Santa Clara County - Clerk-Recorder Office
State of California

County of Santa Clara

Office of the County Clerk-Recorder
Business Division

County Government Center
70 West Hedding Street, E. Wing, 1st Floor
San Jose, California 95110 (408) 299-5688

File Number: ENV21220

ENVIRONMENTAL FILING
No. of Pages: 2
Total Fees: $2266.25
File Date: 11/28/2017
Expires: 12/28/2017

REGINA ALCOMENDRAS, Clerk-Recorder
By: Mike Louie, Deputy Clerk-Recorder

CEQA DOCUMENT DECLARATION

ENVIRONMENTAL FILING FEE RECEIPT

PLEASE COMPLETE THE FOLLOWING:

1. **LEAD AGENCY:** City of Palo Alto
2. **PROJECT TITLE:** Highway 101 Overcrossing and Adobe Creek Trail Project
3. **APPLICANT NAME:** Elizabeth Ames **PHONE:** (650) 329-2502
4. **APPLICANT ADDRESS:** City of Palo Alto Department of Public Works 250 Hamilton Ave. Palo Alto, CA 94301
5. **PROJECT APPLICANT IS A:** ☒ Local Public Agency ☐ School District ☐ Other Special District ☐ State Agency ☐ Private Entity
6. **NOTICE TO BE POSTED FOR** 30 **DAYS.**
7. **CLASSIFICATION OF ENVIRONMENTAL DOCUMENT**

a. **PROJECTS THAT ARE SUBJECT TO DFG FEES**

☐ 1. ENVIRONMENTAL IMPACT REPORT (PUBLIC RESOURCES CODE §21152)	$ 3,078.25	$ 0.00
☒ 2. NEGATIVE DECLARATION (PUBLIC RESOURCES CODE §21080(C)	$ 2,216.25	$ 2,216.25
☐ 3. APPLICATION FEE WATER DIVERSION (STATE WATER RESOURCES CONTROL BOARD ONLY)	$ 850.00	$ 0.00
☐ 4. PROJECTS SUBJECT TO CERTIFIED REGULATORY PROGRAMS	$ 1,046.50	$ 0.00
☒ 5. COUNTY ADMINISTRATIVE FEE (REQUIRED FOR a-1 THROUGH a-4 ABOVE) Fish & Game Code §711.4(e)	$ 50.00	$ 50.00

b. **PROJECTS THAT ARE EXEMPT FROM DFG FEES**

☐ 1. NOTICE OF EXEMPTION ($50.00 COUNTY ADMINISTRATIVE FEE REQUIRED)	$ 50.00	$ 0.00
☐ 2. A COMPLETED "CEQA FILING FEE NO EFFECT DETERMINATION FORM" FROM THE DEPARTMENT OF FISH & GAME, DOCUMENTING THE DFG'S DETERMINATION THAT THE PROJECT WILL HAVE NO EFFECT ON FISH, WILDLIFE AND HABITAT, OR AN OFFICIAL, DATED RECEIPT / PROOF OF PAYMENT SHOWING PREVIOUS PAYMENT OF THE DFG FILING FEE FOR THE *SAME PROJECT IS ATTACHED ($50.00 COUNTY ADMINISTRATIVE FEE REQUIRED)		
DOCUMENT TYPE: ☐ ENVIRONMENTAL IMPACT REPORT ☐ NEGATIVE DECLARATION	$ 50.00	$ 0.00

c. **NOTICES THAT ARE *NOT* SUBJECT TO DFG FEES *OR* COUNTY ADMINISTRATIVE FEES**

☐ NOTICE OF PREPARATION ☐ NOTICE OF INTENT	NO FEE	$ NO FEE

8. **OTHER:** _____ **FEE (IF APPLICABLE):** $ _____
9. **TOTAL RECEIVED** ..... $ 2,266.25

*NOTE: "***SAME PROJECT***" MEANS **NO** CHANGES. IF THE DOCUMENT SUBMITTED IS NOT THE SAME (OTHER THAN DATES), A "NO EFFECT DETERMINATION" LETTER FROM THE DEPARTMENT OF FISH AND GAME FOR THE **SUBSEQUENT** FILING OR THE APPROPRIATE FEES ARE REQUIRED.

THIS FORM MUST BE COMPLETED AND ATTACHED TO THE FRONT OF ALL CEQA DOCUMENTS LISTED ABOVE *(INCLUDING COPIES)* SUBMITTED FOR FILING. WE WILL NEED AN ORIGINAL (WET SIGNATURE) AND TWO (2) COPIES. IF THERE ARE ATTACHMENTS, PLEASE PROVIDE THREE (3) SETS OF ATTACHMENTS FOR SUBMISSION. *(YOUR ORIGINAL WILL BE RETURNED TO YOU AT THE TIME OF FILING.)*

CHECKS FOR ALL FEES SHOULD BE MADE PAYABLE TO: SANTA CLARA COUNTY CLERK-RECORDER

PLEASE NOTE: FEES ARE ANNUALLY ADJUSTED (Fish & Game Code §711.4(b); PLEASE CHECK WITH THIS OFFICE AND THE DEPARTMENT OF FISH AND GAME FOR THE LATEST FEE INFORMATION.

"... NO PROJECT SHALL BE OPERATIVE, VESTED, OR FINAL, NOR SHALL LOCAL GOVERNMENT PERMITS FOR THE PROJECT BE VALID, UNTIL THE FILING FEES REQUIRED PURSUANT TO THIS SECTION ARE PAID." Fish & Game Code §711.4(c)(3)

(Fees Effective 01-01-2017)

Print Form

Notice of Determination

Appendix D

To:

☒ Office of Planning and Research

U.S. Mail: P.O. Box 3044, Sacramento, CA 95812-3044

Street Address: 1400 Tenth St., Rm 113, Sacramento, CA 95814

☒ County Clerk
County of: Santa Clara
Address: 70 W. Hedding Steet
San Jose, CA 95110

From:
Public Agency: City of Palo Alto, Public Works Dept
Address: 250 Hamilton Avenue, 6th Floor
Palo Alto, CA 94301
Contact: Elizabeth Ames
Phone: 650-329-2502

Lead Agency (if different from above):
City of Palo Alto Planning & Community Environme
Address: 250 Hamilton Avenue, 5th Floor
Palo Alto, CA 94301
Contact: Claire Hodgkins
Phone: 650-329-2116

SUBJECT: Filing of Notice of Determination in compliance with Section 21108 or 21152 of the Public Resources Code.

State Clearinghouse Number (if submitted to State Clearinghouse): 2017082098

Project Title: Highway 101 Overcrossing and Adobe Creek Trail Project

Project Applicant: City of Palo Alto

Project Location (include county): Palo Alto, Santa Clara County, CA

Project Description:
The proposed project will be constructed on APN 008-05-005, 127-10-100 and -076, 127-56-006, and -007. The project involves the construction of a year-round pedestrian/bicycle overcrossing of Highway 101 at Adobe Creek, as well as associated trail connections and improvements, in the city of Palo Alto. The overcrossing would serve as a replacement for the existing Benjamin Lefkowitz pedestrian/bicycle undercrossing of Highway 101 at Adobe Creek and would connect to the SF Bay Trail on the east side of Hwy 101 and the Adobe Creek Trail on the west side of Hwy 101.

This is to advise that the City of Palo Alto (☒ Lead Agency or ☐ Responsible Agency) has approved the above described project on 11/27/2017 (date) and has made the following determinations regarding the above described project.

1. The project [☐ will ☒ will not] have a significant effect on the environment.
2. ☐ An Environmental Impact Report was prepared for this project pursuant to the provisions of CEQA.
   ☒ A Negative Declaration was prepared for this project pursuant to the provisions of CEQA.
3. Mitigation measures [☒ were ☐ were not] made a condition of the approval of the project.
4. A mitigation reporting or monitoring plan [☒ was ☐ was not] adopted for this project.
5. A statement of Overriding Considerations [☐ was ☒ was not] adopted for this project.
6. Findings [☐ were ☒ were not] made pursuant to the provisions of CEQA.

This is to certify that the final EIR with comments and responses and record of project approval, or the negative Declaration, is available to the General Public at:
City of Palo Alto Planning & Community Environment Dept., 250 Hamilton Avenue, 5th Floor, Palo Alto

Signature (Public Agency): _____ Title: ASSOCIATE PLANNER

Date: 11/27/2017 Date Received for filing at OPR: _____

Authority cited: Sections 21083, Public Resources Code.
Reference Section 21000-21174, Public Resources Code.

Revised 2011

State of California - Department of Fish and Wildlife

2016 ENVIRONMENTAL FILING FEE CASH RECEIPT

DFW 753.5a (Rev. 12/15/15) Previously DFG 753.5a

RECEIPT NUMBER: ENV21220

STATE CLEARINGHOUSE NUMBER *(If applicable)*

SEE INSTRUCTIONS ON REVERSE. TYPE OR PRINT CLEARLY.

LEAD AGENCY	LEADAGENCY EMAIL	DATE
CITY OF PALO ALTO		11/28/2017

COUNTY/STATE AGENCY OF FILING	DOCUMENT NUMBER
SANTA CLARA	

PROJECT TITLE
HIGHWAY 101 OVERCROSSING AND ADOBE CREEK TRAIL PROJECT

PROJECT APPLICANT NAME	PROJECT APPLICANT EMAIL	PHONE NUMBER
ELIZABETH AMES		(650) 329-2502

PROJECT APPLICANT ADDRESS	CITY	STATE	ZIP CODE
250 HAMILTON AVE	PALO ALTO	CA	94301

PROJECT APPLICANT *(Check appropriate box)*

☒ Local Public Agency ☐ School District ☐ Other Special District ☐ State Agency ☐ Private Entity

CHECK APPLICABLE FEES:

☐ Environmental Impact Report (EIR)	$3,070.00	$	
☒ Mitigated/Negative Declaration (MND)(ND)	$2,210.25	$	$2,216.25
☐ Certified Regulatory Program document (CRP)	$1,043.75	$	

☐ Exempt from fee
- ☐ Notice of Exemption (attach)
- ☐ CDFW No Effect Determination (attach)

☐ Fee previously paid (attach previously issued cash receipt copy)

☐ Water Right Application or Petition Fee (State Water Resources Control Board only)	$850.00	$	
☒ County documentary handling fee		$	$50.00
☐ Other		$	

PAYMENT METHOD:

☐ Cash ☐ Credit ☒ Check ☐ Other **TOTAL RECEIVED** $ $2,266.25

SIGNATURE	AGENCY OF FILING PRINTED NAME AND TITLE
X Mike Louie	Mike Louie, Deputy County Clerk-Recorder

ORIGINAL - PROJECT APPLICANT | COPY - CDFW/ASB | COPY - LEAD AGENCY | COPY - COUNTY CLERK | DFW 753.5a (Rev. 20151215)

Regina Alcomendras
Santa Clara County
Clerk-Recorder
(408) 299-5688
https://www.clerkrecorder.org

Receipt: 17-248169

Product	Name	Extended
CEQA	ENVIRONMENTAL FILING	$2,266.25
	# Pages	2
	Document #	ENV21220
	Document Info:	CITY OF PALO ALTO
	Filing Type	N
Total		$2,266.25
Tender (Check)		$2,266.25
Check #	35961	
Paid By	customer	

PLEASE KEEP FOR REFERENCE

11/28/17 1:26 PM mlouie

Highway 101 Overcrossing and Adobe Creek Trail Project

Initial Study

17PLN-00212

CITY OF PALO ALTO

August 2017

MITIGATED NEGATIVE DECLARATION

CIRCULATION PERIOD	9/1/2017 to 10/2/2017
PROJECT NAME	Highway 101 Overcrossing and Adobe Creek Tail Project
PROJECT LOCATION	The project site is located approximately 0.30 mile north of San Antonio Road and 1.30 miles south of Oregon Expressway at United States Highway 101 (Highway 101). The proposed project will be constructed on Assessor's Parcel Number (APN) 008-05-005 owned by the City of Palo Alto within the Baylands, across Caltrans right-of-way on Highway 101, and within Santa Clara Valley Water District (SCVWD) rights-of-way at APNs 127-10-100, 127-56-006, and 127-56-007. In addition, right-of-way will be acquired from the portion of APN 127-10-076 at 3600 West Bayshore Road. The approximately two acre project site is located entirely within the City of Palo Alto in Santa Clara County.
PROJECT PROPONENT	City of Palo Alto Department of Public Works
CITY CONTACT	Elizabeth Ames, Senior Project Manager City of Palo Alto Department of Public Works 250 Hamilton Avenue Palo Alto, CA 94301 Phone: (650) 329-2502 Email: Elizabeth.ames@cityofpaloalto.org
PROJECT DESCRIPTION	The proposed project involves the construction of a year-round pedestrian/bicycle overcrossing of Highway 101 at Adobe Creek in the City of Palo Alto. The project includes a pedestrian/ bicycle connection to the San Francisco Bay Trail at East Bayshore Road, sidewalk and bikeway improvements along West Bayshore Road, and construction of an approximately 650-foot-long trail along the east side of Adobe Creek between Highway 101 and East Meadow Drive. The combined overcrossing and access improvements will support regional bicycle commuting and encourage greater recreational use of the Baylands and trail system. The project would serve as a replacement for the existing Benjamin Lefkowitz pedestrian/bicycle undercrossing (undercrossing) of Highway 101 at Adobe Creek. That facility is located within the Adobe Creek channel and experiences

frequent closures due to flooding each year between October 15 and April 15 and lacks a cohesive bicycle and pedestrian connection to existing adjacent pathways. The undercrossing would remain as a creek channel and be closed to the public.

DETERMINATION

In accordance with the City of Palo Alto's procedures for compliance with the California Environmental Quality Act (CEQA), the City has conducted an Initial Study to determine whether the proposed project could have a significant effect on the environment. On the basis of that study, the City makes the following determination:

☐ The proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION is hereby adopted.

☒ Although the project, as proposed, could have a significant effect on the environment, there will not be a significant effect on the environment in this case because mitigation measures have been added to the project and, therefore, a MITIGATED NEGATIVE DECLARATION is hereby adopted.

The attached initial study incorporates all relevant information regarding the potential environmental effects of the project and confirms the determination that an EIR is not required for the project. In addition, the following mitigation measures have been incorporated into the project:

MM AQ-1.1 Implementation of MM AQ-1.1, described below, will ensure that any significant adverse effects associated with construction-generated dust are avoided.

- Exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day or covered.
- Haul trucks transporting soil, sand, or other loose material off-site shall be covered.
- Visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
- Roadways, driveways, and sidewalks to be paved shall be completed as soon as possible.

A publicly visible sign shall be posted with the telephone number and name of an individual working for the construction contractor who can be contacted regarding dust complaints. This person shall respond and take corrective action within 48 hours. The Bay Area Air Quality Management District's phone number shall also be visible to ensure compliance with applicable regulations.

MM BIO-1.1: The project contractors will implement the following measures to avoid potential take of salt marsh harvest mice and impacts to salt marsh wandering shrews:

- **Work Schedule:** Work within the biological study area will occur between April 15 and October 15. If it is not possible to schedule project activities between April 15 and October 15 within the biological study area, then pre-construction surveys by a United States Fish and Wildlife Service (USFWS)-approved biologist for salt marsh harvest mouse and wandering shrews will be conducted by a qualified biologist to ensure that these species will not be disturbed during project implementation. These surveys will be conducted no more than one month prior to the initiation of project activities conducted prior to April 15 and after October 15.
- **Worker Environmental Awareness Program.** Before any construction activities begin, a USFWS-approved biologist will conduct a training session for all construction personnel. At a minimum, the training will include descriptions of the salt marsh harvest mouse and salt marsh wandering shrew, their habitats, the importance of the species, general measures that are being implemented to conserve these species as they relate to the project, and boundaries within which the project may be accomplished, and if found (living or dead) their observations must be immediately reported to the Resident Engineer and USFWS-approved biologist..
- **Herbaceous Cover Removal.** Prior to the start of project activities within the Flood Control Basin portion of the biological study area (including vehicle/equipment access), herbaceous vegetation will be removed from impact areas to eliminate cover for salt marsh harvest mice and salt marsh wandering shrews, thereby discouraging them from occurring in impact areas. The grassland land cover within the project footprint on the northeast side of Highway 101 will be trimmed to within two inches of the ground level prior to the start of ground disturbing activities. Vegetation removal will start where the San Francisco Bay Trail crosses Adobe Creek, and will proceed gradually northwards towards the open marsh habitat in the Flood Control Basin. Vegetation will not be removed during a flooding event that inundates the Flood Control Basin, as these are the conditions in which salt marsh harvest mice and salt marsh wandering shrews are most likely to be present in the biological study area. A USFWS-approved biologist familiar with the biology of these species will conduct a pre-construction survey prior to vegetation removal, and will monitor the vegetation removal process. Vegetation will be

removed using hand-held equipment (e.g., weed-whackers). This will allow any small mammals, including salt marsh harvest mice and salt marsh wandering shrews, to escape the biological study area under the cover of vegetation, and will encourage movement of such small mammals towards available vegetated habitat to the north outside the biological study area. Herbaceous vegetation that could potentially conceal a salt marsh harvest mouse or salt marsh wandering shrew within the biological study area will be removed, including herbaceous understory vegetation on the north bank of Adobe Creek. Vegetation that is removed will be hauled offsite the day it is removed, and will not be left on the site to provide potential cover for small mammal species. It is possible that vegetation within the Flood Control Basin portion of the biological study area will be removed during the fall prior to construction to reduce potential impacts to nesting birds. In such a case, if sufficient herbaceous cover regrows prior to construction the following year, this herbaceous cover will again be removed by hand prior to initiation of construction activities.

- **Exclusion Barrier.** Following vegetation trimming and prior to the start of construction activities on the northeast side of Highway 101, a fence will be installed at the outer limits of the work area, as shown in the Initial Study. The fence will be designed to exclude salt marsh harvest mice from the project footprint, define the limits of the footprint, and provide a visual screen. This barrier, which will be constructed under the guidance of a Service-Approved Biologist, will consist of a three-foot tall, tight cloth, smooth plastic, or sheet-metal (or similar material approved by the Service) fence toed into the soil at least three inches deep and supported with stakes placed on the inside of the barrier. A USFWS-Approved Biologist will conduct a pre-construction survey of the area where vegetation was trimmed prior to construction access, and will monitor the installation of the barrier. Following the installation of the barrier, designated construction personnel will check its integrity each morning that construction activities occurring, and will initiate repairs immediately as needed. The area of vegetation removal will extend approximately two to three feet beyond the area where equipment and personnel will operate during project construction to create an open area that will discourage salt marsh harvest mice and salt marsh wandering shrews from approaching the exclusion barrier
- **Environmentally Sensitive Area Fencing.** Within the Flood Control Basin, biological study area limits will also be clearly demarcated with Environmentally Sensitive Area fencing to avoid

inadvertent disturbance of any habitat outside of the designated construction area during construction activities. This fencing can be combined with the exclusion barrier but must not be outside that barrier.

- **Visual Screening.** Additional green-screen fencing will be installed along the limits of the biological study area between work areas and natural habitats within the Palo Alto Flood Control Basin to screen project activities from view of the Baylands and avoid potential visual disturbance of salt marsh harvest mice and salt marsh wandering shrews. This fencing can be combined with the fencing described above but must not be outside the exclusion barrier.
- **High-water Work Suspension.** All ground work on the northeast side of highway 101, including vegetation trimming, will be suspended while there are flood waters within 100 feet of the project footprint (other than waters within the Adobe Creek channel).
- **Immediate Work Stoppage.** If a salt marsh harvest mouse or salt marsh wandering shrew, or an animal that could be a harvest mouse or wandering shrew (e.g., a similar species of mouse or shrew), is observed within the biological study area during project activities, all work that could result in the injury or death of the individual will stop and the USFWS-approved biologist will be immediately notified. The animal will be allowed to leave the area on its own and will not be handled before work in that area resumes.
- **Work Limits.** All activity will be limited to the existing and proposed footprint, access, and staging described in the May 2017 Biological Assessment, prepared by H.T. Harvey & Associates. Environmentally sensitive areas, such as wetlands and tidal habitat, will be identified on contract plans and discussed in the Special Provisions. Temporary orange fencing or other obvious system will be used to identify areas of avoidance and will remain in place until all construction is completed.
- **Night Work Lighting**. If night-time work is conducted, the use of temporary artificial lighting during nighttime construction hours will be minimized to the maximum extent practicable and will be directed at the associated work zone and away from adjacent tidal wetland habitat.
- **Trash.** Food-related trash items such as wrappers, cans, bottles, and food scraps will be disposed of in closed containers and removed at least once a day from the work area.

- **Firearms Forbidden.** No firearms will be allowed on the project except for those carried by authorized security personnel, or local, state, or federal law enforcement officials.
- **Pets Forbidden.** To prevent harassment, injury or mortality of wildlife species, no pets will be permitted on the project site.
- **Water Quality.** The potential for adverse effects to water quality will be avoided by implementing temporary and permanent Best Management Practices (BMPs) outlined in Section 7-1.01 G of the Caltrans Standard Specifications. Caltrans erosion control BMPs will be used to minimize any wind or water-related erosion. The State Water Resources Control Board has issued a National Pollution Discharge Elimination System Statewide Storm Water Permit to Caltrans to regulate storm water and non-storm water discharges from Caltrans facilities. A Storm Water Pollution Prevention Plan (SWPPP) will be developed for the project, as one is required for all projects that have at least 1.0 acre of soil disturbance. The SWPPP complies with the Caltrans Storm Water Management Plan (SWMP). The SWMP includes guidance for Design staff to include provisions in construction contracts to include measures to protect sensitive areas and to prevent and minimize storm water and non-storm water discharges.

  The SWPPP will reference the Caltrans Construction Site BMPs Manual. This manual is comprehensive and includes many other protective measures and guidance to prevent and minimize pollutant discharges and can be found at the following website: http://www.dot.ca.gov/hq/ construe/stormwater/ manuals.htm. Protective measures will be included in the contract, including, at a minimum:

  a) No discharge of pollutants from vehicle and equipment cleaning are allowed into the storm drain or water courses.
  b) Vehicle and equipment fueling and maintenance operations must be at least 50 feet away from water courses.
  c) Concrete wastes are collected in washouts and water from curing operations is collected and disposed of and not allowed into water courses.
  d) Dust control will be implemented, including use of water trucks and tackifiers to control dust in excavation and fill areas, rocking temporary access road entrances and exits, and covering temporary stockpiles when weather conditions require.
  e) Coir rolls will be installed along or at the base of slopes during construction to capture sediment and temporary

organic hydro-mulching will be applied to all unfinished disturbed and graded areas.

f) Work areas where temporary disturbance has removed the pre-existing vegetation will be restored and re-seeded with a native seed mix.

g) Graded areas will be protected from erosion using a combination of silt fences, fiber rolls along toe of slopes or along edges of designated staging areas, and erosion-control netting (such as jute or coir) as appropriate.

MM BIO-2.1: The following measures will be implemented to ensure that project activities avoid substantial impacts to nesting birds and their eggs, which are protected under the migratory Bird Treaty Act (MBTA) and California Fish and Game Code (CDGC).

- **Avoidance of the Nesting Bird Season.** To the extent feasible, project activities will be scheduled to avoid the avian nesting season. If such activities are scheduled to take place outside the nesting season, impacts on nesting birds, including raptors, protected under the MBTA and CFGC, will be avoided. The nesting season for most birds in Santa Clara County typically extends from February 1 through August 31.
- **Vegetation Removal during the Non-Nesting Season.** If project activities will not be initiated until after the start of the nesting season, potential nesting substrate (e.g., bushes, trees, grasses, and other vegetation) that is scheduled to be removed by the project, if any, may be removed prior to the start of the nesting season (e.g., prior to February) to reduce the potential for initiation of nests. The project schedule includes vegetation removal in the Flood Control Basin portion of the biological study area during the fall prior to construction to minimize impacts to nesting birds the following spring. If it is not feasible to schedule vegetation removal during the nonbreeding season, or where vegetation cannot be removed (e.g., in areas immediately adjacent to the biological study area), then pre-construction surveys for nesting birds will be conducted as described below.
- **Pre-construction/Pre-disturbance Surveys for Nesting Birds.** If it is not possible to schedule project activities between September 1 and January 31, then pre-construction surveys for nesting birds will be conducted by a qualified biologist to ensure that no nests will be disturbed during project implementation. These surveys will be conducted no more than 48 hours prior to the initiation of project activities. During this survey, a qualified biologist will inspect all potential nesting habitats (e.g., trees, shrubs, grasslands, and buildings) within 300 feet of impact areas for

raptor nests and within 100 feet of impact areas for nests of non-raptors.

- **Buffers around Active Nests.** If an active nest (i.e., a nest with eggs or young, or any completed raptor nest attended by adults) is found sufficiently close to work areas to be disturbed by these activities, the biologist, in consultation with California Department of Fish and Wildlife, will determine the extent of a disturbance-free buffer zone to be established around the nest (typically 300 feet for raptors and 100 feet for other species), to ensure that no nests of species protected by the MBTA and California Fish and Game Code will be disturbed during project implementation. Because the majority of the biological study area is already subject to disturbance by vehicles and pedestrians, activities that will be prohibited from occurring within the buffer zone around a nest will be determined on a case-by-case basis. In general, activities prohibited within such a buffer while a nest is active will be limited to new construction-related activities (i.e., activities that were not ongoing when the nest was constructed) involving significantly greater noise, human presence, or vibrations than were present prior to nest initiation.
- **Screening.** As described for salt marsh harvest mice and salt marsh wandering shrews above, additional fencing with a green screen will be installed along the limits of the biological study area between work areas and natural habitats within the Palo Alto Baylands Nature Preserve's Flood Control Basin (Flood Control Basin). This fencing will screen project activities from view of the Baylands and minimize potential visual disturbance of nesting birds as a result of the project.
- **Nest Deterrence.** If necessary to avoid impacts to active nests (i.e., nests containing eggs or young), nest starts may be removed on a regular basis (e.g., every second or third day), starting in late January or early February, or measures such as exclusion netting or slippery panels may be placed over nesting sites on the existing bridges to prevent active nests from becoming established. Any netting installed for nest deterrence must be installed appropriately by an experienced deterrence technician, under the supervision of a qualified biologist, and must be inspected and maintained regularly to avoid the entrapment or entanglement of birds.

MM BIO-3.1 The following measures will be implemented to avoid impacts on bird populations due to potential collisions and project lighting:

- The overcrossing will be designed to minimize the potential for bird strikes; it will not include highly reflective surfaces,

suspension cables, transparent surfaces, or features such as small wires or netting that could injure birds.

- No power lines will be suspended above the bridge deck.
- Night lighting on the bridge will be minimized; only lighting needed for safety purposes will be installed. Lighting will be directed at the bridge deck or downward, not outwards toward natural areas, and lights will be shielded to minimize spillover of light into natural areas.

MM CUL-1.1 In the event any significant cultural materials (including fossils) are encountered during construction grading or excavation, construction within a radius of 50 feet of the find would be halted, the Director of Public Works shall be notified, and a qualified archaeologist shall examine the find and make appropriate recommendations regarding the significance of the find and the appropriate treatment of the resource. Recommendations could include collection, recordation and analysis of any significant cultural materials. A report of findings documenting any data recovered during monitoring shall be submitted to the Director of Planning.

MM CUL-1.2 Pursuant to Section 7050.5 of the Health and Safety Code, and Section 5097.94 of the Public Resources Code of the State of California in the event of the discovery of human remains during construction, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains. The Santa Clara County Coroner shall be notified and shall make a determination as to whether the remains are Native American. If the Coroner determines that the remains are not subject to his authority, he shall notify the Native American Heritage Commission (NAHC) who shall attempt to identify descendants of the deceased Native American. If no satisfactory agreement can be reached as to the disposition of the remains pursuant to this state law, then the land owner shall reinter the human remains and items associated with Native American burials on the property in a location not subject to further subsurface disturbance. If the Director of Planning finds that the archaeological find is not a significant resource, work would resume only after the submittal of a preliminary archaeological report and after provisions for reburial and ongoing monitoring are accepted.

MM CUL-2.1 In the event that a tribal cultural resource is found during construction, the NAHC will be contacted for information regarding the appropriate tribe and/or persons to notify. Once the appropriate tribal representatives are notified, consultation will take place consistent with Assembly Bill 52 requirements. Mitigation measures that may be considered to avoid significant impacts (if there is no agreement on appropriate mitigation in discussions with the tribal representatives) may include:

- Avoidance and preservation of the resources in place, including:
  - Planning and construction to avoid the resources and protect the cultural and natural context;
  - Planning greenspace, parks, or other open space, to incorporate the resources with culturally appropriate protection and management criteria;
- Treating the resource with culturally appropriate dignity, taking into account the tribal cultural values and meaning of the resource, including, but not limited to, the following:
  - Preservation in place;
  - Protecting the cultural character and integrity of the resource;
  - Protecting the traditional use of the resource;
  - Protecting the confidentiality of the resource;
  - Permanent conservation easements or other interests in real property, with culturally appropriate management criteria for the purposes of preserving or utilizing the resources or places.

