Meeting Date: 02/26/24
Application Number: 2421
Staff: J. Holt

Staff Report 46

APPLICANT:

City of Sacramento, a California municipal corporation

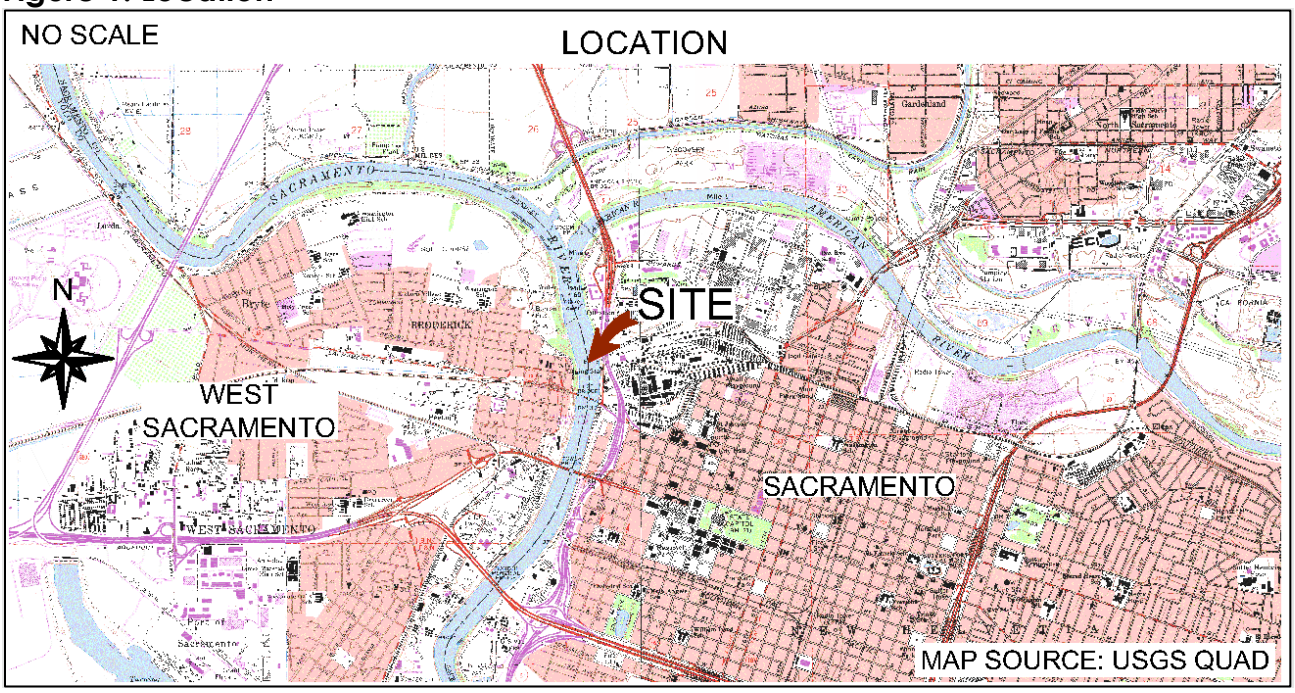
PROPOSED ACTION:

Issuance of General Lease – Public Agency Use.

AREA, LAND TYPE, AND LOCATION:

Sovereign land in the Sacramento River, adjacent to and within Assessor's Parcel Numbers 002-0010-018 and 002-0010-023 in Sacramento County and adjacent to Assessor's Parcel Numbers 010-102-005, 010-102-003, and 010-102-010 in Yolo County (as shown in Figure 1).

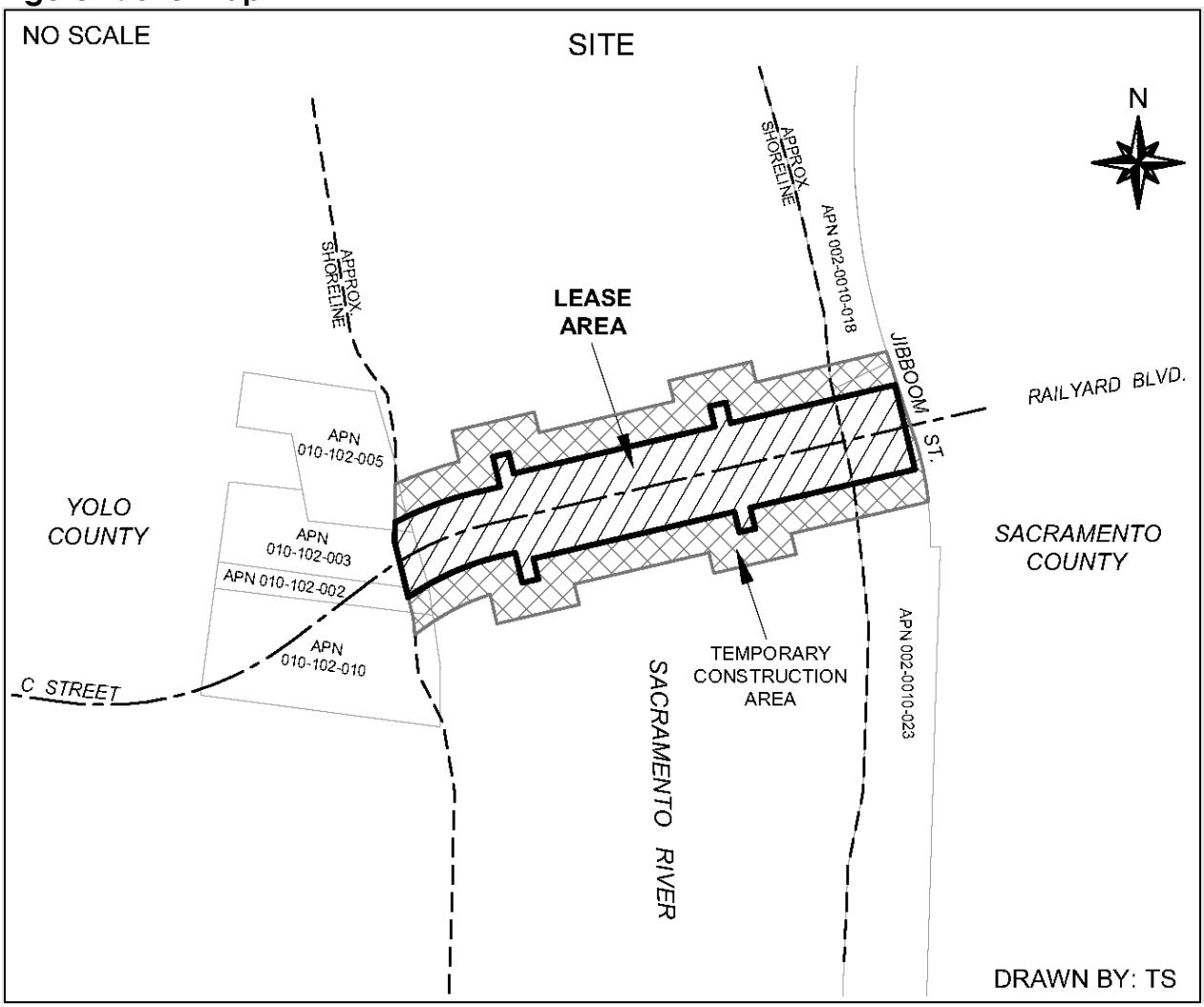
Figure 1. Location



AUTHORIZED USE:

Construction, use, and maintenance of a new vehicle bridge with bicycle and pedestrian lanes; and use of a temporary construction area (as shown in Figure 2).

Figure 2. Site Map



NOTE: This depiction of the lease premises is based on unverified information provided by the Applicant or other parties and is not a waiver or limitation of any State interest in the subject or any other property.

TERM:

20 years, beginning February 26, 2024.

CONSIDERATION:

The public use and benefit, with the State reserving the right at any time to set a monetary rent if the Commission finds such action to be in the State's best interest.

SPECIFIC LEASE PROVISIONS:

- Lessee shall indemnify, hold harmless, and, at the option of Lessor, defend Lessor from all damages, injuries, or claims arising from the construction, maintenance, or operation of Lessee's facilities on State land, including any attached, suspended, or otherwise fixed to the improvements.
- Lessee shall not install, attach, or authorize the placement or expansion of any other improvements on the bridge or within the Lease Premises without Lessor's prior review and approval.
- Lessee shall place warning signage or buoys clearly visible from the shore and in the water both upstream and downstream of the construction site to provide notice of the bridge project, and to advise the public to exercise caution. Lessee shall notify the California Department of Parks and Recreation's Division of Boating and Waterways of the location, description, and purpose of such signage or buoys upon installation and removal.
- Lessee agrees and acknowledges that the hazards associated with sea level rise and climate change may require additional maintenance or protection strategies regarding the improvements on the Lease Premises.
- Within 60 days of completing the construction of authorized improvements, Lessee will provide Lessor with photographs and a set of "as built" plans that show where the improvements have been placed. Lessor shall then replace Lease Exhibit A (Land Description) and Lease Exhibit B (Site and Location Map) to this Lease as necessary to accurately reflect the final location of the authorized improvements. Once approved by Lessor's Executive Officer or designee, the revised Exhibits shall replace the Exhibits incorporated in this Lease as though fully set forth herein.
- Lessee, or its qualified contractor, shall conduct an external inspection and condition assessment of the Lease Improvements at least once every 2 years, performed by a licensed engineer. Upon request by Lessor, Lessee shall provide electronic copies of reports to Commission staff for review.

STAFF ANALYSIS AND RECOMMENDATION:

AUTHORITY:

Public Resources Code sections 6005, 6216, 6301, 6501.1, and 6503; California Code of Regulations, title 2, sections 2000 and 2003.

PUBLIC TRUST AND STATE'S BEST INTERESTS:

In November 2023, the Applicant submitted a lease application for the I Street Bridge Replacement Project. A portion of the Project will be located on state sovereign land in the Sacramento River (River) and on two upland parcels immediately adjacent to the River in Sacramento County that the State owns and is under the Commission's jurisdiction. The Applicant has applied for a General Lease – Public Agency Use for the construction, use, and maintenance of a new vehicle bridge with bicycle and pedestrian lanes crossing the River, between Sacramento and West Sacramento, and use of a temporary construction area in and adjacent to the River.

The Applicant is the lead implementing agency, owner, and maintenance coordinator for the proposed bridge. According to the Applicant, the City of West Sacramento will share in the maintenance costs. After completion of construction, the bridge will be inspected by the California Department of Transportation (Caltrans) at regular intervals. The proposed bridge will serve as an east-west connector between Sacramento County and Yolo County. The bridge would be constructed approximately 1,000 feet north of the existing I Street Bridge, adjacent to APNs 002-0010-018 and 002-0010-023 in Sacramento County and APNs 010-102-005, 010-102-003, and 010-102-010 in Yolo County (Figure 2). According to the Applicant, the Project includes a new approximately 860-foot vehicle bridge, consisting of two vehicle lanes, on-street Class II bike lanes, and sidewalks on both sides. The bridge would include two fixed-span approach structures, approximately 200-feet and 270-feet in length, that tie into the Sacramento and West Sacramento banks of the River, respectively. The center span of the bridge would be an approximately 330-foot movable span that meets the U.S. Coast Guard requirements for vessel passage. The full project also includes roadway improvements on Railyards Boulevard in Sacramento and C Street in West Sacramento (outside of the Commission's jurisdiction). Vehicle and pedestrian traffic would be removed from the existing I Street Bridge after construction of the proposed bridge. The existing approach structures for Jibboom Street, I Street, and

J Street in the City of Sacramento and C Street in the City of West Sacramento would be demolished (outside of the Commission's jurisdiction).

The existing I Street Bridge would remain in place for railroad use, with the upper deck potentially adapted to pedestrian and bicycle use, as analyzed in the Mitigated Negative Declaration (State Clearinghouse No. 2022100319) adopted by the City of West Sacramento on March 15, 2023 for the I Street Bridge Deck Conversion for Active Transportation project. This is a separate proposed project from the City of Sacramento's Bridge Replacement Project, which would be considered by separate Commission action if needed.

The proposed bridge will provide critical infrastructure for transportation and use by the public. The bridge will be open for vehicle navigation, bicycle, and pedestrian use. The bridge will accommodate a diverse range of commercial and non-commercial vehicles. Based on its movable features, the bridge will allow boats of various sizes to navigate the River. The bridge will include conduits for communications and bridge operations but no other attached utilities based on its movable features. These features will satisfy the vertical clearance and River navigation requirements of the U.S. Coast Guard. The project activities are expected to begin in 2024, once all permits and authorizations are obtained from regulatory agencies. All in-water work within the Sacramento River will occur between May 1 and November 30 to minimize or avoid potential impacts on special-status fish species. The project activities are estimated to conclude by 2030. Public information notices will be provided to the local community in advance of construction activities. Buoys and signage will direct boating traffic through the construction area. The Project will not substantially interfere with public use and access to the waterway.

According to the Applicant, the proposed bridge will offer significant public benefits to the Statewide public which include but are not limited to reduction of traffic congestion; improvement of roadway and freeway operations and safety; for multiple modes of transportation; and compliance with current American Association of State Highway and Transportation Officials, Caltrans, and local agency design standards. Additionally, the Project will include pedestrian and bicycle lanes which meet the Americans with Disabilities Act requirements and facilitate connections to and from the new crossing and the Sacramento River Parkway and the Riverfront Park trails.

Promotion of public access to and use of California's navigable waters is a mandate of the California Constitution (article X, section 4), a condition of

statehood in the Act of Admission of the State of California into the Union (9 Stat. 452, Sept. 9, 1850), and a responsibility of all involved public agencies pursuant to the common law Public Trust Doctrine. Often the most logical location for access to a waterway is where a bridge crosses it. Kayakers, rafters, and others may legally utilize the public access easements around bridges to enter and exit navigable waterways. With those factors in mind, the Legislature adopted three code sections in 1972 to facilitate increased public access around bridges (Sts. & Hy. Code, §§ 84.5, 991, and 1809). All state or county highway projects and all city street projects that propose construction of a new bridge over a navigable waterway must consider, and report on, the feasibility of providing public access for recreational purposes to the waterway before the bridge is constructed. These code provisions apply to state agencies and city and county governments that approve bridge construction projects.

The Applicant conducted a Public Access Feasibility Study (Study) to comply with the Streets and Highways Code noted above. The Study included public outreach, research, data analysis, and conclusions/findings. In the City of Sacramento, the Study identified existing public access points to the River as: Tiscornia Park and parking lot, Sacramento River Parkway, and Old Sacramento Public Boat Docks. In the City of West Sacramento, the Study noted existing public access points as: River Walk Park and River Walk Trail, Broderick Boat Ramp and Parking Lot, and Etenesh Zeleke Public Dock. The Study concluded that it was not feasible to construct new public access to the River within the city right-of-way at the new bridge location based on the existing levees, the steep riverbank slopes, and the existing built out roadway network at the proposed bridge site. However, after the proposed construction, visitors may utilize the existing areas of public access around the bridge to access the River. The proposed lease includes certain provisions protecting the public use of the proposed lease area. Furthermore, the proposed lease will not substantially interfere with Public Trust uses in this area. The bridge will not limit access to adjacent marinas and boat launch facilities such as the Broderick Boat Launch in West Sacramento. The public will enjoy continued use of the River for recreational Public Trust activities.

The Lessee shall indemnify, hold harmless, and, at the option of Lessor, defend Lessor from all damages, injuries, or claims arising from the construction, use, maintenance, and operation of Lessee's improvement, including those attached, suspended, or otherwise fixed to the Lessee improvement.

The proposed lease does not alienate the State's fee simple interest or permanently impair public rights. The lease is limited to a 20-year term, does not grant the lessee

exclusive rights to the lease premises, and reserves an easement for Public Trust consistent uses. Upon termination of the lease, the lessee may be required to remove all improvements from State land and restore the lease premises to their original condition. The proposed lease requires the lessee to indemnify the State for any liability incurred as a result of the lessee's activities thereon.

CLIMATE CHANGE:

Climate change impacts, including sea level rise, more frequent and intense storm events, and increased flooding and erosion, affect both open coastal areas and inland waterways in California. The facilities are located on the Sacramento River, in a tidally influenced site vulnerable to flooding at current sea levels and at a higher risk of flood exposure given projected scenarios of sea level rise.

The California Ocean Protection Council updated the *State of California Sea-Level Rise Guidance in 2018* to provide a synthesis of the best available science on sea level rise projections and rates. Commission staff evaluated the "high emissions," "medium-high risk aversion" scenario to apply a conservative approach based on both current emission trajectories and the lease location and structures. The San Francisco tide gauge was used for the projected sea level rise scenario for the region as listed in Table 1 (below).

Table 1. Projected Sea Level Rise for San Francisco

Year	Projection (feet)
2030	0.8
2040	1.3
2050	1.9
2100	6.9

Source: Table 13, State of California Sea-Level Rise Guidance: 2018 Update
Note: Projections are with respect to a 1991 to 2009 baseline.

This effect could increase the Sacramento River's inundation levels within the lease area. In addition, as stated in the *Safeguarding California Plan: 2018 Update* (California Natural Resources Agency 2018), climate change is projected to increase the frequency and severity of natural disasters related to flooding, fire, drought, extreme heat, and storms (especially when coupled with sea level rise). In rivers and tidally influenced waterways, more frequent and powerful storms can result in increased flooding conditions and damage from storm-created debris as well as decreased bank stability and structure. Conversely, climate change induced droughts could decrease river levels and flow for extended periods of

time. Climate change and sea level rise will further influence riverine areas by changing erosion and sedimentation rates. Flooding and storm flow, as well as runoff, will likely increase scour and decrease bank stability at a faster rate.

The new bridge with bicycle and pedestrian lanes would have a typical clearance between 28 and 31 feet from the ordinary River levels to the low steel when the bridge is in the closed/down position, and therefore increased water levels associated with climate change-induced sea level rise would not impact the bridge and public's use of the bridge connecting the City of Sacramento with the City of West Sacramento. The bridge structures in the water would be fixed and therefore more vulnerable to sea level rise and more frequent flood events. These structures may need additional fortification or repair and maintenance to ensure they do not become dislodged or degraded, as they could pose risks to public safety and navigation.

The bank is heavily vegetated, which provides additional stability and will reduce the amount of erosion and scour pressure experienced during future events because of the vegetation's underground root system. However, the bank remains at risk of accelerated deterioration from currents and floods and an alternative bank protection strategy, such as bank restoration, may be required in the future to protect the anchoring points of the bridge in the lease premise and reduce flood impacts to the upland parcel (not within the lease area).

Regular maintenance, as referenced in the lease, may reduce the likelihood of severe structural degradation and dislodgement. Pursuant to the proposed lease, the Applicant acknowledges that the lease premises and adjacent upland are in an area that may be subject to the effects of climate change, including sea level rise.

CONCLUSION:

For all the reasons above, staff believes the issuance of the proposed lease will not substantially interfere with the Public Trust rights to navigation, fishing, and commerce; or substantially interfere with Public Trust needs and values at this location, at this time, and for the term of the proposed lease; and is in the best interests of the State.

OTHER PERTINENT INFORMATION:

1. Approval or denial of the application is a discretionary action by the Commission. Each time the Commission approves or rejects a use of sovereign land, it exercises legislatively delegated authority and responsibility as trustee of the State's Public Trust lands as authorized by law. If the Commission does not authorize the lease, the Applicant may not conduct the proposed project activities within lands under the Commission's jurisdiction. The Applicant has no right to a new lease or to renewal of any previous lease.

2. This action is consistent with the "Meeting Evolving Public Trust Needs" and "Leading Climate Activism" Strategic Focus Areas of the Commission's 2021 – 2025 Strategic Plan.

3. An Environmental Impact Report (EIR), State Clearinghouse No. 2014092069, was prepared for this project by the City of Sacramento (City) and certified on June 25, 2019. As part of its project approval, the City made a California Environmental Quality Act (CEQA) Findings of Fact and Statement of Overriding Considerations and adopted a Mitigation Monitoring Plan.

   Staff has reviewed these documents and prepared an independent Mitigation Monitoring Program (MMP) (attached, Exhibit A). The City's Final EIR, Mitigation Monitoring Plan, CEQA Findings of Fact, Statement of Overriding Considerations, and Appendix D of the Final EIR (*Avoidance, Minimization and/or Mitigation Summary*) were used to identify potential impacts, mitigation measures (MMs), and avoidance and minimization measures (AMMs) under the Commission's jurisdiction. The City remains responsible for ensuring that implementation of the measures occurs in accordance with its program. Staff recommends adoption of Exhibit A by the Commission.

   Staff also prepared Findings made in conformance with the State CEQA Guidelines (Cal. Code Regs., tit. 14, §§ 15091, 15096) contained in the attached Exhibit B.

   Staff determined that 5 potential resource areas would have impacts that are less than significant with implementation of mitigation measures. Staff also identified in the Findings that the project could cause potentially significant impacts to Biological Resources and Noise from demolishing the existing bridge's approach structures and building the replacement bridge, despite the implementation of all applicable measures. Staff prepared a Statement of Overriding Considerations made pursuant to the State CEQA Guidelines (Cal.

Code Regs., tit. 14, § 15093) that balances the benefits of the project against its unavoidable impacts and finds that the potential impacts are acceptable in light of the project benefits. Staff recommends the Commission adopt the Findings and Statement of Overriding Considerations contained in the attached Exhibit B.

4. This activity involves lands identified as possessing significant environmental values pursuant to Public Resources Code section 6370 et seq., but such activity will not affect those significant lands. Based upon participation from the agency nominating such lands through the CEQA review and permitting process, it is staff's opinion that the project, as proposed, is consistent with its use classification.

APPROVALS OBTAINED:

- California Department of Transportation
- National Marine Fisheries Service

APPROVALS REQUIRED:

- City of West Sacramento
- U.S. Army Corps of Engineers
- U.S. Fish and Wildlife Service
- California Department of Fish and Wildlife
- State Water Resources Control Board
- Central Valley Regional Water Quality Control Board
- Central Valley Flood Protection Board
- Sacramento Area Flood Control Agency
- West Sacramento Area Flood Control Agency
- Sacramento Metropolitan Air Quality Management District
- Yolo-Solano Air Quality Management District

EXHIBITS:

A. Mitigation Monitoring Program

B. Statement of Findings and Statement of Overriding Considerations

RECOMMENDED ACTION:

It is recommended that the Commission:

CEQA FINDING:

Find that an EIR, State Clearinghouse No. 2014092069, was prepared for this project by the City of Sacramento and certified on June 25, 2019, and that the Commission has reviewed and considered the information contained therein.

Adopt the Mitigation Monitoring Program, as contained in the attached Exhibit A.

Adopt the Findings, made in conformance with California Code of Regulations, title 14, sections 15091 and 15096, subdivision (h), as contained in the attached Exhibit B.

Adopt the Statement of Overriding Considerations made in conformance with California Code of Regulations, title 14, section 15093, as contained in the attached Exhibit B.

SIGNIFICANT LANDS INVENTORY FINDING:

Find that this activity is consistent with the use classification designated by the Commission for the land pursuant to Public Resources Code section 6370 et seq.

PUBLIC TRUST AND STATE'S BEST INTERESTS:

Find that the proposed lease will not substantially impair the public rights to navigation or substantially interfere with the Public Trust needs and values at this location, at this time, and for the term of the proposed lease; and is in the best interests of the State.

AUTHORIZATION:

1. Authorize issuance of a General Lease – Public Agency Use to the Applicant, beginning February 26 , 2024, for a term of 20 years, for the construction, use, and maintenance of a new vehicle bridge with bicycle and pedestrian lanes;

and use of a temporary construction area; consideration: the public use and benefit, with the State reserving the right at any time to set a monetary rent if the Commission finds such action to be in the State's best interests.

2. Authorize the Executive Officer or designee to replace exhibits in the lease upon submission, review, and approval of as-built plans detailing the final location of the new improvements, and to remove the temporary construction area, following construction.

EXHIBIT A
CALIFORNIA STATE LANDS COMMISSION
MITIGATION MONITORING PROGRAM
I STREET BRIDGE REPLACEMENT PROJECT
(A2421, State Clearinghouse No. 2014092069)

The California State Lands Commission (Commission or CSLC) is a responsible agency under the California Environmental Quality Act (CEQA) for the I Street Bridge Replacement Project (Project). The CEQA lead agency for the Project is the City of Sacramento (City).

