CITY OF SANTA BARBARA
COMMUNITY DEVELOPMENT DEPARTMENT
DRAFT NEGATIVE DECLARATION - MST2010-00263

Pursuant to the State of California Public Resources Code and the "Guidelines for Implementation of the California Environmental Quality Act of 1970," as amended to date, this Draft Negative Declaration has been prepared for the following project:

PROJECT LOCATION: **200 Block Chapala Street**

PROJECT PROPONENT: **Engineering Division, Public Works Department, City of Santa Barbara, 630 Garden Street, Santa Barbara, CA 93101**

PROJECT DESCRIPTION: The project would demolish the existing 4, 655 square feet (s.f.) bridge deck over Mission Creek and replace it with a 2,740 s.f. bridge deck. The southwest side of the new bridge deck would be supported on piles and a foundation behind the existing sandstone abutment. The northeast side of the new bridge would be supported by a new abutment that would be located to align with the existing sandstone walls upstream of the bridge and the existing bank downstream of the bridge. The new bridge would provide one vehicular lane in each direction and a five foot sidewalk on each side. New bridge railings and approaches to the bridge would be constructed.

NEGATIVE DECLARATION FINDING:
Based on the attached Initial Study prepared for the proposed project, it has been determined that the proposed project will not have a significant effect on the environment.

Environmental Analyst

7/21/2011
Date

CITY OF SANTA BARBARA
COMMUNITY DEVELOPMENT DEPARTMENT, PLANNING DIVISION

INITIAL STUDY/ ENVIRONMENTAL CHECKLIST MST2010-00263

PROJECT: Chapala/Yanonali Streets Bridge Replacement

July 25, 2011

This Initial Study has been completed for the project described below because the project is subject to review under the California Environmental Quality Act (CEQA) and was determined not to be exempt from the requirement for the preparation of an environmental document. The information, analysis and conclusions contained in this Initial Study are the basis for deciding whether a Negative Declaration (ND) is to be prepared or if preparation of an Environmental Impact Report (EIR) is required to further analyze impacts. Additionally, if preparation of an EIR is required, the Initial Study is used to focus the EIR on the effects determined to be potentially significant.

APPLICANT/ PROPERTY OWNER

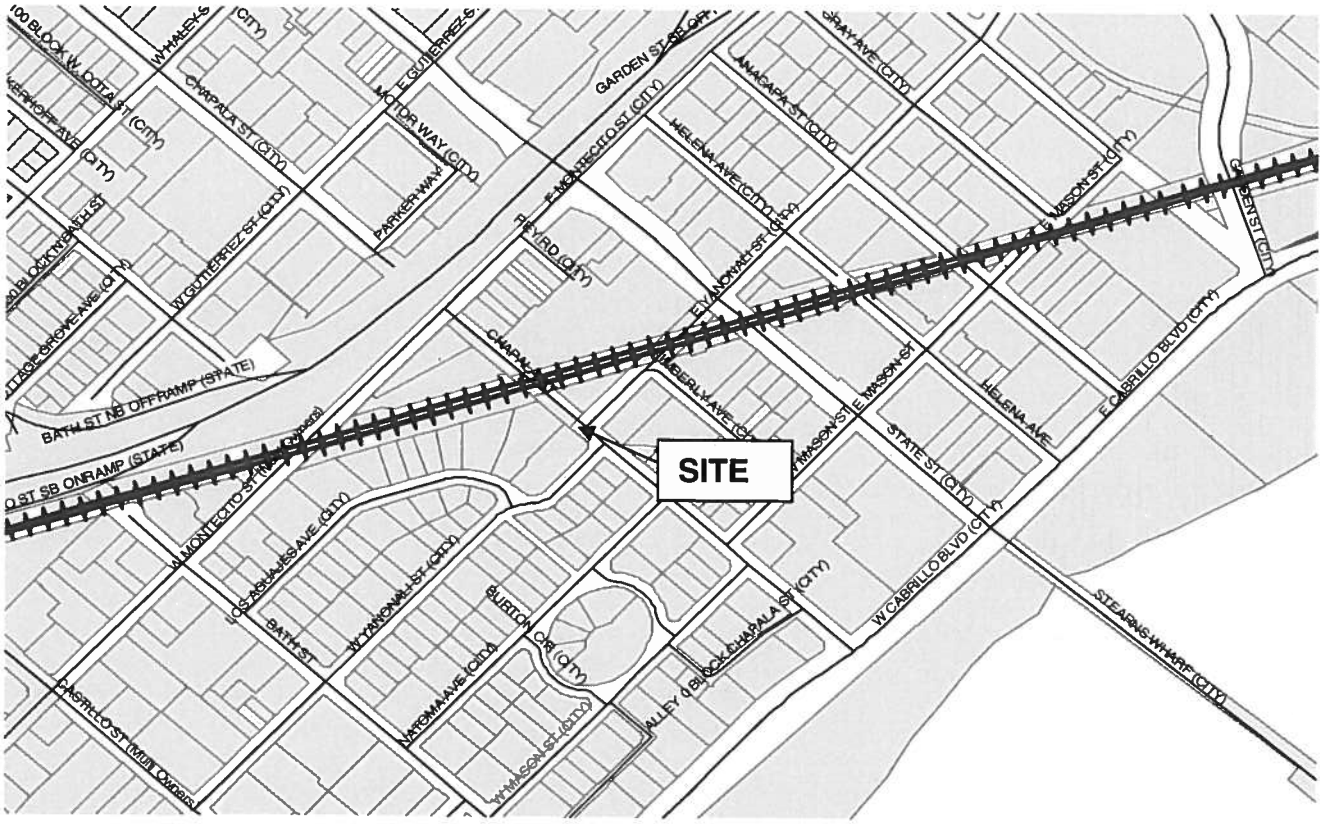
Applicant: Engineering Division, Public Works Department, City of Santa Barbara

Applicant Representatives: Jeff Palmer, Engineering Division, Public Works Department, City of Santa Barbara

Owner: City of Santa Barbara

PROJECT ADDRESS/LOCATION

200 Block Chapala Street



PROJECT DESCRIPTION (See *Exhibit A-Project Plans*)

OBJECTIVES

The project seeks to attain the following primary objectives:

- Replace the current bridge that is currently posted for a 15-ton load limit and is rated Structurally Deficient according to FHWA bridge rating standards.
- Minimize impacts to historic and other environmental resources

- Provide maximum room for the bypass box culvert behind the north-east abutment
- Avoid reduction in drainage capacity of Mission Creek
- Improve fish passage beneath the proposed bridge where possible

DESCRIPTION

The proposed project would replace the existing single span 4,655 square foot (sf) Yanonali/Chapala Street Bridge over Mission Creek with a single span 2,740 sf bridge. The existing bridge is currently posted for a 15-ton load limit and is rated structurally deficient according to Federal Highway Administration (FHWA) bridge rating standards.

The new bridge deck would provide for a single lane of vehicular traffic in each direction, but would have a smaller footprint than the existing bridge. No load limitation would be imposed. The proposed bridge layout allows a forty foot bus and city standard design vehicle, traveling in opposite directions, to use the bridge at the same time. Five foot wide sidewalks would be added to both sides of the bridge, would tie into the existing sidewalks along Chapala Street and Yanonali Street and include pedestrian access ramps. New combination vehicular/pedestrian railings would be installed on each side of the bridge over Mission Creek.

To accommodate the already approved Lower Mission Creek Flood Control Project (LMCFCP) "oxbow bypass" box culvert alignment, while maintaining hydrologic capacity, the existing north-east sandstone bridge abutment wall would be removed and replaced with a new slightly realigned concrete abutment wall that would support the bridge deck and minimize the spatial requirements for the new bridge abutment. The new concrete abutment wall would continue the alignment of the channel wall upstream of the bridge, and eliminate an existing "jog" in the alignment of the two walls. The exposed surface of the new wall would be covered with a sandstone veneer derived from the existing sandstone blocks, as much as possible, and would be supplemented with similar sandstone veneer as necessary. The new abutment on the south side of the channel would be constructed behind the existing sandstone bridge abutment wall, using piles and a concrete wall supported by the piles. Since the existing south side sandstone abutment wall under the bridge is approximately two feet below the existing ground surface, it would be necessary to add sandstone block to the top of this wall to raise and cap the top of the wall. A code compliant handrail would be placed upon the sandstone wall cap.

The project is adjacent to National Register Listed historic sandstone channel walls associated with the Railroad Depot and Depot Park, a contributor to the Railroad Depot. The proposed project includes measures to ensure that the Potter Hotel Bridge, Depot related sandstone channel walls and railings located to the west of the project, and Depot Park are protected in place during construction. The Potter Hotel Footbridge and the sandstone walls beneath the bridge are historic elements eligible for listing as a City Structure of Merit. For the bridge abutment wall to be reconstructed, the applicant has proposed to provide photo documentation of the historic features of the site and to use sandstone veneer on the northeast abutment sandstone wall. A sign describing the existing bridge would be placed in the area.

A portion of the concrete creek bottom area adjacent to the north abutment would be removed to facilitate the construction of the new north abutment. During final design, the this strip of the creek bottom will be configured to enhance fish passage. Options including swale width, depth and stilling pool location will be evaluated for the best fit possible.

Paint containing lead was detected on Chapala Bridge, below 5,000 parts per million. The proposed project would comply with federal, state, and local regulations regarding handling, transportation and removal of lead containing materials during bridge demolition.

Overhead electrical utility poles would be relocated to avoid conflicts with the new bridge foundations. Underground utilities would be either relocated off the bridge or incorporated into the new bridge. There is a 12-inch water line on the bridge that would be removed and capped on either side of the bridge. This water line has been determined to be unnecessary and would not be replaced. There are three 4-inch communication conduits suspended under the existing bridge. These conduits would be rerouted through the new bridge. Two poles supporting overhead electrical and telecommunication lines would be relocated due to conflicts with the new bridge. Temporary de-energizing of these lines would be required during certain construction operations.

Private property hardscape and landscape would be removed and replaced immediately adjacent to the corners of the bridge. A fig and a yucca tree would be removed on private property at the southeast corner of the bridge. Two additional trees, including a primrose and edible fig would be removed from the right-of-way.

For security purposes, the entire expanse of the area under the proposed bridge deck would be visible from the adjacent historic Potter Hotel Bridge. Other points around the bridge provide for almost full visibility under the bridge.

Five parking spaces within the right of way along Yanonali Street, just east of Chapala Street Bridge, would be permanently removed to make way for the new bridge approach.

CONSTRUCTION ACTIVITIES

Chapala Street at Yanonali Street would be closed to all traffic during the construction of the replacement bridge. The existing bridge would be removed, and the new bridge constructed to completely span the existing channel at the same location as the existing bridge. The construction activities would proceed as follows:

- Chapala Street would be closed at Yanonali Street. Northbound traffic on Chapala would be routed onto west Yanonali south of the bridge, and the area north of the bridge would be accessed from Kimberly Avenue. Work would involve installation of barricades and signs in the vicinity of the project.
- Two overhead utility poles would be relocated within the project limits.
- Stream flow would be diverted into a pipe through the construction zone. A stream diversion dam would be established at the upstream end of the bridge. The stream diversion dam would be constructed within the existing, concrete-lined channel within the project limits, to divert the flow of water around the demolition and construction activities. Materials to construct the diversion dam would consist of pipe(s) to convey anticipated flow rates, sandbags, and plastic sheeting. The downstream side of the diversion dam drops off the concrete lined channel where the estuary begins. Any water trapped downstream of the diversion dam would drain by gravity flow into the natural channel, leaving the work area dry.
- The existing bridge would be demolished by first stripping off the asphalt concrete overlay and deck planks on the timber stringers. The channel below would be protected with the stream diversion dam and plastic or fabric sheets to contain debris that falls through the timber stringers. The timber stringers would be removed with truck mounted cranes. Finally, the trusses would be removed by chipping away the concrete at the top of the channel walls where the truss chords are embedded in the wall. The existing bridge bearings (anti-friction devices that allow the bridge deck to move for expansion/contraction) would be cut away from the walls, and all material from the existing bridge would be hauled off site for disposal. Prior to construction, the existing bridge would be tested again for hazardous materials, dismantled, and disposed in proper landfill facilities based on the finding of the hazardous materials study.
- Remove portions of hardscape and landscaping in conflict with new construction. The areas around the corners of the new bridge would be cleared of vegetation, fencing, and planter beds to gain access for constructing the new bridge.
- Pavement would be saw cut to the limits shown on plans, and existing pavement and sidewalks would be removed for disposal/recycling offsite.
- The existing water line under the bridge would be removed and disposed of offsite. The water line valve south of the bridge would be relocated farther south, and a short segment of water pipe would be relocated south of the bridge within the project limits. The work would require excavation in the street to expose the existing water line. The work would also require temporary pavement patching on the south side of the bridge on Chapala Street.
- The existing telecommunication conduits under the bridge would be temporarily relocated.
- The southern sandstone wall abutment would be repaired and/or modified where the existing bridge was supported. The top of the existing sandstone wall would be cleaned up and repaired as needed.
- A row of sheet piling would be installed approximately five feet behind the northern sandstone wall abutment as temporary shoring. The existing northern sandstone abutment beneath the existing bridge would be completely removed (about four feet below the flow line of the concrete channel bottom). The concrete channel bottom within one foot of the existing abutment wall would be saw cut and removed. Groundwater could be encountered below the channel bottom, so dewatering would be needed within the excavations. The groundwater would be pumped through appropriate settling tanks and filters, and released into the creek downstream of the construction site. Concrete would be poured into areas that have been dewatered and the creek bottom would be replaced with a low flow fish passage concrete lined channel.
- The drainage inlet/pipe at northwest corner of bridge would be excavated and relocated. The drainage inlet would be tied into the existing drainage pipe that penetrates the channel wall at the northwest corner of the bridge.

- Steel pile casings (36" diameter) would be driven approximately 60 feet into the ground in excavations behind existing channel walls.
- Soil from inside steel piles would be removed and steel reinforcing and concrete would be inserted into steel piles. Piles would be sealed against groundwater intrusion, so dewatering is not anticipated. However, in the event that seepage into the piles does occur, dewatering of the piles prior to placement of concrete would be needed. Assuming that the piles fill with water, there would be a maximum of 10,000 gallons of water pumped from the piles. Specifications would be written to require the contractor to pump the water from the piles into a containment tank and remove the water from the site for proper disposal off site.
- Abutments would be formed reinforced, poured, and finished, and backfill would be placed behind them.
- False work would be erected on the channel bottom to support the bridge. Work within the channel would be performed by laborers placing false work delivered by cranes from the creek bank above. Forms would be constructed on the false work, steel inserted, and concrete poured for the new bridge deck. Bridge barrier railings and sidewalk would be formed and poured. False work would be removed from the channel, and concrete surfaces ground and patched to create the desired finish. Upon completion of concrete finishing, the channel would be cleaned of debris within the streambed diversion area.
- The temporary dam, pipe, sandbags, and plastic sheeting would be removed from the channel. The area behind the abutments would be backfilled, and roadway base materials placed. The roadway would be prepared for final surfacing. Underground utilities would be relocated into final position on the new bridge. New pavement and sidewalks would be placed. Hardscape and landscaping would be replaced within temporary construction easements.
- The portions of Chapala Street and Yanonali Street that would be closed during construction would be used for contractor staging and lay down.

ENVIRONMENTAL SETTING

Existing Site Characteristics

Biological Resources:

A biological survey was conducted as part of a Biological Assessment prepared by Arcadis in December 2010. The document is summarized below and incorporated herein by reference. The Chapala Street Bridge project site is highly disturbed, with a predominance of non-native vegetation, and the channel bottom is covered with concrete, although sand often accumulates above the concrete surface.

One large native western sycamore (Platanus racemosa) occurs in front of a building on Chapala Street just east (downstream) of the bridge and the vertical constructed walls in this area are covered with non-native English ivy (Hedera helix). The vegetation in the channel bottom upstream of the Chapala Street Bridge includes a limited amount of scattered native herbaceous perennial species such as common horsetail, cattail, water cress, and willow seedlings, typical of freshwater marsh, especially along the channel margins. Downstream from the bridge, the riparian vegetation is limited to the north side of the creek, and is comprised of mostly invasive or planted non-native species, although two young western sycamores are present as well.

Steelhead (an endangered species) habitat in the vicinity of the Chapala Street Bridge is currently marginal, but Mission Creek is classified as a coastal steelhead trout stream along the length of the project area. Habitat for steelhead smolts and tidewater goby (an endangered species) is present in the estuarine environment around the Mason Street Bridge, and there is documented goby breeding habitat further down Mission Creek at the State Street Bridge (CDFG 2010). Tidewater goby habitat is also present downstream of the Chapala Street Bridge area in the estuarine portion of the creek. The estuary begins south of the bridge construction area where a concrete sill is located

Creeks/Drainage:

The project sits astride both banks of Mission Creek, which is a major drainage channel in the city of Santa Barbara. At Montecito Street, Mission Creek is currently estimated to be able to convey 1500 cubic feet per second (cfs), approximately a five year statistical storm event (LMCFCP Feasibility Study, Page 29). Storms larger than this can result in the creek overflowing its banks. The LMCFCP is currently being implemented, and would result in the construction of a culvert designed to bypass the portion of the channel that the Chapala Street Bridge spans, to add capacity to the creek in this reach. Planned up and downstream improvements include channel widening and bridge replacements to increase Mission Creek's hydraulic capacity.

Cultural Resources:

An Archaeological Survey Report (ASR), dated August 26, 2010, by Applied Earthworks is summarized below and incorporated herein by reference. The project area was surveyed by Applied Earthworks in May 2010. The survey found no evidence of historic or prehistoric archaeological resources in the area that would be disturbed by the proposed project.

A Historic Structures Report (HSR), dated August 26, 2010, by Applied Earthworks is summarized below and incorporated by reference. The HSR found that the Chapala Street Bridge rails and the sandstone abutments beneath the bridge are eligible for listing by the city as a Structure of Merit. The sandstone abutments were constructed as part of an earlier bridge deck than the current pony truss bridge and deck. The bridge deck has been replaced and the pony trusses have been modified to add a channel iron cap that is bolted to the trusses using high strength bolts, in an attempt to strengthen them. The pony truss bridge is the only one of its type in Santa Barbara, but this type of bridge is plentiful in California. The Chapala Street Bridge is a contributing element to the potential West Beach historic district. The Railroad Depot, Depot Park, and the sandstone revetment lining both banks of Mission Creek northwest of the existing bridge abutments, that are adjacent to the project area, are designated National Register sites.

Flooding/Fire Hazard:

The project site is within Mission Creek that is subject to flooding. The project site is not within a high wildland fire area according to the City of Santa Barbara, Wildland Fire Plan.

Noise:

The project site is within an area subject to noise levels of above 70 dBA according to the City of Santa Barbara 2010 Master Environmental Assessment (MEA). The primary noise source in the area is the railroad.

