



County of Orange NOTICE OF DETERMINATION

Recorded in Official Records, Orange County
Hugh Nguyen, Clerk-Recorder



NO FEE

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MAR 05 2015

HUGH NGUYEN, CLERK-RECORDER

BY:  DEPUTY

Planning Application:

TO: County Clerk, County of Orange

FROM: OC Public Works, 300 N. Flower St., Santa Ana, CA 92702-4048

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

Project Title: "F" Street Alignment (Cow Camp Road to Oso Parkway)	Type of Document: Addendum to FEIRs
State Clearinghouse Number: 2003021141 and 2006061140	Previously certified or adopted? YES If yes, provide document number and certification date: FEIR 584, certified October 24, 2006 and FEIR 589 certified on November 8, 2004
Contact Persons: Rose Fistrovic	Telephone: 714 667-8858
Applicant: RMV Community Development, LLC	Address: 28811 Ortega Highway, San Juan Capistrano, CA 92693
Project Location: "F" Street is located in unincorporated Orange County in the Rancho Mission Viejo Planned Community. The roadway is east of the community of Ladera Ranch and City of Mission Viejo, west and southwest of the community of Coto de Caza. The roadway generally traverses a ridge line that separates the Cañada Gobernadora and Cañada Chiquita Watersheds. The roadway will connect Oso Parkway on the north with Cow Camp Road on the south. The connection at Oso Parkway is east of Tesoro High School and generally aligned with the SR-241, which terminates north of Oso Parkway.	
Project Description: "F" Street is proposed to be a modified Rural Secondary Highway, which will consist of two 12-foot through lanes with 8-foot shoulders in both directions and a median that varies from approximately 10 feet wide north of Chiquita Canyon Drive and 58 feet wide maximum south of Chiquita Canyon Drive. Storm water conveyance facilities (e.g., bio-swales) will be provided adjacent to the roadway. In keeping with the Complete Streets concept, a paved ten-foot-wide pedestrian and bicycle multi-purpose pathway will be provided on the southbound side of the roadway to enhance opportunities for alternative non-motorized transportation modes. The roadway will have a design speed of 70 mph and a posted speed limit of up to 65 mph. The proposed right-of-way for "F" Street is generally expected to be 120 feet, generally being 60 feet west and east of the centerline, respectively, plus slopes from Chiquita Canyon Drive north. From Chiquita Canyon Drive south, the proposed right-of-way of "F" Street is generally expected to be 150 feet, generally 73 feet west of the centerline and 77 feet east of the centerline. This width will vary due to varying width medians and intersection geometrics. At the intersections, the street will widen out to accommodate the couplet at Oso Parkway; the southbound off-/northbound on-ramps at Chiquita Canyon Drive, and right- and left-turn lanes at Cow Camp Road.	

Notice is hereby given that the **County of Orange** as lead agency, OC Public Works, has made the following determination on the above-described project:

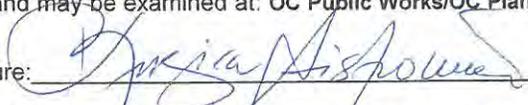
- The project was approved by OC Public Works Director on **March 4, 2015**.
- The project will have a significant effect on the environment.
 - An Environmental Impact Report was prepared for this project pursuant to the provisions of CEQA.
 - A Negative Declaration was prepared for this project pursuant to the provisions of CEQA.
- Mitigation Measures **were** incorporated into the project through conditions of approval and project design.
- For this project Mitigation Monitoring Plan/Program **was Adopted**
- For this project a Statement of Overriding consideration **was Adopted**
- Findings **were** made pursuant to CEQA Guidelines 15091 (Statement of Facts and Findings).
- A copy of the **EIR** and the record of the project approval is on file and may be examined at: **OC Public Works/OC Planning, 300 N. Flower, Santa Ana, California 92702-4048. (714) 667-8857**

POSTED

MAR 05 2015

ORANGE COUNTY CLERK-RECORDER DEPARTMENT

BY:  DEP

Signature: 

Title: MANAGER, LAND DEVELOPMENT

Date: 3/4/2015

Fish & Game Fee Finding: EIR: filing fee previously paid.



ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

Addendum to FEIR 584 and FEIR 589 ST # 140005

"F" Street Alignment

IP 15-055

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

- | | | |
|--|--|---|
| <input checked="" type="checkbox"/> Aesthetics | <input type="checkbox"/> Agriculture/Forestry Res. | <input checked="" type="checkbox"/> Air Quality |
| <input type="checkbox"/> Biological Resources | <input type="checkbox"/> Cultural Resources | <input type="checkbox"/> Geology/Soils |
| <input type="checkbox"/> Greenhouse Gas Emiss. | <input type="checkbox"/> Hazards/Hazardous Mat. | <input checked="" type="checkbox"/> Hydrology/Water Quality |
| <input type="checkbox"/> Land Use/Planning | <input type="checkbox"/> Mineral Resources | <input type="checkbox"/> Noise |
| <input type="checkbox"/> Population/Housing | <input type="checkbox"/> Public Services | <input type="checkbox"/> Recreation |
| <input checked="" type="checkbox"/> Transportation/Traffic | <input type="checkbox"/> Utilities/Service Systems | <input type="checkbox"/> Mandatory Findings |

DETERMINATION: (To be completed by the Lead Agency) On the basis of this initial evaluation:

I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION (ND) will be prepared pursuant to CEQA Guidelines Article 6, 15070 through 15075.

I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION (MND) will be prepared pursuant to CEQA Guidelines Article 6, Sec. 15070 through 15075.

I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT (EIR) is required.

I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

I find that although the proposed project could have a significant effect on the environment, because potentially effects 1) have been analyzed adequately in an earlier EIR or ND/MND pursuant to applicable legal standards and 2) have been avoided or mitigated pursuant to that earlier EIR/ND/MND, including revisions or mitigation measures that are imposed upon the project, MINOR ADDITIONS AND/OR CLARIFICATIONS are needed to make the previous documentation adequate to cover the project which are documented in this Addendum to the earlier CEQA Document (Sec. 15164)

Signature: *Robyn Uptegraff*
Name: Robyn Uptegraff

March 3, 2015
Date



ENVIRONMENTAL ANALYSIS CHECKLIST

Addendum to FEIR 584 and FEIR 589 ST # 140005

"F" Street Alignment

IP 15-055

ISSUES AND SUPPORTING DATA SOURCES:	Potential Significant Impact	Less than Significant Impact/MM	Less than Significant Impact	No Impact
1. AESTHETICS. Would the project:				
a. Have a substantial adverse effect on a scenic vista?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input 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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input 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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. AGRICULTURE & FORESTRY RESOURCES.				
<p>In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California <u>Agricultural Land Evaluation and Site Assessment Model (1997)</u> 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 California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board.</p>				
Would the project:				
a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	<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	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Section 51104(g))?

- | | | | | |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|
| 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 forest land to non-forest use? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

3. 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 checked="" type="checkbox"/> | <input type="checkbox"/> | <input 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 checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| d. Expose sensitive receptors to substantial pollutant concentrations? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" 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"/> |

4. BIOLOGICAL RESOURCES. Would the project:

- | | | | | |
|--|--------------------------|-------------------------------------|-------------------------------------|--------------------------|
| a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input 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 Wildlife or U.S. Fish and Wildlife Service? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input 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 checked="" type="checkbox"/> | <input type="checkbox"/> | <input 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 | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

of native wildlife nursery sites?

- e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?
- f. Conflict with provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

5. CULTURAL RESOURCES. Would the project:

- a. Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?
- b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?
- c. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?
- d. Disturb any human remains, including those interred outside of formal cemeteries?

6. GEOLOGY AND SOILS. Would the project:

- a. Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:
- i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.
 - ii. Strong seismic ground shaking?
 - iii. Seismic-related ground failure, including liquefaction?
 - iv. Landslides?
- b. Result in substantial soil erosion or the loss of topsoil?
- c. 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?
- 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?
- e. Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal system where sewers are not available for the disposal of waste water?

7. 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?

* GHG emissions and global climate change is not “new information” since these effects have been generally known for quite some time. Therefore, for the “F” Street Project, GHG emissions would not be considered new information under Section 21166 of CEQA. This issue and summarizes of the supporting court cases is discussed in the Addendum.

8. HAZARDS & 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?
- b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?
- c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?
- d. 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?
- e. For a project located within an airport land use plan or, where such plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?
- f. For a project within the vicinity of private airstrip, would the project result in a safety hazard for people residing or working in the project area?
- g. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?
- 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?

9. HYDROLOGY & WATER QUALITY. Would the project:

- a. Violate any water quality standards or waste discharge requirements?
- b. Substantially deplete groundwater supplies or

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

- c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?
- d. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?
- e. Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?
- f. Otherwise substantially degrade water quality?
- g. Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?
- h. Place within a 100-year flood hazard area structures, which would impede or redirect flood flows?
- i. Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?
- j. Inundation by seiche, tsunami, or mudflow?

10. LAND USE & PLANNING. Would the project:

- a. Physically divide an established community?
- 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?
- c. Conflict with any applicable habitat conservation plan or natural community conservation plan?

11. 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?
- 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?

12. 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"/> |
| 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 checked="" type="checkbox"/> | <input 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 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 the project area to excessive noise levels? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

13. POPULATION & 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"/> |

14. 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: | | | | |
| i. Fire protection? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| ii. Police protection? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| iii. Schools? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| iv. Parks? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| v. Other public facilities? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

15. 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?
- 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?

16. 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?
- b. Conflict with an applicable congestion management program, including, but not limited to level of service standard and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?
- c. Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?
- d. Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?
- e. Result in inadequate emergency access?
- f. Conflict with adopted policies, plans or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?

17. UTILITIES & SERVICE SYSTEMS. Would the project:

- a. Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?
- b. Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?
- c. Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which would cause significant environmental effects?
- d. Have sufficient water supplies available to serve the project from existing entitlements and

resources, or are new or expanded entitlements needed?

- | | | | | | |
|----|--|--------------------------|--------------------------|--------------------------|-------------------------------------|
| e. | Result in a determination by the wastewater treatment provider which serves or may serve the project that it has 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"/> |

18. MANDATORY FINDINGS

- | | | | | | |
|----|---|-------------------------------------|-------------------------------------|--------------------------|--------------------------|
| 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? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input 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 checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| c. | Does project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

NOTE: All referenced and/or incorporated documents may be reviewed by appointment only, at the County of Orange Public Works Department, 300 N. Flower Street, Santa Ana, California, unless otherwise specified. An appointment can be made by contacting the CEQA Contact Person identified above.

CUD: Revised 01/2014

ADDENDUM
TO FINAL EIR NOs. 584 and 589

THE RANCH PLAN
“F” STREET ALIGNMENT
(COW CAMP ROAD TO OSO PARKWAY)
PERMIT ST140005



Prepared for:
Rose Fistrovic
OC Public Works
300 North Flower Street
Santa Ana, California 92702-4048

Prepared by:
BonTerra Psomas
3 Hutton Centre Drive, Suite 200
Santa Ana, California 92707

March 2015

**“F” Street Alignment
(Cow Camp Road to Oso Parkway)
(Permit ST140005)**

**Addendum 2.1 to Final Environmental Impact Report No. 584
(State Clearinghouse No. 2006061140)**

Southern Subregion Natural Community Conservation Plan/Master Streambed Alteration Agreement/Habitat Conservation Plan Joint Programmatic Environmental Impact Report

**Addendum 2.2 to Final Environmental Impact Report No. 589
(State Clearinghouse No. 2003021141)**

The Ranch Plan General Plan Amendment and Zone Change

Prepared for:

Rose Fistrovic
OC Public Works
300 North Flower Street
Santa Ana, California 92702

Prepared by:

BonTerra Psomas
3 Hutton Centre Drive, Suite 200
Santa Ana, California 92707

March 2015

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SECTION 1.0 PURPOSE OF ADDENDUM

1.1 OVERVIEW

The County of Orange was the California Environmental Quality Act (CEQA) lead agency for The *Ranch Plan Final Program Environmental Impact Report* (EIR) No. 589 (hereinafter referred to as "FEIR 589") and FEIR 584, which was the CEQA portion of the Joint Programmatic EIR/Environmental Impact Statement (EIS) prepared for the Southern Subregion Natural Community Conservation Plan/Master Streambed Alteration Agreement/Habitat Conservation Plan (herein referred to as the "Southern Subregion HCP" or "SSHCP"). As discussed below, these two Program EIRs addressed the development of the Rancho Mission Viejo Planned Community. The focus of each of these documents is further discussed below.

Consistent with the requirements of the CEQA, both FEIR 584 and FEIR 589 were prepared as Program EIRs. Section 15165 of the CEQA Guidelines states, "Where individual projects are, or a phased project is, to be undertaken and where the total undertaking comprises a project with significant environmental effect, the Lead Agency shall prepare a single program EIR for the ultimate project as described in Section 15168. As such, these documents provide the comprehensive evaluation of the potential environmental impacts associated with the development of the Rancho Mission Viejo Planned Community, of which "F" Street (i.e., "Project") is a component. The Rancho Mission Viejo Planned Community was addressed as a single project. Past and future actions, including the approvals associated with implementation of "F" Street, are the phased implementation of the larger Rancho Mission Viejo Planned Community.

Though identified as Program EIRs, as recommended by CEQA both FEIR 589 and FEIR 584 provided a substantial amount of detail on the uses and potential environmental impacts associated with the development of the Ranch Plan (hereinafter referred to as the "Rancho Mission Viejo Planned Community"). Both FEIR 589 and FEIR 584 went beyond a broad General Plan level of evaluation. They provided detailed information on the area of development, the amount and types of uses to be constructed; the sizing and location of infrastructure required to support the development (i.e., roads; drainage and water quality basins; electrical facilities; and water and wastewater storage and conveyance facilities). This allowed a comprehensive evaluation of the potential impacts and development of a mitigation program that identified conditions applicable to tract map approvals. The level of detail was of sufficient detail that regulatory permits have been issued for the Rancho Mission Viejo Planned Community by federal and State regulatory agencies (this is discussed further in Section 2.4).

When a Program EIR has been prepared, Section 15168 of the CEQA Guidelines provides the following direction for use of that document with later activities:

Subsequent activities in the program must be examined in the light of the program EIR to determine whether an additional environmental document must be prepared.

- (1) If a later activity would have effects that were not examined in the program EIR, a new Initial Study would need to be prepared leading to either an EIR or a Negative Declaration.
- (2) If the agency finds that pursuant to Section 15162, no new effects could occur or no new mitigation measures would be required, the agency can approve the activity as being within the scope of the project covered by the program EIR, and no new environmental document would be required.

- (3) An agency shall incorporate feasible mitigation measures and alternatives developed in the program EIR into subsequent actions in the program.
- (4) Where the subsequent activities involve site specific operations, the agency should use a written checklist or similar device to document the evaluation of the site and the activity to determine whether the environmental effects of the operation were covered in the program EIR.
- (5) A program EIR will be most helpful in dealing with subsequent activities if it deals with the effects of the program as specifically and comprehensively as possible. With a good and detailed analysis of the program, many subsequent activities could be found to be within the scope of the project described in the program EIR, and no further environmental documents would be required.

In keeping with this direction, the County of Orange has evaluated the Project (construction of "F" Street) to determine what level of environmental document is required. Though the impacts of the Project are generally consistent with those identified in FEIR 589 and FEIR 584, the County of Orange has required the preparation of an Addendum as a method of documenting the consistency with the certified documents and address any modifications.

1.2 USE OF AN ADDENDUM

This Addendum has been prepared in accordance with the provisions of the CEQA (Sections 21000, et seq. of the *California Public Resources Code*) and the State CEQA Guidelines (Title 14 *California Code of Regulations* Sections 15000, et seq.). Section 15164(a) of the State CEQA Guidelines states that "the lead agency or a responsible agency shall prepare an addendum to a previously certified EIR if some changes or additions are necessary but none of the conditions described in Section 15162 calling for preparation of a subsequent EIR have occurred". Pursuant to Section 15162(a) of the State CEQA Guidelines, a subsequent Environmental Impact Report (EIR) or Negative Declaration is only required when:

- (1) Substantial changes are proposed in the project which will require major revisions of the previous EIR or negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects;
- (2) Substantial changes occur with respect to the circumstances under which the project is undertaken which will require major revisions of the previous EIR or Negative Declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; or
- (3) New information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous EIR was certified as complete or the Negative Declaration was adopted, shows any of the following:
 - (A) The project will have one or more significant effects not discussed in the previous EIR or negative declaration;
 - (B) Significant effects previously examined will be substantially more severe than shown in the previous EIR;
 - (C) Mitigation measures or alternatives previously found not to be feasible would in fact be feasible, and would substantially reduce one or more significant

effects of the project, but the project proponents decline to adopt the mitigation measure or alternative; or

- (D) Mitigation measures or alternatives which are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measure or alternative.

FEIR 589 was certified by the Orange County Board of Supervisors on November 8, 2004, as adequately addressing the potential environmental impacts associated with the development of the "Ranch Plan", a 22,815-acre Planned Community allowing for the development of 14,000 dwelling units and 5,200,000 square feet of employment uses. Subsequent to the approvals, the name was changed from the Ranch Plan to the Rancho Mission Viejo Planned Community. Thus, the overall development is referred to as "the Rancho Mission Viejo Planned Community"; however, there are references to planning document that still use the name "the Ranch Plan".

Following the preparation of FEIR 589, the SSHCP and its associated Joint Programmatic EIR/EIS was prepared by the County of Orange in cooperation with the California Department of Fish and Game (CDFG)¹ and the U.S. Fish and Wildlife Service (USFWS) in accordance with the provisions of the State Natural Community Conservation Planning Act of 1991 (NCCP Act), the California Endangered Species Act (CESA), the Federal Endangered Species Act (FESA), Section 1600 et seq. of the *California Fish and Game Code*, CEQA, and the National Environmental Policy Act (NEPA).² The SSHCP provides for the conservation of designated State- and federally listed and unlisted species and associated habitats that are currently found within the 132,000-acre Natural Community Conservation Plan/Master Streambed Alteration Agreement/Habitat Conservation Plan (NCCP/MsAA/HCP) study area. **The County of Orange Board of Supervisors certified the EIR, hereinafter referred to as "FEIR 584", on October 24, 2006.**

The purpose of this Addendum is to analyze the potential differences between the impacts evaluated in FEIR 584 and FEIR 589 and those that would be associated with the construction of "F" Street between Cow Camp Road and Oso Parkway (i.e., the "Project"). The proposed alignment, which is located in Planning Area 2 of the Rancho Mission Viejo Planned Community, has been modified slightly from the alignment evaluated in FEIR 584 and FEIR 589 to provide for a more effective Project. As described in detail herein, there are no new significant impacts resulting from these changes.

As further discussed in Section 2.4, the Rancho Mission Viejo Planned Community was developed in coordination with the NCCP/MsAA/HCP to ensure that the Rancho Mission Viejo Planned Community was substantially consistent with the draft planning guidelines and principles formulated to address biological resources in the larger subregion. Both FEIR 589 and FEIR 584 addressed the potential that State Route (SR) 241 would not be extended beyond

¹ Although the California Department of Fish and Game (CDFG) changed its name to the California Department of Fish and Wildlife (CDFW) effective January 1, 2013, "CDFG" is still used throughout this document for all documents published, actions taken, or database searches completed before January 1, 2013.

² The environmental document for the Southern Subregion NCCP/MsAA/HCP was prepared pursuant to both CEQA and NEPA. NEPA was required because the approval of the SSHCP and issuance of the Incidental Take Permit (ITP) was a federal action taken by the USFWS. Though the Minor Amendment to the SSHCP will be a federal action, this Addendum is being prepared to satisfy the requirements of CEQA only. Therefore, the discussion in this Addendum references FEIR 584 (the CEQA component of the joint environmental document prepared for the Southern Subregion NCCP/MsAA/HCP because certification of FEIR 584 is the action taken by the Orange County Board of Supervisors).

its current terminus at Oso Parkway and an arterial highway would be constructed along a similar alignment.

It is appropriate to have this Addendum be to both FEIR 589 and FEIR 584 because both of these documents address the implementation of the Rancho Mission Viejo Planned Community. FEIR 589 addressed the County entitlements for the Rancho Mission Viejo Planned Community and became the basis for the County's General Plan and zoning. The SSHCP, and the associated FEIR 584, is recognized as the planning program adopted by both the County and USFWS for the protection of biological resources for southeast Orange County. The analysis in FEIR 584 and FEIR 589 is consistent; however, since FEIR 584 was certified after the Settlement Agreement on FEIR 589 was reached (this is discussed further in Section 2.2), FEIR 584 addressed the development concept accepted by the Settlement Agreement. As the CEQA lead agency for both documents, it is beneficial for the County of Orange to have the Addendum reference both documents to ensure a complete and updated record of all actions is maintained. Additionally, because a minor amendment to the SSHCP was required, it is appropriate that this Addendum be to both FEIR 584 and FEIR 589. However, as noted above, the analysis pertaining to consistency with FEIR 584 is focused on the biological resources evaluation.

The proposed "F" Street alignment does result in an increase in open space/habitat impacts; however, as discussed in this Addendum, mitigation consistent with the SSHCP is proposed to ensure there is no "loss of habitat reserve acres" and no "loss of habitat value". There are no substantial changes to the circumstances under which the "F" Street Project would be undertaken and there is no new information (as defined in State CEQA Guidelines, Section 15162(a)). Therefore, in accordance with Section 15164 of the State CEQA Guidelines, this Addendum to FEIR 584 and FEIR 589 is the appropriate environmental documentation for construction-level approvals and regulatory requirements associated with the proposed Project.

In taking action on any of the approvals outlined in Section 3.0, Project Description, the decision-making body must consider the whole of the data presented in FEIR 584 and FEIR 589 (the FEIR includes the Findings of Fact and Statement of Overriding Considerations, and Mitigation Monitoring and Reporting Program (MMRP), which is contained in the Regulation Compliance Matrix [RCM])³ and this Addendum.

Section 2.0 of this Addendum provides background on and a chronology of the Rancho Mission Viejo Planned Community, actions taken subsequent to the approval by the Board of Supervisors, and related planning programs; Section 3.0 provides a description of the proposed actions associated with "F" Street.

Section 4.0 presents an environmental analysis of the proposed "F" Street project. The County of Orange's current Environmental Checklist questions have been used as the basis for the analysis in this Addendum. It should be noted that the Environmental Checklist has been updated since FEIR 584 and FEIR 589 were certified.

Appendix A, the "F" Street RCM, identifies the project design features, standard conditions of approval, mitigation measures, stipulations from past settlement agreements, and permit

³ In conjunction with the approval of the Rancho Mission Viejo Planned Community, the County Board of Supervisors adopted a Mitigation Monitoring and Reporting Program (MMRP) pursuant to Section 21081.6 of the *California Public Resources Code*. Over time, other compliance measures that apply to the Rancho Mission Viejo Planned Community that also serve to reduce environmental impacts have been included. These include provisions from the Development Agreement; the Planned Community Zoning Regulations/Conditions; the South County Roadway Improvement Program (SCRIP); Litigation Settlement Agreement requirements; and Service Provider Agreement requirements. Combined, these requirements are tracked in a comprehensive Regulation Compliance Matrix.

requirements that are applicable to "F" Street. As previously noted, "F" Street represents a portion of the much larger, previously approved, Rancho Mission Viejo Planned Community. Therefore, only those mitigation requirements from the previously approved document that are applicable to "F" Street have been included in this analysis.

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SECTION 2.0 PROJECT BACKGROUND

The following provides a summary of actions associated with the development, approval, and implementation of the Rancho Mission Viejo Planned Community.

2.1 THE RANCH PLAN PROGRAM FINAL EIR 589

The Rancho Mission Viejo Planned Community was developed in coordination with the Natural Community Conservation Plan/Master Streambed Alteration Agreement/Habitat Conservation Plan (NCCP/MsAA/HCP) and the Special Area Management Plan (SAMP) planning programs to ensure that the Rancho Mission Viejo Planned Community was substantially consistent with the draft planning guidelines and principles formulated to address biological and water resources in the larger subregion. In addition, a third process, the South County Outreach and Review Effort (SCORE), was developed by the County of Orange to seek input from the community on the Rancho Mission Viejo Planned Community.

As part of the CEQA process, the County of Orange prepared and circulated a Notice of Preparation (NOP)/Initial Study (IS) for The Ranch Plan Program EIR 589 on February 24, 2003. The County received 52 comment letters. A revised NOP outlining minor changes in the Rancho Mission Viejo Planned Community was sent on March 23, 2004, to the recipients of the original NOP and others who commented on the NOP and/or wished to be added to the notification list. The County of Orange Planning Commission held a public scoping meeting on the Rancho Mission Viejo Planned Community and its associated Program EIR on April 23, 2003, at the City of Mission Viejo City Council chambers.

The County of Orange released Draft Program EIR 589 (Draft EIR 589) for public review and comment on June 10, 2004, for a 61-day public review period. Copies of the Draft EIR were made available in the following branch libraries in south Orange County: Laguna Niguel, Rancho Santa Margarita, San Clemente, San Juan Capistrano Regional, Mission Viejo, and Ladera Ranch. The County received 193 written comments (letters and emails) during the public review period on Draft EIR 589. All these comments were responded to in writing and are part of FEIR 589. In addition, five public meetings were held before the Orange County Planning Commission.

On November 8, 2004, the Orange County Board of Supervisors approved a General Plan Amendment (Resolution No. 04-291), Zone Change (Resolution No. 04-292 and Ordinance No. 04-014), and Development Agreement (Resolution No. 04-293 and Ordinance No. 04-015) for the 22,815-acre Rancho Mission Viejo Planned Community. The Board of Supervisors selected Alternative B-10 Modified, which established a blueprint for the long-term conservation, management, and development of the last large-scale, integrated landholding in south Orange County. This alternative allowed for the construction of 14,000 dwelling units, 3,480,000 square feet of Urban Activity Center (UAC) uses on 251 acres, 500,000 square feet of Neighborhood Center uses on 50 acres, and 1,220,000 square feet of business park uses on 80 acres, all of which were proposed to occur on approximately 7,683 acres of the Rancho Mission Viejo Planned Community. The balance of the Rancho Mission Viejo Planned Community, totaling approximately 15,132 gross acres (or approximately 66.32 percent), was identified for open space uses.

Concurrent with the foregoing approvals, the Board of Supervisors adopted Resolution No. 04-290, certifying FEIR 589 as complete, adequate, and in full compliance with the requirements of CEQA and the State CEQA Guidelines. A Findings of Fact and a Statement of Overriding Considerations were adopted as part of the approval process. The Findings of Fact

for unavoidable adverse impacts were made for the following topical areas: land use and relevant planning, agricultural resources, water resources, air quality, noise, aesthetics and visual resources, mineral resources, fire protection services and facilities, traffic and circulation, and biological resources.

2.2 SETTLEMENT AGREEMENTS

On December 8, 2004, the City of Mission Viejo (City) and a coalition of concerned environmental groups (Resource Organizations) filed separate actions in the Orange County Superior Court challenging the Board of Supervisors' approval of the Rancho Mission Viejo Planned Community and its certification of FEIR 589 (Orange County Superior Court Case Nos. 04CC11999 and 04CC01637). In summary, the individual actions raised questions concerning (1) potential local and regional transportation impacts associated with implementation of the Rancho Mission Viejo Planned Community and (2) the appropriate/desired scope of biological resource protection to be implemented within the boundaries of the Rancho Mission Viejo Planned Community. Following a series of meetings and negotiations between representatives of the County, the City, the applicant, and the Resource Organizations, the parties achieved full settlement of the outstanding issues on June 9, 2005 (City) and August 16, 2005 (Resource Organizations), with dismissal of the individual lawsuits following thereafter.

The terms of the individual settlements were memorialized in separate settlement agreements executed by and among the parties on the identified dates. Notably, the provisions of the August 16, 2005, settlement agreement (Resource Organizations) resulted in certain refinements to the Rancho Mission Viejo Planned Community that, in effect, increased the amount of open space that will be permanently protected and managed (i.e., from approximately 15,132 gross acres to 16,942 gross acres) and reduced the acreage available for development activities (i.e., from approximately 7,683 acres to 5,873 acres). The refinements focused on further protection of resources by concentrating development in the areas with lower biological resource values while continuing to protect high resource values, including the vast majority of the western portion of the San Mateo Creek Watershed within the Rancho Mission Viejo Planned Community.

The Rancho Mission Viejo Planned Community was further and subsequently influenced by input received from the general public, the U.S. Army Corps of Engineers (USACE), the California Department of Fish and Wildlife (CDFW), and the USFWS. The refinements resulted in what is referred to as "Alternative B-12", a plan that is consistent with the settlement agreements. Alternative B-12 will retain 16,942 gross acres of the Rancho Mission Viejo Planned Community in protected open space and will allow for development activities on 5,873 acres. At the same time, Alternative B-12 provides the same level of housing and nonresidential development as previously approved for the B-10 Modified Alternative. It should be noted that, for the B-12 Alternative, an overstated impact analysis is assumed for development in Planning Areas 4 and 8 and for the orchards in Planning Areas 6 and 7. The impact analysis is considered "overstated" as the final footprint of future development/orchards within these planning areas was undefined at that time because the precise location of future development/orchards was not known. As such, possible impacts in Planning Area 4 are assumed to affect a larger "impact area" of approximately 1,127 acres and the impacts for Planning Area 8 are assumed to affect a larger "impact area" of approximately 1,349 acres. The impact areas in Planning Areas 6 and 7 were approximately 249 acres and 182 acres, respectively. Therefore, the total impact area for Alternative B-12 was approximately 7,788 acres. It should be emphasized that this impact analysis overstates possible impacts because ultimately, the Rancho Mission Viejo Planned Community development in the areas of overstated impacts is limited to 550 acres of development and 175 acres of reservoir uses in Planning Area 4, 500 acres of development in Planning Area 8, and a total of 50 acres of

orchards in Planning Areas 6 and/or 7. Since the approval of the settlement agreements, the 50 acres of orchards have been planted in Planning Area 7. The configuration of the 500 acres of development in Planning Area 8 is required to take into consideration the findings of five years of arroyo toad telemetry studies in conjunction with minimizing impacts, as required by the USACE Special Conditions.

All subsequent discussion of the "Ranch Plan project" or the Rancho Mission Viejo Planned Community in this Addendum refers to Alternative B-12 outlined in the settlement agreements, unless otherwise noted.

2.3 CITY OF SAN JUAN CAPISTRANO ANNEXATION

In 2009, the City of San Juan Capistrano purchased 132 acres of the Rancho Mission Viejo Planned Community, of which 105 acres were within the boundaries of Planning Area 1. The property was annexed into the City for use as recreational open space (i.e., the Rancho Mission Viejo Riding Park at San Juan Capistrano). This change to a portion of the Rancho Mission Viejo Planned Community area resulted in administrative corrections to the Rancho Mission Viejo Planned Community Development Map and Rancho Mission Viejo Plan Statistical Table in February 2011. As revised, the Rancho Mission Viejo Planned Community totals 22,683 acres with approximately 16,915 acres (or approximately 74.57 percent) identified for open space uses with 5,768 acres for development uses. However, it should be noted, though the amount of open space designated within the Rancho Mission Viejo Planned Community was reduced as a result of the annexation (i.e., from 16,942 acres to 16,915 acres), the overall acreage in the Habitat Reserve was not modified. The open space areas acquired in conjunction with the Rancho Mission Viejo Riding Park at San Juan Capistrano have a conservation easement overlay; therefore, no recreational activities or other development will be allowed in these areas.

2.4 REGULATORY AGENCIES PLANS AND APPROVALS

As previously noted, concurrently with the development of the Rancho Mission Viejo Planned Community, two other major planning and regulatory programs were developed: the Southern Subregion NCCP/MSAA/HCP and the SAMP. Both of these plans integrated the development of the Rancho Mission Viejo Planned Community into their baseline assumptions. Therefore, the technical analysis conducted as part of these larger subregional planning programs have assumed development consistent with the Rancho Mission Viejo Planned Community and the associated infrastructure. These plans, and their associated approvals, will not be affected by the proposed Project or this Addendum. However, as mentioned above, the Project required an amendment to the SSHCP.

2.4.1 SOUTHERN SUBREGION NCCP/MSAA/HCP AND FINAL EIR 584

The Southern Subregion NCCP/MSAA/HCP and EIR/EIS were prepared by the County of Orange in cooperation with the CDFW and the USFWS in accordance with the provisions of the NCCP Act, CESA, FESA, and Section 1600 et seq. of the *California Fish and Game Code*. The Southern Subregion NCCP/MSAA/HCP provides for the conservation of designated State- and federally listed and unlisted species and associated habitats that are currently found within the 132,000-acre NCCP/MSAA/HCP study area. The NCCP/MSAA/HCP is a voluntary, collaborative planning program involving landowners, local governments, State and federal agencies, environmental organizations, and interested members of the public. The purpose of the NCCP Program is to provide long-term, large-scale protection of natural vegetation communities and wildlife diversity while allowing compatible land uses and appropriate development and growth. The NCCP process was initiated to provide an alternative to "single

species" conservation efforts. The shift in focus from single species, project-by-project conservation efforts to large-scale conservation planning at the natural community level was intended to facilitate regional and subregional protection of a suite of species that inhabit a designated natural community or communities.

The proposed Conservation Strategy of the plan "focuses on long-term protection and management of multiple natural communities that provide habitat essential to the survival of a broad array of wildlife and plant species" (County of Orange 2006d). The NCCP/MSAA/HCP creates a permanent habitat reserve consisting of (1) 11,950 County of Orange-owned acres contained within 3 existing County regional and wilderness parks (O'Neill Regional Park, Riley Wilderness Park, and Caspers Wilderness Park) and (2) 20,868 acres owned by Rancho Mission Viejo (RMV).

To address the potential impacts associated with the NCCP/MSAA/HCP, the Joint Programmatic EIR/EIS (of which FEIR 584 is the CEQA document) identified future projects by the participating landowners (i.e., the County of Orange, SMWD, and RMV), which upon approval of the SSHCP and issuance of the Incidental Take Permits (ITPs) by USFWS became "Covered Activities". The Rancho Mission Viejo Planned Community and associated infrastructure was identified as the RMV Covered Activity.

With respect to the CEQA document, the County of Orange Board of Supervisors certified FEIR 584 on October 24, 2006. With respect to the NEPA documentation, the USFWS distributed the Final EIS for public review on November 13, 2006. The Implementation Agreement (IA) was signed by the Participating Landowners (i.e., the County, RMV, and the Santa Margarita Water District [SMWD]) in December 2006. The USFWS issued a Record of Decision, signed the IA, approved the Southern Subregion HCP, and issued Federal Endangered Species Act (FESA) Section 10(a)(1)(B) Incidental Take Permits (ITPs) to RMV and the SMWD for federally listed species on January 10, 2007 (1-6-07-F-812.8) ("the Opinions") for the HCP component of the Draft Southern Subregion NCCP/MSAA/HCP, referred to hereinafter as the Southern Subregion HCP (SSHCP).⁴

The Opinions state that proposed incidental take will occur as a result of habitat loss and disturbance associated with urban development and other proposed activities (i.e., Covered Activities) identified in the SSHCP. The Opinions further identify "construction of residential, commercial, industrial and infrastructure facilities" as RMV-Covered Activities. The Opinions address 6 federally listed animals, 1 federally listed plant, and 25 unlisted plants and animals for a total of 32 species.

The CDFW issued an MSAA for the Rancho Mission Viejo Planned Community on September 29, 2008. The MSAA covers the activities associated with implementation of the approved development. The covered activities include (1) development in Planning Areas 2, 3, 4, 5, and 8;⁵ (2) cultivation of orchards; (3) roadway improvements; (4) construction of bikeways and trails; (5) sewer and wastewater facilities; (6) drainage, flood-control, and water quality facilities; (7) maintenance of existing facilities within the Rancho Mission Viejo Planned Community boundary; (8) habitat restoration; (9) geotechnical investigations; and (10) relocation of the RMV headquarters.

⁴ The distinction between the Draft Southern Subregion NCCP/MSAA/HCP and the SSHCP is important. The SSHCP, as the federal component of the NCCP/MSAA/HCP, is the federally approved Habitat Conservation Plan for which the Section 10(a)(1)(B) ITP was issued. The Project impacts reported herein are based, for the most part, on the analysis reported in the Southern Subregion NCCP/MSAA/HCP and which were incorporated into the SSHCP. Therefore, all impacts authorized by the SSHCP ITP are the same as those reported in the Southern Subregion NCCP/MSAA/HCP and these documents are fundamentally the same for this purpose.

⁵ Planning Area 1 was permitted separately through a standard Streambed Alteration Agreement.

2.4.2 SPECIAL AREA MANAGEMENT PLAN

A SAMP is a voluntary watershed-level planning and USACE permitting process involving local landowners and public agencies that seek permit coverage under Section 404 of the Federal Clean Water Act for future actions that affect jurisdictional "waters of the U.S.". The purpose of a SAMP is to provide for reasonable economic development and the protection and long-term management of sensitive aquatic resources (biological and hydrological). Under a SAMP, to the extent feasible, federal "waters of the U.S." (including wetlands) are avoided and unavoidable impacts are minimized and mitigated. The San Juan Creek and Western San Mateo Creek Watersheds SAMP provides a framework for permit coverage for the San Juan Creek Watershed (approximately 113,000 acres) and the western portion of the San Mateo Creek Watershed (approximately 15,104 acres). The SAMP study area includes the Rancho Mission Viejo Planned Community area.

The SAMP, which was approved by the USACE in 2007, establishes three regulatory permitting procedures: (1) Regional General Permit Procedures for Maintenance Activities Outside of the Rancho Mission Viejo Planned Community; (2) Letter of Permission Procedures for Future Qualifying Applicants Subject to Future Section 404 (b)(1) Guidelines Review Outside the Rancho Mission Viejo Planned Community; and (3) Long-Term Individual Permits/Letters of Permission for Dredge and Fill Activities within the Rancho Mission Viejo Planned Community. With respect to the Rancho Mission Viejo Planned Community, the USACE issued an Individual Permit of extended duration to specify allowable impacts to "waters of the U.S." over the life of the Rancho Mission Viejo Planned Community. The long-term Individual Permit requires additional review and analysis as individual projects are proposed within the Rancho Mission Viejo Planned Community to ensure consistency with allowable impacts and the terms and conditions of this long-term Individual Permit. The USACE will review specific activities under the Letter of Permission procedures for the geographic area covered by the Individual Permit as each activity is proposed for implementation.

2.5 RANCHO MISSION VIEJO PLANNED COMMUNITY MASTER AREA PLAN AND SUBAREA PLANS APPROVALS

Per the *Ranch Plan Planned Community Program Text*, a Master Area Plan is required for each planning area proposed for development. A Master Area Plan shows the relationship of proposed uses within the entire planning area. A Master Area Plan consists of a map, a set of statistics, and text that describe the location, density, and intensity of proposed uses within a planning area (the full requirements are listed in Section II.B.3.a of the *Ranch Plan Planned Community Program Text*). It is a tool to describe how special features or planning concerns will be addressed. All grading, development, and improvements shall be in substantial conformance with the provisions of the approved Master Area Plan. The Planning Commission is the approving authority for all Master Area Plan applications.

The Master Area Plan will divide the planning area into subareas. Prior to approval of any subdivision within each subarea, a Subarea Plan shall be prepared. The Subarea Plans must be consistent with the Master Area Plan. The Subarea Plans provide more detail on the proposed development. The Subarea Plans provide information on the key features of the development proposed in the Subarea. This would include, but not be limited to (1) the specific residential use categories and other non-residential uses; (2) locations and acreage of park, recreation, and other open space uses; (3) circulation features; (4) a concept grading plan; and (5) community facility locations. The full requirements of Subarea Plans are identified in the *Ranch Plan Planned Community Program Text*.

2.6 INFRASTRUCTURE IMPROVEMENTS

Infrastructure improvements have been approved to support the Rancho Mission Viejo Planned Community. These improvements are discussed below and their locations are depicted on Local Vicinity Map (Exhibit 2). Exhibit 2 also identifies the locations of other projects in the area, which are discussed in Section 2.7 of this Addendum.

2.6.1 COW CAMP ROAD AND OTHER INFRASTRUCTURE IMPROVEMENTS

The Rancho Mission Viejo Planned Community and its associated FEIR 589 identified that certain supporting infrastructure facilities (e.g., roadways) would be built. Cow Camp Road is one such roadway. Cow Camp Road is proposed as an east-west Major Arterial Highway with up to a 60 mile per hour (mph) design speed that will extend from Antonio Parkway to the existing Ortega Highway near the common boundary of the Rancho Mission Viejo Planned Community and Caspers Wilderness Park. The segment adjacent to and within Planning Areas 1 and 2 is known as "Segment 1" and would include four "T" signalized intersections (one at Antonio Parkway and three within Planning Area 2) and a bridge at Cañada Chiquita (Chiquita Bridge). To adhere to existing hillside contours, construction phasing, habitat preservation and to provide enhanced wildlife crossings, the eastbound and westbound lanes across Cañada Chiquita would be built as two separate bridge structures. The typical cross-section for Cow Camp Road would be consistent with the County of Orange Standard Plans for a major arterial highway. In its ultimate configuration, there would be 6 general-purpose lanes (3 westbound and 3 eastbound), 8-foot-wide shoulders, and 6-foot-wide sidewalks with a raised curbed median that is 20 feet wide. Cow Camp Road was addressed in EIR 589 and further addressed in an Addendum to EIR 589 approved by the County of Orange in 2008. A portion of Segment 1 of Cow Camp Road has been constructed with the remaining portion of Segment 1 presently under construction and scheduled for completion in early 2015.

Certain infrastructure improvements have also been constructed since the approval of the Rancho Mission Viejo Planned Community, namely a new substation within the boundary of Planning Area 2. This substation was constructed by San Diego Gas and Electric (SDG&E) to ensure adequate electrical service for the Rancho Mission Viejo Planned Community and surrounding area and also to ensure reliability of service to both existing and new customers. The substation is located at the south-eastern corner of Planning Area 2, north of San Juan Creek. The substation has been named the Rancho Mission Viejo Substation and has been operational since October 2011.

2.6.2 ZONE 1 AND ZONE A RESERVOIR FACILITIES

To serve Planning Areas 1, 2, and 3, the SMWD has constructed certain water conveyance and storage facilities. These facilities were included in the analysis contained in FEIR 589 as part of the Rancho Mission Viejo Planned Community. The facilities located in Chiquita Canyon include approximately 12,000 linear feet (LF) of domestic water (DW) transmission main; 11,300 LF of recycled water (RW) transmission main; two 2.0-million-gallon (MG) domestic water (DW) reservoirs, and one 4.0-MG recycled water reservoir. The DW and RW reservoir sites are at pad elevations of 618 feet and 548 feet, respectively, and they comprise approximately 7 acres combined. All reservoirs are above grade welded-steel tanks. The DW reservoir site includes two 104-foot-diameter tanks, each with a high water level (HWL) of 650 feet, corresponding to SMWD's Zone I DW distribution system. The RW reservoir site includes a single 146-foot-diameter tank with an HWL of 580 feet. It will serve SMWD's Zone A RW distribution system. A minimum 20-foot wide of paved access is provided around each tank. SMWD, as the lead agency for this project, prepared and approved an Addendum to FEIR 584 as the CEQA compliance documents in June 2011.

2.6.3 ZONE 2 AND ZONE B RESERVOIR FACILITIES

SMWD, as lead agency, is preparing an Addendum to FEIR 584 for the design and construction of reservoirs for the Zone B and Zone 2 service areas. To serve Planning Areas 2 and 3, the SMWD will be constructing certain water conveyance and storage facilities. These facilities were included in the analysis contained in FEIR 584 and FEIR 589 as part of the Rancho Mission Viejo Planned Community. The facilities are located in Chiquita Canyon south of Tesoro High School. The proposed facilities include the construction of approximately 11,500 LF of a 24-inch-diameter DW transmission main; 11,500 LF of a 20-inch-diameter RW transmission main; one 3.0-MG domestic water reservoir; and one 2.0-MG recycled water reservoir. These facilities are intended to serve the SMWD's Zone II DW distribution system and Zone B RW distribution system.

The DW and RW transmission mains are proposed to be aligned parallel to each other in a single easement. A 20-foot-wide access road with an all-weather surface will be constructed within the easement for SMWD maintenance purposes. The pipelines will begin near the existing Zone I/Zone A tank site, north of the Planning Area 2 boundary. From there, the pipelines' alignment extend southwesterly in the existing Zone I/Zone A access road. The pipelines alignment turns north where the existing Chiquita Canyon access road meets the existing Zone I/Zone A access road. The alignment then follows the existing Chiquita Canyon access road for approximately 1,500 LF before turning northeasterly and continuing to the proposed reservoir site.

The DW and RW reservoirs are proposed to be located at a single site, which has an area of approximately 1.8 acres and is at a pad elevation of 798 feet. Both reservoirs are to be constructed as above grade, welded-steel tanks. The DW tank will be 127 feet in diameter, and the RW tank will be 104 feet in diameter. Both tanks will be approximately 45 feet high and have an operational HWL set at 830 feet. A 25-foot-wide paved perimeter access road is provided around each tank. The reservoir site will also have space for a photovoltaic solar panel system, which will be used to supply power for system control and data acquisition (SCADA) and cathodic protection systems. The project also includes storm drainage facilities and a detention basin to accommodate storm water runoff from the graded reservoir site and access road.

2.7 OTHER PROJECTS IN THE AREA

2.7.1 EXTENSION OF STATE ROUTE 241

The Foothill Transportation Corridor (FTC) has been on the Orange County Master Plan of Arterial Highways (MPAH) since 1981 and is designated a Transportation Corridor. The route was identified to run along the foothills in southeastern Orange County parallel to Interstate (I) 5. In 1986, a joint-powers authority, known as the Transportation Corridor Agencies (TCA), was formed to oversee the planning, design, financing, and construction of the FTC and two other tollroads in Orange County. Recognizing the regional nature of the tollroads, the FTC was added to the State Highway System and designated as State Route (SR) 241. Once constructed, the roadway is transferred to the State of California. Currently, SR-241 has been constructed from SR-91 in the City of Yorba Linda south to Oso Parkway, near the City of Rancho Santa Margarita, a distance of over 24 miles. The route has been planned to extend south to I-5 just south of the Orange/San Diego County line.

Plans to complete SR-241 from its current terminus at Oso Parkway to I-5, have been analyzed for more than 30 years. In 2006, the TCA certified the *South Orange County Transportation Infrastructure Improvement Project Final Subsequent Environmental Impact Report/Environmental Impact Statement* (SOCTIIP SEIR/EIS) addressing the environmental

impacts of this approximate 14-mile southerly extension. A preferred alignment was selected by the TCA, the Federal Highway Administration (FHWA), the U.S. Environmental Protection Agency (USEPA), the USFWS, the USACE, and the California Department of Transportation (Caltrans). The selected route would extend through Planning Areas 2 and 5 of the Rancho Mission Viejo Planned Community, cross into San Diego County, and connect to I-5 in the vicinity of the San Onofre Nuclear Generating Station. The southern portion of the alignment is within the California Coastal Zone, which required approval of the alignment by the California Coastal Commission (CCC). In 2008, the CCC rejected the selected alignment as being inconsistent with the California Coastal Act. This decision was appealed by the TCA to the Secretary of Commerce. In December 2008, the Secretary of Commerce upheld the CCC decision.

In October 2011, engineering and environmental work began on a plan to extend the current SR-241 toll road from its existing terminus at Oso Parkway to Cow Camp Road in Planning Area 2, a distance of approximately 5.5 miles. This segment, which is known as the Tesoro Extension, is outside the Coastal Zone and avoids all water subject to federal jurisdiction. In February 2013, the TCA prepared an Addendum to the SOCTIIP SEIR, which focused on the Tesoro Extension. However, in June 2013, the San Diego Regional Water Quality Control Board (San Diego Water Board) denied the TCA's application for a Waste Discharge Permit per the Porter-Cologne Water Quality Control Act. The TCA filed for a review by the State Water Board of the denial, requesting that the San Diego Water Board provide the factual and legal basis for its decision. The petition was heard by the State Water Board on September 23, 2014. At that meeting, the State Water Board remanded the matter to the San Diego Water Board with direction to provide the factual and legal basis for its decision.

The proposed Tesoro Extension alignment is similar to the "F" Street alignment. On September 5, 2014, the TCA entered into an option agreement (Option Agreement) with RMV to obtain the right-of-way for the Tesoro Extension. In relevant part, the Option Agreement provides that it may be terminated by RMV in the event that RMV, prior to exercise of the option by TCA, obtains permits and funding for, and elects to proceed with, construction of "F" Street. In that event, the Tesoro Extension would not be built.

2.7.2 LA PATA EXTENSION

The La Pata Avenue Gap Closure and Camino Del Rio Extension Project is designed to complete the planned improvements for La Pata Avenue as identified in the County of Orange Master Plan of Arterial Highways.⁶ When complete, the improvements would connect Avenida La Pata in the City of San Clemente with La Pata Avenue in the City of San Juan Capistrano via a four-lane roadway, a distance of about 4.5 miles. The roadway, which crosses the Prima Deshecha Landfill in unincorporated Orange County, will provide a north-south roadway inland to I-5. The improvements will accommodate pedestrians and bicyclists by constructing streetlights, bike lanes, and sidewalks. It will also enhance trail connectivity through the construction of a pedestrian bridge that links the Prima Deshecha Trail and Forster Ridgeline Trail.

The County of Orange approved the contract for construction in December 2013 and construction was initiated in April 2014. Construction of the roadway is proposed in three phases. The first phase—which requires the removal of refuse from the Prima Deshecha Landfill, relocation of major utility lines, drainage improvements, and bridge construction—will provide four travel lanes from the existing La Pata Avenue just south of Vista Montana to Calle

⁶ The roadway is known as Avenida La Pata in the City of San Clemente and La Pata Avenue in unincorporated Orange County and the City of San Juan Capistrano.

Saluda, a distance of approximately 2.27 miles. This phase is expected to be completed in fall 2016. The second phase will widen the existing La Pata Avenue with one additional travel lane in each direction between Ortega Highway and just south of Vista Montana. The final phase, will extend Camino Del Rio from its current terminus to the newly extended La Pata Avenue (County of Orange 2014a).

The project is funded by State and local financing, including funding from the Orange County Transportation Authority's (OCTA's) Renewed Measure M (M2), Ladera Ranch and the Rancho Mission Viejo Community Facilities Districts, State Proposition 1B Funds, La Pata Road Fee Program, OC Waste & Recycling, OC Public Works Road Fund (State Gas Tax), the City of San Juan Capistrano, South County Road Improvement Program (SCRIP), and the City of San Clemente (County of Orange 2014b).

2.7.3 CHIQUITA WATER RECLAMATION PLANT EXPANSION

The Chiquita Water Reclamation Plan (CWRP) Expansion Project involves the upgrade and expansion of the CWRP to provide preliminary, primary, secondary, and tertiary wastewater treatment for flows up to 10.5 MGD. The secondary treatment system will be expanded from its current permit capacity of 9.0 MGD up to the projected future flow of 10.5 MGD. Additionally, the tertiary treatment capacity to produce Title 22 reclaimed water for recycling and reuse will be expanded from its current permit capacity of 5.0 MGD up to the projected future flow of 10.5 MGD. The solids handling systems, biogas handling systems, odor control, and other ancillary mechanical, electrical, and instrumentation systems will also be upgraded and expanded to serve the projected future flows and loadings at the CWRP. Additionally, the project includes the construction of a biosolids reduction system that will reduce the CWRP's volume of biosolids by transforming the waste into a biofuel that can be used to power the reduction system and produce additional renewable energy for SMWD use. The Mitigated Negative Declaration was approved by the SMWD Board of Directors in February 2014. The implementation will be phased. Equipment modifications has been initiated and other improvements occurring over the next few years.

2.7.4 GOBERNADORA MULTI- PURPOSE BASIN

The Gobernadora Multipurpose Basin is a 26-acre facility located north of the Planning Area 3 development area and south of the community of Coto de Caza. The basin, which is currently under construction, will capture and naturally treat urban runoff and storm flows, and use that water to help meet irrigation demands in the nearby community. The basin receives flows from Gobernadora Creek, which drains the Coto de Caza development. The total basin provides a maximum flood storage capacity of 120 acre-feet. This project is a being constructed through a partnership of SMWD, RMV and Orange County Public Works. Benefits of the basin will include:

- flood mitigation
- urban stormwater treatment
- groundwater recharge
- groundwater recovery
- non-potable water reclamation
- stream stabilization and habitat restoration
- regional trail connectivity.

The project is being constructed in two phases. The first phase involves the construction of the upper basin, pump station, and pipelines. The upper basin provides for water quality treatment, groundwater infiltration, and flood control. The second phase involves the lower basin, which will serve as a flood basin. The project is expected to be completed in 2015 (RMV et al. m.d.).

SECTION 3.0 PROJECT DESCRIPTION

3.1 PROJECT LOCATION

3.1.1 RANCHO MISSION VIEJO PLANNED COMMUNITY

The 22,683-acre⁷ Rancho Mission Viejo Planned Community is located in southeast Orange County within unincorporated Orange County. The Ladera Ranch Planned Community (Ladera Ranch) and the cities of San Juan Capistrano and San Clemente border the Rancho Plan Planned Community on the west. The planned community of Coto de Caza and the City of Rancho Santa Margarita border the northern edge of the site; the United States Marine Corps Base (MCB) Camp Pendleton in San Diego County borders the southern edge; and Caspers Wilderness Park, the Cleveland National Forest, and several private properties in Riverside and San Diego Counties border the site on its eastern edge.

3.1.2 "F" STREET

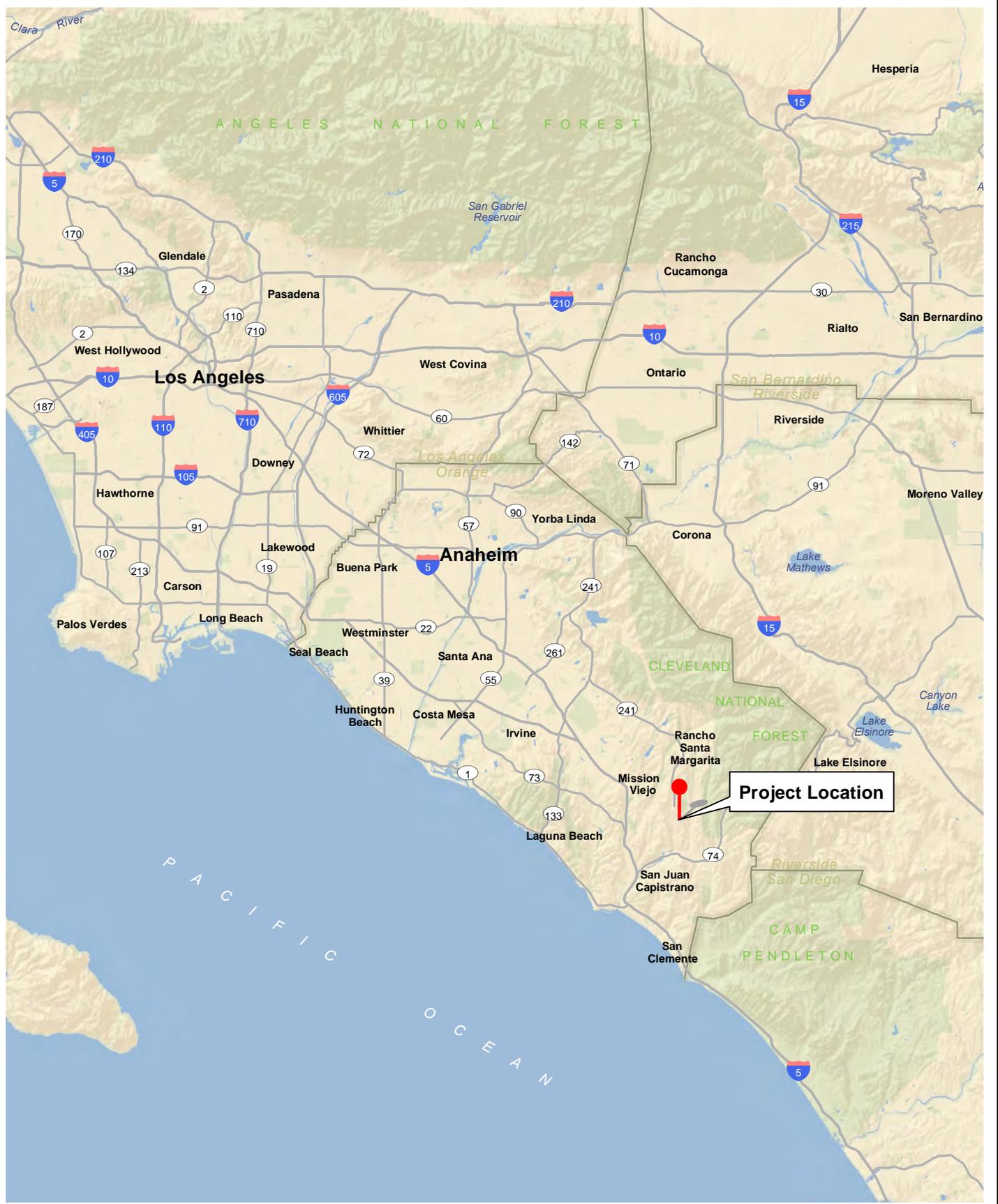
"F" Street is presented in a regional and local context on Exhibits 1 and 2, respectively. The roadway generally traverses a ridge line that separates the Cañada Gobernadora and Cañada Chiquita Watersheds. The roadway will connect Oso Parkway on the north with Cow Camp Road on the south. The connection at Oso Parkway is east of Tesoro High School and generally aligned with the SR-241, which terminates north of Oso Parkway. As "F" Street extends to the south, the proposed alignment curves to the west and traverses the area within the Rancho Mission Viejo Planned Community identified as Planning Subarea 2.5 (sometimes referenced as Planning Area 2 North), which is currently undeveloped. South of Planning Subarea 2.5, the roadway would assume a slightly southeasterly alignment extending through undeveloped open space. As the roadway connects with the eastern edge of Planning Area 2 South (Planning Subareas 2.1 through 2.4), the alignment of "F" Street assumes a southward alignment and the roadway has been rough graded as part of the grading for Planning Area 2 South development. The construction of "F" Street within Planning Area 2 South was environmentally cleared with the Addendum for Planning Area 2.