In conjunction with approval of this Project, the Commission adopts this Mitigation Monitoring Program (MMP) for the implementation of mitigation measures for the portion(s) of the Project located on State lands. The purpose of an MMP is to impose feasible measures to avoid or substantially reduce the significant environmental impacts from a project identified in an Environmental Impact Report (EIR) or a Mitigated Negative Declaration (MND). State CEQA Guidelines section 15097, subdivision (a), states in part:

> *In order to ensure that the mitigation measures and project revisions identified in the EIR or negative declaration are implemented, the public agency shall adopt a program for monitoring or reporting on the revisions which it has required in the project and the measures it has imposed to mitigate or avoid significant environmental effects. A public agency may delegate reporting or monitoring responsibilities to another public agency or to a private entity which accepts the delegation; however, until mitigation measures have been completed the lead agency remains responsible for ensuring that implementation of the mitigation measures occurs in accordance with the program.*

The lead agency certified an EIR, State Clearinghouse No. 2014092069, adopted a Mitigation Monitoring Plan and Appendix D: Avoidance, Minimization and/or Mitigation Summary for the whole of the Project, and remains responsible for ensuring that implementation of the measures occurs in accordance with its program. The Commission's action and authority as a responsible agency apply only to the measures listed in Table A-1 below. The full text of each applicable Mitigation Measure (MM) is in Attachment A-1 and each applicable Avoidance, Minimization and/or Mitigation Measure (AMM) is in Attachment A-2. The text for each impact and measure is extracted from the following lead agency documents: Table S-3 (starting on page S-29 of the Final EIR); Mitigation Monitoring Plan; Appendix D: Avoidance, Minimization and/or Mitigation

Summary; and CEQA Findings of Fact and Statement of Overriding Considerations. Staff has numbered and reformatted the impacts as well as the MMs and AMMs from the lead agency's EIR for accessibility and convenience, but the text of each MM and AMM is intended to be identical to the text of the lead agency's MMs and AMMs in the Final EIR. Any conflict between the MMs in Attachment A-1 or the AMMs in Attachment A-2 and the Final EIR is inadvertent, and the text of the Final EIR controls.

Table A-1. Project Impacts and Applicable Measures

Potential Impact	**Mitigation Measure (MM) and Avoidance, Minimization and/or Mitigation Measure (AMM)**
VIS-1	MM BIO-4, MM VIS-1
VIS-2	MM VIS-2
AIR-1	MM AIR-1, AMM AIR-1
BIO-1	MMs BIO-1 through BIO-27, AMMs BIO-1 through BIO-5
BIO-2	MM BIO-10, MMs BIO-28 through BIO-32
BIO-3	MMs BIO-1 through BIO-4, MMs BIO-33 through BIO-35, AMMs BIO-4, BIO-5
BIO-4	MMs BIO-1 through BIO-3, MM BIO-5, AMMs BIO-1, BIO-2, BIO-4, BIO-5
BIO-5	MMs BIO-14 through BIO-19, MM BIO-21, AMMs BIO-1 BIO-2, BIO-4, BIO-5
BIO-6	MMs BIO-1 through BIO-4, MM BIO-33, AMM BIO-5
CUL-1	MM CUL-1
CUL-2	MMs CUL-2 through CUL-5
CUL-3	MM CUL-2, MM CUL-5
GEO-1	MM GEO-1, MM GEO-2
NOI-1, NOI-2, NOI-3	MM NOI-1, MM NOI-2, AMM NOI-1
REC-1	MM REC-1, MM REC-2

ATTACHMENT A-1

MITIGATION MEASURES ADOPTED AS PART OF THE CALIFORNIA STATE LANDS COMMISSION'S MITIGATION MONITORING PROGRAM

ATTACHMENT A-2

AVOIDANCE, MINIMIZATION AND/OR MITIGATION MEASURES ADOPTED AS PART OF CALIFORNIA STATE LANDS COMMISSION'S MITIGATION MONITORING PROGRAM

ATTACHMENT A-1 – MITIGATION MEASURES ADOPTED AS PART OF THE CALIFORNIA STATE LANDS COMMISSION'S MITIGATION MONITORING PROGRAM

The California State Lands Commission (Commission or CSLC) is the responsible agency under the California Environmental Quality Act (CEQA) for the I Street Bridge Replacement Project (Project). The CEQA lead agency for the Project is the City of Sacramento (City). A list of abbreviations and acronyms can be found in Section 1.2.8.

1.1 ENFORCEMENT AND COMPLIANCE

The City is responsible for enforcing the Mitigation Monitoring Program (MMP).

1.2 MITIGATION MONITORING PLAN (MMP)

The MMP contains Mitigation Measures to reduce or potentially avoid significant impacts to the following resource areas: Visual/Aesthetics; Air Quality; Biological Resources; Cultural Resources; Geology and Soils; Noise; and Recreation. In addition, Avoidance, Minimization and/or Mitigation Measures for Hazardous Waste/Materials and Utilities/Emergency Services have been adopted as part of the Commission's MMP and can be found in Attachment A-2. Project activities were found to have less than significant or no impacts to all other environmental resource areas; therefore, they are not included. The MMP includes the following information:

- **Potential Impact:** Impacts of the Project on the resource
- **Mitigation Measures (MMs):** Full MM(s) text below
- **Action(s)**: Action to be taken by the environmental monitor or Lead Agency
- **Implementing Party**: Entity responsible for compliance
- **Timing:** Before, during, or after construction
- **Monitoring Parties:** The City of Sacramento Department of Public Works is primarily responsible for ensuring that mitigation measures are successfully implemented. Within the City of Sacramento, a number of departments and divisions would have responsibility for monitoring some aspect of the overall project. Other agencies, such as the Sacramento Metropolitan Air Quality Management District, may also be responsible for monitoring the

implementation of mitigation measures. As a result, more than one monitoring party may be identified.

1.2.1 VISUAL/AESTHETICS (VIS)

Potential Impact: VIS-1: Changes in all visual assessment units have the potential to result in significant impacts resulting from vegetation removal.

MM BIO-4: **Compensate for Temporary Effects on and Permanent Loss of Cottonwood Riparian Forest [including SRA Cover].** (See Biological Resources impact section for full text.)

MM VIS-1: **Implement Project Landscaping.** The project proponent will install landscaping where space and safety considerations allow. This will improve the visual quality of the project corridor by improving corridor aesthetics and helping to reduce the apparent scale of new and reconfigured intersections, in addition to replacing some of the vegetation lost through construction. Prior to approval of the roadway design, the City of Sacramento and/or City of West Sacramento project landscape architect will review project designs to ensure that the following elements are implemented in the project landscaping plan.

- Design and implement low impact-development (LID) measures that disperse and reduce runoff by using such features as vegetated buffer strips/medians between paved areas that catch and infiltrate runoff. In addition, pervious paving will be evaluated for use in the proposed project to improve infiltration and to reduce the amount of surface runoff from entering waterways and the storm water system. LID measures will not be used where infiltration could result in adverse environmental effects. LID measures, such as cobbled swales and aggregate mulching, can be used as an aesthetic design element to create an attractive view while reducing water use.
- Require construction contractors to incorporate native grass and wildflower seed to standard seed mixes, which may be non-native, for erosion control measures that will be applied to all exposed slopes. Wildflowers will provide seasonal interest to areas where trees and shrubs are removed, and grasslands are disturbed. Only wildflower and grass species that are native will be incorporated into the seed mix, and under no circumstances will any invasive grass or wildflower plant species be used as any component in any erosion control measures. Species will be chosen that are indigenous to the area and for their appropriateness to the surrounding habitat. For example, upland grass and wildflower species

will be chosen for drier, upland areas, and wetter species will be chosen for areas that will receive more moisture. If not appropriate to the surrounding habitat, wildflowers should not be included in the seed mix.

- Require the species list to include trees, shrubs, and an herbaceous understory of varying heights, as well as both evergreen and deciduous types. Plant variety will increase the effectiveness of the roadside planting areas by providing multiple layers, seasonality, diverse habitat, and reduced susceptibility to disease. Evergreen groundcovers or low-growing plants, such as Ceanothus spp., should be used in areas where taller vegetation would potentially cause driving hazards by obscuring site distances. Species used will be native and indigenous to the project area and California. Native plant species can be used to create attractive spaces, high in aesthetic quality, that are not only drought-tolerant but also attract more wildlife than traditional landscape plant palettes. Use of native species promotes a visual character of California that is being lost through development and reliance on non-native ornamental plant species.
- Use vegetative accents and screening to reduce the perceived scale and mass of the built features, while accentuating the design treatments that will be applied to built features. Special attention should be paid to plant choices near residences to ensure that species chosen are of an appropriate height, and rely on evergreen species to provide year-round light screening from nuisance light, if applicable.
- Under no circumstances will any invasive plant species be used at any location.
- Plant vegetation within the first 6 months following project completion.
- Implement an irrigation and maintenance program during the plant establishment period and carried on, as needed, to ensure plant survival. However, design of the landscaping plan will try to maximize the use of planting zones that are water efficient. The design also may incorporate aesthetic features, such as cobbling swales or shallow detention areas, which can reduce or eliminate the need for irrigation in certain areas.
- If an irrigation system is required, use a smart watering system in areas that are irrigated to evaluate the existing site conditions and plant material against weather conditions to avoid overwatering of such areas. To avoid undue water flows, manage the irrigation system in such a manner that

any broken spray heads, pipes, or other components are fixed within 1 2 days, or the zone or system will be shut down until it can be repaired.

Action(s): Provide landscaping in areas where vegetation is removed and to reduce visual impacts at reconfigured intersections.
Implementing Party: City of Sacramento/ contractor
Timing: Prior to design review and approval of roadway design
Monitoring Parties: City of Sacramento Department of Public Works, City of West Sacramento

Potential Impact: VIS-2: New lighting could affect sensitive receptors if not properly designed by creating a substantial source of nighttime light and glare that could negatively affect nighttime views in the area.

MM VIS-2: Apply Minimum Lighting Standards. All artificial outdoor lighting and overhead street lighting is to be limited to safety and security requirements and the minimum required for driver safety. Lighting will be designed using Illuminating Engineering Society's design guidelines and in compliance with International Dark-Sky Association–approved fixtures. All lighting will be designed to have minimum impact on the surrounding environment and will use downcast, cut-off type fixtures that are shielded and direct the light only toward objects requiring illumination. Therefore, lights will be installed at the lowest allowable height and cast low-angle illumination while minimizing incidental light spill onto adjacent properties or open spaces, or backscatter into the nighttime sky. The lowest allowable wattage will be used for all lighted areas, and the amount of nighttime lights needed to light an area will be minimized to the highest degree possible. Light fixtures will have non-glare finishes that will not cause reflective daytime glare. Lighting will be designed for energy efficiency, with daylight sensors or timers with an on/off program. Lights will provide good color rendering with natural light qualities, with the minimum intensity feasible for security, safety, and personnel access. Lighting, including light color rendering and fixture types, will be designed to be aesthetically pleasing.

LED lighting will avoid the use of blue-rich white light lamps and use a correlated color temperature that is no higher than 3,000 Kelvin, consistent with the International Dark-Sky Associations Fixture Seal of Approval Program (International Dark-Sky Association 2010a, 2010b, 2015). In addition, LED lights will use shielding to ensure that nuisance glare and that light spill does not affect sensitive residential viewers.

Lights along pathways and bridge safety lighting will use shielding to minimize offsite light spill and glare, and will be screened and directed away from adjacent uses to the highest degree possible. The amount of nighttime lights used along pathways will be minimized to the highest degree possible to ensure that spaces are not unnecessarily over-lit. For example, the amount of light can be reduced by limiting the amount of ornamental light posts to higher use areas and by using bollard lighting on travel way portions of pathways.

Technologies to reduce light pollution evolve over time; design measures that are currently available may help but may not be the most effective means of controlling light pollution once the project is designed. Therefore, all design measures used to reduce light pollution will use the technologies available at the time of project design to allow for the highest potential reduction in light pollution.

Action(s): Design lighting to have a minimum impact on surrounding environment using Illuminating Engineering Society's design guidelines and to be in compliance with International Dark-Sky Association–approved fixtures. Minimize nighttime lighting as much as possible. Use the latest technologies available at the time of project design to allow for the highest potential reduction in light pollution. Also refer to requirements in MM BIO-21, *Minimize or Avoid Temporary Construction Lighting and Permanent Bridge Lighting from Directly Radiating on Water Surfaces of the Sacramento River.*
Implementing Party: City of Sacramento
Timing: During final design, prior to final design review
Monitoring Parties: City of Sacramento Department of Public Works, City of West Sacramento

1.2.2 AIR QUALITY (AIR)

Potential Impact: AIR-1: Exceedances of the project-level thresholds would be cumulatively considerable.

MM AIR-1: Implement Control Measures for Construction Emissions of Fugitive Dust. Caltrans' Standard Specification Section 14, "Environmental Stewardship" addresses the construction contractor's responsibility on many items of concern, such as air pollution; protection of lakes, streams, reservoirs, and other waterbodies; use of pesticides; safety; sanitation; convenience for the public; and damage or injury to any person or property as a result of any construction operation. Section 14-9.02 includes specifications relating to air pollution control for work performed under a contract, including compliance with air pollution

control rules, regulations, ordinances, and statutes provided in Government Code Section 11017 Public Contract Code Section 10231). Section 14-9.03 is directed at controlling dust. Caltrans' Standard Specifications are incorporated into all Caltrans' construction contracts.

Sacramento Metropolitan Air Quality Management District

Additional measures to control dust in Sacramento County will be borrowed from SMAQMD's recommended list of dust control measures and implemented to the extent practicable when the measures have not already been incorporated in, and do not conflict with, the requirements of Caltrans' Standard Specifications, special provisions, the NPDES permit, the Biological Opinions, the CWA Section 404 permit, CWA Section 401 Certification, and other permits issued for the project. The following measures are taken from SMAQMD's (2016) CEQA Guide and represent their basic control measures for fugitive dust.

- Water all exposed surfaces two times daily. Exposed surfaces include, but are not limited to soil piles, graded areas, unpaved parking areas, staging areas, and access roads.
- Cover or maintain at least two feet of free board space on haul trucks transporting soil, sand, or other loose material on the site. Any haul trucks that would be traveling along freeways or major roadways should be covered.
- Use wet power vacuum street sweepers to remove any visible trackout mud or dirt onto adjacent public roads at least once a day. Use of dry power sweeping is prohibited.
- Limit vehicle speeds on unpaved roads to 15 mph.
- All roadways, driveways, sidewalks, parking lots to be paved should be completed as soon as possible. In addition, building pads should be laid as soon as possible after grading unless seeding or soil binders are used.

Yolo Solano Air Quality Management District

Additional measures to control dust in Yolo County will be borrowed from YSAQMD's recommended list of dust control measures and implemented to the extent practicable when the measures have not already been incorporated in, and do not conflict with, the requirements of Caltrans' Standard Specifications, special provisions, the NPDES permit, the Biological Opinions, the CWA Section 404 permit, CWA Section 401 Certification, and other permits issued for the

project. The following measures are taken from YSAQMD's Construction Dust Mitigation Measures (Yolo Solano Air Quality Management District 2007).

- Water all active construction sites at least twice daily. Frequency should be based on the type of operation, soil, and wind exposure.
- Haul trucks shall maintain at least 2 feet of freeboard.
- Cover all trucks hauling dirt, sand, or loose materials.
- Apply non-toxic binders (e.g., latex acrylic copolymer) to exposed areas after cut and fill operations and hydroseed area.
- Apply chemical soil stabilizers on inactive construction areas (disturbed lands within construction projects that are unused for at least four consecutive days).
- Plant tree windbreaks on the windward perimeter of construction projects if adjacent to open land.
- Plant vegetative ground cover in disturbed areas as soon as possible.
- Cover inactive storage piles.
- Sweep streets if visible soil material is carried out from the construction site.
- Treat accesses to a distance of 100 feet from the paved road with a 6- to 12-inch layer of wood chips or mulch.
- Treat accesses to a distance of 100 feet from the paved road with a 6-inch layer of gravel.

Sacramento Railyards Specific Plan

Construction activity within the Sacramento Railyards Specific Plan area will comply with the mitigation measures contained in the adopted Mitigation Monitoring Plan for the Railyards development (City of Sacramento 2016). Wet suppression and wind speed reduction are the two most common methods used to control open dust sources at construction sites because a source of water and material for wind barriers tend to be readily available on a construction site.

Action(s): Comply with Caltrans' Standard Specification Section 14, Sacramento Metropolitan Air Quality Management District's (SMAQMD) and Yolo Solano Air Quality Management District's (YSAQMD) recommended list of dust control measures, and Sacramento Railyards Specific Plan measures.
Implementing Party: City of Sacramento/ contractor

Timing: During construction
Monitoring Parties: City of Sacramento Department of Public Works, City of West Sacramento, Sacramento Metropolitan Air Quality Management District, Yolo Solano Air Quality Management District, Caltrans

1.2.3 BIOLOGICAL RESOURCES (BIO)

Potential Impact: BIO-1: Direct and indirect impacts to VELB, western pond turtle, white-tailed kite, Swainson's hawk, pallid bat, western red bat, other migratory birds, other bat species, Sacramento River winter-run Chinook salmon, Central Valley spring-run Chinook salmon, Central Valley fall- and late fall–run Chinook salmon, Central Valley steelhead, the Southern DPS of North American green sturgeon, delta smelt, longfin smelt, Sacramento splittail, Pacific lamprey, and river lamprey.

MM BIO-1: Install Orange Construction Fencing between the Construction Area and Adjacent Sensitive Biological Resources. The project proponent and/or their contractor will install orange construction fencing between the construction area and adjacent sensitive biological resource areas. Sensitive biological resources that occur adjacent to the construction area that could be directly affected by the project include natural communities of special concern; special-status wildlife habitats for valley elderberry longhorn beetle; nest sites of Swainson's hawk, purple martin, or other migratory birds; roosting bats; and protected trees to be avoided.

Barrier fencing around sensitive areas will be installed as one of the first orders of work and prior to equipment staging. Before construction begins, the construction contractor will work with the project engineer and a resource specialist to identify the locations for the orange construction fencing, and will place stakes around the sensitive resource sites to indicate these locations. The protected areas will be designated as environmentally sensitive areas and clearly identified on the construction plans and described in the specifications. To minimize the potential for snakes and other ground-dwelling animals from being caught in the orange construction fencing, the fencing will be placed with at least a 1-foot gap between the ground and the bottom of the orange construction fencing. The exception to this condition is where construction barrier fencing overlaps with erosion control fencing and must be secured to prevent sediment runoff. Barrier fencing will be installed before construction activities are initiated, maintained throughout the construction period, and removed after completion of construction.

Action(s): Install orange construction fencing as a barrier between the construction area and adjacent sensitive biological resource areas.
Implementing Party: City of Sacramento/ contractor, resource specialist
Timing: Identify locations prior to construction. Install prior to construction. Maintain during construction.
Monitoring Parties: City of Sacramento Department of Public Works, City of West Sacramento, U.S. Army Corps of Engineers, California Department of Fish and Wildlife, National Marine Fisheries Service U.S. Fish and Wildlife Service, Caltrans

MM BIO-2: **Conduct Environmental Awareness Training for Construction Employees.** The project proponent will retain a qualified biologist to conduct environmental awareness training for construction crews before project implementation. The awareness training will be provided to all construction personnel and will brief them on the need to avoid effects on sensitive biological resources (e.g., native trees, natural communities of special concern, and special-status species habitats in and adjacent to the construction area). The education program will include a brief review of the special-status species with the potential to occur in the biological study area (BSA) (including their life history and habitat requirements, and photographs of the species). The training will identify the portions of the BSA in which the species may occur, as well as their legal status and protection. The program also will cover the restrictions and guidelines that must be followed by all construction personnel to reduce or avoid effects on these species during project implementation. This will include the steps to be taken if a sensitive species is found within the construction area (i.e., notifying the crew foreman, who will call a designated biologist). In addition, construction employees will be educated about the importance of controlling and preventing the spread of invasive plant infestations. An environmental awareness handout that describes and illustrates sensitive resources to be avoided during project construction and identifies all relevant permit conditions will be provided to each crew member. The crew foreman will be responsible for ensuring that crew members adhere to the guidelines and restrictions. Education programs will be conducted for appropriate new personnel as they are brought on the job during the construction period.

Action(s): Retain a qualified biologist to conduct worker awareness training.
Implementing Party: City of Sacramento, qualified biologist, contractor
Timing: Prior to construction. During construction for new crew members
Monitoring Parties: City of Sacramento Department of Public Works, City of West Sacramento, U.S. Army Corps of Engineers, California Department of Fish and Wildlife, National Marine Fisheries Service, U.S. Fish and Wildlife Service, Caltrans

MM BIO-3: **Conduct Periodic Biological Monitoring.** The project proponent will retain a qualified biological monitor for the project who will visit the site a minimum of once per week to ensure that fencing around environmentally sensitive areas is intact and that activities are being conducted in accordance with the agreed upon project schedule and agency conditions of approval. The monitor will provide the project proponent with a monitoring log for each site visit.

Certain activities will require a biological monitor to be present for the duration of the activity or during the initial disturbance of an area to ensure that impacts on special-status species are avoided.

Action(s): Retain a qualified biologist to perform periodic monitoring and prepare monitoring logs. Retain a qualified biologist to monitor for the duration of an activity, as identified in other biological mitigation measures.
Implementing Party: City of Sacramento/ contractor, qualified biologist
Timing: During construction
Monitoring Parties: City of Sacramento Department of Public Works, City of West Sacramento, U.S. Army Corps of Engineers, California Department of Fish and Wildlife, National Marine Fisheries Service, U.S. Fish and Wildlife Service, Caltrans

MM BIO-4: Compensate for Temporary Effects on and Permanent Loss of Cottonwood Riparian Forest [including SRA Cover]. The project proponent will compensate for the permanent loss of up to 1.44 acres of riparian forest. In addition, any unavoidable loss of riparian forest in the temporary work area will be mitigated. The project proponent will implement onsite and, if necessary, offsite compensation measures and/or purchase mitigation bank credits to compensate for losses of cottonwood riparian forest on the waterside slope of the existing levees, including riparian forest supporting SRA cover habitat (as described in Section 2.20, "Threatened and Endangered Species," portions of the cottonwood riparian forest in the BSA also provide SRA cover habitat for fish). Onsite compensation will be used to the maximum extent practicable. Compliance with the USACE levee vegetation policy (U.S. Army Corps of Engineers 2014), the Urban Levee Design Criteria (California Department of Water Resources 2012), or other engineering constraints may limit the ability to achieve full onsite compensation. Therefore, offsite compensation and/or purchase of mitigation bank credits may be needed to achieve no net loss of existing in-kind riparian and SRA cover habitat values. Each of these options is discussed below.

1. **Onsite and/or Offsite Restoration and/or Enhancement along the Sacramento River**. Riparian habitat restoration and/or enhancement onsite or offsite should occur in the same year construction is completed. For onsite or offsite replacement plantings, the project proponent will prepare a mitigation planting plan, including a species list and number of each species, planting locations, and maintenance requirements. Plantings will consist of cuttings taken from local plants or plants grown from local material. Planted species for the mitigation plantings will be similar to those removed from the project area and will include native species, such as Fremont cottonwood, valley oak, black walnut, Oregon ash, boxelder, and black willow. The final planting plan will be developed based on results of the arborist survey for species to be removed (see additional discussion below). All plantings will be fitted with exclusion cages or other suitable protection from herbivory. Plantings will be irrigated for up to 3 years or until established. Plantings will be monitored annually for 3 years or as required in the project permits. If 75 percent of the plants survive at the end of the monitoring period, the revegetation will be considered successful. If the survival criterion is not met at the end of the monitoring period, planting and monitoring will be repeated after mortality causes have been identified and corrected.

2. **Mitigation Bank Credit Purchase**. If this option is chosen, the project proponent will provide written evidence to the resource agencies that compensation has been established through the purchase of mitigation credits. The amount to be paid will be the fee that is in effect at the time the fee is paid. The mitigation will be approved by CDFW and may be modified during the permitting process. Mitigation can be in the form of creation and/or preservation credits. If mitigation is in the form of restoration/creation credits, the mitigation will be at a minimum ratio of 1:1 (1 acre of restored or created riparian habitat for each acre of riparian habitat removed). If mitigation is in the form of preservation credits, the mitigation will be at a minimum ratio of 2:1 (2 acres of preserved riparian habitat for each acre of riparian habitat removed). The final compensation ratio will be approved by CDFW in order to result in no net loss of riparian habitat. The project proponent will purchase riparian habitat credits from an approved mitigation bank near the project, such as the Cosumnes Floodplain Mitigation Bank, Fremont Landing Conservation Bank, or Elsie Gridley Mitigation Bank. Replacement riparian forest habitat will include trees species that would support nesting

Swainson's hawk (i.e., oak, cottonwood) and will occur within the range of nesting Swainson's hawk within the Sacramento Valley.