Seismic/Geologic Conditions:

A Preliminary Foundation Report was prepared in March 18, 2010 by Fugro West, Incorporated. The report is summarized below and incorporated herein by reference. The report used advanced cone penetration tests (CPT) and sampling using hollow stem auger holes to identify subsurface conditions at the site. Soils at the site consist of artificial fill about ten feet deep consisting of medium stiff lean clay underlain by alluvium consisting of medium stiff to locally soft lean clay and sandy lean clay to a depth of about 40 feet below the surface. Below forty feet the soils consist of stratified dense to very dense sand and stiff to very stiff lean clay with strata ranging in depth from a few feet to twenty five feet. Groundwater depths range to approximately 7 to 9 feet below the surface.

The site is in a seismically active region subject to ground shaking, estimated to result in a peak ground acceleration of 0.64g. The nearest significant faults to the project site are the Mesa, Rincon and San Jose that are 0.4 miles from the site. Since no faults are located at the site, no fault rupture is anticipated at the site. Liquefaction is anticipated to occur in soils at a depth of 32-37 feet below ground surface. Liquefaction could also occur in isolated levels below that depth. Ground surface settlement of about 2 inches and deferential settlement from liquefaction is estimated to be about one inch. Sand boils, formed when granular material in a liquefied soil layer (generally near the ground surface) is forced to the ground surface by the buildup of soil pore pressures, is expected to be low to moderate because the liquefiable soils are greater than 30 feet below ground surface. Lateral spreading that can result in the lateral deformation and cracking of the ground surface is considered to be low to moderate because of the depth of liquefiable soils and nature of overlain soils and need not be considered in the project design.

Topography:

The site is very gently sloping. At the project site the Mission Creek banks/existing bridge abutments are vertical sandstone walls approximately 10 feet tall. The bridge spans the creek with both banks being roughly equal in elevation and Mission Creek beneath the bridge flows to the southeast.

Existing Land Use

Existing Facilities and Uses:

The project site is currently City street right-of-way for Yanonali Street and Chapala Street. A drainage facility, Mission Creek, flows through the project site beneath the existing bridge. A water line is supported on the bridge. Overhead power and utility lines are located in the project area.

Access and Parking:

The project provides access for vehicles and pedestrians through the intersection south on Chapala Street, east and west along Yanonali Street and for pedestrians to the northwest across the railway line to the Railroad Depot. There is no parking on the bridge but on street parking is available in the rights-of-way of Chapala and Yanonali Streets.

PROPERTY CHARACTERISTICS

Assessor's Parcel Number:	ROW-002-070	**General Plan Designation:**	Hotel and Residential
Zoning:	Hotel and Related Commercial	**Parcel Size:**	NA
Existing Land Use:	Street/Bridge/Creek	**Proposed Land Use:**	Street/Bridge/Creek
Slope:	0.12%		
SURROUNDING LAND USES:			
North:	Railroad Line, Depot, and Park		
South:	Residential		
East:	Hostel		
West:	Residential		

PLANS AND POLICY DISCUSSION

(CEQA Guidelines 15063, Contents of Initial Study specifies inclusion of "An examination of whether the project would be consistent with existing zoning, plans, and other applicable land use controls.)

LAND USE AND ZONING DESIGNATIONS:

The project is located in the east end of the West Beach area and west end of the Lower State area. The project site is designated as Hotel and Residential in the Land Use Element of the General Plan. Transportation facilities such as bridges are allowed uses in this land use category. The project replaces an existing bridge at this location and supports surrounding land uses by providing access to them. Therefore, the project is potentially consistent with the designation of Hotel and Residential. Also, the project would be compatible with adjacent uses for the same reasons.

The site is zoned for hotel and related commercial uses. The proposed project would result in transportation improvements in the City street right-of-way that would provide continued and improved transportation to serve the uses in the zone and so, the project is potentially consistent with this zone.

General Plan Policies:

The initial analysis indicates that the proposed project could be found consistent with the policies of the City's General Plan as discussed below.

1. Land Use

Land use Goal (#2) provides for adequate public facilities to all the residents of the community. Land use Goal (#6) provides for safe and convenient transportation through improved traffic and circulation. The project would replace an existing substandard bridge that would provide vehicular and pedestrian access to area land uses. Therefore, the project would be potentially consistent with these policies.

2. Seismic Safety/Safety Element

The Seismic Safety/Safety Element requires that development be sited, designed and maintained to protect life, property, and public well-being from seismic and other geologic hazards, and to reduce or avoid adverse economic, social, and environmental impacts caused by hazardous geologic conditions. The Seismic Safety/Safety Element addresses a number of potential hazards including, geology, seismicity, flooding, liquefaction, tsunamis, high groundwater, and erosion.

The project site is subject to a number of seismic hazards. As discussed in the Initial Study analysis, potential impacts associated with these hazards would be adequately addressed by implementing the required mitigation measures in order to reduce or avoid potential environmental impacts associated with anticipated geologic conditions. The bridge is currently posted for a 15-ton load limit and is rated "Structurally Deficient" according to FHWA bridge rating standards. The existing bridge would be replaced with a new simple span, concrete slab bridge that meets current applicable City,

American Association of State Highway and Transportation Officials, and Caltrans design standards. Therefore, the project is potentially consistent with the Seismic Safety/Safety Element.

3. Conservation Element

City Conservation Element policies provide that significant environmental resources of the City be preserved and protected. The Conservation Element requires implementation of resource protection measures for archaeological, cultural and historic resources; protection and enhancement of visual, biological and open space resources; protection of specimen and street trees; maintenance of air and water quality; and minimizing potential drainage, erosion and flooding hazards. The following four policies directly apply to the proposed project:

Biological Resources Policy 5.0 "The habitats of rare and endangered species shall be preserved."

> The Biological Survey for the proposed project states that sensitive fish species use the creek to migrate or they reside in the lagoon below the bridge. Project construction would occur outside the time when steelhead migrate through the project site and water quality of runoff from the site would be assured by implementing the project as proposed or by required mitigation. Therefore, the project can be found potentially consistent with this policy.

Cultural and Historic Resources Policy 1.0 "Activities and development which could damage or destroy archaeological, historic, or architectural resources are to be avoided".

> As discussed in the Cultural Resources section, the proposed bridge replacement project would remove an existing bridge that has been determined to be eligible for listing as a City Structure of Merit. The bridge would be removed because it has deteriorated structural integrity and is not designed to withstand anticipated seismic forces. Bridge replacement is therefore necessary. The impact of bridge removal would be mitigated by using the historic design elements in the bridge abutment for the new bridge, providing a display at the site that recalls the existing pony truss bridge, and by documenting the existing bridge for archival purposes. This would minimize project impacts and ensure that the project is potentially consistent with this policy.
>
> The project area was surveyed and research was conducted to identify archaeological resources in the project area and no archaeological resources were identified in the project area. Therefore, the project is potentially consistent with City goals and policies related to protection or preservation of archaeological resources.

4. Open Space Element:

The Open Space Element is concerned primarily with conserving, providing, and improving, as appropriate, land and water areas significant in the Santa Barbara landscape. Those would be defined as the ocean, mountains, major hillsides, creeks, shoreline, major parks and the freeway. The project site is located in an area that is developed with urban uses and the proposed bridge would replace an existing bridge. Therefore, the project can be found potentially consistent with the Open Space Element.

5. Circulation Element

The City's Circulation Element contains goals and implementing measures to reduce adverse impacts to the City's street system and parking by reducing reliance on the automobile, encouraging alternative forms of transportation, reviewing traffic impact standards, and applying land use and planning strategies that support the City's mobility goals. As discussed in the traffic section of the Initial Study, the proposed project would continue to facilitate pedestrian and vehicular circulation to surrounding existing land uses and thus the proposed project could be found potentially consistent with the Circulation Element.

6. Noise Element:

The City's Noise Element includes policies intended to achieve and maintain a noise environment that is compatible with the variety of human activities and land uses in the City. The proposed project would not generate a substantial increase in existing ambient noise levels in the area due to the nature of the proposed use, a replacement bridge. Short-term construction noise is anticipated and would be temporary during construction, minimized through implementation of the City's Noise Ordinance requirements and by use of neighborhood noticing and noise shields. Therefore, the proposed project could be found potentially consistent with the Noise Element.

LOCAL COASTAL PLAN

Policy 6.8: states that the riparian resources, biological productivity, and water quality of the City's coastal zone creeks shall be maintained, preserved, enhanced, and, where feasible, restored. The project would protect water quality and

biological resources during construction and operation as discussed in the biological and water quality sections of this Initial Study. Therefore, the proposed project would be potentially consistent with Policy 6.8.

Policy 6.11-A: requires that new highway bridges or other highway improvements should be designed to provide clear spans of the stream or creek and to avoid the use of pilings within the stream or creek corridor. Culverting of the creek channel shall not be permitted. The proposed project replaces a bridge that spans the creek with a similarly designed bridge that also spans the creek. The project is potentially consistent with Policy 6.11A because the bridge would span the creek.

Policies 11-B and C state that new highway structures shall be designed to protect stream and creek environments from non-point pollutants (such as oil and rubber residues from the road surface) and from accidental spills of toxic materials and that in the vicinity of streams or creeks, a emergency response and cleanup plan shall be prepared by the applicant to address accidental releases of toxic materials. The proposed bridge would be designed to divert all flows through the project site during construction, and to route any water pumped from dewatered areas to a settling tank, where it would be tested and either routed to the City sewer system for treatment, or if it meets applicable standards it would be allowed to reenter the creek. During construction, there will be an emergency response plan and materials onsite ready to clean up and remove any spills of toxic materials. Therefore, the project is potentially consistent with Policies 6.11-B and C.

Policies 9.1 and 9.17 require that existing views to, from, and along the ocean and scenic coastal areas shall be protected, preserved, and enhanced, and materials, colors, and textures used in new highway structures shall be appropriate to the Santa Barbara region. Concrete, when used in highway structures shall be textured and/or colored in such a manner that the appearance of these structures will be compatible with landscaping, surrounding structures, and exposed soil. Use of wooden barriers and structures shall be encouraged where feasible. Use of metal beam guard rails shall be minimized. The project would replace an existing bridge with a reduced size bridge with bridge railings that are more substantial than the pony trusses and would therefore not substantially block any views not currently blocked. The project includes either leaving the existing sandstone abutment on the south in place but the abutment on the east side would be replaced with a cast concrete wall faced with sandstone. The proposed design including (materials and colors) of the bridge has been and will be reviewed by the HLC who would ensure that the bridge materials are appropriate for the area. Therefore, the project is potentially consistent with policies 9.1 and 9.17.

MITIGATION MONITORING AND REPORTING PROGRAM (MMRP)

A draft Mitigation Monitoring and Reporting Program has been prepared for the project in compliance with Public Resources Code §21081.6. The draft MMRP is attached here as ***Exhibit B***.

ENVIRONMENTAL CHECKLIST

The following checklist contains questions concerning potential changes to the environment that may result if this project is implemented. If no impact would occur, **NO** should be checked. If the project might result in an impact, check **YES** indicating the potential level of significance as follows:

Significant: Known substantial environmental impacts. Further review needed to determine if there are feasible mitigation measures and/or alternatives to reduce the impact.

Potentially Significant: Unknown, potentially significant impacts that need further review to determine significance level and whether mitigable.

Potentially Significant, Mitigable: Potentially significant impacts that can be avoided or reduced to less than significant levels with identified mitigation measures agreed-to by the applicant.

Less Than Significant: Impacts that are not substantial or significant.

1. AESTHETICS Could the project:	NO	YES *Level of Significance*
a) Affect a public scenic vista or designated scenic highway or highway/roadway eligible for designation as a scenic highway?		Less than significant
b) Have a demonstrable negative aesthetic effect in that it is inconsistent with Architectural Board of Review or Historic Landmarks Guidelines or guidelines/criteria adopted as part of the Local Coastal Program?		Less than significant
c) Create light or glare?		Less than significant

Visual Aesthetics - Discussion

Issues: Issues associated with visual aesthetics include the potential blockage of important public scenic views, project on-site visual aesthetics and compatibility with the surrounding area, and changes in exterior lighting.

Impact Evaluation Guidelines: Aesthetic quality, whether a project is visually pleasing or unpleasing, may be perceived and valued differently from one person to the next, and depends in part on the context of the environment in which a project is proposed. The significance of visual changes is assessed qualitatively based on consideration of the proposed physical change and project design within the context of the surrounding visual setting. First, the existing visual setting is reviewed to determine whether important existing visual aesthetics are involved, based on consideration of existing views, existing visual aesthetics on and around the site, and existing lighting conditions. Under CEQA, the evaluation of a project's potential impacts to scenic views is focused on views from public (as opposed to private) viewpoints. The importance of existing views is assessed qualitatively based on whether important visual resources such as mountains, skyline trees, or the coastline, can be seen, the extent and scenic quality of the views, and whether the views are experienced from public viewpoints. The visual changes associated with the project are then assessed qualitatively to determine whether the project would result in substantial effects associated with important public scenic views, on-site visual aesthetics, and lighting.

Significant visual aesthetics impacts may potentially result from:

- Substantial obstruction or degradation of important public scenic views, including important views from scenic highways; extensive grading and/or removal of substantial amounts of vegetation and trees visible from public areas without adequate landscaping; or substantial loss of important public open space.
- Substantial negative aesthetic effect or incompatibility with surrounding land uses or structures due to project size, massing, scale, density, architecture, signage, or other design features.
- Substantial light and/or glare that poses a hazard or substantial annoyance to adjacent land uses and sensitive receptors.

Visual Aesthetics – Existing Conditions and Project Impacts

According to the MEA the project site does not include any unique, hillside or shoreline visual resources. The project area is visible from portions of the Railroad Depot and adjacent park and from adjacent roadways. The project site itself has a sandstone lined channel and a pony truss bridge over the bridge. The bridge provides views of the creek bank both upstream where the channel has a concrete bottom, oftentimes covered in silt, and downstream where there are views of adjacent sackcrete and concrete walls and mostly non-native vegetation, including landscaping. Views from the project site include some limited views of the railroad depot and adjacent Depot Park. The eastern abutment beneath the bridge is mostly not visible from any public viewing point to the north or east due to its orientation and change in grade.

1.a) Scenic Views: The project would replace an existing bridge over Mission Creek with a bridge with a reduced footprint and similar location. The sandstone abutment wall on the north would be removed and replaced with a cast in place wall clad with sandstone from the original wall. Since this sandstone wall would only be marginally visible from adjacent private property to the northwest, would be difficult if not impossible to see from the Railroad Depot or the adjacent Depot Park, would be similar in appearance to the existing wall, and would be reviewed and approved by the HLC the impacts on scenic views would be *less than significant.*

1.b) On-Site Aesthetics: The project area is currently developed with a bridge. The existing bridge is somewhat deteriorated. The new bridge would replace the existing bridge in a similar location, and that the new deck would have a substantially reduced area, resulting in more of the creek being visible to nearby viewpoints within the adjacent prior Chapala Street right-of-way. Graffiti on sandstone walls under the bridge would be removed and the north abutment would be replaced with a sandstone veneer. This could be construed as an improvement to the nearby views. The final bridge design would be reviewed and approved by the HLC. Since the new bridge replaces an existing bridge in an already developed urban area and the HLC would review the new bridge to ensure it has appropriate aesthetic qualities, project impacts on on-site aesthetics would be *less than significant.*

1.c) Lighting : The proposed project would not include any additional lighting. Existing street lights may be removed and replaced. Since all replacement lighting is required to comply with the City Lighting Ordinance and no new lighting is proposed the relocation of any existing street lighting would have a *less than significant impact.*

Visual Aesthetics - Mitigation

None necessary.

Visual Aesthetics - Residual Impacts

Less than Significant

2. AIR QUALITY Could the project:		**NO**	**YES** *Level of Significance*
a)	Conflict with or obstruct implementation of the applicable air quality plan?		Less than Significant
b)	Exceed any air quality emission threshold?		Less than Significant
c)	Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is designated in non-attainment under an applicable federal or state ambient air quality standard?		Less than Significant
d)	Expose sensitive receptors to substantial pollutants?		Potentially Significant, Mitigable
e)	Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?		Less than Significant
f)	Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emission of greenhouse gases?		Less than Significant
g)	Create objectionable odors?		Less than Significant

Air Quality - Discussion

Issues. Air quality issues involve pollutant emissions from vehicle exhaust stationary sources (i.e. gas stations, boilers, diesel generators, dry cleaners, oil and gas processing facilities, etc), and minor stationary sources called "area sources" (i.e. residential heating and cooling, fireplaces, etc.) that contribute to smog, particulates and nuisance dust associated with grading and construction processes, and nuisance odors. Stationary sources of air emissions are of particular concern to sensitive receptors, as is construction dust and particulate matter. Sensitive receptors are defined as children, elderly, or ill people that can be more adversely affected by air quality emissions. Land uses typically associated with sensitive receptors include schools, parks, playgrounds, childcare centers, retirement homes, convalescent homes, hospitals, and clinics.

Smog, or ozone, is formed in the atmosphere through a series of photochemical reactions involving interaction of oxides of nitrogen [NOx] and reactive organic compounds [ROC] (referred to as ozone precursors) with sunlight over a period of several hours. Primary sources of ozone precursors in the South Coast area are vehicle emissions. Sources of particulate matter (PM_{10} and $PM_{2.5}$) include demolition, grading, road dust, agricultural tilling, mineral quarries, and vehicle exhaust.

The City of Santa Barbara is part of the South Coast Air Basin. The City is subject to the National Ambient Air Quality Standards and the California Ambient Air Quality Standards (CAAQS), which are more stringent than the national standards. The CAAQS apply to six pollutants: photochemical ozone, carbon monoxide, sulfur dioxide, nitrogen dioxide, particulate matter, and lead. The Santa Barbara County Air Pollution Control District (SBCAPCD) provides oversight on compliance with air quality standards and preparation of the County Clean Air Plan.

Santa Barbara County is considered in attainment of the federal eight-hour ozone standard, and in attainment of the state one-hour ozone standard. The County does not meet the state eight-hour ozone standard or the state standard for particulate matter less than ten microns in diameter (PM_{10}); but does meet the federal PM_{10} standard. The County is in attainment for the federal $PM_{2.5}$ standard and unclassified for the state $PM_{2.5}$ standard.

The SBCAPCD has also issued several notifications and requirements regarding asbestos exposure during demolition activities and toxic air emissions generated from activities such as gasoline dispensing, dry cleaning, freeways, manufacturing, etc., that may require projects with these components to mitigate or redesign features of the project to avoid excessive health risks.

Global Climate Change (GCC) is a change in the average weather of the earth that can be measured by changes in wind patterns, storms, precipitation and temperature. Although there is not unanimous agreement regarding the occurrence, causes, or effects of GCC, there is a substantial body of evidence that climate change is occurring due the introduction of gases that trap heat in the atmosphere. Common greenhouse gases (GHG) include water vapor, carbon dioxide, methane, nitrous oxides, chlorofluorocarbons, hydrofluorocarbons, ozone and aerosols. Natural processes emit GHG that help to regulate the earth's temperature; however, it is believed that substantial increases in emissions from human activities, such as electricity generation and vehicle use, have substantially elevated the concentration of these gases in the atmosphere beyond the level of naturally occurring concentrations. While other greenhouse gases have higher global warming potential, carbon dioxide is emitted in such vastly higher quantities that it accounts for 85 percent of the global warming potential of all greenhouse gases emitted by the United States. Greenhouse gas emissions, therefore, are typically measured in terms of mass carbon dioxide equivalents, which is the product of the mass of a particular greenhouse gas and its specific global warming potential (CO2 has a global warming potential of 1).