MM HAZ-1.1 A construction risk and spoils management plan (CRSMP) shall be prepared for the project prior to the start of any ground-disturbing activities. The CRSMP shall include necessary procedures to ensure that excavated materials are stored, managed, and disposed of in a manner that is protective of human health and the environment in accordance with applicable laws and regulations. The CRSMP shall include the following components:

- A site-specific health and safety plan (HASP) shall be prepared by a qualified environmental professional in accordance with federal OSHA regulations (29 CFR 1910.120) and State of California Occupational Safety and Health Administration regulations (8 CCR 5192). The HASP shall include required measures to protect construction workers and the general public by including engineering controls, monitoring, and security measures to prevent unauthorized entry to the construction area and to reduce hazards outside of the construction area. If prescribed contaminant exposure levels are exceeded, personal protective equipment shall be required for workers in accordance with state and federal regulations.
- The CRMSP shall include step-by-step procedures for evaluation, handling, stockpiling, storage, testing, and disposal of excavated material, including criteria for: (1) reuse within the project area; (2) stockpiling within the project area; and (3) offsite disposal shall be included. Excavated materials shall be inspected prior to initial stockpiling, and spoils that are visibly stained and/or have a

noticeable odor should be stockpiled separately to minimize the amount of material that may require special handling. The chemical quality of the spoils intended for reuse shall be characterized, and spoils should be reused onsite only if they meet the reuse criteria established in the Department of Toxic Substances Control Variance obtained by Caltrans (Variance No. V09HQSCD006). If some of the spoils do not meet the reuse criteria and/or debris is identified, these materials shall be disposed of in accordance with applicable state and federal waste disposal requirements.

- The CRMSP shall also include procedures to be implemented if unknown subsurface conditions or contamination are encountered, such as previously unreported tanks, wells, or contaminated soils shall be included in the CRSMP.

MM NOI-1.1 The following measures will be implemented during construction to lessen the potential for noise impacts:

- With one exception, noise-generating construction activities will be restricted to the hours of 8:00 a.m. to 6:00 p.m. Monday through Friday and 9:00 a.m. to 6:00 p.m. on Saturdays. The exception is that, as stated above, there would be up to seven nights of construction including up to three nights to lower prefabricated structures in place over Highway 101, West Bayshore Road, and East Bayshore Road. No construction activities will occur on Sundays or holidays.
- For any planned construction outside permitted hours, the project contractor will notify property owners within 500 feet of the proposed work at least one week in advance of the construction activities, require the contractor to implement a construction noise monitoring program and, if feasible, provide additional mitigation as necessary (in the form of noise control blankets or other temporary noise barriers, etc.) for affected receptors.
- Internal combustion engine driven equipment will be equipped with intake and exhaust mufflers that are in good condition and appropriate for the equipment.
- Unnecessary idling of internal combustion engines within 100 feet of residences will be strictly prohibited.
- Stationary noise generating equipment will be located as far as possible from sensitive receptors when sensitive receptors adjoin or are near a construction project area.
- "Quiet" air compressors and other "quiet" equipment will be

utilized where such technology exists.

- Construction equipment will conform to Section 14-8.02, Noise Control, of the latest Caltrans Standard Specifications.
- The contractor will prepare a detailed construction plan identifying the schedule for major noise-generating construction activities and distribute this plan to adjacent noise-sensitive receptors. The construction plan will also contain these construction noise reduction measures.

[signature]	PROJECT PLANNER	8/29/17
Signature (Project Planner)	*Title*	*Date*

Adopted by City Council, Attested by Director of Planning + Community Environment (signed after MND has been approved)	*Title*	*Date*

WE, THE UNDERSIGNED, HEREBY ATTEST THAT WE HAVE REVIEWED THE INITIAL STUDY AND DRAFT MITIGATED NEGATIVE DECLARATION FOR THE PROJECT DESCRIBED ABOVE AND AGREE TO IMPLEMENT ALL MITIGATION MEASURES CONTAINED THEREIN.

[signature]	Elizabeth Ames	8/29/17
Signature (Project Applicant)	*Printed Name*	*Date*

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SECTION 1.0 INTRODUCTION AND PURPOSE

1.1 PURPOSE OF THE INITIAL STUDY

The City of Palo Alto as the Lead Agency, has prepared this Initial Study for the Highway 101 Overcrossing and Adobe Creek Trail Project in compliance with the California Environmental Quality Act (CEQA), the CEQA Guidelines (California Code of Regulations §15000 et. seq.) and the regulations and policies of the City of Palo Alto, California. Caltrans is the lead agency for National Environmental Protection Act (NEPA) and is preparing a separate environmental assessment to meet federal requirements.

The project proposes to construct a pedestrian/bicycle overcrossing of United States Highway 101 (Highway 101) at Adobe Creek in the City of Palo Alto. This Initial Study evaluates the environmental impacts that might reasonably be anticipated to result from implementation of the proposed project.

1.2 PUBLIC REVIEW PERIOD

Publication of this Initial Study marks the beginning of a 30-day public review and comment period. During this period, the Initial Study will be available to local, state, and federal agencies and to interested organizations and individuals for review. Written comments concerning the environmental review contained in this Initial Study during the 30-day public review period should be sent to:

Elizabeth Ames, Senior Project Manager
Public Works Department
City of Palo Alto
250 Hamilton Avenue
Palo Alto, CA 94301
Elizabeth.ames@cityofpaloalto.org

1.3 CONSIDERATION OF THE INITIAL STUDY AND PROJECT

Following the conclusion of the public review period, the City of Palo Alto will consider the adoption of the Initial Study/Mitigated Negative Declaration (MND) for the project at a regularly scheduled meeting. The Initial Study/MND will be considered along with any comments received during the public review process. Upon adoption of the MND, the City may proceed with project approval actions.

1.4 NOTICE OF DETERMINATION

If the project is approved, the City of Palo Alto will file a Notice of Determination (NOD), which will be available for public inspection and posted within 24 hours of receipt at the Santa Clara County Clerk-Recorder's Office for 30 days. The filing of the NOD starts a 30-day statute of limitations on court challenges to the approval under CEQA (CEQA Guidelines Section 15075(g)).

SECTION 2.0 PROJECT INFORMATION

2.1 PROJECT TITLE

Highway 101 Overcrossing and Adobe Creek Trail Project

2.2 PLANNING FILE NUMBER

17PLN-00212

2.3 LEAD AGENCY CONTACT AND PROJECT PROPONENT

Elizabeth Ames, Senior Project Manager
Department of Public Works
250 Hamilton Avenue
Palo Alto, CA 94301
(650) 329-2502
Elizabeth.ames@cityofpaloalto.org

2.4 PROJECT LOCATION

Adobe Creek crosses under United States Highway 101 (Highway 101) approximately 0.30 mile north of San Antonio Road and 1.30 miles south of Oregon Expressway. On the east side of Highway 101, the overcrossing would connect to the existing San Francisco Bay Trail (Bay Trail) that is adjacent to East Bayshore Road. On the west side of Highway 101, the overcrossing would connect to the existing bike lane on West Bayshore Road via a short trail and bridge over Adobe Creek and would also include a trail along the east side of Adobe Creek between Highway 101 and East Meadow Drive. The project location is shown in Figure 2.6-1: Regional Map, Figure 2.6-2: Vicinity Map, and Figure 2.6-3: Aerial Photo and Surrounding Uses.

2.5 ASSESSOR'S PARCEL NUMBERS

The proposed project will be constructed on Assessor's Parcel Number (APN) 008-05-005 owned by the City of Palo Alto within the Baylands, across Caltrans right-of-way on Highway 101, and within Santa Clara Valley Water District (SCVWD) rights-of-way at APNs 127-10-100, 127-56-006, and 127-56-007. In addition, right-of-way will be acquired from the portion of APN 127-10-076 that contains at-grade parking for the office building located at 3600 West Bayshore Road.

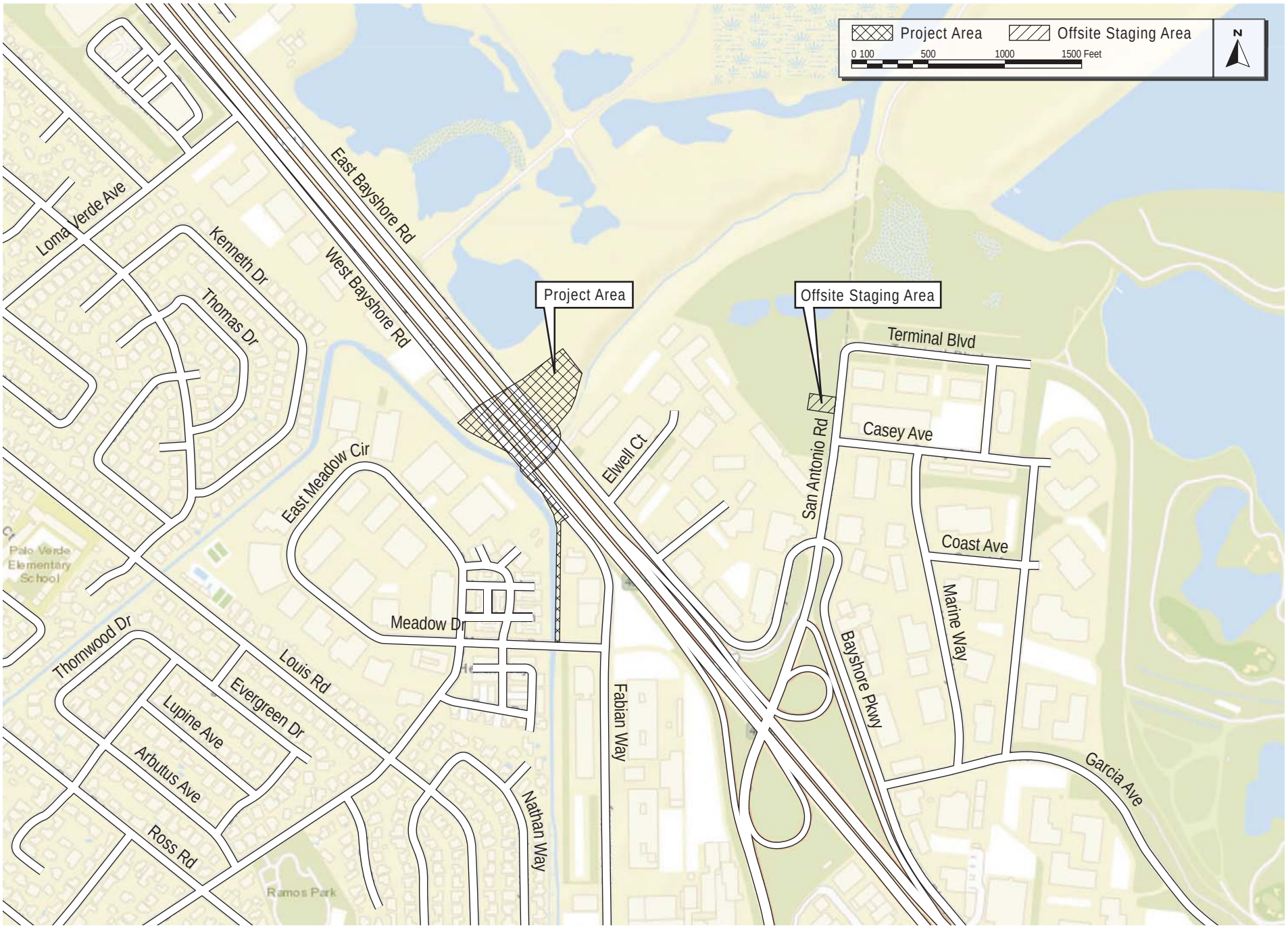
2.6 PROJECT-RELATED APPROVALS, AGREEMENTS, AND PERMITS

It is anticipated that the proposed project would require the following approvals, agreements, and permits:

- Site and Design review and City Building Permits
- Park Improvement Ordinance for project improvements
- Right-of-way encroachment permit for project activities within the Caltrans right-of-way

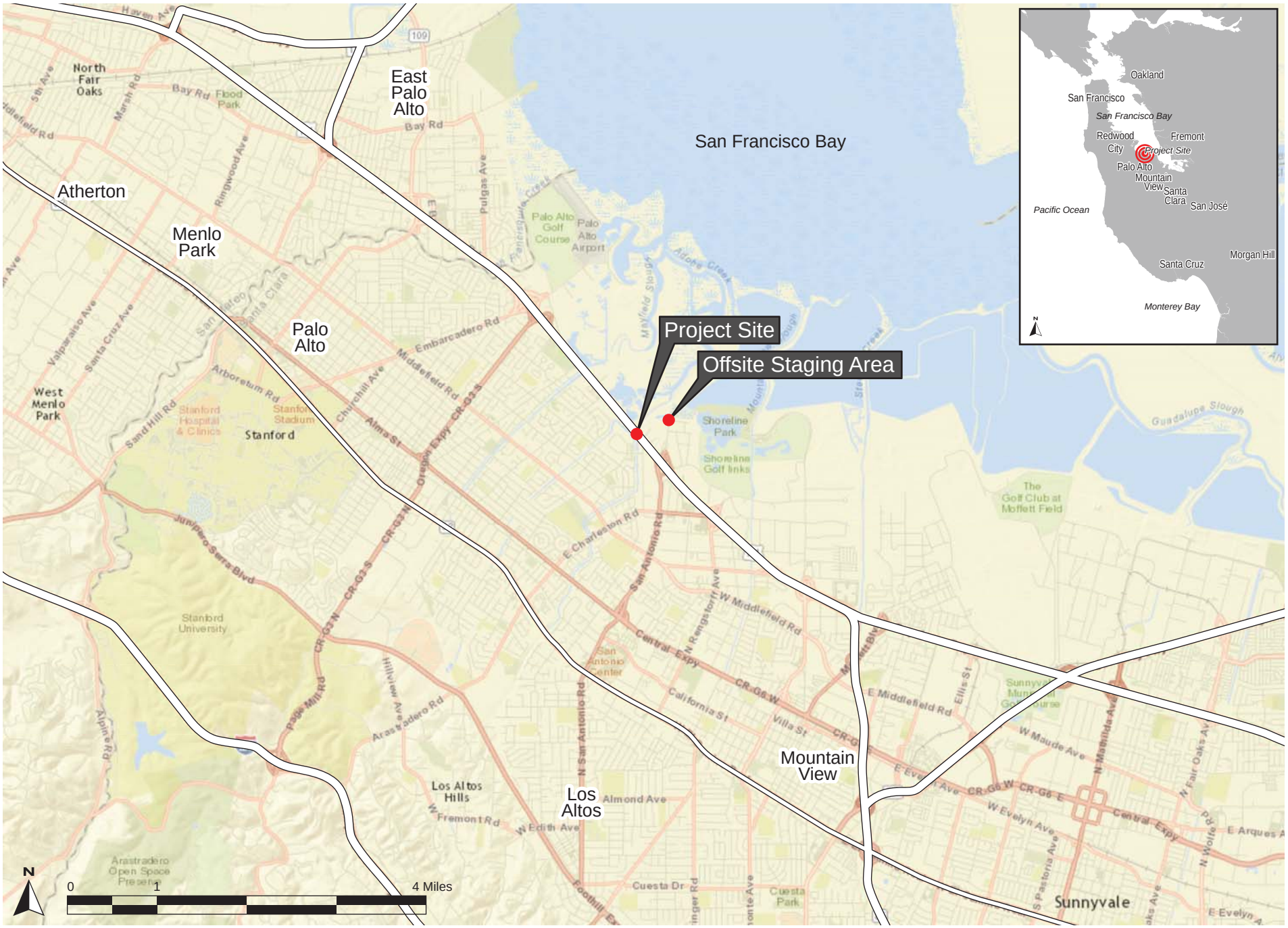
- Authorization for project activities affecting SCVWD properties and right-of-way (Construction, Encroachment permits), and Joint-Use Agreement
- Right-of-way agreement with private entity for APN 127-10-076
- Temporary access and permanent easements with Pacific Gas and Electric Company, a private utility and other utilities for project activities and rights-of-way
- Caltrans Maintenance Agreement
- Public Access Easements including project activities affecting the Bay Trail

AERIAL PHOTOGRAPH AND SURROUNDING LAND USES FIGURE 2.6-3



VICINITY MAP

FIGURE 2.6-2



REGIONAL MAP

FIGURE 2.6-1

SECTION 3.0 PROJECT DESCRIPTION

3.1 LOCATION AND OVERVIEW

The proposed project involves the construction of a year-round pedestrian/bicycle overcrossing of United States Highway 101 (Highway 101) at Adobe Creek in the City of Palo Alto. Adobe Creek, which flows from southwest to northeast through Palo Alto, crosses under Highway 101 approximately 0.30 mile north of San Antonio Road and 1.30 miles south of Oregon Expressway. The project includes a pedestrian/bicycle connection to the San Francisco Bay Trail (Bay Trail) at East Bayshore Road, sidewalk and bikeway improvements along West Bayshore Road, and construction of an approximately 650-foot-long trail along the east side of Adobe Creek between Highway 101 and East Meadow Drive. The combined overcrossing and access improvements will support regional bicycle commuting and encourage greater recreational use of the Baylands and trail system.

The project would serve as a replacement for the existing Benjamin Lefkowitz pedestrian/bicycle undercrossing (undercrossing) of Highway 101 at Adobe Creek. That facility is located within the Adobe Creek channel and experiences frequent closures due to flooding each year between October 15 and April 15 and lacks a cohesive bicycle and pedestrian connection to existing adjacent pathways. The undercrossing would remain under SCVWD's jurisdiction as a creek channel and be closed to the public.

3.2 DETAILED PROJECT DESCRIPTION[1]

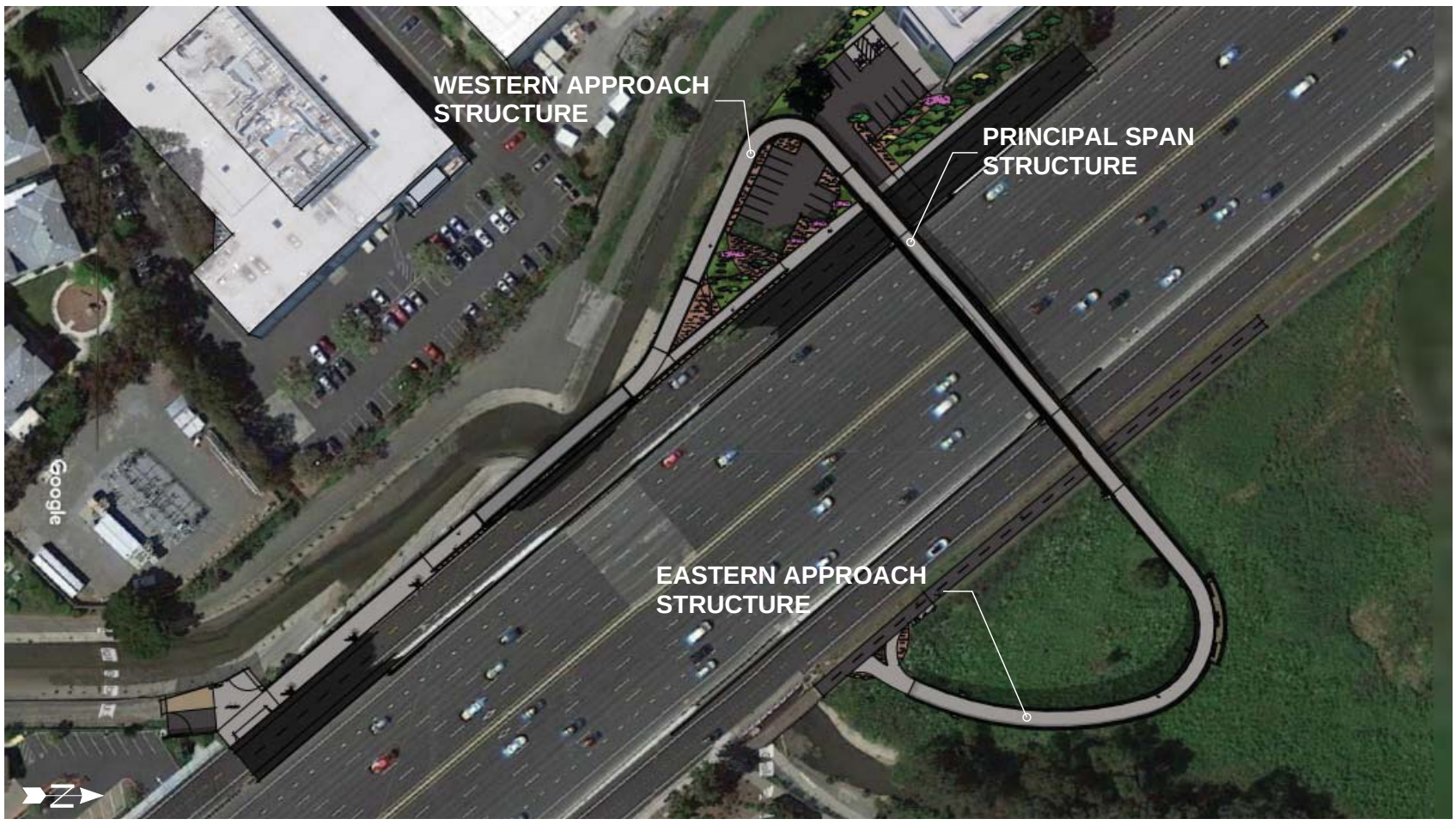
3.2.1 Bridge Overpass

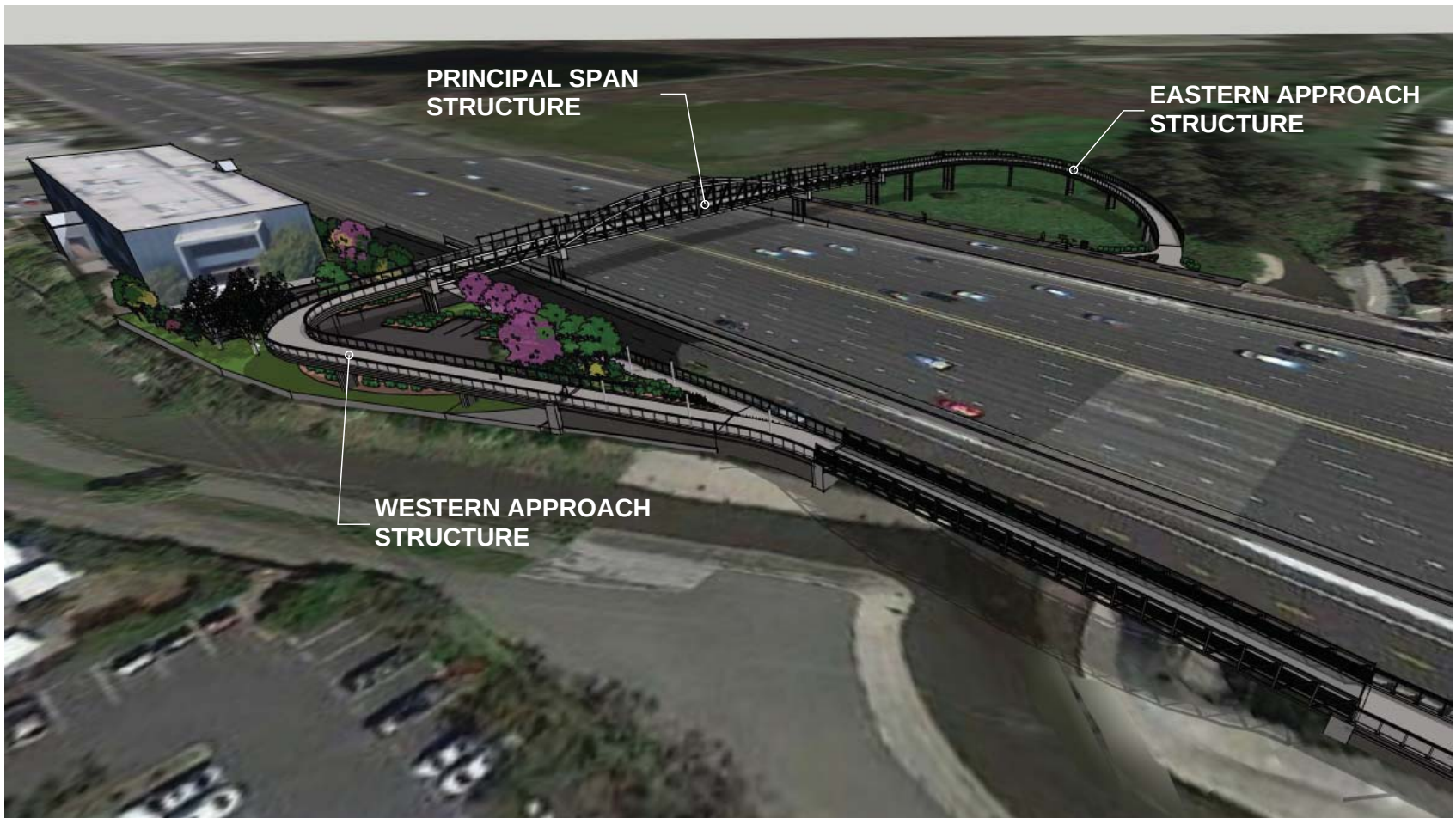
As shown in Figure 3.2-1, the project proposes construction of a year-round, grade-separated, shared bicycle and pedestrian bridge over Highway 101 and East and West Bayshore Roads at Adobe Creek. The proposed pedestrian/bicycle bridge over Highway 101 would be a bowstring steel-truss structure approximately 165 feet in length that would clear-span the freeway. The structure, which would have a total width of approximately 15 feet to allow for bicycle and pedestrian travel, would be supported by approximately two-foot-wide concrete pier walls (located partially on Caltrans right-of-way and partially on City of Palo Alto right-of way areas) between the freeway and East and West Bayshore Roads. The vertical clearance of the bridge structure over Highway 101 would be a minimum of 18.5 feet, consistent with Caltrans standards.

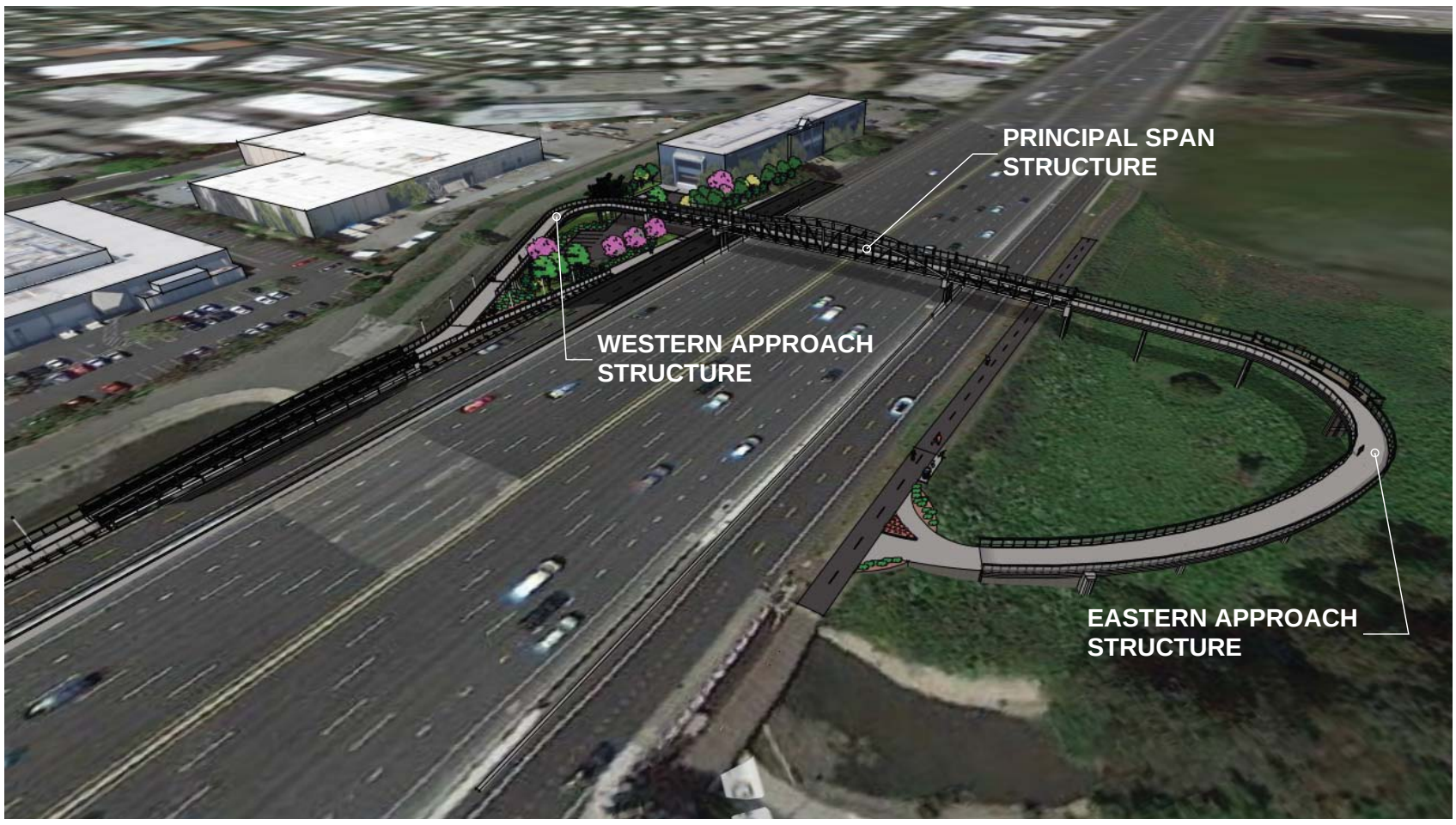
3.2.2 Approach Structures

Leading up to the main bridge overpass structure, steel-truss spans over East and West Bayshore Roads (as well as concrete approach ramp structures) would be constructed to connect to the existing bicycle and pedestrian trails to the bridge. The steel truss and concrete approach ramp on the east side of Highway 101 would be supported by concrete pier walls. The steel truss and the west side of

[1] This project description is based on the engineering design plan set prepared for the City of Palo Alto by Biggs Cardosa Associates. The plans are available online on the City's website at the following address: http://www.cityofpaloalto.org/gov/topics/projects/facilities/bridge_project/







SITE PLAN

FIGURE 3.2-1

Highway 101 would be supported by concrete pier walls, and the concrete approach ramp structure would be supported on concrete columns—several of which would be located within right-of-way area acquired from the existing parking lot for the office building located at 3600 West Bayshore Road. Reconfiguration of the parking lot would be necessary to accommodate the ramp support columns, but no net loss of parking spaces is anticipated.

