

Appendix A

CEQA Checklist

CEQA Environmental Checklist

04-SCL-237/101

2.7-3.3/45.2-45.8

04-4H2900

Dist.-Co.-Rte.

P.M/P.M.

E.A.

This checklist identifies physical, biological, social and economic factors that might be affected by the proposed project. In many cases, background studies performed in connection with the projects indicate no impacts. A NO IMPACT answer in the last column reflects this determination. Where there is a need for clarifying discussion, the discussion is included either following the applicable section of the checklist or is within the body of the environmental document itself. The words "significant" and "significance" used throughout the following checklist are related to CEQA, not NEPA, impacts. The questions in this form are intended to encourage the thoughtful assessment of impacts and do not represent thresholds of significance.

Supporting documentation of all California Environmental Quality Act (CEQA) checklist determinations is provided in Chapters 2 and 3 of this Environmental Impact Report (EIR). Documentation of "No Impact" determinations is provided at the beginning of Chapter 2. Discussion of all impacts, avoidance, minimization, and/or mitigation measures is under the appropriate topic headings in Chapters 2 and 3.

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
I. AESTHETICS: Would the project:				
a) Have a substantial adverse effect on a scenic vista	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

II. AGRICULTURE AND FOREST RESOURCES: In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment Project; and the forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Result in the loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

III. AIR QUALITY: Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:

a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
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IV. BIOLOGICAL RESOURCES: Would the project:

- | | | | | |
|--|--------------------------|--------------------------|-------------------------------------|-------------------------------------|
| a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 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 California Department of Fish and Game or US Fish and Wildlife Service? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 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? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 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? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

V. CULTURAL RESOURCES: Would the project:

- | | | | | |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|
| a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| d) Disturb any human remains, including those interred outside of formal cemeteries? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

VI. GEOLOGY AND SOILS: Would the project:

- a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
ii) Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iii) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iv) Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

VII. GREENHOUSE GAS EMISSIONS: Would the project:

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

An assessment of the greenhouse gas emissions and climate change is included in the body of environmental document. While Caltrans has included this good faith effort in order to provide the public and decision-makers as much information as possible about the project, it is Caltrans determination that in the absence of further regulatory or scientific information related to GHG emissions and CEQA significance, it is too speculative to make a significance determination regarding the project's direct and indirect impact with respect to climate change. Caltrans does remain firmly committed to implementing measures to help reduce the potential effects of the project. These measures are outlined in the body of the environmental document.

VIII. HAZARDS AND HAZARDOUS MATERIALS: Would the project:

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

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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, would it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

IX. HYDROLOGY AND WATER QUALITY: Would the project:

a) Violate any water quality standards or waste discharge requirements?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) Otherwise substantially degrade water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
j) Inundation by seiche, tsunami, or mudflow	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

X. LAND USE AND PLANNING: Would the project:

a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

XI. MINERAL RESOURCES: Would the project:

a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

XII. NOISE: Would the project result in:

a) 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

XIII. POPULATION AND HOUSING: Would the project:

a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

XIV. PUBLIC SERVICES:

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

Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

XV. RECREATION:

a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

XVI. TRANSPORTATION/TRAFFIC: Would the project:

a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Conflict with adopted policies, plans or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

XVII. UTILITIES AND SERVICE SYSTEMS: Would the project:

a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Comply with federal, state, and local statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

XVIII. MANDATORY FINDINGS OF SIGNIFICANCE

a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Appendix B
Title VI Policy Statement

DEPARTMENT OF TRANSPORTATION

OFFICE OF THE DIRECTOR
P.O. BOX 942873, MS-49
SACRAMENTO, CA 94273-0001
PHONE (916) 654-5266
FAX (916) 654-6608
TTY 711
www.dot.ca.gov



*Flex your power!
Be energy efficient!*

March 2013

**NON-DISCRIMINATION
POLICY STATEMENT**

The California Department of Transportation, under Title VI of the Civil Rights Act of 1964 and related statutes, ensures that no person in the State of California shall, on the grounds of race, color, national origin, sex, disability, religion, sexual orientation, or age, be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under any program or activity it administers.

For information or guidance on how to file a complaint based on the grounds of race, color, national origin, sex, disability, religion, sexual orientation, or age, please visit the following web page: http://www.dot.ca.gov/hq/bep/title_vi/t6_violated.htm.

Additionally, if you need this information in an alternate format, such as in Braille or in a language other than English, please contact the California Department of Transportation, Office of Business and Economic Opportunity, 1823 14th Street, MS-79, Sacramento, CA 95811. Telephone: (916) 324-0449, TTY: 711, or via Fax: (916) 324-1949.

A handwritten signature in blue ink, appearing to read "Malcolm Dougherty".

MALCOLM DOUGHERTY
Director

Appendix C
Environmental Commitments Record

Appendix D

Biological Database Queries

**Appendix D.1 – California Native Plant Society's
Inventory of Rare and Endangered Plants of California**



Inventory of Rare and Endangered Plants - 7th edition

interface
v7-16mar 3-5-16

Status: search results - Wed, Mar. 9, 2016, 10:30 ET b

{QUADS_123} =~ m/428A/

Search

Tip: CNPS_LIST: "List 3" (note the field name) returns only taxa on List 3. "List 3" by itself, matches the phrase wherever found. Browse the list of **field names**.[\[all tips and help\]](#)[\[search history\]](#)

Your Quad Selection: **Mountain View (428A) 3712241**

Hits 1 to 6 of 6

[Requests that specify topo quads will return only Lists 1-3.](#)

To save selected records for later study, click the ADD button.

ADD checked items to Plant Press

check all

check none

Selections will appear in a new window.

open	save	hits	scientific	common	family	CNPS
	<input type="checkbox"/>	1	<u>Astragalus tener var. tener</u>	alkali milk-vetch	Fabaceae	List 1B.2
	<input type="checkbox"/>	1	<u>Centromadia parryi ssp. congdonii</u>	Congdon's tarplant	Asteraceae	List 1B.1
	<input type="checkbox"/>	1	<u>Chloropyron maritimum ssp. palustre</u>	Point Reyes bird's-beak	Orobanchaceae	List 1B.2
	<input type="checkbox"/>	1	<u>Eryngium aristulatum var. hooveri</u>	Hoover's button-celery	Apiaceae	List 1B.1
	<input type="checkbox"/>	1	<u>Stuckenia filiformis ssp. alpina</u>	slender-leaved pondweed	Potamogetonaceae	List 2B.2
	<input type="checkbox"/>	1	<u>Suaeda californica</u>	California seablite	Chenopodiaceae	List 1B.1

No more hits.



