

**MITIGATION MONITORING
and
REPORTING PROGRAM**

**La Loma Bridge
Rehabilitation Replacement Project
(SCH #2003101150)**

Prepared for

**Federal Highway Administration
California Department of Transportation
City of Pasadena**

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FOREWORD

This Mitigation Monitoring and Reporting Program (MMRP) is a California Environmental Quality Act (CEQA)-mandated outcome of the environmental analysis process undertaken for the La Loma Bridge Rehabilitation Replacement Project. The results of the environmental analyses, including proposed mitigation measures, are documented in the Draft Environmental Impact Report/Environmental Assessment (EIR/EA) (October 2005) and the Final EIR/EA (June 2006) for the proposed project.

LIST OF ACRONYMS

AB	Assembly Bill
APE	Area of Potential Effect
CEQA	California Environmental Quality Act
CFR	Code of Federal Regulations
CO	Carbon Monoxide
EA	Environmental Assessment
EIR	Environmental Impact Report
EPA	Environmental Protection Agency
FHWA	Federal Highway Administration
FRA	Federal Railroad Administration
LAFD	Los Angeles Fire Department
LAPD	Los Angeles Police Department
LASD	Los Angeles Sheriff's Department
LAUS	Los Angeles Union Station
LAUSD	Los Angeles Unified School District
MMRP	Mitigation Monitoring and Reporting Program
MOA	Memorandum of Agreement
NRHP	National Register of Historic Places
ROG	Reactive Organic Gas
ROW	Right of Way
SCAQMD	South Coast Air Quality Mitigation District
SHPO	State Historic Preservation Officer
TMP	Traffic Management Plan/Program

INTRODUCTION

The California Environmental Quality Act (CEQA) requires that agencies adopting Environmental Impact Reports (EIRs) take affirmative steps to determine that approved mitigation measures are implemented subsequent to project approval.

Effective January 1, 1989, CEQA was amended to add Section 21081.6, implementing Assembly Bill (AB) 3180. As part of CEQA (state-mandated) environmental review procedures, Section 21081.6 requires a public agency to adopt a monitoring and reporting program for assessing and ensuring efficacy of any mitigation measures applied to the proposed project. Specifically, the lead or responsible agency must adopt a reporting or monitoring program for mitigation measures incorporated into a project or imposed as conditions of approval. The program must be designed to ensure compliance during project implementation. As stated in Public Resources Code, Section 21081.6 (a) (1):

“The public agency shall adopt a reporting or monitoring program for the changes made to the project or conditions of project approval, adopted in order to mitigate or avoid significant effects on the environment. The reporting or monitoring program shall be designed to ensure compliance during project implementation. For those changes which have been required or incorporated into the project at the request of a responsible agency or a public agency having jurisdiction by law over natural resources affected by the project, that agency shall, if so requested by the lead agency or a responsible agency, prepare and submit a proposed reporting or monitoring program.”

AB 3180 provides general guidelines for implementing monitoring and reporting programs (MMRP). Specific reporting and/or monitoring requirements, to be enforced during project implementation, shall be defined prior to final approval of the proposal by the responsible decision maker(s). In response to established CEQA requirements and those of AB 3180 (Public Resources Code Section 21000 et seq.), the proposed Mitigation Monitoring and Reporting Program for the La Loma Bridge Rehabilitation Replacement Project shall be submitted for adoption by the decision makers prior to completion of the environmental review process.

This MMRP will be used by the city of Pasadena (the City) to ensure compliance with mitigation measures associated with development proposed under the La Loma Bridge Rehabilitation Replacement Project. The proposed project would retrofit and rehabilitate the existing La Loma Bridge across the Arroyo Seco.

The Mitigation Monitoring and Reporting section of this document identifies the potential impacts under each environmental resource that would occur with implementation of the proposed project (as set forth in the La Loma Bridge Rehabilitation Replacement Project Draft EIR/EA, October 2005, and Final EIR/EA, June 2006). Under each identified resource, the significant adverse impact(s), its corresponding mitigation measure(s), and the implementation and monitoring requirements are discussed. The implementation and monitoring requirements that have been set forth in this MMRP are as follows:

- Party Responsible for Implementation of Mitigation
- Implementation Phase
- Party Responsible for Monitoring Activity
- Monitoring Activity
- Monitoring Period
- Monitoring Frequency
- Outside Agency Coordination

A sample mitigation monitoring compliance form is provided at the end of this document. For detailed information regarding environmental resource impact methodology and analysis, please refer to the Draft EIR/EA and Final EIR/EA.

