

# **INITIAL STUDY FOR PLACER PARKWAY PHASE I IMPROVEMENTS**

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# Acronyms and Abbreviations

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AB 32	Assembly Bill 32
ADL	aerially deposited lead
ARB	California Air Resources Board
ATCM	Airborne Toxic Control Measure
BMP	best management practice
BO	biological opinion
CAAQS	California ambient air quality standards
CalFire	California Department of Forestry and Fire Protection
Caltrans	California Department of Transportation
CCR	California Code of Regulations
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CFGC	California Fish and Game Code
CFR	Code of Federal Regulations
CH <sub>4</sub>	methane
CNDDDB	California Natural Diversity Database
CNPS	California Native Plant Society
CO	carbon monoxide
CO <sub>2</sub>	carbon dioxide
County	Placer County
CRHR	California Register of Historical Resources
CSUS	California State University Sacramento
CWA	Clean Water Act
dB	Decibel
dBA	A-Weighted Decibel
DPM	diesel particulate matter
DSH	diameter at standard height
EIR	Environmental Impact Report
EIS	Environmental Impact Statement
EPA	U.S. Environmental Protection Agency
ESA	federal Endangered Species Act
FEMA	Federal Emergency Management Agency
FHWA	Federal Highway Administration
FMMP	Farmland Mapping and Monitoring Program
FPPA	Farmland Protection Policy Act
FR	Federal Register

GHG	greenhouse gase
GWP	global-warming potential
HFC	hydrofluorocarbons
HOV	High Occupancy Vehicle
I-	Interstate
ICF	ICF International
LEDPA	Least Environmentally Damaging Practicable Alternative
Leq	Equivalent Sound Level
Lmax	Maximum Sound Levels
Lmin	Minimum Sound Levels
LOS	Level of Service
Ma	million years ago
MAP-21	Moving Ahead for Progress in the 21st Century
MBTA	Migratory Bird Treaty Act
mg/kg	milligrams per kilogram
mg/l	milligrams per liter
MLD	most likely descendent
MOU	Memorandum of Understanding
mph	miles per hour
MS4s	municipal separate storm sewer systems
msl	mean sea level
MTIP	Metropolitan Transportation Improvement Program
MTP	Metropolitan Transportation Plan
NAAQS	national ambient air quality standards
NCIC	North Central Information Center
NEPA	National Environmental Policy Act
NESHAP	National Emissions Standards for Hazardous Air Pollutants
NMFS	National Marine Fisheries Service
NO <sub>2</sub>	nitrogen dioxide
NOA	naturally occurring asbestos
NO <sub>x</sub>	nitrogen oxides
NPDES	National Pollutant Discharge Elimination System
NRCS	Natural Resources Conservation Service
OES	Office of Emergency Services
Pb	lead
PCAPCD	Placer County Air Pollution Control District

PCBs	Polychlorinated Biphenyls
PCCP	Placer County Conservation Plan
PCTA	Placer County Transit Agency
PCTPA	Placer County Transportation Planning Agency
PER	Paleontological Evaluation Report
PFC	perfluorinated carbons
PG&E	Pacific Gas & Electric Company
PPMP	Preliminary Paleontological Mitigation Plan
PRC	Public Resources Code
project	Phase I of the Placer Parkway project in Placer County
PRSCG	Placer Regional Stormwater Coordination Group
PSR-PR	Project Study Report-Project Report
RCEM	Road Construction Emissions Model
ROG	reactive organic gases
ROW	right-of-way
SACOG	Sacramento Area Council of Governments
SCS 2035	Sustainable Communities Strategy 2035
SF <sub>6</sub>	sulfur hexafluoride
SFBAAB	San Francisco Bay Area Air Basin
SO <sub>2</sub>	sulfur dioxide
SPRTA	South Placer Regional Transportation Authority
SR	State Route
STLC	soluble threshold limit concentration
SWPPP	Storm Water Pollution Prevention Plan
TAC	toxic air contaminants
TMP	traffic management plan
UC	University of California
UPRR	Union Pacific Railroad
US 50	U.S. Highway 50
USACE	U.S. Army Corps of Engineers
USC	United States Code
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
VMT	vehicles miles traveled
WPUSD	Western Placer Unified School District



# Environmental Checklist

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- 1. Project Title:** Placer Parkway Phase I Improvements
- 2. Lead Agency Name and Address:** Placer County Department of Public Works  
3091 County Center Dr., Suite 220  
Auburn, CA 95603
- 3. Contact Person and Phone Number:** Richard Moorehead, P.E.  
530.745.7533
- 4. Project Location:** Phase I begins at SR 65 in Placer County between Sunset Boulevard and Twelve Bridges Drive and terminates 1.4 miles to the southwest at Foothills Boulevard North.
- 5. Project Sponsor's Name and Address:** Placer County Department of Public Works
- 6. General Plan Designation:** The area immediately surrounding the proposed interchange and the connection of Placer Parkway to SR 65 is designated Retail Commercial, High-Density Residential, Business and Professional, and Recreation/Conservation) on the City of Rocklin General Plan land use map, and Business Park on the Placer County Sunset Industrial Area Plan land use map. The remainder of the project area is designated Industrial on the Placer County Sunset Industrial Area Plan land use map. The portion of the project limits that is located within the City of Lincoln is designated as Open Space east of SR 65 and Light Industrial) west of SR 65 on the City of Lincoln land use map.
- 7. Zoning:** Placer County: F-B-X-DR 160 AC Min; F-B-X-DR 80 AC Min; Business Park-Design Scenic Corridor; Business Park-Design Scenic Corridor-Flood Hazard, Industrial-Design Scenic Corridor, Industrial Park-Design Scenic Corridor  
City of Rocklin: Open Space; Planned Development-Commercial  
City of Lincoln: Open Space-Conservation
- 8. Description of Project:**

The Placer County Department of Public Works, in coordination with the California Department of Transportation (Caltrans), proposes to construct Phase I of the Placer Parkway project in Placer County (project). The proposed project seeks to extend freeway access at State Route (SR) 65 with the construction of a new roadway connection west to Foothills Boulevard North. The project is subject to federal and state environmental review requirements because Placer County proposes the use of federal funds. Caltrans is the lead agency under the National Environmental Policy Act (NEPA), through NEPA Assignment under Moving Ahead for Progress in the 21st Century (MAP-21) (23 United States Code [USC] 327), effective as of October 1, 2012. The Placer County Department of Public Works is the lead agency under the California Environmental Quality Act (CEQA).

The project is included in the Sacramento Area Council of Governments (SACOG) Metropolitan Transportation Plan/Sustainable Communities Strategy 2035 (MTP/SCS 2035) and 2015/2018 Metropolitan Transportation Improvement Program (MTIP) under SACOG ID PLA25299, with a listed completion year of 2020.

Figure 1 identifies the regional location of the proposed project and Figure 2 identifies the project vicinity.

## **Purpose and Need**

### Need

Growth in population and employment in southwestern Placer County, southern Sutter County, and northern Sacramento County will influence the travel demand in the SR 65 and Placer Parkway Corridor. As discussed in the Final Tier I Environmental Impact Report (EIR)/Environmental Impact Statement (EIS), the Placer Parkway connection at SR 65 is envisioned to reduce anticipated traffic congestion along the SR 65 corridor, on the local/regional transportation system, and to advance economic development goals in southern Sutter and western Placer Counties.

Prior to the recent downturn in the economy, the Placer Parkway Corridor included some of the fastest growing communities in the Sacramento region: Roseville, Rocklin, and Lincoln. The SACOG 2035 MTP/SCS estimates that these communities will continue to grow toward buildout conditions by the year 2035. Although growth in these areas will continue at a slower pace than was originally estimated, the continued growth in this area will place additional travel demands on the SR 65 and Interstate 80 (I-80) corridors and the regional roadway network. The jurisdictions in southwestern Placer County have developed Capital Improvement Programs (funded by development fees) that would maintain a high level of service on local roadway systems. However, limited improvements are programmed for the regional roadway system, and travel speeds/travel times from Placer County to both Sacramento and Sutter Counties are projected to deteriorate over the next 20 years, even with improvements to local roadways already identified in local general plans.

Sunset Boulevard provides the primary access to the Sunset Industrial Area. South Loop Road and Placer Corporate Drive provide right-in/right-out access to the Sunset Industrial Area from Sunset Boulevard and SR 65. Due to planned development, the 2035 projected traffic volumes anticipate congestion at both the Sunset Boulevard and Twelve Bridges Drive interchanges along SR 65. The I-80 corridor is the major trans-Sierra roadway in northern California that accommodates the movement of goods and services. Goods and services are moved to and through the project area at a growing rate using three primary modes of transportation: road, air, and rail. The combined increase of vehicles used for the movement of goods and services as well as passenger vehicles has led to increased congestion, which in turn decreases travel times in the project area and competition for roadway capacity.

Congestion on the regional roadways connecting Placer County with Sutter and Sacramento Counties will adversely impact access to jobs. The projected increase in travel times will affect the movement of goods and people and will have an impact on the region's economy.

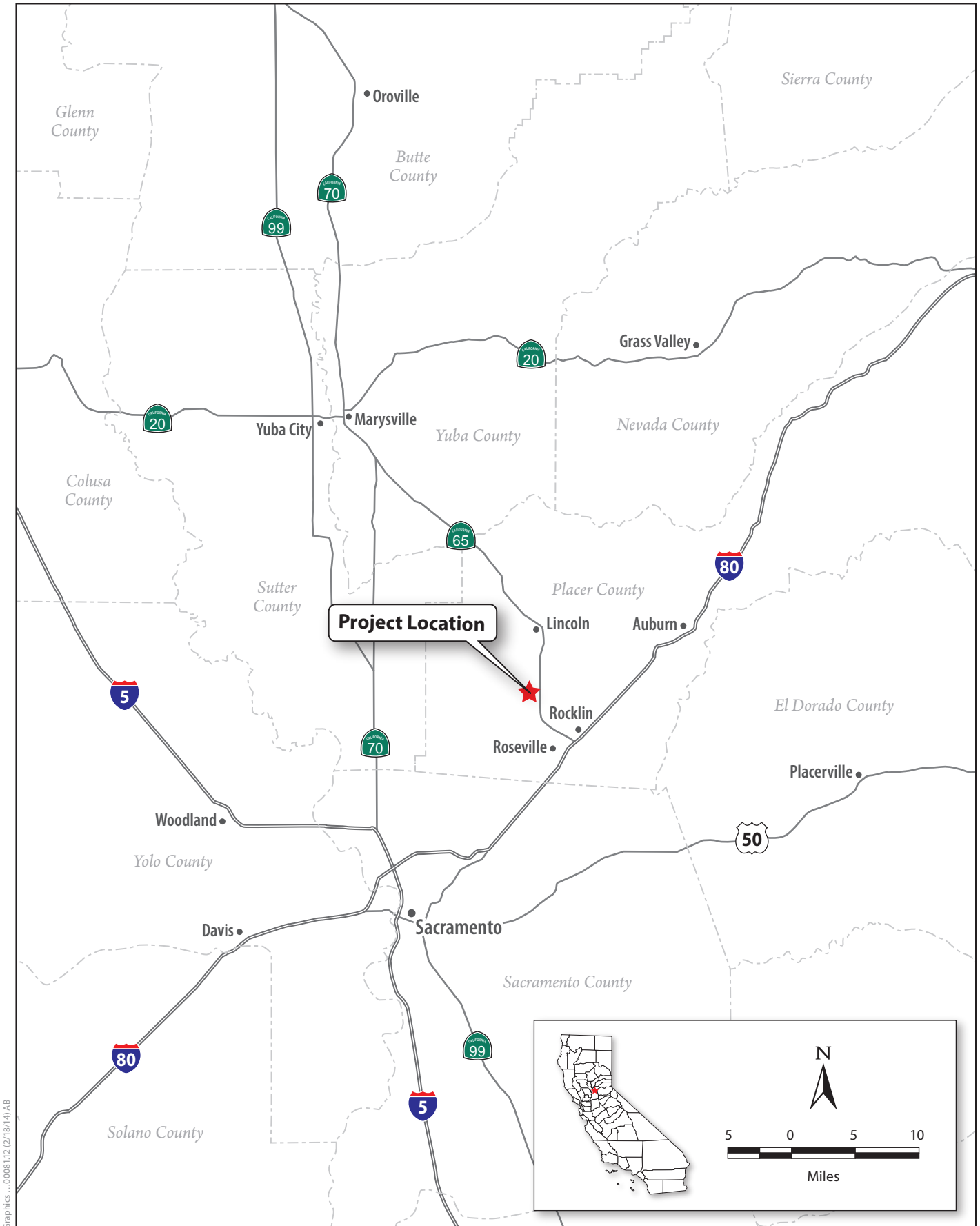
### Purpose

The primary purpose of the ultimate Placer Parkway project is to provide a connection between the SR 65 corridor and the SR 70/99 corridor. Placer Parkway would serve the communities of Lincoln, Rocklin, Roseville, and western Placer County with an alternative to SR 65, I-80, and the local transportation network. Also, Placer Parkway would provide additional accessibility to southern Sutter County. The Placer Parkway project would reduce anticipated congestion on the local and regional transportation system and advance economic development goals in southwestern Placer County and southern Sutter County.

Placer Parkway would also be designed to improve regional accessibility for businesses and jobs in the project vicinity. With its controlled access, an objective of the proposed transportation facility would be to strike a balance among advancing planned job growth along the SR-65 and SR-70/99 corridors, avoiding urban growth inducement in areas not designated for development, and helping to preserve the rural character of southwestern Placer County and southern Sutter County.

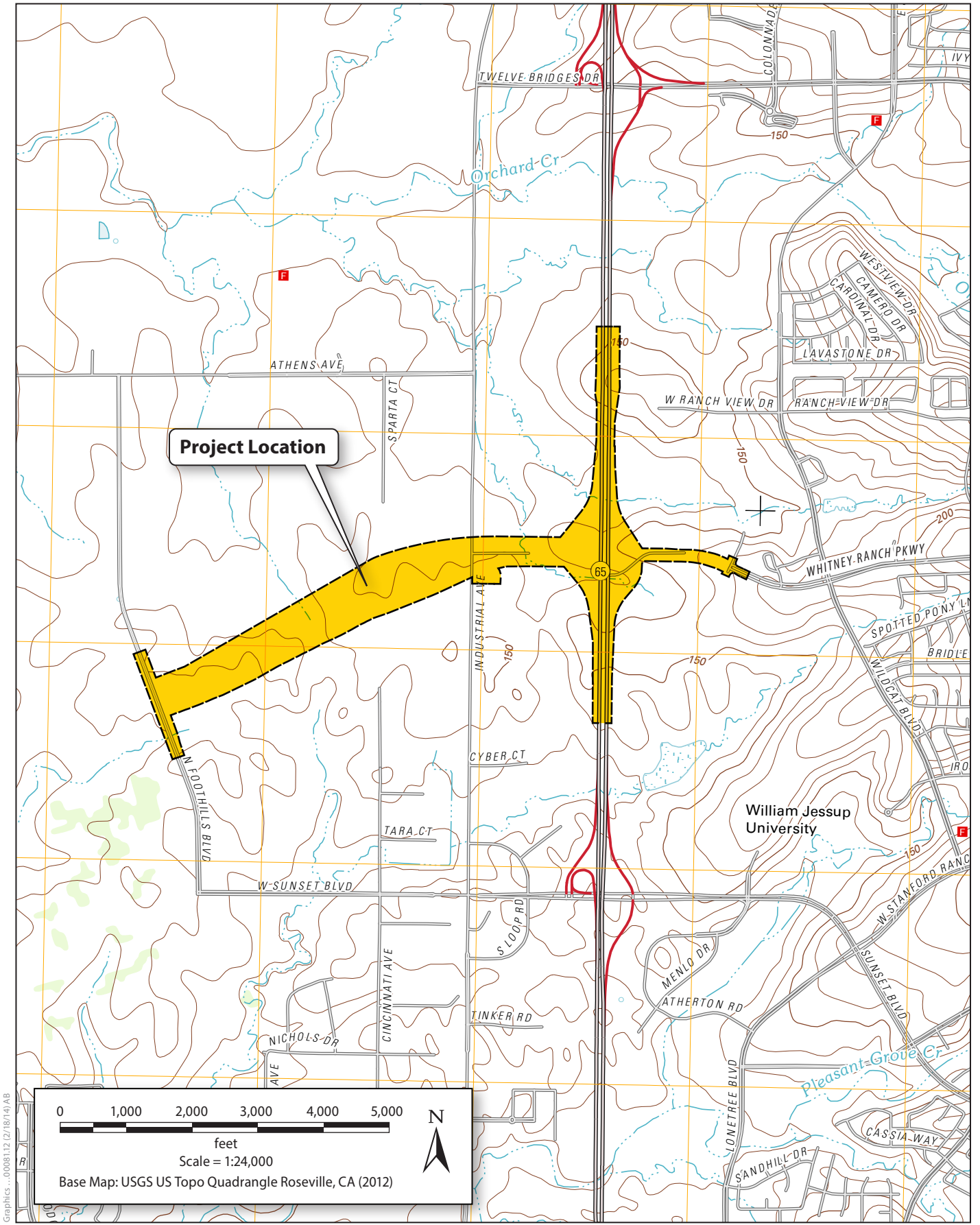
The SR 65 interchange is an integral component of the ultimate Placer Parkway project, providing a new expressway connection between SR 65 and the SR 70/99. The construction of Placer Parkway would benefit the regional transportation system by providing an alternative to SR 65 and I-80, thereby reducing traffic demand in these existing freeway corridors.

The purpose of Phase 1 of Placer Parkway is to establish freeway access at SR 65 and provide alternative connections to Foothills Boulevard North to relieve congestion along SR 65 at Sunset Boulevard and Twelve Bridges Drive and along Industrial Avenue and Sunset Boulevard.



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**Figure 1**  
**Project Vicinity**



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**Figure 2**  
**Project Location**

### **Proposed Project**

Three build alternatives and a No-Build Alternative are analyzed in this document. The project limits include the easternmost portion of the Eastern Segment analyzed in the Tier 1 EIS/EIR, and extend from the SR 65/Whitney Ranch Parkway interchange southwest approximately 1.4 miles to Foothills Boulevard North.

### **Roadway Configuration**

As identified in the Tier 1 EIS/EIR, Placer Parkway would be a high-speed, limited access roadway, designed to Caltrans' standards. Pedestrian access and bicycle facilities are not included. Both the South Placer Regional Transportation Authority Board and the Federal Highway Administration (FHWA) adopted Alternative #5 with a no-access buffer as the preferred alternative. The Placer Parkway conceptual design was developed and planned as an expressway/freeway project; it was not planned as a typical local roadway connection with continuous pedestrian and bicycle facilities. Furthermore, the Whitney Ranch Project Study Report-Project Report (PSR-PR) approved in 2010 does not include pedestrian and bicycle facilities. Consistent with the Tier I EIS/EIR and the established design standards, Placer Parkway Phase 1 would not propose sidewalk at the SR 65 interchange or along the corridor.

Within the project area, pedestrian access exists at the Sunset Boulevard interchange, which is located approximately 1 mile south of the proposed Placer Parkway. The Sunset Boulevard interchange includes sidewalk on both sides of the roadway approaches, sidewalk on the north side of the overcrossing structure, and Class II bike lanes through the interchange. West of the Sunset Boulevard interchange, sidewalk facilities currently end at the Sunset/Placer Corporate Drive/South Loop Road intersection. Placer County has programmed a project in the Placer County Transportation Planning Agency (PCTPA) 2035 Regional Transportation Plan to widen the Sunset Boulevard overcrossing of Industrial Avenue to four lanes and construct sidewalk to provide connectivity between existing pedestrian facilities at the interchange and Cincinnati Avenue.

Additionally, pedestrian and bicycle facilities on Sunset Boulevard would provide a more direct connection between pedestrian and bicycle origin/destination points. Sunset Boulevard is currently planned to tie into the middle of the proposed Placer Ranch development. The Placer Ranch project proposes to develop approximately 2,200 acres of property that is located in unincorporated Placer County, immediately west and south of Placer County's Sunset Industrial Area, south of the Western Regional Sanitary Landfill, north of the existing City of Roseville limits, and east of the Amoruso Ranch Specific Plan. Placer Ranch has executed a Memorandum of Understanding (MOU) with California State University Sacramento (CSUS) to develop a satellite campus to ultimately accommodate 25,000 students. The development will also include a mix of land uses: research and development, office, commercial, housing, schools, parks, and open space. The land uses immediately adjacent to Sunset Boulevard extension vary including commercial mixed use, high density residential, and the CSUS campus.

The Placer Ranch Conceptual Site Plan shows Placer Parkway along the development's northern border with adjacent commercial and industrial land uses. As Placer Parkway will be a limited access expressway, there will not be any direct connection to the surrounding developments.

Based on traffic forecasts for the design year of 2040, Phase I of the Parkway is proposed to be built as a four-lane roadway from SR 65 to Foothills Boulevard North. The Parkway approved in the Tier I document is a six-lane facility. As such, the project design does not preclude the future widening of the Parkway from four to six lanes, should the demand require future widening. However, right-of-way preserved in Phase I of the Parkway would accommodate the ultimate six-lane facility. The design criteria include a design speed of 70 miles per hour (mph). The Parkway would be designed and constructed to local standards and Caltrans standards within the limits of Caltrans right-of-way, unless specific design exceptions are granted. Access would be provided at Foothills Boulevard North and SR 65, as identified in the Tier I EIS/EIR.

### **Roadway Elevation**

As the study area is comprised of relatively flat terrain, the majority of the future Placer Parkway is assumed to be at-grade. Bridges would be used to span certain features and improvements such as the Union Pacific Railroad tracks along Industrial Avenue and SR 65. Generally, the approximate height of bridges is expected to be roughly 30 feet above Industrial Avenue, the railroad, and SR 65. Along the

Parkway, culverts would be used at smaller drainage tributary crossings as appropriate, depending on local conditions and permit requirements.

### **Project Alternatives**

The following subsections describe the project alternatives; a preferred alternative has not been identified. All of the following alternatives are under consideration, and no decision on a preferred alternative will be made until all alternatives have been fully evaluated, including additional consultation with federal agencies.

#### No-Build Alternative

Under the No-Build Alternative, the project would not be implemented. Under the No-Build Alternative, conditions in the study area would not remain static. Although the impacts of the build alternatives would not occur, the SR 65/Whitney Ranch Parkway interchange project would be constructed starting in 2015. In addition, based on current trends and development pressures, it is likely that growth and development related impacts would continue to create changed conditions for a number of resources. For example, under the No-Build Alternative, vehicle hours of delay in congested conditions would increase substantially. Related to the increase in vehicle hours of delay in the future with a No-Build Alternative, the increase in travel in congested conditions would result in increased air pollution emissions and increased energy use. Even under the No-Build Alternative, cumulative impacts related to other projects would still occur, including changes in land use, loss of agricultural land, and increased development. Increased development would continue to result in the cumulative loss of other resources, such as biological habitat, and changes in the visual conditions in the study area.

#### Build Alternatives

Improvements at the SR 65/Whitney Ranch Parkway/Placer Parkway interchange and three alternatives for the extension of Placer Parkway from the interchange to Foothills Boulevard North are being evaluated. The three build alternatives are shown in Figures 3a and 3b (Alternative 1); 4a and 4b (Alternative 2); and 5a and 5b (Alternative 3).

In general, the alternatives are similar in configuration at the southbound SR 65 ramp terminal intersection but begin to curve to the southwest at different points to tie into the proposed Placer Parkway/Foothills Boulevard North intersection to the west. All three alternatives transition from six lanes at the interchange to four lanes west of the interchange. The extension includes a grade separation over Industrial Avenue and Union Pacific Railroad (UPRR) facilities about 0.4 mile west of the interchange. The three alternatives impact the private baseball field at the Ace Hardware distribution center and the Rio Bravo Rocklin plant to varying degrees.

Construction of a build alternative would begin in 2018. Each alternative is summarized below.

#### Alternative 1—Southern Alignment

- Extension of Placer Parkway is located outside of the adopted 500-foot corridor from west of the proposed overcrossing at Industrial Avenue and UPRR tracks to the connection at Foothills Boulevard North.
- Impacts the baseball field.
- Minimizes impacts on Rio Bravo Rocklin plant.

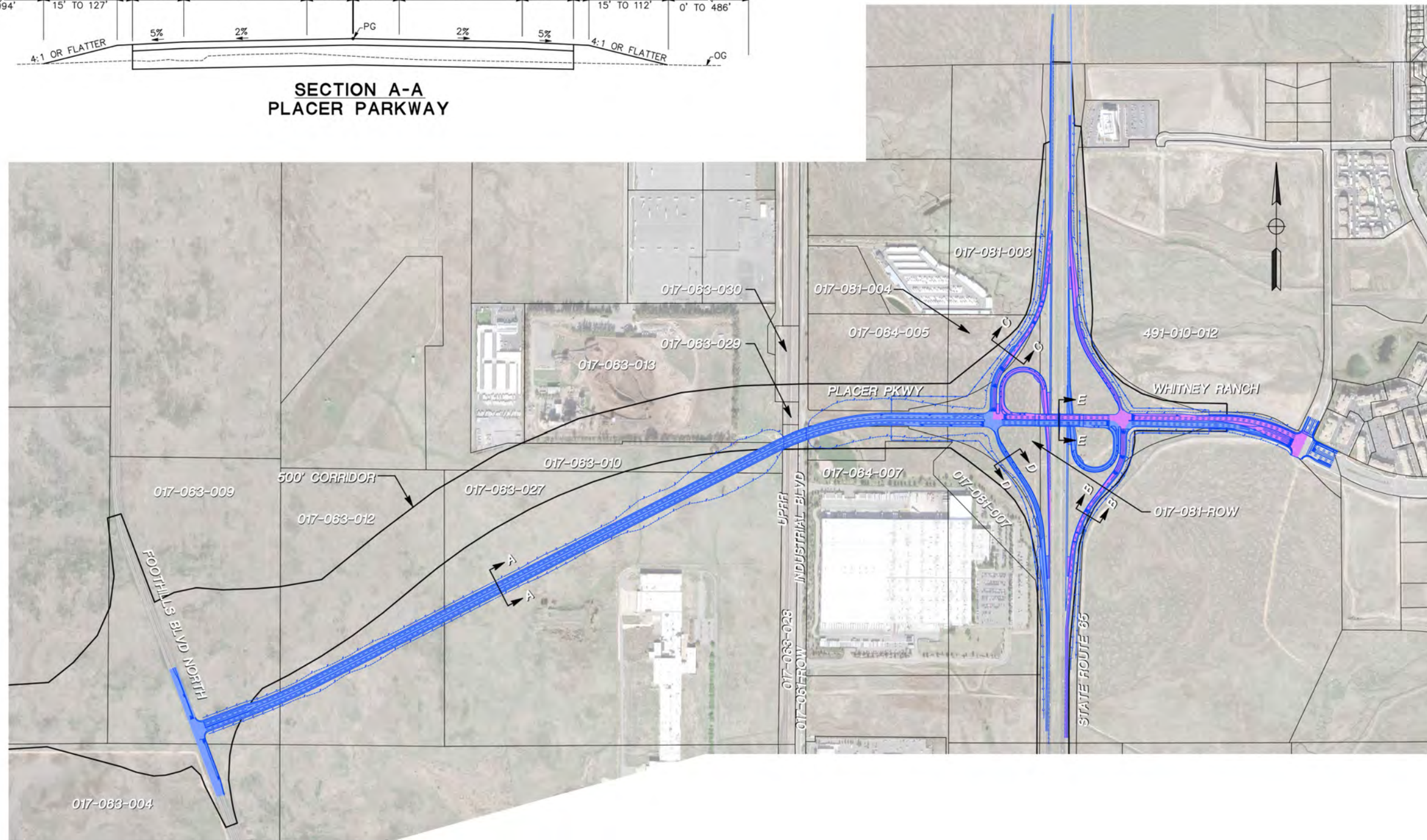
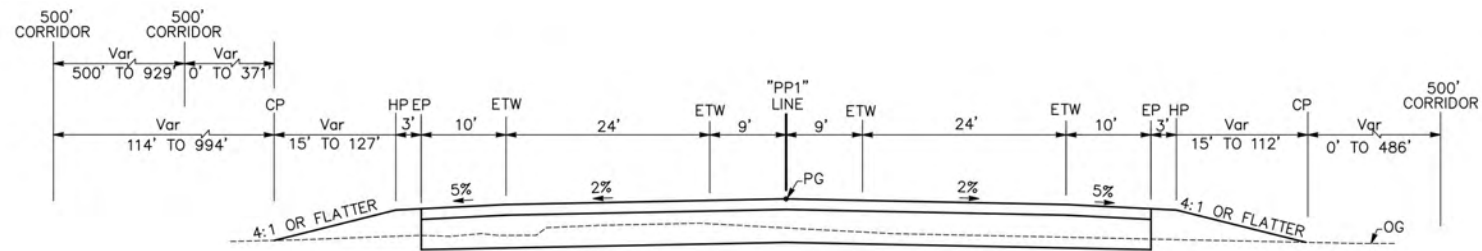
#### Alternative 2—Central Alignment

- Extension of Placer Parkway is partially outside the adopted 500-foot corridor.
- Minimizes impacts on the baseball field.
- Impacts the Rio Bravo Rocklin plant.
- Located up to 200 feet north of southern alignment.

#### Alternative 3—Northern Alignment

- Extension of Placer Parkway is located within the adopted 500-foot corridor.
- Minimizes impacts on the baseball field.
- Greater impacts on the Rio Bravo Rocklin plant.

SR 65 Interchange Improvements: The proposed project includes improvements at the SR 65/Whitney



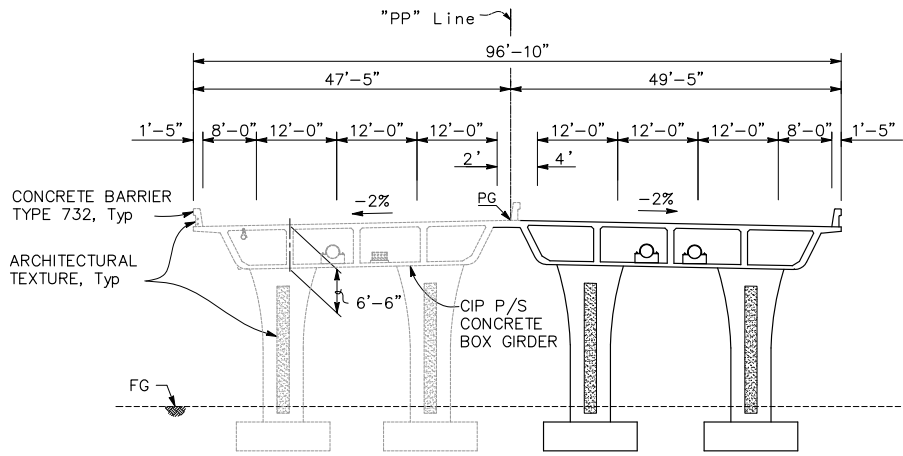
- LEGEND**
- PLACER PARKWAY IMPROVEMENTS
  - WHITNEY RANCH IMPROVEMENTS

**ULTIMATE PLACER PARKWAY INTERCHANGE  
ALTERNATIVE 1**

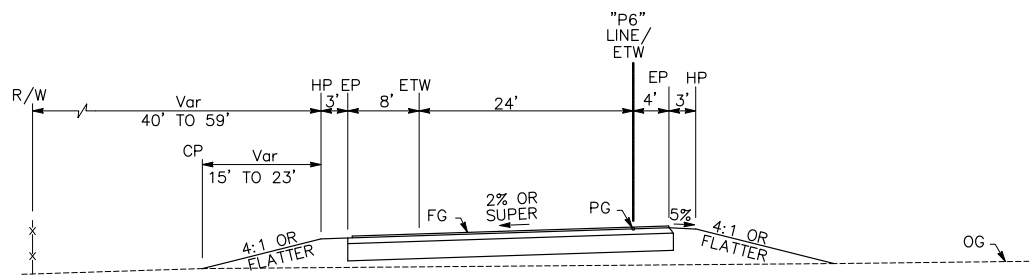
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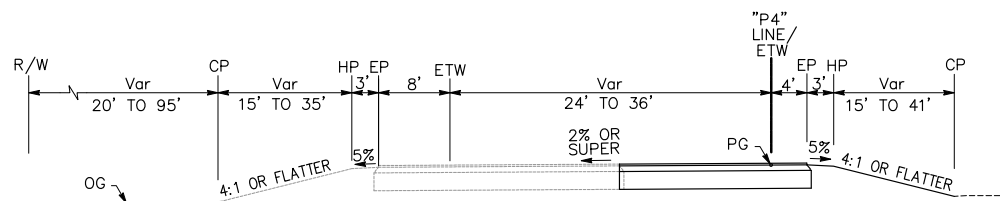
**Figure 3a  
Ultimate Placer Parkway Interchange  
Alternative 1**



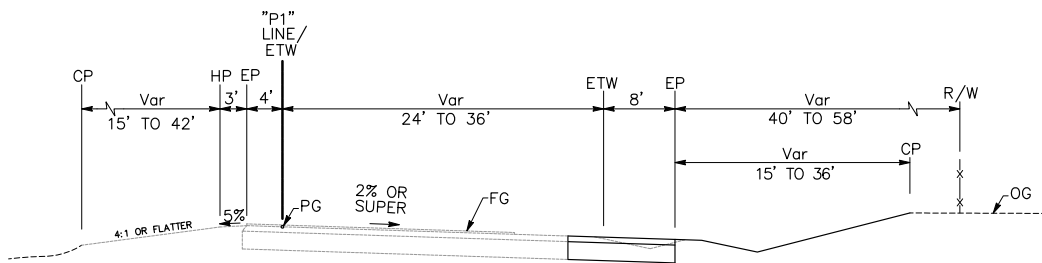
**SECTION E-E  
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**SECTION D-D  
SOUTHBOUND ON-RAMP**



**SECTION C-C  
SOUTHBOUND OFF-RAMP**



**SECTION B-B  
NORTHBOUND OFF-RAMP**

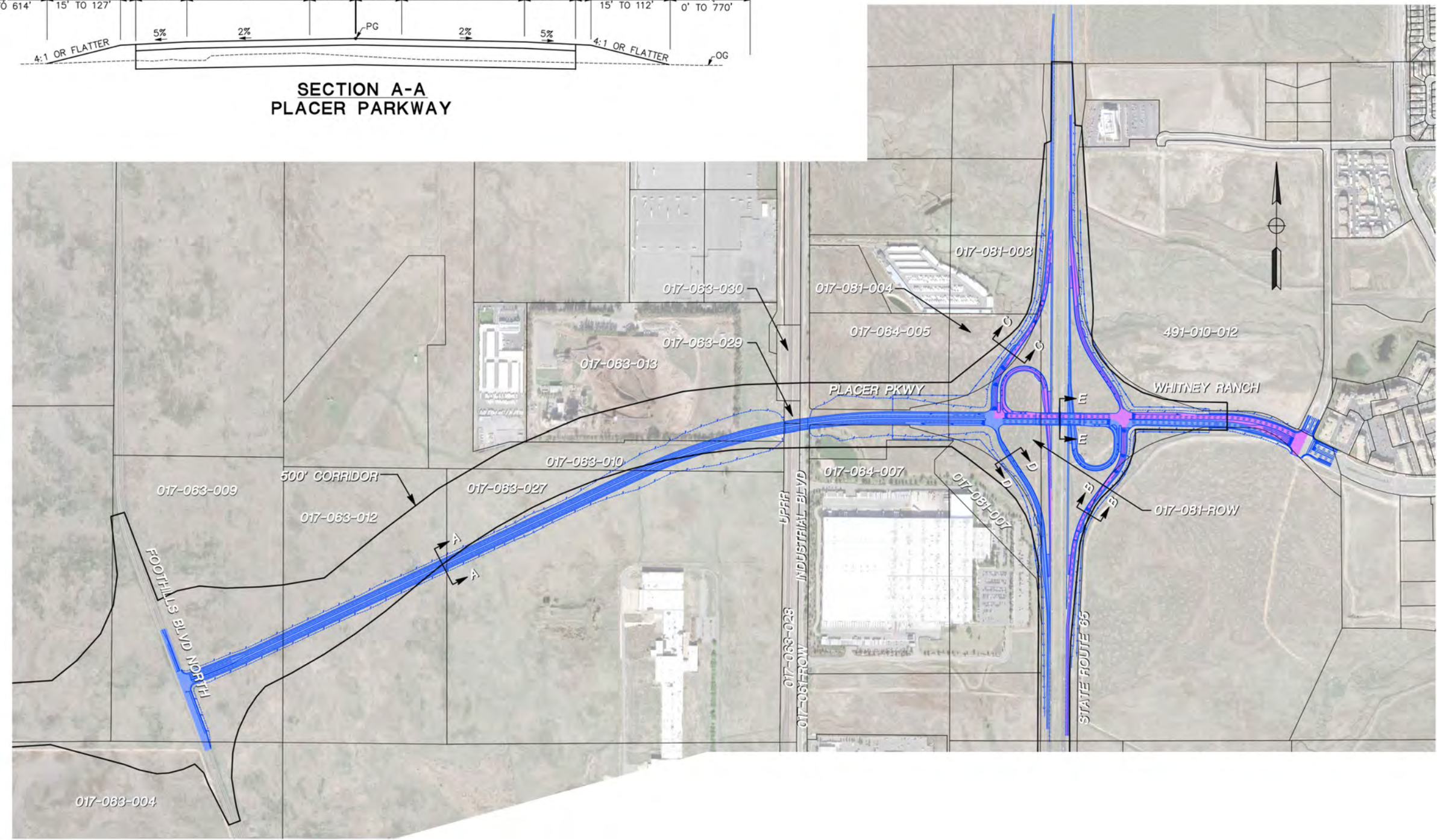
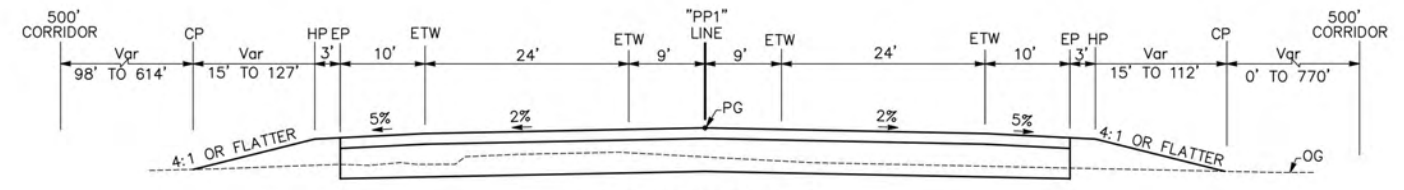
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**Figure 3b  
Ultimate Placer Parkway Interchange  
Cross Sections, Alternative 1**





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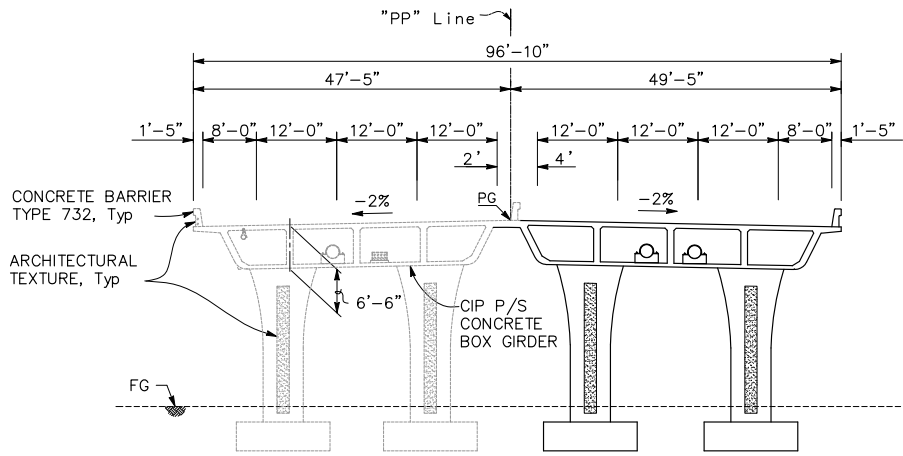
■ PLACER PARKWAY IMPROVEMENTS

■ WHITNEY RANCH IMPROVEMENTS

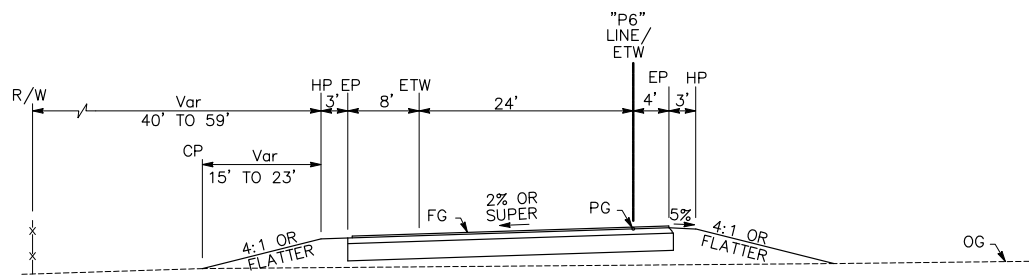
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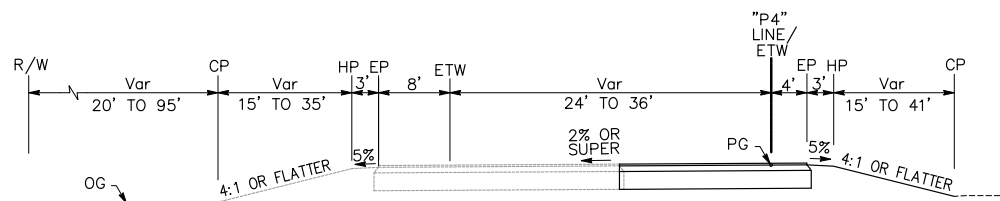
**Figure 4a**  
**Ultimate Placer Parkway Interchange**  
**Alternative 2**



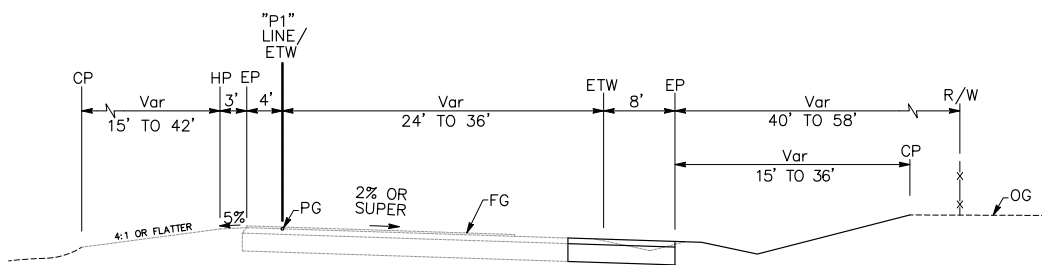
**SECTION E-E  
PLACER PARKWAY OC**



**SECTION D-D  
SOUTHBOUND ON-RAMP**



**SECTION C-C  
SOUTHBOUND OFF-RAMP**



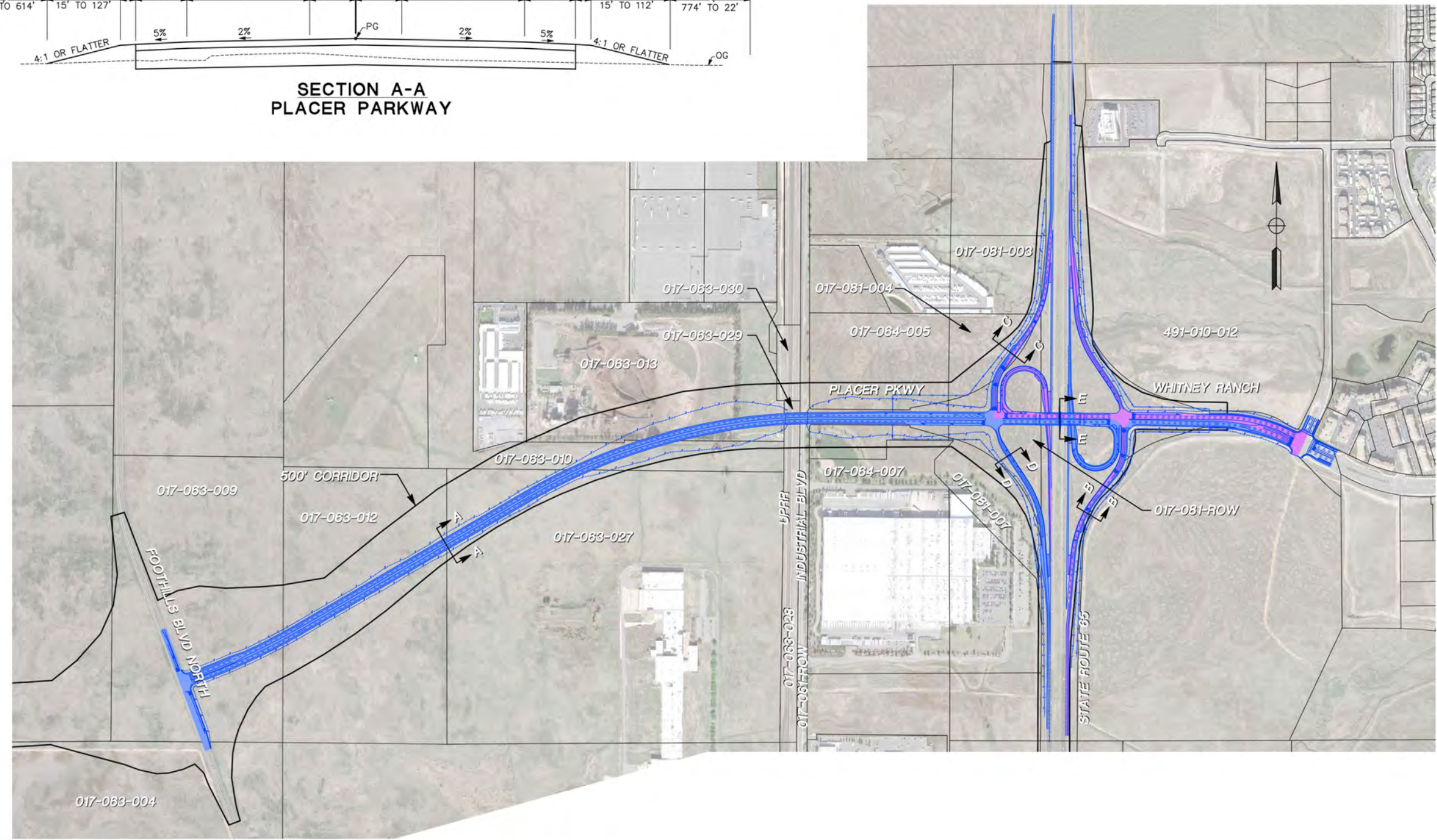
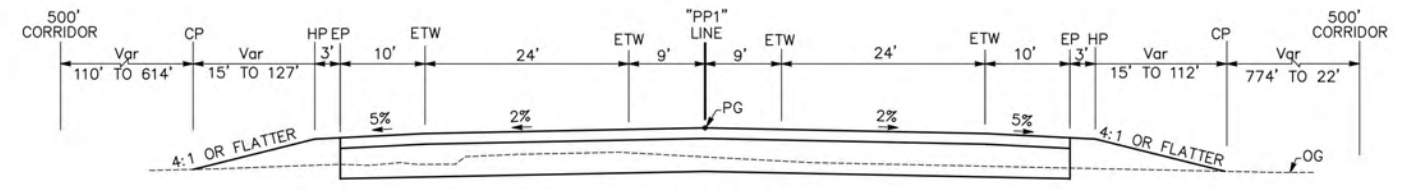
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NORTHBOUND OFF-RAMP**

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**Figure 4b  
Ultimate Placer Parkway Interchange  
Cross Sections, Alternative 2**



**LEGEND**

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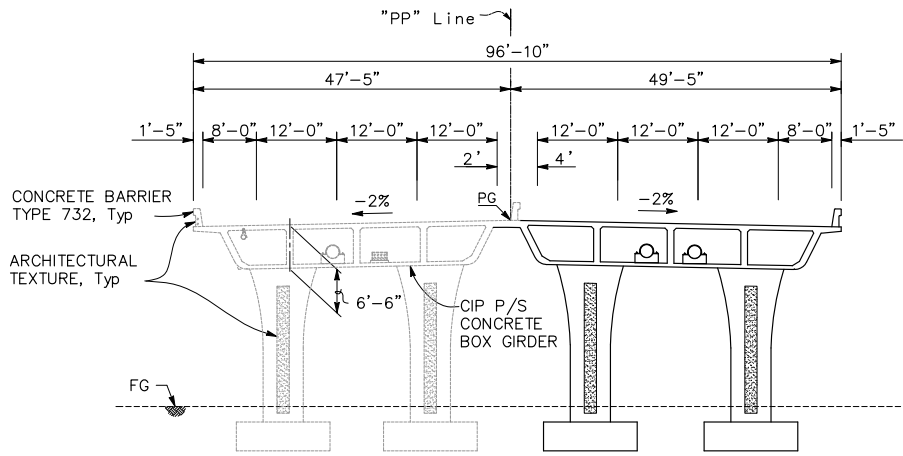
■ WHITNEY RANCH IMPROVEMENTS

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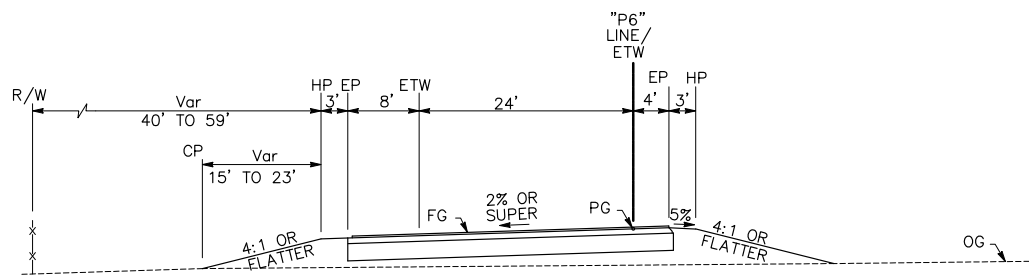


**Figure 5a**  
**Ultimate Placer Parkway Interchange**  
**Alternative 3**

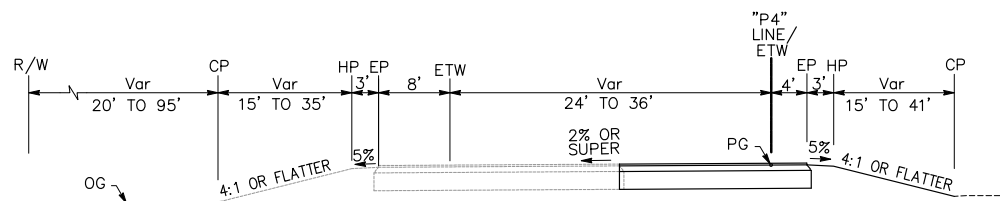
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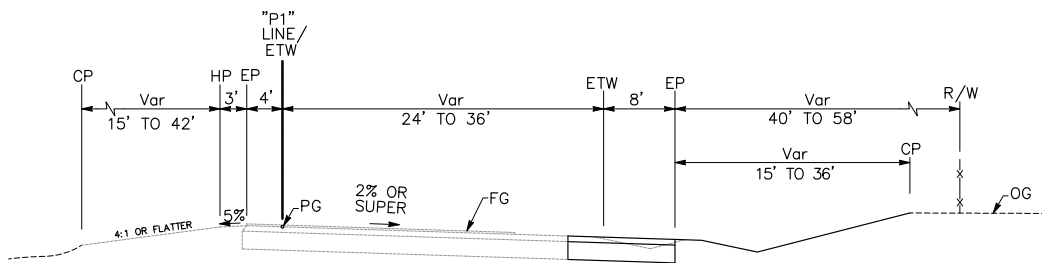
**SECTION E-E  
PLACER PARKWAY OC**



**SECTION D-D  
SOUTHBOUND ON-RAMP**



**SECTION C-C  
SOUTHBOUND OFF-RAMP**



**SECTION B-B  
NORTHBOUND OFF-RAMP**

Source: Mark Thomas & Company, Inc.

