

# NEPA/CEQA RE-VALIDATION FORM

DIST./CO./RTE.	12-ORA-91; 08-RIV-91; 08-RIV-15
PM/PM	ORA-91-R14.43/R18.91; RIV-91-R0.00/R13.04; RIV-15-35.64/45.14
E.A. or Fed-Aid Project No.	Previous EA 08-0F540 PN 08000000239. New EA 08-0F544 PN 0818000209
Other Project No. (specify)	Not Applicable
PROJECT TITLE	Previously State Route 91 Corridor Improvement Project (SR-91 CIP). Now State Route 91 Corridor Operations Project (SR-91 COP)
ENVIRONMENTAL APPROVAL TYPE	Final Environmental Impact Report (EIR)/Environmental Impact Statement (EIS)
DATE APPROVED	August 2012
REASON FOR CONSULTATION (23 CFR 771.129)	Check reason for consultation: <input type="checkbox"/> Project proceeding to next major federal approval <input checked="" type="checkbox"/> Change in scope, setting, effects, mitigation measures, requirements <input type="checkbox"/> 3-year timeline (EIS only) <input type="checkbox"/> N/A (Re-Validation for CEQA only)
DESCRIPTION OF CHANGED CONDITIONS	See the project description for the entire project, and changes in the project design, as follows below.

## NEPA CONCLUSION – VALIDITY

Based on an examination of the changed conditions and supporting information: [Check ONE of the three statements below, regarding the validity of the original document/determination (23 CFR 771.129). If document is no longer valid, indicate whether additional public review is warranted and whether the type of environmental document will be elevated.]

- ☐ The original environmental document or CE remains valid. No further documentation will be prepared.
- ☒ The original environmental document or CE is in need of updating; further documentation has been prepared and ☒ is included on the continuation sheet(s) or ☐ is attached. With this additional documentation, the original ED or CE remains valid.
- Additional public review is warranted (23 CFR 771.111(h)(3)) Yes ☐ No ☒
- ☐ The original document or CE is no longer valid.
- Additional public review is warranted (23 CFR 771.111(h)(3)) Yes ☐ No ☐
- Supplemental environmental document is needed. Yes ☐ No ☐
- New environmental document is needed. Yes ☐ No ☐ (If "Yes," specify type: \_\_\_\_\_)

## CONCURRENCE WITH NEPA CONCLUSION

I concur with the NEPA conclusion above.

Signature: Environmental Branch Chief

03/20/2020

Date

Signature: D.Ciacchella

Signature: Project Manager/DLAE

3/19/20  
Date

## CEQA CONCLUSION: (Only mandated for projects on the State Highway System.)

Based on an examination of the changed conditions and supporting information, the following conclusion has been reached regarding appropriate CEQA documentation: (Check ONE of the five statements below, indicating whether any additional documentation will be prepared, and if so, what kind. If additional documentation is prepared, attach a copy of this signed form and any continuation sheets.)

- ☐ Original document remains valid. No further documentation is necessary.
- ☒ Only minor technical changes or additions to the previous document are necessary. An addendum has been or will be ☒ prepared and is ☒ included on the continuation sheets or ☐ will be attached. It need not be circulated for public review. (CEQA Guidelines, §15164)
- ☐ Changes are substantial, but only minor additions or changes are necessary to make the previous document adequate. A Supplemental environmental document will be prepared, and it will be circulated for public review. (CEQA Guidelines, §15163)
- ☐ Changes are substantial, and major revisions to the current document are necessary. A Subsequent environmental document will be prepared, and it will be circulated for public review. (CEQA Guidelines, §15162) (Specify type of subsequent document, e.g., Subsequent FINAL EIR)
- ☐ The CE is no longer valid. New CE is needed. Yes ☐ No ☐

## CONCURRENCE WITH CEQA CONCLUSION

I concur with the CEQA conclusion above.

Signature: Environmental Branch Chief

03/20/2020

Date

Signature: D.Ciacchella

Signature: Project Manager/DLAE

3/19/20  
Date

## NEPA/CEQA RE-VALIDATION FORM

### CONTINUATION SHEET(S)

*Address only changes or new information since approval of the original document and only those areas that are applicable. Use the list below as section headings as they apply to the project change(s). Use as much or as little space as needed to adequately address the project change(s) and the associated impacts, minimization, avoidance and/or mitigation measures, if any.*

#### **Changes in project design (e.g., scope change, a new alternative, change in project alignment).**

A Final Environmental Impact Report/Environmental Impact Statement (EIR/EIS) was adopted in 2012 for the State Route (SR) 91 Corridor Improvement Project (SR-91 CIP). The SR-91 CIP Alternative 2f was proposed in several phases to maximize use of available funds and consisted of an Initial Phase and an Ultimate Project. The SR-91 CIP 2012 Final EIR/EIS analyzed both the Initial Phase and the Ultimate Project phases. The Record of Decision (ROD) was prepared for the Initial Phase. A new ROD will be needed for this project and for future phases.

Construction of the SR-91 CIP Initial Phase was completed under Expenditure Authorization (EA) 08-0F540. The Initial Phase included improvements on SR-91 from approximately the Orange/Riverside county line to the Interstate 15 (I-15) interchange and a single-lane direct connector to and from I-15 south, extending from SR-91 to the Ontario Avenue interchange. Construction of the Initial Phase began in June 2014 and was opened to traffic in March 2017.

Separate phases/projects are identified below to incorporate the remaining improvements of the Ultimate Project by 2035. See Attachment 1 for the Ultimate Project Study Area.

The Ultimate Project would provide the following improvements:

##### Eastbound SR-91

- A sixth general purpose (GP) lane would be provided between SR-241 and SR-71. Between SR-241 and Coal Canyon, widening on eastbound (EB) SR-91 is proposed to accommodate the additional lane. Between Coal Canyon and Green River Road, the centerline of SR-91 is proposed to be shifted northward, and widening of westbound (WB) SR-91 is proposed to accommodate the additional EB lane. The Green River Road EB off- and on-ramps would be widened and realigned to accommodate the Ultimate Project. Between Green River Road and SR-71, restriping EB SR-91 is proposed to accommodate the additional GP lane.
- From I-15 to Pierce Street, a fifth GP lane would be added by widening EB SR-91 between I-15 and the Pierce Street off-ramp. The EB tolled Express Lane would be extended from I-15 to the McKinley Street interchange by restriping the inside GP lane. The McKinley Street EB ramps would be modified to accommodate the widening of SR-91, and additional lanes would be added to the ramps. A new collector-distributor road would be constructed, combining the Pierce Street and Magnolia Avenue EB off-ramps into one exit point from SR-91, which is also the termination point of the fifth GP lane addition.

##### Westbound SR-91

- A sixth GP lane would be provided between SR-71 and SR-241. Between Green River Road and SR-241, widening on WB SR-91 is proposed to accommodate the additional lane. The Green River Road WB on-ramp would be widened and realigned to accommodate the Ultimate Project. Between the SR-71 south-west connector to Green River Road, the additional GP lane would be added by restriping. An auxiliary lane would also be added in advance of the Green River Road off-ramp by restriping.
- From Pierce Street to I-15, a fourth GP lane would be added by widening WB SR-91 between the Pierce Street WB on-ramp and I-15. The WB high-occupancy vehicle (HOV) lane would become the additional GP lane, and a new tolled Express Lane would be added within these limits. The McKinley Street WB ramps and I-15 connectors exit would be modified to accommodate the widening of SR-91.

##### I-15

- A single-lane tolled Express Lane would be constructed in the median in the northbound (NB) and southbound (SB) directions extending from the Ontario Avenue interchange to the Cajalco Road interchange.

## NEPA/CEQA RE-VALIDATION FORM

- A single-lane tolled Express Lane connector would be provided from EB SR-91 to NB I-15 that would extend in the median of I-15 to the Hidden Valley Road interchange. A single-lane tolled Express Lane would be constructed in the median of I-15 that would begin at the Hidden Valley Road interchange and would continue SB as a single-lane Express Lane connector to WB SR-91.

### **SR-91 Corridor Operations Project**

The Riverside County Transportation Commission (RCTC), in cooperation with California Department of Transportation (Caltrans), is proposing operational and safety improvements by constructing a portion of the SR-91 CIP Ultimate Project on WB SR-91 from Green River Road to SR-241 to alleviate traffic congestion in this area (ORA Post Mile R17.36 to R18.88, RIV Post Mile R0.0 to R0.54). This portion of the Ultimate SR-91 CIP is being described as the SR-91 Corridor Operations Project (COP) (Project). As stated in the 2019 Federal Transportation Improvement Program (FTIP), the total programmed cost for the project is \$41,000,000. The SR-91 COP consists of the following project components:

- Adding a GP lane approximately 2 miles in length in the WB direction on SR-91 from Green River Road WB on-ramp to SR-241. This lane would terminate at SR-241. This would involve adding approximately 9 to 10 feet of outside widening to SR-91 at some locations and restriping in others
- Widening the County Line Creek Undercrossing (UC)
- Constructing new retaining walls approximately 3,200 feet in length and approximately 6 to 28 feet in height on the north side of SR-91
- Reconstructing a portion of Green River Road
- Replacing overhead signs
- Adding high mast lighting on the north side of the outside barrier

Environmental impacts associated with the Ultimate Project were analyzed in the SR-91 CIP Final EIR/EIS. Thus, most of the project components of the SR-91 COP have been analyzed under the Ultimate Project analysis. However, updates to several environmental resource areas are required due to passage of time, modification in design due to partial implementation of the Ultimate Project, and changes in the environmental setting and regulations. These changes are being analyzed with a Revalidation of the analysis conducted in the Final EIR/EIS to ensure no new significant environmental impacts would occur as a result of implementation of the SR-91 COP and that there would be no need to prepare a Supplemental EIR/EIS. See Attachment 2 for a vicinity map of the SR-91 COP. The Revalidation and Record of Decision (ROD) will be available online at RCTC's website.

### ***Changes in environmental setting (e.g., new development affecting traffic or air quality).***

The design changes that occurred during the Initial Phase were addressed in previous revalidations of the Final EIR/EIS and did not result in any substantial impacts to the environment. Three revalidations included changes in the SR-91 COP portion of the SR-91 CIP:

- Revalidation 1: A California Highway Patrol turnaround facility within Caltrans right-of-way (ROW) was revised based on SR-91 median geometry near the western limits of the project. Additionally, this revalidation covered a horizontal alignment change that realigned Green River Road to the south to accommodate a retaining wall.
- Revalidation 3: The Final EIR/EIS reported that Soundwall E-1 along the edge of shoulder between Green River Road and Green River Golf Club would be built in the Ultimate Project. It was later determined the soundwall was not reasonable or feasible, and Soundwall E-1 was eliminated.
- Revalidation 20: A temporary emergency access ramp for WB SR-91 at Green River Road was permanently incorporated into the project.

Attachment 3 provides a summary of these previous revalidations for the Initial Phase.

### ***Changes in environmental circumstances (e.g., a new law or regulation, change in the status of a listed species).***

The following are changes in environmental circumstances from what was previously analyzed in the Final EIR/EIS:

#### **Hazardous Materials/Waste**

## NEPA/CEQA RE-VALIDATION FORM

The governing regulatory guidance for conducting initial site assessments/hazardous materials/hazardous waste assessments at the time the Phase I Initial Site Assessment (ISA) was conducted for the Final EIR/EIS was the American Standards for Testing and Materials (ASTM) E 1527-05, Standard Practice for Environmental Site Assessments: Phase 1 Environmental Site Assessment Process. The regulatory guidance has since been updated to the current ASTM E 1527-13. Major changes in the current version are discussed below:

**Recognized Environmental Conditions (REC)** – The revised Standard simplifies the definition of an REC to be “a release, a likely release, or a material threat of a release of hazardous substances to the environment and property.” A Historical Recognized Environmental Condition (HREC) now refers only to “historic releases which have been remediated to the satisfaction of regulatory authorities for unrestricted use,” therefore limiting an HREC to past releases that do not subject the property to any use restrictions, activity and use limitations (AULs), or other engineering or institutional controls. An HREC is no longer considered an REC. Finally, a new term was introduced: Controlled Recognized Environmental Conditions (CRECs). This term describes “releases that have been addressed to the satisfaction of regulatory authorities, but from which residual contamination has been permitted to remain in place subject to the implementation of use restrictions, AULs, or other institutional or engineering controls on the subject property.” A CREC is an REC and must be identified as such in the conclusions section of the Phase I report.

**Vapor Migration** – The potential for vapor migration, including vapor that migrates in the subsurface, must be considered in the Phase I report.

**Agency File Reviews** – If a relevant property appears on a federal, state, or tribal record, the new Standard requires a review of “pertinent regulatory files and/or records associated with the listing.” The environmental professional can exercise discretion when mandating a review but must document the reasons why a review was not conducted if a document review is deemed unnecessary.

An ISA Technical Memorandum was prepared and approved in March 2019 to update the information related to the project site.

### Air Quality

The governing regulatory guidance for conducting project air quality analysis in 2010 was the Clean Air Act Amendments (CAAA) of 1990. The United States Environmental Protection Agency (EPA) reviews the most up-to-date scientific information and the existing ambient standards for each pollutant every 5 years and obtains advice from the Clean Air Scientific Advisory Committee (CASAC) on each review. Based on these, EPA applies consideration to revise the National Ambient Air Quality Standards (NAAQS) accordingly. The changes and adjustments to the NAAQS, especially those that occurred since approval of the project's 2012 Final EIR/EIS, include the following:

1. The 8-hour ozone (O<sub>3</sub>) standard of 0.075 parts per million (ppm) was established in 2008. On March 12, 2008, EPA promulgated attainment designations based on the 8-hour O<sub>3</sub> standard. On October 1, 2015, EPA strengthened the 8-hour O<sub>3</sub> NAAQS based on new scientific evidence regarding the effects of ground-level O<sub>3</sub> on public health and the environment. The new 8-hour O<sub>3</sub> NAAQS standard (primary and secondary) is 0.070 ppm. The area designation/classification based on the new standard passed Final rule on March 1, 2018, and attainment demonstration plans in the State Implementation Plan (SIP) were submitted in June 2019.

EPA revised the air quality standards for particle pollution in 2012. The new revisions became effective on January 15, 2015, and include the following:

1. The annual particulate matter less than 2.5 microns in diameter (PM<sub>2.5</sub>) standard, for primary and secondary, was strengthened from the 2006 level of 15 micrograms per cubic meter (µg/m<sup>3</sup>) to 12.0 µg/m<sup>3</sup> (primary) and 15.0 µg/m<sup>3</sup> (secondary); the 24-hour standard of 35 µg/m<sup>3</sup> was retained.
2. The 24-hour particulate matter less than 10 microns in diameter (PM<sub>10</sub>) standard of 150 µg/m<sup>3</sup> was retained.

Since approval of the Final EIR/EIS, the Regional Transportation Plan (RTP)/Sustainable Communities Strategy (SCS) and Federal Transportation Improvement Program (FTIP) have been updated (2016-2040 RTP/SCS and 2019 FTIP).

In June 2018, the Federal Highway Administration (FHWA) confirmed that the previously issued Project-Level Conformity Determination for the SR-91 CIP remains valid for obtaining the ROD for the SR-91 COP. Consistent with 40 *Code of Federal Regulations* (CFR) 93.104d, the SR-91 COP does not prompt



## NEPA/CEQA RE-VALIDATION FORM

any of the three triggers that would require a redetermination of conformity:

**1. The project design concept and scope have not changed:**

In 2019, it was determined that the SR-91 COP improvements were consistent with the SR-91 CIP. A Supplemental Traffic Operational Analysis Report (STOAR) was prepared to evaluate the characteristics of the project under proposed conditions to determine the effects on safety, congestion, and highway capacity. The STOAR was approved in June 2019.

**2. No 3-year lapse in major steps to advance the project:**

The SR-91 CIP Initial Phase was opened to traffic in March 2017. The environmental permits are still open, and plant establishment and warranty repair work is ongoing. The project is active.

**3. The SR-91 COP is not performing a supplemental environmental document for air quality purposes.**

The description of the project in the 2012 RTP is as follows: Project ID No. RIV071250; Description:

**Phase 1:** On SR-91/I-15: SR91 – Construct 1 mixed flow lane (SR-71 through I-15)/1 aux lane at various locations (SR-241 through Pierce) (OC PM 14.43-18.91), CD system (2/3/4 lanes from Main Street to I-15), 1 toll express lane (TEL) and convert HOV to TEL in each direction (OC to I-15); I-15 – construct TEL median direct connector NB I-15 to WB SR-91 and EB SR-91 to SB I-15, 1 TEL in each direction (SR-91 direct connector – Ontario Interchange) (I-15 PM 37.56-42.94). **Phase 2:** on SR-91/I-15: SR91 – Add 1 mixed flow lane in each direction (SR241 – SR71)(I15 – Pierce); I15 – add toll express lane (TEL) median direct connector (SB15 to WB91 & EB91 to NB15), 1 TEL each direction from Hidden Valley –SR-91 direct connector and from Ontario Interchange to Cajalco Interchange.

Therefore, because the approved RTP description matches the current proposed work, no further air quality analysis is required for the SR-91 COP.

### Noise

The base cost allowance for noise abatement reasonableness and feasibility was \$55,000 at the time of the Final EIR/EIS (2012). The 2019 base cost analysis is \$107,000 per benefited receptor.

A Noise Study Workplan (approved March 2019), supplemental Noise Study Report (NSR) (approved January 2020), and Noise Abatement Decision Report (NADR) (approved February 2020) were completed for the SR-91 COP. These analyses used \$107,000 per benefited receptor.

### Biology

The California Natural Diversity Database (CNDDB) and Information, Planning and Conservation System (IPaC) databases were accessed to obtain updated species lists to determine whether there were changes to the species listed in the Final EIR/EIS. The updated biological database searches are included in Attachment 4. Since approval of the Final EIR/EIS, one additional special-status species was identified as having potential to occur within the Biological Study Area (BSA): Santa Monica dudleya (*Dudleya cymosa* ssp. *ovatifolia*). A Supplemental Biological Technical Memorandum was approved in August 2019.

***Changes to environmental impacts of the project (e.g., a new type of impact, or a change in the magnitude of an existing impact).***

**There are no new or substantive changes for the following resource areas, as identified in the SR-91 CIP Final EIR/EIS.**

#### **3.1 – Land Use**

Adding a GP lane, widening the County Line Creek UC, constructing new retaining walls, reconstructing a portion of Green River Road, adding high mast lighting, and replacing overhead signs would not result in any new/changed or substantial impacts to land use. These design changes do not result in changes to zoning, and land use remains consistent with the Corona General Plan. Therefore, the SR-91 COP would be consistent with what was analyzed in the SR-91 CIP Final EIR/EIS. No new avoidance, minimization or mitigation measures (AMMs) are required.

#### **3.2 – Growth**

Adding a GP lane, widening the County Line Creek UC, constructing new retaining walls, reconstructing a portion of Green River Road, adding high mast lighting, and replacing overhead signs would not result

## NEPA/CEQA RE-VALIDATION FORM

in any new/changed or substantial impacts to growth. Therefore, the SR-91 COP would be consistent with what was analyzed in the SR-91 CIP Final EIR/EIS. No new AMMs are required.

### **3.3 – Farmlands/Timberlands**

Adding a GP lane, widening the County Line Creek UC, constructing new retaining walls, reconstructing a portion of Green River Road, adding high mast lighting, and replacing overhead signs would not result in substantial impacts to Farmlands of Local Importance and Timberlands; there are no Farmlands of Local Importance or Timberlands in the project area. Therefore, the SR-91 COP would be consistent with what was analyzed in the SR-91 CIP Final EIR/EIS. No new AMMs are required.

### **3.4 – Community Impacts**

Adding a GP lane, widening the County Line Creek UC, constructing new retaining walls, reconstructing a portion of Green River Road, adding high mast lighting, and replacing overhead signs would not result in substantial impacts to the community. Therefore, the SR-91 COP would be consistent with what was analyzed in the SR-91 CIP Final EIR/EIS. No new AMMs are required.

### **3.5 – Utilities/Emergency Services**

Any additional utilities relocations resulting from adding a GP lane, widening the County Line Creek UC, constructing new retaining walls, reconstructing a portion of Green River Road, adding high mast lighting, and replacing overhead signs would be coordinated with the utility companies and emergency service providers to reduce disruptions to service. These changes would not result in any new/changed or substantial impacts to utilities/emergency services. Therefore, the SR-91 COP would be consistent with what was analyzed in the SR-91 CIP Final EIR/EIS. No new AMMs are required.

### **3.6 – Traffic and Transportation/Pedestrian and Bicycle Facilities**

Adding a GP lane, widening the County Line Creek UC, constructing new retaining walls, reconstructing a portion of Green River Road, adding high mast lighting, and replacing overhead signs would not result in any new/changed or substantial impacts to traffic and transportation/pedestrian and bicycle facilities. These changes in design are anticipated to improve traffic and transportation within the project area. Therefore, the SR-91 COP would be consistent with what was analyzed in the SR-91 CIP Final EIR/EIS. No new AMMs are required.

### **3.7 – Visual/Aesthetics**

Since approval of the Final EIR/EIS, design features have been incorporated into the SR-91 COP that have resulted in visual changes, specifically retaining wall dimensions and high mast lighting, and removal of 1-gallon shrub plantings along the WB SR-91 retaining wall at Green River Road.

- **High Mast Lighting.** A lighting study was approved on December 16, 2019. High mast lighting was added to meet design lighting requirements. The 12 high mast lights have a pole height average of 73.9 ft (ranging from 66.1' to 94.5') and are positioned about 430 feet apart. To comply with Environmental Commitments Record (ECR) commitment NC-9 and reduce the amount of light that reaches the MSHCP area, the design team specified a "forward throw" luminaire, added a 180-degree lighting shield, and lowered the heights of the high mast lights.
- **Shrub Removal.** The shrubs along Green River Road will be removed due to freeway widening which eliminates a 5' planting strip between the curb on Green River Road and the retaining wall/barrier for SR-91. These shrubs were planted as part of the 91 CIP Initial Phase per the Project Aesthetics and Landscape Master Plan (PALM) primarily for graffiti control and to soften the appearance of the wall. These plants are only visible from the city street and not visible from the freeway. Furthermore, wall aesthetics will be implemented on the new retaining walls consistent with the PALM. Proposed design has been coordinated and accepted by the City of Corona. None of the shrubs that will be removed were originally incorporated as part of Environmental Commitments Record (ECR) commitment V-2, which requires a 10:1 replacement of 5- to 15-gallon shrubs for removed trees, and no mitigation is required.

Changes associated with the SR-91 COP are not anticipated to result in changes to visual resources beyond what was identified in the 2010 Visual Impact Assessment and analyzed in the Final EIR/EIS. All design will meet the SR-91 CIP Project Aesthetics and Landscape Master Plan (PALM); therefore, impacts to visual resources would be less than significant. No additional impacts were identified, and no new AMMs are recommended.

## NEPA/CEQA RE-VALIDATION FORM

### **3.8 – Cultural Resources**

The proposed project improvements are within the previously designated area of potential effects (APE) for the SR-91 CIP. Of the 24 cultural resources identified in the SR-91 CIP, only 1 cultural resource is within the SR-91 COP APE: Green River Camp (CA-RIV-65321-1/33-10819). As described in the 2010 SR-91 CIP Historic Properties Survey Report (HPSR), archaeological testing completed in 2001 for the site resulted in the determination that the integrity of the site had been compromised by construction. The site was determined not eligible for the National Register of Historic Places, with California State Historic Preservation Officer concurrence in 2001; therefore, the site was not re-evaluated as part of the SR-91 CIP. The SR-91 COP would not change this determination. Therefore, the original HPSR and Supplemental HPSRs remain valid, and the finding of effect (No Adverse Effect) remains valid. Thus, the design changes for the SR-91 COP, including adding a GP lane, widening the County Line Creek UC, constructing new retaining walls, reconstructing a portion of Green River Road, adding high mast lighting, and replacing overhead signs, would not result in any new/changed substantial impacts to cultural resources. Therefore, the SR-91 COP would be consistent with what was analyzed in the SR-91 CIP Final EIR/EIS. No new AMMs are required.

### **3.9 – Hydrology and Floodplains**

Adding a GP lane, widening the County Line Creek UC, constructing new retaining walls, reconstructing a portion of Green River Road, adding high mast lighting, and replacing overhead signs would not result in any new/changed or substantial impacts to hydrology or floodplains. Therefore, the SR-91 COP would be consistent with what was analyzed in the SR-91 CIP Final EIR/EIS. No new AMMs are required.

### **3.10 – Water Quality and Stormwater Runoff**

Adding a GP lane, widening the County Line Creek UC, constructing new retaining walls, reconstructing a portion of Green River Road, adding high mast lighting, and replacing overhead signs would not result in any new/changed or substantial impacts to water quality and stormwater runoff analysis. Therefore, the SR-91 COP would be consistent with what was analyzed in the SR-91 CIP Final EIR/EIS. No new AMMs are required.

### **3.11 – Geology/Soils/Seismic/Topography**

Adding a GP lane, widening the County Line Creek UC, constructing new retaining walls, reconstructing a portion of Green River Road, adding high mast lighting, and replacing overhead signs would not result in any new/changed or substantial impacts to geology, soils, seismic, and topography. Therefore, the SR-91 COP would be consistent with what was analyzed in the SR-91 CIP Final EIR/EIS. No new AMMs are required.

### **3.12 – Paleontology**

Paleontological resources may be located within the project footprint. However, there is a low potential for encountering paleontological resources. Adding a GP lane, widening the County Line Creek UC, constructing new retaining walls, reconstructing a portion of Green River Road, adding high mast lighting, and replacing overhead signs would not result in any new/changed or substantial impacts to paleontological resources. Therefore, the SR-91 COP would be consistent with what was analyzed in the SR-91 CIP Final EIR/EIS. No new AMMs are required.

### **3.16 – Energy**

Energy-efficient light-emitting diode (LED) lighting would be used in the high mast lighting. Adding a GP lane, widening the County Line Creek UC, constructing new retaining walls, reconstructing a portion of Green River Road, adding high mast lighting, and replacing overhead signs would not result in any new/changed or substantial impacts to energy resources. Therefore, the SR-91 COP would be consistent with what was analyzed in the SR-91 CIP Final EIR/EIS. No new AMMs are required.

### **3.23 – Relationship between Local Short-Term Uses of the Human Environment and the Maintenance and Enhancement of Long-Term Productivity**

The SR-91 COP would not change the outcome of what was determined and addressed in Section 3.23 of the Final EIR/EIS.

### **3.24 – Irreversible and Irretrievable Commitments of Resources that would be Involved in the Proposed Project**

The SR-91 COP Project would not change the outcome of what was determined and addressed in Section 3.24 of the Final EIR/EIS.

## NEPA/CEQA RE-VALIDATION FORM

### **3.25 – Cumulative Impacts**

The SR-91 COP would not change the cumulative impacts as identified in the Final EIR/EIS.

**While the following resources did require additional studies or coordination, there are no substantive changes for these resources, as identified in the SR-91 CIP Final EIR/EIS.**

### **3.13 – Hazardous Waste/Materials**

Since approval of the Final EIR/EIS, changes to the SR-91 COP component of the Ultimate Project include adding a GP lane, widening the County Line Creek UC, constructing new retaining walls, reconstructing a portion of Green River Road, adding high mast lighting, and replacing overhead signs to the project components. Impacts from these changes were analyzed in the ISA Technical Memorandum approved in March 2019. Memorandum activities conducted include a review of contaminated properties on or adjacent to the project site, historical records of releases adjacent to or on the project site, other environmental issues that may exist on or near the project site, and other potential environmental issues that may affect Caltrans and/or other project proponent's ability to construct, operate, and maintain the proposed project.

The ISA Memorandum did not reveal any additional RECs in connection with the project beyond those identified and analyzed in the Final EIR/EIS for hazardous materials/waste. Finally, the actions taken to complete the Memorandum satisfied mitigation measure HW-2; therefore, HW-2 is considered closed for the SR-91 COP portion of the SR-91 CIP. No additional AMMs beyond those identified in the Final EIR/EIS were recommended.

### **3.14 – Air Quality**

A memo explaining the project's air quality approach was reviewed in March 2019. The previously issued Project-Level Conformity Determination for the SR-91 CIP remains valid for obtaining the ROD for the SR-91 COP because the project conforms with 40 CFR 93.04d: the project design concept and scope have not changed, there has not been a 3-year lapse in major steps to advance the project, and the SR-91 COP is not performing a supplemental environmental document for air quality purposes. Therefore, the SR-91 COP would be consistent with what was analyzed in the SR-91 CIP Final EIR/EIS. No new AMMs are required.

