



CITY OF LOS ANGELES
CALIFORNIA ENVIRONMENTAL QUALITY ACT
INITIAL STUDY
(Article I – City CEQA Guidelines)

Council District: **14** Date: **July 23, 2007**

Lead City Agency: Department of Public Works, Bureau of Engineering

Project Title: **6TH STREET VIADUCT SEISMIC IMPROVEMENT PROJECT**

I. PROJECT DESCRIPTION

A. Location

Project Location

The 6th Street Viaduct (Bridge No. 53C-1880) and Sixth Street Overcrossing (Bridge No. 53-0595) comprise a single structure, which spans a portion of the Hollywood Freeway (US 101), the Los Angeles River, city streets, and numerous railroad tracks. The structure is located in a highly urbanized area just east of downtown and connects the downtown portion of the North Central Community Planning Area with the Boyle Heights Community Planning Area in the City and County of Los Angeles. Figure 1 illustrates the project areas location with respect to the region while Figure 2 is a Vicinity Map.

B. Purpose

Seismic vulnerability studies, completed in 2004 concluded that the viaduct, with its current state of material deterioration and lack of structural detailing exhibits a high vulnerability to failure under a moderate seismic event (an earthquake with a probable return frequency of once every 40 years). The probability that the viaduct would experience significant failure, and possibly collapse as the result of seismic events exceeds 70 percent over 50 years. This vulnerability level is extremely high compared to the normally accepted collapse probability of 5 percent or less over 50 years. The high risk of collapse and continuing concrete deterioration indicates the need for timely corrective action to 1) seismically retrofit vulnerable viaduct and remove all concrete members experiencing ASR or 2) replace the existing viaduct.

The concrete elements of the 6th Street Viaduct are subject to an ongoing chemical reaction, known as *Alkali Silica Reaction (ASR)*, which has led to significant deterioration of the structure and loss of its seismic integrity. This deterioration of the 6th Street Viaduct has been occurring for at least 75 years, despite many efforts to arrest or limit its effect. In the 1940s, two large pylons (decorative towers) at the center river bent were removed because of concerns for public safety due to the poor condition of the concrete. In the late 1980s, the deck of the viaduct was stripped of asphalt, and a waterproof coating applied to the underlying concrete in an attempt to prevent moisture infiltration. In addition, the viaduct has been repeatedly patched using epoxy injection; an activity that has left stains and

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discoloration and caused by the application of a cementitious coating to hide the unsightly honeycomb effect of these repairs. Cracking is once again evident throughout the viaduct, with large cracks and spalling clearly evident on the outer columns.

C. Description

The proposed project would improve response of this critical Los Angeles River crossing to an acceptable standard resulting from a moderate seismic event by either retrofitting the existing structure or replacing the 6th Street Viaduct entirely. Several alternatives were considered during the project development phase of the project. Criteria used to select the alternatives for carrying forward for detailed analysis in the environmental document include construction and maintenance costs, life span of the facility, constructability, historic preservation, community disruption, and structural and operational safety. Based on the results of the preliminary screening analysis, a No Build Alternative and two Build Alternatives will be analyzed in the environmental document. These are briefly described below.

Alternative 1 – No Build: This alternative provides for neither retrofit nor replacement of the 6th Street Viaduct. The ASR deterioration of the structure would continue. The City would provide ongoing maintenance on the viaduct to keep it open to traffic as long as possible, given the ongoing ASR deterioration. The 6th Street Viaduct would maintain a roadway width of 46 feet, which accommodates two travel lanes in each direction with no outside shoulders or median. The unsafe railings would not be improved to acceptable standards.

Alternative 2 – Viaduct Retrofit: The viaduct's columns would be retrofitted with steel casings, and infill walls would be constructed at additional columns and bents. All columns that are currently identified to have "Moderate-Severe" to "Severe" damage ratings would be encased to reduce the possibility of further deterioration. Additionally, the steel casings would be designed to withstand the high level of internal pressure due to ASR-induced lateral dilation of the encased column. Under this retrofit alternative, 76 columns would be encased, of which 26 would utilize 7/8-inch plates and 50 would use 5/8-inch steel plates. The exposed plates, channels, and bars would be concealed by a 6-inch layer of architectural mortar. All exterior columns with "Light" or "Moderate" damage ratings would also be encased to account for future concrete degradation due to ASR. Encasement of all exterior columns would also maintain visual balance and consistency for the retrofitted structure. The interior columns in Bents 1, 4, and 5 would be encased to enhance their shear strength.