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**Figure 5b  
Ultimate Placer Parkway Interchange  
Cross Sections, Alternative 3**

Ranch Parkway interchange for all three alternatives. The project would include a standard L-9 interchange at SR 65 and Whitney Ranch Parkway/Placer Parkway and an access-controlled extension of Placer Parkway to Foothills Boulevard North. The project includes the following improvements.

- Widen SR 65 overcrossing to six lanes
- Widen Whitney Ranch Parkway from SR 65 to University Avenue to six lanes.
- Add auxiliary lanes north and south of the interchange.
- Widen the southbound off-ramp.
- Add a southbound on-ramp.
- Widen the northbound off-ramp.
- Add a northbound loop on-ramp.
- Add a four-lane overcrossing of Industrial Avenue and UPRR tracks.
- Add a four-lane extension to Foothills Boulevard North with striped median (see alternatives above).

The SR 65 interchange is common to all three build alternatives. It provides a combination of freeway connections and local access from Whitney Ranch Parkway east of the Placer Parkway terminus. Placer Parkway terminates and becomes Whitney Ranch Parkway east of the southbound SR 65 exit ramp intersection. Traffic signals would be provided at the ramp terminal intersections.

Auxiliary lanes would be required on SR 65 in both directions between SR 65/Whitney Ranch Parkway/Placer Parkway interchange and the SR 65/Sunset Boulevard interchange to enhance traffic operations. Between Twelve Bridges and Placer Parkway/Whitney Ranch Parkway, the project includes 1,000-foot northbound and 1,300-foot southbound auxiliary lanes. The remaining auxiliary lanes to Twelve Bridges would be constructed in a future project.

This interchange includes the following features and standards.

- It provides full traffic movement from all the intersecting roadway facilities.
- It provides moderate-speed connections for the eastbound Placer Parkway to southbound SR 65. The design speeds and standards for these ramps would correspond to a 50 mph minimum.
- The eastbound Placer Parkway to northbound SR 65 consists of a 25 mph loop.
- Northbound SR 65 to westbound Placer Parkway traffic and southbound SR 65 to westbound Placer Parkway would enter at the signalized exit ramp terminal. This traffic movement would be a typical urban-type interchange exit.
- Westbound Whitney Ranch Parkway traffic would use the loop entrance ramp to access southbound SR 65.

Interim Phase: An interim phase of the proposed project is also being considered for all three alternatives. The interim phase would implement the following project elements.

- Widen Whitney Ranch Parkway extension to four lanes from the SR 65/northbound ramp terminal intersection to University Avenue.
- Restripe SR 65 overcrossing to three lanes (two westbound lanes, one eastbound lane).
- Construct the following SR 65 interchange improvements.
  - Add a southbound off-ramp.
  - Add a southbound on-ramp.
  - Add a northbound loop on-ramp.
  - Widen the northbound off-ramp.
  - Add an auxiliary lane for northbound off-ramp.
  - Add an auxiliary lane for southbound off-ramp.
  - Add a 1,000-foot auxiliary lane for northbound on-ramp.
  - Add a 1,300-foot auxiliary lane for southbound off-ramp.
- Construct two-lane overcrossing of Industrial Avenue and UPRR tracks.

- Construct two-lane roadway extension to Foothills Boulevard North with striped median.

Utility Relocations: Joint utility poles run parallel to the Industrial Avenue/UPRR corridor on both the east and west side of the corridor. Overhead electric lines run to the west from the overhead lines adjacent to the UPRR tracks to serve the Rio Bravo Rocklin plant. Underground fiber optic and petroleum lines are located between Industrial Avenue and the UPRR tracks. All three alternatives of the Placer Parkway extension impact the Rio Bravo Rocklin service and joint utility poles east and west of the Industrial Avenue/UPRR corridor. It is anticipated that overhead facilities would be relocated and/or raised to clear potential conflicts with alignments of the alternatives.

To prevent future modifications to the widened SR 65 overcrossing structure, empty utility sleeves will be installed in the new bridge from the east terminating at the southbound ramp terminal intersection. The sleeves will allow for future installation of water, electrical, telephone and fiber optic facilities that may be separately proposed by utility providers as planned development in the project area occurs.

An underground joint utility trench and a waterline currently terminate at the existing Whitney Ranch Parkway/SR-65 Interchange. The trench includes electric, telephone, and fiber optic conduits. A sewer line is located in the southeast quadrant of the interchange, just outside of Caltrans right-of-way, connecting into the existing Whitney Ranch Parkway/University Avenue intersection. The proposed project will adjust sewer manholes and utility boxes located within the project footprint to the new roadway elevation.

Property Acquisition: Near the interchange, the proposed project would acquire additional right-of-way adjacent to the northbound on-ramp, southbound off-ramp, and southbound on-ramp. The project also proposes to reserve the necessary right-of-way for the ultimate six-lane width of the roadway extension to Foothills Boulevard North.

### **Construction Staging**

Temporary construction easements may be acquired for contractor access and construction staging areas. The project would be built with construction access from Whitney Ranch Parkway, Industrial Avenue, Foothills Boulevard North, and SR 65. Two lanes in each direction on SR 65, one lane in each direction on Industrial Boulevard, Foothills Boulevard North, and Whitney Ranch Parkway are anticipated to remain open to traffic for the majority of project construction. Short-term (overnight or weekend) closures with detours would be necessary on SR 65 and Industrial Avenue for the erection and removal of bridge falsework.

As is standard with all roadway projects, the contractor would be required to install temporary Best Management Practices (BMPs) to control any runoff or erosion from the project site into the surrounding waterways. These temporary BMPs would be installed prior to any construction operations and would be in place for the duration of the contract. The removal of these BMPs would be the final operation, along with project site cleanup.

### **Placer Parkway Corridor Preservation Tier 1 EIS/EIR**

The Placer Parkway Corridor Preservation project identified a reasonable range of alternatives that were analyzed in a Tier 1 Program Environmental Impact Statement/Environmental Impact Report (Tier 1 EIS/EIR) (FHWA-CA-FEIS-2009-46 and SCH No. 2003092069; available at <http://www.pctpa.net/placerparkway/library.htm>). This document coordinated federal (NEPA) and state (CEQA) requirements for the Placer Parkway Corridor Preservation project. It evaluated five corridor alternatives and lead to the selection of one corridor for right-of-way preservation.

The Federal Highway Administration (FHWA), Caltrans, and the South Placer Regional Transportation Authority (SPRTA) elected to preserve a corridor to vary from approximately 500 feet in the Eastern and Western Segments to approximately 1000 feet in the Central Segment for the future construction of the Placer Parkway. FHWA was the NEPA lead agency. SPRTA was the CEQA lead agency. SPRTA has authorized the Placer County Department of Public Works to carry out the future project efforts for Phase I of the Placer Parkway project.

FHWA, Caltrans, and SPRTA completed the Final Tier 1 EIS/EIR, and it was released on November 16, 2009. The document addressed federal (NEPA) and state (CEQA) requirements to select a corridor within which the future Placer Parkway would be constructed.

The Final Tier 1 EIS/EIR identifies the Preferred Alternative (NEPA) and the Environmentally Superior

Alternative (CEQA). The document contains comments received on the 2007 Draft Tier 1 EIS/EIR, the 2009 Partially Revised Draft Tier 1 EIS/EIR, and responses to these comments. The Final Tier 1 EIS/EIR also identifies changes to those documents as a result of the public comment process. It also includes the Mitigation Monitoring and Reporting Program.

Of the five corridor alignment alternatives considered, the Final Tier 1 EIS/EIR identifies Alternative 5 as the Preferred Alternative and the Environmentally Superior Alternative. This conclusion was based on the 2007 Draft Tier 1 EIS/EIR, the 2009 Partially Revised Draft Tier 1 EIS/EIR, comments received on these documents, and ongoing coordination with federal and state agencies and local jurisdictions.

On December 3, 2009, the SPRTA Board certified the Final Program EIR and adopted Findings, a Statement of Overriding Considerations, and a Mitigation Monitoring and Reporting Program for CEQA compliance (SPRTA Board Resolution #09-06). The Board also selected the Placer Parkway Corridor–Alternative 5 with a no-access buffer zone (SPRTA Board Resolution #09-07). On May 7, 2010, FHWA issued a Record of Decision selecting Placer Parkway Corridor Alternative 5 with a no access buffer zone pursuant to NEPA.

Alternative 5 would have the fewest direct impacts on farmlands, wetlands, and Swainson’s hawk and white-tailed kite foraging habitat. This alternative would have the least potential for impacts on archeologically sensitive resources. Alternative 5 would also have the following characteristics.

- Have the least potential for inducing growth.
- Have the least potential for secondary and indirect impacts on biological resources, including the lowest potential for habitat fragmentation.
- Be the most consistent with the regional habitat conservation plan (Placer County Conservation Plan [PCCP]) being developed by Placer County.
- Be the alignment shortest in linear length, limiting its potential direct effects and construction costs.
- Have Placer County, Sutter County, City of Roseville, and City of Rocklin support.
- Be the corridor most likely to contain the Least Environmentally Damaging Practicable Alternative (LEDPA), as determined by the U.S. Army Corps of Engineers (USACE) and the U.S. Environmental Protection Agency (EPA). This was based on a conservation framework, which would help to prevent new interchanges for an approximate 5-mile-long portion in the Western and Central Segments.

### **Differences from the Selected Tier 1 EIS/EIR Alternative**

The design of the proposed project, Phase I of Placer Parkway, differs from the description of the selected alternative in the Tier 1 EIS/EIR in the following ways.

#### Adopted 500-foot Corridor

The selected alternative may be outside of the of the adopted 500-foot corridor established as part of the Tier I EIR/EIS. Of the three build alternatives identified, only Alternative 3 is fully within the adopted 500-foot corridor. Due to the presence of the Rio Bravo Rocklin plant, Alternative 1 and Alternative 2 were developed to minimize impacts on the Rio Bravo Rocklin site. A constraints analysis was performed, and Alternatives 1 and 2 were determined to be in general compliance with the criteria established as part of the Tier I EIR/EIS, and neither alternative introduced additional impacts that were not identified in the Tier I EIR/EIS. All three alternatives are being evaluated in further detail in order to determine the preferred alternative through the environmental review process.

#### Foothills Boulevard North Connection

The Tier I EIR/EIS identified that the Placer Parkway/Foothills Boulevard North connection would be a standard L-9 interchange. However, based on the traffic forecasts and operations analysis, it was determined that an at-grade signalized intersection would perform adequately through the design year of 2040. Since the ultimate Placer Parkway still includes a planned L-9 interchange at this location, the proposed at-grade intersection does not preclude the ultimate construction of an L-9 interchange.

#### SR 65 Interchange

The project approved in the Tier I document contemplated that this interchange would be constructed in

two phases, as traffic conditions warrant. Initially, there would be a loop on-ramp from the Parkway to SR 65 serving the northbound direction. When traffic volumes increase in the future, a third-level connection would be constructed to provide a direct connection from the Parkway to northbound SR 65. Based on the traffic forecasts and operations analysis, the third-level high-speed connection is not warranted for the design year of 2040. The proposed SR 65 interchange would consist of a standard L-9 interchange that is designed to current Caltrans standards. The adopted Tier I EIR/EIS identified high-speed freeway-to-freeway connection for the following movement: southbound SR 65 to westbound Placer Parkway, eastbound Placer Parkway to southbound SR 65, and the third-level connection described above. While not precluded from the ultimate Placer Parkway project, none of these high-speed connections is included as part of the proposed project.

## 9. Surrounding Land Uses and Setting:

The existing developed land uses east of SR 65, in the city of Rocklin, are primarily residential; to the west, in Placer County, land uses are industrial/commercial.

SR 65 in the vicinity of the proposed project was constructed as a 2-lane expressway in 1971 and widened to a 4-lane facility in 1999. The existing roadway consists of four 12-foot lanes with 10-foot outside shoulders and 5-foot inside shoulders. The SR 65/Sunset Boulevard Interchange is 1 mile south of the proposed Placer Parkway, and SR 65/Twelve Bridges Drive interchange is 1.3 miles north of the project limits.

In 2010, a PSR-PR for a new interchange connection on SR 65 at Whitney Ranch Parkway was approved. The SR 65/Whitney Ranch Parkway project consists of the following improvements.

- Three lane overcrossing (with one eastbound and westbound lane and a striped median that could accommodate a third lane).
- Single-lane northbound off-ramp.
- Northbound on-ramp.
- Single-lane southbound off-ramp.
- Southbound loop on-ramp.

Auxiliary lanes are proposed south of the interchange to conform to the auxiliary lanes constructed with the SR 65/Sunset Boulevard interchange. Each on-ramp would include provisions for ramp metering and a High Occupancy Vehicle (HOV) preferential lane.

A Supplemental PSR-PR, completed in October 2013 and approved on May 6, 2014, staged the interchange project into two phases. The first phase, an interim phase, defers the auxiliary lanes and the southbound diagonal off-ramp until they are needed in final phase of the project. The interim phase of the SR 65/Whitney Ranch Parkway project proposes to construct the following improvements.

- Three-lane SR 65 overcrossing (with one eastbound lane).
- Two-lane connection to Whitney Ranch Parkway/University Avenue intersection.
- Northbound off ramp.
- Northbound on-ramp.
- Southbound loop-on ramp.

Construction of the interim phase of SR 65/Whitney Ranch Parkway interchange project is anticipated to start in the spring of 2015.



**10. Other Public Agencies Whose Approval is Required:**

The project is subject to federal as well as state environmental review requirements because Placer County proposes the use of federal funds from the FHWA. Caltrans is the lead agency under NEPA, through its assumption of responsibility codified at 23 USC 327.

The permits, reviews, and approvals below would be required for project construction.

Agency	Permit/Approval	Status
U.S. Fish and Wildlife Service	Endangered Species Act Section 7 coordination regarding threatened and endangered species	Formal consultation will be initiated after selection of an alternative
U.S. Army Corps of Engineers	Clean Water Act Section 404 authorization for fill of waters of the United States	Application will be submitted after completion of CEQA and NEPA
California Department of Fish and Wildlife	California Fish and Game Code Section 1602 streambed alteration agreement	Application will be submitted after completion of CEQA and NEPA
Central Valley Regional Water Quality Control Board	Clean Water Act Section 401 water quality certification	Application will be submitted after completion of CEQA and NEPA
Placer County Air Pollution Control District	Formal notification prior to construction	Notice will be provided prior to construction

## Environmental Factors Potentially Affected

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

- |   |  |   |
|---|--|---|
| <input type="checkbox"/> Aesthetics               | <input type="checkbox"/> Agricultural and Forestry       | <input type="checkbox"/> Air Quality                        |
| <input type="checkbox"/> Biological Resources     | <input type="checkbox"/> Cultural Resources              | <input type="checkbox"/> Geology/Soils                      |
| <input type="checkbox"/> Greenhouse Gas Emissions | <input type="checkbox"/> Hazards and Hazardous Materials | <input 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 type="checkbox"/> Transportation/Traffic   | <input type="checkbox"/> Utilities/Service Systems       | <input type="checkbox"/> Mandatory Findings of Significance |

## Determination

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 will be prepared.
- 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 to the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
- I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- I find that the proposed project MAY have an impact on the environment that is "potentially significant" or "potentially significant unless mitigated" 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 ENVIRONMENTAL IMPACT REPORT or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier ENVIRONMENTAL IMPACT REPORT or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the project, nothing further is required.

  
 Richard Moorehead

4/28/15  
 Date

# Evaluation of Environmental Impacts

## Aesthetics

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

## Environmental Setting

### Regional and Vicinity Setting

The project region lies in the Sacramento Valley of northern California in western Placer County and within the transition zone between the flat Sacramento Valley and the Sierra Nevada and Lake Tahoe region. The rolling Sierra Nevada foothills largely comprise the easternmost portion of the region. The westernmost portion of the region primarily consists of agricultural and suburban land uses, with the urban core of Sacramento located in the southwestern portion of the region. The landscape pattern is influenced by development sprawling from existing city cores and the major roadways, such as State Route (SR) 65, SR 70, Interstate (I-)80, U.S. Highway 50 (US 50), SR 99, and I-5. This portion of the county primarily supports agricultural, open space, and developed land uses that are located at the base of the foothills. Lincoln, Roseville, and Rocklin are incorporated cities in the region. In addition to numerous creeks and streams, major water bodies in the region include Auburn Ravine, Pleasant Grove Creek, Folsom Lake, and the American River.

The proposed project would be located between the Sunset Boulevard and Twelve Bridges Drive interchanges on SR 65 and would extend westward approximately 1.7 miles from Whitney Ranch Parkway to Foothills Boulevard North. The portion of the proposed project west of SR 65 would be located in unincorporated Placer County, while the portion east of SR 65 would be located at the western edge of the city of Rocklin. The immediate project area is characterized by flat to gently sloping grasslands with distant views of the Sutter Buttes to the northwest and views of the Sierra Nevada to the east. The land use within the corridor is primarily suburban residential and business parks to the east of SR 65. Industrial and rural agriculture/grazing land lies to the west of SR 65,

with areas of business park and commercial use. The project site is not located near a state scenic highway or other designated scenic corridor (California Department of Transportation 2014).

The Whitney Ranch Parkway interchange project, and interim phase is approved and anticipated to be under construction starting in 2015. This project consist of a three-lane SR 65 overcrossing, two-lane connection to Whitney Ranch Parkway/University Avenue intersection, and northbound- and southbound on- and off-ramps. The Whitney Ranch Parkway interchange projects are part of the setting for the proposed project. These improvements are depicted in pink on Figures 3a and 3b (Alternative 1); 4a and 4b (Alternative 2); and 5a and 5b (Alternative 3).

### **Project Setting**

In the project vicinity, rural and industrial areas are primarily located west of SR 65, and open grasslands and suburban and commercial areas are located east of SR 65. Because the highway is generally at-grade, with limited vegetation on both sides and an unplanted median, views are present to the east and west when traveling either north or south (refer to Figure 6, Key View 1). Foreground, middleground, and background views of the surrounding area and beyond are present when traveling through rural and lightly developed areas and sometimes afford scenic vista views. However, gently rolling terrain on either side of the corridor acts to briefly limit views to the foreground along short segments of SR 65. Where views are not limited, the Sierra Nevada Mountains to the north and east may be seen on clear days in the distant background, rising above the flat valley floor. Foreground and middleground views are largely of grasslands and intermittent industrial and business parks to the west, grasslands and suburban development to the east, and the immediate paved surface of the highway to the north and south. Vegetation alongside the highway consists of annual grasslands. Lights are located near the SR 65 on- and off-ramps and overcrossings north and south of the proposed project site. The Twelve Bridges Drive and Sunset Boulevard overpasses limit views to the middleground and background when roadway travelers are in close proximity to the overpasses. Current lighting along the SR 65 corridor is minimal and focused at the existing interchanges. While lighting is currently not located within the immediate area of the proposed Placer Parkway, lighting will be installed as a part of the City of Rocklin's SR 65/Whitney Ranch Parkway interchange project (approved August 2010) and will introduce a new source of light and glare typical of urban development.

The rural areas west of SR 65 are predominantly open space grasslands with some agricultural grazing land at the westernmost portion of areas west of SR 65. Industrial areas west of SR 65 consist of warehouses and office complexes that include distribution centers, supply warehouses, truck rental and repair centers, and other commercial, retail, and institutional uses. The most prominent views of the project site are available from Industrial Avenue, which parallels SR 65 (refer to Figure 7, Key View 2). Industrial Avenue receives a lot of use because it provides access to the Thunder Valley Casino, located on Athens Avenue, via the Sunset Boulevard and Industrial Avenue interchanges with SR 65. Aboveground utilities (e.g., roadway lights, traffic lights, and utility lines and poles), railroad tracks, and industrial and commercial warehouses are prominent features in the viewshed. Lighting within areas west of SR 65 is minimal along roadways and is primarily associated with the industrial and commercial sites, the Thunder Valley Casino, and their parking areas.

Land uses east of SR 65 includes suburban residential, institutional, and commercial land uses and flat to gently sloping, open space grasslands with a paved service road and recreational path that directly abuts the SR 65 right-of-way (ROW). Suburban residential areas contain multi- and single-

**Existing View**  
(1/14/2014)



**Simulation**



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**Figure 6**  
**From SR 65 at Sunset Boulevard looking North**

**Existing View**  
(1/14/2014)



**Simulation**



Graphics ... 0008112 (12-10-2014) tm



**Figure 7**  
**From Industrial Avenue looking north towards Athens Avenue**

family residential uses. Three-story, multi-family housing complexes are located west of Wildcat Boulevard, at the current western terminus of Whitney Ranch Parkway and off University Avenue, closer to the project area. One- and two-story, single-family housing is located east of Wildcat Boulevard, farther from the project area. Nonresidential and commercial areas are also located west of Wildcat Boulevard, are nearest to the project area, and include community centers, a church, William Jessup University, and a University of California (UC) Davis Medical Group facility that is located adjacent to the project corridor. Lighting in areas east of SR 65 is concentrated within the residential and business developments and is typical of other residential and business developments in the area.

Due to the area's flat to gently sloping topography and the lack of landscaping, expansive views are available from the western edges of single- and multi-family residential developments toward the surrounding grasslands, SR 65, the casino, and industrial and commercial buildings west of SR 65. Views from the interior of single-family developments further east of Wildcat Boulevard are primarily limited to views of residential development, local roadways, and nearby institutional (e.g., local schools) and commercial land uses. The existing buildings and landscaping block views of the project site. Views from the UC Davis medical facility are similar to those from the western edges of single- and multi-family residential developments, but feature SR 65 more predominantly in the foreground because the medical facility is located immediately east of the highway. These views are mainly available from upper levels of the building, because landscaping between the parking area and the highway serves to block ground level views of SR 65 from the medical facility.

### **Viewers**

Viewers of the proposed project would consist of highway neighbors and highway users. Highway neighbors include residents located east of SR 65, workers in businesses located east and west of SR 65, patrons of those businesses and the casino west of SR 65, and roadway users on local roadways east and west of SR 65. Roadway neighbors constitute viewers who would have long-term, stationary views of the proposed project. However, roadway neighbors' views of the proposed project would vary based on location within the landscape and distance from the project site. Most roadway neighbors do not have immediate and direct views of the project site but have distant foreground to middleground views of the project site. Roadway neighbors would have moderate sensitivity to visual changes resulting from the proposed project because they are adjacent to the proposed project and have long-term, stationary views, but SR 65 is not a dominant focal point of their views.

Highway users include recreational travelers, local commuters, and haulers traveling on SR 65. It is estimated that there are up to approximately 2,600 vehicles per hour travelling in each direction on SR 65 through the project area during peak hours (Fehr & Peers 2013) The Sunset Boulevard and Twelve Bridges Drive overcrossings would obscure views on approach to the project site and views of the proposed project from SR 65 would be available only as roadway users pass through the project area, in between these two overcrossings. Roadway users would have low sensitivity to visual changes resulting from the proposed project because they would come in direct visual contact with the proposed project only while traveling through the area, and because construction activities are typical within the project vicinity.

## Discussion of Impacts

### a. Less than Significant

Many views in the project vicinity are limited to the foreground and middleground and largely consist of grasslands and intermittent industrial parks and business parks to the south and west, grasslands and suburban development to the east, and, for SR 65 travelers, the immediate paved surface of the highway. In addition, gently rolling terrain on either side of the corridor acts to briefly limit views to the foreground along short segments of SR 65. However, scenic vistas of rolling terrain and grasslands in the surrounding area and beyond are present for people traveling through rural and lightly developed areas east and west of SR 65 and along SR 65. On clear days, the Sierra Nevada Mountains may be seen to the north and east, in the distant background, rising above the flat valley floor.

#### Construction

Construction activities would introduce heavy equipment and associated vehicles, including backhoes, compactors, tractors, cranes, and trucks, into the viewshed of all viewer groups and create temporary impacts on views seen of and from the project site during the construction period. However, construction would be temporary and would not introduce tall structures or barriers that would affect scenic vistas that are available from areas east and west of SR 65. Views out and over SR 65 to the background would remain (refer to Figure 8, Key View 3). Views from SR 65 would be only temporarily impacted as highway users pass construction equipment.

#### Operation

Once built, the proposed project would not have any structures or barriers that would affect scenic vistas available from areas east and west of SR 65 under all alternatives. From these areas, the roadway extensions and interchange would appear low-profile and would not interrupt views out and over SR 65. Therefore, scenic vistas would remain intact and, as described in Aesthetics checklist item d below, the visual character of the project area would remain largely unchanged. Views from SR 65 would not be greatly changed by the proposed project and views to the east and west of the SR 65 corridor would remain available (refer to Figure 6, Key View 1, Existing View and Simulation). The interchange and overpass would be seen on approach from the north and south and then highway users would pass under the overpass. As seen in Key View 1, Existing Conditions, views to the north are not available, but the mountains can be seen to the east. As seen in Key View 1, Simulated Conditions, the interchange and overpass would not create enough of a raised landform or visual mass or extend east far enough to impact scenic vistas.

### b. No Impact

The project site is not located near a state scenic highway or other designated scenic corridor and, therefore, there would be no impact.

### c. Less than Significant with Mitigation Incorporated

#### Construction

Construction activities would introduce heavy equipment and associated vehicles, including backhoes, compactors, tractors, cranes, and trucks, into the viewshed of all viewer groups.



**Existing View**  
(1/14/2014)



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**Figure 8**  
**Existing View – From west side of SR 65 looking east toward existing Whitney Ranch Parkway**

Construction activities and the presence of equipment and vehicles would create a temporary visual impact on views seen of and from the project site during the construction period. This impact would not be significant due to the temporary nature of construction, the transient nature of viewers passing by the project site, and viewers' familiarity with heavy equipment for recent development within the project vicinity. As seen in Figure 6, Key View 1, Existing View, minimal vegetation is present within the SR 65 corridor; therefore, visual changes resulting from vegetation removal during construction would be minimal and would primarily impact grassland areas. This view depicts conditions prior to the construction of the separately proposed SR 65/Whitney Ranch Parkway interchange project, on which construction will be completed prior to the construction of the proposed project. The effects of the SR 65/Whitney Ranch Parkway interchange project are discussed in a separate visual impact analysis prepared for that project (HDR Engineering, Inc. 2010).

Temporary visual changes due to construction signaling, signage, and lighting would also occur, but would not be significant due to the short intervals of time that viewers would be in direct contact with the project site. Caltrans Design Guidelines and Placer County Design Guidelines would be followed to keep construction visual impacts to a minimum.

### **Operation**

The proposed project would modify the interchange at SR 65/Whitney Ranch Parkway and create the proposed Placer Parkway that would extend west from the interchange to Foothills Boulevard North (see Figure 6, Key View 1). The simulation for Key View 1 depicts the proposed project improvements as well as the SR 65/Whitney Ranch Parkway interchange that will already be in place at the time construction of the proposed project is initiated. The interchange would be similar to the interchange to the south of the proposed project at SR 65/Sunset Boulevard and the interchange to the north of the project at SR 65/Twelve Bridges Drive. As seen in Key View 1, Simulation, the westerly extension connecting Whitney Ranch Parkway to Foothills Boulevard North would result in an overpass wider than proposed as part of the SR 65/Whitney Ranch Parkway interchange project. This wider overpass would require additional fill and mounding. This additional landform to the west would obscure views beyond the overpass only to a small degree and would not substantially alter the visual character that will exist after construction of the SR 65/Whitney Ranch Parkway interchange. The overpass design would be visually similar and consistent with the Sunset Boulevard and Twelve Bridges Drive overpasses above SR 65.

The modified interchange at SR 65/Whitney Ranch Parkway/Placer Parkway would be visible primarily from the parking lot of the Ace Hardware distribution center and its baseball field within the industrial and commercial land uses west of SR 65. It is not likely to be visible from the self-storage business, which also abuts SR 65 in close proximity to the proposed interchange, because the storage units enclose the parking area and block views beyond the facility. Development, mature trees, and distance limit most other views of the interchange from areas west of SR 65. The Whitney Ranch Parkway extension is not likely to be seen because of distance, topography, and intervening infrastructure and vegetation.

The proposed Placer Parkway would be most directly visible where the parkway crosses Industrial Avenue or terminates at Foothills Boulevard North. However, most views of the proposed project would be from Industrial Avenue, because it is the most heavily traveled roadway. As seen in Figure 7, Key View 2, Simulation, the proposed Placer Parkway would require a bridge structure over UPRR facilities and Industrial Boulevard, about 0.4 mile west of the proposed SR 65 interchange. The

bridge would not be obtrusive in the landscape because of the presence of existing utilities and trees that help to reduce the apparent scale of the structure, because of the industrial nature of the area surrounding the bridge, and because the structure would be in keeping with other similar overpasses in the vicinity. Foothills Boulevard North is not heavily traveled and the connection to it would be similar to other roadway intersections in the vicinity.

Views from Athens Avenue and Sunset Boulevard would be minimally affected because the proposed project would be low-profile and would be minimally, if at all, visible at more than 0.5 mile away because of distance and terrain. Alternative 1 would come near the southeast corner of the Rio Bravo Rocklin biomass burning facility but would not alter the Rio Bravo property, whereas Alternatives 2 and 3 would use the southeast corner of the property (see Figures 3, 4, and 5). Nonnative eucalyptus trees along the southeast corner of the Rio Bravo property would need to be removed for Alternative 2. Alternative 3 would require even more tree removal at the Rio Bravo property. The facility is industrial in nature and the area of the facility that would be altered by the project is visually disturbed and degraded. However, tree removal would affect visual screening of the facility that these trees provide. Mitigation is provided, below, to reduce these impacts.

The proposed project would also widen Whitney Ranch Parkway to SR 65 and modify the on- and off-ramps at SR 65/Whitney Ranch Parkway/Placer Parkway within the residential and commercial land use areas east of SR 65 (see Figure 8, Key View 3). The widening of Whitney Ranch Parkway would not substantially impact viewers because only a relatively short roadway segment (less than 0.3 mile) connecting to the proposed ramps would be widened, the segment would be visually similar to the existing Whitney Ranch Parkway, and only a limited number of viewers would see these changes. Portions of the utility access road close to the existing Whitney Ranch Parkway terminus would need to be relocated to accommodate the roadway widening. Large areas of undeveloped grassland remain in the area, so relocating portions of the utility access road would be easily accommodated. The modified northbound SR 65 on-ramp would bring highway facilities closer to the UC Davis medical facility, but landscaping between the parking lot and highway would screen these visual changes that are in keeping with the existing visual environment. The proposed Placer Parkway is not likely to be visible from areas east of SR 65 because of distance, topography, and intervening infrastructure and vegetation.

Views of the project area would not be greatly affected by the proposed project because the roadway extensions would be low-profile and would not greatly alter the existing visual landscape. The roadway and new overpass at Industrial Boulevard would be in keeping with existing visual conditions and the appearance of the highway corridor. The modified interchange would also be visually similar to the interchanges at SR 65/Sunset Boulevard and at SR 65/Twelve Bridges Drive. Viewers within the project vicinity are familiar with these types of interchanges and, therefore, the interchange would not be an eyesore and it would not greatly alter the existing visual character of the project area.

The primary difference in the three alternatives is the alignment of the proposed Placer Parkway. During construction, Alternative 1 would temporarily impact up to 2 native trees and result in the permanent removal of up to 19 native trees associated with the Ace Hardware distribution center's baseball field. Alternative 2 would temporarily impact up to 16 native trees and result in the permanent removal of up to 4 native trees associated with the Ace Hardware distribution center's baseball field and also impact nonnative eucalyptus trees along the southeast corner of the Rio Bravo Rocklin biomass burning facility. Alternative 3 would temporarily impact up to 16 native trees and result in the permanent removal of up to 32 native trees and would remove more of the

eucalyptus trees at the Rio Bravo Rocklin. Rio Bravo Rocklin is industrial in nature and the area of the facility that would be altered by the proposed project is visually disturbed and degraded. However, tree removal would affect visual screening of the facility that these trees provide.

To mitigate for the loss of native trees, the County would comply with Placer County Code, Article 12.16, (Tree Ordinance). The following mitigation measures would reduce the minor visual changes to the project area so that visual impacts would be less than significant by providing seasonal visual interest to affected grassland areas and by replacing trees on the Rio Bravo Rocklin property that would be removed.

#### **Mitigation Measure AES-1: Use Native Grass and Wildflower Species in Erosion Control Grassland Seed Mix**

The County will require construction contractors to incorporate native grass and wildflower seed into standard seed mixes, which may contain nonnative seed, for erosion control measures that will be applied to all exposed slopes. Wildflowers will provide seasonal interest to areas where trees and shrubs are removed and grasslands are disturbed. Only wildflower and grass species that are native will be incorporated into the seed mix, and under no circumstances will any invasive grass or wildflower plant species be used as any component in any erosion control measures. Species will be chosen that are indigenous to the area and for their appropriateness to the surrounding habitat. For example, upland grass and wildflower species will be chosen for drier, upland areas, and wetter species will be chosen for areas that will receive more moisture. If not appropriate to the surrounding habitat, wildflowers should not be included in the seed mix.

#### **Mitigation Measure AES-2: Replant Trees to Provide a Visual Buffer between the Proposed Placer Parkway and Rio Bravo Rocklin**

A new landscape buffer will be planted between the proposed Placer Parkway and Rio Bravo Rocklin to replace portions of the vegetative buffer that surround the facility that are removed for the project. This buffer will serve to replace the visual screening of the facility and its industrial uses that the existing trees provide. One hundred percent of the species composition will reflect species that are native and indigenous to the project vicinity. Under no circumstances shall any invasive plant species be used. The species list should include trees and shrubs of varying heights, as well as both evergreen and deciduous types. Plant variety will increase the effectiveness of the buffer by providing multiple layers, seasonality, diverse habitat, and reduced susceptibility to disease. The inclusion of shrubs will help to provide screening until trees mature.

An irrigation and maintenance program will be implemented during the plant establishment period. If the Rio Bravo Rocklin facility currently has irrigation near the buffer, the plantings can be irrigated by that property's irrigation system or a tie-in to its irrigation system can be provided, if approved by the property owner. If the property owner permits such a tie-in, then it is the responsibility of that property owner to incur the costs associated with supplying water to the plantings and maintaining the irrigation system. Watering can be continued by the property owner, as-needed, after the plant establishment period. Placer County is not responsible for plant mortality or poor plant quality as a result of miswatering. If a tie-in to Rio Bravo Rocklin is not available or permitted by the property owner, then the County will implement a watering program during plant establishment.

**Mitigation Measure AES-3: Implement Measures to Comply with Tree Ordinance**

The County will comply with Placer County Code, Article 12.16, (Tree Ordinance) by implementing one or more of the following measures in accordance with Section 12.16.080 of the ordinance.

- Planting replacement trees.
- Implementation of a revegetation plan.
- In-lieu payment of the installation cost into the County's Tree Preservation Fund.

The total number of trees to be planted will be calculated based on the diameter size of the replacement trees to satisfy the County's inch-for-inch replacement requirement (with minimum 15-gallon size trees). If there is insufficient space onsite, the County will pay the in-lieu fee to the Tree Preservation Fund.

**d. Less than Significant****Construction**

The proposed project may involve nighttime construction, primarily associated with erecting the bridge falsework. Nighttime construction would require temporary lighting at the Sunset Boulevard, Placer Parkway, and Twelve Bridges Drive interchanges with SR 65. This lighting may result in temporary impacts related to nighttime light or glare; however, Caltrans Design Guidelines and Placer County Design Guidelines would be followed to reduce glare and keep construction visual impacts to a minimum. Therefore, impacts would be less than significant.

**Operation**

New lighting would be located along the northbound off-ramp, northbound diagonal on-ramp, and southbound loop on-ramp. This new lighting would be consistent with existing lighting in the area and would not create a substantial amount of new glare. Therefore, operation would not result in a noticeable change to lighting in the project area and impacts would be less than significant.

**References**

- California Department of Transportation. 2014. *Officially Designated State Scenic Highways*. Available: <<http://www.dot.ca.gov/hq/LandArch/scenic/schwy.htm>>. Last updated: October 14, 2013. Accessed: April 2, 2014.
- Fehr & Peers. 2013. *Placer Parkway Phase 1 Transportation Analysis Report*. August. Placer County, CA.
- HDR Engineering, Inc. 2010. *SR 65/Whitney Ranch Parkway Interchange Project, Visual Impact Assessment*. May.

## Agricultural and Forestry Resources

II. Agricultural and Forestry Resources	Potentially Significant Impact	Less-than-Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
<p>In determining whether impacts on agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts on forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state’s inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment Project, and forest carbon measurement methodology provided in the Forest Protocols adopted by the California Air Resources Board. Would the project:</p>				
<p>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?</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p>b. Conflict with existing zoning for agricultural use or conflict with a Williamson Act contract?</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>c. Conflict with existing zoning for, or cause rezoning of forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>d. Result in the loss of forest land or conversion of forest land to non-forest use?</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>e. Involve other changes in the existing environment that, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

## Environmental Setting

Agriculture has long been established as the predominant land use in the project vicinity. However, in recent years, much of the land surrounding the project area has been undergoing rapid change. Additional development is anticipated to occur in the vicinity of the project. According to the California Farmland Mapping and Monitoring Program (FMMP), most of the land within the project area is classified as Grazing Land and Urban and Built-Up Land. The land in the far western portion of the project limits is classified as Farmland of Local Importance, and there are parcels under Williamson Act contracts northwest of the project area. However, there are no parcels under contract located within the project limits. The project site and surrounding area contain no timberland (California Department of Transportation 2014).

The western-most portion of the project limit, classified as Farmland of Local Importance, is zoned as F-B-X-DR 160 AC. MIN<sup>1</sup>. The remainder of the project area is zoned for industrial or business park uses. The project site is not designated for agricultural use by any of the applicable city or county general plans. While the area has historically included agricultural uses, such as grazing, the project is located within the Sunset Industrial Area Plan and includes the “combining Development Reserve” zoning designation, which signifies that this area is identified for future development of commercial and industrial land uses and infrastructure.

## Discussion of Impacts

### a. Less than Significant

Acquisition of approximately 4.2 acres of land classified as Farmland of Local Importance, a portion of the parcel in the western-most portion of the project area, would be required for the proposed project. The land to be acquired is zoned as F-B-X-DR 160 AC. MIN<sup>1</sup>. To assess the effects of farmland conversion, a land evaluation and site assessment was performed using criteria developed by the Secretary of Agriculture under the Farmland Protection Policy Act (FPPA). The criteria are explained in detail in 7 CFR 658.5 b. The land evaluation criterion is based on information from several sources including national cooperative soil surveys or other acceptable soil surveys, Natural Resources Conservation Service (NRCS) field office technical guides, soil potential ratings or soil productivity ratings, land capability classifications, and important farmland determinations. Based on this information, groups of soils are evaluated by the NRCS and assigned a score between 0 to 100, representing the relative value, for agricultural production, of the farmland to be converted by the project compared to other farmland in the same local government jurisdiction,

The site assessment criteria consider the suitability of a proposed site for farmland protection. Twelve criteria are used along with the score from the land evaluation criterion described above. A score on a scale of 0 to the maximum points indicated for each criterion (0-20 depending on the criterion) is assigned. A combined score of 160 or greater from both the land evaluation and site assessment would be considered a significant impact to farmland.

Based on the land evaluation analysis, the NRCS assigned the soil in the farmland-classified parcel a relative farmland score of 30 on a scale of 0 to 100. This means the soil is suitable for agriculture but

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<sup>1</sup> F-B-X-DR 160 AC MIN stands for a base zone of Farmland with a 160-acre minimum parcel size, combined with a Development Reserve designation, which provides for future development of residential, commercial, and industrial uses.

is restricted to certain crops and requires moderate soil management techniques. The results of the site assessment indicate that the site has a suitability score of 72 points, which means that the site is key agricultural land. However, the combined evaluation score (30 plus 72) of 102 is less than the 160 threshold of significance for farmland protection (California Department of Transportation 2014).

The undeveloped land in the remainder of the project area is not zoned for agricultural use and is designated as Grazing Land on the state FMMP maps. Grazing Land is not considered Prime Farmland, Unique Farmland, or Farmland of Statewide Importance and was therefore not part of the land evaluation and site assessment described above. Local zoning designations of the areas mapped as Grazing Land are Retail Commercial, High-Density Residential, Business and Professional on the City of Rocklin General Plan land use map; Business Park and Industrial on the Placer County Sunset Industrial Area Plan land use map; and, Open Space east of SR 65 and Light Industrial on the City of Lincoln land use map. The zoning designations signify the intention of the local agencies to develop the land for commercial and industrial land uses and infrastructure. Development on the land designated as Grazing Land on the FMMP maps will not convert farmland to a non-agricultural use.

#### **b. No Impact**

According to the applicable general plan land use maps, with the exception of the parcel zoned F-B-X-SR-160 AC MIN at the western-most project limits, none of the land in the project area is zoned for agricultural use. The F-B-X-DR 160 AC MIN zoning stands for a base zone of Farmland with a 160-acre minimum parcel size, combined with a Development Reserve designation, which provides for future development of residential, commercial, and industrial uses. Placer County mapping also indicates that no areas within the project site are under Williamson Act contracts. There are parcels enrolled in Williamson Act contracts approximately 0.5 mile northwest of the project limits; however, the proposed project would not encroach upon or limit access to any of these parcels (California Department of Transportation 2014). Accordingly, the project would not conflict with existing zoning for agricultural use or conflict with a Williamson Act contract.

#### **c, d. No Impact**

No forest land or timberland exists within the project area and, therefore, there would be no impact.

#### **e. No Impact**

As discussed under checklist item a, approximately 4.2 acres of land classified as Farmland of Local Importance would be acquired for the proposed project. The project would not involve other changes that would result in conversion or loss of farmland or forest land.

### **References**

California Department of Transportation. 2014. *Placer Parkway Phase I Community Impact Assessment*. State Route 65 from Sunset Boulevard to Twelve Bridges Drive and 1.5 miles southwest to Foothills Boulevard North, Placer County, CA. EA 2F920K. Prepared by ICF International, Sacramento, CA. August.