The approach ramp on the east side of Highway 101 would connect to the existing Bay Trail located adjacent to East Bayshore Road. The ramp on the west side of Highway 101 would connect to a new pedestrian/bicycle bridge over Adobe Creek adjacent to West Bayshore Road. The existing sidewalk would be widened and connections to the existing bike lane on West Bayshore Road and the Adobe Creek Reach Trail (described below) would be constructed.

3.2.3 Other Improvements

An approximately 650-foot-long Adobe Creek Reach Trail would be constructed along the east side of Adobe Creek between Highway 101 and East Meadow Drive in order to connect the new bridge overpass to the surrounding bicycle and pedestrian network on the west side of Highway 101. Construction of the Adobe Creek Reach Trail would consist of paving the existing gravel maintenance road that is above the top-of-bank, which is currently used by the SCVWD for maintenance purposes. A two- to four-foot-tall fence would be constructed on top of the existing raised floodwall along the trail for safety purposes. Trailheads, to facilitate access, would be constructed at entrance and exit points of the new trail. A new mid-block raised crosswalk at East Meadow Drive would be constructed to improve connectivity to the new trailhead. Required stormwater treatment measures, such as self-retaining areas and swales, will also be included as part of the project. Project amenities such as drinking fountains, bike repair stations, interpretive, wayfinding and regulatory signage, art and benches will be included. Streetlights and bridge pedestrian scale lighting would be on the bridge pathway to improve visibility during evening use. No lighting is proposed along the Adobe Creek Reach and Bay Trails.

3.2.4 Right-of-Way Requirements

The proposed project would be constructed within existing Caltrans, SCVWD, and City of Palo Alto rights-of-way. Additional right-of-way would be acquired for the project (for the approach ramp structure on the west side of Highway 101) from the portion of the property at 3600 West Bayshore Road that contains at-grade parking for the adjacent on-site office building. The lot would be reconfigured so that implementation of the project would not result in a permanent loss of office parking spaces. Additional easements may be required for utility relocation(s) that are needed to accommodate the construction of the project.

3.2.5 Construction and Phasing

3.2.5.1 *Staging*

The City has identified an equipment staging/materials storage area that would be utilized by the contractor during construction. The site is a City-owned parcel on San Antonio Road, approximately 0.20 mile east of the project site, near the intersection of San Antonio Road and Casey Street. The

area to be used for staging is a gravel lot that is presently used for equipment storage and vehicle parking.

3.2.5.2 *Construction*

Based on preliminary geotechnical recommendations, the bridge overcrossing would be supported on cast-in-drilled-hole piles that would extend to a depth of approximately 90 feet. Pile driving is not proposed as part of the project. The approximately 18-month construction timeframe is anticipated to include the following activities:

- Site preparation and utility relocation and installation work in advance of the primary bridge construction;
- Construction of the principal bridge span substructure (including piles, pile caps, and pier walls) within the Caltrans and City of Palo Alto rights-of-way would be expedited to minimize impacts to motorists on Highway 101. Any road closures would be limited to non-peak traffic periods when volumes are relatively low.
- Construction of the west approach structure will require temporary signalization to limit two-way vehicle traffic on West Bayshore Road;
- Placement of the principal bridge span's prefabricated steel superstructure over Highway 101, this would require night work and temporary closure of Highway 101 during setting of the principal span; and
- Construction of the 650-foot-long Adobe Creek Reach Trail and approximately 140-foot-long span bridge across the confluence, of Adobe Creek and Barron Creek, this work would be scheduled to minimize impacts to SCVWD maintenance operations.

3.3 PROJECT NEED AND OBJECTIVE

The purpose of the proposed project is to improve pedestrian and cyclist connectivity to the Palo Alto Baylands Nature Preserve, East and West Bayshore Road businesses, and regional Bay Trail network from residential neighborhoods and employment districts in Palo Alto. The improved connectivity and access would support regional bicycle commuting and encourage greater recreational activity.

During the rainy season when the existing Benjamin Lefkowitz undercrossing of Highway 101 is closed due to Adobe Creek flooding, access across Highway101 to and from southern Palo Alto and the Baylands Nature Preserve/Bay Trail does not meet community needs because it requires a significant detour south to the San Antonio Road overpass, which primarily serves motor vehicles and lacks sufficient facilities for bicycles and pedestrians. Access across Highway 101 is also available to the north on the Oregon Expressway Overpass, but that facility is 1.30 miles away and does not meet current Americans with Disabilities Act (ADA) standards.

The need for a new year-round pedestrian/bicycle crossing of Highway 101 in south Palo Alto is identified in the City of Palo Alto Comprehensive Plan (2007) and the Palo Alto Bicycle and Pedestrian Transportation Plan (BPTP). The BPTP, which was adopted in June 2012, identifies the

Adobe Creek project as the highest priority Across Barrier Connection project in the City. The Highway 101 Overcrossing at Adobe Creek is also identified as a high-priority project in the City's Bicycle Transportation Plan (2003) and the East Meadow Circle/Fabian Way Concept Plan (2012).

SECTION 4.0 ENVIRONMENTAL SETTING, CHECKLIST, AND IMPACT DISCUSSION

This section presents the discussion of impacts related to the following environmental subjects in their respective subsections:

4.1 AREAS OF NO MEASURABLE IMPACT

The Highway 101 Overcrossing and Adobe Creek Trail Project involves replacement of an existing, seasonally-available pedestrian and bicycle undercrossing of Highway 101 with an overpass available for use year round. Because a project's impacts under CEQA are measured against a baseline that consists of the existing physical conditions (which currently include the use and maintenance of the existing undercrossing), impacts in certain resource areas typically evaluated within an Initial Study will not occur. For example, measurable impacts to agricultural, forest, and mineral resources are not anticipated, because none are located in the project area. Thus, these areas are not further analyzed, consistent with Appendix G of the CEQA Guidelines, which states that a No Impact response is adequately supported if the Checklist Sources, References, and project information show that the impact does not apply. No further discussion is required for those resource areas.

4.1.1 Agricultural and Forest Resources

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Sources
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☒	1,2
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒	1,2

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Sources
c) Conflict with existing zoning for, or cause rezoning of, forest land[2], timberland[3], or timberland zoned Timberland Production[4]	☐	☐	☐	☒	1,2
d) Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒	1,2
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?	☐	☐	☐	☒	1,2
f) Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒	1,2

4.1.2 MINERAL RESOURCES

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Sources
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☒	1,2
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	☐	☐	☐	☒	1,2

Important Note to the Reader

The California Supreme Court in a December 2015 opinion (*California Building Industry Association v. Bay Area Air Quality Management District,* 62 Cal. 4th 369) confirmed that CEQA, with several specific exceptions, is concerned with the impacts of a project on the environment, not the effects the existing environment may have on a project. Therefore, the evaluation of the significance of project impacts under CEQA in the following sections focuses on impacts of the project on the environment, including whether a project may exacerbate existing environmental hazards.

The City of Palo Alto has policies that address existing conditions affecting a proposed project, which are also addressed in this section. This is consistent with one of the primary objectives of CEQA and this document, which is to provide objective information to decision-makers and the public regarding a project as a whole. The CEQA Guidelines and the courts are clear that a CEQA

[2] As defined in Public Resources Code section 12220(g)
[3] As defined by Public Resources Code section 4526
[4] As defined by Government Code section 51104(g)

document can include information of interest even if such information is not an "environmental impact" as defined by CEQA.

Therefore, where applicable, in addition to describing the impacts of the project on the environment, this document will discuss relevant City policies. Such examples include, but are not limited to, locating a project near sources of air emissions that can pose a health risk, in a floodplain, in a geologic hazard zone, in a high noise environment, or on/adjacent to sites involving hazardous substances.

4.2 AESTHETICS

The discussion within this section is based on a Visual Impact Assessment prepared by Alta Planning and Design and dated May 25, 2017. This assessment is included with this Initial Study as Appendix A. The Visual Impact Assessment follows the guidance outlined in the Federal Highway Administration's 1981 publication entitled *Visual Impact Assessment for Highway Projects.*

4.2.1 Environmental Checklist

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
Would the project:					
a) Substantially degrade the existing visual character or quality of the area and its surroundings?	☐	☐	☒	☐	1,23
b) Significantly alter public viewsheds or view corridors or scenic resources (such as trees, rocks, outcroppings or historic buildings) along a scenic highway?	☐	☐	☒	☐	1,2,23
c) Create a new source of substantial light or glare which will adversely affect day or nighttime views in the area?	☐	☐	☒	☐	1,2,23
d) Substantially shadow public open space (other than public streets and adjacent sidewalks) between 9:00 a.m. and 3:00 p.m. from September 21 to March 21?	☐	☐	☒	☐	1

4.2.2 Regulatory Framework

State Scenic Highways

The California Scenic Highway Program is managed by Caltrans. The program is intended to protect and enhance the natural scenic beauty of California highways and adjacent corridors through special conservation treatment. State laws governing the Scenic Highway Program are found in the Streets and Highway Code, Sections 260 through 263. Highway 101 within the project area is not a designated State Scenic Highway.

City of Palo Alto

Palo Alto Baylands Nature Preserve Site Assessment and Design Guidelines

The Site Assessment and Design Guidelines for the Palo Alto Baylands Nature Preserve are intended to protect the Baylands area and ensure that new facility designs and landscape elements are consistent with the Baylands Master Plan and Palo Alto Comprehensive Plan. The design guidelines encourage the use of muted, natural colors; long-life and low-maintenance materials, as well as preservation of views of the horizon line.

Comprehensive Plan Designated Scenic Views

Within the City of Palo Alto, views of the hills and Bay are considered to be character-defining elements of the City. Per the City of Palo Alto Comprehensive Plan Policy L-71, entrances to the City from Highway 101 are considered important community gateways. The project site is located approximately 0.30 mile north of the San Antonio Road exit from Highway 101 and 1.30 miles south of the Oregon Expressway exit. The nearest Comprehensive Plan-designated scenic route is located along Oregon Expressway. The City's Comprehensive Plan also states that wetlands within the City are an important scenic resource.

City of Palo Alto Tree Preservation Ordinance

The City of Palo Alto's Tree Preservation Ordinance (Title 8 of the Palo Alto Municipal Code) requires permits for removal of or trimming more than 25 percent of the canopy of any regulated trees. Regulated trees can fall under several categories: public trees, protected public and private trees. Protected trees under the ordinance include coast live oaks and valley oaks with an 11.5-inch trunk diameter or more, and coast redwoods with a 16-inch or more trunk diameter (measured at 54 inches above the natural grade). Heritage trees are individual trees of any size or species or historical significance that are deemed as such by City Council. Additionally, the ordinance requires that development project plans include trunk location and diameter and drip line locations of all oaks and redwoods. Project impacts affecting areas under the drip line of these trees requires an arborist's assessment and conservation measures to be submitted with development plans.

Comprehensive Plan Policies

The following policies are contained within the Comprehensive Plan and are relevant to the proposed project.

Policy	Description
L-3	Guide development to respect views of the foothills and East Bay hills from public streets in the developed portions of the City.
L-5	Maintain the scale and character of the City. Avoid land uses that are overwhelming and unacceptable due to their size and scale.
L-50	Encourage high quality signage that is attractive, appropriate for the location and balances visibility needs with aesthetic needs.
L-68	Integrate creeks and green spaces with the street and pedestrian/bicycle path system.
L-70	Enhance the appearance of streets and other public spaces by expanding and maintaining Palo Alto's street tree system.
L-71	Strengthen the identity of important community gateways, including the entrances to the City at Highway 101, El Camino Real and Middlefield Road; the Caltrain stations; entries to commercial districts; and Embarcadero Road at El Camino Real.
L-72	Promote and maintain public art and cultural facilities throughout Palo Alto. Ensure that such projects are compatible with the character and identity of the surrounding neighborhood.
L-76	Require trees and other landscaping within parking lots.

Lighting Regulations

The City of Palo Alto Municipal Code (PAMC), Section 18.23.030, regulates lighting throughout the City. The purpose of these regulations is to minimize the visual impacts of lighting on abutting or nearby residential sites and from adjacent roadways. Regulations address the intensity, height, and direction of lighting to reduce and avoid excess light, light spill-over, and over-lighting, which can also affect nighttime views.

4.2.3 Existing Conditions

The existing landscape is characterized by low (one- to three-story tall) urban development to the east, south, west, and northwest and open space (Palo Alto Baylands) to the north and northeast. Roadways and roadway guard facilities, including low walls and fences, dominate the immediate view at the project site. Expanded views to the northeast are of the open space area of the Baylands. The Oregon Expressway overpass is visible in the distance to the northwest and the San Antonio Road overpass is visible to the southeast.

There are distinct visual landscape components in the project area, including the Palo Alto Baylands Nature Preserve (contiguous open space northeast of Highway 101 that includes the Bay Trail and riparian areas associated with Adobe Creek and the Charleston Slough), Highway 101 and East and West Bayshore Roads (wide, linear swath of asphalt roadway bordered by sound walls and chain-link fencing) and the East Meadow Circle/Bayshore Sub Area (a mix of industrial, commercial, educational and residential uses with significant amount of surface parking). The following discussion addresses the proposed changes to the visual setting and potential impacts.

4.2.4 Impact Evaluation

a) Would the project substantially degrade the existing visual character or quality of the area and its surroundings?

Short-Term/Construction Phase

Construction activities would create short-term negative visual impacts through the presence of equipment and removal of trees, shrubs and groundcover; however, these impacts would be temporary and disturbed vegetation would be replaced within the project area as required by the City of Palo Alto (described further under Question b). During construction, the project would preserve pedestrian and bicycle access to the recreational and scenic resources of the Baylands.

Long-Term/Operational Phase

Photographs of the existing conditions in the project area and photosimulations of the project views follow. As shown in Photograph 2 and Photograph 4, the proposed project would introduce a horizontal bridge element across the width of Highway 101, similar to those created by the Oregon Expressway overcrossing to the north and the San Antonio Road overcrossing to the south. The proposed pedestrian and bicycle overcrossing would introduce an urban, gateway feature within a primarily urbanized viewshed.

Photograph 1: Existing view facing southeast on Highway 101 with the Palo Alto Baylands on the left

Photograph 2: View showing the proposed project facing southeast on Highway 101 with the Palo Alto Baylands on the left

Photograph 3: Existing view facing northwest from West Bayshore Road at Adobe Creek

Photograph 4: View of the proposed project facing northwest from West Bayshore Road at Adobe Creek

Photograph 5: Existing view of the San Francisco Bay Trail and Palo Alto Baylands facing northeast from East Bayshore Road

Photograph 6: Existing view of the San Francisco Bay Trail and Palo Alto Baylands facing northeast from East Bayshore Road

Proposed project materials would include concrete surfaces, metal railings, and safety lighting, similar to what is currently present at the site and in the surrounding area; thus, the visual character would not change significantly such that it would be degraded. Trees removed on the west side of Highway 101 within and adjacent to the reconfigured parking lot as part of the bridge approach would be replaced on site in numbers consistent with the tree replacement ratios described within the City's *Tree Technical Manual*, as discussed further in Section 4.4 Biological Resources.

The proposed project would obscure a portion of the Baylands landscape to the north (as shown in Photograph 6), breaking up the overall views from the area roadways. However, considering the relatively narrow width and shallow depth of pedestrian/bicycle bridge structures and location of the ramps, the change would not be significant as the character of the area is already urbanized with development in the vicinity and existing roads. As detailed within the Visual Impact Assessment (Appendix A), the visual character of the proposed project would be compatible with the existing visual character of the freeway corridor. **(Less Than Significant Impact)**

b) Would the project significantly alter public viewsheds or view corridors or scenic resources (such as trees, rocks, outcroppings or historic buildings) along a scenic highway?

The project site is not located along a designated State Scenic Highway or City-designated scenic road or gateway. There are no rock outcroppings on site, and the site is not visible from a designated State Scenic Highway. The site has limited views from a City-designated road or gateway (i.e., the Oregon Expressway and San Antonio Road exits from Highway 101), due to the distance of separation. Four protected trees (as defined in the City's tree protection ordinance) on the site would be preserved. Approximately 28 other trees that are not protected would be removed and replaced consistent with the ratios within the City's *Tree Technical Manual*, as discussed in detail in Section 4.4 Biological Resources. With the required tree protection and replacement, any visual/aesthetic impact associated with the removal of trees would be less than significant. **(Less Than Significant Impact)**

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

Safety lighting for the proposed overcrossing would be limited, focused, and comparable in brightness to the existing undercrossing lighting and ambient lighting in the surrounding area. Landscape or architectural accent lighting fixtures would include glare control features or be shielded from direct vertical uplight, consistent with PAMC Section 18.23.030. Compliance with code requirements would ensure that the proposed project would not result in significant impacts to adjacent properties or uses with nighttime lighting or daytime glare. **(Less than Significant Impact)**

d) Would the project substantially shadow public open space (other than public streets and adjacent sidewalks) between 9:00 a.m. and 3:00 p.m. from September 21 to March 21?

The project would not increase shading on publicly-accessible open space. Minor amounts of shade and shadow over open space on the northeast side of Highway 101 would be generated by the proposed project; however, the area is not publicly accessible. Further, the degree of shadows caused by the bridge approach structure would be limited because it would only be approximately 15-feet-

wide. Thus, the project would not result in a significant shade and shadow impact. **(Less than Significant Impact)**

4.1.4 Conclusion

Implementation of the proposed project would not result in significant adverse visual or aesthetic impacts. **(Less than Significant Impact)**

4.3 AIR QUALITY

4.3.1 Environmental Checklist

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
Would the project:					
a) Conflict with or obstruct implementation of the applicable air quality plan (such as the 2017 Clean Air Plan or the 2001 Ozone Attainment Plan)?	☐	☐	☐	☒	1,2,3,5
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☐	☐	☒	☐	1,2,3,5
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	☐	☐	☒	☐	1,2,3,5
d) Expose sensitive receptors to substantial pollutant concentrations?	☐	☒	☐	☐	1,2,3,5
e) Create objectionable odors affecting a substantial number of people?	☐	☐	☒	☐	1,2,3,5

4.3.2 Regulatory Framework

4.3.2.1 *State and Federal Regulations*

The project site is located within the San Francisco Bay Area Air Basin. The Bay Area Air Quality Management District (BAAQMD) is the regional government agency that monitors and regulates air pollution within the air basin. The Federal Clean Air Act and the California Clean Air Act require that the California Air Resources Board (CARB), based on air quality monitoring data, designate portions of the state where the federal or state ambient air quality standard are not met as "nonattainment areas." Because of the differences between the national and state standards, the designation of nonattainment areas is different under the federal and state legislation.

The Bay Area is considered a nonattainment area for ground-level ozone and particulate matter $(PM)_{2.5}$ under both the federal Clean Air Act and the California Clean Air Act. The area is also considered non-attainment for PM_{10} under the California Clean Air Act, but not the federal Clean Air Act. The area has attained both state and federal ambient air quality standards for carbon monoxide. As part of an effort to attain and maintain ambient air quality standards for ozone, PM_{10} and $PM_{2.5}$, BAAQMD has established thresholds of significance for air pollutants. These thresholds are for ozone precursor pollutants, PM_{10} and $PM_{2.5}$ and apply to both construction period and operational period impacts.

The United States Environmental Protection Agency (EPA) and CARB have also established ambient air quality standards for what are commonly referred to as "criteria pollutants," because they set the criteria for attainment of good air quality. Criteria pollutants include carbon monoxide, ozone, nitrogen dioxide, sulfur dioxide, and PM.

4.3.2.2 *Regional Regulations*

Bay Area Air Quality Management District

The BAAQMD is the agency primarily responsible for assuring that the federal and state ambient air quality standards are maintained in the San Francisco Bay Area. BAAQMD has permit authority over stationary sources, acts as the primary reviewing agency for environmental documents, and develops regulations that must be consistent with or more stringent than, federal and state air quality laws and regulations.

Regional air quality management districts, such as BAAQMD, must prepare air quality plans specifying how state air quality standards would be met. BAAQMD's most recently adopted plan is the Bay Area 2017 Clean Air Plan (2017 CAP). The 2017 CAP focuses on two closely related BAAQMD goals: protecting public health and protecting the climate. To protect public health, the 2017 CAP describes how the BAAQMD will continue its progress toward attaining state and federal air quality standards and eliminating health risk disparities from exposure to air pollution among Bay Area communities.

The 2017 CAP includes a wide range of control measures designed to decrease emissions of the air pollutants that are most harmful to Bay Area residents, such as particulate matter, ozone, and toxic air contaminants; to reduce emissions of methane and other "super-GHGs" that are potent climate pollutants in the near-term; and to decrease emissions of carbon dioxide by reducing fossil fuel combustion.

4.3.3 **Existing Conditions**

The proximity of this location to both the Pacific Ocean and San Francisco Bay has a moderating influence on the climate. Northwest and northerly winds are most common in the project area, reflecting the orientation of the Bay and the San Francisco Peninsula. Winds from these directions carry pollutants released by autos and factories from upwind areas of the Peninsula toward Palo Alto, particularly during the summer months. Winds are lightest on average in fall and winter. Every year in fall and winter there are periods of several days when winds are very light and local pollutants can build up.

Air quality standards for ozone are typically exceeded when relatively stagnant conditions occur for periods of several days during the warmer months of the year. Weak wind flow patterns combined with strong inversions substantially reduce normal atmospheric mixing. Key components of ground-level ozone formation are sunlight and heat. Significant ozone formation, therefore, only occurs during the months from late spring through early fall. Prevailing winds during the summer and fall can transport and trap ozone precursors in the Bay Area. Topography can restrict horizontal dilution and mixing of pollutants by creating a barrier to air movement. The South Bay has significant terrain

features that affect air quality. The Santa Cruz Mountains and Diablo Range on either side of Palo Alto restrict horizontal dilution, and this alignment of the terrain also channels winds from the north to south, carrying pollution from north to south.

4.3.4 Impact Evaluation

As discussed in CEQA Guidelines Section 15064(b), the determination of whether a project may have a significant effect on the environment calls for careful judgment on the part of the Lead Agency and must be based to the extent possible on scientific and factual data. The City of Palo Alto has considered the thresholds updated by BAAQMD in May 2017 and regards these thresholds to be based on the best information available for the San Francisco Bay Area Air Basin and conservative in terms of the assessment of health effects associated with TACs and $PM_{2.5}$. The BAAQMD CEQA Air Quality thresholds used in this analysis are identified in Table 4.3-1 below.

Table 4.3-1: Thresholds of Significance Used in Air Quality Analyses

Pollutant	Construction	Operation	
	Average Daily Emissions (pounds)	Average Daily Emissions (pounds)	Maximum Annual Emissions (tons)
ROG, NO_x	54	54	10
PM_{10}	82 (exhaust)	82	15
$PM_{2.5}$	54 (exhaust)	54	10
Fugitive Dust (PM_{10}/$PM_{2.5}$)	Implement Best Management Practices	None	None
Risk and Hazards for New Sources and Receptors (Project)	Same as operational threshold	• Increased cancer risk of >10.0 in one million • Increased non-cancer risk of > 1.0 Hazard Index (chronic or acute) • Ambient $PM_{2.5}$ increase: > 0.3 μ/m^3 (Zone of influence: 1,000-foot radius from property line of source or receptor)	
Risk and Hazards for New Sources and Receptors (Cumulative)	Same as operational threshold	• Increased cancer risk of >100 in one million • Increased non-cancer risk of > 10.0 Hazard Index (chronic or acute) • Ambient $PM_{2.5}$ increase: > 0.8 μ/m^3 (Zone of influence: 1,000-foot radius from property line of source or receptor)	

Sources: BAAQMD CEQA *Thresholds Options and Justification Report (2009)* and BAAQMD CEQA *Air Quality Guidelines* (dated May 2017).

a) Would the project conflict with or obstruct implementation of the applicable air quality plan (such as the 2017 CAP or the 2001 Ozone Attainment Plan)?

Impacts from Construction Activities

The 2017 CAP defines an integrated, multipollutant control strategy to reduce emissions of particulate matter, TACs, ozone precursors, and GHGs. The 2017 CAP includes control measures that are intended to reduce air pollutant emissions in the Bay Area, either directly or indirectly. The control measures are divided into five categories that include:

- Measures to reduce emissions from stationary and area sources;
- Mobile source measures;
- Transportation control measures;
- Land use and local impact measures; and
- Energy and climate measures.

Exposure of sensitive receptors to TACs and $PM_{2.5}$ emissions from construction vehicle trips associated with the project is addressed under the responses to Questions b), c) and d), which follow. The proposed project would be constructed in compliance with the applicable BAAQMD regulations and policies and would implement MM AQ-1.1 described under the response to Question b). Construction activities would, therefore, not conflict with, or obstruct, implementation of the 2017 CAP with regard to reductions in air pollutant emissions. Thus, the project would not conflict with implementation of the 2017 CAP. **(No Impact)**

Impacts from Project Operation

The most recent and applicable adopted air quality plan is the 2017 CAP. The proposed project would result in a significant impact if it would conflict with, or obstruct, implementation of the 2017 CAP. However, such a conflict would not occur under the proposed project because it is a new pedestrian/bicycle overcrossing that is intended to reduce single-occupancy vehicle trips. It would not result in population or employment growth and there would be no operational emissions of air pollutants. Therefore, the proposed project would not conflict with or obstruct implementation of the 2017 CAP. **(No Impact)**

b),c),d) Would the project violate any air quality standard or contribute substantially to an existing or projected air quality violation. Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?Would the project expose sensitive receptors to substantial pollutant concentrations?

Emissions Associated with Construction Activities

During the construction phase of the project, emissions of air pollutants would be associated with vehicles, equipment, materials, and activities (e.g., grading). Such emissions include particulates, reactive organic gases, oxides of nitrogen, and TACs. The magnitude of such emissions was recently

calculated for a proposed pedestrian/bicycle bridge in San Jose and such emissions were compared to the BAAQMD thresholds listed in Table 4.3-1. The San Jose project, known as the Three Creeks Trail Pedestrian Bridge, consists of the construction of 14-foot-wide and 206-foot long pedestrian/bicycle bridge. The anticipated level of activity for the proposed project is anticipated to be similar to the level of activity assumed in the Three Creeks Trail Pedestrian Bridge Project. The results of the Three Creeks analysis, including a comparison to BAAQMD thresholds of significance, are shown in Table 4.3-2. The data show that construction-related emissions from the Three Creeks project would be substantially below the applicable BAAQMD thresholds. Since construction of the proposed project would require similar activities and activity levels as the Three Creeks Trail Pedestrian Bridge Project, it can reasonably be extrapolated and concluded that its emissions would not exceed the BAAQMD thresholds. **(Less than Significant Impact)**

Table 4.3-2: Three Creeks Trail Pedestrian Bridge Project Construction Emissions

Scenario	ROG	NOx	PM_{10} Exhaust	$PM_{2.5}$ Exhaust
Average daily emissions (pounds)[1]	4.48 lbs.	47.1 lbs.	2.31 lbs.	0.54 lbs.
BAAQMD Thresholds (pounds per day)	*54 lbs.*	*54 lbs.*	*82 lbs.*	*54 lbs.*
Exceed Threshold:	**No**	**No**	**No**	**No**

Source: City of San Jose. *Environmental Impact Report for the Three Creeks Trail Pedestrian Bridge Project.* January 2015.