Alternative 3 – Viaduct Replacement: The 6th Street Viaduct would be demolished and replaced with a new four-lane structure. Four alignment alternatives have been defined for the purpose of environmental evaluation (Figure 2). Each alignment alternative may be evaluated with multiple bridge types and profiles. Based on public input, the new viaduct may be designed with various use features, but no additional traffic capacity would be provided. The bridge types and profiles for the following alignment options have yet to be determined.

The analysis in this document assumes that, unless otherwise stated, the project would be designed, constructed and operated following all applicable laws, regulations, ordinances and formally adopted City standards (e.g., *Los Angeles Municipal Code* and Bureau of Engineering *Standard Plans*). Construction would follow the uniform practices established by the Southern California Chapter of the American Public Works Association (e.g., *Standard Specifications for Public Works Construction* and the *Work Area Traffic Control Handbook*) as specifically adapted by the City of Los Angeles (e.g., The City of Los Angeles Department of Public Works *Additions and Amendments to the Standard*

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Specifications For Public Works Construction (AKA "The Brown Book," formerly Standard Plan S-610)).

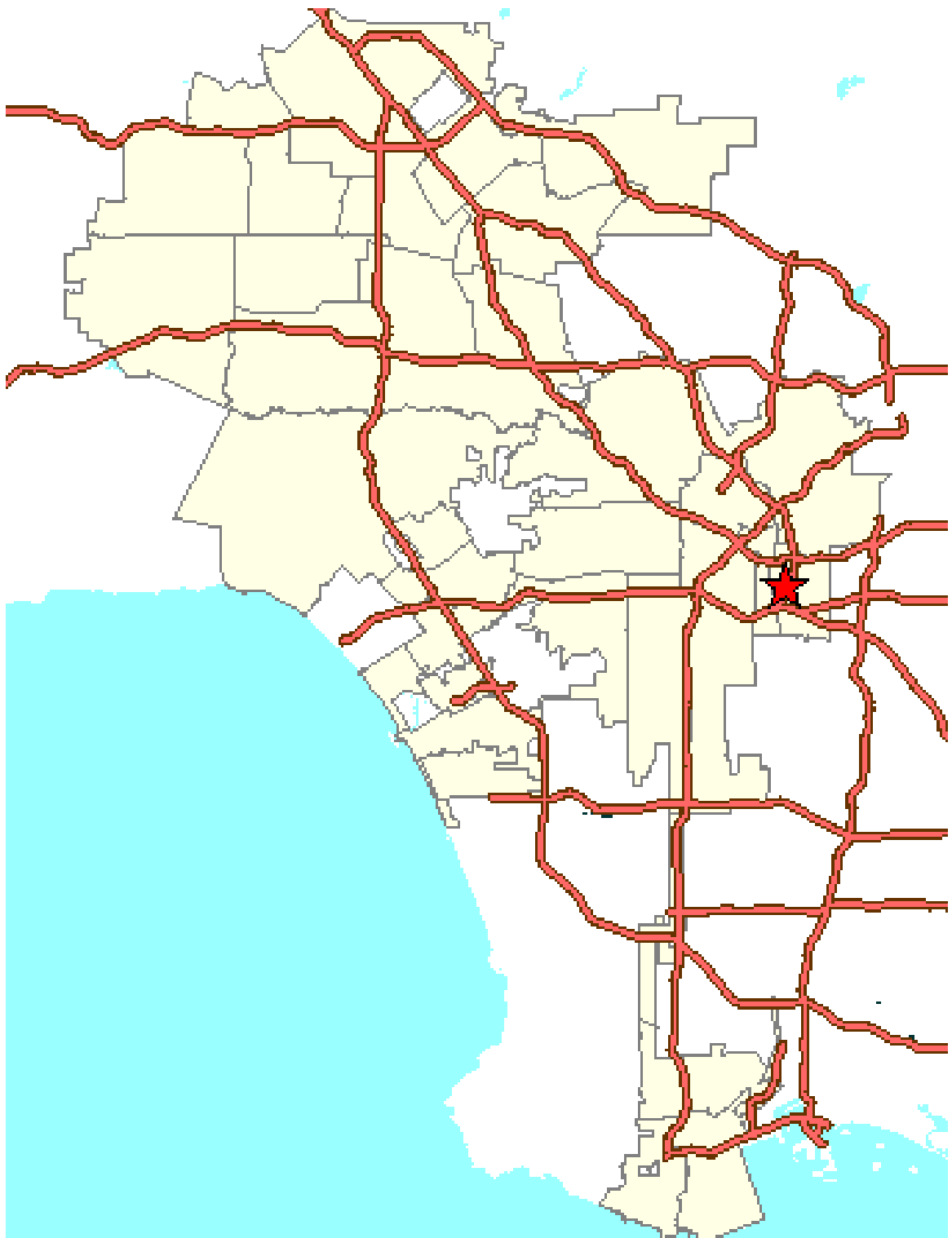


Figure 1. Regional Map



Figure 2. Vicinity Map

II. EXISTING ENVIRONMENT

The proposed project is located within a fully developed, mixed-use urban setting. The active construction zone would extend along 6th Street from west of I-5 on the east side of the Los Angeles River to Mill Street on the west side of the River (see Figure 2). The project is located at the boundary of the City of Los Angeles' Central City North and Boyle Heights General Plan Areas. 6th Street is one of the primary thoroughfares connecting downtown Los Angeles and Boyle Heights.