## Air Quality

III. Air Quality	Potentially Significant Impact	Less-than-Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
When 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 checked="" type="checkbox"/>	<input type="checkbox"/>
b. Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	<input type="checkbox"/>	<input checked="" 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 a nonattainment area for an applicable federal or state ambient air quality standard (including releasing emissions that exceed quantitative thresholds for ozone precursors)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

## Environmental Setting

The project area is located in Placer County, which is in the Sacramento Valley Air Basin (SVAB). Concentrations of ozone, carbon monoxide (CO), nitrogen dioxide (NO<sub>2</sub>), sulfur dioxide (SO<sub>2</sub>), lead (Pb), and particulate matter (PM<sub>10</sub> and PM<sub>2.5</sub>) are commonly used as indicators of ambient air quality conditions. These pollutants are known as “criteria pollutants” and are regulated by the EPA and California Air Resources Board (ARB) through national and California ambient air quality standards (NAAQS and CAAQS), respectively. The NAAQS and CAAQS limit criteria pollutant concentrations to protect human health and prevent environmental and property damage. Other pollutants of concern in the proposed project area are nitrogen oxides (NO<sub>x</sub>) and reactive organic gases (ROG), which are precursors to ozone, and toxic air contaminants (TAC), which can cause cancer and other human health ailments.

Criteria pollutant concentrations in Placer County are measured at monitoring stations throughout the county. The station nearest the project area is the North Sunrise Boulevard monitoring station, which is located at 151 North Sunrise Boulevard in Roseville. Monitoring data collected at the North Sunrise Boulevard station show that the station experienced frequent violations of the state and federal ozone standards, as well as the state PM<sub>10</sub> and federal PM<sub>2.5</sub> standards from 2010 to 2012 (California Air Resources Board 2014, U.S. Environmental Protection Agency 2013b). Air quality monitoring data indicate that Placer County is a nonattainment area for the federal and state ozone standards, as well as nonattainment for the state PM<sub>10</sub> standard and a maintenance area for the

federal CO standard (U.S. Environmental Protection Agency 2013a; California Air Resources Board 2013a, 2013b).

The Placer County Air Pollution Control District (PCAPCD) is responsible for ensuring the NAAQS and CAAQS are met within Placer County. The PCAPCD manages air quality through a comprehensive program of long-term planning, regulations, incentives for technical innovation, education, and community outreach.

The PCAPCD CEQA Guidelines provide guidance for evaluating project-level air quality impacts (Placer County Air Pollution Control District 2012). The guidelines also establish a significance threshold of 82 pounds per day for emissions of ozone precursors—ROG and NO<sub>x</sub>—and PM<sub>10</sub> to support future attainment of the NAAQS and CAAQS. As stated in Appendix G of the State CEQA Guidelines, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the checklist determinations. Accordingly, the PCAPCD's thresholds, as outlined in its 2012 CEQA Guidelines, are used evaluate the significance of air quality impacts associated with the proposed project.

## Discussion of Impacts

### a. Less than Significant

Placer Parkway Phase 1 (# PLA25299) is identified in the Sacramento Council of Governments' Metropolitan Transportation Plan/Sustainable Communities Strategy 2035 (Sacramento Council of Governments 2012) and 2015/2018 Metropolitan Transportation Improvement Program (Sacramento Council of Governments 2015). Projects in the Metropolitan Transportation Plan are consistent with the planning goals of the State Implementation Plan. Accordingly, the proposed project would not conflict with or obstruct implementation of air quality management plans. This impact would be less than significant.

### b. Less than Significant with Mitigation

#### Construction

Implementation of any build alternative would result in the construction of widened roads, overcrossings, and embankments, as well as intersection improvements. Temporary construction emissions would result from grubbing/land clearing, grading/excavation, drainage/utilities/subgrade construction, and paving activities and construction worker commuting. Pollutant emissions would vary daily, depending on the level of activity, specific operations, and prevailing weather.

The Sacramento Metropolitan Air Quality Management District's Road Construction Emissions Model (RCEM) (Version 7.1.5.1) was used to estimate construction-related ROG, NO<sub>x</sub>, CO, PM<sub>10</sub>, and PM<sub>2.5</sub> emissions from construction activities. Construction was assumed to begin in 2018 and to be completed in 2021. It was also assumed that construction activities would occur for 8 hours per day, 5 days a week, over this period. The total project length was assumed to be 2.45 miles, with a total area of disturbed ground of 99.6 acres. Because the configuration of each of the build alternatives is similar, this total area of disturbed ground was evaluated for all alternatives, with an assumed maximum of 14 acres disturbed per day, based on the maximum acres allowed to ensure that emissions are below PCAPCD thresholds of 82 pounds per day, as identified through modeling with the RCEM.

RCEM default assumptions were used to estimate emissions from soil hauling, worker commute, water truck emissions, and fugitive dust emissions based on the available model inputs. Construction activities were divided into four project components (e.g., New Road, Bridge/Overpass 1) and four separate phases (e.g., Drainage/Utilities/Sub-Grade, Grading/Excavation) for each of the project components. Emissions from each phase were analyzed independently of other phases with no assumed overlap in construction phasing. Construction emission estimates represent the maximum emissions for each phase of construction. Total emissions per day represent the potential maximum daily emissions by phase with no assumed overlapping of activity. Calculations also assumed watering would occur 4 times per day during the construction (Siviglia pers. comm.).

The results of modeling for construction activities are summarized in Table 1. Violations of the PCAPCD thresholds of significance are shown in underline.

**Table 1. Worst-Case Construction Emission Estimates (pounds per day)**

Construction Phase beginning in 2018	ROG	CO	NO <sub>x</sub>	PM10	PM2.5
<b>New Road</b>					
Drainage/Utilities/Sub-Grade	4.79	37.84	38.77	74.99	17.10
Grading/Excavation	11.02	76.53	<u>132.56</u>	78.48	19.91
Grubbing/Land Clearing	2.58	19.74	26.40	73.91	16.11
Paving	2.60	23.03	21.23	1.22	1.08
<b>Bridge/Overpass 1</b>					
Drainage/Utilities/Sub-Grade	3.52	23.58	29.90	4.30	2.13
Grading/Excavation	11.60	72.85	<u>128.23</u>	8.18	5.63
Grubbing/Land Clearing	1.65	12.15	17.20	3.25	1.19
Paving	1.77	12.51	15.14	0.95	0.85
<b>Bridge/Overpass 2</b>					
Drainage/Utilities/Sub-Grade	3.52	23.58	29.90	5.30	2.34
Grading/Excavation	11.60	72.85	<u>128.23</u>	9.18	5.84
Grubbing/Land Clearing	1.65	12.15	17.20	4.25	1.40
Paving	1.77	12.51	15.14	0.95	0.85
<b>Interchange</b>					
Drainage/Utilities/Sub-Grade	5.88	38.72	47.57	75.68	17.73
Grading/Excavation	12.69	77.02	<u>166.89</u>	79.56	20.90
Grubbing/Land Clearing	3.00	20.07	31.55	74.11	16.29
Paving	3.10	23.46	24.89	1.54	1.38
PCAPCD Thresholds	82	n/a	82	82	n/a
<i>Exceed Thresholds?</i>	No	n/a	<u>Yes</u>	No	n/a

*Note:* Emissions calculations based on Road Construction Emissions Model (Version 7.1.5.1).

ROG = reactive organic gases

CO = carbon monoxide

NO<sub>x</sub> = nitrogen oxides

PM10 = particulate matter less than 10 micrometers in diameter

PM2.5 = particulate matter less than 2.5 micrometers in diameter

PCAPCD = Placer County Air Pollution Control District

Table 1 indicates that estimated emissions would exceed PCAPCD's daily thresholds for NO<sub>x</sub>. Applying Mitigation Measure AQ-1 would reduce emissions to below local thresholds and result in a less-than-significant impact. In addition, the proposed project would comply with existing PCAPCD BMPs and rules to reduce emissions, including Rule 228, *Fugitive Dust*, as well as Standard Specifications for Construction of Local Streets and Roads (California Department of Transportation 2010).

### **Mitigation Measure AQ-1: Reduce Construction Emissions to Below PCAPCD NO<sub>x</sub> Thresholds**

The following measures, or others that are necessary to achieve the construction NO<sub>x</sub> target of 82 lbs/day, will be implemented to ensure construction-related emissions do not exceed PCAPCD's NO<sub>x</sub> threshold:

- Require the usage of EPA rated Tier 4 interim or higher rated construction equipment. In general, replacing Tier 2 Equipment with Tier 4 interim rated equipment will reduce NO<sub>x</sub> emissions by 68% (94%, if using Tier 4 final rated equipment) (South Coast Air Quality Management District 2010).
- Require the usage of equipment that is retrofitted with Diesel Oxidation Catalysts or Selective Catalytic Reduction technology. In general, equipment that is retrofitted with this technology emits 40% less NO<sub>x</sub> than conventional equipment.
- Work with the PCAPCD to purchase NO<sub>x</sub> credits to offset remaining NO<sub>x</sub> construction emissions exceeding PCAPCD thresholds.

### **Operation**

Long-term air quality impacts are those associated with motor vehicles operating on the roadway network, predominantly those operating in the project vicinity. Emission of ROG, NO<sub>x</sub>, CO, PM10, and PM2.5 for existing year (2012), construction interim year (2020) with and without project, and design-future year (2040) with and without project conditions were evaluated through modeling conducted using the CT-EMFAC model and vehicle activity data provided by the project traffic engineer, Fehr & Peers (Milam, Stanek, Jackson pers. comm.; Jackson pers. comm.).

Table 2 summarizes the modeled emissions by scenario, as well as a comparison of build emissions with no build and existing conditions. The differences in emissions between with- and without-project conditions represent emissions generated directly as a result of implementation of the build alternatives. Vehicular emission rates are anticipated to lessen in future years due to continuing improvements in engine technology and the retirement of older, higher-emitting vehicles.

**Table 2. Operational Emissions Estimates (pounds per day)**

Scenario	VMT per year	ROG	NO <sub>x</sub>	CO	PM10	PM2.5
2012 Existing	5,144,317	1,062	4,248	30,024	612	281
Existing + 2020 Build <sup>a</sup>	5,141,316	1,059	4,243	29,979	611	281
Existing + 2040 Build <sup>a</sup>	5,133,813	1,052	4,232	29,868	610	280
2020 No Build <sup>b</sup>	5,877,484	577	2,311	17,200	654	280
2020 Build <sup>b</sup>	5,874,483	575	2,308	17,178	654	280
2040 No Build <sup>c</sup>	7,710,401	565	1,727	15,948	855	366
2040 Build <sup>c</sup>	7,699,897	562	1,722	15,897	854	365
<b>Comparison with No Build</b>						
2020 Build	-3,001	-1.12	-2.29	-21.60	-0.39	-0.20
2040 Build	-10,504	-2.62	-4.86	-51.12	-1.39	-0.70
<b>Comparison with Existing</b>						
Existing + 2020 Build	-3,001	-2.73	-4.64	-44.46	-0.47	-0.27
Existing + 2040 Build	-10,504	-9.57	-16.24	-155.62	-1.65	-0.94
PCAPCD Thresholds	-	82	82	-	82	-

Note: Emissions calculations based on CT-EMFAC v. 5.0. Emissions rates for given years were weighted by VMT, speed bin, and vehicle and fuel mix for Placer County within the Sacramento Valley Air Basin. VMT and truck percentages were provided by Fehr and Peers (Milam, Stanek, Jackson Pers. Comm., Jackson Pers. Comm., Milam Pers. Comm.) Refer to the Air Quality Study Report for more detail.

<sup>a</sup> Existing plus project VMT was not available from the Traffic Study and was instead calculated by adding the difference in VMT between build and no build scenarios to existing conditions. Emissions were calculated using 2012 emission factors.

<sup>b</sup> 2020 VMT was interpolated between 2012 and 2040 VMT estimates as recommended by Fehr and Peers (Jackson Pers. Comm.)

<sup>c</sup> 2040 emissions are based off of 2035 emission factors. CT-EMFAC Version 5.0 does not provide emission factors beyond 2035.

ROG = reactive organic gases  
CO = carbon monoxide  
NO<sub>x</sub> = nitrogen oxides  
PM10 = particulate matter less than 10 micrometers in diameter  
PM2.5 = particulate matter less than 2.5 micrometers in diameter  
VMT = vehicle miles traveled

As shown in Table 2, the build alternatives would result in decreases in all criteria pollutant emissions compared with the No-Build Alternative, while the build alternatives would result in an increase in PM10 emissions relative to existing conditions in 2020 and both PM10 and PM2.5 in 2040. The decreases in emissions between the No-Build Alternative and build alternatives are attributed to the overall decrease in VMT between no-build and build conditions and lower exhaust emission factors associated with future years. The decreases in emissions between the existing and build conditions are attributed to the lower exhaust emission factors associated with future years,

even as VMT increases, while the increases in PM emissions between the existing and build conditions are attributed to increases in VMT, as tire and break wear PM emissions are directly correlated with VMT and offset the lower future year PM exhaust emissions. Emissions reductions achieved by the proposed project would be an air quality benefit. Emissions associated with operation of the proposed project would result in a less-than-significant impact.

### **c. Less than Significant with Mitigation**

See checklist item b, above. The proposed project would not result in substantial increases of any criteria pollutants during construction with implementation of Mitigation Measure AQ-1. The proposed project would result in a regional air quality benefit during operation as a result of long-term reductions in criteria pollutant emissions. Therefore, the proposed project would not result in a cumulatively considerable air quality impact.

### **d. Less than Significant**

#### **Diesel Particulate Matter**

The PCAPCD defines sensitive receptors as facilities or land uses that include members of the population who are particularly sensitive to the effects of air pollutants, such as children, the elderly, and people with illnesses. Schools, hospitals and residential areas are examples of sensitive receptors. In the vicinity of the project area, sensitive land uses include single-family residences, multi-family residences within 100 feet of the project area, a medical center within 100 feet of the project area, a university, a high school, a middle school, and a number parks and outdoor recreation areas. Figure 9 depicts the general locations of sensitive receptors in the vicinity of the project area.

Heavy-duty construction equipment, which generates diesel particulate matter (DPM), would operate within the vicinity of sensitive receptors. Cancer health risks associated with exposures to diesel exhaust typically are associated with chronic exposure in which a 70-year exposure period is assumed. Because construction would be short-term and last approximately 2 years, construction of the proposed project is not anticipated to result in an elevated cancer risk for exposed sensitive receptors. In addition, DPM emitted during construction would dissipate as a function of distance and would be lower at the nearest sensitive receptor. Emissions of DPM during construction are not expected to expose sensitive populations to substantial pollutant concentrations and the impact would be less than significant. Implementation of Mitigation Measure AQ-1 would further reduce DPM from heavy-duty construction equipment.

Operation of the proposed project is not anticipated to result in a significant new source of DPM, but may have the effect of moving existing diesel trucks closer to receptors along the new roadway sections that would be built at the intersection SR 65 southbound ramps from Placer Parkway, under all Alternatives; and at the existing intersections of Placer Corporate Drive/Sunset Boulevard, Wildcat Boulevard/West Stanford Ranch Road, and Blue Oaks Boulevard/Foothills Boulevard under all build alternatives. However, truck volumes would decrease slightly between the no-build and build conditions (129 fewer average daily trips in the design year and 25 fewer trips in the opening year). In addition, the proposed project would provide marginal relief to congestion, as observed in the decreased volume-to-capacity ratio between the no-build and build alternatives. Thus, the proposed project is not expected to expose sensitive populations to substantial pollutant concentrations.

### **Naturally Occurring Asbestos**

According to the California Department of Conservation's 2000 publication, *A General Location Guide for Ultramafic Rocks in California*, and PCAPCD mapping (Placer County Air Pollution Control District 2008) there are no geologic features normally associated with naturally occurring asbestos (NOA) (i.e., serpentine rock or ultramafic rock near fault zones) in or near the project area (California Department of Conservation 2000). Consequently, there is no potential for impacts related to NOA emissions during construction activities. Construction activities that involve the demolition of any building or structure containing asbestos would be subject to EPA's National Emissions Standards for Hazardous Air Pollutants (NESHAP) and CARB's Airborne Toxic Control Measures (ATCMs).

### **Carbon Monoxide**

Changes in traffic patterns as a result of any of the build alternatives could create CO hot-spots at nearby roadways and intersections. Existing year (2012), construction interim year (2020) with and without project, and design-future year (2040) with and without project conditions were modeled to evaluate CO concentrations relative to the NAAQS and CAAQS. CO concentrations were estimated at seven roadway intersections in and near the project area. These roadway intersections and segments were modeled because they represent the roadway intersections and segments in the vicinity of the project area with the highest traffic volumes and worst levels of congestion and delay. Table summarizes the results of the intersection and segment CO modeling and indicates that CO concentrations are not anticipated to exceed the 1- or 8- hour NAAQS and CAAQS under any of the build alternatives or the No-Build Alternative.

#### **e. Less than Significant**

While offensive odors rarely cause any physical harm, they can be unpleasant, leading to considerable distress among the public and often generating citizen complaints to local governments and air districts. Project-related odor emissions would be predominantly limited to the construction period, when emissions from equipment may be evident in the immediately surrounding area. These activities would be short term and are not likely to result in nuisance odors. Odor emissions during proposed project operations may originate from diesel vehicle exhaust. However, as discussed previously, truck volumes would decrease slightly between the no-build and build conditions. Accordingly, operation of the build alternatives is not expected to result in nuisance odors.

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**Legend**

- Project Boundary
- Air Quality Receptor Areas
- Air Quality Receptors

0 600 1,200  
Feet

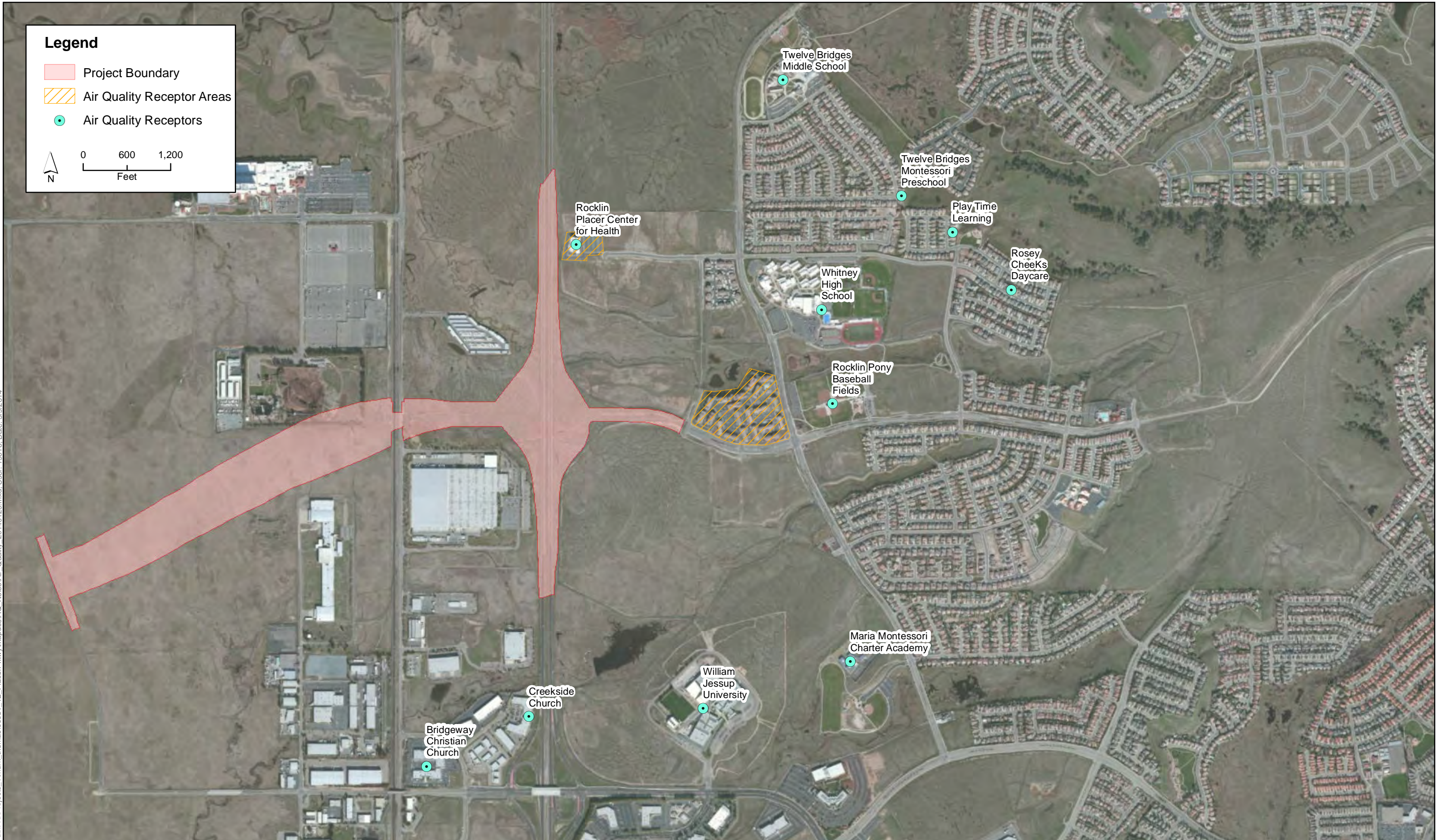


Figure 9  
Air Quality Receptors



**Table 3. CO Modeling Concentration Results (Parts per Million)**

Intersection	Receptor <sup>a</sup>	Existing (2012)		Construction Year (2020) No Build		Construction Year (2020) Build		Design Year (2040) No Build		Design Year (2040) Build	
		1-hr CO <sup>b</sup>	8-hr CO <sup>c</sup>	1-hr CO <sup>b</sup>	8-hr CO <sup>c</sup>	1-hr CO <sup>b</sup>	8-hr CO <sup>c</sup>	1-hr CO <sup>b</sup>	8-hr CO <sup>c</sup>	1-hr CO <sup>b</sup>	8-hr CO <sup>c</sup>
SR 65/ Sterling Pkwy <sup>d</sup>	1	5.1	3.3	NA	NA	NA	NA	NA	NA	NA	NA
	2	6.4	4.3	NA	NA	NA	NA	NA	NA	NA	NA
	3	7.2	4.8	NA	NA	NA	NA	NA	NA	NA	NA
	4	5.6	3.7	NA	NA	NA	NA	NA	NA	NA	NA
SR 65 SB On- ramp/Lincol n Blvd <sup>e</sup>	5	NA	NA	3.5	2.2	3.5	2.2	3.1	1.9	3.1	1.9
	6	NA	NA	3.3	2.1	3.3	2.1	3.1	1.9	3.1	1.9
	7	NA	NA	3.3	2.1	3.2	2.0	3.0	1.9	3.0	1.9
	8	NA	NA	3.6	2.3	3.6	2.3	3.2	2.0	3.2	2.0
SR 65 NB Off- ramp/Lincol n Blvd <sup>e</sup>	9	NA	NA	3.9	2.5	3.9	2.5	3.4	2.2	3.3	2.1
	10	NA	NA	4.1	2.6	4.1	2.6	3.5	2.2	3.5	2.2
	11	NA	NA	4.0	2.6	4.0	2.6	3.4	2.2	3.4	2.2
	12	NA	NA	4.3	2.8	4.3	2.8	3.6	2.3	3.6	2.3
Placer Corporate Dr/ Sunset Blvd	13	4.2	2.7	3.7	2.4	3.5	2.2	3.3	2.1	3.1	1.9
	14	3.9	2.5	4.0	2.6	3.6	2.3	3.5	2.2	3.3	2.1
	15	4.3	2.8	4.0	2.6	3.6	2.3	3.5	2.2	3.3	2.1
	16	4.1	2.6	3.9	2.5	3.5	2.2	3.4	2.2	3.2	2.0
Wildcat Blvd/ W Stanford Ranch Road	17	4.2	2.7	3.6	2.3	3.7	2.4	3.6	2.3	3.6	2.3
	18	4.6	3.0	3.5	2.2	3.7	2.4	3.5	2.2	3.5	2.2
	19	5.0	3.3	3.5	2.2	3.6	2.3	3.4	2.2	3.4	2.2
	20	4.8	3.1	3.7	2.4	3.7	2.4	3.4	2.2	3.4	2.2
Blue Oaks Blvd/ Foothills Blvd	21	6.3	4.2	4.4	2.9	4.4	2.9	3.7	2.4	3.6	2.3
	22	5.3	3.5	4.1	2.6	4.1	2.6	3.5	2.2	3.4	2.2
	23	5.6	3.7	4.4	2.9	4.4	2.9	3.6	2.3	3.6	2.3
	24	5.8	3.8	4.7	3.1	4.6	3.0	3.9	2.5	3.8	2.4
SR 65 SB Ramps/ Placer Pkwy	25	2.5	1.5	3.2	2.0	3.4	2.2	3.7	2.4	3.4	2.2
	26	2.5	1.5	3.0	1.9	3.3	2.1	3.5	2.2	3.3	2.1
	27	2.5	1.5	3.0	1.9	3.3	2.1	3.6	2.3	3.2	2.0
	28	2.5	1.5	3.2	2.0	3.3	2.1	3.9	2.5	3.3	2.1

<sup>a</sup> Receptors are located at 3 meters from the intersection, at each of the four corners. All intersections modeled have two intersecting roadways.

<sup>b</sup> Average 1-hour background concentration from 2010 to 2012 was 2.5 ppm (California Air Resources Board 2014).

<sup>c</sup> Average 8-hour background concentration from 2010 to 2012 was 1.5 ppm (U.S. Environmental Protection 2013b).

<sup>d</sup> This intersection does not exist under future years, regardless of alternative.

<sup>e</sup> This intersection only exists under future years, regardless of alternative.

CO = carbon monoxide.

NA = not applicable.

NB = northbound.

SB = southbound.

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**Personal Communication**

Jackson, Katie. Senior Transportation Engineer. Fehr & Peers. Roseville, CA. January 17, 2014—email message with attachment to Shannon Hatcher, ICF International and Ronald Milam, Fehr and Peers.

Milam, Ronald T., David Stanek, and Katie Jackson. Transportation Engineers. Fehr & Peers. Updated Placer Parkway for POAQC Assessment. Roseville, CA. October 24, 2012. — Memorandum to Matt Brogan, Mark Thomas & Company, Inc.

Milam, Ronald T. Transportation Engineer. Fehr & Peers. Roseville, CA. June 26, 2014—email message to Shannon Hatcher, ICF International and David Stanek, Fehr and Peers.

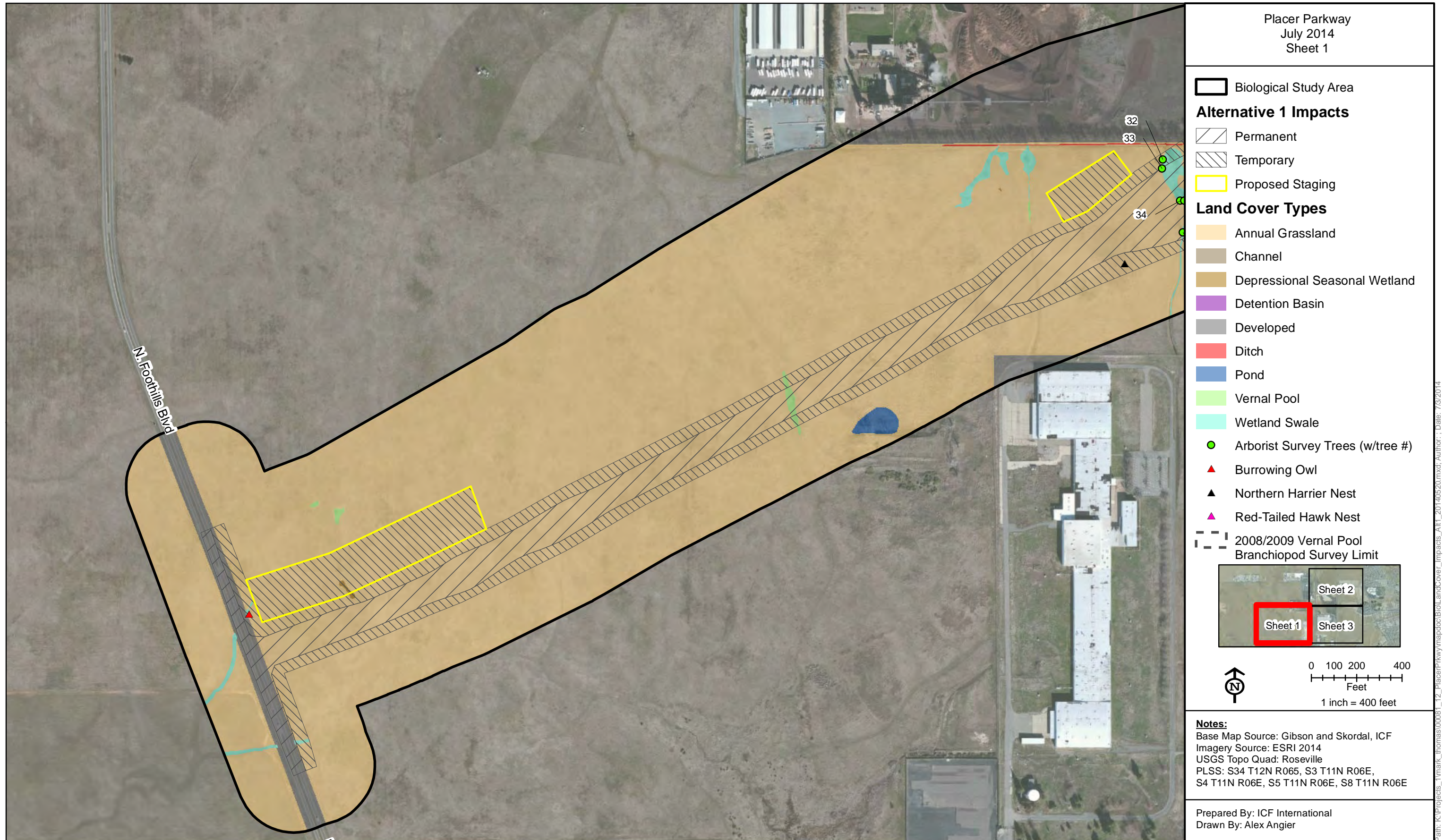
Siviglia, Zach. Project Manager. Mark Thomas. Sacramento, CA. March, 11, 2014. Email message to Claire Bromund, Shannon Hatcher, Brenda Chang, and Emily Setzer, ICF International and Jake Weir, Mark Thomas.

## Biological Resources

IV. Biological Resources	Potentially Significant Impact	Less-than-Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:				
a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input 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, or regulations, or by the California Department of Fish and Game 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, marshes, vernal pools, coastal wetlands, 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 of native wildlife nursery sites?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f. Conflict with the provisions of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

## Environmental Setting

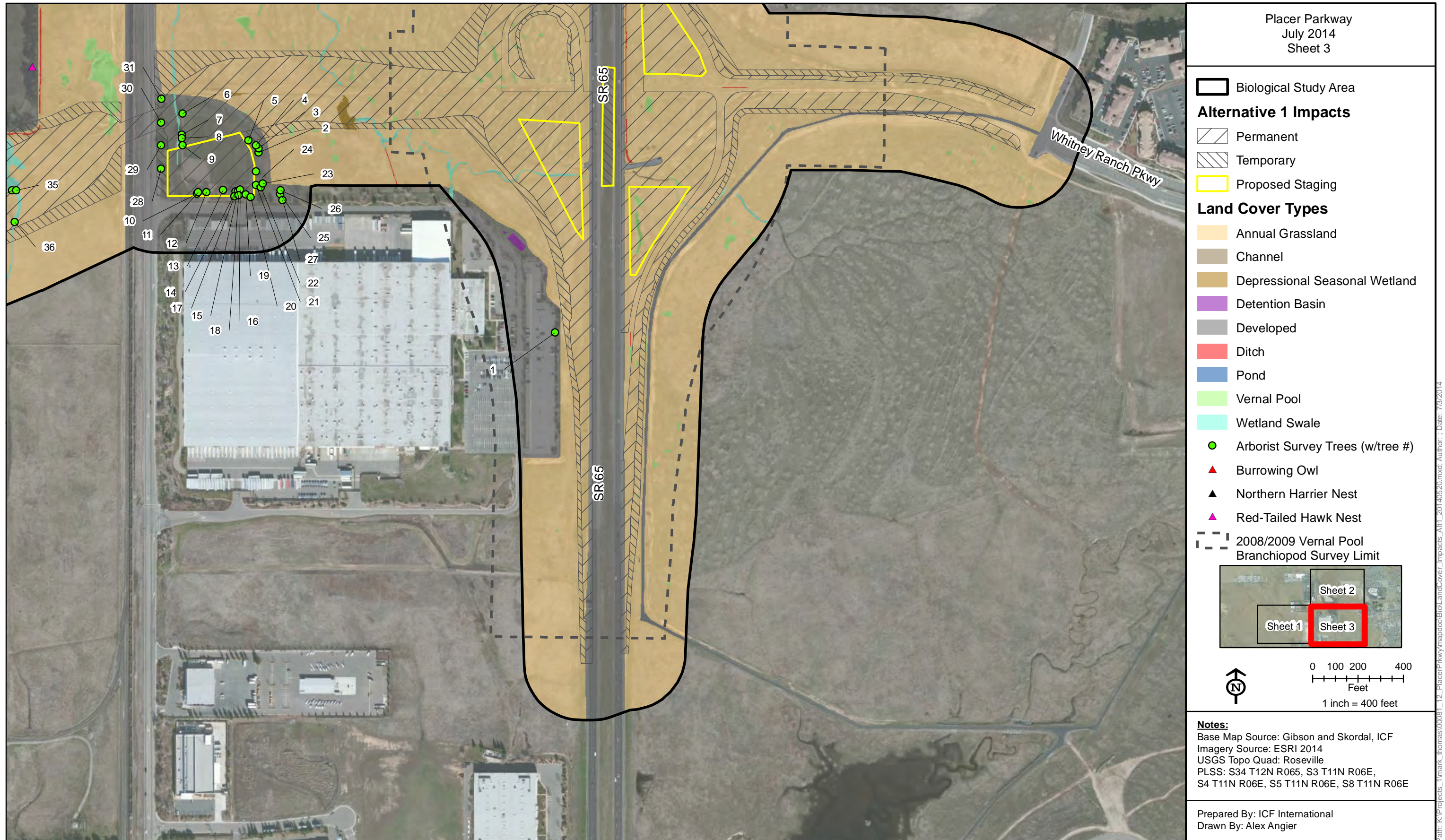
Potential biological resource issues associated with the proposed project were identified through review of existing information and field surveys. The study area for purposes of evaluating project impacts on biological resources generally comprises the limits of disturbance (including areas to accommodate temporary construction activities and staging) and undeveloped habitats within 250 feet of these limits to account for potential indirect effects on nearby aquatic resources. When wetland boundaries extend past the 250-foot boundary, the entire wetland is considered part of the study area (Figures 10a-c, 11a-c, and 12a-c).



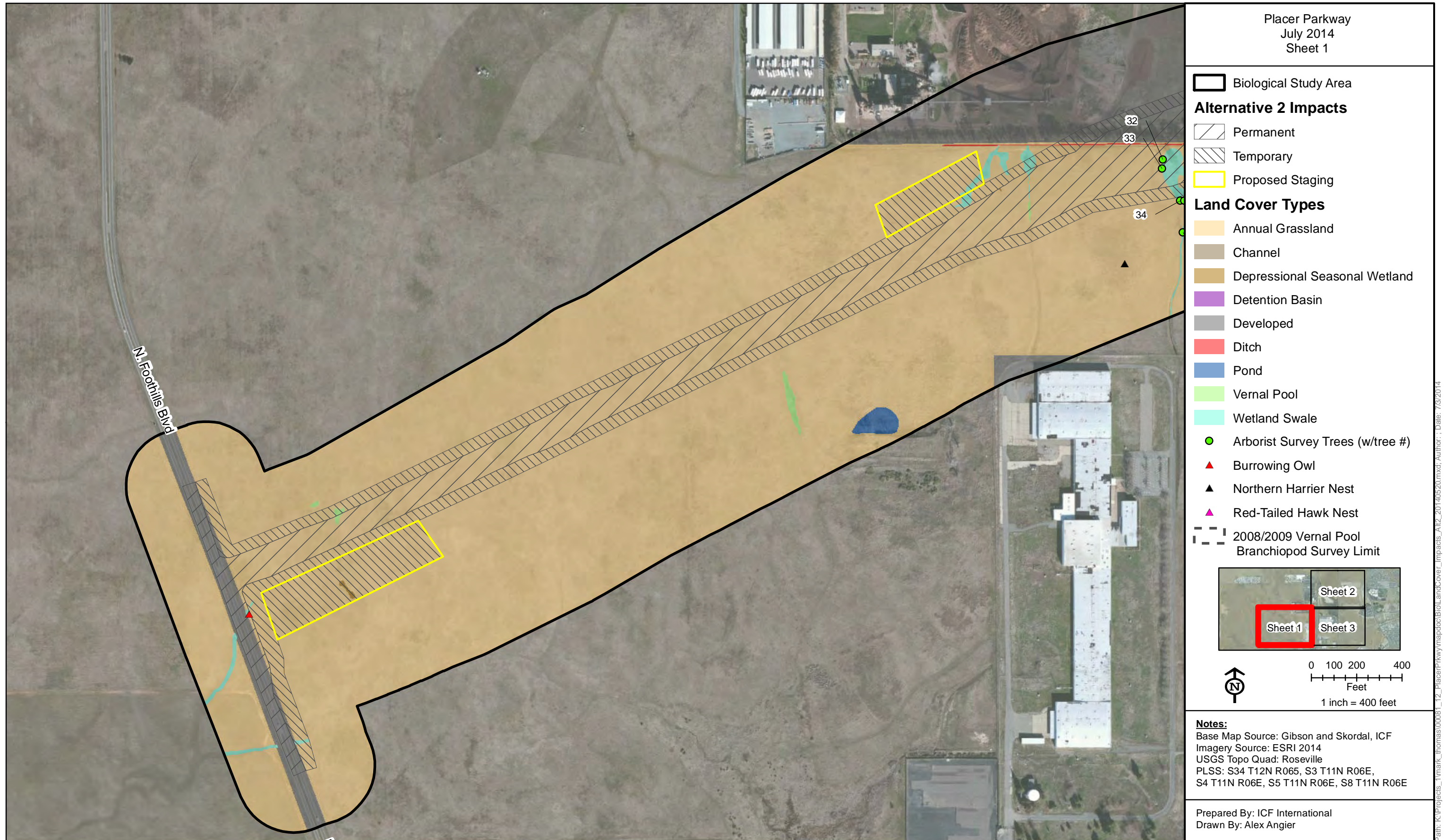
**Figure 10a**  
**Biological Resources and Project Impacts**  
**Alternative 1**



**Figure 10b**  
**Biological Resources and Project Impacts**  
**Alternative 1**



**Figure 10c**  
**Biological Resources and Project Impacts**  
**Alternative 1**

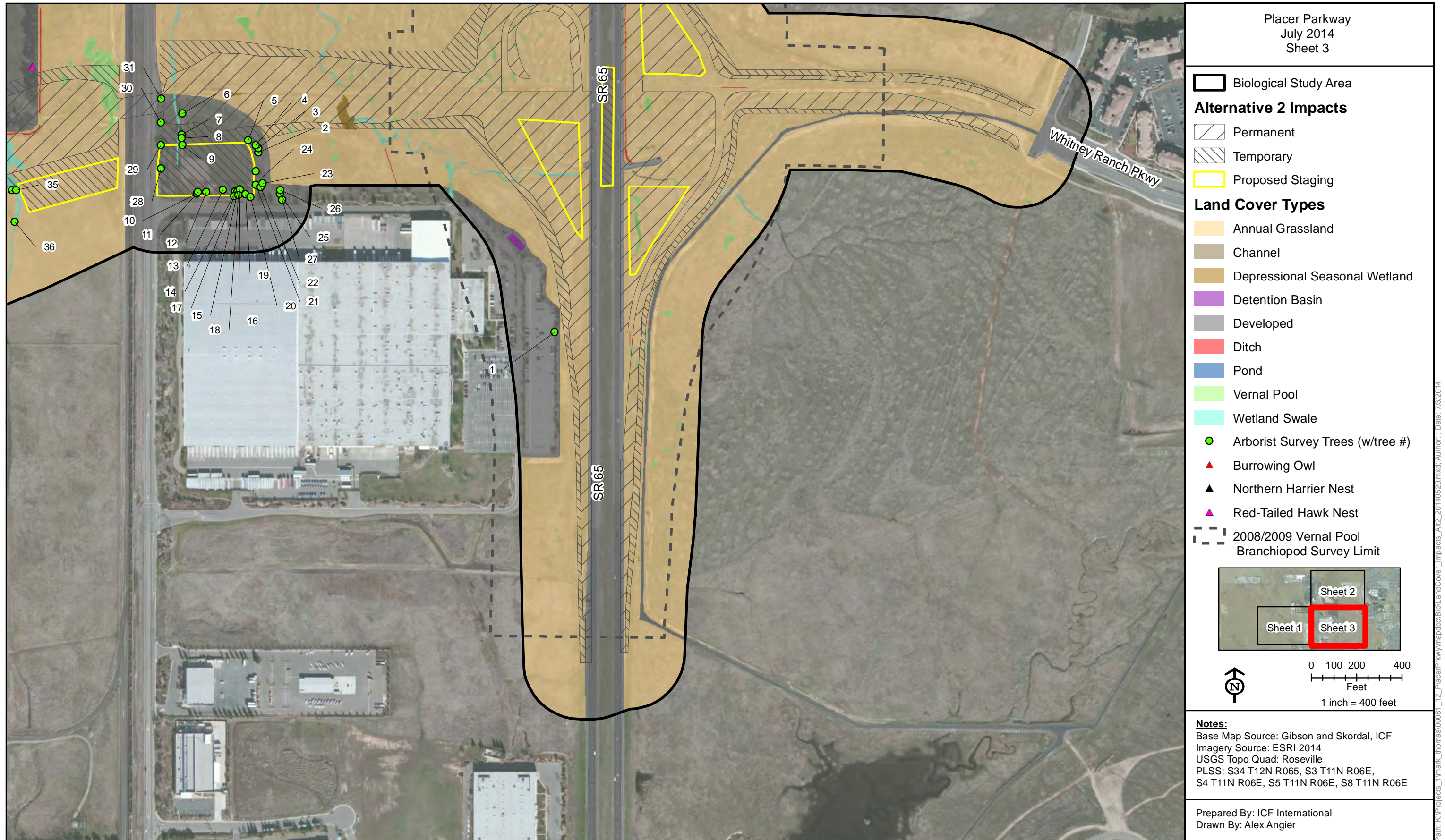


**Figure 11a**  
**Biological Resources and Project Impacts**  
**Alternative 2**



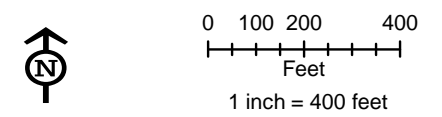
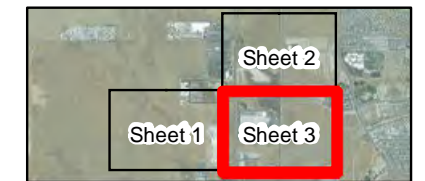


**Figure 11b**  
**Biological Resources and Project Impacts**  
**Alternative 2**



Placer Parkway  
 July 2014  
 Sheet 3

- Biological Study Area
- Alternative 2 Impacts**
- Permanent
- Temporary
- Proposed Staging
- Land Cover Types**
- Annual Grassland
- Channel
- Depressional Seasonal Wetland
- Detention Basin
- Developed
- Ditch
- Pond
- Vernal Pool
- Wetland Swale
- Arborist Survey Trees (w/tree #)
- Burrowing Owl
- Northern Harrier Nest
- Red-Tailed Hawk Nest
- 2008/2009 Vernal Pool Branchiopod Survey Limit

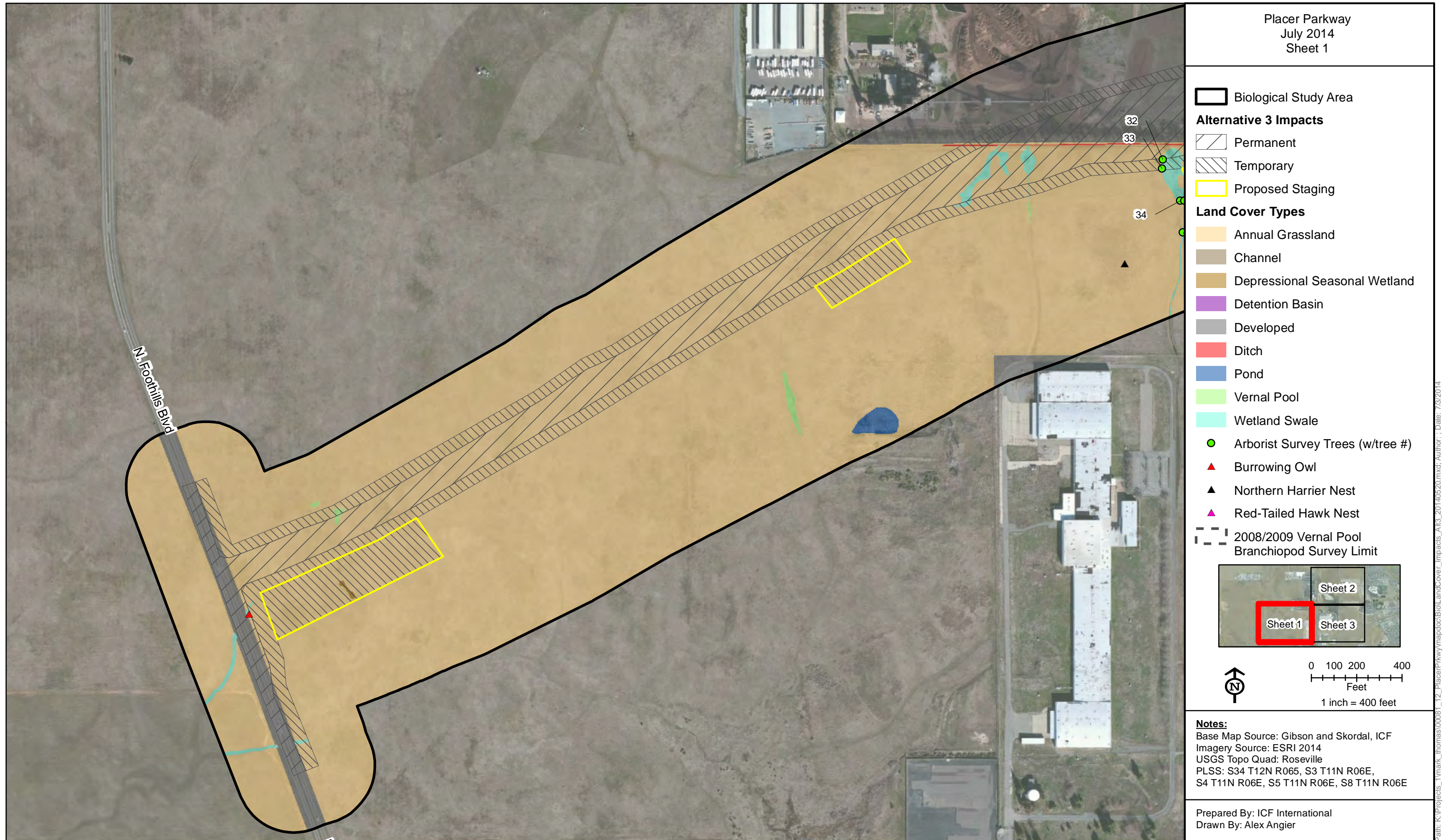


**Notes:**  
 Base Map Source: Gibson and Skordal, ICF  
 Imagery Source: ESRI 2014  
 USGS Topo Quad: Roseville  
 PLSS: S34 T12N R06E, S3 T11N R06E,  
 S4 T11N R06E, S5 T11N R06E, S8 T11N R06E

Prepared By: ICF International  
 Drawn By: Alex Angier

**Figure 11c**  
**Biological Resources and Project Impacts**  
**Alternative 2**

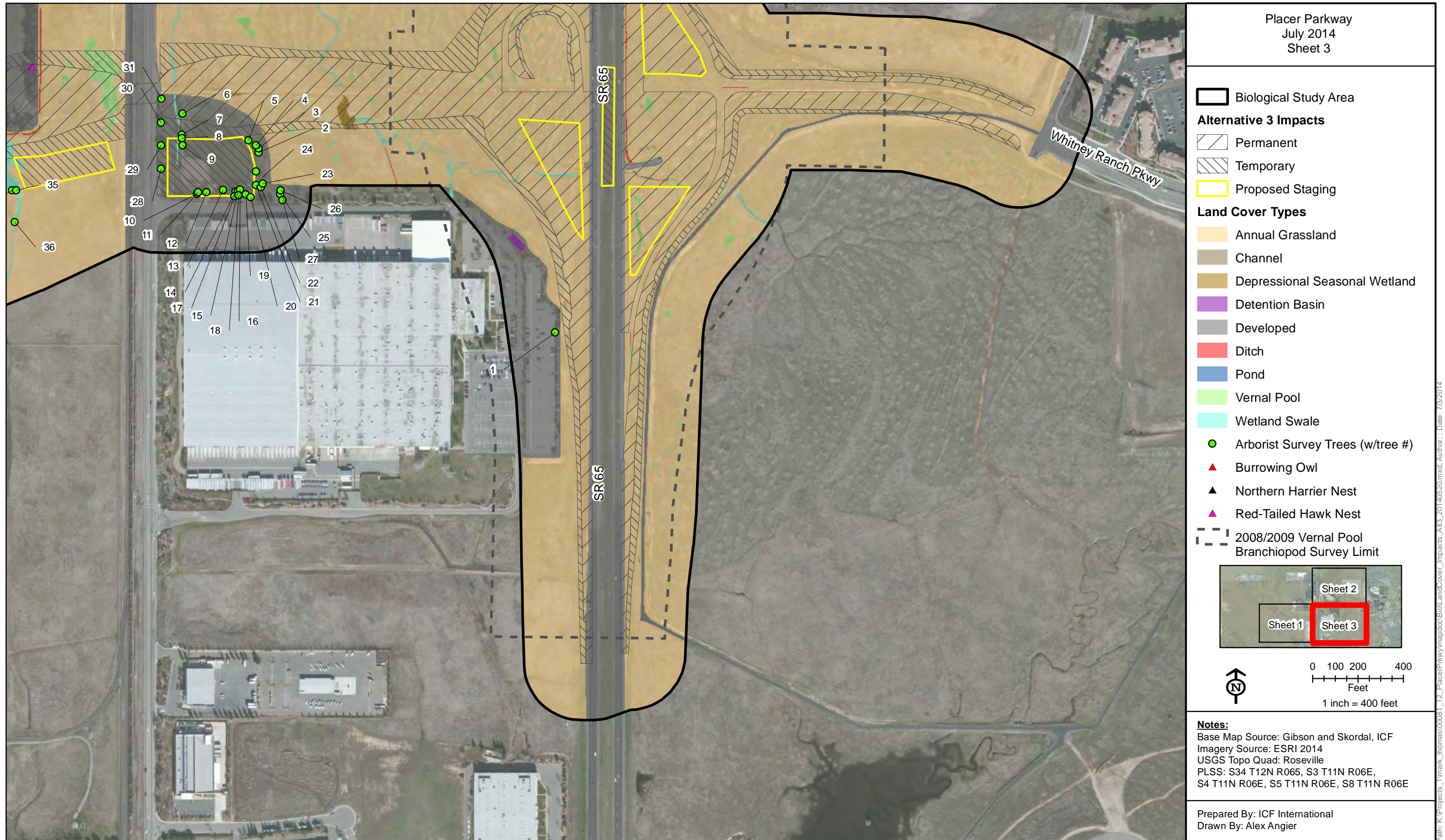
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**Figure 12a**  
**Biological Resources and Project Impacts**  
**Alternative 3**



**Figure 12b**  
**Biological Resources and Project Impacts**  
**Alternative 3**



**Figure 12c**  
**Biological Resources and Project Impacts**  
**Alternative 3**

## Review of Existing Information

Biologists reviewed existing resource information and previously prepared environmental documents related to the project and the geographic area to determine whether special-status species or other sensitive biological resources (e.g., waters of the United States) could occur in the study area. The sources listed below were reviewed.

