1997
Action: Staff Letter - #29069

Global Id: T0608501568
Action Type: ENFORCEMENT
Date: 03/02/1997
Action: Staff Letter - #29061

Global Id: T0608501568
Action Type: ENFORCEMENT
Date: 12/22/1993
Action: Staff Letter - #29039

Global Id: T0608501568
Action Type: RESPONSE
Date: 10/23/1993
Action: Other Report / Document

Global Id: T0608501568
Action Type: RESPONSE
Date: 06/18/2003
Action: Other Report / Document

Global Id: T0608501568
Action Type: RESPONSE
Date: 04/16/1985
Action: Tank Removal Report / UST Sampling Report

Global Id: T0608501568
Action Type: RESPONSE
Date: 08/21/1995
Action: Proposed Plan

Global Id: T0608501568
Action Type: RESPONSE
Date: 11/02/1993
Action: Other Report / Document

Global Id: T0608501568
Action Type: RESPONSE
Date: 10/17/2002
Action: Preliminary Site Assessment Report

Global Id: T0608501568
Action Type: RESPONSE
Date: 01/14/2003
Action: Other Report / Document

Global Id: T0608501568
Action Type: RESPONSE
Date: 02/03/2004
Action: Correspondence

Global Id: T0608501568
Action Type: RESPONSE

CHEVRON #9-0136 (Continued) **U001595831**

Date: 09/30/1993
Action: Tank Removal Report / UST Sampling Report

Global Id: T0608501568
Action Type: RESPONSE
Date: 01/15/1995
Action: Well Installation Report

Global Id: T0608501568
Action Type: RESPONSE
Date: 03/12/1986
Action: Unauthorized Release Form

Global Id: T0608501568
Action Type: RESPONSE
Date: 12/01/1994
Action: Soil and Water Investigation Report

Global Id: T0608501568
Action Type: RESPONSE
Date: 09/16/1997
Action: Other Report / Document

Global Id: T0608501568
Action Type: RESPONSE
Date: 03/28/1997
Action: CAP/RAP - Other Report

Global Id: T0608501568
Action Type: RESPONSE
Date: 03/24/1999
Action: Verbal Communication

Global Id: T0608501568
Action Type: RESPONSE
Date: 01/27/2004
Action: Other Report / Document

Global Id: T0608501568
Action Type: RESPONSE
Date: 12/22/1993
Action: Corrective Action Plan / Remedial Action Plan

Global Id: T0608501568
Action Type: RESPONSE
Date: 11/22/2000
Action: Monitoring Report - Quarterly

Global Id: T0608501568
Action Type: Other
Date: 07/24/1984
Action: Leak Reported

Global Id: T0608501568
Action Type: RESPONSE
Date: 10/19/1989
Action: Preliminary Site Assessment Report

CHEVRON #9-0136 (Continued) **U001595831**

Global Id: T0608501568
Action Type: ENFORCEMENT
Date: 03/28/1997
Action: Closure/No Further Action Letter

Global Id: T0608501568
Action Type: ENFORCEMENT
Date: 06/09/1993
Action: Staff Letter - #29034

Global Id: T0608501568
Action Type: ENFORCEMENT
Date: 10/16/1989
Action: Staff Letter - #29032

Global Id: T0608501568
Action Type: ENFORCEMENT
Date: 12/20/1996
Action: Staff Letter - #29059

Global Id: T0608501568
Action Type: ENFORCEMENT
Date: 06/14/1996
Action: Staff Letter - #29053

Global Id: T0608501568
Action Type: ENFORCEMENT
Date: 03/19/1996
Action: Staff Letter - #29051

Global Id: T0608501568
Action Type: ENFORCEMENT
Date: 01/15/1996
Action: Staff Letter - #29047

Global Id: T0608501568
Action Type: ENFORCEMENT
Date: 08/18/1995
Action: Staff Letter - #29045

Global Id: T0608501568
Action Type: ENFORCEMENT
Date: 06/15/1994
Action: Staff Letter - #29041

Global Id: T0608501568
Action Type: ENFORCEMENT
Date: 07/01/2002
Action: Staff Letter - #38821

Global Id: T0608501568
Action Type: ENFORCEMENT
Date: 12/07/1998
Action: Staff Letter - #29081

Global Id: T0608501568
Action Type: ENFORCEMENT

CHEVRON #9-0136 (Continued) **U001595831**

Date: 08/27/1997
Action: Staff Letter - #29074

Global Id: T0608501568
Action Type: ENFORCEMENT
Date: 08/03/1997
Action: Staff Letter - #29072

Global Id: T0608501568
Action Type: ENFORCEMENT
Date: 03/06/1997
Action: Staff Letter - #29067

Global Id: T0608501568
Action Type: ENFORCEMENT
Date: 03/05/1997
Action: Staff Letter - #29065

Global Id: T0608501568
Action Type: ENFORCEMENT
Date: 05/02/1999
Action: Staff Letter - #29085

Global Id: T0608501568
Action Type: ENFORCEMENT
Date: 02/25/1999
Action: Staff Letter - #29083

Global Id: T0608501568
Action Type: ENFORCEMENT
Date: 10/21/1993
Action: Staff Letter - #29037

Global Id: T0608501568
Action Type: REMEDIATION
Date: 12/20/1993
Action: Excavation

Global Id: T0608501568
Action Type: REMEDIATION
Date: 12/20/1993
Action: Soil Vapor Extraction (SVE)

HIST UST:
File Number: 0002CFD2
URL: http://geotracker.waterboards.ca.gov/ustpdfs/pdf/0002CFD2.pdf
Region: STATE
Facility ID: 00000061730
Facility Type: Gas Station
Other Type: Not reported
Contact Name: CO BRANDED OUTLET-CHEVRON
Telephone: 4153290636
Owner Name: CHEVRON U.S.A. INC.
Owner Address: 575 MARKET
Owner City,St,Zip: SAN FRANCISCO, CA 94105
Total Tanks: 0004

CHEVRON #9-0136 (Continued) **U001595831**

Tank Num:	001
Container Num:	1
Year Installed:	Not reported
Tank Capacity:	00001000
Tank Used for:	WASTE
Type of Fuel:	Not reported
Container Construction Thickness:	0000250
Leak Detection:	Stock Inventor

Tank Num:	002
Container Num:	2
Year Installed:	Not reported
Tank Capacity:	00010000
Tank Used for:	PRODUCT
Type of Fuel:	Not reported
Container Construction Thickness:	0000250
Leak Detection:	Stock Inventor

Tank Num:	003
Container Num:	3
Year Installed:	Not reported
Tank Capacity:	00010000
Tank Used for:	PRODUCT
Type of Fuel:	Not reported
Container Construction Thickness:	0000250
Leak Detection:	Stock Inventor

Tank Num:	004
Container Num:	4
Year Installed:	Not reported
Tank Capacity:	00010000
Tank Used for:	PRODUCT
Type of Fuel:	Not reported
Container Construction Thickness:	0000250
Leak Detection:	Stock Inventor

Click here for Geo Tracker PDF:

AA118 **CHEVRON** **HIST CORTESE** **S110060594**
SSW **745 EL CAMINO REAL** **N/A**
1/4-1/2 **PALO ALTO, CA 94301**
0.437 mi.
2305 ft. **Site 3 of 4 in cluster AA**

Relative:
Higher

Actual:
60 ft.

HIST CORTESE:

Region:	CORTESE
Facility County Code:	43
Reg By:	LTNKA
Reg Id:	43-1613

AA119 **CHEVRON USA INC** **LUST** **S101594410**
SSW **745 EL CAMINO REAL** **CA FID UST** **N/A**
1/4-1/2 **PALO ALTO, CA 94301**
0.437 mi.
2305 ft. **Site 4 of 4 in cluster AA**

Relative:
Higher

Actual:
60 ft.

LUST SANTA CLARA:

Region:	SANTA CLARA
SCVWD ID:	06S3W02F01F
Date Closed:	12/08/2004
EDR Link ID:	06S3W02F01F

CA FID UST:

Facility ID:	43000532
Regulated By:	UTNKA
Regulated ID:	00061730
Cortese Code:	Not reported
SIC Code:	Not reported
Facility Phone:	4153290636
Mail To:	Not reported
Mailing Address:	P O BOX
Mailing Address 2:	Not reported
Mailing City,St,Zip:	PALO ALTO 94301
Contact:	Not reported
Contact Phone:	Not reported
DUNs Number:	Not reported
NPDES Number:	Not reported
EPA ID:	Not reported
Comments:	Not reported
Status:	Active

---

120 **MORRIS AUTO PARTS** **LUST** **S100234826**
SSE **999 ALMA** **HIST LUST** **N/A**
1/4-1/2 **PALO ALTO, CA 94301** **HIST CORTESE**
0.446 mi.
2356 ft.

Relative:
Lower

Actual:
52 ft.

LUST:

Region:	STATE
Global Id:	T0608500960
Latitude:	37.439793
Longitude:	-122.157048
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	01/11/2000
Lead Agency:	SANTA CLARA COUNTY LOP
Case Worker:	UST
Local Agency:	SANTA CLARA COUNTY LOP
RB Case Number:	Not reported
LOC Case Number:	Not reported
File Location:	All Files are on GeoTracker or in the Local Agency Database
Potential Media Affect:	Other Groundwater (uses other than drinking water)
Potential Contaminants of Concern:	Gasoline
Site History:	Not reported

Click here to access the California GeoTracker records for this facility:

Contact:

Global Id:	T0608500960
Contact Type:	Regional Board Caseworker

MORRIS AUTO PARTS (Continued) **S100234826**

Contact Name: Regional Water Board
Organization Name: SAN FRANCISCO BAY RWQCB (REGION 2)
Address: 1515 CLAY ST SUITE 1400
City: OAKLAND
Email: Not reported
Phone Number: Not reported

Global Id: T0608500960
Contact Type: Local Agency Caseworker
Contact Name: UST CASE WORKER
Organization Name: SANTA CLARA COUNTY LOP
Address: 1555 Berger Drive, Suite 300
City: SAN JOSE
Email: Not reported
Phone Number: 4089183400

Status History:
Global Id: T0608500960
Status: Completed - Case Closed
Status Date: 01/11/2000

Global Id: T0608500960
Status: Open - Case Begin Date
Status Date: 02/05/1986

Global Id: T0608500960
Status: Open - Site Assessment
Status Date: 02/05/1986

Regulatory Activities:
Global Id: T0608500960
Action Type: RESPONSE
Date: 10/24/1999
Action: Soil and Water Investigation Report

Global Id: T0608500960
Action Type: RESPONSE
Date: 07/30/1999
Action: Soil and Water Investigation Workplan

Global Id: T0608500960
Action Type: Other
Date: 03/03/1987
Action: Leak Reported

Global Id: T0608500960
Action Type: ENFORCEMENT
Date: 11/19/1996
Action: Notice of Responsibility - #40021

Global Id: T0608500960
Action Type: ENFORCEMENT
Date: 07/26/1999
Action: Staff Letter - #29155

Global Id: T0608500960

MORRIS AUTO PARTS (Continued) **S100234826**

Action Type: ENFORCEMENT
Date: 06/15/1999
Action: Staff Letter - #29153

LUST REG 2:
Region: 2
Facility Id: Not reported
Facility Status: Case Closed
Case Number: 06S3W02G02f
How Discovered: Not reported
Leak Cause: Not reported
Leak Source: Not reported
Date Leak Confirmed: Not reported
Oversight Program: LUST
Prelim. Site Assesment Wokplan Submitted: Not reported
Preliminary Site Assesment Began: 2/5/1986
Pollution Characterization Began: Not reported
Pollution Remediation Plan Submitted: Not reported
Date Remediation Action Underway: Not reported
Date Post Remedial Action Monitoring Began: Not reported

HIST LUST SANTA CLARA:
Region: SANTA CLARA
Region Code: 2
SCVWD ID: 06S3W02G02
Oversite Agency: SCVWD
Date Listed: 1988-01-01 00:00:00
Closed Date: 2000-01-11 00:00:00

HIST CORTESE:
Region: CORTESE
Facility County Code: 43
Reg By: LTNKA
Reg Id: 43-0955

121
South
1/4-1/2
0.492 mi.
2596 ft.

Relative:
Higher

Actual:
58 ft.

CLOUDBURST CAR WASH
841 EL CAMINO REAL
PALO ALTO, CA 94301

LUST **1000424414**
HIST LUST **N/A**
SWEEPS UST
HIST UST
CA FID UST
HIST CORTESE

LUST:
Region: STATE
Global Id: T0608500433
Latitude: 37.438986
Longitude: -122.160988
Case Type: LUST Cleanup Site
Status: Completed - Case Closed
Status Date: 01/25/2000
Lead Agency: SANTA CLARA COUNTY LOP
Case Worker: UST
Local Agency: SANTA CLARA COUNTY LOP
RB Case Number: Not reported
LOC Case Number: Not reported

CLOUDBURST CAR WASH (Continued) **1000424414**

File Location: All Files are on GeoTracker or in the Local Agency Database
Potential Media Affect: Other Groundwater (uses other than drinking water)
Potential Contaminants of Concern: Gasoline
Site History: Not reported

Click here to access the California GeoTracker records for this facility:

Contact:
Global Id: T0608500433
Contact Type: Regional Board Caseworker
Contact Name: Regional Water Board
Organization Name: SAN FRANCISCO BAY RWQCB (REGION 2)
Address: 1515 CLAY ST SUITE 1400
City: OAKLAND
Email: Not reported
Phone Number: Not reported

Global Id: T0608500433
Contact Type: Local Agency Caseworker
Contact Name: UST CASE WORKER
Organization Name: SANTA CLARA COUNTY LOP
Address: 1555 Berger Drive, Suite 300
City: SAN JOSE
Email: Not reported
Phone Number: 4089183400

Status History:
Global Id: T0608500433
Status: Completed - Case Closed
Status Date: 01/25/2000

Global Id: T0608500433
Status: Open - Case Begin Date
Status Date: 05/28/1986

Global Id: T0608500433
Status: Open - Site Assessment
Status Date: 09/18/1991

Global Id: T0608500433
Status: Open - Site Assessment
Status Date: 12/15/1993

Regulatory Activities:
Global Id: T0608500433
Action Type: RESPONSE
Date: 10/20/1993
Action: Other Report / Document

Global Id: T0608500433
Action Type: RESPONSE
Date: 01/25/2000
Action: Other Report / Document

Global Id: T0608500433
Action Type: Other
Date: 05/28/1986

CLOUDBURST CAR WASH (Continued) **1000424414**

Action: Leak Reported

Global Id: T0608500433
Action Type: ENFORCEMENT
Date: 05/03/1994
Action: Notice of Violation - #40022

Global Id: T0608500433
Action Type: ENFORCEMENT
Date: 01/25/2000
Action: Closure/No Further Action Letter

Global Id: T0608500433
Action Type: REMEDIATION
Date: 05/09/1991
Action: Excavation

Global Id: T0608500433
Action Type: REMEDIATION
Date: 05/09/1991
Action: Excavation

LUST REG 2:
Region: 2
Facility Id: Not reported
Facility Status: Case Closed
Case Number: 06S3W02L01f
How Discovered: Not reported
Leak Cause: Not reported
Leak Source: Not reported
Date Leak Confirmed: Not reported
Oversight Program: LUST
Prelim. Site Assesment Wokplan Submitted: Not reported
Preliminary Site Assesment Began: 9/18/1991
Pollution Characterization Began: 12/15/1993
Pollution Remediation Plan Submitted: Not reported
Date Remediation Action Underway: Not reported
Date Post Remedial Action Monitoring Began: Not reported

LUST SANTA CLARA:
Region: SANTA CLARA
SCVWD ID: 06S3W02L01F
Date Closed: 01/25/2000
EDR Link ID: 06S3W02L01F

HIST LUST SANTA CLARA:
Region: SANTA CLARA
Region Code: 2
SCVWD ID: 06S3W02L01
Oversite Agency: SCVWD
Date Listed: 1991-07-19 00:00:00
Closed Date: 2000-01-25 00:00:00

SWEEPS UST:

CLOUDBURST CAR WASH (Continued) **1000424414**

Status: Not reported
Comp Number: 8517
Number: Not reported
Board Of Equalization: 44-013762
Referral Date: Not reported
Action Date: Not reported
Created Date: Not reported
Owner Tank Id: Not reported
SWRCB Tank Id: 43-006-008517-000001
Tank Status: Not reported
Capacity: 12000
Active Date: Not reported
Tank Use: M.V. FUEL
STG: PRODUCT
Content: REG UNLEADED
Number Of Tanks: 3

Status: Not reported
Comp Number: 8517
Number: Not reported
Board Of Equalization: 44-013762
Referral Date: Not reported
Action Date: Not reported
Created Date: Not reported
Owner Tank Id: Not reported
SWRCB Tank Id: 43-006-008517-000002
Tank Status: Not reported
Capacity: 12000
Active Date: Not reported
Tank Use: M.V. FUEL
STG: PRODUCT
Content: LEADED
Number Of Tanks: Not reported

Status: Not reported
Comp Number: 8517
Number: Not reported
Board Of Equalization: 44-013762
Referral Date: Not reported
Action Date: Not reported
Created Date: Not reported
Owner Tank Id: Not reported
SWRCB Tank Id: 43-006-008517-000003
Tank Status: Not reported
Capacity: 12000
Active Date: Not reported
Tank Use: M.V. FUEL
STG: PRODUCT
Content: REG UNLEADED
Number Of Tanks: Not reported

HIST UST:
File Number: Not reported
URL: Not reported
Region: STATE
Facility ID: 00000008517
Facility Type: Gas Station

CLOUDBURST CAR WASH (Continued) **1000424414**

Other Type: CARWASH WITH FUEL
Contact Name: VAN JULIAN
Telephone: 4153280898
Owner Name: FREE CAR WASH DBA. CLOUDBURST
Owner Address: 1710 NOVATO BLVD.
Owner City,St,Zip: NOVATO, CA 94947
Total Tanks: 0002

Tank Num: 001
Container Num: 001
Year Installed: 1972
Tank Capacity: 00010000
Tank Used for: PRODUCT
Type of Fuel: UNLEADED
Container Construction Thickness: 1/4
Leak Detection: 10

Tank Num: 002
Container Num: 002
Year Installed: 1972
Tank Capacity: 00010000
Tank Used for: PRODUCT
Type of Fuel: REGULAR
Container Construction Thickness: 1/4
Leak Detection: 10

CA FID UST:
Facility ID: 43000570
Regulated By: UTNKI
Regulated ID: 00008517
Cortese Code: Not reported
SIC Code: Not reported
Facility Phone: 4158979601
Mail To: Not reported
Mailing Address: 1710 NOVATO BLVD
Mailing Address 2: Not reported
Mailing City,St,Zip: PALO ALTO 94301
Contact: Not reported
Contact Phone: Not reported
DUNs Number: Not reported
NPDES Number: Not reported
EPA ID: Not reported
Comments: Not reported
Status: Inactive

HIST CORTESE:
Region: CORTESE
Facility County Code: 43
Reg By: LTNKA
Reg Id: 43-0382

122
West
1/2-1
0.639 mi.
3374 ft.

PHOTOTIME, INC.
138 STANFORD SHOPPING CTR
PALO ALTO, CA 94304

ENVIROSTOR **S110494159**
N/A

Relative:
Higher

Actual:
73 ft.

ENVIROSTOR:

Facility ID:	71003258
Status:	Inactive - Needs Evaluation
Status Date:	Not reported
Site Code:	Not reported
Site Type:	Tiered Permit
Site Type Detailed:	Tiered Permit
Acres:	Not reported
NPL:	NO
Regulatory Agencies:	NONE SPECIFIED
Lead Agency:	NONE SPECIFIED
Program Manager:	Not reported
Supervisor:	Not reported
Division Branch:	Cleanup Berkeley
Assembly:	24
Senate:	13
Special Program:	Not reported
Restricted Use:	NO
Site Mgmt Req:	NONE SPECIFIED
Funding:	Not reported
Latitude:	37.44445
Longitude:	-122.1707
APN:	NONE SPECIFIED
Past Use:	NONE SPECIFIED
Potential COC:	NONE SPECIFIED
Confirmed COC:	NONE SPECIFIED
Potential Description:	NONE SPECIFIED
Alias Name:	CAL000055975
Alias Type:	EPA Identification Number
Alias Name:	71003258
Alias Type:	Envirostor ID Number

Completed Info:

Completed Area Name:	Not reported
Completed Sub Area Name:	Not reported
Completed Document Type:	Not reported
Completed Date:	Not reported
Comments:	Not reported
Future Area Name:	Not reported
Future Sub Area Name:	Not reported
Future Document Type:	Not reported
Future Due Date:	Not reported
Schedule Area Name:	Not reported
Schedule Sub Area Name:	Not reported
Schedule Document Type:	Not reported
Schedule Due Date:	Not reported
Schedule Revised Date:	Not reported

123
West
1/2-1
0.805 mi.
4250 ft.

CAMP FREMONT (J09CA0017)
MENLO PARK, CA

RESPONSE
ENVIROSTOR

S107736072
N/A

Relative:
Higher

Actual:
64 ft.

RESPONSE:

Facility ID:	80000016
Site Type:	State Response
Site Type Detail:	FUDS
Acres:	Not reported
National Priorities List:	NO
Cleanup Oversight Agencies:	SMBRP
Lead Agency Description:	DTSC - Site Cleanup Program
Project Manager:	Not reported
Supervisor:	Charles Ridenour
Division Branch:	Cleanup Sacramento
Site Code:	Not reported
Site Mgmt. Req.:	NONE SPECIFIED
Assembly:	24
Senate:	13
Special Program Status:	Not reported
Status:	Inactive - Needs Evaluation
Status Date:	07/01/2005
Restricted Use:	NO
Funding:	DERA
Latitude:	37.44833
Longitude:	-122.1747
APN:	NONE SPECIFIED
Past Use:	NONE SPECIFIED
Potential COC :	NONE SPECIFIED
Confirmed COC:	NONE SPECIFIED
Potential Description:	NONE SPECIFIED
Alias Name:	CA99799F523600
Alias Type:	Federal Facility ID
Alias Name:	J09CA0017
Alias Type:	INPR
Alias Name:	201682
Alias Type:	Envirostor ID Number
Alias Name:	80000016
Alias Type:	Envirostor ID Number

Completed Info:

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Inventory Project Report (INPR)
Completed Date:	01/11/1991
Comments:	Public Inquiry of information on Site. Document was obtained from Corps Web Site since Corps did not provided for comment or review.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Other Report
Completed Date:	04/12/2010
Comments:	Public Inquiry on Camp Fremont. Information obtained from CALIFORNIA STATE MILITARY MUSEUM.
Future Area Name:	Not reported
Future Sub Area Name:	Not reported
Future Document Type:	Not reported

CAMP FREMONT (J09CA0017) (Continued) **S107736072**

Future Due Date: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

ENVIROSTOR:
Facility ID: 80000016
Status: Inactive - Needs Evaluation
Status Date: 07/01/2005
Site Code: Not reported
Site Type: State Response
Site Type Detailed: FUDS
Acres: Not reported
NPL: NO
Regulatory Agencies: SMBRP
Lead Agency: SMBRP
Program Manager: Not reported
Supervisor: Charles Ridenour
Division Branch: Cleanup Sacramento
Assembly: 24
Senate: 13
Special Program: Not reported
Restricted Use: NO
Site Mgmt Req: NONE SPECIFIED
Funding: DERA
Latitude: 37.44833
Longitude: -122.1747
APN: NONE SPECIFIED
Past Use: NONE SPECIFIED
Potential COC: NONE SPECIFIED
Confirmed COC: NONE SPECIFIED
Potential Description: NONE SPECIFIED
Alias Name: CA99799F523600
Alias Type: Federal Facility ID
Alias Name: J09CA0017
Alias Type: INPR
Alias Name: 201682
Alias Type: Envirostor ID Number
Alias Name: 80000016
Alias Type: Envirostor ID Number

Completed Info:
Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Inventory Project Report (INPR)
Completed Date: 01/11/1991
Comments: Public Inquiry of information on Site. Document was obtained from Corps Web Site since Corps did not provided for comment or review.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Other Report
Completed Date: 04/12/2010
Comments: Public Inquiry on Camp Fremont. Information obtained from CALIFORNIA STATE MILITARY MUSEUM.

CAMP FREMONT (J09CA0017) (Continued) **S107736072**

Future Area Name:	Not reported
Future Sub Area Name:	Not reported
Future Document Type:	Not reported
Future Due Date:	Not reported
Schedule Area Name:	Not reported
Schedule Sub Area Name:	Not reported
Schedule Document Type:	Not reported
Schedule Due Date:	Not reported
Schedule Revised Date:	Not reported

Count: 2 records. ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
EAST PALO ALTO	S106234944	PENINSULA SPORTSMENS CLUB	UNIVERSITY AVENUE		SLIC
PALO ALTO	1003877979	OREGON EXPWY UNDERPASS	OREGON EXPWY & ALMA ST	94304	SEMS-ARCHIVE

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

Number of Days to Update: Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL: National Priority List

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 04/05/2017
Date Data Arrived at EDR: 04/21/2017
Date Made Active in Reports: 05/12/2017
Number of Days to Update: 21

Source: EPA
Telephone: N/A
Last EDR Contact: 07/07/2017
Next Scheduled EDR Contact: 10/16/2017
Data Release Frequency: Quarterly

NPL Site Boundaries

Sources:

EPA's Environmental Photographic Interpretation Center (EPIC)
Telephone: 202-564-7333

EPA Region 1
Telephone 617-918-1143

EPA Region 6
Telephone: 214-655-6659

EPA Region 3
Telephone 215-814-5418

EPA Region 7
Telephone: 913-551-7247

EPA Region 4
Telephone 404-562-8033

EPA Region 8
Telephone: 303-312-6774

EPA Region 5
Telephone 312-886-6686

EPA Region 9
Telephone: 415-947-4246

EPA Region 10
Telephone 206-553-8665

Proposed NPL: Proposed National Priority List Sites

A site that has been proposed for listing on the National Priorities List through the issuance of a proposed rule in the Federal Register. EPA then accepts public comments on the site, responds to the comments, and places on the NPL those sites that continue to meet the requirements for listing.

Date of Government Version: 04/05/2017
Date Data Arrived at EDR: 04/21/2017
Date Made Active in Reports: 05/12/2017
Number of Days to Update: 21

Source: EPA
Telephone: N/A
Last EDR Contact: 07/07/2017
Next Scheduled EDR Contact: 10/16/2017
Data Release Frequency: Quarterly

NPL LIENS: Federal Superfund Liens

Federal Superfund Liens. Under the authority granted the USEPA by CERCLA of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner received notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

Date of Government Version: 10/15/1991
Date Data Arrived at EDR: 02/02/1994
Date Made Active in Reports: 03/30/1994
Number of Days to Update: 56

Source: EPA
Telephone: 202-564-4267
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Federal Delisted NPL site list

Delisted NPL: National Priority List Deletions

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 04/05/2017
Date Data Arrived at EDR: 04/21/2017
Date Made Active in Reports: 05/12/2017
Number of Days to Update: 21

Source: EPA
Telephone: N/A
Last EDR Contact: 07/07/2017
Next Scheduled EDR Contact: 10/16/2017
Data Release Frequency: Quarterly

Federal CERCLIS list

FEDERAL FACILITY: Federal Facility Site Information listing

A listing of National Priority List (NPL) and Base Realignment and Closure (BRAC) sites found in the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) Database where EPA Federal Facilities Restoration and Reuse Office is involved in cleanup activities.

Date of Government Version: 11/07/2016
Date Data Arrived at EDR: 01/05/2017
Date Made Active in Reports: 04/07/2017
Number of Days to Update: 92

Source: Environmental Protection Agency
Telephone: 703-603-8704
Last EDR Contact: 07/07/2017
Next Scheduled EDR Contact: 10/16/2017
Data Release Frequency: Varies

SEMS: Superfund Enterprise Management System

SEMS (Superfund Enterprise Management System) tracks hazardous waste sites, potentially hazardous waste sites, and remedial activities performed in support of EPA's Superfund Program across the United States. The list was formerly know as CERCLIS, renamed to SEMS by the EPA in 2015. The list contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). This dataset also contains sites which are either proposed to or on the National Priorities List (NPL) and the sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 02/07/2017
Date Data Arrived at EDR: 04/19/2017
Date Made Active in Reports: 05/05/2017
Number of Days to Update: 16

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 07/21/2017
Next Scheduled EDR Contact: 10/30/2017
Data Release Frequency: Quarterly

Federal CERCLIS NFRAP site list

SEMS-ARCHIVE: Superfund Enterprise Management System Archive

SEMS-ARCHIVE (Superfund Enterprise Management System Archive) tracks sites that have no further interest under the Federal Superfund Program based on available information. The list was formerly known as the CERCLIS-NFRAP, renamed to SEMS ARCHIVE by the EPA in 2015. EPA may perform a minimal level of assessment work at a site while it is archived if site conditions change and/or new information becomes available. Archived sites have been removed and archived from the inventory of SEMS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list the site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. The decision does not necessarily mean that there is no hazard associated with a given site; it only means that. based upon available information, the location is not judged to be potential NPL site.

Date of Government Version: 02/07/2017
Date Data Arrived at EDR: 04/19/2017
Date Made Active in Reports: 05/05/2017
Number of Days to Update: 16

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 07/28/2017
Next Scheduled EDR Contact: 10/30/2017
Data Release Frequency: Quarterly

Federal RCRA CORRACTS facilities list

CORRACTS: Corrective Action Report

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 12/12/2016
Date Data Arrived at EDR: 12/28/2016
Date Made Active in Reports: 02/10/2017
Number of Days to Update: 44

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 08/11/2017
Next Scheduled EDR Contact: 10/09/2017
Data Release Frequency: Quarterly

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF: RCRA - Treatment, Storage and Disposal

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 12/12/2016
Date Data Arrived at EDR: 12/28/2016
Date Made Active in Reports: 02/10/2017
Number of Days to Update: 44

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 08/11/2017
Next Scheduled EDR Contact: 10/09/2017
Data Release Frequency: Quarterly

Federal RCRA generators list

RCRA-LQG: RCRA - Large Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

Date of Government Version: 12/12/2016
Date Data Arrived at EDR: 12/28/2016
Date Made Active in Reports: 02/10/2017
Number of Days to Update: 44

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 08/11/2017
Next Scheduled EDR Contact: 10/09/2017
Data Release Frequency: Quarterly

RCRA-SQG: RCRA - Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

Date of Government Version: 12/12/2016
Date Data Arrived at EDR: 12/28/2016
Date Made Active in Reports: 02/10/2017
Number of Days to Update: 44

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 08/11/2017
Next Scheduled EDR Contact: 10/09/2017
Data Release Frequency: Quarterly

RCRA-CESQG: RCRA - Conditionally Exempt Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Conditionally exempt small quantity generators (CESQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

Date of Government Version: 12/12/2016
Date Data Arrived at EDR: 12/28/2016
Date Made Active in Reports: 02/10/2017
Number of Days to Update: 44

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 08/11/2017
Next Scheduled EDR Contact: 10/09/2017
Data Release Frequency: Varies

Federal institutional controls / engineering controls registries

LUCIS: Land Use Control Information System

LUCIS contains records of land use control information pertaining to the former Navy Base Realignment and Closure properties.

Date of Government Version: 12/28/2016
Date Data Arrived at EDR: 01/04/2017
Date Made Active in Reports: 04/07/2017
Number of Days to Update: 93

Source: Department of the Navy
Telephone: 843-820-7326
Last EDR Contact: 08/10/2017
Next Scheduled EDR Contact: 11/27/2017
Data Release Frequency: Varies

US ENG CONTROLS: Engineering Controls Sites List

A listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Date of Government Version: 02/13/2017
Date Data Arrived at EDR: 02/28/2017
Date Made Active in Reports: 06/09/2017
Number of Days to Update: 101

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 05/31/2017
Next Scheduled EDR Contact: 09/11/2017
Data Release Frequency: Varies

US INST CONTROL: Sites with Institutional Controls

A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

Date of Government Version: 02/13/2017
Date Data Arrived at EDR: 02/28/2017
Date Made Active in Reports: 06/09/2017
Number of Days to Update: 101

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 05/31/2017
Next Scheduled EDR Contact: 09/11/2017
Data Release Frequency: Varies

Federal ERNS list

ERNS: Emergency Response Notification System

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 09/26/2016
Date Data Arrived at EDR: 09/29/2016
Date Made Active in Reports: 11/11/2016
Number of Days to Update: 43

Source: National Response Center, United States Coast Guard
Telephone: 202-267-2180
Last EDR Contact: 06/28/2017
Next Scheduled EDR Contact: 10/09/2017
Data Release Frequency: Annually

State- and tribal - equivalent NPL

RESPONSE: State Response Sites

Identifies confirmed release sites where DTSC is involved in remediation, either in a lead or oversight capacity. These confirmed release sites are generally high-priority and high potential risk.

Date of Government Version: 01/30/2017
Date Data Arrived at EDR: 01/31/2017
Date Made Active in Reports: 05/23/2017
Number of Days to Update: 112

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 08/01/2017
Next Scheduled EDR Contact: 11/13/2017
Data Release Frequency: Quarterly

State- and tribal - equivalent CERCLIS

ENVIROSTOR: EnviroStor Database

The Department of Toxic Substances Control's (DTSC's) Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifes sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.

Date of Government Version: 01/30/2017
Date Data Arrived at EDR: 01/31/2017
Date Made Active in Reports: 05/23/2017
Number of Days to Update: 112

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 08/01/2017
Next Scheduled EDR Contact: 11/13/2017
Data Release Frequency: Quarterly

State and tribal landfill and/or solid waste disposal site lists

SWF/LF (SWIS): Solid Waste Information System

Active, Closed and Inactive Landfills. SWF/LF records typically contain an inve ntory of solid waste disposal facilities or landfills. These may be active or i nactive facilities or open dumps that failed to meet RCRA Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 02/13/2017
Date Data Arrived at EDR: 02/15/2017
Date Made Active in Reports: 05/02/2017
Number of Days to Update: 76

Source: Department of Resources Recycling and Recovery
Telephone: 916-341-6320
Last EDR Contact: 05/17/2017
Next Scheduled EDR Contact: 08/28/2017
Data Release Frequency: Quarterly

State and tribal leaking storage tank lists

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

LUST: Leaking Underground Fuel Tank Report (GEOTRACKER)
Leaking Underground Storage Tank (LUST) Sites included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 03/13/2017
Date Data Arrived at EDR: 03/14/2017
Date Made Active in Reports: 05/02/2017
Number of Days to Update: 49
Source: State Water Resources Control Board
Telephone: see region list
Last EDR Contact: 06/14/2017
Next Scheduled EDR Contact: 09/25/2017
Data Release Frequency: Quarterly

LUST REG 6V: Leaking Underground Storage Tank Case Listing
Leaking Underground Storage Tank locations. Inyo, Kern, Los Angeles, Mono, San Bernardino counties.

Date of Government Version: 06/07/2005
Date Data Arrived at EDR: 06/07/2005
Date Made Active in Reports: 06/29/2005
Number of Days to Update: 22
Source: California Regional Water Quality Control Board Victorville Branch Office (6)
Telephone: 760-241-7365
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

LUST REG 4: Underground Storage Tank Leak List
Los Angeles, Ventura counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/07/2004
Date Data Arrived at EDR: 09/07/2004
Date Made Active in Reports: 10/12/2004
Number of Days to Update: 35
Source: California Regional Water Quality Control Board Los Angeles Region (4)
Telephone: 213-576-6710
Last EDR Contact: 09/06/2011
Next Scheduled EDR Contact: 12/19/2011
Data Release Frequency: No Update Planned

LUST REG 3: Leaking Underground Storage Tank Database
Leaking Underground Storage Tank locations. Monterey, San Benito, San Luis Obispo, Santa Barbara, Santa Cruz counties.

Date of Government Version: 05/19/2003
Date Data Arrived at EDR: 05/19/2003
Date Made Active in Reports: 06/02/2003
Number of Days to Update: 14
Source: California Regional Water Quality Control Board Central Coast Region (3)
Telephone: 805-542-4786
Last EDR Contact: 07/18/2011
Next Scheduled EDR Contact: 10/31/2011
Data Release Frequency: No Update Planned

LUST REG 2: Fuel Leak List
Leaking Underground Storage Tank locations. Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano, Sonoma counties.

Date of Government Version: 09/30/2004
Date Data Arrived at EDR: 10/20/2004
Date Made Active in Reports: 11/19/2004
Number of Days to Update: 30
Source: California Regional Water Quality Control Board San Francisco Bay Region (2)
Telephone: 510-622-2433
Last EDR Contact: 09/19/2011
Next Scheduled EDR Contact: 01/02/2012
Data Release Frequency: Quarterly

LUST REG 1: Active Toxic Site Investigation
Del Norte, Humboldt, Lake, Mendocino, Modoc, Siskiyou, Sonoma, Trinity counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/01/2001
Date Data Arrived at EDR: 02/28/2001
Date Made Active in Reports: 03/29/2001
Number of Days to Update: 29
Source: California Regional Water Quality Control Board North Coast (1)
Telephone: 707-570-3769
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

LUST REG 6L: Leaking Underground Storage Tank Case Listing
For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/09/2003
Date Data Arrived at EDR: 09/10/2003
Date Made Active in Reports: 10/07/2003
Number of Days to Update: 27

Source: California Regional Water Quality Control Board Lahontan Region (6)
Telephone: 530-542-5572
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

LUST REG 5: Leaking Underground Storage Tank Database

Leaking Underground Storage Tank locations. Alameda, Alpine, Amador, Butte, Colusa, Contra Costa, Calveras, El Dorado, Fresno, Glenn, Kern, Kings, Lake, Lassen, Madera, Mariposa, Merced, Modoc, Napa, Nevada, Placer, Plumas, Sacramento, San Joaquin, Shasta, Solano, Stanislaus, Sutter, Tehama, Tulare, Tuolumne, Yolo, Yuba counties.

Date of Government Version: 07/01/2008
Date Data Arrived at EDR: 07/22/2008
Date Made Active in Reports: 07/31/2008
Number of Days to Update: 9

Source: California Regional Water Quality Control Board Central Valley Region (5)
Telephone: 916-464-4834
Last EDR Contact: 07/01/2011
Next Scheduled EDR Contact: 10/17/2011
Data Release Frequency: No Update Planned

LUST REG 7: Leaking Underground Storage Tank Case Listing

Leaking Underground Storage Tank locations. Imperial, Riverside, San Diego, Santa Barbara counties.

Date of Government Version: 02/26/2004
Date Data Arrived at EDR: 02/26/2004
Date Made Active in Reports: 03/24/2004
Number of Days to Update: 27

Source: California Regional Water Quality Control Board Colorado River Basin Region (7)
Telephone: 760-776-8943
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

LUST REG 8: Leaking Underground Storage Tanks

California Regional Water Quality Control Board Santa Ana Region (8). For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/14/2005
Date Data Arrived at EDR: 02/15/2005
Date Made Active in Reports: 03/28/2005
Number of Days to Update: 41

Source: California Regional Water Quality Control Board Santa Ana Region (8)
Telephone: 909-782-4496
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: Varies

LUST REG 9: Leaking Underground Storage Tank Report

Orange, Riverside, San Diego counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 03/01/2001
Date Data Arrived at EDR: 04/23/2001
Date Made Active in Reports: 05/21/2001
Number of Days to Update: 28

Source: California Regional Water Quality Control Board San Diego Region (9)
Telephone: 858-637-5595
Last EDR Contact: 09/26/2011
Next Scheduled EDR Contact: 01/09/2012
Data Release Frequency: No Update Planned

INDIAN LUST R1: Leaking Underground Storage Tanks on Indian Land

A listing of leaking underground storage tank locations on Indian Land.

Date of Government Version: 11/14/2016
Date Data Arrived at EDR: 01/26/2017
Date Made Active in Reports: 05/05/2017
Number of Days to Update: 99

Source: EPA Region 1
Telephone: 617-918-1313
Last EDR Contact: 07/27/2017
Next Scheduled EDR Contact: 11/08/2017
Data Release Frequency: Varies

INDIAN LUST R4: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Florida, Mississippi and North Carolina.

Date of Government Version: 10/14/2016
Date Data Arrived at EDR: 01/27/2017
Date Made Active in Reports: 05/05/2017
Number of Days to Update: 98

Source: EPA Region 4
Telephone: 404-562-8677
Last EDR Contact: 07/28/2017
Next Scheduled EDR Contact: 11/08/2017
Data Release Frequency: Semi-Annually

INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 10/07/2016
Date Data Arrived at EDR: 01/26/2017
Date Made Active in Reports: 05/05/2017
Number of Days to Update: 99
Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 07/27/2017
Next Scheduled EDR Contact: 11/08/2017
Data Release Frequency: Quarterly

INDIAN LUST R9: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Arizona, California, New Mexico and Nevada

Date of Government Version: 10/06/2016
Date Data Arrived at EDR: 01/26/2017
Date Made Active in Reports: 05/05/2017
Number of Days to Update: 99
Source: Environmental Protection Agency
Telephone: 415-972-3372
Last EDR Contact: 07/27/2017
Next Scheduled EDR Contact: 11/08/2017
Data Release Frequency: Quarterly

INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 10/01/2016
Date Data Arrived at EDR: 01/26/2017
Date Made Active in Reports: 05/05/2017
Number of Days to Update: 99
Source: EPA Region 6
Telephone: 214-665-6597
Last EDR Contact: 07/27/2017
Next Scheduled EDR Contact: 11/08/2017
Data Release Frequency: Varies

INDIAN LUST R5: Leaking Underground Storage Tanks on Indian Land
Leaking underground storage tanks located on Indian Land in Michigan, Minnesota and Wisconsin.

Date of Government Version: 11/14/2016
Date Data Arrived at EDR: 01/26/2017
Date Made Active in Reports: 05/05/2017
Number of Days to Update: 99
Source: EPA, Region 5
Telephone: 312-886-7439
Last EDR Contact: 07/27/2017
Next Scheduled EDR Contact: 11/08/2017
Data Release Frequency: Varies

INDIAN LUST R8: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming.

Date of Government Version: 10/17/2016
Date Data Arrived at EDR: 01/26/2017
Date Made Active in Reports: 05/05/2017
Number of Days to Update: 99
Source: EPA Region 8
Telephone: 303-312-6271
Last EDR Contact: 07/27/2017
Next Scheduled EDR Contact: 11/08/2017
Data Release Frequency: Quarterly

INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 09/01/2016
Date Data Arrived at EDR: 01/26/2017
Date Made Active in Reports: 05/05/2017
Number of Days to Update: 99
Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 07/27/2017
Next Scheduled EDR Contact: 11/08/2017
Data Release Frequency: Varies

SLIC: Statewide SLIC Cases (GEOTRACKER)
Cleanup Program Sites (CPS; also known as Site Cleanups [SC] and formerly known as Spills, Leaks, Investigations, and Cleanups [SLIC] sites) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 03/13/2017
Date Data Arrived at EDR: 03/14/2017
Date Made Active in Reports: 05/02/2017
Number of Days to Update: 49
Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 06/14/2017
Next Scheduled EDR Contact: 09/25/2017
Data Release Frequency: Varies

SLIC REG 1: Active Toxic Site Investigations

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/03/2003
Date Data Arrived at EDR: 04/07/2003
Date Made Active in Reports: 04/25/2003
Number of Days to Update: 18

Source: California Regional Water Quality Control Board, North Coast Region (1)
Telephone: 707-576-2220
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

SLIC REG 2: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/30/2004
Date Data Arrived at EDR: 10/20/2004
Date Made Active in Reports: 11/19/2004
Number of Days to Update: 30

Source: Regional Water Quality Control Board San Francisco Bay Region (2)
Telephone: 510-286-0457
Last EDR Contact: 09/19/2011
Next Scheduled EDR Contact: 01/02/2012
Data Release Frequency: Quarterly

SLIC REG 3: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 05/18/2006
Date Data Arrived at EDR: 05/18/2006
Date Made Active in Reports: 06/15/2006
Number of Days to Update: 28

Source: California Regional Water Quality Control Board Central Coast Region (3)
Telephone: 805-549-3147
Last EDR Contact: 07/18/2011
Next Scheduled EDR Contact: 10/31/2011
Data Release Frequency: Semi-Annually

SLIC REG 4: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 11/17/2004
Date Data Arrived at EDR: 11/18/2004
Date Made Active in Reports: 01/04/2005
Number of Days to Update: 47

Source: Region Water Quality Control Board Los Angeles Region (4)
Telephone: 213-576-6600
Last EDR Contact: 07/01/2011
Next Scheduled EDR Contact: 10/17/2011
Data Release Frequency: Varies

SLIC REG 5: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/01/2005
Date Data Arrived at EDR: 04/05/2005
Date Made Active in Reports: 04/21/2005
Number of Days to Update: 16

Source: Regional Water Quality Control Board Central Valley Region (5)
Telephone: 916-464-3291
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: Semi-Annually

SLIC REG 6V: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 05/24/2005
Date Data Arrived at EDR: 05/25/2005
Date Made Active in Reports: 06/16/2005
Number of Days to Update: 22

Source: Regional Water Quality Control Board, Victorville Branch
Telephone: 619-241-6583
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: Semi-Annually

SLIC REG 6L: SLIC Sites
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/07/2004
Date Data Arrived at EDR: 09/07/2004
Date Made Active in Reports: 10/12/2004
Number of Days to Update: 35
Source: California Regional Water Quality Control Board, Lahontan Region
Telephone: 530-542-5574
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

SLIC REG 7: SLIC List
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 11/24/2004
Date Data Arrived at EDR: 11/29/2004
Date Made Active in Reports: 01/04/2005
Number of Days to Update: 36
Source: California Regional Quality Control Board, Colorado River Basin Region
Telephone: 760-346-7491
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

SLIC REG 8: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/03/2008
Date Data Arrived at EDR: 04/03/2008
Date Made Active in Reports: 04/14/2008
Number of Days to Update: 11
Source: California Region Water Quality Control Board Santa Ana Region (8)
Telephone: 951-782-3298
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: Semi-Annually

SLIC REG 9: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/10/2007
Date Data Arrived at EDR: 09/11/2007
Date Made Active in Reports: 09/28/2007
Number of Days to Update: 17
Source: California Regional Water Quality Control Board San Diego Region (9)
Telephone: 858-467-2980
Last EDR Contact: 08/08/2011
Next Scheduled EDR Contact: 11/21/2011
Data Release Frequency: Annually

State and tribal registered storage tank lists

FEMA UST: Underground Storage Tank Listing
A listing of all FEMA owned underground storage tanks.

Date of Government Version: 01/01/2010
Date Data Arrived at EDR: 02/16/2010
Date Made Active in Reports: 04/12/2010
Number of Days to Update: 55
Source: FEMA
Telephone: 202-646-5797
Last EDR Contact: 07/14/2017
Next Scheduled EDR Contact: 10/23/2017
Data Release Frequency: Varies

UST: Active UST Facilities
Active UST facilities gathered from the local regulatory agencies

Date of Government Version: 03/12/2017
Date Data Arrived at EDR: 03/16/2017
Date Made Active in Reports: 05/12/2017
Number of Days to Update: 57
Source: SWRCB
Telephone: 916-341-5851
Last EDR Contact: 06/14/2017
Next Scheduled EDR Contact: 09/25/2017
Data Release Frequency: Semi-Annually

AST: Aboveground Petroleum Storage Tank Facilities
A listing of aboveground storage tank petroleum storage tank locations.

Date of Government Version: 07/06/2016
Date Data Arrived at EDR: 07/12/2016
Date Made Active in Reports: 09/19/2016
Number of Days to Update: 69
Source: California Environmental Protection Agency
Telephone: 916-327-5092
Last EDR Contact: 06/21/2017
Next Scheduled EDR Contact: 10/09/2017
Data Release Frequency: Quarterly

INDIAN UST R5: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 5 (Michigan, Minnesota and Wisconsin and Tribal Nations).

Date of Government Version: 01/14/2017
Date Data Arrived at EDR: 01/26/2017
Date Made Active in Reports: 05/05/2017
Number of Days to Update: 99
Source: EPA Region 5
Telephone: 312-886-6136
Last EDR Contact: 07/27/2017
Next Scheduled EDR Contact: 11/08/2017
Data Release Frequency: Varies

INDIAN UST R6: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 6 (Louisiana, Arkansas, Oklahoma, New Mexico, Texas and 65 Tribes).

Date of Government Version: 10/01/2016
Date Data Arrived at EDR: 01/26/2017
Date Made Active in Reports: 05/05/2017
Number of Days to Update: 99
Source: EPA Region 6
Telephone: 214-665-7591
Last EDR Contact: 07/27/2017
Next Scheduled EDR Contact: 11/08/2017
Data Release Frequency: Semi-Annually

INDIAN UST R7: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 7 (Iowa, Kansas, Missouri, Nebraska, and 9 Tribal Nations).

Date of Government Version: 09/01/2016
Date Data Arrived at EDR: 01/26/2017
Date Made Active in Reports: 05/05/2017
Number of Days to Update: 99
Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 07/27/2017
Next Scheduled EDR Contact: 11/08/2017
Data Release Frequency: Varies

INDIAN UST R8: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming and 27 Tribal Nations).

Date of Government Version: 10/17/2016
Date Data Arrived at EDR: 01/26/2017
Date Made Active in Reports: 05/05/2017
Number of Days to Update: 99
Source: EPA Region 8
Telephone: 303-312-6137
Last EDR Contact: 07/27/2017
Next Scheduled EDR Contact: 11/08/2017
Data Release Frequency: Quarterly

INDIAN UST R9: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 9 (Arizona, California, Hawaii, Nevada, the Pacific Islands, and Tribal Nations).

Date of Government Version: 10/06/2016
Date Data Arrived at EDR: 01/26/2017
Date Made Active in Reports: 05/05/2017
Number of Days to Update: 99
Source: EPA Region 9
Telephone: 415-972-3368
Last EDR Contact: 07/27/2017
Next Scheduled EDR Contact: 11/08/2017
Data Release Frequency: Quarterly

INDIAN UST R1: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont and ten Tribal Nations).

Date of Government Version: 11/14/2016
Date Data Arrived at EDR: 01/26/2017
Date Made Active in Reports: 05/05/2017
Number of Days to Update: 99

Source: EPA, Region 1
Telephone: 617-918-1313
Last EDR Contact: 07/27/2017
Next Scheduled EDR Contact: 11/08/2017
Data Release Frequency: Varies

INDIAN UST R4: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee and Tribal Nations)

Date of Government Version: 10/14/2016
Date Data Arrived at EDR: 01/27/2017
Date Made Active in Reports: 05/05/2017
Number of Days to Update: 98

Source: EPA Region 4
Telephone: 404-562-9424
Last EDR Contact: 07/28/2017
Next Scheduled EDR Contact: 11/08/2017
Data Release Frequency: Semi-Annually

INDIAN UST R10: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 10 (Alaska, Idaho, Oregon, Washington, and Tribal Nations).

Date of Government Version: 10/07/2016
Date Data Arrived at EDR: 01/26/2017
Date Made Active in Reports: 05/05/2017
Number of Days to Update: 99

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 07/27/2017
Next Scheduled EDR Contact: 11/08/2017
Data Release Frequency: Quarterly

State and tribal voluntary cleanup sites

INDIAN VCP R1: Voluntary Cleanup Priority Listing

A listing of voluntary cleanup priority sites located on Indian Land located in Region 1.

Date of Government Version: 07/27/2015
Date Data Arrived at EDR: 09/29/2015
Date Made Active in Reports: 02/18/2016
Number of Days to Update: 142

Source: EPA, Region 1
Telephone: 617-918-1102
Last EDR Contact: 06/27/2017
Next Scheduled EDR Contact: 10/09/2017
Data Release Frequency: Varies

INDIAN VCP R7: Voluntary Cleanup Priority Lisitng

A listing of voluntary cleanup priority sites located on Indian Land located in Region 7.

Date of Government Version: 03/20/2008
Date Data Arrived at EDR: 04/22/2008
Date Made Active in Reports: 05/19/2008
Number of Days to Update: 27

Source: EPA, Region 7
Telephone: 913-551-7365
Last EDR Contact: 04/20/2009
Next Scheduled EDR Contact: 07/20/2009
Data Release Frequency: Varies

VCP: Voluntary Cleanup Program Properties

Contains low threat level properties with either confirmed or unconfirmed releases and the project proponents have request that DTSC oversee investigation and/or cleanup activities and have agreed to provide coverage for DTSC's costs.

Date of Government Version: 01/30/2017
Date Data Arrived at EDR: 01/31/2017
Date Made Active in Reports: 05/23/2017
Number of Days to Update: 112

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 08/01/2017
Next Scheduled EDR Contact: 11/13/2017
Data Release Frequency: Quarterly

State and tribal Brownfields sites

BROWNFIELDS: Considered Brownfieds Sites Listing
A listing of sites the SWRCB considers to be Brownfields since these are sites have come to them through the MOA Process.

Date of Government Version: 01/03/2017
Date Data Arrived at EDR: 01/04/2017
Date Made Active in Reports: 03/02/2017
Number of Days to Update: 57
Source: State Water Resources Control Board
Telephone: 916-323-7905
Last EDR Contact: 06/28/2017
Next Scheduled EDR Contact: 10/09/2017
Data Release Frequency: Varies

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS: A Listing of Brownfields Sites
Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties takes development pressures off of undeveloped, open land, and both improves and protects the environment. Assessment, Cleanup and Redevelopment Exchange System (ACRES) stores information reported by EPA Brownfields grant recipients on brownfields properties assessed or cleaned up with grant funding as well as information on Targeted Brownfields Assessments performed by EPA Regions. A listing of ACRES Brownfield sites is obtained from Cleanups in My Community. Cleanups in My Community provides information on Brownfields properties for which information is reported back to EPA, as well as areas served by Brownfields grant programs.

Date of Government Version: 03/02/2017
Date Data Arrived at EDR: 03/02/2017
Date Made Active in Reports: 04/07/2017
Number of Days to Update: 36
Source: Environmental Protection Agency
Telephone: 202-566-2777
Last EDR Contact: 06/20/2017
Next Scheduled EDR Contact: 10/02/2017
Data Release Frequency: Semi-Annually

Local Lists of Landfill / Solid Waste Disposal Sites

WMUDS/SWAT: Waste Management Unit Database
Waste Management Unit Database System. WMUDS is used by the State Water Resources Control Board staff and the Regional Water Quality Control Boards for program tracking and inventory of waste management units. WMUDS is composed of the following databases: Facility Information, Scheduled Inspections Information, Waste Management Unit Information, SWAT Program Information, SWAT Report Summary Information, SWAT Report Summary Data, Chapter 15 (formerly Subchapter 15) Information, Chapter 15 Monitoring Parameters, TPCA Program Information, RCRA Program Information, Closure Information, and Interested Parties Information.

Date of Government Version: 04/01/2000
Date Data Arrived at EDR: 04/10/2000
Date Made Active in Reports: 05/10/2000
Number of Days to Update: 30
Source: State Water Resources Control Board
Telephone: 916-227-4448
Last EDR Contact: 08/03/2017
Next Scheduled EDR Contact: 11/20/2017
Data Release Frequency: No Update Planned

SWRCY: Recycler Database
A listing of recycling facilities in California.

Date of Government Version: 03/13/2017
Date Data Arrived at EDR: 03/14/2017
Date Made Active in Reports: 05/03/2017
Number of Days to Update: 50
Source: Department of Conservation
Telephone: 916-323-3836
Last EDR Contact: 06/14/2017
Next Scheduled EDR Contact: 09/25/2017
Data Release Frequency: Quarterly

HAULERS: Registered Waste Tire Haulers Listing
A listing of registered waste tire haulers.

Date of Government Version: 01/13/2017
Date Data Arrived at EDR: 01/17/2017
Date Made Active in Reports: 05/31/2017
Number of Days to Update: 134
Source: Integrated Waste Management Board
Telephone: 916-341-6422
Last EDR Contact: 08/10/2017
Next Scheduled EDR Contact: 11/27/2017
Data Release Frequency: Varies

INDIAN ODI: Report on the Status of Open Dumps on Indian Lands
Location of open dumps on Indian land.

Date of Government Version: 12/31/1998
Date Data Arrived at EDR: 12/03/2007
Date Made Active in Reports: 01/24/2008
Number of Days to Update: 52
Source: Environmental Protection Agency
Telephone: 703-308-8245
Last EDR Contact: 08/01/2017
Next Scheduled EDR Contact: 11/13/2017
Data Release Frequency: Varies

ODI: Open Dump Inventory
An open dump is defined as a disposal facility that does not comply with one or more of the Part 257 or Part 258 Subtitle D Criteria.

Date of Government Version: 06/30/1985
Date Data Arrived at EDR: 08/09/2004
Date Made Active in Reports: 09/17/2004
Number of Days to Update: 39
Source: Environmental Protection Agency
Telephone: 800-424-9346
Last EDR Contact: 06/09/2004
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

DEBRIS REGION 9: Torres Martinez Reservation Illegal Dump Site Locations
A listing of illegal dump sites location on the Torres Martinez Indian Reservation located in eastern Riverside County and northern Imperial County, California.

Date of Government Version: 01/12/2009
Date Data Arrived at EDR: 05/07/2009
Date Made Active in Reports: 09/21/2009
Number of Days to Update: 137
Source: EPA, Region 9
Telephone: 415-947-4219
Last EDR Contact: 07/24/2017
Next Scheduled EDR Contact: 11/08/2017
Data Release Frequency: No Update Planned

IHS OPEN DUMPS: Open Dumps on Indian Land
A listing of all open dumps located on Indian Land in the United States.

Date of Government Version: 04/01/2014
Date Data Arrived at EDR: 08/06/2014
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 176
Source: Department of Health & Human Serivces, Indian Health Service
Telephone: 301-443-1452
Last EDR Contact: 08/10/2017
Next Scheduled EDR Contact: 11/13/2017
Data Release Frequency: Varies

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL: National Clandestine Laboratory Register
A listing of clandestine drug lab locations that have been removed from the DEAs National Clandestine Laboratory Register.

Date of Government Version: 02/09/2017
Date Data Arrived at EDR: 03/08/2017
Date Made Active in Reports: 06/09/2017
Number of Days to Update: 93
Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 02/28/2017
Next Scheduled EDR Contact: 06/12/2017
Data Release Frequency: No Update Planned

HIST CAL-SITES: Calsites Database
The Calsites database contains potential or confirmed hazardous substance release properties. In 1996, California EPA reevaluated and significantly reduced the number of sites in the Calsites database. No longer updated by the state agency. It has been replaced by ENVIROSTOR.

Date of Government Version: 08/08/2005
Date Data Arrived at EDR: 08/03/2006
Date Made Active in Reports: 08/24/2006
Number of Days to Update: 21

Source: Department of Toxic Substance Control
Telephone: 916-323-3400
Last EDR Contact: 02/23/2009
Next Scheduled EDR Contact: 05/25/2009
Data Release Frequency: No Update Planned

SCH: School Property Evaluation Program

This category contains proposed and existing school sites that are being evaluated by DTSC for possible hazardous materials contamination. In some cases, these properties may be listed in the CalSites category depending on the level of threat to public health and safety or the environment they pose.

Date of Government Version: 01/30/2017
Date Data Arrived at EDR: 01/31/2017
Date Made Active in Reports: 05/23/2017
Number of Days to Update: 112

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 08/01/2017
Next Scheduled EDR Contact: 11/13/2017
Data Release Frequency: Quarterly

CDL: Clandestine Drug Labs

A listing of drug lab locations. Listing of a location in this database does not indicate that any illegal drug lab materials were or were not present there, and does not constitute a determination that the location either requires or does not require additional cleanup work.

Date of Government Version: 12/31/2016
Date Data Arrived at EDR: 03/17/2017
Date Made Active in Reports: 05/10/2017
Number of Days to Update: 54

Source: Department of Toxic Substances Control
Telephone: 916-255-6504
Last EDR Contact: 08/03/2017
Next Scheduled EDR Contact: 10/23/2017
Data Release Frequency: Varies

TOXIC PITS: Toxic Pits Cleanup Act Sites

Toxic PITS Cleanup Act Sites. TOXIC PITS identifies sites suspected of containing hazardous substances where cleanup has not yet been completed.

Date of Government Version: 07/01/1995
Date Data Arrived at EDR: 08/30/1995
Date Made Active in Reports: 09/26/1995
Number of Days to Update: 27

Source: State Water Resources Control Board
Telephone: 916-227-4364
Last EDR Contact: 01/26/2009
Next Scheduled EDR Contact: 04/27/2009
Data Release Frequency: No Update Planned

US CDL: Clandestine Drug Labs

A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 02/09/2017
Date Data Arrived at EDR: 03/08/2017
Date Made Active in Reports: 06/09/2017
Number of Days to Update: 93

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 05/31/2017
Next Scheduled EDR Contact: 09/11/2017
Data Release Frequency: Quarterly

Local Lists of Registered Storage Tanks

SWEEPS UST: SWEEPS UST Listing

Statewide Environmental Evaluation and Planning System. This underground storage tank listing was updated and maintained by a company contacted by the SWRCB in the early 1990's. The listing is no longer updated or maintained. The local agency is the contact for more information on a site on the SWEEPS list.

Date of Government Version: 06/01/1994
Date Data Arrived at EDR: 07/07/2005
Date Made Active in Reports: 08/11/2005
Number of Days to Update: 35

Source: State Water Resources Control Board
Telephone: N/A
Last EDR Contact: 06/03/2005
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

UST MENDOCINO: Mendocino County UST Database
A listing of underground storage tank locations in Mendocino County.

Date of Government Version: 03/09/2017
Date Data Arrived at EDR: 03/17/2017
Date Made Active in Reports: 05/23/2017
Number of Days to Update: 67

Source: Department of Public Health
Telephone: 707-463-4466
Last EDR Contact: 05/24/2017
Next Scheduled EDR Contact: 09/11/2017
Data Release Frequency: Annually

HIST UST: Hazardous Substance Storage Container Database
The Hazardous Substance Storage Container Database is a historical listing of UST sites. Refer to local/county source for current data.

Date of Government Version: 10/15/1990
Date Data Arrived at EDR: 01/25/1991
Date Made Active in Reports: 02/12/1991
Number of Days to Update: 18

Source: State Water Resources Control Board
Telephone: 916-341-5851
Last EDR Contact: 07/26/2001
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

CA FID UST: Facility Inventory Database
The Facility Inventory Database (FID) contains a historical listing of active and inactive underground storage tank locations from the State Water Resource Control Board. Refer to local/county source for current data.

Date of Government Version: 10/31/1994
Date Data Arrived at EDR: 09/05/1995
Date Made Active in Reports: 09/29/1995
Number of Days to Update: 24

Source: California Environmental Protection Agency
Telephone: 916-341-5851
Last EDR Contact: 12/28/1998
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

Local Land Records

LIENS: Environmental Liens Listing
A listing of property locations with environmental liens for California where DTSC is a lien holder.

Date of Government Version: 03/06/2017
Date Data Arrived at EDR: 03/07/2017
Date Made Active in Reports: 04/21/2017
Number of Days to Update: 45

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 06/02/2017
Next Scheduled EDR Contact: 09/18/2017
Data Release Frequency: Varies

LIENS 2: CERCLA Lien Information
A Federal CERCLA ('Superfund') lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties.

Date of Government Version: 02/18/2014
Date Data Arrived at EDR: 03/18/2014
Date Made Active in Reports: 04/24/2014
Number of Days to Update: 37

Source: Environmental Protection Agency
Telephone: 202-564-6023
Last EDR Contact: 07/26/2017
Next Scheduled EDR Contact: 11/08/2017
Data Release Frequency: Varies

DEED: Deed Restriction Listing

Site Mitigation and Brownfields Reuse Program Facility Sites with Deed Restrictions & Hazardous Waste Management Program Facility Sites with Deed / Land Use Restriction. The DTSC Site Mitigation and Brownfields Reuse Program (SMBRP) list includes sites cleaned up under the program's oversight and generally does not include current or former hazardous waste facilities that required a hazardous waste facility permit. The list represents deed restrictions that are active. Some sites have multiple deed restrictions. The DTSC Hazardous Waste Management Program (HWMP) has developed a list of current or former hazardous waste facilities that have a recorded land use restriction at the local county recorder's office. The land use restrictions on this list were required by the DTSC HWMP as a result of the presence of hazardous substances that remain on site after the facility (or part of the facility) has been closed or cleaned up. The types of land use restriction include deed notice, deed restriction, or a land use restriction that binds current and future owners.

Date of Government Version: 06/05/2017
Date Data Arrived at EDR: 06/06/2017
Date Made Active in Reports: 08/10/2017
Number of Days to Update: 65

Source: DTSC and SWRCB
Telephone: 916-323-3400
Last EDR Contact: 06/06/2017
Next Scheduled EDR Contact: 09/18/2017
Data Release Frequency: Semi-Annually

Records of Emergency Release Reports

HMIRS: Hazardous Materials Information Reporting System

Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 12/28/2016
Date Data Arrived at EDR: 12/28/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 37

Source: U.S. Department of Transportation
Telephone: 202-366-4555
Last EDR Contact: 06/28/2017
Next Scheduled EDR Contact: 10/09/2017
Data Release Frequency: Annually

CHMIRS: California Hazardous Material Incident Report System

California Hazardous Material Incident Reporting System. CHMIRS contains information on reported hazardous material incidents (accidental releases or spills).

Date of Government Version: 12/06/2016
Date Data Arrived at EDR: 01/25/2017
Date Made Active in Reports: 05/10/2017
Number of Days to Update: 105

Source: Office of Emergency Services
Telephone: 916-845-8400
Last EDR Contact: 07/26/2017
Next Scheduled EDR Contact: 11/08/2017
Data Release Frequency: Varies

LDS: Land Disposal Sites Listing (GEOTRACKER)

Land Disposal sites (Landfills) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 03/13/2017
Date Data Arrived at EDR: 03/14/2017
Date Made Active in Reports: 05/02/2017
Number of Days to Update: 49

Source: State Water Qualilty Control Board
Telephone: 866-480-1028
Last EDR Contact: 06/14/2017
Next Scheduled EDR Contact: 09/25/2017
Data Release Frequency: Quarterly

MCS: Military Cleanup Sites Listing (GEOTRACKER)

Military sites (consisting of: Military UST sites; Military Privatized sites; and Military Cleanup sites [formerly known as DoD non UST]) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 03/13/2017
Date Data Arrived at EDR: 03/14/2017
Date Made Active in Reports: 05/02/2017
Number of Days to Update: 49

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 06/14/2017
Next Scheduled EDR Contact: 09/25/2017
Data Release Frequency: Quarterly

SPILLS 90: SPILLS90 data from FirstSearch

Spills 90 includes those spill and release records available exclusively from FirstSearch databases. Typically, they may include chemical, oil and/or hazardous substance spills recorded after 1990. Duplicate records that are already included in EDR incident and release records are not included in Spills 90.

Date of Government Version: 06/06/2012
Date Data Arrived at EDR: 01/03/2013
Date Made Active in Reports: 02/22/2013
Number of Days to Update: 50

Source: FirstSearch
Telephone: N/A
Last EDR Contact: 01/03/2013
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

Other Ascertainable Records

RCRA NonGen / NLR: RCRA - Non Generators / No Longer Regulated

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

Date of Government Version: 12/12/2016
Date Data Arrived at EDR: 12/28/2016
Date Made Active in Reports: 02/10/2017
Number of Days to Update: 44

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 08/11/2017
Next Scheduled EDR Contact: 10/09/2017
Data Release Frequency: Varies

FUDS: Formerly Used Defense Sites

The listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.

Date of Government Version: 01/31/2015
Date Data Arrived at EDR: 07/08/2015
Date Made Active in Reports: 10/13/2015
Number of Days to Update: 97

Source: U.S. Army Corps of Engineers
Telephone: 202-528-4285
Last EDR Contact: 02/24/2017
Next Scheduled EDR Contact: 06/05/2017
Data Release Frequency: Varies

DOD: Department of Defense Sites

This data set consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 11/10/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 62

Source: USGS
Telephone: 888-275-8747
Last EDR Contact: 07/12/2017
Next Scheduled EDR Contact: 10/23/2017
Data Release Frequency: Semi-Annually

FEDLAND: Federal and Indian Lands

Federally and Indian administrated lands of the United States. Lands included are administrated by: Army Corps of Engineers, Bureau of Reclamation, National Wild and Scenic River, National Wildlife Refuge, Public Domain Land, Wilderness, Wilderness Study Area, Wildlife Management Area, Bureau of Indian Affairs, Bureau of Land Management, Department of Justice, Forest Service, Fish and Wildlife Service, National Park Service.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 02/06/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 339

Source: U.S. Geological Survey
Telephone: 888-275-8747
Last EDR Contact: 07/14/2017
Next Scheduled EDR Contact: 10/23/2017
Data Release Frequency: N/A

SCRD DRYCLEANERS: State Coalition for Remediation of Drycleaners Listing

The State Coalition for Remediation of Drycleaners was established in 1998, with support from the U.S. EPA Office of Superfund Remediation and Technology Innovation. It is comprised of representatives of states with established drycleaner remediation programs. Currently the member states are Alabama, Connecticut, Florida, Illinois, Kansas, Minnesota, Missouri, North Carolina, Oregon, South Carolina, Tennessee, Texas, and Wisconsin.

Date of Government Version: 01/01/2017
Date Data Arrived at EDR: 02/03/2017
Date Made Active in Reports: 04/07/2017
Number of Days to Update: 63
Source: Environmental Protection Agency
Telephone: 615-532-8599
Last EDR Contact: 05/19/2017
Next Scheduled EDR Contact: 08/28/2017
Data Release Frequency: Varies

US FIN ASSUR: Financial Assurance Information

All owners and operators of facilities that treat, store, or dispose of hazardous waste are required to provide proof that they will have sufficient funds to pay for the clean up, closure, and post-closure care of their facilities.

Date of Government Version: 02/13/2017
Date Data Arrived at EDR: 02/15/2017
Date Made Active in Reports: 05/12/2017
Number of Days to Update: 86
Source: Environmental Protection Agency
Telephone: 202-566-1917
Last EDR Contact: 08/11/2017
Next Scheduled EDR Contact: 08/28/2017
Data Release Frequency: Quarterly

EPA WATCH LIST: EPA WATCH LIST

EPA maintains a "Watch List" to facilitate dialogue between EPA, state and local environmental agencies on enforcement matters relating to facilities with alleged violations identified as either significant or high priority. Being on the Watch List does not mean that the facility has actually violated the law only that an investigation by EPA or a state or local environmental agency has led those organizations to allege that an unproven violation has in fact occurred. Being on the Watch List does not represent a higher level of concern regarding the alleged violations that were detected, but instead indicates cases requiring additional dialogue between EPA, state and local agencies - primarily because of the length of time the alleged violation has gone unaddressed or unresolved.

Date of Government Version: 08/30/2013
Date Data Arrived at EDR: 03/21/2014
Date Made Active in Reports: 06/17/2014
Number of Days to Update: 88
Source: Environmental Protection Agency
Telephone: 617-520-3000
Last EDR Contact: 08/07/2017
Next Scheduled EDR Contact: 11/20/2017
Data Release Frequency: Quarterly

2020 COR ACTION: 2020 Corrective Action Program List

The EPA has set ambitious goals for the RCRA Corrective Action program by creating the 2020 Corrective Action Universe. This RCRA cleanup baseline includes facilities expected to need corrective action. The 2020 universe contains a wide variety of sites. Some properties are heavily contaminated while others were contaminated but have since been cleaned up. Still others have not been fully investigated yet, and may require little or no remediation. Inclusion in the 2020 Universe does not necessarily imply failure on the part of a facility to meet its RCRA obligations.

Date of Government Version: 04/22/2013
Date Data Arrived at EDR: 03/03/2015
Date Made Active in Reports: 03/09/2015
Number of Days to Update: 6
Source: Environmental Protection Agency
Telephone: 703-308-4044
Last EDR Contact: 08/03/2017
Next Scheduled EDR Contact: 11/20/2017
Data Release Frequency: Varies

TSCA: Toxic Substances Control Act

Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/2012
Date Data Arrived at EDR: 01/15/2015
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 14
Source: EPA
Telephone: 202-260-5521
Last EDR Contact: 06/21/2017
Next Scheduled EDR Contact: 10/02/2017
Data Release Frequency: Every 4 Years

TRIS: Toxic Chemical Release Inventory System

Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 11/24/2015
Date Made Active in Reports: 04/05/2016
Number of Days to Update: 133

Source: EPA
Telephone: 202-566-0250
Last EDR Contact: 05/26/2017
Next Scheduled EDR Contact: 09/04/2017
Data Release Frequency: Annually

SSTS: Section 7 Tracking Systems

Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 12/31/2009
Date Data Arrived at EDR: 12/10/2010
Date Made Active in Reports: 02/25/2011
Number of Days to Update: 77

Source: EPA
Telephone: 202-564-4203
Last EDR Contact: 07/28/2017
Next Scheduled EDR Contact: 11/08/2017
Data Release Frequency: Annually

ROD: Records Of Decision

Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 11/25/2013
Date Data Arrived at EDR: 12/12/2013
Date Made Active in Reports: 02/24/2014
Number of Days to Update: 74

Source: EPA
Telephone: 703-416-0223
Last EDR Contact: 06/09/2017
Next Scheduled EDR Contact: 09/18/2017
Data Release Frequency: Annually

RMP: Risk Management Plans

When Congress passed the Clean Air Act Amendments of 1990, it required EPA to publish regulations and guidance for chemical accident prevention at facilities using extremely hazardous substances. The Risk Management Program Rule (RMP Rule) was written to implement Section 112(r) of these amendments. The rule, which built upon existing industry codes and standards, requires companies of all sizes that use certain flammable and toxic substances to develop a Risk Management Program, which includes a(n): Hazard assessment that details the potential effects of an accidental release, an accident history of the last five years, and an evaluation of worst-case and alternative accidental releases; Prevention program that includes safety precautions and maintenance, monitoring, and employee training measures; and Emergency response program that spells out emergency health care, employee training measures and procedures for informing the public and response agencies (e.g the fire department) should an accident occur.

Date of Government Version: 02/01/2017
Date Data Arrived at EDR: 02/09/2017
Date Made Active in Reports: 04/07/2017
Number of Days to Update: 57

Source: Environmental Protection Agency
Telephone: 202-564-8600
Last EDR Contact: 07/24/2017
Next Scheduled EDR Contact: 11/08/2017
Data Release Frequency: Varies

RAATS: RCRA Administrative Action Tracking System

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/1995
Date Data Arrived at EDR: 07/03/1995
Date Made Active in Reports: 08/07/1995
Number of Days to Update: 35

Source: EPA
Telephone: 202-564-4104
Last EDR Contact: 06/02/2008
Next Scheduled EDR Contact: 09/01/2008
Data Release Frequency: No Update Planned

PRP: Potentially Responsible Parties
A listing of verified Potentially Responsible Parties

Date of Government Version: 10/25/2013
Date Data Arrived at EDR: 10/17/2014
Date Made Active in Reports: 10/20/2014
Number of Days to Update: 3
Source: EPA
Telephone: 202-564-6023
Last EDR Contact: 08/08/2017
Next Scheduled EDR Contact: 11/20/2017
Data Release Frequency: Quarterly

PADS: PCB Activity Database System
PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 01/20/2016
Date Data Arrived at EDR: 04/28/2016
Date Made Active in Reports: 09/02/2016
Number of Days to Update: 127
Source: EPA
Telephone: 202-566-0500
Last EDR Contact: 04/10/2017
Next Scheduled EDR Contact: 07/24/2017
Data Release Frequency: Annually

ICIS: Integrated Compliance Information System
The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program.

Date of Government Version: 11/18/2016
Date Data Arrived at EDR: 11/23/2016
Date Made Active in Reports: 02/10/2017
Number of Days to Update: 79
Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 07/28/2017
Next Scheduled EDR Contact: 10/23/2017
Data Release Frequency: Quarterly

FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25
Source: EPA/Office of Prevention, Pesticides and Toxic Substances
Telephone: 202-566-1667
Last EDR Contact: 05/19/2017
Next Scheduled EDR Contact: 09/04/2017
Data Release Frequency: Quarterly

FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
A listing of FIFRA/TSCA Tracking System (FTTS) inspections and enforcements.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25
Source: EPA
Telephone: 202-566-1667
Last EDR Contact: 05/19/2017
Next Scheduled EDR Contact: 09/04/2017
Data Release Frequency: Quarterly

MLTS: Material Licensing Tracking System
MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 08/30/2016
Date Data Arrived at EDR: 09/08/2016
Date Made Active in Reports: 10/21/2016
Number of Days to Update: 43
Source: Nuclear Regulatory Commission
Telephone: 301-415-7169
Last EDR Contact: 08/01/2017
Next Scheduled EDR Contact: 11/20/2017
Data Release Frequency: Quarterly

COAL ASH DOE: Steam-Electric Plant Operation Data
A listing of power plants that store ash in surface ponds.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 08/07/2009
Date Made Active in Reports: 10/22/2009
Number of Days to Update: 76
Source: Department of Energy
Telephone: 202-586-8719
Last EDR Contact: 06/05/2017
Next Scheduled EDR Contact: 09/18/2017
Data Release Frequency: Varies

COAL ASH EPA: Coal Combustion Residues Surface Impoundments List
A listing of coal combustion residues surface impoundments with high hazard potential ratings.

Date of Government Version: 07/01/2014
Date Data Arrived at EDR: 09/10/2014
Date Made Active in Reports: 10/20/2014
Number of Days to Update: 40
Source: Environmental Protection Agency
Telephone: N/A
Last EDR Contact: 06/05/2017
Next Scheduled EDR Contact: 09/18/2017
Data Release Frequency: Varies

PCB TRANSFORMER: PCB Transformer Registration Database
The database of PCB transformer registrations that includes all PCB registration submittals.

Date of Government Version: 02/01/2011
Date Data Arrived at EDR: 10/19/2011
Date Made Active in Reports: 01/10/2012
Number of Days to Update: 83
Source: Environmental Protection Agency
Telephone: 202-566-0517
Last EDR Contact: 07/28/2017
Next Scheduled EDR Contact: 11/08/2017
Data Release Frequency: Varies

RADINFO: Radiation Information Database
The Radiation Information Database (RADINFO) contains information about facilities that are regulated by U.S. Environmental Protection Agency (EPA) regulations for radiation and radioactivity.

Date of Government Version: 01/04/2017
Date Data Arrived at EDR: 01/06/2017
Date Made Active in Reports: 02/10/2017
Number of Days to Update: 35
Source: Environmental Protection Agency
Telephone: 202-343-9775
Last EDR Contact: 07/12/2017
Next Scheduled EDR Contact: 10/16/2017
Data Release Frequency: Quarterly

HIST FTTS: FIFRA/TSCA Tracking System Administrative Case Listing
A complete administrative case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40
Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2007
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

HIST FTTS INSP: FIFRA/TSCA Tracking System Inspection & Enforcement Case Listing
A complete inspection and enforcement case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2008
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

DOT OPS: Incident and Accident Data

Department of Transporation, Office of Pipeline Safety Incident and Accident data.

Date of Government Version: 07/31/2012
Date Data Arrived at EDR: 08/07/2012
Date Made Active in Reports: 09/18/2012
Number of Days to Update: 42

Source: Department of Transporation, Office of Pipeline Safety
Telephone: 202-366-4595
Last EDR Contact: 08/01/2017
Next Scheduled EDR Contact: 11/13/2017
Data Release Frequency: Varies

CONSENT: Superfund (CERCLA) Consent Decrees

Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

Date of Government Version: 09/30/2016
Date Data Arrived at EDR: 11/18/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 77

Source: Department of Justice, Consent Decree Library
Telephone: Varies
Last EDR Contact: 06/21/2017
Next Scheduled EDR Contact: 10/09/2017
Data Release Frequency: Varies

BRS: Biennial Reporting System

The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/31/2013
Date Data Arrived at EDR: 02/24/2015
Date Made Active in Reports: 09/30/2015
Number of Days to Update: 218

Source: EPA/NTIS
Telephone: 800-424-9346
Last EDR Contact: 05/26/2017
Next Scheduled EDR Contact: 09/04/2017
Data Release Frequency: Biennially

INDIAN RESERV: Indian Reservations

This map layer portrays Indian administered lands of the United States that have any area equal to or greater than 640 acres.

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 07/14/2015
Date Made Active in Reports: 01/10/2017
Number of Days to Update: 546

Source: USGS
Telephone: 202-208-3710
Last EDR Contact: 07/11/2017
Next Scheduled EDR Contact: 10/23/2017
Data Release Frequency: Semi-Annually

FUSRAP: Formerly Utilized Sites Remedial Action Program

DOE established the Formerly Utilized Sites Remedial Action Program (FUSRAP) in 1974 to remediate sites where radioactive contamination remained from Manhattan Project and early U.S. Atomic Energy Commission (AEC) operations.

Date of Government Version: 12/23/2016
Date Data Arrived at EDR: 12/27/2016
Date Made Active in Reports: 02/17/2017
Number of Days to Update: 52

Source: Department of Energy
Telephone: 202-586-3559
Last EDR Contact: 08/03/2017
Next Scheduled EDR Contact: 11/20/2017
Data Release Frequency: Varies

UMTRA: Uranium Mill Tailings Sites

Uranium ore was mined by private companies for federal government use in national defense programs. When the mills shut down, large piles of the sand-like material (mill tailings) remain after uranium has been extracted from the ore. Levels of human exposure to radioactive materials from the piles are low; however, in some cases tailings were used as construction materials before the potential health hazards of the tailings were recognized.

Date of Government Version: 09/14/2010
Date Data Arrived at EDR: 10/07/2011
Date Made Active in Reports: 03/01/2012
Number of Days to Update: 146

Source: Department of Energy
Telephone: 505-845-0011
Last EDR Contact: 05/22/2017
Next Scheduled EDR Contact: 09/04/2017
Data Release Frequency: Varies

LEAD SMELTER 1: Lead Smelter Sites

A listing of former lead smelter site locations.

Date of Government Version: 12/05/2016
Date Data Arrived at EDR: 01/05/2017
Date Made Active in Reports: 02/10/2017
Number of Days to Update: 36

Source: Environmental Protection Agency
Telephone: 703-603-8787
Last EDR Contact: 07/07/2017
Next Scheduled EDR Contact: 10/16/2017
Data Release Frequency: Varies

LEAD SMELTER 2: Lead Smelter Sites

A list of several hundred sites in the U.S. where secondary lead smelting was done from 1931and 1964. These sites may pose a threat to public health through ingestion or inhalation of contaminated soil or dust

Date of Government Version: 04/05/2001
Date Data Arrived at EDR: 10/27/2010
Date Made Active in Reports: 12/02/2010
Number of Days to Update: 36

Source: American Journal of Public Health
Telephone: 703-305-6451
Last EDR Contact: 12/02/2009
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

US AIRS (AFS): Aerometric Information Retrieval System Facility Subsystem (AFS)

The database is a sub-system of Aerometric Information Retrieval System (AIRS). AFS contains compliance data on air pollution point sources regulated by the U.S. EPA and/or state and local air regulatory agencies. This information comes from source reports by various stationary sources of air pollution, such as electric power plants, steel mills, factories, and universities, and provides information about the air pollutants they produce. Action, air program, air program pollutant, and general level plant data. It is used to track emissions and compliance data from industrial plants.

Date of Government Version: 10/12/2016
Date Data Arrived at EDR: 10/26/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 100

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 08/11/2017
Next Scheduled EDR Contact: 10/09/2017
Data Release Frequency: Annually

US AIRS MINOR: Air Facility System Data

A listing of minor source facilities.

Date of Government Version: 10/12/2016
Date Data Arrived at EDR: 10/26/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 100

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 08/11/2017
Next Scheduled EDR Contact: 10/09/2017
Data Release Frequency: Annually

US MINES: Mines Master Index File

Contains all mine identification numbers issued for mines active or opened since 1971. The data also includes violation information.

Date of Government Version: 02/08/2017
Date Data Arrived at EDR: 02/28/2017
Date Made Active in Reports: 04/07/2017
Number of Days to Update: 38

Source: Department of Labor, Mine Safety and Health Administration
Telephone: 303-231-5959
Last EDR Contact: 05/31/2017
Next Scheduled EDR Contact: 09/11/2017
Data Release Frequency: Semi-Annually

US MINES 2: Ferrous and Nonferrous Metal Mines Database Listing

This map layer includes ferrous (ferrous metal mines are facilities that extract ferrous metals, such as iron ore or molybdenum) and nonferrous (Nonferrous metal mines are facilities that extract nonferrous metals, such as gold, silver, copper, zinc, and lead) metal mines in the United States.

Date of Government Version: 12/05/2005
Date Data Arrived at EDR: 02/29/2008
Date Made Active in Reports: 04/18/2008
Number of Days to Update: 49

Source: USGS
Telephone: 703-648-7709
Last EDR Contact: 05/31/2017
Next Scheduled EDR Contact: 09/11/2017
Data Release Frequency: Varies

US MINES 3: Active Mines & Mineral Plants Database Listing

Active Mines and Mineral Processing Plant operations for commodities monitored by the Minerals Information Team of the USGS.

Date of Government Version: 04/14/2011
Date Data Arrived at EDR: 06/08/2011
Date Made Active in Reports: 09/13/2011
Number of Days to Update: 97

Source: USGS
Telephone: 703-648-7709
Last EDR Contact: 06/02/2017
Next Scheduled EDR Contact: 09/11/2017
Data Release Frequency: Varies

ABANDONED MINES: Abandoned Mines

An inventory of land and water impacted by past mining (primarily coal mining) is maintained by OSMRE to provide information needed to implement the Surface Mining Control and Reclamation Act of 1977 (SMCRA). The inventory contains information on the location, type, and extent of AML impacts, as well as, information on the cost associated with the reclamation of those problems. The inventory is based upon field surveys by State, Tribal, and OSMRE program officials. It is dynamic to the extent that it is modified as new problems are identified and existing problems are reclaimed.

Date of Government Version: 03/14/2017
Date Data Arrived at EDR: 03/17/2017
Date Made Active in Reports: 04/07/2017
Number of Days to Update: 21

Source: Department of Interior
Telephone: 202-208-2609
Last EDR Contact: 06/09/2017
Next Scheduled EDR Contact: 09/25/2017
Data Release Frequency: Quarterly

FINDS: Facility Index System/Facility Registry System

Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 04/04/2017
Date Data Arrived at EDR: 04/07/2017
Date Made Active in Reports: 05/12/2017
Number of Days to Update: 35

Source: EPA
Telephone: (415) 947-8000
Last EDR Contact: 06/07/2017
Next Scheduled EDR Contact: 09/18/2017
Data Release Frequency: Quarterly

ECHO: Enforcement & Compliance History Information

ECHO provides integrated compliance and enforcement information for about 800,000 regulated facilities nationwide.

Date of Government Version: 03/19/2017
Date Data Arrived at EDR: 03/21/2017
Date Made Active in Reports: 05/12/2017
Number of Days to Update: 52

Source: Environmental Protection Agency
Telephone: 202-564-2280
Last EDR Contact: 06/07/2017
Next Scheduled EDR Contact: 09/18/2017
Data Release Frequency: Quarterly

UXO: Unexploded Ordnance Sites

A listing of unexploded ordnance site locations

Date of Government Version: 10/25/2015
Date Data Arrived at EDR: 01/29/2016
Date Made Active in Reports: 04/05/2016
Number of Days to Update: 67

Source: Department of Defense
Telephone: 571-373-0407
Last EDR Contact: 07/17/2017
Next Scheduled EDR Contact: 10/30/2017
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

DOCKET HWC: Hazardous Waste Compliance Docket Listing
A complete list of the Federal Agency Hazardous Waste Compliance Docket Facilities.

Date of Government Version: 06/02/2016
Date Data Arrived at EDR: 06/03/2016
Date Made Active in Reports: 09/02/2016
Number of Days to Update: 91
Source: Environmental Protection Agency
Telephone: 202-564-0527
Last EDR Contact: 05/24/2017
Next Scheduled EDR Contact: 09/11/2017
Data Release Frequency: Varies

FUELS PROGRAM: EPA Fuels Program Registered Listing
This listing includes facilities that are registered under the Part 80 (Code of Federal Regulations) EPA Fuels Programs. All companies now are required to submit new and updated registrations.

Date of Government Version: 02/22/2017
Date Data Arrived at EDR: 02/22/2017
Date Made Active in Reports: 05/12/2017
Number of Days to Update: 79
Source: EPA
Telephone: 800-385-6164
Last EDR Contact: 05/24/2017
Next Scheduled EDR Contact: 09/04/2017
Data Release Frequency: Quarterly

CA BOND EXP. PLAN: Bond Expenditure Plan
Department of Health Services developed a site-specific expenditure plan as the basis for an appropriation of Hazardous Substance Cleanup Bond Act funds. It is not updated.

Date of Government Version: 01/01/1989
Date Data Arrived at EDR: 07/27/1994
Date Made Active in Reports: 08/02/1994
Number of Days to Update: 6
Source: Department of Health Services
Telephone: 916-255-2118
Last EDR Contact: 05/31/1994
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

CORTESE: "Cortese" Hazardous Waste & Substances Sites List
The sites for the list are designated by the State Water Resource Control Board (LUST), the Integrated Waste Board (SWF/LS), and the Department of Toxic Substances Control (Cal-Sites).

Date of Government Version: 12/28/2016
Date Data Arrived at EDR: 12/28/2016
Date Made Active in Reports: 03/02/2017
Number of Days to Update: 64
Source: CAL EPA/Office of Emergency Information
Telephone: 916-323-3400
Last EDR Contact: 06/28/2017
Next Scheduled EDR Contact: 10/09/2017
Data Release Frequency: Quarterly

DRYCLEANERS: Cleaner Facilities
A list of drycleaner related facilities that have EPA ID numbers. These are facilities with certain SIC codes: power laundries, family and commercial; garment pressing and cleaner's agents; linen supply; coin-operated laundries and cleaning; drycleaning plants, except rugs; carpet and upholster cleaning; industrial launderers; laundry and garment services.

Date of Government Version: 03/09/2017
Date Data Arrived at EDR: 04/11/2017
Date Made Active in Reports: 05/23/2017
Number of Days to Update: 42
Source: Department of Toxic Substance Control
Telephone: 916-327-4498
Last EDR Contact: 07/13/2017
Next Scheduled EDR Contact: 09/18/2017
Data Release Frequency: Annually

EMI: Emissions Inventory Data
Toxics and criteria pollutant emissions data collected by the ARB and local air pollution agencies.

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 09/23/2016
Date Made Active in Reports: 10/24/2016
Number of Days to Update: 31
Source: California Air Resources Board
Telephone: 916-322-2990
Last EDR Contact: 06/23/2017
Next Scheduled EDR Contact: 10/02/2017
Data Release Frequency: Varies

ENF: Enforcement Action Listing

A listing of Water Board Enforcement Actions. Formal is everything except Oral/Verbal Communication, Notice of Violation, Expedited Payment Letter, and Staff Enforcement Letter.

Date of Government Version: 01/23/2017
Date Data Arrived at EDR: 01/27/2017
Date Made Active in Reports: 05/25/2017
Number of Days to Update: 118

Source: State Water Resoruces Control Board
Telephone: 916-445-9379
Last EDR Contact: 08/03/2017
Next Scheduled EDR Contact: 11/08/2017
Data Release Frequency: Varies

Financial Assurance 1: Financial Assurance Information Listing

Financial Assurance information

Date of Government Version: 04/25/2016
Date Data Arrived at EDR: 04/29/2016
Date Made Active in Reports: 06/21/2016
Number of Days to Update: 53

Source: Department of Toxic Substances Control
Telephone: 916-255-3628
Last EDR Contact: 07/21/2017
Next Scheduled EDR Contact: 10/30/2017
Data Release Frequency: Varies

Financial Assurance 2: Financial Assurance Information Listing

A listing of financial assurance information for solid waste facilities. Financial assurance is intended to ensure that resources are available to pay for the cost of closure, post-closure care, and corrective measures if the owner or operator of a regulated facility is unable or unwilling to pay.

Date of Government Version: 02/14/2017
Date Data Arrived at EDR: 02/17/2017
Date Made Active in Reports: 05/25/2017
Number of Days to Update: 97

Source: California Integrated Waste Management Board
Telephone: 916-341-6066
Last EDR Contact: 08/10/2017
Next Scheduled EDR Contact: 11/27/2017
Data Release Frequency: Varies

HAZNET: Facility and Manifest Data

Facility and Manifest Data. The data is extracted from the copies of hazardous waste manifests received each year by the DTSC. The annual volume of manifests is typically 700,000 - 1,000,000 annually, representing approximately 350,000 - 500,000 shipments. Data are from the manifests submitted without correction, and therefore many contain some invalid values for data elements such as generator ID, TSD ID, waste category, and disposal method. This database begins with calendar year 1993.

Date of Government Version: 12/31/2015
Date Data Arrived at EDR: 10/12/2016
Date Made Active in Reports: 12/15/2016
Number of Days to Update: 64

Source: California Environmental Protection Agency
Telephone: 916-255-1136
Last EDR Contact: 07/12/2017
Next Scheduled EDR Contact: 10/23/2017
Data Release Frequency: Annually

ICE: ICE

Contains data pertaining to the Permitted Facilities with Inspections / Enforcements sites tracked in Envirostor.

Date of Government Version: 11/21/2016
Date Data Arrived at EDR: 11/22/2016
Date Made Active in Reports: 01/23/2017
Number of Days to Update: 62

Source: Department of Toxic Subsances Control
Telephone: 877-786-9427
Last EDR Contact: 05/24/2017
Next Scheduled EDR Contact: 09/04/2017
Data Release Frequency: Quarterly

HIST CORTESE: Hazardous Waste & Substance Site List

The sites for the list are designated by the State Water Resource Control Board [LUST], the Integrated Waste Board [SWF/LS], and the Department of Toxic Substances Control [CALSITES]. This listing is no longer updated by the state agency.

Date of Government Version: 04/01/2001
Date Data Arrived at EDR: 01/22/2009
Date Made Active in Reports: 04/08/2009
Number of Days to Update: 76

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 01/22/2009
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

HWP: EnviroStor Permitted Facilities Listing
Detailed information on permitted hazardous waste facilities and corrective action ("cleanups") tracked in EnviroStor.

Date of Government Version: 11/21/2016
Date Data Arrived at EDR: 11/22/2016
Date Made Active in Reports: 01/23/2017
Number of Days to Update: 62
Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 05/24/2017
Next Scheduled EDR Contact: 09/04/2017
Data Release Frequency: Quarterly

HWT: Registered Hazardous Waste Transporter Database
A listing of hazardous waste transporters. In California, unless specifically exempted, it is unlawful for any person to transport hazardous wastes unless the person holds a valid registration issued by DTSC. A hazardous waste transporter registration is valid for one year and is assigned a unique registration number.

Date of Government Version: 04/11/2017
Date Data Arrived at EDR: 04/13/2017
Date Made Active in Reports: 04/26/2017
Number of Days to Update: 13
Source: Department of Toxic Substances Control
Telephone: 916-440-7145
Last EDR Contact: 07/12/2017
Next Scheduled EDR Contact: 10/23/2017
Data Release Frequency: Quarterly

MINES: Mines Site Location Listing
A listing of mine site locations from the Office of Mine Reclamation.

Date of Government Version: 09/12/2016
Date Data Arrived at EDR: 09/14/2016
Date Made Active in Reports: 10/14/2016
Number of Days to Update: 30
Source: Department of Conservation
Telephone: 916-322-1080
Last EDR Contact: 06/14/2017
Next Scheduled EDR Contact: 09/25/2017
Data Release Frequency: Varies

MWMP: Medical Waste Management Program Listing
The Medical Waste Management Program (MWMP) ensures the proper handling and disposal of medical waste by permitting and inspecting medical waste Offsite Treatment Facilities (PDF) and Transfer Stations (PDF) throughout the state. MWMP also oversees all Medical Waste Transporters.

Date of Government Version: 12/02/2016
Date Data Arrived at EDR: 12/06/2016
Date Made Active in Reports: 03/02/2017
Number of Days to Update: 86
Source: Department of Public Health
Telephone: 916-558-1784
Last EDR Contact: 06/06/2017
Next Scheduled EDR Contact: 09/18/2017
Data Release Frequency: Varies

NPDES: NPDES Permits Listing
A listing of NPDES permits, including stormwater.

Date of Government Version: 11/14/2016
Date Data Arrived at EDR: 11/15/2016
Date Made Active in Reports: 03/02/2017
Number of Days to Update: 107
Source: State Water Resources Control Board
Telephone: 916-445-9379
Last EDR Contact: 05/17/2017
Next Scheduled EDR Contact: 08/28/2017
Data Release Frequency: Quarterly

PEST LIC: Pesticide Regulation Licenses Listing
A listing of licenses and certificates issued by the Department of Pesticide Regulation. The DPR issues licenses and/or certificates to: Persons and businesses that apply or sell pesticides; Pest control dealers and brokers; Persons who advise on agricultural pesticide applications.

Date of Government Version: 12/06/2016
Date Data Arrived at EDR: 12/06/2016
Date Made Active in Reports: 03/03/2017
Number of Days to Update: 87
Source: Department of Pesticide Regulation
Telephone: 916-445-4038
Last EDR Contact: 06/07/2017
Next Scheduled EDR Contact: 09/18/2017
Data Release Frequency: Quarterly

PROC: Certified Processors Database
A listing of certified processors.

Date of Government Version: 03/13/2017
Date Data Arrived at EDR: 03/14/2017
Date Made Active in Reports: 05/03/2017
Number of Days to Update: 50
Source: Department of Conservation
Telephone: 916-323-3836
Last EDR Contact: 06/14/2017
Next Scheduled EDR Contact: 09/25/2017
Data Release Frequency: Quarterly

NOTIFY 65: Proposition 65 Records
Listings of all Proposition 65 incidents reported to counties by the State Water Resources Control Board and the Regional Water Quality Control Board. This database is no longer updated by the reporting agency.

Date of Government Version: 12/16/2016
Date Data Arrived at EDR: 12/22/2016
Date Made Active in Reports: 03/02/2017
Number of Days to Update: 70
Source: State Water Resources Control Board
Telephone: 916-445-3846
Last EDR Contact: 06/16/2017
Next Scheduled EDR Contact: 10/02/2017
Data Release Frequency: No Update Planned

UIC: UIC Listing
A listing of wells identified as underground injection wells, in the California Oil and Gas Wells database.

Date of Government Version: 01/20/2017
Date Data Arrived at EDR: 03/14/2017
Date Made Active in Reports: 05/03/2017
Number of Days to Update: 50
Source: Deaprtment of Conservation
Telephone: 916-445-2408
Last EDR Contact: 06/14/2017
Next Scheduled EDR Contact: 09/25/2017
Data Release Frequency: Varies

WASTEWATER PITS: Oil Wastewater Pits Listing
Water officials discovered that oil producers have been dumping chemical-laden wastewater into hundreds of unlined pits that are operating without proper permits. Inspections completed by the Central Valley Regional Water Quality Control Board revealed the existence of previously unidentified waste sites. The water board?s review found that more than one-third of the region?s active disposal pits are operating without permission.

Date of Government Version: 04/15/2015
Date Data Arrived at EDR: 04/17/2015
Date Made Active in Reports: 06/23/2015
Number of Days to Update: 67
Source: RWQCB, Central Valley Region
Telephone: 559-445-5577
Last EDR Contact: 07/14/2017
Next Scheduled EDR Contact: 10/23/2017
Data Release Frequency: Varies

WDS: Waste Discharge System
Sites which have been issued waste discharge requirements.

Date of Government Version: 06/19/2007
Date Data Arrived at EDR: 06/20/2007
Date Made Active in Reports: 06/29/2007
Number of Days to Update: 9
Source: State Water Resources Control Board
Telephone: 916-341-5227
Last EDR Contact: 05/22/2017
Next Scheduled EDR Contact: 09/04/2017
Data Release Frequency: Quarterly

WIP: Well Investigation Program Case List
Well Investigation Program case in the San Gabriel and San Fernando Valley area.

Date of Government Version: 07/03/2009
Date Data Arrived at EDR: 07/21/2009
Date Made Active in Reports: 08/03/2009
Number of Days to Update: 13
Source: Los Angeles Water Quality Control Board
Telephone: 213-576-6726
Last EDR Contact: 06/27/2017
Next Scheduled EDR Contact: 10/09/2017
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP: EDR Proprietary Manufactured Gas Plants

The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

EDR Hist Auto: EDR Exclusive Historic Gas Stations

EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR Hist Cleaner: EDR Exclusive Historic Dry Cleaners

EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA LF: Recovered Government Archive Solid Waste Facilities List

The EDR Recovered Government Archive Landfill database provides a list of landfills derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Resources Recycling and Recovery in California.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 01/13/2014
Number of Days to Update: 196

Source: Department of Resources Recycling and Recovery
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

RGA LUST: Recovered Government Archive Leaking Underground Storage Tank

The EDR Recovered Government Archive Leaking Underground Storage Tank database provides a list of LUST incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the State Water Resources Control Board in California.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 12/30/2013
Number of Days to Update: 182

Source: State Water Resources Control Board
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

COUNTY RECORDS

ALAMEDA COUNTY:

Contaminated Sites

A listing of contaminated sites overseen by the Toxic Release Program (oil and groundwater contamination from chemical releases and spills) and the Leaking Underground Storage Tank Program (soil and ground water contamination from leaking petroleum USTs).

Date of Government Version: 04/10/2017
Date Data Arrived at EDR: 04/11/2017
Date Made Active in Reports: 05/12/2017
Number of Days to Update: 31

Source: Alameda County Environmental Health Services
Telephone: 510-567-6700
Last EDR Contact: 07/07/2017
Next Scheduled EDR Contact: 10/23/2017
Data Release Frequency: Semi-Annually

Underground Tanks

Underground storage tank sites located in Alameda county.

Date of Government Version: 04/10/2017
Date Data Arrived at EDR: 04/11/2017
Date Made Active in Reports: 05/02/2017
Number of Days to Update: 21

Source: Alameda County Environmental Health Services
Telephone: 510-567-6700
Last EDR Contact: 07/07/2017
Next Scheduled EDR Contact: 04/24/2047
Data Release Frequency: Semi-Annually

AMADOR COUNTY:

CUPA Facility List

Cupa Facility List

Date of Government Version: 06/20/2017
Date Data Arrived at EDR: 06/21/2017
Date Made Active in Reports: 08/09/2017
Number of Days to Update: 49

Source: Amador County Environmental Health
Telephone: 209-223-6439
Last EDR Contact: 06/16/2017
Next Scheduled EDR Contact: 09/18/2017
Data Release Frequency: Varies

BUTTE COUNTY:

CUPA Facility Listing

Cupa facility list.

Date of Government Version: 04/21/2017
Date Data Arrived at EDR: 04/25/2017
Date Made Active in Reports: 08/09/2017
Number of Days to Update: 106

Source: Public Health Department
Telephone: 530-538-7149
Last EDR Contact: 08/03/2017
Next Scheduled EDR Contact: 10/23/2017
Data Release Frequency: No Update Planned

CALVERAS COUNTY:

CUPA Facility Listing
Cupa Facility Listing

Date of Government Version: 04/25/2017
Date Data Arrived at EDR: 04/27/2017
Date Made Active in Reports: 08/09/2017
Number of Days to Update: 104

Source: Calveras County Environmental Health
Telephone: 209-754-6399
Last EDR Contact: 06/27/2017
Next Scheduled EDR Contact: 10/09/2017
Data Release Frequency: Quarterly

COLUSA COUNTY:

CUPA Facility List
Cupa facility list.

Date of Government Version: 02/23/2017
Date Data Arrived at EDR: 02/24/2017
Date Made Active in Reports: 05/12/2017
Number of Days to Update: 77

Source: Health & Human Services
Telephone: 530-458-0396
Last EDR Contact: 08/03/2017
Next Scheduled EDR Contact: 11/20/2017
Data Release Frequency: Varies

CONTRA COSTA COUNTY:

Site List
List includes sites from the underground tank, hazardous waste generator and business plan/2185 programs.

Date of Government Version: 05/26/2017
Date Data Arrived at EDR: 05/30/2017
Date Made Active in Reports: 07/27/2017
Number of Days to Update: 58

Source: Contra Costa Health Services Department
Telephone: 925-646-2286
Last EDR Contact: 07/31/2017
Next Scheduled EDR Contact: 11/13/2017
Data Release Frequency: Semi-Annually

DEL NORTE COUNTY:

CUPA Facility List
Cupa Facility list

Date of Government Version: 05/02/2017
Date Data Arrived at EDR: 05/04/2017
Date Made Active in Reports: 08/04/2017
Number of Days to Update: 92

Source: Del Norte County Environmental Health Division
Telephone: 707-465-0426
Last EDR Contact: 07/27/2017
Next Scheduled EDR Contact: 11/13/2017
Data Release Frequency: Varies

EL DORADO COUNTY:

CUPA Facility List
CUPA facility list.

Date of Government Version: 06/19/2017
Date Data Arrived at EDR: 06/20/2017
Date Made Active in Reports: 08/09/2017
Number of Days to Update: 50

Source: El Dorado County Environmental Management Department
Telephone: 530-621-6623
Last EDR Contact: 07/31/2017
Next Scheduled EDR Contact: 11/13/2017
Data Release Frequency: Varies

FRESNO COUNTY:

CUPA Resources List

Certified Unified Program Agency. CUPA's are responsible for implementing a unified hazardous materials and hazardous waste management regulatory program. The agency provides oversight of businesses that deal with hazardous materials, operate underground storage tanks or aboveground storage tanks.

Date of Government Version: 06/30/2017
Date Data Arrived at EDR: 07/05/2017
Date Made Active in Reports: 08/04/2017
Number of Days to Update: 30

Source: Dept. of Community Health
Telephone: 559-445-3271
Last EDR Contact: 06/29/2017
Next Scheduled EDR Contact: 10/16/2017
Data Release Frequency: Semi-Annually

GLENN COUNTY:

CUPA Facility List

Cupa facility list

Date of Government Version: 12/02/2016
Date Data Arrived at EDR: 02/03/2017
Date Made Active in Reports: 05/25/2017
Number of Days to Update: 111

Source: Glenn County Air Pollution Control District
Telephone: 830-934-6500
Last EDR Contact: 07/21/2017
Next Scheduled EDR Contact: 11/08/2017
Data Release Frequency: Varies

HUMBOLDT COUNTY:

CUPA Facility List

CUPA facility list.

Date of Government Version: 03/20/2017
Date Data Arrived at EDR: 03/21/2017
Date Made Active in Reports: 05/17/2017
Number of Days to Update: 57

Source: Humboldt County Environmental Health
Telephone: N/A
Last EDR Contact: 05/22/2017
Next Scheduled EDR Contact: 09/04/2017
Data Release Frequency: Varies

IMPERIAL COUNTY:

CUPA Facility List

Cupa facility list.

Date of Government Version: 04/24/2017
Date Data Arrived at EDR: 04/25/2017
Date Made Active in Reports: 08/04/2017
Number of Days to Update: 101

Source: San Diego Border Field Office
Telephone: 760-339-2777
Last EDR Contact: 07/21/2017
Next Scheduled EDR Contact: 11/08/2017
Data Release Frequency: Varies

INYO COUNTY:

CUPA Facility List
Cupa facility list.

Date of Government Version: 06/08/2017
Date Data Arrived at EDR: 06/09/2017
Date Made Active in Reports: 08/04/2017
Number of Days to Update: 56

Source: Inyo County Environmental Health Services
Telephone: 760-878-0238
Last EDR Contact: 06/02/2017
Next Scheduled EDR Contact: 09/04/2017
Data Release Frequency: Varies

KERN COUNTY:

Underground Storage Tank Sites & Tank Listing
Kern County Sites and Tanks Listing.

Date of Government Version: 02/07/2017
Date Data Arrived at EDR: 02/10/2017
Date Made Active in Reports: 05/02/2017
Number of Days to Update: 81

Source: Kern County Environment Health Services Department
Telephone: 661-862-8700
Last EDR Contact: 08/03/2017
Next Scheduled EDR Contact: 11/20/2017
Data Release Frequency: Quarterly

KINGS COUNTY:

CUPA Facility List
A listing of sites included in the county's Certified Unified Program Agency database. California's Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

Date of Government Version: 03/06/2017
Date Data Arrived at EDR: 03/07/2017
Date Made Active in Reports: 05/17/2017
Number of Days to Update: 71

Source: Kings County Department of Public Health
Telephone: 559-584-1411
Last EDR Contact: 08/03/2017
Next Scheduled EDR Contact: 09/04/2017
Data Release Frequency: Varies

LAKE COUNTY:

CUPA Facility List
Cupa facility list

Date of Government Version: 05/09/2017
Date Data Arrived at EDR: 05/11/2017
Date Made Active in Reports: 08/09/2017
Number of Days to Update: 90

Source: Lake County Environmental Health
Telephone: 707-263-1164
Last EDR Contact: 07/17/2017
Next Scheduled EDR Contact: 10/30/2017
Data Release Frequency: Varies

LASSEN COUNTY:

CUPA Facility List
Cupa facility list

Date of Government Version: 01/13/2017
Date Data Arrived at EDR: 04/25/2017
Date Made Active in Reports: 08/04/2017
Number of Days to Update: 101

Source: Lassen County Environmental Health
Telephone: 530-251-8528
Last EDR Contact: 07/21/2017
Next Scheduled EDR Contact: 11/08/2017
Data Release Frequency: Varies

LOS ANGELES COUNTY:

San Gabriel Valley Areas of Concern
San Gabriel Valley areas where VOC contamination is at or above the MCL as designated by region 9 EPA office.

Date of Government Version: 03/30/2009
Date Data Arrived at EDR: 03/31/2009
Date Made Active in Reports: 10/23/2009
Number of Days to Update: 206
Source: EPA Region 9
Telephone: 415-972-3178
Last EDR Contact: 06/16/2017
Next Scheduled EDR Contact: 10/02/2017
Data Release Frequency: No Update Planned

HMS: Street Number List
Industrial Waste and Underground Storage Tank Sites.

Date of Government Version: 11/14/2016
Date Data Arrived at EDR: 11/18/2016
Date Made Active in Reports: 01/23/2017
Number of Days to Update: 66
Source: Department of Public Works
Telephone: 626-458-3517
Last EDR Contact: 07/07/2017
Next Scheduled EDR Contact: 10/23/2017
Data Release Frequency: Semi-Annually

List of Solid Waste Facilities
Solid Waste Facilities in Los Angeles County.

Date of Government Version: 04/17/2017
Date Data Arrived at EDR: 04/18/2017
Date Made Active in Reports: 05/02/2017
Number of Days to Update: 14
Source: La County Department of Public Works
Telephone: 818-458-5185
Last EDR Contact: 07/18/2017
Next Scheduled EDR Contact: 10/30/2017
Data Release Frequency: Varies

City of Los Angeles Landfills
Landfills owned and maintained by the City of Los Angeles.

Date of Government Version: 01/01/2016
Date Data Arrived at EDR: 01/26/2016
Date Made Active in Reports: 03/22/2016
Number of Days to Update: 56
Source: Engineering & Construction Division
Telephone: 213-473-7869
Last EDR Contact: 07/13/2017
Next Scheduled EDR Contact: 10/30/2017
Data Release Frequency: Varies

Site Mitigation List
Industrial sites that have had some sort of spill or complaint.

Date of Government Version: 03/29/2016
Date Data Arrived at EDR: 04/06/2016
Date Made Active in Reports: 06/13/2016
Number of Days to Update: 68
Source: Community Health Services
Telephone: 323-890-7806
Last EDR Contact: 07/17/2017
Next Scheduled EDR Contact: 10/30/2017
Data Release Frequency: Annually

City of El Segundo Underground Storage Tank
Underground storage tank sites located in El Segundo city.

Date of Government Version: 01/17/2017
Date Data Arrived at EDR: 01/18/2017
Date Made Active in Reports: 05/10/2017
Number of Days to Update: 112
Source: City of El Segundo Fire Department
Telephone: 310-524-2236
Last EDR Contact: 07/13/2017
Next Scheduled EDR Contact: 10/30/2017
Data Release Frequency: Semi-Annually

City of Long Beach Underground Storage Tank
Underground storage tank sites located in the city of Long Beach.

Date of Government Version: 03/09/2017
Date Data Arrived at EDR: 03/10/2017
Date Made Active in Reports: 05/03/2017
Number of Days to Update: 54
Source: City of Long Beach Fire Department
Telephone: 562-570-2563
Last EDR Contact: 07/21/2017
Next Scheduled EDR Contact: 11/08/2017
Data Release Frequency: Annually

City of Torrance Underground Storage Tank
Underground storage tank sites located in the city of Torrance.

Date of Government Version: 01/10/2017
Date Data Arrived at EDR: 01/13/2017
Date Made Active in Reports: 05/03/2017
Number of Days to Update: 110

Source: City of Torrance Fire Department
Telephone: 310-618-2973
Last EDR Contact: 07/07/2017
Next Scheduled EDR Contact: 10/23/2017
Data Release Frequency: Semi-Annually

MADERA COUNTY:

CUPA Facility List
A listing of sites included in the county's Certified Unified Program Agency database. California's Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

Date of Government Version: 06/01/2017
Date Data Arrived at EDR: 06/02/2017
Date Made Active in Reports: 08/04/2017
Number of Days to Update: 63

Source: Madera County Environmental Health
Telephone: 559-675-7823
Last EDR Contact: 05/22/2017
Next Scheduled EDR Contact: 09/04/2017
Data Release Frequency: Varies

MARIN COUNTY:

Underground Storage Tank Sites
Currently permitted USTs in Marin County.

Date of Government Version: 03/31/2017
Date Data Arrived at EDR: 04/06/2017
Date Made Active in Reports: 05/03/2017
Number of Days to Update: 27

Source: Public Works Department Waste Management
Telephone: 415-473-6647
Last EDR Contact: 06/29/2017
Next Scheduled EDR Contact: 10/16/2017
Data Release Frequency: Semi-Annually

MERCED COUNTY:

CUPA Facility List
CUPA facility list.

