

# **Appendix E:**

## **Mitigation and Monitoring and Reporting Program**

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Project Name: **El Camino Real Roadway Improvements Project**

Project No: **6072**

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# Mitigation Monitoring and Reporting Program

PROJECT NAME: **El Camino Real Roadway Improvements Project**

PROJECT NO: **6072**

APPROVAL DATE/RESOLUTION NUMBER(S): \_\_\_\_\_

The following environmental mitigation measures were incorporated into the Conditions of Approval for this Project in order to mitigate identified environmental impacts to a level of insignificance. A completed and signed checklist for each mitigation measure indicates that this mitigation measure has been complied with and implemented, and fulfills the City’s monitoring requirements with respect to Assembly Bill 3180 (Public Resources Code Section 21081.6).

MITIGATION MEASURE		Monitoring Type	Monitoring Department	Shown on Plans	Verified Implementation	Remarks
<b>VIS-1</b>	Caltrans Standard Specifications (2018) “Erosion Control” will be followed during construction. At the conclusion of construction, areas of bare soil shall be hydroseeded with native seed mix to prevent or at least minimize erosion.	Project	Contractor			
<b>VIS-2</b>	Vegetation clearing shall only occur within the delineated Project boundaries in an effort to minimize the impacts.	Project	Contractor			
<b>VIS-3</b>	All disturbed areas including staging of vehicles and equipment will be restored to pre-construction contours and revegetated, either through hydroseeding or other means, with native species.	Project	Contractor			
<b>BIO-1</b>	Prior to the start of construction activities, the Project limits in the vicinity of coastal sage scrub and southern mixed chaparral, near the HMP Hardline Preserve, shall be marked with high visibility ESA fencing or staking to ensure construction will not further encroach into these habitats. The fencing shall be inspected by the Contractor before the start of each workday and maintained by the Contractor until completion of the Project. The Project biologist will periodically inspect the ESA to ensure sensitive locations remain undisturbed.	Project	Contractor and biological monitor			
<b>BIO-2</b>	Every individual working on the Project construction must attend a	Project	Contractor			

**Explanation of Headings**

**Type** = Project, ongoing, cumulative.

**Monitoring Dept.** = Department, or Agency, responsible for monitoring a particular mitigation measure.

**Shown on Plans** = When mitigation measure is shown on plans, this column will be initialed and dated.

**Verified Implementation** = When mitigation measure has been implemented, this column will be initialed and dated.

**Remarks** = Area for describing status of ongoing mitigation measure, or for other information.

**Legend**

- PLN** Planning Division
- ENG** Land Development Engineering Division
- BLDG** Building Division

MITIGATION MEASURE		Monitoring Type	Monitoring Department	Shown on Plans	Verified Implementation	Remarks
	<p>biological awareness training session delivered by a qualified biologist. This training program shall include information regarding special status species, including the coastal California gnatcatcher and sensitive habitats within the BSA.</p> <p>The training shall include species identification characteristics, Best Management Practices (BMPs) to be implemented, Project-specific avoidance measures that must be followed, and the steps necessary if the species is encountered at any time. Personnel would attend biological awareness training prior to working within the Project area.</p>		and City			
<b>BIO-3</b>	Project activities would not encroach into any adjacent habitat designated as Hardline Preserve areas within the HMP.	Project	Contractor			
<b>BIO-4</b>	<p>Contract specifications will include the following BMPs where applicable, to reduce erosion during construction:</p> <ul style="list-style-type: none"> <li>• Implementation of the Project shall require approval of a site-specific Storm Water Pollution Prevention Plan (SWPPP) or Water Pollution Control Program (WPCP) that would implement effective measures to protect regional water quality, which may include a hazardous spill prevention plan and additional erosion prevention techniques;</li> <li>• Existing vegetation will be protected in place where feasible to provide an effective form of erosion and sediment control;</li> <li>• Soil exposure must be minimized through the use of temporary BMPs, groundcover, and stabilization measures</li> <li>• The contractor must conduct periodic maintenance of erosion and sediment-control measures</li> </ul>	Project	Contractor			
<b>BIO-5</b>	Vehicle maintenance, staging and storing equipment, materials, fuels, lubricants, solvents, and other possible contaminants must remain outside of sensitive habitat marked with high-visibility fencing. Any necessary equipment washing must occur where the water cannot	Project	Contractor			