- California Native Plant Society's (CNPS's) online Inventory of Rare and Endangered Plants of California (2014).
- California Natural Diversity Database (CNDDB) records search of the Roseville and the eight surrounding U.S. Geological Survey (USGS) 7.5-minute quadrangles (California Department of Fish and Wildlife 2014).
- A list of endangered and threatened species that may occur in or be affected by projects within the Roseville USGS 7.5-minute quadrangle and Placer County (U.S. Fish and Wildlife Service 2014).
- Lists of plants that have been identified as noxious weeds or invasive plants by the U.S. Department of Agriculture (2014), California Department of Food and Agriculture (2014), and the California Invasive Plant Council (2014).
- Placer County Conservation Plan for Western Placer County, Agency Review Draft Document (Placer County 2011).
- Biological Resources section of the Placer Parkway Corridor Preservation Tier 1 Environmental Impact Statement (EIS)/Program Environmental Impact Report (EIR) (South Placer Regional Transportation Authority et al. 2007a).
- Natural Environment Study for the Placer Parkway Corridor Preservation Tier 1 EIS/Program EIR (South Placer Regional Transportation Authority et al. 2007b).
- State Route 65/Whitney Ranch Interchange Project Natural Environment Study (HDR Engineering, Inc. 2010).
- Operations and Management Plan for the Highway 65 Self-Storage Open Space Preserve (Ecorp Consulting, Inc. 2008).

This information was used to develop lists of special-status species and other sensitive biological resources that could be present in the project region. Species from the lists were considered if they were known to occur in the project region (i.e., within a 10-mile radius of the project area) or if potential habitat for the species was known to be present in the study area.

## Personnel and Survey Methods

Biological surveys conducted for the proposed project were performed in 2012, 2013, and 2014 by ICF International (ICF) and Gibson & Skordal (Table 4). The study area overlaps with the study area for the Whitney Ranch Interchange Project (see Figures 10c, 11c, and 12c) that included 2008–2009 protocol-level surveys for vernal pool branchiopods listed as threatened or endangered under the federal Endangered Species Act (ESA), which are also listed in Table 3-s.

**Table 4. Biological Survey Personnel and Dates**

Type of Survey	Survey Date	Surveyors
Vernal pool branchiopod wet-season surveys*	November 13, 2008– May 19, 2009	Stephen Stringer, LaTisha Burnaugh, and Sean Marquis (HDR)
Vernal pool branchiopod dry-season surveys*	September 11 and 18, 2009	Stephen Stringer and LaTisha Burnaugh (HDR)
Natural communities and habitat-based assessment for special-status species	February 7, 2013; January 15, 2014	Jessica Hughes and Angela Alcala (ICF International)
Botanical surveys	October 30, 2012; April 15, 17, and 22, 2013	Jessica Hughes, Dr. Robert Preston, Cristian Singer, and John Holson (ICF International)
Delineation of wetlands and other waters of the U.S.	May 9 and 10, 2013; January 16, 2014; June 4, 2014	Tom Skordal (Gibson & Skordal)
Tree survey	January 27, 2014	Paul Weller and John Holson (ICF International)
Habitat assessment for federally listed large branchiopods	January 15 and 21, 2014	Angela Alcala (ICF International)

\* Vernal pool branchiopod surveys were conducted for the Whitney Ranch Interchange Project, which overlaps with the proposed project.

Methods and personnel involved in documenting wetlands and other waters of the United States and conducting vegetation and wildlife surveys are described below.

#### ***Waters of the United States, Including Wetlands***

Gibson & Skordal conducted delineation fieldwork in the project footprint for each of the three build alternatives on May 9 and 10, 2013, and January 16, 2014. The delineation was performed in accordance with the 1987 Corps of Engineers Wetlands Delineation Manual (Environmental Laboratory 1987), the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (U.S. Army Corps of Engineers 2008), and Sacramento District's Minimum Standards for Acceptance of Preliminary Wetlands Delineations (U.S. Army Corps of Engineers 2001). USACE regulations (33 Code of Federal Regulations [CFR] 328) were used to determine the presence of waters of the United States other than wetlands. The U.S. Army Corps of Engineers Jurisdictional Determination Form Instructional Guidebook (U.S. Army Corps of Engineers and U.S. Environmental Protection Agency 2007) was consulted in evaluating the jurisdictional status of the various waterbodies in the delineation area. The National Wetland Plant List (Lichvar 2013) was used to determine the wetland indicator status of species observed in the delineated area. A portion of the study area was verified by USACE biologist Will Ness on June 4, 2014. The remaining portion of the study area is pending verification by the USACE.

#### ***Botanical Resources***

ICF botanists Jessica Hughes, Dr. Robert Preston, Cristian Singer, and John Holson conducted botanical surveys in the study area on October 30, 2012 and April 15, 17, and 22, 2013. Natural

communities in the study area were identified and mapped during the botanical surveys. The results of these surveys are presented below.

### **Wildlife Resources**

ICF wildlife biologist Angela Alcala conducted a habitat-based field assessment for wildlife in the study area on February 7, 2013. Ms. Alcala revisited the study area on January 15 and 21, 2014, to survey an additional alternative alignment and to assess delineated wetlands within the study area as potential habitat for vernal pool branchiopods. During habitat-based field assessments, Ms. Alcala took notes on the general topography of the study area, amount of human activity and disturbance, and presence of burrows or other refuge sites for burrowing owl (*Athene cunicularia*). She also recorded wildlife (or wildlife sign) observed during the site visits.

Within the eastern portion of the study area (Figures 10a–c, 11a–c, and 12a–c), wet-season and dry-season surveys for federally listed vernal pool branchiopods were conducted for the Whitney Ranch Interchange Project in 2008 and 2009 according to the Interim Survey Guidelines for Permittees for Recovery Permits under Section 10(a)(1)(A) of the Endangered Species Act for Listed Vernal Pool Branchiopods (U.S. Fish and Wildlife Service 1996). No vernal pool branchiopods were detected during these surveys. Although negative survey results are only valid for 5 years, they provide scientific data relevant to the study area.

### **Arborist Survey**

ICF arborist Paul Weller and ICF botanist John Holson conducted an arborist survey on January 27, 2014. Mr. Weller is certified by the International Society of Arboriculture (#WE-7862A). The arborist survey limits consisted of the proposed project footprint plus a 50-foot-wide buffer required by the Placer County Tree Preservation Ordinance. Data collected for each tree included tree location (using a Trimble Global Positioning System receiver with sub-meter accuracy), species, height, canopy dripline radius, health and vigor, structure, and trunk diameter at 4.5 feet above the ground surface (diameter standard height [DSH]).

### **Existing Biological Conditions**

The study area is located in the transition zone between the Sacramento Valley and northern Sierra Nevada Foothill subregions of the California Floristic Province (Baldwin et al. 2012:42, 43). The topography in the study area is relatively level with some small hills, and elevations range from approximately 100 to 150 feet above mean sea level.

The natural communities in the study area are interspersed with roadways, railroad tracks, commercial and industrial areas, and residential development. The land cover types identified and mapped during botanical and delineation field surveys are described below. The descriptions of the aquatic resources are based primarily on information from the delineation report.

The study area supports both common natural communities and natural communities of special concern. Common natural communities are habitats with low species diversity that are widespread, reestablish naturally after disturbance, or support primarily nonnative species. These communities are not generally protected by agencies unless the specific site is habitat for or supports special-status species (e.g., raptor foraging or nesting habitat, upland habitat in a wetland watershed). The common natural community in the study area is annual grassland.



Natural communities of special concern are habitats considered sensitive because of their high species diversity, high productivity, unusual nature, limited distribution, or declining status. Local, state, and federal agencies consider these habitats important. The CNDDDB contains a current list of rare natural communities throughout the state. The U.S. Fish and Wildlife Service (USFWS) considers certain habitats, such as wetlands and riparian communities, important to wildlife, and USACE and EPA consider wetland habitats important for water quality and wildlife. The habitats in the study area that meet criteria for natural communities of special concern are vernal pool, wetland swale, and depressional seasonal wetland.

Natural communities and developed areas within the study area are described below.

### **Annual Grassland**

Annual grassland is the largest natural community in the study area and contains primarily nonnative grasses and forbs. Some areas of annual grassland exhibit a higher degree of disturbance than others (e.g., swaths of land adjacent to roadways) as the result of past grading activities. Common nonnative grass species present are Medusahead (*Elymus caput-medusae*), Italian ryegrass (*Festuca perennis*), slender wild oat (*Avena barbata*), ripgut brome (*Bromus diandrus*), soft chess (*Bromus hordeaceus*), and foxtail barley (*Hordeum murinum* ssp. *leporinum*). Common nonnative forbs present are spring vetch (*Vicia sativa*), winter vetch (*Vicia villosa* ssp. *varia*), filarees (*Erodium* spp.), and smooth cat's-ear (*Hypochaeris glabra*). Native grasses present are beardless wild rye (*Elymus triticoides*), small fescue (*Festuca microstachys*), purple needlegrass (*Stipa pulchra*), and meadow foxtail (*Alopecurus saccatus*). Representative native forbs in annual grasslands are California poppy (*Eschscholzia californica*), fiddleneck (*Amsinckia* spp.), blue dicks (*Dichelostemma capitatum*), miniature lupine (*Lupinus bicolor*), and narrow tarplant (*Holocarp36utatesata*). Scattered trees (e.g., Fremont cottonwood [*Populus fremontii*]) and coyote brush shrubs (*Baccharis pilularis*) also occur in the annual grasslands.

### **Developed Areas**

Developed portions of the study area consist of commercial and industrial areas (e.g., Ace Hardware distribution center, Rio Bravo Rocklin plant), roadways, and residential development. The vegetation in developed areas typically comprises ornamental species planted for decorative or landscaping purposes, such as bearberry manzanita (*Arctostaphylos uva-ursi*), pines (*Pinus* spp.), London planetree (*Platan36utateida*), Deodar cedar (*Cedrus deodara*), oleander (*Nerium oleander*), and ornamental deer grass (*Muhlenbergia rigens*).

### **Vernal Pool**

Vernal pools are a type of seasonal wetland. The pools support long-term ponding and soil saturation as the result of water perched above an impenetrable hardpan layer during winter and early spring. Precipitation is the primary source of hydrology for the pools, but supplemental water comes from surface sheet flow and subsurface discharges onto the perched water tables.

Native forbs present that are typically found only in vernal pools are coyote thistle (*Eryngium castrense*), doublehorn calicoflower (*Downingia bicornuta* var. *picta*), horned downingia (*D. ornatissima*), smooth goldfields (*Lasthenia glaberrima*), vernal pool buttercup (*Ranunculus bonariensis* var. *trisepalus*), stalked popcornflower (*Plagiobothrys stipitatus* var. *micranthus*), and whitehead navarretia [*Navarretia leucocephala* ssp. *leucocephala*].

**Wetland Swale**

Wetland swales commonly occur as wetland plant communities found in linear sloping drainages that lack a defined bed and bank. Species present are Italian ryegrass, Mediterranean barley (*Hordeum marinum* ssp. *gussoneanum*), stalked popcornflower, rabbitsfoot grass (*Polypogon monspeliensis*), creeping spike rush (*Eleocharis palustris*), and curly dock (*Rumex crispus*).

**Depressional Seasonal Wetland**

For the purposes of the delineation, depressional seasonal wetlands were differentiated from vernal pools based on the presence of a less diverse plant community. Comparable to vernal pools, depressional seasonal wetlands support long-term ponding and soil saturation during and following precipitation events in the winter and early spring. Supplemental sources of water may be surface sheet flow and subsurface discharges onto the perched water tables, if present. Species present are Italian ryegrass and/or Mediterranean barley with scattered curly dock.

**Channel**

Channels in the study area consist of linear features that typically possess a bed and bank, have an ordinary high water mark, and do not appear to have been excavated for drainage purposes. The hydrology of channels varies from ephemeral (i.e., briefly conveying flows from precipitation events) to intermittent (i.e., conveying flows from groundwater and precipitation events on a relatively consistent basis during the wetter times of the year). The channels within the study area contain almost no vegetation, and the channel bed consists of bedrock with cobble in most locations.

**Drainage Ditch**

Ditches in the study area consist of linear features that appear to have been excavated for drainage purposes, primarily to convey flows away from SR 65. Vegetation within the ditches mapped in the study area consists of Italian ryegrass and Mediterranean barley. The hydrology of ditches is comparable to the channels described above and varies from ephemeral to intermittent.

**Pond**

A pond is located at the base of a mound in the annual grassland west of Industrial Avenue. The pond was identified in preliminary mapping by Gibson & Skordal but was not formally delineated because it is located outside the limits of disturbance. ICF biologists observed inundation of the pond on February 7, 2013, but it was dry during a subsequent site visit on January 15, 2014.

**Detention Basin**

The detention basin abuts the northeast corner of the Ace Hardware distribution center parking lot. The detention basin was identified in preliminary mapping by Gibson & Skordal but was not formally delineated because it is located outside the limits of disturbance. The basin was dry at the time of the January 21, 2014 site visit conducted by ICF biologist Angela Alcalá.

According to Gibson & Skordal, the detention basin has been excavated to a depth of approximately 4 feet, receives runoff from the parking lot, and drains through a culvert at its western end. The dominant vegetation observed in the detention basin includes common spikerush (*Eleocharis macrostachya*), common tarweed (*Centromadia pungens*), and stinkwort (*Dittrichia graveolens*) (Skordal pers. comm.).

### Special-Status Species

For the purpose of this document, special-status species are plants, wildlife, and fish that are legally protected under ESA, the California Endangered Species Act, or other regulations, and species that are considered sufficiently rare by the scientific community to qualify for such listing. Sensitive plants and wildlife are those species in any of the categories listed below.

- Species listed or proposed for listing as threatened or endangered under ESA (50 CFR 17.11 [listed animals], 50 CFR 17.12 [listed plants], and various notices in the Federal Register [FR] [proposed species]).
- Species that are candidates for possible future listing as threatened or endangered under ESA (78 FR 70104, November 22, 2013).
- Species listed or proposed for listing by the State of California as threatened or endangered under the California Endangered Species Act (14 California Code of Regulations [CCR] 670.5).
- Species that meet the definitions of rare or endangered under CEQA (State CEQA Guidelines Section 15380).
- Plants listed as rare under the CNPPA (California Fish and Game Code 1900 et seq.).
- Plants considered by the California Department of Fish and Wildlife (CDFW) and CNPS to be “rare, threatened, or endangered in California” (Rare Plant Ranks 1B and 2) (California Department of Fish and Wildlife 2013; California Native Plant Society 2014).
- Plants identified by CDFW and CNPS about which more information is needed to determine their status, and plants of limited distribution (Rare Plant Ranks 3 and 4) (California Department of Fish and Wildlife 2013, California Native Plant Society 2014) that may be included as special-status species on the basis of local significance or recent biological information.
- Wildlife species of special concern to CDFW.
- Wildlife fully protected in California (California Fish and Game Code [CFGC] Section 3511 [birds], 4700 [mammals], 5050 [amphibians and reptiles], and 5515 [fish]).

### Special-Status Plant Species

Based on the searches of the CNDDDB, CNPS’s rare plant inventory, and USFWS’s website, 17 special-status plant species were identified as occurring in the project region (Table 5). The natural communities in the study area contain potential habitat for 10 of these 17 species. The remaining seven species have habitat (i.e., cismontane woodland, chaparral) or microhabitat requirements (i.e., alkaline, gabbro, or serpentine soils) that are not present in the study area or that occur at elevations substantially higher than the elevation of the study area. Additionally, the relatively high level of historical and ongoing disturbance present in most of the study area reduces the quality of potential habitat for special-status plant species in the study area.

No special-status plants were observed during 2012 and 2013 botanical surveys that coincided with reported blooming periods for the special-status plants. Sacramento Orcutt grass (*Orcuttia viscida*) is the only federally listed plant species identified during prefield investigation as having potential habitat in the vernal pools in the study area. Sacramento Orcutt grass typically occurs in deep vernal pools, but was not found during the April 2013 botanical surveys conducted during its blooming period. Therefore, Sacramento Orcutt grass was found to be absent in the study area.

The 2012 and 2013 surveys did not include a small portion of the study area outside the project construction footprint (i.e., where direct impacts would occur) that supports annual grassland and was added to the study area as part of an additional project alternative after the 2012 and 2013 botanical surveys were conducted.

**Table 5. Sensitive Plant Species Known or with Potential to Occur in the Project Region**

Common Name <i>Scientific Name</i>	Status <sup>a</sup>		General Habitat Description	Blooming Period	Habitat Present/ Absent	Rationale
	Federal/ State/CRPR <sup>2a</sup>	Geographic Distribution				
California balsamroot <i>Balsamorhiza macrolepis</i>	-/-/1B.2	Scattered occurrences in the Coast Ranges and Sierra Nevada Foothills	Sometimes on serpentine soils in chaparral, cismontane woodland, valley and foothill grassland; 295– 5, 101 feet	March– June	P	Potential habitat present, but not observed during surveys within blooming period that covered majority of the BSA. Low potential to occur in portion of BSA added after survey completion. No serpentine soils present. No effect.
Stebbin's morning- glory <i>Calystegia stebbinsii</i>	E/E/1B.1	Northern Sierra Nevada Foothills with reported occurrences in El Dorado and Nevada Counties	Serpentine or gabbroic soils in chaparral openings, cismontane woodland; 606–3,576 feet	April–July	A	BSA substantially lower than species' elevation range and no serpentine or gabbro soils present. No effect.
Pine Hill ceanothus <i>Ceanothus roderickii</i>	E/R/1B.2	Endemic to El Dorado County	Serpentine or gabbro soils in chaparral or cismontane woodland; 803–2,066 feet	April–June	A	BSA substantially lower than species' elevation range and no serpentine or gabbro soils present. No effect.
Hispid bird's-beak <i>Chloropyron molle</i> ssp. <i>hispidum</i>	-/-/1B.1	Central Valley in Alameda, Fresno, Kern, Merced, Placer, and Solano Counties	Meadow and seeps, valley and foothill grassland, playa, on alkaline soils; 3–508 feet	June– September	A	Microhabitat requirements (i.e., alkaline soils) not met in BSA. No effect.

<sup>2</sup> In March 2010, California Department of Fish and Game (now DFW) changed the name of "CNPS List" or "CNPS Ranks" to "CRPR." This was done to reduce confusion over the fact that CNPS and DFW jointly manage the Rare Plant Status Review groups (300+ botanical experts from government, academia, non-governmental organizations, and the private sector) and that the rank assignments are the product of a collaborative effort and not solely a CNPS assignment.

Common Name <i>Scientific Name</i>	Status <sup>a</sup>		General Habitat Description	Blooming Period	Habitat Present/ Absent	Rationale
	Federal/ State/CRPR <sup>2a</sup>	Geographic Distribution				
Brandegee's clarkia <i>Clarkia biloba</i> ssp. <i>brandegeae</i>	-/-/4.2	Northern Sierra Nevada Foothills from Butte to El Dorado Counties	Chaparral, cismontane woodland, lower coniferous forest, often on roadcuts; 246–3,001 feet	May–July	A	No potential habitat present in BSA. No effect.
Dwarf downingia <i>Downingia pusilla</i>	-/-/2.2	Central Valley	Vernal pools and mesic valley and foothill grasslands; below 1,459 feet	March– May	P	Potential habitat present but not observed during surveys within blooming period. No potential habitat present in portion of BSA added after survey completion. No effect.
Stinkbells <i>Fritillaria agrestis</i>	-/-/4.2	Alameda, Contra Costa, Fresno, Kern, Mendocino, Monterey, Merced, Monterey, Mariposa, Placer, Sacramento, Santa Barbara, San Benito, San Luis Obispo, San Mateo, Stanislaus, and Tuolumne Counties	Chaparral, cismontane woodland, pinyon- juniper woodland, valley and foothill grassland, on clay, sometimes serpentinite substrate; 33–5,101 feet	March– June	P	Potential habitat present but not observed during surveys within blooming period. Low potential to occur in portion of BSA added after survey completion. No effect.
El Dorado bedstraw <i>Galium californicum</i> ssp. <i>sierrae</i>	E/R/1B.2	Endemic to El Dorado County	On gabbroic soils in chaparral, cismontane woodland, lower montane coniferous forest; 328–1,919 feet	May–June	A	BSA substantially lower than species' elevation range and no gabbro soils present. No effect.

Common Name <i>Scientific Name</i>	Status <sup>a</sup>		General Habitat Description	Blooming Period	Habitat Present/ Absent	Rationale
	Federal/ State/CRPR <sup>2a</sup>	Geographic Distribution				
Boggs Lake hedge- hyssop <i>Gratiola heterosepala</i>	-/E/1B.2	Inner North Coast Ranges, Central Sierra Nevada Foothills, Sacramento Valley and Modoc Plateau: Fresno, Lake, Lassen, Madera, Merced, Modoc, Placer, Sacramento, Shasta, Siskiyou, San Joaquin, Solano, and Tehama Counties; also Oregon	Clay soils in areas of shallow water, lake margins of swamps and marshes, vernal pool margins; 33–7,791 feet	April– August	P	Potential habitat present but not observed during surveys within blooming period. No potential habitat present in portion of BSA added after survey completion. No effect.
Ahart's dwarf rush <i>Juncus leiospermus</i> var. <i>ahartii</i>	-/-/1B.2	Eastern Sacramento Valley, northeastern San Joaquin Valley with occurrences in Butte, Calaveras, Placer, Sacramento, Tehama, and Yuba Counties	Wet areas in valley and foothill grassland, vernal pool margins; 98–751 feet	March– May	P	Potential habitat present but not observed during surveys within blooming period. No potential habitat present in portion of BSA added after survey completion. No effect.
Red Bluff dwarf rush <i>Juncus leiospermus</i> var. <i>leiospermus</i>	-/-/1B.1	Northern Sacramento Valley and Cascade Range foothills with occurrences in Butte, Placer, Shasta, and Tehama Counties	Seasonally wet areas in chaparral, cismontane woodland, meadows and seeps, valley and foothill grassland, vernal pools; 115–4,101 feet	March– May	P	Potential habitat present but not observed during surveys within blooming period. No potential habitat present in portion of BSA added after survey completion. No effect.
Legenere <i>Legenere limosa</i>	-/-/1B.1	Primarily in the lower Sacramento Valley, also from north Coast Ranges, northern San Joaquin Valley and the Santa Cruz Mountains	Deep, seasonally wet habitats such as vernal pools, ditches, marsh edges, and river banks; below 2,887 feet	April–June	P	Potential habitat present but not observed during surveys within blooming period. No potential habitat present in portion of BSA added after survey completion. No effect.

Common Name <i>Scientific Name</i>	Status <sup>a</sup>		General Habitat Description	Blooming Period	Habitat Present/ Absent	Rationale
	Federal/ State/CRPR <sup>2a</sup>	Geographic Distribution				
Pincushion navarretia <i>Navarretia myersii</i> <i>ssp. myersii</i>	-/-/1B.1	Central Valley in Amador, Calaveras, Merced, Placer, and Sacramento Counties	Edges of vernal pools; 66–1,083 feet	April–May	P	Potential habitat present but not observed during surveys within blooming period. No potential habitat present in portion of BSA added after survey completion. No effect.
Sacramento Orcutt grass <i>Orcuttia viscida</i>	E/E/1B.1	Endemic to Sacramento County	Vernal pools; 98–328 feet	April–July	P	Potential habitat present but not observed during surveys within blooming period. No potential habitat present in portion of BSA added after survey completion. No effect.
Layne’s butterweed <i>Packera layneae</i>	T/R/1B.2	Northern Sierra Nevada Foothills, Butte, El Dorado, Placer, Tuolumne, and Yuba Counties	Rocky serpentinite or gabbro soils in chaparral and foothill woodland; 656–3,281 feet	April–August	A	BSA substantially lower than species’ elevation range and no serpentine or gabbro soils present. No effect.
Tahoe yellow cress <i>Rorippa subumbellata</i>	C/E/1B.1	Lake Tahoe Basin: El Dorado, Nevada*, and Placer Counties; also adjacent Nevada	Lower montane coniferous forest, meadows and seeps, on decomposed granitic beaches; 6,217–6,233 feet	May–September	A	No potential habitat present and BSA substantially lower than species’ elevation range. No effect.
Sanford’s arrowhead <i>Sagittaria sanfordii</i>	-/-/1B.2	Scattered locations in Central Valley and Coast Ranges	Freshwater marshes, sloughs, canals, and other slow-moving water habitats; below 2,132 feet	May–October	P	Potential habitat present but not observed during surveys within blooming period. No potential habitat present in portion of BSA added after survey completion. No effect.



**Note for Table 5**

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<sup>a</sup> Status explanations:

**Federal**

E = Listed as endangered under the federal ESA.

T = Listed as threatened under the federal ESA.

C = Species for which USFWS has on file sufficient information on biological vulnerability and threat(s) to support issuance of a proposed rule to list, but issuance of the proposed rule is precluded.

— = No listing status.

**State**

E = Listed as endangered under CESA.

R = Listed as rare under the CESA. This category is no longer used for newly listed plants, but some plants previously listed as rare retain this designation.

— = No listing status.

**CRPR**

1B = rare, threatened, or endangered in California and elsewhere.

2 = rare, threatened, or endangered in California but more common elsewhere.

4 = limited distribution; species on a watch list

.1 = seriously endangered in California (over 80% of occurrences threatened–high degree and immediacy of threat).

.2 = fairly endangered in California (20–80% occurrences threatened).

\* = presumed extirpated in that county.

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There is low potential for two of the special-status plant species, California balsamroot (*Balsamorhiza macrolepis*) and stinkbells (*Fritillaria agrestis*), to occur in the annual grassland in the area added to the study area after the surveys were conducted. There is no potential habitat in the area added post-surveys for 8 of the 10 special-status species with potential habitat in the study area: dwarf downingia (*Downingia pusilla*), Boggs Lake hedge-hyssop (*Gratiola heterosepala*), Ahart's dwarf rush (*Juncus leiospermus* var. *ahartii*), Red Bluff dwarf rush (*Juncus leiospermus* var. *leiospermus*), legenere (*Legenere limosa*), pincushion navarretia (*Navarretia myersii* ssp. *myersii*), Sacramento Orcutt grass, and Sanford's arrowhead (*Sagittaria sanfordii*).

### **Special-Status Wildlife Species**

Based on a review of the environmental documents prepared for the Placer Parkway Corridor Preservation Tier 1 Project (South Placer Regional Transportation Authority et al. 2007a, 2007b), CNDDDB search results, and the USFWS list of endangered, threatened, and proposed species within the project region, 24 special-status wildlife and fish species were determined to have the potential to occur in the project region (Table 6). After completion of the field survey and review of species distribution and habitat requirements data, the biologists determined that 14 of the 24 species would not occur in the study area because the area lacks suitable habitat for them or is outside the species' known range. An explanation for the absence of each of these species from the study area is provided in Table 6. Three species of special-status bat species (silver-haired bat [*Lasionycteris noctivagans*], Townsend's big-eared bat [*Corynorhinus townsendii townsendii*], and western red bat [*Lasiurus blossevillii*]) could forage over the study area but are not expected to roost in the study area based on the lack of suitable roost trees or structures. Suitable habitat is present in the study area for the remaining seven species listed and discussed below.

- Vernal pool fairy shrimp (*Branchinecta lynchi*)
- Vernal pool tadpole shrimp (*Lepidurus packardii*)
- Western spadefoot (*Spea hammondi*)
- Swainson's hawk (*Buteo swainsoni*)
- Burrowing owl (*Athene cunicularia hypugaea*)
- Northern harrier (*Circus cyaneus*)
- White-tailed kite (*Elanus leucurus*)

#### *Vernal Pool Fairy Shrimp*

Vernal pool fairy shrimp is a federally listed threatened species. Vernal pool fairy shrimp inhabit vernal pools that form in depressions, usually in grassland habitats (Eng et al. 1990:255–258). Pools must remain inundated long enough for the species to complete its life cycle. Vernal pool fairy shrimp has a short time to reach sexual maturity, a minimum of 18 days (Helm 1998:132). Vernal pool fairy shrimp also occur in other wetlands that provide habitat similar to vernal pools, such as alkaline rain pools, ephemeral drainages, rock outcrop pools, ditches, stream oxbows, stock ponds, vernal swales, and some seasonal wetlands (Helm 1998:137). Occupied wetlands range in size from as small as several square feet to more than 10 acres.

**Table 6. Sensitive Wildlife and Fish Species Known or with Potential to Occur in the Project Region**

Common Name <i>Scientific Name</i>	Legal Status (Federal/State) <sup>a</sup>	General Habitat Description	Habitat Present/ Absent	Rationale
<b>Invertebrates</b>				
Conservancy fairy shrimp <i>Branchinecta conservatio</i>	E/-	Largest California fairy shrimp species most often found in large (3,900 to 7,500 meter square) clay bottom vernal pools to very large (356,253 meter square) vernal lakes.	Absent	Vernal pools in the study area do not provide the characteristics of occupied habitat known to support Conservancy fairy shrimp. No effect.
Vernal pool fairy shrimp <i>Branchinecta lynchi</i>	T/-	Found in Central Valley, central and south Coast Ranges from Tehama County to Santa Barbara County; isolated populations also in Riverside County; common in vernal pools; also found in sandstone rock outcrop pools.	Present	Suitable vernal pool and swale habitat is present throughout the study area. Likely to adversely affect.
Vernal pool tadpole shrimp <i>Lepidurus packardi</i>	E/-	Found from Shasta County south to Merced County; occur in vernal pools and ephemeral stock ponds.	Present	Large, deep vernal pools within the study area provide potential habitat for vernal pool tadpole shrimp. Likely to adversely affect.
Valley elderberry longhorn beetle <i>Desmocerus californicus dimorphus</i>	T/-	Stream side habitats below 3,000 feet throughout the Central Valley; occur in riparian and oak savanna habitats with elderberry shrubs; elderberries are the host plant.	Absent	No elderberry shrubs are present in the study area. No effect.
<b>Fish</b>				
Central Valley steelhead <i>Oncorhynchus mykiss</i>	T/-	Sacramento and San Joaquin Rivers and tributary Central Valley streams and rivers below impassable barriers; occurs in well-oxygenated, cool, riverine habitat with water temperatures from 7.8 to 18 degrees (°) Celsius (Moyle "002); habitat types are riffles, runs, and pools. Adults and juveniles migrate through the Delta.	Absent	No suitable stream or river habitat is present within the study area. No effect.

Common Name <i>Scientific Name</i>	Legal Status (Federal/State) <sup>a</sup>	General Habitat Description	Habitat Present/ Absent	Rationale
Central Valley fall-/late fall-run Chinook salmon <i>Oncorhynchus</i> <i>tshawytscha</i>	SC/SSC	Sacramento and San Joaquin Rivers and tributary Central Valley streams and rivers below impassable barriers. Occurs in well-oxygenated, cool, riverine habitat with water temperatures from 8.0 to 12.5°C; habitat types are riffles, runs, and pools (Moyle "002).	Absent	No suitable stream or river habitat is present within the study area. No effect.
Sacramento River winter-run Chinook salmon <i>Oncorhynchus</i> <i>tshawytscha</i>	E/E	Main stem Sacramento River below Keswick Dam (Moyle "002); occurs in well-oxygenated, cool, riverine habitat with water temperatures from 8.0 to 12.5°C; habitat types are riffles, runs, and pools (Moyle "002); adults and juveniles migrate in the lower Sacramento River and through the Delta.	Absent	No suitable stream or river habitat is present within the study area. No effect.
Delta smelt <i>Hypomesus</i> <i>transpacificus</i>	T/E	Found primarily in the Sacramento-San Joaquin Estuary but has been found as far upstream as the mouth of the American River on the Sacramento River and Mossdale on the San Joaquin River; range extends downstream to San Pablo Bay; occur in estuary habitat in the Delta where fresh and brackish water mix in the salinity range of 2-7 parts per thousand (Moyle "002)	Absent	No suitable stream or river habitat is present within the study area. No effect.
<b>Amphibians</b>				
California red-legged frog <i>Rana aurora draytonii</i>	T/SSC	Found along the coast and coastal mountain ranges of California from Marin County to San Diego County and in the Sierra Nevada from Tehema County to Fresno County; occur in permanent and semipermanent aquatic habitats, such as creeks and cold-water ponds, with emergent and submergent vegetation; may estivate in rodent burrows or cracks during dry periods.	Absent	No suitable perennial aquatic habitat is present within the study area and the species has not been previously documented within valley grassland habitat in western Placer County. The closest CNDDDB occurrences are more than 30 miles north and northeast of the study area. No effect.

Common Name <i>Scientific Name</i>	Legal Status (Federal/State) <sup>a</sup>	General Habitat Description	Habitat Present/ Absent	Rationale
Western spadefoot <i>Spea hammondi</i>	-/SSC	Seasonal wetlands such as vernal pools and stock ponds in annual grasslands and oak woodlands within the Sierra Nevada foothills, Central Valley and Coast Ranges.	Present	Suitable vernal pool habitat is present throughout the study area. Spadefoot were not observed during branchopod surveys conducted for the Whitney Ranch Interchange project in the eastern portion of the study area. Not likely to adversely affect.
<b>Reptiles</b>				
Giant garter snake <i>Thamnophis couchi gigas</i>	T/T/-	Sloughs, canals, low gradient streams and freshwater marsh habitats where there is a prey base of small fish and amphibians; also found in irrigation ditches and rice fields; requires grassy banks and emergent vegetation for basking and areas of high ground protected from flooding during winter.	Absent	No suitable perennial marsh or drainage habitat is present within the study area. No effect.
Pacific pond turtle <i>Actinemys marmorata</i>	-/SSC	Occurs throughout California west of the Sierra-Cascade crest; found from sea level to 6,000 feet; does not occur in desert regions except for along the Mojave River and its tributaries; occupies ponds, marshes, rivers, streams, and irrigation canals with muddy or rocky bottoms and with watercress, cattails, water lilies, or other aquatic vegetation in woodlands, grasslands, and open forests.	Absent	No Suitable perennial aquatic habitat is present within the study area. The closest potential habitat is approximately 0.5 mile to the north at Orchard Creek. No effect.
<b>Birds</b>				
Bank swallow <i>Riparia riparia</i>	-/T	Occurs along the Sacramento River from Tehama County to Sacramento County, along the Feather and lower American Rivers, in the Owens Valley; and in the plains east of the Cascade Range in Modoc, Lassen, and northern Siskiyou Counties. Small populations near the coast from San Francisco County to Monterey County. Nests in	Absent	No suitable river or stream bank habitat is present in study area. No effect.

Common Name <i>Scientific Name</i>	Legal Status (Federal/State) <sup>a</sup>	General Habitat Description	Habitat Present/ Absent	Rationale
		bluffs or banks, usually adjacent to water, where the soil consists of sand or sandy loam, along streams, coastal bluffs, and sand/gravel pits.		
Burrowing owl <i>Athene cunicularia hypugaea</i>	-/SSC	Lowlands throughout California, including the Central Valley, northeastern plateau, southeastern deserts, and coastal areas; rare along south coast; level, open, dry, heavily grazed or low stature grassland or desert vegetation with available burrows.	Present	One burrowing owl was observed during a February 2013 survey in a culvert at west end of study area (Figure 4). Grassland habitat provides suitable winter and breeding habitat; however, no suitable burrows for nesting were observed during the 2013 and 2014 surveys. Not likely to adversely affect.
California black rail <i>Laterallus jamaicensis coturniculus</i>	-/T, FP	Permanent resident in the San Francisco Bay and east-ward through the Delta into Sacramento and San Joaquin Counties; small populations in Marin, Santa Cruz, San Luis Obispo, Orange, Riverside, and Imperial Counties; tidal salt marshes associated with heavy growth of pickleweed; also occurs in brackish marshes or freshwater marshes at low elevations. Recently discovered northern Sierra Nevada foothill population occupies shallow, densely vegetated freshwater wetlands.	Absent	No suitable freshwater marsh habitat is present within the study area. No effect.
Grasshopper sparrow <i>Ammodramus savannarum</i>	-/SSC	Dry, dense grasslands with a variety of grasses and tall forbs and scattered shrubs in the foothills of the Sierra Nevada and Coast Ranges from Mendocino and Trinity Counties south to San Diego County.	Present	Suitable nesting habitat present within annual grassland within the study area. Closest CNDDDB occurrence is 0.5 mile to the north. Not likely to adversely affect.
Northern harrier <i>Circus cyaneus</i>	-/SSC	Occurs in grasslands, meadows, marshes, and seasonal and agricultural wetlands throughout lowland California.	Present	Suitable nesting habitat is present within annual grassland in study area. Not likely to adversely affect.

Common Name <i>Scientific Name</i>	Legal Status (Federal/State) <sup>a</sup>	General Habitat Description	Habitat Present/ Absent	Rationale
Osprey <i>Pandion haliaetus</i>	-/SSC	Nests in snags, trees, or utility poles near the ocean, large lakes, or rivers with abundant fish populations.	Absent	No suitable nesting or foraging habitat. Possible migrant through the area. No effect.
Purple martin <i>Progne subis</i>	-/SSC	Nests in abandoned woodpecker holes in oaks, cottonwoods, and other deciduous trees in a variety of wooded and riparian habitats. Also nests in vertical drainage holes under elevated freeways and highway.	Absent	No suitable nesting habitat is present. No effect.
Swainson's hawk <i>Buteo swainsoni</i>	-/T	Lower Sacramento and San Joaquin Valleys, the Klamath Basin, and Butte Valley; highest nesting densities occur near Davis and Woodland, Yolo County; nests in oaks or cottonwoods in or near riparian habitats; forages in grasslands, irrigated pastures, and grain fields.	Present	Suitable nesting and foraging habitat is present within the study area; however, the closest known nest sites are approximately 2.5 miles to the southwest and 3.5 miles to the northwest (CNDDB "014). Likely to adversely affect.
Tricolored blackbird <i>Agelaius tricolor</i>	-/SSC	Permanent resident in the Central Valley from Butte County to Kern County; breeds at scattered coastal locations from Marin County south to San Diego County; and at scattered locations in Lake, Sonoma, and Solano Counties; rare nester in Siskiyou, Modoc, and Lassen Counties; nests in dense colonies in emergent marsh vegetation, such as tules and cattails, or upland sites with blackberries, nettles, thistles, and grainfields; habitat must be large enough to support 50 pairs; probably requires water at or near the nesting colony.	Absent	No suitable nesting habitat is present within the study area. The closest known nesting colony is on Orchard Creek approximately 1.0 mile north of the study area. This colony was documented during March 2014 preconstruction nesting bird surveys for the Whitney Ranch Interchange Project. No effect.
White-tailed kite <i>Elanus leucurus</i>	-/FP	Lowland areas west of Sierra Nevada from the head of the Sacramento Valley south, including coastal valleys and foothills to western San Diego County at the Mexico border; low foothills or valley areas with valley or live oaks, riparian areas, and marshes near open grasslands for foraging.	Present	Suitable nesting and foraging habitat is present in the study area. Not likely to adversely affect.

Common Name <i>Scientific Name</i>	Legal Status (Federal/State) <sup>a</sup>	General Habitat Description	Habitat Present/ Absent	Rationale
<b>Mammals</b>				
Silver-haired bat <i>Lasionycteris noctivagans</i>	-/SSC	Roosts in hollow trees, snags, buildings, rock crevices, caves, and under bark within montane and foothill woodlands, riparian, and conifer forest habitats.	Present	Generally requires larger expanses of wooded habitat for roosting. May forage or drink in the study area but would not be impacted by project activities. No effect.
Townsend’s big-eared bat <i>Corynorhinus townsendii townsendii</i>	-/SSC	Roosts in caves, tunnels, mines, and dark attics of abandoned buildings; very sensitive to disturbances and may abandon a roost after one onsite visit.	Present	No suitable roosting habitat is present in the study area. May forage or drink in the study area but would not be impacted by project activities. No effect.
Western red bat <i>Lasiurus blossewillii</i>	-/SSC	Found throughout much of California at lower elevations. Found primarily in riparian and wooded habitats. Occurs at least seasonally in urban areas. Day roosts in trees within the foliage. Found in fruit orchards and sycamore riparian habitats in the Central Valley.	Present	Generally requires larger expanses of wooded habitat for roosting. May forage or drink in the study area but would not be impacted by project activities. No effect.
<sup>a</sup> Status explanations:				
Federal				
-	=	no listing.		
D	=	delisted from the Federal Endangered Species Act.		
E	=	listed as endangered under the Federal Endangered Species Act.		
T	=	listed as threatened under the Federal Endangered Species Act.		
State				
E	=	listed as endangered under the California Endangered Species Act.		
T	=	listed as threatened under the California Endangered Species Act.		
FP	=	fully protected under the California Fish and Game Code.		
SSC	=	species of special concern in California.		
-	=	no listing.		
Other				
-	=	no listing.		



The project area is within the current range of vernal pool fairy shrimp. Based on the Recovery Plan for Vernal Pool Ecosystems of California and Southern Oregon (U.S. Fish and Wildlife Service "005), the study area lies within the Western Placer County core area within the Southeastern Sacramento Valley vernal pool region but does not overlap with designated critical habitat (70 FR 46924, August 11, 2005). Vernal pools and wetland swales within the study area represent potential habitat for this species. Most of the vernal pools and wetland swales within the study area occur on the Mehrten geologic formation. These areas of volcanic mudflow tend to support shallow, rock-bottom pools that have a short ponding duration. Although vernal pool fairy shrimp can inhabit large, deep wetland habitats, they are most often found in small (less than 0.05 acre) and shallow (as little as 2 inches) wetlands (Helm "998:137), which are characteristic of vernal pools in the study area. The short maturation period of vernal pool fairy shrimp enables them to inhabit some of the most ephemeral of wetlands.

