

TO: ARCHITECTURAL REVIEW BOARD

**FROM: ELIZABETH AMES
PUBLIC WORKS ENGINEERING**

DATE: FEBRUARY 21, 2013

SUBJECT: HIGHWAY 101 PEDESTRIAN/BICYCLE OVERCROSSING

The City of Palo Alto is currently advancing the preliminary design for the Highway 101 Pedestrian/Bicycle Overcrossing at Adobe Creek with a total project budget up to \$10M. Based on extensive feasibility testing and analysis, three conceptual alignments are being carried forward into the Environmental Impact Report (EIR) process. Staff has recommended Alignment A as preferred pending the outcome of the environmental studies, community, board and commission input to be initiated this spring. Staff is seeking input from the Architectural Review Board on three design concepts and unique design features proposed to be referenced in the environmental assessment and visual analysis.

Alignment Alternatives (See Attachment A)

Alignments A and B1

The bridge alignments start at the current entrance to the seasonal Lefkowitz Tunnel near West Bayshore Road and Adobe Creek. Alignment B1 has virtual the same end points as Alignment A, but includes a 270 degree loop turn before crossing over the highway from West Bayshore Road. Alignment B1 heads northwestward, and potentially conflicts at the landing site along the Bay Trail with existing senior and daycare activities.

Alignment F

The final alignment being considered is a “low impact” alternative developed in part to explore alternatives that do not enter the Baylands (as required by NEPA). Although similar to Option B1 on the West Bayshore Road side of the highway, Alignment F includes a sharper loop turn that more closely aligns with Barron Creek to avoid private property right-of-way.

Bridge Concepts

Three architectural bridge concepts will include common and unique design features. The selected concepts will have potential visual and aesthetic impacts as part of the environmental assessment. The environmental assessment currently includes the following architectural bridge concepts (sample photos are shown below):

1. A low-profile concrete bridge structure (i.e. box girder or slab) with emphasis on ‘softness,’ landscaping, and incorporation of wildlife habitat.
2. A signature steel arch or cable-stayed bridge design with iconic features, verticality, and

bridge color/lighting.

3. A concrete bridge structure with a modern aesthetic, sharp or irregular features, and great massing and sense of enclosure than Bridge Style #1. Large customized solar panels or other truss/roof structures may be rendered to approximate these features.



There are a significant number of bridge features that have technical standards or guidelines established by Caltrans or other agencies. A sample of the common features and design parameters that are likely to be consistent across all options are: vertical clearance, ramp slope, trail surface and width, railings, lighting, signage and striping, wayfinding and interpretive signage, columns, and landscaping and civil improvements. Unique design features are going to be described for each architectural concept and for each alignment such as: viewing platforms,

integrated slopes, spires or other vertical elements, solar panels, modern arch or cable systems, sculptural columns, etc.

Environmental Review

The bridge project is subject to the requirements of the California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA). Through discussions with Caltrans' and City staff, a combined NEPA/CEQA outline was developed as a means to combine both analyses into one document for this project (Attachment B). A draft Visual Impact Analysis (VIA) is attached for your reference (Attachment C). This process will allow the City and Caltrans to document impacts to assist in a selection of an environmentally preferred alignment. The common and unique design features will allow for flexibility in selecting a future design.

Next Steps

A draft EIR is planned to be in circulation this spring and final EIR is anticipated to be certified this fall/winter 2013.

Should a bridge design be selected through a design competition or through a site and design review process, the environmental assessment would require preparation of either an amendment or an addendum to include the winning design. See Attachment D for a sample of a bridge competition RFP.

