I Street Bridge Deck Conversion for Active Transportation
Initial Study/Mitigated Negative Declaration

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Proposed
Mitigated Negative Declaration

I Street Bridge Deck Conversion for Active Transportation

Project Description

The I Street Bridge Deck Conversion for Active Transportation Project would maintain and improve active transportation use on the upper deck of the existing I Street Bridge. As a part of the separate I Street Bridge Replacement Project, the existing roadway approach ramps to the I Street Bridge from I Street and Jibboom Street in Sacramento and from C Street in West Sacramento would be removed. The proposed deck conversion project would retain a portion of each approach ramp structure on each end of the existing I Street Bridge to accommodate access points for pedestrians and bicyclists. The retained portions would be used as raised platforms to which Americans with Disabilities Act (ADA)-compliant pedestrian ramps would be attached. These platforms already span over the active railroad tracks.

Four ADA-compliant bicycle/pedestrian ramps would be constructed, two in West Sacramento and two in Sacramento. In West Sacramento, one ramp would be constructed north of the existing I Street Bridge, and the other to south of the existing bridge. In Sacramento, one ramp would be constructed north of the existing bridge, the other would be to the south and would be designed to accommodate maintenance vehicles to allow Union Pacific Railroad (UPRR) to access the bridge for their routine maintenance activities and to provide City maintenance or emergency vehicle access, when required.. The new ramps would provide user connectivity to existing pathways and travel routes for bicyclists and pedestrians (commuting and recreational use). Stairways may be incorporated into one ramp on each side.

Project Location

The project is located at the I Street Bridge (Bridge No. 22C0153), specifically the upper deck of the bridge, and the areas immediately adjacent to the bridge in both West Sacramento and Sacramento. The I Street Bridge currently serves as an important link between West Sacramento's historic Washington District, CalSTRS and The Ziggurat buildings, and Sacramento's Sacramento Valley Station, Old Sacramento, and central city.

Potential Impacts

The proposed project would result in no impact on agricultural and forestry resources, geology and soils, land use and planning, mineral resources, population and housing, public services, and recreation.

The proposed project would have less than significant impacts on energy, greenhouse gas emissions, hydrology and water quality, noise, and transportation.

Although the proposed project could result in significant impacts on aesthetics, air quality, biological resources, cultural resources, paleontology, hazards and hazardous materials, and tribal cultural resources, these impacts would be reduced to less-than-significant levels with the incorporation of the following mitigation measures.

Mitigation Measure AIR-1: Implement Additional Control Measures for Construction Emissions of Fugitive Dust

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 included in and do not conflict with the requirements or other permits and authorizations 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 4 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.

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 included in, and do not conflict with, the requirements of other permits and authorizations issued for the project. The following measures are taken from SMAQMD's (2021) *Guide to Air Quality Assessment in Sacramento County* 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 2 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 track out 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, and 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.

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

The project proponent and/or its 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.

Mitigation Measure 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, riparian habitat, 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 project area (including their life history, habitat requirements, and photographs of the species). The training will identify the portions of the project area 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.

Mitigation Measure 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 month 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.

Mitigation Measure BIO-4: Conduct Preconstruction Surveys for Crotch Bumble Bee and Western Bumble Bee and Avoid Active Nests

Pre-construction surveys for active bee nest colonies and associated floral resources (i.e., flowering vegetation on which bees from the colony are observed foraging) no more than 30 days prior to any ground disturbance between March and September. The purpose of this pre-construction survey would be to identify active nest colonies and associated floral resources in impact areas that could be avoided by construction personnel. The project biologist would establish, monitor, and maintain no-work buffers around nest colonies and floral resources identified during surveys. The size and configuration of the no-work buffer would be based on best professional judgment of the project biologist. At a minimum, the buffer would provide at least 20 feet of clearance around nest entrances and maintain disturbance-free airspace between the nest and nearby floral resources. Construction activities would not occur within the no-work buffers until the colony is no longer active (i.e., no bees are seen flying in or out of the nest for three consecutive days indicating the colony has completed its nesting season and the next season's queens have dispersed from the colony).

Mitigation Measure BIO-5: Protect Crotch Bumble Bee and Western Bumble Bee Food Plants from Herbicide and Pesticide Use

To minimize impacts on Crotch bumble bee and western bumble bee from pesticide and herbicide drift, application of these chemicals will be limited to the extent feasible and will be conducted using handheld equipment. Herbicides and pesticides will be applied only by applicators with current licenses and/or certifications from the California Department of Pesticide Regulation. The applicator will follow the pesticide and herbicide label directions. Spray nozzles will be kept within 24 inches of target areas during spraying. The most current information on pesticide and herbicide toxicity on wildlife will be used to inform future decisions about their use during project operation.

Mitigation Measure BIO-6: Revegetate Temporary Impact Areas within Crotch Bumble Bee and Western Bumble Bee Habitat

The project proponent will include suitable native nectar- and pollen-producing plants commonly used as food sources by Crotch bumble bee and western bumble bees in on-site revegetation and erosion control plans. Native plants of the following genera are appropriate for Crotch bumble bee: *Antirrhinum*, *Asclepias*, *Phacelia*, *Chaenactis*, *Clarkia*, *Dendromecon*,

Eriogonum, *Eschscholzia*, *Lupinus*, *Medicago*, and *Salvia*. Native plants of the following taxa are appropriate for western bumble bee: Asteraceae, *Ceanothus*, *Centaurea*, *Chrysothamnus*, *Cirsium*, *Eriogonum*, *Geranium*, *Grindelia*, *Lupinus*, *Melilotus*, *Monardella*, *Rubus*, *Penstemon*, *Solidago*, and *Trifolium*.

Mitigation Measure 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 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 will 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.

Mitigation Measure 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 Mitigation Measure BIO-10) 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 structures, trees, shrubs, ruderal areas, and grassland vegetation that provide suitable nesting habitat within 50 feet of disturbance. 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.

Mitigation Measure 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 mitigation measures for Swainson's hawk, nesting birds, and roosting bats (see Mitigation Measures BIO-8 and BIO-10 through BIO-13. Implementation of the following measures will avoid and minimize impacts on purple martins, as well as other nesting birds and bats that use the approach structures.

Mitigation Measure BIO-10: 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.

Mitigation Measure BIO-11: Monitor Active Swainson's Hawk Nests during Construction Activities

Active Swainson's hawk nests within 600 feet of the study area will be monitored during construction. Monitoring will be conducted by a wildlife biologist with experience in monitoring Swainson's hawk 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 are still in the nest, 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 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.

Mitigation Measure BIO-12: Avoid and Minimize Impacts on Purple Martins during Construction Activities

No construction activity that results in ground disturbance, 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.

Mitigation Measure BIO-13: Conduct Preconstruction Surveys for Tree 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 construction noise and vibration, the project proponent will implement the following actions.

Preconstruction Surveys

One month prior to tree trimming or removal, a qualified biologist will examine trees to be removed or trimmed and trees or structures within the vicinity of construction activities (a minimum of 100 feet) for suitable bat roosting habitat. High-quality habitat features (e.g., crevices, large tree cavities, basal hollows, loose or peeling bark, larger snags) 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.

Protective Measures

Protective measures may be necessary if it is determined that bats are using trees in the study area 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 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.

- Trees planned for removal 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.
- 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.
- 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 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 sledgehammer or an axe. Several minutes should pass before 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.
- No construction activity that results in ground disturbance, loud noises, and/or vibrations will be conducted within 100 feet of the edge of occupied roosts during the maternity season (April 1 to September 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.
- Biologists experienced with bats will monitor construction activities within 100 feet of identified roosts to ensure that roosting bats are not disturbed.

Mitigation Measure BIO-14: Avoid the Introduction and Spread of Invasive Plants

The project proponent or its contractor will be responsible for avoiding the introduction of new invasive plants and the spread of invasive plants previously documented in the project's study area. 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 black locust trees from the riparian forest in and adjacent to the impact area on the Sacramento side of the bridge and any red sesbania trees in or adjacent to the impact area on the West Sacramento side.

Mitigation Measure BIO-15: Compensate for Loss of Protected Trees

Within 1 year prior to construction, the project proponent will conduct a preconstruction inventory of all protected trees to be removed within the project area. The inventory will include the location, species, diameter of all trunks, approximate height and canopy diameter, and approximate age, in support of a tree permit for removal of the protected trees. All conditions of the tree permit will be implemented.

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

- If feasible, plant replacement trees at or near the location of the tree removal. 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. 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 adequate space is not 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, following the same replacement ratio, species, monitoring, and tree survival requirements described for the option above.

Mitigation Measure CUL-1: Implement Measures to Protect Previously Unidentified Cultural Resources

- Construction shall stop if potential cultural resources are encountered. It is possible that previous activities have obscured surface evidence of cultural resources. If signs of an archeological site, such as any unusual amounts of stone, bone, or shell, are uncovered during grading or other construction activities, work will be halted within 100 feet of the find and the City of West Sacramento will be notified. A qualified archeologist will be consulted for an onsite evaluation. If the site appears to be eligible for listing in state or

federal registers, additional mitigation, such as further testing for evaluation or data recovery, may be necessary.

- In the event resources are discovered, the City of West Sacramento will retain a qualified archaeologist to assess the find and to determine whether the resource requires further study. Any previously undiscovered resources found during construction will be recorded on appropriate California Department of Parks and Recreation 523 forms and evaluated for significance under all applicable regulatory criteria.
- All work will stop in the immediate vicinity of the find, and, if the find is determined to be an important cultural resource, the City of West Sacramento will make available contingency funding and a time allotment sufficient to allow recovery of an archaeological sample or to implement an avoidance measure. Construction work may continue on other parts of the project while archaeological mitigation takes place.

Mitigation Measure CUL-2: Implement Measures if Construction Activities Inadvertently Discover or Disturb Human Remains

- If human remains are discovered during any phase of construction, including disarticulated or cremated remains, the construction contractor will immediately cease all ground-disturbing activities within 100 feet of the remains and notify the City of West Sacramento.
- In accordance with California State Health and Safety Code Section 7050.5, no further disturbance will occur until the following steps have been completed.
    - The County Coroner has made the necessary findings as to origin and disposition pursuant to Public Resources Code Section 5097.98.
    - If the remains are determined by the County Coroner to be Native American, NAHC will be notified within 24 hours, and the treatment and disposition of the remains will comply with NAHC guidelines.
- It is further recommended that a professional archaeologist with Native American burial experience conduct a field investigation of the specific site and consult with the Most Likely Descendant (MLD), if any, identified by NAHC. As necessary and appropriate, a professional archaeologist may provide technical assistance to the MLD, including excavation and removal of the human remains.

Mitigation Measure GEO-1: 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 qualified professional paleontologist can assess the nature and importance of the find and 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 also include preparation of a report for publication describing the finds. The project proponent will be responsible for ensuring that recommendations regarding treatment and reporting are implemented.

Minimization Measure GHG-1: Implement SMAQMD's Recommended Construction GHG BMPs

The project proponent will implement the following SMAQMD's recommended GHG reduction measures, to the extent feasible.

- Improve fuel efficiency from construction equipment.
    - 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.
    - 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.
    - Train equipment operators in proper use of equipment.
    - Use the proper size of equipment for the job.
    - Use equipment with new technologies (repowered engines, electric drive trains).
- Perform onsite 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 a CARB-approved low carbon fuel for construction equipment. (NO_x 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.
- Use SmartWay certified trucks for deliveries and equipment transport.
- Develop a plan to efficiently use water for adequate dust control.

Mitigation Measure HAZ-1: Develop and Implement a Health and Safety Plan

The project proponent will develop and implement a health and safety plan to address worker safety when working with potentially hazardous materials, including potential ADL, TPHs, PCBs, and other construction-related materials within the ROW during any soil-disturbing activity. The plan will include identification of appropriate fueling and maintenance areas for equipment, daily equipment inspection schedule, a spill response plan, spill response supplies to be maintained on site, and a complete list of the agencies to be notified (with their telephone numbers).

Mitigation Measure HAZ-2: 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 leading from I Street. If soils contain ADL in excess of established thresholds, soils will be handled in a manner compliant with the County Certified Unified Program Agency regulatory requirements and disposed of properly. The testing may be conducted in conjunction with testing required for the separate I Street Bridge Replacement Project.

Mitigation Measure HAZ-3: Perform a Phase II Environmental Site Assessment Prior to Construction Activities and Remediate if Necessary

Prior to construction, the project proponent will conduct a Phase II environmental site assessment in conformance with the American Society for Testing and Materials Standard Practice E1527-05. All environmental investigation, sampling, and remediation activities associated with the project will be conducted under a work plan approved by the regulatory oversight agency and will be conducted by the appropriate environmental professional consistent with Phase II environmental site assessment requirements. The environmental site assessment may occur in conjunction with the Phase II assessment conducted for the separate I Street Bridge Replacement Project.

The Phase II environmental assessment will include sampling and laboratory analysis to confirm the presence of hazardous materials and may include the following.

- Collection of original surface and/or subsurface samples of soil, groundwater to analyze for quantities of various contaminants.
- Subsurface soil borings.
- An analysis to determine the vertical and horizontal extent of contamination (if the evidence from sampling shows contamination).

If contamination is uncovered as part of Phase II environmental site assessment, remediation will be required. Any contaminated soil identified on a project site must be properly disposed of in accordance with DTSC regulations in effect at the time.

If, during construction, soil or groundwater contamination is suspected, construction activities will cease and appropriate health and safety procedures will be implemented, including the use of appropriate personal protective equipment (e.g., respiratory protection, protective clothing, helmets, goggles).

Mitigation Measure TCR-1: Implement Measures to Protect Previously Unidentified Tribal Cultural Resources

If any suspected tribal cultural resources are discovered during ground disturbing construction activities, all work shall cease within 100 feet of the find, or an agreed upon distance based on the project area and nature of the find. A Tribal Representative from a California Native American tribe that is traditionally and culturally affiliated with a geographic area shall be immediately notified and shall determine if the find is a tribal cultural resource (Pub. Resources Code Section 21074). The Tribal Representative will make recommendations for further evaluation and treatment as necessary.

When avoidance is infeasible, preservation in place is the preferred option for mitigation of tribal cultural resources under CEQA, and every effort shall be made to preserve the resources in place, including through project redesign, if feasible. Culturally appropriate treatment may be, but is not limited to, processing materials for reburial, minimizing handling of cultural objects, leaving objects in place within the landscape, or returning objects to a location within the project area where they will not be subject to future impacts. Permanent curation of tribal cultural resources will not take place unless approved in writing by the California Native American tribe that is traditionally and culturally affiliated with the project area.

The contractor will implement any measures deemed by the City of West Sacramento to be necessary and feasible to preserve in place, avoid, or minimize impacts to the resource, including, but not limited to, facilitating the appropriate tribal treatment of the find, as necessary. Treatment that preserves or restores the cultural character and integrity of a Tribal Cultural Resource may include Tribal Monitoring, culturally appropriate recovery of cultural objects, and reburial of cultural objects or cultural soil.

Work at the discovery location cannot resume until all necessary investigation and evaluation of the discovery under the requirements of the CEQA, including AB 52, have been satisfied.

Proposed Finding

Based on the information in the attached Initial Study for the I Street Bridge Deck Conversion for Active Transportation project and in the entire record, the City of West Sacramento finds that although the proposed project could have a significant impact on the environment, mitigation measures have been incorporated into the project that reduce these impacts to less-than-significant levels.

By:

_____ _____

Name Date
Title

Contents

Tables

Figures

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Acronyms and Abbreviations

°	degrees
2020 MTP/SCS	*2020 Metropolitan Transportation Plan/Sustainable Communities Strategy*
AAQS	ambient air quality standards
AB	Assembly Bill
ACM	asbestos containing materials
ADA	Americans with Disabilities Act
ADL	Aerially deposited lead
AQMPs	air quality management plans
BACT	Best Available Control Technologies
BAU	business-as-usual
BMPs	Best Management Practices
C	Celsius
Cal/OSHA	California Division of Occupational Safety and Health
Cal-IPC	California Invasive Plant Council
CAP	Climate Action Plan
CARB	California Air Resources Board
CBSC	California Building Standards Code
CCR	California Code of Regulations
CDFA	California Department of Agriculture
CDFA	California Department of Food and Agriculture
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act of 1970, as amended
CESA	California Endangered Species Act
CH_4	methane
CIDH	cast-in-drilled-hole
City	City of West Sacramento
CNDDB	California Natural Diversity Database
CNPS's	California Native Plant Society's
CO	Carbon Monoxide
CO_2	carbon dioxide
CRHR	California Register of Historic Resources
CWA	Clean Water Act
DPM	diesel particulate matter
DPS	Distinct Population Segment

dsh	diameter standard height
DTSC	Department of Toxic Substances Control
EO	Executive Order
ESA	Endangered Species Act
FCAA	Federal Clean Air Act
FEMA	Federal Emergency Management Agency
FHWA	Federal Highway Administration
FR	Federal Register
GHG	greenhouse gas
H_2S	hydrogen sulfide
HOCs	halogenated organic compounds
I-5	Interstate 5
IS/MND	initial study/proposed mitigated negative declaration
ISA	Initial Site Assessment
LBP	lead-based paint
LUC	land use covenant
MBTA	Migratory Bird Treaty Act
MRZ	Mineral Resource Zone
N_2O	nitrous oxide
NAAQS	national ambient air quality standard
NAHC	Native American Heritage Commission
NCIC	North Central Information Center
NO_2	nitrogen dioxide
NOAA	National Oceanic and Atmospheric Administration
NO_X	nitrogen oxides
NPDES	National Pollution Discharge Elimination System
NRHP	National Register of Historic Places
NWIC	Northwest Information Center
O_3	Ozone
Pb	Lead
PCBs	polychlorinated biphenyls
PM10	particles of 10 micrometers or smaller
PM2.5	particles of 2.5 micrometers and smaller
ppd	pounds per day
proposed project	I Street Bridge Deck Conversion for Active Transportation project
Pub. Res. Code	Public Resources Code
REC	Recognized environmental conditions

RoadMod	Roadway Construction Emissions Model
ROG	reactive organic gases
ROW	right-of-way
SACOG	Sacramento Area Council of Governments
SB	Senate Bill
SFNA	Sacramento Federal Nonattainment Area
SIP	state implementation plan
SMAQMD	Sacramento Metropolitan Air Quality Management District
SMARA	Surface Mining and Reclamation Act of 1975
SO_2	sulfur dioxide
SPRR	Southern Pacific Railroad
SVAB	Sacramento Valley Air Basin
SWPPP	stormwater pollution prevention
TCE	temporary construction easements
TMP	Transportation Management Plan
TMP Guidelines	Caltrans' *Transportation Management Plan Guidelines*
TPH	total petroleum hydrocarbons
UAIC	United Auburn Indian Community
UPRR	Union Pacific Railroad
USACE	U.S. Army Corp of Engineers
USEPA	U.S. Environmental Protection Agency
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
VOC	volatile organic compounds
WDR	Waste Discharge Requirements
WSCAP	West Sacramento Climate Action Plan
YDWN	Yoche Dehe Wintun Nation
Yolo HCP/NCCP	Yolo Habitat Conservation Plan/Natural Communities Conservation Plan
YSAQMD	Yolo-Solano Air Quality Management District

Chapter 1
Introduction/Project Description

Introduction

The City of West Sacramento (City) has prepared this initial study/proposed mitigated negative declaration (IS/MND) to provide the public, responsible agencies, and trustee agencies with information about the potential environmental effects of the I Street Bridge Deck Conversion for Active Transportation project (proposed project).

This document was prepared following the requirements of the California Environmental Quality Act of 1970, as amended (CEQA) (Public Resources Code [Pub. Res. Code] Section 21000 et seq.) and the State CEQA Guidelines (Title 14 California Code of Regulations [CCR] Section 15000 et seq.).

The City is evaluating the proposed conversion of the upper deck of the I Street Bridge so it can be used only for active transportation. The project would include construction of new Americans with Disabilities Act (ADA)-compliant access ramps to the upper deck and connections to the existing pedestrian, bicycle, and trail network on each side of the Sacramento River.

This chapter provides the project purpose and objectives, its location and setting, a description of what the project would entail, and the regulatory requirements for project approval.

Project Objectives

The objectives of the proposed project are listed below.

- Maintain access to, and change the use of, the upper deck of the existing I Street Bridge for only active transportation modes of travel (i.e., bicycle and pedestrian use).
- Create new access points for active transportation modes in both West Sacramento and Sacramento that allow use of the upper deck of the existing I Street Bridge as a river crossing.
- Provide an opportunity to better serve bicycle traffic between the Washington District of West Sacramento and Downtown Sacramento.
- Maintain vehicular access to the upper deck for maintenance access for fuel delivery and equipment replacement associated with the existing movable bridge. Allow emergency vehicle access.

Project Background

The City of West Sacramento, in cooperation with the City of Sacramento, prepared the *I Street Bridge Final Feasibility Study for Bridge Deck Conversion to Active Transportation Use* (WSP 2019) (feasibility study) to analyze converting the vehicular portion of upper deck of the existing I Street Bridge to active transportation use. The I Street Bridge is a historic movable swing railroad bridge built across the Sacramento River in 1911 by Southern Pacific Railway. It continues to be used for

vehicle, pedestrian, and bicycle crossings on the top deck and train crossings (commuter and freight) on the bottom deck.

The separate and approved I Street Bridge Replacement Project will cross the Sacramento River upstream of the existing bridge and will connect the Sacramento Railyards and the West Sacramento Washington neighborhoods. It will provide a new bicycle, pedestrian, and automobile crossing, relocating vehicle traffic to the new bridge. The funding for the I Street Bridge Replacement Project requires that vehicular traffic from the I Street Bridge be relocated to the new bridge and the approach structures to the upper deck removed.

Consequently, due to stipulations related to access easement rights, if the cities do not maintain consistent use of the upper deck, the lower deck of the existing I Street Bridge will continue to be used by the railroad, and the cities' access rights to the upper deck for all travel modes will terminate.

The feasibility study identified options for construction of new ramp connection points and illustrated potential designs for new ways for active transportation modes to maintain access to the upper deck of the bridge from both West Sacramento and Sacramento. The options and concepts in the feasibility study were used as the basis for the design of the proposed project.

Project Location and Setting

The project is located at the I Street Bridge (Bridge No. 22C0153), specifically the upper deck of the bridge, and the areas immediately adjacent to the bridge in both West Sacramento and Sacramento (see Figure 1). The I Street Bridge currently serves as an important link between West Sacramento's historic Washington District, CalSTRS and The Ziggurat buildings, and Sacramento's Sacramento Valley Station, Old Sacramento, and central city.

As described in the feasibility study prepared for the project (WSP 2019), the I Street Bridge carries two vehicular lanes, one in each direction, and pedestrian sidewalks along both sides on an upper deck. It also carries two active railroad tracks on a lower deck. The upper deck has raised 5-foot-wide sidewalks specifically for pedestrian use. The vehicular travel way is 18-feet-wide with no shoulders. The vehicular and pedestrian approach structures that connect to the upper deck lie within rights-of-way owned by the cities. The bridge was listed in the National Register of Historic Places (NRHP) in 1982 (National Register #82002233). The bridge is also listed in the California Register of Historic Resources (CRHR) and is a historical resource for the purposes of CEQA.

In West Sacramento, the River Walk Trail borders the Sacramento River and currently terminates at the south side of the I Street Bridge overcrossing. Parcels adjacent to the bridge, west and north of the trail, are currently vacant.

In Sacramento, the project is just north of the Old Sacramento State Historic Park and the State Railroad Museum. The Sacramento Valley Station is to the east, and the Railyards development is to the north of the rail lines and train station. The Sacramento River Parkway, and the trail within it, pass under the I Street Bridge along the east bank of the Sacramento River.