There are four previously documented occurrences for vernal pool fairy shrimp within 1 mile of the study area (California Department of Fish and Wildlife "014). The closest occurrence is approximately 800 feet east and south of the study area where vernal pool fairy shrimp were observed in a single vernal pool in 2000 and 2001 during surveys for the Stanford Ranch North project (ECORP Consulting "002). This vernal pool is located within an area that is currently undeveloped but is proposed to be filled as authorized under a Biological Opinion for the Placer Creek Corporate Center (USFWS reference no. 81420-2010-F-0176-R001-1 and USACE no. SPK-2005-00741). The other three occurrences are from created pools within the Orchard Creek Mitigation Bank north of the study area. Vernal pool fairy shrimp are also known to occur within vernal pools and swales on the Antonio Mountain Ranch property located north of Athens Avenue and east of Fiddymont Road, approximately 1.5 miles northwest of the study area (Helm pers. c"mm.). Based on extensive survey efforts within southwestern Placer County and the large amount of available vernal pool habitat within the area surrounding the study area (Roseville, Lincoln, Rocklin), this portion of the county supports a low density of vernal pool fairy shrimp compared with other vernal pool landscapes (Helm pers. "omm.). Factors affecting vernal pool densities may include soil type, historic habitat alteration, and a high density of nonnative grasses.

Protocol-level wet-season and dry-season surveys for federally listed vernal pool branchiopods were conducted in 2008 and 2009 for the Whitney Ranch Interchange project (HDR Engineering, Inc. "010), which overlaps with a portion of the study area (Figures 10c, 11c, and 12c). No vernal pool branchiopods were detected during these surveys. Although the negative results of the surveys are only valid for 5 years, results of these surveys provide one set of data that assess the probability of vernal pool fairy shrimp occupying the study area.

Based on field observations of vernal pool and wetland swale habitat within the study area, many of the wetlands in the study area (particularly those east of Industrial Avenue) are characterized as having a flashy hydroperiod that results in the filling, drying, and refilling of the wetland many times over the wet season. This is likely a result of shallow ponding on shallow soils that overlay an impervious mudlayer. These conditions accelerate drying; as a result, in years where rainfall is not consistent during the winter, many of the pools are not likely to hold water for a minimum of the 18 days required for vernal pool fairy shrimp maturity. However, in rain years during which rainfall is consistent over the wet season, these habitats are likely to remain ponded and could support vernal pool fairy shrimp reproduction. Those vernal pools that are larger and deeper, such as the vernal pool west of Industrial Avenue, are likely to pond water for a longer duration and have a higher probability of supporting vernal pool fairy shrimp. Although the study area is not likely to support a

large population of vernal pool fairy shrimp based on negative survey results within the eastern portion of the study area, low density of vernal pool fairy shrimp in the project vicinity, and the shallow nature of many of the vernal pools in the study area, there is a moderate potential for vernal pool fairy shrimp to be present based on their known presence near the study area (within 800 feet) and the presence of suitable habitat. Waterfowl are known dispersers of vernal pool fairy shrimp, and several waterbirds, including killdeer and great egret, were observed foraging in and around vernal pools in the study area.

#### *Vernal Pool Tadpole Shrimp*

Vernal pool tadpole shrimp is a federally listed endangered species. Vernal pool tadpole shrimp generally take 38 days to mature and typically reproduce in about 54 days (Helm "998:133). Vernal pool tadpole shrimp occur in a wide variety of seasonal habitats, including vernal pools, ponded clay flats, alkaline pools, ephemeral stock tanks, and roadside ditches (Helm 1998:137"138; Rogers 2001:1002-"005). This species is typically found at the highest concentrations in playa pools, large deep vernal pools, and winter lakes (greater than 100 acres) but have also been found in very small (less than 25 square feet) ephemeral pools (Helm 1998:134"138; Rogers 2001:1002-"005). The species' presence in very small pools is believed to be a result of wash down from larger source pools (Helm pers. "omm.). Vernal pool tadpole shrimp have been observed in a variety of habitats ranging from clear, vegetated vernal pools to highly turbid alkali scald with variable depths and volumes of water during the wet cycle (Helm "998:134-138). Vernal pool tadpole shrimp are uncommon even where suitable habitats occur. During surveys conducted in 95 areas across 27 counties in northern and central California, vernal pool tadpole shrimp were detected in only 17 percent of more than 5,000 wetlands sampled (Helm "998).

The project area is within the current range of vernal pool tadpole shrimp. Based on the Recovery Plan for Vernal Pool Ecosystems of California and Southern Oregon (U.S. Fish and Wildlife Service "005), the study area lies within the Western Placer County core area within the Southeastern Sacramento Valley vernal pool region but does not overlap with designated critical habitat for this species (70 FR 46924, August 11, 2005). Within Placer County, vernal pool tadpole shrimp have been documented only at the Lincoln Communication Facility, now part of the Western Placer Schools Conservation Bank (U.S. Fish and Wildlife Service "007).

As described above for vernal pool fairy shrimp, no vernal pool branchiopods (including vernal pool tadpole shrimp) were detected during 2008 and 2009 protocol-level wet-season and dry-season surveys for the Whitney Ranch Interchange project (HDR Engineering, Inc. "010), which overlaps with a portion of the study area (Figures 10c, 11c, and 12c).

Vernal pools and wetland swales within the study area represent potential habitat for vernal pool tadpole shrimp; however, there is a very low likelihood of the species occurring within the study area based on its low densities across suitable habitats, lack of detections within extensively surveyed areas in western Placer County (U.S. Fish and Wildlife Service "007), and the limited amount of large seasonal pool habitats within the study area. As described above for vernal pool fairy shrimp, most of the vernal pools and wetland swales within the study area occur on the Mehrten geologic formation, and they are very shallow and have a short ponding duration. Based on the longer maturation period of tadpole shrimp (minimum of 38 days vs. 18 days for vernal pool fairy shrimp), the species is unlikely to occur in most of the vernal pools and seasonal swales within the study area. One very large vernal pool (0.66 acre) is present along the west side of Industrial

Avenue and the railroad tracks (Figures 10c, 11c, and 12c); this pool appears to pond water for a sufficient duration to support vernal pool tadpole shrimp.

#### *Western Spadefoot*

The western spadefoot is designated as a state species of special concern. Western spadefoot toads typically inhabit lowland habitats such as washes, floodplains of rivers, alluvial fans, playas, and alkali flats. This species may also be found in the foothills and mountain regions. Western spadefoot toads prefer areas of open vegetation and short grasses where the soil is sandy or gravelly (U.S. Fish and Wildlife Service "005: II-230). They are found in the valley and foothill grasslands, open chaparral, and pine-oak woodlands. Spadefoot toads are primarily terrestrial, and require upland habitats for feeding and for constructing burrows for their long dry-season dormancy (U.S. Fish and Wildlife Service "005: II-231). They require wetlands for reproduction and have been observed in a variety of permanent and temporary wetlands including rivers, creeks, pools in intermittent streams, vernal pools, and temporary rain pools (U.S. Fish and Wildlife Service "005: II-231). Larval development can be completed in 3 to 11 weeks but has been known to take up to 79 day from hatching to metamorphosis (U.S. Fish and Wildlife Service "005: II-227). Vernal pools and other temporary wetlands may be optimal for breeding because of the absence or reduced abundance of predators (U.S. Fish and Wildlife Service "005: II-231).

The study area supports numerous vernal pools, wetland swales, seasonal wetlands, and intermittent drainages that provide potential breeding habitat for western spadefoot. No spadefoot adults or larvae were identified during wet-season vernal pool branchiopod surveys conducted within the eastern portion of the study area for the Whitney Ranch Parkway Interchange project (ECORP Consulting "010). The closest CNDDDB occurrences for spadefoot in the vicinity of the study area consists of a 1994 record between the railroad tracks and Taylor Road approximately 5 miles to the southeast of the study area and a 2004 record from an intermittent drainage approximately 4 miles to the southwest (California Department of Fish and Wildlife "014).

#### *Swainson's Hawk*

Swainson's hawk is a state-listed threatened species. Swainson's hawks forage in grasslands, grazed pastures, alfalfa and other hay crops, and certain grain and row croplands. Vineyards, orchards, rice, and cotton crops are generally unsuitable for foraging because of the density of the vegetation (California Department of Fish and Game 1"94). They usually nest in large, mature trees. Most nest sites (87 percent) in the Central Valley are found in riparian habitats (Estep 1989"35), primarily because trees are more available there. Swainson's hawks also nest in mature roadside trees and in isolated trees in agricultural fields or pastures. The breeding season is from March through August (Estep "989:12, 35).

Within the study area, potential nesting habitat for Swainson's hawk is restricted to a few large cottonwood and willow trees near the Ace Hardware warehouse and several cottonwood and eucalyptus trees around the Rio Bravo Rocklin plant located east and west of Industrial Avenue. One existing raptor nest that could be used by Swainson's hawk was observed within a eucalyptus tree on the east end of the Rio Bravo site. This nest was occupied by red-tailed hawks during the 2014 nesting season (Figures 10c, 11c, and 12c). Swainson's hawks were observed soaring and foraging within the study area during surveys conducted for the proposed project in the 2013 and 2014 nesting season. The closest documented Swainson's hawk nest sites are located 2.5 miles to the southwest along Pleasant Grove Creek and 3.5 miles to the northwest along Auburn Ravine, both within riparian habitat (California Department of Fish and Wildlife "014). Annual grassland in the

study area supports a high density of small rodents (mice, voles, pocket gopher), as evidenced by the numerous burrows and grass tunnels and paths throughout this habitat, and, therefore, represents suitable foraging habitat for Swainson's hawk.

#### *Burrowing Owl*

Burrowing owl is a state species of special concern and is protected during its nesting season under the Migratory Bird Treaty Act ("BTA) and CFGC Section 3503.5. Burrowing owl is a ground-nesting raptor that typically uses the burrows of other species, such as ground squirrels, for nesting, protection, and shelter. Burrowing owls are a year-long resident in a variety of grasslands, as well as in scrublands with a low density of trees and shrubs and low-growing vegetation. Burrowing owls that nest in the Central Valley may winter elsewhere. The primary habitat requirement of the burrowing owl is burrows appropriate for nesting. Burrowing owls usually nest in abandoned burrows, although they have been known to construct their own burrows in softer soils. In urban and agricultural areas, burrowing owls often use artificial burrows, such as cement culverts, cement, asphalt, or wood debris piles, or openings beneath cement or asphalt pavement, particularly pipes. This owl breeds from March through August and is most active while hunting during dawn and dusk. (California Department of Fish and Game "995:2, 3)

Annual grassland in the study area represents potential wintering and breeding habitat for burrowing owls. Burrowing owls have been observed in the study area on multiple occasions during the winter season. A single owl was observed by ECORP Consulting during a vernal pool branchiopod survey conducted for the Whitney Ranch Parkway Interchange project in November 2008 (HDR Engineering, Inc. "010). This owl was observed perched on a rock pile west of SR 65 in the central portion of the study area. During a reconnaissance-level survey conducted February 7, 2013 for the proposed project, ICF biologist Angela Alcala observed a burrowing owl fly out of a large corrugated pipe culvert at the west end of the study area (Figures 10a, 11a, and 12a). Culverts can provide winter refuge and foraging cover for burrowing owls but are not suitable for breeding. Although the study area supports abundant rodent activity (e.g., mice, vole, and pocket gopher), ground squirrel burrows typically used as nest sites by breeding burrowing owls are absent from the study area, and so there is a low probability that burrowing owls would nest onsite. No burrowing owl observations have been reported within or near the study area during the breeding season. If ground squirrels move into the area or artificial nesting habitat is created (e.g., rock or debris piles), the study area could support breeding burrowing owls in the future.

#### *White Tailed Kite*

White-tailed kite is designated as California species of special concern and a fully protected species under the CFGC. White-tailed kite occurs in coastal and valley lowlands in California. White-tailed kites generally inhabit low-elevation grassland, savannah, oak woodland, wetlands, agricultural, and riparian habitats. Some large shrubs or trees are required for nesting and for communal roosting sites. Nest trees range from small, isolated shrubs and trees to trees in relatively large stands (Dunk "995). White-tailed kites make nests of loosely piled sticks and twigs, lined with grass and straw, near the top of dense oaks, willows, and other trees. The breeding season lasts from February through October and peaks from May to August. They forage in undisturbed, open grassland, meadows, farmland, and emergent wetlands.

White-tailed kite could forage within annual grassland habitat throughout the study area. Potential nesting habitat for white tailed-kites in the study area is restricted to a few large cottonwood and willow trees near the Ace Hardware warehouse and several cottonwood and eucalyptus trees

around the Rio Bravo Rocklin plant as described above for Swainson's hawk. White tailed kites have not been documented to nest in or near the study area and no active nests were detected during nesting raptor surveys conducted by ICF biologist Angela Alcala in 2014 for the Whitney Ranch Interchange project.

#### *Northern Harrier*

Northern harrier kite is designated as California species of special concern. This species is a year-round resident throughout the Central Valley and is often associated with open grassland habitats and agricultural fields. Nests are found on the ground in tall, dense herbaceous vegetation (MacWhirter and Bildstein "996). Northern harrier nests from April to September, with peak activity in June and July. The breeding population has been reduced, particularly along the southern coast, because of the destruction of wetland habitat, native grassland, and moist meadows and from the burning and plowing of nesting areas during early stages of breeding.

Suitable nesting and foraging habitat for northern harrier is present within annual grassland habitat throughout the study area. Nesting raptor surveys were conducted within a portion of the study area during March and April 2014 for the adjacent Whitney Ranch Interchange project. One active northern harrier nest was found within annual grassland west of Industrial Avenue (Figures 10a, 11a, and 12a).

#### ***Migratory Birds and Raptors***

Non-special-status migratory birds and raptors have the potential to nest in grassland, trees, and shrubs in the study area. Within the study area, an active red-tailed hawk nest was observed in a eucalyptus tree adjacent to the Rio Bravo Rocklin plant during 2014 surveys (Figures 10c, 11c, and 12c). Non-special-status swallows and black phoebes have the potential to nest within concrete culverts in the study area. Although these species are not considered special-status wildlife species, their occupied nests and eggs are protected by CFGC Sections 3503 and 3503.5 and the MBTA.

#### ***Native Trees***

The study area contains Fremont cottonwood, valley oak (*Quercus lobata*), and black willow (*Salix gooddingii*), native trees that meet the County's criterion of a single main stem or trunk at least 6 inches DSH, or a multiple trunk with an aggregate of at least 10 inches DSH (California Department of Transportation "014). Most of these trees would be protected under the County's Tree Preservation Ordinance (Placer County Code, Article 12.16); however, two of the native trees surveyed were determined to be exempt from the County's ordinance because they had poor health and structure. The native trees in the study area are located on the Ace Hardware distribution center property and in the annual grassland south of the Rio Bravo Rocklin plant (Figures 10a and c, 11a and c, and 12a and c). The eucalyptus trees that surround the Rio Bravo Rocklin plant would not be protected under the ordinance because they are not native.

## **Discussion of Impacts**

### **a. Less than Significant with Mitigation**

As described above, habitat for seven special-status wildlife species is present within the study area and, therefore, the proposed project could directly or indirectly (through habitat modification) affect wildlife species identified as a candidate, sensitive, or special-status species in local or regional

plans, policies, or regulations, or by CDFW or USFWS. No special-status plants were located during the field surveys within the project footprint and so impacts on special-status plants are not anticipated. Table 7 summarizes the impacts on special-status wildlife species by alternative. These impacts are discussed below for each species.

**Table 7. Impacts on Special-Status Wildlife by Alternative**

Species	Alternative 1		Alternative 2		Alternative 3	
	Temporary (acres)	Permanent (acres)	Temporary (acres)	Permanent (acres)	Temporary (acres)	Permanent (acres)
<b>Direct Impacts</b>						
Vernal pool fairy shrimp <sup>a</sup>	0.64	1.11	0.94	1.21	0.92	1.40
Vernal pool tadpole shrimp <sup>a</sup>	0.64	1.11	0.94	1.21	0.92	1.40
Western spadefoot <sup>b</sup>	0.64 (30.63)	1.11 (53.44)	0.94 (30.40)	1.21 (53.37)	0.92 (29.80)	1.40 (50.82)
Burrowing owl and northern harrier (nesting habitat)	30.63	53.44	30.40	53.37	29.80	50.82
Swainson's hawk and white-tailed kite (foraging and nesting habitat)	30.63	53.44 21 trees	30.40	53.37 5 trees	29.80	50.82 3 trees
<b>Indirect Impacts (acres of suitable habitat within 250 feet of proposed ground disturbance)</b>						
Vernal pool fairy shrimp	2.48 (1.34 + 1.14) <sup>c</sup>		2.28 (1.04 + 1.24) <sup>c</sup>		1.99 (0.79 + 1.20) <sup>c</sup>	
Vernal pool tadpole shrimp	2.48 (1.34 + 1.14) <sup>c</sup>		2.28 (1.04 + 1.24) <sup>c</sup>		1.99 (0.79 + 1.20) <sup>c</sup>	
<sup>a</sup> For purposes of calculating impacts on vernal pool fairy shrimp and vernal pool tadpole shrimp, vernal pools and wetland swales were considered suitable habitat for this species. <sup>b</sup> Acres shown first represent impacts to potential breeding habitat (vernal pools and seasonal swales) and acreages in parenthesis represent upland grassland impacts <sup>c</sup> Acres in parenthesis are individual totals for vernal pool and seasonal swale						

### Vernal Pool Fairy Shrimp

Because the 2008 and 2009 vernal pool branchiopod surveys did not cover the entire study area, are more than 5 years old, and because several records for vernal pool fairy shrimp have been documented within 1 mile of the study area, it was determined that this species may occur in suitable habitat (vernal pools and wetland swales) within the study area. Roadway construction would result in the direct permanent loss of potentially occupied habitat within the project footprint. Movement and staging of vehicles and equipment during construction could result in temporary impact on the species through degradation of habitat resulting from temporary wetland fill and fuel or oil leaks.

Additionally, suitable vernal pool fairy shrimp habitat within 250 feet of project construction may be indirectly affected. Construction activities such as excavation, grading, paving, or stockpiling of soil could result in indirect effects on vernal pool fairy shrimp by altering the suitability of nearby habitat. Runoff of sediment, gasoline, oil, or other contaminants may result in the degradation of

water quality within suitable habitat. Changes in hydrology may also reduce suitability of habitat by altering the hydroperiod of vernal pools and swales.

Direct permanent and temporary loss of habitat, as well as potential indirect impacts on vernal pool fairy shrimp, are summarized in Table 7 for each of the three alternatives. Permanent loss or modification of suitable and potentially occupied habitat for vernal pool fairy shrimp could adversely affect this federally threatened species and would be a significant impact. Following selection of a preferred alternative, a biological assessment will be prepared as part of ESA Section 7 consultation with USFWS to address project impacts on the federally listed vernal pool fairy shrimp.

Implementation of Mitigation Measures BIO-1 through BIO-6 would ensure that the proposed project would avoid and minimize potential direct and indirect effects on vernal pool fairy shrimp, and would compensate for permanent and temporary habitat loss.

### **Vernal Pool Tadpole Shrimp**

Potential direct and indirect impacts on vernal pool tadpole shrimp would be similar to those described above for vernal pool fairy shrimp. Direct permanent and temporary loss of habitat, as well as potential indirect impacts on vernal pool tadpole shrimp, are summarized in Table 7 for each of the three alternatives. Permanent loss or modification of suitable and potentially occupied habitat for vernal pool tadpole shrimp could adversely affect this federally threatened species and would be a significant impact. Following selection of a preferred alternative, a biological assessment will be prepared as part of ESA Section 7 consultation between Caltrans and USFWS to address project impacts on the federally listed vernal pool tadpole shrimp.

Implementation of Mitigation Measures BIO-1 through BIO-6 would ensure that the proposed project would avoid and minimize potential direct and indirect effects on vernal pool tadpole shrimp, and would compensate for permanent and temporary habitat loss.

### **Western Spadefoot**

Vernal pools and seasonal swales in the study area provide potential breeding habitat for western spadefoot, and adjacent grasslands represents suitable upland habitat. Construction of the proposed project has the potential to result in the loss of potential breeding habitat and mortality of individual spadefoots during excavation within grassland habitat. Permanent and temporary loss of habitat for western spadefoot is summarized in Table 7 for each of the three alternatives. Because the population of western spadefoots in western Placer County is expected to be small and a large amount of potential upland habitat would be disturbed as a result of the proposed project (up to 53.44 acres permanently affected and 30.63 acres temporarily affected), the loss of individuals would be considered a potentially significant impact.

Implementation of Mitigation Measures BIO-1 through BIO-5 would ensure that the proposed project would avoid and minimize potential impacts on western spadefoot.

### **Swainson's Hawk**

Construction activities associated with the proposed project could result in the disturbance or loss of an active Swainson's hawk nest, if present in or near the construction area. These activities could result in the incidental loss of fertile eggs or nestlings or otherwise lead to nest abandonment. Roadway construction could also result in indirect impacts on Swainson's hawk through the temporary and permanent loss of grassland that provides suitable foraging habitat. Because the

availability of foraging habitat has been closely tied to the breeding success of Swainson's hawk, projects that would significantly modify suitable Swainson's hawk foraging habitat are considered to have potential significant effects on this species (California Department of Fish and Game "994). Permanent and temporary loss of foraging habitat for Swainson's hawk is summarized in Table 7 for each of the three alternatives.

Permanent removal of up to 53.44 acres (depending on the alternative selected) of foraging habitat is not likely to result in a substantial decrease in the available foraging habitat for locally nesting Swainson's hawks. Foraging habitat is not a limiting resource within the project vicinity because large tracts of grassland and agricultural lands to the west provide foraging opportunities for Swainson's hawks nesting along Orchard Creek and Pleasant Grove Creek. However, the cumulative loss of foraging habitat as a result of the full buildout of Placer Parkway is estimated to permanently remove approximately 760 acres of foraging habitat (Placer County "011:4-29). This impact would be cumulatively considerable and could result in a reduction in the reproductive potential of Swainson's hawks in western Placer County. Compensation to offset the loss of foraging habitat resulting from proposed project activities is described below. Temporarily affected habitat would return to baseline conditions once construction was complete; therefore no long-term effects are anticipated.

Implementation of Mitigation Measures BIO-1 through BIO-3, BIO-7, and BIO-8 would ensure that the proposed project would avoid and minimize potential direct effects on Swainson's hawk and would compensate for permanent habitat loss.

### **Burrowing Owl**

Construction activities within annual grassland habitat during the nesting season (generally February 1 to August 31) or wintering season (September 1 through January 31) of burrowing owl could directly impact this species. Permanent and temporary loss of habitat for burrowing owl is summarized in Table 7 for each of the three alternatives. Additionally, construction-generated noise has the potential to indirectly affect burrowing owls nesting near construction activities.

Disturbance of burrows with active nests or indirect construction disturbance (i.e., noise, increased human presence) during the breeding season may result in nest abandonment and subsequent loss of eggs or young. Construction during the wintering season that removes or disturbs active refuge locations (e.g., culverts, debris piles) could increase predation risks for owls, which lack burrows and have limited cover in and around the study area. This impact would be the same for each build alternative. Disturbance or loss of burrowing owls would violate the MBTA and CFGC and would be a significant impact.

Implementation of Mitigation Measures BIO-1 through BIO-3 and BIO-9 below would avoid and minimize potential impacts on burrowing owl and would avoid violation of the MBTA and CFGC.

### **White-Tailed Kite, Northern Harrier, and Other Migratory Birds**

Construction of the proposed project would result in the permanent loss of up to 53.44 acres of suitable nesting and foraging habitat (consisting of annual grassland) for northern harrier and other ground-nesting migratory birds. The proposed project would also remove up to 21 natural and planted trees (i.e., eucalyptus, cottonwood, oak, ash, and willow) that provide potential nesting substrate for white-tailed kite and other tree-nesting migratory birds and raptors. Permanent and temporary loss of habitat for migratory birds and raptors is summarized in Table 7 for each of the three alternatives.



Construction activities would occur during the nesting season of migratory birds (generally February 1 through August 31) and could result in the possible loss of active migratory bird nests. Removal of nests or construction disturbance during the breeding season could result in the incidental loss of fertile eggs or nestlings or otherwise lead to nest abandonment. This impact would be the same for each build alternative. Disturbance or loss of northern harrier or other migratory bird eggs, young, or adults would violate the MBTA and CFGC.

Implementation of Mitigation Measures BIO-1 through BIO-3 and BIO-10 would avoid and minimize potential impacts on nesting migratory birds and raptors and would avoid violation of the MBTA and CFGC.

### **Mitigation Measure BIO-1: Install Fencing and/or Flagging to Protect Sensitive Biological Resources**

Prior to construction, the County's contractor will install high-visibility orange construction fencing and/or flagging, as appropriate, along the perimeter of the work area adjacent to Environmentally Sensitive Areas. Where specific buffer distances are required for sensitive biological resources (e.g., wetlands, sensitive species habitats, active bird nests, protected trees), buffer distances will be specified under the corresponding measures below. The County will ensure that the final construction plans show the locations where fencing will be installed. The plans will also define the fencing installation procedure. The County or contractor (at the discretion of the County) will ensure that the fencing is maintained throughout the duration of the construction period. If the fencing is removed, damaged, or otherwise compromised during the construction period, construction activities will cease until the fencing is repaired or replaced. The project's special provisions package will provide clear language regarding acceptable fencing material and prohibited construction-related activities, vehicle operation, material and equipment storage, and other surface-disturbing activities within ESAs. A note specifying this information will be included on the project Improvement Plans.

### **Mitigation Measure BIO-2: Conduct Mandatory Environmental Awareness Training for Construction Personnel**

Before any work occurs in the project area, including grading, the County will retain a qualified biologist (familiar with the resources to be protected) to conduct a mandatory contractor/worker environmental awareness training for construction personnel. The awareness training will be provided to all construction personnel (contractors and subcontractors) to brief them on the need to avoid effects on sensitive biological resources (e.g., wetlands, sensitive species, nesting birds, protected trees) adjacent to construction areas and the penalties for not complying with applicable state and federal laws and permit requirements. The biologist will inform all construction personnel about the life history and habitat requirements of sensitive species with potential for occurrence onsite, the importance of maintaining habitat, and the terms and conditions of the biological opinion (BO) or other authorizing document. Proof of this instruction will be submitted to the County, and other overseeing agencies (e.g., USFWS), as appropriate.

The environmental training also will cover general restrictions and guidelines that must be followed by all construction personnel to reduce or avoid effects on sensitive biological resources during project construction. The crew foreman will be responsible for ensuring that crew members adhere to these guidelines and restrictions, and that new personnel review the

environmental training prior to starting work onsite. General restrictions and guidelines that must be followed by construction personnel are listed below.

- Project-related vehicles will observe the posted speed limit on hard-surfaced roads and a 10 mile-per-hour speed limit on unpaved roads or access areas during travel on the project site.
- Project-related vehicles and construction equipment will restrict offroad travel to the designated construction area.
- Vegetation clearing and construction operations will be limited to the minimum necessary in areas of temporary access work areas and staging.
- All food-related trash will be disposed of in closed containers and removed from the project site at least once a week during the construction period. Construction personnel will not feed or otherwise attract wildlife to the project site.
- No pets or firearms will be allowed on the project site.
- To prevent possible resource damage from hazardous materials such as motor oil or gasoline, construction personnel will not service vehicles or construction equipment outside designated staging areas.

The training will also include identifying the BMPs written into construction specifications for avoiding and minimizing the introduction and spread of invasive plants, and the rationale behind their implementation during project construction. A note specifying this information will be included on the project Improvement Plans.

### **Mitigation Measure BIO-3: Retain a Biologist to Conduct Periodic Monitoring during Construction in Sensitive Habitats**

The County will retain a qualified biologist to conduct weekly site visits during any ground-disturbing activities that occur within or adjacent to ESAs (e.g., wetlands, sensitive species habitat, active bird nests, protected trees). The purpose of the site visits is to ensure that measures identified in this report are properly implemented to avoid and minimize effects on sensitive biological resources and to ensure the project complies with all applicable permit requirements and agency conditions of approval. The biologist will ensure that fencing around ESAs remains in place during construction and that no construction personnel, equipment, or runoff/sediment from the construction area enters ESAs.

### **Mitigation Measure BIO-4: Protect Water Quality and Minimize Sedimentation Runoff in Wetlands and Other Waters outside the Project Limits**

The County and its construction contractor will comply with all construction site BMPs specified in the Storm Water Pollution Prevention Plan (SW“PP) and any other permit conditions to minimize introduction of construction-related contaminants and sedimentation runoff. Broadly, these BMPs will address soil stabilization, sediment control, wind erosion control, vehicle tracking control, non-storm water management, and waste management practices. The BMPs will be based on the best conventional and best available technology.

The proposed project is subject to stormwater quality regulations established under the National Pollutant Discharge Elimination System (NP“ES), described in Clean Water Act “CWA) Section 402. In California, the NPDES program requires that any construction activity disturbing 1 or more acres comply with the statewide General Permit, as authorized by the State Water

Resources Control Board. The General Permit requires elimination or minimization of nonstormwater discharges from construction sites and the development and implementation of a SWPPP for the site. Below are the primary elements of the SWPPP.

- Description of site characteristics—including runoff and overland characteristics and soil erosion hazard—and construction procedures.
- Guidelines for proper application of erosion and sediment control BMPs.
- Description of measures to prevent and control toxic materials spills.
- Description of construction site housekeeping practices.

In addition to these primary elements, the SWPPP also specifies that the extent of soil and vegetative disturbance would be minimized by control fencing or other means and that the extent of soil disturbed at any given time would be minimized. The SWPPP must be retained at the construction site.

The BMPs will be selected to achieve maximum sediment removal and represent the best available technology that is economically achievable and are subject to review and approval by the County. The County will perform routine inspections of the construction area to verify the BMPs are properly implemented and maintained. The County will notify contractors immediately if there is a noncompliance issue and will require compliance.

The BMPs will include, but are not limited to, the following.

- All earthwork in and around wetlands or other waters will occur in the dry season. Earthwork will not occur from the first day of the first significant rain (1 inch or greater) until June 1, or until wetlands remain dry for 72 hours and no significant rain is forecast on the day of such ground disturbance.
- Equipment used in and around drainages and wetlands will be in good working order and free of dripping or leaking engine fluids. All vehicle maintenance will be performed at least 300 feet from all streams. Any necessary equipment washing will be carried out where the water cannot flow into drainages or wetlands.
- The contractor will be required to develop a hazardous material spill prevention control and countermeasure plan before construction begins. The plan will include strict onsite handling rules to keep construction and maintenance materials from entering wetlands and other waters, including procedures related to refueling, operating, storing and staging construction equipment and preventing and responding to spills. The plan will also identify the parties responsible for monitoring the spill response. During construction, any spills will be cleaned up immediately according to the spill prevention and countermeasure plan. The County will review and approve the contractors' hazardous material spill prevention control and countermeasure plan before allowing construction to begin.
- The following types of materials will not be rinsed or washed into the streets, shoulder areas, or gutters: concrete; solvents and adhesives; thinners; paints; fuels; sawdust; dirt; gasoline; asphalt and concrete saw slurry; heavily chlorinated water.
- Any surplus concrete rubble, asphalt, or other rubble from construction will be taken to a local landfill.

- An erosion and sediment control plan will be prepared and implemented for the project. It will include the following provisions and protocols. The SWPPP for the project will detail the applications and type of measures and the allowable exposure of unprotected soils.
  - Make discharge from dewatering operations, if needed, and runoff from disturbed areas conform to the water quality requirements of the waste discharge permit issued by the Central Valley Regional Water Quality Control Board.
  - Apply temporary erosion control measures, such as sandbagged silt fences, throughout construction of the proposed project and remove after the working area is stabilized or as directed by the engineer. Soil exposure will be minimized through use of temporary BMPs, groundcover, and stabilization measures. Exposed dust-producing surfaces will be sprinkled daily, if necessary, until wet. Sprinkling will be controlled to avoid producing runoff. Paved roads will be swept daily following construction activities.
  - Conduct periodic maintenance of erosion and sediment control measures.
  - Plant an appropriate seed mix of native or naturalized species on disturbed areas upon completion of construction.
  - Cover or apply nontoxic soil stabilizers to inactive construction areas (previously graded areas inactive for 10 days or more) that could contribute sediment to waterways.
  - Enclose and cover exposed stockpiles of dirt or other loose, granular construction materials that could contribute sediment to waterways. Material stockpiles will be located in non-traffic areas only. Side slopes will not be steeper than 2:1. All stockpile areas will be surrounded by a filter fabric fence and interceptor dike
  - Contain soil and filter runoff from disturbed areas by berms, vegetated filters, silt fencing, straw wattle, plastic sheeting, catch basins, or other means necessary to prevent the escape of sediment from the disturbed area.
  - Use other temporary erosion control measures (such as silt fences, staked straw bales/wattles, silt/sediment basins and traps, check dams, geofabric, sandbag dikes, and temporary re-vegetation or other ground cover) to control erosion from disturbed areas as necessary.
  - Avoid earth or organic material from being deposited or placed where it may be directly carried into nearby wetlands or other waters.

The County will also obtain a 401 Water Quality Certification from the Central Valley Regional Water Quality Control Board, and a Lake and Streambed Alteration Agreement from the CDFW, both of which may contain additional BMPs and water quality measures to ensure the protection of water quality.

#### **Mitigation Measure BIO-5: Avoid and Minimize Potential Indirect Impacts on Vernal Pool Fairy Shrimp and Vernal Pool Tadpole Shrimp Habitat**

The following avoidance and minimization measures will be implemented prior to and during construction to protect vernal pool fairy shrimp habitat outside the project footprint.

- Ground disturbance within 250 feet of suitable vernal pool fairy shrimp habitat (i.e., vernal pools and wetland swales) will be avoided from the first day of the first significant rain (1

inch or greater) until June 1, or until suitable wetlands remain dry for 72 hours and no significant rain is forecast on the day of such ground disturbance.

- Consistent with Mitigation Measure BIO-1, a qualified biologist will guide the installation of exclusion fencing prior to the start of ground disturbing activities (including staging and grading). The exclusion fencing will be installed along the edge of the construction limits and in a manner that minimizes disturbance of adjacent wetlands. The exclusion fencing will consist of orange construction barrier and erosion control fencing or combination fencing and will be installed by the construction contractor.
- No herbicide will be applied within 100 feet of aquatic habitat, except when applied to cut stumps or frilled stems or injected into stems. No broadcast applications will be applied.

#### **Mitigation Measure BIO-6: Compensate for Direct and Indirect Impacts on Vernal Pool Fairy Shrimp and Vernal Pool Tadpole Shrimp Habitat**

The County will compensate for the permanent loss of up to 1.40 acres and temporary loss of up to 0.94 acre of suitable habitat (vernal pools and vernal swales) for vernal pool fairy shrimp. Consistent with the County's current working draft of the PCCP, direct impacts on vernal pool fairy shrimp habitat will be mitigated at a minimum 2.25:1 ratio (1 acre preserved and 1.25 acre restored for every 1 acre affected). The exact acreage and location of compensatory mitigation will be based on final revisions to the project design and consultation with USFWS. Compensatory mitigation can be accomplished through one or a combination of the following three options.

1. Purchase the appropriate number and type of habitat credits at a USFWS-approved mitigation bank or conservation area.
2. Establish a conservation easement on a parcel(s) containing a sufficient amount of existing and restored vernal pool fairy shrimp habitat (based on minimum 2.25:1 ratio) and adaptively manage the mitigation lands consistent with the most current information on vernal pool fairy shrimp habitat requirements.
3. Mitigate for vernal pool fairy shrimp habitat through an approved habitat conservation plan (i.e., PCCP) if the plan is finalized prior to the start of construction.

#### **Mitigation Measure BIO-7: Conduct Vegetation Removal during the Non-Breeding Season and Conduct Preconstruction Surveys for Swainson's Hawk**

The County will remove vegetation (including trees, shrubs, and grasses) during the non-breeding season for Swainson's hawk (generally from September 16 to February 28), to the extent feasible.

If it is not feasible to remove all vegetation during the non-breeding season, then the County will retain a qualified wildlife biologist with knowledge of Swainson's hawk to conduct nesting surveys before the start of construction. Surveys will be conducted during the nesting season (March 1 through September 15) in accordance with the Swainson's Hawk Technical Advisory Committee's methodology (May 31, 2000) within the methodology's Survey Periods I, II, and III (March 1 through April 20) or according to updated methodologies as issued by CDFW. If construction will commence after March 1 but prior to April 5, then a minimum of two surveys will be conducted prior to the start of construction to determine whether Swainson's hawk are

nesting within the survey area. For phased construction, surveys will continue throughout the remainder of the survey period to cover areas not under active construction. If surveys conclude that Swainson's hawk nests occur, and are occupied, the County will implement the following minimization measures.

- To prevent nest abandonment, the County will establish a minimum 1,000-foot no-disturbance buffer between the occupied nest and construction activities that occur during the nesting season (March 1 through September 15). The buffer distance may be reduced based on site-specific conditions or the nature of the construction activity (e.g., level of existing disturbance, location of the nest, status of nest and eggs/nestlings, and type and level of construction activity). The reduced buffer distance will be determined by a qualified biologist (with knowledge of the species) in coordination with CDFW.
- If the Swainson's hawk young fledge prior to September 15, project activities can proceed normally after a qualified biologist determines that the young are capable of independent survival (i.e., not being fed by parents).
- Nest trees will not be removed, if feasible. If a nest tree (any tree that has an active nest during the year the impact is to occur) must be removed, tree removal will be between September 16 and February 28.

#### **Mitigation Measure BIO-8: Compensate for Permanent Removal of Swainson's Hawk Foraging Habitat**

The County will compensate for the permanent removal of suitable foraging habitat for Swainson's hawks by providing offsite habitat management lands as described in CDFW's Staff Report Regarding Mitigation for Impacts to Swainson's Hawks in the Central Valley of California (California Department of Fish and Game "994). The final acreage of offsite management lands to be provided will depend on the distance between the project area and the nearest active nest site. The mitigation ratio varies from 0.5:1 to 1:1 (dependent on the location of the closest known nest site) of habitat preserved for each acre lost. In lieu of acquiring offsite mitigation lands, the County may purchase mitigation credits for Swainson's hawk foraging habitat from a suitable mitigation or conservation bank that sells upland habitat credits with habitat function equal or similar to lands that are permanently affected by the project. To determine the appropriate mitigation ratio, information on the nearest nest will be collected during preconstruction Swainson's hawk surveys conducted under Mitigation Measure BIO-7. If no active nests are found during this survey, a search of the CNDDDB will be conducted, and CDFW will be contacted to determine the nearest active nest (active within the previous 5 years).

In the event that the PCCP is in place prior to project construction, this compensation requirement will be considered met if the applicant pays mitigation fees for valley grassland habitat through the PCCP.

#### **Mitigation Measure BIO-9: Conduct Preconstruction Surveys for Burrowing Owl and Establish No Activity Zones, if Necessary**

A qualified biologist will conduct preconstruction take avoidance surveys for burrowing owl no less than 14 days prior to and within 24 hours of initiating ground-disturbing activities. The survey area will encompass the designated work area (including staging areas) and a 500-foot buffer around this area.

To the maximum extent feasible (i.e., where the construction footprint can be modified), construction activities within 500 feet of active burrowing owl burrows will be avoided during the nesting season (February 1 to August 31).

If an active burrow is identified near a proposed work area and work cannot be conducted outside of the nesting season (February 1 to August 31), a no-activity zone will be established by a qualified biologist and in coordination with CDFW. The no-activity zone will be large enough to avoid nest abandonment and will extend a minimum of 250 feet around the burrow.

If burrowing owls are present at the site during the non-breeding season (September 1 through January 31), a qualified biologist will establish a no-activity zone that extends a minimum of 150 feet around the burrow.

If the designated no-activity zone for either breeding or non-breeding burrowing owls cannot be established, a wildlife biologist experienced in burrowing owl behavior will evaluate site-specific conditions and, in coordination with CDFW, recommend a smaller buffer (if possible) that still minimizes the potential to disturb the owls (and is deemed to still allow reproductive success during the breeding season). The site-specific buffer will consider the type and extent of the proposed activity occurring near the occupied burrow, the duration and timing of the activity, the sensitivity and habituation of the owls, and the dissimilarity of the proposed activity to background activities.

If burrowing owls are present within the direct disturbance area and cannot be avoided during non-breeding season (generally September 1 through January 31), passive relocation techniques (e.g., installing one-way doors at burrow entrances) shall be used instead of trapping. Passive relocation may also be used during the breeding season (February 1 through August 30) if a qualified biologist, coordinating with CDFW, determines through site surveillance and/or scoping that the burrow is not occupied by burrowing owl adults, young, or eggs. The one-way doors shall be left in place for a minimum of 1 week and monitored daily to insure that the owls have left the burrow. Excavation of the burrow shall be conducted using hand tools and a section of flexible plastic pipe (at least 3 inches in diameter) shall be inserted into the burrow tunnel to maintain an escape route for any animals that may be inside the burrow.

Destruction of unoccupied burrows outside the work area will be avoided and visible markers will be placed near burrows to ensure they are not collapsed.

A qualified biologist will conduct ongoing surveillance of the project parcels for burrowing owls during project activities. If additional owls are observed using burrows within 500 feet of construction, a qualified biologist will determine if the owl(s) would be affected by future construction and if additional exclusion zones are required.

**Mitigation Measure BIO-10: Conduct Vegetation Removal during the Non-Breeding Season and Conduct Preconstruction Surveys for Nesting Migratory Birds and Raptors**

The County will remove vegetation during the non-breeding season for migratory birds and raptors (generally from September 1 to January 31), to the extent feasible.

If it is not feasible to remove vegetation during the non-breeding season, then the County will retain a qualified wildlife biologist with knowledge of the relevant species to conduct nesting surveys before the start of construction. The nesting surveys will be conducted in conjunction with Swainson's hawk and burrowing owl surveys conducted for Mitigation Measures BIO-6 and

BIO-8 and will include a minimum of two separate surveys to look for active migratory bird and raptor nests. Surveys will include a search of all trees and shrubs, wetland, and grassland vegetation that provide suitable nesting habitat in the construction area. In addition, a 500-foot area around the project area will be surveyed for nesting raptors. Surveys should occur during the height of the breeding season (March 1 to June 1) with one survey occurring within 30 days prior to construction and the second survey occurring within 1 week after of the start of construction. If no active nests are detected during these surveys, no additional measures are required.

If an active nest is found in the survey area, a no-disturbance buffer will be established around the site to avoid disturbance or destruction of the nest site until the end of the breeding season (August 31) or until after a qualified wildlife biologist determines that the young have fledged and moved out of the project area (this date varies by species). The extent of these buffers will be determined by the biologist in coordination with USFWS and CDFW and will depend on the level of construction disturbance, line-of-sight between the nest and the disturbance, ambient levels of noise and other disturbances, and other topographical or artificial barriers. Suitable buffer distances may vary between species.

#### **b. Less than Significant with Mitigation**

Riparian habitat is not present in the study area. Vernal pool grassland (supporting vernal pools and seasonal swales) in the study area is considered a sensitive natural community by CDFW. Direct permanent and temporary loss of vernal pool and seasonal swale habitat, as well as potential indirect impacts on this habitat within the study area, are summarized above under vernal pool fairy shrimp and in Table 7 for each of the three alternatives. Implementation of the proposed project would result in permanent removal of up to 1.40 acres, temporary disturbance of up to 0.94 acre, and indirect effects on up to 2.48 acres of vernal pools and seasonal swales within this sensitive natural community. Specific impacts to vernal pools and vernal swales are discussed in further detail below under checklist item c.

Impacts on vernal pool grassland would be less than significant with the implementation of Mitigation Measures BIO-1 through BIO-6.

#### **Mitigation Measure BIO-1: Install Fencing and/or Flagging to Protect Sensitive Biological Resources**

Described under checklist item a.

#### **Mitigation Measure BIO-2: Conduct Mandatory Environmental Awareness Training for Construction Personnel**

Described under checklist item a.

#### **Mitigation Measure BIO-3: Retain a Biologist to Conduct Periodic Monitoring during Construction in Sensitive Habitats**

Described under checklist item a.



**Mitigation Measure BIO-4: Protect Water Quality and Minimize Sedimentation Runoff in Wetlands and Other Waters outside the Project Limits**

Described under checklist item a.

**Mitigation Measure BIO-6: Compensate for Direct and Indirect Impacts on Vernal Pool Fairy Shrimp and Vernal Pool Tadpole Shrimp Habitat**

Described under checklist item a.

**c. Less than Significant with Mitigation**

The proposed project would result in temporary and permanent impacts on potential waters of the United States, including vernal pool, wetland swale, depressional seasonal wetland, channel, and drainage ditch. Table 8 summarizes potential impacts on each of these potential waters of the United States by alternative.

**Table 8. Impacts on Potential Waters of the United States by Alternative**

Other Water Type	Alternative 1		Alternative 2		Alternative 3	
	Temporary (acres)	Permanent (acres)	Temporary (acres)	Permanent (acres)	Temporary (acres)	Permanent (acres)
Vernal Pool <sup>a</sup>	0.194	0.531	0.336	0.660	0.401	0.739
Wetland Swale <sup>a</sup>	0.446	0.577	0.603	0.548	0.514	0.659
Depressional Seasonal Wetland	0.068	0.149	0.069	0.151	0.064	0.156
Channel	0.011	0.052	0.011	0.052	0.011	0.052
Drainage Ditch	0.095	0.233	0.098	0.330	0.099	0.406
<b>TOTAL</b>	<b>0.81</b>	<b>1.54</b>	<b>1.12</b>	<b>1.74</b>	<b>1.09</b>	<b>2.01</b>

<sup>a</sup> Habitat for federally listed branchiopods and will be mitigated as part of the compensatory mitigation for vernal pool fairy shrimp and vernal pool tadpole shrimp.

Implementation of the proposed project would result in up to 2.01 acres of permanent fill and up to 1.74 acres of temporary fill that would be placed in waters of the United States, which are regulated by USACE under CWA Section 404. An Individual Permit would most likely be required to authorize the fill resulting from project construction. In addition to direct fill impacts, project activities could indirectly affect water quality within the waterways by causing increased erosion and sedimentation downstream of the work area. Implementing Mitigation Measures BIO-1 through BIO-4 would minimize impacts on waters of the United States. Mitigation Measures BIO-6 and BIO-11 would compensate for any unavoidable impacts on waters of the United States. Substantial adverse effects on federally protected waters of the United States as defined by CWA Section 404 would be less than significant with the implementation of these mitigation measures.

**Mitigation Measure BIO-1: Install Fencing and/or Flagging to Protect Sensitive Biological Resources**

Described under checklist item a.

**Mitigation Measure BIO-2: Conduct Mandatory Environmental Awareness Training for Construction Personnel**

Described under checklist item a.

**Mitigation Measure BIO-3: Retain a Biologist to Conduct Periodic Monitoring during Construction in Sensitive Habitats**

Described under checklist item a.

**Mitigation Measure BIO-4: Protect Water Quality and Minimize Sedimentation Runoff in Wetlands and Other Waters outside the Project Limits**

Described under checklist item a.

**Mitigation Measure BIO-6: Compensate for Direct and Indirect Impacts on Vernal Pool Fairy Shrimp and Vernal Pool Tadpole Shrimp Habitat**

Described under checklist item a.