Environmental Review: Complete Fall/Winter 2013

Potential Design Competition Summer 2013 – Winter 2013

Preliminary Design: Summer 2013 – Winter 2013

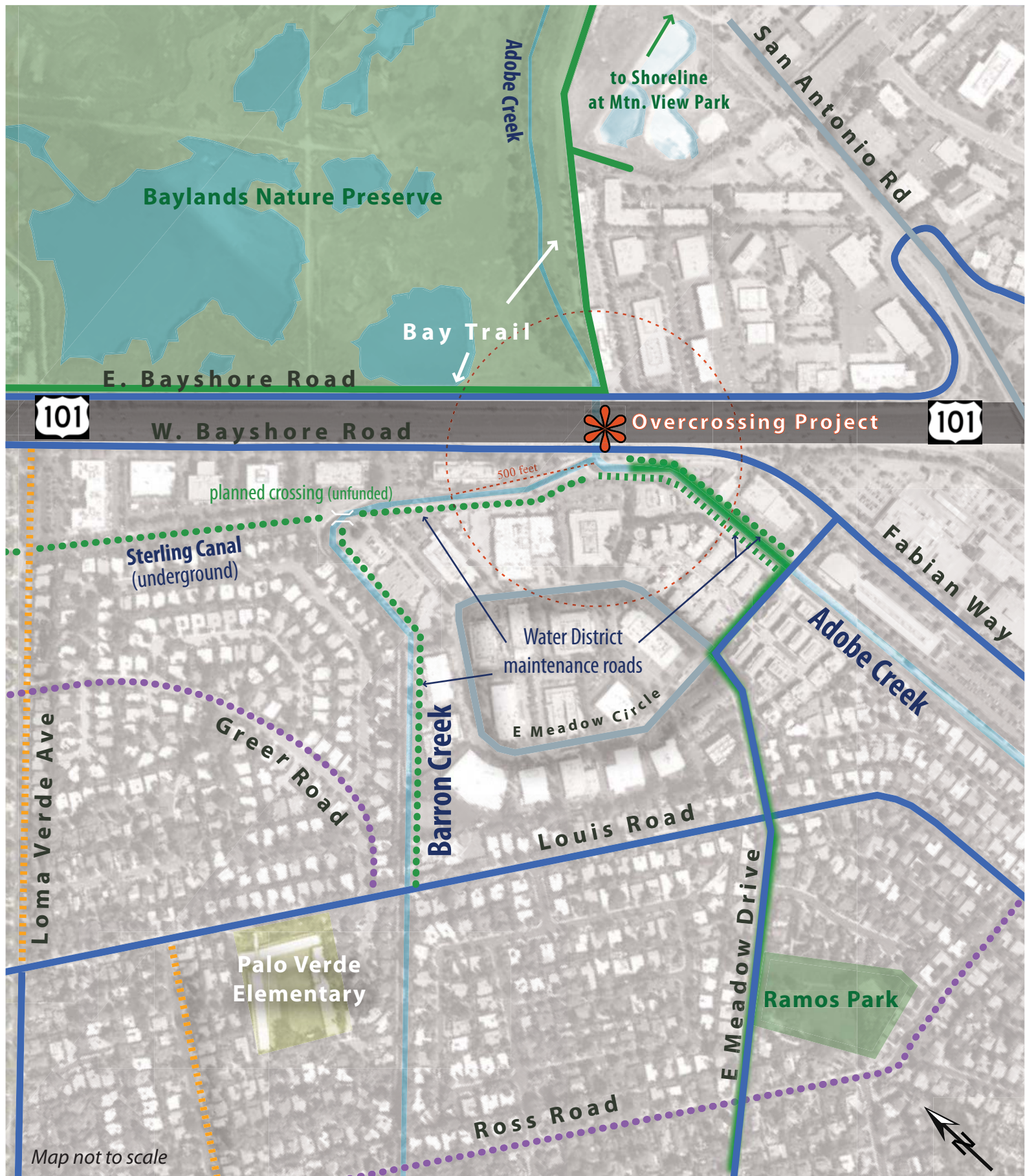
Final Design/Bid Documents - 2014

Permitting: Fall 2014 – Spring 2015

Advertisement/Award: Summer 2015

Construction: Fall 2015 – Winter 2017 (1½ years construction time frame)