Date of Government Version: 02/22/2017
Date Data Arrived at EDR: 02/23/2017
Date Made Active in Reports: 05/17/2017
Number of Days to Update: 83

Source: Merced County Environmental Health
Telephone: 209-381-1094
Last EDR Contact: 07/13/2017
Next Scheduled EDR Contact: 09/04/2017
Data Release Frequency: Varies

MONO COUNTY:

CUPA Facility List
CUPA Facility List

Date of Government Version: 02/21/2017
Date Data Arrived at EDR: 03/02/2017
Date Made Active in Reports: 05/17/2017
Number of Days to Update: 76

Source: Mono County Health Department
Telephone: 760-932-5580
Last EDR Contact: 08/08/2017
Next Scheduled EDR Contact: 09/11/2017
Data Release Frequency: Varies

MONTEREY COUNTY:

CUPA Facility Listing
CUPA Program listing from the Environmental Health Division.

Date of Government Version: 06/22/2017
Date Data Arrived at EDR: 06/23/2017
Date Made Active in Reports: 08/09/2017
Number of Days to Update: 47
Source: Monterey County Health Department
Telephone: 831-796-1297
Last EDR Contact: 05/22/2017
Next Scheduled EDR Contact: 09/04/2017
Data Release Frequency: Varies

NAPA COUNTY:

Sites With Reported Contamination
A listing of leaking underground storage tank sites located in Napa county.

Date of Government Version: 01/09/2017
Date Data Arrived at EDR: 01/11/2017
Date Made Active in Reports: 03/02/2017
Number of Days to Update: 50
Source: Napa County Department of Environmental Management
Telephone: 707-253-4269
Last EDR Contact: 05/24/2017
Next Scheduled EDR Contact: 09/11/2017
Data Release Frequency: No Update Planned

Closed and Operating Underground Storage Tank Sites
Underground storage tank sites located in Napa county.

Date of Government Version: 03/15/2017
Date Data Arrived at EDR: 03/16/2017
Date Made Active in Reports: 05/09/2017
Number of Days to Update: 54
Source: Napa County Department of Environmental Management
Telephone: 707-253-4269
Last EDR Contact: 05/24/2017
Next Scheduled EDR Contact: 09/11/2017
Data Release Frequency: No Update Planned

NEVADA COUNTY:

CUPA Facility List
CUPA facility list.

Date of Government Version: 05/08/2017
Date Data Arrived at EDR: 05/09/2017
Date Made Active in Reports: 08/09/2017
Number of Days to Update: 92
Source: Community Development Agency
Telephone: 530-265-1467
Last EDR Contact: 07/27/2017
Next Scheduled EDR Contact: 11/13/2017
Data Release Frequency: Varies

ORANGE COUNTY:

List of Industrial Site Cleanups
Petroleum and non-petroleum spills.

Date of Government Version: 02/06/2017
Date Data Arrived at EDR: 02/10/2017
Date Made Active in Reports: 04/21/2017
Number of Days to Update: 70
Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 08/07/2017
Next Scheduled EDR Contact: 11/20/2017
Data Release Frequency: Annually

List of Underground Storage Tank Cleanups
Orange County Underground Storage Tank Cleanups (LUST).

Date of Government Version: 11/04/2016
Date Data Arrived at EDR: 11/11/2016
Date Made Active in Reports: 01/23/2017
Number of Days to Update: 73
Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 08/07/2017
Next Scheduled EDR Contact: 11/20/2017
Data Release Frequency: Quarterly

List of Underground Storage Tank Facilities
Orange County Underground Storage Tank Facilities (UST).

Date of Government Version: 02/06/2017
Date Data Arrived at EDR: 02/07/2017
Date Made Active in Reports: 05/03/2017
Number of Days to Update: 85
Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 08/09/2017
Next Scheduled EDR Contact: 11/20/2017
Data Release Frequency: Quarterly

PLACER COUNTY:

Master List of Facilities
List includes aboveground tanks, underground tanks and cleanup sites.

Date of Government Version: 09/02/2016
Date Data Arrived at EDR: 09/06/2016
Date Made Active in Reports: 10/14/2016
Number of Days to Update: 38
Source: Placer County Health and Human Services
Telephone: 530-745-2363
Last EDR Contact: 06/02/2017
Next Scheduled EDR Contact: 09/18/2017
Data Release Frequency: Semi-Annually

PLUMAS COUNTY:

CUPA Facility List
Plumas County CUPA Program facilities.

Date of Government Version: 06/19/2017
Date Data Arrived at EDR: 07/05/2017
Date Made Active in Reports: 08/09/2017
Number of Days to Update: 35
Source: Plumas County Environmental Health
Telephone: 530-283-6355
Last EDR Contact: 07/21/2017
Next Scheduled EDR Contact: 11/08/2017
Data Release Frequency: Varies

RIVERSIDE COUNTY:

Listing of Underground Tank Cleanup Sites
Riverside County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 04/18/2017
Date Data Arrived at EDR: 04/20/2017
Date Made Active in Reports: 04/21/2017
Number of Days to Update: 1
Source: Department of Environmental Health
Telephone: 951-358-5055
Last EDR Contact: 06/19/2017
Next Scheduled EDR Contact: 10/02/2017
Data Release Frequency: Quarterly

Underground Storage Tank Tank List
Underground storage tank sites located in Riverside county.

Date of Government Version: 01/19/2017
Date Data Arrived at EDR: 01/25/2017
Date Made Active in Reports: 05/03/2017
Number of Days to Update: 98
Source: Department of Environmental Health
Telephone: 951-358-5055
Last EDR Contact: 06/19/2017
Next Scheduled EDR Contact: 10/02/2017
Data Release Frequency: Quarterly

SACRAMENTO COUNTY:

Toxic Site Clean-Up List
List of sites where unauthorized releases of potentially hazardous materials have occurred.

Date of Government Version: 02/06/2017
Date Data Arrived at EDR: 04/04/2017
Date Made Active in Reports: 08/09/2017
Number of Days to Update: 127

Source: Sacramento County Environmental Management
Telephone: 916-875-8406
Last EDR Contact: 07/06/2017
Next Scheduled EDR Contact: 10/16/2017
Data Release Frequency: Quarterly

Master Hazardous Materials Facility List

Any business that has hazardous materials on site - hazardous material storage sites, underground storage tanks, waste generators.

Date of Government Version: 11/08/2016
Date Data Arrived at EDR: 01/05/2017
Date Made Active in Reports: 03/02/2017
Number of Days to Update: 56

Source: Sacramento County Environmental Management
Telephone: 916-875-8406
Last EDR Contact: 07/06/2017
Next Scheduled EDR Contact: 10/16/2017
Data Release Frequency: Quarterly

SAN BENITO COUNTY:

CUPA Facility List

Cupa facility list

Date of Government Version: 11/30/2016
Date Data Arrived at EDR: 02/09/2017
Date Made Active in Reports: 05/25/2017
Number of Days to Update: 105

Source: San Benito County Environmental Health
Telephone: N/A
Last EDR Contact: 08/03/2017
Next Scheduled EDR Contact: 11/20/2017
Data Release Frequency: Varies

SAN BERNARDINO COUNTY:

Hazardous Material Permits

This listing includes underground storage tanks, medical waste handlers/generators, hazardous materials handlers, hazardous waste generators, and waste oil generators/handlers.

Date of Government Version: 12/09/2016
Date Data Arrived at EDR: 12/13/2016
Date Made Active in Reports: 03/03/2017
Number of Days to Update: 80

Source: San Bernardino County Fire Department Hazardous Materials Division
Telephone: 909-387-3041
Last EDR Contact: 08/07/2017
Next Scheduled EDR Contact: 11/20/2017
Data Release Frequency: Quarterly

SAN DIEGO COUNTY:

Hazardous Materials Management Division Database

The database includes: HE58 - This report contains the business name, site address, business phone number, establishment 'H' permit number, type of permit, and the business status. HE17 - In addition to providing the same information provided in the HE58 listing, HE17 provides inspection dates, violations received by the establishment, hazardous waste generated, the quantity, method of storage, treatment/disposal of waste and the hauler, and information on underground storage tanks. Unauthorized Release List - Includes a summary of environmental contamination cases in San Diego County (underground tank cases, non-tank cases, groundwater contamination, and soil contamination are included.)

Date of Government Version: 10/05/2016
Date Data Arrived at EDR: 12/06/2016
Date Made Active in Reports: 03/02/2017
Number of Days to Update: 86

Source: Hazardous Materials Management Division
Telephone: 619-338-2268
Last EDR Contact: 06/07/2017
Next Scheduled EDR Contact: 09/18/2017
Data Release Frequency: Quarterly

Solid Waste Facilities
San Diego County Solid Waste Facilities.

Date of Government Version: 10/31/2015
Date Data Arrived at EDR: 11/07/2015
Date Made Active in Reports: 01/04/2016
Number of Days to Update: 58
Source: Department of Health Services
Telephone: 619-338-2209
Last EDR Contact: 07/21/2017
Next Scheduled EDR Contact: 11/08/2017
Data Release Frequency: Varies

Environmental Case Listing
The listing contains all underground tank release cases and projects pertaining to properties contaminated with hazardous substances that are actively under review by the Site Assessment and Mitigation Program.

Date of Government Version: 03/23/2010
Date Data Arrived at EDR: 06/15/2010
Date Made Active in Reports: 07/09/2010
Number of Days to Update: 24
Source: San Diego County Department of Environmental Health
Telephone: 619-338-2371
Last EDR Contact: 06/05/2017
Next Scheduled EDR Contact: 09/18/2017
Data Release Frequency: No Update Planned

SAN FRANCISCO COUNTY:

Local Oversite Facilities
A listing of leaking underground storage tank sites located in San Francisco county.

Date of Government Version: 09/19/2008
Date Data Arrived at EDR: 09/19/2008
Date Made Active in Reports: 09/29/2008
Number of Days to Update: 10
Source: Department Of Public Health San Francisco County
Telephone: 415-252-3920
Last EDR Contact: 08/07/2017
Next Scheduled EDR Contact: 11/20/2017
Data Release Frequency: Quarterly

Underground Storage Tank Information
Underground storage tank sites located in San Francisco county.

Date of Government Version: 02/28/2017
Date Data Arrived at EDR: 03/02/2017
Date Made Active in Reports: 05/03/2017
Number of Days to Update: 62
Source: Department of Public Health
Telephone: 415-252-3920
Last EDR Contact: 08/07/2017
Next Scheduled EDR Contact: 11/20/2017
Data Release Frequency: Quarterly

SAN JOAQUIN COUNTY:

San Joaquin Co. UST
A listing of underground storage tank locations in San Joaquin county.

Date of Government Version: 03/21/2017
Date Data Arrived at EDR: 03/23/2017
Date Made Active in Reports: 05/09/2017
Number of Days to Update: 47
Source: Environmental Health Department
Telephone: N/A
Last EDR Contact: 06/16/2017
Next Scheduled EDR Contact: 10/02/2017
Data Release Frequency: Semi-Annually

SAN LUIS OBISPO COUNTY:

CUPA Facility List
Cupa Facility List.

Date of Government Version: 06/05/2017
Date Data Arrived at EDR: 06/16/2017
Date Made Active in Reports: 08/09/2017
Number of Days to Update: 54
Source: San Luis Obispo County Public Health Department
Telephone: 805-781-5596
Last EDR Contact: 06/02/2017
Next Scheduled EDR Contact: 09/04/2017
Data Release Frequency: Varies

SAN MATEO COUNTY:

Business Inventory
List includes Hazardous Materials Business Plan, hazardous waste generators, and underground storage tanks.

Date of Government Version: 03/15/2017
Date Data Arrived at EDR: 04/07/2017
Date Made Active in Reports: 05/10/2017
Number of Days to Update: 33
Source: San Mateo County Environmental Health Services Division
Telephone: 650-363-1921
Last EDR Contact: 06/09/2017
Next Scheduled EDR Contact: 09/25/2017
Data Release Frequency: Annually

Fuel Leak List
A listing of leaking underground storage tank sites located in San Mateo county.

Date of Government Version: 03/15/2017
Date Data Arrived at EDR: 04/07/2017
Date Made Active in Reports: 04/21/2017
Number of Days to Update: 14
Source: San Mateo County Environmental Health Services Division
Telephone: 650-363-1921
Last EDR Contact: 06/09/2017
Next Scheduled EDR Contact: 09/25/2017
Data Release Frequency: Semi-Annually

SANTA BARBARA COUNTY:

CUPA Facility Listing
CUPA Program Listing from the Environmental Health Services division.

Date of Government Version: 09/08/2011
Date Data Arrived at EDR: 09/09/2011
Date Made Active in Reports: 10/07/2011
Number of Days to Update: 28
Source: Santa Barbara County Public Health Department
Telephone: 805-686-8167
Last EDR Contact: 05/22/2017
Next Scheduled EDR Contact: 09/04/2017
Data Release Frequency: Varies

SANTA CLARA COUNTY:

Cupa Facility List
Cupa facility list

Date of Government Version: 02/22/2017
Date Data Arrived at EDR: 02/23/2017
Date Made Active in Reports: 05/23/2017
Number of Days to Update: 89
Source: Department of Environmental Health
Telephone: 408-918-1973
Last EDR Contact: 08/07/2017
Next Scheduled EDR Contact: 09/04/2017
Data Release Frequency: Varies

HIST LUST - Fuel Leak Site Activity Report
A listing of open and closed leaking underground storage tanks. This listing is no longer updated by the county. Leaking underground storage tanks are now handled by the Department of Environmental Health.

Date of Government Version: 03/29/2005
Date Data Arrived at EDR: 03/30/2005
Date Made Active in Reports: 04/21/2005
Number of Days to Update: 22
Source: Santa Clara Valley Water District
Telephone: 408-265-2600
Last EDR Contact: 03/23/2009
Next Scheduled EDR Contact: 06/22/2009
Data Release Frequency: No Update Planned

LOP Listing
A listing of leaking underground storage tanks located in Santa Clara county.

Date of Government Version: 03/03/2014
Date Data Arrived at EDR: 03/05/2014
Date Made Active in Reports: 03/18/2014
Number of Days to Update: 13
Source: Department of Environmental Health
Telephone: 408-918-3417
Last EDR Contact: 05/24/2017
Next Scheduled EDR Contact: 09/11/2017
Data Release Frequency: Annually

Hazardous Material Facilities
Hazardous material facilities, including underground storage tank sites.

Date of Government Version: 05/04/2017
Date Data Arrived at EDR: 05/08/2017
Date Made Active in Reports: 07/27/2017
Number of Days to Update: 80

Source: City of San Jose Fire Department
Telephone: 408-535-7694
Last EDR Contact: 08/03/2017
Next Scheduled EDR Contact: 11/20/2017
Data Release Frequency: Annually

SANTA CRUZ COUNTY:

CUPA Facility List
CUPA facility listing.

Date of Government Version: 01/21/2017
Date Data Arrived at EDR: 02/22/2017
Date Made Active in Reports: 05/23/2017
Number of Days to Update: 90

Source: Santa Cruz County Environmental Health
Telephone: 831-464-2761
Last EDR Contact: 05/22/2017
Next Scheduled EDR Contact: 09/04/2017
Data Release Frequency: Varies

SHASTA COUNTY:

CUPA Facility List
Cupa Facility List.

Date of Government Version: 06/15/2017
Date Data Arrived at EDR: 06/19/2017
Date Made Active in Reports: 08/09/2017
Number of Days to Update: 51

Source: Shasta County Department of Resource Management
Telephone: 530-225-5789
Last EDR Contact: 05/22/2017
Next Scheduled EDR Contact: 09/04/2017
Data Release Frequency: Varies

SOLANO COUNTY:

Leaking Underground Storage Tanks
A listing of leaking underground storage tank sites located in Solano county.

Date of Government Version: 11/29/2016
Date Data Arrived at EDR: 12/21/2016
Date Made Active in Reports: 12/22/2016
Number of Days to Update: 1

Source: Solano County Department of Environmental Management
Telephone: 707-784-6770
Last EDR Contact: 06/09/2017
Next Scheduled EDR Contact: 09/25/2017
Data Release Frequency: Quarterly

Underground Storage Tanks
Underground storage tank sites located in Solano county.

Date of Government Version: 03/15/2017
Date Data Arrived at EDR: 03/17/2017
Date Made Active in Reports: 05/03/2017
Number of Days to Update: 47

Source: Solano County Department of Environmental Management
Telephone: 707-784-6770
Last EDR Contact: 06/09/2017
Next Scheduled EDR Contact: 09/25/2017
Data Release Frequency: Quarterly

SONOMA COUNTY:

Cupa Facility List
Cupa Facility list

Date of Government Version: 06/23/2017
Date Data Arrived at EDR: 06/27/2017
Date Made Active in Reports: 08/09/2017
Number of Days to Update: 43

Source: County of Sonoma Fire & Emergency Services Department
Telephone: 707-565-1174
Last EDR Contact: 06/21/2017
Next Scheduled EDR Contact: 10/09/2017
Data Release Frequency: Varies

Leaking Underground Storage Tank Sites

A listing of leaking underground storage tank sites located in Sonoma county.

Date of Government Version: 01/04/2017
Date Data Arrived at EDR: 01/06/2017
Date Made Active in Reports: 03/02/2017
Number of Days to Update: 55

Source: Department of Health Services
Telephone: 707-565-6565
Last EDR Contact: 06/21/2017
Next Scheduled EDR Contact: 10/09/2017
Data Release Frequency: Quarterly

STANISLAUS COUNTY:

CUPA Facility List

Cupa facility list

Date of Government Version: 05/10/2017
Date Data Arrived at EDR: 05/16/2017
Date Made Active in Reports: 08/09/2017
Number of Days to Update: 85

Source: Stanislaus County Department of Ennvironmental Protection
Telephone: 209-525-6751
Last EDR Contact: 07/17/2017
Next Scheduled EDR Contact: 10/30/2017
Data Release Frequency: Varies

SUTTER COUNTY:

Underground Storage Tanks

Underground storage tank sites located in Sutter county.

Date of Government Version: 12/02/2016
Date Data Arrived at EDR: 12/06/2016
Date Made Active in Reports: 01/10/2017
Number of Days to Update: 35

Source: Sutter County Department of Agriculture
Telephone: 530-822-7500
Last EDR Contact: 06/02/2017
Next Scheduled EDR Contact: 09/18/2017
Data Release Frequency: Semi-Annually

TEHAMA COUNTY:

CUPA Facility List

Cupa facilities

Date of Government Version: 05/01/2017
Date Data Arrived at EDR: 05/08/2017
Date Made Active in Reports: 08/09/2017
Number of Days to Update: 93

Source: Tehama County Department of Environmental Health
Telephone: 530-527-8020
Last EDR Contact: 08/03/2017
Next Scheduled EDR Contact: 11/20/2017
Data Release Frequency: Varies

TRINITY COUNTY:

CUPA Facility List

Cupa facility list

Date of Government Version: 04/24/2017
Date Data Arrived at EDR: 04/25/2017
Date Made Active in Reports: 08/09/2017
Number of Days to Update: 106

Source: Department of Toxic Substances Control
Telephone: 760-352-0381
Last EDR Contact: 07/21/2017
Next Scheduled EDR Contact: 11/08/2017
Data Release Frequency: Varies

TULARE COUNTY:

CUPA Facility List
Cupa program facilities

Date of Government Version: 01/05/2017
Date Data Arrived at EDR: 02/10/2017
Date Made Active in Reports: 05/25/2017
Number of Days to Update: 104

Source: Tulare County Environmental Health Services Division
Telephone: 559-624-7400
Last EDR Contact: 08/03/2017
Next Scheduled EDR Contact: 11/20/2017
Data Release Frequency: Varies

TUOLUMNE COUNTY:

CUPA Facility List
Cupa facility list

Date of Government Version: 04/27/2017
Date Data Arrived at EDR: 04/27/2017
Date Made Active in Reports: 08/10/2017
Number of Days to Update: 105

Source: Divison of Environmental Health
Telephone: 209-533-5633
Last EDR Contact: 08/03/2017
Next Scheduled EDR Contact: 11/08/2017
Data Release Frequency: Varies

VENTURA COUNTY:

Business Plan, Hazardous Waste Producers, and Operating Underground Tanks
The BWT list indicates by site address whether the Environmental Health Division has Business Plan (B), Waste Producer (W), and/or Underground Tank (T) information.

Date of Government Version: 12/27/2016
Date Data Arrived at EDR: 01/27/2017
Date Made Active in Reports: 05/10/2017
Number of Days to Update: 103

Source: Ventura County Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 07/24/2017
Next Scheduled EDR Contact: 11/08/2017
Data Release Frequency: Quarterly

Inventory of Illegal Abandoned and Inactive Sites
Ventura County Inventory of Closed, Illegal Abandoned, and Inactive Sites.

Date of Government Version: 12/01/2011
Date Data Arrived at EDR: 12/01/2011
Date Made Active in Reports: 01/19/2012
Number of Days to Update: 49

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 06/29/2017
Next Scheduled EDR Contact: 10/16/2017
Data Release Frequency: Annually

Listing of Underground Tank Cleanup Sites
Ventura County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 05/29/2008
Date Data Arrived at EDR: 06/24/2008
Date Made Active in Reports: 07/31/2008
Number of Days to Update: 37

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 08/10/2017
Next Scheduled EDR Contact: 11/27/2017
Data Release Frequency: Quarterly

Medical Waste Program List
To protect public health and safety and the environment from potential exposure to disease causing agents, the Environmental Health Division Medical Waste Program regulates the generation, handling, storage, treatment and disposal of medical waste throughout the County.

Date of Government Version: 09/26/2016
Date Data Arrived at EDR: 10/27/2016
Date Made Active in Reports: 01/24/2017
Number of Days to Update: 89

Source: Ventura County Resource Management Agency
Telephone: 805-654-2813
Last EDR Contact: 07/24/2017
Next Scheduled EDR Contact: 11/08/2017
Data Release Frequency: Quarterly

Underground Tank Closed Sites List
Ventura County Operating Underground Storage Tank Sites (UST)/Underground Tank Closed Sites List.

Date of Government Version: 02/27/2017
Date Data Arrived at EDR: 03/15/2017
Date Made Active in Reports: 05/03/2017
Number of Days to Update: 49
Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 06/14/2017
Next Scheduled EDR Contact: 09/25/2017
Data Release Frequency: Quarterly

YOLO COUNTY:

Underground Storage Tank Comprehensive Facility Report
Underground storage tank sites located in Yolo county.

Date of Government Version: 03/31/2017
Date Data Arrived at EDR: 04/06/2017
Date Made Active in Reports: 05/03/2017
Number of Days to Update: 27
Source: Yolo County Department of Health
Telephone: 530-666-8646
Last EDR Contact: 06/29/2017
Next Scheduled EDR Contact: 10/16/2017
Data Release Frequency: Annually

YUBA COUNTY:

CUPA Facility List
CUPA facility listing for Yuba County.

Date of Government Version: 01/30/2017
Date Data Arrived at EDR: 01/31/2017
Date Made Active in Reports: 05/23/2017
Number of Days to Update: 112
Source: Yuba County Environmental Health Department
Telephone: 530-749-7523
Last EDR Contact: 07/27/2017
Next Scheduled EDR Contact: 11/13/2017
Data Release Frequency: Varies

OTHER DATABASE(S)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

CT MANIFEST: Hazardous Waste Manifest Data
Facility and manifest data. Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a tsd facility.

Date of Government Version: 07/30/2013
Date Data Arrived at EDR: 08/19/2013
Date Made Active in Reports: 10/03/2013
Number of Days to Update: 45
Source: Department of Energy & Environmental Protection
Telephone: 860-424-3375
Last EDR Contact: 05/15/2017
Next Scheduled EDR Contact: 08/28/2017
Data Release Frequency: No Update Planned

NJ MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 12/31/2016
Date Data Arrived at EDR: 04/11/2017
Date Made Active in Reports: 07/27/2017
Number of Days to Update: 107
Source: Department of Environmental Protection
Telephone: N/A
Last EDR Contact: 07/10/2017
Next Scheduled EDR Contact: 10/23/2017
Data Release Frequency: Annually

NY MANIFEST: Facility and Manifest Data
Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a TSD facility.

Date of Government Version: 01/30/2017
Date Data Arrived at EDR: 02/01/2017
Date Made Active in Reports: 02/13/2017
Number of Days to Update: 12
Source: Department of Environmental Conservation
Telephone: 518-402-8651
Last EDR Contact: 08/03/2017
Next Scheduled EDR Contact: 11/13/2017
Data Release Frequency: Annually

PA MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 12/31/2015
Date Data Arrived at EDR: 07/22/2016
Date Made Active in Reports: 11/22/2016
Number of Days to Update: 123
Source: Department of Environmental Protection
Telephone: 717-783-8990
Last EDR Contact: 07/17/2017
Next Scheduled EDR Contact: 10/30/2017
Data Release Frequency: Annually

RI MANIFEST: Manifest information
Hazardous waste manifest information

Date of Government Version: 12/31/2013
Date Data Arrived at EDR: 06/19/2015
Date Made Active in Reports: 07/15/2015
Number of Days to Update: 26
Source: Department of Environmental Management
Telephone: 401-222-2797
Last EDR Contact: 05/22/2017
Next Scheduled EDR Contact: 09/04/2017
Data Release Frequency: Annually

WI MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 12/31/2016
Date Data Arrived at EDR: 04/13/2017
Date Made Active in Reports: 07/14/2017
Number of Days to Update: 92
Source: Department of Natural Resources
Telephone: N/A
Last EDR Contact: 06/12/2017
Next Scheduled EDR Contact: 09/25/2017
Data Release Frequency: Annually

Oil/Gas Pipelines
Source: PennWell Corporation
Petroleum Bundle (Crude Oil, Refined Products, Petrochemicals, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)) N = Natural Gas Bundle (Natural Gas, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)). This map includes information copyrighted by PennWell Corporation. This information is provided on a best effort basis and PennWell Corporation does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of PennWell.

Electric Power Transmission Line Data
Source: PennWell Corporation
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Sensitive Receptors: There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

AHA Hospitals:
Source: American Hospital Association, Inc.
Telephone: 312-280-5991
The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

Medical Centers: Provider of Services Listing
Source: Centers for Medicare & Medicaid Services
Telephone: 410-786-3000
A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services, a federal agency within the U.S. Department of Health and Human Services.

Nursing Homes
Source: National Institutes of Health
Telephone: 301-594-6248
Information on Medicare and Medicaid certified nursing homes in the United States.
Public Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on elementary and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.
Private Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on private school locations in the United States.
Daycare Centers: Licensed Facilities
Source: Department of Social Services
Telephone: 916-657-4041

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.
Source: FEMA
Telephone: 877-336-2627
Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetland Inventory
Source: Department of Fish & Game
Telephone: 916-445-0411

Current USGS 7.5 Minute Topographic Map
Source: U.S. Geological Survey

STREET AND ADDRESS INFORMATION

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GEOCHECK ®- PHYSICAL SETTING SOURCE ADDENDUM

TARGET PROPERTY ADDRESS

PROPOSED PALO ALTO PARKING STRUCTURE
375 HAMILTON AVENUE
PALO ALTO, CA 94301

TARGET PROPERTY COORDINATES

Latitude (North):	37.446095 - 37° 26' 45.94''
Longitude (West):	122.15977 - 122° 9' 35.17''
Universal Tranverse Mercator:	Zone 10
UTM X (Meters):	574323.9
UTM Y (Meters):	4144488.0
Elevation:	54 ft. above sea level

USGS TOPOGRAPHIC MAP

Target Property Map:	5640620 PALO ALTO, CA
Version Date:	2012

EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principal investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

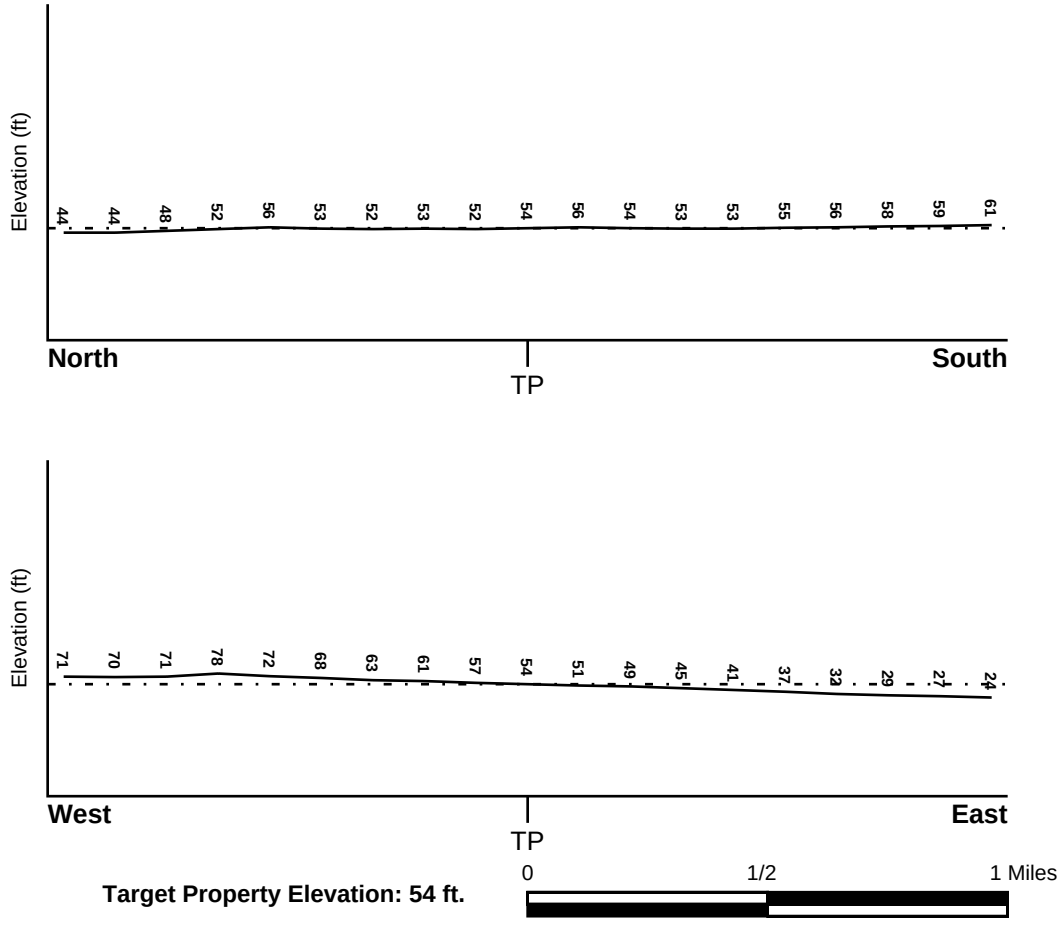
TOPOGRAPHIC INFORMATION

Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General East

SURROUNDING TOPOGRAPHY: ELEVATION PROFILES



Target Property Elevation: 54 ft.

Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

FEMA FLOOD ZONE

Flood Plain Panel at Target Property	FEMA Source Type
06081C0308E	FEMA FIRM Flood data

Additional Panels in search area:	FEMA Source Type
06081C0309E	FEMA FIRM Flood data
06085C0010H	FEMA FIRM Flood data
06085C0016H	FEMA FIRM Flood data
06085C0017H	FEMA FIRM Flood data

NATIONAL WETLAND INVENTORY

NWI Quad at Target Property	NWI Electronic Data Coverage
PALO ALTO	YES - refer to the Overview Map and Detail Map

HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Site-Specific Hydrogeological Data*:

Search Radius:	1.25 miles
Status:	Not found

AQUIFLOW®

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

MAP ID	LOCATION FROM TP	GENERAL DIRECTION GROUNDWATER FLOW
8	1/2 - 1 Mile West	E
B9	1/2 - 1 Mile WNW	E
B10	1/2 - 1 Mile WNW	NE
1G	1/2 - 1 Mile WNW	NE
2G	1/2 - 1 Mile WNW	E

* ©1996 Site−specific hydrogeological data gathered by CERCLIS Alerts, Inc., Bainbridge Island, WA. All rights reserved. All of the information and opinions presented are those of the cited EPA report(s), which were completed under a Comprehensive Environmental Response Compensation and Liability Information System (CERCLIS) investigation.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

MAP ID	LOCATION FROM TP	GENERAL DIRECTION GROUNDWATER FLOW
3G	1/2 - 1 Mile West	E

For additional site information, refer to Physical Setting Source Map Findings.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

ROCK STRATIGRAPHIC UNIT

Era:	Cenozoic
System:	Quaternary
Series:	Quaternary
Code:	Q *(decoded above as Era, System & Series)*

GEOLOGIC AGE IDENTIFICATION

Category: Stratifed Sequence

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps. The following information is based on Soil Conservation Service STATSGO data.

Soil Component Name:	BOTELLA
Soil Surface Texture:	clay loam
Hydrologic Group:	Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.
Soil Drainage Class:	Not reported

Hydric Status: Soil does not meet the requirements for a hydric soil.

Corrosion Potential - Uncoated Steel:	MODERATE
Depth to Bedrock Min:	> 60 inches
Depth to Bedrock Max:	> 60 inches

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
	Boundary			Classification			
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil	Permeability Rate (in/hr)	Soil Reaction (pH)
1	0 inches	9 inches	clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 0.60 Min: 0.20	Max: 7.30 Min: 5.60
2	9 inches	41 inches	silty clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 0.60 Min: 0.20	Max: 7.80 Min: 5.60
3	41 inches	76 inches	sandy clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Clayey sand.	Max: 0.60 Min: 0.20	Max: 7.80 Min: 5.60

OTHER SOIL TYPES IN AREA

Based on Soil Conservation Service STATSGO data, the following additional subordinant soil types may appear within the general area of target property.

Soil Surface Textures: No Other Soil Types

Surficial Soil Types: No Other Soil Types

Shallow Soil Types: No Other Soil Types

Deeper Soil Types: No Other Soil Types

LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

WELL SEARCH DISTANCE INFORMATION

DATABASE	SEARCH DISTANCE (miles)
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 0.001 miles
State Database	1.000

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
1	USGS40000183197	1/4 - 1/2 Mile SE
6	USGS40000183206	1/2 - 1 Mile East
7	USGS40000183284	1/2 - 1 Mile NNE
11	USGS40000183291	1/2 - 1 Mile NW
12	USGS40000183281	1/2 - 1 Mile NW
C13	USGS40000183250	1/2 - 1 Mile ENE
C18	USGS40000183245	1/2 - 1 Mile ENE
C19	USGS40000183244	1/2 - 1 Mile ENE
C20	USGS40000183247	1/2 - 1 Mile ENE
C21	USGS40000183246	1/2 - 1 Mile ENE

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

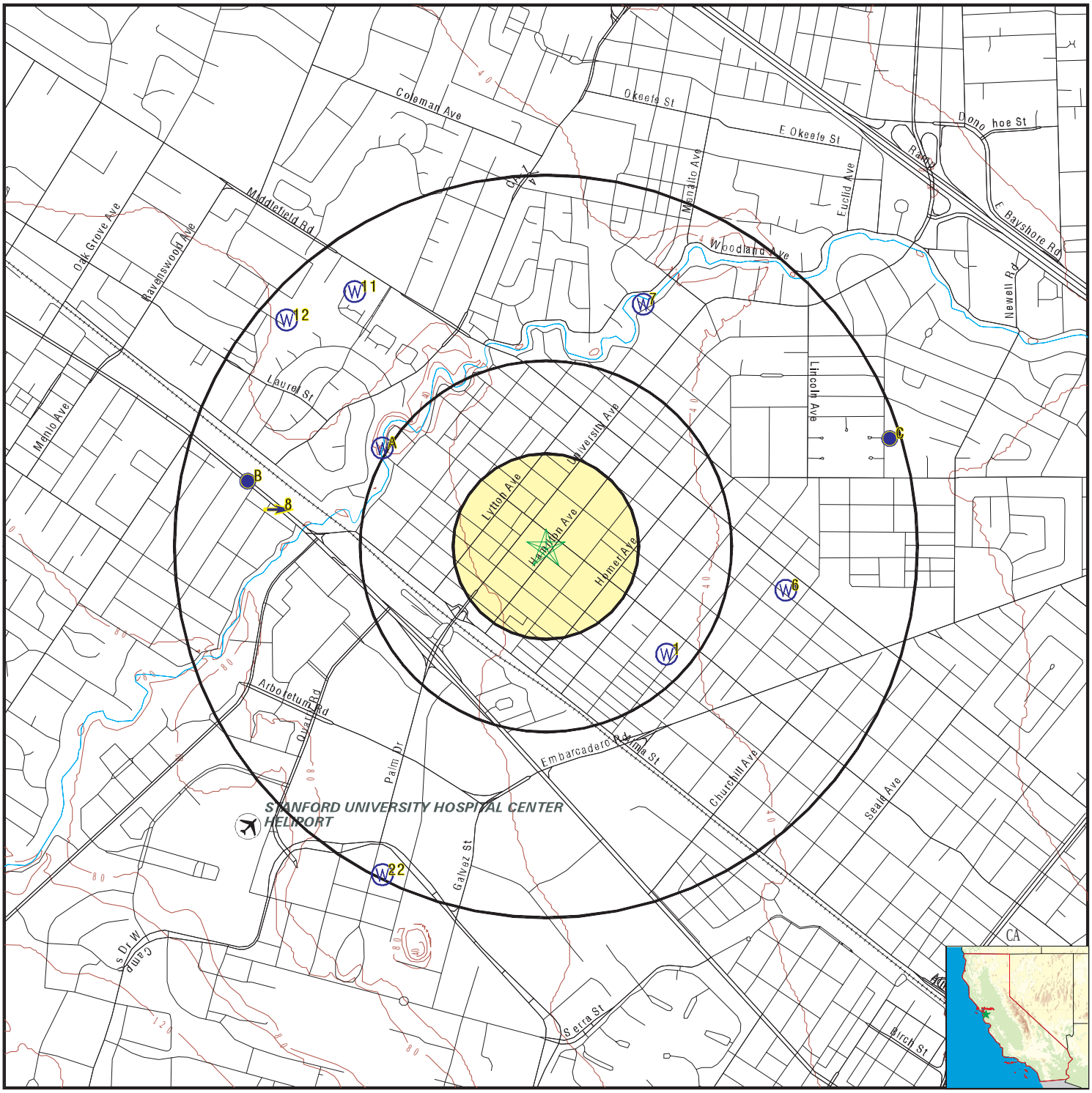
MAP ID	WELL ID	LOCATION FROM TP
No PWS System Found		

Note: PWS System location is not always the same as well location.

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
A2	5880	1/2 - 1 Mile WNW
A3	5874	1/2 - 1 Mile WNW
A4	5872	1/2 - 1 Mile WNW
A5	5873	1/2 - 1 Mile WNW
C14	CADW60000004022	1/2 - 1 Mile ENE
C15	CADW60000004023	1/2 - 1 Mile ENE
C16	CADW60000004024	1/2 - 1 Mile ENE
C17	CADW60000004025	1/2 - 1 Mile ENE
22	6924	1/2 - 1 Mile SSW

PHYSICAL SETTING SOURCE MAP - 5021939.2s



- County Boundary
- Major Roads
- Contour Lines
- Earthquake Fault Lines
- Airports
- Earthquake epicenter, Richter 5 or greater
- Water Wells
- Public Water Supply Wells
- Cluster of Multiple Icons
- Groundwater Flow Direction
- GI Indeterminate Groundwater Flow at Location
- GV Groundwater Flow Varies at Location
- HD Closest Hydrogeological Data
- Oil, gas or related wells

SITE NAME:	Proposed Palo Alto Parking Structure	CLIENT:	Parsons Brinkerhoff
ADDRESS:	375 Hamilton Avenue Palo Alto CA 94301	CONTACT:	Adam Heft
LAT/LONG:	37.446095 / 122.15977	INQUIRY #:	5021939.2s
		DATE:	August 14, 2017 5:40 pm

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GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

1
SE **FED USGS** **USGS40000183197**
1/4 - 1/2 Mile
Lower

Org. Identifier:	USGS-CA		
Formal name:	USGS California Water Science Center		
Monloc Identifier:	USGS-372631122091001		
Monloc name:	006S003W02H010M		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	18050003	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	37.4418834
Longitude:	-122.153853	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	40
Vert measure units:	feet	Vertacc measure val:	2.5
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	California Coastal Basin aquifers		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	Not Reported	Welldepth:	85
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
1997-04-28	18.7	

A2
WNW **CA WELLS** **5880**
1/2 - 1 Mile
Lower

Water System Information:

Prime Station Code:	05S/03W-35G10 M	User ID:	HEN
FRDS Number:	4310009002	County:	Santa Clara
District Number:	05	Station Type:	WELL/AMBNT/MUN/INTAKE/SUPPLY
Water Type:	Well/Groundwater	Well Status:	Standby Raw
Source Lat/Long:	372700.0 1221000.0	Precision:	1 Mile (One Minute)
Source Name:	HALE - STANDBY		
System Number:	4310009		
System Name:	City of Palo Alto		
Organization That Operates System:			
	P.O. BOX 10250 PALO ALTO, CA 94303		
Pop Served:	57000	Connections:	19021
Area Served:	PALO ALTO		

Sample Collected:	04-NOV-13	Findings:	100. MG/L
Chemical:	CALCIUM		
Sample Collected:	04-NOV-13	Findings:	32. MG/L
Chemical:	MAGNESIUM		
Sample Collected:	04-NOV-13	Findings:	320. MG/L
Chemical:	SODIUM		
Sample Collected:	04-NOV-13	Findings:	2.1 MG/L
Chemical:	POTASSIUM		
Sample Collected:	04-NOV-13	Findings:	670. UG/L
Chemical:	BARIUM		
Sample Collected:	04-NOV-13	Findings:	810. UG/L
Chemical:	IRON		
Sample Collected:	04-NOV-13	Findings:	380. MG/L
Chemical:	HARDNESS (TOTAL) AS CACO3		
Sample Collected:	04-NOV-13	Findings:	670. UG/L
Chemical:	BARIUM		
Sample Collected:	04-NOV-13	Findings:	280. UG/L
Chemical:	MANGANESE		
Sample Collected:	14-NOV-13	Findings:	10. UNITS
Chemical:	COLOR		
Sample Collected:	14-NOV-13	Findings:	2800. US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	14-NOV-13	Findings:	7.5
Chemical:	PH, LABORATORY		
Sample Collected:	14-NOV-13	Findings:	180. MG/L
Chemical:	ALKALINITY (TOTAL) AS CACO3		
Sample Collected:	14-NOV-13	Findings:	220. MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	14-NOV-13	Findings:	610. MG/L
Chemical:	CHLORIDE		
Sample Collected:	14-NOV-13	Findings:	23. MG/L
Chemical:	SULFATE		
Sample Collected:	14-NOV-13	Findings:	1400. MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	18-DEC-13	Findings:	3.4 NTU
Chemical:	TURBIDITY, LABORATORY		
Sample Collected:	29-FEB-16	Findings:	0.12 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	29-FEB-16	Findings:	310. UG/L
Chemical:	MANGANESE		

A3
WNW
1/2 - 1 Mile
Lower

CA WELLS **5874**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Water System Information:

Prime Station Code:	05S/03W-25M02 M	User ID:	ENG
FRDS Number:	4110020003	County:	San Mateo
District Number:	04	Station Type:	WELL/AMBNT/MUN/INTAKE/SUPPLY
Water Type:	Well/Groundwater	Well Status:	Active Raw
Source Lat/Long:	372700.0 1221000.0	Precision:	1 Mile (One Minute)
Source Name:	WELL 03		
System Number:	4110020		
System Name:	Palo Alto Park Mut Wtr Co		
Organization That Operates System:			
	2190 Addison Ave		
	East Palo Alto, CA 94303		
Pop Served:	3000	Connections:	665
Area Served:	PALO ALTO EAST		
Sample Collected:	03-SEP-14	Findings:	670. US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	03-SEP-14	Findings:	7.84
Chemical:	PH, LABORATORY		
Sample Collected:	03-SEP-14	Findings:	229. MG/L
Chemical:	ALKALINITY (TOTAL) AS CACO3		
Sample Collected:	03-SEP-14	Findings:	229. MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	03-SEP-14	Findings:	173. MG/L
Chemical:	HARDNESS (TOTAL) AS CACO3		
Sample Collected:	03-SEP-14	Findings:	45. MG/L
Chemical:	CALCIUM		
Sample Collected:	03-SEP-14	Findings:	15. MG/L
Chemical:	MAGNESIUM		
Sample Collected:	03-SEP-14	Findings:	110. MG/L
Chemical:	SODIUM		
Sample Collected:	03-SEP-14	Findings:	100. MG/L
Chemical:	CHLORIDE		
Sample Collected:	03-SEP-14	Findings:	45. MG/L
Chemical:	SULFATE		
Sample Collected:	03-SEP-14	Findings:	0.17 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	03-SEP-14	Findings:	445. MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	03-SEP-14	Findings:	0.294 NTU
Chemical:	TURBIDITY, LABORATORY		
Sample Collected:	08-DEC-15	Findings:	0.508 NTU
Chemical:	TURBIDITY, LABORATORY		
Sample Collected:	08-DEC-15	Findings:	1.35 PCI/L
Chemical:	GROSS ALPHA COUNTING ERROR		
Sample Collected:	08-DEC-15	Findings:	0.851 PCI/L
Chemical:	GROSS BETA COUNTING ERROR		

Sample Collected:	08-DEC-15	Findings:	0.169 PCI/L
Chemical:	RADIUM 226 COUNTING ERROR		
Sample Collected:	08-DEC-15	Findings:	1.64 PCI/L
Chemical:	GROSS ALPHA MDA95		
Sample Collected:	08-DEC-15	Findings:	0.47 PCI/L
Chemical:	RADIUM 226 MDA95		
Sample Collected:	08-DEC-15	Findings:	1.13 PCI/L
Chemical:	GROSS BETA MDA95		
Sample Collected:	06-JAN-11	Findings:	1.26 PCI/L
Chemical:	RADIUM 228		
Sample Collected:	06-JAN-11	Findings:	0.26 PCI/L
Chemical:	RADIUM 228 COUNTING ERROR		
Sample Collected:	06-JAN-11	Findings:	0.37 PCI/L
Chemical:	RADIUM 228 MDA95		
Sample Collected:	17-MAY-11	Findings:	2.4 UNITS
Chemical:	COLOR		
Sample Collected:	17-MAY-11	Findings:	791. US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	17-MAY-11	Findings:	7.79
Chemical:	PH, LABORATORY		
Sample Collected:	17-MAY-11	Findings:	224. MG/L
Chemical:	ALKALINITY (TOTAL) AS CACO3		
Sample Collected:	17-MAY-11	Findings:	224. MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	17-MAY-11	Findings:	170. MG/L
Chemical:	HARDNESS (TOTAL) AS CACO3		
Sample Collected:	17-MAY-11	Findings:	43. MG/L
Chemical:	CALCIUM		
Sample Collected:	17-MAY-11	Findings:	14. MG/L
Chemical:	MAGNESIUM		
Sample Collected:	17-MAY-11	Findings:	110. MG/L
Chemical:	SODIUM		
Sample Collected:	17-MAY-11	Findings:	96. MG/L
Chemical:	CHLORIDE		
Sample Collected:	17-MAY-11	Findings:	42. MG/L
Chemical:	SULFATE		
Sample Collected:	17-MAY-11	Findings:	474. MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	17-MAY-11	Findings:	0.219 NTU
Chemical:	TURBIDITY, LABORATORY		
Sample Collected:	17-MAY-11	Findings:	1.83 PCI/L
Chemical:	RADIUM 228		
Sample Collected:	17-MAY-11	Findings:	0.26 PCI/L
Chemical:	RADIUM 228 COUNTING ERROR		

Sample Collected:	17-MAY-11	Findings:	0.87 PCI/L
Chemical:	RADIUM 228 MDA95		
Sample Collected:	17-OCT-11	Findings:	736. US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	17-OCT-11	Findings:	39. MG/L
Chemical:	SULFATE		
Sample Collected:	17-OCT-11	Findings:	0.18 PCI/L
Chemical:	RADIUM 228 COUNTING ERROR		
Sample Collected:	17-OCT-11	Findings:	0.89 PCI/L
Chemical:	RADIUM 228 MDA95		
Sample Collected:	05-JUN-12	Findings:	459. US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	05-JUN-12	Findings:	41. MG/L
Chemical:	SULFATE		
Sample Collected:	05-JUN-12	Findings:	21. UG/L
Chemical:	MANGANESE		
Sample Collected:	05-JUN-12	Findings:	1.47 PCI/L
Chemical:	RADIUM 228		
Sample Collected:	05-JUN-12	Findings:	0.4 PCI/L
Chemical:	RADIUM 228 COUNTING ERROR		
Sample Collected:	05-JUN-12	Findings:	0.7 PCI/L
Chemical:	RADIUM 228 MDA95		
Sample Collected:	28-DEC-12	Findings:	0.17 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	23-JUL-13	Findings:	21. UG/L
Chemical:	MANGANESE		
Sample Collected:	23-JUL-13	Findings:	1.87 PCI/L
Chemical:	RADIUM 226		
Sample Collected:	23-JUL-13	Findings:	1.25 PCI/L
Chemical:	RADIUM 226 COUNTING ERROR		
Sample Collected:	23-JUL-13	Findings:	1.62 PCI/L
Chemical:	RADIUM 228		
Sample Collected:	23-JUL-13	Findings:	0.45 PCI/L
Chemical:	RADIUM 228 COUNTING ERROR		
Sample Collected:	23-JUL-13	Findings:	2.e-002 PCI/L
Chemical:	RADIUM 226 MDA95		
Sample Collected:	23-JUL-13	Findings:	0.45 PCI/L
Chemical:	RADIUM 228 MDA95		
Sample Collected:	19-MAY-14	Findings:	4.8 UNITS
Chemical:	COLOR		
Sample Collected:	19-MAY-14	Findings:	807. US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	19-MAY-14	Findings:	8.01
Chemical:	PH, LABORATORY		

Sample Collected:	19-MAY-14	Findings:	222. MG/L
Chemical:	ALKALINITY (TOTAL) AS CACO3		
Sample Collected:	19-MAY-14	Findings:	222. MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	19-MAY-14	Findings:	146. MG/L
Chemical:	HARDNESS (TOTAL) AS CACO3		
Sample Collected:	19-MAY-14	Findings:	37. MG/L
Chemical:	CALCIUM		
Sample Collected:	19-MAY-14	Findings:	13. MG/L
Chemical:	MAGNESIUM		
Sample Collected:	19-MAY-14	Findings:	100. MG/L
Chemical:	SODIUM		
Sample Collected:	19-MAY-14	Findings:	100. MG/L
Chemical:	CHLORIDE		
Sample Collected:	19-MAY-14	Findings:	42. MG/L
Chemical:	SULFATE		
Sample Collected:	19-MAY-14	Findings:	0.15 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	19-MAY-14	Findings:	492. MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	19-MAY-14	Findings:	0.307 NTU
Chemical:	TURBIDITY, LABORATORY		
Sample Collected:	11-JUN-14	Findings:	13. MG/L
Chemical:	MAGNESIUM		

A4
WNW
1/2 - 1 Mile
Lower

CA WELLS **5872**

Water System Information:

Prime Station Code:	05S/03W-25F01 M	User ID:	ENG
FRDS Number:	4110024001	County:	San Mateo
District Number:	04	Station Type:	WELL/AMBNT/MUN/INTAKE/SUPPLY
Water Type:	Well/Groundwater	Well Status:	Standby Raw
Source Lat/Long:	372700.0 1221000.0	Precision:	1 Mile (One Minute)
Source Name:	WELL 01 - STANDBY		
System Number:	4110024		
System Name:	East Palo Alto Water Wrks Dist		
Organization That Operates System:			
	10 Twin Dolphin Dr.Suite C-200 Redwood City, CA 94065		
Pop Served:	20000	Connections:	3858
Area Served:	EAST PALO ALTO		
Sample Collected:	25-MAR-15	Findings:	1.1 MG/L
Chemical:	POTASSIUM		
Sample Collected:	25-MAR-15	Findings:	360. MG/L
Chemical:	CHLORIDE		

Sample Collected:	25-MAR-15	Findings:	33. MG/L
Chemical:	SULFATE		
Sample Collected:	25-MAR-15	Findings:	0.12 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	25-MAR-15	Findings:	28. MG/L
Chemical:	SILICA		
Sample Collected:	25-MAR-15	Findings:	360. UG/L
Chemical:	BARIUM		
Sample Collected:	25-MAR-15	Findings:	160. UG/L
Chemical:	IRON		
Sample Collected:	25-MAR-15	Findings:	190. UG/L
Chemical:	MANGANESE		
Sample Collected:	25-MAR-15	Findings:	5.3 UG/L
Chemical:	SELENIUM		
Sample Collected:	25-MAR-15	Findings:	6.3 PCI/L
Chemical:	GROSS ALPHA		
Sample Collected:	25-MAR-15	Findings:	0.22 PCI/L
Chemical:	GROSS ALPHA COUNTING ERROR		
Sample Collected:	25-MAR-15	Findings:	850. MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	25-MAR-15	Findings:	0.61 NTU
Chemical:	TURBIDITY, LABORATORY		
Sample Collected:	25-MAR-15	Findings:	13.
Chemical:	AGGRSSIVE INDEX (CORROSIVITY)		
Sample Collected:	25-MAR-15	Findings:	1.5 PCI/L
Chemical:	GROSS ALPHA MDA95		
Sample Collected:	25-MAR-15	Findings:	0.35 PCI/L
Chemical:	RADIUM 226 MDA95		
Sample Collected:	25-MAR-15	Findings:	0.66 PCI/L
Chemical:	RADIUM 228 MDA95		
Sample Collected:	25-MAR-15	Findings:	5. UNITS
Chemical:	COLOR		
Sample Collected:	25-MAR-15	Findings:	1600. US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	25-MAR-15	Findings:	8.2
Chemical:	PH, LABORATORY		
Sample Collected:	25-MAR-15	Findings:	210. MG/L
Chemical:	ALKALINITY (TOTAL) AS CACO3		
Sample Collected:	25-MAR-15	Findings:	250. MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	25-MAR-15	Findings:	2.6 MG/L
Chemical:	CARBONATE ALKALINITY		
Sample Collected:	25-MAR-15	Findings:	0.3 MG/L
Chemical:	PHOSPHATE, ORTHO		

Sample Collected:	25-MAR-15	Findings:	240. MG/L
Chemical:	HARDNESS (TOTAL) AS CACO3		
Sample Collected:	25-MAR-15	Findings:	55. MG/L
Chemical:	CALCIUM		
Sample Collected:	25-MAR-15	Findings:	25. MG/L
Chemical:	MAGNESIUM		
Sample Collected:	25-MAR-15	Findings:	230. MG/L
Chemical:	SODIUM		

A5
WNW **CA WELLS 5873**
1/2 - 1 Mile
Lower

Water System Information:

Prime Station Code:	05S/03W-25M01 M	User ID:	ENG
FRDS Number:	4110020002	County:	San Mateo
District Number:	04	Station Type:	WELL/AMBNT/MUN/INTAKE/SUPPLY
Water Type:	Well/Groundwater	Well Status:	Active Raw
Source Lat/Long:	372700.0 1221000.0	Precision:	1 Mile (One Minute)
Source Name:	WELL 02		
System Number:	4110020		
System Name:	Palo Alto Park Mut Wtr Co		
Organization That Operates System:			
	2190 Addison Ave		
	East Palo Alto, CA 94303		
Pop Served:	3000	Connections:	665
Area Served:	PALO ALTO EAST		
Sample Collected:	19-APR-11	Findings:	100. UG/L
Chemical:	MANGANESE		
Sample Collected:	17-MAY-11	Findings:	85. UG/L
Chemical:	MANGANESE		
Sample Collected:	17-MAY-11	Findings:	3.4 UNITS
Chemical:	COLOR		
Sample Collected:	17-MAY-11	Findings:	864. US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	17-MAY-11	Findings:	7.21
Chemical:	PH, LABORATORY		
Sample Collected:	17-MAY-11	Findings:	380. MG/L
Chemical:	HARDNESS (TOTAL) AS CACO3		
Sample Collected:	17-MAY-11	Findings:	110. MG/L
Chemical:	CALCIUM		
Sample Collected:	17-MAY-11	Findings:	26. MG/L
Chemical:	MAGNESIUM		
Sample Collected:	17-MAY-11	Findings:	48. MG/L
Chemical:	SODIUM		
Sample Collected:	17-MAY-11	Findings:	1.4 MG/L
Chemical:	POTASSIUM		

Sample Collected:	17-MAY-11	Findings:	52. MG/L
Chemical:	CHLORIDE		
Sample Collected:	17-MAY-11	Findings:	84. MG/L
Chemical:	SULFATE		
Sample Collected:	17-MAY-11	Findings:	0.21 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	17-MAY-11	Findings:	85. UG/L
Chemical:	MANGANESE		
Sample Collected:	17-MAY-11	Findings:	566. MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	17-MAY-11	Findings:	3.3 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	17-MAY-11	Findings:	0.241 NTU
Chemical:	TURBIDITY, LABORATORY		
Sample Collected:	17-MAY-11	Findings:	9.e-002 PCI/L
Chemical:	RADIUM 228 COUNTING ERROR		
Sample Collected:	17-MAY-11	Findings:	0.83 PCI/L
Chemical:	RADIUM 228 MDA95		
Sample Collected:	21-JUN-11	Findings:	68. UG/L
Chemical:	MANGANESE		
Sample Collected:	19-JUL-11	Findings:	24. UG/L
Chemical:	MANGANESE		
Sample Collected:	16-AUG-11	Findings:	65. UG/L
Chemical:	MANGANESE		
Sample Collected:	20-SEP-11	Findings:	62. UG/L
Chemical:	MANGANESE		
Sample Collected:	17-OCT-11	Findings:	0.13 PCI/L
Chemical:	RADIUM 228 COUNTING ERROR		
Sample Collected:	17-OCT-11	Findings:	0.85 PCI/L
Chemical:	RADIUM 228 MDA95		
Sample Collected:	17-OCT-11	Findings:	808. US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	18-OCT-11	Findings:	66. UG/L
Chemical:	MANGANESE		
Sample Collected:	15-NOV-11	Findings:	71. UG/L
Chemical:	MANGANESE		
Sample Collected:	20-DEC-11	Findings:	47. UG/L
Chemical:	MANGANESE		
Sample Collected:	17-JAN-12	Findings:	62. UG/L
Chemical:	MANGANESE		
Sample Collected:	21-FEB-12	Findings:	36. UG/L
Chemical:	MANGANESE		
Sample Collected:	20-MAR-12	Findings:	61. UG/L
Chemical:	MANGANESE		

Sample Collected:	17-APR-12	Findings:	42. UG/L
Chemical:	MANGANESE		
Sample Collected:	15-MAY-12	Findings:	58. UG/L
Chemical:	MANGANESE		
Sample Collected:	05-JUN-12	Findings:	463. US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	05-JUN-12	Findings:	7.38
Chemical:	PH, LABORATORY		
Sample Collected:	05-JUN-12	Findings:	335. MG/L
Chemical:	ALKALINITY (TOTAL) AS CACO3		
Sample Collected:	05-JUN-12	Findings:	335. MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	05-JUN-12	Findings:	120. MG/L
Chemical:	CALCIUM		
Sample Collected:	05-JUN-12	Findings:	29. MG/L
Chemical:	MAGNESIUM		
Sample Collected:	05-JUN-12	Findings:	54. MG/L
Chemical:	SODIUM		
Sample Collected:	05-JUN-12	Findings:	1.5 MG/L
Chemical:	POTASSIUM		
Sample Collected:	05-JUN-12	Findings:	51. MG/L
Chemical:	CHLORIDE		
Sample Collected:	05-JUN-12	Findings:	80. MG/L
Chemical:	SULFATE		
Sample Collected:	05-JUN-12	Findings:	0.2 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	05-JUN-12	Findings:	69. UG/L
Chemical:	MANGANESE		
Sample Collected:	05-JUN-12	Findings:	557. MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	05-JUN-12	Findings:	4.1 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	05-JUN-12	Findings:	0.141 NTU
Chemical:	TURBIDITY, LABORATORY		
Sample Collected:	05-JUN-12	Findings:	1.55 PCI/L
Chemical:	RADIUM 228		
Sample Collected:	05-JUN-12	Findings:	0.21 PCI/L
Chemical:	RADIUM 228 COUNTING ERROR		
Sample Collected:	05-JUN-12	Findings:	0.91 PCI/L
Chemical:	RADIUM 228 MDA95		
Sample Collected:	19-JUN-12	Findings:	58. UG/L
Chemical:	MANGANESE		
Sample Collected:	17-JUL-12	Findings:	42. UG/L
Chemical:	MANGANESE		

Sample Collected:	21-AUG-12	Findings:	59. UG/L
Chemical:	MANGANESE		
Sample Collected:	20-NOV-12	Findings:	36. UG/L
Chemical:	MANGANESE		
Sample Collected:	15-JAN-13	Findings:	46. UG/L
Chemical:	MANGANESE		
Sample Collected:	19-FEB-13	Findings:	46. UG/L
Chemical:	MANGANESE		

6
East **FED USGS** **USGS40000183206**
1/2 - 1 Mile
Lower

Org. Identifier:	USGS-CA		
Formal name:	USGS California Water Science Center		
Monloc Identifier:	USGS-372640122084901		
Monloc name:	006S003W01D010M		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	18050003	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	37.4443834
Longitude:	-122.1480196	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	31.40
Vert measure units:	feet	Vertacc measure val:	20
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	California Coastal Basin aquifers		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	19320101	Welldepth:	600
Welldepth units:	ft	Wellholedepth:	750
Wellholedepth units:	ft		

Ground-water levels, Number of Measurements: 91

Date	Feet below Surface	Feet to Sealevel	Date	Feet below Surface	Feet to Sealevel
1983-09-01	9.8		1983-08-01	8.9	
1983-07-01	6.9		1983-06-01	7.9	
1983-05-02	3.9		1983-03-31	4.9	
1983-03-01	7.9		1983-02-01	9.8	
1983-01-03	18.0		1982-10-01	15.1	
1982-08-05	15.1		1982-07-01	13.1	
1982-06-01	13.1		1982-04-30	8.9	
1982-04-01	18.7		1982-03-01	19.0	
1982-02-02	16.1		1982-01-05	18.0	
1981-12-01	19.0		1981-10-30	24.0	
1981-10-01	20.0		1981-09-01	20.0	
1981-07-31	17.1		1981-07-16	17.1	
1981-06-01	16.1		1981-05-04	15.1	
1981-03-30	15.1		1981-03-02	21.0	
1981-02-02	17.1		1981-01-02	17.1	

Ground-water levels, continued.

Date	Feet below Surface	Feet to Sealevel
1980-10-02	16.1	
1980-03-03	16.0	
1980-01-02	19.0	
1979-08-31	19.0	
1979-08-01	16.0	
1979-06-01	16.0	
1979-03-30	16.1	
1979-02-01	20.0	
1978-12-01	20.0	
1978-10-02	21.0	
1978-08-01	19.0	
1978-05-01	20.0	
1978-03-01	25.9	
1977-12-30	30.8	
1977-09-01	34.1	
1977-06-30	30.8	
1977-05-02	29.0	
1977-03-01	27.0	
1976-12-01	29.0	
1976-09-16	33.0	
1976-08-03	45.0	
1975-10-02	20.0	
1972-08-31	57.0	
1971-10	55.0	
1970-10	54.0	
1969-03-26	54.0	
1968-04-18	58.0	
1967-03-09	64.0	
1966-03-15	80.0	
1965-03-15	80.0	
1963-10-01	103.0	
1980-04-01	13.0	
1980-02-01	18.0	
1979-09-04	20.0	
1979-08-13	17.0	
1979-06-29	16.0	
1979-05-01	16.0	
1979-03-01	17.1	
1979-01-02	20.0	
1978-11-01	21.0	
1978-09-01	20.0	
1978-06-30	19.0	
1978-03-30	22.0	
1978-01-31	28.9	
1977-09-30	35.1	
1977-08-02	33.1	
1977-05-31	29.0	
1977-04-01	26.0	
1977-02-01	28.0	
1976-10-01	32.0	
1976-09-02	34.0	
1976-04-01	22.0	
1974-04-16	34.0	
1972-05-30	51.0	
1971-04	47.0	
1970-03	49.0	
1968-07-11	64.0	
1967-10-13	67.0	
1966-10-14	77.0	
1965-10-14	81.0	
1964-10-01	92.0	

7
NNE
1/2 - 1 Mile
Lower

FED USGS **USGS40000183284**

Org. Identifier:	USGS-CA		
Formal name:	USGS California Water Science Center		
Monloc Identifier:	USGS-372720122091501		
Monloc name:	005S003W35G010M		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	18050003	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	37.4555556
Longitude:	-122.155	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Global positioning system (GPS), uncorrected		
Horiz coord refsys:	NAD83	Vert measure val:	44
Vert measure units:	feet	Vertacc measure val:	1
Vert accmeasure units:	feet		
Vertcollection method:	Level or other surveying method		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	California Coastal Basin aquifers		
Formation type:	Not Reported		

Aquifer type: Mixed (confined and unconfined multiple aquifers)
Construction date: 19551212 Welldepth: 840
Welldepth units: ft Wellholedepth: 935
Wellholedepth units: ft

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
1994-05-11	34.27	

8
West
1/2 - 1 Mile
Higher

Site ID: 440030
Groundwater Flow: E
Shallow Water Depth: 22.70
Deep Water Depth: 26.23
Average Water Depth: Not Reported
Date: 01/04/1999

AQUIFLOW **51279**

B9
WNW
1/2 - 1 Mile
Higher

Site ID: 440046
Groundwater Flow: E
Shallow Water Depth: Not Reported
Deep Water Depth: Not Reported
Average Water Depth: 48
Date: 04/15/1991

AQUIFLOW **64436**

B10
WNW
1/2 - 1 Mile
Higher

Site ID: 440009
Groundwater Flow: NE
Shallow Water Depth: Not Reported
Deep Water Depth: Not Reported
Average Water Depth: 41
Date: 05/14/1991

AQUIFLOW **64408**

11
NW
1/2 - 1 Mile
Higher

FED USGS **USGS40000183291**

Org. Identifier: USGS-CA
Formal name: USGS California Water Science Center
Monloc Identifier: USGS-372722122100501
Monloc name: 005S003W34H001M
Monloc type: Well
Monloc desc: Not Reported
Huc code: 18050004 Drainagearea value: Not Reported
Drainagearea Units: Not Reported Contrib drainagearea: Not Reported
Contrib drainagearea units: Not Reported Latitude: 37.4560497
Longitude: -122.1691312 Sourcemap scale: 24000
Horiz Acc measure: 1 Horiz Acc measure units: seconds
Horiz Collection method: Interpolated from map
Horiz coord refsys: NAD83 Vert measure val: 53.0
Vert measure units: feet Vertacc measure val: 5
Vert accmeasure units: feet
Vertcollection method: Interpolated from topographic map
Vert coord refsys: NGVD29 Countrycode: US
Aquifername: California Coastal Basin aquifers
Formation type: Not Reported

Aquifer type:	Not Reported		
Construction date:	19770808	Welldepth:	290
Welldepth units:	ft	Wellholedepth:	310
Wellholedepth units:	ft		

Ground-water levels, Number of Measurements: 42

Date	Feet below Surface	Feet to Sealevel	Date	Feet below Surface	Feet to Sealevel
1997-04-30	31.20		1995-09-13	39.55	
1995-06-21	34.52		1995-05-24	34.25	
1995-03-30	35.05		1995-03-08	36.90	
1994-12-14	42.18		1994-11-11	46.58	
1994-10-05	47.52		1994-09-07	46.85	
1994-08-03	43.66		1994-07-06	42.48	
1994-06-08	39.02		1994-05-11	37.77	
1994-05-05	38.14		1993-11-04	40.92	
1993-05-06	36.86		1992-10-07	46.53	
1992-05-21	44.81		1991-11-20	47.30	
1991-09-18	49.26		1991-05-17	53.83	
1990-11-01	50.56		1990-05-22	54.70	
1989-10-19	48.63				
1989-04-11	49.12				
Note: A nearby site that taps the same aquifer was being pumped.					
1985-01-04	27.21		1984-05-11	28.84	
1983-10-18	28.20				
Note: The site had been pumped recently.					
1983-04-20	22.59		1982-10-07	33.09	
1980-12-04	34.20				
1980-09-05	34.29				
Note: A nearby site that taps the same aquifer was being pumped.					
1980-07-14	32.36		1980-05-20	30.85	
1979-10-02	38.97		1979-03-30	34.09	
1978-06-21	37.67		1978-03-09	42.48	
1978-01-03	49.30		1977-12-08	50.35	
1977-08-16	53.90				

12
NW
1/2 - 1 Mile
Higher

FED USGS **USGS40000183281**

Org. Identifier:	USGS-CA		
Formal name:	USGS California Water Science Center		
Monloc Identifier:	USGS-372718122101701		
Monloc name:	005S003W34H002M		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	18050003	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	37.4549386
Longitude:	-122.1724647	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	53.00
Vert measure units:	feet	Vertacc measure val:	5
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	California Coastal Basin aquifers		
Formation type:	Not Reported		

Aquifer type:	Not Reported		
Construction date:	Not Reported	Welldepth:	54
Welldepth units:	ft	Wellholedepth:	70
Wellholedepth units:	ft		

Ground-water levels, Number of Measurements: 36

Date	Feet below Surface	Feet to Sealevel	Date	Feet below Surface	Feet to Sealevel
1980-12-04	30.1				
1980-09-05	28.45				
Note: A nearby site that taps the same aquifer was being pumped.					
1980-07-14	27.27		1980-05-20	26.29	
1979-10-02	31.14		1979-03-30	29.98	
1979-01-10	32.06		1978-06-21	28.63	
1978-03-09	31.90		1978-01-03	36.85	
1977-12-08	39.17		1977-04-20	34.66	
1976-07-02	32.10		1976-02-03	31.62	
1975-05-20	27.47		1975-04-18	28.27	
1975-03-11	29.24		1975-02-12	29.90	
1975-01-16	29.85		1974-12-12	29.38	
1974-10-30	28.67		1974-09-20	27.68	
1974-08-15	26.79		1974-07-17	26.05	
1974-06-18	25.37		1974-05-20	25.35	
1974-04-16	25.88		1974-03-19	27.85	
1974-02-21	27.50		1973-12-20	29.36	
1973-11-21	29.74		1973-10-26	30.10	
1973-09-26	29.58		1973-08-31	28.87	
1973-08-03	28.33		1973-07-13	27.99	

C13
ENE **FED USGS** **USGS40000183250**
1/2 - 1 Mile
Lower

Org. Identifier:	USGS-CA		
Formal name:	USGS California Water Science Center		
Monloc Identifier:	USGS-372703122083201		
Monloc name:	005S003W36L010M		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	18050003	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	37.4507722
Longitude:	-122.1432973	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	23
Vert measure units:	feet	Vertacc measure val:	2.5
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	California Coastal Basin aquifers		
Formation type:	Not Reported		

Aquifer type:	Not Reported		
Construction date:	195408	Welldepth:	65
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
1997-04-28	9.45	

C14
ENE
1/2 - 1 Mile
Lower

CA WELLS **CADW60000004022**

Objectid:	4022
Latitude:	37.45023
Longitude:	-122.14299
Site code:	374502N1221430W001
State well numbe:	05S03W36P002M
Local well name:	'05S03W36P002'
Well use id:	1
Well use descrip:	Observation
County id:	43
County name:	Santa Clara
Basin code:	'2-9.02'
Basin desc:	Santa Clara
Dwr region id:	80236
Dwr region:	North Central Region Office
Site id:	CADW60000004022

C15
ENE
1/2 - 1 Mile
Lower

CA WELLS **CADW60000004023**

Objectid:	4023
Latitude:	37.45023
Longitude:	-122.14299
Site code:	374502N1221430W002
State well numbe:	05S03W36P003M
Local well name:	'05S03W36P003'
Well use id:	1
Well use descrip:	Observation
County id:	43
County name:	Santa Clara
Basin code:	'2-9.02'
Basin desc:	Santa Clara
Dwr region id:	80236
Dwr region:	North Central Region Office
Site id:	CADW60000004023

C16
ENE
1/2 - 1 Mile
Lower

CA WELLS **CADW60000004024**

Objectid:	4024
Latitude:	37.45024
Longitude:	-122.14299
Site code:	374502N1221430W003
State well numbe:	05S03W36P004M
Local well name:	'05S03W36P004'
Well use id:	1
Well use descrip:	Observation
County id:	43
County name:	Santa Clara
Basin code:	'2-9.02'
Basin desc:	Santa Clara
Dwr region id:	80236
Dwr region:	North Central Region Office
Site id:	CADW60000004024

C17
ENE
1/2 - 1 Mile
Lower

CA WELLS **CADW60000004025**

Objectid:	4025
Latitude:	37.45024
Longitude:	-122.14299
Site code:	374502N1221430W004
State well numbe:	05S03W36P005M
Local well name:	'05S03W36P005'
Well use id:	1
Well use descrip:	Observation
County id:	43
County name:	Santa Clara
Basin code:	'2-9.02'
Basin desc:	Santa Clara
Dwr region id:	80236
Dwr region:	North Central Region Office
Site id:	CADW60000004025

C18
ENE
1/2 - 1 Mile
Lower

FED USGS **USGS40000183245**

Org. Identifier:	USGS-CA		
Formal name:	USGS California Water Science Center		
Monloc Identifier:	USGS-372701122083402		
Monloc name:	005S003W36P003M		
Monloc type:	Well: Multiple wells		
Monloc desc:	Not Reported		
Huc code:	18050003	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	37.4502778
Longitude:	-122.1427778	Sourcemap scale:	24000

Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	23
Vert measure units:	feet	Vertacc measure val:	2.5
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	California Coastal Basin aquifers		
Formation type:	Not Reported		
Aquifer type:	Confined multiple aquifer		
Construction date:	20030204	Welldepth:	740
Welldepth units:	ft	Wellholedepth:	932
Wellholedepth units:	ft		

Ground-water levels, Number of Measurements: 0

C19
ENE **FED USGS** **USGS40000183244**
1/2 - 1 Mile
Lower

Org. Identifier:	USGS-CA		
Formal name:	USGS California Water Science Center		
Monloc Identifier:	USGS-372701122083401		
Monloc name:	005S003W36P002M		
Monloc type:	Well: Multiple wells		
Monloc desc:	Not Reported		
Huc code:	18050003	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	37.4502778
Longitude:	-122.1427778	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	23
Vert measure units:	feet	Vertacc measure val:	2.5
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	California Coastal Basin aquifers		
Formation type:	Not Reported		
Aquifer type:	Confined multiple aquifer		
Construction date:	20030204	Welldepth:	930
Welldepth units:	ft	Wellholedepth:	932
Wellholedepth units:	ft		

Ground-water levels, Number of Measurements: 0

C20
ENE **FED USGS** **USGS40000183247**
1/2 - 1 Mile
Lower

Org. Identifier:	USGS-CA		
Formal name:	USGS California Water Science Center		
Monloc Identifier:	USGS-372701122083404		
Monloc name:	005S003W36POO5M		
Monloc type:	Well: Multiple wells		
Monloc desc:	Not Reported		
Huc code:	18050003	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	37.4502778
Longitude:	-122.1427778	Sourcemap scale:	24000

Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	23
Vert measure units:	feet	Vertacc measure val:	2.5
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	California Coastal Basin aquifers		
Formation type:	Not Reported		
Aquifer type:	Confined multiple aquifer		
Construction date:	20030204	Welldepth:	200
Welldepth units:	ft	Wellholedepth:	932
Wellholedepth units:	ft		

Ground-water levels, Number of Measurements: 0

C21
ENE **FED USGS** **USGS40000183246**
1/2 - 1 Mile
Lower

Org. Identifier:	USGS-CA		
Formal name:	USGS California Water Science Center		
Monloc Identifier:	USGS-372701122083403		
Monloc name:	005S003W36P004M		
Monloc type:	Well: Multiple wells		
Monloc desc:	Not Reported		
Huc code:	18050003	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	37.4502778
Longitude:	-122.1427778	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	23
Vert measure units:	feet	Vertacc measure val:	2.5
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	California Coastal Basin aquifers		
Formation type:	Not Reported		
Aquifer type:	Confined multiple aquifer		
Construction date:	20030204	Welldepth:	560
Welldepth units:	ft	Wellholedepth:	932
Wellholedepth units:	ft		

Ground-water levels, Number of Measurements: 0

22
SSW **CA WELLS** **6924**
1/2 - 1 Mile
Higher

Water System Information:

Prime Station Code:	06S/03W-02D10 M	User ID:	HEN
FRDS Number:	4310009010	County:	Santa Clara
District Number:	05	Station Type:	WELL/AMBNT/MUN/INTAKE
Water Type:	Well/Groundwater	Well Status:	Destroyed
Source Lat/Long:	372600.0 1221000.0	Precision:	1 Mile (One Minute)
Source Name:	TOWER - DESTROYED		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

System Number: 4310009
System Name: City of Palo Alto
Organization That Operates System:
P.O. BOX 10250
PALO ALTO, CA 94303
Pop Served: 57000 Connections: 19021
Area Served: PALO ALTO

1G
WNW
1/2 - 1 Mile
Lower

Site ID:	440009
Groundwater Flow:	NE
Shallow Water Depth:	Not Reported
Deep Water Depth:	Not Reported
Average Water Depth:	41
Date:	05/14/1991

AQUIFLOW **64408**

2G
WNW
1/2 - 1 Mile
Lower

Site ID:	440046
Groundwater Flow:	E
Shallow Water Depth:	Not Reported
Deep Water Depth:	Not Reported
Average Water Depth:	48
Date:	04/15/1991

AQUIFLOW **64436**

3G
West
1/2 - 1 Mile
Lower

Site ID:	440030
Groundwater Flow:	E
Shallow Water Depth:	22.70
Deep Water Depth:	26.23
Average Water Depth:	Not Reported
Date:	01/04/1999

AQUIFLOW **51279**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS
RADON

AREA RADON INFORMATION

State Database: CA Radon

Radon Test Results

Zipcode	Num Tests	> 4 pCi/L
94301	39	7

Federal EPA Radon Zone for SANTA CLARA County: 2

Note: Zone 1 indoor average level > 4 pCi/L.
: Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.
: Zone 3 indoor average level < 2 pCi/L.

Federal Area Radon Information for SANTA CLARA COUNTY, CA

Number of sites tested: 70

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	1.363 pCi/L	91%	9%	0%
Living Area - 2nd Floor	2.100 pCi/L	100%	0%	0%
Basement	2.300 pCi/L	100%	0%	0%

PHYSICAL SETTING SOURCE RECORDS SEARCHED

TOPOGRAPHIC INFORMATION

USGS 7.5' Digital Elevation Model (DEM)
Source: United States Geologic Survey
EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

Current USGS 7.5 Minute Topographic Map
Source: U.S. Geological Survey

HYDROLOGIC INFORMATION

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.
Source: FEMA
Telephone: 877-336-2627
Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetland Inventory
Source: Department of Fish & Game
Telephone: 916-445-0411

HYDROGEOLOGIC INFORMATION

AQUIFLOW^{R} Information System
Source: EDR proprietary database of groundwater flow information
EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

GEOLOGIC INFORMATION

Geologic Age and Rock Stratigraphic Unit
Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

STATSGO: State Soil Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)
The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

SSURGO: Soil Survey Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)
Telephone: 800-672-5559
SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Service, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

LOCAL / REGIONAL WATER AGENCY RECORDS

FEDERAL WATER WELLS

PWS: Public Water Systems
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: USGS National Water Inventory System (NWIS)
This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

STATE RECORDS

Water Well Database
Source: Department of Water Resources
Telephone: 916-651-9648

California Drinking Water Quality Database
Source: Department of Public Health
Telephone: 916-324-2319
The database includes all drinking water compliance and special studies monitoring for the state of California since 1984. It consists of over 3,200,000 individual analyses along with well and water system information.

OTHER STATE DATABASE INFORMATION

California Oil and Gas Well Locations
Source: Department of Conservation
Telephone: 916-323-1779
Oil and Gas well locations in the state.

RADON

State Database: CA Radon
Source: Department of Health Services
Telephone: 916-324-2208
Radon Database for California

Area Radon Information
Source: USGS
Telephone: 703-356-4020
The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

EPA Radon Zones
Source: EPA
Telephone: 703-356-4020
Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

OTHER

Airport Landing Facilities: Private and public use landing facilities
Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater
Source: Department of Commerce, National Oceanic and Atmospheric Administration

California Earthquake Fault Lines: The fault lines displayed on EDR's Topographic map are digitized quaternary fault lines, prepared in 1975 by the United State Geological Survey. Additional information (also from 1975) regarding activity at specific fault lines comes from California's Preliminary Fault Activity Map prepared by the California Division of Mines and Geology.

STREET AND ADDRESS INFORMATION

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APPENDIX D: REGULATORY RECORDS DOCUMENTATION

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OFFICE OF COUNTY ASSESSOR — SANTA CLARA COUNTY, CALIFORNIA

BOOK 120 PAGE 15

PERRY'S SUBDIVISION OF BLOCK 20

WADE'S SUBDIVISION OF BLOCK 30

14

LYTTON AVENUE

C.L.M. 16327059

STREET

FLORENCE

P.M. 437-M-50

KIPLING

107 CITY OF PALO ALTO PCL. 1 1.054 AC.

108 5,004sf

CITY OF PALO ALTO 98 0.73 AC.

100 CITY OF PALO ALTO PCL. 1 0.26 AC. N.

15 PCL. 1 0.35 AC.

C.L.M. 21207506

P.M. 358-M-55

C.L.M. 15439829

1" = 100'

B.B. N38°15'00"E

26 UNIVERSITY AVENUE 3

R.O.S. 736/46

P.M. 268-M-33

P.M. 654-M-49 0.08 AC.

BRYANT

PACIFIC BELL 102

0.67 AC. NET 80 CITY OF PALO ALTO

0.73 AC.

WAVERLEY

CITY OF PALO ALTO 73 0.70 AC. NET

COWPER

P.M. 445-M-17

HAMILTON AVENUE

GILMAN STREET

UNIVERSITY PARK

16

TRA DET. MAP 61

LAWRENCE E. STONE – ASSESSOR
Cadastral map for assessment purposes only.
Compiled under R. & T. Code, Sec. 327.
Effective Roll Year 2017–2018

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Parcel Report for APN: 120-15-086

Net Lot Size: **28,993 sf**

Zone Dist: **PF**

Comp Plan Des: **CC**

Flood Zone: **X** LOMA: **no**

FEMA Map Panel: **0010H** HMP Request: **no**

Parking District: **University Ave**

SCCA* YR Built: **0** SCCA* Eff. YR Built: **0**

Historic Status: **none**

Traffic Imp. Dist: **none**

Easements: **Yes, see PW : PUE**

Near Creek: **no**

Substandard: **Cannot assess for this zone.**

Flag Lot: **no**

ADU/JADU: **Cannot assess for this zone.**

Max Floor Area : **Cannot assess for this zone.**

Max Lot Coverage : **Cannot assess for this zone.**

Max Height to Ridge: **Cannot assess for this zone.**

Special Setbacks: **7' along Hamilton Ave**

Minimum Setbacks:

Front: **Cannot assess for this zone.**

Rear: **Cannot assess for this zone.**

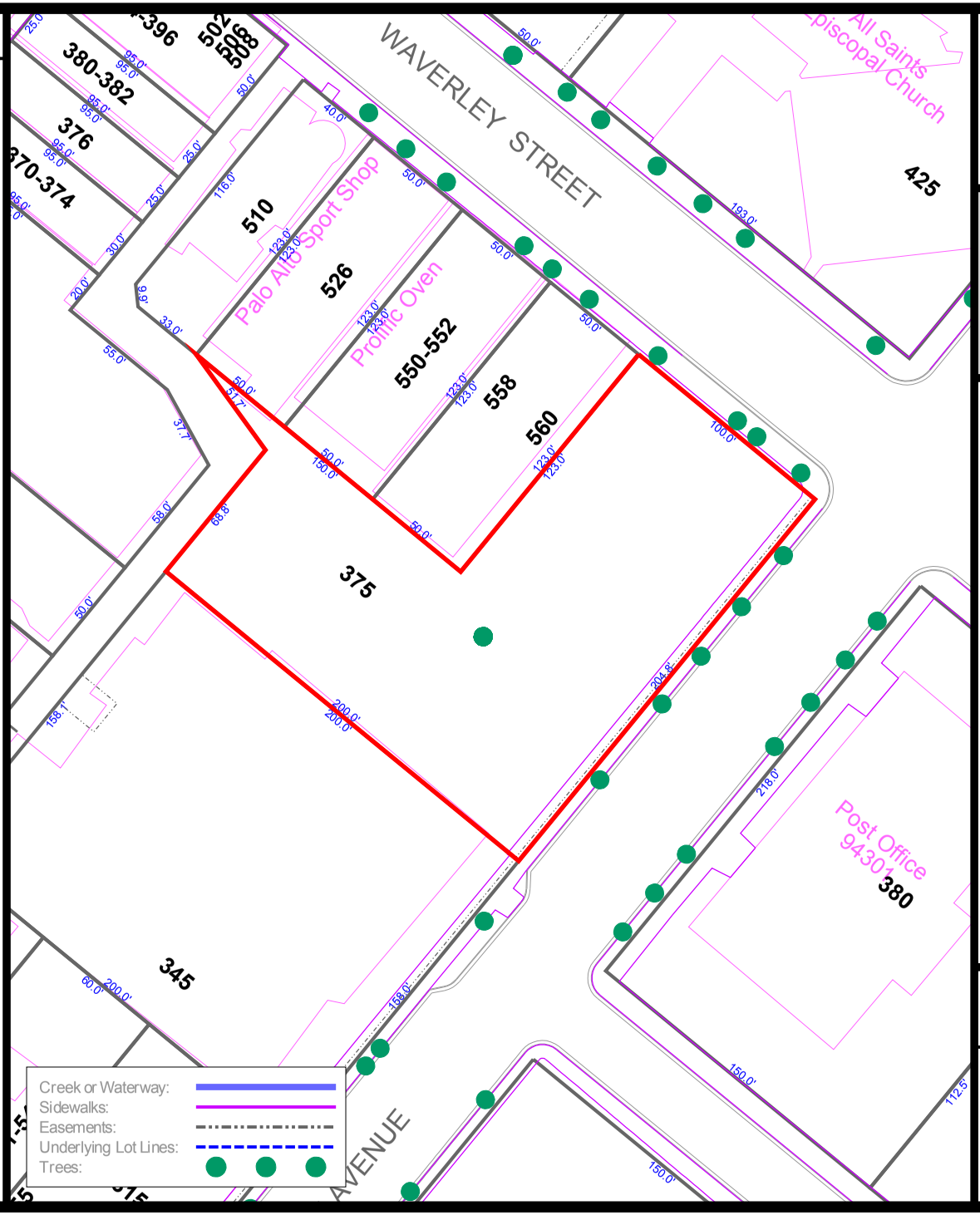
Interior Side(s): **Cannot assess for this zone.**

Street Side: **Cannot assess for this zone.**

Comments: **n/a**

* Source of year built data is the Santa Clara County Assessor

Click here for data details or navigate to
http://www.cityofpaloalto.org/gov/depts/pln/parcel.asp#Parcel Report Details



The City of Palo Alto



375 Hamilton Ave

This map is a product of the City of Palo Alto GIS

0' 70'

gis.service, 2017-06-03 01:49:28
Parcel Report Online ()

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The City of Palo Alto assumes no responsibility for any errors. ©1989 to 2016 City of Palo Alto

Heft, Adam

From: Pech, Somira <Somira.Pech@cep.sccgov.org>
Sent: Wednesday, August 30, 2017 6:02 PM
To: Heft, Adam
Subject: CPRA REQ082817C

Good afternoon Adam,

Thank you for your recent record request received on 08/28/2017 for the following address in Palo Alto:

375 Hamilton Ave

We have no records for this location. Please check with Palo Alto Fire Department.

However, additional electronic documents may be found on the following websites:

Local Oversight Program (LOP)
GEOTracker (GT)
Cal EPA Site Portal

Spill Reports Website – California Office of Emergency Services (Cal OES):

https://w3.calema.ca.gov/operational/malhaz.nsf/$defaultview

Please be advised that in some cities, other participating agencies may be responsible for maintaining the type of files you requested. This link may be of assistance in determining who will have the documents you are looking for in the future: UNIDOCS – Who regulates what in Santa Clara County

Best regards,

Somira Pech
Department of Environmental Health
1555 Berger Drive, Building 2, Suite 300
San Jose, CA 95112
www.ehinfo.org
408-918-3423 Direct Line
408-280-6479 Fax
Email: somira.pech@deh.sccgov.org
** LAST business transaction/payment/submittal of the day will be processed at 4:45 pm. Transactions submitted after 4:45 pm will be processed the following business day.
"Learn from yesterday, live for today, hope for tomorrow." By Albert Einstein

NOTICE: This email message and/or its attachments may contain information that is confidential or restricted. It is intended only for the individuals named as recipients in the message. If you are NOT an authorized recipient, you are prohibited from using, delivering, distributing, printing, copying, or disclosing the message or content to others and must delete the message from your computer. If you have received this message in error, please notify the sender by return mail.

STATE WATER RESOURCES CONTROL BOARD
GEOTRACKER

Tools Reports UST Case Closures Information

OFFICE BUILDING (T0608501854) - (MAP)

SIGN UP FOR EMAIL ALERTS

529 BRYANT
PALO ALTO, CA 94301
SANTA CLARA COUNTY
LUST CLEANUP SITE
PRINTABLE CASE SUMMARY / CSM REPORT

CLEANUP OVERSIGHT AGENCIES
SANTA CLARA COUNTY LOP *(LEAD)*
CASEWORKER: *UST CASE WORKER*
SAN FRANCISCO BAY RWQCB (REGION 2)
CASEWORKER: *Regional Water Board*
SANTA CLARA VALLEY WATER DISTRICT - *CASE #: 06S3W02C04f*

Summary | Cleanup Action Report | Regulatory Activities | *Environmental Data (ESI)* | Site Maps / Documents | *Community Involvement* | *Related Cases*

Regulatory Profile

PRINTABLE CASE SUMMARY

CLEANUP STATUS - DEFINITIONS
COMPLETED - CASE CLOSED AS OF 3/15/1996 - CLEANUP STATUS HISTORY

POTENTIAL CONTAMINANTS OF CONCERN
DIESEL

POTENTIAL MEDIA OF CONCERN
OTHER GROUNDWATER (USES OTHER THAN DRINKING WATER)

FILE LOCATION
ALL FILES ARE ON GEOTRACKER OR IN THE LOCAL AGENCY DATABASE

USER DEFINED BENEFICIAL USE
SW - MUNICIPAL AND DOMESTIC SUPPLY

DESIGNATED BENEFICIAL USE(S) - DEFINITIONS
MUN, AGR, IND, PROC

DWR GROUNDWATER SUB-BASIN NAME
Santa Clara Valley - Santa Clara (2-9.02)

CALWATER WATERSHED NAME
Santa Clara - Palo Alto (205.50)

Site History

No site history available

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STATE WATER RESOURCES CONTROL BOARD
GEOTRACKER

CASE SUMMARY

REPORT DATE
1/1/1993

HAZARDOUS MATERIAL INCIDENT REPORT FILED WITH OES?

I. REPORTED BY -
UNKNOWN

CREATED BY
UNKNOWN

III. SITE LOCATION
FACILITY NAME
Office Building

FACILITY ID

FACILITY ADDRESS
529 Bryant
Palo Alto, CA 94301
SANTA CLARA COUNTY

ORIENTATION OF SITE TO STREET

CROSS STREET

V. SUBSTANCES RELEASED / CONTAMINANT(S) OF CONCERN
DIESEL

VI. DISCOVERY/ABATEMENT
DATE DISCHARGE BEGAN

DATE DISCOVERED

HOW DISCOVERED

DESCRIPTION

DATE STOPPED

STOP METHOD

DESCRIPTION

VII. SOURCE/CAUSE
SOURCE OF DISCHARGE

CAUSE OF DISCHARGE

DISCHARGE DESCRIPTION

VIII. CASE TYPE
CASE TYPE
Other Groundwater (uses other than drinking water)

IX. REMEDIAL ACTION
NO REMEDIAL ACTIONS ENTERED

X. GENERAL COMMENTS

XI. CERTIFICATION
I HEREBY CERTIFY THAT THE INFORMATION REPORTED HEREIN IS TRUE AND ACCURATE TO THE BEST OF MY KNOWLEDGE.

XII. REGULATORY USE ONLY

LOCAL AGENCY CASE NUMBER	REGIONAL BOARD CASE NUMBER
06S3W02C04f	

LOCAL AGENCY

CONTACT NAME	INITIALS	ORGANIZATION_NAME	EMAIL ADDRESS
UST CASE WORKER	UST	SANTA CLARA COUNTY LOP	

ADDRESS
1555 Berger Drive, Suite 300
SAN JOSE, CA 95112

CONTACT DESCRIPTION

PHONE TYPE	PHONE NUMBER	EXTENSION
PHONE	(408)-918-3400	

REGIONAL BOARD

CONTACT NAME	INITIALS	ORGANIZATION_NAME	EMAIL ADDRESS
Regional Water Board	UUU	SAN FRANCISCO BAY RWQCB (REGION 2)	

ADDRESS
1515 CLAY ST SUITE 1400
OAKLAND, CA 94612

CONTACT DESCRIPTION

PHONE TYPE	PHONE NUMBER	EXTENSION
Office	(510)-622-2300	
SCP General Contact	(510)-622-2408	
UST General Contact	(510)-622-3277	

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March 15, 1996

Property Tax Manager
Digital Equipment Corporation
111 Powder Mill Road
Maynard, MA 07154

Mr. Jim Baer
Premier Properties
172 University Avenue
Palo Alto, CA 94301

Ladies and Gentlemen:

Subject: Underground Storage Tank Case Closure—Office Building, 529 Bryant Street, Palo Alto, CA; Case No. 06S3W02C04f

This letter confirms the completion of site investigation and remedial action for the underground storage tank(s) formerly located at the above-described location. Enclosed is the Case Closure Summary for the referenced site for your records.

Based upon the available information, including the current land use, and with the provision that the information provided to this agency was accurate and representative of site conditions, no further action related to the underground storage tank release is required.

This notice is issued pursuant to a regulation contained in Title 23, California Code of Regulations, Division 3, Chapter 16, Section 2721(e).

Please contact Ms. Christine Tulloch at the Santa Clara Valley Water District's Camden Office, (408) 927-0710, extension 2636, if you have any questions in this matter.

Sincerely,

ORIGINAL SIGNED BY

James S. Crowley, P.E.
Associate Civil Engineer
Leaking Underground Storage Tank Oversight Program

Enclosure

cc: Mr. John West (w/enc)
Regional Water Quality Control Board
San Francisco Bay Region
2101 Webster Street, Suite 500
Oakland, CA 94612

Mr. Steve Gubber
Central Fire Protection District
14700 Winchester Boulevard
Los Gatos, CA 95030-1818

J. Crowley, C. Tulloch (w/original enc), Database (enc)

CT:lcg:FL9482qs

CASE CLOSURE SUMMARY
LEAKING UNDERGROUND FUEL STORAGE TANK PROGRAM

Santa Clara Valley Water District

I. AGENCY INFORMATION

Date: March 14, 1996

Agency Name: Santa Clara Valley Water District	Address: 5750 Almaden Expressway
City/State/Zip: San Jose, CA 95118	Phone: (408) 265-2600
Responsible Staff Person: Christine A. Tulloch	Title: Water Quality Specialist

II. CASE INFORMATION

Site Facility Name: Office Building		
Site Facility Address: 529 Bryant Street, Palo Alto, CA		
RB LUSTIS Case No.: —	Local Case No.: 06S3W02C04f	LOP Case No.: —
URF Filing Date: 9/16/90	SWEEPS No.: —	

Responsible Parties	Addresses	Phone Numbers
Digital Equipment Corporation Attention: Property Tax Manager	111 Powder Mill Road Maynard, MA 07154	—
Mr. Jim Baer Premier Properties	172 University Avenue Palo Alto, CA 94301	(415) 329-7977

Tank I.D. No.	Size in Gallons	Contents	Closed In-Place/Removed?	Date
1	1,500	Heating or fuel oil	Unknown	—
Fuel Oil Piping			Removed	9/23/90

III. RELEASE AND SITE CHARACTERIZATION INFORMATION

Cause and Type of Release: Unknown		
Site characterization complete? Yes	Date Approved By Oversight Agency: March 11, 1996	
Monitoring wells installed? Yes	Number: 4	Proper screened interval? Yes
GW Depth Below Ground Surface: 35	Lowest Depth: —	Flow Direction: —
Most Sensitive Current Use: Potential drinking water		

Summary of Production Wells in Vicinity: Not assessed due to low severity of contaminants.	
Are drinking water wells affected? No	Aquifer Name: Santa Clara Valley Basin
Is surface water affected? No	Nearest/Affected SW Name:
Off-Site Beneficial Use Impacts (Addresses/Locations): None	
Reports on file? Yes	Where are reports filed? Santa Clara Valley Water District

TREATMENT AND DISPOSAL OF AFFECTED MATERIAL

Material	Amount (Include Units)	Action (Treatment or Disposal w/Destination)	Date
Tank	Unknown	—	—
Piping	Approx. 60 linear feet	Assumed off site	—
Free Product	None	—	—
Soil	None	—	—
Groundwater	None	—	—
Barrels	None	—	—

MAXIMUM DOCUMENTED CONTAMINANT CONCENTRATIONS—BEFORE AND AFTER CLEANUP

Contaminant	Soil (ppm)		Water (ppb)		Contaminant	Soil (ppm)		Water (ppb)	
	Before	After	Before	After		Before	After	Before	After
TPH (Gas)	NA	NA	ND	NA	Xylene	0.015	NA	0.44	NA
TPH (Diesel)	50	NA	ND	NA	Ethylbenzene	0.0054	NA	ND	NA
Benzene	0.0069	NA	ND	NA	Oil & Grease	130	NA	NA	NA
Toluene	0.014	NA	ND	NA	Heavy Metals	NA	NA	NA	NA
Other (8240/8270)	NA	NA	NA	NA	Other	NA	NA	NA	NA

Description of Interim Remediation Activities: None performed other than piping removal.

IV. CLOSURE

Does completed corrective action protect existing beneficial uses per the Regional Board Basin Plan? Yes		
Does completed corrective action protect potential beneficial uses per the Regional Board Basin Plan? Yes		
Does corrective action protect public health for current land use? District staff does not make specific determinations concerning public health risk. However, it does not appear that the release would present a risk to human health.		
Site Management Requirements: None		
Should corrective action be reviewed if land use changes? No		
Monitoring Wells Decommissioned: No	Number Decommissioned: 0	Number Retained: 0
List Enforcement Actions Taken: None		
List Enforcement Actions Rescinded: None		

V. ADDITIONAL COMMENTS, DATA, ETC.

Considerations and/or Variances: There is no documentation available at the District or Palo Alto Fire Department (PAFD) to document the removal of the 1,500-gallon fuel oil tank located beneath the sidewalk. The PAFD indicated that the tank still contained product in 1991. The District has not received any reports of release from the tank. However, corrective action may be required in the future if a release is discovered. Four groundwater monitoring wells were installed as part of a Phase II environmental assessment. MW-4 contained dissolved diesel range contamination. District staff does not believe this contamination is associated with the piping release; it may be associated with the diesel tank located at an adjacent Pacific Bell facility.

Conclusion: Due to the low severity of contamination detected beneath the piping to the fuel oil tank, District staff does not believe that there is substantial evidence of a significant release. Therefore, further corrective action is not required for the piping.

VI. LOCAL AGENCY REPRESENTATIVE DATA

Prepared by: Christine A. Tulloch	Title: Water Quality Specialist
Signature:	Date: 3/11/96
Approved by: James S. Crowley, P.E.	Title: Associate Civil Engineer
Signature:	Date: 3/11/96

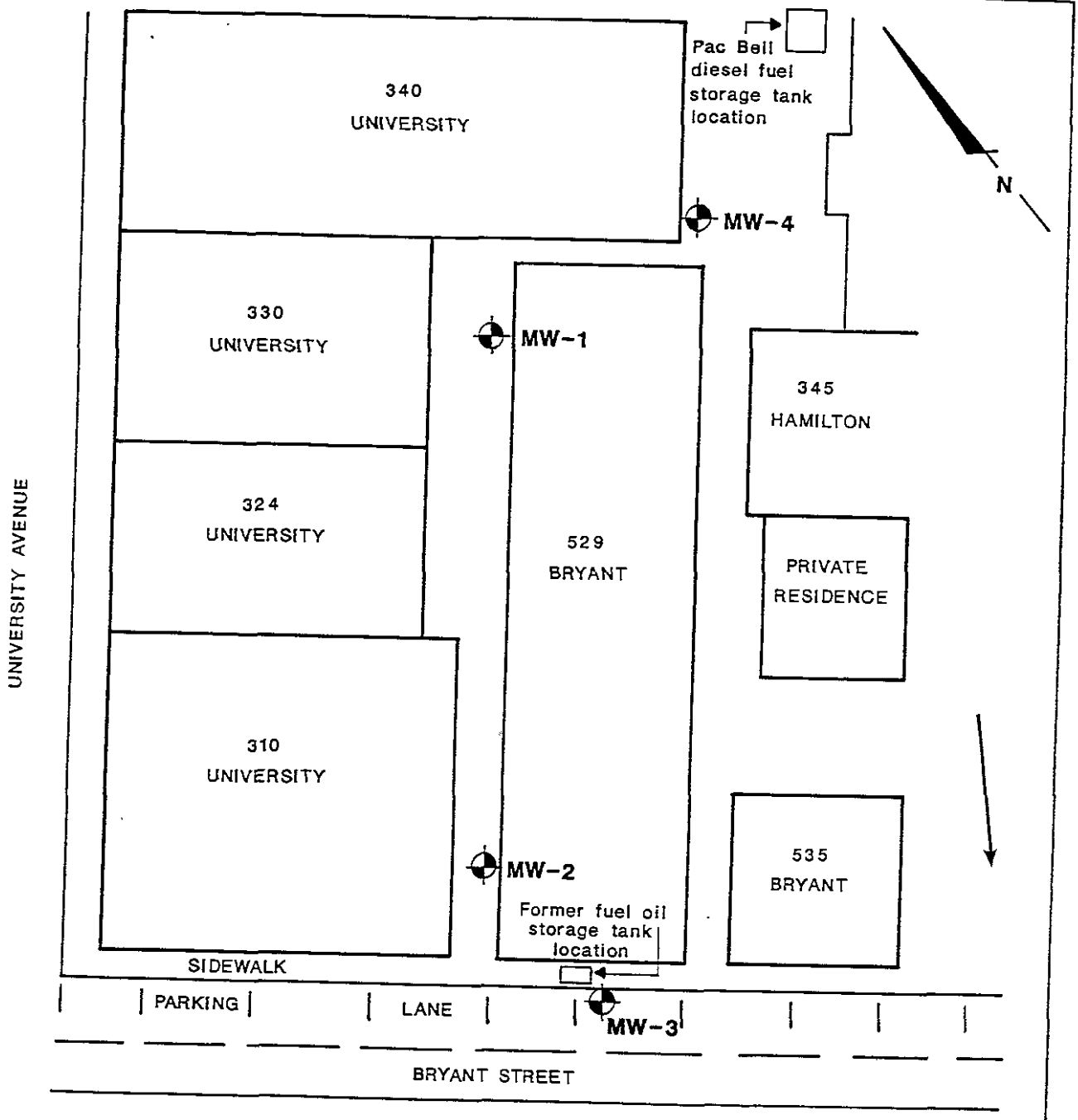
This closure approval is based upon the available information and with the provision that the information provided to this agency was accurate and representative of site conditions.

Attachments:

1. Piping Sample Locations
2. Site Plan

This document and the related CASE CLOSURE LETTER, shall be retained by the lead agency as part of the official site file.

105649



EXPLANATION

Monitoring well location

General groundwater flow direction

0 50 100

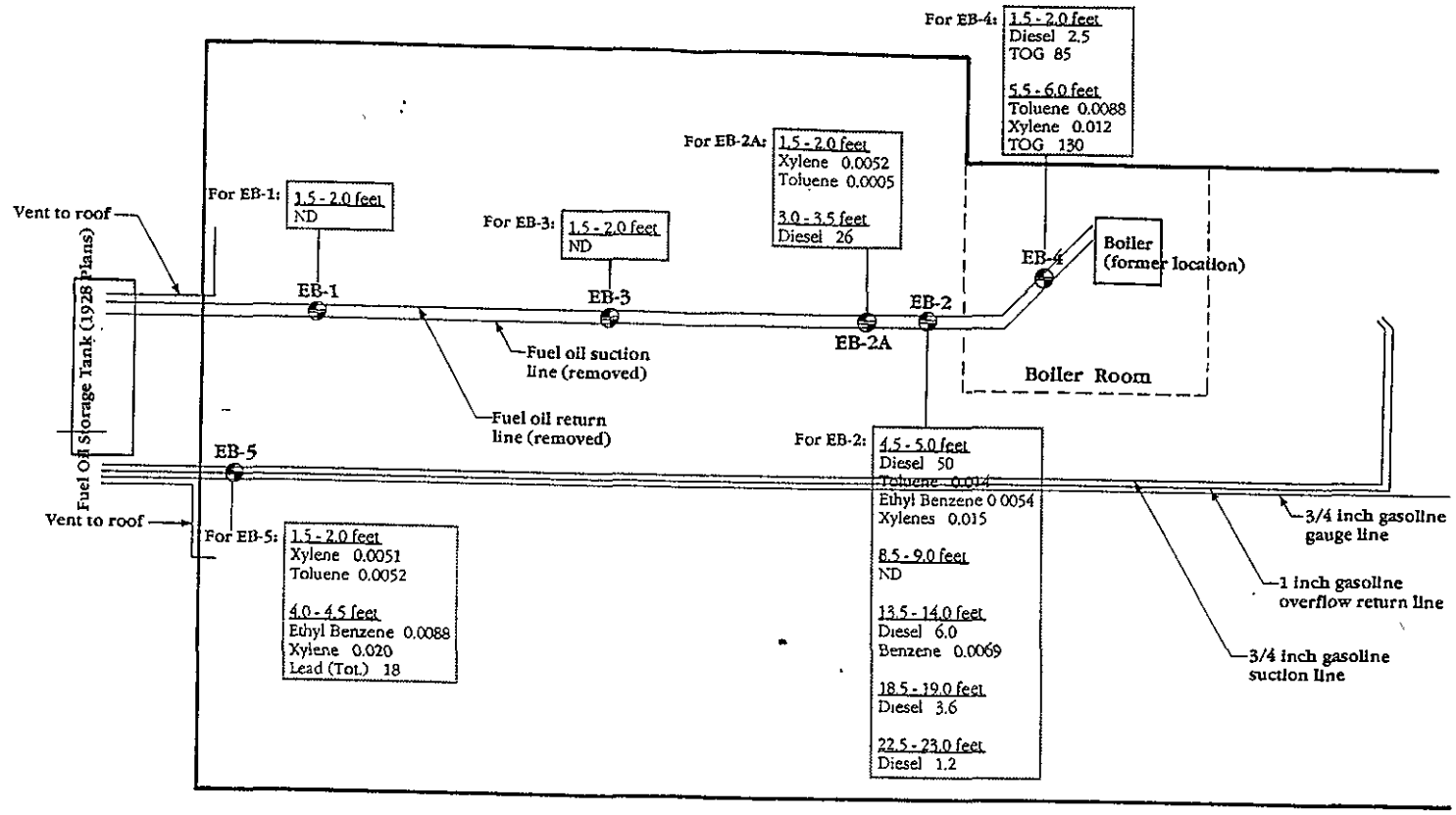
Scale in feet

Harding Lawson Associates
Engineers and Geoscientists

Groundwater Flow Direction
Digital Phase II
529 Bryant Street
Palo Alto, California

PLATE
3

DRAWN	JOB NUMBER	APPROVED	DATE	REVISED	DATE
AG	17691 026 03	SJO	7/80		



LEGEND

- Approximate location of soil boring
- Concentration of compounds detected (ppm)

J.V. LOWNEY & ASSOCIATES
ENVIRONMENTAL & GEOTECHNICAL CONSULTANTS

BASEMENT PLAN SHOWING SOIL SAMPLE LOCATIONS AND RESULTS

PIPELINE REMOVAL AT 529 BRYANT STREET
Palo Alto, California

PROJECT NO.	DATE	
684-3A	October 1990	Figure 2a

684 3A 10/11 MT JC

Digital Equipment Corporation
111 Powdermill Road
Maynard, Massachusetts 01754-1499
508.493.5111

December 1, 1994

12/5-M; AnShepherd 4/5
TAttenmeither

Adele Sheperd
Self-Directed Program
Santa Clara Valley Water District
5750 Almaden Expressway
San Jose, CA 95118-3686

Re: Office Building, 529 Bryant Street, Palo Alto, CA

Dear Ms. Sheperd:

This letter is in response to a request for information dated August 29, 1994 from your agency. We have reviewed our records to confirm that the reported releases occurred prior to Digital ownership of the property. According to our purchase agreement, Premier Properties are responsible for addressing the releases. However, to facilitate your efforts, I have provided information on the potential petroleum releases identified through our due diligence investigations.

Prior to purchasing the property, Digital investigated four potential sources of petroleum (2 onsite, 2 offsite). Specifically, our investigations identified the following:

- A 1,500 gallon UST for heating oil was installed in 1929 and later removed from beneath the sidewalk in front of 529 Bryant Street. During the excavation/removal of these former oil lines, additional lines for gasoline transmission were discovered, which were also likely part of the original building construction in 1929. Petroleum contamination of soil observed during the removal of these lines resulted in the UST release report;
- A 275 gallon gasoline tank existed in the basement of the 529 Bryant Street property, which was removed;
- Pacific Bell currently operates a 10,000 gallon UST at 345 Hamilton Avenue (within 100 feet northeast of the 520 Bryant Street property);
- A 2,000 gallon UST was reportedly removed from an alley behind the facility at 233 Hamilton Avenue (within 20 feet of the eastern property boundary.

Enclosed is a copy of the Phase II Investigation report to facilitate your response to the release notification before December 31, 1994

Since Digital did not operate the tanks or own the property, I would suggest that you contact the responsible parties:

Jim Baer
Premier Properties
532 Emerson Avenue
Palo Alto, CA 94301

If you have any additional comments, please call me at (508) 493-8374.

Sincerely,

Christopher L. Wilson
Corporate Director
Site Assessment & Remediation

Santa Clara Valley Water District
5750 Almaden Expwy, San Jose, CA 95118, (408) 265-2600

Camden Building
5480 Camden Avenue
San Jose, CA 95120
Telephone: (408) 927-0710
FAX NUMBER: (408) 268-7687

FAX TRANSMISSION

To:

Name:	Date:
Duane Wanty	11-3-94

Company or Agency:
Digital Equipment

FAX Number:
(508) 493-8353

From:

Name:
Adele Shepherd

Reference:

Project #	Scope #:	Total Pages (Including Coversheet)
529 Bryant St. PA		2

Message: Ms. Wanty,

There is additional information in the file. Call w/ any questions.

Adele

x2639

FC 102-EE (07-1-92)

UNDERGROUND STORAGE TANK UNAUTHORIZED RELEASE (LEAK) / CONTAMINATION SITE REPORT

EMERGENCY ☐ YES ☒ NO

HAS STATE OFFICE OF EMERGENCY SERVICES REPORT BEEN FILED? ☐ YES ☐ NO

FOR LOCAL AGENCY USE ONLY
I HEREBY CERTIFY THAT I HAVE DISTRIBUTED THIS INFORMATION ACCORDING TO THE DISTRIBUTION SHOWN ON THE INSTRUCTION SHEET ON THE BACK SIDE OF THIS FORM.
SIGNED [illegible] DATE [illegible]

REPORT DATE: 04/16/90

REPORTING PARTY
NAME OF PERSON FILING REPORT: R BROUCHOUD
PHONE: (415) 329-2321
SIGNATURE: R Brouchoud
REPRESENTING: ☐ OWNER/OPERATOR ☐ REGIONAL BOARD ☒ LOCAL AGENCY ☐ OTHER
COMPANY OR AGENCY NAME: PALO ALTO FIRE DEPT
ADDRESS: 250 HAMILTON AVE. CITY: PALO ALTO STATE: CALIF. ZIP: 94301

RESPONSIBLE PARTY
NAME: HARDING LAWSON ASSOCIATES ☐ UNKNOWN
CONTACT PERSON: STEVE OSBORNE
PHONE: 510 687-9664
ADDRESS: 1955 WILLOW WAY CITY: CONCORD STATE: CALIF. ZIP: 94520

SITE LOCATION
FACILITY NAME (IF APPLICABLE): OFFICE BUILDG.
OPERATOR:
PHONE: ( )
ADDRESS: 522 ERINA ST. CITY: PALO ALTO CA. COUNTY: SANTA CLARA ZIP: 94301
CROSS STREET: UNIVERSITY AVE.