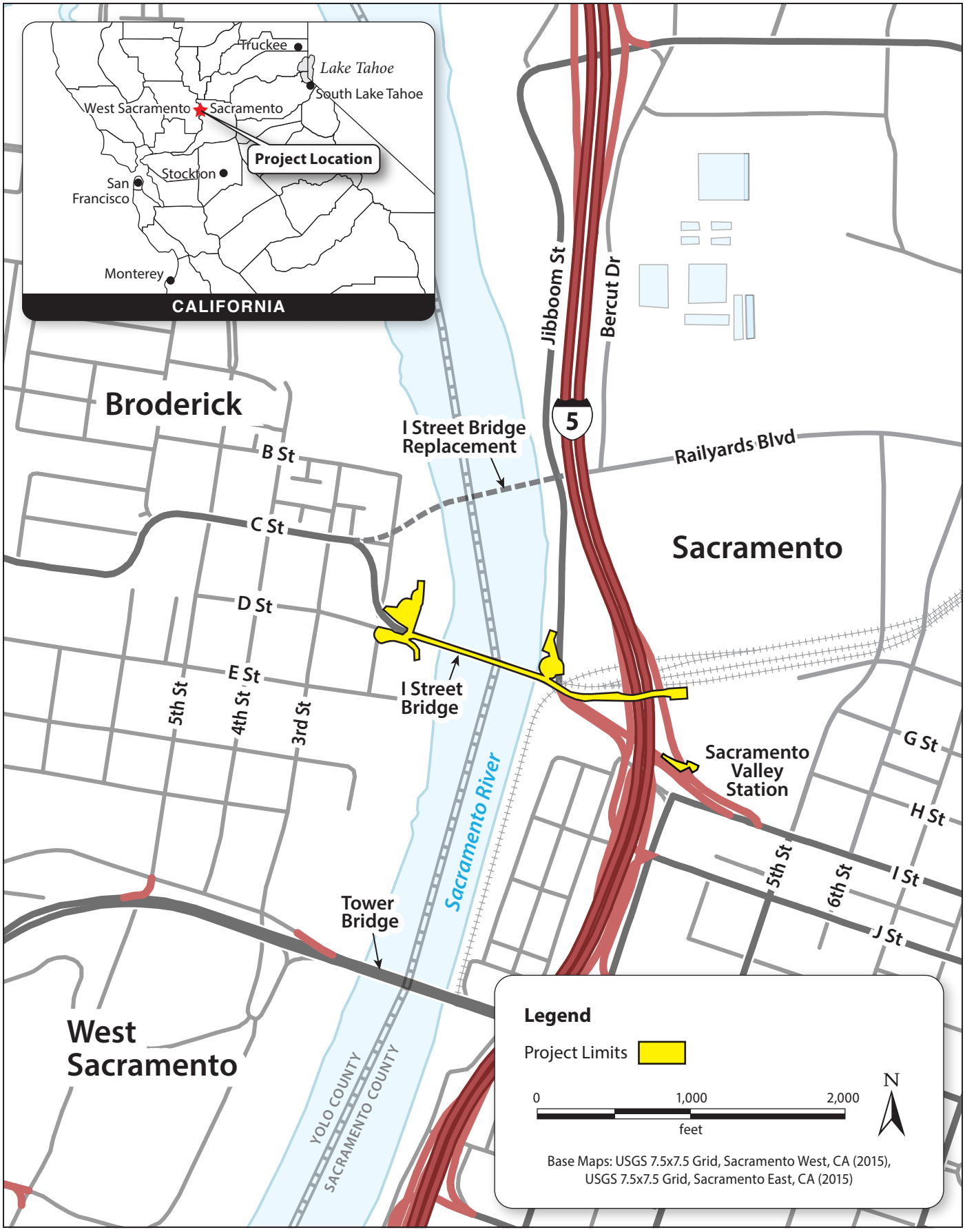

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Figure 1
Project Location

Project Description

The I Street Bridge Deck Conversion for Active Transportation Project would maintain and improve active transportation use on the upper deck of the existing I Street Bridge. As a part of the separate I Street Bridge Replacement Project, the existing roadway approach ramps to the I Street Bridge from I Street and Jibboom Street in Sacramento and from C Street in West Sacramento would be removed. The proposed deck conversion project would retain a portion of each approach ramp structure on each end of the existing I Street Bridge to accommodate access points for pedestrians and bicyclists. The retained portions would be used as raised platforms to which ADA-compliant pedestrian ramps would be attached. These platforms already span over the active railroad tracks.

Four ADA-compliant bicycle/pedestrian ramps would be constructed, two in West Sacramento and two in Sacramento. In West Sacramento, one ramp would be constructed north of the existing I Street Bridge, and the other to south of the existing bridge. In Sacramento, one ramp would be constructed north of the existing bridge, the other would be to the south and would be designed to accommodate maintenance vehicles to allow Union Pacific Railroad (UPRR) to access the bridge for their routine maintenance activities and to provide City maintenance or emergency vehicle access, when required. The new ramps would provide user connectivity to existing pathways and travel routes for bicyclists and pedestrians (commuting and recreational use). Stairways may be incorporated into one ramp on each side of the river. See Figure 2 and the design drawings in Appendix A.

Project Phasing

Depending on funding availability, construction of the project may be phased. Construction phasing will ensure pedestrian, maintenance, and emergency response vehicle access is maintained to the upper deck of the existing I Street Bridge during each phase. There are two possible phases, as well as a possible interim phase on the Sacramento side of the project.

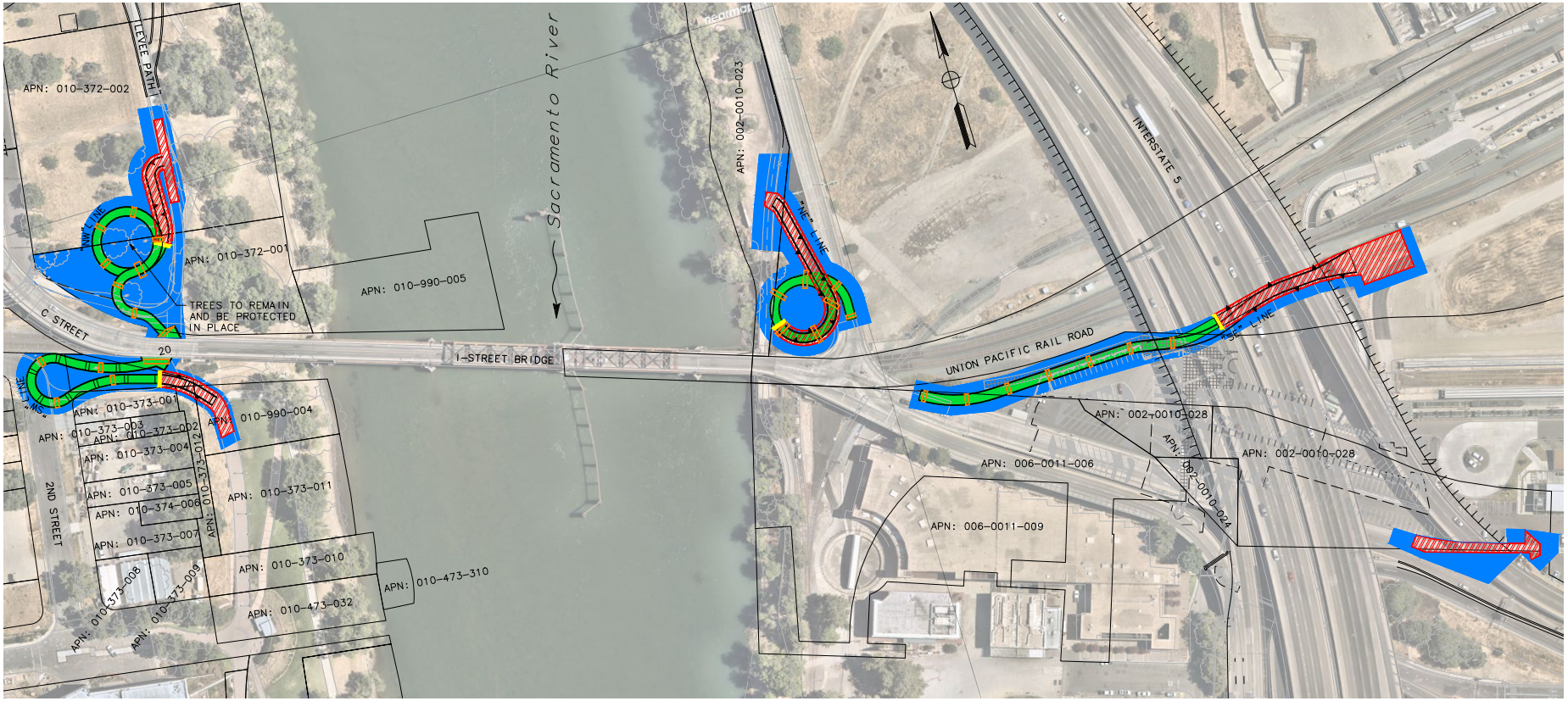
Construction of at least the first phase of the project would be concurrent with construction of the I Street Bridge Replacement Project. The interim phase could be constructed prior to completion of the first phase. If funding is not available to construct all proposed ramps at once, construction of the second phase would occur when funding becomes available.

Phase One

The first phase would provide bicycle and pedestrian access to the upper deck of the existing I Street Bridge from both sides of the river via ADA-compliant ramps at each end of the bridge, which are anticipated to be one ramp in West Sacramento north of the railroad tracks and one ramp in Sacramento south of the railroad tracks. The first phase would also provide UPRR maintenance, public safety, and emergency response vehicle access on the ramp constructed in Sacramento.

Interim Phase

An interim phase may be constructed prior to full completion of Phase One depending upon funding availability. The interim phase would include modifying an existing pedestrian connection between the Sacramento Valley Station parking lot and the westbound I Street Bridge roadway approach ramp structure in Sacramento that is planned for removal as part of the separate I Street Bridge Replacement Project. As part of the bridge replacement project, prior to its removal, the structure



LEGEND

- STRUCTURE
- COLUMN LOCATION – ~60 FOOT PILE DEPTH
- MAXIMUM 2–3 FOOT EXCAVATION
- BRIDGE ABUTMENT – MAXIMUM 6 FOOT EXCAVATION, ~60 FOOT PILE DEPTH
- TEMPORARY IMPACT AREA, MAXIMUM 1 FOOT EXCAVATION

Source: Mark Thomas, 2021

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Figure 2
Project Design and Impact Limits

will be barricaded to prevent vehicular access once traffic is shifted to the new bridge upstream. The interim phase of the proposed project would use the existing approach ramp to create a pedestrian connection to the existing I Street Bridge. The approach ramp would temporarily remain in place. The connection from the Sacramento Valley Station would be widened and reconstructed under the Interstate 5 (I-5) northbound onramp to provide access to the upper bridge deck of the I Street Bridge for maintenance vehicles, bicycles, and pedestrians.

Phase Two

The project's second phase would construct second ADA-compliant ramps on each side of the river on opposite sides of the railroad tracks from the first ramps constructed (i.e., south of the railroad tracks in West Sacramento; north of the railroad tracks in Sacramento).

Transportation Management During Construction

A transportation management plan (TMP) would be developed for use during project construction. The TMP would incorporate strategies described in the *California Manual on Uniform Traffic Control Devices* (California Department of Transportation 2021) and the California Department of Transportation's (Caltrans) *Transportation Management Plan Guidelines* (TMP Guidelines) (California Department of Transportation 2015), selected in accordance with the scale and scope of the project and the variety of transportation facility types and jurisdictions in the project area. The TMP would direct the process and procedures for dissemination of information to the public and motorists, provide guidance for implementation of incident management, describe construction strategies for traffic handling and guiding traffic through work zones, address traffic demand management during construction, and describe and direct the implementation of temporary alternate routes or detours. As part of the implementation of the TMP, local emergency service providers and other identified providers, as appropriate, would be notified prior to any road or trail closures.

Responsible and Trustee Agencies, Regulatory Compliance, and Permitting

The City of Sacramento is a responsible agency under CEQA and will adopt its own environmental documents prior to approving the project within its jurisdiction. The use of federal funding from the Federal Highway Administration (FHWA) is anticipated; therefore, the proposed project also would be subject to federal environmental review requirements. Caltrans would be the lead agency under the National Environmental Policy Act. Other permits and regulatory processes needed are listed in Table 1.

Table 1. Permits and Approvals Needed

Agency	Permit/Approval	Status
U.S. Army Corps of Engineers	Section 408 Clean Water Act authorization for excavations in regulated levees	Not yet initiated
U.S. Fish and Wildlife Service	Coordination regarding threatened and endangered species	Not yet initiated

Agency	Permit/Approval	Status
California Department of Fish and Wildlife	Section 1602 Department of Fish and Game Code Streambed Alteration Agreement	Not yet initiated
California Public Utilities Commission	GO-88B permit and approval of change of use of upper deck	Not yet initiated
California State Lands Commission	Lease of State Lands	Not yet initiated
State Water Resources Control Board	Statewide National Pollutant Discharge Elimination System Permit (NPDES) compliance Statewide Construction General Permit stormwater pollution prevention plan (SWPPP) compliance	Not yet initiated
Central Valley Flood Protection Board	Encroachment permit	Not yet initiated
West Sacramento Area Flood Control Agency	Approval of changes to levee	Not yet initiated
Sacramento Area Flood Control Agency	Approval of changes to levee	Not yet initiated
Yolo-Solano Air Quality Management District	Formal notification prior to construction	Not yet initiated
Sacramento Metropolitan Air Quality Management District	Formal notification prior to construction	Not yet initiated

Chapter 2
Environmental Checklist

1.	**Project Title:**	I Street Bridge Deck Conversion for Active Transportation
2.	**Lead Agency Name and Address:**	City of West Sacramento, 1110 West Capitol Avenue, West Sacramento, CA
3.	**Contact Person and Phone Number:**	Jason McCoy, 916-617-4832
4.	**Project Location:**	West Sacramento and Sacramento
5.	**Project Sponsor's Name and Address:**	Same as lead agency
6.	**General Plan Designation:**	West Sacramento: Public/Quasi-Public and Recreation and Parks; Sacramento: Parks, Public/Quasi-Public, Central Business District
7.	**Zoning:**	West Sacramento: RP Recreation and Parks, MU-C Mixed Use Corridor, MU-NC Mixed Use Neighborhood Commercial; Sacramento: TC-SPD Transportation Corridor, M2 Heavy Industrial, C-3-SPD Central Business District

8. Description of Project:

The project would maintain and improve active transportation use on the upper deck of the existing I Street Bridge. As a part of the separate I Street Bridge Replacement Project, the existing roadway approach ramps to the I Street Bridge from I Street and Jibboom Street in Sacramento and from C Street in West Sacramento would be removed. The proposed deck conversion project would retain a portion of each approach ramp structure on each end of the existing I Street Bridge to accommodate access points for pedestrians and bicyclists. The retained portions would be used as raised platforms to which ADA-compliant pedestrian ramps would be attached. These platforms already span over the active railroad tracks.

9. Surrounding Land Uses and Setting:

Land use classifications West Sacramento: Public/Quasi-public, and Recreation and Parks. Land use classifications Sacramento: Parks and Recreation, and Public/Quasi-Public.

In West Sacramento, the River Walk Trail borders the Sacramento River and currently terminates at the south side of the I Street Bridge overcrossing. Parcels adjacent to the bridge, west and north of the trail, are currently vacant.

In Sacramento, the project is just north of the Old Sacramento State Historic Park and the State Railroad Museum. The Sacramento Valley Station is to the east and the Railyards development is to the north, north of the rail lines and train station. The Sacramento River Parkway, and the trail within in, pass under the I Street Bridge along the east bank of the Sacramento River.

The I Street Bridge, constructed in 1911, was listed in the National Register of Historic Places in 1982 (National Register #82002233). The bridge is also listed in the CRHR and is a historical resource for the purposes of CEQA.

10. Other Public Agencies Whose Approval is Required:

See Table 1. Permits and Approvals Needed.

11. Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code Section 21080.3.1? If so, has consultation begun?

Note: Conducting consultation early in the CEQA process allows tribal governments, lead agencies, and project proponents to discuss the level of environmental review, identify and address potential adverse impacts to tribal cultural resources, and reduce the potential for delay and conflict in the environmental review process. (See Public Resources Code Section 21083.3.2.) Information may also be available from the California Native American Heritage Commission's Sacred Lands File per Public Resources Code Section 5097.96 and the California Historical Resources Information System administered by the California Office of Historic Preservation. Please also note that Public Resources Code Section 21082.3(c) contains provisions specific to confidentiality.

Consultation with tribes commenced in May 2021. More information can be found in Sections V, *Cultural Resources* and XVIII, *Tribal Cultural Resources*.

Environmental Factors Potentially Affected

The environmental factors checked below would potentially be affected by this project (i.e., the project would involve at least one impact that is a "Potentially Significant Impact"), as indicated by the checklist on the following pages.

Aesthetics	Agricultural and Forestry Resources	Air Quality
Biological Resources	Cultural Resources	Energy
Geology/Soils/ Paleontological Resources	Greenhouse Gas Emissions	Hazards and Hazardous Materials
Hydrology/Water Quality	Land Use/Planning	Mineral Resources
Noise	Population/Housing	Public Services
Recreation	Transportation	Tribal Cultural Resources
Utilities/Service Systems	Wildfire	Mandatory Findings of Significance

Determination

On the basis of this initial evaluation:

I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

X I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions to the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

I find that the proposed project MAY have an impact on the environment that is "potentially significant" or "potentially significant unless mitigated" but at least one effect (1) has been adequately analyzed in an earlier document pursuant to applicable legal standards and (2) has been addressed by mitigation measures based on the earlier analysis, as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier ENVIRONMENTAL IMPACT REPORT or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier ENVIRONMENTAL IMPACT REPORT or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the project, nothing further is required.

Signature — October 11, 2022 (Date)

Jason McCoy, Supervising Transportation Manager (Printed Name) — For

Evaluation of Environmental Impacts

1. A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained if it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
2. All answers must take account of the whole action involved, including offsite as well as onsite, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
3. Once the lead agency has determined that a particular physical impact may occur, the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an Environmental Impact Report (EIR) is required.
4. "Negative Declaration: Less than Significant with Mitigation Incorporated" applies when the incorporation of mitigation measures has reduced an effect from a "Potentially Significant Impact" to a "Less-than-Significant Impact." The lead agency must describe the mitigation measures and briefly explain how they reduce the effect to a less-than-significant level. (Mitigation measures from *Earlier Analyses*, as described in #5 below, may be cross-referenced.)
5. Earlier analyses may be used if, pursuant to tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration (Section 15063(c)(3)(D)). In this case, a brief discussion should identify the following:
    a. Earlier Analysis Used. Identify and state where earlier analyses are available for review.
    b. Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards and state whether such effects were addressed by mitigation measures based on the earlier analysis.
    c. Mitigation Measures. For effects that are "Less than Significant with Mitigation Incorporated," describe the mitigation measures that were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.
6. Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, when appropriate, include a reference to the page or pages where the statement is substantiated.
7. Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.
8. This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.
9. The explanation of each issue should identify:
    a. the significance criteria or threshold, if any, used to evaluate each question; and
    b. the mitigation measure identified, if any, to reduce the impact to a less-than-significant level.

I. Aesthetics

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Except as provided in Public Resources Code Section 21099, would the project:				
a. Have a substantial adverse effect on a scenic vista?				X
b. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings along a scenic highway?				X
c. In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?		X		
d. Create a new source of substantial light or glare that would adversely affect daytime or nighttime views in the area?			X	

Affected Environment

The proposed project is located within an urbanized area of West Sacramento and Sacramento next to the I Street Bridge (Figures 1 and 2). The western termini of the project, the northwest and southwest ramps, would connect to existing and proposed sections of the River Walk Trail in West Sacramento. The eastern termini would connect to the Sacramento River Parkway and the Sacramento Valley Station in Sacramento. The immediate project area is visually characterized by the Sacramento River (river), vegetated levee banks, and developed land uses on either side of the river. Civic (CalSTRS), commercial (e.g., Ziggurat building), recreational (River Walk Park and Trail), vacant, and suburban residential land uses are located to the west of the river in West Sacramento. Rail-related (Sacramento Valley Station and California State Railroad Museum), historical (Old Sacramento), industrial, commercial, recreational (Sacramento River Parkway and Trail), and vacant land uses associated with Old Sacramento, Downtown Sacramento, and the Railyards redevelopment area are located east of the river in Sacramento.

The I Street Bridge offers an elevated view out and over the landscape toward West Sacramento and downtown Sacramento skylines. This view is not considered a scenic vista view because views are not expansive, and they are limited by intervening vegetation and developed land uses in the foreground. The proposed project is not located near a state scenic highway or a scenic corridor designated by either West Sacramento or Sacramento for maintaining and enhancing its scenic viewsheds (California Department of Transportation 2019; City of West Sacramento 2016; City of Sacramento 2015).

Levels of lighting in the project area are moderately high. Levels of glare are also moderately high due to the urbanized setting, predominance of roadway infrastructure, and the river that provide many surfaces (e.g., water, vehicle and building windows, built surfaces) to reflect light. The project area is well-lit by sources of light coming from vehicles, parking areas, development, and street lighting along local roadways and I-5, and there are only scattered areas of shade to help screen light and glare. The West Sacramento side of the bridge is slightly less bright than the Sacramento side because the Sacramento side has denser development, higher traffic volumes along local roadways and I-5, and there is more street lighting in the immediate vicinity. At night, the river corridor is somewhat dark compared to the adjacent developed land. Lighting from both sides of the river provides low levels of illumination of the river corridor in the project area. The I Street Bridge is lit at night but does not stand out as strongly as a visual focal point compared to the Tower Bridge.

Viewers of any given bridge project include users and neighbors. Because vehicular use of the bridge will be removed by the separate I Street Bridge Replacement Project, bridge users include active transportation travelers connecting from adjacent trails, roadways, and sidewalks. Neighbors include workers and patrons of local businesses, travelers on roadways adjacent to the project, residents along 2nd Street in West Sacramento, and recreationists using local parks, formal trails, roadways and sidewalks, and the river. Neighbors' views of the project vary based on their location within the landscape and distance from the project. Most viewers do not have immediate and direct views of the proposed project modifications unless very close to the area where changes are occurring because vegetation, development, and transportation facilities limit their views beyond those immediate views. The views of most roadway neighbors generally are focused on the immediate surrounding development or on work activities within buildings. Other neighbors would be in visual contact for shorter periods when passing by the site, in transit on local roadways, trails, and I-5. Residential viewers along 2nd Street are not anticipated to have direct views of the project site because of intervening vegetation that largely obscures views. Therefore, neighbors have a viewer exposure that is moderate-low.

The proposed project is located near areas that are undergoing redevelopment. All viewer groups are familiar with maintenance and construction activities occurring in the vicinity and close to the project corridor. Most neighbors would come in direct visual contact with the proposed project only while traveling through the area; consequently, views would be intermittent, and construction activities are typical in the project vicinity. Therefore, roadway neighbors would have moderate-low sensitivity to visual changes resulting from the proposed project. The overall viewer response would be moderate-low.

Discussion

a. Have a substantial adverse effect on a scenic vista?

b. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings along a scenic highway?

Checklist items a and b. Because there are no scenic vistas associated with the proposed project, there would be no impact on scenic vista views. There are no federal, state, or city-designated scenic routes associated with the project corridor. There would be no impact.

c. In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?

The proposed project is in urbanized portions of the cities of West Sacramento and Sacramento. The potential for conflicts with regulations governing scenic quality are discussed below.

City of West Sacramento Regulations

The City of West Sacramento *General Plan 2035 Policy Document* (City of West Sacramento 2016) contains policies pertaining to scenic resources that protect scenic vistas (NCR-8.1) and require that new development to be sited and designed to visually complement the natural environment, including the Sacramento River (NCR-8.2); reduce light pollution and preserve views of the night sky; minimize obtrusive light; and prevent excessive glare (NCR-8.3 through NCR-8.5). City policies also require the projects be designed for public safety and provide adequate lighting (UD-5.6).