**Appendix D.2 – California Natural Diversity Database
Records Search for the U.S. Geological Survey 7.5-minute
Mountain View Quadrangle**

CALIFORNIA DEPARTMENT OF
FISH and WILDLIFE *RareFind*

Query Summary:Quad **IS** (Mountain View (3712241))

Print

Close

CNDDB Element Query Results

Scientific Name	Common Name	Taxonomic Group	Element Code	Total Occs	Returned Occs	Federal Status	State Status	Global Rank	State Rank	CA Rare Plant Rank	Other Status	Habitats
<i>Antrozous pallidus</i>	pallid bat	Mammals	AMACC10010	402	1	None	None	G5	S3	null	BLM_S-Sensitive CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern USFS_S-Sensitive WBWG_H-High Priority	Chaparral Coastal scrub Desert wash Great Basin grassland Great Basin scrub Mojavean desert scrub Riparian woodland Sonoran desert scrub Upper montane coniferous forest Valley & foothill grassland
<i>Astragalus tener</i> var. <i>tener</i>	alkali milk-vetch	Dicots	PDFAB0F8R1	65	1	None	None	G2T2	S2	1B.2	null	Alkali playa Valley & foothill grassland Vernal pool Wetland
<i>Athene cucularia</i>	burrowing owl	Birds	ABNSB10010	1882	15	None	None	G4	S3	null	BLM_S-Sensitive CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern USFWS_BCC-Birds of Conservation Concern	Coastal prairie Coastal scrub Great Basin grassland Great Basin scrub Mojavean desert scrub Sonoran desert scrub Valley & foothill grassland
<i>Bombus occidentalis</i>	western bumble bee	Insects	IIHYM24250	282	1	None	None	G2G3	S1	null	USFS_S-Sensitive XERCES_IM-Imperiled	null
<i>Centromadia parryi</i> ssp. <i>congdonii</i>	Congdon's tarplant	Dicots	PDAST4R0P1	93	3	None	None	G3T2	S2	1B.1	BLM_S-Sensitive SB_RSABG-Rancho Santa Ana Botanic Garden	Valley & foothill grassland
<i>Charadrius alexandrinus nivosus</i>	western snowy plover	Birds	ABNNB03031	122	1	Threatened	None	G3T3	S2	null	CDFW_SSC-Species of Special Concern NABCI_RWL-Red Watch List USFWS_BCC-Birds of Conservation Concern	Great Basin standing waters Sand shore Wetland
<i>Chloropyron maritimum</i> ssp. <i>palustre</i>	Point Reyes salty bird's-beak	Dicots	PDSCR0J0C3	68	2	None	None	G4?T2	S2	1B.2	BLM_S-Sensitive	Marsh & swamp Salt marsh Wetland
<i>Circus cyaneus</i>	northern harrier	Birds	ABNKC11010	44	3	None	None	G5	S3	null	CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern	Coastal scrub Great Basin grassland Marsh & swamp Riparian scrub Valley & foothill grassland Wetland
<i>Corynorhinus townsendii</i>	Townsend's big-eared bat	Mammals	AMACC08010	619	1	None	Candidate Threatened	G3G4	S2	null	BLM_S-Sensitive CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern	Broadleaved upland forest Chaparral Chenopod scrub Great Basin grassland Great Basin scrub Joshua tree woodland Lower montane coniferous forest Meadow

											USFS_S-Sensitive WBWG_H-High Priority	& seep Mojavean desert scrub Riparian forest Riparian woodland Sonoran desert scrub Sonoran thorn woodland Upper montane coniferous forest Valley & foothill grassland
Egretta thula	snowy egret	Birds	ABNGA06030	15	1	None	None	G5	S4	null	IUCN_LC-Least Concern	Marsh & swamp Meadow & seep Riparian forest Riparian woodland Wetland
Emys marmorata	western pond turtle	Reptiles	ARAAD02030	1151	1	None	None	G3G4	S3	null	BLM_S-Sensitive CDFW_SSC-Species of Special Concern IUCN_VU-Vulnerable USFS_S-Sensitive	Aquatic Artificial flowing waters Klamath/North coast flowing waters Klamath/North coast standing waters Marsh & swamp Sacramento/San Joaquin flowing waters Sacramento/San Joaquin standing waters South coast flowing waters South coast standing waters Wetland
Eryngium aristulatum var. hooveri	Hoover's button-celery	Dicots	PDAP10Z043	16	1	None	None	G5T1	S1	1B.1	SB_RSABG-Rancho Santa Ana Botanic Garden	Vernal pool Wetland
Geothlypis trichas sinuosa	saltmarsh common yellowthroat	Birds	ABPBX1201A	111	6	None	None	G5T3	S3	null	CDFW_SSC-Species of Special Concern USFWS_BCC-Birds of Conservation Concern	Marsh & swamp
Lasiurus cinereus	hoary bat	Mammals	AMACC05030	235	1	None	None	G5	S4	null	IUCN_LC-Least Concern WBWG_M-Medium Priority	Broadleaved upland forest Cismontane woodland Lower montane coniferous forest North coast coniferous forest
Laterallus jamaicensis coturniculus	California black rail	Birds	ABNME03041	241	3	None	Threatened	G3G4T1	S1	null	BLM_S-Sensitive CDFW_FP-Fully Protected IUCN_NT-Near Threatened NABCI_RWL-Red Watch List USFWS_BCC-Birds of Conservation Concern	Brackish marsh Freshwater marsh Marsh & swamp Salt marsh Wetland
Melospiza melodia pusillula	Alameda song sparrow	Birds	ABPBXA301S	38	6	None	None	G5T2?	S2?	null	CDFW_SSC-Species of Special Concern USFWS_BCC-Birds of Conservation Concern	Salt marsh
Northern Coastal Salt Marsh	Northern Coastal Salt Marsh	Marsh	CTT52110CA	53	2	None	None	G3	S3.2	null	null	Marsh & swamp Wetland
Rallus longirostris obsoletus	California clapper rail	Birds	ABNME05016	98	10	Endangered	Endangered	G5T1	S1	null	CDFW_FP-Fully Protected NABCI_RWL-Red Watch List	Brackish marsh Marsh & swamp Salt marsh Wetland
Reithrodontomys raviventris	salt-marsh harvest mouse	Mammals	AMAFF02040	141	13	Endangered	Endangered	G1G2	S1S2	null	CDFW_FP-Fully Protected IUCN_EN-Endangered	Marsh & swamp Wetland
Sorex vagrans halicoetes	salt-marsh wandering shrew	Mammals	AMABA01071	12	3	None	None	G5T1	S1	null	CDFW_SSC-Species of Special Concern	Marsh & swamp Wetland
Spirinchus thaleichthys	longfin smelt	Fish	AFCHB03010	45	1	Candidate	Threatened	G5	S1	null	CDFW_SSC-Species of Special Concern	Aquatic Estuary