3.2 ENVIRONMENTAL SETTING AND EXISTING LAND USES

As previously indicated, the proposed alignment for "F" Street would traverse Planning Area 2, with the northern portion of the alignment generally extending through open space and the southern portion of the roadway extending through the area that is currently being graded for Planning Area 2 development which is anticipated to be completed in early 2016. An arterial roadway or SR-241 was evaluated in FEIR 589 in this general location as part of the Circulation Plan for the Rancho Mission Viejo Planned Community.

As shown on Exhibit 3-22 in FEIR 589, a local collector road (identified in FEIR 589 as Chiquita Canyon Drive) was assumed to extend through Planning Area 2 and connect with Tesoro Creek Road, which is the roadway that provides access to Tesoro High School. In addition, the southern extension of SR-241 was assumed along an alignment further to the east and entering into Planning Area 3. However, FEIR 589 also evaluated a proposed circulation network without

⁷ The Rancho Mission Viejo Planned Community, as addressed in FEIR 589, covered 22,815 acres. In January 2010, the City of San Juan Capistrano acquired the Rancho Mission Viejo Riding Park and surrounding open space area acres located in the southwestern quadrant of the Ortega Highway/La Pata Avenue Intersection. The Local Agency Formation Commission (LAFCO) agreed to extend the San Juan Capistrano city limits east to La Pata Avenue on the south side of Ortega Highway. As a result of the purchase and annexation, the size of the Rancho Mission Viejo Planned Community was reduced to 22,683 acres.

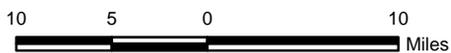


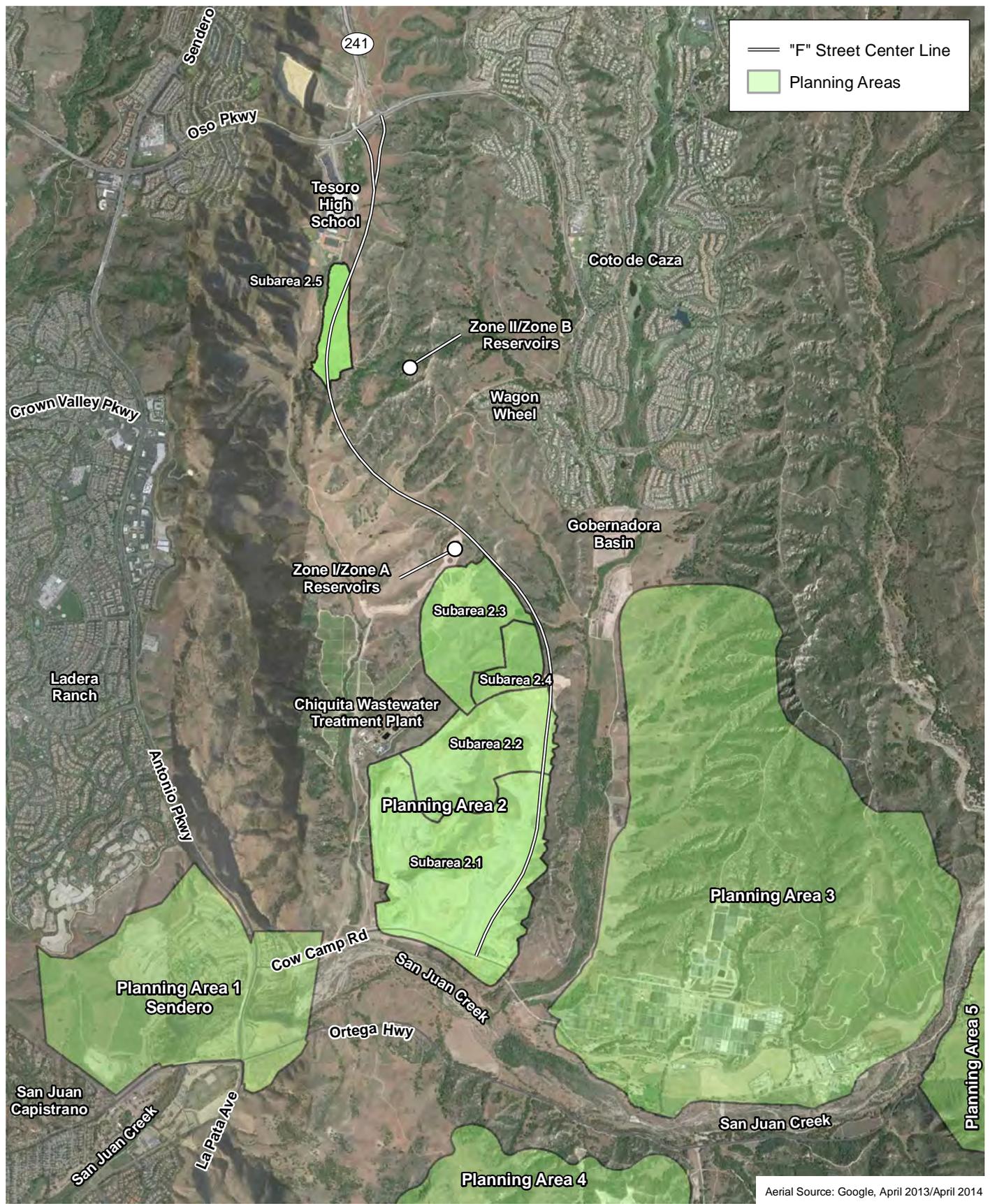
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Regional Map

Exhibit 1

Rancho Mission Viejo Planned Community
 "F" Street





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Aerial Source: Google, April 2013/April 2014

Local Vicinity

Exhibit 2

Rancho Mission Viejo Planned Community
"F" Street



Bonterra
PSOMAS

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the extension of SR-241, which was depicted in Exhibit 3-24. Without the extension of SR-241, the local collector road would not connect to Tesoro Creek Road, but would rather connect to an arterial highway in the general alignment assumed for SR-241. The arterial highway (what is now called "F" Street) was shown crossing Chiquadora Ridge and Cañada Gobernadora to connect to Planning Area 3. The proposed alignment has shifted the roadway to the west from the hillsides into the valley in the northern half of the alignment and then re-aligned to run within Planning Area 2 South.⁸

The alignment traverses areas that support a variety of vegetative communities, including four vegetation communities of concern: coastal sage scrub, needlegrass grasslands, riparian, and woodland and forest. An extensive amount of the alignment area has also been disturbed by past agricultural activities and, most recently, by grading for development. Sensitive plant species in the vicinity of the proposed alignment include intermediate mariposa lily, southern tarplant, and many-stemmed dudleya. Threatened wildlife species known to have occurred in the vicinity of the proposed alignment include the California gnatcatcher.

The roadway generally traverses a ridge line that separates the Cañada Gobernadora and Cañada Chiquita Watersheds. Both Gobernadora Creek and Chiquita Creek flow in a southerly direction, to their confluence with San Juan Creek. San Juan Creek, which is a dominant physical feature extending northeast and southwest through the larger Rancho Mission Viejo Planned Community, is located south of Planning Area 2. Major tributaries to San Juan Creek are the Arroyo Trabuco, Oso Creek, Chiquita Creek, Gobernadora Creek, Bell Canyon Creek, and Verdugo Canyon Creek. San Juan Creek discharges into the Pacific Ocean in the vicinity of the City of Dana Point.

Cow Camp Road is designated on the MPAH as an east-west arterial highway that will extend from Antonio Parkway to the existing Ortega Highway near the common boundary of Rancho Mission Viejo and Caspers Wilderness Park. Segment 1 of the roadway is a Major Arterial Highway within and adjacent to Planning Areas 1 and 2. The roadway has been constructed through Planning Area 1 and near completion through the eastern boundary of Planning Area 2. East of Planning Area 2, Cow Camp Road is designated a Primary Arterial Highway.

Chiquita Canyon Drive, another proposed arterial highway in the vicinity of the Project site, is designated on the MPAH as a 4-lane Secondary Arterial Highway. This roadway, which is internal to Planning Area 2, initiates at Cow Camp Road near the southwest portion of Planning Area 2; extends north along the Planning Area boundary; and curves to the east near the boundary of Subareas 2.1 and 2.2. A connection with "F" Street is assumed before the roadway continues east into Planning Area 3 where it is referred to as "K" Street. The design of "F" Street and Chiquita Canyon Drive is being designed in close coordination with the design for "K" Street, which will be evaluated as part of Master Area Plan process for Planning Area 3. A

⁸ At the time FEIR 589 was prepared, the TCA was also preparing the South Orange County Transportation Infrastructure Improvement Project (SOCTIIP) study for the alignment of the southern extension of SR-241. FEIR 589 assumed the alignment for SR-241 then shown on the *County of Orange General Plan* and the MPAH. That alignment extended into Planning Area 3, continued southeast of Planning Area 5 and the Donna O'Neill Land Conservancy (now part of the Reserve at Rancho Mission Viejo), and extended into San Diego County through San Onofre State Beach. FEIR 589 included provisions for the Rancho Mission Viejo Planned Community development area to be modified to reflect the SR-241 alignment that was ultimately adopted by the TCA and the FHWA. In 2006, the TCA and FHWA adopted an alignment generally comparable to the "F" Street alignment shown in this study. Minor modifications have been made since 2006 to reduce environmental impacts.

portion of Chiquita Canyon Drive and "F" Street have been graded in conjunction with the grading of Planning Area 2.⁹

The extension of Crown Valley Parkway is currently shown on the MPAH and Geometric Approval Drawings; however, the future extension is not likely to occur because of the extent of environmental impacts associated with the extension of the roadway across Chiquita Ridge. Additionally, the extension is not supported by the local jurisdictions. Further, the major regional traffic studies performed in this area do not assume the extension of this roadway (i.e., Tesoro Extension, La Pata Avenue Extension, Rancho Mission Viejo Planned Community EIR, etc.). Crown Valley Parkway Extension will need to be removed from the MPAH by amendment.

The SMWD's CWRP is located in the center of Planning Area 2, but is not a part of the Rancho Mission Viejo Planned Community. There is an existing paved access road to the CWRP; north of the plant, this road is an unpaved ranch road. This facility is west of the proposed "F" Street alignment.

Several major public facilities and utilities are located in the vicinity of "F" Street. These include the South County pipeline, which is owned by the SMWD. Southern California Edison (SCE) owns high power transmission lines mounted on lattice towers, which are located in easements within the Rancho Mission Viejo Planned Community open space. As previously mentioned, an SDG&E electrical substation is located at the southeast corner of Planning Area 2.

3.3 PROJECT DESCRIPTION

Three alternatives for "F" Street were studied as part of the Project Report: the No Project Alternative and alternatives with 50-mile-per-hour (mph) and 70-mph design speeds (Huitt-Zollars et al. 2015). The 50-mph and 70-mph Alternative Alignments are relatively the same approximately 1,000 feet south of Planning Subarea 2.5 (Station ~170+00). North of this point, the 50-mph Alternative Alignment is more curvilinear due to its lower design speed, and it lies slightly to the east of the 70-mph Alternative Alignment at many points. The 70-mph Alternative Alignment was developed to incorporate larger horizontal and vertical curve radii to accommodate a higher design speed as well as to provide somewhat fewer impacts to sensitive habitat and wetlands. Based on the preliminary engineering and environmental considerations, the 70-mph Alternative Alignment is the recommended alternative and is the focus of the analysis in this Addendum.

"F" Street is proposed to be a modified Rural Secondary Highway, which will consist of two 12-foot through lanes with 8-foot shoulders in both directions and a median that varies from approximately 10 feet wide north of Chiquita Canyon Drive and 58 feet wide maximum south of Chiquita Canyon Drive. At Cow Camp Road, the median narrows to four feet wide to allow for left-turn lanes. For the segment between Cow Camp Road and the northern boundary of Planning Subarea 2.3 (Stations 10+00 and 125+00), where the median is only ten feet wide, a concrete barrier will be provided to enhance safety. No curb and gutter and no curb-adjacent

⁹ Chiquita Canyon Drive was identified as "A" Street in the Planning Area 2 Master Area Plans and Subarea Plans. "K" Street has been depicted in past studies as providing the connection to Planning Area 2 and traversing Planning Area 3. The "K" Street alignment is comparable to "F" Street as shown on the MPAH. However, the alignment for "K" Street is slightly modified from what was presented in FEIR 589 and in the SSHCP. The proposed alignment provides a direct east-west connection between Planning Areas 2 and 3 across Cañada Gobernadora, whereas the conceptual "K" Street alignment analyzed in FEIR 589 and the SSHCP would have crossed Cañada Gobernadora on a northwest-southeast trend. The "K" Street alignment, which is generally consistent with the MPAH configuration, reduces impacts on the biological resources in Cañada Gobernadora. It should also be noted that the "F" Street shown on the MPAH is not the "F" Street discussed in this Addendum. The "F" Street in this document follows an alignment comparable to the SR-241 alignment shown on the MPAH.

sidewalks will be provided. Exhibit 3 depicts the typical cross-section for the roadway. Storm water conveyance facilities (e.g., bio-swailes) will be provided adjacent to the roadway. In keeping with the Complete Streets concept, a paved ten-foot-wide pedestrian and bicycle trail will be provided on the southbound side of the roadway to enhance opportunities for alternative non-motorized transportation modes. The trail will have a two-foot clearance at the top of a fill slope or a three-foot toe drain at the bottom of a cut slope. It will have a design speed of 70 mph and a posted speed limit of up to 65 mph. This is consistent with the approved Letter of Geometric Alignment Recommendation and Geometric Approval Drawing. Plan, profile, and typical sections for the 70-mph Alternative Alignment are depicted in Exhibits 4a and 4b.

The proposed right-of-way for "F" Street is generally expected to be 120 feet, generally being 60 feet west and east of the centerline, respectively, plus slopes from Chiquita Canyon Drive north. From Chiquita Canyon Drive south, the proposed right-of-way of "F" Street is generally expected to be 150 feet, generally 73 feet west of the centerline and 77 feet east of the centerline. This width will vary due to varying width medians and intersection geometrics. At the intersections, the street will widen out to accommodate the couplet at Oso Parkway; the southbound off-/northbound on-ramps at Chiquita Canyon Drive, and right- and left-turn lanes at Cow Camp Road.

3.3.1 INTERSECTIONS

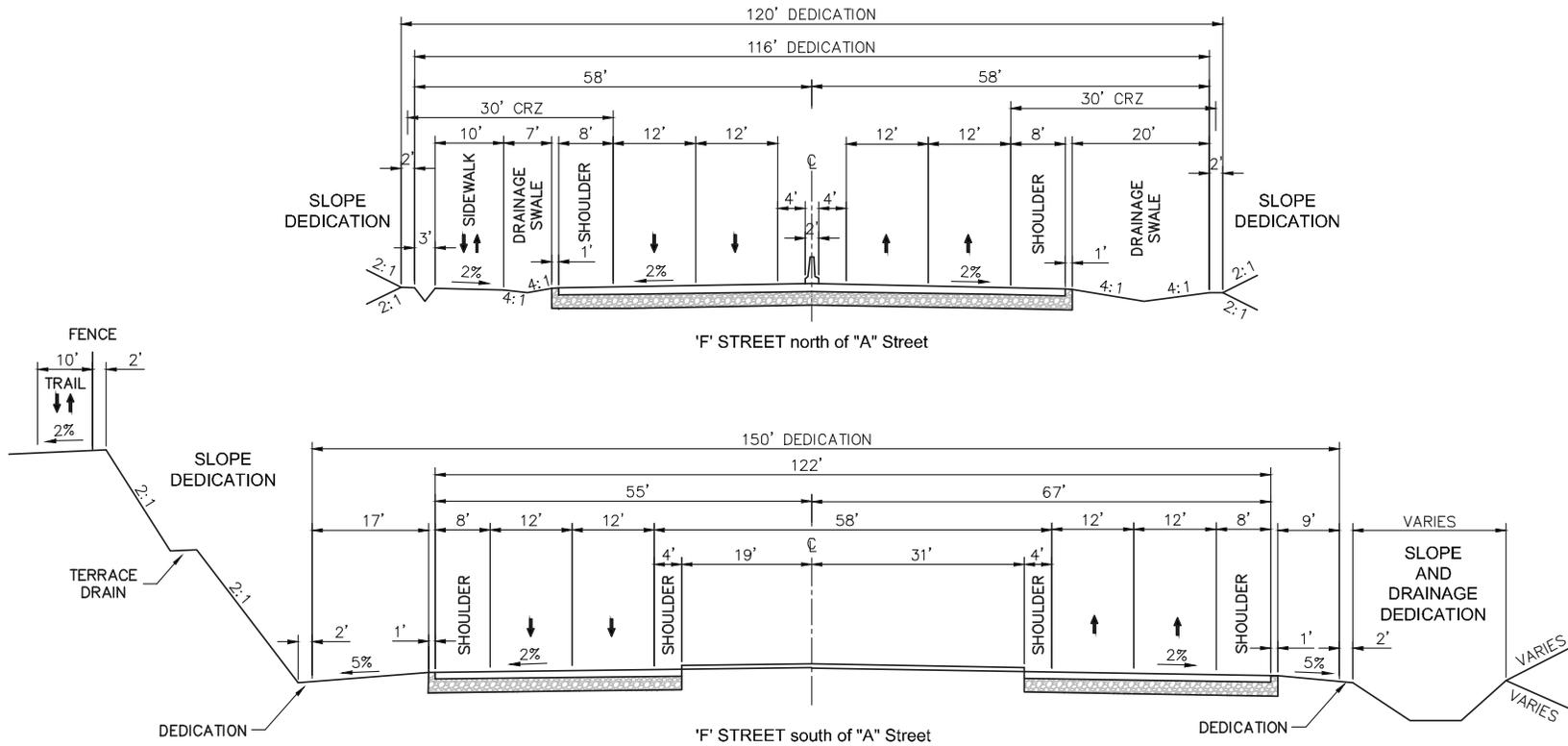
At its northern terminus, "F" Street will connect to Oso Parkway at the existing intersections of the SR-241 on- and off-ramps. At this location, the SR-241 on- and off-ramps terminate in a "wishbone" configuration at signalized intersections. At the SR-241 northbound on-ramp, eastbound Oso Parkway has three through lanes and one left-turn lane; westbound has two through lanes and one right-turn lane. At the SR-241 southbound off-ramp, both eastbound and westbound Oso Parkway has three through lanes. The on-ramp has two lanes; the off-ramp has three lanes (one left-turn, one dual left-/right-turn and one right-turn).

At the south end of "F" Street, Cow Camp Road, Segment 1, is currently under construction. Cow Camp Road was designed and is being constructed to accommodate an intersection with "F" Street. It should be noted that the Geometric Approval Drawings (provided as Appendices 1 and 2 in the "F" Street Project Report [Huitt-Zollars et al. 2015]) do allow for flexibility on the location of the connection of "F" Street with Cow Camp Road. An option would be to have the roadway connect approximately east of the connection shown in Exhibit 4b. However, either alignment variation would be located within the Planning Area 2 South development area so the impacts would be the same. The "F" Street and Cow Camp Road will be a signalized T-intersection.

Local access to Planning Area 2 South will be via a half-expressway interchange at Chiquita Canyon Drive, with access being provided to and from the north. No access to Chiquita Canyon Drive from the south (i.e., northbound traffic on "F" Street) or from Chiquita Canyon Drive to southbound "F" Street will be provided. Local streets internal to Planning Area 2 will provide for this movement.

The following five intersections, all signalized, will be provided in the Project area:

1. Oso Parkway Northbound (east side of SR-241) Couplet
2. Oso Parkway Southbound (west side of SR-241) Couplet
3. Chiquita Canyon Drive Northbound On-Ramp



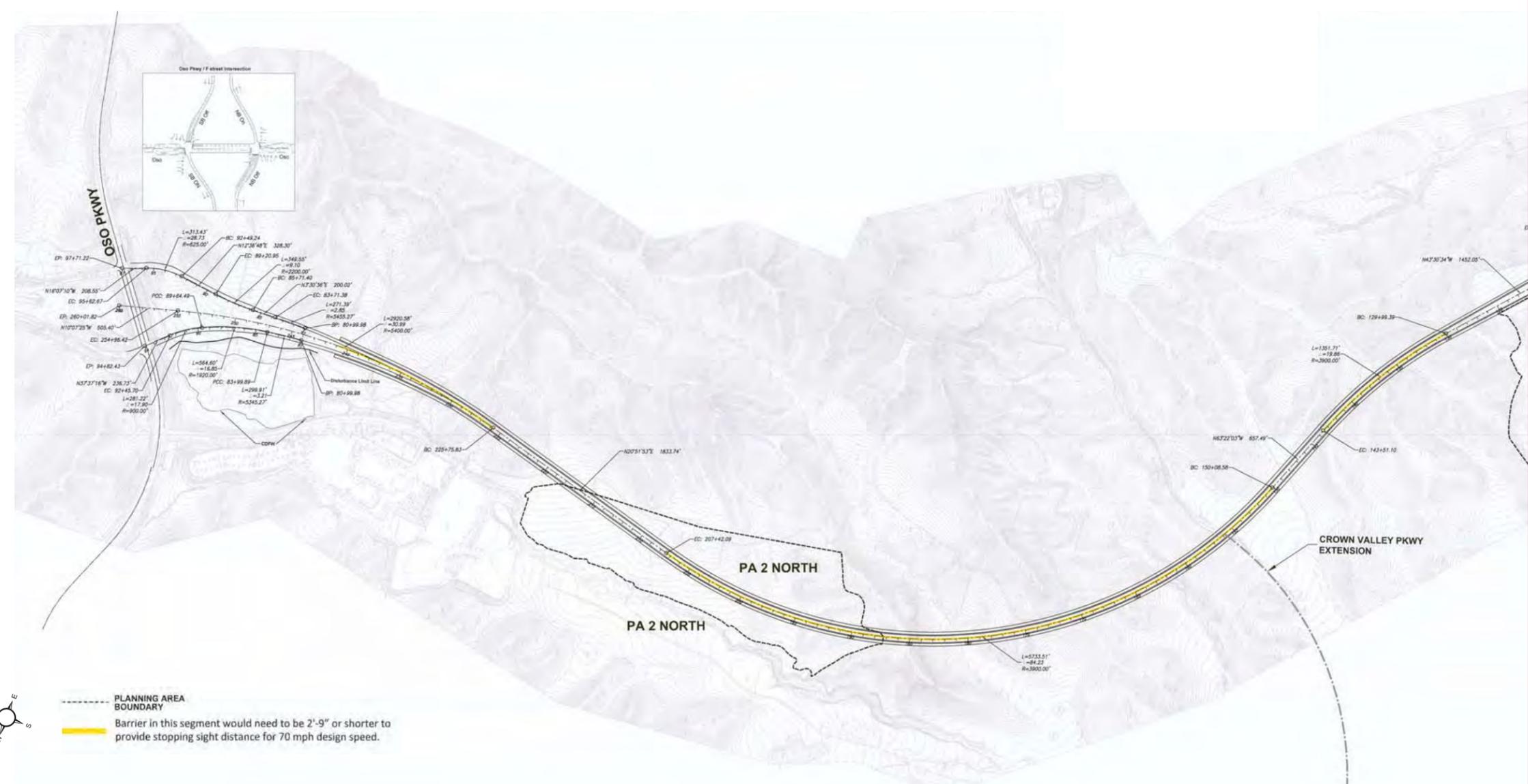
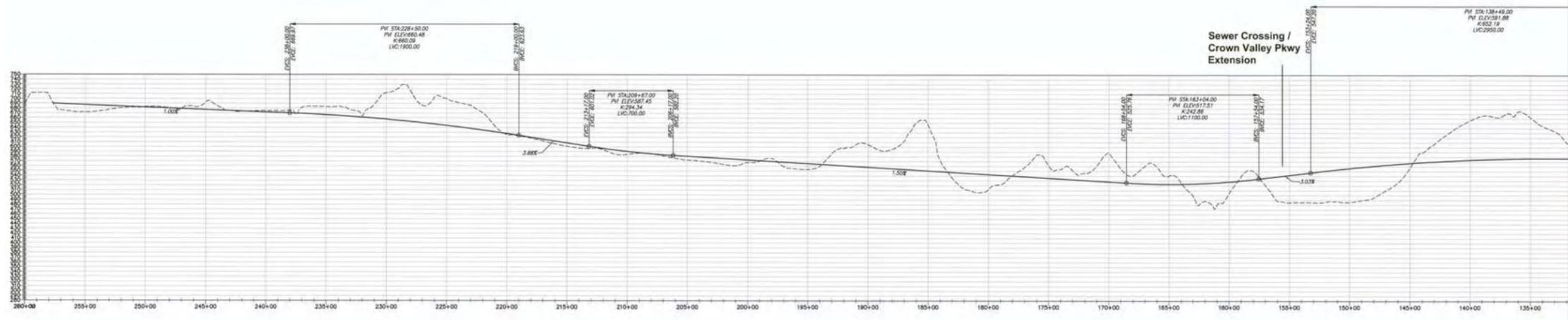
Source: Huitt-Zollars, Inc. 2014

"F" Street Road Cross-Sections

Exhibit 3

Rancho Mission Viejo Planned Community
"F" Street





Please See Exhibit 4b

Source: Huitt-Zollars, Inc. 2014

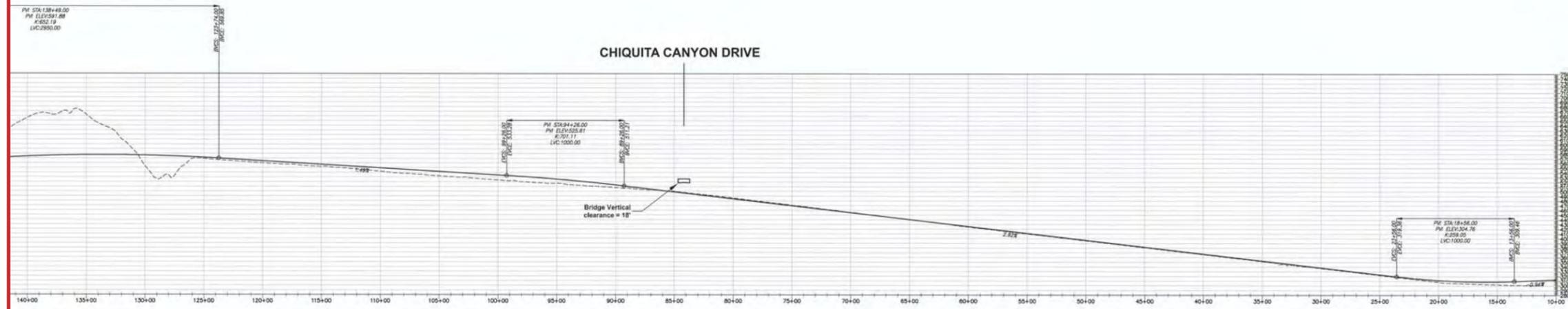
Plan, Profile and Typical Cross-Sections

Rancho Mission Viejo Planned Community
"F" Street

Exhibit 4a



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Please See Exhibit 4a



PLANNING AREA BOUNDARY

 Barrier in this segment would need to be 2'-9" or shorter to provide stopping sight distance for 70 mph design speed.

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Source: Huitt-Zollars, Inc. 2014

Plan, Profile and Typical Cross-Sections

Rancho Mission Viejo Planned Community
"F" Street

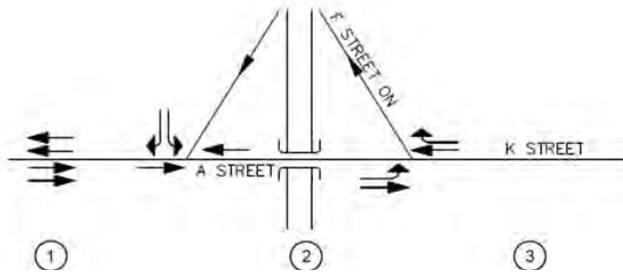
Exhibit 4b



4. Chiquita Canyon Drive Southbound Off-Ramp
5. Cow Camp Road

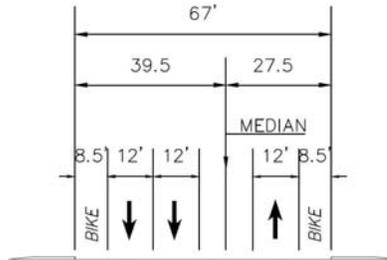
Based on the traffic analyses, minor lane modifications at the existing intersections will be required. Intersection and lane configurations are depicted in Exhibits 5a through 5c. The following provides a brief description of the intersection lane configuration and the required modifications.

1. **Oso Parkway/"F" Street/SR-241 northbound intersection:** The Oso Parkway intersection will be a three-way signalized intersection. In the eastbound direction, Oso Parkway will have two through lanes and two left-turn lanes (onto northbound SR-241). In the westbound direction, Oso Parkway will have three through lanes and one de-facto right-turn lane (onto northbound SR-241). In the northbound direction, "F" Street will have two through lanes (to the northbound SR-241 on-ramp) as well as two left-turn lanes and one right-turn lane (onto Oso Parkway). This configuration adds one westbound through lane and converts one eastbound through lane to a left-turn lane onto Oso Parkway. North of the intersection, the northbound on-ramp to SR-241 will be two lanes, which matches the existing condition. Traffic signals will be modified as required to accommodate the intersection modifications. The need for an overhead sign bridge will be evaluated during design to determine if one is warranted for lane assignments approaching the intersection northbound on "F" Street.
2. **Oso Parkway/"F" Street/SR-241 southbound intersection:** The Oso Parkway intersection will be a three-way signalized intersection. In the eastbound direction, Oso Parkway will have three through lanes and one free right-turn lane (onto southbound "F" Street). In the westbound direction, Oso Parkway will have three through lanes and one left-turn lane (onto southbound "F" Street). In the southbound direction, the southbound off-ramp from SR-241 will have two through lanes (onto southbound "F" Street) as well as two left-turn lanes and one right-turn lane (onto Oso Parkway). South of the intersection, southbound "F" Street will be two lanes. This configuration adds one westbound left-turn lane and one eastbound right-turn lane onto Oso Parkway; it also adds two southbound lanes to the SR-241 off-ramp to accommodate the above-stated lane configuration. Traffic signals will be modified as required to accommodate the intersection modifications.
3. **Chiquita Canyon Drive/"F" Street northbound on-ramp intersection:** The Chiquita Canyon Drive to northbound on-ramp intersection will be a signalized T-intersection. In the eastbound direction, Chiquita Canyon Drive will have one through lane and one left-turn lane (onto northbound "F" Street). In the westbound direction, Chiquita Canyon Drive will have one through lane and one right-turn lane (onto northbound "F" Street). In the northbound direction, the on-ramp will have two lanes that will merge to one before entering northbound "F" Street.
4. **Chiquita Canyon Drive /"F" Street southbound off-ramp intersection:** The Chiquita Canyon Drive southbound off-ramp intersection will be a signalized T-intersection. In the eastbound direction, Chiquita Canyon Drive will have two through lanes west of "F" Street, with a transition to one lane prior to this intersection. In the westbound direction, Chiquita Canyon Drive will have one through lane east of the off-ramp and two lanes west of the off-ramp, with the right lane receiving the free right-turn lane from "F" Street onto westbound Chiquita Canyon Drive. In the southbound direction, the off-ramp will have one right-turn lane and one left-turn lane (onto Chiquita Canyon Drive).



N'LY R/W

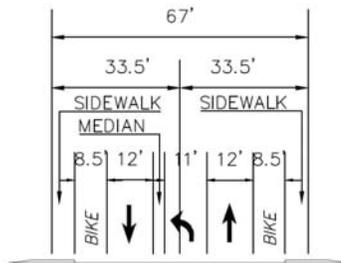
S'LY R/W



① WEST OF F STREET

N'LY R/W

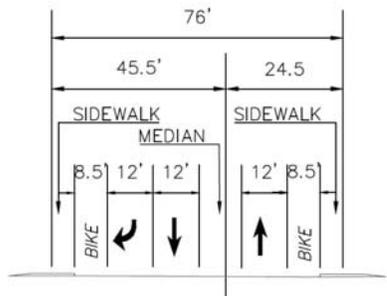
S'LY R/W



② F STREET OVER-CROSSING

N'LY R/W

S'LY R/W



③ EAST OF F STREET

Source: Huitt-Zollars, Inc. 2014

Intersection and Lane Configurations - Chiquita Canyon Drive

Rancho Mission Viejo Planned Community
"F" Street

Exhibit 5b



- 5. Cow Camp Road/"F" Street intersection:** The Cow Camp Road intersection will be a signalized T-intersection. In the eastbound direction, Cow Camp Road will have three through lanes and two left-turn lanes (onto northbound "F" Street). In the westbound direction, Cow Camp Road will have three through lanes and one right-turn lane (onto northbound "F" Street). "F" Street will have two southbound left-turn lanes and two southbound right-turn lanes (onto Cow Camp Road). In the northbound direction, north of Cow Camp Road, "F" Street will have two lanes. The Cow Camp Road lane configuration is consistent with the approved *Cow Camp Road Project Report* dated November 4, 2008. The need for an overhead sign bridge will be evaluated during design to determine if one is warranted for lane assignments approaching the intersection southbound on "F" Street.

3.3.2 DRAINAGE SYSTEMS

The only major (regional) drainage facility identified in the Project area is County Facility L06 (Cañada Chiquita), which drains northeast to southwest across SR-241 and Oso Parkway in a double 10-foot by 10-foot reinforced concrete box culvert (RCB), which outlets on the south side of Oso Parkway into a basin. The L06 facility then drains from the existing flood-control basin located southwest of Oso Parkway. It runs parallel to the "F" Street alignment on the west side in a 14-foot by 10-foot RCB under Tesoro Creek Road for approximately 0.25 mile, providing flood protection to Tesoro High School. It then outlets into a natural canyon, which flows for approximately 1.25 miles, discharging into an unnamed tributary.

A comprehensive surface drainage system has been developed to collect and convey runoff from the Project site into the planned County storm drain system. Storm water runoff from the proposed roadway will be collected and conveyed by swales and interceptor drains. This runoff will be routed to storm water best management practices (BMPs) that are designed to provide biofiltration and/or filtration to address pollutants of concern and to meet water quality treatment requirements. These facilities will also provide flow-duration-control functions, as needed, to provide hydromodification control. Flood-control requirements will also be met by providing additional peak flow detention storage in these BMPs, if needed.

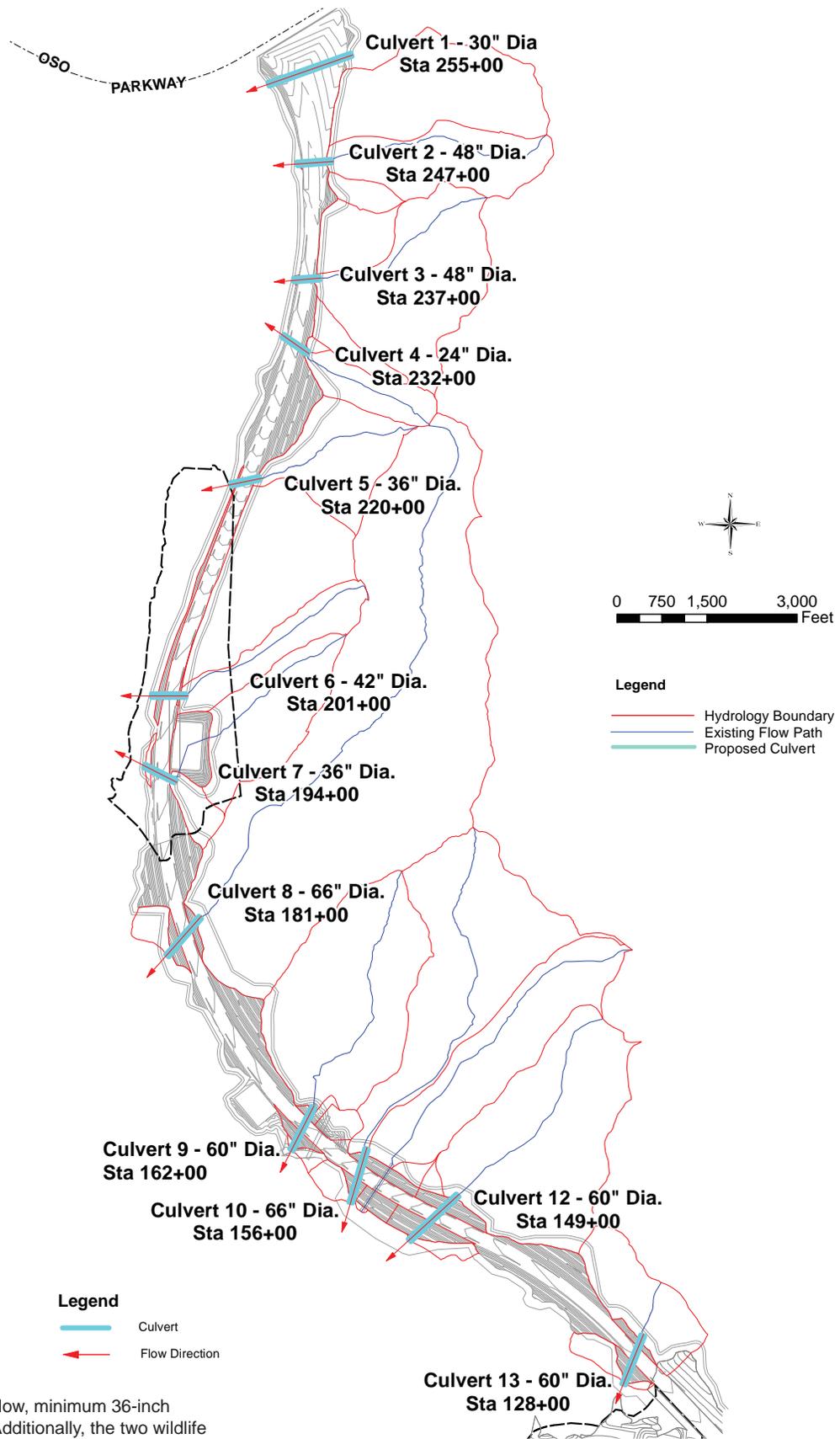
As shown in Exhibit 6, 13 cross-culverts will convey off-site flows across "F" Street, flowing from east to west to the Cañada Chiquita tributaries. The culverts will be located to preserve existing flow paths. Based on preliminary hydrologic analysis, the required size of culverts will vary in size, from a minimum of 21 inches up to 66 inches. However, due to potential for debris flow, minimum 36-inch culverts are proposed.

South of Planning Subarea 2.3's northern boundary (Station ~125+00), there are no off-site flows tributary to "F" Street from the west because the grading and drainage system for Planning Area 2, which is currently under construction, captures all flows west of "F" Street in storm drains that are independent of "F" Street. South of Chiquita Canyon Drive (Station ~85+00), there are minor canyons along and tributary to the east side of "F" Street; flow from these canyons will be collected and conveyed in roadside drainage swales and a roadway storm drain system before ultimately discharging into San Juan Creek.

3.3.3 WATER QUALITY MANAGEMENT PLAN

A Water Quality Management Plan (WQMP) for this Project will be developed to incorporate the water quality treatment and low impact development (LID) provisions of San Diego Regional Water Quality Control Board (SDRWQCB) Order No. R9-2009-0002, as described in the Model WQMP and its accompanying Technical Guidance Document (DAMP Section 7.II and 7.III,

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Due to potential debris flow, minimum 36-inch culverts are proposed. Additionally, the two wildlife crossings (as shown on Exhibit 12 in Section 4.4) will also accommodate storm flows.

Source: Huitt-Zollars, Inc. 2015

Cross-Culvert Locations

Exhibit 6

Rancho Mission Viejo Planned Community
"F" Street

Bonterra
PSOMAS

respectively, December 20, 2013). A Conceptual WQMP is provided in the "F" Street Project Report as Appendix 2 (Huitt-Zollars et al. 2015).

The grading and layout of the Project have been prepared to allow space for large footprint vegetated biofiltration BMPs, which are known as "Combination Basins". The Combination Basins will provide water quality treatment, hydromodification control, and flood control within common basin footprints. The basins will be approximately 4 to 12 feet deep, providing multiple storm water control functions under different storm conditions. The combination basins will have the following characteristics:

- **Biofiltration media bed.** The lowest elevations of the basins, up to a maximum ponding depth of 18 inches, will include a biofiltration media bed, which will be vegetated with native plants adapted to the hydrologic conditions expected to be encountered, and media will be designed to address the Project pollutants of concern.
- **Hydromodification control volume.** Low to middle elevations of the combination basins will provide flow duration control via a controlled release outlet structure to meet hydromodification control criteria. The volume above the biofiltration volume will be utilized infrequently during large storms. When the system is ponded higher than the biofiltration volume, the system will discharge through the media bed as well as through notch weirs and/or orifices located above the biofiltration ponding volume.
- **Flood-control volume.** Flood-control storage will be provided in addition to the hydromodification control volume, if needed, to detain peak storm events. The hydromodification and flood-control portions of the basin will be designed per the criteria of the Orange County Flood Control Manual.
- **Pre-treatment forebay.**¹⁰ A sedimentation forebay (or equivalent approach) will be used to remove coarse sediment before water enters the main portion of the biofiltration media bed.

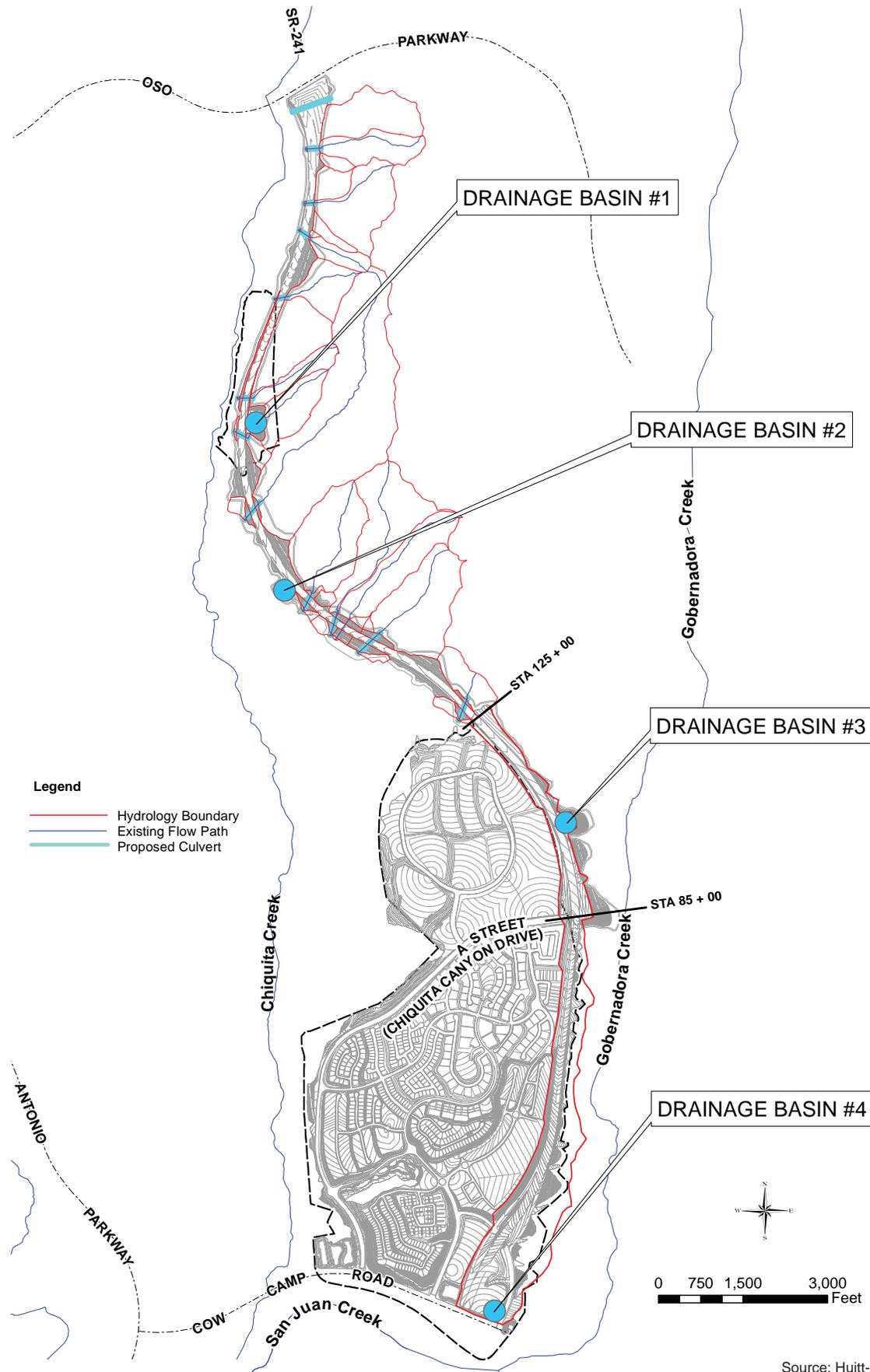
The storage capacity of individual combination basins will be less than 15 acre-feet and will not fall under the jurisdiction of the California Division of Safety of Dams. The proposed storm water BMPs will discharge to receiving channels. At points of discharge, energy dissipation and outfall protection will be provided. The location of these basins and the associated drainage areas is shown in Exhibit 7. Access to the basins for operations and maintenance purposes will be via driveways from "F" Street onto access paths that surround each basin. The basins will be fenced.

3.3.4 UTILITIES

The existing SMWD Coto Sewer crosses under the proposed "F" Street alignment about half way between Planning Area 2 South and the proposed Planning Subarea 2.5 (Station 154+00). Additional utilities are planned in the area to serve the future development in the Rancho Mission Viejo Planned Community, including two 20-inch water transmission lines. An undercrossing structure aligned over the sewer and water lines will be constructed at this location to maintain continuity of the existing approximate 10-foot-wide dirt maintenance road. Utility easements may need to be granted to various utility purveyors (e.g., SDG&E, SMWD, AT&T, Cox Communications) for the crossing of "F" Street as the master planning, design and

¹⁰ A sediment forebay is a small pool located near the inlet of a storm basin designed as initial storage areas to trap and settle out sediment and heavy pollutants before the water reaches the main basin. Sediment forebays act as a pretreatment feature on a storm water pond and can greatly reduce the overall pond maintenance requirement.

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Source: Huitt-Zollars, Inc. 2015

Proposed Basin Locations and Hydrologic Boundaries

Exhibit 7

Rancho Mission Viejo Planned Community
"F" Street

Bonterra
PSOMAS

development for these utilities progresses. Additionally, there may be the need for franchise/license positions for these utilities within the road right-of-way to facilitate service to the planning areas to the east.

3.3.5 WILDLIFE MOVEMENT CROSSINGS

Two wildlife undercrossings are currently planned—one approximately 1,400 feet north of the Planning Area 2 South northern boundary (Station 149+00) and one approximately 440 feet south of Planning Subarea 2.5 (Station 181+00)—to serve mule deer and mountain lions. Precise locations will be determined as part of the final design process. Both undercrossings are expected to be either corrugated structural steel plate (CSSP) or precast concrete arch-type culverts, under approximately 30 feet and 340 feet of fill, respectively. Each culvert will have a minimum width at the base of 20 feet and a minimum vertical clearance of 10 feet. Culverts will have a line of sight through the structure allowing views of natural vegetation and/or the horizon from the entry points at either end. The bottom of the culvert will be of a natural substrate. A dry pathway at least three feet wide will be provided through the length of any structure if it is determined that significant water flows will routinely occur in the wildlife crossings. Vegetation at both ends of the crossing will be a mix of plant types in order to provide suitable cover for mountain lions and other animals as well as more open vegetation suitable for mule deer. Appropriate fencing will be installed to deter deer, mountain lion, coyote, bobcat, and other wildlife entry to the roadway in order to minimize wildlife and vehicle collisions.

3.3.6 MULTI-PURPOSE PATHWAY

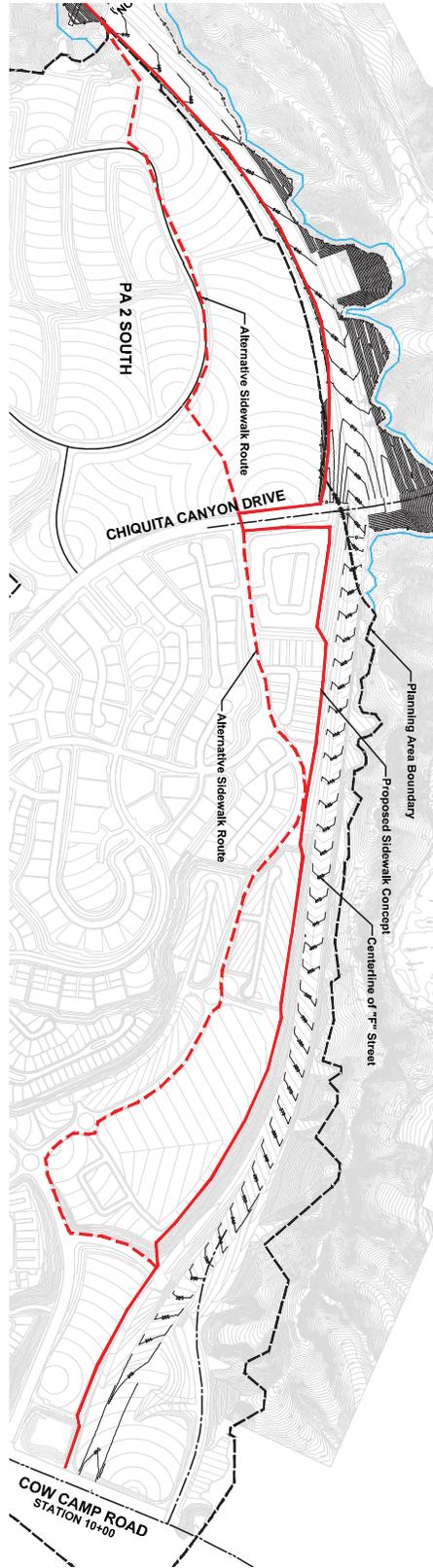
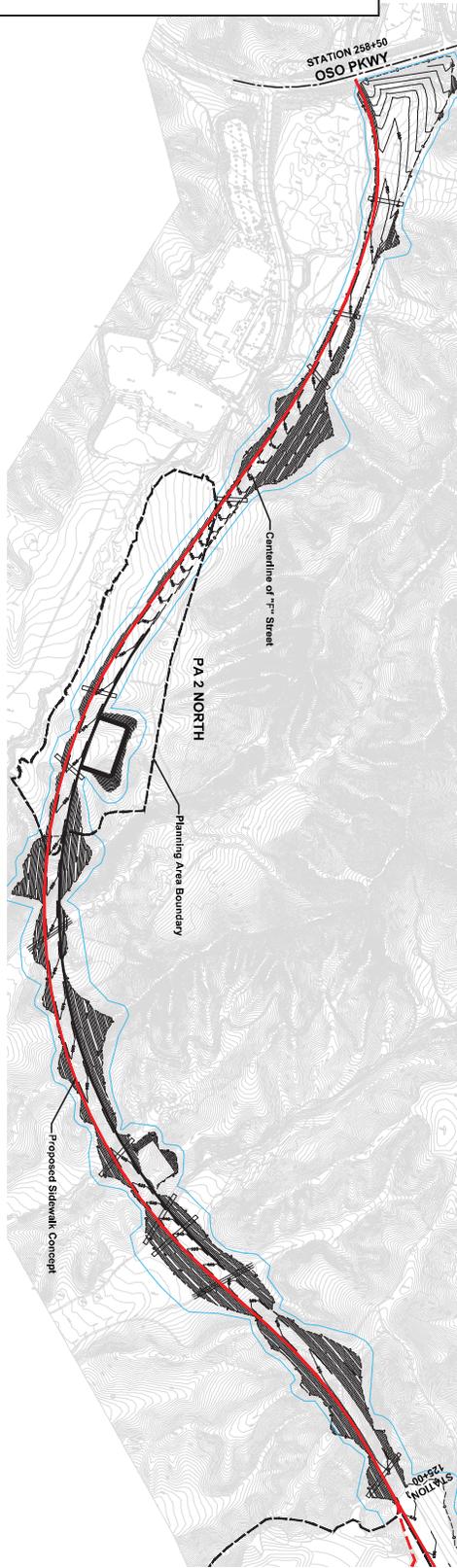
A ten-foot-wide paved multi-purpose pathway, which would serve pedestrians and bicyclists will be incorporated into the Project. The pathway will be located on the west side of "F" Street within the roadway right-of-way to provide for opportunities for alternative non-motorized transportation modes. When construction of "F" Street is complete, including the multi-purpose pathway, ownership of the facilities would be assumed by the County of Orange. The pathway alignment is shown on Exhibit 8.

Between Oso Parkway and Chiquita Canyon Drive, the multi-purpose pathway will be adjacent to the roadway, but separated from the travelled way by an 8-foot shoulder and a 7-foot drainage swale (a total distance of 15 feet). Between Chiquita Canyon Drive and Cow Camp Road, the pathway will be atop the roadway embankment or alternatively routed through the Planning Area 2 roadway network. The alternative alignment would allow the pathway to extend through the edge of development within Planning Area 2 South potentially providing more direct access to the pathway. The function and purpose of the pathway would remain the same (i.e., to provide for opportunities for alternative non-motorized transportation modes). Pathway cross-sections are shown on Exhibit 9.

Primary access points to the multi-purpose pathway will be at Oso Parkway, Chiquita Canyon Drive, and Cow Camp Road. At Oso Parkway, a pedestrian crossing (crosswalk) will be added to the existing signalized Oso Parkway/SR-241 southbound intersection to provide connectivity to the existing sidewalk on the north side of Oso Parkway. There would also be a connection to the Class II bikeway on Oso Parkway. As the multi-purpose pathway approaches the Chiquita Canyon Drive southbound off-ramp intersection, its north and south approaches to Chiquita Canyon Drive will be aligned towards the intersection, where a "protected" at-grade crossing will be incorporated into the signalized intersection. The multi-purpose pathway will join the proposed sidewalk at Cow Camp Road.