MITIGATION MEASURE		Monitoring Type	Monitoring Department	Shown on Plans	Verified Implementation	Remarks
	flow into sensitive habitat communities.					
<b>BIO-6</b>	If nighttime work must occur, any nighttime lighting must be shielded down and away from preserve areas.	Project	Contractor			
<b>BIO-7</b>	Where feasible, native vegetation will be trimmed rather than fully removed in areas where vegetation removal is required. Furthermore, invasive plant species must not be used within any landscaped areas.	Project	Contractor			
<b>BIO-8</b>	The Project biologist (qualified/pre-approved by USFWS) will periodically monitor construction within the vicinity of sensitive habitats to ensure that vegetation removal, BMPs, ESAs, and all avoidance and minimization measures are properly constructed and followed.	Project	City			
<b>BIO-9</b>	Permanent impacts to approximately 0.66 acres of coastal sage scrub habitat outside of the coastal zone shall be mitigated at a 2:1 mitigation ratio through use of credits at the City's Lake Calavera Mitigation Parcel. Although protocol level surveys for CAGN were not conducted, the impacted habitat is presumed to be	Project	City			
<b>BIO-10</b>	<del>During</del> the spring blooming season immediately prior to initial ground disturbing activities, a focused botanical clearance survey will be conducted within the patch of coastal sage scrub habitat that will be impacted by the Project. If a special status plant species is identified within this habitat community and cannot be feasibly avoided during construction, the Project team, in coordination with the appropriate regulatory agencies, will then identify appropriate measures to minimize adverse effects to special status plant species.	Project	City			
<b>BIO-11</b>	If a CAGN is identified nesting directly in or within 300 feet of Project limits all work must stop in that vicinity until the appropriate buffer and sound restrictions, determined in coordination with the city, are established. The established buffer and other restriction must remain until the Project biologist determined that the juveniles have fledged. Clearing of occupied CAGN habitat cannot occur during the breeding	Project	Contractor			

MITIGATION MEASURE		Monitoring Type	Monitoring Department	Shown on Plans	Verified Implementation	Remarks
	season of CAGN, from March 1- August 15.					
<b>BIO-12</b>	If vegetation is being removed from within CAGN habitat during the nesting season, a biologist must inspect the vegetation immediately prior to removal and monitor for the duration of initial vegetation clearing.	Project	City			
<b>BIO-13</b>	Prior to arrival at the Project site and prior to leaving the Project site, construction equipment that may contain invasive plants and/or seeds will be cleaned to reduce the spreading of noxious weeds.	Project	Contractor			
<b>BIO-14</b>	If hydroseed and plant mixes are used during or post-construction, plant species must consist of a biologist approved plant palette seed mix of native species sourced locally to the Project area.	Project	City			
<b>BIO-15</b>	<p>The construction contractor shall avoid removing vegetation within the mixed chaparral habitat during the nesting bird season (February 15 –August 31). If vegetation must be removed within the breeding season, a pre-construction nesting bird survey must be conducted no more than 3 days prior to vegetation removal. The vegetation must be removed within 3 days from the nesting bird survey.</p> <p>A no-disturbance buffer will be established around any active nest of migratory birds (width to be determined by a qualified biologist in coordination with the City) and a minimum 300 foot no-disturbance buffer will be established around any nesting raptor species. The contractor must immediately stop work in the nesting area until the appropriate buffer is established and is prohibited from conducting work that could disturb the birds (as determined by the Project biologist and in coordination with the city) in the buffer area until a qualified biologist determines the young have fledged. A reduced buffer can be established if determined appropriate by the Project biologist and approved by the city.</p>	Project	Contractor			
<b>BIO-16</b>	The contractor must dispose of all food-related trash in closed	Project	Contractor			