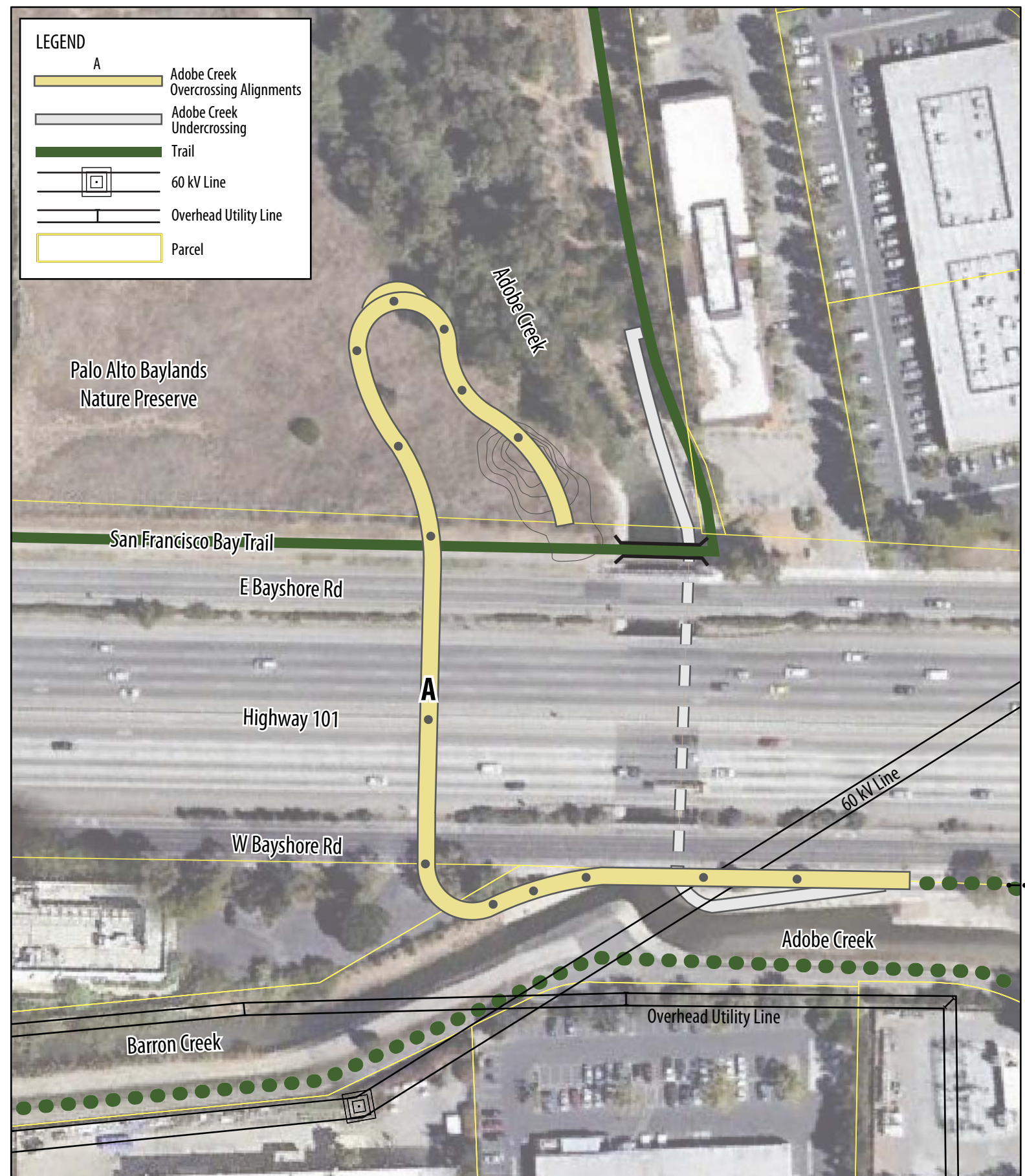
The project will be well positioned to receive grant funds after the EIR is certified as the bridge is also regionally significant according to the Valley Transportation Authority (VTA) Bicycle Expenditure Plan. This project is also a high priority project from the City's Bicycle and Pedestrian Transportation Plan.