The 6th Street Viaduct crosses the Los Angeles River along an east-west alignment. Land uses along the north and south sides of the viaduct are predominantly industrial and commercial. The City maintenance office is located within the area underneath the viaduct on the west side of the river. Many homeless people are typically found sheltering under the viaduct on both sides of the river. A US Army Corps of Engineers tunnel is located under the viaduct on the west side to access the river.

In addition to the existing uses mentioned above, the Metropolitan Transit Authority (MTA) also owns a right-of-way corridor on the east and west banks of the river. On the west bank, the two tracks closest to the river are owned by MTA and used by the Southern California Regional Rail Authority (SCRRRA) to operate Metrolink trains. The five tracks west of the MTA tracks are owned by Burlington Northern Santa Fe (BNSF), and the rest of the tracks are owned by MTA and used for the Metro Red Line. Amtrak and BNSF also operate trains on MTA's two tracks on the west bank. On the east bank, the two tracks closest to the river are owned by MTA, and the Union Pacific Railroad (UP RR) owns the rest of the tracks. UPRR also operates trains on MTA's tracks.

The Los Angeles River, which crosses under the viaduct in a north-south direction, is a trapezoidal concrete-lined channel. The Los Angeles River is a flood control channel that receives stormwater

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runoff from its 834-square-mile watershed, treated effluent from two wastewater treatment plants, and some rising groundwater (in the Glendale Narrows area). The river discharges to an estuary in Queensway Bay in the Long Beach Harbor. High voltage transmission lines are located along each bank of the river and cross over the viaduct

III. ENVIRONMENTAL IMPACT EVALUATION

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

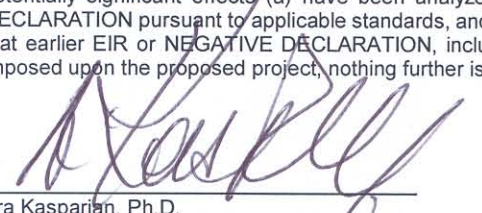
The environmental factors checked below ☒ would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist, which follows.