Sternula antillarum browni	California least tern	Birds	ABNNM08103	67	2	Endangered	Endangered	G4T2T3Q	S2	null	CDFW_FP-Fully Protected NABCI_RWL-Red Watch List	Alkali playa Wetland
Suaeda californica	California seablite	Dicots	PDCHE0P020	18	1	Endangered	None	G1	S1	1B.1	null	Freshwater marsh Marsh & swamp Wetland
Tryonia imitator	mimic tryonia (=California brackishwater snail)	Mollusks	IMGASJ7040	39	1	None	None	G2	S2	null	IUCN_DD-Data Deficient	Aquatic Brackish marsh Estuary Lagoon Marsh & swamp Salt marsh Wetland

**Appendix D.3 – U.S. Fish and Wildlife Official Species List
for the Mathilda Avenue Improvements Project**



United States Department of the Interior



FISH AND WILDLIFE SERVICE

Sacramento Fish and Wildlife Office

FEDERAL BUILDING, 2800 COTTAGE WAY, ROOM W-2605

SACRAMENTO, CA 95825

PHONE: (916)414-6600 FAX: (916)414-6713

Consultation Code: 08ESMF00-2016-SLI-1023

March 09, 2016

Event Code: 08ESMF00-2016-E-02229

Project Name: Mathilda Avenue Improvements at SR 237 and US 101 Project

Subject: List of threatened and endangered species that may occur in your proposed project location, and/or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, under the jurisdiction of the U.S. Fish and Wildlife Service (Service) that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the Service under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

Please follow the link below to see if your proposed project has the potential to affect other species or their habitats under the jurisdiction of the National Marine Fisheries Service:

http://www.nwr.noaa.gov/protected_species/species_list/species_lists.html

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2)

of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2) (c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

<http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF>

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 *et seq.*), and projects affecting these species may require development of an eagle conservation plan (http://www.fws.gov/windenergy/eagle_guidance.html). Additionally, wind energy projects should follow the wind energy guidelines (<http://www.fws.gov/windenergy/>) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at: <http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm>; <http://www.towerkill.com>; and <http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html>.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment



United States Department of Interior
Fish and Wildlife Service

Project name: Mathilda Avenue Improvements at SR 237 and US 101 Project

Official Species List

Provided by:

Sacramento Fish and Wildlife Office
FEDERAL BUILDING
2800 COTTAGE WAY, ROOM W-2605
SACRAMENTO, CA 95825
(916) 414-6600

Consultation Code: 08ESMF00-2016-SLI-1023

Event Code: 08ESMF00-2016-E-02229

Project Type: TRANSPORTATION

Project Name: Mathilda Avenue Improvements at SR 237 and US 101 Project

Project Description: Highway and road improvements

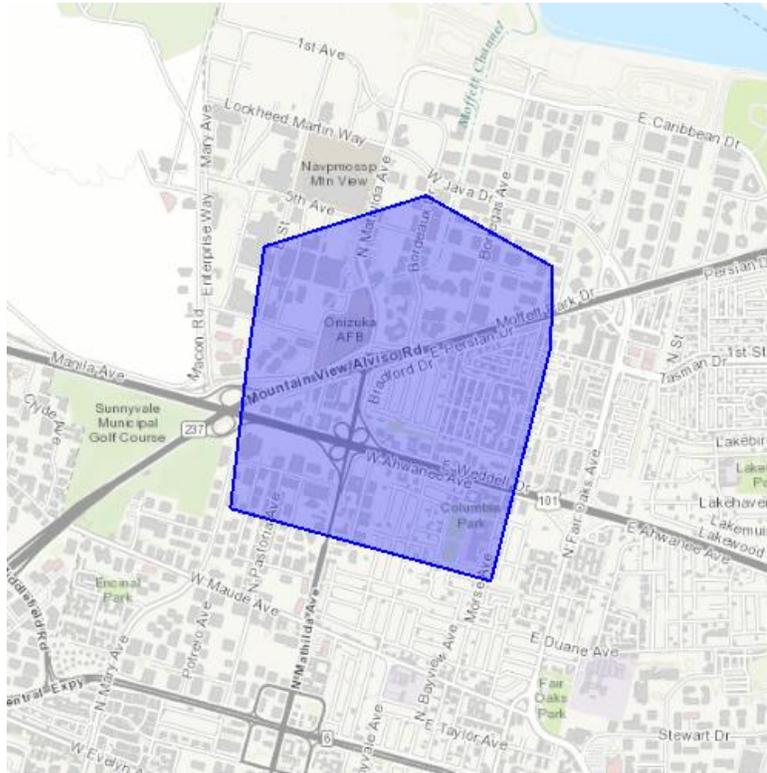
Please Note: The FWS office may have modified the Project Name and/or Project Description, so it may be different from what was submitted in your previous request. If the Consultation Code matches, the FWS considers this to be the same project. Contact the office in the 'Provided by' section of your previous Official Species list if you have any questions or concerns.



United States Department of Interior
Fish and Wildlife Service

Project name: Mathilda Avenue Improvements at SR 237 and US 101 Project

Project Location Map:



Project Coordinates: MULTIPOLYGON (((-122.03437328338623 37.40330103524173, -122.03544616699217 37.39563015074828, -122.0185375213623 37.39191375105402, -122.01463222503662 37.40401694439883, -122.01450347900392 37.40810772264832, -122.02278614044188 37.4117892321013, -122.03330039978026 37.40916447072623, -122.03437328338623 37.40330103524173)))

Project Counties: Santa Clara, CA



United States Department of Interior
Fish and Wildlife Service

Project name: Mathilda Avenue Improvements at SR 237 and US 101 Project

Endangered Species Act Species List

There are a total of 12 threatened or endangered species on your species list. Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species. Critical habitats listed under the **Has Critical Habitat** column may or may not lie within your project area. See the **Critical habitats within your project area** section further below for critical habitat that lies within your project. Please contact the designated FWS office if you have questions.