Exhibits 10a and 10b depict the bicycle facilities on the County of Orange General Plan within and adjacent to the Rancho Mission Viejo Planned Community and on the Ranch Plan Master

- Proposed Multi-Purpose Pathway Alignment
- - - Alternative Multi-Purpose Pathway Alignment



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Source: Huitt-Zollars, Inc. 2015

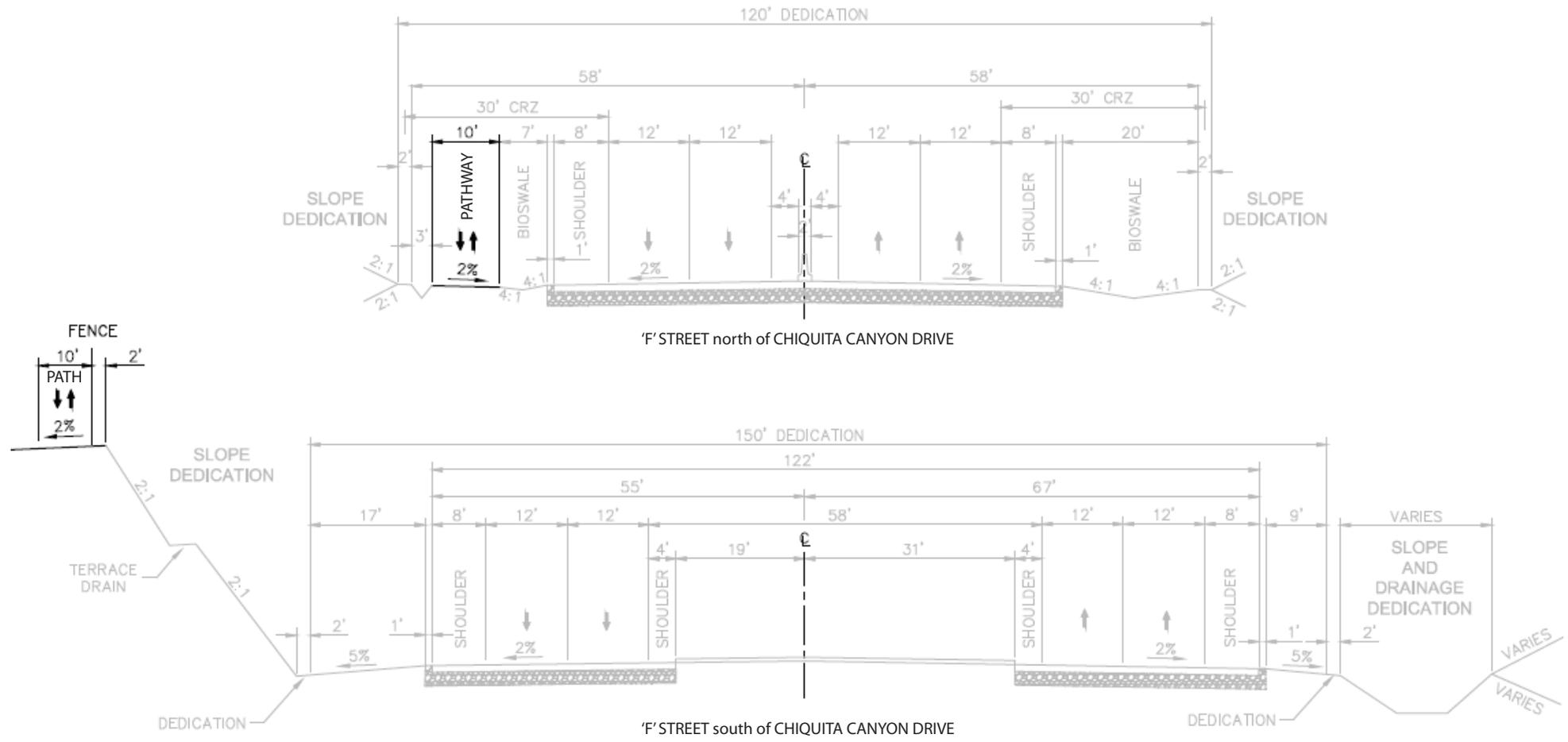
"F" Street Multi-Purpose Pathway Alignment

Exhibit 8

Rancho Mission Viejo Planned Community
"F" Street



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Source: Huitt-Zollars, Inc. 2014

"F" Street Multi-Purpose Pathway Cross-Sections

Exhibit 9

Rancho Mission Viejo Planned Community
"F" Street



Trail and Bikeway Implementation Plan, respectively. These exhibits provide a context for the proposed multi-purpose pathway and its connectivity to other existing and planned facilities that are intended to enhance nonmotorized transportation in the area. It should be noted that the multipurpose path way has been added to the Trails and Bikeway Concept map (Exhibit 10b) to provide a context to the surrounding bikeways and trails, but is not actually reflected on the actual adopted map.

3.3.7 LIGHTING

Street lighting will be installed in the section of roadway between Chiquita Canyon Drive and Cow Camp Road. North of Chiquita Canyon Drive, "F" Street primarily traverses open space; hence, street lighting in this stretch of roadway should be minimized as much as possible to minimize impacts on wildlife.¹¹ However, street lighting at the intersection is required for safety. Therefore, street lighting will extend only as far north of Chiquita Canyon Drive as required to illuminate the Chiquita Canyon Drive on- and off-ramps and as far south of Oso Parkway to illuminate the Oso Parkway northbound and southbound couplets. Lighting currently exists at Oso Parkway, though it would be extended along the couplet, it would not be intensified. The limits and placement of "F" Street lighting will be in accordance with the Caltrans Traffic Manual (specifically, Section 9-10). Installation of the street lights will be in accordance with Caltrans standards and requirements of FEIR 589.¹²

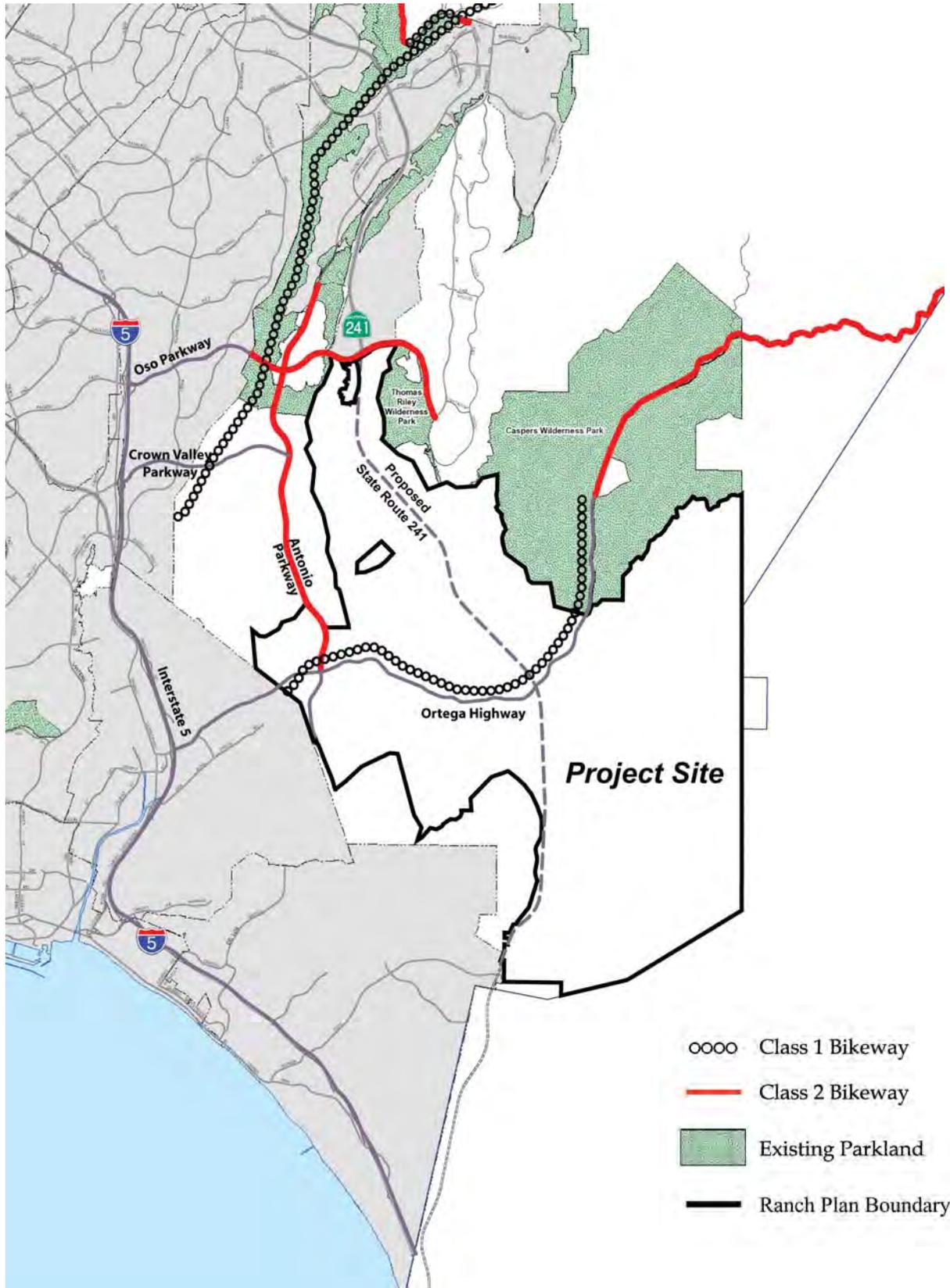
3.3.8 CONSTRUCTION AND PHASING

Oso Parkway will be affected by the "F" Street construction; specifically the construction of the southbound and northbound "F" Street couplets joining Oso Parkway at the existing SR-241 off and on-ramp intersections. The only physical geometric improvement to Oso Parkway will be to widen a short segment of roadway to construct a dedicated eastbound right-turn lane onto southbound "F" Street. Further, traffic signal modifications will be required at each couplet intersection, including new poles and mast arms to accommodate a full intersection. Construction of right-turn lane, as well as curb returns and pavement for connection of the north and southbound couplets, will at a minimum require the temporary closure of the exiting eastbound through lane and bike lane. No sidewalk exists on the south side of Oso Parkway; hence, there will not be any impacts to pedestrians. Temporary traffic impacts will be addressed during design with development of traffic control/traffic handling plans. The improvements to Oso Parkway are within Caltrans right-of-way.

At the time of construction of "F" Street at Cow Camp Road, the westerly half of Cow Camp Road will be constructed; however, traffic will not be open in this reach of Cow Camp Road until "F" Street connects to Cow Camp Road. Cow Camp Road will not be open to traffic at this location. A traffic signal will be installed when Cow Camp Road is extended further to the east of this intersection. Physical geometric improvements to Cow Camp Road will include the widening of the north side of the roadway to a dedicated eastbound right-turn lane onto northbound "F" Street. Further, a traffic signal will be constructed to accommodate a T-intersection. If Cow Camp Road is an active roadway at the time of "F" Street construction, at a minimum the temporary closure of the exiting westbound through lane and bike lane. Temporary traffic

¹¹ As shown on Exhibit 2, development (Planning Subareas 2.3 and 2.4) is located north of Chiquita Canyon Drive and west of "F" Street. The area north of Chiquita Canyon Drive and east of "F" Street is designated as open space.

¹² FEIR 589 (Mitigation Measures 4.9-28 and 4.10-1) requires that all lighting along the perimeter of natural areas, particularly street lights, be downcast luminaries and be shielded and oriented in a manner that will prevent spillage or glare into the remaining natural and open space areas. This measure has been incorporated into the Project design for "F" Street.



- oooo Class 1 Bikeway
- Class 2 Bikeway
- Existing Parkland
- Ranch Plan Boundary

Source: EDAW, Inc. 2004

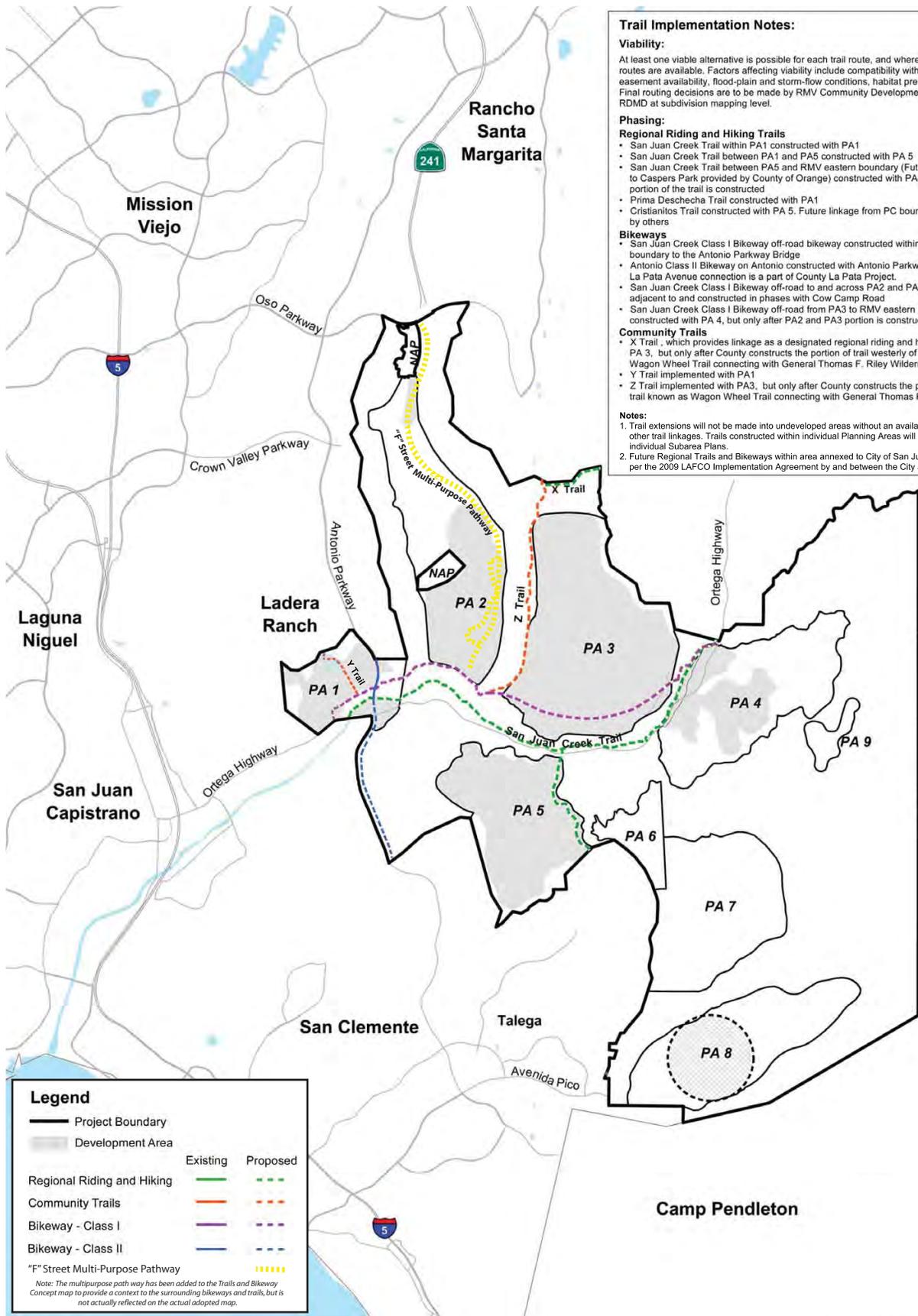
County Bikeway Plan for the Project Area

Exhibit 10a

Rancho Mission Viejo Planned Community
"F" Street



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Trail Implementation Notes:

Viability:

At least one viable alternative is possible for each trail route, and where applicable, multiple alternative routes are available. Factors affecting viability include compatibility with adjacent uses, security, utility easement availability, flood-plain and storm-flow conditions, habitat preservation and slope stability. Final routing decisions are to be made by RMV Community Development, LLC, with the concurrence of RDMC at subdivision mapping level.

Phasing:

Regional Riding and Hiking Trails

- San Juan Creek Trail within PA1 constructed with PA1
- San Juan Creek Trail between PA1 and PA5 constructed with PA 5
- San Juan Creek Trail between PA5 and RMV eastern boundary (Future linkage from PC boundary to Caspers Park provided by County of Orange) constructed with PA4, but only after the PA 1 to PA5 portion of the trail is constructed
- Prima Deschecha Trail constructed with PA1
- Cristianitos Trail constructed with PA 5. Future linkage from PC boundary to San Clemente provided by others

Bikeways

- San Juan Creek Class I Bikeway off-road bikeway constructed within PA1 from the PA 1 western boundary to the Antonio Parkway Bridge
- Antonio Class II Bikeway on Antonio constructed with Antonio Parkway widening project. La Pata Avenue connection is a part of County La Pata Project.
- San Juan Creek Class I Bikeway off-road to and across PA2 and PA3 to Ortega Hwy will be adjacent to and constructed in phases with Cow Camp Road
- San Juan Creek Class I Bikeway off-road from PA3 to RMV eastern boundary (at Caspers Park) constructed with PA 4, but only after PA2 and PA3 portion is constructed

Community Trails

- X Trail, which provides linkage as a designated regional riding and hiking trail, constructed with PA 3, but only after County constructs the portion of trail westerly of X trail known as Wagon Wheel Trail connecting with General Thomas F. Riley Wilderness Park
- Y Trail implemented with PA1
- Z Trail implemented with PA3, but only after County constructs the portion of trail westerly of X trail known as Wagon Wheel Trail connecting with General Thomas F. Riley Wilderness Park

Notes:

1. Trail extensions will not be made into undeveloped areas without an available return trail or connection to other trail linkages. Trails constructed within individual Planning Areas will be phased with development of individual Subarea Plans.
2. Future Regional Trails and Bikeways within area annexed to City of San Juan Capistrano to be implemented per the 2009 LAFCO Implementation Agreement by and between the City and Rancho Mission Viejo.

Legend

- Project Boundary
- Development Area

	Existing	Proposed
Regional Riding and Hiking		
Community Trails		
Bikeway - Class I		
Bikeway - Class II		
"F" Street Multi-Purpose Pathway		

Note: The multipurpose path way has been added to the Trails and Bikeway Concept map to provide a context to the surrounding bikeways and trails, but is not actually reflected on the actual adopted map.

Riverside Co.
San Diego Co.

Source: OC Planned Communities 2011

Trails and Bikeways Concept

Rancho Mission Viejo Planned Community
"F" Street

Exhibit 10b



impacts will be addressed during design with development of traffic control/traffic handling plans if required.

The Project will be constructed to meet the traffic demands, with some elements potentially being deferred until there is sufficient demand. The precise phasing of improvements will be determined during the design phase. Grading south of Chiquita Canyon Drive is approximately 75 percent complete with the remainder to be completed in 2015. Grading as part of the remaining part of Planning Area 2 just north of Chiquita Canyon Drive will begin mid-2015 and completed in 2016. Grading north of Planning Area 2-South will be graded in the final phase of grading. Project grading is balanced overall, but dirt will generally need to be moved from the north end of the Project to the south.

The roadway construction (laying of asphalt and finishing improvements) is expected to start at the north end with the segment from Oso Parkway to Chiquita Canyon Drive being constructed as a first phase. This is anticipated to begin as early as 2016, after grading construction is completed; overall construction for this reach would be completed as early as 2018. If determined appropriate, the southern portion (Chiquita Canyon Drive to Cow Camp Road) would be constructed as the second phase. The second phase of this roadway would be open to traffic by 2018, if constructed concurrent with the first phase, or 2020 at the earliest, if constructed as a separate second phase. The travel demand will be determined by the pace of home sales, which is market driven.

3.4 AGREEMENTS, PERMITS AND APPROVALS

The following agreements, permits and approvals will be needed for the Project:

OC Public Works

- Approval of plans and specifications.

U.S. Army Corps of Engineers

- Letter of Permission pursuant to the Special Area Management Plan.

U.S. Fish and Wildlife Service

- Minor amendment to the Southern Subregion HCP (issued January 2015)

California Department of Fish and Wildlife

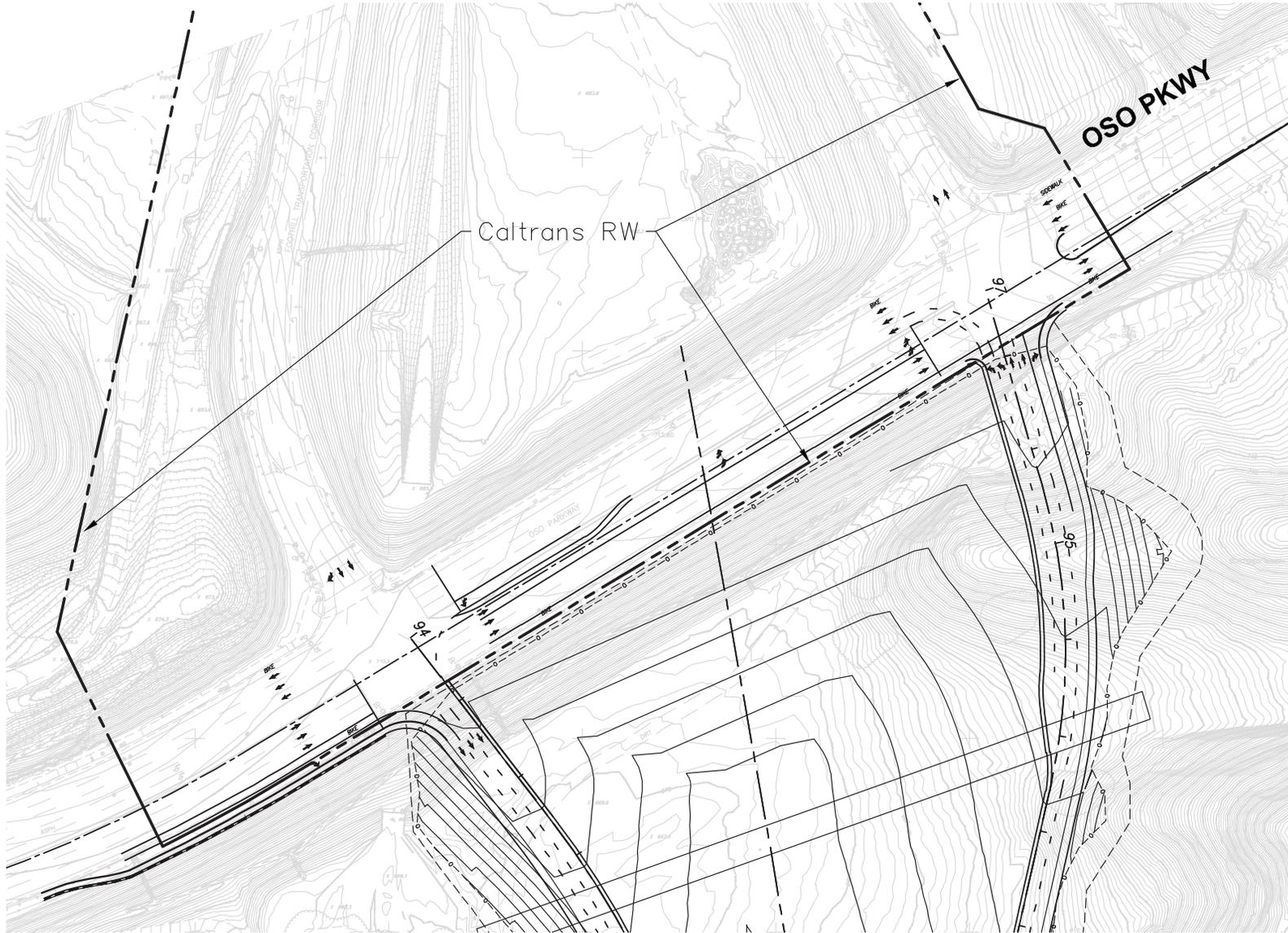
- Subnotification pursuant to the Master Streambed Alteration Agreement.

San Diego Regional Water Quality Control Board

- Section 401 certification pursuant to the Clean Water Act/Waste Discharge Permit per the Porter-Cologne Water Quality Control Act

California Department of Transportation

- Encroachment permits and approval of all improvements within right-of-way under their jurisdiction (i.e., portion of Oso Parkway between the SR-241 on- and off-ramps and modification to the SR-241 on-ramp). See Exhibit 11 for the limits of Caltrans right-of-way.



Source: Huitt-Zollars, Inc. 2014

Caltrans Right-of-Way Boundary

Rancho Mission Viejo Planned Community
"F" Street

Exhibit 11

Bonterra
PSOMAS

Santa Margarita Water District

- Approval of plans for Coto Sewer and proposed water transmission lines.

Utilities, including San Diego Gas & Electric, Southern California Gas Company, AT&T, and Cox Communications

- Provision for utilities in the roadway, including new power and gas lines crossing "F" Street at Chiquita Canyon Drive and electrical service to traffic signals and street/safety lighting.

3.5 INTENDED USES OF THIS ADDENDUM

FEIR 589 was a Program EIR, which was intended to address the overall program for implementing the Rancho Mission Viejo Planned Community. FEIR 584 was prepared to address the impacts of the Southern Subregion NCCP/MSAA/HCP. This Addendum, when considered in conjunction with FEIR 584 and FEIR 589, the Findings of Fact, Statement of Overriding Considerations, and the Regulation Compliance Matrix, is intended to provide the necessary CEQA clearance for the required approvals for "F" Street.

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SECTION 4.0 ENVIRONMENTAL ANALYSIS

The analysis in this Addendum evaluates whether the potential impacts associated with the "F" Street alignment, as outlined in Section 3.0, Project Description, are substantially the same as those addressed in FEIR 584 (for biological resources) and FEIR 589 (for all other topics). This evaluation includes a determination as to whether the changes proposed for the "F" Street alignment would result in any new significant impacts or a substantial increase in a previously identified significant impact.

Section III.I of the *Ranch Plan Planned Community Program Text* identifies necessary urban infrastructure (including, but not limited to, roadways, transportation corridors, utilities, and flood control structures) as permitted uses within the open space, which includes the Habitat Reserve. As discussed in FEIR 589 (Section 3, Project Description) infrastructure improvements, such as roadways, trails, pipelines water quality basins, and water storage facilities that would be constructed outside of the development footprint are conceptually shown to the extent that they could be identified. The impact assessment for both FEIR 584 and FEIR 589 made assumption on the size, location and extent of habitat removal and species impacts as part of the evaluation of the Rancho Mission Viejo Planned Community; however, it was acknowledged that the precise location may shift to address engineering constraints, minimize impacts, or other factors that could not be known until more detailed plans are developed. Both FEIR 584 and FEIR 589 depicted the "F" Street alignment as crossing Chiquadora Ridge and Cañada Gobernadora to connect to Planning Area 3 (consistent with the then-conceptual alignment for SR-241). The alignment as currently shown has shifted the roadway to the west from the hillsides into the valley in the northern half and then re-aligned to be within Planning Area 2 South.

Although Section 15164 of the State CEQA Guidelines does not stipulate the format or content of an Addendum, the topical areas identified in the County of Orange Environmental Checklist (Checklist) were used as guidance for this Addendum. This comparative analysis provides the County of Orange with the factual basis for determining whether any changes in the project, any changes in circumstances, or any new information since FEIR 584 (for biological resources) and FEIR 589 (for all other topics) were certified require additional environmental review or preparation of a subsequent EIR.

Pursuant to Section 15162 of the State CEQA Guidelines, the County of Orange has determined, on the basis of substantial evidence in the light of the whole record, that (1) construction of "F" Street does not propose substantial changes to the project; (2) no substantial changes in circumstances would occur that would require major revisions to FEIR 584 and FEIR 589; and (3) no new information of substantial importance has been revealed since the certification of FEIR 584 and FEIR 589.

A mitigation program was adopted as a part of FEIR 589 that minimized impacts associated with implementation of the Rancho Mission Viejo Planned Community. In addition, there are regulatory conditions from *The Ranch Plan Planned Community Text* and provisions from the settlement agreements that are applicable to implementation of "F" Street. The mitigation program applicable to "F" Street is contained in the Regulation Compliance Matrix (RCM) included in Appendix A.

"F" Street would require improvements to Oso Parkway, which is within the Caltrans jurisdiction. To facilitate the Caltrans' evaluation of impacts within their jurisdiction, the analysis of improvements to Oso Parkway has been discussed in a separate subheading for each of the Environmental Checklist topics (see Exhibit 11, which depicts the Caltrans right-of-way).

However, for topics such as biological resources where the analysis has quantified impacts, the Caltrans evaluation is a subset and has been included in the impact total analysis. The Caltrans review will occur at the design phase of the roadway improvements and would be processed directly with Caltrans.

In certifying FEIR 589, the Findings of Fact for unavoidable significant impacts were made for the following topical areas:

- Aesthetics
- Agricultural Resources
- Air Quality
- Biological Resources
- Land Use and Relevant Planning
- Mineral Resources
- Public Services (Fire Protection Services and Facilities)
- Traffic and Circulation
- Water Resources

As previously indicated, FEIR 584 has been used as the basis for the analysis of biological resources in this Addendum. Since FEIR 584 addressed the land use development alternative (known as B-12) that was developed as part of the Settlement Agreement (see Section 2.2), biological impacts were reduced to less than significant.

Several of the unavoidable significant impacts listed above were associated with development of certain locations within the Rancho Mission Viejo Planned Community. Therefore, not all these impacts apply to the construction of "F" Street. As discussed in Sections 4.1 through 4.17, unavoidable significant impacts associated with "F" Street are limited to:

- Aesthetics
- Air Quality
- Water Resources

Sections 4.1 through Section 4.17 address the topical areas from the County of Orange CEQA Environmental Checklist. These sections have been set up as follows:

- **Summary of Previous Findings**—This provides a brief overview of the impact conclusions from FEIR 589 and, for biological resources, FEIR 584. This summary is at a high level and addresses the Rancho Mission Viejo Planned Community as a whole. A comprehensive summary is not required because the record as a whole is considered in making the determination if there are new significant impacts beyond what was addressed in the previous documents.
- **Project Impact Analysis**—This section includes the questions from the County of Orange CEQA Environmental Checklist; an analysis that is focused on "F" Street; reference to the mitigation program that was adopted in conjunction with the certification of FEIR 589 and FEIR 584 applicable to the Project; the level of significance after mitigation; and a finding of consistency with the applicable FEIR.

4.1 AESTHETICS

Summary of Previous Findings

FEIR 589 addressed aesthetic impacts associated with the development of the Rancho Mission Viejo Planned Community, including impacts on scenic vistas, scenic highways, visual quality, and lighting and glare. Construction of the Rancho Mission Viejo Planned Community will result in substantial landform alterations. Mass grading would affect existing topography, vegetation cover, and visual character. Throughout much of the grading, large construction vehicles would be visible from adjacent (and some distant) vantage points. Barren slopes and new development in various stages of construction would be visible intermittently throughout the implementation of the Rancho Mission Viejo Planned Community. Though landscaping would involve the replanting of slopes in order to reduce the aesthetic impacts associated with grading, FEIR 589 determined that implementation of the Rancho Mission Viejo Planned Community would alter the visual characteristics of the RMV Planning Area.

Development and construction of the Rancho Mission Viejo Planned Community would introduce new sources of nighttime light into the area. New light sources are anticipated to occur from the illumination of on-site structures such as commercial buildings and recreational uses (i.e., signage, interior and exterior lighting), residences (i.e., interior and exterior lighting), and street and vehicle lights. Although these light sources are not expected to extend beyond the physical limits of the RMV Planning Area, they have the potential and spillage to create night glow in an area that has very limited lighting sources at night. This change was identified as a significant impact in FEIR 589 because the Rancho Mission Viejo Planned Community would introduce lighting into a currently undeveloped area.

In conjunction with FEIR 589, the Orange County Board of Supervisors adopted a Findings of Fact and a Statement of Overriding Considerations for aesthetic impacts.

Project Impact Analysis

- a) Would the project have a substantial adverse effect on a scenic vista?**
- b) Would the project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?**
- c) Would the project substantially degrade the existing visual character or quality of the site and its surroundings?**
- d) Would the project create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area?**

The aesthetic impacts have been previously analyzed as part of FEIR 589, which was prepared and certified pursuant to State and County CEQA Guidelines. Minor additions and/or clarifications are needed to cover the actions that are currently proposed, which are documented below and serve as an Addendum to FEIR 589.

The southern portion of "F" Street extends through Planning Area 2 South, which has already been graded. The consistency of this portion of the roadway was previously addressed in the Addendum for Master and Subarea Plans for Planning Area 2. Significant visual impacts associated with development within Planning Area 2 were identified in FEIR 589.

"F" Street is not designated a scenic highway in the Scenic Highways Plan of the County of Orange General Plan's Transportation Element, nor are there designated scenic vistas that would have views of the roadway. Ortega Highway, Antonio Parkway, and Cow Camp Road are designated on Scenic Highways Plan as Landscape Corridors. Portions of the roadway would be visible from these facilities; however, most of these views, other than at the connection with Cow Camp Road, would be distant views off the roadway. The Landscape Corridor, as opposed to a Viewscape Corridor, emphasizes provision of additional landscaping in the median and adjacent to the roadway, rather than protection of scenic vistas. Cow Camp Road has been designed to incorporate landscaping to comply with the Rancho Mission Viejo Planned Community's landscape guidelines and Figure IV-15 of the General Plan Transportation Element. "F" Street would not preclude the ability to incorporate the required landscaping at Cow Camp Road. No new impacts on scenic highways or designated scenic vistas would occur with the proposed alignment for "F" Street.

Though not formally designed scenic vistas, there are several public vantage points that were evaluated in FEIR 589 that would be visually affected by the construction of "F" Street. Specifically, FEIR 589 identified that the development of Planning Area 2 South and "F" Street would be visible from the Community Trail in Ladera Open Space and the West Ridge Trail in Caspers Wilderness Park. Based on the thresholds of significance set forth in FEIR 589, the change in land use from open space to urban land uses was identified to result in an unavoidable, significant aesthetic impacts at these locations and included in the Statement of Overriding Consideration for the Rancho Mission Viejo Planned Community.

The portion of "F" Street north of the CWRP would extend through open space area. The construction of "F" Street would result in substantial landform alteration and extend a roadway through area that is currently open space. FEIR 589 did assume the construction of a local roadway and SR-241 or arterial highway in this general locale. As previously indicated, Exhibit 3-24 in FEIR 589 depicts an arterial highway as part of the proposed circulation network without the extension of SR-241. However, the alignment has shifted to the west from the hillsides to the valley in the northern half and then re-aligned to be located within Planning Area 2 South. Though this would potentially reduce the visual impacts associated with "F" Street because it would be further away, and therefore less visible, from sensitive uses, such as Caspers Wilderness Park, the landform alteration associated with the construction of "F" Street would remain a significant, unavoidable impact. As such the finding of an unavoidable significant impact identified in FEIR 589 and the Statement of Overriding Considerations adopted by the Board of Supervisors for the Rancho Mission Viejo Planned Community would be applicable to the "F" Street Project.

Though minor alignment modifications have occurred during the preliminary design process, the impacts associated with changes to the topography and visual character were assessed in FEIR 589. Aesthetic impacts from nearby uses would be reduced. The closest uses would be Tesoro High School to the west of the "F" Street alignment and the communities of Wagon Wheel and Coto de Caza, located to the east. At Oso Parkway, "F" Street is east of Tesoro Creek Road, which provides access to the high school and is approximately 650 feet east of the high school at its closest point. Though the high school would not be considered a visually sensitive use, the proposed alignment does provide greater separation of the roadway from the high school and would not have an effect on the visual character of the school. The proposed alignment is also further from the communities of Wagon Wheel and Coto de Caza than what

was assumed in FEIR 589 for both the with and without SR-241 scenarios. Previously, when the roadway (either SR-241 or the arterial highway) was assumed to extend into Planning Area 3, the alignment was along a more easterly route. Additionally, the distance and topography that separates these communities would limit views of the roadway.

As addressed in FEIR 589 (pages 4.10-23 and 4.10-24), the development and construction of the Rancho Mission Viejo Planned Community would introduce new sources of nighttime lighting into the area. Street and vehicle lights were identified as part of the sources of light and glare. This was identified as a significant unavoidable impact and included in the Statement of Overriding Considerations. As discussed above in Section 3.3.7, proposed design measures would minimize all lighting on "F" Street within the open space area to the lighting required for safety. Specifically, in natural areas (i.e, on the Oso Parkway northbound and southbound couplets), street lighting would be downcast luminaries and be shielded and oriented in a manner that will prevent spillage or glare into the remaining natural and open space areas. As indicated in the Project Description (Section 3.3.7), the design assumes street lighting will extend only as far north of Chiquita Canyon Drive as required to illuminate the Chiquita Canyon Drive on- and off-ramps and as far south of Oso Parkway to illuminate the Oso Parkway northbound and southbound couplets. Standard street lighting would not be provided through the open space between these intersections.¹³ Though this would reduce the light and glare impacts to the maximum extent feasible, the construction of "F" Street would introduce vehicle lights into an area that is currently open space. Therefore, the original finding of a significant unavoidable impact associated with sources of light and glare would be applicable to the "F" Street Project and the finding in the Statement of Overriding Considerations adopted by the Board of Supervisors would be applicable to this Project.

Improvements within Caltrans Right-of-Way

The Caltrans jurisdiction is the portion of Oso Parkway between the on and off ramps for SR-241. The physical geometric improvement to Oso Parkway include widening a short segment of roadway to construct a dedicated eastbound right-turn lane onto southbound "F" Street and traffic signal modifications. There would be minimal visual impacts associated with the construction activities within the Caltrans right-of-way. Visually, "F" Street would be a continuation of the SR-241 to the north. Improvements in this portion of the roadway would not be visible from a scenic highway or scenic vista. Limited grading (approximately 15,000 cubic yards of cut and fill) would be required within the Caltrans right-of-way. Lighting currently exists at Oso Parkway and would not be intensified within Caltrans right-of-way. No significant impacts would occur and no new mitigation measures would be required.

Mitigation Program

As a part of FEIR 589, a mitigation program was adopted, which minimizes impacts associated with implementation of the Rancho Mission Viejo Planned Community, including the construction of "F" Street. The proposed alignment for "F" Street would not result in any new aesthetic impacts, nor would it increase the severity of a previously identified significant impact as previously analyzed in FEIR 589. No new mitigation is required. As discussed above, and consistent with the requirements of FEIR 589 (Mitigation Measures 4.9-28 and 4.10-1), all lighting along the perimeter of natural areas, particularly street lights, be downcast luminaries and be shielded and oriented in a manner that will prevent spillage or glare into the remaining natural and open space areas. This measure has been incorporated into the Project design for

¹³ The Chiquita Canyon Drive intersection is within a development area and lighting currently exists at the Oso Parkway/SR 241 intersection. The lighting at the Oso Parkway/SR-241 intersection would not be intensified; however, the lighting would be extended south on the northbound and southbound couplets.

"F" Street. Please refer to Item 140 in the RCM in Appendix A to this Addendum for the measure applicable "F" Street.¹⁴

Level of Significance After Mitigation

Consistent with the findings of FEIR 589, the grading and construction of "F" Street would alter the natural visual characteristics of the Project site and incrementally increase lighting levels, which would constitute unavoidable significant impacts. In conjunction with the certification of FEIR 589, the County Board of Supervisors adopted a Findings of Fact and a Statement of Overriding Considerations addressing these impacts. This Statement of Overriding Considerations would continue to apply to this Addendum for "F" Street.

Finding of Consistency With Final EIR 589

As discussed above, the construction of "F" Street would alter the visual characteristics of the Project site and would incrementally increase lighting levels. These have been identified as unavoidable significant impacts. However, these findings are consistent with the conclusions of FEIR 589. When certifying FEIR 589, the County Board of Supervisors adopted a Findings of Fact and a Statement of Overriding Considerations addressing these impacts. This Statement of Overriding Considerations would continue to apply to this Addendum for "F" Street.

The County of Orange has determined, on the basis of substantial evidence in the light of the whole record, that the "F" Street Project does not propose substantial changes to the Rancho Mission Viejo Planned Community; that no substantial changes would occur that would require major revisions to FEIR 589 due to new significant impacts; and that no new information of substantial importance has been revealed since the certification of FEIR 589. Therefore, since none of the conditions described in Section 15162 calling for preparation of a subsequent EIR have occurred, an Addendum to FEIRs 589 and FEIR 584 is the appropriate document for CEQA compliance.

4.2 AGRICULTURE AND FORESTRY RESOURCES

Summary of Previous Findings

As detailed in FEIR 589, implementation of the Rancho Mission Viejo Planned Community would result in a significant impact due to the conversion of farmland listed as "Prime", "Unique", or "Statewide Importance", as shown on the State Farmland Mapping and Monitoring Program. These farmlands are collectively known as "Important Farmland". The specific agricultural uses that will be affected by the Rancho Mission Viejo Planned Community include citrus and avocado orchards, limited row crops, and commercial nursery operations. At the time FEIR 589 was prepared, the site was zoned for agriculture and portions of the site were within Williamson Act contracts. In conjunction with FEIR 589, the Orange County Board of Supervisors adopted a Findings of Fact and a Statement of Overriding Considerations for impacts to Important Farmland.

¹⁴ As noted in the beginning of the RCM, subsequent Board of Supervisor actions and other agency actions have also been approved that supersede or superimpose the original Board of Supervisor action and have resulted in modifications to mitigation measures. Specifically, Mitigation Measure 4.10-1 was eliminated due to the overlap with Mitigation Measure 4.9-28 (Items 140-141); lighting is being shielded for habitat protection, not aesthetic reasons. From an aesthetics perspective, the impact remains significant and unavoidable.

Project Impact Analysis

- a) **Would the project 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?**
- b) **Would the project conflict with existing zoning for agricultural use, or a Williamson Act contract?**
- c) **Would the project 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])?**
- d) **Would the project result in the loss of forest land or conversion of forest land to non-forest use?**
- e) **Would the project 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 forest land to no-forest use?**

Agricultural resources impacts have been previously analyzed as part of FEIR 589, which was prepared and certified pursuant to the State and County CEQA Guidelines. As discussed below, the State FMMP has been updated since the certification of FEIR 589. This Addendum to FEIR 589 documents the consistency of the previous analysis with the updated mapping.

For CEQA purposes, Prime Farmland, Farmland of Statewide Importance, and Unique Farmland are collectively defined as "Important Farmland". Grazing Land is also considered farmland, although it is not included as Important Farmland. FEIR 589 identified that the Rancho Mission Viejo Planned Community contained 319 acres of Prime Farmland, 61 acres of Farmland of Statewide Importance, and 576 acres of Unique Farmland.

"F" Street would not traverse any area designated as Prime Farmland, Farmland of Statewide Importance, or Unique Farmland as shown on the State Farmland Mapping and Monitoring Program (2010). The roadway would be located on lands designated for grazing.

"F" Street is located entirely within Planning Area 2. FEIR 589 identified 295 acres along the eastern boundary of Planning Area 2 as being within Williamson Act contracts. This includes the portion of the "F" Street alignment in Planning Area 2 South. However, these contracts subsequently expired in 2005 and 2008. As a result, there are no portions of the "F" Street alignment or any of the Rancho Mission Viejo Planned Community that are under a Williamson Act contract. No impact would occur.

Forestry Resources were not a topic that required evaluation at the time FEIR 589 was prepared. However, there are no forestry resources within the "F" Street alignment or in any part of the Rancho Mission Viejo Planned Community.

Improvements within Caltrans Right-of-Way

The improvements needed at Oso Parkway are under Caltrans' jurisdiction and would not affect farmland. Therefore, implementation of the portion of "F" Street within the Caltrans improvements at Oso Parkway would not result in any impacts to agricultural resources.

Mitigation Program

As a part of FEIR 589, a mitigation program was adopted, which minimizes impacts associated with implementation of the Rancho Mission Viejo Planned Community, including the construction of "F" Street. The proposed alignment for "F" Street would not result in any impacts to agricultural and forestry resources, nor would it increase the severity of a previously identified significant impact as previously analyzed in FEIR 589. Though mitigation measures for agricultural resources were identified for the Rancho Mission Viejo Planned Community, no mitigation is required for the "F" Street Project.

Level of Significance After Mitigation

FEIR 589 concluded that the Rancho Mission Viejo Planned Community had significant unavoidable impacts to Prime Farmland. A Findings of Fact and a Statement of Overriding Considerations were adopted by the County Board of Supervisors in conjunction with the certification of FEIR 589. However, the "F" Street Project does not contribute to these significant, unavoidable impacts. The "F" Street Project would have no impacts to Prime Farmland.

Finding of Consistency With Final EIR 589

As discussed above, the "F" Street would have no impacts to Prime Farmland. Though the County Board of Supervisors adopted a Findings of Fact and a Statement of Overriding Considerations pertaining to unavoidable significant impacts to Prime Farmland, the "F" Street Project does not contribute to this impact.

The County of Orange has determined, on the basis of substantial evidence in the light of the whole record, that the "F" Street Project does not propose substantial changes to the Rancho Mission Viejo Planned Community; that no substantial changes would occur that would require major revisions to FEIR 589 due to new significant impacts; and that no new information of substantial importance has been revealed since the certification of FEIR 589. Therefore, since none of the conditions described in Section 15162 calling for preparation of a subsequent EIR have occurred, an Addendum to FEIRs 589 and FEIR 584 is the appropriate document for CEQA compliance.

4.3 AIR QUALITY

Summary of Previous Findings

FEIR 589 addressed the construction and operational impacts associated with the Rancho Mission Viejo Planned Community. FEIR 589 identified short-term, construction-related emissions of carbon monoxide (CO), volatile organic compounds (VOC), oxides of nitrogen (NOx), and particulate matter (PM10) in excess of the South Coast Air Quality Management District's (SCAQMD's) daily significance thresholds and quarterly significance thresholds. Construction activities would result in a significant direct air quality impact for CO, NOx, VOC, and PM10 (NOx and VOC are ozone precursors). Heavy-duty equipment emissions were calculated using the then-current (2004) emissions assumptions for construction equipment. However, the mitigation measure in FEIR 589 committed to having off-road diesel equipment comply with emission control regulations in force at that time of construction.

In addition to construction emissions, FEIR 589 found that the Rancho Mission Viejo Planned Community operational emissions of CO, VOC, NOx, and PM10 on a regional scale would result in significant direct and cumulative impacts based on SCAQMD thresholds of significance.

FEIR 589 also found the following:

- Local operational impacts would be less than significant. The FEIR 589 analysis showed that 1-hour and 8-hour CO concentrations at all analyzed intersections would be less than State and federal standards.
- The operations of the Rancho Mission Viejo Planned Community are not expected to expose a substantial number of people to objectionable odors.
- The Rancho Mission Viejo Planned Community would not conflict with or obstruct implementation of the Air Quality Management Plan because implementation of the proposed Rancho Mission Viejo Planned Community would not exceed growth projections for the subarea.

In conjunction with certification of FEIR 589, the Orange County Board of Supervisors adopted a Finding of Fact and a Statement of Overriding Considerations for air quality impacts.

Project Impact Analysis

- a) Would the project conflict with or obstruct implementation of the applicable air quality plan?**
- b) Would the project violate any air quality standard or contribute substantially to an existing or projected air quality violation?**
- c) Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or State ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?**
- d) Would the project expose sensitive receptors to substantial pollutant concentrations?**
- e) Would the project create objectionable odors affecting a substantial number of people?**

The air quality impacts have been previously analyzed as part of FEIR 589, which was prepared and certified pursuant to State and County CEQA Guidelines. As discussed below, since the certification of FEIR 589 State and regional air quality plans have been updated. This Addendum to FEIR 589 documents the consistency of the previous analysis with the updated documents.

The modification of the "F" Street alignment relative to the alignment evaluated in FEIR 589 would not substantially change the construction effort and related emissions, nor would it change the anticipated vehicle use of the roadway. Overall, the air quality impacts associated with the Project are not expected to change substantially from what was addressed in FEIR 589.

Since the certification of FEIR 589, the South Coast Air Quality Management District (SCAQMD) adopted the *Final 2007 Air Quality Management Plan (2007 AQMP)*. The 2007 AQMP was an update of the 2003 AQMP. Importantly, the 2007 AQMP has incorporated the projected growth for the Rancho Mission Viejo Planned Community which, in turn, has been included in the *2007 State Implementation Plan (SIP)*. The California Air Resources Board (CARB) adopted the State Strategy for the 2007 State Implementation Plan (SIP), including the 2007 AQMP on September 27, 2007.

On November 28, 2007, CARB submitted a SIP revision to the USEPA for ozone (O₃), fine particulate matter with a diameter of 2.5 microns or less (PM_{2.5}), carbon monoxide (CO), and nitrogen dioxide (NO₂) in the SoCAB; this revision is identified as the "2007 South Coast SIP". The 2007 AQMP/2007 South Coast SIP demonstrates attainment of the federal PM_{2.5} standard in the SoCAB by 2014 and attainment of the federal 8-hour O₃ standard by 2023. The SIP also includes a request to reclassify the O₃ attainment designation from "severe" to "extreme". The USEPA approved the redesignation effective June 4, 2010. The extreme designation requires the attainment of the 8-hour O₃ standard in the SoCAB by June 2024.

On December 7, 2012, the SCAQMD adopted the 2012 AQMP, which is a regional and multi-agency effort (among the SCAQMD, CARB, the Southern California Association of Governments [SCAG], and the USEPA). The 2012 AQMP incorporates the latest scientific and technical information and planning assumptions, including the 2012 Regional Transportation Plan/Sustainable Communities Strategy (RTP SCS); updated emission inventory methods for various source categories; and SCAG's latest growth forecasts. The 2012 AQMP continues to demonstrate attainment of the federal 24-hour PM_{2.5} standard by 2014; it updates the USEPA approved 8-hour O₃ control plan with new measures; and it includes new demonstrations of 1-hour O₃ attainment and vehicle miles traveled emissions offsets in accordance with recent USEPA requirements. The 2012 AQMP builds upon the approaches taken in the 2007 AQMP for the South Coast Air Basin for the attainment of federal particulate matter (PM) and O₃ standards within the timeframes allowed under Federal Clean Air Act.

The Rancho Mission Viejo Planned Community Plan is consistent with regional and State air quality planning programs. The proposed alignment of "F" Street would not result in any new impacts, nor would it increase the severity of a previously identified significant impact as analyzed in FEIR 589.

The Project region, the Orange County portion of the South Coast Air Basin, is a nonattainment area for O₃, PM₁₀, and PM_{2.5}. FEIR 589 found that the Rancho Mission Viejo Planned Community operational emissions of O₃ precursors VOC and NO_x, and PM₁₀ on a regional scale would result in significant cumulative impacts based on SCAQMD thresholds of significance. As previously discussed, the overall trip generation would not be changed substantially from what was assumed in FEIR 589. Therefore, the "F" Street would not result in any new cumulatively considerable impacts, nor would they increase the severity of the previously identified significant cumulative impact as analyzed in FEIR 589. However, in the context of the larger Rancho Mission Viejo Planned Community, the "F" Street Project would contribute to the long-term operational emissions of CO, VOC, NO_x, and PM₁₀, which would remain significant and unavoidable.

Sources that could expose sensitive receptors to substantial pollutant concentrations include construction activities for PM₁₀ and diesel exhaust (a toxic air contaminant) and congested traffic conditions for CO. Implementation of dust control measures required by SCAQMD rules and compliance with the mitigation measure in FEIR 589 requiring off-road diesel equipment to comply with emission control regulations in force at the time of construction would ensure that exposure to PM₁₀ and diesel exhaust would be less than significant. The overall trip generation would not be changed substantially from what was assumed in FEIR 589; therefore, there would be no increase in the severity of local CO concentrations, confirming the FEIR 589 conclusion that 1-hour and 8-hour CO concentrations at all analyzed intersections would be less than State and federal standards. It should also be noted, there are no sensitive receptors in close proximity to the roadway. The high school and the Wagon Wheel development are the closest uses in proximity to the Project but these are a sufficient distance and the vehicle counts are not sufficiently high to trigger the need for a dispersion modeling or hotspot evaluation. The existing

development in Planning Area 1 is approximately one mile from "F" Street at the closest point (very eastern edge of Planning Area 1 to the closest point on the alignment).

There would be no changes in the proposed "F" Street Project that would change the FEIR 589 conclusion that Project operations are not expected to expose a substantial number of people to objectionable odors.

Improvements within Caltrans Right-of-Way

The connection to Oso Parkway within Caltrans' jurisdiction has been considered as part of the entire "F" Street when assessing potential air quality impacts. The work within the Caltrans right-of-way would be limited. There are no components of this work that would result in disproportionate impacts. Therefore, since the assessment of impacts provided in FEIR 589 and this Addendum adequately address the potential air quality impacts within the Caltrans right-of-way.

Mitigation Program

As a part of FEIR 589, a mitigation program was adopted, which minimizes impacts associated with implementation of the Rancho Mission Viejo Planned Community, including the construction of "F" Street. The proposed alignment for "F" Street would not result in any new air quality impacts, nor would it increase the severity of a previously identified significant impact as previously analyzed in FEIR 589. The mitigation program adopted as part of FEIR 589 incorporates measures to reduce impacts during construction, including Fugitive Dust (SC-4.7-1) and ROC and NO_x emissions (SC 4.7-2) and a Diesel-Fuel Reduction Plan (MM 4.7-1). No new mitigation is required. Please refer to Items 555 through 556.3 in the RCM in Appendix A to this Addendum for measures applicable "F" Street.

Level of Significance After Mitigation

As set forth in FEIR 589, short-term, construction-related emissions of nitrogen oxides (NO_x), CO, volatile organic compounds (VOC), and respirable particulate matter with a diameter of 10 microns or less (PM₁₀) generated during a peak construction period would remain significant after mitigation. The Project would not result in significant local operational air quality effects or odor impacts. Consistent with the findings of FEIR 589, long-term operational emissions of CO, VOC, NO_x, and PM₁₀ would remain significant and unavoidable. The Project would not conflict with the SCAQMD AQMP. These conclusions are consistent with the findings of FEIR 589 and were included in the Findings of Fact and Statement of Overriding Considerations adopted by the Board of Supervisors on November 8, 2004. The Statement of Overriding Considerations would continue to apply to this Addendum for the "F" Street Project.

Finding of Consistency With Final FEIR 589

As discussed above, with the "F" Street there would be short-term, construction-related emissions of nitrogen oxides (NO_x), CO, volatile organic compounds (VOC), and respirable particulate matter with a diameter of 10 microns or less (PM₁₀) generated during a peak construction period which would remain significant after mitigation. Additionally, long-term operational emissions of CO, VOC, NO_x, and PM₁₀ would remain significant and unavoidable. However, these findings are consistent with the conclusions of FEIR 589. When certifying FEIR 589, the County Board of Supervisors adopted a Findings of Fact and a Statement of Overriding Considerations addressing these impacts. This Statement of Overriding Considerations would continue to apply to this Addendum for "F" Street.

The County of Orange has determined, on the basis of substantial evidence in the light of the whole record, that the "F" Street Project does not propose substantial changes to the Rancho Mission Viejo Planned Community; that no substantial changes would occur that would require major revisions to FEIR 589 due to new significant impacts; and that no new information of substantial importance has been revealed since the certification of FEIR 589. Therefore, since none of the conditions described in Section 15162 calling for preparation of a subsequent EIR have occurred, an Addendum to FEIRs 589 and FEIR 584 is the appropriate document for CEQA compliance.

4.4 BIOLOGICAL RESOURCES

Summary of Previous Findings

FEIR 589 identified significant impacts, prior to mitigation, on a number of sensitive species and vegetation communities. Impacts to USACE and CDFW jurisdiction were also identified. Implementation of the Rancho Mission Viejo Planned Community would have short-term construction-related impacts and long-term indirect impacts. Short-term effects are related to noise impacts on nesting raptors and other sensitive bird species and grading activities that would disturb soils and result in the accumulation of dust on the surface of the leaves of trees, shrubs, and herbs. Grading activities would also result in an accumulation of trash and debris. These short-term impacts were identified in FEIR 589 as significant.

Long-term indirect effects would include the introduction of landscape materials that have the potential to include planting ornamental species that can be invasive; changes in water quality that can impact biological resources; the addition of lighting in development areas that could result in an indirect effect on the behavioral patterns of nocturnal and crepuscular (i.e., active at dawn and dusk) wildlife adjacent to these areas; and increases in human activity that would increase the disturbance of natural open space adjacent to development. These long-term indirect impacts were identified in FEIR 589 as significant.

Implementation of the mitigation program, which includes the preservation of 16,942 acres of open space (Habitat Reserve), would reduce biological impacts to less than significant levels except for those impacts associated with two slope wetlands in the Chiquita sub-basin; wildlife linkages K and G; and fecal coliform pathogen impacts. These impacts remained significant and unavoidable and a Findings of Fact and a Statement of Overriding Considerations were adopted for impacts to Biological Resources.

Given the timing of the public release of Draft EIR 584, the document addressed a Rancho Mission Viejo Planned Community development scenario (identified as Alternative B-12, see Section 2.2) that was agreed to as part of the Settlement Agreements. Therefore, the impacts associated with the Rancho Mission Viejo Planned Community identified in FEIR 584, though similar in nature, are reduced from what was identified in FEIR 589. The mitigation program included the protection of habitat as part of the Habitat Reserve and the Habitat Reserve Management Program. These provisions have been incorporated into the Incidental Take Permits (ITP) issued to RMV. No significant unavoidable biological impacts were identified in FEIR 584.

Project Impact Analysis

- a) **Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Services?**
- 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 California Department of Fish and Wildlife or U.S. Fish and Wildlife Services?**
- 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?**
- 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, or impede the use of native wildlife nursery sites?**
- e) **Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?**
- f) **Would the project conflict with provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?**

Impacts to biological resources associated with the proposed "F" Street Project—including most Special Status plant and wildlife species as well as vegetation communities and habitats of concern—were previously analyzed in both FEIR 589 and FEIR 584. The effects were also analyzed by the USFWS in Biological Opinion/Conference Opinion 1-6-07-F-812.8. The USFWS issued a FESA Section 10(a)(1)(B) ITP for federally listed species in January 2007. Mitigation for impacts from planned development activities and infrastructure in the SSHCP area, including the Rancho Mission Viejo Planned Community, is primarily preservation, monitoring, and management of an approximate 32,000-acre Habitat Reserve.