ENVIRONMENTAL IMPACT OVERVIEW

Mitigation measures are required at the La Loma Bridge Rehabilitation Replacement Project site to address significant or potentially significant impact(s) to the following resources:

- Traffic and Transportation
- Archeological Resources
- Paleontological Resources
- Air Quality
- Noise
- Biological Resources

Although the impacts that could occur in the following resource area(s) are expected to be less than significant, mitigation is nonetheless proposed to ensure any potential impact(s) remain less than significant:

- Utilities
- Public/Emergency Services
- Visual Resources
- Historical Resources
- Hydrology/Water Quality
- Geology/Soils/Seismicity
- Hazardous Waste/Materials

Refer to the following table for the mitigation measures that will reduce these impacts.

MITIGATION MONITORING AND REPORTING				
IMPACT	MITIGATION MEASURE	IMPLEMENTATION	MONITORING	OUTSIDE AGENCY COORDINATION
UTILITIES				
<p>Construction activities would take place adjacent to two water mains (one 8-inch main and one 12-inch main) traversing the Arroyo. Mitigation is provided to ensure that these mains are protected in place and avoided during construction.</p>	<p>UT-1 Prior to construction, the 8-inch water main and 12-inch water main adjacent to the bridge shall be protected in place. During construction, the adjacent protected-in-place water mains shall be avoided.</p>	<p>Responsible Party(s) Construction Contractor</p> <p>Phase Construction</p>	<p>Responsible Party(s) City Project Manager</p> <p>Activity (1) Check that water mains are protected in place. (2) Check that water mains are avoided during construction.</p> <p>Monitoring Period (1) Pre-construction (2) Construction</p> <p>Frequency (1) Once during pre-construction. (2) As necessary during construction.</p>	

MITIGATION MONITORING AND REPORTING				
IMPACT	MITIGATION MEASURE	IMPLEMENTATION	MONITORING	OUTSIDE AGENCY COORDINATION
PUBLIC AND EMERGENCY SERVICES				
<p>Police Protection: Construction of all project alternatives would require closure of La Loma Bridge for approximately 18 months. Although La Loma Road is not a typical response route, notification of and coordination with the Pasadena Police Department is required to ensure that detour routes are developed and emergency access is not affected.</p>	<p>PS-1 The project proponent shall coordinate with the Pasadena Police Department to develop detour routes prior to construction.</p>	<p>Responsible Party(s) City Project Manager</p> <p>Phase Pre-construction</p>	<p>Responsible Party(s) City Project Manager</p> <p>Activity Check that alternative routes for emergency vehicles are identified in consultation with city agencies.</p> <p>Monitoring Period Pre-construction</p> <p>Frequency Once during pre-construction.</p>	<p>Pasadena Police Department.</p>
	<p>PS-2 The project proponent shall regularly notify Pasadena Police Department of project construction activities and schedules, and any changes to such activities and schedules.</p>	<p>Responsible Party(s) City Project Manager Construction Contractor</p> <p>Phase Construction</p>	<p>Responsible Party(s) City Project Manager</p> <p>Activity Check to confirm that Pasadena Police Department is notified of project construction activities and schedules, and any changes to such activities.</p> <p>Monitoring Period Construction</p> <p>Frequency As necessary during construction.</p>	<p>Pasadena Police Department</p>

MITIGATION MONITORING AND REPORTING

IMPACT	MITIGATION MEASURE	IMPLEMENTATION	MONITORING	OUTSIDE AGENCY COORDINATION
<p>Fire Protection: Construction would require closure of La Loma Bridge for approximately 18 months. Although La Loma Road is not a typical response route for fire and EMS vehicles, notification of and coordination with the Pasadena Fire Department is required to ensure that detour routes are developed and emergency access is not affected.</p>	<p>PS-3 The project proponent shall coordinate with Pasadena Fire Department to develop alternate access routes prior to construction.</p>	<p>Responsible Party(s) City Project Manager Phase Pre-construction</p>	<p>Responsible Party(s) City Project Manager Activity Check that alternative routes for emergency vehicles are identified in consultation with city agencies. Monitoring Period Pre-construction Frequency Once during pre-construction.</p>	<p>Pasadena Fire Department.</p>
	<p>PS-4 The project proponent shall regularly notify Pasadena Fire Department of project construction activities and schedules, and any changes to such activities and schedules.</p>	<p>Responsible Party(s) City Project Manager Construction Contractor Phase Construction</p>	<p>Responsible Party(s) City Project Manager Activity Check to confirm that Pasadena Police Department is notified of project construction activities and schedules, and any changes to such activities. Monitoring Period Construction Frequency As necessary during construction.</p>	<p>Pasadena Fire Department</p>