Amphibians	Status	Has Critical Habitat	Condition(s)
California red-legged frog (<i>Rana draytonii</i>) Population: Entire	Threatened	Final designated	
California tiger Salamander (<i>Ambystoma californiense</i>) Population: U.S.A. (Central CA DPS)	Threatened	Final designated	
Birds			
California Clapper rail (<i>Rallus longirostris obsoletus</i>) Population: Entire	Endangered		
California Least tern (<i>Sterna antillarum browni</i>)	Endangered		
western snowy plover (<i>Charadrius nivosus ssp. nivosus</i>) Population: Pacific coastal pop.	Threatened	Final designated	
Crustaceans			
Vernal Pool tadpole shrimp (<i>Lepidurus packardi</i>)	Endangered	Final designated	



United States Department of Interior
Fish and Wildlife Service

Project name: Mathilda Avenue Improvements at SR 237 and US 101 Project

Population: Entire			
Fishes			
Delta smelt (<i>Hypomesus transpacificus</i>) Population: Entire	Threatened	Final designated	
steelhead (<i>Oncorhynchus (=salmo) mykiss</i>) Population: Northern California DPS	Threatened	Final designated	
Flowering Plants			
California seablite (<i>Suaeda californica</i>)	Endangered		
Insects			
Bay Checkerspot butterfly (<i>Euphydryas editha bayensis</i>) Population: Entire	Threatened	Final designated	
San Bruno Elfin butterfly (<i>Callophrys mossii bayensis</i>) Population: Entire	Endangered		
Mammals			
Salt Marsh Harvest mouse (<i>Reithrodontomys raviventris</i>) Population: wherever found	Endangered		



United States Department of Interior
Fish and Wildlife Service

Project name: Mathilda Avenue Improvements at SR 237 and US 101 Project

Critical habitats that lie within your project area

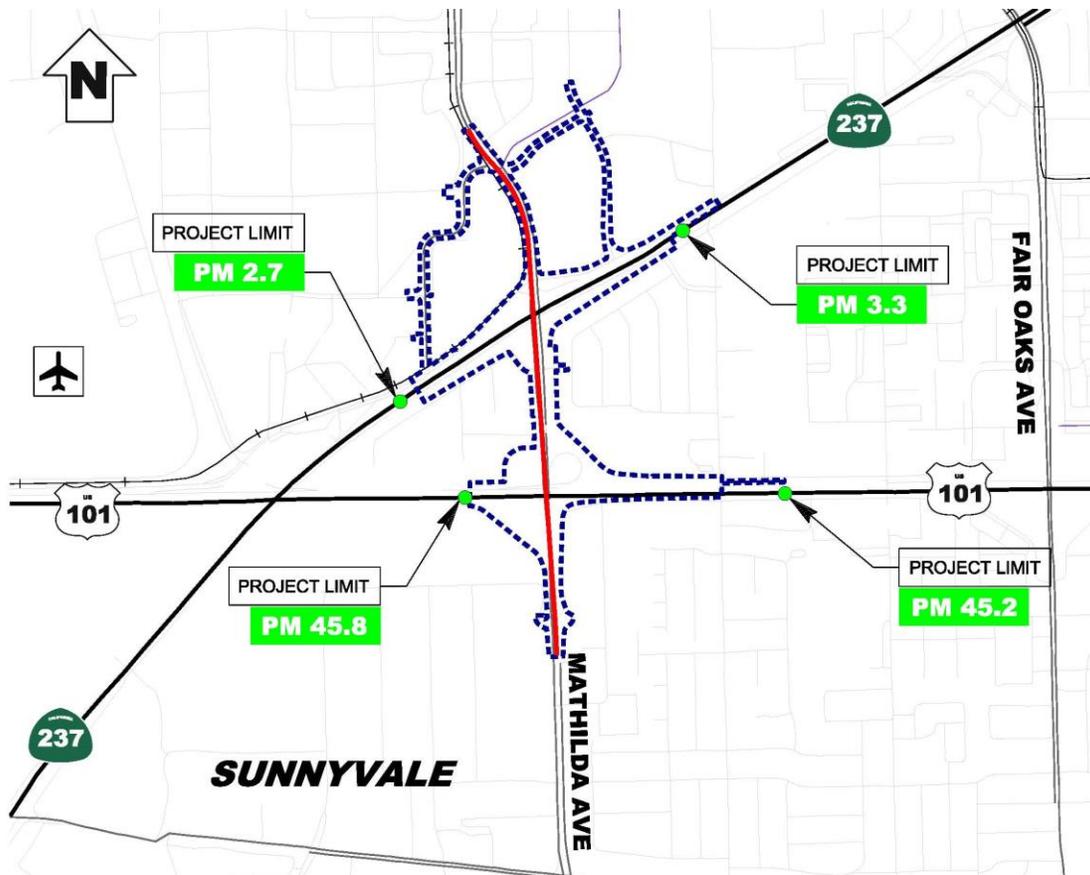
There are no critical habitats within your project area.

Appendix D.4 – Wetlands Assessment

WETLANDS ASSESSMENT

for the

MATHILDA AVENUE IMPROVEMENTS AT SR 237 AND US 101 PROJECT



Prepared for:

Santa Clara Valley Transportation Authority
California Department of Transportation
District 4

Prepared by:

ICF, International

Dated: December 2015

For individuals with sensory disabilities, this document is available in Braille, in large print, on audiocassette, or on computer disk. To obtain a copy in one of these alternative formats, please write to Caltrans, Attn: Elizabeth White, Office of Environmental Planning, 111 Grand Avenue, Oakland, CA 94623-0660; or call (510) 286-6233 (voice); or use the California Relay Service TTY number, (800) 735-2929.

WETLANDS ASSESSMENT

for the

MATHILDA AVENUE IMPROVEMENTS AT SR 237 AND US 101 PROJECT

on Mathilda Avenue from Almanor Avenue to Innovation Way; on SR 237 from 0.3 mile south of US 101/SR 237 Junction to 0.3 mile east of Mathilda Avenue Undercrossing; and on US 101 from 0.5 mile south of Mathilda Avenue to SR 237/US 101/SR 237 Junction in City of Sunnyvale, in Santa Clara County

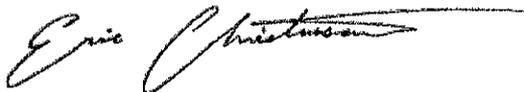
SCL-237-PM 2.7/3.3; SCL-101-PM 45.2/45.8
EA 04-4H2900/Project ID 0413000204

December 2015

U.S. DEPARTMENT OF TRANSPORTATION
STATE OF CALIFORNIA

and

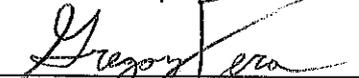
Cooperating Agency: Santa Clara Valley Transportation Authority

Prepared By:  Date: January 5, 2016

Eric Christensen, Biologist
(415) 677-7128
ICF International

Reviewed By:  Date: 1/5/2016

Kit Lyons-Stycket
Associate District Biologist
Office of Biological Sciences & Permits
(510) 622-8716
California Department of Transportation, District 4

Approved By:  Date: 1/8/2016

Gregory Pera
Branch Chief
(510) 286-5617
California Department of Transportation, District 4

Statement of Compliance: Produced in compliance with California Environmental Quality Act (CEQA) requirements, as appropriate, to meet the level of analysis and documentation that has been determined necessary for this project.