California is a substantial contributor of GHG (2nd largest contributor in the U.S. and the 16th largest contributor in the world); with transportation and electricity generation representing the two largest contributing factors (41 and 22 percent, respectively). According to the US EPA greenhouse gas emissions in the U.S. amounted to 7,260 million metric tons of carbon dioxide equivalents in 2005. The California Energy Commission estimates that California emissions in 2004 were approximately 482 million metric tons of carbon dioxide equivalents.

Assembly Bill 32 created the California Global Warming Solutions Act of 2006 that requires the California Air Resources Board to adopt regulations to evaluate statewide greenhouse gas emissions, and then create a program and emission caps to limit statewide emissions to 1990 levels. The program is to be adopted by 2012 and implemented in a manner achieving emissions compliance by 2020. AB 32, therefore, creates an emission reduction goal for the state of 173 million metric tons of carbon dioxide equivalents by 2020. AB 32 does not directly amend CEQA or other environmental laws, but it does acknowledge that emissions of greenhouse gases cause significant adverse impacts to human health and the environment.

California State Senate Bill 97, enacted in 2007, required that the CEQA Guidelines be amended to include "guidance for the mitigation of greenhouse gas emission or the effects of greenhouse gas emissions." The California Office of Planning and Research developed amendments to the CEQA Guidelines which were adopted by the California Natural Resources Agency on December 30, 2009 and became effective March 18, 2010. These amendments established a general framework for addressing global climate change impacts in the CEQA process. A number of state and regional agencies within California are working to develop procedures to evaluate climate change impacts in CEQA documents and to determine whether those impacts are significant. While these standards are being developed for Santa Barbara County, SBCAPD recommends that CEQA documents include: 1) a discussion of a project's impacts to and from global climate change; 2) a quantification of greenhouse gas emissions from all project sources; and 3) a discussion of how climate change impacts have been be mitigated to the extent reasonably possible for each project.

Impact Evaluation Guidelines: A project may create a significant air quality impact from the following:

- Exceeding an APCD pollutant threshold; inconsistency with District regulations; or exceeding population forecasts in the adopted County Clean Air Plan.
- Exposing sensitive receptors, such as children, the elderly or sick people to substantial pollutant exposure.
- Substantial unmitigated nuisance dust during earthwork or construction operations.

- Creation of nuisance odors inconsistent with APCD regulations.

Long-Term (Operational) Impact Guidelines: The City of Santa Barbara uses the SBCAPCD thresholds of significance for evaluating air quality impacts. The APCD has determined that a proposed project will not have a significant air quality impact on the environment if operation of the project will:

- Emit (from all project sources, both stationary and mobile) less than 240 pounds per day for ROC and NO_x, and 80 pounds per day for PM_{10};
- Emit less than 25 pounds per day of ROC or NO_x from motor vehicle trips only;
- Not cause a violation of any California or National Ambient Air Quality Standard (except ozone);
- Not exceed the APCD health risks public notification thresholds adopted by the APCD Board; and
- Be consistent with the adopted federal and state air quality plans for Santa Barbara.

Short-Term (Construction) Impacts Guidelines: Projects involving grading, paving, construction, and landscaping activities may cause localized nuisance dust impacts and increased particulate matter (PM_{10}). Substantial dust-related impacts may be potentially significant, but are generally considered mitigable with the application of standard dust control mitigation measures. Standard dust mitigation measures are applied to projects with either significant or less than significant effects.

Exhaust from construction equipment also contributes to air pollution. Quantitative thresholds of significance are not currently in place for short-term or construction emissions. However, SBCAPCD uses combined emissions from all construction equipment that exceed 25 tons of any pollutant except carbon monoxide within a 12-month period as a guideline threshold for determining significance of construction emission impacts.

Cumulative Impacts and Consistency with Clean Air Plan: If the project-specific impact exceeds the ozone precursor significance threshold, it is also considered to have a considerable contribution to cumulative impacts. When a project is not accounted for in the most recent Clean Air Plan growth projections, then the project's impact may also be considered to have a considerable contribution to cumulative air quality impacts. The Santa Barbara County Association of Governments and Air Resources Board on-road emissions forecasts are used as a basis for vehicle emission forecasting. If a project provides for increased population growth beyond that forecasted in the most recently adopted CAP, or if the project does not incorporate appropriate air quality mitigation and control measures, or is inconsistent with APCD rules and regulations, then the project may be found inconsistent with the CAP and may have a significant impact on air quality.

Global Climate Change: According to recent amendments to Appendix G of the CEQA Guidelines, a project would have significant impacts related to greenhouse gas emission if it would generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment or conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases. A number of state and regional agencies within California are currently working to develop procedures to determine specifically how this significance determination should be interpreted and to develop plans and policies for the reduction of greenhouse gas emissions. In the meantime, projects should be designed to reduce greenhouse gas emissions to the extent reasonably possible.

Air Quality – Existing Conditions and Project Impacts

An Asbestos and Lead Sampling study prepared by RGA Environmental, dated September 9, 2010, is summarized herein and incorporated by reference. RGA Environmental tested three samples of suspected asbestos containing materials (concrete and grout) at the Chapala Street Bridge and detected no asbestos in any of the samples. The report states that it is still possible that concealed materials may include asbestos that should be tested during demolition to determine if they contain asbestos.

2.a) Clean Air Plan

Direct and indirect emissions associated with the project are accounted for in the 2007 Clean Air Plan emissions growth assumptions. Appropriate air quality mitigation measures, including construction dust suppression, would be applied to the project, consistent with CAP and City policies. The project could be found consistent with the 2007 Clean Air Plan; therefore, impacts would be *less than significant.*

2.b-f) Air Pollutant Emissions, Sensitive Receptors, and Cumulative Impacts

Long-Term (Area Source & Operational) Emissions:

Substantial long-term project emissions could potentially stem from stationary sources which may require permits from the APCD and from motor vehicles associated with the project and from mobile sources. Examples of stationary emission sources that require permits from APCD include gas stations, auto body shops, diesel generators, boilers and large water heaters, dry cleaners, oil and gas production and processing facilities, and wastewater treatment facilities. As proposed, the project would be a bridge replacement project, with all of the uses and vehicle trips associated with this type of development. The project would include not include any stationary sources because it is a bridge. However, for emission modeling purposes some minimal stationary sources were included. Utilizing the URBEMIS 9.2.4 computer model (Exhibit C) and SBAPCD emission factor data, it is estimated that the proposed project would generate the following combined operational (vehicle) emissions and area source emissions:

Pollutant	**Vehicle (lbs/day)**	**Stationary/ Area Source (lbs/day)**	**Combined (lbs/day)**	**SBAPCD Threshold (lbs/day)**
ROG	0.04	0.02	0.06	motor vehicle sources: 25; all sources combined: 240
NO_x	0.02	0.01	0.03	motor vehicle sources: 25; all sources combined: 240
PM_{10}	0.01	0	0.01	all sources combined: 80

Note that the bridge already generates traffic for maintenance and so the operational vehicular emissions are already occurring. Project-related vehicle emissions would be below the threshold of significance of 25 pounds per day for both ROG and NOx. The combined operational (vehicle), area, and stationary source emissions from all long term project sources would be below the SBAPCD threshold of 240 pounds per day of ROG or NOx and 80 pounds per day of PM_{10}. Therefore, the proposed project is anticipated to have a *less than significant* effect on long term air quality.

Short-Term (Construction) Emissions:

Construction of the proposed project could result in emissions of pollutants due to grading, fumes, and vehicle exhaust. Utilizing the URBEMIS 9.2.4 computer model and SBAPCD emission factor data, it is estimated that the proposed project would generate the following construction emissions from all sources:

Pollutant	**Proposed Construction Emissions (tons/year)**		
ROG	0.64		
NO_x	6.05		
CO	2.55		
SO_2	0		
PM_{10}	0.28		
$PM_{2.5}$	0.25		
Total Proposed Emissions (tons/year)	9.77	**SBAPCD Total Emissions Threshold (tons/year)**	25

The project would involve grading, paving, and landscaping activities which could cause localized dust related impacts resulting in increases in increases in particulate matter (PM_{10} and $PM_{2.5}$). However, dust control measures are required for the project as standard conditions of approval and therefore dust-related impacts to sensitive receptors would be *less than significant*.

Although samples of grout and concrete at the bridge were tested and do not contain asbestos, it is possible that concealed materials that would be exposed during demolition contain asbestos. Demolition of the bridge could release asbestos contained in concealed materials into the atmosphere. Friable asbestos represents an air quality health hazard. As materials are exposed during demolition they will be assessed and tested as necessary to determine the presence of asbestos. Should any of the material be found, demolition of the structure will follow all the necessary protocols for permitting, removal and disposal of the materials. The Air District would be notified when the applicant submits an APCD Asbestos Demolition and Renovation Compliance Checklist. Therefore, impacts from asbestos would be *potentially significant, mitigable.*

Diesel and gasoline powered construction equipment also emit particulate matter, NOx, and ROC. In order for emissions from construction equipment to be considered a significant environmental impact, combined emissions from all construction equipment would need to exceed 25 tons of any pollutant except carbon monoxide) within a 12-month period. As shown in the table above the combined emissions is 9.77 tons per year. Therefore, with proposed

recommendation for mitigations for dust control and compliance with APCD requirements for construction equipment engines, the proposed project would reduce a *less than significant* impact

Global Climate Change:

Sources of carbon dioxide emissions that could result from the project include project-related traffic, natural gas use, landscape maintenance, consumer product use, solid waste generations, site lighting, and potable water delivery. Short-term and long term emissions of carbon dioxide that would result from the development of the project were estimated using the URBEMIS 9.2.4 computer program and SBAPCD emission factors as follows:

Construction CO_2 Emissions (tons/year)	**Proposed Operational CO_2 Emissions (tons/year)**	**Threshold**
867.47	3.6	N/A

The emissions from the project, described in the table above, are a conservative estimate because the current emissions have not been deducted from the proposed project emissions. In addition to these emissions, SBCAPCD has estimated that under worst case scenarios, the average residential project in Santa Barbara County emits 1.87 tons of CO2 per year per household and 0.0043 tons of CO2 per year per square foot commercial space due to energy use. Construction emissions would be limited to the construction period and would be reduced through construction equipment emission control measures required as standard conditions of approval as shown under Recommended Mitigations.

The California Energy Commission (CEC) estimates that California emissions in 2004 were approximately 492 Million Metric Tons of Carbon dioxide equivalent (MMTCO2E). The project's long-term emissions of carbon dioxide would not hinder the State's attainment of greenhouse gas emission reductions under AB 32 (173 million metric tons of carbon dioxide equivalents by 2020). Vehicle trips are part of the CO_2 calculation and the project-related average daily trips and vehicle miles traveled for maintenance are incremental. The project's potential impacts on circulation systems (public transit, bicycle, pedestrian, and vehicle) are included in the following transportation section. Finally, the project would not exceed other air quality significance thresholds adopted by the APCD. The project would, therefore, not result in substantial greenhouse gas emissions or impede the ability of the State to attain greenhouse gas reduction goals and would be considered *less than significant.*

2.g) Odors

The project is limited to replacement of an existing bridge including paving, and would not include operation of land uses involving odors or smoke. The project would not contain features with the potential to emit substantial odorous emissions, from sources such as commercial cooking equipment, combustion or evaporation of fuels, sewer systems, or solvents and surface coatings.

Due to the nature of the proposed land use and limited size of the project, project impacts related to odors would be considered *less than significant.*

Air Quality – Mitigation

AQ-1 **Asbestos Containing Materials.** Pursuant to APCD Rule 1001, the applicant is required to complete and submit an APCD Asbestos Demolition and Renovation Compliance Checklist at least 10 working days prior to commencing any alterations of the buildings. As materials are exposed during demolition they shall be sampled to determine their asbestos content and materials containing asbestos shall be properly abated. Any abatement or removal of asbestos containing materials must be performed in accordance with applicable federal, State, and local regulations. Permits shall be obtained for the Air Pollution Control District prior commencement of demolition of the structures containing asbestos. Materials containing asbestos shall be sent to appropriate land fill that are certified to accept this material.

Air Quality – Recommended Mitigation

AQ-2 **Construction Dust Control - Watering.** During site grading and transportation of fill materials, regular water sprinkling shall occur using reclaimed water whenever the Public Works Director determines that it is reasonably available. During clearing, grading, earth moving or excavation, sufficient quantities of water, through use of either water trucks or sprinkler systems, shall be applied to achieve minimum soil moisture of 12% to prevent dust from leaving the site. Each day, after construction activities cease, the entire area of disturbed soil shall be

sufficiently moistened to create a crust. Throughout construction, water trucks or sprinkler systems shall also be used to keep all areas of vehicle movement damp enough to prevent dust raised from leaving the site. At a minimum, this will include wetting down such areas every three hours. Increased watering frequency will be required whenever the wind speed exceeds 15 mph.

AQ-3 **Construction Dust Control – Tarping.** Trucks transporting fill material to and from the site shall be covered from the point of origin and maintain a freeboard height of 12 inches.

AQ-4 **Construction Dust Control – Gravel Pads.** Gravel pads, 3 inches deep, 25 feet long, 12 feet wide per lane and edged by rock berm or a row of stakes or a pipe-grid track out control device shall be installed to reduce mud/dirt track out from unpaved truck exit routes.

AQ-5 **Construction Dust Control – Minimize Disturbed Area/Speed.** Minimize amount of disturbed area and reduce on site vehicle speeds to 15 miles per hour or less.

AQ-6 **Construction Dust Control – Disturbed Area Treatment.** After clearing, grading, earth moving, excavation, or demolition is completed, the entire area of disturbed soil shall be treated to prevent wind erosion. This may be accomplished by:

a. Seeding and watering until grass cover is grown;

b. Spreading soil binders;

c. Sufficiently wetting the area down to form a crust on the surface with repeated soakings as necessary to maintain the crust and prevent dust pickup by the wind;

d. Other methods approved in advance by the Air Pollution Control District.

AQ-7 **Construction Dust Control – Surfacing.** All surfaces for roadways, driveways, sidewalks, etc., shall be laid as soon as possible. Additionally, building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.

AQ-8 **Stockpiling.** If importation, exportation and stockpiling of fill material are involved, soil stockpiled for more than two days shall be covered, kept moist by applying water at a rate of 1.4 gallons per hour per square yard, or treated with soil binders to prevent dust generation. Apply cover when wind events are declared.

AQ-9 **Construction Dust Control – Project Environmental Coordinator (PEC).** The contractor or builder shall designate a person or persons to monitor the dust control program and to order increased watering, as necessary, to prevent transport of dust offsite. Their duties shall include holiday and weekend periods when construction work may not be in progress. The name and telephone number of such persons shall be provided to the Air Pollution Control District prior to land use clearance for map recordation and land use clearance for finish grading for the structure.

AQ-10 **Engine Size.** The engine size of construction equipment shall be the minimum practical size.

AQ-11 **Equipment Numbers.** The number of construction equipment operating simultaneously shall be minimized through efficient management practices to ensure that the smallest practical number is operating at any one time.

AQ-12 **Equipment Maintenance.** Construction equipment shall be maintained to meet the manufacturer's specifications.

AQ-13 **Catalytic Converters.** Catalytic converters shall be installed on gasoline-powered equipment, if feasible.

AQ-14 **Diesel Catalytic Converters.** Diesel catalytic converters, diesel oxidation catalysts and diesel particulate filters as certified and/or verified by EPA or California shall be installed, if available.

AQ-15 **Diesel Replacements.** Diesel powered equipment shall be replaced by electric equipment whenever feasible.

AQ-16 **Idling Limitation.** All commercial diesel vehicles are subject to Title 13, Section 2485 and 2449 of the California Code of Regulations, limiting engine idling times. Idling of heavy-duty diesel trucks and diesel fueled or alternative diesel fueled off-road compression ignition vehicle during loading and unloading shall be limited to five minutes; auxiliary power units shall be used whenever possible.

AQ-17 **Worker Trips.** Construction worker trips shall be minimized by requiring carpooling and by providing for lunch onsite.

AQ-18 **Portable diesel equipment** - All portable diesel-powered construction equipment shall be registered with the state's portable equipment registration program or shall obtain an APCD permit.

AQ-19 Mobile construction equipment - Fleet owners of mobile construction equipment are subject to the California Air Resource Board (CARB) Regulation for In-use Off-road Diesel Vehicles (Title 13 California Code of Regulations, Chapter 9, Section 2449), the purpose of which is to reduce diesel particulate matter (PM) and criteria pollutant emission from in-use (existing) off-road diesel-fueled vehicles. The current requirements include idling limits of 5 minutes, labeling of vehicles with ARB-issued equipment identification numbers, reporting to ARB, and vehicle sales disclosures For more information, please refer to the CARB website at www.arb.ca.gov/msprog/ordiesel/ordiesel.htm

Refer to the Traffic section for alternative transportation measures that would reduce construction related automotive vehicle use and associated exhaust emissions. Refer to the Public Services and Utilities and Service Systems sections for a discussion of recycling and additional energy consumption measures that would minimize energy consumption and emissions.

Air Quality - Residual Impacts

Less than significant

3. BIOLOGICAL RESOURCES Could the project result in impacts to:		NO	YES *Level of Significance*
a)	Endangered, threatened or rare species or their habitats (including but not limited to plants, fish, insects, animals, and birds)?		Potentially Significant, Mitigable
b)	Locally designated historic, Landmark or specimen trees?	x	
c)	Natural communities (e.g. oak woodland, coastal habitat, etc.).		Less than Significant
d)	Wetland habitat (e.g. marsh, riparian, and vernal pool)?		Less than Significant
e)	Wildlife dispersal or migration corridors?		Potentially Significant, Mitigable

Biological Resources - Discussion

Issues: Biological resources issues involve the potential for a project to substantially affect biologically-important natural vegetation and wildlife, particularly species that are protected as rare, threatened, or endangered by federal or state wildlife agencies and their habitat, native specimen trees, and designated landmark or historic trees.

Impact Evaluation Guidelines: Existing native wildlife and vegetation on a project site are assessed to identify whether they constitute important biological resources, based on the types, amounts, and quality of the resources within the context of the larger ecological community. If important biological resources exist, project effects to the resources are evaluated to determine whether the project would substantially affect these important biological resources. Significant biological resource impacts may potentially result from substantial disturbance to important wildlife and vegetation in the following ways:

- Elimination or substantial reduction or disruption of important natural vegetative communities and wildlife habitat or migration corridors, such as oak woodland, coastal strand, riparian, and wetlands.
- Substantial effect on protected plant or animal species listed or otherwise identified or protected as endangered, threatened or rare.
- Substantial loss or damage to important native specimen trees or designated landmark or historic trees.