MITIGATION MEASURE		Monitoring Type	Monitoring Department	Shown on Plans	Verified Implementation	Remarks
	containers and must remove it from the Project area each day during construction. Construction personnel must not feed or attract wildlife to the Project area.					
<b>BIO-17</b>	The contractor must not apply rodenticide or herbicide within the BSA during construction.	Project	Contractor			
<b>CR-1</b>	Cultural awareness and sensitivity training shall be provided to construction crews working within the Project area. In addition, the City will inform the Rincon Band of Luiseño Indians of the construction schedule to ensure the tribe is afforded the opportunity to monitor Project ground disturbing activities.	Project	City			
<b>CR-2</b>	If previously unidentified cultural materials are unearthed during construction, work shall be halted within 50 feet of the area until a qualified archaeologist/Tribal Monitor can assess the significance of the find and develop a plan for documentation and removal of resources if necessary. This buffer can be reduced or increased, based on the type of discovery. Additional archaeological survey will be needed if Project limits are extended beyond the present survey limits. If cultural materials are prehistoric in nature, the Rincon Band of Luiseño Indians shall be consulted regarding appropriate treatment protocol.	Project	Contractor and City			
<b>CR-3</b>	Section 7050.50 of the California Health and Safety Code establishes the intentional disturbance, mutilation, or removal of interred human remains a misdemeanor. This code also requires that upon the discovery of human remains outside of a dedicated cemetery excavation or disturbance of land cease until a county Medical Examiner makes a report. If the Medical Examiner determines the remains are not the result of a crime scene and are not Native American, a qualified archaeologist shall be consulted to assess the significance of the find and develop a plan for documentation and removal. Should the remains be determined to Native American, then	Project	Contractor and City			

MITIGATION MEASURE	Monitoring Type	Monitoring Department	Shown on Plans	Verified Implementation	Remarks
<p><b>TCR-1 through TCR-10</b> shall be implemented.</p>					
<p><b>GEO-1</b>  <b>Educate Construction Personnel in Recognizing Fossil Material</b>                      All construction personnel must receive training provided by a qualified professional paleontologist experienced in teaching non-specialists to ensure that construction personnel can recognize fossil materials in the event that any are discovered during construction.</p>	Project	Contractor and City			
<p><b>GEO-2</b>  <b>Stop Work if Substantial Fossil Remains are Encountered during Construction</b>                      If substantial fossil remains (particularly vertebrate remains) are discovered during earth-disturbing activities, activities will stop immediately until a State-registered professional geologist or qualified professional paleontologist can assess the nature and importance of the find and a qualified professional paleontologist can recommend appropriate treatment. Treatment may include preparation and recovery of fossil materials so that they can be housed in an appropriate museum or university collection, and may include preparation of a report for publication describing the finds. The Project proponent will ensure that recommendations regarding treatment and reporting are implemented.</p>	Project	Contractor and City			
<p><b>GEO-3</b>  <b>Resource Stewardship Measures</b>                      The following will be added to the Project’s standard specification.                      If paleontological resources are discovered at the job site, do not disturb the material and immediately:</p> <ul style="list-style-type: none"> <li>• Stop all work within a 60-foot radius of the discovery</li> <li>• Protect the area</li> <li>• Notify the Resident Engineer</li> </ul>	Project	Contractor			

MITIGATION MEASURE		Monitoring Type	Monitoring Department	Shown on Plans	Verified Implementation	Remarks
	<p>The Project proponent investigates and modifies the dimensions of the protected area if necessary.</p> <p>Do not take paleontological resources from the job site. Do not resume work within the specified radius of the discovery until authorized. A specification alerting the construction contractor that paleontological monitoring will occur during activities that will disturb native sediments will also be added to the Project's specifications.</p>					
<b>HAZ-1</b>	The contractor shall prepare a Spill Prevention, Control, and Countermeasure Program (SPCCP) prior to the commencement of construction activities. The SPCCP shall include information on the nature of all hazardous materials that shall be used on-site. The SPCCP shall also include information regarding proper handling of hazardous materials, and clean-up procedures in the event of an accidental release. The phone number of the agency overseeing hazardous materials and toxic clean-up shall be provided in the SPCCP.	Project	Contractor			
<b>HAZ-2</b>	As is the case for any project that proposes excavation, the potential exists for unknown hazardous contamination to be revealed during project construction. If soil contaminated by hazardous waste is discovered during construction, proper hazardous waste handling and emergency procedures under 40 CFR § 262 and Division 4.5 of Title 22 CA Code of Regs shall be followed.	Project	Contractor			
<b>HAZ-3</b>	If any yellow pavement striping is to be removed during construction, it is recommended that testing and removal requirements for yellow striping and pavement marking materials be performed in accordance with Caltrans Standard Special Provisions for REMOVE TRAFFIC STRIPE AND PAVEMENT MARKINGS.	Project	Contractor			
<b>HAZ-4</b>	Any leaking transformers observed during the course of the Project should be considered a potential polychlorinated biphenyl (PCB)	Project	Contractor			