To provide a more accurate estimate of tree loss, an arborist survey will be conducted upon completion of 90 percent design plans for the project. In addition to a description of the tree, the arborist survey report will include the precise location of the trunk and size of the dripline for all trees whose trunk or canopy overlap with the project footprint. Riparian forest compensation will be consistent with the requirements of the City of West Sacramento and City of Sacramento tree ordinances to ensure compensation for losses of individual protected trees.

In addition to mitigating for the loss of riparian forest habitat, specific measures will be included to satisfy National Marine Fisheries Service requirements and compensate for the loss of SRA cover (area and linear feet). However, the acreage will not be duplicated, such that the acreage of riparian forest habitat restored for SRA cover mitigation will apply toward riparian forest habitat mitigation requirements. SRA cover mitigation will include the following riparian replacement requirements.

- Replace the 890 linear feet and 0.44 acre of affected SRA cover vegetation (see Section 2.19.3.1, "Loss of Shaded Riverine Aquatic Cover") at a 3:1 replacement ratio (i.e., 3 linear feet replaced for every 1 foot affected and 3 acres replaced for every acre affected) by planting native riparian trees in temporary impact areas and along existing onsite or offsite unshaded banks along the Sacramento River.

- Plant native riparian trees onsite to the maximum extent practicable, followed by planting on adjacent reaches of the Sacramento River to minimize the need for purchasing offsite mitigation bank credits.

- Plant riparian trees that are intended to provide SRA cover along the water's edge at summer low flows up to the OHWM and at sufficient densities to provide shade along at least 85 percent of the bank's length when the trees reach maturity. This will ensure that riparian plantings intended for SRA cover mitigation will contribute to instream SRA cover when they are inundated during winter/spring flows and overhead cover (shade) during summer flows when they approach maturity.

- Monitor and evaluate the revegetation success of riparian plantings intended for SRA cover mitigation as described above.

If mitigation for SRA cover is in the form of offsite mitigation bank credits, credits will need to be purchased from an approved mitigation bank within the approved service area for the project that provides riparian forest floodplain conservation credits as off-site compensation for impacts on state- and federally listed fish species, designated critical habitat, and essential fish habitat for Pacific salmon (i.e., Chinook salmon).

Action(s): Conduct arborist survey upon completion of 90% design. Provide written documentation that riparian forest has been compensated either through onsite/offsite restoration or through mitigation bank credit purchase as described in Options 1 and 2 within this Mitigation Measure, *Compensate for Temporary Effects on and Permanent Loss of Cottonwood Riparian Forest (including SRA Cover)*.
Implementing Party: City of Sacramento, arborist
Timing: Conduct arborist survey upon completion of 90% design. Provide compensation or develop and implement plan for restoration/ enhancement to permitting agencies as required by permit terms.
Monitoring Parties: City of Sacramento Department of Public Works, City of West Sacramento, U.S. Army Corps of Engineers, California Department of Fish and Wildlife, National Marine Fisheries Service, U.S. Fish and Wildlife Service

MM BIO-5: Protect Water Quality and Prevent Erosion and Sedimentation in Drainages and Wetlands. The project proponent and/or their construction contractor will comply with all construction site BMPs specified in the Water Quality Assessment Report prepared for the project (ICF International 2016b) and the final SWPPP that will be developed for the project, as well as any other permit conditions to minimize introduction of construction-related contaminants and mobilization of sediment in the Sacramento River and the riparian forest/shrub wetland near the construction area. Broadly, these BMPs will address soil stabilization, sediment control, wind erosion control, vehicle tracking control, non-storm water management, and waste management practices. The BMPs will be based on the best conventional and best available technology.

The proposed project is subject to storm water quality regulations established under the NPDES, described in Section 402 of the federal CWA. In California, the NPDES program requires that any construction activity disturbing 1 or more acres comply with the statewide General Permit, as authorized by the State Water Board. The General Permit requires elimination or minimization of non-storm water discharges from construction sites and development and implementation of a SWPPP for the site. The primary elements of the SWPPP include the following.

- Description of site characteristics—including runoff and streamflow characteristics and soil erosion hazard—and construction procedures
- Guidelines for proper application of erosion and sediment control BMPs
- Description of measures to prevent and control toxic materials spills
- Description of construction site housekeeping practices

In addition to these primary elements, the SWPPP specifies that the extent of soil and vegetative disturbance would be minimized by control fencing or other means and that the extent of soil disturbed at any given time would be minimized. The SWPPP must be retained at the construction site.

The BMPs will be selected to achieve maximum sediment removal and represent the best available technology that is economically achievable; they are subject to review and approval by the project proponent. The project proponent will perform routine inspections of the construction area to verify that the BMPs are properly implemented and maintained. The project proponent will notify contractors immediately of a noncompliance issue and will require compliance.

The BMPs will include, but are not limited to, the following.

- All earthwork or foundation activities involving wetlands or the intermittent vegetated stream will occur in the dry season (between May 1 and October 31). All in-water work within the Sacramento River will be conducted between May 1 and November 30 to minimize or avoid potential impacts on sensitive life stages (migration, spawning, egg and embryo incubation, and rearing) of special-status fish species.
- Equipment used in and around drainages and wetlands will be in good working order and free of dripping or leaking engine fluids. All vehicle maintenance will be performed at least 300 feet from all streams. Any necessary equipment washing will be carried out where the water cannot flow into drainages or wetlands.
- Develop a hazardous material spill prevention control and countermeasure plan before construction begins. The plan will include strict onsite handling rules to keep construction and maintenance materials from entering the river, including procedures related to refueling, operating, storing, and staging construction equipment and to preventing and responding to spills. The plan also will identify the parties responsible for monitoring a spill response. During construction, any spills will be

cleaned up immediately according to the spill prevention control and countermeasure plan. The project proponent will review and approve the contractors' spill prevention control and countermeasure plan before allowing construction to begin.

- Prohibit the following types of materials from being rinsed or washed into the streets, shoulder areas, or gutters: concrete, solvents and adhesives, thinners, paints, fuels, sawdust, dirt, gasoline, asphalt and concrete saw slurry, and heavily chlorinated water.
- Take any surplus concrete rubble, asphalt, or other rubble from construction to a local landfill.
- Prepare and implement an erosion and sediment control plan for the proposed project that will include the following provisions and protocols. The SWPPP for the project will detail the applications and type of measures and the allowable exposure of unprotected soils.
    - Discharge from dewatering operations, if needed, and runoff from disturbed areas will be made to conform to the water quality requirements of the waste discharge permit issued by the RWQCB.
    - Apply temporary erosion control measures, such as sandbagged silt fences, throughout construction of the proposed project and remove them after the working area is stabilized or as directed by the engineer. Soil exposure will be minimized through use of temporary BMPs, groundcover, and stabilization measures. Exposed dust-producing surfaces will be sprinkled daily, if necessary, until wet; this measure will be controlled to avoid producing runoff. Paved roads will be swept daily following construction activities.
    - The contractor will conduct periodic maintenance of erosion and sediment control measures.
    - Plant an appropriate seed mix of native species on disturbed areas upon completion of construction.
    - Cover or apply nontoxic soil stabilizers to inactive construction areas (previously graded areas inactive for 10 days or more) that could contribute sediment to waterways.
    - Enclose and cover exposed stockpiles of dirt or other loose, granular construction materials that could contribute sediment

to waterways. Material stockpiles will be located in non-traffic areas only. Side slopes will not be steeper than 2:1. All stockpile areas will be surrounded by a filter fabric fence and interceptor dike.

- Contain soil and filter runoff from disturbed areas by berms, vegetated filters, silt fencing, straw wattle, plastic sheeting, catch basins, or other means necessary to prevent the escape of sediment from the disturbed area.
- Use other temporary erosion control measures (such as silt fences, staked straw bales/wattles, silt/sediment basins and traps, check dams, geofabric, sandbag dikes, and temporary revegetation or other ground cover) to control erosion from disturbed areas as necessary.
- Avoid earth or organic material from being deposited or placed where it may be directly carried into the channel.

The project proponent also will obtain a 401 Water Quality Certification from the Central Valley RWQCB, which may contain additional BMPs and water quality measures to ensure the protection of water quality.

Action(s): Implement measures to protect water quality and prevent erosion and sedimentation. Comply with SWPPP requirements and BMPs as described in this Mitigation Measure, *Protect Water Quality and Prevent Erosion and Sedimentation in Drainages and Wetlands*. Obtain a 401 Water Quality Certification from the Central Valley RWQCB.
Implementing Party: City of Sacramento/ contractor
Timing: Prior to and during construction. Conduct all in-water work within the Sacramento River between May 1 and November 30. Conduct all earthwork or foundation activities involving wetlands or the intermittent vegetated stream in the dry season (between May 1 and October 31).
Monitoring Parties: City of Sacramento Department of Public Works, City of West Sacramento, U.S. Army Corps of Engineers, Central Valley Regional Water Quality Control Board, California Department of Fish and Wildlife

MM BIO-6: Compensate for Loss of Perennial Stream. The project proponent will comply with any regulatory requirements determined as part of the state (Section 401 Water Quality Certification or WDRs, LSAA) and federal (Section 404 and Section 10 permits) processes for the work that would occur in the Sacramento River. The project proponent will compensate for the permanent fill of up to 1.85 acre of other waters of the United States in the Sacramento River

by purchasing mitigation bank credits, which can be in the form of preservation and/or creation credits using the following minimum ratios.

- A minimum of 2:1 (2 acres of mitigation for each acre filled), for a total of up to 3.7 acres, if credits are for preservation of habitat; or
- A minimum of 1:1 (1 acre of mitigation for each acre filled), for a total of up to 1.85 acre, if credits are for creation of habitat.

The actual compensation ratios will be determined through coordination with the Central Valley RWQCB and USACE as part of the permitting process. The project proponent will compensate for permanent loss of perennial stream by implementing one or a combination of the following options.

- Purchase credits for created riparian stream channel at a USACE-approved mitigation bank with a service area that encompasses the project area, such as the Cosumnes Floodplain Mitigation Bank, Fremont Landing Conservation Bank, or Elsie Gridley Mitigation Bank. The project proponent will provide written evidence to the resource agencies that compensation has been established through the purchase of mitigation credits.
- Compensate out-of-kind for loss of perennial stream by implementing compensatory mitigation for cottonwood riparian forest impacts described in Section 2.16, "Natural Communities" (Compensate for Temporary Effects to and Permanent Loss of Cottonwood Riparian Forest [including SRA Cover]). The acreage restored or created to compensate for loss of perennial stream will be added to the acreage restored or created for loss of riparian habitat.

Action(s): Purchase credits or provide out-of-kind compensation. Provide written documentation to resource agencies that credits/compensation has been provided at the required ratios according to permit terms and regulatory agency requirements.
Implementing Party: City of Sacramento/ contractor
Timing: Per the terms of each regulatory permit prior to construction
Monitoring Parties: City of Sacramento Department of Public Works, City of West Sacramento, U.S. Army Corps of Engineers, Central Valley Regional Water Quality Control Board, California Department of Fish and Wildlife

MM BIO-7: Conduct Preconstruction Surveys for Western Pond Turtle and Allow Turtles to Leave Work Area Unharmed. To avoid potential injury to or mortality of western pond turtles, the project proponent will retain a qualified biologist to

conduct a preconstruction survey for western pond turtles immediately prior to construction activities (including vegetation removal) along the banks of the Sacramento River. The biologist will survey the aquatic habitat, river banks, and adjacent riparian and ruderal habitat within the construction area immediately prior to disturbance.

If a western pond turtle is found within the immediate work area during the preconstruction survey or during project activities, work shall cease in the area until the turtle is able to move out of the work area on its own.

Information about the location of turtles seen during the preconstruction survey will be included in the environmental awareness training (Conduct Environmental Awareness Training for Construction Employees) and provided directly to the construction crew working in that area to ensure that areas where turtles were observed are inspected each day prior to the start of work to ensure that no turtles are present.

If a western pond turtle nest is discovered during the preconstruction survey or during project construction, the project proponent will coordinate with CDFW to determine whether additional avoidance measures (e.g., no-disturbance buffer or monitoring) is prudent.

Action(s): Retain a qualified biologist to perform preconstruction surveys for western pond turtles. Retain a qualified biologist to perform an environmental awareness training if turtles are found. Cease work if western pond turtle(s) is found on site. Coordinate with CDFW if a turtle nest is identified.
Implementing Party: City of Sacramento
Timing: Prior to and during construction
Monitoring Parties: City of Sacramento Department of Public Works, City of West Sacramento, California Department of Fish and Wildlife

MM BIO-8: Conduct Preconstruction Surveys for Nesting Migratory Birds, Including Special-Status Birds, and Establish Protective Buffers. The project proponent will retain a qualified wildlife biologist to conduct nesting surveys before the start of construction. These nesting surveys will be conducted in conjunction with the Swainson's' hawk nesting surveys (see MM BIO-26, *Conduct Focused Surveys for Nesting Swainson's Hawk prior to Construction*) and will include a minimum of three separate surveys to look for active nests of migratory birds, including raptors. Surveys will include a search of all trees and shrubs, ruderal areas, and grassland vegetation that provide suitable nesting habitat

within 50 feet of disturbance. In addition, a 0.25-mile area from the river will be surveyed for nesting raptors in order to identify raptors that might be affected by pile driving. Surveys should occur during the height of the breeding season (March 1 to June 1), with one survey occurring in each of the 2 consecutive months within this peak period and the final survey occurring within 1 week of the start of construction. If no active nests are detected during these surveys, no additional measures are required.

If an active nest is found in the survey area, a no-disturbance buffer will be established to avoid disturbance or destruction of the nest site until the end of the breeding season (September 15) or until after a qualified wildlife biologist determines that the young have fledged and moved out of the construction area (this date varies by species). The extent of these buffers will be determined by the biologist in coordination with CDFW and will depend on the level of noise or construction disturbance taking place, line-of-sight between the nest and the disturbance, ambient levels of noise and other non-project disturbances, and other topographical or artificial barriers. Suitable buffer distances may vary between species.

Action(s): Retain a qualified biologist to perform preconstruction surveys and establish a protective buffer for nesting migratory birds, including special-status birds. If an active nest is found, coordinate with CDFW regarding extent of buffer.
Implementing Party: City of Sacramento/ contractor
Timing: Conduct preconstruction surveys prior to construction per survey guidelines and during height of breeding season (March 1 to June 1). At active nests, establish and maintain no-disturbance buffer until end of breeding season (until September 15) or until qualified wildlife biologist determines young have fledges and moved out of area.
Monitoring Parties: City of Sacramento Department of Public Works, City of West Sacramento, California Department of Fish and Wildlife

MM BIO-9: Conduct Tree Removal during Non-Sensitive Periods for Wildlife. The project proponent will remove or trim trees during the non-breeding season for tree-nesting migratory birds and raptors, and prior to periods when bats would be hibernating (generally between September 15 and October 31). If tree removal cannot be confined to this period, the project proponent will retain a qualified wildlife biologist with knowledge of the wildlife species that could occur in the project area to conduct the appropriate preconstruction surveys

and establish no-disturbance buffers for sensitive wildlife species as described under measures for Swainson's hawk, nesting birds, and roosting bats.

Action(s): Conduct tree removal activities during the non-breeding season (September 15 – October 31).
Implementing Party: City of Sacramento/ contractor
Timing: Prior to project construction between September 15 and October 31 or after preconstruction surveys conducted by qualified wildlife biologist and establishment of no-disturbance buffer
Monitoring Parties: City of Sacramento Department of Public Works and City of West Sacramento

MM BIO-10: Avoid and Minimize Impacts on Nesting Birds and Roosting Bats from Demolition of Approach Structures. Because all four of the approach structures that are associated with the I Street Bridge are used by nesting birds (including purple martin) and roosting bats, the removal of these structures will take place outside of the breeding season for migratory birds and bats, and will be conducted in the following manner to avoid and minimize direct harm and temporary disturbance to nesting birds and roosting bats.

Timing of Approach Structure Demolition

To avoid and minimize potential impacts on purple martins and bats, the approach structures will not be removed or be altered until after the new I Street Bridge and associated replacement habitat on the bridge and/or elsewhere is in place and available for use by birds and bats for at least one overlapping nesting/maternal season, which generally would be from March 15 to September 15. Exclusion activities will be initiated between September 15 and October 31 to avoid affecting nesting purple martins and other birds, and to avoid affecting maternal and hibernating bat roosts. The exact date of beginning exclusion will be determined based on the results of preconstruction surveys that will be conducted in mid- to late August to document the status of bird nests and bat roosts. Active nests will be periodically monitored until it is verified that they are no longer being used. The non-volant (non-flying) period for most young bats is between April and the beginning of September (Johnston et al. 2004:26).

To avoid and minimize potential noise impacts on migratory birds nesting adjacent to project demolition activities, all demolition activities resulting in loud

noise will be conducted outside of the nesting season, which is generally September 15 to February 1, to the extent feasible.

Approach Structure Exclusion Measures

The following exclusion measures will be implemented before demolition of the approach structures and will be approved by the project proponent and CDFW prior to implementation.

The vent holes and expansions joints on the approach structures will be altered to exclude birds and bats from using them prior to initiating demolition activities. After it has been confirmed that purple martins or other birds are no longer nesting in the vent holes, one-way doors will be installed on the vent holes to allow any wildlife (e.g., birds and bats) that may be occupying the hollow box-girders on the existing approach structure to exit and not re-enter. After the one-way doors have been in place for 48 hours, they will be removed and the vent holes will be sealed off to prevent any wildlife from re-entering prior to demolition.

One-way door devices also will be installed along the expansion joints to allow bats to exit but not re-enter. These one-way door devices will be designed such that they do not contain netting or wire mesh that bats could become entangled in. Once installed, a qualified biologist will observe the one-way door devices at locations confirmed to have contained bats to verify that bats are exiting the structures and being excluded. The one-way doors will remain in place for 48 hours, after which they will be inspected for remaining bats. Once each expansion joint is confirmed to be unoccupied, they will be sealed close with an expanding foam sealant to prevent bats from reoccupying the approach structures.

Action(s): Remove approach structures outside of breeding season for nesting birds and roosting bats and according to the protocol described in this Mitigation Measure, *Avoid and Minimize Impacts on Nesting Birds and Roosting Bats from Demolition of Approach Structures.*
Implementing Party: City of Sacramento/ contractor
Timing: Prior to issuance if grading permit and during construction at times specified in mitigation measure
Monitoring Parties: City of Sacramento Department of Public Works, City of West Sacramento, California Department of Fish and Wildlife

MM BIO-11: Conduct Preconstruction Surveys for Roosting Bats and Implement Protective Measures. To avoid and minimize potential impacts on pallid bat, western red bat, and non-special-status bat species from the removal of trees and buildings, the project proponent will implement the following actions.

Preconstruction Surveys

Within 2 weeks prior to tree trimming or removal and any building demolition (e.g., homes, sheds, other outbuildings), a qualified biologist will examine trees to be removed or trimmed and buildings planned for demolition for suitable bat roosting habitat. High-quality habitat features (e.g., large tree cavities, basal hollows, loose or peeling bark, larger snags, abandoned buildings, attics) will be identified, and the area around these features searched for bats and bat sign (e.g., guano, culled insect parts, staining). Riparian woodland and stands of mature broadleaf trees will be considered potential habitat for solitary foliage-roosting bat species.

If suitable roosting habitat and/or bat sign is detected, biologists will conduct an evening visual emergence survey of the source habitat feature, from a half hour before sunset to 1–2 hours after sunset for a minimum of 2 nights. Full-spectrum acoustic detectors will be used during emergence surveys to assist in species identification. If site security allows, detectors should be set to record bat calls for the duration of each night. All emergence and monitoring surveys will be conducted during favorable weather conditions (calm nights with temperatures conducive to bat activity and no precipitation predicted). The biologist will analyze the bat call data using appropriate software and prepare a report that will be submitted to the project proponent and CDFW.

Timing of Tree Removal and Building Demolition

Trees and buildings planned for removal and demolition will have exclusion devices installed between September 15 and October 31 to avoid affecting maternal and hibernating bat roosts. The exact timing of removal and demolition will be determined based on preconstruction surveys of trees and buildings.

Protective Measures

Protective measures may be necessary if it is determined that bats are using buildings or trees in the BSA as roost sites, or if sensitive bats species are detected during acoustic monitoring. The following measures will be implemented when

roosts are found within trees or buildings planned for removal according to the timing discussed above. Specific measures will be approved by the project proponent and CDFW prior to excluding bats from occupied roosts.

- Exclusion from buildings or bridge structures will not take place until temporary or permanent replacement roosting habitat is available.
- Exclusion from roosts will take place late in the day or in the evening to reduce the likelihood of evicted bats falling prey to diurnal predators, and will take place during weather and temperature conditions conducive to bat activity.
- Biologists experienced with bats and bat evictions will carry out or oversee the exclusion tasks and will monitor tree trimming and removal, and buildings if they are determined to be occupied.
- Trees that provide suitable roost habitat will be removed in pieces, rather than felling the entire tree and should be done late in the day or in the evening to reduce the likelihood of evicted bats falling prey to diurnal predators, and will take place during warm weather conditions conducive to bat activity.
- Structural changes may be made to a known roost proposed for removal, to create conditions in the roost that are undesirable to roosting bats and encourage the bats to leave on their own (e.g., open additional portals so that temperature, wind, light and precipitation regime in the roost change). Structural changes to the roost will be authorized by CDFW and will be performed during the appropriate exclusion timing (listed above) to avoid harming bats.
- Non-injurious harassment at the roost site, such as ultrasound deterrents or other sensory irritants, may be used to encourage bats to leave on their own.
- One-way door devices will be used where appropriate to allow bats to leave the roost but not to return.
- Prior to building demolition and/or tree removal/trimming and after other eviction efforts have been attempted, any confirmed roost site will be gently shaken or repeatedly struck with a heavy implement such as a sledge hammer or an axe. Several minutes should pass before beginning demolition work, felling trees, or trimming limbs to allow bats time to arouse and leave the roost. A biological monitor will search downed vegetation for dead and injured bats. The presence of dead or injured

bats will be reported to CDFW. Injured bats will be transported to the nearest CDFW-permitted wildlife rehabilitation facility.

Action(s): Retain a qualified biologist to perform preconstruction surveys and establish protective measures for roosting bats. Removal of trees and buildings will not occur from September 15 to October 31 to avoid affecting maternal and hibernating bat roosts.
Implementing Party: City of Sacramento/ contractor
Timing: Install exclusion devices between September 15 and October 31 at trees planned for removal and buildings planned for demolition (prior to removal/demolition). Conduct evening visual emergence survey according to details in mitigation measure. Conduct preconstruction surveys within two weeks prior to tree trimming or removal, or any building demolition.
Monitoring Parties: City of Sacramento Department of Public Works, City of West Sacramento, California Department of Fish and Wildlife

MM BIO-12: Replace Bat Roosting Habitat Lost from Demolition of Approach Structures. Bat roosting habitat will be incorporated into the new bridge and, if necessary, additional free-standing roosting habitat (e.g., bat houses) will be created and installed within or adjacent to the BSA. At a minimum ratio of 1:1, 1,132 linear feet of roosting habitat will be created to compensate for the loss of bat roosting habitat associated with the approach structures. Bat replacement habitat will consist of crevice habitat built into the new bridge. Bat replacement habitat will be designed generally following the guidelines in California Bat Mitigation Techniques, Solutions, and Effectiveness (Johnston et al. 2004), which provides a review of mitigation options for bats in relation to Caltrans projects. Final plans for bat habitat replacement will be approved by the project proponent and CDFW.

Action(s): Incorporate bat habitat into the new bridge and, if necessary, create additional free-standing roosting habitat (e.g., bat houses).
Implementing Party: City of Sacramento/ contractor
Timing: Designed as part of final bridge design, installed during project construction
Monitoring Parties: City of Sacramento Department of Public Works, City of West Sacramento, California Department of Fish and Wildlife

MM BIO-13: Monitor Bat Replacement Habitat. The project proponent will be responsible for monitoring replacement bat habitat over a 5-year period for a minimum of 3 years (e.g., years 2, 3, and 5) to determine whether bats are using

the habitat, determine whether the habitat is functioning as intended, and identify any corrective actions that need to be made to the habitat to improve its use by bats. Bat use will be documented through a combination of visual observation (bats and bat sign), which could be conducted during the day where roosting bats are visible or at night during an emergence survey. Acoustic recordings will be used in combination with emergence surveys to attempt to identify the species of bat(s) using the replacement habitat. The locations and amount of occupied habitat will be recorded. Recommendations for corrective actions will be presented to the project proponent and CDFW for approval. Annual monitoring reports will be sent to the project proponent and CDFW.