### **3.15 – Noise**

A Supplemental NSR and Supplemental NADR were prepared to account for updates to the SR-91 COP portion of the SR-91 CIP since approval of the 2012 Final EIR/EIS. As mentioned in the "Changes in Environmental Circumstances" section of this revalidation, the base cost allowance for noise abatement reasonableness and feasibility increased from \$55,000 in 2012 to \$107,000 per benefited receptor.

The Supplemental NSR concluded that the following soundwalls would be needed to provide feasible abatement of traffic noise of reducing existing noise levels to 5 decibels (dB) for impacted receptors.

- Soundwall SW497A would be located along the WB SR-91 edge of shoulder and would provide feasible noise abatement for the frequent outdoor use area of one benefited receptor with minimum heights ranging from 6 to 10 feet. The reasonableness allowance for this soundwall is \$107,000. The Supplemental NADR determined that Soundwall SW497A is not reasonable from a basis of cost; therefore, a soundwall is not recommended to be constructed.
- Soundwall SW555A was considered along the WB SR-91 edge of shoulder and would provide feasible noise abatement for the frequent outdoor use areas of six benefited receptors with minimum heights ranging from 10 to 14 feet. The reasonableness allowance for this soundwall is \$642,000. The Supplemental NADR determined that Soundwall SW555A is not reasonable from a basis of cost; therefore, a soundwall is not recommended to be constructed.
- Soundwall SW555C was considered on the Chino Hills State Park property as an alternative to Soundwall SW555A and would provide feasible noise abatement for the frequent outdoor use area of one benefited receptor with a minimum height of 10 feet. The reasonableness allowance for this soundwall is \$107,000. The Supplemental NADR determined that Soundwall SW555C is reasonable from a basis of cost; however, the property owner is not in favor of the soundwall; therefore, a soundwall is not recommended to be constructed.
- Soundwall SW27C would be located on the private property of the Green River Village Mobile Homes in place of an existing chain-link fence and would provide feasible noise abatement for the

## NEPA/CEQA RE-VALIDATION FORM

frequent outdoor use areas of 17 benefited receptors with minimum heights ranging from 10 to 14 feet. The reasonableness allowance for this soundwall is \$1,819,000. The Supplemental NADR determined that Soundwall SW27C is not reasonable from a basis of cost; therefore, a soundwall is not recommended to be constructed.

- Soundwall SW528A was considered along the EB SR-91 mainline edge of shoulder and would provide feasible noise abatement for the Coal Canyon Trail, which is considered one receptor. The wall would have minimum heights ranging from 6 to 12 feet. The reasonableness allowance for this soundwall is \$107,000. The Supplemental NADR determined that Soundwall SW528A is not reasonable from a basis of cost; therefore, a soundwall is not recommended to be constructed.
- Soundwall SW528B would provide feasible noise abatement for the Coal Canyon Trail, which is considered one receptor, as an alternative to Soundwall SW528A. The wall would have heights ranging from 10 to 16 feet. This soundwall would be located along the State ROW line and have a reasonableness allowance of \$107,000. The Supplemental NADR determined that Soundwall SW528B is not reasonable from a basis of cost; therefore, a soundwall is not recommended to be constructed.

### **Biological Resources (3.17 – Natural Communities, 3.22 – Invasive Species)**

Since approval of the Final EIR/EIS, design changes have been incorporated into the SR-91 COP final design. One such design feature, the addition of high mast lighting, may have impacts on sensitive habitat that is covered under the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) on the north and south sides of SR-91. High mast lighting was added to meet design lighting requirements. The 12 high mast lights have a pole height average of 73.9 ft (ranging from 66.1' to 94.5') and are positioned about 430 feet apart. To comply with Environmental Commitments Record (ECR) commitment NC-9 and reduce the amount of light that reaches the MSHCP area, the design team specified a "forward throw" luminaire, added a 180-degree lighting shield, and lowered the heights of the high mast lights. With these changes in place, very low light levels reach the habitat adjacent to the project; most of the light that reaches is 0.1 foot-candle (fc), and there are some instances where 0.2 fc reaches portions of habitat. It was determined that these measures will conform to MSHCP guidelines. Please see Attachment 6 for the lighting exhibit.

The potential impacts of other design changes of adding a GP lane, widening the County Line Creek UC, constructing new retaining walls, reconstructing a portion of Green River Road, and replacing overhead signs, as well as the potential project impacts due to changes in the affected biological environment, were analyzed in a Supplemental Biological Technical Memorandum that was approved in August 2019. To complete the analysis of the biological environment for this memorandum, habitat assessment site visits were conducted; new species lists from the United States Fish and Wildlife Service (USFWS), California Department of Fish and Wildlife (CDFW), and California Native Plant Society (CNPS) were obtained; and a review was conducted of the Natural Environment Study (NES) (approved May 2010) and the Biological Opinion (approved November 2011), both in support of the Final EIR/EIS.

New species lists were obtained to update the occurrence of flora and fauna in the project area. The IPaC planning tool was used to obtain a species list from USFWS. One species, Santa Monica Mountains dudleya (*Dudleya cymosa* ssp. *ovatifolia*), was not previously identified in the approved May 2010 NES. No suitable habitat for the Santa Monica Mountains dudleya was observed during the April 2019 site visit. According to the database search results, no suitable habitat occurs within the project study area for Santa Monica Mountains dudleya.

To construct the SR-91 COP, 0.052 acre of coastal sage scrub from the SR-91 CIP Initial Phase will be affected. The 91 COP affected area, located in Temporary Restoration Area #1 of the SR 91 CIP Initial Phase, is identified in the SR-91 CIP FEIR/EIS as a permanent impact. Permanent impacts to coastal sage scrub have been satisfied through project consistency with the Western Riverside County Multiple Species Habitat Conservation Plan (SR-91 CIP Final EIR/EIS). Of the 0.052 acre of affected CSS, 0.042 acre will be permanently removed and 0.01 acre will remain as Temporary Restoration Area #1; this area will be re-seeded with a CSS seed mix. The impacts associated with the SR-91 COP are consistent with those analyzed in the Final EIR/EIS and no new avoidance, minimization or mitigation measures would be required.

According to the analysis in the Supplemental Biological Technical Memorandum, the project would implement the AMMs as included in the previously approved NES and the Final EIR/EIS. The analysis



## NEPA/CEQA RE-VALIDATION FORM

shows that the project, including the design changes, would result in minimal changes to the biological environment; therefore, no new mitigation measures have been recommended.

### **Section 4(f)**

#### **Background**

In August 2012, a Final EIR/EIS was approved for the SR-91 CIP. The project was analyzed for two phases: Initial Phase and Ultimate Project. The Initial Phase has been constructed and opened in 2017. Section 4(f) coordination with County of Orange Department of Public Works (OCPW), County of Orange Department of Parks and Recreation, City of Corona Department of Public Works, and City of Corona Recreational Services took place as part of the Initial Phase in 2012.

#### **Update**

RCTC, in cooperation with Caltrans, is planning to construct a portion of the Ultimate Project of the SR-91 CIP by adding a new lane on WB SR-91 from the Green River Road WB on-ramp to the SR-241 WB to SB connector. This portion of the SR-91 CIP Ultimate Project is scheduled for completion by the end of 2021.

The Santa Ana River Trail and Bike Path is located near the SR-91 COP. A surface parking lot near the trailhead would be affected by the SR-91 COP. Currently, there exists a retaining wall at the location of Proposed Retaining Wall No. 4. Due to widening of SR-91 at this location, the existing retaining wall needs to have portions of it removed and rebuilt a few feet farther north of its existing location, which would be constructed just south of the trailhead parking area on the north side of SR-91. With a required buffer of 27.5 feet for pile-driving activities, only one lane of traffic could remain open during temporary construction staging; maintaining one-way traffic throughout construction between Green River Golf Club Road and the cul-de-sac at the end of Green River Road was deemed to be too great of a safety issue. Due to the short-term nature of this daytime-only work and the distance between pile-driving activities and the trail, and by following all relevant noise and biological mitigation measures as stated in the Final EIR/EIS ECR, noise impacts associated with pile driving are not anticipated.

Public vehicle access to the street parking area adjacent to the Santa Ana River Trail would be prohibited during construction of Retaining Wall No. 4, and 59 parking spaces would be temporarily closed for approximately 3 months; however, pedestrian and bicycle access to the trail in this location would remain open. The next nearest trail access location with parking is approximately 2.7 miles to the west in Featherly Regional Park.

All impacts would be temporary. Green River Road would remain in its current configuration. Parking spaces would not be altered or removed; however, the Green River Road segment west of Green River Golf Club Road would be returned to a slightly reduced width due to this project's improvements.

Public outreach efforts to notify the public and trail users of the temporary closure of the parking lot at the trailhead located at the end of Green River Road, west of Green River Golf Club Road, would include posting signs in advance of construction at the parking lot; placing flyers on vehicles located in the parking lot; social media postings; news releases; outreach to the cycling community; and postings on City of Corona, County of Riverside, and RCTC websites.

#### **Section 4(f) Impact Determination**

*Temporary Occupancy Use with De Minimis Impact*— Caltrans determined that this portion of the SR-91 CIP Ultimate Project satisfies the five conditions set forth in 23 CFR 771.13(d), and that Section 4(f) will not apply. The duration of the temporary occupancy will be less than the time needed for construction of the build alternatives, and there would be no change in ownership of land. There would be no changes to the Santa Ana River Trail. There are no anticipated permanent adverse physical impacts, nor would there be interference with the activities or purposes of the resource, on either a temporary or permanent basis associated with the EA 0F540 SR-91 CIP Ultimate Project. The land being used would be fully restored and returned to a condition that is at least as good as that which existed prior to the project.

Caltrans deems these impacts a temporary occupancy use and has made a *de minimis* impact finding because OCPW, County of Orange Department of Parks and Recreation, City of Corona Department of Public Works, and City of Corona Recreational Services all concurred that the project would not adversely affect the activities, features, and attributes of the park/recreational area. Please see Attachment 5 for coordination and concurrence documentation.

## NEPA/CEQA RE-VALIDATION FORM

### Section 4(f) Coordination and Concurrence

As in the Initial Phase, coordination was initiated with OCPW, County of Orange Department of Parks and Recreation, City of Corona Department of Public Works, and City of Corona Recreational Services. These four agencies were contacted because of their relationship to the Santa Ana River Trail: OCPW owns the land on which the trail is located; County of Orange Department of Parks and Recreation manages the trail; and the land itself is in the City of Corona. On October 25, 2019, coordination letters were sent to the four agencies; all letters were delivered by October 28, 2019.

Concurrence requested by Caltrans was that Section 4(f) will not apply and the SR-91 CIP Ultimate Project satisfies the five conditions set forth in 23 CFR 771.13(d) for a determination of temporary occupancy. Concurrence was received from City of Corona Public Works on October 29, 2019. Concurrence was received from County of Orange Department of Parks and Recreation on November 14, 2019. Follow-up communications with OCPW and City of Corona Recreational Services occurred on December 3, 2019. Concurrence was received from City of Corona Recreational Services on December 3, 2019.

On December 10, 2019, OCPW requested additional information regarding the location of Retaining Wall No. 4, the design and cross sections for the retaining wall, construction impacts to Green River Road Golf Course, current and post-construction conditions, and the construction schedule. This information was provided to OCPW on December 23, 2019. Additional information was requested by OCPW on January 16, 2020, concerning verification that the bikeway at those locations would remain open during construction and that measures would be provided to ensure safety of bikeway users. Additional information was provided to OCPW on January 16, 2020. Concurrence was received from OCPW on January 16, 2020.

A Supplemental NSR and Supplemental NADR were completed for this portion of the SR-91 CIP Ultimate Project. A soundwall (SW 555c) was determined to be reasonable and feasible from a noise abatement and cost perspective. This soundwall would be located in Chino Hills State Park (CHSP), potentially resulting in Section 4(f) impacts. However, when CHSP was surveyed to determine whether they wanted the soundwall to be constructed on their lands, CHSP indicated they did not want the soundwall to be built. The decision to not have the soundwall built on parklands removed any potential Section 4(f) impacts associated with Soundwall SW 555c.

### ***Changes to avoidance, minimization, and/or mitigation measures since the environmental document was approved.***

Since approval of the Final EIR/EIS, the Initial Phase of the SR-91 CIP has been constructed. Attachment 7 contains the Environmental Commitments Record (ECR) for the SR-91 COP. This ECR also includes the additional AMMs required as a result of the design changes analyzed in the various revalidations completed during design and construction of the Initial Phase of the SR-91 CIP.

### ***Changes to environmental commitments since the environmental document was approved (e.g., the addition of new conditions in permits or approvals). When this applies, append a revised Environmental Commitments Record (ECR) as one of the Continuation Sheets.***

No additional AMMs were identified during analysis of the SR-91 COP; however, Measure NC-3 has been updated to reflect the correct nesting bird season dates. Attachment 7 contains the ECR, which denotes which measures were applicable to previous phases, which measures are applicable to the SR-91 COP phase, and which measures will be applicable to future phases of the SR-91 CIP.

# **ATTACHMENT 1**

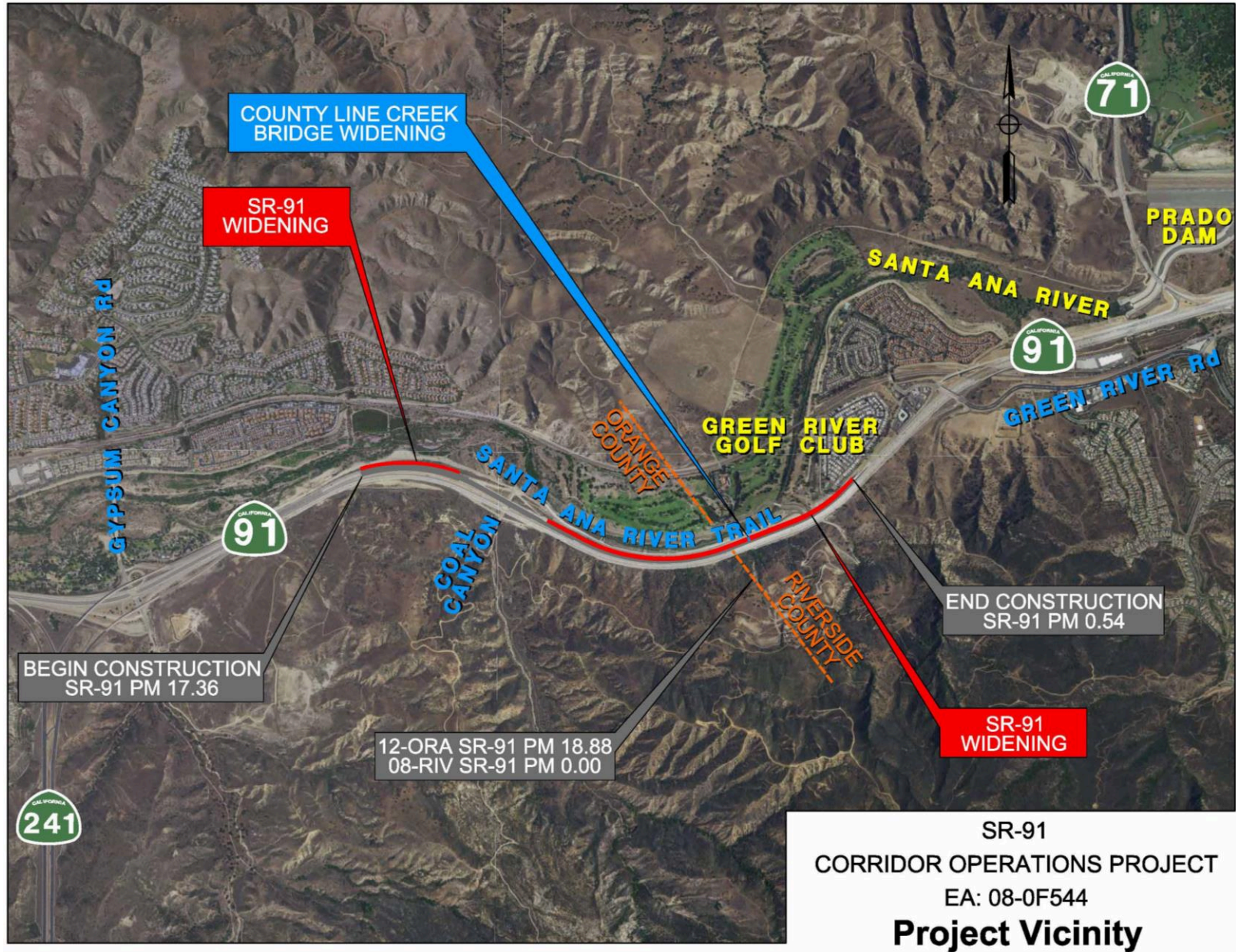
## **SR-91 CIP Ultimate Project Study Area**



# **ATTACHMENT 2**

## **91 COP Project Vicinity**





**ATTACHMENT 3**  
**SR-91 CIP Final EIR/EIS Initial Phase**  
**Revalidations**



Reval #	Reason for Revalidation	Avoidance, Minimization, and/or Mitigation Measures Added, Deleted, or Revised
1.	<p><b><u>Design Change #1</u></b>  <i>Horizontal Alignment</i></p> <ul style="list-style-type: none"> <li>Shift the Serfas Club Drive alignment approximately 6 degrees to accommodate a right-turn pocket from northbound (NB) Serfas Club Drive to eastbound (EB) Pine Crest Drive, avoid right-of-way (ROW) impacts to Assessor's Parcel Number (APN) #102 -113-001, and accommodate a driveway from APN #102-050-002 (Arco/McDonald's) to Serfas Club Drive. The change addresses City of Corona and County of Riverside concerns of proposed intersections leading to traffic circulation issues.</li> </ul> <p><i>ROW</i></p> <ul style="list-style-type: none"> <li>Chevron Station at APN #102-091-020 to be protected in place instead of acquired (as originally reported in the Final Environmental Impact Report [EIR]/Environmental Impact Statement [EIS]).</li> <li>Arco/McDonalds at APN #102-050-002 to be reconfigured to provide a driveway. Acquisition of this property not required.</li> <li>Acquisition of a currently vacant parcel (site of a former golf course) at Serfas Club Drive/Pine Crest Drive (APN #102-050-012).</li> <li>The change would address City of Corona concerns regarding the tax revenue loss from acquisition of the Chevron Station.</li> </ul> <p><i>Slope-Fill Work</i></p> <ul style="list-style-type: none"> <li>Implement slope-fill work to correct differences in elevation between the roadway improvements at Serfas Club Drive and adjacent parcel APN #102-050-003. The change is required as a result of the change in horizontal alignment of Serfas Club Drive.</li> </ul> <p><i>Traffic Signal Synchronization</i></p> <ul style="list-style-type: none"> <li>Frontage Road/Serfas Club Drive traffic signal synchronized with Pine Crest Drive/Serfas Club Drive signal to accommodate right-turn pocket from NB Serfas Club Drive to EB Pine Crest Drive. The change is required to address City of Corona and County of Riverside concerns of proposed intersections leading to traffic circulation issues.</li> </ul> <p><b><u>Design Change #2</u></b>  <i>Traffic Signal Installation</i></p> <ul style="list-style-type: none"> <li>Install new traffic signal at Corona Town Center and Lincoln Avenue to facilitate right-turn movements onto NB Lincoln Avenue from Corona Town Center and for left-turn movements from southbound (SB) Lincoln Avenue onto Corona Town Center.</li> <li>The change is required as ROW mitigation for impacts to parking lot access at Corona Town Center.</li> </ul> <p><b><u>Design Changes #3-#6</u></b></p>	N/A

Reval #	Reason for Revalidation	Avoidance, Minimization, and/or Mitigation Measures Added, Deleted, or Revised
	<p><i>California Highway Patrol (CHP) Turn-Around Facilities within the Existing Median</i></p> <ul style="list-style-type: none"> <li>• Redesign of CHP turn-around based on revised State Route (SR) 91 median geometry, at SR-91 near western limits of project.</li> <li>• Minor realignment of EB SR-91 near the proposed SR-91/SR-71 toll facilities to allow sufficient horizontal clearances for a CHP turn-around area.</li> <li>• Modification of median barriers under the SR-91 to Interstate 15 (I-15) flyover structure to allow room for a CHP turn-around.</li> <li>• Modification of median barriers along I-15 between the Magnolia Boulevard and Ontario Avenue interchanges to allow room for a CHP turn-around.</li> <li>• CHP turn-around areas are a requirement for the enforcement component of Express Toll Lanes.</li> </ul> <p><b><u>Design Change #7</u></b> <i>Horizontal Alignment</i></p> <ul style="list-style-type: none"> <li>• Realign Green River Road to accommodate Initial Phase instead of the Ultimate Project.</li> <li>• Shift Green River Road alignment south, closer to SR-91, to accommodate a retaining wall for the Initial Phase of the project.</li> <li>• Minimize impacts to entrance driveway of Green River Golf Course by pulling cul-de-sac south, closer to SR-91.</li> <li>• Eliminate separate bicycle parking lot directly adjacent to the Reach 9 Phase 11B Project and place parking lot west of cul-de-sac bulb.</li> <li>• The purpose of this change is to minimize impacts to facilities related to the United States Army Corps of Engineers (USACE), Orange County Public Works, and City of Corona.</li> </ul> <p><b><u>Design Change #8</u></b> <i>Rail Relocation</i></p> <ul style="list-style-type: none"> <li>• Relocate rail switches at Porphyry Yard within Burlington Northern Santa Fe (BNSF) Railroad ROW (APN #115-050-019), beneath the SR-91/I-15 interchange, to accommodate interchange improvements.</li> <li>• Install fifth storage track (1,561 feet of track) due to loss of existing storage track resulting from rail switch relocation.</li> <li>• Relocate a small segment of BNSF maintenance access road to allow enough vehicle spacing between a proposed bridge column for the SR-91/I-15 interchange and the railroad.</li> </ul>	

Reval #	Reason for Revalidation	Avoidance, Minimization, and/or Mitigation Measures Added, Deleted, or Revised
	<ul style="list-style-type: none"> <li>Relocate up to four additional acorn-style streetlights within the Grand Boulevard Historic District.</li> <li>The purpose of this change is to accommodate widening of the SR-91 bridges over East and West Grand Boulevard and to accommodate underground utility relocations along East Grand Boulevard, under Design Changes #4, #5, and #15.</li> </ul>	
3.	<p><b>Noise Abatement</b>  <i>Soundwall E-1 (Noise Study Area E)</i></p> <ul style="list-style-type: none"> <li>Soundwall E-1 is generally located at the Edge of Shoulder (EOS) along WB SR-91, between Green River Road and Green River Golf Club. The Final EIR/EIS reported that Soundwall E-1 would be constructed during the Ultimate Project. Soundwall E-1 was not found to be reasonable or feasible for the reasons stated below and will not be built as part of the Initial Phase of the project:</li> <li>As shown in the Supplemental Noise Study Report (NSR), construction of the project's Initial Phase will not result in noise impacts to the receivers in receiver areas representing the Green River Mobile Home Park. Figure 7-1 in the Supplemental NSR provides a summary of modeled noise impacts for each receiver located within the Green River Mobile Home Park; none of the receiver levels surpassed the Noise Abatement Criteria (NAC) of 67 A-weighted decibels (dBA) levels, which is required for construction of a soundwall.</li> <li>The California Department of Transportation's (Caltrans) Traffic Noise Analysis Protocol requirement to obtain at least a 50 percent vote in favor of the wall was not achieved. According to the sound barrier survey results, Soundwall E-1 received six votes. Two of the six votes were in support of the wall, and four opposed the soundwall; indicating that less than 50 percent of the adjacent property owners were in support of the soundwall. During the final design phase, further coordination was conducted with local stakeholders (discussed above), who indicated that they oppose the soundwall during the project's Initial Phase, resulting in the elimination of Soundwall E-1.</li> </ul>	N/A



Reval #	Reason for Revalidation	Avoidance, Minimization, and/or Mitigation Measures Added, Deleted, or Revised
20.	<p><b><u>Emergency Access Feature Incorporation</u></b></p> <ul style="list-style-type: none"> <li>• Due to emergency access issues that arose during construction, a temporary ramp was developed at the end of Green River Road, partially using the Old Santa Ana River Trail, to avoid and minimize any potential impacts of a WB freeway shutdown.</li> <li>• The purpose of this revalidation is to incorporate this emergency access as a permanent project feature. The emergency detour ramp (located approximately at station 573+00) near Green River Road will be permanently maintained and opened to the public in the event WB SR-91, west of Green River Road, becomes partially or fully impassable.</li> </ul>	N/A

# **ATTACHMENT 4**

## **Biological Database Searches**



## United States Department of the Interior

### FISH AND WILDLIFE SERVICE

Carlsbad Fish And Wildlife Office

2177 Salk Avenue - Suite 250

Carlsbad, CA 92008-7385

Phone: (760) 431-9440 Fax: (760) 431-5901

<http://www.fws.gov/carlsbad/>



In Reply Refer To:

November 27, 2019

Consultation Code: 08ECAR00-2020-SLI-0258

Event Code: 08ECAR00-2020-E-00613

Project Name: 91-COP

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

#### To Whom It May Concern:

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

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

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

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

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

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

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

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

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

Attachment(s):

- Official Species List

## Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

**Carlsbad Fish And Wildlife Office**

2177 Salk Avenue - Suite 250

Carlsbad, CA 92008-7385

(760) 431-9440



## Project Summary

Consultation Code: 08ECAR00-2020-SLI-0258

Event Code: 08ECAR00-2020-E-00613

Project Name: 91-COP

Project Type: TRANSPORTATION

Project Description: Project is to construct an auxiliary lane on the westbound SR-91 between Green River Road and SR-241. The project extends from 0.6 miles east of Orange County line and 1.5 west of Orange County line.

Project Location:

Approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/place/33.87172522762609N117.68535074086323W>



Counties: Orange, CA | Riverside, CA

## Endangered Species Act Species

There is a total of 9 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries<sup>1</sup>, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

- 
1. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

### Birds

NAME	STATUS
Coastal California Gnatcatcher <i>Polioptila californica californica</i> There is <b>final</b> critical habitat for this species. Your location overlaps the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/8178">https://ecos.fws.gov/ecp/species/8178</a>	Threatened
Least Bell's Vireo <i>Vireo bellii pusillus</i> There is <b>final</b> critical habitat for this species. Your location is outside the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/5945">https://ecos.fws.gov/ecp/species/5945</a>	Endangered
Southwestern Willow Flycatcher <i>Empidonax traillii extimus</i> There is <b>final</b> critical habitat for this species. Your location is outside the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/6749">https://ecos.fws.gov/ecp/species/6749</a>	Endangered

### Amphibians

NAME	STATUS
Arroyo (=arroyo Southwestern) Toad <i>Anaxyrus californicus</i> There is <b>final</b> critical habitat for this species. Your location is outside the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/3762">https://ecos.fws.gov/ecp/species/3762</a>	Endangered

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## Fishes

NAME	STATUS
Santa Ana Sucker <i>Catostomus santaanae</i> Population: 3 CA river basins There is <b>final</b> critical habitat for this species. Your location overlaps the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/3785">https://ecos.fws.gov/ecp/species/3785</a>	Threatened

## Insects

NAME	STATUS
Quino Checkerspot Butterfly <i>Euphydryas editha quino</i> (= <i>E. e. wrighti</i> ) There is <b>final</b> critical habitat for this species. Your location is outside the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/5900">https://ecos.fws.gov/ecp/species/5900</a>	Endangered

## Crustaceans

NAME	STATUS
Santa Diego Fairy Shrimp <i>Branchinecta sandiegonensis</i> There is <b>final</b> critical habitat for this species. Your location is outside the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/6945">https://ecos.fws.gov/ecp/species/6945</a>	Endangered

## Flowering Plants

NAME	STATUS
Braunton's Milk-vetch <i>Astragalus brauntonii</i> There is <b>final</b> critical habitat for this species. Your location is outside the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/5674">https://ecos.fws.gov/ecp/species/5674</a>	Endangered
Santa Monica Mountains Dudleyea <i>Dudleya cymosa</i> ssp. <i>ovatifolia</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/2538">https://ecos.fws.gov/ecp/species/2538</a>	Threatened

## Critical habitats

There are 2 critical habitats wholly or partially within your project area under this office's jurisdiction.