MITIGATION MEASURE	Monitoring Type	Monitoring Department	Shown on Plans	Verified Implementation	Remarks
<p>hazard. A detailed inspection of individual electrical transformers was not conducted for this Phase I Environmental Site Assessment. However, should leaks from electrical transformers (that will either remain within the construction limits or will require removal and/or relocation) be encountered during construction, the transformer fluid should be sampled and analyzed by qualified personnel for detectable levels of PCB's. Should PCBs be detected, the transformer should be removed and disposed of in accordance with Title 22, Division 4.5 of the California Code of Regulations and any other appropriate regulatory agency. Any stained soil encountered below electrical transformers with detectable levels of PCB's should also be handled and disposed of in accordance with Title 22, Division 4.5 of the California Code of Regulations and any other appropriate regulatory agency.</p>					
<p><b>HAZ-5</b> Based on the Statewide Soil Management Agreement for Caltrans for Reuse of Aerially Deposited Lead-Contaminated Soils (DTSC, 2016), the on-site soils down to 3 feet below grade can be reused with no minimum cover requirement. However, the soils below 3 feet can be reused with a minimum of 1-foot of soil cover. Contractors excavating, transporting, or stockpiling soil should prepare a Lead Compliance Plan in accordance with the Caltrans Code of Safety Practices, California Code of Regulations and Cal-OSHA standards addressing the presence of ADL in the soils within the Project area. Lead content testing results contained herein should be given to contractors handling the soils during construction.</p>	Project	Contractor			
<p><b>NOI-1</b> To minimize the construction-generated noise, abatement measures from Public Works Construction (Greenbook) 3-12.3 must be followed:</p> <ul style="list-style-type: none"> <li>• Do not operate construction equipment or run the equipment engines. <ul style="list-style-type: none"> <li>○ After six p.m. on any day, and before seven a.m., Monday through Friday, and before eight a.m. on</li> </ul> </li> </ul>	Project	City			

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<p style="padding-left: 40px;">Saturday</p> <ul style="list-style-type: none"> <li>○ All day on Sunday</li> <li>○ On any federal holiday.</li> </ul> <ul style="list-style-type: none"> <li>● "Equip an internal combustion engine with the manufacturer recommended muffler.</li> <li>● Do not operate an internal combustion engine on the job site without the appropriate muffler.</li> </ul> <p>A variance from these requirements may be provided by request at the discretion of City of Carlsbad.</p>					
<p><b>TCR-1</b></p> <p>Prior to the commencement of any ground-disturbing activities, including but not limited to exploratory geotechnical investigations/borings for contractor bidding purposes, the project developer shall enter into a Pre- Excavation Agreement, otherwise known as a Tribal Cultural Resources Treatment and Tribal Monitoring Agreement, with a consulting Traditionally and Culturally Affiliated Luiseño tribe ("TCA Tribe"). This agreement will contain provisions to address the proper treatment of any tribal cultural resources and/or Luiseño Native American human remains inadvertently discovered during the course of the project. The agreement shall outline the roles and powers of the Luiseño Native American monitors and the archaeologist, and may include the following provisions. A copy of said archaeological contract and Pre-Excavation Agreement shall be provided to the City of Carlsbad prior to the issuance of a grading permit.</p>					
<p><b>TCR-1a</b></p> <p>A Luiseño Native American monitor, associated with a TCA Tribe, shall be present during all ground disturbing activities. Ground disturbing activities may include, but are not be limited to, archaeological studies, geotechnical investigations, clearing, grubbing, trenching, excavation, preparation for utilities and other infrastructure, and grading activities.</p>					