Biological Resources – Existing Conditions and Project Impacts

3.a. Sensitive Species: The project would result in the removal of the eastern sandstone abutment, adjacent sediment covered concrete lined creek bottom, and bridge deck, and the construction of new foundations (i.e. piles), a pile cap and bridge abutments. The south-west abutment would be constructed behind the existing sandstone walls and the creek bottom. The low flows in the creek would be diverted by plastic sheeting covered silt free sand bags into temporary pipes that would discharge downstream of the construction area. The propose bridge deck is substantially smaller than the existing deck.

Construction of these improvements would result in a *potentially significant, mitigable* impact on Steelhead that migrate within Mission Creek and reside in the lagoon and indirect impacts on gobies that reside within the lagoon. Steelhead (an endangered species) habitat in the vicinity of the Chapala Street Bridge is currently marginal, but Mission Creek is classified as a coastal steelhead trout stream along the length of the project area. Habitat for steelhead smolts and tidewater goby (an endangered species) is present in the estuarine environment around the Mason Street Bridge, and there is documented goby breeding habitat further down Mission Creek at the State Street Bridge (CDFG 2010). Tidewater goby habitat is also present downstream of the Chapala Street Bridge area in the estuarine portion of the creek.

Mitigation would involve construction during the time that flows in the creek are low and Steelhead are not migrating, biological monitoring prior to and during the diversion of water to move any sensitive fish species found in the area, so that construction including pouring of concrete would be in dry areas. Other measures designed to minimize the pollution of creek water with eroded soils, and other contaminants inadvertently released from equipment such as fuel and oil are also proposed as mitigation. Ph levels in creek water would not be expected to alter substantially because precautions are proposed to make sure that wet or curing concrete would not come into contact with water (i.e. construction would only occur in dry areas). These measures would reduce project direct and indirect impacts on sensitive species to a less than significant level.

3.b. Trees: The project would remove three ornamental trees. There are no specimen trees in the area and therefore the project would have *no impacts* on specimen trees.

3.c.d. Sensitive Communities/Riparian Habitat: Proposed construction described above would result in the temporary removal of a small portion of the degraded riparian habitat, but the riparian habitat would not be substantially affected by construction work associated with the bridge replacements. After construction the limited areas available for vegetation would be restored. Project impacts on natural communities would be *less than significant* because of the limited degraded communities that would be temporarily impacted and would be further reduced by restoring any remaining areas suitable for landscaping.

3.e. Wildlife Corridors: Proposed construction described above would result in the temporary diversion of the creek during the time when low flows are present in the creek and steelhead migration is not anticipated but could occur through the diversion. The installation, maintenance and removal of the diversion would be monitored by a biologist to ensure that no fish are present or harmed during the diversion installation and removal, any fish present are safely relocated, and that flows in the creek are low and use of the creek as a corridor by Steelhead is unlikely. The project would have a *potentially significant, mitigable* impact on migration of Steelhead that would be reduced to a less than significant level by proposed diversion precautions described above and by the timing of the installation and removal of the diversion.

Since the creek in this location is flanked by ten foot high vertical sandstone walls, there is no potential wildlife corridor above the banks or from the creek bottom to the top of the banks (or visa versa) due to the steepness of the banks and the location of existing development. The creek walls would be restored to a similar condition to the existing walls. The project would include improvements to the concrete bottom of the channel to provide a low flow channel that would improve fish passage under the bridge. There would be no long term change in the potential for any wildlife to use the creek bed as a corridor. The proposed fish passage channel improvement under the bridge would result in a beneficial impact on steelhead fish passage. Therefore, long term project impacts on wildlife corridors would be *beneficial.*

Biological Resources – Mitigation

BIO-1 Equipment. To avoid impacts to aquatic resources, no construction equipment shall be operated within the channel and stream bottom between December 1st and the end of March 30th or whenever significant water flows (water flow in the CALTRANS Channel more than 1/2 inch deep) pass down Mission Creek.

BIO-2 Construction Dates. To avoid impact to steelhead and tidewater goby, which are federally listed species, construction upstream of Yanonali Street shall be restricted to dates between June 1st and December 1st if water flow in the CALTRANS Channel is more than 1/2 inch deep. If no continuous surface water flow exists in the CALTRANS Channel after April 15th, construction could occur from then until December 1st.

BIO-3 Flowing Water. No construction shall occur in the flowing water. If water is present during the construction, the water shall be diverted by construction of a low flow channel or installation of a pipe.

BIO-4 Biological Monitor. A qualified biologist (knowledgeable of steelhead and tidewater goby) shall survey the area for steelhead prior to construction and relocate according to USF&WS protocol any individuals in the construction area, and shall monitor project construction in critical times, (during de-watering of the creek, or installation/removal of pipes in the creek). Monitoring would be performed every week at the beginning of construction and every other week after completion of project construction.

BIO-5 Design. Implement a bridge design which causes no constriction to the creek bed, and hence no increase of water velocity compared to existing conditions.
(See Water Resources section for water quality related Mitigation Measures)

Biological Resources - Residual Impacts

Less than significant.

4. CULTURAL RESOURCES Could the project:		NO	YES *Level of Significance*
a)	Disturb archaeological resources?		Less than Significant
b)	Affect a historic structure or site designated or eligible for designation as a National, State or City landmark?		Potentially Significant, Mitigable
c)	Have the potential to cause a physical change which would affect ethnic cultural values or restrict religious uses in the project area?	X	

Cultural Resources - Discussion

Issues: Archaeological resources are subsurface deposits dating from Prehistoric or Historical time periods. Native American culture appeared along the channel coast over 10,000 years ago, and numerous villages of the Barbareno Chumash flourished in coastal plains now encompassed by the City. Spanish explorers and eventual settlements in Santa Barbara occurred in the 1500's through 1700's. In the mid-1800's, the City began its transition from Mexican village to American city, and in the late 1800's through early 1900's experienced intensive urbanization. Historic resources are above-ground structures and sites from historical time periods with historic, architectural, or other cultural importance. The City's built environment has a rich cultural heritage with a variety of architectural styles, including the Spanish Colonial Revival style emphasized in the rebuilding of Santa Barbara's downtown following a destructive 1925 earthquake.

Impact Evaluation Guidelines: Archaeological and historical impacts are evaluated qualitatively by archeologists and historians. First, existing conditions on a site are assessed to identify whether important or unique archaeological or historical resources exist, based on criteria specified in the State CEQA *Guidelines* and City Master Environmental Assessment *Guidelines for Archaeological Resources and Historical Structures and Sites*, summarized as follows:

- Contains information needed to answer important scientific research questions and there exists a demonstrable public interest in that information.
- Has a special and particular quality such as being the oldest of its type or the best available example of its type.
- Is directly associated with an important prehistoric or historic event or person.

If important archaeological or historic resources exist on the site, project changes are evaluated to determine whether they would substantially affect these important resources.

Cultural Resources – Existing Conditions and Project Impacts

4.a) Archaeological Resources: Since no archaeological resources are expected to occur in the project area, project impacts would be *less than significant*. However, since there is always some potential to uncover archaeological resources the contractors would be required to notify the City in the event that archaeological resources are discovered during excavations. This is a standard condition of approval and is therefore not required as a mitigation measure

4.b) Historic Resources: The proposed project would result in the removal of the existing pony trusses, bridge deck, and the sandstone abutment wall on the north side of the creek under the bridge. Replacement of the bridge deck would involve a configuration that results in a smaller bridge deck. The north abutment sandstone wall would be replaced with a new concrete wall with a sandstone veneer. Note that the north wall is not clearly visible from the railroad station although a part of it is visible from observers located on the pedestrian bridge to the previous location of the Potter hotel.

The existing bridge railings have been altered to add steel channel reinforcement to the top rail. Bolt holes were bored into the trusses altering them irreversibly. The bridge elements that are historic qualify as historic resources at the lowest

level (Structure of Merit). Project impacts on the Bridge (Structure of Merit) and on the potential Historic District to which it contributes would be *potentially significant, mitigable.* Removal of the pony trusses would be mitigated by photo documentation and a plaque. The abutment wall would be replaced with a similar appearing sandstone veneer abutment. Photo documentation of the existing facility and installation of a plaque that commemorates the location and configuration of the existing bridge would reduce project impacts to a less than significant level.

Project construction has the potential to inadvertently damage the adjacent Railroad Depot sandstone channel walls, Depot Park, and the Potter hotel pedestrian bridge. This impact would be *potentially significant, mitigable.* This impact would be reduced to a less than significant level by protecting these resources in place, photo documentation and if any damage does occur by restoring them to their former configuration as illustrated in the photo documentation.

4.c) Ethnic/Religious Resources

There is no evidence that the site involves any ethnic or religious use or importance. The project would have *no impact* on historic, ethnic or religious resources.

Cultural Resources – Mitigation

CR-1 **Bridge Design.** Bridge and restoration plans shall be subject to HLC review and approval to ensure that they are compatible with the proposed West Beach Historic District, photo documentation of the existing railing, north abutment and installation of a plaque that commemorates the location and configuration of the existing bridge.

CR-2 **Archive Plans and Photos.** Prior to demolition, the bridge will be recorded in accordance with the National Park Service guidelines for Historic American Engineering Record (HAER) documentation. The documentation will include historic research, a narrative report of the history of the bridge, and photo documentation of the bridge. The HAER document will be submitted to the Library of Congress.

CR-3 **Railroad Depot Sandstone Channel Wall, Depot Park, and Potter Pedestrian Bridge.** The sandstone wall forming the channel adjacent to the bridge abutments, Depot Park and the Potter Hotel pedestrian bridge shall be protected in place and if any inadvertent damage to this wall, park or the pedestrian bridge occurs during construction the wall and/or bridge and/or park shall be restored to their existing configuration.

Residual Impacts

Less than significant

5. GEOPHYSICAL CONDITIONS Could the project result in or expose people to:		*NO*	*YES* *Level of Significance*
a)	Seismicity: fault rupture?	X	
b)	Seismicity: ground shaking or liquefaction?		Potentially Significant, Mitigable
c)	Seismicity: seiche or tsunami?		Less than Significant
d)	Landslides or mudslides?	X	
e)	Subsidence of the land?		Potentially Significant, Mitigable
f)	Expansive soils?		Less than Significant
g)	Excessive grading or permanent changes in the topography?		Potentially Significant, Mitigable

Geophysical Conditions - Discussion

Issues: Geophysical impacts involve geologic and soil conditions and their potential to create physical hazards affecting persons or property; or substantial changes to the physical condition of the site. Included are earthquake-related conditions such as fault rupture, groundshaking, liquefaction (a condition in which saturated soil looses shear strength during earthquake shaking); or seismic sea waves; unstable soil or slope conditions, such as landslides, subsidence, expansive or compressible/collapsible soils; or erosion; and extensive grading or topographic changes.

Impact Evaluation Guidelines: Potentially significant geophysical impacts may result from:

- Exposure to or creation of unstable earth conditions due to seismic conditions, such as earthquake faulting, groundshaking, liquefaction, or seismic waves.
- Exposure to or creation of unstable earth conditions due to geologic or soil conditions, such as landslides, settlement, or expansive, collapsible/compressible, or expansive soils.
- Extensive grading on slopes exceeding 20%, substantial topographic change, destruction of unique physical features; substantial erosion of soils, overburden, or sedimentation of a water course.

Geophysical Conditions – Existing Conditions and Project Impacts

5.a-c) Seismic Hazards

Fault Rupture: The project would result in construction of a new bridge in a location where there are no known faults and associated ground rupture is not anticipated. Therefore, the project would not be subject to ground rupture and there would be *no impacts* due to fault rupture.

Ground Shaking and Liquefaction: Proposed bridge construction would be subject to substantial ground shaking and about two inches of ground settlement due to liquefaction. The impacts of ground shaking and associated liquefaction are expected to be *potentially significant, mitigable.* These impacts can be reduced to a less than significant level by following the recommendations of the Foundation Report. There are foundation and bridge structure designs available that would ensure that the proposed project would withstand anticipated ground shaking and liquefaction anticipated at the site.

Seiche or Tsunami: Proposed bridge construction is immediately northwest of Mission Creek lagoon. Wave action (seiche) in this confined water body would not substantially impact the proposed bridge structure, as it would already be engineered to withstand much higher flows due to flooding than would be anticipated from the lagoon, where the surface elevation would be about 10 feet below the bottom of the proposed bridge deck. Therefore, impacts of seiche in the project area would be *less than significant.*

According to the 2010 MEA the proposed project is within the Tsunami run-up area. The General Plan Update Certified EIR states that "Modeling suggests that purely earthquake generated tsunamis could result in local run-up of up to seven feet in elevation…" and goes on to say that landslide induced tsunamis could be even higher. The annual probability of such tsunami is not provided but is on the order of 100 or more years. The bridge would replace an existing bridge that is designed to provide access across a creek. In the event of a tsunami, damage to the bridge could occur. Any damage would need to be repaired. This is a project that replaces an existing bridge facility that is already exposed to tsunami. The new bridge deck would be designed to handle high storm flow so the abutments would be resistant to damage from a Tsunami that was within the channel. The project would not expose additional people to tsunami hazard. Project impacts would be *less than significant* because of the low statistical probability of a major tsunami, the new bridge would be near the extremity of the inundation area due to its elevation, the existing bridge is already exposed to the same risk, and because no more people would be exposed to the tsunami risk.

5.d-f) Geologic or Soil Instability

Landslides: Bridge construction would occur in an area where there is no substantial landslide hazard according to the 2010 City of Santa Barbara Master Environmental Assessment (MEA). Therefore, there would be *no impacts* due to landslides.

Subsidence: Bridge construction would occur where there is anticipated subsidence due to liquefaction discussed above. Subsidence is anticipated to be about 2 inches and would be *potentially significant, mitigable.* This impact would be reduced to a less that significant level by following recommendations for foundation design in the Foundation Investigation and the design of the bridge engineers. These measures would include the type and size of the foundation and bridge deck design.

Expansive Soils: Bridge construction would occur where the soils have a low potential for expansion according to the 2010 MEA. Therefore, impacts of expansive soils would be *less than significant.*

5.g) Topography; Grading / Erosion

Topographic Changes: Bridge construction would result in replacement of an existing bridge supporting existing roads. No substantial changes in topography are proposed but minor changes in road profile and sidewalk configuration may occur. Therefore, impacts due to changes in topography would be *less than significant.*

Grading/ Erosion: Bridge construction would result in replacement of an existing bridge that would involve excavations for bridge foundations and at bridge roadway approaches. An estimated 965 total cubic yards of soils would be excavated for the removal of the existing sandstone abutment. Grading impacts would be *less than significant* due to the incremental amount of grading that would occur and because the area would be returned to a similar contour after construction.

Bridge construction could result in exposure of soils, temporarily during construction, in a drainage course that includes sensitive species year round downstream. Erosion impacts would be *potentially significant, mitigable* because soils could be eroded during construction from the disturbed areas would flow into sensitive habitat downstream. Impacts of construction related erosion could be reduced to less than significant levels by implementation of best management practices designed to ensure that work areas are protected from flows, capturing any flows crossing exposed soils and allowing them to stand until sediment has settled out in properly sized catch basins before release or by ensuring that grading occurs outside of high rainfall periods.

Geophysical Conditions - Mitigation

G-1 **Bridge Foundation and Structure Design.** The foundation and bridge design shall follow the specifications for type and configuration of foundation and structure in the Final Foundation Report and Bridge Engineers design recommendations

See section Water Resources for soil erosion mitigation

Geophysical Conditions – Residual Impacts

Less than significant

6. HAZARDS Could the project involve:		**NO**	**YES** *Level of Significance*
a)	A risk of accidental explosion or release of hazardous substances (including, but not limited to: oil, pesticides, chemicals or radiation)?		Potentially significant, mitigable
b)	The creation of any health hazard or potential health hazards?		Potentially significant, mitigable
c)	Exposure of people to existing sources of potential health hazards?		Potentially significant, mitigable
d)	Increased fire hazard in areas with flammable brush, grass, or trees?		Less than significant

Hazards - Discussion

Issues: Hazardous materials issues involve the potential for public health or safety impacts from exposure of persons or the environment to hazardous materials or risk of accidents involving combustible or toxic substances.

Impact Evaluation Guidelines: Significant impacts may result from the following:

- Siting of incompatible projects in close proximity to existing sources of safety risk, such as pipelines, industrial processes, railroads, airports, etc.
- Exposure of project occupants or construction workers to unremediated soil or groundwater contamination.
- Exposure of persons or the environment to hazardous substances due to improper use, storage, or disposal of hazardous materials.
- Siting of development in a high fire hazard areas or beyond adequate emergency response time, with inadequate access or water pressure, or otherwise in a manner that creates a fire hazard

Hazards – Existing Conditions and Project Impacts

Samples were taken of the bridge to determine if asbestos or lead are present. The results are presented in the Asbestos and Lead Sampling study prepared by RGA Environmental, dated September 9, 2010. The Asbestos and Lead Sampling study is summarized below and incorporated herein by reference. RGA Environmental took two samples of gray paint from Chapala Street Bridge railing. No samples from Chapala Street Bridge contained lead above the Federal standard of

5,000 parts per million (ppm) or 0.5% by weight, for Lead Based Paint. These samples tested were found to be Lead Containing paint because they have lead levels of 710 to 2,000 ppm.

6.a - c. Release Hazardous Materials The project would replace an existing bridge. Demolition of the bridge could result in the release of lead from lead containing paint, and from areas of the bridge that are not currently exposed. Any existing hazardous materials that occur in the existing bridge construction materials could be released into the environment, and expose people to those hazardous materials. Since lead found in the railing paint has the potential to be released when demolition, reuse or disposal occurs, and because there is the potential for other materials to be present and released during demolition, impacts of hazardous material release would be *potentially significant, mitigable*. Mitigation would involve removal of contaminated lead paint according to approved procedures, evaluation of materials that are exposed for identification of hazardous materials during demolition, and proper handling and disposal of any identified contaminated materials.

See the Air Quality Section for a discussion of asbestos hazards. No asbestos was identified during the sampling of concrete grout at the bridge site.

6.d) Fire Hazard The proposed bridge would replace a wooden deck bridge with a concrete deck bridge. The new bridge would be less prone to fire than the existing bridge. There are no wild land fire hazards in the project area. Therefore, impacts of fire would be *less than significant.*

Hazards - Mitigation

H-1 **Hazardous Materials Abatement.** Implementation of a lead abatement plan meeting Federal and State standards shall be required to ensure that the materials on the site are sampled and tested as they are exposed during construction and that hazardous materials identified including the lead containing paint on the bridge railing and cross braces is removed and disposed of in a manner that does not allow the lead based paint to contaminate the environment. During demolition sampling of materials suspected to contain asbestos of lead shall be conducted. If hazardous materials are present they shall be handled and disposed of according to existing laws.