In addition to the emissions described above, the majority of the pollution associated with construction of the project would consist of wind-blown dust generated by excavation, grading, and hauling. Construction activities, particularly during site preparation and grading, would temporarily generate fugitive dust in the form of particulate matter. Sources of fugitive dust would include disturbed soils at the construction site and trucks carrying uncovered loads of soil. The amount of dust generated would be highly variable, and would be dependent on the size of the area disturbed at any given time, the amount of construction activity, soil type and moisture, and meteorological conditions. Residences and/or other receptors located in the vicinity of the project site could be adversely affected by dust generated during construction activities.

Impact-AQ-1: Dust generated by various construction activities could adversely impact residences and/or other receptors located in the project vicinity. **(Significant Impact)**

MM AQ-1.1: Implementation of MM AQ-1.1, described below, will ensure that any significant adverse effects associated with construction-generated dust are avoided.

- Exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day or covered.

- Haul trucks transporting soil, sand, or other loose material off-site shall be covered.
- Visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
- Roadways, driveways, and sidewalks to be paved shall be completed as soon as possible.
- A publicly visible sign shall be posted with the telephone number and name of an individual working for the construction contractor who can be contacted regarding dust complaints. This person shall respond and take corrective action within 48 hours. The BAAQMD's phone number shall also be visible to ensure compliance with applicable regulations. **(Less than Significant Impact)**

With the implementation of MM-AQ-1.1, impacts associated with construction-related dust would be less than significant. **(Less than Significant Impact with Mitigation Incorporated)**

Project Operation

The proposed project does not involve a new use at the site that might increase vehicle trips. As a pedestrian/bicycle bridge, the project by its very nature is anticipated to reduce single-occupancy vehicle trips by increasing opportunities for bicyclists and pedestrians, thereby reducing emissions. With no increase in daily traffic, the associated local and regional pollutant emissions would not increase compared to existing conditions; thus, operation of the project would not violate any air quality standard or contribute substantially to any existing or projected air quality violations. **(No Impact)**

e) Create objectionable odors affecting a substantial number of people?

The project does not include any odor-causing operations, and any odors emitted during construction would be temporary and localized and would not affect a substantial number of people. **(Less than Significant Impact)**

4.3.5 Conclusion

Short-Term Air Quality Impacts: The project would generate dust during construction that could adversely impact nearby receptors but this impact will be minimized through the implementation of MM AQ-1.1. **(Less than Significant Impact with Mitigation)**

Long-Term Air Quality Impacts: The operational phase of the project will not result in an increase in emissions. Any increase in bicycle/pedestrian traffic resulting from the project will likely reduce trips made by automobile, thereby reducing emissions. **(No Impact)**

4.4 BIOLOGICAL RESOURCES

The discussion within this section is based on a Natural Environment Study prepared by H. T. Harvey & Associates, Inc. and dated February 2017, a Biological Assessment prepared by H. T. Harvey & Associates, Inc. and dated February 2017, and a Tree Survey Report prepared by Walter Passmore and dated May 23, 2017. These reports are included with this Initial Study as Appendix B, Appendix C, and Appendix D, respectively.

4.4.1 Environmental Checklist

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
Would the project:					
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife (CDFW) or United States Fish and Wildlife Service (USFWS)?	☐	☒	☐	☐	1,2,21
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the CDFW or USFWS?	☐	☐	☐	☒	1,2,21,22
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☐	☒	1,2,21
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, impede the use of native wildlife nursery sites?	☐	☒	☐	☐	1,2,21
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or as defined by the City of Palo Alto's Tree Preservation Ordinance (Municipal Code Chapter 8.10)?	☐	☐	☒	☐	1,2,21,22
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒	1,2

4.4.2 Regulatory Framework

Federal and State

Federal Endangered Species Act

The U.S. Fish and Wildlife Service (USFWS), which has jurisdiction over federally listed (i.e., threatened and endangered) plants, wildlife, and resident fish; and the National Marine Fisheries Service (NMFS), which has jurisdiction over anadromous fish and marine fish and mammals, implement the federal Endangered Species Act (FESA). Section 7 of FESA mandates consultation with the USFWS and NMFS to ensure that actions and projects do not jeopardize the continued existence of a listed species or destroy or adversely modify critical habitat for listed species. Consultation with the USFWS and NMFS is required if a project "may affect" a listed species. FESA prohibits the "take" of any fish or wildlife species listed as threatened or endangered, including the destruction of habitat that could hinder species recovery.

California Endangered Species Act

The State of California enacted the California Endangered Species Act (CESA) in 1984. CESA prohibits the "take" of state endangered and threatened species; however, habitat destruction is not included in the state's definition of take. The California Department of Fish and Wildlife (CDFW) administers CESA and, with the exception of Fully Protected Species, authorizes take through Section 2080.1 agreements (also known as a Consistency Determination) for take of species that are both federal- and state-listed, and Section 2081 for take of a state-only listed species.

Clean Water Act and Porter-Cologne Water Quality Control Act

The U.S. Army Corps of Engineers (USACE) has primary federal responsibility for administering regulations that concern waters of the United States. The USACE acts under two statutory authorities, the Rivers and Harbors Act (Sections 9 and 10) and the Clean Water Act (CWA) (Section 404). The USACE requires that a permit be obtained if a project proposes placing structures within, over, or under navigable waters and/or discharging dredged or fill material into waters of the United States below the ordinary high water (OHW) mark in non-tidal waters.

The State of California's authority to regulate activities in wetlands and waters resides primarily with the Regional Water Quality Control Board (RWQCB), which regulates fill in and discharges to waters of the state, including activities in wetlands, under Section 401 of the CWA, and the Porter-Cologne Water Quality Control Act. The RWQCB administers the Federal National Pollutant Discharge Elimination System (NPDES) program. Established by the CWA, the NPDES program controls and reduces pollutants entering water bodies from point and nonpoint discharges. The RWQCB issues NPDES permits for discharges to water bodies in the San Francisco Bay Area, including those related to construction activity (i.e., Construction General Permit).

The Federal Migratory Bird Treaty Act

The federal Migratory Bird Treaty Act (MBTA) prohibits killing, possessing, or trading in migratory birds, except in accordance with regulations prescribed by the Secretary of the Interior. This act encompasses whole birds, parts of birds, and bird nests and eggs. Construction disturbance during

the breeding season could result in the incidental loss of fertile eggs or nestlings, or otherwise lead to nest abandonment, in violation of the MBTA.

California Fish and Game Code

The CDFW is authorized under the California Fish and Game Code, Sections 1600-1603, to enter into a Streambed Alteration Agreement (SAA) with applicants and develop mitigation measures when a proposed project will obstruct the flow or alter the bed, channel, or bank of a river or stream in which there is a fish or wildlife resource, including intermittent and ephemeral streams.

Under Section 3503 of the California Fish and Game Code, it is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird. Section 3503.3 of the California Fish and Game Code prohibits take, possession, or destruction of any birds in the orders Falconiformes (hawks) or Strigiformes (owls), or of their nests and eggs.

Regional and Local

City of Palo Alto Tree Preservation Ordinance

The City of Palo Alto's Tree Preservation Ordinance (Title 8 of the Palo Alto Municipal Code) requires permits for removal of or trimming more than 25 percent of the canopy of any regulated trees. Regulated trees can fall under several categories: public trees, protected public and private trees. Protected trees under the ordinance include coast live oaks and valley oaks with an 11.5-inch trunk diameter or more, and coast redwoods with a 16 inch or more trunk diameter (measured at 54 inches above the natural grade). Heritage trees are individual trees of any size or species or historical significance that are deemed as such by City Council. Additionally, the ordinance requires that development project plans include trunk location and diameter and drip line locations of all oaks and redwoods. Project impacts affecting areas under the drip line of these trees requires an arborist's assessment and conservation measures to be submitted with development plans.

4.4.3 Existing Conditions

4.4.3.1 *Habitats within the Biological Study Area*

Reconnaissance-level surveys of the project's Biological Study Area (BSA) were conducted by H. T. Harvey & Associates ecologists on November 18 and 21, 2013, and December 13, 2016. Biotic habitats within the BSA were mapped onto an aerial photograph during field surveys, as shown in Figure 4.4-1. Four biotic habitats were identified within the approximately 7.78-acre BSA, including developed/landscaped, ruderal grassland, aquatic, and riparian eucalyptus woodland. Table 4.3-1 provides the approximate acreage of each habitat and land use type within the BSA. These habitat types are discussed further in the sections that follow.

Table 4.4-1: Biotic Habitat and Impacts within the BSA			
Biotic Habitat/Land Use	**Total Area in BSA (acres)**	**Temporary Impacts (acres)**	**Permanent Impacts (acres)**
Developed/Landscaped	6.50	0.27	1.79
Ruderal Grassland	1.04	0.74	0.17
Aquatic (most under developed areas)	0.29	0	0
Riparian Eucalyptus Woodland	0.24	0	0
Total Area:	7.78*	1.01	1.96

Source: H.T. Harvey & Associates. *City of Palo Alto U.S. Highway 101 Overpass and Reach Trail at Adobe Creek Project Natural Environment Study*. February 2017.

* The total BSA acreage is less than the sum of the acreages of individual habitat types because all "aquatic" habitat is located underneath the developed/landscaped areas of Highway 101.

Developed/Landscaped Habitat

Vegetation

Upland portions of the BSA are mostly developed and consist of concrete or asphalt hardscape (i.e., bike trails, sidewalks, parking lots, frontage roads, and Highway 101), as well as defined landscaped areas within parking lots, rights of way, and sidewalks. These urbanized areas are identified as developed habitat. Vegetation within these areas is limited to landscaping plants or roadside grasses and weeds. Several trees are located along the roadside edges and existing parking lots.

Wildlife

Developed areas provide relatively little habitat value for most wildlife species; however, bridges can provide important nesting sites for birds and roosting sites for bats. The existing Highway 101 bridge over the Adobe Creek undercrossing supports night-roosting habitat for commonly occurring bat species, such as the big brown bat and the long-eared myotis. No special-status bats use the existing Highway 101/Adobe Creek bridge over the undercrossing due to the urban nature of the project area. However, barn swallows, cliff swallows, and black phoebe birds and/or nests have been observed in the vicinity of and under both the existing Highway 101/Adobe Creek bridge and existing East Bayshore Road/Adobe Creek bridges.

BIOTIC HABITATS AND IMPACTS FIGURE 4.4-1

Bird species, such as American robins, American crows, and lesser goldfinches may utilize trees or other vegetation in landscaped areas for nesting.

Species that are typically accustomed to urban environments and high levels of disturbance from human activities, including native gulls, house finches, non-native European starlings, and rock pigeons, are located in the developed/landscaped habitat portion of the BSA. Mammals such as the house mouse, Norway rat and raccoon can also occur in developed portions of the BSA.

Ruderal Grassland Habitat

Vegetation

The dominant vegetation in the ruderal grassland habitat area comprises approximately five- to seven-foot-tall, short-lived, weedy, herbaceous species, such as black mustard, poison hemlock, and fennel, which thrive in the saline and brackish soil conditions. This ruderal community occurs within the upland edge of a larger, more complex, salt and brackish marsh community and native wetland plants of the Baylands to the northeast.

Wildlife

The wildlife community is influenced by the presence of both adjacent development and natural areas within the Flood Control Basin. Adjacent roads, highways, and businesses are sources of high levels of human disturbance, which discourage the presence of wildlife species that do not tolerate such disturbance. In contrast, the Flood Control Basin supports many native species associated with large areas of marsh habitat, including special-status species. Thus, while the ruderal grassland habitat in the BSA is not extensive or of high quality, it has the potential to support wildlife species that are both adapted to urban areas and associated with large marsh and aquatic habitats nearby.

The tall ruderal vegetation present throughout the majority of this habitat precludes the presence of burrowing owls. Smaller avian species such as the house finch, lesser goldfinch, golden-crowned sparrow, and white-crowned sparrow are likely to forage in this tall vegetation. Avian species associated with the adjacent riparian eucalyptus woodland are also likely to forage in this ruderal vegetation. Common nesting species in ruderal grassland vegetation are the red-winged blackbird and song sparrow.

Amphibian species associated with the adjacent riparian and aquatic habitats, such as the Sierran chorus frog, could potentially occur. Common reptiles such as the western terrestrial garter snake, gopher snake, and western fence lizard are likely to occur in this area. Common mammal species that could potentially occur in this ruderal habitat include gray foxes, California voles, and Botta's pocket gophers. Bats forage aerially over this habitat.

Riparian Eucalyptus Woodland Habitat

Vegetation

Riparian communities often dominate fine-grained sand and gravel bars and are distributed along and at the mouths of most streams in the Bay Area. The riparian community within the BSA is dominated by the non-native eucalyptus species. These trees are approximately 30- to 50-feet-tall. Some native species such as common reed and coyote brush are present at the edges of the riparian woodland in the lower canopy and understory.

Wildlife

Riparian habitats in California generally support rich animal communities and contribute disproportionately to landscape-level species diversity; however, the riparian habitat within the BSA is of relatively low quality because it is composed primarily of introduced tree and understory species. The riparian vegetation is relatively dense, the understory is composed of common reed, and the paucity of native trees limits the likelihood that native riparian-obligate wildlife species will occur here; nevertheless, a number of riparian wildlife species occur.

Reptiles such as the western terrestrial garter snake, western fence lizard, and gopher snake that occur mainly in adjacent ruderal and marsh habitats will forage in riparian eucalyptus woodland. Black-crowned night herons are known to roost in the riparian habitat along Adobe Creek approximately 0.25 mile downstream from the BSA. The mature eucalyptus trees provide potential nesting habitat for several species of raptors, including the red-shouldered hawk, Cooper's hawk, and white-tailed kite. Many other common bird species may nest in this habitat, including the mourning dove, Anna's hummingbird, California scrub-jay, Bewick's wren, and house finches. Migrating birds such as yellow-rumped warblers, yellow warblers, and Pacific-slope flycatchers forage in this habitat.

Urban-adapted mammals such as the raccoon, non-native Virginia opossum, and striped skunk are likely to use the riparian eucalyptus woodland as foraging habitat. In addition, several species of bats, including the Yuma myotis and Mexican free-tailed bat forage over riparian habitats such as that found in the BSA, and small numbers may roost in small crevices in trees on the project site.

Aquatic Habitat

Vegetation

The entire reach of Adobe Creek within the BSA is channelized within a concrete bed and bank. The water within the channel is slow moving and was approximately one- to two-feet-deep at the time of the surveys. No wetlands occur within the channel, although sparse hydrophytic vegetation was present on sediment deposits during surveys in 2013 and 2014. Spring scouring flows and channel maintenance activities remove much of the channel bottom sediments. Associated "riparian habitat" along Adobe Creek as it passes under Highway 101 consists of concrete channel banks.

Wildlife

Waterbirds (such as mallards, great blue herons, and great egrets) forage in the aquatic habitat in the BSA. Mammals expected to forage in this habitat include the raccoon and the non-native common muskrat. Bats will forage aerially over aquatic habitat in Adobe Creek. Sparse hydrophytic vegetation, when present, could provide cover for native Sierran chorus frogs, which were observed during 2007 reconnaissance-level surveys, as well as other aquatic species such as non-native bullfrogs.

Carp have been observed at the existing Adobe Creek bridge crossing. The presence of this species is expected in creeks with shallow water and low dissolved oxygen concentration.

Aquatic wildlife species use Adobe Creek to cross from one side of the freeway to the other. Adobe Creek, in addition to the adjacent existing seasonal undercrossing, also serves as a trail and movement pathway for terrestrial species. Due to the intensive urbanization adjacent to the BSA and heavy traffic volumes along Highway 101, there is little potential for movement of wildlife across the highway aside from the existing overpasses and the creeks that cross under the highway. Thus, common, urban-adapted species such as raccoons, striped skunks, and the non-native opossum may use the stream channel within and adjacent to the BSA to move from one side of Highway 101 to the other.

4.4.3.2 *Special Status Species*

Based on the analysis contained in the Biological Assessment prepared for the project (Appendix C), it is determined that implementation of the proposed project will have no effect on the San Mateo thorn-mint, Crystal Springs fountain thistle, San Mateo woolly sunflower, Contra Costa goldfields, California sea blite, two-fork clover, robust spineflower, Marin western flax, vernal pool tadpole shrimp, Bay checkerspot butterfly, San Bruno elfin butterfly, longfin smelt, Delta smelt, Alameda

whipsnake, western snowy plover, California least tern, marbled murrelet, and western yellow-billed cuckoo. This conclusion is based on the fact that the BSA is outside the known ranges of these species and/or because no suitable habitat for these species is present in the BSA. Similarly, the California tiger salamander, California red-legged frog, and San Francisco garter snake have been extirpated from (or did not historically occur in) the site vicinity, and the project will have no effect on these species.

The following discussion addresses species that have been known, or are known, to occur in the vicinity of the BSA.

Central California Coast Steelhead & Central California Coast Coho Salmon

Historical records indicate that the Central California Coast steelhead, and possibly the Central California Coast coho salmon, once inhabited the Adobe Creek watershed. However, these species are currently absent from Adobe and Barron Creeks due to the construction of barriers, channelization of the creeks (with long reaches of concrete-lined, restricted channels), and a lack of suitable spawning and rearing habitat. The BSA is not located within designated critical habitat or Essential Fish Habitat (EFH) for Central California Coast steelhead or Central California Coast coho salmon. In the unlikely event that anadromous steelhead or coho salmon entered the tidal gate at Mayfield Slough, the shallow, stagnant water in the BSA does not provide suitable habitat for these species, which require cool, shaded stream habitats. Thus, Central California Coast steelhead and Central California Coast coho salmon are determined to be absent from the BSA and adjacent areas.

Salt Marsh Harvest Mouse & Salt Marsh Wandering Shrew

The salt marsh harvest mouse is listed as endangered under both FESA and CESA. It is also fully-protected under California Fish and Game Code. The salt marsh wandering shrew is a California Species of Special Concern and may co-occur with the salt marsh harvest mouse.

Salt marsh harvest mice may occur within the pickleweed-dominated diked marsh habitat present throughout much of the Palo Alto Flood Control Basin and just outside the BSA. However, no suitable breeding or foraging habitat for the salt marsh harvest mouse occurs within the BSA. The ruderal vegetation within the BSA does not provide cover and foraging opportunities for small mammal species, and is not suitable as upland escape habitat for salt marsh harvest mice. Therefore, salt marsh harvest mice may occur in the BSA during very rare, extreme flood events that inundate the rest of the Flood Control Basin. Because the salt marsh harvest mouse is fully protected under California Fish and Game Code, take of individuals cannot occur and extra care to avoid take of the species is warranted.

California Ridgway's Rails

The California Ridgway's rail is listed as endangered under both FESA and CESA. It is also fully-protected under California Fish and Game Code.

No suitable nesting or foraging habitat for California Ridgway's rails occurs within or near the BSA, and Ridgway's rails have not been documented within the BSA or in nearby areas. Ridgway's rails occur in tidal habitats along the edges of San Francisco Bay, with the nearest documented breeding

occurrences along Permanente Creek approximately 1.0 mile to the east and at Charleston Slough approximately 1.3 miles to the northeast. Ridgway's rails do not breed in muted tidal or diked brackish marshes. They are not expected to travel upstream to forage along the Adobe Creek channel because they are strongly associated with tidal habitats. Similarly, they will not traverse the more than 1.0 mile of unsuitable diked marsh habitat to reach the BSA or nearby areas to take refuge in nontidal habitats during high tides. Thus, Ridgway's rails are not expected to occur within the BSA or close enough to the BSA to be affected by project activities, even during high tides. No suitable tidal habitat for this species is present within or near enough to the BSA for individuals or their nests to be affected by project activities. Therefore, it is determined that implementation of the project will have no effect on the California Ridgway's rail.

California Black Rail

The California black rail is listed as threatened under CESA. It is also fully-protected under California Fish and Game Code.

Habitat for the California black rail is absent from the BSA, but wintering individuals may occasionally forage nearby in the Palo Alto Flood Control Basin.

4.4.4 Impact Evaluation

a) Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS?

Impacts to Salt Marsh Harvest Mouse and Salt Marsh Wandering Shrew

As described above in Section 4.3.3.2, salt marsh harvest mice and salt marsh wandering shrews are not expected to be present within the BSA when construction occurs due to the unsuitability of the habitat. The project will not temporarily or permanently impact habitat utilized by these species. Additionally, project-related impacts on salt marsh harvest mice and salt marsh wandering shrews have been avoided to the maximum extent feasible through design considerations. The areas of temporary and permanent disturbance were minimized and temporary staging areas will be located outside of the Baylands altogether, as will construction access roads, where practicable.

No pile driving activities will occur as part of the project, and thus no very loud noises or percussive activities resulting in strong ground vibrations will occur. The closest marsh habitat where salt marsh harvest mice may occur is nearly 100 feet from the nearest construction activities, which will consist of grading and vehicle circulation activities. Small mammals within suitable habitat outside the BSA will be subjected to increased noise and vibrations during construction. No studies have been conducted to determine what noise levels result in disturbance of salt marsh harvest mice or salt marsh wandering shrews. Because noise and vibration levels will attenuate with increasing distance from the source, the nearly 100-foot distance between construction activities and potential salt marsh harvest mouse/salt marsh wandering shrew habitat may be sufficient to prevent noise and vibrations from affecting these small mammals at all. Should salt marsh harvest mice or salt marsh wandering shrews in nearby marsh habitat move away from the source of noise or vibration, they will move away from the project site and toward higher-quality marsh habitat farther out in the Palo Alto Flood

Control Basin. Thus, project noise levels are not expected to cause salt marsh harvest mice or salt marsh wandering shrews to flush out into the open, or to increase mortality of individuals due to predation. Therefore, project noise impacts will not result in take of individual salt marsh harvest mice or salt marsh wandering shrews.

The above notwithstanding, if project construction were to occur during a flooding event that inundates the adjacent Flood Control Basin, salt marsh harvest mice and salt marsh wandering shrews could potentially take refuge in the BSA until the flooding recedes. Thus, during flooding events, there is the potential for project activities to result in take of salt marsh harvest mice and potentially impact salt marsh wandering shrews within the BSA. These events would most likely occur during the rainy season between April 15 and October 15.

Impact-BIO-1: If project construction occurs during a flooding event that inundates the area Flood Control Basin, there is the potential for project activities to result in take of salt marsh harvest mice and impacts to salt marsh wandering shrews. **(Significant Impact)**

Implementation of MM BIO-1.1, described below, will ensure that take of salt marsh harvest mice and any impact to salt marsh wandering shrews is avoided.

MM BIO-1.1: The project contractors will implement the following measures to avoid potential take of salt marsh harvest mice and impacts to salt marsh wandering shrews:

- **Work Schedule:** Work within the BSA will occur between April 15 and October 15. If it is not possible to schedule project activities between April 15 and October 15 within the BSA, then pre-construction surveys by a USFWS-approved biologist for salt marsh harvest mouse and wandering shrews will be conducted by a qualified biologist to ensure that these species will not be disturbed during project implementation. These surveys will be conducted no more than one month prior to the initiation of project activities conducted prior to April 15 and after October 15.
- **Worker Environmental Awareness Program.** Before any construction activities begin, a USFWS-approved biologist will conduct a training session for all construction personnel. At a minimum, the training will include descriptions of the salt marsh harvest mouse and salt marsh wandering shrew, their habitats, the importance of the species, general measures that are being implemented to conserve these species as they relate to the project, and boundaries within which the project may be accomplished, and if found (living or dead) their observations must be immediately reported to the Resident Engineer and USFWS-approved biologist.
- **Herbaceous Cover Removal.** Prior to the start of project activities within the Flood Control Basin portion of the BSA (including vehicle/equipment access), herbaceous vegetation will be removed from impact areas to eliminate cover for salt marsh harvest mice and salt marsh wandering

shrews, thereby discouraging them from occurring in impact areas. The grassland land cover within the project footprint on the northeast side of Highway 101 will be trimmed to within two inches of the ground level prior to the start of ground disturbing activities. Vegetation removal will start where the San Francisco Bay Trail crosses Adobe Creek, and will proceed gradually northwards towards the open marsh habitat in the Flood Control Basin. Vegetation will not be removed during a flooding event that inundates the Flood Control Basin, as these are the conditions in which salt marsh harvest mice and salt marsh wandering shrews are most likely to be present in the BSA. A USFWS-approved biologist familiar with the biology of these species will conduct a pre-construction survey prior to vegetation removal, and will monitor the vegetation removal process. Vegetation will be removed using hand-held equipment (e.g., weed-whackers). This will allow any small mammals, including salt marsh harvest mice and salt marsh wandering shrews, to escape the BSA under the cover of vegetation, and will encourage movement of such small mammals towards available vegetated habitat to the north outside the BSA. Herbaceous vegetation that could potentially conceal a salt marsh harvest mouse or salt marsh wandering shrew within the BSA will be removed, including herbaceous understory vegetation on the north bank of Adobe Creek. Vegetation that is removed will be hauled offsite the day it is removed, and will not be left on the site to provide potential cover for small mammal species. It is possible that vegetation within the Flood Control Basin portion of the BSA will be removed during the fall prior to construction to reduce potential impacts to nesting birds. In such a case, if sufficient herbaceous cover regrows prior to construction the following year, this herbaceous cover will again be removed by hand prior to initiation of construction activities.

- **Exclusion Barrier.** Following vegetation trimming and prior to the start of construction activities on the northeast side of Highway 101, a fence will be installed at the outer limits of the work area (as shown in Figure 4.4-1: Biotic Habitats and Impacts). The fence will be designed to exclude salt marsh harvest mice from the project footprint, define the limits of the footprint, and provide a visual screen. This barrier, which will be constructed under the guidance of a Service-Approved Biologist, will consist of a three-foot tall, tight cloth, smooth plastic, or sheet-metal (or similar material approved by the Service) fence toed into the soil at least three inches deep and supported with stakes placed on the inside of the barrier. A USFWS-approved biologist will conduct a pre-construction survey of the area where vegetation was trimmed prior to construction access, and will monitor the installation of the barrier. Following the installation of the barrier, designated construction personnel will check its integrity each morning that construction activities occurring, and will initiate repairs immediately as needed. The area of vegetation removal will extend approximately two to three feet beyond the area where equipment and personnel will operate during project construction to create an open

area that will discourage salt marsh harvest mice and salt marsh wandering shrews from approaching the exclusion barrier

- **Environmentally Sensitive Area Fencing.** Within the Flood Control Basin, BSA limits will also be clearly demarcated with Environmentally Sensitive Area fencing to avoid inadvertent disturbance of any habitat outside of the designated construction area during construction activities. This fencing can be combined with the exclusion barrier but must not be outside that barrier.
- **Visual Screening.** Additional green-screen fencing will be installed along the limits of the BSA between work areas and natural habitats within the Palo Alto Flood Control Basin to screen project activities from view of the Baylands and avoid potential visual disturbance of salt marsh harvest mice and salt marsh wandering shrews. This fencing can be combined with the fencing described above but must not be outside the exclusion barrier.
- **High-water Work Suspension.** Ground work on the northeast side of Highway 101, including vegetation trimming, will be suspended while there are flood waters within 100 feet of the project footprint (other than waters within the Adobe Creek channel).
- **Immediate Work Stoppage.** If a salt marsh harvest mouse or salt marsh wandering shrew, or an animal that could be a harvest mouse or wandering shrew (e.g., a similar species of mouse or shrew), is observed within the BSA during project activities, all work that could result in the injury or death of the individual will stop and the USFWS-approved biologist will be immediately notified. The animal will be allowed to leave the area on its own and will not be handled before work in that area resumes.
- **Work Limits.** Activity will be limited to the existing and proposed footprint, access, and staging described in the May 2017 Biological Assessment, prepared by H.T. Harvey & Associates (attached as Appendix C). Environmentally sensitive areas, such as wetlands and tidal habitat, will be identified on contract plans and discussed in the Special Provisions. Temporary orange fencing or other obvious system will be used to identify areas of avoidance and will remain in place until all construction is completed.
- **Night Work Lighting**. If night-time work is conducted, the use of temporary artificial lighting during nighttime construction hours will be minimized to the maximum extent practicable and will be directed at the associated work zone and away from adjacent tidal wetland habitat.
- **Trash.** Food-related trash items such as wrappers, cans, bottles, and food scraps will be disposed of in closed containers and removed at least once a day from the work area.
- **Firearms Forbidden.** No firearms will be allowed on the project except for those carried by authorized security personnel, or local, state, or federal law enforcement officials.

- **Pets Forbidden.** To prevent harassment, injury or mortality of wildlife species, no pets will be permitted on the project site.
- **Water Quality.** The potential for adverse effects to water quality will be avoided by implementing temporary and permanent Best Management Practices (BMPs) outlined in Section 7-1.01 G of the Caltrans Standard Specifications. Caltrans erosion control BMPs will be used to minimize any wind or water-related erosion. The State Water Resources Control Board has issued a National Pollution Discharge Elimination System Statewide Storm Water Permit to Caltrans to regulate storm water and non-storm water discharges from Caltrans facilities. A Storm Water Pollution Prevention Plan (SWPPP) will be developed for the project, as one is required for all projects that have at least 1.0 acre of soil disturbance. The SWPPP complies with the Caltrans Storm Water Management Plan (SWMP). The SWMP includes guidance for Design staff to include provisions in construction contracts to include measures to protect sensitive areas and to prevent and minimize storm water and non-storm water discharges.