Impacts to biological resources resulting from the construction of "F" Street that are generally consistent with the impacts analyzed in the SSHCP and FEIRs 584 and 589 are already mitigated by the 32,000-acre Habitat Reserve. As designed, the proposed "F" Street includes some modifications from the conceptual roadway alignment not assumed in the SSHCP. However, when evaluating the consistency with the SSHCP the overall context of the Project was be considered. The SSHCP and the ITP addressed, among other things, the entire Rancho Mission Viejo Planned Community. There was a recognition that design level information for roadway alignments and other supporting infrastructure was not available; therefore, the appraisal of the potential impacts of the infrastructure in the open space areas was based on conceptual plans as part of an "infrastructure overlay". The more detailed analysis would occur when a full understanding of the impacts was known. Recognizing that the impacts may change as the overall design effort progresses, the SSHCP has provisions for processing amendments. The amendment process requires demonstration that there is no net reduction in the Habitat Reserve acres or a loss of "Habitat Value".

The "F" Street Project required a minor amendment to the SSHCP. In processing the minor amendment, the USFWS evaluates the "F" Street Project in light of the both the larger Rancho Mission Viejo Planned Community and the SSHCP, as a whole. It is considered in the larger context not as a separate standalone project. Therefore, even if the impacts of "F" Street are larger than the original assumptions for the roadway, provided the overall Rancho Mission Viejo Planned Community does not result in a loss of Habitat Reserve acres or a loss of "Habitat Value" the Project would be considered consistent with SSHCP. USFWS has confirmed this approach and the consistency of the "F" Street Project with SSHCP through the processing of the minor amendment for the Project. Therefore, the alignment modification is not deemed to be a substantial change to the Rancho Mission Viejo Planned Community or the SSCHP pursuant to Section 15162 of the State CEQA Guidelines (see Finding of Consistency with Final EIRs 584 and 589 at the end of this section). It is important to remember that both FEIR 584 and FEIR 589 addressed the construction of an arterial highway in this general alignment and serving this travel demand if SR-241 was not built. The change is a minor realignment of the roadway not the introduction of a roadway that was not previous identified and evaluated in the FEIR 584 and FEIR 589. The SSHCP Habitat Reserve Design is discussed further below in this section. Exhibit 12 depicts the biological resources surrounding the "F" Street Alignment. In addition, the exhibit depicts the alignment for "F" Street evaluated in the SSHCP and FEIR 584.

Since the certification of FEIR 584 and approval of the SSHCP and Joint Programmatic EIR/EIS, the special-status species database (the California Natural Diversity Database [CNDDDB]) maintained by the CDFW has been periodically updated. Additionally, special-status plant designations have been updated by the California Native Plant Society (CNPS) and CDFW, and the Special Status Animals List has been updated by CDFW. Therefore, the lists of special-status plant and wildlife species analyzed has been updated.

Table 1 identifies the vegetation communities and non-natural lands in the "F" Street Project Area (e.g., limits of disturbance), except for the portion of the roadway in Planning Area 2 South, which has already been graded. The table distinguishes between habitat in Planning Subarea 2.5, which is approved for development but has not been graded and Habitat Reserve.

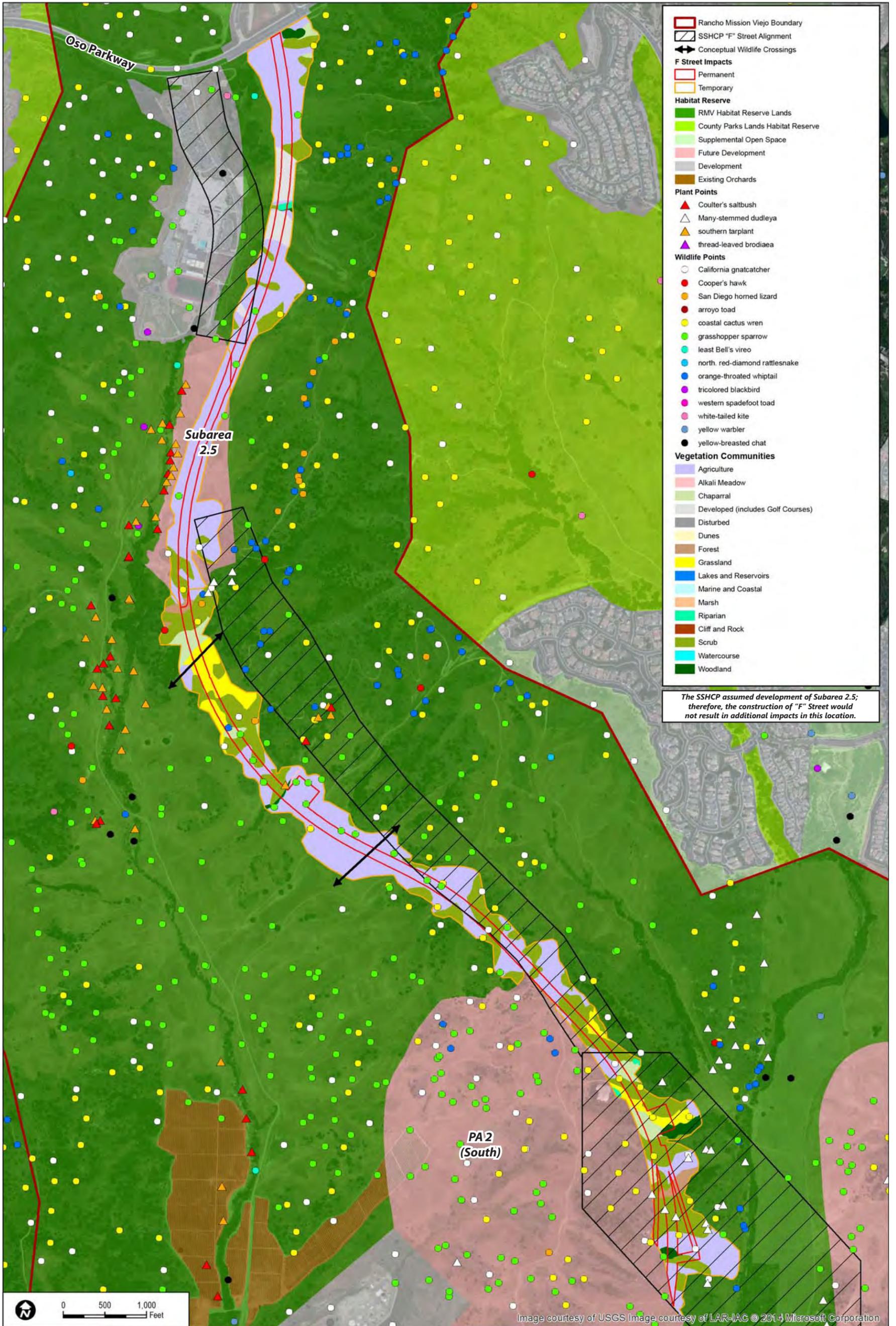
**TABLE 1
 VEGETATION AND LAND COVERS – "F" STREET IMPACTS**

Vegetation Type/ Land Cover	"F" Street Total	Impacts within Planning Subarea 2.5		Impacts within Habitat Reserve		Total Impacts	
		Perm. (acres)	Temp. (acres)	Perm. (acres)	Temp. (acres)	Perm. (acres)	Temp. (acres)
coastal sage scrub	53.2	1.0	1.8	13.6	36.9	14.6	38.7
chaparral	7.3	0.0	0.0	2.8	4.5	2.8	4.5
grassland	10.5	0.0	0.0	3.5	7.0	3.5	7.0
riparian	0.7	0.0	0.0	0.2	0.5	0.2	0.5
alkali meadow	0.1	0.0	0.0	0.0	0.1	0.0	0.1
woodland and forest	5.7	0.1	0.0	1.3	4.2	1.4	4.3
agriculture	106.1	5.8	15.4	23.3	61.7	29.1	77.1
developed	6.1	0.0	0.0	2.6	3.5	2.6	3.5
Total*	189.7	6.9	17.1	47.3	118.4	54.1	135.7

Perm: permanent impacts; Temp: temporary impacts

* Totals may not sum due to rounding variances.

Source: Dudek 2014.



Source: Dudek 2014

Biological Resources in the Vicinity of "F" Street

Exhibit 12

Rancho Mission Viejo Planned Community
"F" Street

Bonterra
PSOMAS

The wildlife and plant species analyzed for the "F" Street Project are listed in Tables B-1 and B-2, respectively (Appendix B). Both tables include the species' primary habitat associations and their known occurrence or potential to occur in the broader SSHCP study area and within the "F" Street Project area. Species in the Tables B-1 and B-2 in boldface are SSHCP Covered Species and species in shaded rows are species that were not analyzed in the SSHCP and EIR/EIS, but are included in the present analysis.

Table 2 shows the documented wildlife special-status species occurrences in the "F" Street Project area.

**TABLE 2
 SPECIAL-STATUS WILDLIFE – "F" STREET IMPACTS^a**

Common Name ^b	"F" Street Total	Impacts within Planning Subarea 2.5		Impacts within Habitat Reserve		Total Impacts	
		Perm.	Temp.	Perm.	Temp.	Perm.	Temp.
California gnatcatcher	8	0	1	3	4	3	5
cactus wren	15	1	0	3	11	4	11
Cooper's hawk	1	0	0	0	1	0	1
grasshopper sparrow	20	1	0	9	10	9	11
Southern California rufous-crowned sparrow	14	1	0	5	8	6	8
coast horned lizard	2	0	0	0	2	0	2
orangethroat whiptail	2	0	0	1	1	1	1
coastal whiptail	3	0	0	1	2	1	2

Perm: permanent impacts; Temp.: temporary impacts

^a The numbers represent cumulative occurrence points or occurrence locations compiled over multiple years. These data are show relative magnitude of impacts and general locations where species tend to occur not the numbers that can be expected to occur in any given year.

^b SSHCP Covered Species are shown in **boldface** type. Common names may be slightly different from those in FEIR 589 and the SSHCP due to changes in naming conventions.

Source: Dudek 2014

Implementation of "F" Street will impact approximately 189.7 acres, including 54.1 acres of permanent impacts and 135.7 acres of temporary impacts for remedial grading and staging areas (see Table 1). Of the 189.7 acres impacted, approximately 77.5 acres consist of natural vegetation communities (also referred to as Conserved Vegetation Communities in the SSHCP), and 112.2 acres consist of non-natural land covers (i.e., agriculture and developed).

As shown in Table 1, the large majority (84%) of the permanent and temporary impacts would be to agriculture (106.1 acres) and coastal sage scrub (53.2 acres). Much smaller amounts of grassland (10.5 acres), chaparral (7.3 acres), riparian (0.7 acre), woodland and forest (5.7 acres) and alkali meadow (0.1 acre) would be impacted.

A conceptual alignment for "F" Street was analyzed in FEIR 589, as well as the SSHCP and FEIR 584, and was included as an approved Covered Activity in the SSHCP. Due to a lack of detailed design information available at the time the impact analysis was being conducted, no impacts for remedial grading, water quality treatment, or drainage facilities were calculated for this facility. The impacts in the Habitat Reserve open space attributed to "F" Street are shown in Table 3. Estimated SSHCP impacts from development of Planning Subarea 2.5 are also shown

in Table 3. The SSHCP analysis did not differentiate between temporary and permanent impacts, thus all of the 77.9 acres of roadway impacts noted below are assumed to be permanent, as are the 41.8 acres of impact associated with Planning Subarea 2.5.

TABLE 3
"F" STREET IMPACTS ASSUMED IN THE SOUTHERN SUBREGION
HABITAT CONSERVATION PLAN

Habitat Type	"F" Street Impacts in Open Space	Planning Subarea 2.5 Excluding "F" Street Impacts
coastal sage scrub	36.3	3.4
chaparral	6.9	0.0
grassland	21.9	0.0
riparian	2.0	0.0
alkali meadow	0.0	0.0
woodland and forest	0.4	0.2
agriculture	4.6	38.2
developed	5.8	0.0
Total	77.9	41.8
Source: Dudek 2014		

As part of the minor amendment, it must be demonstrated that both "Loss of Habitat Reserve Acres" and "Loss of Habitat Value" are consistent with those approved in the SSHCP, and these additional impacts can be mitigated through the SSHCP. The impact analysis conducted for the minor amendment addresses both general impacts to biological resources and impacts in the context of the consistency with the design and function of the SSHCP.

Tables 4, 5, and 6 below show comparisons of impacts in the Habitat Reserve between the "F" Street alignment assumed in the SSHCP and the proposed "F" Street alignment.

TABLE 4
IMPACT COMPARISON OF PERMANENT VS. TEMPORARY IMPACTS
IN THE HABITAT RESERVE

	SSHCP "F" Street Alignment	Proposed "F" Street Alignment	Differential
Permanent	77.9	47.3	-30.6
Temporary	0.0	118.4	+118.4
Total	77.9	165.7	+87.8
SSHCP: Southern Subregion Habitat Conservation Plan			
Source: Dudek 2014.			

**TABLE 5
IMPACT COMPARISON BY VEGETATION COMMUNITIES**

Vegetation Type/ Land Cover	SSHCP "F" Street Impacts in Open Space	Permanent "F" Street Impacts in Open Space	Temporary "F" Street Impacts in Open Space	Total "F" Street in Open Space
coastal sage scrub	36.3	13.6	36.9	50.5
chaparral	6.9	2.8	4.5	7.3
grassland ^b	21.9	3.5	7.0	10.5
riparian	2.0	0.2	0.5	0.7
alkali meadow	0.0	0.0	0.1	0.1
woodland and forest	0.4	1.3	4.2	5.5
agriculture ^b	4.6	23.3	61.7	85.0
developed	5.8	2.6	3.5	6.1
Total	77.9	47.3	118.4	165.7

SSHCP: Southern Subregion Habitat Conservation Plan

^a A 10 percent contingency assumes an additional 10 percent impact for each vegetation type/land cover because the locations of the contingency impacts are unknown. The 10 percent would be applicable to both alternatives.

^b The apparent discrepancy in the balance of impacts to grassland and agriculture between the SSHCP "F" Street Impacts in Open Space and the current total "F" Street impacts is due to different mapping classifications. BonTerra included dryland farming under the grassland classification for their version of the SSHCP "F" Street impacts analysis. Consistent with the original SSHCP impact analysis, the current analysis for "F" Street includes dryland farming within the agricultural designation resulting in appropriately higher impacts to this designation. The grassland impacts attributable to the current "F" Street are truly impacts to grassland.

Source: Dudek 2014

**TABLE 6
IMPACT COMPARISON BY SPECIAL-STATUS WILDLIFE AND PLANTS**

Special-Status Wildlife and Plant Species ^{a,b}	SSHCP "F" Street Impacts in Open Space	Permanent "F" Street Impacts in Open Space	Temporary "F" Street Impacts in Open Space	Total "F" Street in Open Space
California gnatcatcher	4	3	4	7
cactus wren	10	3	11	14
Cooper's hawk	0	0	1	1
grasshopper sparrow	7	9	10	19
yellow-breasted chat	1	0	0	0
Southern California rufous-crowned sparrow	9	5	8	13
coast horned lizard	0	0	2	2
orangethroat whiptail	4	1	1	2
coastal whiptail	2	1	2	3
Coulter's saltbush – acres	0.02	0	0	0
Coulter's saltbush – population	10	0	0	0
Coulter's saltbush – locations	1	0	0	0
many-stemmed dudleya – acres	0.81	0.05	0.27	0.32
many-stemmed dudleya – population	287	548	537	1,085
many-stemmed dudleya – locations ^c	2	2	7	7
southern tarplant – acres	0.2	0.23	1.00	1.23
southern tarplant – populations	1,342	101	438	539

**TABLE 6
 IMPACT COMPARISON BY SPECIAL-STATUS WILDLIFE AND PLANTS**

Special-Status Wildlife and Plant Species ^{a,b}	SSHCP "F" Street Impacts in Open Space	Permanent "F" Street Impacts in Open Space	Temporary "F" Street Impacts in Open Space	Total "F" Street in Open Space
southern tarplant - locations ^d	4	1	1	1
intermediate mariposa lily – acres	0.79	0	0.51	0.51
intermediate mariposa lily – populations	40	0	439	439
intermediate mariposa lily – locations	1	0	1	1
Catalina mariposa lily – acres	0.91	0	0	0
Catalina mariposa lily – populations	83	0	0	0
Catalina mariposa lily – locations	5	0	0	0

SSHCP: Southern Subregion Habitat Conservation Plan

^a SSHCP Covered Species are shown in **boldface** type. Common names may be slightly different from those in SSHCP due changes in naming conventions.

^b Impacts to special-status species shown in this table do not include impacts in the Project Area within Planning Subarea 2.5 shown in Table 2, including 1 occurrence location each for California gnatcatcher, cactus wren, grasshopper sparrow, and Southern California rufous-crowned sparrow and two locations for intermediate mariposa lily totaling 3 individuals.

^c Permanent and temporary locations should not be added because too many-stemmed dudleya polygons intersect both temporary and permanent impact areas.

^d Permanent and temporary locations should not be summed because one southern tarplant polygon intersects both temporary and permanent impact areas.

Source: Dudek 2014

The current alignment for "F" Street will result in a net increase of 87.8 acres of impacts to Habitat Reserve open space compared to the conceptual "F" Street alignment depicted in the SSHCP (this includes both permanent and temporary impacts, see Table 4). For the vegetation community/land cover types in general, the large majority of the increase is due to a net increase of 80.4 acres of impacts to agriculture (see Table 5). For the six Conserved Vegetation Communities, there are both increases and decreases in impacts due to a general shifting of the alignment west from the hillsides to the valley in the northern half of the alignment and then re-aligning the roadway to intersect Planning Area 2 South instead of crossing Chiquadora Ridge and Cañada Gobernadora to connect to Planning Area 3. The resulting changes in impacts are:

- A net loss of 14.2 acres of coastal sage scrub
- A net loss of 0.4 acre of chaparral
- A net gain of 11.4 acres of grassland
- A net gain of 1.3 acres of riparian
- A net loss of 0.1 acre of alkali meadow
- A net loss of 5.1 acres of woodland and forest.

The most substantial net losses are the 14.2 acres of coastal sage scrub and the 5.1 acres of woodland and forest. As noted above, the impacts associated with the "F" Street Project must be considered in light of the larger Rancho Mission Viejo Planned Community and the SSHCP as a whole, not as a separate standalone project. Therefore, even if the impacts of "F" Street are larger than the original assumptions for the roadway, provided the overall Rancho Mission Viejo Planned Community does not result in a loss of Habitat Reserve acres or a loss of "Habitat Value" the Project would be considered consistent with SSHCP. USFWS has confirmed this

approach and the consistency of the "F" Street Project with SSHCP through the processing of the minor amendment for the Project.

With respect to coastal sage scrub, the additional loss would be in two main areas: (1) the northern portion of the alignment just south of Planning Subarea 2.5 and where the alignment swings east of Tesoro High School to connect with Oso Parkway and (2) in the south where the alignment runs parallel to and then enters Planning Area 2 South instead of crossing Chiquadora Ridge and Cañada Gobernadora to connect to Planning Area 3 (as was proposed at the time FEIR 589 and the SSHCP were prepared). However, it should be noted that the proposed Project from the northern end of Planning Area 2 South to the point where "F" Street enters Planning Area 2 South is within the flexible area within which the road could be located under the SSHCP. Therefore, the biological analysis of "F" Street in the context of the Habitat Reserve design accounted for this potential shift in the alignment near its southern terminus, even though the different impacted acreages were not accounted for in the conceptual grading plan. The "F" Street alignment in relation to Habitat Reserve design and function is discussed in more detail below.

For woodland and forest, the additional loss would also result from the proposed alignment being shifted to the west and then along the eastern boundary of Planning Area 2 South. As with the coastal sage scrub impacts, these impacts were accounted for in the context of Habitat Reserve design and function even though the different impacted acreages were not accounted for.

Special-Status Wildlife

The increase in impacts to the Conserved Vegetation Communities would result in a net increase in impacts to Covered Species locations, with the exception of orangethroat whiptail, yellow-breasted chat, Coulter's saltbush, and southern tarplant (Table 6). For the two scrub birds—California gnatcatcher and cactus wren—the differences are relatively small, with a net increase of three impacted locations for the gnatcatcher and four impacted locations for the cactus wren.

The impacts to special-status species shown in Table 2 include impacts in the "F" Street Project Area within Planning Subarea 2.5, including one occurrence location each for California gnatcatcher, cactus wren, grasshopper sparrow, and Southern California rufous-crowned sparrow. Impacts to these species were addressed in the SSHCP and Draft Joint Programmatic EIR/EIS and were all assumed to be permanently impacted as a result of development of Planning Subarea 2.5. These impacts were assumed to be mitigated by preservation, management, and monitoring of the 32,000-acre Habitat Reserve.

Table 6 shows impacts to special-status wildlife within the Habitat Reserve in comparison to using the alignment assumed in the SSHCP. Of the four California gnatcatcher locations in temporary impact areas, two are well within the temporary impact areas and may be displaced from their territories. The other two are located along the edge of the temporary impact area with suitable habitat available off site; these impacts may only cause minor temporary displacement or a shift in territory by the birds to avoid construction activities. However, even with two or three additional gnatcatcher locations being impacted by the proposed "F" Street alignment, along with the additional impacted location in Planning Area 2 South, these additional impacts will not substantially affect the viability of the Chiquita Canyon/Wagon Wheel sub-basins and Chiquadora Ridge major population/key location. This population contains approximately 404 locations in the SSHCP database, of which the SSHCP originally estimated 51 would be impacted by Covered Activities (see SSHCP, Appendix E). The proposed Project

combined with the Planning Area 2 South development would raise this number to approximately 54 to 55 impacted locations.

Cactus wrens may have less ability to move because of their obligate association with discrete cactus patches, so it should be assumed that all 14 impacted cactus wrens will be displaced by the proposed "F" Street alignment, or 4 more than estimated in the SSHCP. Further, the previous Planning Area 2 South boundary adjustment removed a net of three cactus wren locations compared to the boundary analyzed in the SSHCP. The USFWS and RMV have agreed to the restoration of 27.41 acres of southern cactus scrub to compensate for these impacts to cactus wren. Combined, an additional seven cactus wrens would be impacted by revised Planning Area 2 South development boundary and the proposed "F" Street alignment. The SSHCP estimated permanent impacts to 216 cactus wren locations in the SSHCP planning area overall, so the proposed Project combined with the revised Planning Area 2 South development boundary would raise this number to approximately 223 impacted locations, or 16 percent of the 1,408 locations in the SSHCP planning area (see SSHCP, Appendix E). This additional impact would not substantially affect conservation of the cactus wren in the SSHCP planning area.

The proposed Project would result in 12 additional impacted locations of the grasshopper sparrow compared to the conceptual "F" Street alignment assumed in the SSHCP, primarily due to the 80-acre increase in impacts to agriculture, which provides suitable habitat for grasshopper sparrows when fallowed. Ten of the total 19 impacted locations would be temporarily impacted; however, temporarily impacted grassland (about 7 acres) and agriculture (about 62 acres) can be restored fairly readily and quickly and will likely be re-occupied by grasshopper sparrows once suitable shrub and other perching sites re-establish. The Planning Area 2 South boundary adjustment adds one grasshopper sparrow location to the Habitat Reserve, so with the permanent loss of nine sites for the proposed Project (compared to seven for the conceptual alignment), there will be an overall net permanent loss of one location for the combined Planning Area 2 South and proposed "F" Street impacts. This additional impact would not substantially affect conservation of grasshopper sparrow in the SSHCP planning area.

Increased impacts to coast horned lizard (two locations), coastal whiptail (one location), Southern California rufous-crowned sparrow (four locations), and Cooper's hawk (one nest location) are also considered minor and will not affect conservation of these species in the Habitat Reserve. One of the two impacted horned lizard locations is on the edge of the temporary impact area and substantial scrub habitat is available off site. The Cooper's hawk nest site is also on the edge of a temporary impact area. Conserving suitable nesting habitat for Cooper's hawk is more important than conserving a specific documented nest site per se because, while maintaining some fidelity to nesting territories, this species often establishes new nest sites within a nesting territory—in this case, likely the substantial suitable habitat to the west of the impact area that could support a nesting territory. Reduced impacts to riparian by 1.3 acres also will benefit Cooper's hawk by providing additional suitable nesting habitat compared to the conceptual alignment.

Table B-1 includes a number of special-status wildlife species that have moderate or high potential to occur in the Project Area. Most of the species in Table B-1 were previously analyzed in FEIR 589, the SSHCP, and the Joint Programmatic EIR/EIS for the SSHCP. The SSHCP determined that preservation, management, and monitoring of the approximate 32,000-acre Habitat Reserve would reduce any significant impacts due to Covered Activities on these species (including the construction of "F" Street) to less than significant levels. While the proposed Project would impact more habitat in the Habitat Reserve open space for these species than contemplated in the SSHCP, the proposed mitigation strategy (see Section 4.4.3) is consistent with the framework of the SSHCP and assembly of the Habitat Reserve. These

measures were approved by the USFWS as part of the minor amendment to the SSHCP and were determined to adequately offset any additional impacts associated with the "F" Street Project; therefore the impacts due to the proposed Project would be less than significant.

Special-status wildlife in Table B-1 that were not previously analyzed in the SSHCP (see species in shaded rows) generally occur in the same habitats as the species that were previously analyzed. Additional special-status species that have moderate or high occur in the Project Area and could be impacted by the Project include:

- **Oak titmouse (*Baeolophus inornatus*), Nuttall's woodpecker (*Picoides nuttallii*), chipping sparrow (*Spizella passerine*).** All three species are relatively common in woodland and/or forest and riparian areas. The Habitat Reserve will ultimately preserve approximately 1,750 acres of woodland and 3,060 acres of riparian habitats. The loss of 5.7 acres of woodland and forest and 0.7 acre of riparian due to the proposed Project would be less than significant.
- **Costa's hummingbird (*Calypte costae*).** This species has moderate potential to nest in coastal sage scrub and chaparral in the Project Area. The Habitat Reserve will ultimately preserve approximately 11,920 acres of coastal sage scrub and 7,140 acres of chaparral. The loss of 53.2 acres of coastal sage scrub and 7.3 acres of chaparral due to the proposed Project would be less than significant.
- **Oregon vesper sparrow (*Pooecetes gramineus affinis*) and mountain plover (*Charadrius montanus*).** These species may winter in the Project Area and forage in the grassland and agriculture vegetation types. The Habitat Reserve will ultimately include approximately 5,570 acres of grassland. In addition, approximately 975 acres of agriculture will be maintained. The permanent loss of 10.5 acres of grassland and 106.1 acres of agriculture due to the proposed Project would be less than significant. Habitat value from temporary impacts to 7.0 acres of grassland and 77.1 acres of agriculture will be restored following Project completion.
- **Bats, including silver-haired bat (*Lasionycteris noctivagans*), western red bat (*Lasiurus blossevillii*), hoary bat (*Lasiurus cinereus*), fringed myotis (*Myotis thysanodes*), and pocketed free-tailed bat (*Nyctinomops femorosaccus*).** All of these bats are expected to forage in most natural communities and agricultural areas when and where insect prey are available, although different species may have different preferred habitats (see Primary Habitat Associations in Table B-1). Therefore the 32,000-acre Habitat Reserve will mitigate for impacts to 183.6 acres of potential foraging habitat (i.e., all vegetation and land covers excluding 6.1 acres of developed) and impacts would be less than significant. Silver-haired bat, western red bat, and hoary bat are primarily "tree-roosting" bats and may occasionally roost in oak woodland and forest or riparian in the Project Area during the winter season. However, hoary bat and western red bat are migrants that are not expected to establish maternity roosts in the Project Area. Silver-haired bats typically establish maternity roosts in old growth forest and large trees (i.e., > 50 feet), which are lacking in the Project area. Fringed myotis and pocketed free-tailed bat primarily roost in rocks, crevices, cliff structures, and man-made structures (e.g., buildings, bridges), which are not present in the Project Area. Therefore, the proposed Project would not have significant impacts on important roosting sites for the special-status bats.

In conclusion, the proposed "F" Street alignment would not have significant impacts on any of the special-status wildlife species that were not previously analyzed in FEIR 589, the SSHCP, and Draft Joint Programmatic EIR/EIS.

Special-Status Plants

Table 6 shows impacts to special-status plants documented in the proposed "F" Street Project Area. An additional location of intermediate mariposa lily (*Calochortus weedii* var. *intermedius*) supporting about three individuals would be temporarily impacted in Planning Subarea 2.5; this impact was addressed in the SSHCP and was assumed to be permanently impacted as a result of development. This impact therefore was assumed to be mitigated by preservation, management, and monitoring of the 32,000-acre Habitat Reserve and implementation of the Translocation, Propagation, and Management Plan for Special Status Plants (see Appendix I of the SSHCP).

With respect to changes in impacts to special-status plants from those analyzed in FEIR 589 and the SSHCP, the proposed "F" Street Project would avoid impacts to Coulter's saltbush (*Atriplex coulteri*) that would have been impacted by the "F" Street alignment assumed in the SSHCP; therefore, impacts would be reduced by one location and ten individuals. Similarly, impacts to southern tarplant would be reduced by 647 individuals, and only one location would be impacted compared to the three by the conceptual SSHCP "F" Street alignment. Southern tarplant can effectively be re-established following disturbance (see Appendix I of the SSHCP).

The proposed "F" Street alignment would result in a net increase of impacts on an estimated 798 many-stemmed dudleya (*Dudleya multicaulis*) individuals and five locations compared to the conceptual "F" Street alignment in the SSHCP. Six of the seven impacted locations resulting from the "F" Street Project would occur in the Chiquadora Ridge *major population/key location*. About 50 percent of the impacts to many-stemmed dudleya populations (i.e., individuals) would be temporary. This increase is analyzed in the context of modifications to both the "F" Street alignment and the revised Planning Area 2 South development boundary discussed above.

Based on the analysis for the SSHCP (see Appendix E of the SSHCP), the Chiquadora Ridge *major population/key location* includes approximately 8,623 individuals in 48 locations, of which 12 locations and 1,779 individuals would have been impacted in the Planning Area 2 South development area and the conceptual SSHCP "F" Street alignment. The Planning Area 2 South boundary adjustment resulted in a net addition of 161 individuals and 1 location to the Habitat Reserve. Therefore, the current baseline for the "F" Street analysis is impacts to 1,618 individuals¹⁵ (or 19 percent of the 8,623 individuals) and 11 (23 percent) impacted locations within the revised Planning Area 2 South boundary and the conceptual "F" Street alignment in the SSHCP. With the net increase of 798 individuals for the proposed "F" Street Project, the combined total impacts to the Chiquadora Ridge *major population/key location* would be 2,416 individuals¹⁶ (or 28 percent of the estimated population). The 16 impacted locations¹⁷ represent 33 percent of the total locations for dudleya in the SSHCP database. However, while there will be a net increase in impacts to individuals and population locations, the impact acreage for the populations will be reduced from 0.81 acre for the conceptual "F" Street alignment in the SSHCP to 0.32 acre for the proposed "F" Street alignment. The strategy to avoid and minimize these additional impacts is discussed in the Mitigation Program below.

The proposed Project would also result in a net increase in impacts to approximately 399 individuals of intermediate mariposa lily. The strategy to avoid and minimize these additional impacts is also discussed below.

¹⁵ 1,779 – 161 = 1,618

¹⁶ 1,618 + 798 = 2,416.

¹⁷ 11 original + 5 net new locations

Several special-status plants in Table B-2 were not previously analyzed in FEIR 589, the SSHCP, or the Joint Programmatic EIR/EIS (see species in shaded rows). These species are not expected to occur in the Project Area for at least one or more of the following reasons:

- **The species is a narrow endemic with a restricted geographic range fairly distant from the Project Area.** This category includes Munz's onion (*Allium munzi*), Rainbow manzanita (*Arctostaphylos rainbowensis*), Santa Rosa basalt brodiaea (*Brodiaea santarosae*), Pendleton button-celery (*Eryngium pendletonensis*), Tecate cypress (*Hesperocyparis forbesii*), and Nuttall's scrub oak (*Quercus dumosa*).
- **The Project Area does not support suitable habitat.** This category includes Orcutt's pincushion (*Chaenactis glabriuscula* var. *orcuttiana*), lemon lily (*Lilium parryi*), prostrate vernal pool navarretia (*Navarretia prostrata*), and San Bernardino aster (*Symphotrichum defoliatum*).
- **The species most likely would have been detected during rare plant surveys.** This category includes long-spined spineflower (*Chorizanthe polygonoides* var. *longispina*), Mesa horkelia (*Horkelia cuneata* ssp. *puperula*), Ramona horkelia (*Horkelia truncate*), California satintail (*Imperata brevifolia*), Allen's pentachaeta (*Pentachaeta aurea* ssp. *allenii*), round-leaved filaree (*California macrophylla*), and white rabbit-tobacco (*Pseudognaphalium leucocephalum*).

Therefore, the proposed Project would not have significant impacts on any of the special-status plant species that were not previously analyzed in FEIR 589, the SSHCP, or Joint Programmatic EIR/EIS.

SSHCP Habitat Reserve Design

The spatial pattern of the increased impacts to coastal sage scrub and woodland and forest resulting from the proposed Project will not have a long-term adverse effect on the Habitat Reserve function with respect to Reserve design and wildlife dispersal and movement, including habitat blocks and habitat linkages. The shifting of the alignment will result in a narrowing of the Planning Subarea 2.5 open space/Thomas F. Riley Wilderness Park habitat block from approximately 3,600 feet wide, as currently configured, to 2,400 feet wide at its narrowest point (i.e., from the westernmost edge of Coto de Caza to Tesoro High School). Despite this narrowing, the area will still well exceed the minimum width criterion of 2,000 feet for a habitat block, as defined in the SSHCP.¹⁸ Therefore, as long as the acreage loss is compensated elsewhere in the Habitat Reserve, as described in the Mitigation Program, the design of the proposed Project would not result in a loss of "net habitat value" of the Habitat Reserve with respect to Conserved Vegetation Communities and landscape-level Reserve design and function. The Habitat Reserve function and conservation of Covered Species and other special-status wildlife species in this area of the Habitat Reserve will actually be improved because: 1) the proposed "F" Street Project alignment has been shifted more to the valley floor; 2) the northern portion of the roadway will not cross Chiquadora Ridge or Cañada Gobernadora (as was assumed for the analysis in the SSHCP); 3) Chiquadora Ridge east of Planning Area 2 South will remain completely intact; and 4) riparian habitat in the Gobernadora Ecological Reserve Area (GERA), including habitat for least Bell's vireo and southwestern willow

¹⁸ Habitat blocks were defined in the SSHCP for the purpose of Habitat Reserve design and function by the width of habitat areas and limited to areas where the habitat area is at least 2,000 feet wide. The functional analysis assumed that a 2,000-foot-wide area would provide "live-in" habitat for most proposed Covered Species, with the recognition that what defines a "habitat block" is species-specific (i.e., functional habitat blocks for species with small home ranges likely are smaller than functional blocks for species with large home ranges) (see SSHCP Chapter 13, p. 13-53).

flycatcher, will not be directly affected or indirectly disturbed (e.g., noise, lighting). In addition, "F" Street wildlife crossings will be provided (see Exhibit 12) and fencing will be employed to minimize vehicle-wildlife collisions.

Jurisdictional Waters

Riparian is a Conserved Vegetation Community in the SSHCP. Mitigation for impacts to riparian is addressed by preservation, management, and monitoring of the SSHCP Habitat Reserve. Riparian was also addressed in the SAMP prepared by the USACE for the San Juan Creek and Western San Mateo Creek Watersheds pursuant to Section 404 of the Clean Water Act. CDFW also issued a Master Streambed Alteration Agreement pursuant to the Section 1600 of the California Fish and Game Code.

The proposed Project will result in permanent impacts to 0.087 acre of ephemeral "waters of the U.S." extending 1,318 linear feet, none of which consist of wetlands. The Project would also result in permanent impacts to 0.098 acre of ephemeral non-federal jurisdictional drainages extending 1,820 feet, none of which consist of jurisdictional wetlands. The Project will result in permanent impacts to 0.53 acre of CDFW jurisdiction, of which 0.34 acre consists of coast live oak riparian habitat. As shown in Table 7, these impacts are reduced compared to the conceptual alignment assumed in the SSHCP.

**TABLE 7
 COMPARISON OF JURISDICTIONAL WATER IMPACTS**

Resource	Conceptual SSHCP "F" Street Alignment (acres)	Proposed "F" Street Alignment (acres)
USACE non-wetlands jurisdictional waters	0.01	0.087
RWQCB non-federal waters	0.18	0.098
CDFW riparian habitat	2.527	0.34
Source: GLA 2014		

Improvements within Caltrans Right-of-Way

The Caltrans jurisdiction affected by "F" Street includes Oso Parkway and the ramps north of Oso Parkway. This area has been disturbed as a result of the construction of SR-241 and Oso Parkway. No significant impacts to sensitive habitat would occur as a result of the Project.

Mitigation Program

An extensive mitigation program is identified in FEIRs 584 and 589; this mitigation program has been designed to reduce the impacts associated with the development in the SSHCP study area, including the Rancho Mission Viejo Planned Community. A primary mitigation for the Rancho Mission Viejo Planned Community, inclusive of "F" Street, is the preservation, monitoring, and management for the approximate 32,000-acre SSHCP Habitat Reserve, as described in detail in Chapter 7 of the SSHCP. Additionally, Appendix U of the SSHCP identifies Avoidance and Minimization Measures applicable to Rancho Mission Viejo. For projects located outside the development planning areas (such as the portion of "F" Street within the open space habitat), there is a requirement to prepare a Biological Resources Construction Plan (BRCP), which is designed to avoid and minimize impacts during construction. Appendix U specifies the minimum requirements of the BRCP. Appendix U of the SSHCP also requires restoration of all temporary impact areas to equivalent or better conditions compared to the time of the impact.

Recognizing it is not feasible to precisely define the grading footprint until further in design, the SSHCP has incorporated a mechanism for processing amendments to the Habitat Reserve. As part of the amendment process, it must be demonstrated that there is no net loss of Habitat Reserve acreage or net habitat value.

The preceding analysis identifies that the alignment for "F" Street Project, and therefore, the associated impacts, is slightly different than what was contemplated in the SSHCP and addressed in FEIR 584 and FEIR 589. As identified in Section 3.5, the Project required a minor amendment to the SSHCP. By processing an amendment to the SSHCP, the USFWS deemed the proposed Project consistent with the project described in the SSHCP and the effects that were analyzed by the USFWS in Biological Opinion/Conference Opinion 1-6-07-F-812.8. The following mitigation has been proposed as part of the amendment process and ensures there is no net loss of Habitat Reserve acreage or net habitat value. This measure is consistent with the framework (i.e., the Reserve) for mitigating impacts to habitat developed as part of the SSHCP and the associated FEIR 584. The measure represents a relocation of the acres in the Habitat Reserve. As documented in the minor amendment to the SSHCP, it ensures there is no "loss of habitat reserve acres" and no "loss of habitat value".

Loss of Habitat Reserve Acres and Habitat Value

The loss of 87.8 Habitat Reserve acres and their associated value will be addressed through the following:

- RMV will restore 114.3 acres ("F" Street slopes in open space) to compensate for temporary impacts¹⁹.
- RMV will restore 27.41 acres of southern cactus scrub to compensate for loss of habitat for the cactus wren.
- RMV will forego the opportunity to develop the remainder of Planning Subarea 2.5 outside the footprint of the proposed "F" Street Project. This is estimated to be approximately 23.5 acres. RMV will record an irrevocable covenant over the remainder of Planning Subarea 2.5 upon initiation of clearing and grubbing for "F" Street in open space.
- RMV will reduce the development acreage for Planning Area 4 by 46 acres, resulting in a development footprint of 504 acres. The exact location of Planning Area 4 development will be determined in the future, but will be located within the impact analysis area set forth in the SSHCP. RMV will record an irrevocable covenant over the 46 acres in Planning Area 4 upon initiation of clearing and grubbing in Planning Area 4. Management and monitoring of this open space would be initiated upon recordation.
- RMV will record an irrevocable covenant over the open space associated with Planning Subarea 2.5 upon initiation of clearing and grubbing for "F" Street in open space. Planning Subarea 2.5 open space is approximately 207 acres. Vegetation communities and covered wildlife species present in this open space are set forth in Tables 8 and 9 below.

¹⁹ The restoration of the "F" Street slopes would provide for 12.74 acres of coastal sage scrub within the development area. The slope restoration in the open space would provide for 14.71 acres of annual grassland; 66.32 acres of coastal sage scrub; 18.73 acres of southern cactus scrub; and 1.8 acres of transitional riparian.

**TABLE 8
 VEGETATION COMMUNITIES AND LAND COVERS
 IN PLANNING SUBAREA 2.5 OPEN SPACE**

Vegetation/Land Cover Type	Acres
coastal sage scrub	90.9
chaparral	10.1
grassland	1.2
riparian	3.0
alkali meadow	1.9
woodland	10.9
agriculture	68.7
disturbed	0.3
developed	20.1
Total	207.1
Source: Dudek 2014	

**TABLE 9
 SPECIAL-STATUS WILDLIFE SPECIES
 IN PLANNING SUBAREA 2.5 OPEN SPACE**

Wildlife Species	Locations
California gnatcatcher	10
cactus wren	17
least Bell's vireo	1
grasshopper sparrow	8
orangethroat whiptail	19
coast horned lizard	4
Source: Dudek 2014	

Impacts to Special-Status Plants

RMV will attempt to reduce impacts to many-stemmed dudleya through the final design of "F" Street. Any populations or individuals that are not avoided through final design will be addressed through implementation of SSHCP's Appendix I (Translocation, Propagation and Management Plan for Special Status Plants). Impacts to southern tarplant and intermediate mariposa lily will also be addressed with implementation of SSHCP's Appendix I. Implementation of Appendix I will address the following elements:

- Seed collection
- Selection of receptor sites
- Greenhouse propagation
- Site preparation
- Translocation of natural populations
- Introduction of cultivated plants
- Direct seeding at translocation site

- Maintenance and Monitoring

Level of Significance After Mitigation

Through implementation of the mitigation program, impacts to coastal sage scrub, chaparral, grassland, riparian, and woodland and forest vegetation communities associated with the Rancho Mission Viejo Planned Community, which includes "F" Street, would be reduced to a level considered less than significant. Impacts to sensitive species would be reduced to a level considered less than significant through the dedication and preservation of open space; through implementation of the SSHCP Habitat Reserve; and through implementation of the mitigation program set forth in FEIRs 584 and 589 and in this Addendum. Measures for biological resources specifically applicable to "F" Street are presented in Appendix A of this Addendum as items 121 through 166 and 664 through 686.

Implementation of "F" Street with the proposed mitigation program would not result in any new impacts, nor would it substantially increase the severity of a previously identified significant impact as analyzed in FEIRs 584 and 589. In certifying FEIR 589, the Board of Supervisors made a finding that the Rancho Mission Viejo Planned Community would result in unavoidable significant biological impacts to two slope wetlands in the Cañada Chiquita sub-basin and to Wildlife Linkages K (Trampas Canyon, located south of Ortega Highway) and G (Chiquidora Ridge and Gobernadora Creek, located east of the Project); the Board of Supervisors also determined that the Rancho Mission Viejo Planned Community would contribute to significant unavoidable impacts from fecal coliform pathogens. A Statement of Overriding Considerations was adopted by the Orange County Board of Supervisors in conjunction with the certification of FEIR 589. However, the "F" Street Project would not contribute to these impacts.

Finding of Consistency With Final EIRs 584 And 589

As discussed above, the "F" Street Project would result in impacts to coastal sage scrub, chaparral, grassland, riparian, and woodland and forest vegetation communities and the sensitive species that utilize these habitats. Through implementation of the mitigation program adopted in association with the Rancho Mission Viejo Planned Community FEIRs 584 and 589, which includes the dedication and preservation of open space; implementation of the SSHCP Habitat Reserve; and implementation of the mitigation program set forth in this Addendum, these impacts have been reduced to less than significant.

The County of Orange has determined, on the basis of substantial evidence in the light of the whole record, that the "F" Street Project does not propose substantial changes to the Rancho Mission Viejo Planned Community; that no substantial changes would occur that would require major revisions to FEIR 584 or FEIR 589 due to new significant impacts; and that no new information of substantial importance has been revealed since the certification of FEIR 584 and FEIR 589. Therefore, since none of the conditions described in Section 15162 calling for preparation of a subsequent EIR have occurred, an Addendum to FEIRs 589 and FEIR 584 is the appropriate document for CEQA compliance.

4.5 CULTURAL/SCIENTIFIC RESOURCES

Summary of Previous Findings

FEIR 589 addressed the potential significant impacts on cultural resources associated with the construction of the Rancho Mission Viejo Planned Community. FEIR 589 addressed the maximum environmental impact by assuming any archaeological resources located within the development areas of the Rancho Mission Viejo Planned Community would be eliminated

through grading and construction activities. Direct impacts on archaeological sites that are either eligible or potentially eligible for the National Register of Historic Places (NRHP) and/or the California Register of Historic Resources (CRHR) were identified. Through implementation of various project design features, standard conditions, and a mitigation program, impacts were reduced to less than significant levels.

Project Impact Analysis

- a) **Would the project cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?**
- b) **Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?**
- c) **Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?**
- d) **Would the project disturb any human remains, including those interred outside of formal cemeteries?**

The cultural/scientific resources impacts have been previously analyzed as part of FEIR 589, which was prepared and certified pursuant to State and County CEQA Guidelines.

Archaeological Resources

"F" Street would impact two prehistoric sites: CA-ORA-1559, and CA-ORA-1560. These sites were identified in FEIR 589 as eligible for both the NRHP and the CRHR under Criterion D. With the implementation of mitigation measure (MM) 4.11-3 and standard condition (SC) 4.11-1 from the mitigation program adopted as a part of FEIR 589, impacts to CA-ORA 1559 and CA-ORA 1560 would be mitigated to a less than significant level. Because FEIR 589 anticipated that these two sites would be impacted as a part of the Rancho Mission Viejo Planned Community, implementation of "F" Street would not result in any new impacts, nor would it increase the severity of a previously identified significant impact as analyzed in FEIR 589.

FEIR identified that during grading activities there is the potential for discovery of archaeological resources, including human remains interred outside of formal cemeteries. The County of Orange standard conditions of approval addresses this potential impact. The measure is consistent with Section 7050.5 of the State Health and Safety Code that further requires if the remains are thought to be Native American, disturbances be stopped and the county coroner be contacted; and Section 5097.98 of the Public Resources Code, that requires the coroner to notify the Native American Heritage Commission (NAHC) if the remains are thought to be Native American. The NAHC will then notify the Most Likely Descendent.

Paleontological Resources

Approximately 1,500 feet south of the proposed Planning Subarea 2.5 (Station ~162+00), the underlying bedrock for "F" Street is the Sespe Formation. To the south of this Station 162+00, the underlying bedrock is the Santiago Formation. The Sespe Formation has historically yielded only a few well-documented fossils, including remains of a horse, entelodont, camel, and oreodont. However, the Santiago Formation has a high potential for containing significant fossil resources. Because of the high sensitivity of the Santiago Formation, impacts to this formation associated with ground-disturbing activities—including brush clearance and grading—are considered significant. However, with implementation of SC 4.11-2 from the mitigation program

adopted as part of the FEIR 589, these impacts would be mitigated to less than significant levels. The implementation of "F" Street would not result in any new or more severe impacts than those assumed in FEIR 589.

Historic Resources

Of the five historic sites that would be directly impacted through implementation of the Rancho Mission Viejo Planned Community, none of these sites are located within the alignment of "F" Street. Therefore, no significant historic resources impacts would occur with implementation of "F" Street.

Improvements within Caltrans Right-of-Way

There are no known archaeological or historic sites within Caltrans right-of-way. The mitigation program—which requires monitoring for archaeological, paleontological and historic resources during construction—would also apply to any improvements with Caltrans right-of-way.

Mitigation Program

As a part of FEIR 589, a mitigation program was adopted, which minimizes impacts associated with implementation of the Rancho Mission Viejo Planned Community, including the construction of "F" Street. The proposed alignment for "F" Street would not result in any new cultural resources impacts, nor would it increase the severity of a previously identified significant impact as previously analyzed in FEIR 589. The mitigation program adopted in conjunction with FEIR 589 included the County Standard Conditions of Approval associated with cultural resources (archaeological and paleontological monitoring during grading) and a data recovery plan if the sites cannot be avoided during construction (MM 4.11-3). No new mitigation is required. Please refer to Items 571 through 576 in the RCM in Appendix A to this Addendum for measures applicable "F" Street.

Level of Significance After Mitigation

Consistent with the findings of FEIR 589, with implementation of the mitigation program provided in Appendix A, the Rancho Mission Viejo Planned Community, which includes "F" Street, would not result in any significant unavoidable impacts associated with potential impacts to prehistoric archaeological, historical, and paleontological resources.

Finding of Consistency With Final EIR 589

As discussed above, with the "F" Street Project there would be the potential for impacts to prehistoric archaeological and paleontological resources. These issues were addressed in FEIR 589 and a mitigation program was developed to reduce the impacts to less than significant. As indicated above, the mitigation program would be applicable to the "F" Street Project.

The County of Orange has determined, on the basis of substantial evidence in the light of the whole record, that the "F" Street Project does not propose substantial changes to the Rancho Mission Viejo Planned Community; that no substantial changes would occur that would require major revisions to FEIR 589 due to new significant impacts; and that no new information of substantial importance has been revealed since the certification of FEIR 589. Therefore, since none of the conditions described in Section 15162 calling for preparation of a subsequent EIR have occurred, an Addendum to FEIRs 589 and FEIR 584 is the appropriate document for CEQA compliance.

4.6 GEOLOGY AND SOILS

Summary of Previous Findings

FEIR 589 addressed the constraints associated with geology and soils on the Rancho Mission Viejo Planned Community site. FEIR 589 identified that:

- The Rancho Mission Viejo Planned Community site is not in a designated Alquist-Priolo Earthquake Fault Zone. No known active or potentially active faults are known to cross the Planned Community site. Two inactive faults, the Cristianitos and Mission Viejo Faults, cross the Rancho Mission Viejo Planned Community.
- Because no active or potentially active faults have been mapped on or adjacent to the any of the Rancho Mission Viejo Planned Community development planning areas, the potential for surface displacement is considered to be less than significant.
- Seismic Hazard Zone Maps prepared by the California Geological Survey for the Rancho Mission Viejo Planned Community site indicate that portions of site are within a zone that requires investigation for liquefaction and therefore susceptible to liquefaction. Measures to reduce the potential for liquefaction can be achieved using conventional grading techniques. These methods may include but are not limited to removal and recompaction of soils; deep dynamic compaction; and dewatering.
- Within the development areas there are surficial units that are highly susceptible to erosion. Erodibility can be mitigated during grading using conventional grading techniques (e.g., slope stabilization, construction of drainage devices).
- Collapsible and/or compressible soils are located throughout the planning areas. Removal and compaction of all collapsible or compressible soils would be required in areas to be developed.
- Expansive soils are present in most of the planning areas. Significant impacts associated with the presence of expansive soils in areas to be developed can be remediated with proper foundation design.

FEIR 589 determined that implementation of various project design features, standard conditions, and the adopted mitigation program will reduce the geotechnical impacts to less than significant levels.

Project Impact Analysis

- a) Would the project expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:**
- i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.**
 - ii) Strong seismic ground shaking?**
 - iii) Seismic-related ground failure, including liquefaction?**

iv) Landslides?

- b) Would the project result in substantial soil erosion or the loss of topsoil?
- c) Would the project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?
- d) Would the project be located on expansive soils, as defined in Table 18-1-B of the California Building Code (1994), creating substantial risks to life or property?
- e) Would the project have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal system where sewers are not available for the disposal of wastewater?

The geophysical impacts have been previously analyzed as part of FEIR 589, which was prepared and certified pursuant to State and County CEQA Guidelines. Minor clarifications are needed to validate that the previous document is adequate to cover the actions that are currently proposed, which are documented below and serve as an Addendum to FEIR 589.

Seismic Hazards

Faulting and Seismicity

The Rancho Mission Viejo Planned Community, including proposed "F" Street, is not in a designated Alquist-Priolo Earthquake Fault Zone. No known active or potentially active faults are known to cross the "F" Street alignment; however, because "F" Street is located in a seismically active region of Southern California, future project design would use a site-specific probabilistic seismic hazard analysis (PSHA) to evaluate the likelihood of various ground motion levels at the site as reflected in peak horizontal ground acceleration (PHGA). Based on the soil types, proximity to seismic sources, and other PSHA analyses in the area, a preliminary PHGA in the range of 0.33–0.35g is estimated. With implementation of the FEIR 589 mitigation program—which includes SCs 4.4-1 through 4.4-5 and MM 4.4-1—these impacts would be mitigated to a less than significant level. Implementation of "F" Street would not result in any new or more severe faulting and seismicity impacts than those assumed in FEIR 589.

Liquefaction

Soil liquefaction results from loss of strength during cyclic loading, such as imposed by earthquakes. Liquefaction is induced when during seismic ground shaking occurs, the soil is subjected to cyclic shear stresses that can cause increased pore-water pressure. Liquefaction causes softening and deformation. Portions of the "F" Street alignment are located within zones requiring investigation for liquefaction, as indicated on the Seismic Hazard Zone Map for the Gobernadora Quadrangle. Final project design would include additional field investigation, testing, and analysis to further quantify liquefaction potential. The PHGA and California Building Code (CBC) site-specific seismic coefficients would also apply in the analysis of liquefaction hazards and the future design of structures (i.e., culverts and walls). Final design of remedial grading would need to mitigate excessive liquefaction-induced settlement and slope deformation. Based on the preliminary investigation and studies to date, mitigation would be feasible through conventional remedial grading (i.e., localized removal and re-compaction of liquefiable materials). With implementation of the FEIR 589 mitigation program—which includes SCs 4.4-1 through 4.4-5 and MM 4.4-1—these impacts would be mitigated to a less than

significant level. Implementation of "F" Street would not result in any new or more severe impacts than those assumed in FEIR 589.

Erosion

Consistent with FEIR 589, the "F" Street Project requires a Storm Water Pollution Prevention Plan (SWPPP) to prevent potential short-term impacts of construction on water quality. Temporary construction erosion and sediment-control BMPs would be used to keep sediment, construction wastes, and vehicle wastes from affecting downstream water bodies. These include but would not be limited to waste and materials management; non-storm water management; training and education; and maintenance, monitoring, and inspection activities. With implementation of the FEIR 589 mitigation program—which includes SCs 4.5-1 through SC 4.5-11 and MMs 4.4-1 through 4.5-8—these impacts would be mitigated to a less than significant level. Implementation of "F" Street would not result in any new or more severe impacts than those assumed in FEIR 589.

Landslides

Several small to medium landslides have been mapped within the "F" Street Project limits. These landslides are almost exclusively located on west- to northwest-facing slopes where the geologic structure tends to be more adverse (i.e., out of slope bedding). The geologic mapping, geomorphology, and existing drill hole data indicate that the landslides in this area are relatively shallow (less than 40 feet in depth) and can be removed or stabilized through conventional remedial grading. With implementation of the FEIR 589 mitigation program—which includes SCS 4.4-1 through 4.4-5 and MM 4.4-1—these impacts would be mitigated to a less than significant level. Implementation of "F" Street would not result in any new or more severe impacts than those assumed in FEIR 589.

Groundwater

Near the Project alignment, groundwater is present in two forms: (1) seepage within bedrock and landslides and (2) unconfined groundwater within saturated alluvial/slopewash deposits. The saturated alluvial/slopewash deposits are present at depth within some of the tributary canyons that underlie the roadway grading. Above the canyon areas, groundwater seepage is sometimes found emanating from stratigraphic contacts and fractures in bedrock units and landslide debris. The preliminary design recommendation for "F" Street is to leave the saturated alluvial soils in place below the remedial grading, such that only minor groundwater may be encountered. Extensive dewatering and wet removals are not anticipated; however, handling of nuisance groundwater and/or wet soils near the bedrock contact may be required. This preliminary recommendation would be verified during subsequent design studies for "F" Street, which would include more exploration, testing, and analysis of the saturated alluvium. With implementation of the FEIR 589 mitigation program—which includes SCs 4.4-1 through 4.4-5 and MM 4.4-1—these impacts would be mitigated to a less than significant level. Implementation of "F" Street would not result in any new or more severe impacts than those assumed in FEIR 589.

Slope Stability

The Project is underlain primarily by bedrock of the Santiago and Sespe Formations. The Project proposes cut and fill slopes up to 140 feet and 110 feet, respectively, in these formations. Some of the smaller cut slopes near the north end of the Project site would expose alluvial soils. Bedrock cut slopes would have geologic conditions ranging from favorable to slightly adverse and, in general, the bedrock is competent and massive to poorly bedded.

Favorable slope conditions have geologic structure dipping into slope, whereas the slightly adverse condition exists where bedding dips out of slope (typically on west- to northwest-facing slopes). In order to achieve gross and surficial slope stability, to reduce erodibility, and to facilitate long-term maintenance, the planned 2:1 cut slopes would be constructed with keyways and buttresses. Larger buttresses would be required east of the road where bedding is more adverse.