NAME	STATUS
Coastal California Gnatcatcher <i>Polioptila californica californica</i> <a href="https://ecos.fws.gov/ecp/species/8178#crithab">https://ecos.fws.gov/ecp/species/8178#crithab</a>	Final
Santa Ana Sucker <i>Catostomus santaanae</i> <a href="https://ecos.fws.gov/ecp/species/3785#crithab">https://ecos.fws.gov/ecp/species/3785#crithab</a>	Final

**From:** NMFSWCRCA Specieslist - NOAA Service Account  
<nmfswcrca.specieslist+canned.response@noaa.gov>  
**Sent:** Saturday, March 14, 2020 2:27 PM  
**To:** prvs=0342251a62=brian.upchurch@parsons.com  
**Subject:** [EXTERNAL] Re: FHWA (California Department of Transportation) Project  
Title EA-08-0F544 Corridor Operations Project

Receipt of this message confirms that NMFS has received your email to [nmfswcrca.specieslist@noaa.gov](mailto:nmfswcrca.specieslist@noaa.gov). If you are a federal agency (or representative) and have followed the steps outlined on the California Species List Tools web page ([http://www.westcoast.fisheries.noaa.gov/maps\\_data/california\\_species\\_list\\_tools.html](http://www.westcoast.fisheries.noaa.gov/maps_data/california_species_list_tools.html) [[westcoast.fisheries.noaa.gov/](http://www.westcoast.fisheries.noaa.gov/)]), you have generated an official Endangered Species Act species list.

Messages sent to this email address are not responded to directly. For project specific questions, please contact your local NMFS office.

Northern California/Klamath (Arcata) 707-822-7201

North-Central Coast (Santa Rosa) 707-387-0737

Southern California (Long Beach) 562-980-4000

California Central Valley (Sacramento) 916-930-3600

**From:** Upchurch, Brian  
**Sent:** Saturday, March 14, 2020 2:27 PM  
**To:** nmfswcrca.specieslist@noaa.gov  
**Subject:** FHWA (California Department of Transportation) Project Title EA-08-0F544 Corridor Operations Project

Federal Highway Administration  
California Department of Transportation  
Contact: Brian Upchurch  
Environmental Planner  
3200 E Guasti Rd CA 91761, Suite 200  
(909) 218-3567

Project Title EA-08-0F544 Corridor Operations Project; construct auxiliary lane in the Westbound direction along SR-91

Between Green River Road and SR-241. Postmiles are between ORA Post Mile R17.4 to R18.9 and RIV Post Mile R0.0 to R0.6

Quad Name **Black Star Canyon**  
Quad Number **33117-G6**

### **ESA Anadromous Fish**

SONCC Coho ESU (T) -  
CCC Coho ESU (E) -  
CC Chinook Salmon ESU (T) -  
CVSR Chinook Salmon ESU (T) -  
SRWR Chinook Salmon ESU (E) -  
NC Steelhead DPS (T) -  
CCC Steelhead DPS (T) -  
SCCC Steelhead DPS (T) -  
SC Steelhead DPS (E) - **X**  
CCV Steelhead DPS (T) -  
Eulachon (T) -  
sDPS Green Sturgeon (T) -

### **ESA Anadromous Fish Critical Habitat**

SONCC Coho Critical Habitat -  
CCC Coho Critical Habitat -  
CC Chinook Salmon Critical Habitat -  
CVSR Chinook Salmon Critical Habitat -  
SRWR Chinook Salmon Critical Habitat -  
NC Steelhead Critical Habitat -  
CCC Steelhead Critical Habitat -  
SCCC Steelhead Critical Habitat -  
SC Steelhead Critical Habitat -  
CCV Steelhead Critical Habitat -  
Eulachon Critical Habitat -  
sDPS Green Sturgeon Critical Habitat -

### **ESA Marine Invertebrates**

Range Black Abalone (E) -  
Range White Abalone (E) -

### **ESA Marine Invertebrates Critical Habitat**

Black Abalone Critical Habitat -

### **ESA Sea Turtles**

East Pacific Green Sea Turtle (T) -  
Olive Ridley Sea Turtle (T/E) -  
Leatherback Sea Turtle (E) -  
North Pacific Loggerhead Sea Turtle (E) -

### **ESA Whales**

Blue Whale (E) -  
Fin Whale (E) -  
Humpback Whale (E) -  
Southern Resident Killer Whale (E) -  
North Pacific Right Whale (E) -  
Sei Whale (E) -



Sperm Whale (E) -

**ESA Pinnipeds**

Guadalupe Fur Seal (T) -

Steller Sea Lion Critical Habitat -

**Essential Fish Habitat**

Coho EFH -

Chinook Salmon EFH -

Groundfish EFH -

Coastal Pelagics EFH -

Highly Migratory Species EFH -

**MMPA Species (See list at left)**

**ESA and MMPA Cetaceans/Pinnipeds**

**See list at left and consult the NMFS Long Beach office  
562-980-4000**

MMPA Cetaceans -

MMPA Pinnipeds -

Quad Name **Prado Dam**

Quad Number **33117-H6**

**ESA Anadromous Fish**

SONCC Coho ESU (T) -

CCC Coho ESU (E) -

CC Chinook Salmon ESU (T) -

CVSR Chinook Salmon ESU (T) -

SRWR Chinook Salmon ESU (E) -

NC Steelhead DPS (T) -

CCC Steelhead DPS (T) -

SCCC Steelhead DPS (T) -

SC Steelhead DPS (E) -

**X**

CCV Steelhead DPS (T) -

Eulachon (T) -

sDPS Green Sturgeon (T) -

### **ESA Anadromous Fish Critical Habitat**

SONCC Coho Critical Habitat -  
CCC Coho Critical Habitat -  
CC Chinook Salmon Critical Habitat -  
CVSR Chinook Salmon Critical Habitat -  
SRWR Chinook Salmon Critical Habitat -  
NC Steelhead Critical Habitat -  
CCC Steelhead Critical Habitat -  
SCCC Steelhead Critical Habitat -  
SC Steelhead Critical Habitat -  
CCV Steelhead Critical Habitat -  
Eulachon Critical Habitat -  
sDPS Green Sturgeon Critical Habitat -

### **ESA Marine Invertebrates**

Range Black Abalone (E) -  
Range White Abalone (E) -

### **ESA Marine Invertebrates Critical Habitat**

Black Abalone Critical Habitat -

### **ESA Sea Turtles**

East Pacific Green Sea Turtle (T) -  
Olive Ridley Sea Turtle (T/E) -  
Leatherback Sea Turtle (E) -  
North Pacific Loggerhead Sea Turtle (E) -

### **ESA Whales**

Blue Whale (E) -  
Fin Whale (E) -  
Humpback Whale (E) -  
Southern Resident Killer Whale (E) -  
North Pacific Right Whale (E) -  
Sei Whale (E) -

Sperm Whale (E) -

**ESA Pinnipeds**

Guadalupe Fur Seal (T) -

Steller Sea Lion Critical Habitat -

**Essential Fish Habitat**

Coho EFH -

Chinook Salmon EFH -

Groundfish EFH -

Coastal Pelagics EFH -

Highly Migratory Species EFH -

**MMPA Species (See list at left)**

**ESA and MMPA Cetaceans/Pinnipeds**

**See list at left and consult the NMFS Long Beach office  
562-980-4000**

MMPA Cetaceans -

MMPA Pinnipeds -

# **ATTACHMENT 5**

## **Section 4(f) Coordination**

**DEPARTMENT OF TRANSPORTATION****DIVISION OF ENVIRONMENTAL PLANNING**

464 WEST FOURTH STREET, MS 1222

SAN BERNARDINO, CA. 92401-1400

MAIN (909) 383-4561

PHONE (909)-388-7725

FAX (909) 388-7048

TTY 711

www.dot.ca.gov

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October 24, 2019

Mr. Shane L. Silsby  
Director  
County of Orange Department of Public Works  
601 North Ross Street  
Santa Ana, CA 92701

**Subject:** EA 0F540 SR-91 Corridor Improvement Project Ultimate Project Re-Validation  
- Section 4(f) Consultation

Dear Mr. Silsby:

In August 2012, a Final Environmental Impact Report/Environmental Impact Statement (FEIR/EIS) was approved for the State Route 91 Corridor Improvement Project (SR-91 CIP). The project was analyzed for two phases: Initial Phase and Ultimate Project. The Initial Phase has been constructed and opened in 2017. Section 4(f) coordination with County of Orange Department of Public Works took place as part of the Initial Phase in 2012. Please see **Figure 1** for the concurrence letter Caltrans received from OC Public Works. All components of the Ultimate Project are planned for completion by 2035. The Section 4(f) analysis completed for the FEIR/EIS did not identify any project effects at the Santa Ana River Trail/Bike Lane associated with the Ultimate Project. Today, Caltrans is coordinating with the County of Orange Department of Public Works to determine Section 4(f) use and ensure that all reasonable measures to minimize harm have been considered.

The Riverside County Transportation Commission (RCTC), in cooperation with Caltrans is planning to construct a portion of the Ultimate Project of the SR-91 CIP by adding a new lane on WB SR-91 from the Green River Road WB on-ramp to the SR-241 WB to SB connector. This portion of the SR-91 CIP Ultimate Project is scheduled for completion by the end of 2021. Project components are shown in **Figure 2**.

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to enhance California's economy and livability"*

## ***Potential Impacts to Section 4(f) Properties***

### **Santa Ana River Trail and Bike Path**

#### *Description of the Property*

The Santa Ana River Trail segment closest to the Project is located north of the SR-91 in northeastern Orange County. The 29-mile Class 1 bicycle path and hiking trail extends from the Green River Golf Course west through Featherly Regional Park and terminates at Huntington Beach, paralleling the Santa Ana River channel. Features of the trail include sections of maintained asphalt paths, decomposed granite trails, and parking opportunities at various locations along the trail. The segment of Green River Road that is west of Green River Golf Club Road contains a trailhead parking area with 59 parking spaces. When consultation was conducted in 2012, the existing parking area at the trailhead was dirt lot with capacity for about 25 cars. On the initiative of RCTC, the Initial Phase of the SR-91 CIP included construction of an increased-capacity (30-space) surface parking lot near the Trail/Bike Lane.

#### *Potential Project Effects*

Project improvements at the Santa Ana River Trail and Bike Path trailhead parking area are discussed below and shown in **Figure 3**.

Currently, there exists a retaining wall at the location of Proposed Retaining Wall No. 4. Due to widening of SR-91 at this location, the existing retaining wall needs to have portions of it removed and rebuilt a few feet further north of its existing location, which would be constructed just south of the trailhead parking area on the north side of SR-91. With a required buffer of 27.5 feet for piledriving activities, only one lane of traffic could remain open during temporary construction staging; maintaining one-way traffic throughout construction between Green River Golf Club Road and the cul-de-sac at the end of Green River Road was deemed to be too great of a safety issue. Due to the short-term nature of this daytime-only work and the distance between piledriving activities and the trail, and by following all relevant noise and biological mitigation measures as stated in the FEIR/EIS Environmental Commitments Record, noise impacts associated with piledriving are not anticipated.

Public vehicle access to the street parking area adjacent to the Santa Ana River Trail would be prohibited during construction of Retaining Wall No. 4 and 59 parking spaces would be temporarily closed for approximately three months. However, pedestrian and bicycle access to the trail in this location would remain open. The next nearest trail access location with parking is about 2.7 miles to the west in Featherly Regional Park.

All impacts would be temporary. Green River Road would remain in its current configuration. Parking spaces would not be altered or removed; however, the Green River Road segment west of Green River Golf Club Road would be returned to a slightly reduced width due to this project's improvements.

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Mr. Shane L. Silsby  
October 24, 2019  
Page 3

Public outreach efforts to notify the public and trail users of the temporary closure of the parking lot at the trailhead located at the end of Green River Road, west of Green River Golf Club Road, would include posting signs in advance of construction at the parking lot; placing flyers on vehicles located in the parking lot; social media postings; news releases; outreach to the cycling community; and postings on City of Corona, County of Riverside and RCTC websites.

*Preliminary Section 4(f) Impact Determination*

*Temporary Occupancy Use with De Minimis Impact*– Caltrans anticipates a determination that the EA 0F540 portion of the SR-91 CIP Ultimate Project satisfies the five conditions set forth in 23 CFR 771.13(d), and that Section 4(f) will not apply. The duration of the temporary occupancy will be less than the time needed for construction of the build alternatives, and there would be no change in ownership of land. There will be no changes to the Santa Ana River Trail. There are no anticipated permanent adverse physical impacts, nor will there be interference with the activities or purposes of the resource, on either a temporary or permanent basis associated with the EA 0F540 SR-91 CIP Ultimate Project. The land being used will be fully restored and returned to a condition which is at least as good as that which existed prior to the project.

Caltrans deems these impacts a temporary occupancy use and intends to make a *de minimis* impact finding if Orange County Department of Public Works concurs that the project will not adversely affect the activities, features, and attributes of the park/recreational area.

Caltrans is now requesting your concurrence that Section 4(f) will not apply and the SR-91 CIP Ultimate Project satisfies the five conditions set forth in 23 CFR 771.13(d) for a determination of temporary occupancy. A signature block is provided at the bottom of this letter for your convenience. Your concurrence is requested within the next 30 days in order to maintain the schedule for this project.

If you should have any questions, please contact Shawn Oriaz of my staff at (909) 388-7034 or [shawn.oriaz@dot.ca.gov](mailto:shawn.oriaz@dot.ca.gov).

Sincerely,



DAVID BRICKER  
Deputy District Director for Environmental Planning

Enclosures: Initial Phase Concurrence Letter, Project Location, and Impacts to Parking

*"Provide a safe, sustainable, integrated and efficient transportation system  
to enhance California's economy and livability"*

January 16, 2020

Mr. David Bricker  
Deputy District Director for Environmental Planning  
Department of Transportation  
Division of Environmental Planning  
464 West Fourth Street, MS 1222  
San Bernardino, CA 92401-1400

The Orange County Public Works Department (OC Public Works) appreciates the opportunity to participate in the Section 4(f) concurrence process. OC Public Works understands that the California Department of Transportation (Caltrans) and the Riverside County Transportation Commission (RCTC) are initiating the next phase of the State Route 91 Corridor Improvement Project (CIP). This phase of the project, EA 0F540, includes highway widening and construction of retaining walls.

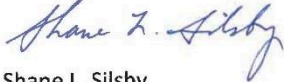
This phase will require temporary occupancy of the 59 parking spaces adjacent to the Santa Ana River Trail along Green River Road. During a construction period of approximately three months, public vehicle access to the street parking area adjacent to the Santa Ana River Trail would be prohibited. Bicycle and pedestrian access, however, would remain open, and trail access with parking available is located to the west in Featherly Regional Park. After this section of the Ultimate CIP is complete, additional coordination and concurrence will be needed as future iterations are designed and constructed.

The environmental review, consultation, and any other actions required by applicable federal environmental laws for this CIP is being, or has been, carried out by Caltrans pursuant to 23 U.S.C. § 327 and the Memorandum of Understanding dated December 23, 2016 that was executed by the Federal Highway Administration (FHWA) and Caltrans. OC Public Works understands that Caltrans aims to abide by all established policies as required by agencies with jurisdiction over Section 4(f) facilities, and any recommended measures to preserve the operation and maintenance of such during construction. Caltrans maintains that the temporary occupancy use with *de minimis* impact finding is appropriate and would be maintained with regards to the potential impacts to the Santa

Ana River Trail on the activities, features, and attributes that make the Santa Ana River Trail eligible for Section 4(f) protection.

My signature below represents written concurrence on the temporary occupancy use with *de minimis* impact finding that the current phase of the State Route 91 CIP would not adversely affect the activities, features, and attributes that qualify the Santa Ana River Trail for protection under Section 4(f).

Sincerely,

A handwritten signature in blue ink that reads "Shane L. Silsby". The signature is fluid and cursive, with the first name "Shane" and last name "Silsby" clearly legible.

Shane L. Silsby  
Director of OC Public Works

**DEPARTMENT OF TRANSPORTATION****DIVISION OF ENVIRONMENTAL PLANNING**

464 WEST FOURTH STREET, MS 1222

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TTY 711

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October 24, 2019

Ms. Stacy Blackwood  
Director  
County of Orange Department of Parks and Recreation  
13042 Old Mydford Road  
Irvine, CA 92602

**Subject:** EA 0F540 SR-91 Corridor Improvement Project Ultimate Project Re-Validation  
- Section 4(f) Consultation

Dear Ms. Blackwood:

In August 2012, a Final Environmental Impact Report/Environmental Impact Statement (FEIR/EIS) was approved for the State Route 91 Corridor Improvement Project (SR-91 CIP). The project was analyzed for two phases: Initial Phase and Ultimate Project. The Initial Phase has been constructed and opened in 2017. Section 4(f) coordination with County of Orange Department of Parks and Recreation took place as part of the Initial Phase in 2012. Please see **Figure 1** for the original coordination letter sent to the County of Orange Department of Parks and Recreation. All components of the Ultimate Project are planned for completion by 2035. The Section 4(f) analysis completed for the FEIR/EIS did not identify any project effects at the Santa Ana River Trail/Bike Lane associated with the Ultimate Project. Today, Caltrans is coordinating with the County of Orange Department of Parks and Recreation to determine Section 4(f) use and ensure that all reasonable measures to minimize harm have been considered.

The Riverside County Transportation Commission (RCTC), in cooperation with Caltrans is planning to construct a portion of the Ultimate Project of the SR-91 CIP by adding a new lane on WB SR-91 from the Green River Road WB on-ramp to the SR-241 WB to SB connector. This portion of the SR-91 CIP Ultimate Project is scheduled for completion by the end of 2021. Project components are shown in **Figure 2**.

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to enhance California's economy and livability"*

### ***Potential Impacts to Section 4(f) Properties***

#### **Santa Ana River Trail and Bike Path**

##### *Description of the Property*

The Santa Ana River Trail segment closest to the Project is located north of the SR-91 in northeastern Orange County. The 29-mile Class 1 bicycle path and hiking trail extends from the Green River Golf Course west through Featherly Regional Park and terminates at Huntington Beach, paralleling the Santa Ana River channel. Features of the trail include sections of maintained asphalt paths, decomposed granite trails, and parking opportunities at various locations along the trail. The segment of Green River Road that is west of Green River Golf Club Road contains a trailhead parking area with 59 parking spaces. When consultation was conducted in 2012, the existing parking area at the trailhead was dirt lot with capacity for about 25 cars. On the initiative of RCTC, the Initial Phase of the SR-91 CIP included construction of an increased-capacity (30-space) surface parking lot near the Trail/Bike Lane.

##### *Potential Project Effects*

Project improvements at the Santa Ana River Trail and Bike Path trailhead parking area are discussed below and shown in **Figure 3**.

Currently, there exists a retaining wall at the location of Proposed Retaining Wall No. 4. Due to widening of SR-91 at this location, the existing retaining wall needs to have portions of it removed and rebuilt a few feet further north of its existing location, which would be constructed just south of the trailhead parking area on the north side of SR-91. With a required buffer of 27.5 feet for piledriving activities, only one lane of traffic could remain open during temporary construction staging; maintaining one-way traffic throughout construction between Green River Golf Club Road and the cul-de-sac at the end of Green River Road was deemed to be too great of a safety issue. Due to the short-term nature of this daytime-only work and the distance between piledriving activities and the trail, and by following all relevant noise and biological mitigation measures as stated in the FEIR/EIS Environmental Commitments Record, noise impacts associated with piledriving are not anticipated.

Public vehicle access to the street parking area adjacent to the Santa Ana River Trail would be prohibited during construction of Retaining Wall No. 4 and 59 parking spaces would be temporarily closed for approximately three months. However, pedestrian and bicycle access to the trail in this location would remain open. The next nearest trail access location with parking is about 2.7 miles to the west in Featherly Regional Park.

All impacts would be temporary. Green River Road would remain in its current configuration. Parking spaces would not be altered or removed; however, the Green River Road segment west of Green River Golf Club Road would be returned to a slightly reduced width due to this project's improvements.

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Ms. Stacy Blackwood  
October 24, 2019  
Page 3

Public outreach efforts to notify the public and trail users of the temporary closure of the parking lot at the trailhead located at the end of Green River Road, west of Green River Golf Club Road, would include posting signs in advance of construction at the parking lot; placing flyers on vehicles located in the parking lot; social media postings; news releases; outreach to the cycling community; and postings on City of Corona, County of Riverside and RCTC websites.

*Preliminary Section 4(f) Impact Determination*

*Temporary Occupancy Use with De Minimis Impact*– Caltrans anticipates a determination that the EA 0F540 portion of the SR-91 CIP Ultimate Project satisfies the five conditions set forth in 23 CFR 771.13(d), and that Section 4(f) will not apply. The duration of the temporary occupancy will be less than the time needed for construction of the build alternatives, and there would be no change in ownership of land. There will be no changes to the Santa Ana River Trail. There are no anticipated permanent adverse physical impacts, nor will there be interference with the activities or purposes of the resource, on either a temporary or permanent basis associated with the EA 0F540 SR-91 CIP Ultimate Project. The land being used will be fully restored and returned to a condition which is at least as good as that which existed prior to the project.

Caltrans deems these impacts a temporary occupancy use and intends to make a *de minimis* impact finding if Orange County Department of Parks and Recreation concurs that the project will not adversely affect the activities, features, and attributes of the park/recreational area.

Caltrans is now requesting your concurrence that Section 4(f) will not apply and the SR-91 CIP Ultimate Project satisfies the five conditions set forth in 23 CFR 771.13(d) for a determination of temporary occupancy. A signature block is provided at the bottom of this letter for your convenience. Your concurrence is requested within the next 30 days in order to maintain the schedule for this project.

If you should have any questions, please contact Shawn Oriaz of my staff at (909) 388-7034 or [shawn.oriaz@dot.ca.gov](mailto:shawn.oriaz@dot.ca.gov).

Sincerely,



DAVID BRICKER  
Deputy District Director for Environmental Planning

Enclosures: Initial Phase Coordination Letter, Project Location, and Impacts to Parking

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DYLAN WRIGHT  
DIRECTOR  
OC COMMUNITY RESOURCES

CYMANTHA ATKINSON  
ASSISTANT DIRECTOR  
OC COMMUNITY RESOURCES

ROGER UMINSKI II  
DIRECTOR  
ADMINISTRATIVE SERVICES

MIKE KAVIANI  
DIRECTOR  
OC ANIMAL CARE

SHANNON LEGERE  
DIRECTOR  
OC HOUSING & HOMELESS SERVICES

RENEE RAMIREZ  
DIRECTOR  
OC COMMUNITY SERVICES

STACY BLACKWOOD  
DIRECTOR  
OC PARKS

SHERRY TOTH  
ACTING COUNTY LIBRARIAN  
OC PUBLIC LIBRARIES

# OC Community Resources

November 14, 2019

David Bricker  
Department of Transportation, Division of Environmental Planning  
464 W. Fourth Street, MS 1222  
San Bernardino, CA 92401-1400

**Subject: EA OF540 SR-91 Corridor Improvement Project Ultimate Project Re-Validation – Section 4(f) Consultation**

Dear Mr. Bricker:

OC Parks appreciates the opportunity to participate in the Section 4(f) concurrence process. OC Parks understands that California Department of Transportation (Caltrans) and the Riverside County Transportation Commission (RCTC) are initiating the next phase of the State Route 91 Corridor Improvement Project (CIP). This phase of the project, EA OF540, includes highway widening and construction of retaining walls.

This phase will require temporary occupancy of the 59 parking spaces adjacent to the Santa Ana River Trail along Green River Road. During a construction period of approximately three months, public vehicle access to the street parking area adjacent to the Santa Ana River Trail would be prohibited. Bicycle and pedestrian access, however, would remain open, and trail access with parking available is located to the west in Featherly Regional Park. After this section of the Ultimate Project is complete, additional coordination and concurrence will be needed as future iterations of the Ultimate Project are designed and constructed.

The environmental review, consultation, and any other actions required by applicable federal environmental laws for this project are being, or have been, carried out by Caltrans pursuant to 23 U.S.C. § 327 and the Memorandum of Understanding dated December 23, 2016 and was executed by the Federal Highway Administration (FHWA) and Caltrans. Caltrans aims to abide by all established policies as required by agencies with jurisdiction over Section 4(f) facilities, and any recommended measures to preserve the operation and maintenance of such during construction. Caltrans maintains that the temporary occupancy use with *de minimis* finding is appropriate and would be maintained with regard to the potential impacts of the Santa Ana River Trail on the activities, features, and attributes that make the Santa Ana River Trail eligible for Section 4(f) protection.

My signature below represents written concurrence on the temporary occupancy use with *de minimis* impact finding that the current phase of the State Route 91 CIP would not adversely affect the activities, features, and attributes that qualify the Santa Ana River Trail for protection under Section 4(f).

Sincerely,

Eric E. Hull, AICP  
Entitlement Manager



13042 OLD MYFORD ROAD  
IRVINE, CA 92602  
PHONE: 866.OC PARKS  
FAX: 714-667-6511

**DEPARTMENT OF TRANSPORTATION****DIVISION OF ENVIRONMENTAL PLANNING**

464 WEST FOURTH STREET, MS 1222

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www.dot.ca.gov

*Making Conservation  
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October 24, 2019

Tom Koper  
Acting Director  
City of Corona Department of Public Works  
400 South Vicentia Avenue  
Corona, CA 92882

**Subject:** EA 0F540 SR-91 Corridor Improvement Project Ultimate Project Re-Validation  
- Section 4(f) Consultation

Dear Mr. Koper:

In August 2012, a Final Environmental Impact Report/Environmental Impact Statement (FEIR/EIS) was approved for the State Route 91 Corridor Improvement Project (SR-91 CIP). The project was analyzed for two phases: Initial Phase and Ultimate Project. The Initial Phase has been constructed and opened in 2017. Section 4(f) coordination with County of Orange Department of Public Works took place as part of the Initial Phase in 2012. Please see **Figure 1** for the original coordination letter sent to the City of Corona Public Works Department and the concurrence letter Caltrans received from Corona Public Works Department. All components of the Ultimate Project are planned for completion by 2035. The Section 4(f) analysis completed for the FEIR/EIS did not identify any project effects at the Santa Ana River Trail/Bike Lane associated with the Ultimate Project. Today, Caltrans is coordinating with the City of Corona Public Works Department to determine Section 4(f) use and ensure that all reasonable measures to minimize harm have been considered.

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to enhance California's economy and livability"*

### ***Potential Impacts to Section 4(f) Properties***

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##### *Description of the Property*

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##### *Potential Project Effects*

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Public vehicle access to the street parking area adjacent to the Santa Ana River Trail would be prohibited during construction of Retaining Wall No. 4 and 59 parking spaces would be temporarily closed for approximately three months. However, pedestrian and bicycle access to the trail in this location would remain open. The next nearest trail access location with parking is about 2.7 miles to the west in Featherly Regional Park.

All impacts would be temporary. Green River Road would remain in its current configuration. Parking spaces would not be altered or removed; however, the Green River Road segment west of Green River Golf Club Road would be returned to a slightly reduced width due to this project's improvements.

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to enhance California's economy and livability"*

Mr. Tom Koper  
October 24, 2019  
Page 3

Public outreach efforts to notify the public and trail users of the temporary closure of the parking lot at the trailhead located at the end of Green River Road, west of Green River Golf Club Road, would include posting signs in advance of construction at the parking lot; placing flyers on vehicles located in the parking lot; social media postings; news releases; outreach to the cycling community; and postings on City of Corona, County of Riverside and RCTC websites.

*Preliminary Section 4(f) Impact Determination*

*Temporary Occupancy Use with De Minimis Impact*– Caltrans anticipates a determination that the EA 0F540 SR-91 CIP Ultimate Project satisfies the five conditions set forth in 23 CFR 771.13(d), and that Section 4(f) will not apply. The duration of the temporary occupancy will be less than the time needed for construction of the build alternatives, and there would be no change in ownership of land. There will be no changes to the Santa Ana River Trail. There are no anticipated permanent adverse physical impacts, nor will there be interference with the activities or purposes of the resource, on either a temporary or permanent basis associated with the EA 0F540 portion of the SR-91 CIP Ultimate Project. The land being used will be fully restored and returned to a condition which is at least as good as that which existed prior to the project.

Caltrans deems these impacts a temporary occupancy use and intends to make a *de minimis* impact finding if Corona Department of Public Works concurs that the project will not adversely affect the activities, features, and attributes of the park/recreational area.

Caltrans is now requesting your concurrence that Section 4(f) will not apply and the SR-91 CIP Ultimate Project satisfies the five conditions set forth in 23 CFR 771.13(d) for a determination of temporary occupancy. A signature block is provided at the bottom of this letter for your convenience. Your concurrence is requested within the next 30 days in order to maintain the schedule for this project.

If you should have any questions, please contact Shawn Oriaz of my staff at (909) 388-7034 or [shawn.oriaz@dot.ca.gov](mailto:shawn.oriaz@dot.ca.gov).