REPORTING PERSON (IF OTHER THAN ABOVE)
LOCAL AGENCY / AGENCY NAME: PALO ALTO FIRE
CONTACT PERSON: R BROUCHOUD
PHONE: (415) 329-2321
REGIONAL BOARD:
PHONE: ( )

SUBSTANCE
NAME: PETROLEUM HYDROCARBONS
QUANTITY LOST (GALLONS): ☒ UNKNOWN

☐ UNKNOWN

DISCOVERY & RESPONSE
DATE DISCOVERED: 04/23/90
HOW DISCOVERED: ☐ TANK TEST ☐ INVENTORY CONTROL ☐ TANK REMOVAL ☐ SUBSURFACE MONITORING ☐ OTHER PIPE REMOVAL ☐ NUISANCE CONDITIONS
DATE DISCHARGE BEGAN: ☒ UNKNOWN
HAS DISCHARGE BEEN STOPPED? ☒ YES ☐ NO IF YES, DATE:
METHOD USED TO STOP DISCHARGE (CHECK ALL THAT APPLY): ☐ REMOVE CONTENTS ☐ CLOSE TANK & REMOVE ☐ REPAIR PIPING ☐ REPAIR TANK ☐ CLOSE TANK & FILL IN PLACE ☐ CHANGE PROCEDURE ☐ REPLACE TANK ☐ OTHER

SOURCE & CAUSE
SOURCE OF DISCHARGE: ☐ TANK LEAK ☒ PIPING LEAK ☐ UNKNOWN ☐ OTHER
CAUSE(S): ☐ OVERFILL ☐ RUPTURE/FAILURE ☐ SPILL ☐ CORROSION ☒ UNKNOWN ☐ OTHER

CASE TYPE
CHECK ONE ONLY: ☒ UNDETERMINED ☐ SOIL ONLY ☐ GROUNDWATER ☐ DRINKING WATER - (CHECK ONLY IF WATER WELLS HAVE ACTUALLY BEEN AFFECTED)

CURRENT STATUS
CHECK ONE ONLY: ☒ NO ACTION TAKEN ☐ LEAK BEING CONFIRMED ☐ REMEDIATION PLAN ☐ PRELIMINARY SITE ASSESSMENT WORKPLAN SUBMITTED ☐ PRELIMINARY SITE ASSESSMENT UNDERWAY ☐ CASE CLOSED (CLEANUP COMPLETED OR UNNECESSARY) ☐ POLLUTION CHARACTERIZATION ☐ POST CLEANUP MONITORING IN PROGRESS ☐ CLEANUP UNDERWAY

REMEDIAL ACTION
CHECK APPROPRIATE ACTION(S): ☐ CAP SITE (CA) ☐ CONTAINMENT BARRIER (CB) ☐ VAPOR EXTRACT (VE) ☐ EXCAVATE & DISPOSE (ED) ☐ EXCAVATE & TREAT (ET) ☐ NO ACTION REQUIRED (NA) ☐ OTHER (OT) ☐ REMOVE FREE PRODUCT (FP) ☐ PUMP & TREAT GROUNDWATER (GT) ☐ TREATMENT AT HOOKUP (HU) ☐ ENHANCED BIO DEGRADATION (IT) ☐ REPLACE SUPPLY (RS) ☐ VENT SOIL (VS)

REMARKS
Oil stain associated with an in ground fuel tank was removed in 1990. I do not believe that the tank itself was ever removed. There are several past generations of ownership of the tank.

HMC 68 (5/88)

Engineering Aide

August 29, 1994

Property Tax Manager
Digital Equipment Corporation
111 Powdermill Road
Maynard, MA 01754

Dear Sir:

Subject: Office Building, 529 Bryant Street, Palo Alto, CA

This notifies you that Santa Clara Valley Water District (District) records, Palo Alto Fire Department Underground Storage Tank Unauthorized Release Report dated September 16, 1990, indicate that a spill or leak of gasoline, fuel, or waste oil has contaminated soil and/or groundwater underlying the subject site and that you have been identified as a responsible party. Pursuant to the California Water Code, polluted soil and groundwater shall be cleaned up to the satisfaction of the Regional Water Quality Control Board (Regional Board). The Regional Board is the state agency responsible for enforcing the California Water Code to protect beneficial uses of both surface and groundwater.

Due to the large numbers of subsurface fuel leak cases being reported, the Regional Board has been unable to provide detailed regulatory oversight on these cases. A program has been developed between the Regional Board and the District where the District provides oversight on fuel leak cases and issues case closure certification. Therefore, in order to protect groundwater quality we request that you proceed with investigation and cleanup at the subject site without delay.

The investigation and cleanup of polluted soils and groundwater will generally follow the steps listed in the enclosed summary which is excerpted from the District's guidelines entitled, "Investigation and Remediation at Fuel Leak Sites Guidelines for Investigation and Technical Report Preparation," dated March 1989 (revised October 1990). These guidelines describe the steps for investigation and cleanup (remediation) that are necessary to progress towards case closure and are included in the enclosed guidance package.

Please conduct an investigation to delineate the extent of petroleum hydrocarbon contamination in soil and groundwater at the site. You are requested to submit a technical report documenting the activities and findings of the investigation by November 15, 1994. This request is made pursuant to the Regional Board's authority under Section 13267 of the California Water Code.

Copies of all future reports, letters, etc., should be submitted to the Santa Clara Valley Water District (Attention: Self Directed Program) and

Mr. Jim Timko
Palo Alto Fire Department
350 Hamilton Avenue
Palo Alto, CA 94301

Map

December 18, 1992

Mr. Jim Tinko
Palo Alto Fire Department
250 Hamilton Avenue
Palo Alto, CA 94301

Dear Mr. Tinko:

Subject: Fuel Leak at Office Building, 529 Bryant Street, Palo Alto, California

Our records indicate that there has been a subsurface release of petroleum hydrocarbons at the above site. We are currently reviewing our files on this case; however, in order to proceed, we find it necessary to request your assistance on the matter. Please send us a copy of the consultant's tank removal report, including a detailed site map. If you have additional information which will assist us in evaluating any threat to surface or groundwater, please include it in the package. If you have any questions, please call the Camden Office, (408) 927-0710, extension 2647, to speak to the Self-Directed Case Advisor or leave a message.

Sincerely,

ORIGINAL SIGNED BY

Fuel Leaks Section
Groundwater Protection Division

cc: Santa Clara Valley Local Program Coordinator
Regional Water Quality Control Board
2101 Webster Street, Suite 500
Oakland, CA 94612

Engineering Aide, Read

RP:jm:L7332h

UNDERGROUND STORAGE TANK: UNAUTHORIZED RELEASE (LEAK) / CONTAMINATION SITE REPORT

EMERGENCY: ☐ YES ☑ NO

HAS STATE OFFICE OF EMERGENCY SERVICES REPORT BEEN FILED? ☐ YES ☐ NO

FOR LOCAL AGENCY USE ONLY
I HEREBY CERTIFY THAT I HAVE DISTRIBUTED THE INFORMATION ACCORDING TO THE DISTRIBUTION SHOWN ON THE INSTRUCTION SHEET ON THE BACK OF THIS FORM.
SIGNED _____ DATE _____

REPORT DATE: 02/16/90

CASE #:

REPORTED BY
NAME OF INDIVIDUAL FILING REPORT: R BROUCHOUD
PHONE: (415) 329-2321
SIGNATURE: R Brouchoud
REPRESENTING: ☐ OWNER/OPERATOR ☐ REGIONAL BOARD ☑ LOCAL AGENCY ☐ OTHER
COMPANY OR AGENCY NAME: PALO ALTO FIRE DEPT.
ADDRESS: 250 HAMILTON AVE. CITY: PALO ALTO STATE: CALIF. ZIP: 94301

RESPONSIBLE PARTY
NAME: [illegible] ASSOCIATES ☐ UNKNOWN
CONTACT PERSON: STEVE OSBORNE
PHONE: (510) 687-9660
ADDRESS: 1355 WILLOW WAY CITY: CONCORD STATE: CALIF. ZIP: 94520

SITE LOCATION
FACILITY NAME (IF APPLICABLE): OFFICE BUILDG
OPERATOR:
PHONE: ( )
ADDRESS: 529 BRYANT ST. CITY: PALO ALTO COUNTY: SANTA CLARA ZIP: 94301
CROSS STREET: UNIVERSITY AVE.

MONITORING AGENCY
LOCAL AGENCY / AGENCY NAME: PALO ALTO FIRE
CONTACT PERSON: R BROUCHOUD
PHONE: (415) 329-2321
REGIONAL BOARD:
PHONE: ( )

SUBSTANCES INVOLVED
(1) NAME: PETROLEUM HYDROCARBONS
QUANTITY LOST (GALLONS): _____ ☑ UNKNOWN
(2) _____ ☐ UNKNOWN

DISCOVERY / RELEASE
DATE DISCOVERED: 02/23/90
HOW DISCOVERED: ☐ INVENTORY CONTROL ☐ SUBSURFACE MONITORING ☐ NUISANCE CONDITIONS ☐ TANK TEST ☐ TANK REMOVAL ☐ OTHER PIPE REMOVAL
DATE DISCHARGE BEGAN: ☑ UNKNOWN
HAS DISCHARGE BEEN STOPPED? ☑ YES ☐ NO IF YES, DATE
METHOD USED TO STOP DISCHARGE (CHECK ALL THAT APPLY)
☐ REMOVE CONTENTS ☐ CLOSE TANK & REMOVE ☐ REPAIR PIPING ☐ REPAIR TANK ☐ CLOSE TANK & FILL IN PLACE ☐ CHANGE PROCEDURE ☐ REPLACE TANK ☐ OTHER

SOURCE / CAUSE
SOURCE OF DISCHARGE: ☐ TANK LEAK ☐ UNKNOWN ☑ PIPING LEAK ☐ OTHER
CAUSE (?): ☐ OVERFILL ☐ RUPTURE/FAILURE ☐ SPILL ☐ CORROSION ☑ UNKNOWN ☐ OTHER

CASE TYPE
WATER (OR) ONLY: ☑ UNDETERMINED ☐ SOIL ONLY ☐ GROUNDWATER ☐ DRINKING WATER - (CHECK ONLY IF WATER WELLS HAVE ACTUALLY BEEN AFFECTED)

CURRENT STATUS
CHECK ONLY ONE:
☐ NO ACTION TAKEN ☐ PRELIMINARY SITE ASSESSMENT WORKPLAN SUBMITTED ☐ POLLUTION CHARACTERIZATION
☑ LEAK BEING CONFIRMED ☐ PRELIMINARY SITE ASSESSMENT UNDERWAY ☐ POST CLEANUP MONITORING IN PROGRESS
☐ REMEDIATION PLAN ☐ CASE CLOSED (CLEANUP COMPLETED OR UNNECESSARY) ☐ CLEANUP UNDERWAY

REMEDIAL ACTION
CHECK APPROPRIATE ACTION(S)
☐ SOIL AERATION (SA) ☐ EXCAVATE & DISPOSE (ED) ☐ REMOVE FREE PRODUCT (FP) ☐ ENHANCED BIO DEGRADATION (BI)
☐ CONTAINMENT BARRIER (CB) ☐ EXCAVATE & TREAT (ET) ☐ PUMP & TREAT GROUNDWATER (GT) ☐ REPLACE SUPPLY (RS)
☐ VACUUM EXTRACT (VE) ☐ NO ACTION REQUIRED (NA) ☐ TREATMENT AT HOOKUP (HU) ☐ VENT SOIL (VS)
☐ OTHER (OT)

COMMENTS
A leak associated with an underground fuel tank was discovered during removal in 1990. I do not believe that the fuel tank was removed. There are several [illegible] of ownership of the tank.

Table 2. Summary of Chemical Results on Soil Samples
Phase II Hazardous Materials Site Assessment
[illegible] Bryant Street Palo Alto, California
Concentrations in parts per million (ppm)

		EPA 3550/8015		EPA 5030/8020				EPA 8240	EPA 7421
Sample	Date	Total Petroleum Hydrocarbons as Diesel	as Gasoline	Benzene	Toluene	Ethyl-benzene	Xylenes	Toluene	Total Lead
MW-1-36'	9/16/90	7.2	ND	ND	0.005	ND	0.0071	ND	2.7
MW-2-36'	9/16/90	13	1.3	ND	0.036	0.018	0.025	0.4	3.4
MW-3-38'	9/17/90	13	ND	ND	0.11	ND	ND	0.64	3.2
MW-4-35.5'	10/7/90	ND	ND	--	--	--	--	ND	--
Drum Comp	10/7/90	ND	ND	ND	ND	ND	ND	--	ND
Detection Limit		1	1	0.005	0.005	0.005	0.005	0.1 - 0.5	0.25

-- = Not Analyzed
ND = Not detected above stated detection limit

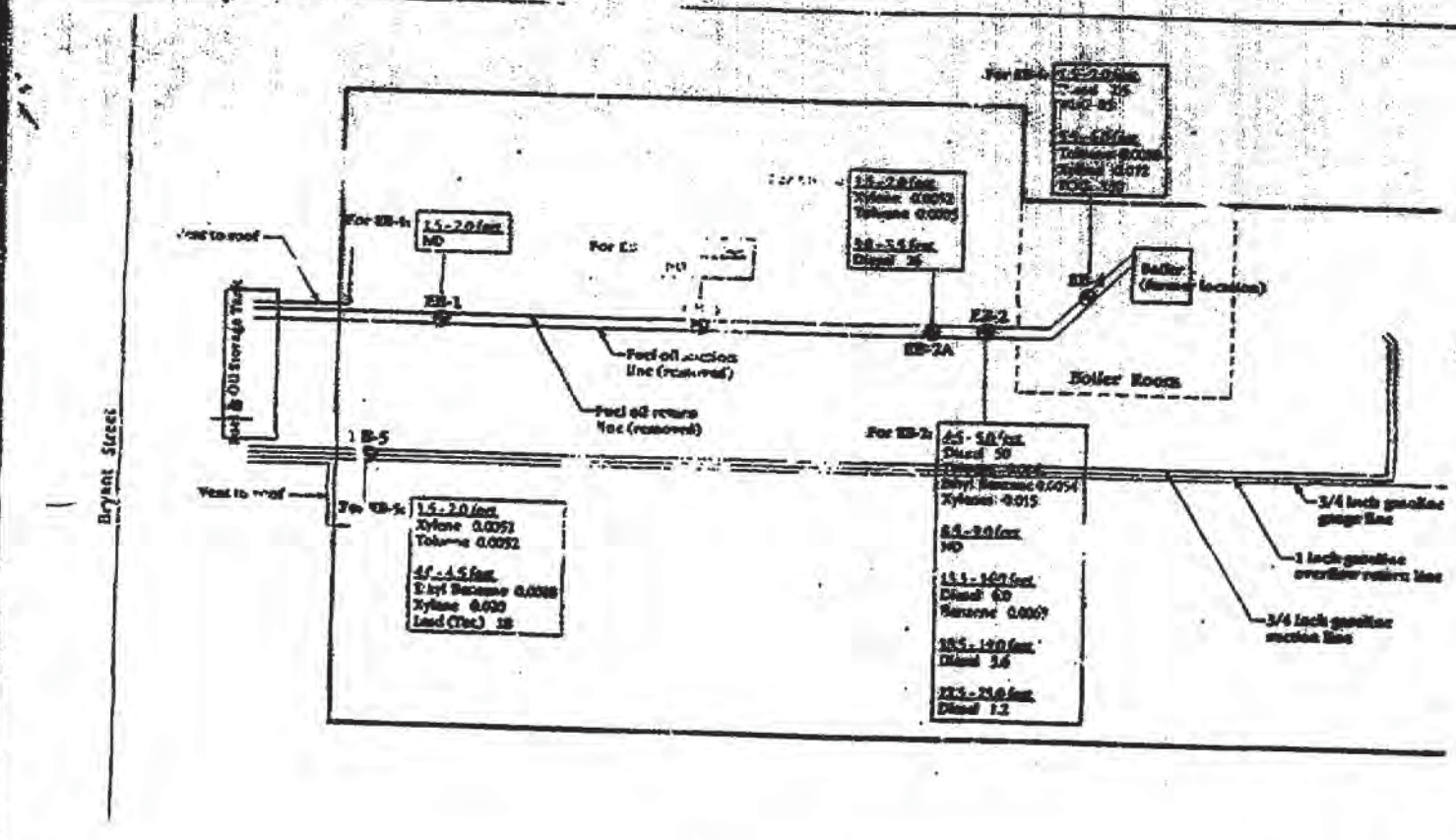
DRAFT

Table 3. Summary of Chemical Results on Groundwater Samples
Phase II Hazardous Materials Site Assessment
529 Bryant Street Palo Alto, California
Concentrations in parts per billion (ppb)

		EPA 8015 modified		EPA 602				EPA 624	
Well	Date	Total Petroleum Hydrocarbons as Diesel	as Gasoline	Ethyl Benzene	Toluene	Benzene	Xylenes	Chloroform	Toluene
MW-1	9/25/90	ND	ND	ND	ND	ND	ND	ND	ND
MW-2	9/25/90	ND	ND	ND	ND	ND	ND	ND	ND
MW-3	9/25/90	ND	ND	ND	ND	ND	ND	ND	ND
MW-4	10/12/90	3900	ND	ND	1.9	ND	1.0	4.4	3.1
Detection Limit		30	0.30	0.30	0.30	0.30	0.30	2.0 - 10	

ND = Not detected above stated detection limit

DRAFT

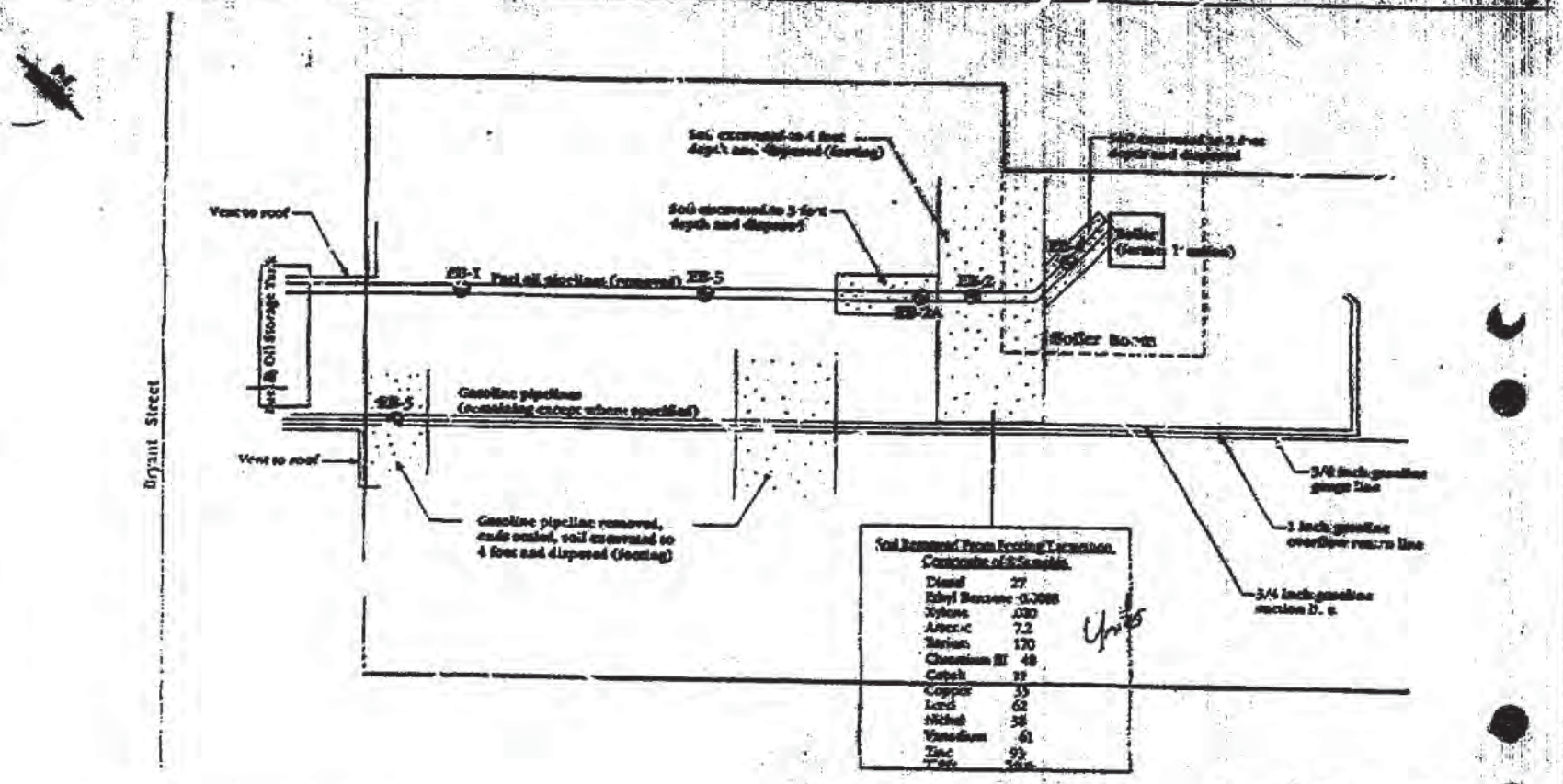


LEGEND

- Approximate location of soil boring
- Concentration of compounds detected (ppm)

Scale: 20 feet

J.V. LOWNEY & ASSOCIATES



LEGEND

- Approximate location of soil boring
- Approximate extent of excavated soil near pipeline, elevation relative to top of basement slab

J.V. LOWNEY & ASSOCIATES

BASEMENT EXCAVATION REPORT

PIPELINE REMOVAL AT 5-39 BRYANT STREET

Palo Alto, California

PROJECT NO.

DATE

Figure 2b

APPENDIX D

LABORATORY REPORTS

DRAFT

SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233
(510) 687-9660

[illegible]	Client Project ID:	#17691.026.03, Digital	Sampled:
1801 [illegible] Way, Suite 109	Matrix Descript:	Soil	Received:
Concord, CA 94520	Analysis Method:	EPA 5030/8015/8020	Analyzed:
Attn: [illegible]	First Sample #:	009-2176	Reported:

TOTAL PETROLEUM FUEL HYDROCARBONS with BTEX DISTINCTION (EPA 8015/8020)

Sample Number	Sample Description	Low/Medium B.P. Hydrocarbons mg/kg (ppm)	Benzene mg/kg (ppm)	Toluene mg/kg (ppm)	Ethyl Benzene mg/kg (ppm)	Xylenes mg/kg (ppm)
009-2176	MW-1-36'	N.D.	N.D.	0.0050	N.D.	0.0071
009-2177	MW-3-36'	1.3	N.D.	0.036	0.015	0.028
009-2178	MW-5-36'	N.D.	N.D.	0.11	N.D.	N.D.

SEQUOIA ANALYTICAL
680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

Client Project ID: #17691.026.03, Digital

Work Order: 109

QC Sample Group: 0092176-78

Reported: Oct 2, 1990

QUALITY CONTROL DATA REPORT

ANALYTE	Benzene	Toluene	Ethyl Benzene	Xylenes
Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Analyst:	Meyer/Gonzales	Meyer/Gonzales	eyer/Gonzale	eyer/Gonzales
Reporting Unit:	mg/kg	mg/kg	mg/kg	mg/kg
Date Analyzed:	Sep 28, 1990	Sep 28, 1990	Sep 28, 1990	Sep 28, 1990
QC Sample #:	009-2101	009-2101	009-2101	009-2101
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Spike Conc. Added:	0.20	0.20	0.20	0.60
Conc. Matrix Spike:	0.21	0.20	0.20	0.64
Matrix Spike % Recovery:	105	100	100	107
Conc. Matrix Spike Dup.:	0.20	0.19	0.20	0.61
Matrix Spike Duplicate % Recovery:	100	95	100	102
Relative % Difference:	4.9	5.1	0	4.8

SEQUOIA ANALYTICAL

Vickie Tague
Project Manager

% Recovery: $\frac{\text{Conc. of M.S. - Conc. of Sample}}{\text{Spike Conc. Added}} \times 100$

Relative % Difference: $\frac{\text{Conc. of M.S. - Conc. of M.S.D.}}{(\text{Conc. of M.S. + Conc. of M.S.D.}) / 2} \times 100$

92176.HAD <7>

SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

Harding Lawson Associates	Client Project ID:	#17691,026.03, Digital	Sampled: Sep 18, 1992
1365 Willow Way, Suite 109	Sample Descript:	Soil, MW-1-36'	Received: Sep 19, 1992
Concord, CA 94520	Analysis Method:	EPA 8240	Analyzed: Sep 25, 1992
Attention: Belinda Holloway	Lab Number:	009-2176	Reported: Oct 1, 1992

VOLATILE ORGANICS by GC/MS (EPA 8240)

Analyte	Detection Limit µg/kg	Sample Results µg/kg
Acetone	500	N.D.
Benzene	100	N.D.
Bromodichloromethane	100	N.D.
Bromoform	100	N.D.
Bromomethane	100	N.D.
2-Butanone	500	N.D.
Carbon disulfide	100	N.D.
Carbon tetrachloride	100	N.D.
Chlorobenzene	100	N.D.
Chloroethane	100	N.D.
2-Chloroethyl vinyl ether	500	N.D.
Chloroform	100	N.D.
Chloromethane	100	N.D.
Dibromochloromethane	100	N.D.
1,1-Dichloroethane	100	N.D.
1,2-Dichloroethane	100	N.D.
1,1-Dichloroethene	100	N.D.
Total 1,2-Dichloroethene	100	N.D.
1,2-Dichloropropane	100	N.D.
cis 1,3-Dichloropropene	100	N.D.
trans 1,3-Dichloropropene	100	N.D.
Ethylbenzene	100	N.D.
2-Hexanone	500	N.D.
Methylene chloride	100	N.D
4-Methyl-2-pentanone	500	N.D.
Styrene	100	N.D.
1,1,2,2-Tetrachloroethane	100	N.D.
Tetrachloroethene	100	N.D.
Toluene	100	N.D.
1,1,1-Trichloroethane	100	N.D.
1,1,2-Trichloroethane	100	N.D.
Trichloroethene	100	N.D.
Trichlorofluoromethane	100	N.D.
Vinyl acetate	100	N.D.
Vinyl chloride	100	N.D.
Total Xylenes	100	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL

Vickie Tague
Project Manager

92176.HAO <3>

SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

Harding Lawson Associates	Client Project ID:	#17691,020.03, Digital	Sampled:	Sep 16, 1990
1556 Willow Way, Suite 109	Sample Descript:	Soil, MW-2-35'	Received:	Sep 19, 1990
Concord, CA 94520	Analysis Method:	EPA 8240	Analyzed:	Sep 26, 1990
Attention: Dorinda Holloway	Lab Number:	009-2177	Reported:	Oct 2, 1990

VOLATILE ORGANICS by GC/MS (EPA 8240)

Analyte	Detection Limit µg/kg	Sample Result µg/kg
Acetone	500	N.D.
Benzene	100	N.D.
Bromodichloromethane	100	N.D.
Bromoform	100	N.D.
Bromomethane	100	N.D.
2-Butanone	500	N.D.
Carbon disulfide	100	N.D.
Carbon tetrachloride	100	N.D.
Chlorobenzene	100	N.D.
Chloroethane	100	N.D.
2-Chloroethyl vinyl ether	500	N.D.
Chloroform	100	N.D.
Chloromethane	100	N.D.
Dibromochloromethane	100	N.D.
1,1-Dichloroethane	100	N.D.
1,2-Dichloroethane	100	N.D.
1,1-Dichloroethene	100	N.D.
Total 1,2-Dichloroethene	100	N.D.
1,2-Dichloropropane	100	N.D.
cis 1,3-Dichloropropene	100	N.D.
trans 1,3-Dichloropropene	100	N.D.
Ethylbenzene	100	N.D.
2-Hexanone	500	N.D.
Methylene chloride	100	N.D.
4-Methyl-2-pentanone	500	N.D.
Styrene	100	N.D.
1,1,2,2-Tetrachloroethane	100	N.D.
Tetrachloroethene	100	N.D.
Toluene	100	400
1,1,1-Trichloroethane	100	N.D.
1,1,2-Trichloroethane	100	N.D.
Trichloroethene	100	N.D.
Trichlorofluoromethane	100	N.D.
Vinyl acetate	100	N.D.
Vinyl chloride	100	N.D.
Total Xylenes	100	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL

Vickie Tague
Project Manager

92176.HAO <4>

SEQUOIA ANALYTICAL
680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

Harding Lawson Associates	Client Project ID:	#17691,026.05, Digital	Sampled:	Sep 18, 1990
1656 Willow Way, Suite 109	Sample Descript:	Soil, MW-3-36'	Received:	Sep 19, 1990
Concord, CA 94520	Analysis Method:	EPA 8240	Analyzed:	Sep 26, 1990
Attention: Dorinda Holloway	Lab Number:	009-2178	Reported:	Oct 2, 1990

VOLATILE ORGANICS by GC/MS (EPA 8240)

Analyte	Detection Limit µg/kg	Sample results µg/kg
Acetone	500	N.D.
Benzene	100	N.D.
Bromodichloromethane	100	N.D.
Bromoform	100	N.D.
Bromomethane	100	N.D.
2-Butanone	500	N.D.
Carbon disulfide	100	N.D.
Carbon tetrachloride	100	N.D.
Chlorobenzene	100	N.D.
Chloroethane	100	N.D.
2-Chloroethyl vinyl ether	500	N.D.
Chloroform	100	N.D.
Chloromethane	100	N.D.
Dibromochloromethane	100	N.D.
1,1-Dichloroethane	100	N.D.
1,2-Dichloroethane	100	N.D.
1,1-Dichloroethene	100	N.D.
Total 1,2-Dichloroethene	100	N.D.
1,2-Dichloropropane	100	N.D.
cis 1,3-Dichloropropene	100	N.D.
trans 1,3-Dichloropropene	100	N.D.
Ethylbenzene	100	N.D.
2-Hexanone	500	N.D.
Methylene chloride	100	N.D.
4-Methyl-2-pentanone	500	N.D.
Styrene	100	N.D.
1,1,2,2-Tetrachloroethane	100	N.D.
Tetrachloroethene	100	N.D.
Toluene	100	240
1,1,1-Trichloroethane	100	N.D.
1,1,2-Trichloroethane	100	N.D.
Trichloroethene	100	N.D.
Trichlorofluoromethane	100	N.D.
Vinyl acetate	100	N.D.
Vinyl chloride	100	N.D.
Total Xylenes	100	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL

Vickie Tague
Project Manager

92178.HAC <5>

SEQUOIA ANALYTICAL
680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

[illegible] Associates	Client Project ID.	#1691.026.03; Digital	
[illegible] Way, Suite 109	Method (units):	EPA 8240 (µg/L purged)	Q.C. Sample Dat
[illegible], CA 9520	Analyst(s):	S. Scott	Analyzed: Sep 24, 19
Attention: Dorrie Holloway	QC Sample #:	009-2784	Reported: Oct 4,

QUALITY CONTROL DATA REPORT

Analyte	Sample Conc.	Spike Conc. Added	Conc. Matrix Spike	Matrix Spike % Recovery	Conc. Matrix Spike Duplicate	Matrix Spike Duplicate % Recovery	Relative % Difference
1,1-Dichloro-ethene	N.D.	50	49	98	43	86	13
Trichloroethene	N.D.	50	47	94	43	86	8.9
Benzene	N.D.	50	49	98	45	90	8.5
Toluene	N.D.	50	50	100	45	90	11
Chlorobenzene	N.D.	50	51	102	47	94	8.2

SEQUOIA ANALYTICAL

Vicki Tague
Project Manager

% Recovery: $\frac{\text{Conc. of M.S. - Conc. of Sample}}{\text{Spike Conc. Added}} \times 100$

Relative % Difference: $\frac{\text{Conc. of M.S. - Conc. of M.S.D.}}{(\text{Conc. of M.S. + Conc. of M.S.D.})\ 2} \times 100$

92176.HAO <6>

SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

[illegible]	Client Project ID:	#17691.026.03, Diablo	Sampled: [illegible]
[illegible] Suite 100	Sample Descript:	Soil	Received: [illegible]
Concord, CA [illegible]	Analysis for:	Lead	Extracted: [illegible]
Attention: Dennis Holloway	First Sample #:	009-2176	Analyzed: [illegible]
			Reported: [illegible]

LABORATORY ANALYSIS FOR: Lead

Sample Number	Sample Description	Detection Limit mg/kg	Sample Result mg/kg
009-2176	MW-1-35'	0.25	2.7
009-2177	MW-2-35'	0.25	3.4
009-2178	MW-3-35'	0.25	3.2

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL

Vickie Tague
Project Manager

92176.HAO <7>

SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

[illegible] Street Associates	Client Project ID: #17691,026.03, Digital
1[illegible] West State 109	
[illegible]	
Attention: Dennis Holloway	QC Sample Group: 0092176-78

Reported: Oct 2, 1990

QUALITY CONTROL DATA REPORT

ANALYTE	Lead
Method:	EPA 7421
Analyst:	R. Bilton
Reporting Units:	mg/kg
Date Analyzed:	Sep 21, 1990
QC Sample #:	090-1296
Sample Conc.:	2.2
Spike Conc. Added:	50
Conc. Matrix Spike:	55
Matrix Spike % Recovery:	106
Conc. Matrix Spike Dup.:	54
Matrix Spike Duplicate % Recovery:	104
Relative % Difference:	1.8

SEQUOIA ANALYTICAL

Vicki Tague
Project Manager

% Recovery:	Conc. of M.S. - Conc. of Sample / Spike Conc. Added	x 100
Relative % Difference:	Conc. of M.S. - Conc. of M.S.D. / (Conc. of M.S. + Conc. of M.S.D.) / 2	x 100

SEQUOIA ANALYTICAL
[illegible] Bonaire Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

[illegible]	Client Project ID:	#17681.023.03, Digital	Sampled:
[illegible] 100	Matrix Descript:	Soil	Received:
[illegible]	Analysis Method:	EPA 3550/8015	Extracted:
Attention: Dennis Holdaway	First Sample #:	0092176R	Analyzed:
			Reported:

TOTAL PETROLEUM FUEL HYDROCARBONS (EPA 8015)

Sample Number	Sample Description	High B.P. Hydrocarbons mg/kg (ppm)
0092176R	MW-1-35'	7.2
009-2177	MW-2-35'	15
009-2178	MW-3-35'	13

Detection Limit:	1.0

High Boiling Point Hydrocarbons are quantitated against a diesel fuel standard.
Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL

Victoria Teague
Project Manager

0092176R.HAO <1>

SEQUOIA ANALYTICAL
680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

Harding Lawson Associates
1600 Willow Way, Suite 100
Concord, CA 94520
Attention: Dennis Holowaty

Client Project ID: #17691,026.03; Digital

QC Sample Group: 0092176-78

Reported: Oct 1, 1990

QUALITY CONTROL DATA REPORT

ANALYTE:	Non-Halogenated Volatile Hydrocarbons
Method:	EPA 8015
Analyst:	K. Mitchell
Reporting Units:	mg/kg
Date Analyzed:	Sep 27, 1990
QC Sample #:	Matrix
Sample Conc.:	N.D.
Spike Conc. Added:	15
Conc. Matrix Spike:	12
Matrix Spike % Recovery:	80
Conc. Matrix Spike Dup.:	15
Matrix Spike Duplicate % Recovery:	100
Relative % Difference:	22

SEQUOIA ANALYTICAL

Vickie Tague
Project Manager

% Recovery: $\frac{\text{Conc. of M.S. - Conc. of Sample}}{\text{Spike Conc. Added}} \times 100$

Relative % Difference: $\frac{\text{Conc. of M.S. - Conc. of M.S.D.}}{(\text{Conc. of M.S. + Conc. of M.S.D.}) / 2} \times 100$

UOIA ANALYTICAL
Drive • Redwood City, CA 94063
9600 • FAX (415) 364-9233

	Client Project ID: #17691.026.03		Sampled: Sep [illegible]
	Matrix Descript: Water		Received: Sep 25, [illegible]
	Analysis Method: EPA 5030/8015/8020		Analyzed: Sep 29, [illegible]
	First Sample #: 009-3179 A		Reported: Oct [illegible]

[illegible] PETROLEUM FUEL HYDROCARBONS with BTEX DISTINCTION (EPA 8015/8020)

Sample Description	Low/Medium B.P. Hydrocarbons µg/L (ppb)	Benzene µg/L (ppb)	Toluene µg/L (ppb)	Ethyl Benzene µg/L (ppb)	Xylenes µg/L (ppb)
[illegible]	N.D.	N.D.	N.D.	N.D.	N.D.
[illegible]	N.D.	N.D.	N.D.	N.D.	N.D.
[illegible]	N.D.	N.D.	N.D.	N.D.	0.44
Detection Limits:	30	0.30	0.30	0.30	0.30

Low to Medium Boiling Point Hydrocarbons are quantitated against a gasoline standard.
Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL

Vickie Tague
Project Manager

93179.HAD <1>

SEQUOIA ANALYTICAL
680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

Harding Lawson Associates
1535 Willow Way, Suite 109
Concord, CA 94520
Attention: Carlton Holloway

Client Project ID: #17691,026.03

QC Sample Group: 0003179-81

Reported: Oct 9, 1990

QUALITY CONTROL DATA REPORT

ANALYTE	Benzene	Toluene	Ethyl Benzene	Xylenes
Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Analyst:	W. Parks	W. Parks	W. Parks	W. Parks
Reporting Units:	µg/L	µg/L	µg/L	µg/L
Date Analyzed:	Sep 28, 1990	Sep 28, 1990	Sep 28, 1990	Sep 28, 1990
QC Sample #:	009-2605	009-2605	009-2605	009-2605
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Spike Conc. Added:	10	10	10	30
Conc. Matrix Spike:	9.2	8.8	8.8	28
Matrix Spike % Recovery:	92	88	88	93
Conc. Matrix Spike Dup.:	9.4	8.9	9.1	28
Matrix Spike Duplicate % Recovery:	94	89	91	93
Relative % Difference:	2.2	1.1	3.4	0

SEQUOIA ANALYTICAL

Vickie Tague
Project Manager

% Recovery: $\frac{\text{Conc. of M.S.} - \text{Conc. of Sample}}{\text{Spike Conc. Added}} \times 100$

Relative % Difference: $\frac{\text{Conc. of M.S.} - \text{Conc. of M.S.D.}}{(\text{Conc. of M.S.} + \text{Conc. of M.S.D.}) / 2} \times 100$

93179.HAO <2>

SEQUOIA ANALYTICAL
680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

[illegible]	Client Project ID:	#17631.05.03	Sampled: Sep 23, 1993
1919 Ygnacio Valley Rd. #108	Matrix Descript:	Water	Received: Sep 24, 1993
Concord, CA 94520	Analysis Method:	EPA 3510/8015	Extracted: Sep 27, 1993
Attention: Dorinda Holloway	First Sample #:	009-3179 C	Analyzed: Sep 28, 1993
			Reported: Oct 5, 1993

TOTAL PETROLEUM FUEL HYDROCARBONS (EPA 8015)

Sample Number	Sample Description	High B.P. Hydrocarbons µg/L (ppb)
0093179 C	MW-1	N.D.
0093180 C	MW-2	N.D.
0093181 C	MW-3	N.D.

Detection Limits:	50

High Boiling Point Hydrocarbons are quantitated against a diesel fuel standard.
Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL

Vicki Tacker
Project Manager

93179.HAO <3>

SEQUOIA ANALYTICAL
680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-3233

Harding Lawson Associates
1330 Willow Pass, Suite 109
Concord, CA 94520
Attention: Gretchen Hoffstadt

Client Project ID: #17651,026.03

QC Sample Group: 0009179-81

Reported: Oct 3, 1990

QUALITY CONTROL DATA REPORT

ANALYTE	High Boiling Point Hydrocarbons
Method:	SHA3016
Analyst:	K. Mitchell
Reporting Units:	mg/L
Date Analyzed:	Sep 27, 1990
QC Sample #:	6LK002790
Sample Conc.:	N.D.
Spike Conc. Added:	300
Conc. Matrix Spike:	320
Matrix Spike % Recovery:	107
Conc. Matrix Spike Dup.:	310
Matrix Spike Duplicate % Recovery:	103
Relative % Difference:	3.2

SEQUOIA ANALYTICAL

Vicki Tague
Project Manager

$$\% \text{ Recovery:} \quad \frac{\text{Conc. of M.S.} - \text{Conc. of Sample}}{\text{Spike Conc. Added}} \times 100$$

$$\text{Relative \% Difference:} \quad \frac{\text{Conc. of M.S.} - \text{Conc. of M.S.D.}}{(\text{Conc. of M.S.} + \text{Conc. of M.S.D.}) / 2} \times 100$$

SEQUOIA ANALYTICAL
680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

Harding Lawson Associates	Client Project ID:	#17691,026.03	Sampled: Sep 23, 1990
1355 Willow Way, Suite 109	Sample Descript:	Water, MW-1	Received: Sep 25, 1990
Concord, CA 94520	Analysis Method:	EPA 8240	Analyzed: Sep 28, 1990
Attention: Dorinda Holloway	Lab Number:	009-3179 D	Reported: Oct 5, 1990

VOLATILE ORGANICS by GC/MS (EPA 8240)

Analyte	Detection Limit µg/L	Sample Results µg/L
Acetone	10	N.D.
Benzene	2.0	N.D.
Bromodichloromethane	2.0	N.D.
Bromoform	2.0	N.D.
Bromomethane	2.0	N.D.
2-Butanone	10	N.D.
Carbon disulfide	2.0	N.D.
Carbon tetrachloride	2.0	N.D.
Chlorobenzene	2.0	N.D.
Chloroethane	2.0	N.D.
2-Chloroethyl vinyl ether	10	N.D.
Chloroform	2.0	N.D.
Chloromethane	2.0	N.D.
Dibromochloromethane	2.0	N.D.
1,1-Dichloroethane	2.0	N.D.
1,2-Dichloroethane	2.0	N.D.
1,1-Dichloroethene	2.0	N.D.
Total 1,2-Dichloroethene	2.0	N.D.
1,2-Dichloropropane	2.0	N.D.
cis-1,3-Dichloropropene	2.0	N.D.
trans-1,3-Dichloropropene	2.0	N.D.
Ethylbenzene	2.0	N.D.
2-Hexanone	10	N.D.
Methylene chloride	2.0	N.D.
4-Methyl-2-pentanone	10	N.D.
Styrene	2.0	N.D.
1,1,2,2-Tetrachloroethane	2.0	N.D.
Tetrachloroethene	2.0	N.D.
Toluene	2.0	N.D.
1,1,1-Trichloroethane	2.0	N.D.
1,1,2-Trichloroethane	2.0	N.D.
Trichloroethene	2.0	N.D.
Trichlorofluoromethane	2.0	N.D.
Vinyl acetate	2.0	N.D.
Vinyl chloride	2.0	N.D.
Total Xylenes	2.0	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL

Vickie Tejada
Project Manager

93179.HAO <5>

SEQUOIA ANALYTICAL
680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

Harding Lawson Associates	Client Project ID:	#17691,026.03	Sampled: Sep 23, 1990
1355 Willow Way, Suite 109	Sample Descript:	Water, MW-2	Received: Sep 25, 1990
Concord, CA 94520	Analysis Method:	EPA 8240	Analyzed: Sep 28, 1990
Attention: Dorinda Holloway	Lab Number:	009-3180 D	Reported: Oct 5, 1990

VOLATILE ORGANICS by GC/MS (EPA 8240)

Analyte	Detection Limit µg/L	Sample Results µg/L
Acetone	10	N.D.
Benzene	2.0	N.D.
Bromodichloromethane	2.0	N.D.
Bromoform	2.0	N.D.
Bromomethane	2.0	N.D.
2-Butanone	10	N.D.
Carbon disulfide	2.0	N.D.
Carbon tetrachloride	2.0	N.D.
Chlorobenzene	2.0	N.D.
Chloroethane	2.0	N.D.
2-Chloroethyl vinyl ether	10	N.D.
Chloroform	2.0	N.D.
Chloromethane	2.0	N.D.
Dibromochloromethane	2.0	N.D.
1,1-Dichloroethane	2.0	N.D.
1,2-Dichloroethane	2.0	N.D.
1,1-Dichloroethene	2.0	N.D.
Total 1,2-Dichloroethene	2.0	N.D.
1,2-Dichloropropane	2.0	N.D.
cis 1,3-Dichloropropene	2.0	N.D.
trans 1,3-Dichloropropene	2.0	N.D.
Ethylbenzene	2.0	N.D.
2-Hexanone	10	N.D.
Methylene chloride	2.0	N.D.
4-Methyl-2-pentanone	10	N.D.
Styrene	2.0	N.D.
1,1,2,2-Tetrachloroethane	2.0	N.D.
Tetrachloroethene	2.0	N.D.
Toluene	2.0	N.D.
1,1,1-Trichloroethane	2.0	N.D.
1,1,2-Trichloroethane	2.0	N.D.
Trichloroethene	2.0	N.D.
Trichlorofluoromethane	2.0	N.D.
Vinyl acetate	2.0	N.D.
Vinyl chloride	2.0	N.D.
Total Xylenes	2.0	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL

Vickie Tague
Project Manager

93179 HAO <6>

SEQUOIA ANALYTICAL
680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

Harding Lawson Associates	Client Project ID:	#17691,028.03	Sampled: Sep 23, 1990
1555 Willow Way, Suite 100	Sample Descript:	Water, MW-3	Received: Sep 25, 1990
Concord, CA 94520	Analysis Method:	EPA 8240	Analyzed: Sep 28, 1990
Attention: Dorinda Holloway	Lab Number:	009-3161 D	Reported: Oct 3, 1990

VOLATILE ORGANICS by GC/MS (EPA 8240)

Analyte	Detection Limit µg/L	Sample Results µg/L
Acetone	10	N.D.
Benzene	2.0	N.D.
Bromodichloromethane	2.0	N.D.
Bromoform	2.0	N.D.
Bromomethane	2.0	N.D.
2-Butanone	10	N.D.
Carbon disulfide	2.0	N.D.
Carbon tetrachloride	2.0	N.D.
Chlorobenzene	2.0	N.D.
Chloroethane	2.0	N.D.
2-Chloroethyl vinyl ether	10	N.D.
Chloroform	2.0	N.D.
Chloromethane	2.0	N.D.
Dibromochloromethane	2.0	N.D.
1,1-Dichloroethane	2.0	N.D.
1,2-Dichloroethane	2.0	N.D.
1,1-Dichloroethene	2.0	N.D.
Total 1,2-Dichloroethene	2.0	N.D.
1,2-Dichloropropane	2.0	N.D.
cis-1,3-Dichloropropene	2.0	N.D.
trans-1,3-Dichloropropene	2.0	N.D.
Ethylbenzene	2.0	N.D.
2-Hexanone	10	N.D.
Methylene chloride	2.0	N.D.
4-Methyl-2-pentanone	10	N.D.
Styrene	2.0	N.D.
1,1,2,2-Tetrachloroethane	2.0	N.D.
Tetrachloroethene	2.0	N.D.
Toluene	2.0	N.D.
1,1,1-Trichloroethane	2.0	N.D.
1,1,2-Trichloroethane	2.0	N.D.
Trichloroethene	2.0	N.D.
Trichlorofluoromethane	2.0	N.D.
Vinyl acetate	2.0	N.D.
Vinyl chloride	2.0	N.D.
Total Xylenes	2.0	N.D.

Analytes reported as N.D. were not present above the stated limit of detection

SEQUOIA ANALYTICAL

Vickie Tague
Project Manager

93179.HAO <7>

SEQUOIA ANALYTICAL
680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

[illegible] on Associates	Client Project ID:	#17691,028.03
1333 Willow Way, Suite 109	Method (units):	EPA 8240 (µg/L purged)
Concord, CA 94520	Analyst(s):	S. Scott
Attention: Dennis Holloway	QC Sample #:	009-2435

Q.C. Sample Dates
Analyzed: Sep 24, 1990
Reported: Oct 3, 1990

QUALITY CONTROL DATA REPORT

Analyte	Sample Conc.	Spike Conc. Added	Conc. Matrix Spike	Matrix Spike % Recovery	Conc. Matrix Spike Duplicate	Matrix Spike Duplicate % Recovery	Relative % Difference
1,1-Dichloro-ethene	N.D.	50	42	84	39	78	7.4
Trichloroethene	N.D.	50	49	98	49	98	0
Benzene	N.D.	50	47	94	46	92	2.2
Toluene	N.D.	50	49	98	49	98	0
Chlorobenzene	N.D.	50	52	104	52	104	0

SEQUOIA ANALYTICAL

Vickie Tsou
Project Manager

% Recovery: $\frac{\text{Conc. of M.S. - Conc. of Sample}}{\text{Spike Conc. Added}} \times 100$

Relative % Difference: $\frac{\text{Conc. of M.S. - Conc. of M.S.D.}}{(\text{Conc. of M.S. + Conc. of M.S.D.}) / 2} \times 100$

93179.HAO <8>

SEQUOIA ANALYTICAL

1900 Bates Avenue • Suite LM • Concord, California 94520
(415) 686-9600 • FAX (415) 686-9689

Harding Lawson Associates	Client Project ID:	1788\026.09/Diesel Phase II	Sampled: [illegible]
1355 Willow Way, Suite 109	Sample Descript.:	Soil, Drum Composite	Received: [illegible]
Concord, CA 94520	Analysis Method:	EPA 5030/8015/8020	Analyzed: [illegible]
Attention: Dorinda Holloway	Lab Number:	010-0236	Reported: [illegible]

TOTAL PETROLEUM FUEL HYDROCARBONS WITH BTEX DISTINCTION (EPA 8015/8020)

Analyte	Detection Limit mg/kg (ppm)	Sample Results mg/kg (ppm)
Low to Medium Boiling Point Hydrocarbons	1.0	N.D.
Benzene	0.0050	N.D.
Toluene	0.0050	N.D.
Ethyl Benzene	0.0050	N.D.
Xylenes	0.0050	N.D.

Low to Medium Boiling Point Hydrocarbons are quantitated against a gasoline standard.
Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL

Belinda C. Vega
Laboratory Director

100266.HAO <1>

SEQUOIA ANALYTICAL
1900 Bates Avenue • Suite LM • Concord, California 94520
(415) 686-9600 • FAX (415) 686-9689

Harding Lawson Associates
1365 Willow Way, Suite 109
Concord, CA 94520
Attention: Dennis Holloway

Client Project ID: 17699,026.03/Digital Phase II

Q.C. #: 010-0266

Reported: Oct 16, 1990

QUALITY CONTROL DATA REPORT

ANALYTE	Benzene	Toluene	Ethyl Benzene	Xylenes
Method:	EPA5015/8020	EPA8015/8020	EPA8015/8020	EPA8015/8020
Analyst:	J. Fontecha	J. Fontecha	J. Fontecha	J. Fontecha
Reporting Units:	ppm	ppm	ppm	ppm
Date Analyzed:	Oct 12, 1990	Oct 12, 1990	Oct 12, 1990	Oct 12, 1990
QC Sample #:	010-0348	010-0348	010-0348	010-0348
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Spike Conc. Added:	0.4	0.4	0.4	1.2
Conc. Matrix Spike:	0.34	0.35	0.34	1
Matrix Spike % Recovery:	85	88	85	83
Conc. Matrix Spike Dup.:	0.35	0.36	0.35	1.1
Matrix Spike Duplicate % Recovery:	88	90	88	92
Relative % Difference:	2.9	2.8	2.9	9.5

SEQUOIA ANALYTICAL

Belinda G. Vega
Laboratory Director

% Recovery: $\frac{\text{Conc. of M.S. - Conc. of Sample}}{\text{Spike Conc. Added}} \times 100$

Relative % Difference: $\frac{\text{Conc. of M.S. - Conc. of M.S.D.}}{(\text{Conc. of M.S. + Conc. of M.S.D.})/2} \times 100$

100266.HAO <2>

SEQUOIA ANALYTICAL

1900 Olatie Avenue • Suite LM • Concord, California 94520
(415) 686-0600 • FAX (415) 686-9689

Harding Lawson Associates	Client Project ID:	17669.026.03/Digital Phase II	Sampled: Oct 7, 1990
1956 Webster Way, Suite 100	Sample Descript:	Soil, Drum Composite	Received: Oct 8, 1990
Concord, CA 94520			Extracted: Oct 9, 1990
Attention: Dorinda Holloway	Lab Number:	010-0266	Analyzed: Oct 10, 1990
			Reported: Oct 11, 1990

LABORATORY ANALYSIS

Analyte	Detection Limit mg/kg	Sample Results mg/kg
Lead (Total)	0.50	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL

Bernadette C. Vera
Laboratory Director

100266.HAO <3>

SEQUOIA ANALYTICAL

1900 Elkins Avenue • Suite LM • Concord, California 94520
(415) 686-9600 • FAX (415) 686-9689

Client Project ID: 17699,026.03/Capital Phase II

1355 Willow Way, Suite 109

Concord, CA 94520

Attention: Kelly

Q.C. #: 010-0266

Reported: Oct 19, 1990

QUALITY CONTROL DATA REPORT

ANALYTE	Lead
Method:	EPA 7420
Analyst:	N. Herrera
Reporting Units:	mg/kg
Date Analyzed:	Oct 19, 1990
QC Sample #:	010-0266
Sample Conc.:	N.D.
Spike Conc. Added:	0.50
Conc. Matrix Spike:	0.49
Matrix Spike % Recovery:	98
Conc. Matrix Spike Dup.:	0.51
Matrix Spike Duplicate % Recovery:	102
Relative % Difference:	4.0

SEQUOIA ANALYTICAL

Belinda C. Vega
Laboratory Director

% Recovery: $\frac{\text{Conc. of M.S. - Conc. of Sample}}{\text{Spike Conc. Added}} \times 100$

Relative % Difference: $\frac{\text{Conc. of M.S. - Conc. of M.S.D.}}{(\text{Conc. of M.S. + Conc. of M.S.D.})/2} \times 100$

100266.HAO <4>

SEQUOIA ANALYTICAL
1900 Elkins Avenue • Suite LM • Concord, California 94520
(415) [illegible]-9600 • FAX (415) 686-9689

[illegible] Engineering Associates	Client Project ID:	17[illegible] Phase II	Sampled: Oct 7, 1[illegible]
635 Ward Way, Suite 100	Matrix Descript:	Soil, MW-4 (35.5)	Received: Oct 9, 1[illegible]
Concord, CA 94520	Analysis Method:	EPA 5030/8015	Analyzed: Oct 11, 1[illegible]
Attention: Dennis Holowaty	First Sample #:	010-0295	Reported: Oct 16, 1[illegible]

TOTAL PETROLEUM FUEL HYDROCARBONS (EPA 8015)

Sample Number	Sample Description	Low/Medium B.P. Hydrocarbons mg/kg (ppm)
010-0295	MW4 (35.5)	N.D.

Detection Limits:	1.0

Low to Medium Boiling Point Hydrocarbons are quantitated against a gasoline standard.
Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL

Belinda C. Vega
Laboratory Director

100286.HAO <11>

SEQUOIA ANALYTICAL
Avenue • Suite LM • Concord, California 94520
[illegible] • FAX (415) 686-9689

Client Project ID: 17699.026.03/Digital Phase II

Attn: [illegible] Holloway

Q.C. #: 010-0265

Reported: Oct 16, 1990

QUALITY CONTROL DATA REPORT

ANALYTE:	Benzene	Toluene	Ethyl Benzene	Xylenes
Method:	EPA8015/8020	EPA8015/8020	EPA8015/8020	EPA8015/8020
Analyst:	W.K. Park/G. Meyer	W.K. Park	G. Meyer	W.K. Park
Reporting Units:	ppm	ppm	ppm	ppm
Date Analyzed:	Oct 11, 1990	Oct 11, 1990	Oct 11, 1990	Oct 11, 1990
QC Sample #:	009-1401	009-1401	009-1401	009-1401
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Spike Conc. Added:	0.20	0.20	0.20	0.60
Conc. Matrix Spike:	0.25	0.22	0.25	0.66
Matrix Spike % Recovery:	125	110	125	110
Conc. Matrix Spike Dup.:	23	21	23	68
Matrix Spike Duplicate % Recovery:	115	105	115	113
Relative % Difference:	8.3	4.6	8.3	3.0

SEQUOIA ANALYTICAL

Belinda C. Vega
Laboratory Director

$$\% \text{ Recovery:} = \frac{\text{Conc. of M.S.} - \text{Conc. of Sample}}{\text{Spike Conc. Added}} \times 100$$

$$\text{Relative \% Difference:} = \frac{\text{Conc. of M.S.} - \text{Conc. of M.S.D.}}{(\text{Conc. of M.S.} + \text{Conc. of M.S.D.}) / 2} \times 100$$

100266.HAO <5>

SEQUOIA ANALYTICAL

1900 Bates Avenue • Suite LM • Concord, California 94520
(415) 680-9600 • FAX (415) 680-9689

[illegible] Associates	Client Project ID:	17696.038.03/Digital Phase II	Sampled: Oct 7, 1990
[illegible] Way, Suite 109	Matrix Descript:	Soil	Received: Oct 9, 1990
Concord, CA 94520	Analysis Method:	EPA 3550/8015	Extracted: Oct 10, 1990
Attention: Dorinda Holloway	First Sample #:	010-0265	Analyzed: Oct 11, 1990
			Reported: Oct 16, 1990

TOTAL PETROLEUM FUEL HYDROCARBONS (EPA 8015)

Sample Number	Sample Description	High B.P. Hydrocarbons ug/kg (ppm)
010-02 5	MW-4 (35.5)	N.D.

Detection Limit:	1.0

High boiling point hydrocarbons are quantitated against a diesel fuel standard.
ND means reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL

Belinda G. Vega
Laboratory Director

10026E HAD <12>

SEQUOIA ANALYTICAL
1900 Bates Avenue • Suite LM • Concord, California 94520
(415) 686-9600 • FAX (415) 686-9689

Harding Lawson Associates
1338 Willow Way, Suite 109
Concord, CA 94520
Attention: Dorinda Holloway

Client Project ID: 17699,026.03/Diesel Phase II

Q.C. #: 010-0265

Reported: Oct 16, 1990

QUALITY CONTROL DATA REPORT

ANALYTE	Diesel
Method:	EPA 3550/8015
Analyst:	K. Mitchell
Reporting Units:	mg/kg
Date Analyzed:	Oct 11, 1990
QC Sample #:	010-0011
Sample Conc.:	N.D.
Spike Conc. Added:	15
Conc. Matrix Spike:	14
Matrix Spike % Recovery:	93
Conc. Matrix Spike Dup.:	13
Matrix Spike Duplicate % Recovery:	87
Relative % Difference:	7.4

SEQUOIA ANALYTICAL

Belinda C. Vega
Laboratory Director

% Recovery: $\frac{\text{Conc. of M.S.} - \text{Conc. of Sample}}{\text{Spike Conc. Added}} \times 100$

Relative % Difference: $\frac{\text{Conc. of M.S.} - \text{Conc. of M.S.D.}}{(\text{Conc. of M.S.} + \text{Conc. of M.S.D.}) / 2} \times 100$

100266 HAD

SEQUOIA ANALYTICAL

1900 Bates Avenue • Suite LM • Concord, California 94520
(415) 686-9600 • FAX (415) 686-9689

Harding Lawson Associates	Client Project ID:	17609.020.03/Digital Phase II	Sampled:	Oct 7, 1990
1355 Willow Way, Suite 109	Sample Descript:	Soil, MW-4 (35.5)	Received:	Oct 9, 1990
Concord, CA 94520	Analysis Method:	EPA 8240	Analyzed:	Oct 15, 1990
Attention: Dorinda Holloway	Lab Number:	010-0265	Reported:	Oct 16, 1990
	QC Sample #:			

VOLATILE ORGANICS by GC/MS (EPA 8240)

Analyte	Detection Limit µg/kg	Sample Results µg/kg
Acetone	500	N.D.
Benzene	100	N.D.
Bromodichloromethane	100	N.D.
Bromoform	100	N.D.
Bromomethane	100	N.D.
2-Butanone	500	N.D.
Carbon disulfide	100	N.D.
Carbon tetrachloride	100	N.D.
Chlorobenzene	100	N.D.
Chlorodibromomethane	100	N.D.
Chloroethane	100	N.D.
2-Chloroethyl vinyl ether	500	N.D.
Chloroform	100	N.D.
Chloromethane	100	N.D.
1,1-Dichloroethane	100	N.D.
1,2-Dichloroethane	100	N.D.
1,1-Dichloroethene	100	N.D.
Total 1,2-Dichloroethene	100	N.D.
1,2-Dichloropropane	100	N.D.
cis 1,3-Dichloropropene	100	N.D.
trans 1,3-Dichloropropene	100	N.D.
Ethylbenzene	100	N.D.
2-Hexanone	500	N.D.
Methylene chloride	100	N.D.
4-Methyl-2-pentanone	500	N.D.
Styrene	100	N.D.
1,1,2,2-Tetrachloroethane	100	N.D.
Tetrachloroethene	100	N.D.
Toluene	100	N.D.
1,1,1-Trichloroethane	100	N.D.
1,1,2-Trichloroethane	100	N.D.
Trichloroethene	100	N.D.
Trichlorofluoromethane	100	N.D.
Vinyl acetate	100	N.D.
Vinyl chloride	100	N.D.
Total Xylenes	100	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL

Selinda C. Vega
Laboration Director

100266 HAO

SEQUOIA ANALYTICAL

1900 Bates Avenue • Suite LM • Concord, California 94520
(415) 686-9600 • FAX (415) 686-9689

Harding Lawson Associates
1365 Willow Way, Suite 109
Concord, CA 94520
Attention: Dorinda Holloway

Client Project ID: 17699.026.03/Digital Phase II
Method (units): EPA 8240 (µg/L purged)
Analyst(s): E. Manuel
QC Sample #: 0[illegible]1678

Q.C. Sample Dates
Analyzed: Oct 15, 1990
Reported: Oct 16, 1990

QUALITY CONTROL DATA REPORT

Analyte	Sample Conc.	Spike Conc. Added	Conc. Matrix Spike	Matrix Spike % Recovery	Conc. Matrix Spike Duplicate	Matrix Spike Duplicate % Recovery	Relative % Difference
1,1-Dichloro-ethene	N.D.	50	56	110	54	110	3.6
Trichloroethene	N.D.	50	47	94	46	92	2.2
Benzene	N.D.	50	53	110	52	100	1.9
Toluene	N.D.	50	48	96	48	96	0
Chlorobenzene	N.D.	50	51	100	51	100	0

SEQUOIA ANALYTICAL

Belinda C. Vega
Laboratory Director

% Recovery: (Conc. of M.S. - Conc. of Sample) / Spike Conc. Added x 100

Relative % Difference: (Conc. of M.S. - Conc. of M.S.D.) / (Conc. of M.S. + Conc. of M.S.D.) / 2 x 100

100266.HAD <10>

Harding Lawson Associates

CHAIN OF CUSTODY FORM

Lab: Sequoia

Samplers: MAC

Job Number: 17691.026.03

Name/Location: Digital Phase II

Project Manager: Deniza Holloway

Recorder: Deniza Holloway (Signature Required)

SOURCE CODE	MATRIX: Water	MATRIX: Sediment	MATRIX: Soil	MATRIX: Oil	#CONTAINERS & PRESERV.: Unpres.	#CONTAINERS & PRESERV.: H_2SO_4	#CONTAINERS & PRESERV.: HNO_3	SAMPLE NUMBER OR LAB NUMBER: Yr	Wk	Seq	DATE: Yr	Mo	Dy	Time	STATION DESCRIPTION/ NOTES	ANALYSIS REQUESTED: EPA 601/8010	EPA 602/8020 BTEX	EPA 624/8240	EPA 625/8270	ICP METALS	EPA 8015M/TPH as Gas	TPH as Diesel	Lead (Pb)	
SO			X		X						90	10	07		MW-4-35 5'		X				X	X		9100524-026
↓			↓		↓							↓			Drum Composite	X					X	X		

LAB NUMBER: Yr	Wk	Seq	DEPTH IN FEET	COL MTD CD	QA CODE	MISCELLANEOUS
						5 day turnaround

CHAIN OF CUSTODY RECORD

RELINQUISHED BY: (Signature)	RECEIVED BY: (Signature)	DATE/TIME
Deniza Holloway		
RELINQUISHED BY: (Signature)	RECEIVED BY: (Signature)	DATE/TIME
RELINQUISHED BY: (Signature)	RECEIVED BY: (Signature)	DATE/TIME
RELINQUISHED BY: (Signature)	RECEIVED BY: (Signature)	DATE/TIME
DISPATCHED BY: (Signature) DATE/TIME	RECEIVED FOR LABORATORY BY: (Signature)	DATE/TIME 10/7/15
METHOD OF SHIPMENT		

Laboratory Copy Project Office Copy Field or Office Copy

SEQUOIA ANALYTICAL
680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

[illegible] Associates	Client Project ID:	#17641.026.03, Digital	Sampled: Oct 18, 1990
1[illegible] Willow Way, Suite 109	Sample Descript.:	Water, MW4	Received: Oct 19, 1990
[illegible], CA 94520	Analysis Method:	EPA 5030/ 8015/8020	Analyzed: Oct 19, 1990
Attention: Dorinda Holloway	Lab Number:	010-1905	Reported: Oct 19, 1990

TOTAL PETROLEUM FUEL HYDROCARBONS WITH BTEX DISTINCTION (EPA 8015/8020)

Analyte	Detection Limit µg/L (ppb)	Sample Results µg/L (ppb)
Low to Medium Boiling Point Hydrocarbons	50	N.D.
Benzene	0.30	N.D.
Toluene	0.30	N.D.
Ethyl Benzene	0.30	N.D.
Xylenes	0.30	N.D.

Low to Medium Boiling Point Hydrocarbons are quantitated against a gasoline standard.
Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL

Michelle Tague
Project Manager

101905.HAD <1>

SEQUOIA ANALYTICAL
680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

[illegible] Woodside	Client Project ID:	#176[illegible],026.03, Digital	Sampled: Oct 1 [illegible]
[illegible] Way, Suite 109	Matrix Descript:	Water	Received: Oct 12 [illegible]
[illegible], CA 94062	Analysis Method:	EPA 3510/8015	Extracted: Oct 15 [illegible]
Attention: Dolinda Holloway	First Sample #:	010-1905	Analyzed: Oct 15 [illegible]
			Reported: Oct [illegible]

TOTAL PETROLEUM FU[illegible]. HYDROCARBONS (EPA 8015)

Sample Number	Sample Description	High B.P. Hydrocarbons µg/L (ppb)
010-1905	[illegible]4	3,900

Detection Limits:	50

High Boiling Point Hydrocarbons are quantitated against a diesel fuel standard.
Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL

Victor Tague
Project Manager

101905 HBO <2>

SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

Herring Lawson Associates	Client Project ID:	#17641.026.03, Digital	Sampled:	Oct 12, 1990
1355 Willow Way, Suite 109	Sample Descript:	Water, MW4	Received:	Oct 12, 1990
Concord, CA 94520	Analysis Method:	EPA 624	Analyzed:	Oct 15, 1990
Attention: Dorinda Holloway	Lab Number:	010-1905	Reported:	Oct 19, 1990

PURGEABLES by GC/MS (EPA 624)

Analyte	Detection Limit µg/L	Sample Results µg/L
Acetone	10	N.D.
Benzene	2.0	N.D.
Bromodichloromethane	2.0	N.D.
Bromoform	2.0	N.D.
Bromomethane	2.0	N.D.
2-Butanone	10	N.D.
Carbon disulfide	2.0	N.D.
Carbon tetrachloride	2.0	N.D.
Chlorobenzene	2.0	N.D.
Chloroethane	2.0	N.D.
2-Chloroethyl vinyl ether	10	N.D.
Chloroform	2.0	[illegible]
Chloromethane	2.0	N.D.
Dibromochloromethane	2.0	N.D.
1,1-Dichloroethane	2.0	N.D.
1,2-Dichloroethane	2.0	N.D.
1,1-Dichloroethene	2.0	N.D.
Total 1,2-Dichloroethene	2.0	N.D.
1,2-Dichloropropane	2.0	N.D.
cis 1,3-Dichloropropene	2.0	N.D.
trans 1,3-Dichloropropene	2.0	N.D.
Ethylbenzene	2.0	N.D.
2-Hexanone	10	N.D.
Methylene chloride	2.0	N.D.
4-Methyl-2-pentanone	10	N.D.
Styrene	2.0	N.D.
1,1,2,2-Tetrachloroethane	2.0	N.D.
Tetrachloroethene	2.0	N.D.
Toluene	2.0	3.1
1,1,1-Trichloroethane	2.0	N.D.
1,1,2-Trichloroethane	2.0	N.D.
Trichloroethene	2.0	N.D.
Trichlorofluoromethane	2.0	N.D.
Vinyl acetate	2.0	N.D.
Vinyl chloride	2.0	N.D.
Total Xylenes	2.0	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL

Vickie Tague
Project Manager

DISTRIBUTION

5 copies: Digital Equipment Corporation
2352 Main Street
Concord, Massachusetts 01742-3880

Attention: Mr. Michael Zuniga

DCH/SJO/ere 031792P/R41

QUALITY CONTROL REVIEWER

Randolph Stone
Associate Hydrogeologist

DRAFT

TELEPHONE CONVERSATION

DATE 3/7/96 TIME _____ PHONE NO. (___) _____

PERSON CALLING/CALLED Bob Bouchard

AGENCY REPRESENTED City, PA

CONVERSATION

He does not have any documentation of tank being removed.

2 tank removal applications rec'd in 1991

In April 91 an inspection revealed the tank had product

I told him we did not have authority to require removal because we do not have indication of release.

We would indicate questions about UST in closure.

It is up to PAFD to follow up with tank closure Maybe the closure with questions will help.

Santa Clara Valley Water District

FG 617 (01-27-92)

CT
(Initials)

TELEPHONE CONVERSATION

DATE 4/8/95 TIME _____ PHONE NO. (_____) _____

PERSON CALLING/CALLED Adela

AGENCY REPRESENTED _____

CONVERSATION _____

1. It can probably be closed. The only problem is determining whether the Fuel Oil tank was removed. [redacted] 12/1/94 letter refers to removal. No date

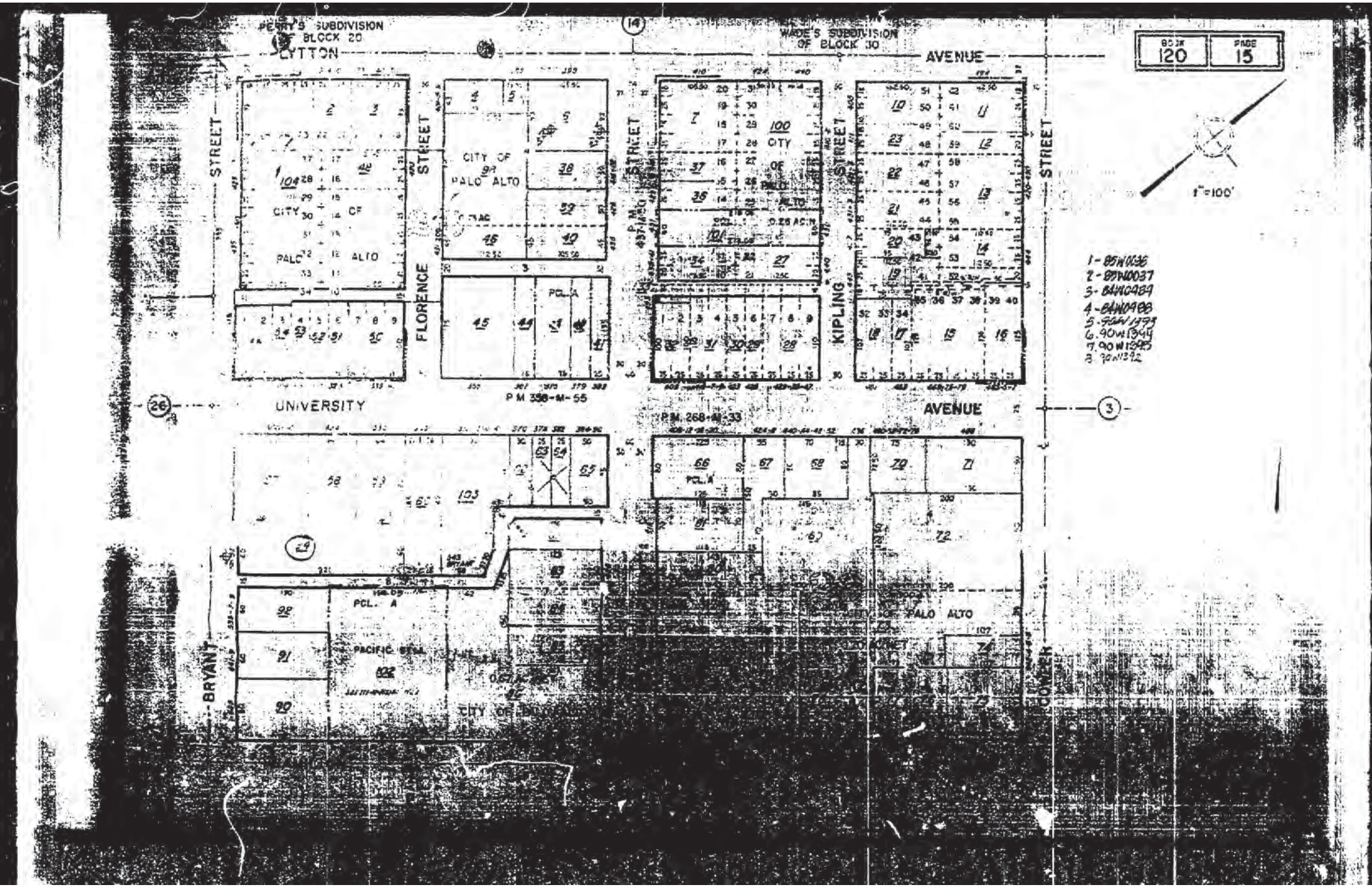
2. It is a case because:
   a) the report states a UST existed (fuel oil)
   b) the report identifies contamination in soil under the piping to the Fuel Oil tank. The contamination appears to be associated with the contents of the UST. Therefore, we have sufficient information to document that an unauthorized release occurred
   c) ~~It~~ I do not believe the gasoline tank meets the definition of a UST because it was in a basement.

Adela: Who is Marie Riddell? (before she is the present contact for the RP. What is her association to the case?) Do you have anyone you can contact to determine if the Fuel Oil tank was removed and if ~~Sampling~~ occurred? If you don't know anything about this case, I can handle followup. However, any help you can give would be appreciated. (CT initials)

Santa Clara Valley Water District

** 106 **

** 106 **


BOOK 120
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PERRY'S SUBDIVISION BLOCK 20
WADE'S SUBDIVISION OF BLOCK 30
LYTTON AVENUE
UNIVERSITY AVENUE
FLORENCE STREET
KIPLING STREET
BRYANT STREET
CITY OF PALO ALTO
PCL. A
PACIFIC BELL
P.M. 437-1/50
P.M. 356-M-55
P.M. 268-41-33
1"=100'
1-85W0036
2-87W0037
3-84W0489
4-84W0488
5-90W1379
6-90W1344
7-90W1395
8-90W1392

A Report Prepared for

Digital Equipment Corporation
111 Powdermill Road
Maynard, Massachusetts 01754

PHASE II HAZARDOUS MATERIALS SITE ASSESSMENT
529 BRYANT STREET
PALO ALTO, CALIFORNIA

HLA Job No. 7691,026.03

by

Stephen J. Osborne
Geotechnical Engineer

REGISTERED PROFESSIONAL ENGINEER
STEPHEN J. OSBORNE
No. 656
Exp. 3/31/95
GEOTECHNICAL
STATE OF CALIFORNIA

Harding Lawson Associates
1855 Gateway Boulevard, Suite 500
Concord, California 94520
510/687-9660

November 18, 1994

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DISTRIBUTION

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I INTRODUCTION

This report presents the results of a Phase II Hazardous Materials Site Assessment conducted by Harding Lawson Associates (HLA) for a building located at 529 Bryant Street in Palo Alto, California (Plate 1). In 1990, Digital Equipment Corporation (Digital) contracted with HLA to prepare a Phase I Preliminary Hazardous Site Assessment (PSA) and this Phase II Hazardous Materials Site Assessment. HLA presented results of the PSA in a report dated June 26, 1990. A draft copy of the Phase II report was issued to Digital dated November 15, 1990 (revised November 19, 1990). At the request of Digital, HLA has now issued this Phase II report final. This report reflects conditions at the 529 Bryant Street site at the time of our investigation in October 1990. We understand that since October 1990, Digital has purchased the 529 Bryant Street site and is presently using it as an office building.

HLA's PSA was performed to evaluate whether the generation, use, storage, or disposal of hazardous materials has occurred on site and/or adjacent properties, and whether such materials could have affected the site or created conditions that require remediation. On the basis of results from that study, Digital authorized HLA to proceed with the Phase II study documented in this report.

The purpose of the Phase II Assessment was to further evaluate the presence of hazardous materials and their impacts on

the site. The following areas of concern were identified in our PSA:

- The presence of a transformer that may contain polychlorinated biphenyls (PCBs) in the basement of the structure, and the suspected presence of three additional transformers just outside the building
- The potential presence of asbestos-containing materials (ACMs) in two locations on the property
- The former presence of 275-gallon fuel tank reportedly stored in the basement of the building
- The possible existence of a 2,000-gallon underground storage tank (UST), used by the previous owner of the structure, on the south side of the building
- The potential migration onto the site of volatile organic compounds (VOCs) in groundwater from several identified off-site sources.

The objectives of the Phase II investigation were (1) to check that adequate clean-up has been performed with respect to ACMs and transformer removal, and (2) to assess whether other hazardous materials (e.g., petroleum hydrocarbons) are present in the soil and groundwater at four locations at the perimeter of the site. The Phase II assessment was based on information gathered from a site visit conducted by HLA personnel, personal interviews with people familiar with the property, and a field investigation that included the collection of soil and groundwater samples for chemical testing.

II SCOPE OF SERVICES

To further evaluate the potential impact of hazardous materials identified in the PSA, HLA conducted the following activities in the fall of 1990:

- Discussed disposition of ACM, storage tanks and transformers with personnel of Wentz Construction (construction contractor of Amidi Partnership, the current building owner), Pacific Bell, and the Palo Alto Utilities Department (PAUD)
- Reviewed design plans dated 1928, 1949 and 1947 by Pacific Telephone and Telegraph (PT&T, former building owners) to check for information regarding the USTs
- Conducted a site visit to confirm that ACMs and transformers have been removed
- Obtained information on work by J. V. Lowney & Associates, including chemical analyses of soil samples collected and areas of soil removal in the basement of the building
- Conducted a field investigation which involved installing four groundwater monitoring wells and collecting soil and groundwater samples for chemical testing
- Evaluated findings and prepared this report.

III SITE DESCRIPTION

As shown on Plate 1, the site is on Bryant Street between Hamilton Avenue and University Avenue in a developed area of downtown Palo Alto. The subject building is a three-story structure with basement, and has an area of approximately 45,000 square feet. It was originally built in 1928 and expanded twice, in 1940 and 1947. In October 1990, the building was empty and undergoing renovation. The building occupies the approximate property limits shown on Plate 2, with a sidewalk in front, an alley on either side, and another building directly behind.

The area surrounding the site is relatively flat and lies at an approximate elevation of 45 feet above mean sea level (MSL). Surface runoff from the site is directed toward the municipal sewer system. The nearest stream is San Francisquito Creek, about 5/8 mile north of the site, running roughly north-south. Data from monitoring wells at a nearby Digital facility (130 Lytton Avenue, approximately 4 blocks southwest of that property) indicate that groundwater flows eastward toward San Francisc. Bay. However, as discussed in Section V, water level measurements from wells installed during the Phase II Assessment indicate that groundwater flow direction at this site was south-southwest in October 1990

IV ASSESSMENT ACTIVITIES

A. Site Visit and Interviews

To further investigate items of concern identified during the PSA, HLA visited the site and interviewed people familiar with the property.

1. PAUD Transformer Records

The Palo Alto Utilities Department (PAUD) was contacted on July 9 and 10, 1990, regarding sampling and testing of transformer oil for PCBs. Mr. Gary Emberland, Supervisor of System Operations, informed us that all transformers in Palo Alto are routinely sampled by PAUD and tested for PCBs. PAUD records showed that the three transformers formerly located adjacent to 529 Bryant Street had been removed. Prior to demolition, oil from the transformers was tested for PCBs and none were detected. A copy of the laboratory report appears in Appendix A.

2. Site Visit and Building Plan Review

On July 18, 1990, HLA personnel visited the site to observe the progress of building renovation and to check for the presence of ACMs and spills or residues remaining from the removal of the transformers or fuel storage tanks. At that time, the building was vacant and its walls and interior supports had been stripped of plaster in preparation for seismic upgrading.

We toured the building under the supervision of Mr. Bill Curtswiler of Wentz Construction. In the basement, we observed what appeared to be a containment pan for the former

275-gallon storage tank, but no oily stains were present. Mr. Curtzwiler told us that a small transformer in the southern end of the basement was to be removed from the site; we observed no oily stains in its vicinity.

We toured all three floors of the building and observed no ACMs or other indications of hazardous materials. Mr. Curtzwiler mentioned that the design plans for the building indicated the presence of a fuel oil tank beneath the sidewalk in front of the building. The plans showed a 5-foot diameter tank almost at the mid-point of the building between the structure's front on Bryant Street and the curb. We looked for evidence of the tank, but did not see any fill pipes, vent lines, etc. in the area.

Our observations indicated that the transformers once in the eastern alley adjacent to 529 Bryant were no longer present. However, we noted a vault containing transformers adjacent to the alley behind the Pacific Bell facility at 345 Hamilton Avenue (see Plate 2). We found no evidence of the former 2,000-gallon UST location in the alley, but confirmed that (as noted in the PSA) there is a 10,000-gallon UST, used for diesel fuel, behind Pacific Bell at 345 Hamilton Avenue (see Plate 3).

On July 31, we reviewed PT&T's design plans dated 1928, 1940 and 1947 and found reference to the 2000-gallon UST in the stated location (see Plate 3). The 1928 plan shows that fill and return pipes for the tank extended from the front of the building

to the boiler room in the basement, approximately 3/4 of the building's length toward the rear. The plans also show gas lines running parallel to the fuel oil lines, approximately 10 feet away. We identified no other reference to storage tanks nor hazardous material storage or handling.

3. Site Investigation by J. V. Lowney & Associates

HLA learned from the previous owner's geotechnical consultant, J. V. Lowney & Associates (Lowney), that petroleum hydrocarbons were present in soil adjacent to the fuel oil lines before the purchase of the site by Digital and that the gas lines noted in the design plans carried gasoline, not natural gas. These gasoline lines were presumably linked to the 275-gallon storage tank in the basement. Lowney's soil sampling locations and results are shown on Figures 2a and 2b in Appendix B. Low levels of the following compounds were detected: toluene, xylenes, ethylbenzene, total petroleum hydrocarbons (TPH) as diesel fuel, and total oil and grease (TOG). See J. V. Lowney & Associates, *Soil Quality Reconnaissance for Pipeline Removal at 529 Bryant Street*, dated October 1990.

Lowney oversaw the removal of soil and portions of the conduits adjacent to selected footings, as shown on Figure 26, Appendix B. Lowney recommended additional removal of the remaining conduit that underlay the basement. HLA does not know if this work was completed.

4. Pacific Bell Underground Storage Tank

During the PSA, it was reported that the 2,000-gallon underground storage tank (UST) adjacent to the building was removed in 1979 by Carl W. Olsen and Sons, a general contractor. We were unable to contact that company to verify the tank location. Subsequent discussions with Jim Dover, a facility engineer with Pacific Bell, revealed that the tank had been removed by Howard J. White, a general contractor. We contacted Howard J. White and learned from their records that they removed a tank from a location behind 333 Hamilton Avenue; this information would locate the tank in the alley near the private residence shown on Plate 3.

In October 1990, the alley was a major underground utility corridor and property of the City of Palo Alto. The parcels along Hamilton Avenue from 535 Bryant that open onto the alley belonged to Pacific Bell. Because of the density of underground utilities, we could not place a monitoring well in the alley; furthermore, a right-of-entry agreement with Pacific Bell could not be obtained. As stated above, Pacific Bell had a 10,000-gallon diesel fuel UST behind 345 Hamilton Avenue (Plate 3). That UST may still be in service.

B. Field Investigation

Between September 16 and October 12, 1990, HLA installed and sampled four groundwater monitoring wells, MW-1 through MW-4, at locations shown on Plate 2. Monitoring well permits were obtained from the Santa Clara Valley Water District. MW-3 was

drilled in the parking lane in front of 529 Bryant Street (near the former location of the fuel oil UST), in the City of Palo Alto's right-of-way. An encroachment/street excavation permit was obtained from the City of Palo Alto Public Works Engineering Department. Remaining wells were located on private property and license agreements were obtained between Digital and the appropriate parties prior to drilling at those locations. MW-4 was installed along the west side of the southern alley in th only space not occupied by utilities.

1 Drilling and Monitoring Well Installation

Using six-inch-diameter, continuous flight, hollow-stem augers, we drilled well borings to approximately 50 feet, about 15 feet below the water table surface. To evaluate lithology, we collected soil samples approximately every five feet using a 2-1/2-inch-diameter, Sprague & Henwood, split-barrel sampler lined with 6-inch-long stainless steel tubes. Soils were logged by our field geologist, using the Unified Soil Classification System (Plate C-9). Soil samples were screened in the field with a photoionization detector (PID), an instrument that measures the concentration of organic vapors such as those found in gasoline. Very low (less than 5 parts per million [ppm]) or zero concentrations of organic vapors were detected in the soil samples. Boring logs are presented in Appendix C.

Soil samples were sealed with aluminum foil, plastic-end-caps, and electrical tape, and held for possible laboratory

analysis. They were placed in a cooled ice chest and transported under chain-of-custody to Sequoia Analytical, a state-certified chemical testing laboratory. All soil sampling equipment was cleaned in a trisodium phosphate solution (TSP) and rinsed in clean water. Appropriate quality assurance and quality control (QA/QC) measures were applied during the field investigation. HLA's internal QA/QC program includes protocols for avoiding cross-contamination and maintaining chain-of-custody documentation.

All drill cuttings were placed in 55-gallon drums and hauled to a Construction Services Inc. facility in Emeryville, California, for storage. The drill cuttings were subsequently hauled to a non-hazardous landfill for disposal.

Wells were constructed of 2-inch-diameter, Schedule 40, PVC casing with flush-threaded joints and 15 feet of 0.020-inch slotted screen. A watertight end cap was placed at the bottom of the screen. The annular space between the casing and borehole was backfilled with No. 3 Monterey sand to at least one foot above the screen, with the exception of MW-4. That well experienced some caving of the natural sandy formation against the screen. A layer of bentonite (~ 2 feet thick) was placed on top of the sand pack and the remainder of the annular space was backfilled with a cement/bentonite grout seal. A watertight locking cap was placed at the top of each well and well heads were completed with watertight covers, installed flush with the

existing grade. Well completion diagrams are presented in Appendix C.

2. Groundwater Sampling

On September 23, 1990, we purged wells MW-1 through MW-3 by bailing, in an attempt to obtain clear water. We continued to purge each well, monitoring temperature, pH, and specific conductance, until 10 well volumes had been removed or until these parameters stabilized. We then collected groundwater samples from each well, using a stainless steel bailer. The bailer was decontaminated between wells, using a TSP solution and deionized water. Groundwater samples were placed in appropriate bottles and were handled and transported for chemical testing as described above for soil samples. On October 12, MW-4 was sampled using similar methods, except that because of a slow rate of recharge approximately five well volumes were removed prior to sampling.

Purge water was contained in 55-gallon drums and disposed at a licensed oil-water recycler.

3. Elevation and Water-level Survey

On October 12, 1990, we surveyed the tops of the monitoring well casings to obtain relative elevation data. An arbitrary benchmark was chosen along the curb in front of 529 Bryant Street, as shown on Plate 2, and assigned an elevation of 45.00 feet. Water-level measurements were collected from

accessible wells on September 23, October 7, October 12 and November 14. These data are summarized in Table 1.

C Chemical Analysis

Laboratory reports for chemical testing are presented in Appendix D.

1. Soil

One soil sample from each well boring and a composite sample of the drummed material were analyzed for the following: TPH as diesel fuel and gasoline (EPA Methods 3550 and 8015, modified); benzene, toluene, ethylbenzene, and xylenes (BTEX, EPA Methods 5030 and 8020); VOCs (EPA Method 8240); and total lead (EPA Method 7421). Results are summarized in Table 2.

2. Groundwater

Groundwater samples were analyzed for the same parameters as described above, with the exception of total lead. Results are summarized in Table 3.

V RESULTS

A. Presence of Hazardous Materials on or Adjacent to Site

The transformers formerly located adjacent to the site reportedly contained no detectable PCBs. The other transformer has been removed from the basement, and we found no evidence of oil spills or residue there. Our site visit in 1990 indicated that the ACM previously identified had been removed from the site; additional ACM may have been found and removed during renovation.

On the basis of the Lowney investigation, we believe that soil containing petroleum hydrocarbons and remnants of storage tank piping probably remain on site, beneath the building slab. Lowney indicated that some of these contaminated soils and fuel conduit were excavated and removed prior to the purchase of the property by Digital from areas found to contain TPH and TOG.

B. Site Hydrogeology

The general site lichology is summarized below:

Depth (feet)	Description
0 - 20	Brown silt and clay
20 - 50 and below	Brown sandy silt grading into silty sands and gravels

Sediments are fairly uniform, although occasional lenses of sand or silt are present within other materials. Gravels are rounded and reach cobble size. The permeable sediments become

saturated at 35 to 36 feet below grade and appear to represent alluvial stream or fan deposits.

On the basis of groundwater level measurements taken on October 12 and November 14, 1990 (see Table 1), we have calculated the direction of groundwater flow in this area to be toward the south-southwest, as shown on Plate 3. Groundwater flow direction was initially expected to be eastward toward San Francisco Bay because of the data from a nearby Digital property at 130 Lytton; the flow direction found at 529 Bryant in October 1990 in Palo Alto could influenced by local variations in lithology, such as stream channels.

C Chemical Results

Results of chemical analyses on soil and groundwater samples are summarized in Tables 2 and 3, respectively. Only VOCs that were detected in a sample are listed on the tables.

1. Soil

TPH as diesel fuel was detected in soil samples collected near the water table surface in MW-1, -2, and -3, at concentrations ranging from 7.2 to 15 ppm. TPH as gasoline was detected only in soil from MW-2, along with toluene, ethylbenzene, and xylenes, in concentrations just above detection limits. Toluene and xylenes were found in similar concentrations in the MW-1 sample. Soil from MW-3 contained toluene at 0.64 ppm. Benzene was not detected in any of the soil samples. No compounds were detected in the samples from MW-4 or drummed soil.

Total lead was present in samples from MW-1 through -3 at 2.7 to 3.4 ppm.

2. Groundwater

No organic compounds were detected in groundwater samples from MW-1 and MW-2. Xylenes were detected only in the MW-3 sample, at a concentration slightly above the detection limit. Groundwater from MW-4 contained toluene, xylenes, and chloroform in low concentrations and TPH as diesel fuel at 3900 parts per billion (ppb). The laboratory report stated that this sample does not appear to actually contain diesel, but a single compound from the diesel range. Because chloroform is a common fluid used in chemical laboratories, we believe that its presence in the water sample may be related to laboratory contamination.

VI CONCLUSIONS AND RECOMMENDATIONS

A. Conclusions

On the basis of the information collected in 1990 for this study, HLA identified low concentrations of petroleum hydrocarbons in the soil and groundwater on or near the site. HLA concludes that the detected concentrations are unlikely to adversely affect the human health of employees in the structure. This conclusion is based on HLA's study in October 1990.

HLA presents the following conclusions with respect to the impact of contaminants identified in this study.

1. Presence of ACM and PCBs

On the basis of the results of this study, HLA concludes that ACM and PCBs were not present at 529 Bryant Street in October 1990.

2. Presence of Petroleum Hydrocarbons in Soil and Groundwater

Diesel or fuel oil constituents are present in soil just above the water table at MW-1, -2, and -3 and in the groundwater at MW-4. TPH components in the soil may have migrated vertically from an on-site source in the basement or may have migrated from an off-site source with groundwater, coming in contact with sediments as water levels fluctuated.

TPH in the groundwater was present in what appears to be the upgradient well, MW-4 where no TPH was found in the soil. The laboratory data indicate that a single compound is present and may have come from an upgradient source such as the Pacific Bell

UST. However, because the local direction of groundwater flow differs from measurement in other areas of Palo Alto, we believe that future measurements of groundwater depths may indicate a different groundwater flow direction. A different groundwater flow direction may indicate that MW-4 is truly a downgradient well and that therefore the TPH in MW-4 is the result of petroleum leaks from 529 Bryant Street.

Because onsite releases of these petroleum compounds were documented by Lowney, see Appendix B, HLA concludes that these low concentrations of petroleum hydrocarbons were probably the result of spillage or leaking by a previous landowner or tenant. Some petroleum hydrocarbons may also have been migrated from neighboring properties where USTs have been located. In either case, we conclude that these petroleum hydrocarbons are not related to Digital's use of the site because the petroleum hydrocarbons were documented before Digital took possession of the site in 1990.

3. Onsite Source of Petroleum Hydrocarbons

HLA concludes that petroleum hydrocarbons were stored and used onsite prior to Digital's occupancy of the site. A UST was located along Bryant Street, in front of the building, and fuel oil and gasoline conduits extended beneath the basement floor, see Plate 2B, Appendix B. The complete removal of all conduits and the UST has not been confirmed by HLA.

B. Recommendati s

HLA recommends groundwater monitoring of the site for a one-year period to confirm the direction of groundwater flow and to further evaluate the impact of the petroleum hydrocarbons released at the site and the potential contribution of the PacBell UST near MW-4. HLA further recommends that Digital send a copy of this report to the Santa Clara Valley Water District.

VIII TABLES

Table 1. Groundwater Level Elevations
Phase II Hazardous Materials Site Assessment
529 Bryant Street Palo Alto, California

Monitoring Well	Top of Casing* Elevation (ft)	Depth to Groundwater (ft)				Water Level Elevation (ft)			
		09/23/90	10/12/90	10/16/90	11/14/90	09/23/90	10/12/90	10/16/90	11/14/90
MW-1	44.51	35.35	35.51	35.67	36.02	9.16	9.00	8.84	8.49
MW-2	43.70	35.98	36.33	36.48	36.81	7.72	7.37	7.22	6.89
MW-3	44.13	36.50	--	--	37.21	7.63	--	--	6.92
MW-4	44.96	--	--	35.82	36.18	--	--	9.14	8.78

* - Elevations based on an arbitrary benchmark of 45.00 ft established by HLA.
-- Well not accessible

Harding Lawson Associates

0349774P/T/5

Table 2. Summary of Chemical Results on Soil Samples
Phase II Hazardous Materials Site Assessment
529 Bryant Street Palo Alto, California
Concentrations in parts per million (ppm)

		EPA 3550/8015		EPA 8030/8020				EPA 8240	EPA 7421
Sample	Date	Total Petroleum Hydrocarbons as Diesel	as Gasoline	Benzene	Toluene	Ethyl-benzene	Xylenes	Toluene	Total Lead
MW-1-36'	9/16/90	7.2	ND	ND	0.005	ND	0.0071	ND	2.7
MW-2-36'	9/16/90	15	1.3	ND	0.036	0.018	0.025	0.4	3.4
MW-3-36'	9/17/90	13	ND	ND	0.11	ND	ND	0.64	3.2
MW-4-35.5'	10/7/90	ND	ND	--	--	--	--	ND	--
Drum Comp	10/7/90	ND	ND	ND	ND	ND	ND	--	ND
Detection Limit		1	1	0.005	0.005	0.005	0.005	0.1 - 0.5	0.25

-- = Not Analyzed
ND = Not detected above stated detection limit

Table 3. Summary of Chemical Results on Groundwater Samples
Phase II Hazardous Materials Site Assessment
529 Bryant Street Palo Alto, California
Concentrations in parts per billion (ppb)

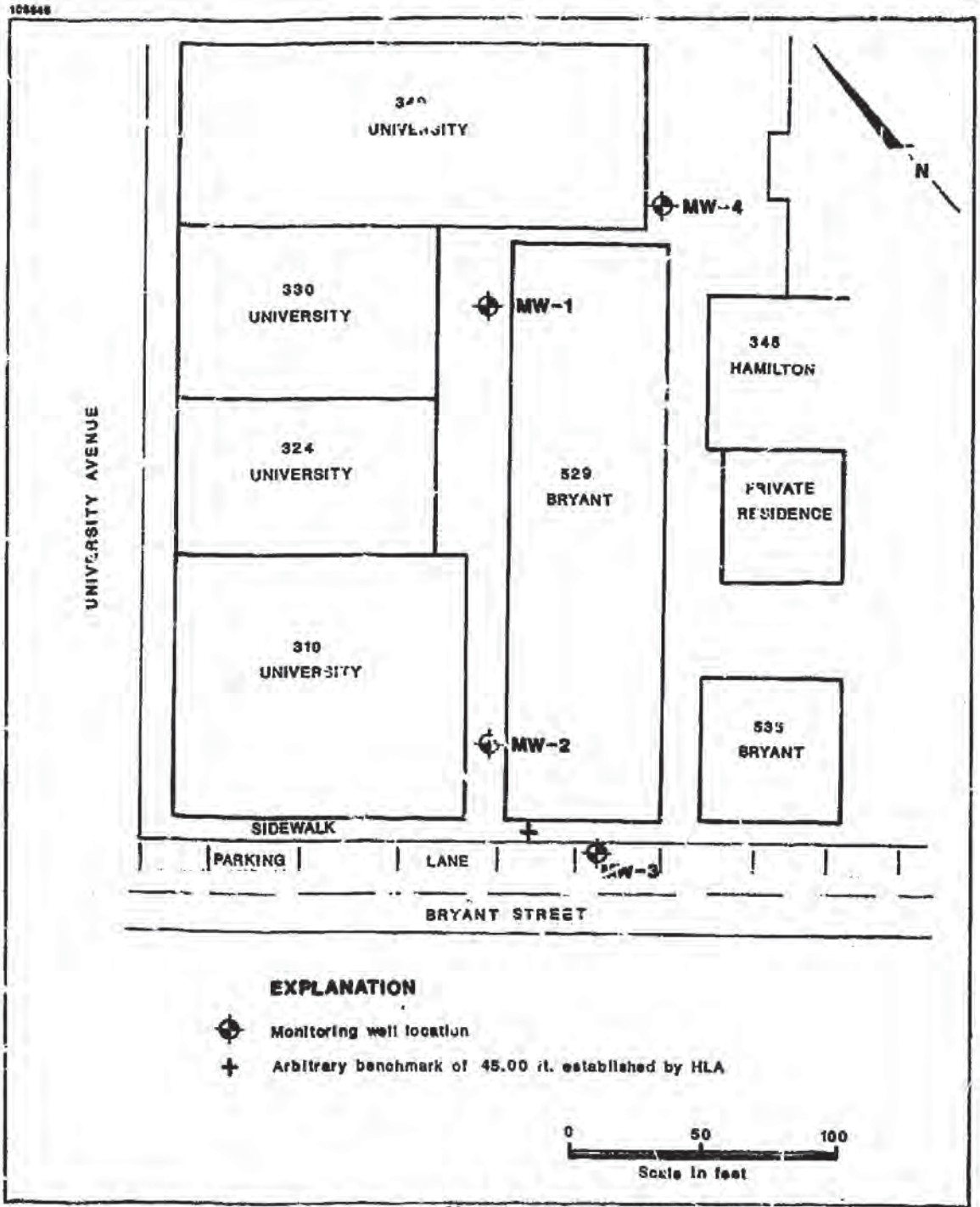
		EPA 8015 modified		EPA 602				EPA 624	
Well	Date	Total Petroleum Hydrocarbons as Diesel	as Gasoline	Ethyl Benzene	Toluene	Benzene	Xylenes	Chloroform	Toluene
MW-1	9/23/90	ND	ND	ND	ND	ND	ND	ND	ND
MW-2	9/23/90	ND	ND	ND	ND	ND	ND	ND	ND
MW-3	9/23/90	ND	ND	ND	ND	ND	0.44	ND	ND
MW-4	10/12/90	3900	ND	N.'	1.9	ND	1.0	4.4	3.1
Detection Limit		30	0.30	0.30	0.30	0.30	0.30	2.0 - 10	

ND = Not detected above stated detection limit

VIX ILLUSTRATIONS



Harding Lawson Associates Engineers and Geoscientists	**Site Location Map** Digital Phase II 529 Bryant Street Palo Alto, California				PLATE **1**
DRAWN AG	JOB NUMBER 17691,026.03	APPROVED JPO	DATE 10/90	REVISED	DATE



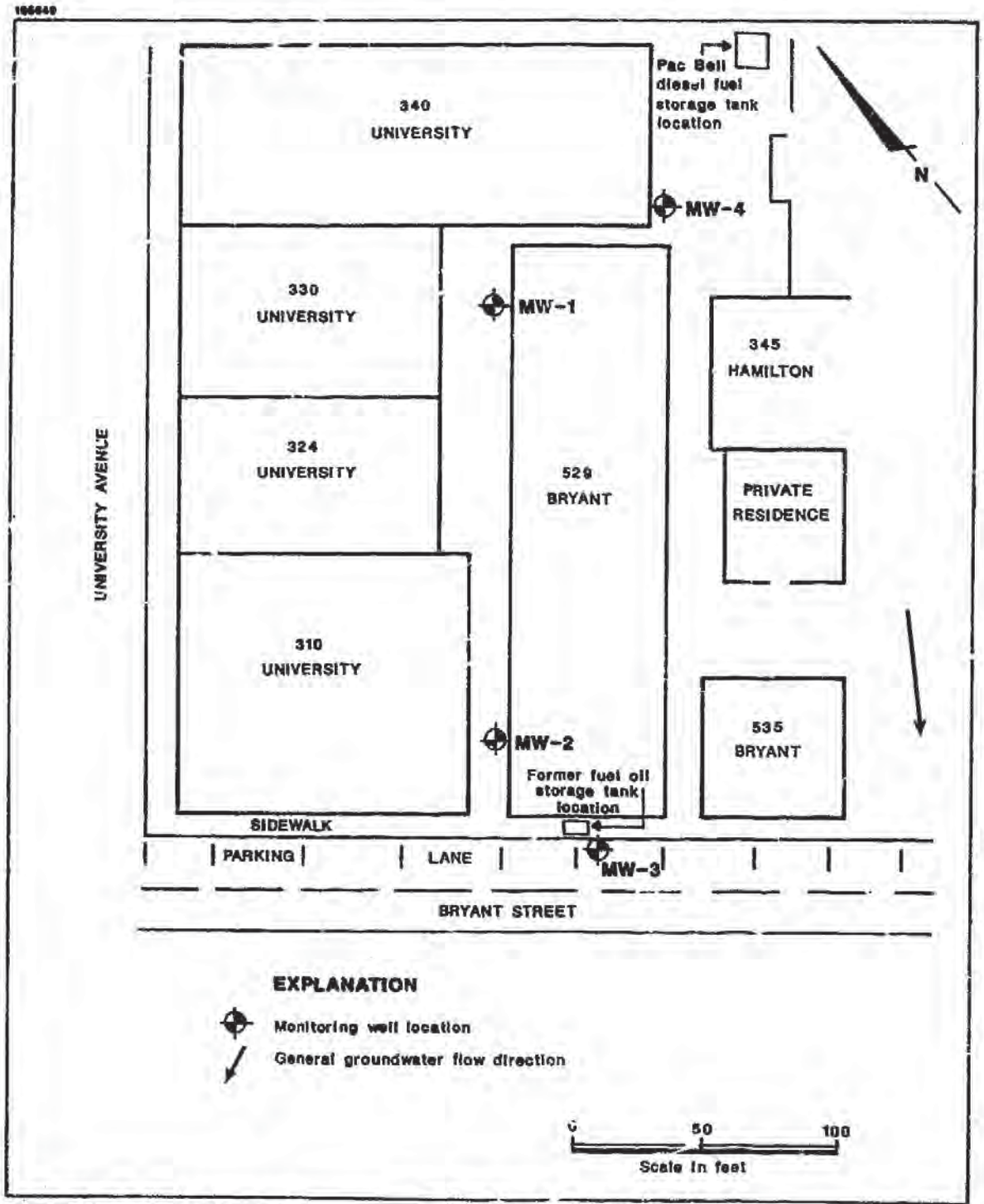
HLA

Harding Lawson Associates
Engineers and Geoscientists

Site Plan Showing Well Locations
Digital Phase II
529 Bryant Street
Palo Alto, California

PLATE
2

DRAWN	JOB NUMBER	APPROVED	DATE	REVISED	DATE
AG	17691,026.03	SJD	7/90		



HLA

Harding Lawson Associates
Engineers and Geoscientists

Groundwater Flow Direction
Digital Phase II
529 Bryant Street
Palo Alto, California

PLATE 3

DRAWN	JOB NUMBER	APPROVED	DATE	REVISED	DATE
MC	17691 026 03	SJD	7/30		

APPENDIX A

PCB TEST RESULTS FROM PAUD

HARDING ASSOC.

INTERNATIONAL TECHNOLOGY CORPORATION

JUL 18 1990

T0070611

REQUEST FOR ANALYSIS

R/A Control No.

C/C Control No.

PROJECT NAME (NONE)

PROJECT NUMBER (NONE)

PROJECT MANAGER JOHN LEW

BILL TO CITY OF PALO ALTO
3201 E. BAYSHORE
PALO ALTO, CA 94303

PURCHASE ORDER NO. (NONE)

DATE SAMPLES SHIPPED

LAB DESTINATION SAN JOSE, CA

LABORATORY CONTACT

SEND LAB REPORT TO JOHN LEW
FAX # 415 496-6959
12 Sept Hold

DATE REPORT REQUIRED

PROJECT CONTACT JOHN LEW

PROJECT CONTACT PHONE NO. 415/496-6592 or 496-5914

IDs ckd MLM 7/19/90

Result Margaret 7-10-90

	Sample No.	Sample Type	Sample Volume	Preservative	Requested Testing Program	Special Instructions
1	DRUM #12	Oil	None detected	(n.d.)	PCB	Rush TAT
2	DRUM #13		128 parts per million (ppm)		Aroclor 1260	
3	" #14		1.9 ppm	Aroclor 1260		
4	" #15		1.8 ppm			
5	" #16		32. ppm			
6	" #17		29. ppm			
7	" #18		2.4 ppm			
8	XF-3902		None detected	Formally Located @ 529 Bryant St Palo Alto		
9	XF 3903		None detected			
10	XF-3904	Oil	None detected		PCB	
11	PAGE 70341	"	1.1 ppm	Aroclor 1260	"	Rush TAT

TURNAROUND TIME REQUIRED: (Rush must be approved by the Project Manager.)

Normal ____ Rush X (Subject to rush surcharge)

POSSIBLE HAZARD IDENTIFICATION: (Please indicate if sample(s) are hazardous materials and/or suspected to contain high levels of hazardous substances)

Nonhazard ____ Flammable ____ Skin Irritant ____ Highly Toxic X Other ____ (Please Specify)

SAMPLE DISPOSAL: (Please indicate disposition of sample following analysis. Lab will charge for packing, shipping, and disposal.)