  The SWPPP will reference the Caltrans Construction Site BMPs Manual. This manual is comprehensive and includes many other protective measures and guidance to prevent and minimize pollutant discharges and can be found at the following website: http://www.dot.ca.gov/hq/ construe/stormwater/ manuals.htm. Protective measures will be included in the contract, including, at a minimum:

  a) No discharge of pollutants from vehicle and equipment cleaning are allowed into the storm drain or water courses.

  b) Vehicle and equipment fueling and maintenance operations must be at least 50 feet away from water courses.

  c) Concrete wastes are collected in washouts and water from curing operations is collected and disposed of and not allowed into water courses.

  d) Dust control will be implemented, including use of water trucks and tackifiers to control dust in excavation and fill areas, rocking temporary access road entrances and exits, and covering temporary stockpiles when weather conditions require.

  e) Coir rolls will be installed along or at the base of slopes during construction to capture sediment and temporary organic hydro-mulching will be applied to all unfinished disturbed and graded areas.

  f) Work areas where temporary disturbance has removed the pre-existing vegetation will be restored and re-seeded with a native seed mix.

  g) Graded areas will be protected from erosion using a combination of silt fences, fiber rolls along toe of slopes or along edges of designated

staging areas, and erosion-control netting (such as jute or coir) as appropriate.

With the implementation of the measures contained within MM-BIO-1.1, impacts to salt marsh harvest mice and any impact to salt marsh wandering shrews would be less than significant. **(Less than Significant Impact with Mitigation Incorporated)**

Impacts to California Ridgway's Rail

The nearest tidal habitat to the BSA where Ridgway's rails potentially occur is approximately one mile to the northeast, outside of the Palo Alto Flood Control Basin. Should Ridgway's rails move into adjacent non-tidal areas during high tides, they are expected to remain in areas near the tidal habitat; individuals will not traverse the more than one mile of unsuitable diked marsh habitat to reach the BSA or nearby areas during high tides. No Ridgway's rails have been recorded even in the portion of the Flood Control Basin closest to tidal marshes. Thus, Ridgway's rails are not expected to occur within the BSA or close enough to the BSA to be affected by project activities, even during high tides, and the project would have no effect on the species. **(No Impact)**

Impacts to California Black Rail

Habitat for the state threatened California black rail is absent from the BSA, but wintering individuals may occasionally forage nearby in the Palo Alto Flood Control Basin. The California black rail is listed as fully protected under the California Fish and Game Code; however, the project will not result in take of this species. Therefore, an Incidental Take Permit from the CDFW will not be required for this species and any impacts to wintering individuals foraging in the vicinity of the project site would be less than significant. **(Less than Significant Impact)**

Impacts to Central California Coast Steelhead & Central California Coast Coho Salmon

For the reasons described previously in Section 4.3.3.2, Central California Coast steelhead and Central California Coast coho salmon are determined to be absent from the BSA and adjacent areas. Therefore, the project will have no impact on these species. (**No Impact)**

Impacts to Bats

Project construction within the portion of the BSA in the Baylands will result in the permanent and temporary loss of a small amount of foraging habitat for bats. However, the amount of habitat impacted is minute compared to the area of available foraging habitat available to bat species in the vicinity. Therefore, the project will not result in significant impacts on habitat for foraging bats.

Because bats are expected to use the new overcrossing in low numbers (if at all) due to its height and location, creation of this habitat is not expected to result in appreciable effects (positive or negative) on regional populations. There is some potential for bats roosting on the new overcrossing to have a higher probability of mortality due to vehicle strikes; however, due to the minimal number of bats expected to be roosting on the overcrossing this also will not result in significant impacts on regional populations. **(Less than Significant Impact)**

b) Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the CDFW or USFWS?

The CDFW considers habitats within the beds of Adobe Creek and Baron Creek, from top of the outermost bank to top of the outermost bank, as well as any vegetation associated with these banks (e.g., the riparian habitat along Adobe Creek) as under their jurisdiction. However, no impacts to the bed or bank of Adobe Creek or Baron Creek, or to any associated riparian habitat, would occur as part of the project and a SAA is not required. Paving of the Adobe Creek Reach Trail, which would consist of paving the existing gravel maintenance road that is at the top-of-bank and above the ordinary high water line, would not impact riparian areas or habitat. While there is riparian eucalyptus woodland habitat in the project vicinity, it would not be directly affected by project activities. **(No Impact)**

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

Adobe Creek and Barron Creek converge on the west side of Highway 101 where the new Adobe Creek Bridge is proposed and then cross under Highway 101 at the location of the current seasonal Benjamin Lefkowitz undercrossing. Both of these creeks are jurisdictional waterways and are considered both Waters of the State and Waters of the U.S., as described within the Delineation of Wetlands and Other Waters (included as Appendix D to Appendix B: Natural Environment Study). The project includes the new Adobe Creek Bridge, which would span Adobe Creek and Barron Creek where the two creeks converge. In addition, the Adobe Creek Reach Trail would follow the existing Santa Clara Valley Water District access road immediately adjacent Adobe Creek from the new Adobe Creek Bridge out to East Meadow Drive. No work will occur within the bed and bank or aquatic habitat of Barron Creek or Adobe Creek; including paving of the Adobe Creek Reach Trail above the top-of bank and installation of the prefabricated Adobe Creek Bridge. While there are wetlands in the greater project area, none are present in the BSA and none would be impacted by the project. **(No Impact)**

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

Impacts to Migratory Birds

Nesting Birds

The project will affect a very small amount of potential nesting habitat for migratory birds, but such effects will have no measurable effect on regional populations of these species because the impacted habitat represents such a small proportion of regionally available habitat.

If construction occurs during the avian breeding season (February 1 through August 31 for most species nesting in the project vicinity), removal of vegetation and trees (as well as demolition of

existing site improvements) could result in direct loss of nests containing eggs or young. This could occur either directly through the destruction or disturbance of active nests or indirectly by causing the abandonment of nests, in particular for the large numbers of cliff swallows that nest under the existing Highway 101/Adobe Creek undercrossing and the East Bayshore Road/Adobe Creek bridge.

Impact BIO-2: Construction activities associated with the proposed project could result in impacts to nesting birds through the loss of fertile eggs or nest abandonment. **(Significant Impact)**

The project shall implement the measures that follow as part of MM BIO-2.1 to reduce impacts to nesting birds and their eggs to a less than significant level.

MM BIO-2.1: The following measures will be implemented to ensure that project activities avoid substantial impacts to nesting birds and their eggs, which are protected under the MBTA and California Fish and Game Code (CGFC).

- **Avoidance of the Nesting Bird Season.** To the extent feasible, project activities will be scheduled to avoid the avian nesting season. If such activities are scheduled to take place outside the nesting season, impacts on nesting birds, including raptors, protected under the MBTA and CFGC, will be avoided. The nesting season for most birds in Santa Clara County typically extends from February 1 through August 31.
- **Vegetation Removal during the Non-Nesting Season.** If project activities will not be initiated until after the start of the nesting season, potential nesting substrate (e.g., bushes, trees, grasses, and other vegetation) that is scheduled to be removed by the project, if any, may be removed prior to the start of the nesting season (e.g., prior to February) to reduce the potential for initiation of nests. The project schedule includes vegetation removal in the Flood Control Basin portion of the BSA during the fall prior to construction to minimize impacts to nesting birds the following spring. If it is not feasible to schedule vegetation removal during the nonbreeding season, or where vegetation cannot be removed (e.g., in areas immediately adjacent to the BSA), then pre-construction surveys for nesting birds will be conducted as described below.
- **Pre-construction/Pre-disturbance Surveys for Nesting Birds.** If it is not possible to schedule project activities between September 1 and January 31, then pre-construction surveys for nesting birds will be conducted by a qualified biologist to ensure that no nests will be disturbed during project implementation. These surveys will be conducted no more than 48 hours prior to the initiation of project activities. During this survey, a qualified biologist will inspect all potential nesting habitats (e.g., trees, shrubs, grasslands, and

buildings) within 300 feet of impact areas for raptor nests and within 100 feet of impact areas for nests of non-raptors.

- **Buffers around Active Nests.** If an active nest (i.e., a nest with eggs or young, or any completed raptor nest attended by adults) is found sufficiently close to work areas to be disturbed by these activities, the biologist, in consultation with CDFW, will determine the extent of a disturbance-free buffer zone to be established around the nest (typically 300 feet for raptors and 100 feet for other species), to ensure that no nests of species protected by the MBTA and California Fish and Game Code will be disturbed during project implementation. Because the majority of the BSA is already subject to disturbance by vehicles and pedestrians, activities that will be prohibited from occurring within the buffer zone around a nest will be determined on a case-by-case basis. In general, activities prohibited within such a buffer while a nest is active will be limited to new construction-related activities (i.e., activities that were not ongoing when the nest was constructed) involving significantly greater noise, human presence, or vibrations than were present prior to nest initiation.
- **Screening.** As described for salt marsh harvest mice and salt marsh wandering shrews above, additional fencing with a green screen will be installed along the limits of the BSA between work areas and natural habitats within the Palo Alto Baylands Nature Preserve's Flood Control Basin (Flood Control Basin). This fencing will screen project activities from view of the Baylands and minimize potential visual disturbance of nesting birds as a result of the project.
- **Nest Deterrence.** If necessary to avoid impacts to active nests (i.e., nests containing eggs or young), nest starts may be removed on a regular basis (e.g., every second or third day), starting in late January or early February, or measures such as exclusion netting or slippery panels may be placed over nesting sites on the existing bridges to prevent active nests from becoming established. Any netting installed for nest deterrence must be installed appropriately by an experienced deterrence technician, under the supervision of a qualified biologist, and must be inspected and maintained regularly to avoid the entrapment or entanglement of birds.

With the implementation of MM-BIO-2.1, impacts to migratory birds or their active nests, eggs, or young would be less than significant. **(Less than Significant Impact with Mitigation Incorporated)**

Raptor Predation

Construction of the new overcrossing will provide perching sites for raptors within the Flood Control Basin. Raptors are likely to perch on the new structure when hunting for prey, such as migratory birds, within the Flood Control Basin. However, eucalyptus trees, light poles, and other structures

provide existing perches for raptors in the immediate vicinity of the location of the new overcrossing structure. Therefore, construction of the overcrossing is not expected to result in a substantial increase in predation of migratory birds inhabiting the Flood Control Basin by raptors, or to affect regional populations of these species. **(Less than Significant Impact)**

Collision and Lighting Hazards

Construction of the Highway 101 overcrossing could affect resident or migratory bird species by increasing collision hazards and the amount of artificial lighting in the BSA. Migrating birds, such as songbirds, can be affected by human-built structures because of their propensity to migrate at night and their tendency to be disoriented by artificial light, making them vulnerable to collision with obstructions. Artificial lighting may indirectly impact birds (as well as other mammals) by increasing the nocturnal activity of predators like owls, hawks, and mammalian predators. The presence of artificial light may also influence habitat use by rodents and breeding birds by causing avoidance of well-lit areas, resulting in a net loss of habitat availability and quality.
In the absence of protective measures, the potential impacts of the proposed overcrossing due to bird strikes and increased lighting could be significant due to the potential for large numbers of birds moving along the Baylands to collide with the bridge structure.

Impact BIO-3: The project could result in potential impacts as a result of bird strikes with the bridge structure; as well as disorientation, predation, and habitat impacts from increased lighting. **(Significant Impact)**

MM BIO-3.1: The following measures will be implemented to avoid impacts on bird populations due to potential collisions and project lighting:

- The overcrossing will be designed to minimize the potential for bird strikes; it will not include highly reflective surfaces, suspension cables, transparent surfaces, or features such as small wires or netting that could injure birds.
- No power lines will be suspended above the bridge deck.
- Night lighting on the bridge will be minimized; only lighting needed for safety purposes will be installed. Lighting will be directed at the bridge deck or downward, not outwards toward natural areas, and lights will be shielded to minimize spillover of light into natural areas.

With the implementation of the avoidance and minimization measures described below as part of MM-BIO-3.1, project impacts on bird populations due to potential collisions with the overcrossing structure and increased lighting will be less than significant. **(Less than Significant Impact with Mitigation Incorporated)**

e) Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or as defined by the City of Palo Alto's Tree Preservation Ordinance (Municipal Code Chapter 8.10)?

Trees within the BSA are located outside the Caltrans' right-of-way and are subject to City of Palo Alto requirements. Four trees located within this portion of the BSA would meet the definition of a Protected Tree (under PAMC Chapter 8.10), as described within Appendix D. These trees would be protected and remain in place. Approximately 28 other trees of varying size, species, and health would be removed.

The project would be required to comply with the City's Tree Preservation Ordinance requirements, which provide protective measures for trees during construction. The project would also be required to mitigate either on or off site for removal of trees consistent with the tree replacement ratios described within the City's *Tree Technical Manual* and shown below in Table 4.4-2: Tree Replacement Ratios.

Table 4.4-2: Tree Replacement Ratios

Canopy of Removed Tree*	Replacement Trees	Alternative Tree
4'-9'	Two 24" Box Size	One 36" Box Size
10'-27'	Three 24" Box Size	Two 36" Box Size
28'-40'	Four 24" Box Size	Two 48" Box Size
40'-56'	Six 24" Box Size	Two 48" Box and Two 36" Box Size
56'-60'	Two 24" Box and Two 36" Box + Two 48" Box Size	**
60'+	**	**

*Add half of the difference between the two to the narrowest measurement for the average canopy.

** Replace the tree with a combination of both Tree Canopy and Tree Value Standards.

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

Because the project would be consistent with relevant policies and ordinances, there would be no conflict and any impact would be less than significant. **(Less than Significant Impact)**

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

The proposed project site is located outside of the Santa Clara Valley Habitat Plan and the Stanford University Habitat Conservation Plan. There are no other adopted Habitat Conservation Plans or Natural Community Conservations Plans that include the project site. Therefore, there would be no conflict with the provisions of any adopted plans. **(No Impact)**

4.4.5 Conclusion

With implementation of MM BIO-1.1, MM BIO-2.1, and MM BIO-3.1; as well as compliance with City ordinance requirements, the project would have a less than significant impact on biological resources. **(Less than Significant Impact with Mitigation Incorporated)**

4.5 CULTURAL RESOURCES

The cultural resources discussion in this section is based on the Historic Property Survey Report prepared by Environmental Science Associates in March 2017. The report is included in this Initial Study as Appendix E. The paleontological resources discussion is based on the Paleontological Identification Report prepared by Paleo Solutions in December 10, 2013 (and revised January 20, 2017), which is included as Appendix F.

4.5.1 Environmental Checklist

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
Would the project:					
a) Would the project directly or indirectly destroy a local cultural resource that is recognized by City Council resolution? Would the project adversely affect a historic resource listed or eligible for listing on the National and/or California Register, or listed on the City's Historic Inventory or eliminate important examples of major periods of California history or prehistory?	☐	☐	☐	☒	1,2,6
b) Cause a substantial adverse change in the significance of an archaeological resource as defined in CEQA Guidelines Section 15064.5?	☐	☒	☐	☐	1,2,6
c) Directly or indirectly destroy a unique paleontological resource or site, or unique geologic feature?	☐	☒	☐	☐	1,2,7
d) Disturb any human remains, including those interred outside of dedicated cemeteries?	☐	☒	☐	☐	1,2,6
e) Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either:					
1. a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe that is listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k); or	☐	☒	☐	☐	1,2,6

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
Would the project:					
2. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying this criteria, the significance of the resource to a California Native American tribe shall be considered.	☐	☒	☐	☐	1,2,6

4.5.2 Regulatory Framework

Historic Resources

The National Historic Preservation Act of 1966 (as amended), California Public Resources Code, and CEQA are the basic federal and state regulations governing the preservation of historic and archaeological resources of national, regional, state and/or local significance. The historic significance and eligibility of a building, structure, object, site, or district for listing may be assessed based upon the criteria in the National Register of Historic Places (NRHP) or California Register of Historical Resources (CRHR). Additionally, the City of Palo Alto has identified historic resources and structures that are important to the overall context of the City, including approximately 400 buildings of historic merit, four districts listed on the NRHP, and nine California Points of Historical Interest. The City of Palo Alto has an adopted Historic Preservation Ordinance (PAMC Chapter 16.49), which is intended to protect and enhance historical structures, districts, and neighborhoods in the City.

Archaeological Resources

Section 15064.5 of the state CEQA Guidelines specifies procedures to be used in the event of an unexpected discovery of Native American human remains on nonfederal land. These procedures are outlined in Public Resources Code, Sections 5097 and 5097.98. These codes protect such remains from disturbance, vandalism, and inadvertent destruction; establish procedures to be implemented if Native American skeletal remains are discovered during construction of a project; and establish the Native American Heritage Commission (NAHC) as the authority to resolve disputes regarding disposition of such remains.

Tribal Cultural Resources

Assembly Bill 52 (AB 52) was signed into law in 2014, creating a new category of environmental resources (tribal cultural resources), which must be considered under CEQA. A tribal cultural resource is defined under Public Resources Code Section 21074 as a site, feature, place, cultural landscape, sacred place, or object with cultural value to a California Native American tribe. More specifically, a tribal cultural resource must also be eligible for the CRHR or a local register of

historical resources, or determined by the CEQA lead agency to be significant based on the criteria for listing in the CRHR.

AB 52 also requires lead agencies to provide notice to tribes that are traditionally and culturally affiliated with the geographic area if they have requested to be notified of projects proposed within that area. Where a project may have a significant impact on a tribal cultural resource, consultation is required until the parties agree to measures to mitigate or avoid a significant effect on a tribal cultural resource or when it is concluded that mutual agreement cannot be reached.

4.5.3 Existing Conditions

Cultural Resources

Two structures older than 45 years were documented in the project area, including the building located at 1036 East Meadow Circle (P-43-003049) and the Adobe Creek/Barron Creek Canal (P-43-003048). As described in Appendix E, these structures were not deemed eligible for the HRHP or CRHR, nor are the structures listed on the City of Palo Alto historic register.

No archaeological resources or other evidence of past human use and occupation were identified in the project area (as discussed in Appendix E) including the off-site staging area. Previous studies of the project area have concluded there to be moderate to high potential for buried archaeological resources in the general project vicinity. However, based on observations made during a pedestrian survey, known distribution of sites in the region, previous disturbance from the construction of Highway 101, and the channelization of Adobe and Barron Creeks, and the project geotechnical investigation, the potential for uncovering unknown sites within the project area is significantly lessened. Thus, the potential for uncovered buried archaeological resources to be located in the project area was determined to be low.

Native American Correspondence

As described within Appendix E, a sacred lands search request was sent to the NAHC on June 12, 2013. A response was received on June 20, 2013. A records search of the NAHC sacred land files did not indicate the presence of Native American cultural resources in the vicinity of the project. The NAHC provided a list of Native American individuals/organization that might have additional information or concerns; each was contacted by letter on October 4, 2013.

Ms. Ann Marie Sayers, Chairperson of the Indian Canyon Mutsun Band of Costanoan, responded by telephone on October 30, 2013. Ms. Sayers requested that she be informed of any cultural resources identified in the vicinity of the proposed project and that deep excavation be monitored by a qualified archaeological consultant and a Native American representative. Based on the results of the sensitivity analysis, however, it was recommended that a monitor not be present during construction due to the low potential for archaeological resources in the project area and the limited depth of excavation.

Updated letters were sent with a revised project description to each person on the NAHC list on December 19, 2016. No comments were received in response. Any future correspondence will be

forwarded to the City of Palo Alto. All correspondence sent and received is provided as Appendix A to Appendix E: Historic Property Survey Report, included with this Initial Study.

Paleontological Resources

The project area occupies a late Pliocene structural depression that has been flooded several times in response to Pleistocene glacial cycles. San Francisco Bay is fairly shallow, highly tidal, and is edged by numerous shallow mudflat areas of variable contours. The project area is underlain by silty and organic clays below artificial fill material. No verifiable fossils have been found within the project area. Project activities underlain by geologic units designated as having low sensitivity for paleontological resources.

4.5.4 Impact Evaluation

a) Would the project directly or indirectly destroy a local cultural resource that is recognized by City Council resolution? Would the project adversely affect a historic resource listed or eligible for listing on the National and/or California Register, or listed on the City's Historic Inventory or eliminate important examples of major periods of California history or prehistory?

No eligible or designated cultural or historical resources are located in the project area; therefore, none would be impacted by the proposed project and there would be no impact. **(No Impact)**

b),d) Would the project cause a substantial adverse change in the significance of an archaeological resource as defined in Section 15064.5? Would the project disturb any human remains, including those interred outside of formal cemeteries?

The potential for uncovered buried archaeological resources to be located in the project area is low. Discovery of human remains is unlikely given the location of the project site in comparison to known culturally sensitive areas; however, the project includes excavation and ground disturbance. Should human remains or other archaeological resources be encountered during project construction, a significant impact under CEQA could occur.

Impact CUL-1: Unknown subsurface archaeological or paleontological resources could be present on the site in underlying native soils and could be disturbed during project construction. **(Significant Impact)**

With implementation of the following mitigation measures, potential impacts to subsurface cultural resources would be reduced to a less than significant level.

MM CUL-1.1: In the event any significant cultural materials (including fossils) are encountered during construction grading or excavation, construction within a radius of 50 feet of the find would be halted, the Director of Public Works shall be notified, and a qualified archaeologist shall examine the find and make appropriate recommendations regarding the significance of the find and the appropriate treatment of the resource. Recommendations could include collection, recordation and analysis of any significant cultural materials. A

report of findings documenting any data recovered during monitoring shall be submitted to the Director of Planning.

MM CUL-1.2: Pursuant to Section 7050.5 of the Health and Safety Code, and Section 5097.94 of the Public Resources Code of the State of California in the event of the discovery of human remains during construction, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains. The Santa Clara County Coroner shall be notified and shall make a determination as to whether the remains are Native American. If the Coroner determines that the remains are not subject to his authority, he shall notify the NAHC who shall attempt to identify descendants of the deceased Native American. If no satisfactory agreement can be reached as to the disposition of the remains pursuant to this state law, then the land owner shall reinter the human remains and items associated with Native American burials on the property in a location not subject to further subsurface disturbance. If the Director of Planning finds that the archaeological find is not a significant resource, work would resume only after the submittal of a preliminary archaeological report and after provisions for reburial and ongoing monitoring are accepted.

With implementation of mitigation measures MM CUL-1.1 and 1.2 the project would have a less than significant impact. **(Less than Significant Impact with Mitigation)**.

c) Would the project directly or indirectly destroy a unique paleontological resource or site, or unique geologic feature?

While there are no known paleontological resources in the vicinity and the project area is underlain by geologic units designated as low sensitivity for paleontological resources. There is, however, a potential that paleontological resources could be discovered during construction. Implementation of MM CUL-1.1, however, would ensure that any impacts to paleontological resources are less than significant. **(Less than Significant Impact with Mitigation)**

e.1),e.2) Would the project cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code 21074 that is listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)? Would the project cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code 21074 that is a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 2024.1?

As described previously, a sacred lands search request was sent to the NAHC on June 12, 2013. Letters were also sent to Native American individuals/organization that might have additional information or concerns on October 4, 2013 and December 19, 2016. Aside from telephone correspondence with Ms. Sayers, Chairperson of the Indian Canyon Mutsun Band of Costanoan, none of the tribes or individuals contacted requested formal consultation under AB 52.

In May 2016, the City of Palo received a single request from the Torres Martinez Desert Cahuilla Indians to be contacted in accordance with AB 52. Through subsequent correspondence with Tribal Representatives, however, it was concluded that the Tribe had contacted the City of Palo Alto in error and did not wish to be contacted regarding future projects within the City's jurisdiction. The Tribe is not traditionally or culturally affiliated with the geographic area within the City of Palo Alto; rather, the area they are affiliated with lies over 400 miles southeast of the project site. Because no other tribes have requested to be contacted, no notices in accordance with AB 52 were sent and no further action is required. There is, however, the potential that unknown tribal cultural resources could be uncovered or disturbed during construction activities. This disturbance would be a significant impact under CEQA.

Impact 2.1: Unknown tribal cultural resources could be uncovered or disturbed during construction activities associate with the project. **(Significant Impact)**

With implementation of the following measure, potential impacts to unknown tribal cultural resources would be reduced to a less than significant level.

MM CUL-2.1: In the event that a tribal cultural resource is found during construction, the NAHC will be contacted for information regarding the appropriate tribe and/or persons to notify. Once the appropriate tribal representatives are notified, consultation will take place consistent with AB 52 requirements. Mitigation measures that may be considered to avoid significant impacts (if there is no agreement on appropriate mitigation in discussions with the tribal representatives) may include:

- Avoidance and preservation of the resources in place, including:
  - Planning and construction to avoid the resources and protect the cultural and natural context;
  - Planning greenspace, parks, or other open space, to incorporate the resources with culturally appropriate protection and management criteria;
- Treating the resource with culturally appropriate dignity, taking into account the tribal cultural values and meaning of the resource, including, but not limited to, the following:
  - Preservation in place;
  - Protecting the cultural character and integrity of the resource;
  - Protecting the traditional use of the resource;
  - Protecting the confidentiality of the resource;
  - Permanent conservation easements or other interests in real property, with culturally appropriate management criteria for the purposes of preserving or utilizing the resources or places.

With implementation of MM CUL-2.1, potential impacts to tribal cultural resources would be less than significant. **(Less than Significant with Mitigation)**

4.5.5 Conclusion

Incorporation of MM CUL-1.1 and MM CUL-1.2 would reduce impacts to archaeological and paleontological resources and human remains to a less than significant level. Impacted to tribal cultural resources would be less than significant with implementation of MM CUL-2.1. **(Less than Significant Impact with Mitigation)**

4.6 ENERGY CONSERVATION

Except for very limited amounts of lighting on the proposed overcrossing structure and associated approach structure (similar to existing lighting), energy will only be consumed during the construction phase of the project and will primarily be utilized in the form of diesel fuel (for construction equipment) and gasoline (for worker vehicles).

4.6.1 Environmental Checklist

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
Would the project:					
a) Have an energy impact? Energy impacts may include:					
1. Impacts resulting from amount and fuel type used for each stage of the project.	☐	☐	☒	☐	1-3
2. Impacts on local and regional energy supplies and on requirements for additional capacity.	☐	☐	☒	☐	1-3
3. Impacts on peak and base period demands for electricity and other forms of energy.	☐	☐	☒	☐	1-3
4. Impacts to energy resources.	☐	☐	☒	☐	1-3
5. Impacts resulting from the project's projected transportation energy use requirements.	☐	☐	☒	☐	1-3

4.6.2 Regulatory Framework

Federal Fuel Standards

California crude oil production levels have been declining over the last 30 years; however, the state still accounts for six percent of the United States' crude oil production and petroleum refining capacity.[5] In 2016, 143.4 billion gallons of gasoline were consumed in the United States (setting an annual gasoline consumption record) and 15.5 billion gallons were consumed in California.[6,7] The United States has seen low gasoline prices and high demand in the last few years, though forecast growth in demand is expected to slow as retail prices begin to increase.[8]

The average fuel economy for light-duty vehicles (autos, pickups, vans, and SUVs) in the United States has steadily increased from about 13.1 miles-per-gallon (mpg) in the mid-1970s to 22.0 mpg in

[5] United States Energy Information Administration (EIA). "California State Profile and Energy Estimates Profile Analysis". Accessed July 13, 2017. https://www.eia.gov/state/analysis.php?sid=CA#40.
[6] EIA. Frequently Asked Questions. Accessed July 14, 2017. https://www.eia.gov/tools/faqs/faq.cfm?id=23&t=10.
[7] California State Board of Equalization. Taxable Gasoline, Diesel Fuel, Jet Fuel Ten Year Reports. Accessed July 14, 2017. http://www.boe.ca.gov/sptaxprog/reports/MVF_10_Year_Report.pdf.
[8] EIA. "Short-Term Energy Outlook, U.S. Liquid Fuels". Accessed July 14, 2017. http://www.eia.gov/forecasts/steo/report/us_oil.cfm.

2015.[9] Federal fuel economy standards have changed substantially since the Energy Independence and Security Act was passed in 2007. That standard, which originally mandated a national fuel economy standard of 35 mpg by the year 2020, applies to cars and light trucks of Model Years 2011 through 2020.[10,11] In 2012, the federal government raised the fuel economy standard to 54.5 mpg for cars and light-duty trucks by Model Year 2025.[12]

Local Regulations

Comprehensive Plan

The following Comprehensive Plan policy related to energy would apply to the project.

Policy	Description
N-47	Optimize energy conservation and efficiency

Construction and Demolition Debris Diversion Ordinance

The City's Construction and Demolition Debris Diversion Ordinance (PAMC Chapter 16.14) is based on the California Green Building Code and requires qualifying commercial construction projects to salvage, and/or divert at least 80 percent of project debris from being landfilled. Demolition permits (whole structure and interior non-structural) and building permits with a valuation of $25,000 or greater are subject to the requirements of the ordinance.