The proposed 2:1 fill slopes would be placed overtop of bedrock or suitable alluvium after remedial grading is completed. Remedial grading for these slopes would generally consist of removal and re-compaction of low density alluvial soils. Some saturated alluvium would also need to be removed depending on the results of future liquefaction and slope stability analyses. Future Project design would incorporate quantitative slope stability analyses that define specific keyway and buttress dimensions for cut slopes and detailed remedial recommendations for fill slopes. With implementation of the FEIR 589 mitigation program—which includes SCs 4.4-1 through 4.4-5 and MM 4.4-1—these impacts would be mitigated to a less than significant level. Implementation of "F" Street would not result in any new or more severe impacts than those assumed in FEIR 589.

Settlement

For "F" Street, settlement resulting from Project grading would be dependent on two components: (1) settlement of new engineered fill and (2) settlement of any suitable alluvium left in place. Consolidation potential is considered negligible for the bedrock materials and is estimated to be within acceptable tolerances (i.e., less than ~3 inches) for suitable alluvium to be left in place. Settlement of engineered fill would be minor based on the mostly granular composition of the fill soils, and the fact that the engineered fill would be compacted to a minimum 90 percent relative compaction with above-optimum moisture content. Future design would include detailed settlement analyses to define the depth of remedial grading (i.e., removal and re-compaction of alluvial soils) needed to achieve the settlement criteria noted above. With implementation of the FEIR 589 mitigation program—which includes SCs 4.4-1 through 4.4-5 and MM 4.4-1—these impacts would be mitigated to a less than significant level. Implementation of "F" Street would not result in any new or more severe impacts than those assumed in FEIR 589.

Soil Expansion and Corrosion

The preliminary assessment of soil expansion and corrosion for "F" Street is based on laboratory testing completed for adjacent areas of Planning Area 2 South and the fact that on-site soils are predominantly sandy in composition. After completion of grading, the expansion potential of engineered fill is anticipated to be low to medium. The engineered fills are anticipated to be moderately to severely corrosive to ferrous metals and characterized by a negligible to moderate sulfate exposure to concrete. These are considered preliminary findings for "F" Street, and additional recommendations for soil expansion and corrosion would be provided during the Project's final design phase. With implementation of the FEIR 589 mitigation program—which includes SCs 4.4-1 through 4.4-5 and MM 4.4-1—these impacts would be mitigated to a less than significant level. Implementation of "F" Street would not result in any new or more severe impacts than those assumed in FEIR 589.

"F" Street is a roadway project and does not propose or require the use of septic tanks, alternative disposal systems, or a sewer system.

Improvements within Caltrans Right-of-Way

The portion of the Project within Caltrans right-of-way is limited to Oso Parkway and the area of the existing ramps for SR-241. This area is mapped as engineered artificial fill. Immediately south of the engineered artificial fill are areas of older alluvial deposits. As discussed above, future design would include detailed settlement analyses to define the depth of remedial grading (i.e., removal and re-compaction of alluvial soils) needed to achieve the settlement criteria consistent with applicable requirements. These soils are not expected to have a substantial effect on the planned roadway grading. No significant impacts are anticipated with the implementation of the mitigation program in FEIR 589.

Mitigation Program

As a part of FEIR 589, a mitigation program was adopted, which minimizes impacts associated with implementation of the Rancho Mission Viejo Planned Community, including the construction of "F" Street. The proposed alignment for "F" Street would not result in any new geology and soils impacts, nor would it increase the severity of a previously identified significant impact as previously analyzed in FEIR 589. No new mitigation is required. Please refer to Items 6 through 14 in the RCM in Appendix A to this Addendum for measures applicable "F" Street.

Level of Significance After Mitigation

Consistent with the findings of FEIR 589, with implementation of the mitigation program provided in Appendix A, the Rancho Mission Viejo Planned Community, which includes "F" Street, would not result in any significant unavoidable impacts associated with geology and soils.

Finding of Consistency With Final EIR 589

As discussed above, with the "F" Street there would be geotechnical constraints associated with seismic hazards, erosion, landslides, groundwater, slope stability, settlement, and soil expansion and corrosion. These issues were addressed in FEIR 589 and a mitigation program was developed to reduce the impacts to less than significant. As indicated above, the mitigation program would be applicable to the "F" Street Project.

The County of Orange has determined, on the basis of substantial evidence in the light of the whole record, that the "F" Street Project does not propose substantial changes to the Rancho Mission Viejo Planned Community; that no substantial changes would occur that would require major revisions to FEIR 589 due to new significant impacts; and that no new information of substantial importance has been revealed since the certification of FEIR 589. Therefore, since none of the conditions described in Section 15162 calling for preparation of a subsequent EIR have occurred, an Addendum to FEIRs 589 and FEIR 584 is the appropriate document for CEQA compliance.

4.7 GREENHOUSE GAS EMISSIONS

At the time of certification of FEIR 589 for the Rancho Mission Viejo Planned Community, a Greenhouse Gas (GHG) Emissions analysis was not part of the required CEQA Checklist.

Project Impact Analysis

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

The "F" Street Project would implement a component of the previously approved Rancho Mission Viejo Planned Community based on FEIR 589, which was certified on November 8, 2004. Effective March 18, 2010, the State of California adopted amendments to the State CEQA Guidelines requiring the analysis and mitigation of the effects of GHG emissions in CEQA documents. The new State CEQA Guidelines regarding GHG emissions do not specifically address situations involving subsequent implementing actions for a project with a previously certified FEIR.

FEIR 589 is a "program EIR" as defined in CEQA and the State CEQA Guidelines (see State CEQA Guidelines, Section 15168) in that it covers one large project with several phases or components that require a series of implementing actions. Pursuant to CEQA and the State CEQA Guidelines, subsequent activities in implementing the approved Rancho Mission Viejo Planned Community that are subject to further discretionary approvals by the County are to be examined by the County pursuant to the three-part test set forth in Section 15162(a) of the State CEQA Guidelines.²⁰

GHG emissions and global climate change is not "new information" since these effects have been generally known for quite some time. Therefore, for the "F" Street Project, GHG emissions would not be considered new information under Section 21166 of CEQA. The "F" Street Project would simply implement a component of a previously approved project (the Rancho Mission Viejo Planned Community) and would not allow for any new development or uses beyond that previously authorized.

A 2010 decision by the Fourth District of the California Court of Appeals is also instructive and confirms that, after an initial EIR is certified, CEQA establishes a presumption against additional environmental review.²¹ In the *San Diego Navy Broadway Complex Coalition v. City of San Diego*, case, the court held that the City of San Diego was not required to prepare a subsequent EIR (SEIR) regarding the potential impact of a redevelopment project on global climate change because the City action did not constitute a discretionary approval that would provide it with the authority to address the project's impact on that environmental issue. Opponents of the redevelopment project had argued that an SEIR was required to address the project's GHG emissions because that issue had not been examined in the project's previously certified FEIR.

The court in the Navy Broadway Complex case determined that the key question was whether the City had any remaining authority to shape the project in a way that could respond to any of the concerns that might be identified in an SEIR; that is, would the City have the authority to require the project proponent to mitigate the environmental damage to some degree. The court ultimately found that the scope of the City's remaining authority, which was principally related to an aesthetic issue, did not extend to potential impacts on global climate change. The City did not have the authority to modify the project so as to reduce its impact on global climate change.

²⁰ Section 1.0 of this Addendum provides the citation from the State CEQA Guidelines Section 15162(a), which explains the three-part test for determining if a subsequent EIR (SEIR) is required.

²¹ See *San Diego Navy Broadway Complex Coalition v. City of San Diego*, 185 Cal App 4th 924 (2010).

The circumstances related to the Rancho Mission Viejo Planned Community are similar to those presented in the Navy Broadway Complex case in that the County of Orange has limited discretion with regard to subsequent Rancho Mission Viejo Planned Community. Pursuant to Section 15162(a) of the State CEQA Guidelines, the County's discretion with regard to additional environmental review is limited to determining whether any of the three triggering conditions would require the preparation of a SEIR.

In the 2011 case, *Citizens for Responsible Equitable Environmental Development v. City of San Diego* case,²² the Fourth District Court of Appeal affirmed the trial court's denial of a petition for writ of mandate challenging the City of San Diego's adoption of an addendum to a previously certified EIR rather than the preparation of an SEIR for a development project. In one of many issues, the court found that "information on the effect of greenhouse gas emissions on climate was known long before the City approved the 1994 FEIR". The court discussed several federal court decisions that demonstrated information about the nexus between GHG emissions and climate change was known well before the 1994 FEIR was certified. As such, the effect of GHG emissions on climate change could have been raised in 1994 when the City certified the FEIR. Because the plaintiff in this case provided no competent evidence of new information of a significant impact, it did not meet its burden under Section 21166 of CEQA to demonstrate that an SEIR was required. Therefore, this case supports an agency's decision that an SEIR is not required based on the general issue of GHG emissions and climate change, where an earlier certified FEIR for the project did not address climate change.

A 2014 decision by the Sixth District Court of Appeals in *Citizens Against Airport Pollution v. City of San Jose* is consistent with the cases described above. The decision states, "Thus, information about the potential environmental impact of greenhouse gas emissions was known or could have been known at the time the 1997 EIR and the 2003 SEIR for the Airport Master Plan were certified. We reiterate, . . . an agency may not require an SEIR unless '[n]ew information, which was not known and could not have been known at the time the [EIR] was certified as complete, becomes available.'" Since the potential environmental impact of GHG emissions does not constitute new information as defined in in the CEQA statutes, Section 21166, subdivision (c), the City did not violate Section 15064.4 of the State CEQA Guidelines by failing to analyze greenhouse gas emissions in the eighth addendum.

Assuming that the first and second conditions have not occurred (i.e., that the "F" Street Project would not result in substantial changes to the Rancho Mission Viejo Planned Community and that there have not been substantial changes in circumstances, such that new or more severe environmental impacts require major revisions to FEIR 589), the issue is simply whether GHG emissions constitute "new information" under Section 15162(a) of the State CEQA Guidelines. This approach has been used by the Orange County Planning Commission for the approval of the previous Addenda for the Rancho Mission Viejo Planned Community and other developments with an FEIR that was certified prior to the requirement of the GHG analysis. As noted above, a factual finding can be made by the County that such emissions do not constitute new information. Therefore, no further analysis of this topic is required.

Improvements within Caltrans Right-of-Way

By the nature of GHG emissions, an evaluation of impacts within the Caltrans right-of-way is not applicable and these emissions do not constitute new information.

²² *Citizens for Responsible Equitable Environmental Development v. City of San Diego* (2011) 196 Cal. App.4th 515.

Mitigation Program

As a part of FEIR 589, a mitigation program was adopted, which minimizes impacts associated with implementation of the Rancho Mission Viejo Planned Community, including the construction of "F" Street. Specific measures were adopted that would minimize air quality impacts. These measures would also serve to reduce GHG emissions. The proposed alignment for "F" Street would not result in any new GHG impacts, nor would it increase the severity of a previously identified significant impact as previously analyzed in FEIR 589. No new mitigation is required. Please refer to Items 555 through 556.3 in the RCM in Appendix A to this Addendum for air quality measures applicable "F" Street.

4.8 HAZARDOUS MATERIALS

Summary of Previous Findings

As part of FEIR 589, Phase I Environmental Site Assessments (ESAs) were prepared for each of the development areas to assess the possible presence of recognized environmental conditions within the Rancho Mission Viejo Planned Community's development areas. A range of issues were identified, including risks associated with residual pesticides; potential demolition of buildings containing asbestos-containing materials and lead-based paint; potential of contamination in the vicinity of aboveground tanks (AGT) and underground storage tanks (UST); minor surface soil staining; contamination associated with past lease and agricultural operations; and potential damage or disturbance to abandoned oil wells.

The hazards section of FEIR 589 also evaluated wildland fire hazards. An Adaptive Management Program, which includes a *Wildland Fire Management Plan*, was developed in conjunction with the Rancho Mission Viejo Planned Community. This plan outlines management requirements for the extensive open space provided as part of the Rancho Mission Viejo Planned Community and provide protection of both the approved development and the sensitive habitat within the Southern Subregion HCP. Additionally, a *Ranch Plan Planned Community-Wide Fire Protection Plan* has been developed in conjunction with the Orange County Fire Authority (OCFA) and approved by the Orange County Board of Supervisors' comprehensive approach to the processing of all emergency access and fire safety issues associated with proposed development within the Rancho Mission Viejo Planned Community.

With implementation of the project design feature, standard condition of approval, and the mitigation measures, impacts due to hazardous materials and wildland fires would be reduced to a level considered less than significant.

Project Impact Analysis

- a) Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?**
- b) 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?**
- 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?**

- d) Would the project 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?**
- e) Would the project be located within an airport land use plan or, where such plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?**
- f) For a project within the vicinity of private airstrip, would the project result in a safety hazard for people residing or working in the project area?**
- g) Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?**
- h) Would the project expose people or structures to a significant risk or loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?**

The hazard impacts have been previously analyzed as part of FEIR 589, which was prepared and certified pursuant to State and County CEQA Guidelines. Minor additions and/or clarifications are needed to make the previous document adequate to cover the actions that are currently proposed, which are documented below and serve as an Addendum to FEIR 589.

As a part of the Addendum for Planning Area 2, consistent with FEIR 589 requirements, Environmental Equalizers, Inc. (EEI) prepared a Phase I Environmental Site Assessment and Limited Agricultural Chemical Survey, dated December 21, 2012. EEI contacted the OCFA and County Health Care Agency, the California Department of Toxic Substances Control (DTSC), and State Water Resources Control Board (SWRCB) and reviewed other State and federal databases to determine whether Planning Area 2 or any adjacent properties were listed as hazardous waste generators, underground storage tank (UST) releasers, or properties that have other environmental concerns (i.e., spill, leak, or aboveground tank). The hazardous materials database search included a radius minimum of 0.25 mile around the boundary of Planning Area 2, which would include the segment of "F" Street from the northern boundary of Planning Area 2 South to Oso Parkway. No areas within the "F" Street alignment are listed on any of the databases searched. Additionally, due to the type of previous agricultural land uses within the "F" Street alignment (i.e., dry farming), an agricultural chemical survey was not required.

Construction of the road would require the use of construction-related hazardous materials. However, as identified in the RCM, measures such as the development of Health and Safety Contingency Plan (HSCP) protect workers; safeguard the environment; and meet the requirements of the *California Code of Regulations* (CCR, Title 8, General Industry Safety Orders – Control of Hazardous Substances).

As with all roadways, there is the potential that hazardous materials may be transported on "F" Street once it is operational. Compliance with applicable federal, State, and local requirements pertaining to the transport of hazardous materials would provide sufficient safeguards to the community and environment. There are no design features that would result in a significant hazard or that would increase the risk of upset with routine transport of hazardous materials.

At its closest point to the alignment, Tesoro High School is located less than a ¼ mile from "F" Street. As indicated above, there are no known hazardous materials within the alignment.

Consistent with the findings of FEIR 589, there are no locations within the Rancho Mission Viejo Planned Community on the Hazardous Waste and Substance Site List (also known as the Cortese List), which is compiled pursuant to Section 65962.5 of the *California Government Code*. The closest site is the former El Toro Marine Corps Air Station facility in Irvine, which at the closest point is approximately eight mile north of the "F" Street alignment. Based on the distance from this site, the Project would not expose the public to hazardous materials associated with the sites on the Cortese List.

No land use compatibility issues were identified related to airports for "F" Street. John Wayne Airport is the closest commercial airport, which is located approximately 18 miles from the Project site. There are no private airstrips in the vicinity of the Project site.

With respect to emergency access or evacuation plans, this topic was evaluated in Section 4.15, Public Services and Facilities, of FEIR 589 (see pages 4.15-1 through 4.15-10). There are no designated evacuation routes within the Rancho Mission Viejo Planned Community. The construction of "F" Street would improve access to the area, thereby providing an additional route for emergency access and evacuation.

The *Safety Element* identifies the Rancho Mission Viejo Planned Community as being located in a Special Fire Management Zone. The extension of urban land uses to this area would introduce more people and urban activities into an area that currently has limited accessibility. This can have a positive influence by improving accessibility, reducing fuel loading in the area, and providing improved water availability to the area. However, it also increases the number of structures and people that would be affected by a wildland fire and the potential losses should there be a fire. "F" Street would serve as an additional barrier to wildland fire for the development in Planning Area 2 South because it would provide a buffer between development and open space. The portion of "F" Street through the open space area would be designed to County standards, which would provide fuel modification immediately adjacent to the roadway and would not increase direct access to the surrounding open space. Additionally, the "F" Street Project would provide improved access for the surrounding development and emergency access vehicles.

The risks associated with exposure of people or structures to a significant risk involving wildland fires, was fully addressed in FEIR 589. Modeling done as part of the *Wildland Fire Management Plan*, which is contained in the Adaptive Management Program (Appendix J of FEIR 589). This information was used in the preparation of the *Ranch Plan Planned Community-Wide Fire Protection Program* approved by the Orange County Board of Supervisors in July 2007 and a Secured Fire Protection Agreement between the Orange County Fire Authority (OCFA) and RMV approved in March 2007. Compliance with these programs and Unified Building Code and OCFA ordinances dealing with the wildland/ urban interface would reduce potential impacts to less than significant. This is consistent with the findings of FEIR 589.

Therefore, implementation of "F" Street would not result in any new impacts, nor would it increase the severity of impacts previously analyzed in FEIR 589.

Improvements within Caltrans Right-of-Way

Oso Parkway is an existing roadway that would be modified to allow the connection of "F" Street. The improvements at Oso Parkway are not listed on any of the databases searched as part of the Phase 1 ESAs. As with "F" Street, improvements to Oso Parkway would not increase the severity of impacts previously analyzed in FEIR 589.

Mitigation Program

As a part of FEIR 589, a mitigation program was adopted, which minimizes impacts associated with implementation of the Rancho Mission Viejo Planned Community, including the construction of "F" Street. The proposed alignment for "F" Street would not result in any new impacts associated with hazardous materials, nor would it increase the severity of a previously identified significant impact as previously analyzed in FEIR 589. No new mitigation is required. Please refer to Items 178 through 197 in the RCM in Appendix A to this Addendum for measures applicable "F" Street.

Level of Significance After Mitigation

Consistent with the findings of FEIR 589, with implementation of the mitigation program provided in Appendix A, the Rancho Mission Viejo Planned Community, which includes "F" Street, would not result in any significant unavoidable impacts associated with hazardous materials.

Finding of Consistency With Final EIR 589

As discussed above, with the "F" Street Project there would be exposure to hazardous materials associated with construction activities. Additionally, the roadway would traverse an area designated as a Special Fire Management Zone. These issues were addressed in FEIR 589 and a mitigation program was developed to reduce the impacts to less than significant. As indicated above, the mitigation program would be applicable to the "F" Street Project.

The County of Orange has determined, on the basis of substantial evidence in the light of the whole record, that the "F" Street Project does not propose substantial changes to the Rancho Mission Viejo Planned Community; that no substantial changes would occur that would require major revisions to FEIR 589 due to new significant impacts; and that no new information of substantial importance has been revealed since the certification of FEIR 589. Therefore, since none of the conditions described in Section 15162 calling for preparation of a subsequent EIR have occurred, an Addendum to FEIRs 589 and FEIR 584 is the appropriate document for CEQA compliance.

4.9 HYDROLOGY AND WATER QUALITY

Summary of Previous Findings

Based on the watershed management measures (project design features, standard conditions, and mitigation measures) adopted in conjunction with FEIR 589, the Rancho Mission Viejo Planned Community would maintain the flow regime and prevent significant impacts during a full range of flow events (2-year, 10-year and 100-year). Proposed detention facilities, in conjunction with the infiltration approach, will reduce post-project flow peaks to the pre- Rancho Mission Viejo Planned Community level. The size of the detention facilities will comply with County criteria and reduce on- and off-site flood hazards to less than significant. The existing flow regime, especially for the more frequent and channel forming (approximately 2-year events) will be maintained. For larger events, flow peaks will not increase. The *Water Quality Management Plan* prepared for the Rancho Mission Viejo Planned Community outlines the site design, source control and treatment systems that would provide effective treatment for most pollutants associated with urbanization. In addition, the proposed features address both dry-weather and wet-weather water quality concerns. With the exception of certain pathogen indicators, potential runoff water quality impacts are considered less than significant with the

proposed mitigation features outlined in the WQMP. More detailed WQMPs are developed for each Planning Area.

In conjunction with certification of FEIR 589, the Orange County Board of Supervisors adopted a Finding of Fact and a Statement of Overriding Considerations for water quality impacts (pathogens).

Project Impact Analysis

- a) Would the project violate any water quality standards or waste discharge requirements?**
- b) Would the project substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or lowering of the local groundwater table level (e.g., the production rate of the pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?**
- c) Would the project substantially alter the existing drainage pattern of the site or area including the alteration of the course of a stream or river, in manner which would result in substantial erosion or siltation on or off-site?**
- d) Would the project substantially alter drainage patterns 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 offsite?**
- e) Would the project create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff?**
- f) Would the project otherwise substantially degrade water quality?**
- g) 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?**
- h) Would the project place within a 100-year flood hazard area structures, which would impede or redirect flood flows?**
- i) Would the project expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?**
- j) Would the project be subject to inundation by seiche, tsunami, or mudflow?**

The hydrology and water quality impacts have been previously analyzed as part of FEIR 589, which was prepared and certified pursuant to State and County CEQA Guidelines. The County of Orange has required the preparation of this Addendum as a method of documenting the consistency of the Project with FEIR 589. Additional analysis, including a WQMP, has been prepared to validate that the "F" Street Project is substantially consistent with analysis provided in FEIR 589 and that the previous document is adequate to cover the actions that are currently proposed.

Drainage

"F" Street generally traverses the ridgeline that separates the Cañada Gobernadora and Cañada Chiquita watersheds. Generally, the northern half of the Project (north of Station ~125+00 near the northern edge of Planning Area 2 South) drains mostly from east to west into the adjacent Cañada Chiquita tributaries. Throughout the northern portion of the Project, Cañada Chiquita flows from north to south, parallel to and to the west of the alignment. The central portion of the Project (between Stations ~125+000 to ~85+00, near the northern edge of Planning Area 2 South and south of Chiquita Canyon Drive) drains mostly from west to east into the adjacent Cañada Gobernadora Creek. Cañada Gobernadora flows from north to south parallel to and to the east of the alignment. The southern half of the Project (south of Station ~85+00) drains from north to south into the San Juan Creek. San Juan Creek flows east to west immediately south of Cow Camp Road.

As described in Section 3.0, Project Description, a comprehensive surface drainage system has been developed to collect and convey runoff from the "F" Street Project site into the planned County storm drain systems. The proposed drainage system is based on a preliminary hydrology analysis that was performed to conceptually size cross culvert facilities within "F" Street and to identify locations where flow mitigation and hydromodification would be required.

On-Site Drainage

North of the northern Planning Area 2 South boundary (Station ~134+00), drainage systems would convey roadway and adjacent cut slope drainage to dual water quality and flood control detention basins (combination basins) to provide water quality treatment BMPs and to satisfy hydromodification requirements. Two combination basins (Basin 1 at Station ~196+00 and ~Basin 2 at Stations ~160+00) would discharge into Cañada Chiquita tributaries. The location of the basins are shown on Exhibit 7.

Combination Basin 3 (located north of Chiquita Canyon Drive at Station ~101+00) will provide roadway and adjacent cut slope drainage between the northern edge of Planning Area 2 South to the proposed Basin 3 location (Stations ~134+00 and ~101+00). Basin 3 would discharge into a Cañada Gobernadora tributary. South of Station ~101+00, runoff from the roadway and adjacent cut slopes would flow to a water quality Basin 4 (a bioretention with underdrains) located at the southwest corner of "F" Street and Cow Camp Road prior to discharging into the vicinity of the 10-year floodplain of San Juan Creek. Proposed onsite drainage design uses flow splitters to convey water quality flows to basins and to minimize flow diversion between adjacent watersheds. Typical flow-splitter locations would be immediately upstream of basin outlets and near existing sub-watershed boundaries.

Additional hydrologic analysis of the roadway and graded slopes would be performed during the final roadway design phase. Consistent with the requirements of FEIR 589, the 100-year high confidence rational method analysis will be used for culvert sizing. If a mitigation basin is required due to increased flows, 100-, 50-, 25-, 10-, 5-, and 2-year expected value analyses would be required during final design to demonstrate that the proposed basin reduces the flow rates to the existing condition level for these return events. With the implementation of the FEIR 589 mitigation program which includes standard conditions SC 4.5-1 through SC 4.5-11, and mitigation measures MM 4.4-1 through MM 4.5-8, drainage impacts would be mitigated to a less than significant level. The implementation of "F" Street would not result in any new or more severe impacts than those assumed in FEIR 589.

Off-Site Drainage

No major improvements to existing drainage systems are required outside of the proposed disturbance limit line. The existing drainage systems in the area of Oso Parkway Intersection will be extended or replaced as necessary. Consistent with the assumptions presented in FEIR 589, drainage flow paths for the Project condition generally preserve existing flow patterns, with only minor alterations that will be mitigated by hydromodification measures when warranted. The proposed cross-culverts are depicted in Exhibit 6. The culverts would be located to preserve existing flow paths. Due to potential for debris flow, minimum 36-inch culverts are proposed.

Water Quality

Consistent with FEIR 589, "F" Street requires a Stormwater Pollution Prevention Plan (SWPPP) to prevent potential short-term impacts of construction on water quality. Temporary construction erosion and sediment control BMPs would be used to keep sediment, construction wastes, and vehicle wastes from affecting downstream water bodies. These would include but not be limited to waste and materials management, non-stormwater management, training and education, as well as maintenance, monitoring, and inspection activities.

A Conceptual WQMP has been developed for "F" Street (provided as Appendix B to the "F" Street Project Report). This Conceptual WQMP is consistent with the current Orange County Drainage Area Management Plan (DAMP) Order R9-2009-0002 and FEIR 589. Pollutants of concern would be associated with metals, oil and grease, trash and debris, oxygen-demanding substances, and nutrients and pesticides (associated with landscaping particularly for the portion of the Project adjacent to development).

Potential long-term treatment control best management practices (BMPs) for "F" Street include both non-structural (e.g., common area landscape management, common area catch basin inspection, employee training, landscape maintenance) and structural source control BMPs (e.g., provide storm drain system stenciling and signage; use of efficient irrigation systems and landscape design, water conservation, smart controllers, and source control; and hillside landscaping). Site design practices also help source control treatment; they include maximizing opportunities for BMPs, preserving existing drainage patterns and time of concentration, and maximizing natural infiltration capacity and preserving vegetation. Project-based treatment-control BMPs are required to reduce pollutants of concern in stormwater discharges to the maximum extent practicable. "F" Street incorporates combination basins which provide multiple stormwater control functions including water quality treatment, hydromodification control and flood control.

The BMPs are consistent with those identified in FEIR 589. With the implementation of the FEIR 589 mitigation program which includes standard conditions SC 4.5-1 through SC 4.5-11, and mitigation measures MM 4.4-1 through MM 4.5-8, FEIR 589 determined water quality impacts for the Rancho Mission Viejo Planned Community would be mitigated to a less than significant level with the exception to contribution of pathogen indicators within stormwater runoff. While "F" Street would not directly contribute to pathogen indicators, the proposed BMPs such as biofiltration would serve to reduce pathogens in San Juan Creek, which is listed on the 2010 Clean Water Act 303(d) listing of impaired water bodies. Implementation of "F" Street would not result in any new or more severe impacts than those assumed in FEIR 589.

Groundwater

Groundwater is present near the roadway alignment in two forms: (1) seepage within bedrock and landslides, and (2) unconfined groundwater within saturated alluvial/slopewash deposits. The saturated alluvial/slopewash deposits are present at depth within some of the tributary canyons that underlie the roadway grading. Above the canyon areas, groundwater seepage is sometimes found emanating from stratigraphic contacts and fractures in bedrock units and landslide debris.

According to Plate 1.2 of the United States Geological Services (USGS) Cañada Gobernadora Quadrangle, historical high groundwater reaches the surface within Cañada Chiquita and Cañada Gobernadora. Groundwater also rises up to 10 feet of the ground surface in many of the small tributaries to both Cañada Chiquita and Cañada Gobernadora. (Huitt-Zollars et al. 2014)

During final design, the groundwater table elevation in the vicinity of the proposed basins will be evaluated and considered for the design and selection of the basin inverts to maintain the mandatory 15 feet of vertical clearance. (Huitt-Zollars et al. 2014)

With the implementation of the FEIR 589 mitigation program which includes standard conditions SC 4.5-1 through SC 4.5-11, and mitigation measures MM 4.4-1 through MM 4.5-8, these impacts would be mitigated to a less than significant level. The implementation of "F" Street would not result in any new or more severe impacts than those assumed in FEIR 589.

Flood Hazards/Seiche/Tsunami

"F" Street is a road project and would not result in any housing being located within the 100 year flood zone. "F" Street does not involve the construction of, or modification of a levee or dam. The area is not prone to seiches or tsunami because it is not in close proximity to a major water body or ocean. Though basins are proposed in conjunction with the construction of "F" Street, the storage capacity of individual combination basins will be designed to be less than 15 acre-feet in order to not fall under the jurisdiction of the California Division of Safety of Dams.

Improvements within Caltrans Right-of-Way

No substantial impacts to water quality or potential flooding would be associated with the improvements within the Caltrans right-of-way. The Project would connect with the existing drainage systems in the area of Oso Parkway. During the design phase, the improvements necessary to either extend or replaced the existing facilities would be determined.

Mitigation Program

As a part of FEIR 589, a mitigation program was adopted, which minimizes impacts associated with implementation of the Rancho Mission Viejo Planned Community, including the construction of "F" Street. The proposed alignment for "F" Street would not result in any new hydrology and water quality impacts, nor would it increase the severity of a previously identified significant impact as previously analyzed in FEIR 589. No new mitigation is required. Please refer to Items 527 through 542 in the RCM in Appendix A to this Addendum for measures applicable "F" Street.

Level of Significance After Mitigation

Because there is no feasible method for infiltrating storm water flows from large storms due to saturated soil conditions and the impracticality of providing sufficiently large storage facilities, FEIR 589 identified potential pathogen impacts as a potentially significant adverse impact even after applying all feasible mitigation measures. Through the use of source and treatment controls, the Rancho Mission Viejo Planned Community, inclusive of "F" Street, does employ BMPs meeting the "Maximum Extent Practicable" (MEP) standard established by the State Water Resources Control Board and accordingly reduces impacts to the maximum extent feasible pursuant to current water quality regulations. A Findings of Fact and a Statement of Overriding Considerations were adopted by the County Board of Supervisors in conjunction with the certification of FEIR 589. However, the "F" Street Project does not contribute to these significant, unavoidable impacts.

Finding of Consistency With Final EIR 589

As discussed above, with the "F" Street Project there would be potential impacts associated with modification to drainage systems and water quality. These issues were addressed in FEIR 589 and a mitigation program was developed to reduce the impacts. The potential impacts on drainage systems were reduced to a level of less than significant. However, FEIR 589 identified water quality impacts associated with pathogens as a potentially significant adverse impact even after applying all feasible mitigation measures. This impact has been identified as unavoidable cumulative significant impacts for the "F" Street Project. However, this finding is consistent with the conclusions of FEIR 589. When certifying FEIR 589, the County Board of Supervisors adopted a Findings of Fact and a Statement of Overriding Considerations addressing this impact. This Statement of Overriding Considerations would continue to apply to this Addendum for "F" Street.

The County of Orange has determined, on the basis of substantial evidence in the light of the whole record, that the "F" Street Project does not propose substantial changes to the Rancho Mission Viejo Planned Community; no substantial changes would occur that would require major revisions to FEIR 589 due to new significant impacts; and no new information of substantial importance has been revealed since the certification of FEIR 589. Therefore, since none of the conditions described in Section 15162 calling for preparation of a subsequent EIR have occurred, an Addendum to FEIRs 589 and FEIR 584 is the appropriate document for CEQA compliance

4.10 LAND USE AND PLANNING

Summary of Previous Findings

The Rancho Mission Viejo Planned Community is generally at the edge of urban development. Existing uses within the Rancho Mission Viejo Planned Community include various agricultural uses, industrial leases, and residential uses. The *Ranch Plan Planned Community Text* allows the continuation of these uses until they are replaced with urban uses. As set forth in FEIR 589, the Rancho Mission Viejo Planned Community would not disrupt or divide the physical arrangement of an established community. The closest established communities are Ladera Ranch to the north, Wagon Wheel and Coto de Caza to the east, and the cities of San Juan Capistrano and San Clemente to the west. The Rancho Mission Viejo Planned Community would not have any physical impact on these communities. At the time FEIR 589 was prepared, the Rancho Mission Viejo Planned Community was found to be inconsistent with the regional planning programs, which identified a greater level of development on the site. This was identified as a significant unavoidable impact.

Project Impact Analysis

- a) Would the project physically divide an established community?**
- b) Would the project conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?**
- c) Would the project conflict with any applicable habitat conservation plan or natural community conservation plan?**

Land use and planning impacts have been previously analyzed as part of FEIR 589, which was prepared and certified pursuant to State and County CEQA Guidelines. Minor additions and/or clarifications are needed to make the previous document adequate to cover the actions that are currently proposed, which are documented below and serve as an Addendum to FEIR 589.

"F" Street was proposed and evaluated as a local collector road in FEIR 589 as part of the infrastructure of the Rancho Mission Viejo Planned Community. As determined in FEIR 589, the Rancho Mission Viejo Planned Community would not disrupt or divide the physical arrangement of an established community. At the time FEIR 589 was prepared, the closest established communities were Ladera Ranch to the west, Wagon Wheel and Coto de Caza to the east, and the cities of San Juan Capistrano and San Clemente to the south. Subsequent to the certification of the FEIR, Planning Area 1, also known as the Village of Sendero, was constructed and the grading for Planning Area 2 South has commenced. The alignment for "F" Street would not physically divide any of these communities.

Other surrounding land uses include Tesoro High School and the CWRP. FEIR 589 determined that the Rancho Mission Viejo Planned Community would not have a significant impact on either of these facilities. It should be noted, that the realignment of "F" Street compared to what was evaluated in FEIR 589 provides a greater buffer to Tesoro High School. The alignment addressed in FEIR 589 assumed that the local collector road would connect to Tesoro Creek Road, which is located on the eastern boundary of the school. With the proposed alignment, "F" Street traffic and those accessing the school would be separated. The proposed alignment would bisect Planning Subarea 2.5, having the potential to impact planned land uses in this subarea. However, as discussed in Section 4.4, as mitigation RMV will forego the opportunity to develop Planning Subarea 2.5 outside the footprint of the proposed "F" Street Project.

As discussed in the Summary of Previous Findings, at the time FEIR 589 was prepared, the Rancho Mission Viejo Planned Community was found to be inconsistent with the regional planning programs, which identified a greater level of development on the site. This was identified as a significant unavoidable impact. Subsequent to the approval of the Rancho Mission Viejo Planned Community and certification of FEIR 589, the Orange County Preferred (OCP) socioeconomic projections were modified and the regional planning documents were updated to reflect the 2004 approvals. As such, this is no longer an impact.

The Project site is within the SSHCP. Consistency with the plan was discussed in Section 4.4, Biological Resources.

Based on the analysis, implementation of "F" Street would not result in any new impacts beyond those analyzed in FEIR 589.

Improvements within Caltrans Right-of-Way

"F" Street would require improvements within the Caltrans right-of-way, including the addition of a westbound through lane on Oso Parkway; addition of turn lanes on Oso Parkway; and modifications to the ramps. These improvements would not result in land use impacts such as physical impacts to established communities or inconsistency with regional planning documents.

Mitigation Program

As a part of FEIR 589, a mitigation program was adopted, which minimizes land use impacts associated with implementation of the Rancho Mission Viejo Planned Community. The proposed alignment for "F" Street would not result in any land use and planning impacts, nor would it increase the severity of a previously identified significant impact as previously analyzed in FEIR 589. No mitigation is required.

Level of Significance After Mitigation

As noted above in the analysis, the significant unavoidable impact identified in FEIR 589 was eliminated with the update of the socioeconomic projections for Orange County and the associated regional planning documents that are based on the adopted projections. FEIR 589 did not identify any other significant, unavoidable land use impacts associated with the Rancho Mission Viejo Planned Community, which includes "F" Street. The "F" Street Project would not result in any land use and planning impacts.

Finding of Consistency With Final EIR 589

As discussed above, the "F" Street Project would have no land use impacts. Though the County Board of Supervisors adopted a Findings of Fact and a Statement of Overriding Considerations pertaining to unavoidable significant impacts due to inconsistency with the socioeconomic projections for Orange County and the associated regional planning documents, this impact has been eliminated due to an update of the regional planning documents. Therefore, the "F" Street Project does not contribute to this impact.

The County of Orange has determined, on the basis of substantial evidence in the light of the whole record, that the "F" Street Project does not propose substantial changes to the Rancho Mission Viejo Planned Community; that no substantial changes would occur that would require major revisions to FEIR 589 due to new significant impacts; and that no new information of substantial importance has been revealed since the certification of FEIR 589. Therefore, since none of the conditions described in Section 15162 calling for preparation of a subsequent EIR have occurred, an Addendum to FEIRs 589 and FEIR 584 is the appropriate document for CEQA compliance.

4.11 MINERAL RESOURCES

Summary of Previous Findings

FEIR 589 identified two areas of significant mineral resources within the limits of the Rancho Mission Viejo Planned Community. The first is the Oglebay-Norton Industrial Sands (ONIS)²³ operation in Trampas Canyon, which would be displaced by development in Planning Area 5. The second is sand and gravel resources within San Juan Creek. FEIR 589 assessed that the

²³ FEIR 589 identified the site as the ONIS. Though the operator of the quarry has changed, the nature of the operations is not substantially different from what was evaluated in FEIR 589.

ability to extract these resources would be lost with the Rancho Mission Viejo Planned Community. These impacts remained significant and unavoidable and Findings of Fact and a Statement of Overriding Considerations were adopted for impacts to mineral resources.

Project Impact Analysis

- a) **Would the project 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?**
- b) **Would the project result in the loss of availability of a locally important mineral resources recovery site delineated on a local general plan, specific plan, or other land use plan.**

The mineral resources impacts have been previously analyzed as part of FEIR 589, which was prepared and certified pursuant to State and County CEQA Guidelines.

As indicated above, FEIR 589 identified two areas of significant mineral resources within the Rancho Mission Viejo Planned Community limits: the sand and gravel operation in Planning Area 5 and sand and gravel resources in San Juan Creek. "F" Street would not impact either of these mineral resources. FEIR 589 did make Findings of Fact and adopted a Statement of Overriding Consideration because with the implementation of the Rancho Mission Viejo Planned Community recovery of the mineral resources in these locations would be precluded.²⁴ The approval of the "F" Street Project would not result in any new impacts or increase the severity of a previously identified significant impact as previously analyzed in FEIR 589.

Improvements within Caltrans Right-of-Way

The improvements at Oso Parkway would not be located near the ONIS Operation or the sand and gravel resources in San Juan Creek; therefore, improvements to Oso Parkway, which is under Caltrans jurisdiction, would not impact these mineral resources.

Mitigation Program

As a part of FEIR 589, a mitigation program was adopted, which minimizes impacts associated with implementation of the Rancho Mission Viejo Planned Community. The proposed alignment for "F" Street would not result in any mineral resource impacts. No mitigation is required.

Level of Significance After Mitigation

FEIR 589 concluded that the Rancho Mission Viejo Planned Community had significant unavoidable impacts by precluding the extraction of mineral resources in San Juan Creek, a State-designated Mineral Resource Zone. Findings of Fact and a Statement of Overriding Considerations were adopted by the County Board of Supervisors in conjunction with the certification of FEIR 589. However, the "F" Street Project does not contribute to these significant, unavoidable impacts. The "F" Street Project would not result in any impacts to mineral resources.

²⁴ The sand and gravel operations in Trampas Canyon are allowed to continue as an existing use until such time as Planning Area 5 is developed. Recovery of the resources in San Juan Creek will not be permitted because San Juan Creek has been designated as part of the SSHCP Habitat Reserve.

Finding of Consistency With Final EIR 589

As discussed above, the "F" Street Project would have no impacts to mineral resources. Though the County Board of Supervisors adopted a Findings of Fact and a Statement of Overriding Considerations pertaining to unavoidable significant impacts to mineral resources, the "F" Street Project does not contribute to this impact.

The County of Orange has determined, on the basis of substantial evidence in the light of the whole record, that the "F" Street Project does not propose substantial changes to the Rancho Mission Viejo Planned Community; that no substantial changes would occur that would require major revisions to FEIR 589 due to new significant impacts; and that no new information of substantial importance has been revealed since the certification of FEIR 589. Therefore, since none of the conditions described in Section 15162 calling for preparation of a subsequent EIR have occurred, an Addendum to FEIRs 589 and FEIR 584 is the appropriate document for CEQA compliance.

4.12 NOISE

Summary of Previous Findings

FEIR 589 addressed both short-term construction and long-term operational noise impacts. At the time FEIR 589 was prepared, there were limited noise-sensitive uses in close proximity to the proposed development. Noise was measured at Tesoro High School, which is the closest noise-sensitive use to the proposed "F" Street alignment.

FEIR 589 concluded that impacts would be less than significant if construction was limited to the hours prescribed in the County of Orange Noise Ordinance, if equipment was equipped with mufflers, and if stock piles were located away from residential areas.

Impacts from noise from the Rancho Mission Viejo Planned Community project-generated traffic were estimated in FEIR 589 by comparing the with and without the Rancho Mission Viejo Planned Community traffic volumes and evaluating the projected changes in noise levels along roadways in the vicinity of the RMV Planning Area. The analysis evaluated potential impacts on the adjacent arterial highways, extending west to I-5. Cumulative noise impacts were estimated by comparing the future noise levels to existing noise levels. FEIR 589 noted that, based on the thresholds of significance, the Rancho Mission Viejo Planned Community would not have any significant project-specific noise impacts.

Aircraft noise was determined not to be a significant impact.

Project Impact Analysis

- a) Would the project expose persons to or generate noise levels in excess of standards established in a local general plan or noise ordinance or applicable standards of other agencies?**
- b) Would the project expose persons to or generate excessive ground borne vibration or ground borne noise levels?**
- c) Would the project cause substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?**

- d) **Would the project cause a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?**
- e) **For a project located within an airport land use plan area, or, where such a plan has not been adopted, within two miles of a public airport or public use airport would the project expose people residing or working in the project area to excessive noise levels?**
- f) **For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?**

The noise impacts have been previously analyzed as part of FEIR 589, which was prepared and certified pursuant to State and County CEQA Guidelines. Minor additions and/or clarifications are needed to make the previous document adequate to cover the actions that are currently proposed, which are documented below and serve as an Addendum to FEIR 589.

Tesoro High School is the only sensitive noise receptor near the proposed "F" Street alignment. The closest point of the alignment is approximately 650 feet from the school building and activity areas, west of the parking lots.

FEIR 589 addressed both short-term construction noise (see pages 4.8-12 and 4.8-13) associated with the Rancho Mission Viejo Planned Community. The noise conditions would not change substantially from what was addressed in FEIR 589. Short-term (construction) impacts on existing uses would be limited because "F" Street construction would comply with the permitted hours of construction listed in the Noise Ordinance²⁵; because construction equipment would be equipped with mufflers; and because stockpiles would be located away from Tesoro High School.

Traffic noise from "F" Street was not analyzed in FEIR 589; therefore, the following analysis is provided.

The significance criteria from FEIR 589, as it relates to traffic noise to Tesoro High School are listed below.

The project would be considered to have a significant noise effect if:

- both of the following criteria are met:
 - a. the project traffic results in a substantial noise level increase on a roadway segment adjacent to a noise sensitive land use (e.g., residential use) (a substantial noise increase²⁵ is defined as an increase of 3 dB or more); and
 - b. the resulting "future with project" noise level exceeds the criteria for the noise sensitive land use, as identified above, for the County of Orange.

FEIR 589 also states the following regarding noise standards:

The County has established exterior noise standards for residential uses, schools, hospitals, and places of worship. . . . For schools, hospitals, and places of worship, the standard is 65 LEQ(h)²⁶ . . . These standards are applicable only

²⁵ The County of Orange Noise Ordinance restricts noise generating activities to the hours of 7 a.m. to 8 p.m. on weekdays and Saturdays. No noise generating activities shall occur on Sundays and holidays in accordance.

²⁶ LEQ(h) is defined in FEIR 589 as the average daytime noise level.

at "outdoor living areas." The County defines "outdoor living areas" to be spaces that are typically used for passive recreational activities or other noise sensitive uses. . . . For schools, areas routinely used for educational purposes that may be adversely impacted by noise are considered "outdoor living areas," while other areas not used for education uses such as play yard areas are not considered "outdoor living areas."

The traffic analysis for the "F" Street Project is included in the *F Street PR Study Technical Report*, which is Appendix 6 of the Project Report (see Huitt-Zollars et al. 2014). The traffic analysis forecasts a 2035 average daily traffic volume (ADT) of 39,000 vehicles on the segment of "F" Street between Oso Parkway and Chiquita Canyon Drive. Using this volume and an average speed of 65 miles per hour, traffic noise to Tesoro High School was calculated using the Federal Highway Administration's (FHWA) *Highway Traffic Noise Prediction Model* (Barry and Reagan 1978). The calculated 2035 average daytime noise level at Tesoro High School is 60 A-weighted decibels (dBA) LEQ(h). This noise level is less than the County standard of 65 dBA $L_{eq}(h)$ and therefore less than the significant impact criterion "b" above; the impact would be less than significant and no mitigation is required. The following should be noted:

1. The noise model is conservative (i.e., overestimates the potential noise levels) in that no noise reduction was taken for topographical features; the elevation of "F" Street above the school elevation and grading on the west side of "F" Street will likely result in the shielding of noise from the east side of "F" Street to the school.
2. Traffic noise from Oso Parkway and SR-241 to the school would be less than 50 dBA $L_{eq}(h)$ and would be a negligible addition to the traffic noise from "F" Street. When noise from 2 sources differ by 10 dBA or more, the contribution of the lower source is less than 0.5 dBA.

Vibration impacts were not analyzed in FEIR 589. Vibration from construction or from roadway traffic is not a concern when structures or people are more than 200 feet from the source of vibration. This provides sufficient distance for vibration from equipment during construction, or the vehicles on the roadway when "F" Street is operational, to dissipate and any vibration would be negligible. Tesoro High School, the closest sensitive receptor, is approximately 650 feet from the proposed "F" Street project alignment. Therefore, there would be no significant vibration impact.

Improvements within Caltrans Right-of-Way

There are no noise-sensitive receptors in or immediately adjacent to the Caltrans right-of-way. Therefore, no impacts would occur.

Mitigation Program

As a part of FEIR 589, a mitigation program was adopted, which minimizes impacts associated with implementation of the Rancho Mission Viejo Planned Community, including the construction of "F" Street. The proposed alignment for "F" Street would not result in any new noise impacts, nor would it increase the severity of a previously identified significant impact as previously analyzed in FEIR 589. No new mitigation is required. Please refer to Items 557 through 558.4 in the RCM in Appendix A to this Addendum for measures applicable "F" Street.

Level of Significance After Mitigation

Consistent with the findings of FEIR 589, with implementation of the mitigation program provided in Appendix A, the Rancho Mission Viejo Planned Community, which includes "F" Street, noise impacts would be less than significant.

Finding of Consistency With Final EIR 589

As discussed above, the "F" Street would not result in noise impacts to any existing sensitive receptors. The County of Orange has determined, on the basis of substantial evidence in the light of the whole record, that the "F" Street Project does not propose substantial changes to the Rancho Mission Viejo Planned Community; that no substantial changes would occur that would require major revisions to FEIR 589 due to new significant impacts; and that no new information of substantial importance has been revealed since the certification of FEIR 589. Therefore, since none of the conditions described in Section 15162 calling for preparation of a subsequent EIR have occurred, an Addendum to FEIRs 589 and FEIR 584 is the appropriate document for CEQA compliance.

4.13 POPULATION AND HOUSING

Summary of Previous Findings

At the time the Rancho Mission Viejo Planned Community was approved, the OCP-2000M socioeconomic projections assumed 20,468 units in the RMV Planning Area. The OCP-2004 projections had not been adopted but also reflected the higher unit count. The finding of a significant unavoidable impact was identified because the Rancho Mission Viejo Planned Community would not fully meet the housing goal and would result in an inconsistency with the adopted regional growth projections. The FEIR states that the inconsistency could be eliminated through updating the socioeconomic projections for Orange County and the associated plans that are based on the adopted projections; however, since the County of Orange is not the agency with jurisdiction over the regional planning programs, this impact was identified as a significant, unavoidable impact.

FEIR 589 determined that the Rancho Mission Viejo Planned Community would not (1) remove obstacles to growth in the surrounding counties or areas within Orange County; (2) induce unplanned growth; (3) encourage economic activities that would result in adverse impacts to the environment; or (4) require the expansion of one or more public services to areas that were not already planned to receive such services. Growth resulting from the Rancho Mission Viejo Planned Community would be limited to the growth planned as part of the project and would not substantially influence growth outside the Rancho Mission Viejo Planned Community limits. This is primarily due to the fact that much of the surrounding area is currently developed or in public ownership.

Project Impact Analysis

- a) 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)?**
- b) Would the project displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?**

c) Would the project displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?

The population and housing impacts have been previously analyzed as part of FEIR 589, which was prepared and certified pursuant to State and County CEQA Guidelines. Minor additions and/or clarifications are needed to make the previous document adequate to cover the actions that are currently proposed, which are documented below and serve as an Addendum to FEIR 589.

As indicated above in the Summary of FEIR 589, FEIR 589 determined that the Rancho Mission Viejo Planned Community would not be growth inducing. "F" Street was proposed as a local collector road as part of the infrastructure of the Rancho Mission Viejo Planned Community and therefore, included in the analysis contained in FEIR 589. Therefore, implementation of "F" Street would not result in any new population and housing impacts beyond those analyzed in FEIR 589.

"F" Street has been planned in conjunction with the land uses within the Rancho Mission Viejo Planned Community; therefore, it would not result in the displacement of existing housing or require replacement housing to be constructed.

Improvements within Caltrans Right-of-Way

Only minor improvements at Oso Parkway are under Caltrans jurisdiction. The improvements within Caltrans right-of-way are limited to the connection at Oso Parkway (their jurisdiction is between the two signals for SR-241). The only physical geometric improvement to Oso Parkway would be to widen a short segment of roadway to construct a dedicated eastbound right-turn lane onto southbound "F" Street and traffic signal modifications. As "F" Street would not induce substantial population growth, neither would the improvements to Oso Parkway within Caltrans jurisdiction. Oso Parkway is an existing road and improvements to Oso Parkway in support of "F" Street would not displace any existing housing or people. Therefore, implementation of "F" Street, including the improvements at Oso Parkway under Caltrans jurisdiction, would not result in any new impacts beyond those analyzed in FEIR 589.

Mitigation Program

As a part of FEIR 589, a mitigation program was adopted, which minimizes impacts associated with implementation of the Rancho Mission Viejo Planned. The proposed alignment for "F" Street would not result in any population and housing impacts. No mitigation is required.

Level of Significance After Mitigation

There would be no population and housing impacts associated with the "F" Street Project.

Finding of Consistency With Final EIR 589

As discussed above, the "F" Street Project would have no impacts associated with population and housing. The County of Orange has determined, on the basis of substantial evidence in the light of the whole record, that the "F" Street Project does not propose substantial changes to the Rancho Mission Viejo Planned Community; that no substantial changes would occur that would require major revisions to FEIR 589 due to new significant impacts; and that no new information of substantial importance has been revealed since the certification of FEIR 589. Therefore, since none of the conditions described in Section 15162 calling for preparation of a subsequent

EIR have occurred, an Addendum to FEIRs 589 and FEIR 584 is the appropriate document for CEQA compliance.

4.14 PUBLIC SERVICES

Summary of Previous Findings

FEIR 589 evaluated potential impacts associated with the provision of public services and identified potentially significant unavoidable impacts for fire protection services; however, these impacts were generally associated with development in Planning Areas 7 and 9 due to their remoteness. As part of the Settlement Agreement (see Section 2.2), development was eliminated in Planning Area 9 and only the RMV headquarters would be allowed in Planning Area 7; therefore, these impacts have been eliminated.

Project Impact Analysis

- 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?

Police protection?

Schools?

Parks?

Other Public Facilities?

The public services impacts have been previously analyzed as part of FEIR 589, which was prepared and certified pursuant to State and County CEQA Guidelines. Minor additions and/or clarifications are needed to make the previous document adequate to cover the actions that are currently proposed, which are documented below and serve as an Addendum to FEIR 589.

Fire Protection

Fire protection services are provided by the Orange County Fire Authority (OCFA). The closest existing fire station is located in Ladera Ranch (Crown Valley Parkway near Antonio Parkway). FEIR 589 identified the need for additional fire stations to service the Rancho Mission Viejo Planned Community. A new fire station is currently under construction in Planning Area 1 and is expected to be operational in summer 2015. The construction of "F" Street would facilitate access by emergency services personnel to Planning Area 2, currently under construction, and the future development in Planning Area 3. The implementation of "F" Street would not adversely affect the provision of fire protection services or result in the need for new or physically altered facilities.

Police Protection

Police protection services would be provided by the Orange County Sheriff's Department (OCSD), South Operations Division and the California Highway Patrol (CHP), Capistrano Area. As with the fire protection services, the construction of "F" Street would facilitate access by police services personnel to Planning Area 2 and the future development in Planning Area 3.

The roadway as a standalone project would not generate the need for new or altered police facilities. No impact to police protection services would result from the "F" Street Project.

Schools

Tesoro High School is located to the southwest of the "F" Street connection with Oso Parkway. "F" Street would not result in any increased demand or direct effects to the school. The proposed alignment provides a greater buffer between the roadway and Tesoro High School, which would be a benefit. The Capistrano Unified School District has planned a K-8 school on the west side of "F" Street, south of Chiquita Canyon Drive. The facilities have not been constructed; however, an evaluation of the compatibility of the school with the proposed Tesoro Extension of SR-241 was conducted. Issues evaluated included noise, air quality, hazardous materials, land use compatibility, and access. No constraints were identified that would limit the function of the school or require extensive design measures to accommodate the roadway. Since "F" Street would serve a similar function as the Tesoro Extension no impacts to the school would result from the construction of "F" Street.

Parks

Implementation of "F" Street would not result in any impacts or increased demand for parks or other public facilities or governmental services. The provision of parks within the Rancho Mission Viejo Planned Community is implemented in conjunction the land uses, rather than implementation of infrastructure. The park requirements are outlined in the *Ranch Plan Planned Community Local Park Implementation Plan (LPIP)*.

Other Public Facilities

The "F" Street Project would not directly result in the demand for new public facilities, such as libraries. FEIR 589 addressed these impacts, which are associated with the development of new housing. The County of Orange has made provisions for library services through developer fees used to provide for future demand.

Improvements within Caltrans Right-of-Way

The Caltrans jurisdiction is the portion of Oso Parkway between the on and off ramps for SR-241. The only physical geometric improvement to Oso Parkway will be to widen a short segment of roadway to construct a dedicated eastbound right-turn lane onto southbound "F" Street and traffic signal modifications. Improvements within the Caltrans' right-of-way would not result in any increased demand for other public facilities or governmental services. There would be potential short-term traffic delays during construction; however, Oso Parkway and SR-241 would remain open during construction. No significant impact to emergency response would occur. Therefore, implementation of "F" Street, including the improvements at Oso Parkway, would not result in any new impacts beyond those analyzed in FEIR 589.

Mitigation Program

As a part of FEIR 589, a mitigation program was adopted, which minimizes impacts associated with implementation of the Rancho Mission Viejo Planned Community, including the construction of "F" Street. The proposed alignment for "F" Street would not result in any public service impacts. No mitigation is required.

Level of Significance After Mitigation

There would be no impacts on public services with the "F" Street Project.

Finding of Consistency With Final EIR 589

As discussed above, the "F" Street Project would have no impacts on public services. The County of Orange has determined, on the basis of substantial evidence in the light of the whole record, that the "F" Street Project does not propose substantial changes to the Rancho Mission Viejo Planned Community; that no substantial changes would occur that would require major revisions to FEIR 589 due to new significant impacts; and that no new information of substantial importance has been revealed since certification of FEIR 589. Therefore, since none of the conditions described in Section 15162 calling for preparation of a subsequent EIR have occurred, an Addendum to FEIRs 589 and FEIR 584 is the appropriate document for CEQA compliance.

4.15 RECREATION

Summary of Previous Findings

The Rancho Mission Viejo Planned Community requires the construction of new parks and recreational facilities, such as trails and bikeways. The *Ranch Plan Planned Community Local Park Implementation Plan (LPIP)* has been prepared to demonstrate how the Rancho Mission Viejo Planned Community will provide a local park program in compliance with the Orange County Local Park Code and the Master Plan of Local Parks Component of the Recreation Element of the General Plan. The parks would be constructed within the approved development areas. Therefore, FEIR 589 addressed the impacts on the environment as part of the development impacts. No significant unavoidable impacts associated with recreation were identified.