Sincerely,



DAVID BRICKER  
Deputy District Director for Environmental Planning

Enclosures: Initial Phase Coordination and Concurrence Letters, Project Location, and Impacts to Parking

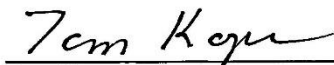
*"Provide a safe, sustainable, integrated and efficient transportation system  
to enhance California's economy and livability"*

City of Corona Public Works Department appreciates the opportunity to participate in the Section 4(f) concurrence process. City of Corona Public Works Department understands that California Department of Transportation (Caltrans) and the Riverside County Transportation Commission (RCTC) are initiating the next phase of the State Route 91 Corridor Improvement Project (CIP). This phase of the project, EA 0F540, includes highway widening and construction of retaining walls.

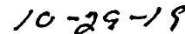
This phase will require temporary occupancy of the 59 parking spaces adjacent to the Santa Ana River Trail along Green River Road. During a construction period of approximately three months, public vehicle access to the street parking area adjacent to the Santa Ana River Trail would be prohibited. Bicycle and pedestrian access, however, would remain open, and trail access with parking available is located to the west in Featherly Regional Park. After this section of the Ultimate Project is complete, additional coordination and concurrence will be needed as future iterations of the Ultimate Project are designed and constructed.

The environmental review, consultation, and any other actions required by applicable federal environmental laws for this project are being, or have been, carried out by Caltrans pursuant to 23 U.S.C. § 327 and the Memorandum of Understanding dated December 23, 2016 and was executed by the Federal Highway Administration (FHWA) and Caltrans. Caltrans aims to abide by all established policies as required by agencies with jurisdiction over Section 4(f) facilities, and any recommended measures to preserve the operation and maintenance of such during construction. Caltrans maintains that the temporary occupancy use with *de minimis* impact finding is appropriate and would be maintained with regards to the potential impacts to the Santa Ana River Trail on the activities, features, and attributes that make the Santa Ana River Trail eligible for Section 4(f) protection.

My signature below represents written concurrence on the temporary occupancy use with *de minimis* impact finding that the current phase of the State Route 91 CIP would not adversely affect the activities, features, and attributes that qualify the Santa Ana River Trail for protection under Section 4(f).



Tom Koper  
Acting Director  
City of Corona Department of Public Works  
400 South Vicentia Avenue  
Corona, CA 92882



Date

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**DEPARTMENT OF TRANSPORTATION****DIVISION OF ENVIRONMENTAL PLANNING**

464 WEST FOURTH STREET, MS 1222

SAN BERNARDINO, CA. 92401-1400

MAIN (909) 383-4561

PHONE (909)-388-7725

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TTY 711

www.dot.ca.gov

*Making Conservation  
a California Way of Life.*

October 24, 2019

David Montgomery-Scott  
Director  
City of Corona Recreation Services  
400 South Vicentia Avenue  
Corona, CA 92882

**Subject:** EA 0F540 SR-91 Corridor Improvement Project Ultimate Project Re-Validation  
- Section 4(f) Consultation

Dear Mr. Montgomery-Scott:

In August 2012, a Final Environmental Impact Report/Environmental Impact Statement (FEIR/EIS) was approved for the State Route 91 Corridor Improvement Project (SR-91 CIP). The project was analyzed for two phases: Initial Phase and Ultimate Project. The Initial Phase has been constructed and opened in 2017. Section 4(f) coordination with City of Corona Parks and Community Services Department took place as part of the Initial Phase in 2012. Please see **Figure 1** for the original coordination letter sent to City of Corona Parks and Community Services Department and the concurrence letter Caltrans received from Corona Parks and Community Services Department. All components of the Ultimate Project are planned for completion by 2035. The Section 4(f) analysis completed for the FEIR/EIS did not identify any project effects at the Santa Ana River Trail/Bike Lane associated with the Ultimate Project. Today, Caltrans is coordinating with the City of Corona Recreation Services to determine Section 4(f) use and ensure that all reasonable measures to minimize harm have been considered.

The Riverside County Transportation Commission (RCTC), in cooperation with Caltrans is planning to construct a portion of the Ultimate Project of the SR-91 CIP by adding a new lane on WB SR-91 from the Green River Road WB on-ramp to the SR-241 WB to SB connector. This portion of the SR-91 CIP Ultimate Project is scheduled for completion by the end of 2021. Project components are shown in **Figure 2**.

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## ***Potential Impacts to Section 4(f) Properties***

### **Santa Ana River Trail and Bike Path**

#### *Description of the Property*

The Santa Ana River Trail segment closest to the Project is located north of the SR-91 in northeastern Orange County. The 29-mile Class 1 bicycle path and hiking trail extends from the Green River Golf Course west through Featherly Regional Park and terminates at Huntington Beach, paralleling the Santa Ana River channel. Features of the trail include sections of maintained asphalt paths, decomposed granite trails, and parking opportunities at various locations along the trail. The segment of Green River Road that is west of Green River Golf Club Road contains a trailhead parking area with 59 parking spaces. When consultation was conducted in 2012, the existing parking area at the trailhead was dirt lot with capacity for about 25 cars. On the initiative of RCTC, the Initial Phase of the SR-91 CIP included construction of an increased-capacity (30-space) surface parking lot near the Trail/Bike Lane.

#### *Potential Project Effects*

Project improvements at the Santa Ana River Trail and Bike Path trailhead parking area are discussed below and shown in **Figure 3**.

Currently, there exists a retaining wall at the location of Proposed Retaining Wall No. 4. Due to widening of SR-91 at this location, the existing retaining wall needs to have portions of it removed and rebuilt a few feet further north of its existing location, which would be constructed just south of the trailhead parking area on the north side of SR-91. With a required buffer of 27.5 feet for piledriving activities, only one lane of traffic could remain open during temporary construction staging; maintaining one-way traffic throughout construction between Green River Golf Club Road and the cul-de-sac at the end of Green River Road was deemed to be too great of a safety issue. Due to the short-term nature of this daytime-only work and the distance between piledriving activities and the trail, and by following all relevant noise and biological mitigation measures as stated in the FEIR/EIS Environmental Commitments Record, noise impacts associated with piledriving are not anticipated.

Public vehicle access to the street parking area adjacent to the Santa Ana River Trail would be prohibited during construction of Retaining Wall No. 4 and 59 parking spaces would be temporarily closed for approximately three months. However, pedestrian and bicycle access to the trail in this location would remain open. The next nearest trail access location with parking is about 2.7 miles to the west in Featherly Regional Park.

All impacts would be temporary. Green River Road would remain in its current configuration. Parking spaces would not be altered or removed; however, the Green River Road segment west of Green River Golf Club Road would be returned to a slightly reduced width due to this project's improvements.

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Mr. David Montgomery-Scott  
October 24, 2019  
Page 3

Public outreach efforts to notify the public and trail users of the temporary closure of the parking lot at the trailhead located at the end of Green River Road, west of Green River Golf Club Road, would include posting signs in advance of construction at the parking lot; placing flyers on vehicles located in the parking lot; social media postings; news releases; outreach to the cycling community; and postings on City of Corona, County of Riverside and RCTC websites.

*Preliminary Section 4(f) Impact Determination*

*Temporary Occupancy Use with De Minimis Impact*– Caltrans anticipates a determination that the EA 0F540 portion of the SR-91 CIP Ultimate Project satisfies the five conditions set forth in 23 CFR 771.13(d), and that Section 4(f) will not apply. The duration of the temporary occupancy will be less than the time needed for construction of the build alternatives, and there would be no change in ownership of land. There will be no changes to the Santa Ana River Trail. There are no anticipated permanent adverse physical impacts, nor will there be interference with the activities or purposes of the resource, on either a temporary or permanent basis associated with the EA 0F540 SR-91 CIP Ultimate Project. The land being used will be fully restored and returned to a condition which is at least as good as that which existed prior to the project.

Caltrans deems these impacts a temporary occupancy use and intends to make a *de minimis* impact finding if Corona Recreation Services concurs that the project will not adversely affect the activities, features, and attributes of the park/recreational area.

Caltrans is now requesting your concurrence that Section 4(f) will not apply and the SR-91 CIP Ultimate Project satisfies the five conditions set forth in 23 CFR 771.13(d) for a determination of temporary occupancy. A signature block is provided at the bottom of this letter for your convenience. Your concurrence is requested within the next 30 days in order to maintain the schedule for this project.

If you should have any questions, please contact Shawn Oriaz of my staff at (909) 388-7034 or [shawn.oriaz@dot.ca.gov](mailto:shawn.oriaz@dot.ca.gov).

Sincerely,



DAVID BRICKER  
Deputy District Director for Environmental Planning

Enclosures: Initial Phase Coordination and Concurrence Letters, Project Location, and Impacts to Parking


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to enhance California's economy and livability"*

City of Corona Recreation Services appreciates the opportunity to participate in the Section 4(f) concurrence process. City of Corona Recreation Services understands that California Department of Transportation (Caltrans) and the Riverside County Transportation Commission (RCTC) are initiating the next phase of the State Route 91 Corridor Improvement Project (CIP). This phase of the project, EA 0F540, includes highway widening and construction of retaining walls.

This phase will require temporary occupancy of the 59 parking spaces adjacent to the Santa Ana River Trail along Green River Road. During a construction period of approximately three months, public vehicle access to the street parking area adjacent to the Santa Ana River Trail would be prohibited. Bicycle and pedestrian access, however, would remain open, and trail access with parking available is located to the west in Featherly Regional Park. After this section of the Ultimate Project is complete, additional coordination and concurrence will be needed as future iterations of the Ultimate Project are designed and constructed.

The environmental review, consultation, and any other actions required by applicable federal environmental laws for this project are being, or have been, carried out by Caltrans pursuant to 23 U.S.C. § 327 and the Memorandum of Understanding dated December 23, 2016 and was executed by the Federal Highway Administration (FHWA) and Caltrans. Caltrans aims to abide by all established policies as required by agencies with jurisdiction over Section 4(f) facilities, and any recommended measures to preserve the operation and maintenance of such during construction. Caltrans maintains that the temporary occupancy use with *de minimis* impact finding is appropriate and would be maintained with regards to the potential impacts to the Santa Ana River Trail on the activities, features, and attributes that make the Santa Ana River Trail eligible for Section 4(f) protection.

My signature below represents written concurrence on the temporary occupancy use with *de minimis* impact finding that the current phase of the State Route 91 CIP would not adversely affect the activities, features, and attributes that qualify the Santa Ana River Trail for protection under Section 4(f).

  
\_\_\_\_\_  
David Montgomery-Scott  
Director  
City of Corona Recreation Services  
400 South Vicentia Avenue  
Corona, CA 92882

12/03/2015  
\_\_\_\_\_  
Date

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# **ATTACHMENT 6**

## **High Mast Lighting Exhibit**



PROPOSED HIGH MAST LIGHTING					
HEIGHT	STATIONING	STREET NAME	FS F.F.	FS ELEV. (FEET)	FS ELEV. (FEET)
1	100+00.00	10	481.49	483.65	21.44'
2	100+00.00	20.5'	478.69	479.02	20.52'
3	100+00.00	20.5'	483.69	483.69	20.52'
4	100+00.00	20.5'	483.69	483.69	20.52'
5	100+00.00	20.5'	483.69	483.69	20.52'
6	100+00.00	20.5'	483.69	483.69	20.52'
7	100+00.00	20.5'	483.69	483.69	20.52'
8	100+00.00	20.5'	483.69	483.69	20.52'
9	100+00.00	20.5'	483.69	483.69	20.52'
10	100+00.00	20.5'	483.69	483.69	20.52'
11	100+00.00	20.5'	483.69	483.69	20.52'
12	100+00.00	20.5'	483.69	483.69	20.52'
13	100+00.00	20.5'	483.69	483.69	20.52'
14	100+00.00	20.5'	483.69	483.69	20.52'
15	100+00.00	20.5'	483.69	483.69	20.52'
16	100+00.00	20.5'	483.69	483.69	20.52'
17	100+00.00	20.5'	483.69	483.69	20.52'
18	100+00.00	20.5'	483.69	483.69	20.52'
19	100+00.00	20.5'	483.69	483.69	20.52'
20	100+00.00	20.5'	483.69	483.69	20.52'

Calculation Summary						
Label	CalcType	Units	Avg	Max	Min	Avg/Min
High Mast LED Luminaires	ILLuminance	Fc	0.6	1.6	0.2	3.2
ANSI/IESNA RP-88	Standard Design Values	Fc	0.6 to 1.1	N/A	0.2	3:1 to 4:1

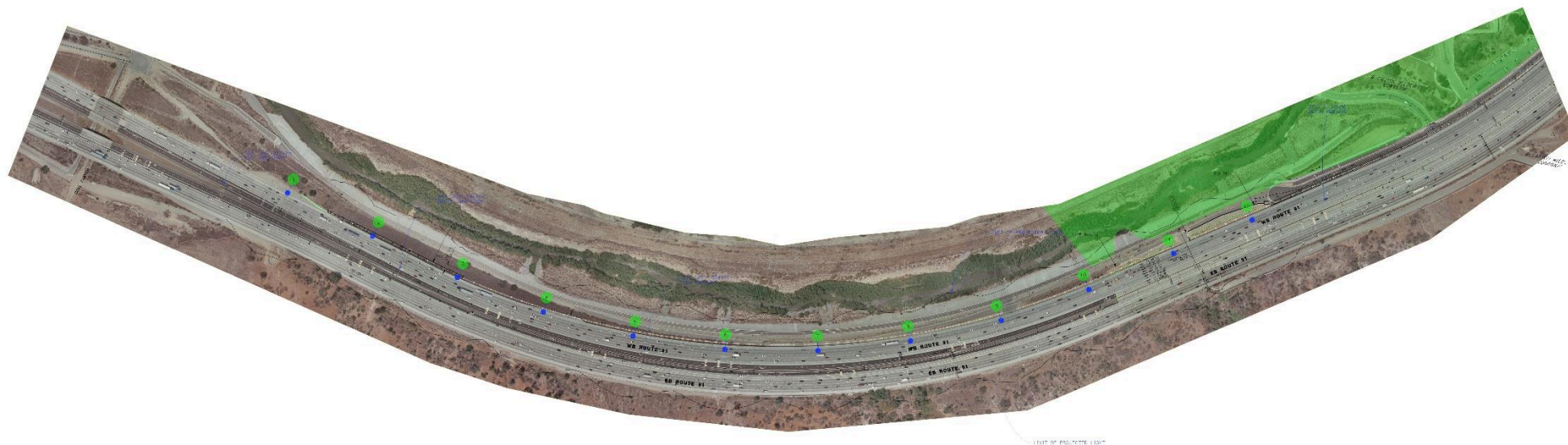
Luminaire Schedule						
Symbol	Qty	Label	Arrangement	Total Lamp Lumens	LLF	Description
◀	11	PMF03 PK2 3K XXXXX X F RVLS	3 @ 45 DEGREES	N.A.	0.90	PMF03 PK2 3K XXXXX X F RVLS

# LEGEND:

→	DIRECTION OF TRAVEL
SP	GENERAL PURPOSE
CDP	COMMERCE
ADP	ADDITIONAL
PROPOSED LIGHT LINE	
DEVELOPMENT AREA	

# NOTE:

LIMIT OF PROPOSED LIGHT  
 IS 10' FROM EXISTING ROAD  
 TO 10' FROM EXISTING ROAD  
 TO 10' FROM EXISTING ROAD



## 91 COP PROPOSED HIGH MAST LIGHTING PHOTOMETRIC EXHIBIT





**ATTACHMENT 7**  
**Environmental Commitments Record**  
**for the Ultimate Project**



ECR ID	Avoidance, Minimization, and/or Mitigation Measures	Environmental Analysis Source (Technical Study, Environmental Document, and/or Technical Discipline)	Responsible for Development and/or Implementation of Measure	Timing/ Phase	Action(s) Taken to Implement Measure	Measure Completed (Date and Initials)	Remarks	Measure is Applicable to Previous Phases	Measure is Applicable to SR-91 COP	Measure is Applicable to Future Phases
LU-1	If a Build Alternative is selected for implementation, the Riverside County Transportation Commission (RCTC) will request the County of Riverside, the County of Orange, and the cities along the alignments of State Route 91 (SR-91) and Interstate 15 (I-15) to amend their respective General Plans to reflect the selected SR-91 Corridor Improvement Project (CIP) alternative and the modification of land use designations for properties that would be acquired for the project which are not currently designated for transportation uses.	Final EIR/EIS	RCTC		The City of Corona will include 91 CIP land use changes in their regular General Plan Update. City of Corona has provided written verification.  A meeting was held with the County of Riverside on 2/28/2018. County of Riverside does not have an official designation for "transportation use" and does not need to amend the General Plan for that purpose. Land use changes for remnant parcels will occur during standard entitlement process as properties have already been sold for private development. Please see meeting minutes.	10/23/17 AT; 2/28/18 JLS	Measure Closed in Initial Phase	YES	NO	NO
PR-1	During final design/construction of the Initial Phase, RCTC will contribute \$100,000 to the planning and implementation of improvements in that area that would support and expand regional trail connectivity.	Final EIR/EIS	RCTC	Final design/ construction	RCTC Paid CDPR in January 2014	8/21/2015 SB	Measure Closed in Initial Phase	YES	NO	NO
PR-2	During final design/construction of the Initial Phase, RCTC will coordinate with State Parks on the aesthetic features that will be included in the project specifications for the proposed retaining wall facing CHSP between SR-71 and the westbound Green River Road off-ramp, consistent with the aesthetic and features required in Measure V 2. The aesthetic treatment will include a texture to simulate a natural type appearance such as a soil or rock surface, or equivalent.	Final EIR/EIS	RCTC/ Design-Builder	Final design/ construction	RCTC submitted design concept and renderings in December 2014. CDPR concurs in February 2015. Final design still needs to be reviewed prior to construction of aesthetic and entrance features.	12/02/16 AT	Measure Closed in Initial Phase	YES	NO	NO
PR-3	To minimize nighttime noise impacts to Chino Hills State Park (CHSP): 1. RCTC's Resident Engineer will require the design/build contractor to limit the hours of construction in CHSP to daylight hours (7:00 a.m. to 7:00 p.m.), with the exception of limited periods when evening or night construction is necessary for operational reasons. Operational reasons may include the desire to conduct certain construction activities; such as closing multiple ramps or travel lanes, during night hours to minimize delays to the traveling public. Any night construction must be	Final EIR/EIS	RCTC	1. During construction 2. Prior to construction				YES	NO	TBD

ECR ID	Avoidance, Minimization, and/or Mitigation Measures	Environmental Analysis Source (Technical Study, Environmental Document, and/or Technical Discipline)	Responsible for Development and/or Implementation of Measure	Timing/ Phase	Action(s) Taken to Implement Measure	Measure Completed (Date and Initials)	Remarks	Measure is Applicable to Previous Phases	Measure is Applicable to SR-91 COP	Measure is Applicable to Future Phases
	<p>approved in writing by the RCTC Resident Engineer and coordinated with the District 8 and 12 biologists, the USFWS, and CDFG.</p> <p>2. Other Commitments by RCTC Relevant to Chino Hills State Park. RCTC has committed to an additional action in the Coal Canyon area, as follows. <u>A stand-alone project will be developed to construct barriers on the south and north sides of SR-91 to shield headlight glare and freeway noise. The required barriers are estimated to be approximately 1,500 feet and 1,300 feet long on the south and north sides of SR-91 respectively.</u> The project will follow environmental process requirements and engage subject area experts to establish the specific requirements and effectiveness of the proposed barriers to meet the project purpose as well as ensure safety and structural standards are met. In consideration of and reliance on the needs of State Parks and other open space plans that depend on Chino Hills State Park, and subject to environmental review, RCTC commits to build this barrier in tandem with the completion of the SR-91 widening in this area currently planned for completion in 2035. RCTC intends to work with the Department and other agencies to fund and implement this project.</p>									
CI-1	<p>The Riverside County Transportation Commission's (RCTC) Project Engineer will ensure that <u>design refinements are incorporated in the final design</u> and project specifications to <u>minimize impacts to existing land uses</u> related to the temporary use and/or permanent acquisition of property. Prior to and during construction, RCTC's <u>Resident Engineer</u> will <u>ensure</u> that the design <u>refinements</u> included in the project specifications to minimize impacts to existing land uses related to temporary use and/or permanent acquisition of property are <u>properly implemented by the design/build contractor.</u></p>	Final EIR/EIS	RCTC	Prior to construction; during construction				YES	NO	TBD
CI-2	<p><u>Where property acquisition and relocation are unavoidable</u>, RCTC's Right-of-Way Agents will follow the provisions of the <u>Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (Uniform Act)</u> and the <u>1987 Amendments as implemented by the Uniform</u></p>	Final EIR/EIS	RCTC	Prior to construction; during construction				YES	NO	TBD

ECR ID	Avoidance, Minimization, and/or Mitigation Measures	Environmental Analysis Source (Technical Study, Environmental Document, and/or Technical Discipline)	Responsible for Development and/or Implementation of Measure	Timing/ Phase	Action(s) Taken to Implement Measure	Measure Completed (Date and Initials)	Remarks	Measure is Applicable to Previous Phases	Measure is Applicable to SR-91 COP	Measure is Applicable to Future Phases
	<p><u>Relocation Assistance and Real Property Acquisition Regulations for Federal and Federally Assisted Programs</u>. Appendix D in the Environmental Impact Report/Environmental Impact Statement (EIR/EIS) provides a summary of the RCTC Relocation Assistance Program for implementing the Uniform Act.</p> <p>For properties where a <u>partial acquisition results in the removal of some or all of the parking</u> for the property, RCTC's Right-of-Way Agents will <u>conduct parking studies</u> to investigate the use of adjacent acquisitions for replacement parking, reconfiguring the remaining parking spaces and lots on the property, restriping parking spaces, enlarging parking lots, and reconfiguring driveways and/or delivery locations <u>to reduce the project effects on the property</u>.</p>									
CI-3	<p>Where possible during final design, RCTC's Right-of-Way Agents and the Project Engineer will <u>work with owners of commercial, agricultural, and industrial uses subject to partial property acquisitions</u> to reconfigure those uses on site consistent with applicable local codes and ordinances <u>in such a manner as to enable them to remain in operation</u>. If a commercial or industrial partial acquisition cannot be reconfigured to allow for continued operation, RCTC's Right-of-Way Agents will work with the property owners to either relocate that use to land designated for that given land use, preferably within the boundaries of the study area or to provide compensation for the land pursuant to the provisions of the Uniform Act. If an agricultural use cannot be reconfigured to allow for its continued operation, the property owner will be compensated pursuant to the provisions of the Uniform Act as required in Measure CI-2 and the agricultural use will be discontinued.</p>	Final EIR/EIS	RCTC	Prior to construction				YES	NO	TBD
CI-4	<p>During final design and property acquisition, the RCTC Project Engineer and Right-of-Way Agents <u>will work with billboard/property owners</u>, the City of Corona, and the California Department of Transportation's (Department) Outdoor Advertising Unit <u>to find locations for relocating the affected billboards</u>, within the existing sites where the billboards are currently located or other sites in the</p>	Final EIR/EIS	RCTC	Final design/ construction				YES	NO	TBD

ECR ID	Avoidance, Minimization, and/or Mitigation Measures	Environmental Analysis Source (Technical Study, Environmental Document, and/or Technical Discipline)	Responsible for Development and/or Implementation of Measure	Timing/ Phase	Action(s) Taken to Implement Measure	Measure Completed (Date and Initials)	Remarks	Measure is Applicable to Previous Phases	Measure is Applicable to SR-91 COP	Measure is Applicable to Future Phases
	City where billboards are allowed. The Right-of-Way Agents will work with the City and the Department's Outdoor Advertising Unit to ensure that the sites for the relocated billboards comply with the requirements in the City of Corona Municipal Code and the Outdoor Advertising Act and Regulations. The Right-of-Way Agents will also work with the billboard/property owners to develop Billboard Relocation Agreements with the City of Corona.									
UES-1	During final design, the Riverside County Transportation Commission's (RCTC) Project Engineer will prepare utility relocation plans in consultation with the affected utility providers/owners for those utility facilities anticipated to be relocated, removed, and protected in-place. Final design will focus on avoiding utility relocations. If relocation is necessary, final design will focus on relocating utilities within the State right-of-way (in coordination with District 12 in Orange County) or within other existing public rights-of-way and/or easements. If relocation outside of existing or the additional public rights-of-way and/or easements required for the project is necessary, final design will focus on relocating those facilities in such a manner as to minimize environmental impacts as a result of project construction and ongoing maintenance and repair activities. The utility relocation plans will be included in the project specifications. Prior to and during construction, the RCTC Resident Engineer will ensure that the components of the utility relocation plans provided in the project specifications are properly implemented by the contractor.	Final EIR/EIS	Contractor/ RCTC	Final design/ construction				YES	YES	TBD
UES-2	Prior to and during construction, RCTC's Resident Engineer will require the contractor to coordinate all temporary ramp and lane closures and detour plans with law enforcement, fire protection, and emergency medical service providers to minimize temporary delays in emergency response times as part of the Final Transportation Management Plan (TMP) and Final Ramp Closure Study required in Measures T-1 and T-2, including the identification of alternative routes and routes across the construction areas for emergency vehicles	Final EIR/EIS	Contractor	Prior to construction; during construction				YES	YES	TBD



ECR ID	Avoidance, Minimization, and/or Mitigation Measures	Environmental Analysis Source (Technical Study, Environmental Document, and/or Technical Discipline)	Responsible for Development and/or Implementation of Measure	Timing/ Phase	Action(s) Taken to Implement Measure	Measure Completed (Date and Initials)	Remarks	Measure is Applicable to Previous Phases	Measure is Applicable to SR-91 COP	Measure is Applicable to Future Phases
	developed in coordination with the affected agencies.									
UES-3	Prior to and during any construction activities, the RCTC Project Engineer will require the contractor to implement the following to minimize the risk of fires during construction: <u>Coordinate with the applicable local fire department to identify and maintain defensible spaces around active construction areas; Coordinate with the applicable local fire department to identify and maintain firefighting equipment</u> (extinguishers, shovels, water tankers) in active construction areas; <u>Prohibit the use of mechanized equipment or equipment that could throw off sparks in areas adjacent to open space or undeveloped land</u> , including areas adjacent to CHSP; Post emergency services phone numbers (fire, emergency medical, police) in visible locations in all active construction areas.	Final EIR/EIS	Contractor	Prior to construction; during construction				YES	YES	TBD
UES-4	The final design of the SR-91 CIP Build Alternatives will include closing gaps so there is the equivalent of a continuous barrier 30 to 36 inches high on the edge of the shoulder on both westbound and eastbound SR-91 from SR-71 to SR-241, as follows:1. Initial Phase: The 36-inch high concrete barrier on westbound SR-91 between SR-71 and Green River Road already included in the design alternatives will meet the requirements for this barrier. 2. Ultimate Project: Close gaps to provide an equivalent continuous barrier 30 to 36 inches high on the edge of shoulder on SR-91 in both directions between Green River Road and SR-241 meeting Department standards, in coordination with District 12 in Orange County, applicable at the time.	Final EIR/EIS	RCTC	Prior to construction				YES	YES	TBD
T-1	<b>Transportation Management Plan.</b> During final design, the Riverside County Transportation Commission's (RCTC) Project Engineer direct a qualified traffic engineer to prepare the Final Traffic Management Plan (TMP), which will be based on the Preliminary TMP developed for the Project Report, to address specific short-term traffic impacts during construction of the project. The objectives of the Final TMP are to: Maintain traffic safety during construction Effectively maintain an acceptable level of traffic flow throughout the	Final EIR/EIS	RCTC/ Contractor	Final design/construction				YES	YES	TBD

ECR ID	Avoidance, Minimization, and/or Mitigation Measures	Environmental Analysis Source (Technical Study, Environmental Document, and/or Technical Discipline)	Responsible for Development and/or Implementation of Measure	Timing/ Phase	Action(s) Taken to Implement Measure	Measure Completed (Date and Initials)	Remarks	Measure is Applicable to Previous Phases	Measure is Applicable to SR-91 COP	Measure is Applicable to Future Phases
	<p>transportation system during construction Minimize traffic delays and facilitate reduction of overall duration of construction activities Minimize detours and impacts to pedestrians and bicyclists Foster public awareness of the project and related impacts Achieve public acceptance of construction of the project and the Final TMP measures.</p> <p>RCTC will submit the Final TMP to the California Department of Transportation (Department) for review and approval during final design and prior to any construction activities.</p> <p>The existing Preliminary TMP and Ramp Closure Study contains the following elements intended to reduce traveler delay and enhance traveler safety. These elements will be refined during final design and incorporated in the Final TMP for implementation during project construction.</p> <p>Public Information/Public Awareness Campaign (PAC). The primary goal of the PAC is to educate motorists, business owners/operators, residents, elected officials, and government agencies about construction activities and associated impacts. The PAC is an important tool for reaching target audiences with important construction project information and will include, but not be limited to: Rideshare information Brochures and mailers Media releases Paid advertising Public meetings Broadcast fax and email services Telephone hotline Notification to targeted groups Commercial traffic reporters/feeds Project website Visual information Local cable television and news Internet postings</p> <p>Traveler Information Strategies. The effective implementation of a traveler information system during construction is crucial for enabling motorists to make informed decisions about their travel plans and options with real-time traffic information. That real-time traffic information will include information on lane closures, detours, delays, access to adjacent land uses, “businesses are open” signing, and other signing and information to assist travelers in navigating through and in construction areas. Key components of this system will include, but not be limited to: Fixed changeable message signs Portable changeable message signs Ground-mounted signs Automated work zone information</p>									