Highway 101 Overcrossing at Adobe Creek

Project Location

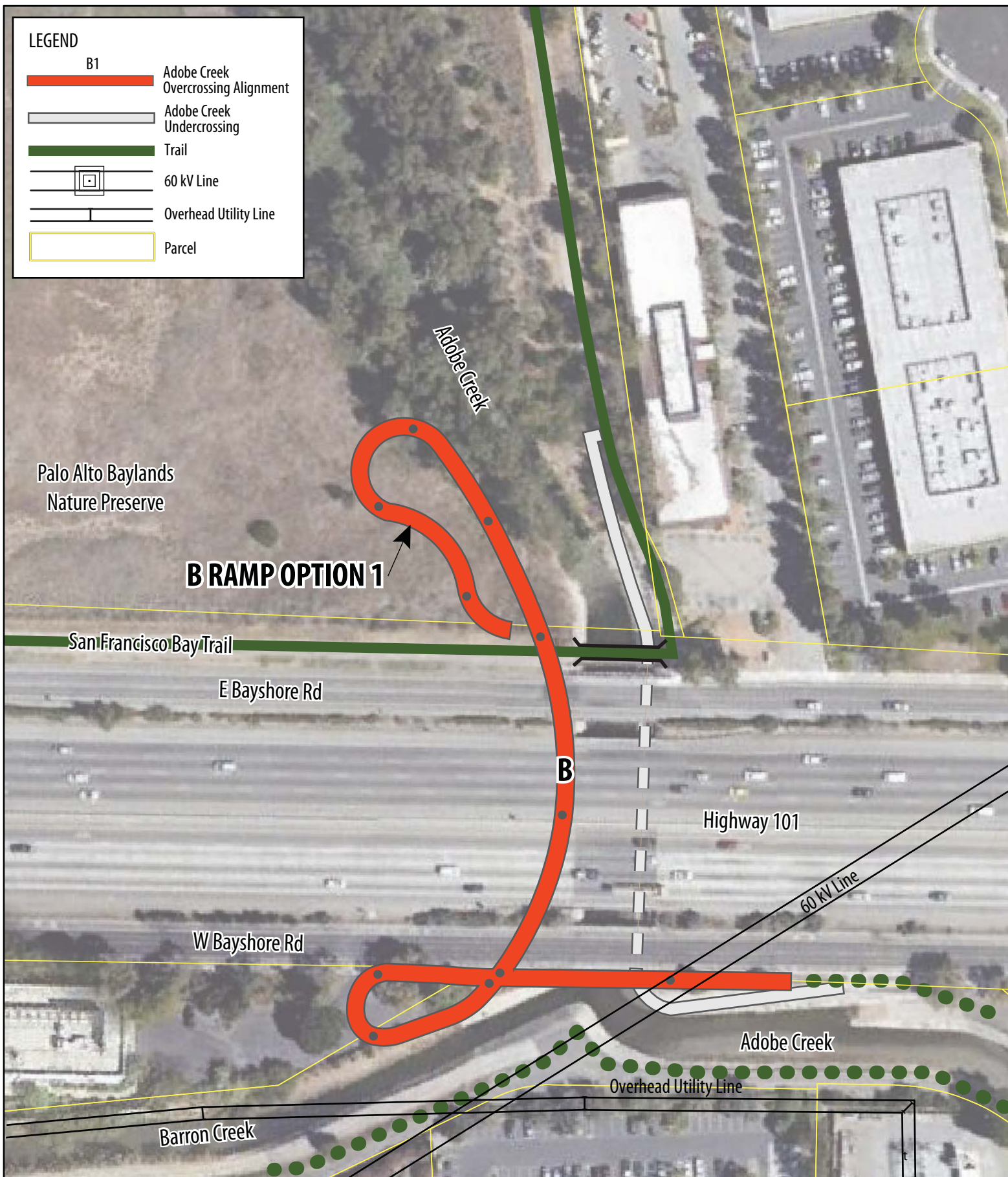
- Existing Class I Path (Bay Trail)
- Bay to Ridge Trail (adopted 2012)
- Existing Class II Bike Lanes
- ⋯ Planned Bicycle Boulevard (Class III)
- ⋯ Planned Shared Bikeway (Class III)
- ⋯ Planned Class I Path
- ⋯ Potential Class I Path