See the Air Quality section for a discussion of Asbestos containing materials

Hazards – Residual Impacts

Less than significant

7. NOISE Could the project result in:		**NO**	**YES** *Level of Significance*
a)	Increases in existing noise levels?		Less than significant
b)	Exposure of people to severe noise levels?		Less than significant

Noise - Discussion

Issues: Noise issues are associated with siting of a new noise-sensitive land use in an area subject to high ambient background noise levels, siting of a noise-generating land use next to existing noise-sensitive land uses, and/or short-term construction-related noise.

The primary source of ambient noise in the City is vehicle traffic noise. The City Master Environmental Assessment (MEA) *Noise Contour Map* identifies average ambient noise levels within the City.

Ambient noise levels are determined as averaged 24-hour weighted levels, using the Day-Night Noise Level (L_{dn}) or Community Noise Equivelence Level (CNEL) measurement scales. The L_{dn} averages the varying sound levels occurring over the 24-hour day and gives a 10 decibel penalty to noises occurring between the hours of 10:00 p.m. and 7:00 a.m. to take into account the greater annoyance of intrusive noise levels during nighttime hours. Since L_{dn} is a 24-hour average noise level, an area could have sporadic loud noise levels above 60 dB(A) which average out over the 24-hour period. CNEL is similar to L_{dn} but includes a separate 5 dB(A) penalty for noise occurring between the hours of 7:00 p.m. and 10:00 p.m. CNEL and L_{dn} values usually agree with one another within 1 dB(A). The Equivalent Noise Level (L_{eq}) is a single noise level, which, if held constant during the measurement time period, would represent the same total energy as a fluctuating noise. L_{eq} values are commonly expressed for periods of one hour, but longer or shorter time periods may be

specified. In general, a change in noise level of less than three decibels is not audible. A doubling of the distance from a noise source will generally equate to a change in decibel level of six decibels.

Guidance for appropriate long-term background noise levels for various land uses are established in the City General Plan Noise Element Land Use Compatibility Guidelines. Building codes also establish maximum average ambient noise levels for the interiors of structures.

High construction noise levels occur with the use of heavy equipment such as scrapers, rollers, graders, trenchers and large trucks for demolition, grading, and construction. Equipment noise levels can vary substantially through a construction period, and depend on the type of equipment, number of pieces operating, and equipment maintenance. Construction equipment generates noise levels of more than 80 or 90 dB(A) at a distance of 50 feet, and the shorter impulsive noises from other construction equipment (such as pile drivers and drills) can be even higher, up to and exceeding 100 dB(A). Noise during construction is generally intermittent and sporadic, and after completion of the initial demolition, grading and site preparation activities, tends to be quieter.

The Noise Ordinance (Chapter 9.16 of the Santa Barbara Municipal Code) governs short-term or periodic noise, such as construction noise, operation of motorized equipment or amplified sound, or other sources of nuisance noise. The ordinance establishes limitations on hours of construction and motorized equipment operations, and provides criteria for defining nuisance noise in general.

Impact Evaluation Guidelines: A significant noise impact may result from:

- Siting of a project such that persons would be subject to long-term ambient noise levels in excess of Noise Element land use compatibility guidelines
- Substantial noise from grading and construction activity in close proximity to noise-sensitive receptors for an extensive duration.

Noise – Existing Conditions and Project Impacts

7.a-b) Increased Noise Level and Exposure to High Noise Levels

Long-Term Operational Noise:

The project would replace an existing bridge and therefore would not result in a substantial increase in the generation of operational noise and increased exposure to operational noise. Periodic maintenance may generate temporary noise primarily during working hours. Existing ambient noise levels in the project area are high and are estimated to be 70 dBA according to the MEA. These existing noise levels are primarily due to the project location adjacent to the Railroad Depot. The project would not result in increased exposure of people to these existing noise levels because it replaces and existing bridge. Periodic maintenance would result in minor intermittent noise being generated. There would be *less than significant* long term operational noise impacts associated with the project.

Temporary Construction Noise:

An Acoustical Analysis Report for a similar bridge project, the Haley/De la Vina Street Bridge Replacement Noise and Vibration Analysis, March 23, 2004, was prepared by Hersh Walker Acoustics. The results of the noise study are summarized below along with the recommended mitigation measures for construction noise impacts, and the report is incorporated by reference herein.

Vibration and noise from impact-hammer type pile insertion would be highly annoying and could cause plaster cracking or other damage to structures in the immediate project area. These impacts can be mitigated by recording the existing structure conditions, offering compensation for any project related damage, complying with ordinance time of construction requirements, providing notice to nearby residents, use of noise shields, and proper maintenance of equipment.

Noise from de-watering pumps could exceed CNEL 60 by 9 to 19 dB, depending upon the type of pump system used. Continuous tonal noises would be expected to cause disturbance, particularly at night. This can be mitigated by using properly enclosed and operating equipment,

Noise levels from demolition and construction activities associated with bridge construction would exceed CNEL 60 by 15-20 dB at residential uses with direct exposure to the project work area. Although residences abutting the project area are already exposed to noise exceeding 70 dBA, this would be *less than significant, mitigable* impact because it is temporary. Mitigation described below would further reduce this impact.

Noise – Recommended Mitigation

N-1 **Construction Notice.** At least 20 days prior to commencement of construction, the contractor shall provide written notice to all property owners and residents within 450 feet of the project area. The notice shall contain a description of the proposed project, a construction schedule including days and hours of construction, the name and phone number of the Project Environmental Coordinator (PEC) who can answer questions, and provide additional information or address problems that may arise during construction. A 24-hour construction hot line shall be provided. Informational signs with the PEC's name and telephone number shall also be posted at the site.

N-2: **Construction Hours.** Noise-generating construction activities (which may include preparation for construction work) shall be permitted weekdays between the hours of 8:00 a.m. and 5:00 p.m., excluding holidays observed by the City as legal holidays: New Year's Day (January 1st); Martin Luther King Jr.'s Birthday (3rd Monday in January); President's Day (3rd Monday in February); Memorial Day (Last Monday in May); Independence Day (July 4th); Labor Day (1st Monday in September); Thanksgiving Day (4th Thursday in November); Day Following Thanksgiving Day (Friday following Thanksgiving); Christmas Day (December 25th). *When a holiday falls on a Saturday or Sunday, the preceding Friday or following Monday respectively shall be observed as a legal holiday.

Occasional night work may be approved for the hours between 5 p.m. and 8 a.m. by the Chief of Building and Zoning per Section 9.13.015 of the Municipal Code) between the hours of 5 p.m. and 8 a.m. weekdays In the event of such night work approval, the applicant shall provide written notice to all property owners and residents within 450 feet of the project property boundary and the City Planning and Building Divisions at least 48 hours prior to commencement of any night work. Night work shall not be permitted on weekends and holidays.

N-3: **Construction Equipment Sound Control.** All construction equipment, including trucks, shall be professionally maintained and fitted with standard manufacturers' muffler and silencing devices. Any pumps used for dewatering shall be enclosed in a noise barrier designed to reduce noise from pumps to 55 dBA (CNEL 60 dBA) at the nearest residential property line.

N-4 **Sound Barriers.** As determined necessary by the Planning Division, the project shall employ sound control devices and techniques such as noise shields and blankets during the construction period to reduce the level of noise due to pile insertion to adjacent residents.

N-5 **Condition Documentation**. Prior to commencement of demolition the applicant shall document the existing condition of structures within 100 feet of pile insertion points to document the condition of those structures prior to commencement of heavy vibration events if the impact-hammer type pile insertion method is selected. Any damage caused by project construction shall result in compensation to the owner of the damaged structure.

N-6 **Impact Noise**. Specify in the construction documents and require the contractor to exercise due diligence to prevent unnecessary repetitive metal on metal impacts during pile insertion.

Noise – Residual Impact

Less than significant

8. POPULATION AND HOUSING Could the project:		**NO**	**YES** **Level of Significance**
a)	Induce substantial growth in an area either directly or indirectly (e.g. through projects in an undeveloped area or extension of major infrastructure)?		Less than significant
b)	Displace existing housing, especially affordable housing?	x	

Population and Housing - Discussion

Impact Evaluation Guidelines: Issues of potentially significant population and housing impacts may involve:

- Growth inducement, such as provision of substantial population or employment growth or creation of substantial housing demand; development in an undeveloped area, or extension/ expansion of major infrastructure that could support additional future growth.
- Loss of a substantial number of housing units, especially loss of more affordable housing.

Population and Housing – Existing Conditions and Project Impacts

8.a) Growth-Inducing Impacts

The project would result in the replacement of an existing bridge. The project would not involve a substantial increase in major public facilities such as extension of water or sewer lines or roads that would facilitate other growth in the area. The project would not involve substantial long term growth that would increase population and housing demand. The project would temporally incrementally increase employment during construction. Growth-inducing impacts would be *less than significant*.

8.b) Housing Displacement

The project would not involve any housing displacement. *No impact* would result from the project.

Population and Housing - Mitigation

No mitigation is required.

Population and Housing – Residual Impact

Less than significant

9. PUBLIC SERVICES Could the project have an effect upon, or result in a need for new or altered services in any of the following areas:		**NO**	**YES** *Level of Significance*
a)	Fire protection?		Less than significant
b)	Police protection?		Less than significant
c)	Schools?		Less than significant
d)	Maintenance of public facilities, including roads?		Less than significant
e)	Other governmental services?		Less than significant
f)	Electrical power or natural gas?		Less than significant
g)	Water treatment or distribution facilities?		Less than significant
h)	Sewer or septic tanks?		Less than significant
i)	Water distribution/demand?		Less than significant
j)	Solid waste disposal?		Less than significant

Public Services - Discussion

Issues: This section evaluates project effects on fire and police protection services, schools, road maintenance and other governmental services, utilities, including electric and natural gas, water and sewer service, and solid waste disposal.

Impact Evaluation Guidelines: The following may be identified as significant public services and facilities impacts:

- Creation of a substantial need for increased police department, fire department, road maintenance, or government services staff or equipment.
- Generation of substantial numbers of students exceeding public school capacity where schools have been designated as overcrowded.
- Inadequate water, sewage disposal, or utility facilities.
- Substantial increase in solid waste disposal to area sanitary landfills.

The County's threshold for project specific impacts to the solid waste system is 196 tons per year (this figure represents 5% of the expected average annual increase in solid waste generation [4000 tons/year]). Source reduction, recycling, and composting can reduce a project's waste stream by as much as 50%. If a proposed project generates 196 or more tons per year after reduction and recycling efforts, impacts would be considered significant and unavoidable.

Proposed projects with a project specific impact as identified above (196 tons/year or more) would also be considered cumulatively significant, as the project specific threshold of significance is based on a cumulative growth scenario. However, as landfill space is already extremely limited, any increase in solid waste of 1% or more of the expected average annual increase in solid waste generation [4000 tons/year], which equates to 40 tons per year, is considered an adverse cumulative impact.

Public Services – Existing Conditions and Project Impacts

Public Services were found to be generally adequate in the Plan Santa Barbara Final EIR prepared in support of the General Plan Update.

Most of the waste generated in the City is transported on a daily basis to seven landfills located around the County. The County of Santa Barbara, which operates the landfills, has developed impact significance thresholds related to the impacts of development on remaining landfill capacity. The County thresholds are based on the projected average solid waste generation for Santa Barbara County from 1990-2005. The County assumes a 1.2% annual increase (approximately 4000 tons per year) in solid waste generation over the 15-year period.

There is ongoing elicit activity under the bridge deck that include drug use and littering.

9a-i. Public Services: The project involves construction of a replacement bridge. No sustained substantial increased in demand for public services would be expected because no permanent new residences with new population to serve or habitable structures with employees would be constructed and minimal new landscaping would be installed. Also, the project replaces an existing bridge, so major road maintenance would be reduced where new facilities are installed. During construction there would be an incremental increase in water use for construction, and dewatering could result in temporary flows being routed to the City sewer system, but this is expected to be a minor and temporary increase in demand for these services and adequate capacity is available at the treatment plant. There are some utilities (e.g. a water line) that cross the creek using the bridge for support but they will be temporarily relocated and installed in the deck of the new bridge or they would be capped and not reinstalled on the new bridge. Increased visibility under the bridge would result from a reduced bridge footprint. This would be expected to reduce illicit activity occurring under the existing bridge. Therefore, impacts of the project on public services are anticipated to be *less than significant.* Cumulative impacts of similar projects that are planned or approved would add little to impact public services and so cumulative impacts would be *less than significant.*

9.j) Solid Waste Generation/ Disposal:

Long-Term (Operational). The project use is estimated to generate minimal additional long term operational waste because it is a bridge replacement project. Therefore, the operational waste impacts would be *less than significant.*

Short-Term (Demolition and Construction). Demolition of the existing bridge deck would generate an estimated 981 tons of waste, mainly wood, concrete rubble, and steel. An estimated 934 tons of waste would be recycled and 47 tons would be disposed of at a landfill. The project would be required to minimize waste sent to the local landfill by recycling as much waste as possible. Construction-related waste generation would be short-term and *less than significant.* Application of recommended standard mitigation to reduce, re-use, and recycle construction waste to the extent feasible would minimize this effect. (See sections 2, Air Quality and 6 Hazards for additional discussion of hazardous waste)

Public Services – Recommended Mitigation

PS-1 **Recycling.** The project shall recycle as much construction waste as feasible.

Public Services – Residual Impacts

Less than significant

10. RECREATION Could the project:	NO	YES *Level of Significance*
a) Increase the demand for neighborhood or regional parks or other recreational facilities?		Less than significant
b) Affect existing parks or other public recreational facilities?		Less than significant

Recreation - Discussion

Issues: Recreational issues are associated with increased demand for recreational facilities, or loss or impacts to existing recreational facilities.

Impact Evaluation Guidelines: Recreation impacts may be significant if they result in:

- Substantial increase in demand for park and recreation facilities in an area under-served by existing public park and recreation facilities.
- Substantial loss or interference with existing park space or other public recreational facilities such as hiking, cycling, or horse trails.

Recreation – Existing Conditions and Project Impacts

10 a) Recreational Demand: The project would result in the replacement of an existing bridge. The replacement of the bridge would create some temporary jobs that could be filled by new residents in the area that would require recreational facilities. As documented in the Plan Santa Barbara FEIR, the City has adequate recreational facilities in the project area and the increase in temporary recreation demand due to construction would be incremental. Therefore, effects of project increases in recreational demand would be *less than significant.*

10 b) Existing Recreational Facilities: The project would result in construction of a replacement bridge adjacent to an existing park. Bridge construction would last approximately 1 year and during that period access to the Depot park from the west side of Mission Creek south of the railroad line would involve a detour around the bridge to access the park. This would result in a *less than significant* impact on existing recreation resources because it is temporary and access would still be available but would be slightly less convenient. The project would have no direct impacts on Depot Park because it would be protected in place.

Recreation - Mitigation

None necessary.

Recreation – Residual Impacts

Less than significant

11. TRANSPORTATION/CIRCULATION Could the project result in:	NO	YES *Level of Significance*
a) Increased vehicle trips?		Less than significant
b) Hazards to safety from design features (e.g. sharp curves, inadequate sight distance or dangerous intersections)?		Less than significant
c) Inadequate emergency access or access to nearby uses?		Less than significant
d) Decreased performance or safety of pedestrian, bicycle, or public transit facilities?		Beneficial
e) Conflicts with adopted policies, plans, programs, or ordinances regarding congestion management and the circulation system, taking into account all modes of transportation.	X	

Transportation - Discussion

Issues: Transportation issues include traffic, access, circulation, safety, and parking. Vehicle, bicycle and pedestrian, and transit modes of transportation are all considered, as well as emergency vehicle access. The City General Plan Circulation Element contains policies addressing circulation, traffic, and parking in the City.

Impact Evaluation Guidelines: A proposed project may have a significant impact on traffic/ circulation/ parking if it would:

Vehicle Traffic

- Cause an increase in traffic that is substantial in relation to the existing traffic load and street system capacity (see traffic thresholds below).
- Cause insufficiency in the transit system.
- Conflict with the Congestion Management Plan (CMP) or Circulation Element or other adopted plan or policy pertaining to vehicle or transit systems.

Circulation and Traffic Safety

- Create potential hazards due to addition of traffic to a roadway that has design features (e.g., narrow width, roadside ditches, sharp curves, poor sight distance, inadequate pavement structure) or that supports uses that would be incompatible with substantial increases in traffic.
- Diminish or reduce safe pedestrian, bicycle, or public transit circulation.
- Result in inadequate emergency access on-site or to nearby uses.
- Conflict with regional and local plans, policies, or ordinances regarding the circulation system, including all modes of transportation (vehicle, pedestrian, bicycle, and public transportation).

Parking

- Result in insufficient parking capacity for the projected amount of automobiles and bicycles.

Traffic Thresholds of Significance: The City uses Levels of Service (LOS) "A" through "F" to describe operating conditions at signalized intersections in terms of volume-to-capacity (V/C) ratios, with LOS A (0.50-0.60 V/C) representing free flowing conditions and LOS F (0.90+ V/C) describing conditions of substantial delay. The City General Plan Circulation Element establishes the goal for City intersections to not exceed LOS C (0.70-0.80 V/C).

For purposes of environmental assessment, LOS C at 0.77 V/C is the threshold Level of Service against which impacts are measured. An intersection is considered "impacted" if the volume to capacity ratio is .77 V/C or greater.

Project-Specific Significant Impact: A project-specific significant impact results when:

(a) Project peak-hour traffic would cause a signalized intersection to exceed 0.77 V/C, or

(b) The V/C of an intersection already exceeding 0.77 V/C would be increased by 0.01 (1%) or more as a result of project peak-hour traffic.

For non-signalized intersections, delay-time methodology is utilized in evaluating impacts.

Significant Cumulative Contribution: A project would result in a significant contribution to cumulative traffic impacts when:

(a) Project peak-hour traffic together with other cumulative traffic from existing and reasonably foreseeable pending projects would cause an intersection to exceed 0.77 V/C, or

(b) Project would contribute traffic to an intersection already exceeding 0.77 V/C.

Transportation – Existing Conditions and Project Impacts

11.a) Traffic. The project would result in the replacement of an existing bridge that is currently weight restricted due to inadequate structural support, and that does not meet current FHWA seismic safety standards. The only long term traffic that would be generated by the project would be for periodic maintenance. The project would result in an average of a few trips per year for maintenance over the life of the bridge. However, the existing bridge is already being maintained so the project would not result in a substantial increase in the need for maintenance when compared to the existing bridge. This impact would therefore be *less than significant.*

During construction the project would result in a short term increase in traffic for transportation of construction workers, equipment, waste, and building materials. This traffic would be limited due to the relatively limited construction required to remove and replace the existing bridge, and would be limited to a route approved by the city Transportation Engineer. With the exception of worker commute traffic, trips would be restricted to occur outside of peak traffic hours when intersection capacity is most impacted. Therefore, project construction traffic would result in a *less than significant* impact that would be reduced with application of mitigation measures.

11.b): Safety Hazards The project would replace an existing bridge. The new bridge design would be reviewed by the city Traffic Engineer to ensure that it does not create any safety hazards. The bridge railing would be designed to meet CALTRANS standards for safety. Therefore the project would result in a *less than significant* safety hazard.