- | | | |
|---|--|--|
| <input checked="" type="checkbox"/> Aesthetics | <input type="checkbox"/> Agriculture Resources | <input checked="" type="checkbox"/> Air Quality |
| <input type="checkbox"/> Biological Resources | <input checked="" type="checkbox"/> Cultural Resources | <input type="checkbox"/> Geology/Soils |
| <input checked="" type="checkbox"/> Hazards & Hazardous Materials | <input type="checkbox"/> Hydrology/Water Quality | <input checked="" type="checkbox"/> Land Use/Planning |
| <input type="checkbox"/> Mineral Resources | <input checked="" type="checkbox"/> Noise | <input type="checkbox"/> Population/Housing |
| <input type="checkbox"/> Public Services | <input type="checkbox"/> Recreation | <input checked="" type="checkbox"/> Transportation/Traffic |
| <input checked="" type="checkbox"/> Utilities/Service Systems | <input checked="" type="checkbox"/> Mandatory Findings of Significance | |

ENVIRONMENTAL DETERMINATION

On the basis of this initial evaluation:

- ☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION would be prepared.
- ☐ I find that although the proposed project could have a significant effect on the environment, there would not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION would be prepared.
- ☐ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- ☒ I find that the proposed project MAY have a "potentially significant impact" on the environment and that an ENVIRONMENTAL IMPACT REPORT is required.
- ☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.


Ara Kasparian, Ph.D.
Manager, Environmental Group
City of Los Angeles Department of Public Works
Bureau of Engineering

Date

7/25/07

ENVIRONMENTAL ANALYSIS AND DISCUSSION OF IMPACTS

I. AESTHETICS

Issues & Supporting Information Sources	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
the project:				
a. Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Substantially degrade the existing visual character or quality of the site and its surroundings?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Discussion:

The 6th Street Viaduct is a historic resource and is recognized as a visual landmark to the communities in the surrounding area as well as the general public within the City of Los Angeles. Implementation of any of the project alternatives would result in some degree of adverse impact to the visual character of the existing viaduct. The Environmental Impact Statement/Environmental Impact Report (EIS/EIR) for the proposed project would evaluate the visual and aesthetic impacts to scenic resources and the affected viewshed, and it would identify feasible mitigation measures to reduce any identified significant impact to a less than significant level.

II. AGRICULTURAL RESOURCES

Issues & Supporting Information Sources	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
the project:				
a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Involve other changes in the existing environment which, due to their location or nature, could individually or cumulatively result in loss of Farmland, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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Discussion:

The proposed project is situated in a fully urbanized area that is devoid of farmland or agricultural operations.

III. AIR QUALITY

Issues & Supporting Information Sources	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emission which exceed quantitative thresholds for ozone precursors)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Discussion:

The proposed project is located in the South Coast Air Basin, which is in non-attainment for ozone and small particulate materials. Construction of the proposed project would marginally increase the emission of these air contaminants as a result of operating construction equipment; clearing of debris and asphalt; onsite excavation and grading; and transportation of demolition debris and excavated material to offsite disposal locations. The EIS/EIR will evaluate potential impacts to local and regional air quality, and identify measures to reduce potentially significant impacts to a less than significant level, as applicable.

IV. BIOLOGICAL RESOURCES

Issues & Supporting Information Sources	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or US Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

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Issues & Supporting Information Sources	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Have a substantial adverse effect on federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) either individually or in combination with the known or probable impacts of other activities through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Interfere substantially with the movement of any resident or migratory fish or wildlife species or with established resident or migratory wildlife corridors, or impede the use of wildlife nursery sites?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Communities Conservation Plan, or other approved local, regional, or state habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion:

The project site is located within an urbanized industrial area of the City of Los Angeles and does not contain any significant biological resources, including riparian habitats, wetland, or protected trees. The project would not affect any biological resources. No further study is required.

V. CULTURAL RESOURCES

Issues & Supporting Information Sources	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Cause a substantial adverse change in the significance of a unique archaeological resource pursuant to §15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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Issues & Supporting Information Sources	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
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Discussion:

The 6th Street Viaduct was built in 1932 and is 75 years old. According to the Caltrans Historic Bridge Inventory, the Viaduct is rated “2 – Eligible for listing by the National Register of Historic Places (NRHP).” Therefore, it is also included in the California Register of Historic Resources (California Register). In addition, several structures more than 50 years of age are located within the proposed project’s area of potential effects. These structures will be evaluated and documented in the EIS/EIR.

A full Section 106 (of the National Historic Preservation Act) review, in consultation with the City of Los Angeles Cultural Heritage Commission, Los Angeles Conservancy, State Historic Preservation Officer (SHPO), Caltrans, and FHWA would be conducted as part of the EIS/EIR for this project. The Section 106 review would identify both archaeological and architectural historic resources subject to impact by the proposed project. The work would be done in accordance with the Secretary of the Interior’s Standards for the Treatment of Historic Properties and the Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings, under the stipulations of a Memorandum of Agreement (MOA) to be entered into between FHWA, SHPO, Caltrans, and the City of Los Angeles as a result of Section 106 consultation.