The West Sacramento *General Plan 2035 Policy Document* also contains policies that promote pedestrian-friendly neighborhoods that have well-appointed sidewalks (e.g., lighting, landscaping, adequate width), tree-shaded streets, buildings that define and are oriented to adjacent streets and public spaces, limited driveway curb cuts, paseos and pedestrian lanes, alleys, traffic-calming features, convenient pedestrian street crossings, and access to transit (LU-3.8). In addition, I Street Bridge is identified as a city gateway. The general plan policies seek to maintain distinctive gateways, enhance the sense of arrival in West Sacramento, protect and enhance each gateway's unique characteristics, and enhance river-crossings and bridges to create strong and memorable gateways and promote the use of streetscaping and signage to help achieve these goals (UD-2.1 through UD-2.5) (City of West Sacramento 2016).

The proposed project falls within the Washington Specific Plan area (City of West Sacramento 1996). The specific plan contains policies that promote pedestrian use of the I Street Bridge, establish pathway links between the plan area and Sacramento, create and maintain a safe and convenient pathway system in the plan area, and provide public access to the river (3.A.3. 3.C.2, 3.E.2 through 3.E.5, 4.A.4, 4.D.1, 4.D.2, 4.A.3, 4.C.1, 4.C.2, 6.B.2 through 6.B.4). In addition, the I Street Bridge is a historic structure (refer to Section V, *Cultural Resources*), and the specific plan seeks to protect and reinforce the character of historic structures (4.E.5, 4.E07, 6.B.4). The specific plan promotes site designs that utilize native trees, plant street trees, and minimize impacts on valley oaks, landmark trees, and riparian vegetation (5.A.1 through 5.A.4, 5.A.6, 6.B.1, 6.D.1, 6.D.3, 6.D.4). The specific plan also identifies that lighting will be installed in the plan area to enhance the streetscape and contribute to the safety and security of the area (6.D.2).

City of Sacramento Regulations

The *Sacramento 2035 General Plan* provides guidance and policies that support the improving areas along the Sacramento riverfront (LU 2.2.1, LU 2.2.3, LU 2.3.2, ER 7.1.1, ER 7.1.2), improving the visual character and quality of areas within the city (LU 2.4.1, LU 2.7.1, LU 2.7.2), improving streetscape design (LU 6.1.9, LU 6.1.10, M 2.1.3), and enhancing city gateways and connections (LU 2.4.3, LU 2.5.2, LU 6.1.8, M 1.3.2) (City of Sacramento 2015). In addition, the 2035 General Plan has a policy to minimize obtrusive light and prevent excessive glare (ER 7.1.3) (City of Sacramento 2015).

The City of Sacramento Railyards Specific Plan policies encourage the use of native plantings and creating and maintaining the urban tree canopy for aesthetics and shade (S-1.9 through S-1.21), creating strong pedestrian and bicycle linkages with surrounding areas and a strong sense of place (CC-1.4, CC-3.2, OS-1.3, C-3.2), and utilizing landscape and building elements to create safe and attractive pedestrian environments (C-3.3, C-3.4, C-5.2, C-5.4, C-5.6) (City of Sacramento 2016).

In addition to general and specific plan policies, the City of West Sacramento Tree Preservation Ordinance and the Sacramento Heritage Tree Ordinance protect and regulate trimming and removal of certain street trees and landmark and heritage trees.

Discussion

The proposed project is consistent with general and specific plan policies and goals. The proposed project would be consistent with the existing visual setting by re-creating access to the upper deck of the I Street Bridge for active transportation uses. The proposed ramps would have a smaller footprint and form compared to the vehicular ramps to the I Street Bridge being removed by the separate I Street Bridge Replacement Project. The proposed project would not alter streetscapes but would alter active transportation facilities by creating new travel connections and a new river crossing for these modes of travel. Further, the project would enhance city gateways and connections, consistent with general plan policies of both cities. The new active transportation crossing would be visually unique to this location and would serve as a distinctive gateway. The proposed project also would give viewers a new way to experience views when entering either city, provide for longer viewer times, and provide additional views of the river. It is anticipated that the proposed ramps would be lit. However, lighting would be designed in accordance with the City of West Sacramento and City of Sacramento lighting standards to be consistent with general and specific plan policies and avoid the creation of nuisance light and glare. The existing I Street Bridge would not be altered and the historic visual character the bridge provides would be retained, consistent with Washington Specific Plan policies.

Tree Removal

The design of the northwestern ramp in West Sacramento preserves and incorporates into the project design two existing trees as part of project aesthetics. Tree removal would occur where the new western termini of the project would connect to the informal levee path to the north of the bridge in West Sacramento. Tree removal also occur to construct the southeastern and northeastern ramps in Sacramento. The removal of trees that are aesthetic resources protected by city ordinance is a **potentially significant impact**. Implementation of Mitigation Measure BIO-15, *Compensate for Loss of Protected Trees* (refer to Section IV, *Biological Resources*), would ensure compliance with city ordinance. This impact is considered **less than significant with mitigation incorporated**.

d. Create a new source of substantial light or glare that would adversely affect daytime or nighttime views in the area?

As described under the *Affected Environment*, existing daytime glare in the project area is moderately high due to the predominance of development and transportation infrastructure and lack of large areas of shade-providing vegetation. The proposed ramps would have a smaller footprint and form compared to the existing vehicular ramps/approaches that lead to the I Street Bridge, and their design would not include reflective surfaces. The proposed ramps would not substantially increase glare in the project area.

The I Street Bridge would not be altered by the proposed project; its existing lighting would remain in use. The vehicular bridge approaches and their associated lighting would be removed by the separate I Street Bridge Replacement Project. While it is still in place during construction of the separate project, the I Street approach would be utilized by the proposed project for the interim phase ramp. The proposed pedestrian/bicycle ramps would be lit for safety, but the scale and intensity of the lighting needed would be smaller than that of vehicular roads and existing conditions on the Jibboom Street and C Street approaches. In addition, new lighting would be designed in accordance with the lighting standards of the Cities of West Sacramento and Sacramento to avoid the creation of nuisance light and glare. As a result, the proposed project would not create a substantial new source of light or glare. Impacts would be less than significant. No mitigation is required.

II. Agricultural and Forestry Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
In determining whether impacts on agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts on forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment Project, and forest carbon measurement methodology provided in the Forest Protocols adopted by the California Air Resources Board. Would the project:				
a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?				X
b. Conflict with existing zoning for agricultural use or conflict with a Williamson Act contract?				X
c. Conflict with existing zoning for, or cause rezoning of forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?				X
d. Result in the loss of forest land or conversion of forest land to non-forest use?				X
e. Involve other changes in the existing environment that, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?				X

Affected Environment

No farmland is in or near the project area, and there are no parcels under Williamson Act contract. No forestland or timberland is in or near the project area, and the project area is not zoned for farm, forest, or timber. (California Department of Agriculture 2018).

Discussion

a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?

b. Conflict with existing zoning for agricultural use or conflict with a Williamson Act contract?

c. Conflict with existing zoning for, or cause rezoning of forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?

d. Result in the loss of forest land or conversion of forest land to non-forest use?

e. Involve other changes in the existing environment that, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?

Checklist items a through e. The proposed project is in developed portions of West Sacramento and Sacramento where there are no farmlands, agriculture land uses, or forest resources. The project would have no impact on agricultural or forest resources.

III. Air Quality

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. Would the project:					
a.	Conflict with or obstruct implementation of the applicable air quality plan?				X
b.	Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is a nonattainment area for an applicable federal or state ambient air quality standard?		X		
c.	Expose sensitive receptors to substantial pollutant concentrations?		X		
d.	Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?			X	

Affected Environment

Topography and Climate

The proposed project is located within the cities of West Sacramento and Sacramento, which are in Yolo and Sacramento Counties, California, respectively. Yolo and Sacramento County are located entirely within the Sacramento Valley Air Basin (SVAB). The SVAB includes Sacramento, Shasta, Tehama, Butte, Glenn, Colusa, Sutter, Yuba, and Yolo Counties, as well as parts of Solano and Placer Counties. The SVAB is bounded on the west by the Coast Ranges and on the north and east by the Cascade Range and Sierra Nevada. The San Joaquin Valley Air Basin lies to the south.

Hot, dry summers and mild, rainy winters characterize the Mediterranean-type climate of the air basin. The temperature may range during the year from around 20 to 115 degrees Fahrenheit, with summer highs usually in the 90s and winter lows occasionally below freezing. Average annual rainfall is about 15 inches, about 75 percent of which occurs during the rainy season—generally from November through March. Light and infrequent thunderstorms may occur at any time of year, typically whenever cool, moist air moves in to break a prolonged hot spell. Humidity levels vary within the region, often dropping below 10 percent in the warm season, while increasing during colder months to form shallow layers of ground fog (i.e., tule fog) in the valley. The prevailing winds are moderate in strength, and primarily from the south or southeast.

The mountains surrounding the SVAB create a barrier to airflow, which can trap air pollutants when certain meteorological conditions exist. The highest frequency of air stagnation occurs between mid-November and mid-January when large high-pressure cells lie over the SVAB. The lack of surface

wind during these periods and the reduced vertical flow caused by less surface heating reduce the influx of outside air and allow air pollutants to become concentrated in a stable volume of air. The surface concentrations of pollutants are highest when these conditions are combined with smoke or when temperature inversions trap cool air, fog, and pollutants near the ground. The ozone season (May through October) in the SVAB is characterized by stagnant morning air or light winds, with the Delta sea breeze arriving in the afternoon out of the southwest.

Existing Air Quality

Existing air quality conditions in the project area can be characterized in terms of the ambient air quality standards (AAQS) that the State of California and the federal government have established for several different pollutants. For some pollutants, separate standards have been set for different measurement periods. Most standards have been set to protect public health. For some pollutants, standards are based on other values (such as protection of crops, protection of materials, or avoidance of nuisance conditions). Table 2 shows the state and federal standards (California Air Resources Board 2021). Table 3 shows the effects and sources, for a variety of pollutants; Ozone (O3), Carbon Monoxide (CO), particulate matter particles of 10 micrometers or smaller (PM10), particles of 2.5 micrometers and smaller (PM2.5), nitrogen dioxide (NO_2), Lead (Pb), hydrogen sulfide (H_2S) and sulfur dioxide (SO_2) (California Department of Transportation 2020).

Table 2. State and Federal Criteria Air Pollutant Standards

Pollutant	Averaging Time	State Standard [a]	Federal Standard [b]	Project Area Attainment Status	Project Area Attainment Status
O_3[c]	1 hour	0.09 ppm[d]	NA	Nonattainment	NA
O_3	8 hours	0.070 ppm	0.070 ppm (4th highest in 3 years)	Nonattainment	Nonattainment (Severe 15)
CO[e]	1 hour	20 ppm	35 ppm	Attainment	Nonattainment/ Unclassified
CO	8 hours	9.0 ppm	9 ppm	Attainment	Attainment/ Unclassified
CO	8 hours (Lake Tahoe)	6 ppm	NA	NA	NA
PM10[f]	24 hours	50 µg/m^3 [g]	150 µg/m^3 (expected number of days above standard < or equal to 1)	Nonattainment	Sacramento County: Maintenance (Moderate) Yolo County: Attainment/ Unclassified
PM10	Annual	20 µg/m^3	NA	Nonattainment	NA
PM2.5[h]	24 hours	NA	35 µg/m^3 [f]	NA	Nonattainment (Moderate)
PM2.5	Annual	12 µg/m^3	12.0 µg/m^3	Sacramento County: Attainment Yolo County: Unclassified	Attainment/ Unclassified
NO_2	1 hour	0.18 ppm	0.100 ppm[i]	Attainment	Attainment/ Unclassified

Pollutant	Averaging Time	State Standard [a]	Federal Standard [b]	Project Area Attainment Status	Project Area Attainment Status
NO_2	Annual	0.030 ppm	0.053 ppm	Attainment	Attainment/ Unclassified
SO_2[j]	1 hour	0.25 ppm	0.075 ppm (99th percentile over 3 years)	Attainment	Attainment/ Unclassified
SO_2	3 hours	NA	0.5 ppm[k]	NA	Attainment/ Unclassified
SO_2	24 hours	0.04 ppm	0.14 ppm (for certain areas)	Attainment	Attainment/ Unclassified
SO_2	Annual	NA	0.030 ppm (for certain areas)	NA	Attainment/ Unclassified
Pb[l]	Monthly	1.5 µg/m^3	NA	Attainment	NA
Pb	Calendar quarter	NA	1.5 µg/m^3 (for certain areas)	NA	Attainment/ Unclassified
Pb	Rolling 3-month average	NA	0.15 µg/m^3 [m]	NA	Attainment/ Unclassified
Sulfates	24 hours	25 µg/m^3	NA	Attainment	NA
H_2S	1 hour	0.03 ppm	NA	Unclassified	NA
Visibility-reducing particles[n]	8 hours	Visibility of 10 miles or more (Tahoe: 30 miles) at relative humidity less than 70%	NA	Unclassified	NA
Vinyl chloride[l]	24 hours	0.01 ppm	NA	Unclassified	NA

Source: California Air Resources Board 2021.
NA = not applicable.

[a] California standards for ozone, carbon monoxide (except 8-hour Lake Tahoe), sulfur dioxide (1- and 24-hour), nitrogen dioxide, and particulate matter (PM10, PM2.5, and visibility-reducing particles), are values that are not to be exceeded. All others are not to be equaled or exceeded. California ambient air quality standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.

[b] Federal standards (other than ozone, particulate matter, and those based on annual arithmetic mean) are not to be exceeded more than once a year. The ozone standard is attained when the fourth highest 8-hour concentration measured at each site in a year, averaged over 3 years, is equal to or less than the standard. For PM10, the 24-hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 µg/m3 is equal to or less than one. For PM2.5, the 24-hour standard is attained when 98 percent of the daily concentrations, averaged over 3 years, are equal to or less than the standard. Contact the U.S. Environmental Protection Agency for further clarification and current national policies.

[c] On October 1, 2015, the national 8-hour ozone primary and secondary standards were lowered from 0.075 to 0.070 ppm. Transportation conformity applies in newly designated nonattainment areas for the 2015 national 8-hour ozone primary and secondary standards on and after August 4, 2019 (see Transportation Conformity Guidance for 2015 Ozone NAAQS Nonattainment Areas).

[d] ppm = parts per million.

[e] Transportation conformity requirements for CO no longer apply after June 1, 2018 for the following California Carbon Monoxide Maintenance Areas (see U.S. EPA CO Maintenance Letter).

[f] On December 14, 2012, the national annual PM2.5 primary standard was lowered from 15 micrograms per cubic meter (µg/m^3) to 12 µg/m^3. The existing national 24-hour PM2.5 standards (primary and secondary) were retained at 35 µg/m^3, as was the annual secondary standard of 15 µg/m^3. The existing 24-hour PM10 standards (primary and secondary) of 150 µg/m^3 also were retained. The form of the annual primary and secondary standards is the annual mean, averaged over 3 years.

[g] µg/m^3 = micrograms per cubic meter.

[h] The 65 µg/m^3 PM2.5 (24-hour) national ambient air quality standard (NAAQS) was not revoked when the 35 µg/m^3 NAAQS was promulgated in 2006. The 15 µg/m^3 annual PM2.5 standard was not revoked when the 12 µg/m^3 standard was promulgated in 2012. Therefore, for areas designated as nonattainment or nonattainment/maintenance for the 1997 and or 2006 PM2.5 NAAQS, conformity requirements still apply until the NAAQS are fully revoked.

[i] Final 1-hour NO_2 NAAQS published in the Federal Register on 2/9/2010, effective 3/9/2010. Initial area designation for California (2012) was attainment/unclassifiable throughout. Project-level hot spot analysis requirements do not currently exist. Near-road monitoring starting in 2013 may cause re-designation to nonattainment in some areas after 2016.

[j] On June 2, 2010, a new 1-hour SO_2 standard was established, and the existing 24-hour and annual primary standards were revoked. To attain the 1-hour national standard, the 3-year average of the annual 99th percentile of the 1-hour daily maximum concentrations at each site must not exceed 75 parts per billion. The 1971 SO_2 national standards (24-hour and annual) remain in effect until 1 year after an area is designated for the 2010 standard, except that in areas designated as nonattainment for the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved.

[k] Secondary standard, the levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant rather than health. Conformity and environmental analyses address both primary and secondary NAAQS.

[l] The California Air Resources Board (CARB) has identified vinyl chloride and the particulate matter fraction of diesel exhaust as toxic air contaminants. Diesel exhaust particulate matter is part of PM10 and, in larger proportion, of PM2.5. Both CARB and U.S. Environmental Protection Agency have identified lead and various organic compounds that are precursors to ozone and PM2.5 as toxic air contaminants. There are no exposure criteria for adverse health effects due to toxic air contaminants, and control requirements may apply at ambient concentrations below any criteria levels specified above for these pollutants or the general categories of pollutants to which they belong.

[m] Lead NAAQS are not considered in transportation conformity analysis.

Table 3. State and Federal Criteria Air Pollutant Effects and Sources

Pollutant	Principal Health and Atmospheric Effects	Typical Sources
Ozone (O_3)	High concentrations irritate lungs. Long-term exposure may cause lung tissue damage and cancer. Long-term exposure damages plant materials and reduces crop productivity. Precursor organic compounds include many known toxic air contaminants. Biogenic volatile organic compounds (VOC) may also contribute.	Low-altitude ozone is almost entirely formed from reactive organic gases (ROG)/VOC and nitrogen oxides (NO_X) in the presence of sunlight and heat. Common precursor emitters include motor vehicles and other internal combustion engines, solvent evaporation, boilers, furnaces, and industrial processes.
Carbon monoxide (CO)	CO interferes with the transfer of oxygen to the blood and deprives sensitive tissues of oxygen. CO also is a minor precursor for photochemical ozone. Colorless, odorless.	Combustion sources, especially gasoline-powered engines and motor vehicles. CO is the traditional signature pollutant for on-road mobile sources at the local and neighborhood scale.
Respirable particulate matter (PM10)	Irritates eyes and respiratory tract. Decreases lung capacity. Associated with increased cancer and mortality. Contributes to haze and reduced visibility. Includes some toxic air contaminants. Many toxic and other aerosol and solid compounds are part of PM10.	Dust- and fume-producing industrial and agricultural operations; combustion smoke and vehicle exhaust; atmospheric chemical reactions; construction and other dust-producing activities; unpaved road dust and re-entrained paved road dust; natural sources.
Fine particulate matter (PM2.5)	Increases respiratory disease, lung damage, cancer, and premature death. Reduces visibility and produces surface soiling. Most diesel exhaust particulate matter – a toxic air contaminant – is in the PM2.5 size range. Many toxic and other aerosol and solid compounds are part of PM2.5.	Combustion, including motor vehicles, other mobile sources, and industrial activities; residential and agricultural burning; also formed through atmospheric chemical and photochemical reactions involving other pollutants, including NO_X, sulfur oxides (SO_X), ammonia, and ROG.
Nitrogen dioxide (NO_2)	Irritating to eyes and respiratory tract. Colors atmosphere reddish-brown. Contributes to acid rain and nitrate contamination of stormwater. Part of the "NO_X" group of ozone precursors.	Motor vehicles and other mobile or portable engines, especially diesel; refineries; industrial operations.
Sulfur dioxide (SO_2)	Irritates respiratory tract; injures lung tissue. Can yellow plant leaves. Destructive to marble, iron, and steel. Contributes to acid rain. Limits visibility.	Fuel combustion (especially coal and high-sulfur oil), chemical plants, sulfur recovery plants, metal processing; some natural sources like active volcanoes. Limited contribution possible from heavy-duty diesel vehicles if ultra-low sulfur fuel not used.

Pollutant	Principal Health and Atmospheric Effects	Typical Sources
Lead (Pb)	Disturbs gastrointestinal system. Causes anemia, kidney disease, and neuromuscular and neurological dysfunction. Also a toxic air contaminant and water pollutant.	Lead-based industrial processes like battery production and smelters. Lead paint, leaded gasoline. Aerially deposited lead from older gasoline use may exist in soils along major roads.
Sulfates	Premature mortality and respiratory effects. Contributes to acid rain. Some toxic air contaminants attach to sulfate aerosol particles.	Industrial processes, refineries and oil fields, mines, natural sources like volcanic areas, salt-covered dry lakes, and large sulfide rock areas.
Hydrogen sulfide (H_2S)	Colorless, flammable, poisonous. Respiratory irritant. Neurological damage and premature death. Headache, nausea. Strong odor.	Industrial processes such as refineries and oil fields, asphalt plants, livestock operations, sewage treatment plants, and mines. Some natural sources like volcanic areas and hot springs.
Visibility-reducing particles (VRP)	Reduces visibility. Produces haze. NOTE: not directly related to the Regional Haze program under the Federal Clean Air Act, which is oriented primarily toward visibility issues in National Parks and other "Class I" areas. However, some issues and measurement methods are similar.	See particulate matter above. May be related more to aerosols than to solid particles.
Vinyl chloride	Neurological effects, liver damage, and cancer. Also considered a toxic air contaminant.	Industrial processes.

Source: California Department of Transportation 2020.

Sensitive Receptors

S*ensitive receptors* are defined as facilities or land uses that include members of the population particularly sensitive to the effects of air pollutants, such as children, the elderly, and people with illnesses. According to the California Air Resources Board (CARB) (2005), *sensitive individuals* refer to those segments of the population most susceptible to poor air quality (i.e., children, the elderly, and those with pre-existing serious health problems affected by air quality). Primary pollutants of concern to sensitive receptors are CO; diesel particulate matter (DPM); and, to a lesser extent, odors or odorous compounds such as ammonia and sulfur dioxide. Sensitive receptors would not be directly affected by emissions of regional pollutants, such as ozone precursors (reactive organic gases [ROG] and NO_X).

The project area is located within an existing urban environment that includes a number of sensitive receptors, such as single-family and multi-family homes and commercial land uses. The nearest sensitive locations are single-family residences, multi-family residences, and apartment buildings to the west and northwest of the proposed ramp locations, in the city of West Sacramento. The nearest single-family residences are about 300 feet to the west, and the nearest multi-family residences are about 500 feet to the northwest. In the city of Sacramento, the nearest sensitive receptor is a hotel about 750 feet to the southeast of the nearest proposed construction limits.

Discussion

a. Conflict with or obstruct implementation of the applicable air quality plan?

Construction of the proposed project (ID YOL19424) is included in the regional emissions analysis conducted by the Sacramento Area Council of Governments (SACOG) for the conforming *2020*

Metropolitan Transportation Plan/Sustainable Communities Strategy (2020 MTP/SCS) (Sacramento Council of Governments 2019). Projects included in the 2020 MTP/SCS are consistent with the planning goals of the state implementation plan (SIP) or air quality management plans (AQMPs) adopted by the local air quality management agencies.

In addition, the proposed project would maintain and improve active transportation on the upper deck of the I Street Bridge. This would promote alternative modes of transportation for crossing the Sacramento River that would not require fossil fuels. As such, the proposed project would be consistent with the 2020 MTP/SCS *Policies and Implementation Actions*. Specifically, the conversion of the upper deck would encourage alternative modes of transportation that would help build a vibrant place for todays and tomorrow's residents (Policy 1); foster the next generation of mobility solutions (Policy 2); and build and maintain a safe, reliable, multimodal transportation system (Policy 3). Additionally, the proposed project is not anticipated to create any operational emissions. Thus, the proposed project would not conflict or obstruction implementation of the 2020 MTP/SCS. There would be no impact.

b. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is a nonattainment area for an applicable federal or state ambient air quality standard?

The proposed project is located within both the city of West Sacramento and the city of Sacramento. The I Street Bridge spans across the Sacramento River is evenly split between both cities. The Sacramento Metropolitan Air Quality Management District (SMAQMD) is responsible for the air quality within the city of Sacramento, and Yolo-Solano Air Quality Management District (YSAQMD) is responsible for the air quality within the city of West Sacramento. Both SMAQMD and YSAQMD have identified project-level thresholds to evaluate construction criteria pollutant impacts. In developing these thresholds, the air districts considered levels at which project emissions would be cumulatively considerable. The project-level criteria pollutant thresholds therefore represent the maximum emissions the project may generate before contributing to a cumulative impact on regional air quality. Consequently, exceedances of the project-level thresholds would be cumulatively considerable. Table 4 lists the applicable project-level construction thresholds from both SMAQMD and YSAQMD.