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IMPACT	MITIGATION MEASURE	IMPLEMENTATION	MONITORING	OUTSIDE AGENCY COORDINATION
<p>Schools: Construction of all project alternatives would require closure of La Loma Bridge for approximately 18 months. One special education van operated by the Pasadena Unified School District (PUSD) currently traverses the bridge and would need to be re-routed north to Colorado Boulevard. Notification of and coordination with PUSD is required to ensure that a detour route is developed.</p>	<p>PS-5 The project proponent shall coordinate with Pasadena Unified School District (PUSD) and associated PUSD Transportation Personnel to develop detour routes for school buses and school vans prior to construction.</p>	<p>Responsible Party(s) City Project Manager Phase Pre-construction</p>	<p>Responsible Party(s) City Project Manager Activity Check that alternative routes for school buses are identified in consultation with PUSD. Monitoring Period Pre-construction Frequency Once during pre-construction.</p>	<p>PUSD Transportation Department.</p>
	<p>PS-6 The project proponent shall regularly notify Pasadena Unified School District (PUSD) and associated PUSD Transportation Personnel of project construction activities and schedules, and any changes to such activities and schedules.</p>	<p>Responsible Party(s) City Project Manager Construction Contractor Phase Construction</p>	<p>Responsible Party(s) City Project Manager Activity Check to confirm that PUSD is notified of project construction activities and schedules, and any changes to such activities. Monitoring Period Construction Frequency As necessary during construction.</p>	<p>PUSD Transportation Department</p>

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IMPACT	MITIGATION MEASURE	IMPLEMENTATION	MONITORING	OUTSIDE AGENCY COORDINATION
<p>Recreational Facilities and Parks: During most of the construction, at least one recreation trail in the Arroyo would remain open, which would be covered by a temporary canopy-like structure. Both trails may be closed for an estimated 3 to 4 days. Construction vehicles and equipment would use designated haul and access routes along the east bank of the Arroyo channel. Construction staging and equipment storage would be located beneath the bridge. The parking lot at the casting pond may be used for construction worker parking but would remain open to the public. Once construction is completed, vegetation removed to accommodate construction would be replanted. Temporary structures would be removed and any damage to trails would be repaired. The staging area would be cleared and returned to pre-construction period condition.</p>	<p>PS-7 Upon completion of construction activities, any vegetation cleared or removed for construction, including vegetation removed immediately adjacent to the bridge, shall be replaced and replanted with native vegetation appropriate to the setting. The staging area shall be cleared and returned to pre-construction period condition.</p>	<p>Responsible Party(s) Landscape Contractor Phase Post-construction</p>	<p>Responsible Party(s) City Project Manager Activity Check that vegetation is restored by construction landscape contractor. Monitoring Period Post-construction Frequency Once during post-construction.</p>	<p>N/A</p>

MITIGATION MONITORING AND REPORTING				
IMPACT	MITIGATION MEASURE	IMPLEMENTATION	MONITORING	OUTSIDE AGENCY COORDINATION
	<p>PS-8 Upon completion of construction activities, the multi-use trails shall be repaired and restored to their previous condition.</p>	<p>Responsible Party(s) Construction Contractor</p> <p>Phase Post-construction</p>	<p>Responsible Party(s) City Project Manager</p> <p>Activity Check that trails are repaired and restored by construction contractor.</p> <p>Monitoring Period Post-construction</p> <p>Frequency Once during post-construction.</p>	
TRAFFIC AND TRANSPORTATION				
<p>Construction traffic: During construction, the bridge would be closed to traffic. Roadway segments in the study area (Colorado Boulevard, La Loma Road, Laguna Road, San Rafael Avenue west of Laguna Road and San Rafael Avenue west of Arroyo Boulevard) would experience a marginal increase in user capacity due to the temporary bridge closure; however, utilized capacity would not exceed 60 percent. A minimum of 40 percent capacity of each roadway would remain to accommodate traffic under the closed La Loma Bridge conditions.</p>	<p>T-1 A Traffic Management Plan (TMP) shall be developed by the City prior to construction to ensure that impacts and disruption to circulation and access are minimized during construction.</p>	<p>Responsible Party(s) City Project Manager</p> <p>Phase Pre-construction</p>	<p>Responsible Party(s) City Project Manager</p> <p>Activity Verify that TMP is developed prior to construction.</p> <p>Monitoring Period Pre-construction</p> <p>Frequency Once during pre-construction.</p>	<p>N/A</p>

