Historic Resources Board
Staff Report

From: Jonathan Lait, Planning and Development Services Director
Lead Department: Planning and Development Services

Meeting Date: June 8, 2023
Report #: 2304-1319

TITLE
Study Session to Review the Draft North Ventura Coordinated Area Plan

RECOMMENDATION
Staff recommends that the Historic Resources Board (HRB) conduct a Study Session to review the draft North Ventura Coordinated Area Plan (NVCAP) as it relates to historic resources. There is no requirement for the HRB to formally recommend Council adoption of the NVCAP.

EXECUTIVE SUMMARY
The draft NVCAP summarized in this report represents a major milestone in the preparation of the NVCAP (Attachment A).[1] The draft is a culmination of extensive community outreach, input from decision-makers and stakeholders throughout multiple public hearings on the alternatives, and the refinement of the Council endorsed preferred alternative by consultants and staff.

This report focuses the discussion on the aspects of the NVCAP that pertain to eligible historic resources, such as the building at 340 Portage that originally housed the Bayside Cannery and the associated 3201-3225 Ash Street office building. The primary objective of this study session is to receive feedback on the draft NVCAP as it relates to historic resources. For a more detailed review of the entire draft NVCAP, see the Planning & Transportation Commission (PTC) staff report for May 31, 2023.[2]

BACKGROUND
The NVCAP project started in November 2017 via an adopted resolution by the City Council. Subsequently, the City Council approved goals and objectives for the project (Attachment B). The NVCAP is a direct outcome of the 2030 Comprehensive Plan (Program L-4.10.1) adopted in November 2017 and the process to develop the plan is governed by Palo Alto Municipal Code

[1] Draft NVCAP, May 2023 (Without Appendices): https://www.cityofpaloalto.org/files/assets/public/planning-amp-development-services/north-ventura-cap/230511_nvcap_completedraft.pdf
[2] 5/31/2023 PTC Staff Report: https://www.cityofpaloalto.org/Departments/Planning-Development-Services/Planning-and-Transportation-Commission-PTC/Current-PTC-Agendas-Minutes

(PAMC) Chapter 19.10. Additional background information about the project, including prior reports and public meeting information can be found at the project website.[3]

Recent Board and Commission Study Sessions

On May 31, 2023, the PTC conducted a study session on the NVCAP. The video of the PTC meeting is viewable at the below link[4]. The PTC comments included some concerns about building height, specifying use of the small office spaces to encourage neighborhood serving uses, the grid streets cut-through traffic and calming, specifying percentages of mixed uses, economic feasibility information and effect of state law AB2097 on parking. Specific to building height, there was general concern about the 33-feet additive height for 100% affordable housing and the PTC suggested there is a need for diagrams showing the use of the daylight plane to create stepped building design.

On June 1, 2023, the Architectural Review Board (ARB) conducted a study session on the NVCAP. The video of the ARB meeting will be viewable at the below link[5]. The ARB comments included concerns about building height and transitions to lower density residential; ensuring consistency of text and graphics within the plan; ensuring that where applicable include essential information, otherwise refer to other master plan documents or municipal code; and providing greater detail on sustainability elements such as green roofs and permeable pavement.

Project Site

The approximately 60-acre NVCAP project area is roughly bounded by Page Mill Road, El Camino Real, Lambert Avenue, and the Caltrain tracks and represents a rare opportunity within the City to plan proactively for a transit-oriented mixed-use neighborhood. The project area includes one of the City's largest housing opportunity sites, currently occupied by the cannery building. The plan area is developed with a mix of small and large businesses, mixed-use buildings and single-family residences. Attachment C is a location map of the plan area.

Historic Resource Evaluation

As part of the initial assessment of the NVCAP project area, staff retained Page and Turnbull to prepare an evaluation of the project area for potential historic resources.[6] There are no properties located within the project boundary that are listed in the City of Palo Alto Historic Inventory, the National Register of Historic Places (National Register), or the California Register of Historic Resources (California Register), nor are there any recorded historic districts. Prior to the preparation of the Historic Resource Evaluation (HRE), there were no records found of any

[3] NVCAP Project Website: https://www.cityofpaloalto.org/Departments/Planning-Development-Services/Long-Range-Planning/NVCAP

[4] Link to the PTC May 31, 2023 meeting video: https://www.cityofpaloalto.org/Departments/Planning-Development-Services/Planning-and-Transportation-Commission-PTC/Current-PTC-Agendas-Minutes

[5] Link to the ARB June 1, 2023 meeting video: https://www.cityofpaloalto.org/Departments/Planning-Development-Services/Architectural-Review-Board-ARB/Current-ARB-Agendas-Minutes

[6] NVCAP Windshield Survey and Preliminary Historic Resource Eligibility Analysis (2019): https://cityofpaloalto.org//files/assets/public/planning-amp-development-services/north-ventura-cap/nvcap-reports/nvcap-historic-reports-preliminary-historic-resource-eligibility-analysis.pdf

properties identified as an eligible historic resource.[7] Out of the entire 60-acre area, only 340 Portage Avenue (cannery) and the associated office building at 3201-3225 Ash Street have been found to be eligible historic resources, as further described in the HRE. The HRE was presented to the HRB on July 25, 2019[8] and included with the HRB May 25, 2023 packet for the HRB's review of the 14.5-acre Sobrato development project at 200-404 Portage Avenue, 3040-3250 Park Boulevard, 3201-3225 Ash Street and 278 Lambert located within the NVCAP boundary. Links[9] to the May 25, 2023 HRB staff report and video of the meeting are provided below.

Pipeline Development Projects

In the fall of 2022, the property owner (Sobrato) of the former Bayside Cannery building and office building currently eligible for listing on the California Register of Historical Resources (340 Portage Avenue and 3201-3225 Ash Street) submitted a development proposal. The proposal includes the retention of the Ash Street building and partial demolition of the cannery building to accommodate new residential dwellings and the renovation of the remaining cannery building for commercial use. The HRB discussed the Sobrato project during its public hearing on January 12, 2023[10] and again at a second hearing on May 25, 2023, as noted above. The project is considered a pipeline development project and not subject to the NVCAP policies and guidelines since the NVCAP is not yet adopted. Staff anticipates the Sobrato project would be considered by the City Council this year. Projects within the NVCAP area submitted after its adoption would be subject to the NVCAP.

Process, Findings & Purview

Development of the coordinated area plan followed the process contained within PAMC 19.10, Coordinated Area Plans. This chapter provides detail on the initiation, the process procedures, including the creation of goals and objectives; community involvement (the formation of a working group); public hearings, and adoption. The HRB is identified as a hearing body that will provide input on the draft NVCAP. The PTC will make a recommendation on the draft NVCAP to the City Council for their consideration of the plan.

ANALYSIS

This section provides a high-level summary of the NVCAP document, and an overview of historic designation action included in the NVCAP.

NVCAP Summary

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[7] 340 Portage Avenue Historic Resource Evaluation (2019): https://cityofpaloalto.org//files/assets/public/planning-amp-development-services/north-ventura-cap/nvcap-reports/nvcap-historic-reports-340-portage-evaluation.pdf

[8] Historic Resources Board Staff Report July 25, 2019: https://www.cityofpaloalto.org/civicax/filebank/blobdload.aspx?BlobID=72490

[9] Links to the May 25, 2023 HRB report and video of the Sobrato development project: https://www.cityofpaloalto.org/files/assets/public/agendas-minutes-reports/agendas-minutes/historic-resources-board/2023/hrb-5.25-3200-park.pdf and https://midpenmedia.org/historic-resources-board-46-5252023/

[10] Historic Resources Board Staff Report January 12, 2023: https://www.cityofpaloalto.org/files/assets/public/agendas-minutes-reports/agendas-minutes/historic-resources-board/2023/hrb-1.12-3200-park.pdf

The NVCAP represents a rare opportunity within the City of Palo Alto to plan proactively for a transit-oriented, mixed-use, mixed-income, and walkable neighborhood. The NVCAP sets forth a vision that:

- Honors the storied history and unique character of the North Ventura neighborhood
- Understands the needs of current residents and puts forward near-term solutions to current challenges
- Establishes a long-term framework for desired growth so that more people can call North Ventura home
- Invests in community infrastructure to support an equitable, resilient, and sustainable Palo Alto.

NVCAP is aligned with the goals and policies embedded in the adopted City of Palo Alto 2030 Comprehensive Plan, addressing the eight major themes: Building Community and Neighborhoods; Maintaining and Enhancing Community Character; Reducing Reliance on the Automobile; Meeting Housing Supply Challenges; Protecting and Sustaining the Natural Environment; Keeping Palo Alto Prepared for Future Natural and Human-Caused Hazards; Meeting Residential and Commercial Needs; and Providing Responsive Governance and Regional Leadership. Each chapter touches on these themes leading to a cohesive vision.

Finally, this is a vision shaped by the Palo Alto community. This plan would not be possible without the guidance of stakeholders, decision-makers, residents, and other community members, who graciously volunteered their time as members of the Working Group to thoughtfully consider the challenges and opportunities of the Plan.

The following summarizes the contents of the NVCAP:

- *Chapter 1: Introduction* provides an overview of the NVCAP physical and regulatory context. The plan is shaped by the project goals and objectives, adopted and in-progress City plans and policies, recently enacted regional and state laws, and the comprehensive community planning process.

- *Chapter 2: The Vision* provides an overview of the vision for the future of NVCAP built and natural environment. This includes urban design frameworks that calibrate the optimal mix of uses; support a multi-modal mobility framework within the neighborhood and how it connects to the rest of the city and the region; foster a regenerative and ecological framework to support the health of humans and wildlife while supporting the implementation of City's Climate Action Plan; and the neighborhood's context-specific urban form.

- *Design Standards and Guidelines* include requirements that govern the construction and modification of the public realm including streets and open space, as well as new buildings. Standards are quantifiable, whereas guidelines are qualitative requirements.

- *Chapter 3: Public Realm* includes requirements and guidelines that govern the construction and modifications of the public realm including the sidewalk zone, traffic lanes and intersections, green infrastructure, paving, exterior lighting, wayfinding, and public art.

- *Chapter 4: Streets* includes the requirements and guidelines that govern improvements adjacent and within Park Boulevard, Olive Avenue, Ash Street, Acacia Avenue, Pepper Avenue, Portage Avenue, Lambert Avenue, and Page Mill Road. In addition to public streets, this chapter discusses publicly accessible private streets.

- *Chapter 5: Parks* includes the requirements and guidelines that govern improvements within park and open space areas such as Matadero Creek and the future public park.

- *Chapter 6: Buildings* provides guidance on desired future built form and sets aspirations for how new buildings will contribute to the character of the NVCAP as it develops incrementally over time. This chapter discusses building heights and massing, retail and active frontage, Portage Avenue frontage, residential frontage and sustainable design.

- *Chapter 7: Implementation* outlines the necessary steps to fulfill the vision of the plan, including funding, financing strategies, infrastructure improvements, and capital investments. This chapter will include the necessary steps for property owners considering improvements on their property.

- *Appendix* includes information for reference used to prepare the NVCAP, including existing site conditions, market studies, and infrastructure analysis.

340 Portage - Historic Structures

The draft NVCAP includes policies and implementation actions to facilitate the vision for the former Bayside Cannery building (340 Portage) and Ash Street office building (3201-3225 Ash). Staff seeks feedback from the HRB on these policies and implementation actions that affect historic resources. Within the Introduction chapter (pages 14-15), there is a spotlight on the cannery, providing background information and photographs. The draft NVCAP contains policies and guidelines that acknowledge the importance of the cannery and the Ash Street office building.

The draft NVCAP maintains the cannery building and Ash Street office building and allows for two possible uses of the cannery:

1) Continued use as retail and office space; or
2) Adaptive re-use into housing (noting that a transition to housing is a long-term vision and converting a cannery building into residential use would be highly problematic at best).

The NVCAP also permits the construction of housing on remaining portions of the parcel, specifically the two remaining surface parking lots on the property. According to the NVCAP vision, the Ash Street building could become a "creative arts" space in the long-term. The NVCAP proposes that a portion of the southern parking lot become a public park along a re-naturalized Matadero Creek.

The plan indicates that any adaptive re-use project would be consistent with the *Secretary of Interior Standards for Treatment of Historic Properties*, though additional analysis would be required to determine whether compliance with the *Secretary of the Interior's Standards* is feasible, depending on the proposed use.

Additionally, the NVCAP includes the following guidelines pertaining to the cannery building:

- Design of wayfinding signage would take cues from the design of the cannery (Guideline 3.6.4).
- Any development within the cannery building footprint would be no taller than the existing monitor roof (Guideline 6.1.5).
- Development along Portage Avenue adjacent to the Cannery should emulate the Cannery by taking cues from materiality and fenestration, and roof datum (Guideline 6.3.2).

Historic Designation

The Council expressed interest in exploring the possibility of placing the cannery and the Ash Street office building on the City's historic inventory or pursing listing on the California Register of Historical Resources or National Register of Historic Places given the HRE found these eligible for such listing. The following NVCAP implementation action addresses the Council's direction:

- Explore within the first year after adoption of the NVCAP, the initiation of California or National Register and/or local Inventory as appropriate/as determined by Council for the cannery and the Ash Street office building.

This implementation action could lead to the nomination and placement of the cannery and/or the Ash Street building on the Palo Alto Historic Inventory by Council action, or (if eligible at the time of nomination) nomination to the California or National Register (requiring the owner's agreement and participation). The actions could occur regardless of the property owner's pipeline project.

Recommended Additions

To reinforce these guidelines, staff seeks confirmation from the HRB to add a sub-section within Chapter 2 regarding historic resources, to consolidate vision statements describing potential adaptive re-use of the cannery and historic resource designation recommendations. This will make clear the intent of the NVCAP regarding historic resources.

STAKEHOLDER ENGAGEMENT

Consistent with PAMC 19.10, the City Council appointed a 14-member working group. The working group met 17 times over the course of two years and concluded their effort once alternatives were forwarded to the PTC and City Council for consideration. Notifications throughout the process have been sent to the working group, stakeholders, and property owners. The City maintains a project website with archives of working group, workshops and public hearing materials related to the NVCAP.

ENVIRONMENTAL REVIEW

This study session does not trigger any California Environmental Quality Act (CEQA) determination. However, the adoption of the NVCAP will require a Supplemental Environmental Impact Report (EIR) that tiers from the Comprehensive Plan EIR.

Consistent with CEQA, a Notice of Preparation (NOP) was released on March 1, 2023.[11] The NOP is the initial step in the EIR process where input may be gathered from the public and public agencies on the scope and content of the forthcoming Supplemental EIR. The NOP contains the project description, location, and probable environmental effects to be analyzed in the EIR. The comment period on the NOP ended on March 31, 2023. The next step in the environmental review process is to release a public draft of the Supplemental EIR for public comment for a period of 45-days. Any comment on the EIR requiring responses will be integrated into the Final Supplemental EIR for certification by the City Council when considering the NVCAP.

NEXT STEPS

The NVCAP is entering the final phase of the project. The next series of meetings include the additional follow-up study sessions, a PTC recommendation meeting and the City Council decision meeting.

ATTACHMENTS

Attachment A: Public Draft NVCAP May 2023 (Without Appendices)

Attachment B: Council Adopted Goals & Objectives

Attachment C: Location Map

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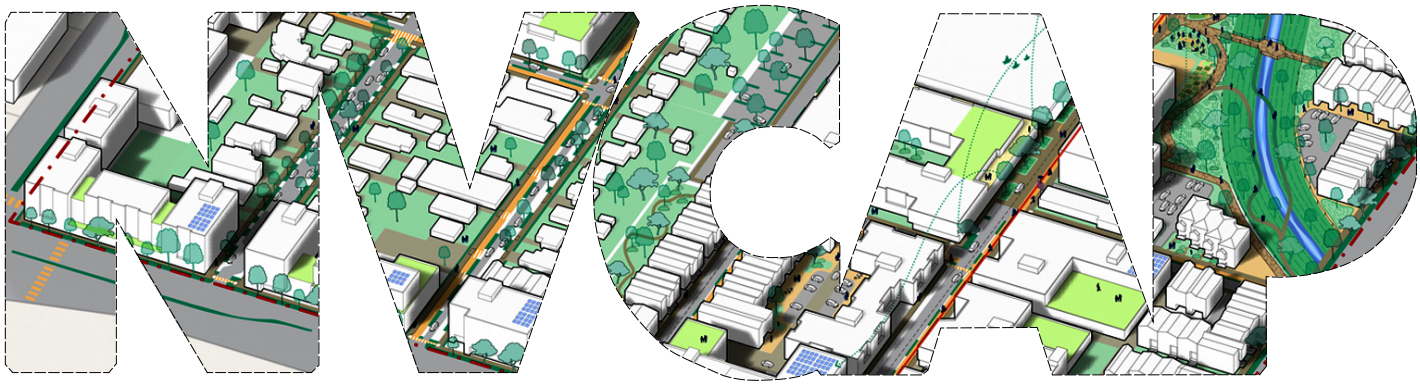
Sheldon Ah Sing, Principal Planner

[11] NVCAP Notice of Preparation (March 2023): https://www.cityofpaloalto.org/files/assets/public/planning-amp-development-services/north-ventura-cap/environmental/nop-nvcap-2.28.23-signed.pdf



North Ventura Coordinated Area Plan

Draft Plan: May 2023

CITY OF PALO ALTO

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CHAPTER 1: INTRODUCTION

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Figure 1 *Photograph of architect Mike Lyzwa holding a model of a proposed building at the intersection of Page Mill Road and Park Boulevard, circa 1984.*

Executive Summary

The North Ventura Coordinated Area Plan (NVCAP) represents a rare opportunity within the City of Palo Alto to plan proactively for a transit-oriented, mixed-use, mixed-income, and walkable neighborhood. The NVCAP sets forth a vision that:

- Honors the storied history and unique character of the North Ventura neighborhood;
- Understands the needs of current residents and puts forward near-term solutions to current challenges;
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Finally, this is a vision shaped by the Palo Alto community. This Plan would not be possible without the guidance of stakeholders, decision-makers, residents, and other community members, who graciously volunteered their time as members of the Working Group to thoughtfully consider the challenges and opportunities of the Plan.

Plan Organization

The plan document is organized as follows:

Introduction provides an overview of the NVCAP physical and regulatory context. The Plan is shaped by the project goals and objectives, adopted and in-progress City plans and policies, recently enacted regional and state laws, and the comprehensive community planning process.

The Vision provides an overview of the vision for the future of NVCAP built and natural environment. This includes urban design frameworks that calibrate the optimal mix of uses; support a multi-modal mobility framework within the neighborhood and how it connects to the rest of the city and the region; foster a regenerative and ecological framework to support the health of humans and wildlife while supporting the implementation of City's Climate Action Plan; and the neighborhood's context-specific urban form.

Design Standards and Guidelines (Public Realm, Streets, Parks, Buildings) include requirements that govern the construction and modification of horizontal and vertical development, standards are quantifiable, whereas guidelines are qualitative requirements.

Implementation outlines the necessary steps to fulfill the vision of the Plan, including funding and financing strategies, infrastructure improvements, and capital investments.

Appendix contains information for reference used to generate the NVCAP including existing site conditions, market studies, and infrastructure analysis.

Figure 2 *Photograph of the Cannery monitor roof supergraphic on the former Fry's site, 2022*

Credit: Perkins&Will

1

Introduction

Figure 3 *Bird's eye photograph of the NVCAP Plan Area circa 1957.*


Stanford Industrial Park
Plant
El Camino Real
Southern Pacific Railroad
Park Boulevard
N

1.0

The Context

The purpose of the NVCAP is to capture the City's vision for the North Ventura neighborhood into a regulatory document that will guide the future development of the 60-acre Plan Area, including land use, development standards, and design guidelines

This planning effort was initiated by Palo Alto Comprehensive Plan Program L-4.10, which states the following,

> ***Prepare a Coordinated Area Plan for the North Ventura area and surrounding California Avenue area. The Plan should describe a vision for the future of the North Ventura area as a walkable neighborhood with multi-family housing, ground-floor retail, a public park, creek improvements, and an interconnected street grid. It should guide the development of the California Avenue area as a well-designed mixed-use district with diverse land uses and a network of pedestrian-oriented streets.***

The NVCAP aligns with the Comprehensive Plan policy, however, the Plan Area focuses solely on the North Ventura neighborhood.

On November 6, 2017, the City Council adopted Resolution 9717, authorizing the filing of an application to the Metropolitan Transportation Commission for a Priority Development Area Grant for the North Ventura Coordinated Area Plan. The Council expressed local support and commitment of necessary matching funds and assurance of the completion of the project.

City Policies

Comprehensive Plan Policy 1.7: Use coordinated area plan to guide development

Comprehensive Plan (Program L-4.10.1): Prepare a coordinated area plan for the North Ventura area and surrounding California Avenue area.

On November 6, 2017, the City Council adopted a Resolution expressing local support and commitment for the preparation of the NVCAP.

The Region

The Bay Area is expected to be home to an additional 1.4 million households by 2050. It is essential that housing, transportation, and other types of land use ning work together – as part of a regional growth framework – create an equitable, prosperous future for all Bay Area communities and make the best use of available resources. Priority Development Areas (PDA) are a key piece of the Bay Area's regional growth framework.

Approximately 70% of the Plan Area is located within the California Avenue PDA, which was selected as a PDA based on excellent access to transit, the proximity of the existing California Avenue Business District, and the availability of underutilized parcels of land.

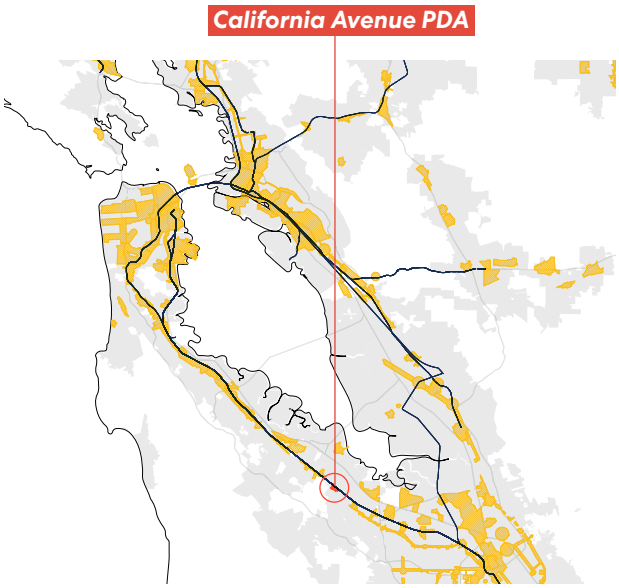


Figure 4 *Priority Development Areas (PDA) in the Bay Area*

Palo Alto Growth Projections

Additionally, the City of Palo Alto is growing. According to the City's Housing Element Update, the total population is projected to grow to 82,835 people by 2030 and 86,510 people by 2040.

Historically, the number of new homes built in the Bay Area has not kept pace with demand, resulting in longer commutes, increasing prices, and exacerbating issues of displacement and homelessness. The number of new homes in Palo Alto increased 3.8 percent from 2010 to 2020, which is below the growth rate for Santa Clara County and below the growth rate of the region's housing stock during this time period. At the same time, Palo Alto's population increased 6 percent.

Year	Population	Numerical Change	Percent Change
1980	55,225	741	1%
1990	55,900	675	1%
2000	58,598	2,698	5%
2010	64,403	5,805	10%
2020	68,145	3,254	6%
2030*	82,835*	15,178*	22%*
2040*	86,510*	3,675*	4%*

** Projections*

Sources: U.S. Census 1980, 1990, 2000, 2010, California Department of Finance 2021 and ABAG Plan Bay Area 2040 Projections

Table 1 *Historical Population and Growth in Palo Alto, 1980 - 2040*

1.1

The Plan Area

The NVCAP Plan Area is approximately 60 acres, roughly bounded by Oregon Expressway / Page Mill Road to the north, El Camino Real to the west, Lambert Avenue to the south, and the Caltrain rail corridor to the east. Nearby neighborhoods include the Evergreen neighborhood to the west, the Midtown neighborhood to the north, and Barron Park to the south.

Proximity to City Destinations

The Plan Area is within walking and biking distance to several key destinations, including:

- The California Avenue Caltrain Station, which is within a half mile of the Plan Area, and walking access to the station is primarily along Park Boulevard, a designated Bike Boulevard,
- El Camino Real, which is a regional commercial and retail corridor, but has limited opportunities for pedestrians and bicyclists to cross Page Mill Road safely.
- California Avenue, which is a regional retail attraction and social destination for the peninsula.
- Stanford University, one of the premier higher-education institutions in the world
- Stanford Research Park. A University affiliated employment center, which, along with California Avenue accounts for almost 40% of the City's employment distribution.
- Signature Palo Alto open spaces such as Sarah Wallis Park, Boulware Park, and J. Bowden Park.

Plan Area Notable Sites

Notable sites within the Plan Area include the Matadero Creek Channel and the buildings associated with the Cannery.

The portion of the Matadero Creek running through the Plan Area is contained with a concrete trapezoidal channel, which was built in 1990 from El Camino Real to the Caltrain Tracks.

Figure 5 *The Matadero Creek Channel is currently a constrained concrete trapezoidal channel.*

Figure 6 *Th[illegible]es an[illegible]*

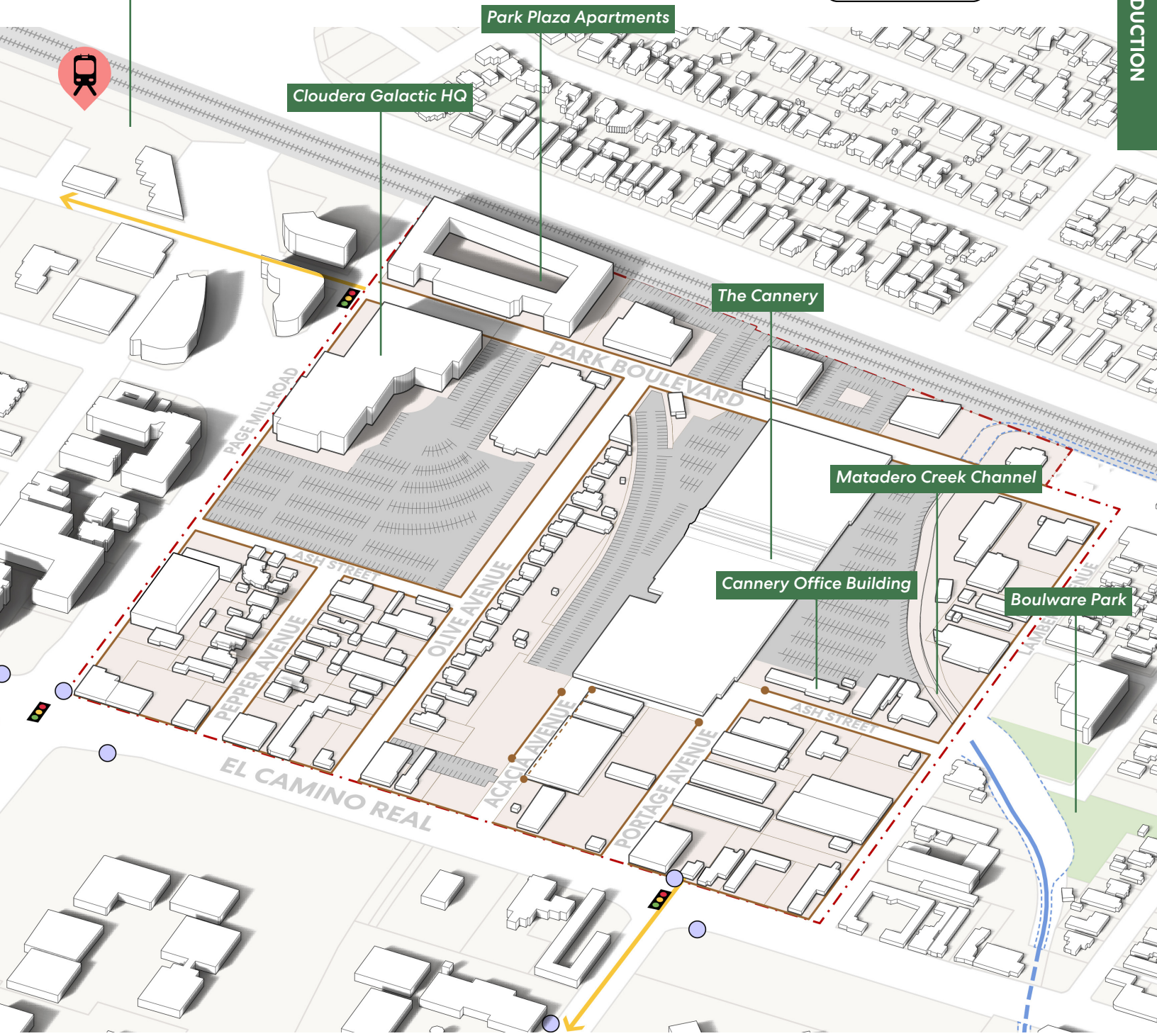


Figure 7 *Existing Conditions of the NVCAP Plan Area*

Land Use and Zoning

The North Ventura neighborhood is already made up of a mix of multi-family and single-family residential, office, service, and retail. Service commercial uses are concentrated along El Camino Real, Lambert Avenue, and the southern segment of Portage Avenue. Additionally, office uses are located primarily along Page Mill Road and Park Boulevard, the most notable anchors being the Cloudera Galactic Headquarters at 395 Page Mill Road and the newly constructed 3045 Park Boulevard. Several smaller companies such as Blue Sky Outdoors and EarnIn are currently located in the historic Cannery building.

About 70% of units in North Ventura are single-family detached homes, most built before 1950. Single-family homes occupy about 10 percent of the Plan Area and are generally found along Pepper Avenue and Olive Avenue. The Park Plaza Apartments is the most notable multi-family residential development within the Plan Area, situated at the corner of Park Boulevard and Page Mill Road.

Zoning Map Designation	District Name
R-1	Single-family residence district
RM-30	Medium density multiple-family residence district
CS	Service commercial district
ROLM	Research, office and limited manufacturing district
GM	General manufacturing district
CN	Neighborhood commercial
GM	General manufacturing
PC	Planned community district

Table 2 *Existing Zoning Designations*

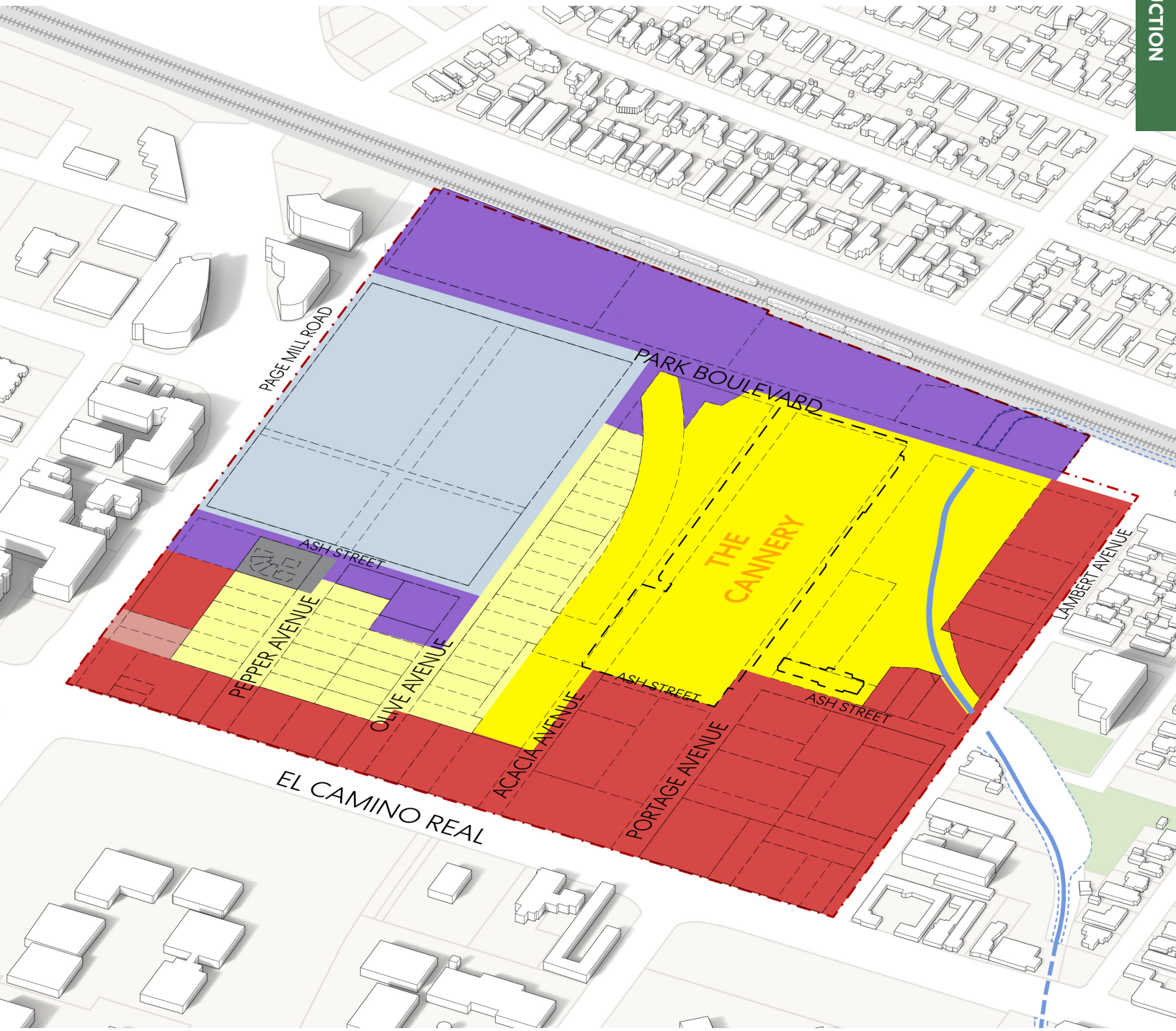


Figure 8 *Existing Zoning Districts of the NVCAP*

Recent and Pipeline Development

The Plan Area is experiencing significant change and new investment in mixed-use development. This includes the following development:

Completed

Figure 9 *Photographs of recent development*

425 Page Mill Road: a three-story mixed use building with one level of underground parking. The project includes Class-A office space, ground floor retail, and 16 apartments.

3045 Park Boulevard: a two-story shell commercial building with underground parking.

Under Construction

Figure 10 *Renderings of development under construction*

3225 El Camino Real: the project consists of two distinct mixed-use buildings. The first building is 4 stories with ground floor retail and apartments/ condos on the upper floors. The second building is 2 stories with ground floor retail and office on the upper floor. The project includes underground and podium parking.

3265 El Camino Real: a three-story mixed-use building with commercial space on the ground floor and residential on the upper floors.

The 340 Portage Avenue Development Agreement

In parallel to the NVCAP planning process, a development agreement for the combined 14.65-acre parcel at the 340 Portage site also known as the Fry's site has been underway with the City. The proposed development agreement includes the following:

- Demolition of a portion of the Cannery building to develop 74 ownership townhouses.
- Adaptive reuse of the historic portion of the Cannery to include research & development (R&D) and 2,600 square feet of retail.
- The Ash Building will remain office space.
- The 3250 Park Boulevard (Audi Building) will go from auto repair service to R&D space.
- The developer will construct one level garage for R&D and retail parking needs on the existing surface parking lot.
- Dedication of 2.25 acres for parkland.
- Dedication of one (1) acre for affordable housing.
- Contribution of $5 million for future park improvements and contributions to the City's affordable housing fund.
- Development of a Transportation Demand Management (TDM) program for the R&D and office uses.

It is not the intent of the development agreement to replace the NVCAP goals and objectives. The development agreement and development proposal are considered as a pipeline project being processed prior to the adoption of the NVCAP. Every attempt to ensure compatibility with the NVCAP goals, objectives and preferred plan were made.

Spotlight:
The Palo Alto Cannery

At the heart of the NVCAP is the 12.5-acre 340 Portage Avenue property. What appears to be one large building on the parcel is composed of approximately ten buildings that were constructed at various times between 1918 and 1949. The building is surrounded by a narrow parking lot to the north and a larger parking lot to the south bounded by Matadero Creek. The rectangular former cannery building features walls that are concrete, corrugated metal or wood siding, with a variety of roof shapes.

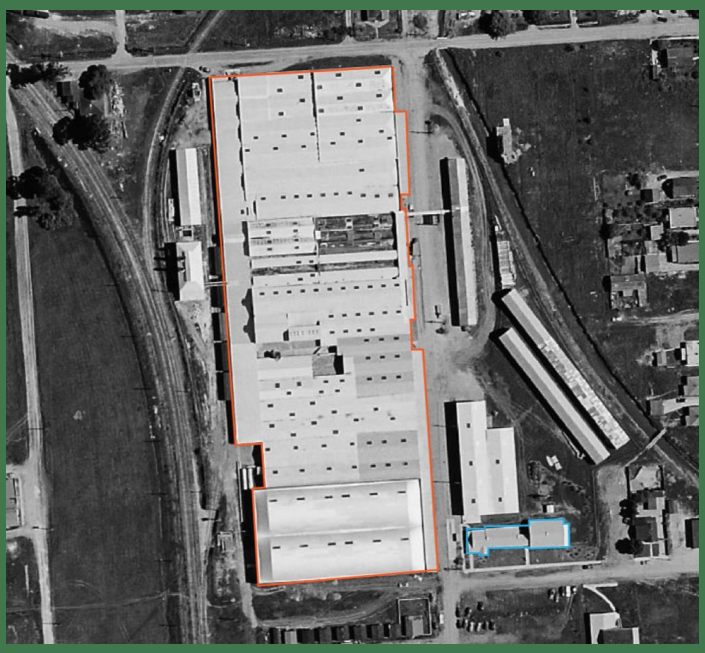


Figure 11 *1941 aerial photograph of the Sutter Packing Company. Source: Fairchild Aerial Surveys, Flight C-7065, Frame 92, Collection of UC Santa Barbara. Edited by Page & Turnbull.*

Some of the most distinctive features include the monitor roofs, capped with composition shingles and clad with corrugated metal, wood clerestory ribbon windows and wire glass skylights.

Figure 12 *Gabled addition attached to the southernmost monitor roof of 340 Portage Avenue. View northeast. Source: Page & Turnbull*

On the parcel is a one-story, wood frame office building on Ash Street located to the south of the former cannery building. The building appears to have been initially built as a dormitory for the cannery employees sometime between 1918 and 1925 and was moved to its current location in 1940. The building features a front-gabled roof, wraparound porch with a shed roof, and wood lap siding.