11 c): Access: The new bridge would provide access for similar vehicular and improved pedestrian use compared to the existing bridge. Therefore, the project would not have a significant impact on vehicular access in the long term. During construction, the project site would temporarily preclude access across Mission Creek and through the construction area because the bridge would be closed. Since this is temporary, and adequate alternative access to adjacent and surrounding uses would be available from other routes, project temporary construction related access impacts would be *less than significant.*

11 d): Pedestrian Safety: The proposed bridge would replace an existing bridge that does not provide any curb, gutter and sidewalk. Since the new bridge would include a curb protected sidewalk and ADA accessible access ramps for pedestrians, and the new bridge railing would meet current CALTANS safety standards and California Building Code requirements for bridge railings restricting opening size, to make it too small for infants to pass through, the new bridge pedestrian safety would result in a *beneficial impact* on pedestrian safety.

11 e): Conflict with Plans: The new bridge would replace an existing bridge that is a part of the City existing circulation system and is consistent with the city Circulation Element. Maintaining the existing roadway system would be consistent with the Circulation Element. Therefore, the project would be potentially consistent with the city General Plan Circulation Element.

Transportation - Mitigation

T-1 **Construction Traffic.** The haul routes for all construction-related trucks, three tons or more, entering or exiting the site, shall be approved by the Transportation Engineer. Construction-related truck trips shall not be scheduled during peak hours (7:00 a.m. to 9:00 a.m. and 4:00 p.m. to 6:00 p.m.) to help reduce truck traffic and noise on adjacent streets and roadways. The route of construction-related traffic shall be established to minimize trips through surrounding residential neighborhoods.

T-2 **Construction Parking.** Construction parking and vehicle/equipment/materials storage shall be provided as follows:

A. During construction, free parking spaces for construction workers shall be provided on-site or off-site in a location subject to the approval of the Transportation and Parking Manager.

B. On-site or off-site storage shall be provided for construction materials, equipment, and vehicles.

Transportation – Residual Impact

Less than significant

12. WATER ENVIRONMENT Could the project result in:	NO	YES *Level of Significance*
a) Changes in absorption rates, drainage patterns, or the rate and amount of surface runoff?		Less than significant
b) Exposure of people or property to water related hazards such as flooding?		Less than significant
c) Discharge into surface waters?		Potentially Significant, mitigable
d) Change in the quantity, quality, direction or rate of flow of ground waters?		Less than Significant
e) Increased storm water drainage?		Beneficial

Water – Discussion

Issues: Water resources issues include changes in offsite drainage and infiltration/groundwater recharge; storm water runoff and flooding; and water quality.

Impact Evaluation Guidelines: A significant impact would result from:

Water Resources and Drainage

- Substantially changing the amount of surface water in any water body or the quantity of groundwater recharge.
- Substantially changing the drainage pattern or creating a substantially increased amount or rate of surface water runoff that would exceed the capacity of existing or planned drainage and storm water systems.

Flooding

- Locating development within 100-year flood hazard areas; substantially altering the course or flow of flood waters or otherwise exposing people or property to substantial flood hazard

Water Quality

- Substantial discharge of sediment or pollutants into surface water or groundwater, or otherwise degrading water quality, including temperature, dissolved oxygen, or turbidity.

Water Resources – Existing Conditions and Project Impacts

The project area already includes a bridge that is impervious to rainfall and surface flows and the bridge is over Mission Creek a major drainage facility in the City. Flows from the bridge flow directly onto the street and into Mission Creek. Mission Creek is only able to accommodate flows of the 6-year storm. Therefore, the project area is subject to flooding in the event of a 25- or 100-year storm. Within the reach of Mission Creek in the area of the project Mission Creek has a concrete bottom oftentimes covered in a layer of silt and vertical sandstone banks.

12a) Surface Runoff: The proposed project would replace the existing bridge with a new bridge with approximately half the footprint of the existing bridge. Therefore the amount of surface runoff from the proposed bridge would be less than the existing condition. Project impacts on the amount of surface runoff would be *less than significant.*

12b) Flooding: The elevation of the proposed bridge deck bottom would be at the same elevation as the existing bridge, and an existing water line and other conduits that are suspended beneath the existing bridge deck would be removed or reinstalled within the proposed bridge deck. The north channel wall beneath the bridge would be widened to align with the upstream channel wall. This would result in increased capacity of the channel beneath the bridge, because the cross section of the area beneath the bridge would have been enlarged. However, the bridge railing would be replaced with a bridge railing that has a less porous design, because it has to comply with requirements that no opening is greater than four inches. However, if flood waters reached this height, it would have already left the channel, and would be flowing

over the creek bank and around the new bridge. Therefore, the project would have a *less than significant* effect on flooding as an existing restriction on flows down the creek beneath the bridge would be reduced, and the railing that could somewhat impede flows will not have an effect on flood waters.. Additionally, a separate bypass culvert proposed by the LMCFCP is designed to reduce higher flows beneath the bridge by routing them around the channel in a culvert.

12c) Discharge: It would be necessary to dewater the construction area to allow construction of the north bridge abutment. Any flows from the areas to be dewatered would be pumped to a baker tank where settling would occur. Also, concrete washout could contaminate surface water. This water could have altered PH due to contact with curing cement that would have a *potentially significant impact* on water quality. This water would then be tested, and if it meets Regional Water Quality Control Board (RWQCB) criteria for discharge to surface water, would be discharged to the creek. If this water does not meet RWQCB criteria it would be discharged to the City septic sewer system where it would be treated and discharged under the applicable discharge permit. A diversion consisting of a coffer dam and culvert would be installed in the creek channel to temporarily convey low flows than may occur through the construction area. The project includes measures to ensure that dewatering would result in limited discharge to the septic sewer system or if testing demonstrates that treating would result in water quality that would be appropriate for discharge to the creek, it would be discharged to the creek. The discharges would be temporary while the bridge abutment is being constructed. Since discharges would be treated and temporary effects of construction related discharge would be *less than significant.*

Flows from the proposed bridge deck would be routed to adjacent roadways and to drainage inlets that ultimately discharge to Mission Creek. Filters would be installed at the inlets to the treat runoff from the bridge deck and approaches. This is an improved situation to the existing condition. Therefore, project operational impacts of discharge would be *less than significant.* The project would be required to comply with the Storm Water Management Plan. That plan would require that any runoff from the new bridge deck and paving be treated prior to discharge to the creek. This would have a *beneficial* effect on the quality of project area surface flow discharges to Mission Creek.

Project construction would include excavations that result in soils being exposed. The excavations could result in the release of pollutants that may have a *potentially significant impact* on water quality in Mission Creek including the following:

- Sediment from the disturbed stream channel as a result of pile driving, dewatering operations, and construction
- Oil and grease resulting from equipment spills within the dewatered areas in Mission Creek
- Discharges of debris, concrete, or sediment during bridge demolition
- Discharge of sediment and oil and grease in stormwater discharged from construction staging areas
- Changes in pH due to spills of wet concrete during pouring of bridge piles, bent and abutment construction

During construction drainage from the project site would be governed by the requirements of the RWQCB permit and a required Storm Water Pollution Prevention Plan (SWPPP). These requirements would be designed to minimize runoff from exposed areas during construction, minimize pollution due to equipment leaks, control water PH levels due to concrete pours, and provide means to clean up any accidents that may occur.

Drainage from the operation of the new bridge deck and adjacent streets would be required to comply with the Storm Water Management Plan (SWMP) to reduce the amount of urban pollutants that are washed into the creek by either diverting these flows to vegetated areas where they can be treated to remove the pollutants or by installing filters at culvert inlets to clean the pollutants before they enter the creek.. The project would comp[y with the SWMP by installing filters at drainage inlets around the bridge that would comply with the SWMP. This would be an improvement over the existing situation where the runoff from a larger bridge deck flows into the creek without treatment. The one inch storm is estimated to generate 1,107 gallons of storm water and the 25-year storm would generate 11,460 gallons from the new bridge deck. This is a relatively small amount of water that would be treated. Therefore, the project would have a less than significant impact on

12d) Groundwater Flows and Water Quality: The proposed project may result in excavations that would be within soils that contain groundwater, and proposed piles would be installed into soils that contain groundwater. The groundwater within any excavations would be pumped out of the project area prior to any concrete being poured, so groundwater would not come in contact with curing cement. The pumped groundwater would be discharged appropriately as described above in section 12c Discharge. The size of the excavation would be adequate for abutment construction and would be approximately 17 feet below grade and have an estimated volume of 180 cubic yards below estimated groundwater levels. This potential penetration into groundwater would not substantially affect groundwater flows because there are alternative paths for the groundwater to flow in and the size of the penetration is limited in comparison to the groundwater basin size. Therefore, project impacts on groundwater flows would be *less than significant.*

12e) Drainage: The proposed project would replace an existing bridge allowing a greater capacity beneath the bridge than the existing bridge and providing a curb and gutter to direct flows on the bridge deck to drainage inlets on the roadway adjacent to the new bridge. Since the new bridge would increase the drainage capacity of Mission Creek and surface drainage would be better directed than currently the project would have a *beneficial* impact on area drainage.

Water Resources –Mitigation

W-1 Drainage and Water Quality. Project plans for grading, drainage, stormwater facilities, and project development shall be subject to review and approval by the Public Works Department per City regulations, including the Storm Water Management Plan (SWMP) and *Regional Water Quality Control Board* waste discharge permit.. Sufficient engineered design and adequate measures shall be employed to ensure that no substantial construction-related or long-term effects from increased runoff, erosion and sedimentation, urban water quality pollutants, or groundwater pollutants would result from the project.

Prior to commencement of construction, a Storm Water Pollution Prevention Plan (SWPPP) shall be prepared for implementation during construction that incorporates all feasible Best Management Practices (BMPs) to reduce erosion from construction activities, to minimize the discharge of sediment during storm events, and to eliminate the discharge of non-stormwater pollutants to the maximum extent possible. The following measures shall be incorporated into the project SWPPP, which must meet state NPDES General Construction Permit requirements:

- Temporary stockpiles at the project site shall be protected from erosion by the combined use of temporary berms around the perimeter, perimeter interceptor ditches, and temporary downstream catchments as necessary and appropriate.
- Stockpiles that are present during the winter season shall be protected from erosion due to direct precipitation or runoff during the winter by the use of surface stabilization (such as erosion control blankets).
- Sediment filters/barriers will be constructed along the perimeter of the work area above Mission Creek to prevent sheet flow from discharging sediment into Mission Creek. Protection measures shall remain in place and be maintained in good condition until all disturbed soil areas are permanently stabilized by installation and establishment of landscaping, grass, mulching, or are otherwise covered and protected from erosion.
- The SWPPP must include a contingency plan to protect the exposed work site during the winter months in the event of high runoff in the creek.
- BMPs to prevent discharge of construction materials, contaminants, wash-water, concrete, fuels, and oils that include the following measures:
    - Ensure that all construction vehicles and equipment are properly maintained (off-site) to prevent leaks of fuel, oil, and other vehicle fluids.
    - Refuel only in bermed areas with impermeable surfaces at least 50 feet from the creek or culvert.
    - Implement measures and provide materials to contain any accidental spills or leakage during the fueling of construction equipment at the site.
    - Place all stored fuel, lubricants, paints, and other construction liquids in secured and covered containers within a bermed or otherwise contained area at least 200 feet from the creek.
    - Prohibit equipment washing and major maintenance at the project site except at the construction staging area. Prohibit concrete washout except at the construction staging area. Concrete washout water shall be collected and stored in an onsite Baker tank to be properly disposed of off-site. Place berms around the active work area on the road when installing piles through the roadbed during the winter to capture any construction debris or concrete in the event of rainfall; place sandbag or straw bale barriers at all storm drain inlets near the work area to capture any site runoff during winter construction. Remove all refuse and construction debris from the site as soon as possible.
    - During concrete pours, the contractor shall have a qualified monitor present to measure pH within any standing water adjacent to the pour. The monitor will have onsite suitable material such as acid to neutralize contaminated water.

- A Storm Inspection Program. During extended storm events, inspections must be made during each 24-hour period, focusing on times when high floods are predicted. The goals of these inspections are: 1) to identify areas contributing to a storm water discharge, 2) to evaluate whether measures to reduce pollutant loadings identified in the SWPPP are adequate, properly installed and functioning in accordance with the terms of the General Permit, and 3) whether additional control practices or corrective maintenance activities are needed. Equipment, materials, and workers must be available for rapid response to failures and emergencies. All corrective maintenance to BMPs shall be performed as soon as possible, depending upon worker safety. Each discharger shall certify annually that the construction activities are in compliance with the requirements of the RWQCB General Permit. Dischargers who cannot certify annual compliance shall notify the appropriate RWQCB.

Water Resources – Residual Impact

Less than significant

13. LAND USE AND PLANNING Would the project:		YES	NO
a)	Physically divide an established community?		X
b)	Conflict with any applicable land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?		X

Land Use and Planning – Discussion

13.a) The project does not involve construction of a cross-town freeway, a storm channel, utility transmission lines or any other improvements that have the potential to physically divide the community. The project would close the existing bridge temporarily, during construction. The project would replace a deteriorating bridge with a new bridge, thus maintaining access across Mission Creek in the long term at that location.

13.b) While preparing this Initial Study Plans and Policy section, an analysis was undertaken of the potential conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project adopted for the purposes of avoiding or mitigating an environmental effect. Based on this analysis, it was determined that the project would not have any inconsistencies with these plans, policies, because the project is either designed to address potential impacts or mitigation measures are proposed to address the impact and reduce it to a less than significant level.

Mitigation Measures are required to ensure that impacts to tidewater gobies and steelhead are less than significant and that the project is consistent with applicable policies of the City's General Plan Conservation Element. Mitigation Measures are required to ensure that impacts to historic resources associated with the demolition of the bridge are reduced to a less than significant level, consistent with applicable General Plan Conservation Element policies.

Therefore, with mitigation, the project is not in conflict with any adopted land use plans, policies, or regulations adopted for the purpose of avoiding or mitigating an environmental effect.

Land Use and Planning – Required Mitigation

None Necessary

Land Use and Planning – Recommended Mitigation

None Necessary

Land Use and Planning – Residual Impacts

Less than significant.

MANDATORY FINDINGS OF SIGNIFICANCE.		YES	NO
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 wildfire 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?		X
b)	Does the project have the potential to achieve short-term, to the disadvantage of long-term, environmental goals?		X
c)	Does the project have potential impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?		X
d)	Does the project have potential environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?		X

a. Section 1 through 12 of this Initial Study explain why this project would not degrade the quality of the environment, As discussed in Section 3 (Biological Resources), with the implementation of required mitigation measures, the project would not reduce the habitat of a fish or wildlife species, cause a fish or wildfire population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, or reduce the number or restrict the range of a rare or endangered plant or animal. As discussed in Section 4 (Cultural Resources), the project would not eliminate or impact important California prehistoric or historic resources.

b. As discussed in Sections 1 through 12 of this Initial Study, the project, as mitigated, would not result in significant short- or long-term environmental impacts.

c. Sections 1 through 12 of this Initial Study consider potential cumulative impacts to environmental resources. As discussed in these sections, the project, as mitigated, would not result in any significant, cumulative impacts on the environment because the project contribution to cumulative impacts would not be considerable.

d. As discussed in Sections 1 through 12 of this Initial Study, no significant effects on humans (direct or indirect) would occur as a result of this project as mitigated. All potentially significant impacts related to biological resources, geophysical conditions, and hazards can be mitigated to a less than significant level. In addition, mitigation measures are recommended to further reduce adverse but less than significant impacts associated with air quality.

INITIAL STUDY CONCLUSION

On the basis of this initial evaluation it has been determined that with identified mitigation measures, agreed-to by the applicant, potentially significant impacts would be avoided or reduced to less than significant levels. A Mitigated Negative Declaration will be prepared.

MB 3/25/11

Initial Study Preparer — Date

MB 3/25/11

Environmental Analyst — Date

EXHIBITS:

A. Project Plans

B. Mitigation Monitoring and Reporting Program

C. Air Quality Model Results

LIST OF SOURCES USED IN PREPARATION OF THIS INITIAL STUDY

The following sources used in the preparation of this Initial Study are located at the Community Development Department, Planning Division, 630 Garden Street, Santa Barbara and are available for review upon request.