**Mitigation Measure BIO-11: Compensate for Permanent Fill of Waters of the United States**

The County will return temporarily disturbed portions of waters of the United States to original grade following construction.

The County will compensate for the permanent fill of waters of the United States. The County will purchase compensatory credits at a USACE- and CDFW-approved mitigation bank to ensure no net loss of functions and values. Mitigation banks with service areas that include Placer County include Laguna Terrace East Conservation Bank, Reeds Creek Vernal Pool Preserve, Twin Cities Conservation Bank and Preserve, Toad Hill Ranch Mitigation Bank, and Western Placer Schools Conservation Bank. The minimum waters compensation ratio will be 1:1 (1 acre of other waters habitat credits for every 1 acre of permanent impact) to ensure no net loss of habitat functions and values. Vernal pools and wetland swales that provide habitat for federally listed branchiopods will be mitigated as part of the compensatory mitigation for vernal pool fairy shrimp and vernal pool tadpole shrimp (described under Mitigation Measure BIO-6).

The County will also implement the conditions and requirements of state and federal permits that it obtains for the project. The County will enter into a Lake and Streambed Alteration Agreement with CDFW, obtain CWA Section 401 and 404 permits, and obtain an NPDES permit and Waste Discharge Requirements from the Central Valley Regional Water Quality Control Board.

**d. Less than Significant**

The study area is predominantly undeveloped but is bordered and divided by major roadways including Whitney Ranch Parkway, SR 65, Industrial Avenue, and Foothill Boulevard North. These existing roadways generally do not provide wildlife migration corridors; however, resident wildlife species may traverse the study area along intermittent drainages that culvert under these roadways. Although there is a substantial amount of undeveloped and potential wildlife habitat west of the study area, areas to the east are predominantly developed (City of Rocklin) and, therefore, the study area does not provide a significant wildlife dispersal or migration corridor. Resident wildlife may

use the study area during daily movements and migratory birds may use aquatic habitats as resting or foraging areas during seasonal migration or daily dispersal events.

Therefore, the proposed project would not 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. Mitigation measures described under checklist item a would be implemented during construction to ensure that the movement of native resident or migratory wildlife species is not substantially affected.

#### **e. Less than Significant with Mitigation**

The proposed project would conflict with a local county ordinance protecting native trees. A tree survey of the study area was conducted to measure and map all native trees at least 6 inches DSH.

Implementation of the proposed project would result in permanent and temporary impacts on protected trees. Permanent impacts would result from tree removal or root compaction caused by construction equipment operation in the protected zone of the trees. Temporary impacts include pruning and minor root zone disturbance.

There are nine trees located outside the project footprint of all three project alternatives but within the 50-foot tree survey buffer required by the County; these trees have been designated as not being affected by project construction. As engineering plans are finalized, impact designations may require reassessment. One black willow (tree #19) and Fremont cottonwood (tree #34), shown on Figures 10, 11, and 12, would not qualify for protection under the County's tree ordinance due to their poor health and structure.

Table 9 summarizes the impacts on protected trees by alternative.

**Table 9. Impacts on Protected Trees by Alternative**

Protected Trees	Alternative 1		Alternative 2		Alternative 3	
	Temporary (# trees)	Permanent (# trees)	Temporary (# trees)	Permanent (# trees)	Temporary (# trees)	Permanent (# trees)
Black willow	-	4	4	-	4	-
Fremont cottonwood	1	13	9	4	10	2
Valley oak	1	2	3	-	2	-
<b>Total</b>	<b>2</b>	<b>19</b>	<b>16</b>	<b>4</b>	<b>16</b>	<b>2</b>

The implementation of Mitigation Measures BIO-1 through BIO-3 would minimize disturbance of protected trees. Implementation of Mitigation Measure AES-3 would compensate for the loss of trees protected by the Placer County Tree Preservation Ordinance.

#### **Mitigation Measure BIO-1: Install Fencing and/or Flagging to Protect Sensitive Biological Resources**

Described under checklist item a.

### **Mitigation Measure BIO-2: Conduct Mandatory Environmental Awareness Training for Construction Personnel**

Described under checklist item a.

### **Mitigation Measure BIO-3: Retain a Biologist to Conduct Periodic Monitoring during Construction in Sensitive Habitats**

Described under checklist item a.

### **Mitigation Measure AES-3: Implement Measures to Comply with Tree Ordinance**

Described in *Aesthetics* section.

## **f. No Impact**

The Placer County Conservation Plan covers approximately 200,000 acres of western Placer County. The PCCP analyzes the biological resources within the plan area and identifies a conservation strategy reflecting the geography of natural communities and covered species. In February 2011, Placer County released an Agency-Review Draft of the PCCP that included responses to agency comments received on the June 2005 Draft PCCP.

As part of the PCCP process, the County, CDFW, USFWS, and the National Marine Fisheries Service ("MFS) entered into a Natural Community Conservation Planning Agreement in 2001. This agreement requires that all projects designed during preparation of the PCCP be consistent with the principles and objectives of the conservation process and that projects approved before the plan is adopted should not compromise the successful development or implementation of the PCCP. Because activities related to the proposed project may commence prior to the approval of the PCCP, mitigation measures in this document are designed to be implemented absent the approved conservation plan but are consistent with the draft conservation strategies.

The proposed project would not conflict with the provisions of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan.

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### **Personal Communications**

Dr. Brent Helm, Ecologist. July 24, 2014—telephone conversation with Angela Alcala regarding the distribution of vernal pool fairy shrimp and vernal pool tadpole shrimp in Placer County.

Tom Skordal. Principal. Gibson & Skordal, LLC. Sacramento, CA. May 22, 2014—email to Emily Setzer of ICF International regarding the detention basin in the study area.

## Cultural Resources

<b>V. Cultural Resources</b>	Potentially Significant Impact	Less-than-Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:				
a. Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## Environmental Setting

The following information applies to the archaeological Area of Potential Effects (study area) defined for the project as the impact limits for ground-disturbing project activities (both permanent and temporary, including staging areas). The impact limits are shown on Figures 10, 11, and 12.

### Background

The Nisenan occupied the project area when the first Euro-Americans arrived in the region. The Nisenan occupied the Feather River drainage and the drainages of the Yuba, Bear, and American Rivers (Wilson and Towne “978:387; Kroeber “925 [1976]:Plate 37). Villages had 5 to 50 houses that were dome-shaped and covered with earth, mats, and grass. Brush shelters were used in the summer and when people were away from the village, and major villages had semi-subterranean dance houses with post and beam construction (Wilson and Towne “978:388). Most villages had bedrock milling stations (Wilson and Towne “978:389). The dead were cremated along with their property, their houses moved or destroyed, and the cremated bones and ashes buried in the cemetery of their birth village (Wilson and Towne “978:392). Acorns were an important part of the Nisenan diet. Acorns were stored in granaries in the village, shelled, ground in bedrock mortars, leached with water, and cooked. Other foods were roots, seeds, berries, deer, antelope, rabbits, salmon, sturgeon, eels, clams, mussels, birds, and grasshoppers (Wilson and Towne “978:389–390).

Spanish expeditions began to cross Nisenan territory in the early 1800s. During the 2 to 3 years following the 1848 gold discovery, Nisenan territory was overrun by settlers from throughout the world. Gold seekers and the settlements established to support them, and the disease and violence accompanying them, almost led to extinction of the area’s native inhabitants. Nisenan survivors worked as wage laborers and domestic help, living on the edges of foothill towns. Despite severe depredations, descendants of the Nisenan still live in Placer County and maintain their cultural identity.

In the project vicinity, villages were located along the American River. The documented village closest the project area was located approximately 8 kilometers southeast of the project area. No



known Native American villages or habitation sites, sacred sites, or material possessing unique ethnic cultural values have been documented within the project area.

Evidence for early human use of the project area likely is buried under deep alluvial sediments that accumulated rapidly during the late Holocene epoch. Archaeological remains of this early period, although rare, have been identified in and around the Central Valley (Johnson “967; Peak “981; Treganza and Heizer “953). The taxonomic framework of the Sacramento Valley has been described in terms of archaeological patterns (Moratto “984 [2004]). Fredrickson (“973) identified three general patterns of resource use for the period between 4,500 and 3,500 years before present: the Windmill, Berkeley, and Augustine Patterns. The Windmill Pattern (4,500–3,000 before present) shows evidence of a mixed economy of game procurement and use of wild plant foods. Windmill archaeological assemblages include numerous projectile points and a wide range of faunal remains. Settlement strategies reflect seasonal adaptations: habitation sites in the Valley were occupied during winter with populations moving into the foothills during summer (Moratto “984 [2004]). The Windmill Pattern ultimately changed to a more specialized adaptation entitled the Berkeley Pattern (3,500–2,500 before present). At Berkeley Pattern sites, the use of mutated metates declines in favor of mortars and pestles, indicating greater dependence on acorns. The Berkeley Pattern was superseded by the Augustine Pattern around AD 500. The Augustine Pattern reflects a change in subsistence and land use patterns to those of the ethnographically known people, the Nisenan, of the historic era. This pattern exhibits high elaboration of ceremonial and social organization, including the development of social stratification. Augustine Pattern assemblages show that well-developed exchange networks were present, along with an increased emphasis on acorn use, evidenced by abundant shaped mortars and pestles, along with hopper mortars. The use of the bow and arrow from Augustine Pattern sites is suggested by the presence of small projectile point types (Gunther Barbed). Sites from this Pattern also reflect increased village sedentism, population growth, and an incipient monetary economy in which beads were used as a standard of exchange (Moratto “984 [2004]).

Placer County was established on April 25, 1851, and named after a western American term of Spanish origin, *el dorado*, which refers to the “alluvial or glacial deposits containing gold particles” obtained by washing. The place name was appropriate for the county because placer mining was the principal means of employment in the area (Hoover et al. “966 [1970]:271)). The discovery of gold in the area in 1848 brought thousands of miners and emigrants to the area. One of the more lucrative mining districts was the Secret Ravine area from present-day Roseville to Newcastle (Barry-Schweyer and Alvarez “005:7). By the early 1850s, surface mining was already in decline, and permanent settlements, homesteads, and farms began to replace the temporary camps and transient mining communities.

The earliest Placer County map reveals that in 1887 the project area and vicinity were still largely undeveloped except for the communities of Roseville and Rocklin. The same map also shows the Central Pacific Railroad running north-south through the alignment on the west side of Industrial Avenue (Uren “887) in the west-central segment of the project area. United States Government Land Office records show that all portions of the project area had been patented by 1882 (United States Bureau of Land Management 2014a, 2“14b). In southwestern Placer County, the establishment of the Lincoln Highway, as well as the completion of Interstate 80 and State Route“(SR) 65, contributed not only to the abatement in rail passenger service, but also to the reshaping of former trackside towns such as Roseville and Rocklin because of the concentration of new commercial developments and residential subdivisions along these corridors. SR 65 from Roseville to Lincoln—then designated Legislative Route Number 3—was originally constructed from 1912 to 1914. The portion

of SR 65 within the project area was designated SR 99E from 1928 until 1965, at which point the segment from I-80 near Roseville to SR 70 near Marysville was renumbered SR 65 (Faigin "013). The highway is a major north-south corridor along the east side of the Sacramento Valley, and became part of the California Freeway and Expressway system in 1959. The California Highway Commission adopted the highway as a freeway on May 20, 1964. Since then, considerable changes in land use along the existing alignment between Roseville and Lincoln have taken place. The once predominantly agricultural area adjacent to the corridor has become increasingly residential, commercial, and industrial (Faigin "013).

### **Review of Existing Information**

In April 2013, by ICF request, the staff of the North Central Information Center ("CIC) at California State University, Sacramento, the California Historical Resources Information System repository covering Placer County, conducted a cultural resources records search. The purposes of the search was to identify any previously-recorded cultural resources inside or within 0.5 mile of the study area and to assess the potential for cultural resources in this area. Also included in the search were cultural resources studies that have been conducted inside or within 0.5 mile of the study area.

According to the records search, 13 previous cultural resources studies have been conducted within portions of the study area, and 24 additional cultural resources studies have been conducted within 0.5 mile of the study area. Also, ICF possesses two reports not on file at the NCIC (URS Corporation "007; Flint "007) whose study areas encompassed portions of the Placer Parkway Phase I study area. The *Placer Parkway Corridor Preservation Tier 1 Environmental Impact Statement/Program Environmental Impact Report* covered almost all of the study area (South Placer Regional Transportation Authority et al. 2007), and the Flint ("007) study covered almost all of the eastern half of the Placer Parkway Phase I study area (ICF International "014).

The NCIC has record of one cultural resource, a prehistoric pestle and potential metate, within the study area and eight resources within 0.5 mile of the study area. ICF is aware of two previously-recorded resources, both located within the study area, that are not on file at the NCIC. These two resources were identified during the Flint et al. (2009", b) survey. Of these 11 previously recorded resources, six (three prehistoric and three historic-era) are isolates and five (two prehistoric and three historic-era) are sites (ICF International "014).

### **Field Surveys**

On October 22, 2013, ICF archaeologists Robin Hoffman, MA, RPA, and William Leyva, BS, conducted an intensive pedestrian archaeological survey of the portion of the study area east of Industrial Avenue, and on January 07, 2014, ICF archaeologists Hoffman and Julie McGehee, MA, conducted an intensive pedestrian archaeological survey of the study area west of Industrial Avenue. Weather conditions during the survey were sunny, mild temperature, with no wind. Intensive pedestrian survey methods were used, consisting of walking transects spaced at 15 meters and inspecting the surface for cultural material or evidence thereof. Areas cleared of vegetation or disturbed by rodents along and between the transect lines were checked with special attention, as were all bedrock outcrops. Focused efforts were made to relocate the three previously recorded resources within the study area. A Trimble XH6000 sub-meter global positioning system unit was used to identify the study area and guide transect placement. Digital photographs were taken to document ground conditions and all observations were recorded in the field.

Based on the NCIC records search, ICF's additional knowledge of resources and studies in the study area and surrounding areas, and the field survey results, the proposed project has a low risk of encountering buried deposits.

## Discussion of Impacts

### a. No Impact

Previous cultural resources investigations have identified four isolated cultural resources (all archaeological) in the study area: a prehistoric pestle, a possible prehistoric metate, a possible biface tip, and a railroad spike (Peak & Associates, Inc. "986; Flint et al. 2"09a). However, the studies indicated that the metate and biface tip were questionable and were unconfirmed as cultural resources. The railroad spike and pestle are not unusual for this area, given the presence of UPRR tracks within the project area, and locally available granitic rock from which the pestle was formed (Peak & Associates, Inc. "986; Flint et al. 2"09b). By definition, the isolates identified during previous cultural resource investigations are not eligible for the California Register of Historical Resources ("RHR"); therefore, none of the resources is considered a historical resource for the purposes of CEQA. In addition, the cultural resources investigation for the project did not identify any cultural resources within the project area, including those described above (ICF International "014). Consequently, it is likely that the previously identified cultural resources, none of which is an historical resources for the purposes of CEQA, remain in the project area.

Large portions of the project area have been highly modified as a result of roadway and railroad construction. Based on the modified landscape of major portions of the project area, the extensive cultural resources investigations that have been conducted in, adjacent to, and near the project area, and the limited isolates identified within the project area during previous investigations, it is unlikely that buried cultural deposits are present within the project area.

No historical resources are present in the project area; therefore, the project would not cause a substantial adverse change in the significance of a historical resource and would have no impact on historical resources. Additionally, the potential for discovering previously unidentified cultural resources within the project area is very low.

### b. Less than Significant with Mitigation

As described in the discussion for checklist item a, above, all of the archaeological resources that have been identified from previous cultural resource investigations in the project area are common to the area. None of these resources is unique, as there is a very low probability that any contains information that would answer research questions, or is directly associated with an important prehistoric or historic event or person. Descriptions of the resources indicate that none is the oldest or best available example of its type. Therefore, none of the resources that have, at some point, been identified in the project area is considered a unique archaeological resource. Also, the cultural resources field investigation for the proposed project did not identify any archaeological resources within the project area, and did not relocate those resources described above (ICF International "014).

No unique archaeological resources are present in the project area; therefore, the proposed project would not result in an adverse change in the significance of a unique archaeological resource, and would have no impact on unique archaeological resources. As described in the discussion of

checklist item a, the potential for discovering previously unidentified archaeological resources within the project area is very low. However, if an archaeological resource is encountered during construction, implementation of Mitigation Measure CUL-1 would ensure that impacts are less than significant.

#### **Mitigation Measure CUL-1: Stop Work if Cultural Materials are Encountered During Ground-Disturbing Activities**

If previously-unidentified cultural materials are encountered or unearthed during construction, consistent with Caltrans and County policies to avoid cultural resources, work in that area will halt until a qualified archaeologist can evaluate the nature and significance of the find and identify an appropriate course of treatment, in consultation with Caltrans and the State Historic Preservation Office, as appropriate. Treatment could include data recovery, analysis, and curation. A note specifying this information will be included on the project Improvement Plans.

#### **c. Less than Significant with Mitigation**

No human remains are known to be located in or near the project area. However, the possibility always exists that unmarked burials may be unearthed during subsurface construction activities. Consequently, the potential for the proposed project to disturb human remains, including those interred outside of formal cemeteries, exists. This impact is potentially significant, but would be reduced to a less-than-significant level with implementation of Mitigation Measure CUL-2.

#### **Mitigation Measure CUL-2: Stop Work if Human Remains are Encountered During Ground-Disturbing Activities**

In the event that human remains are discovered, the Placer County coroner will be notified immediately. If the coroner determines the remains to be Native American in origin, the coroner will be responsible for notifying the NAHC, which will appoint a "most likely descendent" (MLD) (Public Resources Code "PRC" Section 5097.99). The archaeological consultant, project applicant, Placer County, and MLD will make all reasonable efforts to develop an agreement for the dignified treatment of human remains and associated or unassociated funerary objects (State CEQA Guidelines Section 15064.5[d]). The agreement should take into consideration the appropriate excavation, removal, recordation, analysis, custodianship, curation, and final disposition of the human remains and associated or unassociated funerary objects. The MLD will have 24 hours after notification by the NAHC to make their recommendation (PRC Section 5097.98). If the MLD does not agree to the reburial method, the project shall follow PRC Section 5097.98(b), which states, "The landowner or his or her authorized representative shall reinter the human remains and items associated with Native American burials with appropriate dignity on the property in a location not subject to further subsurface disturbance." A note specifying this information will be included on the project Improvement Plans.

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## Geology and Soils

VI. Geology and Soils	Potentially Significant Impact	Less-than-Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:				
a. Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
1. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2. Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3. Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4. Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Be located on a geologic unit or soil that is unstable or that would become unstable as a result of the project and potentially result in an onsite or offsite landslide, lateral spreading, subsidence, liquefaction, or collapse?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems in areas where sewers are not available for the disposal of wastewater?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## Environmental Setting

### Regional Geology

The project area lies on the eastern margin of the Great Valley Geomorphic Province (Sacramento Valley portion). The Great Valley is bordered by the Cascade and Klamath Ranges to the north, the Coast Ranges to the west, and the Sierra Nevada to the east. The valley was formed by tilting of the

Sierran Block with the western side dropping to form the valley and the eastern side uplifted to form the Sierra Nevada. The valley deposits are characterized by a thick sequence of alluvial, lacustrine, and marine sediments. The thickness of the sediments varies from a thin veneer at the margin, to thousands of feet in the central portion. In the project area, volcanic deposits also occur along the valley margin (Blackburn Consulting "014).

The Great Valley is bordered by the Coast Ranges to the west, the Klamath Mountains and Cascade Range to the north, and the Sierra Nevada Mountains to the east. The trough continues southward from the Sacramento-San Joaquin Delta region, where it is called the San Joaquin Valley. Both the Sacramento and San Joaquin valleys constitute the Great Valley geomorphic province of California. The Great Valley geocline trough has a long, stable eastern shelf that is supported by metamorphic and igneous rocks of the west-dipping Sierran slope. The basement rocks of the western edge of the structural trough are composed of Jurassic metamorphic, ultramafic, and igneous rocks of the Franciscan Formation. The northwest-trending axis of the geocline is closer to the west side of the valley; therefore, the regional dip of the formations on the east side is less than that of the formations on the west side. The Great Valley geocline structural trough began receiving sediments in the Late Jurassic epoch (208 to 144 million years ago "[Ma]). It has been filled with sediments derived from both marine and continental sources. The thickness of the valley fill ranges from thin veneers along the valley edges to greater than 40,000 feet in the central portion of the valley. These sedimentary deposits range in age from Jurassic (190 to 135 Ma) to Holocene (0 to 0.01 Ma), with the older deposits (Jurassic to Eocene [57.8 to 36.6 Ma]) constituting the marine sequence and the younger deposits (Eocene to Holocene age) constituting the continental sequence. The marine deposits were formed in offshore shallow ocean shelf and basin environments. Continental sediments were derived from mountain ranges surrounding the valley and were deposited in lacustrine, fluvial, and alluvial environments. (South Placer Regional Transportation Authority et al. "007.)

### **Local Geology**

Based on review of published geologic maps, a geotechnical site review, and available subsurface information, the project area is underlain by the following two formations (Blackburn Consulting "014).

#### ***Mehrten Formation***

Deposits of the Mehrten Formation occur along the eastern portion of the project alignment and consist primarily of andesitic, volcanic mudflow breccia, and cobble conglomerate. Breccia consists of a gray mixture of gravel to boulder size, angular, andesitic fragments. These fragments are well cemented in a matrix of volcanic lapilli and ash (tuff). The conglomerate consists primarily of cobbles in a well cemented matrix of andesitic sand and silt, and often contains interbedded layers of sandstone, siltstone, and lenses of mudflow breccia. In the project area, the Mehrten Formation is often underlain by claystones possibly associated with the Valley Springs or Ione Formations (Blackburn Consulting "014).

Bedding of sediments and flows within the Mehrten Formation typically dip gently (2 to 4 degrees) to the west/southwest. These volcanic materials were deposited during Miocene time (5 to 20 million years ago) (Blackburn Consulting "014).



**Turlock Lake Formation**

Sediments of the Turlock Lake Formation occur in the central and western portion of the project. These are alluvial deposits that are typically composed of interbedded medium dense to dense sands (often cemented) and gravels, and very stiff to hard silts and clays. Bedding is typically horizontal, lenticular, and discontinuous. These sediments are Late to Middle Pleistocene age (deposited more than 150,000 years ago) (Blackburn Consulting "014).

In the project area, SR 65 has been cut down (up to about 10 feet) into native soil and rock. Industrial Avenue and the UPRR are constructed near original grade (there is minimal cut and fill). North Foothills Boulevard is also constructed near original grade with some area of embankment fill (up to about 6 feet) at drainage swales (Blackburn Consulting "014).

**Seismicity**

According to the Probabilistic Seismic Hazards Ground Motion Interpolator, the project area is an area of low-shaking intensity (California Geological Survey "008). Faulting is not identified within or adjacent to the site. Based on the Caltrans "2007 Deterministic Peak Ground Acceleration Map," the closest seismic source is a portion of the Foothills Fault System (Spenceville Fault, Caltrans Fault ID# 81) located approximately 9.8 miles to the east (Blackburn Consulting "014). It is not anticipated that any provisions will be required to comply with the Alquist-Priolo Special Studies Zones Act of 1972 because the project area is not in an area that is classified as a Special Studies Zone under this Act (South Placer Regional Transportation Authority et al. "007).

Available site information and a geotechnical site review did not indicate significant geologic hazards (e.g., landsliding, ground settlement, very soft soils, severe erosion) within the project area (Blackburn Consulting "014). No soils in the project area are known to be expansive (South Placer Regional Transportation Authority et al. "007).

During a seismic event, ground shaking can cause densification of granular soil above the water table that can result in settlement of the ground surface. Based on geotechnical review, medium dense to dense and/or hard soil or rock is present at relatively shallow depths throughout the project area and probable ground motions are relatively low (Peak Ground Acceleration of approximately 0.21g). The potential for detrimental seismic settlement within the project area is considered low for native soil/rock and engineered fill, provided engineered fills are constructed in accordance with Caltrans Highway Design Manual and California Building Standards Code specifications (Blackburn Consulting "014).

Liquefaction can occur when saturated, loose to medium dense, granular soils (generally within 50 feet of the surface), or specifically defined cohesive soils, are subjected to ground shaking. Based on geotechnical review and available subsurface information, non-liquefiable soils (medium dense to very dense granular soils, very stiff to hard, cohesive soils, and/or soft rock) are present at relatively shallow depths and groundwater is deep. The potential for detrimental liquefaction is very low along the project alignment (Blackburn Consulting "014).

**Paleontological Resources**

Geologic mapping by Wagner et al. ("981), Helley and Harwood ("985), and the most recent map compilation (California Geological Survey "011) shows the greatest portion of the project area is underlain by the Turlock Lake Formation. The eastern portion of the project area is situated on

strata assigned to the Pliocene-Miocene Mehrten Formation (California Department of Transportation 2“14a).

The Irvingtonian (~780,000 years old) Fairmead Landfill Locality contains significant vertebrate fossils from the Turlock Lake Formation, including remains of horses, ground sloths (Jefferson’s ground sloth and Harlan’s ground sloth), saber-toothed cat, Armbruster’s wolf, scimitar-toothed cat, llama, *Tetrameryx irvingtonensis* Stirton (ancestor to modern pronghorn), deer, camels, mammoth, smooth-toothed pocket gopher, *Capromeryx* (pronghorn-like ungulates), coyote, *Miracinonyx trumani* (American cheetah-like cat), turtle, and tortoise (Dundas et al. “996). Because of its vertebrate content, the Turlock Lake Formation is considered highly sensitive for paleontological resources.

Vertebrate fossils have been recovered from the Turlock Lake Formation in the Central Valley. The Fairmead Landfill site, near Chowchilla, which is located in sediments of both the Turlock Lake Formation and the Riverbank Formation, has yielded thousands of Pleistocene-age specimens from 35 species, including mammoth, ground sloth, bear, sabertooth cat, wolf, deer, camel, horse, antelope, rodents, birds, reptiles, and pollen and plants (California Department of Transportation 2“14a). Excavations for Caltrans’ Fresno SR 180 West Freeway project in Fresno County uncovered fossil specimens from a Pleistocene-age camel in sediments of the Turlock Lake Formation (Hansen “008). Fossilized fish specimens, plant fragments, petrified wood, and ichnofossils were reported in the sediments of the Turlock Lake Formation near Roseville (Fisk and Butler “005). The widespread occurrence of Pleistocene vertebrate fossil remains in sediments referable to the Turlock Lake Formation throughout the Central Valley suggests potential for uncovering additional similar fossil remains during construction-related earth-moving activities in the project area (California Department of Transportation 2“14a).

The Mehrten Formation contains significant fossils that aid in interpreting late Miocene uplift of the Sierra Nevada mountain ranges, the life during this time, climate, and environment of deposition. Fossils found in the Merhten Formation include microfossils such as foraminifera, plants (*Sequoia* and white oaks) and vertebrates (extinct horse, primitive rhinoceros, camel, and tortoise). Because of its significant fossil content, the Mehrten Formation is considered highly sensitive for paleontological resources. (California Department of Transportation 2“14a).

## Discussion of Impacts

### a. No Impact

There are no known active faults in or near the project site, and the ground shaking intensity potential is low. Conditions susceptible to seismic liquefaction have not been identified within the project area. The proposed project would comply with Caltrans Highway Design Manual and the California Building Standards Code to ensure that earthquake design and construction measures are implemented.

### b. Less than Significant with Mitigation

Embankment slopes and areas disrupted by grading are susceptible to erosion from surface runoff. Cut and fill slopes will require erosion control, such as vegetation, and control of surface runoff. Cuts within the breccia of the Mehrten Formation would be less susceptible to erosion and likely not

suitable for planting without additional ground preparation or addition of planting soils (Blackburn Consulting "014).

Implementation of the temporary best management practices identified in the Storm Water Data Report prepared for the project (California Department of Transportation 2"14b); compliance with Section 402 of the Clean Water Act, including implementation of the NPDES general permit for stormwater discharges associated with construction activity; and compliance with the County grading code would prevent increased erosion and the loss of topsoil and would reduce this impact to a less-than-significant level.

### **Mitigation Measure GEO-1: Implement Temporary Construction Site BMPs**

The County will implement the temporary construction site BMPs identified in the project's Storm Water Data Report (California Department of Transportation 2"14b). Whenever possible, earth-disturbing construction activities should not be scheduled during anticipated rain events. Construction site BMPs should be installed prior to the start of construction or as early as feasibly possible during construction. Drainage Shed Areas will be protected in accordance with the Project's pollution control measures. The construction site BMP strategy for this project will consist of implementing the following measures.

- Soil stabilization measures including move-in/move-out (erosion control), temporary hydraulic mulch, temporary cover and temporary fence (type ESA).
- Sediment control measures including temporary fiber rolls, temporary silt fence, and temporary drainage inlet protection.
- Tracking control including stabilized construction entrances/exits and street sweeping.
- Non-stormwater management measures including concrete washout bins.
- General construction site management including training employees and subcontractors. Training shall address the proper selection, deployment, and repair of construction site BMPs used within project limits.

The design of all construction BMPs will comply with the design requirements found in the Caltrans Storm Water Quality Handbooks: Project Planning and Design Guide and Construction Site Best Management Practices Manual.

### **c. No Impact**

There are no known active faults in or near the project site and the ground shaking intensity potential is low. No unstable geologic units or soils are present. The project site is nearly level, so there is little risk of landsliding. Conditions susceptible to seismic liquefaction or subsidence have not been identified within the project area. In addition, the proposed project would comply with Caltrans Highway Design Manual and the California Building Standards Code to ensure that earthquake design and construction measures are implemented.

### **d. No Impact**

Expansive soils do not occur at the project site.

**e. No impact**

The proposed project would not require septic tanks or wastewater disposal systems.

**f. Less than Significant with Mitigation**

The primary mechanism for impacts on paleontological resources under all three build alternatives would be ground disturbance during construction of the roadway. The potential for impact is uniform across the project area because the entire project area is directly underlain by geologic units with potential to contain fossils. Depending on the location and depth of construction activities, impacts could be substantial. Utility work, bridge foundations, and ramps require excavation up to 15 feet below ground surface, which could damage paleontological resources. With implementation of the following mitigation measure summarized below and described in the Paleontological Evaluation Report/Preliminary Paleontological Mitigation Plan (PER/"PMP) prepared for the project (California Department of Transportation 2"14a), these effects would be reduced to less than significant.

**Mitigation Measure GEO-2: Monitor Excavation and Earthmoving Activities**

Excavation and earthmoving in native soil and sediment in the project area will be monitored by a qualified professional under the supervision of a California licensed Professional Geologist. Moving of imported fill material does not require monitoring.

If paleontological resources are discovered during construction activities, specific steps to evaluate and salvage fossil specimens, document their scientific value, and store specimens in a recognized repository institution, as appropriate, will be taken. The detailed approach to implementation of this mitigation is provided in Chapter 8 of the PER/PPMP (California Department of Transportation 2"14a).

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## Greenhouse Gas Emissions

VII. Greenhouse Gas Emissions	Potentially Significant Impact	Less-than-Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:				
a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

## Environmental Setting

Climate change is a complex phenomenon that has the potential to alter local climatic patterns and meteorology. Increases in anthropogenic greenhouse gas (GHG) emissions have been unequivocally linked to recent warming and climate shifts (Intergovernmental Panel on Climate Change “007). Although modeling indicates that climate change will result globally and regionally, there remains uncertainty with regard to characterizing the precise local climate characteristics and predicting precisely how various ecological and social systems will react to any changes in the existing climate at the local level. Regardless of this uncertainty in precise predictions, it is widely understood that some degree of climate change is expected as a result of past and future GHG emissions.

The most common GHGs resulting from human activity are carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), and nitrous oxide (N<sub>2</sub>O). State CEQA Guidelines also define GHGs to include perfluorinated carbons (PFCs), sulfur hexafluoride (SF<sub>6</sub>), and hydrofluorocarbons (HFCs). Unlike criteria air pollutants, which occur locally or regionally, the long atmospheric lifetimes of these GHGs allow them to be well-mixed in the atmosphere and transported over distances. Within California, transportation is the largest source of GHG emissions (38% of emissions in 2011), followed by industrial sources (21%) (California Air Resources Board “014).

Although there is currently no federal law specifically related to climate change or the reduction of GHGs, EPA is developing proposed regulations under the Clean Air Act. California has adopted statewide legislation addressing various aspects of climate change and GHG emissions mitigation. Much of this legislation establishes a broad framework for the state’s long-term GHG reduction and climate change adaptation program. Of particular importance is Assembly Bill 32 (A“ 32), which establishes a statewide goal to reduce GHG emissions to 1990 levels by 2020. The governor has also issued several executive orders related to the state’s evolving climate change policy.

As disused in Section III, *Air Quality*, PCAPCD has the primary responsibility for air quality management within Placer County. However, PCAPCD has not adopted GHG guidance to assist lead agencies in determining the level of significance of operational- and construction-related GHG emissions or a qualified plan, policy, or regulation to reduce GHG emissions.

## Discussion of Impacts

### a. Less than Significant

GHG emissions from transportation-related projects can be divided into those produced during construction and those produced during operation.

#### Construction

Construction activities would generate short-term emissions of CO<sub>2</sub>, CH<sub>4</sub>, and N<sub>2</sub>O from the use of equipment (e.g., graders) and on-road vehicles (e.g., employee commuter cars). CO<sub>2</sub> emissions generated by these sources were estimated using the Sacramento Metropolitan Air Quality Management District's Road Construction Emissions Model (RCEM) (Version 7.1.5.1), as discussed in Section III, *Air Quality*.

The RCEM does not include emission factors for CH<sub>4</sub> or N<sub>2</sub>O for diesel or gasoline power equipment. Emissions of CH<sub>4</sub> or N<sub>2</sub>O from diesel equipment were determined by scaling the CO<sub>2</sub> emissions quantified by the model by the ratio of CH<sub>4</sub>/CO<sub>2</sub> (0.000057) and N<sub>2</sub>O/CO<sub>2</sub> (0.000026) emissions expected per gallon of diesel fuel (Climate Registry "014). Emissions of CH<sub>4</sub> and N<sub>2</sub>O emissions from gasoline-powered vehicles were determined by dividing the CO<sub>2</sub> emissions quantified by the RCEM by 0.95. This statistic is based on EPA's recommendation that CH<sub>4</sub>, N<sub>2</sub>O, and other GHG emissions account for approximately 5% of onroad emissions (U.S. Environmental Protection Agency "014). Table 10 summarizes the annual GHG emissions from off-road diesel equipment and on-road vehicles associated with construction of the proposed project

**Table 10. Construction GHG Emission Estimates (metric tons)**

Construction Phase	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	Other <sup>a</sup>	CO <sub>2</sub> e <sup>b</sup>
New Road	3,408	1.8	0.83	12	3,691
Bridge/Overpass 1	767	0.3	0.15	9	826
Bridge/Overpass 2	767	0.3	0.15	9	826
Interchange	3,457	1.9	0.84	12	3,744
<b>Total Construction Emissions (24 months)</b>	<b>8,399</b>	<b>4.4</b>	<b>1.97</b>	<b>43</b>	<b>9,088</b>
Average Construction Emissions per year	4,200	2.2	1.0	21	4,544

*Sources:* The Climate Registry "014; U.S. Environmental Protection Agency "014.

*Note:* Emissions calculations based on Road Construction Emissions Model (Version 7.1.5.1)

<sup>a</sup> From construction worker commutes (mix of fuels). Other GHGs include CH<sub>4</sub>, N<sub>2</sub>O, and HFCs, which represent 5% of total GHG emissions from on-road sources (calculated by diving CO<sub>2</sub> emissions by 0.95 and multiplying the resulting number by 0.05).

<sup>b</sup> Refers to carbon dioxide equivalent, which includes the relative warming capacity (i.e., global warming potential) of each GHG.

As shown in Table 10, construction of the proposed project would generate 4,544 metric tons of GHG emissions per year over the 2-year construction period. This represents approximately 0.001% of the state GHG inventory of 458,680,000 metric tons of GHG emissions (California Air Resources

Board "014). These emissions would be short-term and represent a small portion of overall emissions in the air basin.

### **Operation**

The proposed project would result in new roadways, additional lanes, and a new interchange configuration, contributing to a reduction in congestion and overall traffic delay. Although the proposed project would increase roadway capacity. However, as presented in Table 11, the proposed project would decrease regional vehicles miles traveled (VMT) and associated CO<sub>2</sub> emissions over the no-build condition under both modeled future years (2020 and 2040). Annual CO<sub>2</sub> equivalent emissions in 2040 are estimated to be 3,750 metric tons less per year under any build alternative than under the No-Build Alternative. Emissions under the existing plus 2040 build alternative condition (any build alternative) are estimated to be 5,549 metric tons less than existing conditions. This is due to the relative reduction in VMT due to the impact of the 2040 project on existing conditions. Thus, emissions reductions achieved by the proposed project would be an air quality benefit. While there are temporary increases in construction-related emissions, they would be offset over the life of the proposed project due to the reductions seen from operation, as see in Table 11.



**Table 11. Operational GHG Emissions Estimates (metric tons per year)**

Scenario	VMT per year	CO <sub>2</sub>	Other <sup>a</sup>	CO <sub>2</sub> e
2012 Existing	5,144,317	832,455	9,989	842,444
Existing + 2020 Build <sup>b</sup>	5,141,316	830,888	9,971	840,859
Existing + 2040 Build <sup>b</sup>	5,133,813	826,971	9,924	836,895
2020 No Build <sup>c</sup>	5,877,484	737,046	8,845	745,890
2020 Build <sup>c</sup>	5,874,483	735,867	8,830	744,698
2040 No Build <sup>d</sup>	7,710,401	869,694	10,436	880,131
2040 Build <sup>d</sup>	7,699,897	865,989	10,392	876,380
<b>Comparison to No Build</b>				
2020 Build	-3,001	-1,178	-14	-1,193
2040 Build	-10,504	-3,706	-44	-3,750
<b>Comparison to Existing</b>				
Existing + 2020 Build	-3,001	-1,567	-19	-1,585
Existing + 2040 Build	-10,504	-5,483	-66	-5,549
PCAPCD Thresholds	-	-	-	-

*Note:* Emissions calculations based on CT-EMFAC v. 5.0. Emissions rates for given years were weighted by VMT, speed bin, and vehicle and fuel mix for Placer County within the Sacramento Valley Air Basin. VMT and truck percentages were provided by Fehr and Peers (Milam, Stanek, Jackson pers. “omm., Jackson pers. “omm., Milam pers. “omm.)

- <sup>a</sup> Includes CH<sub>4</sub>, N<sub>2</sub>O, and other trace GHGs emissions emitted by typical passenger vehicles (U.S. Environmental Protection Agency 2013a and 2<sup>nd</sup> 13b).
- <sup>b</sup> Existing plus project VMT was not available from the Traffic Study and was instead calculated by adding the difference in VMT between build and no build scenarios to existing conditions. Emissions were calculated using 2012 emission factors.
- <sup>c</sup> 2020 VMT was interpolated between 2012 and 2040 VMT estimates as recommended by Fehr and Peers (Jackson pers. “omm.)
- <sup>d</sup> 2040 emissions are based on 2035 emission factors. CT-EMFAC Version 5.0 does not provide emission factors beyond 2035.

## **b. Less than Significant**

Placer County has not yet adopted a qualified plan, policy, or regulation to reduce GHG emissions. Therefore, the most applicable plan, policy, or regulation adopted for the purpose of reducing GHG emissions is AB 32, which codified the State’s GHG emissions reduction targets.

The ARB adopted the AB 32 Scoping Plan as a framework for achieving AB 32. The Scoping Plan outlines a series of technologically feasible and cost-effective measures to reduce statewide GHG emissions. These strategies are geared toward sectors and activities that generate significant amounts of GHGs. For example, the majority of measures address building, energy, waste and wastewater generation, goods movement, water usage, and high global-warming potential “GWP” gases. Activities associated with proposed project construction are not considered by the AB 32

Scoping Plan as having a high potential to emit GHGs. Table 10, demonstrates that construction GHG emissions from the proposed project would be considerably low. Consequently, none of the AB 32 reduction strategies are applicable to the proposed project.

The project operation is expected to be consistent with regional plans and policies designed to accommodate population growth in a carbon efficient way, as stated in the Scoping Plan. The Placer Parkway Phase 1 project is listed in the joint document of the SACOG 2035 MTP/SCS Amendment #1 and the 2013-16 MTIP as SACOGID # PLA25299, adopted by SACOG on August 16, 2012. The design concept and scope of the proposed project is consistent with the project description in the 2013-16 MTIP and 2035 MTP/SCS Amendment #1. Although Amendment #1 does not discuss how the project will improve traffic flow, the original 2035 MTP/SCS includes a qualitative discussion of its regional plan to alleviate congestion and vehicle delay by adding roadways and promoting transit, carpooling, and non-vehicular travel in the region (Sacramento Area Council of Governments 2012a, 2<sup>12b</sup>).<sup>3</sup>

Based on the above analysis, the proposed project would not conflict with implementation of AB 32.

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<sup>3</sup> The original MTP lists Placer Parkway Phase 1 as a project, but describes the project as extending from Watt Avenue to SR 65. In the MTP/SCS Amendment #1, Placer Parkway Phase 1 extends only from Foothills Boulevard North to SR-65. The updated project description in Amendment #1 is still expected to support the original goals of the 2035 MTP/SCS.

U.S. Environmental Protection Agency. 2013a. *Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2011*. Chapter 3 (Energy), Tables 3-12, 3-13, and 3-14. Washington, DC. U.S. EPA #430-R-13-001.

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### **Personal Communications**

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## Hazards and Hazardous Materials

<b>VIII. Hazards and Hazardous Materials</b>	Potentially Significant Impact	Less-than-Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:				
a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Emit hazardous emissions or involve handling hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e. Be located within an airport land use plan area or, where such a plan has not been adopted, be within two miles of a public airport or public use airport, and result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f. Be located within the vicinity of a private airstrip and result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h. Expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

## Environmental Setting

An Initial Site Assessment Update (Blackburn Consulting 2"13a) and an Aerially Deposited Lead Screening (Blackburn Consulting 2"13b) were prepared for the proposed project. Based on those reports, this section describes the existing hazards and hazardous conditions within the project area.

### **Properties Potentially Containing Hazardous Materials**

Property formerly owned by the Formica Corporation (APN 017-063-027) was identified as previously containing diesel underground storage tanks. Tanks were removed in 1985 and 1992. None of the former underground storage tank sites is near areas where the proposed project would be constructed. The records review did not suggest hazardous materials associated with this property would affect the proposed project (Blackburn Consulting 2013a).

The Rio Bravo Rocklin plant (APN 017-063-031) was identified as having an operating diesel underground storage tank. Above ground storage tanks are also documented. The plant is regulated as a large quantity generator of hazardous waste and is a California Accidental Release Prevention site due to anhydrous ammonia storage. No significant hazardous material releases have been reported and the records review did not suggest hazardous materials associated with the site would affect the proposed project (Blackburn Consulting 2013a).

The Ace Hardware Distribution Center (APNs 017-064-006; -007) was identified as containing an above ground diesel fuel tank for an emergency generator and a storage area for lead acid batteries. No hazardous materials releases have been reported and there is no evidence in the records review to suggest hazardous materials associated with the site would affect the proposed project (Blackburn Consulting 2013a).

### **Yellow Traffic Stripes**

Yellow traffic stripes may contain heavy metals such as lead and chromium at concentrations in excess of the hazardous waste thresholds established by the California Code of Regulations and may produce toxic fumes when heated (Blackburn Consulting 2013a).

### **Aerially Deposited Lead**

Ongoing testing by Caltrans indicates that aerially deposited lead (ADL) exists along the shoulders of highways, freeways, and other heavily traveled roads that were in use prior to 1987 (Blackburn Consulting 2013a). A portion of the SR 65 alignment assessed was constructed sometime between 1967 and 1975. An ADL assessment was conducted at the shoulders and median of SR 65 in the vicinity of the proposed interchange. Based on the distribution of "total lead" concentrations detected, it appears that ADL is present along the shoulder and median of the southbound SR 65 lanes. These findings are consistent with the historic roadway configuration (Blackburn Consulting 2013b).

### **Utilities**

Pacific Gas & Electric Company ("G&E) provides electrical and gas service in and around the project area.

Joint utility poles run parallel to the Industrial Avenue/UPRR corridor on both the east and west side of the corridor. Overhead electric lines run to the west from the overhead lines adjacent to the UPRR tracks to serve the Rio Bravo Rocklin plant. Older electrical transformers have the potential for containing hazardous materials, specifically Polychlorinated Biphenyls (PCBs), in the oil (Blackburn Consulting 2013a). One pole mounted transformer labeled with "No PCB" signage is located within the corridor at the east eastern end of the Rio Bravo property (Blackburn Consulting 2013a).

Underground fiber optic and petroleum lines are located between Industrial Avenue and the UPRR tracks. There is a potential for buried leaks along buried petroleum distribution pipelines. A marker indicating a buried petroleum distribution pipeline is located along the east side of the UPRR tracks (Blackburn Consulting 2013a).

### **Railroad Right-of-Way**

UPRR facilities are located about 0.3 mile west of the interchange. Railroad grades are potential locations of heavy metal, petroleum hydrocarbon, and pesticide impacts.

### **Nearby Schools and Airports**

The nearest school to the project is the Whitney High School (701 Wildcat Boulevard), approximately 0.47 miles east of the project alignment.

The closest public airport to the project is Lincoln Regional Airport, approximately 5 miles north of the project alignment. The closest private airport to the project is the Fiddymont Field Airport, approximately 3.27 miles southwest of the project alignment.

### **Fire Protection**

According to the California Department of Forestry and Fire Protection's (CalFire's) Placer County Fire Hazard Severity map, the project area is not located in a Fire Hazard Severity Area (California Department of Forestry and Fire Protection 2008).

## **Discussion of Impacts**

### **a, b. Less than Significant with Mitigation**

Small quantities of potentially toxic substances (such as petroleum and other chemicals used to operate and maintain construction equipment) would be used in the project area and transported to and from the area during construction. All staging and refueling would occur within the designated staging areas. Accidental releases of small quantities of these substances could contaminate soils and degrade the quality of surface water and groundwater, resulting in a public safety hazard. However, the handling and disposal of these materials would comply with regulations enforced by Placer County's Environmental Health Department, a Hazardous Materials Certified Unified Program Agency, and the California Division of Occupational Safety and Health. This impact would be less than significant. In addition, implementation of Mitigation Measures BIO-4 and GEO-1, required to reduce other potentially significant project impacts, would further reduce the potential impact resulting from the routine use of hazardous materials.

The proposed project could create a hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. Construction of the proposed project would require grading and disturbance of soils and removal of existing pavement and materials that could contain hazardous materials such as ADL, lead chromate, and PCBs. The release of these or other toxics into the environment could result in a significant hazard.