4.6.3 Existing Conditions

Aside from limited safety lighting in and around the existing Benjamin Lefkowitz bicycle and pedestrian undercrossing of Highway 101, energy is not consumed at the project site.

4.6.4 Impact Evaluation

a) Would the project have an energy impact? Impacts include the 1) amount and fuel type used for each stage of the project, 2) impacts on local and regional energy supplies and on requirements for additional capacity, 3) impacts on peak and base period demands for electricity and other forms of energy, 4) impacts to energy resources, and 5) impacts resulting from the project's projected transportation energy use requirements.

Construction activities would last approximately 18 months and would require energy for the manufacture and transportation of building materials, preparation of the site (i.e. demolition and

[9] EPA. Table 4-23: Average Fuel Efficiency of U.S. Light Duty Vehicles. Accessed July 14, 2017. http://www.rita.dot.gov/bts/sites/rita.dot.gov.bts/files/publications/national_transportation_statistics/html/table_04_23.html.
[10] U.S. Department of Energy. Energy Independence & Security Act of 2007. Accessed December 7, 2016. http://www.afdc.energy.gov/laws/eisa.
[11] Public Law 110–140—December 19, 2007. Energy Independence & Security Act of 2007. Page 1449. Accessed December 7, 2016. http://www.gpo.gov/fdsys/pkg/PLAW-110publ140/pdf/PLAW-110publ140.pdf.
[12] National Highway Traffic Safety Administration. *Obama Administration Finalizes Historic 54.5 mpg Fuel Efficiency Standards*. Accessed July 14, 2017. https://www.nhtsa.gov/press-releases/obama-administration-finalizes-historic-545-mpg-fuel-efficiency-standards.

grading), and the actual construction of the overpass, approach structures, and trail connections. Petroleum-based fuels, such as diesel fuel and gasoline, would be the primary sources of energy for these tasks.

The overall construction schedule and process for the project is already designed to be efficient in order to avoid excess monetary costs. That is, equipment and fuel are not typically used wastefully on the site because of the added expense associated with renting the equipment, maintaining it, and fueling it. Therefore, the opportunities for efficiency gains during construction are limited. The proposed project does, however, include several measures that will improve the efficiency of the construction process. Implementation of the BAAQMD BMPs, as described in Section 4.3 Air Quality would restrict excessive equipment use by reducing idling times to five minutes or less and would require the applicant to post signs on the project site reminding workers to shut off idle equipment.

The project would also be required to comply with the City's Construction and Demolition Debris Diversion Ordinance. The ordinance requirements are currently enforced through the City's Green Building Program and require projects to salvage, and/or divert at least 80 percent of project debris from landfill.

There will be adverse effects caused by construction because the use of fuels and building materials are fundamental to construction of new structures; however, with implementation of BMPs and recycling requirements, the short-term energy impacts of construction, including impacts to energy resources, would be less than significant. **(Less than Significant Impact)**

4.6.5 Conclusion

Implementation of the proposed project would result in a less than significant impact to energy resources as a result of construction activities. **(Less Than Significant Impact)**

4.7 GEOLOGY AND SOILS

The discussion within this section is based on the information contained within the Preliminary Foundation Report prepared by Parikh Consultants, Inc. and included with this Initial Study as Appendix G.

4.7.1 Environmental Checklist

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
Would the project:					
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:					
1. Rupture of a known earthquake fault, as described on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault (refer to Division of Mines and Geology Special Publication 42.)?	☐	☐	☒	☐	1,2,3,8
2. Strong seismic ground shaking?	☐	☐	☒	☐	1,2,3,8
3. Seismic-related ground failure, including liquefaction?	☐	☐	☒	☐	1,2,3,8
4. Landslides?	☐	☐	☐	☒	1,2,3,8
5. Expansive Soils?	☐	☐	☐	☒	1,2,3,8
b) Expose people or property to major geologic hazards that cannot be mitigated through the use of standard engineering design and seismic safety techniques?	☐	☐	☒	☐	1,2,3,8
c) Be located on a geologic unit or soil that is unstable, or that will become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?	☐	☐	☒	☐	1,2,3,8
d) Cause substantial soil erosion or siltation?	☐	☐	☒	☐	1,2
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	☐	☐	☐	☒	1

4.7.2 Regulatory Framework

Alquist-Priolo Earthquake Fault Zoning Act

The Alquist-Priolo Earthquake Fault Zoning Act (Alquist-Priolo Act) was passed into law following the destructive 1971 San Fernando earthquake. The Alquist-Priolo Act provides a mechanism for reducing losses from surface fault rupture and is intended to ensure public safety by prohibiting the

siting of most structures for human occupancy across traces of active faults that constitute a potential hazard to structures from surface faulting or fault creep.

Seismic Hazards Mapping Act

The Seismic Hazards Mapping Act (SHMA) was passed by the California legislature in 1990 to protect the public from the effects of strong ground shaking, liquefaction, landslides, and other seismic hazards. The SHMA established a statewide mapping program that identifies areas subject to violent shaking and ground failure; the program is intended to assist cities and counties in protecting public health and safety. The California Geological Survey has completed seismic hazard mapping for the portions of California most susceptible to liquefaction, ground shaking, and landslides in the San Francisco Bay Area.

City of Palo Alto Municipal Code

The City of Palo Alto has adopted the California Building Standards Code (CBC) as the basis for the City's Building Regulations (PAMC Title 16). New construction is subject to requirements to perform a detailed soils and geotechnical investigations prior to project construction to identify soil conditions such as expansive soils, unsuitable fill material, or compressible soils. The soils and geotechnical investigation must include construction recommendations to address potentially unsuitable or dangerous conditions.

Within the City of Palo Alto Zoning Ordinance, specifically Chapter 18.40.120, requires soils and geotechnical investigations areas that have been identified as having moderate or high risk for seismic or other geologic hazards. These soils and geotechnical investigations are required to make construction recommendations to minimize geotechnical risk for projects

4.7.3 Existing Conditions

The 2014 Working Group on California Earthquake Probabilities estimates that there is a 72 percent probability that one or more major earthquakes would occur in the San Francisco Bay Area before 2043. An earthquake occurring on any of the fault lines in the region would likely result in seismic ground shaking at the project site. The project site is located within five to seven miles of three fault lines, and the nearest fault is the Cascade Fault located approximately 3.5 miles from the project site. Since no active faults pass through the site, the potential for fault rupture is relatively low. The site does, however, have a high to very high potential for soil liquefaction.

The project site is underlain by clay, gravel, and sandy silt layers and groundwater was encountered at a depth of approximately 9 feet. Soils above the groundwater level area are cohesive and would not be subject to seismically induced dry settlement. Overall the area is relatively flat and would not be subject to landslides, excessive erosion, or siltation.

4.7.4 Impact Evaluation

a),b),c) Would the project expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving: 1) rupture of a known earthquake fault, 2) strong seismic ground shaking, 3) seismic-related ground failure, 4) landslides, or

5) expansive soils? Would the project expose people or property to major geologic hazards that cannot be mitigated through the use of standard engineering design and seismic safety techniques? Would the project be located on a geologic unit or soil that is unstable, or that will become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?

The project site is located within the seismically-active San Francisco Bay region, but is not located within a mapped fault zone. There are no known earthquake faults crossing the site; therefore, the likelihood of primary ground rupture is low.

The project would be completed in accordance with City of Palo Alto codes and standards to reduce damage from seismic activity. Further, the project would be designed in accordance with a Caltrans standards (including Caltrans Fault Database information) and in accordance with the recommendations contained within the project's design-level geotechnical investigation.

According to the California Seismic Hazards Zone Map, the project site is not located within an earthquake induced landslide area; thus, there would be no impact.

The proposed project site is located within an area subject to liquefaction. The proposed bridge overcrossing and associated facilities would be constructed to meet the current California Building Codes and the City of Palo Alto Municipal Code, which would reduce impacts to a less than significant level.

Expansive soils were not identified as a potential geological or geotechnical issue at the project site (per Appendix G). Conformance with Caltrans and City of Palo Alto civil, geotechnical engineering, and construction best practices and regulations would further reduce any risks to life or property to a less than significant level

There are no geologic conditions that would affect the feasibility of the bridge overcrossing or approach structures based on Caltrans and City of Palo Alto civil, geotechnical engineering, and construction best practices and regulations. Geologic hazards at the project site can be avoided through the use of standard engineering design and seismic safety techniques. **(Less than Significant Impact)**

d) Would the project result in substantial soil erosion or siltation?

The project site is flat, lessening the chance for substantial erosion or siltation. Conformance with Caltrans and City of Palo Alto civil, geotechnical engineering, and construction and post-construction stormwater BMPs (described further in Section 4.10 Hydrology and Water Quality) would further reduce any risk of substantial erosion or siltation to a less than significant level. (**Less than Significant Impact)**

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

The project does not propose the use of septic tanks or alternative wastewater disposal systems. **(No Impact)**

4.7.5 Conclusion

The project would not result in significant geology or soils impacts. **(Less than Significant Impact)**

4.8 GREENHOUSE GAS EMISSIONS

4.8.1 Environmental Checklist

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
Would the project:					
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐	1,2,3
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☐	☒	1,2,3

4.8.2 Regulatory Framework

State

Assembly Bill 32 and Executive Order S-3-05

Assembly Bill 32 (AB 32), also known as the Global Warming Solutions Act, was passed in 2006 and established a goal to reduce Greenhouse Gas (GHG) emissions to 1990 levels by 2020. Prior to the adoption of AB 32, the Governor of California also signed Executive Order S-3-05 into law, which set a long term objective to reduce GHG emissions to 80 percent below 1990 levels by 2050.

In December 2008, the California Air Resources Control Board (CARB) approved the *Climate Change Scoping Plan*, which proposes a comprehensive set of actions designed to reduce California's dependence on oil, diversify energy sources, save energy, and enhance public health, among other goals. The First Update to the *Climate Change Scoping Plan*, was approved on May 22, 2014 and builds upon the previous plan with new strategies and recommendations. The First Update defines CARB's priorities over the next five years and lays the groundwork to reach long-term goals set forth in Executive Order S-3-05.[13]

Executive Order B-30-15

On April 29, 2015, Governor Brown issued Executive Order B-30-15 establishing a GHG reduction target for California of 40 percent below 1990 levels by 2030. This is considered a mid-term target for implementation of reducing statewide GHG emissions to 80 percent below 1990 levels by 2050. State agencies with jurisdiction over sources of GHG emissions were directed to implement measures to achieve reductions of GHG emissions to meet the 2030 and 2050 targets.

A Second Update to the *Climate Change Scoping Plan* has been released in draft form and will be considered for adoption by CARB in June 2017. It specifically addresses the 2030 mid-term target

[13] CARB. *First Update to the Climate Change Scoping Plan*. Accessed April 12, 2017. https://www.arb.ca.gov/cc/scopingplan/2013_update/first_update_climate_change_scoping_plan.pdf.

established under SB 32 and identifies state and local actions and programs to reduce GHG emissions.

SB 32 and AB 197

Senate Bill (SB 32) and AB 197 were signed into law in September 2016. SB 32 legislation amends provisions of AB 32, the California Global Warming Solutions Act of 2006 (Health and Safety Code Division 25.5), to require CARB to ensure that statewide GHG emissions are reduced to 40 percent below the 1990 level by December 31, 2030. This legislation incorporates the Executive Order B-30-15 target discussed above into state law. Changes to the California Health and Safety Code under the companion AB 197 legislation call for each scoping plan update to identify emissions reduction measures and projected GHG emissions reductions.

Regional

Bay Area 2017 Clean Air Plan

BAAQMD approved the *Bay Area 2017 Clean Air Plan* (2017 CAP) on April 17, 2017. The 2017 CAP focuses on two closely-related BAAQMD goals: protecting public health and protecting the climate. Consistent with the GHG reduction targets adopted by the state of California, the 2017 CAP lays the groundwork for the BAAQMD's long-term effort to reduce Bay Area GHG emissions 40 percent below 1990 levels by 2030 and 80 percent below 1990 levels by 2050.

City of Palo Alto Sustainability and Climate Action Plan

The City of Palo Alto's Climate Action Plan was adopted in December 2007, and updated goals were adopted in 2010. This plan addresses measures that the City's municipal operations and residents should implement to reduce GHG emissions. By 2014, the City of Palo Alto cut its GHG emissions by approximately 32 percent from 2005 levels and 37 percent from 1990 levels. A combination of actions led to these reductions, including use of entirely carbon-neutral electricity sources by the municipal utility.[14]

In November of 2016, the Palo Alto City Council adopted a framework for its Sustainability and Climate Action Plan (S/CAP). The goal of the S/CAP is to achieve an 80 percent reduction in GHG emissions below 1990 levels by 2030, as well as address broader issues of sustainability.

4.8.3 Existing Conditions

The project site is undeveloped and does not generate GHG emissions.

4.8.4 Impact Evaluation

a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

[14] City of Palo Alto. "Sustainability and Climate Action Plan". Accessed March 7, 2017. http://www.cityofpaloalto.org/services/sustainability/sustainability_and_climate_action_plan/default.asp

The BAAQMD CEQA Guidelines and City of Palo Alto do not suggest a threshold of significance for short-term construction-related GHG emissions. Based on the size of the project, the amount of ground disturbance and construction-related activities necessary, and implementation of BAAQMD BMPs discussed in Section 4.3 Air Quality, the construction phase of the project would not make a cumulatively considerable contribution of GHG emissions to cumulative GHG emissions.

Travel by automobile accounts for the largest source of GHG emissions in the City of Palo Alto (according to the S/CAP). By making the crossing of Highway 101 at Adobe Creek a year-round pedestrian/bicycle facility, rather than only being seasonally available, nearly twice as many yearly trips are projected (up to 74,000 estimated trips) than currently use the existing underpass. While not all these trips would have been taken by vehicle, a significant number can be expected to represent car trips removed from the arterial and highway system. Therefore, once complete, the project would not have any operational GHG impacts and is intended to actually lessen vehicle-related GHG emissions by providing a dedicated bicycle and pedestrian connection over Highway 101. Thus, the project would result in a less than significant GHG impact. **(Less than Significant Impact)**

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

The 2017 CAP contains control measures, consistent with the state's climate protection goals, aimed at reducing Bay Area GHG emissions to 40 percent below 1990 levels by 2030 and 80 percent below 1990 levels by 2050. The project would be consistent with relevant Transportation Control Measure TR9: Bicycle and Pedestrian Access and Facilities, which encourages planning for bicycle and pedestrian facilities. The project is consistent with, and partially implements, the City's S/CAP framework strategy T-FAC-1, which calls for expanding the City's bicycle infrastructure to facilitate non-automobile mobility options. Therefore, development of the project would not result in an impact related to consistency with or implementation of the 2017 CAP or City's S/CAP. **(No Impact)**

4.8.5 Conclusion

The proposed project would not generate substantial construction-related GHG emissions considered to have a significant impact on global climate change, nor would it conflict with applicable GHG emissions reducing policies. Implementation of BAAQMD's recommended BMPs would further reduce impacts as a result of GHG emissions to a less than significant level. **(Less than Significant Impact)**

4.9 HAZARDS AND HAZARDOUS MATERIALS

The following discussion is based on information contained within the Hazardous Materials Assessment prepared by Environmental Science Associates and included with this Initial Study as Appendix H.

4.9.1 Environmental Checklist

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
Would the project:					
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☒	☐	☐	1,2,3,9
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☒	☐	☐	1,2,9
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☐	☒	1,2,9
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, will it create a significant hazard to the public or the environment?	☐	☐	☐	☒	1,2,9
e) Expose people or structures to a significant risk of loss, injury, or death involving wildland fires.	☐	☐	☐	☒	1,2
f) Result in a safety hazard from a public airport for people residing or working within the project area?	☐	☐	☒	☐	1,2,11
g) For a project within the vicinity of a private airstrip, will the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒	1,2,11
h) Impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒	1,2

4.9.2 Regulatory Framework

Hazardous materials encompass a wide range of substances, some of which are naturally occurring and some of which are man-made. Examples include pesticides, herbicides, petroleum products, metals (e.g., lead, mercury, arsenic), asbestos, and chemical compounds used in manufacturing. Determining if such substances are present on or near project sites is important because exposure to hazardous materials above regulatory thresholds can result in adverse health effects on humans, as well as harm to plant and wildlife ecology.

Due to the fact that hazardous materials have properties that are toxic to humans and/or the ecosystem, there are multiple regulatory programs in place designed to minimize the chance for unintended releases and/or exposures to occur. Other programs set forth remediation requirements at sites where contamination has occurred. Hazardous waste generators and hazardous materials users in the City are required to comply with regulations enforced by several federal, state, and county agencies. The regulations are designed to reduce the risk associated with exposure to hazardous materials and minimize adverse environmental effects. State and federal construction worker health and safety regulations (federal Occupational Safety and Health Administration [OSHA] and California OSHA [Cal/OSHA]) require protective measures during construction activities where workers may be exposed to asbestos, lead, and/or other hazardous materials.

4.9.3 Existing Conditions

The project site is not included on a list of hazardous materials sites compiled pursuant to Government Code section 65962 (Cortese List). Three Leaking Underground Storage Tank clean-up sites are located in 0.25 mile of the site in the City of East Palo Alto (at 1979 Pulgas Avenue, 1800 West Bayshore Boulevard, and 940 O'Connor Street); however, these sites are contained and not expected to impact the project.

Past soil and groundwater sampling analyses indicate that aerially deposited lead is the primary constituent of concern at the project site. This situation is common along highways and resulted from lead being emitted from exhaust tailpipes when lead was formerly a constituent of gasoline. Soil sampling in the project area detected lead concentrations at levels considered Hazardous Waste under California criteria at depths ranging from 0 to 1.5 feet below ground surface. Lead concentrations in deeper soil samples were below hazardous waste thresholds. With respect to groundwater, several chemical constituents were identified; however, none was detected at levels that exceed state thresholds for hazardous materials. No metals or other constituents of concern in groundwater exceeded hazardous waste thresholds. Previously performed groundwater analyses did not reveal the presence of contamination that would require disposal as a hazardous waste.

The nearest public school to the site is Fairmeadow Elementary School, which is approximately 0.80 mile southwest. The Google Children's Center (3801 East Bayshore Road) is located approximately 250 feet from the nearest construction activities associated with the bridge approach structure on the

east side of Highway 101, and Pinewood School Activity Center (3750 Fabian Way) is located immediately adjacent to the proposed Adobe Creek Trail Reach.[15]

4.9.4 Impact Evaluation

a),b) Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials? Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

Construction of the proposed project would require the temporary use of gasoline-, diesel- or electric-powered equipment; as well as the use of hazardous materials including petroleum products, lubricants, cleaners, paints, and solvents. Once operational, these materials would also be utilized for occasional maintenance on an as-needed basis (likely not more than once each year). These materials would be used in accordance with relevant federal, state, and local laws, as required by the City of Palo Alto. If used as directed, these materials would not pose a hazard to the environment or workers or persons in the vicinity.

Based on soil and groundwater sampling analyses conducted in the project area, aerially deposited lead (specifically at shallow depths of 0 to 1.5 feet below the ground surface is the primary hazardous material of concern at the project site). During grading and construction activities, this lead could be disturbed in soils and potentially impact workers, area residents, or the environment.

Impact HAZ-1: Aerially deposited lead located in soils at the project site could be disturbed during grading and construction activities and potentially impact workers, area residents, or the environment. **(Significant Impact)**

In order to ensure worker, resident, and environmental safety during and after construction, development and implementation of construction risk and spoils management plan (CRSMP) shall occur.

MM HAZ-1.1: A CRSMP shall be prepared for the project prior to the start of any ground-disturbing activities. The CRSMP shall include necessary procedures to ensure that excavated materials are stored, managed, and disposed of in a manner that is protective of human health and the environment in accordance with applicable laws and regulations. The CRSMP shall include the following components:

- A site-specific health and safety plan (HASP) shall be prepared by a qualified environmental professional in accordance with federal OSHA regulations (29 CFR 1910.120) and State of California OSHA regulations (8 CCR 5192). The HASP shall include required measures to protect construction workers and the general public by

[15] The Google Children's Center is a childcare facility and the Pinewood School Activity Center is an athletic facility used by the sports teams of Pinewood School in Los Altos. The Activity Center is not used for classrooms/educational instruction.

including engineering controls, monitoring, and security measures to prevent unauthorized entry to the construction area and to reduce hazards outside of the construction area. If prescribed contaminant exposure levels are exceeded, personal protective equipment shall be required for workers in accordance with state and federal regulations.

- The CRMSP shall include step-by-step procedures for evaluation, handling, stockpiling, storage, testing, and disposal of excavated material, including criteria for: (1) reuse within the project area; (2) stockpiling within the project area; and (3) offsite disposal shall be included. Excavated materials shall be inspected prior to initial stockpiling, and spoils that are visibly stained and/or have a noticeable odor should be stockpiled separately to minimize the amount of material that may require special handling. The chemical quality of the spoils intended for reuse shall be characterized, and spoils should be reused onsite only if they meet the reuse criteria established in the Department of Toxic Substances Control Variance obtained by Caltrans (Variance No. V09HQSCD006). If some of the spoils do not meet the reuse criteria and/or debris is identified, these materials shall be disposed of in accordance with applicable state and federal waste disposal requirements.
- The CRMSP shall also include procedures to be implemented if unknown subsurface conditions or contamination are encountered, such as previously unreported tanks, wells, or contaminated soils shall be included in the CRSMP.

With implementation of a CRSMP for the project (as described above in MM HAZ-1.1), potential impacts to workers, area residents, or the environment as a result of exposure to lead in soils in the project area would be reduced to a less than significant level. **(Less than Significant Impact with Mitigation Incorporated)**

c) Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

The Google Children's Center (a daycare facility) is located approximately 250 feet from the nearest construction activities. However, the proposed project would not emit hazardous emissions or handle acutely hazardous materials, substances, or waste during operation and there would be no impact. **(No Impact)**

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

The California Supreme Court issued an opinion that CEQA does not generally require an analysis of the impacts of locating development in areas subject to environmental hazards (i.e., impacts to a project) unless the project would exacerbate existing environmental hazards.[16] The proposed project site is not on a list of hazardous materials sites pursuant to Government Code Section 65962.5. The proposed project would not create a hazard to the public or the environment from contamination in excess of soil and groundwater cleanup goals because none currently exist for the site. **(No Impact)**

e) Would the project expose people or structures to a significant risk of loss, injury, or death involving wildland fires?

The project is not located in a designated Fire Hazard Severity Zone and is not subject to hazards as a result of wildland fires; therefore, there would be no impact.[17] **(No Impact)**

f),g) Would the project result in a safety hazard from a public airport for people residing or working within the project area? For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?

The project is not located in the vicinity of a private airport. However, the City-owned Palo Alto Airport is located approximately 1.30 miles north. The bridge overcrossing approach on the northeast side of Highway 101 is located within the Airport Influence Area but is not within a defined Airport Safety Zone, as described in the Comprehensive Land Use Plan (CLUP) for the Palo Alto Airport. The proposed project involves construction of a pedestrian and bicycle overcrossing with a total height of less than 40 feet above existing grade. It would not require referral to the Santa Clara County Airport Land Use Commission, per CLUP Section 4.2.1.1 Review of Development Projects. **(Less than Significant Impact)**

h) Would the project impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan?

Construction Activities

During construction, temporary roadway closures (on Highway 101 and East and West Bayshore Roads) will be necessary, in particular when the bridge span is lifted into place. These closures would be temporary and would occur during non-commute times. Travel could be reduced to one lane on East and West Bayshore Roads at times; however, these closures would also be temporary. Emergency access would be accommodated during the entire construction period, as described below.

A Construction Logistics Plan and Traffic Control Plan would be prepared for the project and approved by the City to address the project construction hours, schedule, and traffic control issues. The requisite Traffic Control Plan would show the location and details of temporary traffic signals, signs, cones, and barricades needed to protect, warn, direct, and guide traffic. The City's Traffic

[16] California Supreme Court published opinion in *California Building Industry Association v. Bay Area Air Quality Management District, 62 Cal. 4th 369* (No. S 213478), filed December 17, 2015.
[17] California Department of Forestry and Fire Protection. *Fire Hazard Severity Zones – Santa Clara County*. October 8, 2008. http://www.fire.ca.gov/fire_prevention/fhsz_maps_santaclara.php. Accessed March 31, 2017.

Control Guidelines and requirements require that projects always maintain access to abutting parcels and access for emergency vehicles. Further, the City's Construction Logistics Plan Preparation Guidelines prohibit work on East and West Bayshore Roads between the hours of 7:00 a.m. to 9:00 a.m. and 4:00 p.m. to 6:00 p.m.; thus, traffic delays associated with utility relocation or street improvements would occur only during non-peak traffic hours, which would lessen any potential for conflict with emergency vehicle access. For these reasons, the project would not impair implementation of or physically interfere with the City's Emergency Operations Plan preparedness and planning, emergency response, or long-term recovery activities.

Project Operation

The project would not block evacuation or emergency logistics routes. The project would not impair or interfere with implementation of the City's emergency response plans or any statewide emergency response or evacuation plans; rather, it would facilitate access and mobility for pedestrians and bicycles in an area where access is currently constrained. **(Less than Significant Impact)**

4.9.5 Conclusion

With implementation of MM HAZ-1.1, the project would result in a less than significant hazards and hazardous materials impact. (**Less than Significant Impact with Mitigation Incorporated)**

4.10 HYDROLOGY AND WATER QUALITY

The following discussion is based on information contained within the Water Quality Technical Memo prepared by BKF Engineers and included with this Initial Study as Appendix H.

4.10.1 Environmental Checklist

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
Would the project:					
a) Violate any water quality standards or waste discharge requirements?	☐	☐	☒	☐	1,2
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there will be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells will drop to a level which will not support existing land uses or planned uses for which permits have been granted)?	☐	☐	☒	☐	1,2,8
c) Substantially increase the rate, volume, or flow duration of storm water runoff or alter the existing drainage pattern of the site or area, including altering the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site, including increase in-stream erosion?	☐	☐	☒	☐	1,2,8
d) Result in stream bank instability	☐	☐	☐	☒	1,2,8
e) Significantly increase the rate, volume, or flow duration of storm water runoff in a manner which would result in new or increased flooding on-or off-site?	☐	☐	☒	☐	1,2,8
f) Create or contribute runoff water which will exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	☐	☐	☒	☐	1,2
g) Provide substantial additional sources of pollutants associated with urban runoff or otherwise substantially degrade water quality?	☐	☐	☒	☐	1,2
h) Place housing within a 100-year flood hazard area as mapped on a Federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	☐	☐	☐	☒	1,2,12
i) Place within a 100-year flood hazard area structures which will impede or redirect flood flows?	☐	☐	☐	☒	1,2,12

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
Would the project:					
j) Expose people or structures to a significant risk of loss, injury or death involve flooding by placing housing or other development within a 100-year flood hazard area or a levee or dam failure inundation area?	☐	☐	☐	☒	1,2
k) Inundation by seiche, tsunami, or mudflow?	☐	☐	☐	☒	1,2

4.10.2 Regulatory Framework

Water Quality

The United States Army Corps of Engineers (USACE) has primary federal responsibility for administering regulations over waters of the United States within the project area. The USACE acts under Sections 9 and 10 of the Rivers and Harbors Act, which govern specified activities in waters of the United States; and Section 404 of the Clean Water Act (CWA), which governs specified activities in other waters of the United States (including wetlands). The USACE requires that a permit be obtained if a project proposes to place structures within, over, or under navigable waters and/or discharging dredged or fill material into waters of the United States.

Section 401 of the CWA requires issuance of a Water Quality Certification by the State Water Resources Control Board (SWRCB) or Regional Water Quality Control Board (RWQCB) when the project requires a CWA Section 404 Permit from the USACE. The SWRCB and RWQCB also regulate other waste discharges to land within California through the issuance of Waste Discharge Requirements under authority of the Porter-Cologne Water Quality Act.

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Stormwater

Stormwater runoff water quality is regulated under Section 402 of the CWA by the federal National Pollutant Discharge Elimination System (NPDES) program to control and reduce pollutants to water bodies from surface water discharges. The SWRCB has developed and issued a statewide NPDES permit to regulate storm water discharges from Caltrans activities on its highways and facilities. Caltrans construction projects are regulated under the statewide permit, and projects performed by other entities on Caltrans right-of-way (encroachments) are regulated by the SWRCB's Construction General Permit. Construction projects with over one acre of disturbance also require that a Storm Water Pollution Prevention Plan (SWPPP) be prepared and implemented during construction. Caltrans activities disturbing less than one acre require a Water Pollution Control Program.

Locally, the NPDES program is administered by the San Francisco Bay RWQCB. The RWQCB worked with cities and counties throughout the region to prepare and adopt a Municipal Regional Stormwater Permit (MRP). This MRP identifies minimum standards and provisions that the City of Palo Alto, as a permittee, must require of development projects within the City limits.