Highway 101 Overcrossing at Adobe Creek

Alignment Alternative A





Highway 101 Overcrossing at Adobe Creek

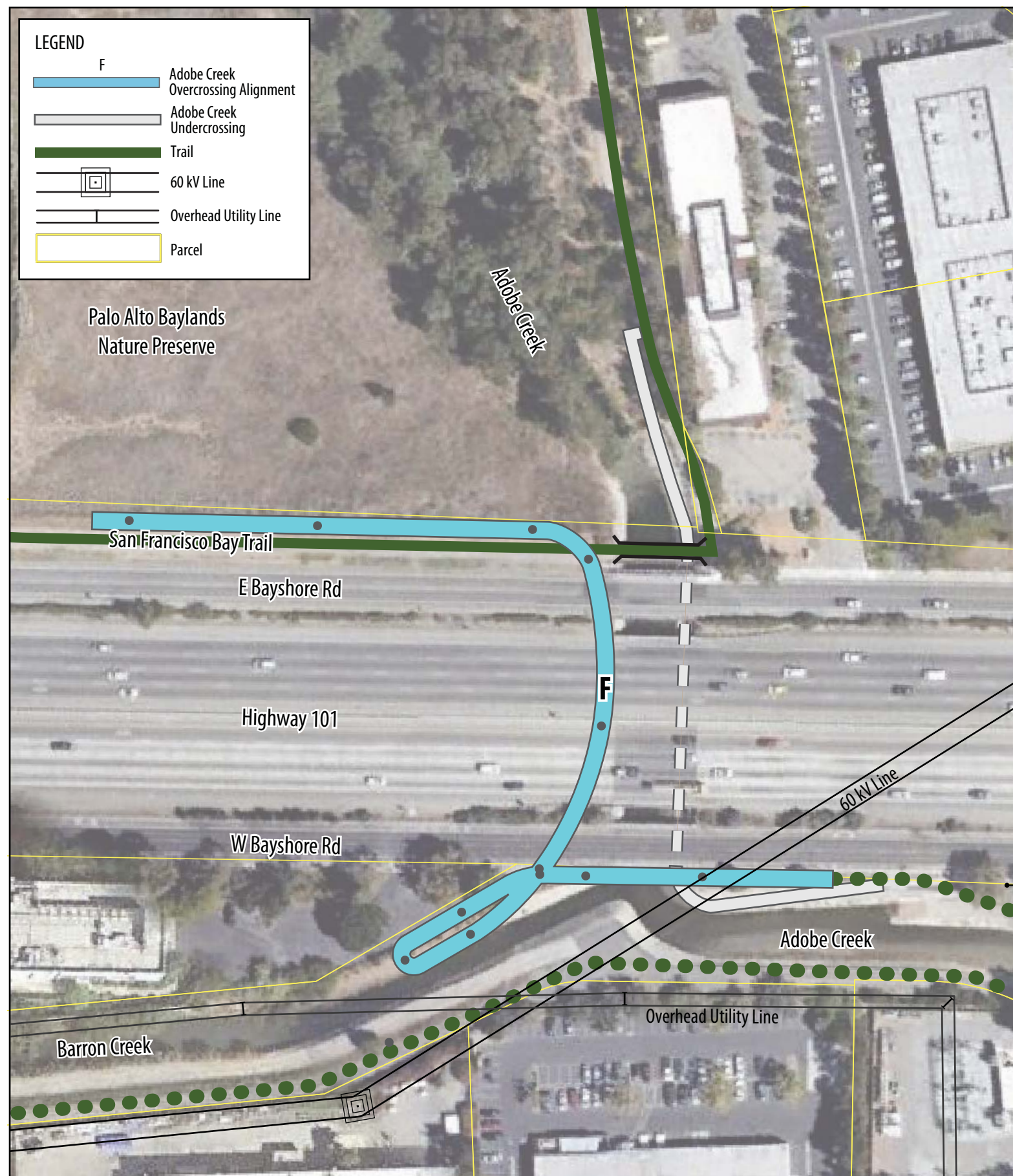
Alignment Alternative B1



City of Palo Alto, CA
 Source: Base Data obtained from City of Palo Alto, MTC, Google Maps
 Date: 1/30/13