Aerially deposited lead was found in two samples during soil testing. Based on the distribution of "total lead", ADL was found along the shoulder and median of the southbound lanes, but no detectable concentrations of "total lead" were detected along northbound lanes (Blackburn

Consulting 2013b). “Total lead” concentrations adjacent to the southbound lanes are relatively low (all concentrations at or below 100 milligrams per kilogram[mg/kg]), which are well below the total threshold limit concentration of 1,000 mg/kg that defines the lower limit for hazardous waste. However, all four samples from the southbound lanes did exceed the 50 mg/kg threshold, equal to 10 times the soluble threshold limit concentration (STLC) for lead of 5 milligrams per liter (mg/l). It is common practice to conduct additional testing to establish relative soluble lead concentrations when total lead concentrations exceed 50 mg/kg. Soluble lead test results ranged from 3.4 to 4.6 mg/l, which correspond to “total lead” concentrations of 100 and 78 mg/kg, respectively. These soluble lead results are below the STLC hazardous waste threshold of 5 mg/l (Blackburn Consulting 2013b).

Some of the older existing yellow pavement striping in the project area may contain lead chromate in average concentrations greater than or equal to 350 mg/kg and less than 1,000 mg/kg total lead (Blackburn Consulting 2013a). If yellow striping along the planned alignment requires removal, this impact could be significant.

One pole mounted transformer labeled with “No PCB” signage is located within the corridor at the east eastern end of the Rio Bravo Rocklin property (Blackburn Consulting 2013a). All three build alternatives would affect the Rio Bravo Rocklin service and joint utility poles east and west of the Industrial Avenue/UPRR corridor. It is anticipated that overhead facilities would be relocated or raised to clear potential conflicts with alignments of the alternatives. Relocation of utility poles would be completed by the utility companies prior to project construction.

No record of contamination resulting from the buried petroleum distribution pipeline was discovered in the initial site assessment; however, there is the potential for unidentified leaks along buried pipelines (Blackburn Consulting 2013a).

The proposed project would include an overpass above the railroad tracks. Abutments are not expected to be located in close proximity to the railroad grade; therefore, the likelihood of encountering potentially impacted soil is low (Blackburn Consulting 2013a).

Implementation of the following mitigation measures would reduce potential impacts to less-than-significant levels.

#### **Mitigation Measure HAZ-1: Test Yellow Pavement Striping and Include Provisions in Standard BMPs**

Construction contract specifications will provide that the County or its contractors will arrange for sampling and testing of striping paint in areas scheduled for removal to determine the presence of lead chromate, other metals, or chemicals. If the lead or chemical content of the paint is above regulatory thresholds, the project area will require an appropriate Lead Compliance Plan. The County will assess where yellow thermoplastic striping is located within the project limits. Hazardous materials found within the project limits will be removed and disposed of by a licensed and certified abatement contractor prior to demolition or other activities that will disturb hazardous materials.

#### **Mitigation Measure HAZ-2: Prepare and Implement Health and Safety Plan**

Consistent with the mitigation commitment in the Placer Parkway Corridor Preservation Tier 1 EIS/EIR, a Health and Safety Plan will be prepared by the contractor prior to construction. This plan will describe appropriate procedures to follow in the event that any contaminated soil or

groundwater is encountered during construction activities. Any unknown substances should be tested, handled, and disposed of in accordance with appropriate federal, state, and local regulations.

**c. No impact**

There are no public or private K-12 schools within 0.25 mile of the project area. The nearest school is approximately 0.47 mile east of the project alignment. It is unlikely that hazardous materials would be emitted or released within 0.25 mile of any schools. Also, compliance with health and safety regulations and implementation of the standard BMPs by contractors would reduce the potential of a hazardous spill incident. There would be no impact.

**d. No Impact**

The proposed project site is not included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 (California Department of Toxic Substances Control 2014).

**e, f. No Impact**

The project area is not located within 2 miles of any private or public airports (AirNav 2014). The closest public airport to the project area is the Lincoln Regional Airport, approximately 5 miles to the north. The closest private airport to the project area is the Fiddymont Field Airport, approximately 3.27 miles to the southwest. The project area is not within any airport land use plan or safety zone. Therefore, the proposed project would not result in an airport-related safety hazard for people residing or working in the project area.

**g. No impact**

Placer County does not have an adopted emergency evacuation route in the area.

**h. No impact**

The project area is not located in a Fire Hazard Severity Area (California Department of Forestry and Fire Protection 2008). There would be no impact associated with wildland fires.

**References**

AirNav. 2014. *Airport Information*. Atlanta, GA. Available: < <https://www.airnav.com/cgi-bin/airport-search>>. Accessed: August 4, 2014.

Blackburn Consulting. 2013a. *Initial Site Assessment*. Auburn, CA.

Blackburn Consulting. 2013b. *Aerially Deposited Lead Screening*. Auburn, CA.

California Department of Forestry and Fire Protection 2008. *Very High Fire Hazard Severity Zones in LRA*. Available: <[http://frap.fire.ca.gov/webdata/maps/placer/fhszl\\_map.31.jpg](http://frap.fire.ca.gov/webdata/maps/placer/fhszl_map.31.jpg)>. Accessed: August 1, 2014.

California Department of Toxic Substances Control. 2014. *EnviroStor*. Available: < [http://www.envirostor.dtsc.ca.gov/public/mapfull.asp?global\\_id=31400007](http://www.envirostor.dtsc.ca.gov/public/mapfull.asp?global_id=31400007)>. Accessed: August 4, 2014.



## Hydrology and Water Quality

<b>IX. Hydrology and Water Quality</b>	Potentially Significant Impact	Less-than-Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:				
a. Violate any water quality standards or waste discharge requirements?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Substantially deplete groundwater supplies or interfere substantially with groundwater recharge, resulting in a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level that would not support existing land uses or planned uses for which permits have been granted)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner that would result in substantial erosion or siltation onsite or offsite?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding onsite or offsite?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. Create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f. Otherwise substantially degrade water quality?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g. Place housing within a 100-year flood hazard area, as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h. Place within a 100-year flood hazard area structures that would impede or redirect floodflows?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
i. Expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
j. Contribute to inundation by seiche, tsunami, or mudflow?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

## Environmental Setting

This section is based on the analysis included in the Drainage Report (Civil Engineering Solutions 2014) and Storm Water Data Report (California Department of Transportation 2014) prepared for the proposed project.

### Watersheds

The project area straddles the ridge line properties between the Pleasant Grove Creek watershed and Auburn Ravine/Orchard Creek watersheds in western Placer County. Orchard Creek is a tributary to Auburn Ravine, which ultimately discharges to the Sacramento River via the Natomas North Canal, and the Natomas Cross Canal. Pleasant Grove Creek discharges to the Sacramento River via the Pleasant Grove Canal and the Natomas Cross Canal (California Department of Transportation 2014).

### Water Quality and Stormwater Runoff

The existing impervious area within the project area is approximately 18.1 acres (California Department of Transportation 2014). The majority of the runoff from the project area is within the Auburn Ravine Watershed. The runoff makes its way via overland flow within the subwatershed Orchard Creek. Orchard Creek is located approximately 1 mile north of the project area. The small, remaining portion of runoff from the westerly portion of the project area is within the Pleasant Grove Creek-Cross Canal watershed. The runoff makes its way via overland flow within the subwatershed Pleasant Grove Creek. Pleasant Grove Creek is located approximately 2 miles south of the project area (California Department of Transportation 2014).

While the project area is located within the Pleasant Grove Creek and Auburn Ravine watersheds, which are both Title 23 Section 8 listed streams under the jurisdiction of the Central Valley Flood Protection Board, the project does not cross any main stream paths of these watersheds. Pleasant Grove Creek is listed under the Clean Water Act, Section 303(d), as an impaired water body but does not have an adopted Total Maximum Daily Load (the calculation of the maximum amount of a pollutant that a waterbody can receive and still safely meet water quality standards). Pollutants of concern are dissolved oxygen, pyrethroids, and toxic sediment (California Department of Transportation 2014).

The Municipal Storm Water Permitting Program regulates stormwater discharges from municipal separate storm sewer systems (MS4s). Placer County's MS4 Phase II permit, WQ Order No. 2003-0005-DWQ, went into effect July 1, 2013. The Placer Regional Stormwater Coordination Group (PRSCG) is currently reviewing the permit, and it is expected that some changes to the current PRSCG methodologies will be forthcoming, especially with respect to the Hydrograph Modification Requirements that go into effect July 2015 (Civil Engineering Solutions 2014).

### Groundwater

Groundwater elevations range from approximately 45 feet above mean sea level at the west end of the project area (near North Foothills Boulevard) to approximately 60 feet at the east end. Regional groundwater levels are generally greater than 80 feet below the ground surface and the gradient is to the west-southwest (Blackburn Consulting 2014).

## Existing Floodplains

A portion of the project area is located within existing Federal Emergency Management Agency (FEMA) floodway and floodplain delineations for Orchard Creek. Figure 13 shows the floodway and floodplain as shown on the maps currently available from the FEMA online Map Store. These maps have an effective date of June 8, 1998. Tributaries to Orchard Creek located in the project area include wetland swales and channels identified on Figures 10, 11, and 12.

### *City of Roseville Reason Farms Retention Basin*

The City of Roseville has developed a regional stormwater retention facility—Reason Farms Retention Basin—for the alleviation of potential downstream flooding that could be caused by entitled projects and future projects within the City of Roseville or within the area covered by a MOU) between the City of Roseville and Placer County (County). The Reason Farms Retention Basin is located on Pleasant Grove Creek within the north-central portion of the Placer Parkway study area. To accommodate the estimated retention storage volume requirements for the City of Roseville plus the West Roseville Specific Plan and MOU areas, the retention basin was designed to provide 2,530 acre-feet of storage capacity (South Placer Regional Transportation Authority et al. 2007).

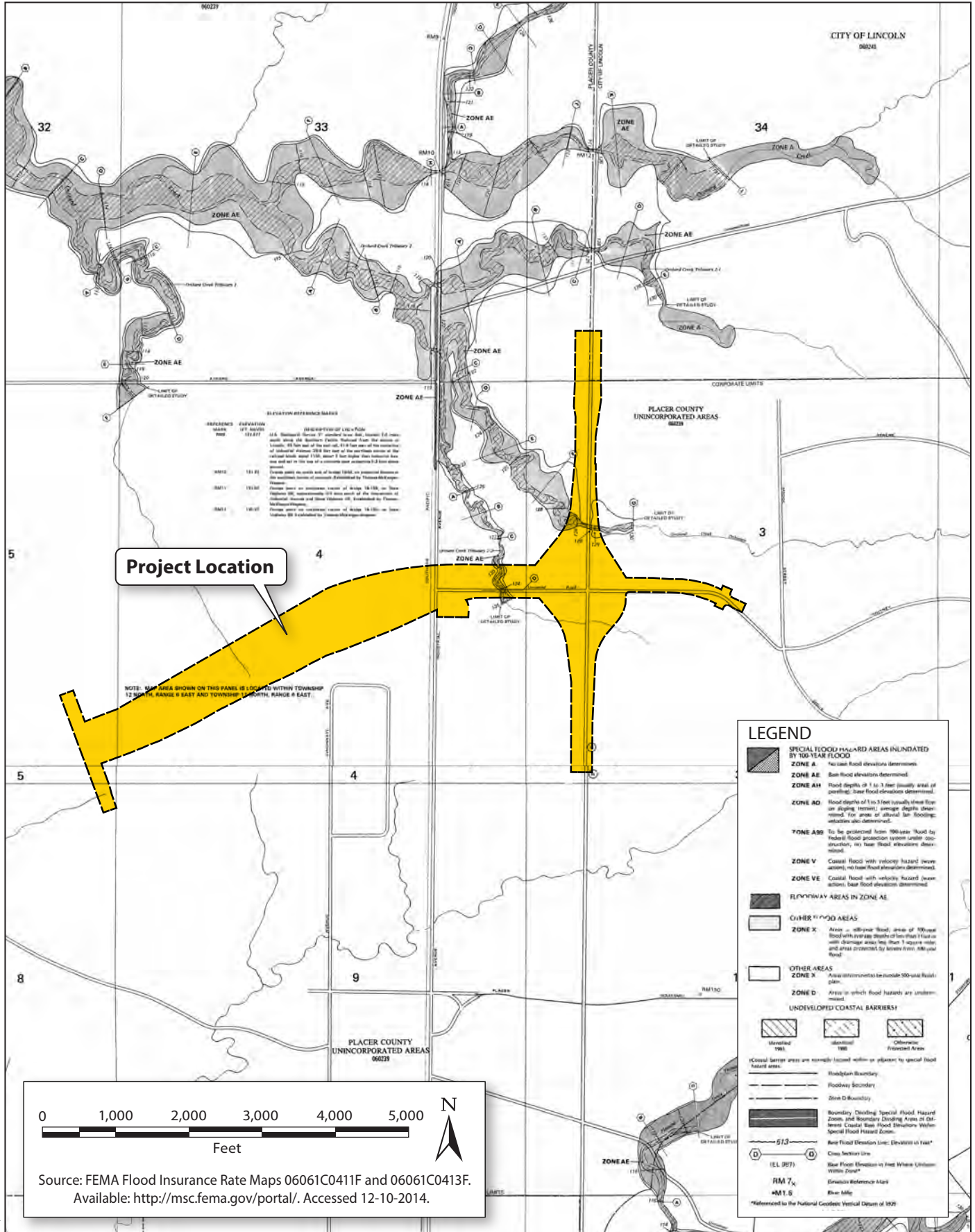
## Discussion of Impacts

### **a, c, e, f. Less than Significant with Mitigation**

The proposed project has the potential to impact water quality in Pleasant Grove Creek and Orchard Creek, and their tributaries. Excavation and grading equipment would be used during the construction of the proposed project. Without proper implementation of BMPs, loose soil could affect local and downstream water quality if a storm were to occur during construction. Also, construction of the project includes creation of new fill slopes along the roadway and bridge approaches. These new fill slopes have the potential to alter existing drainage patterns at the project site. Because the proposed project would disturb more than 1 acre during construction, the County would be required to comply with the National Pollutant Discharge Elimination System and obtain coverage under the Construction General Permit (Order No. 2012-0006-DWQ) which requires development and implementation of a SWPPP. The specific BMPs that would be incorporated into the SWPPP would be determined during the final design phase and would be prepared in accordance with the Central Valley Regional Water Quality Control Board field manual. The County would also be required to obtain a Lake and Streambed Alteration Agreement from CDFW, which may require additional measures regarding debris, waste or other materials that could pass into waterways.

BMPs would be designed to reduce or eliminate pollutants from urban stormwater runoff and prevent contamination of receiving waters, and to prevent violation of water quality standards or waste discharge requirements. The final selection of BMPs would consider requirements specific to the Pleasant Grove Creek and Orchard Creek watersheds.

To minimize or prevent changes that could cause erosion or siltation, the project design incorporates low impact design efforts to maintain or restore pre-project hydrology and to improve water quality of discharges. The overall strategy for project stormwater quality is to maximize pervious areas and treat the remainder using low impact design efforts (California Department of Transportation 2014).



**Figure 13**  
**Existing Floodplains**

The proposed project includes the permanent installation of biofiltration strips and swales to provide permanent treatment of stormwater runoff. The biofiltration strips and swales would be designed to treat 100% of the water quality flow (California Department of Transportation 2014). Slopes would be graded to blend with the natural terrain and promote sheet flow to vegetated areas. Swales would be designed to decrease the velocity of discharge.

In addition to the permanent stormwater treatment efforts incorporated into the project design, implementation of the following mitigation would reduce water quality impacts and changes to drainage patterns that may cause erosion or siltation to less-than-significant levels.

**Mitigation Measure BIO-4: Protect Water Quality and Minimize Sedimentation Runoff in Wetlands and Other Waters outside the Project Limits**

Described in *Biological Resources* section.

**Mitigation Measure GEO-1: Implement Temporary Construction Site BMPs**

Described in *Geology and Soils* section.

**b. Less than Significant**

There is low potential for substantial depletion of groundwater supplies or interference with groundwater recharge associated with the proposed project. Though the project would result in some increase in impervious surfaces, drainage improvements are anticipated to reduce the peak runoff rate allowing for more infiltration into the groundwater table.

**d, h. Less than Significant**

The proposed project would extend a roadway into a 100-year flood area. The project would result in a net additional impervious area of approximately 31.4 acres. The additional impervious area was calculated by subtracting the total existing impervious area intended to be removed from the total new impervious area (California Department of Transportation 2014). Runoff from the proposed project area ultimately has to pass through the Natomas Cross Canal before entering the Sacramento River. The construction of impervious surfaces would increase the velocity and volume of water flow within the project limits (California Department of Transportation 2014).

The proposed project drains to the Natomas Cross Canal via Pleasant Grove Creek and Orchard Creek (Auburn Ravine). Increased runoff from the proposed project would not increase peak flow rate within the Pleasant Grove Creek watershed. For Orchard Creek, peak flow rate would increase for the watersheds at the east end of the project area by as much as 38 cubic feet per second in the 100-year event. However, the hydrology analysis indicates that there will not be any increases to the 100-year peak flow rates resulting from this project downstream of the project area near Fiddymont Road, near the confluence of Orchard Creek and Ingram Slough (Civil Engineering Solutions 2014).

Under any of the build alternatives, the proposed project would construct collection channels and “vegetated swales” adjacent to the roadway slopes to collect and deliver roadway runoff to existing flow swales and discharge points. Vegetated swales at the ends of the collection channels would perform stormwater quality. Detention of 0.45 acre-feet of water is proposed within the northbound SR 65 onramp loop.

The proposed project would conform to design considerations and requirements in the Caltrans Highway Design Manual, and the Placer County *Stormwater Management Manual* (Placer County Flood Control and Water Conservation District 1990). Design of the proposed project would include features such as culverts, open channels, roadside drainage, and conduits that would accommodate and convey the 100-year flood without overtopping or flooding the traveled way or adversely impacting or damaging adjacent properties.

Because the proposed project would be contained within a watershed that discharges through the Natomas Cross Canal, it is subject to volumetric impacts analysis and potential mitigation requirements. In Sutter County, within the sump areas upstream of the Natomas Cross Canal, flooding is known to occur when the Sacramento River rises above a flood stage of 37.0 at the Verona Gage. Sutter County flooding is the result of the limited discharge capacity of the Natomas Cross Canal when the Sacramento River is flooding. As a result, the discharge of additional volumes of runoff during this type of event could make the depth of flooding worse. Additionally, flooding of the sump area could occur from local runoff of the streams and watersheds that are tributary to the Natomas Cross Canal. As a result, the City of Roseville collects a development fee, the Pleasant Grove Watershed Mitigation Fee, which goes towards the Reason Farms Environmental Preserve to mitigate such impacts (Civil Engineering Solutions 2014).

#### **g. No Impact**

The proposed project does not involve the construction of houses.

#### **i. No impact**

Because the proposed project would be designed to include features that would accommodate the 100-year flood, the proposed project would not expose people or structures to a significant risk of loss, injury, or death involving flooding.

#### **j. No impact**

The risk of ground shaking in the project area is considered to be low and large bodies of water are not located close to the project area. Therefore, the risk of damage from seiches is low. Because the study area is located primarily within alluvial valleys, is adjacent to granitic hills and mountains, and is a considerable distance from a large water body, the potential for a tsunami is nonexistent (South Placer Regional Transportation Authority et al. 2007).

Based on geologic conditions, relative topographic relief, and past performance, the potential for seismic slope instability in the form of landslides and mudslides within the project area is very low. Similarly, the potential for seismic instability of engineered cut or fill slopes constructed at typical allowable gradients, 2:1(horizontal to vertical) or flatter, is also very low (Blackburn Consulting 2014).

Therefore, the proposed project would not contribute to inundation by seiche, tsunami, or mudflow.

### **References**

Blackburn Consulting. 2014. *Draft Structures Preliminary Geotechnical Report*. Auburn, CA.

California Department of Transportation. 2014. *Long Form – Storm Water Data Report*. 03-PLA-65 – PM 10.1 to 11.2. 03-2F920. Prepared by Leo Rubio. May 16.

Civil Engineering Solutions. 2014. *Draft Drainage Report Placer Parkway Phase I*. Lincoln, CA.

Placer County Flood Control and Water Conservation District. 1990. *Stormwater Management Manual*. September 1. Auburn, CA.

South Placer Regional Transportation Authority, California Department of Transportation, and Federal Highway Administration. 2007. *Draft Placer Parkway Corridor Preservation Tier 1 Environmental Impact Statement/Program Environmental Impact Report*. November. Prepared by URS Corporation, Sacramento, CA.

## Land Use and Planning

<b>X. Land Use and Planning</b>	Potentially Significant Impact	Less-than-Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:				
a. Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to, a general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Conflict with any applicable habitat conservation plan or natural community conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

## Environmental Setting

The proposed project would be located in western Placer County. Portions of the proposed project would be located at the western edge of the City of Rocklin (east side of SR 65), the southern edge of the City of Lincoln (north of Athens Avenue), the northern edge of the City of Roseville, and unincorporated Placer County (west side of SR 65). A multi-family housing unit is located east of SR 65 north of Whitney Ranch Parkway and west of Wildcat Boulevard. Immediately southwest of the proposed connection with SR 65 is an Ace Hardware distribution center, which includes a private baseball diamond located immediately northwest of the distribution center. Immediately northwest of the project area, between Industrial Avenue and SR 65, is a self-storage business (Sundance Self-Storage). The Rio-Bravo Rocklin plant, a biomass facility, is also located northwest of the project area.

Land use decisions in and around the project area are guided by the *City of Rocklin General Plan* (City of Rocklin 2012), the *City of Lincoln 2050 General Plan* (City of Lincoln 2008), the *Roseville General Plan 2025* (City of Roseville 2010), and the *Sunset Industrial Area Plan* (Placer County 1994). The area immediately surrounding the proposed interchange of Placer Parkway and SR 65 is designated Retail Commercial, High-Density Residential, Business and Professional, and Recreation/Conservation on the *City of Rocklin General Plan* land use map, and Business Park on the Placer County *Sunset Industrial Area Plan* land use map. The remainder of the project area is designated Industrial on the Placer County *Sunset Industrial Area Plan* land use map. The portion of the project that would be located in Lincoln is designated as Open Space east of SR 65 and Light Industrial west of SR 65 on the City of Lincoln land use map. Land use designations and zoning are listed below in Table 12.



**Table 12. Land Use Designations and Zoning in the Project Area**

Jurisdiction	Governing Document	Land Use Designation	Zoning
City of Rocklin	General Plan	Retail Commercial High-Density Residential Business and Professional Recreation/Conservation	Open Space Planned Development-Commercial
City of Lincoln	2050 General Plan	Open Space Light Industrial	Open Space-Conservation
Placer County	Sunset Industrial Area Plan	Business Park Industrial	F-B-X-DR <sup>a</sup> 160 AC Min, F-B-X-DR 80 AC Min Business Park-Design Scenic Corridor, Business Park-Design Scenic Corridor- Flood Hazard

Sources: Rocklin, Lincoln and Placer County general plans and zoning maps, Sunset Industrial Area Plan.

<sup>a</sup> F-B-X-DR stands for a base zone of Farmland with a 160- or 80-acre minimum parcel size, combined with a Development Reserve designation, which provides for future development of residential, commercial, and industrial uses.

Placer County is in the process of developing the *Placer County Conservation Plan (PCCP)*. The PCCP covers approximately 200,000 acres of western Placer County, including the project area. The PCCP analyzes the biological resources within the plan area and identifies a conservation strategy reflecting the geography of natural communities and covered species. In February 2011, Placer County released an Agency-Review Draft of the PCCP that included responses to agency comments received on the June 2005 Draft PCCP. The PCCP has not been adopted.

## Discussion of Impacts

### a. No Impact

The proposed project would not displace any residents, businesses, or community resources. There are no schools or other community facilities in the immediate vicinity. The proposed project would improve circulation and access in the area, and would not create additional barriers. Accordingly, the proposed project would not physically divide an established community (California Department of Transportation 2014).

### b. Less than Significant

Additional ROW acquired adjacent to the SR 65 northbound on-ramp, southbound off-ramp, and southbound on-ramp would not conflict with the goals and policies of the relevant local and regional plans. The project would reduce congestion and increase access to SR 65, which would support planned growth for the area (California Department of Transportation 2014).

### c. No Impact

No habitat conservation plan, natural community conservation plan, or other habitat conservation plan has been adopted for the project area. As part of the PCCP process, the County, CDFW, USFWS,

and NMFS entered into a Natural Community Conservation Planning Agreement in 2001. This agreement requires that all projects designed during preparation of the PCCP be consistent with the principles and objectives of the conservation process and that projects approved before the plan is adopted should not compromise its successful development or implementation. Because activities related to the proposed project may commence prior to the approval of the PCCP, mitigation measures in this document are designed to be implemented absent the approved conservation plan but consistent with the draft conservation strategies.

## References

- California Department of Transportation. 2014. *Placer Parkway Phase I Community Impact Assessment*. State Route 65 from Sunset Boulevard to Twelve Bridges Drive and 1.5 miles southwest to Foothills Boulevard North, Placer County, CA. EA 2F920K. Prepared by ICF International, Sacramento CA. August.
- City of Lincoln. 2008. *City of Lincoln General Plan*. March. Available: <<http://lincolnca.org/pagedownloads/General%20Plan%20Final.pdf>>. Accessed: December 8, 2008.
- City of Rocklin. 2012. *City of Rocklin General Plan*. October. Available: <[http://www.rocklin.ca.us/depts/develop/planning/publications\\_n\\_maps/rocklin\\_general\\_plan.asp](http://www.rocklin.ca.us/depts/develop/planning/publications_n_maps/rocklin_general_plan.asp)>. Accessed: December 8, 2014.
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- Placer County. 1994. *Sunset Industrial Area Plan*. Available: <<http://www.placer.ca.gov/departments/communitydevelopment/planning/documentlibrary/commplans/sunset-industrial-area-cp>>. Accessed: December 8, 2014.

## Mineral Resources

<b>XI. Mineral Resources</b>	Potentially Significant Impact	Less-than-Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:				
a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

## Environmental Setting

There is no land zoned for mining in the project vicinity (Placer County 1994 and 2014). The project area is classified as MRZ-4, which is an area with no known mineral occurrences (South Placer Regional Transportation Authority et al. 2007). MRZ-4 classification implies a lack of knowledge regarding mineral resources; however, there is little likelihood of the occurrence of mineral resources.

## Discussion of Impacts

### a. No impact

There are no known mineral resources at or near the project site. There would be no impact.

### b. No impact

The proposed project area is not delineated in any planning document as containing valuable mineral resources. Therefore, there would be no impact.

## References

Placer County. 1994. *Placer County General Plan – 1994*. Last revised: March 4, 2008. Available: <<http://www.placer.ca.gov/~media/cdr/Admin/GIS/PCGPMAP1994.pdf>>. Accessed: July 29, 2014.

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South Placer Regional Transportation Authority, California Department of Transportation, and Federal Highway Administration. 2007. *Placer Parkway Corridor Preservation Tier 1 Environmental Impact Statement/Program Environmental Impact Report*. Draft. November. Prepared by URS Corporation. Sacramento, CA.

## Noise

XII. Noise	Potentially Significant Impact	Less-than-Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:				
a. 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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Expose persons to or generate excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Result in 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. Result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Be 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 and 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. Be located in the vicinity of a private airstrip and 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"/>

## Environmental Setting

### Noise Terminology

Noise terminology used in this evaluation is defined below.

*Sound.* A vibratory disturbance created by a vibrating object, which, when transmitted by pressure waves through a medium such as air, is capable of being detected by a receiving mechanism, such as the human ear or a microphone.

*Noise.* Sound that is loud, unpleasant, unexpected, or otherwise undesirable.

*Decibel (dB).* A unitless measure of sound on a logarithmic scale, which indicates the squared ratio of sound pressure amplitude to a reference sound pressure amplitude. The reference pressure is 20 micropascals.

*A-Weighted Decibel (dBA).* An overall frequency-weighted sound level in decibels, which approximates the frequency response of the human ear.

*Equivalent Sound Level (Leq)*. The average of sound energy occurring over a specified period. In effect, Leq is the steady-state sound level that in a stated period would contain the same acoustical energy as the time-varying sound that occurs during the same period.

*Maximum and Minimum Sound Levels (Lmax and Lmin)*. The maximum and minimum sound level measured during a measurement period.

In general, humans commonly hear a sound level increase of 3 dB as a perceptible increase. Sound level increases of less than 3 dB are generally not noticeable. An increase of 5 dB is clearly noticeable, and an increase of 10 dB is perceived as twice as loud.

### **Noise-Sensitive Land Uses**

Noise-sensitive land uses typically include residences, schools, libraries, hospitals, and other similar uses. Much of the project site is adjacent to undeveloped or industrial land. There is a multi-family apartment complex located adjacent to the eastern terminus of the project. The area of outdoor frequent human use nearest to the project corridor is a swimming pool at the Montessa Attached Homes apartment complex on Whitney Ranch Parkway in Rocklin, which would be approximately 800 feet from the eastern terminus of the project.

### **Local Noise Ordinances**

The project site is located in unincorporated Placer County to the west of SR 65, and in the cities of Lincoln and Rocklin to the east of SR 65.

#### ***Placer County***

The Placer County Noise Ordinance Article 9.36 specifies that sound levels at sensitive receptor locations should not exceed 55 dBA Leq during daytime hours (7:00 a.m. to 10:00 p.m.) or 45 dBA Leq during nighttime hours (10:00 p.m. to 7:00 a.m.)

The ordinance contains an exception for construction between the hours of 6:00 a.m. and 8:00 p.m. Monday through Friday, and between the hours of 8:00 a.m. and 8:00 p.m. Saturday and Sunday. Normal operation of vehicles on public roadways is exempt from the code.

#### ***City of Rocklin***

The Rocklin Municipal Code does not contain specific requirements for vehicle noise or construction. The code contains a general provision that “nuisance” noise is prohibited.

Policy N-3 of the *Rocklin General Plan Noise Element* states, “Ensure that stationary noise sources do not interfere with sleep by applying an interior hourly maximum noise level design standard of 45 dBA in the enclosed sleeping areas of residences affected by stationary noise sources. This standard assumes doors and windows are closed” (City of Rocklin 2012).

Policy N-9 of the Noise Element specifies noise level design criteria for transportation noise sources. The maximum allowable noise exposure for residential use is 60 dB Ldn at common outdoor activity areas such as swimming pools and recreation areas. Noise levels at interior spaces should not exceed 45 dB Ldn. The maximum allowable noise exposure for playgrounds and neighborhood parks is 70 dB Ldn.

### **City of Lincoln**

The Lincoln Municipal Code does not contain specific requirements for vehicle noise or construction. However, Chapter 9.04 of the code prohibits the operation of any electrical or mechanical device or apparatus that emit sound waves that are audible to a person of “average hearing faculties or capacity at a distance of more than twenty-five feet from the source of the sound emitted.” City Council may make exceptions to the ordinance by permit (Code Section 9.04.030). Because the City of Lincoln limits are at the northernmost portion of the project area where the project improvements proposed are on SR 65 and are minor (e.g., roadway restriping) and no development exists nearby, the prohibitions of this ordinance will not apply.

## **Discussion of Impacts**

The discussion of impacts is based on a traffic noise analysis conducted for this project, which is documented in the *Placer Parkway Phase I Noise Study Report* (NSR) prepared by ICF International (2014).

### **a. Less than Significant with Mitigation**

Future traffic noise levels are predicted to be in the range of 53 to 60 dBA (adjusted from 51 to 58 dBA Leq in the NSR) at the nearest areas of outdoor residential use: an outdoor use area at Whitney Ranch Apartments, and a swimming pool at the Montessa Attached Homes apartment complex. Future noise levels would be up to 50 dB Ldn (adjusted from 63 dBA Leq in the NSR) at a ballfield adjacent to an Ace Hardware distribution facility (ICF International 2014). All other areas near the project area are undeveloped or agricultural land, or commercial and industrial areas that do not contain areas of outdoor frequent human use. Noise levels would conform to maximum allowable transportation noise levels in the City of Rocklin General Plan.

Noise from operation of trucks and on-site construction equipment could intermittently raise noise levels at locations of noise-sensitive uses adjacent to the project. Wherever possible, construction would be conducted in accordance with Caltrans Standard Specifications (Section 14-8.02) and applicable local noise standards. Estimated construction noise levels as a function of distance from the construction site, based on the three loudest pieces of equipment (scraper, bulldozer and heavy truck) operating simultaneously are shown in Table 13. Construction noise would be short-term, intermittent, and overshadowed by local traffic noise (ICF International 2014). However, project construction may occur during nighttime hours of 10:00 p.m. to 7:00 a.m.

As shown in Table 13, outdoor noise levels may exceed the City of Rocklin interior noise standard of 45 dBA Leq at maximum distance of 325 feet from residential use areas, such as Montessa Attached Homes.

**Table 13. Estimated Construction Noise Levels**

Distance Between Source and Receiver, (ft.)	Outdoor Sound Level, dBA Leq(1h)	Indoor Sound Level, dBA Leq(1h) <sup>1</sup>
50	86	66
100	78	58
200	70	50
300	66	46
325	65	45
500	60	40
600	58	38
700	56	36
1000	52	32
1250	49	29
1500	47	27
1900	45	25
2000	44	24

<sup>1</sup> Assumes a nominal outdoor-to-indoor noise attenuation value of 20 dB.

Construction noise may intermittently exceed the City of Rocklin nighttime noise ordinance. This impact is therefore considered to be significant. Implementation of Mitigation Measures NOI-1 and NOI-2 would reduce this impact to a less-than-significant level.

### **Mitigation Measure NOI-1: Employ Noise-Reducing Construction Practices during Construction**

During construction, project proponents will employ best practices to reduce construction noise at noise-sensitive land uses. Implementation of this measure will ensure that construction noise levels, as applicable, do not exceed 45 dBA (interior one-hour  $L_{eq}$ ) during nighttime hours (10:00 p.m. to 7:00 a.m.) for construction activities 350-feet or further from residential land uses.

Measures used to limit construction noise include the following:

- Locating stationary equipment (e.g., generators, compressors, rock crushers, cement mixers, idling trucks) as far as possible from noise-sensitive land uses.
- Prohibiting gasoline or diesel engines from having unmuffled exhaust.
- Requiring that all construction equipment powered by gasoline or diesel engines have sound-control devices that are at least as effective as those originally provided by the manufacturer and that all equipment be operated and maintained to minimize noise generation.
- Preventing excessive noise by shutting down idle vehicles or equipment.
- Using noise-reducing enclosures around noise-generating equipment.



- Selecting haul routes that affect the fewest number of people.

Constructing barriers to block sound transmission to noise-sensitive land uses. The barriers shall be designed to obstruct the line of sight between the noise-sensitive land use and on-site construction equipment.

#### **Mitigation Measure NOI-2. Limit Construction within 350-feet of Residential Uses**

In addition to the measures included in NOI-1, construction activities within 350 feet of residential uses will be limited to the hours between 7:00 am and 10:00 pm in order to ensure that construction noise levels do not do not exceed 45 dBA (interior one-hour  $L_{eq}$ ) during nighttime hours (10:00 p.m. to 7:00 a.m.).

#### **b. Less than Significant**

Construction activities associated with the operation of heavy equipment may generate localized groundborne vibration and noise. However, vibration from non-impact construction activity is typically below the threshold of perception when the activity is more than about 50 feet from receiver. Moreover, vibration from such activities is a short-term effect that ends when construction is completed.

#### **c. Less than Significant**

Future traffic noise levels associated with the proposed project would increase ambient noise levels at the nearest outdoor use areas by up to 10 dB. Ambient noise levels in undeveloped or industrial use zones are predicted to increase by up to 34 dB in some areas, as existing ambient noise levels are in the range of 40 to 50 dBA in areas west of SR 65. As described in the *Local Noise Ordinances* section, vehicle noise is exempt from local noise ordinance provisions; however, noise compatibility standards may need to be addressed when development is proposed for currently undeveloped areas.

The proposed project would have no on-site facilities that would be permanent sources of noise adjacent to a residential use.

#### **d. Less than Significant with Mitigation**

Construction activities at the project site would result in a temporary increase in noise levels at residential areas near the eastern terminus of the project. Construction noise would be short term, intermittent, and overshadowed by local traffic noise. However, as discussed under Checklist Item (a), project construction may occur during nighttime hours of 10: p.m. to 7:00 a.m. Construction east of SR 65 would likely result in a noticeable increase in noise above ambient levels, particularly during nighttime hours. This impact is therefore considered significant. Implementation of Mitigation Measures NOI-1 and NOI-2 would reduce this impact to a less-than-significant level.

#### **Mitigation Measure NOI-1: Employ Noise-Reducing Construction Practices during Construction**

Described under checklist item a.

**Mitigation Measure NOI-2. Limit Construction within 350-feet of Residential Uses**

Described under checklist item a.

**e, f. No Impact**

The proposed project is not located within an airport land use plan area or within 2 miles of a public airport.

**References**

City of Rocklin. 2012. *Noise Element of the City of Rocklin General Plan*. Chapter 4E. Rocklin. October. Available: <https://www.rocklin.ca.us/civica/filebank/blobdload.asp?BlobID=15661>. Accessed February 20, 2015.

County of Placer. 2013. *Noise Element of the County of Placer General Plan*. Section 9. Auburn. May.  
ICF International. 2014. *Placer Parkway Phase I Noise Study Report*. May.

## Population and Housing

XIII. Population and Housing	Potentially Significant Impact	Less-than-Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:				
a. Induce substantial population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Displace a substantial number of existing housing units, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Displace a substantial number of people, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

## Environmental Setting

The population of Placer County is growing and is expected to grow the most rapidly in the cities of Rocklin, Lincoln, and Roseville. At present, the nearest land uses to the project area are a residential neighborhood to the east, industrial and commercial uses to the north and northwest, and open space in the surrounding areas. The area west of SR 65 is included in the Sunset Industrial Area Plan, which was established to improve opportunities for industrial development, attract new industries, retain existing industries, and allow them to expand. (California Department of Transportation 2014).

## Discussion of Impacts

### a. Less than Significant

The proposed project would provide increased access to SR 65 from surrounding areas (the cities of Rocklin and Lincoln and unincorporated Placer County). The proposed project would provide businesses in the Sunset Industrial Area with immediate access to SR 65 that is not currently available. The nearby residential areas in Lincoln and Rocklin would also gain an additional access point to SR 65.

Development in the vicinity of the project site is planned and is reasonably foreseeable. Areas to be developed near the project site would be geographically confined and contiguous with other developed areas. The proposed project would aid development by providing direct access to SR 65, but it would not introduce new or changed conditions that would affect growth. (California Department of Transportation 2014).

### b, c. No impact

The proposed project would be located primarily within the existing SR 65 right-of-way and newly acquired ROW. It would not displace existing housing units or necessitate the construction of

replacement housing elsewhere. It would also not displace people or necessitate the construction of replacement housing elsewhere.

## References

California Department of Transportation. 2014. *Placer Parkway Phase I Community Impact Assessment*. State Route 65 from Sunset Boulevard to Twelve Bridges Drive and 1.5 miles southwest to Foothills Boulevard North, Placer County, CA. EA 2F920K. Prepared by ICF International, Sacramento CA. August.

## Public Services

<b>XIV. Public Services</b>	Potentially Significant Impact	Less-than-Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:				
a. Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities or a 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 following public services:				
Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

## Environmental Setting

### Fire Protection

The CalFire Nevada, Yuba, Placer Unit provides fire protection services in unincorporated Placer County. The nearest station is located directly northwest of the project area at 1300 Athens Avenue in Lincoln. The City of Rocklin Fire Department also serves the project area, and the nearest station is located at 2001 Wildcat Blvd. in Rocklin, less than 1 mile east of the project area (California Department of Transportation 2014).

The Placer County Office of Emergency Services (OES), headquartered in Auburn, coordinates countywide disaster response services and manages the County’s Emergency Operation Centers. The Placer County Fire Department is administered by the OES. It provides fire protection services and manages the Hazardous Materials Response Program, which has a Roseville team and two interagency teams based in Auburn and Truckee. There is a County/CalFire station on Athens Avenue, close to the northeastern portion of the project area. The cities of Roseville, Rocklin, and Lincoln have independent fire departments that provide services within city limits and can also coordinate with other emergency service providers in the region on a mutual aid basis. The Roseville Fire Department has nine fire stations located throughout the city; the closest station to the project area is located at 1020 Winding Creek Way (City of Roseville 2011).

## Police Protection

The Placer County Sheriff's Department provides law enforcement services in the portion of the project area located within unincorporated Placer County. The cities of Roseville, Rocklin, and Lincoln have independent police departments that provide services within their city limits and can also coordinate with other emergency service providers in the region on a mutual aid basis (California Department of Transportation 2014).

The Valley Division of the California Highway Patrol provides highway patrol services to the region, including the project area. The closest office is in Newcastle at 9440 Indian Hill Road (California Highway Patrol 2014).

## Schools

Several schools are located in the vicinity of the project area (Figure 14). Most of the project area is served by the Western Placer Unified School District (WPUSD), though a small portion of the eastern edge of the project area is served by Rocklin School District. Sunset Ranch Elementary School is located approximately 1 mile east of the project limits at 2500 Bridlewood Drive in Rocklin. Whitney High School is located approximately 0.5 mile northeast of the project limits at 701 Wildcat Blvd. in Rocklin. Twelve Bridges Middle School (part of the WPUSD) is located approximately 0.7 mile northeast of the project area. William Jessup University, a private college, is located approximately 0.5 mile southeast of the project limits at 333 Sunset Blvd. in Rocklin. There are also several daycare and preschool centers near the project area. Twelve Bridges Montessori Preschool, Play Time Learning, and Rosey Cheeks Daycare are all located approximately 0.9 mile northeast of the project area (California Department of Transportation 2014).

## Parks

There are several publicly operated community and neighborhood parks in the vicinity of the project area. The nearest public park and recreation facility is Margaret Azevedo Park, a neighborhood park located in Rocklin approximately 0.7 mile southeast of the project area (California Department of Transportation 2014).

# Discussion of Impacts

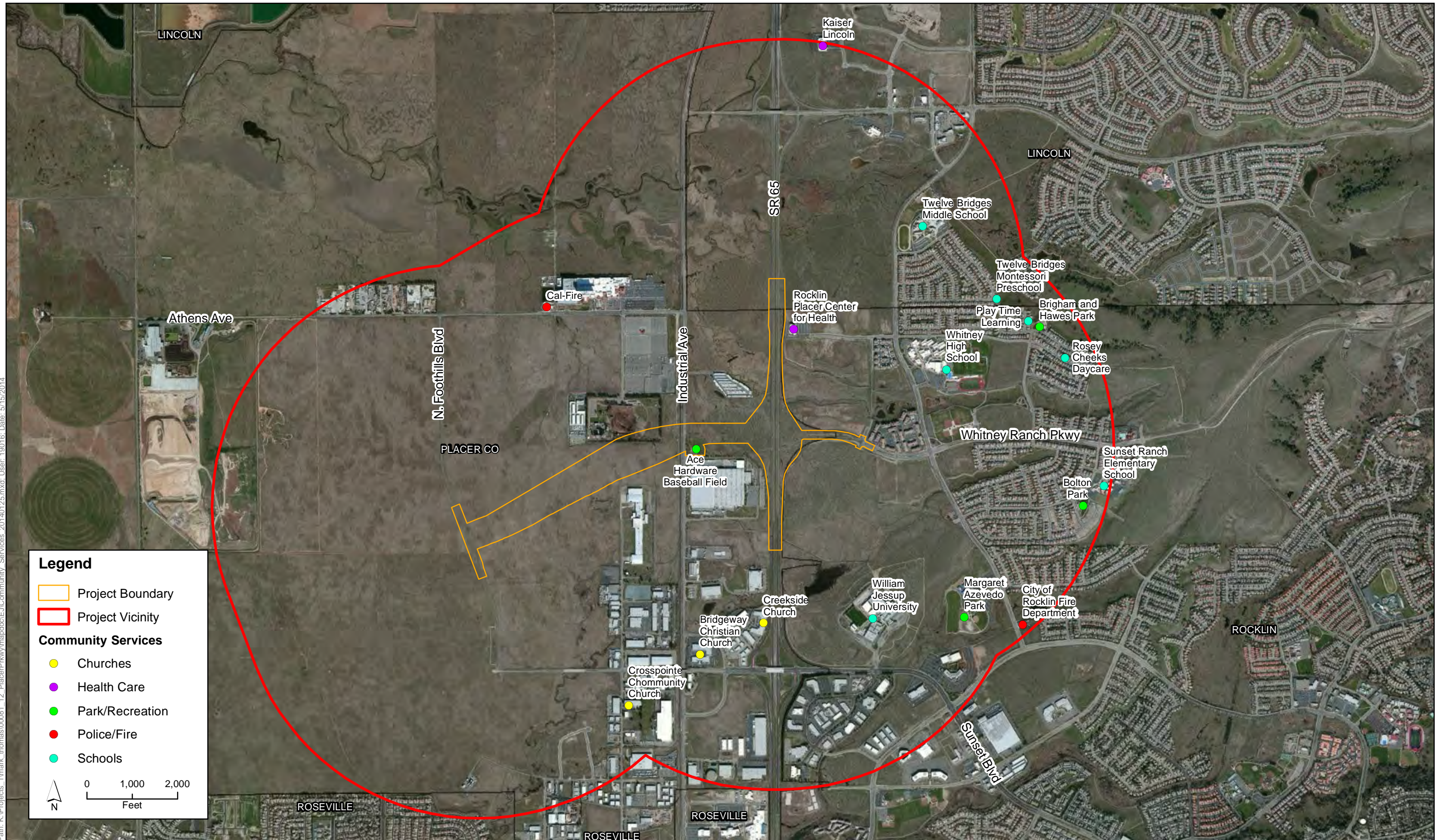
## a. No Impact

The proposed project would not result in the need for new or physically altered governmental facilities. The project area would continue to be served by existing fire and police facilities. Temporary effects on emergency access and response times are discussed in Section XVI, *Transportation/Traffic*, below.

The proposed project would not directly affect any schools in the vicinity and would not provide new housing that could increase the use of schools. The nearest public park is 0.7 miles from the project area. The proposed project would not affect parks, park services, or recreational services or result in the need for new park facilities.

Maintenance of Placer Parkway would be the responsibility of the Placer County Department of Public Works and would be conducted with existing maintenance facilities. No new or expanded maintenance facilities would be needed.

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**Legend**

- Project Boundary
- Project Vicinity

**Community Services**

- Churches
- Health Care
- Park/Recreation
- Police/Fire
- Schools

0 1,000 2,000 Feet

N



Figure 14  
Community Services

## References

California Department of Transportation. 2014. *Placer Parkway Phase I Community Impact Assessment*. State Route 65 from Sunset Boulevard to Twelve Bridges Drive and 1.5 miles southwest to Foothills Boulevard North, Placer County, CA. EA 2F920K. Prepared by ICF International, Sacramento CA. August.

California Highway Patrol. 2014. *CHP Valley Division*. Available: <http://www.chp.ca.gov/offices/201.html>. Accessed: August 19, 2014.

City of Roseville. 2011. *Location of Fire Stations*. Available: <http://www.roseville.ca.us/civicax/filebank/blobdload.aspx?blobid=21712>. Accessed: August 19, 2014.