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<b>TCR-1b</b>	Any and all uncovered artifacts of Luiseño Native American cultural importance shall be treated with dignity and respect in accordance with the TCA Tribe’s cultural and spiritual traditions and reburied on-site within an appropriate location protected by open space or easement, etc., where the cultural items will not be disturbed in the future, or shall be returned to the Most Likely Descendant, whichever is most applicable, and shall not be curated, unless ordered to do so by a federal agency or a court of competent jurisdiction.					
<b>TCR-1c</b>	The tribal representative shall be present at the project’s preconstruction meeting to consult with grading and excavation contractors concerning excavation schedules and safety issues, as well as to consult with the archaeologist concerning the proposed archaeologist techniques and/or strategies for the project.					
<b>TCR-1d</b>	Luiseño Native American monitors and archaeological monitors shall have joint authority to temporarily divert and/or halt construction activities. If tribal cultural resources are discovered during construction, all earth-moving activity within and around the immediate discovery area must be diverted until the Luiseño Native American monitor and the archaeologist can assess the nature and significance of the find.					
<b>TCR-1e</b>	If a significant tribal cultural resource(s) and/or unique archaeological resource(s) are discovered during ground-disturbing activities for this project, consulting TCA Tribes shall be notified and consulted regarding the respectful and dignified treatment of those resources. Pursuant to California Public Resources Code Section 21083.2(b) avoidance is the preferred method of preservation for archaeological and tribal cultural resources. If, however, the Applicant is able to demonstrate that avoidance of a significant and/or unique cultural resource is infeasible and a data recovery plan, or other culturally-appropriate mitigation measure, is authorized by the City of Carlsbad as the lead agency, and the TCA Tribes that consulted with the City for					

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<p>TCR-1f</p> <p>When tribal cultural resources are discovered during the project, if the archaeologist collects such resources, a Luiseño Native American monitor must be present during any testing or cataloging of those resources. If the archaeologist does not collect the tribal cultural resources that are unearthed during the ground disturbing activities, the Luiseño Native American monitor shall follow the procedures in TCR-1b.</p>					
<p>TCR-1g</p> <p>If suspected Native American human remains are encountered, California Health and Safety Code Section 7050.5(b) states that no further disturbance shall occur until the San Diego County Medical Examiner has made the necessary findings as to origin. Further, pursuant to California Public Resources Code Section 5097.98(b) remains shall be left in place and free from disturbance until a final decision as to the treatment and disposition has been made. Suspected Native American remains shall be examined in the field and kept in a secure location at the site. A Luiseño Native American monitor shall be present during the examination of the remains. If the San Diego County Medical Examiner determines the remains to be Native American, the Native American Heritage Commission (NAHC) must be contacted by the Medical Examiner within 24 hours. The NAHC must then immediately notify the "Most Likely Descendant" about the discovery. The Most Likely Descendant shall then make recommendations within 48 hours, and engage in consultation concerning treatment of remains as provided in Public Resources Code 5097.98.</p>					
<p>TCR-1h</p> <p>In the event that fill material is imported into the project area, the fill shall be clean of tribal cultural resources and documented as such. Commercial sources of fill material are already permitted as appropriate and will be culturally sterile. If fill material is to be utilized</p>					

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	and/or exported from areas within the project site, then that fill material shall be analyzed and confirmed by an archeologist and Luiseño Native American monitor that such fill material does not contain tribal cultural resources.					
<b>TCR-1i</b>	No testing, invasive or non-invasive, shall be permitted on any recovered tribal cultural resources without the written permission of the consulting tribes.					
<b>TCR-1j</b>	Prior to the approval of final inspection, a monitoring report and/or evaluation report, if appropriate, which describes the results, analysis and conclusions of the monitoring program shall be submitted by the archaeologist, along with the Luiseño Native American monitor's notes and comments, to the City of Carlsbad for approval. Said report shall be subject to confidentiality as an exception to the Public Records Act and will not be available for general public distribution; however, a copy of the final monitoring report shall be provided to each consulting tribe upon request to the Planning Division.					
<b>402 Permit from RWQCB</b>	TBD	Project	City			
<b>Grading Permit</b>	TBD	Project	City			
<b>Special Use Permit</b>	TBD	Project	City			
<b>Minor Habitat Management Plan</b>	TBD	Project	City			

MITIGATION MEASURE	Monitoring Type	Monitoring Department	Shown on Plans	Verified Implementation	Remarks
(HMP) permit					

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