VI. GEOLOGY AND SOILS

Issues & Supporting Information Sources	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
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Would the project:

a. Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:

i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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ii) Strong seismic ground shaking?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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iii) Seismic-related ground failure, including liquefaction?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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iv) Landslides?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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b. Result in substantial soil erosion or the loss of topsoil?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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c. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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d. Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994) creating substantial risks to life or property?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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Issues & Supporting Information Sources	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
e. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion:

The proposed project would be located in Southern California, an area known to be seismically active and prone to earthquakes, which may result in hazardous conditions to people and property within the region. The existing 6th Street Viaduct's vulnerability to extensive damage as a result of a moderate event is the principal concern for undertaking the proposed project. The proposed project would be designed to meet seismic requirements of the local, state, and federal agencies governing the project.

Short-term erosion impacts could occur during the construction phase of the project. During grading, excavation, and other site preparation activities, unearthed and exposed soil could potentially be eroded. Implementation of standard erosion control would minimize the impacts to a less than significant level.

The EIS/EIR would address potentially significant impacts associated with seismic and short-term erosion impacts. Mitigation measures to reduce the identified significant impacts to a less than significant level would be provided.

VII. HAZARDS AND HAZARDOUS MATERIALS

Issues & Supporting Information Sources	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Create a significant hazard to the public or the environment through the reasonably foreseeable upset and accident conditions involving the likely release of hazardous materials into the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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Issues & Supporting Information Sources	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f. For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
h. Expose people or structures to the risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion:

The project site is characterized by industrial and commercial land uses. A potential to encounter hazardous wastes/materials exists within the proposed project's footprint. An Initial Site Assessment (ISA) was conducted along the viaduct corridor within the project limits to identify any hazardous waste or material sites or any potentially contaminated areas listed by federal, state, and local agencies (Parsons, 2007). Based on the ASTM E 1527 -00 standard search distances, 183 sites were identified in the database. Only one of these sites has been determined to present a Recognized Environmental Condition (REC) having the potential to cause soil and/or groundwater contamination.

The viaduct and appurtenances may include asbestos -containing materials (ACM), and portions of the viaduct structure may have previously been treated with lead -based paint (LBP) coatings that would be disturbed by demolition. Unpaved soils adjacent to roadway surfaces within the project corridor (e.g., US 101) may contain aerally deposited lead (ADL).

A site investigation would be conducted during the engineering design phase of the project to confirm the extent of impact and to identify the appropriate mitigation measures. The result of the site investigation would be presented in the EIS/EIR.

The proposed project is situated within a heavy traffic area near downtown Los Angeles. Construction activities related to the proposed project would require traffic lane closures, which would be likely to interfere with traffic flows. Emergency response and evacuation plans that use affected roadways would be impacted in the short term. Implementation of a Traffic Management Plan (TMP) would be required to minimize the impacts to a less than significant level.

The EIS/EIR would discuss potential impacts associated with hazardous waste and materials, including interference with emergency response plans because of project construction. Mitigation measures to minimize these construction phase impacts to a less than significant level would be identified.

VIII. HYDROLOGY AND WATER QUALITY

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

Discussion:

The 6th Street Viaduct crosses the Los Angeles River through a section that is concrete lined and fully channelized. The proposed project would involve some work in the channel to either retrofit, remove or reconstruct existing piers, depending on the alternative selected. A hydraulic analysis would be conducted to assess the impact to the river flow and floodway elevation within the channel.

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The City of Los Angeles in cooperation with the California Department of Fish and Game (CDFG), the Regional Water Quality Control Board Los Angeles Region (RWQCB), United States Army Corps of Engineers Los Angeles District (USACE), and Caltrans District 7, has developed a classification system and menu of Construction Best Management Practices (BMPs) to address the potential for bridge construction projects to harm waterways. Adherence to the approved BMPs would ensure impacts to water resources are minimized to the level of less than significant.