Table 4. Project-Level Construction Thresholds of Significance

Pollutant	Threshold of Significance
SMAQMD	
NO_X (ozone precursor)	85 pounds/day
ROG	None
PM10	Zero (0). If all feasible BACT/BMPs are applied, then 80 pounds/day and 14.6 tons/year
PM2.5	Zero (0). If all feasible BACT/BMPs are applied, then 82 pounds/day and 15 tons/year
CO	20 ppm 1-hour standard (23 milligrams/square meter[mg/m^3]); 9 ppm 8-hour standard (10 mg/m^3)

Pollutant	Threshold of Significance
YSAQMD	
ROG	10 tons/year
NO_X	10 tons/year
PM10	80 pounds/day
CO	Violation of a state ambient air quality standard for CO

BACT: Best Available Control Technologies, BMPs: Best Management Practices.

Source: Sacramento Metropolitan Air Quality Management District 2020; Yolo-Solano Air Quality Management District 2007.

Construction-Related Particulate Matter Emissions in Excess of Thresholds

Construction emissions were estimated using SMAQMD's latest Road Construction Emissions Model (RoadMod) (Version 9.0.0) based on the project's anticipated duration and required paving and earthmoving quantities. Construction would be separated into two phases. Phase One would start in 2024 and require approximately 18 months to complete. Phase Two would start in 2026 and require approximately 18 months to complete. Because RoadMod does not have a bridge deck conversion project category, the bridge/overpass construction category was used to inform the equipment and vehicle inventory for emissions estimating purposes.

The RoadMod modeling results for the different construction phases as well as the total project are shown in Table 5. Table 5 indicates that construction of the project would not exceed SMAQMD's or YSAQMD's numeric thresholds of significance. Furthermore, as shown in Table 2, the SVAB is in attainment for the CO standard and it is not anticipated that the project's construction emissions would create a CO hotspot. However, SMAQMD's (2021) *Guide to Air Quality Assessment in Sacramento County* only considers PM10 and PM2.5 emissions below their 82- and 80-pound-per-day thresholds, respectively, to be less than significant with application of Best Management Practices (BMPs). This is considered a **potentially significant impact**.

Table 5. Estimated Unmitigated Criteria Pollutant Emissions from Construction

Emission Source	VOC (ppd)	NO_X (ppd)	CO (ppd)	PM2.5 (ppd)	PM10 (ppd)	VOC (tpy)	NOx (tpy)
Phase One							
Grubbing/Land Clearing	1.7	15.7	10.3	0.6	1.0	<0.1	0.1
Grading/Excavation	2.6	23.0	15.4	1.0	1.5	<0.1	0.1
Drainage/Utilities/Sub-Grade	1.6	11.7	16.9	0.5	0.9	<0.1	0.1
Paving	3.5	32.6	34.9	1.2	1.3	0.7	6.5
Potential overlapping emissions (both air quality districts)	*7.6*	*67.2*	*67.2*	*2.7*	*3.7*	*0.7*	*6.5*
Emissions within SMAQMD only[a]	**3.8**	**33.6**	**33.6**	**1.3**	**1.9**	**0.3**	**3.2**
SMAQMD CEQA significance threshold	**–**	**85 (ppd)**	**–**	**82 (ppd)**	**80 (ppd)**	**–**	**–**
Emissions within YSAQMD only[a]	**3.8**	**33.6**	**33.6**	**1.3**	**1.9**	**0.3**	**3.2**
YSAQMD CEQA Significance Threshold	**–**	**–**	**–**	**–**	**80 (ppd)**	**10 (tpy)**	**10 (tpy)**
Phase Two							
Grubbing/Land Clearing	1.6	13.4	10.0	0.5	0.8	<0.1	0.1
Grading/Excavation	2.4	20.6	14.6	0.9	1.3	<0.1	0.1
Drainage/Utilities/Sub-Grade	1.0	7.4	13.4	0.4	0.7	<0.1	<0.1
Paving	3.4	31.2	34.5	1.1	1.3	0.7	6.1
Potential overlapping emissions (both air quality districts)	*6.8*	*59.1*	*62.6*	*2.3*	*3.3*	*0.7*	*6.1*
Emissions within SMAQMD only[a]	**3.4**	**29.6**	**31.4**	**1.2**	**1.7**	**0.4**	**3.1**
SMAQMD CEQA significance threshold	**–**	**85 (ppd)**	**–**	**82 (ppd)**	**80 (ppd)**	**–**	**–**
Emissions within YSAQMD only[a]	**3.4**	**29.6**	**31.4**	**1.2**	**1.7**	**0.4**	**3.1**
YSAQMD CEQA Significance Threshold	**–**	**–**	**–**	**–**	**80 (ppd)**	**10 (tpy)**	**10 (tpy)**

Source: Emission Estimates from Roadway Construction Emissions Model (RoadMod) Version 9.0.

ppd = pounds per day; tpy= tons per year.

[a] Total emissions for each air district were calculated assuming a 50/50 split of total project emissions between the Sacramento Metropolitan Air Quality Management District (SMAQMD) and Yolo-Solano Air Quality Management District (YSAQMD).

[b] YSAQMD reactive organic gases/volatile organic compounds (VOC) and NOX construction thresholds are based on 10 tons/year.

Implementation of Mitigation Measure AIR-1 would require the project to use the Best Available Control Technologies (BACT) and BMPs. Implementation of Mitigation Measure AIR-1 would reduce potentially significant construction-related PM emissions to less-than-significant levels. This impact is considered **less than significant with mitigation incorporated**.

Mitigation Measure AIR-1: Implement Additional Control Measures for Construction Emissions of Fugitive Dust

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 included in and do not conflict with the requirements or other permits and authorizations 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 4 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.

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 included in, and do not conflict with, the requirements of other permits and authorizations issued for the project. The following measures are taken from SMAQMD's (2021) *Guide to Air Quality Assessment in Sacramento County* 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 2 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 track out 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, and 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.

Particulate Matter Emissions during Project Operation

The proposed project would promote walking and cycling as a transportation method over the Sacramento River, helping connectivity between the cities of West Sacramento and Sacramento. The proposed project is consistent with adopted land use plans, would not induce growth, and would not create any land use that would have operational emissions from area or energy sources. Periodic project maintenance trips by motor vehicle may occur during a given year. However, the project would not materially change traffic volume, fleet mix, speed, or any other factor that would cause an increase in emissions relative to the no build alternative. Therefore, the project would not result in an increase in operational emissions, and there would be a less than significant impact during project operation. No mitigation is required.

c. Expose sensitive receptors to substantial pollutant concentrations?

There are potential health risks (e.g., asthma, lower respiratory problems) associated with the criteria pollutants that would be generated by the construction of the proposed project. As discussed above, the primary criteria pollutants of concern generated by the project are ozone precursors (ROG and NO_X), and PM (including DPM).[1] The following sections discuss thresholds and analysis considerations for regional and local project-generated criteria pollutants with respect to their human health implications. In addition, although asbestos and lead would not be generated directly by construction activities associated with the project, construction activities could cause asbestos and lead to be resuspended if present in the soil and structures. Accordingly, these pollutants also are discussed under *Asbestos and Lead* below.

There are no thresholds to assess the significance of health effects from emissions of regional criteria pollutants; however, consistent with the California Supreme Court's decision in *Sierra Club v. County of Fresno* (6 Cal. 5th 502, Case No. S219783) (known as the "Friant Ranch decision"), Table 6 provides a conservative estimate of potential health effects associated with regional criteria pollutants generated by construction and operation of the proposed project. The estimates were developed using SMAQMD's draft Project Health Effects Tool (Version 2). The Minor Project Health Screening Tool was developed by SMAQMD, on behalf of regional air districts in the Sacramento Federal Nonattainment Area (SFNA), including YSAQMD (Ramboll 2020). SMAQMD conducted photochemical and health effects modeling of hypothetical projects throughout the SFNA with NO_X, ROG, and PM2.5 emissions at 82 pounds per day (ppd), which corresponds to the highest daily emissions threshold of all SFNA air districts.[2] The tool outputs the estimated health effects at the 82-ppd emissions rate by spatially interpolating the health effects from the hypothetical projects based

[1] Minor amounts of CO, NO_2, and SO_2 may be generated by construction and operational sources. But these emissions are of less concern because Sacramento County currently attains the CAAQS and NAAQS for CO, NO_2, SO_2 and neither construction nor operational activities associated with this project are likely to generate substantial quantities of these criteria pollutants (Sacramento Metropolitan Air Quality Management District 2021).

[2] YSAQMD's threshold of 10 tons per year is equivalent to 55 ppd.

on user inputs for the latitude and longitude coordinates of a project. Because the proposed project is linear, three points along the alignment were selected for analysis, as shown in Table 6.

Table 6. Conservative Estimate of Increased Health Effect Incidence Associated with Construction (Cases Per Year)

Health Endpoint	Age Range[a]	Incidences (per year)[b,e] Mean	Incidences (per year)[b] Mean	Percent of Background Health Incidences [c]	Total Number of Health Incidences [d] (per year)
Respiratory (PM2.5)					
Emergency Room Visits, Asthma	0 - 99	1.2	1.1	0.0060%	18419
Hospital Admissions, Asthma	0 - 64	0.081	0.074	0.0040%	1846
Hospital Admissions, All Respiratory	65 - 99	0.33	0.28	0.0014%	19644
Cardiovascular (PM2.5)					
Hospital Admissions, All Cardiovascular (less Myocardial Infarctions)	65 - 99	0.18	0.16	0.00065%	24037
Acute Myocardial Infarction, Nonfatal	18 - 24	0.00012	0.000096	0.0025%	4
Acute Myocardial Infarction, Nonfatal	25 - 44	0.0098	0.0091	0.0030%	308
Acute Myocardial Infarction, Nonfatal	45 - 54	0.021	0.020	0.0027%	741
Acute Myocardial Infarction, Nonfatal	55 - 64	0.034	0.032	0.0026%	1239
Acute Myocardial Infarction, Nonfatal	65 - 99	0.11	0.10	0.0020%	5052
Mortality (PM2.5)					
Mortality, All Cause	30 - 99	2.3	1.9	0.0042%	44766
Respiratory (Ozone)					
Hospital Admissions, All Respiratory	65 - 99	0.084	0.065	0.00033%	19644
Emergency Room Visits, Asthma	0 - 17	0.46	0.39	0.0066%	5859
Emergency Room Visits, Asthma	18 - 99	0.72	0.60	0.0048%	12560
Mortality (Ozone)					
Mortality, Non-Accidental	0 - 99	0.053	0.043	0.00014%	30386

Source: SMAQMD Minor Project Health Screening Tool, Version 2, published June 2020.

Note: Three different analysis points were chosen and were located at the (1) southern project edge (38.586611, -121.508994); (2) center of the project (38.586250, -121.506290); and (3) eastern project edge (38.585661, -121.502177). All three analysis points had the same results.

[a] Affected age ranges are shown. Other age ranges are available, but the endpoints and age ranges shown here are the ones used by the U.S. Environmental Protection Agency in their health assessments. The age ranges are consistent with the epidemiological study that is the basis of the health function.

[b] Health effects are shown in terms of incidences of each health endpoint and how it compares to the base (2035 base year health effect incidences, or "background health incidence") values. Health effects are shown for the Reduced Sacramento 4-km Modeling Domain and the 5-Air-District Region. .

[c] The percent of background health incidence uses the mean incidence. The background health incidence is an estimate of the average number of people that are affected by the health endpoint in a given population over a given period of time. In this case, the background incidence rates cover the 5-Air-District Region (estimated 2035 population of 3,271,451 persons). Health incidence rates and other health data are typically collected by the government as well as the World Health Organization. The background incidence rates used here are obtained from BenMAP.

[d] The total number of health incidences across the 5-Air-District Region is calculated based on the modeling data. The information is presented to assist in providing overall health context.

[e] The technical specifications and map for the Reduced Sacramento 4-km Modeling Domain are included in Appendix A, Table A-1 and Appendix B, Figure B-2 of the Guidance to Address the Friant Ranch Ruling for CEQA Projects in the Sac Metro Air District (Ramboll 2020).

Note that the results presented in Table 6 are conservative for two reasons. First, they are based on a source generating 82 ppd of ROG, NOx, and PM2.5. As shown in Table 5, construction would generate a maximum daily emissions rate of 3.8 pounds of ROG, 1.3 pounds of PM2.5, and 67.2 pounds of NOx. Second, the results assume that the source would generate emissions 365 days per year. Construction of the proposed project would occur on only 288 days per year. For these reasons, any increase in regional health risks associated with construction- and operations-generated emissions would be less than those presented in Table 6, which are already very small increases over the background incident health effect. Thus, impacts would be less than significant in this regard.

Regional Criteria Pollutants during Project Construction

SMAQMD and YSAQMD have developed region-specific CEQA thresholds of significance in consideration of existing air quality concentrations and attainment designations under the NAAQS and CAAQS, which are informed by a wide range of scientific evidence which demonstrates that there are known safe concentrations of criteria pollutants. While recognizing that air quality is a cumulative problem, SMAQMD and YSAQMD consider that the impacts of projects that generate criteria pollutant and ozone precursor emissions below the thresholds to be minor. Such projects would not adversely affect air quality or cause the NAAQS or CAAQS to be exceeded. Moreover, photochemical and health risk modeling conducted by SMAQMD demonstrates that projects generating emissions below SMAQMD thresholds "do not on [their] own lead to sizeable health effects" (Ramboll 2020).

As shown in Table 5, construction of the proposed project would not generate regional criteria pollutants that would exceed SMAQMD and YSAQMD thresholds. As such, construction of the build alternatives would not be expected to contribute a significant level of air pollution that would degrade air quality within the SVAB. However, SMAQMD's (2021) *Guide to Air Quality Assessment in Sacramento County* only considers PM10 and PM2.5 emissions below their 82- and 80-ppd thresholds, respectively, to be less than significant after application of BMPs. Therefore, this is considered a **potentially significant impact**. Implementation of Mitigation Measure AIR-1 would reduce potentially significant construction-related PM emissions to less-than-significant levels. Consequently, the impact from construction-generated criteria pollutant emissions and risk of exposure of receptors to substantial criteria pollutant concentrations would be **less than significant with mitigation incorporated**.

Mitigation Measure AIR-1: Implement Additional Control Measures for Construction Emissions of Fugitive Dust

The full text of this measure is provided under checklist item "b" above.

Regional Criteria Pollutants during Project Operation

As discussed above, the proposed project would not materially change traffic volume, fleet mix, speed, or any other factor that would cause an increase in emissions relative to the no build alternative. Additionally, the proposed project would be consistent with the policies from within the 2020 MTP/SCS. As such, operation of the build alternatives would not be expected to contribute a significant level of air pollution that would degrade air quality within the SVAB. Consequently, the impact from operational criteria pollutant emissions is considered less than significant. The project

would not expose receptors to substantial criteria pollutant concentrations or risks. Furthermore, the SVAB basin is in attainment for CO. This impact is considered less than significant. No mitigation is required.

Localized Particulate Matter

Construction equipment and vehicles would generate PM during roadway-widening activities. Table 5 indicates that construction of the project would not exceed SMAQMD's or YSAQMD's numeric thresholds of significance. However, SMAQMD's (2021) *Guide to Air Quality Assessment in Sacramento County* only considers PM10 and PM2.5 emissions below their 82- and 80-ppd thresholds, respectively, to be less than significant with application of BMPs. This is considered a **potentially significant impact**. Implementation of Mitigation Measure AIR-1 would reduce potentially significant construction-related PM emissions such that construction of the proposed project would not expose sensitive populations to substantial pollutant concentrations. This impact is considered **less than significant with mitigation incorporated**.

Mitigation Measure AIR-1: Implement Additional Control Measures for Construction Emissions of Fugitive Dust

The full text of this measure is provided under checklist item "b" above.

Localized Diesel Particulate Matter

Heavy-duty diesel-fueled equipment used during construction of the proposed project would generate DPM. As shown in Table 5, DPM emissions, or PM2.5 emissions, would be minor and occur over a period of 4 years. The short-term construction period is well below the 70-year exposure period typically associated with increased cancer risks. The nearest sensitive receptor is located 300 feet to the west. The DPM from construction equipment would be transitory and spread throughout the entire project area, as opposed to concentrated at a single location. Thus, most of construction would occur at a distance greater than 300 feet. Accordingly, construction of the proposed project would not expose sensitive populations to substantial pollutant concentrations.

As discussed above, the proposed project not materially change traffic volume, fleet mix, speed, or any other factor that would cause an increase in emissions relative to the no build alternative. Neither construction nor operation of the proposed project would not expose sensitive populations to substantial pollutant concentrations. This impact is considered less than significant. No mitigation is required.

Asbestos and Lead

According to the California Department of Conservation's 2000 publication, *A General Location Guide for Ultramafic Rocks in California*, no geologic features normally associated with NOA (i.e., serpentine rock or ultramafic rock near fault zones) are in or near the project area (California Department of Conservation 2000). As such, there is no potential for impacts related to NOA emissions during construction activities. With respect to structural asbestos and lead, per YSAQMD Rule 9.9 and SMAQMD Rule 902, the project proponent would be required to develop an Asbestos Abatement Plan (*Asbestos*). Lead is normally not an air quality issue for transportation projects unless the project involves disturbance of soils containing high levels of aerially deposited lead or painting or modification of structures with lead-based coatings. Portions of the project area have been subject to vehicular and rail traffic for over 80 years, during which time lead may have been aerially

deposited. Excavated soil hauled offsite for disposal (if any) will be tested for the accumulation of lead. A *Hazardous Materials Survey Final Report* (Entek Consulting Group, Inc. 2015:4) was prepared for the I Street Bridge Replacement Project, to document the analysis of samples taken from the I Street Bridge and its roadway approach structures. The study concluded that white paint on the metal railings of the northeast roadway approach structures that connect to the I Street Bridge, and the tested locations on the bridge itself, had paint containing more than 5,000 parts per million (ppm) of lead and are classified as lead-based paint.

In addition, the gasket at the base of light boxes on the northeast approaches was determined in the same study to be pure lead. Any modification to the remaining portions of approach structures in the project limits that could disturb these lead-containing materials would require the development and implementation of a Lead Abatement Plan (*Develop a Lead and Asbestos Abatement Plan*) to meet U.S. Environmental Protection Agency (USEPA) and air district rules. Accordingly, this impact is considered less than significant. No mitigation is required.

d. Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

Some phases of construction, particularly asphalt paving, would result in short-term odors in the immediate area of each paving site. Such odors would quickly disperse to below detectable levels as distance from the site increases. Therefore, the impact is considered less than significant. No mitigation is required.

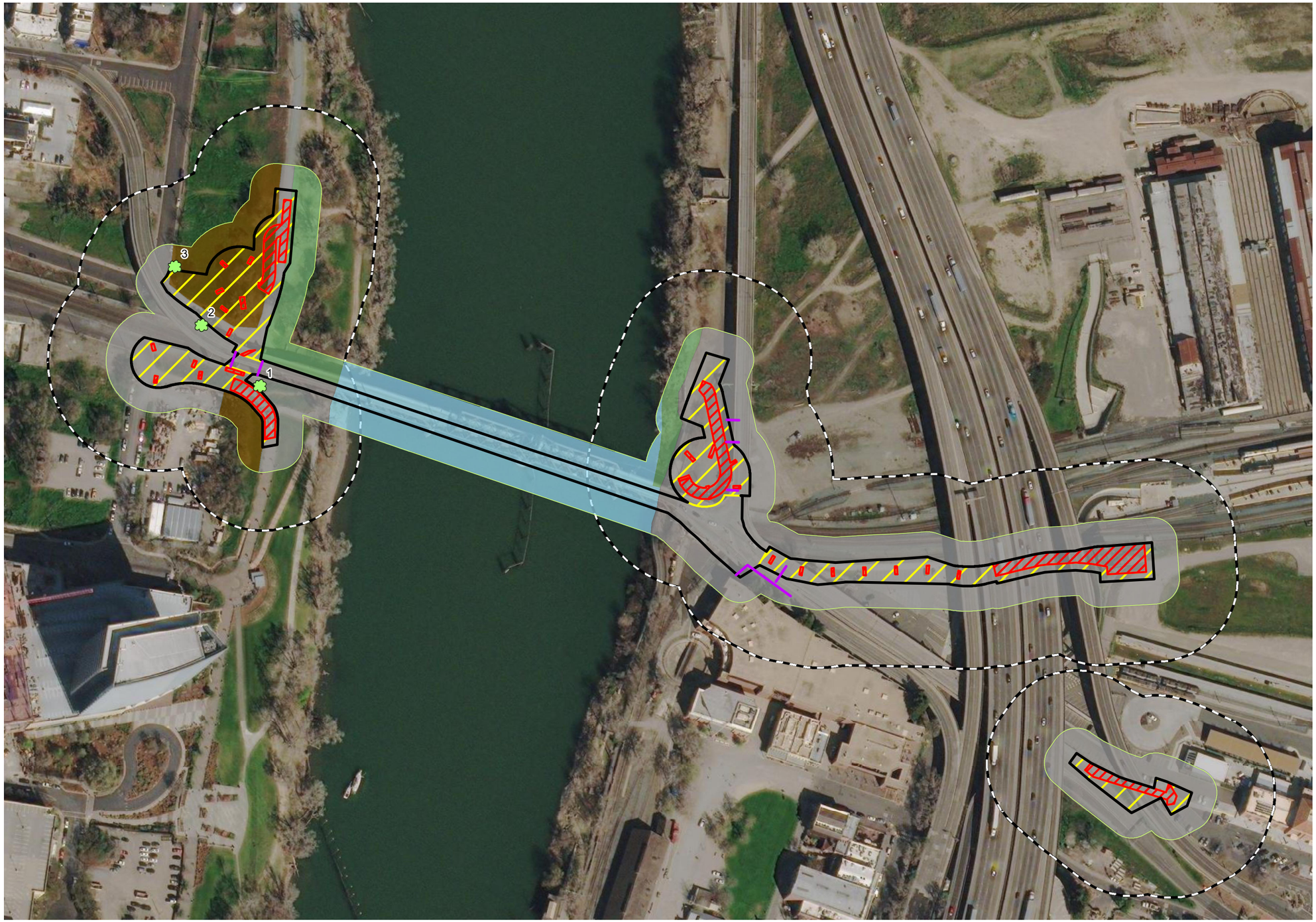
IV. Biological Resources

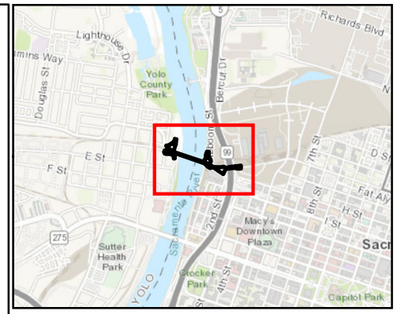
		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:					
a.	Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?		X		
b.	Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?		X		
c.	Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marshes, vernal pools, coastal wetlands, etc.) through direct removal, filling, hydrological interruption, or other means?			X	
d.	Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?			X	
e.	Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?		X		
f.	Conflict with the provisions of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan?				X

Affected Environment

Methodology

The ICF biological team (consisting of a botanist/wetlands ecologist and a wildlife biologist) reviewed existing information and conducted field surveys to identify biological resource issues in the study area. For the biological resources section, the study area is defined as all areas in which temporary or permanent impacts would occur for construction of the project components plus a 50-foot buffer around the project components to address indirect effects on most biological resources and a 165-foot buffer to address indirect effects on valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*) (Figure 3).





Legend

- Project Footprint
- 50 ft Buffer
- VELB Buffer (165 ft)

Impact

- Permanent Impact
- Temporary Impact

Land Cover Types

- Cottonwood Riparian Forest
- Developed/Graded
- Perennial Stream
- Ruderal Woodland
- Elderberry Shrubs
- Bat Roosts on Viaducts

N

0 100 200 Feet

1:2,400

Figure 3
Impacts on Landcover Types and Sensitive Biological Resources in the Biological Study Area

The following information was reviewed to support this biological resource analysis.