Figure 13 *A portion of the southwest facade of the former office building. Source: Page & Turnbull*

The former cannery site was initially developed in April 1918, by Thomas Foon Chew, the owner of Bayside Canning Company or affectionately known in the press at the time as "the asparagus king". This was intended to be Mr. Chew's second cannery; the first cannery was built nearby in Alviso, California. The Palo Alto cannery was strategically located alongside a railroad spur of the Southern Pacific Railroad's Los Gatos branch, which facilitated shipments, and Matadero Creek for a ready water supply.

Figure 14 *Thomas Foon Chew with two foremen at his canning plant in Alviso. Source: Our Town of Palo Alto.*

The cannery was expanded over the next several decades. The site operated as the Bay Side Cannery and then as the Sutter Packing Company in 1929. The cannery continued to grow through World War II and was closed in 1949.

Although the building has undergone some exterior alterations throughout the expansion, aerial photos show that from 1965, the building continues to have the same shape and general form as now. Following the closure of the cannery, the site has been occupied by an anchor retailer Maximart and other retail and office uses. The next significant and largest tenant, Fry's Electronics, continued to occupy the site until the end of 2019.

Figure 15 *Sutter Packing Plant, 1940. Source: Palo Alto Historical Association*

1.2

Project Goals

On March 5th, 2018, the City Council approved the following goals to guide the NVCAP. A project goal refers to the desired outcome of a project. The following goals are high-level statements that provide an overall context for the aims and accomplishments of the project.

Housing and Land Use

Add to the City's supply of multi-family housing, including market rate, affordable, "missing middle" and senior housing in a walkable, mixed-use, transit-accessible neighborhood, with retail and commercial services, open space, and possibly arts and entertainment uses.

Transit, Pedestrian, and Bicycle Connections

Create and enhance well-defined connections to transit, pedestrian, and bicycle facilities, including connections to the Caltrain Station, Park Boulevard, and El Camino Real.

Connected Street Grid

Create a connected street grid, filling in sidewalk gaps and street connections to California Avenue, the Caltrain Station, and El Camino Real where appropriate.

Community Facilities and Infrastructure

Carefully align and integrate development of new community facilities and infrastructure with private development, recognizing both the community's needs and that such investments can increase the cost of housing.

Balance of Community Interests

Balance community-wide objectives with the interests of neighborhood residents and minimize displacement of existing residents.

Urban Design, Design Guidelines, and Neighborhood Fabric

Develop human-scale urban design strategies, and design guidelines that strengthen and support the neighborhood fabric. Infill development will respect the scale and character of the surrounding residential neighborhood.

Sustainability and the Environment

Protect and enhance the environment, while addressing the principles of sustainability.

Throughout the document, applicable project goals are included in insets.

Figure 16 *(left) An illustrative example of low-cost buffered bike lanes and intersection improvements.*

Figure 17 *(top) Building 0 in San Francisco, CA, an example of mixed-i to a public park.*

1.3

Project Objectives

On March 5th, 2018, the City Council approved the following objectives to guide the NVCAP. Project objectives describe the optimal process and set the goalposts for a successful plan. Project objectives are measurable and achievable.

Data-Driven Approach

Employ a data-driven approach that considers community desires, market conditions and forecasts, financial feasibility, existing uses and development patterns, development capacity, traffic and travel patterns, historic/cultural and natural resources, need for community facilities (e.g., schools), and other relevant data to inform plan policies.

Guide and Strategy for Staff and Decision Makers

Provide a guide and strategy for staff and decision-makers to bridge the gap between the goals and policies of the Comprehensive Plan and individual development projects in order to streamline future land use and transportation decisions.

Comprehensive User-Friendly Document and Implementation

Create a comprehensive but user-friendly document that identifies the distribution, location and extent of land uses, planning policies, development regulations, and design guidelines to enable development and needed infrastructure investments in the project area.

Meaningful Community Engagement

Enable a process with meaningful opportunities for community engagement, within the defined timeline, and an outcome (the coordinated area plan document) that reflects the community's priorities.

Economic Feasibility

A determination of the economic and fiscal feasibility of the plan with specific analysis of marketplace factors and incentives and disincentives, as well as a cost-benefit analysis of public infrastructure investments and projected economic benefits to the City and community.

Environmental

A plan that is protective of public health and a process that complies with the requirements of the California Environmental Quality Act.

Figure 18 *(left) A breakout discussion during the NVCAP working group meeting.*

Figure 19 *(top) Documenting feedback during a working group design*

1.4

Citywide Planning

The standards and guidelines in this document are informed and in conformance with the following foundational city plans and policies.

2030 Comprehensive Plan

The City adopted the 2030 Comprehensive Plan in November 2017, which is the primary tool for guiding preservation and development in Palo Alto. The Plan reflects community values and provides a collective vision that guides preservation, growth, and change. The Plan Area is a part of the California Avenue Multi-Neighborhood Center. A multi-neighborhood center is defined as retail shopping centers or districts that serves more than one neighborhood with a diverse mix of uses, including retail, service, office, and residential. Program L4.10.1 directs staff to prepare a coordinated area plan for the North Ventura area and surrounding California Avenue area. The plan should describe a vision for the future of the North Ventura area as a walkable neighborhood with multi-family housing, ground-floor retail, a public park, creek improvements, and an interconnected street grid. It should guide the development of the California Avenue area as a well-designed mixed-use district with diverse land uses and a network of pedestrian-oriented streets.

Bicycle and Pedestrian Transportation Plan

The City adopted the Bicycle and Pedestrian Transportation Plan in July 2012, which strategically guides public and private investments in non-motorized transportation facilities and related programs. The plan identifies several streets within the Plan Area as critical bicycle streets, including Portage Avenue as an enhanced bikeway as part of the Bay to Ridge Trail and Park Boulevard as a major north-south Bicycle Boulevard.

Housing Element 2023-2031

The Housing Element update, one of the State-mandated components of the City's Comprehensive Plan, represents the City of Palo Alto's sixth Housing Element and plans for the years 2023 through 2031. In total, approximately 6,700 housing units are needed to accommodate the 2023-2031 growth for all income groups as part of the Regional Housing Needs Allocation (RHNA) process. The Plan Area includes 15 properties identified by the Housing Element as opportunity sites that could help the City meet its housing needs (unit yield of 348).

Palo Alto Municipal Code, Chapter 19.10: Coordinated Area Plans

This chapter establishes the procedures for the preparation of coordinated area plans. The chapter's sections outline the purpose of a CAP, the procedures needed to be performed throughout the planning process, the contents of the plan document, and the requirements for permitting and development once the CAP has been adopted.

Palo Alto Municipal Code, Chapter 18.32: Affordable Housing Incentive Program

The affordable housing incentive program is intended to promote the development of 100% affordable rental housing projects located within one-half mile of a major transit stop or one-quarter mile of a high-quality transit corridor. Due to the Plan Area's proximity to transit and everyday needs, the NVCAP is a strong candidate to support the City's goal of adding more affordable housing units to support a wider range of incomes.

Palo Alto Municipal Code, Chapter 18.24: Contextual Design Criteria and Objective Design Standards

To comply with California's recently adopted legislation (Senate Bill (SB) 35 and SB 330) to address the housing shortage within the state, Palo Alto adopted objective design standards to review new multi-family and mixed-use residential housing projects. The development standards and design guidelines included in the coordinated area plan are intended to be complementary to the objective design standards.

Parks, Trails, Natural Open Space, and Recreation Master Plan

Adopted in September 2017, the Parks Master Plan presents the vision for the future of Palo Alto's parks, trails, natural open space, and recreation system. The plan identifies the entire Plan Area as an urban canopy target area, emphasizing the need for new green streets and parks. Additionally, Policy 1.B.10 states the following, 'develop a creek walk along Matadero Creek that links parks and creates open space and a habitat corridor'. Finally, the plan designates Portage Avenue and Park Boulevard as 'Pollinator Pathways,' which are intended to provide connectivity for natural systems through the integration of green stormwater infrastructure. The future public park and the renaturalization of the creek can serve as an integral component of the City's larger regional habitat connection concept, connecting people and wildlife from the foothills to the Baylands.

Urban Forest Master Plan

Adopted in February 2019, the Urban Forest Master Plan establishes long-term management goals and strategies to foster a sustainable urban forest in Palo Alto. The urban forest includes street trees, park trees, forested parklands, and trees in many private ownership settings. NVCAP is aligned with the master plan's goals and policies including:

- Goal 1: A well-developed contiguous, healthy, and ecologically resilient citywide urban forest; and
- Goal 2: Re-generated native woodland and riparian landscapes as the key ecological basis of the urban forest with a focus on native species and habitat.

Green Stormwater Infrastructure Plan

Completed in 2019, the Green Stormwater Infrastructure (GSI) Plan provides a guidance framework to integrate GSI measures into the City's urban landscape to properly manage and treat stormwater at its source, decreasing water quality impacts to local creeks, the Baylands, and the San Francisco Bay. Integration of GSI measures is critical for the Plan Area to address the current lack of open spaces, and high amount of imperviousness. Chapter 4 of the Green Stormwater Infrastructure Plan (GSI) specifies in the Developed Project Location Prioritization Criteria, that projects located within one of the key development areas should receive a higher priority than projects located outside one of these areas.

Public Art Master Plan

Completed in November 2016, the mission of the plan is to ensure that new public art reflects Palo Alto's people, diverse neighborhoods, the innovative and global character of its businesses and academic institutions, and the beauty of its natural environment. Several of the plan's objectives are applicable to NVCAP including:

- Objective 1: Locate art in unexpected places, such as alleys to provide an element of surprise and whimsy to everyday life.
- Objective 2: Integrate impactful, permanently-sited public art projects in business areas.
- Objective 3: Install public art in neighborhoods for residents to enjoy on a daily basis.
- Objective 4: Use art to promote environmental stewardship and sustainability. Create partnerships with Environmental Services and local regional agencies to integrate public art into environmental projects.
- Objective 5: Commission artists or artist/design teams to create specific public art plans for areas of Palo Alto where development is taking place.

Relationship Between the NVCAP and Other City Plans and Ordinances

The NVCAP implements the City of Palo Alto Comprehensive Plan and provides more detailed programs and policies for the specifically defined NVCAP. These policies and programs are consistent with those found in the Comprehensive Plan but address the unique characteristics of NVCAP.

The NVCAP provides the zoning for the area, supplementing Title 18 Zoning of the Palo Alto Municipal Code (PAMC). In the case of a conflict between the CAP and the PAMC, the CAP prevails. References to the PAMC are to the PAMC as amended from time to time, unless otherwise noted.

Regulatory Compliance

The Plan was prepared in accordance with CEQA, and any state applicable law. The NVCAP guides all development within the Plan Area and will require amendments to the Zoning Ordinance to ensure consistency and to implement the development regulations and land uses established in this CAP. The CAP is adopted under the authority of the City's Zoning Ordinance, which designates Coordinated Area Plans as a tool to guide land use and development consistent with the Comprehensive Plan.

1.5

Regional and Statewide Planning

Approximately 70% of the Plan Area is located within the California Avenue PDA, which was selected based on excellent access to transit, the proximity of the existing California Avenue Business District, and the availability of underutilized parcels of land. Therefore, NVCAP is subject to both regional and state legislation, developed and adopted to ensure new development within PDAs are supporting compact, equitable transit-oriented communities.

Transit-Oriented Communities (TOC) Policy

Metropolitan Transportation Commission's (MTC's) regional Transit-Oriented Communities (TOC) policy update seeks to support the region's transit investments by creating communities around transit stations and along transit corridors that not only support transit ridership, but that are places where Bay Area residents of all abilities, and income levels, and racial and ethnic backgrounds can live, work and access services, such as education, childcare, and healthcare. The TOC policies would apply to PDAs that are served by fixed-guideway transit such as the California Avenue Station (Caltrain). PDAs that comply with these TOC policies are eligible for grant funding administered by the MTC. Jurisdictions adopting these policies would be required to implement the following:

- New Residential Development: a minimum density of 50 units/net acre or higher and an allowable maximum density of 75 units/net acre or higher.
- New Commercial Office Development: a minimum density of 2 Floor Area Ratio (FAR) or higher and an allowable maximum density of 4 FAR or higher.
- Parking Management Requirements: no minimum parking requirement allowed.

At the time of plan adoption, the City has not adopted the TOC policy.

Assembly Bill 2097 (AB2097)

The California State Legislature passed, and the Governor signed, Assembly Bill (AB) 2097 that eliminates minimum parking requirements for all uses/development, (except hotels) within a half-mile of public transit. This bill affects all properties within the NVCAP. The new requirements went into effect on January 1, 2023, ahead of the adoption of the NVCAP.

The Community Process

The NVCAP was informed by a multi-year planning process, which prioritized a robust and authentic community process, and invited a diversity of voices from both city departmental agencies and community stakeholders to shape the future of the Plan Area.

Over the course of the planning process, City staff and consultants conducted extensive community outreach, providing numerous opportunities for public engagement and meaningful input. Stakeholders, decision-makers, residents, and other community members have volunteered their time to thoughtfully consider the challenges and opportunities afforded by this project and contribute to the evolving plan ideas.

As part of the planning process, three draft alternatives were developed for the NVCAP. The draft alternatives take into account feedback provided by: (1) the NVCAP Working Group, (2) feedback from community members provided at community workshops, (3) analyses and information provided by the City's consultant team to City staff and leadership. City Council deliberated and selected a preferred scenario. This community process led to the development of the draft plan including the vision and design framework included in Chapter 2.

Figure 20 *A worksession during the NVCAP working group meeting*

Spotlight:

The City of Palo Alto conducted:

2
Community Workshops

17
NVCAP Working Group Meetings

6
Stakeholder Group Meetings

2
Online Surveys

Meetings with Decision-Makers

- *City Council*
- *Historic Resources Board (HRB)*
- *Parks and Recreation Commission (PRC)*
- *Planning and Transportation Commission (PTC)*
- *Architectural Review Board (ARB)*

The NVCAP Working Group

Consistent with PAMC 19.10.030 and to ensure significant and meaningful community engagement, the City Council appointed a 14-member Working Group (WG). The WG was made up of 14 individuals and two alternates. The group's composition represented a diversity of interests and expertise, including homeowners and renters, people of different ages and cultural backgrounds. The WG included:

- Residents (rents and property owners) living within the Plan Area boundaries or the greater North Ventura neighborhood.
- Business owners and local employees working or owning a business within the Plan Area boundaries or nearby (mix of small and larger businesses).
- Property owners (large and small properties).
- City residents with expertise in urban design, housing development, environmental planning, transportation, or land economics.
- Planning and Transportation Commission (PTC) member.
- Architectural Review Board (ARB) member.
- Parks and Recreation Commission member.

Over the course of 17 meetings held from 2018 to 2020, the WG reviewed and provided feedback on existing conditions, planning alternatives, and other information related to the planning area.

The WG created a vision statement for the Plan Area which is summarized below:

> ***'The Working Group envisions the Plan Area to replicate a European square with open plaza, colorful public art, beautiful landscaping with green open spaces and lots of public amenities such as benches, trails, and bike paths. The building designs should fit well within the existing context, between three and six stories, interconnected with pedestrian and bicycle paths. The bustling plaza should have lots of local-serving retail uses such as cafes, small local markets, and theaters, which encourage lively foot traffic. The Plan Area also should provide diverse housing opportunities, with minimum intrusion from automobile traffic.'***

City Department Partnerships

The planning process was informed by representatives from the City of Palo Alto to ensure the plan was aligned with foundational city plans, projects, and programs. The departments represented include Planning & Development, Transportation, Public Works, Utilities, and Community Services.

Figure 21 *A s[illegible] the NVCAP working group meeting*

The Community Workshops

Two community workshops were held to share ideas, respond to study results, and weigh in on the vision and emerging policies of the plan. The first community workshop was held in February 2019. The community feedback helped to frame the basis of the proposed draft plans. The City hosted the second community workshop on February 27, 2020. The workshop solicited input on the three draft plan alternatives and endeavored to identify community priorities on various topics.

Community Surveys

Staff prepared two online community surveys (April 2020 and October 2020) to solicit input from the members of the community. The surveys aimed to reach community members unable to attend the workshops. An online questionnaire on the draft alternatives was created by staff to solicit input from the community at-large in October 2020. About 30 community members responded. The majority of the participants preferred Alternative 3, supporting higher residential densities and heights, allowing small office footprints. There was general agreement on the proposed transportation improvements, and parks and open space proposals. Opinions varied over preservation of the cannery building. Some preferred removal of old cannery building for better and efficient use of the existing space, while others supported partial retention.

Project Website

To augment the community engagement efforts, the city hosted a robust project website that served as the primary online portal for community engagement. It included information on project updates, upcoming events, updated summaries of workshops and staff reports.

Public Noticing / Mailing List

Notices of all public hearings and WG meetings were published in accordance with the regulations set forth by the Palo Alto Municipal Code and City regulations. Additionally, an extensive emailing list consisting of over 430 interested community members has been developed and maintained by City staff and is used for disseminating information to all interested individuals.

Figure 22 *A presentation during a community workshop*

Stakeholder Group Meetings

Stakeholder groups including property owners, commercial tenants, area residents, Palo Alto Unified School District and affinity groups/ advocates (affordable housing representatives, bicycle groups, environmental representatives, etc.) were identified early in the NVCAP process and their input was gathered through a series of six meetings. Staff also presented to the Palo Alto Unified School District Committee on December 2018, on February 20, 2020, and on October 15, 2020. Palo Alto Unified School District Board Members indicated an interest to site a new school to serve new families conceived in the draft alternatives. The City is supportive of working together to understand student yield from proposed typologies and suitable sites. During the development and public review of alternatives, City staff have continued discussions with stakeholders, such as property owners and affordable housing advocates to gather their feedback on evolving policy ideas and aspects of the alternatives.

Decision Maker Meetings

Since the initiation of the NVCAP planning work in October 2018, City staff have provided several updates to the following boards: City Council, Historic Resources Board (HRB), Parks and Recreation Commission (PRC), Planning and Transportation Commission (PTC), and the Architectural Review Board (ARB).

2

The Vision

The North Ventura Coordinated Area Preferred Plan endorsed by Palo Alto City Council sets forth a flexible, aspirational vision to guide growth and investment to support a transit oriented, mixed-use, mixed-income, and walkable neighborhood.

The vision frameworks described in the following pages illustrates the desired physical form delivered incrementally over time which:

- Honors the storied history and unique character of the North Ventura neighborhood;
- Understands the needs of current residents and puts forward near-term solutions to current challenges;
- Establishes a long-term framework for desired growth so more people can call North Ventura home; and
- Invests in community infrastructure to support an equitable, resilient, and sustainable Palo Alto.

2.1

Preferred Plan

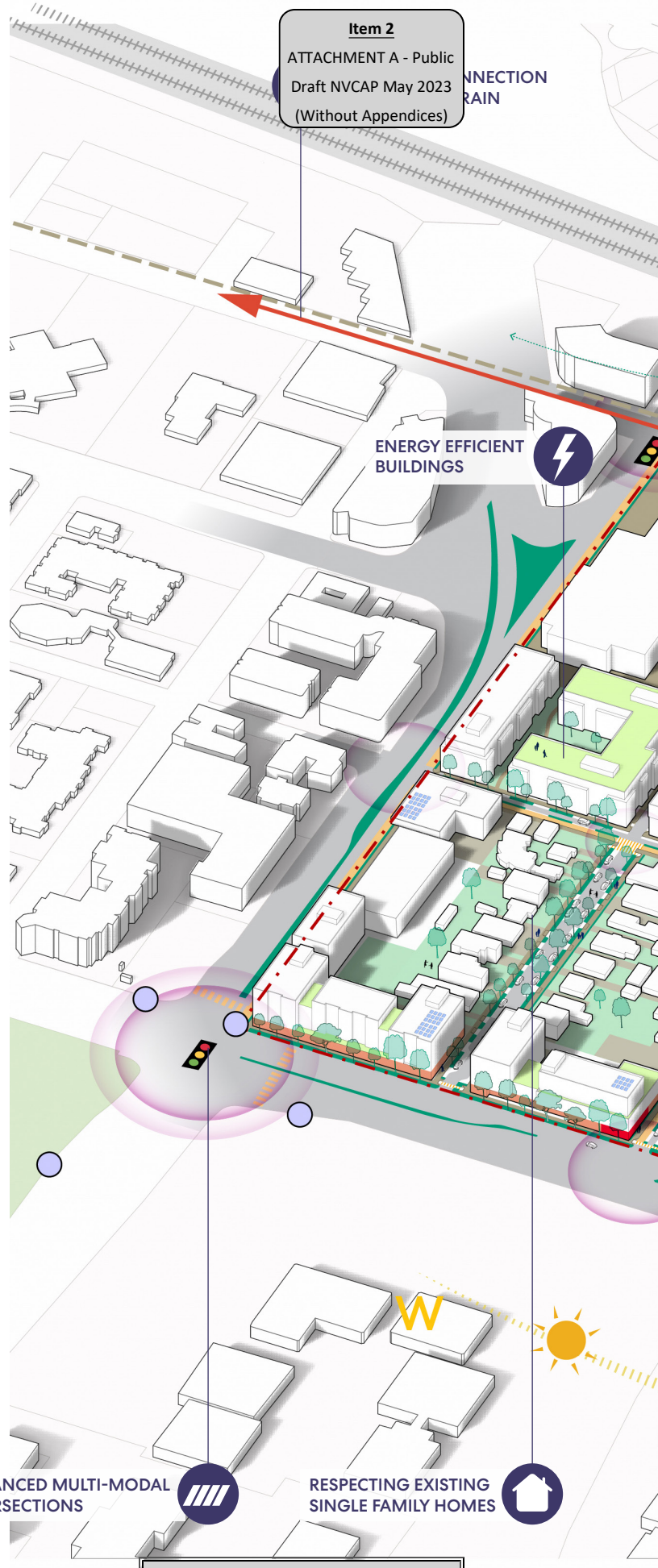
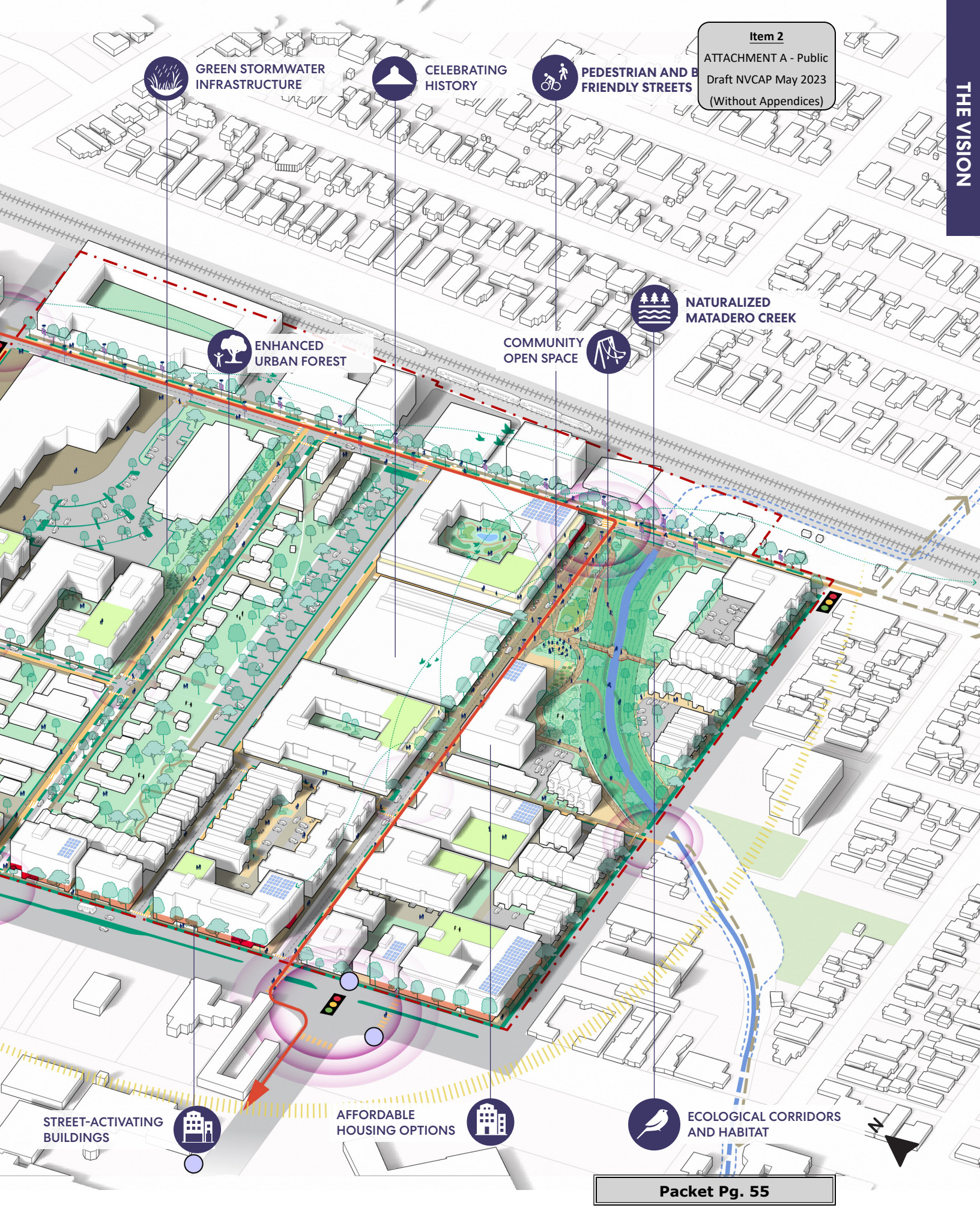


Figure 23 *The NVCAP Preferred Plan*


GREEN STORMWATER INFRASTRUCTURE
CELEBRATING HISTORY
PEDESTRIAN AND B
FRIENDLY STREETS
NATURALIZED MATADERO CREEK
ENHANCED URBAN FOREST
COMMUNITY OPEN SPACE
STREET-ACTIVATING BUILDINGS
AFFORDABLE HOUSING OPTIONS
ECOLOGICAL CORRIDORS AND HABITAT
N

2.2

Land Use

Development Potential by Land Use

NVCAP aims to achieve the following targets for these land uses within the Plan Area:

- Allow up to 530 new dwelling units;
- 2.25 acres of public open space;
- 16,600 square feet of commercial development including existing and new local retail and professional services; and

Land Use	Existing	Future
Residential (units)	142 units	672 units
Parks (acres)	0 acres	2.25 acres
Office (sq.ft.)	744,000 sq.ft.	466,000 sq.ft.
Retail (sq.ft.)	111,200 sq.ft.	103,700 sq.ft.

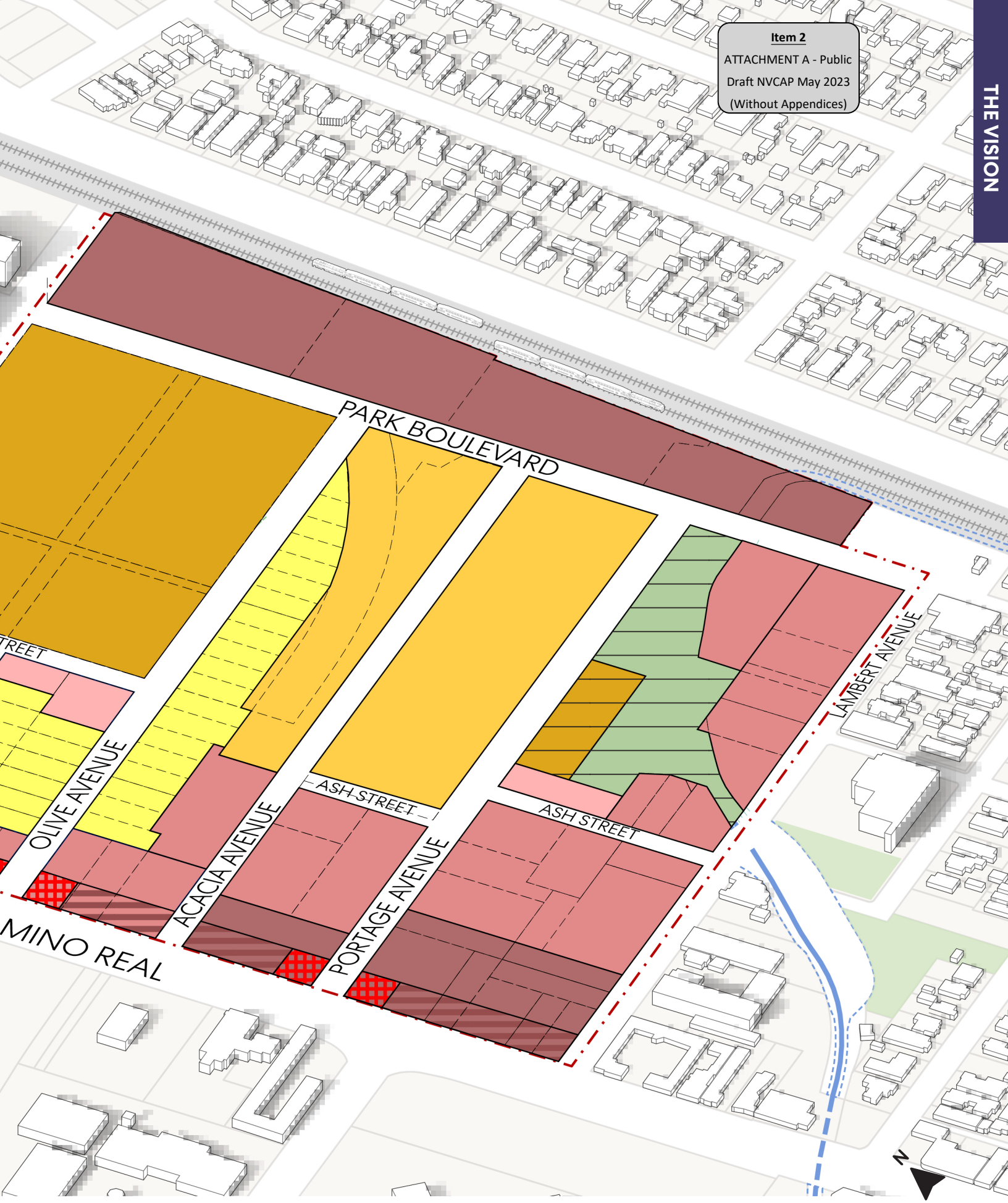
Table 3 *Existing and Future Development Potential by Land Use*

Legend

- *High Density Mixed-Use*
- *Medium Density Mixed-Use*
- *Low Density Mixed-Use*
- *Retail Required*
- *Active Ground Floor Required*
- *Project Boundary*
- *High Density Residential*
- *Medium Density Residential*
- *Low Density Residential*
- *Open Space*
- *Public Facilites Area**

**Exact acreage and dimensions for the public park and affordable housing site within the public facilities area will be determined at a later date.*

amework


PARK BOULEVARD
TREET
OLIVE AVENUE
ACACIA AVENUE
ASH STREET
ASH STREET
PORTAGE AVENUE
LAMBERT AVENUE
MINO REAL
N

Residential

The NVCAP land use framework is principally focused on supporting a variety of housing options and price points to support Palo Alto residents at different stages of life. Residential density will depend on its location within the Plan Area. For example, mixed use mid-rise development will be encouraged along commercial corridors whereas townhomes will be encouraged adjacent to existing residential development.

The land use designations listed below are calibrated for a wide range of multi-family housing typologies:

High-Density Mixed Use

The high-density mixed-use designation is located along the southern segment of El Camino Real. The designation is intended to support 5 to 6 story mid-rise apartment buildings. This designation requires active uses for ground floor frontages with retail requirements at specific nodes along El Camino Real, to support its role as a regional commercial corridor. The designation requires that upper stories be residential.

Figure 25 *Example of High-Density Mixed Use in Palo Alto*

Project Goals

Housing and Land Use

Add to the City's supply of multi-family housing, including market rate, affordable, "missing middle," and senior housing in a walkable, mixed-use, transit-accessible neighborhood, with retail and commercial services, open space, and possibly arts and entertainment uses.

Balance of Community Interests

Balance community-wide objectives with the interests of neighborhood residents and minimize displacement of existing residents.

Medium-Density Mixed Use

The medium-density mixed-use designation is located on the northern segment of El Camino Real and Page Mill Road. The designation is intended to support 4 to 5 story mid-rise apartment buildings. This designation requires active uses for ground floor frontages with retail requirements at specific nodes along El Camino Real, to support its role as a regional commercial corridor. The designation requires that upper stories be residential.

Figure 26 *Ex... Mi...*

Low-Density Mixed Use

The low-density mixed-use designation serves as a transition between the high-density mixed-use area and the low-density residential areas located in the interior of the Plan Area. The designation area is also located along Ash Street and Lambert Avenue, to support mid-to-low-rise multi-family development near the proposed public park. Active ground floor uses are encouraged but not required. Residential is required on the upper floors.

Figure 27 *Example of Low-Density Mixed Use in Palo Alto*

High-Density Residential

The high-density residential designation is located in areas such as the 395 Page Mill surface parking lot to support the long-term goal of supporting additional affordable housing in the Plan Area. The designation requires that both the ground floor and upper floors are residential use. Limited retail may be permitted.

Figure 28 *Example of High Density Residential in Palo Alto*

Medium-Density Residential

The medium-density residential designation is located at the 340 Portage site to support the long-term goal of supporting additional housing in the Plan Area. The designation requires that both the ground floor and upper floors are residential use. Limited retail may be permitted The designation is intended to support a mix of townhouses and mid-rise apartments. Allowable heights are calibrated to support sensitive structures such as the Cannery building.

Figure 29 *Example of Medium Density Residential in Palo Alto*

Low-Density Residential

The low-density residential designation is calibrated to both facilitate new housing development while also being sensitive to existing single-family neighborhood fabric, located along Pepper Avenue and Olive Avenue. This area of existing single-family homes has been designated as an area of stability and will not experience a significant degree of change.

Figure 30 *Ex... Re...*

Land Use Classification	Anticipated Density (DU/AC)	Maximum Height (FT)	FAR	Active Use Requirements	Allowed Zoning Districts
High-Density Mixed Use	61-100	55*	3.0:1	Required	NV-MX3
Medium-Density Mixed-Use	31-70	45*	2.0:1	Required	NV-MX2
Low-Density Mixed Use	3-17	35*	0.5:1	Encouraged	NV-MX1
High Density Residential	61-100	55*	3.0:1	None	NV-R4 NV-PF
Medium Density Residential	16-30	36*	1.5:1	None	NV-R3
Low Density Residential	1 or 2 units/lot	30	0.45:1	None	NV-R2 NV-R1
Public Facilities and Open Space	n/a	n/a	n/a	n/a	NV-PF

** 100% Affordable Housing is eligible for an additional 33 feet.*

Table 4 *Proposed Land Use, FAR, and Active Use Requirements*

Affordable Housing

To bolster the City's affordable housing program, new residential projects across the Plan Area would require 20% inclusionary below market rate (BMR) for-sale townhouses, 15% inclusionary BMR for-sale condominiums and rental projects. In accordance with the Palo Alto Municipal Code (PAMC), in-lieu fees may be paid in certain circumstances.

Proposed 100% below-market-rate (BMR) projects in the NVCAP are eligible for an additional height bonus through either the State Density Bonus or the City's Housing Incentive Program.

Open Space

This land use designation is located in the southeastern corner of the Plan Area. This will include the proposed 2.25 acre public open space as well as the re-naturalization of the Matadero Creek between Park Boulevard and Lambert Avenue.

Existing Uses

Existing land uses are permitted to remain in place and continue operations. Existing buildings or land uses which become nonconforming as a result of the new zoning and land use classifications are governed by the provisions in the Zoning Code regarding nonconforming buildings and uses. Certain limits are established for repairs, additions, restoration, expansion, and occupancy after an extended vacancy.