IX. LAND USE AND PLANNING

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

Discussion:

The project is located at the boundary of the City of Los Angeles Central City North and Boyle Heights General Plan Areas.

Within the Central City North Community Plan Area, the project site is located in the South Industrial Area, one of the major industrial districts within the City of Los Angeles. The South Industrial Area is located between Alameda Street and the Los Angeles River, and between 3rd Street and US 101. Preservation of industrial land use designations is a main objective of the Central City North Community Plan. The project area is also located in the Artists -in-Residence District, which is situated between the Santa Ana Freeway and Santa Monica Freeway and between Alameda Street and the Los Angeles River. Although the largest concentration of artists' residences is located outside of the project area between 1st Street and Palmetto Street and Alameda Street and the Los Angeles River, they are not restricted to those boundaries and may be encountered in the project area.

The Boyle Heights Community, situated east of the river, was developed as one of the first residential suburbs in Los Angeles when rail and rail -related uses began to expand and dominate the Los Angeles River corridor. would Immigrants and residents employed by the railroads and related industrial sectors settled in the Boyle Heights area. Moreover, some of the first public housing projects were constructed in Boyle Heights.

The Community Redevelopment Agency of Los Angeles (CRA) has two redevelopment projects in the project area including the Central Industrial Redevelopment Project and the Adelante Eastside Redevelopment Project. The Central Industrial Redevelopment Project is located in the western portion of the project site. The Adelante Eastside Redevelopment Project is located in the eastern

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portion of the project site. The redevelopment projects are to revitalize the area, eliminate blight, and preserve industrial and commercial uses.

The Los Angeles River Revitalization Master Plan (LARRMP) is the conceptual framework to guide the revival of the Los Angeles River corridor. The 32 -mile-long and one-mile-wide river plan spans from the area of Topanga Canyon east to River Glen and South to around Washington Boulevard. The plan is currently in the Draft Programmatic EIR/Programmatic EIS stage of the environmental process.

The project area lies within the “Downtown Industrial opportunity area,” one of the five demonstration areas of the LARRMP. Two alternatives were considered for the development of the opportunity area : the DI-A and DI-B concepts. Both DI-A and DI-B designate 6th Street in the project area as a Primary Arterial Green Street. The alternatives also propose an expanded multi-use and bicycle trail on the western bank of the Los Angeles River, and a promenade along the eastern bank of the river, each having its own underpass beneath the 6th Street Viaduct. In addition, both alternatives provide pedestrian bridge access ramps from the west side of 6th Street north to the proposed expanded trail. Alternative DI-A designates the eastern portion of the project area on 6th Street as a *Neighborhood Gateway*, while Alternative DI-B establishes the eastern side of the project area as a *Regional Gateway*.

Since the proposed project may facilitate development of the area surround the existing viaduct, the EIS/EIR would evaluate the compatibility of the proposed project development with various land use plans, policies and zoning within the project area.

X. MINERAL RESOURCES

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

Discussion:

The proposed project is located in a highly urbanized area of the City of Los Angeles. No mineral resources that would be of value to the region or residents of the state have been identified in the vicinity of the project site. The State Department of Conservation has not designated the project site as a Significant Mineral Aggregate Resources Area; thus, no impacts resulting from the loss of mineral resources are anticipated.

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XI. NOISE

Issues & Supporting Information Sources	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project result in:				
a. Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Exposure of persons to or generation of excessive ground-borne vibration or ground-borne noise levels?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f. For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion:

Construction of the replacement alternative would require demolition of the existing viaduct and construction of the new structure, which could take up to 4 years. Ambient noise levels may temporarily increase when construction equipment is operating. Ground-borne vibration as a result of the new viaduct structure construction could also occur, potentially during the foundation construction phase. In addition, residents, businesses, and the general public along the designated traffic detour and material hauling routes could experience higher noise levels and ground-borne vibration during the construction period. The project would fully comply with the City's noise ordinance or require a permit from the Police Commission. The EIS/EIR would analyze noise impacts as a result of project construction and identify appropriate mitigation measures to minimize the project impacts.

Following construction, the proposed project is not expected to elevate ambient noise levels because the project would not cause and increase in traffic volumes along the viaduct corridor.