- California Natural Diversity Database (CNDDB) records search of the Sacramento East, Sacramento West, Clarksburg, Saxon, Rio Linda, Florin, Taylor Monument, Grays Bend, and Davis U.S. Geological Survey (USGS) 7.5-minute quadrangles (2021 and 2022).
- California Native Plant Society's (CNPS's) 9th Edition Inventory of Rare and Endangered Plants of California (2022) and electronic updates available at: https://rareplants.cnps.org.
- National Marine Fisheries Service Intersection of USGS Topographical Quadrangles with National Oceanic and Atmospheric Administration (NOAA) Fisheries Endangered Species Act (ESA)-Listed Species, Critical Habitat, Essential Fish Habitat, and Marine Mammal Protection Act Species Data in California available at: https://archive.fisheries.noaa.gov/wcr/maps_data/california_species_list_tools.html (National Oceanic and Atmospheric Administration 2019).
- U.S. Fish and Wildlife Service (USFWS) lists of special-status species for the study area (U.S. Fish and Wildlife Service 2022).
- Environmental documents prepared for other projects in the project region (including the I Street Bridge Replacement Project EIR/EA).
- Aerial photographs of the study area (scale: 1 inch = 200 feet).

This information was used to develop lists of special-status species and other sensitive biological resources that could be present or are known to occur in the region (generally within a 5-mile radius). Species were included in these lists if they were known to occur in the project region and if their habitats occur in the project vicinity.

An ICF botanist/wetland ecologist and wildlife biologist conducted a reconnaissance field survey of the study area on May 5, 2021. During the field survey, the biological team walked all accessible parts of the study area, although some developed parts were fenced and could not be directly accessed. A list of plant and wildlife species observed during the field surveys was compiled and remains on file at ICF.

The biological field surveys were conducted with the general objectives listed below.

- Characterize biological communities and their associated wildlife habitat uses.
- Determine whether suitable habitat is present for special-status species with the potential to occur in the project region.
- Determine the extent of waters of the United States and waters of the state in the study area.
- Identify and assess native tree impacts that would be subject to the City of Sacramento and City of West Sacramento tree ordinances.
- Provide biological resource information to the Cities and design engineers for their consideration in project design and planning.

Natural Communities

The natural communities in the study area are interspersed with roadways, railroad tracks, commercial and industrial areas, and residential development. The term *land cover type* is used in

this report to refer to vegetation communities, open water, and unvegetated developed or disturbed areas. Land cover types mapped during field surveys are described below and shown in Figure 3.

The study area supports both common vegetation communities and natural communities of special concern. Common vegetation communities are habitats with low species diversity that are widespread, reestablish naturally after disturbance, or support primarily non-native species. These communities generally are not protected by agencies unless the specific site is habitat for or supports special-status species (e.g., raptor foraging or nesting habitat). Common vegetation communities in the study area are ruderal woodland and landscaped areas.

Natural communities of special concern are habitats considered sensitive because of their high species diversity, high productivity, unusual nature, limited distribution, or declining status. Local, state, and federal agencies consider these habitats important. The CNDDB contains a current list of rare natural communities throughout the state. USFWS considers certain habitats, such as wetlands and riparian communities, important to wildlife; and the U.S. Army Corp of Engineers (USACE) and USEPA consider wetland habitats important for water quality and wildlife. One natural community in the study area, cottonwood riparian forest, meets the criteria for natural communities of special concern. Perennial stream, although unvegetated, is also included in this discussion of natural communities of special concern because it is important wildlife and fish habitat and is regulated by resource agencies.

The distribution, representative vegetation, and typical wildlife species found in land cover types within the study area are described below.

Cottonwood Riparian Forest

Cottonwood riparian forest in the study area occurs along the upper banks and floodplains of the Sacramento River within the 165-foot valley elderberry longhorn beetle buffer around the project construction area, and none is present in the construction area. The overstory of riparian forest is predominantly mature Fremont cottonwood (*Populus fremontii*) trees associated with valley oak (*Quercus lobata*), black walnut (*Juglans californica* var. *hindsii*), and Oregon ash (*Fraxinus latifolia*). The riparian understory is primarily nonnative annual grasses and native and nonnative forbs, with riprap and common buttonbush (*Cephalanthus occidentalis* var. *californicus*) on the Sacramento side of the study area.

Riparian habitats are sensitive natural communities that provide important habitat for wildlife and shaded riverine habitat for fish. Local, state, and federal agencies recognize riparian habitats as sensitive natural communities.

Riparian habitats provide cover, foraging and nesting habitat, and serve as migration and dispersal corridors for several bird and mammal species in the region. Common wildlife species that may occur in these habitats include black phoebe (*Sayornis nigricans*), yellow-rumped warbler (*Dendroica coronata*), house finch (*Carpodacus mexicanus*), American goldfinch (*Carduelis tristis*), yellow-billed magpie (*Pica nuttalli*), pocket gopher (*Thomomys bottae*), fox squirrel (*Sciurus niger*), common muskrat (*Ondatra zibethicus*), and raccoon (*Procyon lotor*).

Ruderal Woodland

The West Sacramento side of the study area includes several areas of naturalized vegetation on undeveloped parcels or parts of parcels that support mature trees with ruderal or non-native annual grassland in the understory. Riparian trees are interspersed in this area, including black walnut,

Fremont cottonwood, and valley oak. The invasive tree species tree of heaven (*Ailanthus altissima*) also grows in this area. The understory vegetation in these areas of naturalized vegetation includes nonnative annual grasses and forbs, such as wild oat (*Avena fatua*), ripgut brome (*Bromus diandrus*), foxtail barley (*Hordeum murinum* ssp. *leporinum*), star thistle (*Centaurea solstitialis*), vetch (*Vicia* spp.), and prickly lettuce (*Lactuca serriola*). Three blue elderberry shrubs (*Sambucus nigra* ssp. *caerulea*), habitat for the federally threatened valley elderberry longhorn beetle, occur in ruderal woodland below the existing I Street Bridge ramp in West Sacramento.

The ruderal woodland and associated ruderal grasslands provide nesting habitat for common birds, including northern mockingbird (*Mimus polyglottos*), western meadowlark (*Sturnella neglecta*), and killdeer (*Charadrius vociferous*) (in more open areas). Mallards from the adjacent river could use the denser areas of ruderal grassland for nesting. This ruderal area also provides foraging habitat for bird species. Pocket gophers are known to occur in the ruderal woodlands of the study area.

Perennial Stream (Sacramento River)

The Sacramento River is the only perennial stream in the study area. All perennial stream is unvegetated open water. The river averages 630 feet wide at the ordinary high water mark in the study area. The riverbanks are levees that are mostly steeply sloped and support riparian forest vegetation, as described above, with rip-rap near the bottom of the slope.

The Sacramento River is a traditional navigable water and a water of the United States subject to regulation under Clean Water Act (CWA) Section 404 and Rivers and Harbors Act Section and is under the jurisdiction of USACE. The river is considered a sensitive natural community. The Regional Water Quality Control Board protects all waters of the state under the Porter-Cologne Act.

Riverine habitats like the Sacramento River provide habitat for amphibians, birds, and mammals. Common wildlife species that could be found in the river and along the shore of the river include American bullfrog (*Lithobates catesbeianus*), mallard (*Anas platyrhynchos*), great egret (*Ardea alba*), and river otter (*Lutra canadensis*). Numerous species of fish also are known to occur in the Sacramento River.

Developed/Disturbed

Most of the study area consists of paved roadways and parking lots. Disturbed portions of the study area include areas adjacent to roadways, the railroad, the Sacramento River Parkway bike trail, unpaved parking areas, and the area underneath and east of I-5. The area south of the I Street Bridge in West Sacramento was under construction at the time of the field surveys. The vegetative composition of these areas is generally sparse and generally consists of nonnative species, particularly annual grasses and weedy forbs.

Common bird species may forage and nest in some of the developed areas, including mourning dove, (*Zenaida macroura*), American robin (*Turdus migratorius*), cliff swallow (*Petrochelidon pyrrhonota*) (nests on buildings and bridges), and western scrub jay (*Aphelocoma californica).*

Wetlands and Non-Wetland Waters

No wetlands occur in the study area, and the only non-wetland water feature in the study area is the Sacramento River beneath the I Street Bridge. See *Perennial Stream (Sacramento River)* for additional description of the Sacramento River in the study area.

Wildlife

The study area supports common birds and mammals typical of both riverine, riparian, and urban areas. Wildlife species that were observed in the study area are swallowtail butterfly (*Papilio* sp.), western fence lizard (*Sceloporus occidentalis),* white-throated swift (*Aeronautes saxatalis*), western scrub jay, rock dove (*Columbia livia*), American crow (*Corvus brachyrhynchos*), Brewer's blackbird (*Euphagus cyanocephalus*), house finch, osprey (*Pandion haliaetus*), yellow-billed magpie, American bushtit (*Psaltriparus minimus*), black phoebe, European starling (*Sturnus vulgaris*), feral house cat (*Felis catus*), and fox squirrel. Signs of roosting bats were observed under the I Street (both sides of the Sacramento River) bridge structure. Staining and guano were observed at multiple crevices on the bridge on both sides of the river, and odor was evident on the east side of the river. Purple martin (*Progne subis*) is also known to roost on the eastern side of the bridge ramp within the study area.

Fish

The Sacramento River in the study area falls within the Sacramento-San Joaquin Province (Central Valley Subprovince), one of six aquatic zoogeographic provinces in California, as defined by Moyle (2002). The Sacramento-San Joaquin Province is drained by the Sacramento and San Joaquin Rivers. Generally, four native fish assemblages can be recognized in Central Valley streams: rainbow trout assemblage, California roach assemblage, pikeminnow-hardhead-sucker assemblage, and deep-bodied fish assemblage (Moyle 2002). Based on its geographic location, the study area lies at the interface between the zone characterized by the deep-bodied fish assemblage and the Sacramento-San Joaquin Estuary (i.e., the Delta).

Native fish species that occur where the Sacramento River meets the Delta include Sacramento sucker (*Catostomus occidentalis*), Sacramento pikeminnow (*Ptychocheilus grandis*), Sacramento splittail (*Pogonichthys macrolepidotus*), Sacramento blackfish (*Orthodon microlepidotus*), hitch (*Lavinia exilicauda*), Chinook salmon (*Oncorhynchus tshawytscha*) (winter-, spring-, fall-, and late fall–run), steelhead (*O. mykiss*), green (*Acipenser medirostris*) and white sturgeon (*A. transmontanus*), Pacific lamprey (*Entosphenus tridentata*), river lamprey (*Lampetra ayresi*), delta smelt (*Hypomesus transpacificus),* longfin smelt (*Spirinchus thaleichthys*), tule perch (*Hysterocarpus traski*), and prickly sculpin (*Cottus asper*) (Moyle 2002). The dominant fishes, however, are all nonnative (alien) species: largemouth, smallmouth, and spotted bass (*Micropteru*s spp.); white and black crappie (*Pomoxis* spp.); bluegill (*Lepomis macrochirus*); American (*Alosa sapidissima*) and threadfin shad (*Dorosoma petenense*); striped bass (*Morone saxatilis*); bigscale logperch (*Percina macrolepida*); red shiner (*Cyprinella lutrensis*); inland silverside (*Menidia beryllina*); white catfish (*Ameiurus catus*); black and brown bullhead (*Ameiurus* spp.); and common carp (*Cyprinus carpio*) (Moyle 2002).

Special-Status Species

Regional species and habitats of concern were identified using the CNDDB records search (California Department of Fish and Wildlife 2022) (Appendix B), CNPS's online Inventory of Rare and Endangered Plants of California (2022) (Appendix B), the species lists obtained from the USFWS (2022) website (Appendix B), and species distribution and habitat requirements data. Based on a review of this information, 33 special-status plant species, 27 special-status wildlife species, and 10 special-status fish species (Tables 7 and 8) were identified as having the potential to occur or are known to occur in the project region (i.e., within 5 miles of the study area).

For the purpose of this analysis, special-status species are plants, wildlife, and fish that are legally protected under ESA, the California Endangered Species Act (CESA), or other regulations, and species that are considered sufficiently rare by the scientific community to qualify for such listing. Special-status plants, animals, and fish are those species in any of the categories listed below.

- Species listed or proposed for listing as threatened or endangered under ESA (50 Code of Federal Regulations [CFR] 17.11 [listed animals], 50 CFR 17.12 [listed plants], and various notices in the Federal Register [FR] [proposed species]).
- Species that are candidates for possible future listing as threatened or endangered under ESA (84 FR54732 October 10, 2019).
- Species listed or proposed for listing by the State of California as threatened or endangered under CESA (14 California Code of Regulations [CCR] 670.5).
- Plants listed as rare under the CNPPA (California Fish and Game Code [Fish & Game Code] Section 1900 et seq.).
- Plants considered by the California Department of Fish and Wildlife (CDFW) and CNPS to be "rare, threatened, or endangered in California" (Rare Plant Ranks 1B and 2; California Department of Fish and Wildlife 2022; California Native Plant Society 2022).
- Plants identified by CDFW and CNPS about which more information is needed to determine their status, and plants of limited distribution (Rare Plant Ranks 3 and 4, California Department of Fish and Wildlife 2022, California Native Plant Society 2022), which may be included as sensitive species on the basis of local significance or recent biological information.
- Animal species of special concern to CDFW.
- Animals fully protected in California (Fish & Game Code Section 3511 [birds], 4700 [mammals], 5050 [amphibians and reptiles], and 5515 [fish]).

Special-Status Plants

Based on the searches of the CNDDB, the CNPS rare plant inventory, and the USFWS website, 33 special-status plant species were identified as occurring in the project region (Table 7). The cottonwood riparian forest in the study area contains potential habitat for 3 of these 33 species (rose-mallow, Mason's lilaeopsis, and Suisun Marsh aster). The other 29 species have habitat or microhabitat requirements (e.g., vernal pools, seasonal wetlands; subalkaline, clay, serpentine, or volcanic soils) that are not present in the study area. Additionally, the relatively high level of historical and ongoing disturbance that is present in most of the study area detracts from the quality of potential habitat for special-status plant species. No other special-status plants were observed during 2021 reconnaissance surveys, and none has been previously reported in the study area (California Department of Fish and Wildlife 2022; California Native Plant Society 2022).

Although plant surveys were conducted during a drought period, the special-status species with potential habitat in the study area would all grow on the Sacramento River banks. The riverbanks did not experience substantially drier conditions than normal due to the presence of normal river water levels; therefore, the drought conditions would not be expected to affect the growth of special-status plants along the river. Both species with potential habitat in the study area are herbaceous perennials. The habitat for these species would be restricted to the banks of the Sacramento River, and their seed germination and growth would not likely be affected by the

drought conditions. Based on the field survey results and the lack of recorded occurrences in the study area, this report concludes that no special-status plant species occur in the study area.

Special-Status Wildlife

Based on a review of the CNDDB search results; the USFWS list of endangered, threatened, and proposed species within the project region; and species' distribution and habitat data, 27 special-status wildlife species were determined to have the potential to occur in the project region (Table 8). After completion of the field survey, the biologists determined that 18 of the 27 species would not occur in the study area because the area lacks suitable habitat or is outside the species' known range. An explanation for the absence of each of these species from the study area is provided in Table 8. Suitable habitat is present in the study area for the remaining 9 species described below.

Table 7. Special-Status Plants Known to Occur in the Project Region

Common Name *Scientific Name*	Status[a] Federal/State/CRPR	General Habitat Description	Blooming Period	Habitat Present/ Absent	Rationale
Depauperate milk-vetch *Astragalus pauperculus*	–/–/4.3	In seasonally wet areas on volcanic soils in chaparral, cismontane woodland, valley and foothill grassland in seasonally wet areas or on volcanic soils; 195–3985 feet	March–June	Habitat absent	No seasonally wet grassland habitat present. No volcanic soils present. Nearest recorded occurrence is more than 5 miles away. Not observed in May 2021 survey.
Ferris' milk-vetch *Astragalus tener* var. *ferrisiae*	–/–/1B.1	Seasonally wet areas in meadows and seeps, subalkaline flats in valley and foothill grassland; 6–246 feet	April–May	Habitat absent	Grassland habitat only in open areas of ruderal woodland. No subalkaline flats present. Nearest recorded occurrence is ~4 miles west of the study area. Not observed in May 2021 survey.
Alkali milk-vetch *Astragalus tener* var. *tener*	–/–/1B.2	Playas, on adobe clay in valley and foothill grassland, vernal pools on alkali soils; below 197 feet	March–June	Habitat absent	Grassland habitat only in open areas of ruderal woodland. No playas, vernal pools or alkali soils present. Nearest recorded occurrence is more than 5 miles away. Not observed in May 2021 survey.
Heartscale *Atriplex cordulata* var. *cordulata*	–/–/1B.2	Saline or alkaline soils in chenopod scrub, meadows and seeps, sandy areas in valley and foothill grassland; below 1,230 feet	April–October	Habitat absent	Grassland habitat only in open areas of ruderal woodland. No saline or alkaline soils present. Nearest recorded occurrence is more than 5 miles away. Not observed in May 2021 survey.

Common Name *Scientific Name*	Status[a] Federal/State/CRPR	General Habitat Description	Blooming Period	Habitat Present/ Absent	Rationale
Brittlescale *Atriplex depressa*	–/–/1B.2	Alkaline or clay soils in chenopod scrub, meadows and seeps, playas, valley and foothill grassland, vernal pools; below 1,050 feet	April–October	Habitat absent	Grassland habitat only in open areas of ruderal woodland. No alkaline or clay soils present. Nearest recorded occurrence is more than 5 miles away. Not observed in May 2021 survey.
Valley brodiaea *Brodiaea rosea* ssp. *vallicola*	–/–/4.2	Valley and foothill grassland and swales, vernal pools on old alluvial terraces on silty, sandy, and gravelly loam; 32–2,000 feet	April–May (June)	Habitat absent	Grassland habitat only in open areas of ruderal woodland. No swales or vernal pools present. Nearest recorded occurrence is more than 5 miles away. Not observed in May 2021 survey.
Bristly sedge *Carex comosa*	–/–/2.1	Coastal prairie, marshes and swamps at lake margins, valley and foothill grassland; below 2,050 feet	May–September	Habitat absent	Grassland habitat only in open areas of ruderal woodland, no marsh habitat present. Nearest recorded occurrence is more than 5 miles away. Not observed in May 2021 survey.
Pappose tarplant *Centromadia parryi* ssp. *parryi*	–/–/1B.2	Coastal prairie, meadows and seeps, coastal salt marshes and swamps, alkaline soils in vernally mesic valley and foothill grassland; 0–1380 feet	May–November	Habitat absent	No alkaline grassland habitat present. Nearest recorded occurrence is more than 5 miles away. Not observed in May 2021 survey.

Common Name *Scientific Name*	Status[a] Federal/State/CRPR	General Habitat Description	Blooming Period	Habitat Present/ Absent	Rationale
Parry's rough tarplant *Centromadia parryi* ssp. *rudis*	–/–/4.2	Alkaline, vernally mesic seeps, sometimes roadsides, in valley and foothill grassland, vernal pools; 0–330 feet	May–October	Habitat absent	No vernal pool habitat or alkaline soils present. Nearest recorded occurrence is more than 5 miles away. Not observed in May 2021 survey.
Palmate-bracted bird's-beak *Chloropyron palmatum*	E/E/1B.1	Alkaline grassland, alkali meadow, chenopod scrub; 50–1,670 feet	May–October	Habitat absent	No alkaline grassland habitat or chenopod scrub present. Nearest recorded occurrence is more than 5 miles away. Not observed in May 2021 survey.
Peruvian dodder *Cuscuta obtusiflora* var. *glandulosa*	–/–/2.2	Not seen since 1948; freshwater marshes and swamps; 50–920 feet	July–October	Habitat absent	No freshwater marsh habitat present. Nearest recorded occurrence is more than 5 miles away.
Dwarf downingia *Downingia pusilla*	–/–/2.2	Vernal pools and mesic valley and foothill grasslands; below 1,459 feet	March–May	Habitat absent	No vernal pool habitat present. Nearest recorded occurrence is more than 5 miles away. Not observed in May 2021 survey.
Jepson's coyote-thistle *Eryngium jepsonii*	–/–/1B.2	Vernal pools and mesic valley and foothill grassland; 5–985 feet	April–August	Habitat absent	No vernal pool habitat present. Nearest recorded occurrence is more than 5 miles away. Not observed in May 2021 survey.
San Joaquin saltscale (*Extriplex joaquiniana*)	–/–/1B.2	Alkaline soils in chenopod scrub, meadows and seeps, playas, valley and foothill grassland; below 2,739 feet	April–October	Habitat absent	Grassland habitat only in open areas of ruderal woodland. No alkaline soils present. Nearest recorded occurrence is more than 5 miles away. Not observed in May 2021 survey.

Common Name *Scientific Name*	Status[a] Federal/State/CRPR	General Habitat Description	Blooming Period	Habitat Present/ Absent	Rationale
Stinkbells *Fritillaria agrestis*	–/–/4.2	Chaparral, cismontane woodland, pinyon-juniper woodland, valley and foothill grassland, on clay, sometimes serpentinite substrate; 33–5,101 feet	March–June	Habitat absent	Grassland habitat only in open areas of ruderal woodland. No chaparral or suitable woodland habitat present. No clay or serpentine soils. Nearest recorded occurrence is more than 5 miles away. Not observed in May 2021 survey.
Boggs Lake hedge-hyssop *Gratiola heterosepala*	–/E/1B.2	Clay soils in areas of shallow water, lake margins of swamps and marshes, vernal pool margins; 33–7,791 feet	April–August	Habitat absent	No vernal pool habitat or clay soils present. Nearest recorded occurrence is more than 5 miles away. Not observed in May 2021 survey.
Hogwallow starfish *Hesperevax caulescens*	–/–/4.2	Mesic clay in valley and foothill grassland; 0–1,655 feet	March–June	Habitat absent	No mesic grassland habitat or clay soils present. Nearest recorded occurrence is more than 5 miles away. Not observed in May 2021 survey.
Rose-mallow *Hibiscus lasiocarpus* var. *occidentalis*	–/–/2.2	Freshwater marsh along rivers and sloughs; often in rip-rap on sides of levees; below 394 feet	June–September	Habitat present	Low potential for presence in rip-rap along the Sacramento River. Nearest recorded occurrence is ~2.5 miles northwest of the study area. No vegetative parts of plants observed in May 2021.
Alkali-sink goldfields *Lasthenia chrysantha*	–/–/1B.1	Alkaline vernal pools; below 650 feet	February–April	Habitat absent	No vernal pool habitat or alkaline soils present. Nearest recorded occurrence is more than 5 miles away. Not observed in May 2021 survey.

Common Name *Scientific Name*	Status[a] Federal/State/CRPR	General Habitat Description	Blooming Period	Habitat Present/ Absent	Rationale
Legenere *Legenere limosa*	–/–/1B.1	Deep, seasonally wet habitats such as vernal pools, ditches, marsh edges, and riverbanks; below 2,887 feet	April–June	Habitat absent	No vernal pool habitat present. Nearest recorded occurrence is more than 5 miles away. Not observed in May 2021 survey.
Heckard's pepper-grass *Lepidium latipes* var. *heckardii*	–/–/1B.2	Alkaline flats in valley and foothill grassland; 32–656 feet	March–May	Habitat absent	Grassland habitat only in open areas of ruderal woodland. No alkaline soils present. Nearest recorded occurrence is more than 5 miles away. Not observed in May 2021 surveys.
Mason's lilaeopsis *Lilaeopsis masonii*	–/R/1B.1	Freshwater or brackish marsh, riparian scrub; in tidal zone	April–November	Habitat present	Low potential for presence in degraded habitat on the Sacramento River bank, but not known to occur in this area; flow and boat wakes are likely too great for establishment of this species, and most levee banks have riprap to below the water level or trampled sand flats. Nearest recorded occurrence is more than 5 miles away along the Deep Water Ship Channel. Not observed in May 2021 survey.
Little mousetail *Myosurus minimus* ssp. *apus*	–/–/3.1	Alkaline soils in valley and foothill grassland and vernal pools; 66–2,100 feet	March–June	Habitat absent	Project area is lower than species' known elevation range. No alkaline soils or vernal pool habitat present. Nearest recorded occurrence is more than 5 miles away. Not observed in May 2021 survey.
Cotula navarretia *Navarretia cotulifolia*	–/–/4.2	Chaparral, cismontane woodland, valley and foothill grassland on adobe soils; 15–6,005 feet	May–June	Habitat absent	Grassland habitat only in open areas of ruderal woodland. No adobe soils present. Nearest recorded occurrence is more than 5 miles away. Not observed in May 2021 survey.