Mathilda Avenue Improvements at SR 237 and US 101

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Project Introduction and Purpose

The California Department of Transportation (Caltrans), in cooperation with the Santa Clara Valley Transportation Authority (VTA) and the City of Sunnyvale, is proposing the “Mathilda Avenue Improvements at SR 237 and US 101 Project” (Project) to improve Mathilda Avenue in the City of Sunnyvale from Almanor Avenue to Innovation Way, including on- and off-ramp improvements at SR 237/Mathilda Avenue and US 101/Mathilda Avenue interchanges. The primary purpose of the Project is to improve traffic operations on Mathilda Avenue through the US 101 and SR 237 interchanges. Figure 1 (Attachment A) shows the location of the Project. ICF International (ICF) conducted a delineation of waters of the United States within the Biological Study Area (BSA) of the Project in March and July 2015.

Site Description

The Project site is located within the City of Sunnyvale in Santa Clara County, California (Figure 1, Attachment A). It occurs in the Mountain View U.S. Geological Survey (USGS) 7.5-minute quadrangle. The BSA for the Project is based on the Project’s limits (Figure 2, Attachment A). On SR 237, the Project limits are from 0.3-mile east of the US 101/SR 237 interchange (post mile [PM] 2.7) to 0.3-mile east of the Mathilda Avenue undercrossing (PM 3.3). On US 101, the Project limits are from 0.3-mile south of Mathilda Avenue overcrossing (PM 45.4) to 0.3-mile south of SR 237/US 101 interchange (PM 45.8). The total length of the Project on Mathilda Avenue is approximately one mile. The BSA includes a proposed road that would connect Mathilda Avenue to Bordeaux Drive; however, this road would be completed by the Moffett Place Project separate from the Mathilda Avenue Improvements at SR 237 and US 101 Project. The Mathilda Avenue Improvements at SR 237 and US 101 Project proposes to construct traffic signals and paint bicycle lanes on the road after it is constructed by the Moffett Place Project.

Elevations in the BSA range from approximately 15 feet in low-lying areas to 40 feet on raised highway ramps (Google Earth Pro 2015). Topography within the BSA is relatively flat with a gentle slope downwards from US 101 to SR 237. The BSA has an estimated mean annual temperature of 59 degrees Fahrenheit and an estimated mean annual precipitation of 15.71 inches (U.S. Department of Agriculture, Natural Resources Conservation Service 2015).

Vegetation

Land cover types within the BSA include developed areas (existing roadways, parking lots, etc.), ornamental landscaping, and ruderal ground cover. Typical ornamental landscaping species include purple lantana (*Lantana montevidensis*), pepper tree (*Schinus molle*), flowering cherry (*Prunus serrulata*), deodar cedar (*Cedrus deodara*), silver-dollar gum (*Eucalyptus polyanthemus*), southern magnolia (*Magnolia grandiflora*), white Lady Banks rose (*Rosa banksiae*), and olive (*Olea europaea*), to name a few. The ruderal ground cover consists predominantly of wild oat (*Avena* sp.), ripgut grass (*Bromus diandrus*), summer mustard (*Hirschfeldia incana*), Italian thistle (*Carduus pycnocephalus* subsp. *pycnocephalus*), bristly ox-tongue (*Helminthotheca echioides*), smilo grass (*Stipa miliaceae* var. *miliaceae*), and prickly lettuce (*Lactuca serriola*).

Soil

Soil at the Project site is composed of Urbanland-Hangerone complex with 0 to 2 percent slopes, drained (Figure 3, Attachment A). The Urbanland-Hangerone complex is listed as hydric by the U.S.

Department of Agriculture, Natural Resources Conservation Service (USDA NRCS 2014). The major soil types in this map unit are urban land (70%) and Hangerone (25%) with inclusions of Bayshore (2%), Clear Lake (2%), and Embarcadero (1%). The map unit aggregated data indicate that the soils typically occur on basin floors and are poorly drained (Natural Resources Conservation Service 2013).

Hydrology

Stormwater drainage ditches and the Sunnyvale West Channel occur within the BSA (Figure 4, Attachment A). The ditches drain stormwater runoff during rain events but flow does not persist after rain events. The Sunnyvale West Channel provides flood control protection and water flows through the channel to the San Francisco Bay via Guadalupe Slough (Figure 5, Attachment A). The Sunnyvale West Channel was constructed in the 1960s in response to flooding caused by a combination of major storm events, land subsidence, and inadequate drainage to the San Francisco Bay (Santa Clara Valley Water District 2015).

Methods

Prior to conducting fieldwork, ICF reviewed U.S. Fish and Wildlife Service's Wetlands Mapper (USFWS) (U.S. Fish and Wildlife Service 2015) and Google Earth aerial imagery (Google Earth Pro 2015) to identify areas with the potential to support waters of the United States, based on apparent signatures of hydrology, topography, and/or vegetation composition.

ICF wetland specialists conducted the delineation fieldwork on March 6 and July 29, 2015 within the BSA. Both site visits occurred on days with no precipitation. The delineation was conducted using the routine onsite determination method described in the *1987 U.S. Army Corps of Engineers Wetlands Delineation Manual* (Environmental Laboratory 1987) and the supplemental procedures and wetland indicators provided in the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region* (U.S. Army Corps of Engineers 2008a). Delineation data were collected to support a preliminary jurisdictional determination from U.S. Army Corps of Engineers (USACE).

Wetland boundaries were determined by establishing representative sampling points to evaluate the presence of positive indicators of hydrophytic vegetation, hydric soil, and wetland hydrology. The boundaries of nonwetland waters (other waters) in the BSA were identified by locating the ordinary high water mark (OHWM), which represents the lateral limit of USACE jurisdiction over non-tidal, non-wetland waters in the absence of adjacent wetlands (33 Code of Federal Regulations [CFR] 328.4[c]). The OHWM of intermittent streams was identified using the field indicators provided in 33 CFR 328.3(e) and 329.11(a)(1) and *A Field Guide to the Identification of the Ordinary High Water Mark in the Arid West Region of the Western United States* (U.S. Army Corps of Engineers 2008b). Historic and current Section 10 waters do not occur within the BSA and, therefore, were not evaluated during the delineation.

The base map used during fieldwork consisted of the BSA overlaid on 2012 aerial imagery obtained from Microsoft Bing Maps at a scale of 1"= 50'. The delineators used a resource-grade GPS (global positioning system) unit with sub-meter accuracy, supplemented with aerial photograph interpretation, to map sampling points, the boundaries of wetlands and other waters, and the

locations of representative photos in the BSA. All GPS data collected in the field were downloaded and differentially corrected using the nearest available base-station data to produce the delineation maps.