Action(s): Monitor and document effectiveness of bat replacement habitat. Present recommendations for corrective actions to the project proponent and CDFW for approval. Send annual monitoring reports to CDFW.
Implementing Party: City of Sacramento/ wildlife biologist
Timing: Following construction of replacement habitats for the periods of time specified in the mitigation measure over the 5-year monitoring timeframe
Monitoring Parties: City of Sacramento Department of Public Works, City of West Sacramento, California Department of Fish and Wildlife

MM BIO-14: Conduct All In-Water Construction Activities between May 1 and November 30 and Only during Daylight Hours. The project proponent will conduct all in-water construction work and pile driving (in-water and shore-based within 250 feet of the Sacramento River), installation of cofferdams, removal of temporary sheet piles, and placement of rock revetment between May 1 and November 30 to avoid or minimize causing disturbance and injury to, or mortality of, special-status fish species in the affected reaches of the Sacramento River. In addition, in-water work will be conducted during daylight hours only to provide fish in the affected reaches of the Sacramento River with an extended quiet period during nighttime hours for feeding and unobstructed passage.

Limiting in-water construction to the May 1–November 30 period would achieve several goals.

- In-water construction activities with the potential to generate harmful levels of underwater noise (e.g., driving piles with an impact hammer) would avoid the primary migration periods of adults and juveniles of special-status fish species.

- The length of the in-water construction period would be maximized, thereby limiting the number of construction seasons that in-water construction would be needed and the number of year classes of fish species that potentially would be exposed to in-water construction effects.

Action(s): Conduct all in-water construction work and pile driving during daylight hours only between May 1 and November 30.
Implementing Party: City of Sacramento/ contractor
Timing: Conduct all in-water construction work and pile driving (in-water and shore-based within 250 feet of the Sacramento River), installation of cofferdams, removal of temporary sheet piles, and placement of rock revetment between May 1 and November 30.
Monitoring Parties: City of Sacramento Department of Public Works, City of West Sacramento, U.S. Fish and Wildlife Service, National Marine Fisheries Service

MM BIO-15: Implement Measures to Minimize Exceedance of Interim Threshold Sound Levels during Pile Driving. The project proponent will require the contractor to implement the following measures, developed in coordination with project design engineers, to minimize the exposure of listed fish species to potentially harmful underwater sounds.

- If feasible, the contractor will vibrate all piles to the maximum depth possible before using an impact hammer.
- No more than 20 piles will be driven per day, and pile driving with an impact hammer will occur on no more than 75 individual days total during construction.
- During impact driving, the contractor will limit the number of strikes per day to the minimum necessary to complete the work and will limit the total number of hammer strikes to 16,000 strikes per day (i.e., 800 hammer strikes per pile, per day) for piles for the bridge piers and temporary trestles, and 20,000 strikes per day (i.e., 1,000 hammer strikes per pile, per day) for the piles for the bridge fender system.
- The smallest pile driver and minimum force necessary will be used to complete the work.
- During impact driving, the project proponent will require the contractor to use a bubble curtain or similar device, if feasible, to minimize the extent to which the interim peak and cumulative SEL thresholds are exceeded.

- No pile driving activity will occur at night, thereby providing fish with an extended quiet period during nighttime hours on days pile driving is being conducted for feeding and unobstructed passage.

Action(s): Implement measures to minimize sound levels during pile driving.
Implementing Party: City of Sacramento/ contractor
Timing: Prior to final design and during pile driving/impact hammer activities
Monitoring Parties: City of Sacramento Department of Public Works, City of West Sacramento, U.S. Fish and Wildlife Service, National Marine Fisheries Service, California Department of Fish and Wildlife

MM BIO-16: **Develop and Implement a Hydroacoustic Monitoring Plan.** The project proponent and/or its construction contractor will develop and implement a hydroacoustic monitoring plan. The monitoring plan will be submitted to the resource agencies (CDFW, NMFS, and USFWS) for approval at least 60 days before the start of project activities. The plan will include the following requirements.

- The project proponent and/or its construction contractor will monitor underwater noise levels during all impact pile driving activities on land and in water to ensure that that peak and cumulative SELs) do not exceed estimated values (Table 2.19-8).
- The monitoring plan will describe the methods and equipment that will be used to document the extent of underwater sounds produced by pile driving, including the number, location, distances, and depths of the hydrophones and associated monitoring equipment.
- The monitoring plan will include a reporting schedule for daily summaries of the hydroacoustic monitoring results and for more comprehensive reports to be provided to the resource agencies on a monthly basis during the pile driving season.
- The daily reports will include the number of piles installed per day; the number of strikes per pile; the interval between strikes; the peak SPL, SEL, and RMS per strike; and the accumulated SEL per day at each monitoring station.
- The project proponent or its contractors will ensure that a qualified fish biologist is on site during impact pile driving to document any occurrences of stressed, injured, or dead fish. If stressed, injured, or dead fish are observed during pile driving, the project proponent and/or its

construction contractor will reduce the number of strikes per day to ensure that fish are no longer showing signs of stress, injury, or mortality.

Action(s): Develop and implement a hydroacoustic monitoring plan; submit the plan to CDFW, NMFS, and USFWS for approval.
Implementing Party: City of Sacramento/ contractor/ fish biologist
Timing: 60 days prior to start of project activities, during construction
Monitoring Parties: City of Sacramento Department of Public Works, City of West Sacramento, U.S. Fish and Wildlife Service, National Marine Fisheries Service, California Department of Fish and Wildlife

MM BIO-17: Monitor Turbidity in the Sacramento River. The project proponent will require the construction contractor to monitor turbidity levels in the Sacramento River during in-water construction activities (e.g., pile driving, extraction of temporary sheet piles used for cofferdams, placement of RSP). Turbidity will be measured using standard techniques upstream and downstream of the construction area to determine whether changes in ambient turbidity levels exceed 20 percent, the threshold derived from the Sacramento and San Joaquin Rivers Basins Plan (Central Valley Regional Water Quality Control Board 2011). If it is determined that turbidity levels exceed the 20-percent threshold, then the project proponent and/or its contractors will adjust work to ensure that turbidity levels do not exceed the 20-percent threshold.

Action(s): Monitor turbidity levels in the Sacramento River using standard techniques upstream and downstream of the construction area. Adjust work to reduce turbidity if levels exceed 20 percent.
Implementing Party: City of Sacramento/ contractor
Timing: During in-water construction activities
Monitoring Parties: City of Sacramento Department of Public Works, City of West Sacramento, Central Valley Regional Water Quality Control Board

MM BIO-18: Implement Cofferdam Restrictions. The following restrictions will be implemented during installation of the cofferdams and cofferdam dewatering.

- The extent of cofferdam footprints will be limited to the minimum necessary to support construction activities.
- Sheet piles used for cofferdams will be installed and removed using a vibratory pile driver.
- Cofferdams will be installed and removed only during the proposed in-water work window (between May 1 and November 30).

- Cofferdams will not be left in place over winter where they could be overtopped by winter/spring flows and when juveniles of listed species are most likely to be present in the construction area.
- All pumps used during dewatering of cofferdams will be screened according to CDFW and NMFS guidelines for screens.
- Cofferdam dewatering and fish rescue/relocation from within cofferdams will commence immediately following cofferdam closure.

Action(s): Implement cofferdam restrictions during installation of cofferdams and cofferdam dewatering.
Implementing Party: City of Sacramento/ contractor
Timing: During installation of the cofferdams and cofferdam dewatering
Monitoring Parties: City of Sacramento Department of Public Works, City of West Sacramento, U.S. Fish and Wildlife Service, National Marine Fisheries Service, California Department of Fish and Wildlife

MM BIO-19: Prepare and Implement a Fish Rescue and Relocation Plan. The project proponent and/or its construction contractor will develop and implement a fish rescue and relocation plan to recover any fish trapped in cofferdams. The fish rescue and relocation plan will be submitted to the resource agencies (CDFW, NMFS, and USFWS) for approval at least 60 days before initiating activities to install cofferdams. At a minimum, the plan will include the following.

A requirement that fish rescue and relocation activities will commence immediately after cofferdam closure and that dewatering has sufficiently lowered water levels inside cofferdams to make it feasible to rescue fish.

- A description of the methods and equipment proposed to collect, transfer, and release all fish trapped within cofferdams. Capture methods may include seining, dip netting, and/or electrofishing as approved by CDFW, NMFS, and USFWS. The precise methods and equipment to be used will be developed cooperatively by CDFW, NMFS, USFWS, and the project proponent and/or contractor.
- A requirement that only CDFW-, NMFS-, and USFWS-approved fish biologists will conduct the fish rescue and relocation.
- A requirement that fish biologists will contact CDFW, NMFS, and USFWS immediately if any listed species are found dead or injured.

- A requirement that a fish rescue and relocation report be prepared and submitted to CDFW, NMFS, and USFWS within 5 business days following completion of the fish relocation. Data will be provided in tabular form and at a minimum will include the species and number rescued and relocated, approximate size of each fish (or alternatively, approximate size range if large number of individuals are encountered), date and time of their capture, and general condition of all live fish (e.g., good–active with no injuries; fair–reduced activity with some superficial injuries; poor–difficulty swimming/orienting with major injuries). For dead fish, additional data will include fork length and description of injuries and/or possible cause of mortality if it can be determined.

Action(s): Develop and implement a fish rescue and relocation plan to recover any fish trapped in cofferdams as detailed in this mitigation measure.
Implementing Party: City of Sacramento/ contractor; CDFW-, NMFS-, and USFWS-approved fish biologists
Timing: 60 days prior to initiating activities to install cofferdams; during construction
Monitoring Parties: City of Sacramento Department of Public Works, City of West Sacramento, U.S. Fish and Wildlife Service, National Marine Fisheries Service, California Department of Fish and Wildlife

MM BIO-20: Prevent the Spread or Introduction of Aquatic Invasive Species. The project proponent or its contractors will implement the following actions to prevent the potential spread or introduction of AIS associated with the operation of barges and other in-water construction activities. Species of concern related to the operation of barges and other equipment in the lower Sacramento River include invasive mussels (e.g., quagga mussels [Dreissena bugensis] and zebra mussels [Dreissena polymorpha]) and aquatic plants (e.g., Brazilian waterweed [Egeria densa] and hydrilla [Hydrilla verticillata]) (California Department of Fish and Game 2008).

- The project proponent or its contractors will coordinate with the CDFW's Invasive Species Program to ensure that the appropriate BMPs are implemented to prevent the spread or introduction of AIS.
- Educate construction supervisors and managers about the importance of controlling and preventing the spread of aquatic invasive species (AIS).
- Train vessel and equipment operators and maintenance personnel in the recognition and proper prevention, treatment, and disposal of AIS.

- If feasible, prior to departure of vessels from their place of origin and before in-water construction equipment is allowed to operate within the waters of the Sacramento River, thoroughly inspect and remove and dispose of all dirt, mud, plant matter, and animals from all surfaces that are submerged or may become submerged, or places where water can be held and transferred to the surrounding water.

Action(s): Prevent the spread of aquatic invasive species according to protocol described in this mitigation measure.
Implementing Party: City of Sacramento/ contractor
Timing: Prior to and during construction
Monitoring Parties: City of Sacramento Department of Public Works, City of West Sacramento, California Department of Fish and Wildlife

MM BIO-21: Minimize or Avoid Temporary Construction Lighting and Permanent Bridge Lighting from Directly Radiating on Water Surfaces of the Sacramento River. The project proponent will minimize or avoid the effects of nighttime lighting on special-status fish species by implementing the following actions.

<u>Temporary Construction Lighting</u>

- Avoiding construction activities at night, to the maximum extent practicable.
- Using the minimal amount of lighting necessary to safely and effectively illuminate the work areas.
- Shielding and focusing lights on work areas and away from the water surface of the Sacramento River, to the maximum extent practicable.

<u>Permanent Bridge Lighting</u>

- Minimizing nighttime lighting of the bridge structure for aesthetic purposes.
- Using the minimal amount of lighting necessary to safely and effectively illuminate vehicular, bicycle, and pedestrian areas on the bridge.
- Shielding and focusing lights on vehicular, bicycle, and pedestrian areas and away from the water surface of the Sacramento River, to the maximum extent practicable.

Action(s): Avoid nighttime construction as much as possible. Shield construction lights to avoid illuminating river. Minimize and shield permanent bridge lighting. Also refer to requirements in MM VIS-2, *Apply Minimum Lighting Standards.*
Implementing Party: City of Sacramento/ contractor, project design team
Timing: During final project design and bridge construction. Prior to and during nighttime construction activities.
Monitoring Parties: City of Sacramento Department of Public Works, City of West Sacramento

MM BIO-22: Implement Measures Required in the Biological Assessments. As part of consultation under Section 7 of FESA, Biological Assessments have been prepared to address project impacts on delta smelt and VELB (USFWS) and Sacramento River winter-run Chinook salmon, CV spring-run Chinook salmon, CV steelhead, and the Southern DPS of North American green sturgeon (NMFS). The project proponent will implement the measures required by the Biological Assessments.

Action(s): Measures and terms in the Biological Opinions will be implemented
Implementing Party: City of Sacramento, or its qualified contractor
Timing: Prior to, during, and after construction, as required
Monitoring Parties: City of Sacramento Department of Public Works, City of West Sacramento, U.S. Fish and Wildlife Service, and the National Marine Fisheries Service

MM BIO-23: Avoid and Minimize Impacts on Valley Elderberry Longhorn Beetle. The following measures will be implemented prior to and during construction to ensure that the proposed project does not adversely affect elderberry shrubs adjacent to the project footprint.

- Contractors will be briefed on the need to avoid damaging the elderberry shrubs and the possible penalties for not complying with these requirements. Crews also will be educated on the status of the VELB and the need to protect its habitat.
- All elderberry shrubs that are outside of the permanent project footprint or that can be avoided will be identified on construction drawings, with notes indicating that they are sensitive resources to be avoided.
- Orange construction barrier fencing will be placed at a minimum of 20 feet from each shrub's dripline [fencing around shrub 6 (construction will be within 20 feet) will be placed as far out from the dripline as possible].

No construction activities will be permitted within the buffer zone other than those activities necessary to erect the fencing. As specified in the Conservation Guidelines for the Valley Elderberry Longhorn Beetle (Guidelines) (U.S. Fish and Wildlife Service 1999), signs will be posted every 50 feet (at a minimum) along the perimeter of the buffer area fencing. The signs will contain the following information: This area is habitat of the valley elderberry longhorn beetle, a threatened species, and must not be disturbed. This species is protected by the Endangered Species Act of 1973, as amended. Violators are subject to prosecution, fines, and imprisonment. The signs should be clearly readable from a distance of 20 feet and must be maintained for the duration of construction.

- Buffer area fences around the shrubs will be inspected weekly by a biological monitor during ground-disturbing activities and monthly after ground-disturbing activities until project construction is complete or until the fences are removed, as approved by the biological monitor. The biological monitor will be responsible for ensuring that the contractor maintains the buffer area fences around elderberry shrubs throughout construction. Biological inspection reports will be provided to USFWS and the project proponent.

Action(s): Contractors and construction crews will be educated on VELB status and how to avoid. All elderberry shrubs that can be avoided will be identified on construction drawings. Place barrier fencing at least 20-feet from each shrub's dripline. Retain a qualified biological monitor to inspect buffer areas weekly during ground-disturbing activities and to provide biological inspection reports to USFWS and the project proponent.
Implementing Party: City of Sacramento/ contractor
Timing: Prior to and during ground disturbance such as grading and excavation activities
Monitoring Parties: City of Sacramento Department of Public Works, West Sacramento; U.S. Fish and Wildlife Service

MM BIO-24: Transplant Elderberry Shrubs that Cannot be Avoided. Elderberry shrubs that cannot be avoided will be transplanted to a USFWS-approved conservation area in accordance with the Guidelines (U.S. Fish and Wildlife Service 1999). Transplanting will occur during the plant's dormant phase (approximately November through the first 2 weeks of February, after they have lost their leaves). A qualified specialist familiar with elderberry shrub transplantation procedures will supervise the transplanting. The location of the

conservation area transplantation site will be approved by USFWS before removal of the shrubs.

Action(s): Transplant elderberry shrubs that cannot be avoided and retain a qualified specialist to supervise transplantation procedures.
Implementing Party: City of Sacramento/ contractor; elderberry shrub specialist
Timing: Prior to project construction during the dormant phase of the plant, approximately November through the first 2 weeks of February, after they have lost their leaves
Monitoring Parties: City of Sacramento Department of Public Works, West Sacramento; U.S. Fish and Wildlife Service

MM BIO-25: Compensate for Impacts on Valley Elderberry Longhorn Beetle Habitat. Before construction begins, the project proponent will compensate for direct impacts (including transplanting) on all elderberry stems measuring 1 inch or more at ground level (i.e., habitat for VELB) that are located within 20 feet of proposed construction activities. Compensation will include planting replacement elderberry seedlings or cuttings and associated native plantings in a USFWS-approved conservation area, at a ratio between 1:1 and 8:1 (ratio = new plantings to affected stems), depending on the diameter of the stem at ground level, the presence or absence of exit holes, and whether the shrub is located in riparian habitat (U.S. Fish and Wildlife Service 1999). Mitigation credits for VELB will be purchased at a USFWS-approved mitigation bank. The exact amount and location of compensatory mitigation will be based on consultation with USFWS. Table 3-18 summarizes the compensation required for direct effects on up to five elderberry shrubs (shrubs 1, 2, 3, 5, and 7) that provide VELB habitat. Based on stem counts listed in Table 3-18 for these five shrubs and in accordance with the Guidelines, 34 elderberry seedlings and 34 associated native plants will be planted in a USFWS-approved conservation area. This compensation may be reduced if some of the shrubs occurring within temporary impact areas (shrubs 1, 2, 3, and 7) can be avoided once more detailed plans are available.

Table 3-18. Required Compensation for Directly Affected Elderberry Shrubs

Habitat	Stem Diameter	Number of Stems	Exit Holes?	Seedling Ratio	Native Plant Ratio	Total Seedling	Total Native Plants
Riparian	Stems >1" to <3"	0	No	2:1	1:1	0	0
	Stems >1" to <3"	0	Yes	4:1	2:1	0	0
	Stems >3" to <5"	0	No	3:1	1:1	0	0
	Stems >3" to <5"	0	Yes	6:1	2:1	0	0
	Stems >5"	1	No	4:1	1:1	4	4
	Stems >5"	0	Yes	8:1	2:1	0	0
Nonriparian	Stems >1" to <3"	22	No	1:1	1:1	22	22
	Stems >1" to <3"	0	Yes	2:1	2:1	0	0
	Stems >3" to <5"	1	No	2:1	1:1	2	2
	Stems >3" to <5"	0	Yes	4:1	2:1	0	0
	Stems >5"	2	No	3:1	1:1	6	6
	Stems >5"	0	Yes	6:1	2:1	0	0
Total		**26**				**34**	**34**

Action(s): Compensate for direct impacts (including transplanting) on all elderberry stems as described in this Mitigation Measure, *Compensate for Impacts on Valley Elderberry Longhorn Beetle Habitat.*
Implementing Party: City of Sacramento
Timing: Prior to issuance of grading permit
Monitoring Parties: City of Sacramento Department of Public Works, West Sacramento; U.S. Fish and Wildlife Service

MM BIO-26: Conduct Focused Surveys for Nesting Swainson's Hawk Prior to Construction. The project proponent will retain a wildlife biologist experienced in surveying for Swainson's hawk to conduct surveys for the species in the spring/summer prior to construction. The surveys will be conducted within the limits of disturbance and in a buffer area up to 0.25 mile from the limits of disturbance. The size of the buffer area surveyed will be based on the type of

habitat present and the line-of-sight from the construction area to surrounding suitable breeding habitat. Surveys will follow the methods in Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley (Swainson's Hawk Technical Advisory Committee 2000). A minimum of six surveys will be conducted according to these methods. If a variance of the survey distance or number of surveys is necessary, the project proponent will coordinate with CDFW regarding appropriate survey methods based on proposed construction activities. Surveys generally will be conducted from February to July. Survey methods and results will be reported to the project proponent and CDFW.

Action(s): Retain a qualified biologist to determine the presence/absence of Swainson's Hawk.
Implementing Party: Project proponent; wildlife biologist
Timing: Prior to project construction and from February to July
Monitoring Parties: City of Sacramento Department of Public Works, City of West Sacramento, California Department of Fish and Wildlife

MM BIO-27: Monitor Active Swainson's Hawk Nest During Pile Driving and Other Construction Activities. Active Swainson's hawk and white-tailed kite nests within 600 feet of the Biological Study Area will be monitored during pile driving and other construction activities. Monitoring will be conducted by a wildlife biologist with experience in monitoring Swainson's hawk and white-tailed kite nests. The monitor will document the location of active nests, coordinate with the project proponent and CDFW, and record all observations in a daily monitoring log. The monitor will have the authority to temporarily stop work if activities are disrupting nesting behavior to the point of resulting in potential take (i.e., eggs and young chicks still in nests and adults appear agitated and could potentially abandon the nest). The monitor will work closely with the contractor, the project proponent, and CDFW to develop plans for minimizing disturbance, such as modifying or delaying certain construction activities.

A minimum non-disturbance buffer of 600 feet (radius) will be established around all active Swainson's hawk and white-tailed kite nests. No entry of any kind related to construction will be allowed within this buffer while the nest is active, unless approved by CDFW through issuance of an Incidental Take Permit or through consultation during project construction. The buffer size may be modified based on site-specific conditions, including line-of-sight, topography, type of disturbance, existing ambient noise and disturbance levels, and other relevant factors. Entry into the buffer for construction activities will be granted

when the biological monitor determines that the young have fledged and are capable of independent survival or that the nest has failed and the nest site is no longer active. All buffer adjustments will be approved by CDFW.

Action(s): Retain a qualified biologist to monitor Swainson's Hawk nests during construction.
Implementing Party: City of Sacramento; qualified wildlife biologist
Timing: During pile driving and project construction
Monitoring Parties: City of Sacramento Department of Public Works, City of West Sacramento, California Department of Fish and Wildlife

Potential Impact: BIO-2: Removal of purple martin habitat (i.e., approach structures) could displace approximately 25% of the Sacramento purple martin population.

MM BIO-10: Avoid and Minimize Impacts on Nesting Birds and Roosting Bats from Demolition of Approach Structures.

MM BIO-28: Avoid and Minimize Impacts on Purple Martins during Construction Activities. No construction activity that results in ground disturbance, modification of the I Street Bridge approach structure, loud noises, and/or vibrations will be conducted within 100 feet of the edge of the purple martin colony during the purple martin nesting season (March 15 to August 15). In addition, no construction-related vehicles or machinery shall be operated or stored beneath the colony during this period or until a qualified biologist determines that the purple martins have completed nesting and are no longer occupying the structure.

Action(s): From March 15 to August 15, keep all ground-disturbing, noisy, or vibratory construction activities, or modifications of the I Street Bridge approach structures, 100 feet from the edge of the purple martin colony. Do not store or operate construction-related vehicles or machinery under the purple martin colony between March 15 and August 15.
Implementing Party: City of Sacramento/ contractor
Timing: During project construction activities between March 15 and August 15
Monitoring Parties: City of Sacramento Department of Public Works

MM BIO-29: Conduct Staff Training. The City of Sacramento will work with a wildlife biologist with knowledge of the life history, behavior, and habitat requirements of purple martin to conduct a training session for City project managers (i.e., project managers from the Public Works department) to inform

staff of the biology, habitat requirements, regulatory status, and legal protection of purple martin as well as the mitigation requirements under CEQA and NEPA for the colonies in the City of Sacramento. The training will allow City staff to be informed for other City projects that could affect purple martins. The training session will occur prior to the demolition of the I Street Bridge approach structure.

Action(s): Develop training material and conduct training session.
Implementing Party: City of Sacramento, wildlife biologist with knowledge of purple martins
Timing: Prior to demolition of I Street Bridge approach structures
Monitoring Parties: City of Sacramento Department of Public Works

MM BIO-30: Enhance Existing Colony Entrance Holes. To improve nesting success at other existing colonies within the city of Sacramento, nest guards will be installed in at least 50 nest entrance holes (unless there are fewer than 50 holes without guards already installed) across colony locations in the City used by martins in the previous 3 years. The nest guards will consist of 1/2-inch wire mesh installed along the interior edge of the previously used vent holes and will extend at least 1 inch above the floor of the structure chamber. Nest guards will be installed prior to the demolition of the I Street Bridge approach structure and outside of the nesting season (i.e., installation could generally occur between September 15 and February 1).