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	<p>systems Highway advisory radio Lane closure website Department highway information network Bicycle and pedestrian information Commute Smart website</p> <p>Incident Management. Effective incident management will ensure that incidents in construction areas are cleared quickly and do not lead to substantial delays for the traveling public through work zones. Incident management includes, but is not limited to: Construction Zone Enhanced Enforcement Program (COZEEP) Freeway service patrol for construction Traffic surveillance stations Transportation Management Center Unit 370 Traffic management team Towing services</p> <p>Construction Strategies. The Final TMP will include procedures to lessen the effect of typical construction activities and will include, but not be limited to, consideration of the following: Conflicts with other projects and special events Construction staging alternatives Mainline lane closures Local road closures Ramp/connector closures Pedestrian and bicycle detours and facility closures Traffic control improvements Coordination with other projects Project phasing Traffic screens Truck traffic restrictions</p> <p>Demand Management. Temporarily reducing the overall traffic volumes on the project segments of State Route 91 (SR-91) and Interstate 15 (I-15) could reduce the short-term adverse effects of construction on traffic operations. The Final TMP will include, but not be limited to, the following strategies that could reduce vehicular demand in the study area during project construction: Rideshare incentives Transit services Shuttle services Variable work hours/ telecommuting High-occupancy vehicle (HOV) lanes/ramps Park-and-ride lots</p> <p>Alternate Route Strategies. The Final TMP will provide strategies for notifying motorists, pedestrians, and bicyclists, especially interregional commuters, of planned construction activities. This notification will allow travelers to make informed decisions about their travel plans, including the consideration of possible alternate routes. The Final TMP will consider the development of</p>									

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	alternate routes for motorists to address the following: Mainline lane closures Ramp/connector closures Local road closures Temporary highway or shoulder use Local street improvements Temporary detours and closures of bicycle and pedestrian facilities Traffic signal coordination RCTC's Resident Engineer will ensure that the measures in the Final TMP are properly implemented by the contractor prior to and during construction.									
T-2	Management of Ramp Closures. During final design, RCTC's Project Engineer will direct a qualified environmental planner to develop the Final Ramp Closure Study to address specific short-term impacts associated with ramp closures longer than 10 days during construction. The objectives of the Final Ramp Closure Study will be to: Minimize inconvenience to the traveling public; Minimize closures; Avoid or minimize concurrently multiple closures where possible; Coordinate closures as needed with other projects and activities. Prior to and during construction, RCTC's Resident Engineer will ensure that the measures included in the <i>Final Ramp Closure Study</i> are properly implemented by the design/build contractor.	Final EIR/EIS	RCTC/Design Builder	Final design/ construction				YES	NO	TBD
T-3	Fair Share Contributions. RCTC's Project Manager will ensure that RCTC pays the fair share contribution for the project-related impacts at area intersections. Those fair shares are shown by intersection in Table T-3.1. The recommended improvements include additional turn and through lanes. Summaries of the improved intersection delays and levels of service (LOS) are provided in Tables T-3.2, T-3.3, and T-3.4 for 2015 with the Initial Phase of Alternative 2, Design Year 2035 with Alternative 1, and Design Year 2035 with Alternative 2 conditions, respectively.	Final EIR/EIS	RCTC	During Construction				YES	NO	TBD
T-4	During final design, the RCTC Project Engineer will ensure that the final design and project specifications for the widened areas in the undercrossings on SR-91 and I-15 include appropriate lighting for vehicles and pedestrians. The RCTC Project Engineer will also assess the need for additional lighting in the original parts of	Final EIR/EIS	RCTC/ Design-Builder	Final design/ construction				YES	NO	TBD

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	<p>the undercrossings in the event the <u>longer undercrossings result in the need for additional lighting</u> in those areas. That additional lighting, if any, will also be shown in the project specifications. The RCTC Project Engineer will have any lighting considered at Coal Canyon reviewed and approved by the Project Biologist prior to incorporation in the project specifications to ensure the lighting does not affect the use of Coal Canyon as a wildlife crossing.</p> <p>During construction, the RCTC Resident Engineer will require the design-build contractor to implement the lighting in undercrossings as shown in the project specifications.</p>									
V-1	<p><b>Structure Elements.</b> To address adverse impacts of the project structures, the Project Engineer will direct a qualified landscape architect to ensure that the final project design <u>incorporates the mitigation and minimization elements A–D, below, and that these enhancements to structures are incorporated in the design and construction of sound walls, retaining walls, and bridge elements</u> and will not be “follow-up” enhancements. During construction, RCTC’s Resident Engineer will ensure that the contractor constructs the retaining and sound walls, medians, bridges, and other structures consistent with aesthetic and design features included in the project specifications. RCTC’s Resident Engineer will <u>ensure that those aesthetic and design features are constructed during the construction phase when the impact occurs.</u></p> <p>A. <u>Sound walls in low-density, developed areas or those fronting private property will be heavily textured (i.e. split-face or fractured rib) and integrally colored to minimize reflected glare and visual mass. Sound walls facing public-use areas (parks, streets, etc.) will incorporate textures and color as above plus site-specific aesthetic features (local or historical references) to minimize/mitigate impacts to community character and to restore a “sense of place.” Specific color selection for sound walls will be determined by the 215/91 Corridor Master Plan.</u></p> <p>B. <u>Retaining walls (including walls associated with bridge structures) will be heavily textured (i.e., split-</u></p>	Final EIR/EIS	RCTC/ Contractor	Final Design/ construction				YES	YES	TBD

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	<p>face or fractured rib) to minimize glare and visual mass. <u>Retaining walls facing public use areas (parks, streets, etc.) over 9 feet (ft) high will be heavily textured (i.e., split-face or fractured rib) and include site-specific aesthetic features (local or historical references).</u> Color (integral or applied) is not required for retaining walls.</p> <p>C. In addition to texture and color as described in A and B, above, <u>sound walls and retaining walls with low-density development or recreational viewer groups will include planting of trees or trees and shrubs, and vines at the base of the walls (non-motorist side)</u> to minimize loss of visual unity. Plantings will be local native species or ornamental species that require no irrigation after establishment. These plantings will not require permanent irrigation.</p> <p>D. <u>Slope paving in all areas with bicyclist and pedestrian viewers will include texture (i.e. stamped slate).</u> In urban areas, <u>slope paving will direct a qualified landscape architect to incorporate site-specific aesthetic features in addition to texture.</u> Texture and pattern will be used to minimize the visual impacts of increased hard surface, and reinforce community identify, offsetting reduced community connectivity associated with increased bridge widths.</p>									
V-2	<p><b>Highway Planting:</b> RCTC's Project Engineer will direct a qualified landscape architect to ensure that replacement planting to mitigate the loss of existing landscaping is included in the final design. Replacement planting will be funded with the project's construction and will include no less than 3 years of plant establishment. All planting must be reviewed and approved by the Caltrans District 8 Landscape Architect.</p> <p>RCTC's Project Engineer will ensure that the replacement planting is under construction within 2 years of acceptance of the highway contract that damaged or removed the existing planting.</p> <p>RCTC's Project Engineer will direct a qualified landscape architect to ensure the project plans show that where plantable right-of-way is reduced (as at Main Street), replacement planting will be trees, shrubs, vines, ground cover, permanent</p>	Final EIR/EIS	RCTC/Design Builder	During construction	<p>Summarized from Express Lane Connector (ELC) Revalidation, approved June 13, 2019:</p> <ul style="list-style-type: none"> <li>- Most recent count of tree replacements for SR-91 CIP is 1,169 and 4,977 (5-gallon shrubs)</li> <li>- All community adjacent trees are replaced at a 1:1 tree ratio and SR-91 CIP required an additional 360 trees to fulfill ECR Measure V-2</li> <li>- Through the SR-91 CIP, 324 trees were donated to the City of Corona to plant within their community</li> </ul>		Measure will be closed with I-15 ELC Project	YES	NO	NO



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	<p>irrigation, and enhanced structural elements. Enhanced structural elements will minimize the impact of reduced planting areas. Enhanced structural elements will include enhanced pedestrian facilities (such as pavement treatments, graphics, or above-standard decorative pedestrian lighting) and may incorporate community entry features into the structures.</p> <p>RCTC's Project Engineer will direct a qualified landscape architect to ensure that the project plans show that where plantable right-of-way is eliminated (as at residential areas on both sides of State Route 91 [SR-91] between just east of Lincoln Boulevard to approximately 400 ft west of East Grand Boulevard), the loss will be mitigated by off-site planting. Planting of street trees or other approved planting such as vines with permanent irrigation in City right-of-way such as at the base of retaining walls at Bollero Place and the 600 to 700 block of West Second Street will minimize the loss of existing landscape. The off-site tree planting will minimize the visual presence of the widened adjacent mainline. Replacement of existing trees by new street trees will be at a 1:1 (new tree to existing tree) ratio. To minimize the visual loss of the mature existing trees, these mitigating/replacement street trees will be planted at no less than 36 in box size.</p> <p>RCTC's Project Engineer will direct a qualified landscape architect to ensure that where plantable right-of-way is eliminated without the prospect of site-adjacent mitigation (as at the industrial areas just east of East Grand Boulevard or the above residential areas if street planting is not accepted by the City), the loss will be mitigated by planting within the project limits. This planting will be at a 4:1 (new tree to existing tree) ratio. If vehicle recovery distances prohibit tree planting in any selected area, mitigation planting may be achieved at a ratio of 10 new shrubs to 1 existing tree. For this mitigation planting, all trees will be no less than 15-gallon size and all shrubs will be no less than 5-gallon size.</p> <p>RCTC's Project Engineer will direct a qualified landscape architect to ensure that the project plans show that all mitigation planting within the State</p>				<ul style="list-style-type: none"> <li>- 236 trees were donated to Riverside County Parks and Recreation to plant within their jurisdiction</li> <li>- Planting of 87 trees within the I-15/SR-91 interchange transferred to the Express Lanes Project (ELP) (EA 0J0800) through ELP's Revalidation 11</li> <li>- These 87 trees are in addition to any tree replacement commitments already determined by ELP</li> <li>- Final count for the SR-91 CIP, including landscape plan quantities and community donations, totaled 2,227 tree equivalents,</li> <li>- This exceeds the requirements of the ECR</li> </ul>					

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	right-of-way, where appropriate, will include native tree, shrub, and vine species, and include temporary irrigation for establishment. Replacement planting will include permanent irrigation. The Project Engineer will refer to the Project Development Procedures Manual (PDPM) for the California Department of Transportation's (Department) policy regarding planting, and Measures V-2 and V-3 above.  RCTC's Resident Engineer will ensure that the design/build contractor properly implements the landscaping and structural treatment components described in Measures V-1 through V-4.									
V-3	<b>Light and Glare.</b> To reduce glare, RCTC's Project Engineer will ensure that the project plans specify lighting fixtures with non-glare hoods and that lighting is designed to illuminate only the right-of-way. The lighting plans will require the review and approval of the Department and applicable cities and counties before construction to assure compliance with their applicable policies regarding public street lighting. RCTC's Project Engineer will coordinate with the City of Corona and other applicable cities and counties to ensure that sufficient lighting is provided as part of the improvements to local streets within the project limits, consistent with applicable local policies and street lighting codes. Increased glare from walls, structures and pavement will be minimized by measures identified in V-2 and V-3.  RCTC's Resident Engineer will ensure that the project lighting plan included in the project specifications is implemented by the contractor during construction.	Final EIR/EIS	Design Builder	Final design/ construction				YES	YES	TBD
V-4	<b>Graffiti Reduction, Removal and Control.</b> During final design, the RCTC Project Engineer will incorporate vine planting on all sound barriers in the project specifications to reduce the potential for graffiti and to soften the appearance of those walls, consistent with the Highway Design Manual, Index 902.3(5).  After the construction of each sound barrier, the RCTC Resident Engineer will require the design/build contractor to install vine planting	Final EIR/EIS	Design Builder/ RCTC	Final design/constr uction				YES	NO	TBD

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	<p>consistent with the project specifications and the planting requirements in Measure V-3.</p> <p>The Department and the City of Corona have existing ongoing maintenance programs for the control and removal of graffiti. Those programs would apply to all new and modified structures in Alternatives 1 and 2, on public and private property, as appropriate. Key components of those programs are:</p> <p>Department Program. Chapter D1, Litter, Debris, and Graffiti (July 2006), in the Caltrans Maintenance Manual (Volume I, January 2011) describes the Department's maintenance program for the control and removal of graffiti. Key program components applicable to the project features in Alternatives 1 and 2 are: Use of recycled paint for various structures and matching paint used to cover graffiti with the original paint color on the structure. Use of physical devices such as rat guards, sign hoods, razor wire, and glare screen patches to limit access to facilities targeted by taggers. Replacement of ground-mounted signs with signs that have protective coatings or application of protective coatings to signs.</p> <p>City of Corona Program. Chapter 9.30, Graffiti Abatement Procedure, in the Corona Municipal Code, describes the City's procedures related to the prohibition of graffiti in the City and the graffiti removal process. Methods for the removal of graffiti include power washing, gel removers, and painting.</p>									
V-5	<p><b>Construction Plan.</b> To address adverse impacts associated with views of construction access and staging areas, the Riverside County Transportation Commission's (RCTC) Resident Engineer will require the contractor to construct the project in accordance with California Department of Transportation (Caltrans) Standard Construction Specifications, including appropriate measures to address visual impacts during construction.</p>	Final EIR/EIS	RCTC/ Contractor	During construction				YES	YES	TBD
V-6	<p>Prior to the implementation of the 2:1 slopes in <u>the area between Bridge Nos. 56-0637 Prado OH and 56-0634 West Prado OH</u>, RCTC will ensure that <u>the design/build contractor will minimize the impacts for the loss of visual quality by</u></p>	SR-91 CIP Revalidation No. 6	Design Builder	During construction	SR-91 Corridor Design Build/1.2 Design/1.2.12 Aesthetics and Landscaping/1.2.12.1 Aesthetic and Landscape Concept Development/Landscape and	<p>AT 2/23/17</p> <p>AT 7/10/17</p>	Measure Closed in Initial Phase	YES	NO	NO

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	<u>incorporating V-2 measures as approved by Caltrans and the permitting agencies.</u>				Irrigation/PALM/Final/RCT-AWJ-LTR-2544_Project Aesthetics and Landscape Master Plan Rev 3_Aproved as Noted_06222016.pdf  SR-91 Corridor Design Build/1.15 RFC and AFC (Released for Construction and Approved for Construction)/Conformed RFC Sets/Landscape					
V-7	During construction of the I-15 TEL project, a revalidation shall be processed for the addition of 44 trees to be planted at the SR-91/I-15 interchange.	SR-91 CIP Revalidation No. 30	Design-Builder	During Construction				YES	NO	NO
CR-1	Replacement of Trees in the Grand Boulevard Historic District. The requirements of Measure V-3 related to highway planting would apply to the replacement of the 18 trees in the Grand Boulevard Historic District. In addition, the following will be implemented during the design/build phase regarding the removal and replacement of the 18 trees in the Grand Boulevard Historic District: The RCTC Project Engineer will require the design/build contractor to replace all trees removed from the Historic District at a ratio of 1:1. The RCTC Project Engineer will require the design/build contractor to install replacement trees that are compatible with the existing plantings in the Grand Boulevard Historic District and with the overall character of the Historic District, and that the replacement trees be identified in consultation with the City of Corona, the California Department of Transportation (Department) District Landscape Architect, and a Professional Qualified Staff Architectural Historian from the District. The RCTC Project Engineer will require the construction contractor to install all replacement trees no later than the completion of construction activities in the Grand Boulevard Historic District.	Final EIR/EIS	RCTC	Final design/ construction	23 trees have been identified as contributing to the historic district that will be replaced per coordination with City of Corona and as applicable RCTC and Caltrans. June 2014 memo and location map satisfactorily documents which trees will be removed. Coordination will occur for identifying location and type of replacement trees within City of Corona ROW. Additional trees were removed due to design change and utility relocations. Two queen palms have been added (May 2017) to the Package E plan set.  Three California Fan Palms were added to the Historic District to complete replacement requirements. To meet the City's/Historical Society's request for larger trees, RCTC directed 20-25' of clear brown trunk to be planted on E. Grand Ave, between 2nd and 3rd Street.  The three additional trees were planted 9/27/17.	5/19/17 AT; 9/12/17 AT; 10/6/17 AT	Measure Closed in Initial Phase	YES	NO	NO

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CR-2	Discovery of Cultural Materials. If cultural materials are discovered during construction, the RCTC Project Engineer will require the contractor to divert all earthmoving activity within and around the immediate discovery area until a qualified archaeologist can assess the nature and significance of the find.	Final EIR/EIS	RCTC/ Contractor	During construction				YES	YES	TBD
CR-3	Discovery of Human Remains. If human remains are discovered during construction, State Health and Safety Code Section 7050.5 states that further disturbances and activities shall cease in any area or nearby area suspected to overlie remains and the County Coroner shall be contacted. Pursuant to Public Resources Code (PRC) Section 5097.98, if the remains are thought to be Native American, the Coroner will notify the Native American Heritage Commission (NAHC), which will then notify the Most Likely Descendant (MLD). At that time, the Department's District 8 Environmental Branch Chief or the District 8 Native American Coordinator (Gary Jones, [909] 383-7505) will be contacted so they may work with the MLD on the respectful treatment and disposition of the remains. Further provisions of PRC 5097.98 are to be followed as applicable.	Final EIR/EIS	RCTC/ Contractor	During construction				YES	YES	TBD
CR-4	During final design, the RCTC Project Manager and Department Cultural 1) Resources Professionally Qualified Staff will coordinate with representatives from the Pechanga Band of Mission Indians to identify areas in the project disturbance limits considered sensitive to the Tribe. 2) During final design, the RCTC Project Engineer will identify on the project plans all areas that require monitoring by a Native American Monitor during site preparation, disturbance, and grading. 3) During all site preparation, disturbance, and grading, the RCTC Resident Engineer will require the design/build contractor to have a Native American monitor present and conducting monitoring activities in all areas identified by the Pechanga Band of Mission Indians as sensitive, as shown in the project specifications.	Final EIR/EIS	RCTC/ Design-Builder	Final design				YES	NO	TBD
CR-5	Condition for the Grand Boulevard Historic District: Acorn-Style Streetlights. The following condition will be implemented during the project design/build	Final EIR/EIS	Design-Builder	Final design/ construction	During July 2014, 10 acorn-style street lights were satisfactorily removed from within the planned	2/3/17 AT; 7/31/17 AT	Measure Closed in	YES	NO	NO

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	<p>phase regarding the removal, temporary storage, and relocation of up to seven existing acorn-style streetlights within the project disturbance limits in the Grand Boulevard Historic District:</p> <ul style="list-style-type: none"> <li>- The Riverside County Transportation Commission (RCTC) Project Engineer will require the design/build contractor to clearly indicate on the final plans the locations of up to seven acorn-style streetlights in the project disturbance limits that are to be removed at the beginning of construction in those areas and to identify the locations where the removed streetlights would be reinstalled.</li> <li>- The RCTC Resident Engineer will require the design/build contractor to remove and, as necessary, dismantle the affected acorn-style streetlights and to place them in containers appropriate for storing those fixtures during the project construction period.</li> <li>- The RCTC Resident Engineer will require the design/build contractor to store the containers holding the acorn-style streetlights in a secure location protected from public access and weather.</li> <li>- The RCTC Project Engineer will require the design/build contractor to verify that the locations identified for the reinstallation of the affected streetlights are acceptable to the City of Corona and consistent with the City's requirements for the siting of streetlights.</li> <li>- The RCTC Resident Engineer will require the design/build contractor to reinstall the acorn-style streetlights at the locations designated in the final plans when no further construction/disruption will occur at those locations, as follows:</li> <li>- The streetlights will be reinstalled as close to their original locations as possible, based on the project design and available space, in a manner consistent with the other acorn-style streetlights in the Grand Boulevard Historic District and with the City of Corona requirements for the siting of streetlights.</li> <li>- If any of the acorn-style streetlights cannot be reinstalled at or near their original locations, they will be reinstalled elsewhere within the boundaries of the Grand Boulevard Historic District, focusing on locations where acorn-style lights have previously been removed as long as those</li> </ul>				<p>project limits. AWJV is storing 5 poles and has transferred 5 poles to City of Corona. Documentation is on file for compliance verification with this portion of this measure.</p> <p>On October 29, 2015 Andrew Walters, Caltrans Principal Architectural Historian, approved the Acorn-Style Decorative Light Design Plan.</p> <p>As of Dec. 2016, 5 poles had been re-installed. The City will return the remaining 5 poles and direct location for RCTC/Contractor to install.</p> <p>Acorn-style light replicas (5) were installed at the East Grand Ave undercrossing the first week of July 2017. On 7/7/17, a site visit with Andrew Walters was performed. On 7/18/17 an e-mail addressed to Andrew Walters was sent to document the installation and location of those lights.</p>		Initial Phase			



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	locations are consistent with the historic spatial relationships of the Historic District and with the City of Corona requirements for the siting of streetlights; and - If the lights cannot be reinstalled as described above, the RCTC Project Engineer will consult with the City of Corona to identify alternative locations. - The RCTC Resident Engineer will require the construction contractor to have an architectural historian on site during the removal, dismantling, and reinstallation of the acorn-style streetlights									
WQ-1	Prior to and during construction, Riverside County Transportation Commission's (RCTC) Resident Engineer will require the contractor to <u>comply with the provisions of the National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities</u> (Order No. 2009-0009-DWQ, NPDES No. CAS000002), and any subsequent permit, as they relate to the project construction activities. This will include submission of the Permit Registration Documents, including a Notice of Intent (NOI), risk assessment, site map, Storm Water Pollution Prevention Plan (SWPPP), annual fee, and signed certification statement to the State Water Resources Control Board (SWRCB) at least 14 days prior to the start of construction activity. The SWPPP will meet the requirements of the Construction General Permit and will identify potential pollutant sources associated with construction activities; identify non-storm water discharges; develop a water quality monitoring and sampling plan; and identify, implement, and maintain best management practices (BMPs) to reduce or eliminate pollutants associated with the construction site. The BMPs identified in the SWPPP will be implemented during project construction. A Notice of Termination (NOT) will be submitted to the SWRCB on the completion of construction and the stabilization of the site. RCTC's Resident Engineer will also require the contractor to implement SWRCB Resolution No. 2001-046 requiring sampling and analysis during project construction.	Final EIR/EIS	RCTC/ Contractor	Prior to construction; during construction				YES	YES	TBD

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WQ-2	Prior to and during construction, RCTC's Resident Engineer will require the contractor to comply with the provisions of the General Waste Discharge Requirements for Discharges to Surface Waters that Pose an Insignificant ( <i>De Minimis</i> ) Threat to Water Quality, Order No. R8-2009-0003, NPDES No. CAG998001, as they relate to discharge of non-storm-water dewatering wastes for the project. This will include <u>submitting</u> to the Santa Ana Regional Water Quality Control Board (RWQCB) an <u>NOI at least 60 days prior to the start of construction, notification of discharge at least 5 days prior to any planned discharges, and monitoring reports by the 30th day of each month following the monitoring period.</u>	Final EIR/EIS	RCTC/ Contractor	Prior to construction; during construction				YES	YES	TBD
WQ-3	<u>Prior to dewatering activities, RCTC's Resident Engineer will provide the contractor with a copy of the discharge authorization letter issued by the RWQCB Executive Director.</u>	Final EIR/EIS	RCTC	Prior to construction				YES	YES	TBD
WQ-4	Prior to and during construction, RCTC's Resident Engineer will <u>require the contractor to follow the procedures outlined in the California Department of Transportation (Caltrans) Storm Water Quality Handbooks, Project Planning and Design Guide (July 2010 or subsequent issuance) for implementing Design Pollution Prevention and Treatment BMPs for the project.</u> This will include coordination with the Santa Ana RWQCB with respect to the feasibility, maintenance, and monitoring of Treatment BMPs as set forth in the Department's Statewide Storm Water Management Plan (SWMP, May 2003 or subsequent issuance). RCTC's Resident Engineer will also require the contractor to <u>comply with other provisions identified in the NPDES Permit, Statewide Storm Water Permit, and Waste Discharge Requirements for the State of California, Department of Transportation (Order No. 99-06-DWQ, NPDES No. CAS000003).</u> RCTC's Resident Engineer will also require the contractor to <u>comply with other provisions identified in the NPDES Permit and Waste Discharge Requirements for the Riverside County Flood Control and Water Conservation District, the County of Riverside, and the incorporated cities of Riverside County within the Santa Ana Region</u>	Final EIR/EIS	RCTC/ Contractor	Prior to construction; during construction				YES	YES	TBD

ECR ID	Avoidance, Minimization, and/or Mitigation Measures	Environmental Analysis Source (Technical Study, Environmental Document, and/or Technical Discipline)	Responsible for Development and/or Implementation of Measure	Timing/ Phase	Action(s) Taken to Implement Measure	Measure Completed (Date and Initials)	Remarks	Measure is Applicable to Previous Phases	Measure is Applicable to SR-91 COP	Measure is Applicable to Future Phases
	(Order No. R8-2010-0033, NPDES No. CAS618033); and for the County of Orange, Orange County Flood Control District, and the incorporated cities of Orange County within the Santa Ana Region (Order No. R8-2009-0030), as applicable.									
GEO-1	During final design, the Riverside County Transportation Commission's (RCTC) Project Engineer or a Project Geotechnical Engineer or Project Geologist under contract to RCTC will prepare a design-level geotechnical report. This report will document soil-related constraints and hazards such as slope instability, settlement, liquefaction, or related secondary seismic impacts that may be present along the project segments of State Route 91 (SR-91) and Interstate 15 (I-15). This report will require review and approval by the California Department of Transportation (Department). The performance standard for this report will be the geotechnical design standards of the State of California and the Department, as they apply to the project features and structures. RCTC will submit the design-level geotechnical report to the Department for review and approval during final design. The report will include but not be limited to: Evaluation of expansive soils and recommendations regarding construction procedures and/or design criteria to minimize the effect of these soils on the construction of the project and to minimize effects related to expansive soils on project facilities in the long term. Identification of potential liquefiable areas within the project limits and recommendations for mitigation. Evaluation of the corrosion potential of soils along those segments of the project alignment not previously tested (i.e., areas along I-15 and the westbound side of SR-91). Demonstration that no retaining walls or excavations will occur in the existing landslide areas, or that landslide stabilization measures independent of the retaining wall design are included in the final project design. Demonstration that the design of all retaining walls is geotechnically suitable for project area soils, and verification that project design has considered and addressed the possibility of scour associated with the Santa Ana River. Demonstration that side	Final EIR/EIS	RCTC/ Contractor	Final design / construction				YES	YES	TBD

ECR ID	Avoidance, Minimization, and/or Mitigation Measures	Environmental Analysis Source (Technical Study, Environmental Document, and/or Technical Discipline)	Responsible for Development and/or Implementation of Measure	Timing/ Phase	Action(s) Taken to Implement Measure	Measure Completed (Date and Initials)	Remarks	Measure is Applicable to Previous Phases	Measure is Applicable to SR-91 COP	Measure is Applicable to Future Phases
	slopes can be designed and graded so that surface erosion of the engineered fill is not increased compared to existing, natural conditions. RCTC's Project Engineer will incorporate the measures recommended in the design-level geotechnical report in the final design and project specifications. RCTC's Resident Engineer will require the contractor to implement the measures recommended in the design-level geotechnical report as included in the project specifications.									
GEO-2	RCTC's Resident Engineer will <u>maintain a quality assurance/quality control plan during construction</u> . The plan will include observing, monitoring, and <u>testing by the Project Geotechnical Engineer and/or the Project Geologist under contract to RCTC prior to and during construction to confirm that the geotechnical/geologic recommendations from the design-level geotechnical report and standard design and construction practices are fulfilled by the contractor</u> , or if different site conditions are encountered, appropriate changes are made to accommodate such issues. The <u>geotechnical engineer will submit weekly reports to RCTC</u> and the Department during all project-related grading, excavation, and construction activities.	Final EIR/EIS	RCTC	During construction				YES	YES	TBD
GEO-3	During final design, if blasting is required, RCTC's Project Engineer will require the design/build contractor to prepare a blasting plan to minimize potential hazards related to blasting activities. The blasting plan will address all applicable standards in accordance with the United States Department of the Interior, Office of Surface Mining. The issues to be addressed in the blasting plan will include, but are not limited to, the following: hours of blasting activity, notification to adjacent property owners, noise and vibration, and dust control. RCTC's Resident Engineer will require the design/build contractor to implement the blasting plan prior to and during any blasting during construction.	Final EIR/EIS	Design-Builder	Final design				YES	NO	TBD
PAL-1	Following preparation of suitable construction drawings and elevations and during final design, the Riverside County Transportation Commission's (RCTC) Project Engineer will require the	Final EIR/EIS	RCTC/ Design-Builder	Final design/ construction				YES	NO	TBD