0 50 100 Feet



Highway 101 Overcrossing at Adobe Creek

Alignment Alternative F



City of Palo Alto, CA
 Source: Base Data obtained from City of Palo Alto, MTC, Google Maps
 Date: 1/30/13



0 50 100 Feet



Highway 101 Pedestrian Overpass

Environmental Impact Report/ Environmental Assessment Draft Annotated Outline

Cover Sheet

Title Sheet

Summary

Table of Contents

Chapter 1 – Proposed Project

- Introduction
- Purpose and Need
- Project Description
- Alternatives
 - Common Design Features of Build Alternatives
 - Unique Design Features of Build Alternatives
 - Estimated Cost Information
 - No-Build Alternative
 - Alternatives Comparison Table
 - Locally-preferred alternative if one has been identified
 - Alternatives considered but eliminated from further discussion
- Permits and Approvals Needed

Chapter 2 – Affected Environment, Environmental Consequences, and Avoidance, Minimization, and/or Mitigation Measures

- Topic Areas with Negligible Potential Impact (i.e., agricultural and forest resources, noise, and mineral resources)

The discussion of each topic below will include the following subheadings:

- **Regulatory Setting**
This section describes the relevant laws and regulations that guide the analysis.

- **Affected Environment**
This section gives a concise description of the existing social, economic, and environmental setting for the area affected by all alternatives presented in the EIR/EA.
- **Environmental Consequences**
This section presents the impacts of each build alternative (or action alternative) and the no-build alternative. Construction-related impacts and cumulative impacts will be discussed in each resource section.
- **Avoidance, Minimization, and/or Mitigation Measures**
This section will be designed to satisfy both NEPA and CEQA requirements and will clearly differentiate between them. NEPA limits the use of “mitigation” and “mitigate”. These terms only refer to impacts that are adverse under NEPA. NEPA uses the framework of avoidance and/or minimization. For CEQA mitigation will be described as affecting impacts so that they are “significant” or “less than significant with mitigation incorporated.”

Human Environment

- **Land Use** - *Includes discussion of existing and future land use, consistency with State, Regional, and Local Plans and Programs; Coastal Zone; Parks & Recreation*
- **Growth (Population and Housing)** - *Discusses in a qualitative manner the influence that the project could have on growth and development.*
- **Community Impacts (Recreation)** – *Discusses community character and cohesion and Environmental Justice; Real Property Acquisition if applicable*
- **Utilities/Emergency Services (Public Services, and Utilities/Service Systems)** *Includes discussion of existing utilities/emergency services and potential changes or impacts.*
- **Traffic and Transportation/Pedestrian and Bicycle Facilities** – *Includes a discussion of the project’s impacts on traffic and circulation, both during construction and after completion of the project operational impacts. This is a qualitative discussion. Modeling is not included.*
- **Visual/Aesthetics** – *Includes discussion of the project setting and its viewshed. Key points are as follows:*
 - *Identify key views for visual assessment.*
 - *Analyze existing visual resources and viewer response.*
 - *Analyzes attributes such as line, form, color, texture, dominance, scale, diversity, and continuity. Visual quality is measured by vividness, intactness, and unity.*
 - *Depict the visual appearance of project alternatives.*
 - *Assess the visual impacts of project alternatives, including whether the project:*
 - *Promotes orderly and harmonious development in the city;*
 - *Enhances the desirability of residence or investment in the city;*
 - *Encourages the attainment of the most desirable use of land and improvements;*

- *Enhances the desirability of living conditions upon the immediate site or in adjacent areas; and*
 - *Promotes visual environments which are of high aesthetic quality and variety and which, at the same time, are considerate of each other.*
- **Cultural Resources** - *Includes discussion of all “built environment” cultural resources (structures, bridges, railroads, water conveyance systems, etc.) and archaeological resources (both prehistoric and historic) that could potentially be impacted.*