4.10.3 Existing Conditions

Adobe Creek

The majority of the project site is located within the Adobe Creek watershed, which covers an area of approximately 10 square miles in northern Santa Clara County. Adobe Creek originates on the northeastern facing slopes of the Santa Cruz Mountains and flows northerly towards the San Francisco Bay. Other major tributaries in the upper watershed area are Moody and Purissima Creeks. The portion of Adobe Creek at the south side of Highway 101 in the project area is contained within an engineered channel that is actively managed for flood control purposes. The portion of Adobe Creek adjacent to the project site on the north side of Highway 101 is more natural, but would not be directly impacted by the proposed project.

Barron Creek

The existing commercial parking lot that would be reconfigured and the approach ramp structure on the west side of Highway 101 are located adjacent to (and above the ordinary high water line of) Barron Creek at its confluence with Adobe Creek. The Barron Creek watershed covers approximately three square miles of urban area between the Matadero and Adobe Creek watersheds. Barron Creek is approximately five miles long, originating in the Town of Los Alto Hills and flowing in a northeasterly direction through residential, commercial, and industrial areas within the City of Palo Alto. Barron Creek has been greatly modified for flood control purposes and the majority of the creek length flows within a concrete channel or is piped below grade. Barron Creek joins neighboring Adobe Creek just west of Highway 101. It has no major tributaries.

Flooding

The proposed project area lies within flood zone AE and has a base flood elevation of 11 feet, as designated by the Federal Emergency Management Agency.[18]

4.10.4 Impact Evaluation

a),g) Would the project violate any water quality standards or waste discharge requirements? Would the project provide substantial additional sources of pollutants associated with urban runoff or otherwise substantially degrade water quality?

Construction of the project would require excavation, drilling for bridge overcrossing foundations structures, grading, and paving. In addition, construction materials and equipment would be moved on and off of the site as necessary for the duration of construction. These construction activities would temporarily increase the amount of unconsolidated materials on site, and grading activities could increase erosion and sedimentation that could be carried by runoff into natural waterways, which could increase sedimentation impacts to Barron Creek, Adobe Creek, and the San Francisco Bay.

[18] Federal Emergency Management Act. "National Flood Hazard Layer". Accessed April 17, 2017. http://www.arcgis.com/home/webmap/viewer.html?webmap=cbe088e7c8704464aa0fc34eb99e7f30&extent=-121.88620702655062,37.367936536613456,-121.86002866656457,37.3791910545685.

Because construction activities could temporarily increase sedimentation and pollutant loads, the project would be required to develop and implement Best Management Practices (BMPs) to control erosion and sedimentation during construction. The project applicant would be required to comply with the state's Construction General Permit for Storm Water Discharges Associated with Construction Activity. This entails filing a Notice of Intent, paying a filing fee, and preparing and implementing a site-specific SWPPP (which includes both construction-stage and post-construction BMPs for stormwater quality protection). Preparation of and compliance with a SWPPP as part of the NPDES program is mandated by state and federal statutes. Impacts to water quality during construction would be less than significant as a result.

As described below, the project includes post-construction stormwater treatment facilities. As a result, the project would not result in a substantial degradation of water quality during its operational phase. **(Less than Significant Impact)**

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

Minor amounts of new impervious surfaces to connect the bridge overcrossing and approach structures to existing pathways and to pave the graveled portion of the Adobe Creek Reach Trail is proposed. The project would not utilize or otherwise deplete groundwater supplies, nor would it interfere with groundwater recharge. Thus, the project would not result in a significant impact. **(Less than Significant Impact)**

c),d) Would the project substantially increase the rate, volume, or flow duration of storm water runoff or alter the existing drainage pattern of the site or area, including altering the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site, including increase in-stream erosion? Would the project result in stream bank instability?

The proposed project would provide a pedestrian and bicycle overcrossing of Highway 101 near Adobe Creek; however, no support structures will be placed in the Adobe Creek or Barron Creek channel such that siltation or erosion would occur. Any improvements (including pavement of existing graveled trail areas) would occur at the top-of-bank and above the ordinary high water line. These improvements would be minor and would also not cause erosion, siltation, or bank destabilization because the channels are concrete and not prone to instability. During construction, the project would implement stormwater BMPs and SWPPP requirements so that substantial erosion would not occur and any impact would be less than significant. **(Less than Significant Impact)**

e) Would the project increase the rate, volume, or flow duration of storm water runoff in a manner which would result in new or increased flooding on-or off-site?

The proposed project would not significantly alter the existing drainage pattern of the site or overall grades in the area. While structural support elements for the bridge overcrossing and new pavement

for the pedestrian and bicycle connections would be constructed, they would involve minor amounts of new paving and would not alter the course of nearby Adobe or Barron Creeks such that flooding would occur. New stormwater treatment and self-retention areas will be provided as part of the project to slow and retain stormwater flows, as described further below. For these reasons, impacts would be less than significant. **(Less than Significant Impact)**

f) Would the project create or contribute runoff water which will exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?

The proposed project would result in approximately 1.07 acre of new impervious surfaces, primarily associated with new paving to connect the bicycle and pedestrian pathways to the bridge crossover approach structures and partially paving the Adobe Creek Reach Trail (which is currently a graveled surface). West of Highway 101, the bridge overcrossing approach structure would include construction of a retention/stormwater treatment area that would then flow into the City's existing storm drain system in West Bayshore Road. On the east side of Highway 101, water will flow into a self-retaining area to be constructed adjacent to the bridge overcrossing approach structure. As a result of implementation of these stormwater treatment BMPs, the project would not exceed the capacity of existing stormwater drainage systems nor would it result in a substantial additional source of polluted runoff. Further, the project does not include uses such as new traffic lanes for motor vehicle use that would result in new sources of polluted runoff. **(Less than Significant Impact)**

h),i),j) Would the project place housing within a 100-year flood hazard area as mapped on a Federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map? Would the project place within a 100-year flood hazard area structures which will impede or redirect flood flows? Would the project expose people or structures to a significant risk of loss, injury or death involve flooding by placing housing or other development within a 100-year flood hazard area or a levee or dam failure inundation area?

The proposed project does not propose housing and would not place housing within a 100-year flood hazard area as mapped on a Federal Flood Hazard Boundary, Flood Insurance Rate Map, or other flood hazard delineation map. The project site is also not subject to inundation from dam failure.[19] Additionally, the project does not propose any modifications that would impede or redirect flood flows, nor would the project exacerbate flooding risks in any way. As a result, there would be no impact. **(No Impact)**

k) Would the project expose people or structures to inundation by seiche, tsunami, or mudflow?

The project site is flat and would not be subject to, nor would it exacerbate, mudflow risks. The project site is not located within a mapped Tsunami Inundation Area and not subject to seiches due to its distance (approximately 0.45 mile) from the shoreline of the San Francisco Bay.[20] Because the

[19] City of Palo Alto. *Comprehensive Plan Update Hydrology and Water Quality Draft Existing Conditions Report.* Accessed. April 18, 2017. http://www.paloaltocompplan.org/ExistingConditions/7/Chapter_7.html#p=32.
[20] California Emergency Management Agency. *Tsunami Inundation Maps*. March 18, 2017. http://www.conservation.ca.gov/cgs/geologic_hazards/Tsunami/Inundation_Maps/SantaClara/Documents/Tsunami_Inundation_MountainView_Quad_SantaClara.pdf.

proposed project would not increase or worsen mudflow, tsunami, or seiche risk, there would be no impact. **(No Impact)**

4.10.5 Conclusion

With implementation of the project SWPPP and construction and operation stormwater BMPs, the proposed project would result less than significant impacts to hydrology and stormwater quality. **(Less than Significant Impact)**

4.11 LAND USE AND PLANNING

4.11.1 Environmental Checklist

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
Would the project:					
a) Physically divide an established community?	☐	☐	☐	☒	1,2
b) Conflict with any applicable City land use plan, policy, or regulation (including but not limited to the Comprehensive Plan, S/CAP, or the City's Zoning Ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☐	☒	1,2,3
1) Substantially adversely change the type or intensity of existing or planned land use in the area?	☐	☐	☐	☒	1,2,3
2) Be incompatible with adjacent land uses or with the general character of the surrounding area, including density and building height?	☐	☐	☐	☒	1,2,3
3) Conflict with established residential, recreational, educational, religious, or scientific uses of an area?	☐	☐	☐	☒	1,2,3
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	☐	☐	☐	☒	1,2

4.11.2 Regulatory Framework

City of Palo Alto Comprehensive Plan

The City of Palo Alto Comprehensive Plan guides future development within the City. The Comprehensive Plan includes goals, policies, and programs related to land use, the natural environment, business and economics, and community services. The Comprehensive Plan land use map identifies land use designations for properties within the City. The type of development and uses allowed within each land use designation is described in the Land Use and Community Design Element. The Comprehensive Plan land uses are further detailed and implemented through the city's Municipal Code and Zoning Ordinance.

The following policies are contained within the Comprehensive Plan and are relevant to the proposed project.

Policy	Description
L-68	Integrate creek sand green spaces with the street and pedestrian/bicycle path system.
T-14	Improve pedestrian and bicycle access to and between local destinations, including public facilities, schools, parks, open space, employment districts, shopping centers, and multimodal transit stations.
T-17	Increase cooperation with surrounding communities and other agencies to establish and maintain off-road bicycle and pedestrian paths and trails utilizing creek, utility, and railroad rights-of-way.
T-18	Support the development of the Santa Clara County Countywide Bicycle System, and other regional bicycle plans.
T-22	Improve amenities such as seating, lighting, bicycle parking, street trees, and interpretive stations along bicycle and pedestrian paths and in City parks to encourage walking and cycling and enhance the feeling of safety
T-42	Address the needs of people with disabilities and comply with the requirements of the Americans with Disabilities Act (ADA) during the planning and implementation of transportation and parking improvement projects.

East Meadow Circle/Fabian Way Concept Plan

The East Meadow Circle/Fabian Way Concept Plan outlines a vision for the area roughly bounded by Highway 101, Charleston Road, and Louis Road in Palo Alto (adjacent to the west of the proposed project). The plan identifies the kinds of uses and the types of future development that are desirable in the area. The plan includes specific policies and programs pertaining to each of three subareas within the plan, as well as recommendations for improvements to the area bicycle network. The plan includes the following policies, which are relevant to the proposed project.

Policy	Description
EMC-6	Provide new routes along the Adobe Creek right-of-way, Barron Creek, and Sterling Canal
EMC-7	Improve access to the Baylands
EMC-7.1	Continue to pursue funding for the design and construction of a pedestrian/bike overpass/underpass that will provide year-round access to the Baylands in the vicinity of the current seasonal underpass at Adobe Creek

4.11.3 Existing Conditions

In the immediate vicinity of the bridge overcrossing on the east side of Highway 101, there is undeveloped open space and commercial and light-industrial office uses farther to the north and south. The area is designated Publicly Owned Conservation Land within the City of Palo Alto Comprehensive Plan land use map, and is zoned Public Facility (PF) with a Site and Design Review Combining District (D) overlay.

The bridge overcrossing approach and Adobe Creek Reach Trail area on the west side of Highway 101 are surrounded by commercial and light-industrial office uses. The project crosses multiple parcels that have different zoning and land use designations. On the east side of Highway 101 the Comprehensive Plan land use designation is Publicly Owned Conservation Land. On the west side of Highway 101 the land use designations are Light Industrial and Research Office.

The Caltrans Highway 101 roadway right-of-way does not have a Comprehensive Plan land use designation, but is zoned Public Facility (PF). From east to west the project would be located on parcels zoned Public Facility with a Site and Design Overlay (PF)(D), PF, Research Office and Limited Manufacturing (ROLM), and General Manufacturing (GM).

Public infrastructure facilities (such as the proposed bridge overcrossing and associated bicycle/pedestrian improvements) would be considered allowed uses in all zoning districts within the City of Palo Alto.

4.11.4 Impact Evaluation

a) Would the project physically divide an established community?

The project would provide a bicycle and pedestrian overcrossing of Highway 101 to replace the current undercrossing, which is only usable during the dry season. The proposed project, therefore, would not physically divide an established community but rather would facilitate access between the east and west side of Highway 101. (**No Impact)**

b) Would the project conflict with any applicable City land use plan, policy, or regulation (including but not limited to the Comprehensive Plan, CAP, or the City's Zoning Ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?

The project proposes an ADA-compliant bicycle and pedestrian crossing of Highway 101 and connections to existing bicycle and pedestrian pathways supporting local and regional bike access between recreational, residential, and commercial uses in the vicinity. Lighting, landscaping, and signage would be included to enhance safety and usability. The project is consistent with relevant land use plans and policies, including the previously-described Comprehensive Policies (addressing the need for safe, accessible bicycle infrastructure) and East Meadow Circle/Fabian Way Concept Plan policies (addressing the need for area trail improvements and year-round access to the Baylands in the vicinity of the current seasonal underpass at Adobe Creek). Thus, there would be no conflict and no impact. **(No Impact)**

b)1) Would the project substantially adversely change the type or intensity of existing or planned land use in the area?

The proposed project would replace and improve an existing bicycle and pedestrian crossing of Highway 101. While an existing commercial parking lot at the south side of Highway 101 would be reconfigured as part of the project, no parking spaces would be lost and the reconfiguration would not adversely affect the type or intensity of existing or planned land uses in the area. **(No Impact)**

b)2),3) Would the project be incompatible with adjacent land uses or with the general character of the surrounding area, including density and building height? Would the project conflict with established residential, recreational, educational, religious, or scientific uses of an area?

The bridge overcrossing would be similar in height to the vehicular overpasses at Oregon Expressway to the north and San Antonio Road to the south; thus, it would be consistent with the character of the general area. The proposed project would not introduce new uses, but would rather improve the existing bicycle and pedestrian infrastructure and connections, which would not impact or conflict with existing uses in the area. While an existing commercial parking lot would be reconfigured, no parking spaces would be lost such that a conflict with the established use at the site would occur. **(No Impact)**

c) Would the project conflict with any applicable habitat conservation plan or natural community conservation plan?

The project site is not within the boundaries of the Santa Clara Valley Habitat Plan, Stanford Habitat Conservation Plan, or any other adopted habitat conservation plan or natural community conservation plan; therefore, there would be no impact. **(No Impact)**

4.11.5 Conclusion

The proposed project would not result in a land use impact. **(No Impact)**

4.12 NOISE AND VIBRATION

The discussion within this section is based on a construction noise assessment memo prepared by Illingworth &Rodkin, Inc. This memo is included with this initial study as Appendix I.

4.12.1 Environmental Checklist

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
Would the project result in:					
a) Exposure of persons to, or generation of, excessive groundborne vibration or groundborne noise levels?	☐	☐	☒	☐	1,2,3,13
b) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☒	☐	☐	1,2,3,13
c) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☒	☐	☐	1,2,3,13
d) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒	1,2,3,13
e) For a project within the vicinity of a private airstrip, will the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒	1,2,3,13

4.12.2 Regulatory Framework

Caltrans Standard Specifications for Noise

Section 14-8.02: Noise Control of the Caltrans Standard Specifications addresses noise levels for construction projects and include the following directives:

- Do not exceed 86 dBA at 50 feet from the job site activities from 9:00 p.m. to 6:00 a.m. Use an alternative warning method instead of a sound signal unless required by safety laws.
- Equip an internal combustion engine with the manufacturer-recommended muffler. Do not operate an internal combustion engine on the job site without the appropriate muffler.

Caltrans Regulatory Vibration Criteria

Caltrans recommends a vibration limit of 0.5 inches/second, peak particle velocity (in/sec, PPV) for buildings that are structurally sound and designed to modern engineering standards, 0.3 in/sec, PPV

for older residential buildings, 0.25 in/sec, PPV for historic and some old buildings, and a conservative limit of 0.08 in/sec, PPV for ancient buildings or buildings that are documented to be structurally weakened. The buildings in the project vicinity are assumed to be structurally sound; however, these buildings may not have been designed to modern engineering standards. No ancient buildings or buildings that are documented to be structurally weakened are known to exist in the area.

City of Palo Alto Noise Regulations

The City of Palo Alto establishes the following noise limits for construction activities in Section 9.10.060: Special Provisions of the Municipal Code:

- Construction is limited to the hours of 8:00 a.m. and 6:00 p.m. on Monday through Friday, 9:00 a.m. and 6:00 p.m. on Saturdays, with unauthorized construction activities prohibited on Sundays and Holidays.

- No individual piece of equipment shall produce a noise level exceeding 110 dBA at a distance of 25 feet. If the device is housed within a structure on the property, the measurement shall be made outside the structure at a distance as close to 25 feet from the equipment as possible.

- The noise level at any point outside of the property plane of the project shall not exceed 110 dBA.

4.12.3 Existing Conditions

A noise monitoring survey of the project area was conducted on May 8, 2014. The noise monitoring survey included four short-term (five to ten minutes in duration) measurements taken at the locations shown in Figure 4.12-1. Noise levels are summarized in Table 4.12-1. The primary noise source in the project area is traffic from Highway 101.

Table 4.12-1: Summary of Noise Monitoring Survey

Location	Start Time	L_{eq} (in dBA)	L_1 (in dBA)	Primary Noise Source
ST-1: 3801 East Bayshore Road	11:50 a.m.	63	67	Highway 101 Traffic
ST-2: 3457 Kenneth Drive	12:15 p.m.	48	55	Highway 101 Traffic
ST-3: Paloma Townhomes	12:30 p.m.	59	63	Highway 101 Traffic
ST-4: 270 feet west of Highway 101	12:45 p.m.	61	65	Highway 101 Traffic

NOISE MONITORING LOCATIONS

FIGURE 4.12-1

4.12.4 Impact Evaluation

a) Would the project result in exposure of persons to, or generation of, excessive groundborne vibration or groundborne noise levels?

Project construction activities, such as drilling holes for pilings, the use of jackhammers, rock drills and other high-power or vibratory tools, and rolling stock equipment (tracked vehicles, compactors, etc.) may generate vibration in the immediate vicinity of the project work area. Vibration levels would vary depending on soil conditions, construction methods, and equipment used. As stated in Appendix I, however, vibration levels would not approach or exceed the 0.3 in/sec PPV threshold and would not be expected to cause cosmetic or structural damage.

At the nearest residences (Paloma Street townhomes), vibration caused by project construction would range from below the perceptible threshold to barely perceptible. Further, these activities would be temporary and would only occur intermittently during the construction phase of the project, in particular when the support piles are constructed (over three to seven days) for the bridge structure or during construction of the Adobe Creek Trail extension when vehicles would be used for short-durations to compact soil and lay pavement (over one to two weeks). As a result, impacts would be less than significant. **(Less than Significant Impact)**

b),c) Would the project result in exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies? Would the project result in a substantial temporary or periodic increase in ambient noise levels?

4.12.4.1 *Long-Term Noise Impacts*

Once the proposed project is constructed, there will be no ongoing long-term increases in noise. This statement is based on the fact that the users of the proposed facility will consist of pedestrians and bicyclists. Motor vehicles will not use the overcrossing and the project will not generate additional traffic. The only long-term noise would be associated with occasional daytime maintenance activities. **(No Impact)**

4.12.4.2 *Short-Term Construction-Generated Noise Impacts*

Except as noted in the following sentence, construction activity would occur within the hours specified by the PAMC (8:00 a.m. and 6:00 p.m. on Monday through Friday, 9:00 a.m. and 6:00 p.m. on Saturdays). Nighttime construction is anticipated to occur for up to seven nights for cranes to lower prefabricated structures in place over Highway 101, as well as miscellaneous concrete work for bridge columns and decking, West Bayshore Road, and East Bayshore Road.

Nighttime work occurring outside of normal construction hours would require an exception permit under PAMC Section 9.10.070. As part of the exception permit, the project applicant must show that compliance with the requirements of the Noise Ordinance would be impractical or unreasonable. A permit to allow exception from the provisions on the Noise Ordinance may be issued, with appropriate conditions to minimize the public detriment caused by such exceptions. Any such permit

would be as short of duration as possible (up to six months), and would be conditioned by a schedule for compliance. Compliance with noise exception permit conditions would result in a less than significant impact.

Demolition, earthwork, and construction of structures would be anticipated to generate hourly average noise levels of 73 to 82 dBA L_{eq} with maximum noise levels reaching about 84 dBA L_{max} at a distance of 100 feet. Construction generated noise levels drop off at a rate of about 6 dBA per doubling of distance between the source and receptor. As such, the project could result in exposure of persons in the project area to a substantial temporary or periodic increase in ambient noise levels.

Impact NOI-1.1: The project could result in exposure of persons in the project area to a substantial temporary or periodic increase in ambient noise levels during construction activities. **(Significant Impact)**

To reduce the potential for noise impacts resulting from project construction, the project contractor will implement the following avoidance and minimization measures during project construction.

MM NOI-1.1: The following measures will be implemented during construction to lessen the potential for noise impacts:

- With one exception, noise-generating construction activities will be restricted to the hours of 8:00 a.m. to 6:00 p.m. Monday through Friday and 9:00 a.m. to 6:00 p.m. on Saturdays. The exception is that, as stated above, there would be up to seven nights of construction including up to three nights to lower prefabricated structures in place over Highway 101, West Bayshore Road, and East Bayshore Road. No construction activities will occur on Sundays or holidays.
- For any planned construction outside permitted hours, the project contractor will notify property owners within 500 feet of the proposed work at least one week in advance of the construction activities, require the contractor to implement a construction noise monitoring program and, if feasible, provide additional mitigation as necessary (in the form of noise control blankets or other temporary noise barriers, etc.) for affected receptors.
- Internal combustion engine driven equipment will be equipped with intake and exhaust mufflers that are in good condition and appropriate for the equipment.
- Unnecessary idling of internal combustion engines within 100 feet of residences will be strictly prohibited.
- Stationary noise generating equipment will be located as far as possible from sensitive receptors when sensitive receptors adjoin or are near a construction project area.
- "Quiet" air compressors and other "quiet" equipment will be utilized where such technology exists.

- Construction equipment will conform to Section 14-8.02, Noise Control, of the latest Caltrans Standard Specifications.
- The contractor will prepare a detailed construction plan identifying the schedule for major noise-generating construction activities and distribute this plan to adjacent noise-sensitive receptors. The construction plan will also contain these construction noise reduction measures.

With the implementation of MM NOI-1.1, impacts as a result of exposure to a substantial temporary or periodic increase in ambient noise levels during construction activities would be less than significant. **(Less than Significant with Mitigation)**

Noise Generated by Construction Vehicles

Construction-related vehicles traveling to and from the project site would generate maximum noise levels of approximately 57 dBA L_{eq} at a distance of 50 feet from the center of the truck route road.[21] The truck routes would be limited to non-residential streets and would follow existing high-traffic volume roadways (Highway 101 and San Antonio Road) or roadways directly adjacent to Highway 101 (East and West Bayshore Road, Fabian Way, and Middlefield Road). As a result, project construction traffic would not increase ambient noise levels along these roadways and impacts would be less than significant. **(Less than Significant Impact)**

Noise Impacts at Residential Land Uses - Daytime Construction

Residential uses in the vicinity of the project include townhomes located along Paloma Street and single-family homes located along Kenneth Drive, located 300 feet and 900 feet west of the project site, respectively. At a distance of 300 feet, demolition, earthwork, and construction activities would generate hourly average noise levels of 63 to 72 dBA L_{eq} with maximum instantaneous noise levels reaching 74 dBA L_{max}. Hourly average construction noise levels at approximately 900 feet from the project would be 54 to 63 dBA L_{eq}, with maximum instantaneous noise levels reaching 65 dBA L_{max}. Both the townhomes located along Paloma Street and the homes along Kenneth Drive would be shielded from construction noise by existing structures, which is anticipated to provide an additional 10 to 20 dB of noise reduction. As such, construction activities are calculated to generate noise levels of 53 to 62 dBA L_{eq} at the Paloma Street townhomes and 44 to 53 dBA L_{eq} at the Kenneth Drive homes. At times when these activities occur farther from residences, noise levels would be lower.

The existing ambient daytime noise levels at these residences were measured to be approximately 48 dBA L_{eq} at 3457 Kenneth Drive and 59 dBA L_{eq} at the outdoor use area for the Paloma Street townhomes. Construction noise could occasionally exceed existing daytime ambient noise levels at these locations by 3 to 5 dB, but would not exceed 60 dBA L_{eq}. Thus, construction activities would generate noise levels below the applicable daytime criteria and the impact would be less than significant. **(Less than Significant Impact)**

[21] Assumes that the peak number of trucks expected on any one day would be approximately eight one-way truck trips per hour and that up to 20 one-way vehicle trips would occur per hour for the construction crew.

Noise Impacts at Residential Land Uses - Nighttime Construction

Nighttime construction work is anticipated to occur over a period of up to seven nights when cranes would be used to lower prefabricated bridge structures into place over Highway 101, West Bayshore Road, and East Bayshore Road. These nighttime activities are anticipated to generate an average noise level of 75 dBA L_{eq} at a distance of 100 feet, with maximum instantaneous noise levels also reaching 75 dBA L_{max}.

Residential occupants are typically more sensitive to nighttime construction noise because ambient levels are lower and intermittent noise can cause sleep disturbance. Following standard practice, the threshold for sleep interference is considered to be 35 dBA L_{eq} and 30 dBA L_{max} inside bedrooms. Interior noise levels would vary depending on the final design of the buildings (relative window area to wall area) and construction materials and methods. Standard residential construction provides approximately 15 dBA of exterior to interior noise reduction assuming the windows are partially open for ventilation. Standard construction with the windows closed provides approximately 20 to 25 dBA of noise reduction. Sleep interference is, therefore, possible when nighttime exterior noise levels are about 50 dBA L_{eq} with open windows and 55 to 60 dBA L_{eq} if the windows are closed. In addition, sleep interference could occur with intermittent instantaneous maximum noise exterior levels greater than 55 dBA L_{max} with open windows and 60 to 65 dBA L_{max} if the windows are closed.

The nearest nighttime construction would occur more than 900 feet from the homes on Kenneth Drive and 300 feet from the nearest townhomes along Paloma Street. Assuming a noise reduction of 10 dB due to intervening structures, nighttime construction activities are anticipated to generate noise levels of 46 dBA L_{eq} outside the nearest Kenneth Drive residences and 55 dBA L_{eq} outside the nearest Paloma Street townhomes. Maximum noise levels are anticipated to reach about 46 dBA L_{max} outside the nearest Kenneth Drive residences and 55 dBA L_{max} outside the nearest Paloma Street townhomes. These nighttime construction noise levels would be below the threshold for sleep disturbance at the Kenneth Drive homes (with windows in the open or shut position) and would be below the threshold for sleep disturbance at the Paloma Street townhomes with windows in the closed position. The Paloma Street townhomes have been confirmed to have mechanical ventilation/central air conditioning, allowing occupants the option of keeping windows closed to control noise. As a result, the impact would be less than significant. **(Less than Significant Impact)**

Noise Impacts at Google Children Center & Pinewood School Activity Center[22]

The Google Children's Center (3801 East Bayshore Road) is located approximately 250 feet from the nearest construction activities and Pinewood School Activity Center (3750 Fabian Way) is located immediately adjacent to the Adobe Creek Trail Reach.[23] Noise generated during demolition, earthwork, and construction of structures would typically generate hourly average noise levels of 62 to 71 dBA L_{eq} and maximum instantaneous noise levels of 73 dBA L_{max} at those times when

[22] Educational and commercial uses are assumed to be daytime uses and would, therefore, not be impacted by nighttime construction work.

[23] The Google Children's Center is a childcare facility and the Pinewood School Activity Center is an athletic facility used by the sports teams of Pinewood School in Los Altos. The Activity Center is not used for classrooms/educational instruction.

construction is occurring nearest the receptors. The existing ambient daytime noise level is calculated to be approximately 54 dBA L_{eq} at the Google Children's Center and approximately 61 dBA L_{eq} at the Pinewood School Activity Center. Such increases would be temporary and would not exceed Caltrans or City criteria. **(Less than Significant Impact)**

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

The Palo Alto Airport is located approximately 1.30 miles north of the project site. Per the Comprehensive Land Use Plan for the Palo Alto Airport, the project site falls outside of any designated noise exposure contour area. There are no private airstrips within the vicinity. **(No Impact)**

4.12.5 Conclusion

The project proposes would not result in an increase in noise over the long-term. During construction, compliance with MM-NOI-1.1 and the City of Palo Alto Municipal Code for noise exceptions will ensure that noise impacts would be less than significant. **(Less than Significant Impact with Mitigation)**

4.13 POPULATION AND HOUSING

4.13.1 Environmental Checklist

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
Would the project:					
a) Induce substantial population growth in an area, either directly (by proposing new homes and businesses) or indirectly (through extension of roads or other infrastructure)?	☐	☐	☐	☒	1
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒	1
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒	1
d) Create a substantial imbalance between employed residents and jobs?	☐	☐	☐	☒	1

4.13.2 Existing Setting

The project proposes to replace an existing bicycle and pedestrian crossing of Highway 101 with a new crossing and improve bicycle trails and connections. No aspect of the project is related to or would affect population and housing.