ECR ID	Avoidance, Minimization, and/or Mitigation Measures	Environmental Analysis Source (Technical Study, Environmental Document, and/or Technical Discipline)	Responsible for Development and/or Implementation of Measure	Timing/ Phase	Action(s) Taken to Implement Measure	Measure Completed (Date and Initials)	Remarks	Measure is Applicable to Previous Phases	Measure is Applicable to SR-91 COP	Measure is Applicable to Future Phases
	<p>Designated Principal Paleontologist under contract to RCTC to prepare a Paleontological Mitigation Plan (PMP). The PMP will provide guidance for developing and implementing paleontological mitigation efforts, including field work, laboratory methods, and curation. This PMP will be consistent with guidelines provided in the Department's Standard Environmental Reference (SER), Environmental Handbook, Volume I, Chapter 8, Paleontology, the Counties of Riverside and Orange, and the Society of Vertebrate Paleontology (SVP), and will be specifically tailored to the resources and sedimentary formations in the disturbance limits.</p> <p>The part of the PMP that covers excavation will include but not be limited to:</p> <p>Prior to any ground disturbance, RCTC's Designated Principal Paleontologist or his/her representative will attend a meeting with the design/build contractor to explain the likelihood for encountering paleontological resources during construction, what resources may be discovered, and the methods that will be employed if anything is discovered.</p>									
PAL-1 (cont'd)	<p>RCTC's Principal Paleontologist will conduct a preconstruction field survey in areas identified as having high paleontological sensitivity after vegetation and any pavement are removed, followed by salvage of any observed surface paleontological resources prior to the beginning of additional ground-disturbing activities. The survey will be conducted by the Principal Paleontologist or their representative who is qualified to identify vertebrate, invertebrate, and plant fossils.</p> <p>During ground disturbance, grading, and excavation, RCTC's Project Engineer will require the <u>design-build contractor to retain a Principal Paleontologist</u>. The Principal Paleontologist will provide a Paleontological Monitor who is qualified to recognize and professionally collect vertebrate, invertebrate, and plant fossils. The qualified Paleontological Monitor will initially be present on site on a full-time basis whenever these types of construction activities occur in sediments that have a high paleontological sensitivity rating and also on</p>	Final EIR/EIS	Design-Builder	Prior to construction				YES	NO	TBD

ECR ID	Avoidance, Minimization, and/or Mitigation Measures	Environmental Analysis Source (Technical Study, Environmental Document, and/or Technical Discipline)	Responsible for Development and/or Implementation of Measure	Timing/ Phase	Action(s) Taken to Implement Measure	Measure Completed (Date and Initials)	Remarks	Measure is Applicable to Previous Phases	Measure is Applicable to SR-91 COP	Measure is Applicable to Future Phases
	a spot-check basis in sediments that have a low sensitivity rating. Monitoring may be reduced to a part-time basis if no resources are being discovered in sediments with a high sensitivity rating. Any reduction or modification in scheduling of monitoring will be determined by the Principal Paleontologist and RCTC's Resident Engineer. The qualified Paleontological Monitor will inspect fresh cuts and/or spoils piles to recover paleontological resources. That monitor will be empowered to temporarily divert construction equipment away from the immediate area of the discovery. The monitor will be equipped to rapidly stabilize and remove fossils to avoid prolonged delays to construction schedules.									
PAL-1 (cont'd)	<p>If large mammal fossils or large concentrations of fossils are encountered, RCTC's Resident Engineer will require the <u>contractor to make heavy equipment available to assist in the removal and collection of large materials.</u></p> <p>Localized concentrations of small (or micro-) vertebrates may be found in all native sediments. Therefore, the qualified Paleontological Monitor will occasionally spot-screen native sediments through one-eighth- to one-twentieth-inch mesh screens to determine whether microfossils are present. If microfossils are encountered, a standard sediment sample (up to 3 cubic yards or 6,000 pounds) will be collected and processed through one-twentieth-inch mesh screens to recover additional fossils. Processing of large bulk samples is best accomplished at a designated location within the project limits that will be accessible throughout the duration of construction but will also be away from any cut or fill areas or active construction areas. Processing is usually completed concurrently with construction and with the intent to have all processing completed before, or just after, project completion. A small corner of a staging or equipment parking area is an ideal location for this activity. If water is not available, the location should be accessible for a water truck to occasionally fill containers with water.</p>	Final EIR/EIS	RCTC/ Contractor	During construction				YES	YES	TBD
PAL-1 (cont'd)	RCTC's Project Engineer will require the <u>Principal Paleontologist or their representative to prepare</u>	Final EIR/EIS	RCTC	During construction				YES	YES	TBD

ECR ID	Avoidance, Minimization, and/or Mitigation Measures	Environmental Analysis Source (Technical Study, Environmental Document, and/or Technical Discipline)	Responsible for Development and/or Implementation of Measure	Timing/ Phase	Action(s) Taken to Implement Measure	Measure Completed (Date and Initials)	Remarks	Measure is Applicable to Previous Phases	Measure is Applicable to SR-91 COP	Measure is Applicable to Future Phases
	<p>any recovered specimens to the point of identification and permanent preservation. This includes sorting any washed mass samples to recover small invertebrate and vertebrate fossils, the removal of surplus sediment from around larger specimens to reduce the volume of storage for the repository and storage cost, and the addition of approved chemical hardeners/stabilizers to fragile specimens. This is best accomplished at a designated laboratory with access to fossil preparation tools, magnifying equipment, storage boxes and vials, and chemical hardeners. Processing of fossils through the lab is best accomplished concurrently with construction, especially if numerous fossils are being collected.</p>									
PAL-1 (cont'd)	<p>Specimens will be identified to the lowest taxonomic level possible and curated into an institutional repository with retrievable storage. Repository institutions usually charge a one-time fee based on volume, so removing surplus sediment is important. The repository institution may be a local museum or university that has a curator who can retrieve the specimens on request. RCTC's Project Manager and the California Department of Transportation (Department) will require that a draft curation agreement be in place between the Principal Paleontologist and an approved curation facility prior to the initiation of paleontological monitoring and mitigation activities for the project. RCTC's Resident Engineer will require the contractor to comply with the provisions of the PMP during all ground disturbance, grading, and excavation activities. This will include appropriate coordination with RCTC's Designated Principal Paleontologist and the provision of qualified paleontological monitors consistent with the provisions of the PMP.</p> <p>After the completion of all ground disturbance and grading, RCTC's Project Manager will require Designated Principal Paleontologist to prepare a Final Paleontological Mitigation Report (PMR) that summarizes the project area investigated, the field and laboratory methods used, the stratigraphic units inspected, the types of fossils recovered, and the scientific significance of the curated collection. RCTC's Project Manager will retain a copy of the</p>	Final EIR/EIS	RCTC/ Contractor	During construction				YES	YES	TBD



ECR ID	Avoidance, Minimization, and/or Mitigation Measures	Environmental Analysis Source (Technical Study, Environmental Document, and/or Technical Discipline)	Responsible for Development and/or Implementation of Measure	Timing/ Phase	Action(s) Taken to Implement Measure	Measure Completed (Date and Initials)	Remarks	Measure is Applicable to Previous Phases	Measure is Applicable to SR-91 COP	Measure is Applicable to Future Phases
	report for the RCTC project files and will provide a copy of the report to the Department.									
HW-1	<p>A Phase I ESA was conducted for the Mobil No. 18-FLM site (616 Paseo Grande Street, Corona, California), and a Phase I ESA and Phase II Site Investigation were conducted for the Honda Cars of Corona site (231 South Lincoln Avenue, Corona, California) as part of the DSI, in accordance with ASTM Standard E 1527-05. The DSI identified Recognized Environmental Conditions (RECs) associated with on-site releases. Based on the results of the DSI, the following measures will be implemented for these two sites of potential environmental concern:</p> <p>Honda Cars of Corona Site: During final design and prior to any ground disturbance, RCTC's Resident Engineer will require the design-build contractor to consult with regulators, confirm that the final confirmation sampling has been completed at the site, and that contaminant investigation for the site has received regulatory site closure. In addition, prior to the completion of final design, the RCTC Resident Engineer will require the design-build contractor to properly abandon all monitoring wells and vapor extraction wells on the site in accordance with regulatory requirements.</p>	Final EIR/EIS	Design-BUILDER	Final design; prior to disturbance	<p>Additional investigation completed. The Mobile No. 18-FLM site memo revised on November 2014 is in compliance with measure HW-1. Honda Cars of Corona: approved July 2014.</p> <p>Mobil Site: approved December 2014. Recommendations provided on managing of hazardous waste soil.</p> <p>Attachments 3 &amp; 6 of Final Draft 06.17.14 document coordination with agencies and closure/well-abandonment in accordance with regulatory requirements.</p>	9/13/2017 AT	Measure Closed in Initial Phase	YES	NO	NO
HW-1 (cont'd)	Mobil No. 18-FLM Site: During final design and prior to any ground disturbance, RCTC's Resident Engineer will require the design-build contractor to conduct further investigation on contaminants in soils on site after a work plan is prepared and additional information is available.	Final EIR/EIS	RCTC	Final design; prior to disturbance	Additional investigation completed. Mobil Site: approved December 2014. Recommendations provided on managing of hazardous waste soil.	2/3/2017 AT	Measure Closed in Initial Phase	YES	NO	NO
HW-2	During final design and prior to any ground disturbance activities, RCTC's Resident Engineer will require the design/build contractor to <u>conduct site investigations for any new release sites that are within the project right-of-way</u> . RCTC's Resident Engineer will require the design-build contractor to conduct these site investigations in compliance with applicable federal, State, and local regulations and in accordance with ASTM Standard E 1527-05. <u>If contaminants are determined to be present during the site investigation, RCTC's Resident Engineer may</u>	Final EIR/EIS	Design Builder	Final design; prior to disturbance				YES	YES	TBD

ECR ID	Avoidance, Minimization, and/or Mitigation Measures	Environmental Analysis Source (Technical Study, Environmental Document, and/or Technical Discipline)	Responsible for Development and/or Implementation of Measure	Timing/ Phase	Action(s) Taken to Implement Measure	Measure Completed (Date and Initials)	Remarks	Measure is Applicable to Previous Phases	Measure is Applicable to SR-91 COP	Measure is Applicable to Future Phases
	<u>require the design-build contractor to prepare one or more of the following specialized reports:</u> Remedial Actions Options Report, Sensitive Receptor Survey, Human Health/Ecological Risk Assessment, and/or Quarterly Monitoring Report.									
HW-3	During final design and prior to any ground disturbance activities, RCTC's Resident Engineer will require the design-build contractor to conduct an aerially deposited lead (ADL) study for soil if excavation will exceed 3 feet (ft) below ground surface (bgs) in unpaved locations adjacent to the State right-of-way between Gypsum Canyon Road and Magnolia Avenue, or 5 ft bgs in unpaved locations in areas where there would be fiber-optic signage along eastbound State Route 91 (SR-91) starting east of the Weir Canyon Road undercrossing and extending east of the Gypsum Canyon Road undercrossing.  During construction, if soils within the project disturbance limits along SR-91 are removed off site, RCTC's Resident Engineer will require the design-build contractor to treat the soils as State hazardous waste and to properly dispose of those soils at an appropriate State-certified landfill facility. In addition, during construction, RCTC's Resident Engineer will require the design-build contractor to test all soils imported on site as fill. RCTC's Resident Engineer will require the design-build contractor to use only clean soils as imported fill on site.	Final EIR/EIS	Design-Builder	Final design; prior to disturbance				YES	YES	TBD
HW-4	1. Predemolition asbestos and/or LBP surveys were conducted for 21 road structures that will be renovated or demolished during project construction.	Final EIR/EIS	Design-Builder	Prior to construction				YES	NO	TBD
HW-4 (cont'd)	2. Based on the results of the ACM surveys of the 21 freeway structures, the SR-91/State Route 71 (SR-71) Separation (Bridge No. 56-0587), East SR-91/ North SR-71 Connector Separation (Bridge No. 56-0635), Prado Overhead (Bridge No. 56-0637), West Grand Boulevard Undercrossing (UC) (Bridge No. 56-0445 L/R), El Cerrito Road UC (Bridge No. 56-0558 L/R), and Serfas Club Drive UC (Bridge No. 56-0368 L/R) contain ACMs. Therefore, prior to disturbance associated with renovation or demolition of these bridges, RCTC's	Final EIR/EIS	Design-Builder	Prior to construction	Asbestos Abatement Plan completed. 1403 Permit (SCAQMD) obtained August 2014. ACM abatement measures implemented in the field during demolition of listed bridges. Notification to SCAQMD, prior to construction, was provided.	2/5/2017 JLS	Measure Closed in Initial Phase	YES	NO	NO

ECR ID	Avoidance, Minimization, and/or Mitigation Measures	Environmental Analysis Source (Technical Study, Environmental Document, and/or Technical Discipline)	Responsible for Development and/or Implementation of Measure	Timing/ Phase	Action(s) Taken to Implement Measure	Measure Completed (Date and Initials)	Remarks	Measure is Applicable to Previous Phases	Measure is Applicable to SR-91 COP	Measure is Applicable to Future Phases
	Resident Engineer will require the design-build contractor to have a licensed asbestos contractor properly remove and dispose of asbestos-containing railing brace pads from these structures.				Logs attached to AW Memorandum which was transmitted 1/31/18. Documentation was reviewed during 2/5/2018 ECR meeting and it was determined compliance with this measure is complete.					
HW-4 (cont'd)	3. Based on the results of the LBP surveys of the 21 freeway structures, the Main Street UC (Bridge No. 56-0448 L/R), McKinley Street UC (Bridge No. 56-0365), and Buchanan Street Overcrossing (Bridge No. 56-0368) contain LBPs. Therefore, prior to disturbance associated with renovation or demolition of these bridges, RCTC's Resident Engineer will inform the design-build contractor of the presence of LBPs in those structures. RCTC's Resident Engineer will require the design-build contractor to protect construction workers from exposure to lead dust when disturbing LBP during bridge renovation or demolition activities.	Final EIR/EIS	Design-Builder	Prior to construction				YES	NO	TBD
HW-4 (cont'd)	4. In addition, a hazardous materials survey identified two areas with potential hazardous materials. Based on the results of the visual hazardous materials survey of the bridges, light fixture components and possible lead metal railing braces may pose an additional concern. These components include: - Light fixtures (some flush-mounted) on the undersides of many of the bridges. At a few of the bridges that cross over the freeway, there are light posts. The light bulbs in these fixtures may contain mercury. - The Temescal Wash Bridge overhead has some metal braces and wire tension cable at joint locations on the underside of the bridge. While no suspected ACMs were observed or sampled at these locations, the presence of metal washers and spacers, which may contain lead, was noted. - Soft metal railing brace pads that may be composed of lead metal were observed at the following bridges: Pierce Street UC (Bridge No. 56-0369 L/R) and Buchanan Street Overcrossing (Bridge No. 56-0368)	Final EIR/EIS	Design-Builder	During construction				YES	NO	TBD

ECR ID	Avoidance, Minimization, and/or Mitigation Measures	Environmental Analysis Source (Technical Study, Environmental Document, and/or Technical Discipline)	Responsible for Development and/or Implementation of Measure	Timing/ Phase	Action(s) Taken to Implement Measure	Measure Completed (Date and Initials)	Remarks	Measure is Applicable to Previous Phases	Measure is Applicable to SR-91 COP	Measure is Applicable to Future Phases
HW-4 (cont'd)	5. Therefore, during final design and prior to any disturbance of these facilities and materials, RCTC's Resident Engineer will inform the design-build contractor of the presence and location of the hazardous materials in the freeway structures described above.	Final EIR/EIS	RCTC	Final design; prior to disturbance				YES	NO	TBD
HW-4 (cont'd)	6. <u>Prior to the disturbance</u> of freeway structures, RCTC's Resident Engineer will <u>require</u> the design-build contractor to <u>have asbestos-containing railing brace pads removed and disposed of by a licensed asbestos abatement contractor</u> . If abated, RCTC's Resident Engineer will require the design-build contractor to remove non-friable ACMs in accordance with Category II asbestos abatement procedures as defined in Federal Occupational Safety and Health Administration (Fed-OSHA) 29 <i>Code of Federal Regulations</i> (CFR) 1926.1101. However, if mechanical means are utilized for abatement of ACMs, RCTC's Resident Engineer will require the design-build contractor to convert these non-friable materials into a friable state during removal activities and manage these materials under Class I asbestos abatement procedures.	Final EIR/EIS	Design-Builder	During construction				YES	NO	TBD
HW-4 (cont'd)	7. Prior to disturbance of freeway structures, RCTC's Resident Engineer will require the design-build contractor <u>to properly test any areas that have not been previously tested, and remove and dispose of any materials from these structures that exceed California Health and Safety Code criteria</u> for hazardous waste at an appropriate State-certified landfill facility.	Final EIR/EIS	Design-Builder	Prior to construction				YES	NO	TBD
HW-4 (cont'd)	8. During final design and prior to any ground disturbance, demolition, or renovation activities, RCTC's Project Engineer will require the design-build contractor to <u>conduct predemolition asbestos, LBP, polychlorinated biphenyl (PCB), and/or mercury surveys of any buildings that will be renovated or demolished</u> .	Final EIR/EIS	RCTC	Final design; prior to disturbance				YES	NO	TBD
HW-4 (cont'd)	9. During construction, RCTC's Resident Engineer will require the design-build contractor to <u>properly remove and dispose of any materials from these structures that exceed California Health and Safety</u>	Final EIR/EIS	RCTC	During construction				YES	NO	TBD

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	<u>Code criteria</u> for hazardous waste at an appropriate State-certified landfill facility.									
HW-5	During final design and prior to any ground disturbance activities, RCTC's Resident Engineer will require the design-build contractor to conduct inspections for potential PCBs in utility pole-mounted transformers that will be relocated or removed as part of the project	Final EIR/EIS	Design-BUILDER	Final design; prior to construction				YES	NO	TBD
HW-5 (cont'd)	RCTC's Resident Engineer will require the design-build contractor to consider leaking transformers a PCB hazard unless tested and confirmed otherwise, and to handle them accordingly.	Final EIR/EIS	Design-BUILDER	Prior to construction				YES	NO	TBD
HW-6	During construction, RCTC's Resident Engineer will require the contractor to test, remove, and dispose of any yellow traffic striping and pavement marking materials in accordance with the California Department of Transportation (Department) Construction Manual, Chapter 7, Section 106.	Final EIR/EIS	Contractor	During construction				YES	YES	TBD
HW-7	During final design and prior to any dewatering activities, RCTC's Resident Engineer will require the contractor to conduct additional coordination with the Riverside County Department of Environmental Health when groundwater dewatering will occur in the vicinity of contaminated soils or contaminated groundwater sites.	Final EIR/EIS	Contractor	Final design				YES	YES	TBD
HW-8	During final design and prior to any ground disturbance activities, RCTC's Project Engineer will require the design-build contractor to <u>sample soil adjacent to the Burlington Northern Santa Fe (BNSF) railroad tracks that will be disturbed during construction for the presence of petroleum hydrocarbons, metals, solvents, and other potential contaminants</u> (e.g., polynuclear aromatic hydrocarbons [PNAs], kerosene, ACMs, chlorinated hydrocarbons, pesticides, and herbicides). That testing will determine whether the soils require special handling and disposal during construction. During construction, RCTC's Resident Engineer will require the design-build contractor to <u>properly dispose of all soils exceeding the criteria for State or federal hazardous waste at an appropriate State-certified landfill facility.</u>	Final EIR/EIS	Design-BUILDER	Final design; prior to disturbance				YES	NO	TBD

ECR ID	Avoidance, Minimization, and/or Mitigation Measures	Environmental Analysis Source (Technical Study, Environmental Document, and/or Technical Discipline)	Responsible for Development and/or Implementation of Measure	Timing/ Phase	Action(s) Taken to Implement Measure	Measure Completed (Date and Initials)	Remarks	Measure is Applicable to Previous Phases	Measure is Applicable to SR-91 COP	Measure is Applicable to Future Phases
HW-9	Prior to the start of construction, RCTC's Project Engineer will require the contractor to prepare a site-specific Health and Safety Plan (HASP) by a certified industrial hygienist. The HASP will be based on evaluation of proposed construction activities, the potential hazards identified in the Phase I Environmental Site Assessment and Phase II testing, and any future assessments prepared for the project. The HASP will outline specific procedures for encountering expected and unexpected contaminants. It will include safe work practices, contaminant monitoring, the need for personal protective equipment, emergency response procedures, and safety training requirements to protect construction workers and third parties working on site. The HASP will be in compliance with the requirements of 29 CFR 1910 and 1926 and all other applicable federal, State, and local regulations and requirements. During construction, RCTC's Resident Engineer will require the contractor to implement the requirements in the HASP.	Final EIR/EIS	Contractor	Prior to construction				YES	YES	TBD
HW-10	Prior to the start of construction, RCTC's Project Engineer will require the contractor to prepare a soils and groundwater Contaminant Management Plan (CMP). The CMP will include procedures for contaminant monitoring and identification as well as temporary storage, handling, treatment, and disposal of hazardous waste and materials in accordance with applicable federal, State, and local regulations and requirements. Prior to and during construction, RCTC's Resident Engineer will require the contractor to implement the soils and groundwater CMP.	Final EIR/EIS	Contractor	Prior to and during construction				YES	YES	TBD
HW-11	Prior to the start of construction, RCTC's Project Engineer will require the contractor to prepare a <u>Construction Contingency Plan (CCP)</u> in accordance with the Department's Unknown Hazards Procedures for Construction. The CCP will include provisions for emergency response in the event that <u>unidentified underground storage tanks (USTs), hazardous materials, petroleum hydrocarbons, or hazardous or solid wastes are discovered during construction activities.</u> The CCP will address UST decommissioning, field	Final EIR/EIS	Contractor	Prior to construction; during construction				YES	YES	TBD

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	<p><u>screening, contaminant materials testing methods, mitigation and contaminant management requirements, and health and safety requirements for construction workers.</u></p> <p>RCTC's Resident Engineer will require the contractor to <u>implement the CCP during all construction activities.</u></p> <p>During construction, RCTC's Resident Engineer will require the contractor to <u>cease work immediately if an unexpected release of hazardous substances is found in reportable quantities.</u> If an unexpected release of hazardous substances is found in reportable quantities, RCTC's Resident Engineer will require the design-build contractor to notify the National Response Center by calling 1-800-424-8802. RCTC's Resident Engineer will require the contractor to perform cleanup of unexpected releases under the appropriate federal, State, or local agency oversight.</p>									
HW-12	RCTC's Resident Engineer will require the contractor to notify Underground Service Alert (USA) at least 2 days prior to excavation by calling 811 to require that all utility owners within the project disturbance limits identify the locations of underground transmission lines and facilities.	Final EIR/EIS	Contractor	Prior to construction				YES	YES	TBD
HW-13	RCTC's Resident Engineer will require the contractor to submit the fees to the South Coast Air Quality Management District (SCAQMD) at least 10 days prior to proceeding with any demolition or renovation of a structure (refer to SCAQMD Rule 1403). RCTC's Resident Engineer will require the contractor to adhere to the requirements of SCAQMD Rule 1403 during renovation and demolition activities.	Final EIR/EIS	Contractor	During construction				YES	YES	TBD
HW-14	During final design and prior to any ground disturbance, RCTC's Resident Engineer will require the contractor to test all wooden utility poles, railroad ties, and other treated wood waste material that will be removed and disposed of as part of the project are tested for wood treatments/preservatives. RCTC's Resident Engineer will also require the contractor to test soils surrounding railroad ties for wood treatments/preservatives.	Final EIR/EIS	Contractor	Final design; prior to disturbance				YES	YES	TBD



ECR ID	Avoidance, Minimization, and/or Mitigation Measures	Environmental Analysis Source (Technical Study, Environmental Document, and/or Technical Discipline)	Responsible for Development and/or Implementation of Measure	Timing/ Phase	Action(s) Taken to Implement Measure	Measure Completed (Date and Initials)	Remarks	Measure is Applicable to Previous Phases	Measure is Applicable to SR-91 COP	Measure is Applicable to Future Phases
	Prior to and during construction, RCTC's Resident Engineer will require the contractor to properly dispose of all treated wood waste as required in Alternative Management Standards for Wood Treated Waste in Section 67386.6(a)(2)(B)(3) of the California Code of Regulations (CCR). Alternative Management Standards for Wood Treated Waste. In addition, RCTC's Resident Engineer will require the contractor to require any personnel who come in contact with treated wood waste or contaminated soils to follow all applicable requirements under Section 67386.6(a)(2)(B)(3) of the CCR and to be trained in the proper identification, disposal, and safe handling of treated wood waste and contaminated soils.									
HW-15	For buildings that would be demolished as part of ROW acquisition and/or construction, Asbestos Containing Material (ACM) and Lead Based Paint (LBP) testing shall be performed after ROW acquisition and prior to building demolition.	SR-91 CIP Revalidation No. 2	Design-Builder	During construction				YES	NO	TBD
HW-16	Herbicide, pesticide, and fungicide testing shall be performed on the soils within acquired ROW at the Green River Golf Club (5215 Green River Road, Corona, CA).	SR-91 CIP Revalidation No. 2	Design-Builder	During construction				YES	NO	TBD
HW-17	Where lead is present and dust producing activities will be performed, the California Occupational Safety and Health Administration (Cal-OSHA) regulation for lead in construction (Title 8, California Code of Regulations, Section 1532.1) identifies that the employer shall treat the employee as if they would be exposed to lead above the Permissible Exposure Limit (PEL) and shall implement employee protective measures until an employee exposure assessment is performed to document otherwise. Lead was identified in the yellow traffic striping paint, the grey paint on the guard rail, and black traffic paint. Contractors involved in renovation/demolition activities should be informed of the presence of and potential health hazards associated with lead containing paints. Care should be taken to protect workers (i.e., respiratory protection) when disturbing lead containing paints during renovation/demolition activities.	SR-91 CIP Revalidation No. 4	Contractor	During construction				YES	YES	TBD

ECR ID	Avoidance, Minimization, and/or Mitigation Measures	Environmental Analysis Source (Technical Study, Environmental Document, and/or Technical Discipline)	Responsible for Development and/or Implementation of Measure	Timing/ Phase	Action(s) Taken to Implement Measure	Measure Completed (Date and Initials)	Remarks	Measure is Applicable to Previous Phases	Measure is Applicable to SR-91 COP	Measure is Applicable to Future Phases
SC-1	<p>Development of a Construction Emissions Mitigation Plan. Prior to any site preparation, grading and/or construction activities, the Riverside County Transportation Commission (RCTC) Project Engineer will require the contractor to develop a Construction Emissions Mitigation Plan. That plan will specifically incorporate measures for controlling particulate and other emissions during construction from the following sources:</p> <p>California Department of Transportation (Department) Standard Specifications Sections 10 and 18 (Dust Control), Department's Standard Specifications Section 39-3.06 (Asphalt Concrete Plant Emissions) South Coast Air Quality Management District (SCAQMD) Rule 403, including control measures from Tables 1, 2, and 3 in that rule</p> <p>The plan will also include the following measures:</p> <p>Control of ozone precursor emissions from construction equipment vehicles by maintaining equipment engines in good condition and in proper tune per the manufacturers' specifications.</p> <p>Control of material on all trucks hauling excavated or graded material from the site by compliance with State Vehicle Code Section 23114, with special attention to Sections 23114(b)(F), (e)(2), and (e)(4) as amended, regarding the prevention of such material spilling onto public streets and roads.</p>	Final EIR/EIS	Contractor	Prior to construction				YES	YES	TBD
SC-2	<p>Implementation of the Construction Emissions Mitigation Plan. During all site preparation, grading, construction, clean-up, and other activities during construction, RCTC's Resident Engineer will require the contractor to comply with the measures in the Construction Emissions Mitigation Plan. RCTC's Resident Engineer will conduct site inspections at least once a month to ensure that the contractor is complying with the provisions of the Construction Emissions Mitigation Plan.</p>	Final EIR/EIS	RCTC/ Contractor	Prior to construction				YES	YES	TBD
SC-3	<p>Prior to any construction activities, RCTC's Project Engineer will ensure that the <u>grading plans and project specifications show the anticipated duration of construction</u> in individual construction areas along the project alignment.</p>	Final EIR/EIS	Contractor	Prior to construction				YES	YES	TBD