Action(s): Identify suitable locations for nest guards across colony locations within City of Sacramento. Install nest guards in at least 50 nest entrance holes at locations used by purple martins in the previous 3 years.
Implementing Party: City of Sacramento
Timing: Prior to demolition of I Street Bridge approach structures. Between September 15 and February 1.
Monitoring Parties: City of Sacramento Department of Public Works

MM BIO-31: Create Purple Martin Replacement Habitat. Purple martin nesting habitat that will be lost due to demolition of the I Street Bridge approach structure will be mitigated in part with replacement habitat. Replacement habitat will consist of at least 10 large (e.g., 4-foot tall) nest boxes placed at least 20 feet above the ground at the same location as the existing approach structure. An initial set of nest boxes will be installed prior to the 2019 nesting season to determine if they are used by purple martins. The initial nest boxes will be strapped to the approach structure support columns. Nest box design,

construction, and installation will be coordinated with a biologist with extensive experience with the nesting needs of the Sacramento region population of purple martins.

Nest boxes will be monitored in all years leading up to the demolition of the approach structure to determine their use by purple martins in order to make modifications to the design, location, and/or number of boxes to encourage and continue to support purple martins at the I Street colony location.

The final design and at least the minimum number of replacement boxes will be in place and overlap temporally with the approach structure for at least one season prior to demolition and removal of the approach structure. Prior to the demolition of the approach structure, the nest boxes may be removed (outside of the nesting season) to accommodate demolition activities but will be re-installed in advance of the subsequent nesting season on permanent poles within the same location as the approach structure.

Landscaping near the nesting habitat will be designed to not disrupt the flight access within 120 feet of replacement nesting habitat (i.e., will not physically or visually obstruct the space around the nesting habitat). Small to medium non-fruit-bearing trees will be incorporated into the landscaping plans. Where possible, pine trees (*Pinus* spp.) also will be incorporated into landscaping plans to provide a permanent source of nesting material for purple martins. If feasible, some mowed or cut vegetation along the West Sacramento levee in the BSA (see BSA limits shown on EIR/EA Figure 2.16-1) will be left in place between March 15 and May 15 to allow purple martins to use this material for nesting.

Action(s): Install nest boxes under approach viaduct where martins are currently nesting. Monitor nest boxes according to protocol described in this Mitigation Measure, *Create Purple Martin Replacement Habitat,* and in Mitigation Measure BIO-32, *Prepare and Implement a Monitoring and Management Plan for the I Street Bridge Purple Martin Colony Replacement Habitat.* Design landscaping to not disrupt the flight access within 120 feet of replacement habitat.
Implementing Party: City of Sacramento/ contractor, biologist with extensive experience with the nesting needs of the Sacramento region population of purple martins
Timing: First nest boxes installed in 2019. All nest boxes installed prior to demolition of approach structure. Complete landscaping design concurrent with project design. Remove and re-install boxes outside of nesting season for demolition of

approach structure. Monitor in all years leading up to demolition of approach structure.
Monitoring Parties: City of Sacramento Department of Public Works, biologist with extensive experience with the nesting needs of the Sacramento region population of purple martins

MM BIO-32: Prepare and Implement a Monitoring and Management Plan for the I Street Purple Martin Colony Replacement Habitat. The project proponent will develop and implement a monitoring and management plan for the I Street Bridge purple martin colony replacement habitat prior to the construction of the proposed project. The monitoring portion of the plan will be implemented at least one nesting season prior to the demolition of the existing approach structure near the I Street Bridge. At a minimum, the plan will include the following actions and requirements.

- Monitor annually the use of replacement habitat by purple martins at the I Street Bridge colony location over a minimum 10-year period with at least 7 of the years occurring after the completion of the new bridge and the demolition of the existing approach structure that provides nesting habitat for purple martins. The monitoring period may be extended if it is found that (1) purple martins are not using the replacement habitat; or (2) the replacement habitat is not functioning as intended and repairs are made, or additional replacement habitat is created.
- Monitor annually the other colonies in the Sacramento region to provide context for how the I Street Bridge colony is doing relative to the remaining population. Colonies will be monitored over the same period as the I Street Bridge colony.
- Annual monitoring will include up to 6 visits to each colony starting in March and ending in approximately June. Reproductive monitoring at colonies will be conducted using a pole mounted camera. Reproductive monitoring will occur during the latter part of the annual colony monitoring (approximately 3 of the total visits to a colony). At a minimum, the following information will be recorded.
    - Number of nesting pairs
    - Documentation of which vent holes and/or nest boxes are used
    - Documentation of use of perching structures
    - Effectiveness of landscaped areas and semi-natural areas (vegetated levee) in providing nesting materials

    - Observations of predation or presence of known predators
    - Changes in habitat in and around the colony
- Monitoring and management will be conducted by a wildlife biologist with knowledge of the life history, behavior, and habitat requirements of purple martin and with demonstrated prior experience in monitoring purple martin colonies.
- The monitoring and management plan will include adaptive management measures to correct problems with I Street Bridge Project replacement habitat, make other habitat improvements, and/or implement management recommendations within or adjacent to the BSA, or at other city of Sacramento colony locations where the City has existing rights to make modifications, in an attempt to boost nesting success. These measures may include but would not be limited to the following.
    - A commitment to replacing poor-functioning or damaged free-standing purple martin nesting and/or perching habitat such that there is no net loss in the amount of created habitat.
    - A process for making and implementing recommendations on the management of vegetation around colonies within the city of Sacramento.

The Director of the City of Sacramento Department of Public Works, or his or her designee, will be responsible on a continuing basis for the implementation of the mitigation measures relating to purple martin impacts, replacement habitat and the replacement habitat management plan. The Director will determine the manner in which mitigation shall proceed, and the resources, including staff commitment and consultants, that will be utilized in the effort.

Action(s): Retain a qualified wildlife biologist to develop and implement purple martin monitoring and management plan according to protocol described in this Mitigation Measure, *Prepare and Implement a Monitoring and Management Plan for the I Street Bridge Purple Martin Colony Replacement Habitat.* Conduct annual monitoring per terms of measure. Identify adaptive management measures and implement as necessary.
Implementing Party: City of Sacramento/ wildlife biologist
Timing: Prepare plan prior to construction. Implement plan at least on nesting season prior to the demolition of existing approach structure. Monitor following completion of the new bridge and demolition of approach structure for

minimum of 7 years. Conduct adaptive management as needed, per the mitigation measure.
Monitoring Parties: City of Sacramento Department of Public Works

Potential Impact: BIO-3: Permanent and temporary impacts on vegetation communities of special concern, including, non-wetland riparian forest and SRA cover.

MM BIO-1: Install Orange Construction Fencing between the Construction Area and Adjacent Sensitive Biological Resources.

MM BIO-2: Conduct Environmental Awareness Training for Construction Employees.

MM BIO-3: Conduct Periodic Biological Monitoring.

MM BIO-4: Compensate for Temporary Effects on and Permanent Loss of Cottonwood Riparian Forest [including SRA Cover].

MM BIO-33: Compensate for Loss of Protected Trees not in Riparian Habitat.
Within 1 year prior to construction, the project proponent will have a certified arborist conduct a preconstruction inventory of all heritage trees to be removed within the areas defined as ruderal woodland and landscaped land cover types. The inventory will include the location, species, and diameter of all trunks; approximate height and canopy diameter; and approximate age, in support of a tree permit for removal of the heritage trees. All conditions of the tree permit will be implemented.

The project proponent will mitigate the loss of protected trees using one or a combination of the two following options.

- Because it is unlikely that adequate space will be available in the project area for tree planting after construction, pay an in-lieu fee to the City of West Sacramento, which would be used to purchase and plant trees elsewhere in West Sacramento. Replacement trees will be required at a ratio of 1:1 (i.e., 1-inch diameter of replacement tree planted for every 1-inch diameter of tree removed). Replacement trees will be of the same species, except for the replacement of tree of heaven and black locust, which are invasive species and will be replaced with native tree species. Mitigation will be subject to approval by the City's tree administrator and will take into account species affected, replacement species, location,

health and vigor, habitat value, and other factors to determine fair compensation for tree loss. Replacement trees will be monitored annually for 3 years to document vigor and survival. If any of the replacement trees die within 3 years of the initial planting, the project proponent will plant additional replacement trees and monitor them until all trees survive for a minimum of 3 years after planting.

- If feasible, plant replacement trees at or near the location of the tree removal, following the same replacement ratio, species, monitoring, and tree survival requirements described for the option above.

Action(s): Provide written documentation that heritage trees removed have been replaced at a ratio of 1:1.
Implementing Party: City of Sacramento, certified arborist
Timing: Within 1 year prior to construction and immediately after construction
Monitoring Parties: City of Sacramento Department of Public Works, City of Sacramento's tree administrator

MM BIO-34: Purchase Channel Enhancement Credits for Impacts on Critical Habitat. Permanent impacts on critical habitat (bank and substrate below the OHWM and water column habitat), totaling 1.33 acres (up to 2,949 square feet [0.07 acre] from the new bridge piers and RSP and up to 55,000 square feet [1.26 acre] from bridge shading of aquatic habitat) will be mitigated at a 3:1 ratio. The project proponent proposes to mitigate the permanent loss of critical habitat through purchase of 3.99 acres of mitigation credits at a NMFS-approved anadromous fish conservation bank.

Action(s): Compensate for permanent impacts on critical habitat through purchasing credits as a 3:1 ratio.
Implementing Party: City of Sacramento
Timing: Prior to issuance of grading permit
Monitoring Parties: City of Sacramento Department of Public Works, National Marine Fisheries Service, Caltrans

MM BIO-35: Avoid the Introduction and Spread of Invasive Plants. The project proponent or their contractor will be responsible for avoiding the introduction of new invasive plants and the spread of invasive plants previously documented in the study area. Accordingly, the following measures will be implemented during construction.

- Educate construction supervisors and managers on weed identification and the importance of controlling and preventing the spread of invasive weeds.
- Dispose of invasive species material removed during project construction offsite at an appropriate disposal facility to avoid the spread of invasive plants into natural areas.
- Minimize surface disturbance to the greatest extent feasible to complete the work.
- Use weed-free imported erosion-control materials (or rice straw in upland areas).
- Use locally grown native plant stock and native or naturalized (noninvasive) grass seed during revegetation.
- If feasible, remove trees of heaven located in and adjacent to the temporary impact area on the east side of 2nd Street in the City of West Sacramento.

Action(s): Prevent the spread of invasive plants according to protocol described in this mitigation measure.
Implementing Party: City of Sacramento/ contractor
Timing: Prior to and during construction
Monitoring Parties: City of Sacramento Department of Public Works and City of West Sacramento

Potential Impact: BIO-4: Permanent and temporary effects on non-wetland waters of the United States and waters of the State in the Sacramento River, which is a perennial stream.

MM BIO-1: Install Orange Construction Fencing between the Construction Area and Adjacent Sensitive Biological Resources

MM BIO-2: Conduct Environmental Awareness Training for Construction Employees

MM BIO-3: Conduct Periodic Biological Monitoring

MM BIO-5: **Protect Water Quality and Prevent Erosion and Sedimentation in Drainages and Wetlands**

Potential Impact: BIO-5: Short-term work activities, including pile driving, in or adjacent to the Sacramento River could affect fish species that may be injured or killed by exposure to harmful levels of noise, suspended sediment, contaminants, or other factors.

MM BIO-14: Conduct All In-Water Construction Activities between May 1 and November 30 and Only during Daylight Hours

MM BIO-15: Implement Measures to Minimize Exceedance of Interim Threshold Sound Levels during Pile Driving

MM BIO-16: Develop and Implement a Hydroacoustic Monitoring Plan

MM BIO-17: Monitor Turbidity in the Sacramento River

MM BIO-18: Implement Cofferdam Restrictions

MM BIO-19: Prepare and Implement a Fish Rescue and Relocation Plan

MM BIO-21: Minimize or Avoid Temporary Construction Lighting and Permanent Bridge Lighting from Directly Radiating on Water Surfaces of the Sacramento River

Potential Impact: BIO-6: Removal of heritage trees in the City of Sacramento and the City of West Sacramento.

MM BIO-1: Install Orange Construction Fencing between the Construction Area and Adjacent Sensitive Biological Resources

MM BIO-2: Conduct Environmental Awareness Training for Construction Employees

MM BIO-3: Conduct Periodic Biological Monitoring

MM BIO-4: Compensate for Temporary Effects on and Permanent Loss of Cottonwood Riparian Forest [including SRA Cover]

MM BIO-33: Compensate for Loss of Protected Trees not in Riparian Habitat

1.2.4 CULTURAL RESOURCES (CUL)

Potential Impact: CUL-1: Removal of the approaches (non-rail vehicular aspect of the bridge) would modestly affect the bridge's integrity of design.

MM CUL-1: Develop Interpretative Display for the I Street Bridge. The project proponent will develop an interpretive display and erect the display in Old Sacramento at a site within clear view of the I Street Bridge. The display will focus on the removal of vehicular uses from the I Street Bridge, to interpret for future generations the vehicular uses of the bridge. The project proponents will also assemble a freestanding interpretive panel that documents the history of the joint railroad-automobile use of the I Street Bridge, emphasizing the non-rail uses. Details on the implementation on the interpretive display will be coordinated through Caltrans in consultation with SHPO.

Action(s): Develop and install an interpretive display for the I Street Bridge.
Implementing Party: City of Sacramento
Timing: Prior to and during construction
Monitoring Parties: City of Sacramento Department of Public Works, City of West Sacramento, Caltrans

Potential Impact: CUL-2: Ground-disturbing activities could impact CA-SAC-658H or previously unknown archaeological resources.

MM CUL-2: Conduct Mandatory Cultural Resources Awareness Training for Construction Personnel. Before any ground-disturbing work occurs in the project area, a qualified archaeologist will be retained to conduct mandatory contractor/worker cultural resources awareness training for construction personnel. The awareness training will be provided to all construction personnel (contractors and subcontractors), to brief them on the need to avoid effects on cultural resources adjacent to and within construction areas and the penalties for not complying with applicable state and federal laws and permit requirements.

Action(s): Conduct cultural resources awareness training for construction personnel. Include construction worker training requirements on grading and construction plans.
Implementing Party: City of Sacramento/ contractor; qualified archaeologist
Timing: Prior to ground-disturbing construction activities
Monitoring Parties: City of Sacramento Department of Public Works, City of West Sacramento, Caltrans

MM CUL-3: Establish an Environmental Sensitive Area for Resource CA-SAC-658H. An Environmentally Sensitive Area (ESA) will be established to ensure that resource CA SAC 658H is not affected during project implementation. Prior to construction, the construction contractor will install high-visibility orange construction fencing and/or flagging, as appropriate, along the perimeter of the area of direct impact (ADI) located within the APE to restrict access to the portion of CA SAC 658H outside the ADI. Prior to installation of the ESA fencing, the Environmentally Sensitive Area Action Plan will be reviewed as a stipulation of the Programmatic Agreement (PA) prepared for the project.

Action(s): Install orange barrier fencing around CA-SAC-658H to restrict access and avoid damaging the site.
Implementing Party: City of Sacramento/ contractor
Timing: Prior to ground-disturbing construction activities
Monitoring Parties: City of Sacramento Department of Public Works, Caltrans

MM CUL-4: Implement Programmatic Agreement. A project-specific PA between Caltrans, the City of Sacramento and the SHPO was developed for the project. The project-specific PA assures fulfillment of the NHPA requirements of Section 106 and ensures proper evaluation and treatment of any previously unknown archaeological resources uncovered during ground-disturbing construction activities. Additionally, the project-specific PA establishes responsibilities for the treatment of historic properties, the implementation of mitigation measures, and ongoing consultation efforts with Native American groups.

The project-specific PA includes development of a plan for archaeological test trenching within the APE on the West Sacramento side of the river, since this area has a high archaeological sensitivity for both historic-period and prehistoric material. A plan will be prepared for this work similar to a Caltrans Extended Phase I (XPI) Plan. Excavations will be conducted prior to construction, and will aid in the identification of unknown subsurface archaeological deposits that may be present within the APE. The project-specific PA also includes an Environmentally Sensitive Area Action Plan, as discussed above, for CA- SAC 658H. As part of the project-specific PA, a Cultural Resources Management Plan (CRMP) was prepared to Caltrans, City of Sacramento, and City of West Sacramento standards. The CRMP designates procedures for treatment of previously unidentified cultural resources encountered during test trenching or construction, including steps for the mitigation of resources that are determined eligible for the NRHP.

The CRMP specifies that a qualified archaeologist and a Native American monitor will be retained to monitor all initial ground disturbing activities (e.g., vegetation removal, grading, excavation, bridge construction). The purpose of the monitoring is to ensure that measures identified in the environmental document are properly implemented to avoid and minimize effects to cultural resources and to ensure that the project complies with all applicable permit requirements and agency conditions of approval. Conditions for monitoring and project reporting are specified in the CRMP.

Action(s): Follow Programmatic Agreement protocol as described in this Mitigation Measure, *Implement a Programmatic Agreement for the Project.*
Implementing Party: City of Sacramento, City of West Sacramento
Timing: Before and during ground disturbing construction activities
Monitoring Parties: City of Sacramento Department of Public Works, City of West Sacramento, Caltrans

MM CUL-5: Implement Avoidance and Notification Procedures for Cultural Resources. It is Caltrans' and the City of Sacramento's policy to avoid cultural resources whenever possible. If cultural materials are discovered during construction, all earthmoving activity within and around the immediate discovery area will be diverted until a qualified archaeologist can assess the nature and significance of the find. All reasonable measures will be implemented to avoid, minimize, or mitigate further harm to the resource. If appropriate, the project proponent will notify Indian tribes or Native American groups that may attach religious or cultural significance to the affected resource.

If human remains are discovered, State Health and Safety Code Section 7050.5 states that further disturbances and activities shall cease in any area or nearby area suspected to overlie remains, and the county coroner shall be contacted. Pursuant to PRC Section 5097.98, if the remains are thought to be Native American, the coroner will notify the NAHC, which will then notify the Most Likely Descendent (MLD). The project proponent will work with the MLD to avoid the remains and, if avoidance is not feasible, to determine the respectful treatment of the remains. Further provisions of PRC Section 5097.98 are to be followed as applicable.

Action(s): Immediately cease all work activities around the immediate area of discovery and follow the protocol described in this Mitigation Measure, *Implement Avoidance and Notification Procedures for Cultural Resources.*

Include cultural resources discovery, identification, and notification guidelines on grading and construction plans.
Implementing Party: City of Sacramento/ contractor
Timing: During ground-disturbing construction activities and immediately upon inadvertent archaeological discoveries, including human remains
Monitoring Parties: City of Sacramento Department of Public Works, City of West Sacramento, Caltrans

Potential Impact: CUL-3: Earth-disturbing and (i.e., excavation and grading) construction activities could damage human remains if present in the project area.

MM CUL-2: Conduct Mandatory Cultural Resources Awareness Training for Construction Personnel

MM CUL-5: Implement Avoidance and Notification Procedures for Cultural Resources

1.2.5 GEOLOGY AND SOILS (GEO)

Potential Impact: GEO-1: Earth-disturbing and (i.e., excavation and grading) construction activities could damage fossils if present in the project area.

MM GEO-1: Educate Construction Personnel in Recognizing Fossil Material. All construction personnel will receive training provided by a qualified professional paleontologist experienced in teaching non-specialists to ensure that construction personnel can recognize fossil materials in the event that any are discovered during construction.

Action(s): Conduct paleontological resources awareness training for construction personnel. Include construction worker training requirements on grading and construction plans.
Implementing Party: City of Sacramento/ contractor
Timing: Prior to ground-disturbing construction activities
Monitoring Parties: City of Sacramento Department of Public Works and City of West Sacramento

MM GEO-2: Stop Work if Substantial Fossil Remains Are Encountered during Construction. If substantial fossil remains (particularly vertebrate remains) are discovered during earth-disturbing activities, activities will stop immediately until a State-registered professional geologist or qualified professional paleontologist

can assess the nature and importance of the find and a qualified professional paleontologist can recommend appropriate treatment. Treatment may include preparation and recovery of fossil materials so that they can be housed in an appropriate museum or university collection, and may include preparation of a report for publication describing the finds. The project proponent will ensure that recommendations regarding treatment and reporting are implemented.

Action(s): Immediately cease all work activities around the immediate area of discovery and follow the protocol described in this Mitigation Measure, *Stop Work if Substantial Fossil Remains Are Encountered during Construction*. Include paleontological resources discovery, identification, and notification guidelines on grading and construction plans.
Implementing Party: City of Sacramento/ contractor; State-registered professional geologist or qualified professional paleontologist
Timing: During ground-disturbing construction, immediately upon inadvertent paleontological discoveries
Monitoring Parties: City of Sacramento Department of Public Works and City of West Sacramento

1.2.6 NOISE (NOI)

Potential Impact: NOI-1: Construction noise could exceed City of West Sacramento noise standards for non-transportation sources.

MM NOI-1: Use Noise-Reducing Construction Practices. To the extent feasible, construction contractors will control noise from construction activity such that noise does not exceed applicable noise ordinance standards specified by the City of West Sacramento. Measures that can be implemented to control noise include:

- Locate noise-generating equipment as far away as practical from residences and other noise-sensitive uses.
- Equip all construction equipment with standard noise attenuation devices such as mufflers to reduce noise and equip all internal combustion engines with intake and exhaust silencers in accordance with manufacturer's standard specifications.
- Establish equipment and material haul routes that avoid residential uses to the extent practical, limit hauling to the hours between 7:00 a.m. and 10:00 p.m., and specify maximum acceptable speeds for each route.

- Use electrically powered equipment in place of equipment with internal combustion engines where practical, where electric equipment is readily available, and where this equipment accomplishes project work as effectively and efficiently as equipment powered with internal combustion engines.
- Restrict the use of audible warning devices such as bells, whistles, and horns to those situations that are required by law for safety purposes.
- Provide noise-reducing enclosure around stationary noise-generating equipment.
- Provide temporary construction noise barriers between active construction sites that are in close proximity to residential and other noise-sensitive uses. Temporary barriers can be constructed or created with parked truck trailers, soil piles, or material stock piles.
- Route haul trucks away from residential areas where practical.

The construction contractor will develop a construction noise control plan which identifies specific feasible noise control measures that will be employed and the extent to which the measure will be able to control noise to specific noise ordinance limits. The plan will identify areas where it not considered feasible to comply with applicable noise ordinance limits. The noise control plan will be submitted to and approved by the project proponent before any noise-generating activity begins.

Action(s): Use noise-reducing construction practices. Develop and submit a construction noise control plan to specific noise ordinance limits.
Implementing Party: City of Sacramento/ contractor
Timing: Prior to issuance of grading permit and during project construction
Monitoring Parties: City of Sacramento Department of Public Works and City of West Sacramento

MM NOI-2: **Use Vibration-Reducing Construction Practices.** The construction contractor will, to the extent feasible, maintain the following minimum distances between vibration-generating construction activity and nearby buildings:

- Impact pile driving – 200 feet
- Sonic pile driving – 125 feet
- Vibratory roller – 75 feet

For cases where this is not feasible, the resident or property owner will be notified in writing prior to construction activity that construction may occur within these distances of their building. The project proponent will inspect the potentially affected buildings prior to construction to inventory existing cracks in paint, plaster, concrete, and other building elements. The project proponent will retain a qualified acoustical consultant or engineering firm to conduct vibration monitoring at potentially affected buildings to measure the actual vibration levels during construction and to keep vibration at those buildings below 0.1 in/sec where feasible. Following completion of construction, the City will conduct a second inspection to inventory changes in existing cracks and new cracks or damage, if any that occurred as a result of construction-induced vibration. If new damage is found, then the City will promptly arrange to have the damaged repaired, or will reimburse the property owner for appropriate repairs.

In addition, if construction activity is required within 100 feet of residences or other vibration-sensitive buildings, a designated complaint coordinator will be responsible for handling and responding to any complaints received during such periods of construction. A reporting program will be required that documents complaints received, actions taken, and the effectiveness of these actions in resolving disputes.

Action(s): Use vibration-reducing construction practices and develop a reporting program as described in this Mitigation Measure, *Use Vibration-Reducing Construction Practices.* Develop a reporting program to document complaints.
Implementing Party: City of Sacramento/ contractor; qualified acoustical consultant
Timing: Prior to, during, and after project construction
Monitoring Parties: City of Sacramento Department of Public Works and City of West Sacramento

Potential Impact: NOI-2: Impact pile driving vibration within about 175 feet of the activity could result in vibration causing potential annoyance and damage to historic buildings.