Figure 31 *The Cloudera Galactic*
395
Page Mill Road

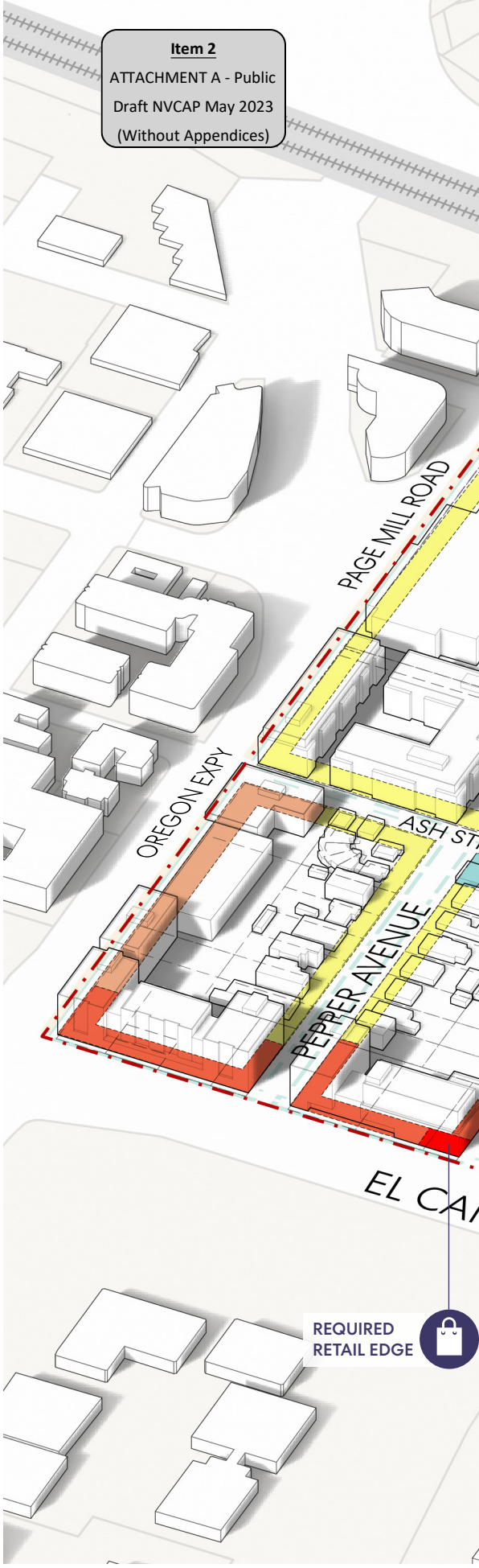

395

2.3

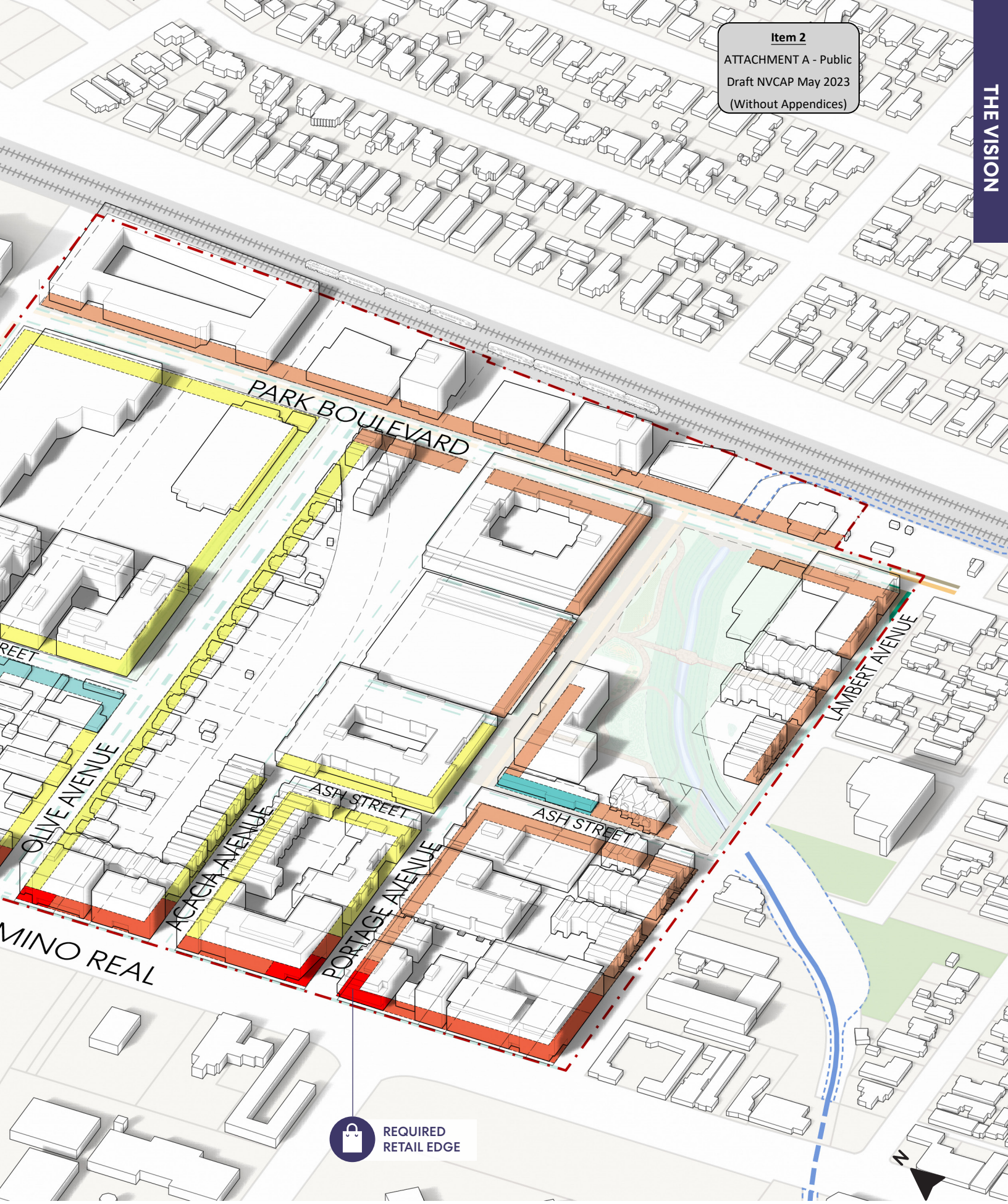
Ground Floor Edges

The street level is the most important interface between a building and the public realm. Each development should define and animate the street level, exploring active uses, transparency, and engaging design.

For design standards and guidelines, go to: Chapter 5: Buildings



Edges Framework


PARK BOULEVARD
OLIVE AVENUE
ACACIA AVENUE
PORTAGE AVENUE
LAMBERT AVENUE
ASH STREET
ASH STREET
MINO REAL
REQUIRED RETAIL EDGE
N

Active Uses

To create a pedestrian-friendly environment and visual interest on the ground floors of buildings, new development within the high-density and low-density mixed-use designations will provide active uses on frontages facing a public right-of-way, greenway, or park, to the degree feasible. Retail or retail-like uses are required at specific frontages facing El Camino Real and encouraged along Park Boulevard. By requiring ground floor commercial uses at select nodes along prominent corridors, NVCAP is supporting the ability for residents to walk to everyday services and subsequently reduce the number of cars on the road.

Active uses include but are not limited to the following:

- Neighborhood-serving retail which provides goods and services that people would frequently use to take care of their personal and household needs. Examples include grocery stores, drug stores, restaurants, dry cleaners, hair salons, etc.
- Professional Offices with regular customers such as dentists that are 5,000 sq. ft. or less.
- Public Uses including a community room and daycare.
- Building lobbies.
- Spaces accessory to residential uses, such as fitness rooms, workspaces, leasing offices, shared kitchens, and mail rooms.
- Building frontage for mechanical equipment, transformer doors, parking garage entrances, exit stairs, and other facilities necessary to the operation of the building are excluded from this requirement.

Figure 33 *Building lobbies and other accessory spaces to residential uses are considered active uses.*

Retail Frontage

Where ground floor retail is required within the Plan Area, an urban edge should be created to foster healthy street life. This includes storefronts with tall floor to ceiling heights to foster visibility and transparency for homegrown businesses. Traditional retail such as food and beverage establishments are a subset of active uses.

Figure 34 *Neighborhood-serving retail along major boulevards like El Camino Real.*

Residential Frontage

Residential stoops, porches, patios, terraces, and frontage courts create a social edge to a neighborhood street. When set back by a small distance and vertically above the sidewalk grade, they can also ensure privacy at a comfortable social distance for a residential unit.

Figure 35 *Residential stoops should be set back and elevated to provide privacy for residents.*

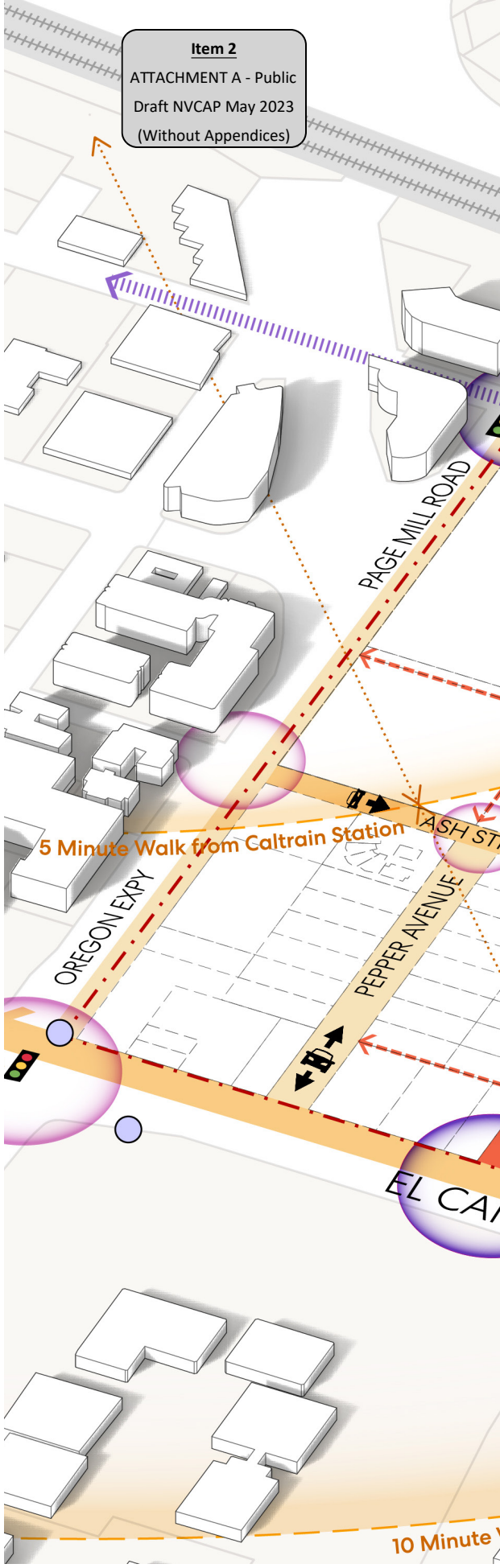
2.4

Mobility

The envisioned mobility framework for the NVCAP will provide an array of high-quality mobility options on safe, low-stress, and visually interesting streets.

Pedestrian and bicycle facilities will be designed for people of all ages and abilities, and accessible paths to transit will include wayfinding signage and other amenities. Streets and intersections will be designed to prioritize local circulation and access and to encourage low vehicle speeds. The planned improvements will be fully integrated into the surrounding neighborhoods to ensure seamless connections for all users.

For design standards and guidelines, go to:
Chapter 3: Public Realm
Chapter 4: Streets



Legend

Pedestrian and Bicycle Streets

- *Priority Streets*
- *Secondary Streets*
- *Tertiary Streets*
- *Private Connection*
- *Park Trail*
- *First Mile / Last Mile Connections*
- *Woonerf*
- *Vehicular Street on Private Property*
- *Surface Parking*
- *Potential Location for Mobility Hub*
- *Vehicular Movement*
- *California Avenue Caltrain*
- *Major Intersection Improvements*
- *Minor Intersection Improvements*
- *Bus Stops*
- *Traffic Signals*
- *Project Boundary*

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PARK BOULEVARD
OLIVE AVENUE
ASH STREET
ASH STREET
ACACIA AVENUE
PORTAGE AVENUE
LAMBERT AVENUE
MINO REAL
P
P
Walk from Caltrain Station
N

Pedestrian Realm

A well-designed, integrated pedestrian network is a vital component of the NVCAP. The mobility framework prioritizes a fully connected, ADA-accessible sidewalk network throughout the neighborhood. Wide, tree-lined sidewalks will foster a people-first environment, where all ages and abilities can move safely and conveniently throughout the neighborhood.

Portage Avenue, Park Boulevard, and Olive Avenue will become priority walking routes to the California Avenue Caltrain Station and the bus stops along El Camino Real to ensure convenient alternatives to driving.

In addition to established public sidewalks, the Plan envisions publicly accessible private paths to bridge existing gaps.

Project Goals

Transit, Pedestrian, and Bicycle Connections

Create and enhance well-defined connections to transit, pedestrian, and bicycle facilities, including connections to the Caltrain Station, Park Boulevard, and El Camino Real.

Connected Street Grid

Create a connected street grid, filling in sidewalk gaps and street connections to California Avenue, the Caltrain Station, and El Camino Real where appropriate.

Community Facilities and Infrastructure

Carefully align and integrate development of new community facilities and infrastructure with private development, recognizing both the community's needs and that such investments can increase the cost of housing.

Figure 37 *NVCAP Pedestrian Network*

Spotlight:
The Portage Avenue Woonerf

Central to the vision for a re-imagined North Ventura neighborhood is a shared street, or "woonerf," along Portage Avenue.

Woonerf ("street for living") is a Dutch term for an integrated, common space shared by pedestrians, bicyclists, and low-speed motor vehicles. They typically have no curbs or sidewalks, and vehicles are slowed by trees, planters, parking areas, and other traffic calming devices in the street. In addition to becoming a great space for walking and bicycling, the Portage Avenue woonerf can provide a placemaking space for community gatherings, events, retail, and other flexible uses.

Figure 38 *View of the Bell Street Woonerf in Seattle, Washington*

Bike Network

The NVCAP will feature a high-quality, "low-stress" bikeway network that will be comfortable for people of all ages and abilities to use. The proposed network will be integrated into the citywide network to ensure safe, convenient connections to the adjacent neighborhoods. This will be achieved by selecting bicycle facilities that prioritize safety and comfort based on vehicle speeds and volumes, and with intersections that have appropriate bike-specific crossing treatments and traffic control. Wayfinding signage and ample bicycle parking are also integral elements of the network. The bicycle network will support a range of users, including the future integration of scooters, e-bikes, and other micromobility devices.

The low-stress bike network will include separated bicycle lanes on busier streets, bicycle boulevards on calmer neighborhood streets, and well-designed intersections throughout the project Plan.

Shared-Use Paths are off-street, two-way bikeways physically separated from motor vehicle traffic and used by people bicycling, walking, and other non-motorized users.

Separated Bike Lanes are dedicated bikeways that combine the user experience of a multi-use path but are located on a street. They are physically distinct from the sidewalk and separated from motor vehicle traffic by physical objects such as parked vehicles, a curb, green stormwater infrastructure, or posts.

Buffered Bike Lanes provide dedicated on-street space for bicyclists delineated with a designated buffer space separating the bicycle lane from the adjacent motor vehicle travel lane.

Bicycle Boulevards are streets with low vehicle volumes and speeds, designated and designed to prioritize bicyclists. Bicycle boulevards use signs, pavement markings, and speed and volume management measures to discourage vehicle cut-through trips and include safe, convenient bicycle crossings of busy arterials.

Gateway Intersections

The intersections surrounding the Plan Area will be enhanced to improve access, safety, and connectivity to adjacent neighborhoods. This is particularly important for pedestrian and bicycle safety, as the current intersections' designs largely prioritize vehicular speed and access. New design guidance and signal technology advancements offer options for improved intersection interactions between people walking, biking, and driving. In particular, intersections on the bicycle network with a high potential for conflicts between bicycles and vehicles must be designed thoughtfully.

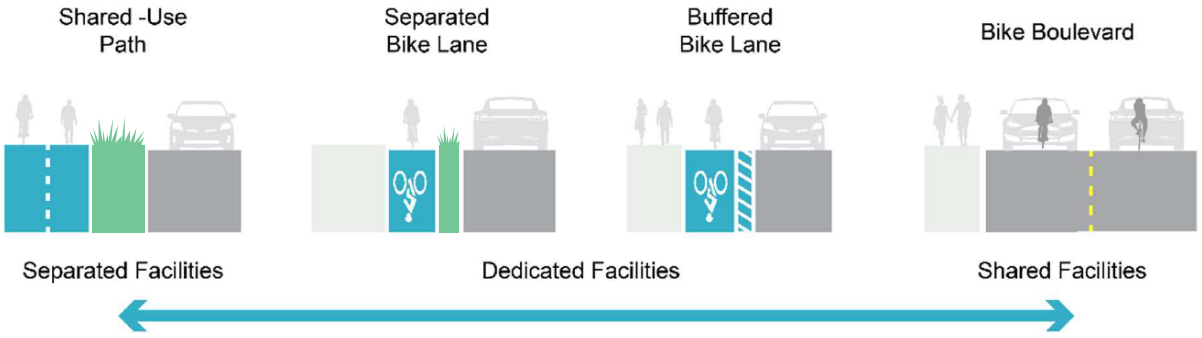


Figure 39 *Bike Facility Degree of Separation*

Figure 40 *NVCAP Bike Network Framework*

Street	From	To	Bike Facility
El Camino Real	Page Mill Road	Lambert Avenue	Separated and/or Buffered Bike Lane along segment
Ash Street	Page Mill Road	Olive Avenue	Shared Use Path
	Portage Avenue	Lambert Avenue	Bicycle Boulevard
Park Boulevard	Page Mill Road	Lambert Avenue	Buffered Bike Lanes
Page Mill Road	El Camino Real	Park Boulevard	Separated or Buffered Bike Lanes
Olive Avenue	El Camino Real	Park Boulevard	Bicycle Boulevard with Wide Sidewalks
Portage Avenue	El Camino Real	Ash Street	Shared Use Path or Bicycle Boulevard
	Ash Street	Park Boulevard	Woonerf or Shared Use Path

Table 5 *Bicycle Facility Classifications*

Transit

The success of transit is strongly dependent upon the level of convenience that is offered to the patron. Currently, the North Ventura neighborhood contains two transit stops: a mid-block stop located at El Camino Real and Portage Avenue and a far-side stop located at El Camino Real and Page Mill Road. The mobility framework focuses on designing intuitive, accessible, and safe routes to transit through priority pedestrian and bike streets, wayfinding signage to navigate to Caltrain, enhanced bus stop amenities for passengers, and a mobility hub along Portage Avenue.

Vehicles Circulation and Parking

The mobility framework serves the needs of existing and future development with vehicle and parking strategies aimed to prioritize local circulation and access, encourage low speeds, and determine right-sized parking capacity.

To support local access and mitigate cut-through traffic, the Plan proposes to convert Ash Street from Page Mill Road to Olive Avenue into a one-way southbound street. Olive Avenue from Ash Street to El Camino Real will remain a two-way street.

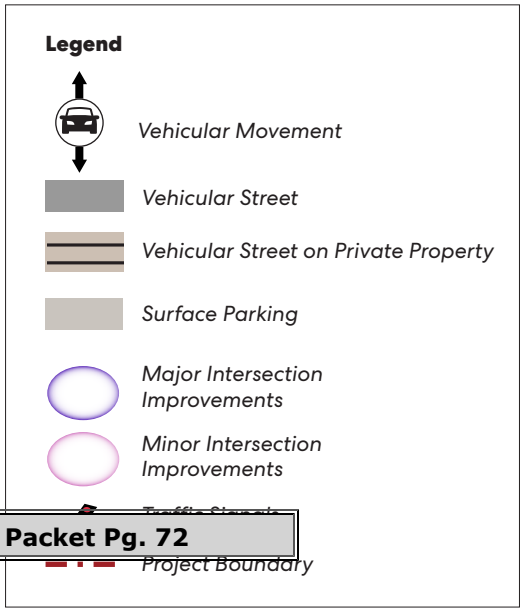
Vehicular traffic on the woonerf on Portage Avenue is permitted but should be discouraged. Vehicle circulation in this area will be primarily for access to buildings located on the woonerf. Acacia Avenue from Ash Street to Park Boulevard will be a private aisle for accessing residential frontage on Acacia Avenue for parking and unloading.

In compliance with AB-2097, no parking minimums are to be set as the neighborhood is near a Caltrain Station. However, there will also be no parking maximums, allowing the neighborhood to follow a market-based regulatory approach. No new surface parking is proposed, and new parking supply should be implemented on the ground or basement levels of new buildings. Where new buildings are not proposed, existing surface parking spaces are to remain to support remaining commercial offices. Street parking is to remain in front of single-family homes on Pepper Avenue and Olive Avenue, with no new street parking proposed along new developments. Street parking near intersections should be restricted to ensure large vehicles and emergency vehicles are able to safely make turns. To support the new ground-floor retail and active use frontage in new buildings, short-term parking should be implemented on the ground or basement levels of the new developments.

Transportation Demand Management (TDM) Strategies

TDM strategies can be effective at encouraging fewer trips made by single-occupancy vehicles (SOV). An effective TDM Plan ensures that alternative modes of transportation, such as walking, bicycling, public transit, or other forms of shared mobility, are made available to site occupants and nearby community members. TDM enhancements have additional benefits beyond reducing SOV trips, including:

- Improving the environment by reducing traffic congestion and air quality impacts produced by new development.
- Improving transportation circulation and safety conditions for community members
- Quality of life enhancements that improve the public realm.



Spotlight: Mobility Hub

Mobility hubs are places in a community that bring together public transit, bike share, car share and other sustainable transportation modes. The MTC Mobility Hub Program has identified the North Ventura neighborhood as a candidate for a mobility hub. This neighborhood's proximity to the proposed public park, the California Avenue Caltrain Station, and bus stops on El Camino Real provides important connections to regional transit and micromobility pathways. The neighborhood mobility hub is proposed at the intersection of Portage Avenue and El Camino Real. This location is ideal given its proximity to varying active frontage uses as well as the proposed woonerf. Proposed amenities could include:

- Transit shelters and waiting areas.
- Bicycle parking facilities.
- Shared mobility (bike share, scooter share, etc.) access points.
- Electric vehicle (EV) charging infrastructure.
- Designated parking for car share services.
- Real-time travel information signage and interactive displays.
- Area maps and bulletins promoting local amenities and events.
- Monitoring systems to measure ridership, mobility, security, and public life metrics.
- Digital and physical wayfinding tools.

Figure 41 *NVCAP Vehicle and Parking Framework*

2.5

Ecology and Sustainability

NVCAP's ecological framework takes direct inspiration from the City's Sustainability and Climate Action Plan, putting forward design strategies that collectively expands the definition of sustainability.

This framework goes beyond mitigation, adaptation, and resilience, but grounded in regeneration – identifying opportunities for renewal, restoration, carbon sequestration, and growth of the natural environment.

The future streets, parks, natural areas, and buildings will restore and enhance habitat and pollinator pathways, flood protection and stormwater management, cleaner air and cleaner water, and healthier habitats for current and future generations.

For design standards and guidelines, go to:
Chapter 3: Public Realm
Chapter 4: Streets
Chapter 5: Parks
Chapter 6: Buildings

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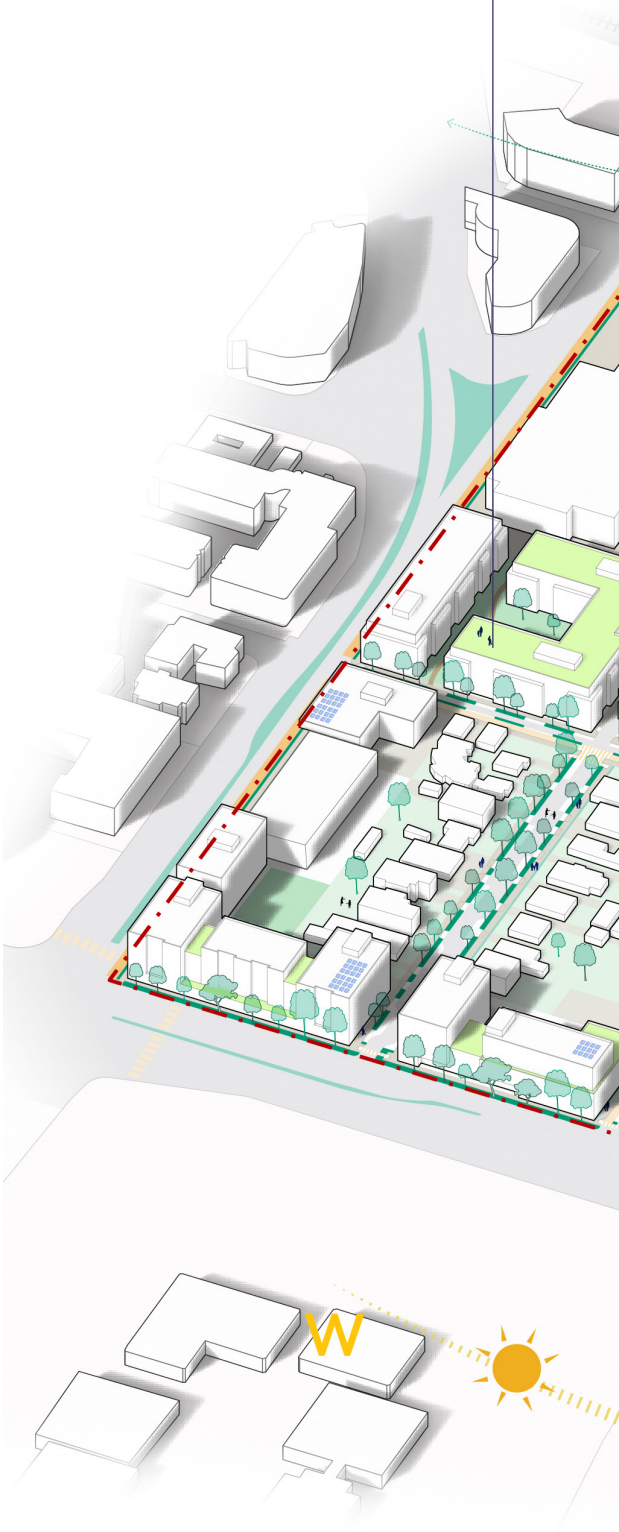
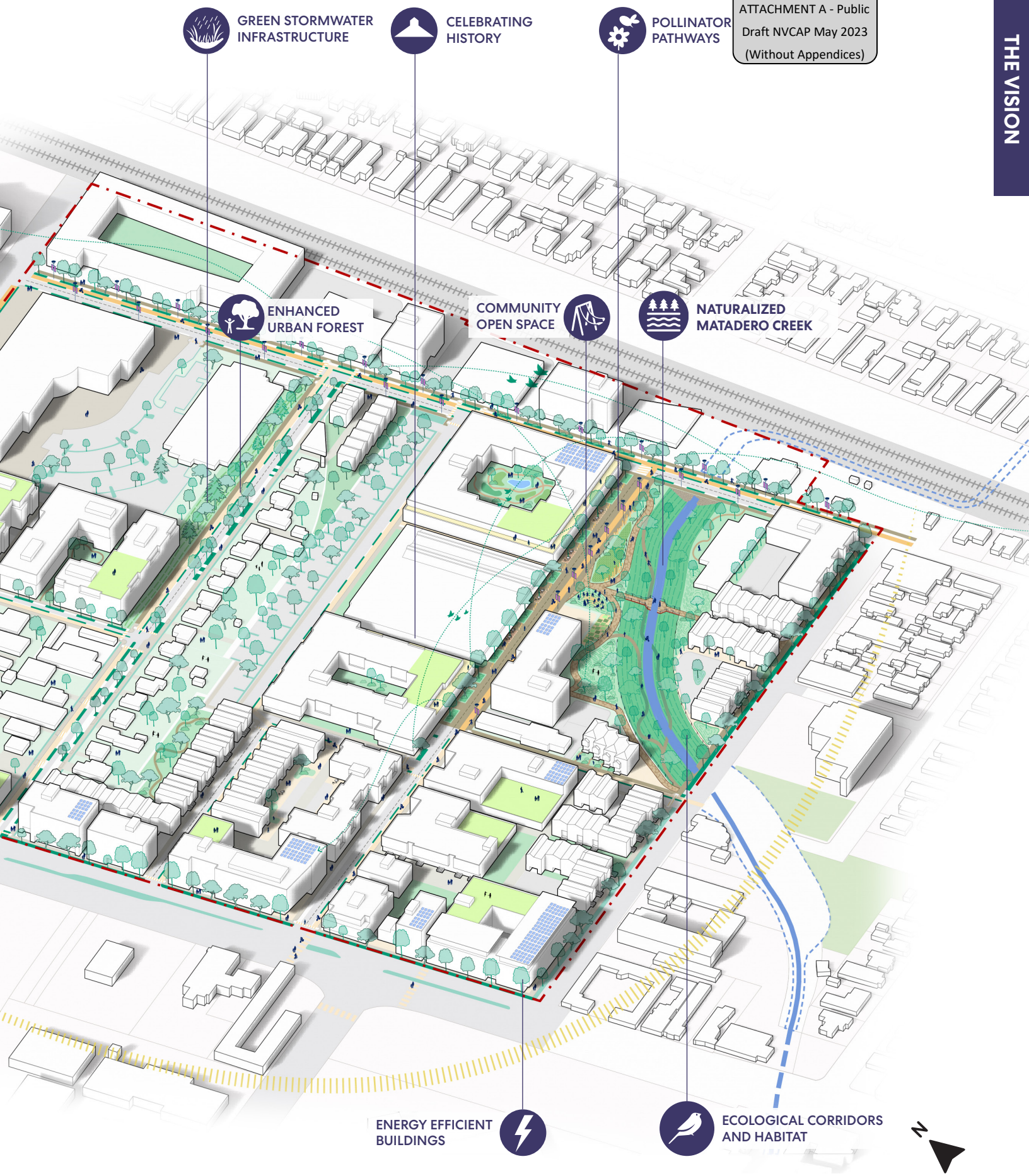


ustainability Framewo


GREEN STORMWATER INFRASTRUCTURE
CELEBRATING HISTORY
POLLINATOR PATHWAYS
ENHANCED URBAN FOREST
COMMUNITY OPEN SPACE
NATURALIZED MATADERO CREEK
ENERGY EFFICIENT BUILDINGS
ECOLOGICAL CORRIDORS AND HABITAT
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2.5

Public Park

Located in the southeast corner of the Plan Area, NVCAP proposes to transform a 2-acre surface parking lot into a new 2.25 acre public park. The proposed naturalization of Matadero Creek between Park Boulevard and Lambert Avenue serves as the organizing framework for the park's design and neighborhood destination, inviting Palo Alto residents, employees, and visitors to enjoy access to recreational activities, habitat, and inclusive community programming. Shared multi-use pathways weave through the Park, providing access to the Creek and seamless connections to the citywide pedestrian and bicycle network, ensuring that the park is a beloved city asset that can be enjoyed by the entire community.

The primary entrance to the park is along the new Portage Avenue woonerf directly across from the historic Palo Alto Cannery, creating an iconic activity node. The curbless design of the proposed Portage Avenue woonerf supports a natural extension of the park to the renovated Cannery building.

Project Goals

Sustainability and the Environment

Protect and enhance the environment, while addressing the principles of sustainability.

Community Facilities and Infrastructure

Carefully align and integrate development of new community facilities and infrastructure with private development, recognizing both the community's needs and that such investments can increase the cost of housing.

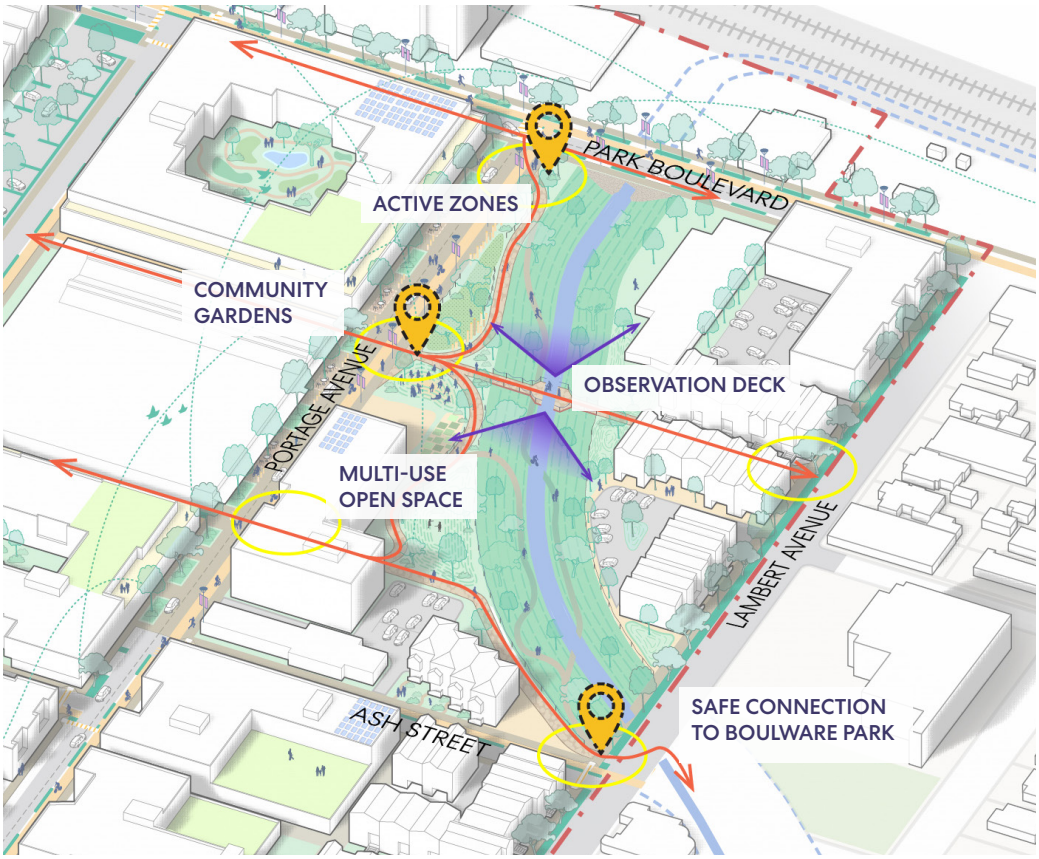


Figure 43 *A conceptual design for the future public park*

Matadero Creek

NVCAP proposes to re-naturalize a section of the Matadero Creek, removing the existing U-shaped concrete channel and replacing it with a widened, natural channel. The goals of a renaturalization project are to provide community benefits, re-establish riparian ecosystem habitat, and avoid adverse impacts on hydraulic performance and flood risks. The NVCAP Preferred Plan[1] supports a widened natural corridor with an area available for riparian plantings, creative landscape architecture design, and increased recreation access. This concept includes replacing the Lambert Avenue bridge with a longer span and widening the creek channel from approximately 30 feet wide to 100 feet wide.

1. City of Palo Alto Council Meeting, January 10, 2022 https://www.cityofpaloalto.org/files/assets/public/agendas-minutes-reports/agendas-minutes/city-council-agendas-minutes/2022/20220110/20220110p-ccsm-linked-updated.pdf

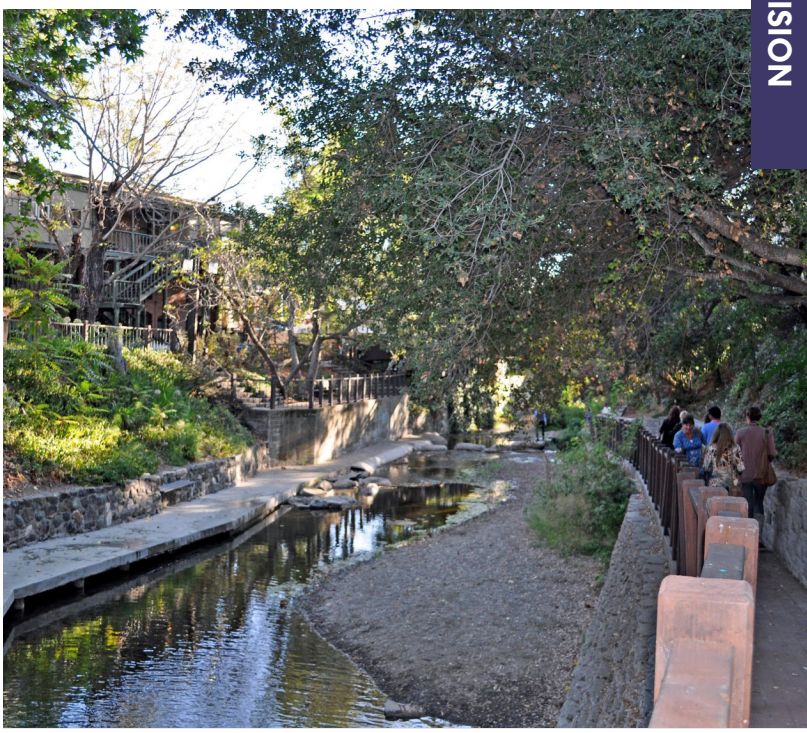


Figure 44 *An example of a restored creek in San Luis Obispo, CA.*

Green Stormwater Infrastructure

As an integral part of the Plan Area's ecological and sustainability framework, the public realm consists of a coordinated network of multi-functional landscapes that effectively manage stormwater, create pollinator pathways, mitigate the urban heat island effect, and create usable public spaces for all to enjoy.

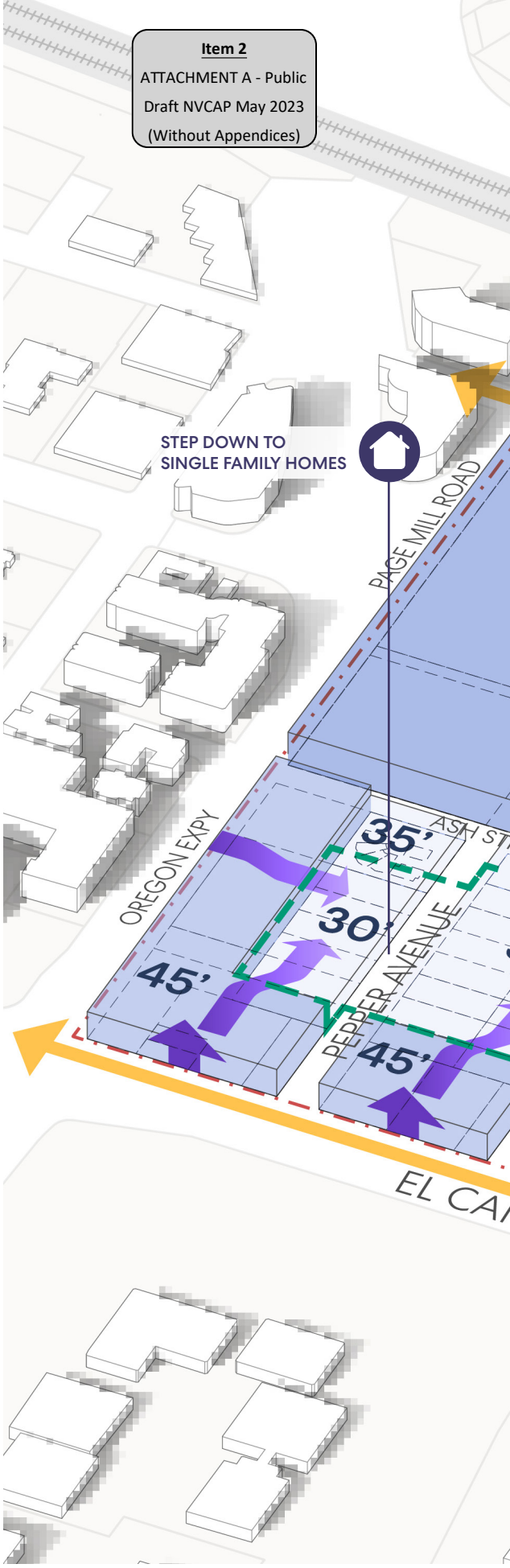
Figure 45 *An example of green stormwater infrastructure integrated with street furnishings.*

2.6

Urban Form

NVCAP's Urban Form framework champions the design of buildings that are respectful neighbors, human-scaled, and embrace the street. New development will respond to the surrounding context such as building up to El Camino Real while creating a gentle transition to quieter residential portions of the neighborhood.

For design standards and guidelines, go to: Chapter 6: Buildings



Legend

- *Building Height Stepdowns*
- *Maximum Development Potential*
- *Area of Stability*
- *Priority Corridors*
- *55'*
- *45'*
- *30' / 35' / 36'*
- *Open Space*
- *Project Boundary*

Framework

Allowable Heights

Allowable building heights establish a consistent, urban character; protect access to sunlight and views, and appropriately frame the public realm. Allowable heights are calibrated to enable taller buildings along major corridors while requiring lower heights to respect single family houses and the roof datum of notable structures such as the 340 Portage Cannery building.

Setbacks

Building setbacks create a transitional zone between the building face and the sidewalk, where active uses can spill out or residential users can experience public life at a comfortable social distance. Additionally, rear and side setbacks are utilized to ensure the necessary buffering between new development and existing single-family residential and high-value habitat areas.

For more information on setback requirements design standards and guidelines, go to:

Chapter 4: Streets
Chapter 6: Buildings

Project Goals

Urban Design, Design Guidelines, and Neighborhood Fabric

Develop human-scale urban design strategies, and design guidelines that strengthen and support the neighborhood fabric. Infill development will respect the scale and character of the surrounding residential neighborhood.