ECR ID	Avoidance, Minimization, and/or Mitigation Measures	Environmental Analysis Source (Technical Study, Environmental Document, and/or Technical Discipline)	Responsible for Development and/or Implementation of Measure	Timing/ Phase	Action(s) Taken to Implement Measure	Measure Completed (Date and Initials)	Remarks	Measure is Applicable to Previous Phases	Measure is Applicable to SR-91 COP	Measure is Applicable to Future Phases
SC-4	During final design and prior to any ground disturbance, RCTC's Project Geologist will conduct appropriate testing to determine whether there are asbestos-containing materials (ACMs) present in the project disturbance limits.	Final EIR/EIS	RCTC	Final design; prior to disturbance				YES	NO	TBD
SC-5	If RCTC's Project Geologist determines that ACMs are present in the project disturbance limits during that final preconstruction inspection, RCTC's Resident Engineer will require the contractor to properly remove and dispose of those ACMs.	Final EIR/EIS	Contractor	Prior to construction				YES	NO	TBD
N-1	Based on studies completed to date, Riverside County Transportation Commission (RCTC) <u>intends to incorporate noise abatement in the form of reasonable and feasible barriers at 15 to 16 locations,</u> depending on the selected alternative, ranging in height from 8 feet (ft) to 14 ft, depending on the alternative and the design variations. Calculations based on preliminary design data indicate that the barriers will reduce noise levels by 5 to 15 A-weighted decibels (dBA) for 333 to 419 homes and the Green River Golf Club, depending on the design variation. <u>If during final design conditions have substantially changed, noise abatement at some of these locations may not be necessary.</u> The final decision on noise abatement will be made on completion of the project design and the public involvement processes for the environmental document. RCTC's Resident Engineer will require the design-build contractor to construct the noise abatement measures included in the final design and project specifications.	Final EIR/EIS	Design-BUILDER	During construction				YES	NO	TBD
N-2	RCTC's Resident Engineer will require the contractor to control noise from construction activity consistent with the California Department of Transportation's (Department's) Standard Specifications, Section 14-8.02, "Noise Control," and Standard Special Provisions (SSP) S5-310. <u>RCTC's Resident Engineer will require the contractor to ensure that noise levels from construction operations within the State right-of-way between the hours of 9:00 p.m. and 6:00 a.m. not exceed 86 dBA at a distance of 50 ft.</u> The noise level requirement will apply to the equipment on the job site or related to the job, including, but not	Final EIR/EIS	Contractor	During construction				YES	YES	TBD

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	limited to trucks, transit mixers, or transient equipment that may or may not be owned by the contractor. RCTC's Resident Engineer will require the contractor to use an alternative warning method instead of a sound signal unless required by safety laws. In addition, RCTC's Resident Engineer will require the contractor to equip all internal combustion engines with the manufacturer-recommended mufflers and not operate any internal combustion engine on the job site without the appropriate mufflers. As directed by RCTC's Resident Engineer, <u>the contractor will implement appropriate additional noise mitigation measures</u> , including changing the location of stationary construction equipment, turning off idling equipment, rescheduling construction activity, <u>notifying adjacent residents in advance of construction work</u> , and installing acoustic barriers around stationary construction noise sources.									
N-3	<u>In accordance with the Municipal Codes</u> of the Cities of Anaheim, Corona, Riverside, and Norco, RCTC's Resident Engineer will require the contractor to <u>limit construction activities to between the hours of 7:00 a.m. and 7:00 p.m., Monday through Friday, excluding weekends and holidays</u> . If construction is needed outside those hours or days, RCTC's Resident Engineer will require the contractor to coordinate with the affected local jurisdiction. In addition to Measure N-3, Measure GEO-3 specifically addresses potential noise control in the event blasting is necessary during construction along State Route 91 (SR-91) east of Interstate 15 (I-15).	Final EIR/EIS	Contractor	During construction				YES	YES	TBD
N-4	If noise barriers proposed for I-15 (with the exception of Noise Barrier [NB] K1-A), as part of a separate project, are not constructed within 5 years of the completion of the construction the SR-91 Corridor Improvement Project (CIP), the RCTC will initiate a separate project to construct those walls.	Final EIR/EIS	RCTC	During construction				YES	NO	TBD
N-5	1. Residences that would experience a severe traffic noise impact of 75 dBA equivalent continuous sound level (Leq) or higher would qualify for consideration of unusual and extraordinary abatement under Alternative 2f. NBs	Final EIR/EIS	RCTC	Final design				YES	NO	TBD

ECR ID	Avoidance, Minimization, and/or Mitigation Measures	Environmental Analysis Source (Technical Study, Environmental Document, and/or Technical Discipline)	Responsible for Development and/or Implementation of Measure	Timing/ Phase	Action(s) Taken to Implement Measure	Measure Completed (Date and Initials)	Remarks	Measure is Applicable to Previous Phases	Measure is Applicable to SR-91 COP	Measure is Applicable to Future Phases
	M-1, M-2, M-3, and D1-B are considered unusual and extraordinary noise abatement. 2. During the design-build phase, RCTC will contract with a qualified acoustical specialist to conduct interior noise analyses at residences projected to experience severe traffic noise impacts. Interior noise abatement for each of those homes will be evaluated on a case-by-case basis per FHWA guidance and noise protocol.									
N-6	ReVal 14a - Since a portion of the proposed sound barrier is outside the State right of way, a permanent easement will be secured for the affected properties to construct and maintain the noise abatement measure – the wall return of barrier P-1A, approximately 150' long. The property owners will enter into a contract with RCTC, on behalf of Caltrans, that specifies their agreement: <ul style="list-style-type: none"> <li>• To allow RCTC personnel, representatives, and contractors to enter their property for purposes of constructing the noise abatement measure and all other related work.</li> <li>• To allow RCTC personnel and representatives to enter their property with appropriate prior notification for the purpose of periodic inspection or structural repair of the noise abatement measure.</li> <li>• To accept aesthetic maintenance responsibility of their respective portion of the noise abatement measure upon its completion and to perpetuate the noise abatement measure's initial aesthetic qualities.</li> <li>• Not to remove the noise abatement measure without full consent of all other affected property owners and Caltrans.</li> </ul>	SR-91 CIP Revalidation No. 14	RCTC	During construction				YES	NO	TBD
N-7	Reval 12-A: A noise barrier survey, of all property owners affected by the construction of M-1B Option 2, will be conducted to constitute a 51 percent minimum vote in support of this noise barrier. Reval 12-B: A permanent easement will be secured from the affected properties to construct and maintain the noise abatement measure. The contract shall be between the property owner and Caltrans (RCTC will secure all maintenance agreements and record easements on behalf of Caltrans) and the property owner(s) must agree:	SR-91 CIP Revalidation No. 12	RCTC	During construction				YES	NO	TBD

ECR ID	Avoidance, Minimization, and/or Mitigation Measures	Environmental Analysis Source (Technical Study, Environmental Document, and/or Technical Discipline)	Responsible for Development and/or Implementation of Measure	Timing/ Phase	Action(s) Taken to Implement Measure	Measure Completed (Date and Initials)	Remarks	Measure is Applicable to Previous Phases	Measure is Applicable to SR-91 COP	Measure is Applicable to Future Phases
	<ul style="list-style-type: none"> <li>- To allow Caltrans personnel, representatives, and contractors to enter their property for purposes of constructing the noise abatement measure and all other related work.</li> <li>- To allow Caltrans personnel and representatives to enter their property with appropriate prior to notification for the purpose of periodic inspection or structural repair of the noise abatement measure.</li> <li>- To accept aesthetic maintenance responsibility of their respective portion of the noise abatement measure upon its completion and to perpetuate the noise abatement measure's initial aesthetic qualities.</li> <li>- Not to remove the noise abatement measure without full consent of all other affected property owners and Caltrans.</li> <li>- That the contract provisions will be a permanent burden on the property involved. Caltrans District right of way will determine specific wording that, at a minimum, must include the following provision: "The term of this contract shall be a burden that runs with the land, and shall inure and be binding upon the successors, assignees, or transferees of the property owner."</li> </ul> <p>Reval 12-C: RCTC will obtain a variance from the County of Riverside's Planning Department for portions of NB M-1B that exceed allowable wall height.</p>									
Compensatory Mitigation (1)	<p><b>Compensatory Mitigation:</b></p> <p>1.) Compensatory mitigation for the effects to coastal sage scrub (CSS) vegetation within Riverside County will be achieved through project consistency with the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP). Permanent effects to CSS vegetation in Orange County occupied by coastal California gnatcatcher (CAGN) or within CAGN-designated critical habitat will be mitigated as described in the Biological Opinion received from the United States Fish and Wildlife Service (USFWS) on November 30, 2011. Specifically, 16.03 acres (ac) of habitat (e.g., CSS) suitable for CAGN breeding, dispersal, and foraging will be restored in Chino Hills State Park (CHSP) (or another off-site area approved by the USFWS) during construction of the Initial</p>	Final EIR/EIS	RCTC	During construction				YES	NO	TBD

ECR ID	Avoidance, Minimization, and/or Mitigation Measures	Environmental Analysis Source (Technical Study, Environmental Document, and/or Technical Discipline)	Responsible for Development and/or Implementation of Measure	Timing/ Phase	Action(s) Taken to Implement Measure	Measure Completed (Date and Initials)	Remarks	Measure is Applicable to Previous Phases	Measure is Applicable to SR-91 COP	Measure is Applicable to Future Phases
	Phases under Alternatives 1 and 2. This will increase the amount of conserved habitat available for CAGN in the area.									
Compensatory Mitigation (2 & 3)	<p>2.) Temporarily impacted coastal sage scrub (CSS) and other vegetation communities used by California gnatcatcher (CAGN) for dispersal and foraging will be restored with in-kind or better vegetation during and after construction as the construction in each disturbed area is completed (e.g., after each phase of construction). Measures TE-1 through TE-17, provided later in the Environmental Commitments Record (ECR), were developed from the Biological Opinion.</p> <p>3.) The plant palette used for restored areas in the project limits and CHSP (or other areas approved by the USFWS) will be approved by the District Biologist at each location. The District Biologist may consult with local responsible agencies (e.g., local fire agencies) regarding the plant palettes if the District Biologist determines that such consultation would be appropriate.</p>	Final EIR/EIS	RCTC	During construction				YES	NO	TBD
Compensatory Mitigation (4)	<p>4. Compensatory mitigation for riparian communities in both counties will be required for United States Army Corps of Engineers (Corps) Section 404 and California Department of Fish and Game (CDFG) Section 1600 permitting. Typically, riparian habitat subject to Corps and CDFG jurisdiction is mitigated at a minimum mitigation-to-effect ratio of 2:1 for permanent effects and 1:1 for temporary effects, which is consistent with Corps and CDFG policies for no net loss of riparian/riverine habitat (e.g., wetlands) standards. Mitigation for permanent effects will be conducted in advance during the Initial Phases in the form of habitat restoration and/or enhancement in on- or off-site areas where similar riparian habitat exists. Temporary effects to riparian communities will be mitigated at a minimum mitigation ratio of 1:1 to be replaced on site in kind after the temporary impact has occurred. Final details for compensatory mitigation will be coordinated and environmental clearance will be obtained (if necessary) through coordination among the Riverside County Transportation Commission (RCTC), the California</p>	Final EIR/EIS	RCTC	During construction				YES	NO	TBD



ECR ID	Avoidance, Minimization, and/or Mitigation Measures	Environmental Analysis Source (Technical Study, Environmental Document, and/or Technical Discipline)	Responsible for Development and/or Implementation of Measure	Timing/ Phase	Action(s) Taken to Implement Measure	Measure Completed (Date and Initials)	Remarks	Measure is Applicable to Previous Phases	Measure is Applicable to SR-91 COP	Measure is Applicable to Future Phases
	Department of Transportation (Department), the resource agencies, and third-party landowners.									
Compensatory Mitigation (5)	5. Prior to beginning construction, a Habitat Mitigation and Monitoring Plan (HMMP) will be developed in coordination with the Corps, CDFG, and USFWS that ensures no net loss of riparian habitat value or acreage. Final details for compensatory mitigation will be evaluated through coordination among the Department, RCTC, and the resource agencies.	Final EIR/EIS	RCTC	Prior to construction				YES	NO	TBD
Item 6 under Compensatory Mitigation	6. The HMMP will comply with all terms and conditions set forth in the permits and opinions issued by the resource agencies for the project and will include, at a minimum, the following provisions: Permanent impacts to riparian/riverine areas will be replaced on or off site at a minimum ratio of 3:1 with in-kind habitat. Permanent effects to native habitat will be replaced on or off site at a minimum 2:1 ratio with in-kind habitat. Temporary effects to native vegetation will be replaced at a minimum 1:1 ratio with in-kind habitat restored in place within the project area. If off-site restoration is conducted, it will be done within the same watershed as the project. The HMMP will identify a success criterion of at least 80 percent cover of native riparian vegetation or composition structure similar to existing adjacent high-quality riparian vegetation. Further criteria specified in the HMMP will include an establishment period for the replacement habitat, regular trash removal, and regular maintenance and monitoring activities to ensure the success of the mitigation plan. After construction, annual summary reports of biological monitoring will be provided to the Corps, CDFG, and USFWS documenting the monitoring effort. The duration of the monitoring and reporting will be established by resource agency permit conditions. Compensatory mitigation for effects to oak trees (excluding California scrub oaks) with trunk sizes above 8 inches in diameter at breast height (dbh) will involve replacement at a mitigation-to-effect ratio of 3:1. Heritage oaks (oaks with a greater than 36-inch dbh) will be replaced at a mitigation-to-effect ratio of 10:1, if feasible.	Final EIR/EIS	RCTC	During construction; after construction				YES	NO	TBD

ECR ID	Avoidance, Minimization, and/or Mitigation Measures	Environmental Analysis Source (Technical Study, Environmental Document, and/or Technical Discipline)	Responsible for Development and/or Implementation of Measure	Timing/ Phase	Action(s) Taken to Implement Measure	Measure Completed (Date and Initials)	Remarks	Measure is Applicable to Previous Phases	Measure is Applicable to SR-91 COP	Measure is Applicable to Future Phases
Item 6 under Compensatory Mitigation (cont'd)	If the replacement trees cannot be planted in the immediate vicinity of where the previous trees were located, they may be planted elsewhere in the project area, subject to approval by the Department Landscape Architect and the affected local jurisdiction, if any. All compensatory mitigation for the entire project, both the Initial Phases and Ultimate Projects, will be provided in the Initial Phases of the SR-91 CIP Build Alternatives. RCTC will provide appropriate funds, to be maintained in a non-wasting endowment, to Chino Hills State Park to provide for the long-term maintenance and management of the restored areas within the park to support gnatcatcher habitat in perpetuity.	Final EIR/EIS	RCTC	During construction				YES	NO	TBD
NC-1	<p>1. During final design, RCTC's Project Engineer will coordinate with the Designated Qualified Biologist to <u>delineate all environmentally sensitive areas (ESAs) within the project footprint and the immediately surrounding areas</u> in the project specifications. ESAs include CSS, chaparral, and riparian/riverine vegetation; the protected zone of any oak tree (5 feet [ft]) outside the dripline or 15 ft from the trunk of the tree, whichever is greater) or oak habitat; and designated critical habitat (with constituent elements).</p> <p>2. In addition, all restoration and mitigation areas at Coal Canyon adjacent to the project footprint will be designated ESAs on the project plans.</p> <p>3. Prior to clearing or construction, RCTC's Resident Engineer will require the contractor to install highly visible barriers (such as orange construction fencing) around all designated ESAs. <u>No grading or fill activity of any type will be permitted within the ESAs. In addition, no construction activities, materials, or equipment will be allowed within the ESAs.</u> All construction equipment will be operated in a manner so as to prevent accidental damage to nearby preserved areas. No structure of any kind, or incidental storage of equipment or supplies, will be allowed within the ESAs. Silt fence barriers will be installed at the ESA boundaries to prevent accidental deposition of fill material in areas where vegetation is adjacent to planned grading activities.</p>	Final EIR/EIS	RCTC/ Contractor	Final design/construction				YES	YES	TBD

ECR ID	Avoidance, Minimization, and/or Mitigation Measures	Environmental Analysis Source (Technical Study, Environmental Document, and/or Technical Discipline)	Responsible for Development and/or Implementation of Measure	Timing/ Phase	Action(s) Taken to Implement Measure	Measure Completed (Date and Initials)	Remarks	Measure is Applicable to Previous Phases	Measure is Applicable to SR-91 COP	Measure is Applicable to Future Phases
NC-2	RCTC's Resident Engineer will have a Designated Qualified Biologist under contract. The Designated Qualified Biologist will monitor construction in the vicinity of the ESAs for the duration of construction to flush any wildlife species present prior to construction and to ensure that all vegetation removal, best management practices (BMPs), ESAs, and all avoidance and minimization measures are properly implemented.	Final EIR/EIS	Contractor	During construction				YES	YES	TBD
NC-3	<p>To avoid effects to nesting birds, RCTC's Resident Engineer will require the contractor to <u>conduct any native or exotic vegetation removal or tree trimming activities outside of the nesting bird season (i.e., February 1–September 30).</u> In the event that vegetation <u>clearing is necessary</u> during the nesting season, RCTC's Resident Engineer will require the <u>Designated Qualified Biologist conduct a preconstruction survey within 300 ft of construction areas no more than 7 days prior to construction to identify the locations of nests.</u> Should nesting birds be found, an exclusionary buffer of 300 ft will be established by the Designated Biologist around each nest site. This buffer will be clearly marked in the field by construction personnel under guidance of the Designated Qualified Biologist, and construction or clearing will not be conducted within this zone until the Designated Qualified Biologist determines that the young have fledged or the nest is no longer active.</p> <p>In the event that construction must occur within the 300 ft buffer, the Designated Biologist will take steps to ensure that construction activities do not disturb or disrupt nesting activities. If the Designated Biologist determines that construction activities are disturbing or disrupting nesting activities, the Designated Biologist will notify the Resident Engineer, who has the authority to halt construction to reduce the noise and/or disturbance to the nests. Responses may include, but are not limited to, turning off vehicle engines and other equipment whenever possible to reduce noise, installing a protective noise barrier between the nest and the construction activities, and/or working in other areas until the young have fledged.</p>	Final EIR/EIS	RCTC/ Contractor	Prior to construction; during construction			Nesting Bird Season updated during the SR-91 COP Revalidation	YES	YES	TBD

ECR ID	Avoidance, Minimization, and/or Mitigation Measures	Environmental Analysis Source (Technical Study, Environmental Document, and/or Technical Discipline)	Responsible for Development and/or Implementation of Measure	Timing/ Phase	Action(s) Taken to Implement Measure	Measure Completed (Date and Initials)	Remarks	Measure is Applicable to Previous Phases	Measure is Applicable to SR-91 COP	Measure is Applicable to Future Phases
NC-4	<p>When work is conducted during the fire season (as identified by the Orange County Fire Authority [OCFA], Riverside County Fire Department [RCFD], City of Norco Fire Department, and/or the City of Corona Fire Department) adjacent to any vegetated open space, RCTC's Resident Engineer will require the contractor to ensure that appropriate firefighting equipment (e.g., extinguishers, shovels, water tankers) is available on site during all phases of project construction to help minimize the potential for human-caused wildfires. Shields, protective mats, and/or other fire-preventive methods will be used during grinding, welding, and other spark-inducing activities. Personnel trained in fire hazards, preventive actions, and responses to fires will advise contractors regarding fire risk from all construction-related activities.</p> <p>If a responsible fire agency (OCFA, RCFD, City of Norco Fire Department, or City of Corona Fire Department) requires the RCTC to clear defensible spaces during construction, RCTC's Resident Engineer, the contractor, and the Designated Qualified Biologist will coordinate with the USFWS prior to this clearing effort. In the event there are resources in the areas identified for defensible clearing, RCTC's Resident Engineer and the Designated Qualified Biologist will coordinate with any applicable permitting agencies regarding possible effects to those resources prior to approving the defensible clearing of any areas by the contractor.</p> <p>During all Red Flag Warning periods as issued by the National Weather Service, the contractor will not be allowed to operate mechanized equipment or equipment that could throw off sparks or potentially start fires in any areas of natural open space in CHSP or other areas.</p>	Final EIR/EIS	RCTC/ Contractor	During construction				YES	YES	TBD
NC-5	During final design, the Project Engineer will coordinate with the Designated Qualified Biologist to identify developed or nonsensitive upland habitat areas appropriate for use during construction for equipment maintenance, staging, dispensing of fuel and oil, or any other such activities and will delineate and identify those areas on the project	Final EIR/EIS	RCTC/ Contractor	Final design; during construction				YES	YES	TBD

ECR ID	Avoidance, Minimization, and/or Mitigation Measures	Environmental Analysis Source (Technical Study, Environmental Document, and/or Technical Discipline)	Responsible for Development and/or Implementation of Measure	Timing/ Phase	Action(s) Taken to Implement Measure	Measure Completed (Date and Initials)	Remarks	Measure is Applicable to Previous Phases	Measure is Applicable to SR-91 COP	Measure is Applicable to Future Phases
	<p>specifications. The Designated Qualified Biologist will specifically identify developed or nonsensitive upland habitat areas to prevent any spill runoff on those sites from entering waters of the United States.</p> <p>During construction, RCTC's Resident Engineer will require the contractor to ensure that all equipment maintenance, staging, dispensing of fuel and oil, or any other such activities occur in developed or designated nonsensitive upland habitat areas designated in the project specifications for those uses.</p>									
NC-6	<p>During final design, RCTC's Project Engineer will coordinate with the Designated Qualified Biologist to <u>identify the locations of all existing wildlife fencing and will delineate and identify those areas on the project specifications</u>. Prior to and during construction, RCTC's Resident Engineer will require the contractor to install new fencing prior to the removal of any existing wildlife fencing to protect against wildlife-vehicle incidents. The new fencing must be the same or greater height than the previous wildlife fence.</p> <p>The RCTC Resident Engineer will require the contractor to <u>ensure that the fencing is maintained and functional throughout the project construction</u>.</p> <p>Caltrans will ensure that the fencing is maintained and functional throughout the life of the project to prevent wildlife-vehicle incidents.</p>	Final EIR/EIS	RCTC/ Contractor	Final design; prior to and during construction				YES	YES	TBD
NC-7	<p>During final design, RCTC's Project Engineer will coordinate with the Designated Qualified Biologist to identify the habitat adjacent to Coal Canyon, B Canyon, Fresno Canyon/Wardlow Wash, and Bedford Wash that is anticipated to be disturbed by construction activities and will delineate those areas on the project specifications.</p> <p>As detailed in the project specifications, RCTC's Resident Engineer will require the contractor to restore habitat adjacent to Coal Canyon, B Canyon, Fresno Canyon/Wardlow Wash, and Bedford Wash that was disturbed during construction as construction in the affected areas is completed. That restoration will be provided on a 1:1 ratio, using native vegetation as determined by</p>	Final EIR/EIS	RCTC/ Contractor	Final design; during construction				YES	YES	TBD

ECR ID	Avoidance, Minimization, and/or Mitigation Measures	Environmental Analysis Source (Technical Study, Environmental Document, and/or Technical Discipline)	Responsible for Development and/or Implementation of Measure	Timing/ Phase	Action(s) Taken to Implement Measure	Measure Completed (Date and Initials)	Remarks	Measure is Applicable to Previous Phases	Measure is Applicable to SR-91 COP	Measure is Applicable to Future Phases
	RCTC and the Department in coordination with the resource agencies.									
NC-8	During final design, RCTC's Project Engineer will coordinate with the Designated Qualified Biologist to delineate all wildlife corridors within the project footprint and the immediately surrounding areas as Environmentally Sensitive Areas (ESAs) in the project specifications. Prior to and during construction, RCTC's Resident Engineer will require the contractor to ensure that equipment maintenance, lighting, and staging are limited to designated areas away from wildlife corridor entrances.	Final EIR/EIS	RCTC/ Contractor	Final design; prior to and during construction				YES	YES	TBD
NC-9	During final design, RCTC's Project Engineer will develop design and construction management measures to direct temporary construction noise and nighttime construction lighting and permanent facility lighting away from the wildlife corridors, bridges (structures potentially occupied by bats), biologically sensitive areas, Western Riverside County MSHCP Conservation Areas, vegetated drainages, CSS in CAGN-designated critical habitat with long-term conservation value for covered species. Those design measures will be approved by Department District 8 Biology/Environmental prior to the completion of final design. If construction work must be done at night, RCTC's Resident Engineer will require the contractor to properly implement the measures developed during final design to direct noise and direct lighting away from the wildlife corridors, bridges, and biologically sensitive areas during those nighttime construction activities.	Final EIR/EIS; High Mast Lighting Study	RCTC/ Contractor	Final design; prior to construction	COP Actions: To comply with Environmental Commitments Record (ECR) commitment NC-9 and reduce the amount of light that reaches the MSHCP area, the design team specified a "forward throw" luminaire, added a 180-degree lighting shield, and lowered the heights of the high mast lights.			YES	YES	TBD
NC-10	Prior to and during construction, RCTC's Resident Engineer will require the contractor to keep the wildlife corridors clear of all equipment or structures that could potentially serve as barriers to wildlife passage.	Final EIR/EIS	Contractor	Prior to and during construction				YES	YES	TBD
NC-11	During final design, RCTC's Project Engineer will ensure that the existing culvert structures that will be extended or modified by the project are designed so that they are at least as compatible with wildlife usage as the existing culvert	Final EIR/EIS	RCTC/ Contractor	Final design				YES	NO	TBD

ECR ID	Avoidance, Minimization, and/or Mitigation Measures	Environmental Analysis Source (Technical Study, Environmental Document, and/or Technical Discipline)	Responsible for Development and/or Implementation of Measure	Timing/ Phase	Action(s) Taken to Implement Measure	Measure Completed (Date and Initials)	Remarks	Measure is Applicable to Previous Phases	Measure is Applicable to SR-91 COP	Measure is Applicable to Future Phases
	structures. Those culverts will be shown on the project specifications. RCTC's Resident Engineer will require the contractor to properly implement these compatible culvert designs during construction.									
NC-12	Within Coal Canyon, B Canyon, Fresno Canyon/Wardlow Wash, and Bedford Wash, RCTC's Resident Engineer will require the contractor to limit the hours of construction within 1,000 ft of the centerline of each of these crossings to daylight hours (7:00 a.m. to 4:00 p.m.) to ensure continued use of these wildlife corridors during construction, with the exception of limited periods when evening or night work is required for safety or operations reasons.	Final EIR/EIS	Contractor	During construction				YES	YES	TBD
NC-13	During final design, RCTC's Project Engineer will ensure that the design and construction process for all structures required for bridge and/or culvert work within Coal Canyon, B Canyon, Fresno Canyon/Wardlow Wash, and Bedford Wash, will not block the main underpass at these locations during construction. RCTC's Project Engineer will ensure that the design of the scaffolding and false work is restricted to the sides of the underpass and limits of the existing exclusionary chain-link fence to maintain the existing width of the wildlife corridor during construction activities. During construction within Coal Canyon, B Canyon, Fresno Canyon/Wardlow Wash, and Bedford Wash, RCTC's Resident Engineer will require the contractor to ensure that all structures required for bridgework are installed and constructed consistent with the final design specifically to avoid blocking the main underpass during construction and to restrict all scaffolding and false work to the sides of the underpass and limits of the existing exclusionary chain-link fence to maintain the existing width of the wildlife corridor during construction activities.	Final EIR/EIS	Contractor	Final design; during construction				YES	YES	TBD
NC-14	Minimal equipment staging area is available at the eastbound Coal Canyon off-ramp along the sides of the paved road and will be used for the staging of equipment for Coal Canyon work only. During final design, RCTC's Project Engineer will <u>ensure that the available area for construction staging at</u>	Final EIR/EIS	RCTC/ Contractor	Final design; during construction				YES	YES	TBD