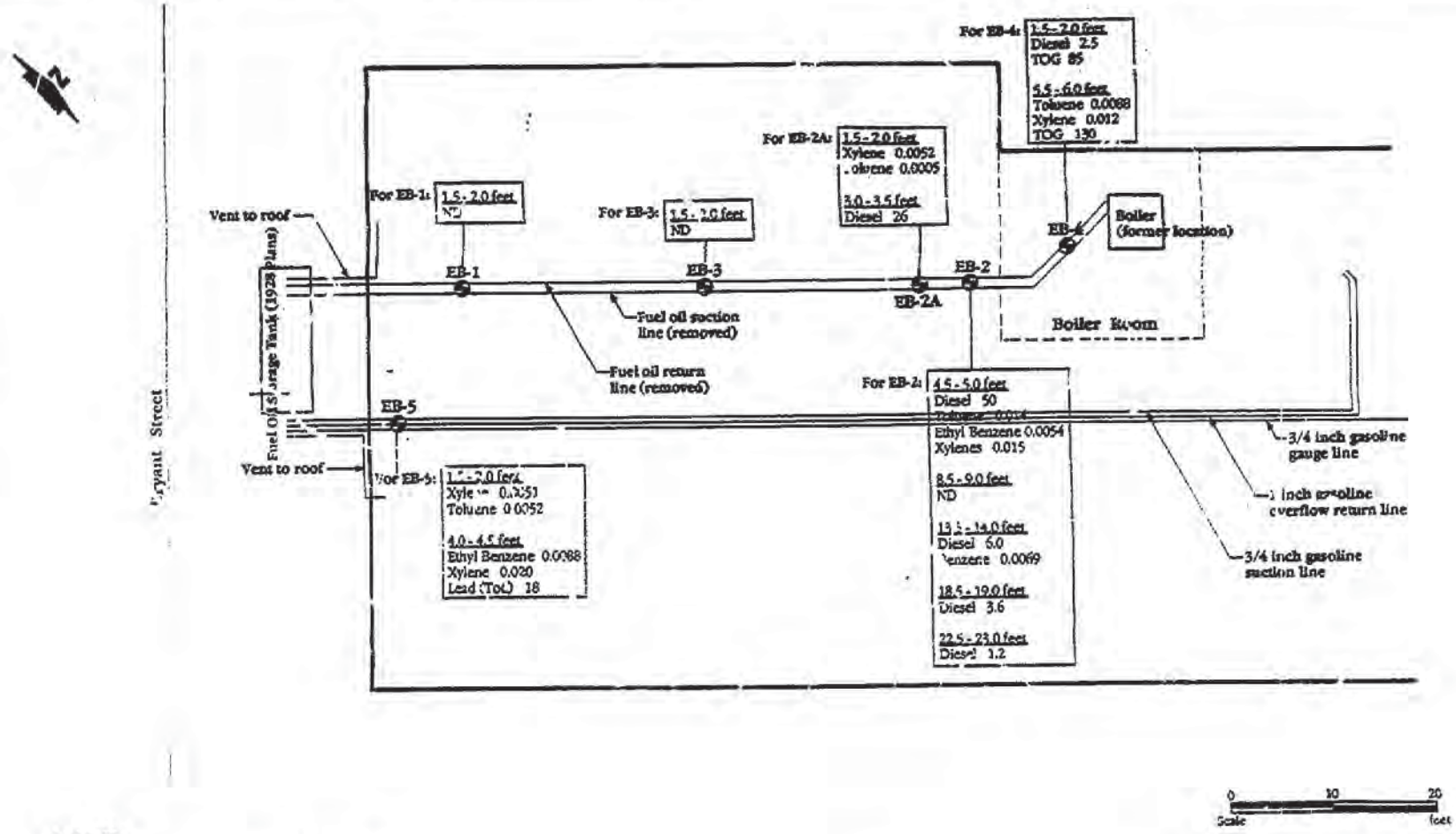
Return to Client ____ Disposal by Lab X

FOR LAB USE ONLY

Received By ____ Date/Time 7/19/90 1030

APPENDIX B

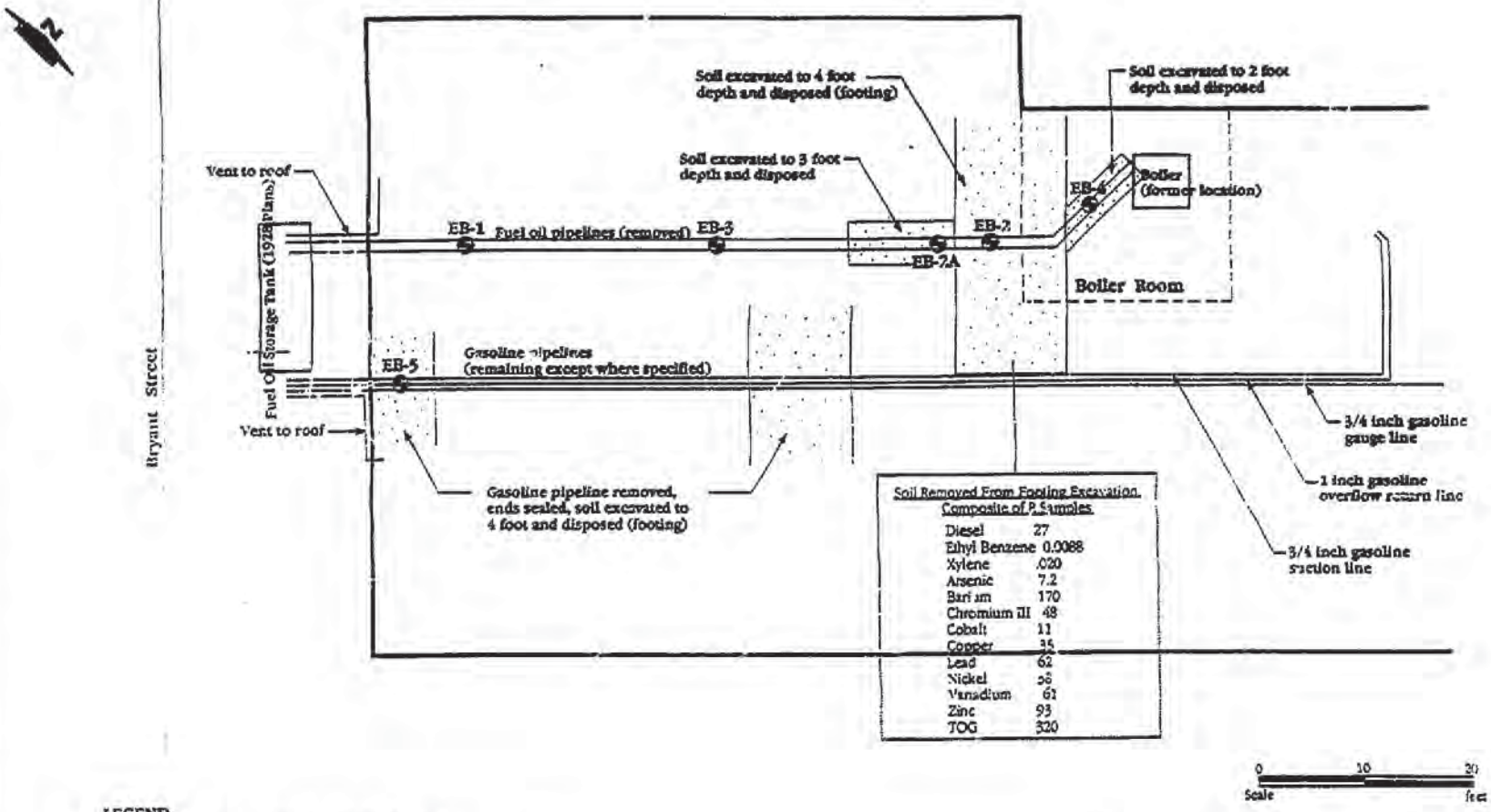
J. V. LOWNEY & ASSOCIATES TESTING RESULTS



LEGEND

- Approximate location of soil boring
- Concentration of compounds detected (ppm)

J.V. LOWNEY & ASSOCIATES ENVIRONMENTAL & GEOTECHNICAL CONSULTANTS	BASEMENT PLAN SHOWING SOIL SAMPLE LOCATIONS AND RESULTS PIPELINE REMOVAL AT 529 BRYANT STREET Palo Alto, California
PROJECT NO. 684-3A	DATE October 1990
Figure 2a	



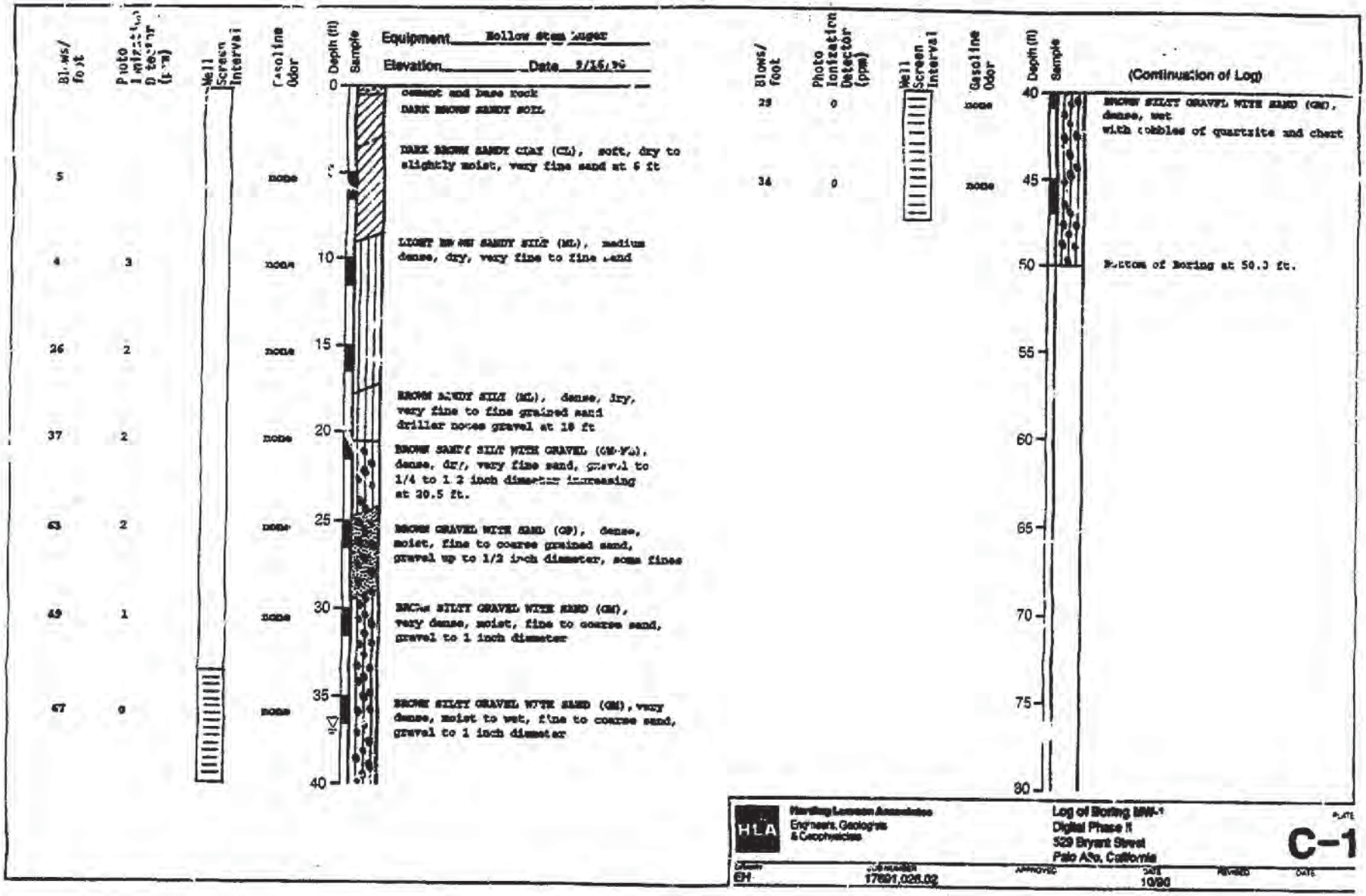
LEGEND

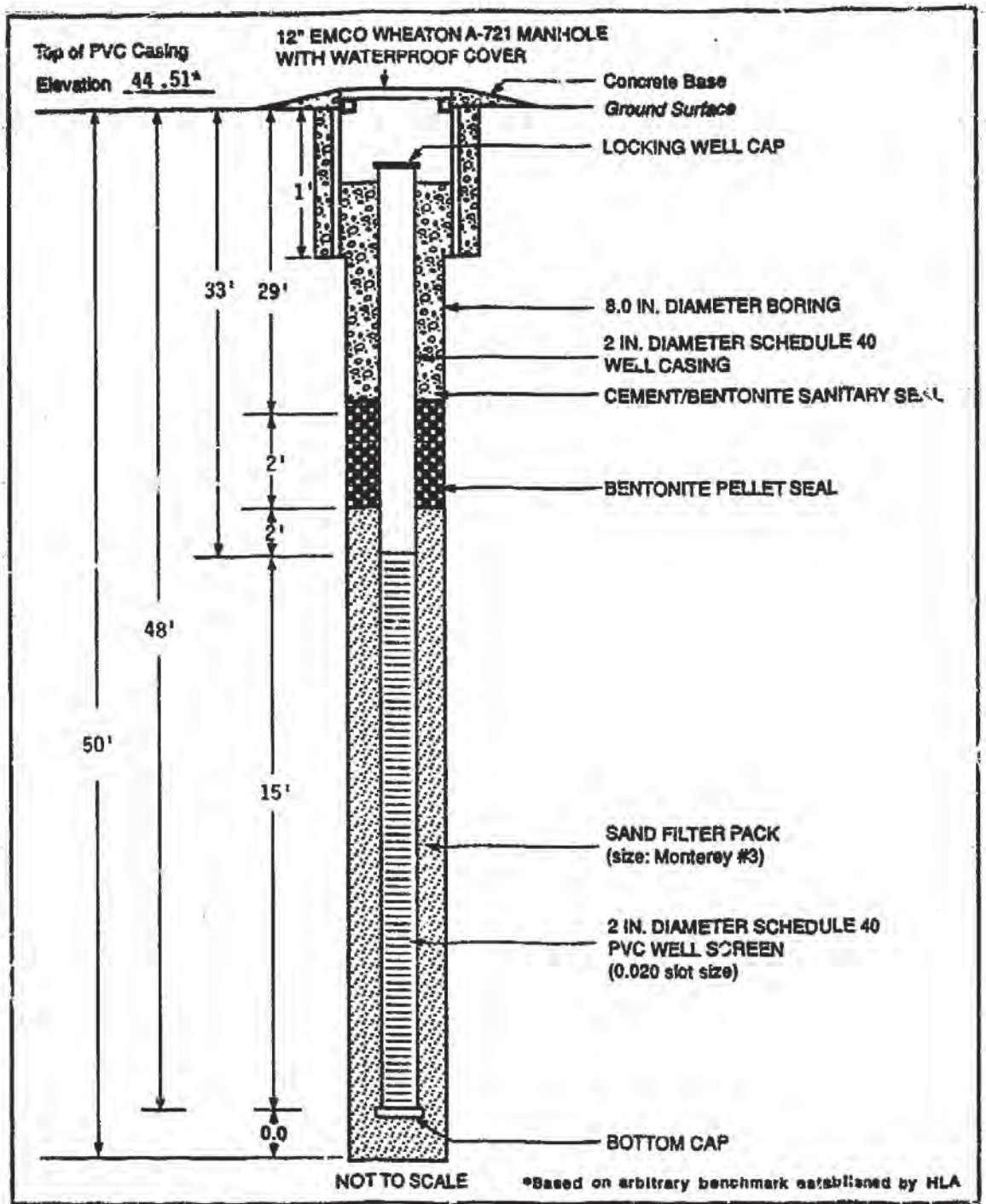
- Approximate location of soil boring
- Approximate extent of excavated soil near pipeline, elevation relative to top of basement slab
- Concentration of compounds detected (ppm)

J.V. LOWNEY & ASSOCIATES ENVIRONMENTAL & GEOTECHNICAL CONSULTANTS	BASEMENT PLAN SHOWING EXTENT OF SOIL REMOVAL PIPELINE REMOVAL AT 529 BRYANT STREET Palo Alto, California
PROJECT NO. 684-3A	DATE October 1990
Figure 2b	

APPENDIX C

SOIL BORING LOGS AND WELL COMPLETION DIAGRAMS


Equipment Hollow Stem Auger
Elevation Date 9/16/96
Blows/ foot
Photo Ionization Detector (ppm)
Well Screen Interval
Gasoline Odor
Depth (ft)
Sample
concrete and base rock
DARK BROWN SANDY SOIL
DARK BROWN SANDY CLAY (CL), soft, dry to slightly moist, very fine sand at 6 ft
LIGHT BROWN SANDY SILT (ML), medium dense, dry, very fine to fine sand
BROWN SANDY SILT (ML), dense, dry, very fine to fine grained sand driller notes gravel at 18 ft
BROWN SANDY SILT WITH GRAVEL (ML-GM), dense, dry, very fine sand, gravel to 1/4 to 1 2 inch diameter increasing at 20.5 ft.
BROWN GRAVEL WITH SAND (GP), dense, moist, fine to coarse grained sand, gravel up to 1/2 inch diameter, some fines
BROWN SILTY GRAVEL WITH SAND (GM), very dense, moist, fine to coarse sand, gravel to 1 inch diameter
BROWN SILTY GRAVEL WITH SAND (GM), very dense, moist to wet, fine to coarse sand, gravel to 1 inch diameter
(Continuation of Log)
BROWN SILTY GRAVEL WITH SAND (GM), dense, wet with cobbles of quartzite and chert
Bottom of Boring at 50.5 ft.
Harding Lawson Associates
Engineers, Geologists & Geophysicists
Log of Boring MW-1
Digital Phase II
329 Bryant Street
Palo Alto, California
PLATE
C-1
DRAWN EH
JOB NUMBER 17691,026.02
APPROVED
DATE 10/96
REVISED
DATE

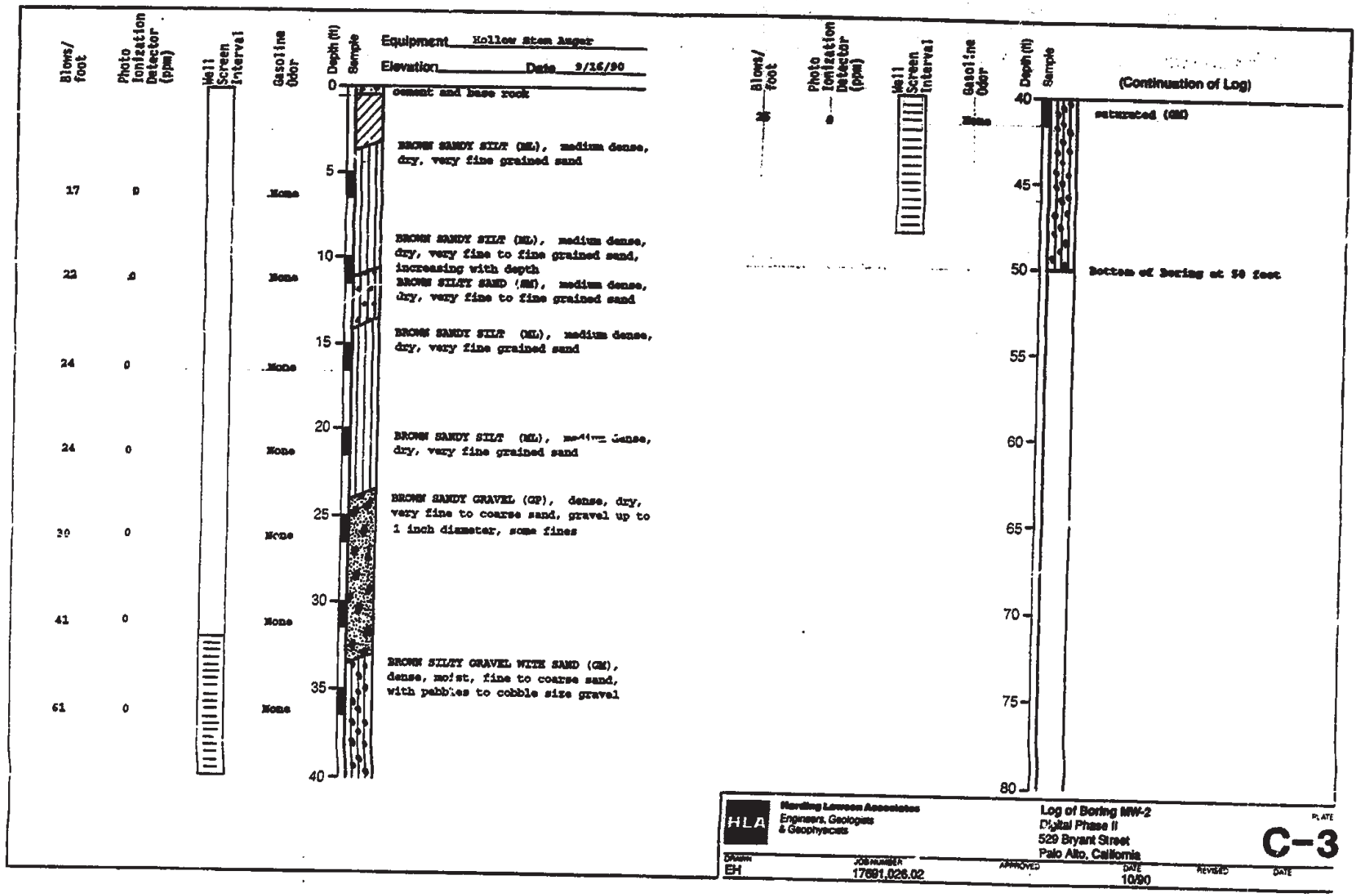


Harding Lawson Associates
Engineering and
Environmental Services

Well Completion Diagram of MW-1
Digital Phase II
529 Bryant Street
Palo Alto, CA

PLATE
C-2

DRAWN	JOB NUMBER	APPROVED	DATE	REVISED	DATE
	17691,026.03				

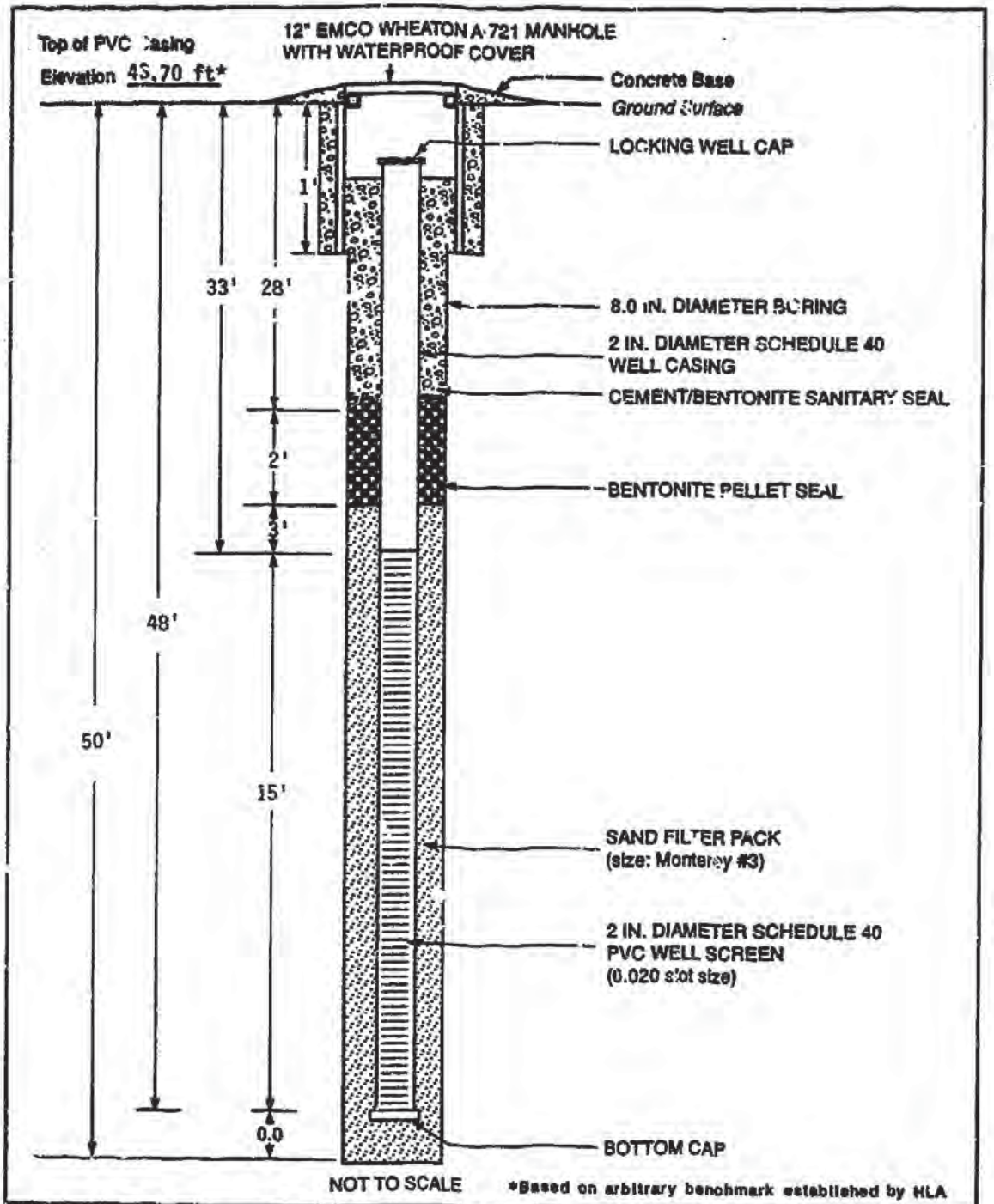


HLA Harding Lawson Associates Engineers, Geologists & Geophysicists

Log of Boring MW-2
Digital Phase II
529 Bryant Street
Palo Alto, California

PLATE C-3

DRAWN EH | JOB NUMBER 17691,026.02 | APPROVED | DATE 10/90 | REVISED | DATE



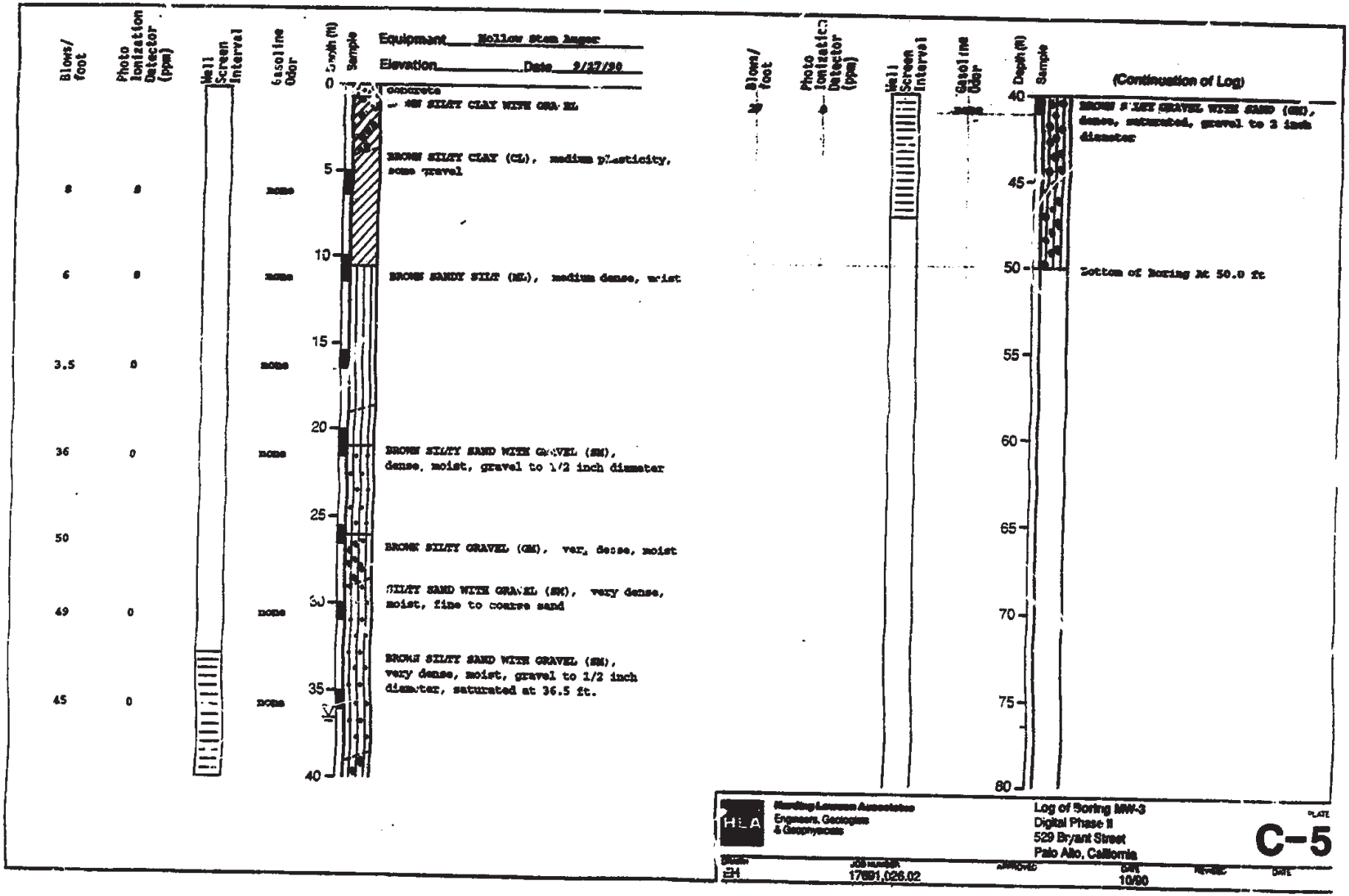
HLA

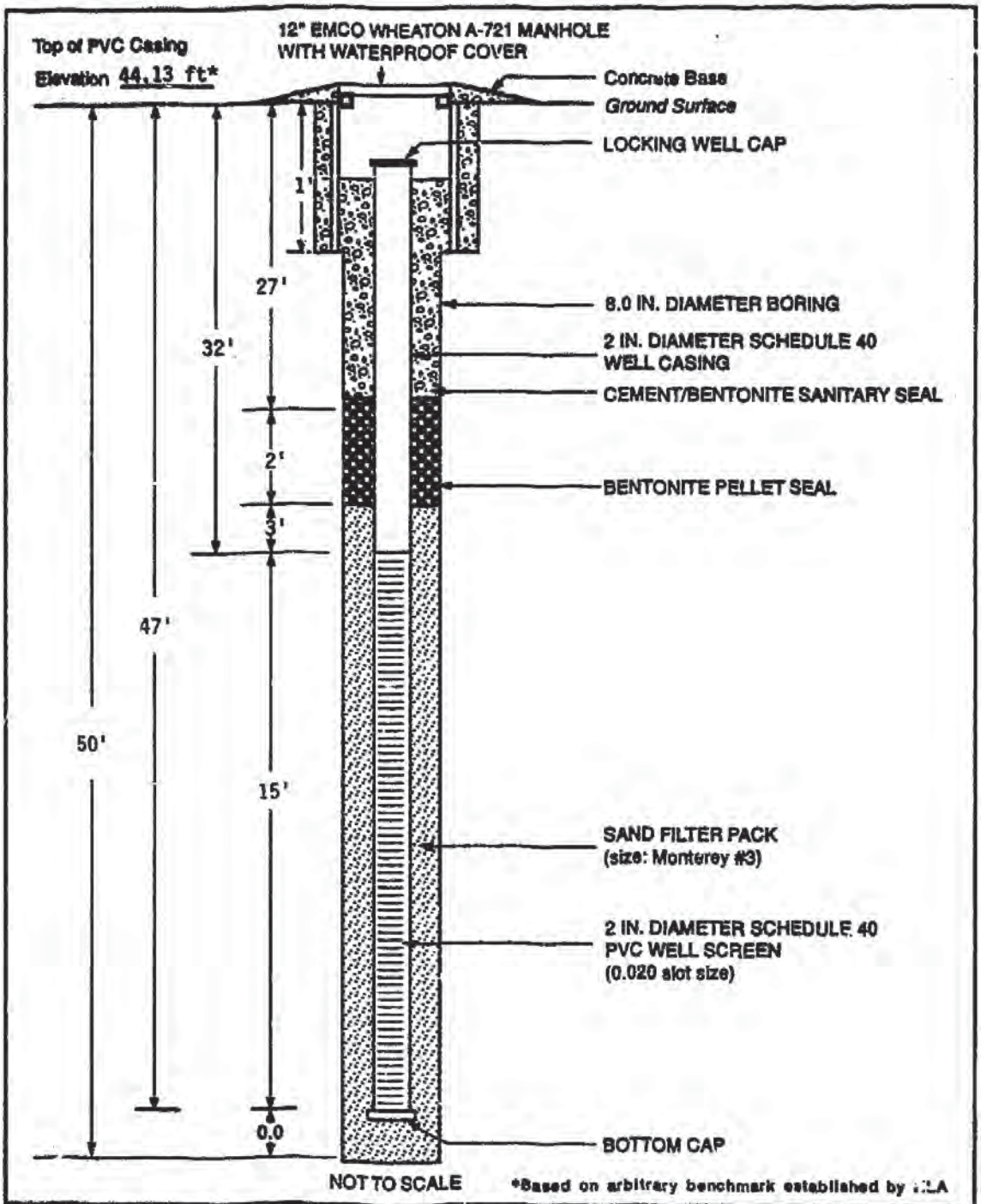
Harding Lawson Associates
Engineering and
Environmental Services

Well Completion Diagram of MW-2
Digital Phase II
529 Bryant Street
Palo Alto, CA

PLATE **C-4**

DRAWN	JOB NUMBER	APPROVED	DATE	REVISED	DATE
	17691,026.03				


Blows/foot
Photo Ionization Detector (ppm)
Well Screen Interval
Gasoline Odor
Depth (ft)
Sample
Equipment Hollow Stem Auger
Elevation
Date 9/27/90
Concrete
-- SILTY CLAY WITH GRAVEL
BROWN SILTY CLAY (CL), medium plasticity, some gravel
BROWN SANDY SILT (ML), medium dense, moist
BROWN SILTY SAND WITH GRAVEL (SM), dense, moist, gravel to 1/2 inch diameter
BROWN SILTY GRAVEL (GM), very dense, moist
SILTY SAND WITH GRAVEL (SM), very dense, moist, fine to coarse sand
BROWN SILTY SAND WITH GRAVEL (SM), very dense, moist, gravel to 1/2 inch diameter, saturated at 36.5 ft.
8
8
none
6
8
none
3.5
0
none
36
0
none
50
49
0
none
45
0
none
0
5
10
15
20
25
30
35
40
(Continuation of Log)
BROWN SILTY GRAVEL WITH SAND (GM), dense, saturated, gravel to 2 inch diameter
Bottom of Boring at 50.0 ft
45
50
55
60
65
70
75
80
HLA
Harding Lawson Associates
Engineers, Geologists & Geophysicists
Log of Boring MW-3
Digital Phase II
529 Bryant Street
Palo Alto, California
PLATE
C-5
Job Number
17691,026.02
Date
10/90



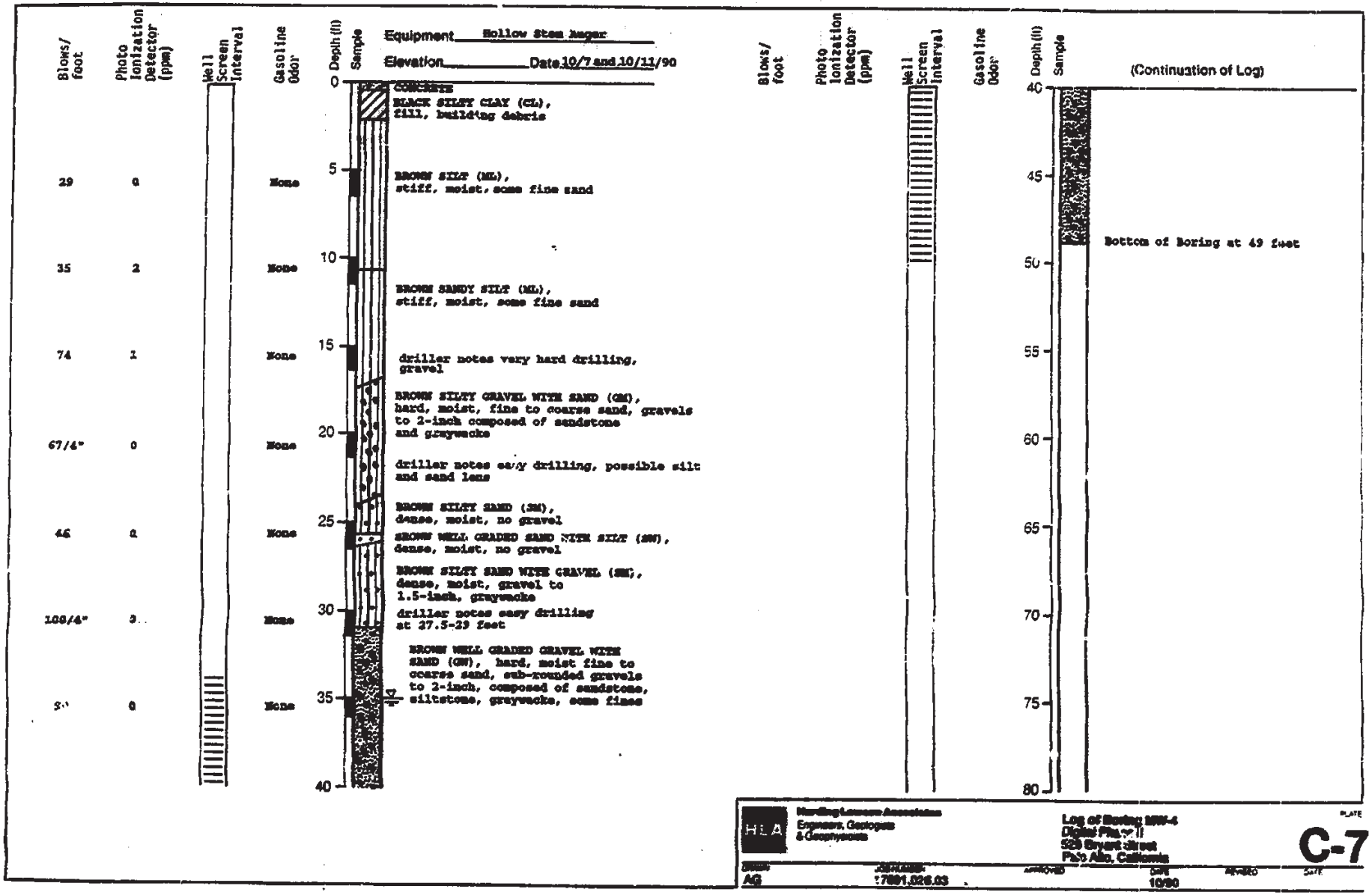
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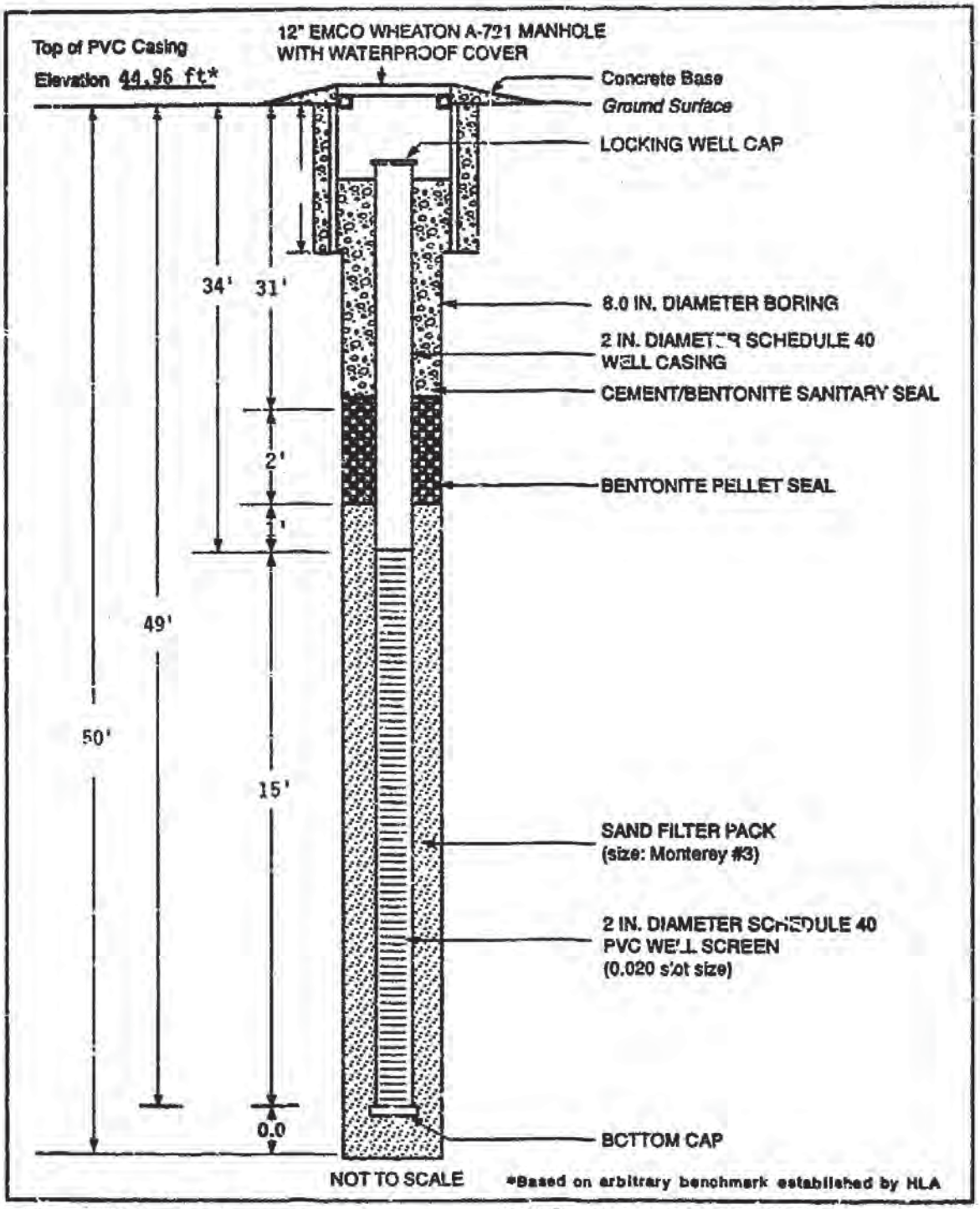
Harding Lawson Associates
Engineering and
Environmental Services

Well Completion Diagram of MW-3
Digital Phase II
529 Bryant Street
Palo Alto, CA

PLATE
C-6

DRAWN	JOB NUMBER	APPROVED	DATE	REVISED	DATE
	17691,025.03				


Equipment Hollow Stem Auger
Elevation Date 10/7 and 10/11/90
Blows/foot
Photo Ionization Detector (ppm)
Well Screen Interval
Gasoline Odor
Depth (ft)
Sample
29
0
None
35
2
None
74
1
None
67/4"
0
None
46
0
None
100/4"
0
None
50"
0
None
CONCRETE
BLACK SILTY CLAY (CL), fill, building debris
BROWN SILT (ML), stiff, moist, some fine sand
BROWN SANDY SILT (ML), stiff, moist, some fine sand
driller notes very hard drilling, gravel
BROWN SILTY GRAVEL WITH SAND (GM), hard, moist, fine to coarse sand, gravels to 2-inch composed of sandstone and greywacke
driller notes easy drilling, possible silt and sand lens
BROWN SILTY SAND (SM), dense, moist, no gravel
BROWN WELL GRADED SAND WITH SILT (SW), dense, moist, no gravel
BROWN SILTY SAND WITH GRAVEL (SM), dense, moist, gravel to 1.5-inch, greywacke
driller notes easy drilling at 27.5-29 feet
BROWN WELL GRADED GRAVEL WITH SAND (GW), hard, moist fine to coarse sand, sub-rounded gravels to 2-inch, composed of sandstone, siltstone, greywacke, some fines
(Continuation of Log)
Bottom of Boring at 49 feet
HLA
Harding Lawson Associates
Engineers, Geologists & Geophysicists
Log of Boring MW-4
Digital Plaza II
525 Bryant Street
Palo Alto, California
PLATE
C-7
AG
7891.026.03
10/90



HLA

Harding Lawson Associates
Engineering and
Environmental Services

Well Completion Diagram of MW-4
Digital Phase II
529 Bryant Street
Palo Alto, CA

PLATE
C-8

DRAWN | JOB NUMBER | APPROVED | DATE | REVISED | DATE

6196

MAJOR DIVISIONS					TYPICAL NAMES
COARSE-GRAINED SOILS MORE THAN HALF IS COARSER THAN NO. 200 SIEVE	GRAVELS MORE THAN HALF COARSE FRACTION IS LARGER THAN No. 4 SIEVE SIZE	CLEAN GRAVELS WITH LITTLE OR NO FINES	GW		WELL GRADED GRAVELS WITH OR WITHOUT SAND, LITTLE OR NO FINES
			GP		POORLY GRADED GRAVELS WITH OR WITHOUT SAND, LITTLE OR NO FINES
		GRAVELS WITH OVER 12% FINES	GM		SILTY GRAVELS, SILTY GRAVELS WITH SAND
			GC		CLAYEY GRAVELS, CLAYEY GRAVELS WITH SAND
	SANDS MORE THAN HALF COARSE FRACTION IS SMALLER THAN NO. 4 SIEVE SIZE	CLEAN SANDS WITH LITTLE OR NO FINES	SW		WELL GRADED SANDS WITH OR WITHOUT GRAVEL, LITTLE OR NO FINES
			SP		POORLY GRADED SANDS WITH OR WITHOUT GRAVEL, LITTLE OR NO FINES
		SANDS WITH OVER 12% FINES	SM		SILTY SANDS WITH OR WITHOUT GRAVEL
			SC		CLAYEY SANDS WITH OR WITHOUT GRAVEL
FINE-GRAINED SOILS MORE THAN HALF IS FINER THAN NO. 200 SIEVE	SILTS AND CLAYS LIQUID LIMIT 50% OR LESS		ML		INORGANIC SILTS AND VERY FINE SANDS, ROCK FLOUR, SILTS WITH SANDS AND GRAVELS
			CL		INORGANIC CLAYS OF LOW TO MEDIUM PLASTICITY, CLAYS WITH SANDS AND GRAVELS, LEAN CLAYS
			OL		ORGANIC SILTS OR CLAYS OF LOW PLASTICITY
	SILTS AND CLAYS LIQUID LIMIT GREATER THAN 50%		MH		INORGANIC SILTS, MICACEOUS OR DIATOMACIOUS, FINE SANDY OR SILTY SOILS, ELASTIC SILTS
			CH		INORGANIC CLAYS OF HIGH PLASTICITY, FAT CLAYS
			OH		ORGANIC SILTS OR CLAYS OF MEDIUM TO HIGH PLASTICITY
HIGHLY ORGANIC SOILS			Pt		PEAT AND OTHER HIGHLY ORGANIC SOILS

UNIFIED SOIL CLASSIFICATION - ASTM D2487-85

Perm — Permeability
Consol — Consolidation
LL — Liquid Limit (%)
PI — Plastic Index (%)
G_s — Specific Gravity
MA — Particle Size Analysis
■ — "Undisturbed" Sample
⊠ — Bulk or Classification Sample

Shear Strength (psf) ↓ Confining Pressure ↓

TxUU (FM) or (S)	3200	(2600)	—	Unconsolidated Undrained Triaxial Shear (field moisture or saturated)
TxCU (P)	3200	(2600)	—	Consolidated Undrained Triaxial Shear (with or without pore pressure measurement)
TxCD	3200	(2600)	—	Consolidated Drained Triaxial Shear
SSCU (P)	3200	(2600)	—	Simple Shear Consolidated Undrained (with or without pore pressure measurement)
SSCD	3200	(2600)	—	Simple Shear Consolidated Drained
DSCD	2700	(2000)	—	Consolidated Drained Direct Shear
UC	470		—	Unconfined Compression
LVS	700		—	Laboratory Vane Shear

KEY TO TEST DATA

HLA Harding Lawson Associates
Engineers and Geoscientists

Soil Classification and Test Data Key
Digital Phase II
529 Bryant Street
Palo Alto, California

PLATE **C-9**

DRAWN	JOB NUMBER	APPROVED	DATE	REVISED	DATE
	1765,026.02		10/90		

APPENDIX D

LABORATORY REPORTS

SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

Harding Lawson Associates	Client Project ID:	#17691,026.03, Digital	Sampled: Sept 16-17, 1990
1355 Willow Way, Suite 109	Matrix Descript:	Soil	Received: Sep 19, 1990
Concord, CA 94520	Analysis Method:	EPA 5030/8015/8020	Analyzed: Sep 28, 1990
Attention: Dorinda Holloway	First Sample #:	009-2176	Reported: Oct 2, 1990

TOTAL PETROLEUM FUEL HYDROCARBONS with BTEX DISTINCTION (EPA 8015/8020)

Sample Number	Sample Description	Low/Medium B.P. Hydrocarbons mg/kg (ppm)	Benzene mg/kg (ppm)	Toluene mg/kg (ppm)	Ethyl Benzene mg/kg (ppm)	Xylenes mg/kg (ppm)
009-2176	MW-1-35'	N.D.	N.D.	0.0050	N.D.	0.0071
009-2177	MW-2-35'	1.3	N.D.	0.036	0.018	0.025
009-2178	MW-3-35'	N.D.	N.D.	0.11	N.D.	N.D.
Detection Limits:		1.0	0.0050	0.0050	0.0050	0.0050

Low to Medium Boiling Point Hydrocarbons are quantitated against a gasoline standard.
Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL

Vickie Tague
Project Manager

92176.HAO <1>

SEQUOIA ANALYTICAL
680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

Harding Lawson Associates
1365 Willow Way, Suite 109
Concord, CA 94520
Attention: Dorinda Holloway

Client Project ID: #17691,026.03, Digital

QC Sample Group: 0092178

Reported: Oct 2, 1990

QUALITY CONTROL DATA REPORT

ANALYTE	Benzene	Toluene	Ethyl Benzene	Xylenes
Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Analyst:	Meyer/Gonzales	Meyer/Gonzales	Meyer/Gonzales	Meyer/Gonzales
Reporting Units:	mg/kg	mg/kg	mg/kg	mg/kg
Date Analyzed:	Sep 28, 1990	Sep 28, 1990	Sep 28, 1990	Sep 28, 1990
QC Sample #:	009-2101	009-2101	009-2101	009-2101
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Spike Conc. Added:	0.20	0.20	0.20	0.60
Conc. Matrix Spike:	0.21	0.20	0.20	0.64
Matrix Spike % Recovery:	105	100	100	107
Conc. Matrix Spike Dup.:	0.20	0.19	0.20	0.61
Matrix Spike Duplicate % Recovery:	100	95	100	102
Relative % Difference:	4.9	5.1	0	4.8

SEQUOIA ANALYTICAL

Vickie Tague
Project Manager

$$\text{\% Recovery:} = \frac{\text{Conc. of M.S.} - \text{Conc. of Sample}}{\text{Spike Conc. Added}} \times 100$$

$$\text{Relative \% Difference:} = \frac{\text{Conc. of M.S.} - \text{Conc. of M.S.D.}}{(\text{Conc. of M.S.} + \text{Conc. of M.S.D.}) / 2} \times 100$$

92178.HAO <2>

SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

Harding Lawson Associates	Client Project ID:	#17691,026.03, Digital	Sampled:	Sep 16, 1990
1355 Willow Way, Suite 109	Sample Descript:	Soil, MW-1-36'	Received:	Sep 19, 1990
Concord, CA 94520	Analysis Method:	EPA 8240	Analyzed:	Sep 26, 1990
Attention: Dorinda Holloway	Lab Number:	009-2176	Reported:	Oct 2, 1990

VOLATILE ORGANICS by GC/MS (EPA 8240)

Analyte	Detection Limit µg/kg	Sample Results µg/kg
Acetone	500	N.D.
Benzene	100	N.D.
Bromodichloromethane	100	N.D.
Bromoform	100	N.D.
Bromomethane	100	N.D.
2-Butanone	500	N.D.
Carbon disulfide	100	N.D.
Carbon tetrachloride	100	N.D.
Chlorobenzene	100	N.D.
Chloroethane	100	N.D.
2-Chloroethyl vinyl ether	500	N.D.
Chloroform	100	N.D.
Chloromethane	100	N.D.
Dibromochloromethane	100	N.D.
1,1-Dichloroethane	100	N.D.
1,2-Dichloroethane	100	N.D.
1,1-Dichloroethene	100	N.D.
Total 1,2-Dichloroethene	100	N.D.
1,2-Dichloropropane	100	N.D.
cis 1,3-Dichloropropene	100	N.D.
trans 1,3-Dichloropropene	100	N.D.
Ethylbenzene	100	N.D.
2-Hexanone	500	N.D.
Methylene chloride	500	N.D.
4-Methyl-2-pentanone	500	N.D.
Styrene	100	N.D.
1,1,2,2-Tetrachloroethane	100	N.D.
Tetrachloroethene	100	N.D.
Toluene	100	N.D.
1,1,1-Trichloroethane	100	N.D.
1,1,2-Trichloroethane	100	N.D.
Trichloroethene	100	N.D.
Trichlorofluoromethane	100	N.D.
Vinyl acetate	500	N.D.
Vinyl chloride	100	N.D.
Total Xylenes	100	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL

Vickie Tague
Project Manager

92176.HAO <3>

SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

Harding Lawson Associates	Client Project ID:	#17691,026.03, Diglal	Sampled:	Sep 16, 1990
1335 Willow Way, Suite 109	Sample Descript:	Soil, MW-2-35'	Received:	Sep 19, 1990
Concord, CA 94520	Analysis Method:	EPA 8240	Analyzed:	Sep 26, 1990
Attention: Dorinda Holloway	Lab Number:	009-2177	Reported:	Oct 2 1990

VOLATILE ORGANICS by GC/MS (EPA 8240)

Analyte	Detection Limit µg/kg	Sample Results µg/kg
Acetone	500	N.D.
Benzene	100	N.D.
Bromodichloromethane	100	N.D.
Bromoform	100	N.D.
Bromomethane	100	N.D.
2-Butanone	500	N.D.
Carbon disulfide	100	N.D.
Carbon tetrachloride	100	N.D.
Chlorobenzene	100	N.D.
Chloroethane	100	N.D.
2-Chloroethyl vinyl ether	500	N.D.
Chloroform	100	N.D.
Chloromethane	100	N.D.
Dibromochloromethane	100	N.D.
1,1-Dichloroethane	100	N.D.
1,2-Dichloroethane	100	N.D.
1,1-Dichloroethene	100	N.D.
Total 1,2-Dichloroethene	100	N.D.
1,2-Dichloropropane	100	N.D.
cis 1,3-Dichloropropene	100	N.D.
trans 1,3-Dichloropropene	100	N.D.
Ethylbenzene	100	N.D.
2-Hexanone	500	N.D.
Methylene chloride	100	N.D.
4-Methyl-2-pentanone	500	N.D.
Styrene	100	N.D.
1,1,2,2-Tetrachloroethane	100	N.D.
Tetrachloroethene	100	N.D.
Toluene	100	N.D.
1,1,1-Trichloroethane	100	N.D.
1,1,2-Trichloroethane	100	N.D.
Trichloroethene	100	N.D.
Trichlorofluoromethane	100	N.D.
Vinyl acetate	100	N.D.
Vinyl chloride	100	N.D.
Total Xylenes	100	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL

Vickie Tague
Project Manager

02176.HAO <4>

SEQUOIA ANALYTICAL
680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

Harding Lawson Associates	Client Project ID:	#17691,026.03, Digital	Sampled: Sep 16, 1990
1355 Willow Way, Suite 109	Sample Descript:	Soil, MW-3-35'	Received: Sep 19, 1990
Concord, CA 94520	Analysis Method:	EPA 8240	Analyzed: Sep 26, 1990
Attention: Dorinda Holloway	Lab Number:	009-2178	Reported: Oct 2, 1990

VOLATILE ORGANICS by GC/MS (EPA 8240)

Analyte	Detection Limit µg/kg	Sample Results µg/kg
Acetone	500	N.D.
Benzene	100	N.D.
Bromodichloromethane	100	N.D.
Bromoform	100	N.D.
Bromomethane	100	N.D.
2-Butanone	500	N.D.
Carbon disulfide	100	N.D.
Carbon tetrachloride	100	N.D.
Chlorobenzene	100	N.D.
Chloroethane	100	N.D.
2-Chloroethyl vinyl ether	500	N.D.
Chloroform	100	N.D.
Chloromethane	100	N.D.
Dibromochloromethane	100	N.D.
1,1-Dichloroethane	100	N.D.
1,2-Dichloroethane	100	N.D.
1,1-Dichloroethene	100	N.D.
Total 1,2-Dichloroethene	100	N.D.
1,2-Dichloropropane	100	N.D.
cis 1,3-Dichloropropene	100	N.D.
trans 1,3-Dichloropropene	100	N.D.
Ethylbenzene	100	N.D.
2-Hexanone	500	N.D.
Methylene chloride	100	N.D.
4-Methyl-2-pentanone	500	N.D.
Styrene	100	N.D.
1,1,2,2-Tetrachloroethane	100	N.D.
Tetrachloroethene	100	N.D.
Toluene	100	240
1,1,1-Trichloroethane	100	N.D.
1,1,2-Trichloroethane	100	N.D.
Trichloroethene	100	N.D.
Trichlorofluoromethane	100	N.D.
Vinyl acetate	100	N.D.
Vinyl chloride	100	N.D.
Total Xylenes	100	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL

Vickie Tague
Project Manager

92178.HAO <5>

SEQUOIA ANALYTICAL
680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

Harding Lawson Associates	Client Project ID:	#17691.026.03, Digital	
1355 Willow Way, Suite 109	Method (units):	EPA 8240 (µg/L purged)	Q.C. Sample Dates
Concord, CA 94520	Analyst(s):	S. Scott	Analyzed: Sep 24, 1990
Attention: Dorinda Holloway	QC Sample #:	005-2784	Reported: Oct 2, 1990

QUALITY CONTROL DATA REPORT

Analyte	Sample Conc.	Spike Conc. Added	Conc. Matrix Spike	Matrix Spike % Recovery	Conc. Matrix Spike Duplicate	Matrix Spike Duplicate % Recovery	Relative % Difference
1,1-Dichloro-ethene	N.D.	50	49	98	43	86	13
Trichloroethene	N.D.	50	47	94	43	86	8.9
Benzene	N.D.	50	49	98	45	90	8.5
Toluene	N.D.	50	50	100	45	90	11
Chlorobenzene	N.D.	50	51	102	47	94	8.2

SEQUOIA ANALYTICAL

Vickie Tague
Project Manager

% Recovery:	Conc. of M.S. - Conc. of Sample / Spike Conc. Added	x 100
Relative % Difference:	Conc. of M.S. - Conc. of M.S.D. / (Conc. of M.S. + Conc. of M.S.D.) / 2	x 100

92178.HAO <6>

SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

Harding Lawson Associates	Client Project ID:	#17691,?26.03, Digital	Sampled: Sep 16-17, 1990
1365 Willow Way, Suite 109	Sample Descript:	Soil	Received: Sep 19, 1990
Concord, CA 94520	Analysis for:	Lead	Extracted: Sep 20, 1990
Attention: Dorinda Holloway	First Sample #:	009-2176	Analyzed: Sep 21, 1990
			Reported: Oct 2, 1990

LABORATORY ANALYSIS FOR: Lead

Sample Number	Sample Description	Detection Limit mg/kg	Sample Result mg/kg
009-2176	MW-1-35'	0.25	2.7
009-2177	MW-2-35'	0.25	3.4
009-2178	MW-3-35'	0.25	3.2

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL

Vickie Tague
Project Manager

92176.HAO <7>

SEQUOIA ANALYTICAL
680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

Harding Lawson Associates
1365 Willow Way, Suite 100
Concord, CA 94520
Attention: Dorinda Holloway

Client Project ID: #17691,026.03, Digital

QC Sample Group: 0092176-78

Reported: Oct 2, 1990

QUALITY CONTROL DATA REPORT

ANALYTE	Lead

Method:	EPA 7421
Analyst:	R. Britton
Reporting Units:	mg/kg
Date Analyzed:	Sep 21, 1990
QC Sample #:	009-1226
Sample Conc.:	2.2
Spike Conc. Added:	50
Conc. Matrix Spike:	55
Matrix Spike % Recovery:	106
Conc. Matrix Spike Dup.:	54
Matrix Spike Duplicate % Recovery:	104
Relative % Difference:	1.6

SEQUOIA ANALYTICAL

Vickie Tague
Project Manager

% Recovery:	Conc. of M.S. - Conc. of Sample / Spike Conc. Added	x 100
Relative % Difference:	Conc. of M.S. - Conc. of M.S.D. / (Conc. of M.S. + Conc. of M.S.D.) / 2	x 100

92176.HAO <8>

SEQUOIA ANALYTICAL
380 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

Harding Lawson Associates	Client Project ID:	[illegible]1,026.03, [illegible]	Sampled: Sep 19, 1990
1555 Willow Way, Suite 109	Matrix Descript:	Soil	Relogged: Sep 21, 1990
Concord, CA 94520	Analysis Method:	EPA 3550/8015	Extracted: Sep 26, 1990
Attention: Dorinda Holloway	First Sample #:	0092176R	Analyzed: Sep 27, 1990
			Reported: Oct 1, 1990

TOTAL PETROLEUM FUEL HYDROCARBONS (EPA 8015)

Sample Number	Sample Description	High B.P. Hydrocarbons mg/kg (ppm)
0092176R	MW-1-35'	7.2
009-2177	MW-2-35'	15
009-2178	MW-3-35'	13

Detection Limits:	1.0

High Boiling Point Hydrocarbons are quantitated against a diesel fuel standard.
Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL

Vickie Tague
Project Manager

0092176R.HAD <1>

SEQUOIA ANALYTICAL
680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

Harding Lawson Associates
1555 Willow Way, Suite 109
Concord, CA 94520
Attention: Dorinda Holloway

Client Project ID: #17691,026.03, Digital
QC Sample Group: 0092176-73
Reported: Oct 1, 1990

QUALITY CONTROL DATA REPORT

ANALYTE	High Boiling Point Hydrocarbons
Method:	EPA 8015
Analyst:	K. Mitchell
Reporting Units:	mg/kg
Date Analyzed:	Sep 27, '990
QC Sample #:	Matrix
Sample Conc.:	N.D.
Spike Conc. Added:	15
Conc. Matrix Spike:	12
Matrix Spike % Recovery:	80
Conc. Matrix Spike Dup.:	15
Matrix Spike Duplicate % Recovery:	100
Relative % Difference:	22

SEQUOIA ANALYTICAL

Vickie Tague
Project Manager

$$\%\ \text{Recovery:} = \frac{\text{Conc. of M.S.} - \text{Conc. of Sample}}{\text{Spike Conc. Added}} \times 100$$

$$\text{Relative \% Difference:} = \frac{\text{Conc. of M.S.} - \text{Conc. of M.S.D.}}{(\text{Conc. of M.S.} + \text{Conc. of M.S.D.})/2} \times 100$$

SEQUOIA ANALYTICAL
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Harding Lawson Associates	Client Project ID:	#17691.026.03	Sampled: Sep 22, 1990
1365 Willow Way, Suite 109	Matrix Descript:	Water	Received: Sep 25, 1990
Concord, CA 94520	Analysis Method:	EPA 5030/8015/8020	Analyzed: Sep 28, 1990
Attention: Dorinda Holloway	First Sample #:	009-3179 A	Reported: Oct 3, 1990

TOTAL PETROLEUM FUEL HYDROCARBONS with BTEX DISTINCTION (EPA 8015/8020)

Sample Number	Sample Description	Low/Medium B.P. Hydrocarbons µg/L (ppb)	Benzene µg/L (ppb)	Toluene µg/L (ppb)	Ethyl Benzene µg/L (ppb)	Xylenes µg/L (ppb)
0093179 A	MW-1	N.D.	N.D.	N.D.	N.D.	N.D.
0093180 A	MW-2	N.D.	N.D.	N.D.	N.D.	N.D.
0093181 A	MW-3	N.D.	N.D.	N.D.	N.D.	0.44
Detection Limits:		30	0.30	0.30	0.30	0.30

Low to Medium Boiling Point Hydrocarbons are quantitated against a gasoline standard.
Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL

Vickie Tague
Project Manager

93179.HAO <1>

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Harding Lawson Associates
1365 Willow Way, Suite 109
Concord, CA 94520
Attention: Dorinda Holloway

Client Project ID: #17691,026.03

QC Sample Group: 0003179-81

Reported: Oct 3, 1990

QUALITY CONTROL DATA REPORT

ANALYTE	Benzene	Toluene	Ethyl Benzene	Xylenes
Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Analyst:	W. Parks	W. Parks	W. Parks	W. Parks
Reporting Units:	µg/L	µg/L	µg/L	µg/L
Date Analyzed:	Sep 28, 1990	Sep 28, 1990	Sep 28, 1990	Sep 28, 1990
QC Sample #:	009-2605	009-2605	009-2605	009-2605
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Spike Conc. Added:	10	10	10	30
Conc. Matrix Spike:	9.2	8.8	8.8	28
Matrix Spike % Recovery:	92	88	88	93
Conc. Matrix Spike Dup.:	9.4	8.9	9.1	28
Matrix Spike Duplicate % Recovery:	94	89	91	93
Relative % Difference:	2.2	1.1	3.4	0

SEQUOIA ANALYTICAL

Vickie Tague
Project Manager

$$\text{\% Recovery:} \quad \frac{\text{Conc. of M.S.} - \text{Conc. of Sample}}{\text{Spike Conc. Added}} \times 100$$

$$\text{Relative \% Difference:} \quad \frac{\text{Conc. of M.S.} - \text{Conc. of M.S.D.}}{(\text{Conc. of M.S.} + \text{Conc. of M.S.D.})/2} \times 100$$

93179.HAO <2>

SEQUOIA ANALYTICAL
680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

Harding Lawson Associates	Client Project ID:	#17691,026.03	Sampled: Sep 23, 1990
1355 Willow Way, Suite 109	Matrix Descript:	Water	Received: Sep 25, 1990
Concord, CA 94520	Analysis Method:	EPA 3510/8015	Extracted: Sep 27, 1990
Attention: Dorinda Holloway	First Sample #:	009-3179 C	Analyzed: Sep 28, 1990
			Reported: Oct 3, 1990

TOTAL PETROLEUM FUEL HYDROCARBONS (EPA 5015)

Sample Number	Sample Description	High B.P. Hydrocarbons µg/L (ppb)
0093179 C	MW-1	N.D.
0093180 C	MW-2	N.D.
0093181 C	MW-3	N.D.

Detection Limits:	50

High Boiling Point Hydrocarbons are quantitated against a diesel fuel standard.
Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL

Vickie Tague
Project Manager

93179.HAO <3>

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(415) 364-9600 • FAX (415) 364-9233

Harding Lawson Associates
1333 Willow Way, Suite 109
Concord, CA 94520
Attention: Dorinda Holloway

Client Project ID: #17691,026.03

QC Sample Group: 0093179-81

Reported: Oct 3, 1990

QUALITY CONTROL DATA REPORT

ANALYTE	High Boiling Point Hydrocarbons

Method:	EPA 8015
Analyst:	K. Mitchell
Reporting Units:	µg/L
Date Analyzed:	Sep 27, 1990
QC Sample #:	BLK092790
Sample Conc.:	N.D.
Spike Conc. Added:	300
Conc. Matrix Spike:	320
Matrix Spike % Recovery:	107
Conc. Matrix Spike Dup.:	310
Matrix Spike Duplicate % Recovery:	103
Relative % Difference:	3.2

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Vickie Tague
Project Manager

% Recovery:	Conc. of M.S. - Conc. of Sample / Spike Conc. Added	x 100
Relative % Difference:	Conc. of M.S. - Conc. of M.S.D. / (Conc. of M.S. + Conc. of M.S.D.) / 2	x 100

93179.HAD <4>

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(415) 364-9600 • FAX (415) 364-9233

Harding Lawson Associates	Client Project ID:	#17691,026.03	Sampled:	Sep 23, 1990
1355 Willow Way, Suite 109	Sample Descript:	Water, MW-1	Received:	Sep 25, 1990
Concord, CA 94520	Analysis Method:	EPA 8240	Analyzed:	Sep 28, 1990
Attention: Dorinda Holloway	Lab Number:	009-3179 D	Reported:	Oct 3, 1990

VOLATILE ORGANICS by GC/MS (EPA 8240)

Analyte	Detection Limit µg/L	Sample Results µg/L
Acetone	10	N.D.
Benzene	2.0	N.D.
Bromodichloromethane	2.0	N.D.
Bromoform	2.0	N.D.
Bromomethane	2.0	N.D.
2-Butanone	10	N.D.
Carbon disulfide	2.0	N.D.
Carbon tetrachloride	2.0	N.D.
Chlorobenzene	2.0	N.D.
Chloroethane	2.0	N.D.
2-Chloroethyl vinyl ether	10	N.D.
Chloroform	2.0	N.D.
Chloromethane	2.0	N.D.
Dibromochloromethane	2.0	N.D.
1,1-Dichloroethane	2.0	N.D.
1,2-Dichloroethane	2.0	N.D.
1,1-Dichloroethene	2.0	N.D.
Total 1,2-Dichloroethene	2.0	N.D.
1,2-Dichloropropane	2.0	N.D.
cis 1,3-Dichloropropene	2.0	N.D.
trans 1,3-Dichloropropene	2.0	N.D.
Ethylbenzene	2.0	N.D.
2-Hexanone	10	N.D.
Methylene chloride	2.0	N.D.
4-Methyl-2-pentanone	10	N.D.
Styrene	2.0	N.D.
1,1,2,2-Tetrachloroethane	2.0	N.D.
Tetrachloroethene	2.0	N.D.
Toluene	2.0	N.D.
1,1,1-Trichloroethane	2.0	N.D.
1,1,2-Trichloroethane	2.0	N.D.
Trichloroethene	2.0	N.D.
Trichlorofluoromethane	2.0	N.D.
Vinyl acetate	2.0	N.D.
Vinyl chloride	2.0	N.D.
Total Xylenes	2.0	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL

Vickie Tague
Project Manager

93179.HAO <5>

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Harding Lawson Associates	Client Project ID:	#17691,026.03	Sampled:	Sep 23, 1990
1355 Willow Way, Suite 109	Sample Descript:	Water, MW-2	Received:	Sep 25, 1990
Concord, CA 94520	Analysis Method:	EPA 8240	Analyzed:	Sep 28, 1990
Attention: Dorinda Holloway	Lab Number:	009-3180 D	Reported:	Oct 3, 1990

VOLATILE ORGANICS by GC/MS (EPA 8240)

Analyte	Detection Limit µg/L	Sample Results µg/L
Acetone	10	N.D.
Benzene	2.0	N.D.
Bromodichloromethane	2.0	N.D.
Bromoform	2.0	N.D.
Bromomethane	2.0	N.D.
2-Butanone	10	N.D.
Carbon disulfide	2.0	N.D.
Carbon tetrachloride	2.0	N.D.
Chlorobenzene	2.0	N.D.
Chloroethane	2.0	N.D.
2-Chloroethyl vinyl ether	10	N.D.
Chloroform	2.0	N.D.
Chloromethane	2.0	N.D.
Dibromochloromethane	2.0	N.D.
1,1-Dichloroethane	2.0	N.D.
1,2-Dichloroethane	2.0	N.D.
1,1-Dichloroethene	2.0	N.D.
Total 1,2-Dichloroethene	2.0	N.D.
1,2-Dichloropropane	2.0	N.D.
cis 1,3-Dichloropropene	2.0	N.D.
trans 1,3-Dichloropropene	2.0	N.D.
Ethylbenzene	2.0	N.D.
2-Hexanone	10	N.D.
Methylene chloride	2.0	N.D.
4-Methyl-2-pentanone	10	N.D.
Styrene	2.0	N.D.
1,1,2,2-Tetrachloroethane	2.0	N.D.
Tetrachloroethene	2.0	N.D.
Toluene	2.0	N.D.
1,1,1-Trichloroethane	2.0	N.D.
1,1,2-Trichloroethane	2.0	N.D.
Trichloroethene	2.0	N.D.
Trichlorofluoromethane	2.0	N.D.
Vinyl acetate	2.0	N.D.
Vinyl chloride	2.0	N.D.
Total Xylenes	2.0	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL

Vickie Tague
Project Manager

93179.HAO <6>

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(415) 364-9600 • FAX (415) 364-9233

Harding Lawson Associates	Client Project ID:	#17691,026.03	Sampled:	Sep 23, 1990
1365 Willow Way, Suite 109	Sample Descript:	Water, MW-3	Received:	Sep 25, 1990
Concord, CA 94520	Analysis Method:	EPA 8240	Analyzed:	Sep 28, 1990
Attention: Dorinda Holloway	Lab Number:	009-3181 D	Reported:	Oct 3, 1990

VOLATILE ORGANICS by GC/MS (EPA 8240)

Analyte	Detection Limit µg/L	Sample Results µg/L
Acetone	10	N.D.
Benzene	2.0	N.D.
Bromodichloromethane	2.0	N.D.
Bromoform	2.0	N.D.
Bromomethane	2.0	N.D.
2-Butanone	10	N.D.
Carbon disulfide	2.0	N.D.
Carbon tetrachloride	2.0	N.D.
Chlorobenzene	2.0	N.D.
Chloroethane	2.0	N.D.
2-Chloroethyl vinyl ether	10	N.D.
Chloroform	2.0	N.D.
Chloromethane	2.0	N.D.
Dibromochloromethane	2.0	N.D.
1,1-Dichloroethane	2.0	N.D.
1,2-Dichloroethane	2.0	N.D.
1,1-Dichloroethene	2.0	N.D.
Total 1,2-Dichloroethene	2.0	N.D.
1,2-Dichloropropane	2.0	N.D.
cis 1,3-Dichloropropene	2.0	N.D.
trans 1,3-Dichloropropene	2.0	N.D.
Ethylbenzene	2.0	N.D.
2-Hexanone	10	N.D.
Methylene chloride	2.0	N.D.
4-Methyl-2-pentanone	10	N.D.
Styrene	2.0	N.D.
1,1,2,2-Tetrachloroethane	2.0	N.D.
Tetrachloroethene	2.0	N.D.
Toluene	2.0	N.D.
1,1,1-Trichloroethane	2.0	N.D.
1,1,2-Trichloroethane	2.0	N.D.
Trichloroethene	2.0	N.D.
Trichlorofluoromethane	2.0	N.D.
Vinyl acetate	2.0	N.D.
Vinyl chloride	2.0	N.D.
Total Xylenes	2.0	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL

Vickie Tague
Project Manager

93179.HAO <7>

SEQUOIA ANALYTICAL
680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

Harding Lawson Associates	Client Project ID:	#17691,026.03	
1365 Willow Way, Suite 109	Method (units):	EPA 8240 (µg/L purged)	Q.C. Sample Dates
Concord, CA 94520	Analyst(s):	S. Scott	
Attention: Dorinda Holloway	QC Sample #:	092435	Analyzed: Sep 24, 1990
			Reported: Oct 3, 1990

QUALITY CONTROL DATA REPORT

Analyte	Sample Conc.	Spike Conc. Added	Conc. Matrix Spike	Matrix Spike % Recovery	Conc. Matrix Spike Duplicate	Matrix Spike Duplicate % Recovery	Relative % Difference
1,1-Dichloro-ethene	N.D.	50	42	84	39	78	7.4
Trichloroethene	N.D.	50	49	98	49	98	0
Benzene	N.D.	50	47	94	46	92	2.2
Toluene	N.D.	50	49	98	49	98	0
Chlorobenzene	N.D.	50	52	104	52	104	0

SEQUOIA ANALYTICAL

Vickie Tague
Project Manager

% Recovery: $\frac{\text{Conc. of M.S. - Conc. of Sample}}{\text{Spike Conc. Added}} \times 100$

Relative % Difference: $\frac{\text{Conc. of M.S. - Conc. of M.S.D.}}{(\text{Conc. of M.S.} + \text{Conc. of M.S.D.}) / 2} \times 100$

93179.HAO <5>

SEQUOIA ANALYTICAL

1900 Bates Avenue • Suite LM • Concord, California 94520
(415) 686-9600 • FAX (415) 686-9689

Harding Lawson Associates	Client Project ID:	17699,026.03/Digital Phase II	Sampled:	Oct 7, 1990
1355 Willow Way, Suite 109	Sample Descript.:	Soil, Drum Composite	Received:	Oct 9, 1990
Concord, CA 94520	Analysis Method:	EPA 5030/8015/8020	Analyzed:	Oct 12, 1990
Attention: Dorinda Holloway	Lab Number:	010-0266	Reported:	Oct 16, 1990

TOTAL PETROLEUM FUEL HYDROCARBONS WITH BTEX DISTINCTION (EPA 8015/8020)

Analyte	Detection Limit mg/kg (ppm)	Sample Results mg/kg (ppm)
Low to Medium Boiling Point Hydrocarbons	1.0	N.D.
Benzene	0.0050	N.D.
Toluene	0.0050	N.D.
Ethyl Benzene	0.0050	N.D.
Xylenes	0.0050	N.D.

Low to Medium Boiling Point Hydrocarbons are quantitated against a gasoline standard.
Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL

Belinda C. Vega
Laboratory Director

100266.HAO <1

SEQUOIA ANALYTICAL

1900 Bates Avenue • Suite LM • Concord, California 94520
(415) 686-9600 • FAX (415) 686-9689

Harding Lawson Associates
1355 Willow Way, Suite 109
Concord, CA 94520
Attention: Dorinda Holloway

Client Project ID: 17699,026.03/Digital Phase II

Q.C. #: 010-0268

Reported: Oct 16, 1990

QUALITY CONTROL DATA REPORT

ANALYTE	Benzene	Toluene	Ethyl Benzene	Xylenes
Method:	EPA8015/8020	EPA8015/8020	EPA8015/8020	EPA8015/8020
Analyst:	J. Fontecha	J. Fontecha	J. Fontecha	J. Fontecha
Reporting Units:	ppm	ppm	ppm	ppm
Date Analyzed:	Oct 12, 1990	Oct 12, 1990	Oct 12, 1990	Oct 12, 1990
QC Sample #:	010-0348	010-0348	010-0348	010-0348
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Spike Conc. Added:	0.4	0.4	0.4	1.2
Conc. Matrix Spike:	0.34	0.35	0.34	1
Matrix Spike % Recovery:	85	88	85	83
Conc. Matrix Spike Dup.:	0.35	0.36	0.35	1.1
Matrix Spike Duplicate % Recovery:	88	90	88	92
Relative % Difference:	2.9	2.8	2.9	9.5

SEQUOIA ANALYTICAL

Belinda C. Vega
Laboratory Director

$$\text{\% Recovery:} \quad \frac{\text{Conc. of M.S. - Conc. of Sample}}{\text{Spike Conc. Added}} \times 100$$

$$\text{Relative \% Difference:} \quad \frac{\text{Conc. of M.S. - Conc. of M.S.D.}}{(\text{Conc. of M.S. + Conc. of M.S.D.})/2} \times 100$$

100266.HAO <2>

SEQUOIA ANALYTICAL

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(415) 686-9600 • FAX (415) 686-9689

Harding Lawson Associates	Client Project ID:	17699,026.03/Digital Phase II	Sampled:	Oct 7, 1990
1355 Willow Way, Suite 109	Sample Descript:	Soil, Drum Composite	Received:	Oct 9, 1990
Concord, CA 94520			Extracted:	Oct 9, 1990
Attention: Dorinda Holloway	Lab Number:	010-0266	Analyzed:	Oct 10, 1990
			Reported:	Oct 16, 1990

LABORATORY ANALYSIS

Analyte	Detection Limit mg/kg	Sample Results mg/kg
Lead (Total)	0.50	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL

Belinda C. Vega
Laboratory Director

100266.HAO <3>

SEQUOIA ANALYTICAL
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(415) 686-9600 • FAX (415) 686-9689

Harding Lawson Associates
1355 Willow Way, Suite 109
Concord, CA 94520
Attention: Dorinda Holloway

Client Project ID: 17699,026.03/Digital Phase II

Q.C. #: 010-0286

Reported: Oct 16, 1990

QUALITY CONTROL DATA REPORT

ANALYTE	Lead
Method:	EPA 7420
Analyst:	N. Herrera
Reporting Units:	mg/kg
Date Analyzed:	Oct 10, 1990
QC Sample #:	010-0286
Sample Conc.:	N.D.
Spike Conc. Added:	0.50
Conc. Matrix Spike:	0.49
Matrix Spike % Recovery:	98
Conc. Matrix Spike Dup.:	0.51
Matrix Spike Duplicate % Recovery:	102
Relative % Difference:	4.0

SEQUOIA ANALYTICAL

Belinda C. Vega
Laboratory Director

% Recovery: $\frac{\text{Conc. of M.S. - Conc. of Sample}}{\text{Spike Conc. Added}} \times 100$

Relative % Difference: $\frac{\text{Conc. of M.S. - Conc. of M.S.D.}}{(\text{Conc. of M.S. + Conc. of M.S.D.}) / 2} \times 100$

100286.HAO <4>

SEQUOIA ANALYTICAL

1900 Bates Avenue • Suite LM • Concord, Ca[illegible]rnia 94520
(415) 685-9600 • FAX (415) 685-9689

Harding Lawson Associates	Client Project ID:	17699.026.03/Diesel Phase II	Sampled:	Oct 7, 1990
1365 Willow Way, Suite 109	Matrix Descript:	Soil, MW-4 (35.5)	Received:	Oct 9, 1990
Concord, CA 94520	Analysis Method:	EPA 5030/8015	Analyzed:	Oct 11, 1990
Attention: Dorinda Holloway	First Sample #:	010-0265	Reported:	Oct 16, 1990

TOTAL PETROLEUM FUEL HYDROCARBONS (EPA 8015)

Sample Number	Sample Description	Low/Medium B.P. Hydrocarbons mg/kg (ppm)
010-0265	MW-4 (35.5)	N.D.

Detection Limits:	1.0

Low to Medium Boiling Point Hydrocarbons are quantitated against a gasoline standard.
Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL

Belinda C. Vega
Laboratory Director

100265.HAD <11>

SEQUOIA ANALYTICAL

1900 Bates Avenue • Suite LM • Concord, California 94520
(415) 686-9600 • FAX (415) 686-9689

Harding Lawson Associates
1355 Willow Way, Suite 109
Concord, CA 94520
Attention: Dorinda Holloway

Client Project ID: 17699,026.03/Digital Phase II

Q.C. #: 010-0265

Reported: Oct 16, 1990

QUALITY CONTROL DATA REPORT

ANALYTE	Benzene	Toluene	Ethyl Benzene	Xylenes
Method:	EPA8015/8020	EPA8015/8020	EPA8015/8020	EPA8015/8020
Analyst:	W.K. Park/G. Meyer	W.K. Park	G. Meyer	W.K. Park
Reporting Units:	ppm	ppm	ppm	ppm
Date Analyzed:	Oct 11, 1990	Oct 11, 1990	Oct 11, 1990	Oct 11, 1990
QC Sample #:	009-1401	009-1401	009-1401	009-1401
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Spike Conc. Added:	0.20	0.20	0.20	0.60
Conc. Matrix Spike:	0.25	0.22	0.25	0.66
Matrix Spike % Recovery:	125	110	125	110
Conc. Matrix Spike Dup.:	23	21	23	68
Matrix Spike Duplicate % Recovery:	115	105	115	113
Relative % Difference:	8.3	4.6	8.3	3.0

SEQUOIA ANALYTICAL

Belinda C. Vega
Laboratory Director

% Recovery: $\frac{\text{Conc. of M.S. - Conc. of Sample}}{\text{Spike Conc. Added}} \times 100$

Relative % Difference: $\frac{\text{Conc. of M.S. - Conc. of M.S.D.}}{(\text{Conc. of M.S. + Conc. of M.S.D.})/2} \times 100$

100266.HAO <5>

SEQUOIA ANALYTICAL

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Harding Lawson Associates	Client Project ID:	17699,026.03/Digital Phase II	Sampled: Oct 7, 1990
1656 Willow Way, Suite 100	Matrix Descript:	Soil	Received: Oct 9, 1990
Concord, CA 94520	Analysis Method:	EPA 3550/8015	Extracted: Oct 10, 1990
Attention: Dorinda Holloway	First Sample #:	010-0265	Analyzed: Oct 11, 1990
			Reported: Oct 16, 1990

TOTAL PETROLEUM FUEL HYDROCARBONS (EPA 8015)

Sample Number	Sample Description	High B.P. Hydrocarbons mg/kg (ppm)
010-0265	MW-4 (35.5)	N.D.

Detection Limits:	1.0

High Boiling Point Hydrocarbons are quantitated against a diesel fuel standard.
Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL

Belinda C. Vega
Laboratory Director

1003JB.HAO <12>

SEQUOIA ANALYTICAL

1900 Bates Avenue • Suite LM • Concord, California 94520
(415) 686-9600 • FAX (415) 686-9689

Harding Lawson Associates
1355 Willow Way, Suite 109
Concord, CA 94520
Attention: Dorinda Holloway

Client Project ID: 17699,026.03/Digital Phase II

Q.C. #: 010-0285

Reported: Oct 16, 1990

QUALITY CONTROL DATA REPORT

ANALYTE	Diesel
Method:	EPA 3550/8015
Analyst:	K. Mitchell
Reporting Units:	mg/kg
Date Analyzed:	Oct 11, 1990
QC Sample #:	010-6011
Sample Conc.:	N.D.
Spike Conc. Added:	15
Conc. Matrix Spike:	14
Matrix Spike % Recovery:	93
Conc. Matrix Spike Dup.:	13
Matrix Spike Duplicate % Recovery:	87
Relative % Difference:	7.4

SEQUOIA ANALYTICAL

Belinda C. Vega
Laboratory Director

% Recovery: $\frac{\text{Conc. of M.S.} - \text{Conc. of Sample}}{\text{Spike Conc. Added}} \times 100$

Relative % Difference: $\frac{\text{Conc. of M.S.} - \text{Conc. of M.S.D.}}{(\text{Conc. of M.S.} + \text{Conc. of M.S.D.}) / 2} \times 100$

100286.HAO <e>

SEQUOIA ANALYTICAL

1900 Bates Avenue • Suite LM • Concord California 94520
(415) 686-9600 • FAX (415) 686-9689

Harding Lawson Associates	Client Project ID:	17600,026.03/Digital Phase II	Sampled: Oct 7, 1990
1355 Willow Way, Suite 109	Sample Descript:	Soil, MW-4 (35.5)	Received: Oct 9, 1990
Concord, CA 94520	Analysis Method:	EPA 8240	Analyzed: Oct 15, 1990
Attention: Dorinda Holloway	Lab Number:	010-0265	Reported: Oct 16, 1990
	QC Sample #:		

VOLATILE ORGANICS by GC/MS (EPA 8240)

Analyte	Detection Limit µg/kg	Sample Results µg/kg
Acetone	500	N.D.
Benzene	100	N.D.
Bromodichloromethane	100	N.D.
Bromoform	100	N.D.
Bromomethane	100	N.D.
2-Butanone	500	N.D.
Carbon disulfide	100	N.D.
Carbon tetrachloride	100	N.D.
Chlorobenzene	100	N.D.
Chlorodibromomethane	100	N.D.
Chloroethane	100	N.D.
2-Chloroethyl vinyl ether	500	N.D.
Chloroform	100	N.D.
Chloromethane	100	N.D.
1,1-Dichloroethane	100	N.D.
1,2-Dichloroethane	100	N.D.
1,1-Dichloroethene	100	N.D.
Total 1,2-Dichloroethene	100	N.D.
1,2-Dichloropropane	100	N.D.
cis 1,3-Dichloropropene	100	N.D.
trans 1,3-Dichloropropene	100	N.D.
Ethylbenzene	100	N.D.
2-Hexanone	500	N.D.
Methylene chloride	100	N.D.
4-Methyl-2-pentanone	500	N.D.
Styrene	100	N.D.
1,1,2,2-Tetrachloroethane	100	N.D.
Tetrachloroethene	100	N.D.
Toluene	100	N.D.
1,1,1-Trichloroethane	100	N.D.
1,1,2-Trichloroethane	100	N.D.
Trichloroethene	100	N.D.
Trichlorofluoromethane	100	N.D.
Vinyl acetate	100	N.D.
Vinyl chloride	100	N.D.
Total Xylenes	100	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL

Belinda C. Vega
Laboratory Director

100266.HAO <7>

SEQUOIA ANALYTICAL

1900 Bates Avenue • Suite LM • Concord, California 94520
(415) 686-9600 • FAX (415) 686-9689

Harding Lawson Associates	Client Project ID:	17650,026.03/Digital Phase II	
1365 Willow Way, Suite 109	Method (units):	EPA 8240 (µg/L purged)	Q.C. Sample Dates
Concord, CA 94520	Analyst(s):	E. Manuel	
Attention: Dorinda Holloway	QC Sample #:	009-3678	Analyzed: Oct 15, 1999
			Reported: Oct 16, 1999

QUALITY CONTROL DATA REPORT

Analyte	Sample Conc.	Spike Conc. Added	Conc. Matrix Spike	Matrix Spike % Recovery	Conc. Matrix Spike Duplicate	Matrix Spike Duplicate % Recovery	Relative % Difference
1,1-Dichloro-ethene	N.D.	50	56	110	54	110	3.6
Trichloroethene	N.D.	50	47	94	46	92	2.2
Benzene	N.D.	50	53	110	52	100	1.9
Toluene	N.D.	50	48	96	48	96	0
Chlorobenzene	N.D.	50	51	100	51	100	0

SEQUOIA ANALYTICAL

Belinda C. Vega
Laboratory Director

% Recovery: $\frac{\text{Conc. of M.S. - Conc. of Sample}}{\text{Spike Conc. Added}} \times 100$

Relative % Difference: $\frac{\text{Conc. of M.S. - Conc. of M.S.D.}}{(\text{Conc. of M.S. + Conc. of M.S.D.}) / 2} \times 100$

100268.HAD <10>

Harding Lawson Associates
1555 Willow Way, Suite 100
Concord, California 94520
415/687-6660
Telecopy: 415/687-6673

CHAIN OF CUSTODY FORM

Lab: Sequoia

Samplers: MAC

Job Number: 17691.026.03

Name/Location: Digital Phase II

Project Manager: DeNida Holloway

Recorder: [signature] (Signature Required)

SOURCE CODE	MATRIX: Water	Sediment	Soil	Oil	#CONTAINERS & PRESERV.: Unp.	H_2SO_4	HNO_3	SAMPLE NUMBER OR LAB NUMBER: Yr	Wk	Seq	DATE: Yr	Mo	Dy	Time	STATION DESCRIPTION/ NOTES	ANALYSIS REQUESTED: EPA 601/8010	EPA 602/8020 BTEX	EPA 624/8240	EPA 625/8270	ICP METALS	EPA 5015M/TPH as Gas	TPH as diesel	Lead, Total
S			X		X						90	10	07		MW-4-35.5' Drum Composite		X				X	X	9100265 62lab

LAB NUMBER: Yr	Wk	Seq	DEPTH IN FEET	COL MTD CD	QA CODE	MISCELLANEOUS
						5 day turnaround

CHAIN OF CUSTODY RECORD

RELINQUISHED BY: (Signature) [signature]	RECEIVED BY: (Signature)	DATE/TIME
RELINQUISHED BY: (Signature)	RECEIVED BY: (Signature)	DATE/TIME
RELINQUISHED BY: (Signature)	RECEIVED BY: (Signature)	DATE/TIME
RELINQUISHED BY: (Signature)	RECEIVED BY: (Signature)	DATE/TIME
DISPATCHED BY: (Signature) DATE/TIME	RECEIVED FOR LAB BY: (Signature) [signature]	DATE/TIME 10/7 1:55
METHOD OF SHIPMENT		

6533

Laboratory Copy White — Project Office Copy Yellow — Field or Office Copy Pink

SEQUOIA ANALYTICAL
680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

Harding Lawson Associates	Client Project ID:	#17641,026.03, Digital	Sampled:	Oct 12, 1990
1355 Willow Way, Suite 109	Sample Descript.:	Water, MW4	Received:	Oct 12, 1990
Concord, CA 94520	Analysis Method:	EPA 5030/ 8015/8020	Analyzed:	Oct 16, 1990
Attention: Dorinda Holloway	Lab Number:	010-1905	Reported:	Oct 19, 1990

TOTAL PETROLEUM FUEL HYDROCARBONS WITH BTEX DISTINCTION (EPA 8015/8020)

Analyte	Detection Limit µg/L (ppb)	Sample Results µg/L (ppb)
Low to Medium Boiling Point Hydrocarbons	60	N.D.
Benzene	0.30	N.D.
Toluene	0.30	N.D.
Ethyl Benzene	0.30	N.D.
Xylenes	0.30	N.D.

Low to Medium Boiling Point Hydrocarbons are quantitated against a gasoline standard.
Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL

Vickie Tague
Project Manager

101905.HAO <1>

SEQUOIA ANALYTICAL
680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

Harding Lawson Associates	Client Project ID:	#17841,026.03, Digital	Sampled: Oct 12, 1990
1365 Willow Way, Suite 109	Matrix Descript:	Water	Received: Oct 12, 1990
Concord, CA 94520	Analysis Method:	EPA 3510/8015	Extracted: Oct 15, 1990
Attention: Dorinda Holloway	First Samp'e #:	010-1905	Analyzed: Oct 15, 1990
			Reported: Oct 19, 1990

TOTAL PETROLEUM FUEL HYDROCARBONS (EPA 8015)

Sample Number	Sample Description	High B.P. Hydrocarbons µg/L (ppb)
010-1905	MW4	3,900

Detection Limits:	50

High Boiling Point Hydrocarbons are quantitated against a diesel fuel standard.
Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL

Vickie Tague
Project Manager

101905.HAO <2>

SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

Harding Lawson Associates	Client Project ID:	#17641,026.03, Digital	Sampled:	Oct 12, 1990
1355 Willow Way, Suite 109	Sample Descript:	Water, MW4	Received:	Oct 12, 1990
Concord, CA 94520	Analysis Method:	EPA 624	Analyzed:	Oct 15, 1990
Attention: Dorinda Holloway	Lab Number:	010-1905	Reported:	Oct 19, 1990

PURGEABLES by GC/MS (EPA 624)

Analyte	Detection Limit µg/L	Sample Results µg/L
Acetone	10	N.D.
Benzene	2.0	N.D.
Bromodichloromethane	2.0	N.D.
Bromoform	2.0	N.D.
Bromomethane	2.0	N.D.
2-Butanone	10	N.D.
Carbon disulfide	2.0	N.D.
Carbon tetrachloride	2.0	N.D.
Chlorobenzene	2.0	N.D.
Chloroethane	2.0	N.D.
2-Chloroethyl vinyl ether	10	N.D.
Chloroform	2.0	N.D.
Chloromethane	2.0	N.D.
Dibromochloromethane	2.0	N.D.
1,1-Dichloroethane	2.0	N.D.
1,2-Dichloroethane	2.0	N.D.
1,1-Dichloroethene	2.0	N.D.
Total 1,2-Dichloroethene	2.0	N.D.
1,2-Dichloropropane	2.0	N.D.
cis 1,3-Dichloropropene	2.0	N.D.
trans 1,3-Dichloropropene	2.0	N.D.
Ethylbenzene	2.0	N.D.
2-Hexanone	10	N.D.
Methylene chloride	2.0	N.D.
4-Methyl-2-pentanone	10	N.D.
Styrene	2.0	N.D.
1,1,2,2-Tetrachloroethane	2.0	N.D.
Tetrachloroethene	2.0	N.D.
Toluene	2.0	N.D.
1,1,1-Trichloroethane	2.0	N.D.
1,1,2-Trichloroethane	2.0	N.D.
Trichloroethene	2.0	N.D.
Trichlorofluoromethane	2.0	N.D.
Vinyl acetate	2.0	N.D.
Vinyl chloride	2.0	N.D.
Total Xylenes	2.0	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL

Vickie Tague
Project Manager

101905.HAO <3>

DISTRIBUTION

5 copies: Digital Equipment Corporation
111 Powdermill Road
Maynard, Massachusetts 01754

Attention: Mr. Chris Wilson
Director of Remediation

SJO/pkp 034974P/R75

QUALITY CONTROL REVIEWER

Terence J. McManus
Associate Environmental Scientist

Office Building
529 Bryant St.
Palo Alto Co.

71

Add to fiche

6920 Koll Center Parkway
Suite 216
Pleasanton, CA 94566
925.426.2600
Fax 925.426.0106

Clayton GROUP SERVICES

RECEIVED
OCT 24 2000

October 19, 2000

James S. Crowley, P. E.
Santa Clara Valley Water District
5750 Almaden Expressway
San Jose, California 95118-3686

Clayton Project No. 70-01363.00

Subject: Underground Storage Tank Case No. 06S3W02C04f
529 Bryant Street, Palo Alto, California

Dear Mr. Crowley:

Clayton Group Services, Inc. (Clayton) has reviewed the Santa Clara Valley Water District (SCVWD) Underground Storage Tank (UST) Case Closure issued on March 15, 1996 for the subject property. As we discussed, we would like to confirm that the SCVWD Case Closure applies to all USTs and piping removed/closed at the subject property including:

- the in-place closure 1,500 gallon fuel oil UST;
- the removal of a 2,000 diesel gallon UST; and
- the reported 275 gallon UST.

Clayton, on behalf of Menlo Equities Associates, LLC (the perspective purchaser), requests that the SCVWD review the case closure information and records and, if appropriate, confirm that no further action is warranted at the subject property. In addition, we request permission to appropriately destroy four groundwater monitor wells present at the site that were installed as part of the 1990 investigation of the USTs.

We appreciate your review and consideration of this matter. Please let us know if there are any costs associated with the review of this information. If you have any questions or need additional information, please call us at (925) 426-2600.

Sincerely,

Jon A. Rosso, P. E.
Director of Environmental Services

cc. Richard Holmstrom, Menlo Equities

closed

State Water Resources Control Board

Division of Clean Water Programs
1001 I Street • Sacramento, California 95814 • (916) 341-5651
Mailing Address: P.O. Box 944212 • Sacramento, California • 94244-2120
FAX (916) 341-5806 • Internet Address: http://www.swrcb.ca.gov/~cwphome/ustcf

Winston H. Hickox
Secretary for Environmental Protection

Gray Davis
Governor

November 15, 2000

Gilbert Amoroso
S.J. Amoroso Properties
348 Hatch Dr
Foster City, CA 94010

Amoroso Construction

UNDERGROUND STORAGE TANK CLEANUP FUND PROGRAM, STAFF DECISION TO REJECT CLAIM: CLAIM NUMBER 013068; FOR SITE ADDRESS: 1015 TIMOTHY, SAN JOSE

Your claim has been found to be ineligible for placement on the Priority List for the following reason:

On June 8, 1998 and August 30, 2000 you were sent letters requesting further documentation to complete your claim application to the Cleanup Fund. Each letter informed you to respond within 30 days or your claim would be deemed ineligible. To date, this office has not received the requested information. Therefore, your claim to the Cleanup Fund is hereby rejected.

NOTE: Sections cited are found in the Petroleum Underground Storage Tank Cleanup Fund Regulations, Title 23, Division 3, Chapter 18, of the California Code of Regulations.

If you disagree with this Staff Decision, you may either request review and reconsideration by the Program Manager or you may formally appeal the decision and request a Final Division Decision from the Chief of the Division. A request for reconsideration along with any additional documentation should be sent to:

Allan V. Patton, Program Manager, Claim #013068
UST Cleanup Fund Program
State Water Resources Control Board
Division of Clean Water Programs
P.O. Box 944212
Sacramento, CA 94244-2120

A request to the Chief of the Division must include, at a minimum: (1) a statement describing how the claimant is damaged by the prior Staff Decision; (2) a description of the remedy or outcome desired; and (3) an explanation of why the claimant believes the action or the Staff Decision is erroneous, inappropriate or improper.

The request to the Chief of the Division must be sent to Barbara L. Evoy, Chief, Division of Clean Water Programs, at the address listed above.

If you do not request review and reconsideration by the Program Manager or request a Final Division Decision from the Chief of the Division within sixty (60) calendar days from the date of this letter, the Staff Decision will then become final and conclusive.

If you have any questions, please call me at (916) 341-5651.

Sincerely,

Jim Wehinger

Jim Wehinger
Claims Review Unit
Underground Storage Tank Cleanup Fund

cc: Ms. Jeannette Townsend
Santa Clara Valley Water Dist.
5750 Almaden Expressway
San Jose, CA 95118

SENDER:

- ☐ Complete items 1 and/or 2 for additional services.
  Complete items 3, 4a, and 4b.
- ☐ Print your name and address on the reverse of this form so that we can return this card to you.
- ☐ Attach this form to the front of the mailpiece, or on the back if space does not permit.
- ☐ Write "Return Receipt Requested" on the mailpiece below the article number.
- ☐ The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):

1. ☐ Addressee's Address
2. ☐ Restricted Delivery

3. Article Addressed to:

Mr. Harry & Ms. Sue Shannon
19765 Saratoga-Los Gatos Road
Saratoga, CA 95070

4a. Article Number
Z 775 119 370

4b. Service Type
☐ Registered ☐ Certified
☐ Express Mail ☐ Insured
☐ Return Receipt for Merchandise ☐ COD

7. Date of Delivery
M/5/00

5. Received By: (Print Name)
Harry L. Shannon
14-573

8. Addressee's Address (Only if requested and fee is paid)

6. Signature (Addressee or Agent)

PS Form 3811, December 1994 102595-99-B-0223 Domestic Return Receipt

Thank you for using Return Receipt Service.

Z 775 119 370

Receipt for Certified Mail
No Insurance Coverage Provided
Do not use for International Mail
(See Reverse)

Sent to: Mr. Harry & Ms. Sue Shannon	
Street and No.: 19765 Saratoga-Los Gatos Road	
P.O., State and ZIP Code: Saratoga, CA 95070	
Postage	$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, and Addressee's Address	
TOTAL Postage & Fees	$ 2.98
Postmark or Date: M. Martin 02/09/00 MM:lcg	2/14

PS Form 3800, March 1993

Postal Nbrd Resident cc 19765 Saratoga-Sunnyvale

UNITED STATES POSTAL SERVICE

First Class Mail
Postage & Fees Paid
USPS
Permit No. G-10

• Print your name, address, and ZIP Code in this box •

SANTA CLARA VALLEY WATER DISTRICT
5750 ALMADEN EXPRESSWAY
SAN JOSE, CALIFORNIA 95118

STICK POSTAGE STAMPS TO ARTICLE TO COVER FIRST CLASS POSTAGE, CERTIFIED MAIL FEE, AND CHARGES FOR ANY SELECTED OPTIONAL SERVICES (see front).

1. If you want this receipt postmarked, stick the gummed stub to the right of the return address leaving the receipt attached and present the article at a post office service window or hand it to your rural carrier (no extra charge).

2. If you do not want this receipt postmarked, stick the gummed stub to the right of the return address of the article, date, detach and retain the receipt, and mail the article.

3. If you want a return receipt, write the certified mail number and your name and address on a return receipt card, Form 3811, and attach it to the front of the article by means of the gummed ends if space permits. Otherwise, affix to back of article. Endorse front of article RETURN RECEIPT REQUESTED adjacent to the number.

4. If you want delivery restricted to the addressee, or to an authorized agent of the addressee, endorse RESTRICTED DELIVERY on the front of the article.

5. Enter fees for the services requested in the appropriate spaces on the front of this receipt. If return receipt is requested, check the applicable blocks in item 1 of Form 3811.

6. Save this receipt and present it if you make inquiry.

102595-93-Z-0478

PS Form 3800, March 1993 (Reverse)

STATE WATER RESOURCES CONTROL BOARD
GEOTRACKER

Tools Reports UST Case Closures Information

PACIFIC BELL (T0608501799) - (MAP)

SIGN UP FOR EMAIL ALERTS

345 HAMILTON AVE
PALO ALTO, CA 94301
SANTA CLARA COUNTY
LUST CLEANUP SITE
PRINTABLE CASE SUMMARY / CSM REPORT

CLEANUP OVERSIGHT AGENCIES
SANTA CLARA COUNTY LOP *(LEAD)*
CASEWORKER: *UST CASE WORKER*
SAN FRANCISCO BAY RWQCB (REGION 2)
CASEWORKER: *Regional Water Board*
SANTA CLARA VALLEY WATER DISTRICT - *CASE #: 06S3W02C03f*

Summary | Cleanup Action Report | Regulatory Activities | *Environmental Data (ESI)* | Site Maps / Documents | *Community Involvement* | *Related Cases*

Regulatory Profile

PRINTABLE CASE SUMMARY

CLEANUP STATUS - DEFINITIONS
COMPLETED - CASE CLOSED AS OF 12/29/1995 - CLEANUP STATUS HISTORY

POTENTIAL CONTAMINANTS OF CONCERN	POTENTIAL MEDIA OF CONCERN
DIESEL	SOIL

FILE LOCATION	USER DEFINED BENEFICIAL USE	DESIGNATED BENEFICIAL USE(S) - DEFINITIONS
ALL FILES ARE ON GEOTRACKER OR IN THE LOCAL AGENCY DATABASE	SW - MUNICIPAL AND DOMESTIC SUPPLY	MUN, AGR, IND, PROC

DWR GROUNDWATER SUB-BASIN NAME	CALWATER WATERSHED NAME
Santa Clara Valley - Santa Clara (2-9.02)	Santa Clara - Palo Alto (205.50)

Site History

No site history available

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STATE WATER RESOURCES CONTROL BOARD

GEOTRACKER

CASE SUMMARY

REPORT DATE
1/1/1993

HAZARDOUS MATERIAL INCIDENT REPORT FILED WITH OES?

I. REPORTED BY -

UNKNOWN

CREATED BY

UNKNOWN

III. SITE LOCATION

FACILITY NAME
Pacific Bell

FACILITY ID

FACILITY ADDRESS
345 Hamilton Ave
Palo Alto, CA 94301
SANTA CLARA COUNTY

ORIENTATION OF SITE TO STREET

CROSS STREET

V. SUBSTANCES RELEASED / CONTAMINANT(S) OF CONCERN

DIESEL

VI. DISCOVERY/ABATEMENT

DATE DISCHARGE BEGAN

DATE DISCOVERED

HOW DISCOVERED

DESCRIPTION

DATE STOPPED

STOP METHOD

DESCRIPTION

VII. SOURCE/CAUSE

SOURCE OF DISCHARGE

CAUSE OF DISCHARGE

DISCHARGE DESCRIPTION

VIII. CASE TYPE

CASE TYPE
Soil

IX. REMEDIAL ACTION

NO REMEDIAL ACTIONS ENTERED

X. GENERAL COMMENTS

XI. CERTIFICATION

I HEREBY CERTIFY THAT THE INFORMATION REPORTED HEREIN IS TRUE AND ACCURATE TO THE BEST OF MY KNOWLEDGE.

XII. REGULATORY USE ONLY

LOCAL AGENCY CASE NUMBER
06S3W02C03f

REGIONAL BOARD CASE NUMBER

LOCAL AGENCY

CONTACT NAME	INITIALS	ORGANIZATION_NAME	EMAIL ADDRESS
UST CASE WORKER	UST	SANTA CLARA COUNTY LOP	

ADDRESS
1555 Berger Drive, Suite 300
SAN JOSE, CA 95112

CONTACT DESCRIPTION

PHONE TYPE	PHONE NUMBER	EXTENSION
PHONE	(408)-918-3400	

REGIONAL BOARD

CONTACT NAME	INITIALS	ORGANIZATION_NAME	EMAIL ADDRESS
Regional Water Board	UUU	SAN FRANCISCO BAY RWQCB (REGION 2)	

ADDRESS
1515 CLAY ST SUITE 1400
OAKLAND, CA 94612

CONTACT DESCRIPTION

PHONE TYPE	PHONE NUMBER	EXTENSION
Office	(510)-622-2300	
SCP General Contact	(510)-622-2408	
UST General Contact	(510)-622-3277	

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December 29, 1995

Ms. Irene Soto
Environmental Management
Pacific Bell
2600 Camino Ramon, Room 2
San Ramon, CA 94583

Dear Ms. Soto:

Subject: Underground Storage Tank Case Closure—Pacific Bell, 345 Hamilton Avenue, Palo Alto, CA; Case No. 06S3W02C03f

This letter confirms the completion of site investigation and remedial action for the underground storage tank(s) formerly located at the above-described location. Enclosed is the Case Closure Summary for the referenced site for your records.

Based upon the available information, including the current land use, and with the provision that the information provided to this agency was accurate and representative of site conditions, no further action related to the underground storage tank release is required.

This notice is issued pursuant to a regulation contained in Title 23, California Code of Regulations, Division 3, Chapter 16, Section 2721(e).

Please contact Ms. Christine Tulloch at the Santa Clara Valley Water District's Camden Office, (408) 927-0710, extension 2636, if you have any questions in this matter.

Sincerely,

ORIGINAL SIGNED BY

James S. Crowley, P.E.
Associate Civil Engineer
Leaking Underground Storage Tank Oversight Program

Enclosure

cc: Mr. John West (w/enc)
Regional Water Quality Control Board
San Francisco Bay Region
2101 Webster Street, Suite 500
Oakland, CA 94612

J. Crowley, C. Tulloch (w/original enc), Database (enc)

CAT:fd:FL9482od

CASE CLOSURE SUMMARY
LEAKING UNDERGROUND FUEL STORAGE TANK PROGRAM

I. AGENCY INFORMATION

Date: December 28, 1995

Agency Name: Santa Clara Valley Water District	Address: 5750 Almaden Expressway
City/State/Zip: San Jose, CA 95118	Phone: (408) 265-2600
Responsible Staff Person: Christine A. Tulloch	Title: Water Quality Specialist

II. CASE INFORMATION

Site Facility Name: Pacific Bell		
Site Facility Address: 345 Hamilton Avenue, Palo Alto, CA		
RB LUSTIS Case No.: —	Local Case No.: 06S3W02C03f	LOP Case No.: —
URF Filing Date: 09/07/93	SWEEPS No.: —	

Responsible Parties	Addresses	Phone Numbers
Ms. Irene Soto Environmental Management Pacific Bell	2600 Camino Ramon, Room 2, San Ramon, CA 94583	(408) 268-0012

Tank I.D. No.	Size in Gallons	Contents	Closed In-Place/Removed?	Date
1	10,000	Diesel	Removed	06/24/93
Piping			Assumed with tank	—

III. RELEASE AND SITE CHARACTERIZATION INFORMATION

Cause and Type of Release: Unknown		
Site characterization complete? Yes	Date Approved By Oversight Agency: December 28, 1995	
Monitoring wells installed? No	Number: 0	Proper screened interval? Yes No
Highest GW Depth Below Ground Surface: N/A	Lowest Depth: —	Flow Direction: —
Most Sensitive Current Use: Potential drinking water		

Summary of Production Wells in Vicinity: Not assessed due to low severity of contaminants.	
Are drinking water wells affected? No	Aquifer Name: Santa Clara Valley Basin
Is surface water affected? No	Nearest/Affected SW Name:
Off-Site Beneficial Use Impacts (Addresses/Locations): None	
Reports on file? Yes	Where are reports filed? Santa Clara Valley Water District

TREATMENT AND DISPOSAL OF AFFECTED MATERIAL			
Material	Amount (Include Units)	Action (Treatment or Disposal w/Destination)	Date
Tank	One 10,000-gallon	Erickson	06/24/93
Piping	—	—	—
Free Product	None	—	—
Soil/Backfill	Unknown	Gibson Oil	—
Groundwater	None	—	—
Barrels	None	—	—

MAXIMUM DOCUMENTED CONTAMINANT CONCENTRATIONS—BEFORE AND AFTER CLEANUP

Contaminant	Soil (ppm)		Water (ppb)		Contaminant	Soil (ppm)		Water (ppb)	
	Before	After	Before	After		Before	After	Before	After
TPH (Gas)	NA	—	NA	—	Xylene	ND	—	NA	—
TPH (Diesel)	5.8	—	NA	—	Ethylbenzene	ND	—	NA	—
Benzene	ND	—	NA	—	Oil & Grease	NA	—	NA	—
Toluene	ND	—	NA	—	Heavy Metals	NA	—	NA	—
Other (8240/8270)	NA	—	NA	—	Other	NA	—	NA	—

Description of Interim Remediation Activities: None performed other than tank removal.

IV. CLOSURE

Does completed corrective action protect existing beneficial uses per the Regional Board Basin Plan? Yes		
Does completed corrective action protect potential beneficial uses per the Regional Board Basin Plan? Yes		
Does corrective action protect public health for current land use? District staff does not make specific determinations concerning public health risk. However, it does not appear that the release would present a risk to human health.		
Site Management Requirements: None		
Should corrective action be reviewed if land use changes? No		
Monitoring Wells Decommissioned: No	Number Decommissioned: 0	Number Retained: 0
List Enforcement Actions Taken: None		
List Enforcement Actions Rescinded: None		

V. ADDITIONAL COMMENTS, DATA, ETC.

Conclusion: Due to the low severity of contamination detected beneath the tanks, District staff does not believe that there is substantial evidence of a significant release. Therefore, further corrective action is not required at this time.

VI. LOCAL AGENCY REPRESENTATIVE DATA

Prepared by: Christine A. Tulloch	Title: Water Quality Specialist
Signature:	Date: 12/28/95
Approved by: James S. Crowley, P.E.	Title: Associate Civil Engineer
Signature:	Date: 12/29/95

This closure approval is based upon the available information and with the provision that the information provided to this agency was accurate and representative of site conditions.

This document and the related CASE CLOSURE LETTER, shall be retained by the lead agency as part of the official site file.

PAGE 3294 STATE WATER RESOURCES CONTROL BOARD 06/01/88
HAZARDOUS SUBSTANCE STORAGE CONTAINER INFORMATION FOR SANTA CLARA COUNTY
CONTAINER TYPES: 1,2,3,4,5
(1=FARM MOTOR VEHICLE FUEL TANKS, 2=ALL OTHER PRODUCT TANKS, 3=WASTE TANKS, 4=SUMPS, 5=PITS, PONDS, LAGOONS & OTHERS)

I OWNER
PACIFIC BELL
370 THIRD STREET SAN FRANCISCO CA 94107

II FACILITY

	MAILING ADDRESS TOWNSHIP/RANGE/SECTION	DEALER/FOREMAN/SUPERVISOR TELEPHONE	TYPE OF BUSINESS NO. OF CONTAINERS
PACIFIC BELL (P1-007) 340 HAMILTON AVE PALO ALTO CA 94301	370 THIRD STREET, ROOM 6C0G SAN FRANCISCO CA 94107	E.J. KOEHN (415) 542-6758	SIC 4800 1

CROSS STREET :
BRYANT

III 24-HR. CONTACT PERSON / TELEPHONE
DAY: EMERGENCY CONTROL CENTER (415) 542-4601 NIGHT: SAME ( ) -

********** OWNER ASSIGNED CONTAINER NUMBER: D-67-10K ********** STATE BOARD ASSIGNED CONTAINER ID NUMBER: U0000036908001 *********

IV DESCRIPTION
A. CONTAINER TYPE : TANK
B. MANUFACTURER/YR OF MFG: /1967
C. YEAR INSTALLED : 1967
D. CAPACITY (GALLONS) : 10,000
E. REPAIRS : UNKN IF YES WHEN :
F. CURRENTLY USED : YES IF NO, YEAR OF LAST USE:
G. STORES : PRODUCT
H. MOTOR VEHICLE FUEL/WASTE OIL : YES CONTAINS: DIESEL

IS CONTAINER LOCATED ON A FARM : NO

V CONTAINER CONSTRUCTION
A. THICKNESS:
B. VAULTING: NON-VAULTED C. WALLING: WRAPPED
D. MATERIAL : STEEL CLAD
E. LINING : UNKNOWN
F. WRAPPING : UNKNOWN

VI PIPING
A. ABOVEGROUND PIPING :
B. UNDERGROUND PIPING : SUCTION
C. REPAIRS : UNKN IF YES, YEAR OF MOST RECENT REPAIR:

VII LEAK DETECTION
VISUAL

URE TEST	COMPOSITION OF SUBSTANCES CURRENTLY STORED IN CONTAINER
12034	DIESEL MOTOR VEHICLE FUEL

PAGE 3295 STATE WATER RESOURCES CONTROL BOARD 06/01/88

HAZARDOUS SUBSTANCE STORAGE CONTAINER INFORMATION FOR SANTA CLARA COUNTY

CONTAINER TYPES: 1,2,3,4,5

(1=FARM MOTOR VEHICLE FUEL TANKS, 2=ALL OTHER PRODUCT TANKS, 3=WASTE TANKS, 4=SUMPS, 5=PITS, PONDS, LAGOONS & OTHERS)

********** OWNER ASSIGNED CONTAINER NUMBER: 1 ********** STATE BOARD ASSIGNED CONTAINER ID NUMBER: 000000369J8002 *********

IV DESCRIPTION
- A. CONTAINER TYPE : TANK
- B. MANUFACTURER/YR OF MFG: /
- C. YEAR INSTALLED : 1967
- D. CAPACITY (GALLONS) : 10,000
- E. REPAIRS : UNKN IF YES WHEN :
- F. CURRENTLY USED : YES IF NO, YEAR OF LAST USE:
- G. STORES : PRODUCT
- H. MOTOR VEHICLE FUEL/WASTE OIL : YES CONTAINS: DIESEL

IS CONTAINER LOCATED ON A FARM : NO

V CONTAINER CONSTRUCTION
- A. THICKNESS:
- B. VAULTING: NON-VAULTED
- C. WALLING: UNKNOWN
- D. MATERIAL : CARBON STEEL
- E. LINING : UNKNOWN
- F. WRAPPING : UNKNOWN

VI PIPING
- A. ABOVEGROUND PIPING :
- B. UNDERGROUND PIPING : PRESSURE
- C. REPAIRS : UNKN IF YES, YEAR OF MOST RECENT REPAIR:

VII LEAK DETECTION
NONE

P

URE TEST COMPOSITION OF SUBSTANCES CURRENTLY STORED IN CONTAINER

12034 DIESEL MOTOR VEHICLE FUEL

STATE WATER RESOURCES CONTROL BOARD
GEOTRACKER

Tools Reports UST Case Closures Information

VARSITY THEATRE (T0608501967) - (MAP)

SIGN UP FOR EMAIL ALERTS

456 UNIVERSITY AVE
PALO ALTO, CA 94301
SANTA CLARA COUNTY
LUST CLEANUP SITE
PRINTABLE CASE SUMMARY / CSM REPORT

CLEANUP OVERSIGHT AGENCIES
SANTA CLARA COUNTY LOP *(LEAD)*
CASEWORKER: UST CASE WORKER
SAN FRANCISCO BAY RWQCB (REGION 2)
CASEWORKER: Regional Water Board
SANTA CLARA VALLEY WATER DISTRICT - *CASE #: 05S3W35Q02f*

Summary | Cleanup Action Report | Regulatory Activities | *Environmental Data (ESI)* | Site Maps / Documents | *Community Involvement* | *Related Cases*

Regulatory Profile

PRINTABLE CASE SUMMARY

CLEANUP STATUS - DEFINITIONS
COMPLETED - CASE CLOSED AS OF 7/9/1998 - CLEANUP STATUS HISTORY

POTENTIAL CONTAMINANTS OF CONCERN
WASTE OIL / MOTOR / HYDRAULIC / LUBRICATING

POTENTIAL MEDIA OF CONCERN
SOIL

FILE LOCATION
ALL FILES ARE ON GEOTRACKER OR IN THE LOCAL AGENCY DATABASE

USER DEFINED BENEFICIAL USE
SW - MUNICIPAL AND DOMESTIC SUPPLY

DESIGNATED BENEFICIAL USE(S) - DEFINITIONS
MUN, AGR, IND, PROC

DWR GROUNDWATER SUB-BASIN NAME
Santa Clara Valley - Santa Clara (2-9.02)

CALWATER WATERSHED NAME
Santa Clara - Palo Alto (205.50)

Site History

No site history available

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STATE WATER RESOURCES CONTROL BOARD

GEOTRACKER

CASE SUMMARY

REPORT DATE
9/22/1995

HAZARDOUS MATERIAL INCIDENT REPORT FILED WITH OES?

I. REPORTED BY -

UNKNOWN

CREATED BY

UNKNOWN

III. SITE LOCATION

FACILITY NAME
Varsity Theatre

FACILITY ID

FACILITY ADDRESS
456 University Ave
Palo Alto, CA 94301
SANTA CLARA COUNTY

ORIENTATION OF SITE TO STREET

CROSS STREET

V. SUBSTANCES RELEASED / CONTAMINANT(S) OF CONCERN

WASTE OIL / MOTOR / HYDRAULIC / LUBRICATING

VI. DISCOVERY/ABATEMENT

DATE DISCHARGE BEGAN

DATE DISCOVERED

HOW DISCOVERED

DESCRIPTION

DATE STOPPED

STOP METHOD

DESCRIPTION

VII. SOURCE/CAUSE

SOURCE OF DISCHARGE

CAUSE OF DISCHARGE

DISCHARGE DESCRIPTION

VIII. CASE TYPE

CASE TYPE
Soil

IX. REMEDIAL ACTION

NO REMEDIAL ACTIONS ENTERED

X. GENERAL COMMENTS

XI. CERTIFICATION

I HEREBY CERTIFY THAT THE INFORMATION REPORTED HEREIN IS TRUE AND ACCURATE TO THE BEST OF MY KNOWLEDGE.

XII. REGULATORY USE ONLY

LOCAL AGENCY CASE NUMBER	REGIONAL BOARD CASE NUMBER
05S3W35Q02f	

LOCAL AGENCY

CONTACT NAME	INITIALS	ORGANIZATION_NAME	EMAIL ADDRESS
UST CASE WORKER	UST	SANTA CLARA COUNTY LOP	

ADDRESS

1555 Berger Drive, Suite 300
SAN JOSE, CA 95112

CONTACT DESCRIPTION

PHONE TYPE	PHONE NUMBER	EXTENSION
PHONE	(408)-918-3400	

REGIONAL BOARD

CONTACT NAME	INITIALS	ORGANIZATION_NAME	EMAIL ADDRESS
Regional Water Board	UUU	SAN FRANCISCO BAY RWQCB (REGION 2)	

ADDRESS

1515 CLAY ST SUITE 1400
OAKLAND, CA 94612

CONTACT DESCRIPTION

PHONE TYPE	PHONE NUMBER	EXTENSION
Office	(510)-622-2300	
SCP General Contact	(510)-622-2408	
UST General Contact	(510)-622-3277	

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July 9, 1998

Palo Alto Theatre Corp.
700 Emerson Street
Palo Alto, CA 94301

Ladies and Gentlemen:

Subject: Fuel Leak Site Case Closure—Varsity Theatre, 456 University Avenue, Palo Alto, CA; Case No. 05S3W35Q02f

This letter transmits the enclosed underground storage tank (UST) case closure letter in accordance with Chapter 6.75 (Article 4, Section 25299.37[h]). The State Water Resources Control Board adopted this letter on February 20, 1997. As of March 1, 1997, the Santa Clara Valley Water District is required to use this case closure letter for all UST leak sites. We are also transmitting to you the enclosed case closure summary. These documents confirm the completion of the investigation and cleanup of the reported release at the subject site. The subject fuel leak case is closed.