MM NOI-1: Use Noise-Reducing Construction Practices

MM NOI-2: Use Vibration-Reducing Construction Practices

Potential Impact: NOI-3: Increases in construction noise are expected to result in noise levels that exceed City of West Sacramento noise standards at nearby residential uses.

MM NOI-1: Use Noise-Reducing Construction Practices

MM NOI-2: Use Vibration-Reducing Construction Practices

1.2.7 RECREATION (REC)

Potential Impact: REC-1: Temporary and permanent impacts—including acquisition of land—on the riverfront parks in both the Sacramento and West Sacramento.

MM REC-1: Restore Sacramento River Parkway Trail after Construction. In the event that any inadvertent damage occurs to the Sacramento River Parkway Trail, the area affected will be restored to the condition that existed prior to construction activities or better.

Action(s): Restore the Sacramento River Parkway Trail after construction.
Implementing Party: City of Sacramento/ contractor
Timing: During and immediately after construction
Monitoring Parties: City of Sacramento Department of Public Works; City of Sacramento Department of Youth, Parks & Community Enrichment

MM REC-2: Provide Advance Notification of Sacramento River Parkway Trail Closures. The City of Sacramento will provide advance notification of the Sacramento River Parkway Trail closure on its websites and trailheads. Notices will include trail closure dates, approximate duration, and a description of the detour available during closure.

Action(s): Provide advance notice of Sacramento River Parkway Trail closures on trails and websites.
Implementing Party: City of Sacramento/ contractor
Timing: During construction and prior to closures
Monitoring Parties: City of Sacramento Department of Public Works; City of Sacramento Department of Youth, Parks & Community Enrichment

1.2.8 LIST OF ABBREVIATIONS AND ACRONYMS

AIR= Air Quality
APE = Area of Potential Effects
BIO = Biological Resources
BMP = best management practice
BSA = biological study area
CDFW = California Department of Fish and Wildlife
CRMP = Cultural Resource Management Program
CUL = Cultural Resources
CV = Central Valley
CWA = Clean Water Act
DPS = distinct population segment
EIR/EA = Environmental Impact Report/Environmental Assessment
FESA = federal Endangered Species Act
GEO = Geology and Soils
LID = low impact-development
NEPA= National Environmental Policy Act
NMFS = NOAA Fisheries (formally known as National Oceanic and Atmospheric Administration's National Marine Fisheries Service)
NOI = Noise
NPDES = National Pollutant Discharge Elimination System
NRHP = National Register of Historic Places
OHWM = ordinary high-water mark
PA = Programmatic Agreement
REC = Recreation
RMS = Root Mean Square
RWQCB = Regional Water Quality Control Board
SHPO = California State Historic Preservation Officer
SMAQMD = Sacramento Metropolitan Air Quality Management District
SRA = shaded riverine aquatic
SEL = sound exposure level
SPL = sound pressure level
SWPPP = Stormwater Pollution Prevention Plan
USACE = U.S. Army Corps of Engineers
USFWS = U.S. Department of Fish and Wildlife Service
VELB = valley elderberry longhorn beetle
VIS = Visual/Aesthetics
YSAQMD = Yolo Solano Air Quality Management District

ATTACHMENT A-2 – AVOIDANCE, MINIMIZATION AND/OR MITIGATION MEASURES ADOPTED AS PART OF THE CALIFORNIA STATE LANDS COMMISSION'S MITIGATION MONITORING PROGRAM

The text for each avoidance, minimization and/or mitigation measure (AMM) was extracted from the Final EIR Appendix D: Avoidance, Minimization and/or Mitigation Summary, as certified by the City of Sacramento. A list of abbreviations and acronyms can be found in Section 1.1.1.

Table A-2: Project Avoidance, Minimization and/or Mitigation Measures

Environmental Resource	Avoidance, Minimization and/or Mitigation Measure (AMM)
Utilities/Emergency Services (UTI)	**AMM UTI-1: Provide Advance Notice to Utility Service Providers.** The project proponent will provide advance notification and coordinate with utility service providers prior to and during construction to avoid or minimize potential service disruptions.
Water Quality	**AMM Biological Resources (BIO)-1: Implement Measures to Protect Water Quality during Construction.** Compliance with regulatory permits and municipality programmatic requirements is anticipated during all construction field activities, including project staging and storage area usage. As a result, no water quality impacts are anticipated for the duration of the project. In support of this effort, the project is expected to be regulated under the CGP, Order No. 2009-0009-DWQ, and all associated adopted amendments. The CGP is applicable for all construction projects where operations, such as clearing, grubbing, grading and excavation, disturbs 1 acre or more of land. Compliance with the CGP requires the project proponent/construction contractor to prepare a SWPPP. The SWPPP includes conditions for final stabilization of the project area, including staging areas, which will require review and approval by the RWQCB prior to acceptance of the project's Notice of Termination. Implementation of the SWPPP begins when construction operations start and continues until the project is complete, field activities have finished, and the Notice of Termination is approved. The approved SWPPP includes (and is not limited to) the following elements.

Environmental Resource	Avoidance, Minimization and/or Mitigation Measure (AMM)
	The approved SWPPP includes (and is not limited to) the following elements. • Project Description – The Project description includes maps and other information related to construction activities and potential sources of pollutants. • Minimum Construction Control Measures – These measures may include limiting construction access routes, stabilizing areas denuded by construction, and using sediment controls and filtration. • Erosion and Sediment Control – The SWPPP is required to contain a description of soil stabilization practices, control measures to prevent a net increase in sediment load in storm water, controls to reduce tracking sediment onto roads, and controls to reduce wind erosion. • Non-Storm Water Management – The SWPPP includes provisions to reduce and control discharges other than storm water. • Post-Construction Storm Water Management – The SWPPP includes a list of storm water control measures that provide ongoing (permanent) protection for water resources. • Waste Management and Disposal – The SWPPP includes a waste management section, including, for example, equipment maintenance waste, used oil, and batteries. All waste must be disposed of as required by state and federal law. • Maintenance, Inspection, and Repair – The SWPPP requires an ongoing program to ensure that all controls are in place and operating as designed. • Monitoring – This provision requires documented inspections of the control measures.

Environmental Resource	Avoidance, Minimization and/or Mitigation Measure (AMM)

	• Reports – The contractor will prepare an annual report on the construction project and submit this report on July 15 each year. This report will be submitted to the State Water Board on the Storm Water Multiple Application and Report Tracking System website.
	• Training – The SWPPP provides documentation on the training and qualifications of the designated Qualified SWPPP Developer and Qualified SWPPP Practitioner. Trained personnel must perform inspections, maintenance, and repair of construction site BMPs.
	• Construction Site Monitoring Program – The SWPPP includes a Construction Site Monitoring Program detailing the procedures and methods related to the visual monitoring and sampling and analysis plans for non-visible pollutants, sediment and turbidity, and pH and bioassessment.
	
	The following minimum BMPs would be necessary for the project to comply with the CGP.
	• Soil stabilization
	• Hydroseeding
	  o Geotextiles, mats, plastic covers, and erosion control blankets
	  o Hydraulic mulch
	• Sediment control
	  o Fiber rolls
	  o Silt fence
	  o Sediment trap
	  o Gravel bag berm
	  o Check dams

Environmental Resource	Avoidance, Minimization and/or Mitigation Measure (AMM)
	- Storm drain inlet protection - Tracking control practices - Temporary construction entrance - Non-storm water controls - Dewatering operations - Material and equipment use over water - Clear water diversion - Temporary stream crossing - Potable water/irrigation - Water management and materials pollution control - Concrete waste management - Hazardous waste management and contaminated soil management The project proponent and construction contractor are required to follow the conditions and provisions stipulated in the applicable water quality permits and associated water quality/storm water programmatic documents. With that understanding, at this time, no additional measures are anticipated. However, changes to project field variables during construction, including implementation of minimization and avoidance measures related to permit compliance, could result in additional measures being required and implemented.
Water Quality	**AMM BIO-2: Implement Measures to Protect Water Quality during Project Operation and Maintenance.** The project design will incorporate Construction General Permit SWPPP post-construction measures, site design measures, LID measures, and other permanent erosion control elements found in Sacramento Stormwater Quality Partnership's SQIP, the City of West

Environmental Resource	Avoidance, Minimization and/or Mitigation Measure (AMM)
	Sacramento's SWMP, and Caltrans' MS4 program guidance documents. The NPDES MS4 permits contains provisions to reduce, to the maximum extent practicable, pollutant loadings from the facility once construction is complete. Thus, design features or BMPs would be developed and incorporated into the project design and operations prior to project construction. These measures would reduce the suspended particulate loads, and thus pollutants associated with the particles, from entering waterways. Under the Sacramento County MS4 Permit, storm water mitigation measures are required to be incorporated into project design plans for Planning Priority Projects. These include development projects or land-disturbing activity that results in the creation, addition, or replacement of 5,000 square feet or more of impervious surface area on an already developed site. Traditional permittees, such as City of West Sacramento, are required to comply with Section E of the Statewide Phase II MS4 Permit, which specifies requirements for site design measures[1], LID design standards, alternative post-construction stormwater management program, and operations and management requirements for post construction stormwater management. Additionally, an operation and maintenance program would be implemented for permanent control measures. Low-impact development measures are proposed to reduce the rate of runoff, filter pollutants, and allow infiltration into the ground. The proposed measures would address peak-flow attenuation impacts and can include structural measures, such as detention, underground storage, and non-structural measures,

[1] Site design measures are implemented to reduce site runoff. Examples of these measures include stream setbacks and buffers, soil quality improvement and maintenance, tree planting and preservation, rooftop and impervious area disconnection, porous pavement, green roofs, vegetated swales, and rain barrels and cisterns.

Environmental Resource	Avoidance, Minimization and/or Mitigation Measure (AMM)
	through the modification of proposed treatment BMPs to accommodate flow and volume control. Caltrans-approved treatment BMPs/low-impact development measures that have been studied and verified to remove targeted design constituents and provide general pollutant removal include the following. • Biofiltration systems • Infiltration devices • Detention devices • Dry weather flow division • Gross solids removal devices (GSRDs) • Media filters • Multi-chamber treatment train • Wet basins The project proponent would be responsible for maintaining the treatment BMPs discussed above. The Maintenance Stormwater Coordinator would be involved in the design review of any permanent storm water treatment BMPs and would need to approve any such devices at the end of the plans, specifications, and estimate phase. The Caltrans Maintenance Unit would be able to provide guidance on the following project-related issues to ensure that BMPs function as needed. • Drainage patterns (particularly known areas of flooding and debris) • Stability of slopes and roadbed (help to determine whether the Project can be built and maintained economically) • Possible material borrow or spoil sites

Environmental Resource	Avoidance, Minimization and/or Mitigation Measure (AMM)
	• Concerns of the local residents • Existing and potential erosion problems • Facilities within the right-of-way that will affect design • Special problems such as deer crossings and endangered species • Whether facilities are safe to maintain • Known environmentally sensitive areas • Frequency of traction sand use and estimate of sand quantity applied annually BMPs will address soil stabilization, sediment control, wind-erosion control, non-storm water management, vehicle tracking control, and waste management practices and will be based on the best available technology. Implementation of these measures will ensure that storm water runoff would reduce or avoid permanent impacts on water quality. Because project proponent and the construction contractor must comply with conditions stipulated in the MS4 permit for the project, and an operation and maintenance program would be implemented for permanent control measures, no additional measures are required during operation and maintenance.
Hazardous Waste/Materials (HAZ)	**AMM HAZ-1: Conduct Phase II Site Assessments.** The project proponent will conduct a Phase II assessment within the proposed acquisition area of the parcels described below. • APNs 010-371-005 and 010-371-006 to assess the site for possible soil/groundwater contamination. • Existing Caltrans right-of-way and C Street Site Y for previous ADL impacts and metals within the depth of construction as metals could potentially originate from historical Capitol Plating operations.

Environmental Resource	Avoidance, Minimization and/or Mitigation Measure (AMM)
	• APNs 001-019-017, 001-210-018, and 002-010-023 to evaluate the site's potential for metals, TPH, and PCB impacts for all construction activities that will result in soil excavation within the proposed right-of-way adjacent to Jibboom Street at these parcels. Based on the findings of the Phase II investigation, a soils management plan and health and safety plan may be necessary. The Phase II assessment will include sampling and laboratory analysis to confirm the presence of hazardous materials and may include the following. • Surficial soil and water samples • Testing of underground storage tanks • Subsurface soil borings • Groundwater monitoring well installation, sampling, and analysis (may be appropriate on neighboring properties as well to determine the presence of contamination) • Asbestos, lead, and other regulated material testing
Hazardous Waste/Materials	**AMM HAZ-2: Develop and Implement Plans to Address Worker Health and Safety.** The project proponent will develop and implement the necessary plans and measures required by Caltrans and federal and state regulations, including a health and safety plan, BMPs, and/or an injury and illness prevention plan. The plans will be prepared and implemented to address worker safety when working with potentially hazardous materials, including potential ACMs, LCPs, lead or chromium in traffic stripes, ADL, and other construction-related materials within the right-of-way during any soil-disturbing activity.
Hazardous Waste/Materials	**AMM HAZ-3: Conduct Sampling, Testing, Removal, Storage, Transportation, and Disposal of Yellow/White**

Environmental Resource	Avoidance, Minimization and/or Mitigation Measure (AMM)
	Traffic Striping. As required by Caltrans' standard special provisions, the construction contractor will sample and test yellow/white traffic striping scheduled for removal to determine whether lead or chromium is present. All aspects of the project associated with removal, storage, transportation, and disposal will be in strict accordance with appropriate regulations of the California Health and Safety Code. The stripes will be disposed of at a Class 1 disposal facility. The responsibility of implementing this measure will be outlined in the contract between the project proponent and the construction contractor. Implementing this measure will minimize potential effects from these hazardous materials.
Hazardous Waste/Materials	**AMM HAZ-4: Perform Soil Testing and Appropriately Dispose of Soils Contaminated with ADL.** The project proponent will conduct soil testing for ADL contamination in the project area along C Street, 2nd Street, and at the bridge approach/viaduct leading from C Street in West Sacramento; and within the proposed project limits in Sacramento at the bridge approach/viaduct leading from I Street, and along Jibboom Street and Bercut Drive. Soils in the project limits identified as having hazardous levels of ADL will be disposed of or reused according to federal and state regulations. Soils within the right-of-way that contain hazardous waste concentrations of ADL may be reused under the authority of variances issued by DTSC. These variances include stockpiling, transporting, and reusing soils with concentrations of lead below maximum allowable levels in the project right-of-way. Stockpiling, transporting, and reusing of soil will also be conducted following Caltrans' standard special provisions.
Hazardous Waste/Materials	**AMM HAZ-5: Develop a Lead and Asbestos Abatement Plan.** For the structures proposed to be removed or renovated as part of the project, a hazardous materials survey will be conducted prior to demolition

Environmental Resource	Avoidance, Minimization and/or Mitigation Measure (AMM)
	or significant renovation. If lead or asbestos is found in these structures, an abatement plan will be developed prior to removal or renovation. The abatement plan will provide for a California-certified asbestos consultant and California Department of Health Services–certified lead project designer to prepare hazardous materials specifications for abatement of the ACM and LCP. This specification should be the basis for selecting qualified contractors to perform the proposed asbestos and lead abatement work. The project proponent will retain a California-licensed asbestos abatement contractor to perform the abatement of any asbestos-containing construction materials and LCP deemed potentially hazardous. Abatement of hazardous building materials will be completed prior to any work on these structures.
Hazardous Waste/Materials	**AMM HAZ-6: Comply with the Land Use Covenant for the Northern Shops and Sacramento Station Study Areas.** The land use covenant (LUC) outlines approved land use and provisions for soil, soil vapor, and groundwater management. These provisions include the Northern Shops study area and Sacramento Station study area sites. The project proponent will comply with the provisions of the LUC, including the following. 1. No activities that will disturb the soil shall be allowed on the property without a soil management plan (SMP) approved in writing by the Department of Toxic Substances Control (DTSC). 2. Any soil brought to the surface shall be managed in compliance with all applicable provisions of state and federal law and a SMP approved in writing by DTSC. 3. No groundwater will be extracted, except as approved of in advance in writing by DTSC in a groundwater management plan.

Environmental Resource	Avoidance, Minimization and/or Mitigation Measure (AMM)
	4. Vapor intrusion mitigation management is required for enclosed structures or buildings.
Hazardous Waste/Materials	**AMM HAZ-7: Comply with the Land Use Covenant or Guidance Documents for the Manufactured Gas Plant Study Area.** If soil remedy is complete and soils are certified prior to construction in the Manufactured Gas Plant study area, the project proponent will comply with the resulting LUC and/or guidance documents. If site characterization is not complete, the project proponent will conduct a Phase II assessment within the depth and area of construction improvements.
Air Quality (AIR)	**AMM AIR-1: Implement SMAQMD's Recommended Construction GHG BMPs.** The City will implement the following SMAQMD's recommended GHG reduction measures, to the extent feasible. • Improve fuel efficiency from construction equipment: o Minimize idling time either by shutting equipment off when not in use or reducing the time of idling to no more than 3 minutes (5 minute limit is required by the state airborne toxics control measure [Title 13, sections 2449(d)(3) and 2485 of the California Code of Regulations]). Provide clear signage that posts this requirement for workers at the entrances to the site. o Maintain all construction equipment in proper working condition according to manufacturer's specifications. The equipment must be checked by a certified mechanic and determined to be running in proper condition before it is operated. o Train equipment operators in proper use of equipment. o Use the proper size of equipment for the job.

Environmental Resource	Avoidance, Minimization and/or Mitigation Measure (AMM)
	○ Use equipment with new technologies (repowered engines, electric drive trains). • Perform on-site material hauling with trucks equipped with on-road engines (if determined to be less emissive than the off-road engines). • Use alternative fuels for generators at construction sites such as propane or solar, or use electrical power. • Use an ARB-approved low carbon fuel for construction equipment. (NOx emissions from the use of low carbon fuel must be reviewed and increases mitigated.) • Encourage and provide carpools, shuttle vans, transit passes and/or secure bicycle parking for construction worker commutes. • Reduce electricity use in the construction office by using compact fluorescent bulbs, powering off computers every day, and replacing heating and cooling units with more efficient ones. • Recycle or salvage non-hazardous construction and demolition debris (goal of at least 75 percent by weight). • Use locally sourced or recycled materials for construction materials (goal of at least 20 percent based on costs for building materials, and based on volume for roadway, parking lot, sidewalk and curb materials). Wood products utilized should be certified through a sustainable forestry program. • Minimize the amount of concrete for paved surfaces or utilize a low carbon concrete option. • Produce concrete on-site if determined to be less emissive than transporting ready mix.

Environmental Resource	Avoidance, Minimization and/or Mitigation Measure (AMM)
	• Use SmartWay certified trucks for deliveries and equipment transport. • Develop a plan to efficiently use water for adequate dust control.
Noise (NOI)	**AMM NOI-1: Measures to Minimize Noise Effects from Construction.** Standard Caltrans procedures include implementation of the following measures to minimize the temporary noise effects from construction. • All equipment will have sound-control devices that are no less effective than those provided on the original equipment. No equipment will have an unmuffled exhaust. • The construction contractor will implement appropriate additional noise measures, including changing the location of stationary construction equipment, turning off idling equipment, rescheduling construction activity, notifying adjacent residents in advance of construction work, and installing acoustic barriers around stationary construction noise sources.
Threatened & Endangered Species	**AMM BIO-3: Compensate for Permanent Loss of Shallow Water Habitat for Delta Smelt.** As a result of FESA consultation for effects on listed species, the USFWS identified mitigation for permanent impacts on 0.036 acre of shallow water habitat for delta smelt through the purchase of mitigation bank credits at a 3:1 ratio. The project proponent will compensate for the permanent loss of shallow water habitat through the purchase of 0.108 acre of mitigation credit at a USFWS-approved mitigation bank, such as Liberty Island Conservation Bank.
Threatened & Endangered Species	**AMM BIO-4: Implement Reasonable and Prudent Measures and Terms and Conditions of USFWS Biological Opinion for Delta Smelt and VELB.** As a result

Environmental Resource	Avoidance, Minimization and/or Mitigation Measure (AMM)
	of FESA consultation for effects on listed species, the USFWS determined the following reasonable and prudent measures necessary and appropriate to minimize the effect of the action area on delta smelt and VELB. The project proponent will be responsible for the implementation and compliance with these measures in accordance with the terms and conditions listed in the Biological Opinion issued for the project. 1. Minimize adverse effects to the delta smelt and VELB and their habitats in the action area by implementing the proposed project, including the conservation measures as described with the following terms and conditions. 2. Minimize adverse effects to the delta smelt and its critical habitat to the fullest extent practicable. The terms and conditions described in the Biological Opinion are non-discretionary, and the project proponent must comply with them in order to implement the above reasonable and prudent measures (50 CFR 402.14).
Threatened & Endangered Species	**AMM BIO-5: Implement Reasonable and Prudent Measures and Terms and Conditions of NMFS Biological Opinion for Sacramento River winter-run Chinook salmon, CV spring-run Chinook salmon, CV steelhead, and the southern DPS of North American green sturgeon.** As a result of FESA consultation for effects on listed species, NMFS identified the measures listed below as non-discretionary, stating they must be undertaken by the project proponent, following the terms and conditions listed in the Biological Opinion, so that they become binding conditions of any contracts or permits. 1. Measures shall be taken to minimize sedimentation events and turbidity plumes.

Environmental Resource	Avoidance, Minimization and/or Mitigation Measure (AMM)
	2. Measures shall be taken to reduce the potential sound impacts. 3. Measures shall be taken to revegetate temporarily impacted areas below and above the OHWM with native plants and shrubs. 4. The project proponent shall monitor and report on the amount or extent of incidental take. The terms and conditions described in the Biological Opinion are non-discretionary, and the project proponent must comply with them in order to implement the above reasonable and prudent measures (50 CFR 402.14).

1.1.1 LIST OF ABBREVIATIONS AND ACRONYMS

ACM = asbestos-containing material
ADL = Aerially deposited lead
APN = Assessor's Parcel Number
ARB = California Air Resources Board
BMPs = Best management practices
CGP = Construction General Permit
CV = Central Valley
DPS = distinct population segment
DTSC = Department of Toxic Substances Control
FESA = federal Endangered Species Act
GHG = greenhouse gas
LCP = lead-containing paint
LID = low impact-development
LUC = land use covenant
MS4 = municipal separate storm sewer systems
NMFS = NOAA Fisheries (formally known as National Oceanic and Atmospheric Administration's National Marine Fisheries Service)
NOx = nitrogen oxides
NPDES = National Pollutant Discharge Elimination System
OHWM = ordinary high-water mark

PCB = polychlorinated biphenyls
RWQCB = Regional Water Quality Control Board
SMAQMD = Sacramento Metro Air Quality Management District
SMP = Soil Management Plan
SQIP = Stormwater Quality Improvement Plan
SWMP = Sacramento's Stormwater Management Program
SWPPP = Stormwater Pollution Prevention Plan
TPH = total petroleum hydrocarbon
USFWS = U.S. Department of Fish and Wildlife Service
VELB = valley elderberry longhorn beetle

EXHIBIT B
CALIFORNIA STATE LANDS COMMISSION
STATEMENT OF FINDINGS AND
STATEMENT OF OVERRIDING CONSIDERATIONS
I STREET BRIDGE REPLACEMENT PROJECT
(A2421, State Clearinghouse No. 2014092069)

1.0 INTRODUCTION

The California State Lands Commission (Commission or CSLC), acting as a responsible agency under the California Environmental Quality Act (CEQA), makes these findings and this Statement of Overriding Considerations to comply with CEQA as part of its discretionary approval to authorize issuance of a General Lease - Public Agency Use lease, to the City of Sacramento (City), for use of sovereign land associated with the proposed I Street Bridge Replacement Project (Project). (See generally Pub. Resources Code, § 21069; State CEQA Guidelines[1], § 15381.) The Commission has jurisdiction and management authority over all ungranted tidelands, submerged lands, and the beds of navigable lakes and waterways. The Commission also has certain residual and review authority for tidelands and submerged lands legislatively granted in trust to local jurisdictions. (Pub. Resources Code, §§ 6301, 6306, 6009, subd. (c).) All tidelands and submerged lands, granted or ungranted, as well as navigable lakes and waterways, are subject to the protections of the common law Public Trust.