ECR ID	Avoidance, Minimization, and/or Mitigation Measures	Environmental Analysis Source (Technical Study, Environmental Document, and/or Technical Discipline)	Responsible for Development and/or Implementation of Measure	Timing/ Phase	Action(s) Taken to Implement Measure	Measure Completed (Date and Initials)	Remarks	Measure is Applicable to Previous Phases	Measure is Applicable to SR-91 COP	Measure is Applicable to Future Phases
	<p><u>the eastbound Coal Canyon off-ramp is delineated on the project specifications.</u></p> <p>RCTC's Resident Engineer will require the contractor to minimize the use of this area during construction and, where possible, to avoid the area from February 15 to September 1. RCTC's Resident Engineer will require the contractor to <u>ensure that vehicles staged in this area are equipped with security lights.</u></p>									
NC-15	<p>During construction within Coal Canyon, RCTC's Resident Engineer will require the contractor to <u>keep the Coal Canyon on- and off-ramps open at all times for emergency and police personnel.</u> RCTC's Resident Engineer will <u>require the contractor to ensure that use of the emergency access road as a turnaround or shortcut for any construction or non-emergency traffic is prohibited.</u> That road will only be used during bridge construction and general road construction at Coal Canyon. RCTC's Resident Engineer will also require the contractor to ensure that, in general, no hauling is allowed at night through underpasses and freeway off-ramps.</p>	Final EIR/EIS	Contractor	During construction				YES	YES	TBD
NC-16	<p>During construction in Coal Canyon, RCTC's Resident Engineer will require the contractor to <u>close the gates at Coal Canyon at the end of each construction day.</u> The locations of those gates will be shown on the project specifications.</p>	Final EIR/EIS	Contractor	During construction				YES	YES	TBD
NC-17	<p>During final design, RCTC's Project Engineer will coordinate with the Designated Qualified Biologist to <u>identify existing and proposed conservation areas within the project footprint or in the immediately surrounding areas</u> and will designate those areas on the project specifications. To reduce impacts where the project interfaces with existing or proposed conservation areas prior to and during construction, RCTC's Project Manager will ensure that the <u>project complies with the Urban/Wildlands Interface Guidelines in Section 6.1.4 of the Western Riverside County MSHCP.</u> The project specifications will include applicable guidelines from the Western Riverside County MSHCP.</p>	Final EIR/EIS	RCTC	Final design				YES	YES	TBD

ECR ID	Avoidance, Minimization, and/or Mitigation Measures	Environmental Analysis Source (Technical Study, Environmental Document, and/or Technical Discipline)	Responsible for Development and/or Implementation of Measure	Timing/ Phase	Action(s) Taken to Implement Measure	Measure Completed (Date and Initials)	Remarks	Measure is Applicable to Previous Phases	Measure is Applicable to SR-91 COP	Measure is Applicable to Future Phases
NC-18	<p>During final design, RCTC's Project Engineer will coordinate with the Designated Qualified Biologist to <u>identify existing Criteria Areas within the project footprint</u> or in the immediately surrounding areas and will designate those areas on the project specifications.</p> <p>To reduce impacts where the project is located within the Criteria Area, RCTC's Project Manager will ensure that the <u>project complies with the applicable siting and design criteria and the Construction Guidelines in Section 7.5.2 of the Western Riverside County MSHCP</u>. The project specifications will include applicable guidelines from the Western Riverside County MSHCP.</p>	Final EIR/EIS	RCTC	Final design				YES	YES	TBD
NC-19	<p>During construction, RCTC's Resident Engineer will require the contractor to comply with guidelines from the Western Riverside County MSHCP included in the project specifications. The SR-91 CIP is a covered project. Therefore, RCTC's Resident Engineer will ensure that the SR-91 CIP complies with all Western Riverside County MSHCP Construction Guidelines and Standard BMPs prior to and during construction.</p>	Final EIR/EIS	Contractor	During construction				YES	YES	TBD
WET-1	<p>Riverside County Transportation Commission's (RCTC) Project Manager will ensure that prior to any clearing or construction, a Section 404 Nationwide Permit is obtained through the United States Army Corps of Engineers (Corps) pursuant to Section 404 of the Clean Water Act (CWA).</p> <p>RCTC's Resident Engineer will retain a copy of the Corps permit at the construction site and will ensure that the conditions in that permit are properly implemented prior to and during construction.</p>	Final EIR/EIS	Design-BUILDER	Prior to construction				YES	NO	TBD
WET-2	<p>RCTC's Project Manager will ensure that prior to any clearing or construction, a Streambed Alteration Agreement with CDFW is obtained.</p> <p>RCTC's Resident Engineer will retain a copy of the CDFW agreement at the construction site and will ensure that the conditions in that agreement are properly implemented prior to and during construction.</p>	Final EIR/EIS	Design-BUILDER	Prior to construction				YES	NO	TBD

ECR ID	Avoidance, Minimization, and/or Mitigation Measures	Environmental Analysis Source (Technical Study, Environmental Document, and/or Technical Discipline)	Responsible for Development and/or Implementation of Measure	Timing/ Phase	Action(s) Taken to Implement Measure	Measure Completed (Date and Initials)	Remarks	Measure is Applicable to Previous Phases	Measure is Applicable to SR-91 COP	Measure is Applicable to Future Phases
WET-3	RCTC's Project Manager will ensure that prior to any clearing or construction, a Section 401 Water Quality Certification from the RWQCB is obtained. RCTC's Resident Engineer will retain a copy of the Section 401 certification at the construction site and will ensure that the conditions in that certification are properly implemented prior to and during construction.	Final EIR/EIS	Design-Builder	Prior to construction				YES	NO	TBD
PS-1	As part of the SR-91 CIP Habitat Mitigation and Monitoring Plan, trees and shrubs will be planted at appropriate locations, and the species list to be used for those plantings will include Southern California black walnut and Coulter's matilija poppy. At a minimum, 30 Southern California black walnut trees will be planted.	Final EIR/EIS	RCTC's Project Manager	Required for Initial Phase; Timing during the design-build phase	The HMMP approved in September 2014, identifies oak tree plantings and that Coulter's Matilija poppy seedlings. RFC landscape package B (approved November 2014) includes highway planting of Southern California Black walnut trees within the SR 91/71 interchange area. The Cooperative Agreement with State Parks, executed 2/10/16, for mitigation restoration within Chino Hills State Park includes the planting of 50 container Matilija Poppy (pg. 58).	1/6/2017 AT	Measure Closed in Initial Phase	YES	NO	NO
AS-1	During final design, the Riverside County Transportation Commission's (RCTC) Project Engineer will coordinate with the Designated Qualified Biologist to <u>identify all areas of potential burrowing owl (BUOW) habitat within the project footprint or in the immediately surrounding areas</u> and will designate those areas on the project specifications. To ensure that any BUOW that may occupy the site in the future are not affected by construction activities, RCTC's Resident Engineer will have preconstruction BUOW surveys conducted by a Designated Qualified Biologist within 30 days prior to any phase of construction in the areas identified as potential BUOW habitat. These preconstruction surveys are also required to comply with the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP), the federal Migratory Bird Treaty Act (MBTA), and the California Fish and Game Code. <u>If any of the preconstruction surveys determine that BUOW are</u>	Final EIR/EIS	RCTC	Final design				YES	YES	TBD

ECR ID	Avoidance, Minimization, and/or Mitigation Measures	Environmental Analysis Source (Technical Study, Environmental Document, and/or Technical Discipline)	Responsible for Development and/or Implementation of Measure	Timing/ Phase	Action(s) Taken to Implement Measure	Measure Completed (Date and Initials)	Remarks	Measure is Applicable to Previous Phases	Measure is Applicable to SR-91 COP	Measure is Applicable to Future Phases
	<p><del>present</del>, one or more of the following mitigation measures may be required:</p> <p>(1) avoidance of active nests/burrows and surrounding buffer area during construction activities;</p> <p>(2) passive relocation of individual owls;</p> <p>(3) active relocation of individual owls; and</p> <p>(4) preservation of on-site habitat with long-term conservation value for the owl. The specifics of the required measures will be coordinated among the Department District Biologist, RCTC's Project Manager, RCTC's Resident Engineer, Designated Qualified Biologist, and the resource agencies. RCTC's Resident Engineer will ensure that any BUOW measures determined to be required based on the results of the preconstruction surveys and the required coordination are properly implemented by the contractor prior to and during construction in the BUOW areas identified in the surveys.</p>									
AS-2	<p>During final design, RCTC's Project Engineer will coordinate with the Designated Qualified Biologist to <u>identify all areas of potential bat habitat within the project footprint or in the immediately surrounding areas</u> and will designate those areas on the project specifications.</p> <p>RCTC's Project Manager will have a Designated Qualified Bat Biologist <u>survey all potential bat habitat in June</u>, prior to construction, to assess the potential for the presence of maternity roosts because maternity roosts are generally formed in late spring. The Designated Qualified Bat Biologist will also perform preconstruction surveys because bat roosts can change seasonally. <u>The surveys will include a combination of structure inspection, sampling, exit counts, and acoustic surveys.</u></p>	Final EIR/EIS	RCTC	Final design				YES	YES	TBD
AS-3	<p>To avoid direct mortality to bats roosting in areas subject to effects from construction activities, RCTC's Resident Engineer will require the contractor to ensure that any structure with potential bat habitat will have temporary bat exclusion devices installed under the supervision of the Designated Qualified Bat Biologist prior to construction. The installation of the exclusion devices will be conducted during the fall</p>	Final EIR/EIS	RCTC/ Contractor	Prior to construction				YES	YES	TBD

ECR ID	Avoidance, Minimization, and/or Mitigation Measures	Environmental Analysis Source (Technical Study, Environmental Document, and/or Technical Discipline)	Responsible for Development and/or Implementation of Measure	Timing/ Phase	Action(s) Taken to Implement Measure	Measure Completed (Date and Initials)	Remarks	Measure is Applicable to Previous Phases	Measure is Applicable to SR-91 COP	Measure is Applicable to Future Phases
	(September or October) to avoid trapping flightless young inside during the summer months or hibernating individuals during the winter. Such exclusion efforts must be continued to keep the structures free of bats until the completion of construction. Replacement roosting habitat may also be needed to minimize effects to excluded bats. All bat exclusion techniques will be coordinated among the California Department of Transportation (Department) District 8 Biologist, the Department District 12 Biologist, RCTC's Project Manager, RCTC's Resident Engineer, the Designated Qualified Bat Biologist, and the resource agencies.									
AS-4	As required in Measure NC-10, RCTC's Resident Engineer will ensure that all construction work on bridges will take place during the day to the best extent feasible. Limited evening and/or night construction may be required for safety and/or operations reasons. The RCTC Project Engineer will require the contractor to include construction management measures to direct lighting and noise away from bat night roosting areas in the project specifications. The RCTC Resident Engineer will require the contractor to implement those measures during evening and night construction as much as possible while providing for safe facility operations and construction worker safety.	Final EIR/EIS	RCTC/ Contractor	During construction				YES	YES	TBD
AS-5	RCTC's Project Engineer will ensure that the final design specifically addresses keeping riparian vegetation delineated on the project specifications that is adjacent to bat roosting sites (which include crevices in bridges, culverts, and overhead structures) intact during construction per measures included in the project specifications. Prior to and during construction, RCTC's Resident Engineer will require the design-build contractor to properly implement the measures in the project specifications to keep riparian vegetation adjacent to bat roosting sites intact.	Final EIR/EIS	Design-Builder	Prior to and during construction				YES	NO	TBD
AS-6	To prevent project effects to bridge- and crevice-nesting birds (i.e., swifts and swallows), RCTC's Resident Engineer will require the to ensure that all work on existing bridges with potential habitat that	Final EIR/EIS	RCTC/ Contractor	During construction				YES	YES	TBD

ECR ID	Avoidance, Minimization, and/or Mitigation Measures	Environmental Analysis Source (Technical Study, Environmental Document, and/or Technical Discipline)	Responsible for Development and/or Implementation of Measure	Timing/ Phase	Action(s) Taken to Implement Measure	Measure Completed (Date and Initials)	Remarks	Measure is Applicable to Previous Phases	Measure is Applicable to SR-91 COP	Measure is Applicable to Future Phases
	is conducted between February 15 and October 31 includes removal of all bird nests prior to construction under the guidance and observation of the Designated Qualified Biologist prior to February 1 of that year, before the swallow colony returns to the nesting site. Removal of swallow nests that are under construction must be repeated as frequently as necessary to prevent nest completion or until a nest exclusion device is installed (such as netting or a similar mechanism that keeps birds from building nests). Nest removal and exclusion device installation will be monitored by the Designated Qualified Biologist. Such exclusion efforts must be continued to keep the structures free of swallows until September or completion of construction. All nest exclusion techniques will be coordinated among the Department District 8 Biologist, the Department District 12 Biologist, RCTC's Project Manager, RCTC's Resident Engineer, the Designated Qualified Biologist, and the resource agencies.									
AS-7	During final design, RCTC's Project Manager, the Department District 8 Biologist, the Department District 12 Biologist, and the Designated Qualified Biologist will determine whether structural features providing existing bat roosting habitat cannot be permanently retained following construction. If that is the case, RCTC's Project Manager, RCTC's Project Engineer, the Department District 8 Biologist, the Department District 12 Biologist, and the Designated Qualified Biologist will identify alternative roosting habitat to be installed during project construction. The project specifications will include suitable designs and specifications for bat exclusion and habitat replacement structures. Prior to and during construction, RCTC's Resident Engineer will require the contractor to properly implement the designs and specifications for bat exclusion and habitat replacement structures included in the project specifications. The installation and maintenance of those structures will be monitored by the Designated Qualified Biologist.	Final EIR/EIS	RCTC/ Contractor	Final design; prior to and during construction				YES	YES	TBD
AS-8	RCTC's Resident Engineer will require the contractor to <u>install and maintain silt fence barriers</u>	Final EIR/EIS	RCTC/ Contractor	During construction				YES	YES	TBD

ECR ID	Avoidance, Minimization, and/or Mitigation Measures	Environmental Analysis Source (Technical Study, Environmental Document, and/or Technical Discipline)	Responsible for Development and/or Implementation of Measure	Timing/ Phase	Action(s) Taken to Implement Measure	Measure Completed (Date and Initials)	Remarks	Measure is Applicable to Previous Phases	Measure is Applicable to SR-91 COP	Measure is Applicable to Future Phases
	<u>at all staging or construction areas at Coal Canyon and areas within Chino Hills State Park (CHSP) to prevent small animals from entering those areas.</u>									
TE-1	<p>Prior to any ground disturbing activities, an individual will be identified as the Designated Biologist. A qualified Designated Biologist must have a Bachelor's degree with an emphasis in ecology, natural resource management, or related science; 3 years of experience in field biology or current certification of a nationally recognized biological society, such as The Ecological Society of America or The Wildlife Society; previous experience with applying the terms and conditions of a Biological Opinion; and the appropriate permit and/or training if conducting focused or protocol surveys for listed species.</p> <p>The Riverside County Transportation Commission (RCTC) will ensure the Designated Biologist position is filled throughout the construction period. Each successive Designated Biologist (if applicable) will be approved by the United States Fish and Wildlife Service (USFWS) and California Department of Fish and Game (CDFG) (hereafter referred to as the Wildlife Agencies).</p> <p>The Designated Biologist will have the authority to ensure compliance with conservation measures and will be the primary agency contact for the implementation of these measures. The Designated Biologist will have the authority and responsibility to halt activities that are in violation of the conservation measures.</p>	Final EIR/EIS	Contractor	Prior to disturbance				YES	YES	TBD
TE-2	<u>To minimize adverse effects from dust during all site disturbance, grading, and construction activities, the contractor will ensure that all active parts of the construction site are watered a minimum of twice daily or more often when needed due to dry or windy conditions</u> to prevent excessive amounts of dust. Additionally, the contractor will ensure that <u>all stockpiled material is sufficiently watered or covered</u> to prevent excessive amounts of dust.	Final EIR/EIS	Contractor	During construction				YES	YES	TBD
TE-3	All erosion and sediment control devices during project construction and operation, including fiber rolls and bonded fiber matrix, will be made from biodegradable materials such as jute, with no	Final EIR/EIS	Contractor	During construction				YES	YES	TBD

ECR ID	Avoidance, Minimization, and/or Mitigation Measures	Environmental Analysis Source (Technical Study, Environmental Document, and/or Technical Discipline)	Responsible for Development and/or Implementation of Measure	Timing/ Phase	Action(s) Taken to Implement Measure	Measure Completed (Date and Initials)	Remarks	Measure is Applicable to Previous Phases	Measure is Applicable to SR-91 COP	Measure is Applicable to Future Phases
	plastic mesh, to avoid creating a wildlife entanglement hazard.									
TE-4	During all site disturbance, grading, and construction activities, the contractor will be required to control noise from construction activity consistent with Caltrans Standard Specifications, Section 14-8.02, "Noise Control," and the California Department of Transportation (Caltrans) Standard Special Provisions S5-310. Noise levels from construction operations within the State right-of-way between the hours of 9:00 p.m. and 6:00 a.m. will not exceed 86 A-weighted decibels (dBA) at a distance of 50 feet (ft) from the noise source. The noise level requirement will apply to the equipment on the job site or related to the job, including, but not limited to, trucks, transit mixers, or transient equipment that may or may not be owned by the contractor.	Final EIR/EIS	Contractor	During construction				YES	YES	TBD
TE-5	During all site disturbance, grading, and construction activities in and immediately adjacent to biologically sensitive areas, Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) Conservation Areas, vegetated drainages, and coastal sage scrub (CSS) in coastal California gnatcatcher (CAGN) designated critical habitat, the contractor will be required to control noise from construction activity by using an alternative warning method instead of a sound signal unless required by safety laws. In addition, the contractor will equip all internal combustion engines with the manufacturer-recommended mufflers and will not operate any internal combustion engine on the job site without the appropriate mufflers. As directed by the RCTC Resident Engineer, the contractor will implement appropriate additional noise mitigation measures, including changing the location of stationary construction equipment, turning off idling equipment, rescheduling construction activity, notifying adjacent residents in advance of construction work, and installing acoustic barriers around stationary construction noise sources.	Final EIR/EIS	Contractor	During construction				YES	YES	TBD
TE-6	<u>In accordance with the Municipal Codes of the Cities of Anaheim, Corona, Riverside, and Norco, the contractor will be required to limit construction</u>	Final EIR/EIS	Contractor	During construction				YES	YES	TBD



ECR ID	Avoidance, Minimization, and/or Mitigation Measures	Environmental Analysis Source (Technical Study, Environmental Document, and/or Technical Discipline)	Responsible for Development and/or Implementation of Measure	Timing/ Phase	Action(s) Taken to Implement Measure	Measure Completed (Date and Initials)	Remarks	Measure is Applicable to Previous Phases	Measure is Applicable to SR-91 COP	Measure is Applicable to Future Phases
	<u>activities to between the hours of 7:00 a.m. and 7:00 p.m., Monday through Friday, excluding weekends and holidays.</u> If construction is needed outside those hours or days, the contractor will be required to coordinate with the affected local jurisdiction. If the local jurisdiction approves construction hours that are different from those imposed by this measure, then the contractor will immediately request that RCTC consider a modification to this measure to allow construction during the new hours that the local jurisdiction approved.									
TE-7	In the major wildlife movement corridors at, Coal Canyon, Wardlow Wash, and Fresno Canyon, and areas adjacent to least Bell's vireo and CAGN occupied areas (approximately Post Mile [PM] ORA-91-R17.16 to PM ORA-91-R18.74), construction activities will be limited to between the hours of 7:00 a.m. and 7:00 p.m., Monday through Friday. Should an exception to this measure be necessary, RCTC and the California Department of Transportation (Department) will consult with the Wildlife Agencies to determine effective measures to avoid and minimize adverse impacts to these species and movement corridors.	Final EIR/EIS	Contractor	During construction				YES	YES	TBD
TE-8	Braunton's Milk-vetch Conservation Measures. A pre-construction survey will be conducted prior to ground disturbing activities in the vicinity of the historical occurrence in Coal Canyon in Orange County. This survey will be conducted by a biologist familiar with the species and during the appropriate time of year to optimize detection. Should Braunton's milk-vetch be found during surveys, the Designated Biologist will consult with the USFWS to determine effective measures to avoid and minimize adverse impacts to this species.	Final EIR/EIS	RCTC	Prior to construction				YES	YES	TBD
TE-9	Coastal California Gnatcatcher Conservation and Compensatory Measures. The Designated Biologist (or their designee) will monitor construction within the vicinity of CAGN-designated critical habitat areas prior to and during site preparation, grading, and construction activities, to flush any wildlife species present prior to construction and to ensure that vegetation removal,	Final EIR/EIS	RCTC	During construction				YES	YES	TBD

ECR ID	Avoidance, Minimization, and/or Mitigation Measures	Environmental Analysis Source (Technical Study, Environmental Document, and/or Technical Discipline)	Responsible for Development and/or Implementation of Measure	Timing/ Phase	Action(s) Taken to Implement Measure	Measure Completed (Date and Initials)	Remarks	Measure is Applicable to Previous Phases	Measure is Applicable to SR-91 COP	Measure is Applicable to Future Phases
	best management practices (BMPs), Environmentally Sensitive Areas (ESAs), and all avoidance and minimization measures are properly implemented and followed.									
TE-10	RCTC will offset the permanent loss of 8.42 acres (ac) of occupied CAGN habitat in Orange County, including 6.32 ac of designated critical habitat, by restoring 16.03 ac of habitat suitable for CAGN breeding, dispersal, and foraging in Chino Hills State Park (CHSP) to be conducted during the Initial Phase of the project. If restoration is unable to be conducted in CHSP, another location will be selected on approval of the Wildlife Agencies.	Final EIR/EIS	RCTC	After construction	Compensatory Mitigation Plans for CAGN and LBV was approved in September of 2014. Restoration work began in 2015	5/18/2017 AT	Measure Closed in Initial Phase	YES	NO	NO
TE-11	RCTC will offset the temporary loss of 3.01 ac of occupied CAGN habitat in Orange County, including 2.09 ac of CAGN-designated critical habitat, with in-kind, or better, on-site restoration after the completion of project construction.	Final EIR/EIS	RCTC	After construction				YES	NO	TBD
TE-12	Prior to site preparation, grading or construction activities, a restoration plan will be developed by a qualified biologist for the permanent and temporary impacts to occupied CAGN habitat in Orange County, including designated critical habitat. The plan will be submitted to the USFWS for review and approval. This plan will include, at a minimum, a detailed description of restoration methods, slope stabilization/erosion control, criteria for restoration to be considered successful, and monitoring and reporting protocol(s).  The restoration plan will be implemented for a minimum of 5 years, unless success criteria are met earlier and all artificial watering has been off for at least 2 years.	Final EIR/EIS	RCTC	Prior to construction				YES	YES	TBD
TE-13	During all site preparation, grading, and construction activities in Orange County, the RCTC Resident Engineer, will require the contractor to use shielded lighting for any nighttime construction adjacent to coastal sage scrub in CAGN-designated critical habitat.	Final EIR/EIS	Contractor	During construction				YES	YES	TBD
TE-14	Riparian Birds Conservation Measures. During the bird breeding season (i.e., February 15–September 15), the Designated Biologist (or their designee) will monitor riparian and riverine areas within 500 ft of active construction areas for the duration of the	Final EIR/EIS	RCTC	During construction				YES	YES	TBD

ECR ID	Avoidance, Minimization, and/or Mitigation Measures	Environmental Analysis Source (Technical Study, Environmental Document, and/or Technical Discipline)	Responsible for Development and/or Implementation of Measure	Timing/ Phase	Action(s) Taken to Implement Measure	Measure Completed (Date and Initials)	Remarks	Measure is Applicable to Previous Phases	Measure is Applicable to SR-91 COP	Measure is Applicable to Future Phases
	construction in those areas to survey for active nests and/or nesting activity to ensure breeding activities are not disrupted and to ensure vegetation removal, BMPs, ESAs, and all avoidance and minimization measures are properly implemented.									
TE-15	Measure for Light Intrusion and Wildfires. To minimize adverse effects from light intrusion from vehicle headlights and the potential threat of increased fires from the operation of State Route 91 (SR-91), during final design, the Department (District 12) and RCTC will work with the USFWS to <u>investigate the possibility of adding features along SR-91 in the vicinity of the Coal Canyon wildlife crossing in Orange County.</u> For example, consideration can be given to the placement of K-rail, concrete walls, and/or hardscaping barriers along the shoulder of SR-91. In investigating these features, consideration must be given to motorist safety, freeway operations, vehicle headlight mitigation and the potential fire threat.	Final EIR/EIS	RCTC	Final design				YES	NO	TBD
TE-16	Santa Ana Sucker Conservation Measures. The United States Army Corps of Engineers (Corps) is in the process of constructing the Santa Ana River (SAR) Reach 9 Phase 2 Green River Golf Club Embankment Protection Project within the action area. Following completion of the embankment construction, perennial stream habitat for the Santa Ana sucker will be reestablished within the construction footprint. The Department and RCTC will coordinate with the Corps during construction of the SR-91 CIP to ensure these restoration areas will not be temporarily or permanently impacted during construction of the SR-91 CIP.	Final EIR/EIS	Design-BUILDER	During construction				YES	NO	TBD
TE-17	The Department and RCTC will coordinate with the Corps during construction to ensure that the SR-91 CIP will not affect releases from Prado Dam or result in a permanent reduction of acreage within the Santa Ana River Canyon Habitat Management Area.	Final EIR/EIS	Design-BUILDER	During construction				YES	NO	TBD
IS-1	During final design, Riverside County Transportation Commission (RCTC) Project Engineer will direct a qualified landscape architect develop a weed abatement program for inclusion in the project specifications. That program will be	Final EIR/EIS	RCTC	Final design; prior to construction				YES	YES	TBD

ECR ID	Avoidance, Minimization, and/or Mitigation Measures	Environmental Analysis Source (Technical Study, Environmental Document, and/or Technical Discipline)	Responsible for Development and/or Implementation of Measure	Timing/ Phase	Action(s) Taken to Implement Measure	Measure Completed (Date and Initials)	Remarks	Measure is Applicable to Previous Phases	Measure is Applicable to SR-91 COP	Measure is Applicable to Future Phases
	developed in compliance with Executive Order (EO) 13112 to minimize the potential for intrusion or export of invasive plant species to and from the biological study area (BSA) during project construction. At a minimum, the following will be included in the weed abatement program and implemented prior to and during construction to address potential effects associated with invasive species:									
IS-1a	RCTC's Resident Engineer will require the contractor to inspect and clean construction equipment at the beginning and end of each day and prior to transporting equipment from one project location to another. RCTC's Resident Engineer will require the contractor to limit soil and vegetation disturbance to those areas specifically required for the project construction.	Final EIR/EIS	Contractor	During construction				YES	YES	TBD
IS-1b	RCTC's Resident Engineer will require the contractor to obtain soil, gravel, and rock from weed-free sources. RCTC's Resident Engineer will require the contractor to use only certified weed-free straw, mulch, and/or fiber rolls for erosion control during construction.	Final EIR/EIS	Contractor	During construction				YES	YES	TBD
IS-1c	Prior to the completion of construction, RCTC's Resident Engineer will require the contractor to revegetate affected areas adjacent to native vegetation with plant species that are native to the vicinity and approved by the California Department of Transportation (Department) District 8 and District 12 Biologists.	Final EIR/EIS	Contractor	During construction				YES	YES	TBD
IS-1	RCTC's Resident Engineer will require the contractor to not use any species listed in the California Invasive Plant Council (Cal-IPC) California Invasive Plant Inventory with a high or moderate rating in revegetation.	Final EIR/EIS	Contractor	During construction				YES	YES	TBD
IS-1d	After construction, RCTC's Resident Engineer will ensure that erosion control and revegetation sites are monitored until achievement of the performance standards included in the weed abatement program or for a period of 2 to 3 years	Final EIR/EIS	Contractor	After construction				YES	NO	TBD

ECR ID	Avoidance, Minimization, and/or Mitigation Measures	Environmental Analysis Source (Technical Study, Environmental Document, and/or Technical Discipline)	Responsible for Development and/or Implementation of Measure	Timing/ Phase	Action(s) Taken to Implement Measure	Measure Completed (Date and Initials)	Remarks	Measure is Applicable to Previous Phases	Measure is Applicable to SR-91 COP	Measure is Applicable to Future Phases
	after installation to detect nonnative species prior to the establishment of the native vegetation.									
IS-1e	RCTC's Resident Engineer will require the contractor and the post-construction monitors to implement eradication procedures (e.g., spraying and/or hand weeding) should an infestation occur. The use of herbicides will be prohibited within and adjacent to native vegetation, except as specifically authorized and monitored by the Department District 8 and District 12 Biologists during and after project construction.	Final EIR/EIS	Contractor	During construction				YES	YES	TBD
IS-1f	During construction, RCTC's Resident Engineer will require the contractor to reduce indirect impacts of exotic plant infestations and litter by regular roadside maintenance to remove litter and weeds from the right-of-way. Because the Department already conducts regular ongoing maintenance of landscaping in the State right-of-way, no additional project-specific measures for invasive species are required during project operations.	Final EIR/EIS	Contractor	During construction				YES	YES	TBD