If you have any questions, please call Ms. Christine Tulloch at the Camden Office, (408) 927-0710, extension 2636. Thank you.

Sincerely,

ORIGINAL SIGNED BY

James S. Crowley, P.E.
Special Programs Engineer
Leaking Underground Storage Tank Oversight Program

Enclosures:
1. Case Closure Letter
2. Case Closure Summary

cc: Mr. Chuck Headlee (w/enc)
Regional Water Quality Control Board
San Francisco Bay Region
2101 Webster Street, Suite 500
Oakland, CA 94612

Mr. Steve Mizera (w/enc)
Division of Clean Water
State Water Resources Control Board
P.O. Box 944212
Sacramento, CA 94244-2120

Ms. Nancy Commoncho
Division of Clean Water Programs
Underground Storage Tank Cleanup Fund
State Water Resources Control Board
P.O. Box 944212
Sacramento, CA 94244-2120

J. Crowley, C. Tulloch (w/orig enc), Database (w/enc)

CT:lcg:FL9482tx

July 9, 1998

Palo Alto Theatre Corp.
700 Emerson Street
Palo Alto, CA 94301

Ladies and Gentlemen:

Subject: Fuel Leak Site Case Closure—Varsity Theatre, 456 University Avenue, Palo Alto, CA; Case No. 05S3W35Q02f

This letter confirms the completion of a site investigation and remedial action for the underground storage tank(s) formerly located at the above-described location. Thank you for your cooperation throughout this investigation. Your willingness and promptness in responding to our inquiries concerning the former underground storage tank(s) are greatly appreciated.

Based on information in the above-referenced file and with the provision that the information provided to this agency was accurate and representative of site conditions, no further action related to the underground tank release is required.

This notice is issued pursuant to a regulation contained in Section 2721(e) of Title 23 of the California Code of Regulations.

Please contact our office if you have any questions regarding this matter.

Sincerely,

ORIGINAL SIGNED BY

James S. Crowley, P.E.
Special Programs Engineer
Leaking Underground Storage Tank Oversight Program

FL9482tx

Santa Clara Valley Water District

CASE CLOSURE SUMMARY
LEAKING UNDERGROUND FUEL STORAGE TANK PROGRAM

I. AGENCY INFORMATION

Date: July 1, 1998

Agency Name: Santa Clara Valley Water District	Address: 5750 Almaden Expressway
City/State/Zip: San Jose, CA 95118	Phone: (408) 265-2600
Responsible Staff Person: Christine A. Tulloch	Title: Water Quality Specialist

II. CASE INFORMATION

Site Facility Name: Varsity Theatre		
Site Facility Address: 456 University Avenue, Palo Alto, Santa Clara, CA 94301		
RB LUSTIS Case No.: —	Local Case No.: 05S3W35Q02f	LOP Case No.: —
URF Filing Date: 11/30/95	SWEEPS No.: —	APN: 120-15-069

Responsible Parties	Addresses	Phone Number
Palo Alto Theatre Corp.	700 Emerson Street, Palo Alto, CA 94301	(415) 326-2244

Tank I.D. No	Size in Gallons	Contents	Closed In Place/Removed?	Date
1	1,550	Bunker oil	Removed	09/22/95
Piping			Removed	09/20/95

III. RELEASE AND SITE CHARACTERIZATION INFORMATION

Cause and Type of Release: A hole was observed in the tank. However, soil contamination was not observed beneath the tank. Contamination was observed beneath the piping.		
Site characterization complete? Yes	Date Approved By Oversight Agency: N/A	
Monitoring wells installed? No	Number: —	Proper screened interval? —
Highest GW Depth Below Ground Surface: —	Lowest Depth: —	Flow Direction: —
Most Sensitive Current Use: Potential drinking water.		

Summary of Production Wells in Vicinity: Only one well has been identified as being within ¼ mile of the site. The well 06S3W2B010 is approximately 600 feet southeast of the site. No other information is available on this well. The well is not expected to be affected by the release.	
Are drinking water wells affected? No	Aquifer Name: Santa Clara Valley Basin
Is surface water affected? No	Nearest SW Name: San Francisquito Creek
Off-Site Beneficial Use Impacts (Addresses/Locations): —	
Reports on file? Yes	Where are reports filed? Santa Clara Valley Water District

TREATMENT AND DISPOSAL OF AFFECTED MATERIAL			
Material	Amount (Include Units)	Action (Treatment or Disposal w/Destination)	Date
Tank	1,500 gallons	Transported with hazardous waste manifest by Erickson, Inc., of Richmond to their disposal site in Richmond, CA	09/22/95
Piping	1¼" diameter, 102' vent line 2" diameter, 102' product line	Transported with hazardous waste manifest by Erickson, Inc., of Richmond to their disposal site in Richmond, CA	09/22/95
Free Product	—	—	—
Soil	20 cubic yards	Transported with nonhazardous manifest to Vasco Road Sanitary Landfill	10/02/95
Groundwater	—	—	—
Barrels	—	—	—

MAXIMUM DOCUMENTED CONTAMINANT CONCENTRATIONS—BEFORE AND AFTER CLEANUP

Contaminant	Soil (ppm)		Water (ppb)		Contaminant	Soil (ppm)		Water (ppb)	
	Before	After	Before	After		Before	After	Before	After
TPH (Gas)	NS	NS	NS	NS	Xylene	<0.005	NS	NS	NS
TPH (Diesel)	NS	NS	NS	NS	Ethylbenzene	<0.005	NS	NS	NS
Benzene	<0.005	NS	NS	NS	Oil & Grease	43	NS	NS	NS
Toluene	<0.005	NS	NS	NS	Heavy Metals*	2.1	NS	NS	NS
Other (8240/8270)	NS	NS	NS	NS	MTBE (if not analyzed, explain below)**	NS	NS	NS	NS

Description of Interim Remediation Activities:

*Lead was the highest value found (2.1 parts per million [ppm] and is recorded in table. Other values were Cadmium (0.014), Chromium (0.11), Nickel (0.86), and Zinc (1.3). All values in ppm.

**Methyl tert-Butyl Ether testing is not required for oil and grease releases.

IV. CLOSURE

Does completed corrective action protect existing beneficial uses per the Regional Board Basin Plan? Yes		
Does completed corrective action protect potential beneficial uses per the Regional Board Basin Plan? Yes		
Does corrective action protect public health for current land use? Santa Clara Valley Water District staff does not make specific determinations concerning public health risk. However, it does not appear that the release would present a risk to human health.		
Site Management Requirements: None required		
Should corrective action be reviewed if land use changes? No		
Monitoring Wells Decommissioned: No	Number Decommissioned: —	Number Retained: —
List Enforcement Actions Taken: None taken		
List Enforcement Actions Rescinded: None rescinded		

V. ADDITIONAL COMMENTS, DATA, ETC.

Considerations and/or Variances: The underground storage tank excavated from the Varsity theater site was a 5-foot diameter by 10-foot long, 1,550-gallon rivet steel tank. The tank was heavily pitted and one hole was found in the southeast corner of the tank along a seam. This hole measured approximately ¾-inch long and ¼-inch wide and was located approximately ⅓ of the way down from the top of the tank. A soil sample was collected approximately 3 feet from the hole. Soil samples gave mostly none detect results. The high value for oil and grease was 43 ppm. Due to the viscous nature of the fuel oil and absence of detectable contaminants beneath the tank, a significant release appears unlikely.

Conclusion: Santa Clara Valley Water District staff has concluded that residual soil contamination at this site does not pose a threat to public health, safety, or beneficial uses of water.

VI. LOCAL AGENCY REPRESENTATIVE DATA

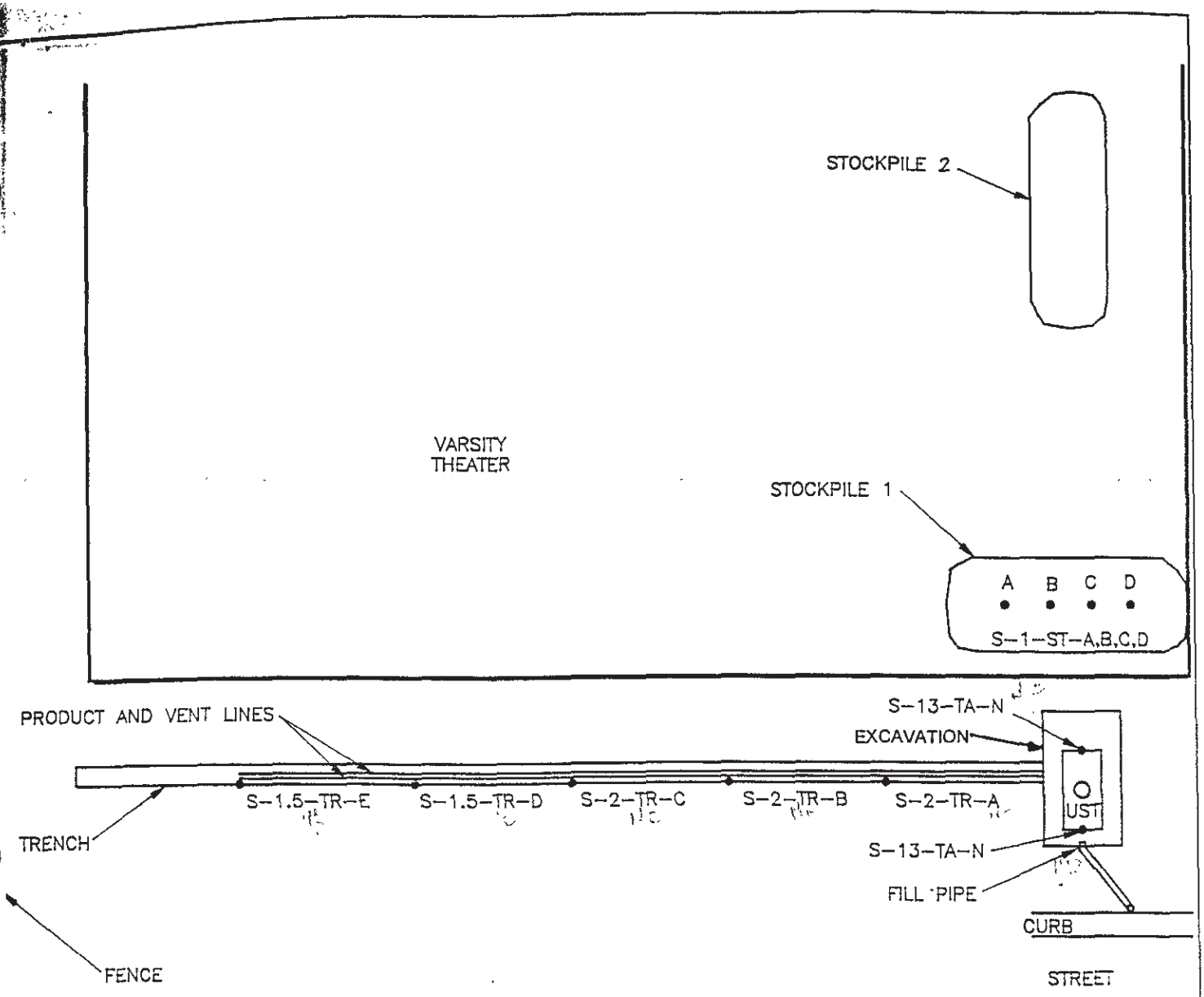
Prepared by: Christine A. Tulloch	Title: Water Quality Specialist
Signature:	Date: 7/16/98
Approved by: James S. Crowley, P.E.	Title: Special Programs Engineer (acting)
Signature:	Date: 7/16/98

This closure approval is based upon the available information and with the provision that the information provided to this agency was accurate and representative of site conditions.

Attachments:

1. Site Vicinity Map
2. Site Plan

This document and the related CASE CLOSURE LETTER, shall be retained by the lead agency as part of the official site file.



L E G E N D

S-2-TR-A • = Sample location

Approximate Scale

20 10 0 20 40

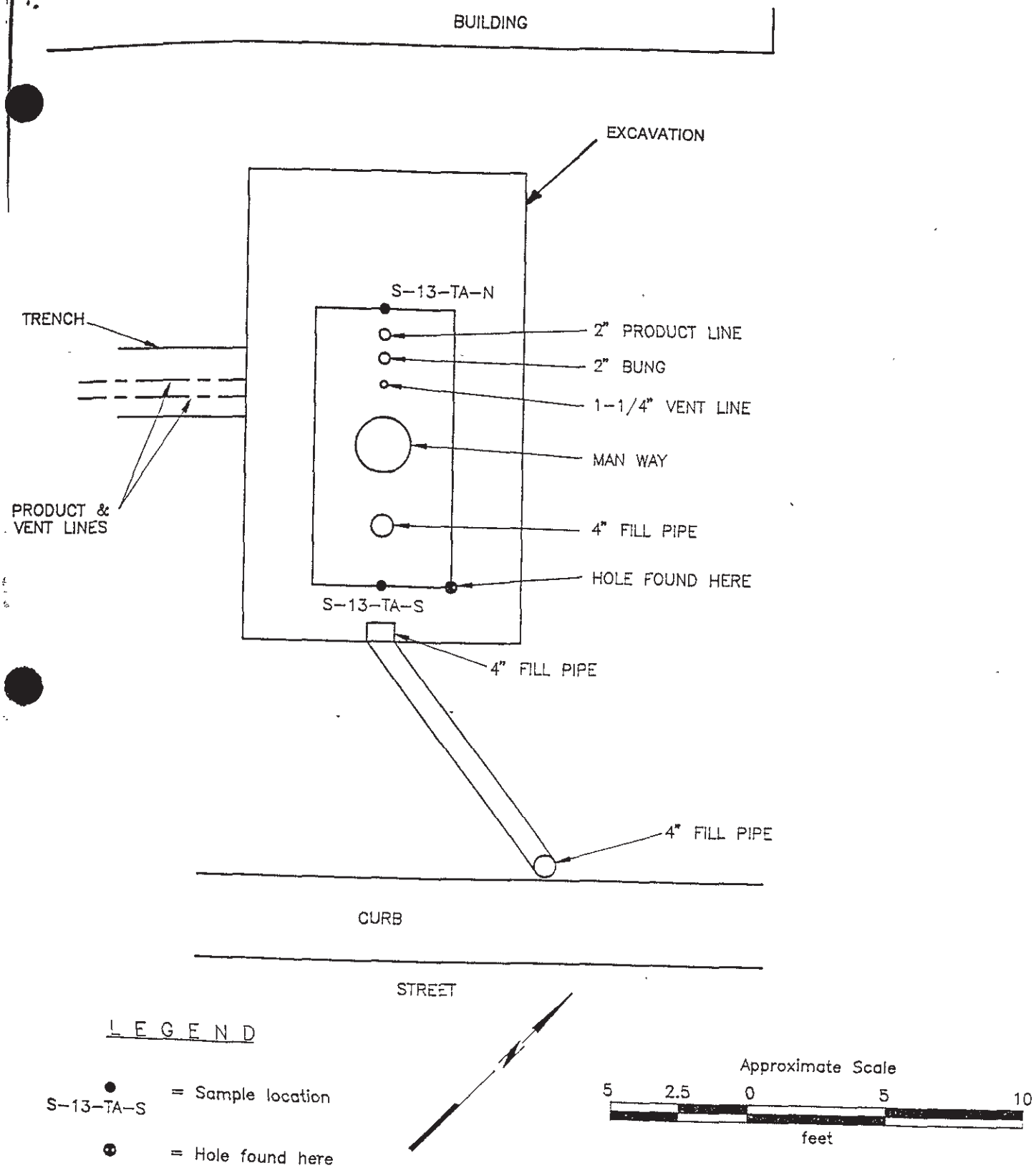
feet

KTW & ASSOCIATES

PROJECT NO. KLC002

GENERALIZED SITE PLAN
Varsity Theater
456 University Avenue
Palo Alto, California

PLATE 2



LEGEND

S-13-TA-S = Sample location

= Hole found here

Approximate Scale

5 2.5 0 5 10

feet

KTW & ASSOCIATES

PROJECT NO. KLC002

DETAIL OF UST EXCAVATION
Varsity Theater
456 University Avenue
Palo Alto, California

PLATE 3



Source: U.S. Geological Survey
7.5-Minute Quadrangle
Palo Alto, California
Photorevised 1973

N

Approximate Scale

2000 1000 0 2000 4000

feet

KTN & ASSOCIATES

JECT NO. KLC002

SITE VICINITY MAP
Varsity Theater
456 University Avenue
Palo Alto, California

PLATE
1

HAMILTON MANAGEMENT, INC.

November 7, 1995

Mr. Gordon Simpkinson
City of Palo Alto Fire Department
Hazardous Material Division
250 Hamilton Avenue
Palo Alto, CA 94301

Re: Underground Storage Tank Removal - Closure Report
456 University Avenue, Palo Alto

Dear Mr. Simpkinson:

Enclosed is a report prepared by our consultant KTW Environmental, on the underground storage tank removal and closure at the Varsity site, 456 University Avenue, Palo Alto.

This report is submitted per the requirements of the Uniform Underground Storage Tank System Closure Permit.

Upon review and acceptance of this report, I would request a copy of the permit indicating your certification that the tank system closure activities are complete.

Should you have any questions, do not hesitate to call.

Sincerely,

Craig French

Hamilton Management

cc: Santa Clara Valley Water District

700 EMERSON STREET · PALO ALTO, CALIFORNIA 94301
TELEPHONE (415) 326-2244 · TELECOPY (415) 326-2920

K.T.W. & ASSOCIATES
Environmental Services
3499 Edison Way, Fremont, CA. 94538

(510) 659-1823
Fax (510) 659-6344

License # 572427

October 13, 1995
KLC-002

Mr. Craig French
Palo Alto Theater Corporation
700 Emerson Street
Palo Alto, California 94301

Subject: Letter Report on Tank Closure at the Varsity Theater site, 456 University Avenue, Palo Alto, California.

Mr. French:

K.T.W. & Associates, Inc. is pleased to submit this report describing closure activities associated with the removal of an underground storage tank (UST) at the Varsity Theater site, Palo Alto, California. This report provides a description of site activities and observations that include: the condition of tanks' backfill, conditions of other sampling procedures, sampling locations, analytical results, chain of custody documentation, hazardous waste manifest, and Certificate of Disposal.

Site Description

The Varsity Theater is located at 456 University Avenue, Palo Alto, California. Plate 1 shows the location of the site which is between Cowper and Waverly Streets on the south side of University Avenue. The site contains a movie theater which is currently undergoing renovation and seismic upgrading. This scope of work included the removal of a 1,500 gallon UST near the eastern corner of the building. Plate 2 shows the sample areas which include the tank excavation, pipeline trench, and the tank excavation stockpiles.

Closure Plan and Permitting

A closure plan and a permit application for removal of the UST was completed and submitted to the Palo Alto Fire Department. An Underground Storage Tank Permit Application was also submitted to the state of California Water Resources Control Board as well as the required 5 day notification to the Bay Area Air Quality Management District, and notification of Cal OSHA prior to commencement of work. Closure activities were conducted under the permits included in Attachment A.

Underground Tank Removal

Underground tank and pipeline removal consisted of determining the type of fuel remaining in the UST, removing the remaining oil, removing associated piping, inerting the UST, and removing the UST. Laboratory analysis of the fuel remaining in the tank determined it to be a heavy aliphatic hydrocarbon mixture. The analysis was performed by Silicon Valley Chem Labs, Inc. of Santa Clara, California; results are presented in Attachment C.

A total of 270 gallons of fuel were removed from the UST in two events. The first event occurred on September 20, 1995 when 200 gallons of fuel were pumped from the UST and removed for recycling by Evergreen Environmental Services of Newark, California. The second event occurred just prior to tank removal when the tank was tipped and the remaining 70 gallons of fuel were removed by Evergreen Environmental Services. Fuel removed by Evergreen Environmental Services, Inc. was removed to their treatment center in Newark, California for recycling. Copies of Hazardous Waste Manifests and Certificate of Disposal are presented in Attachment B.

On September 22, 1995 the UST at the Varsity Theater site was removed under the supervision of Gordon Simpkinson of the Palo Alto Fire Department. The tank was first rendered inert with the addition of 75 pounds of dry ice (carbon dioxide). LEL and oxygen levels were monitored both before pumping, and before tank removal in order to insure that both of these factors were within safe levels. After the tank was rendered inert, 70 gallons of bunker oil were pumped from the tank by Evergreen Environmental Services, Inc. of Newark, California. Prior to tank removal, the lower explosivity limit (LEL) was recorded at 0 (zero) percent and the oxygen level was 10 percent. The tank was then removed and transported from the site by a permitted hazardous waste transporter, Erickson, Inc. of Richmond, California, to their disposal site in Richmond, under a hazardous waste manifest. Product and vent lines were also removed for disposal by Erickson, Inc, at this time.

Piping consisted of a 2-inch diameter product line, a 1¼-inch diameter vent line, and a 4-inch remote fill line. The product and vent lines were located in the trench west of the UST excavation and the fill line was located between the south end of the tank excavation and the sidewalk. Plate 2 shows the locations of these lines. The product and vent lines were removed on September 20, 1995. At the time of removal, the product line was found to contain fuel in the 50 feet of line nearest the UST. This fuel was drained into the UST by opening the popit valve in the tank and allowing the fuel to drain back into the tank. A very small amount of fuel was found in the vent line. This fuel was drained into a storage drum on site. The 4-inch remote fill line was left in place as directed by Gordon Simpkinson of the Palo Alto Fire Department.

General Observations, Underground Tank Closure

The UST excavation at the Varsity Theater site was located 4.5 feet south and 9 feet west of the southeast corner of the building. It contained a 5-foot-diameter x 10-foot-long, 1,550-gallon, riveted steel storage tank. Assuming that the UST was installed when the theater was built, the tank was approximately 68 years old. The UST excavation was 13 feet deep x 10 feet wide x 17 feet long. Upon removal, the 1,500-gallon UST was observed to be of rivetted steel construction. The tank was heavily pitted and one hole was found in the southeast corner of the tank along a seam. This hole measured approximately ¾-inch long and ¼-inch wide, and was located approximately one third of the way down from the top of the tank. No odor or discoloration was noted in the tank excavation. Plate 3 shows the details of the UST and UST excavation.

The tank cavity was excavated to a depth of 13 feet in native soil consisting of light brown sandy lean clay. The tank cavity appeared to have been originally excavated to a depth of 13 feet below currently existing grade in native soil. This material was also used for fill material. No evidence of staining or discoloration was noted during excavation.

The UST was connected to a 2-inch product line, a 1¼-inch vent line and a 4-inch fill pipe. All pipes were composed of steel. The product and vent lines were excavated from along the south side of the trench which ran along the south side of the Varsity Theater as shown in Plate 2. The pipeline trench was 123 feet long x 3 feet wide x 4 feet deep and was dug deeper and longer than the product and vent lines it contained. The product and vent lines were buried side by side at depths which increased from 1.5 feet at the western end of the line to a depth of approximately 2 feet at the tank end of the line. These lines were each 102 feet in length and were found to contain fuel upon removal. Both lines were heavily corroded, however, no leaks were noticed and the pipes appeared to be structurally sound. Fuel remaining in the product and vent lines was removed as previously described. Both pipelines had been removed at the time of sampling with the exception of 5 feet of pipeline at the western end of the trench. This portion of the pipeline was removed just prior to sampling, under the supervision of Gordon Simpkinson of the Palo Alto Fire Department, and was found to be uncapped at the western end. The 4-inch fill pipe was located 4¾-feet below grade at the tank and came to the surface at the curb. As directed by Gordon Simpkinson, this pipe was not removed, and the soil below it was not sampled.

Excavated material was stored on-site in 2 stockpiles during the UST removal action. Stockpile 1 was located in the southeastern corner of the Varsity Theater, north of the tank excavation, and contained approximately 20 cubic yards of soil excavated from around the tank; Stockpile 2 was composed of approximately 50 cubic yards of soil removed from above the tank and was located north of stockpile 1. Stockpile locations are shown in Plate 2. Material from stockpile 1 was accepted as Class III landfill by Vasco Road Sanitary Landfill. This material was hauled under non-hazardous manifest

and disposed of at Vasco Road Sanitary Landfill. The manifest for this material is presented in Attachment B. Material from stockpile 2 was used as fill material on site.

Soil Sampling

Field work for this investigation included sampling soil from the tank excavation, trench, and stockpile 1. Soil samples were taken by Robert Magginetti of KTW on September 22, 1995. Soil from sample locations in the UST excavation was taken with a backhoe, and samples were then taken from the bucket of the backhoe. Soil samples were taken in-place in the case of the pipeline trench and stockpile. All soil samples were collected in pre-cleaned brass sleeves. Trench soil samples were collected using a slide hammer; samples from the tank excavation and the stockpile were taken by hand. The slide hammer was decontaminated between samples by washing in a solution of alconox and water, and then by rinsing twice in clean water. Samples were sealed with teflon sheets, plastic caps, and duct tape, and placed in a container containing "blue" ice. McCampbell Analytical, Inc. of Pacheco, California picked up the samples at the site along with a completed chain of custody form.

Stockpile 2 was not sampled because it consisted of material removed from above the bunker oil tank, and thus would not have been impacted by any leakage from the tank.

Laboratory Analysis of Samples

Samples for chemical analysis were submitted under Chain of Custody to state-certified McCampbell Analytical, Inc. of Pacheco, California, (Department of Health Services Certification No. 1644). Two soil samples were collected from the tank excavation and five samples were collected from the trench. Samples S-13-TA-N and S-13-TA-S from the tank excavation were collected at the north and south ends of the tank at a depth of 13 feet. Samples S-2-TR-A, S-2-TR-B, S-2-TR-C, S-1.5-TR-D, and S-1.5-TR-E were collected from the pipeline trench at intervals of 20 feet along the length of the former pipeline. Soil samples from the tank excavation, and trench were analyzed for total recoverable petroleum hydrocarbons as oil and grease (TRPH as Oil and Grease) using Standard Methods C & F, and benzene, toluene, ethylbenzene, and xylenes (BTEX) using EPA Method 8020.

One sample was composited from four sample locations in stockpile 1. Composite sample S-1-SP-A, B, C, D, from the soil stockpile, was tested for TRPH as Oil and Grease, BTEX, and LUFT metals (cadmium, chromium, lead, nickel, and zinc using EPA methods 7130, 7190, 7420, 7520, and 7950 respectively). LUFT metals were extracted for soluble threshold limit concentration (STLC) using the method from California Title 22, and analyzed using EPA Method 6010.

The sample locations are shown on Plate 2; laboratory analytical results are shown in Tables 1 and 2.

Certified Analytical Results

The samples collected for minimum verification analyses were analyzed in accordance with appropriate regulatory guidelines contained within Regional Board Staff Recommendations for Initial Evaluation and Investigation of Underground Tanks (RWQCB, 1988). The two samples from the tank excavation the five from the pipeline trench were analyzed individually; the four samples from stockpile 1 were composited by the laboratory before analysis.

Copies of the chain of custody Records and the laboratory analytical reports are presented in Attachment C.

Regulatory Guidelines

The California Regional Water Quality Control Board, San Francisco Bay Region has established a level of 100 parts per million TRPH concentrations in soil as a general decision making value for requiring further definition of site soil and ground-water contamination where shallow ground-water conditions are known to exist. The origin of the 100 parts per million level was to "develop a method to prioritize the case load and indicate whether a significant volume of fuel had been released or discharged" (RWQCB, June, 1988).

Copies of this report should be submitted to:

Regional Water Quality Control Board
2101 Webster Street, Suite 500
Oakland, California, 94612

City of Palo Alto Fire Department
Hazardous Materials Division
250 Hamilton Avenue
Palo Alto, California 94301

Two additional copies of this report have been provided for the purpose of regulatory submittal. Should you have any questions or comments regarding the evaluations presented in this report, please call.

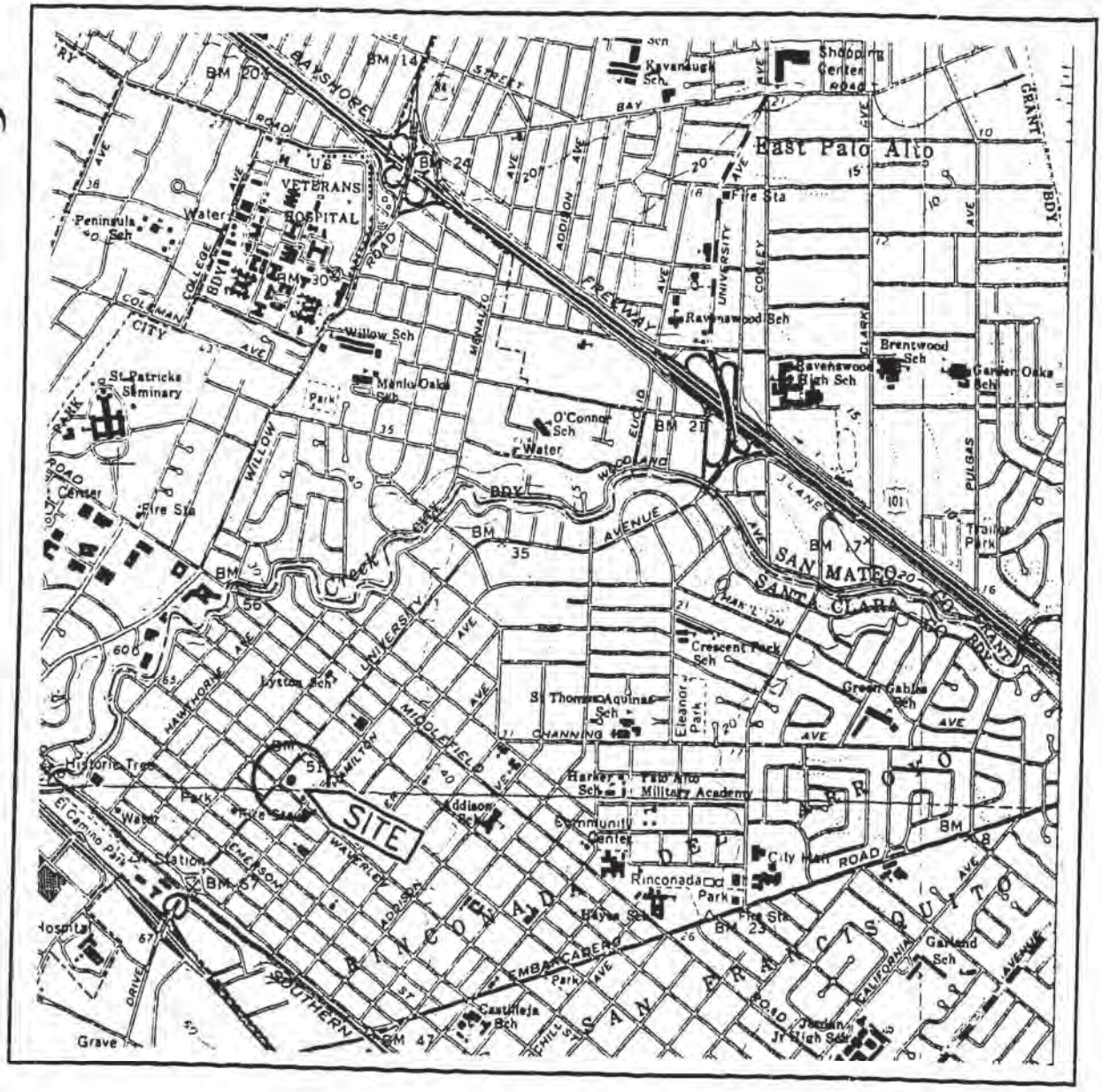
Sincerely;
K.T.W. & Associates, Inc.

Peter Schurman
Operations Manager

Thomas Meichtry, P.E.
President

Plate 1: Site Vicinity Map
Plate 2: Generalized Site Plan
Plate 3: Detail of Underground Storage Tank and Excavation
Table 1: Results of Laboratory Analyses for Oil and Grease, and BTEX
Table 2: Results of Laboratory Analyses of Soil Samples for Metals
Attachment A: Permits
Attachment B: Hazardous Waste Manifests and Certificates of Disposal
Attachment C: Certified Analytical Results

PLATES



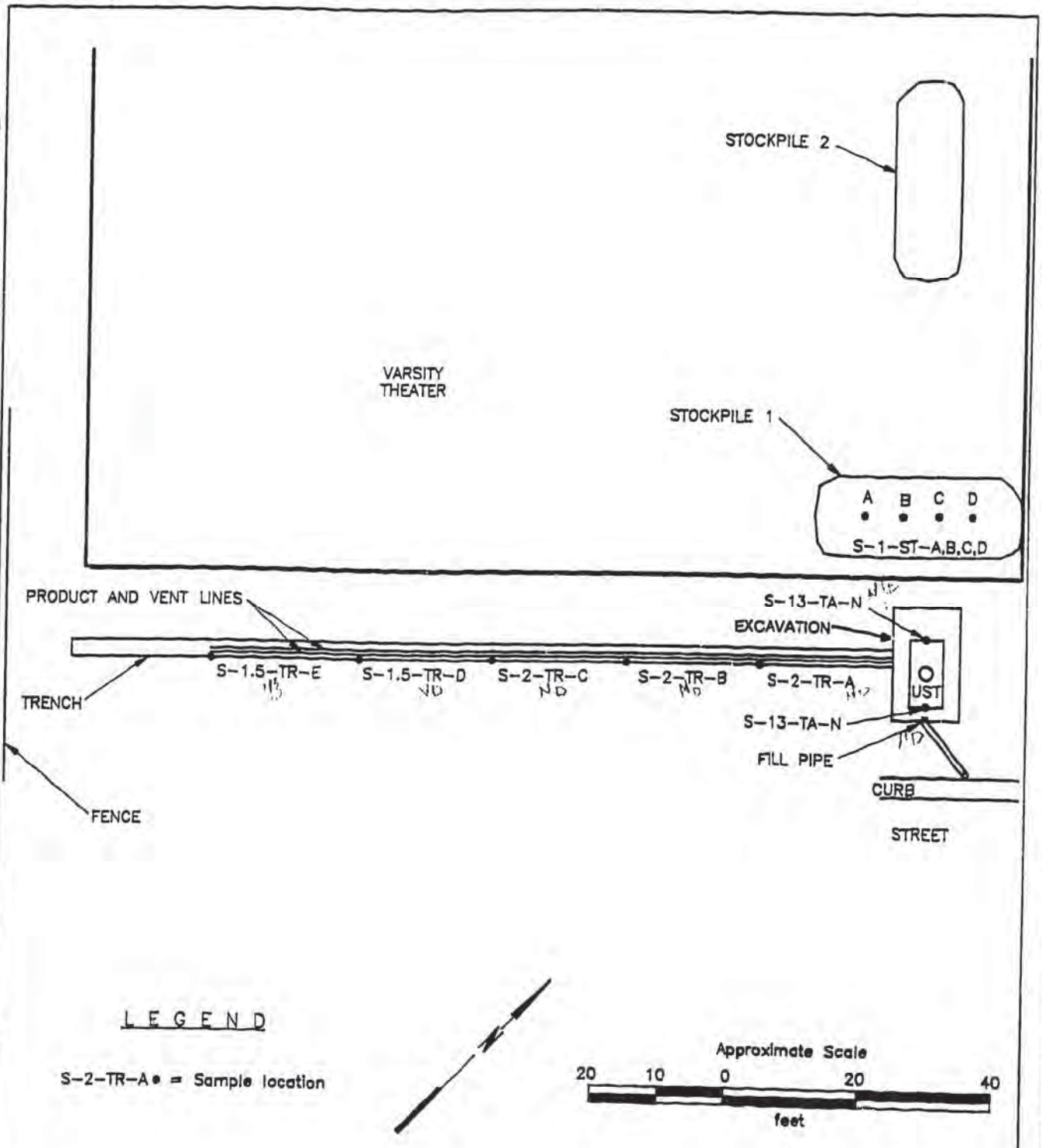
Source: U.S. Geological Survey
7.5-Minute Quadrangle
Palo Alto, California
Photorevised 1973

KTN & ASSOCIATES

PROJECT NO. KLC002

SITE VICINITY MAP
Varsity Theater
456 University Avenue
Palo Alto, California

PLATE 1

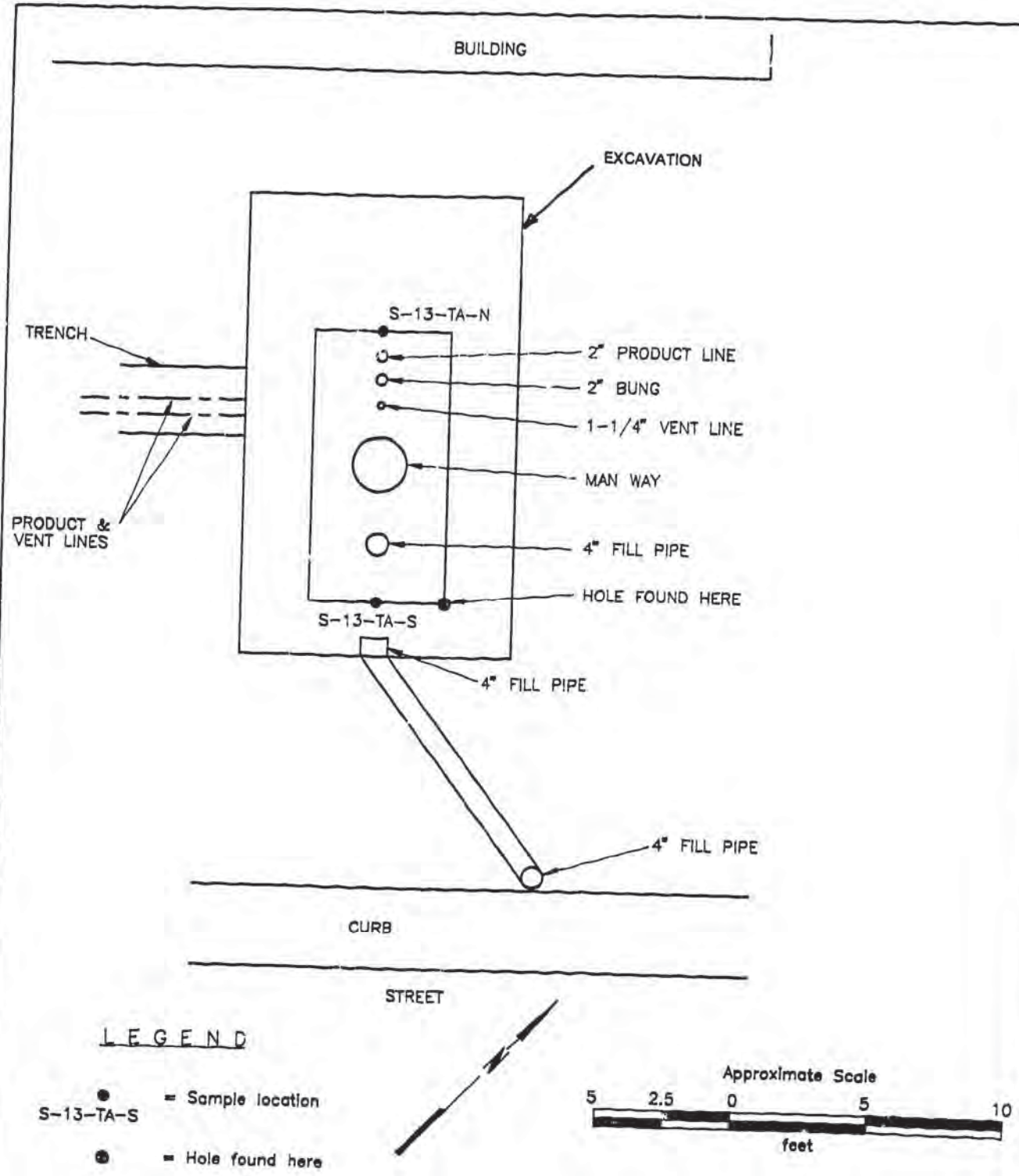


KTW & ASSOCIATES

PROJECT NO. [illegible]002

GENERALIZED SITE PLAN
Varsity Theater
456 University Avenue
Palo Alto, California

PLATE 2



KTW & ASSOCIATES

PROJECT NO. KLC002

DETAIL OF UST EXCAVATION
Varsity Theater
456 University Avenue
Palo Alto, California

PLATE 3

TABLES

TABLE 1
RESULTS OF LABORATORY ANALYSES OF SOIL SAMPLES
FOR OIL AND GREASE, AND BTEX
(Page 1 of 1)

Sample Number	Date Sampled	TRPH as Oil and Grease	Benzene	Toluene	Ethylbenzene	Xylenes
TANK EXCAVATION						
S-13-TA-N	9/22/95	<10	<0.005	<0.005	<0.005	<0.005
S-13-TA-S	9/22/95	<10	<0.005	<0.005	<0.005	<0.005
TRENCH EXCAVATION						
S-2-TR-A	9/22/95	<10	<0.005	<0.005	<0.005	<0.005
S-2-TR-B	9/22/95	<10	<0.005	<0.005	<0.005	<0.005
S-2-TR-C	9/22/95	<10	<0.005	<0.005	<0.005	<0.005
S-1.5-TR-D	9/22/95	<10	<0.005	<0.005	<0.005	<0.005
S-1.5-TR-E	9/22/95	43	<0.005	<0.005	<0.005	<0.005
STOCKPILE						
S-1-SP-A,B,C,D	9/22/95	39	<0.005	<0.005	<0.005	<0.005

Soil sample results are in milligrams per kilogram = parts per million
< = less than the detection limit of the laboratory analytical method
Sample identification:
S-13-TA-N = Soil sample - depth below ground surface in feet - tank excavation - cardinal direction
S-2-TR-A = Soil sample - depth below ground surface in feet - trench - sample location
S-1-SP-A,B,C,D = Soil sample - depth below ground surface in feet - stockpile - composite sample

TABLE 2
RESULTS OF LABORATORY ANALYSES OF SOIL SAMPLE FROM STOCKPILE 1 FOR METALS

Sample Number	Date Sampled	Cadmium	Chromium	Lead	Nickel	Zinc
STOCKPILE						
S-1-SP-A,B,C,D	9/22/95	0.014	0.11	2.1	0.86	1.3

Soil sample results are in milligrams per kilogram = parts per million
< = less than the detection limit of the laboratory analytical method
Sample identification:
S-1-SP-A,B,C,D = Soil sample - depth below ground level in feet - stockpile - composite sample

ATTACHMENT A

Permits

City of Palo Alto
FIRE PREVENTION BUREAU (415) 329-2184
250 HAMILTON AVENUE PALO ALTO, CALIFORNIA 94301

ID NUMBER

UNIFORM UNDERGROUND STORAGE TANK SYSTEM CLOSURE PERMIT APPLICATION/CLOSURE PLAN

For Use By All Jurisdictions, Cities and County, Within the Limits of the County of Santa Clara

1. Facility Name (Tank Site): VARSITY THEATRE Bldg. No.: ____
   Address: 456 UNIVERSITY AV City: PALO ALTO Zip: 94301
   EPA ID No.: CAC001132288 Contact Person: Craig French Phone No.: 415 326 2244
2. Tank Owner's Name: Palo Alto Theatre Corp
   Address: 700 EMERSON City: PALO ALTO Zip: 94301
3. Tank Operator's Name: VARSITY THEATRE (Retired)
   Address: 456 University City: Palo Alto Zip: 94301
4. Consultant (If Applicable): N/A
   Address: ____ City: ____ Zip: ____
   Contact Person: ____ Phone No.: ____
5. Tank Closure Contractor: KTW & ASSOCIATES INC
   Address: 3160 ETHAN WAY City: FREMONT Zip: 94538
   Contact Person: TERR SCHERMAN Phone No.: 510-659-1973

Hazardous Substance Removal Certificate: ✓ on file; ____ attached
Worker's Compensation Declaration: ✓ on file; ____ attached; ____ not applicable
Business License (if required): ____ on file; ____ attached; ✓ not applicable

6. Firm that will take soil/water samples: Clark & WITHAM INC Phone No.: 510 659 1965
7. State-certified laboratory that will analyze samples: McCampbell Analytical Phone No.: 510-798-1620

Shaded areas to be completed by local agency

Laboratory analyses shall test for:

	TPH G	TPH D	BTEX	TE Lead	CL Hydro	O&G	EPA 8270	pH	Other (Specify)
Tank 1			✓						
Tank 2									TK Gas 12K
Tank 3									
Tank 4									
Tank 5									
Tank 6									

Additional analyses may be required by inspector in field.

UGT Closure Permit Ap./Closure Plan - p. 2 of 2 Tank Site Address (from page 1): 456 University Av P.A.

8. Name of Licensed Transporter of Tanks: Erickson Inc.

EPA ID No.: CAD009466392 Phone No.: 510-235-1393

9. Destination of Tanks and Piping: TDS Facility Erickson Richmond Ca

10. Tank System: Size (gallons) Substance(s) Previously Contained

Tank 1 unknown (Volume 500 Gallons) Diesel/#4 Furnace Fuel/(aliphatic)

Tank 2 _____

Tank 3 _____

Tank 4 _____

Tank 5 _____

Tank 6 _____

If the owner/operator does not have a current Hazardous Materials Business Plan/HMMP which includes these tanks on file with the local agency, provide an 8-1/2" x 11" plot plan of the tanks to be closed. Indicate the nearest cross street to the facility, buildings immediately adjacent to the tanks, location(s) of tanks to be closed, and location of nearby utilities.

This Underground Tank Closure Permit expires 6 months from the date of closure plan approval. If tanks have not been closed within 6 months, a new closure permit application and appropriate fees may be required.

Facility closure inspections must be scheduled at least 48 hours in advance. Call the appropriate local agency to make necessary arrangements.

I certify that I have read the tank closure guidelines and declare that the above information is correct to the best of my knowledge. The owner of the tank(s) described above is aware of the pending closure. I agree to comply with all applicable city and county ordinances and state laws relating to hazardous materials/wastes, and hereby authorize representatives of local agencies to enter upon the within mentioned property for inspection purposes.

PETER SCHURMAN — Peter Schurman — 9/19/95

Applicant/Agent's Name (Print) Applicant/Agent's Signature Date

THIS APPROVAL CONSTITUTES A PERMIT FOR REMOVAL OF THE ABOVE LISTED TANKS

Agency _____ Date _____

Print Name _____ Signature _____

THIS CERTIFIES THAT ALL TANK SYSTEM CLOSURE ACTIVITIES ARE COMPLETE

Agency _____ Date _____

Print Name _____ Signature _____

- If contamination of any detectable concentration is found, contact the Santa Clara Valley Water District and/or Regional Water Quality Control Board for cleanup and/or remediation requirements.

Rev. 9/30/94

ATTACHMENT B

Hazardous Waste Manifest
and
Certificates of Disposal

State of California—Environmental Protection Agency
Form Approved OMB No. 2050-0039 (Expires 9-30-96)
Please print or type. Form designed for use on elite (12-pitch) typewriter.

See Instructions on back of page 6.

Department of Toxic Substances Control
Sacramento, California

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.	Manifest Document No.	2. Page 1 of 1	Information in the shaded areas is not required by Federal law.
CA C 0 0 1 1 3 2 2 8 8	0 2 1 8 1		

3. Generator's Name and Mailing Address: Palo Alto Terminal Corp. 700 Embarcadero St Palo Alto, Ca 94301

4. Generator's Phone: (415) 326-2244

A. State Manifest Document Number: 95602181

B. State Generator's ID:

5. Transporter 1 Company Name: EVERGREEN ENVIRONMENTAL SERVICES

6. US EPA ID Number: C A D 9 8 0 6 9 5 7 6 1

C. State Transporter's ID: 610572

D. Transporter's Phone: (510) 795-4400

7. Transporter 2 Company Name:

8. US EPA ID Number:

E. State Transporter's ID:

F. Transporter's Phone:

9. Designated Facility Name and Site Address: EVERGREEN OIL, INC. [illegible] Newark, CA 94560

10. US EPA ID Number: C A D 9 8 0 8 8 7 4 1 8

G. State Facility's ID: C A D 0 8 0 8 8 7 4 1 8

H. Facility's Phone: (510) 795-4400

11. US DOT Description (including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste Number
a. Oil And Water, NON-RCRA HAZARDOUS WASTE, LIQUID	0 0 1	T T	0 0 1 0 0	G	State 221 / EPA/Other NONE
b.					State / EPA/Other
c.					State / EPA/Other
d.					State / EPA/Other

J. Additional Descriptions for Materials Listed Above

K. Handling Codes for Wastes Listed Above: a. b. c. d.

15. Special Handling Instructions and Additional Information

IN EMERGENCY
CALL CHEMTREC
1-800-424-9300
DOT ERG 31 WEAR PROTECTIVE EQUIPMENT

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name	Signature	Month	Day	Year
[illegible]	[signature]	0 9	2 0	9 5

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
Fernando Cabezas	[signature]	0 9	2 0	9 5

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

19. Discrepancy Indication Space

20. Facility Owner or Operator Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name	Signature	Month	Day	Year

DO NOT WRITE BELOW THIS LINE.

GENERATOR

TRANSPORTER

FACILITY

IN CASE OF EMERGENCY OR SPILL, CALL THE NATIONAL RESPONSE CENTER 1-800-424-8802; WITHIN CALIFORNIA, CALL 1-800-852-7550

95602181

DTSC 8022A (1/95)
EPA 8700—22

State of California—Environmental Protection Agency
Form Approved OMB No. 2050-0039 (Expires 9-30-96)
Please print or type. Form designed for use on elite (12-pitch) typewriter.

See Instructions on back of page 6.

Department of Toxic Substances Control
Sacramento, California

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.	Manifest Document No.	2. Page 1	Information in the shaded areas is not required by Federal law.
CA C000113722886	010919 4	1 of 1	

3. Generator's Name and Mailing Address
~~[illegible]~~
~~[illegible] EDISON WAY~~
~~[illegible] CA 94538~~
~~[illegible]~~
PALO ALTO THEATRE CO
700 EMERSON ST
PALO ALTO CA 94301
415 327-2744

4. Generator's Phone ~~[illegible]~~

A. State Manifest Document Number: 95600994

B. State Generator's ID

5. Transporter 1 Company Name: EVERGREEN ENVIRONMENTAL SERVICES

6. US EPA ID Number: CAD980695761

C. State Transporter's ID: 610575

D. Transporter's Phone: (510) 795-2400

7. Transporter 2 Company Name

8. US EPA ID Number

E. State Transporter's ID

F. Transporter's Phone

9. Designated Facility Name and Site Address
EVERGREEN OIL, INC.
6880 Smith Avenue
Newark, CA 94560

10. US EPA ID Number: CAD980887418

G. State Facility's ID: CAD980887418

H. Facility's Phone: (510) 795-2400

11. US DOT Description (including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste Numbers
a. WATER - OIL NON-RCRA HAZARDOUS WASTE, LIQUID	001	TT	00070	G	State EPA/Other
b.					State EPA/Other
c.					State EPA/Other
d.					State EPA/Other

J. Additional Descriptions for Materials Listed Above
Evergreen Hazardous waste manifest

K. Handling Codes for Wastes Listed Above
b.
d.

15. Special Handling Instructions and Additional Information
IN EMERGENCY
CALL CHEMTREC
1-800-424-9300
DOT ERG 31 WEAR PROTECTIVE EQUIPMENT

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name	Signature	Month	Day	Year
PETER SCHURMAN		09	12	95

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
AL MISQUEZ		09	12	95

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

19. Discrepancy Indication Space

20. Facility Owner or Operator Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name	Signature	Month	Day	Year

DO NOT WRITE BELOW THIS LINE.

GENERATOR
TRANSPORTER
FACILITY

IN CASE OF EMERGENCY OR SPILL, CALL THE NATIONAL RESPONSE CENTER 1-800-424-8802; WITHIN CALIFORNIA, CALL 1-800-852-7550

95600994

DTSC 8022A (1/95)
EPA 8700—22

Blue: GENERATOR SENDS THIS COPY TO DTSC WITHIN 30 DAYS.
To: P.O. Box 400, Sacramento, CA 95812-0400

State of California—Environmental Protection Agency
Form Approved OMB No. 2050-0039 (Expires 9-30-96)
Please print or type. Form designed for use on elite (12-pitch) typewriter.

See Instructions on back of page 6.

Department of Toxic Substances Con
Sacramento, California

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.	Manifest Document No.	2. Page 1	Information in the shaded areas is not required by Federal law.
CAC001131288	9211518	1 of 1	tktmp CA93TEMP

3. Generator's Name and Mailing Address
PALO ALTO THEATRE CORP.
700 EMERSON ST PALO ALTO CA 94301

4. Generator's Phone 415 3262244

A. State Manifest Document Number: 95592158

B. State Generator's ID:

5. Transporter 1 Company Name: ERICKSON INC.

6. US EPA ID Number: CAD009146391

C. State Transporter's ID: 427428

D. Transporter's Phone: 510-235-1393

7. Transporter 2 Company Name

8. US EPA ID Number

E. State Transporter's ID:

F. Transporter's Phone:

9. Designated Facility Name and Site Address
ERICKSON INC.
255 PARR BLVD.
RICHMOND, CA 94801

10. US EPA ID Number: CAD009466392

G. State Facility's ID:

H. Facility's Phone: (510) 235 - 1393

11. US DOT Description (including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste Numbers
a. NON-RCRA HAZARDOUS WASTE SOLID: WASTE EMPTY STORAGE TANK & ASSOCIATED PIPES	001	TP	015010	P	State 512 EPA/Other NONE
b.					State EPA/Other
c.					State EPA/Other
d.					State EPA/Other

Erickson Hazardous waste manifest

J. Additional Descriptions for Materials Listed Above

K. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information
KEEP AWAY FROM SOURCES OF IGNITION. ALWAYS WEAR HARD HATS WHEN WORKING AROUND UGSTs.

24 HR. EMERGENCY CONTACT NAME: CRAIG FRENCH
24 HR. EMERGENCY PHONE: 408-568-8889

OE P.O.: OE JOB: 966653

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name	Signature	Month	Day	Year
X PETER SCHIRMAN		09	12	95

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
SAM G. RODRIGUEZ		09	12	95

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

19. Discrepancy Indication Space

20. Facility Owner or Operator Certification of receipt of hazardous materials covered by this manifest except as noted in item 19.

Printed/Typed Name	Signature	Month	Day	Year

DO NOT WRITE BELOW THIS LINE.

GENERATOR

TRANSPORTER

FACILITY

IN CASE OF EMERGENCY OR SPILL, CALL THE NATIONAL RESPONSE CENTER 1-800-424-8802; WITHIN CALIFORNIA, CALL 1-800-852-7550

95592158

DTSC 8022A (1/95)
EPA 8700—22

Blue: GENERATOR SENDS THIS COPY TO DTSC WITHIN 30 DAYS.
To: P.O. Box 400, Sacramento, CA 95812-0400

Copy: Craig Brenner

No. 890760

BFI Waste Systems
BROWNING-FERRIS INDUSTRIES

NON-HAZARDOUS SPECIAL WASTE MANIFEST

GENERATOR

Generator Name PALO ALTO THEATER CORP. Generating Location VARSITY THEATER

Address 700 EMERSON ST Address 456 UNIVERSITY AVE

PALO ALTO CA 94301 PALO ALTO CA

Phone No. 415-326-2424 Phone No. 415-328-5259

BFI Waste Code CA 405 092695 54209

Description of Waste: Soil

Quantity	Units	Containers No.	Containers Type
	Y		T

Type: D - Drum, C - Carton, B - Bag, T - Truck, P - Pounds, Y - Yards, O - Other

I hereby certify that the above named material does not contain free liquid as defined by 40 CFR Part 260.10 or any applicable state law, is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations.

PETE SCHERMAN — Generator Authorized Agent Name — Signature — Shipment Date

TRANSPORTER

Truck No. 93 Phone No. (415) 345-2444

Transporter Name GREGS TRUCK SERVICE Driver Name (Print) RAYMOND [illegible]

Address PO BOX 1626 Vehicle License No./State CA 3[illegible]

SAN [illegible] CA 94401 Vehicle Certification

I hereby certify that the above named material was picked up at the generator site listed above.

Driver Signature — Shipment Date 10/9/95

I hereby certify that the above named material was delivered without incident to the destination listed below.

Driver Signature — Delivery Date 10/9/95

DESTINATION

Site Name EFI / LIVERMORE Phone No. 510-447-0401

Address VASCO RD

I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.

Name of Authorized Agent — Signature — Receipt Date 10/9/95

Pass Code

BF 280-730 11/94

GENERATOR RETAIN

ATTACHMENT C

Certified Analytical Results

Silicon Valley Chemlabs, Inc.

September 18, 1995

Performance • Quality • Safety

Report for: Devcon Construction Co.
Attn: Mr. Ken Sullivan
555 Los Coches
Milpita.CA 95035

Project# 2361
P.O. # 94109

Subject: **Analysis of Unknown Oil Sample**

One unknown black liquid oil sample has been analyzed for its chemical composition using FT-IR (Fourier Transform Infrared) spectrometry, GC/Mass Spectrometry and other standard analytical methods

Sample#	**Description**
2361	Dark Brown Oil

A portion of the oil sample was dissolved or extracted using a spectroscopy grade organic solvent and the extracted sample residue was deposited on a polished KBr window. A thin film cast of the neat material was also prepared on a KBr window and the FT-IR spectra of the sample was scanned and recorded. The FT-IR spectra of the sample was recorded using a Perkin Elmer 1650 FT-IR spectrometer with a DTGS detector. The FT-IR result was correlated with the spectra of >11,000 pure organic compounds and polymers from the Aldrich Library of FT-IR.

For Gas Chromatography analysis, the sample was extracted with methylene chloride (CH2CL2) and injected in a 30 m DB-5 fused Silica capillary column and was analyzed on a Hewlett packard 5890 GC/MS system.The volatile organic components of the samples were detected on a FID detector.

The FT-IR results indicate that the material is a heavy aliphatic hydrocarbon mixture, a petroleum base product. The GC results confirms that the material is 100% aliphatic hydrocarbon, heavy petroleum extract . The unknown material was identified as a hydrocarbon based (medium viscosity, low molecular weight) light asphalt.

Copies of the FT-IR spectra and GC chromatograms are enclosed.

Respectfully submitted,

Javad J. Sahbari, Ph.D.
R & D / Lab Director

3446 De La Cruz Blvd., Santa Clara, CA 95054 Phone: 408-970-0656 800-408-CHEM FAX: 408-970-0659

McCAMPBELL ANALYTICAL INC. | 110 2nd Avenue South, #D7, Pacheco, CA 94553
Tele: 510-798-1620 Fax: 510-798-1622

Clark & Witham, Inc. 3499 Edison Way Fremont, CA 94538	Client Project ID: # KLC-002: Varsity Theater	Date Sampled: 09/22/95
		Date Received: 09/22/95
	Client Contact: Peter Schurman	Date Extracted: 09/23/95
	Client P.O:	Date Analyzed: 09/23/95

Total Recoverable Petroleum Hydrocarbons as Oil & Grease (with Silica Gel Clean-up) by Scanning IR Spectrometry*

EPA method 418.1 or 9073; Standard Methods 5520 C&F

Lab ID	Client ID	Matrix	TRPH+
56745	S-2-TR-A	S	ND
56746	S-1.5-TR-E	S	43
56747	S-1.5-TR-D	S	ND
56748	S-2-TR-C	S	ND
56749	S-2-TR-B	S	ND
56750	S-1-SP-A,B,C,D	S	39
56751	S-13-TA-N	S	ND
56752	S-13-TA-S	S	ND
Reporting Limit unless otherwise stated; ND means not detected above the reporting limit		W	1.0 mg/L
		S	10 mg/kg

* water samples are reported in mg/L and soils in mg/kg

surrogate diluted out of range

+ At the laboratory's discretion, one positive sample may be run by direct injection chromatography with FID detection. The following comments pertain to this GC result: a) gasoline-range compounds (C6-C12) are present; b) diesel range compounds (C10-C23) are present; c) oil-range compounds (> C18) are present; d) other patterned solvent (?); e) isolated peaks; f) GC compounds are absent or insignificant relative to TRPH inferring that complex biologically derived molecules (lipids?)are the source of IR absorption; h) a lighter than water immiscible sheen is present; i) liquid sample that contains greater than ~ 5 vol. % sediment

DHS Certification No. 1644

Edward Hamilton, Lab Director

McCAMPBELL ANALYTICAL INC. | 110 2nd Avenue South, #D7, Pacheco, CA 94553
Tele: 510-798-1620 Fax: 510-798-1622

Clark & Witham, Inc. 3499 Edison Way Fremont, CA 94538	Client Project ID: # KLC-002; Varsity Theater	Date Sampled: 09/22/95
		Date Received: 09/22/95
	Client Contact: Peter Schurman	Date Extracted: 09/22/95
	Client P.O:	Date Analyzed: 09/22-09/23/95

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline*, with BTEX*

EPA methods 5030, modified 8015, and 8020 or 602; California RWQCB (SF Bay Region) method GCFID(5030)

Lab ID	Client ID	Matrix	TPH(g)+	Benzene	Toluene	Ethylbenzene	Xylenes	% Rec. Surrogate
56745	S-2-TR-A	S	---	ND	ND	ND	ND	103
56746	S-1.5-TR-E	S	---	ND	ND	ND	ND	104
56747	S-1.5-TR-D	S	---	ND	ND	ND	ND	105
56748	S-2-TR-C	S	---	ND	ND	ND	ND	100
56749	S-2-TR-B	S	---	ND	ND	ND	ND	103
56750	S-1-SP-A,B,C,D	S	---	ND	ND	ND	ND	103
56751	S-13-TA-N	S	---	ND	ND	ND	ND	99
56752	S-13-TA-S	S	---	ND	ND	ND	ND	96
Reporting Limit unless otherwise stated; ND means not detected above the reporting limit		W	50 ug/L	0.5	0.5	0.5	0.5	
		S	1.0 mg/kg	0.005	0.005	0.005	0.005	

* water and vapor samples are reported in ug/L, soil samples in mg/kg, and all TCLP extracts in mg/L

cluttered chromatogram; sample peak coelutes with surrogate peak

+ The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation: a) unmodified or weakly modified gasoline is significant; b) heavier gasoline range compounds are significant(aged gasoline?); c) lighter gasoline range compounds (the most mobile fraction) are significant; d) gasoline range compounds having broad chromatographic peaks are significant; biologically altered gasoline?; e) TPH pattern that does not appear to be derived from gasoline (?); f) one to a few isolated peaks present; g) strongly aged gasoline or diesel range compounds are significant; h) lighter than water immiscible sheen is present; i) liquid sample that contains greater than ~ 5 vol. % sediment; j) no recognizable pattern.

DHS Certification No. 1644

Edward Hamilton, Lab Director

McCAMPBELL ANALYTICAL INC. | 110 2nd Avenue South, #D7, Pacheco, CA 94553
Tele: 510-798-1620 Fax: 510-798-1622

Clark & Witham, Inc. 3499 Edison Way Fremont, CA 94538	Client Project ID: # KLC-002; Varsity Theater	Date Sampled: 09/22/95
		Date Received: 09/22/95
	Client Contact: Peter Schurman	Date Extracted: 09/22-09/24/95
	Client P.O:	Date Analyzed: 09/24/95

LUFT Metals*

EPA analytical methods 6010/200.7, 239.2+

Lab ID	Client ID	Matrix	Extraction°	Cadmium	Chromium	Lead	Nickel	Zinc	% Rec. Surrogate
56750	S-1-SP-A,B,C,D	S	STLC	0.014	0.11	2.1	0.86	1.3	NA
Reporting Limit unless otherwise stated; ND means not detected above the reporting limit		S	TTLC	0.5 mg/L	0.5	3.0	2.0	1.0	
		W	TTLC	0.01 mg/kg	0.005	0.005	0.02	0.01	
		—	STLC,TCLP	0.01 mg/L	0.05	0.2	0.05	0.05	

* soil samples are reported in mg/kg, and water samples and all STLC & TCLP extracts in mg/L

+ Lead is analysed using EPA method 6010 (ICP)for soils, STLC & TCLP extracts and method 239.2 (AA Furnace) for water samples

° EPA extraction methods 1311(TCLP), 3010/3020(water,TTLC), 3040(organic matrices,TTLC), 3050(solids,TTLC); STLC from CA Title 22

surrogate diluted out of range; N/A means surrogate not applicable to this analysis

1) liquid sample that contains greater than ~ 2 vol. % sediment; this sediment is extracted with the liquid, in accordance with EPA methodologies and can significantly effect reported metal concentrations.

DHS Certification No. 1644

Edward Hamilton, Lab Director

4920

4'WX

{0805CoC.WK1}

CLARK & WITHAM, INC. CHAIN OF CUSTODY

Project No.	Project Name/Site	Turn Around Time:
KLC-002	Varsity Theater	24 hr

Sampler

(Print) Robert McGrath (Signature) Robert McGrath

P.O. #

ANALYSES REQUESTED

TRPH Otc →

~~8015 (5520EF)~~ BTEX (EPA602) TPHd TPHg

NOTE

Sample Id.	Date	Time	Compst.	Grab	Iced	Num.Cont.				Comments:
S-2-TR-A	9/22/95	3:25		X	X	1 sleeve	X	X		
S-1.5-TR-E	9/22/95	2:35		X	X	1 sleeve	X	X		NOTE
S-1.5-TR-D	9/22/95	2:40		X	X	1 sleeve	X	X		LUFT 5 Analysis by
S-2-TR-C	9/22/95	2:45		X	X	1 sleeve	X	X		STLC
S-2-TR-B	9/22/95	2:50		X	X	1 sleeve	X	X		
S-1-SP-A,B,C,D	9/22/95	3:00	X	X	X	4 sleeves	X	X	X	56745
S-13-TA-N	9/22/95	3:05		X	X	1 sleeve	X	X		56746
S-13-TA-S	9/22/95	3:10		X	X	1 sleeve	X	X		56747
										56748
										Please return original
										and include chromato
										laboratory reports. 56749
										56750
										56751
										56752

PRESERVATIVE
APPROPRIATE
CONTAINERS

Relinquished By:	Date	Time	Received By:	Call Results To:	Send Results T
Robert McGrath	9/22/95	1530	Peter Schurman	☐ (510) 659-1805	
Relinquished By: Peter Schurman	Date 9/22/95	Time 1933	Received By:	Project Manager: Peter Schurman	Clark & Witham, Inc.
Relinquished By:	Date	Time	Received By:	Condition When Received:	3499 Edison Way
Relinquished By:	Date	Time	Received By Laboratory:	Laboratory Name:	Fremont, CA 94538
					FAX: (510) 659-6344

SANTA CLARA
VALLEY WATER DISTRICT

95 NOV 9 AM : 11

APPENDIX E: AERIAL PHOTOGRAPHS

Proposed Palo Alto Parking Structure
375 Hamilton Avenue
Palo Alto, CA 94301

Inquiry Number: 5021939.12
August 15, 2017

The EDR Aerial Photo Decade Package

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

EDR Aerial Photo Decade Package

08/15/17

Site Name:

Proposed Palo Alto Parking Str
375 Hamilton Avenue
Palo Alto, CA 94301
EDR Inquiry # 5021939.12

Client Name:

WSP USA
6011 West St. Josephs Suite 400
Lansing, MI 48917-0000
Contact: Adam Heft

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Search Results:

Year	Scale	Details	Source
2012	1"=500'	Flight Year: 2012	USDA/NAIP
2010	1"=500'	Flight Year: 2010	USDA/NAIP
2009	1"=500'	Flight Year: 2009	USDA/NAIP
2005	1"=500'	Flight Year: 2005	USDA/NAIP
1998	1"=500'	Flight Date: August 27, 1998	USDA
1991	1"=500'	Acquisition Date: October 30, 1991	USGS/DOQQ
1982	1"=500'	Flight Date: July 05, 1982	USDA
1974	1"=500'	Flight Date: June 26, 1974	USGS
1968	1"=500'	Flight Date: June 14, 1968	USGS
1963	1"=500'	Flight Date: June 24, 1963	USGS
1958	1"=500'	Flight Date: July 21, 1958	USGS
1956	1"=500'	Flight Date: July 02, 1956	USDA
1948	1"=500'	Flight Date: September 26, 1948	USDA
1943	1"=500'	Flight Date: October 05, 1943	USDA
1939	1"=500'	Flight Date: August 01, 1939	USDA

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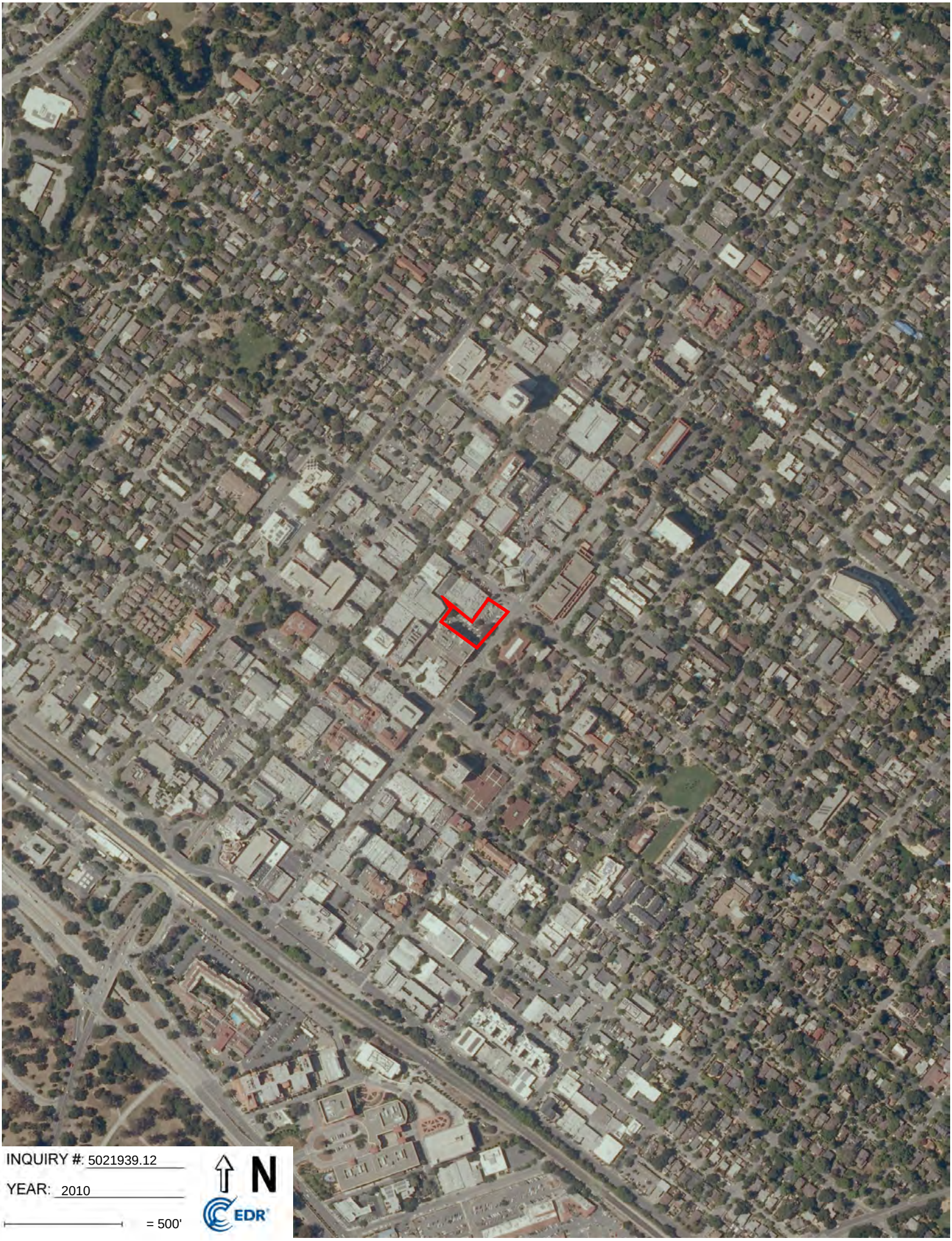
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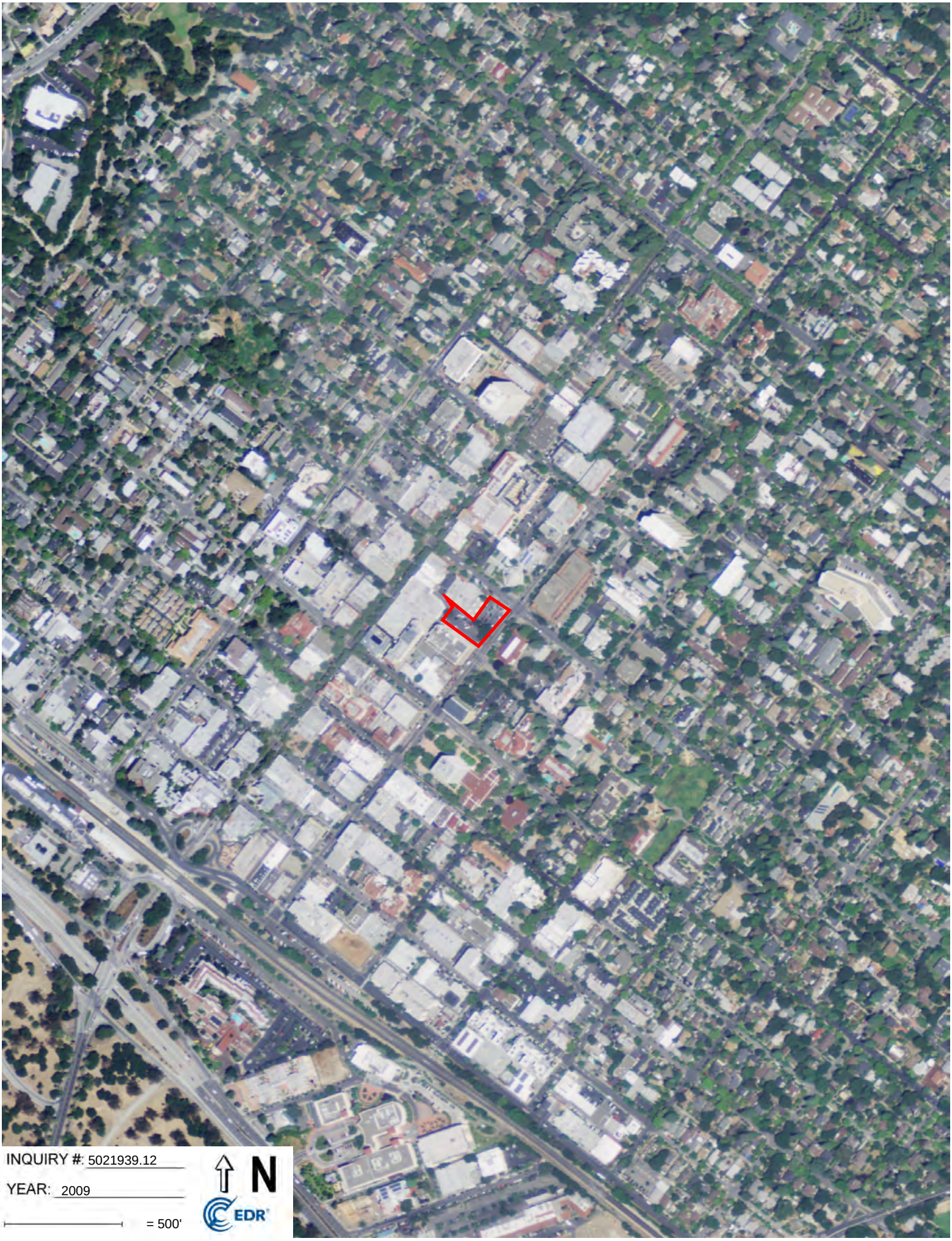
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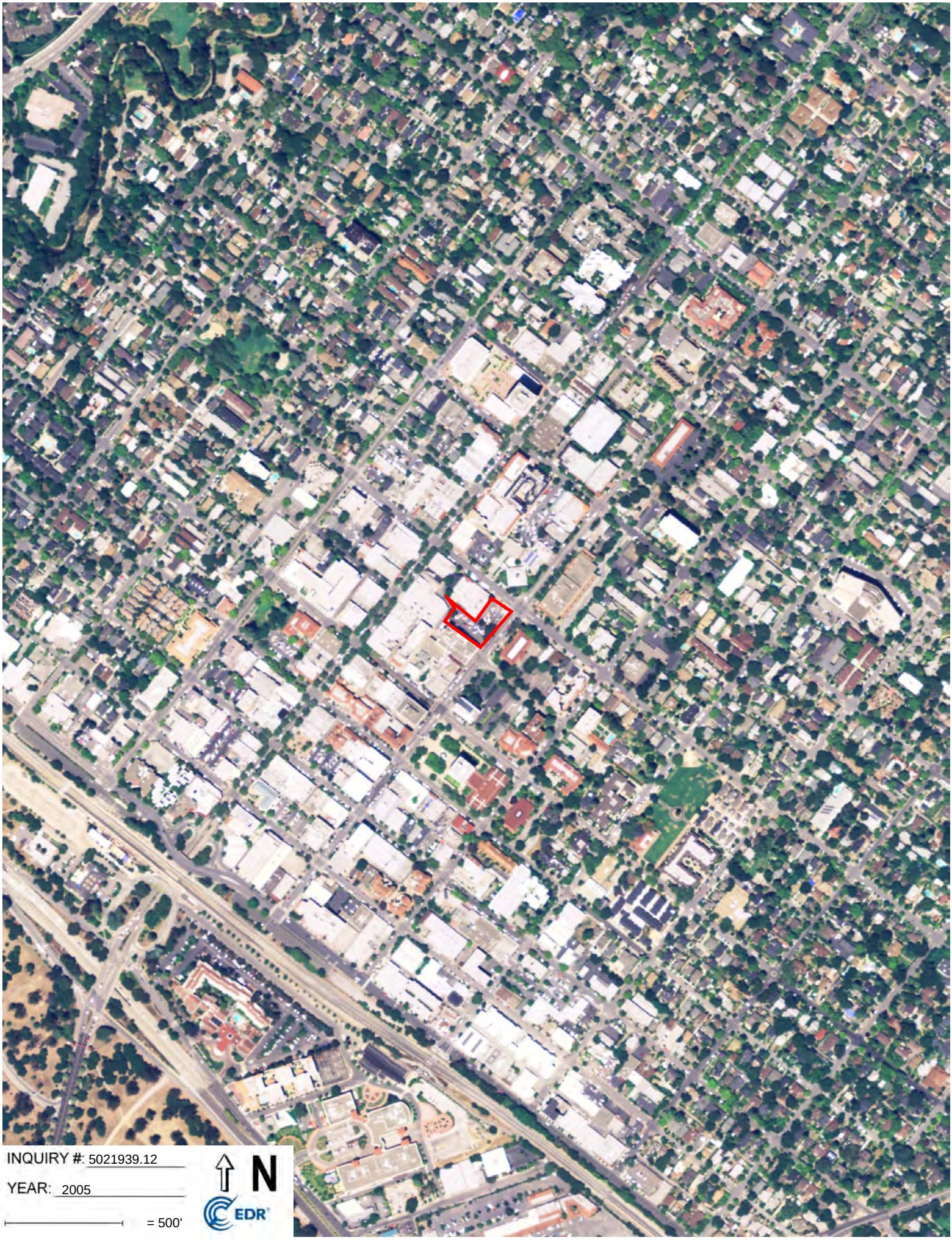
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EDR


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EDR

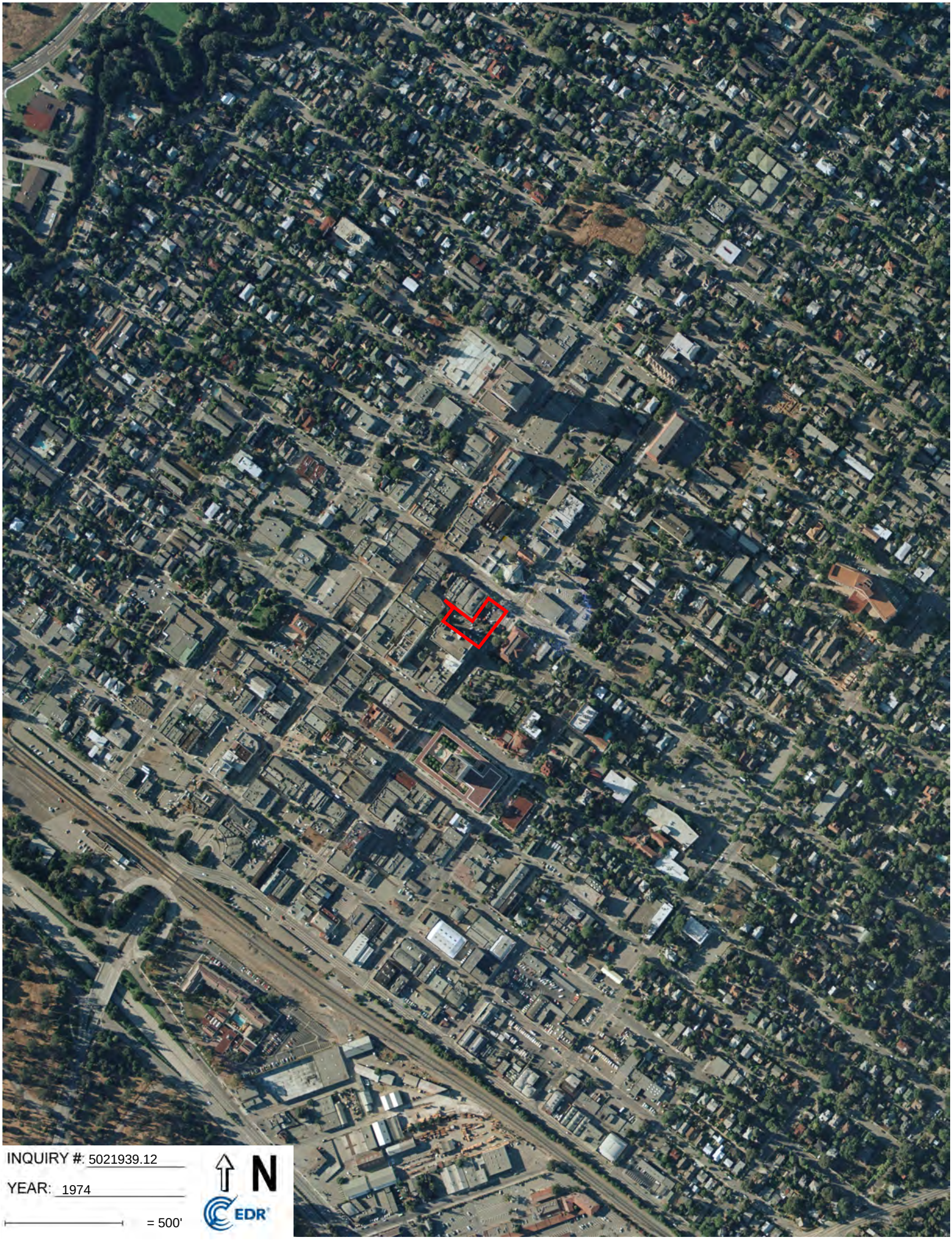

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EDR


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YEAR: 1991
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EDR


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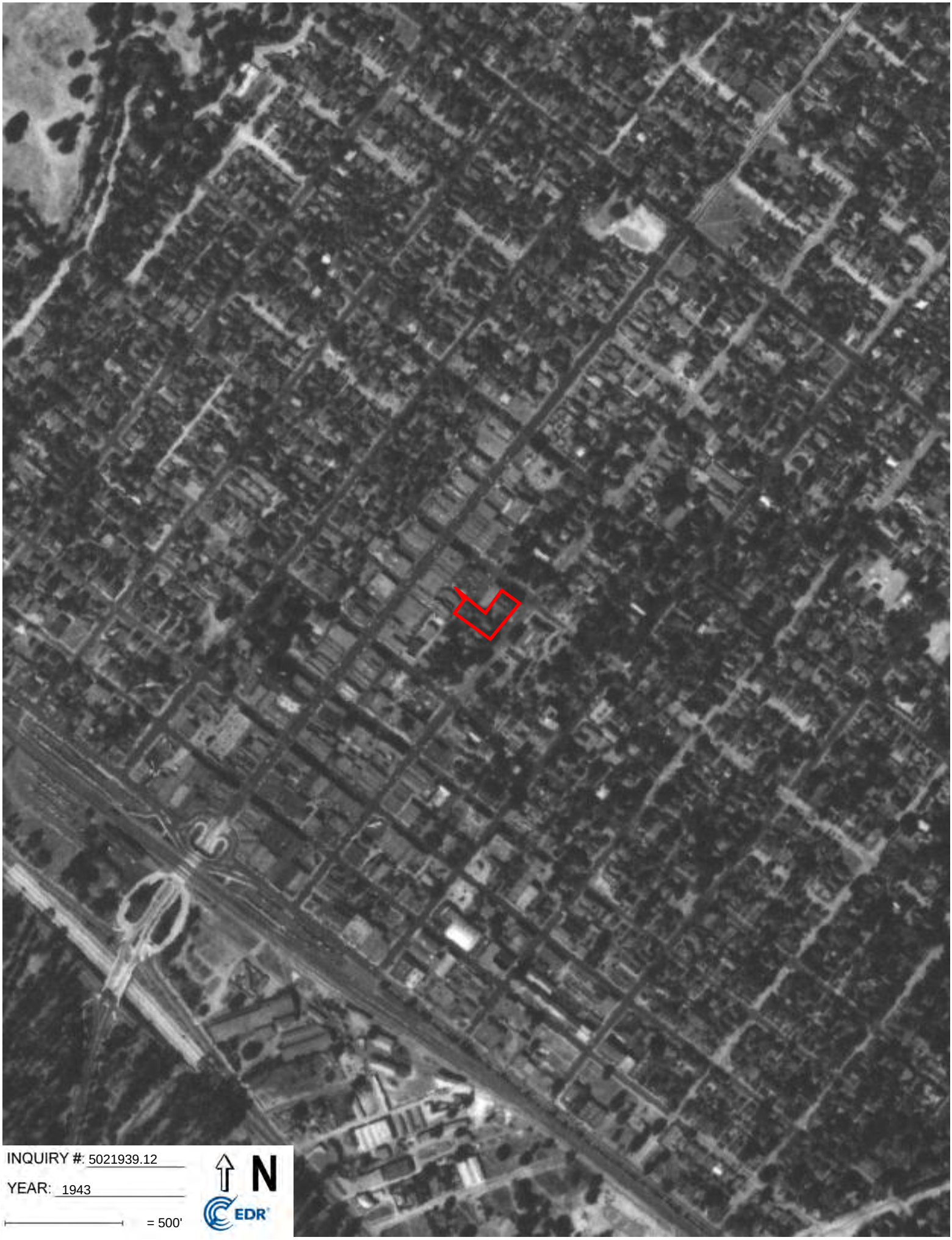

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EDR


INQUIRY #: 5021939.12
YEAR: 1956
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EDR


INQUIRY #: 5021939.12
YEAR: 1948
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EDR


INQUIRY #: 5021939.12
YEAR: 1943
= 500'
N
EDR


INQUIRY #: 5021939.12
YEAR: 1939
= 500'
N
EDR

APPENDIX F: SANBORN™ FIRE INSURANCE MAPS

Proposed Palo Alto Parking Structure
375 Hamilton Avenue
Palo Alto, CA 94301

Inquiry Number: 5021939.3
August 15, 2017

Certified Sanborn® Map Report

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

Certified Sanborn® Map Report

08/15/17

Site Name:

Proposed Palo Alto Parking Str
375 Hamilton Avenue
Palo Alto, CA 94301
EDR Inquiry # 5021939.3

Client Name:

WSP USA
6011 West St. Josephs Suite 400
Lansing, MI 48917-0000
Contact: Adam Heft

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The Sanborn Library is continually enhanced with newly identified map archives. This report accesses all maps in the collection as of the day this report was generated.

Certified Sanborn Results:

Certification # 971B-42E7-9B29

PO # NA

Project 13396B

Maps Provided:

1978	1904
1969	1901
1956	1897
1949	1895
1948	
1947	
1924	
1908	

Sanborn® Library search results

Certification #: 971B-42E7-9B29

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- ☑ Library of Congress
- ☑ University Publications of America
- ☑ EDR Private Collection

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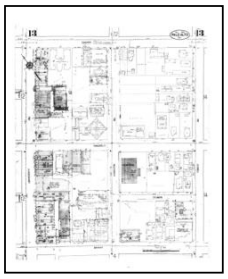
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Sanborn Sheet Key

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1978 Source Sheets

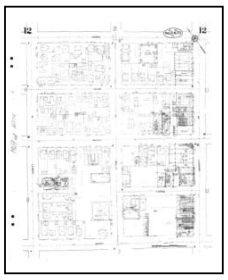


Volume 1, Sheet 13
1978



Volume 1, Sheet 12
1978

1969 Source Sheets

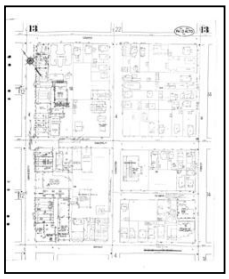


Volume 1, Sheet 12
1969

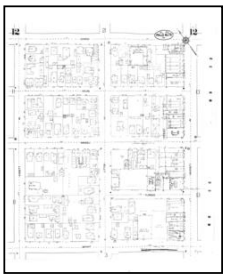


Volume 1, Sheet 13
1969

1956 Source Sheets



Volume 1, Sheet 13
1956

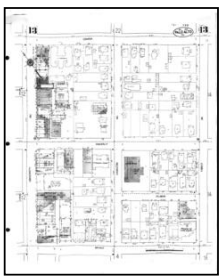


Volume 1, Sheet 12
1956

1949 Source Sheets



Volume 1, Sheet 12
1949

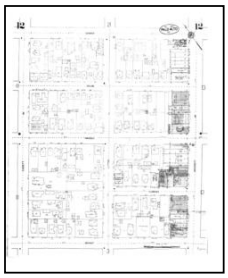


Volume 1, Sheet 13
1949

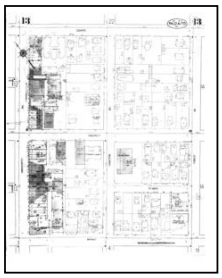
Sanborn Sheet Key

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1948 Source Sheets



Volume 1, Sheet 12
1948

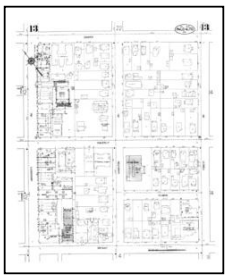


Volume 1, Sheet 13
1948

1947 Source Sheets

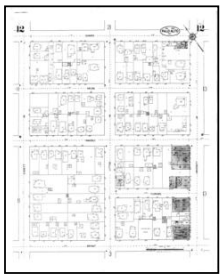


Volume 1, Sheet 12
1947

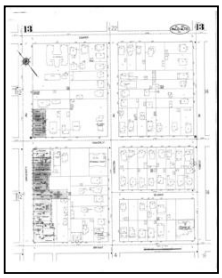


Volume 1, Sheet 13
1947

1924 Source Sheets



Volume 1, Sheet 12
1924

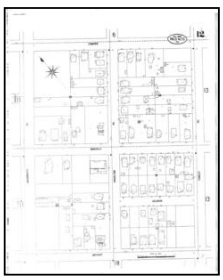


Volume 1, Sheet 13
1924

1908 Source Sheets



Volume 1, Sheet 11
1908



Volume 1, Sheet 12
1908

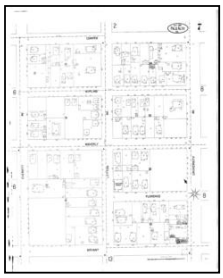


Volume 1, Sheet 18
1908

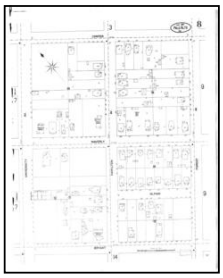
Sanborn Sheet Key

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1904 Source Sheets



Volume 1, Sheet 7
1904

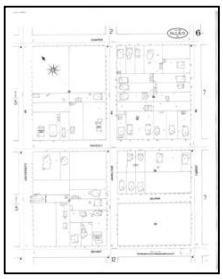


Volume 1, Sheet 8
1904

1901 Source Sheets

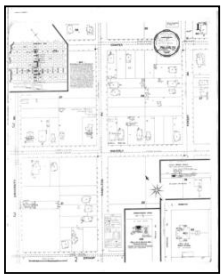


Volume 1, Sheet 5
1901

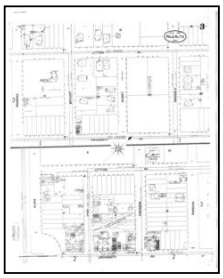


Volume 1, Sheet 6
1901

1897 Source Sheets

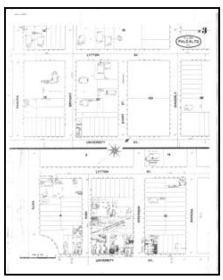


Volume 1, Sheet Keymap/Sheet1
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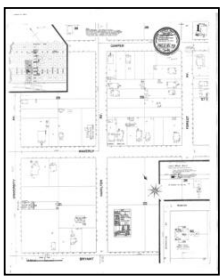


Volume 1, Sheet 3
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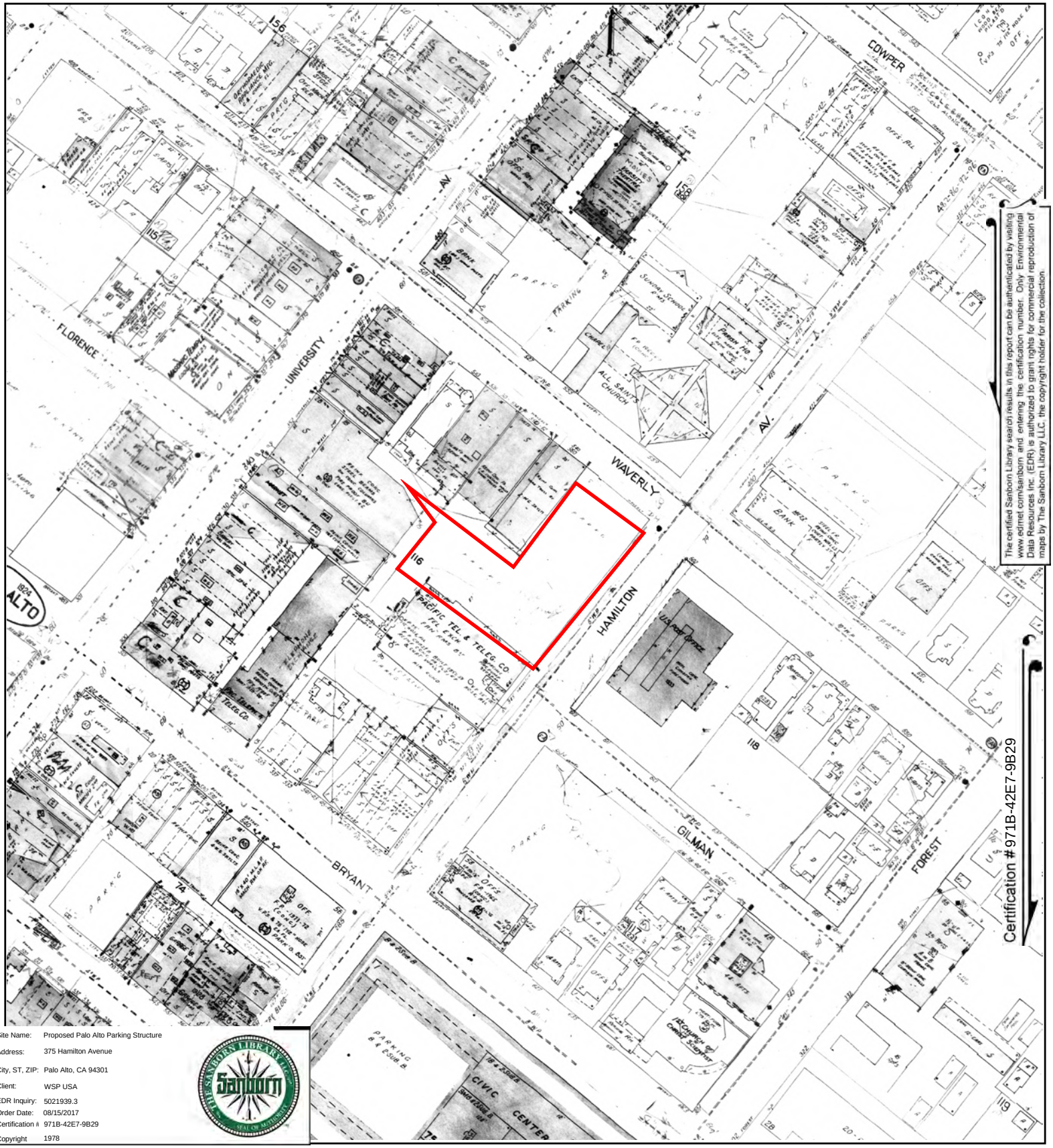
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Volume 1, Sheet 3
1895



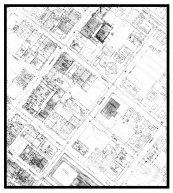
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1895

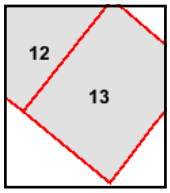


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Address:	375 Hamilton Avenue
City, ST, ZIP:	Palo Alto, CA 94301
Client:	WSP USA
EDR Inquiry:	5021939.3
Order Date:	08/15/2017
Certification #:	971B-42E7-9B29
Copyright	1978

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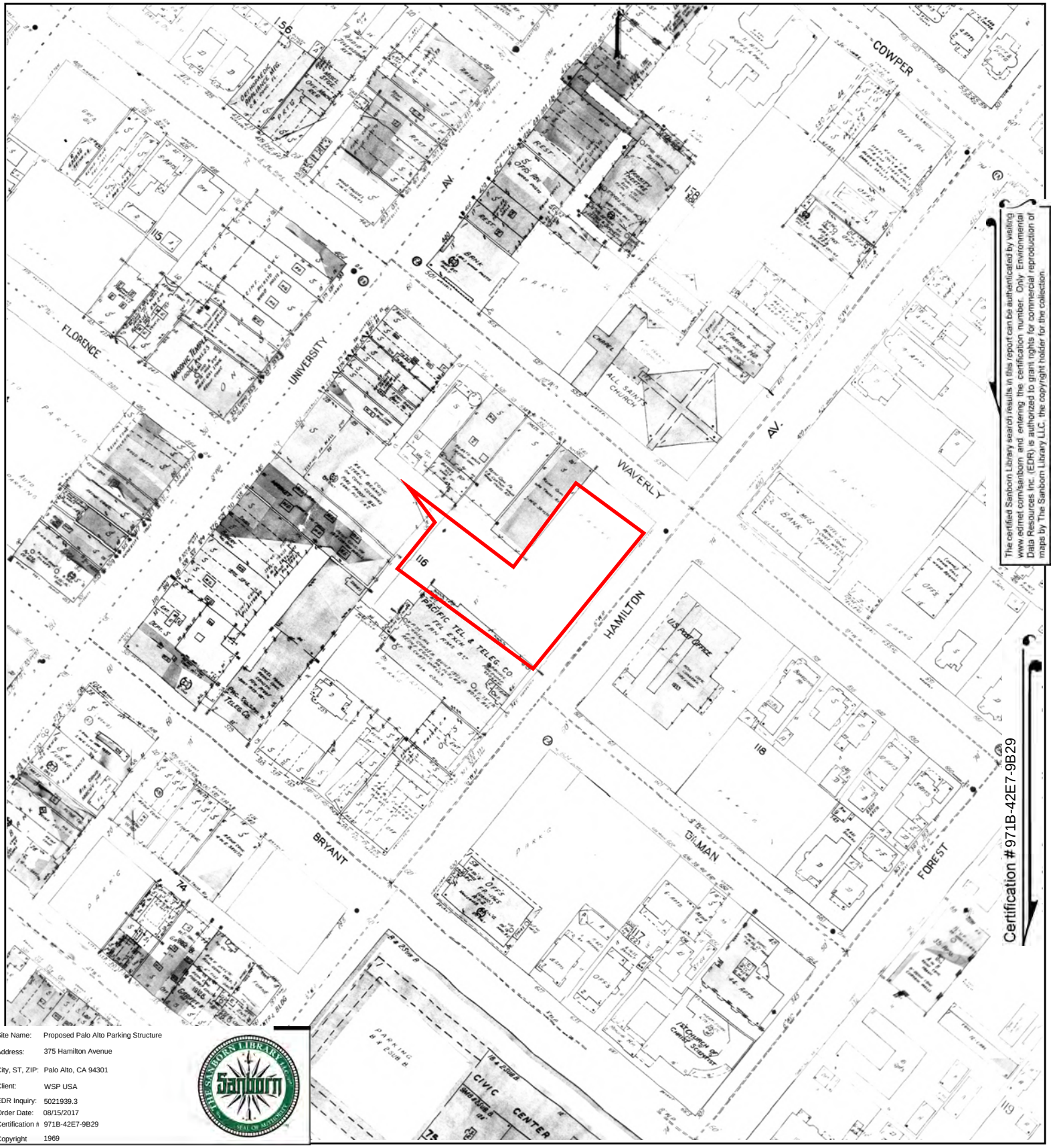




Volume 1, Sheet 12
Volume 1, Sheet 13

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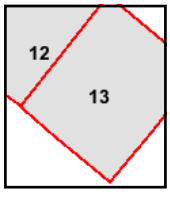


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Client:	WSP USA
EDR Inquiry:	5021939.3
Order Date:	08/15/2017
Certification #	971B-42E7-9B29
Copyright	1969

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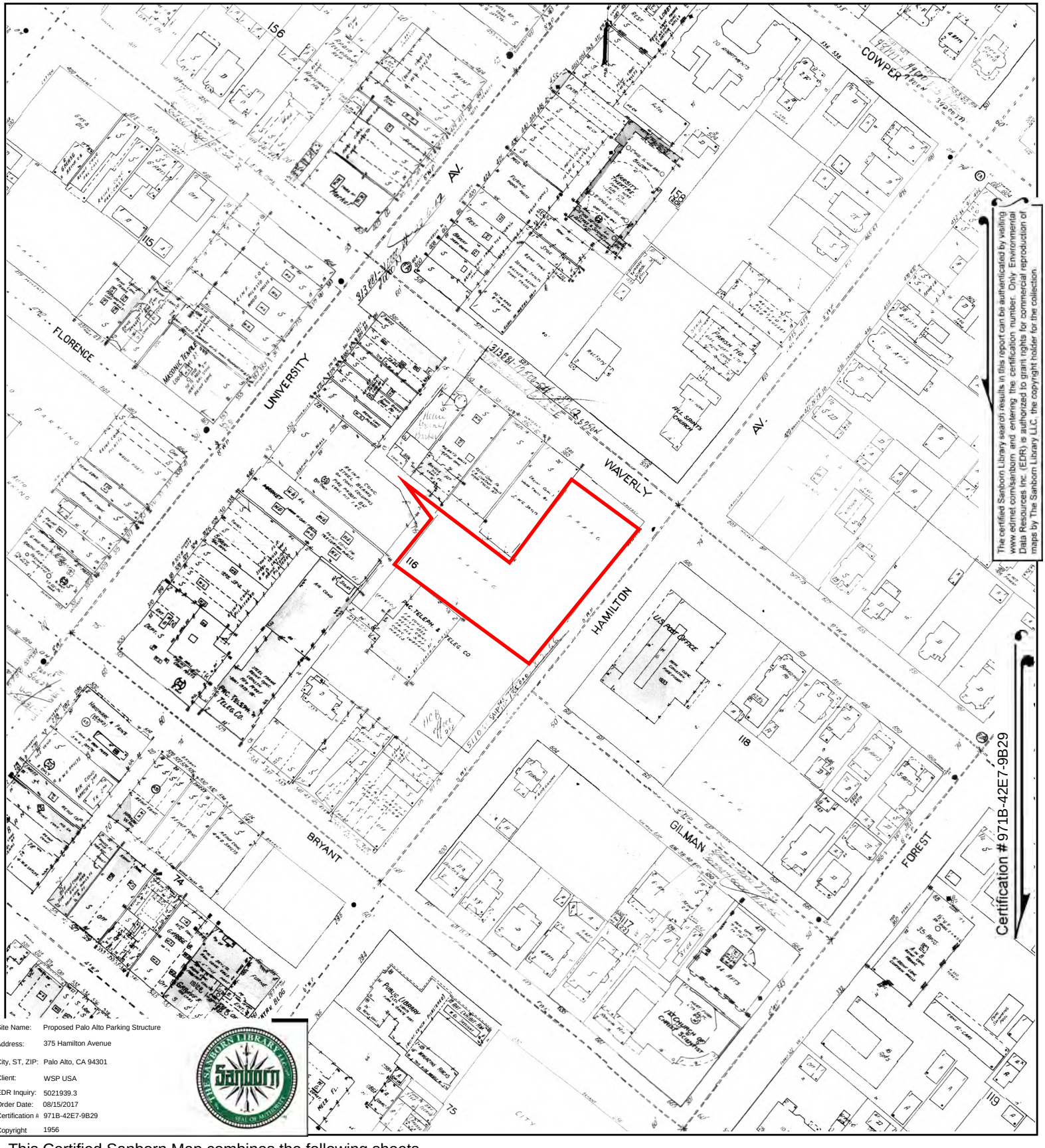




Volume 1, Sheet 13
Volume 1, Sheet 12

0 Feet 150 300 600

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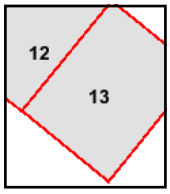
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Address:	375 Hamilton Avenue
City, ST, ZIP:	Palo Alto, CA 94301
Client:	WSP USA
EDR Inquiry:	5021939.3
Order Date:	08/15/2017
Certification #:	971B-42E7-9B29
Copyright	1956

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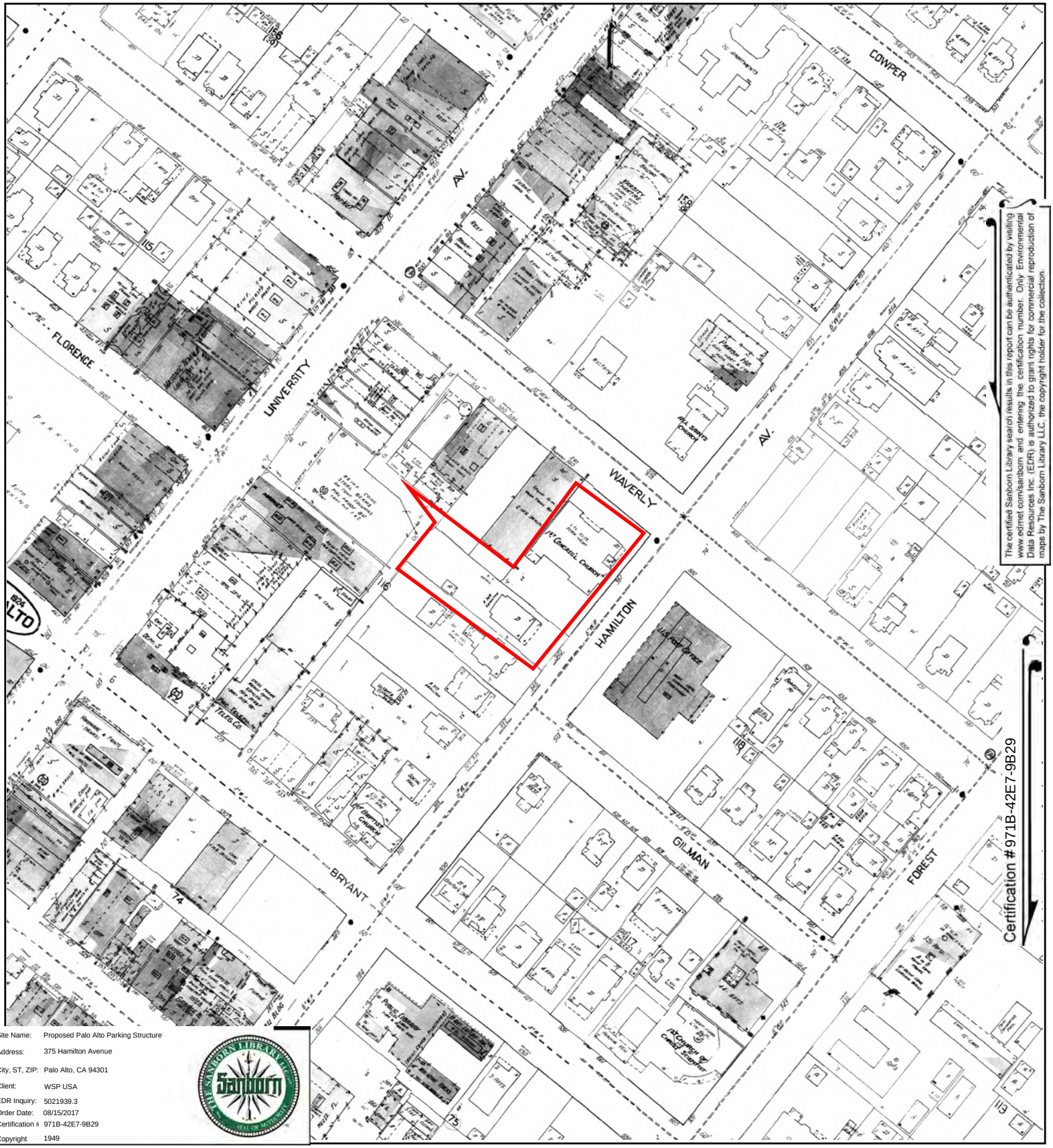
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Volume 1, Sheet 12
Volume 1, Sheet 13

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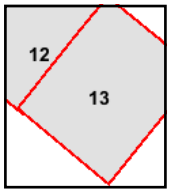
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Address:	375 Hamilton Avenue
City, ST, ZIP:	Palo Alto, CA 94301
Client:	WSP USA
EDR Inquiry:	5021939.3
Order Date:	08/15/2017
Certification #:	971B-42E7-9B29
Copyright	1949

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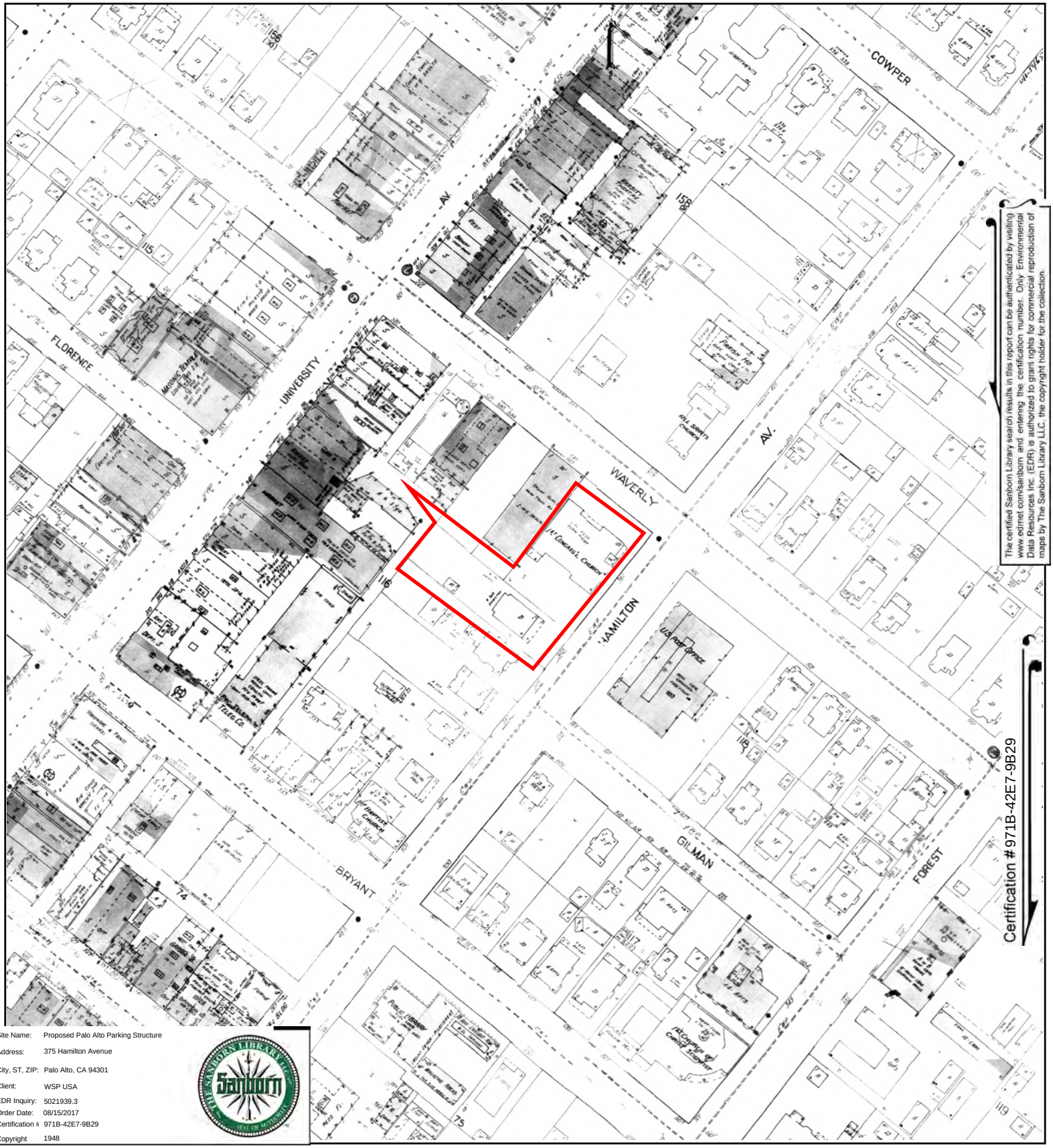