Project Impact Analysis

- 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?**
- b) Would 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 recreation impacts have been previously analyzed as part of FEIR 589, which was prepared and certified pursuant to State and County CEQA Guidelines. Minor additions and/or clarifications are needed to make the previous document adequate to cover the actions that are currently proposed, which are documented below and serve as an addendum to FEIR 589.

As discussed in Section 3.3, Project Description, a ten-foot-wide multi-purpose pathway is proposed on the west side of "F" Street, within the roadway right-of-way (see Exhibits 8 and 9). Between Oso Parkway and Chiquita Canyon Drive, the multi-purpose pathway will be adjacent to the roadway, but separated from the travelled way by an 8-foot shoulder and a 7-foot drainage swale (a total distance of 15 feet). Between Chiquita Canyon Drive and Cow Camp Road, the trail will be atop the roadway embankment or alternatively routed through the Planning Area 2 roadway network.

The impact of the multi-purpose pathway has been evaluated as part of the evaluation of "F" Street; therefore, there would be no additional impacts associated with the provision of this facility. Once "F" Street is constructed, including the multi-purpose pathway, the facilities would become County facilities.

Exhibits 10a and 10b depict the bicycle facilities on the County of Orange General Plan within and adjacent to the Rancho Mission Viejo Planned Community and the Ranch Plan Master Trail and Bikeway Implementation Plan, respectively. As shown on these exhibits, "F" Street would not affect, cross, or impact any existing or proposed trails identified in the Orange County Master Plan of Regional Riding and Hiking Trails but would provide a connection to other facilities. Primary access points to the multi-purpose pathway will be at Oso Parkway, Chiquita Canyon Drive, and Cow Camp Road. At Oso Parkway, a pedestrian crossing (crosswalk) will be added to the existing signalized Oso Parkway/SR-241 southbound intersection to provide connectivity to the existing sidewalk on the north side of Oso Parkway. There would also be a connection to the Class II bikeway on Oso Parkway. On the south end, the multi-purpose pathway will join the proposed sidewalk at Cow Camp Road and users would be able to access the Class I Bikeway proposed along the north side of San Juan Creek.

Improvements within Caltrans Right-of-Way

As discussed in Section 3.3, Project Description, a pedestrian crossing (crosswalk) will be added to the existing signalized Oso Parkway/SR-241 southbound intersection to provide trail connectivity to the existing sidewalk on the north side of Oso Parkway. This will provide a safe endpoint for the trail proposed for "F" Street. No impacts to existing facilities would occur. There are no parks, trails, or other recreational facilities in proximity of the "F" Street connection at Oso Parkway (i.e., Caltrans jurisdiction).

Mitigation Program

As a part of FEIR 589, a mitigation program was adopted, which minimizes impacts associated with implementation of the Rancho Mission Viejo Planned Community. The proposed alignment for "F" Street would not result in any recreation impacts. No mitigation is required.

Level of Significance After Mitigation

The "F" Street would not result in any impacts associated with recreation.

Finding of Consistency With Final EIR 589

As discussed above, the "F" Street Project would have no impacts to recreational facilities. The County of Orange has determined, on the basis of substantial evidence in the light of the whole record, that development of "F" Street does not propose substantial changes to the Rancho Mission Viejo Planned Community; that no substantial changes would occur that would require major revisions to FEIR 589 due to new significant impacts; and that no new information of substantial importance has been revealed since the certification of FEIR 589. Therefore, since none of the conditions described in Section 15162 calling for preparation of a subsequent EIR have occurred, an Addendum to FEIRs 589 and FEIR 584 is the appropriate document for CEQA compliance.

4.16 TRANSPORTATION AND TRAFFIC

Summary of Previous Findings

The total trip generation associated with the Rancho Mission Viejo Planned Community would be up to 183,338 trips per day, of which 14,289 average daily trips (ADT) are anticipated to be in the AM peak hour and 18,033 trips in the PM peak hour. The traffic analysis was conducted with a 2025 horizon year both with and without the SR-241 extension. For the scenario without the SR-241 extension, an arterial highway between Oso Parkway and Cow Camp Road is assumed (i.e., "F" Street). Significant unavoidable project and cumulative impacts were identified on arterial highway intersections and the freeway network (both ramps and mainline facilities) with buildout of the Rancho Mission Viejo Planned Community. The number of arterial highway intersections impacted would vary based on the circulation network assumed. As part of FEIR 589, a mitigation program was formulated to address the significant circulation impacts associated with development of the Rancho Mission Viejo Planned Community. However, a number of the proposed improvements are located outside the County's jurisdiction. Because the County is unable to ensure that mitigation outside their jurisdictional boundaries will be implemented, the impacts to be mitigated by those improvements were identified as significant and unavoidable. It should be noted, however, that a number of the roadway improvements (e.g., the widening of Antonio Parkway and Ortega Highway, the construction of the La Pata Avenue Gap Closure and Cow Camp Road) have been constructed or are under construction.

Project Impact Analysis

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

The "F" Street PR Study Technical Report, prepared by Stantec in October 2014 provides a traffic analysis to demonstrate that the planned roadway will have sufficient capacity to serve the future traffic demand estimated to be carried by this facility; it is included as Appendix 6 of the Project Report (Huitt-Zollars et al. 2015).

As previously discussed, FEIR 589 evaluated an alternative regional circulation network that assumed no extension of SR-241 beyond its current termination point, but with an arterial roadway along the northern part of the alignment. That arterial extended from Oso Parkway to Cow Camp Road and was thereby equivalent to the "F" Street Project evaluated in this Addendum. The other update is the horizon year evaluated. A horizon year of 2025 was used in the EIR 589 traffic study, whereas the horizon year for this "F" Street analysis is 2035. The Orange County Projections (OCP) 2010 demographic data projections, prepared by the Center for Demographic Research, show minimal growth in south Orange County from 2025 to 2035 (i.e., less than five percent). Since FEIR 589 assumed that the Rancho Mission Viejo Planned Community was fully built out by 2025, the background assumptions for the updated "F" Street analysis are essentially the same apart from a small amount of traffic growth on regional facilities such as I-5.

Methods and Assumptions

Opening year for "F" Street is assumed to be 2020.²⁷ Traffic forecasts for 2035 are derived using the South County Sub-Area Model (SCSAM). The SCSAM is a sub-area derivation of the Orange County Transportation Analysis Model (OCTAM) and is consistent with the latest version of OCTAM 3.4. The highway system in the traffic analysis includes future improvements that are funded and planned for implementation by 2035. New roadways include Cow Camp Road from Antonio Parkway to Ortega Highway (SR-74); the La Pata Avenue gap closure from Ortega Highway southward to Avenida Pico in San Clemente; the I-5/Ortega Highway interchange improvements; and roadways serving the Rancho Mission Viejo Planned Community, as depicted on the County MPAH.

Performance measures for evaluating the Project in relation to the traffic forecasts are based on peak hour intersection volumes. The intersection capacity utilization (ICU) procedure is applied for traffic analysis purposes. The Highway Capacity Manual (HCM) delay-based procedure used by Caltrans is also applied to the Oso Parkway intersections, which are discussed as part of the analysis of improvements within the Caltrans jurisdiction. Table 10 lists these methods and the level of service (LOS) criteria for acceptable performance. These standards are consistent with the thresholds of significance used in FEIR 589.

²⁷ The "F" Street PR Study Technical Report contains an analysis of the 2020 traffic conditions. The purpose of the Addendum is to document whether there have been substantial changes since the analysis in FEIR 589 was prepared that would result in new significant impacts. For that reason, the 2035 horizon year is the focus of this analysis.

**TABLE 10
ARTERIAL INTERSECTION PERFORMANCE CRITERIA**

Performance Criteria Methodology		
County of Orange	Level of Service (LOS) based on peak hour intersection capacity utilization (ICU), calculated using the following input values: Lane Capacity: 1,700 vehicles/hour Clearance Interval: 0.05 Right-Turn-On-Red Utilization Factor: 0.75 Deficiencies are identified as locations that exceed LOS D (ICU > 0.90).	
Caltrans Intersections	LOS based on intersection control delay (average seconds per vehicle) as calculated using procedures contained in the Highway Capacity Manual (HCM). Deficiencies are identified as locations that exceed LOS D (average control delay > 55.0 seconds).	
LOS Relationships – Signalized Intersections		
LOS	Control Delay (Average seconds/vehicle)	ICU
A	≤10	<0.61
B	10–20	0.61–0.70
C	20–35	0.71–0.80
D	35–55	0.81–0.90
E	55–80	0.91–1.00
F	>80	>1.00
Source: Huitt-Zollars et al. 2014 (see Appendix 6)		

Traffic Analysis

The 2025 average daily traffic (ADT) volumes in the vicinity of the Rancho Mission Viejo Planned Community provided in FEIR 589 for the “without the SR-241 extension scenario” identified two north-south roadways that were projected to carry a combined ADT of 38,000, equivalent to the 39,000 ADT currently forecasted for “F” Street in 2035.²⁸ ADT volumes for 2035 are shown on Exhibit 13 for the Project and surrounding roadway system. Estimated volumes on “F” Street are 39,000 ADT north of Chiquita Canyon Drive and 22,000 ADT south of Chiquita Canyon Drive.

As a result of the nominal change in traffic volumes from the 2025 “build-out” presented in FEIR 589 and the 2035 updated analysis, it is reasonable to assume that the effect of “F” Street would not be substantially different than the evaluation presented in FEIR 589. The FEIR 589 analysis did identify a number of intersections as being deficient in 2025. Those locations not meeting the performance standard of LOS D were addressed in the South County Roadway Improvement Program (SCRIP). That program defined the improvements to be implemented in the study area and the responsibilities of the Rancho Mission Viejo Planned Community to contribute to the improvements on a fair share basis. A summary of the improvements in SCRIP and the implementation status is provided in Table 11. This program addresses traffic impacts

²⁸ At the time FEIR 589 was prepared, the alignment of the SR-241 extension was further to the east than currently proposed. Hence the alignment for “F” Street was likewise located further to the east than the alignment shown for the Project. A second north-south local roadway that connected to Tesoro Creek Road (labeled as “A” Street) was also included in the local roadway system (this is depicted in Exhibit 4.6-26 of the FEIR).

for the approved development in the Ranch Plan and also for the associated roadway system. Hence, it addresses the off-site impacts associated with the proposed "F" Street Project.

Design Issues

The "F" Street PR Study Technical Report, included as part of the Project Report, included a queuing analysis to evaluate the ramp design to ensure there was sufficient length for the projected queuing at the off-ramp intersections and at the on-ramp meters. Table 12 summarizes the results of the 2035 queuing analysis.

**TABLE 11
 SOUTH COUNTY ROADWAY IMPROVEMENT PROGRAM SUMMARY**

Location/Jurisdictions	Description of Improvements	Status of Improvement
City of Mission Viejo		
I-5: Saddleback Connector	Improvements per Caltrans design plans/PSR	Future improvement.
Crown Valley Pkwy/I-5 Bridge widening	Improvements per Caltrans design plans	Construction complete.
Oso Pkwy/I-5 Southbound Ramp	Improvements per Caltrans design plans	Construction complete.
Oso Pkwy Widening (I-5 to Marguerite Pkwy)	Addition of a fourth lane in each direction	Construction complete.
Oso Pkwy/Felipe Rd Intersection	Felipe Rd: addition of a second southbound left-turn lane	Future improvement.
Crown Valley Pkwy/Marguerite Pkwy Intersection	Crown Valley Pkwy: addition of a second westbound left-turn lane, a fourth through lane, and a right-turn lane	Construction complete.
City of San Juan Capistrano		
I-5/Ortega Hwy Interchange	Improvements per Caltrans/City design plans	Under construction.
Ortega Hwy context-sensitive design in City	Improvements per Caltrans/City design plans/PSR	Project in the design phase.
Rancho Viejo Rd/Ortega Hwy Intersection	Rancho Viejo Rd: addition of a second left-turn lane in the northbound direction	Future improvement.
La Novia Ave/Ortega Hwy Intersection	Ortega Hwy: addition of a second left-turn lane in the eastbound direction	Future improvement.
Valle Rd/San Juan Creek Rd Intersection	Improvements per City Nexus program	Requirement satisfied with recent improvements to the San Juan Creek Road interchange.
I-5/Junipero Serra Rd	Improvements per Caltrans/City design plans/PSR	Future improvement.
Camino Capistrano/Del Obispo St	Improvements per City Nexus program	Maximum feasible improvements have been implemented by City.

**TABLE 11
SOUTH COUNTY ROADWAY IMPROVEMENT PROGRAM SUMMARY**

Location/Jurisdictions	Description of Improvements	Status of Improvement
City of San Clemente		
I-5/Southbound Ramp at Avenida Pico	Improvements per Caltrans design plans PSR: Restriping of the southbound off-ramp and modification of the signal	Improvements under construction.
Camino Vera Cruz/Avenida Vista Hermosa Intersection	Camino Vera Cruz: addition of a second left-turn lane in the southbound direction	Future improvement.
Avenida La Pata/Avenida Vista Hermosa Intersection	La Pata -Add southbound free right-turn lane, Vista Hermosa - Add second and third eastbound left turn lane	Under contract for construction with the La Pata Ave improvements.
City of Laguna Niguel		
Crown Valley Pkwy/Railroad Bridge Improvement	Improvements per City Design	Requirement may be satisfied as a result of the completed improvements on the I-5/ Crown Valley Pkwy interchange.
Crown Valley Pkwy/Forbes Rd	Improvements per City 'Gateway' Project conditions	Requirement may be satisfied as a result of the completed improvements on the I-5/ Crown Valley Pkwy interchange.
Crown Valley Pkwy at Cabot Rd	Improvements per City 'Gateway' Project conditions	Requirement may be satisfied as a result of the completed improvements on the I-5/ Crown Valley Pkwy interchange.
Crown Valley Pkwy/I-5 Bridge widening	Improvements per Caltrans design plans/PSR	Construction complete.
Avery Pkwy/I-5 Interchange	Improvements per Caltrans/City design plans	Construction complete.
County Of Orange		
Oso Pkwy Widening: Meandering Trail to Solano	Addition of one lane in each direction	Construction complete.
La Pata Ave construction and widening from Ortega Hwy to Avenida Vista Hermosa	Addition of one lane on La Pata Ave from Ortega Hwy to the landfill and construction of four lanes from the landfill to Calle Saluda.	Under construction.
Antonio Pkwy Widening: Ladera Ranch to Ortega Hwy	Addition of one lane in each direction and widen bridge	Construction complete.
Antonio Pkwy/Oso Pkwy Intersection	Antonio Pkwy: Addition of a fourth southbound through lane and a third northbound left turn lane Oso Pkwy: addition of a fourth through lane in the westbound direction.	Project design is 95 percent complete.

**TABLE 11
SOUTH COUNTY ROADWAY IMPROVEMENT PROGRAM SUMMARY**

Location/Jurisdictions	Description of Improvements	Status of Improvement
Antonio Pkwy/La Pata Ave/ Ortega Hwy Intersection	Antonio Pkwy: addition of a second through lane and free right turn lane La Pata Ave: addition of a second northbound left-turn and a second through lane Ortega Hwy: addition of a second eastbound through lane.	Construction complete.
Antonio Pkwy/Crown Valley Pkwy Intersection	Crown Valley Pkwy: Addition of a second right-turn lane in the eastbound direction Antonio Pkwy: Addition of a third left-turn lane in the northbound direction	Project design is 95 percent complete.
Cow Camp Road	Construction from Antonio Pkwy to Ortega Hwy.	Construction underway, to be completed with development of Planning Areas 3 and 4.
I: Interstate; Caltrans: California Department of Transportation; PSR: Project Study Report Source: Huitt-Zollars et al. 2014 (see Appendix 6)		

**TABLE 12
2035 QUEUING ANALYSIS**

Intersection	Movement	Queue Length (ft)- 95 th percentile	Recommended Turn Pocket Length (ft)
SR-241/"F" St NB Ramps at Oso Pkwy	WB Right	250	250
	NB Left	276	300
	NB Right	106	150
	EB Left	188	200
SR-241/"F" St SB Ramps at Oso Pkwy	SB Left	186	200
	SB Right	127	150
	WB Left	113	150
	EB Right	N/A	300 ^a
"F" St NB On-Ramp at Chiquita Canyon Dr/"K" St	WB Right	144	150
	EB Left	244	250
"F" St SB Off-Ramp at Chiquita Canyon Dr/ "K" Street	SB Left	227	250
	SB Right	129	150
"F" St at Cow Camp Rd	SB Left	158	200
	SB Right	123	150
	WB Right	198	200
	EB Left	144	150
ft: feet; SR: State Route; NB: northbound; SB: southbound; WB: westbound; EB: eastbound; N/A: not applicable (free right-turn lane)			
^a Based on the length of the eastbound through queue length to ensure that the entrance of the free right-turn lane will not be blocked by through traffic.			
Source: Huitt-Zollars et al. 2014 (see Appendix 6)			

The County has approved the following three deviations from the design standards outlined in the County Highway Design Manual (HDM):

- The curve radius on the northbound couplet is shown as 900.05 ft, which is less than the 1,400 ft provided in the HDM. This reduction is requested to minimize impacts on environmental resources. Superelevation of the roadway would be used for this curve to comply with the Caltrans Highway Design Manual to maintain design speed.
- The curve radius on the southbound couplet is shown as 625 ft, which is less than the 1,400 ft provided in the HDM. This reduction is requested to minimize impacts on environmental resources. Superelevation of the roadway would be used for this curve to comply with the Caltrans Highway Design Manual to maintain design speed.
- Modifications to the Rural Secondary Highway Typical Section to include a median, swales, and a 10 ft multi-purpose pathway of the west side of the road is proposed. The Standard Plan provides for open swales and a multi-purpose pathway within the road right-of-way. The median will allow for greater separation and safety of opposing travel lanes and will meet sight distance requirements. The pathway allows the Project to conform to "Complete Streets" standards.

Even with the above noted deviation requests, the roadway design would avoid any design features that would result in a hazardous condition. Given the hilly terrain, warning signs and various speed reduction treatments will be considered on the downhill approach to the Cow Camp Road intersection. These measures could include advanced traffic signal warning signage; speed reduction signage and beacons; or flashing speed limit beacon used with appropriate signs to indicate that the posted speed is in effect. The need for such measures is evaluated as part of the final design process.

The Project would enhance emergency access by providing an additional access point to and from the Rancho Mission Viejo Planned Community. The roadway would have minimal side conflict (i.e., access points from side streets or driveways), which would allow unimpeded access by emergency vehicles or evacuations in the case of emergency.

Alternative Transportation Modes

The Project would not conflict with adopted policies, plans, or programs pertaining to alternative modes of transportation. The Project incorporates a pedestrian and bicycle trail on the west side of "F" Street within the roadway right-of-way to provide for opportunities for alternative non-motorized transportation modes. Though there are no planned transit stops at this time, as the Rancho Mission Viejo Planned Community builds out, the need for transit stops may be evaluated in the future.

Primary access points to the trail will be at Oso Parkway, Chiquita Canyon Drive, and Cow Camp Road. At Oso Parkway, a pedestrian crossing (crosswalk) will be added to the existing signalized Oso Parkway/SR-241 southbound intersection to provide trail connectivity to the existing sidewalk on the north side of Oso Parkway. As the trail approaches the Chiquita Canyon Drive southbound off-ramp intersection, its north and south approaches to Chiquita Canyon Drive will be aligned towards the intersection, where a "protected" at-grade crossing will be incorporated into the signalized intersection. The trail will join the proposed sidewalk at Cow Camp Road.

The Project would not result in a change in air traffic patterns or result in substantial safety risks. John Wayne Airport is the closest commercial airport, which is located approximately 18 miles from the Project site. There are no private airstrips in the vicinity of the Project site.

Improvements within Caltrans Right-of-Way

As previously discussed, the intersection at Oso Parkway and "F" Street is within Caltrans jurisdiction. An analysis of these two intersections is provided in the "F" Street PR Study Technical Report, included as part of the Project Report, and summarized below in Table 13. As previously indicated, the HCM method was used and the analysis is provided for both the 2020 and 2035 timeframe, consistent with Caltrans requirements. As shown in Table 13, there would be no intersections within Caltrans jurisdiction that would operate at a deficient level of service. As noted in Table 10, Caltrans identifies a deficiencies as locations that exceed LOS D (average control delay > 55.0 seconds).

**TABLE 13
 OPERATIONAL EVALUATION OF CALTRANS INTERSECTIONS**

Intersection	AM Peak Hour		PM Peak Hour	
	Delay (seconds)	LOS	Delay (seconds)	LOS
Opening Year (2020)				
"F" St Southbound and Oso Pkwy	16	B	32	C
"F" St Northbound and Oso Pkwy	30	C	13	B
Horizon Year (2035)				
"F" St Southbound and Oso Pkwy	13	B	23	C
"F" St Northbound and Oso Pkwy	36	D	17	B
LOS: Level of Service Source: Huitt-Zollars et al. 2014 (see Appendix 6)				

The queuing analysis presented in Table 12 demonstrates that the ramp length would be adequate to accommodate the projected queuing and no impacts would result.

Mitigation Program

As a part of FEIR 589, a mitigation program was adopted, which minimizes impacts associated with implementation of the Rancho Mission Viejo Planned Community, including the construction of "F" Street. The proposed alignment for "F" Street would not result in any new transportation and traffic impacts, nor would it increase the severity of a previously identified significant impact as previously analyzed in FEIR 589. No new mitigation is required. Please refer to Items 546 through 552 in the RCM in Appendix A to this Addendum for measures applicable "F" Street.

Level of Significance After Mitigation

The cumulative analysis in FEIR 589 with the Rancho Mission Viejo Planned Community and without the SR-241 extension established that with the proposed improvements impacts would be less than significant with the exception of three intersections (Marguerite Parkway at Crown Valley Parkway in the City of Mission Viejo; Camino Capistrano at Del Obispo Street in the City of San Juan Capistrano; and the I-5 southbound ramp intersection at Avenida Pico in the City of San Clemente). The mitigation included the payment of SCRIP fees.

To address the contribution of the Rancho Mission Viejo Planned Community on deficient intersections located outside the County's jurisdiction, the County will enter into agreements with the affected jurisdictions regarding the design and construction of the improvements and the transfer of monies paid towards funding these improvements. However, if the County is not able to reach an agreement with one or more of the jurisdictions to implement these improvements, consistent with the findings of FEIR 589, the impacts to be mitigated by those improvements may remain significant and be unavoidable. Additionally, the Rancho Mission Viejo Planned Community's contribution to impacts on freeway mainline segments that are forecasted to operate deficiently would be considered significant and unavoidable. This conclusion was included in the Findings of Fact and Statement of Overriding Considerations adopted by the Board of Supervisors on November 8, 2004. The "F" Street Project provides improved circulation for the area and is component of the overall improvements envisioned for the Rancho Mission Viejo Planned Community. As such, the Project does not contribute to the significant unavoidable impacts identified in FEIR 589 and the associated Findings of Fact and Statement of Overriding Considerations adopted by the Board of Supervisors.

Finding of Consistency With Final EIR 589

As discussed above, the "F" Street Project would not result in traffic impacts. Though the County Board of Supervisors adopted a Findings of Fact and a Statement of Overriding Considerations pertaining to unavoidable significant traffic impacts, the "F" Street Project does not contribute to these impacts.

The County of Orange has determined, on the basis of substantial evidence in the light of the whole record, that the "F" Street Project does not propose substantial changes to the Rancho Mission Viejo Planned Community; that no substantial changes would occur that would require major revisions to FEIR 589 due to new significant impacts; and that no new information of substantial importance has been revealed since the certification of FEIR 589. Therefore, since none of the conditions described in Section 15162 calling for preparation of a subsequent EIR have occurred, an Addendum to FEIRs 589 and FEIR 584 is the appropriate document for CEQA compliance.

4.17 UTILITIES AND SERVICE SYSTEMS

Summary of Previous Findings

FEIR 589 identified the impacts associated with construction of a full network of utility services required to support the Rancho Mission Viejo Planned Community. This includes a number of water reservoirs and pump stations. Most of these facilities are proposed within the footprint of the development areas; however, due to design requirements to accommodate gravity flows, some facilities are proposed in open space areas. The impacts of these facilities are addressed as part of the impact assessment for the overall planned community.

The Rancho Mission Viejo Planned Community requires the construction of a number of storm water facilities to accommodate the flows associated with the Project. This included construction of basins to retain water during peak flows in order to avoid impacts off site. The footprint for these facilities is included in the acreage identified as part of the development footprint described in FEIR 589.

FEIR 589 determined that, using both the California Integrated Waste Management Board (CIWMB) and County Integrated Waste Management District solid waste generation factors, there was sufficient capacity at the Prima Deshecha landfill to accommodate the projected daily tonnage generated by implementation of the Rancho Mission Viejo Planned Community.

No significant, unavoidable impacts to utilities and service systems were identified in FEIR 589.

Project Impact Analysis

- a) **Would the project exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?**
- b) **Would the project require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental impacts?**
- c) **Would the project require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which would cause significant environmental effects?**
- d) **Would the project have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?**
- e) **Would the project 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?**
- f) **Would the project be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?**
- g) **Would the project comply with federal, state, and local statutes and regulations related to solid waste?**

The utilities and service impacts have been previously analyzed as part of FEIR 589, which was prepared and certified pursuant to State and County CEQA Guidelines. Minor additions and/or clarifications are needed to make the previous document adequate to cover the actions that are currently proposed, which are documented below and serve as an Addendum to FEIR 589.

The Proposed "F" Street is a road project and would not generate wastewater; therefore, it would not require wastewater treatment facilities or exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board.

The portion of "F" Street through the Habitat Reserve would be restored with native plant material upon completion of construction. The restoration area would result in a short-term demand for water for irrigation. Once the restoration area is established, irrigation would cease. The segment of the road through Planning Area 2 South would be irrigated with recycled water. The allocation of water for "F" Street irrigation was included in the Water Supply Assessment prepared for FEIR 589. No new impacts are anticipated.

The impacts associated with the construction of the proposed storm drains and drainage basins have been included as a component of the "F" Street and have been evaluated as part of the analysis in this Addendum. There are no major improvements to existing drainage systems required outside of the proposed disturbance limit line. The existing drainage systems in the area of Oso Parkway Intersection will be extended or replaced as necessary.

Construction related solid waste would be generated during implementation of "F" Street. However, compliance with AB 939, as included as a standard condition in FEIR 589, would reduce the amount of refuse generated by construction of the Project. "F" Street would not

generate long-term solid waste. The Project would comply with federal, state, and local statutes and regulations related to solid waste.

With the implementation of the FEIR 589 mitigation program, impacts to utilities and service systems would be mitigated to a less than significant level. The implementation of "F" Street would not result in any new or more severe impacts than those assumed in FEIR 589.

Improvements within Caltrans Right-of-Way

No substantial impacts to utilities or service systems would be associated with the improvements within the Caltrans right-of-way. The Project would connect with the existing drainage systems in the area of Oso Parkway. During the design phase, the improvements necessary to either extend or replaced the existing facilities would be determined.

Mitigation Program

As a part of FEIR 589, a mitigation program was adopted, which minimizes impacts associated with implementation of the Rancho Mission Viejo Planned Community, including the construction of "F" Street. The proposed alignment for "F" Street would not result in any impacts to utilities and service systems. No mitigation is required.

Level of Significance After Mitigation

There would be no impacts on utilities and service systems with the "F" Street Project.

Finding of Consistency With Final EIR 589

As discussed above, the "F" Street Project would have no impacts on utilities and service systems. The County of Orange has determined, on the basis of substantial evidence in the light of the whole record, that the "F" Street Project does not propose substantial changes to the Rancho Mission Viejo Planned Community; that no substantial changes would occur that would require major revisions to FEIR 589 due to new significant impacts; and that no new information of substantial importance has been revealed since the certification of FEIR 589. Therefore, since none of the conditions described in Section 15162 calling for preparation of a subsequent EIR have occurred, an Addendum to FEIRs 589 and FEIR 584 is the appropriate document for CEQA compliance.

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APPENDIX A

“F” STREET REGULATION COMPLIANCE MATRIX (RCM)

"F" STREET REGULATION COMPLIANCE MATRIX

In conjunction with the approval of the Rancho Mission Viejo Planned Community project, the County Board of Supervisors adopted a Mitigation Monitoring and Reporting Program (MMRP) pursuant to Public Resources Code Section 21081.6. The MMRP included all the project design features (PDF), standard conditions (SC), and mitigation measures (MM) that were adopted concurrently with and as a condition of approval of the project. In addition, there are other compliance measures that apply to the Rancho Mission Viejo Planned Community that also serve to reduce environmental impacts. These include provisions from the following:

- Development Agreement requirements
- Planned Community Zoning Regulations/Conditions
- South County Roadway Improvement Program (SCRIP) requirements
- Litigation Settlement Agreement requirements
- Service Provider Agreement requirements

Recognizing the number of conditions that apply to the Rancho Mission Viejo Planned Community, a program for monitoring their implementation was developed. The program, called the Regulation Compliance Matrix (RCM), recites and categorizes all of the project's mitigations (from the MMRP), conditions, and other project requirements adopted with the initial approving actions and has been supplemented with added requirements as more detailed plans and programs are approved for the Rancho Mission Viejo Planned Community. The RCM represents a single source of the project's requirements that will be maintained and available for application to subsequent entitlement plans.

The program allows for the sorting of the measures to determine which measures are applicable to each portion of the Rancho Mission Viejo Planned Community (i.e., by planning area and type of project), as well as at each level of entitlement. The measures within the RCM applicable to "F" Street have been included as Attachment A to this Addendum. It should be noted, that some measures have been included in Attachment A that from a strict reading of the measure would not appear to be applicable to "F" Street. However, when preparing the RCM for "F" Street the intent of the requirements were evaluated to determine if it would be applicable to the approvals required for the construction of "F" Street. All applicable measures were included. For example, the first measure in the "F" Street RCM (MM 4.4.-1) pertains to submittal of geotechnical studies in conjunction with approvals of tentative tract maps. "F" Street will not involve a tentative tract map; however, submittal of geotechnical analysis associated with the roadway design plans would be applicable. Therefore, the measure was included in the RCM.

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RANCHO MISSION VIEJO PLANNED COMMUNITY “F” STREET REGULATION COMPLIANCE MATRIX

Background:

On November 8, 2004, the Orange County Board of Supervisors approved the Ranch Plan project subject to 599 requirements and provisions. These requirements and provisions were detailed in several approving documents, agreements and instruments used to implement the project over time. Subsequent OC Board of Supervisor actions and other agency actions have also been approved that supersede or superimpose the original OC Board of Supervisor action. These include settlement agreements, OC Board of Supervisor actions, as well as Federal, State and local agency actions that add specific requirements and provisions for project implementation.

Summary:

The Ranch Plan Regulation Compliance Matrix (Matrix) is a compendium of all of the regulations, conditions, provisions, mitigation measures, project design features and standard conditions applicable to the Ranch Plan project since its original approval in November of 2004 by action of the Orange County Board of Supervisors and subsequently by other applicable agencies. It is intended to be used in an electronic format as an official common and on-going record to assist staff and applicants in project review and implementation. The matrix format provides a variety of information about each item such as original source documents, timing, approving authority, form of compliance and area of application. The items are also cross-referenced when duplicated and listed elsewhere in the matrix.

Vesting:

The Ranch Plan Planned Community approvals are vested by virtue of the Development Agreement (DA) and vesting tentative tract maps. Among other things, the Development Agreement establishes with certainty the scope of benefits to the public and the exactions to be contributed by the project proponent. Other ancillary approved programs and agreements such as (but not limited to) the Affordable Housing Agreement, Open Space Agreement, Fire Protection Program, Alternative Development Standards, the Guidance Documents for the PC zoning, and this Regulation Compliance Matrix, all further define the vested project entitlements and help ensure the orderly and timely development of the project in accordance with the project's vested rights. Additional federal and state programmatic environmental agency permits that have been obtained for the Ranch Plan further help to define the Ranch-wide conditions and administrative protocols for subsequent permit processing.

The following list of items are included in the Matrix and defined below:

- **Mitigation Measure (MM)** – Project specific mitigating measure identified where a potentially significant environmental effect has been identified and is not reduced to a level considered less than significant through the application of other regulations, project design features or standard conditions.
- **General Regulation (Gen. Reg.)** – Either a condition or entitlement provision applied to the project.
- **Condition (Cond.)** – An applied requirement of the project based on local, state or federal regulations or laws.
- **Entitlement Provision** – An approved project-enabling feature providing program explanation for the purpose of organization, operation or guidance.
- **Public Benefit** – Provision identifying a certain public facility improvement from the adopted Development Agreement (DA) between the County and Rancho Mission Viejo (effective December 8, 2004) that is to be provided in connection with implementation of the project.
- **Project Design Feature (PDF)** – Specific design elements intended to prevent the occurrence of, or reduce the significance of, potential environmental effects. Because PDF's have been incorporated into the project, they do not constitute mitigation measures as defined by CEQA and may be expressed as a condition or provision, providing explanation for how implementation of the approved project reduces potential impacts.
- **Standard Condition (SC)** – An applied requirement of the project based on local, state, or federal regulations or laws that are frequently required independently of CEQA review and also serve to offset or prevent specific impacts. OC Planning retains a “library” of standard conditions that are applied to all development applications. The Standard Conditions wording included in EIR 589 are circa 2004, and while the intent of each condition must be met, the interpretation, timing and responsible party information may change with time, except as provided in the Development Agreement.

RANCHO MISSION VIEJO PLANNED COMMUNITY “F” STREET REGULATION COMPLIANCE MATRIX (Continued)

Guidance Annotations:

Throughout the Matrix guidance annotations have been added to provide updates, explanation and guidance. Since the original Ranch Plan approvals, a number of OC Board of Supervisors and other agency actions have occurred which supersede or superimpose the Ranch Plan requirements and provisions as adopted by the Board of Supervisors November 8, 2004. These actions are listed below and annotations (also see ANNOTATIONS LEGEND below) are used to reflect changes in the matrix items. This list may be updated as new County or other agency-adopted actions affect Ranch Plan implementation, to the extent allowed under the Development Agreement.

- (1) **Settlement Agreement** between the County of Orange, Rancho Mission Viejo and Endangered Habitats League, et al. (“Resource Organization Settlement Agreement”, or “ROSA”) approved by Board of Supervisors on August 16, 2005,
- (2) **Southern Subregion NCCP/MSAA/HCP** (“Southern HCP”) approved by Board of Supervisors by Resolution No. 06-202 on October 24, 2006, and by U.S. Fish & Wildlife Service on January 10, 2007 – including associated Implementation Agreement and Incidental Take Permit
- (3) **Special Area Management Plan** (“SAMP”) for the San Juan Creek and Western San Mateo Creek Watersheds approved by U.S. Army Corps of Engineers on March 16, 2007
- (4) **Ranch Plan Fire Protection Program** approved by Board of Supervisors on July 31, 2007
- (5) **Zoning Code Amendments** CA04-01, CA-05-01 and CA 08-01, as approved by Board of Supervisors (most recently on August 12, 2008)
- (6) **County Reorganization and Department Name Changes** approved by Board of Supervisors on March 18, 2008 (Resolution 08-023)
- (7) **Annexation of 132 acres of PA1 to the City of San Juan Capistrano** approved by LAFCO Resolution CA 09-19 on December 9, 2009

Notes:

- Project Design Features are listed in EIR 589, but are not listed in this matrix, as they are not specific PA1 requirements.
- Project-enabling features providing program explanation for the purpose of organization, operation or guidance are listed in EIR 589, but are not listed in this matrix, as they are not specific PA1 requirements.

The following legend identifies five forms of supplemental annotation and their application within the Guidance Document:

LEGEND

Red Bold Text Supersedes as the result of (1) through (7) listed above.

Blue Text Clarifying inserts intended to aid staff and applicants in their understanding and interpretation of certain requirements, provisions and supporting information are based upon staff review and adopted actions (1) through (6) listed above.

Item No.	Cross Reference Column	Source	Condition, Mitigation, Public Benefit or Entitlement Provision	Timing	Requirements or Entitlement Provisions	Reviewing / Approving Authority (Advisory Agency in Parentheses)	Form of Compliance	Guidance for Compliance	Area Application
6	7-12 (MM 4.4-1)	EIR 589	MM 4.4-1	Prior to the approval of <u>each</u> the first tentative tract map in each Planning Area	Prior to the approval of <u>each</u> the first tentative tract map in each Planning Area, the applicant shall submit a geotechnical report to the Director, OC Planning Deputy Director, Planning and Development Services , for approval. The report shall meet the requirements outlined in the County of Orange Grading Code and Manual, and as appropriate, shall adequately address each of the following issues to the satisfaction of the Deputy Director, Planning and Development Services:	Director, PDS Director, OC Planning	Preparation and submittal of satisfactory geotechnical report addressing required elements	This TT Map geotechnical report is to be qualitative, not quantitative, providing an overview of the site's geologic conditions, demonstrating understanding of geotechnical issues, and how they are to be remediated. A more complete subsurface investigation is to be performed prior to issuance of a grading permit (Item No. 521, SC 4.4-1).	Each PA
7	6 and 8-12 (MM 4.4-1)	EIR 589	MM 4.4-1 (cont.)	See above	a. Locate, define and map the activity status of any faults within the development area of the project site, and if any active faults are encountered, determine the appropriate structural setbacks.	Director, PDS Director, OC Planning	The purpose of the TT Map study is to identify fault locations per published maps and literature. The Grading Permit study will define limits and activity as necessary.	See Above	Each PA
8	6-7 and 9-12 (MM 4.4-1)	EIR 589	MM 4.4-1 (cont.)	See above	b. Identify and map areas where grading activities may encounter unconsolidated soils (e.g., alluvial deposits, colluvium, native soil, debris flow deposits, etc.) susceptible to soil creep, liquefaction, landslides, or settlement. Define specific measures to be taken when such soils are encountered during grading (i.e., removal and replacement with compacted fill, slope stabilization, etc.).	Director, PDS Director, OC Planning	The purpose of the TT Map study is to identify soil types and boundaries. The Grading Permit study will further define soil types and boundaries as necessary.	See Above	Each PA
9	6-8 and 10-12 (MM 4.4-1)	EIR 589	MM 4.4-1 (cont.)	See above	c. Identify and map areas where fill is to be placed on top of unconsolidated soils (e.g., alluvium, colluvium, landslide debris, etc.). Define specific measures to be taken when such fills are anticipated during grading (i.e., removal and re-compaction of unconsolidated soils, settlement monitoring in deep canyon areas, etc.).	Director, PDS Director, OC Planning	The purpose of the TT Map study is to identify where fill is to be placed on top of unconsolidated soils. The Grading Permit study will further define these areas as necessary.	See Above	Each PA
10	6-9 and 11-12 (MM 4.4-1)	EIR 589	MM 4.4-1 (cont.)	See above	d. Locate and map all landslides within the development area of the project site and evaluate the lateral extent, depth and potential instability as a result of grading and the potential effects of settlement due to fill loads. Define specific measures to be taken during grading (i.e., bury under proposed fills, complete or partial removal, slope stabilization, avoidance, etc.).	Director, PDS Director, OC Planning	The purpose of the TT Map study is to identify landslides per published maps, preliminary exploration, surface mapping & observations, and anticipated limits of remediation. The Grading Permit study will further define the extent and limits of the landslides as necessary.	See Above	Each PA
11	6-10 and 12 (MM 4.4-1)	EIR 589	MM 4.4-1 (cont.)	See above	e. Identify and map areas susceptible to debris flows and surficial slumping, including potential debris flow volumes. Define specific measures to be taken during grading (i.e., removal during mass grading, containment within a debris basin, etc.).	Director, PDS Director, OC Planning	The purpose of the TT Map study is to identify areas of potential debris flows. The Grading Permit study will further define quantities and remedial measures as necessary.	See Above	Each PA

Item No.	Cross Reference Column	Source	Condition, Mitigation, Public Benefit or Entitlement Provision	Timing	Requirements or Entitlement Provisions	Reviewing / Approving Authority (Advisory Agency in Parentheses)	Form of Compliance	Guidance for Compliance	Area Application
12	6-11 (MM 4.4-1)	EIR 589	MM 4.4-1 (cont.)	See above	f. Identify and map areas susceptible to expansive soils. Define specific measures to be taken during grading (i.e., pre-saturation of expansive soils during construction, reinforcement of building foundations and concrete slabs, removal and replacement with non-expansive granular soil beneath structures, etc.).	Director, PDS Director, OC Planning	The purpose of the TT Map study is to identify and map areas susceptible to expansive soils. It should be understood that expansive soils could end up throughout the site as a result of grading.	See Above	Each PA
33	32 and 34-35 (MM 4.5-4)	EIR 589	MM 4.5-4 (cont.)	See above	(i) How site-design, source-control and treatment control BMPs will be implemented at the Sub-Area Plan level for the area in question,	*Manager of OC Flood Control and Manager of Watershed and Coastal Resources Director, OC Planning	See above		Each PA
34	32-33 and 35 (MM 4.5-4)	EIR 589	MM 4.5-4 (cont.)	See above	(ii) The size, location and design features of the individual water resource facilities to be developed within the subject Sub-Area Plan area, and	*Manager of OC Flood Control and Manager of Watershed and Coastal Resources Director, OC Planning	See above		Each PA
35	32-34 (MM 4.5-4)	EIR 589	MM 4.5-4 (cont.)	See above	(iii) Monitoring, operation and maintenance of the stormwater BMPs within the relevant Sub-Area Plan area.	*Manager of OC Flood Control and Manager of Watershed and Coastal Resources Director, OC Planning	See above		Each PA
104	105-107 (MM 4.7-1)	EIR 589	MM 4.7-1	Prior to the issuance of a grading permit	In order to reduce diesel fuel engine emissions, the project applicant shall require that all construction bid packages include a separate "Diesel Fuel Reduction Plan." This plan shall identify the actions to be taken to reduce diesel fuel emissions during construction activities (inclusive of grading and excavation activities). Reductions in diesel fuel emissions can be achieved by measures including, but not limited to, the following: a) use of alternative energy sources, such as compressed natural gas or liquefied petroleum gas, in mobile equipment and vehicles; b) use of "retrofit technology," including diesel particulate traps, on existing diesel engines and vehicles; and c) other appropriate measures. Prior to the issuance of a grading permit, the Diesel Fuel Reduction Plan shall be filed with the County of Orange. The Diesel Fuel Reduction Plan shall include the following provisions:	Director, PDS (AQMP) Director, OC Planning	Preparation and submittal of a Diesel Fuel Reduction Plan identifying actions to reduce diesel fuel emissions during construction (with specified provisions)		Each PA
105	104 and 106-107 (MM 4.7-1)	EIR 589	MM 4.7-1 (cont.)	See above	a. All diesel fueled off-road construction equipment shall be California Air Resources Board (CARB) certified or use post-combustion controls that reduce pollutant emissions to the same level as CARB certified equipment. CARB certified off-road engines are engines that are three years old or less and comply with lower emission standards. Post-combustion controls are devices that are installed downstream of the engine on the tailpipe to treat the exhaust. These devices are now widely used on construction equipment and are capable of removing over 90 percent of the PM10, carbon monoxide, and volatile organic compounds from engine exhaust, depending on the specific device, sulfur content of the fuel, and specific engine. The most common and widely used post-combustion control devices are particulate traps (i.e., soot filters), oxidation catalysts, and combinations thereof.	Director, PDS (AQMP) Director, OC Planning	See above		Each PA

Item No.	Cross Reference Column	Source	Condition, Mitigation, Public Benefit or Entitlement Provision	Timing	Requirements or Entitlement Provisions	Reviewing / Approving Authority (Advisory Agency in Parentheses)	Form of Compliance	Guidance for Compliance	Area Application
106	104-105 and 107 (MM 4.7-1)	EIR 589	MM 4.7-1 (cont.)	See above	b. All diesel fueled on-road construction vehicles shall meet the emission standards applicable to the most current year to the greatest extent possible. To achieve this standard, new vehicles shall be used or older vehicles shall use post-combustion controls that reduce pollutant emissions to the greatest extent feasible.	Director, PDS Director, OC Planning	See above		Each PA
107	104-106 (MM 4.7-1)	EIR 589	MM 4.7-1 (cont.)	See above	c. The effectiveness of the latest diesel emission controls is highly dependent on the sulfur content of the fuel. Therefore, diesel fuel used by on-road and off-road construction equipment shall be low sulfur (>15 ppm) or other alternative low polluting diesel fuel formulation such as PuriNOXTM or Amber363. Low sulfur diesel fuel shall be required by existing regulations after the year 2007 and it is already being produced and sold as the regulation is phased in.	Director, PDS Director, OC Planning	See above		Each PA
112		EIR 589	MM 4.7-4	Prior to issuance of grading permit	All construction staging areas and stockpile sites will be located as far as feasible from residential areas. This provision will apply to currently existing residential areas and to future residential developments that are completed prior to later development stages.	Director, PDS Director, OC Planning	Preparation and approval of construction staging area plan	These locations will change throughout the grading process. OCFA must be kept abreast of the most current access information	Each PA
113		EIR 589	MM 4.7-4 (cont.)	See above	A vegetative buffer zone, including trees and shrubs, will be placed between grading sites and residential areas or other locations where sensitive receptors can be reasonably expected.	Director, PDS Director, OC Planning	Preparation and approval of a grading plan showing a vegetative buffer zone (if applicable) **Handbook should define sensitive receptors**	Currently no sensitive receptors located within Ranch Plan planned community	Each Grading Permit area (if applicable)
121.1	122-124 (MM 4.9-22)	EIR 589	MM 4.9-22	Prior to completion of the Project Report for F Street issuance of a Grading Permit for construction of Cristianitos Road and	Prior to completion of the Project Report issuance of a grading permit for construction of Cristianitos Road from PA 5 to PA 2 and Cow Camp Road (see 121.2 below) , the applicant shall demonstrate to the satisfaction of the County's Director of Planning Services Department or his/her designee that the design for the specified portions of Cristianitos Road and Cow Camp Road (see 121.2 below) includes the following features to facilitate wildlife movement: (see Items 122-124 below)	Director, PDS Director, OC Planning	Approval of a Street Improvement Plan demonstrating the design for Cristianitos Road and Cow Camp Road (see 121.2 below) includes features to facilitate wildlife movement	The portion of Cristianitos Road not eliminated by the ROSA is depicted on the OCTA approved Circulation Plan [Hyperlink #10]	PA-1.1, 2-8 and 10
124.1	121-123 (MM 4.9-22)	EIR 589	MM 4.9-22 (cont.)	Prior to completion of the Project Report for F Street issuance of a Grading Permit for construction of Cristianitos Road and	• All lighting on the bridge, if required for public health and safety, shall be shielded to prevent spill-over effects.	Director, PDS Director, OC Planning	Project Report for F Street	Project Report for F Street shall include sufficient detail to demonstrate that lighting of bridge(s) will prevent spill-over effect, thereby facilitating wildlife movement	PA-2-8 and 10

Item No.	Cross Reference Column	Source	Condition, Mitigation, Public Benefit or Entitlement Provision	Timing	Requirements or Entitlement Provisions	Reviewing / Approving Authority (Advisory Agency in Parentheses)	Form of Compliance	Guidance for Compliance	Area Application
136	144-150 (MM 4.9-30)	EIR 589	MM 4.9-26	Prior to issuance of grading permit	During construction, a construction monitoring program shall be implemented to mitigate for short-term noise impacts to nesting raptors, to the satisfaction of the County of Orange, Manager, Subdivision and Grading. Indirect impacts shall be mitigated by limiting heavy construction (i.e., mass grading) within 300 feet of occupied raptor nests. Occupied raptor nests shall be marked as "Environmentally Sensitive Areas" on grading/construction plans and shall be protected with fencing consisting of T-bar posts and yellow rope. Signs noting the area as an "Environmentally Sensitive Area" will be attached to the rope at regular intervals.	Director, PDS Director, OC Planning	Preparation and approval of a Construction Monitoring Program with subsequent implementation	Only Construction Monitoring Program submittal documentation is required: [Hyperlink #12] No copy of USFWS approval is required (often no formal written approval granted by USFWS)	Each Applicable PA
140	141 (MM 4.9-28) 515 (ROSA Exhibit G)	EIR 589	MM 4.9-28	Prior to the issuance of building permits on streets for tracts with public street lighting adjacent to RMV Open Space habitat areas	Lighting shall be shielded or directed away from RMV Open Space habitat areas through the use of low-sodium or similar intensity lights, light shields, native shrubs, berms or other shielding methods.	Director, PDS Director, OC Planning	Preparation of a lighting plan	Preparation of street improvement plans for public streets that detail how street lighting is to be directed away from RMV Open Space areas	Each Applicable PA
141	140 (EIR 589, MM 4.9-28)	EIR 589	MM 4.9-28 (cont.)	See above	a. Prior to the issuance of building permits for a tract with public street lighting adjacent to RMV Open Space habitat areas, the County of Orange shall verify that measures to shield such lighting have been incorporated in the street improvement building plans.	Director, PDS Director, OC Planning	Preparation of building plans in compliance with lighting measures		Each Applicable PA
144	136 (MM 4.9-26) 145-150 (EIR 589, MM 4.9-30)	EIR 589	MM 4.9-30	Prior to issuance of grading (GA) permits	Biological resources outside of the Proposed Project impact area shall be protected during construction. To ensure this protection, the Project Applicant shall prepare and implement a Biological Resources Construction Plan (BRCP) that provides for the protection of the resource and established the monitoring requirements. The BRCP shall contain at a minimum the following:	Director, PDS Director, OC Planning	Preparation and approval of a Biological Resources Construction Plan (BRCP)		Each PA
145	144 and 148-150 (EIR 589, MM 4.9-30) Item Nos. 146 and 147 have been integrated into 145 (originally three bullet points were separate items)	EIR 589	MM 4.9-30 (cont.)	Prior to issuance of grading (GA) permits	<ul style="list-style-type: none"> • Specific measures for the protection of sensitive amphibian, mammal, bird, and plant species during construction. • Identification and qualification of habitats to be removed. • Design of protective fencing around conserved habitat areas and the construction staging areas. 	Director, PDS Director, OC Planning	See above		Each PA
148	144-145 and 149-150 (EIR 589, MM 4.9-30)	EIR 589	MM 4.9-30 (cont.)	Prior to issuance of grading (GA) permits	<ul style="list-style-type: none"> • Specific construction monitoring programs for sensitive species required by Wildlife Agencies including, but not limited to, programs for the arroyo southwestern toad, western spadefoot toad, southwestern pond turtle, cactus wren, and coastal California gnatcatcher. Such measures shall be consistent with prior Section 7 consultations and 1600 agreements e.g., Arroyo Trabuco Golf Course. 	Director, PDS Director, OC Planning	See above		Each PA
149	144-148 and 150 (EIR 589, MM 4.9-30)	EIR 589	MM 4.9-30 (cont.)	Prior to issuance of grading (GA) permits	<ul style="list-style-type: none"> • Specific measures required by Wildlife Agencies (e.g., Arroyo Trabuco Golf Course) for the protection of sensitive habitats including, but are not limited to, erosion and siltation control measures, protective fencing guidelines, dust control measures, grading techniques, construction area limits, and biological monitoring requirements. 	Director, PDS Director, OC Planning	See above		Each PA

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150	144-149 (EIR 589, MM 4.9-30)	EIR 589	MM 4.9-30 (cont.)	Prior to issuance of grading (GA) permits	Provisions for biological monitoring during construction activities to ensure compliance and success of each protective measure. The monitoring procedures will (1) identify specific locations of wildlife habitat and sensitive species to be monitored; (2) identify the frequency of monitoring, monitoring methodology (for each habitat and sensitive species to be monitored); (3) list required qualifications of biological monitor(s); and (4) identify reporting requirements.	Director, PDS Director, OC Planning	See above		Each PA
157	158 (EIR 589, MM 4.9-37)	EIR 589	MM 4.9-37	Prior to issuance of grading permit as monitored by the County Biological Monitor	Catalina mariposa lily shall be salvaged and relocated to the coastal sage scrub/native grassland restoration and enhancement areas by the Project Applicant; or seed can be collected prior to project impacts for use in the seed mix for coastal sage scrub/native grassland restoration areas. The receiver sites shall support clay soils and other conditions suitable for Catalina mariposa lily.	Director, PDS Director, OC Planning	Preparation and approval of Final Plant Species Translocation, Propagation and Management Plan	Satisfied by GLA's response to comment letter dated August 8, 2013.	Each Applicable PA
158	157 (EIR 589, MM 4.9-37)	EIR 589	MM 4.9-37 (cont.)	Prior to initiation of grading as monitored by the County Biological Monitor	In addition, where feasible, clay soils shall be salvaged from development areas and appropriately transported to restoration areas to provide a seed bank. Implementation details of the salvage and relocation program shall be identified in the Final Plant Species Translocation, Propagation and Management Plan, outlined in Appendix J-1.	Director, PDS Director, OC Planning	Verification of Catalina mariposa lily salvage/ relocation		Each Applicable PA
163	164 (EIR 589, MM 4.9-40)	EIR 589	MM 4.9-40	Prior to issuance of a grading permit as monitored by the County Biological Monitor	Mud nama inoculum (topsoil and dried plants to obtain seed) shall be collected prior to project impacts for use in the relocation of this species. The receiver sites shall support appropriate soils and other conditions suitable for mud nama.	Director, PDS Director, OC Planning	Preparation and approval of Final Plant Species Translocation, Propagation and Management Plan		Each Applicable PA
164	163 (EIR 589, MM 4.9-40)	EIR 589	MM 4.9-40 (cont.)	Prior to initiation of grading as monitored by the County Biological Monitor	Implementation details of the salvage and relocation program shall be identified in the Final Plant Species Translocation, Propagation and Management Plan.	Director, PDS Director, OC Planning	Verification of Mud nama inoculum seed collection		Each Applicable PA
166		EIR 589	MM 4.9-42	Prior to issuance of grading permit for those areas with federal or state endangered species, or jurisdictional land	The project applicant shall obtain Section 404, 1600, and federal and state Endangered Species Act permits, as applicable.	Director, PDS Director, OC Planning (CDFG, USFWS, ACOE)	Provide evidence of Section 404, 1600, and federal and state Endangered Species Act permits from the regulatory agencies	Regulatory agency permit summary letter from RMV [Hyperlink #15], accompanied by diagram identifying proposed development footprint and overlay of federal or state endangered species, or jurisdictional land location.	Each Applicable PA

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172	173-176 (EIR 589, MM 4.11-3) 571 (SC 4.11-1)	EIR 589	MM 4.11-3	Prior to issuance of grading permit in vicinity of identified resources	As applicable, the following archaeological sites shall be mitigated to a less than significant level: CA-ORA-656, -753, -754, -882, -1043, -1048, -1121, -1122, -1125, -1137, 1144, -1185, -1449, -1556, -1559, -1560, and -1565, and historic sites CA-ORA-29, 30-176631, 30-176633, 30-176634, and 30-176635. Based on the mitigation standards set forth in the California Environmental Act (CEQA) Guidelines §15126.4(b) and Public Resources Code §21083.2, mitigation shall be accomplished through implementation of one of the following mitigation options consistent with the Cultural Resources Management Plan: (Revised per Bonterra, 8/25/06)	Director, PDS in conjunction with the Manager of Harbors, Beaches & Parks HBP/Coastal and Historical Facilities Director, OC Planning	Mitigate impacts to archaeological sites through implementation of options set forth in Cultural Resources Management Plan (see below)	Only Pre-historic sites CA-ORA -1043 (Cow Camp Road), -1048 (PA2), -1121 (PA3), -1122 (PA3), -1559 (PA2), -1560 (PA2), and -1565 (PA3) and historic sites CA-ORA-29 (PA2) still need to be addressed. Resource Organization Settlement Agreement eliminated development in areas which contain prehistoric sites CA-ORA-1125, -1137, 1144, -1185, -1449, -1556, and historic sites CA-ORA-30-176631.	Each Applicable PA
173	172 and 174-176 (EIR 589, MM 4.11-3) 571 (SC 4.11-1)	EIR 589	MM 4.11-3 (cont.)	Prior to issuance of grading permit in vicinity of identified resources; during grading activities	a. Relocation of grading boundaries/fuel modification zones to completely avoid disturbance to the site(s). Should the boundary relocation be infeasible, an archaeological monitor shall be present during grading and fuel modification brush clearance in the vicinity of archaeological resources. Fencing or stakes shall be erected outside of the sites to visually depict the areas to be avoided during construction.	Director, PDS in conjunction with the Manager of Harbors, Beaches & Parks HBP/Coastal and Historical Facilities Director, OC Planning	Verify archaeological sites have been avoided or the presence of a county certified archaeologist during grading and brush removal	Approved Planning Area 1 Archaeology report [Hyperlink #19] addresses prehistoric site CA-ORA-882. Approved Planning Area 8 Archaeology report [Hyperlink] addresses prehistoric sites CA-ORA-753 & 754 and historic sites 30-176633, -176634, and -176635. Prehistoric site CA-ORA-656 is not a development area, but rather a utility area (not applicable to Ranch Plan development).	Each Applicable PA
174	172-173 and 175-176 (EIR 589, MM 4.11-3) 571 (SC 4.11-1)	EIR 589	MM 4.11-3 (cont.)	Prior to issuance of grading permit in vicinity of identified resources	b. Prior to grading in the vicinity of archaeological resources (note: confidential archaeological mapping is on file at the County of Orange), Phase III data recovery (salvage excavations) shall be conducted for these archaeological sites or any other sites within the potential impact area of development that cannot be avoided. The Phase III work shall provide sufficient scientific information to fully mitigate the impacts of development on these sites and be performed in accordance with standards of the State Office of Historic Preservation.	Director, PDS in conjunction with the Manager of Harbors, Beaches & Parks HBP/Coastal and Historical Facilities Director, OC Planning	Conduct Phase III data recovery for archaeological sites		Each Applicable PA