The Commission is a responsible agency under CEQA for the Project because the Commission must approve a lease for the Project to go forward and because the City, as the CEQA lead agency, has the principal responsibility for approving the Project and has completed its environmental review under CEQA. The City analyzed the environmental impacts associated with the Project in a Final Environmental Impact Report (EIR) (State Clearinghouse [SCH] No. 2014092069) and, on June 25, 2019, certified the EIR and adopted a Mitigation Monitoring Plan (MMP), CEQA Findings of Fact, and a Statement of Overriding Considerations.

The Project involves constructing a new bridge over the Sacramento River (River) between Sacramento and West Sacramento to replace the vehicular crossing that is provided by the existing I Street Bridge. The Project would facilitate vehicular and multimodal traffic over the River in order to reduce

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[1] CEQA is codified in Public Resources Code section 21000 et seq. The State CEQA Guidelines are found in California Code of Regulations, title 14, section 15000 et seq.

traffic congestion, improve safety, and remove a number of structurally deficient or functionally obsolete features that have reached the limit of their design life. While the existing I Street Bridge over the River would remain in place and continue to be used for railroad operations, the approach structures leading up to the bridge from both directions would be demolished.

The City determined that the Project could have significant environmental effects on the following environmental resources:

- Visual/Aesthetics
- Air Quality
- Biological Resources
- Cultural Resources
- Geology and Soils
- Noise
- Recreation
- Transportation/Traffic

Of the 8 resources areas noted above, Project components within the Commission's jurisdiction could have significant environmental effects on 7 of the resource areas, as follows:

- Visual/Aesthetics
- Air Quality
- Biological Resources
- Cultural Resources
- Geology and Soils
- Noise
- Recreation

In certifying the Final EIR and approving the Project, the City imposed various mitigation measures and Avoidance, Minimization and/or Mitigation Measures for Project-related significant effects on the environment as conditions of Project approval and concluded that Project-related impacts would be substantially lessened with implementation of these mitigation measures. However, even with the integration of all feasible mitigation, the City concluded in the EIR that some of the identified impacts would remain significant. As a result, the City adopted a Statement of Overriding Considerations to support its approval of the Project despite the significant and unavoidable impacts. The City determined that, after mitigation, the Project may still have significant impacts on Biological Resources, Noise, and Transportation/Traffic. Because significant impacts to Biological Resources and Noise may occur from activities occurring on or otherwise affecting lands under the jurisdiction of the Commission, the Commission also adopts the Statement of Overriding Considerations set forth in this Exhibit B as part of its approval.

As a responsible agency, the Commission complies with CEQA by considering the EIR and reaching its own conclusions on whether, how, and with what conditions to approve a project. In doing so, the Commission may require changes in a project to lessen or avoid the effects, either direct or indirect, of that part of the project which the Commission will be called on to carry out or approve. In order to ensure the identified mitigation measures, Avoidance, Minimization and/or Mitigation Measures, and/or Project revisions are implemented, the Commission adopts the Mitigation Monitoring Program (MMP) as set forth in Exhibit A as part of its Project approval.

2.0 ADMINISTRATIVE RECORD OF PROCEEDINGS AND CUSTODIAN OF THE RECORD

These Findings are supported by substantial evidence contained in the EIR and other relevant information provided to the Commission or existing in its files, all of which is contained in the administrative record. The administrative record is located at the California State Lands Commission, 100 Howe Avenue, Suite 100-South, Sacramento, CA 95825. The custodian for the administrative record is the California State Lands Commission, Division of Environmental Science, Planning, and Management.

3.0 FINDINGS

The Commission's role as a responsible agency affects the scope of, but not the obligation to adopt, findings required by CEQA. Findings are required under CEQA by each "public agency" that approves a project for which an EIR has been certified that identifies one or more significant impacts on the environment (Pub. Resources Code, § 21081, subd. (a); State CEQA Guidelines, § 15091, subd. (a).) Because the EIR certified by the City for the Project identifies potentially significant impacts that fall within the scope of the Commission's approval, the Commission makes the Findings set forth below as a responsible agency under CEQA. (State CEQA Guidelines, § 15096, subd. (h); *Riverwatch v. Olivenhain Mun. Water Dist.* (2009) 170 Cal.App.4th 1186, 1202, 1207.)

While the Commission must consider the environmental impacts of the Project as set forth in the EIR, the Commission's obligation to mitigate or avoid the direct or indirect environmental impacts of the Project is limited to those parts which it decides to carry out, finance, or approve (Pub. Resources Code, § 21002.1, subd. (d); State CEQA Guidelines, §§ 15041, subd. (b), 15096, subds. (f)-(g).) Accordingly, because the Commission's exercise of discretion involves only issuing a General Lease - Public Agency Use for this Project, the Commission is responsible for considering only the environmental impacts related to lands or resources subject to the Commission's jurisdiction. With respect to all other

impacts associated with implementation of the Project, the Commission is bound by the legal presumption that the EIR fully complies with CEQA.

The Commission has reviewed and considered the information contained in the Project EIR. All significant adverse impacts of the Project identified in the EIR relating to the Commission's approval of a General Lease - Public Agency Use, which would allow construction of a replacement bridge, are included herein and organized according to the resource affected.

These Findings, which reflect the independent judgment of the Commission, are intended to comply with CEQA's mandate that no public agency shall approve or carry out a project for which an EIR has been certified that identifies one or more significant environmental effects unless the agency makes written findings for each of those significant effects. Possible findings on each significant effect are:

(1) Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant environmental effect as identified in the EIR.

(2) Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the Commission. Such changes have been adopted by such other agency or can and should be adopted by such other agency.

(3) Specific economic, legal, social, technological or other considerations, including provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or project alternatives identified in the EIR.[2]

A discussion of supporting facts follows each Finding.

- Whenever Finding (1) occurs, the mitigation measures that lessen the significant environmental impact are identified in the facts supporting the Finding.
- Whenever Finding (2) occurs, the agencies with jurisdiction are specified. These agencies, within their respective spheres of influence, have the responsibility to adopt, implement, and enforce the mitigation discussed.
- Wherever Finding (3) is made, the Commission has determined that, even after implementation of all feasible mitigation measures, Avoidance, Minimization and/or Mitigation Measures, and consideration of feasible alternatives, the identified impact will exceed the significance criteria set

[2] See Public Resources Code section 21081, subdivision (a) and State CEQA Guidelines section 15091, subdivision (a).

> forth in the EIR. Furthermore, to the extent that potentially feasible measures have been alleged or proposed, the Findings explain why certain economic, legal, social, technological, or other considerations render such possibilities infeasible. The significant and unavoidable impacts requiring Finding (3) are identified in the Final EIR, discussed in the Responses to Comments, and explained below. Having done everything it can to avoid and substantially lessen these effects consistent with its legal authority and CEQA, the Commission finds in these instances that overriding economic, legal, social, and other benefits of the approved Project outweigh the resulting significant and unavoidable impacts. The Statement of Overriding Considerations adopted as part of this exhibit applies to all such unavoidable impacts as required by CEQA. (Pub. Resources Code, § 21081, subd. (b); State CEQA Guidelines, §§ 15092 and 15093.)

The mitigation measures are briefly described in these Findings; more detail on the mitigation measures is included in the EIR.

A. SUMMARY OF FINDINGS

Based on the EIR, the proposed Project will have No Impact on the following environmental issue areas:

- Mineral Resources
- Public Services

The EIR subsequently identified the impacts to the following resource areas as Less Than Significant:

- Greenhouse Gas Emissions
- Hazardous Waste/Materials
- Hydrology and Water Quality
- Land Use and Planning
- Population and Housing
- Utilities/Emergency Services

For the remaining potentially significant effects, the Findings are organized by significant impacts within the EIR issue areas as presented below.

B. POTENTIALLY SIGNIFICANT IMPACTS

The impacts within CSLC jurisdiction identified in Table B-1 were determined in the EIR to be potentially significant absent mitigation. After application of mitigation, however, several impacts were determined to be less than significant (LTSM). For the full text of each mitigation measure (MM), please refer to Exhibit A, Attachment A-1.

However, even with the integration of all feasible mitigation, the City concluded in the EIR that the other identified potentially significant impacts will remain significant. Table B-1 also identifies those impacts that the City determined would be, after mitigation, significant and unavoidable (SU).

Table B-1 – Significant Impacts by Issue Area

Environmental Issue Area	Impact Nos. (LTSM)	Impact Nos. (SU)
Visual/Aesthetics	VIS-1, VIS-2	None
Air Quality	AIR-1	None
Biological Resources	BIO-3, BIO-4, BIO-5, BIO-6	BIO-1, BIO-2
Cultural Resources	CUL-1, CUL-2, CUL-3	None
Geology and Soils	GEO-1	None
Noise	None	NOI-1, NOI-2, NOI-3
Recreation	REC-1	None

As a result, the Commission adopts the Statement of Overriding Considerations set forth as part of this Exhibit to support its approval of the Project despite the significant and unavoidable impacts.

C. IMPACTS REDUCED TO LESS THAN SIGNIFICANT LEVELS WITH MITIGATION

The impacts identified below were determined in the EIR to be potentially significant absent mitigation; however, the impacts were determined to be less than significant with mitigation (LTSM).

1. VISUAL/AESTHETICS (VIS)

CEQA FINDING NO. 1

Impact: **VIS-1: Changes in all visual assessment units have the potential to result in significant impacts resulting from vegetation removal.**

Finding(s): (1) Changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the significant environmental effect as identified in the EIR.

FACTS SUPPORTING THE FINDING(S)

Removal of the existing vegetation to build the replacement bridge would adversely impact the existing visual character or quality of views from various locations along the River. The EIR identified measures to compensate for this loss of vegetation and to install new landscaping.

Implementation of MM BIO-4 and MM VIS-1 has been incorporated into the Project to reduce this impact to a less than significant level.

MM BIO-4: Compensate for Temporary Effects on and Permanent Loss of Cottonwood Riparian Forest [including SRA Cover]

MM VIS-1: Implement Project Landscaping

LEVEL OF SIGNIFICANCE AFTER MITIGATION. With the mitigation described above, this impact is reduced to a less than significant level.

CEQA FINDING NO. 2

Impact: **VIS-2: New lighting could affect sensitive receptors if not properly designed by creating a substantial source of nighttime light and glare that could negatively affect nighttime views in the area.**

Finding(s): (1) Changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the significant environmental effect as identified in the EIR.

FACTS SUPPORTING THE FINDING(S)

Building the replacement bridge, roadway, and intersection lighting would create new sources of nighttime light and glare that would adversely impact the nighttime views in the area. The EIR identified measures to establish minimum lighting standards.

Implementation of MM VIS-2 has been incorporated into the Project to reduce this impact to a less than significant level.

MM VIS-2: Apply Minimum Lighting Standards

LEVEL OF SIGNIFICANCE AFTER MITIGATION. With the mitigation described above, this impact is reduced to a less than significant level.

2. AIR QUALITY (AIR)

CEQA FINDING NO. 3

Impact: **AIR-1: Exceedances of the project-level thresholds would be cumulatively considerable.**

Finding(s): (1) Changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the significant environmental effect as identified in the EIR.

FACTS SUPPORTING THE FINDING(S)

Grubbing and land clearing, grading and excavation, drainage/utilities/sub-grade construction, paving activities, bridge construction, and the commuting patterns of construction workers would all contribute to exceeding emissions thresholds. The EIR identified measures to reduce potentially significant fugitive dust emissions.

Implementation of MM AIR-1 has been incorporated into the Project to reduce this impact to a less than significant level.

MM AIR-1: Implement Control Measures for Construction Emissions of Fugitive Dust

LEVEL OF SIGNIFICANCE AFTER MITIGATION. With the mitigation described above, this impact is reduced to a less than significant level.

3. BIOLOGICAL RESOURCES (BIO)

CEQA FINDING NO. 4

Impact: **BIO-3. Permanent and temporary impacts on vegetation communities of special concern, including, non-wetland riparian forest and SRA cover**.

Finding(s): (1) Changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the significant environmental effect as identified in the EIR.

FACTS SUPPORTING THE FINDING(S)

Removal of the existing vegetation to build the replacement bridge would adversely impact vegetation communities. The EIR identified measures to install fencing, conduct monitoring and promote worker awareness, compensate for habitat loss, and avoid introducing and spreading invasive plants.

Implementation of MM BIO-1, MM BIO-2, MM BIO-3, MM BIO-4, MM BIO-33, MM BIO-34, and MM BIO-35 has been incorporated into the Project to reduce this impact to a less than significant level.

MM BIO-1: Install Orange Construction Fencing between the Construction Area and Adjacent Sensitive Biological Resources

MM BIO-2: Conduct Environmental Awareness Training for Construction Employees

MM BIO-3: Conduct Periodic Biological Monitoring

MM BIO-4: Compensate for Temporary Effects on and Permanent Loss of Cottonwood Riparian Forest [including SRA Cover]

MM BIO-33: Compensate for Loss of Protected Trees not in Riparian Habitat

MM BIO-34: Purchase Channel Enhancement Credits for Impacts on Critical Habitat

MM BIO-35: Avoid the Introduction and Spread of Invasive Plants

LEVEL OF SIGNIFICANCE AFTER MITIGATION. With the mitigation described above, this impact is reduced to a less than significant level.

CEQA FINDING NO. 5

Impact: **BIO-4. Permanent and temporary effects on non-wetland waters of the United States and waters of the State in the Sacramento River, which is a perennial stream**.

Finding(s): (1) Changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the significant environmental effect as identified in the EIR.

FACTS SUPPORTING THE FINDING(S)

Installing two cofferdams and approximately 141 temporary trestle piles to build the replacement bridge would create temporary impacts, including turbidity, from dewatering as well as permanent impacts from the fill needed to anchor the bridge. The EIR identified measures to install fencing, conduct monitoring and promote worker awareness, and prevent erosion and sedimentation in drainages and wetlands.

Implementation of MM BIO-1, MM BIO-2, MM BIO-3, and MM BIO-5 has been incorporated into the Project to reduce this impact to a less than significant level.

MM BIO-1: Install Orange Construction Fencing between the Construction Area and Adjacent Sensitive Biological Resources

MM BIO-2: Conduct Environmental Awareness Training for Construction Employees

MM BIO-3: Conduct Periodic Biological Monitoring

MM BIO-5: Protect Water Quality and Prevent Erosion and Sedimentation in Drainages and Wetlands

LEVEL OF SIGNIFICANCE AFTER MITIGATION. With the mitigation described above, this impact is reduced to a less than significant level.

CEQA FINDING NO. 6

Impact: **BIO-5. Short-term work activities, including pile driving, in or adjacent to the Sacramento River could affect fish species that may be injured or killed by exposure to harmful levels of noise, suspended sediment, contaminants, or other factors**.

Finding(s): (1) Changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the significant environmental effect as identified in the EIR.

FACTS SUPPORTING THE FINDING(S)

Pile driving in and adjacent to the River as well as the suspension of sediments and contaminants from construction activities would adversely impact fish movement, spawning, and survival rates. While most adult and juvenile fish are expected to move upstream or downstream during the Project activities, some may remain in the area and be injured or killed. The EIR identified measures to limit in-water work windows, minimize and monitor pile driving acoustic levels, monitor turbidity, avoid and recover fish in the Project area, and minimize light source impacts.

Implementation of MM BIO-14, MM BIO-15, MM BIO-16, MM BIO-17, MM BIO-18, MM BIO-19, and MM BIO-21 has been incorporated into the Project to reduce this impact to a less than significant level.

MM BIO-14: Conduct All In-Water Construction Activities between May 1 and November 30 and Only during Daylight Hours

MM BIO-15: Implement Measures to Minimize Exceedance of Interim Threshold Sound Levels during Pile Driving

MM BIO-16: Develop and Implement a Hydroacoustic Monitoring Plan

MM BIO-17: Monitor Turbidity in the Sacramento River

MM BIO-18: Implement Cofferdam Restrictions

MM BIO-19: Prepare and Implement a Fish Rescue and Relocation Plan

MM BIO-21: Minimize or Avoid Temporary Construction Lighting and Permanent Bridge Lighting from Directly Radiating on Water Surfaces of the Sacramento River

LEVEL OF SIGNIFICANCE AFTER MITIGATION. With the mitigation described above, this impact is reduced to a less than significant level.

CEQA FINDING NO. 7

Impact: **BIO-6. Removal of heritage trees in the City of Sacramento and the City of West Sacramento.**

Finding(s): (1) Changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the significant environmental effect as identified in the EIR.

FACTS SUPPORTING THE FINDING(S)

Bridge replacement activities would remove 22 heritage trees in the City of Sacramento and 45 heritage trees in the City of West Sacramento. The EIR identified measures to install and monitor construction fences to protect any adjacent sensitive biological resources, conduct Environmental Awareness Training to avoid effects on sensitive biological resources during tree removal, and compensate for loss of trees within cottonwood riparian forest.

Implementation of MM BIO-1, MM BIO-2, MM BIO-3, MM BIO-4, and MM BIO-33 has been incorporated into the Project to reduce this impact to a less than significant level.

MM BIO-1: Install Orange Construction Fencing between the Construction Area and Adjacent Sensitive Biological Resources

MM BIO-2: Conduct Environmental Awareness Training for Construction Employees

MM BIO-3: Conduct Periodic Biological Monitoring

MM BIO-4: Compensate for Temporary Effects on and Permanent Loss of Cottonwood Riparian Forest [including SRA Cover]

MM BIO-33: Compensate for Loss of Protected Trees not in Riparian Habitat

LEVEL OF SIGNIFICANCE AFTER MITIGATION. With the mitigation described

4. CULTURAL RESOURCES (CUL)

CEQA FINDING NO. 8	
Impact:	**CUL-1. Removal of the approaches (non-rail vehicular aspect of the bridge) would modestly affect the bridge's integrity of design**.
Finding(s):	(1) Changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the significant environmental effect as identified in the EIR.

FACTS SUPPORTING THE FINDING(S)

Removal of the existing bridge features to build the replacement bridge would adversely impact the integrity of design of the existing bridge. The EIR identified measures to compensate for the impact to this historic resource by developing an interpretative display for the I Street Bridge in Old Sacramento.

Implementation of MM CUL-1 has been incorporated into the Project to reduce this impact to a less than significant level.

MM CUL-1: Develop Interpretative Display for the I Street Bridge

LEVEL OF SIGNIFICANCE AFTER MITIGATION. With the mitigation described above, this impact is reduced to a less than significant level.

CEQA FINDING NO. 9

Impact: **CUL-2. Ground-disturbing activities could impact CA-SAC-658H or previously unknown archaeological resources**.

Finding(s): (1) Changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the significant environmental effect as identified in the EIR.

FACTS SUPPORTING THE FINDING(S)

Ground disturbing activities to build the replacement bridge would adversely impact recorded archaeological resource CA-SAC-658H and could affect unanticipated cultural resources. The EIR identified measures to implement cultural resources awareness training, delineate Environmental Sensitive Areas, and implement avoidance and notification procedures as well as related agreements.

Implementation of MM CUL-2, MM CUL-3, MM CUL-4, and MM CUL-5 has been incorporated into the Project to reduce this impact to a less than significant level.

MM CUL-2: Conduct Mandatory Cultural Resources Awareness Training for Construction Personnel

MM CUL-3: Establish an Environmental Sensitive Area for Resource CA-SAC-658H

MM CUL-4: Implement Programmatic Agreement

MM CUL-5: Implement Avoidance and Notification Procedures for Cultural Resources

LEVEL OF SIGNIFICANCE AFTER MITIGATION. With the mitigation described above, this impact is reduced to a less than significant level.

CEQA FINDING NO. 10

Impact: **CUL-3. Earth-disturbing and (i.e., excavation and grading) construction activities could damage human remains if present in the project area**.

Finding(s): (1) Changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the significant environmental effect as identified in the EIR.

FACTS SUPPORTING THE FINDING(S)

Earth disturbing activities to build a replacement bridge could disturb unanticipated human remains if they are present in the Project area. The EIR identified measures to implement cultural resources awareness training and implement avoidance and notification procedures for cultural resources.

Implementation of MM CUL-2 and MM CUL-5 has been incorporated into the Project to reduce this impact to a less than significant level.

MM CUL-2: Conduct Mandatory Cultural Resources Awareness Training for Construction Personnel

MM CUL-5: Implement Avoidance and Notification Procedures for Cultural Resources

LEVEL OF SIGNIFICANCE AFTER MITIGATION. With the mitigation described above, this impact is reduced to a less than significant level.

5. GEOLOGY AND SOILS (GEO)

CEQA FINDING NO. 11

Impact: **GEO-1. Earth-disturbing and (i.e., excavation and grading) construction activities could damage fossils if present in the project area**.

Finding(s): (1) Changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the significant environmental effect as identified in the EIR.

FACTS SUPPORTING THE FINDING(S)

Construction activities for the replacement bridge would adversely impact fossils if present in the project area. The EIR identified measures to educate

construction personnel and require work stoppage if substantial fossil remains are encountered during construction.

Implementation of MM GEO-1 and MM GEO-2 has been incorporated into the Project to reduce this impact to a less than significant level.

MM GEO-1: Educate Construction Personnel in Recognizing Fossil Material

MM GEO-2: Stop Work if Substantial Fossil Remains Are Encountered During Construction

LEVEL OF SIGNIFICANCE AFTER MITIGATION. With the mitigation described above, this impact is reduced to a less than significant level.

6. RECREATION (REC)

CEQA FINDING NO. 19

Impact: **REC-1. Temporary and permanent impacts—including acquisition of land—on the riverfront parks in both Sacramento and West Sacramento.**

Finding(s): (1) Changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the significant environmental effect as identified in the EIR.

FACTS SUPPORTING THE FINDING(S)

Construction activities would prevent portions of bicycle and pedestrian access on the River Parkway Trail in the riverfront parks for 2 years. The EIR identified measures to restore this trail after construction and to provide advanced notification of the trail closures.

Implementation of MM REC-1 and MM REC-2 has been incorporated into the Project to reduce this impact to a less than significant level.

MM REC-1: Restore Sacramento River Parkway Trail after Construction

MM REC-2: Provide Advance Notification of Sacramento River Parkway Trail Closures

LEVEL OF SIGNIFICANCE AFTER MITIGATION. With the mitigation described above, this impact is reduced to a less than significant level.

D. SIGNIFICANT AND UNAVOIDABLE IMPACTS

The following impacts were determined in the EIR to be significant and unavoidable. The Statement of Overriding Considerations adopted as part of this exhibit applies to all such unavoidable impacts as required by CEQA. (Pub. Resources Code, § 21081, subd. (b); State CEQA Guidelines, §§ 15092 and 15093.)

1. BIOLOGICAL RESOURCES (BIO)

CEQA FINDING NO. 21

Impact: **BIO-1. Direct and indirect impacts to VELB, western pond turtle, white-tailed kite, Swainson's hawk, pallid bat, western red bat, other migratory birds, other bat species, Sacramento River winter-run Chinook salmon, Central Valley spring-run Chinook salmon, Central Valley fall- and late fall–run Chinook salmon, Central Valley steelhead, the Southern DPS of North American green sturgeon, delta smelt, longfin smelt, Sacramento splittail, Pacific lamprey, and river lamprey.**

Finding(s):
(1) Changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the significant environmental effect as identified in the EIR.

(3) Specific economic, legal, social, technological, or other considerations, including considerations for the provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or alternatives identified in the EIR.

FACTS SUPPORTING THE FINDING(S)

Replacement bridge construction activities, including removing vegetation, modifying habitat, creating noise from construction equipment, and working in the River would adversely impact candidate, sensitive, or special-status species. The EIR identified measures to minimize impacts to these species by installing fencing around and controlling access to sensitive biological resources, conducting Environmental Awareness Training for employees, surveying and monitoring for terrestrial and aquatic species as well as habitat replacement success, providing compensation for terrestrial and aquatic habitat loss, protecting water quality, minimizing pile driving sound levels, cofferdam restrictions, and preventing introduced aquatic invasive species. However, loss of vegetation, construction noise, and work in the River create potentially significant impacts that cannot be eliminated.

Implementation of MM BIO-1, MM BIO-2, MM BIO-3, MM BIO-4, MM BIO-5, MM BIO-6, MM BIO-7, MM BIO-8, MM BIO-9, MM BIO-10, MM BIO-11, MM BIO-12, MM BIO-13, MM BIO-14, MM BIO-15, MM BIO-16, MM BIO-17, MM BIO-18, MM BIO-19, MM BIO-20, MM BIO-21, MM BIO-22, MM BIO-23, MM BIO-24, MM BIO-25, MM BIO-26, and MM BIO-27 has been incorporated into the Project and would reduce the severity of Impact BIO-1, although not necessarily to a less than significant level.