Figure 47 *Internal streets have height allowances that are conducive with missing middle housing like townhomes.*

Figure 48 *Urban form design standards requires setbacks and stepbacks for new development that is adjacent to single family zoning.*

3

The Public Realm

The public realm is a connective tissue of streets, parks, plazas, and natural spaces that weaves throughout the neighborhood, serving as an organizing framework for future development while fostering inclusive, experience-rich spaces for the entire Palo Alto community.

Building on the 2030 Comprehensive Plan's Urban Design Vision, the Plan Area's public realm will 'serve as centers for public life with gathering places, bicycle and pedestrian access, safety-enhancing night-time lighting and clear visual access, and, in some cases, small-scale retail uses such as cafes.'

The standards and guidelines layout a planned, intentional, well-designed public realm network that works in unison to achieve multiple goals:

- Aesthetically pleasing, context-appropriate streets that enhance residents' quality of life and Palo Alto's reputation as 'a gracious residential community.'
- A comprehensive multi-modal network that provides equitable access to clean, safe, and reliable mobility options and seamlessly connects to the larger citywide transportation network.
- Open spaces that blend people places with green stormwater infrastructure to provide new social gathering outdoor rooms while showcasing climate-positive design.

The Sidewalk Zone

The Sidewalk Zone is described in Palo Alto Municipal Code, Chapter 18.24 – Contextual Design Criteria and Objective Design Standards, which delineates the sidewalk zone into three distinct zones: Frontage, Sidewalk, and Street.

Definitions:

Frontage: a zone along building frontages for active edge uses such as seating, signage, and merchandising. Frontage zone treatments can include private setbacks to widen the sidewalk as necessary.

Sidewalk: a zone that includes both the pedestrian clear zone and the landscape/furniture zone. The pedestrian clear zone is an unobstructed accessible path of travel for pedestrians. The landscape/furniture zone accommodates elements such as trees, lighting, furnishing, and green stormwater infrastructure.

Street: a zone that includes the non-vehicle travel lane portion of the roadway such as on-street parking, bus stops, and parklets.

Standards:

The following standards are in accordance with Palo Alto Municipal Code Section 18.24.020:

3.1.1 Sidewalk Width

Where site conditions allow, public sidewalks shall have a minimum of at least 12 feet. This can be met with a combination of the pedestrian clear zone and the landscape/furniture zone, provided the pedestrian clear path shall be no less than eight (8) feet.

Publicly accessible private sidewalks or walkways, with landscape strips, connecting through a development parcel shall have a minimum of six (6) feet.

Project Goal

Community Facilities and Infrastructure

Carefully align and integrate development of new community facilities and infrastructure with private development, recognizing both the community's needs and that such investments can increase the cost of housing.

3.1.2 Sidewalk Zone Features

All improved streets shall allow the following features within the sidewalk zone:

- Pedestrian Clear
- Landscape and Furniture
  - Street Trees, Green Stormwater Infrastructure, and Plantings
  - Street Lighting
  - Seating
  - Bike Parking
  - Public Art
  - Outdoor Dining
  - Bus Shelters
  - Utilities

3.1.3 Street Zone Features

All improved streets shall allow the following features within the street zone:

- On Street Parking
- Bike Lanes
- Drop-Off Zones
- Parklets
- Bus Stops

3.1.4 Frontage Zone Features

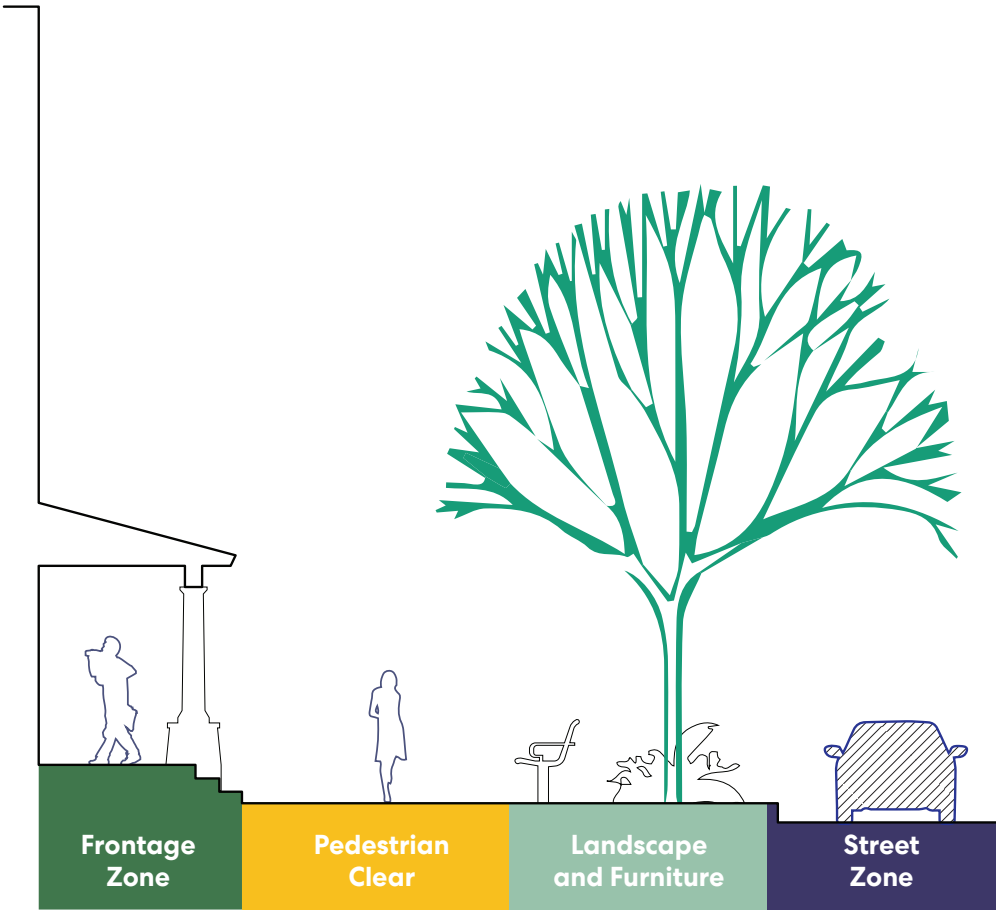
All new development with a ground floor commercial use shall allow the following features within the frontage zone:

- Sidewalk Dining
- Outdoor Displays
- Public Art
- Seating
- Trees / Plantings
- Green Stormwater Infrastructure

All new development with a ground floor residential use shall allow the following features within the frontage zone:

- Stoops
- Porches
- Front Yards
- Trees and Plantings
- Green Stormwater Infrastructure

For more information on street standards and guidelines, go to: Chapter 4: Streets



Sidewalk Zone

Figure 49 *The Sidewalk Zone*

Traffic Lanes and Intersections

The neighborhood is bounded on the west and north by two major vehicular roads: El Camino Real, a major arterial, and Oregon Expressway, an street designed to move higher volumes of vehicles quickly and efficiently.

However, most streets within the Plan Area are classified in the Comprehensive Plan as local/collectors, designed to calm traffic and give pedestrians priority in terms of scale and facility. The plan is aligned with the recommendations of the National Association of City Transportation Officials (NACTO) which states that narrower lane widths such as 10 feet are appropriate in urban areas and have a positive impact on street safety without impacting traffic operations.

Definitions:

Traffic Lanes: Within the public right-of-way and outside of the sidewalk zones are the traffic lanes. According to 10.04.180 of the Palo Alto Municipal Code, a "Traffic Lane means that portion of any roadway, either marked or unmarked, being not less than eight and one-half feet in width." The traffic lanes are intended to support safe and efficient vehicular traffic.

Standards:

3.2.1 Local Street Traffic Lane Width

All vehicle traffic lanes on local streets shall have a width of 10 feet.

3.2.2 California Fire Code

All roadway configurations shall comply with the California Fire Code. This includes the following:

- Roadway widths shall accommodate aerial fire apparatus set up at strategic locations for buildings over 27 feet tall.
- Walkable pathways shall be a minimum of 16 feet wide and support fire apparatus weights if vehicle traffic circulation is being restricted.

3.2.3 Crosswalk Treatments

All crosswalk surfacing and treatments shall follow the Americans with Disabilities Act (ADA) specifications.

3.2.4 Intersection Enhancements

All intersection enhancements shall select from the following toolbox:

- High visibility marked crosswalks.
- Raised crosswalks.
- Advance stop bars and yield lines.
- Daylighting to improve sightlines by removing parking adjacent to the intersection.
- ADA-accessible, bi-directional curb ramps.
- Curb extensions or bulb-outs.
- Bicycle detention and markings to indicate the position and path for bicyclists to cross the intersection.
- Traffic signals.
- Accessible pedestrian signals at intersections with clear markings, audio, and braille messaging.
- Leading pedestrian intervals at signalized intersections for pedestrians to establish their presence in the crosswalks before vehicles proceed.
- Green Stormwater Infrastructure

Guidelines:

3.2.5 Artful Intersections

To enhance the aesthetics and vibrancy of the roadway, key intersections and crosswalks should be evaluated for the inclusion of public art, such as unique pavers, intersection murals, or crosswalk artwork, where appropriate.

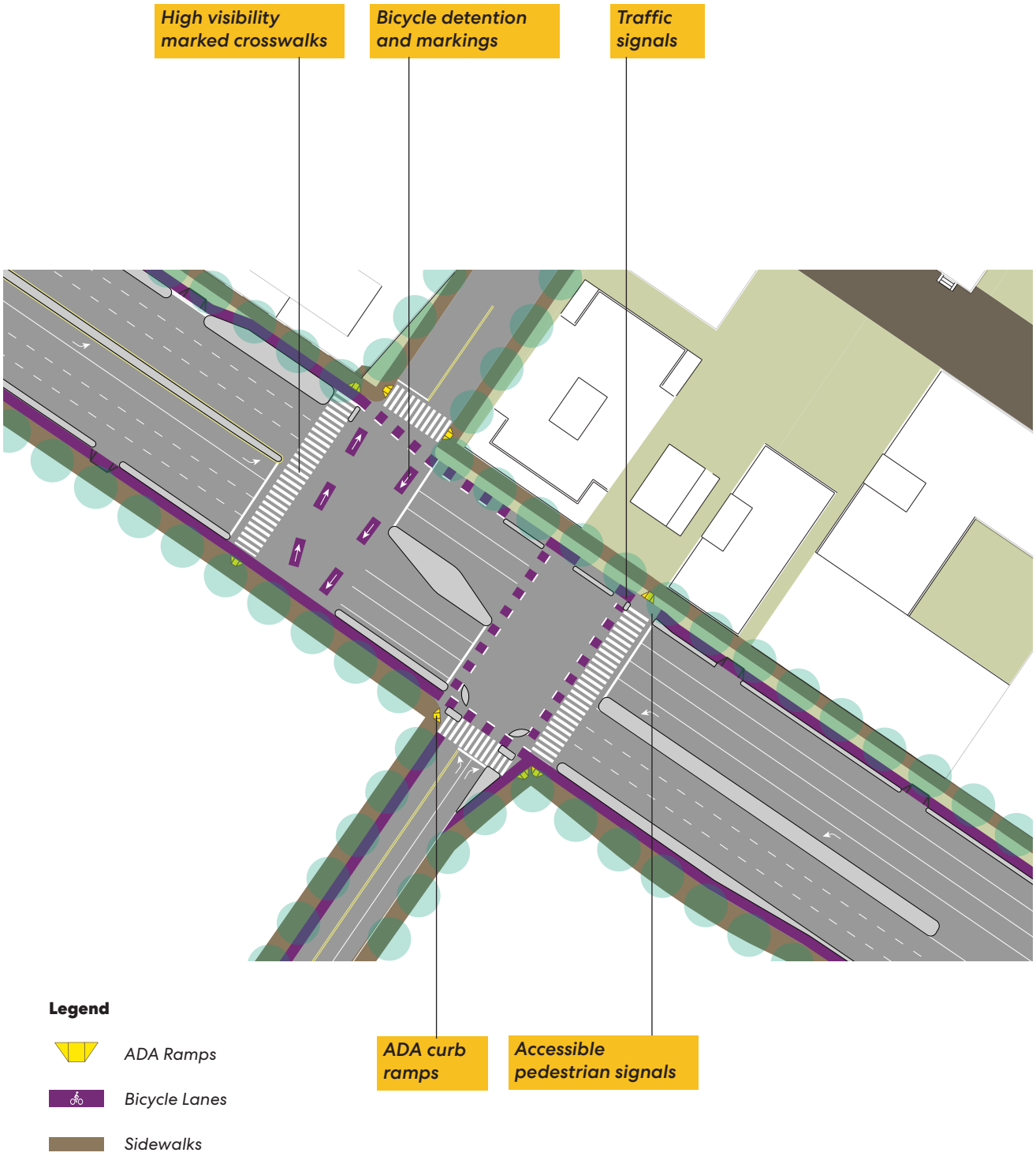


Figure 50 *Proposed improvements to El Camino Real, Hansen Way, and Portage Avenue will support a safe, low-stress, multi-modal street environment.*

Green Stormwater Infrastructure

As an integral part of the Plan Area's ecological network, the public realm will consist of a coordinated network of green stormwater infrastructure intended to implement the Comprehensive Plan's vision to "provide ecological and health benefits and a source of beauty for residents. Palo Alto will strive for clean air and clean water." Inspired by natural systems, the following standards and guidelines for green stormwater infrastructure and the urban forest are aimed at creating multi-functional landscapes that:

- Effectively manage stormwater.
- Create pollinator pathways.
- De-pave unnecessary hardscaped areas to mitigate the urban heat island effect.
- Create usable outdoor rooms which are an extension of parks and plazas.

Definition:

Diameter at Breast Height or DBH: a standard method of expressing the diameter of the trunk or bole of a standing tree. DBH is one of the most common methods to measure trees.

Green Stormwater Infrastructure: infrastructure built into our urban environment to collect, slow, and clean stormwater runoff through the use of natural processes.

Project Goal

Sustainability and the Environment

Protect and enhance the environment, while addressing the principles of sustainability.

Standards:

3.3.1 Green Stormwater Infrastructure

Green Stormwater Infrastructure shall adhere to Palo Alto Municipal Code Chapter 16.11 Stormwater Pollution Prevention and other stormwater design and maintenance requirements and specifications.

3.3.2 Protected Street Trees

Any locally native mature tree measuring 15" or more DBH shall be protected.

Use Table 7 for locally native protected species trees shall be protected and Table 8 for trees exempt for protection.

Species Name	Common Name	Diameter at Breast Height (DBH)
Acer Macrophyllum	Big Leaf Maple	11.5" or more
Calocedrus Decurrens	California Incense Cedar	
Quercus Agrifolia	Coast Live Oak	
Quercus Douglasii	Blue Oak	
Quercus Kelloggii	California Black Oak	
Quercus Lobata	Valley Oak	
Sequoia Sempervirens	Coast Redwood	18" or more

Table 6 *Local native protected tree species*

Species Name	Common Name	List Category
Alnus rhombifolia	White Alder	High Water Use
Alnus rubra (alnus oregona)	Red Alder	High Water Use
Araucaria Columnaris (A. cookii)	New Caledonian Pine	High Water Use
Betua spp	Birch Species	High Water Use
Metasequoia Glyptostroboides	Dawn Redwood	High Water Use
Populus Trichocarpa (P. Balsamifera)	Black Cottonwood	High Water Use
Populus x Canadensis	Carolina Poplar	High Water Use
Salix spp.	Willow Species	High Water Use
Acaia Dealbata	Silver Wattle	Invasive, Cal-IPC
Acacia Melanoxylon	Blackwood Acacia	Cal-IPC, PlantRight
Ailanthus Altissima	Tree-of-Heaven	Invasive, Cal-IPC
Cotoneaster spp.	Cotoneaster Species	Invasive, Cal-IPC
Crataegus Monogyna	English Hawthorn	Cal-IPC, Plant Right
Elauagnus Angustifolia	Russian Olive	Invasive, Cal-IPC
Eucalyptus Camaldulensis	Red Gum	Cal-IPC, PlantRight
Eucalyptus Globulus	Blue Gum	Cal-IPC, PlantRight
Fraxinus Uhdei	Evergreen Ash	Fruit
Ficus Carica	Edible Fig	Invasive, Cal-IPC
Ilex Aquifolium	English Holly	Cal-IPC, PlantRight
Melaleuca Quinquenervia	Cajeput Tree	State of CA
Myoporum Laetum	Ngaio Tree	Cal-IPC, PlantRight
Olea Europaea	European Olive	Cal-IPC, PlantRight
Phoenix Canariensis	Canary Island Date Palm	Cal-IPC, PlantRight
Populus spp.	Poplar, Cottonwood	Downy Fruit
Prunus Cerasifera	Cherry Plum	Cal-IPC, PlantRight
Robinia Pseudoacacia	Black Locust	Cal-IPC, PlantRight
Schinus Terebinthefolius	Brazilian Pepper	Invasive, Cal-IPC
Washingtonia Robusta	Mexican Fan Palm	Invasive, Cal-IPC

Table 7 *Trees to be exempt from protection*

Standards:

3.3.3 Tree Species Selection

Property owners shall consult with the City's urban forestry division staff to determine the appropriate street tree.

3.3.4 Street Tree Spacing

In accordance with Chapter 13.24.020 of the Palo Alto Municipal Code, All street trees shall be planted within the city easement in coordination with existing utilities.

3.3.5 Pollinator Pathways

The adopted Palo Alto Parks, Trails, Natural Open Space, & Recreation Master Plan identifies Portage Avenue and Park Boulevard as Pollinator Pathways.

Street design for these streets shall integrate native plantings (e.g. riparian, grassland, or oak woodland), and specific habitat plantings to support pollinators such as hummingbirds and butterflies.

Guidelines:

3.3.6 Tree Spacing

Sidewalks should include at least one tree for every 30 feet of sidewalk length.

3.3.7 Double Row of Trees

Where space allows, either on private setbacks or within the sidewalk zones, the planting of a second row of street trees is encouraged.

3.3.8 Seasonal Interest

Select a planting palette that provides seasonal interest, such as autumn colors. Seasonal interest should not be prioritized over enhancing biodiversity.

3.3.9 Tree Species Criteria

Tree species should be selected based on a combination of their aesthetics and their ecological performance benefits including the following considerations:

- California native trees
- Biodiversity amongst street trees
- Drought tolerance
- Non-invasive
- Proven long-term durability
- Tolerance of urban conditions such as compacted soils and air pollution
- Resistance to disease
- Branching structure that will provide a shade structure
- Ability to adapt to predicted future temperature increases related to climate change
- Non-fruiting and free of significant seed pods
- Wind tolerance
- Habitat value

3.3.10 Stormwater Runoff

In addition to the City of Palo Alto Municipal Code and city-specific design and maintenance requirements, all new Green Stormwater Infrastructure should adhere to the Santa Clara Valley Urban Runoff Pollution Prevention Program's reports and work products for materials, precedents, and methods. The integration of green stormwater infrastructure when planting trees should always be considered.

Figure 51 *Planting a double row of trees along the sidewalk and fronta[illegible]or a pleasant pedestrian experience, improves neighborhood aesthetics, and fosters ecological corridors.*

Paving

Paving is a key component that will help define the character, connectivity, and identity of the North Ventura neighborhood's varied streets and open spaces. A hierarchy of paving materials on streets like El Camino Real, Portage Avenue, and Park Boulevard can help create clear wayfinding and contributes aesthetically to the neighborhood.

Standards:

3.4.1 City Standards

All street paving shall meet City of Palo Alto Sidewalk Standards and be approved by the city engineer or designate.

3.4.2 Solar Reflectance Index (SRI)

Materials that reduce the urban heat island effect by using pavement with a Solar Reflectance Index (SRI) of 29 or higher shall be selected for use.

Guidelines:

3.4.3 Responsible Material Use

Paved areas should be made of sustainable paving materials, including recycled, local, and sustainable sourced materials. Consider opportunities for the reuse of demolition waste from the site.

3.4.4 Accent Paving at Intersections

Street improvement projects should install accent paving at key intersections and raised crossings.

For more information on intersections go to: Chapter 7: Implementation

3.4.5 Portage Avenue Special Paving

The Portage Avenue Woonerf should incorporate a special paving pattern. The use of contrasting, tactile, and high-quality paving that distinguishes the bike lanes and vehicle lanes with a curbless street that prioritizes pedestrians, gathering and spill-over activities is encouraged.

3.4.6 El Camino Real Special Paving

In coordination with Caltrans and VTA, the segment of El Camino Real within the neighborhood should incorporate a special paving pattern that reflects its position as a Grand Boulevard. The paving material should extend into the private setback along active ground floor uses to create a more comfortable and welcoming public space for adjacent businesses.

3.4.7 Pervious Paving for Green Stormwater Infrastructure

Large hardscaped areas such as parking areas, sidewalks, and driveways could utilize types of pervious pavements to reduce ponding, recharge groundwater, and prevent stormwater pollution.

Figure 52 *Light colored pavement reduces the urban heat island effect.*

Exterior Lighting

Adequate exterior lighting should be provided in all dedicated open spaces and along all streets and greenways to ensure clear wayfinding and safe pedestrian passage. Lighting design also has an opportunity to support habitat and mitigate light pollution, allowing current and future generations to be able to look up and clearly see the night sky.

Standards:

3.5.1 City Standards

All exterior light fixtures in the right-of-way shall meet City of Palo Alto standards and be approved by the City.

3.5.2 Full Shielded Fixtures

All exterior light fixtures shall be fully shielded to minimize glare, light trespass, and light pollution throughout the neighborhood.

3.5.3 Dark Sky Compliant

Exterior light fixtures shall meet or exceed applicable energy-efficiency standards while adhering to recommended kelvin temperature specified by the International Dark Sky Association to prevent negative health impacts on humans and wildlife.

3.5.4 Key Pedestrian Routes and Scale

Lighting shall reinforce key active transportation streets and all lighting shall be scaled to the pedestrian and bicycle experience.

3.5.5 Safety

Lighting shall allow facial recognition along paths of travel. Lighting shall not create glare or "hot spots" that would inhibit visual accessibility.

Guidelines:

3.5.6 Habitat Areas

If lighting is appropriate in the proposed public park adjacent to the Creek and sensitive habitat areas, light fixtures should be equipped with motion sensors or timers to not disrupt the circadian rhythms of wildlife.

3.5.7 Retail / Active Use Areas

Lighting along El Camino Real and Portage should incorporate signature fixtures and a variety of special lighting types such as catenary string lights to reinforce an experience-rich street life.

Figure 53 *Dark sky compliant exterior light fixtures helps mitigate light pollution and the health of both humans an*

Credit: Edgar Zacarias via Foursquare

Wayfinding

The design and integration of wayfinding is an effective tool that can celebrate the neighborhood's history, foster a sense of place, and support clear and predictable navigability for residents, employees, and visitors.

Standards:

3.6.1: Caltrans Standards

Roadway signage shall comply with the California Manual on Uniform Traffic Control Devices (MUTCD), and California Sign Specifications.

3.6.2: City Standards

Active Transportation signage shall adhere to the Design Standards included in the City of Palo Alto's Bicycle and Pedestrian Transportation Plan.

Guidelines:

3.6.3: Shared Use Signage

Curbless streets such as Portage Avenue Woonerf should have signage that indicates the delineation of the right of way for pedestrians, bicycles, and vehicles. Shared trails within the public park should include signage indicating the shared use area at pedestrian and bicycle eye level.

3.6.4: Celebrate the Cannery and Other Landmarks

Signage and wayfinding that is not required to adhere to Caltrans and City standards should take cues from neighborhood landmarks like the Cannery by correlating graphically and emulating a consistent color and material palette.

3.6.5: Neighborhood Maps and Directional Signage

Area-specific maps and directional signage that highlights nearby destinations along pedestrian pathways should be installed at major gateways into the neighborhood.

3.6.6: Mile Markers and Educational Placards

The use of mile markers and educational and interpretive placards can be placed along the trails along Matadero Creek to inform visitors about the re-naturalization process and subsequent ecological benefits.

For more information on wayfinding go to: Chapter 7: Implementation

Figure 54 *Neighborhood map and directional sig... for vis...*

3.7

Public Art

Building on the City's legacy of commissioning iconic public art within urban centers like Downtown Palo Alto and California Avenue, the integration of new and diverse public art can contribute significantly to the sense of place within the neighborhood. This plan is aligned with the City of Palo Alto's Public Art Master Plan's guiding principles which state that Palo Alto's public art will:

- Be distributed citywide, focusing on areas where people gather and in unexpected places that encourage exploration;
- Represent a broad variety of artistic media and forms of expression;
- Enhance City infrastructure, transportation corridors, and gateways;
- Include both permanent and temporary artworks;
- Strive for artistic excellence;
- Be maintained for people to enjoy.

Guidelines:

3.7.1 Location of Public Art

Public art should be located at major social engagement areas such as the proposed public park and the Cannery Building, along transportation corridors such as El Camino Real, Portage Avenue, and Park Boulevard, and at major gateway moments announcing that you are entering the neighborhood.

Figure 55 *The location of public art such as Passages by Susan Zoccola should be located at the public park, major transportation corridors and major gateways.*

4

Streets

Vibrant, pedestrian-oriented, and visually interesting streets will be the setting for the future of the North Ventura neighborhood. With generous and active sidewalks, traffic calming devices, and low-stress bicycle facilities, the street network will provide a variety of options to travel safely and conveniently through the neighborhood.

Building on the 2030 Comprehensive Plan, the plan supports the implementation of the transportation chapter's vision to,*'build and maintain a sustainable network of safe, accessible and efficient transportation and parking solutions for all users and modes, while protecting and enhancing the quality of life in Palo Alto. Programs will include alternative and innovate transportation processes, and the adverse impacts of automobile traffic on the environment in general and residential streets in particular will be reduced.*

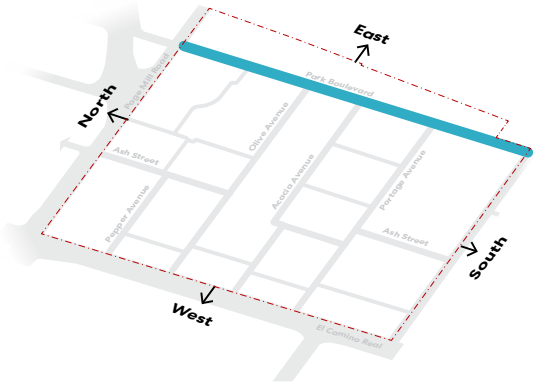
Streets will be safe, attractive and designed to enhance the quality and aesthetics of Palo Alto neighborhoods. Palo Alto recognizes the regional nature of its transportation system, and will be a leader in seeking regional transportation solutions, prioritizing Caltrain service improvements and railroad grade separations.'

The following street sections are intended to illustrate the long term vision of the NVCAP mobility network. The design of the new streets will be built out over time.

4.1

Park Boulevard

Park Boulevard is a priority north-south bicycle and pedestrian street that connects the NVCAP Plan Area to the California Avenue Caltrain Station and terminates at the California Avenue Business District. The street emphasizes multi-modal transportation with wide pedestrian sidewalks, bi-directional buffered bike lanes, and a two-way flow of vehicles is maintained. Park Boulevard is designated as a citywide pollinator pathway, the design of the street prioritizes a connected canopy of trees and a lush, landscaped streetscape to support the health and comfort of both people and wildlife.



Standards:

4.1.1 Street Design

Pedestrian Clear Zone	8 Feet
Landscape / Furniture Zone	4.5 Feet
Bicycle Facility	Separated Buffered Bike Lanes 5 Feet Bike Lane 2-3 Feet Buffer
Vehicle Travel Lanes	10 Feet One Lane in Each Direction
Parking / Loading	No On-Street Parking
Frontage / Setback	Western Edge: 20 Feet from Property Line Eastern Edge: 5 Feet from Property Line
Building Entries	New development shall provide a primary entry or entries on Park Boulevard.

Table 8 *Park Boulevard Street Design*

Guidelines:

4.1.2 Widen the Pedestrian Throughway

It is encouraged to extend the width of the standard pedestrian throughway on the western edge into the frontage zone to support a more generous pedestrian realm.

4.1.3 Streetscape Elements

Streetscape elements should include:

- Street trees that can create a connective canopy at full maturity
- Lighting and wayfinding that provides a neighborhood branding/identity opportunity
- Seating/rest areas for residents and commuters
- Green Stormwater Infrastructure in the setbacks, landscape/furniture zone, and if space allows, the separated buffered bike lane.

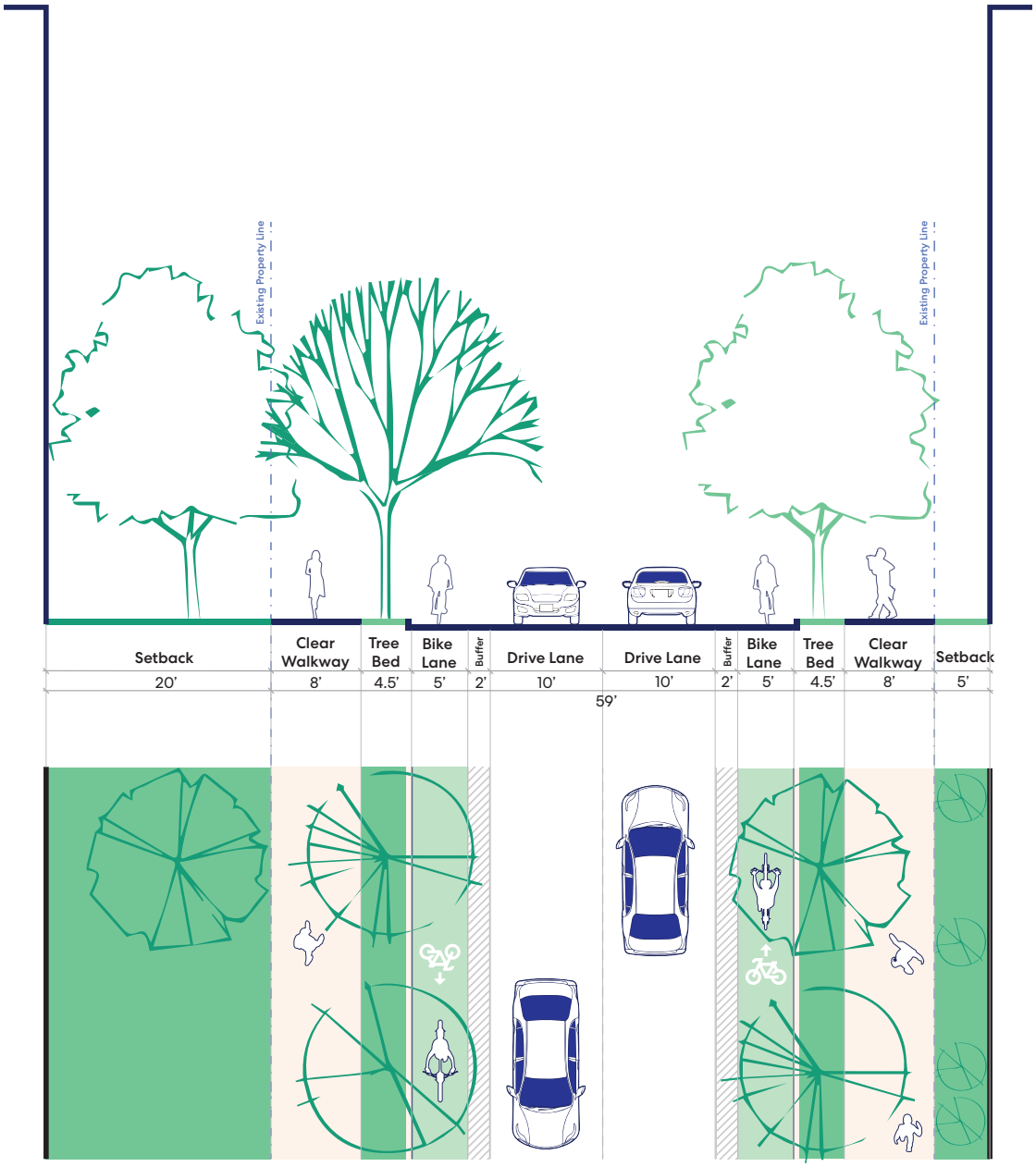
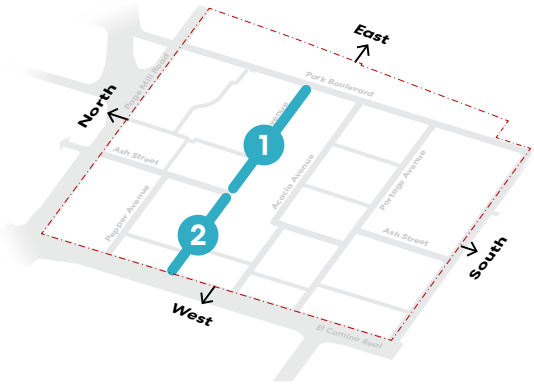


Figure 56 *Typical Park Boulevard Section*

4.2

Olive Avenue

Olive Avenue is a priority east-west pedestrian and bicycle street that creates a direct link between the commercial activity on El Camino Real with the multi-modal mobility on Park Boulevard. Olive Avenue has two distinct street designs:



Between Park Boulevard and Ash Street, the street is configured to accommodate comfortable sidewalks and two-way vehicle travel lanes. Due to the low traffic volumes and speeds on Olive Avenue, the street is designated as a bicycle boulevard which allows cyclists to ride with traffic. The setback on the northern edge of the street is 20 feet to protect the existing green stormwater infrastructure along the 395 Page Mill property.

Between Ash Street and El Camino Real, the street remains a two-way street. Due to the low traffic volumes and speeds on Olive Avenue, the street is designated as a bicycle boulevard which allows cyclists to ride with traffic. The on-street parking on both sides of the street is maintained.

Standards:

4.2.1 Street Design

	1 Between Park Boulevard and Ash Street	2 Between Ash Street and El Camino Real
Pedestrian Clear Zone	8 Feet	8 Feet
Landscape / Furniture Zone	Northern Edge: 3 Feet Southern Edge: 4 Feet	Northern Edge: 3 Feet Southern Edge: 4 Feet
Bicycle Facility	Bicycle Boulevard 10 Feet	Bicycle Boulevard 10 Feet
Vehicle Travel Lanes	10 Feet 1 Lane in Each Direction	10 Feet 1 Lane in Each Direction
Parking / Loading	2 Lanes of On-Street Parking	2 Lanes of On-Street Parking
Frontage / Setback	Northern Edge: 20 Feet (Existing Bioswale) Southern Edge: 12.5 Feet from Property Line	Northern Edge: 12.5 Feet from Property Line Southern Edge: 10 Feet from Property Line
Building Entries	New development shall provide a primary entry or entries on Olive Avenue except for properties that are abutting Park Boulevard or Ash Street.	New development shall provide a primary entry or entries on Olive Avenue except for properties that are abutting El Camino Real or Ash Street.

Table 9 *Olive Avenue Street Design*

1

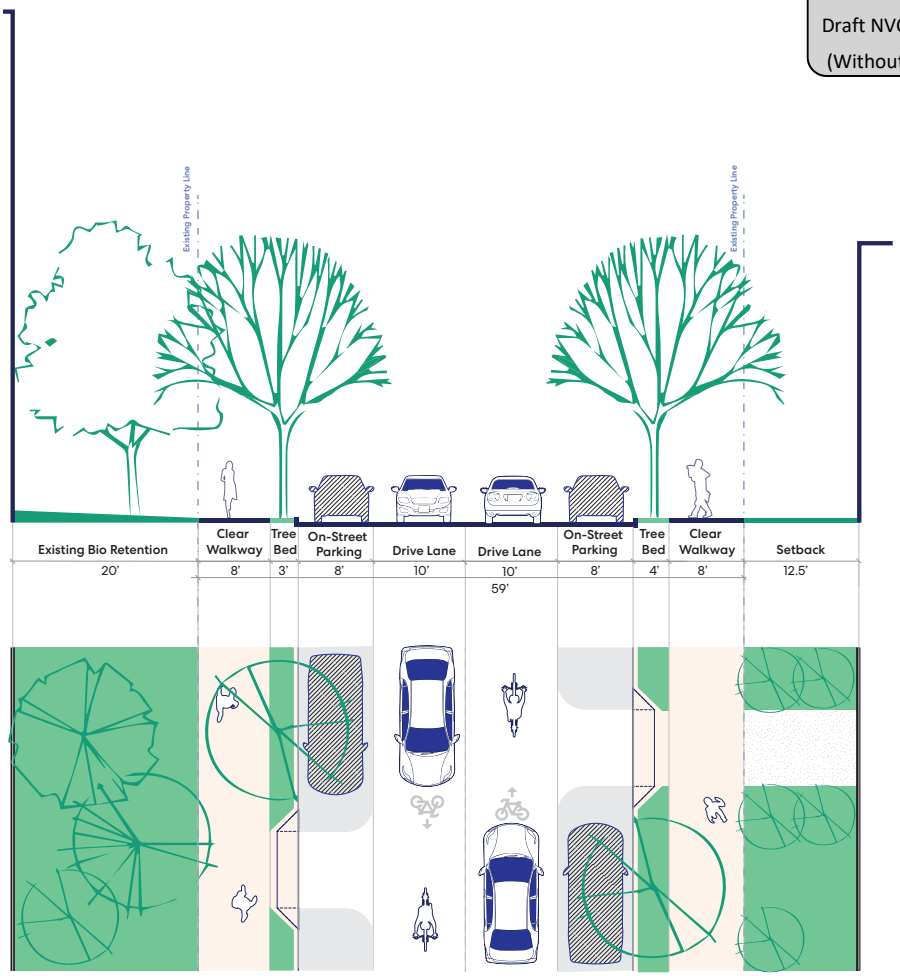


Figure 57 *Typical Olive Avenue section between Park Boulevard and Ash Street*

2

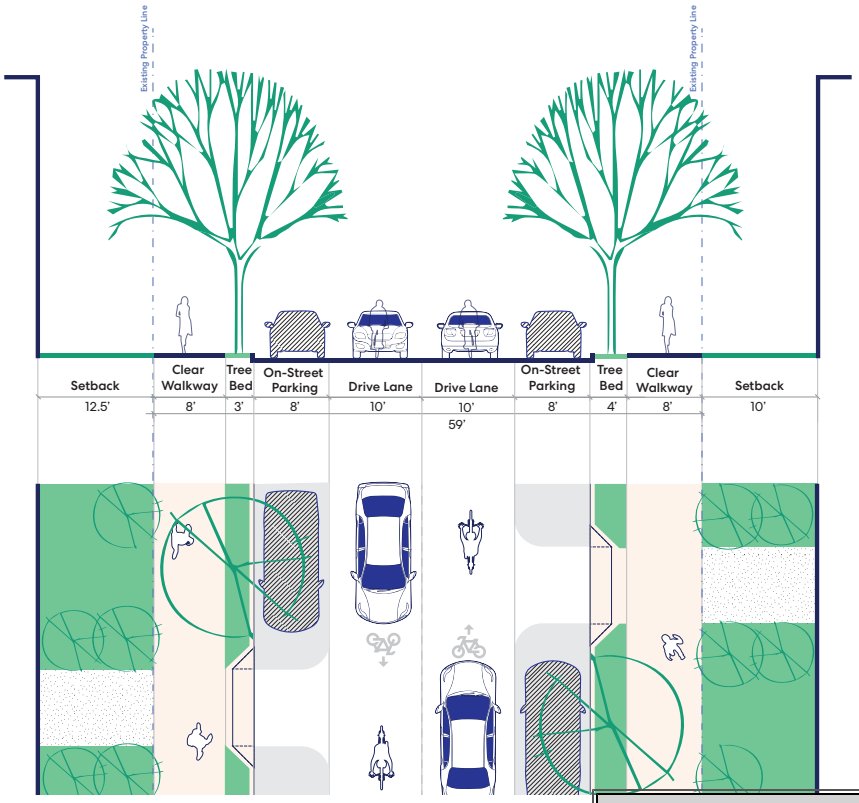
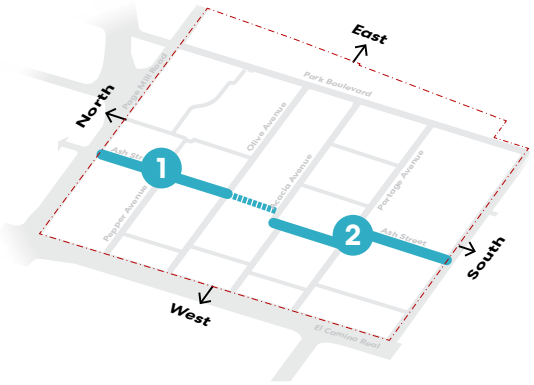


Figure 58 *Typical Olive Avenue section between Ash Street and El Cam*

Ash Street

Ash Street is a quiet, predominately residential street, which provides a critical north-south connection throughout the Plan Area. A desired pedestrian connection across Olive Avenue to Acacia Avenue will provide seamless access from Page Mill Road to public park, Matadero Creek, and existing community amenities such as Bouleware Park. Ash Street has two distinct street designs:



Between Page Mill Road and Olive Avenue, the street is converted from a two-way street to a one-way southbound street. This change prevents northbound traffic on El Camino Real from using the neighborhood as a cut-through to travel eastbound on Page Mill Road. The western edge of the street features a wide shared-use path for pedestrians and northbound cyclists.