## Recreation

<b>XV. Recreation</b>	Potentially Significant Impact	Less-than-Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:				
a. Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

## Environmental Setting

The City of Rocklin manages 30 developed parks and another 200 acres of open space for its residents (City of Rocklin 2014). There are several public parks within the vicinity of the project area. The nearest is Margaret Azevedo Park, a 24- acre neighborhood park located in Rocklin approximately 0.7 mile southeast of the project limits (City of Rocklin 2014).

A baseball field privately owned by Ace Hardware lies within the project area. Though not a public park, it is considered a community resource. Ace Hardware allows Lincoln Little League, Rocklin Little League, and Roseville Little League to use the field free of charge for practice and games (California Department of Transportation 2014).

## Discussion of Impacts

### a, b. Less than Significant

The proposed project does not include the construction of recreational facilities or construction of land uses that would increase the use of existing facilities. The nearest public park is 0.7 mile from the project area. Project construction would not disrupt public park activities, and construction would not prevent access to any nearby public parks.

All three of the build alternatives would affect the private Ace Hardware baseball field, making it no longer available for use by local Little League teams. Because construction of the proposed project would not begin until 2018 it is anticipated that the local Little Leagues would be able to devise a practice schedule to accommodate the loss of the Ace Hardware field or make use of facilities already planned for development within the cities of Roseville and Rocklin, such as the regional sports park proposed within the West Roseville Specific Plan area south of Blue Oaks Boulevard between Phillip Road and Hayden Parkway in Roseville.

Construction and operation of the proposed project would not result in a substantial increase in use of existing neighborhood and regional parks or other recreational facilities. This impact is considered less than significant and no mitigation is required. Notification about the future closure

of the private baseball field, as described in Measure **REC-1**, Notify Local Parks and Recreation, would ensure sufficient advance notice so that local Little Leagues can plan future schedules.

### **Measure REC-1: Notify Local Parks and Recreation Departments**

Placer County will notify the cities of Rocklin, Lincoln, and Roseville parks and recreation departments in advance of the closure of the private baseball field owned and operated by Ace Hardware.

### **References**

California Department of Transportation. 2014. *Placer Parkway Phase I Community Impact Assessment*. State Route 65 from Sunset Boulevard to Twelve Bridges Drive and 1.5 miles southwest to Foothills Boulevard North, Placer County, CA. EA 2F920K. Prepared by ICF International, Sacramento, CA. August.

City of Rocklin. 2014. *City of Rocklin Parks*. Rocklin, CA. Available: <<http://www.rocklin.ca.us/depts/parksnrec/parks/default.asp>>. Accessed: July 30, 2014.

## Transportation/Traffic

XVI. Transportation/Traffic	Potentially Significant Impact	Less-than-Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:				
a. Conflict with an applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation, including mass transit and non-motorized travel and relevant components of the circulation system, including, but not limited to, intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Conflict with an applicable congestion management program, including, but not limited to, level-of-service standards and travel demand measures or other standards established by the county congestion management agency for designated roads or highways?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Substantially increase hazards because of a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Result in inadequate emergency access?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f. Conflict with adopted policies, plans, or programs regarding public transit, bicycle or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

## Environmental Setting

A Traffic Analysis Report (Fehr & Peers 2013) was prepared for the proposed project. The traffic analysis study area is located in unincorporated Placer County and the cities of Roseville, Lincoln, and Rocklin. The study area is generally bounded by Fiddymont Road to the west, Blue Oaks Boulevard to the south, E. Joiner Parkway to the east, and Sterling Parkway to the north. The study area includes basic freeway segments and ramp junctions on SR 65 in both directions from Twelve Bridges Drive to Sunset Boulevard. Industrial Avenue crosses the proposed four-lane expressway just west of the SR 65 junction. Connections to the SR 65 interchange from the east may be partially provided by a separate project that would extend Whitney Ranch Parkway to SR 65 and provide access to northbound and southbound SR 65 from Rocklin (Fehr & Peers 2013).

Public bus transit in the study area is provided by Placer County Transit and Lincoln Transit. Placer County's Lincoln/Rocklin/Sierra College bus route runs between downtown Lincoln and Sierra College in Rocklin, between the hours of 6:00 a.m. and 11:00 p.m. Monday through Saturday. The nearest stop to the study area is at the Twelve Bridges School Library at the Twelve Bridges Middle School (see Figure 9). Lincoln Transit runs a downtown circulator, Route 205, from downtown Lincoln to Kaiser Permanente in Lincoln, north of the project area. Route 205 runs every hour between 6:35 a.m. and 5:25 p.m. and includes a stop at Twelve Bridges School Library. (California Department of Transportation 2014). In the City of Rocklin portion of the study area, sidewalks are provided on Whitney Ranch Parkway and other roadways adjacent to development. In the Placer County portion of the study area, within the limits of the Sunset Industrial Area Plan, sidewalks are not provided.

### **Acceptable Traffic Operating Conditions**

The acceptable traffic operating conditions for each jurisdiction in the study area is described below.

#### ***California Department of Transportation***

Caltrans has identified the route concept LOS as LOS E for the study facilities. The LOS E threshold was used to identify minimum acceptable operations and potential impacts to state highway mainline segments, ramp junctions, weaving segments, and ramp terminal intersections. For locations with LOS F under the no project condition, an impact would occur if the project alternatives worsen the LOS F condition based on the quantitative performance measure associated with the specific type of analysis.

#### ***City of Roseville***

For study intersections within the City of Roseville, the *City of Roseville General Plan 2025* (adopted May 5, 2010) LOS policy states:

Maintain a level of service (LOS) "C" standard at a minimum of 70 percent of all signalized intersections and roadway segments in the City during the P.M. peak hours. Exceptions to the LOS "C" standard may be considered for intersections where the City finds that the required improvements are unacceptable based on established criteria identified in the implementation measures. In addition, Pedestrian Districts may be exempted from the LOS standard.

LOS C will serve as the minimum acceptable LOS for the Blue Oaks Boulevard/Foothills Boulevard intersection during the PM peak hour.

#### ***City of Lincoln***

For study intersections within the City of Lincoln, the *City of Lincoln General Plan* (adopted March 2008) LOS policy for local streets and intersections states:

Strive to maintain a LOS C at all signalized intersections in the City during the p.m. peak hours.

The LOS policy for state highways states:

The City shall coordinate with Caltrans in order to strive to maintain a minimum LOS "D" for SR-65 and SR-193.

Based on this standard, LOS C and LOS D will serve as the minimum acceptable LOS for the intersections of East Joiner Parkway/Twelve Bridges Drive and SR-65/Sterling Parkway, respectively, during the PM peak hour. With the opening of the Lincoln Bypass in 2012, SR-65 was

re-routed from G Street through downtown. As a result, the SR-65/Sterling Parkway intersection is no longer be under Caltrans' jurisdiction and is subject to the City of Lincoln's policies, with LOS C serving as the minimum acceptable LOS.

### **City of Rocklin**

For study intersections within the City of Rocklin, the *City of Rocklin General Plan* (updated August 2012), Policy C-10 of the Circulation Element states:

- A. Maintain a minimum traffic Level of Service "C" for all signalized intersections during the p.m. peak hour on an average weekday, except in the circumstances described in C-10.B and C. below.
- B. Recognizing that some signalized intersections within the City serve and are impacted by development located in adjacent jurisdictions, and that these impacts are outside the control of the City, a development project which is determined to result in a Level of Service worse than "C" may be approved, if the approving body finds (1) the diminished level of service is an interim situation which will be alleviated by the implementation of planned improvements or (2) based on the specific circumstances described in Section C below, there are no feasible street improvements that will improve the Level of Service to "C" or better as set forward in the Action Plan for the Circulation Element.
- C. All development in another jurisdiction outside of Rocklin's control which creates traffic impacts in Rocklin should be required to construct all mitigation necessary in order to maintain a LOS C in Rocklin unless the mitigation is determined to be infeasible by the Rocklin City Council. The standard for determining the feasibility of the mitigation would be whether or not the improvements create unusual economic, legal, social, technological, physical or other similar burdens and considerations.

Based on these standards, for this project LOS C will serve as the minimum acceptable LOS for the City of Rocklin intersections in both the a.m. and p.m. peak hours.

If an intersection is already operating at an unsatisfactory level of service, an increase of 5 percent (addition of 0.05) to the volume-to-capacity ratio would be considered a measurable worsening of the intersection operations and therefore would constitute a significant project impact. (City of Rocklin 2011)

If an unsignalized intersection is already operating at unsatisfactory LOS, then the addition of more than 5 percent of the total traffic at the intersection would be considered a significant project impact. (City of Rocklin 2011)

This threshold applies even where project traffic will be added to existing or projected conditions that are already unacceptable or are projected to be unacceptable under cumulative conditions without the project. (City of Rocklin 2011)

### **Placer County**

For study intersections within Placer County, the *Placer County General Plan* (Adopted August 16, 1994) LOS Policy 3.A.7 states:

The County shall develop and manage its roadway system to maintain the following minimum levels of service:

- LOS C on rural roadways, except within one-half mile of state highways where the standard shall be LOS D.
- LOS C on urban/suburban roadways, except within one-half mile of state highways where the standard shall be LOS D.

Based on these standards, LOS C will serve as the minimum acceptable LOS for Placer County intersections, except for Placer Corporate Drive/Sunset Boulevard. This intersection is located within one-half mile of SR-65; therefore LOS D is the minimum acceptable LOS.

**Baseline Conditions (2012)**

Existing, baseline conditions were collected using peak period traffic counts conducted for the proposed project in 2012. The traffic counts revealed two intersections that operate at LOS D during the AM peak period—Wildcat Boulevard/West Stanford Ranch Road in Rocklin and Blue Oaks Boulevard/Foothills Boulevard in Roseville. These intersections serve both inbound (employees and students) and outbound (residents) commuters for Roseville and Rocklin. The LOS policies for Roseville and Rocklin only apply to the PM peak hour, and, therefore, these intersections do not operate unacceptably. All portions of the project area on SR 65 also operate at an acceptable LOS B or C during both peak hours (Fehr & Peers 2013). Tables 13 and 14 provide detailed baseline traffic conditions.

**Table 13. Baseline (2012) Condition Intersection Operations**

Intersection	Jurisdiction (Minimum Acceptable LOS)	Traffic Control	AM Peak Hour (LOS/average delay in seconds)	PM Peak Hour (LOS/average delay in seconds)
1 SR-65/Sterling Pkwy	Caltrans (D)	Signal	C / 26	B / 20
2 SR-65 SB Ramps/Twelve Bridges Dr	Caltrans (E)	Signal	B / 10	A / 8
3 SR-65 NB Ramps/Twelve Bridges Dr	Caltrans (E)	Signal	A / 10	B / 13
4 E. Joiner Pkwy/Twelve Bridges Dr	City of Lincoln (C - PM Only)	Signal	C / 35	C / 31
5 Athens Ave/Fiddymont Rd	Placer County (C)	All-Way Stop	B / 11	B / 13
6 Athens Ave/Foothills Blvd North	Placer County (C)	Side- Street Stop	B / 13	C / 16
7 Athens Ave/Thunder Valley Casino Garage Drwy	Placer County (C)	Signal	B / 16	C / 20
8 Athens Ave/Thunder Valley Casino Hotel Drwy	Placer County (C)	Signal	A / 4	B / 13
9 Athens Ave/Thunder Valley Ct	Placer County (C)	Signal	B / 14	B / 18
10 Athens Ave/Industrial Ave	Placer County (C)	Signal	B / 15	B / 16
11 Whitney Ranch Pkwy/Wildcat Blvd	City of Rocklin (C)	Signal	C / 23	B / 18
12 Sunset Blvd/Cincinnati Ave	Placer County (C)	Signal	B / 15	C / 24
13 Placer Corporate Dr/Industrial Ave	Placer County (C)	Signal	B / 12	B / 12
14 Placer Corporate Dr/Sunset Blvd	Placer County (D)	Side- Street Stop	B / 11	D / 31
15 South Loop Rd/Industrial Ave	Placer County (C)	Signal	B / 13	B / 16
16 SR-65 SB Ramps/Sunset Blvd	Caltrans (E)	Signal	A / 8	A / 5
17 SR-65 NB Ramps/Sunset Blvd	Caltrans (E)	Signal	A / 9	A / 9
18 Wildcat Blvd/W. Stanford Ranch Rd	City of Rocklin (C)	Signal	D / 44	C / 25
19 Blue Oaks Blvd/Foothills Blvd	City of Roseville (C - PM Only)	Signal	D / 40	C / 30

Source: Fehr &amp; Peers 2013

**Table 14. Baseline (2012) Condition Freeway Operations**

Freeway	Location	Type	LOS/Average Density	
			AM Peak Hour	PM Peak Hour
NB SR-65	Sunset Blvd Off-ramp	Diverge	B / 10	B / 16
	Sunset Blvd EB On-ramp	Merge	B / 14	C / 24
	Sunset Blvd WB On-ramp	Merge	B / 11	C / 21
	Sunset Blvd to Twelve Bridges Dr	Basic	B / 12	C / 22
	Twelve Bridges Dr Off-ramp	Diverge	B / 17	C / 27
	Twelve Bridges Dr On-ramp	Merge	B / 15	C / 23
SB SR-65	Twelve Bridges Dr Off-ramp	Diverge	B / 18	B / 12
	Twelve Bridges Dr On-ramp	Merge	C / 26	B / 20
	Twelve Bridges Dr to Sunset Blvd	Basic	C / 22	B / 16
	Sunset Blvd Off-ramp	Diverge	B / 17	B / 11
	Sunset Blvd WB On-ramp	Merge	C / 26	C / 23
	Sunset Blvd EB On-ramp	Merge	C / 23	C / 21

Note: Average density is reported in passenger cars per lane per mile (pcplpm).

Source: Fehr & Peers 2013

## Discussion of Impacts

### a, b. Less than Significant with Mitigation

#### Open-to-Traffic (2020) Intersection and Freeway Operations

The proposed project would redistribute traffic within the study area, which would decrease delay and improve traffic operations at two intersections that would operate unacceptably under no build conditions (Fehr & Peers 2013). Therefore, the project would not result in any significant impacts at the study intersections in 2020. Similarly, all freeway facilities are projected to operate acceptably during construction (Fehr & Peers 2013). Accordingly, the open-to-traffic year operations of the project would not conflict with any applicable plans, ordinances, policies, or standards. This impact would be less than significant. Tables 15 and 16 provide intersection and freeway conditions once the proposed project is open to traffic.



**Table 15. Open-to-Traffic (2020) Condition Intersection Operations**

Intersection	Jurisdiction (Minimum Acceptable LOS)	Traffic Control	No Build (LOS/average delay in seconds)		Build (LOS/ average delay in seconds)	
			AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour
2 SR-65 SB Ramps/Twelve Bridges Dr	Caltrans (E)	Signal	B / 15	B / 10	B / 18	B / 12
3 SR-65 NB Ramps/Twelve Bridges Dr	Caltrans (E)	Signal	B / 17	B / 16	B / 15	B / 16
4 E. Joiner Pkwy/Twelve Bridges Dr	City of Lincoln (C – PM Only)	Signal	C / 22	C / 26	C / 28	C / 30
5 Athens Ave/Fiddymont Rd	Placer County (C)	All-Way Stop	B / 10	B / 10	A / 10	A / 9
6 Athens Ave/Foothills Blvd North	Placer County (C)	Side-Street Stop	C / 17	C / 19	B / 12	C / 19
7 Athens Ave/Thunder Valley Casino Garage Drwy	Placer County (C)	Signal	B / 17	C / 35	C / 22	C / 31
8 Athens Ave/Thunder Valley Casino Hotel Drwy	Placer County (C)	Signal	A / 4	A / 7	A / 4	A / 3
9 Athens Ave/Thunder Valley Ct	Placer County (C)	Signal	B / 15	B / 19	B / 16	B / 19
10 Athens Ave/Industrial Ave	Placer County (C)	Signal	C / 27	C / 28	C / 25	C / 28
11 Whitney Ranch Pkwy/Wildcat Blvd	City of Rocklin (C)	Signal	C / 25	C / 24	C / 30	C / 27
12 Sunset Blvd/Cincinnati Ave	Placer County (C)	Signal	C / 27	C / 30	C / 27	C / 21
13 Placer Corporate Dr/Industrial Ave	Placer County (C)	Signal	B / 14	B / 12	B / 15	B / 10
14 Placer Corporate Dr/Sunset Blvd	Placer County (D)	Side-Street Stop	C / 23	<b>F / &gt;240</b>	B / 13	<b>F / 123</b>
15 South Loop Rd/Industrial Ave	Placer County (C)	Signal	B / 18	C / 24	B / 14	C / 35
16 SR-65 SB Ramps/Sunset Blvd	Caltrans (E)	Signal	B / 11	A / 8	B / 12	A / 9
17 SR-65 NB Ramps/Sunset Blvd	Caltrans (E)	Signal	B / 16	B / 14	B / 16	B / 20
18 Wildcat Blvd/W. Stanford Ranch Rd	City of Rocklin (C)	Signal	C / 31	C / 22	C / 32	C / 23
19 Blue Oaks Blvd/Foothills Blvd	City of Roseville (C – PM Only)	Signal	<b><u>D / 37</u></b>	<b><u>D / 44</u></b>	<b><u>D / 37</u></b>	<b><u>D / 42</u></b>
20 Twelve Bridges Dr/Industrial Ave	City of Lincoln (C – PM Only)	Signal	B / 19	C / 21	B / 15	C / 22
21 SR-65 SB Ramps/Lincoln Blvd	Caltrans (E)	Signal	C / 22	B / 16	B / 20	B / 17
22 SR-65 NB Ramps/Lincoln Blvd	Caltrans (E)	Signal	A / 9	B / 17	A / 9	B / 18
23 SR-65 SB Ramps/Placer Pkwy	Caltrans (E)	Signal	Uncontrolled Intersection		A / 7	A / 8
24 SR-65 NB Ramps/ Whitney Ranch Pkwy	Caltrans (E)	Signal	A / 1	A / 1	A / 5	A / 8
25 Whitney Ranch Pkwy/University Ave	City of Rocklin (C)	Signal	B / 15	B / 18	B / 16	B / 18
26 Placer Pkwy/Foothills Blvd North	Placer County (C)	Signal	B / 10	B / 11	B / 19	B / 19

Notes: **Bold** and underlined text indicates unacceptable LOS. Shaded cells indicate a significant impact.

Intersection 1 (SR 65/Sterling Parkway) was only analyzed under Existing Conditions. For Open-to-Traffic year and Design Year scenarios, the analysis of the SR 65/Sterling Parkway intersection was replaced by the two ramp terminal intersections at the SR 65/Lincoln Boulevard interchange, which opened in Fall 2012 as part of the Lincoln Bypass project.

Source: Fehr & Peers 2013

**Table 16. Open-to-Traffic (2020) Condition Freeway Operations**

Freeway	Location	Type	LOS / Average Density			
			No Build		Build	
			AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour
NB SR-65	Sunset Blvd Off-ramp	Diverge	B / 17	C / 24	B / 18	C / 25
	Sunset Blvd EB On-ramp	Merge	B / 19	D / 31	B / 20	D / 31
	Sunset Blvd to Whitney Ranch Pkwy	Weave	A	C	A	C
	Whitney Ranch Pkwy EB On-ramp	Merge	Does not Exist		B / 19	D / 30
	Whitney Ranch Pkwy WB On-ramp	Merge	B / 14	C / 26	B / 15	C / 27
	Whitney Ranch Pkwy to Twelve Bridges Dr	Basic	B / 17	D / 29	B / 18	D / 29
	Twelve Bridges Dr Off-ramp	Diverge	C / 21	D / 34	C / 23	D / 35
	Twelve Bridges Dr to Lincoln Blvd	Weave	A	C	A	C
SB SR-65	Lincoln Blvd to Twelve Bridges Dr	Weave	C	B	C	B
	Twelve Bridges Dr On-ramp	Merge	D / 32	C / 24	D / 33	C / 25
	Twelve Bridges to Placer Pkwy	Basic	D / 29	C / 20	D / 30	C / 21
	Placer Pkwy Off-ramp	Diverge	C / 24	B / 15	C / 25	B / 16
	Placer Pkwy WB On-ramp	Merge	C	B	C / 21	B / 16
	Placer Pkwy EB On-ramp	Merge			C / 23	B / 18
	Sunset Blvd Off-ramp	Diverge			C / 20	B / 16
	Sunset Blvd WB On-ramp	Merge	D / 32	C / 27	D / 32	D / 30
Sunset Blvd to Blue Oaks Blvd	Merge	D / 31	D / 29	D / 31	D / 29	

Notes Average density is reported in passenger cars per lane per mile

Source: Fehr & Peers 2013

### Design Year (2040) Intersection Operations

Traffic operations at all study area intersections and freeway facilities under design year (2040) conditions were evaluated by Fehr & Peers (2013). The traffic analysis assumes construction of all project improvements, included the completed SR 65 interchange and four-lane expressway between SR 65 and Foothills Boulevard North. Table 17 summarizes the LOS and delay for the study area intersections for both the build alternatives and No-Build Alternative. Unacceptable operations are shown in bold and potentially significant impacts are shown in grey.

**Table 17. Design Year (2040) Condition Intersection Operational Results**

Intersection	No Build (LOS/average delay in seconds)		Build (LOS/average delay in seconds)	
	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour
2 SR 65 Southbound Ramps/Twelve Bridges Dr	D / 50	C / 35	B / 12	B / 15
3 SR 65 Southbound Ramps/Twelve Bridges Dr	D / 45	E / 63	C / 31	D / 39
4 E. Joiner Pkwy/Twelve Bridges Dr	C / 25	C / 26	C / 25	C / 29
5 Athens Ave/Fiddymnt Rd	<b>F / 85</b>	<b>F / 163</b>	<b>F / 105</b>	<b>F / 106</b>
6 Athens Ave/Foothills Blvd North	<b>F / 75</b>	<b>D / 30</b>	C / 25	<b>F / &gt;240</b>
7 Athens Ave/Thunder Valley Casino Garage Driveway	C / 34	<b>F / 86</b>	B / 18	C / 28
8 Athens Ave/Thunder Valley Casino Hotel Driveway	A / 4	A / 5	A / 3	A / 5
9 Athens Ave/Thunder Valley Ct	B / 15	C / 25	B / 13	C / 20
10 Athens Ave/Industrial Ave	<b>F / 222</b>	<b>F / &gt;240</b>	<b>F / 96</b>	<b>F / 105</b>
11 Whitney Ranch Pkwy/Wildcat Blvd	<b>D / 35</b>	<b>D / 46</b>	<b>D / 40</b>	<b>D / 45</b>
12 Sunset Blvd/Cincinnati Ave	<b>F / 105</b>	<b>F / 100</b>	C / 31	<b>E / 61</b>
13 Placer Corporate Dr/Industrial Ave	B / 20	B / 14	B / 19	B / 14
14 Placer Corporate Dr/Sunset Blvd	C / 23	<b>F / &gt;240</b>	C / 21	<b>F / &gt;240</b>
15 South Loop Rd/Industrial Ave	B / 19	<b>D / 35</b>	B / 18	<b>D / 35</b>
16 SR 65 Southbound Ramps/Sunset Blvd	B / 13	A / 9	B / 14	B / 12
17 SR 65 Northbound Ramps/Sunset Blvd	B / 15	B / 15	B / 15	B / 14
18 Wildcat Blvd/W. Stanford Ranch Rd	E / 63	<b>E / 74</b>	D / 54	<b>E / 66</b>
19 Blue Oaks Blvd/Foothills Blvd	<b>F / 89</b>	<b>F / 118</b>	<b>E / 57</b>	<b>F / 105</b>
20 Twelve Bridges Dr/Industrial Ave	B / 20	D / 50	B / 13	C / 25
21 SR 65 Southbound Ramps/Industrial Ave	B / 15	C / 28	B / 14	C / 27
22 SR 65 Northbound Ramps/Industrial Ave	A / 6	A / 6	A / 4	A / 4
23 SR 65 Southbound Ramps/Placer Pkwy/Whitney Ranch Pkwy	Uncontrolled		A/8	B/18
24 SR 65 Southbound Ramps/Placer Pkwy/Whitney Ranch Pkwy	A / 1	A / 1	B / 13	B / 16
25 Whitney Ranch Pkwy/University Ave	C / 23	C / 27	C / 23	C / 31
26 Placer Pkwy/Foothills Blvd North	C / 20	C / 29	C / 35	C / 31

Notes: Intersection 1 (SR-65/Sterling Parkway) was only analyzed under Baseline Conditions. For Open-to-Traffic year and Design Year scenarios, the analysis of the SR-65/Sterling Parkway intersection was replaced by the two ramp terminal intersections at the SR-65/Lincoln Boulevard interchange, which opened in Fall 2012 as part of the Lincoln Bypass project. Intersection 26 was analyzed with three through lanes in the eastbound and westbound directions, with the third through lane dropping and Placer Parkway narrowing to two lanes after the intersection. Three eastbound and westbound through lanes are necessary to accommodate the through traffic and to provide LOS C operations. The intersection would operate at LOS D with two lanes for the eastbound and westbound through movements.

**Bold** and underlined text indicates unacceptable operations. Shaded cells indicate a significant impact.

Unacceptable operations are shown in bold and potentially significant impacts are shown in grey.

Source: Fehr & Peers 2013

As shown in Table 17, ten study intersections are projected to operate at an unacceptable level under no build conditions, nine of which would continue to operate at an unacceptable level under the project. Of those intersections, the project would increase delay compared with the no build condition at the following three locations.

- 5. Athens Avenue/Fiddymment Road (Placer County)
- 6. Athens Avenue/Foothills Boulevard North (Placer County)
- 11. Whitney Ranch Parkway/Wildcat Boulevard (Rocklin)

The increase in delay at the two Athens Avenue intersections would constitute a potentially significant impact. Implementation of Mitigation Measure TRA-1 would ensure the intersections operate at a minimum of LOS C.

The increase in delay at the Whitney Ranch Parkway/Wildcat Boulevard intersection represents an addition of 0.037 to the volume-to-capacity ratio. Since the increase is less than the City of Rocklin's threshold of 5 percent (addition of 0.05) for intersections already operating at an unacceptable LOS, the increase is considered a less-than-significant impact.

Accordingly, the project would not conflict with any applicable plans, ordinances, policies, or intersection LOS standards.

#### **Design Year (2040) Freeway Operations**

Fehr & Peers (2013) evaluated LOS and average traffic density for each freeway facility in the project study area under design year (2040) conditions. The analysis indicates that freeway operations improve under the project such that no impacts occur on any freeway facilities. However, micro-scale modeling conducted for the separately proposed Interstate 80 (I-80)/SR 65 Interchange Improvement Project, which has a study area that overlaps with the proposed project's study area, indicates that there would be significant queue spillback during the AM peak period on southbound SR 65 due to bottlenecks at Twelve Bridges Drive and Sunset Boulevard, resulting in LOS F conditions at three locations. Table 18 provides design year freeway operations.

**Table 18. Design Year (2040) Condition Freeway Operations**

Freeway	Location	Type	LOS / Average Density			
			No Build		Build	
			AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour
NB SR-65	Sunset Blvd Off-ramp	Diverge	B / 10	B / 14	A / 9	B / 14
	Sunset Blvd EB On-ramp	Merge	C / 27	E / 38	C / 24	E / 37
	Sunset Blvd to Whitney Ranch Pkwy	Weave <sup>1</sup>	C	E	C	E
	Whitney Ranch Pkwy EB On-ramp	Merge	Does Not Exist		C / 24	E / 35
	Whitney Ranch Pkwy WB On-ramp	Merge	C / 21	<b><u>F</u></b> / --	C / 22	D / 33
	Whitney Ranch Pkwy to Twelve Bridges Dr	Basic	C / 23	<b><u>F</u></b> / --	C / 24	E / 43
	Twelve Bridges Dr Off-ramp	Diverge	D / 29	<b><u>F</u></b> / --	D / 30	E / 43
	Twelve Bridges Dr to Lincoln Blvd	Weave <sup>1</sup>	D	<b><u>F</u></b>	D	<b><u>F</u></b>
SB SR-65	Lincoln Blvd to Twelve Bridges Dr	Weave <sup>1</sup>	<b><u>F</u></b>	E	E	E
	Twelve Bridges Dr On-ramp	Merge	E / 39	D / 33	E / 39	D / 33
	Twelve Bridges to Placer Pkwy	Basic	E / 43	D / 31	E / 41	D / 31
	Placer Pkwy Off-ramp	Diverge	D / 32	C / 25	D / 31	C / 26
	Placer Pkwy WB On-ramp	Merge			C / 24	B / 19
	Placer Pkwy EB On-ramp	Merge	D <sup>1</sup>	D <sup>1</sup>	D / 28	C / 25
	Sunset Blvd Off-ramp	Diverge			C / 25	C / 21
	Sunset Blvd WB On-ramp	Merge	E / 37	D / 34	E / 37	D / 34
	Sunset Blvd to Blue Oaks Blvd	Weave <sup>1</sup>	E	E	E	E

Notes: Average density is reported in passenger cars per lane per mile.

<sup>1</sup> Density is not reported for weave sections.

**Bold** and underline font indicates unacceptable operations. Density is not reported for LOS F conditions.

Source Fehr & Peers 2013

The I-80/SR 65 transportation analysis recommends mainline improvements on southbound SR 65 including the potential for additional mixed-flow lanes and auxiliary lanes. The proposed project's connection to the Whitney Ranch Parkway interchange could contribute to the need for additional southbound freeway capacity. SR 65 improvements between the I-80/SR 65 interchange and the Lincoln Bypass is a separately proposed and funded project that is currently being analyzed and designed by the Placer County Transportation Planning Agency (PCTPA). Placer County and PCTPA are coordinating regarding the scale and timing of SR 65 improvements in relation to current and future projects in the region. No mitigation is required.

### **Mitigation Measure TRA-1. Install Traffic Signals at Affected Intersections to Ensure Acceptable Traffic Operations**

After the project is constructed, but prior to design year (2040), Placer County will install traffic signals at the following intersections to reduce delays and achieve acceptable LOS operations under design year (2040) conditions (Fehr & Peers 2013).

- Athens Avenue/Fiddymont Road
- Athens Avenue/Foothills Boulevard North

#### **c. No Impact**

The proposed project is not anticipated to result in any changes in air traffic patterns, increase in air traffic levels, or a change in location that would result in substantial safety risks. Therefore, no impact would occur with project implementation.

#### **d, e. Less than Significant with Mitigation**

The proposed roadway improvements would alleviate traffic on neighboring transportation facilities by providing parallel capacity to Blue Oaks Boulevard, Sunset Boulevard, and Athens Avenue. Therefore, implementation of the proposed project would reduce congested roadway conditions and associated safety hazards on neighboring transportation facilities. While traffic volumes on Blue Oaks Boulevard, Sunset Boulevard, and Athens Avenue would slightly increase with implementation of the project, they are not expected to result in dangerous driving conditions or congestion that would violate applicable traffic polices (refer to checklist items a and b).

For the majority of project construction, two lanes in each direction on SR 65, and one lane in each direction on Industrial Boulevard, Foothills Boulevard North, and Whitney Ranch Parkway are anticipated to remain open to traffic. During construction, short-term (overnight or weekend) closures with detours would be necessary on SR 65 and Industrial Avenue for the erection and removal of bridge falsework. These temporary lane closures, as well as the movement of heavy equipment and trucks, could potentially increase safety hazards for vehicles traveling through the project area. Mitigation Measure TRA-2, Prepare and Implement a Traffic Management Plan, would ensure that construction activities would not substantially increase hazards within the project area.

The proposed project is not anticipated to significantly affect acceptable response times for fire and police protection services. During planned detours, access routes would be coordinated with emergency service providers to ensure that response times are not delayed or affected by construction activities. The following emergency service providers would be notified by Placer County prior to any road closures.

- Placer County Sheriff's Department
- CalFire Nevada, Yuba, Placer Unit
- City of Rocklin Police Department
- City of Rocklin Fire Department
- City of Lincoln Police Department

Mitigation Measure TRA-2 would ensure that construction would not create major delays to emergency service providers.

The proposed project would increase access to land uses within the project vicinity, as well as reduce congestion on neighboring transportation facilities. Therefore, long-term operation of the project would improve emergency access and mobility within the project study area.

### **Mitigation Measure TRA-2: Prepare and Implement a Traffic Management Plan**

The County will develop or require its contractors to develop a traffic management plan (TMP) that will be implemented throughout project construction. The TMP will:

- Contain a plan for communicating with emergency service providers, and an access and circulation plan for use by emergency vehicles when lane closures or detours are in effect.
- Specify that the contractor will provide advance notice of lane or road closures to local fire and police departments to ensure that emergency routes are designated to maintain response times.
- Provide specific standards to be followed for traffic control signage and implementation to minimize hazards for vehicles travelling through the project area during construction.
- Contain a plan for communicating to the public the locations and routes of detours.
- Require that access to driveways and private roads be maintained at all times.

The provisions of the traffic management plan will be incorporated into the terms and specifications of the contracts for construction of the proposed project and will implemented during the entire construction period.

### **f. Less than Significant.**

Implementation of the proposed project would not conflict with existing transit, bicycle, or pedestrian facilities. Congestion relief provided by the proposed project may improve long-term transit operations by reducing route headways. During construction, temporary lane closures could cause a short-term disruption of transit service on SR 65. This impact would be less than significant. Further, implementation of a TMP, as discussed under checklist items d and e, would minimize access and circulation conflicts during construction.

### **References**

- California Department of Transportation. 2014. *Placer Parkway Phase I Community Impact Assessment*. State Route 65 from Sunset Boulevard to Twelve Bridges Drive and 1.5 miles southwest to Foothills Boulevard North, Placer County, CA. EA 2F920K. Prepared by ICF International, Sacramento, CA. August.
- City of Rocklin. 2011. *General Plan Update, Volume 1, Draft Environmental Impact Report*. Section 4.4, Transportation and Circulation. SCH No. 2008072115.
- Fehr & Peers. 2013. *Placer Parkway Phase I Transportation Analysis Report*. Placer County, CA.

## Utilities and Service Systems

	Potentially Significant Impact	Less-than-Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
<b>XVII. Utilities and Service Systems</b>				
Would the project:				
a. Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Have sufficient water supplies available to serve the project from existing entitlements and resources, or would new or expanded entitlements be needed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e. Result in a determination by the wastewater treatment provider that 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 checked="" type="checkbox"/>	<input 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"/>

## Environmental Setting

Potable water is provided by Placer County Water Agency. Sewer and wastewater treatment services are provided by the South Placer Municipal Utility District. The nearest solid waste collection facility is the Western Placer Waste Management Authority Landfill, a 280-acre facility located at 3195 Athens Avenue that includes a landfill, materials recovery facility, household hazardous waste center, and buy-back center (California Department of Transportation 2014).



## Discussion of Impacts

### **a, b, d, e. No Impact**

The proposed project would not produce wastewater, increase water demand or result in construction of new facilities; therefore, the project would have no impact on water or wastewater treatment facilities.

Construction of the proposed project would not generate a significant water demand. For dust control, water would be provided and brought onsite by the construction contractor. Expanded water facilities would not be required.

### **c. Less than Significant**

The proposed project would include construction of new collection channels, biofiltration strips, and vegetated swales adjacent to the roadway slopes to collect and deliver roadway runoff to existing flow swales and discharge points (Civil Engineering Solutions 2014). Vegetated swales at the ends of the collection channels would perform stormwater quality treatment (Civil Engineering Solutions 2014). Construction of these project-specific facilities would not require the expansion of other existing stormwater drainage facilities.

### **f. Less than Significant**

Solid waste generated by the proposed project would be limited to construction waste. Demolition and construction materials, including any hazardous wastes that may be encountered, would be disposed of pursuant to federal, state, and local regulations. Disposal locations would be determined by the contractor. The disposal need would be temporary. Operation of the proposed project would not result in additional solid waste disposal needs.

### **g. No Impact**

The proposed project would generate waste only during construction activities and would comply with all federal, state, and local laws and regulations related to the disposal of solid waste.

## References

California Department of Transportation. 2014. *Placer Parkway Phase I Community Impact Assessment*. State Route 65 from Sunset Boulevard to Twelve Bridges Drive and 1.5 miles southwest to Foothills Boulevard North, Placer County, CA. EA 2F920K. Prepared by ICF International, Sacramento, CA. August.

Civil Engineering Solutions. 2014. *Draft Drainage Report Placer Parkway Phase I*. Lincoln, CA.

## Mandatory Findings of Significance

XVIII. Mandatory Findings of Significance	Potentially Significant Impact	Less-than-Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
a. Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?	<input type="checkbox"/>	<input 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 type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

## Discussion of Impacts

### a. Less than Significant with Mitigation

With incorporation of Mitigation Measures AES-1, AES-2, AES-3, AQ-1, BIO-1 through BIO-11, CUL-1, GEO-1, GEO-2, HAZ-1, HAZ-2, TRA-1, and TRA-2, the project is not expected to degrade the quality of the environment, substantially reduce the habitat or affect populations of any fish or wildlife species, eliminate important examples of the major periods of California history or prehistory (see Section IV, *Cultural Resources*), or significantly impact public services, utilities, recreation, or public health. The text of the following measures is provided in Section I, *Aesthetics* Section III, *Air Quality*, Section IV, *Biological Resources*, Section V, *Cultural Resources*, Section VI, *Geology and Soils*, Section VIII, *Hazards and Hazardous Materials*, and Section XVI, *Traffic and Transportation*.

#### **Mitigation Measure AES-1: Use Native Grass and Wildflower Species in Erosion Control Grassland Seed Mix.**

#### **Mitigation Measure AES-2: Replant Trees to Provide a Visual Buffer between the Proposed Placer Parkway and Rio Bravo Rocklin.**

**Mitigation Measure AES-3: Implement Measures to Comply with Tree Ordinance.**

**Mitigation Measure AQ-1: Reduce Construction Emissions to Below PCAPCD NOX Thresholds.**

**Mitigation Measure BIO-1: Install Fencing and/or Flagging to Protect Sensitive Biological Resources.**

**Mitigation Measure BIO-2: Conduct Mandatory Environmental Awareness Training for Construction Personnel.**

**Mitigation Measure BIO-3: Retain a Biologist to Conduct Periodic Monitoring during Construction in Sensitive Habitats.**

**Mitigation Measure BIO-4: Protect Water Quality and Minimize Sedimentation Runoff in Wetlands and Other Waters outside the Project Limits.**

**Mitigation Measure BIO-5: Avoid and Minimize Potential Indirect Impacts on Vernal Pool Fairy Shrimp and Vernal Pool Tadpole Shrimp Habitat.**

**Mitigation Measure BIO-6: Compensate for Direct and Indirect Impacts on Vernal Pool Fairy Shrimp and Vernal Pool Tadpole Shrimp Habitat.**

**Mitigation Measure BIO-7: Conduct Vegetation Removal during the Non-Breeding Season and Conduct Preconstruction Surveys for Swainson's Hawk.**

**Mitigation Measure BIO-8: Compensate for Permanent Removal of Swainson's Hawk Foraging Habitat.**

**Mitigation Measure BIO-9: Conduct Preconstruction Surveys for Burrowing Owl and Establish No Exclusion Zones, if Necessary.**

**Mitigation Measure BIO-10: Conduct Vegetation Removal during the Non-Breeding Season and Conduct Preconstruction Surveys for Nesting Migratory Birds and Raptors.**

**Mitigation Measure BIO-11: Compensate for Permanent Fill of Waters of the United States.**

**Mitigation Measure CUL-1: Stop Work if Human Remains are Encountered During Ground-Disturbing Activities.**

**Mitigation Measure GEO-1: Implement Temporary Construction Site BMPs.**

**Mitigation Measure GEO-2: Monitor Excavation and Earthmoving Activities.**

**Mitigation Measure HAZ-1: Test Yellow Pavement Striping and Include Provisions in Standard BMPs.**

**Mitigation Measure HAZ-2: Prepare and Implement Health and Safety Plan.**

**Mitigation Measure TRA-1. Install Traffic Signals at Affected Intersections to Ensure Acceptable Traffic Operations.**

**Mitigation Measure TRA-2: Prepare and Implement a Traffic Management Plan.**

**b. Less than Significant with Mitigation**

The proposed project could contribute to cumulative significant impacts on traffic and biological resources (listed species, wetlands, and protected trees). The incremental effects of the project, in connection with effects of past, current and foreseeable future projects, and the potential for the proposed project to contribute to cumulatively considerable impacts, are discussed further below.

The SACOG 2035 MTP/SCS estimates that the communities of Roseville, Rocklin, and Lincoln will continue to grow toward buildout conditions by the year 2035, including development adjacent to the proposed project consistent with the *City of Rocklin General Plan* (City of Rocklin 2012), the *City of Lincoln 2050 General Plan* (City of Lincoln 2008), the *Roseville General Plan 2025* (City of Roseville 2010), and the *Sunset Industrial Area Plan* (Placer County 1994). Past projects in close proximity to the proposed project that could contribute to significant cumulative impacts include the Thunder Valley Casino Resort expansion project, construction of Foothills Boulevard North between Sunset Boulevard and Athens Avenue, and the City of Rocklin sewer trunk line project. The SR 65/Whitney Ranch Parkway interchange project is currently proposed with construction starting in 2015. Reasonably foreseeable future projects include the Placer Ranch project<sup>4</sup>, the eastern-most portion of which extends into the limits of the proposed project, and the Placer Creek Corporate Center commercial development at the southeast quadrant of the SR 65/Whitney Ranch Parkway interchange.

As described in “8. Description of Project” in the Environmental Checklist above, the Placer Parkway Corridor Preservation project was analyzed in a Tier 1 EIS/EIR (FHWA-CA-FEIS-2009-46 and SCH No. 2003092069)( South Placer Regional Transportation Authority, California Department of Transportation, and Federal Highway Administration. 2007a). The document addressed federal (NEPA) and state (CEQA) requirements to select a corridor within which the future Placer Parkway would be constructed. The proposed project is Phase 1 and the eastern-most 1.4-mile portion of the 14.2-mile Placer Parkway.

The Tier 1 EIS/EIR, Section 5.18, included a cumulative analysis of the effects of full construction of Placer Parkway. The study area used in the Tier 1 analysis encompassed all five of the considered corridor alternatives for Placer Parkway from SR 70/99 in Sutter County to SR 65 in Placer County. The Tier 1 EIS/EIR concluded that construction of Placer Parkway would result in cumulatively significant impacts on nine resource areas: land use and farmland; visual resources; cultural resources; traffic and transportation; air quality; noise; hydrology; water quality; and biology. As stated above, the proposed project could contribute to cumulatively considerable impacts on traffic and biological resources. An assessment of whether the proposed project contributes to these cumulative impacts is presented below. The proposed project would not contribute to cumulative impacts on the other seven resource areas because either the resources are not located within the project area, or the project’s contribution is not cumulatively considerable.

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<sup>4</sup> Placer Ranch would develop approximately 2,200 acres of property located in unincorporated Placer County, immediately west and south of Placer County’s Sunset Industrial Area, south of the Western Regional Sanitary Landfill, north of the existing City of Roseville limits, and east of the Amoruso Ranch Specific Plan.

## Traffic and Transportation

The Tier 1 EIS/EIR included a detailed analysis of modeled traffic conditions in 2040, based on the transportation network and development projections data available at the time of the EIS/EIR. The Tier I EIS/EIR identified the following specific cumulative traffic impacts:

- Add traffic, in 2040, to SR 70/99 and thereby lengthen the period of time during the peak period where SR 70/99 would operate at LOS F conditions (from I-5 to the proposed Placer Parkway);
- Add traffic, in 2040, to SR 65 and thereby lengthen the period of time during the peak period where SR 70/99 would operate at LOS F conditions (between I-80 and Lincoln Bypass); and
- Traffic LOS impacts on Sierra College Boulevard between the future Valley View Parkway and English Colony Way; on Valley View Parkway, and on Whitney Ranch Parkway between SR 65 and University Avenue.

The Traffic Analysis Report prepared for the proposed project (Fehr & Peers 2013) updates existing and future conditions for the proposed project based on socioeconomic (i.e., population and employment) projections developed by SACOG as well as already planned separate transportation projects included in the 2035 MTP/SCS. Separate transportation projects include Placer Parkway from Foothills Boulevard North to Santucci Boulevard (extension of Watt Avenue north of Baseline Road). The traffic study's model conditions represent the current anticipated cumulative development scenario for the project area for the purposes of assessing traffic impacts of the proposed project. The results of the study are included in the *Transportation/Traffic* section above.

The proposed project's connection to the Whitney Ranch Parkway interchange could contribute to the need for additional southbound SR 65 freeway capacity. SR 65 improvements between the I-80/SR 65 interchange and the Lincoln Bypass is a separately proposed and funded project that is currently being analyzed and designed by the PCTPA. Placer County and PCTPA are coordinating regarding the scale and timing of SR 65 improvements in relation to current and future projects in the region. No mitigation is required for the proposed project as it would not contribute to a cumulatively considerable traffic impact.

## Biological Resources

The Tier 1 EIS/EIR determined that construction of Placer Parkway could incrementally contribute to the loss of natural vegetation and sensitive communities and fragment existing habitat in areas where development would not be likely to occur, except for Placer Parkway. It also determined that Placer Parkway impacts on waters of the United States and associated vernal pool habitat would be considerable, even though the percentage of contribution of impacts from Placer Parkway would be small compared to the overall impacts anticipated by 2040.

As described in the *Biological Resources* section, the proposed project would affect habitat for listed vernal pool species and would fill or otherwise effect wetlands and other waters of the United States, which could contribute to the cumulative loss of these resources. The protection of these resources by the Endangered Species Act and the Clean Water Act, respectively, require compensation to ensure the continued existence of listed species and no net loss of wetlands, both of which would prevent cumulatively considerable impacts. Compliance with the requirements of Endangered Species Act Section 7 consultation for effects on listed species and with the Clean Water Act Section 404, and implementation of Mitigation Measures BIO-6, BIO-8, and BIO-11 would reduce incremental effects of the proposed project to less-than-cumulatively-considerable levels.

The proposed project would also remove established trees and affect trees protected by the Placer County tree ordinance which would contribute to the loss of these resources in the project area. Implementation of Mitigation Measures AES-2 and AES-3, which require replacement of trees, would reduce incremental effects of the project to less-than-cumulatively-considerable levels.

With implementation of the mitigation measures described above, the proposed project would not contribute to any significant cumulative impacts.

### **c. Less than Significant with Mitigation**

With adoption and implementation of the mitigation measures listed in the environmental checklist, environmental effects of the proposed project would be less than significant. No substantial adverse effects on human beings would occur. Operation of the proposed project is intended to provide safety improvements within the project area and would result in beneficial effects.

## **References**

Fehr & Peers. 2013. *Placer Parkway Phase I Transportation Analysis Report*. Placer County, CA.

South Placer Regional Transportation Authority, California Department of Transportation, and Federal Highway Administration. 2007a. *Placer Parkway Corridor Preservation Tier 1 Environmental Impact Statement/Program Environmental Impact Report*. Draft. November. Prepared by URS Corporation. Sacramento, CA.