MITIGATION MONITORING AND REPORTING				
IMPACT	MITIGATION MEASURE	IMPLEMENTATION	MONITORING	OUTSIDE AGENCY COORDINATION
	T-2 Detours to and from the 134 and 210 freeways in the affected area must be implemented and approved by Caltrans during construction closure.	<p>Responsible Party(s) City Project Manager</p> <p>Phase Construction</p>	<p>Responsible Party(s) City Project Manager</p> <p>Activity Check that detours to and from freeways during construction are approved by Caltrans.</p> <p>Monitoring Period Construction</p> <p>Frequency As necessary during Construction.</p>	Caltrans
	T-3 Appropriate signs should be installed or covered while the closure is in place and restored once construction is completed.	<p>Responsible Party(s) Construction Contractor City Project Manager</p> <p>Phase Construction Post-construction</p>	<p>Responsible Party(s) City Project Manager</p> <p>Activity Check that proper signage is installed and removed.</p> <p>Monitoring Period Construction Post-construction</p> <p>Frequency As necessary during Construction As necessary during Post-construction.</p>	N/A

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IMPACT	MITIGATION MEASURE	IMPLEMENTATION	MONITORING	OUTSIDE AGENCY COORDINATION
VISUAL/AESTHETICS				
<p>Visual Resources and Visual Quality: Under the Retrofit and Rehabilitation Alternative, the integrity of the original design would be maintained and any signs of structural deterioration of the bridge removed, this would have a beneficial visual effect on this important visual resource. During construction, presence of construction equipment, and falsework around the bridge would result in short-term degradation of visual quality.</p>	<p>V-1 Any historic materials removed shall be replaced with materials that are consistent with the original historic design.</p>	<p>Responsible Party(s) Construction Contractor Qualified Architectural Historian Phase Pre-construction Construction</p>	<p>Responsible Party(s) City Project Manager Activity (1) Check project plans to ensure replacement materials are specified that are consistent with original design. (2) Inspect construction activities to ensure compliance with plans and consistency with original historic design. Monitoring Period (1) Design (2) Construction Frequency (1) Once during design. (2) As necessary during construction.</p>	N/A

MITIGATION MONITORING AND REPORTING

IMPACT	MITIGATION MEASURE	IMPLEMENTATION	MONITORING	OUTSIDE AGENCY COORDINATION
ARCHEOLOGICAL RESOURCES				
<p>The archaeological survey of the La Loma Bridge APE located one historic-era archaeological site, 19-003346. Site 19-003346 appears to be potentially eligible for the NRHP under Criterion D and for the CRHR under Criterion 4. Construction excavation has the potential to disturb, alter, or destroy this archaeological resource present in the project area. However, Extended Phase I testing of 19-003346 has determined that the portion of the archaeological site within the project's APE lacks integrity and is not significant. However, if other yet undiscovered sites or features or deposits within 19-003346 are encountered during project-related construction, construction activities could disturb or destroy these resources.</p>	<p>AR-1 A certified archaeologist shall monitor all project-related ground disturbing activities. Monitoring may be reduced, at the discretion of the certified archaeological monitor, if it is discovered, based on additional research or initial monitoring, that areas to be disturbed by grading are subsequently determined to have a low potential to contain archaeological resources.</p>	<p>Responsible Party(s) Qualified Archeologist</p> <p>Phase Construction</p>	<p>Responsible Party(s) City Project Manager</p> <p>Activity (1) Check that contract for qualified archaeological monitor is executed. (2) Check that archaeologist is onsite monitoring construction activities.</p> <p>Monitoring Period (1) Pre-construction (2) Construction</p> <p>Frequency (1) Once during pre-construction. (2) As necessary during construction.</p>	

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	<p>AR-2 The site boundaries shall be fenced beyond the Area of Potential Effect (APE) to prevent inadvertent intrusions by construction equipment. If construction activity requires staging or "lay down" areas within site boundaries, protective measures must be taken to ensure site integrity in areas outside the APE.</p>	<p>Responsible Party(s) Construction Contractor Qualified Archeologist Phase Construction</p>	<p>Responsible Party(s) City Project Manager Activity (1) Verify APE boundaries and construction equipment staging requirements are identified in construction plans and specifications. (2) Inspect construction site for compliance with plans and specifications. Monitoring Period (1) Pre-construction (2) Construction Frequency (1) Once during pre-construction. (2) As necessary during construction.</p>	