Arcadis, Natural Environmental Study, December 2010

Arcadis, Biological Assessment, City of Santa Barbara Mission Creek Bridge Replacement Projects, December 10, 2010

Applied Earthworks, Archaeological Survey Report, August 26, 2010

Applied Earthworks, Memorandum Archeological Evaluation, August 26, 2010

Applied Earthworks, Memorandum Historical Resources Evaluation, August 26, 2010

Applied Earthworks, Historical Resources Evaluation Report, September, 2010

California Environmental Quality Act (CEQA) & CEQA Guidelines

Certified Final Program Environmental Impact Report for the Santa Barbara General Plan Update SCH#2009011031, September, 2010

Drake Haglan and Assoc., Design Report for the Replacement of the Chapala Street Bridge over Mission Creek, March 25, 2011

Fugro, Preliminary Foundation Report Chapala Street Bridge Seismic Retrofit/Replacement Project, March 18, 2010

General Plan Circulation Element

General Plan Conservation Element

Housing Element

General Plan Land Use Element

General Plan Noise Element w/appendices

General Plan Map

General Plan Seismic Safety/Safety Element

General Plan Update 2030 – Conditions, Trends, Issues – September 2005

Geology Assessment for the City of Santa Barbara

Institute of Traffic Engineers Parking Generation Manual

Institute of Traffic Engineers Trip Generation Manual

Local Coastal Plan

Lower Mission Creek Flood Control Final EIS/EIR *September 2000*

Master Environmental Assessment

Parking Design Standards

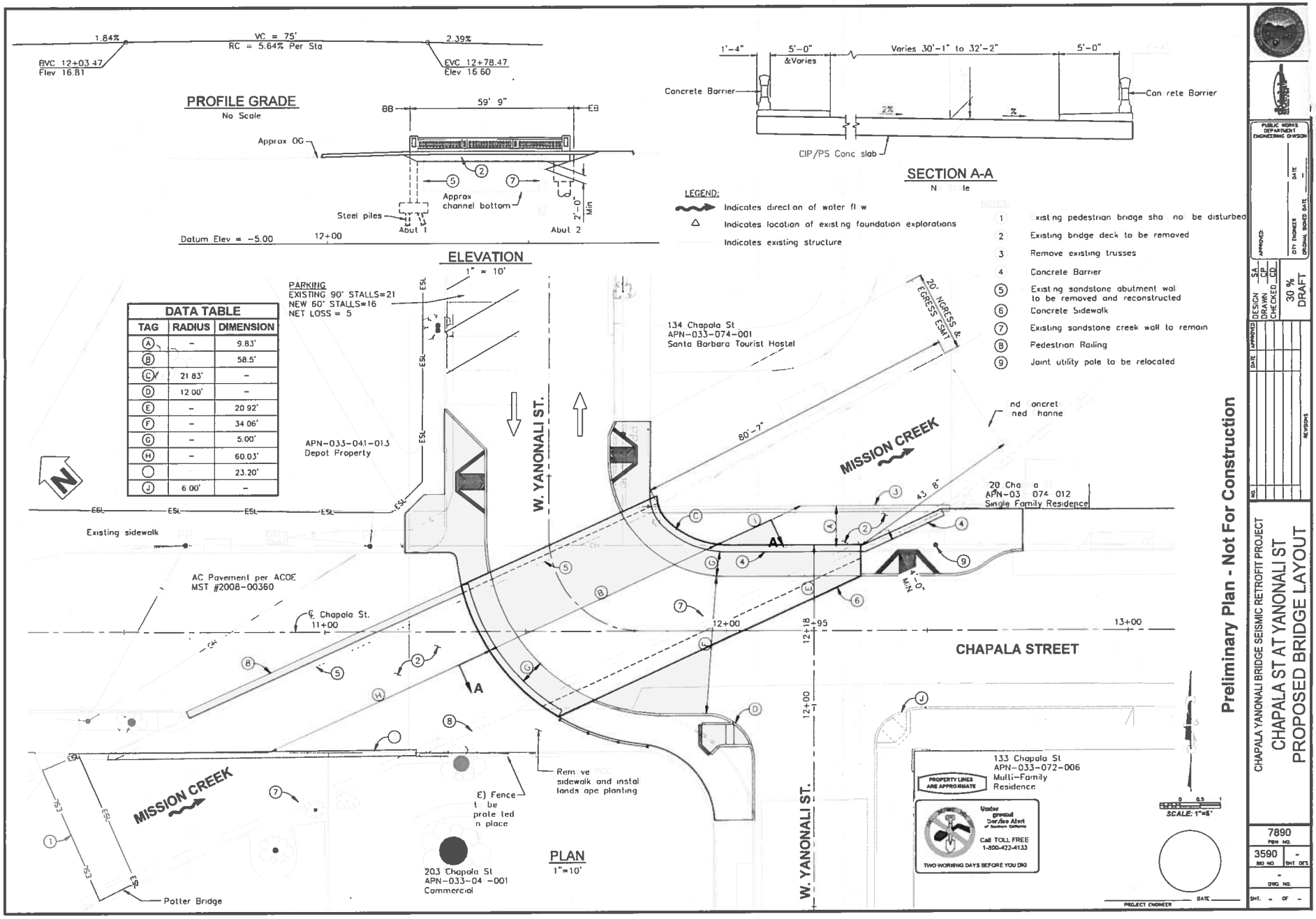
RGA Environmental, Asbestos and Lead Sampling, September 9, 2010

Santa Barbara Municipal Code & City Charter

Special District Map

2007 California Editions of the 2006 International Building Code

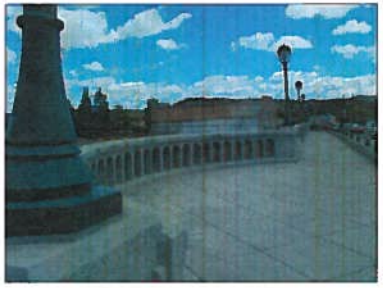
\\chgarden\ComDev\Group Folders\PLAN\Environ. Review\INITIAL STUDIES\200 Blk Chapala -Chapala Street Bridge7-19-11.docx



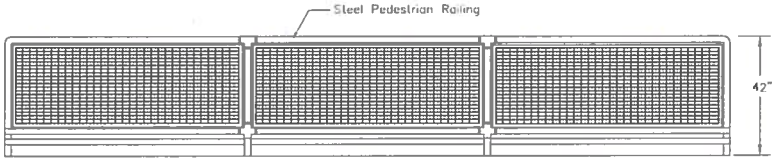
DATA TABLE		
TAG	RADIUS	DIMENSION
A	-	9.83'
B		58.5'
C	21.83'	-
D	12.00'	-
E	-	20.92'
F	-	34.06'
G	-	5.00'
H	-	60.03'
		23.20'
J	6.00'	-

EXHIBIT A

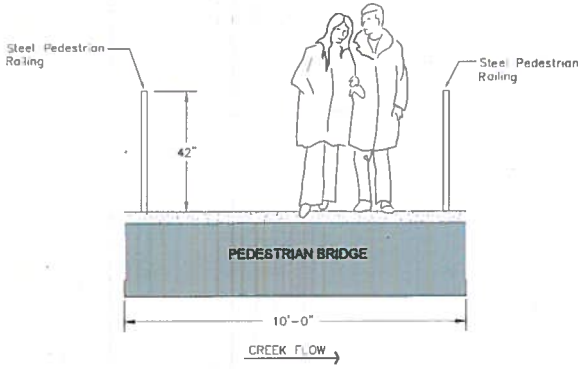
U:\09016 - Chapala\400 Project Design Files\430 Bridges & Structures\APS\Preferred Alternative\Revised per DART Comments\2011_07_19_APS_2B-REV5_dim added.dwg, 7/19/2011 10:00 AM



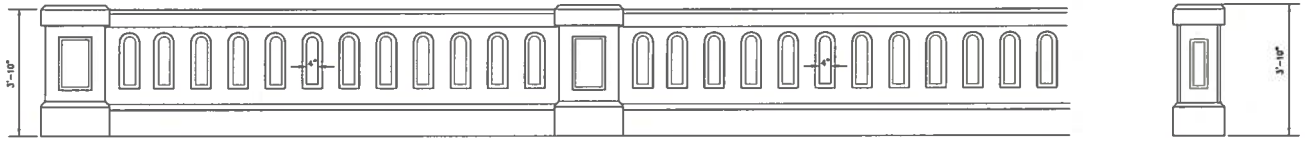
Curved Railing Precedent



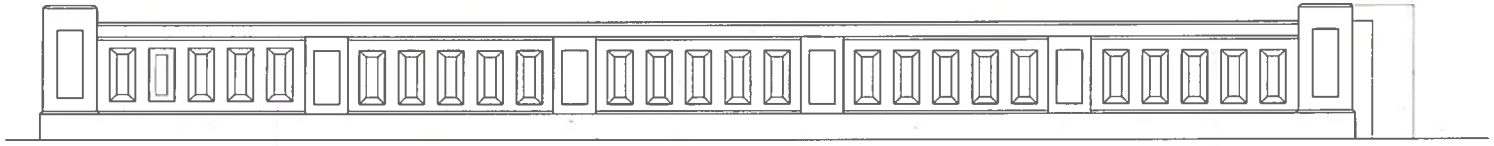
STEEL PEDESTRIAN RAILING



PEDESTRIAN RAILING



APPROVED CABRILLO STREET BRIDGE



APPROVED ORTEGA STREET BRIDGE

DAVID R. BLACK & ASSOCIATES

Project: Chapala Street at Yanonali Street Alternative 3

Sheet Title: Bridge Railings

Revisions

No.	Date	Revision

Date: 2-11-11

Scale: Scale 1/4" = 1'-0"

Drawn: NJ

Job: 1883

Sheet Number: 2

2 of 3

Chapala Street Bridge Replacement Project MST2010-00263

MITIGATION MONITORING AND REPORTING PROGRAM

PROJECT LOCATION

200 Block Chapala Street

PROJECT DESCRIPTION

The project would demolish the existing 4,655 square feet (s.f.) bridge deck over Mission Creek and replace it with a 2,740 s.f. bridge deck. The south side of the new bridge deck would be supported on piles and a foundation behind the existing sandstone abutment. The north side of the new bridge would be supported by a new abutment that would be located to align with the existing sandstone walls upstream of the bridge and the existing bank downstream of the bridge. The new bridge would provide one vehicular lane in each direction and a five foot sidewalk on each side. New bridge railings and approaches to the bridge would be constructed.

PURPOSE

The purpose of the Chapala Street Bridge Replacement Project Mitigation Monitoring and Reporting Program (MMRP) is to ensure compliance with all mitigation measures identified in the Initial Study to mitigate or avoid potentially significant adverse environmental impacts resulting from the proposed project. The implementation of this MMRP shall be accomplished by City staff and the project developer's consultants and representatives. The program shall apply to the following phases of the project:

- Plan and specification preparation
- Pre-construction conference
- Construction of the site improvements
- Post Construction

I. RESPONSIBILITIES AND DUTIES

A qualified representative of the developer, approved by the City Planning Division and paid for by the developer, shall be designated as the Project Environmental Coordinator (PEC). The PEC shall be responsible for assuring full compliance with the provisions of this mitigation monitoring and reporting program to the City. The PEC shall have authority over all other monitors/specialists, the contractor, and all construction personnel for those actions that relate to the items listed in this program.

It is the responsibility of the contractor to comply with all mitigation measures listed in the attached MMRP matrix. Any problems or concerns between monitors and construction personnel shall be addressed by the PEC and the contractor. The contractor shall prepare a construction schedule subject to the review and approval of the PEC. The contractor shall inform the PEC of any major revisions to the construction schedule at least 48 hours in advance. The PEC and contractor shall meet on a weekly basis in order to assess compliance and review future construction activities.

A. PRE-CONSTRUCTION BRIEFING

The PEC shall prepare a pre-construction project briefing report. The report shall include a list of all mitigation measures and a plot plan delineating all sensitive areas to be avoided. This report shall be provided to all construction personnel.

EXHIBIT B

The pre-construction briefing shall be conducted by the PEC. The briefing shall be attended by the PEC, construction manager, necessary consultants, Planning Division Case Planner, Public Works representative and all contractors and subcontractors associated with the project. Multiple pre-construction briefings shall be conducted as the work progresses and a change in contractor occurs.

The MMRP shall be presented to those in attendance. The briefing presentation shall include project background, the purpose of the MMRP, duties and responsibilities of each participant, communication procedures, monitoring criteria, compliance criteria, filling out of reports, and duties and responsibilities of the PEC and project consultants.

It shall be emphasized at this briefing that the PEC and project consultants have the authority to stop construction and redirect construction equipment in order to comply with all mitigation measures.

Once construction commences, field meetings between the PEC and project consultants, and contractors shall be held on an as-needed basis in order to create feasible mitigation measures for unanticipated impacts, assess potential effects, and resolve conflicts.

II. IMPLEMENTATION PROCEDURES

There are three types of activities which require monitoring. The first type pertains to the review of the Conditions of Approval and Construction Plans and Specifications. The second type relates to construction activities and the third to ongoing monitoring activities during operation of the project.

A. MONITORING PROCEDURES

The PEC and required consultant(s) shall monitor all field activities. The authority and responsibilities of the PEC and consultant(s) are described in the previous section.

B. REPORTING PROCEDURES

The following three (3) types of reports shall be prepared:

1. Schedule

   The PEC and contractor shall prepare a monthly construction schedule to be submitted to the City prior to or at the pre-construction briefing.

2. General Progress Reports

   The PEC shall be responsible for preparing written progress reports submitted to the City. These reports would be expected on a weekly basis during grading, excavation and construction, activities. The reports would document field activities and compliance with project mitigation measures, such as dust control and sound reduction construction.

3. Final Report

A final report shall be submitted to the Planning Division when all monitoring (other than long term operational) has been completed and shall include the following:

a. A brief summary of all monitoring activities.

b. The date(s) the monitoring occurred.

c. An identification of any violations and the manner in which they were dealt with.

d. Any technical reports required, such as noise measurements.

e. A list of all project mitigation monitors.

C. MMRP MATRIX

The following MMRP Matrix describes each initial study mitigation measure, monitoring activities and the responsibilities of the various parties, along with the timing and frequency of monitoring and reporting activities. For complete language of each condition, the matrix should be used in conjunction with the mitigation measures described in full in the Initial Study.

The MMRP Matrix is intended to be used by all parties involved in monitoring the project mitigation measures, as well as project contractors and others working in the field. The Matrix should be used as a compliance checklist to aid in compliance verification and monitoring requirements. A copy of the MMRP matrix shall be kept in the project file as verification that compliance with all mitigation measures has occurred.

MITIGATION MEASURE	PARTY RESPONSIBLE FOR IMPLEMENTATION	VERIFICATION		
		DATE	ACCOMPLISHED	COMMENTS
Asbestos Containing Materials. Pursuant to APCD Rule 1001, the applicant is required to complete and submit an APCD Asbestos Demolition and Renovation Compliance Checklist at least 10 working days prior to commencing any alterations of the buildings. As materials are exposed during demolition they shall be sampled to determine their asbestos content and materials containing asbestos shall be properly abated. Any abatement or removal of asbestos containing materials must be performed in accordance with applicable federal, State, and local regulations. Permits shall be obtained for the Air Pollution Control District prior commencement of demolition of the structures containing asbestos. Materials containing asbestos shall be sent to appropriate land fill that are certified to accept this material.				
Construction Dust Control - Watering. During site grading and transportation of fill materials, regular water sprinkling shall occur using reclaimed water whenever the Public Works Director determines that it is reasonably available. During clearing, grading, earth moving or excavation, sufficient quantities of water, through use of either water trucks or sprinkler systems, shall be applied to achieve minimum soil moisture of 12% to prevent dust from leaving the site. Each day, after construction activities cease, the entire area of disturbed soil shall be sufficiently moistened to create a crust. Throughout construction, water trucks or sprinkler systems shall also be used to keep all areas of vehicle movement damp enough to prevent dust raised from leaving the site. At a minimum, this will include wetting down such areas every three hours. Increased watering frequency will be required				

MITIGATION MEASURE	PARTY RESPONSIBLE FOR IMPLEMENTATION	VERIFICATION		
		DATE	ACCOMPLISHED	COMMENTS
whenever the wind speed exceeds 15 mph.				
Construction Dust Control – Gravel Pads. Gravel pads, 3 inches deep, 25 feet long, 12 feet wide per lane and edged by rock berm or a row of stakes or a pipe-grid track out control device shall be installed to reduce mud/dirt track out from unpaved truck exit routes.				
Construction Dust Control – Minimize Disturbed Area/Speed. Minimize amount of disturbed area and reduce on site vehicle speeds to 15 miles per hour or less.				
Construction Dust Control – Project Environmental Coordinator (PEC). The contractor or builder shall designate a person or persons to monitor the dust control program and to order increased watering, as necessary, to prevent transport of dust offsite. Their duties shall include holiday and weekend periods when construction work may not be in progress. The name and telephone number of such persons shall be provided to the Air Pollution Control District prior to land use clearance for map recordation and land use clearance for finish grading for the structure.				
Construction Dust Control – Disturbed Area Treatment. After clearing, grading, earth moving, excavation, or demolition is completed, the entire area of disturbed soil shall be treated to prevent wind erosion. This may be accomplished by: Seeding and watering until grass cover is grown; Spreading soil binders; Sufficiently wetting the area down to form a crust on the surface with repeated soakings				

MITIGATION MEASURE	PARTY RESPONSIBLE FOR IMPLEMENTATION	VERIFICATION		
		DATE	ACCOMPLISHED	COMMENTS
as necessary to maintain the crust and prevent dust pickup by the wind; Other methods approved in advance by the Air Pollution Control District.				
Construction Dust Control – Tarping. Trucks transporting fill material to and from the site shall be covered from the point of origin and maintain a freeboard height of 12 inches.				
Stockpiling. If importation, exportation and stockpiling of fill material are involved, soil stockpiled for more than two days shall be covered, kept moist by applying water at a rate of 1.4 gallons per hour per square yard, or treated with soil binders to prevent dust generation. Apply cover when wind events are declared.				
Construction Dust Control – Surfacing. All surfaces for roadways, driveways, sidewalks, etc., shall be laid as soon as possible. Additionally, building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.				
Engine Size. The engine size of construction equipment shall be the minimum practical size.				
Equipment Maintenance. Construction equipment shall be maintained to meet the manufacturer's specifications.				
Equipment Numbers. The number of construction equipment operating simultaneously shall be minimized through efficient management practices to ensure that the smallest practical number is operating at any one time.				
Catalytic Converters. Catalytic converters shall be				

MITIGATION MEASURE	PARTY RESPONSIBLE FOR IMPLEMENTATION	VERIFICATION		
		DATE	ACCOMPLISHED	COMMENTS
installed on gasoline-powered equipment, if feasible.				
Diesel Replacements. Diesel powered equipment shall be replaced by electric equipment whenever feasible.				
Diesel Catalytic Converters. Diesel catalytic converters, diesel oxidation catalysts and diesel particulate filters as certified and/or verified by EPA or California shall be installed, if available.				
Idling Limitation. All commercial diesel vehicles are subject to Title 13, Section 2485 and 2449 of the California Code of Regulations, limiting engine idling times. Idling of heavy-duty diesel trucks and diesel fueled or alternative diesel fueled off-road compression ignition vehicle during loading and unloading shall be limited to five minutes; auxiliary power units shall be used whenever possible.				
Worker Trips. Construction worker trips shall be minimized by requiring carpooling and by providing for lunch onsite.				
Portable diesel equipment - All portable diesel-powered construction equipment shall be registered with the state's portable equipment registration program or shall obtain an APCD permit.				
Mobile construction equipment - Fleet owners of mobile construction equipment are subject to the California Air Resource Board (CARB) Regulation for In-use Off-road Diesel Vehicles (Title 13 California Code of Regulations, Chapter 9, Section 2449), the purpose of which is to reduce diesel particulate matter (PM) and criteria pollutant emission from in-use (existing) off-road diesel-fueled vehicles. The current requirements include idling limits of 5 minutes, labeling of vehicles with ARB-issued equipment				

MITIGATION MEASURE	PARTY RESPONSIBLE FOR IMPLEMENTATION	VERIFICATION		
		DATE	ACCOMPLISHED	COMMENTS
identification numbers, reporting to ARB, and vehicle sales disclosures For more information, please refer to the CARB website at www.arb.ca.gov/msprog/ordiesel/ordiesel.htm				
Equipment. To avoid impacts to aquatic resources, no construction equipment shall be operated within the channel and stream bottom between December 1st and the end of March 30th or whenever significant water flows (water flow in the CALTRANS Channel is more than 1/2 inch deep) pass down Mission Creek. Construction Dates. To avoid impact to steelhead and tidewater goby, which are federally listed species, construction upstream of Yanonali Street shall be restricted to dates between June I and December 1st if water flow in the CALTRANS Channel is more than 1/2 inch deep. If no continuous surface water flow exists in the CALTRANS Channel after April 15th, construction could occur from then until December 1st.				
Flowing Water. No construction shall occur in the flowing water. If water is present during the construction, the water shall be diverted by construction of a low flow channel or installation of a pipe.				
Biological Monitor. A qualified biologist shall survey the area for steelhead prior to construction and relocate according to USF&WS protocol any individuals in the construction area. A qualified biologist (knowledgeable of steelhead and tidewater goby) shall monitor project construction in critical times, (during de-watering of the creek, or installation/removal of pipes in the creek). Monitoring would be performed every week at the beginning of construction and every other week after completion of project construction.				