Between Olive Avenue and Lambert Avenue, the street segment is designed with bi-directional sidewalks and vehicle lanes. The vehicle travel lanes are also designated as bicycle boulevards, where cyclists share the road with vehicles.

Standards:

4.3.1 Street Design

1 Between Page Mill Road and Olive Avenue

Pedestrian Clear Zone	Western Edge: Shared Use Path: 12 Feet Eastern Edge: 8 Feet
Landscape / Furniture Zone	Western Edge: 5 Feet Eastern Edge: 5 Feet
Bicycle Facility	Southbound: Bicycle Boulevard 10 Feet
Vehicle Travel Lanes	10 Feet 1 Southbound Lane
Frontage / Setback	Western Edge: Maximum 5 Feet from Property Line Eastern Edge: Maximum 5 Feet from Property Line
Building Entries	New development shall provide a primary entry or entries on Ash Street except for properties that are abutting Page Mill or Olive Avenue.

2 Between Acacia Avenue and Lambert Avenue

Pedestrian Clear Zone	8 Feet
Landscape / Furniture Zone	Western Edge: n/a Eastern Edge: 4 Feet
Bicycle Facility	Bicycle Boulevard: 10 Feet
Vehicle Travel Lanes	10 Feet 1 Lane in Each Direction
Frontage / Setback	Maximum 5 Feet from Property Line
Building Entries	New development shall provide a primary entry or entries on Ash Street except for properties that are abutting Portage Avenue, Lambert Avenue or Acacia Avenue.

Table 10 *Ash Street Street Design*

1

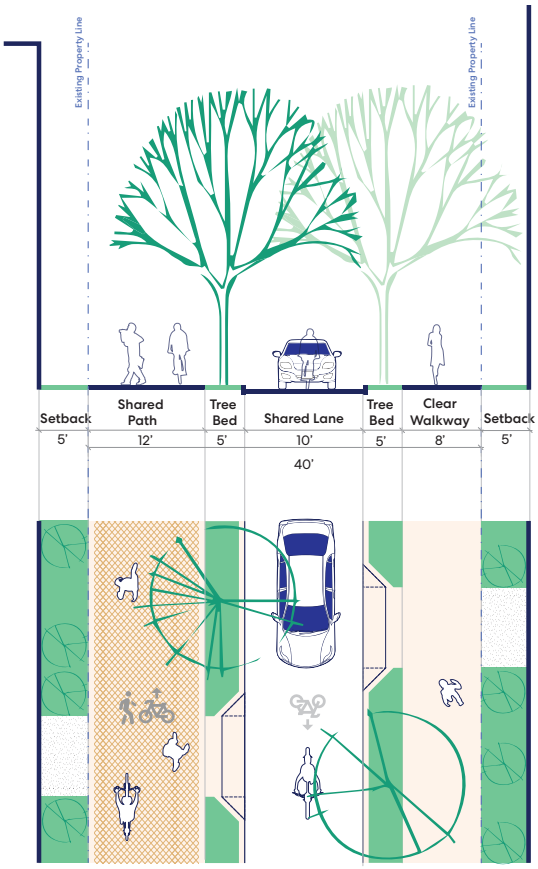


Figure 59 *Typical Ash Street section between Page Mill Road and Olive Avenue*

2

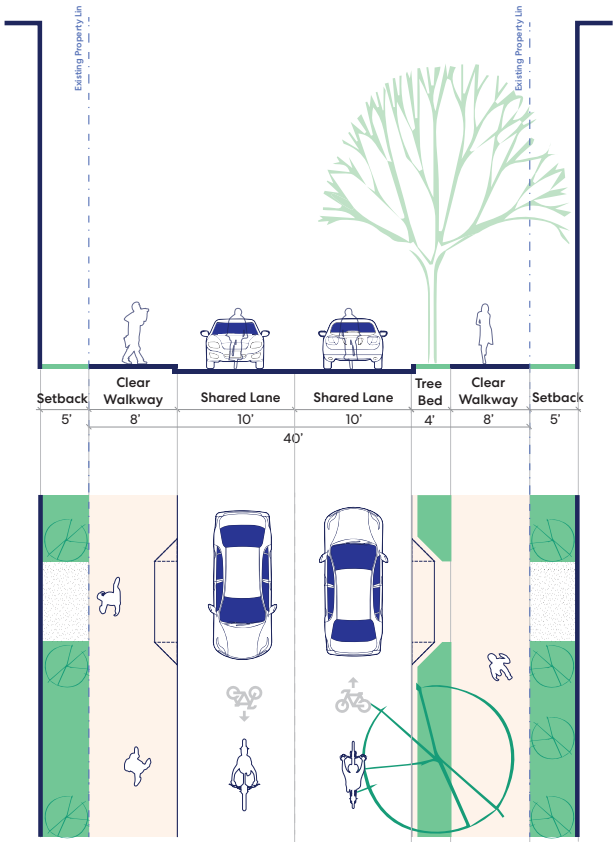
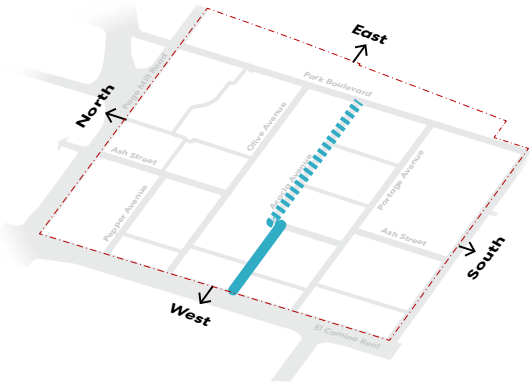


Figure 60 *Typical Ash Street section between Acacia Avenue and*

4.4

Acacia Avenue



Acacia Avenue is an east-west street, primarily serving as service street for the Plan Area. The street extends from El Camino Real to Ash Street, at which point it becomes a private driveway for the 340 Portage site. The street design for the segment between Ash Street and El Camino Real consists of bi-directional pedestrian sidewalks along with two-way vehicle lanes. On-street parking is maintained on the southern edge of the street.

Standards:

4.4.1 Street Design

Between Ash Street and El Camino Real

Pedestrian Clear Zone	8 Feet
Landscape / Furniture Zone	Northern Edge: 4 Feet Southern Edge: n/a
Bicycle Facility	n/a
Vehicle Travel Lanes	10 Feet 1 Lane in Each Direction
Parking / Loading	Southern Edge: 1 Lane of On-Street Parking
Frontage / Setback	Maximum 5 Feet from Property Line
Building Entries	New development shall provide a primary entry or entries on Acacia Avenue except for properties that are abutting El Camino Real or Park Boulevard.

Table 11 *Acacia Avenue Street Design*

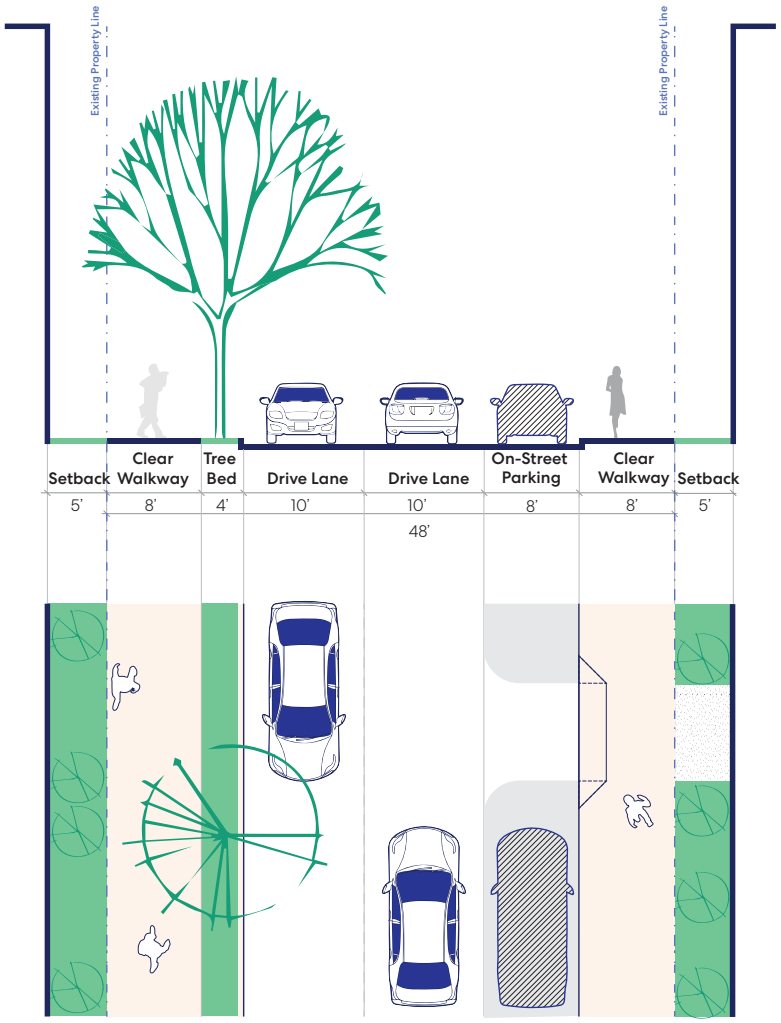
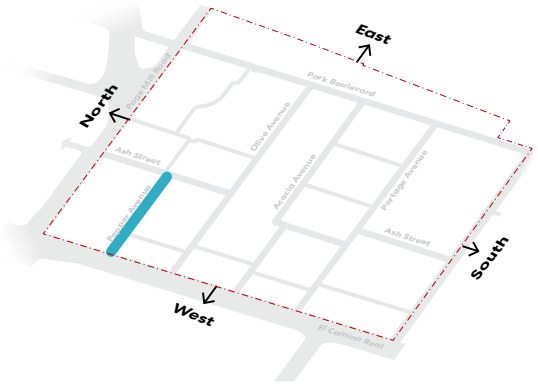


Figure 61 *Typical Acacia Avenue Section*

4.5

Pepper Avenue

Pepper Avenue is a slow residential street, extending from El Camino Real to Ash Street. The street design supports existing residents with wide, tree-lined sidewalks and two-way traffic lanes. On-street parking is maintained on either side.



Standards:

4.5.1 Street Design

Between Ash Street and El Camino Real

Pedestrian Clear Zone	8 Feet
Landscape / Furniture Zone	Northern Edge: 5 Feet Southern Edge: 5 Feet
Bicycle Facility	n/a
Vehicle Travel Lanes	10 Feet 1 Lane in Each Direction
Parking / Loading	2 Lanes of On-Street Parking
Frontage / Setback	Minimum 3.5 Feet Maximum 12.5 Feet from Property Line
Building Entries	New development shall provide a primary entry or entries on Pepper Avenue except for properties that are abutting Ash Street.

Table 12 *Pepper Avenue Street Design*

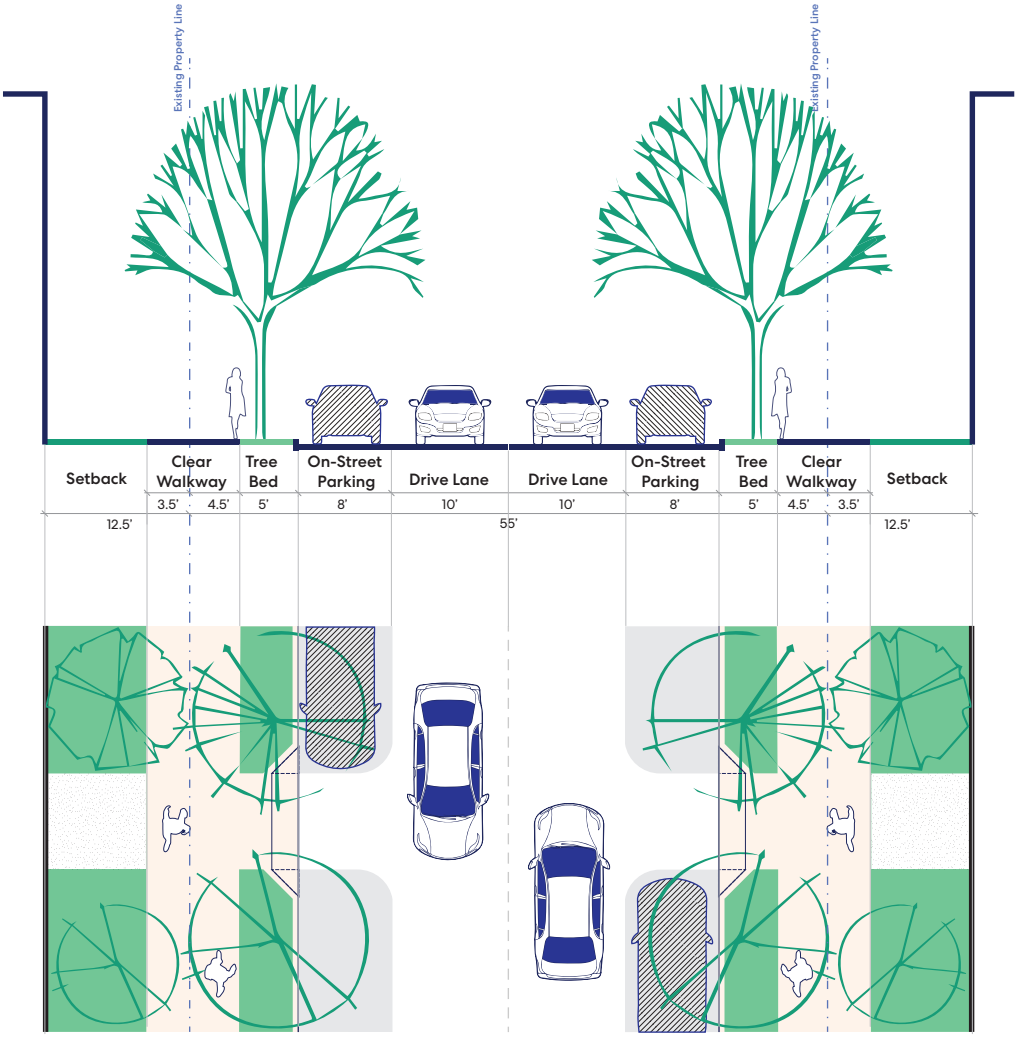
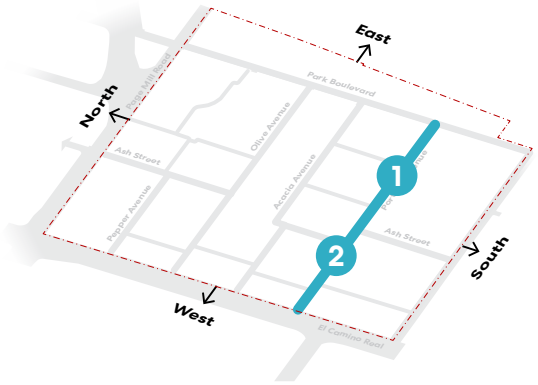


Figure 62 *Typical Pepper Avenue Section*

4.6

Portage Avenue



Portage Avenue is a priority east-west bicycle and pedestrian street which becomes a critical citywide link from Park Boulevard connecting the California Avenue Caltrain and Business District to the existing bicycle infrastructure on Hansen Way to the Stanford Research Park. Portage Avenue has two distinct street designs:

Between Park Boulevard and Ash Street is the Portage Avenue woonerf, 'the front door' for the public park and the Cannery building. The woonerf, which will be a publicly accessible private street is an integrated, curbless street, shared by pedestrians, bicyclists, and low-speed vehicles. On-street parking will be integrated where possible to support visitors to the public park. The street incorporates outdoor furnishings such as trees, planters, green stormwater infrastructure and seating to ensure this space fosters community gatherings, events, retail, and other flexible uses. The city may consider a shared-use path on Portage Avenue.

Between Ash Street and El Camino Real, Portage Avenue takes on a more typical street configuration. The street design includes two sidewalks with a wide furnishing zone on the northern edge of the street. Two-way traffic lanes are retained with on-street parking on the southern edge of the street. Due to the low traffic volumes and speeds, this segment of Portage is designated as a bicycle boulevard, where cyclists share the road with vehicles.

Standards:

4.6.1 Street Design

1 Between Park Boulevard and Ash Street

Pedestrian Clear Zone	8 Feet
Landscape / Furniture Zone	Northern Edge: 15 Feet Southern Edge: 8'
Bicycle Facility	Bicycle Boulevard 10 Feet
Vehicle Travel Lanes	10 Feet
Frontage / Setback	Northern Edge: Maximum 5 Feet from Property Line Southern Edge: n/a
Building Entries	New development shall provide a primary entry or entries on Portage Avenue except for properties that are abutting Park Boulevard.

2 Between Ash Street and El Camino Real

Pedestrian Clear Zone	8 Feet
Landscape / Furniture Zone	Northern Edge: 15 Feet Southern Edge: n/a
Bicycle Facility	Bicycle Boulevard 10 Feet
Vehicle Travel Lanes	10 Feet 1 Lane in Each Direction
Parking / Loading	Southern Edge: 1 Lane of On-Street Parking
Frontage / Setback	Maximum 5 Feet from Property Line
Building Entries	New development shall provide a primary entry or entries on Olive Avenue except for properties that are abutting El Camino Real.

Table 13 *Portage Avenue Street Design*

1

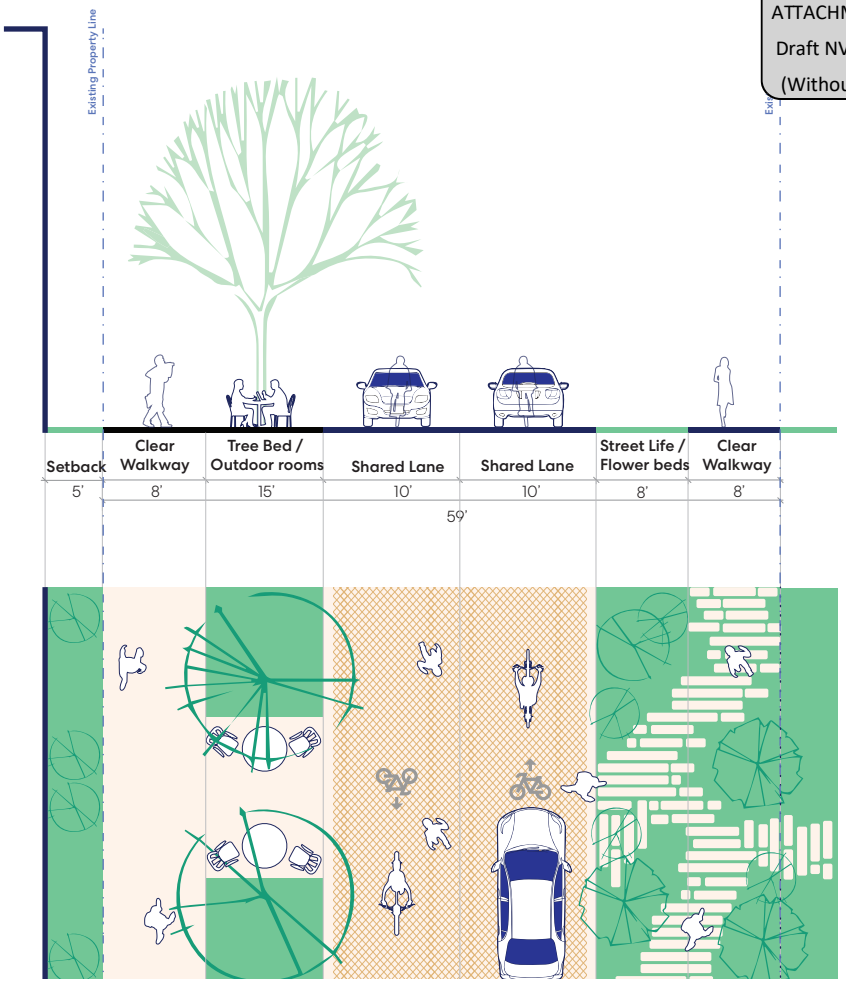


Figure 63 *Typical Portage Avenue section between Park Boulevard and Ash Street*

2

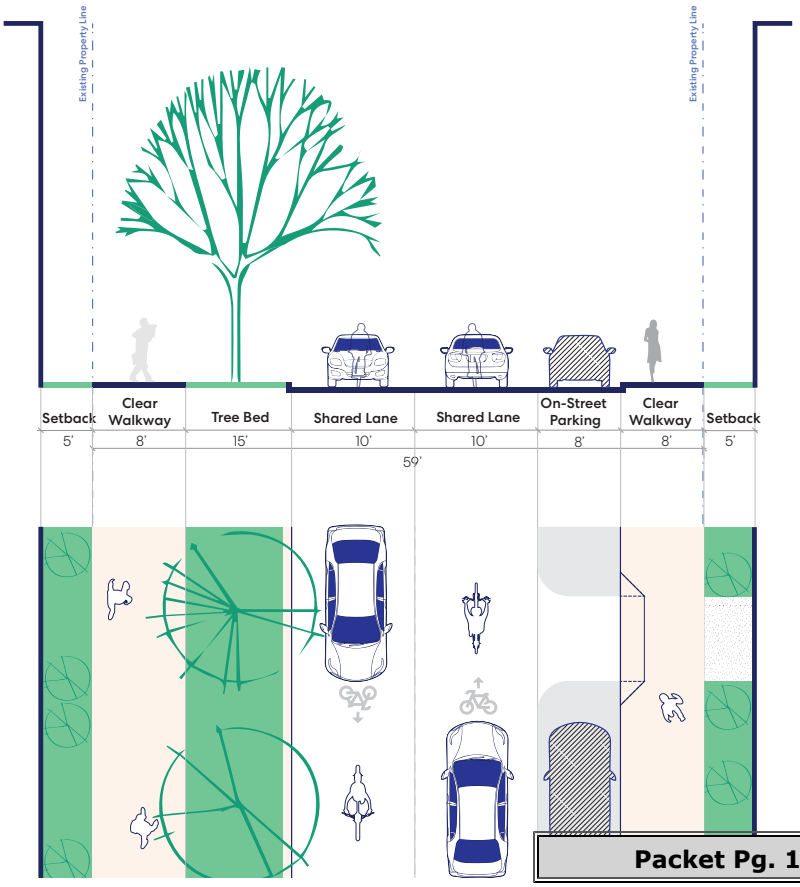


Figure 64 *Typical Portage Avenue section between Ash Street and El Camino Real*

Guidelines:

4.6.2 Streetscape Elements

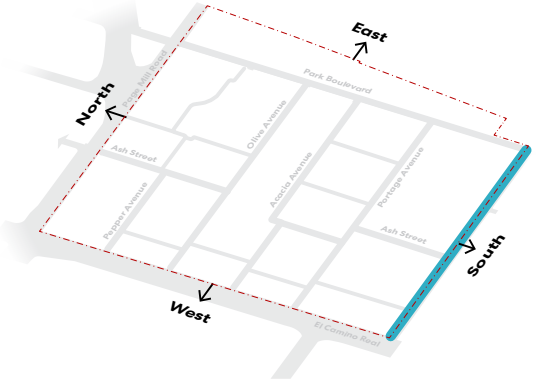
Streetscape elements of the Portage Avenue woonerf include:

- A row of street trees on either side of the main travel way to designate pedestrian priority areas adjacent to building frontages
- Signage emphasizing the presence of pedestrians and bicyclists
- Textured or permeable pavement designed to slow vehicle speeds and provide stormwater management benefits
- Pedestrian-scale lighting
- Seating areas
- Landscaping and green stormwater infrastructure
- Design elements that highlight the community's vision or character
- Public art that will enhance the pedestrian experience and reflect the community's unique character.

Figure 65 *Streetscape elements like double row of trees, textured pave[illegible] seating encourages a low-carbon, welcoming neighborhood environment.*

Lambert Avenue

Lambert Avenue is improved on the northern half of the existing street to enhance the pedestrian experience along the edge of the NVCAP site boundary. The existing vehicular travel lane is narrowed, and on-street parking is eliminated to make space for a wider pedestrian thoroughfare and generous furnishing zone for enhanced bio-retention area and dense canopy trees.



Standards:

4.7.1 Street Design

1 Between Park Boulevard and El Camino Real

Pedestrian Clear Zone	Northern Edge: 10 Feet
Landscape / Furniture Zone	Northern Edge: 7.5 Feet
Vehicle Travel Lanes	Westbound Lane 10 Feet
Frontage / Setback	Northern Edge: Maximum 5 Feet
Building Entries	New development shall provide a primary entry or entries on Lambert Avenue except for properties that are abutting Park Boulevard or El Camino Real.

Table 14 *Lambert Avenue Sidewalk Zone Design*

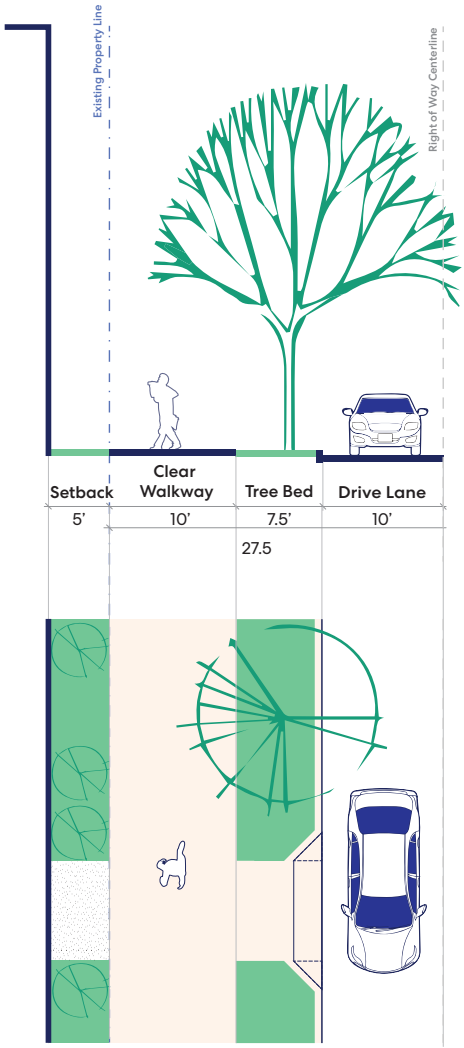


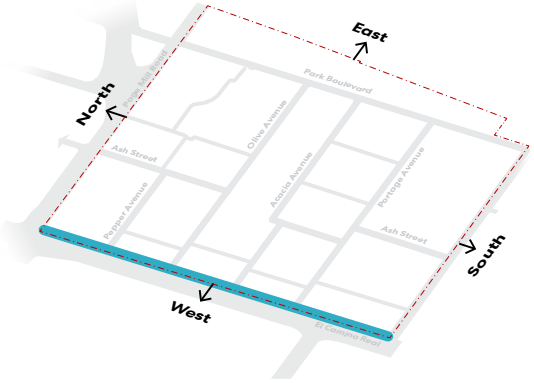
Figure 66 *Typica* *ction*

4.8

El Camino Real

El Camino Real is improved on the eastern half of the existing street. New development is required to setback by 5 feet in order to provide a wider pedestrian sidewalk and furnishing zone to support a more comfortable pedestrian experience.

The configuration of the roadway will be determined in coordination with Caltrans independently of the NVCAP.



Standards:

4.8.1 Street Design

1 Between Page Mill Road and Lambert Avenue

Pedestrian Clear Zone	Eastern Edge: 8 Feet
Landscape / Furniture Zone	Eastern Edge: 4 Feet
Frontage / Setback	Minimum 5 Feet Maximum 10 Feet
Building Entries	New development shall provide a primary entry or entries on El Camino Real.

Table 15 *El Camino Real Sidewalk Zone Design*

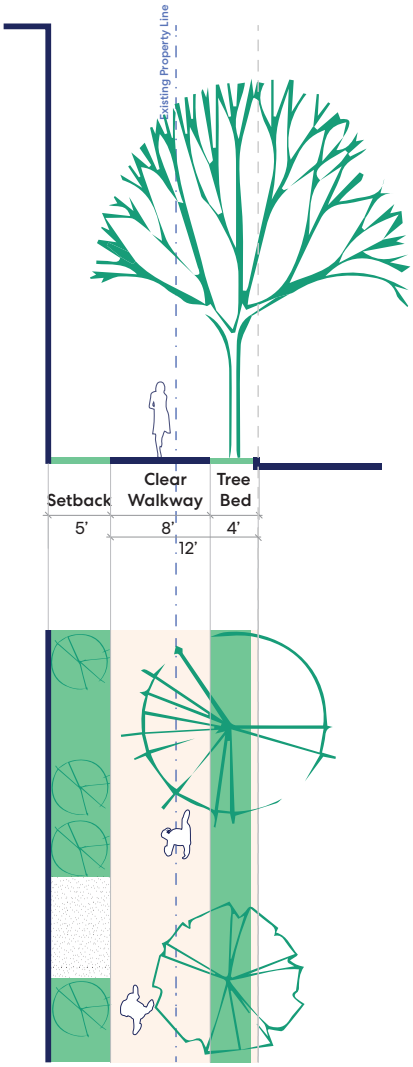
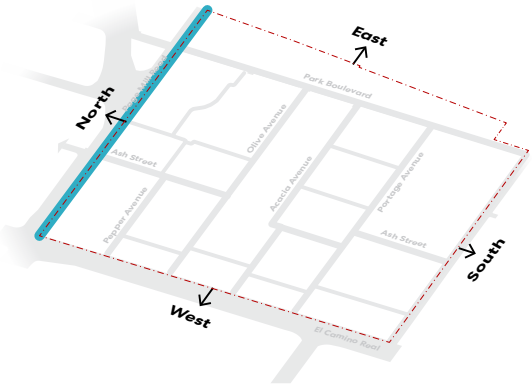


Figure 67 *Typical El Camino Real Section*

Page Mill Road



Page Mill Road is improved on the southern half of the existing street to enhance the pedestrian experience along the edge of the NVCAP Plan Area boundary. New development will provide a wider pedestrian sidewalk and furnishing zone to support a more comfortable pedestrian experience. In order to provide a consistent width, the setback for new development will vary based on existing site conditions.

The configuration of the roadway will be determined in coordination with Santa Clara County.

Standards:

4.9.1 Street Design

1 Between Park Boulevard and El Camino Real

Pedestrian Clear Zone	Southern Edge: 8 Feet
Landscape / Furniture Zone	Southern Edge: 4 Feet
Frontage / Setback	Southern Edge: Minimum 5 Feet
Building Entries	New development shall provide a primary entry or entries on Page Mill road except for properties that are abutting Park Boulevard or El Camino Real.

Table 16 *Page Mill Road Sidewalk Zone Design*

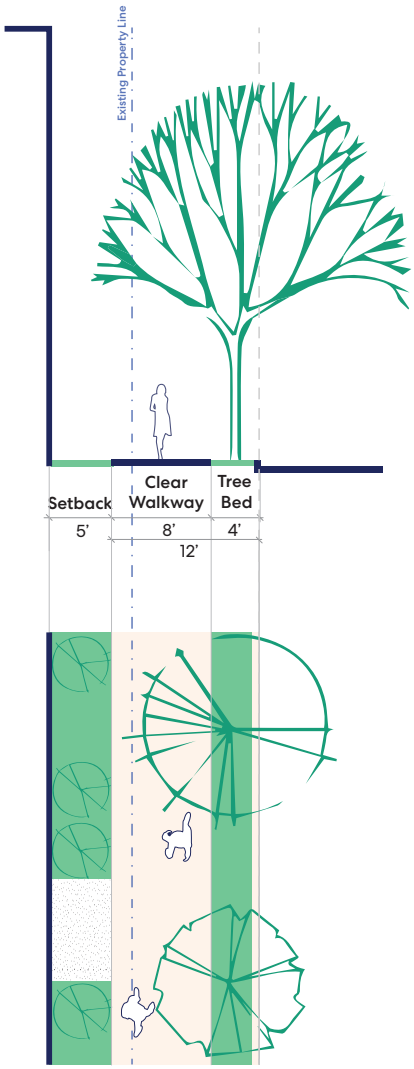


Figure 68 *Typica* *ion*

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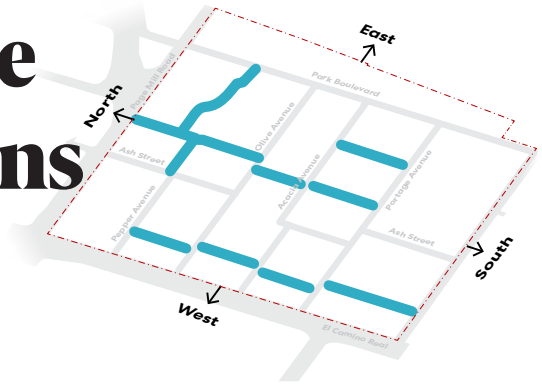
Publicly Accessible Private Connections



New publicly accessible connections on private property are intended to support greater porosity and walkability throughout the Plan Area. These connections can break up large 'super-blocks' and provide alternative routes for residents to move through the Plan Area. These connections include mid-block paseos in between the Cannery building, pedestrian pathways within the rear setback of new development along El Camino Real, and pedestrian pathways through the 395 Page Mill property.

For more information on public easements go to: Chapter 7: Implementation

Standards:

4.10.1 Street Design

1 Mid-Block Paseo

Pedestrian Clear Zone	Shared Use Path: 20 Feet
Landscape / Furniture Zone	3 Feet
Vehicle Travel Lanes	26 Feet Emergency Vehicle Access
Building Entries	New development shall provide a secondary entry or entries on mid-block paseos.

Table 17 *Mid-Block Paseo Design*

2 Rear Setback Pathway

Pedestrian Clear Zone	Shared Use Path: 12 Feet
Landscape / Furniture Zone	Rear Green Buffer : 10 Feet
Frontage / Setback	Rear Setback: Minimum 22 Feet
Building Entries	New development shall provide a secondary entry or entries on real setback pathways.

Table 18 *Rear Setback Pathway Design*

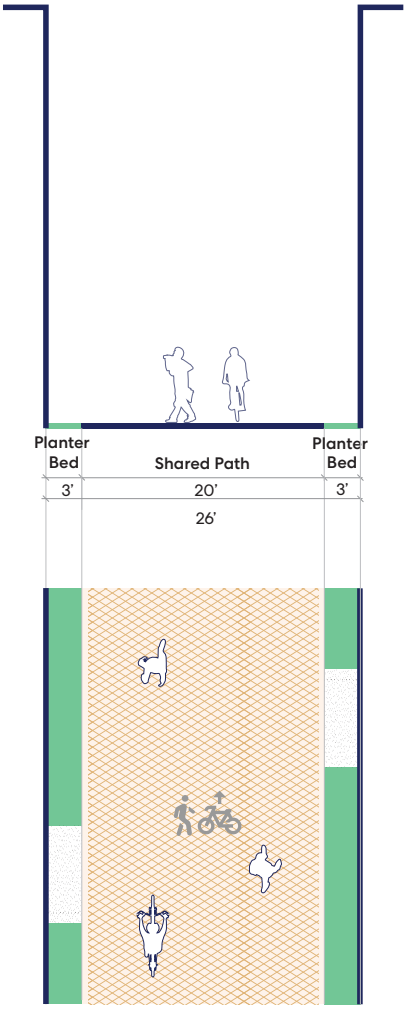


Figure 69 *Typical mid-block connection section*

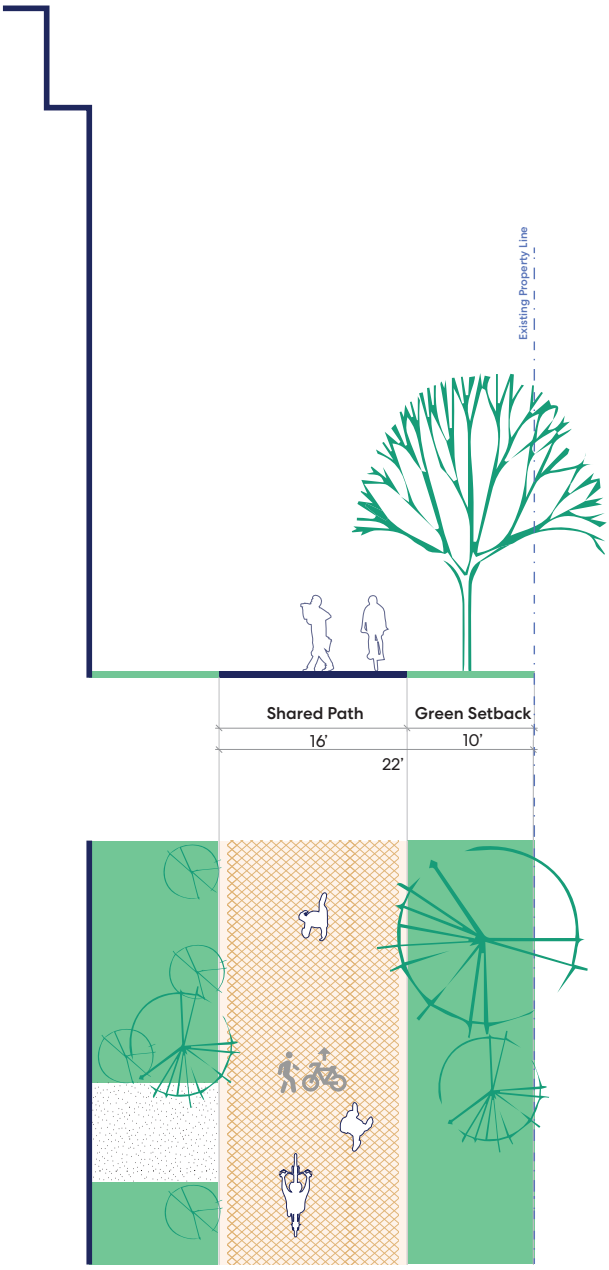


Figure 70 *Typical rear setback connection section*

5

Parks and Open Space

NVCAP's ecological framework takes direct inspiration from the City's Sustainability and Climate Action Plan, putting forward design strategies that collectively expand the definition of sustainability beyond mitigation, adaptation, and resilience, but grounded in regeneration – identifying opportunities for renewal, restoration, carbon sequestration, and growth of the natural environment.