MM BIO-1: Install Orange Construction Fencing between the Construction Area and Adjacent Sensitive Biological Resources

MM BIO-2: Conduct Environmental Awareness Training for Construction Employees

MM BIO-3: Conduct Periodic Biological Monitoring

MM BIO-4: Compensate for Temporary Effects on and Permanent Loss of Cottonwood Riparian Forest [including SRA Cover]

MM BIO-5: Protect Water Quality and Prevent Erosion and Sedimentation in Drainages and Wetlands

MM BIO-6: Compensate for Loss of Perennial Stream

MM BIO-7: Conduct Preconstruction Surveys for Western Pond Turtle and Allow Turtles to Leave Work Area Unharmed

MM BIO-8: Conduct Preconstruction Surveys for Nesting Migratory Birds, Including Special-Status Birds, and Establish Protective Buffers

MM BIO-9: Conduct Tree Removal during Non-Sensitive Periods for Wildlife

MM BIO-10: Avoid and Minimize Impacts on Nesting Birds and Roosting Bats from Demolition of Approach Structures

MM BIO-11: Conduct Preconstruction Surveys for Roosting Bats and Implement Protective Measures

MM BIO-12: Replace Bat Roosting Habitat Lost from Demolition of Approach Structures

MM BIO-13: Monitor Bat Replacement Habitat

MM BIO-14: Conduct All In-Water Construction Activities between May 1 and November 30 and Only during Daylight Hours

MM BIO-15: Implement Measures to Minimize Exceedance of Interim Threshold Sound Levels during Pile Driving

MM BIO-16: Develop and Implement a Hydroacoustic Monitoring Plan

MM BIO-17: Monitor Turbidity in the Sacramento River

MM BIO-18: Implement Cofferdam Restrictions

MM BIO-19: Prepare and Implement a Fish Rescue and Relocation Plan

MM BIO-20: Prevent the Spread or Introduction of Aquatic Invasive Species

MM BIO-21: Minimize or Avoid Temporary Construction Lighting and Permanent Bridge Lighting from Directly Radiating on Water Surfaces of the Sacramento River

MM BIO-22: Implement Measures Required in the Biological Assessments

MM BIO-23: Avoid and Minimize Impacts on Valley Elderberry Longhorn Beetle

MM BIO-24: Transplant Elderberry Shrubs that Cannot be Avoided

MM BIO-25: Compensate for Impacts on Valley Elderberry Longhorn Beetle Habitat

MM BIO-26: Conduct Focused Surveys for Nesting Swainson's Hawk Prior to Construction

MM BIO-27: Monitor Active Swainson's Hawk Nest During Pile Driving and Other Construction Activities

LEVEL OF SIGNIFICANCE AFTER MITIGATION. This impact is considered significant and unavoidable.

CEQA FINDING NO. 22

Impact: **BIO-2. Removal of purple martin habitat (i.e., approach structures) could displace approximately 25% of the Sacramento purple martin population.**

Finding(s): (1) Changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the significant environmental effect as identified in the EIR.

(3) Specific economic, legal, social, technological, or other considerations, including considerations for the provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or alternatives identified in the EIR.

FACTS SUPPORTING THE FINDING(S)

Removing the existing bridge's approach structures to build the replacement bridge would adversely impact purple martins by removing their nesting habitat. Loss of this habitat would displace approximately 25 percent of the Sacramento population of purple martins, which is the only extant population in the Central Valley. The EIR identified measures to minimize impacts to purple martins by avoiding purple martins during construction and demolition, conducting Staff Training, enhancing existing habitat and creating replacement habitat, and monitoring the replaced habitat for success. However, the loss of the approach structures would still displace approximately 25 percent of the Sacramento Purple Martin population, and this impact cannot be eliminated.

Implementation of MM BIO-10, MM BIO-28, MM BIO-29, MM BIO-30, MM BIO-31, and MM BIO-32, has been incorporated into the Project and would reduce the severity of Impact BIO-2, although not necessarily to a less than significant level.

MM BIO-10: Avoid and Minimize Impacts on Nesting Birds and Roosting Bats from Demolition of Approach Structures

MM BIO-28: Avoid and Minimize Impacts on Purple Martins during Construction Activities

MM BIO-29: Conduct Staff Training

MM BIO-30: Enhance Existing Colony Entrance Holes

MM BIO-31: Create Purple Martin Replacement Habitat

MM BIO-32: Prepare and Implement a Monitoring and Management Plan for the I Street Purple Martin Colony Replacement Habitat

LEVEL OF SIGNIFICANCE AFTER MITIGATION. This impact is considered significant and unavoidable.

2. NOISE (NOI)

CEQA FINDING NO. 23

Impact: **NOI-1. Construction noise could exceed City of West Sacramento noise standards for non-transportation sources**.

Finding(s):
(1) Changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the significant environmental effect as identified in the EIR.

(3) Specific economic, legal, social, technological, or other considerations, including considerations for the provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or alternatives identified in the EIR.

FACTS SUPPORTING THE FINDING(S)

Construction noise would adversely impact existing noise levels by increasing non-transportation noise levels and violating noise standards independent of receptor sensitivity. The EIR identified measures to use noise and vibration reducing construction practices. However, construction noise and vibrations would still exceed the City of West Sacramento noise standards, and therefore have associated potentially significant impacts that cannot be eliminated.

Implementation of MM NOI-1 and MM NOI-2 has been incorporated into the Project and would reduce the severity of Impact NOI-1, although not necessarily to a less than significant level.

MM NOI-1: Use Noise-Reducing Construction Practices

MM NOI-2: Use Vibration-Reducing Construction Practices

LEVEL OF SIGNIFICANCE AFTER MITIGATION. This impact is considered significant and unavoidable.

CEQA FINDING NO. 24

Impact: **NOI-2. Impact pile driving vibration within about 175 feet of the activity could result in vibration causing potential annoyance and damage to historic buildings**.

Finding(s): (1) Changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the significant environmental effect as identified in the EIR.

FACTS SUPPORTING THE FINDING(S)

Vibrations from pile drivers would adversely impact sensitive receptors within 175 feet of Project activities and could damage historic buildings. The EIR identified measures to use noise and vibration reducing construction practices. However, construction noise and vibrations have associated potentially significant impacts that cannot be eliminated.

Implementation of MM NOI-1 and MM NOI-2 has been incorporated into the Project and would reduce the severity of Impact NOI-2, although not necessarily to a less than significant level.

MM NOI-1: Use Noise-Reducing Construction Practices

MM NOI-2: Use Vibration-Reducing Construction Practices

LEVEL OF SIGNIFICANCE AFTER MITIGATION. This impact is considered significant and unavoidable.

CEQA FINDING NO. 25

Impact: **NOI-3. Increases in construction noise is expected to result in noise levels that exceed City of West Sacramento noise standards at nearby residential uses**.

Finding(s): (1) Changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the significant environmental effect as identified in the EIR.

FACTS SUPPORTING THE FINDING(S)

Construction noise would adversely impact residents by exceeding noise standards. The EIR identified measures to use noise and vibration reducing construction practices. However, construction noise and vibrations would still exceed the City of West Sacramento noise standards, and therefore have associated potentially significant impacts that cannot be eliminated.

Implementation of MM NOI-1 and MM NOI-2 has been incorporated into the Project and would reduce the severity of Impact NOI-3, although not necessarily to a less than significant level.

MM NOI-1: Use Noise-Reducing Construction Practices

MM NOI-2: Use Vibration-Reducing Construction Practices

LEVEL OF SIGNIFICANCE AFTER MITIGATION. This impact is considered significant and unavoidable.

E. FINDINGS ON ALTERNATIVES

As explained in *California Native Plant Society* v. *City of Santa Cruz* (2009) 177 Cal.App.4th 957, 1000:

> *When it comes time to decide on project approval, the public agency's decisionmaking body evaluates whether the alternatives [analyzed in the EIR] are actually feasible…. At this final stage of project approval, the agency considers whether '[s]pecific economic, legal, social, technological, or other considerations…make infeasible the mitigation measures or alternatives identified in the environmental impact report.' Broader considerations of policy thus come into play when the decisionmaking body is considering actual feasibility than when the EIR preparer is assessing potential feasibility of the alternatives [citations omitted].*

The three alternatives analyzed in the EIR represent a reasonable range of potentially feasible alternatives that could reduce one or more significant impacts of the Project. These alternatives include:

1) No-Build (No Project) Alternative
2) Alternative 1 - Signalized Intersection at Jibboom Street and Bercut Drive
3) Alternative 2 - Roundabout Intersection at Jibboom Street and Bercut Drive

As presented in the EIR, the alternatives were described and compared with each other and with the proposed Project.

Under State CEQA Guidelines section 15126.6, subdivision (e)(2), if the No Project Alternative is identified as the environmentally superior alternative, the EIR must also identify an environmentally superior alternative among the other alternatives. Based on the analysis contained in the EIR, there is no clear environmentally superior alternative to the proposed Project that is capable of

achieving the Project objective. No one alternative would eliminate the significant and adverse impacts of the proposed Project.

The City independently reviewed and considered the information on alternatives provided in the EIR and in the record. The EIR reflects the City's independent judgment as to alternatives. The City found that the Project provides the best balance between the Project goals and objectives and the Project's benefits. The three CEQA alternatives proposed and evaluated in the EIR were rejected as being infeasible for reasons provided in the City's Findings Regarding Alternatives (Attachment B-1).

Based upon the objectives identified in the EIR and the detailed mitigation measures imposed upon the Project, the Commission has determined that the Project should be approved, subject to such mitigation measures (Exhibit A, Mitigation Monitoring Program), and that any remaining unmitigated environmental impacts attributable to the Project are outweighed by the following specific economic, fiscal, social, environmental, land use, and other overriding considerations.

4.0 STATEMENT OF OVERRIDING CONSIDERATIONS

A. INTRODUCTION

This section addresses the Commission's obligations under Public Resources Code section 21081, subdivisions (a)(3) and (b). (See also State CEQA Guidelines, §§ 15091, subd. (a)(3), 15093.) Under these provisions, CEQA requires the Commission to balance, as applicable, the economic, legal, social, technological, or other benefits, including regionwide or statewide environmental benefits, of the Lease approval related to the I Street Bridge Replacement Project against the backdrop of the Project's unavoidable significant environmental impacts. For purposes of CEQA, if the specific economic, legal, social, technological, or other benefits of a proposed project outweigh the unavoidable significant environmental effects, those effects may be considered acceptable and the decision-making agency may approve the underlying project. (State CEQA Guidelines § 15092, subd. (b)(2)(B).) CEQA, in this respect, does not prohibit the Commission from approving the Lease even if the Project activities as authorized under the Lease may cause significant and unavoidable environmental effects.

This Statement of Overriding Considerations presents a list of (1) the specific significant effects on the environment attributable to the approved Project that cannot feasibly be mitigated to below a level of significance, (2) benefits derived from the approved Project, and (3) specific reasons for approving the Project.

Although the City and Commission have imposed mitigation measures to reduce impacts, impacts remain that are considered significant after application of all feasible mitigation. Significant impacts of the approved Project fall under two resource areas: Biological Resources and Noise (see Table B-2). These impacts are specifically identified and discussed in more detail in the Commission's CEQA Findings and in City's Final EIR. While the Commission has required all feasible mitigation measures, these impacts remain significant for purposes of adopting this Statement of Overriding Considerations.

Table B-2 – Significant and Unavoidable Impacts Identified for the Approved Project

Impact	Impact Description
Biological Resources (BIO)	
BIO-1. Direct and indirect impacts to VELB, western pond turtle, white-tailed kite, Swainson's hawk, pallid bat, western red bat, other migratory birds, other bat species, Sacramento River winter-run Chinook salmon, Central Valley spring-run Chinook salmon, Central Valley fall- and late fall–run Chinook salmon, Central Valley steelhead, the Southern DPS of North American green sturgeon, delta smelt, longfin smelt, Sacramento splittail, Pacific lamprey, and river lamprey.	Removing vegetation, modifying habitat, creating noise from construction equipment, and working in the River would adversely constitute a signifcant impact on candidate, sensitive, or special-status species. The EIR imposes MMs BIO-1 through BIO-27, but discloses that those measures would be unlikely to mitigate the Project's impact to a less than significant level. There are no other feasible mitigation measures that are available to offset this significant impact. Therefore, the impacts would remain significant and unavoidable.

Impact	Impact Description
BIO-2. Removal of purple martin habitat (i.e., approach structures) could displace approximately 25% of the Sacramento purple martin population.	Removing the existing bridge's approach structures would constitute a significant impact on the purple martin population. The EIR imposes MMs BIO-10 and BIO-28 through BIO-32, but discloses that those measures would be unlikely to mitigate the Project's impact to a less than significant level. There are no other feasible mitigation measures that are available to offset this significant impact. Therefore, the impacts would remain significant and unavoidable.
Noise (NOI)	
NOI-1. Construction noise could exceed City of West Sacramento noise standards for non-transportation sources.	Generating construction noise would consitute a significant impact by increasing non-transportation sound levels and violating noise standards independent of receptor sensitivity. The EIR imposes MMs NOI-1 and NOI-2 but discloses that those measures would be unlikely to mitigate the Project's impact to a less than significant level. There are no other feasible mitigation measures that are available to offset this significant impact. Therefore, the impacts would remain significant and unavoidable.
NOI-2. Impact pile driving vibration within about 175 feet of the activity could result in vibration causing potential annoyance and damage to historic buildings.	Vibrations from pile drivers would constitute a significant impact on the sensitive receptors within 175 feet of Project activities and could damage historic buildings. The EIR imposes MMs NOI-1 and NOI-2 but discloses that those measures would be unlikely to mitigate the Project's impact to a less than significant level. There are no other feasible mitigation measures that are available to offset this significant impact. Therefore, the impacts would remain significant and unavoidable.
NOI-3. Increases in construction noise is expected to result in noise levels that exceed City of West Sacramento noise standards at nearby residential uses	Construction noise would constitute a significant impact on residents by exceeding noise standards and affecting sensitive receptors. The EIR imposes MMs NOI-1 and NOI-2 but discloses that those measures would be unlikely to mitigate the Project's impact to a less than significant level. There are no other feasible mitigation measures that are available to offset this significant impact. Therefore, the impacts would remain significant and unavoidable.

B. BALANCING OF BENEFITS AND RISKS ASSOCIATED WITH LEASE APPROVAL

State CEQA Guidelines section 15093, subdivision (a) requires the decision-making agency to balance, as applicable, the economic, legal, social, technological, or other benefits, including region-wide or statewide environmental benefits, of a proposed project against its unavoidable environmental risks when determining whether to approve the project.

C. COMMISSION ADOPTION OF STATEMENT OF OVERRIDING CONSIDERATIONS

As noted above, under Public Resources Code section 21081, subdivisions (a)(3) and (b) and State CEQA Guidelines section 15093, subdivision (a), the decision-making agency is required to balance, as applicable, the economic, legal, social, technological, or other benefits, including region-wide or state-wide environmental benefits, of a proposed project against its unavoidable environmental risks when determining whether to approve a project.

For purposes of CEQA, if these benefits outweigh the unavoidable significant environmental effects of a proposed project, the decision-making agency may approve the underlying project. CEQA, in this respect, does not prohibit the Commission from approving the Project, even if the activities authorized by that approval may cause significant and unavoidable environmental effects. This balancing is particularly difficult given the significant and unavoidable impacts on the resources discussed in the EIR and these Findings. Nevertheless, the Commission finds, as set forth below, that the benefits anticipated by implementing the Project outweigh and override the expected significant effects.

The Commission has balanced the benefits of the Project against the significant unavoidable impacts that will remain after approval of the lease associated with the Approved Project and with implementation of all feasible measures in the EIR that is adopted as enforceable conditions of the Commission's approval of the Project. Based on all available information, the Commission finds that the benefits of the approved Project outweigh the significant and unavoidable adverse environmental effects, and considers such effects acceptable.

The Project would provide the following benefits:

- **Safety**. The new bridge will improve bicycle safety by providing a Class II lane on the bridge. The existing I Street Bridge lacks sufficient space for a separate bicycle lane and mixes bicycle traffic with automobile traffic moving at a greater speed. That creates risk for cyclists.
- **Design and Traffic Operations Standards**. The new bridge would meet current standards for vehicular operations. In addition, it would comply

with the Americans with Disabilities Act (ADA) accessibility requirements. The existing bridge does not meet these standards and requirements.

- **Land Use and Economic Development**. The new bridge would accommodate multiple transportation modes, including motor vehicles, bicycles, pedestrians, and high-quality transit, thereby improving connectivity between new development areas in Sacramento and West Sacramento. This will encourage cross-river travel between developing areas in both cities to the benefit of economic development in both. For example, the Railyards redevelopment may include a Kaiser Foundation hospital and new soccer stadium. The proposed project would simplify access to the hospital and soccer stadium and also make future commercial and restaurant development in West Sacramento more accessible to Sacramento residents.
- **Accommodation of Transit**. The proposed project can accommodate different transit modes. The existing I Street Bridge is too narrow to accommodate both motor vehicles and fixed rail transit. Improved transit between the cities of Sacramento and West Sacramento has long been an objective of both cities, as demonstrated by their support for the concept of a cross-river trolley system.

The Commission adopts and makes this Statement of Overriding Considerations with respect to the impacts identified in the EIR and these Findings that cannot be reduced to a less than significant level. Each benefit set forth above constitutes an overriding consideration warranting approval of the project, independent of the other benefits, despite each and every significant unavoidable impact.

D. CONCLUSION

The Commission has considered the EIR and all of the environmental impacts described therein including those that cannot be mitigated to a less than significant level and those that may affect Public Trust uses of State sovereign land. Based on the foregoing and pursuant to Public Resources Code section 21081 and State CEQA Guidelines sections 15096 subdivision (h) and 15093, the Commission has considered the fiscal, economic, legal, social, environmental, and public health and safety benefits of the Project and has balanced them against the Project's significant and unavoidable and unmitigated adverse environmental impacts and, based upon substantial evidence in the record, has determined that the benefits of the Project outweigh the adverse environmental effects. The Commission finds that the remaining significant unavoidable impacts of the Project are acceptable in light of these benefits. Such benefits

outweigh such significant and unavoidable impacts of the Project and provide the substantive and legal basis for this Statement of Overriding Considerations.

The Commission finds that to the extent that any impacts identified in the EIR remain unmitigated, all associated measures have been required to the extent feasible, although the impacts could not be reduced to a less than significant level.

Based on the above discussion, the Commission finds that the benefits of the Project outweigh the significant unavoidable impacts that could remain after mitigation is applied and considers such impacts acceptable.

ATTACHMENT B-1

CITY OF SACRAMENTO

FINDINGS REGARDING ALTERNATIVES

C. Project Alternatives

Alternatives Considered

CEQA mandates that an EIR evaluate a reasonable range of alternatives to the project that generally reduce or avoid potentially significant impacts of the project. In identifying alternatives to the proposed project, primary consideration was given to alternatives that could reduce one or more of the proposed project's significant impacts while still meeting the project's objectives. CEQA requires that every EIR also evaluate a "No Project" alternative.

Alternative 1—Signalized Intersection at Jibboom Street and Bercut Drive is part of the proposed project. The range of alternatives to the proposed project analyzed in the Draft EIR consists of the following.

- No Build (No-Project) Alternative
- Alternative 2 - Roundabout Intersection at Jibboom Street and Bercut Drive

No Build (No-Project) Alternative

Description

Under the No Build Alternative, the existing I Street Bridge would remain in use for vehicle, bicycle, and pedestrian access between the cities of Sacramento and West Sacramento. No changes to traffic patterns on I Street or C Street would occur. The four approach structures would remain in place and in use; and there would be no changes to existing roadways, levees or Class I bikeways.

Improvements and development of transportation infrastructure would continue following the general plans of both cities, the *Sacramento Railyards Specific Plan* (approved November 2016), and the *Washington Specific Plan* (adopted May 1996). The *Sacramento Railyards Specific Plan* (City of Sacramento 2016) identifies the extension of Railyards Boulevard west to a Tee intersection at Jibboom Street. Railyards Boulevard at Bercut Drive would consist of two westbound lanes and one eastbound lane. The same number of lanes on Railyards Boulevard would extend west to the intersection with Jibboom Street; at this point, the left westbound lane on Railyards Boulevard would become a dedicated left-turn lane onto southbound Jibboom Street, and the right westbound lane would be a dedicated right-turn lane onto northbound Jibboom Street.

In West Sacramento, future changes to C Street would be based on the *Washington Specific Plan* (City of West Sacramento 1996), which identifies 12-foot-wide sidewalks and 7-foot-wide Class II bike lanes along the roadway. The connection to the I Street Bridge would not change.

Relationship to Project Objectives

The No Build Alternative would not meet most of the project objectives. Its design is obsolete and it does not provide for multi-modal or ADA-compliant access between Sacramento and West Sacramento. It is rejected for this reason.

Facts in Support of Finding of Infeasibility

- The No Build Alternative would be inconsistent with the adopted findings of the Sacramento River Crossings Alternatives Study for Bridge Location 2 in the North Market Area.

- The No Build Alternative would retain an old bridge that does not meet the requirements of the Neighborhood Friendly Bridge definition that the City of Sacramento City Council adopted by resolution on October 18, 2011 and not provide a compliant replacement.

- The No Build Alternative would retain the existing structure, with its lack of pedestrian and bicycle facilities that meet Americans with Disabilities Act (ADA) requirements. Because the existing structure does not provide for safe bicycle passage, it would not facilitate connections to and from the new crossing and the Sacramento River Parkway and Riverfront Park trails.

- The No Build Alternative would not facilitate vehicular and multimodal traffic. By leaving vehicle traffic on the existing I Street Bridge, the No Build Alternative would not reduce traffic congestion, improve safety, and remove a structurally deficient bridge.

- The existing I Street Bridge carries rail traffic and does not have space for transit. As a result, No Build Alternative could not accommodate future high-quality transit and the potential addition of a streetcar.

- The existing I Street Bridge does not provide convenient access to the Sacramento Railyards, nor to the Washington District in West Sacramento. The No Build Alternative would not improve the connectivity to, and accessibility of, businesses, recreational areas, and new or redevelopment opportunity sites located in the urban core of Sacramento and West Sacramento, including the Sacramento Railyards and the River District in Sacramento and the Washington District in West Sacramento.

Alternative 2 - Roundabout Intersection at Jibboom Street and Bercut Drive

Description

Railyards Boulevard would be extended west to the new bridge over the Sacramento River. East of Bercut Drive, Railyards Boulevard would consist of two westbound lanes and one eastbound lane. Under Alternative 2, Railyards

Boulevard would consist of a roundabout between Jibboom Street and Bercut Drive, with two lanes in each direction. One westbound lane would be a trap onto northbound Jibboom Street, and one westbound lane would continue onto the new bridge. One eastbound lane would be trapped into left-turn lanes onto Bercut Drive, and one eastbound lane would continue along Railyards Boulevard. West of Jibboom Street, Railyards Boulevard would consist of one lane in each direction.

Relationship to Project Objectives

Alternative 2 would meet most project objectives by virtue of installing a new bridge with improved multi-modal access between Sacramento and West Sacramento.

Facts in Support of Finding of Infeasibility

While the roundabout and roadway configuration in this alternative has similar traffic operations and environmental effects compared to the proposed project, the roundabout is less able to accommodate potential delays when traffic stopped while the bridge is opening and closing. The roundabout also requires more rights-of-way and would result in greater conflicts with the structural components of the I-5 viaduct. The City wishes to retain flexibility to accommodate changes to the I-5 viaduct in the future without resulting in conflict with the roundabout. Conflict could result in limiting the potential for I-5 widening and necessitating future reconstruction of the connection to Railyards Boulevard to remove the roundabout.

4. Statement of Overriding Considerations

Pursuant to Guidelines Section 15092, the City Council finds that in approving the proposed project it has eliminated or substantially lessened all significant and potentially significant effects of the project on the environment where feasible. The City Council further finds that it has balanced the economic, legal, social, technological, and other benefits of the project against the remaining unavoidable environmental risks in determining whether to approve the project and has determined that those benefits outweigh the unavoidable environmental risks and that those risks are acceptable. The City Council makes this statement of overriding considerations in accordance with Section 15093 of the CEQA Guidelines in support of approval of the project.

The City of Sacramento has considered the information contained in and related to the Final EIR (the Draft EIR, Comments and Responses to those documents, text changes and other revisions to the EIR, and all other public comments, responses to comments, accompanying technical memoranda and staff reports, and findings included in the public record for the project). Pursuant to CEQA Guidelines Section 15092, the City Council finds that in approving the I Street Bridge Replacement Project, it has eliminated or substantially lessened