Volume 1, Sheet 13
Volume 1, Sheet 12

N

Certified Sanborn® Map

1948



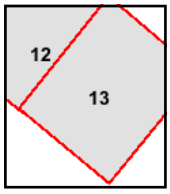
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Address:	375 Hamilton Avenue
City, ST, ZIP:	Palo Alto, CA 94301
Client:	WSP USA
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Order Date:	08/15/2017
Certification #:	971B-42E7-9B29
Copyright	1948

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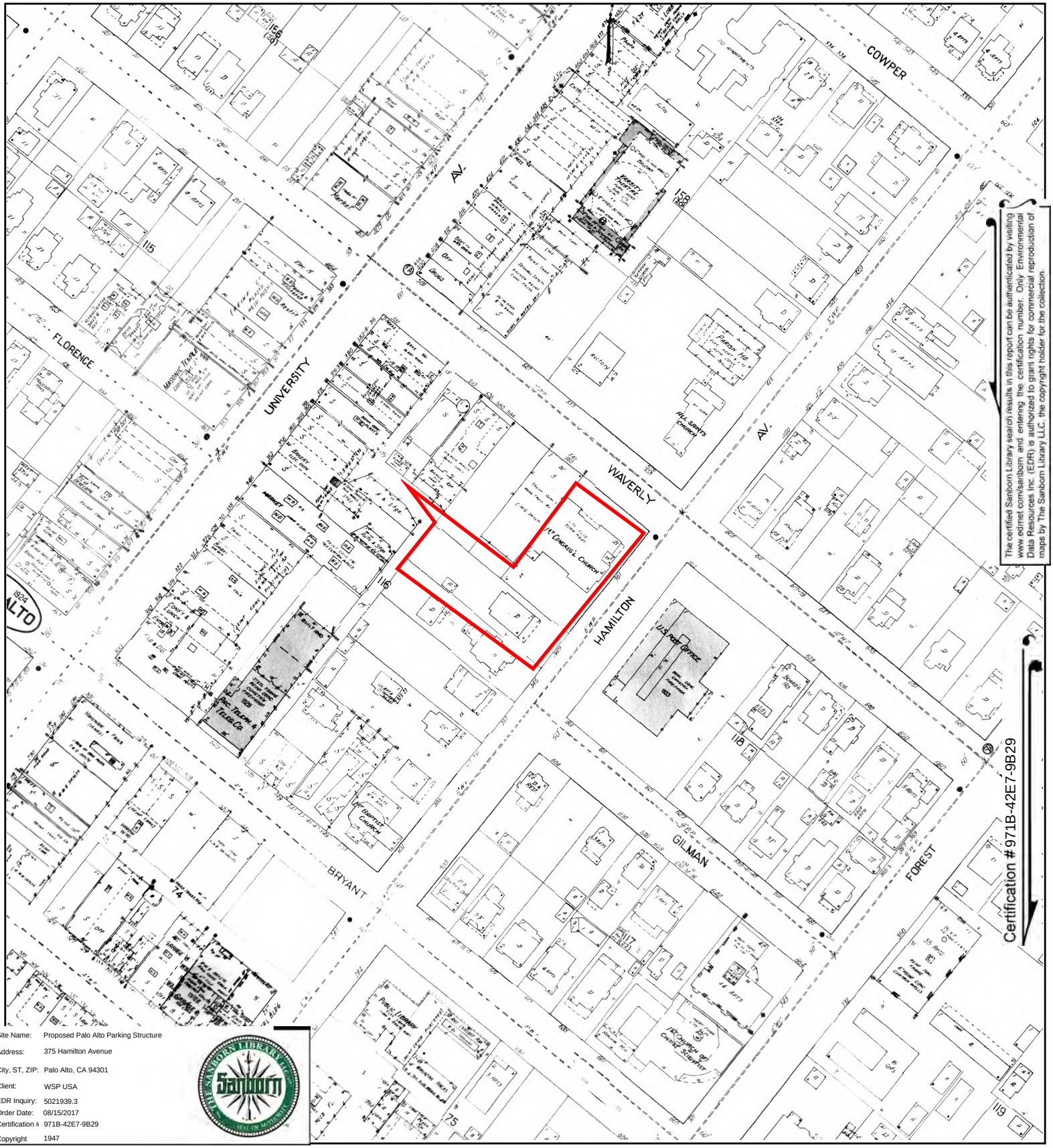
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Volume 1, Sheet 13
Volume 1, Sheet 12

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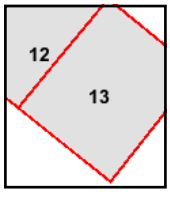


Site Name: Proposed Palo Alto Parking Structure
Address: 375 Hamilton Avenue
City, ST, ZIP: Palo Alto, CA 94301
Client: WSP USA
EDR Inquiry: 5021939.3
Order Date: 08/15/2017
Certification #: 971B-42E7-9B29
Copyright: 1947

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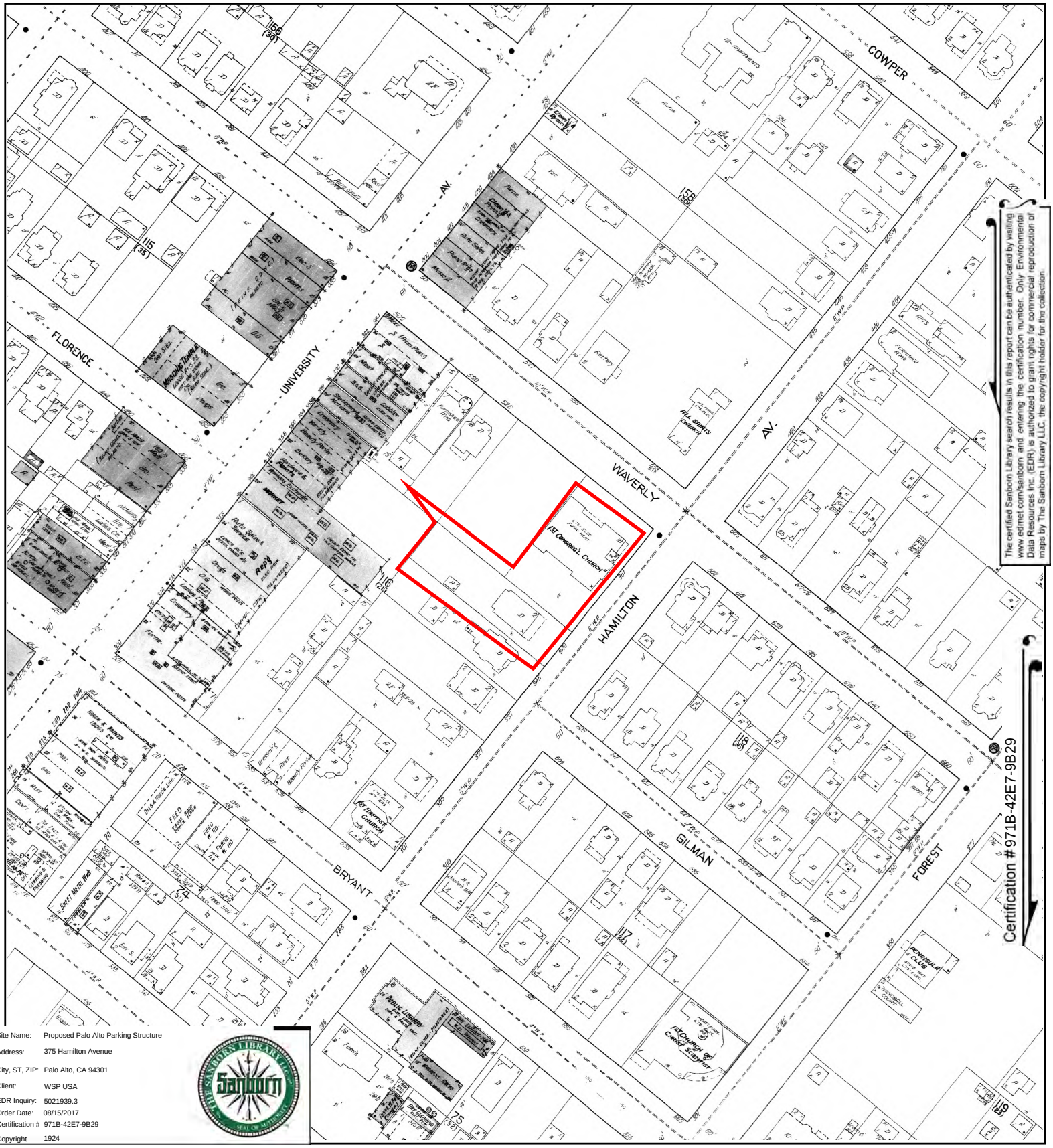
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Volume 1, Sheet 13
Volume 1, Sheet 12

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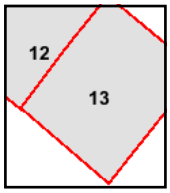
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Certification #:	971B-42E7-9B29
Copyright	1924

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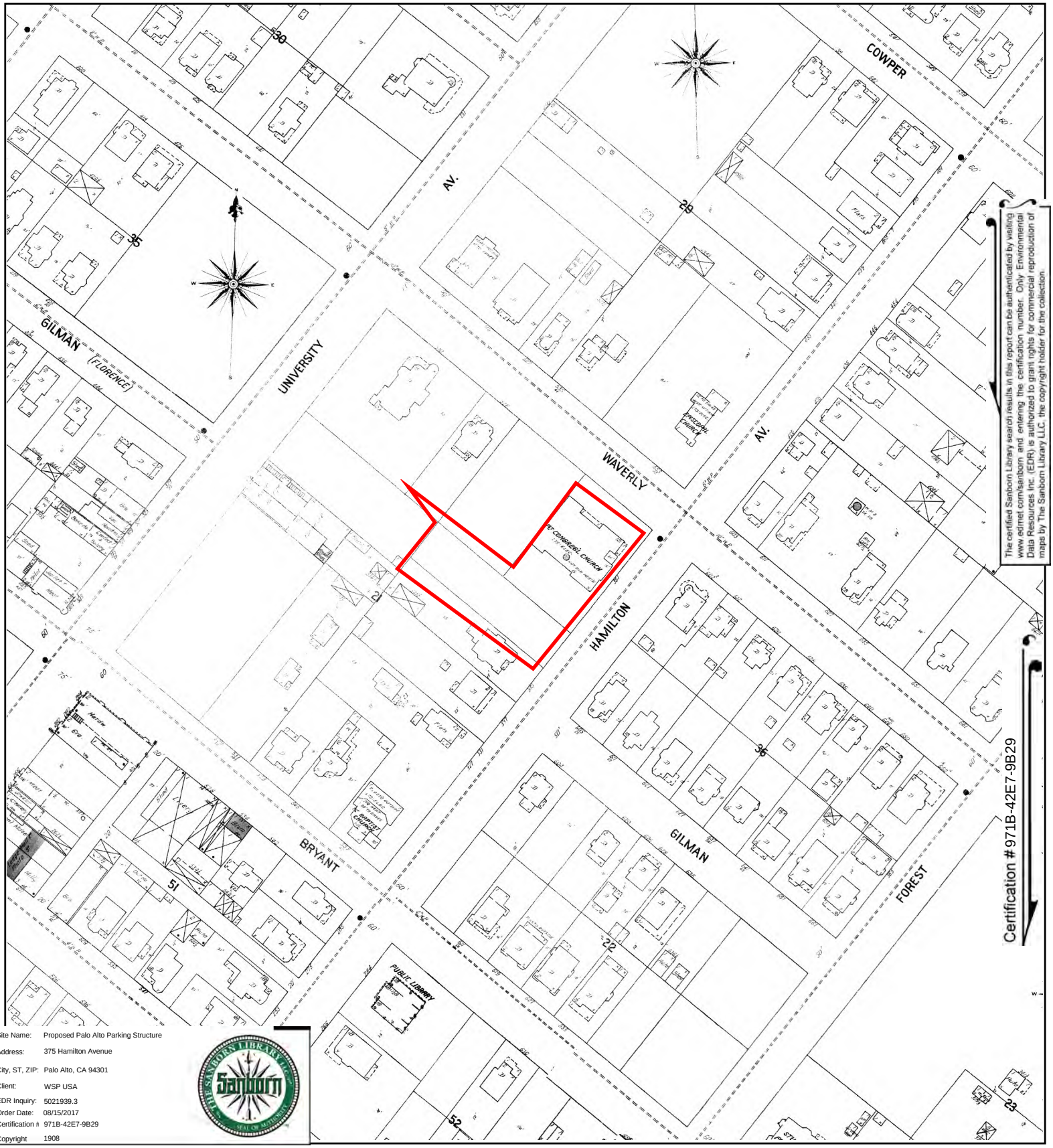
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Volume 1, Sheet 13
Volume 1, Sheet 12

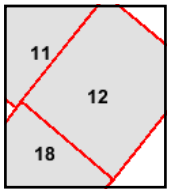
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Site Name:	Proposed Palo Alto Parking Structure
Address:	375 Hamilton Avenue
City, ST, ZIP:	Palo Alto, CA 94301
Client:	WSP USA
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Order Date:	08/15/2017
Certification #:	971B-42E7-9B29
Copyright	1908

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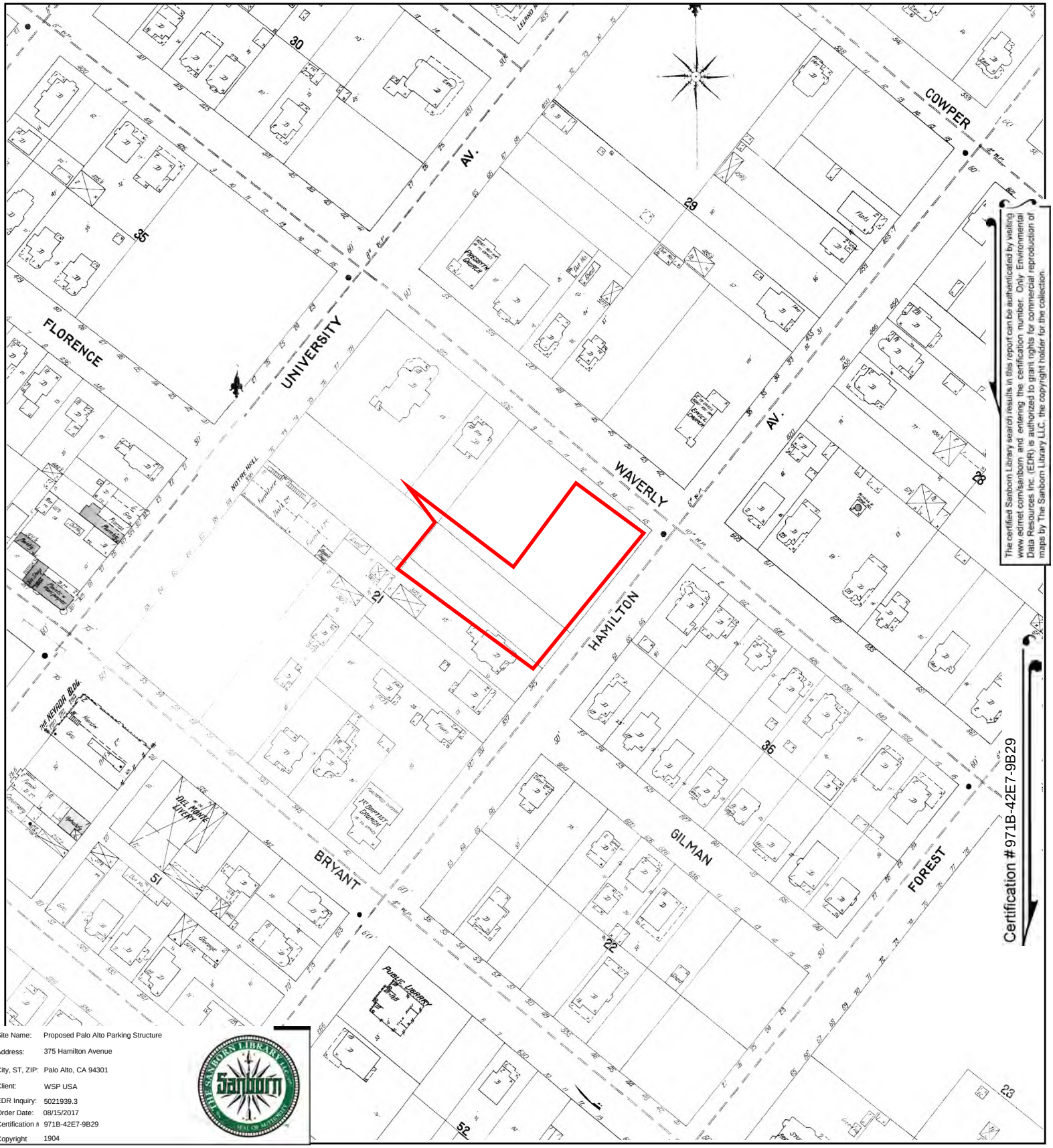




Volume 1, Sheet 18
Volume 1, Sheet 12
Volume 1, Sheet 11

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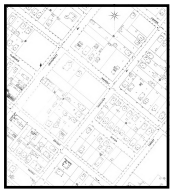
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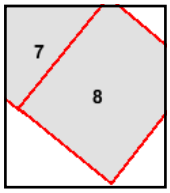


Site Name: Proposed Palo Alto Parking Structure
Address: 375 Hamilton Avenue
City, ST, ZIP: Palo Alto, CA 94301
Client: WSP USA
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Order Date: 08/15/2017
Certification #: 971B-42E7-9B29
Copyright: 1904

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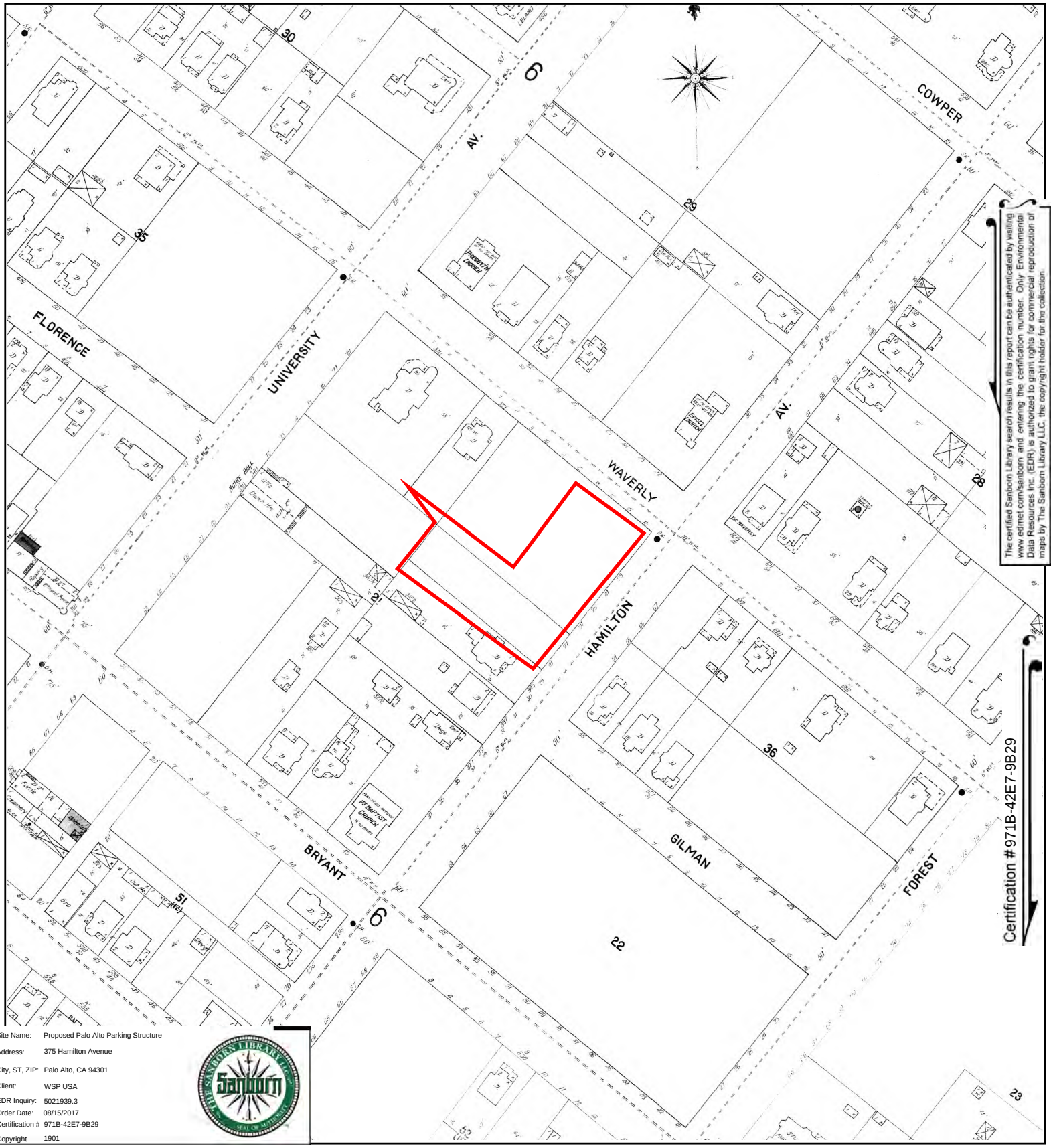
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Volume 1, Sheet 8
Volume 1, Sheet 7

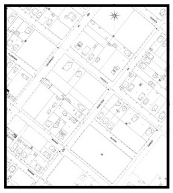
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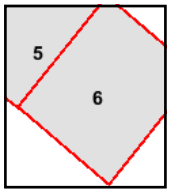


Site Name: Proposed Palo Alto Parking Structure
Address: 375 Hamilton Avenue
City, ST, ZIP: Palo Alto, CA 94301
Client: WSP USA
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Order Date: 08/15/2017
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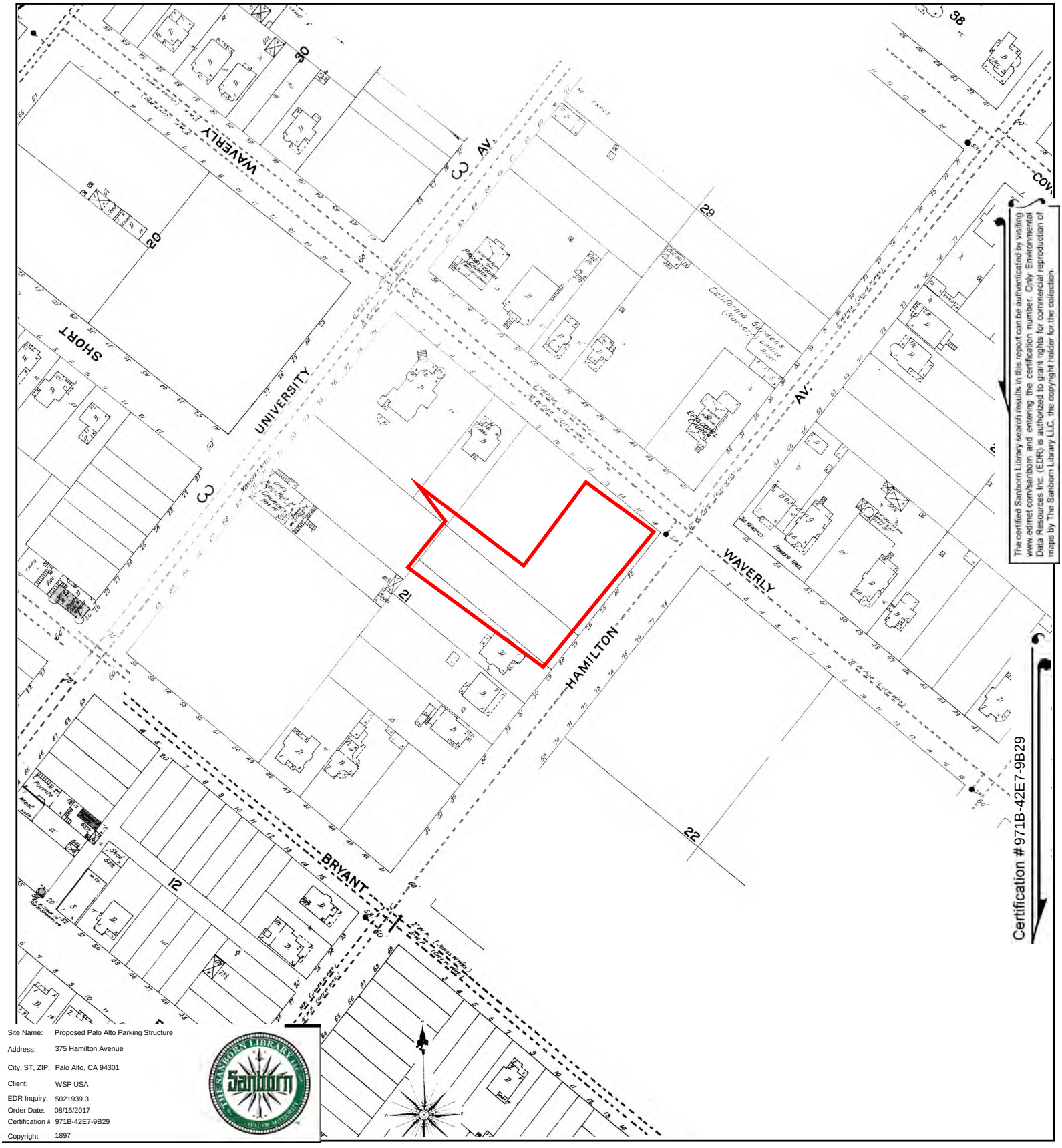
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Volume 1, Sheet 6
Volume 1, Sheet 5

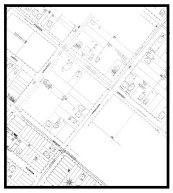
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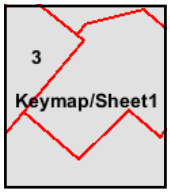


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Address: 375 Hamilton Avenue
City, ST, ZIP: Palo Alto, CA 94301
Client: WSP USA
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Order Date: 08/15/2017
Certification #: 971B-42E7-9B29
Copyright: 1897

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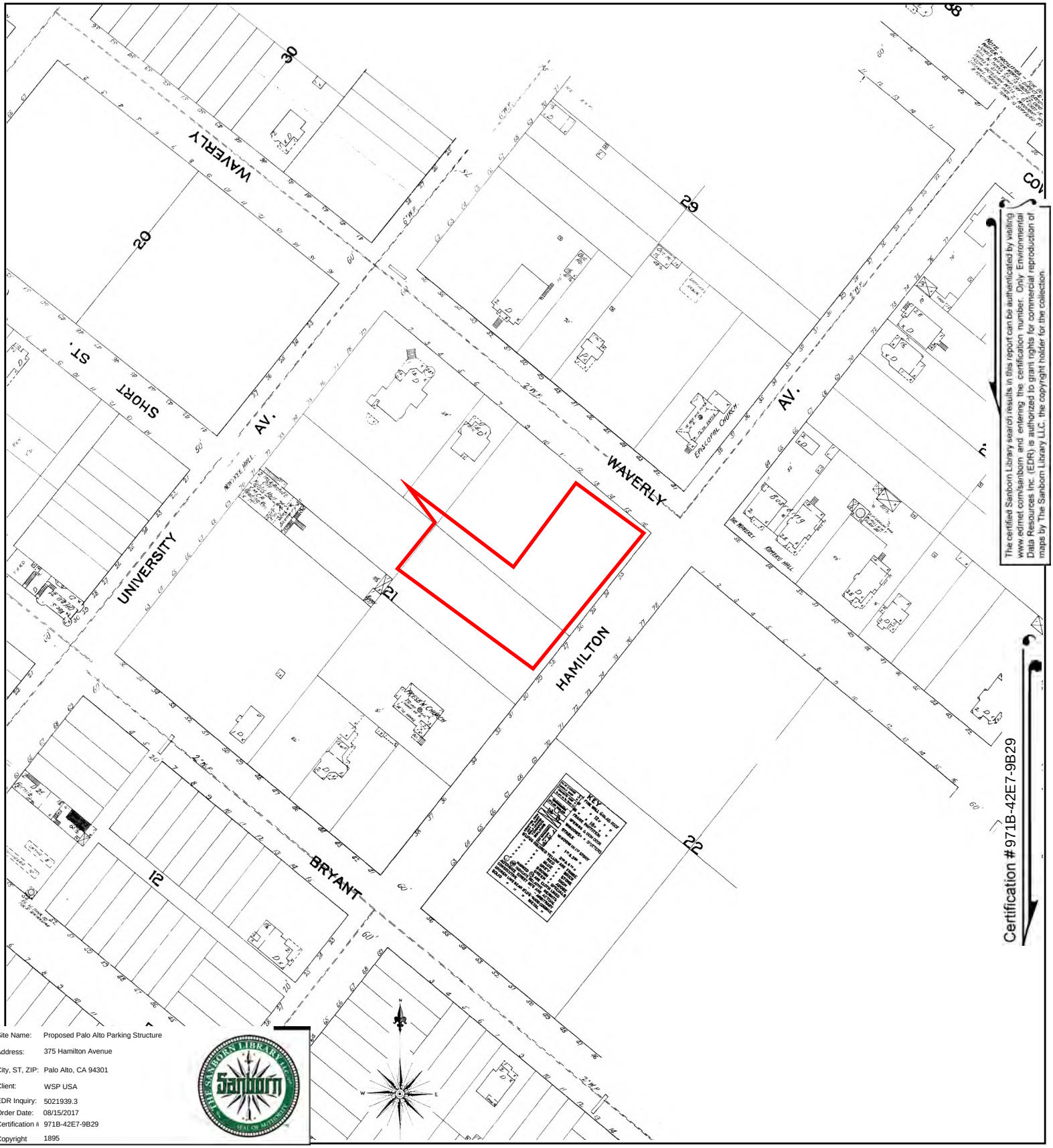
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Volume 1, Sheet 3
Volume 1, Sheet Keymap/Sheet1

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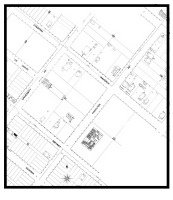


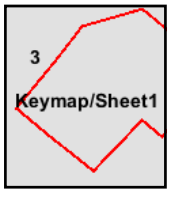
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City, ST, ZIP: Palo Alto, CA 94301
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Order Date: 08/15/2017
Certification #: 971B-42E7-9B29
Copyright: 1895

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0 Feet 150 300 600





Volume 1, Sheet Keymap/Sheet1
Volume 1, Sheet 3

N

APPENDIX G: PROPERTY TAX MAPS

Proposed Palo Alto Parking Structure
375 Hamilton Avenue
Palo Alto, CA 94301

Inquiry Number: 5021939.6
August 14, 2017

The EDR Property Tax Map Report

EDR® Environmental Data Resources Inc

6 Armstrong Road
Shelton, CT 06484
800.352.0050
www.edrnet.com

EDR Property Tax Map Report

Environmental Data Resources, Inc.'s EDR Property Tax Map Report is designed to assist environmental professionals in evaluating potential environmental conditions on a target property by understanding property boundaries and other characteristics. The report includes a search of available property tax maps, which include information on boundaries for the target property and neighboring properties, addresses, parcel identification numbers, as well as other data typically used in property location and identification.

NO COVERAGE

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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APPENDIX H: LIEN SEARCH REPORT

Proposed Palo Alto Parking Structure
375 Hamilton Avenue
Palo Alto, CA 94301

Inquiry Number: 5021939.7S
August 21, 2017

EDR Environmental Lien and AUL Search

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

EDR Environmental Lien and AUL Search

The EDR Environmental LienSearch Report provides results from a search of available current land title records for environmental cleanup liens and other activity and use limitations, such as engineering controls and institutional controls.

A network of professional, trained researchers, following established procedures, uses client supplied address information to:

- search for parcel information and/or legal description;
- search for ownership information;
- research official land title documents recorded at jurisdictional agencies such as recorders' offices, registries of deeds, county clerks' offices, etc.;
- access a copy of the deed;
- search for environmental encumbering instrument(s) associated with the deed;
- provide a copy of any environmental encumbrance(s) based upon a review of key words in the instrument(s) (title, parties involved, and description); and
- provide a copy of the deed or cite documents reviewed.

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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EDR Environmental Lien and AUL Search

TARGET PROPERTY INFORMATION

ADDRESS

PROPOSED PALO ALTO PARKING STRUCTURE
375 HAMILTON AVENUE
PALO ALTO, CA 94301

RESEARCH SOURCE

Source 1: Recorder
Santa Clara County, California

Source 2: Assessor
Santa Clara County, California

PROPERTY INFORMATION

Deed 1:

Type of Deed: Deed

Title is vested in: City of Palo Alto

Title received from: Unknown

Deed Recorded: 05/12/1954

Book: 2872

Page: 318

Legal Description: All that certain piece or parcel of land being a portion of Lot 3, Block 21, City of Palo Alto, filed 02/27/1889 in Book D of Maps, Page 69, situate and lying in the County of Santa Clara, State of California.

Legal Current Owner: City of Palo Alto

Property Identifiers: 120-15-086

ENVIRONMENTAL LIEN

Environmental Lien: Found ☐ Not Found ☒

If found:

1st Party:

2nd Party:

Dated:

Recorded:

Book:

Page:

Docket:

Volume:

Instrument:

Comments:

Miscellaneous:

EDR Environmental Lien and AUL Search

OTHER ACTIVITY AND USE LIMITATIONS (AULs)

Other AUL's: Found ☐ Not Found ☒

If found:

1st Party:

2nd Party:

Dated:
Recorded:
Book:
Page:
Docket:
Volume:
Instrument:
Comments:
Miscellaneous:

APPENDIX I: HISTORIC TOPOGRAPHIC MAPS

Proposed Palo Alto Parking Structure

375 Hamilton Avenue

Palo Alto, CA 94301

Inquiry Number: 5021939.4

August 14, 2017

EDR Historical Topo Map Report

with QuadMatch™

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

EDR Historical Topo Map Report

08/14/17

Site Name:

Proposed Palo Alto Parking Str
375 Hamilton Avenue
Palo Alto, CA 94301
EDR Inquiry # 5021939.4

Client Name:

Parsons Brinkerhoff
6011 West St. Josephs Suite 400
Lansing, MI 48917-0000
Contact: Adam Heft

EDR Topographic Map Library has been searched by EDR and maps covering the target property location as provided by Parsons Brinkerhoff were identified for the years listed below. EDR's Historical Topo Map Report is designed to assist professionals in evaluating potential liability on a target property resulting from past activities. EDRs Historical Topo Map Report includes a search of a collection of public and private color historical topographic maps, dating back to the late 1800s.

Search Results:

P.O.# NA
Project: 13396B

Coordinates:

Latitude:	37.446095 37° 26' 46" North
Longitude:	-122.15977 -122° 9' 35" West
UTM Zone:	Zone 10 North
UTM X Meters:	574322.05
UTM Y Meters:	4144692.36
Elevation:	54.00' above sea level

Maps Provided:

2012	1947
1999	1943
1994	1902
1973	1899
1968	1897
1961	
1953	
1948	

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Topo Sheet Key

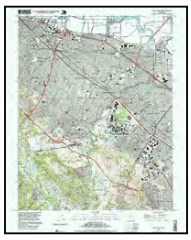
This EDR Topo Map Report is based upon the following USGS topographic map sheets.

2012 Source Sheets



Palo Alto
2012
7.5-minute, 24000

1999 Source Sheets



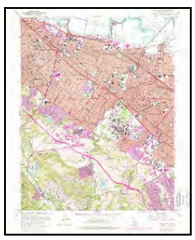
Palo Alto
1999
7.5-minute, 24000
Aerial Photo Revised 1999

1994 Source Sheets



Palo Alto
1994
7.5-minute, 24000
Aerial Photo Revised 1991

1973 Source Sheets

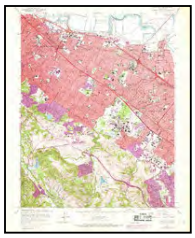


Palo Alto
1973
7.5-minute, 24000
Aerial Photo Revised 1973

Topo Sheet Key

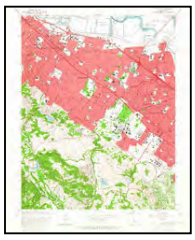
This EDR Topo Map Report is based upon the following USGS topographic map sheets.

1968 Source Sheets



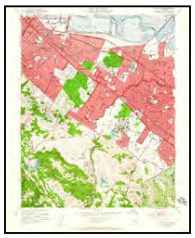
Palo Alto
1968
7.5-minute, 24000
Aerial Photo Revised 1968

1961 Source Sheets



Palo Alto
1961
7.5-minute, 24000
Aerial Photo Revised 1960

1953 Source Sheets



Palo Alto
1953
7.5-minute, 24000
Aerial Photo Revised 1948

1948 Source Sheets



Palo Alto
1948
15-minute, 62500
Aerial Photo Revised 1948

Topo Sheet Key

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

1947 Source Sheets



PALO ALTO
1947
15-minute, 50000

1943 Source Sheets



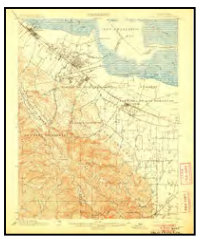
Palo Alto
1943
15-minute, 62500
Aerial Photo Revised 1940

1902 Source Sheets



Santa Cruz
1902
30-minute, 125000

1899 Source Sheets



Palo Alto
1899
15-minute, 62500

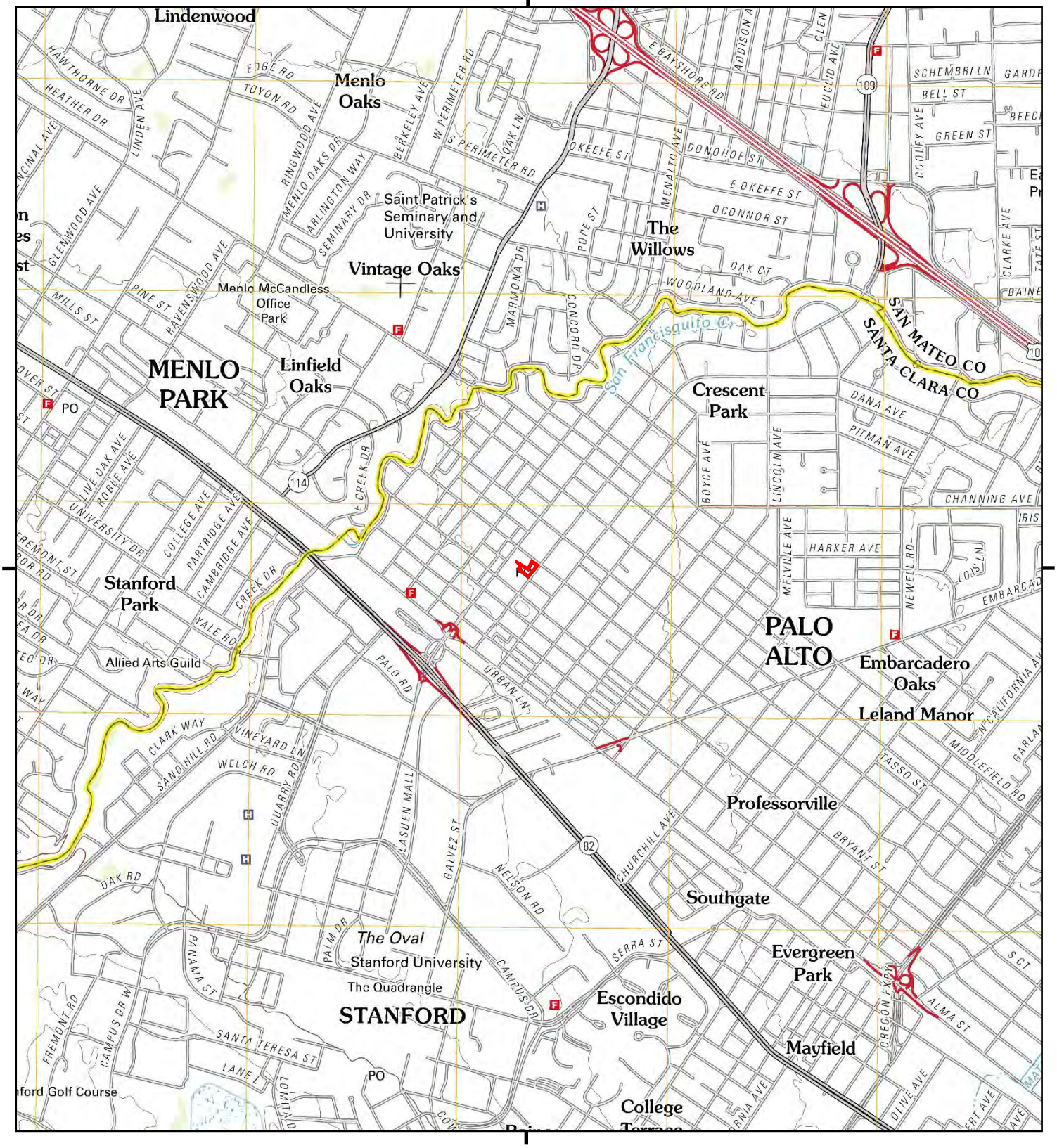
Topo Sheet Key

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

1897 Source Sheets



Palo Alto
1897
15-minute, 62500



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

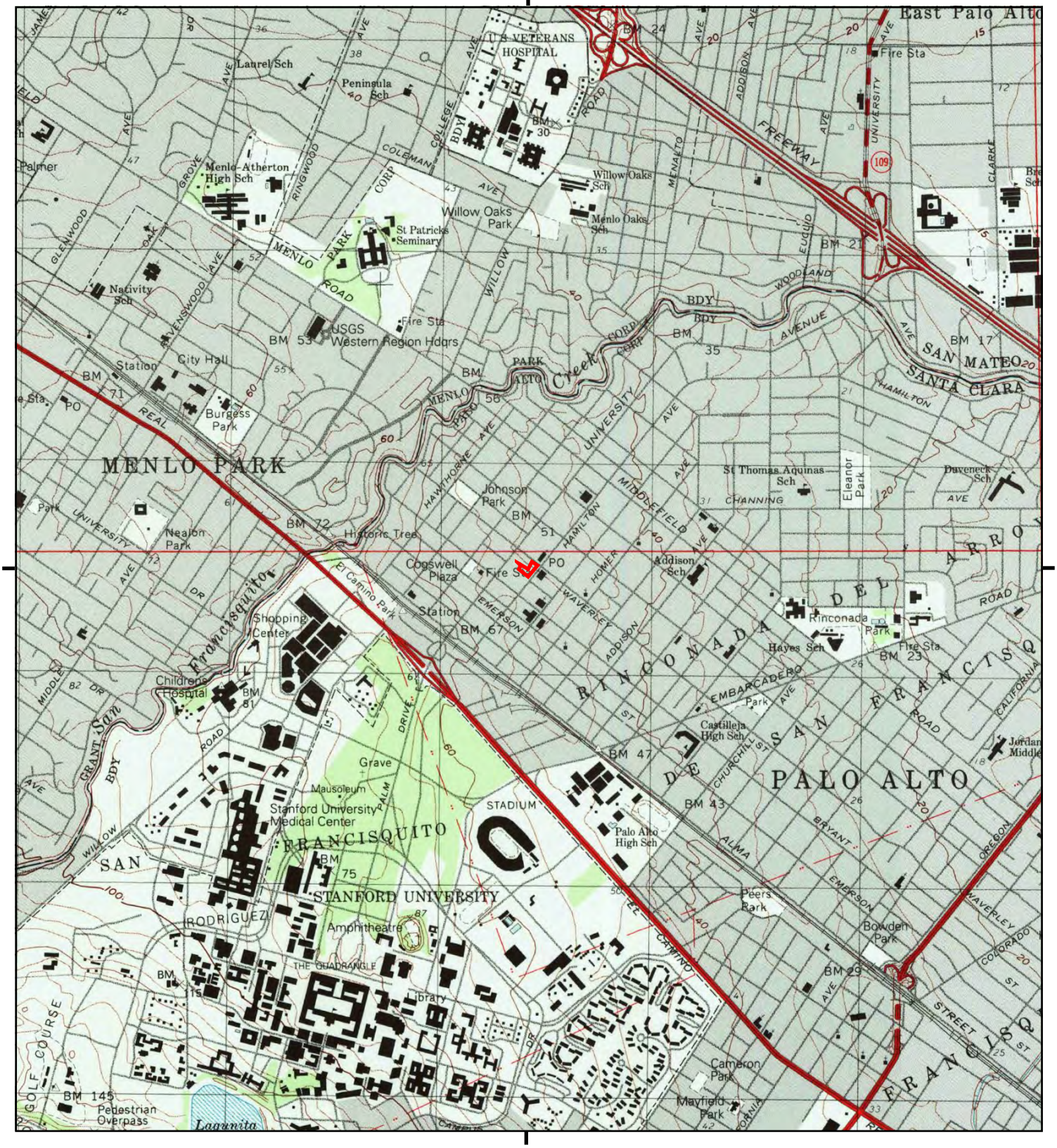
TP, Palo Alto, 2012, 7.5-minute

SITE NAME: Proposed Palo Alto Parking Structure
ADDRESS: 375 Hamilton Avenue
Palo Alto, CA 94301
CLIENT: Parsons Brinkerhoff

N

Historical Topo Map

1999



This report includes information from the following map sheet(s).

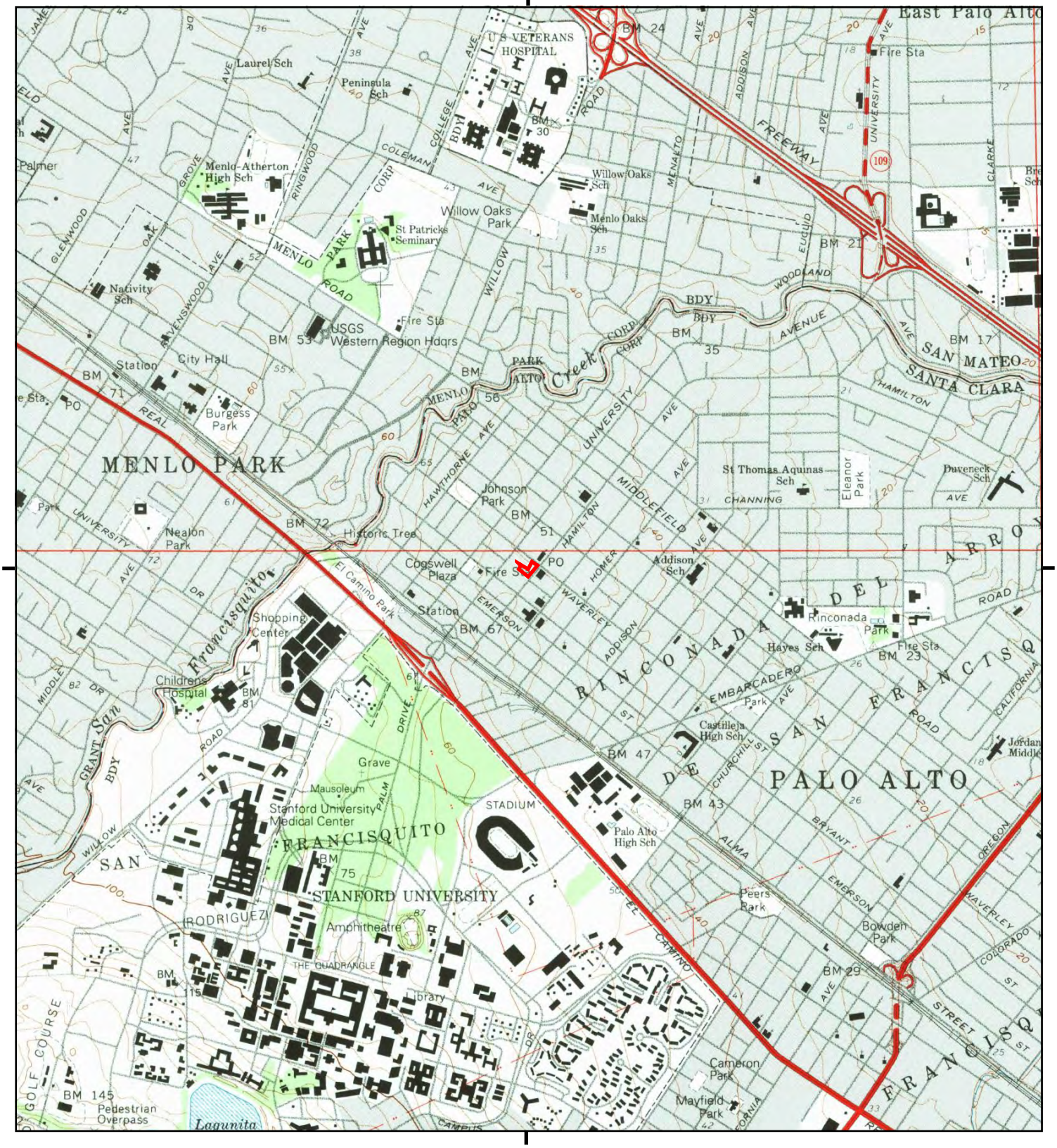
0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Palo Alto, 1999, 7.5-minute

SITE NAME: Proposed Palo Alto Parking Structure
ADDRESS: 375 Hamilton Avenue
Palo Alto, CA 94301
CLIENT: Parsons Brinkerhoff

N



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

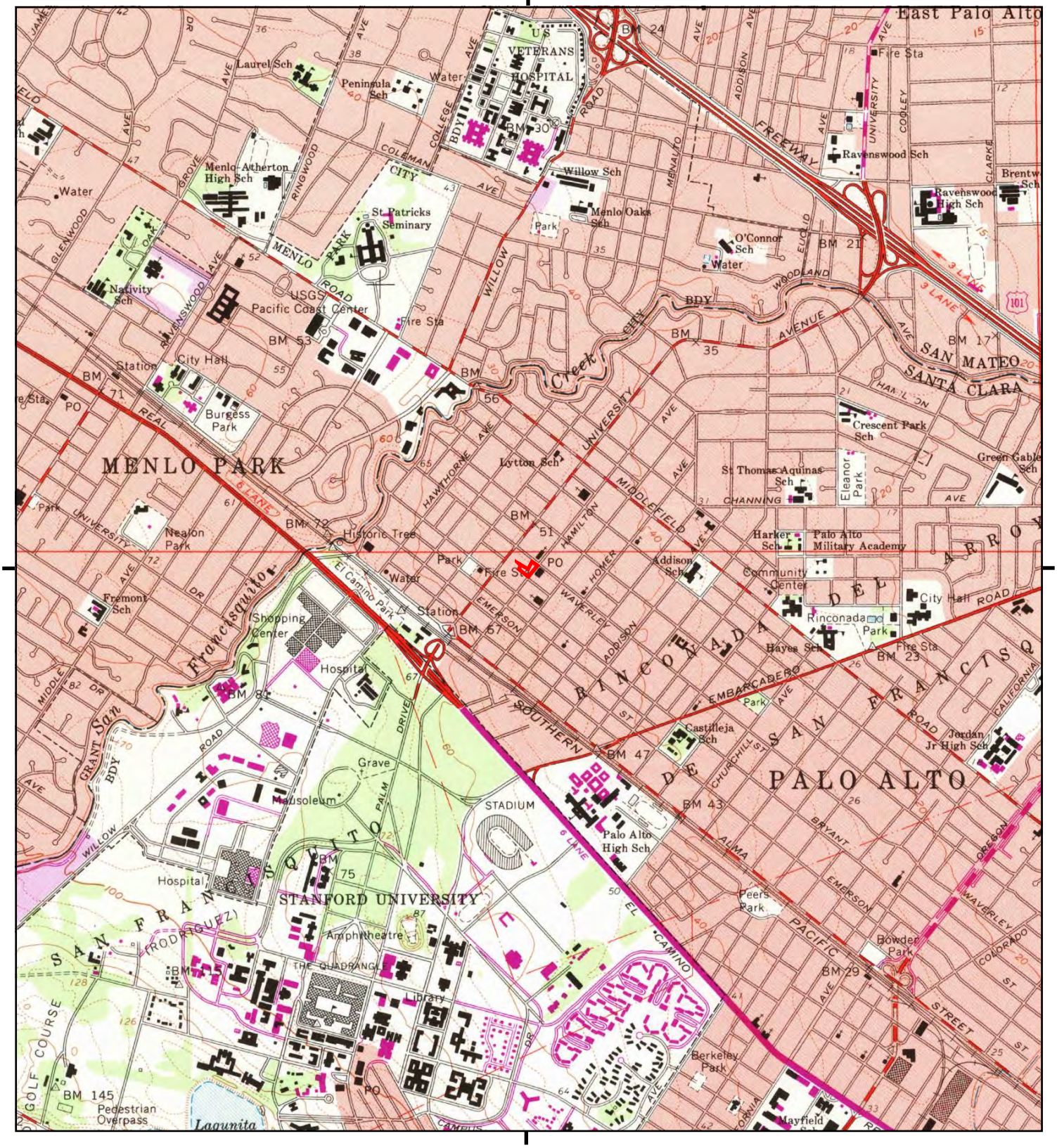
TP, Palo Alto, 1994, 7.5-minute

SITE NAME: Proposed Palo Alto Parking Structure
ADDRESS: 375 Hamilton Avenue
Palo Alto, CA 94301
CLIENT: Parsons Brinkerhoff

N

Historical Topo Map

1973



This report includes information from the following map sheet(s).

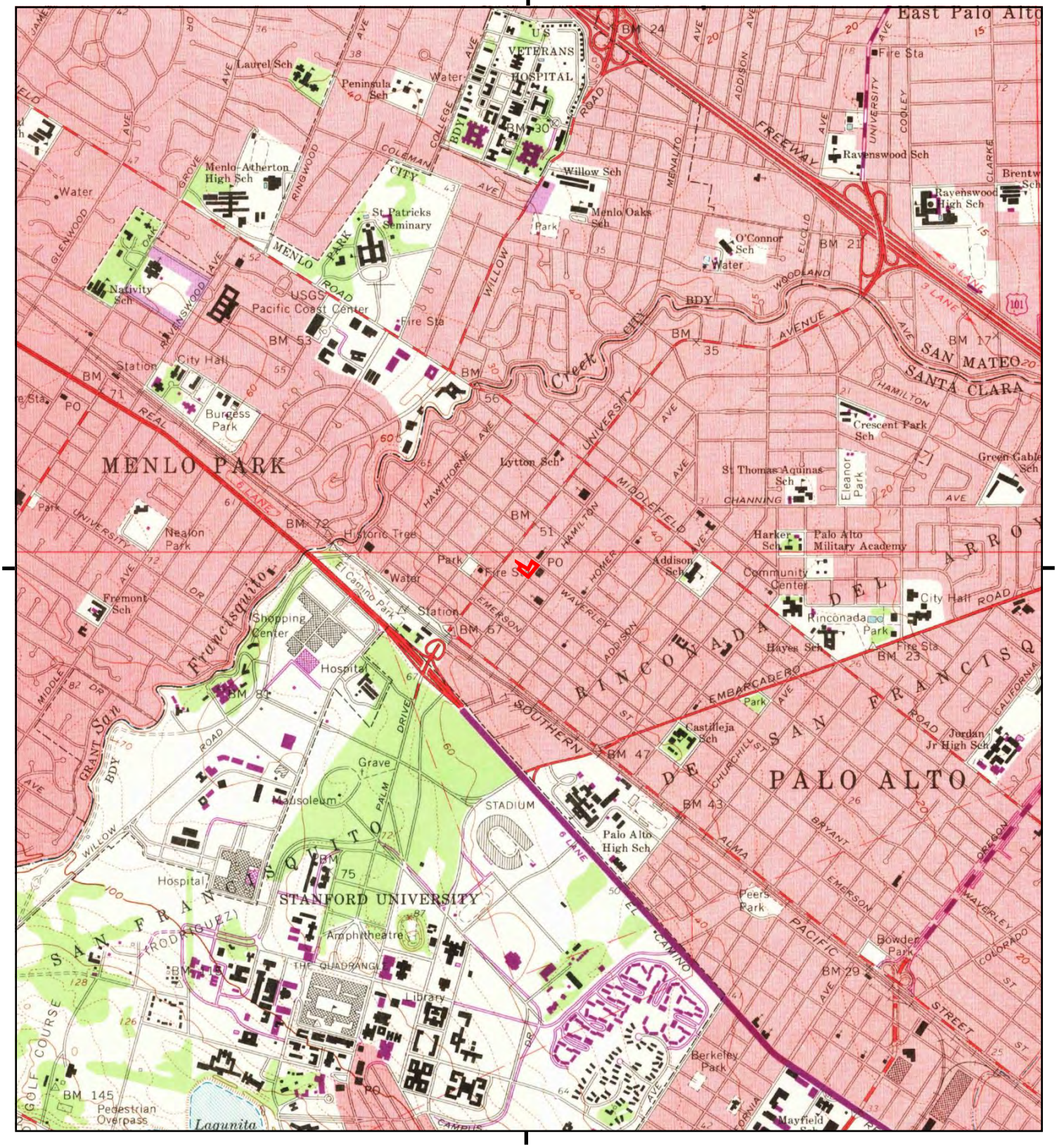
0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Palo Alto, 1973, 7.5-minute

SITE NAME: Proposed Palo Alto Parking Structure
ADDRESS: 375 Hamilton Avenue
Palo Alto, CA 94301
CLIENT: Parsons Brinkerhoff

N



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

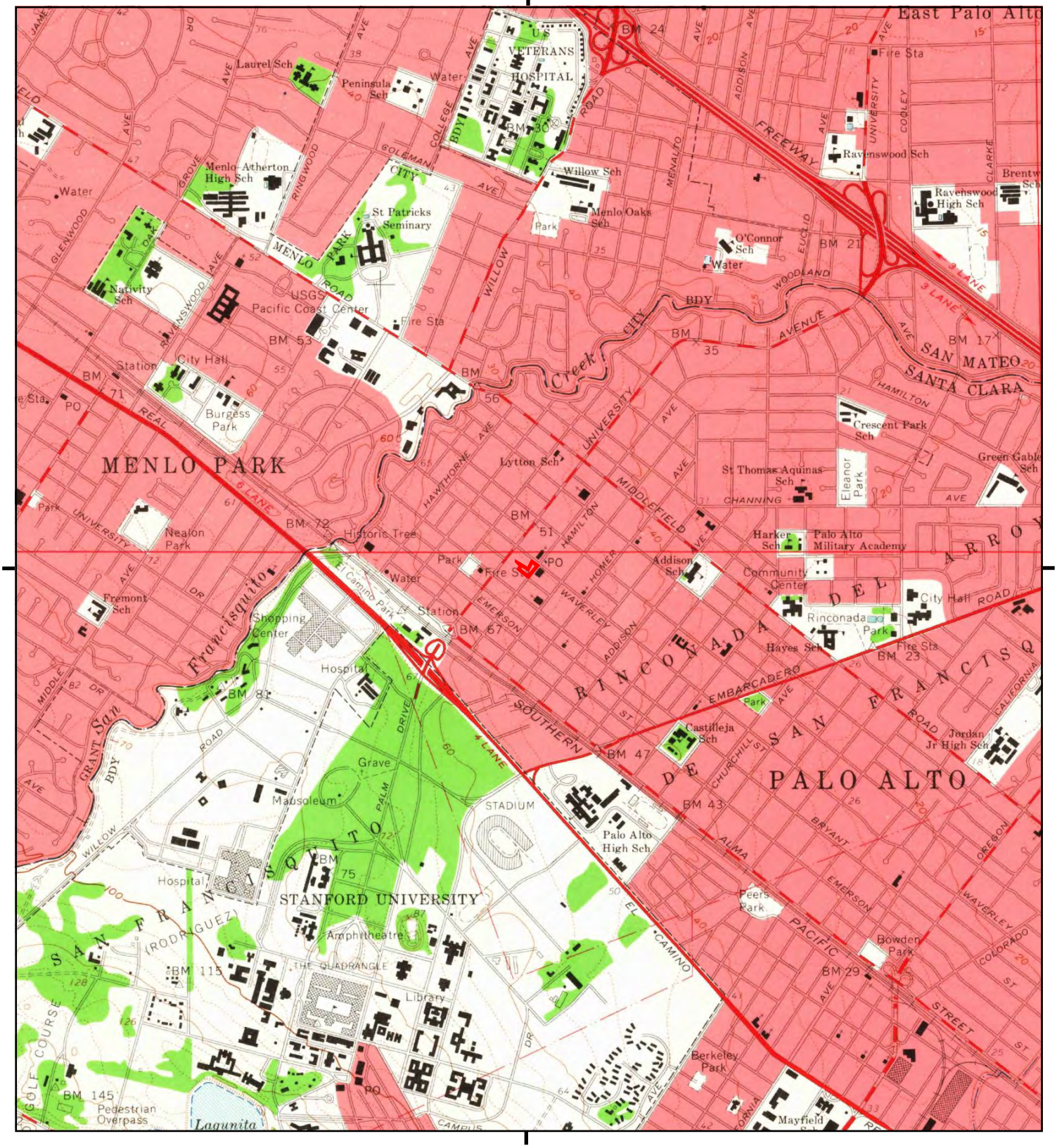
TP, Palo Alto, 1968, 7.5-minute

SITE NAME: Proposed Palo Alto Parking Structure
ADDRESS: 375 Hamilton Avenue
Palo Alto, CA 94301
CLIENT: Parsons Brinkerhoff

N

Historical Topo Map

1961



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

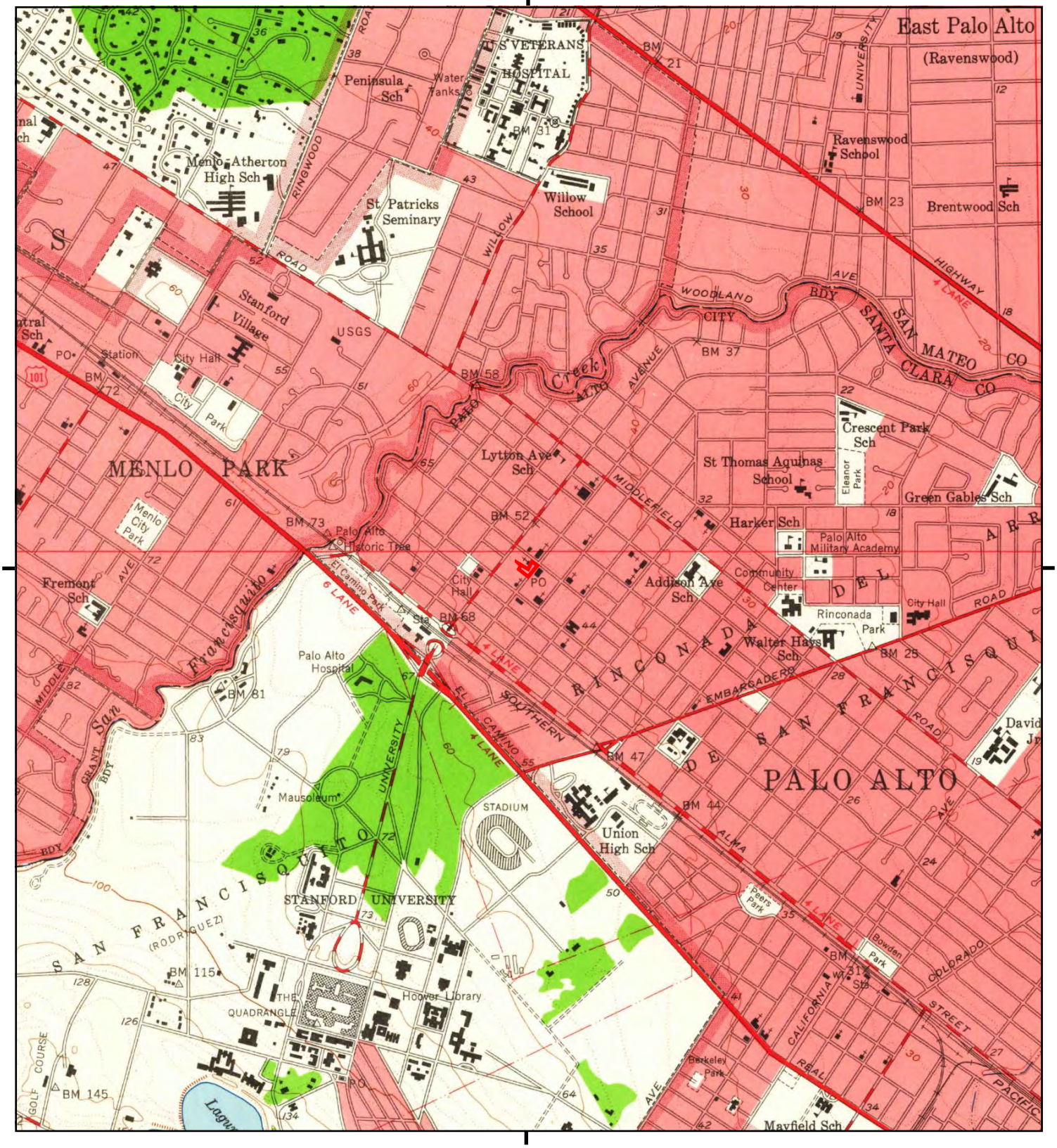
TP, Palo Alto, 1961, 7.5-minute

SITE NAME: Proposed Palo Alto Parking Structure
ADDRESS: 375 Hamilton Avenue
Palo Alto, CA 94301
CLIENT: Parsons Brinkerhoff

N

Historical Topo Map

1953



This report includes information from the following map sheet(s).

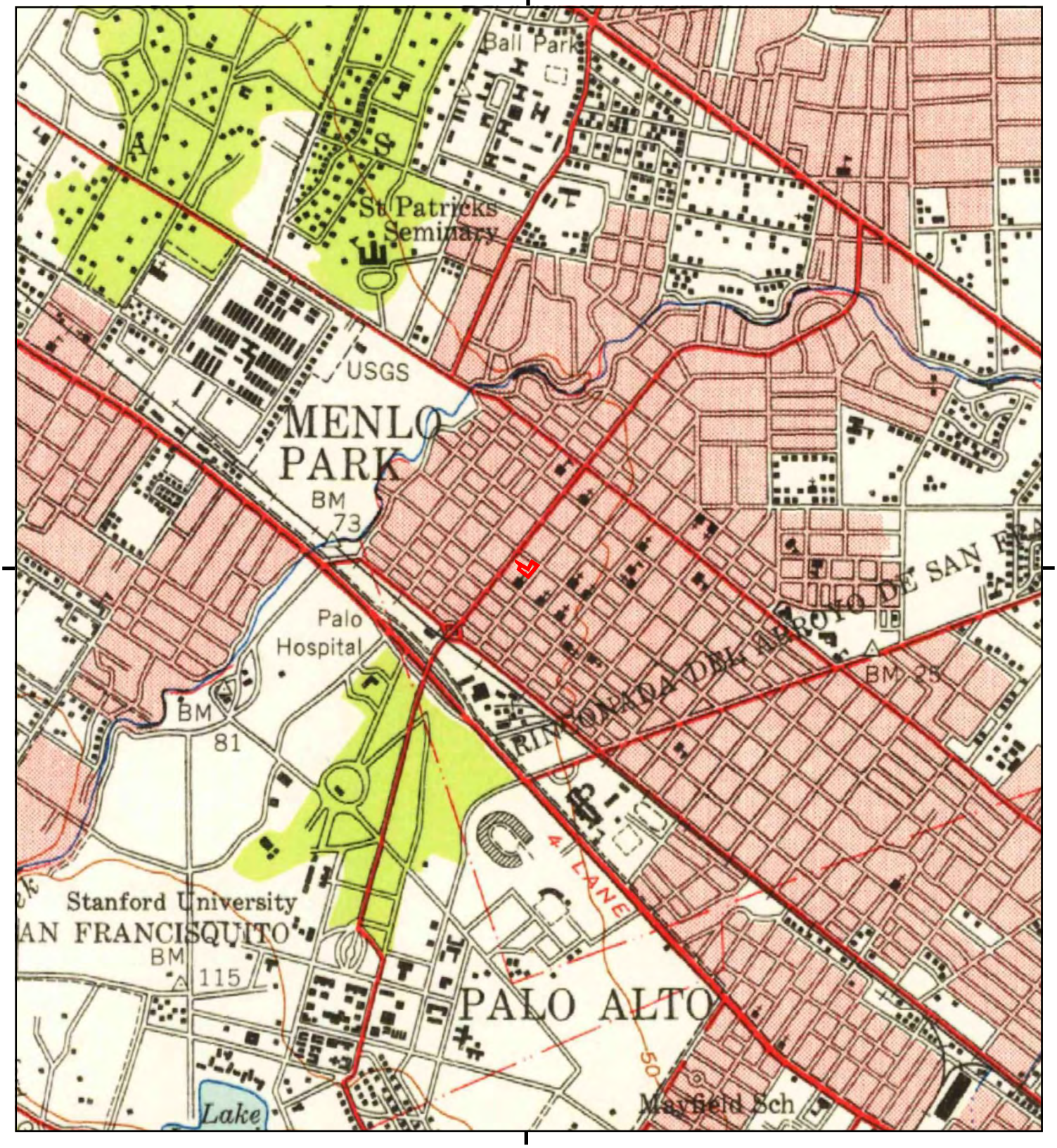
0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Palo Alto, 1953, 7.5-minute

SITE NAME: Proposed Palo Alto Parking Structure
ADDRESS: 375 Hamilton Avenue
Palo Alto, CA 94301
CLIENT: Parsons Brinkerhoff

N



This report includes information from the following map sheet(s).

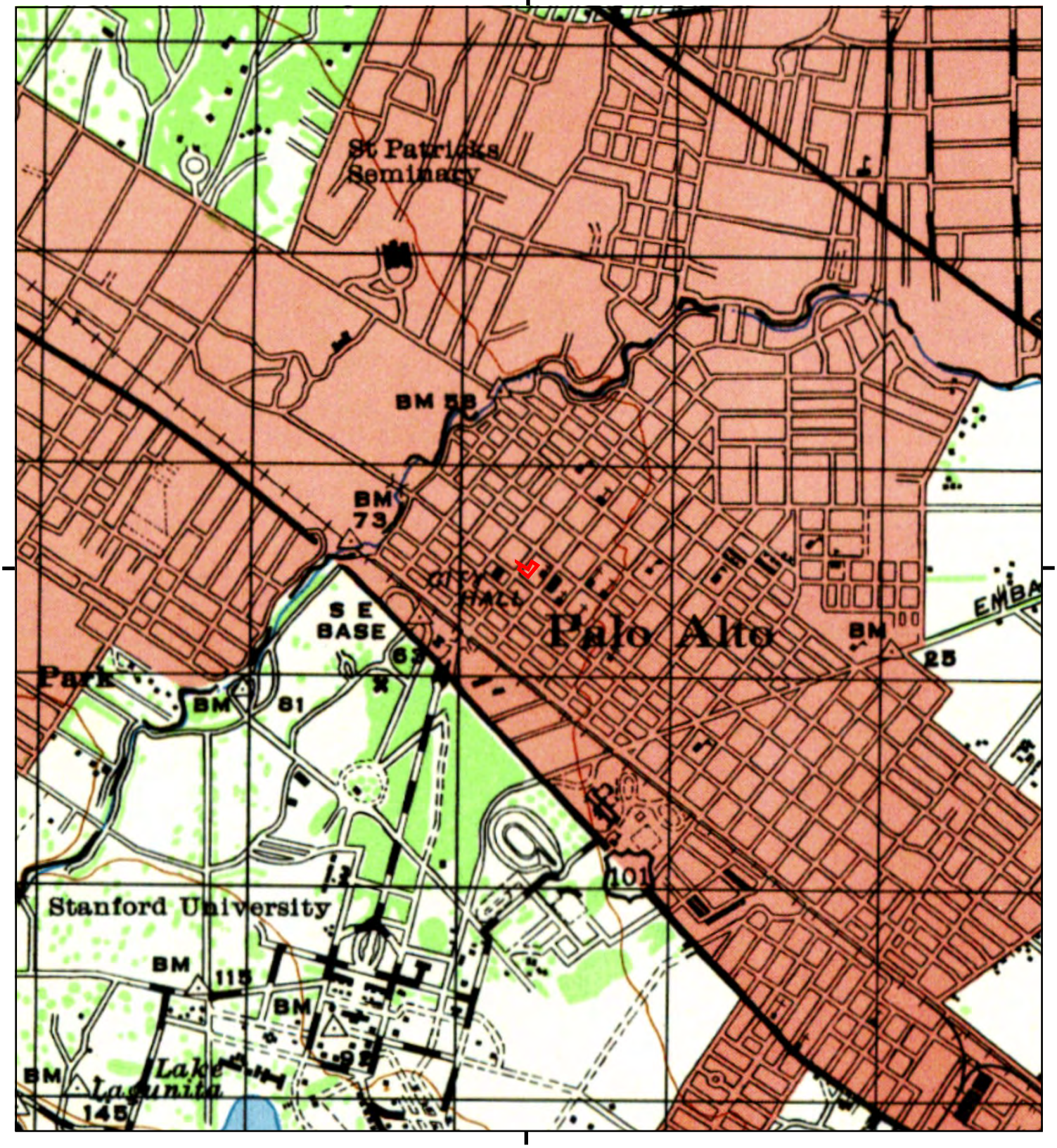
0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Palo Alto, 1948, 15-minute

SITE NAME: Proposed Palo Alto Parking Structure
ADDRESS: 375 Hamilton Avenue
Palo Alto, CA 94301
CLIENT: Parsons Brinkerhoff

N



This report includes information from the following map sheet(s).

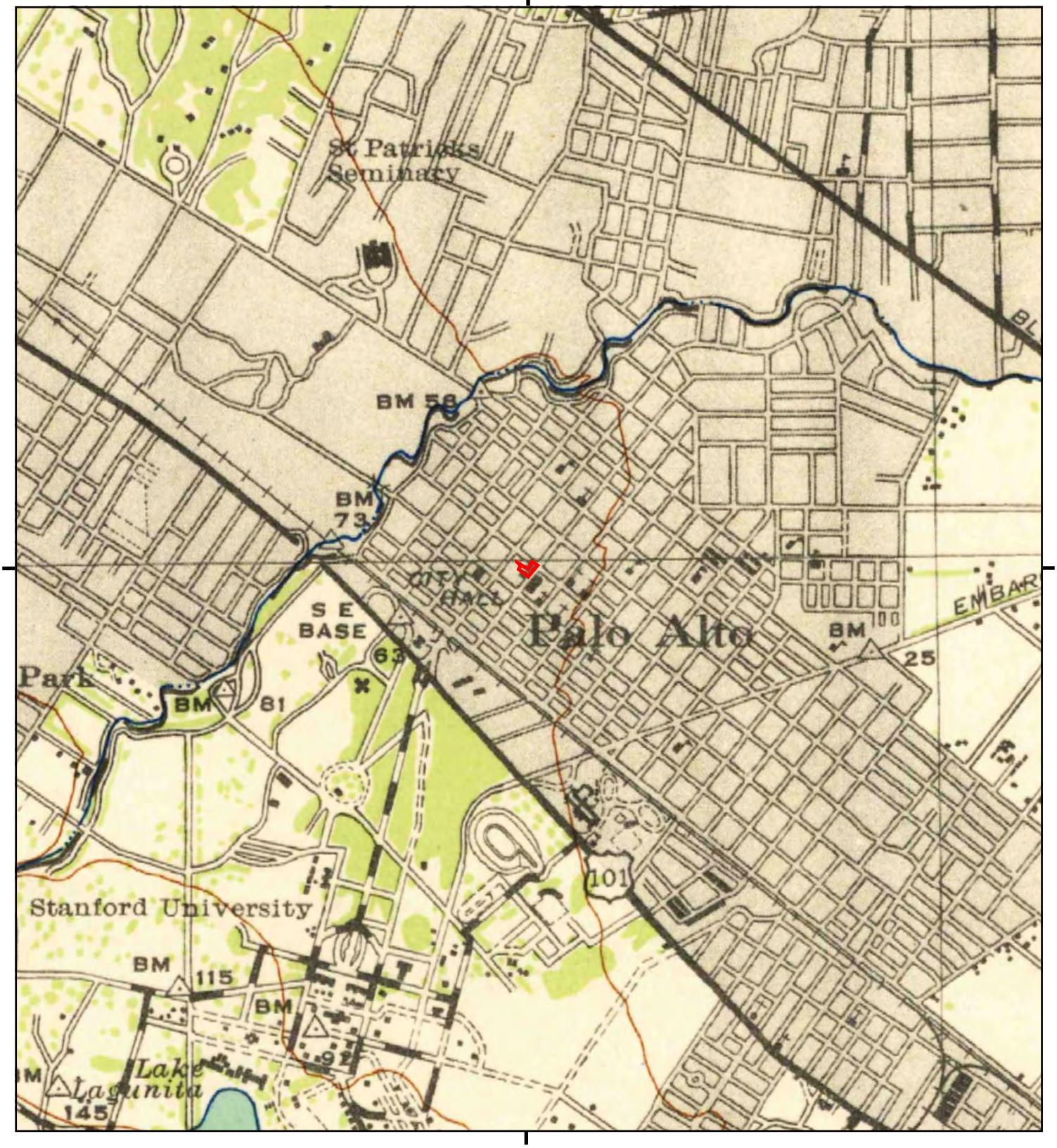
0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, PALO ALTO, 1947, 15-minute

SITE NAME: Proposed Palo Alto Parking Structure
ADDRESS: 375 Hamilton Avenue
Palo Alto, CA 94301
CLIENT: Parsons Brinkerhoff

N



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Palo Alto, 1943, 15-minute

SITE NAME: Proposed Palo Alto Parking Structure
ADDRESS: 375 Hamilton Avenue
Palo Alto, CA 94301
CLIENT: Parsons Brinkerhoff

N



This report includes information from the following map sheet(s).

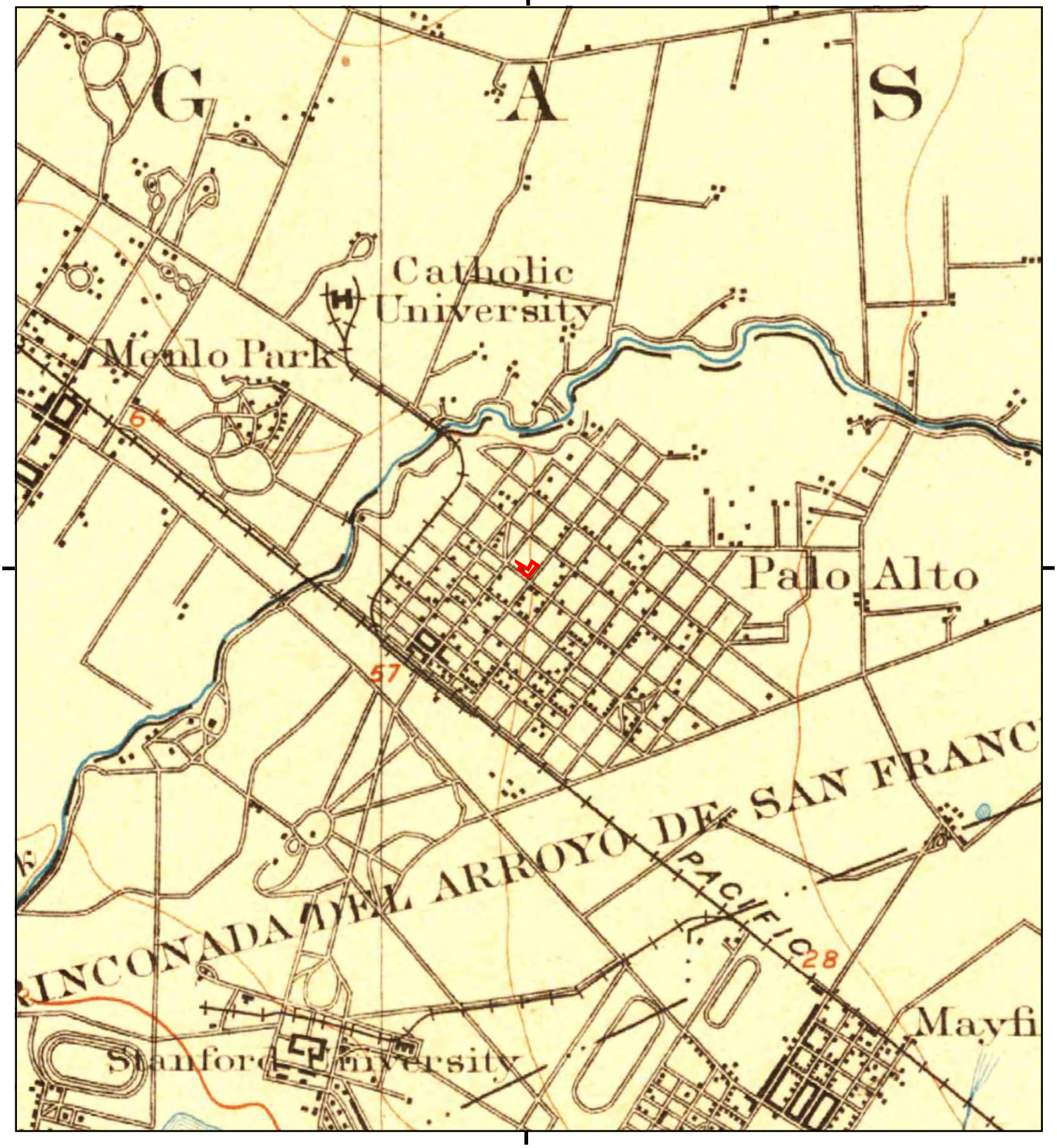
0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Santa Cruz, 1902, 30-minute

SITE NAME: Proposed Palo Alto Parking Structure
ADDRESS: 375 Hamilton Avenue
Palo Alto, CA 94301
CLIENT: Parsons Brinkerhoff

N



This report includes information from the following map sheet(s).

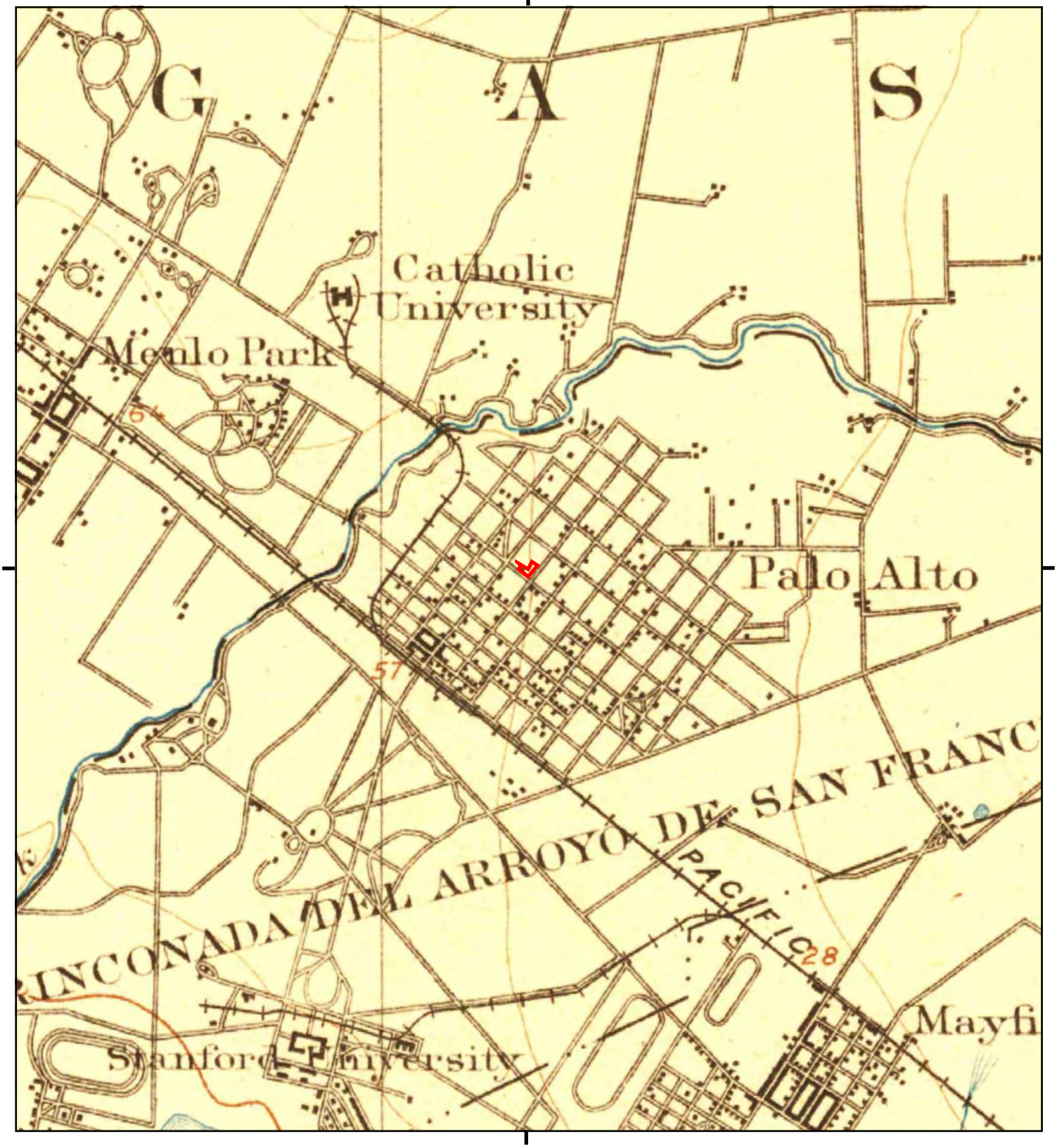
0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Palo Alto, 1899, 15-minute

SITE NAME: Proposed Palo Alto Parking Structure
ADDRESS: 375 Hamilton Avenue
Palo Alto, CA 94301
CLIENT: Parsons Brinkerhoff

N



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Palo Alto, 1897, 15-minute

SITE NAME: Proposed Palo Alto Parking Structure
ADDRESS: 375 Hamilton Avenue
Palo Alto, CA 94301
CLIENT: Parsons Brinkerhoff

N

APPENDIX J: CITY DIRECTORY INFORMATION

Proposed Palo Alto Parking Structure
375 Hamilton Avenue
Palo Alto, CA 94301

Inquiry Number: 5021939.5
August 21, 2017

The EDR-City Directory Abstract

Environmental Data Resources Inc

6 Armstrong Road
Shelton, CT 06484
800.352.0050
www.edrnet.com

TABLE OF CONTENTS

SECTION

Executive Summary

Findings

City Directory Images

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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EXECUTIVE SUMMARY

DESCRIPTION

Environmental Data Resources, Inc.'s (EDR) City Directory Abstract is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's City Directory Abstract includes a search and abstract of available city directory data. For each address, the directory lists the name of the corresponding occupant at five year intervals.

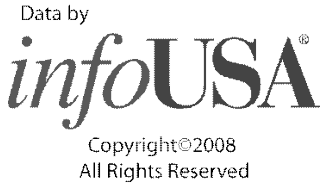
Business directories including city, cross reference and telephone directories were reviewed, if available, at approximately five year intervals for the years spanning 1922 through 2014. This report compiles information gathered in this review by geocoding the latitude and longitude of properties identified and gathering information about properties within 332 feet of the target property.

A summary of the information obtained is provided in the text of this report.

RECORD SOURCES

EDR's Digital Archive combines historical directory listings from sources such as Cole Information and Dun & Bradstreet. These standard sources of property information complement and enhance each other to provide a more comprehensive report.

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RESEARCH SUMMARY

The following research sources were consulted in the preparation of this report. An "X" indicates where information was identified in the source and provided in this report.

Year	Source	TP	Adjoining	Text Abstract	Source Image
2014	EDR Digital Archive	-	X	X	-
2010	EDR Digital Archive	-	X	X	-
2006	Haines Company, Inc.	-	-	-	-
2001	Haines Company, Inc.	-	X	X	-
2000	Haines Company	-	-	-	-
1996	Pacific Bell	-	-	-	-
1991	PACIFIC BELL WHITE PAGES	-	X	X	-
1986	Pacific Bell	-	X	X	-
1985	Pacific Bell	-	-	-	-
1982	Pacific Telephone	-	X	X	-
1980	Pacific Telephone	-	X	X	-
1978	R. L. Polk & Co.	-	X	X	-

EXECUTIVE SUMMARY

Year	Source	TP	Adjoining	Text Abstract	Source Image
1975	Pacific Telephone	-	X	X	-
1974	R. L. Polk Co.	-	-	-	-
1970	R. L. Polk & Co.	-	X	X	-
1968	R. L. Polk Co.	-	-	-	-
1966	R. L. POLK	-	-	-	-
1965	R. L. Polk Co.	-	X	X	-
1964	R. L. Polk & Co.	-	-	-	-
1963	Pacific Telephone	-	X	X	-
1962	R. L. Polk & Co.	-	X	X	-
1960	R. L. Polk Co.	-	X	X	-
1957	Pacific Telephone	-	X	X	-
	R. L. Polk Co.	-	X	X	-
1955	R. L. Polk & Co.	-	X	X	-
	R.L. Polk and Co Publishers	-	X	X	-
1950	R. L. Polk Co.	-	X	X	-
1946	R. L. Polk Co.	-	X	X	-
1945	R. L. Polk & Co.	-	-	-	-
1942	R. L. Polk Co.	-	X	X	-
1940	R. L. Polk Co.	-	-	-	-
1936	R. L. Polk Co.	-	X	X	-
1935	R. L. Polk Co.	-	-	-	-
1931	R. L. Polk Co.	-	X	X	-
1930	R. L. Polk Co.	-	-	-	-
1926	R. L. Polk Co.	-	X	X	-
1925	R. L. Polk Co. of California	-	-	-	-
1922	R. L. Polk Co.	-	-	-	-

EXECUTIVE SUMMARY

SELECTED ADDRESSES

The following addresses were selected by the client, for EDR to research. An "X" indicates where information was identified.

Address	*Type*	*Findings*
560 Waverly Street	Client Entered	
510 Waverly Street	Client Entered	
380 Hamilton Avenue	Client Entered	X
560 Waverly Street	Client Entered	
510 Waverly Street	Client Entered	
380 Hamilton Avenue	Client Entered	
560 Waverly Street	Client Entered	
510 Waverly Street	Client Entered	
380 Hamilton Avenue	Client Entered	

FINDINGS

TARGET PROPERTY INFORMATION

ADDRESS

375 Hamilton Avenue
Palo Alto, CA 94301

FINDINGS DETAIL

Target Property research detail.

FINDINGS

ADJOINING PROPERTY DETAIL

The following Adjoining Property addresses were researched for this report. Detailed findings are provided for each address.

BRYANT

585 BRYANT

Year	Uses	Source
2001	RITZ CAMERA CENTER	Haines Company, Inc.
1960	Calif Pac Title Ins Co ADA	R. L. Polk Co.
1955	Calif Pacific Title Ins Co 4D	R. L. Polk & Co.

595 BRYANT

Year	Uses	Source
2001	HOLIDAY CLEANERS	Haines Company, Inc.
	PARKS DRY	Haines Company, Inc.
	CLEANERS	Haines Company, Inc.

601 BRYANT

Year	Uses	Source
1960	May J Earle & Co inv securities da	R. L. Polk Co.
1955	May J Earle & Co inv sec 4D	R. L. Polk & Co.
1946	Gallaher J A phys	R. L. Polk Co.
	Kirk J H phys	R. L. Polk Co.
1942	Kirk J H phys	R. L. Polk Co.
1936	Kirk J H phys	R. L. Polk Co.
1931	Williams T M phys	R. L. Polk Co.
	Lee Roth Clark & Wilbur phys	R. L. Polk Co.
1926	Roth E F phys	R. L. Polk Co.

BRYANT ST

577 BRYANT ST

Year	Uses	Source
1962	ALICE S BEAUTY SHOP (MRS ALICE L BARKER) BEAUTY SHOP	R. L. Polk & Co.
1957	KL(ATOVICH JOHN R	Pacific Telephone

585 BRYANT ST

Year	Uses	Source
1991	RITZ CAMERA CENTER	PACIFIC BELL WHITE PAGES

Year	Uses	Source
1978	Thomson & Me Kinnon Securities Inc investment securities	R. L. Polk & Co.
1970	Blair & Co Inc investment securities	R. L. Polk & Co.
1965	SCHWABACHER CO INVESTMENT SECURITIES	R. L. Polk Co.

595 BRYANT ST

Year	Uses	Source
1991	HOLIDAY CLEANERS	PACIFIC BELL WHITE PAGES

BRYANT WAY

585 BRYANT WAY

Year	Uses	Source
1986	BROOKS CAMERAS	Pacific Bell
	BROOKS CAMERAS	Pacific Bell
1982	BROOKS CAMERAS	Pacific Telephone
1975	THOMSON & MC KINNON AUCHINCLQSS KOHL MEYER INC	Pacific Telephone
1957	PAC TITLE INSURANCE CO SEE CALIF PAC TITLE INS CO	Pacific Telephone
	CALIF PAC TITLE INSURANCE CO	Pacific Telephone

591 BRYANT WAY

Year	Uses	Source
1957	PIRES MANUEL J	Pacific Telephone

596 BRYANT WAY

Year	Uses	Source
1975	Martins Fernando Vicira	Pacific Telephone

599 BRYANT WAY

Year	Uses	Source
1957	DOL BOSE WM C JR	Pacific Telephone

601 BRYANT WAY

Year	Uses	Source
1957	MAY J EARLE & CO INVESTMNT	Pacific Telephone

608 BRYANT WAY

Year	Uses	Source
1975	Rost Tannisse Brown	Pacific Telephone

FINDINGS

GILMAN

601 GILMAN

Year	Uses	Source
1931	Vacant	R. L. Polk Co.

604 GILMAN

Year	Uses	Source
1960	B & B Furn Mart antiques da	R. L. Polk Co.
1955	B&B Furn Mart antiques da	R. L. Polk & Co.
	Greene Geo L	R. L. Polk & Co.
	GREENE GEO LAB FORMN STANFORD UNIV PALO ALTO	R.L. Polk and Co Publishers
1950	Mrs restr	R. L. Polk Co.
	ADewlaney M F	R. L. Polk Co.
1946	Dewlaney M F Mrs restr	R. L. Polk Co.
1942	Dewlaney M F Mrs restr	R. L. Polk Co.
1936	West Margt E restr	R. L. Polk Co.
1931	Vacant	R. L. Polk Co.

605 GILMAN

Year	Uses	Source
1931	Rempel D G	R. L. Polk Co.

606 GILMAN

Year	Uses	Source
1960	City Parking Lot	R. L. Polk Co.

611 GILMAN

Year	Uses	Source
1931	Park Alice Mrs	R. L. Polk Co.

620 GILMAN

Year	Uses	Source
1950	a Hughes Helen	R. L. Polk Co.
1946	Loveland Mary Mrs	R. L. Polk Co.
	Brister W H	R. L. Polk Co.
1942	Melbourne Terese drsmkr	R. L. Polk Co.
	Lecuyer L B	R. L. Polk Co.
	Irwin L G	R. L. Polk Co.
1936	Hodgen Bertha Mrs	R. L. Polk Co.

FINDINGS

Year	Uses	Source
1936	Espinosa Mabel	R. L. Polk Co.
	Garnjobsi Laura	R. L. Polk Co.
1931	Willey Adelyn L	R. L. Polk Co.
	Watkins I V Mrs	R. L. Polk Co.
	Stewart Betty E	R. L. Polk Co.

621 GILMAN

Year	Uses	Source
1931	Simon Louis exp	R. L. Polk Co.

622 GILMAN

Year	Uses	Source
1950	a Theobald P A	R. L. Polk Co.
	real est	R. L. Polk Co.

625 GILMAN

Year	Uses	Source
1950	Wideman Jas	R. L. Polk Co.
1946	Francis Anna L	R. L. Polk Co.

626 GILMAN

Year	Uses	Source
1950	Guinan N B	R. L. Polk Co.
1946	Guinan H B Mrs	R. L. Polk Co.
1942	Shook Mildred Mrs	R. L. Polk Co.
	Fearey Myrtle Mrs	R. L. Polk Co.
1936	Fuller Leslie	R. L. Polk Co.
1931	Stevens N M Mrs	R. L. Polk Co.

627 GILMAN

Year	Uses	Source
1946	Smith H P	R. L. Polk Co.
	Dingley C L Mrs	R. L. Polk Co.
1942	Vacant	R. L. Polk Co.
1936	Baron Mitchell	R. L. Polk Co.
1931	Mannon J M music tchr	R. L. Polk Co.

628 GILMAN

Year	Uses	Source
1950	AHill M E Mrs	R. L. Polk Co.

FINDINGS

Year	Uses	Source
1946	Hill M E Mrs	R. L. Polk Co.
1942	Hill M E Mrs	R. L. Polk Co.
1936	Grimm Wm	R. L. Polk Co.
	Warner J L	R. L. Polk Co.
1931	Dunn Christina Mrs	R. L. Polk Co.

629 GILMAN

Year	Uses	Source
1950	dentist	R. L. Polk Co.
	a Alexander C M	R. L. Polk Co.
1946	Alexander C M dentist	R. L. Polk Co.

630 GILMAN

Year	Uses	Source
1960	Eric Kson Wihlo	R. L. Polk Co.
1955	Erickson Alma Mrs	R. L. Polk & Co.
1950	Erickson Alma	R. L. Polk Co.
1946	Davis P W	R. L. Polk Co.
1936	Peterson A B	R. L. Polk Co.
1931	Vacant	R. L. Polk Co.

632 GILMAN

Year	Uses	Source
1960	Shepherd Alice Mrs	R. L. Polk Co.
1955	du Luart Jeanne	R. L. Polk & Co.
1946	Davis Clara B	R. L. Polk Co.
	Winder C L	R. L. Polk Co.
	Erickson Alma Mrs	R. L. Polk Co.
1942	Bartges W W	R. L. Polk Co.
	Krantz K W	R. L. Polk Co.
	Fisk M S Mrs	R. L. Polk Co.
1936	Vandervoort R S	R. L. Polk Co.
1931	Merrill Lynne	R. L. Polk Co.

634 GILMAN

Year	Uses	Source
1960	Campbell Eva E Mrs da	R. L. Polk Co.
1955	Fentzwang Peter	R. L. Polk & Co.
1950	Reese R K	R. L. Polk Co.

FINDINGS

636 GILMAN

Year	Uses	Source
1960	Bullock Maryelen D da	R. L. Polk Co.
1955	Bullock Maryelen D da	R. L. Polk & Co.
1950	Ellis Janette E	R. L. Polk Co.
1946	Denman L H Mrs	R. L. Polk Co.
1942	Cook W D Mrs	R. L. Polk Co.
1936	Cook W D Mrs	R. L. Polk Co.
1931	Vacant	R. L. Polk Co.

637 GILMAN

Year	Uses	Source
1950	a Smith H P	R. L. Polk Co.
1942	Smith H P	R. L. Polk Co.
1936	Smith H P	R. L. Polk Co.
1931	Smith H P	R. L. Polk Co.
	Wilde E G Mrs nurse	R. L. Polk Co.

638 GILMAN

Year	Uses	Source
1960	Marinelli Win G jr	R. L. Polk Co.
1955	Pendleton Floyd	R. L. Polk & Co.
1950	Call Justin	R. L. Polk Co.

639 GILMAN

Year	Uses	Source
1950	Culver L J Mrs	R. L. Polk Co.
1946	Culver L J Mrs	R. L. Polk Co.
1942	Culver L J Mrs	R. L. Polk Co.
1936	Culver L J Mrs	R. L. Polk Co.
1931	Culver L J Mrs	R. L. Polk Co.

640 GILMAN

Year	Uses	Source
1960	Cohen Harry da	R. L. Polk Co.
1955	Cohen Harry da	R. L. Polk & Co.
1950	Tierce C J	R. L. Polk Co.
1946	Cook Horacia Mrs	R. L. Polk Co.
1942	Bowen L A	R. L. Polk Co.
1936	Lawrence L S	R. L. Polk Co.
1931	Morgenthau Jessica Mrs	R. L. Polk Co.

FINDINGS

641 GILMAN

Year	Uses	Source
1950	Pry I A Mrs	R. L. Polk Co.
	Stidston A	R. L. Polk Co.
1946	Fry I A Mrs	R. L. Polk Co.
	Stidson A O	R. L. Polk Co.
1942	Fry I A Mrs	R. L. Polk Co.
	Young Hazel	R. L. Polk Co.
1936	Young Hazel	R. L. Polk Co.
	Warner C M	R. L. Polk Co.
1931	Maxwell Helena	R. L. Polk Co.

642 GILMAN

Year	Uses	Source
1960	Denman Laura H Mrs da	R. L. Polk Co.
1955	Dehman Laura H Mrs	R. L. Polk & Co.
1950	a Denman L H	R. L. Polk Co.
	Roger	R. L. Polk Co.
	a Caldwell	R. L. Polk Co.

645 GILMAN

Year	Uses	Source
1950	Arnold J 0 Mrs	R. L. Polk Co.
1946	Arnold J O Mrs	R. L. Polk Co.
1942	Arnold Olive Mrs	R. L. Polk Co.
1936	Jourdin F B Mrs	R. L. Polk Co.
1931	Nugent Don	R. L. Polk Co.

649 GILMAN

Year	Uses	Source
1960	Cedargreen Mus Studio da	R. L. Polk Co.
	Cedargreen Mae E	R. L. Polk Co.
	City Parking Lot	R. L. Polk Co.
1955	Vacant	R. L. Polk & Co.
1950	Ehret Zora	R. L. Polk Co.
1946	Dunnels L H	R. L. Polk Co.
	Schnack Harold	R. L. Polk Co.
1942	King Mabel L	R. L. Polk Co.
1936	King Mabel L	R. L. Polk Co.
1931	Freeman A G	R. L. Polk Co.

FINDINGS

650 GILMAN

Year	Uses	Source
1960	Kegley H Paul pianos	R. L. Polk Co.
1955	Kegley H Paul pianos da	R. L. Polk & Co.
1950	Vacant	R. L. Polk Co.

651 GILMAN

Year	Uses	Source
1960	Pansegrow Nicholaas	R. L. Polk Co.
	boods	R. L. Polk Co.
1955	Waltz Hazel Mrs da	R. L. Polk & Co.
1950	Naslund R A	R. L. Polk Co.
1946	Griffin W A	R. L. Polk Co.
1942	Payne Blanche Mrs	R. L. Polk Co.
1936	Buck L V Mrs	R. L. Polk Co.
1931	King Mabel L	R. L. Polk Co.

654 GILMAN

Year	Uses	Source
1960	Kegley H Paul da	R. L. Polk Co.
1955	Kegley H Paul da	R. L. Polk & Co.

661 GILMAN

Year	Uses	Source
1960	Jervis St ven A	R. L. Polk Co.
	Stofiel Florence J Mrs da	R. L. Polk Co.
	Haddy Grace M	R. L. Polk Co.
1955	Smith May Mrs da	R. L. Polk & Co.
1946	Mc Cann M R Mrs	R. L. Polk Co.
	Matravers C H	R. L. Polk Co.
	Kiffe Clara A	R. L. Polk Co.
1942	Mc Cann M R Mrs	R. L. Polk Co.
	Matravers C H	R. L. Polk Co.
	Kiffe Clara A	R. L. Polk Co.
1936	Matravers C H	R. L. Polk Co.
1931	Hornsby Robt	R. L. Polk Co.
	Mc Cormick Ione Mrs	R. L. Polk Co.
	Matravers C H	R. L. Polk Co.

FINDINGS

664 GILMAN

Year	*Uses*	*Source*
1982	E W S Property Management	Pacific Telephone

GILMAN AVE

664 GILMAN AVE

Year	*Uses*	*Source*
1986	E W S Real Estate Investment Corp William E Riler	Pacific Bell
1982	Reller William E W S Real Estate Investment Corp	Pacific Telephone
1975	Levett Dennis Stanford Financial Co	Pacific Telephone

GILMAN ST

604 GILMAN ST

Year	*Uses*	*Source*
1965	VACANT	R. L. Polk Co.

624 GILMAN ST

Year	*Uses*	*Source*
1965	CITY PARKING LOT	R. L. Polk Co.

630 GILMAN ST

Year	*Uses*	*Source*
1970	Erickson Wihlo E	R. L. Polk & Co.
1965	ERICKSON WIHLO	R. L. Polk Co.

632 GILMAN ST

Year	*Uses*	*Source*
1970	Canole Earl R	R. L. Polk & Co.
1965	WILSON AGNES MRS	R. L. Polk Co.

634 GILMAN ST

Year	*Uses*	*Source*
1975	Campbell Eva Mrs	Pacific Telephone
1970	Campbell Eva E Mrs	R. L. Polk & Co.
1965	CAMPBELL EVA E MRS	R. L. Polk Co.

636 GILMAN ST

Year	*Uses*	*Source*
1970	Porter Brian	R. L. Polk & Co.

Year	Uses	Source
1965	NO RETURN	R. L. Polk Co.

638 GILMAN ST

Year	Uses	Source
1970	Collins Julie	R. L. Polk & Co.
1965	CANOLE EARL R	R. L. Polk Co.

640 GILMAN ST

Year	Uses	Source
1970	Schultz Rose Mrs	R. L. Polk & Co.
1965	COHEN HARRY	R. L. Polk Co.

641 GILMAN ST

Year	Uses	Source
1965	CITY PARKING LOT	R. L. Polk Co.

642 GILMAN ST

Year	Uses	Source
1975	Denman Laura	Pacific Telephone
1970	a Vacant	R. L. Polk & Co.
	Denaman Laur	R. L. Polk & Co.
1965	DENMAN LAURA H MRS	R. L. Polk Co.

649 GILMAN ST

Year	Uses	Source
1975	Neilson R W	Pacific Telephone
1970	Brown Sue	R. L. Polk & Co.
1965	CONSUL JERRY	R. L. Polk Co.

Gilman St

650 Gilman St

Year	Uses	Source
2014	ENGLISH DON LTD	EDR Digital Archive
	ENGLISH DON LTD	EDR Digital Archive
2010	GREEN INSURANCE AGENCY	EDR Digital Archive
	ENGLISH DON LTD	EDR Digital Archive
	GREEN INSURANCE AGENCY	EDR Digital Archive
	ENGLISH DON LTD	EDR Digital Archive

FINDINGS

GILMAN ST

650 GILMAN ST

Year	Uses	Source
1991	PICTURE THIS	PACIFIC BELL WHITE PAGES
1982	Kirby Anne	Pacific Telephone
	Van Valkenburgh Robert	Pacific Telephone
1970	Kegley Paul H Jr piano dealer	R. L. Polk & Co.

651 GILMAN ST

Year	Uses	Source
1975	Benjamin Mark	Pacific Telephone
	Perillat Phil	Pacific Telephone
1970	No Return	R. L. Polk & Co.
1965	VACANT	R. L. Polk Co.

652 GILMAN ST

Year	Uses	Source
1970	Kegley H Paul Jr	R. L. Polk & Co.

Gilman St

654 Gilman St

Year	Uses	Source
2014	CHOCOLATE GARAGE	EDR Digital Archive
	SHARE VISIT	EDR Digital Archive
	EXPERT NETWORKS INC	EDR Digital Archive
	UNAMESA ASSOCIATION	EDR Digital Archive
	HEALTH METRICS SYSTEMS INC	EDR Digital Archive
	CHOCOLATE GARAGE	EDR Digital Archive
	SHARE VISIT	EDR Digital Archive
	EXPERT NETWORKS INC	EDR Digital Archive
	UNAMESA ASSOCIATION	EDR Digital Archive
	HEALTH METRICS SYSTEMS INC	EDR Digital Archive
2010	UNAMESA ASSOCIATION	EDR Digital Archive
	EMERGENT SOLUTIONS INC	EDR Digital Archive
	EMERGENT SOLUTIONS INC	EDR Digital Archive
	UNAMESA ASSOCIATION	EDR Digital Archive

FINDINGS

GILMAN ST

654 GILMAN ST

Year	Uses	Source
2001	KEENANCharles RICHMANTOM&ASC	Haines Company, Inc.
1991	IMMEDIA	PACIFIC BELL WHITE PAGES
	LANDMARK PACIFIC GROUP INC	PACIFIC BELL WHITE PAGES
1986	ALLEN JUDSON PHOTOGRAPHY	Pacific Bell
	SILVER STREAK	Pacific Bell
	ALLEN JUDSON PHOTOGRAPHY	Pacific Bell
	Silver Streak	Pacific Bell
1982	AULEN JUDSON PHOTOGRAPHY	Pacific Telephone
	Silver Streak	Pacific Telephone
1975	Altoan Press prntrs	Pacific Telephone
	Kirby Anne	Pacific Telephone
	Van Valkenburgh R M	Pacific Telephone
1970	Kegley Aline B Mrs	R. L. Polk & Co.
1965	KEGLEY H PAUL	R. L. Polk Co.

661 GILMAN ST

Year	Uses	Source
2001	XXXX	Haines Company, Inc.
1975	Soderberg D	Pacific Telephone
	Harris H E	Pacific Telephone
1970	c No Return	R. L. Polk & Co.
	b No Return	R. L. Polk & Co.
	Powell Geo H	R. L. Polk & Co.
1965	SPARKS SHARON K	R. L. Polk Co.
	CHANEY HOWARD	R. L. Polk Co.
	APARTMENTS	R. L. Polk Co.
	VACANT	R. L. Polk Co.

Gilman St

664 Gilman St

Year	Uses	Source
2014	PARKWOOD PARTNERS LLC	EDR Digital Archive
	120 HAWTHORNE AVE LLC A CALIFO	EDR Digital Archive
	OISEAU LLC	EDR Digital Archive
	WAVERLEY PLAZA CORP	EDR Digital Archive

FINDINGS

Year	Uses	Source
2014	R & M PROPERTIES	EDR Digital Archive
	HAMILTON INVESTORS LLC	EDR Digital Archive
	NORTHWALL BUILDERS INC	EDR Digital Archive
	M2 BUILDERS	EDR Digital Archive
	R & M PROPERTIES	EDR Digital Archive
	HAMILTON INVESTORS LLC	EDR Digital Archive
	120 HAWTHORNE AVE LLC A CALIFO	EDR Digital Archive
	OISEAU LLC	EDR Digital Archive
	WAVERLEY PLAZA CORP	EDR Digital Archive
	PARKWOOD PARTNERS LLC	EDR Digital Archive
	NORTHWALL BUILDERS INC	EDR Digital Archive
	M2 BUILDERS	EDR Digital Archive
2010	NORTHWALL BUILDERS INC	EDR Digital Archive
	M2 BUILDERS	EDR Digital Archive
	PARKWOOD PARTNERS LLC	EDR Digital Archive
	COWPER GROUP LLC	EDR Digital Archive
	R & M PROPERTIES	EDR Digital Archive
	E W S INVESTMENT COMPANY INC	EDR Digital Archive
	WAVERLEY PLAZA CORP	EDR Digital Archive
	370 LOWELL GROUP LLC	EDR Digital Archive
	LADERA INC	EDR Digital Archive
	LADERA INC	EDR Digital Archive
	NORTHWALL BUILDERS INC	EDR Digital Archive
	M2 BUILDERS	EDR Digital Archive
	PARKWOOD PARTNERS LLC	EDR Digital Archive
	COWPER GROUP LLC	EDR Digital Archive
	E W S INVESTMENT COMPANY INC	EDR Digital Archive
	WAVERLEY PLAZA CORP	EDR Digital Archive
	370 LOWELL GROUP LLC	EDR Digital Archive
	R & M PROPERTIES	EDR Digital Archive

GILMAN ST

664 GILMAN ST

Year	Uses	Source
2001	RELLER WILLIAM	Haines Company, Inc.
	EWSREINVSTCORP	Haines Company, Inc.
	MICHAELMONTQYA	Haines Company, Inc.
	GRAPHIC DESIGN R&M PROPERTIES	Haines Company, Inc.

Year	Uses	Source
1991	GREEN ROCK CORP	PACIFIC BELL WHITE PAGES
	E W S REAL ESTATE INVESTMENT CORP WILLIAM E	PACIFIC BELL WHITE PAGES
1986	E W S PROPERTY MANAGEMENT	Pacific Bell
	BRANDT LINDA & JAMES EDTRS	Pacific Bell
	E W S REAL ESTATE INVESTMENT CORP WILLIAM E RILER	Pacific Bell
	Brandt Linda & James edtrs	Pacific Bell
	E W S Property Management	Pacific Bell

670 GILMAN ST

Year	Uses	Source
2001	XXXX	Haines Company, Inc.