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175	172-174 and 176 (EIR 589, MM 4.11-3) 571 (SC 4.11-1)	EIR 589	MM 4.11-3 (cont.)	During performance of grading activities	In accordance with California Health and Safety Code Section 7050.5, if human remains are found, no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains shall occur until the County Coroner has determined the appropriate treatment and disposition of the human remains. The County Coroner shall make such determination within two working days of notification of discovery. The County Coroner shall be notified within 24 hours of the discovery. If the County Coroner determines that the remains are or believed to be Native American, the County Coroner shall notify the Native American Heritage Commission in Sacramento within 24 hours.	Director, PDS in conjunction with the Manager of Harbors, Beaches & Parks HBP/Coastal and Historical Facilities Director, OC Planning	If human remains found, stop work and follow identified procedures		Each Applicable PA
176	172-175 (EIR 589, MM 4.11-3) 571 (SC 4.11-1)	EIR 589	MM 4.11-3 (cont.)	During performance of grading activities	In accordance with California Public Resources Code Section 5097.98, the Native American Heritage Commission must immediately notify those persons it believes to be the most likely descended from the deceased Native American. The descendants shall complete their inspection within 24 hours of notification. The designated Native American representative would then determine, in consultation with the property owner, the disposition of the human remains.	Director, PDS in conjunction with the Manager of Harbors, Beaches & Parks HBP/Coastal and Historical Facilities Director, OC Planning	If Native American remains found, stop work and follow identified procedures		Each Applicable PA
178	179-182 (EIR 589, MM 4.14-1)	EIR 589	MM 4.14-1	Prior to issuance of a GA grading permit	Prior to the issuance of a grading permit, the contractor shall develop an approved Health and Safety Contingency Plan (HSCP) in the event that unanticipated/ unknown environmental contaminants are encountered during construction. The plan shall be developed to protect workers, safeguard the environment, and meet the requirements of the California Code of Regulations (CCR), Title 8, General Industry Safety Orders—Control of Hazardous Substances. The HSCP should be prepared as a supplement to the Contractor's Site-Specific Health and Safety Plan, which should be prepared to meet the requirements of CCR Title 8, Construction Safety Orders. Specifically, the HSCP must:	Director, PDS (OCFA) Director, OC Planning (Health Care Agency and OCFA)	Preparation and approval of a Health and Safety Contingency Plan (with subsequent implementation)	PA1 approved Health and Safety Contingency Plan HSCP [Hyperlink #22]	Each PA
179	178 and 180-182 (EIR 589, MM 4.14-1)	EIR 589	MM 4.14-1 (cont.)	See above	1) Describe the methods, procedures, and processes necessary to identify, evaluate, control, or mitigate all safety and health hazards associated with any soil, groundwater and/or air contamination that may be encountered during field construction activities.	See above	See above	PA1 approved Health and Safety Contingency Plan HSCP [Hyperlink #22]	Each PA
180	178-179 and 181-182 (EIR 589, MM 4.14-1)	EIR 589	MM 4.14-1 (cont.)	See above	2) Apply to all site construction workers, on-site subcontractors, site visitors, and other authorized personnel who are involved in construction operations.	See above	See above	PA1 approved Health and Safety Contingency Plan HSCP [Hyperlink #22]	Each PA
181	178-180 and 182 (EIR 589, MM 4.14-1)	EIR 589	MM 4.14-1 (cont.)	See above	3) Be approved by the Manager of Subdivision and Grading Services (PDS) Manager OC Planned Communities in consultation with the Manager of Environmental Resources (PFRD) and/or their appointed consultant team.	See above	See above	PA1 approved Health and Safety Contingency Plan HSCP [Hyperlink #22]	Each PA

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182	178-181 (EIR 589, MM 4.14-1)	EIR 589	MM 4.14-1 (cont.)	See above	The HSCP will take effect only if materials affected by environmental contaminants are exposed during construction. This includes undocumented waste materials, contaminated soils, affected groundwater, and related substances that may be classified as hazardous or regulated materials, and/or materials that could endanger worker or public health. If affected materials are encountered, the HSCP will be implemented to reduce the potential exposure to the environment and workers at the site. All site workers will be required to perform work in a prescribed manner to reduce the potential that they will endanger themselves, others, or the general public.	See above	See above	PA1 approved Health and Safety Contingency Plan HSCP [Hyperlink #22]	Each PA
183		EIR 589	MM 4.14-2	Prior to issuance of GA grading permits	During construction, if environmentally affected soil, groundwater, or other materials are encountered on-site, the project engineer shall be quickly mobilized to evaluate, assess the extent of, and mitigate the affected materials. The contractor or owner's consultant shall be responsible for implementing all applicable sampling and monitoring of the project. At present, applicable sampling and monitoring activities are expected to include air monitoring (both for personal protection and SCAQMD Rule 1166 compliance), collecting soil and groundwater samples for analysis, and documenting mitigation activities. Specific applicable sampling and monitoring requirements will vary, depending upon the nature, concentration, and extent of affected materials encountered.	Director, PDS Director, OC Planning	Show condition wording as notes on approved GA grading plans	PA1 approved Health and Safety Contingency Plan HSCP [Hyperlink #22]	Each PA
196	197 (EIR 589, MM 4.14-13)	EIR 589	MM 4.14-13	Prior to issuance of grading permits	Prior to issuance of grading permits within each Planning Area, the Environmental Site Assessments (ESAs) will be updated for that grading permit area. If the Phase I Update identifies new actual or potential impacts, a Phase II ESA will be completed as necessary for the grading area by the landowner or subsequent project applicant. During the Phase II ESA, samples from potential areas of concern will be collected and submitted for laboratory analysis to confirm the nature and extent of potential impacts. If hazardous materials are identified during the site assessments, the appropriate response/remedial measures will be implemented including directives of the OCHCA and/or Regional Water Quality Control Board (RWQCB), as appropriate.	Director, PDS Director, OC Planning (Orange County Health Care Agency)	Updated Environmental Site Assessment and, if required, prepare Phase II (with subsequent remediation, if necessary)		Each PA
197	196 (EIR 589, MM 4.14-13)	EIR 589	MM 4.14-13 (cont.)	During construction	If soil is encountered during site development that is suspected of being impacted by hazardous materials, work will be halted and site conditions will be evaluated by a qualified environmental professional. If requested by the qualified environmental professional, the results of the evaluation will be submitted to OCHCA and/or RWQCB, and the appropriate remedial measures will be implemented, as directed by OCHCA, RWQCB, or other applicable oversight agency, until all specified requirements of the oversight agencies are satisfied and a no-further-action status is attained.	Director, PDS Director, OC Planning (Orange County Health Care Agency)	Stop work upon encountering condition; prepare evaluation and submit to OCHCA and/or RWQCB (as directed)		Each PA
521		EIR 589	SC 4.4-1	Prior to the issuance of a grading permit	Prior to the issuance of a grading permit, the applicant shall submit a geotechnical report to the Manager of Subdivision Manager OC Planned Communities and Grading, for approval. The report shall meet the requirements outlined in the County of Orange Grading Code and Manual. (County Standard Condition G01)	County of Orange Director of Planning & Development Services, Director, OC Planning	Submittal of satisfactory geotechnical report		Each PA

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522		EIR 589	SC 4.4-2	Prior to the issuance of a grading permit	Prior to the issuance of any grading permits, the Manager of Subdivision and Grading shall review the grading plan for conformance with the grading shown on the approved tentative map. If the applicant submits a grading plan which the Manager of Subdivision and Grading Manager OC Planned Communities determines to show a significant deviation from the grading shown on the approved tentative map, specifically with regard to slope heights, slope ratios, pad elevations or configurations, the Subdivision Committee shall review the plan for a finding of substantial conformance. (County Standard Condition G02)	County of Orange Director of Planning & Development Services, Director, OC Planning	Approval of grading plan demonstrating submittal conformance with the grading shown on the approved TTM		Each PA
523		EIR 589	SC 4.4-2 (cont.)	Prior to the issuance of a grading permit	If the Subdivision Committee fails to make such a finding, the applicant shall process a revised tentative map; or, if a final map has been recorded, the applicant shall process a new tentative map or a site development permit application per Orange County Zoning Code Sections 7-9-139 and 7-9-150. Additionally, the applicant shall process a new environmental assessment for determination by the decision making entity. (County Standard Condition G02)	Subdivision Committee review for substantial conformance, if required	Process new subdivision, if necessary		Each PA
524		EIR 589	SC 4.4-3	Prior to the recordation of a subdivision map or prior to issuance of a Grading Permit, whichever comes first	Prior to the recordation of a subdivision map or prior to the issuance of any grading permit, whichever comes first, and if determined necessary by the County of Orange Manager, Subdivision and Grading, the applicant shall record a letter of consent from the affected property owners permitting off-site grading, cross lot drainage, drainage diversions and/or unnatural concentrations. The applicant shall obtain approval of the form of the letter of consent from the Manager, Subdivision and Grading Services before recordation of the letter. (County Standard Condition G04)	County of Orange Director of Planning & Development Services, Director, OC Planning	Recordation of a letter of consent from affected property owners if determined necessary by County of Orange Director of Planning & Development Services		Each PA
527		EIR 589	SC 4.5-1	Prior to recordation of a Subdivision Map or Issuance of a Grading Permit, whichever comes first	Prior to the recordation of a subdivision map (except maps for financing and conveyance purposes only) or prior to the issuance of any grading permits, whichever comes first, the following drainage studies shall be submitted to and approved by the Manager, Subdivision and Grading: (County Standard Condition D01a)	County of Orange Director of Planning & Development Services, Director, OC Planning	Submittal of satisfactory of drainage study		Each PA
527.1		EIR 589	SC 4.5-1 (cont.)	See above	A. A drainage study of the project including diversions, off-site areas that drain onto and/or through the project, and justification of any diversions; and B. When applicable, a drainage study evidencing that proposed drainage patterns will not overload existing storm drains; and C. Detailed drainage studies indicating how the project grading, in conjunction with the drainage conveyance systems including applicable swales, channels, street flows, catch basins, storm drains, and flood water retarding, will allow building pads to be safe from inundation from rainfall runoff which may be expected from all storms up to and including the theoretical 100-year flood. (County Standard Condition D01a)	See above	See above		Each PA
528		EIR 589	SC 4.5-2	Prior to recordation of a Subdivision Map or Issuance of a Grading Permit, whichever comes first	A. Prior to the recordation of a subdivision map (except maps for financing and conveyance purposes only) or prior to the issuance of any grading permits, whichever comes first, the applicant shall in a manner meeting the approval of the Manager, Subdivision and Grading: (County Standard Condition D02a)	County of Orange Director of Planning & Development Services, Director, OC Planning	Approval of storm drain drainage plans and offer(s) of dedication, if necessary		Each PA

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528.1		EIR 589	SC 4.5-2 (cont.)	See above	1) Design provisions for surface drainage; 2) Design all necessary storm drain facilities extending to a satisfactory point of disposal for the proper control and disposal of storm runoff; and 3) Dedicate the associated easements to the County of Orange, if determined necessary. (County Standard Condition D02a)	See above	See above		Each PA
530		EIR 589	SC 4.5-3	Prior to the issuance of Grading Permits	A. Prior to the issuance of any grading permits, the applicant shall in a manner meeting the approval of the Manager, Subdivision and Grading: (County Standard Condition D02b)	County of Orange Director of Planning & Development Services, Director, OC Planning	Submittal of satisfactory drainage plans		Each PA
530.1		EIR 589	SC 4.5-3 (cont.)	See above	1) Design provisions for surface drainage; and 2) Design all necessary storm drain facilities extending to a satisfactory point of disposal for the proper control and disposal of storm runoff; and 3) Dedicate the associated easements to the County of Orange, if determined necessary. (County Standard Condition D02b)	See above	See above		Each PA
531		EIR 589	SC 4.5-3 (cont.)	Prior to the issuance of Certificates of Use and Occupancy	B. Prior to the issuance of any certificates of use and occupancy, said improvements shall be constructed in a manner meeting the approval of the Manager, Construction. (County Standard Condition D02b)	County of Orange Manager of Inspection, Manager, OC Inspection Division	Verification of installation of drainage improvement		Each PA
537		EIR 589	SC 4.5-8	Prior to the recordation of a Subdivision Map or the issuance of any Grading or Building Permit, whichever comes first	Prior to the recordation of any final subdivision map (except those maps for financing or conveyance purposes only) or the issuance of any grading or building permit (whichever comes first), the applicant shall submit for review and approval by the Manager, Inspection Services Division, a Water Quality Management Plan (WQMP) specifically identifying Best Management Practices (BMPs) that will be used onsite to control predictable pollutant runoff. This WQMP shall identify, at a minimum, the routine structural and non-structural measures specified in the current Drainage Area Management Plan (DAMP). The WQMP may include one or more of the following: (County Standard Condition WQ01)	County of Orange Director of Planning & Development Services, Director, OC Planning	Submittal of satisfactory Water Quality Management Plan		Each PA
537.1		EIR 589	SC 4.5-8 (cont.)	See above	• Discuss regional water quality and/or watershed programs (if available for the project); • Address Site Design BMPs (as applicable) such as minimizing impervious areas, maximizing permeability, minimizing directly connected impervious areas, creating reduced or "zero discharge" areas, and conserving natural areas; • Include the applicable Routine Source Control BMPs as defined in the DAMP. (County Standard Condition WQ01)	See above	See above		Each PA
538		EIR 589	SC 4.5-8 (cont.)	See above	Demonstrate how surface runoff and subsurface drainage shall be managed and directed to the nearest acceptable drainage facility (as applicable), via sump pumps if necessary. (Standard Condition of Approval, WQ03)	See above	See above		Each PA

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540		EIR 589	SC 4.5-10	Prior to the issuance of any Grading or Building Permits	Prior to the issuance of any grading or building permits, the applicant shall demonstrate compliance under California's General Permit for Stormwater Discharges Associated with Construction Activity by providing a copy of the Notice of Intent (NOI) submitted to the State Water Resources Control Board and a copy of the subsequent notification of the issuance of a Waste Discharge Identification (WDID) Number or other proof of filing in a manner meeting the satisfaction of the Manager, Building Permit Services. Projects subject to this requirement shall prepare and implement a Stormwater Pollution Prevention Plan (SWPPP). A copy of the current SWPPP shall be kept at the project site and be available for County review on request. (County Standard Condition WQ04)	County of Orange Manager of Building Inspection Manager, OC Inspection Division (Regional Water Quality Control Board)	Provision of Notice of Intent and verification of a copy of the Storm Water Pollution Prevention Plan (SWPPP); at the project site		Each PA
541		EIR 589	SC 4.5-11	Prior to the issuance of any Grading or Building Permits	Prior to the issuance of any grading or building permit, the applicant shall submit a Erosion and Sediment Control Plan (ESCP) in a manner meeting approval of the Manager, Building Permit Services, to demonstrate compliance with local and state water quality regulations for grading and construction activities. The ESCP shall identify how all construction materials, wastes, grading or demolition debris, and stockpiles of soil, aggregates, soil amendments, etc. shall be properly covered, stored, and secured to prevent transport into local drainages or coastal waters by wind, rain, tracking, tidal erosion or dispersion. The ESCP shall also describe how the applicant will ensure that all BMPs will be maintained during construction of any future public right-of-ways. A copy of the current ESCP shall be kept at the project site and be available for County review on request. (County Standard Condition WQ05)	County of Orange Manager of Building Permits, Manager, Permit Services (Building Plan Check)	Submittal of satisfactory Erosion and Sediment Control Plan (ESCP); verification of copy of ESCP at project site		Each PA
542		EIR 589	SC 4.5-12	Prior to recordation of a subdivision map (except for financing purposes) or issuance of any grading permit or building permit, whichever comes first	Prior to the recordation of a subdivision map (except maps for financing and conveyance purposes only) or the issuance of any grading or building permits, whichever occurs first, within the FP-2 Zoning District, the applicant shall submit all of the necessary documents to the Federal Emergency Management Agency (FEMA) to receive a Conditional Letter of Map Revision (CLOMR) of the Flood Insurance Rate Map (FIRM). Concurrently, the applicant shall submit to the Manager, Subdivision and Grading, three (3) sets of the calculations and plans showing the method of satisfying FEMA and FP-2 Zoning District Regulations, all in a manner meeting the approval of the Manager, Subdivision and Grading. (County Standard Condition D08A)	County of Orange Director of Planning & Development Services, Director, OC Planning	Submittal of a CLOMR and three sets of calculations	Cleared per transmittal of CLOMR to FEMA on January 29th, 2007 (Determine whether approval is for PA1 only, or for entire Ranch Plan PC)	Each PA
546		EIR 589	SC 4.6-4	Prior to the recordation of a Subdivision Map	Prior to the recordation of a subdivision map, the subdivider shall design and construct (or provide evidence of financial security, such as bonding) the following improvements in accordance with plans and specifications meeting the approval of the Manager, Subdivision and Grading: (County Standard Condition T04)	County of Orange Director of Planning & Development Services, Director, OC Planning	Submittal of satisfactory improvements and utility plans with verification of subsequent construction/installation of improvements	If applicable, bonding may substitute for construction of each of the required improvements.	Each PA
546.1		EIR 589	SC 4.6-4 (cont.)	See above	A. Streets, bus stops, on-road bicycle trails, street names, signs, striping and stenciling. (County Standard Condition T04)	See above	See above	See above	Each PA
546.2		EIR 589	SC 4.6-4 (cont.)	See above	B. The water distribution system and appurtenances shall also conform to the applicable laws and adopted regulations enforced by the County Fire Chief. (County Standard Condition T04)	See above	See above	See above	Each PA

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546.3		EIR 589	SC 4.6-4 (cont.)	See above	C. Underground utilities (including gas, cable, electrical and telephone), streetlights, and mailboxes. (County Standard Condition T04)	See above	See above	See above	Each PA
548		EIR 589	SC 4.6-6	Prior to the issuance of Grading Permits	Prior to the issuance of any grading permits, the applicant shall provide adequate sight distance per Standard Plan 1117 at all street intersections, in a manner meeting the approval of the Manager, Subdivision and Grading. The applicant shall make all necessary revisions to the plan to meet the sight distance requirement such as removing slopes or other encroachments from the limited use area in a manner meeting the approval of the Manager, Subdivision and Grading Services. (Standard Condition of Approval T07)	County of Orange Director of Planning & Development Services, Director, OC Planning	Approved grading plans verifying adequate sight distance		Each PA
551		EIR 589	SC 4.6-9	Prior to the recordation of a Subdivision Map	Prior to the recordation of a subdivision map, the subdivider shall dedicate a signal maintenance easement to the County of Orange at the project site access, in a manner meeting the approval of the Manager, Subdivision and Grading. (County Standard Condition T13b)	County of Orange Director of Planning & Development Services, Director, OC Planning	Submittal of offer(s) of dedication for signal maintenance easement(s)		Each PA
552		EIR 589	SC 4.6-10	Prior to the recordation of a Subdivision Map	Prior to the recordation of a subdivision map, the subdivider shall design and construct/provide a cash deposit of ___ % of the cost of / /enter into an agreement with the County of Orange, accompanied by financial security, for the cost of ___ % of) a traffic signal at the intersection of ___ and ___, in a manner meeting the approval of the Manager, Subdivision and Grading. (County Standard Condition T14b)	County of Orange Director of Planning & Development Services, Director, OC Planning	Verification of approved street improvement plans with subsequent installation of improvements or enter into agreement with County for construction (with appropriate financial security)	If applicable, bonding may substitute for construction of each of the required improvements.	Each PA
555		EIR 589	SC 4.7-1	Prior to the issuance of a grading permit	All construction contractors shall comply with South Coast Air Quality Management District (SCAQMD) regulations, including Rule 403, Fugitive Dust, and Rule 402, Nuisance. All grading (regardless of acreage) shall apply best available control measures for fugitive dust in accordance with Rule 403. To ensure that the project is in full compliance with applicable SCAQMD dust regulations and that there is no nuisance impact off the site, the contractor would implement each of the following:	County of Orange Director of Planning & Development Services, Director, OC Planning	Verification of compliance with Rule 403 and Rule 402		Each PA
555.1		EIR 589	SC 4.7-1 (cont.)	See above	a. Moisten soil not more than 15 minutes prior to moving soil or conduct whatever watering is necessary to prevent visible dust emissions from traveling more than 100 feet in any direction.	See above	See above		Each PA
555.2		EIR 589	SC 4.7-1 (cont.)	See above	b. Apply chemical stabilizers to disturbed surface areas (i.e., completed grading areas) within five days of completing grading or apply dust suppressants or vegetation sufficient to maintain a stabilized surface.	See above	See above		Each PA
555.3		EIR 589	SC 4.7-1 (cont.)	See above	c. Water excavated soil piles hourly or cover with temporary coverings.	See above	See above		Each PA
555.4		EIR 589	SC 4.7-1 (cont.)	See above	d. Water exposed surfaces at least twice a day under calm conditions. Water as often as needed on windy days when winds are less than 25 miles per day or during very dry weather in order to maintain a surface crust and prevent the release of visible emissions from the construction site.	See above	See above		Each PA
555.5		EIR 589	SC 4.7-1 (cont.)	See above	e. Wash mud-covered tires and under-carriages of trucks leaving construction sites.	See above	See above		Each PA

Item No.	Cross Reference Column	Source	Condition, Mitigation, Public Benefit or Entitlement Provision	Timing	Requirements or Entitlement Provisions	Reviewing / Approving Authority (Advisory Agency in Parentheses)	Form of Compliance	Guidance for Compliance	Area Application
555.5		EIR 589	SC 4.7-1 (cont.)	See above	f. Provide for street sweeping, as needed, on adjacent roadways to remove dirt dropped by construction vehicles or mud, which would otherwise be carried off by trucks departing from project sites.	See above	See above		Each PA
556		EIR 589	SC 4.7-2	Prior to issuance of a grading permit	The applicant shall comply with the following measures, as feasible, to reduce NO _x and ROC from heavy equipment.	County of Orange Director of Planning & Development Services, Director, OC Planning	Place as general notes on approved grading plan		Each PA
556.1		EIR 589	SC 4.7-2 (cont.)	See above	a. Turn equipment off when not in use for more than five minutes.	See above	See above		Each PA
556.2		EIR 589	SC 4.7-2 (cont.)	See above	b. Maintain equipment engines in good condition and in proper tune as per manufacturers' specifications.	See above	See above		Each PA
556.3		EIR 589	SC 4.7-2 (cont.)	See above	c. Lengthen the construction period during smog season (May through October) to minimize the number of vehicles and equipment operating at the same time.	See above	See above		Each PA
557		EIR 589	SC 4.8-1	Prior to the issuance of grading permits	During construction, the project applicant shall ensure that all noise generating activities be limited to the hours of 7 a.m. to 8 p.m. on weekdays and Saturdays. No noise generating activities shall occur on Sundays and holidays in accordance with the County of Orange Noise Ordinance.	County of Orange Director of Planning & Development Services, Director, OC Planning	General note on approved grading plan		Each PA
558		EIR 589	SC 4.8-2	Prior to the issuance of grading permits	A. Prior to the issuance of any grading permits, the project proponent shall produce evidence acceptable to the Manager, Building Permits Services, that: (County Standard Condition N10)	County of Orange Director of Planning & Development Services, Director, OC Planning	General note on approved grading plan		Each PA
558.1		EIR 589	SC 4.8-2 (cont.)	See above	(1) All construction vehicles or equipment, fixed or mobile, operated within 1,000' of a dwelling shall be equipped with properly operating and maintained mufflers. (County Standard Condition N10)	See above	See above		Each PA
558.2		EIR 589	SC 4.8-2 (cont.)	See above	(2) All operations shall comply with Orange County Codified Ordinance Division 6 (Noise Control). (County Standard Condition N10)	See above	See above		Each PA
558.3		EIR 589	SC 4.8-2 (cont.)	See above	(3) Stockpiling and/or vehicle staging areas shall be located as far as practicable from dwellings. (County Standard Condition N10)	See above	See above		Each PA
558.4		EIR 589	SC 4.8-2 (cont.)	See above	B. Notations in the above format, appropriately numbered and included with other notations on the front sheet of the project's permitted grading plans, will be considered as adequate evidence of compliance with this condition. (County Standard Condition N10)	See above	See above		Each PA

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571	172-176 (MM 4.11-3)	EIR 589	SC 4.11-1	Prior to the issuance of any grading permits	Prior to the issuance of any grading permit, the applicant shall provide written evidence to the County of Orange Manager, Subdivision and Grading, that applicant has retained a County-certified archaeologist to observe grading activities and salvage and catalogue archaeological resources as necessary. The archaeologist shall be present at the pre-grade conference; shall establish procedures for archaeological resource surveillance; and shall establish, in cooperation with the applicant, procedures for temporarily halting or redirecting work to permit the sampling, identification, and evaluation of the artifacts as appropriate. If the archaeological resources are found to be significant, the archaeological observer shall determine appropriate actions, in cooperation with the project applicant, for exploration and/or salvage. (County Standard Condition A04)	County of Orange Manager, Harbors, Beaches & Parks HBP/Coastal and Historical Facilities OC Public Works/OC Planning*	Written evidence that a County-certified archaeologist has been retained to observe grading and salvage, and to catalogue archaeological resources	If prior to rough grade (GA permit) applicant has obtained archaeological clearance, no additional review or clearance required if precise grading (GB) permit is in compliance with GA permit.	Each PA
572		EIR 589	SC 4.11-1 (cont.)	Prior to the release of the grading bond	Prior to the release of the grading bond, the applicant shall obtain approval of the archaeologist's follow-up report from the Manager, Harbors, Beaches & Parks HBP/Coastal and Historical Facilities. The report shall include the period of inspection, an analysis of any artifacts found and the present repository of the artifacts. Applicant shall prepare excavated material to the point of identification. Applicant shall offer excavated finds for curatorial purposes to the County of Orange, or its designee, on a first refusal basis. (County Standard Condition A04)	County of Orange Manager, Harbors, Beaches & Parks HBP/Coastal and Historical Facilities OC Public Works/OC Planning*	Approval of the archaeologist's follow-up report		Each PA
573		EIR 589	SC 4.11-1 (cont.)	Prior to the release of the grading bond	These actions, as well as final mitigation and disposition of the resources shall be subject to the approval of the Manager, HBP/Coastal and Historical Facilities. Applicant shall pay curatorial fees if an applicable fee program has been adopted by the Board of Supervisor, and such fee program is in effect at the time of presentation of the materials to the County of Orange or its designee, all in a manner meeting the approval of the Manager, HBP/Coastal and Historical Facilities. (County Standard Condition A04)	County of Orange Manager, Harbors, Beaches & Parks HBP/Coastal and Historical Facilities OC Public Works/OC Planning*	Verification of payment of curatorial fee if an applicable fee program has been adopted by the Board of Supervisor at the time of presentation		Each PA
574		EIR 589	SC 4.11-2	Prior to the issuance of any grading permits	Prior to the issuance of any grading permit, the project contractor shall provide written evidence to the Manager, Subdivision and Grading, that contractor has retained a County certified paleontologist to observe grading activities and salvage and catalogue fossils as necessary. The paleontologist shall be present at the pre-grade conference, shall establish procedures for paleontological resources surveillance, and shall establish, in cooperation with the contractor, procedures for temporarily halting or redirecting work to permit sampling, identification, and evaluation of the fossils. If the paleontological resources are found to be significant, the paleontologist shall determine appropriate actions, in cooperation with the contractor, which ensure proper exploration and/or salvage. (County Standard Condition A07)	County of Orange Manager, Harbors, Beaches & Parks HBP/Coastal and Historical Facilities OC Public Works/OC Planning*	Written evidence that a County-certified archaeologist has been retained to observe grading and salvage, and to catalogue fossils as necessary		Each PA

Item No.	Cross Reference Column	Source	Condition, Mitigation, Public Benefit or Entitlement Provision	Timing	Requirements or Entitlement Provisions	Reviewing / Approving Authority (Advisory Agency in Parentheses)	Form of Compliance	Guidance for Compliance	Area Application
575		EIR 589	SC 4.11-2 (cont.)	Prior to the release of the grading bond	Prior to the release of any grading bond, the contractor shall submit the paleontologist's follow up report for approval by the County Manager, HBP/Coastal and Historical Facilities. The report shall include the period of inspection, a catalogue and analysis of the fossils found, and the present repository of the fossils. The contractor shall prepare excavated material to the point of identification. The contractor shall offer excavated finds for curatorial purposes to the County of Orange, or its designee, on a first-refusal basis. (County Standard Condition A07)	County of Orange Manager, Harbors, Beaches & Parks HBP/Coastal and Historical Facilities OC Public Works/OC Planning*	Approval of the paleontologist's follow-up report		Each PA
576		EIR 589	SC 4.11-2 (cont.)	Prior to the release of the grading bond	These actions, as well as final mitigation and disposition of the resources, shall be subject to approval by the HBP/Coastal and Historical Facilities. The contractor shall pay curatorial fees if an applicable fee program has been adopted by the Board of Supervisors, and such fee program is in effect at the time of presentation of the materials to the County of Orange or its designee, all in a manner meeting the approval of the County Manager, HBP/Coastal and Historical Facilities. (County Standard Condition A07)	County of Orange Manager, Harbors, Beaches & Parks HBP/Coastal and Historical Facilities OC Public Works/OC Planning*	Verification of payment of curatorial fee if an applicable fee program has been adopted by the Board of Supervisor at the time of presentation		Each PA
621		Fire Prot. Prog.	Cond. 6	Prior to approval of any GA "Mass Grading Permit", operations that include generators and fuel tanks (up to 10,000 gallons)	Prior to approval of any GA "Mass Grading Permit", operations that include generators and fuel tanks (up to 10,000 gallons), shall be included as part of the grading plan notes. The applicant commits to the following (a-d) prior to bringing fuel storage or deliver systems within the grading permit area:	Director, PDS, Director, OC Planning	Notes on grading plan		
622		Fire Prot. Prog.	Cond. 6 (cont.)	See above	a) All Weather Surface access, a minimum of 16-feet wide, to within 300 feet of any fuel tank and/or generator.	Director, PDS, Director, OC Planning	Notes on grading plan		
623		Fire Prot. Prog.	Cond. 6 (cont.)	See above	b) No combustible vegetation or combustible structures within 500 feet of any fuel tank and/or generator.	Director, PDS, Director, OC Planning	Notes on grading plan		
624		Fire Prot. Prog.	Cond. 6 (cont.)	See above	c) Only Class II or III combustible liquids are stored or dispensed.	Director, PDS, Director, OC Planning	Notes on grading plan		
625		Fire Prot. Prog.	Cond. 6 (cont.)	See above	d) Prior to actual installation of tanks, RMV agrees to process the required OCFA plan approvals.	Director, PDS, Director, OC Planning	Notes on grading plan		
664		Southern Subregion HCP (SSHCP)	Bio-1	Prior to the issuance of any grading permits	Biological resources outside of the Proposed Project impact area shall be protected during construction. To ensure this protection, the Project Applicant shall prepare and implement a Biological Resources Construction Plan (BRCP) that provides for the protection of the resource and established the monitoring requirements. The BRCP will contain at minimum the following:	Director, OC Planning	Preparation and approval of a Biological Resources Construction Plan (BRCP)		
665		Southern Subregion HCP (SSHCP)	Bio-1 (cont)	Prior to the issuance of any grading permits	• Specific measures for protection of special-status wildlife and plant species during construction.	Director, OC Planning	Preparation and approval of a Biological Resources Construction Plan (BRCP)		
666		Southern Subregion HCP (SSHCP)	Bio-1 (cont)	Prior to the issuance of any grading permits	• Precise identification and quantification of vegetation communities to be removed.	Director, OC Planning	Preparation and approval of a Biological Resources Construction Plan (BRCP)		
667		Southern Subregion HCP (SSHCP)	Bio-1 (cont)	Prior to the issuance of any grading permits	• Design of protective fencing around Conserved Vegetation Communities and the construction staging areas.	Director, OC Planning	Preparation and approval of a Biological Resources Construction Plan (BRCP)		

Item No.	Cross Reference Column	Source	Condition, Mitigation, Public Benefit or Entitlement Provision	Timing	Requirements or Entitlement Provisions	Reviewing / Approving Authority (Advisory Agency in Parentheses)	Form of Compliance	Guidance for Compliance	Area Application
668		Southern Subregion HCP (SSHCP)	Bio-1 (cont)	Prior to the issuance of any grading permits	• Specific construction monitoring programs for special-status species required by the Wildlife Agencies that may occur in the Project Area, including, but not limited to, California gnatcatcher and cactus wren.	Director, OC Planning	Preparation and approval of a Biological Resources Construction Plan (BRCP)		
669		Southern Subregion HCP (SSHCP)	Bio-1 (cont)	Prior to the issuance of any grading permits	• Specific measures required by the Wildlife Agencies for protection of sensitive vegetation communities, including, but not limited to, erosion and siltation control measures, protective fencing guidelines, dust control measures, grading techniques, construction area limits, and biological monitoring requirements.	Director, OC Planning	Preparation and approval of a Biological Resources Construction Plan (BRCP)		
670		Southern Subregion HCP (SSHCP) Appendix U	Bio-2		All temporarily impacted upland areas shall be restored to pre-construction elevations within one month following completion of work. All temporarily impacted upland areas will be restored to equivalent or better conditions compared to the existing condition at the time of impact. Revegetation should commence within three months after restoration of pre-construction elevations and be completed within one growing season. If re-vegetation cannot start due to seasonal conflicts (e.g., impacts occurring in late fall/early winter should not be re-vegetated until seasonal conditions are conducive to re-vegetation), exposed earth surfaces should be stabilized immediately with jute-netting, straw matting, or other applicable best management practice to minimize any erosion from wind or water.	Director, OC Planning			
671		"F" Street Addendum	Bio-3		The loss of 87.8 Habitat Reserve acres and their associated value will be addressed through the following:	Director, OC Planning			
672		"F" Street Addendum	Bio-3 (cont)		• RMV will restore 118 acres (F Street slopes in open space) of temporary impacts. USFWS will give 1/4 credit for each acre restored (29.5 acres).	Director, OC Planning			
673		"F" Street Addendum	Bio-3 (cont)		• RMV will forego the opportunity to develop the remainder of PA 2-North outside of the footprint of the proposed F Street Project. This is estimated to be approximately 23.5 acres. RMV will record an irrevocable covenant over the remainder of PA 2-North upon initiation of clearing and grubbing for F Street in open space.	Director, OC Planning			
674		"F" Street Addendum	Bio-3 (cont)		• RMV will reduce the development acreage for PA 4 by 35 acres resulting in a development footprint of 515 acres. The exact location of PA 4 development will be determined in the future but will be located within the impact analysis area set forth in the SSHCP. RMV will record an irrevocable covenant over the 35 acres in PA 4 upon initiation of clearing and grubbing of PA 4. Management and monitoring of this open space would be initiated upon recordation.	Director, OC Planning			
675		"F" Street Addendum	Bio-3 (cont)		• RMV will record an irrevocable covenant over the open space associated with PA 2 North upon initiation of clearing and grubbing for F Street in open space. PA 2-North open space is approximately 207 acres. Vegetation communities and covered wildlife species present in this open space are set forth in Table 8 and 9 below.	Director, OC Planning			

Item No.	Cross Reference Column	Source	Condition, Mitigation, Public Benefit or Entitlement Provision	Timing	Requirements or Entitlement Provisions	Reviewing / Approving Authority (Advisory Agency in Parentheses)	Form of Compliance	Guidance for Compliance	Area Application																						
676		"F" Street Addendum	Bio-3 (cont)		<p align="center">Table 8 Vegetation Communities and Land Covers in Planning Subarea 2.5 Open Space</p> <table border="1"> <thead> <tr> <th>Vegetation/Land Cover Type</th> <th>Acres</th> </tr> </thead> <tbody> <tr> <td>coastal sage scrub</td> <td>90.9</td> </tr> <tr> <td>chaparral</td> <td>10.1</td> </tr> <tr> <td>grassland</td> <td>1.2</td> </tr> <tr> <td>riparian</td> <td>3.0</td> </tr> <tr> <td>alkali meadow</td> <td>1.9</td> </tr> <tr> <td>woodland</td> <td>10.9</td> </tr> <tr> <td>agriculture</td> <td>68.7</td> </tr> <tr> <td>disturbed</td> <td>0.3</td> </tr> <tr> <td>developed</td> <td>20.1</td> </tr> <tr> <td>Total</td> <td>207.1</td> </tr> </tbody> </table> <p>Source: Dudek 2014</p>	Vegetation/Land Cover Type	Acres	coastal sage scrub	90.9	chaparral	10.1	grassland	1.2	riparian	3.0	alkali meadow	1.9	woodland	10.9	agriculture	68.7	disturbed	0.3	developed	20.1	Total	207.1	Director, OC Planning			
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677		"F" Street Addendum	Bio-3 (cont)		<p align="center">Table 9 Special-Status Wildlife Species in Planning Subarea 2.5 Open Space</p> <table border="1"> <thead> <tr> <th>Wildlife Species</th> <th>Locations</th> </tr> </thead> <tbody> <tr> <td>California gnatcatcher</td> <td>10</td> </tr> <tr> <td>cactus wren</td> <td>17</td> </tr> <tr> <td>least Bell's vireo</td> <td>1</td> </tr> <tr> <td>grasshopper sparrow</td> <td>8</td> </tr> <tr> <td>orangethroat whiptail</td> <td>19</td> </tr> <tr> <td>coast horned lizard</td> <td>4</td> </tr> </tbody> </table> <p>Source: Dudek 2014</p>	Wildlife Species	Locations	California gnatcatcher	10	cactus wren	17	least Bell's vireo	1	grasshopper sparrow	8	orangethroat whiptail	19	coast horned lizard	4	Director, OC Planning											
Wildlife Species	Locations																														
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coast horned lizard	4																														
678		"F" Street Addendum	Bio-4		<p>RMV will attempt to reduce impacts to many-stemmed dudleya through the final design of F Street. Any populations or individuals that are not avoided through final design will be addressed through implementation of SSHCP Appendix I: Translocation, Propagation and Management Plan for Special Status Plants. Impacts to southern tarplant and intermediate mariposa lily will also be addressed by implementation of SSHCP Appendix I. Implementation of Appendix I will address the following elements:</p>	Director, OC Planning	Preparation and approval of a Biological Resources Construction Plan (BRCP)																								
679		"F" Street Addendum	Bio-4 (cont)		<ul style="list-style-type: none"> Seed collection 	Director, OC Planning	Preparation and approval of a Biological Resources Construction Plan (BRCP)																								

Item No.	Cross Reference Column	Source	Condition, Mitigation, Public Benefit or Entitlement Provision	Timing	Requirements or Entitlement Provisions	Reviewing / Approving Authority (Advisory Agency in Parentheses)	Form of Compliance	Guidance for Compliance	Area Application
680		"F" Street Addendum	Bio-4 (cont)		<ul style="list-style-type: none"> • Selection of receptor sites 	Director, OC Planning	Preparation and approval of a Biological Resources Construction Plan (BRCP)		
681		"F" Street Addendum	Bio-4 (cont)		<ul style="list-style-type: none"> • Greenhouse propagation 	Director, OC Planning	Preparation and approval of a Biological Resources Construction Plan (BRCP)		
682		"F" Street Addendum	Bio-4 (cont)		<ul style="list-style-type: none"> • Site preparation 	Director, OC Planning	Preparation and approval of a Biological Resources Construction Plan (BRCP)		
683		"F" Street Addendum	Bio-4 (cont)		<ul style="list-style-type: none"> • Translocation of natural populations 	Director, OC Planning	Preparation and approval of a Biological Resources Construction Plan (BRCP)		
684		"F" Street Addendum	Bio-4 (cont)		<ul style="list-style-type: none"> • Introduction of cultivated plants 	Director, OC Planning	Preparation and approval of a Biological Resources Construction Plan (BRCP)		
685		"F" Street Addendum	Bio-4 (cont)		<ul style="list-style-type: none"> • Direct seeding at translocation site 	Director, OC Planning	Preparation and approval of a Biological Resources Construction Plan (BRCP)		
686		"F" Street Addendum	Bio-4 (cont)		<ul style="list-style-type: none"> • Maintenance and Monitoring 	Director, OC Planning	Preparation and approval of a Biological Resources Construction Plan (BRCP)		

APPENDIX B
BIOLOGICAL SPECIAL STATUS SPECIES
TABLES B-1 AND B-2

**TABLE B-1
SPECIAL-STATUS WILDLIFE SPECIES KNOWN OR WITH POTENTIAL TO OCCUR
IN THE "F" STREET PROJECT VICINITY**

Scientific Name ^{1,2}	Common Name	Status Federal/State	Primary Habitat Associations	Occurrence in Rancho Mission Viejo Study Area	Occurrence in F Street Project Area
<i>Invertebrates</i>					
<i>Branchinecta lynchi</i>	Vernal pool fairy shrimp	FT/None	Vernal pools	Species does not occur within the study area.	No potential to occur due to lack of suitable vernal pool habitat.
<i>Branchinecta sandiagonensis</i>	San Diego fairy shrimp	FE/None	Vernal pools	Occurs in two general locations in the study area, including in two pools on Chiquita Ridge and in three pools located along Radio Tower Road south of Ortega Highway.	No potential to occur due to lack of suitable vernal pool habitat.
<i>Euphydryas editha quino</i>	Quino checkerspot butterfly	FE/None	Sparsely vegetated hilltops, ridgelines, occasionally rocky outcrops; host plant <i>Plantago erecta</i> and nectar plants must be present.	Species does not occur within subregion or expected within the study area.	No potential to occur.
<i>Euphyes vestris harbisoni</i>	Harbison's dun skipper	None/SAL	Restricted to springs and seeps within riparian, oak woodlands, and chaparral habitats supporting host plant <i>Carex spissa</i> .	Although no data points exist for this species, it potentially occurs within the study area due to the presence of <i>Carex spissa</i> .	Low potential to occur due to a general lack of suitable habitat. Host plant has not been detected in Project Area.
<i>Streptocephalus woottoni</i>	Riverside fairy shrimp	FE/None	Vernal pools	Occurs in two general locations in the study area, including on one large pool on Chiquita Ridge and in three pools located along Radio Tower Road south of Ortega Highway. Also known from Saddleback Meadows and near the intersection of Antonio Parkway and FTC-North.	No potential to occur due to lack of suitable vernal pool habitat.
<i>Fish</i>					
<i>Eucyclogobius newberryi</i>	Tidewater goby	FE/SSC	Low-salinity waters in coastal wetlands.	Not expected, no suitable habitat present within the study area.	No potential to occur due to lack of suitable habitat and outside range.
<i>Gasterosteus aculeatus</i>	Partially armored threespine	None/SAL	Weedy permanent pools or backwaters,	Known to occur within San Juan Creek.	No potential to occur due to lack of suitable aquatic

**TABLE B-1
SPECIAL-STATUS WILDLIFE SPECIES KNOWN OR WITH POTENTIAL TO OCCUR
IN THE "F" STREET PROJECT VICINITY**

Scientific Name ^{1,2}	Common Name	Status Federal/State	Primary Habitat Associations	Occurrence in Rancho Mission Viejo Study Area	Occurrence in F Street Project Area
<i>microcephalus</i>	stickleback		and in slow moving water along the margins of the stream.		habitat.
<i>Gila orcuttii</i>	Arroyo chub	None/SSC	Warm, fluctuating streams with slow-moving or backwater sections of warm to cool streams; substrates of sand or mud.	Known to occur within San Juan Creek and lower Cañada Gobernadora.	No potential to occur due to lack of suitable aquatic habitat.
<i>Oncorhynchus mykiss irideus</i>	Southern steelhead DPS	FE/SSC	Adult phase primarily in ocean, occur in drainages of coastal watersheds, from lagoons and estuaries to lower reaches of headwater systems with perennial flow. Spawn in meandering channels containing pools, riffles and runs with gravel and small cobble.	No current records for San Juan Creek, believed to be extirpated from this drainage.	No potential to occur due to lack of suitable aquatic habitat and outside known range.
Amphibians					
<i>Anaxyrus californicus</i>	Arroyo toad	FE/SSC	Open, braided stream channels for breeding and adjacent stream terraces and uplands for foraging and wintering.	San Juan Creek, lower Gabino Creek, lower Cristianitos Creek, and Talega Creek.	No potential to occur due to lack of suitable streamcourse habitat.
<i>Rana draytoni</i>	California red-legged frog	FT/SSC	Lowland streams, wetlands, riparian woodlands, livestock ponds; dense, shrubby or emergent vegetation associated with deep, still or slow-moving water; uses adjacent uplands.	Does not occur within the study area.	No potential to occur due to lack of aquatic suitable habitat.
<i>Spea hammondi</i>	Western spadefoot	None/SSC	Most common in grasslands, coastal sage scrub near rain pools or vernal pools; sometimes riparian habitats.	Vernal pools on Radio Tower Road, San Juan Creek from the Rancho Mission Viejo Headquarters to the confluence with Verdugo Canyon, a	Low potential to occur. No known records from Project Area and lack of suitable breeding sites.

**TABLE B-1
SPECIAL-STATUS WILDLIFE SPECIES KNOWN OR WITH POTENTIAL TO OCCUR
IN THE "F" STREET PROJECT VICINITY**

Scientific Name ^{1,2}	Common Name	Status Federal/State	Primary Habitat Associations	Occurrence in Rancho Mission Viejo Study Area	Occurrence in F Street Project Area
				stock pond in upper Cristianitos Canyon, and Lower Gabino Canyon.	
<i>Taricha torosa</i>	Coast Range newt	None/SSC (Monterey Co. south only)	Grassland, woodland, forest, but require ponds, reservoirs or slow-moving streams for reproduction.	Although not observed, potential to occur within suitable habitat in the study area.	No potential to occur due to lack of suitable aquatic breeding habitat.
Reptiles					
<i>Anniella pulchra pulchra</i>	Silvery legless lizard	None/SSC	Loose soils (sand, loam, humus) in coastal dune, coastal sage scrub, woodlands, and riparian habitats	Expected within San Juan Creek and other areas within the study area containing suitable habitat.	Low potential to occur due to general lack of suitable sandy drainage habitat.
<i>Arizona elegans occidentalis</i>	Coastal (California) glossy snake	None/None	Grassland, chaparral, coastal sage scrub, woodlands in sandy and rocky substrates.	Observed in upland habitats adjacent to San Juan Creek. Expected elsewhere throughout the study area.	Moderate potential to occur in coastal sage scrub, chaparral, grassland, and forest and woodland.
<i>Charina trivirgata</i>	Rosy boa	None/SAL	Rocky chaparral, coastal sage scrub, oak woodlands, desert and semi-desert scrub.	Although not observed within the study area, species is known from nearby Casper's Wilderness Park. Expected within the study area in rocky areas.	Moderate potential to occur in coastal sage scrub, chaparral, and forest and woodland.
<i>Emys marmorata</i>	Western pond turtle	None/SSC	Slow-moving permanent or intermittent streams, ponds, small lakes, reservoirs with emergent basking sites; adjacent uplands used during winter.	Known to occur in San Juan Creek, the upper portion of Cristianitos Creek in a small stockpond, at Jerome's Lake in the upper portion of Gabino Canyon, and at a stock pond within the nursery north of Ortega Highway.	No potential to occur due to lack of suitable aquatic habitat.
<i>Aspidoscelis tigris stejnegeri</i>	Coastal whiptail	None/SAL	Coastal sage scrub, chaparral, and woodland.	Known to occur throughout the study area within suitable habitat.	Known to occur in Project Area, including 3 documented occurrence locations.

**TABLE B-1
SPECIAL-STATUS WILDLIFE SPECIES KNOWN OR WITH POTENTIAL TO OCCUR
IN THE "F" STREET PROJECT VICINITY**

Scientific Name ^{1,2}	Common Name	Status Federal/State	Primary Habitat Associations	Occurrence in Rancho Mission Viejo Study Area	Occurrence in F Street Project Area
<i>Aspidoscelis hyperythra</i>	Orangethroat whiptail	None/SSC	Coastal sage scrub, chaparral, grassland, juniper and oak woodland.	Known to occur throughout the study area within suitable habitat.	Known to occur in Project Area, including 2 documented occurrence locations.
<i>Coleonyx variegatus abboti</i>	San Diego banded gecko	None/SAL	Cismontane chaparral, coastal sage scrub, desert scrub; granite outcrops.	Although not observed within the study area, this secretive species may still occur within the study area in suitable habitat.	Low potential to occur in coastal sage scrub, chaparral, and forest and woodland.
<i>Crotalus ruber</i>	Red-diamond rattlesnake	None/SSC	Variety of shrub habitats where there is heavy brush, large rocks, or boulders.	Known to occur throughout the study area within suitable habitat.	High potential to occur in coastal sage scrub, chaparral, and grassland.
<i>Diadophis punctatus similis</i>	San Diego ringneck snake	None/SAL	Moist habitats; woodland, forest, grassland, scrub, chaparral; typically found under debris.	Known to occur throughout the study area within suitable habitat.	High potential to occur in coastal sage scrub, chaparral, and forest and woodland.
<i>Plestiodon skiltonianus interparietalis</i>	Coronado Island skink	None/SSC	Grassland, riparian and oak woodland; found in litter, rotting logs, under flat stones.	Known to occur throughout the study area within suitable habitat although distinction from western skink is not clear.	Moderate potential to occur in riparian and woodland and forest.
<i>Lampropeltis zonata (pulchra)</i> (San Diego population)	San Diego mountain kingsnake	None/SSC	Coniferous forest, oak-pine and riparian woodlands, chaparral, and scrub.	Although not observed, this species may still occur within the study area in suitable habitat.	Low potential to occur due to relatively low elevation of Project area.
<i>Phrynosoma blainvillii</i>	Coast horned lizard	None/SSC	Coastal sage scrub, annual grassland, chaparral, oak and riparian woodland, coniferous forest.	Known to occur throughout the study area within suitable habitat.	Known to occur in Project Area, including 2 documented occurrence locations.
<i>Salvadora hexalepis virgulata</i>	Coast patch-nosed snake	None/SSC	Chaparral, coastal scrub, grassland, woodland, washes, sandy flats, rocky areas.	Although only observed at one location with the study area in upper Cristianitos Canyon, this species is expected to occur throughout the study area within suitable habitat.	Moderate potential to occur in coastal sage scrub, chaparral, grassland, and woodland and forest.

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<i>Thamnophis sirtalis</i> sp.	South coast garter snake	None/SSC	Marsh and upland habitats near permanent water that have strips of riparian vegetation.	Although not observed, this species may still occur within the study area in suitable habitat.	Low potential to occur due to general lack of suitable habitat and species' rarity.
<i>Thamnophis hammondi</i>	Two-striped garter snake	None/SSC	Streams, creeks, pools, streams with rocky beds, ponds, lakes, vernal pools.	Known to occur at Chiquita Canyon, San Juan Creek, Talega Canyon, and upper Gabino Canyon. May occur elsewhere the study area within suitable habitat.	Moderate potential to occur due to small amount of suitable habitat and known occurrence in Project vicinity.
<i>Birds</i>					
<i>Accipiter cooperii</i>	Cooper's hawk	None/WL (nesting)	Riparian and oak woodlands, mountain canyons.	Known to occur in the study area for foraging and nesting.	Known to occur in woodland in Project Area, including 1 historical nest site.
<i>Accipiter striatus</i>	Sharp-shinned hawk	None/WL (nesting)	Nests in coniferous forests, ponderosa pine, black oak, riparian deciduous, mixed conifer, Jeffrey pine; winters in lowland woodlands and other habitats.	This species occurs in Orange County only as a migrant and winter visitor and does not breed here. This species is known to occur and is expected throughout the study area.	Moderate potential to occur as migrant and winter visitor.
<i>Agelaius tricolor</i>	Tricolored blackbird	BCC/SSC (nesting colony)	Nests near fresh water, emergent wetland with cattails or tules; forages in grasslands, woodland, agriculture.	This species has been observed in Chiquita Canyon north and south of the "Narrows," lower Cañada Gobernadora, grassland south of Ortega Highway, CalMat in San Juan Creek, Trampas Canyon, Riverside Cement north of Gabino Canyon, and mouth of Verdugo Canyon. This species may forage throughout the study area within suitable habitat.	Moderate potential to forage in Project Area, but low potential to nest due to general lack of suitable nesting habitat.

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<i>Aimophila ruficeps canescens</i>	Southern California rufous-crowned sparrow	None/WL	Grass-covered hillsides, coastal sage scrub, chaparral with boulders and outcrops.	Known to occur throughout the study area within suitable habitat.	Known to occur in Project Area, including 13 documented occurrence locations.
<i>Ammodramus savannarum</i>	Grasshopper sparrow	None/SSC (nesting)	Open grassland and prairie, especially native grassland with a mix of grasses and forbs.	Known to occur throughout the study area within suitable habitat.	Known to occur in Project Area, including 19 documented occurrence locations.
<i>Ardea alba</i>	Great egret	None/SAL (nesting colony)	Nests colonially in large trees. Rookery sites are typically located near marshes, tide-flats, irrigated pastures, and margins of rivers and lakes.	Known to occur in study area within suitable habitat, but nesting colonies have not been observed.	High potential to forage in Project Area, but no nesting colonies are present.
<i>Ardea herodias</i>	Great blue heron	None/SAL (nesting colony)	Variety of habitats, but primarily wetlands; lakes, rivers, marshes, mudflats, estuaries, saltmarsh, riparian habitats.	Known to occur in study area within suitable habitat, but nesting colonies have not been observed.	High potential to forage in Project Area, but no nesting colonies are present.
<i>Artemisiospiza belli belli</i>	Bell's sage sparrow	BCC/WL	Coastal sage scrub and dry chaparral along coastal lowlands and inland valleys.	Although not observed within the study area, this species may still occur within the study area in suitable habitat.	Moderate potential to occur in coastal sage scrub and chaparral in Project Area.
<i>Aquila chrysaetos</i>	Golden eagle	BCC/WL (nesting & wintering), FP	Open country, especially hilly and mountainous regions; grassland, coastal sage scrub, chaparral, oak savannas, open coniferous forest.	Suitable foraging habitat for this species occurs within the study area. Unlikely to nest within the study area.	Moderate potential to forage in Project Area, but no suitable nesting habitat is present.
<i>Asio flammeus</i>	Short-eared owl	None/SSC (nesting)	Grassland, prairies, dunes, meadows, irrigated lands, saline and freshwater emergent wetlands.	Although not observed, this species may still occur within the study area in suitable habitat. Not expected to nest in study area.	Moderate potential to occur in grassland and agriculture in Project Area, but not expected to nest.
<i>Asio otus</i>	Long-eared owl	None/SSC (nesting)	Riparian, live oak thickets, other dense stands of trees, edges of coniferous forest.	This species nests and forages within suitable habitat in the study area.	High potential to forage in Project Area in grassland and agriculture, not area lacks suitable dense forest and woodlands for nesting.

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<i>Athene cunicularia</i>	Burrowing owl	BCC/SSC (burrow sites & some wintering sites)	Grassland, lowland scrub, agriculture, coastal dunes and other artificial open areas.	Species not believed to nest within the study area but may occur during the winter.	Moderate potential to occur in winter in grassland and agriculture in Project Area.
<i>Baeolophus inornatus</i>	oak titmouse	BCC/SAL (nesting)	Oak woodlands and forests	Expected to occur in oak forest and woodland communities throughout study area.	Moderate potential to occur in woodland and forest in Project Area.
<i>Botarus lentiginosus</i>	American bittern	None/SAL	Emergent habitat of freshwater marsh and vegetation borders of ponds and lakes.	Observed within Cañada Chiquita. Freshwater marsh area of Cañada Gobernadora currently provides potential nesting habitat for this species.	Low potential to occur in Project Area due to lack of suitable habitat.
<i>Buteo swainsoni</i>	Swainson's hawk	BCC/ST (nesting)	Open grassland, shrublands, croplands.	Species known to occur within the area as a rare migrant. May periodically forage onsite during migration. No longer nests in Orange County.	Potential to occasionally occur and forage in Project Area as migrant.
<i>Buteo regalis</i>	Ferruginous hawk	BCC/WL (wintering)	Open, dry country, grasslands, open fields, agriculture.	Species known to occur within the study area during winter as a visitor for foraging. Does not nest in the region.	Moderate potential to forage in grasslands and agriculture in Project Area during winter.
<i>Calypte costae</i>	Costa's hummingbird	None/SAL (nesting)	Occurs in desert wash, edges of desert riparian and valley foothill riparian, coastal scrub, desert scrub, desert succulent shrub, lower-elevation chaparral, and palm oasis.	Known to nest throughout the study area within suitable habitat.	Moderate potential to nest in coastal sage scrub and chaparral in Project Area.
<i>Campylorhynchus brunneicapillus sandiegensis</i>	Coastal cactus wren	BCC/SSC (San Diego & Orange Counties only)	Southern cactus scrub, maritime succulent scrub, cactus thickets in coastal sage scrub.	Known to occur throughout the study area within suitable habitat.	Known to occur in Project Area, including 14 documented occurrence locations.