Results

The Sunnyvale West Channel occurs within the northwestern area of the BSA (Figure 4, Attachment A). The Sunnyvale West Channel is assumed to be subject to USACE jurisdiction under Section 404 of the Clean Water Act (CWA) and thus was identified by ICF as a water of the United States.

No other potential waters of the United States, including Section 404 wetlands and nonwetland waters or Section 10 waters, were observed within the BSA. Nonjurisdictional stormwater drainage ditches were noted along the eastern boundary of Mathilda Avenue and within the traffic circles (Photos 1-3, Attachment B).

Vegetation

Hydrophytic vegetation indicators (1-Dominance Test, 2-Prevalence Test, or 3-Morphological Adaptations) described in *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region* (U.S. Army Corps of Engineers 2008a) were not observed within the BSA.

Soil

Hydric soil indicators described in the *Regional Supplement* (U.S. Army Corps of Engineers 2008a) were not observed within the BSA.

Hydrology

Indicators of wetland hydrology described in the *Regional Supplement* (U.S. Army Corps of Engineers 2008a) were not observed within the BSA.

Discussion

The Sunnyvale West Channel is a concrete-lined, culverted channel that is assumed to be a jurisdictional feature due to its direct hydrologic connection to the San Francisco Bay (Figure 5, Attachment A).

The ditches observed within the BSA do not meet the technical criteria to qualify as waters of the United States based on the Clean Water Rule: Definition of "Waters of the United States"; Final Rule (USACE 2015, US EPA 2015). The ditches are excavated in dry land, and do not drain wetlands or relocate tributaries. The ditches drain stormwater runoff during rain events, but flow does not persist after rain events. Where there is vegetation associated with the ditches, instead of bare ground or gravel/cobble, the vegetation consists of ruderal or weedy species including wild oat, Italian thistle, and riggut grass (Photos 1-3, Attachment B).

Conclusions

The Sunnyvale West Channel is assumed to be subject to USACE jurisdiction under CWA Section 404. Other waters of the United States are not present in the BSA or Project site. A portion of the Sunnyvale West Channel occurs within the BSA (specifically at the proposed road connecting Mathilda Avenue and Bordeaux Drive); however, as mentioned above, this proposed connection would be constructed by the Moffett Place Project, not the Mathilda Avenue Improvements at SR 237 and US 101 Project. Because the Mathilda Avenue Improvements at SR 237 and US 101 Project will not affect the Sunnyvale West Channel, a Section 404 permit from the USACE should not be required to authorize Project construction.

References

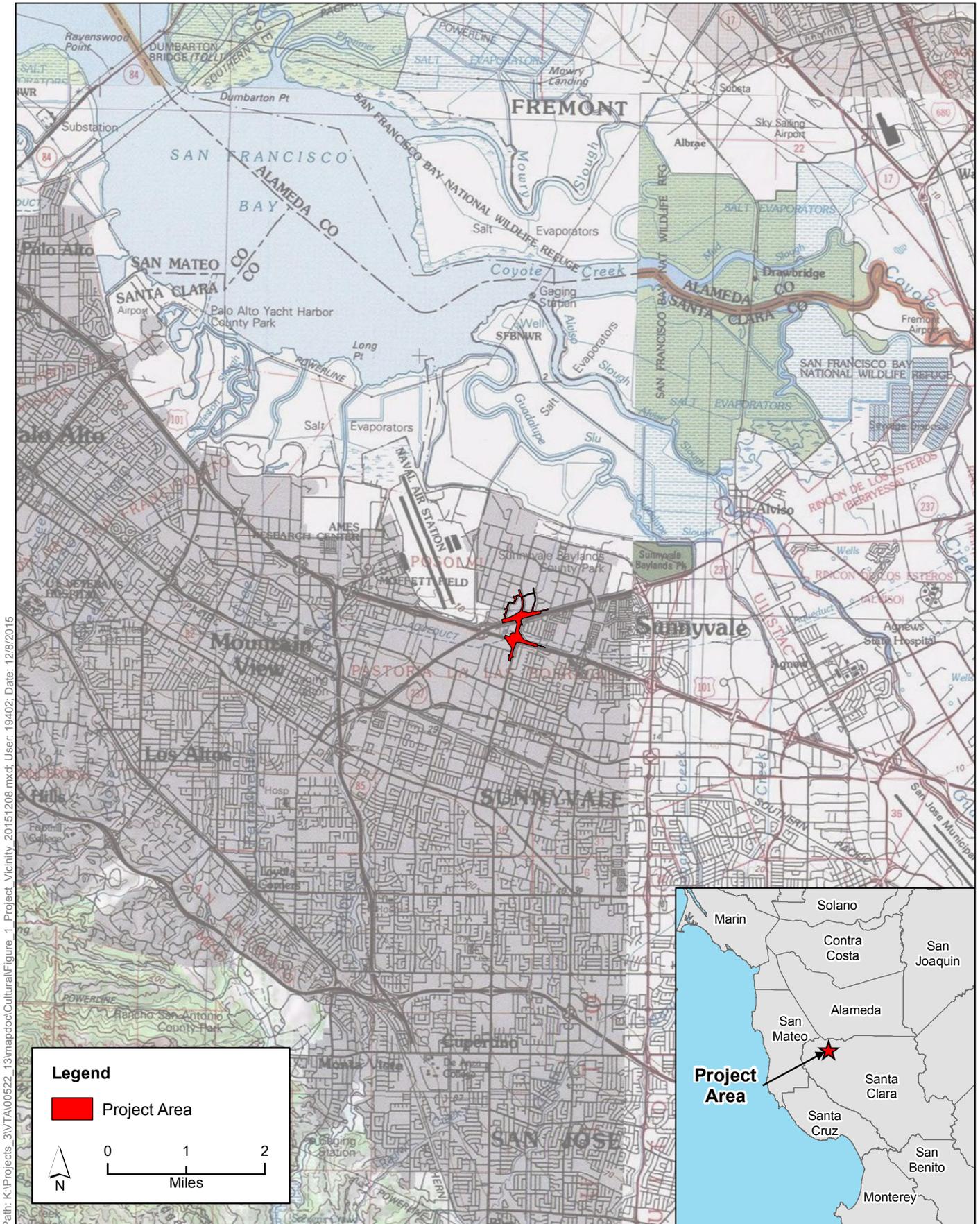
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Attachment A
Figures



Path: K:\Projects_3\VT\A\00522_13\mapdoc\Cultural\Figure_1_Project_Vicinity_20151208.mxd; User: 19402; Date: 12/8/2015