HAINILTON AVE

321 HAINILTON AVE

Year	Uses	Source
1982	BURKHALTER ROBERT MA hearing consltnt	Pacific Telephone

Hamilton Ave

300 Hamilton Ave

Year	Uses	Source
2014	TAYMOR ROSALINDA MD	EDR Digital Archive
	VENUENEXT INC	EDR Digital Archive
	WARE & FREIDENRICH A PROFESSIO	EDR Digital Archive
	LEMPERT DENNIS ALAN	EDR Digital Archive
	FOX PENNY MFCC	EDR Digital Archive
	RUSSIN ELLEN LCSW	EDR Digital Archive
	JPMORGAN CHASE BANK NAT ASSN	EDR Digital Archive
	JPMORGAN CHASE & CO	EDR Digital Archive
	JPMORGAN CHASE BANK NAT ASSN	EDR Digital Archive
	REGIS BERNETT DRILL CO LP	EDR Digital Archive
	MOVIAL NORTH AMERICA INC	EDR Digital Archive
	REGIS MANAGEMENT COMPANY LLC	EDR Digital Archive
	FREIDENRICH FAMILY PARTNERSHIP	EDR Digital Archive
	MILLER STARR & REGALIA LAW	EDR Digital Archive
	TREGARON CAPITAL COMPANY LLC	EDR Digital Archive
	WIMMER PROPERTIES LLC	EDR Digital Archive

FINDINGS

Year	Uses	Source
2014	MLR PROPERTIES PARENT LLC	EDR Digital Archive
	TREGARON CAPITAL COMPANY LLC	EDR Digital Archive
	WIMMER PROPERTIES LLC	EDR Digital Archive
	MLR PROPERTIES PARENT LLC	EDR Digital Archive
	MILLER STARR & REGALIA LAW	EDR Digital Archive
	JPMORGAN CHASE BANK NAT ASSN	EDR Digital Archive
	REGIS MANAGEMENT COMPANY LLC	EDR Digital Archive
	FREIDENRICH FAMILY PARTNERSHIP	EDR Digital Archive
	MOVIAL NORTH AMERICA INC	EDR Digital Archive
	REGIS BERNETT DRILL CO LP	EDR Digital Archive
	FOX PENNY MFCC	EDR Digital Archive
	RUSSIN ELLEN LCSW	EDR Digital Archive
	TAYMOR ROSALINDA MD	EDR Digital Archive
	JPMORGAN CHASE BANK NAT ASSN	EDR Digital Archive
	JPMORGAN CHASE & CO	EDR Digital Archive
	VENUENEXT INC	EDR Digital Archive
	LEMPERT DENNIS ALAN	EDR Digital Archive
	WARE & FREIDENRICH A PROFESSIO	EDR Digital Archive
2010	LEMPERT DENNIS ALAN	EDR Digital Archive
	WARE & FREIDENRICH A PROFESSIO	EDR Digital Archive
	GERMANE CHARLOTTE LEGAL SEARCH	EDR Digital Archive
	MERUS CAPITAL	EDR Digital Archive
	LENT STANLEY DDS	EDR Digital Archive
	GOLDFARB LORH PLANTE PHD	EDR Digital Archive
	KORMAN JOSHUA MD FACS	EDR Digital Archive
	TAYMOR ROSALINDA MD	EDR Digital Archive
	FRESH N CLEAN CARPET & UPHOLST	EDR Digital Archive
	LIM MARGARET MFT	EDR Digital Archive
	RUSSIN ELLEN LCSW	EDR Digital Archive
	FOX PENNY MFCC	EDR Digital Archive
	BERGMAN CLAUDETTE MFCC	EDR Digital Archive
	EXCEL MOVING SERVICE	EDR Digital Archive
	PROVEN TERMITE SOLUTIONS	EDR Digital Archive
	AANTEX PEST CONTROL CO	EDR Digital Archive
	A WINDOW MAN	EDR Digital Archive
	IMPERIAL TREE	EDR Digital Archive
	BEST TREE SERVICE	EDR Digital Archive
	ACE PLUMBING	EDR Digital Archive

FINDINGS

Year	Uses	Source
2010	JPMORGAN CHASE & CO	EDR Digital Archive
	ADAM MCNICOL WEALTH MANAGEMENT	EDR Digital Archive
	REGIS BERNETT DRILL CO LP	EDR Digital Archive
	REGIS MANAGEMENT COMPANY LLC	EDR Digital Archive
	FINTAN PARTNERS	EDR Digital Archive
	FREIDENRICH FAMILY PARTNERSHIP	EDR Digital Archive
	MILLER STARR & REGALIA LAW	EDR Digital Archive
	GLOBESPAN CAPITAL PARTNERS LLC	EDR Digital Archive
	GLOBESPAN CAPITAL PARTNERS LLC	EDR Digital Archive
	MILLER STARR & REGALIA LAW	EDR Digital Archive
	REGIS MANAGEMENT COMPANY LLC	EDR Digital Archive
	FINTAN PARTNERS	EDR Digital Archive
	FREIDENRICH FAMILY PARTNERSHIP	EDR Digital Archive
	REGIS BERNETT DRILL CO LP	EDR Digital Archive
	JPMORGAN CHASE & CO	EDR Digital Archive
	IMPERIAL TREE	EDR Digital Archive
	BEST TREE SERVICE	EDR Digital Archive
	ACE PLUMBING	EDR Digital Archive
	FRESH N CLEAN CARPET & UPHOLST	EDR Digital Archive
	EXCEL MOVING SERVICE	EDR Digital Archive
	PROVEN TERMITE SOLUTIONS	EDR Digital Archive
	AANTEX PEST CONTROL CO	EDR Digital Archive
	A WINDOW MAN	EDR Digital Archive
	LIM MARGARET MFT	EDR Digital Archive
	RUSSIN ELLEN LCSW	EDR Digital Archive
	FOX PENNY MFCC	EDR Digital Archive
	BERGMAN CLAUDETTE MFCC	EDR Digital Archive
	LEMPERT DENNIS ALAN	EDR Digital Archive
	WARE & FREIDENRICH A PROFESSIO	EDR Digital Archive
	LENT STANLEY DDS	EDR Digital Archive
	GOLDFARB LORH PLANTE PHD	EDR Digital Archive
	MERUS CAPITAL	EDR Digital Archive
	GERMANE CHARLOTTE LEGAL SEARCH	EDR Digital Archive
	KORMAN JOSHUA MD FACS	EDR Digital Archive
	TAYMOR ROSALINDA MD	EDR Digital Archive
	ADAM MCNICOL WEALTH MANAGEMENT	EDR Digital Archive

FINDINGS

HAMILTON AVE

300 HAMILTON AVE

Year	*Uses*	*Source*
2001	WASH MUTUAL	Haines Company, Inc.
	WASH MUTUAL BANK	Haines Company, Inc.
1991	LEWIS & BROOKS	PACIFIC BELL WHITE PAGES
	BJORNSON BRETT A	PACIFIC BELL WHITE PAGES
	KAPLAN STANLEY H EDUCATIONAL CENTER LTD	PACIFIC BELL WHITE PAGES
	TECHNOLOGY MODELING ASSOCIATES INC	PACIFIC BELL WHITE PAGES
	OBRIEN KATHLEEN M LCSW	PACIFIC BELL WHITE PAGES
	FIELD JILL LEHMAN LCSW	PACIFIC BELL WHITE PAGES
1986	Bacci Benneft Tap Qn Tholke Inc	Pacific Bell
	Humpal Leftwich Lauck & Sinn Inc advg agcy	Pacific Bell
	Humpal Leftwich Lauck & Sinn Inc advg agcy	Pacific Bell
	BACCI BENNEFT TAP QN THOLKE INC	Pacific Bell
	HUMPAL LEFTWICH LAUCK & SINN INC ADVG AGCY	Pacific Bell
	PRICE WATERHOUSE	Pacific Bell
	PRICE WATERHOUSE CPAS	Pacific Bell
	THOLKE W E	Pacific Bell
	Price Waterhouse	Pacific Bell
	Price Waterhouse CPAs	Pacific Bell
	Tholke W E	Pacific Bell
1982	Main Odfc	Pacific Telephone
	NORTHERN CAUFORNIA SAVINGS & LOAN ASSOCIATION	Pacific Telephone
1978	Northern California Savings & Loan Assn	R. L. Polk & Co.
1975	Palo Alto Ofc	Pacific Telephone
	NORTHERN CALIFORNIA SAVINGS & LOAN ASSOCIATION	Pacific Telephone
1970	Palo Alto Salina Saving boa Ass	R. L. Polk & Co.
	Ashton Morris B real est appraiser	R. L. Polk & Co.
1965	PALO ALTO SAVINGS LOAN ASSN	R. L. Polk Co.
1960	Wulff Hansen & Co inv	R. L. Polk Co.
1957	AETNA AFFILIATED COMPANIES AGCY	Pacific Telephone
	HARRIMFAN RUSSELL ATTY	Pacific Telephone

FINDINGS

Year	Uses	Source
1957	MASSACHUTSETTS MUTUAL LIFE INSURANCE CO	Pacific Telephone
	PEARCE W STANLEY INS	Pacific Telephone
	PETTY KEITH ATTY	Pacific Telephone
	PIERCE W STANLEY INS	Pacific Telephone
	THAYER WHEELER H WULFF HANSEN & CO	Pacific Telephone
	WOODWARD ROBT H JR MASSACHUSETTS MUT I LIFE INS CO	Pacific Telephone
1955	Harriman Russell ofc da	R. L. Polk & Co.
	Massachusetts Mut Life Ins Co da	R. L. Polk & Co.
	Pearce W Stanley ins	R. L. Polk & Co.
	Wulff Hansen & Co	R. L. Polk & Co.
	Religious Science	R. L. Polk & Co.
	Reading Room	R. L. Polk & Co.
1946	Comisky R W chiropodist	R. L. Polk Co.
1942	Comisky R W chiropodist	R. L. Polk Co.
1936	Comisky R W chiropodist	R. L. Polk Co.
	New York Life Ins Co	R. L. Polk Co.
	Whisler G H Ins	R. L. Polk Co.
1926	Lee R V phys	R. L. Polk Co.
	Roth E T	R. L. Polk Co.
	Williams T M phys	R. L. Polk Co.

301 HAMILTON AVE

Year	Uses	Source
1991	STRATTON AGCY	PACIFIC BELL WHITE PAGES
	CRIST GRIFFITHS SCHULZ & BIORN	PACIFIC BELL WHITE PAGES
	GREEN WILLIAM & ASSOCIATES	PACIFIC BELL WHITE PAGES
	PHELPS J BARTON JUDGE SUPERIOR COURT RETIRED	PACIFIC BELL WHITE PAGES
1978	Mill Uar Ronald K lwyr	R. L. Polk & Co.
	Meinhold Wm lwyr	R. L. Polk & Co.
	Waugh Earl E lwyr	R. L. Polk & Co.
	Crist Crist Griffiths Bryant Schulz & Biorm Inc lwyrs	R. L. Polk & Co.
1970	Millar Ronald K lwyr	R. L. Polk & Co.
	Howe Lawrence L lwyr	R. L. Polk & Co.
	Belon Oysters Of California Inc oyster	R. L. Polk & Co.
	cultivation	R. L. Polk & Co.
	Ocean Science Capital Corp publs	R. L. Polk & Co.

FINDINGS

Year	Uses	Source
1970	Monterey Kelp Corp food products	R. L. Polk & Co.
	Northwest Consultant Oceanographers Inc	R. L. Polk & Co.
1965	HARRISON WILSON CO REAL EST LOANS	R. L. Polk Co.
1960	Vacant	R. L. Polk Co.
1955	Cole Walter J phys da	R. L. Polk & Co.
1946	First Baptist Church	R. L. Polk Co.
	Cutter R r phys	R. L. Polk Co.
	Wood Dennistoun jr phys	R. L. Polk Co.
1942	Cutter R D phys	R. L. Polk Co.
	Johnson Edith E phys	R. L. Polk Co.
	First Baptist Ch	R. L. Polk Co.
1936	Johnson Edith E phys	R. L. Polk Co.
	Lamson Margt E phys	R. L. Polk Co.
	First Baptist Church	R. L. Polk Co.
1931	Johnson Edith E phys	R. L. Polk Co.
	Lamson Margt E phys	R. L. Polk Co.
	First Baptist Church	R. L. Polk Co.

302 HAMILTON AVE

Year	Uses	Source
1978	Vacant	R. L. Polk & Co.
1970	Vacant	R. L. Polk & Co.
	Vacant	R. L. Polk & Co.

303 HAMILTON AVE

Year	Uses	Source
1991	ACME SOFTWARE	PACIFIC BELL WHITE PAGES
	LIPNER SHARON J	PACIFIC BELL WHITE PAGES
1978	Nicholas Francis W christian science	R. L. Polk & Co.
	practitioner	R. L. Polk & Co.
1931	Cooper Ward phys	R. L. Polk Co.
	Thomas J B phys	R. L. Polk Co.

304 HAMILTON AVE

Year	Uses	Source
1991	Van Duzen J	PACIFIC BELL WHITE PAGES
	ULEVICH & ORRANGE INC	PACIFIC BELL WHITE PAGES
1978	Vacant	R. L. Polk & Co.
1970	Lovejoy V L dentist	R. L. Polk & Co.

FINDINGS

Year	Uses	Source
1965	LOVEJOY VERNE L DENTIST	R. L. Polk Co.
1960	Lovejoy Verne L dentist	R. L. Polk Co.
1955	Lovejoy Verne L dentist da	R. L. Polk & Co.
1946	Lovejoy V L dentist	R. L. Polk Co.
1942	Lovejoy V L dentist	R. L. Polk Co.
1936	Lovejoy V L dentist	R. L. Polk Co.
1931	Place L M dentist	R. L. Polk Co.

305 HAMILTON AVE

Year	Uses	Source
1991	MILLER MARY	PACIFIC BELL WHITE PAGES
	NEY NICHOLAS H PHD	PACIFIC BELL WHITE PAGES
	BRODY MARJORIE LCSW	PACIFIC BELL WHITE PAGES
	METROPOLIS SOFTWARE INC	PACIFIC BELL WHITE PAGES
1978	Vacant	R. L. Polk & Co.
1970	Hansen Eug D acct	R. L. Polk & Co.
1960	Knutsson Kath H phys	R. L. Polk Co.
1955	Knutsson Kath H phys da	R. L. Polk & Co.
	Palo Alto Physicians Laby da	R. L. Polk & Co.
1946	Baptist Fellowship House	R. L. Polk Co.
1942	Vacant	R. L. Polk Co.
1936	Cooper Ward phys	R. L. Polk Co.
	Thomas J B phys	R. L. Polk Co.
	Barrow W F	R. L. Polk Co.
1931	Vacant	R. L. Polk Co.
1926	Walker J E	R. L. Polk Co.

306 HAMILTON AVE

Year	Uses	Source
1970	Ham Richd T ofc	R. L. Polk & Co.

307 HAMILTON AVE

Year	Uses	Source
1978	Paret Isabel psycho therapist	R. L. Polk & Co.
1970	Rodgers Lee W lwyr	R. L. Polk & Co.
1965	INC MORTGAGE LOAN	R. L. Polk Co.
	SECURITIES INTERMOUNTAIN	R. L. Polk Co.
1946	Lane H J phys	R. L. Polk Co.
	Hepp V E phys	R. L. Polk Co.

FINDINGS

Year	Uses	Source
1946	Cooper Lane & Hepp phys	R. L. Polk Co.
	Cooper Ward phys	R. L. Polk Co.
1942	Thomas Cooper & Lane phys	R. L. Polk Co.

309 HAMILTON AVE

Year	Uses	Source
1991	AULGUR BOB	PACIFIC BELL WHITE PAGES
1978	Church H Robt realtor	R. L. Polk & Co.
1960	Vacant	R. L. Polk Co.
1931	Hammond T F dentist	R. L. Polk Co.

310 HAMILTON AVE

Year	Uses	Source
1991	BENDIX PAUL A	PACIFIC BELL WHITE PAGES
	MCOMBER F BRYANT	PACIFIC BELL WHITE PAGES
1978	STREET CONTINUED	R. L. Polk & Co.
	science practitioner	R. L. Polk & Co.
	Duniway Patricia Mrs christian	R. L. Polk & Co.
	Caruthers Robt L lwyr	R. L. Polk & Co.
	Earle Douglas J lwyr	R. L. Polk & Co.
	Knapp Thos A lwyr	R. L. Polk & Co.
1970	Nichols Rose G Mrs christian scientist	R. L. Polk & Co.
1965	VACANT	R. L. Polk Co.

311 HAMILTON AVE

Year	Uses	Source
1991	MARKET METHODOLOGY GROUP	PACIFIC BELL WHITE PAGES
1978	Grant Eugene L Ofc	R. L. Polk & Co.
1960	Medical Retail Collns Bur 4D	R. L. Polk Co.

312 HAMILTON AVE

Year	Uses	Source
1991	CASAREZ & ASSOCIATES	PACIFIC BELL WHITE PAGES
	STERN JOHN A	PACIFIC BELL WHITE PAGES
1978	Me Laughlin Associates mfra rep	R. L. Polk & Co.
1970	Hansell Associates Inc emp agcy	R. L. Polk & Co.
1942	Cochrane R C dentist	R. L. Polk Co.

FINDINGS

313 HAMILTON AVE

Year	Uses	Source
1978	Hawley James 0 real eat	R. L. Polk & Co.
	Ames Edw P real eat	R. L. Polk & Co.
1970	Ames Edw P real est	R. L. Polk & Co.
1957	FESTINGER LEON J	Pacific Telephone

314 HAMILTON AVE

Year	Uses	Source
1970	Vacant	R. L. Polk & Co.
1960	Vacant	R. L. Polk Co.
1955	Cochrane Redmond C dentist da	R. L. Polk & Co.
1946	Cochrane R C dentist	R. L. Polk Co.
1936	Cochrane R C dentist	R. L. Polk Co.
1931	Cochrane R C dentist	R. L. Polk Co.

315 HAMILTON AVE

Year	Uses	Source
2001	TIBETDESIGNS	Haines Company, Inc.
1991	REALAND PROPERTIES	PACIFIC BELL WHITE PAGES
1986	Moore Associates	Pacific Bell
	MOORE ASSOCIATES	Pacific Bell
1982	Beverly Smith Associates	Pacific Telephone
1978	Vacant	R. L. Polk & Co.
	Laubhan & Company real est	R. L. Polk & Co.
1975	Mi fashnwr&fabrcs	Pacific Telephone
1970	Gold Julius J Ofc	R. L. Polk & Co.
	Rays Barber Shop	R. L. Polk & Co.
1965	LOUIS BARBER SHOP	R. L. Polk Co.
1960	Vacant	R. L. Polk Co.
	Nielsen Harry barber	R. L. Polk Co.
1955	Nielsen Harry barber	R. L. Polk & Co.
1936	Howe A J lawyer	R. L. Polk Co.
1931	Howe A J lawyer	R. L. Polk Co.
	Mc Dougall K R lawyer	R. L. Polk Co.

317 HAMILTON AVE

Year	Uses	Source
1978	Lehigh Graphics Group Sub Ofc	R. L. Polk & Co.
1970	Morse Charles P Ofc	R. L. Polk & Co.

FINDINGS

Year	Uses	Source
1960	Traffic World publication	R. L. Polk Co.
	Traffic Serv Corp publ da	R. L. Polk Co.
1955	Howe Finch & Glass lwyrs da	R. L. Polk & Co.
1946	Howe Finch lawyers	R. L. Polk Co.
1942	Finch N C lawyer	R. L. Polk Co.
	Howe A J lawyer	R. L. Polk Co.
1936	City Attorney	R. L. Polk Co.
	Howe & Rumwell lawyers	R. L. Polk Co.

319 HAMILTON AVE

Year	Uses	Source
1978	Medical Mission Sisters ofc	R. L. Polk & Co.
1955	Wood Dennistoun phys ADA	R. L. Polk & Co.
	Lourdeaux Stanley phys da	R. L. Polk & Co.
	Meyer Robt W phys da	R. L. Polk & Co.
1946	Houck G K phys	R. L. Polk Co.
	Liston Edw phys	R. L. Polk Co.
	Wood G A phys	R. L. Polk Co.
1936	Liston Edw phys	R. L. Polk Co.
	Slater H M phys	R. L. Polk Co.
1931	Liston Edw phys	R. L. Polk Co.
	Slater H M phys	R. L. Polk Co.

320 HAMILTON AVE

Year	Uses	Source
1991	A HALL MARK GRAPHIC DESIGN	PACIFIC BELL WHITE PAGES
	E LUSH CATHERINE	PACIFIC BELL WHITE PAGES
1978	Felton Margery L pub sten	R. L. Polk & Co.
1970	Felton Marjorie L pub sten	R. L. Polk & Co.
1965	STATISTICAL TABULATING CORP	R. L. Polk Co.
	TASK FORCE EMP AGCY	R. L. Polk Co.
1960	Statistical Tabulating	R. L. Polk Co.
	Coys bkpg serv	R. L. Polk Co.

Hamilton Ave

321 Hamilton Ave

Year	Uses	Source
2010	RENAISSANCE CAFE	EDR Digital Archive
	MIZUNO RESTAURANT	EDR Digital Archive

Year	Uses	Source
2010	RENAISSANCE CAFE	EDR Digital Archive
	MIZUNO RESTAURANT	EDR Digital Archive

HAMILTON AVE

321 HAMILTON AVE

Year	Uses	Source
2001	CAFE RENAISSANCE	Haines Company, Inc.
	FELTTom	Haines Company, Inc.
	PLANTATION DELI	Haines Company, Inc.
1991	PLANTATION DELI CAFE	PACIFIC BELL WHITE PAGES
1986	ARCON HEARING RESEARCH FOUNDATION	Pacific Bell
	ARCON HEARING SERVICES	Pacific Bell
	BURKHALTER ROBERT MA HEARING CONSLTNT	Pacific Bell
	DOLL STUDIO THE	Pacific Bell
	ARCON HEARING SERVICES	Pacific Bell
	BURKHALTER ROBERT MA hearing consltnt	Pacific Bell
	DOLL STUDIO THE	Pacific Bell
	Arcon Hearing Research Foundation	Pacific Bell
1982	ARCON HEARING SERVICES	Pacific Telephone
1978	Ellis & Stich Inc ins	R. L. Polk & Co.
	Lindstrom Lois real est	R. L. Polk & Co.
	Lynch Florence real est	R. L. Polk & Co.
	Anderson Jack E realtor	R. L. Polk & Co.
	Kreutmann Insurance Co	R. L. Polk & Co.
1975	LINDSTROM LOIS REALTOR	Pacific Telephone
	STICII AILTON P Ellis & Stich ins	Pacific Telephone
1970	Ellis & Stich ins	R. L. Polk & Co.
	Garrard Lois real est	R. L. Polk & Co.
	Kreutzmann Robt A ins co	R. L. Polk & Co.
	Lynch Florence H real est	R. L. Polk & Co.
	Anderson Jack E realtor	R. L. Polk & Co.
1965	ELLIS C STICH INSURANCE	R. L. Polk Co.
	ELLIS ARTH W REAL EST	R. L. Polk Co.
	TYRONE MARK L REAL EST APPRAISER	R. L. Polk Co.
1960	Briggs Richd W & Co real est da	R. L. Polk Co.

Year	Uses	Source
1960	Kuhn Rupert real est	R. L. Polk Co.
	Wolfe Mort Realty	R. L. Polk Co.
1957	BAILEY H STERLING PUB ACCT	Pacific Telephone
	CARSON E C H CARSON MAC DONALD & CO	Pacific Telephone
	CARSON E C H CARSON MAC DONALD & CO	Pacific Telephone
	CARSON MAC DONALD & CO	Pacific Telephone
	CARSON MAC DONALD &CO	Pacific Telephone
	MAC DONALD WILSON F CARSON MAC DONALD & CO	Pacific Telephone
	MAC DONALD WILSON F CARSON MAC DONALD & CO	Pacific Telephone
	MAC LEOD MORTON P ATTY	Pacific Telephone

323 HAMILTON AVE

Year	Uses	Source
1942	Vacant	R. L. Polk Co.
1936	Pagano Angelo	R. L. Polk Co.
1926	Thompson Chas	R. L. Polk Co.

Hamilton Ave

325 Hamilton Ave

Year	Uses	Source
2014	NEW YORK PIZZA	EDR Digital Archive
	NY STYLE PIZZA	EDR Digital Archive
	NEW YORK PIZZA	EDR Digital Archive
	NY STYLE PIZZA	EDR Digital Archive
2010	NEW YORK PIZZA	EDR Digital Archive
	NY STYLE PIZZA	EDR Digital Archive
	SINA CO LLC	EDR Digital Archive
	PRICE JANITORIAL SERVICE	EDR Digital Archive
	NEW YORK PIZZA	EDR Digital Archive
	NY STYLE PIZZA	EDR Digital Archive
	SINA CO LLC	EDR Digital Archive
	PRICE JANITORIAL SERVICE	EDR Digital Archive

FINDINGS

HAMILTON AVE

325 HAMILTON AVE

Year	Uses	Source
2001	9 Y PIZZ	Haines Company, Inc.
1991	GREAT AMERICAN ASSET MANAGEMENT CO	PACIFIC BELL WHITE PAGES
	NY PIZZA	PACIFIC BELL WHITE PAGES
1982	Frameworks The	Pacific Telephone
1978	Framework The picture framing	R. L. Polk & Co.
	Vacant	R. L. Polk & Co.
1975	Frameworks The	Pacific Telephone
1970	De John Hair Stylist beauty salon	R. L. Polk & Co.
	Office Bldg	R. L. Polk & Co.
1965	DE JOHN HAIR STYLIST BEAUTY SALON	R. L. Polk Co.
1960	Marble Mtge Co loans da	R. L. Polk Co.
1957	EQUITABLE LIFE ASSURANCE SOCIETY OF THE U S DISTRICT OFFICE	Pacific Telephone
1955	Equitable Life Assurance	R. L. Polk & Co.
	Soc of the US da	R. L. Polk & Co.
1926	Crasley Frances	R. L. Polk Co.

326 HAMILTON AVE

Year	Uses	Source
1978	Vacant	R. L. Polk & Co.

327 HAMILTON AVE

Year	Uses	Source
1978	Hurdman & Cranstoun accts	R. L. Polk & Co.
1946	Pardue E C	R. L. Polk Co.
1942	Vacant	R. L. Polk Co.
1936	Keegan Veronica	R. L. Polk Co.
1931	Mc Cargo J L	R. L. Polk Co.
1926	Covley Flora	R. L. Polk Co.

328 HAMILTON AVE

Year	Uses	Source
1991	DONG KATHLEEN J MD	PACIFIC BELL WHITE PAGES

FINDINGS

330 HAMILTON AVE

Year	Uses	Source
1991	HEYLER CHAS J	PACIFIC BELL WHITE PAGES
1978	Vacant	R. L. Polk & Co.

331 HAMILTON AVE

Year	Uses	Source
1946	Paulman A T	R. L. Polk Co.
1942	Paulman A T	R. L. Polk Co.
1936	Paulman A P	R. L. Polk Co.
1931	Vacant	R. L. Polk Co.
1926	Crandall E B	R. L. Polk Co.

332 HAMILTON AVE

Year	Uses	Source
1978	Stachler Ruth A Iwyr	R. L. Polk & Co.

333 HAMILTON AVE

Year	Uses	Source
2001	XXXX	Haines Company, Inc.
1978	Pacific Telephone Dial Admn	R. L. Polk & Co.
1970	No Return	R. L. Polk & Co.
	Vacant	R. L. Polk & Co.
	Vacant	R. L. Polk & Co.
	Pacific Telephone Dial Admn	R. L. Polk & Co.
	Rooms	R. L. Polk & Co.
	Equitable Life Assurance Society Of The U S	R. L. Polk & Co.
1965	WHITSON BUILDING	R. L. Polk Co.
	EQUITABLE LIFE ASSURANCE	R. L. Polk Co.
	SOCIETY OF THE US	R. L. Polk Co.
	STEWART GENE ASSOCIATES	R. L. Polk Co.
	ADV AGCY S PUB RELATIONS	R. L. Polk Co.
	GENERAL ADJUSTMENT BUREAU INS ADJ	R. L. Polk Co.
	INVESTMENT DEPT	R. L. Polk Co.
	REGIONAL MTGE	R. L. Polk Co.
	MUTUAL OF NEW YORK	R. L. Polk Co.
	WHITSON BUILDING	R. L. Polk Co.
	HAMILTON AV	R. L. Polk Co.
	WHITSON JAMES W ARCHT	R. L. Polk Co.

FINDINGS

Year	Uses	Source
1965	WHITSON BROS GENL CONTR	R. L. Polk Co.
	WHITCO CONSTRUCTION CO GENL CONTRS	R. L. Polk Co.
	ASSOCIATED FIRE EXTINGUISHER CO	R. L. Polk Co.
	ASSOCIATE SECURITY AGENCY DETECTIVE AGCY	R. L. Polk Co.
	ASSOCIATE DETECTIVE BUREAU	R. L. Polk Co.
1963	EQUITABLE LIFE ASSURANCE SOCIETY OF THE U S	Pacific Telephone
	Palo Alto District Office	Pacific Telephone
1960	Whitson Building	R. L. Polk Co.
	Equitable Life Assurance	R. L. Polk Co.
	Soc of the US da	R. L. Polk Co.
	Valley Title Co	R. L. Polk Co.
	Automotive Safety Found	R. L. Polk Co.
	ation consultants da	R. L. Polk Co.
	Mendel Walter F acct da	R. L. Polk Co.
	Carson ECH & Co accts	R. L. Polk Co.
	Mac Donald Wilson F acct	R. L. Polk Co.
	Mac Leod Morton P lwyr	R. L. Polk Co.
	Whitco Constn Co contrs da	R. L. Polk Co.
	Whitson Jas W archt	R. L. Polk Co.
	Mut of Nev York Reg	R. L. Polk Co.
	ional Mtge Inv Dept AD	R. L. Polk Co.

334 HAMILTON AVE

Year	Uses	Source
1978	STREET CONTINUED	R. L. Polk & Co.
	Me Crary John V lwyr	R. L. Polk & Co.
	Ruffo Ferrari & Me Neil lwyrs	R. L. Polk & Co.

337 HAMILTON AVE

Year	Uses	Source
1946	Honn A E Mrs gift shop	R. L. Polk Co.
	Borland Wm watch repr	R. L. Polk Co.
1942	Honn A E Mrs gifts	R. L. Polk Co.
1936	Block Print Studio dresses	R. L. Polk Co.
	Narramore Zita Mrs	R. L. Polk Co.
	Gilman begins	R. L. Polk Co.
1931	Gimlin H M	R. L. Polk Co.

FINDINGS

Year	Uses	Source
1931	Gimlin J E L Mrs rest r	R. L. Polk Co.
	Gilman begins	R. L. Polk Co.
1926	Burks J D	R. L. Polk Co.

338 HAMILTON AVE

Year	Uses	Source
1991	NASDAQ COMPANY SERVICES	PACIFIC BELL WHITE PAGES

342 HAMILTON AVE

Year	Uses	Source
1957	Maxey Dwight	R. L. Polk Co.

343 HAMILTON AVE

Year	Uses	Source
1946	Rose Wm	R. L. Polk Co.
	Gilman begins	R. L. Polk Co.
1942	Gilman begins	R. L. Polk Co.
	Rose Wm	R. L. Polk Co.
1936	Vacant	R. L. Polk Co.
1931	Love C H	R. L. Polk Co.

Hamilton Ave

345 Hamilton Ave

Year	Uses	Source
2014	BROWN TERRY	EDR Digital Archive
	J C APPLIANCES	EDR Digital Archive
	LASER EXPRESS	EDR Digital Archive
	PERSHAS RUG & CARPET CLEANING	EDR Digital Archive
	BROWN TERRY	EDR Digital Archive
	J C APPLIANCES	EDR Digital Archive
	LASER EXPRESS	EDR Digital Archive
	PERSHAS RUG & CARPET CLEANING	EDR Digital Archive
2010	PERSHAS RUG & CARPET CLEANING	EDR Digital Archive
	GLORIAS HOME CARE	EDR Digital Archive
	J C APPLIANCES	EDR Digital Archive
	KAYLAS ART LEASONS	EDR Digital Archive
	JENS HAIR BRAIDING	EDR Digital Archive
	DARLENE BUTLER	EDR Digital Archive
	BROWN TERRY	EDR Digital Archive

FINDINGS

Year	Uses	Source
2010	SHANTAYS BRAIDS	EDR Digital Archive
	SMART KIDS TUTORING	EDR Digital Archive
	CK CLEANING SERVICE	EDR Digital Archive
	TELEPRO TECHNOLOGIES INC	EDR Digital Archive
	AIRPORT LIMOUSINE SERVICE	EDR Digital Archive
	ATHERTON UNIGLOBE TRAVEL	EDR Digital Archive
	JALIAS CATERING	EDR Digital Archive
	LAWLESS CATERING	EDR Digital Archive
	NICOLES DESIGN	EDR Digital Archive
	BECK INVESTMENT MANAGEMENT LLC	EDR Digital Archive
	REGGIES PAINTING SERVICE	EDR Digital Archive
	WALTERS PERF PAINT SVC	EDR Digital Archive
	MARIAS TUTORING SERVICE	EDR Digital Archive
	BUTLER AUTO DETAILING	EDR Digital Archive
	STEVIE GLASS REPAIR	EDR Digital Archive
	LASER EXPRESS	EDR Digital Archive
	VANESSA ARTS & CRAFT	EDR Digital Archive
	AUTUM GIFT BASKETS	EDR Digital Archive
	JALYCE GIFT BASKETS	EDR Digital Archive
	SMART KIDS TUTORING	EDR Digital Archive
	PERSHAS RUG & CARPET CLEANING	EDR Digital Archive
	CK CLEANING SERVICE	EDR Digital Archive
	BUTLER AUTO DETAILING	EDR Digital Archive
	STEVIE GLASS REPAIR	EDR Digital Archive
	LASER EXPRESS	EDR Digital Archive
	AUTUM GIFT BASKETS	EDR Digital Archive
	JALYCE GIFT BASKETS	EDR Digital Archive
	VANESSA ARTS & CRAFT	EDR Digital Archive
	GLORIAS HOME CARE	EDR Digital Archive
	J C APPLIANCES	EDR Digital Archive
	KAYLAS ART LEASONS	EDR Digital Archive
	JENS HAIR BRAIDING	EDR Digital Archive
	DARLENE BUTLER	EDR Digital Archive
	BROWN TERRY	EDR Digital Archive
	SHANTAYS BRAIDS	EDR Digital Archive
	TELEPRO TECHNOLOGIES INC	EDR Digital Archive
	AIRPORT LIMOUSINE SERVICE	EDR Digital Archive
	ATHERTON UNIGLOBE TRAVEL	EDR Digital Archive

Year	Uses	Source
2010	JALIAS CATERING	EDR Digital Archive
	LAWLESS CATERING	EDR Digital Archive
	NICOLES DESIGN	EDR Digital Archive
	REGGIES PAINTING SERVICE	EDR Digital Archive
	WALTERS PERF PAINT SVC	EDR Digital Archive
	MARIAS TUTORING SERVICE	EDR Digital Archive
	BECK INVESTMENT MANAGEMENT LLC	EDR Digital Archive

HAMILTON AVE

345 HAMILTON AVE

Year	Uses	Source
2001	TRAVEL BERUBECOMPANY	Haines Company, Inc.
	ATHERTONUNIGLOBE	Haines Company, Inc.
1978	central ofc bldg	R. L. Polk & Co.
	Pacific Telephone & Telegraph Co	R. L. Polk & Co.
1970	switchboard bldg	R. L. Polk & Co.
	Pacific Telephone & Telegraph Co	R. L. Polk & Co.
1965	CO SWITCHBOARD BLDG	R. L. Polk Co.
	PACIFIC TELEPHONE & TELEGRAPH	R. L. Polk Co.
1946	Johnston H G Mrs beauty shop	R. L. Polk Co.
	Johnston C W	R. L. Polk Co.
1942	Johnston C W	R. L. Polk Co.
	Johnston H G Mrs beauty shop	R. L. Polk Co.
1936	Potts T A Mrs drsmkr	R. L. Polk Co.
	Phoenix Helen Mrs beauty shop	R. L. Polk Co.
1931	Williams H S	R. L. Polk Co.
1926	Brickey E M	R. L. Polk Co.

349 HAMILTON AVE

Year	Uses	Source
1946	Trimble V E	R. L. Polk Co.
1942	Eichelberger J L Mrs	R. L. Polk Co.
1936	Anderson G E tea rm	R. L. Polk Co.
1931	Fairall E H Mrs	R. L. Polk Co.
1926	Wehner Wm	R. L. Polk Co.

FINDINGS

350 HAMILTON AVE

Year	Uses	Source
2001	XXXX	Haines Company, Inc.

353 HAMILTON AVE

Year	Uses	Source
1960	Under Constn	R. L. Polk Co.

358 HAMILTON AVE

Year	Uses	Source
1980	Addington Bud	Pacific Telephone

360 HAMILTON AVE

Year	Uses	Source
1991	JOHNSON AERONAUTICS	PACIFIC BELL WHITE PAGES
1982	Smith Gwen	Pacific Telephone
1978	Mayfield Publishing Co	R. L. Polk & Co.
	National Press Publishing Corp	R. L. Polk & Co.

361 HAMILTON AVE

Year	Uses	Source
2001	XXXX	Haines Company, Inc.
1986	Jones Residential Care Home	Pacific Bell
1982	Veterans Board & Care Home	Pacific Telephone

370 HAMILTON AVE

Year	Uses	Source
1991	BORDERS LOUIS H & CO	PACIFIC BELL WHITE PAGES
1986	Criner E	Pacific Bell
	CRINER E	Pacific Bell

371 HAMILTON AVE

Year	Uses	Source
1982	Lamb Katie	Pacific Telephone

Hamilton Ave

380 Hamilton Ave

Year	Uses	Source
2014	AGUA HOLDGINGS	EDR Digital Archive
	SAPIENT BIOMETRICS INC	EDR Digital Archive
	NOVENT GROUP	EDR Digital Archive

Year	Uses	Source
2014	SAPIENT BIOMETRICS INC	EDR Digital Archive
	AGUA HOLDGINGS	EDR Digital Archive
	NOVENT GROUP	EDR Digital Archive
	UNITED STATES POSTAL SERVICE	EDR Digital Archive
	SOLARBUDDY LLC	EDR Digital Archive
	CENTRAL VALLEY HOUSING GROUP	EDR Digital Archive
	UNITED STATES POSTAL SERVICE	EDR Digital Archive
	CENTRAL VALLEY HOUSING GROUP	EDR Digital Archive
	SOLARBUDDY LLC	EDR Digital Archive
2010	CENTRAL VALLEY HOUSING GROUP	EDR Digital Archive
	UNITED STATES POSTAL SERVICE	EDR Digital Archive
	SOMMER SYSTEMS LLC	EDR Digital Archive
	AGUA HOLDGINGS	EDR Digital Archive
	GREENSMITH ENVIRONMENTAL LLC	EDR Digital Archive
	CENTRAL VALLEY HOUSING GROUP	EDR Digital Archive
	UNITED STATES POSTAL SERVICE	EDR Digital Archive
	AGUA HOLDGINGS	EDR Digital Archive
	SOMMER SYSTEMS LLC	EDR Digital Archive
	GREENSMITH ENVIRONMENTAL LLC	EDR Digital Archive
	NOVENT GROUP	EDR Digital Archive
	NOVENT GROUP	EDR Digital Archive

HAMILTON AVE

380 HAMILTON AVE

Year	Uses	Source
2001	XXXX	Haines Company, Inc.
1991	UNITED STATES GOVERNMENT	PACIFIC BELL WHITE PAGES
1978	U S Post Office	R. L. Polk & Co.
1970	U S Post Office	R. L. Polk & Co.
1965	U S POST OFFICE	R. L. Polk Co.
	BSMT U S NAVY DEPT RESERVE TRAINING FACILITY	R. L. Polk Co.
1960	US Post Ofc da	R. L. Polk Co.
1957	UNIT ADVISOR	Pacific Telephone
1955	US Post Office da	R. L. Polk & Co.
	Post Office News Stand	R. L. Polk & Co.
	US Collr of Int Rev da	R. L. Polk & Co.
1946	Post Office	R. L. Polk Co.

FINDINGS

Year	Uses	Source
1942	Post Office	R. L. Polk Co.
1936	Postmens Assn	R. L. Polk Co.
	Post Office	R. L. Polk Co.

381 HAMILTON AVE

Year	Uses	Source
1982	Williams Rufus	Pacific Telephone

385 HAMILTON AVE

Year	Uses	Source
1946	Waverley intersects	R. L. Polk Co.
	First Congregational Ch	R. L. Polk Co.
1942	First Congregational Ch	R. L. Polk Co.
	Waverley intersects	R. L. Polk Co.
1936	First Congregational Church	R. L. Polk Co.
	Waverley intersects	R. L. Polk Co.
1931	Waverley intersects	R. L. Polk Co.
	First Congregation Church	R. L. Polk Co.

391 HAMILTON AVE

Year	Uses	Source
1975	LO PRESTI JOANNA	Pacific Telephone

400 HAMILTON AVE

Year	Uses	Source
2001	WARD E HOLLAND	Haines Company, Inc.
	GREENFIELD	Haines Company, Inc.
	JONATHAN GROLL CHRISTINA	Haines Company, Inc.
	ATTY HALE JOHN BATn Y	Haines Company, Inc.
	HARBOTTLE MR ATTY	Haines Company, Inc.
	HOFFMANNWMATTY	Haines Company, Inc.
	HOUSE CHERYLATTY	Haines Company, Inc.
	HUB DAVIDA ATTY	Haines Company, Inc.
	II JEFFREY RATTY	Haines Company, Inc.
	KATO JOANS An Y	Haines Company, Inc.
	KAVALARISM HATTY	Haines Company, Inc.
	KNORP ALBERT F ATTY	Haines Company, Inc.
	KORYBUTMICH	Haines Company, Inc.
	KOSHLAND JAMESM	Haines Company, Inc.
	KREUTZ PAUL EATTY	Haines Company, Inc.

FINDINGS

Year	Uses	Source
2001	e KUOJANIET	Haines Company, Inc.
	KUOJOHN LAPP ERIC J	Haines Company, Inc.
	LAVSGNE BUTLER	Haines Company, Inc.
	MARY LEDERMANJEFFREYJ	Haines Company, Inc.
	LEE VICTORIAW	Haines Company, Inc.
	LEVINESTEVEN	Haines Company, Inc.
	MADISON MICHAEL	Haines Company, Inc.
	MCGARAGHANPJ ATTY MEISELMARVIN	Haines Company, Inc.
	MILLER ROBERTATTY	Haines Company, Inc.
	MOORETIMOTHYAn S	Haines Company, Inc.
	ORANDOMART	Haines Company, Inc.
	ATTY MUNYON RANDY	Haines Company, Inc.
	MYERS MARTIN H	Haines Company, Inc.
	NADANMICHELEM NELSENNELS	Haines Company, Inc.
	NEWELLCARLAS	Haines Company, Inc.
	OFRIADENISE	Haines Company, Inc.
	PAO FRANK H	Haines Company, Inc.
	PITTENGER 0 ARREN	Haines Company, Inc.
	ATTY POWERSMARGARET	Haines Company, Inc.
	ATTY RADCLIFFEMARK	Haines Company, Inc.
	ATTY RASMUSSEN MEME	Haines Company, Inc.
	ATTY RATTNERJEATTY	Haines Company, Inc.
	REHON PETER ATTY REICHERTMICHELLE	Haines Company, Inc.
	ATTY REIN DOUGLAS ATTY	Haines Company, Inc.
	RINSKY ARTHUR ATY	Haines Company, Inc.
	ROBERTSONJ MARTIN	Haines Company, Inc.
	LLP ROCK BRADLEY J ATTY	Haines Company, Inc.
	RUSHING DON ATTY	Haines Company, Inc.
	RUSSELL ROBERT ATTY SALESINDIANNEATTY	Haines Company, Inc.
	SCHAEFFER BE ATTY	Haines Company, Inc.
	SCHUIn T REBECCA K	Haines Company, Inc.
	SCHREIBER WM ATTY	Haines Company, Inc.
	SEUBERT DANIELATTY	Haines Company, Inc.
	SHUMANJ ROBERTJR	Haines Company, Inc.
	SNOWMAN STACY LLP	Haines Company, Inc.
	SP 170 EN JAY MATSY	Haines Company, Inc.
	SPRINGER ELIZABETH	Haines Company, Inc.

FINDINGS

Year	Uses	Source
2001	LLP STANTONSCOTTLLP	Haines Company, Inc.
	STARTZPAULO	Haines Company, Inc.
	STENELDTLILLIANG	Haines Company, Inc.
	LLP STEPOVICHMATTHEW	Haines Company, Inc.
	LLP STIVENJAMES F LLP	Haines Company, Inc.
	SULLIVAN DENNIS LLP	Haines Company, Inc.
	SYROW 1 KRAULRLLP	Haines Company, Inc.
	TAKETA MARILYN LLP	Haines Company, Inc.
	TAYLOR ALLYN LLP	Haines Company, Inc.
	TIGHECRAIGATTY	Haines Company, Inc.
	T 7 ANT JEFFREYA	Haines Company, Inc.
	VALENTINEANDREW	Haines Company, Inc.
	WALWORTH JANET	Haines Company, Inc.
	AIKINS DOUGLAS An TY	Haines Company, Inc.
	t ALLCOCK JOHN ATTY	Haines Company, Inc.
	t ANDERSONJAMES An Y BAUM ELIZABETH	Haines Company, Inc.
	MILNE	Haines Company, Inc.
	BERRY MARY ELIZABETH BLUMENSTEINPAULA	Haines Company, Inc.
	BRADFISH LARRY J	Haines Company, Inc.
	B 9 ENNAN EDWARDO 650 N	Haines Company, Inc.
	CARLSON CYNTH	Haines Company, Inc.
	CASE HOPE CASTLEBERRYBETH	Haines Company, Inc.
	CATYANI KATHLEEN	Haines Company, Inc.
	HAMILTON AV 94301 CONT CHERRY JEFFERYD	Haines Company, Inc.
	CLOWESJOHN	Haines Company, Inc.
	HOWARD COGAN LAWRENCE	Haines Company, Inc.
	COHENSTEVENG CORNISHUCAREY	Haines Company, Inc.
	DAHLBY GARY L LLP	Haines Company, Inc.
	DORF ERICH LLP	Haines Company, Inc.
	DORNEYMAUREEN	Haines Company, Inc.
	ATTY EASTERBROOKJOHN	Haines Company, Inc.
	W ELMER RUSSELL ATTY	Haines Company, Inc.
	EMAMIZAHRAATTY	Haines Company, Inc.
	FALLON SHANNON	Haines Company, Inc.
	FEINBERGIAN NATTY FOGGJOHN ATTY	Haines Company, Inc.
	FOWLER MARK ATTY	Haines Company, Inc.

FINDINGS

Year	Uses	Source
2001	FRANKLEDIANEATTY	Haines Company, Inc.
	FREIDENRICHJOHN	Haines Company, Inc.
	ATTY FRENCH THOS MATTY	Haines Company, Inc.
	FURLONG THOMAS	Haines Company, Inc.
	ATTY GALLARDOGATTY	Haines Company, Inc.
	GALLO GREGORY ATTY	Haines Company, Inc.
	GALLO PENNY HATn	Haines Company, Inc.
	GOODHUESUSAN	Haines Company, Inc.
	ATTY GOODWIN HUGH ATTY	Haines Company, Inc.
	GRAHAM DAVID R ATTY	Haines Company, Inc.
	GRAY CARY	Haines Company, Inc.
	GRAY CARY GREEN LOUIS B ATTY	Haines Company, Inc.
1991	Clowes John Howard Ware & Freidenrich A Professional Corporation attys	PACIFIC BELL WHITE PAGES
	Corporation attys	PACIFIC BELL WHITE PAGES
	Ebersole Douglas O Ware & Freidenrich A Professional Corporation attys	PACIFIC BELL WHITE PAGES
	Freldenrich John Ware & Freidennich A Professional Corporation attys	PACIFIC BELL WHITE PAGES
	Gallo	PACIFIC BELL WHITE PAGES
	Corporation attys	PACIFIC BELL WHITE PAGES
	Gallo Penny H Ware & Frelfdenrich A Profeasronal Corporation attys	PACIFIC BELL WHITE PAGES
	Greenfield Jonathan Ware & Freidenrich A Professional Corporation attys	PACIFIC BELL WHITE PAGES
	Heckman Carey E Ware & Freidenrich A Professional Corporation attys	PACIFIC BELL WHITE PAGES
	Hohnsbeen George H Ware & Freidenrich A Professional Corporation attys	PACIFIC BELL WHITE PAGES
	Koshiand James M Ware & Freidenrich A Professional Corporation attys	PACIFIC BELL WHITE PAGES
	Kreuter Henry W	PACIFIC BELL WHITE PAGES
	Corporation attys	PACIFIC BELL WHITE PAGES
	Lapp Eric J Ware & Freidenrich A Professional Corporation attys	PACIFIC BELL WHITE PAGES
	Lederman Jeffrey J Ware& Freidenrich A Professional Corporation attys	PACIFIC BELL WHITE PAGES
	Meisel Marvin Ware & Freid Weich A Professgonal Corporation attys	PACIFIC BELL WHITE PAGES
	Miller Robert H Ware & Freidenrich A Professional Corporation attys	PACIFIC BELL WHITE PAGES
	Morando Marta L Ware & Freidenrich A Professional Corporation attys	PACIFIC BELL WHITE PAGES

FINDINGS

Year	*Uses*	*Source*
1991	Rattner Jonathan E Ware & Freidenrich A Professional Corporation attys	PACIFIC BELL WHITE PAGES
	Rinsky Arthur C Ware & Freidenrich A Professional Corpor aion attys	PACIFIC BELL WHITE PAGES
	Savage Diane W Ware & Freidenrich A Professional Corporation attys	PACIFIC BELL WHITE PAGES
	Schaeffer Bruce E Ware & Freidenrfch A Professional Corporation attys	PACIFIC BELL WHITE PAGES
	Stern Michael D Ware & Freidenrich A Professional Corparation attys	PACIFIC BELL WHITE PAGES
	Tennis Stephen M Ware & Freidenrich A Professional Corporation attys	PACIFIC BELL WHITE PAGES
	Trant Jeffrey A Ware & Freidenrh A Professional Copation attys	PACIFIC BELL WHITE PAGES
	Ware & Freidenrich	PACIFIC BELL WHITE PAGES
	Ware & Frekdenrich A Professional Corporation	PACIFIC BELL WHITE PAGES
	Ware Leonard Ware & Freidenrich A Professional Corporation attys	PACIFIC BELL WHITE PAGES
	CLOWES JOHN HOWARD WARE & FREIDENRICH A PROFESSIONAL CORPORATION ATTYS	PACIFIC BELL WHITE PAGES
	CORPORATION ATTYS	PACIFIC BELL WHITE PAGES
	FEINBERG IAN N WARE & FREIDENRCH A PROFESSIONAL CORPORATION ATTYS	PACIFIC BELL WHITE PAGES
	FRELDENRICH JOHN WARE & FREIDENNICH A PROFESSIONAL CORPORATION ATTYS	PACIFIC BELL WHITE PAGES
	GALLO	PACIFIC BELL WHITE PAGES
	GREENFIELD JONATHAN WARE & FREIDENRICH A PROFESSIONAL CORPORATION ATTYS	PACIFIC BELL WHITE PAGES
	HOHNSBEEN GEORGE H WARE & FREIDENRICH A PROFESSIONAL CORPORATION ATTYS	PACIFIC BELL WHITE PAGES
	KOSHIAND JAMES M WARE & FREIDENRICH A PROFESSIONAL CORPORATION ATTYS	PACIFIC BELL WHITE PAGES
	KREUTER HENRY W	PACIFIC BELL WHITE PAGES
	MEISEL MARVIN WARE & FREID WEICH A PROFESSGONAL CORPORATION ATTYS	PACIFIC BELL WHITE PAGES
	MORANDO MARTA L WARE & FREIDENRICH A PROFESSIONAL CORPORATION ATTYS	PACIFIC BELL WHITE PAGES
	SAVAGE DIANE W WARE & FREIDENRICH A PROFESSIONAL CORPORATION ATTYS	PACIFIC BELL WHITE PAGES

FINDINGS

Year	Uses	Source
1991	TENNIS STEPHEN M WARE & FREIDENRICH A PROFESSIONAL CORPORATION ATTYS	PACIFIC BELL WHITE PAGES
	TRANT JEFFREY A WARE & FREIDENR (H A PROFESSIONAL COPATION ATTYS	PACIFIC BELL WHITE PAGES
	WARE & FREIDENRICH	PACIFIC BELL WHITE PAGES
	WARE LEONARD WARE & FREIDENRICH A PROFESSIONAL CORPORATION ATTYS	PACIFIC BELL WHITE PAGES
	COPERTINO	PACIFIC BELL WHITE PAGES
	GALLO PENNY H WARE & FRELFDENRICH A PROFEASRONAL CORPORATION ATTYS	PACIFIC BELL WHITE PAGES
	HECKMAN CAREY E WARE & FREIDENRICH A PROFESSIONAL CORPORATION ATTYS	PACIFIC BELL WHITE PAGES
	LAPP ERIC J WARE & FREIDENRICH A PROFESSIONAL CORPORATION ATTYS PALO ALTO 4	PACIFIC BELL WHITE PAGES
	LEDERMAN JEFFREY J WARE& FREIDENRICH A PROFESSIONAL CORPORATION ATTYS	PACIFIC BELL WHITE PAGES
	MILLER ROBERT H WARE & FREIDENRICH A PROFESSIONAL CORPORATION ATTYS	PACIFIC BELL WHITE PAGES
	RATTNER JONATHAN E WARE & FREIDENRICH A PROFESSIONAL CORPORATION ATTYS PALO	PACIFIC BELL WHITE PAGES
	RINSKY ARTHUR C WARE & FREIDENRICH A PROFESSIONAL CORPOR AION ATTYS	PACIFIC BELL WHITE PAGES
	SCHAEFFER BRUCE E WARE & FREIDENRFCH A PROFESSIONAL CORPORATION ATTYS	PACIFIC BELL WHITE PAGES
	STERN MICHAEL D WARE & FREIDENRICH A PROFESSIONAL CORPARATION ATTYS	PACIFIC BELL WHITE PAGES
	WARE & FREKDENRICH A PROFESSIONAL CORPORATION	PACIFIC BELL WHITE PAGES
	CORNISH & CAREY COMMERCIAL REAL ESTATE	PACIFIC BELL WHITE PAGES
	CORNISH & CAREY THE RESIDENTIAL COMPANY	PACIFIC BELL WHITE PAGES
	WARE & FREIDENRICH A PROFESSIONAL CORPORATION	PACIFIC BELL WHITE PAGES
	CORNISH & CAREY COMMERCIAL	PACIFIC BELL WHITE PAGES
1986	Keenan Chas J III rl est brkr	Pacific Bell
	Woodside Management Corp	Pacific Bell

FINDINGS

Year	Uses	Source
1986	KAHRS RAY	Pacific Bell
	KEENAN LAND COMPANY	Pacific Bell
	WESTERN AMERICAN LAND CORP	Pacific Bell
	WOODSIDE CORP	Pacific Bell
	Kahrs Ray	Pacific Bell
	KEENAN LAND COMPANY	Pacific Bell
	Palo Alto Regional Commercial Banking Office	Pacific Bell
	Westmoor Village Office	Pacific Bell
	WESTERN AMERICAN LAND CORP	Pacific Bell
	Woodside Corp	Pacific Bell
	Baigent Julia M Ware Fletcher & Freidenrich A Professional Corporation attys	Pacific Bell
	Bates Amy P Ware Fletcher & Freidenrich A Professional Corporation attys	Pacific Bell
	Clowes John Howard Ware Fletcher & Freidenrich A Professional Corporation attys	Pacific Bell
	Cohen Steven G Ware Fletcher & Friedenrich A Professional Corporation attys	Pacific Bell
	CORNISH & CAREY REAL ESTATE	Pacific Bell
	De Alcvaz Anthony Ware Fletcher & Freidenrich A Professional Corporation attys	Pacific Bell
	Professional Corporation attys	Pacific Bell
	EBERLE WALTER E DDS	Pacific Bell
	Felnberg Ian N Ware Fletcher & Freldenrich A Professional Corporation attys	Pacific Bell
	Finkel Mark S Ware Fletcher & Freidenrich A Professional Corporation attys	Pacific Bell
	Fletcher David L Ware Fletcher & Freidenrich A Professional Corporation attys	Pacific Bell
	Fletcher Lee Ware Fletcher & Freidenrich A Professional Corporation attys	Pacific Bell
	Fox Harry L Ware Fletcher & Freidenrich A Professional Corporation attys	Pacific Bell
	Freidenrlch John Ware Fletcher & Freidenrich A Professional Corporation attys	Pacific Bell
	French Thomas M Ware Fletcher & Freidenrich A Professional Corporation attys	Pacific Bell

FINDINGS

Year	Uses	Source
1986	Gallo Gregory M Ware Fletcher & Freidenrich A Professional Corporation attys	Pacific Bell
	Gallo Penny H Ware Fletcher & Freidenrich A Professional Corporation attys	Pacific Bell
	Grant Robert N Ware Fletcher & Freidenrich A Professional Corporation attys	Pacific Bell
	Greenfield Jonathan Ware Fletcher & Freidenrich A Professional Corporation attys	Pacific Bell
	Gutteriez Felipe R Ware Fletcher & Freidenrich A Professional Corporation attys	Pacific Bell
	Heckman Carey E Ware Fletcher & Freidenrich A Professional Corporation attys	Pacific Bell
	Hohnsbeen George H Ware Fletcher & Freidenrich A Professional Corporation attys	Pacific Bell
	Jackson Bonnfe Ware Fletcher & Freldenrich A Professional Corporation attys	Pacific Bell
	Koshland James M Ware Fletcher & Freidenrich A Professional Corporation attys	Pacific Bell
	Kreutz Paul E Ware Fletcher & Freidenrich A Professional Corporation attys	Pacific Bell
	Lapp Eric J Ware Fletcher & Freidenrich A Professional Corporatisn attys	Pacific Bell
	Lederman Jeffrey J Ware Fletcher & Freidenrich A Professional Corporation attys	Pacific Bell
	Margiotta Colleen Ware Fletcher & Freidenrich A Professional Corporation attys	Pacific Bell
	Mc Garaghan Patrick J Ware Fletcher & Freidenrich A Professional Corporation attys	Pacific Bell
	Miller Robert H Ware Fletcher & Freidenrich A Professional Corporation attys	Pacific Bell
	Momboisse R Michael Ware Fletcher & Freldenrich A Professional Corporation attys	Pacific Bell
	Paul Joan Ware Fletcher & Freidenrich A Professional Corporation attys	Pacific Bell

FINDINGS

Year	Uses	Source
1986	Rattner Jonathan E Ware Fletcher & Freidenrich A Professional Corporation attys	Pacific Bell
	KEENAN CHAS J III RL EST BRKR PALO ALTO 326 22	Pacific Bell
	WHISKEY HILL ROAD OFFICE WOODSIDE	Pacific Bell
	WOODSIDE MANAGEMENT CORP PALO ALTO 326 220	Pacific Bell
	Rinsky Arthur C Ware Fleicher & Freidenrich A Professional Corporation attys	Pacific Bell
	Russell Robert T Ware Fletcher & Freidenrich A Professional Corporation attys	Pacific Bell
	Savage Diane W Ware Fletcher & Freidenrich A Professional Corporation attys	Pacific Bell
	Shuman John R Jr Ware Fletcher & Freidenrich A Professional Corporation attys	Pacific Bell
	Professional Corporation attys	Pacific Bell
	Stern Management Associates	Pacific Bell
	Palo Alto Offices	Pacific Bell
	STEWART TITLE OF	Pacific Bell
	Sundheim George M Ware Fencher& Freidenrich A Professional Corporaton attys	Pacific Bell
	Trant Jeffrey A Ware Fletcher & Freidenrich A Professional Corporation attys	Pacific Bell
	Van Dyke Lindell H Ware Fletcher & Freidenrich A Professional Corporation attys	Pacific Bell
	Ware Fletcher & Freidenrich A Professional Corporation	Pacific Bell
	Ware & Freidenrich	Pacific Bell
	Ware Leonard Ware Fletcher & Freidenrich A Professional Corporation attys	Pacific Bell
	Yee Leung Ware Fletcher & Freidenrich A Professional Corporation attys	Pacific Bell
1982	Palo Alto Main Office	Pacific Telephone
	WELLS FARGO BANK NA Credit Card Customer Services	Pacific Telephone
1978	Vacant	R. L. Polk & Co.
	Great Western Savings & Loan	R. L. Polk & Co.
	Premises Dept	R. L. Polk & Co.

FINDINGS

Year	Uses	Source
1978	Wells Fargo Bank	R. L. Polk & Co.
1975	Palo Alto Main Office	Pacific Telephone
	WELLS FARGO BANK NA Departments Not Listed Below Or	Pacific Telephone
1970	Vacant	R. L. Polk & Co.
	Wells Fargo Bank	R. L. Polk & Co.
1965	WELLS FARGO BANK	R. L. Polk Co.

401 HAMILTON AVE

Year	Uses	Source
1991	MILLER TERRY P MD	PACIFIC BELL WHITE PAGES
1978	Wassermnan Saul phys	R. L. Polk & Co.
1970	Mc Cormick Clyde I christian scientist	R. L. Polk & Co.
1965	VACANT	R. L. Polk Co.

402 HAMILTON AVE

Year	Uses	Source
1991	EMERSON HAYES	PACIFIC BELL WHITE PAGES
1978	Vacant	R. L. Polk & Co.

403 HAMILTON AVE

Year	Uses	Source
1978	Vacant	R. L. Polk & Co.
1970	Mac Master Polly writer & consultant	R. L. Polk & Co.

404 HAMILTON AVE

Year	Uses	Source
1991	Scheuer Charlotte	PACIFIC BELL WHITE PAGES
1978	Emerson Hayes adv specialties	R. L. Polk & Co.
1970	Vacant	R. L. Polk & Co.
1965	COCHRANE REDMOND C DENTIST	R. L. Polk Co.
1960	Cochrane Redmond C dentist 4D	R. L. Polk Co.
1955	Horswill Rob D dentist da	R. L. Polk & Co.
1946	Clendenin E C dentist	R. L. Polk Co.
1942	Clendenin E C dentist	R. L. Polk Co.
1936	Clendenin E C dentist	R. L. Polk Co.
	Hadeler F C dentist	R. L. Polk Co.
1931	Clendenin E C dentist	R. L. Polk Co.

FINDINGS

405 HAMILTON AVE

Year	Uses	Source
1960	All Saints Episcopal Ch	R. L. Polk Co.
	Vacant	R. L. Polk Co.
1955	All Saints Epis Ch da	R. L. Polk & Co.
	Schuchard Alf S dentist da	R. L. Polk & Co.
1946	All Saints Episcopal Ch	R. L. Polk Co.
	Rudee M C dentist	R. L. Polk Co.
1942	All Saints Episcopal Church	R. L. Polk Co.
	Rudee M C dentist	R. L. Polk Co.
1936	Rudee M C dentist	R. L. Polk Co.
1931	Rude M C dentist	R. L. Polk Co.
	HAMILTON AV Contd	R. L. Polk Co.

406 HAMILTON AVE

Year	Uses	Source
1991	MENCARINI ELECTROLYSIS	PACIFIC BELL WHITE PAGES
	Sauer Donald E	PACIFIC BELL WHITE PAGES
1970	Vacant	R. L. Polk & Co.

408 HAMILTON AVE

Year	Uses	Source
1991	MC GARAGHAN PATRICK J WARE& FREIDENRICH A PROFESSIONAL CORPORATION ATTYS	PACIFIC BELL WHITE PAGES
	Mc Garaghan Patrick J Ware& Freidenrich A Professional Corporation attys	PACIFIC BELL WHITE PAGES
1978	Mencarini Alice electrologist	R. L. Polk & Co.
1970	Kantor Robt E psychologist	R. L. Polk & Co.
1965	KANTOR ROBT E PSYCHOLOGIST	R. L. Polk Co.
1960	Kantor Robt E psycholo gist 4D	R. L. Polk Co.
1955	Vacant	R. L. Polk & Co.
1946	Cameron O L dental labty	R. L. Polk Co.
1942	Cameron O L dental labtry	R. L. Polk Co.
1936	Jackson Axel dental labtry	R. L. Polk Co.

409 HAMILTON AVE

Year	Uses	Source
1978	Palo Alto Dental Laboratory	R. L. Polk & Co.
1970	Palo Alto Dental Laboratory	R. L. Polk & Co.
1965	PALO ALTO DENTAL LABORATORY	R. L. Polk Co.

FINDINGS

Year	Uses	Source
1960	HAMILTON AV Contd	R. L. Polk Co.
	Palo Alto Dental Laby	R. L. Polk Co.
1955	Palo Alto Dental Laby da	R. L. Polk & Co.
1946	Conroy T F phys	R. L. Polk Co.
	Storey Dean Phys	R. L. Polk Co.
1942	Storey Dean phys	R. L. Polk Co.
1936	Conroy T F phys	R. L. Polk Co.

411 HAMILTON AVE

Year	Uses	Source
1986	Young Rosalie	Pacific Bell
1982	Young Rosalie	Pacific Telephone
1978	Sonotone Of Palo Alto hearing aids	R. L. Polk & Co.
1970	Vacant	R. L. Polk & Co.
1965	ALBURGER JOHN T INS	R. L. Polk Co.
1960	Layne Donald M lwyr da	R. L. Polk Co.
1955	Phares Hugh A jr dentist da	R. L. Polk & Co.
1946	Mc Cowen C S orthodontist	R. L. Polk Co.
	Hughes Guy dentist	R. L. Polk Co.
1942	Mc Cowen C S orthodontist	R. L. Polk Co.
1936	Mc Cowen C S orthodontist	R. L. Polk Co.
1931	Mc Cowen C S dentist	R. L. Polk Co.

413 HAMILTON AVE

Year	Uses	Source
1991	CONNELLY TIMOTHY A	PACIFIC BELL WHITE PAGES
1978	Bledsoe Karl V lwyr	R. L. Polk & Co.
1970	Bledsoe Karl V lwyr	R. L. Polk & Co.
1965	BLEOSOE KARL V LWYR	R. L. Polk Co.
1960	t00 ttllert Mark	R. L. Polk Co.
	Bledsoe Karl V lwyr da	R. L. Polk Co.

415 HAMILTON AVE

Year	Uses	Source
1991	HERB ELIZABETH MD	PACIFIC BELL WHITE PAGES
1978	Leibel Eliz A child psychologist	R. L. Polk & Co.
1970	Vacant	R. L. Polk & Co.
1965	VACANT	R. L. Polk Co.
1960	Lundquist Dell T phys	R. L. Polk Co.

Year	Uses	Source
1955	Lundquist Dell T phys da	R. L. Polk & Co.
1946	Lundquist D T phys	R. L. Polk Co.
1942	Lundquist D T phys	R. L. Polk Co.
1936	Lundquist D T phys	R. L. Polk Co.
1931	Lundquist D T phys	R. L. Polk Co.

416 HAMILTON AVE

Year	Uses	Source
1991	GAMARRA ROBERTO J	PACIFIC BELL WHITE PAGES
1978	Gamarra Roberta J dentist	R. L. Polk & Co.
1970	Bennett Robt F dentist	R. L. Polk & Co.
1965	BENNETT ROBT F DENTIST	R. L. Polk Co.
1960	Bennett Robt F dentist	R. L. Polk Co.
1955	Bennett Robt F dentist da	R. L. Polk & Co.
1946	Bennett R F dentist	R. L. Polk Co.
1942	Aiken G S dentist	R. L. Polk Co.
1936	Aiken G S dentist	R. L. Polk Co.
1931	Aiken G S dentist	R. L. Polk Co.

417 HAMILTON AVE

Year	Uses	Source
1970	Vacant	R. L. Polk & Co.

418 HAMILTON AVE

Year	Uses	Source
1978	Reynolds W Me Kinley dentist	R. L. Polk & Co.
1970	Reynolds W Mc Kinley dentist	R. L. Polk & Co.
1965	REYNOLDS W MC KINLEY DENTIST	R. L. Polk Co.
1960	Reynolds W Mc Kinley dentist da	R. L. Polk Co.
1955	Reynolds W Mc Kinley dentist da	R. L. Polk & Co.
1946	Reynolds W M dentist	R. L. Polk Co.
1942	Reynolds W M dentist	R. L. Polk Co.
1936	Reynolds W M dentist	R. L. Polk Co.
1931	Reynolds W M dentist	R. L. Polk Co.

419 HAMILTON AVE

Year	Uses	Source
1991	GREGORY WALDRON A	PACIFIC BELL WHITE PAGES
1978	Vacant	R. L. Polk & Co.
1970	Vacant	R. L. Polk & Co.

FINDINGS

420 HAMILTON AVE

Year	Uses	Source
1991	WALLACE & STEICHEN INC	PACIFIC BELL WHITE PAGES
1980	Hankes Russell	Pacific Telephone
1978	Vacant	R. L. Polk & Co.
1946	Glahan H E	R. L. Polk Co.
1942	Glahan H E	R. L. Polk Co.
1936	Barret M D Mrs	R. L. Polk Co.
1931	Coyle M H	R. L. Polk Co.
1926	Johnson H V	R. L. Polk Co.

421 HAMILTON AVE

Year	Uses	Source
1991	MWA CONSULTING	PACIFIC BELL WHITE PAGES
1982	Jefferson Mattie M	Pacific Telephone
1970	Vacant	R. L. Polk & Co.
1965	WHITEHILL KENNETH J DENTIST	R. L. Polk Co.
1960	Whitehill Kentieth J phys da	R. L. Polk Co.
	Untider Con Ln	R. L. Polk Co.
1955	Collins Laurence R dentist da	R. L. Polk & Co.
1946	Ashcraft Edw dentist	R. L. Polk Co.
1942	Wright R W phys	R. L. Polk Co.
	Sewall E C phys	R. L. Polk Co.
1936	Wright R W phys	R. L. Polk Co.
1931	Phillips H D dentist	R. L. Polk Co.

422 HAMILTON AVE

Year	Uses	Source
1970	Vacant	R. L. Polk & Co.
1965	HANSZEN CLYDE	R. L. Polk Co.
1960	De Frees Jon W da	R. L. Polk Co.
1957	COOPER JOHN W	Pacific Telephone
1955	Cooper John W da	R. L. Polk & Co.

423 HAMILTON AVE

Year	Uses	Source
1991	FOURTH FLOOR DATABASES	PACIFIC BELL WHITE PAGES
1978	Weeden Joseph B dentist	R. L. Polk & Co.
	STREET CONTINUED	R. L. Polk & Co.
1970	Weeden Joseph B dentist	R. L. Polk & Co.

FINDINGS

Year	Uses	Source
1970	Carpenter Douglas Co Inc The	R. L. Polk & Co.
	STREET CONTINUED	R. L. Polk & Co.
	Medico Dental Garage	R. L. Polk & Co.
1965	WELDEN JOSEPH B DENTIST	R. L. Polk Co.
	STREET CONTINUED	R. L. Polk Co.
1960	Street continued	R. L. Polk Co.
	Weeden Jos B dentist	R. L. Polk Co.
1955	Weeden Jos B dentist da	R. L. Polk & Co.
	Street continued	R. L. Polk & Co.
1946	Street continued	R. L. Polk Co.
	Weeden J B dentist	R. L. Polk Co.
1942	Street Continued	R. L. Polk Co.
	Weeden J B dentist	R. L. Polk Co.
	Grover G H dentist	R. L. Polk Co.
1936	Street continued	R. L. Polk Co.
	Weeden J B dentist	R. L. Polk Co.
	Grover G H dentist	R. L. Polk Co.
1931	Weeden J B dentist	R. L. Polk Co.
	Street continued	R. L. Polk Co.

425 HAMILTON AVE

Year	Uses	Source
2001	XXXX	Haines Company, Inc.
1978	All Saints Episcopal Church	R. L. Polk & Co.
	La Comida Senior Nutrition Center senior citizens center	R. L. Polk & Co.
1970	All Saints Episcopal Church	R. L. Polk & Co.
1965	ALL SAINTS EPISCOPAL CHURCH	R. L. Polk Co.
1960	All S ints Episcopal Ch	R. L. Polk Co.
	Parish Hse	R. L. Polk Co.
1955	All Saints Parish House	R. L. Polk & Co.
1946	All Saints Parish House	R. L. Polk Co.
1942	All Saints Parish House	R. L. Polk Co.
1936	All Saints Parish House	R. L. Polk Co.
1931	All Saint Parish House	R. L. Polk Co.

FINDINGS

Hamilton Avenue

380 Hamilton Avenue

Year	*Uses*	*Source*
2001	XXXX	Haines Company, Inc.
	XXXX	Haines Company, Inc.
	XXXX	Haines Company, Inc.
1991	UNITED STATES GOVERNMENT	PACIFIC BELL WHITE PAGES
	UNITED STATES GOVERNMENT	PACIFIC BELL WHITE PAGES
	UNITED STATES GOVERNMENT	PACIFIC BELL WHITE PAGES
1978	U S Post Office	R. L. Polk & Co.
	U S Post Office	R. L. Polk & Co.
	U S Post Office	R. L. Polk & Co.
1970	U S Post Office	R. L. Polk & Co.
	U S Post Office	R. L. Polk & Co.
	U S Post Office	R. L. Polk & Co.
1965	BSMT U S NAVY DEPT RESERVE TRAINING FACILITY	R. L. Polk Co.
	U S POST OFFICE	R. L. Polk Co.
	BSMT U S NAVY DEPT RESERVE TRAINING FACILITY	R. L. Polk Co.
	U S POST OFFICE	R. L. Polk Co.
	BSMT U S NAVY DEPT RESERVE TRAINING FACILITY	R. L. Polk Co.
	U S POST OFFICE	R. L. Polk Co.
1960	US Post Ofc da	R. L. Polk Co.
	US Post Ofc da	R. L. Polk Co.
	US Post Ofc da	R. L. Polk Co.
1957	UNIT ADVISOR	Pacific Telephone
	UNIT ADVISOR	Pacific Telephone
	UNIT ADVISOR	Pacific Telephone
1955	US Post Office da	R. L. Polk & Co.
	Post Office News Stand	R. L. Polk & Co.
	US Collr of Int Rev da	R. L. Polk & Co.
	US Post Office da	R. L. Polk & Co.
	Post Office News Stand	R. L. Polk & Co.
	US Collr of Int Rev da	R. L. Polk & Co.
	US Post Office da	R. L. Polk & Co.
	Post Office News Stand	R. L. Polk & Co.
	US Collr of Int Rev da	R. L. Polk & Co.

Year	Uses	Source
1946	Post Office	R. L. Polk Co.
	Post Office	R. L. Polk Co.
	Post Office	R. L. Polk Co.
1942	Post Office	R. L. Polk Co.
	Post Office	R. L. Polk Co.
	Post Office	R. L. Polk Co.
1936	Postmens Assn	R. L. Polk Co.
	Post Office	R. L. Polk Co.
	Postmens Assn	R. L. Polk Co.
	Post Office	R. L. Polk Co.
	Postmens Assn	R. L. Polk Co.
	Post Office	R. L. Polk Co.

HAMILTON LN

311 HAMILTON LN

Year	Uses	Source
1963	Hassler Earl K	Pacific Telephone

HAMILTON WAY

315 HAMILTON WAY

Year	Uses	Source
1982	Smith Beverly real estate broker	Pacific Telephone

400 HAMILTON WAY

Year	Uses	Source
1986	Schaeffer Bruce E Ware Fletcher & Freidenrich A Professional Corporation attys	Pacific Bell

HAMLTN AVE

321 HAMLTN AVE

Year	Uses	Source
1975	Lynch Florence CPM realtor	Pacific Telephone
	Tyler William H Insurance	Pacific Telephone
	Kreutzmann Ins Agency	Pacific Telephone

FINDINGS

380 HAMLTN AVE

Year	Uses	Source
1975	Upton Gene realtor	Pacific Telephone
	Main Ofc Information	Pacific Telephone

WAVERLEY

540 WAVERLEY

Year	Uses	Source
1931	Jaclen Golfun Golf Course	R. L. Polk Co.

550 WAVERLEY

Year	Uses	Source
2001	EDELSTEIN Chades P 90 LIFICOVEN	Haines Company, Inc.
1960	EyerlyS Hdw da	R. L. Polk Co.
1955	Eyerlys Hdw da	R. L. Polk & Co.

552 WAVERLEY

Year	Uses	Source
2001	REYNOLDSPOTTER	Haines Company, Inc.
	POTTERREYNOLDS CO	Haines Company, Inc.
	TOE UPSTREAM	Haines Company, Inc.

555 WAVERLEY

Year	Uses	Source
2001	ALLSAINTS EPISCOPL	Haines Company, Inc.
	EPISCOPALCHURCH	Haines Company, Inc.
	ALL SAINTS PALOALTOCHLD	Haines Company, Inc.
1975	Downtown Childrens Center	Pacific Telephone
1960	All Saints Episcopal Ch Rectory da	R. L. Polk Co.
1955	All Saints Epis Ch rectory da	R. L. Polk & Co.
	Green Oscar F Rev da	R. L. Polk & Co.
1946	All Saints Episcopal Ch rectory	R. L. Polk Co.
	Green O F Rev	R. L. Polk Co.
1942	All Saints Epis copal Ch rectory	R. L. Polk Co.
	Green O F Rev	R. L. Polk Co.
1936	Green O F Rev	R. L. Polk Co.
1931	All Saints Episcopal Church Rectory	R. L. Polk Co.
	Green O F Rev	R. L. Polk Co.
	n w cor All Saints Episcopal Church Hamilton	R. L. Polk Co.

Year	Uses	Source
1926	Evans D J	R. L. Polk Co.

560 WAVERLEY

Year	Uses	Source
2001	THOMASREID	Haines Company, Inc.
	ASSOCIATES	Haines Company, Inc.
	SYSTEMS SERRAENERGYINC	Haines Company, Inc.
	LOUNGE REST INSTSTUDY COMPLEX	Haines Company, Inc.
	HONG KONG FLOWER	Haines Company, Inc.
	CDRNINGWORKS	Haines Company, Inc.
	CORNISG WORKS	Haines Company, Inc.
	ASSOCIATES CORNING SUSAN P	Haines Company, Inc.
	CHILDRESSJOHN	Haines Company, Inc.
1960	Food Mart gro	R. L. Polk Co.
	Mc Cauley & Richards	R. L. Polk Co.
	Foster Guy meats	R. L. Polk Co.
	Fanos & Bianchi fruit da	R. L. Polk Co.
	Baron Michell delicatess en da	R. L. Polk Co.
1955	Baron Mitchell delica tessen da	R. L. Polk & Co.
	Fanos & Bianchi da	R. L. Polk & Co.
	Foster Guy Meats da	R. L. Polk & Co.
	Reed Mc Cauley	R. L. Polk & Co.
	Richards gro AD	R. L. Polk & Co.
1946	Baron Mitchell delicatessen	R. L. Polk Co.
	Reed & Mc Cauley gro	R. L. Polk Co.
	Mc Cune R R meats	R. L. Polk Co.
	Harbas & Fanos fruits	R. L. Polk Co.
	Guiliani Amedeo fish	R. L. Polk Co.
1942	Baron Mitchell delicatessen	R. L. Polk Co.
	Harbus & Tounger fruits	R. L. Polk Co.
	Mc Cune Roy meats	R. L. Polk Co.
	Reed & Mc Cauley Food Mart gro	R. L. Polk Co.
	Tap Fish Co	R. L. Polk Co.
	Weymouth F W florist	R. L. Polk Co.

575 WAVERLEY

Year	Uses	Source
1936	All Saints Episcopal Church	R. L. Polk Co.

FINDINGS

602 WAVERLEY

Year	Uses	Source
1931	Paulsen C H	R. L. Polk Co.
	Parker F M Mrs	R. L. Polk Co.
	Bullard M C Mrs	R. L. Polk Co.
1926	Paulsen J W	R. L. Polk Co.

603 WAVERLEY

Year	Uses	Source
1946	Potts J A Mrs	R. L. Polk Co.
1942	Potts J A Mrs	R. L. Polk Co.
	Gladstone A M Mrs	R. L. Polk Co.
1936	Gladstone A M Mrs	R. L. Polk Co.
	Powell Dora E	R. L. Polk Co.
	St John Benj Rev	R. L. Polk Co.
	Arnold G I Mrs	R. L. Polk Co.
1931	Frink M B Mrs	R. L. Polk Co.
	Gladstone A M Mrs	R. L. Polk Co.
	Speegle P L	R. L. Polk Co.
1926	Gladstone A M	R. L. Polk Co.
	Hoppin Clara C S pract	R. L. Polk Co.

605 WAVERLEY

Year	Uses	Source
1960	Lucky Seven Serv gas	R. L. Polk Co.
1955	C & E Oil Co No 4 gas	R. L. Polk & Co.

611 WAVERLEY

Year	Uses	Source
1946	Maine E H	R. L. Polk Co.
1942	Reynolds Emma Mrs	R. L. Polk Co.
	Heizenbuttel Rube Mrs	R. L. Polk Co.
1936	Kirkwood Anna Mrs	R. L. Polk Co.
	Kirkwood Apartments	R. L. Polk Co.
1931	Kirkwood Apartments	R. L. Polk Co.
	Hansen Peter	R. L. Polk Co.
	Swalwell W F	R. L. Polk Co.
	Kirkwood Anna Mrs	R. L. Polk Co.
1926	Ashley L H Mrs	R. L. Polk Co.

FINDINGS

612 WAVERLEY

Year	Uses	Source
1931	Gross A E	R. L. Polk Co.
	Shaw Mildred B	R. L. Polk Co.
1926	Peterson A B	R. L. Polk Co.

615 WAVERLEY

Year	Uses	Source
1946	Parr Emil	R. L. Polk Co.
1942	Vacant	R. L. Polk Co.

617 WAVERLEY

Year	Uses	Source
1960	Bamboo The caterers	R. L. Polk Co.
1955	Bamboo The caterers da	R. L. Polk & Co.
1950	caterers	R. L. Polk Co.
	a Bamboo The	R. L. Polk Co.
1946	Curran E B Mrs	R. L. Polk Co.
1942	Spichtig Adelheit	R. L. Polk Co.
1936	Caruso J T	R. L. Polk Co.
1931	Warren L E	R. L. Polk Co.
1926	Miller W F	R. L. Polk Co.

619 WAVERLEY

Year	Uses	Source
1960	Poages Al Radio Center da	R. L. Polk Co.
1955	Poages Al Radio Center	R. L. Polk & Co.
1946	Nesbitt A I Mrs	R. L. Polk Co.
1942	Leplan Clara Mrs	R. L. Polk Co.
1936	Lowe K E	R. L. Polk Co.
1931	Currall Anna C A nurse	R. L. Polk Co.
1926	Vacant	R. L. Polk Co.

620 WAVERLEY

Year	Uses	Source
1931	Brownlee Kath nurse	R. L. Polk Co.
	Mc Kinney W T	R. L. Polk Co.
1926	Mc Kinney W T	R. L. Polk Co.

FINDINGS

627 WAVERLEY

Year	Uses	Source
1960	Wilhelm Lina=s womens dclo da	R. L. Polk Co.
	Moore Don Signs	R. L. Polk Co.
	Moore Don L	R. L. Polk Co.
	b Fisher Gertrude	R. L. Polk Co.
	Knabes Hobby Shop da	R. L. Polk Co.
1955	Community Chest Palo	R. L. Polk & Co.
	Alto Stanford Area da	R. L. Polk & Co.
	Hamilton Ann Mrs da	R. L. Polk & Co.
	Mkt of The Flea The antiques da	R. L. Polk & Co.
	Winston Fay da	R. L. Polk & Co.
1946	Ellet Chas real est	R. L. Polk Co.
	Stanford Realty Co	R. L. Polk Co.
	Sutton H D Rev	R. L. Polk Co.
1942	Ellet Chas real est	R. L. Polk Co.
	Kirkbride Ruth Mrs	R. L. Polk Co.
	Stanford Realty Co	R. L. Polk Co.
1936	Shaw M B Mrs	R. L. Polk Co.
1931	Vacant	R. L. Polk Co.
1926	Sloane D L	R. L. Polk Co.

628 WAVERLEY

Year	Uses	Source
2001	APARTMENTS BERNARD Jin	Haines Company, Inc.
	HALLFredenck M	Haines Company, Inc.
	LEVE 1 TDennrs MANSATAKunal S	Haines Company, Inc.
	MILLERBUbbr	Haines Company, Inc.
	GAWAHiroyukr	Haines Company, Inc.
1960	Wollnick Gus bldg contr da	R. L. Polk Co.
	Wollnick Lucille Mrs rms da	R. L. Polk Co.
	Keag Jullian	R. L. Polk Co.
1955	Wollnick Gus bldg contr da	R. L. Polk & Co.
	Wollnick Lucille Mrs	R. L. Polk & Co.
	furn rms	R. L. Polk & Co.
	Keag Julian	R. L. Polk & Co.
1946	Wollnick Gus	R. L. Polk Co.
	Larson Lucille Mrs	R. L. Polk Co.
1942	Larson Lucille Mrs	R. L. Polk Co.
1936	Waverley House	R. L. Polk Co.

Year	Uses	Source
1936	Larson Cyril	R. L. Polk Co.
	Larson Elmer	R. L. Polk Co.
1931	Larson E W	R. L. Polk Co.
1926	Larson E G	R. L. Polk Co.

635 WAVERLEY

Year	Uses	Source
2001	GLOBALVISION	Haines Company, Inc.
	KEENANCharls TALLWOCDVENTURE	Haines Company, Inc.
	CAPITAL	Haines Company, Inc.
1960	Thompson Eliz	R. L. Polk Co.
1955	Thompson Eliz	R. L. Polk & Co.
1946	Thompson Eliz	R. L. Polk Co.
1942	Thompson Eliz	R. L. Polk Co.
1936	Thompson Eliz	R. L. Polk Co.
1931	Thompson Eliz	R. L. Polk Co.
1926	Thompson Eliz	R. L. Polk Co.

636 WAVERLEY

Year	Uses	Source
2001	RUCKER Douglas	Haines Company, Inc.
	CAMBRIACORP	Haines Company, Inc.
	CAMBRIACORP	Haines Company, Inc.
1986	Cable Communications Cooperative Of Palo Alto Inc	Pacific Bell
1960	Rudat & Ewing mfrg agt da	R. L. Polk Co.
	Roddy Marian E chiro pradist da	R. L. Polk Co.
	Gidley Rose K Mrs CSP da	R. L. Polk Co.
	Cowan Realty da	R. L. Polk Co.
1955	Mc Fall J Harold Real Est & Ins da	R. L. Polk & Co.
	Roddy Marion E Mrs	R. L. Polk & Co.
	chiropodist	R. L. Polk & Co.
	Simplified Tax Records da	R. L. Polk & Co.
1950	a Mc Fall G H	R. L. Polk Co.
	real est	R. L. Polk Co.
1946	Lindskog V J	R. L. Polk Co.
1942	Vacant	R. L. Polk Co.
1936	Vacant	R. L. Polk Co.
1931	Meaney C D	R. L. Polk Co.

Year	Uses	Source
1926	Arnott J D	R. L. Polk Co.

639 WAVERLEY

Year	Uses	Source
1946	Schuler Carl	R. L. Polk Co.

640 WAVERLEY

Year	Uses	Source
2001	RUCKER Douglas	Haines Company, Inc.
1960	Rucker Douglas W da	R. L. Polk Co.
1955	Rucker Douglas W da	R. L. Polk & Co.
1946	Harala H W	R. L. Polk Co.
1942	Graham H F Mrs	R. L. Polk Co.
1936	Carpenter Kath Mrs	R. L. Polk Co.
1931	Carpenter P L	R. L. Polk Co.
1926	Lane S S	R. L. Polk Co.

646 WAVERLEY

Year	Uses	Source
2001	XXXX	Haines Company, Inc.
1960	Hill Robt W	R. L. Polk Co.
	Scharf Eva	R. L. Polk Co.
1955	Johnston Jesse J da	R. L. Polk & Co.
1950	Mary P	R. L. Polk Co.
	Armstrong	R. L. Polk Co.
1946	Enbom A E	R. L. Polk Co.
1942	Vacant	R. L. Polk Co.
1936	Peterson C E	R. L. Polk Co.
1931	Morverader R M	R. L. Polk Co.

Waverley St

550 Waverley St

Year	Uses	Source
2014	PROLIFIC OVEN INC	EDR Digital Archive
	GHS CHAMPION INC	EDR Digital Archive
	GHS CHAMPION INC	EDR Digital Archive
	PROLIFIC OVEN INC	EDR Digital Archive
2010	PROLIFIC OVEN INC	EDR Digital Archive
	GHS CHAMPION INC	EDR Digital Archive

Year	Uses	Source
2010	GHS CHAMPION INC	EDR Digital Archive
	PROLIFIC OVEN INC	EDR Digital Archive

WAVERLEY ST

550 WAVERLEY ST

Year	Uses	Source
1991	PROLIFIC OVEN	PACIFIC BELL WHITE PAGES
1986	PROLIFIC OVEN	Pacific Bell
1978	Eyerlys Hardware	R. L. Polk & Co.
1970	Eyerlys Hardware	R. L. Polk & Co.
1965	EYERLYS HARDWARE	R. L. Polk Co.

Waverley St

552 Waverley St

Year	Uses	Source
2014	DAYONE BABY	EDR Digital Archive
	CONGDON AND CROME	EDR Digital Archive
	CONGDON AND CROME	EDR Digital Archive
	DAYONE BABY	EDR Digital Archive
2010	CONGDON AND CROME	EDR Digital Archive
	CONGDON AND CROME	EDR Digital Archive

WAVERLEY ST

552 WAVERLEY ST

Year	Uses	Source
1991	STEVENS	PACIFIC BELL WHITE PAGES
1986	DEALIN DOWN	Pacific Bell

Waverley St

555 Waverley St

Year	Uses	Source
2014	HAND IN HAND PARENTING	EDR Digital Archive
	PARENTS LEADERSHIP INSTITUTE	EDR Digital Archive
	DOWNTOWN STREETS INC	EDR Digital Archive
	PALO ALTO CHILD CARE CENTERS	EDR Digital Archive
	ALL SAINTS EPISCOPAL CHURCH	EDR Digital Archive

Year	Uses	Source
2014	RECTOR WRDENS VESTRYMEN OF ALL	EDR Digital Archive
	HAND IN HAND PARENTING	EDR Digital Archive
	PARENTS LEADERSHIP INSTITUTE	EDR Digital Archive
	DOWNTOWN STREETS INC	EDR Digital Archive
	PALO ALTO CHILD CARE CENTERS	EDR Digital Archive
	ALL SAINTS EPISCOPAL CHURCH	EDR Digital Archive
	RECTOR WRDENS VESTRYMEN OF ALL	EDR Digital Archive
2010	ALL SAINTS EPISCOPAL CHURCH	EDR Digital Archive
	PALO ALTO CHILD CARE CENTERS	EDR Digital Archive
	RECTOR WRDENS VESTRYMEN OF ALL	EDR Digital Archive
	PARENTS LEADERSHIP INSTITUTE	EDR Digital Archive
	HAND IN HAND PARENTING	EDR Digital Archive
	ALL SAINTS EPISCOPAL CHURCH	EDR Digital Archive
	PALO ALTO CHILD CARE CENTERS	EDR Digital Archive
	RECTOR WRDENS VESTRYMEN OF ALL	EDR Digital Archive
	PARENTS LEADERSHIP INSTITUTE	EDR Digital Archive
	HAND IN HAND PARENTING	EDR Digital Archive

WAVERLEY ST

555 WAVERLEY ST

Year	Uses	Source
1991	PENINSULA PEACE CENTER	PACIFIC BELL WHITE PAGES
	PALO ALTO DOWNTOWN FOOD CLOSET	PACIFIC BELL WHITE PAGES
	ALL SAINTS EPISCOPAL CHURCH	PACIFIC BELL WHITE PAGES
	PALO ALTO COMMUNITY CHILD CARE PACCC	PACIFIC BELL WHITE PAGES
	PEACE INFORMATION & EVENTS	PACIFIC BELL WHITE PAGES
1986	ALL SAINTS EPISCOPAL CHURCH	Pacific Bell
	CORES	Pacific Bell
	COMITE BE REFUGIADOS SALVADORENOS	Pacific Bell
	DOWNTOWN CHILDRENS CENTER	Pacific Bell
	EPISCOPAL CHURCH ALL SAINTS	Pacific Bell
	MID PENINSULA PEACE CENTER	Pacific Bell
	PEACE CENTER MID PENINSULA	Pacific Bell
	SCHOLA CANTORUM THE	Pacific Bell

Year	Uses	Source
1986	SOUTH BAY SANCTURAY COVENANT	Pacific Bell
	US CHINA PEOPLE FRIENDSHIP ASSOCIATION	Pacific Bell
	URBAN MINISTRY OF PALO ALTO	Pacific Bell
1978	Palo Alto Community Child Care	R. L. Polk & Co.
	Senior Adult Drop In Center social organization	R. L. Polk & Co.
	Downtown Childrens Cntr nursery sch	R. L. Polk & Co.
	All Saints Episcopal Church	R. L. Polk & Co.
1965	ALL SAINTS EPISCOPAL CHURCH OFC	R. L. Polk Co.

Waverley St

558 Waverley St

Year	Uses	Source
2014	VALEDGE SOLUTIONS INC	EDR Digital Archive
	VALEDGE SOLUTIONS INC	EDR Digital Archive
2010	VALEDGE SOLUTIONS INC	EDR Digital Archive
	SHOPKICK	EDR Digital Archive
	VALEDGE SOLUTIONS INC	EDR Digital Archive
	SHOPKICK	EDR Digital Archive

560 Waverley St

Year	Uses	Source
2014	TAIPAN RESTAURANT	EDR Digital Archive
	HANNAH INT INV GROUP INC	EDR Digital Archive
	TAIPAN RESTAURANT	EDR Digital Archive
	HANNAH INT INV GROUP INC	EDR Digital Archive
2010	HANNAH INT INV GROUP INC	EDR Digital Archive
	TAIPAN RESTAURANT	EDR Digital Archive
	CORNINGWORKS INC	EDR Digital Archive
	HANNAH INT INV GROUP INC	EDR Digital Archive
	TAIPAN RESTAURANT	EDR Digital Archive
	CORNINGWORKS INC	EDR Digital Archive

WAVERLEY ST

560 WAVERLEY ST

Year	Uses	Source
1991	POCKET INFORMATION	PACIFIC BELL WHITE PAGES

FINDINGS

Year	Uses	Source
1991	HARVEST RESTAURANT & BAKERY THE	PACIFIC BELL WHITE PAGES
	TRAILER & ASSOCS INC	PACIFIC BELL WHITE PAGES
1986	CJC COMMUNICATIONS	Pacific Bell
	WAVERLEY PLACE RESTAURANT	Pacific Bell
	WARTHMAN ASSOCIATES	Pacific Bell
	CESELLI D	Pacific Bell
1978	Food Mart	R. L. Polk & Co.
	Foster Guy B meats	R. L. Polk & Co.
1970	Me Cauley & Richards Food Mart gro	R. L. Polk & Co.
	Foster Guy B meats	R. L. Polk & Co.
1965	MC CAULEY C RICHARDS FOOD MART GRO	R. L. Polk Co.
	FOSTER GUY MEATS	R. L. Polk Co.
	FANOS BIANCHI FRUIT	R. L. Polk Co.

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Year	Uses	Source
1991	Bishop Jeraldean W	PACIFIC BELL WHITE PAGES
	D LEVETT	PACIFIC BELL WHITE PAGES
	B Cohn Ginevra M	PACIFIC BELL WHITE PAGES
1986	BISHOP JERALDEAN W	Pacific Bell
	BRUCE E V	Pacific Bell
	COOK JOHN W	Pacific Bell
	D LEVETT	Pacific Bell
	ESCHER CHRIS	Pacific Bell
	HENRY GERALD L	Pacific Bell
	HOOLHORST JENNIFER	Pacific Bell
	MACLAREN RICHARD	Pacific Bell
	MARTINEZ L J	Pacific Bell
	MURELAGA DJ	Pacific Bell
1982	Henry Gerald L	Pacific Telephone
	Sossunov A	Pacific Telephone
	Stone David	Pacific Telephone
1978	Rear Kolosswitch Ver	R. L. Polk & Co.
	a Sossunov Antonina I	R. L. Polk & Co.
	Pritz Charles	R. L. Polk & Co.
	Wollnick Lucille Mrs lodgings	R. L. Polk & Co.
1970	Rear Kolossowitsch Wadin	R. L. Polk & Co.
	Wollnick Lucille Mrs lodgings	R. L. Polk & Co.

FINDINGS

Year	Uses	Source
1970	Ammamann Geo Sossunov Antonina I	R. L. Polk & Co.
1965	WOLLNICK LUCILLE MRS LODGINGS	R. L. Polk Co.
	REAR KOLOSOVICH WADIM	R. L. Polk Co.

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Year	Uses	Source
1991	BOSTON SAFE DEPOSIT & TRUST CO A REPR	PACIFIC BELL WHITE PAGES
1986	P E L LIMITED	Pacific Bell
	PICTURE ELEMENT LIMITED	Pacific Bell
1978	Bache Halsey Stuart Shields Inc investments	R. L. Polk & Co.
1975	REYNOLDS SECURITIES INC brkrsstk & bnds	Pacific Telephone
1970	Glore Forgan Staats broker stocks & bonds	R. L. Polk & Co.

636 WAVERLEY ST

Year	Uses	Source
1991	CAMBRIA CORP	PACIFIC BELL WHITE PAGES
	TRANZACT	PACIFIC BELL WHITE PAGES
	ARKANSAS BLUE HERON FARMS BLUEBERRY JAMS	PACIFIC BELL WHITE PAGES
1986	Time Accountant	Pacific Bell
	CAMBRIA CORP	Pacific Bell
	MC GUIRE DIARMUID MARKETING	Pacific Bell
	TIME ACCOUNTANT	Pacific Bell
	Cable Co Op	Pacific Bell
	Cambria Corp	Pacific Bell
	Mc Guire Diarmuid Marketing	Pacific Bell
	CABLE COMMUNICATIONS COOPERATIVE OF PALO ALTO INC	Pacific Bell
	CABLE CO OP	Pacific Bell
1978	Smith Thos J tax consultant	R. L. Polk & Co.
	Sitter Service Agency babysitting	R. L. Polk & Co.
	Roddy Marian E podiatrist	R. L. Polk & Co.
	Investors Service Realty Co	R. L. Polk & Co.
1970	Sitter Service Agency babysitting	R. L. Polk & Co.
	Roddy Marian E podiatrist	R. L. Polk & Co.
	Investors Service Realty Co	R. L. Polk & Co.
1965	RODDY MARIAN E PODIATRIST	R. L. Polk Co.

Year	Uses	Source
1965	COWAN REALTY	R. L. Polk Co.

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Year	Uses	Source
1991	PALO ALTO DESIGN	PACIFIC BELL WHITE PAGES
	SWAN GRAPHICS	PACIFIC BELL WHITE PAGES
1986	SWAN GRAPHICS	Pacific Bell
	PALO ALTO DESIGN	Pacific Bell
1978	Rucker Douglas W	R. L. Polk & Co.
1970	Rucker Douglas W	R. L. Polk & Co.
1965	RUCKER DOUGLAS W	R. L. Polk Co.

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Year	Uses	Source
1986	Brock Larry	Pacific Bell
	BROCK LARRY	Pacific Bell
1982	Workshop The	Pacific Telephone
1978	Watkins Penny	R. L. Polk & Co.
1970	Adams Dorothy	R. L. Polk & Co.
1965	SCHARF EV	R. L. Polk Co.

FINDINGS

TARGET PROPERTY: ADDRESS NOT IDENTIFIED IN RESEARCH SOURCE

The following Target Property addresses were researched for this report, and the addresses were not identified in the research source.

Address Researched	Address Not Identified in Research Source
375 Hamilton Avenue	2014, 2010, 2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922

ADJOINING PROPERTY: ADDRESSES NOT IDENTIFIED IN RESEARCH SOURCE

The following Adjoining Property addresses were researched for this report, and the addresses were not identified in research source.

Address Researched	Address Not Identified in Research Source
300 Hamilton Ave	2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
300 Hamilton Ave	2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
300 HAMILTON AVE	2014, 2010, 2006, 2000, 1996, 1985, 1980, 1974, 1968, 1966, 1964, 1963, 1962, 1950, 1945, 1940, 1935, 1931, 1930, 1925, 1922
301 HAMILTON AVE	2014, 2010, 2006, 2001, 2000, 1996, 1986, 1985, 1982, 1980, 1975, 1974, 1968, 1966, 1964, 1963, 1962, 1957, 1950, 1945, 1940, 1935, 1930, 1926, 1925, 1922
302 HAMILTON AVE	2014, 2010, 2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1975, 1974, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
303 HAMILTON AVE	2014, 2010, 2006, 2001, 2000, 1996, 1986, 1985, 1982, 1980, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1930, 1926, 1925, 1922
304 HAMILTON AVE	2014, 2010, 2006, 2001, 2000, 1996, 1986, 1985, 1982, 1980, 1975, 1974, 1968, 1966, 1964, 1963, 1962, 1957, 1950, 1945, 1940, 1935, 1930, 1926, 1925, 1922
305 HAMILTON AVE	2014, 2010, 2006, 2001, 2000, 1996, 1986, 1985, 1982, 1980, 1975, 1974, 1968, 1966, 1965, 1964, 1963, 1962, 1957, 1950, 1945, 1940, 1935, 1930, 1925, 1922
306 HAMILTON AVE	2014, 2010, 2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
307 HAMILTON AVE	2014, 2010, 2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1975, 1974, 1968, 1966, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1945, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
309 HAMILTON AVE	2014, 2010, 2006, 2001, 2000, 1996, 1986, 1985, 1982, 1980, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1930, 1926, 1925, 1922
310 HAMILTON AVE	2014, 2010, 2006, 2001, 2000, 1996, 1986, 1985, 1982, 1980, 1975, 1974, 1968, 1966, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922

FINDINGS

Address Researched	Address Not Identified in Research Source
311 HAMILTON AVE	2014, 2010, 2006, 2001, 2000, 1996, 1986, 1985, 1982, 1980, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
311 HAMILTON LN	2014, 2010, 2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
312 HAMILTON AVE	2014, 2010, 2006, 2001, 2000, 1996, 1986, 1985, 1982, 1980, 1975, 1974, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
313 HAMILTON AVE	2014, 2010, 2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1975, 1974, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
314 HAMILTON AVE	2014, 2010, 2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1968, 1966, 1965, 1964, 1963, 1962, 1957, 1950, 1945, 1942, 1940, 1935, 1930, 1926, 1925, 1922
315 HAMILTON AVE	2014, 2010, 2006, 2000, 1996, 1985, 1980, 1974, 1968, 1966, 1964, 1963, 1962, 1957, 1950, 1946, 1945, 1942, 1940, 1935, 1930, 1926, 1925, 1922
315 HAMILTON WAY	2014, 2010, 2006, 2001, 2000, 1996, 1991, 1986, 1985, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
317 HAMILTON AVE	2014, 2010, 2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1975, 1974, 1968, 1966, 1965, 1964, 1963, 1962, 1957, 1950, 1945, 1940, 1935, 1931, 1930, 1926, 1925, 1922
319 HAMILTON AVE	2014, 2010, 2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1950, 1945, 1942, 1940, 1935, 1930, 1926, 1925, 1922
320 HAMILTON AVE	2014, 2010, 2006, 2001, 2000, 1996, 1986, 1985, 1982, 1980, 1975, 1974, 1968, 1966, 1964, 1963, 1962, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
321 HAINILTON AVE	2014, 2010, 2006, 2001, 2000, 1996, 1991, 1986, 1985, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
321 HAMILTON AVE	2014, 2010, 2006, 2000, 1996, 1985, 1980, 1974, 1968, 1966, 1964, 1963, 1962, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
321 Hamilton Ave	2014, 2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
321 Hamilton Ave	2014, 2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
321 HAMLTN AVE	2014, 2010, 2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
323 HAMILTON AVE	2014, 2010, 2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1940, 1935, 1931, 1930, 1925, 1922
325 HAMILTON AVE	2014, 2010, 2006, 2000, 1996, 1986, 1985, 1980, 1974, 1968, 1966, 1964, 1963, 1962, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1925, 1922
325 Hamilton Ave	2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922

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Address Researched	Address Not Identified in Research Source
325 Hamilton Ave	2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
326 HAMILTON AVE	2014, 2010, 2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
327 HAMILTON AVE	2014, 2010, 2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1945, 1940, 1935, 1930, 1925, 1922
328 HAMILTON AVE	2014, 2010, 2006, 2001, 2000, 1996, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
330 HAMILTON AVE	2014, 2010, 2006, 2001, 2000, 1996, 1986, 1985, 1982, 1980, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
331 HAMILTON AVE	2014, 2010, 2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1945, 1940, 1935, 1930, 1925, 1922
332 HAMILTON AVE	2014, 2010, 2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
333 HAMILTON AVE	2014, 2010, 2006, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1975, 1974, 1968, 1966, 1964, 1962, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
334 HAMILTON AVE	2014, 2010, 2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
337 HAMILTON AVE	2014, 2010, 2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1945, 1940, 1935, 1930, 1925, 1922
338 HAMILTON AVE	2014, 2010, 2006, 2001, 2000, 1996, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
342 HAMILTON AVE	2014, 2010, 2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
343 HAMILTON AVE	2014, 2010, 2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1945, 1940, 1935, 1930, 1926, 1925, 1922
345 HAMILTON AVE	2014, 2010, 2006, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1975, 1974, 1968, 1966, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1945, 1940, 1935, 1930, 1925, 1922
345 Hamilton Ave	2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
345 Hamilton Ave	2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
349 HAMILTON AVE	2014, 2010, 2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1945, 1940, 1935, 1930, 1925, 1922

FINDINGS

Address Researched	Address Not Identified in Research Source
350 HAMILTON AVE	2014, 2010, 2006, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
353 HAMILTON AVE	2014, 2010, 2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
358 HAMILTON AVE	2014, 2010, 2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
360 HAMILTON AVE	2014, 2010, 2006, 2001, 2000, 1996, 1986, 1985, 1980, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
361 HAMILTON AVE	2014, 2010, 2006, 2000, 1996, 1991, 1985, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
370 HAMILTON AVE	2014, 2010, 2006, 2001, 2000, 1996, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
371 HAMILTON AVE	2014, 2010, 2006, 2001, 2000, 1996, 1991, 1986, 1985, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
380 HAMILTON AVE	2014, 2010, 2006, 2000, 1996, 1986, 1985, 1982, 1980, 1975, 1974, 1968, 1966, 1964, 1963, 1962, 1950, 1945, 1940, 1935, 1931, 1930, 1926, 1925, 1922
380 Hamilton Ave	2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
380 Hamilton Ave	2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
380 Hamilton Avenue	2014, 2010, 2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
380 Hamilton Avenue	2014, 2010, 2006, 2000, 1996, 1986, 1985, 1982, 1980, 1975, 1974, 1968, 1966, 1964, 1963, 1962, 1950, 1945, 1940, 1935, 1931, 1930, 1926, 1925, 1922
380 Hamilton Avenue	2014, 2010, 2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
380 HAMLTN AVE	2014, 2010, 2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
381 HAMILTON AVE	2014, 2010, 2006, 2001, 2000, 1996, 1991, 1986, 1985, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
385 HAMILTON AVE	2014, 2010, 2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1945, 1940, 1935, 1930, 1926, 1925, 1922
391 HAMILTON AVE	2014, 2010, 2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
400 HAMILTON AVE	2014, 2010, 2006, 2000, 1996, 1985, 1980, 1974, 1968, 1966, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922

FINDINGS

Address Researched	Address Not Identified in Research Source
400 HAMILTON WAY	2014, 2010, 2006, 2001, 2000, 1996, 1991, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
401 HAMILTON AVE	2014, 2010, 2006, 2001, 2000, 1996, 1986, 1985, 1982, 1980, 1975, 1974, 1968, 1966, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
402 HAMILTON AVE	2014, 2010, 2006, 2001, 2000, 1996, 1986, 1985, 1982, 1980, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
403 HAMILTON AVE	2014, 2010, 2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1975, 1974, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
404 HAMILTON AVE	2014, 2010, 2006, 2001, 2000, 1996, 1986, 1985, 1982, 1980, 1975, 1974, 1968, 1966, 1964, 1963, 1962, 1957, 1950, 1945, 1940, 1935, 1930, 1926, 1925, 1922
405 HAMILTON AVE	2014, 2010, 2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1957, 1950, 1945, 1940, 1935, 1930, 1926, 1925, 1922
406 HAMILTON AVE	2014, 2010, 2006, 2001, 2000, 1996, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
408 HAMILTON AVE	2014, 2010, 2006, 2001, 2000, 1996, 1986, 1985, 1982, 1980, 1975, 1974, 1968, 1966, 1964, 1963, 1962, 1957, 1950, 1945, 1940, 1935, 1931, 1930, 1926, 1925, 1922
409 HAMILTON AVE	2014, 2010, 2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1975, 1974, 1968, 1966, 1964, 1963, 1962, 1957, 1950, 1945, 1940, 1935, 1931, 1930, 1926, 1925, 1922
411 HAMILTON AVE	2014, 2010, 2006, 2001, 2000, 1996, 1991, 1985, 1980, 1975, 1974, 1968, 1966, 1964, 1963, 1962, 1957, 1950, 1945, 1940, 1935, 1930, 1926, 1925, 1922
413 HAMILTON AVE	2014, 2010, 2006, 2001, 2000, 1996, 1986, 1985, 1982, 1980, 1975, 1974, 1968, 1966, 1964, 1963, 1962, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
415 HAMILTON AVE	2014, 2010, 2006, 2001, 2000, 1996, 1986, 1985, 1982, 1980, 1975, 1974, 1968, 1966, 1964, 1963, 1962, 1957, 1950, 1945, 1940, 1935, 1930, 1926, 1925, 1922
416 HAMILTON AVE	2014, 2010, 2006, 2001, 2000, 1996, 1986, 1985, 1982, 1980, 1975, 1974, 1968, 1966, 1964, 1963, 1962, 1957, 1950, 1945, 1940, 1935, 1930, 1926, 1925, 1922
417 HAMILTON AVE	2014, 2010, 2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
418 HAMILTON AVE	2014, 2010, 2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1975, 1974, 1968, 1966, 1964, 1963, 1962, 1957, 1950, 1945, 1940, 1935, 1930, 1926, 1925, 1922
419 HAMILTON AVE	2014, 2010, 2006, 2001, 2000, 1996, 1986, 1985, 1982, 1980, 1975, 1974, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
420 HAMILTON AVE	2014, 2010, 2006, 2001, 2000, 1996, 1986, 1985, 1982, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1945, 1940, 1935, 1930, 1925, 1922
421 HAMILTON AVE	2014, 2010, 2006, 2001, 2000, 1996, 1986, 1985, 1980, 1978, 1975, 1974, 1968, 1966, 1964, 1963, 1962, 1957, 1950, 1945, 1940, 1935, 1930, 1926, 1925, 1922

FINDINGS

Address Researched	Address Not Identified in Research Source
422 HAMILTON AVE	2014, 2010, 2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1968, 1966, 1964, 1963, 1962, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
423 HAMILTON AVE	2014, 2010, 2006, 2001, 2000, 1996, 1986, 1985, 1982, 1980, 1975, 1974, 1968, 1966, 1964, 1963, 1962, 1957, 1950, 1945, 1940, 1935, 1930, 1926, 1925, 1922
425 HAMILTON AVE	2014, 2010, 2006, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1975, 1974, 1968, 1966, 1964, 1963, 1962, 1957, 1950, 1945, 1940, 1935, 1930, 1926, 1925, 1922
510 Waverly Street	2014, 2010, 2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
510 Waverly Street	2014, 2010, 2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
510 Waverly Street	2014, 2010, 2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
540 WAVERLEY	2014, 2010, 2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1930, 1926, 1925, 1922
550 WAVERLEY	2014, 2010, 2006, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1957, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
550 WAVERLEY ST	2014, 2010, 2006, 2001, 2000, 1996, 1985, 1982, 1980, 1975, 1974, 1968, 1966, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
550 Waverley St	2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
550 Waverley St	2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
552 WAVERLEY	2014, 2010, 2006, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
552 WAVERLEY ST	2014, 2010, 2006, 2001, 2000, 1996, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
552 Waverley St	2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
552 Waverley St	2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
555 WAVERLEY	2014, 2010, 2006, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1957, 1950, 1945, 1940, 1935, 1930, 1925, 1922
555 WAVERLEY ST	2014, 2010, 2006, 2001, 2000, 1996, 1985, 1982, 1980, 1975, 1974, 1970, 1968, 1966, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
555 Waverley St	2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922

FINDINGS

Address Researched	Address Not Identified in Research Source
555 Waverley St	2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
558 Waverley St	2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
558 Waverley St	2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
560 WAVERLEY	2014, 2010, 2006, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1957, 1950, 1945, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
560 WAVERLEY ST	2014, 2010, 2006, 2001, 2000, 1996, 1985, 1982, 1980, 1975, 1974, 1968, 1966, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
560 Waverley St	2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
560 Waverley St	2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
560 Waverly Street	2014, 2010, 2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
560 Waverly Street	2014, 2010, 2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
560 Waverly Street	2014, 2010, 2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
575 WAVERLEY	2014, 2010, 2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1935, 1931, 1930, 1926, 1925, 1922
577 BRYANT ST	2014, 2010, 2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1960, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
585 BRYANT	2014, 2010, 2006, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1957, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
585 BRYANT ST	2014, 2010, 2006, 2001, 2000, 1996, 1986, 1985, 1982, 1980, 1975, 1974, 1968, 1966, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
585 BRYANT WAY	2014, 2010, 2006, 2001, 2000, 1996, 1991, 1985, 1980, 1978, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
591 BRYANT WAY	2014, 2010, 2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
595 BRYANT	2014, 2010, 2006, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922

FINDINGS

Address Researched	Address Not Identified in Research Source
595 BRYANT ST	2014, 2010, 2006, 2001, 2000, 1996, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
596 BRYANT WAY	2014, 2010, 2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
599 BRYANT WAY	2014, 2010, 2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
601 BRYANT	2014, 2010, 2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1957, 1950, 1945, 1940, 1935, 1930, 1925, 1922
601 BRYANT WAY	2014, 2010, 2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
601 GILMAN	2014, 2010, 2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1930, 1926, 1925, 1922
602 WAVERLEY	2014, 2010, 2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1930, 1925, 1922
603 WAVERLEY	2014, 2010, 2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1945, 1940, 1935, 1930, 1925, 1922
604 GILMAN	2014, 2010, 2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1957, 1945, 1940, 1935, 1930, 1926, 1925, 1922
604 GILMAN ST	2014, 2010, 2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
605 GILMAN	2014, 2010, 2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1930, 1926, 1925, 1922
605 WAVERLEY	2014, 2010, 2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1957, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
606 GILMAN	2014, 2010, 2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
608 BRYANT WAY	2014, 2010, 2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
611 GILMAN	2014, 2010, 2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1930, 1926, 1925, 1922
611 WAVERLEY	2014, 2010, 2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1945, 1940, 1935, 1930, 1925, 1922
612 WAVERLEY	2014, 2010, 2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1930, 1925, 1922

FINDINGS

Address Researched	Address Not Identified in Research Source
615 WAVERLEY	2014, 2010, 2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1945, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
617 WAVERLEY	2014, 2010, 2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1957, 1945, 1940, 1935, 1930, 1925, 1922
619 WAVERLEY	2014, 2010, 2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1957, 1950, 1945, 1940, 1935, 1930, 1925, 1922
620 GILMAN	2014, 2010, 2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1945, 1940, 1935, 1930, 1926, 1925, 1922
620 WAVERLEY	2014, 2010, 2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1930, 1925, 1922
621 GILMAN	2014, 2010, 2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1930, 1926, 1925, 1922
622 GILMAN	2014, 2010, 2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
624 GILMAN ST	2014, 2010, 2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
625 GILMAN	2014, 2010, 2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
626 GILMAN	2014, 2010, 2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1945, 1940, 1935, 1930, 1926, 1925, 1922
627 GILMAN	2014, 2010, 2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1945, 1940, 1935, 1930, 1926, 1925, 1922
627 WAVERLEY	2014, 2010, 2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1957, 1950, 1945, 1940, 1935, 1930, 1925, 1922
628 GILMAN	2014, 2010, 2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1945, 1940, 1935, 1930, 1926, 1925, 1922
628 WAVERLEY	2014, 2010, 2006, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1957, 1950, 1945, 1940, 1935, 1930, 1925, 1922
628 WAVERLEY ST	2014, 2010, 2006, 2001, 2000, 1996, 1985, 1980, 1975, 1974, 1968, 1966, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
629 GILMAN	2014, 2010, 2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
630 GILMAN	2014, 2010, 2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1957, 1945, 1942, 1940, 1935, 1930, 1926, 1925, 1922

FINDINGS

Address Researched	Address Not Identified in Research Source
630 GILMAN ST	2014, 2010, 2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1968, 1966, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
632 GILMAN	2014, 2010, 2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1957, 1950, 1945, 1940, 1935, 1930, 1926, 1925, 1922
632 GILMAN ST	2014, 2010, 2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1968, 1966, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
634 GILMAN	2014, 2010, 2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1957, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
634 GILMAN ST	2014, 2010, 2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1974, 1968, 1966, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
635 WAVERLEY	2014, 2010, 2006, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1957, 1950, 1945, 1940, 1935, 1930, 1925, 1922
635 WAVERLEY ST	2014, 2010, 2006, 2001, 2000, 1996, 1985, 1982, 1980, 1974, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
636 GILMAN	2014, 2010, 2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1957, 1945, 1940, 1935, 1930, 1926, 1925, 1922
636 GILMAN ST	2014, 2010, 2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1968, 1966, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
636 WAVERLEY	2014, 2010, 2006, 2000, 1996, 1991, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1957, 1945, 1940, 1935, 1930, 1925, 1922
636 WAVERLEY ST	2014, 2010, 2006, 2001, 2000, 1996, 1985, 1982, 1980, 1975, 1974, 1968, 1966, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
637 GILMAN	2014, 2010, 2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1946, 1945, 1940, 1935, 1930, 1926, 1925, 1922
638 GILMAN	2014, 2010, 2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1957, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
638 GILMAN ST	2014, 2010, 2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1968, 1966, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
639 GILMAN	2014, 2010, 2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1945, 1940, 1935, 1930, 1926, 1925, 1922
639 WAVERLEY	2014, 2010, 2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
640 GILMAN	2014, 2010, 2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1957, 1945, 1940, 1935, 1930, 1926, 1925, 1922

FINDINGS

Address Researched	Address Not Identified in Research Source
640 GILMAN ST	2014, 2010, 2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1968, 1966, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
640 WAVERLEY	2014, 2010, 2006, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1957, 1950, 1945, 1940, 1935, 1930, 1925, 1922
640 WAVERLEY ST	2014, 2010, 2006, 2001, 2000, 1996, 1985, 1982, 1980, 1975, 1974, 1968, 1966, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
641 GILMAN	2014, 2010, 2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1945, 1940, 1935, 1930, 1926, 1925, 1922
641 GILMAN ST	2014, 2010, 2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
642 GILMAN	2014, 2010, 2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1957, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
642 GILMAN ST	2014, 2010, 2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1974, 1968, 1966, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
645 GILMAN	2014, 2010, 2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1945, 1940, 1935, 1930, 1926, 1925, 1922
646 WAVERLEY	2014, 2010, 2006, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1957, 1945, 1940, 1935, 1930, 1926, 1925, 1922
646 WAVERLEY ST	2014, 2010, 2006, 2001, 2000, 1996, 1991, 1985, 1980, 1975, 1974, 1968, 1966, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
649 GILMAN	2014, 2010, 2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1957, 1945, 1940, 1935, 1930, 1926, 1925, 1922
649 GILMAN ST	2014, 2010, 2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1974, 1968, 1966, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
650 GILMAN	2014, 2010, 2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1957, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
650 GILMAN ST	2014, 2010, 2006, 2001, 2000, 1996, 1986, 1985, 1980, 1978, 1975, 1974, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
650 Gilman St	2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
650 Gilman St	2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
651 GILMAN	2014, 2010, 2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1957, 1945, 1940, 1935, 1930, 1926, 1925, 1922

FINDINGS

Address Researched	Address Not Identified in Research Source
651 GILMAN ST	2014, 2010, 2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1974, 1968, 1966, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
652 GILMAN ST	2014, 2010, 2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
654 GILMAN	2014, 2010, 2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1957, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
654 GILMAN ST	2014, 2010, 2006, 2000, 1996, 1985, 1980, 1978, 1974, 1968, 1966, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
654 Gilman St	2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
654 Gilman St	2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
661 GILMAN	2014, 2010, 2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1957, 1950, 1945, 1940, 1935, 1930, 1926, 1925, 1922
661 GILMAN ST	2014, 2010, 2006, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1974, 1968, 1966, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
664 GILMAN	2014, 2010, 2006, 2001, 2000, 1996, 1991, 1986, 1985, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
664 GILMAN AVE	2014, 2010, 2006, 2001, 2000, 1996, 1991, 1985, 1980, 1978, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
664 GILMAN ST	2014, 2010, 2006, 2000, 1996, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
664 Gilman St	2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
664 Gilman St	2006, 2001, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922
670 GILMAN ST	2014, 2010, 2006, 2000, 1996, 1991, 1986, 1985, 1982, 1980, 1978, 1975, 1974, 1970, 1968, 1966, 1965, 1964, 1963, 1962, 1960, 1957, 1955, 1950, 1946, 1945, 1942, 1940, 1936, 1935, 1931, 1930, 1926, 1925, 1922

APPENDIX K: SITE PHOTOGRAPHS



Photograph 1: Looking west-southwest across the Site from near the east corner of the Site.