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<i>Charadrius montanus</i>	Mountain plover	BCC/SSC (wintering)	Nests in open, shortgrass prairies or grasslands; winters in shortgrass plains, plowed fields, open sagebrush, and sandy deserts.	Moderate potential to occasionally occur in agriculture in study area during winter.	Moderate potential to occasionally occur in agriculture in Project Area during winter.
<i>Chondestes grammacus</i>	Lark sparrow	None/SAL (nesting)	Grassland-shrub-woodland margins	Known to occur throughout the study area in suitable habitat.	High potential to occur in grassland/coastal sage scrub/chaparral/woodland ecotones in Project Area.
<i>Circus cyaneus</i>	Northern harrier	None/SSC (nesting)	Open wetlands (nesting), pasture, old fields, dry uplands, grasslands, rangelands, coastal sage scrub.	Known to occur within the study area and potentially nests within the study area.	High potential to forage in coastal sage scrub, grasslands, and agriculture in Project Area, but low potential to nest due to lack of suitable habitat.
<i>Coccyzus americanus occidentalis</i>	Western yellow-billed cuckoo	PT (western DPS), BCC/SE	Dense, wide riparian woodlands and forest with well-developed understories.	Species has not been observed within study area, not expected.	No potential to occur in Project Area due to lack of suitable habitat.
<i>Egretta thula</i>	Snowy egret	None/SAL (nesting colony)		Known to occur in study area within suitable habitat, but nesting colonies have not been observed.	High potential to forage in Project Area, but no nesting colonies are present.
<i>Elanus leucurus</i>	White-tailed kite	None/FP (nesting)	Open grasslands, savanna-like habitats, agriculture, wetlands, oak woodlands, and riparian.	Known to occur within San Juan Creek, Cañada Gobernadora, Gabino Canyon, and Richard and Donna O'Neill Conservancy.	High potential to forage in grassland, agriculture, and coastal sage scrub in Project Area and moderate potential to nest in riparian and woodland and forest.
<i>Empidonax traillii extimus</i>	Southwestern willow flycatcher	FE/SE (nesting)	Riparian woodlands along streams and rivers with mature, dense stands of willows or alders; may nest in thickets dominated by tamarisk.	Known to nest in Cañada Gobernadora.	No potential to nest in Project Area due to lack of suitable habitat.
<i>Eremophila alpestris actia</i>	California horned lark	None/WL	Open habitats, grassland, rangeland, shortgrass prairie, montane meadows, coastal plains, fallow grain fields.	Known to occur throughout the study area in suitable habitat.	High potential to forage in grassland and agriculture in Project Area

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<i>Falco columbarius</i>	Merlin	None/WL (wintering)	Nests in open country, open coniferous forest, prairie; winters in open woodlands, grasslands, cultivated fields, marshes, estuaries and sea coasts.	This species occurs in Orange County only as a rare migrant and winter visitor. This species has been observed in the study area.	Moderate potential to forage in grassland and agriculture in Project Area during winter.
<i>Falco mexicanus</i>	Prairie falcon	BCC/WL (nesting)	Grassland, savannas, rangeland, agriculture, desert scrub, alpine meadows; nest on cliffs or bluffs.	Species known to occur within the area as an occasional winter visitor to forage. No longer nests in Orange County.	Known to occur in Project Area, including 1 documented occurrence locations.
<i>Falco peregrinus anatum</i>	American peregrine falcon	FD, BCC/SD, FP (nesting)	Nests on cliffs, buildings, bridges; forages in wetlands, riparian, meadows, croplands, especially where waterfowl are present.	Species known to occur within the area as an occasional winter visitor to forage. Not expected to nest within the study area.	Moderate potential to forage in grassland and agriculture in Project Area during winter. Suitable nesting habitat is not present.
<i>Haliaeetus leucocephalus</i>	Bald eagle	FD, BCC/SE, FP (nesting & wintering)	Seacoasts, rivers, swamps, large lakes; winters at large bodies of water in lowlands and mountains.	Not expected.	No potential to occur due to lack of suitable habitat.
<i>Icteria virens</i>	Yellow-breasted chat	None/SSC (nesting)	Dense, relatively wide riparian woodlands and thickets of willows, vine tangles and dense brush.	Known to occur within Cañada Chiquita, Cañada Gobernadora, San Juan Creek, Cristianitos Creek, Blind Canyon, and Gabino Canyon	Low potential to nest in Project Area due to general lack of suitable habitat.
<i>Ixobrychus exilis</i>	Least bittern	BCC/SSC (nesting)	Dense emergent wetland vegetation, sometimes interspersed with woody vegetation and open water.	Has occurred within the study area, Cañada Gobernadora may provide suitable habitat for this species.	No potential to nest in Project Area due to lack of suitable habitat.
<i>Lanius ludovicianus</i>	Loggerhead shrike	BCC/SSC (nesting)	Open ground including grassland, coastal sage scrub, broken chaparral, agriculture, riparian, and open woodland.	Known to occur infrequently within the study area. Resident, migrant, and wintering populations expected.	Moderate potential to forage in grassland, agriculture, coastal sage scrub and chaparral in Project Area.

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<i>Larus californicus</i>	California gull	None/WL (nesting colony)	Agriculture, water, beach, and marsh.	Known to occur within the study area.	High potential to occur in Project Area but no nesting colonies are present.
<i>Nycticorax nycticorax</i>	Black-crowned night heron (nesting colony)	None/SAL (nesting colony)	Marshes, ponds, reservoirs, estuaries; nests in dense-foliaged trees and dense fresh or brackish emergent wetlands.	High potential to occur in study area but no known nesting colonies.	No potential to nest in Project Area due to lack of suitable habitat.
<i>Pandion haliaetus</i>	Osprey	None/WL (nesting)	Large waters (lakes, reservoirs, rivers) supporting fish; usually near forest habitats, but widely observed along the coast.	Known to occur along San Juan Creek and in the vicinity of the open water areas of the silica mining operations south of Ortega Highway.	No potential to occur in Project Area due to lack of suitable habitat.
<i>Pelecanus erythrorhynchos</i>	American white pelican	None/SSC (nesting colony & communal roosts)	Open water.	Potential to occur within the study area in large water bodies.	No potential to occur in Project Area due to lack of suitable habitat.
<i>Phalacrocorax auritus</i>	Double-crested cormorant	None/WL (nesting colony)	Lakes, rivers, reservoirs, estuaries, ocean; nests in tall trees, rock ledges on cliffs, rugged slopes.	Known to occur within the study area. Open water areas along San Juan Creek and at the silica mine south of Ortega Highway provide suitable habitat.	No potential to occur in Project Area due to lack of suitable habitat.
<i>Picoides nuttallii</i>	Nuttall's woodpecker	BCC/SAL (nesting)	Lower elevation riparian deciduous and oak habitats.	Expected to occur in oak forest and woodland and riparian communities throughout study area.	High potential to occur in riparian and woodland and forest in Project Area.
<i>Piranga rubra</i>	Summer tanager	None/SSC (nesting)	Nests in riparian woodland; winter habitats include parks and residential areas.	May occur within the study area but only as a rare migrant.	Low potential to occur riparian and woodland and forest in Project Area, but only as a rare migrant.
<i>Plegadis chihi</i>	White-faced ibis	None/WL (nesting colony)	Nests in marsh; winter foraging in shallow lacustrine waters, muddy ground of wet meadows, marshes, ponds, lakes, rivers, flooded fields and estuaries.	Expected to occur within the study area in suitable habitat but only as a rare visitor.	No potential to occur in Project Area due to lack of suitable habitat.

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<i>Pooecetes gramineus affinis</i>	Oregon vesper sparrow	BCC/SSC (wintering)	Grasslands, open brushlands, meadows, stubblefields, and road edges in valleys and desert regions	Expected to occur within the study area in suitable habitat but as winter visitor	Moderate potential to occur occasionally in grasslands, agriculture, and coastal sage scrub in Project Area as a winter visitor.
<i>Polioptila californica californica</i>	Coastal California gnatcatcher	FT/SSC	Coastal sage scrub, coastal sage scrub-chaparral mix, coastal sage scrub-grassland ecotone, riparian in late summer.	Known to occur throughout the study area.	Known to occur in Project Area, including 7 documented occurrence locations.
<i>Progne subis</i>	Purple martin (nesting)	None/SSC	Nests in tall sycamores, pines, oak woodlands, coniferous forest; forages over riparian, forest and woodland.	May occur within the study area but only as a rare migrant.	Low potential to occur riparian and woodland and forest in Project Area, but only as a rare migrant.
<i>Rynchops niger</i>	Black skimmer	BCC/SSC (nesting colony)	Open water of ocean and coastal zone.	Not expected.	No potential to occur in Project Area due to lack of suitable habitat.
<i>Selasphorus sasin</i>	Allen's hummingbird	BCC/SAL (nesting)	In the region, breeds primarily in riparian and urban habitats. Migrants occur in a variety of woodland and scrub habitats.	Known to nest within the study area within suitable habitat.	Low potential to nest in Project Area due to general lack of suitable habitat; may use coastal sage scrub, chaparral and woodland and forest as non-nesting habitat.
<i>Setophaga petechial</i>	Yellow warbler	BCC/SSC (nesting)	Nests in lowland and foothill riparian woodlands dominated by cottonwoods, alders and willows; winters in a variety of habitats.	Known to occur within Cristianitos Creek, San Juan Creek, Cañada Gobernadora, and Cañada Chiquita.	Low potential to nest in Project Area due to general lack of suitable riparian habitat.
<i>Spinus lawrencei</i>	Lawrence's goldfinch	BCC/SAL (nesting)	Riparian and woodland habitats in association with grasslands.	Known from one location but likely to occur throughout the study area within suitable habitat.	Moderate potential to nest in riparian and woodland and forest in Project Area.
<i>Spizella passerine</i>	chipping sparrow	None/SAL (nesting)	Open woodlands with sparse or low shrubs.	Expected to occur in open woodland in study area.	Moderate potential to nest in woodland and forest in Project Area

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<i>Sphyrapicus ruber</i>	Red-breasted sapsucker	None/SAL (nesting)	Riparian and woodland habitats.	Expected occur within the study area, but only as a winter visitor.	Moderate potential to occur riparian and woodland and forest in Project Area, but only as winter visitor.
<i>Thalasseus elegans</i>	Elegant tern	None/WL (nesting colony)	Open water of ocean and coastal zone.	Not expected.	No potential to occur in Project Area due to lack of suitable habitat.
<i>Vireo bellii pusillus</i>	Least Bell's vireo	FE/SE (nesting)	Nests in southern willow scrub with dense cover within three to six feet of the ground; habitat includes willows, cottonwoods, baccharis, and wild blackberry.	Known to occur within Cañada Gobernadora, middle San Juan Creek (between the Ortega Highway bridge and Casper Wilderness Park), Chiquita Creek, and lower Cristianitos Creek.	Low potential to nest in Project Area due to general lack of suitable riparian habitat.
Mammals					
<i>Antrozous pallidus</i>	Pallid bat	None/SSC	Arid habitats, including grasslands, shrublands, woodlands and forests; for roosting, prefers rocky outcrops, cliffs and crevices with access to open habitats for foraging.	Known to occur within Cañada Chiquita and Cristianitos Canyon. May occur throughout the study area within suitable habitat.	Moderate potential to forage in coastal sage scrub, chaparral, riparian, woodland and forest, grassland, and agriculture. Not expected to roost in Project Area due to lack of suitable habitat.
<i>Chaetodipus fallax fallax</i>	Northwestern San Diego pocket mouse	None/SSC	Coastal sage scrub, grassland, sage scrub-grassland ecotones, and sparse chaparral; rocky substrates, loams and sandy loams.	Suitable habitat for this species occurs within the southern portion of the study area, and it may occur within the southern portion of the study area.	High potential to occur in coastal sage scrub and grassland-coastal sage scrub ecotone in Project Area/
<i>Chaetodipus californicus femoralis</i>	Dulzura pocket mouse	None/SSC	Coastal sage scrub, chaparral, and riparian-scrub ecotone; more mesic areas.	Suitable habitat for this species occurs within the southern portion of the study area, and it may occur within the southern portion of the study area.	High potential to occur in coastal sage scrub and chaparral in Project Area.

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<i>Corynorhinus townsendii</i>	Townsend's big-eared bat	None/SSC, SC	Mesic habitats characterized by coniferous and deciduous forests and riparian habitat, but also xeric areas; roosts in limestone caves and lava tubes, also man-made structures and tunnels.	May occur throughout the study area within suitable habitat.	Moderate potential to forage in coastal sage scrub, chaparral, riparian, woodland and forest, grassland, and agriculture. Not expected to roost in Project Area due to lack of suitable habitat.
<i>Euderma maculatum</i>	Spotted bat	None/SSC	Foothills, mountains, desert regions of Southern California, including arid deserts, grasslands, and mixed conifer forests; roosts in rock crevices and cliffs; feeds over water and along washes.	May occur throughout the study area within suitable habitat.	Moderate potential to forage in coastal sage scrub, chaparral, riparian, woodland and forest, grassland, and agriculture. Not expected to roost in Project Area due to lack of suitable habitat.
<i>Eumops perotis californicus</i>	Western mastiff bat	None/SSC	Chaparral, coastal and desert scrub, coniferous and deciduous forest and woodland; roosts in crevices in rocky canyons and cliffs where the canyon or cliff is vertical or nearly vertical, trees and tunnels.	Known to occur within the areas of San Juan Creek and Cristianitos Canyon. May occur throughout the study area within suitable habitat.	Moderate potential to forage in coastal sage scrub, chaparral, riparian, woodland and forest, grassland, and agriculture. Not expected to roost in Project Area due to lack of suitable habitat.
<i>Lasionycteris noctivagans</i>	Silver-haired bat	None/SAL	Old growth forest, maternity roosts in trees (primarily woodpecker hollows), large diameter snags 50 ft above ground; hibernates in hollow trees, under sloughing bark, in rock crevices, and occasionally in buildings, mines and caves; forages in or near coniferous or mixed deciduous forest, often following stream or river drainages.	Could roost in trees throughout the study area.	Moderate potential to forage in coastal sage scrub, chaparral, riparian, woodland and forest, grassland, and agriculture. Moderate potential to roost in Project Area in riparian and woodland and forest.

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<i>Lasiurus blossevillii</i>	Western red bat	None/SSC	Forages along open streams and rivers; roosts in tree canopy in forest, woodland, riparian, mesquite bosque and orchards, including fig, apricot, peach, pear, almond, walnut, and orange.	Could roost in trees throughout the study area in the winter.	Moderate potential to forage in coastal sage scrub, chaparral, riparian, woodland and forest, grassland, and agriculture. Moderate potential to roost in Project Area in riparian and woodland and forest.
<i>Lasiurus cinereus</i>	Hoary bat	None/SAL	Forest, woodland riparian, and wetland habitats, also juniper scrub, riparian forest, and desert scrub in arid areas; roosts in tree foliage and sometimes cavities, such as woodpecker holes.	Could roost in trees throughout the study area.	Moderate potential to forage in coastal sage scrub, chaparral, riparian, woodland and forest, grassland, and agriculture. Moderate potential to roost in Project Area in riparian and woodland and forest.
<i>Lepus californicus bennettii</i>	San Diego black-tailed jackrabbit	None/SSC	Arid habitats with open ground; grasslands, coastal sage scrub, agriculture, disturbed areas, and rangelands.	Although suitable habitat for this species is present throughout the study area, this species has not been observed within the study area.	Low potential to occur in Project Area due to lack of historical observations.
<i>Macrotus californicus</i>	California leaf-nosed bat	None/SSC	Riparian woodlands, desert wash, desert scrub; roosts in mines and caves, occasionally buildings.	May occur within the study area.	Moderate potential to forage in coastal sage scrub, chaparral, riparian, woodland and forest, grassland, and agriculture. Not expected to roost in Project Area due to lack of suitable habitat.
<i>Myotis ciliolabrum</i>	Western small-footed myotis	None/SAL	Arid woodlands and shrublands, but near water; roosts in caves, crevices, mines, abandoned buildings	May occur throughout the study area within suitable habitat.	High potential to forage in coastal sage scrub, chaparral, riparian, woodland and forest, grassland, and agriculture. Not expected to roost in Project Area due to lack of suitable habitat.

**TABLE B-1
 SPECIAL-STATUS WILDLIFE SPECIES KNOWN OR WITH POTENTIAL TO OCCUR
 IN THE "F" STREET PROJECT VICINITY**

Scientific Name ^{1,2}	Common Name	Status Federal/State	Primary Habitat Associations	Occurrence in Rancho Mission Viejo Study Area	Occurrence in F Street Project Area
<i>Myotis thysanodes</i>	Fringed myotis	None/SAL	Primarily drier woodlands, including oak, pinyon-juniper, ponderosa pine, and also desert scrub, mesic coniferous forest, grassland, and sage-grass steppe from sea level to 9,350 feet; roosts in crevices in buildings, mines, rocks, cliff faces, and bridges, and large, decadent trees and snags	May occur throughout the study area within suitable habitat.	High potential to forage in coastal sage scrub, chaparral, riparian, woodland and forest, grassland, and agriculture. Moderate potential to roost in Project Area in riparian and woodland and forest.
<i>Myotis volans</i>	Long-legged myotis	None/SAL	Primarily coniferous forests, but also seasonally in riparian and desert habitats; roosts in crevices in cliffs, caves, mines, buildings, exfoliating tree bark, and snags.	May occur throughout the study area within suitable habitat.	High potential to forage in coastal sage scrub, chaparral, riparian, woodland and forest, grassland, and agriculture. Moderate potential to roost in Project Area in riparian and woodland and forest.
<i>Myotis yumanensis</i>	Yuma myotis	None/SAL	Riparian, arid scrublands and deserts, and forests associated with water (streams, rivers, tinajas); roosts in bridges, buildings, cliff crevices, caves, mines, and trees;	Known to occur within the study area within suitable habitat.	High potential to forage in coastal sage scrub, chaparral, riparian, woodland and forest, grassland, and agriculture. Moderate potential to roost in Project Area in riparian and woodland and forest.
<i>Neotoma lepida intermedia</i>	San Diego desert woodrat	None/SSC	Coastal sage scrub, chaparral, and pinyon-juniper woodland with rock outcrops, cactus thickets, dense undergrowth.	Known to occur throughout the study area within suitable habitat.	High potential to occur in coastal sage scrub and more xeric forms of chaparral in Project Area.

**TABLE B-1
 SPECIAL-STATUS WILDLIFE SPECIES KNOWN OR WITH POTENTIAL TO OCCUR
 IN THE "F" STREET PROJECT VICINITY**

Scientific Name ^{1,2}	Common Name	Status Federal/State	Primary Habitat Associations	Occurrence in Rancho Mission Viejo Study Area	Occurrence in F Street Project Area
<i>Nyctinomops femorosaccus</i>	Pocketed free-tailed bat	None/SSC	Arid lands, including pinyon-juniper woodlands, desert scrub, desert succulent shrub, desert riparian, desert wash, alkali desert scrub, Joshua tree, palm oases; roosts in high cliffs or rock outcrops with dropoffs, caverns, buildings.	May occur throughout the study area within suitable habitat.	Moderate potential to forage in coastal sage scrub, chaparral, riparian, woodland and forest, grassland, and agriculture. Not expected to roost in Project Area due to lack of suitable habitat.
<i>Onychomys torridus ramona</i>	Southern grasshopper mouse	None/SSC	Grassland and sparse coastal sage scrub.	Suitable habitat for this species occurs throughout the study area, but has not been documented during various trapping studies.	Very low potential to occur due to lack of documented occurrences in Project vicinity.
<i>Perognathus longimembris pacificus</i>	Pacific pocket mouse	FE/SSC	Grassland and coastal sage scrub with sandy soils; along immediate coast.	Not expected within the study area, due to this species' range restriction to areas along the coast.	Not expected to occur in Project Area.
<i>Taxidea taxus</i>	American badger	None/SSC	Dry, open treeless areas, grasslands, and coastal sage scrub.	Known to occur throughout the study area within suitable habitat.	Moderate potential to occur in grassland, agriculture, and sparse coastal sage scrub in Project Area.

¹ Species in bold face are Covered Species under the SSHCP.

² Species with shading are special-status species that were not analyzed in the Draft Joint Programmatic EIR/EIS.

Federal Designations:

- BCC - Fish and Wildlife Service Bird of Conservation Concern
- FC - Federal Candidate Species (formerly Category 1 candidates)
- FD - Federally-delisted
- FE - Federally-listed Endangered
- FSC - Federal Species of Concern (no longer used)
- FT - Federally-listed Threatened
- FPT - Proposed for listing as Federally Threatened

State Designations:

- SSC - California Special Concern Species
- SC - State Candidate for Listing as Threatened or Endangered
- FP - California Department of Fish and Wildlife Fully Protected Species
- SAL - Species tracked in CNDDDB and included in CDFW 2014 Special Animals List
- SD - State-delisted
- SE - State-listed Endangered
- WL - Watch List

Source: Dudek 2014

**TABLE B-2
SPECIAL-STATUS PLANT SPECIES KNOWN FROM PROJECT STUDY AREA AND "F"
STREET PROJECT VICINITY**

Scientific Name ^{1,2}	Common Name	Status Federal/State/Rare Plant Rank	Primary Habitat Associations/Form/ Blooming Period	Occurrence Project Study Area	Occurrence in "F" Street Project Area
<i>Abronia villosa</i> var. <i>aurita</i>	Chaparral sand- verbena	None/None/List 1B.1	Chaparral, coastal sage scrub, sandy soils/annual herb/January- August.	No records in SSHCP database. Known from Alberhill quadrangle, but may be extirpated from Orange County.	No records for Project Area and not expected to occur.
<i>Allium munzi</i>	Munz's onion	FE/ST/List 1B.1	Chaparral, cismontane woodland, coastal sage scrub, pinyon and juniper woodland, Valley and foothill grassland, clay soils/perennial herb (bulbiferous)/March- May	No records in SSHCP database. Known from Alberhill quadrangle.	Not expected to occur in Project Area.
<i>Arctostaphylos</i> <i>rainbowensis</i>	Rainbow manzanita	None/None/List 1B.1	Chaparral/perennial evergreen shrub/December- March.	No records in SSHCP database. Known from Margarita Peak and Sitton Peak quadrangles.	Not expected to occur in Project Area.
<i>Artemisia palmeri</i>	San Diego sagewort	None/None/List 4.2	Chaparral, coastal sage scrub, riparian, sandy soils/shrub/May- September.	No records in SSHCP database or in 9 USGS quadrangles in study area.	No records for Project Area and not expected to occur.
<i>Astragalus</i> <i>brauntonii</i>	Braunton's milk- vetch	FE/None/List 1B.1	Closed-cone conifer forest, chaparral, coastal sage scrub, valley and foothill grassland, recent burns or disturbed areas/perennial herb/March-July.	No records in SSHCP database or in 9 USGS quadrangles in study area.	No records for Project Area and not expected to occur.
<i>Atriplex coulteri</i>	Coulter's saltbush	None/None/List 1B.2	Coastal bluff scrub, coastal sage scrub, valley and foothill needlegrass grasslands, alkaline or clay soils/perennial herb/March-October.	Coulter's saltbush is known from three general locations in the study area totaling 3,086 individuals: Chiquita Canyon, upper Cristianitos Canyon and upper Gabino Canyon. Coulter's saltbush occurs in alkaline soils and is associated with southern tarplant in Chiquita Canyon.	No records for Project Area and not expected to occur. Known from nearby locations.

**TABLE B-2
SPECIAL-STATUS PLANT SPECIES KNOWN FROM PROJECT STUDY AREA AND "F"
STREET PROJECT VICINITY**

Scientific Name ^{1,2}	Common Name	Status Federal/State/Rare Plant Rank	Primary Habitat Associations/Form/ Blooming Period	Occurrence Project Study Area	Occurrence in "F" Street Project Area
<i>Atriplex pacifica</i>	South Coast saltscale	None/None/List 1B.2	Coastal bluff scrub, coastal sage scrub, alkali playas/annual herb/ March- October.	No records in SSHCP database. Known from San Clemente quadrangle.	No records for Project Area and not expected to occur.
<i>Atriplex parishii</i>	Parish's brittle-scale	None/None/List 1B.1	Alkali swales, sinks, depressions, and grasslands with heavy clay-alkali components/annual herb/June-October.	No records in SSHCP database or in 9 USGS quadrangles in study area.	No records for Project Area and not expected to occur.
<i>Atriplex serenana</i> var. <i>davisonii</i>	Davidson's saltscale	None/None/List 1B.2	Coastal bluff scrub, coastal sage scrub, alkaline soils/annual herb/April-October.	No records in SSHCP database or in 9 USGS quadrangles in study area.	No records for Project Area and not expected to occur.
<i>Berberis nevinii</i>	Nevin's barberry	FE/SE./List 1B.1	Chaparral, cismontane woodland, coastal sage scrub, riparian scrub, sandy or gravelly soils/shrub/March- April.	No records in SSHCP database or in 9 USGS quadrangles in study area.	No records for Project Area and not expected to occur.
<i>Bergerocactus emoryi</i>	Golden-spined cereus	None/None/List 2B.2	Closed-cone conifer forest, chaparral, coastal sage scrub, sandy soils/shrub (stem succulent)/May- June.	No records in SSHCP database or in 9 USGS quadrangles in study area.	No records for Project Area and not expected to occur.
<i>Brodiaea filifolia</i>	Thread-leaved brodiaea	FT/SE./List 1B.1	Coastal sage scrub, chaparral, grassland, vernal pools; heavy clay soils/perennial herb (bulbiferous)/ March-June.	Found in six general locations in the study area, excluding the translocated population at Forster Ranch: Chiquadora Ridge; Cristianitos Canyon; lower Gabino Canyon; Trampas Canyon; Talega ridgeline east of Northrup-Grumman; and just east of Trabuco Creek in the Arroyo Trabuco Golf Course project area. About 9,314 flowering stalks counted in about 30 discrete locations in	No records for Project Area and not expected to occur.

**TABLE B-2
SPECIAL-STATUS PLANT SPECIES KNOWN FROM PROJECT STUDY AREA AND "F"
STREET PROJECT VICINITY**

Scientific Name ^{1,2}	Common Name	Status Federal/State/Rare Plant Rank	Primary Habitat Associations/Form/ Blooming Period	Occurrence Project Study Area	Occurrence in "F" Street Project Area
				the study area.	
<i>Brodiaea jolonensis</i>	Mesa brodiaea	None/None/None	Grassland, foothill woodland, clay soils/perennial herb/April-May.	Two locations in Cristianitos Canyon. Not tracked in CNDDB.	No records for Project Area and not expected to occur.
<i>Brodiaea santarosae</i>	Santa Rosa basalt brodiaea	None/None/List 1B.2	Valley and foothill grassland, basaltic/perennial herb)/May-June.	No records in SSHCP database. Known from Margarita Peak and Sitton Peak quadrangles.	No records for Project Area and not expected to occur.
<i>California macrophylla</i>	Round-leaved filaree	None/None/List 1B.1	Cismontane woodland, Valley and foothill grassland/annual herb/March-May.	No records in SSHCP database. Known from Alberhill quadrangle.	No records for Project Area and not expected to occur.
<i>Calochortus catalinae</i>	Catalina mariposa lily	None/None/List 4.2	Coastal sage scrub, chaparral, Valley and foothill needlegrass grasslands in heavy soils/perennial herb (bulbiferous)/February-May.	Occurs on Chiquita Ridge, in Cañada Gobernadora, the northeast portion of the Talega development and the Saddleback Meadows area.	No records for Project Area and not expected to occur.
<i>Calochortus plummerae</i>	Plummer's mariposa lily	None/None/List 4.2	Chaparral, cismontane woodland, coastal sage scrub, lower montane conifer forest, valley and foothill grassland, granitic soils/perennial herb (bulbiferous)/May-June.	No records in SSHCP database. Known from Sitton Peak quadrangle.	No records for Project Area and not expected to occur.
<i>Calochortus weedii</i> var. <i>intermedius</i>	Intermediate mariposa lily	None/None/ List 1B.2	Chaparral, coastal sage scrub, coastal sage scrub-grassland ecotone, purple needlegrass grasslands/perennial herb (bulbiferous)/May-July.	Weed's-Intermediate mariposa lily hybrids generally occurs in four main areas: Chiquita Canyon/Chiquadora Ridge, Cañada Gobernadora east of the creek/northern Central San Juan Creek sub-basin, Cristianitos Canyon/southern Trampas Canyon sub-basin, and La Paz Canyon. A few	Six occurrence locations known from Project Area totaling approximately 868 individuals.

**TABLE B-2
SPECIAL-STATUS PLANT SPECIES KNOWN FROM PROJECT STUDY AREA AND "F"
STREET PROJECT VICINITY**

Scientific Name ^{1,2}	Common Name	Status Federal/State/Rare Plant Rank	Primary Habitat Associations/Form/ Blooming Period	Occurrence Project Study Area	Occurrence in "F" Street Project Area
				scattered locations also occur in the Foothill-Trabuco Specific Plan area on Saddleback Meadows. Except for the La Paz Canyon location, this species tends to occur in association with many-stemmed dudleya in the study area. There are about 144 locations in the study area with about 20,400 counted individuals	
<i>Caulanthus simulans</i>	Payson's jewel-flower	None/None /List 4.2	Chaparral, coastal sage scrub, sandy and granitic soils/annual herb/March-June.	No records in SSHCP database. or 9 USGS quadrangles in study area.	No records for Project Area and not expected to occur.
<i>Centromadia parryi</i> spp. <i>australis</i>	Southern tarplant	None/None/ List 1B.1	Alkali soils, sinks, depressions, and grasslands with heavy clay-alkali components/annual herb/May-November.	The largest population is in Chiquita Canyon and, including the Tesoro mitigation site, numbers more than 135,000 individuals. A large population numbering 10,000+ individuals occurs on the GERA site in Cañada Gobernadora.	Two occurrence locations known from Project Area totaling approximately 438 individuals.
<i>Centromadia pungens</i> spp. <i>laevis</i>	Smooth tarplant	None/None/ List 1B.1	Chenopod scrub, meadows and seeps, playas, riparian woodland, valley and foothill grassland/annual herb/April-September.	No records in SSHCP database. Known from Alberhill quadrangle.	No records for Project Area and not expected to occur.
<i>Chaenactis glabriuscula</i> var. <i>orcuttiana</i>	Orcutt's pincushion	None/None/ List 1B.1	Coastal bluff scrub (sandy), coastal dunes/annual herb/January-August	No records in SSHCP database. Known from Dana Point and San Juan Capistrano quadrangles.	No records for Project Area and not expected to occur.

**TABLE B-2
SPECIAL-STATUS PLANT SPECIES KNOWN FROM PROJECT STUDY AREA AND "F"
STREET PROJECT VICINITY**

Scientific Name ^{1,2}	Common Name	Status Federal/State/Rare Plant Rank	Primary Habitat Associations/Form/ Blooming Period	Occurrence Project Study Area	Occurrence in "F" Street Project Area
<i>Choloropyron maritimum</i> spp. <i>maritimum</i>	Salt marsh bird's- beak	FE/SE/List 1B.2	Coastal dunes, coastal saltwater marsh and swamp/annual herb/May-October.	No records in SSHCP database. Known from Alberhill quadrangle.	No records for Project Area and not expected to occur.
<i>Chorizanthe parryi</i> var. <i>Fernandina</i>	San Fernando Valley spineflower	FC/SE/List 1B.1	Coastal sage scrub, sandy soils/ annual herb/April-June.	No records in SSHCP database. Known Alberhill quadrangle, but very likely extirpated in county. Only known from two locations in Los Angeles County – Laskey Mesa and Newhall Ranch.	No records for Project Area and not expected to occur.
<i>Chorizanthe parryi</i> var. <i>parryi</i>	Parry's spineflower	None/None/ List 1B.1	Chaparral, coastal sage scrub, sandy openings/annual herb/April-June.	No records in SSHCP database. Known from Alberhill quadrangle.	No records for Project Area and not expected to occur.
<i>Chorizanthe polygonoides</i> var. <i>longispina</i>	Long-spined spineflower	None/None/ List 1B.2	Chaparral, coastal sage scrub, meadows and seeps, valley and foothill grasslands, vernal pools/annual herb/April-July	No records in SSHCP database. Known from Alberhill, San Clemente and Sitton Peak quadrangles.	No records for Project Area and not expected to occur
<i>Chorizanthe procumbens</i>	Prostrate spineflower	None/None/ None	Chaparral, coastal sage scrub, pinyon- juniper woodland, valley needlegrass grassland; associated with weathered mesa soils and gabbroic clay/April-June.	No locations in SSHCP database, but found along Cristianitos Road south of RMV property.	No records for Project Area and not expected to occur.
<i>Clinopodium chandleri</i>	San Miguel savory	None/None/ List 1B.2	Chaparral, oak woodlands, oak forest, shaded stream courses/perennial herb/March-July.	No records in SSHCP database. Known from Upper Hot Spring Canyon in CNF and Alberhill, Sitton Peak and Cañada Gobernadora quadrangles.	No records for Project Area and not expected to occur.

**TABLE B-2
SPECIAL-STATUS PLANT SPECIES KNOWN FROM PROJECT STUDY AREA AND "F"
STREET PROJECT VICINITY**

Scientific Name ^{1,2}	Common Name	Status Federal/State/Rare Plant Rank	Primary Habitat Associations/Form/ Blooming Period	Occurrence Project Study Area	Occurrence in "F" Street Project Area
<i>Comarostaphylis diversifolia</i> spp. <i>diversifolia</i>	Summer holly	None/None/ List 1B.2	Chaparral/shrub (evergreen)/April-June.	No records in SSHCP database. Known from Dana Point, Sitton Peak and San Juan Capistrano quadrangles.	No records for Project Area and not expected to occur.
<i>Dichondra occidentalis</i>	Western dichondra	None/None/ List 4.2	Coastal sage scrub, chaparral, burned areas/perennial herb (rhizomatous)/ March-July.	Occurs in a 25-acre mapped area in the upper/middle portion of Gabino Canyon and several small populations in Cristianitos Canyon.	No records for Project Area and not expected to occur.
<i>Dodecahema leptoceras</i>	Slender-horned spineflower	FE/SE/List 1B.1	Chaparral, coastal sage scrub (alluvial fan)/annual herb/April-June.	No records in SSHCP database. Known from Alberhill quadrangle.	No records for Project Area and not expected to occur.
<i>Dudleya blochmaniae</i> ssp. <i>blochmaniae</i>	Blochman's dudleya	None/None/List 1B.1	Coastal bluff scrub, coastal sage scrub, Valley and foothill needlegrass grassland/perennial herb/April-June.	No records in SSHCP database. Known from San Clemente and Dana Point quadrangles.	No records for Project Area and not expected to occur.
<i>Dudleya cymosa</i> spp. <i>ovatifolia</i>	Santa Monica Mountains dudleya	FT/None/List 1B.2	Chaparral, coastal sage scrub, volcanic substrates/perennial herb/March-June.	No records in SSHCP database. Known only from Santiago Peak quadrangle.	No records for Project Area and not expected to occur.
<i>Dudleya multicaulis</i>	Many-stemmed dudleya	None/None/ List 1B.2	Coastal sage scrub, chaparral, Valley needlegrass grasslands; mesic barrens and cobbly clay soils/ [perennial herb/April-July.	Known from five main areas in the study area: Chiquita Ridge; Chiquadora Ridge; Cañada Gobernadora/Central San Juan east of Gobernadora Creek and north of ColorSpot Nursery; Trampas Canyon/Cristianitos Canyon extending south to the Talega development in the San Clemente Watershed; and upper Gabino and La Paz canyons. A smaller cluster occurs east of the Northrup-Grumman facilities on the mesa.	Known from Project Area, including XX occurrence locations and approximately XX individuals.

**TABLE B-2
SPECIAL-STATUS PLANT SPECIES KNOWN FROM PROJECT STUDY AREA AND "F"
STREET PROJECT VICINITY**

Scientific Name ^{1,2}	Common Name	Status Federal/State/Rare Plant Rank	Primary Habitat Associations/Form/ Blooming Period	Occurrence Project Study Area	Occurrence in "F" Street Project Area
				There also is a single record for the Bell Canyon area on Starr Ranch (F. Roberts 1997) and locations in Caspers Wilderness Park not in the database, but these populations are considered to be small. The total counted individuals in the study area is about 47,200 in about 284 mapped locations.	
<i>Dudleya stolonifera</i>	Laguna Beach dudleya	FT/ST/List 1B.1	Chaparral, cismontane woodland, coastal sage scrub, valley and foothill grassland, rocky areas/perennial herb/May-July.	No records in SSHCP database. Known from San Juan Capistrano quadrangle.	No records for Project Area and not expected to occur.
<i>Dudleya viscida</i>	Sticky dudleya	None/None/ List 1B.2	Coastal bluff scrub, coastal sage scrub, chaparral; on shaded steep rocky cliffs and canyon walls/perennial herb/May-June.	No records in SSHCP database. Known from Cañada Gobernadora, Margarita Peak and Sitton Peak quadrangles.	No records for Project Area and not expected to occur.
<i>Echinodorus berteroi</i>	Upright burhead	None/None/ None	Ponds and ditches/annual herb/August.	One location known from Upper Cristianitos. Not tracked in CNDDB.	No records for Project Area and not expected to occur.
<i>Eleocharis parvula</i>	Small spikerush	None/None/List 4.3	Saltmarsh/perennial herb/June-September.	No records in SSHCP database or in 9 USGS quadrangles in study area.	No records for Project Area and not expected to occur.
<i>Eryngium pendletonensis</i>	Pendleton button-celery	None/None/ List 1B.1	Coastal bluff scrub, Valley and foothill grassland, vernal pools, clay, vernal mesic/perennial herb/April-July.	No records in SSHCP database. Known from San Clemente quadrangle.	No records for Project Area and not expected to occur.

**TABLE B-2
SPECIAL-STATUS PLANT SPECIES KNOWN FROM PROJECT STUDY AREA AND "F"
STREET PROJECT VICINITY**

Scientific Name ^{1,2}	Common Name	Status Federal/State/Rare Plant Rank	Primary Habitat Associations/Form/ Blooming Period	Occurrence Project Study Area	Occurrence in "F" Street Project Area
<i>Euphorbia misera</i>	Cliff spurge	None/None/ List 2B.2	Sea bluffs, coastal sage scrub/shrub/Decemb er-August.	No records in SSHCP database. Known from Dana Point and San Juan Capistrano quadrangles.	No records for Project Area and not expected to occur.
<i>Harpagonella palmeri</i>	Palmer's grapplinghook	None/None/ List 4.2	Open patches of coastal sage scrub, coastal sage scrub- grassland ecotone, purple needlegrass grassland/annual herb/March-May.	Occurs on Chiquita Ridge, east of Gobernadora Creek and in Cristianitos Canyon.	No records for Project Area and not expected to occur.
<i>Hesperocyparis forbesii</i>	Tecate cypress	None/None/ List 1B.1	Closed-cone coniferous forest, chaparral, clay, gabbroic, metavolcanic/perenni al evergreen tree.	No records in SSHCP database. Known from Alberhill and Santiago Peak quadrangles.	No records for Project Area and not expected to occur.
<i>Holocarpha virgata ssp. elongate</i>	Graceful tarplant	None/None/ List 4.2	Coastal sage scrub, valley and foothill needlegrass grasslands, chaparral, and cismontane woodland/annual herb/July-November.	No records in SSHCP database or in 9 USGS quadrangles in study area.	No records for Project Area and not expected to occur.
<i>Hordeum intercedens</i>	Vernal barley	None/None/ List 3.2	Valley and foothills grasslands (saline flats and depressions), vernal pools/ annual herb/March-June.	Populations known from Cañada Gobernadora, Cristianitos Canyon, and the northeastern portion of the Talega development project area.	No records for Project Area and not expected to occur.
<i>Horkelia cuneata ssp. puperula</i>	Mesa horkelia	None/None/ List 1B.1	Chaparral (maritime), coastal sage scrub, cismontane woodland/perennial herb/February- September.	No records in SSHCP database. Known from Alberhill and Sitton Peak quadrangles.	No records for Project Area and not expected to occur
<i>Horkelia truncata</i>	Ramona horkelia	None/None/ List 1B.3	Chaparral, cismontane woodland, clay and gabbroic soils/perennial herb/May-June	No records in SSHCP database. Known from Margarita Peak quadrangle.	No records for Project Area and not expected to occur

**TABLE B-2
SPECIAL-STATUS PLANT SPECIES KNOWN FROM PROJECT STUDY AREA AND "F"
STREET PROJECT VICINITY**

Scientific Name ^{1,2}	Common Name	Status Federal/State/Rare Plant Rank	Primary Habitat Associations/Form/ Blooming Period	Occurrence Project Study Area	Occurrence in "F" Street Project Area
<i>Imperata brevifolia</i>	California satintail	None/None/ List 2B.1	Chaparral, coastal scrub, Mojavean desert scrub, meadows and seeps, riparian scrub/perennial rhizomatous herb/September-May.	No records in SSHCP database. Known from Cañada Gobernadora quadrangle.	No records for Project Area and not expected to occur.
<i>Isocoma menziesii</i> var. <i>decumbens</i>	Decumbent goldenbush	None/None/ List 1B.2	Exposed areas on coastal bluffs, coastal bluff scrub/shrub/April-November.	No records in SSHCP database. Known from the Laguna Beach quadrangle.	No records for Project Area and not expected to occur.
<i>Juncus acutus</i> spp. <i>leopoldii</i>	Southwestern spiny rush	None/None/ List 4.2	Coastal dunes, meadows and seeps (alkaline), saltwater marsh/perennial herb/May-June.	No records in SSHCP database or in 9 USGS quadrangles in study area.	No records for Project Area and not expected to occur.
<i>Lasthenia glabrata</i> spp. <i>coulteri</i>	Coulter's goldfields	None/None/ List 1B.1	Saltwater marsh and swamps, playas, vernal pools/annual herb/February-June.	No records in SSHCP database. Known from Lake Elsinore, Newport Beach, Laguna Beach and Seal Beach quadrangles.	No records for Project Area and not expected to occur.
<i>Lepechinia cardiophylla</i>	Heart-leaved pitcher sage	None/None/ List 1B.2	Chaparral above 1,000 feet, cismontane woodland, conifer forest/ shrub/April-November.	No records in SSHCP database. Two populations known from Trabuco Peak in CNF. Known from Alberhill and Santiago Peak quadrangles.	No records for Project Area and not expected to occur.
<i>Lepidium virginicum</i> var. <i>robinsonii</i>	Robinson's pepper-grass	None/None/ List 4.3	Chaparral, coastal sage scrub/annual herb/January-July.	No records in SSHCP database. Known from Alberhill, El Toro, Margarita Peak and Santiago Peak, quadrangles.	No records for Project Area and not expected to occur.
<i>Lilium humboldtii</i> spp. <i>ocellatum</i>	Ocellated Humboldt lily	None/None/ List 4.2	Oak woodland and stream courses in foothill-mountain transition zone/ perennial herb (bulbiferous)/March-July.	Suitable habitat on Starr Ranch, Caspers Wilderness Park and in the CNF.	No records for Project Area and not expected to occur.

**TABLE B-2
SPECIAL-STATUS PLANT SPECIES KNOWN FROM PROJECT STUDY AREA AND "F"
STREET PROJECT VICINITY**

Scientific Name ^{1,2}	Common Name	Status Federal/State/Rare Plant Rank	Primary Habitat Associations/Form/ Blooming Period	Occurrence Project Study Area	Occurrence in "F" Street Project Area
<i>Lilium parryi</i>	Lemon lily	None/None/ List 1B.2	Lower and upper montane coniferous forest, meadows and seeps, riparian forest/ perennial herb (bulbiferous)/July- August	No records in SSHCP database. Known from Sitton Peak quadrangle.	No records for Project Area and not expected to occur.
<i>Microseris douglasii</i> var. <i>platycarpha</i>	Small-flowered microseris	None/None/ List 4.2	Cismontane woodland, coastal sage scrub, valley and foothill grassland, clays/annual herb/March-May.	Populations known from Cañada Gobernadora and Cristianitos Canyon.	No records for Project Area and not expected to occur.
<i>Mimulus clevelandii</i>	Cleveland's bush monkeyflower	None/None/ List 4.2	Chaparral, lower montane conifer forest (often in disturbed areas)/ perennial herb/May- July.	No records in SSHCP database or in 9 USGS quadrangles in study area.	No records for Project Area and not expected to occur.
<i>Mimulus diffusus</i>	Palomar monkeyflower	None/None/ List 4.3	Chaparral, lower montane conifer forest/annual herb/April- June.	No records in SSHCP database or in 9 USGS quadrangles in study area.	No records for Project Area and not expected to occur.
<i>Monardella hypoleuca</i> spp. <i>lanata</i>	Felt-leaved monardella	None/None/ List 1B.2	Chaparral, cismontane woodland/ perennial herb/May-July.	No records in SSHCP database. Known from Alberhill, Sitton Peak and Santiago Peak quadrangles.	No records for Project Area and not expected to occur.
<i>Mondardella macrantha</i> ssp. <i>hallii</i>	Hall's monardella	None/None/ List 1B.3	Broad-leaved upland forest, chaparral, cismontane woodland, lower conifer forest, valley and foothill grassland/ perennial herb/June-August.	No records in SSHCP database. Known from Alberhill, Sitton Peak, and Santiago Peak quadrangles.	No records for Project Area and not expected to occur.
<i>Mucronea californica</i>	California spineflower	None/None/ List 4.2	Chaparral, cismontane woodland, coastal dunes, coastal sage scrub, valley and foothill grassland, sandy soils/annual herb/March-August.	No records in SSHCP database or in 9 USGS quadrangles in study area.	No records for Project Area and not expected to occur.

**TABLE B-2
SPECIAL-STATUS PLANT SPECIES KNOWN FROM PROJECT STUDY AREA AND "F"
STREET PROJECT VICINITY**

Scientific Name ^{1,2}	Common Name	Status Federal/State/Rare Plant Rank	Primary Habitat Associations/Form/ Blooming Period	Occurrence Project Study Area	Occurrence in "F" Street Project Area
<i>Myosurus minimus</i> spp. <i>apus</i>	Little mousetail	None/None/ List 3.1	Vernal pools (alkaline)/annual herb/March-June.	No records in SSHCP database. Known from San Clemente quadrangle	No records for Project Area and not expected to occur.
<i>Nama stenocarpum</i>	Mud nama	None/None/ List 2B.2	Marsh and swamps, lake margins and riverbanks/annual-perennial herb/ January-July.	Known from vernal pool on Chiquita Ridge, and the margin of stockponds located between Trampas and Cristianitos canyons and west of an RMV residence south of Ortega Highway.	No records for Project Area and not expected to occur.
<i>Nasturtium gambellii</i>	Gambel's water cress	FE/ST/List 1B.1	Marsh and swamps (freshwater and brackish)/perennial herb/April-June.	No records in SSHCP database or in 9 USGS quadrangles in study area.	No records for Project Area and not expected to occur.
<i>Navarretia fossalis</i>	Spreading navarretia	FT/None/ List 1B.1	Chenopod scrub, shallow freshwater marsh and swamps, vernal pools/ annual herb/April-June.	No records in SSHCP database or in 9 USGS quadrangles in study area.	No records for Project Area and not expected to occur.
<i>Navarretia prostrata</i>	Prostrate vernal pool navarretia	None/None/ List 1B.1	Coastal scrub, meadows and seeps, Valley and foothill grasslands (alkaline), vernal pools/annual herb/April-May.	No records in SSHCP database. Known from San Clemente quadrangle.	
<i>Nolina cismontana</i>	Chaparral nolina	None/None/ List 1B.2	Chaparral and coastal sage scrub; mostly associated with Cieneba sandy loam and Cieneba-Rock outcrop complex/shrub (evergreen)/May-July.	Occurs in two areas in study area: east of Live Oak Canyon Road and on the steep, south-facing slopes east of the Northrup-Grumman facility.	No records for Project Area and not expected to occur.
<i>Ophioglossum californicum</i>	California adder's-tongue	None/None/ List 4.2	Chaparral, valley and foothill grassland, vernal pools (margins)/ perennial herb/December-May.	No records in SSHCP database or in 9 USGS quadrangles in study area.	No records for Project Area and not expected to occur.
<i>Orcuttia californica</i>	California Orcutt grass	FE/SE/List 1B.1	Vernal pools/annual herb/April-June.	No records in SSHCP database or in 9 USGS quadrangles in study area.	No records for Project Area and not expected to occur.

**TABLE B-2
SPECIAL-STATUS PLANT SPECIES KNOWN FROM PROJECT STUDY AREA AND "F"
STREET PROJECT VICINITY**

Scientific Name ^{1,2}	Common Name	Status Federal/State/Rare Plant Rank	Primary Habitat Associations/Form/ Blooming Period	Occurrence Project Study Area	Occurrence in "F" Street Project Area
<i>Pentachaeta aurea</i> ssp. <i>aurea</i>	Golden-rayed pentachaeta	None/None/ List 4.2	Cismontane woodland, coastal sage scrub, lower montane conifer forest, valley and foothill grassland/annual herb/March-May.	No records in SSHCP database or in 9 USGS quadrangles in study area.	No records for Project Area and not expected to occur.
<i>Pentachaeta aurea</i> ssp. <i>allenii</i>	Allen's pentachaeta	None/None/ List 1B.1	Coastal sage scrub (openings), Valley and foothill grassland/annual herb/March-June.	No records in SSHCP database. Known from Dana Point, El Toro and San Juan Capistrano quadrangles.	No records for Project Area and not expected to occur.
<i>Phacelia keckii</i>	Santiago Peak phacelia	None/None/ List 1B.3	Closed-cone conifer forest, chaparral/ annual herb/May- June.	No records in SSHCP database. Known from Santiago Peak quadrangle.	No records for Project Area and not expected to occur.
<i>Piperia cooperi</i>	Chaparral rein orchid	None/None/ List 4.2	Chaparral, cismontane woodland, valley and foothill grassland/annual herb/March-July.	One location known from Central San Juan subunit north of San Juan Creek.	No records for Project Area and not expected to occur.
<i>Polygala cornuta</i> var. <i>fishiae</i>	Fish's milkwort	None/None/ List 4.3	Chaparral, cismontane woodland, riparian woodland/shrub/May -August.	Known only from Gabino Canyon.	No records for Project Area and not expected to occur.
<i>Pseudognaphalium</i> <i>leucocephalum</i>	White rabbit- tobacco	None/None/ List 2B.2	Chaparral, cismontane woodland, coastal sage scrub, riparian woodland, sandy, gravelly soils/perennial herb/July-December.	No records in SSHCP database. Known from Cañada Gobernadora, Dana Point, Margarita Peak, San Clemente, San Juan Capistrano and Sitton Peak quadrangles.	
<i>Quercus dumosa</i>	Nuttall's scrub oak	None/None/ List 1B.1	Closed-cone coniferous forest, chaparral, coastal sage scrub, sandy, clay loam soils/perennial evergreen shrub/February- August	No records in SSHCP database. Known from Dana Point and San Juan Capistrano quadrangles.	No records for Project Area and not expected to occur.

**TABLE B-2
SPECIAL-STATUS PLANT SPECIES KNOWN FROM PROJECT STUDY AREA AND "F"
STREET PROJECT VICINITY**

Scientific Name ^{1,2}	Common Name	Status Federal/State/Rare Plant Rank	Primary Habitat Associations/Form/ Blooming Period	Occurrence Project Study Area	Occurrence in "F" Street Project Area
<i>Romneya coulteri</i>	Coulter's matilija poppy	None/None/ List 4.2	Coastal sage scrub and chaparral, dry washes, canyons, and mesic slopes/perennial shrub/March-July.	No records in SSHCP database. , but one location known from upper Chiquita Canyon north of Oso Parkway.	No records for Project Area and not expected to occur.
<i>Sagittaria sanfordii</i>	Sanford's arrowhead	None/None/List 1B.2	Chaparral, oak woodlands, oak forest, shaded stream courses/perennial herb/March-July.	No records in SSHCP database or in 9 USGS quadrangles in study area.	No records for Project Area and not expected to occur.
<i>Senecio aphanactis</i>	Chaparral ragwort	None/None/ List 2B.2	Coastal sage scrub, cismontane woodland, alkaline soils/annual herb/ January-April.	No records in SSHCP database or in 9 USGS quadrangles in study area. Known from Dana Point headlands.	No records for Project Area and not expected to occur.
<i>Sidalcea neomexicana</i>	Salt Spring checkerbloom	None/None/ List 2B.2	Chaparral, coastal sage scrub, lower montane conifer forest, Mojavean Desert scrub, seeps, playas, alkaline-mesic areas/perennial herb/March-June.	Known from two slope wetlands in Chiquita Canyon and one slope wetland in Cañada Gobernadora.	No records for Project Area and not expected to occur.
<i>Suaeda esteroa</i>	Estuary seablite	None/None List 1B.2	Saltmarsh/perennial herb/July-October.	No records in SSHCP database. Known from San Clemente quadrangle.	No records for Project Area and not expected to occur.
<i>Symphotrichum defoliatum</i>	San Bernardino aster	None/ None/ 1B.2	Cismontane woodland, Coastal scrub, Lower montane coniferous forest, Meadows and seeps, Marshes and swamps, Valley and foothill grassland(vernally mesic)/near ditches, streams, springs/ perennial rhizomatous herb/ July-November.	No records in SSHCP database. Known from Alberhill quadrangle	No records for Project Area and not expected to occur.

**TABLE B-2
 SPECIAL-STATUS PLANT SPECIES KNOWN FROM PROJECT STUDY AREA AND "F"
 STREET PROJECT VICINITY**

Scientific Name ^{1,2}	Common Name	Status Federal/State/Rare Plant Rank	Primary Habitat Associations/Form/ Blooming Period	Occurrence Project Study Area	Occurrence in "F" Street Project Area
<i>Tetracoccus dioicus</i>	Parry's tetracoccus	None/None/ List 1B.2	Chaparral and coastal sage scrub on gabbroic soils/shrub (deciduous)/April- May.	No records in SSHCP database. Known from Sitton peak quadrangle.	No records for Project Area and not expected to occur.
<i>Verbesina dissita</i>	Big-leaved crownbeard	FT/ST/List 1B.1	Maritime chaparral, coastal sage scrub/perennial herb/April-July.	No records in SSHCP database. Known from San Juan Capistrano quadrangle.	No records for Project Area and not expected to occur.
<i>Viguiera laciniata</i>	San Diego County viguiera	None/None/ List 4.2	Chaparral, coastal sage scrub/ shrub/February- June.	No records in SSHCP database or in 9 USGS quadrangles in study area. Known from northern San Diego County near San Clemente.	No records for Project Area and not expected to occur.
<i>Xanthisma junceum</i>	Rush-like bristleweed	None/None/ List 4.3	Chaparral, coastal sage scrub/ perennial herb/June- October.	No records in SSHCP database or in 9 USGS quadrangles in study area.	No records for Project Area and not expected to occur.

¹ Species in bold face are Covered Species under the SSHCP.

² Species with shading are special-status species that were not analyzed in the Draft Joint Programmatic EIR/EIS.

Federal Designations:

FE - Federally-listed Endangered
 FSC - Federal Species of Concern (no longer used)
 FT - Federally-listed Threatened

State Designations:

SE - State-listed Endangered
 ST - State-listed Threatened

California Rare Plant Ranks

1A: Plants Presumed Extirpated in California and Either Rare or Extinct Elsewhere
 1B: Plants Rare, Threatened, or Endangered in California and Elsewhere
 2A: Plants Presumed Extirpated in California, But More Common Elsewhere
 2B: Plants Rare, Threatened, or Endangered in California, But More Common Elsewhere
 3: Plants About Which More Information is Needed - A Review List
 4: Plants of Limited Distribution - A Watch List

Threat Rank Extension

0.1-Seriously threatened in California (over 80% of occurrences threatened / high degree and immediacy of threat)
 0.2-Moderately threatened in California (20-80% occurrences threatened / moderate degree and immediacy of threat)
 0.3-Not very threatened in California (<20% of occurrences threatened / low degree and immediacy of threat or no current threats known)

Source: Dudek 2014