The future streets, parks, natural areas, and buildings will restore and enhance habitat and pollinator pathways, and provide flood protection and stormwater management, cleaner air and cleaner water, and healthier habitats for current and future generations.

The Ecological Framework includes the following:

- Public Park
- Matadero Creek

Public Park

Located in the southeast corner of the Plan Area, the public park is a proposed 2.25-acre public open space. The proposed naturalization of Matadero Creek between Park Boulevard and Lambert Avenue will serve as the organizing framework for the park's design and neighborhood destination, inviting Palo Alto residents, employees, and visitors to enjoy access to recreational activities, habitat, and inclusive community programming. Bounded by the proposed Portage Avenue woonerf and Park Boulevard, the proposed public park is seamlessly integrated into the adopted citywide Pedestrian and Bicycle Plan. The curbless design of the proposed Portage Avenue woonerf supports a natural extension of the park, directly connecting to the restored Cannery Building.

Standards:

5.1.1 Park Acreage and Dimensions

Public park shall be located according to Figure 60.

5.1.2 Circulation

All multi-use paths shall form a continuous path connecting all points of entry as illustrated in Figure 60.

Programmed spaces shall connect to the Plan Area mobility network via multi-use paths.

The multi-use paths network shall create a safe connection across Lambert Street to Boulware Park.

The minimum width of the multi-use path shall be 12 feet.

5.1.3 Park Gateways

The park shall have five points of entry to connect with the pedestrian and bike mobility network around the park. The character of these gateways to the park is further outlined in Figure 60.

5.1.4 Utilities

Electrical service, potable water, and sewer supply shall be provided to accommodate varied events such as movie nights, festivals to serve small park structures; and along the park trails and the Picnic Area. Refer to Chapter 7 for additional information regarding utilities.

5.1.5 Design Approval

Once the park becomes a project, the design of the park shall go through the typical City review process including review by the Parks and Recreation Commission.

Project Goals

Balance of Community Interests

Balance community-wide objectives with the interests of neighborhood residents and minimize displacement of existing residents.

Sustainability and the Environment

Protect and enhance the environment, while addressing the principles of sustainability.

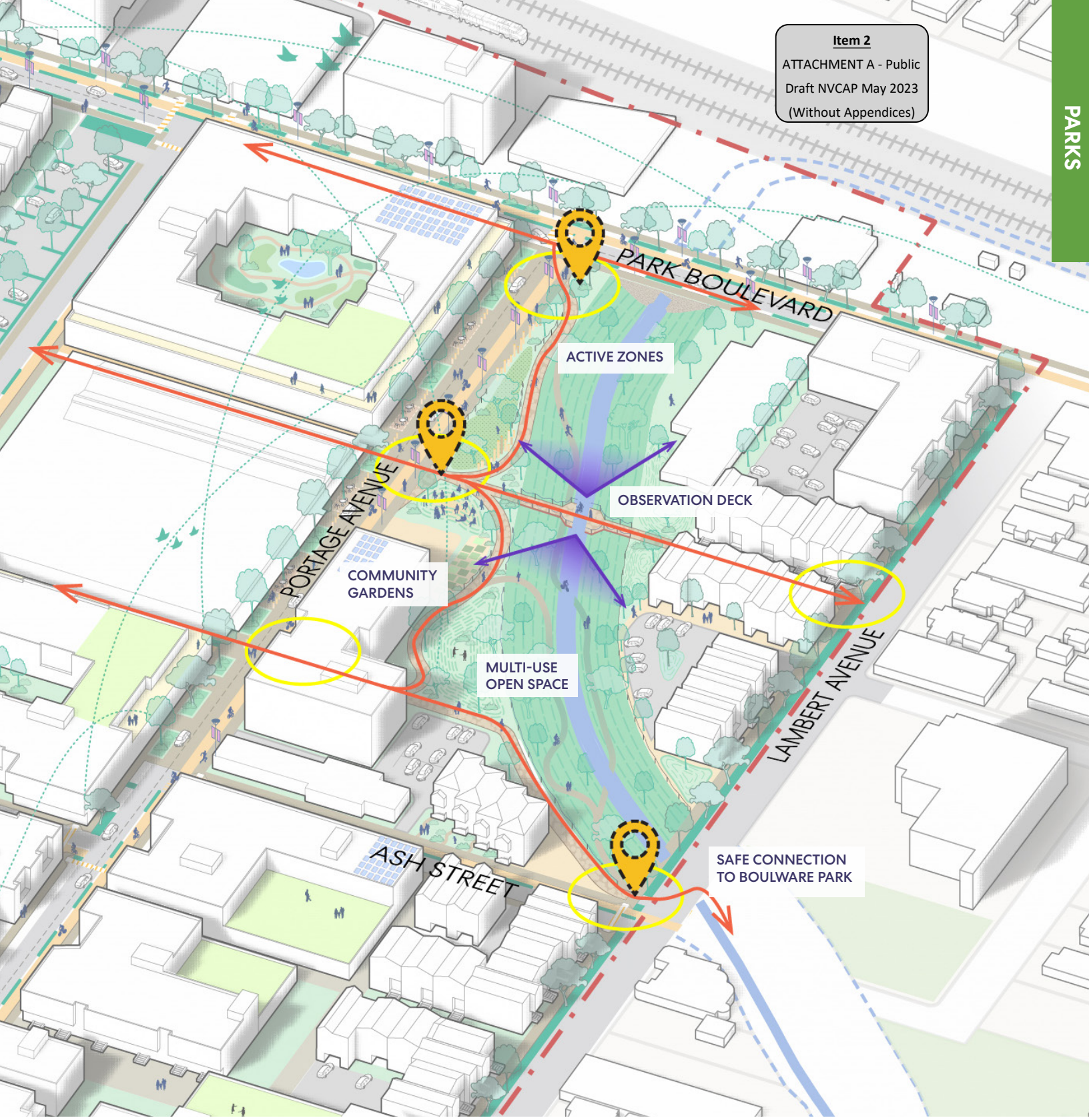


Figure 71 *Location of Park Gateways and Circulation Paths*

Legend

Access to park

Park Gateways

Viewing shed

Guidelines:

5.1.6 Programming

Active Park programming may include but is not limited to a dog park, outdoor fitness area, natural habitat area, community garden, or amphitheater.

In addition to active programming, park design should accommodate passive uses such as reading and picnicking.

When siting park elements, consider types of activity, periods of use or vacancy, availability of sun or shade, and the differing needs of a diverse range of visitors such as small children, adult athletes, and dog owners.

The park should include amenities to support the commercial environment on Portage Avenue such as flexible seating areas, social gathering spaces, play spaces, and public art.

Surrounded by development on more than one side, the program elements should be designed to be protected from wind and down-drafts from buildings with strategic tree planting and thoughtful siting of passive programming.

5.1.7 Native Plantings

Where possible, pollinator friendly native plants should be incorporated.

Figure 72 *An example of passive park programming*

Figure 73 *An example of active park programming*

Matadero Creek

The Matadero creek will be fully naturalized between Park Boulevard and Lambert Avenue. The flood channel is widened to a 100 feet riparian corridor serving maximum geomorphic form and ecological function. Leading with resilience in mind, the design offers the creek the capability to convey 100-year flood events.

Standards:

5.2.1 Creek Buffer

The creek section between Park Boulevard and Lambert Avenue is buffered by a 100 feet riparian corridor. The Matadero creek riparian corridor shall have a naturalized buffer of 100 feet measured from the mid-point of the creek alignment. To determine the defined parameters for the buffer floodwalls, further City coordination is required.

5.2.2 Circulation

The riparian corridor shall maintain public access on both sides of the creek front and be designed to embrace the Matadero creek as a central feature.

Lambert Avenue bridge is replaced with a new bridge spanning 100 feet. The bridge shall be located as shown in Figure 63. It shall align with the first mid-block paseo parallel to Park Boulevard on the 340 Portage site and connect Portage Avenue and Lambert Avenue.

5.2.3 Wind Protection

As the riparian corridor is 10 feet lower than the surrounding terrain, it should be designed to be protected from wind and down-drafts from surrounding areas with strategic tree planting and thoughtful design of the shared trail routes.

5.2.4 Ecology

Impervious surfaces shall be prohibited in the 100 foot buffer as per Figure 65.

Plant selections shall reinforce the native and surrounding ecology and promote habitat development.

5.2.5 Gateways

Gateways to the corridor shall be at the following key intersections. See Figure 65.

Sloped walks, terraces, stairs, or ramps for bicycle and pedestrian circulation shall be a key feature at these gateways, integrated with the flood wall designed to connect across the 10 feet grade change between the public park and the Matadero creek riparian corridor. This will ensure that pedestrians and bicyclists can access both the park and the riparian trail.

Gateway access to multi-use paths shall be designed to be ADA accessible to traverse the 10 feet grade change from the public park to the creek.

Project Goals

Community Facilities and Infrastructure

Carefully align and integrate development of new community facilities and infrastructure with private development, recognizing both the community's needs and that such investments can increase the cost of housing.

Sustainability and the Environment

Protect and enhance the environment, while addressing the principles of sustainability.

Figure 74 *The location of the Matadero Creek buffer, circulation, and gateways*

Legend

Shared Path

Riparian Corridor Gateways

Riparian Corridor Buffer Boundary

5.2.6 Floodwalls

Concrete retaining walls shall be designed to allow for vegetation.

Refer to Chapter 7 for additional information regarding floodwalls.

5.2.7 Utilities

Electrical service and potable water shall be provided along the trails.

For more information on utilities, go to:

Chapter 7: Implementation

Guidelines:

5.2.8 Public Art

Gateways may integrate public art/structures indicate major entry points, when appropriate.

5.2.9 The Matadero Creek Bridge

Observation areas should be integrated with the design of the new bridge.

Educational placards should inform the public on the re-naturalization of Matadero Creek.

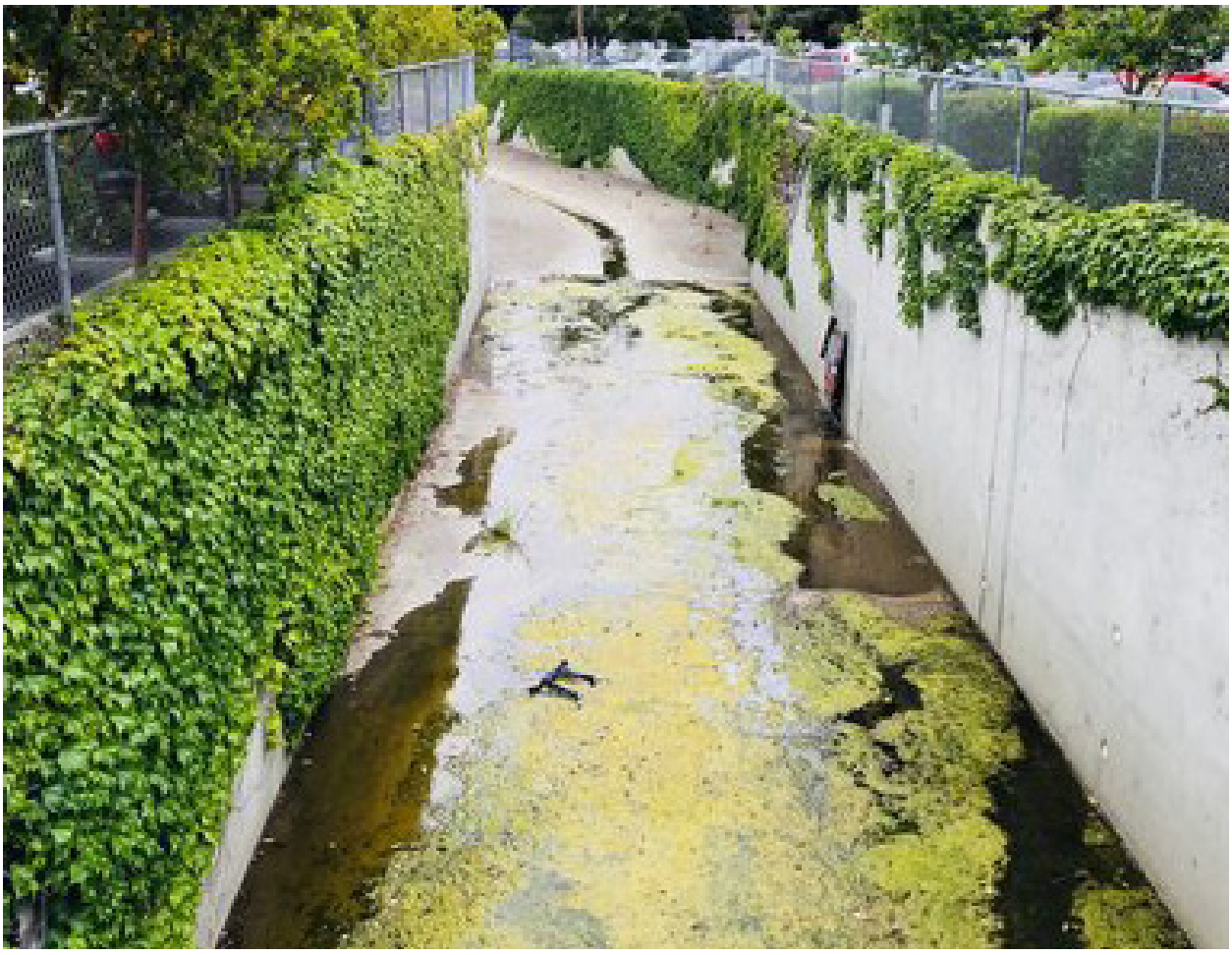


Figure 75 *The Matadero Creek Channel is currently a constrained concrete trapezoidal channel.*

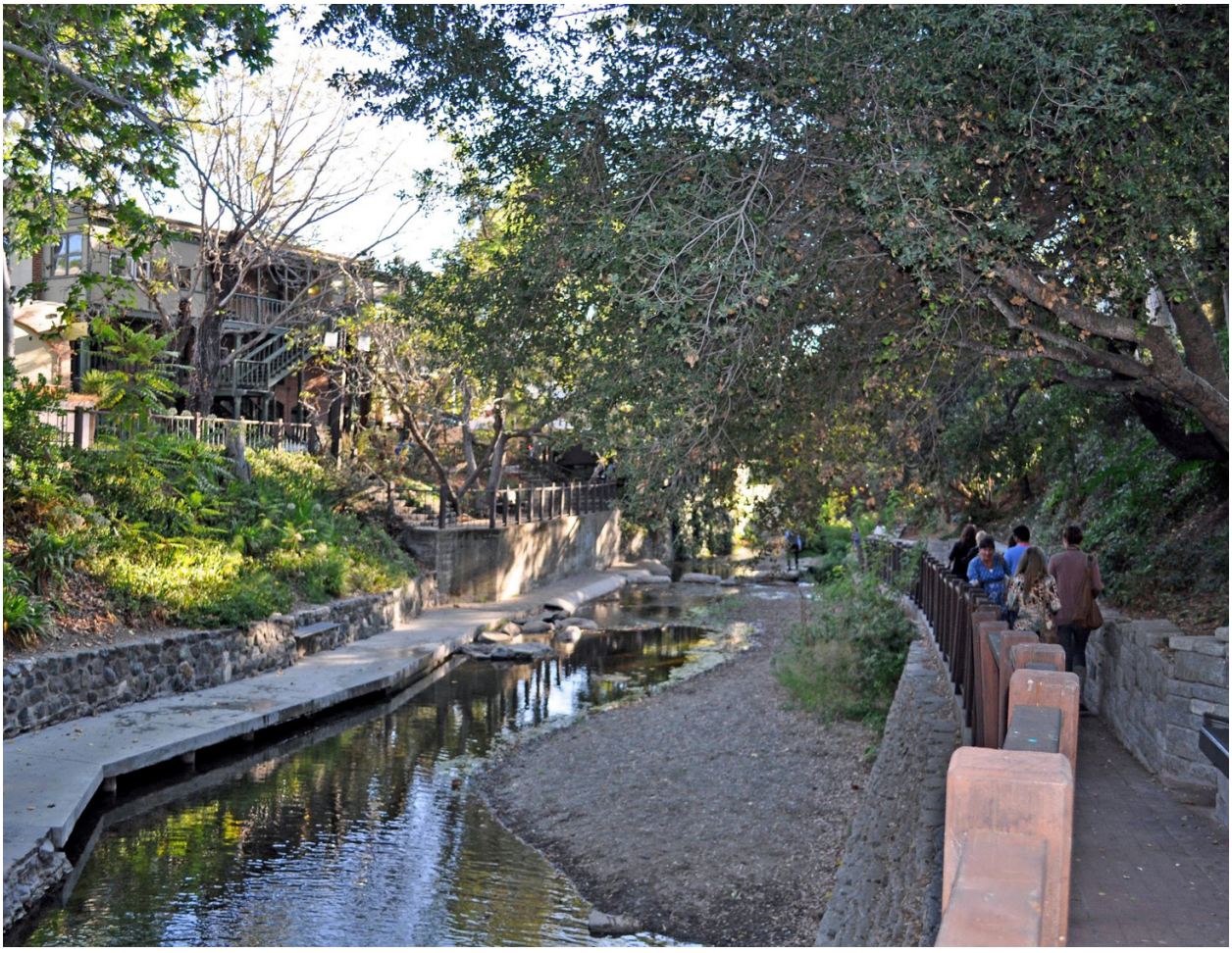


Figure 76 *A naturalized creek has the opportunity to provide multi-use trails and habitat areas.*

6

Buildings

NVCAP's urban form framework champions the design of buildings that are respectful neighbors, human-scaled, and embrace the street. New development will respond to the surrounding context such as building up to El Camino Real while creating a gentle transition to quieter residential portions of the neighborhood.

This chapter provides guidance on the desired future built form and sets aspirations for how new buildings will contribute to the character of the NVCAP as it continues to be developed incrementally over time. The key factors that contribute to good building architecture: building mass and bulk appearance; pedestrian-friendly design of the ground level, and visual interest created by architectural articulation, the materiality of the building, and sustainable design. The standards and guidelines have been organized to address these key elements under the following headings:

- Building Heights and Massing
- Building Frontages
- Sustainable Design

Building Heights and Massing

Building form and massing have a crucial role in forming NVCAP's built environment as a framework for a comfortable and exciting public realm. Massing strategies reflected in NVCAP's architecture make associated building uses more legible and well-organized. Massing regulations such as allowable building heights and stepbacks will support the gradual transition from taller buildings along El Camino Real to quieter, residential parts of the neighborhood.

Standards:

6.1.1 Building Heights

All new development shall conform to Figure 78 for maximum allowable building heights.

6.1.2 Affordable Housing Height Bonus

Through the City's Housing Incentive Program or the State Density Bonus, 100% below market rate projects shall be eligible for additional bonus height (up to 33 feet).

6.1.3 Stepdown to Single-Family Residential

Based on the development standards of a adjacent zoning district, new development shall stepdown to existing single family residential. Refer to the Palo Alto Municipal Code, as setback and stepback requirements on side or rear lot lines shall vary based on zoning.

6.1.4 Utilities

Overhead public utilities shall be buried for buildings with roof edge heights over 27 feet tall.

Guidelines:

6.1.5 Cannery Building Roof Datum

Any adaptive re-use projects directly adjacent to the Cannery should match the structure's 36 foot roof datum.

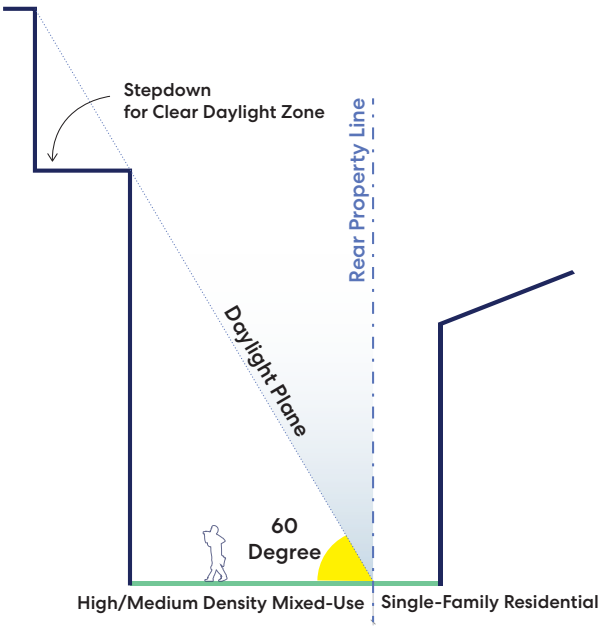


Figure 77 *An example of a daylight plane requirement for mixed-use development stepping down to single family residential neighborhoods.*

Figure 78 *Allowable Height Map*

Retail and Active Use Frontage

Ground floor retail and other active uses enliven and activate streetscapes, enhancing the public interface between new buildings and the sidewalk. Within the Plan Area, the highest concentration of retail and active uses are located along El Camino Real. These ground floor spaces are designed to accommodate a wide variety of commercial spaces including local shops, cafes, maker spaces, co-working spaces, and professional services.

The following uses qualify as active:

- Neighborhood-serving retail that provides goods and services that people would frequently use to take care of their personal and household needs. Examples include grocery stores, drug stores, eating and drinking establishments, dry cleaners, hair salons, etc.
- Professional services with regular customers such as dentists that are 5,000 sq. ft. or less;
- Public uses including a community room and daycare;
- Building lobbies;
- Spaces accessory to residential uses, such as fitness rooms, workspaces, leasing offices, shared kitchens, mail rooms, and Class I bicycle parking facilities with direct access to the sidewalk or street.
- Building frontage for mechanical equipment, transformer doors, parking garage entrances, exit stairs, and other facilities necessary to the operation of the building are excluded from this requirement.

Standards:

6.2.1 El Camino Real Active Frontage

Ground floor active uses shall be required along all new development fronting El Camino Real. Refer to Section 2.3 for a map of ground floor edges.

6.2.2 Ground Floor Retail Height

Ground floor retail floor to ceiling height shall be a minimum of 15 feet.

6.2.3 Objective Standards

For Corner Conditions, Primary Entries, Façade Design, and Transparency, new development shall adhere to Palo Alto Municipal Code, Chapter 18.24 Contextual Design Criteria and Objective Design Standards.

Guidelines:

Figure 79 *Retail ground floors provides adequate floor to ceiling heights, transparency, and signage.*

6.2.4 Park Boulevard

Ground floor active uses should be encouraged for new development fronting Park Boulevard.

6.2.5 Storefront Frontages

Storefronts should create a fine grain of variety along each street frontage, expressing the unique identity of each tenant. Where active uses or retail frontages are required or located, the following design standards shall apply:

- Exterior windows on the ground floor shall use transparent glazing to the extent feasible. Low-e glass or minimal tinting to achieve sun control is permitted, provided the glazing appears transparent when viewed from the ground level.
- Window coverings are not permitted on the ground floor during typical business hours. Where operations preclude transparency (e.g., theaters) or where privacy requires window coverings, sidewalk-facing frontage shall include items of visual interest including displays of merchandise or artwork; visual access shall be provided to a minimum interior depth of 3 feet.

6.1.5 Outdoor Rooms

Outdoor rooms notched into the ground floor should be lined with active retail uses and have ample space for spillover for outdoor dining, murals, and retail displays.

Figure 80 *Ground floors can create notches of outdoor rooms to allow for lively spillover of retail.*

Figure 81 *Active ground floors provide openness, transparency and a connection to the street.*

6.3

Portage Avenue Frontage

The Portage Avenue Park Frontage Zone represents a human-scaled pedestrian environment punctuated by active programming that enlivens the woonerf along public park. Uses along this frontage will be excellent locations for outdoor dining, and a backdrop for activities at public park.

Standards:

6.3.1 Ground Floor Entries

Entries shall be flush at sidewalk grade and shall have a minimum of four (4) active doorways per 200 linear feet.

Guidelines:

6.3.2 Balconies and Terraces

The inclusion of balconies and terraces should be encouraged along the streetwall above the ground floor in the park frontage zone to take advantage of views of the public park and to allow greater programmatic and visual connection between uses in the buildings and the park.

6.3.2 Respect the Cannery

Development along Portage Avenue adjacent to the Cannery should emulate the Cannery, taking cues from the materiality and fenestration, and roof datum.

Figure 82 *Ground floors treatments can emulate the materiality, fenestration, and roof datum of historic structures.*

Residential Frontage

The residential ground floor level is characterized by the lower intensity of activity, generally fronting onto streets that are quieter in character, and serves to foster neighborhood connection. Individual residential entries and stoops are an effective way to activate the street and create greater opportunities for social interaction. At the same time, they should provide a sense of privacy and comfortable social distance from the sidewalk.

Standards:

The following standards are in accordance with Palo Alto Municipal Code Section 18.24.020 (Contextual Design Criteria and Objective Design Standards):

6.4.1 Ground Floor Entries

Entries must be raised above sidewalk grade based on the setback condition from the property line.

Ground floor residential units shall have entries with direct, individual access onto a public right of way, open space, or easement.

Guidelines:

6.4.2 Stoops

Residential units should provide a stoop to create a social distance from the street; home office units are not required to have stoops and may be entered at grade.

The design of stoops should balance the need to create privacy for the unit occupant and allow visual connection with the street.

Areas between stoops should be planted and can be an opportunity to integrate Green Stormwater Infrastructure.

Figure 83 *Ground floor residential stoops can provide privacy for residents and neighborhood beautification and Green Stormwater Infrastructure.*

Sustainable Design

Palo Alto has long been a leader in sustainability, making impressive progress towards reducing its carbon impacts, greenhouse gas (GHG) emissions, and resource consumption. In October 2022, Palo Alto City Council passed an ambitious carbon neutrality by 2030 goal, building on the City's existing goal of cutting emissions 80% below 1990 levels by 2030. The following standards and guidelines are intended to support the City's larger climate action goals to ensure a sustainable and resilient future.

Project Goals

Balance of Community Interests

Balance community-wide objectives with the interests of neighborhood residents and minimize displacement of existing residents.

Sustainability and the Environment

Protect and enhance the environment, while addressing the principles of sustainability.

Standards:

6.6.1 California Green Building (CALGREEN) Standards Code

New development shall adhere to Chapter 16.14 California Green Building Standards Code. As stated in the code, all newly constructed residential buildings must meet CALGREEN Tier 2 requirements.

6.6.2 Bird-Safe Building Design

All new mixed-use development that has facades exceeding 30 percent glazing shall utilize bird-safe design strategies. Applicants shall choose from the following materials list:

A. Fritted Glass - Ceramic dots or 'frits' can be silk-screened, printed, or otherwise applied to the glass surface. This design element, useful primarily for new construction, can also improve solar heat gain control and reduce glare.

B. Etched Glass – Glass etching on the surface of the glass can be achieved through acidic, caustic, or abrasive substances. The etched markers should be on the outside surface.

C. UV Coated Glass – Some birds can see into the ultraviolet (UV) spectrum of light, a range largely invisible to humans. UV-reflective and/or absorbing patterns (transparent to humans but visible to birds) are frequently suggested as a solution for many bird collision problems. This approach is not appropriate for situations where the glazing is back lit.

E. Permanent Stencils or Frosting - Frosted glass is created by acid etching or sandblasting transparent glass. Frosted areas are translucent, but different finishes are available with different levels of light transmission. An entire surface can be frosted, or frosted patterns can be applied.

F. Exterior Apparatus - Fixed exterior screens, grilles, netting, louvers, fins or mullions can effectively reduce visible reflections, provide insulation from strike impact, reduce solar heat gain, reduce glare and provide weather protection.

Guidelines:

6.6.3 Minimize Heat Gain

Building facades should be designed to balance solar access with the need to control heat gain. This could include the following:

- Shade windows with architectural features that add visual interest by creating textural variations.
- Architectural elements that should be used on south-facing facades.
- Fixed shading features, which are designed with a range of projection and spacing dimensions that minimize heat gain and composed with visually pleasing rhythms to avoid monotonous building facades.
- Perforated horizontal overhang
- Awnings that are well integrated with the overall building façade, especially for retail on the ground floor.
- Sliding and folding perforated panels/shutters that double as privacy screens for outdoor private spaces such as balconies and terraces overlooking El Camino Real.
- Trellis, Vegetation on windows and green walls allow for minimizing heat gain while additionally bolstering the overall concept of ecological design.
- Egg crate façades are not only effective in minimizing heat gain but can create privacy while providing structural supports for planter beds etc.
- Shrubs and tree shade wherever possible should augment façade design to minimize heat gain.
- Use of low-solar-transmittance glazing to reduce solar gain.
- Use window treatments to reduce solar gain.
- Reflective and Light-colored outer surfaces can minimally address heat gain but should be employed in combination with the other façade and roof treatments.

6.6.4 Daylighting and Natural Ventilation

Buildings should be designed to maximize the use of daylighting for all inhabited interior spaces to provide a high-quality indoor environment, reduce overall energy consumption and reduce exposure to artificial lighting which can negatively impact human health.

Buildings that allow for natural ventilation reduce energy consumption for heating and cooling and provide a higher-quality indoor environment. Consideration should be given to optimizing floor plates and unit layouts to allow for cross ventilation.

6.6.5 Roofs

Where building roofs are free of solar panels or other sustainability infrastructure, they should be designed to include systems such as vegetated roof covers, plants, green stormwater infrastructure, and roofing materials with high albedo surfaces to reduce heat island effect and slow rainwater runoff.

Building roofs should be designed to create usable recreational spaces. Rooftop shading structures mounted with solar panels can maximize the effective use of roof area.

Pockets of green roof can help furnish these recreational spaces, and resist heat gain while also serving the concept of ecological design.

Figure 84 *Building roofs can be multi-purpose including providing additional outdoor space for residents.*

6.6.6 Renewable Energy

Buildings should provide "solar ready" infrastructure such as solar panel standoffs, conduit, and roof water spigots that minimize the cost and effort of adding solar capacity later, as per the California Green Building Standards Code.

6.6.7 Visibility

New development should incorporate visible elements of sustainability such as green roofs, shading devices or photovoltaic panels into the fabric of the building, to make visible the building's energy saving features.

New development should include interpretive signage to explain the features of the building which promote sustainability, and to educate visitors and occupants how their behavior can make an impact on overall building performance.

Figure 85 *Visible elements of sustainability can include design features such as celebrating secure bike parking.*

7

Implementation

The implementation of the NVCAP will require action by the public, City departments, regional agencies, and private property owners. The City will take the lead in coordinating areawide actions and establishing funding mechanisms for public investment in programs and capital projects. However, private investment through the architecture, landscaping, and maintenance of individual development projects will be a significant determinant of the look and feel of the Plan Area.

Entitlement Process

Entitlement Process Development projects in NVCAP typically require two phases of review and approval: the planning/ zoning entitlement phase and the building permit phase.

Planning / Zoning Entitlements Phase

During the entitlement phase, developers of proposed projects submit applications for review by Planning staff and relevant City departments to determine whether the proposed project is consistent with the Comprehensive Plan, this Coordinated Area Plan, and other associated regulatory requirements, including the Zoning Ordinance. At a minimum in accordance with Palo Alto Municipal Code 19.10, a Coordinated Development Permit is necessary prior to construction or exterior alteration. Uses that are permitted by-right in a zoning district may only require administrative review by Planning staff. More complex development projects are reviewed by the Architectural Review Board and/ or City Council. Specifics are further outlined in the Zoning Ordinance.

However, the recent changes in State Law related to affordable housing may alter the City's processing and approval procedures. Applicants are advised to consult with the Planning and Development Services Department staff prior to project submittal. Planning fees are required at formal project submittal to the Planning and Development Services Department.

Building Permits Phase

Following the approval of all required planning entitlements, developers submit detailed building permit applications, which are reviewed by several departments including Building, Planning, Engineering, and Fire Department prior to approval and permit issuance. The payment of building permit fees, and other development impact fees is required prior to issuance of a building permit.

7.2

Environmental Review (CEQA)

This Coordinated Area Plan is accompanied by the Supplement to the 2030 Comprehensive Plan Environmental Impact Report (EIR).

EIR Findings

The EIR includes an Initial Study that concluded that impacts to the following resources would be less than significant: *PLACEHOLDER FOR NOW.*

The Draft EIR also concluded that impacts to the following resources would be less than significant: *PLACEHOLDER FOR NOW.*

Finally, the Draft SEIR identified *PLACEHOLDER FOR NOW.*

As a result, individual projects consistent with the coordinated area plan *PLACEHOLDER FOR NOW.*

Transportation Infrastructure

The envisioned street network for the NVCAP will provide an array of high-quality mobility options throughout the site. Pedestrian and bicycle facilities will be designed for people of all ages and abilities, and accessible paths to transit will include wayfinding signage and other amenities. Streets and intersections will be designed to prioritize local circulation and access, and to encourage low vehicle speeds.

The planned improvements will be fully integrated into the surrounding neighborhoods to ensure seamless connections for all users. The mobility elements described in this section include the following:

- Pedestrian realm
- Bike network
- Gateway intersections
- Transit access
- Vehicle circulation and parking
- Transportation Demand Management (TDM) strategies

Pedestrian Realm

A well-designed, integrated pedestrian network is a vital component of the NVCAP. This section outlines a range of design strategies for a safe, attractive, and inviting public realm. It includes pedestrian-focused recommendations for:

- Street design
- Public realm elements (landscaping, amenities, etc.)
- First/Last mile transit connections

Pedestrian-Friendly Street Design

The NVCAP includes a fully connected, ADA-accessible sidewalk network throughout the project site. Intersections will be enhanced with appropriate crossing treatments and traffic control to maximize pedestrian safety and access. Specific design treatments for the intersections within the NVCAP are provided in Section 7.4: Gateway Intersections. As vehicle volumes and speeds are key factors of the pedestrian experience, a series of traffic calming interventions are described in Section 7.6: Vehicle Circulation and Parking. Local disability organizations can provide resources to ensure both neighborhood and city-wide design guidelines are inclusive of all community members and reflect best practices.

Public Realm and Pedestrian Amenities

Central to the vision for a re-imagined North Ventura neighborhood is a shared street, or "woonerf," along Portage Avenue. Woonerf ("street for living") is a Dutch term for an integrated, common space shared by pedestrians, bicyclists, and low-speed motor vehicles. They typically have no curbs or sidewalks, and vehicles are slowed by trees, planters, parking areas, and other obstacles in the street. In addition to becoming a great space for walking and bicycling, the Portage Avenue woonerf can provide a placemaking space for community gatherings, events, retail, and other flexible uses.

Design elements of the Portage Avenue woonerf include:

- A row of street trees on either side of the main travel way to designate pedestrian priority areas adjacent to building frontages.
- Signage emphasizing the presence of pedestrians and bicyclists.
- Textured or permeable pavement designed to slow vehicle speeds and provide stormwater management benefits.
- Pedestrian-scale lighting
- Seating areas
- Landscaping and Green Stormwater Infrastructure
- Design elements that highlight the community's vision or character.

Other public realm and pedestrian amenities that should be included throughout the neighborhood include:

- Visually inviting and maintained ground floor frontage.
- Drought-resistant landscaping that is aligned with City guidelines.
- Trees and other forms of shade to provide refuge from the sun.
- Green Stormwater Infrastructure, such as permeable pavement, bioretention and other types.
- Pedestrian-scaled lighting
- Signage and wayfinding, with designs unique to North Ventura that reflect landmark destinations in the neighborhood, to provide navigation to key destinations.
- Flexible and fixed street furniture
- Public art installations that will enhance the pedestrian experience and reflect the community's unique character.

First/Last Mile Transit Connections

Safe and accessible walking routes to the California Avenue Caltrain Station and the bus stops along El Camino Real are a key strategy to provide convenient alternatives to driving.

Currently, the two direct walking and bicycling routes to the California Avenue Caltrain Station are via El Camino Real and Park Boulevard. El Camino Real's auto-oriented design deters many people from walking or bicycling alongside it. While there are long term plans to transform the street, opportunities to enhance the route along Park Boulevard should be pursued in the near-term.

Recommendations include:

- Pedestrian-scaled lighting
- Wider sidewalks
- Wayfinding signage
- Buffered bike lanes
- Collaborating with developers to restrict new curb cuts, close old ones, and design for activated ground floor frontages.

In addition, installing a signalized crosswalk at Page Mill Road/ Ash Street will open another accessible route to the Caltrain Station.

Bike Network

The NVCAP will feature a high quality, "low-stress" bikeway network that will be comfortable for people of all ages and abilities to use. The proposed network will be integrated into the citywide network to ensure safe, convenient connections to the adjacent neighborhoods. This will be achieved by selecting bicycle facilities that prioritize safety and comfort based on vehicle speeds and volumes, and with intersections that have appropriate bike-specific crossing treatments and traffic control. Wayfinding signage and ample bicycle parking are also integral elements of the network. The bicycle network will support a range of users, including scooters, e-bikes, and other micromobility devices.