MITIGATION MEASURE	PARTY RESPONSIBLE FOR IMPLEMENTATION	VERIFICATION		
		DATE	ACCOMPLISHED	COMMENTS
Design. Implement a design which causes no constriction to the creek bed, and hence no increase of water velocity compared to existing conditions.				
Flow Conditions. Create flow conditions conducive to the passage of steelhead through the length of the project on Mission Creek. Revegetation Plan. A final revegetation plan shall be prepared by a qualified biologist that indicates how plants and seeds will be collected and grown for the project, and defines success criteria and monitoring in more detail, and includes the following measures: • Invasive weeds (principally giant reed, castor beam, salt cedar, and sweet fennel) shall be removed mechanically or by spot application of herbicide if necessary • A temporary, above ground irrigation system shall be installed and maintained. • The growth rates of plantings installed as a part of this project shall be monitored biannually for five years or until vegetation has been established. If the plants do not meet pre-determined growth and survival rates, actions shall be taken to improve growing conditions such as fertilization, increased irrigation and replanting. Achieve 90% success of the planted vegetation at end of five years of planting, and ensure that vegetation survival rate is equivalent. If 90% success of the planted vegetation is not achieved after five years, the applicant would ensure achievement of 90% success of the planted vegetation.				
Bridge Railing. Bridge and restoration plans shall be subject to HLC review and approval to ensure that they are compatible with the proposed West Beach Historic District,				

MITIGATION MEASURE	PARTY RESPONSIBLE FOR IMPLEMENTATION	VERIFICATION		
		DATE	ACCOMPLISHED	COMMENTS
photo documentation of the existing railing and installation of a plaque that commemorates the location and configuration of the existing bridge.				
Archive Plans and Photos. Prior to demolition, the bridge will be recorded in accordance with the National Park Service guidelines for Historic American Engineering Record (HAER) documentation. The documentation will include historic research, a narrative report of the history of the bridge, and photo documentation of the bridge. The HAER document will be submitted to the Library of Congress.				
Railroad Depot Sandstone Channel Wall, Depot Park, and Potter Pedestrian Bridge. The sandstone wall forming the channel adjacent to the bridge abutments, Depot Park and the Potter Hotel pedestrian bridge shall be protected in place and if any inadvertent damage to this wall, park or the pedestrian bridge occurs during construction the wall and/or bridge and/or park shall be restored to their existing configuration.				
Bridge Foundation and Structure Design. The foundation and bridge design shall follow the specifications for type and configuration of foundation and structure in the Final Foundation Report and Bridge Engineers design recommendations.				
Hazardous Materials Abatement. Implementation of a lead abatement plan meeting Federal and State standards shall be required to ensure that the materials on the site are sampled and tested as they are exposed during construction and that hazardous materials identified including the lead containing paint on the bridge railing and cross braces is removed and disposed of in a manner that				

MITIGATION MEASURE	PARTY RESPONSIBLE FOR IMPLEMENTATION	VERIFICATION		
		DATE	ACCOMPLISHED	COMMENTS
does not allow the lead based paint to contaminate the environment. During demolition sampling of materials suspected to contain asbestos of lead shall be conducted. If hazardous materials are present they shall be handled and disposed of according to existing laws.				
Construction Notice. At least 20 days prior to commencement of construction, the contractor shall provide written notice to all property owners and residents within 450 feet of the project area. The notice shall contain a description of the proposed project, a construction schedule including days and hours of construction, the name and phone number of the Project Environmental Coordinator (PEC) who can answer questions, and provide additional information or address problems that may arise during construction. A 24-hour construction hot line shall be provided. Informational signs with the PEC's name and telephone number shall also be posted at the site.				
Construction Hours. Noise-generating construction activities (which may include preparation for construction work) shall be permitted weekdays between the hours of 8:00 a.m. and 5:00 p.m., excluding holidays observed by the City as legal holidays: New Year's Day (January 1st); Martin Luther King Jr.'s Birthday (3rd Monday in January); President's Day (3rd Monday in February); Memorial Day (Last Monday in May); Independence Day (July 4th); Labor Day (1st Monday in September); Thanksgiving Day (4th Thursday in November); Day Following Thanksgiving Day (Friday following Thanksgiving); Christmas Day (December 25th). *When a holiday falls on a Saturday or Sunday, the preceding Friday or following Monday respectively shall be				

MITIGATION MEASURE	PARTY RESPONSIBLE FOR IMPLEMENTATION	VERIFICATION		
		DATE	ACCOMPLISHED	COMMENTS
observed as a legal holiday. Occasional night work may be approved for the hours between 5 p.m. and 8 a.m. by the Chief of Building and Zoning per Section 9.13.015 of the Municipal Code) between the hours of 5 p.m. and 8 a.m. weekdays In the event of such night work approval, the applicant shall provide written notice to all property owners and residents within 450 feet of the project property boundary and the City Planning and Building Divisions at least 48 hours prior to commencement of any night work. Night work shall not be permitted on weekends and holidays.				
Construction Equipment Sound Control. All construction equipment, including trucks, shall be professionally maintained and fitted with standard manufacturers' muffler and silencing devices. Any pumps used for dewatering shall be enclosed in a noise barrier designed to reduce noise from pumps to 55 dBA (CNEL 60 dBA) at the nearest residential property line.				
Sound Barriers. As determined necessary by the Planning Division, the project shall employ sound control devices and techniques such as noise shields and blankets during the construction period to reduce the level of noise due to pile insertion to adjacent residents.				
Condition Documentation. Prior to commencement of demolition the applicant shall document the existing condition of structures within 100 feet of pile insertion points to document the condition of those structures prior to commencement of heavy vibration events if the impact-hammer type pile insertion method is selected. Any damage caused by project construction shall result in				

MITIGATION MEASURE	PARTY RESPONSIBLE FOR IMPLEMENTATION	VERIFICATION		
		DATE	ACCOMPLISHED	COMMENTS
compensation to the owner of the damaged structure.				
Impact Noise. Specify in the construction documents and require the contractor to exercise due diligence to prevent unnecessary repetitive metal on metal impacts during pile insertion.				
Recycling. The project shall recycle as much construction waste as feasible				
Construction Traffic. The haul routes for all construction-related trucks, three tons or more, entering or exiting the site, shall be approved by the Transportation Engineer. Construction-related truck trips shall not be scheduled during peak hours (7:00 a.m. to 9:00 a.m. and 4:00 p.m. to 6:00 p.m.) to help reduce truck traffic and noise on adjacent streets and roadways. The route of construction-related traffic shall be established to minimize trips through surrounding residential neighborhoods.				
Construction Parking. Construction parking and vehicle/equipment/materials storage shall be provided as follows: A. During construction, free parking spaces for construction workers shall be provided on-site or off-site in a location subject to the approval of the Transportation and Parking Manager. B. On-site or off-site storage shall be provided for construction materials, equipment, and vehicles.				
Drainage and Water Quality. Project plans for grading, drainage, stormwater facilities, and project development shall be subject to review and				

MITIGATION MEASURE	PARTY RESPONSIBLE FOR IMPLEMENTATION	VERIFICATION		
		DATE	ACCOMPLISHED	COMMENTS
approval by the Public Works Department per City regulations, including the Storm Water Management Plan (SWMP) and *Regional Water Quality Control Board* waste discharge permit.. Sufficient engineered design and adequate measures shall be employed to ensure that no substantial construction-related or long-term effects from increased runoff, erosion and sedimentation, urban water quality pollutants, or groundwater pollutants would result from the project. Prior to commencement of construction, a Storm Water Pollution Prevention Plan (SWPPP) shall be prepared for implementation during construction that incorporates all feasible Best Management Practices (BMPs) to reduce erosion from construction activities, to minimize the discharge of sediment during storm events, and to eliminate the discharge of non-stormwater pollutants to the maximum extent possible. The following measures shall be incorporated into the project SWPPP, which must meet state NPDES General Construction Permit requirements: • Temporary stockpiles at the project site shall be protected from erosion by the combined use of temporary berms around the perimeter, perimeter interceptor ditches, and temporary downstream catchments as necessary and appropriate. • Stockpiles that are present during the winter season shall be protected from erosion due to direct precipitation or runoff during the winter by				

MITIGATION MEASURE	PARTY RESPONSIBLE FOR IMPLEMENTATION	VERIFICATION		
		DATE	ACCOMPLISHED	COMMENTS
the use of surface stabilization (such as erosion control blankets). • Sediment filters/barriers will be constructed along the perimeter of the work area above Mission Creek to prevent sheet flow from discharging sediment into Mission Creek. Protection measures shall remain in place and be maintained in good condition until all disturbed soil areas are permanently stabilized by installation and establishment of landscaping, grass, mulching, or are otherwise covered and protected from erosion. • The SWPPP must include a contingency plan to protect the exposed work site during the winter months in the event of high runoff in the creek. • BMPs to prevent discharge of construction materials, contaminants, wash-water, concrete, fuels, and oils that include the following measures: ➢ Ensure that all construction vehicles and equipment are properly maintained (off-site) to prevent leaks of fuel, oil, and other vehicle fluids. ➢ Refuel only in bermed areas with impermeable surfaces at least 50 feet from the creek or culvert. ➢ Implement measures and provide materials to contain any accidental spills or leakage during the fueling of construction equipment at the site. ➢ Place all stored fuel, lubricants, paints, and other construction liquids in secured and covered containers within a bermed or otherwise contained area at least 200 feet from the creek.				

MITIGATION MEASURE	PARTY RESPONSIBLE FOR IMPLEMENTATION	VERIFICATION		
		DATE	ACCOMPLISHED	COMMENTS
➢ Prohibit equipment washing and major maintenance at the project site except at the construction staging area. Prohibit concrete washout except at the construction staging area. Concrete washout water shall be collected and stored in an onsite Baker tank to be properly disposed of off site. Place berms around the active work area on the road when installing piles through the roadbed during the winter to capture any construction debris or concrete in the event of rainfall; place sandbag or straw bale barriers at all storm drain inlets near the work area to capture any site runoff during winter construction. Remove all refuse and construction debris from the site as soon as possible. ➢ During concrete pours, the contractor shall have a qualified monitor present to measure pH within any standing water adjacent to the pour. The monitor will have onsite suitable material such as acid to neutralize contaminated water. A Storm Inspection Program. During extended storm events, inspections must be made during each 24-hour period focusing on times when high floods are predicted. The goals of these inspections are: 1) to identify areas contributing to a storm water discharge, 2) to evaluate whether measures to reduce pollutant loadings identified in the SWPPP are adequate and properly installed and functioning in accordance with the terms of the General Permit, and 3) whether additional control practices or corrective maintenance activities are needed. Equipment, materials, and workers must be available for rapid response to failures and emergencies. All corrective				

MITIGATION MEASURE	PARTY RESPONSIBLE FOR IMPLEMENTATION	VERIFICATION		
		DATE	ACCOMPLISHED	COMMENTS
maintenance to BMPs shall be performed as soon as possible, depending upon worker safety. Each discharger shall certify annually that the construction activities are in compliance with the requirements of the RWQCB General Permit. Dischargers who cannot certify annual compliance shall notify the appropriate RWQCB.				

8/19/2010 2:19:23 PM

Urbemis 2007 Version 9.2.4

Combined Annual Emissions Reports (Tons/Year)

File Name: C:\Documents and Settings\mberman\Application Data\Urbemis\Version9a\Projects\Chapala -Yanonali Bridge.urb924

Project Name: Replace ChapalaYanonali Street Bridge over Mission Creek

ject Location: Santa Barbara County APCD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

EXHIBIT C

8/19/2010 2:19:23 PM

Summary Report:

CONSTRUCTION EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM10	PM2.5 Dust	PM2.5 Exhaust	PM2.5	CO2
2012 TOTALS (tons/year unmitigated)	0.64	6.05	2.55	0.00	0.00	0.27	0.28	0.00	0.25	0.25	867.47
2012 TOTALS (tons/year mitigated)	0.64	6.05	2.55	0.00	0.00	0.27	0.28	0.00	0.25	0.25	867.47
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (tons/year, unmitigated)	0.02	0.01	0.15	0.00	0.00	0.00	11.93

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (tons/year, unmitigated)	0.02	0.01	0.11	0.00	0.01	0.00	7.58

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (tons/year, unmitigated)	0.04	0.02	0.26	0.00	0.01	0.00	19.51

Construction Unmitigated Detail Report:

CONSTRUCTION EMISSION ESTIMATES Annual Tons Per Year, Unmitigated

ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM10	PM2.5 Dust	PM2.5 Exhaust	PM2.5	CO2

8/19/2010 2:19:23 PM

2012	0.64	6.05	2.55	0.00	0.00	0.27	0.28	0.00	0.25	0.25	867.47
Demolition 06/03/2012-06/08/2012	0.01	0.09	0.06	0.00	0.00	0.01	0.01	0.00	0.01	0.01	9.57
Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Demo Off Road Diesel	0.01	0.08	0.06	0.00	0.00	0.01	0.01	0.00	0.01	0.01	8.39
Demo On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.75
Demo Worker Trips	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.43
Building 06/09/2012-11/09/2012	0.63	5.95	2.47	0.00	0.00	0.26	0.26	0.00	0.24	0.24	856.17
Building Off Road Diesel	0.63	5.95	2.47	0.00	0.00	0.26	0.26	0.00	0.24	0.24	856.17
Building Vendor Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Asphalt 11/10/2012-11/14/2012	0.00	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.72
Paving Off-Gas	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	0.00	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.47
Paving On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03
Paving Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.22

Phase Assumptions

Phase: Demolition 6/3/2012 - 6/8/2012 - Remove Bridge Deck and abutment

Building Volume Total (cubic feet): 13500

Building Volume Daily (cubic feet): 2700

On Road Truck Travel (VMT): 75

Off-Road Equipment:

2 Air Compressors (120 hp) operating at a 1 load factor for 8 hours per day

1 Concrete/Industrial Saws (10 hp) operating at a 0.73 load factor for 8 hours per day

1 Cranes (120 hp) operating at a 0.5 load factor for 8 hours per day

1 Excavators (175 hp) operating at a 1 load factor for 8 hours per day

8/19/2010 2:19:23 PM

1 Rough Terrain Forklifts (120 hp) operating at a 0.5 load factor for 8 hours per day

1 Rubber Tired Dozers (357 hp) operating at a 0.59 load factor for 1 hours per day

1 Tractors/Loaders/Backhoes (120 hp) operating at a 0.75 load factor for 6 hours per day

Phase: Paving 11/10/2012 - 11/14/2012 - Repave roadway surface

Acres to be Paved: 0.09

Off-Road Equipment:

4 Cement and Mortar Mixers (10 hp) operating at a 0.56 load factor for 6 hours per day

1 Pavers (100 hp) operating at a 0.62 load factor for 7 hours per day

1 Rollers (95 hp) operating at a 0.56 load factor for 7 hours per day

1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 7 hours per day

Phase: Building Construction 6/9/2012 - 11/9/2012 - Construct new bridge foundation, abutmetns and Construct new foundation, abutment and deck

Off-Road Equipment:

1 Air Compressors (120 hp) operating at a 1 load factor for 8 hours per day

1 Bore/Drill Rigs (120 hp) operating at a 1 load factor for 8 hours per day

1 Cranes (120 hp) operating at a 0.25 load factor for 8 hours per day

1 Dumpers/Tenders (250 hp) operating at a 1 load factor for 8 hours per day

1 Forklifts (120 hp) operating at a 0.5 load factor for 8 hours per day

1 Other Equipment (250 hp) operating at a 8 load factor for 8 hours per day

1 Tractors/Loaders/Backhoes (120 hp) operating at a 0.6 load factor for 8 hours per day

8/19/2010 2:19:23 PM

Construction Mitigated Detail Report:

CONSTRUCTION EMISSION ESTIMATES Annual Tons Per Year, Mitigated

	ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM10	PM2.5 Dust	PM2.5 Exhaust	PM2.5	CO2
2012	0.64	6.05	2.55	0.00	0.00	0.27	0.28	0.00	0.25	0.25	867.47
Demolition 06/03/2012-06/08/2012	0.01	0.09	0.06	0.00	0.00	0.01	0.01	0.00	0.01	0.01	9.57
Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Demo Off Road Diesel	0.01	0.08	0.06	0.00	0.00	0.01	0.01	0.00	0.01	0.01	8.39
Demo On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.75
Demo Worker Trips	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.43
Building 06/09/2012-11/09/2012	0.63	5.95	2.47	0.00	0.00	0.26	0.26	0.00	0.24	0.24	856.17
Building Off Road Diesel	0.63	5.95	2.47	0.00	0.00	0.26	0.26	0.00	0.24	0.24	856.17
Building Vendor Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Asphalt 11/10/2012-11/14/2012	0.00	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.72
Paving Off-Gas	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	0.00	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.47
Paving On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03
Paving Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.22

Construction Related Mitigation Measures

8/19/2010 2:19:23 PM

Area Source Unmitigated Detail Report:

AREA SOURCE EMISSION ESTIMATES Annual Tons Per Year, Unmitigated

Source	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
Natural Gas	0.00	0.01	0.01	0.00	0.00	0.00	11.68
Hearth	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Landscape	0.01	0.00	0.14	0.00	0.00	0.00	0.25
Consumer Products	0.00						
Architectural Coatings	0.01						
TOTALS (tons/year, unmitigated)	0.02	0.01	0.15	0.00	0.00	0.00	11.93

Area Source Changes to Defaults

Operational Unmitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Annual Tons Per Year, Unmitigated

Source	ROG	NOX	CO	SO2	PM10	PM25	CO2
Transporation Facility	0.02	0.01	0.11	0.00	0.01	0.00	7.58
TOTALS (tons/year, unmitigated)	0.02	0.01	0.11	0.00	0.01	0.00	7.58

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2012 Season: Annual

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

8/19/2010 2:19:24 PM

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Transporation Facility		1.00	1000 sq ft	8.00	8.00	45.60
					8.00	45.60

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	46.3	0.9	98.7	0.4
Light Truck < 3750 lbs	16.6	1.8	95.2	3.0
Light Truck 3751-5750 lbs	20.4	0.5	99.5	0.0
Med Truck 5751-8500 lbs	7.5	0.0	100.0	0.0
Lite-Heavy Truck 8501-10,000 lbs	1.5	0.0	73.3	26.7
Lite-Heavy Truck 10,001-14,000 lbs	1.0	0.0	60.0	40.0
Med-Heavy Truck 14,001-33,000 lbs	1.1	0.0	27.3	72.7
Heavy-Heavy Truck 33,001-60,000 lbs	0.3	0.0	33.3	66.7
Other Bus	0.1	0.0	0.0	100.0
Urban Bus	0.1	0.0	0.0	100.0
Motorcycle	3.7	56.8	43.2	0.0
School Bus	0.2	0.0	0.0	100.0
Motor Home	1.2	0.0	91.7	8.3

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	9.9	5.6	6.1	5.7	4.1	5.7

8/19/2010 2:19:24 PM

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Rural Trip Length (miles)	15.0	15.0	15.0	15.0	10.0	10.0
Trip speeds (mph)	35.0	35.0	35.0	35.0	35.0	35.0
% Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
Transporation Facility				100.0	0.0	0.0

Operational Changes to Defaults