Common Name *Scientific Name*	Status[a] Federal/State/CRPR	General Habitat Description	Blooming Period	Habitat Present/ Absent	Rationale
Baker's navarretia *Navarretia leucocephala* ssp. *bakeri*	–/–/1B.1	Mesic areas in cismontane woodland, lower montane coniferous forest, meadows and seeps, valley and foothill grassland, vernal pools;16–5,709 feet	April–July	Habitat absent	No suitable mesic grassland or vernal pool habitat present. Nearest recorded occurrence is more than 5 miles away. Not observed in May 2021 survey.
Colusa grass *Neostapfia colusana*	T/E/1B.1	Adobe soils of vernal pools; 16–656 feet	May–August	Habitat absent	No vernal pool habitat or adobe soils present. Nearest recorded occurrence is more than 5 miles away. Not observed in May 2021 survey.
Bearded popcorn flower *Plagiobothrys hystriculus*	–/–/1B.1	Mesic grassland, vernal pools; 33–900 feet	April–May	Habitat absent	No mesic grassland or vernal pool habitat present. Nearest recorded occurrence is more than 5 miles away. Not observed in May 2021 survey.
California alkali grass *Puccinellia simplex*	–/–/1B.2	Alkaline soils in mesic sinks, flat, and lake margins in chenopod scrub, meadows and seeps, valley and foothill grassland, vernal pools; 6–3,050 feet	March–May	Habitat absent	No vernal pool habitat or alkaline soils present. Nearest recorded occurrence is more than 5 miles away. Not observed in May 2021 survey.
Sanford's arrowhead *Sagittaria sanfordii*	–/–/1B.2	Freshwater marshes, sloughs, canals, and other slow-moving water habitats; below 2,132 feet	May–October	Habitat absent	No freshwater marsh or slow-moving water habitat present. Nearest recorded occurrence is ~2 miles east of the study area. Not observed in May 2021 survey.

Common Name *Scientific Name*	Status[a] Federal/State/CRPR	General Habitat Description	Blooming Period	Habitat Present/ Absent	Rationale
Keck's checkerbloom *Sidalcea keckii*	E/–/1B.1	Serpentine clay soils in cismontane woodland, valley and foothill grassland; 75–650 meters	April–May (June)	Habitat absent	Grassland habitat only in open areas of ruderal woodland. No serpentine soils present. Nearest recorded occurrence is more than 5 miles away. Not observed in May 2021 surveys.
Suisun Marsh aster *Symphotrichum lentum*	–/–/1B.2	Brackish and freshwater marshes and swamps; below 10 feet	May–November	Habitat present	Low potential for presence in rip-rap along the Sacramento River. Nearest recorded occurrence is ~5 miles southwest of the study area. Not observed in May 2021 survey.
Saline clover *Trifolium hydrophilum*	–/–/1B.2	Salt marsh, mesic alkaline areas in valley and foothill grasslands, vernal pools, marshes and swamps; below 980 feet	April–June	Habitat absent	No salt marsh, mesic grassland, vernal pool, or marsh habitat present. No alkaline soils present. Nearest recorded occurrence is more than 5 miles away. Not observed in May 2021 survey.
Crampton's tuctoria *Tuctoria mucronata*	E/E/1B.1	Mesic areas in valley and foothill grassland, vernal pools; 16–33 feet	April–August	Habitat absent	No mesic grassland or vernal pool habitat present. Nearest recorded occurrence is more than 5 miles away. Not observed in May 2021 survey.

Common Name *Scientific Name*	Status[a] Federal/State/CRPR	General Habitat Description	Blooming Period	Habitat Present/ Absent	Rationale

Sources: California Native Plant Society 2022; California Department of Fish and Wildlife 2022; Consortium of California Herbaria 2022.

[a] Status explanations:

Federal

E = Listed as endangered under the federal ESA.

T = Listed as threatened under the federal ESA.

— = No listing status.

State

E = Listed as endangered under CESA.

R = Listed as rare under the CESA. This category is no longer used for newly listed plants, but some plants previously listed as rare retain this designation.

— = No listing status.

CRPR

1B = CRPR 1B species: rare, threatened, or endangered in California and elsewhere.

2 = CRPR 2 species: rare, threatened, or endangered in California but more common elsewhere.

4 = CRPR 4 species: limited distribution; species on a watch list

.1 = Seriously endangered in California (over 80% of occurrences threatened—high degree and immediacy of threat).

.2 = Fairly endangered in California (20-80% occurrences threatened).

Table 8. Special-Status Wildlife and Fish Known or with Potential to Occur in the Project Region, or That May Be Affected by the Proposed Project

Common Name Scientific Name	Legal Status (Federal/State)	General Habitat Description	Habitat Present/Absent	Rationale
Invertebrates				
Conservancy fairy shrimp *Branchinecta conservatio*	E/-	Typically found in large, turbid vernal pools but known to occur in other types of pools; occurs in scattered locations from Butte and Tehama Counties to Ventura County.	Habitat absent	No suitable vernal pool habitat is present in the study area.
Vernal pool fairy shrimp *Branchinecta lynchi*	T/–	Found in Central Valley, central and south Coast Ranges from Tehama to Santa Barbara County; isolated populations also in Riverside County; common in vernal pools; also found in sandstone rock outcrop pools.	Habitat absent	No suitable vernal pool habitat is present in the study area.
Vernal pool tadpole shrimp *Lepidurus packardi*	E/–	Found from Shasta County south to Merced County; occurs in vernal pools and ephemeral stock ponds.	Habitat absent	No suitable vernal pool habitat is present in the study area.
Valley elderberry longhorn beetle *Desmocerus californicus dimorphus*	T/–	Streamside habitats below 500 feet from Shasta to Fresno counties; occurs in riparian and oak savanna habitats with elderberry shrubs; elderberries are the host plant.	Habitat present	There are 3 elderberry shrubs in the study area, outside of riparian habitat. These shrubs are expected to be removed as part of another project prior to project construction.
Crotch bumble bee *Bombus crotchii*	-/C	Pacific Coast and in the western desert, Central Valley, and adjacent foothills, but now appears now appears to be absent from much of its historical range in the southern two-thirds of California, including the Central Valley; most commonly associated with open grasslands and scrub habitats; feeds on a variety of widely distributed plant genera including *Antirrhinum*, *Asclepias*, *Phacelia*, *Chaenactis*, *Clarkia*, *Dendromecon*, *Eriogonum*, *Eschscholzia*, *Lupinus*, *Medicago*, and *Salvia*.	Habitat present	Suitable habitat and foraging plants occur within and adjacent to the study area.

Common Name Scientific Name	Legal Status (Federal/State)	General Habitat Description	Habitat Present/Absent	Rationale
Western bumple bee *Bombus occidentalis*	-/C	Throughout California, although populations from Central California to the southern British Columbia border have declined sharply since the late 1990s, particularly from lower elevation sites; inhabits grassy areas, urban parks and gardens, chaparral and scrub lands, and mountain meadows; most commonly associated with plants in the Asteraceae family and, *Ceanothus*, *Centaurea*, *Chrysothamnus*, *Cirsium*, *Eriogonum*, *Geranium*, *Grindelia*, *Lupinus*, *Melilotus*, *Monardella*, *Rubus*, *Penstemon*, *Solidago*, and *Trifolium* genera.	Habitat present	Suitable habitat and foraging plants occur within and adjacent to the study area.
Amphibians				
California tiger salamander *Ambystoma californiense*	T/T	Breeds during the wet season in vernal pools and ponds, with a minimum 10-week inundation period; adults spend most of the year in grassland oak woodland habitat, primarily in small mammal burrows; occurs from Yolo to Kern County in the Central Valley and in the Sierra Nevada foothills from Amador to Tulare County, and from Sonoma to Santa Barbara County on the coast.	Habitat absent	No suitable habitat for the species is present in the project area, and the study area is outside the known distribution of the species.
California red-legged frog *Rana draytonii*	T/SSC	Found along the coast and coastal mountain ranges of California from Mendocino to San Diego County and in the Sierra Nevada from Butte to Tuolumne County; occurs in permanent and semipermanent aquatic habitats, such as creeks and ponds, with emergent and submergent vegetation; uses upland areas for cover (burrows, logs, rocks, and crevices) and dispersal.	Habitat absent	No suitable habitat for the species is present in the study area, and the project area is outside the known distribution of the species.

Common Name Scientific Name	Legal Status (Federal/State)	General Habitat Description	Habitat Present/Absent	Rationale
Reptiles				
Western pond turtle *Emys marmorata*	–/SSC	Occurs throughout California west of the Sierra-Cascade crest; found from sea level to 6,000 feet; does not occur in desert regions except along the Mojave River and its tributaries; occupies ponds, marshes, rivers, streams, and irrigation canals with muddy or rocky bottoms.	Habitat present	In the project area, suitable aquatic habitat is present in the Sacramento River, and potential upland habitat is present in riparian woodland habitat adjacent to the river.
Giant garter snake *Thamnophis gigas*	T/T	Sloughs, canals, low-gradient streams, and freshwater marsh habitats with a prey base of small fish and amphibians; also found in irrigation ditches and rice fields; requires grassy banks and emergent vegetation for basking and areas of high ground protected from flooding during winter.	Habitat absent	The Sacramento River is not considered suitable aquatic habitat for the species. No other suitable habitat is present in the study area.
Birds				
Swainson's hawk *Buteo swainsoni*	–/T	Lower Sacramento and San Joaquin Valleys, the Klamath Basin, and Butte Valley; highest nesting densities occur near Davis and Woodland, Yolo County; nests in oaks or cottonwoods in or near riparian habitats; forages in grasslands, irrigated pastures, and grain fields.	Habitat present	Suitable nest trees occur within and adjacent to the study area. Species has been documented nesting north and south of the project area along the Sacramento River.
California black rail *Laterallus jamaicensis coturniculus*	-/T/FP	More than 90% are found in the tidal salt marshes of the northern San Francisco Bay region, primarily in San Pablo and Suisun Bays, with smaller populations in San Francisco Bay, the Outer Coast of Marin County, freshwater marshes in the foothills of the Sierra Nevada, and in the Colorado River Area; inhabits saltwater, brackish, and freshwater marshes	Habitat absent	The study area lacks suitable habitat for the species.

Common Name Scientific Name	Legal Status (Federal/State)	General Habitat Description	Habitat Present/Absent	Rationale
White-tailed kite *Elanus leucurus*	–/FP	Lowland areas west of Sierra Nevada from the head of the Sacramento Valley south, including coastal valleys and foothills to western San Diego County at the Mexico border; low foothills or valley areas with valley or live oaks, riparian areas, and marshes near open grasslands for foraging.	Habitat present	Suitable nest trees occur within and adjacent to the study area.
Western snowy plover *Charadrius alexandrines nivosus*	T/SSC	Barren to sparsely vegetated ground at alkaline or saline lakes, reservoirs, ponds, and riverine sand bars; also along sewage, salt-evaporation, and agricultural wastewater ponds.	Habitat absent	The project area lacks suitable habitat for the species.
Mountain plover *Charadrius montanus*	-/SSC	Occupies open plains or rolling hills with short grasses or very sparse vegetation; nearby bodies of water are not needed; may use newly plowed or sprouting grain fields.	Habitat absent	The study area lacks suitable habitat for the species.
Western yellow-billed cuckoo *Coccyzus americanus occidentalis*	T/E	In the west, breeding populations are limited primarily to the Sacramento Valley; nests in large blocks of riparian habitat with dense understory foliage.	Habitat absent	The riparian habitat in the study area is not typical nesting habitat used by the species because it consists of mostly thin rows of trees along the river with very little understory.
Burrowing owl *Athene cunicularia*	–/SSC	Lowlands throughout California, including the Central Valley, northeastern plateau, southeastern deserts, and coastal areas; rare along south coast; level, open, dry, heavily grazed or low stature grassland or desert vegetation with available burrows.	Habitat absent	The study area lacks ground squirrel burrows or other structures that could be used by burrowing owl for nesting.

Common Name Scientific Name	Legal Status (Federal/State)	General Habitat Description	Habitat Present/Absent	Rationale
Least Bell's vireo *Vireo bellii pusillus*	E/E	Historically nested in riparian habitat throughout the Central Valley, but the majority of the population now occurs in southern California; recently documented nesting on the San Joaquin River west of Modesto; requires dense riparian vegetation for nesting and a dense, stratified canopy for foraging	Habitat absent	The study area lacks dense riparian vegetation with a stratified canopy.
Purple martin *Progne subis*	-/SSC	Nests in abandoned woodpecker holes in oaks, cottonwoods, and other deciduous trees in a variety of wooded and riparian habitats. Also nests in vertical drainage holes under elevated freeways and highway bridges.	Habitat present	The species is known to nest in ventilation holes underneath the Sacramento side of the I Street Bridge ramp.
Bank swallow *Riparia riparia*	-/T	Nests in bluffs or banks, usually adjacent to water, where the soil consists of sand or sandy loam.	Habitat absent	The Sacramento River within the study area lacks suitable bank habitat with sandy open soil for nesting. The banks are all covered with riprap.
Grasshopper sparrow *Ammodramus svannarum*	-/SSC	Occurs in dry, dense grasslands, especially those with a variety of grasses and tall forbs and scattered shrubs for singing perches. Nests in slight depressions in dense grasslands.	Habitat absent	The study area lacks dense grasslands.
Song sparrow ("Modesto populations") *Melospiza melodia*	-/SSC	Endemic to the north-central portion of the Central Valley and the Bay-Delta; breeds in emergent marsh and riparian scrub, and in valley oak riparian forests with dense blackberry understory, vegetated irrigation canals, and levees.	Habitat absent	The study area lacks riparian habitat with a dense understory and lacks emergent marsh.

Common Name Scientific Name	Legal Status (Federal/State)	General Habitat Description	Habitat Present/Absent	Rationale
Tricolored blackbird *Agelaius tricolor*	–/E	Permanent resident in the Central Valley from Butte to Kern County; breeds at scattered coastal locations from Marin County south to San Diego County; and at scattered locations in Lake, Sonoma, and Solano Counties; rare nester in Siskiyou, Modoc, and Lassen Counties; nests in dense colonies in emergent marsh vegetation, such as tules and cattails, or upland sites with blackberries, nettles, thistles, and grain fields; habitat must be large enough to support 50 pairs; probably requires water at or near the nesting colony.	Habitat absent	The study area lacks suitable nesting and foraging habitat for the species.
Yellow-headed blackbird *Xanthocephalus xanthocephalus*	-/SSC	Nests in freshwater emergent wetlands with dense vegetation and deep water, often along borders of lakes or ponds; forages along moist shorelines and in grasslands and agricultural areas; breeding range includes primarily the Central Valley, northeastern California, and portions of southern California; most individuals migrate south of California in winter.	Habitat absent	The study area lacks suitable nesting and foraging habitat for the species.
Mammals				
Pallid bat *Antrozous pallidus*	–/SSC	Occurs throughout California, primarily at lower and mid-level elevations in a variety of habitats from desert to coniferous forest; most closely associated with oak, yellow pine, redwood, and giant sequoia habitats in northern California and oak woodland, grassland, and desert scrub in southern California. Daytime roosts include rock outcrops, mines, caves, hollow trees, buildings, and bridges.	Habitat present	The I Street and Jibboom Street approach structures in the study area are known to be used by bats. Trees on both sides of the river within the study area also provide potential habitat for bats. Buildings within and adjacent to the study area also provide potential roosting habitat for pallid bats.

Common Name Scientific Name	Legal Status (Federal/State)	General Habitat Description	Habitat Present/Absent	Rationale
Western red bat *Lasiurus blossevillii*	–/SSC	Found throughout much of California at lower elevations; found primarily in riparian and wooded habitats; occurs at least seasonally in urban areas; day roosts in trees within the foliage; found in fruit orchards and sycamore riparian habitats in the Central Valley.	Habitat present	Trees within the study area represent potential roosting habitat for the species.
American badger *Taxidea taxus*	-/SSC	Drier open shrub, forest, and herbaceous habitats with friable soils; typically does not occupy cultivated lands; a single individual's home range can range between 300 and 1,500 acres; year-round range spans all of California except the Humboldt and Del Norte County coasts.	Habitat absent	No suitable habitat in the study area for this species.
Fish				
Sacramento Perch *Archoplites interruptus*	-/SSC	Once abundant throughout the Central Valley of California, where they occupied sloughs, lakes, and slow moving rivers, now rare in their native waters, but still exist in Clear Lake and Alameda Creek/Calaveras Reservoir, as well as in some farm ponds and reservoirs; not known in the Sacramento River.	Habitat absent	The study area is outside of the known range for this species.
Sacramento River winter-run Chinook salmon *Oncorhynchus tshawytscha*	E/E	Mainstem Sacramento River below Keswick Dam (Moyle 2002); occurs in well-oxygenated, cool, riverine habitat with water temperatures from 8.0 to 12.5 degrees Celsius (°C); habitat types are riffles, runs, and pools (Moyle 2002); adults and juveniles migrate in the lower Sacramento River and through the Delta.	Habitat present	Sacramento River within the study area provides migration and seasonal rearing habitat, is designated as critical habitat for the species, and is considered essential fish habitat (EFH) for Chinook salmon.

Common Name Scientific Name	Legal Status (Federal/State)	General Habitat Description	Habitat Present/Absent	Rationale
Central Valley spring-run Chinook salmon *Oncorhynchus tshawytscha*	T/T	Upper Sacramento River, Feather River, and Yuba River and several perennial tributaries of the Sacramento River (Battle, Butte, Clear, Deer, and Mill Creeks); has the same general habitat requirements as winter-run Chinook salmon; coldwater pools are needed for holding adults (Moyle 2002); adults and juveniles migrate in the lower Sacramento River and through the Delta.	Habitat present	Sacramento River within the study area provides migration and seasonal rearing habitat, is designated as critical habitat for the species, and is considered EFH for Chinook salmon.
Central Valley fall-/late fall–run Chinook salmon *Oncorhynchus tshawytscha*	SC/SSC	Sacramento and San Joaquin Rivers and tributary Central Valley streams and rivers below impassable barriers; occurs in well-oxygenated, cool, riverine habitat with water temperatures from 8.0 to 12.5 degrees °C; habitat types are riffles, runs, and pools; adults spawn at head of riffles/tails of pools; young rear for several months and emigrate to the ocean before summer (Moyle 2002).	Habitat present	Sacramento River within the study area provides migration and seasonal rearing habitat and is considered EFH for Chinook salmon.
Central Valley steelhead *Oncorhynchus mykiss*	T/–	Sacramento and San Joaquin Rivers and tributary Central Valley streams and rivers below impassable barriers; occurs in well-oxygenated, cool, riverine habitat with water temperatures from 7.8 to 18 °C; habitat types are riffles, runs, and pools; adults spawn at head of riffles/tails of pools; young rear year-round for 1–4 years before emigrating to the ocean (Moyle 2002).	Habitat present	Sacramento River within the study area provides migration and seasonal rearing habitat and is designated as critical habitat for the species.
Green sturgeon (southern DPS) *Acipenser medirostris*	T/SSC	Sacramento, Klamath, and Trinity Rivers (Moyle 2002). Spawns in large river systems with well-oxygenated water, with temperatures from 8.0 to 14 °C.	Habitat present	Sacramento River within the study area provides migration and rearing habitat and is designated as critical habitat for the species.

Common Name Scientific Name	Legal Status (Federal/State)	General Habitat Description	Habitat Present/Absent	Rationale
Delta smelt *Hypomesus transpacificus*	T/E	Found primarily in the Sacramento–San Joaquin Estuary but has been found as far upstream as the mouth of the American River on the Sacramento River and Mossdale on the San Joaquin River; range extends downstream to San Pablo Bay; occurs in estuary habitat in the Delta where fresh and brackish water mix in the salinity range of 2–7 parts per thousand (Moyle 2002).	Habitat present	Sacramento River within the study area provides migration, spawning, and seasonal rearing habitat and is designated as critical habitat for the species.
Longfin smelt *Spirinchus thaleichthys*	-/T	San Francisco estuary, Humboldt Bay, Eel River estuary, and Klamath River estuary. Occurs in open waters of estuaries and seasonally migrates to spawn in freshwater habitats of upper estuary; spawns over sand, rocks, and aquatic plants.	Habitat present	Sacramento River within the study area provides migration, spawning, and seasonal rearing habitat.
Sacramento splittail *Pogonichthys macrolepidotus*	–/SSC	Occurs throughout the year in low-salinity waters and freshwater areas of the Sacramento–San Joaquin Delta, Yolo Bypass, Suisun Marsh, Napa River, and Petaluma River (Moyle 2002). Spawning takes place among submerged and flooded vegetation in sloughs and the lower reaches of rivers.	Habitat present	Sacramento River within the study area provides migration, spawning, and seasonal rearing habitat.
River lamprey *Lampetra ayresi*	–/SSC	Sacramento, San Joaquin, and Napa Rivers; tributaries of San Francisco Bay (Moyle 2002; Moyle et al. 1995). Adults live in the ocean and migrate into fresh water to spawn.	Habitat present	Sacramento River within the study area provides migration and rearing habitat.

[a] Status explanations:

Federal

E = Listed as endangered under the federal Endangered Species Act.
T = Listed as threatened under the federal Endangered Species Act.
D = Delisted from the federal Endangered Species Act.
– = No listing.

State

E = Listed as endangered under the California Endangered Species Act.
T = Listed as threatened under the California Endangered Species Act.
C = Candidate for listing as threatened or endangered under the California Endangered Species Act.

FP = Fully protected under the California Fish and Game Code.
SSC = Species of special concern in California.
– = No listing.
Notes: Habitat absent – no habitat present and no further work needed. Habitat present –habitat is, or may be, present. The species may be present.

Valley Elderberry Longhorn Beetle

Valley elderberry longhorn beetle is federally listed as threatened. The current known range of valley elderberry longhorn beetle of the Central Valley (the valley floor and lower foothills) from approximately Shasta County south to Fresno County at elevations below 500 feet (U.S. Fish and Wildlife Service 2017:4). This species is dependent on its host plant, elderberry, which is a common component of riparian corridors and adjacent upland areas in the Central Valley (Barr 1991:5).

Valley elderberry longhorn beetle has been documented within approximately 1.5 miles of the study area (California Department of Fish and Wildlife 2022). There are three elderberry shrubs in the study area on the West Sacramento side of the river, adjacent to the bridge approach structure and the proposed project footprint. The shrubs are within a ruderal woodland area and not within a riparian community. During a 2015 survey, these shrubs were surveyed and mapped as part of the I Street Bridge Replacement project. No exit holes were observed in the shrubs.

For the separate and approved I Street Bridge Replacement project, USFWS issued a biological opinion to Caltrans (file number 08FBDT00-2016-F-0227) documenting the direct, indirect, and cumulative impacts on valley elderberry longhorn beetle and its habitat, including impacts on the three shrubs in the proposed project study area. The biological opinion specifies the required avoidance and compensatory mitigation that must be implemented for the I Street Bridge Replacement project prior to the start of construction of that project.

The proposed project assumes that the purchase of mitigation credits required by the I Street Bridge Replacement project's biological opinion to compensate for adverse effects on the shrubs will be complete in advance of the start of construction activities for the proposed project. Therefore, the proposed project would not result in any impacts on valley elderberry longhorn beetle, and this species is not discussed further.