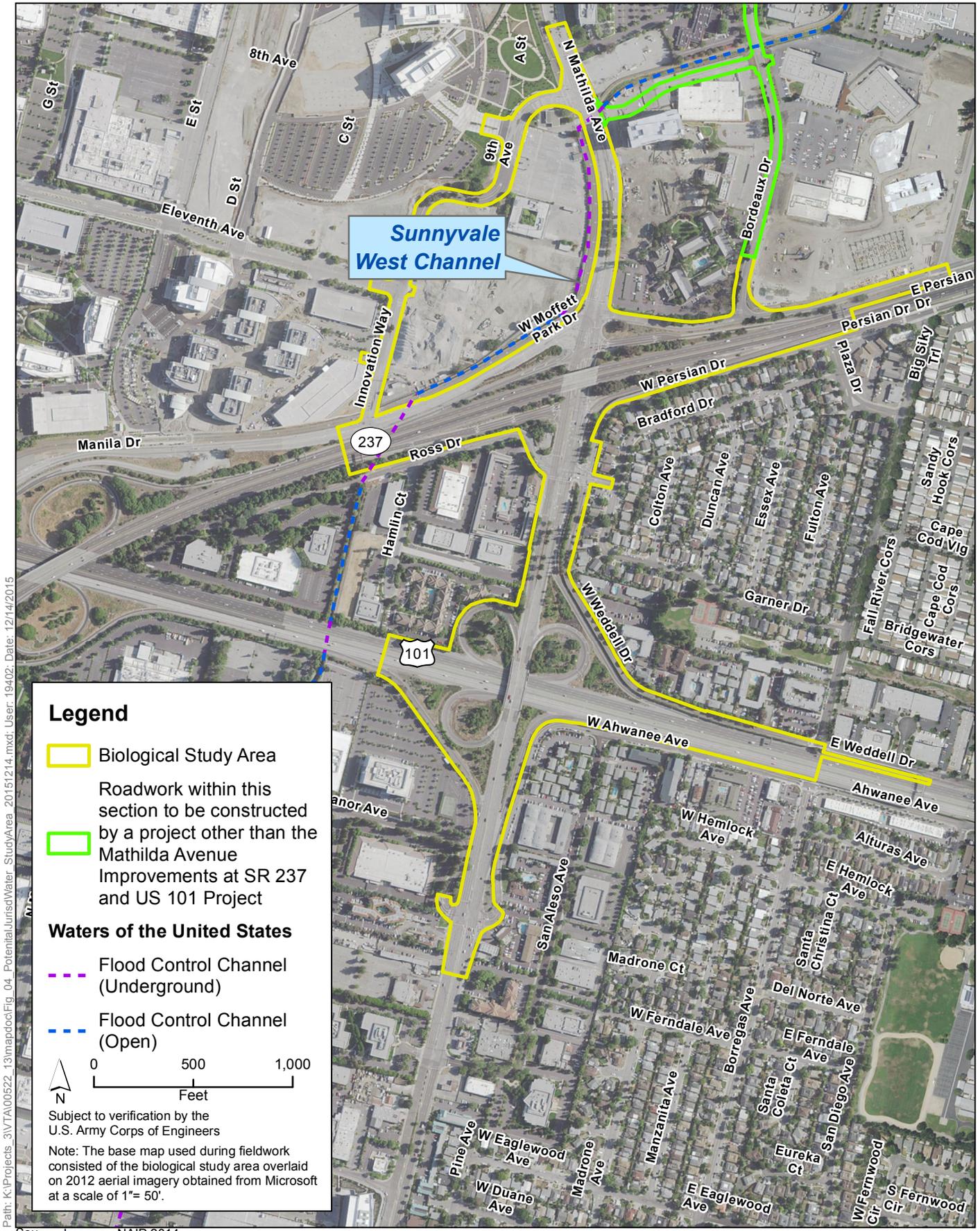
Figure 1
Project Vicinity
Mathilda Avenue Improvements at SR 237 and US 101



Figure 2
Biological Study Area
Mathilda Avenue Improvements at SR 237 and US 101 Project



Figure 3
Soils
Mathilda Avenue Improvements at SR 237 and US 101 Project



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Source: Imagery; NAIP 2014

Figure 4
Waters of the United States within the Biological Study Area
 Mathilda Avenue Improvements at SR 237 and US 101 Project

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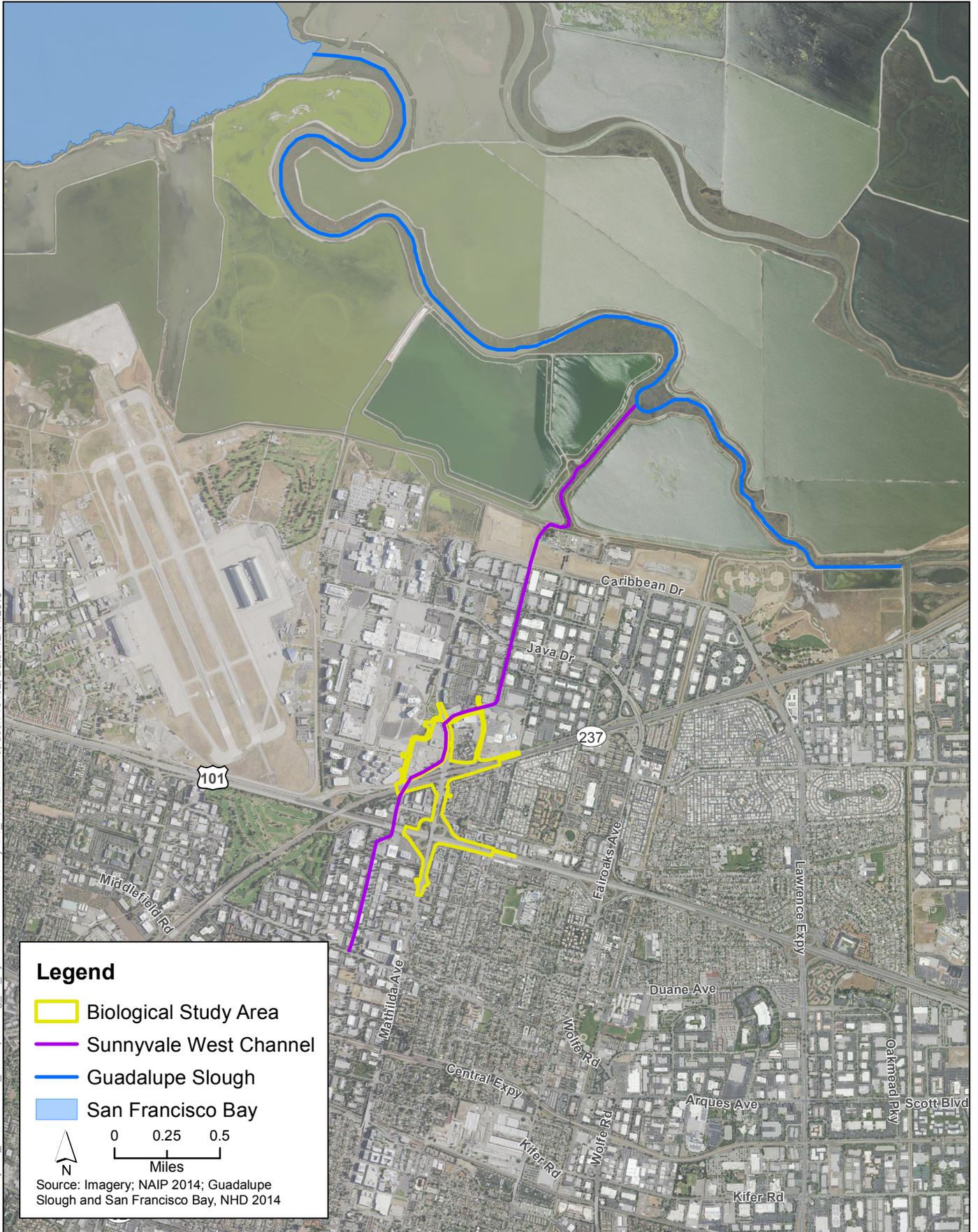