The low-stress bike network will include separated bicycle lanes on busier streets, bicycle boulevards on calmer neighborhood streets, and well-designed intersections throughout the project plan. Opportunities for shared-use paths and a woonerf are also identified.

Shared-Use Paths are off-street two-way bikeways physically separated from motor vehicle traffic and used by people bicycling, walking, and other non-motorized users.

Separated Bike Lanes are dedicated bikeways that combine the user experience of a multi-use path but are located on a street. They are physically distinct from the sidewalk and separated from motor vehicle traffic by physical objects such as parked vehicles, a curb, or posts.

Buffered Bike Lanes provide dedicated on-street space for bicyclists, delineated with a designated buffer space separating the bicycle lane from the adjacent motor vehicle travel lane.

Bicycle Boulevards are streets with low vehicle volumes and speeds, designated and designed to prioritize bicyclists. Bicycle boulevards use signs, pavement markings, and speed and volume management measures to discourage vehicle cut-through trips and include safe, convenient bicycle crossings of busy arterials.

Support Facilities

Facilities that support bicycle travel should be incorporated at various locations throughout the NVCAP. These include:

- Wayfinding signage along the bicycle network that provides information on routes, destinations, and distances.
- Bicycle parking: expand the availability of sidewalk bicycle parking, secure long-term bicycle parking, and install end-of-trip facilities at transit stops along El Camino Real and at the California Avenue Caltrain Station. These may be in the form of outdoor bicycle racks, indoor or outdoor bicycle lockers, or indoor bicycle parking cages for each tenant.
- Shower facilities and lockers at places of employment.

Gateway Intersections

The intersections surrounding the NVCAP site will be enhanced to improve access, safety, and connectivity to adjacent neighborhoods. This is particularly important for pedestrian and bicycle safety, as the current intersections' designs largely prioritize vehicular speed and access.

New design guidance and signal technology advancements offer options for improved intersection interactions between people walking, biking, and driving. In particular, intersections on the bicycle network with a high potential for conflicts between bicycles and vehicles must be designed thoughtfully. The design toolbox for NVCAP intersection enhancements includes:

- High visibility, marked crosswalks
- Raised crosswalks
- Advance stop bars and yield lines
- Daylighting to improve sightlines by removing parking adjacent to the intersection
- ADA-accessible, bi-directional curb ramps
- Curb extensions or bulb-outs

- Bicycle detection and markings to indicate the position and path for bicyclists to cross the intersection
- Traffic signals
- Accessible pedestrian signals at intersections with clear markings, audio, and Braille messaging
- Leading pedestrian intervals at signalized intersections for pedestrians to establish their presence in the crosswalks before vehicles proceed.

Figure 86 *Map of Conceptual Gateway Intersection Design Improveme*

1

El Camino Real and Page Mill Road

The intersection of El Camino Real and Page Mill Road will be redesigned with specific transit, pedestrian and bicycle elements.

The eastbound right turn slip lane from Page Mill Road to El Camino Real will be removed, tightening the turning radius, and thereby reducing vehicular turn speeds and pedestrian crossing distances.

Separated bicycle lanes will provide dedicated space for bicyclists on El Camino Real, and they will also receive dedicated signal phasing to reduce conflicts with right-turning vehicles when crossing Page Mill Road. Red pavement markings will also indicate that buses can use the right-turn lanes to proceed forward across the intersection to far side bus stops with new transit boarding islands.

Figure 87 *El Camino Real and Page Mill Road Conceptual Intersection Design*

2

El Camino Real and Olive Avenue

The intersection of El Camino Real and Olive Avenue will be redesigned with high visibility marked crosswalks and bicycle elements will be painted across all approaches. While a traffic signal is not proposed for this intersection, other strategies should be explored to ensure improved pedestrian access and safety across El Camino Real.

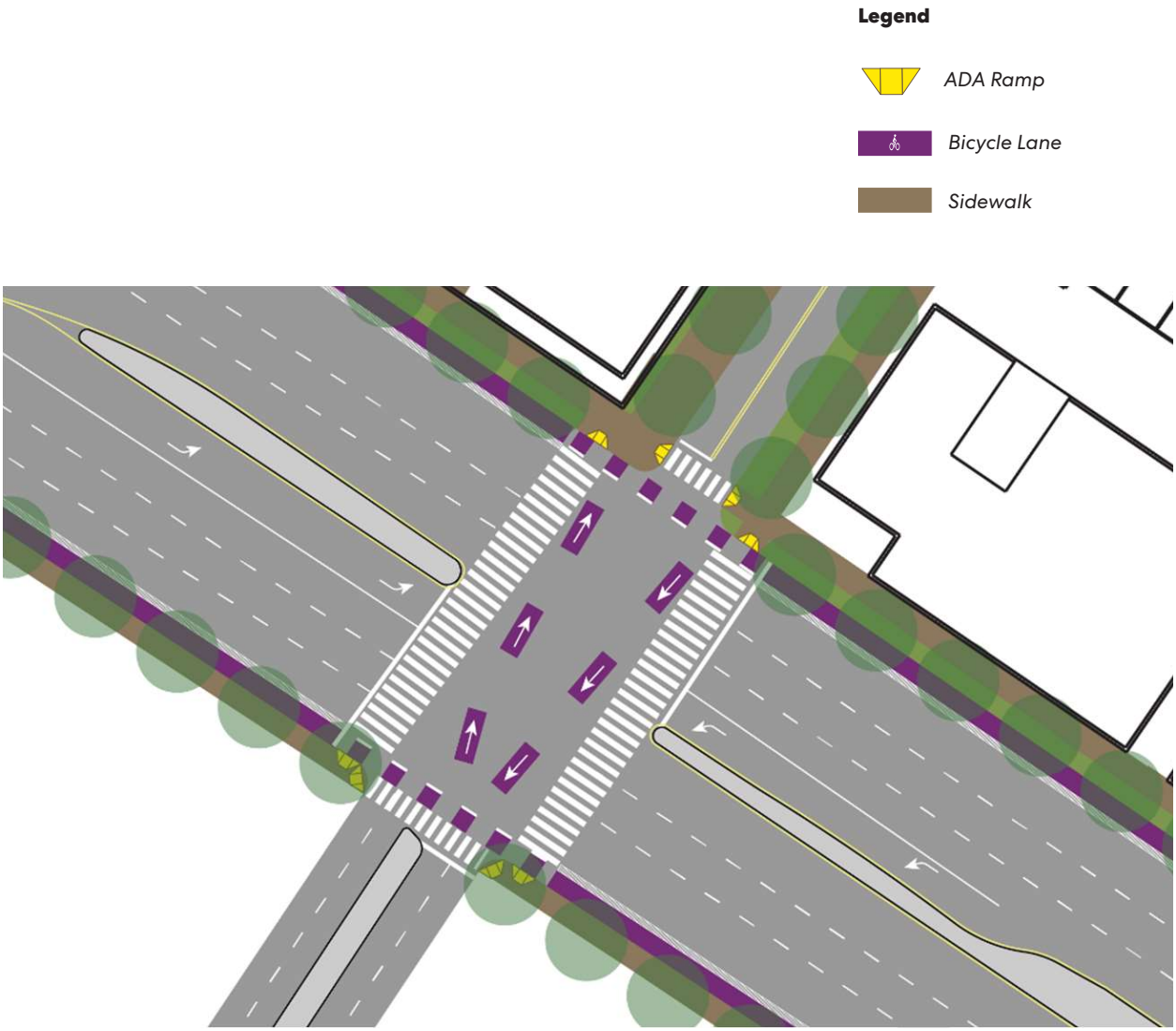


Figure 88 *El Camino Real and Olive Avenue Conceptual Intersection Design*

3

El Camino Real and Portage Avenue / Hansen Way

Both slip lanes entering and exiting Hansen Way from El Camino Real will be closed and redesigned to include a dedicated bicycle cut-out to cross El Camino Real. Separated bicycle lanes will provide dedicated space to cyclists along El Camino Real.

The existing northbound bus stop will be relocated to the far side of Portage Avenue with dedicated boarding islands separating transit users from cyclists. All existing crosswalks will be repainted to be high visibility, and the existing crosswalk at Portage Avenue will be straightened across El Camino Real.

Portage Avenue is currently proposed to be bicycle boulevard and woonerf. Alternatively, a two-way bikeway on Portage Avenue from Park Boulevard to El Camino Real may be included in the final design of this intersection.

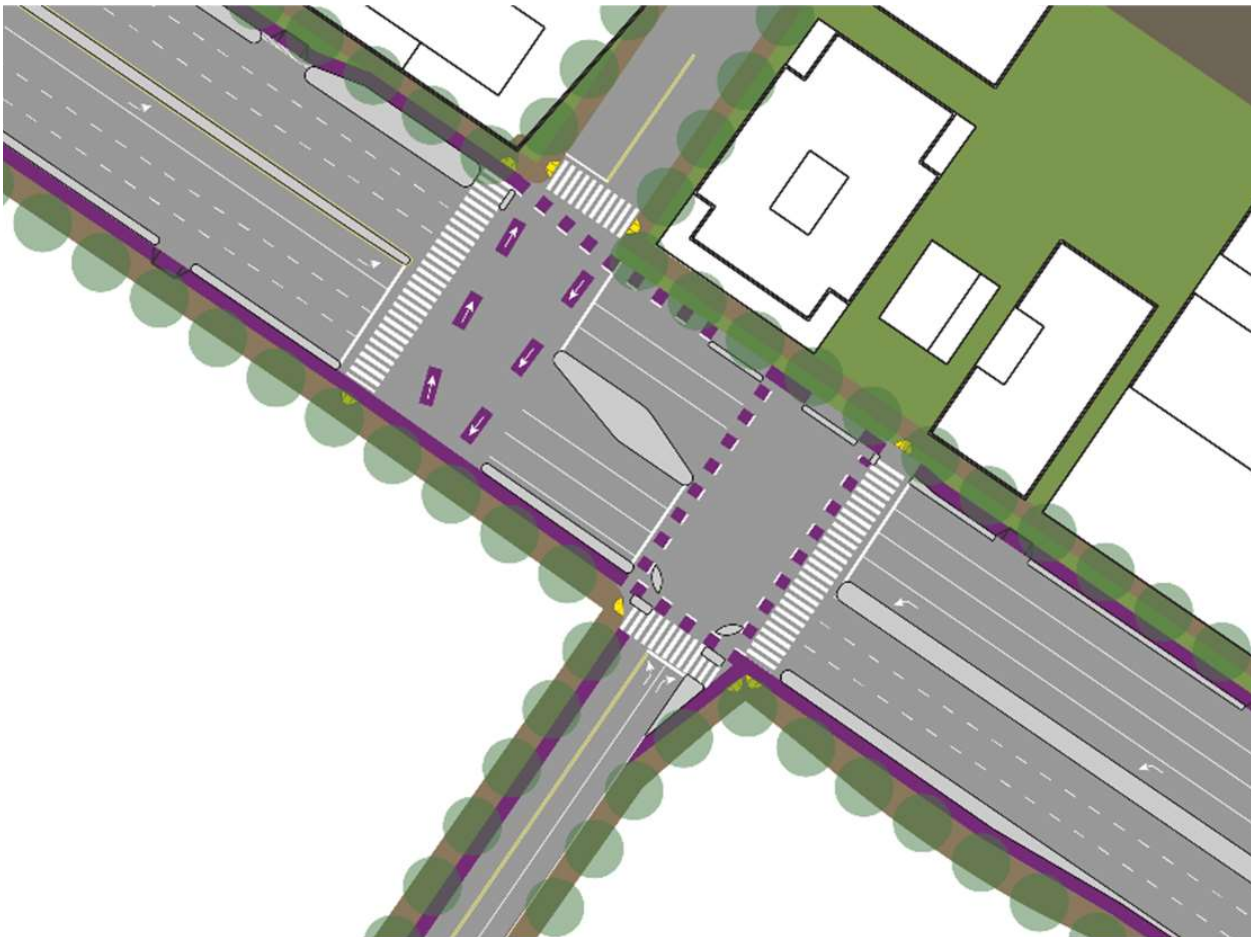


Figure 89 *El Camino Real, Hansen Way, Portage Avenue Conceptual In*

4

Lambert Avenue and Ash Street

A raised crosswalk with advance yield lines will be located on the east side of the intersection. This will provide a direct connection for the proposed path along Matadero Creek between John Boulware Park and the proposed park on the NVCAP site. The segment of Ash Street adjacent to Boulware Park is being removed and will become a part of the park.

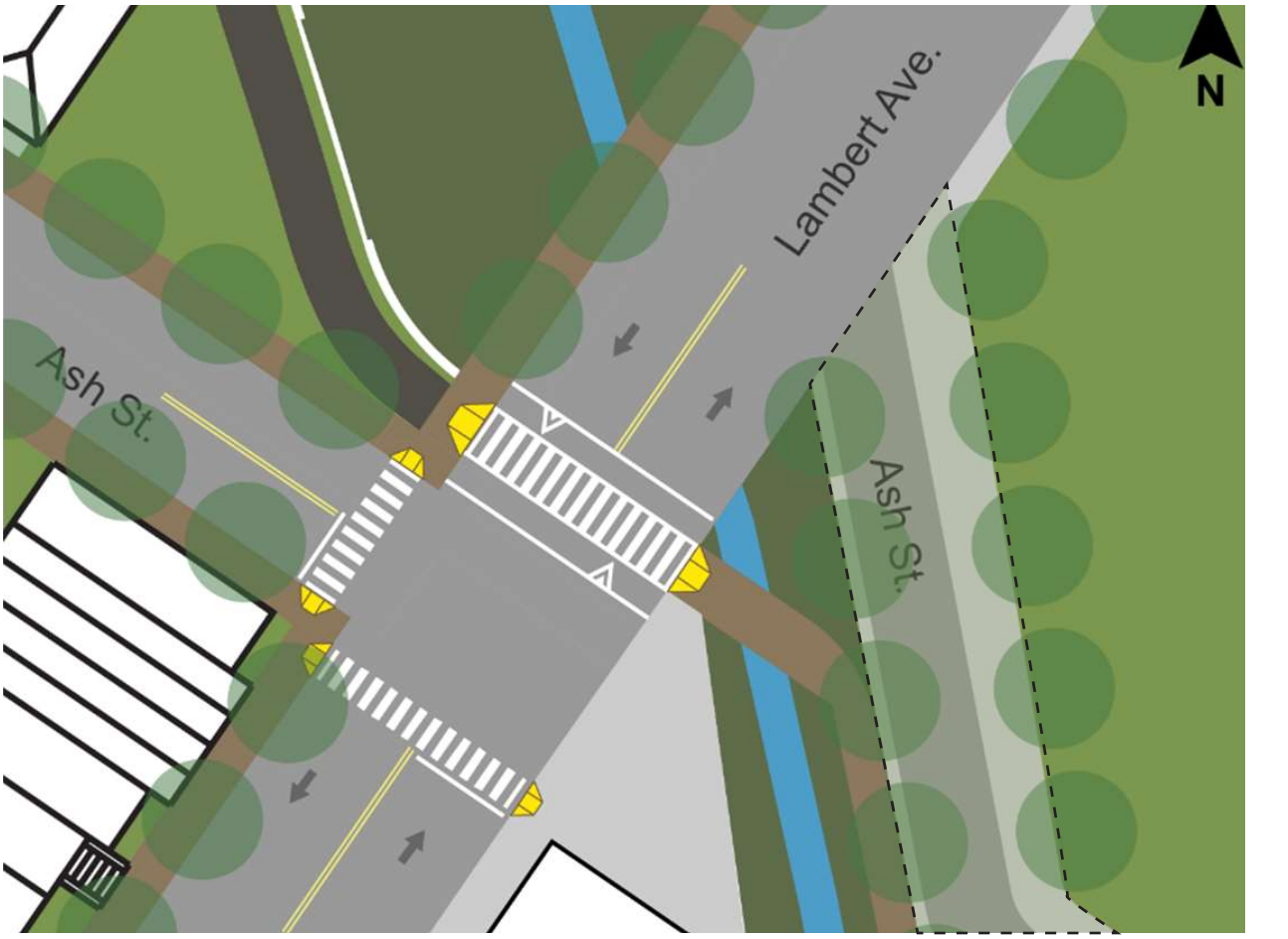


Figure 90 *Lambert Avenue and Ash Street Conceptual Intersection Des*

5

Park Boulevard and Portage Avenue

This intersection is the primary access point into the woonerf along Portage Avenue. The intersection will be stop-controlled and have high visibility crosswalks on all approaches.

A bike box on the northbound leg of Park Boulevard will provide a space for bicyclists to turn left onto the woonerf. "North Ventura" gateway signage should be installed at the entrance to the woonerf.

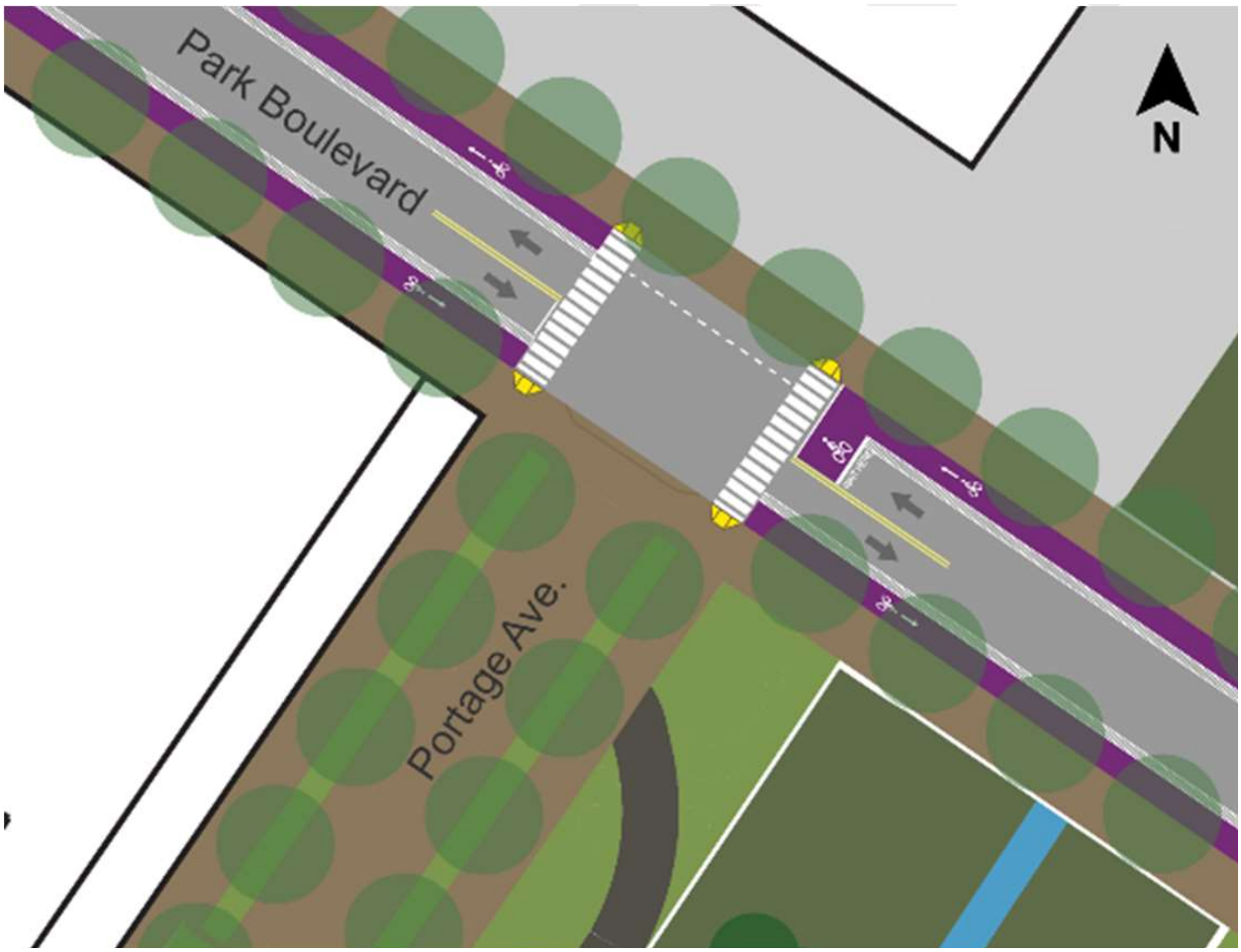


Figure 91 *Park Boulevard and Portage Avenue Conceptual Intersection Design*

Page Mill Road and Park Boulevard

Page Mill Road/Park Boulevard was recently redesigned as part of the construction of adjacent development. While vehicle volumes are currently quite low there today, they are projected to increase over time.

To support the transition to a more pedestrian and bicycle-friendly neighborhood, additional safety treatments such as leading pedestrian intervals, advance stop bars, and a "bike box" for northbound Park Boulevard may be considered.

Page Mill Road and Ash Street

A hybrid beacon or full traffic signal and a marked crosswalk should be installed at this location to support pedestrians and bicyclists crossing Page Mill Road. Santa Clara County to determine if a signal or crossing is feasible.

Transit Access

The North Ventura neighborhood contains two transit stops: a mid-block stop located at the southeast boundary of the site at El Camino Real/ Portage Avenue; and a far side stop located at the southwest boundary of the site at Page Mill Road/ El Camino Real.

Four transit operators are located within the site boundaries and an approximately 15-minute walk surrounding the site boundaries:

- VTA local and regional bus service, with connections to the California Avenue Caltrain Station, the Palo Alto VA Hospital, the Milpitas BART station, and Eastridge Transit Center in San Jose
- AC Transit Dumbarton Express regional bus service between Palo Alto and the Union City BART station
- Caltrain regional rail service at the California Avenue station, connecting Palo Alto to San Francisco and San Jose
- Stanford Marguerite local shuttle service between the Palo Alto Caltrain Station and Research Park
- Palo Alto provides on-demand shuttle service within the City of Palo Alto.

Plans to enhance transit access within the North Ventura neighborhood focus on designing intuitive, accessible, and safe routes to transit. Recommendations include:

- Wayfinding signage
- Enhanced bus stop amenities for passengers
- A mobility hub along Portage Avenue

Wayfinding Signage

Major destinations and their distance, available transit service and other transportation options should be clearly noted on signage throughout the neighborhood. Where possible, signage should reflect a design unique to North Ventura that reflects landmark destinations in the neighborhood.

Mediums such as paint, art installations, and other location markers can also be used to communicate relevant information. An informational kiosk may be installed as part of the proposed mobility hub.

Bus Stop Amenities

Guidance from VTA and AC Transit will ensure that neighborhood bus shelters reflect agency-wide design standards and the latest industry best practices.

In accordance with AC Transit's Multimodal Corridor Guidelines and VTA's Better Bus Stop Program, the contextually appropriate bus stop enhancements and amenities include:

- Bus shelters protecting riders from the elements
- Energy-efficient lighting to ensure visibility and enhance safety
- Comfortable seating
- Digital signage with real-time information informing riders of available service
- Posted information with route information and service schedules, available in English, Spanish, and other locally prevalent languages as well as Braille placards
- Audio capabilities to communicate real-time information to hearing-impaired riders

Portage Avenue Mobility Hub

Mobility hubs are places in a community that bring together public transit, bike share, car share and other Sustainable transportation modes. The MTC Mobility Hub Program has identified the North Ventura neighborhood as a candidate for a mobility hub. This neighborhood's proximity to Matedero Park, the California Avenue Caltrain Station, and bus stops on El Camino Real provides important connections to regional transit and micromobility pathways.

The neighborhood mobility hub is proposed along Portage Avenue between El Camino Real and the intersection of Portage Avenue and Ash Street. This location is ideal given its proximity to varying active frontage uses as well as the proposed woonerf. The mobility hub will be able to accommodate a range of active transportation and micromobility options.

Given the site's half-mile distance to Caltrain, the mobility hub would be classified as a "suburban or rural hub" according to the site typologies outlined in MTC's Mobility Hub Implementation Playbook. The available amenities and the design of the mobility hub should reflect the following principles as outlined by MTC and the City's design guidelines:

- Sustainable access and mobility to encourage mode shift. Proposed amenities include:
- Transit shelters and waiting areas
- Bicycle parking facilities
- Shared mobility (bike share, scooter share, etc.) access points
- Electric vehicle (EV) charging infrastructure
- Designated parking for car share services

High-quality customer experience to create a positive experience for transit riders. Interventions such as improving the ease of fare payment through kiosks and vending machines would be the responsibility of transit operators (AC Transit and VTA). Additional improvements relating to information access can also improve the customer experience.

- Access to information to improve transit ease of use and customer experiences. Proposed amenities include:
- Real-time travel information signage and interactive displays
- Area maps and bulletins promoting local amenities and events
- Monitoring systems to measure ridership, mobility, security, and public life metrics
- Digital and physical wayfinding tools

Vehicle Circulation and Parking

The proposed vehicle and parking strategies aim to prioritize local circulation and access, encourage low speeds, and determine right-sized parking capacity.

Circulation

To support local access and mitigate cut-through traffic, Ash Street from Page Mill Road to Olive Avenue is proposed to become one-way southbound. This change will help prevent northbound traffic on El Camino Real from using the neighborhood as a cut-through to travel eastbound on Page Mill Road.

Vehicular traffic on the woonerf on Portage Avenue is permitted but should be discouraged. Vehicle circulation in this area will be primarily for access to buildings located on the woonerf. Acacia Avenue from Ash Street to Park Boulevard will be a private aisle for accessing the parking garage for research and development use per the 340 Portage Avenue development as well as residential frontage on Acacia Avenue for parking and unloading.

Traffic Calming Measures

Traffic calming measures such as speed humps and raised crosswalks to maintain low vehicle speeds are recommended along Olive Avenue and Lambert Avenue. A chicane, which is an offset curve to the road, is recommended for Pepper Avenue. To prioritize local circulation and access, encourage low vehicle speeds, and to accommodate emergency vehicles, travel lanes within the NVCAP are recommended to be a maximum of 10 feet wide where possible.

To keep traffic volumes on Portage Avenue at a minimum to provide a low stress environment for bicyclists and pedestrians, vehicle entrances to the Portage Avenue woonerf on Park Boulevard and Ash Street should be only wide enough to accommodate one vehicle at a time. Trees or landscaping can be used to create this bottleneck to restrict the flow of vehicles.

Parking

In compliance with AB-2097, no parking minimums are to be set as the neighborhood is near a Caltrain Station. However, there will also be no parking maximums, allowing the neighborhood to follow a market- based regulatory approach.

No new surface parking is proposed, and new parking supply should be implemented on the ground or basement levels of new buildings. Where new buildings are not proposed, existing surface parking spaces are to remain to support remaining commercial offices.

Street parking is to remain in front of single-family homes on Pepper Avenue and Olive Avenue, with no new street parking proposed along new developments. Street parking near intersections should be restricted to ensure large vehicles and emergency vehicles are able to safely make turns.

To support the new ground-floor retail and active use frontage in new buildings, short-term parking should be implemented on the ground or basement levels of the new developments. In coordination with jurisdictional partners on the future re-configuration of El Camino Real, ground-level short-term parking should be located along El Camino Real where the highest concentration of retail and active uses is located. Concentrating short-term parking along El Camino Real reduces vehicle volumes traveling throughout the neighborhood, supporting a low-volume environment within the neighborhood.

Additional parking management strategies include:

- Preferred parking for carpools
- Parking time limits
- Unbundled Parking
- Shared parking locations
- Carshare memberships and designated parking spots

Once the NVCAP is adopted, City staff will explore the following:

- Evaluate as needed future parking strategies to maintain parking availability such as a parking benefit district, pricing options, time-of-day restrictions, residential parking permits, and shared parking.
- If hourly pricing is used, then the parking strategy should create targets such that 85% of the spaces are used at any time or such that 15% of the parking supply is available at any time.
- Unbundling commercial parking or require the parking to be made to the public.
- Parking pricing or a parking benefit district could help support on-demand transit, transportation demand management measures, active transportation investments, transit pass programs, etc.

Transportation Demand Management (TDM) Strategies

TDM strategies can be effective at encouraging fewer trips made by single-occupancy vehicles (SOV). An effective TDM plan ensures that alternative modes of transportation, such as walking, bicycling, public transit, or other forms of shared mobility, are made available to site occupants and nearby community members.

TDM enhancements have additional benefits beyond reducing SOV trips, including:

- Improving the environment by reducing traffic congestion and air quality impacts produced by new development
- Improving transportation circulation and safety conditions for community members
- Quality of life enhancements that improve the public realm

In addition to alignment with the Palo Alto Comprehensive Plan, various local and State regulations require TDM planning as part of new development activities. The Bay Area Air Quality Management District (BAAQMD) under Regulation 14 Rule 1 requires that all employers with 50 or more full-time employees

provide commuter benefits. State legislation, such as SB 743, requires that certain activities within the City enforce VMT reduction targets, including the design of City impact fee programs and project approval under the California Environmental Quality Act (CEQA).

In addition to the development of a TDM plan, North Ventura will need to comply with any City VMT mitigation or performance monitoring and reporting efforts. Program T1.2.3 of the Comprehensive Plan also recommends that any TDM strategies established by proposed development along the El Camino Real Corridor achieve a 30 percent minimum reduction below ITE rates in peak hour motor vehicle trips.

Any assumptions and metrics for evaluating the effectiveness of TDM strategies, and for calculating the vehicle miles traveled (VMT) generated by site-specific activities, should be in alignment with adopted city- wide guidance. Resources such as the California Air Pollution Control Officers Association (CAPCOA) Quantifying Greenhouse Gas Mitigation Measures Handbook can provide guidance on the metrics for evaluating VMT reduction strategies.

Recommendations

The purpose of including TDM strategies in the NVCAP is to optimize the use of programs that encourage and incentivize alternatives to driving-alone trips.

Employers and major residential developments within the North Ventura neighborhood are already eligible to become members of the Palo Alto Transportation Management Association (PATMA).

The PATMA provides resources for eligible members, such as free transit passes, rideshare coupons, bicycle trip incentives, and telework guidance. The PATMA can also provide resources for conducting an annual employee commuter survey to gather information on travel behavior. While not required, an on-site TDM coordinator for major employers or residential developments could also support existing PATMA efforts and work with ~~major employers or residential~~ developments.

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Strategy	Description	Responsible Entity
Active Transportation		
Shared bike or scooter service	Conventional or electric, docked or dockless bikes and scooters can increase first-/last-mile connections and offer alternative transportation	Third party operators City staff to determine regulations, applicable geo-fencing
Bicycle support facilities	Supportive facilities such as short-/long-term bicycle parking, showers, and lockers that increase active transportation trips	Developer Major employers or residential tenants
Shared Mobility		
Car share	For people who do not own cars, car share can offer vehicle access without significantly increasing GHG emissions and necessary parking. Vehicles can be provided to tenants of certain buildings, or through designated parking spaces such as dedicated on- street spots noted with signage.	Third party operators City staff to determine regulations
Shuttle service and new stops	With increased residential and employment density, additional shuttle stops may be necessary. Major employers or residential developments in the area may also operate shuttle service that would serve the neighborhood. The upcoming City on-demand shuttle service may also necessitate additional designated stops.	Stanford shuttle operator City shuttle operator Major employers or residential tenants offering shuttles
Parking		
Electric vehicle charging facilities	Encourage electric vehicle usage to decrease GHG emissions by providing necessary charging facilities	Developer

Table 19 *TDM Strategies Menu*

Strategy	Description	Responsible Entity
Transportation Program Coordination		
Membership in the Palo Alto Transportation Management Association (PATMA)	Joining the PATMA can provide developers, major employers, or residential tenants with access to transportation resources available for community members. The PATMA also works closely with the City to offer events and other relevant programming.	Developer and/or tenants (employers, residential)
Carpool resources	Resources for organizing neighborhood carpools to nearby major activity centers	Developer and/or tenants (employers, residential)*
Active transportation incentives	Resources such as bike/ scooter share coupons, or bicycle purchase subsidies can encourage active transportation	Developer and/or tenants (employers, residential)*
Shared mobility incentives	Resources such as rideshare discounts, carshare discounts, free or subsidized transit passes can decrease trips made by a single occupancy vehicle	Developer and/or tenants (employers, residential)*
Promotional materials on transportation offerings (flyers, emails, websites, etc.)	Resources advertising alternative modes of transportation can raise awareness to people who primarily rely on their car	Developer and/or tenants (employers, residential)*
Bulletin boards or kiosks displaying transportation alternatives		
Participation in City-wide events encouraging alternative modes of transportation	Encouraging major employers, residential developments, and community members to participate in City-wide events, such as the annual Bike to Wherever Day, can expose people to alternative modes of transportation	Developer and/or tenants (employers, residential)*

**If responsible entities decides to join, PATMA can be a facility/ resource provider.*

7.5

Utilities and Infrastructure

This analysis was prepared to provide an overview of the utility infrastructure that serves the North Ventura Coordinated Area Plan (NVCAP) area, identify existing infrastructure constraints, and provide recommendations as determined during review of the proposed NVCAP land-use plan.

As an existing, developed area, the NVCAP area is served by existing utilities. The future NVCAP development will increase water demand and sewer generation. This may require upgrades to aging infrastructure and/or new utilities to meet the needs of the increased development intensities. The existing conditions are described in detail in the Infrastructure Report prepared by BKF Engineers, dated December 10, 2018.

Development Program Summary

The existing program consists of multiple land-use types, including commercial, multi-family residential, research/office park, light industrial, single family residential, and neighborhood commercial. Specifically, the existing NVCAP area includes 142 residential units and approximately 870,000 sf of commercial area. The future development program consists of 672 residential units and approximately 615,000 sf of commercial area. This is an increase of 530 residential units and a decrease of approximately 255,000 sf of commercial area. Along with the residential and commercial work, 2 acres of park land is proposed for the development including the renaturalization of Matadero Creek.

Utility Infrastructure

Storm Drainage

Storm drainage facilities in and around NVCAP are owned and maintained by the City of Palo Alto's Department of Public Works. The Palo Alto models, provided as part of the City's Storm Drain Master Plan[1], split the storm drain system into three parts. The entirety of NVCAP is contained within the Matadero Creek Watershed, which consists of 55 linear miles of pipe (greater than 12-inches in diameter) and four pump stations. The Matadero Creek watershed drains to the San Francisco Bay.

Per City of Palo Alto's records, the storm drain pipes around NVCAP were installed between the 1950's and the 1960's, with the exception of the pipes running through the site (between Ash Street and Park Boulevard), which were built in the 1990's. The City of Palo Alto Storm Drain Master Plan by Schaaf & Wheeler concluded the following about the drainage systems within the North Ventura Coordinated Area Plan:

The Matadero watershed analysis for a 10-year storm event shows flooding occurs at 694 of the 1,373 nodes. The model predicts less than 6 inches of flooding at 353 nodes; between 6 inches and 12 inches of flooding occur at 129 nodes; and more than 12 inches of flooding will occur at 212 nodes.

The Matadero watershed analysis above shows that flooding occurs at multiple locations within the NVCAP area during a 10-year storm event and that existing pipes on Page Mill Road and Portage Avenue lack the capacity for a 10-year storm event. The Storm Drain Master Plan recommends multiple capital improvement projects (CIP) be performed near the NVCAP area. Recommended CIP improvements include upgrades to the Oregon Expressway Pump Station and upsizing pipes on Page Mill Road and Portage Avenue. Further discussion with City staff is needed to determine if any of these CIP projects have already been implemented or scheduled. Implementation of these capital improvement projects will improve storm drain capacity compared to existing conditions. However, individual developers within the NVCAP area may be required to upgrade storm drain infrastructure near their project to further improve performance of the storm drain system.

1 *City of Palo Alto Storm Drain Master Plan, Schaaf & Wheeler Consulting Civil Engineers, June 2015*

Stormwater Management

Redevelopment within the NVCAP area is subject to the Bay Area Municipal Regional Stormwater Permit (MRP). The third reissuance of the Municipal Regional Stormwater Permit, or MRP 3.0, was adopted by the San Francisco Bay Regional Water Quality Control Board in May 2022. MRP 3.0 includes significant changes and additional stormwater management requirements which are outlined in Provision C.3. These requirements become effective July 1, 2023.

Under MRP 3.0, parcel-based development or redevelopment is considered a Regulated Project (i.e., triggers requirements) if it will create or replace 5,000 square feet (sf) or more of impervious area. This includes any impervious surface, sidewalk, or street frontage that is created or replaced in the public right-of-way as part of a project. The 5,000 sf threshold also applies to new roads, sidewalks, and bike lanes. For redevelopment projects, the "50% Rule" applies as noted in the Santa Clara Valley Urban Runoff Pollution Prevention Program (SCVURPPP) guidance. Projects that alter or replace less than 50 percent of existing impervious surface need to treat stormwater runoff only from the portion of the site that is redeveloped. Projects that alter or replace 50 percent or more of the existing impervious surface are required to treat runoff from the entire site.

It is likely that all horizontal and vertical development projects within the NVCAP area will trigger the Regulated Project criteria and be required to comply with MRP Provision C.3. requirements. Projects will need to implement stormwater management measures that collect and treat stormwater runoff from all onsite impervious areas prior to discharge into the City storm drain system. If a Regulated Project creates or replaces less than 50% of the impervious surface within an existing road or public right of way, stormwater runoff from only the new portion of the road must be included in the treatment system design. If runoff from that portion of the road cannot be separated from runoff from the rest of the road, the runoff from the entire surface draining onto the reconstructed portion must be treated. If a project disturbs 50% or more of the existing roadway, the entire road surface must be included in the treatment system design. Treatment measures may include bioretention areas, flow-through planters, or facilities for capture and use of stormwater such as cisterns.

With the incorporation of C.3. treatment measures on a project by project basis, dedication of at least two acres of park space, and proposed renaturalization of Matadero Creek, the future NVCAP development is expected to reduce the total impervious surface at the site. This will result in a net decrease of stormwater flow to the City storm drain system and creeks. Implementation of green stormwater infrastructure measures, such as bioretention areas and pervious pavement, within the public streets in the North Ventura area will also slow and reduce runoff to the storm drain system.

Wastewater Treatment

The City of Palo Alto owns and operates the existing sanitary sewer mains within and surrounding the North Ventura Coordinated Area Plan.[2] The project's wastewater will be treated at the Regional Water Quality Control Plant that is operated by the City of Palo Alto in partnership with the City of Mountain View, City of Los Altos, East Palo Alto Sanitary Sewer District, Town of Los Altos Hills and Stanford University.

The North Ventura Coordinated Area Plan currently consists of sanitary sewer mains within each public road and between the dead end of Portage Avenue and Park Boulevard. These existing sewer mains vary in size from 6" to 15". There are also two parallel sewer mains in Olive Avenue-one 15" and one 8", which connect to two parallel sewer mains in Park Avenue (one 12" and one 15"). The City of Palo Alto's Wastewater Map shows that there will be upgrades to existing sanitary sewer mains along the NVCAP perimeter, in El Camino Real, Page Mill Road and Lambert Avenue. According to the City of Palo Alto Wastewater Capital Improvements Plan 2016-2020, improvements to the existing wastewater infrastructure around the site were implemented in 2018.