Crotch Bumble Bee and Western Bumble Bee

Crotch bumble bee (*Bombus crotchii*) and western bumble bee (*Bombus occidentalis*) are state listed as a candidate threatened species. Crotch bumble bee forages and nests in open grasslands and scrub habitats in California (Xerces Society for Invertebrate Conservation 2018:32). Crotch bumble bee is a generalist forager that feeds on a variety of widely distributed plant genera including *Antirrhinum*, Asclepias, *Phacelia*, *Chaenactis*, *Clarkia*, Dendromecon, *Eriogonum*, *Eschscholzia*, *Lupinus*, *Medicago*, and *Salvia* (Koch et al. 2012:82; Williams et al. 2014:132).

Western bumble bee habitat varies widely and includes open grassy areas, urban parks and gardens, chaparral and scrub lands, and mountain meadows (Williams et al. 2014:116). The western bumblebee is a generalist forager that is most commonly associated with taxa such as Asteraceae, *Ceanothus*, *Centaurea*, *Chrysothamnus*, *Cirsium*, *Eriogonum*, *Geranium*, *Grindelia*, *Lupinus*, *Melilotus*, *Monardella*, *Rubus*, *Penstemon*, *Solidago*, and *Trifolium* (Williams et al. 2014:116; Xerces Society for Invertebrate Conservation 2018:34).

Nest sites vary by species and available habitat. Nests may be located underground in abandoned holes made by ground squirrels, mice, and rats; abandoned bird nests; in tufts of grass; or in empty cavities. Woody cover, or other sheltered areas also provide sites for bumble bees to build nests (e.g., downed wood, rock walls, brush piles) (Xerces Society for Invertebrate Conservation 2018:30). Crotch bumble bees are known to nest underground (Xerces Society for Invertebrate Conservation

2018:32), and western bumble bees are known to nest mostly underground but have been documented nesting above ground (Xerces Society for Invertebrate Conservation 2018:34).

Crotch bumble bee and western bumble bee were not observed during the May 2021 surveys; however, this species has been observed within the 9-quad search area. This species has not been recorded within 5 miles of the study area (California Department of Fish and Wildlife 2022). There are open grassy areas in the study area and potential food plants, including Asteraceae, *Eschscholzia*, *Lupinus*, *Medicago*, *Centaurea*, *Lupinus*, *Melilotus*, and *Trifolium*.

Western Pond Turtle

Western pond turtle (*Emys marmorata*) is a California species of special concern. Western pond turtle occurs throughout much of California, except east of the Sierra-Cascade crest and desert regions (with the exception of the Mojave River and its tributaries) (Zeiner et al. 1988:100). Aquatic habitats used by pond turtles include ponds, lakes, marshes, rivers, streams, and irrigation ditches with a muddy or rocky bottom in grassland, woodland, and open forest areas (Stebbins 2003:250). Pond turtles spend a considerable amount of time basking on rocks, logs, emergent vegetation, mud or sand banks, or human-generated debris (Jennings et al. 1992:11). Pond turtles move to upland areas adjacent to watercourses to deposit eggs and overwinter (Jennings and Hayes 1994:98). Turtles have been observed overwintering several hundred meters from aquatic habitat. In the southern portion of their range and along the central coast, pond turtles are active year-round. In the remainder of their range, these turtles typically become active in March and return to overwintering sites by October or November (Jennings et al.1992:11).

No western pond turtles were observed in the study area during May 2021 field surveys; however, this species has been recorded within the 9-quad search area. This species has not been recorded within 5 miles of the study area (California Department of Fish and Wildlife 2022). The Sacramento River provides suitable aquatic habitat for the species, and the banks on the Sacramento River and adjacent uplands may be used for basking and nesting. Although there is a high amount of disturbance within uplands in the study area, including domestic dogs and cats that may prey on pond turtles or pond turtle eggs, pond turtles may still attempt to nest in these areas if they are present in the adjacent aquatic habitat.

Swainson's Hawk

Swainson's hawk (*Buteo swainsoni*) is state listed as threatened. Swainson's hawks forage in grasslands, grazed pastures, alfalfa and other hay crops, and certain grain and row croplands. Vineyards, orchards, rice, and cotton crops are generally unsuitable for foraging because of the density of the vegetation (California Department of Fish and Game 1992:41). The majority of Swainson's hawks winter in South America, although some winter in the United States. Swainson's hawks arrive in California in early March to establish nesting territories and breed (California Department of Fish and Game 1994:5). They usually nest in large, mature trees. Most nest sites (87 percent) in the Central Valley are found in riparian habitats (Estep 1989:35), primarily because trees are more available there. Swainson's hawks also nest in mature roadside trees and in isolated trees in agricultural fields or pastures. The breeding season is from March through August (Estep 1989:12, 35).

Swainson's hawk was not observed during the May 2021 survey; however, this species has been observed within the 9-quad search area, including multiple observations within 5 miles from the study area. The closest recorded observation was along the Sacramento River approximately 0.5

mile north of the I Street Bridge (California Department of Fish and Wildlife 2022). Trees within the cottonwood riparian forest, riparian forest/shrub wetland, ruderal woodland, and landscaped area represent potential nesting habitat for Swainson's hawk.

White-Tailed Kite

White-tailed kite (*Elanus leucurus*) is fully protected by the Fish & Game Code. White-tailed kite occurs in coastal and valley lowlands in California (Zeiner et al. 1990a:120). White-tailed kites generally inhabit low-elevation grassland, savannah, oak woodland, wetland, agricultural, and riparian habitats. Some large shrubs or trees are required for nesting and for communal roosting sites. Nest trees range from small, isolated shrubs and trees to trees in relatively large stands (Dunk 1995:6, 8). White-tailed kites make nests of loosely piled sticks and twigs lined with grass and straw, near the top of dense oaks, willows, and other tree stands. The breeding season lasts from February through October and peaks from May to August. They forage in undisturbed, open grassland, meadows, farmland, and emergent wetlands (Zeiner et al. 1990a:120).

White-tailed kite was not observed during the May 2021 survey; however, this species has been observed within the 9-quad search area, including several observations within 5 miles from the study area. The closest recorded observation was along the Sacramento River approximately 2 miles from the I Street Bridge (California Department of Fish and Wildlife 2022). Trees within the cottonwood riparian forest, riparian forest/shrub wetland, ruderal woodland, and landscaped area represent potential nesting habitat for white-tailed kite.

Purple Martin

Purple martin (*Progne subis*) is designated as a California species of special concern. The species is broadly distributed across eastern North America and occurs locally in the western states. In California, the species occurs as a summer resident and migrant, primarily from mid-March to late September, and breeds from May to mid-August. Purple martins are widely but locally distributed in forest and woodland areas at low to intermediate elevations throughout much of the state. Populations are densest in central and northern coastal coniferous forests and smaller and more localized in the Sierra Nevada, interior foothills, and southern California.

The species' range has contracted substantially on the central and southern coastal slope and in the Central Valley (Shuford and Gardali 2008:294). Historically widespread, only one extant population of purple martins persists within the Central Valley. This population nests solely in elevated freeways and overpasses in the Sacramento region (Airola et al. 2009:8). The population of purple martins in the Sacramento region has declined 80 percent since 2004, from 173 breeding pairs down to 34 breeding pairs in 2017 (Airola et al. 2017:83). Purple martins are known to nest on the I Street Bridge approach structure on the Sacramento side of the river and within the study area.

Pallid Bat

Pallid bat (*Antrozous pallidus*) is designated as a California species of special concern. Pallid bat occurs at low elevations throughout California (Zeiner et al. 1990b:70). They occur in a variety of habitats, including grasslands, shrublands, and woodlands, and are most common in open, dry habitats with rocky areas for roosting (Zeiner et al. 1990b:70). Pallid bats roost alone, in small groups, or gregariously in crevices in rocky outcrops and cliffs, caves, mines, trees hollows, exfoliating tree bark, and various human structures such as bridges and buildings (Western Bat Working Group 2017).

Pallid bat was not observed in the study area during May 2021 surveys; however, this species has been detected within the 9-quad search area. This species has not been recorded within 5 miles of the study area (California Department of Fish and Wildlife 2022). The existing I Street approach structures, I-5 overpass, buildings, and large trees within the cottonwood riparian forest, landscaped, and ruderal woodland on both sides of the river provide potential roosting habitat for this species. Signs of roosting bats were observed under the I Street bridge structure (both sides of the Sacramento River), staining and guano were observed at multiple crevices on the bridge on both sides of the river, and odor was evident on the east side of the river. In addition, based on previous surveys conducted in 2015, the bridge is known to support roosting bats, although pallid bat was not detected.

Western Red Bat

Western red bat (*Lasiurus blossevillii*) is designated as a California species of special concern. Western red bat occurs along the California coast from Mendocino County south to San Diego and into the Sierra Nevada, but the most significant distribution in the state is within the Central Valley (Pierson et al. 2006:12). Western red bat roost is typically solitary, roosting primarily in the foliage of trees or shrubs (Western Bat Working Group 2017). Day roosts are commonly in edge habitats adjacent to streams or open fields (Western Bat Working Group 2017). In the Central Valley, they are more common in areas with wide strips of mature cottonwoods and sycamores (*Platanus racemosa*) (Pierson et al. 2006:12). They are also known to roost in orchard trees, in particular, walnut orchards (Pierson et al. 2006:13).

Western red bats were detected on the West Sacramento side of the river during acoustic surveys conducted in 2015, and the cottonwood riparian forest, landscaped, and ruderal woodland areas on both sides of the river provide potential roosting habitat in the study area for this species.

Special-Status Fish

Based on a review of the CNDDB search results; the USFWS and National Marine Fisheries Service lists of endangered, threatened, and proposed species within the project region; and species' distribution and habitat data (e.g., Moyle 2002; U.S. Fish and Wildlife Service 2022), the following 9 special-status fish species were identified as occurring in the project region: Sacramento River winter-run Chinook salmon; Central Valley spring-run Chinook salmon; Central Valley fall- and late fall–run Chinook salmon; Central Valley steelhead; southern distinct population segment (DPS) of North American green sturgeon; delta smelt; longfin smelt; Sacramento splittail, and river lamprey.

In addition, the Sacramento River in the study area is designated as critical habitat for Sacramento River winter-run Chinook salmon, Central Valley spring-run Chinook salmon, Central Valley steelhead, North American green sturgeon, and delta smelt. The Sacramento River in the study area is also considered essential fish habitat for Pacific salmon (i.e., Chinook salmon).

Although these special-status fish species are known to inhabit the Sacramento River within the study area, the project would not require any work within or above the Sacramento River; therefore, there would be no direct impacts on fish or loss of habitat. Work would be conducted near the river that could result in potential for release of sediments or other pollutants that could affect water quality; however, standard measures would be required and implemented as part of the stormwater pollution prevention (SWPPP) plan that would prevent materials from entering into the river. Nighttime work would not be required for construction, and no additional lighting on the bridge is

proposed as part of the project. Therefore, impacts on the Sacramento River and existing fish species are not anticipated and are not discussed further.

Other Protected and Managed Biological Resources

Non–Special-Status Migratory Birds and Raptors

Non–special-status migratory birds, including raptors, have the potential to nest in trees, in shrubs, and on the ground in the study area. In addition to purple martins (a species of special concern), cliff swallows (*Petrochelidon pyrrhonota*) and white-throated swifts (*Aeronautes saxatalis*) are known to nest on the approach structures within the study area. The occupied nests and eggs of migratory birds are protected by federal and state laws, including the Migratory Bird Treaty Act (MBTA) and Fish & Game Code Sections 3503 and 3503.5. USFWS is responsible for overseeing compliance with the MBTA, and CDFW is responsible for overseeing compliance with the Fish & Game Code and making recommendations on nesting bird and raptor protection.

Bats

Based on previous surveys conducted in 2015, the I Street Bridge is known to support roosting bats, including Mexican free-tail bat (*Tadarida brasiliensis*), big brown bat (*Eptesicus fuscus*), and Yuma myotis (*Myotis yumanensis*). Western red bat was also detected during the 2015 surveys. Other bat species could roost within bridge expansion joints and in trees and buildings within the study area, including special-status bats. Fish & Game Code Section 4150 states that nongame mammals or parts thereof may not be taken or possessed as provided in the code or in accordance with regulations adopted by the California Fish and Game Commission, which would include common bat species.

Protected Trees

The City of West Sacramento Tree Preservation Ordinance protects all trees with a circumference of 75 inches (diameter standard height [dsh] of approximately 12 inches) or greater and native oaks with a circumference of 50 inches (dsh of approximately 8 inches) or greater. The City of Sacramento Tree Ordinance protects native oaks, California buckeye (*Aesculus californica*), and western sycamore (*Platanus racemosa*) trees with a dsh of 12 inches or greater; all trees on an existing single-family or duplex lot with a dsh of 32 inches or greater; and all trees on undeveloped land or commercial, industrial, or apartment lots with a dsh of 24 inches or greater.

Trees observed in the study area with a dsh of 6 inches or greater are listed in Table 9. Within the project construction area, a total of six trees meets the tree ordinance criteria for the city in which they occur—one tree in Sacramento and five trees in West Sacramento. The tree species included in this total are California black walnut, Fremont's cottonwood, valley oak, elm, apple, and tree of heaven. The tree of heaven is an invasive species but meets the protected tree size criterion.

Within a 50-foot buffer around the project construction area, additional trees meet the criteria. On the West Sacramento side, approximately 13 trees within 50 feet of the construction area meet the tree ordinance criteria, including Fremont's cottonwood, valley oak, California black walnut, Oregon ash, elm, and one very large elderberry with a dsh of approximately 24 inches. On the Sacramento side of the project, three trees meet the tree ordinance criteria: two trees on the riverbank, a Fremont's cottonwood and an Oregon ash, and one valley oak tree beside the elevated section of I Street Bridge at the edge of a parking lot.

Table 9. Protected Trees Observed in the Study Area

Tree Species	Approximate DSH (inches)[a]	Construction Area/Buffer
West Sacramento Side		
Oregon ash	24	Buffer
California black walnut	24	Buffer
California black walnut	12 + 12	Buffer
California black walnut	24	Buffer
California black walnut	36	Buffer
Apple	36	Construction Area
Fremont's cottonwood	60	Construction Area
Fremont's cottonwood	36	Buffer
Fremont's cottonwood	36	Buffer
Fremont's cottonwood	36	Buffer
Fremont's cottonwood	36	Buffer
Fremont's cottonwood	48	Buffer
Valley oak	24	Construction Area
Valley oak	5 + 5 + 5	Construction Area
Valley oak	24	Buffer
Elderberry	24	Buffer
American elm	24	Construction Area
American elm	24	Buffer
Sacramento Side		
Oregon ash	[not measured]	Buffer
Fremont's cottonwood	[not measured]	Buffer
Valley oak	12	Construction Area

[a] DSH values with a "+" indicate sizes of multi-trunked trees.

Invasive Species

Invasive plant species include species designated as federal noxious weeds by the U.S. Department of Agriculture, species listed by the California Department of Food and Agriculture (CDFA), and invasive plants identified by the California Invasive Plant Council (Cal-IPC). Invasive plants displace native species, change ecosystem processes, alter plant community structure, and lower wildlife habitat quality (California Invasive Plant Council 2012:1). Road, highway, and related construction projects are some of the principal dispersal pathways for invasive plants and their propagules. Accordingly, Table 10 below lists the invasive plant species identified by the CDFA and Cal-IPC that were observed in the study area (Natural Resources Conservation Service 2003; California Invasive Plant Council 2022). No plant species designated as federal noxious weeds have been identified in the project area (Natural Resources Conservation Service 2012). Invasive plant species occur in all vegetated parts of the study area.

Table 10. Invasive Plant Species Identified in the Study Area

Species	CDFA	Cal-IPC
Tree of heaven (*Ailanthus altissima*)	C*	Moderate
Wild oat (*Avena fatua*)	–	Moderate
Ripgut brome (*Bromus diandrus*)	–	Moderate
Red brome (*Bromus madritensis* ssp. *rubens*)	–	High
Italian thistle (*Carduus pycnocephalus*)	-*	Moderate
Yellow star-thistle (*Centaurea solstitialis*)	-*	High
Bermuda grass (*Cynodon dactylon*)	–	Moderate
Rattail fescue (*Festuca myuros*)	–	Moderate
Italian ryegrass (*Festuca perennis*)	–	Moderate
Edible fig (*Ficus carica*)	–	Moderate
English ivy (*Hedera helix*)	–	High
Foxtail barley (*Hordeum murinum* ssp. *leporinum*)	–	Moderate
Rough cat's-ear (*Hypochaeris radicata*)	–	Moderate
Wild radish (*Raphanus sativus*)	–	Limited
London rocket (*Sisymbrium irio*)	–	Limited
Smilo grass (*Stipa miliacea*)	–	Limited

Note: The California Department of Agriculture (CDFA) and California Invasive Plant Council (Cal-IPC) lists assign ratings that reflect the CDFA and Cal-IPC views of the statewide importance of the pest, likelihood that eradication or control efforts would be successful, and present distribution of the pest in the state. These ratings are guidelines that indicate the most appropriate action to take against a pest under general circumstances. The Cal-IPC species list is more inclusive than the CDFA list.

The CDFA categories indicated in the table are defined as follows:

C: A pest of known economic or environmental detriment and, if present in California, it is usually widespread.

*: Plant is included in the CCR Section 4500 list of California State Noxious Weeds.

-*: Plant is included in the CCR Section 4500 list of California State Noxious Weeds, but is otherwise not rated.

The Cal-IPC categories indicated in the table are defined as follows:

High: Species with severe ecological impacts, high rates of dispersal and establishment, and usually widely distributed.

Moderate: Species with substantial and apparent ecological impacts, moderate to high rates of dispersal, establishment dependent on disturbance, and limited to widespread distribution.

Limited: Species with minor ecological impacts, low to moderate rates of invasion, limited distribution, and locally persistent and problematic.

Discussion

a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

Special-Status Plants

Because no special-status plants occur in the project construction area, there would be no impact on special-status plants. No mitigation is required.

Special-Status Wildlife

Crotch Bumble Bee and Western Bumble Bee

Construction of the proposed project would result in permanent impacts on 0.059 acre and temporary impacts on 0.486 acre of ruderal woodland on the west side of the river that could serve as suitable habitat for Crotch bumble bee and western bumble bee habitat. Clearing and grubbing, excavation, and other construction activities could result in the destruction of nests or mortality of bees from being crushed or buried by equipment. Crotch and western bumble bees could also be struck by vehicles and equipment traveling along access roads during construction. These would be **potentially significant impacts**. Implementation of Mitigation Measures BIO-1, BIO-2, BIO-3, BIO-4, BIO-5, and BIO-6 would help to prevent impacts on these species. These impacts are considered **less than significant with mitigation incorporated.**

Western Pond Turtle

The project would not require any work within the Sacramento River; therefore, there would be no direct impacts on aquatic habitat for western pond turtle. Construction of the proposed project would result in temporary impacts on 0.030 acre of temporary impacts on cottonwood riparian, and permanent impacts on 0.059 acre and temporary impacts on 0.486 acre of ruderal woodland on both sides of the river that could serve as suitable (upland) nesting habitat for western pond turtle. Clearing and grubbing, excavation, and other construction activities could result in the destruction of nests or mortality of turtles from being crushed or buried by equipment. Western pond turtle could also be struck by vehicles and equipment traveling along access roads during construction. These would be **potentially significant impacts**.These impacts could be significant. Implementation of Mitigation Measures BIO-1, BIO-2, BIO-3, and BIO-7 would help to prevent impacts on this species. These impacts are considered **less than significant with mitigation incorporated**.

Swainson's Hawk

Construction of the proposed project would result in temporary impacts on 0.030 acre of temporary impacts on cottonwood riparian, and permanent impacts on 0.059 acre and temporary impacts on 0.486 acre of ruderal woodland on both sides of the river that could serve as suitable nesting habitat for Swainson's hawk. Nests that are located within or adjacent to the study area could be affected by typical construction noise and visual disturbances. Because the study area has high levels of pedestrian, bike, vehicle, and boat traffic and associated noise, some construction activities would not substantially increase noise and visual disturbance above baseline conditions. However, some activities would increase noise levels above existing levels, which could disrupt normal behaviors, including nesting. Noise and visual disturbances associated with project construction during the nesting season could disrupt nesting behavior to the point of nest abandonment or forced fledging that results in young mortality. These would be **potentially significant impacts**. Implementation of Mitigation Measures BIO-1, BIO-2, BIO-3, BIO-8, BIO-9, BIO-10, and BIO-11 would help to prevent impacts on this species. These impacts are considered **less than significant with mitigation incorporated.**

White-Tailed Kite

Construction of the proposed project would result in temporary impacts on 0.030 acre of temporary impacts on cottonwood riparian, and permanent impacts on 0.059 acre and temporary impacts on

0.486 acre of ruderal woodland on both sides of the river that could serve as suitable nesting habitat for white-tailed kite. Nests that are located within or adjacent to the study area could be affected by typical construction noise and visual disturbances. Because the study area has high levels of pedestrian, bike, vehicle, and boat traffic and associated noise, some construction activities would not substantially increase noise and visual disturbance above baseline conditions. However, some activities would increase noise levels above existing levels, which could disrupt normal behaviors, including nesting. Noise and visual disturbances associated with project construction during the nesting season could disrupt nesting behavior to the point of nest abandonment or forced fledging that results in young mortality, which would be a **potentially significant impact**. Because white-tailed kite is a fully protected species, removal of trees with active nests and activities that may result in loss of white-tailed kites are prohibited. Implementation of Mitigation Measures BIO-1, BIO-2, BIO-3, BIO-8, and BIO-9 would help to prevent impacts on this species. These impacts are considered **less than significant with mitigation incorporated.**

Purple Martin

The existing approach structures to the bridge would be removed as part of the separate I Street Bridge Replacement project; however, mitigation for that separate project would include delaying the removal of the southern approach structure in Sacramento, then installing permanent poles with nesting boxes in the same location as the existing nesting area. Depending on the timing of construction of first phases of the proposed project, including the interim phase, in relation to the removal of the eastern approach structures and installation of nesting boxes, it is possible that purple martins would still be nesting in the study area at the time of construction. Purple martin nesting season is considered to be from March 15 to August 15. Construction activities could result in indirect impacts on purple martins by disrupting normal behaviors, including nesting, which would be a **potentially significant impact**. Implementation of Mitigation Measures BIO-1, BIO-2, BIO-3, BIO-8, BIO-9, and BIO-12 would help to prevent impacts on this species and reduce this impact to a less-than-significant level. This impact is considered **less than significant with mitigation incorporated.**

Other Migratory Birds

Multiple non–special-status migratory birds could nest on the ground or in shrubs or trees in and adjacent to the study area. The breeding season for most birds is generally from February 1 to August 31. Cliff swallows and white-throated swifts are known to utilize the approach structures for nesting. Cliff swallows nest from April to August and migrate south in September and October (Zeiner et al. 1990a:444). White-throated swifts breed from early May to mid-August (Zeiner et al. 1990a:356). There is suitable nesting habitat for migratory birds within the cottonwood riparian forest, ruderal woodland, landscaped areas, and adjacent structures.

Two active nests were observed during the May 2021 surveys, including an osprey nest on top of the bridge structure and a house finch nest on the I-5 bridge structure. White-throated swift activity was also observed around the I Street Bridge ramp on the Sacramento side, although nests were not visible. Migratory birds observed during the surveys included white-throated swift, western scrub jay, rock dove, American crow, Brewer's blackbird, house finch, osprey, yellow-billed magpie, American bushtit, and black phoebe. The project has the potential to affect nesting migratory birds either through direct injury or mortality during ground-disturbing activities, tree removal, or by disrupting normal behaviors, including nesting. Direct injury or mortality of migratory birds as a result of the proposed project would be a **potentially significant impact**. Implementation of

Mitigation Measures BIO-1, BIO-2, BIO-3, BIO-8, and BIO-9 would help to prevent impacts on nesting birds and reduce this impact to a less-than-significant level. This impact is considered **less than significant with mitigation incorporated**.