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	<p>AR-3 If buried cultural resources or additional features associated with site 19-003346 are uncovered during construction, the resident engineer shall halt all work in the vicinity of the archaeological discovery until a qualified archaeologist can assess the significance of the archaeological resource.</p>	<p>Responsible Party(s) Construction Contractor Resident Engineer/City Project Manager Qualified Archeologist Phase Construction</p>	<p>Responsible Party(s) City Project Manager Activity Check that contractor halts construction activity and necessary consultation occurs if archaeological resources or human remains are encountered. Monitoring Period Construction Frequency As necessary during Construction.</p>	
	<p>AR-4 Provisions for the disposition of recovered prehistoric artifacts shall be made in consultation with culturally affiliated Native Americans.</p>	<p>Responsible Party(s) City Project Manager Qualified Archeologist Phase Construction</p>	<p>Responsible Party(s) City Project Manager Activity Check that disposition of any prehistoric artifacts is made in consultation with culturally affiliated Native Americans. Monitoring Period Construction Frequency As necessary during Construction.</p>	Native Americans

MITIGATION MONITORING AND REPORTING				
IMPACT	MITIGATION MEASURE	IMPLEMENTATION	MONITORING	OUTSIDE AGENCY COORDINATION
	<p>AR-5 In the event of an accidental discovery of any human remains in a location other than a dedicated cemetery, the steps and procedures specified in Health and Safety Code 7050.5, State CEQA Guidelines 15064.5(e), and Public Resources Code 5097.98 shall be implemented.</p>	<p>Responsible Party(s) Construction Contractor City Project Manager Qualified Archeologist</p> <p>Phase Construction</p>	<p>Responsible Party(s) City Project Manager</p> <p>Activity Check that steps and procedures specified in state regulations are followed in the event of the discovery of human remains.</p> <p>Monitoring Period Construction</p> <p>Frequency As necessary during Construction.</p>	<p>County Coroner Native American Heritage Commission</p>

MITIGATION MONITORING AND REPORTING				
IMPACT	MITIGATION MEASURE	IMPLEMENTATION	MONITORING	OUTSIDE AGENCY COORDINATION
HYDROLOGY/WATER QUALITY				
<p>Surface Waters: Construction activities and the presence of adverse amounts of raw materials for bridge construction, including concrete, asphalt, and slurry, may lead to stormwater runoff contamination.</p>	<p>WQ-1 Under the statewide National Pollutant Discharge Elimination System (NPDES) General Construction Permit, the project proponent, the City of Pasadena (City), must submit a notice of intent (NOI) to the State Water Resources Control Board (SWRCB) prior to commencement of construction activities. In addition, a Stormwater Pollution Prevention Plan (SWPPP) must be prepared and implemented at the project site and revised as necessary as administrative or physical conditions change.</p> <p>The SWPPP will include best management practices (BMPs) that address source reduction and provide measures and controls necessary to mitigate potential pollutant sources. The SWPPP will be available to the public under Section 308(b) of the Clean Water Act (CWA) and will be made available to the SWRCB upon request. Required elements of the SWPPP include:</p> <ul style="list-style-type: none"> • A site description addressing the elements and characteristics specific to the site; • Descriptions of BMPs for erosion and sediment control; • BMPs for construction waste handling and disposal; • Implementation of approved local plans; • Proposed post-construction controls, including a description of local post-construction erosion and sediment control requirements; and • Non-stormwater management. <p>Recommended BMPs for the construction phase include proper stockpiling and disposal of demolition debris, concrete, and soil; protecting existing storm drain inlets;</p>	<p>Responsible Party(s) City Project Manager Construction Contractor</p> <p>Phase Pre-construction Construction</p>	<p>Responsible Party(s) City Project Manager</p> <p>Activity (1) Check that NOI is submitted to the SWRCB prior to construction. (2) Check that SWPPP is developed. (3) Inspect construction site to ensure that BMPs and other measures specified in SWPPP are implemented during construction.</p> <p>Monitoring Period (1) Pre-construction (2) Pre-construction (3) Construction</p> <p>Frequency (1) As necessary during pre-construction. (2) Once during pre-construction. (3) As necessary during construction.</p>	<p>SWRCB</p>