Figure 5
Hydrological Connection of Sunnyvale West Channel and the San Francisco Bay
Mathilda Avenue Improvements at SR 237 and US 101 Project

Attachment B
Photographs



Photo 1. Drainage parallel to Mathilda Avenue, facing south.



Photo 2. Drainage within the area immediately north of the Mathilda Avenue northbound to US 101 northbound interchange loop ramp, facing north.



Photo 3. Drainage within US 101 northbound to Mathilda Avenue southbound interchange loop ramp, facing southeast.

Appendix E

List of Technical Studies

Appendix E

List of Technical Studies

Air Quality Study Report	ICF International
Archaeological Survey Report	ICF International
Community Impact Assessment	ICF International
Historic Resources Compliance Report	ICF International
Initial Site Assessment	BASELINE Environmental Consulting
Natural Environment Study – Minimal Impacts	ICF International
Noise Study Report	ICF International
Paleontological Identification Report	ICF International
Preliminary Geological Assessment	BASELINE Environmental Consulting
Summary of Floodplain Encroachment	WRECO
Traffic Operations Assessment Report	Fehr and Peers
Visual Impact Assessment (Minor)	ICF International
Water Quality Assessment Report	WRECO
Wetland Assessment Technical Memorandum	ICF International

Appendix F
Build Alternative 2 (Diverging Diamond Interchange)

Build Alternative 2 (Diverging Diamond Interchange)

As part of Project development, the Project Development Team (PDT) agreed to eliminate Build Alternative 2 (Diverging Diamond Interchange (DDI)) due to safety concerns. Build Alternative 2 proposed to realign and widen the existing westbound SR 237 ramps and close Moffett Park Drive (West) at Mathilda Avenue, and modify the SR 237/Mathilda Avenue Interchange to provide a DDI configuration. This alternative was proposed to provide free left turns for ramp movements and additional storage between ramp termini.

CEQA provides three specific factors that may be used to eliminate an alternative from detailed consideration in an EIR. These include failure to meet most of the basic Project objectives, infeasibility, or inability to avoid significant environmental impacts. As part of the preliminary engineering studies conducted during project development, the PDT eliminated following issues were identified to support withdrawing Build Alternative 2 from further consideration based on safety considerations.

Safety

Proximity of Local Street and Ramp Intersections

For the DDI configuration, the Ross Drive and Moffett Park Drive (West) intersections are more closely spaced with the SR 237 ramp intersections compared to the existing condition. Traffic entering or exiting Ross Drive or Moffett Park Drive (West) through the DDI facility may have to traverse multiple lanes over short distances to make turning movements. This would increase the potential for side swipe or rear-end type collisions. Where intersections are closely spaced, traffic operations are often inhibited by short weave distance, storage lengths, and signal phasing. In addition it is difficult to provide proper signing and delineation.

Lane Width

The DDI layout incorporates small curve radii (less than 200 feet) at the crossover intersection due to the close proximity of local street intersections and the SR 237/Mathilda Avenue Undercrossing structure. DDI design guidelines recommend 15-foot-wide lanes at the crossover locations to ensure large trucks do not encroach into adjacent lanes. This is referred to as “off-tracking.” Due to width restrictions at the SR 237/Mathilda Avenue Undercrossing, narrower lane widths are required (11 to 12 feet) which would increase the potential for side swipe type collisions.

Location of Vehicles Stopped at the DDI Crossover Intersections

DDI design guidelines recommend vehicles proceed through the crossover intersections of the DDI on a tangent (straight path). Due to the close proximity of local street intersections and the SR 237/Mathilda Avenue Undercrossing structure, the “stop bar” where vehicles stop for a red light at the crossover intersections would be located within a curved alignment. Consequently, stopped vehicles would not be aligned with the receiving lane on the opposite side of the crossover intersection. This would result in motorist confusion and increase the potential for side swipe type collisions or wrong-way movements.

Crossover Angle

DDI design guidelines recommend the angle of the crossover intersections should be 45 degrees. Due to the close proximity of local street intersections and the SR 237/Mathilda Avenue Undercrossing structure, a crossover intersection angle of only 40 degrees is attainable. DDIs that have been built with crossover intersection angles of 40 degrees or less have exhibited higher percentages of wrong-way movements compared to those with crossover angles of 45 degrees.

Stopping Sight Distance

Sight distance for traffic traveling through the crossover intersections at “free-flow” speeds would be impeded by the SR 237/Mathilda Avenue Undercrossing bridge columns and abutment walls. This would increase the potential for rear-end type collisions.

Bicycle and Pedestrian Access

The combination of small curve radii and narrow lanes through the DDI crossover intersections, would result in vehicles (especially large trucks) “off-tracking” into shoulder areas. This raises safety concerns for bicyclists using the DDI facility. Pedestrian access through the DDI facility is counter-intuitive. For example, pedestrians using the sidewalk on the west side of Mathilda Avenue would need to cross four lanes of traffic into a center walkway that passes under the SR 237/Mathilda Undercrossing structure adjacent to the bridge columns, then cross back over four lanes of traffic to continue along the west side sidewalk. This circuitous route for pedestrians through the DDI facility is expected to raise safety concerns and deter usage, especially for pedestrians with disabilities.