4.13.3 Impact Evaluation

a),b),c),d) Would the project induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)? Would the project displace substantial numbers of existing housing or people, necessitating the construction of replacement housing elsewhere? Create a substantial imbalance between employed residents and jobs?

The project is non-residential and would replace an already established pedestrian and bicycle crossing with improved infrastructure. There would be no impact to the population or number of housing units in Palo Alto with implementation of the project. While the construction phase of the project would bring 12 additional workers to Palo Alto on a daily basis, their employment would be temporary (up to 18 months) and the workers would be expected to commute in from the greater Bay Area and would not require the addition of permanent new housing in Palo Alto. **(No Impact)**

4.13.4 Conclusion

The project would not induce unplanned growth or result in any adverse impacts to the existing housing supply. **(No Impact)**

4.14 PUBLIC SERVICES

4.14.1 Environmental Checklist

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
a) Result in an adverse physical impact from the construction of additional school facilities in order to maintain acceptable performance standards?	☐	☐	☐	☒	1,2,15
b) Result in an adverse physical impact from the construction of additional fire protection facilities in order to maintain acceptable performance standards?	☐	☐	☐	☒	1,2,16
c) Result in an adverse physical impact from the construction of additional police protection facilities in order to maintain acceptable performance standards?	☐	☐	☐	☒	1,2
d) Result in an adverse physical impact from the construction of additional parks and recreation facilities in order to maintain acceptable performance standards?	☐	☐	☐	☒	1,2,17,18
e) Result in an adverse physical impact from the construction of additional library facilities in order to maintain acceptable performance standards?	☐	☐	☐	☒	1,2

4.14.2 Existing Conditions

Public facility-related services are provided to the community as a whole, usually from a central location or from a defined set of nodes. The resources base for delivery of the services, including the physical service delivery mechanisms, is financed on a community-wide basis, usually from a unified or integrated financial system. The service delivery agency can be a city, county, service or other special district.

Fire Services

The nearest fire station, Palo Alto Fire Station 4, is located at 3600 Middlefield Road. Fire Station 4 is approximately one mile from the proposed project.

Police Services

The Palo Alto Police Department (PAPD) provides law enforcement services within the City of Palo Alto limits. The offices for the PAPD are located adjacent to City Hall at 275 Forest Avenue.

Public Schools

Public schools in Palo Alto are operated by the Palo Alto Unified School District. The nearest public school to the site is Fairmeadow Elementary School, which is approximately 0.80 mile southwest.

Parks

The City of Palo Alto has more than 4,300 acres of park space, including 28 neighborhood parks and four open space preserves. Other parkland, managed by the Midpeninsula Regional Open Space District, is also located within the City limits. In addition, the City of Palo Alto Recreation Services Division offers sports programs, teen and middle school activities, as well as a wide range of classes and events. Recreation facilities include three community centers, a golf course, a public pool, a small zoo, and a children's theater.

The eastern portion of the bridge overcrossing approach structure and connections to the San Francisco Bay Trail on the east side of Highway 101 are proposed to be located within the City of Palo Alto Baylands Preserve.

4.14.3 Impact Evaluation

a),b),c),d),e) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for public services?

The proposed replacement of the seasonally available pedestrian and bicycle undercrossing of Highway 101 with an overcrossing bridge (including sidewalk and trail connections and improvements) would not cause an increase in population or generate additional service requirements. Emergency vehicle access would be accommodated during construction (per the required Construction Logistics Plan prepared in conformance with the City's Traffic Control Guidelines) and operation, and additional fire or police facilities would not be required. While the improvements would potentially facilitate increased pedestrian and bicycle access to the greater Baylands Preserve area, additional physical improvements beyond what is proposed by the project would not be required. The proposed project would not, therefore, result in an impact on community facilities, schools, libraries, parks, or public services. (**No Impact)**

4.14.4 Conclusion

The project would not impact any public services. **(No Impact)**

4.15 RECREATION

4.15.1 Environmental Checklist

		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
a)	Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility will occur or be accelerated?	☐	☐	☐	☒	1,2,17,18
b)	Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☐	☒	1,2,17,18

4.15.2 Regulatory Framework

Parks Master Plan

The City of Palo Alto is currently in the process of preparing a Parks Master Plan; the last master plan was completed in 1965. The Parks Master Plan is a 25-year, long-range planning document that will provide the City with clear guidance regarding future renovations and capital improvement needs for parks, trails, open space, and recreation facilities. The Parks Master Plan also provides guidance and recommendations on how to meet the demands for future recreational, programming, environmental, and maintenance needs, as well as establish priorities for future park renovations and facility improvements.

Baylands Master Plan

Originally adopted in 1978, the Baylands Master Plan is a long-range plan for treating the Baylands as an integrated whole and balancing ecological preservation with continued commercial and recreational use. The overall goal of the plan is to preserve and enhance the unique irreplaceable resources within the Baylands, while providing a framework and guide for future actions in the area. Since its adoption, the document has evolved and was most recently updated in 2008. The Baylands Master Plan includes guidance for recreational access and circulation.

4.15.3 Existing Conditions

As described previously in Section 4.14 Public Services, the City of Palo Alto has more than 4,300 acres of park space, including 28 neighborhood parks and four open space preserves, as well as parkland managed by the Midpeninsula Regional Open Space District. The eastern portion of the bridge overcrossing approach structure and trail connections are proposed to be located within and Baylands Preserve on the east side of Highway 101.

4.15.4 Impact Evaluation

a),b) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility will occur or be accelerated? Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

The prosed project would improve an existing seasonal bicycle and pedestrian undercrossing with an overcrossing of Highway 101. Signage, lighting, and new trail connections to existing pedestrian and bicycle facilities would be added to this recreational access facility that currently serves the community.

The proposed project is consistent with the Baylands Master Plan Access and Circulation Policy 25, which calls for implementation of improvements to bicycle circulation in the Baylands area, as also described in the Palo Alto Bicycle Pedestrian Transportation Plan (BPTP) and the Comprehensive Plan, including improving pedestrian/bicycle access to the Bay Trail and Baylands across Highway 101 at Adobe Creek. The pedestrian/bicycle connection is also shown as a Regional Trail within the Parks Master Plan Connections figure.

As described previously, the need for a new year-round pedestrian/bicycle crossing of Highway 101 in south Palo Alto is also identified in the City of Palo Alto Comprehensive Plan and BPTP. The Highway 101 Overcrossing at Adobe Creek is also identified as a high-priority project in the City's Bicycle Transportation Plan (2003) and the East Meadow Circle/Fabian Way Concept Plan (2012). The proposed connection to the Bay Trail is also consistent with the San Francisco Bay Trail Guidelines. Thus, the project itself implements a facility identified in these plans and would facilitate year-round, non-vehicular access to the greater Baylands Preserve area. **(No Impact)**

4.15.5 Conclusion

The project would not adversely impact recreation facilities within the City of Palo Alto, but rather would improve access to existing facilities consistent with City policies and plans for the area. **(No Impact)**

4.16 TRANSPORTATION/TRAFFIC

4.16.1 Environmental Checklist

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
Would the project:					
a) Cause an intersection to drop below its level of service standard, or if it is already operating at a substandard level of service, deteriorate by more than a specified amount?	☐	☐	☒	☐	1
b) Cause a freeway segment to operate at LOS F or contribute traffic in excess of one percent of segment capacity to a freeway segment already operating at LOS F?	☐	☐	☐	☒	1
c) Impede the development or function of planned pedestrian or bicycle facilities?	☐	☐	☐	☒	1,2
d) Increase demand for pedestrian and bicycle facilities that cannot be met by current or planned services?	☐	☐	☐	☒	1,2
e) Impede the operation of a transit system as a result of congestion or otherwise decrease the performance of safety of such facilities?	☐	☐	☐	☒	1,2
f) Create demand for transit services that cannot be met by current or planned services?	☐	☐	☐	☒	1,2
g) Create the potential demand for through traffic to use local residential streets or cause any change in traffic that would increase the Traffic Infusion on Residential Environment (TIRE) index by 0.1 or more?	☐	☐	☐	☒	1
h) Create an operational safety hazard?	☐	☐	☐	☒	1
i) Result in inadequate emergency access?	☐	☐	☐	☒	1
j) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	☐	☐	☐	☒	1,2,11
k) Cause queuing impacts based on a comparative analysis between the design queue length and the available queue storage capacity? Queuing impacts include, but are not limited to, spillback queues at project access locations; queues at turn lanes at intersections that block through traffic; queues at lane drops; queues at one intersection that extend back to impact other intersections, and spillback queues on ramps?	☐	☐	☒	☐	1

4.16.2 Regulatory Framework

City of Palo Alto Bicycle and Pedestrian Transportation Plan

The City of Palo Alto Bicycle and Pedestrian Transportation Plan (BPTP) was adopted in 2012 and serves as a guide for public and private investments in bicycle and pedestrian facilities and programs. The BPTP builds on existing goals and policies from the City's Comprehensive Plan and reflects targets from the City's Climate Action Plan and the state Complete Streets Act. The BPTP includes specific recommendations for "Across Barrier Connections" to enhance connectivity and facilitate bicycle and pedestrian access to key destinations. An overcrossing at Adobe Creek/Highway 101 is identified within the BPTP between West Bayshore Road and the San Francisco Bay Trail.

Santa Clara Countywide Bicycle Plan

The Santa Clara Valley Transportation Authority adopted the Santa Clara Countywide Bicycle Plan (CBP) in August 2008. The CBP describes the existing bicycle network in the county, as well as network gaps and needed improvements. The CBP also establishes a regional framework for local plans and identifies opportunities for coordination between area jurisdictions. The CBP identifies the Adobe Creek tunnel under Highway 101 as an "Across Barrier Connection" in need of replacement due to flooding during the rainy season.

4.16.3 Existing Conditions

The existing Benjamin Lefkowitz pedestrian/bicycle undercrossing of Highway 101 at Adobe Creek facilitates access for pedestrians and bicyclists under Highway 101. The crossing, however, lacks a cohesive bicycle and pedestrian connection to existing adjacent pathways. Additionally, the facility experiences frequent closures due to flooding each year between October 15 and April 15.

4.16.4 Impact Evaluation

a) Would the project cause an intersection to drop below its level of service (LOS) standard, or if it is already operating at a substandard LOS, deteriorate by more than a specified amount?

Short-Term/Construction-Related Traffic Impacts

The amount of traffic that would be generated by the project during the construction phase was estimated based on the anticipated construction schedule, activities, workforce, and anticipated daily truck activity at the site. The vehicular trips associated with the proposed project were separated into construction worker trips (generally auto trips) and delivery and haul trips (truck trips). It is assumed that a maximum of 12 construction workers would be needed throughout construction and that the number of truck trips generated would vary depending on the construction phase. Worker trips are assumed to occur during the a.m. and p.m. peak-hours and truck trips, which are estimated to be up to 16 per day, are assumed to occur outside of the peak-hours. Therefore, the maximum number of trips (trucks and auto trips) that would occur during the busiest phase of construction is

estimated to be 40 daily one-way trips, 12 of which would occur during the a.m. peak-hour and 12 of which would occur in the p.m. peak-hour.[24]

Given the large volume of existing traffic on nearby roadways such as San Antonio Road, adding 12 vehicle trips to the roadway system during each peak-hour would have a negligible and non-discernable effect on the level of service (LOS) at intersections located in the project vicinity. Further, the 40 daily trips would only occur on a limited basis while construction is underway. For these reasons, the short-term traffic impact of the project would be less than significant.

Long-Term Traffic Impacts

The proposed project (once operational) would not generate new vehicle trips and, hence, there would be no long-term traffic impacts. Rather, the project would improve an existing, though only seasonally accessible, pedestrian and bicycle pathway to cross Highway 101; thus, facilitating non-motorized modes of travel. **(No Impact)**

b) Cause a freeway segment or ramp to operate at LOS F or contribute traffic in excess of one percent of segment capacity to a freeway segment or ramp already operating at LOS F?

Construction Activities

Construction activities would require the temporary closure of Highway 101 on up to seven nights to allow for cranes to lower the bridge structures into place. The closure of the freeway would occur during nighttime hours, well outside of peak travel times. In addition, the closures would be announced and well-publicized ahead of time, further minimizing any potential inconvenience. East and/or West Bayshore Roads would be available for detours. Thus, the peak-hour LOS on Highway 101 would not be affected by these nighttime closures. **(No Impact)**

Project Operation

The proposed project would not result in an increase in traffic over the long-term and therefore, would not result in LOS impacts to freeway segments. **(No Impact)**

c),d) Impede the development or function of planned pedestrian or bicycle facilities? Increase demand for pedestrian and bicycle facilities that cannot be met by current or planned services?

The need for a new year-round pedestrian/bicycle crossing of Highway 101 in south Palo Alto is identified in the City of Palo Alto Comprehensive Plan, BPTP, Baylands Master Plan, CBP, and East Meadow Circle/Fabian Way Concept Plan. The project would implement a major infrastructure improvement identified within the relevant plans in order to accommodate bicycle demand.

During construction there may be temporary lane or road closures (with closures lasting only a few minutes at a time for material loading or unloading). East and West Bayshore Roads would remain

[24] These volumes represent a planning level estimate of the anticipated daily truck activity, actual construction traffic volumes and durations will be subject to the selected Contractor's work operations and scheduling.

open to bicyclists during construction. Though bicyclists may encounter occasional temporary delays during the construction phase of the project, the operational phase would result in a substantial improvement to bicycle facilities in the area by providing a year-round crossing of Highway 101. **(No Impact)**

e),f) Impede the operation of a transit system as a result of congestion or otherwise decrease the performance of safety of such facilities? Create demand for transit services that cannot be met by current or planned services?

The approximately 12 workers necessary for construction of the project would not affect transit in the vicinity. Further, there are no bus or shuttle routes located in the vicinity of the project that might be affected by temporary road closures or one-way traffic controls.[25,26]

g) Create the potential demand for through traffic to use local residential streets? Cause any change in traffic that would increase the Traffic Infusion on Residential Environment (TIRE) index by 0.1 or more??

According to the TIRE methodology, a traffic volume increase that causes at least a 0.1 increase in the TIRE index would be noticeable to street residents. The 40 daily trips associated with construction of the proposed project (including 12 a.m. and p.m. peak hour trips) would not result in an increase in traffic overall and would not be noticeable to area residents. Because any road or lane closures would be limited and temporary, and would occur at non-peak traffic hours, changes to traffic patterns would not occur. Therefore, the project would not impact local residential streets. **(No Impact)**

h),i) Would the project create an operational safety hazard? Would the project result in inadequate emergency access?

The project proposes an ADA-accessible bicycle and pedestrian overcrossing over Highway 101 to replace an existing underpass that closes during the rainy season. The project would be constructed to Caltrans and City of Palo Alto standards and would not increase safety hazards due to design features or incompatible land uses. Emergency access would not be impeded during or after construction, as described in Section 4.9 Hazards and Hazardous Materials. As a result, the proposed project would not create an operational safety hazard or impede emergency access. **(No Impact)**

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

Construction Activities

The nearest airport to the project site is the Palo Alto Airport, located approximately 1.30 miles north. The project is located within the Airport Influence Area but is not within a defined Airport

[25] Santa Clara Valley Transportation Authority. "Bus and Rail Map A". Accessed July 29, 2017. http://www.vta.org/getting-around/maps/bus-rail-map.
[26] City of Palo Alto. "Shuttle Information". Accessed July 29, 2017. https://paloaltoliveshuttle.doublemap.com/map/.

Safety Zone, as described in the Comprehensive Land Use Plan for the Palo Alto Airport. The project would not affect air traffic patterns or change risk levels given the relatively low proposed height for the bridge overcrossing structure (i.e., approximately 30 feet) and the overall distance from the airport.

Project Operation

The proposed project would not result in an increase in traffic over the long-term because it is not a traffic-generating use and therefore, would not result in impacts at local or regional intersections. Rather, it is anticipated that a year-round bicycle and pedestrian access would reduce vehicle trips over the current seasonally available access. **(No Impact)**

k) Cause queuing impacts based on a comparative analysis between the design queue length and the available queue storage capacity? Queuing impacts include, but are not limited to, spillback queues at project access locations; queues at turn lanes at intersections that block through traffic; queues at lane drops; queues at one intersection that extend back to impact other intersections, and spill back queues on ramps.

From a CEQA standpoint, there are no quantitative thresholds specific to queuing. However, any road closures would be limited and temporary, would occur at non-peak traffic hours, and would be monitored by the contractor so that queuing would not spill onto any adjacent intersections. Temporary on-way traffic controls on East and West Bayshore Road would also be limited and would be managed as part of the project Construction Logistics Plan and Traffic Control Plan so that significant queuing would not occur. Additionally, the project would not result in an increase in traffic over the long-term and therefore, would not result in queuing impacts. **(Less than Significant Impact)**

4.16.5 Conclusion

The proposed project would result in less than significant impacts to transportation and traffic in the short-term, but will facilitate non-vehicle related transportation in the area and will not case impacts in the long-term. **(Less than Significant Impact)**

4.17 UTILITIES AND SERVICE SYSTEMS

4.17.1 Environmental Checklist

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
Would the project:					
a) Need new or expanded entitlements to water supply?	☐	☐	☒	☐	1,2
b) Result in adverse physical impacts from new or expanded utility facilities due to increase use as a result of the project?	☐	☐	☐	☒	1,2
c) Result in a substantial physical deterioration of a utility facility due to increased use as a result of the project?	☐	☐	☐	☒	1,17
d) Exceed wastewater treatment requirements of the applicable RWQCB?	☐	☐	☐	☒	1,17
e) Result in a determination by the wastewater treatment provider that it has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☐	☒	1,17
f) Require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☐	☒	1,2
g) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☐	☐	☒	☐	1,18
h) Comply with federal, state and local statutes and regulations related to solid waste?	☐	☐	☒	☐	1,2
i) Result in a substantial increase in natural gas and electrical service demands that would require the new construction of energy supply facilities and distribution infrastructure or capacity enhancing alterations to existing facilities?	☐	☐	☐	☒	1,18

4.17.2 Existing Conditions

The City of Palo Alto Utilities (CPAU) is the only municipal utility in California that operates city-owned utility services that include electric, fiber optic, natural gas, water and sewer services.

Water Services

The CPAU serves approximately 16,000 residential customers and approximately 3,500 non-residential customers.[27] The City's drinking water is provided by the CPAU and is purchased from the San Francisco Public Utility Commission, which obtains most of its water from the Hetch Hetchy system. The City also owns five groundwater wells, in case the Hetch Hetchy system cannot meet the City's water needs. Approximately three billion gallons of water are used by the city on an annual basis.[28]

Wastewater Services

The CPAU is responsible for the existing wastewater collection system. The City of Palo Alto also operates the Regional Water Quality Control Plant (RWQCP), a wastewater treatment plant for the East Palo Alto Sanitary District, Los Altos, Los Altos Hills, Mountain View, Palo Alto, and Stanford University. The RWQCP is on the shore of San Francisco Bay in Palo Alto adjacent to the Palo Alto Baylands Preserve. The RWQCP discharges treated wastewater effluent to a man-made channel, which empties into the southern reach of San Francisco Bay. In 2015, the plant treated an average of 22 million gallons per day (MGD) of wastewater during the dry season, well below its permitted dry-weather capacity of 39 MGD.[29] The RWQCP treatment systems are adequately treating the wastewater to meet relevant RWQCB discharge requirements.[30]

Storm Drainage

The City's Department of Public Works Storm Drain Management Program is responsible for the approval, construction, and maintenance of the storm drain system in Palo Alto. The system consists of approximately 107 miles of underground pipelines, 2,750 catch basins, 800 manholes, and six pump stations. Local storm drains are designed to convey the runoff from a 10-year storm.[31]

Solid Waste

Solid waste collection and disposal services are provided under exclusive franchises overseen by the City of Palo Alto Public Works Department. The majority of the City's solid waste is taken to the Sunnyvale Materials Recovery and Transfer Station (SMaRT® Station) where recyclables and yard trimmings are recovered, processed and marketed. The majority of remaining solid waste is sent to the Kirby Canyon Landfill, Ox Mountain Landfill, or Monterey Peninsula Landfill. The City has an agreement with Waste Management, Inc. to dispose of waste until 2031 and the primary landfills have capacity until 2023. In 2014, a total of 43,730 tons of solid waste were generated in Palo Alto, with a diversion rate of 80 percent.[32]

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[27] City of Palo Alto. Comprehensive Plan Draft EIR. Accessed April 17, 2017. http://www.paloaltocompplan.org/eir/.
[28] Southern California Public Radio. Water Use by the City of Palo Alto. Accessed April 17, 2017. http://projects.scpr.org/applications/monthly-water-use/city-of-palo-alto/.
[29] City of Palo Alto Regional Water Quality Control Plant. *2015 Pollution Prevention Plan.* Accessed April 17, 2017. http://www.cityofpaloalto.org/news/displaynews.asp?NewsID=1527&TargetID=65.
[30] City of Palo Alto. Comprehensive Plan Draft EIR. Accessed April 17, 2017. http://www.paloaltocompplan.org/eir/.
[31] City of Palo Alto. Storm Drain System Facts and Figures. Accessed April 17, 2017. http://www.cityofpaloalto.org/civicax/filebank/documents/2806.
[32] City of Palo Alto. Zero Waste Program, Progress Report. Accessed April 17, 2017. http://www.cityofpaloalto.org/gov/depts/pwd/zerowaste/about/progress.asp.

The City's Construction and Demolition Ordinance (Chapter 5.24 of the PAMC) requires the diversion of construction and demolition waste from landfills. Under this ordinance project-related construction and demolition waste shall be diverted to an approved recycling/transformation facility or by salvage. The City passed the Construction and Demolition Debris Diversion Ordinance in 2004, and updated the ordinance in 2009. The ordinance requirements are currently enforced through the City's Green Building Program and require projects to salvage, and/or divert at least 75 percent of project debris from landfills. Mixed construction debris is processed at the Zanker Materials Processing Facility in San Jose. The facility has a total capacity of approximately 1.2 million cubic yards.[33]

Electricity and Natural Gas

The CPAU is responsible for electricity and natural gas service in the City of Palo Alto. Electric lines and gas lines are present in the project area.

4.17.3 Impact Evaluation

a) Would the project need new or expanded entitlements to water supply?

The project would require water during construction activities for dust-control, cleaning equipment, concrete mixing, and crew member consumption. The amount of water required, however, would be limited and would come from existing sources such that new or expanded entitlements would not be required and the impact would be less than significant. **(Less than Significant Impact)**

b),c) Would the project result in adverse physical impacts from new or expanded utility facilities due to increase use as a result of the project? Would the project result in a substantial physical deterioration of a utility facility due to increased use as a result of the project?

The project would not require new or expanded utility facilities due to increased use and none are proposed as part of the project. Construction and operation of the project would require minimal water and electricity use and physical deterioration of a utility facility due to increased use would not occur. While relocation of a utility box would be required along West Bayshore Road, no facilities would deteriorate or be expanded as a result. **(No Impact)**

d),e) Would the project exceed wastewater treatment requirements of the applicable RWQCB? Would the project result in a determination by the wastewater treatment provider that it has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

Water used during construction would not be discharged to a sanitary sewer; therefore, wastewater treatment facilities would not be impacted. Additionally, the operational phase of the proposed project would not require or result in the construction of new water or wastewater facilities because it would not increase water use or wastewater generation. **(No Impact)**

[33] Greenwaste/Zanker. Sustainability Report. Accessed April 17, 2017. http://www.zankerrecycling.com/sites/default/files/GreenWaste_Zanker_Sustainability_Report_2012.pdf.

f) *Would the project require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?*

Stormwater flows in the project area would continue to flow to existing facilities associated with the City's storm drain system or flow into the adjacent marsh areas (for facilities on the east side of Highway 101). There would be no substantial change to these conditions with the proposed project as only minor amounts of new paving would be required to construct the trail connections and pave the Adobe Reach Trail. As a result, the project would not result in the need for new or expanded stormwater facilities and there would be no impact. **(No Impact)**

g),h) *Would the project be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs? Would the project comply with federal, state and local statues and regulations related to solid waste?*

The project would generate construction-related waste on a temporary basis and would comply with applicable federal, state, and local statutes and regulations related to solid waste. As required by the City's Construction and Demolition Ordinance, project-related construction and demolition waste would be diverted to an approved recycling/transformation facility or salvaged. Mixed construction debris would be processed at the Zanker Materials Processing Facility in San Jose. The facility, which operates under current state permits, has remaining capacity to accommodate the project. **(Less than Significant Impact)**

i) *Would the project result in a substantial increase in natural gas and electrical service demands that would require the new construction of energy supply facilities and distribution infrastructure or capacity enhancing alterations to existing facilities?*

The project would replace a seasonally closed pedestrian and bicycle undercrossing of Highway 101 with a year-round overcrossing bridge structure. Aside from safety lighting on the bridge structure, the project would not substantially increase natural gas or electrical service demands, nor does it propose energy supply facilities, distribution infrastructure, or capacity enhancing alterations to existing facilities. **(No Impact)**

4.17.4 Conclusion

The project would not result in any utility or service facility exceeding its current capacity or require the construction of new infrastructure or service facilities. Minor impacts as a result of water use and waste generation during construction would be less than significant. **(Less than Significant Impact)**

4.18 MANDATORY FINDINGS OF SIGNIFICANCE

4.18.1 Environmental Checklist

		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Checklist Source(s)
a)	Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	☐	☒	☐	Page 7-103
b)	Does the project have impacts that are individually limited, but cumulatively considerable ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	☐	☐	☒	☐	Page 7-103
c)	Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☒	☐	Page 7-103

4.18.2 Impact Evaluation

a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?

The project has been designed to avoid biological impacts, to the extent feasible, and the potential for cultural resources to be located within the project area is low. To further reduce the potential for impacts, the project will implement the biological and cultural resources-related mitigation measures described previously. As a result, the proposed project would not result in significant adverse environmental impacts to biological or cultural resources. **(Less than Significant Impact)**

b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?

As identified in this Initial Study, the potential adverse environmental impacts from the proposed project are limited to the construction phase. It is possible that other proposed projects in the vicinity to have construction schedules that may coincide with the project's schedule, but the overlap is likely to be limited. Further, the proposed project includes measures to minimize impacts and other potential cumulative projects in the vicinity would be required to implement similar measures to avoid and/or minimize impacts. **(Less than Significant Impact)**

c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

Under this standard, a change to the physical environment that might otherwise be minor must be treated as significant if it would cause substantial adverse effects to humans, either directly or indirectly. This factor relates to adverse changes to the environment of human beings generally, and not to effects on particular individuals.

While changes to the environment that could indirectly affect human beings would be represented by all of the designated CEQA resource areas, those that could directly affect human beings due to the project include air quality and hazardous materials. Incorporation of BAAQMD BMPs and hazardous materials mitigation measures to address lead-contaminated soils would, however, reduce any impacts to human beings to a less than significant level. No other direct or indirect adverse effects of the project on human beings have been identified. **(Less than Significant Impact)**

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SECTION 6.0 LEAD AGENCY AND CONSULTANTS

6.1 LEAD AGENCY

City of Palo Alto
Palo Alto, California

Elizabeth Ames, Senior Project Manager
Megha Bansal, Project Manager

6.2 CONSULTANTS

David J. Powers & Associates, Inc. [Initial Study Author]
Environmental Consultants and Planners
San Jose, California

John Hesler, Principal Project Manager
Amie Ashton, Project Manager
Zachary Dill, Graphic Artist

Biggs Cardosa Associates, Inc. [Project Design]
Structural Engineers
San Jose, California

Roy Schnabel, Senior Engineer
Anthony Notaro, Associate Engineer

Illingworth & Rodkin, Inc. [Construction Noise Assessment]
Acoustical & Air Quality Consultants
Petaluma, California

Dana Lodico, Senior Consultant

H. T. Harvey & Associates, Inc. [Biological Reports]
Ecological Consultants
Los Gatos, California

Steve Rottenborn, Senior Wildlife Ecologist
Sharon Kramer, Senior Fisheries Specialist
Dave Johnston, Bat Specialist
Steve Carpenter, Herpetologist
Robin Carle, Wildlife Biologist
Elan Alford, Plant Ecologist
Howard Shellhammer, Wildlife Biologist
Melissa Newman, Wildlife Biologist

Environmental Science Associates, Inc. [Cultural Resources & Hazardous Materials Reports]
Environmental Science & Planning Consultants
Petaluma, California

Heidi Koenig, Senior Archaeologist
Eryn Brennan, Architectural Historian
Elijah Davidian, Senior Associate

Parikh Consultants, Inc. [Geologic/Foundation Report]
Consulting Geologists
Milpitas, California

A. Emre Ortakci, Project Engineer
Y. David Wang, Senior Engineer

Paleo Solutions
Paleontological and Archaeological Compliance and Consulting Services
Monrovia, California

Geraldine L. Aron, M.S., Principal Paleontologist
Jennifer Kelly, M.S., Assistant Project Manager
Jeff Hathaway, M.S., PG, Technical Editor

Alta Planning + Design [Visual Impact Assessment]
Planning & Design Consultants
Oakland, California

Brian Burchfield, Senior Designer

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