XII. POPULATION AND HOUSING

Issues & Supporting Information Sources	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Induce substantial population growth in an area, either directly (for example, by proposing new homes and business) or indirectly (for example, through extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion:

The project would not have any growth-inducing effects and would not result in the extension of roads or other infrastructure. The project would require some right-of-way acquisition, the extent of which would depend on the alignment alternative to be selected. The areas to be potentially acquired are mostly industrial and businesses. No residential relocation is anticipated. The EIS/EIR would address the right-of-way acquisition impacts and any necessary relocations within the project limits. Environmental justice impacts would also be addressed in the EIS/EIR. Mitigation measures to minimize the impacts to a less than significant level would be identified.

XIII. PUBLIC SERVICES

Issues & Supporting Information Sources	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

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Discussion:

The proposed project would not require additional police and fire protection or generate a need for new police or fire facilities in the area.

XIV. RECREATION

Issues & Supporting Information Sources	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion:

The project would not generate any additional population; therefore, it would not increase demand for neighborhood or regional parks or other recreational facilities. No impacts to parks or other recreational facilities are anticipated. The project could possibly be designed to enhance the area surrounding the viaduct for recreational purposes and to be in compatible with the Los Angeles River Revitalization Plan. This aspect of the project could be considered a benefit to the community and the region. This opportunity would be addressed in the EIS/EIR.

XV. TRANSPORTATION/TRAFFIC

Issues & Supporting Information Sources	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e. Result in inadequate emergency access?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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Issues & Supporting Information Sources	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
f. Result in inadequate parking capacity?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g. Conflict with adopted policies supporting alternative transportation (e.g., bus turnouts, bicycle racks)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion:

In the event the replacement alternative is selected, the viaduct would be closed for demolition and construction for a period of up to four years. Traffic normally going across 6th Street and the viaduct would have to be rerouted to designated detour routes during this period. The impact from traffic rerouting, including parking loss, during this long construction duration would have to be addressed and mitigation measures identified.

The proposed project would not increase the traffic lanes on the viaduct or the 6th Street approaches. Once the project is in operation, there would be no change in traffic capacity and level of service within the local or regional networks related to the viaduct construction.

XVI UTILITIES AND SERVICE SYSTEMS

Issues & Supporting Information Sources	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e. Result in a determination by the wastewater treatment provider that serves or may serve the project determined that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f. Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g. Comply with federal, state, and local statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

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Discussion:

The proposed project would not require additional utility or service systems.

XVII. MANDATORY FINDINGS OF SIGNIFICANCE

Issues & Supporting Information Sources	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, effects of other current projects, and the effects of probable future projects.)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Does the project have environmental effects, which would cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Discussion:

The project site is presently developed and devoid of significant fish, wild life, and/or plant populations. Construction activities would not degrade or have adverse impacts on the natural environment. If the replacement alternative is selected the historic viaduct would have to be demolished, or if it is retrofitted the viaduct would be substantially modified. The 6th Street Viaduct has been identified as eligible for listing on the NRHP and is also included in the California Register. In addition, several buildings within the vicinity of the viaduct that may be subject to right-of-way acquisition are more than 50 years old. These building are subject to evaluation to determine their historical significance. The EIS/EIR would provide further analysis of impacts on historic resources within the project limits and would identify possible mitigation.

Several known and foreseeable projects are planned within the vicinity of the project area. The EIS/EIR would identify all related projects in the immediate vicinity of the proposed project and analyze them for potential cumulative effects. Mitigation measures to reduce potentially significant adverse cumulative impacts would be identified and presented in the EIS/EIR.

XVIII. REFERENCES

City of Los Angeles, 2007. Draft Programmatic Environmental Impact Report/Programmatic Environmental Statement for the Los Angeles River Revitalization Master Plan. January. 2000.

Central City North Community Plan. December. 1998

Boyle Heights Community Plan. November. 1998

L.A. CEQA Threshold Guide. 2006

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City of Los Angeles Bureau of Engineering, 2006. Preliminary Environmental Study, 6th Street Viaduct Seismic Improvement Project. March 2006

Parsons, 2007. Initial Site Assessment, 6th Street Viaduct Seismic Improvement Project. February. 2006