Physical Environment

- **Hydrology and Floodplain** - *Includes discussion of the potential risks of the project with regards to the floodplain, the potential impacts on natural and beneficial floodplain values and if necessary measures to minimize floodplain impacts and to preserve/restore any beneficial floodplain values impacted by the project.*
- **Water Quality and Storm Water Runoff** - *Includes discussion of the potential water quality concerns such as applicable storm water regulations, receiving water bodies and their beneficial uses, existing water quality, project-related discharges, including storm water, and potential water quality and storm water impacts.*
- **Geology/Soils/Seismic/Topography**- *Includes discussion of the potential geology, soils, and seismic concerns as they relate to public safety and project design.*
- **Hazardous Waste/Materials** - *Includes identification of potential sources of hazardous materials, waste and substances in, and adjacent to, the project area. Will describe results of a field inspection of the parcels in and adjacent to the project area to look for and document land use, disturbance, materials, or facilities that may indicate past or current releases or activities that may release or use hazardous materials.*
- **Air Quality** – *Includes discussion of regional, state, and federal air quality standards, characterization of general climatic and meteorological conditions in the project area, estimations of the types and amounts of air pollutants likely to be generated from project construction, and potential impacts on sensitive receptors in the area. This section will also follow the BAAQMD CEQA guidelines.*
- *(Moved to Chapter 3 and renamed Climate Change)*
- **Energy** – *Discuss project’s potential impacts on energy consumption and for energy conservation*

Biological Environment

- **Natural Communities** – Describe impacts related to each community/habitat type (non-FESA/non-wetland), including habitat fragmentation, fish passage, and wildlife corridors
- **Wetlands and Other Waters** – Describe federal/state waters/wetlands in the project area, including functions and values
- **Plant Species** – Includes description of the dominant plant species in the biological study area.
- **Animal Species** - Includes description of the dominant animal species in the biological study area.
- **Threatened and Endangered Species** – If necessary, this section includes discussion of threatened or endangered (T & E) species that are formally listed as endangered under the Federal Endangered Species Act (FESA) or California Endangered Species Act (CESA).
- **Invasive Species** - Includes description of potential of the project to promote or inhibit the spread of invasive species.

Chapter 3 – California Environmental Quality Act Evaluation

- **Discussion of Significance of Impacts**
- **Less-than-Significant Effects of the Proposed Project**
- **Significant Environmental Effects of the Proposed Project**
- **Unavoidable Significant Environmental Effects**
- **Climate Change**
- **Mitigation Measures for Significant Impacts under CEQA**

Chapter 4 – Comments and Coordination - Includes discussion of the scoping process including meeting dates, attendees, issues raised and comments received. Section will also describe consultation and coordination with public agencies

Chapter 5 – List of Preparers - Includes all individuals, including consultants, that prepared or helped to prepare the environmental document and supporting technical studies.

Chapter 6 – Distribution List

APPENDICES

Appendix A. CEQA Checklist - includes a checklist that is consistent with Appendix G of the CEQA Guidelines on the Office of Planning and Research website.

Appendix B. Section 4(f)

Includes description of all archaeological and historic sites within the Section 106 area of potential effects (APE) and all parks, recreational facilities, and wildlife and waterfowl refuges within approximately one-half mile of any of the project alternatives to determine whether they are protected Section 4(f) resources. It is assumed that the project would result only in a de minimis finding, which would be documented in Appendix B.

Appendix C. Title VI Policy Statement

Appendix D. Glossary of Technical Terms

Appendix E. Avoidance, Minimization and/or Mitigation Summary – *This section will summarize avoidance, minimization, and/or mitigation measures or provide a mitigation monitoring report in the document. It will separate out measures required to mitigate significant impacts under CEQA versus measures taken to avoid or minimize other less than significant impacts.*

Appendix F. List of Acronyms

List of Technical Studies