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2 City of Palo Alto, Sanitary Sewer Management Plan, City of Palo Alto Wastewater Ops, 2016

BKF prepared wastewater generation projections based on the proposed NVCAP land-use and densities. The City of Palo Alto Water Gas & Wastewater Utility Standards state that the proposed wastewater demand shall be based off of the Peak Base Wastewater Flow (PBWF). PBWF is the Average Base Wastewater Flow (ABWF) multiplied by a peaking factor between one and four. ABWF is the average dry weather wastewater flow contributed from residential, commercial and industrial users for the proposed development. The ABWF is calculated using unit flow rates shown in Table 1-1 in The City of Palo Alto Water Gas & Wastewater Utility Standards Section 2730 Wastewater Design and Construction Standards and also shown in Table 20.

Average Base Wastewater Flow (ABWF)

Land Use Category	Land Use Designation**	Unit	Unit Flow Rate (gpd/unit)
Residential			
Single Family	SF	Dwelling Unit	220
Multi-Family	MF	Dwelling Unit	160
Transit-Oriented	CC	Dwelling Unit	160
Commercial	CS, CN, CH	Building Sq. Ft.	0.15
Research/Office Park	RO	Building Sq. Ft.	0.10
Light Industrial	LI	Building Sq. Ft.	0.10
Major Institutional	MISP	Building Sq. Ft.	0.15
School	S	Student	15

Groundwater Infiltration (GWI) = 500 gpd/acre
Rainfall-Dependent Inflow (RDI) = 1,900 gpd/acre

* All rates are based on the 2004 Wastewater Collection System Master Plan.
** Land Use Designations based on Palo Alto's Planning Land Use Designations.

Table 20 *Unit Flow Rates for ABWF, GWI, and RDI in the City of Palo Alto Water, Gas, & Wastewater Utility Standards Section 2730 Wastewater Design and Construction Standards*

Wastewater generation estimates for the existing and proposed developments are calculated based on the City's design standards. Wastewater generation estimates are summarized below and account for the entire NVCAP area. Wastewater generation rates for both the existing and proposed conditions were compared in order to understand the impact the development will have on the existing wastewater infrastructure. The results are summarized in Table 21.

The proposed NVCAP development will have an average base wastewater flow (ABWF) of approximately 197,000 gallons per day (GPD), a net increase of 46,000 GPD compared to existing conditions. Peak wastewater flow will increase from 416 GPM to 546 GPM, a net increase of 130 GPM.

The future NVCAP redevelopment will increase sewer flows compared to existing conditions. According to the City of Palo Alto Wastewater Capital Improvements Plan 2016-2020, improvements to the existing wastewater infrastructure around the site were implemented in 2018. For future projects within the NVCAP area, developers will need to conduct an analysis to determine if the local City infrastructure can accommodate project flows, or if additional improvements to sewer infrastructure are required. BKF to check with the City on what analyses are typically used to assess if a project's increased sewer flows trigger an upgrade.

EXISTING WASTEWATER GENERATION				
Use	Total SF	gpd/1000 sq. ft.	ABWF (GPD)	Peak Flow (GPM)
Residential (Multi-Family)	142 D/U	160	22,720	63
Office (Commercial)	744,000	0.15	111,600	307
Retail (Commercial)	111,200	0.15	16,680	46
Total	-	-	**151,000**	**416**

PROPOSED WASTEWATER GENERATION				
Use	Total SF	gpd/unit	ABWF (GPD)	Peak Flow (GPM)
Residential (Multi-Family)	672 D/U	160	107,520	297
Office (Commercial)	231,270	0.15	34,691	96
Retail (Commercial)	366,544	0.15	54,982	153
Total	-	-	**197,192**	**546**

Table 21 *Existing and proposed wastewater generation for the NVCAP site*

Potable Water and Fire Water

The City of Palo Alto's water comes from the City and County of San Francisco's Regional Water Supply System (RWS), operated by the San Francisco Public Utilities Commission (SFPUC). This water supply consists almost entirely of Sierra Nevada snowmelt delivered through the Hetch Hetchy aqueducts, but also includes treated water produced by the SFPUC from its local watersheds and facilities in Alameda and San Mateo Counties.

The water demand for the developed site was calculated by using the assumption that wastewater generation is 95% of water demand for the site. The proposed water demand for the site is summarized in Table X.X.

Using the same assumption that existing wastewater generation is 95% of existing water demand, the existing peak water demand for the site is 438 GPM. The proposed development will result in a peak flow demand increase of 139 GPM, from 438 GPM to 577 GPM. The SFPUC has adequate supplies to meet its contractual obligation to the wholesale customers (City of Palo Alto) of 184 MPG, through the year 2030. The City has an ISG of 17.07 MGD (or 19,118 SFY). The water distribution system is operated by the City of Palo Alto Public Works.

The NVCAP area consists of existing water mains within the public streets (and between the dead end of Acacia Avenue and Park Boulevard), varying in size from 6" to 12". The network of piping within NVCAP will need to be evaluated for adequacy on a project by project basis. It is likely that the existing 6" water mains are not able to provide sufficient flow and pressure to meet required fire demands for new construction. Depending on the actual building heights, locations, densities, and construction types, water mains may need to be replaced and upsized to meet fire flow requirements.

PROPOSED WATER DEMAND				
Use	Total SF	gpd/unit	Average Day (GPD)	Peak Flow (GPM)
Residential (Multi-Family)	672 D/U	168	113,179	314
Office (Commercial)	231,270	0.16	36,516	101
Retail (Commercial)	366,544	0.16	57,875	161
Total	-	-	**207,571**	**577**

Peak Hour Demand Peaking Factor = 4
Preliminary Assumption, WW Generation is 95% of Water Demand

Table 22 *Proposed water demand for the NVCAP site*

Recycled Water

No recycled water is currently available in the study area. BKF to confirm with City if there is any intent to extend recycled water to this area. BKF to also check if the City has or wants to implement any requirements for new developments to be "recycled water ready" (dual plumbed, site irrigation, etc.).

Gas

Based on the existing underground Map provided by the City of Palo Alto to BKF Engineers on October 29, 2018, there are multiple gas mains servicing the NVCAP project site. The existing gas mains vary in size from 2" to 4", and run within every public street in the North Ventura Coordinated Area Plan.

Electrical Utilities

Based on the Electrical and Fiber Optic Service Maps provided by the City of Palo Alto (Figures 16 and 17), there are existing electrical and fiber optic lines serving NVCAP. The existing electrical utilities consist of both overhead and underground lines. There are overhead electric lines serving existing buildings on each road within the NVCAP project boundaries. Based on the City of Palo Alto's 2019-2023 Capital Improvement Program, the NVCAP project site is not within an area that the City plans on undergrounding between now and 2023. However, as part of individual development projects' conditions of approval, the City may require projects to underground all overhead electric lines along their street frontage.

The majority of the existing electrical utilities, including a 60KV electric line and a fiber optic backbone line, run along Lambert Avenue and Park Boulevard to an existing substation, "Park Boulevard Substation" at the corner of Park Boulevard and Lambert Avenue. The Park Boulevard Substation is not within the North Ventura Coordinated Area Plan.

It should be noted that proposed horizontal development will need to address how critical infrastructure will either be maintained or relocated. The underground 60kV lines on Lambert cannot be relocated. Existing equipment that won't be moved still needs to be accessible for maintenance and clearance requirements need to be met. The utility substation on Park Boulevard and Lambert Avenue will need to be fully accessible during construction.

Matadero Creek Civil Infrastructure

Definition:

Tailwater Condition: the receiving water elevation (or pressure) at the final discharge point of a stormwater management system.

The Matadero Creek Channel is maintained by the Santa Clara Valley Water District (Valley Water). The portion of Matadero Creek running through the North Ventura Coordinated Area Plan is contained within a concrete trapezoidal channel, which was built in 1990 from El Camino Real to the Caltrain tracks.

NVCAP proposes in concept to renaturalize a section of Matadero Creek that is within the Plan Area. There is an existing concrete flood control channel that flows south to north through the Plan Area. This creek corridor is constrained by existing infrastructure and urban development. The proposed renaturalization would remove the existing U-shaped concrete channel and replace it with a widened, natural channel. The goals of a renaturalization project are to provide community benefits, re-establish riparian ecosystem habitat, and avoid adverse impacts on hydraulic performance and flood risks.

The NVCAP Preferred Plan[3] supports a widened natural corridor with area available for riparian plantings, creative landscape architecture design, and increased recreation access. This concept is described in detail as Concept 3 in the Matadero Creek Conceptual Alternative Analysis[1] prepared by WRA, Inc. This concept includes replacing the Lambert Avenue bridge with a longer span and widening the creek channel from approximately 30 feet wide to 100 feet wide. As described by WRA in Section 9.4 of the Matadero Creek Conceptual Alternative Analysis[4]:

Hydraulic modeling indicates that Concept 3 would increase water surface elevations in some portions of the project reach by as much as one foot, but decrease water surface elevations upstream of El Camino Real by roughly 0.5 feet. Increases in water surface elevation between El Camino Real and Park Boulevard may be mitigated by floodwalls and no adverse effect would occur further upstream. Concept 3 appears to be feasible from a hydraulics perspective.

Where the Matadero Creek channel runs through NVCAP (Figure 93), the existing site has several existing outfalls connected to the channel, with sizes varying from 12" storm drain inlet connections up to 60" storm drain mains. Local stormwater runoff is collected in a series of storm drain pipes and discharged at these outfall locations. Due to the widening of the creek channel, the existing outfalls will need to be relocated or otherwise accommodated in place. Hydraulic modeling by WRA indicates that water surface elevations in some portions of the project may increase by up to one foot. Further investigation will be required to assess if the increased tailwater condition at the creek will adversely impact performance of the outfalls and connected, upstream storm drain infrastructure. An additional study will also be needed to confirm that hydraulic performance at the Park Blvd culvert and Lambert Bridge is acceptable and not worse than the existing condition.

The creek widening will require replacement of the Lambert Avenue bridge with a longer span. Currently, a City water main is supported by the existing bridge and spans over the concrete channel. This utility will be impacted by the proposed bridge improvements and will need to be relocated onto the new bridge structure. Service to nearby properties will need to be identified to determine if these properties will be impacted. There are also overhead electrical lines that are supported by poles on either side of the channel.

Future development in this area will need to be coordinated with the Valley Water to ensure adequate measures are implemented to reduce impact to the [illegible] project meets [illegible]

3 *City of Palo Alto Council Meeting, January 10, 2022. https://www.cityofpaloalto.org/files/assets/public/agendas-minutes-reports/agendas-minutes/city-council-agendas-minutes/2022/20220110/20220110pccsm-linked-updated.pdf*

4 *Matadero Creek Conceptual Alternative Analysis, WRA Inc., 2020*

Figure 92 *The Matadero Creek Channel Today along Ash Street*

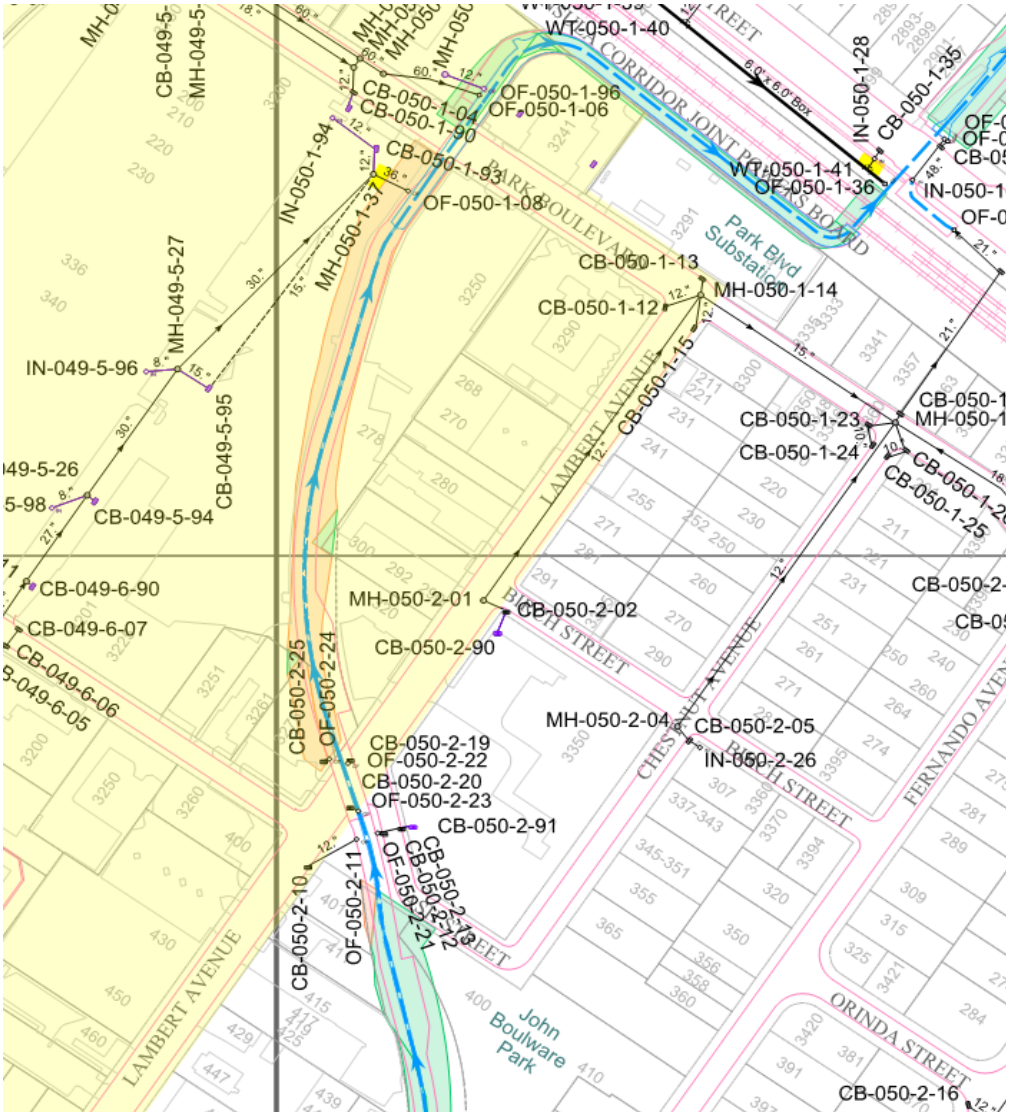

Figure 93 *Storm Drain Outfalls to Matadero Creek Channel*

Funding and Financing Strategy

The NVCAP specifies new public infrastructure and amenities required to support the emergence of a walkable, transit-oriented, mixed-use neighborhood. The funding and financing strategy identifies the primary categories of capital improvement projects included in the NVCAP, and describes applicable funding and financing sources and mechanisms for constructing those projects.

Major Project Categories

The public infrastructure and amenity improvements identified in the NVCAP fall into five primary categories consisting of bicycle and pedestrian infrastructure, streetscape, parks and open space, green stormwater infrastructure, and the re-naturalization of Matadero Creek.

Funding and Financing Sources and Mechanisms

A variety of potential funding sources and financing mechanisms exist for implementing the improvements identified in the NVCAP. This section describes these sources and mechanisms and their potential uses within the Plan Area. In many cases, multiple funding sources will need to be combined to pay for specific projects.

Although the terms "funding" and "financing" are often used interchangeably, there is an important distinction between the two terms. "Funding" typically refers to a revenue source such as a tax, fee, or grant that is used to pay for an improvement. Some funding sources, such as impact fees, are one-time payments, while others, such as assessments, are ongoing payments. "Financing" involves borrowing from future revenues by issuing bonds or other debt instruments that are paid back over time through taxes or fee payments, enabling agencies to pay for infrastructure before the revenue to cover the full cost of the infrastructure is available.

Potential funding for improvements includes a mix of developer contributions (both required and negotiated, such as via the 340 Portage development agreement), City resources, outside grants, and district-based tools.

Funding Source Category	Examples
Developer Contributions	Development Standards
	CEQA Mitigations
	Impact / In-Lieu Fees
	Negotiated Agreements
City Resources	General Fund
	Capital Improvement Plan
	User Fees
Outside Grants	Regional, State, and Federal Grants
District-Based Tools	Special Assessment District
	Community Facilities District
	Enhanced Infrastructure Finance District

Table 23 *Funding Source Categories and Examples*

Developer Contributions

Development Standards:

Each new development project will contribute to the NVCAP's implementation by meeting requirements regulating each project's land uses, height, density, setbacks, parking requirements, street frontage improvements, pedestrian access, and other requirements specified in the NVCAP. These standards are adopted in the City's zoning ordinance and must be satisfied for a project to be granted approval.

Reimbursement Agreements:

If a developer is required to provide additional infrastructure capacity or amenities to serve the entire district, a reimbursement agreement can be established to receive payments from later developers who benefit from these early improvements. This allows for areawide cost-sharing.

CEQA Mitigations:

Developers may be required to contribute to environmental mitigation measures, both for areawide needs and for their specific development projects.

Impact / In-Lieu Fees:

Impact fees are one-time fees imposed on new developments to pay for improvements and facilities that either serve the new development or reduce the impacts of the project on the existing community. Fee revenues cannot be used to fund existing deficiencies in infrastructure. The City of Palo Alto already has citywide impact fees for Housing, Community and Public Safety Facilities, Traffic, Parks, and Public Art. All development projects within the Plan Area must meet citywide impact and in-lieu fee requirements.

Negotiated Agreements:

Community benefits are developer contributions that exceed the baseline features required under development standards, environmental mitigation measures, and impact fees. Community benefits agreements are negotiated with developers individually in exchange for additional development rights. As noted earlier in the NVCAP, a development agreement negotiation is underway for the 340 Portage Avenue site. The developer proposes to provide more than three acres of land for a new public park surrounding Madero Creek and one acre for affordable housing, in addition to monetary contributions to both park improvements and the city's affordable housing fund.

City Resources:

General Fund:

General Fund revenues include property tax, sales tax, transient occupancy tax, and other revenues that are primarily used to pay for ongoing municipal services and operations.

Capital Improvement Plan (CIP):

Infrastructure projects identified in the NVCAP are candidates for inclusion in the City's Capital Improvement Plan, which identifies a range of specific funding sources for capital improvement projects throughout the City of Palo Alto. For example, sanitary sewer and water main replacement projects and fiber optic backbone extensions within the NVCAP area are included in the Fiscal Year 2023 CIP, which plans expenditures for 2023-2027.

User Fees:

User fees and rates include the fees charged for the use of public infrastructure or goods. It may be possible to use a portion of user fee or rate revenue toward financing the costs of new infrastructure, but user fees are unlikely to be a major source of funding for implementation of the NVCAP.

Outside Grants

Various federal, state, and regional grant programs distribute funding for public improvements. Because grant programs are typically competitive, grant funds are an unpredictable funding source, and the City of Palo Alto must remain vigilant in applying for grants to implement the NVCAP. Unique grant funding opportunities may become available due to the area's designation as a Priority Development Area by the Association of Bay Area Governments, and because most of the Plan Area is within ½ mile of a Caltrain station—enabling access to funds directed to transit-oriented locations. However, access to grant funds may be contingent on adopting land use policies that comply with MTC's Transit-Oriented Communities policy, with particular impacts on the Mobility Hubs and One Bay Area grants describe below.

Listing of the former cannery at 340 Portage Avenue in the California Register of Historical Resources may allow that private property to become eligible for State and Federal historic preservation grants and loans, which are not detailed in the table below. However, the more significant preservation benefit would likely be associated with tax incentives, such as the Mills Act, that encourage the private property owner to preserve the resource. These grants and incentives would not be available if alterations to the property make it ineligible for listing.

The following table describes outside grant funding sources that may be applicable to public capital improvements as of the passage of the NVCAP; this is not an exhaustive list, however, and new grant funding programs will open during the implementation of the NVCAP.

Program	Adminstering Agency	
Regional or County		
Mobility Hubs	MTC	
Transportation for Clean Air (TFCA) Regional Program: Bicycle Facilities Grant Program	Bay Area Air Quality Management District (BAAQMD)	
Santa Clara County Measure B: Bicycle and Pedestrian Program	VTA	
One Bay Area Grant (round 3)	MTC	
Transportation Development Act (TDA) Article 3 Program	MTC	

Table 24 *Examples of Potential Regional or County Grant Funding Sources for NVCAP Improvements*

	Description	Eligible Capital Projects			
		Bicycle and Pedestrian Access	Streetscape	Parks, Trails, and Open Space	Storm Drainage and Flood Control
	The Mobility Hubs program funds projects in designated mobility hubs that connect services and infrastructure that promote the use of mobility options besides private vehicles. This includes connecting public transit, bike and pedestrian facilities, and bike or car share facilities.	x	x	x	
	The TFCA program, administered by the BAAQMD, funds projects that reduce vehicle emissions. Sixty percent of funds collected go to the TFCA Regional Fund for competitive grants. Eligible projects must demonstrate air quality benefits and reduction of emissions from motor vehicles. One sub-program within the TFCA Regional Fund is the Bicycle Facilities Grant Program, which funds the construction of new bikeways and the installation of new bike parking facilities.	x			
	Measure B was passed by Santa Clara County voters in 2016. Measure B authorized a 30-year, half-cent countywide sales tax to invest in transit, highway, and active transportation projects. Measure B includes nine different program areas, one of which is the Bicycle and Pedestrian Program (BPP). The BPP provides funding for bicycle and pedestrian capital projects and planning studies. Priority is given to projects that connect schools, transit and employment centers, and that fill gaps in existing bike/ped networks.	x			
	OBAG 3 is MTC's comprehensive policy and funding framework for distributing federal funding. OBAG 3 includes a Regional Program and a County Program. The county programs includes various competitive sub-programs.	x	x	x	
	TDA funds are derived from a 1/4 cent of the State's general sales tax. Article 3 of the TDA makes a portion of these funds available for use on bicycle and pedestrian projects. MTC programs TDA funds in the Bay Area.	x			

Program	Adminstering Agency	Description
State		
Infill Infrastructure Grant	California Department of Housing and Community Development	The Infill Infrastructure Grant program provides fund for infrastr residential or mixed-use infill development.
Transformative Climate Communities	California Strategic Growth Council	Proceeds from California's Cap-and-Trade Program help fund t (TCC) program. The TCC provides competitive grants for coordi infrastructure projects focused on achieving multiple environme a given community. Examples of eligible projects include afford improvements, and urban green infrastructure. The TCC progra have been most impacted by pollution, as measured by the Ca Implementation Grants and Planning Grants.
Affordable Housing and Sustainable Communities	California Strategic Growth Council	Proceeds from California's Cap-and-Trade Program help fund t grant program that promotes infill development and the reduc transportation and land use change. AHSC encourages combi and active transportation infrastructure, with a majority of fun component of a project.
Urban Greening Program	California Natural Resources Agency	Proceeds from the State's Cap-and-Trade Program help fund C Urban Greening Program provides competitive funding for proj and provide other benefits related to reducing air/water polluti and/or to increasing green spaces and green infrastructure. Eli expansion of neighborhood parks, green streets, urban trails, fo and other urban heat island mitigation measures. The program communities, as determined by the CalEnviroScreen index.
Active Transportation Program (ATP)	California Transportation Commission/MTC	ATP provides statewide competitive grants for pedestrian and b also eligible if they meet the requirements of the Recreational T Beyond the statewide competitive grants, ATP funds are also di funds must be allocated to disadvantaged communities.
Urban Streams Restoration Program (USRP)	California Department of Water Resources	The USRP funds projects and provides technical assistance to re Funds used for planning only must be used for projects that wil completed. Matching funds of 20 percent must be provided un community. Examples of eligible projects include installation of removing culverts or storm drains, and flood protection enhanc
Land and Water Conservation Fund	California Department of Parks and Recreation	The LWCF is a competitive grant program focused on creating Californians. The program funds the acquisition or the develo include the acquisition of land to create a new park, a buffer transportation trail corridor, or the development of recreation gardens, open space, etc.)

Table 25 *Examples of Potential State Grant Funding Sources for NVCAP Improvements*

	Eligible Capital Projects			
	Bicycle and Pedestrian Access	Streetscape	Parks, Trails, and Open Space	Storm Drainage and Flood Control
ructure improvements necessary to enable	x	x	x	x
he Transformative Climate Communities nated, community-led development and ental, health, and economic benefits within able housing, transit, bicycle/pedestrian m prioritizes disadvantaged communities that lEnviroScreen index. The TCC program offers	x	x	x	x
he AHSC program. AHSC is a competitive state tion of greenhouse gas emissions through ned investments in affordable housing, transit, ds typically awarded to the affordable housing	x	x	x	
alifornia's Urban Greening Program. The jects that reduce greenhouse gas emissions ion and the consumption of natural resources, gible projects include the enhancement or acilities that encourage active transportation, n prioritizes projects that benefit disadvantaged	x	x	x	x
bicycle capital projects. Certain trail projects are Trails Program (RTP), a sub-program within ATP. stributed to MPOs. A minimum of 25% of ATP	x	x	x	
estore urban streams to a more natural state. l serve disadvantaged communities once less the grant will benefit a disadvantaged green infrastructure such as bioswales, cements.				x
g new outdoor recreation opportunities for pment of recreational space. Eligible projects for an existing park, or a recreational/active al features (e.g. sports fields, dog parks,			x	

Program	Adminstering Agency	Description
State		
Local Highway Safety Improvement Program (HSIP)	Caltrans	HSIP is funded by federal aid as a core program and was codifi and Job Act. HSIP seeks to achieve significant reductions in traf are eligible for work on any public road or publicly owned bicyc investment is focused on improving user safety for and address capital improvements (e.g. landscaping, street beautification) a Caltrans requires that projects be consistent with California's Str
Senate Bill 1: Local Partnership Program (LP)	California Transportation Commission	SB 1, which was signed into law in 2017, is a $54-billion legislat freeways, bridges, and transit across California. Funds are spli the LP program to reward jurisdictions and transportation age developer fees, or other imposed transportation fees. The LP p as a competitive component. Eligible projects include a wide v roads, pedestrian/bicycle facilities, transit facilities, and other new transportation infrastructure. For the competitive grant p improvements.

Table 26 *Examples of Potential State Grant Funding Sources for NVCAP Improvements (Continued)*

Program	Adminstering Agency	Description
Federal		
Infrastructure Investment and Jobs Act	Federal Highway Administration, Federal Transit Administration, Federal Railway Administration, and Federal Aviation Administration	The Infrastructure Investment and Jobs Act provides over $550 Estimated apportionments are available for Fiscal Years 2022 - infrastructure needs including those related to public transit, air Most of the funds will be distributed through state agencies wh grant programs, whereas other funds will be apportioned direc will be available through federal grants processes. The State of than $35 billion over five fiscal years, and the San Jose urbanize be directly apportioned $536 million over this same time period

Table 27 *Examples of Potential Federal Grant Funding Sources for NVCAP Improvements*

	Eligible Capital Projects			
	Bicycle and Pedestrian Access	Streetscape	Parks, Trails, and Open Space	Storm Drainage and Flood Control
ied under the 2021 Infrastructure Investment ffic fatalities and injuries on public roads. Funds cle or pedestrian pathway or trail, so long as the es a specific safety problem. Non-safety related cannot exceed 10 percent of project costs. rategic Highway Safety Plan.	x	x		
ive package to fix and enhance roads, t among numerous programs. SB 1 created encies that have passed sales tax measures, program includes a formula allocation as well variety of transportation improvements – improvements to mitigate urban runoff from program, funds can only be used for capital	x	x		x

	Eligible Capital Projects			
	Bicycle and Pedestrian Access	Streetscape	Parks, Trails, and Open Space	Storm Drainage and Flood Control
billion for the nation's infrastructure. 2026. Funds are available for a wide array of rports, ports, bridges, water systems, and more. hich will be accessible through a range of state ctly to urbanized areas, and additional funds California is estimated to be apportioned more ed area, which includes Palo Alto, is expected to d.	x	x		x

District-Based "Value Capture" Tools

Land-based financing tools are typically associated with new real estate development to generate benefit-based special assessment revenues or property tax revenues to finance improvements through bond repayment or paying for improvements over time. District-based tools provide a stable revenue stream while ensuring that properties benefitting from improvements also contribute to those public investments. The table below describes the three primary types of district-based funding and financing tools. Note that assessment districts and community facilities districts primarily capture additional funding from private entities, while the enhanced infrastructure financing district reinvests growth in public property tax revenues within the district. If a district-based tool is utilized, the boundaries do not necessarily need to align with the NVCAP Plan Area boundaries.

Funding Tools	Description
Special Assessment Districts	Additional assessment against a range participants, depending on the type of and relative benefit received. Examples include: Landscaping and Ligh District, Community Benefit District, Busi Improvement District.
Community Facilities District (Mello-Roos)	Additional assessment on property, levie and varied based on a selected propert characteristic (excluding property value)
Enhanced Infrastructure Financing District (EIFD)	Diverts a portion of future municipal Ge Fund property tax revenues generated v the district to help fund infrastructure pr Climate resilience districts are a type of specifically intended to fund climate pro such as addressing sea level rise.

Table 28 *Summary of Major District-Based Value Capture Tools*

	Uses	Considerations
of district nting ness	Most useful for funding ongoing operations and maintenance.	Requires simple majority vote of paying stakeholders. Increases costs and risk for paying stakeholders. Stakeholders need to perceive a clear benefit for themselves. Impacts paying stakeholders' overall ability to support other taxes, fees, and community benefits. Little financial risk to the City or public agencies; could lead to increased tax revenue based on private reinvestment. Additional City staff time to administer districts could offset some gains.
ed y .	Financing infrastructure improvements, development of public facilities; also, ongoing operations and maintenance.	Requires approval of 2/3 of property owners (by land area) if there are fewer than 12 registered voters residing in the district. Boundaries can include non-contiguous parcels. Fees can be proportionally subdivided and passed on to future property / home owners. Increases costs and risk for landowners and homeowners if fees dissuade buyers or reduce achievable sales prices. Impacts paying stakeholders' overall ability to support other taxes, fees, and community benefits.
neral within ojects. EIFD jects	Financing infrastructure improvements, development of public facilities, affordable housing development.	Formation and bond issuance does not require a local vote. Does not cost individual property owners additional fees and taxes. Does not divert revenues from schools. Reduces future General Fund revenues by restricting use of the district's future property tax revenue growth.

Infrastructure Improvements and Applicable Funding Sources

The following table describes the applicability of various funding sources to the improvement needs identified in the NVCAP. Funding availability for improvements within the Plan Area will vary based on development activity, economic conditions, and availability of grants.

	Developer Contributions				
	Development Standards	CEQA Mitigation	Impact and In-Lieu Fees	Negotiated Agreements	General Fu
Bicycle and Pedestrian Infrastructure, Streetscape Improvements					
Public Right of Way Improvements	X		X	X	X
Intersection Improvements	X	X	X	X	X
Parks and Open Space					
Land Acquisition			X	X	
Construction of New Parks or Plazas			X	X	
Matadero Creek Re-Naturalization					
Land Acquisition			X	X	
Construction of New Infrastructure			X	X	
Utilities					
District-wide: Stormwater, Water, and Sewer Improvements		X	X	X	
On-site/Project Specific: Stormwater, Water, and Sewer Improvements	X	X	X	X	

Table 29 *Infrastructure Improvements and Applicable Funding Sources in the NVCAP*

City Resources			District Based			Outside Sources
und	Capital Improvement Plan	User Fees	CFD	EIFD	Special Assessment District	Grants (Federal, Regional, State)
	X		X	X	X	X
	X		X	X		X
	X		X	X		X
	X		X	X		X
	X		X	X		X
	X		X	X	X	X
	X	X	X	X		X

Implementation Actions

Plan policies in the preceding chapters will be implemented by developers, property owners, and the City over the course of the Plan horizon, many because of development applications. However, certain policies require implementation that must be initiated by City staff and/or coordinated with other public agencies.

Table 30 summarizes proactive steps needed to implement the NVCAP, agencies responsible for implementation, and the expected timeframe for each action. Related policies and goals from preceding chapters for each implementation action are also referenced.

Following Plan Adoption actions are anticipated to completed directly following the adoption of the NVCAP.

- Ongoing actions are expected to be implemented throughout the planning period.
- Short-term actions are actions that are expected to be completed within 0 to 4 years from plan adoption.
- Mid-term actions are anticipated to be implemented within 5 to 9 years from plan adoption.
- Long-term actions are expected to be completed between 10 to 20 years from plan adoption.

Implementat Action Number	
Land Use and Zoning	
IM 1	Field questions, facilitate desired local brokers to identify opportur of the Plan.
Open Space	
IM 2	Renaturalize Matadero Creek: Take actions to implement a con concrete channel) between Park to a 100 feet riparian corridor ser
IM 3	Public Park: Take actions to acquire, plan and Creek.
Street Improvements	
IM 4	Wayfinding Signs: Explore a program to design and to celebrate history and provide employees.
IM 5	Woonerf: Explore and implement a concep partnership to implement a conc elements for the segment of Port
Historic Preservation	
IM 6	Explore within the first year after and/or local Inventory as approp building.
Parking Management	
IM 7	Evaluate as needed future parkin benefit district, pricing options, ti parking.
IM 8	If hourly pricing is used, then exp used at any time OR such that 15

Table 30 *Implementation Actions in the NVCAP*

Action Description	City Department or Public Agency Responsible	
project design, and proactively reach out to property owners and nities for investment and lot consolidation and to promote the vision	Planning	Ongoing
cept for Matadero creek that will fully naturalize (removal of Boulevard and Lambert Avenue. The flood channel is widened up rving maximum geomorphic form and ecological function.	Multiple	Long-Term
d implement the vision for a public park adjacent to Matadero	Multiple	Long-Term
d implement a wayfinding sign program as an effective tool a clear and predictable navigation for residents, visitors and	Multiple	Ongoing
ot for a woonerf that may either be a private or public/private cept that integrates vehicular, pedestrian and traffic calming age Avenue between Ash Street and Park Boulevard.	Multiple	Ongoing
adoption of the Plan, the initiation of California or National Register priate/as determined by Council for the cannery and the Ash office	Planning	Short-Term
ng strategies to maintain parking availability such as a parking me-of-day restrictions, Residential Parking Permits, and shared	Office of Transportation	Mid-Term to Long-Term
lore a strategy that creates targets such that 85% of the spaces are 5% of the parking supply is available at any time.	Office of Transportation	Mid-Term to Long-Term

Implementation Action Number	
IM 9	Explore unbundling commercial
IM 10	Explore a parking pricing or a po transportation demand manage programs, etc.
Infrastructure Improvements	
IM 11	Evaluate water main capacity th likely that the existing six-inch (6" to meet required fire demands fo mains may need to be replaced
IM 12	Paving: Explore including into the Capito intersections and raised crossing
Public Art	
IM 13	Evaluate the placement of publi
IM 14	Explore updating the Public Art M
Mobility	
IM 15	Publicly accessible shared path o requiring recorded easements o

Table 31 *Implementation Actions in the NVCAP (Continued)*

Action Description	City Department or Public Agency Responsible	Timeframe
parking or require the parking to be made to the public.	Office of Transportation	Mid-Term to Long-Term
arking benefit district that could help support on-demand transit, ement measures, active transportation investments, transit pass	Office of Transportation	Mid-Term to Long-Term
hat may need to be upgraded on a project-by-project basis. It is ") water mains are not able to provide sufficient flow and pressure or new construction. Depending on the development project, water and upsized to meet fire flow requirements.	Public Works	Ongoing
al Improvement Program designs and implementation at key gs.	Public Works	Short-term to long-term
c art in relation to the Public Art Master Plan for the NVCAP.	Community Services	Ongoing
Master Plan as necessary to reconcile the vision of the NVCAP.	Community Services	Mid-Term to Long-Term
on private property: Implement locations indicated within NVCAP by ver private property when property redevelops.	Public Works/Planning	Ongoing

North Ventura Coordinated Area Plan
Project Goals, Objectives, Milestones and Proposed Boundary
March 5, 2018

Proposed NVCAP Goals

1. Housing and Land Use
   Add to the City's supply of multifamily housing, including market rate, affordable, "missing middle," and senior housing in a walkable, mixed use, transit-accessible neighborhood, with retail and commercial services, open space, and possibly arts and entertainment uses.

2. Transit, Pedestrian and Bicycle Connections
   Create and enhance well-defined connections to transit, pedestrian, and bicycle facilities, including connections to the Caltrain station, Park Boulevard and El Camino Real.

3. Connected Street Grid
   Create a connected street grid, filling in sidewalk gaps and street connections to California Avenue, the Caltrain Station, and El Camino Real where appropriate.

4. Community Facilities and Infrastructure
   Carefully align and integrate development of new community facilities and infrastructure with private development, recognizing both the community's needs and that such investments can increase the cost of housing.

5. Balance of Community Interests
   Balance community-wide objectives with the interests of neighborhood residents and minimize displacement of existing residents.

6. Urban Design, Design Guidelines and Neighborhood Fabric
   Develop human-scale urban design strategies, and design guidelines that strengthen and support the neighborhood fabric. Infill development will respect the scale and character of the surrounding residential neighborhood.

Proposed NVCAP Objectives

1. Data Driven Approach: Employ a data-driven approach that considers community desires, market conditions and forecasts, financial feasibility, existing uses and development patterns, development capacity, traffic and travel patterns, historic/cultural and natural resources, need for community facilities (e.g., schools), and

other relevant data to inform plan policies.

2. Comprehensive User Friendly Document and Implementation: Create a comprehensive but user-friendly document that identifies the distribution, location and extent of land uses, planning policies, development regulations and design guidelines to enable development and needed infrastructure investments in the project area

3. Guide and Strategy for Staff and Decision Makers: Provide a guide and strategy for staff and decision-makers to bridge the gap between the goals and policies of the Comprehensive Plan and individual development projects in order to streamline future land use and transportation decisions.

4. Meaningful Community Engagement: Enable a process with meaningful opportunities for community engagement, within the defined timeline, and an outcome (the CAP document) that reflects the community's priorities.

5. Economic Feasibility: A determination of the economic and fiscal feasibility of the plan with specific analysis of market place factors and incentives and disincentives, as well as a cost-benefit analysis of public infrastructure investments and projected economic benefits to the City and community.

6. Environmental: A plan that is protective of public health and a process that complies with the requirements of the California Environmental Quality Act.

ATTACHMENT C – LOCATION MAP

Image: CNES/Airbus, Maxar Technologies, Planet.com, USGS, USDA, FPAC, GEO, Google 2023