Photograph 2: Looking northwest across the Site from the Hamilton Avenue entrance.

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Photograph 3: Looking southwest across the Site from the north corner of the Site near Waverley Street.



Photograph 4: A roll-off dumpster temporarily situated on the south corner of the Site.



Photograph 5: Looking northwest across the northwest part of the Site. The CVS Pharmacy is immediately northwest of the Site beyond an alley.



Photograph 6: A transformer in front of two storm drain catch basins situated on the northwest part of the Site. Note also the access hatch at right.

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September 12, 2017



Photograph 7: Looking at the second of two pad-mounted transformers; this one is situated on the northeast part of the Site. Waverley Street is visible at left.



Photograph 8: The adjacent Prolific Oven immediately north of the Site.

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September 12, 2017



Photograph 9: The adjacent Tai Pan restaurant immediately north of the Site.



Photograph 10: The former Palo Alto Sport Shop (now closed) immediately north of the Site.



Photograph 11: Looking north of the Site across Waverley Street at the adjacent Episcopal church.



Photograph 12: Looking east across the Hamilton Avenue/Waverley Street intersection at the Wells Fargo building (former Economy Cleaners location).



Photograph 13: Gate Cleaners facility northeast of the Site beyond the Episcopal church property.



Photograph 14: Looking at the current location of Economy Cleaners. The Wells Fargo building is visible at the far right of the photograph.

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Photograph 15: Looking across Hamilton Avenue at the Palo Alto Post Office.



Photograph 16: Two restaurants southwest of the Site beyond the AT&T Building.

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Photograph 17: Holiday Cleaners southwest of the Site. Bryant Street is visible beyond this facility.



Photograph 18: Looking at the Switch & Data/PAIX building southwest of the Site.



Photograph 19: Looking at the single dwelling remaining in the city block to the southwest of the Site.



Photograph 20: The Apple, Inc. facility at the CVS Pharmacy west/northwest of the Site.

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September 12, 2017

APPENDIX L: INTERVIEW DOCUMENTATION

Phase I Environmental Assessment Interview Form

Project Number __PE-15007__ Proj Name Downtown Parking Garage_____ Site Area(s) _All___

Interviewed Person: Holly Boyd_____ Phone 650-329-2612_____

Affiliation Project Manager_____

Interviewer: __Adam Heft_____

Date: 8/17/2017_____

How long has the interviewed person been familiar with site:

Actively? Y / N: __15_____yrs As local resident? Y / N _____yrs

What relationship does interviewed person have with regards to the site:

Owner _X__ / Occupant ___ / Neighbor ___ / Other _____

For each question, answer yes or no, and when needed, identify location of the condition, and provide any needed details.

1. Are you aware of any current or historic industrial uses of the property? Current use of property is a surface parking lot.

2. Do you know of any current or historic industrial uses of adjoining properties?

   Current use of adjacent properties:
   West: 345 Hamilton, 1958 building occupied by AT&T and Excel Aviation
   East: 526 Waverley, a 1928 building, Category 3 historic resource recently retail use (Palo Alto Sport Shop and Toy World Inc.)
   East: 550-552 Waverley, a 1952 building occupied by the Prolific Oven retail bakery and Day One retail store,
   East: 558-560 Waverley, a 1938 building housing the Tai Pan Restaurant on the ground floor and second office space.
   North: CVS Pharmacy

3. Was the property used as a gasoline station, motor repair facility, commercial printing facility, dry cleaners, photo developing laboratory, junkyard or landfill, or as a waste treatment, storage, disposal, processing, or recycling facility (if applicable, identify which)? No.

4. Were any adjoining properties used as a gasoline station, motor repair facility, commercial printing facility, dry cleaners, photo developing laboratory, junkyard or landfill, or as a waste treatment, storage, disposal, processing, or recycling facility (if applicable, identify which)? No.

5. Are you aware of any current or historic damaged or discarded automotive or industrial batteries, pesticides, paints, or other chemicals in individual containers greater than 5 gal (each) or 50 gal in the aggregate, stored on or used at the facility? No.

6. Do you know of any current or historic use or storage of industrial drums (typically 55 gal) or sacks of chemicals at the facility? No.

7. Do you know of any fill dirt that has been brought onto the property? Y / N (If so, where did it originate and who brought it onto the site?) No.

8. Are you aware of any pits, ponds, or lagoons located on the property in connection with waste treatment or waste disposal? No.

9. Have you ever seen any stained soil on the property? No.

   Are you aware of any petroleum or chemical spills on the property? No.

10. Have there ever been any registered or unregistered storage tanks (above or underground) on the property? No.

11. Have you ever seen any vent pipes, fill pipes, or access ways indicating a fill pipe, protruding from the ground or adjacent to any structure on the property? No.

12. Have you ever seen any flooring, drains, or walls at the facility that were stained by substances other than water, or that smelled foul? No.

13. If the property is served by a private well or non-public water system, are you aware of any water testing of the well or system? No.

Do you have prior knowledge as to whether contaminants have been identified in the well or system that exceed guidelines applicable to the water system? No.

14. Do you know of any existing or former cisterns, pits, sumps or other similar structures on the property? No.

15. Are you aware of any environmental liens or governmental notification relating to past or recurrent violations of environmental laws with respect to the property or any facility located on the property? No.

16. Have you ever been warned about or seen hazardous substances or petroleum products on the property? No.

17. Are you aware of any prior environmental site assessments of the property?
If so, did any of the prior site assessments indicate that hazardous substances or petroleum products have been present on the property or recommend further assessment of the property? No prior environmental site assessment.

18. Are you aware of any past, threatened, or pending lawsuits or administrative proceedings relating to environmental issues concerning the property? No.

19. Does the property discharge wastewater on or adjacent to the property, other than stormwater into a sanitary or stormwater sewer system? No.
Has there ever been a septic tank on the property? No.
Where does wastewater go? _____
Where does stormwater go? _____

20. Are you aware of any dumping, burying, or burning of waste materials, scrap tires, automotive batteries, oil, trash, chemicals or other substances (other than untreated firewood) on the property? No.

21. Are there any transformers, capacitors, or hydraulic equipment on the property? No.
Are there any records indicating whether these items contain PCBs? No.

22. Are you aware of the presence of former buildings on the property? No.

23. What is the address of the property? 375 Hamilton Ave., Palo Alto, CA, 94301

    Has the property ever had a different address? No.
    Have there been any changes in addresses on any of the adjoining properties or streets? No.

24. What is the current source of fuel for heating? N/A.
    Have buildings on the property ever been heated with fuel oil? N/A.
    If so, where was the heating oil tank?

25. If possible, please identify all prior owners, occupants, or users (ie tenant farmers) of the property, and when they occupied the property: Owner – City of Palo Alto

26. Please identify others who might have information about the history of the property? City of Palo Alto.

For Agricultural Properties:

27. What agricultural activities took place, and what types of crops were grown on the property? N/A.

28. Where were fertilizers, pesticides and other chemicals stored, mixed and applied on the property? Who mixed and applied these chemicals? N/A.

29. Where were tractors and other equipment fueled? N/A.

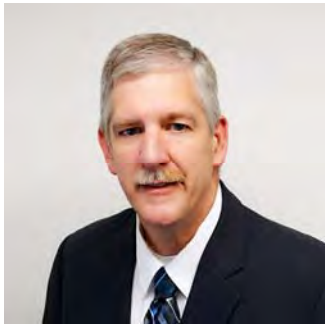
30. Have there been any manure pits on the site? No.

31. Are you aware of any “farm dumps” on the property? No.

APPENDIX M: RESUMES

ADAM W. HEFT, CPG

SENIOR GEOLOGIST



YEARS WITH FIRM

8

YEARS TOTAL

24

AREAS OF PRACTICE

Geology

Due Diligence

Phase I/II Environmental Site Assessments

Site Investigation, Characterization, and Remediation

NEPA Technical Studies and Document Support

LANGUAGES

English

PROFILE

Adam Heft is a senior geologist who has conducted research in geological and geochemical fields since 1990, and has been performing environmental investigations since 1993. His primary area of expertise involves the collection and analysis of samples for trace metals and volatile organic compounds in sediments, soils and waters. He has completed numerous Phase I environmental site assessments (ESAs) in compliance with AAI and ASTM E 1527-13 (and older) standards. Mr. Heft's experience includes Phase II and III environmental site assessments, UST/LUST investigations, baseline environmental assessments (BEAs), hydrogeological work plan implementation, and investigations for vapor intrusion into dwellings and commercial buildings. He has successfully obtained regulatory closures for numerous projects under both Part 213 and Part 201 of NREPA. Adam meets the requirements of an Environmental Professional as defined in §312.10 of 40 CFR Part 312.

PROFESSIONAL QUALIFICATIONS

Professional Geologist, State of Illinois, License No. 196.001041

Michigan Qualified Underground Storage Tank Certified Professional (CP), Certification No. 914

Professional Geologist, State of Minnesota, License No. 30558

Professional Geologist, Commonwealth of Kentucky, License No. 113814

Certified Professional Geologist, American Institute of Professional Geologists, License No. 10265

Professional Geologist, State of Georgia, License No. PG001783

Professional Geologist, State of Indiana, License No. IN2257

Texas DOT, Hazardous Materials Initial Site Assessment certification, Certification No. 000018303

EDUCATION

MS., Geology, Michigan State University	1993
B.S., Geology and Earth Science, Central Michigan University	1990

ADDITIONAL TRAINING

OSHA 40-Hour Safety Training Workshop, University of Findlay	1993
Primary Soils Training, Michigan State University	2004
8-Hour Hazardous Waste Operations and Emergency Response Course, Metro Occupational Trainers, Inc.	Annually

ADAM W. HEFT, CPG

PROFESSIONAL MEMBERSHIPS

American Institute of Professional Geologists

PROFESSIONAL EXPERIENCE

- McIntire Cleaners, Indiana: senior supervising geologist/project manager who planned and conducted the ongoing hydrogeological investigation related to a release of dry cleaning solvents to the soil and groundwater beneath the site and nearby properties. The investigation included planning drilling locations to allow optimal locations for collection of soil and groundwater samples and installation of monitoring wells to delineate the vertical and horizontal extent of contamination. The investigation includes testing and mitigation of intrusion of the dry cleaning contaminant vapors into nearby dwellings and commercial structures. The migration of contaminants required working with state and local governmental agencies, nearby residents, and property owners. He was responsible for planning and implementing the remediation of highly contaminated soil on the subject property, planning and implementing the removal of underground storage tanks, and demolition of the building on the property. A pilot soil vapor extraction remediation system test was conducted to evaluate the feasibility cleaning up the deeper contaminated soil; the successful test led to installation of a full-scale system. The remediation of contaminated groundwater was planned and implemented in three stages, most recently in 2016, and has had good success in lowering contaminant concentrations in treated areas. The successful remediation activities has allowed the regulatory agency to release most of the nearby structures with former vapor intrusion from ongoing monitoring requirements. This project is ongoing.
- Lower Meramec Tunnel, St. Louis, Missouri: senior supervising geologist who helped conduct environmental sampling for a number of previously installed monitoring wells to evaluate the source of odors and staining of materials that were placed into the groundwater at depths within the bedrock that would be representative of the depth of the future proposed tunnel. A baseline sampling was conducted and data was evaluated; additional sampling events for select wells is planned. This project is ongoing.
- Holt Auto Clinic, Holt, Michigan: senior supervising geologist who conducted a contaminant investigation of the property to delineate the horizontal and vertical extent of the previously identified soil and groundwater contamination on the property. Contamination included petroleum and heavy metals. Delineation was achieved on the property owned by the client, and a report was prepared summarizing the information obtained, including the presence of previously unidentified non-aqueous phase liquids (NAPL) in the soil and a potential underground storage tank.
- Michigan Department of Transportation, Interstate 75 (I-75) Modernization Project, Oakland County, Michigan: senior supervising geologist that helped conduct environmental evaluations along the I-75 corridor in Oakland County. Environmental studies include the preparing and reviewing a Project Area Contamination Survey (PACS) along the length of the corridor, and future

Preliminary Site Investigations to evaluate the subsurface environmental conditions. This project is ongoing.

- Project Lotus, Wisconsin: senior supervising geologist who helped conduct Phase I environmental site assessments on three manufacturing facilities in Wisconsin. The ESAs were conducted following ASTM E 1527-13 standards in a short time frame in accordance with client specified requirements. Two of the three reports identified recognized environmental conditions in connection with the sites, and a Phase II testing plan was prepared and submitted to the client to evaluate the concerns.
- San Diego Association of Governments (SANDAG), Mid-Coast Corridor Transit Project, San Diego, CA: senior supervising geologist who assisted the task lead responsible for conducting numerous environmental studies at key locations along the project corridor in support of NEPA/CEQA environmental documentation and planned parcel acquisitions. Environmental due diligence activities have included inventory and review of prior project data and information, database records, lien searches, historical research, agency records, Phase II sampling planning, and site access coordination. This project is ongoing.
- Manufacturing facility, Wixom, Michigan: senior supervising geologist that helped conduct a Phase I environmental site assessment on a manufacturing facility. The ESA was conducted following ASTM E 1527-13 standards in a very short time frame. The ESA did not identify any recognized environmental conditions in connection with the property.
- Lower Pogues Run Tunnel Project, Indianapolis, Indiana: senior supervising geologist/project manager who assisted the project manager by reviewing environmental reports for proposed work locations and providing comments and suggested edits, and QA/QC review of the revised documents. Also provided information related to potential sampling methodology for environmental concerns related to naturally occurring petroleum in the bedrock at the proposed tunnel depth.
- Eaton Rapids Landfill, Eaton Rapids, Michigan: senior supervising geologist/project manager who is conducting a contaminant investigation for a former municipal landfill. The investigation includes an evaluation of groundwater contaminant migration and concentrations and potential migration of methane gasses. Of particular concern is whether methane is or will migrate into a nearby dwelling, posing a fire or explosion hazard. Groundwater contaminants including volatile organic compounds, ammonia, and heavy metals pose a risk to nearby surface water bodies. He is evaluating contaminant information with a goal of preparing a remedial action plan and/or closure to be submitted to the MDEQ. This project is ongoing.
- Sgt. Dougherty Park Comfort Station, New York: senior supervising geologist that reviewed and commented on vapor intrusion mitigation system adequacy and requirements for a proposed new structure for the project.
- LaGuardia Airport, New York: senior supervising geologist/project manager who helped develop specifications and sampling plans to evaluate environmental conditions in anticipation of a major renovation project. He led the team conducting an evaluation of soil vapor conditions in multiple areas of the property and collected samples to provide data for vapor barriers for proposed new

structures. Sub-slab vapor samples were collected from 19 sample collection points as part of the evaluation. This project is ongoing.

- California High-Speed Rail Authority, California: senior supervising geologist serving as a topic expert and providing QA/QC services for Hazardous Materials and Waste in support of NEPA/CEQA environmental documentation. The Authority proposes to construct, operate, and maintain an electric-powered HSR system in California that will run from San Francisco to the Los Angeles basin. The system will eventually extend to Sacramento and San Diego, totaling 800 miles with up to 24 stations. The Authority and FRA are now undertaking Tier 2 environmental evaluations for several sections of the statewide system. The work on this project has included review and back checking of the Hazardous Materials Technical Reports for several of the project sections. This project is ongoing.
- Cedar Lake Property, Holt, Michigan: senior supervising geologist/project manager who conducted a Phase I ESA for a prospective purchaser of the vacant property. The ESA identified two potential environmental concerns in connection with the property, and subsequent Phase II testing did not identify the presence of contaminants at concentrations exceeding regulatory criteria. Because of a delay in the property transaction by the purchaser, a Phase I ESA update was conducted in 2016 to ensure that conditions had not changed since completion of the original ESA and testing.
- School District Property, Lansing, Michigan: senior supervising geologist/project manager who conducted a Phase I ESA for a prospective purchaser of the property which was occupied by an operating school. Several potential environmental concerns were identified in connection with the property, and subsequent Phase II testing identified the presence of contaminants on the property. A baseline environmental assessment and due care plan were completed to protect the purchaser from liability associated with the existing contamination.
- Red Cedar Property, Lansing, Michigan: senior supervising geologist/project manager who conducted a Phase I ESA for a prospective purchaser of the property which was part of a former golf course. The Phase I ESA identified a concern in connection with soil berms on the property, and Phase II testing confirmed contaminants and demolition debris were contained in the soil. A baseline environmental assessment and due care plan were completed to protect the purchaser from liability associated with the existing contamination.
- Nickel Plate Trail, Fishers, Indiana: senior geologist/project manager who conducted a limited Phase I ESA on an approximately two-mile project corridor. The ESA identified several nearby and adjacent properties with impaired environmental conditions; however, none of them posed a potential concern to the project.
- Minnesota Zip Rail Project, Rochester to Twin Cities, Minnesota: senior supervising geologist/project manager who obtained and reviewed a governmental database report for the 100-mile long project corridor, and provided a summary of potential sites of environmental concern for each of eight proposed project alternatives.

- Multiple Vacant Properties, Delhi Township, Michigan: senior supervising geologist/project manager who conducted Phase I ESAs for three separate properties including a closed gas station for a client working with another entity to complete a land swap. The ESAs identified at least one REC associated with each of the properties. The package of ESAs was delivered under an aggressive time schedule and budget.
- Auto Dealership Property, Mason, Michigan: senior supervising geologist/project manager who conducted a Phase I ESA for a prospective purchaser looking to redevelop the property. The Phase I identified several RECs in connection with the property. Phase II testing was completed to evaluate the concerns, and contamination was identified in several locations.
- Fort McHenry Tunnel Maintenance Facility, Baltimore, Maryland: senior supervising geologist who assisted the project manager with reviewing documents and draft bid specifications related to the removal of an underground fuel storage system and replacement with an aboveground system. Provided comments and suggested edits, and QA/QC review of the revised documents.
- Blind Bizz Site, Holt, Michigan: senior geologist/project manager who began a soil and groundwater contaminant investigation of the property in connection with an open leaking underground storage tank (LUST) site listing. He coordinated with subcontractors to arrange the installation of multiple soil borings and monitoring wells, and negotiated with the client and regulatory agency for additional required scope items. He evaluated the contaminated site using laser induced fluorescence (LIF) techniques to help determine whether non aqueous phase liquids were present in the subsurface. Most recently, the full delineation of contamination on the property has been completed.
- Maryland Department of Transportation, Maryland Transit Administration, Red Line Light Rail Transit System; Baltimore, MD: Provided design assistance related to environmental specification quality review for the project and also designed a vapor monitoring plan for the downtown tunnel alignment. The specifications included Chemical Sampling and Analysis, Site Containment, Removal and Disposal of Contaminated Soil, UST Removal, and Vapor Mitigation Control. The vapor monitoring plan design included vapor monitoring well design, placement, and monitoring requirements.
- State of Michigan Site, Lansing, Michigan: senior supervising geologist/project manager who conducted a Phase I ESA for a prospective purchaser looking to redevelop the property. The Phase I ESA identified the presence of fill material and demolition debris on the property that was potentially contaminated.
- B&B Paint facility, Flint, Michigan: senior geologist/project manager who had previously completed a soil and groundwater contaminant investigation of the property in connection with an open leaking underground storage tank (LUST) site listing. A new client requested additional investigation of the property to update the historic data in anticipation of a divestiture of the property to another entity with a possible baseline environmental assessment to be prepared.
- Chicago Transit Authority, 95th Street Terminal Improvement Project, Chicago, Illinois: senior supervising geologist who assisted the task lead responsible for overseeing environmental work associated the design and specification set for the complete reconstruction of the 95th Street CTA terminal in Chicago. Work

included Phase II ESA activities to characterize soil contaminants and preparation of technical reports.

- Landfill Property Evaluation, Eaton Rapids, Michigan: senior geologist/project manager who conducted a Phase I ESA on an old city dump for a private client seeking to install a solar generating plant. The ESA revealed that an agreement between the property owner and the State was in place to prevent the disturbance of the ground surface/landfill cap. The Phase I ESA was a required element of a baseline environmental assessment, which was used to protect the client from liability associated with the city dump.
- Patient Care Drive Site, Delhi Township, Michigan: senior geologist/project manager who conducted a Phase I ESA on a vacant property for a private client seeking to purchase the property and develop it. The Phase I ESA identified numerous soil piles on the Site; the source of the piles was unclear. Phase II testing to evaluate the soil piles was completed to ensure contaminants were not present.
- Scott Road Site, St. Johns, Michigan: senior geologist/project manager who conducted a Phase I ESA on a vacant property for a private client seeking to purchase the property and redevelop it. The Phase I ESA did not identify any RECs in connection with the Site.
- Foundation Parking Lot, Lansing, Michigan: senior geologist/project manager who conducted a Phase I ESA on a public school property for a private client seeking to purchase the property and redevelop it. The ESA identified several RECs, including a former structure on the property and multiple nearby properties of concern including former gas stations, auto repair facilities, and two dry cleaners. Phase II testing was conducted on the property to evaluate whether contaminated soil or groundwater existed. In addition, the client requested that additional Phase II testing be conducted on an adjoining property to evaluate contamination identified during a geotechnical investigation. A due care plan was prepared for the property to address contaminant issues during and after construction activities.
- South Capitol Street Bridge Corridor Assessment, Washington DC: senior geologist/project manager who conducted a limited Phase I ESA on an approximately two-mile corridor crossing the Anacostia River. The ESA identified two RECs in connection with the corridor itself, and nearly 60 nearby and adjacent properties of concern to the project.
- South Cedar Car Wash Site, Holt, Michigan: senior geologist/project manager who conducted a Phase I ESA on a property containing a self-serve car wash. The Phase I ESA identified multiple RECs in connection with the property, including the presence of multiple sediment pits/oil-water separator units and several adjacent properties with potentially migrating contamination. Phase II testing was conducted to evaluate the possible presence of contaminated soil and groundwater on the property.
- Laurus Academy Parking Lot Expansion, Southfield, Michigan: senior geologist who assisted the project manager in conducting a Phase I ESA on three residential properties. The evaluation of the property identified two low-risk RECs in connection with the property.

- Calaveras County Singletree Site, Calaveras County, California: senior geologist who assisted the task manager in conducting an initial site assessment (ISA) for the project site to evaluate whether any adverse environmental conditions existed that could affect the project. The project area was found to contain imported rock that potentially contains naturally occurring asbestos, which may require special handling and care during construction activities.
- Calaveras County Hogan Dam Site, Calaveras County, California: senior geologist who assisted the task manager in conducting an initial site assessment (ISA) for the project site to evaluate whether any adverse environmental conditions existed that could affect the project. The project was found to be situated on bedrock that potentially contains naturally occurring asbestos, which may require special handling and care during construction activities.
- Illinois Department of Transportation, HSR Joliet to Dwight (Tier 6) Project, Illinois: senior supervising geologist who assisted the task manager with reviewing and summarizing historical information for the subject corridor and viewing current conditions along the corridor. He researched geologic information, and helped prepare the preliminary environmental site assessment (PESA) report as requested.
- Lewiston-Queenston Bridge Customs Plaza, Lewiston, New York: senior supervising geologist that conducted a Phase I ESA and limited environmental testing at the site to help identify potential environmental issues and/or contamination that could affect upcoming construction activities for a reconfiguration of the customs plaza.
- Bingham School Property, Lansing, Michigan: senior supervising geologist/project manager who conducted a Phase I ESA on a property used as a school. The Phase I ESA identified multiple RECs on the property, including the possible presence of a fuel oil underground storage tank. Phase II testing was conducted to evaluate the possible presence of contaminated soil, groundwater, and/or vapor on the property.
- M1 Streetcar Corridor, Detroit, Michigan: senior supervising geologist who helped the Task Manager complete environmental assessments on an approximately five mile corridor beginning in downtown Detroit. The assessments included helping with an update of environmental conditions along the corridor, an evaluation of two new vehicle service maintenance facilities, and a QC review of the reports.
- Mt. Clare Intermodal Property, Baltimore, Maryland: senior supervising geologist that initially performed a review of potential environmental facilities of concern near the project. The initial review was upgraded to completing a Phase I ESA in full compliance with ASTM standard E 1527-05.
- Nine Industrial Manufacturing facilities, Eastern US: senior supervising geologist/task manager that conducted Phase I ESAs on five of nine sites located in Indiana, Kentucky, and Ohio, and performed QC reviews of the remaining four sites. The reports included preparation of a conceptual site model at the client's request. All ESA reports were delivered within an aggressive deadline and budget.
- Virginia Avenue Tunnel, Washington DC: senior supervising geologist who performed a review of environmental conditions potentially affecting the nearly one mile tunnel. The review was not intended to be a comprehensive Phase I

ESA, but rather to identify potential nearby properties of concern from which contamination could migrate and impact the project. The review also included an evaluation of limited soil and groundwater testing at about 13 locations along the tunnel.

- Ohio State University, Columbus, Ohio: senior supervising geologist that helped the task manager evaluate over 200 individual parking lots and 17 parking structures for potential environmental issues. A summary report was delivered to the client within a very aggressive deadline and budget.
- OCTA Grade Separation, Orangethorpe, California: senior supervising geologist who provided support to compile a list of facilities that may pose an environmental impact to the project. Also worked to help complete an ISA document.
- Project Thor, Niagara, New York: senior supervising geologist who was part of a multinational team that conducted environmental due diligence activities at a rocket engine testing facility. Due diligence activities included reviewing historical facility documents, conducting a site visit to identify potential environmental concerns, reviewing governmental databases for potential listings of contamination, quantifying risks and liabilities related to identified environmental issues, and preparing a report.
- Pleasant Grove School Property, Lansing, Michigan: senior supervising geologist/project manager who conducted a Phase I ESA on a property used as a school. The Phase I ESA identified multiple RECs on the property, including the possible presence of unsuspected underground storage tanks.
- SR-91 Corridor Improvement Project, Corona, California: senior supervising geologist who prepared a supplemental initial site assessment (ISA) document required for the project. The supplemental ISA summarized numerous Phase I ESAs conducted on properties along the corridor, and for a hazardous materials survey of 22 bridges. He also completed a review of multiple Phase I ESAs (which purported to follow the ASTM E 1527-05 standard) completed by a subcontractor for the project. The Phase I ESA review identified deficiencies that were corrected prior to submittal of the Supplemental ISA. Assisted with modifying the mitigation measures in the supplemental EIR/EIS to address the additional information and recommendations in the supplemental ISA.
- Prichard Intermodal Site, Prichard, West Virginia: senior supervising geologist who completed a review of a Phase I ESA (which purported to follow the ASTM E 1527-05 standard) completed by a subcontractor for the project. The Phase I ESA review identified numerous deficiencies that were required to be corrected.
- La Mesa/Nisqualli Mitigation Site, Victorville, California: senior supervising geologist who conducted a Phase I ESA on an approximately six-acre property proposed for use as a wetland mitigation parcel. The property included land within the Mojave River floodplain. The Phase I ESA did not reveal the presence of any RECs on the property.
- Inspire Academy, Baton Rouge, Louisiana: senior supervising geologist who prepared a Phase I ESA on a property currently used as a private school. The report was prepared in a very short time frame due to client requirements. The Phase I ESA did not reveal the presence of any RECs on the property.

- North Grand River Avenue Site, Lansing, Michigan: senior supervising geologist/project manager who conducted a Phase I ESA on a commercial property used as a data center. The Phase I ESA did not reveal the presence of any RECs on the property.
- 1401 Building Site, Lansing, Michigan: senior supervising geologist/project manager who conducted a Phase I ESA and subsequent Phase II testing on a small commercial property used as a medical office. Fill material placed on the subject property from an unknown source, and two nearby properties posed a risk of migrating contamination to the subject property; however, testing of soil and groundwater did not reveal the presence of any contaminants.
- BARC Site, Baltimore, Maryland: senior supervising geologist who compiled a summary of potential facilities of environmental contamination that could impact four candidate sites along a rail line. The list of facilities potentially affecting the candidate sites were prioritized for the project manager in advance of meetings to select which candidate site(s) would potentially be considered for the project.
- Approximately 54-Mile Corridor, Puerto Rico: senior supervising geologist who conducted a contamination screening assessment on a corridor on the northern part of the island. The assessment revealed the presence of numerous potential sources of contamination that could impact the subject corridor.
- Living Faith Church Site, Marine City, Michigan: senior supervising geologist/project manager who conducted a Phase I environmental site assessment for a former public school property for a prospective purchaser that planned to use the facility as a church and office space. The Phase I ESA identified a former manufacturing facility adjacent to the property with contamination that could impact the property.
- Illinois Department of Transportation, High Speed Rail (HSR) NEPA/Application, Chicago to Dubuque Route, Illinois: senior supervising geologist who assisted the task manager with planning visual reconnaissance of the subject corridor and assisted with data compilation and analysis.
- Illinois Department of Transportation, Galesburg Congestion Relief Project, Galesburg, Illinois: senior supervising geologist who assisted the task manager with reviewing and summarizing historical information for the subject corridor. He researched geologic information, and helped prepare and deliver the Phase I ESA report within time and cost constraints.
- Columbia Lakes Development, Mason, Michigan: senior supervising geologist/project manager who conducted a Phase I ESA on an approximately 270-acre property that included undeveloped portions of a residential development. The Phase I ESA did not reveal the presence of any RECs on the property.
- TCI Medical Office, Owosso, Michigan: senior supervising geologist/project manager who conducted a Phase I environmental site assessment for an operating medical office facility for a prospective purchaser that planned to continue operating the facility. The Phase I ESA did not reveal the presence of any RECs on the property.
- Retail Store, Jackson, Michigan: senior supervising geologist who monitored the installation of monitoring wells around the former UST cavity to delineate the

extent of groundwater contamination related to leaking tanks. He also assisted the project manager to conduct a level survey of the monitoring wells top of casing elevations and to sample the wells using low-flow techniques. The lithologic information was used to prepare soil boring records, and sample data was compiled into tables for preparation of a report to be submitted to the MDEQ. He helped prepare the initial and final assessment reports and supporting documentation.

- MSE Site, Manistee, Michigan: senior supervising geologist who assisted the project manager with completing Phase II testing to evaluate whether contaminants were present on the rural residential property. He conducted a level survey to establish top of casing elevations for monitoring wells on the property, and collected groundwater samples using low-flow sampling techniques.
- Ionia County Memorial Hospital, Ionia, Michigan: senior supervising geologist/project manager who performed Phase II testing to evaluate whether contaminants existed on the hospital property in relation to a former incinerator, some current and former USTs, and two drain structures within the hospital. The testing showed contaminants were present on the property, and he developed a program to delineate the contamination and to clean out the drain structures and have them abandoned in accordance with the client's directives.
- Indygo/Ivy Tech, Indianapolis, Indiana: senior supervising geologist who reviewed a Phase II report summarizing activities completed by a sub consultant for the project. Revisions to the report were recommended, and additional activities were completed related to a potential underground storage tank (UST). Two USTs were found to be present on the property.
- Heritage Greens Site, Indianapolis, Indiana: senior supervising geologist/project manager who conducted a Phase I environmental site assessment (ESA) for part of a former state hospital complex for a prospective purchaser that planned to construct a private school on the property. The Phase I ESA did not reveal the presence of any RECs on the property other than the potential for building materials to contain asbestos.
- Former Anthony Property, Holt, Michigan: senior supervising geologist/project manager who conducted a Phase I ESA for a vacant residential property that had been foreclosed by the local downtown development authority. The Phase I ESA revealed that no recognized environmental conditions (RECs) existed in connection with the property.
- Former Chips Property, Lansing, Michigan: senior supervising geologist who conducted a Phase I environmental site assessment (ESA) for a vacant commercial property for a prospective purchaser of the property. The Phase I ESA revealed the potential for contaminants to exist on the property. A Phase II testing program was planned and implemented, and established that contaminants existed on the property. A baseline environmental assessment (BEA) was prepared and submitted to the MDEQ to protect the client from potential liability related to the contamination.
- Kelly Distributing Properties, Michigan and Ohio: a project geologist that conducted concurrent Phase I ESAs on seven different bulk petroleum storage facilities in Michigan and Ohio. Conducted research, obtained required information, conducted site visits, and prepared or reviewed/edited reports prior to

submission to clients. Responsible for submitting reports to the client on time and within budget constraints. Also prepared estimates for Phase II testing and met with the client to provide findings and recommendations.

- Proposed Pipeline Crossing, Michigan and Ontario: project geologist that researched geologic information about the area of the proposed pipeline crossing beneath and to either side of the St. Clair River. Information was obtained for critical elements of a Monte Carlo simulation to evaluate whether a catastrophic release of drilling fluids could occur and impact nearby municipal drinking water supply intakes.
- BTH Site, Bath, Michigan: project geologist who assisted the project manager with conducting a Phase I ESA, Phase II testing to evaluate RECs identified in the Phase I report, and delineating the soil and groundwater contamination associated with a former truck stop on the property. Planned and implemented the remediation of the contamination so the investigation was ultimately able to receive an unrestricted residential closure with the MDEQ.
- Lake Fenton Marina, Fenton, Michigan: senior project geologist that completed the hydrogeological investigation related to former leaking underground storage tanks on the property. The extent of the groundwater contamination was defined, and remediation of the plume was planned, implemented, and monitored to show the cleanup of the contamination was successful. He subsequently prepared a closure report for submittal to the Michigan Department of Environmental Quality that resulted in the property having an unrestricted use and a successful investigatory closure with the State.
- Various Environmental Site Assessments, Michigan, Indiana, Illinois, and Ohio: senior project geologist responsible for preparing proposal and cost estimates to clients for proposed Phase I ESAs. Conducted research, obtained required information, conducted site visits, and prepared or reviewed/edited reports prior to submission to clients. Responsible for submitting reports to the client on time and within budget constraints.
- Woodland Lakes Apartments, Holt, Michigan: project geologist that conducted an environmental site assessment on a 102-acre property previously thought to not have any environmental contamination associated with it. Completion of the ESA identified extensive areas with buried debris and contaminated soil. He proposed reasonable testing to evaluate the contamination, and through preparation of a baseline environmental assessment, helped the client avoid potential liability for the contamination. He assisted the client and the local municipality in setting up a Brownfield Authority that enabled the contamination to be remediated and the costs recovered. He submitted a closure report to the MDEQ that allowed an unrestricted residential closure to be obtained for the property.

PUBLICATIONS AND PRESENTATIONS

Publications

- Heft, A.W., VanGoethem, D.R., and Pehlivan, M., “Innovative Soil Vapor Monitoring In Observation Wells during Soil Vapor Extraction Reveals Additional Source Areas”, Poster Presentation, Ninth International Conference, Remediation of Chlorinated and Recalcitrant Compounds, May 19 – 22, 2014, Monterey, California, Battelle Conference Group, 2014.

ADAM W. HEFT, CPG

- Heft, A.W., VanGoethem, D.R., and Pehlivan, M., “Using Capillary-Pressure Curve Tests for Designing a Soil Vapor Extraction System”, Poster Presentation, Eighth International Conference, Remediation of Chlorinated and Recalcitrant Compounds, May 21 – 24, 2012, Monterey, California, Battelle Conference Group, 2012.
- Master’s Thesis: “The Role of Atmospheric Deposition of Contaminant Metals to the Great Lakes: Deduced from Sediment Cores,” 1993.
- Heft, A.W., Long, D.T., Eisenreich, S.J., and Swackhammer, D., “Trace Metals in Sediments of Lakes Michigan and Ontario,” Fifteenth Annual Midwest Environmental Chemistry Workshop, Madison, Wisconsin, 1992.
- Undergraduate Thesis: “Minerals of the Champion Mine, Champion, Michigan,” 1991.
- Heft, A.W. and Matty, D.J., “The Champion Mine, Marquette County, Michigan: Geochemistry of Selected Minerals,” The Geology of Michigan and its Geological Resources Symposium II, Michigan Department of Natural Resources/Geological Survey Division, pp. 23- 25, 1991.
- Matty, D.J., Huysken, K.T., Stahl, S.D., and Heft, A.W., “Development of the Peavy Pond Complex, Iron County, Michigan and its Geological Resources,” Symposium II, Michigan Department of Natural Resources/Geological Survey Division, pp. 12-14, 1991.
- Waters, M.A., Crocco, J.L., Heft, A.W., Huysken, K.T., and Stahl, S.D., “The Sauble Anomaly, Western Lake County, Michigan: A Reassessment,” The Geology of Michigan and its Geological Resources Symposium II, Michigan Department of Natural Resources/Geological Survey Division, pp. 29-30, 1991.
- Matty, D.J., Stahl, S.D., and Heft, A.W., “Petrologic and Geochemical Evolution of the Peavy Pond Complex, Iron County, Michigan,” (abstract), Institute on Lake Superior Geology Proceedings and Abstracts, V.36, pp. 40-42, 1990.
- Matty, D.J., Stahl, S.D., and Heft, A.W., “Petrologic Evolution of the Penokean Peavy Pond Complex, Michigan,” (abstract), Geological Society of America Annual Meeting, Abstracts with Programs, V.21, pp. A201, 1988.

DAVID R. VANGOETHEM, P.E.

SENIOR SUPERVISING ENGINEER



YEARS WITH FIRM

8

YEARS TOTAL

25

AREAS OF PRACTICE

Due Diligence

Phase I/II Environmental Site Assessments

Site Investigation, Characterization, and Remediation

Corridor Environmental Studies

NEPA Technical Studies and Document Support

LANGUAGES

English

PROFILE

David VanGoethem is a senior environmental engineer managing environmental projects and performing environmental investigations for public and private entities since 1992. His experience includes environmental consultation, UST/LUST investigations, contaminant investigation and evaluation, environmental due diligence assessments (AAI and ASTM 1527-13 Phase I Environmental Site Assessments (ESAs), Phase II ESAs, and BEAs), Brownfield redevelopment; hydrogeological work plan design and implementation; soil and groundwater contaminant characterization, delineation, remediation, and regulatory closure; facility compliance audits; vapor intrusion investigations; and risk-based corrective action (RBCA) planning. Mr. VanGoethem is thoroughly knowledgeable in regulatory procedures and reporting and has managed projects in several states. Mr. VanGoethem meets the requirements of an Environmental Professional as defined in §312.10 of 40 CFR Part 312 and ASTM 1527-13.

PROFESSIONAL QUALIFICATIONS

Professional Engineer, Michigan, License No. 6201055178

Michigan Certified Underground Storage Tank Professional, Certification No. 1015

Michigan Certified Storm Water Operator, Certification No. I-09207

Texas Department of Transportation, Hazardous Materials Initial Site Assessment, Certification No. 000018314

EDUCATION

Master of Business Administration, summa cum laude, Walsh College, Troy, MI;	2005
B.S.C.E., Civil and Environmental Engineering, Michigan State University, East Lansing, MI	1991

ADDITIONAL TRAINING

OSHA 40-Hour HAZWOPER Training, William Riggs Consulting	1992
OSHA 8-Hour HAZWOPER Refresher, Metro Occupational Trainers, Inc.	Annually

PROFESSIONAL MEMBERSHIPS

Michigan Association of Environmental Professionals

DAVID R. VANGOETHEM, P.E.

PROFESSIONAL EXPERIENCE

Due Diligence, Phase I and II Environmental Site Assessments

San Diego Association of Governments (SANDAG), Mid-Coast Corridor Transit Project, San Diego, CA

- Senior environmental consultant responsible for conducting numerous environmental studies at key locations along the project corridor in support of NEPA/CEQA environmental documentation and planned parcel acquisitions. Environmental due diligence activities have included inventory and review of prior project data and information, database records, lien searches, historical research, agency records, Phase II sampling, and site access coordination. This project is ongoing.

Michigan Department of Transportation, Interstate 75 (I-75) Modernization Project, Oakland County, Michigan

- Task lead responsible for conducting environmental evaluations along the I-75 corridor in Oakland County. Environmental studies include a Project Area Contamination Survey (PACS) along the length of the corridor along with Preliminary Site Investigations (PSI) to evaluate the subsurface environmental condition. This project is ongoing.

Large Automotive Supplier, Project Lotus, Wisconsin

- Project manager responsible for conducting Phase I environmental site assessments on three manufacturing facilities in Wisconsin. The ESAs were conducted following ASTM E 1527-13 standards in a short time frame in accordance with client specified requirements. Two of the three reports identified recognized environmental conditions in connection with the sites, and a Phase II testing plan was prepared and submitted to the client to evaluate the concerns.

Confidential Client, Manufacturing facility, Wixom, Michigan:

- Senior supervising engineer responsible for conducting a Phase I environmental site assessment and compliance audit on a manufacturing facility. The ESA was conducted following ASTM E 1527-13 standards in a very short time frame. The ESA did not identify any recognized environmental conditions in connection with the property.

Amtrak B&P Tunnel, Baltimore, MD

- Senior environmental engineer providing QA/QC and subconsultant management services for numerous hazardous materials evaluations conducted for the Amtrak tunnel replacement project alternatives in Baltimore. Mr. VanGoethem's work on this project has included review of the Preliminary Assessment Report, PAECE Report Sampling Plan, Phase I ESAs, Phase II ESAs, Subsurface Investigation Report, and Material Management Plan, as well as subconsultant coordination and management. This project is ongoing.

Large Automotive Supplier, Chattanooga, TN Facility

- Project Manager responsible for conducting a Phase I ESA per ASTM 1527-13 and EPA AAI standards at the Chattanooga, Tennessee automotive supplier park in advance of a warehouse expansion. Work included conducting the site reconnaissance, historical research, regulatory file reviews and reporting. The

site was historically part of a large United States Military explosives manufacturing and storage plant.

Medical Equipment Manufacturer, Southfield, Michigan

- Task manager responsible for conducting exit interviews for two former medical manufacturing facilities to ensure that hazardous substances associated with the former facility operations were no longer present or pose an environmental threat to the property.

Manufacturing Client, Westland, Michigan

- Project Manager responsible for conducting a Phase I ESA per ASTM 1527-13 at a tool and die manufacturing plant as part of a due diligence transaction. Work included conducting the site reconnaissance, historical research, regulatory file reviews and reporting.

Large Automotive Supplier, Gladstone, IN Facility

- Project Manager responsible for conducting a Phase I ESA per ASTM 1527-13 and EPA AAI standards at the Gladstone automotive supplier manufacturing plant in advance of a major plant expansion. Work included conducting the site reconnaissance, historical research, regulatory file reviews and reporting.

Charter School Client, Gateway Charter Academy, Matthews Mint Hill Charter Academy, Peak Charter Academy; Greensboro, Matthews, and Apex, North Carolina

- Project Manager who conducted three Phase I ESAs on multiple properties to be acquired by the charter school for future charter school developments in three North Carolina cities.

Large Automotive Supplier, Montgomery, AL and Dexter, MO Facilities

- Project Manager responsible for conducting a Phase I ESA per ASTM 1527-13 and EPA AAI standards at the Montgomery, Alabama and Gladstone, Indiana automotive supplier manufacturing plants in advance of a warehouse expansion project. Work included conducting the site reconnaissance, historical research, regulatory file reviews and reporting.

Chicago Transit Authority, 95th Street Terminal Improvement Project, Chicago, IL

- Environmental Discipline lead responsible for overseeing environmental work associated the design and specification set for the complete reconstruction of the 95th Street CTA terminal in Chicago. Work included Phase II ESA activities to characterize soil contaminants; assisting with the asbestos, lead paint, and building hazardous material testing sub-task effort, preparation of technical reports, design, and specifications for the handling, management, and disposal of impacted material.

Michigan Department of Transportation, I-96 Reconstruction Project, Wayne County, Michigan

- Task manager responsible for conducting a Preliminary Site Investigation (PSI) to evaluate the subsurface environmental condition along a 3.5-mile Interstate corridor.

Large Automotive Supplier, Spartanburg, SC Facility

- Project Manager responsible for conducting a Phase I ESA (2012), Phase I ESA update (2014), and Phase II ESA testing to evaluate the RECs identified in the Phase I ESA. This work was conducted through an inter-company agreement with the PB-United Kingdom office. The work was being done in advance of a planned divesture. The laboratory testing of soil samples from the Site revealed no locations with contaminants exceeding established cleanup criteria.

Auto Dealership Property, Mason, Michigan

- Senior supervising engineer who assisted with due diligence activities for a prospective purchaser looking to redevelop the property for a different use. The Phase I identified several RECs in connection with the property. Phase II testing was completed to evaluate the concerns, and contamination was identified in several locations. A due care plan was prepared in anticipation of the redevelopment.

Charter School Client, Laurus Academy Parking Lot Expansion, Southfield, Michigan

- Project Manager who conducted a Phase I ESA on three residential properties to be acquired by the charter school to expand their complex. The evaluation of the property identified two RECs in connection with the property. Subsequent Phase II testing was conducted to evaluate the RECs.

Charter School Client, Novi Promenade Development Site, Novi, Michigan

- Project Manager who conducted a Phase I ESA on a large 30-acre currently undeveloped parcel be acquired by the charter school for construction of a charter school. The evaluation of the property identified RECs in connection with the property associated with fill soil from an unknown source and dumping.

Large Automotive Supplier, Toledo, OH Facility

- Project Manager responsible for conducting a Phase I ESA per ASTM 1527-13 and EPA AAI standards at the Toledo, Ohio automotive supplier manufacturing plant. Work included conducting the site reconnaissance, historical research, regulatory file reviews and reporting. The Phase I ESA identified several RECs, including historic industrial manufacturing, a subsurface concrete tank, and a historic oil house.

Niagara Falls Bridge Commission, Lewiston-Queenston Bridge U.S. Customs Plaza, Lewiston, New York

- Task manager who conducted a Phase I ESA and Phase II environmental testing at the site to help identify potential environmental issues and/or contamination that could affect upcoming construction activities for a reconfiguration of the customs plaza. The Phase II ESA work occurred in three stages spanning two years. The work provided the contractor with pertinent information to undergo successful handling, management, and disposal of contaminated material during the construction activities.

Charter School Client, Former Farmer Jack property, Livonia, Michigan

- Project Manager who conducted a Phase I ESA on the commercial property. The Phase I ESA identified several RECs, including a dry cleaner that operated on the Site. Phase II ESA testing identified contamination resulting from the dry cleaner

operations. Mr. VanGoethem prepared a Baseline Environmental Assessment (BEA) and submitted the documentation to the MDEQ to help ensure owner liability protection from the pre-existing contamination.

Large Automotive Supplier, Nine Industrial Manufacturing facilities, Eastern US

- Task manager responsible for conducting Phase I ESAs on four of nine automotive manufacturing plants located in Missouri, South Carolina, and Mississippi. Performed QC reviews of the remaining five sites. The reports included preparation of conceptual site models for each facility. All ESA reports were delivered within an aggressive deadline and budget. Developed subsequent Phase II testing work plans to evaluate identified RECs for all nine facilities.

Michigan Department of Transportation - M1 Streetcar EA, Detroit, Michigan

- Task manager responsible for completing multiple environmental site assessments and hazardous material evaluations on an approximately five mile corridor in Detroit in association with an EA. The assessments included documenting environmental conditions along the corridor and evaluating two candidate vehicle service maintenance facilities.

Maid of the Mist, Niagara Falls, New York

- Task manager responsible for performing a hazardous material evaluation of the proposed Maid of the Mist Mooring and Winter Storage Facility situated within the lower Niagara River gorge. The hazardous material evaluation assessed current and historical Site conditions to help identify known or potential sources of contamination and evaluate the potential impact of those potential issues to the proposed action.

Pleasant Grove School Property, Lansing, Michigan

- Senior supervising engineer who assisted with conducting a Phase I ESA on a property used as a school. The Phase I ESA identified multiple RECs on the property, including the possible presence of unsuspected underground storage tanks.

Ohio State University, Parking Lot and Structure Environmental Evaluation, Columbus, Ohio

- Senior supervising engineer who evaluated over 200 individual parking lots and 17 parking structures for potential environmental issues as part of a concessionaire evaluation for privatization parking at OSU. A summary report was successfully delivered to the client within a very aggressive deadline and budget.

Maryland Transportation Authority, White Marsh, Maryland, Perry Hall, Maryland

- Project manager responsible for conducting a Phase I ESA on six parcels in White Marsh, MD. The parcels were being considered for purchase by the MdTA as part of an overall wetland mitigation plan for the I-95 Express Toll Lanes project. Several RECs were identified on the parcels and recommendations for Phase II testing were provided. Mr. VanGoethem also conducted another Phase I ESA and subsequent Phase II testing on two parcels in Perry Hall, MD for the MdTA as part of a possible land swap with an adjacent property owner.

DAVID R. VANGOETHEM, P.E.

Bingham School Property, Lansing, Michigan

- Senior supervising engineer who assisted with conducting a Phase I ESA on a property used as a school and served as the QA/QC reviewer. The Phase I ESA identified multiple RECs on the property, including the possible presence of a fuel oil underground storage tank. Assisted with subsequent Phase II testing conducted to evaluate the possible presence of contaminated soil, groundwater, and/or vapor on the property.

Project Thor, Niagara Falls, New York

- Senior supervising engineer who was part of a multinational team that conducted environmental due diligence activities at a rocket engine testing facility. Due diligence activities included reviewing historical facility documents, conducting a site visit to identify potential environmental concerns, reviewing governmental databases for potential listings of contamination, quantifying risks and liabilities related to identified environmental issues, and preparing a report.

Detroit Water and Sewerage Department, Rouge River Outfall No.2, Detroit, Michigan

- Task manager responsible for investigating and documenting the environmental condition of a one-half mile industrial property for the RRO-2 shallow conduit outfall. Environmental site assessment activities included Phase II testing activities designed to evaluate the RECs identified in the Phase I ESA report. The Phase II work included a geophysical survey, soil borings and monitoring well installation, digging test pits, and collecting several soil and groundwater samples for chemical laboratory analysis. The results and findings of the Phase I and II environmental studies were used to prepare a Due Care Plan to identify the requirements and costs for contaminant management and the best way to protect construction workers. Activities also included preparing environmental-related construction specifications for the Segment 1 construction phase, which included building demolition and management of contaminated groundwater generated from the abandonment of the entrance shaft.

Detroit Department of Transportation, Woodward Avenue LRT, Detroit, Michigan

- Task manager responsible for overseeing and coordinating the hazardous materials activities in the DEIS/FEIS. Activities included managing the Phase I ESA and contaminant due care activities along the proposed LRT corridor, vehicle storage maintenance facilities (VSMFs) and traction power substation sites (TPSS). Managed team to conduct 14 Phase I Environmental Site Assessments (ESAs) on proposed vehicle storage maintenance facility sites, traction power substation sites, and other properties planned for acquisition. Work also included identifying, notifying, and securing Right-of-Entry access agreements with property owners. Prepared a Hazardous Materials Technical Report incorporating the findings of the Phase I ESAs (existing conditions), discussing short- and long-term effects, and detailing mitigation options. Prepared the Hazardous Materials FEIS chapter summarizing the findings of the Hazardous Materials Technical Report and incorporating client and agency comments. Developed Phase II testing work plans based on the Phase I ESA findings and recommendations.

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Taylor Devices, Ironton Street Site, North Tonawanda, New York

- Task manager responsible for conducting environmental due diligence activities, including a Phase I ESA and subsequent Phase II testing activities for a prospective purchaser.

City of Victorville, CA, La Mesa/Nisqualli Mitigation Site, Victorville, California

- Senior supervising engineer who assisted in conducting a Phase I ESA on an approximately six-acre property proposed for use as a wetland mitigation parcel, including land within the Mojave River floodplain.

Charter School Client, Taylor, MI, Brighton, CO, Indianapolis, IN, Baton Rouge, LA, Detroit, MI, Canton, MI, Buffalo, NY, Greenville, NC, Lake Charles, LA

- Project manager responsible for conducting Phase I and II ESAs for future charter schools in Michigan, Colorado, New York, North Carolina, and Louisiana.

Illinois Department of Transportation, Galesburg Congestion Relief Project, Galesburg, Illinois

- Task manager responsible for conducting a Phase I Environmental Site Assessment (ESA) for the BNSF rail yard and six-mile long rail corridor in Galesburg, Illinois. The ESA included a site walkover, review of government records, assembly and review of data from area maps and directories, assessment of Sanborn fire insurance maps and aerial photographs, and interviews with the railroad officials, others familiar with the Site, and government officials.

Interurban Transit Partnership (ITP), Wealthy Street Operations Expansion, Grand Rapids, Michigan

- Project manager responsible for conducting Phase II testing in anticipation of ITP's planned Wealthy Street Operations Center expansion project. The Phase II testing and subsequent Due Care Plan provided valuable information relating to worker health and safety and soil management and disposal requirements during the construction activities.

Charter School Client, Atkinson School, Detroit, Michigan

- Project Manager responsible for conducting a Phase I Environmental Site Assessment to check for potential contaminating sources. Although several RECs were identified, the primary concern was a nearby abandoned lead-smelting site which reportedly operated between 1955 and 1983. Heavy metal contamination, particularly lead, was known to exist in the area through air dispersion from the former smelter operations. Comprehensive Phase II testing confirmed the presence of elevated lead in surface soils throughout the entire eight acre property. Although lead was elevated, based on comparisons with regulatory exposure cleanup criteria, The client was able to satisfy due care obligations with the MDEQ. The owner also obtained liability protection through use of a Baseline Environmental Assessment (BEA) for elevated concentrations of arsenic at the Site.

Large Retail Store; FLT Site, Flat Rock, Michigan

- Project manager responsible for conducting a vapor intrusion assessment following ASTM 2600-08 to evaluate whether methane from a nearby landfill

represents a potential vapor intrusion condition to the future retail store. Mr. VanGoethem conducted a Phase I and II ESA for this project while working for a previous employer.

Large Retail Store; MSE Site, Manistee, Michigan

- Project Manager responsible for completing Phase II testing to evaluate whether contaminants were present on the rural residential property and a former gasoline station. Work activities included installation of soil borings and monitoring wells, soil and groundwater sampling, and report preparation. Mr. VanGoethem conducted a Phase I ESA for this project while working for a previous employer.

Large Retail Store. BTH Site, Bath Township, Clinton County, Michigan

- Project manager responsible for compiling and preparing a report summarizing all of the remediation and follow-up activities conducted for the project. Also completed testing per the Due Care Plan to ensure that no groundwater contamination from an adjacent gas station migrated onto the site during the pond dewatering. Mr. VanGoethem conducted a Phase I and II ESA, BEAs, due care documentation, a LUST investigation, remediation, and closure with the MDEQ for this project while working for a previous employer.

Quality Hardwoods, Inc., Sunfield, Michigan

- Project manager and stormwater operator responsible for conducting semi-annual inspections as required under an NPDES general discharge permit. Inspections include visual inspection of equipment, plant areas, and structural pollution prevention and treatment controls. Prepared and updated the SWPPP report and the annual review report for the facility summarizing the inspection reports and changes to the SWPPP. This project is ongoing.

Sparrow Hospital, Ionia County Memorial Hospital, Michigan

- Senior supervising engineer assisting with Phase II testing to evaluate whether contaminants existed on the hospital property in relation to a former incinerator, some current and former USTs, and two drain structures within the hospital. Assisted the project manager with sampling strategies, data interpretation, and QA/QC.

Large Retail Store, HTL Site, Hartland, Michigan

- Project manager responsible for reviewing and assessing compliance with the BEA/Section 7A Compliance Analysis which outlines the due care activities for the Site. Mr. VanGoethem conducted a Phase I and II ESA and BEA/Section 7A Compliance Analysis for this project while working for a previous employer.

NEPA Technical Studies, Document Support, and Corridor Studies

San Diego Association of Governments (SANDAG), Mid-Coast Corridor Transit Project, San Diego, CA

- Senior environmental consultant responsible for conducting numerous environmental studies at key locations along the project corridor in support of NEPA/CEQA environmental documentation and planned parcel acquisitions. Environmental due diligence activities have included inventory and review of prior project data and information, database records, lien searches, historical research,

agency records, Phase II sampling, and site access coordination. This project is ongoing.

California High-Speed Rail Authority, California

- Senior environmental engineer serving as a topic expert and providing QA/QC services for Hazardous Materials and Waste in support of NEPA/CEQA environmental documentation. The Authority proposes to construct, operate, and maintain an electric-powered HSR system in California that will run from San Francisco to the Los Angeles basin. The system will eventually extend to Sacramento and San Diego, totaling 800 miles with up to 24 stations. The Authority and FRA are now undertaking Tier 2 environmental evaluations for several sections of the statewide system. Mr. VanGoethem's work on this project has included review of the Hazardous Materials Technical Reports for the Fresno to Bakersfield, Bakersfield to Palmdale, San Francisco to San Jose, San Jose to Central Valley Wye sections, as well as assistance with preparing an application for a Brownfield grant in Los Angeles. This project is ongoing.

Michigan Department of Transportation, Interstate 75 (I-75) Modernization Project, Oakland County, Michigan

- Task lead responsible for conducting environmental evaluations along the approximate 18-mile long I-75 corridor in Oakland County. Environmental studies include a Project Area Contamination Survey (PACS) along the length of the corridor along with planned upcoming Preliminary Site Investigations to evaluate the subsurface environmental condition. This project is ongoing.

Illinois Department of Transportation, Interstate 290 (I-290) Project, Chicago, Illinois

- Senior environmental engineer responsible for authoring the hazardous materials and special waste sections of the Environmental Impact Statement (EIS) under NEPA. The project is intended to provide an improved transportation facility along the I-290 Eisenhower Expressway multi-modal corridor. The special waste chapter discusses areas where current or past property uses may have resulted in contamination and the potential for the Project to be affected by, or cause impacts related to, special or hazardous waste. This project is ongoing.

San Bernardino Associated Governments (SANBAG), Interstate 15 (I-15) Project, Riverside and San Bernardino Counties, California

- Senior environmental engineer providing QA/QC services for several hazardous materials evaluations conducted along the I-15 corridor in support of NEPA/CEQA environmental documentation. Mr. VanGoethem's work on this project has included review of the Initial Site Assessment (ISA) and Site Investigation Work Plan for upcoming soil and groundwater characterization along the corridor. This project is ongoing.

Illinois Department of Transportation, Chicago to St. Louis High Speed Rail Project, Program Management, Illinois

- Task manager responsible for reviewing and managing subconsultant Preliminary Environmental Site Assessment (PESA) activities. Work included ensuring PESAs follow IDOT protocol, guidelines, and schedule. Also included completing and reviewing PESA response forms on behalf of IDOT along the 300-mile long corridor. This project is ongoing.

DAVID R. VANGOETHEM, P.E.

Amtrak B&P Tunnel, Baltimore, MD

- Senior environmental engineer providing QA/QC and subconsultant management services for numerous hazardous materials evaluations conducted for the Amtrak tunnel replacement project alternatives in Baltimore. Mr. VanGoethem's work on this project has included review of the Preliminary Assessment Report, PAECE Report Sampling Plan, Phase I ESAs, Phase II ESAs, Subsurface Investigation Report, and Material Management Plan, as well as subconsultant coordination and management. This project is ongoing.

City of Fishers, Fishers 116th Street Pedestrian Improvement Project, Fishers, IN

- Senior environmental engineer responsible for conducting a NEPA Tier 1 level hazardous materials screening to identify potential sites of environmental concern along the corridor. Work included an evaluation of a database records search and identifying geographic locations of specific sites of concern that could impact the project. This project is ongoing.

Metropolitan Transit Authority of Harris County, Magnolia Transit Center, Houston, Texas

- Senior environmental engineer who conducted a hazardous materials evaluation for the Magnolia Transit Center as part of proposed modifications to the facility in support of NEPA environmental documentation. The hazardous materials evaluation included a governmental database records search, review of historical aerial photographs, an evaluation of prior environmental documentation related to a former contamination investigation, remediation, and closure for the facility, and a report documenting the results.

Calaveras County, Singletree Drive at Littlejohns Creek Low Water Crossing Replacement, Calaveras County, California

- Hazardous material task lead responsible for preparation of an Initial Site Assessment (ISA) report required as part of the NEPA/CEQA environmental documentation. Work included conducting the site reconnaissance, historical research, regulatory file reviews and reporting. The project area was found to contain imported rock that potentially contains naturally occurring asbestos, which may require special handling and care during construction activities.

Calaveras County, Hogan Dam Road at Bear Creek Low Water Crossing Replacement, Calaveras County, California

- Hazardous material task lead responsible for preparation of an Initial Site Assessment (ISA) report required as part of the NEPA/CEQA environmental documentation. Work included conducting the site reconnaissance, historical research, regulatory file reviews and reporting. The project was found to be situated on bedrock that potentially contains naturally occurring asbestos, which may require special handling and care during construction activities.

City of La Quinta, CA, Dune Palms Road Low Water Crossing Replacement, California

- Hazardous material task lead responsible for preparation of an Initial Site Assessment (ISA) report required as part of the NEPA/CEQA environmental documentation. Work included conducting the site reconnaissance, historical research, regulatory file reviews and reporting.

DAVID R. VANGOETHEM, P.E.

Illinois Department of Transportation, Chicago to St. Louis High Speed Rail (Tier 6) Project, Illinois

- Task manager responsible for conducting a Preliminary Environmental Site Assessment (PESA) for a 36-mile long railroad corridor from Joliet to Dwight, Illinois as part of the NEPA environmental documentation. PESA work included extensive research on governmental databases, geologic information, site reconnaissance, and reporting.

Michigan Department of Transportation - M1 Streetcar EA, Detroit, Michigan

- Task manager responsible for completing multiple environmental site assessments and hazardous material evaluations on an approximately five mile corridor in Detroit in association with NEPA documentation. The assessments included documenting environmental conditions along the corridor and evaluating two candidate vehicle service maintenance facilities.

Needles Connector EA, Needles, California

- Task manager responsible for the preparation of an initial site assessment (ISA) document required as part of the NEPA\CEQA environmental documentation. Work included site reconnaissance, historical research, regulatory file reviews, and reporting along the 1.5-mile long corridor.

Virginia Avenue Tunnel, Washington DC

- Senior supervising engineer who assisted in performing a review of environmental conditions potentially affecting the nearly one mile tunnel. The review was not intended to be a comprehensive Phase I ESA, but rather to identify potential nearby properties of concern from which contamination could migrate and impact the project.

Detroit Department of Transportation, Woodward Avenue LRT, Detroit, Michigan

- Task manager responsible for overseeing and coordinating the hazardous materials activities in the NEPA DEIS/FEIS. Activities included managing the Phase I ESA and contaminant due care activities along the proposed LRT corridor, vehicle storage maintenance facilities (VSMFs) and traction power substation sites (TPSS). Managed team to conduct 14 Phase I Environmental Site Assessments (ESAs) on proposed vehicle storage maintenance facility sites, traction power substation sites, and other properties planned for acquisition. Work also included identifying, notifying, and securing Right-of-Entry access agreements with property owners. Prepared a Hazardous Materials Technical Report incorporating the findings of the Phase I ESAs (existing conditions), discussing short- and long-term effects, and detailing mitigation options. Prepared the Hazardous Materials FEIS chapter summarizing the findings of the Hazardous Materials Technical Report and incorporating client and agency comments. Developed Phase II testing work plans based on the Phase I ESA findings and recommendations.

Riverside County Transportation Commission, SR-91 Corridor Improvement Project, Corona, California

- Senior supervising engineer who assisted with the preparation of a supplemental initial site assessment (ISA) document required as part of the NEPA/CEQA documentation. The supplemental ISA summarized numerous Phase I ESAs

conducted on properties along the corridor, and a hazardous materials survey of 22 bridges. Completed a QA/QC review of multiple Phase I ESAs (which purported to follow the ASTM E 1527-05 standard) completed by a subcontractor for the project. Assisted with modifying the mitigation measures in the supplemental EIR/EIS to address the additional information and recommendations in the supplemental ISA.

OCTA Grade Separation, Orangethorpe, California

- Senior supervising engineer who provided support to compile a list of facilities that may pose an environmental impact to the project. Completed an initial site assessment (ISA) report in support of NEPA/CEQA environmental documentation.

Michigan Department of Transportation, I-96 Reconstruction Project, Wayne County, Michigan

- Task manager responsible for conducting a Preliminary Site Investigation (PSI) to evaluate the subsurface environmental condition along a 3.5-mile Interstate corridor.

Confidential Client, 54-Mile Toll Road Corridor, Puerto Rico

- Senior supervising engineer who conducted a contamination screening assessment on a corridor on the northern part of the island. The assessment revealed the presence of numerous potential sources of contamination that could impact the subject corridor.

Illinois Department of Transportation, High Speed Rail (HSR) NEPA/Application, Chicago to St. Louis and Chicago to Dubuque Routes, Illinois

- Task manager responsible for identifying potentially hazardous material affected sites along the proposed HSR corridor from Chicago to Dubuque and assisted with identifying sites along the proposed Chicago to St. Louis HSR corridor. Tasks included visual reconnaissance, database search information, and data compilation and analysis. Information regarding numerous sites with potential hazardous material concern were identified and incorporated in the application.

Site Investigation, Characterization, and Remediation

Insurance Company, McIntire Cleaners, Indiana

- Deputy project manager assisting with investigating the extent of soil and groundwater contamination and potential indoor air vapor intrusion into nearby structures caused by the release of dry cleaning solvents to the soil and groundwater beneath the site and surrounding properties. A total of 65 monitoring wells have been installed over nine city blocks to help define the extent of the groundwater contamination. The migration of contaminants requires coordination with state and local governmental agencies, nearby residents and property owners. Ongoing sampling has shown that a plume of contaminated groundwater about 1,500 feet long extends from the facility toward a nearby river. Nine nearby structures, five of which are dwellings, were found to have contaminant vapor intrusion. Mr. VanGoethem assisted with facilitating the installation of vapor mitigation systems in impacted structures. A successful Soil/Venting Extraction (SVE) pilot system has been conducted and full system construction and operation was successful in cleaning up the contaminated soil. The remediation of contaminated groundwater, using in-situ chemical injection technologies, was

planned and implemented in three stages, and is currently in a monitoring stage to achieve plume stability and remediation goals. The successful remediation has allowed the regulatory agency to release most of the nearby structures with former vapor intrusion from ongoing monitoring requirements. This project is ongoing.

Metropolitan St. Louis Sewer District (MSD), Lower Meramec Tunnel, St. Louis, Missouri

- Senior environmental engineer responsible for sampling and evaluating the environmental condition within the proposed tunnel target zone. Work includes conducting environmental sampling for a number of previously installed monitoring wells to evaluate the source of odors and staining of materials that were placed into the groundwater at depths within the bedrock that would be representative of the depth of the future proposed tunnel. A baseline sampling was conducted and data was evaluated; additional sampling events for select wells is planned. This project is ongoing

City of Eaton Rapids, Eaton Rapids Landfill, Eaton Rapids, Michigan

- Senior supervising engineer assisting with the contaminant investigation and QA/QC activities for a former municipal landfill. The investigation includes an evaluation of groundwater contaminant migration and concentrations and potential migration of methane gas. Of particular concern is whether methane is or will migrate into a nearby dwelling, posing a fire or explosion hazard. Groundwater contaminants including volatile organic compounds, ammonia, and heavy metals pose a risk to nearby surface water bodies. This project is ongoing.

LaGuardia Airport, New York City

- Senior supervising engineer assisting with specification and environmental plan development in anticipation of a major terminal renovation project. Also provided plan development and QA/QC for evaluation of soil vapor conditions in multiple areas of the airport property. Sub-slab vapor samples were collected from 19 sample collection points as part of the evaluation. This project is ongoing.

Maryland Department of Transportation, Maryland Transit Administration, Red Line Light Rail Transit System; Baltimore, MD

- Provided design assistance related to environmental specification quality review for the project and also designed a vapor monitoring plan for the downtown tunnel alignment. The specifications included Chemical Sampling and Analysis, Site Containment, Removal and Disposal of Contaminated Soil, UST Removal, and Vapor Mitigation Control. The vapor monitoring plan design included vapor monitoring well design, placement, and monitoring requirements.

Delhi Downtown Development Authority, Blind Bizz Site, Delhi Township, Michigan

- Senior supervising engineer who co-led a soil and groundwater contaminant investigation of the property in connection with an open leaking underground storage tank (LUST) site listing. Assisted with coordinating subcontractors to arrange the installation of multiple soil borings and monitoring wells, and planning additional required scope items to fulfill regulatory requirements. Most recently, the full delineation of contamination on the property has been completed.

DAVID R. VANGOETHEM, P.E.

Large Retail Store, Jackson, Michigan

- Project manager responsible for the LUST contaminant investigation, response, and closure under Part 213 of NREPA. Work activities for this investigation included well installation to delineate the extent of petroleum-impacted groundwater, soil and groundwater sampling, and MDEQ report preparation. Closure under Part 213 of NREPA was granted by the MDEQ.

Quality Production Company, Concord, Michigan

- Deputy Project Manager responsible for remediation activities and closure report preparation and submittal under Part 201 of NREPA. Activities included removal and disposal of contaminated soil resulting from the historical automotive parts coating facility. Closure under Part 201 of NREPA was granted by the MDEQ.

Capital Region Airport Authority, Mason Jewett Airport, Mason, Michigan

- Deputy project manager responsible for groundwater testing activities associated with a Part 213 facility investigation and closure.

Indianapolis Transit Agency; Indygo, Indianapolis, Indiana

- Senior supervising engineer responsible for preparing a general specification for contaminated soil removal and disposal activities. The specification was included as part of a larger bid specification to remove and replace hydraulic bus vehicle lifts in the Indygo maintenance garage. The specification described the requirements for proper management, removal, transport, disposal, and documentation of contaminated soil.

PUBLICATIONS AND PRESENTATIONS

- Presenter, “Contamination and Transportation Projects – Design Perspective”, MDOT-ACEC Partnering Workshop, February 5, 2015.
- Panel Member, Planning/Multi-Model Session, MDOT-ACEC Partnering Workshop, February 5, 2015.
- Heft, A.W., VanGoethem, D.R., and Pehlivan, M., “Innovative Soil Vapor Monitoring In Observation Wells during Soil Vapor Extraction Reveals Additional Source Areas”, Poster Presentation, Ninth International Conference, Remediation of Chlorinated and Recalcitrant Compounds, May 19 – 22, 2014, Monterey, California, Battelle Conference Group, 2014.
- Heft, A.W., VanGoethem, D.R., and Pehlivan, M., “Using Capillary-Pressure Curve Tests for Designing a Soil Vapor Extraction System”, Poster Presentation, Eighth International Conference, Remediation of Chlorinated and Recalcitrant Compounds, May 21 – 24, 2012, Monterey, California, Battelle Conference Group, 2012.

LORRAINE AHLQUIST, CEM

Project Manager

Years of Experience

23 (5 with PB; 18 with others)

Education

M.S., Biological Sciences, Florida International University, 2003
B.S., Environmental Studies, Minors in Biology and Chemistry, Florida International University, 1999
A.S., Radiation Protection Technology, Central Florida Community College, 1989
Certification in Project Management
Certification in Geographic Information Systems
Certification in Forensic Science, Specializations in Biology and Chemistry, Florida International University

Professional Registrations

Certified Environmental Manager, 2007 (#7332)

Professional Affiliations

Ecological Society of America
Association of Environmental Professional
Women Transportation Seminar
Environmental Assessment Association
American Public Works Association

Key Qualifications

Ms. Lorraine Ahlquist has over 20 years of experience in state, federal, academia, and the private research sector. She has focused on issues related to regulatory management and research within listed areas: environmental policy (California Environmental Quality Act-CEQA and National Environmental Policy Act-NEPA), community based natural resources management, urban planning and management (including areas of regulatory oversight), bio-diversity conservation, environmental education, Geographical Information Systems (GIS), plant, animal, and water protection, and global climate change. Her responsibilities have included the preparation and review of environmental documents such as Environmental Impact Reports (EIR), Mitigated Negative Declarations (MND), Negative Declarations (ND), environmental documents Addendums, Categorical Exemptions (CE) and Initial Studies under CEQA. Other federal (NEPA) transportation, military and energy projects have included the preparation, review and coordination of Environmental Impact Study (EIS), Environmental Assessments (EA) and Categorical Exclusions (CatEx.) for Caltrans Local Assistance and Oversight, Department of Army, Bureau of Land Management, United States Forest Service, and United States Corps. of Engineers as well as coordinating reviews of technical studies for state and federal compliance. Lorraine has been involved in the approval and review of Tentative Parcel Maps, Minor and Major Use Permits, Zoning ordinances, and environmental review of private land development (L-Grading permits) and coordination on several County and City of San Diego Capital Improvement Projects (CIP), Department of Parks and Recreation (DPR) and Department of Planning and Land Use (DPLU) public works projects.

Current Experience

- **Interstate 15 (I-15) Corridor Project, San Bernardino County, California:** As the environmental project manager, our team is supporting the proposed I-15 Corridor Project that extends for approximately 14 miles. The Project would add two (2) Express Lanes in each direction along the I-15 Corridor between SR-60 and SR-210, one (1) Express Lane in each direction between Cantu-Galleano Ranch Road and SR-60 at the southerly end, and one (1) Express Lane in each direction between SR-210 and Duncan Canyon Road at the northerly end. This Project also proposes to add one (1) Auxiliary Lane in each direction between SR-60 and I-10 and one (1) Auxiliary Lane in the northbound direction between Fourth Street and Foothill Boulevard. Environmental technical support covers the QA/QC of several technical subconsultants, a diversified suite of technical guidance for the project team and coordinating and preparation of the IS/EA environmental document.

- **San Diego North Coast Corridor Public Works Plan and Transportation and Resource Enhancement Program (PWP/TREP), San Diego, California**: Ms. Ahlquist has served as planner supporting California Department of Transportation (Caltrans) and San Diego Association of Governments (SANDAG) in developing a $6 billion, 40-year programmatic approach for implementing highway, rail, transit, bicycle, pedestrian and environmental projects that will improve and maintain mobility in the I-5 North Coast Corridor through 2050. The project requires close coordination with the California Coastal Commission (CCC) to ensure the PWP/TREP serves as a comprehensive permitting document for corridor transportation projects. Lorraine assists with coordination and management of key project and contract activities for the client and project team, including the production and deliverable schedule, meeting agendas and notes, scope and action-item tracking, and other project management functions.
- **Dune Palm Road Bridge Replacement, La Quinta, California**: As the environmental project manager planner, Ms. Ahlquist is providing a diversified suite of technical guidance for the project, working closely with Caltrans Local Assistance and the City of La Quinta. As a grantee of FHWA's Highway Bridge Program (HBP) Program, the City of La Quinta is addressing both NEPA and CEQA regulatory requirements. The proposed bridge improvements will span the Coachella Valley Storm Water Channel (CVSWC) at Dune Palms Road. The bridge is anticipated to be approximately 480 feet long and approximately 86 feet wide. Lorraine is coordinating the preparation along with the Quality Assurance / Quality Control (QA/QC) of the following studies, which are anticipated to support separate documents Initial Study (IS) and a Categorical Exclusion (CE): Noise Impact Report (per TNAP); Initial Site Assessment; Natural Environment Study – Minimal Impact Report; Historical Property Survey Report / Archeological Survey Report & Section 106 Compliance; Wetland Delineation; Water Quality Report; Visual Analysis Checklist and Traffic Analysis
- **Replacement and Realignment of the Anza Road Bridge at the All American Canal, Imperial County, California:** As a grantee of FHWA's Bridge Program (HBP) and Highway Safety Improvement Program (HSIP) funding, the County of Imperial was required to comply with federal requirements. The county intended to reconstruct a new bridge with a new state-of-the-art bridge to accommodate existing traffic volumes. The Anza Road Bridge at the All American Canal was constructed in 1938. It is a 2-lane bridge with no shoulder located approximately 1.8 miles east of Calexico city limits on Anza Road, where it crosses at the All American Canal. The bridge is 130 feet long and 24 feet wide. The bridge was designated by the United States Bureau of Reclamation and is operated by the imperial Irrigation District (IID) as a water facility. The following studies are included Cultural (HPSR/ASR; HRER); Biology (NES-MI); Noise, Air, Traffic, Farmland Study, Community Impact, Hazardous Materials Phase I, and Visual in compliance of the environmental documents conformity leading to environmental clearance to support a separate Initial Study leading to a Mitigated Negative Declaration and a Categorical Exclusion.

- **California High-Speed Rail Program Management, Los Angeles, California:** For over 2 years, Ms. Ahlquist served as the Southern California Environmental Lead for Palmdale to Burbank and Burbank to Los Angeles Union Station and responsible for overseeing preparation two Tier II EIR/EIS documents. Ms. Ahlquist provides guidance to internal and consultant teams, in the development, implementation, and evaluation of California's high-speed rail program, and ensures its compliance with the National Environmental Policy Act (NEPA) and California Environmental Quality Act (CEQA).
  As the section lead, Ms. Ahlquist oversees management of the portfolio of environmental documents/evaluations for the Authority's project, including the review of and comments on environmental documents prepared by other agencies. Job duties include preparing and supervising the preparation (by regional contractors/consultants) of a variety of environmental documents required under CEQA, NEPA and other relevant laws. This includes planning, directing, and coordinating environmental activities; providing project management, administrative, technical, and strategic guidance to internal staff and consultants; and providing technical assistance to regional consultants and environmental resource agencies. In addition, Ms. Ahlquist is responsible for conducting comprehensive technical reviews of proposed high-speed rail plans and developing recommended advisement for the Authority including applying requirements of the National Historic Preservation Act; US DOT Transportation Act, Section 4(f);

Section 106 of the National Historic Preservation Act; Title 23, Statewide and Metropolitan Planning regulations; Clean Air Act as amended and Executive Order 12898 on Environmental Justice. She also works in close partnership with the California High-Speed Rail Authority staff, the Federal Railroad Administration, California Attorney General's Office, and resources agencies.

- **Mid-Coast Corridor LRT (Light Rail Transit) Project Environmental Geotechnical Permitting, San Diego:** permitting coordinator for the geotechnical component for an 11-mile (17.7-kilometer) extension of the San Diego Trolley. Ms. Ahlquist's duties include directing technical staff, drafting and reviewing technical memoranda, and obtaining resource agency permitting while managing the scope and budget.

- **Coastal Rail Trail – Encinitas Segment, San Diego:** project manager providing preliminary storm water, utility, engineering and environment assessment within the City of Encinitas, consisting of approximately 1.7 miles of Class I bike path from Chesterfield Drive northward to G Street.

Previous Experience
Prior to joining Parsons Brinckerhoff, Ms. Ahlquist's experience included:

- **City of San Diego El Camino Real Bridge Project, Del Mar, California:** environmental project manager supporting technical studies and transforming the previously prepared CEQA documents into NEPA compliance documents, consistent with FHWA/Caltrans Standard Environmental Reference report format and content guidelines. Due to the location of the bridge in the San Dieguito River and within the Coastal Zone, biological resources and regulatory agency coordination were key resource areas for this project. Understanding that the regulatory agency coordination and permit approval is a critical path for the project.
- **City of Redlands Park Once Transit Center, Redlands, California:** environmental project manager providing environmental consulting services including the preparation of the CEQA Initial Study, the Air Quality Analysis and Visual Impact Assessment Memorandum. Ms. Ahlquist is also responsible for the coordination of preparation and submittal of technical studies and project team, including the City of Redlands and Caltrans. The project is being partially funded by Federal grant money and therefore has required Caltrans Local Assistance. Project challenges have included an aggressive schedule and the environmental constraint of being in a designated Historical District and highly sensitive archeological site. Additional constraints include the site being locating within a floodplain.
- **City of Oceanside Hydrology, Hydraulic, Design Feasibility, and Environmental Clearance for the Oak Riparian Park Channel Improvement Project:** project manager providing environmental consulting services working closely with City as the lead agency for CEQA. The environmental component was part of the second phase of the project which included preparation of a Mitigated Negative Declaration (MND), regulatory agency permitting and approvals. Responsibilities include preparing of several technical memos for Noise, Air Quality Conformity, Water Quality, Biological and Cultural Resources Reports to support a MND under CEQA for the project.
- **SDCWA Camp Pendleton Desalination Project Feasibility Technical Studies, MCB Camp Pendleton, San Diego County, California:** led the NEPA compliance document and preliminary environmental document (PED) on behalf of Camp Pendleton. In addition, she also was the regulatory specialists for a variety of permits required for the project, including two different permits from two different departments within the California State Lands Commission (SLC), and the County of San Diego Department of Environmental Health. In addition, she was responsible for preparing the CEQA Compliance document, a Categorical Exemption (CE). The technical studies associated with this project will be used as guiding documents and feasibility studies for project permitting and preliminary design of a 50 - 150 mgd desalination facility located in MCB Camp Pendleton, CA. This $2B initial base is currently envisioned to include a 100 mgd seawater desalination plant, new outfall, new seawater intake system, two lift stations, and approximately 14 miles of large diameter pipelines.
- **City of Oceanside Jefferies Ranch Road to State Route 76.** The original intent was to prepare environmental studies, environmental document (Mitigated Negative Declaration – MND) and engineering

designs to re-establish right-turn in/out access from Jefferies Road to State Route 76. After coordination Caltrans, it was determined by City that project was not going to move forward with environmental or engineering.

- **City of Riverside – Public Utilities Department.** The project involved the undergrounding of approximately 0.75 miles of overhead electrical utility lines along Victoria Avenue, which is a scenic roadway that is listed under the National Register of Historic Places (record number 134287). The environmental clearance included the preparation of several technical studies - Noise Technical Memo, Air Quality Report, Natural Environment Study – Minimal Impact, Historical Properties Survey Report/Archeological Survey Record and Initial Site Assessment – Phase I & II to obtain NEPA clearance through Caltrans District 8. She worked closely with the Community Development Department because of the historical nature of the project along with the local community groups.

- **City of Palm Springs Citywide Traffic Signal Interconnect and Traffic Management Center Project, Palm Springs, California:** project manager providing environmental consulting services working closely with City of Palm Springs as the lead agency for CEQA and Caltrans District 8 Local Assistance as the NEPA lead agency. Responsibilities include preparing of several technical memos for Traffic, Noise, Air Quality Conformity, Phase I Hazardous Material Report, Water Quality, Biological and Cultural Resources Reports to support a CE (Categorical Exemption) under CEQA and CatEx (Categorical Exclusion) under NEPA for the project.
- **Monterey Bay Regional Desalination Project - Monterey Presidio Pipeline Crossing, Monterey, California:** environmental project manager providing environmental consulting services working closely with Department of Army - Presidio of Monterey, the lead agency, and various subconsultants. Lorraine's responsibilities include preparing an Environmental Assessment (EA) to support the Finding of No Significant Impact (FONSI) for the project. Due to the highly significant cultural and historical resources located on the Presidio of Monterey, challenges for this project included analyzing many combinations of pipeline alternatives to determine which type of construction (trenching vs. trenchless technologies) and route would best avoid known and undiscovered sensitive resources. As a component of the Monterey Bay Regional Desalination Project, the Monterey Pipeline would connect the existing California American Water Company (CAW) distribution system in the City of Seaside with the CAW distribution system on the Monterey Peninsula to facilitate the exchange of water between the two districts.
- **Environmental Services for FEMA and FHWA Emergency Response Projects, Imperial County, California:** project manager assisting the County in facilitating the processing of Public Assistance Program Grants administered by FEMA and FHWA as a result of the April 4, 2010 7.2 magnitude earthquake.
- **Monterey Bay Regional Water Project - Aquifer Storage and Recovery, Monterey, California:** environmental project manager providing a suite of environmental consulting services for this project. Working closely with Department of Army - Presidio of Monterey, the lead agency along with various subconsultants. The project involves the preparation of an Environmental Assessment (EA) to support the Finding of No Significant Impact (FONSI) for the construction of two Aquifer Storage and Recovery (ASR) wells to provide storage capacity in the winter and peak water supply in the summer. The ASR System is a component of the larger Monterey Bay Regional Water Project being developed by the California American Water Company (CAW).
- **Pitzer Road Resurfacing Project, Imperial County, California:** project manager coordinated the biological reports and the Delineation of Jurisdictional Waters for the proposed project, which involves the asphalt concrete paving of Pitzer Road from East McCabe Road to Correll Road. The road to be paved is 28 feet wide, and work in the existing alignment will include shoulder grading to accommodate drainage, possibly including the installation of storm drains to route runoff to nearby drainage systems. This delineation determined that no state or federal jurisdiction was located within the boundaries of the project site. As a result, no permit approvals were required prior to construction.

- **8th Street Safety Enhancements – J Avenue to Palm Avenue, National City, California:** environmental coordination and approval for the 8th Street Safety Enhancements HSIP Project, which involves the design of medians, curb, gutter and sidewalks, slope stabilization, and pedestrian crossing enhancements.
- **Installation of Asphalt Grindings of Various County Roads, Imperial County, California:** project manager responsible for coordinating the biological reports and the Delineation of Jurisdictional Waters for the proposed project. The scope, which includes shoulder work to accommodate drainage, involves the laying of approximately three to four inches of asphalt grinding material over either existing dirt or aggregate base material. The project also included a multi-day site visit and prepared a detailed Jurisdictional Delineation and determined that no state or federal jurisdiction was located within the boundaries of the project site.
- **South San Diego Bay Wetland Restoration Environmental Compliance, San Diego County, California:** project manager provided environmental analyses and documentation services to the Southwest Wetlands Interpretive Association (SWIA) for the South San Diego Bay Wetland Restoration Project. The project, which consists of both the Western Salt Ponds restoration and the Chula Vista Wildlife Reserve (CVWR) restoration, involves the overall restoration and enhancement of approximately 257acres of coastal wetland habitat in South San Diego Bay. The project included air quality (including greenhouse gas emissions), traffic, and noise analyses to support SWIA, the Port of San Diego and the U.S. Fish and Wildlife Service in drafting a Mitigated Negative Declaration /Environmental Assessment (MND/EA) in compliance with the California Environmental Quality Act and the National Environmental Policy Act.
- **Worthington Road Turn Lane and Intersection Improvements, El Centro, California:** environmental project manager. Ms. Ahlquist provided assistance to the County of Imperial Worthington Road project. Due to the increased traffic flow and the lack of turn lanes or stop signs at the McConnell Road intersection, the County needed to improve road capability and performance. Lorraine fostered the federal approval, technical studies for biological resources, wetland study, farmlands study and water quality report as required. She coordinated with Caltrans District 11 Local Assistance resulting in a Categorical Exclusion.
- **City of Sunnyvale Murphy Avenue Downtown Sunnyvale Redevelopment Projects, Sunnyvale, California:** project manager for NEPA environmental planning consulting services to the City of Sunnyvale focusing on construction activities and CEQA/NEPA clearances. Downtown Sunnyvale is currently undergoing extensive development and redevelopment including some sites containing contaminated soils. The project requires CEQA/NEPA environmental documentation for the upcoming revitalization construction activities for the Murphy Avenue streetscape project.
- **Interstate 880 Operational and Safety Improvements at 29th Avenue and at 23rd Avenue, Oakland, California:** environmental project manager. Ms. Ahlquist provided full environmental support for this project, working closely with Caltrans District 4 and the City of Oakland and the County of Alameda. The project involves major modifications to the existing interchange. Lorraine is managing the preparation of the technical studies and the Environmental Joint CEQA/NEPA document.
- **State Route 57/60 at Grand Overcrossing, Diamond Bar, California:** environmental project manager responsible for providing environmental support and working closely with Caltrans District 7 for the State Route 57/60 (SR-57/SR-60) Confluence at Grand Avenue located in Los Angeles County, within the Cities of Industry and Diamond Bar. This interchange is located approximately at the midpoint of the two-mile common alignment of the SR-57/SR-60. Ms. Ahlquist managed the preparation of the following studies and sharing environmental document (joint Initial Study/Environmental Assessment (IS/EA); Initial Site Assessment; Visual Impact Assessment; Community Impact Assessment and Water Quality Report.
- **Adams Street Bridge Replacement, La Quinta, California:** environmental project manager – Ms. Ahlquist provided a diversified suite of technical guidance for the project, working closely with Caltrans Local Assistance and the City of La Quinta. As a grantee of FHWA's Highway Bridge Replacement and

Rehabilitation (HBRR) Program, the City of La Quinta is addressing both NEPA and CEQA regulatory requirements. The proposed bridge improvements will span the Whitewater River Channel at Adams Street. The bridge is anticipated to be approximately 525 feet long and approximately 76 feet wide. The project will be constructed within the existing roadway right-of-way and will not increase capacity. At a minimum, the typical section will include a six-foot sidewalk on both sides of the bridge, a twelve foot raised curb median island, and four travel lanes. Lorraine is managing the preparation of the following studies, which are anticipated to support a joint Initial Study/Categorical Exclusion (IS/CE):

- Noise Impact Report (per TNAP)
- Initial Site Assessment
- Natural Environment Study Report
- HPSR
- Air Quality Report & CO Hotspot Analysis
- Wetland Delineation
- Section 106 Compliance
- Water Quality Report
- Traffic Analysis

- **Garnet Street Bridge Replacement, Mentone, California:** environmental project manager – Ms. Ahlquist worked closely with Caltrans Local Assistance and the County of San Bernardino. As a grantee of FHWA's Highway Bridge Replacement and Rehabilitation (HBRR) Program, the County of San Bernardino is required to comply with federal requirements. The County of San Bernardino intends to replace the bridge with a new state-of-the-art bridge that will accommodate existing traffic volumes. The width of the existing bridge is approximately 17 feet 10 inches wide (rail-to-rail) including an approximately 16 foot 10 inch travel way. The existing bridge is 159 feet long with two abatement and one center pier supporting the bridge. The proposed project would be approximately 52 feet wide and would include the abatement and piers, with a wider travel way to accommodate modern vehicles that are wider than older models. All existing pipelines and utilities will be relocated as necessary. Lorraine is managing the preparation of the wetland delineation, permitting and compliance of the environmental documents that were previously prepared for conformity and approval with Caltrans Local Assistance, which are anticipated to support a joint Initial Study/Categorical Exclusion(IS/CE).
- **State Route 186 / Interstate 8 Interchange Quechan Indian Tribe, Imperial County, California/Yuma, Arizona border):** environmental project manager responsible for providing a suite of environmental consulting services for this project, working closely with Caltrans, the prime consultant, Quechan Indian Tribe and various subconsultants. The project involves roadway improvements and modifications to the existing bridge and interchange. Lorraine is managing the preparation of the following studies, which are anticipated to support a joint Initial Study/Environmental Assessment (IS/EA):
  - Noise Impact Report (per TNAP)
  - Natural Environment Study Report
  - HPSR/ASR
  - Air Quality Report & CO Hotspot Analysis
  - Section 106 Compliance
- **Interstate 10 / Jefferson Street Interchange, Indio, California:** environmental project manager responsible for providing a wide range of environmental consulting services for this project, working closely with Caltrans and the City of Indio. The project involves major modifications to the existing interchange. Lorraine is managing the preparation of the following studies, which are anticipated to support a joint Initial Study/Environmental Assessment (IS/EA):

  - Visual Impact Analysis (VIA)
  - Noise Impact Report (per TNAP)
  - Initial Site Assessment
  - Natural Environment Study Report/Biological Assessment
  - HPSR/ASR/AER
  - Air Quality Report & CO Hotspot Analysis
  - Section 7 Consultation
  - Section 106 Compliance
- **SR-75/282 Congestion Relief and Corridor Enhancement Project, Coronado, California:** environmental project manager responsible for preparing environmental documents for several road improvement projects including sidewalk bulb-outs, landscaping, and traffic signals to reduce traffic speeds through a residential neighborhood. Issues addressed include coordination with City of Coronado, Caltrans District 11, public controversy over project elements and coordination with U.S. Navy development projects, traffic impacts, and drainage reports.
- **Black Canyon Bridge Replacement, San Diego, California:** project manager on the rehabilitation and replacement of the historical bridge to restore the existing structurally deficient bridge. Managed joint EIR/EA and coordinated with Caltrans district 11 local assistance and federal and state resource agencies on mitigation, permitting, and technical report compliance.
- **Bradley Avenue / SR 67 Interchange Project, San Diego, California:** environmental management specialist responsible for independently managing the SR-67 road widening from 6 to 8 lanes between Interstate 8 and the proposed State Route 52 (SR-52) as identified in the Final 2030 Regional Transportation Plan (RTP) developed by the San Diego Association of Governments (SANDAG). Conducted technical studies oversight and project development with Caltrans district 11 local assistance for Air Quality, Community Impact, Environmental Justice, Natural Environment Study, Noise Abatement, Visual Analysis, and Relocation reports.
- **Viejas Bridge Replacement, San Diego, California:** lead environmental project manager responsible for the oversight of the preparation of the joint environmental EIR/EA and close coordination with Caltrans district 11 local assistance review of technical studies.

Flood Control Projects

- **Central Avenue Drainage Improvement Project, San Diego, California:** environmental planner for the preparation of a Mitigated Negative Declaration (MND) and Off-site mitigation plan to eliminate the flooding conditions in the area. Oversight and review of the technical studies included a biological technical report, a water quality report, wetland delineation and negations with the resource agencies for an acceptable mitigation and restoration plan.
- **Cottonwood Creek Restoration and Invasive Species Removal, San Diego, California:** project manager responsible for the preparation of the environmental MND document as well as oversight manager for the review of the technical studies. Project will be implemented along Cottonwood Creek in two locations in Southeastern San Diego County. Removal consists of approximately 40 acres of *Tamarix* upstream of Morena Reservoir, and approximately 30 acres south of Morena Reservoir. In addition, approximately 6 acres of giant reed and 5acres of *Tamarix* will be removed from a 125-acre area of Cottonwood Creek 2 miles downstream of Barrett Lake. The objective of the project is to enhance the native riparian and wet meadow habitats by removing damaging invasive species.
- **Hillsdale Drainage Improvement Project, San Diego, California:** environmental planner for the preparation of a MND and development of on-site and off-site mitigation plan. The purpose of the proposed project is to alleviate localized flooding and to reduce the collection of downstream sedimentation by increasing the existing drainage facility size under Hillsdale Road in the unincorporated community of Cottonwood.

Wastewater Management

- **Pala Temecula and Pala Mesa Road Improvements Project, Pala, California:** contributed at the Environmental Planner level for the preparation of a MND and review of the technical reports to improve road conditions along Pala Temecula road. The construction of two local casinos has led to an increase in traffic volumes and an increase in the average accident rate greater than the statewide average for similar facilities. The proposed improvements should increase the operational aspects of the road leading to a decrease in the accident rate.
- **Los Coches Sewer Replacement Project, Lakeside, California:** environmental planner for the preparation of a MND, and development of on-site and off-site mitigation plans associated with Los Coches Creek. The purpose of the project was to provide an effective removal of non-native invasive species as well as implementing an appropriate re-vegetation plan both off-site and on-site.

Department of Parks & Recreation

- **As Needed, City of San Diego, Department of Parks & Recreation, San Diego, California:** task manager. Responsible for the oversight, review and coordination of in-house and sub-consultant tasks. Individual task orders include projects with specialized needs with wetland/riparian mitigation, restoration, biological and permit constraints, and landscape architecture. Lorraine has been working with the City on the preparation of environmental documents and permits for the appropriate environmental process.
- **East County Lakeside Sports Complex, Lakeside, California:** project manager responsible for the preparation of the environmental MND document as well as oversight manager for the review of the technical studies. Conceptual plans for the Lakeside Land Company portion to be acquired, so that the entire ballpark site is raised above the 100-year flood level of the San Diego River. Improvements would provide various ballfields, viewing areas, a clubhouse, locker/restroom facilities and 464 parking spaces, including a parking area/trailhead for the regional river trail located in the northeastern corner of the property.

Permitting

- **Regional General Permit 53, San Diego County, California:** primary project manager responsible for the preparation of an addendum to the MND and extensive coordination with the resource agencies for more than 1,080 facilities, including culverts, bridges, road side ditches, drainage channels and road dips, located throughout San Diego County.

Land Development

- **High Tech High – High & Middle Schools Environmental Technical Studies and Environmental Documents, Escondido, Chula Vista and San Marcos, California:** environmental analyst/project manager for technical report preparation and environmental documentation as part of the conditional development process. As part of this process, the City of Escondido, Chula Vista, and San Marcos has been scoped as a Mitigated Negative Declaration along with the technical studies to support the document.
- **Pala Mesa Environmental Impact Report EIR, San Diego County, California:** environmental analyst for preparing an EIR for this residential development located on 84.6 acres in the County of San Diego. The project proposes subdivision of the 84.6-acre site into 130 single-family residential lots with development on 48.1 acres and a natural open space lot to be dedicated to the County for preservation of sensitive biological resources and steep slopes, a neighborhood park lot, a pocket park lot and landscaped open space that will incorporate water quality facilities, and fuel management lot with drainage facilities.

Federal

- **Department of Interior, National Park Service, Everglades National Park, Florida:** biological technician for the resource management section of the South Florida Research Center. Project Leader conducting fire effects monitoring through field sampling and data analysis. Established research plots, conducted field surveys of plant populations. Performed skilled tasks in scientific data collection, analysis,

mapping and ground truthing. Compiled vegetation for analysis. Documented field work data from other park employees.

Industry

- **Duke Engineering-Environmental Laboratory, Westborough, Massachusetts:** senior technician providing nuclear instrumentation counting support on environmental and plant media for commercial nuclear power plants. Performed gamma isotopic analysis of environmental media. Performed and verified calibration measurements. Developed quality control charts in accordance with QA procedures. Conducted water analysis, *in situ* soil sampling, and *in situ* internal dosimetry support. Coordinated complete analytical database of laboratory samples for reporting results.

LYNE-MARIE BOUVET
Planner

Years of Experience
2.5 years (1.5 with WSP, 1 with others)

Education
B. Eng., Construction Engineering, École de Technologies Supérieure, Montréal, Canada, 2015;
B. Sc., Urban Planning, University of Montreal, Montreal, Canada, 2011

Professional Affiliations
Women's Transportation Seminar: Organization of the Annual Event

Key Qualifications
Lyne-Marie Bouvet is a planner with WSP with a diversified professional background in planning and civil engineering. Lyne-Marie is knowledgeable in preparing National Environmental Policy Act (NEPA) and California Environmental Quality Act (CEQA) environmental analysis for building and transit projects, GIS spatial analysis, transit planning, database control and optimization, project coordination, bridge engineering and quantity estimation. She has worked on numerous projects for public agencies and private clients in the United States and in Canada. Lyne-Marie can balance multiple projects and successfully executing them to exceed the client's expectations. She is familair with Microsoft Office, MS Project, ArcGIS, AutoCAD, Visual Basic and Advance Design America.

Relevant Experience

Transportation Planning
- California High-Speed Rail Project (CHSR), California: assisting the California High-Speed Rail Authority in evaluating the community benefits of the high-speed rail in the community within the alignment and in the vicinity of the stations. Tasks include GIS mapping for spatial analysis and for the comprehension of the site and research and analysis of the local plans (2016-ongoing).
- SR-85 Transit Vision, City of Cupertino, California: assisting with the research and analysis of the existing transit conditions along the SR-85 corridor and collaborated in the writing of the final vision. The project involves the identification and high-level analysis of public transit improvement options for Route 85 between its intersection with Route 87 to the south and Highway 101 to the north. (2016).
- West Contra Costa County High-Capacity Transit Investment Study, West Contra Costa Transportation Advisory Committee (WCCTAC): planner collaborating in the creation and improvement of the visual support for the Board Presentations. The purpose of the study is to evaluate the feasibility and effectiveness of improving high-capacity transit service on the I-80 corridor in West Contra Costa County that is a heavily traveled and extremely congested corridor in great needs of new transit and transportation options. (2016-ongoing).
- Alameda Countywide Transit Plan, Alameda County Transportation Commission (ACTC), Oakland, California: coordinating the creation of infographics and templates with the designer and ensure the quality of the final product. The Countywide Transit Plan consists in developing a regional consensus on a vision for future transit service. The objective was to better align transit, land use and economic development goals in the complex situation of Alameda County which features a mosaic of diverse travel markets served by an array of travel modes with a growing employment and population. Lyne-Marie also assist the project manager to prepare meeting agendas and minutes, progress reports and to coordinate the schedule for the final deliveries (2016).

Environmental Planning

- Lone Mountain Proposed Housing CEQA Documentation, University of San Francisco (USF), San Francisco, California: preparing and assisting with the management of the PMND that evaluates the construction of the Student Resident Hall on the USF property that will totalize approximately 237,000 square feet. Lyne-Marie is in charge of various sections of the PMND about socioeconomics, recreation, public services and land use (2016-on-going).
- Transbay Core Capacity Project, Bay Area Rapid Transit (BART), Oakland, California: preparing the Categorical Exclusion (CE) under NEPA to present to FTA. The Core Capacity Project aims to reduce the level of crowding currently experienced on the BART system and allow for continued ridership growth. The project is a comprehensive and coordinated program to increase capacity of BART, particularly in the Transbay Corridor between San Francisco and Oakland where the greatest train loadings occur. Tasks also include research and access to regional databases for the creation of GIS mapping for spatial analysis and the comprehension of the site project (2016).

Construction Services

- Central Subway, San Francisco Metropolitan Transportation Agency (SFMTA), San Francisco, California: technical support for the calculation of the quantities of the contract changes (PCC) according to drawings. The Central Subway consists of 1.7-mile extension of the Muni's light rail T-line in Downtown San Francisco. The contract includes the construction of the three downtown station (Yerba Buena-Moscone, Union Square-Market and Chinatown) and the tunneling. Tasks also include optimizing the information in order to track modifications to drawings for the preparation of the As-Built drawings.

Bridges

- Turcot Interchange, Quebec Ministry of Transportation, Montreal, Canada: structural design of overhead sign structure including shallow foundation and aluminum design. Turcot Interchange is the largest interchange in the province of Quebec (Canada) and one of the busiest in the country. Reaching the end of its useful life, the interchange is under construction under a Design Build method (3,7B$) and includes 4 interchanges, 90 miles of roadway and 12 miles of transit lanes. Tasks also include 3D modeling of aluminum structure according to limit state design, revision of structural drawings and optimization of Excel spreadsheets (2015).
- Rehabilitation of Piers and Structural bearing for Mercier Bridge, Jacques-Cartier and Champlain Bridge Incorporated, Montreal, Canada: (2014-2015): assisting with the preliminary analysis for the rehabilitation of Piers and structural bearings for Mercier Bridge, one of the major bridges crossing the St. Lawrence Seaway and leading to the island of Montreal. The contract includes the preliminary analysis (including the inspection of the bridge), the call-for-tender's documents, the drawings for the rehabilitation of the piers and the structural bearings of the bridge. Tasks also include developing a tool to manage the data of the field inspection, to estimate the cost of the rehabilitation and to work with the Manager for the control of the budget, scope and schedule and to collaborate in the revision of the standard tender documents with the Chief Engineer.

Previous Experience

Prior to joining WSP | Parsons Brinckerhoff, Mrs. Bouvet's experience with planning and construction included:

- Urban planning & environmental inspector, Canada: Redesigned the urban planning regulations and zoning plans. Received projects from property developers and citizens, analyzed their environmental impacts as well as their compliance with the city guidelines and suggest changes to ensure a win-win agreement. Inspected construction works and analyzed their compliance with the City urban planning regulation (2011-2012).

- École de technologie supérieure (ÉTS), Montréal, Canada: Teacher assistant who presented in front of 50 students solutions for problems in Fluid Mechanics and Thermodynamics. Provided one-on-one help with students during practical work session. Graded assignments and led discussion to give feedback on possible improvements, 2013.

Awards

- Scholarship recipient, Academic Performance from École de technologies supérieure, 2014.
- Scholarship recipient, Ordre des Urbanistes du Québec, 2011.
- Scholarship recipient, Prize of Excellence of the Urban Planning Institute of University of Montreal, 2011.

APPENDIX N: USER'S CONTINUING OBLIGATIONS

User's Continuing Obligations Under CERCLA

Conducting this ESA does not alone provide a landowner with protection against CERCLA liability. Landowners who want to maintain a Bona Fide Prospective Purchaser, an Innocent Landowner, or a Contiguous Property Owner Defense must also comply with other pre- and post-acquisition requirements in the CERCLA regulations and AAI standards. The responsibilities for each defense are summarized below.

Bona Fide Prospective Purchaser Responsibilities

The Bona Fide Prospective Purchaser defense is intended for individuals or entities purchasing a property known to be contaminated. To obtain and maintain the defense, the individual or entity seeking the defense must also satisfy the following requirements (AAI, Section II D. 1.):

- Have acquired a property after all disposal activities involving hazardous substances ceased at the property;
- Provide all legally required notices with respect to the discovery or release of any hazardous substances at the property;
- Exercise appropriate care by taking reasonable steps to stop continuing releases, prevent any threatened future releases, and prevent or limit human, environmental, or natural resources exposure to any previously released hazardous substance;
- Provide full cooperation, assistance, and access to persons authorized to conduct response actions or natural resource restorations;
- Comply with land use restrictions established or relied on in connection with a response action;
- Not impede the effectiveness or integrity of any institutional controls;
- Comply with any CERCLA request for information or administrative subpoena; and
- Not be potentially liable, or affiliated with any other person who is potentially liable for response costs for addressing releases at the property.

Innocent Landowner Responsibilities

The Innocent Landowner Defense protects individuals or entities (ultimately the "property owner") purchasing a property that is not known to be contaminated. The property owner must

also satisfy the following requirements to obtain and maintain the defense (AAI, Section II D. 3 and CERCLA Section 107(b)(3)):

- Have no reason to know that any hazardous substance which is the subject of a release or threatened release was disposed of on, in, or at the facility;
- Provide full cooperation, assistance and access to persons authorized to conduct response actions at the property;
- Comply with any land use restrictions and not impeding the effectiveness or integrity of any institutional controls;
- Take reasonable steps to stop continuing releases, prevent any threatened release, and prevent or limit human, environmental, or natural resource exposure to any hazardous substances released on or from the landowner's property;
- Demonstrate that the act or omission that caused the release or threat of release of hazardous substances and the resulting damages were caused by a third party with whom the person does not have employment, agency, or a contractual relationship;
- Exercise due care with respect to the hazardous substance concerned, taking into consideration the characteristics of such hazardous substance, in light of all relevant facts and circumstances;
- Take precautions against foreseeable acts or omissions of a third party and the consequences that could result from such acts or omissions.

Contiguous Property Owner Defenses

The Contiguous Property Owner Defense protects individuals or entities purchasing a property that is not known to be contaminated, but could be contaminated by migration from a contiguous property owned by someone else. To qualify as a contiguous property owner, a landowner must have no knowledge of contamination prior to acquisition and meet all of the criteria set forth in AAI Section II. D. 2. and CERCLA Section 107(q)(1)(A):

- Not cause, contribute, or consent to the release or threatened release;
- Not be potentially liable nor affiliated with any other person potentially liable for response costs at the property;

- Take reasonable steps to stop continuing releases, prevent any threatened release, and prevent or limit human, environmental, or natural resource exposure to any hazardous substances released on or from the landowner's property;
- Provide full cooperation, assistance, and access to persons authorized to conduct response actions or natural resource restorations;
- Comply with land use restrictions established or relied on in connection with a response action;
- Not impede the effectiveness or integrity of any institutional controls;
- Comply with any CERCLA request for information or administrative subpoena;
- Provide all legally required notices with respect to discovery or release of any hazardous substances at the property.

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Appendix L: Waste Water Data Letter

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List Engineering
Mechanical Consultants

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Suite 203
Monterey, CA 93940
831-373-4390
www.listengineering.com

November 07, 2017

Re. Palo Alto Parking Garage
Estimate of Wastewater

Dear Lyne-Marie Bouvet;

The following information was taken from the Los Angeles wastewater design flow rates (2016) (ISA NCAC 02H 0105) estimates of wastewater for different structures:

Wastewater flow calculations must take hours of operations and anticipated maximum occupancies/usage into account when calculating peak flow.

Type of establishments	Daily Flow for Design
Warehouse & Parking Garages	25 gpm per 1000 square feet
Retail/Offices	100 gpm per 1000 square feet
Convenience stores w/o food preparation	250 gallon/plumbing fixture

Assumed Palo Alto Loads	Sub Totals
Garage total parking square feet 143,000 square feet 143,000/1000 = 143 x 25 gpm = 3073 gallons/day	3,575 gallons/day
Six (6) retail spaces at maximum of 3000 sq. ft./ space 18000 sq. ft./1000 =18 x 100 = 1800 gallons/ day	1800 gallons/day
	Say 5500 gallons/day

We will be able to refine this more when we are into the design phase of the project. Please let me know if you need additional information.

Sincerely

Jack Boureston
List Engineering Company

CC:
Gordon Knowles Architect

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