Pallid Bat

The existing approach structures to the bridge would be removed as part of the I Street Bridge Replacement project prior to or roughly concurrent with construction of the proposed project, though mitigation for that separate project would include delaying the removal of the southern approach structure in Sacramento. Several large trees that could be used by roosting pallid bat would be removed by the proposed project within the ruderal woodland area. Project construction could result in injury and/or mortality on this species if occupied roost sites are removed at times when bats are not awake and active (e.g., early in the day, periods of cold weather). In addition, operations of construction equipment, vehicles, and increased human activities under or near existing roosts could result in indirect impacts through disturbance. These would be **potentially significant impacts**. Implementation of Mitigation Measures BIO-1, BIO-2, BIO-3, and BIO-13 would help to prevent impacts on this species. These impacts are considered **less than significant with mitigation incorporated.**

Western Red Bat

Several large trees that could be used by roosting western red bat would be removed within the ruderal woodland area. Project construction could result in injury and/or mortality on this species if trees they are roosting in are removed at times when bats are not awake and active (e.g., early in the day, periods of cold weather). In addition, operations of construction equipment, vehicles, and increased human activities under or near existing roosts could result in indirect impacts through disturbance. These activities could result in **potentially significant impacts**. Implementation of Mitigation Measures BIO-1, BIO-2, BIO-3, and BIO-13 would help to prevent impacts on this species. These impacts are considered **less than significant with mitigation incorporated.**

Other Bats and Bat Habitat

As discussed above, project construction could result in injury and/or mortality of bats if occupied roost sites are removed at times when bats are not awake and active (e.g., early in the day, periods of cold weather). In addition, operations of construction equipment, vehicles, and increased human activities under or near existing roosts could result in indirect impacts through disturbance. These activities could result in **potentially significant impacts**. Implementation of Mitigation Measures BIO-1, BIO-2, BIO-3, and BIO-13 would help to prevent impacts on roosting bats. These impacts are considered **less than significant with mitigation incorporated.**

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

The project proponent and/or its 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.

Mitigation Measure 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, riparian habitat, 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 project area (including their life history, habitat requirements, and photographs of the species). The training will identify the portions of the project area 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.

Mitigation Measure 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 month 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.

Mitigation Measure BIO-4: Conduct Preconstruction Surveys for Crotch Bumble Bee and Western Bumble Bee and Avoid Active Nests

Pre-construction surveys for active bee nest colonies and associated floral resources (i.e., flowering vegetation on which bees from the colony are observed foraging) no more than 30 days prior to any ground disturbance between March and September. The purpose of this pre-construction survey would be to identify active nest colonies and associated floral resources in impact areas that could be avoided by construction personnel. The project biologist would establish, monitor, and maintain no-work buffers around nest colonies and floral resources identified during surveys. The size and configuration of the no-work buffer would be based on best professional judgment of the project biologist. At a minimum, the buffer would provide at least 20 feet of clearance around nest entrances and maintain disturbance-free airspace between the nest and nearby floral resources. Construction activities would not occur within the no-work buffers until the colony is no longer active (i.e., no bees are seen flying in or out of the nest for three consecutive days indicating the colony has completed its nesting season and the next season's queens have dispersed from the colony).

Mitigation Measure BIO-5: Protect Crotch Bumble Bee and Western Bumble Bee Food Plants from Herbicide and Pesticide Use

To minimize impacts on Crotch bumble bee and western bumble bee from pesticide and herbicide drift, application of these chemicals will be limited to the extent feasible and will be conducted using handheld equipment. Herbicides and pesticides will be applied only by applicators with current licenses and/or certifications from the California Department of Pesticide Regulation. The applicator will follow the pesticide and herbicide label directions. Spray nozzles will be kept within 24 inches of target areas during spraying. The most current information on pesticide and herbicide toxicity on wildlife will be used to inform future decisions about their use during project operation.

Mitigation Measure BIO-6: Revegetate Temporary Impact Areas within Crotch Bumble Bee and Western Bumble Bee Habitat

The project proponent will include suitable native nectar- and pollen-producing plants commonly used as food sources by Crotch bumble bee and western bumble bees in on-site revegetation and erosion control plans. Native plants of the following genera are appropriate for Crotch bumble bee: *Antirrhinum*, *Asclepias*, *Phacelia*, *Chaenactis*, *Clarkia*, *Dendromecon*, *Eriogonum*, *Eschscholzia*, *Lupinus*, *Medicago*, and *Salvia*. Native plants of the following taxa are appropriate for western bumble bee: Asteraceae, *Ceanothus*, *Centaurea*, *Chrysothamnus*, *Cirsium*, *Eriogonum*, *Geranium*, *Grindelia*, *Lupinus*, *Melilotus*, *Monardella*, *Rubus*, *Penstemon*, *Solidago*, and *Trifolium*.

Mitigation Measure 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 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 will 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.

Mitigation Measure 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 Mitigation Measure BIO-10) 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 structures, trees, shrubs, ruderal areas, and grassland vegetation that provide suitable nesting habitat within 50 feet of disturbance. 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.

Mitigation Measure 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 mitigation measures for Swainson's hawk, nesting birds, and roosting bats (see Mitigation Measures BIO-8 and BIO-10 through BIO-13. Implementation of the following measures will avoid and minimize impacts on purple martins, as well as other nesting birds and bats that use the approach structures.

Mitigation Measure BIO-10: 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.

Mitigation Measure BIO-11: Monitor Active Swainson's Hawk Nests during Construction Activities

Active Swainson's hawk nests within 600 feet of the study area will be monitored during construction. Monitoring will be conducted by a wildlife biologist with experience in monitoring Swainson's hawk 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 are still in the nest, 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 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.

Mitigation Measure BIO-12: Avoid and Minimize Impacts on Purple Martins during Construction Activities

No construction activity that results in ground disturbance, 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.

Mitigation Measure BIO-13: Conduct Preconstruction Surveys for Tree 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 construction noise and vibration, the project proponent will implement the following actions.

Preconstruction Surveys

One month prior to tree trimming or removal, a qualified biologist will examine trees to be removed or trimmed and trees or structures within the vicinity of construction activities (a minimum of 100 feet) for suitable bat roosting habitat. High-quality habitat features (e.g., crevices, large tree cavities, basal hollows, loose or peeling bark, larger snags) 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.

Protective Measures

Protective measures may be necessary if it is determined that bats are using trees in the study area 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 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.

- Trees planned for removal 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.
- 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.
- 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 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 sledgehammer or an axe. Several minutes should pass before 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.
- No construction activity that results in ground disturbance, loud noises, and/or vibrations will be conducted within 100 feet of the edge of occupied roosts during the maternity season (April 1 to September 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.
- Biologists experienced with bats will monitor construction activities within 100 feet of identified roosts to ensure that roosting bats are not disturbed.

b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

Cottonwood riparian habitat is adjacent to, but outside of, the study area, and construction of the proposed project would have no direct temporary or permanent effects on riparian habitat. The study area does not support any other sensitive natural communities.

The proposed project could result in indirect impacts on riparian habitat due to equipment movement within 20 feet of riparian trees on the Sacramento Riverbank or erosion and sedimentation from construction areas upslope of riparian vegetation.

State and federal agencies would require avoidance and minimization of impacts on riparian habitat. CDFW may require a Lake and Streambed Alternative Agreement for construction on the upper bank of the Sacramento River. Effects on riparian habitat during construction could be a **potentially significant impact**, but implementation of Mitigation Measure BIO-1 would protect adjacent riparian habitat from indirect effects during construction. This impact is considered **less than significant with mitigation incorporated**.

The proposed project has the potential to create additional disturbed areas for a temporary period and to introduce and spread invasive plant species to areas adjacent to the study area. This would be of particular concern for the adjacent riparian habitat, where nonnative invasive plants could outcompete and replace native vegetation, which would be a **potentially significant impact**.

Implementation of Mitigation Measure BIO-14 would help to prevent the introduction and spread of invasive plants. This impact is considered **less than significant with mitigation incorporated**.

Mitigation Measure BIO-14: Avoid the Introduction and Spread of Invasive Plants

The project proponent or its contractor will be responsible for avoiding the introduction of new invasive plants and the spread of invasive plants previously documented in the project's study area. 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 black locust trees from the riparian forest in and adjacent to the impact area on the Sacramento side of the bridge and any red sesbania trees in or adjacent to the impact area on the West Sacramento side.

c. Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marshes, vernal pools, coastal wetlands, etc.) through direct removal, filling, hydrological interruption, or other means?

The only state or federally protected water in the study area is the Sacramento River. The project construction area would not include any work in the river, and there would be no direct impacts. Project construction could have indirect impacts on the Sacramento River from substances or materials falling into the river during construction activities. Implementation of the SWPPP required for the project would prevent these potential effects on the Sacramento River. This would be a less-than-significant impact. No mitigation is required.

d. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

The study area consists of predominantly disturbed and developed areas along both sides of the Sacramento River, with a narrow band of riparian habitat along the river. Despite these existing conditions, the open water portion of the river serves as a migration corridor for aquatic species; and, even though limited, the riparian habitat can be used by birds and other wildlife for dispersing along the Sacramento River corridor. The project would not require any work in the river; therefore, the would be no impacts related to aquatic species, including movement or nursery/breeding sites. Construction activities and staging could result in temporary interference with local wildlife movement along the edges of the river, and could interfere with local breeding activities, including bird nests, bat roosts, and underground burrows. Operation of the project would not be expected to result in any permanent impacts on wildlife corridors or nursery sites, and impacts would be less than significant.

e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

The City of West Sacramento 2035 General Plan includes two overarching goals, and supporting policies, for the preservation of sensitive native vegetation and wildlife communities and habitat and mature trees within the city (City of West Sacramento 2016). The City of Sacramento 2035 General Plan includes one overarching goal, and several supporting policies, for the protection of open space, natural areas, wildlife, and vegetation as integral to a sustainable environment within a larger regional ecosystem (City of Sacramento 2015).

The project would be consistent with the general plan goals and policies and would have minimal impacts on existing natural resources, vegetation, and wildlife. Construction of the project would not require any work within the Sacramento River or other water resources and would not result in any permanent impacts on open space or wildlife movement.

Construction of the proposed project would result in the removal of one protected cottonwood tree in the city of West Sacramento in ruderal woodland habitat north of the I Street Bridge. The tree would be removed for the construction of the new northwest ramps and supporting piers. No protected trees would be removed in the city of Sacramento.

Additional temporary impacts on protected trees could occur during ramp construction due to trimming of trees for construction access or damage from construction equipment operating within the dripline of trees. Temporarily affected trees include one protected valley oak tree in the city of Sacramento located in developed habitat beside the elevated part of the I Street Bridge at the edge of a parking lot and four protected trees (one apple, two valley oaks, and one American elm) in the city of West Sacramento in ruderal woodland. However, the protection measures in each city's tree ordinance would be implemented to avoid impacts on protected trees outside of the permanent impact area.

The tree ordinances of the City of West Sacramento and City of Sacramento would require avoidance, minimization, and compensatory mitigation for the loss of protected trees. Loss of protected trees would be a **potentially significant impact**. Implementation of Mitigation Measures BIO-1, BIO-2, and BIO-3 would ensure that the project avoids or minimizes temporary construction effects on protected trees. The loss of protected trees in the city of West Sacramento would be mitigated based on City of West Sacramento Tree Ordinance requirements as described below in Mitigation Measure BIO-15. This impact is considered **less than significant with mitigation incorporated**.

Mitigation Measure BIO-15: Compensate for Loss of Protected Trees

Within 1 year prior to construction, the project proponent will conduct a preconstruction inventory of all protected trees to be removed within the project area. The inventory will include the location, species, diameter of all trunks, approximate height and canopy diameter, and approximate age, in support of a tree permit for removal of the protected trees. All conditions of the tree permit will be implemented.

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

- If feasible, plant replacement trees at or near the location of the tree removal. 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. 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 adequate space is not 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, following the same replacement ratio, species, monitoring, and tree survival requirements described for the option above.

f. Conflict with the provisions of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan?

The portion of the study area on the west side of the river is within the 2018 Yolo Habitat Conservation Plan/Natural Communities Conservation Plan (Yolo HCP/NCCP) planning area. The Yolo HCP/NCCP provides ESA permits and associated mitigation for planned covered activities including infrastructure (e.g., roads and bridges), development (e.g., agricultural processing facilities, housing, and commercial buildings), and operation and maintenance activities, and implementation of the Yolo HCP/NCCP. The plan covers several natural communities and species, including riparian communities, valley elderberry longhorn beetle, western pond turtle, Swainson's hawk, and white-tailed kite.

The proposed project would be consistent with the Yolo HCP/NCCP. The project would construct new connections to an existing bridge structure within a mostly developed area in West Sacramento, and would have minimal impacts on existing natural resources, vegetation, and wildlife. The avoidance and minimization measures identified above as mitigation for specific project impacts are consistent with the measures in the plan to reduce impacts on special-status species. There would be no conflict with the Yolo HCP/NCCP; therefore, there would be no impact.

V. Cultural Resources

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:					
a.	Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?			X	
b.	Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?		X		
c.	Disturb any human remains, including those interred outside of dedicated cemeteries?		X		

Affected Environment

The cultural resources within the project study area were identified based on the research and analysis conducted for the separate I Street Bridge Replacement Project (ICF International 2016a, 2016b) and updated record searches conducted in March and April 2021 to identify any additional areas not covered as part of the 2016 record searches for the I Street Bridge Replacement Project. While for a different project, the research and analysis for the identification of historical resources is sufficient because the project study area for the proposed project is generally encompassed by the project study area for the I Street Bridge Replacement Project, except for a small section of work south of the UPRR tracks in West Sacramento and a small area within the parcel boundary of the Southern Pacific Railroad (SPRR) District. However, where the current project study area extends beyond the previous study area, there are either no historical resources or the extension occurs within the boundary of the Sacramento SPRR District, an identified historical resource that includes Sacramento Valley Station facilities. No additional research was necessary.

ICF conducted updated record searches at the Northwest Information Center (NWIC) and the North Central Information Center (NCIC). On March 9, 2021, the NCIC provided the results of a search request for a 0.25-mile search radius. On April 14, 2021, the NWIC provided the results of a records search request for a 0.25-mile search radius. These records searches did not identify any previously unidentified cultural resources that had not been surveyed as part of the I Street Bridge Replacement Project. The only portion of the project that had not received previous adequate survey coverage was an approximate 0.5-acre area located south of the I Street bridge approach on the West Sacramento side.

On August 4, 2021, ICF archaeologists conducted a pedestrian survey of the area south of the I Street Bridge approach that had not received previous adequate survey coverage. As a result of this survey, one isolated power pole structure was observed adjacent to the bridge.

A Sacred Lands File Search with the California Native American Heritage Commission (NAHC) was requested on March 31, 2021. On April 14, 2021, the NAHC responded stating that the results of the Sacred Lands File Search were positive. The City contacted the United Auburn Indian Community of the Auburn Rancheria, the Yocha Dehe Wintun Nation, and the Wilton Rancheria as part of Assembly

Bill (AB) 52 consultation efforts and to help identify any Sacred Sites. See Section XVIII, *Tribal Cultural Resources* for a detailed description of Native American consultation.

Historic Context

The project is located in an area historically attributed to two Native American groups: the Patwin (or Wintun) and the Nisenan Maidu.

The approximate maximum extent of Patwin territory in the late eighteenth and early nineteenth centuries was from the town of Princeton in Colusa County south to Suisun Bay and from the Sacramento River west across the eastern slope of the Coast Ranges (Johnson 1978). The Nisenan (also called Southern Maidu), while primarily occupying territories east of the Sacramento River, also used land west of the river (Johnson 1978:350; Levy 1978:Figure 1; Wilson and Towne 1978:Figure 1). The western boundary of Nisenan territory was the western bank of the Sacramento River. The eastern boundary was "the line in the Sierra Nevada mountains where the snow lay on the ground all winter" (Littlejohn 1928).

Historic maps and accounts of early travelers to the Sacramento Valley testify that tule marshes, open grasslands, and occasional oak groves (Jackson 1851; Ord 1843; Wyld 1849) characterized the project vicinity. The area was generally wet in winter and often subject to flooding; the weather was dry in summer. Much of the floodplain presumably was sparsely inhabited, because Native Americans typically situated their larger, permanent settlements on high ground along the Sacramento and American Rivers (Bennyhoff 1977; Kroeber 1925:351, 1932; Levy 1978; Wilson and Towne 1978:388).

Ethnographic accounts documented several Native American villages, both apparently Nisenan, near the project. The closest, *Sa'cum* was located approximately 0.5 mile east of the project, near 10th and J Streets in Sacramento, while *Momol* was situated somewhere on the southeast side of the original confluence of the American and Sacramento Rivers (Wilson and Towne 1978:388, Figure 1; Kroeber 1925:394, Plate 37).

The project is situated where the I Street Bridge crosses the Sacramento River between the cities of Sacramento and West Sacramento. The river front area of West Sacramento, located in the west side of the project study was also active during the 1850s; originally established as the Town of Washington, the area primarily developed as farming and fishing community with a few businesses that catered to Sacramento River travelers. By the late 1980s, the community officially incorporated as the City of West Sacramento. This area in the west side of the project study area is generally comprised of sporadic residential and commercial development that began in the early 1900s and has continued to the present (ICF International 2016b:18).

The river front of Sacramento, located in the east side of the project study area, was a focal point of the Sacramento's development with importance in flood control, shipping, railroad, and industrialization. By the 1850s, Sacramento was one of the most active cities in California and gained prominence as a centrally placed urban core to facilitate activities associated with the Gold Rush. The City of Sacramento gained prominence in politics paying the State of California $1 million for the designation of becoming the state's capital. The post-contact history and development of these sections of Sacramento and West Sacramento are well-documented.

Project Study Area

The project study area follows the boundary of the total project construction footprint in addition to all temporary construction easements (TCE). In general, the project has limited potential for visual or auditory impacts, so the project study area is largely limited to the project footprint, inclusive of project features and all TCEs.

No part of the present undertaking occurs upon or physically alters the I Street Bridge. TCEs flanking their construction footprints accommodate all locations of potential noise or vibration impacts. This includes potential noise and vibration impacts for select excavation areas of a maximum 3-foot depth, and installation of cast-in-drilled-hole (CIDH) piles to a maximum depth of 6 feet. The project study area includes all horizontal and vertical maximum extents of potential impacts. The proposed undertaking has no potential for effects upon the UPRR rail segment upon the I Street Bridge, which is therefore not included in the project study area. Though other rail segments are nearby the project area, they too are outside of the project study area, as no proposed construction or TCEs encroach upon any rail right-of-way (ROW), and the project proposes no work directly above rail ROW in manner potentially affecting any segment. Therefore, all rail segments and their ROWs are outside of the project study area, vertical or otherwise.

On the project's West Sacramento side, construction footprint and TCEs are present immediately north and south of the I Street Bridge and its present approach from C Street. Here, the project study area includes portions of three West Sacramento city streets: D, 1st and 2nd Streets; the RD 811 Levee: a previously evaluated property with no historical significance, and located upon RD 811 Levee crown, the recent Riverwalk Park. Relative to potential effects, the character of the proposed project's West Sacramento portion is an open landscape of lawn and mature tree specimens. The character of this landscape does not necessitate inclusion of their full parcels into the project study area.

The construction footprint at the project's eastern portion encroaches upon the Sacramento SPRR District beneath and immediately east of I-5, under the northbound onramp to I-5 from I Street. In this second portion, the project features are planned at the location of the lawn-and-paved site of a former train shed and multiple rail sidings, all of which have been removed. Furthermore, the planned activities in this area include the modification of existing pedestrian and bikeways to form more seamless transitions with the proposed bikeway. Elevated above the proposed construction footprint and TCEs, the Westside Freeway (I-5) itself is outside of the vertical project study area.

The project study area includes the small segments of the I Street Bridge roadway approach ramps that directly connect to the I Street Bridge. The separate and approved I Street Bridge Replacement Project proposes to remove the three approach structures in their entirety: the two I Street Bridge approaches from either side of the bridge and the Jibboom Street approach.

Where the project proposes construction and TCE, the project study area includes portions, but not the entirety of, the Sacramento East Levee, and the recent Sacramento River Bike Trail upon it. The nature of the proposed work, present upon limited portions of the East Levee's crown extends within the resource's boundary. The project study area is near, but not within, the Old Town Sacramento Historic District, its northern boundary being the southern edge of the I Street Approach.

Resource Identification

To be eligible for listing on the NRHP/CRHR under Evaluation Criteria A/1, B/2, or C/3, an architectural resource must be associated with important events, important persons, or an exemplary example of a type, period, or method of construction. Similarly, an archaeological site must contain artifact assemblages, features, or stratigraphic relationships associated with important events, or important persons, or be exemplary of a type, period, or method of construction to be eligible under Evaluation Criteria A/1, B/2, or C/3 (36 CFR 60.4, State CEQA Guidelines Section 15064.5(a)(1) and (3) and (c)(1) and (2)).

To be eligible under Criterion D/4, a historic resource need only show the potential to yield important information (National Park Service 2002). Rarely are architectural resources eligible under Criterion 4/D. An archaeological resource that qualifies as a "historical resource" under CEQA or as an historic property under Section 106 of the National Historic Preservation Act, generally, qualifies for listing under Criterion "4" of the CRHR (State CEQA Guidelines Section15064.5 (a)(3)(D)). An archaeological resource may qualify for listing under Criterion D/4 when it can be demonstrated that the resource has the potential to contribute significantly to the study of questions of scientific and/or historical importance.

In addition to meeting NRHP or CRHR criteria for significance, an eligible built environment historical resource must retain integrity, which is expressed in seven aspects: location, design, setting, workmanship, materials, feeling, and association. All properties change over the course of time. Consequently, it is not necessary for a property to retain all its historic physical features or characteristics. The property must retain, however, the essential physical features that enable it to convey its historic identity. The essential physical features are those features that define both why a property is significant and when it was significant.

Description of Archaeological Resources

As a result of the previous studies, background research, and field survey, no archaeological resources were identified in the project study area.

Description of Built-Environment Historical Resources

Review of previous studies, background research, and field survey resulted in the identification of three built-environment historical resources within the project study area. The field survey did identify one isolated, wood transmission tower just south of the bridge abutments in West Sacramento. However, there is no potential for this to qualify as an eligible historical resource. Even if the tower was found significant under NRHP/CRHR criteria, it would not possess integrity as an isolated transmission tower for a defunct line.

No properties were evaluated for their potential historical significance as part of this study. Properties of local significance that have been designated under a local preservation ordinance (local landmarks or landmark districts) are presumed to be significant resources for purposes of CEQA unless a preponderance of evidence indicates otherwise (Pub. Resources Code Section 5024.1, 14 CCR Section 4850).

I Street Bridge (Bridge No. 22C0153) (34-002349)

The I Street Bridge was listed in the NRHP in 1982 based on a nomination form prepared by John W. Snyder. The I Street Bridge meets NRHP eligibility Criterion A in the area of transportation and

Criterion C in the area of engineering. The bridge is significant at the statewide level. In addition, this historical resource is listed in the Sacramento Register of Historical and Cultural Resources as the Station Historic District. The I Street Bridge retains integrity of location, design, materials, workmanship, feeling, and association. The setting now features significant modern tourist, business, and housing development, while a significant portion of the Sacramento rail yard, present in 1981, when the bridge was nominated, is gone. The integrity of the bridge is largely unchanged since it was evaluated and listed in the NRHP in 1982 except for its setting, which is not an essential aspect of integrity for the bridge to convey its significance. The I Street Bridge retains sufficient integrity to convey its significance.

Because the I Street Bridge is listed in the NRHP, it is automatically listed in the CRHR under Criteria 1 and 3. The I Street Bridge is considered a historical resource for the purposes of CEQA.

Sacramento Southern Pacific Railroad Station District

The SPRR Depot and Railway Express Agency Building were both listed in the NRHP in 1975. The two buildings, however, as well as several surviving elements associated with the buildings, were determined eligible for listing in the NRHP as the Sacramento SPRR Station District in 2016 by the California Department of Transportation. The district was determined eligible under Criteria A and C under the theme of Railway Transportation and architectural design with a period of significance from 1925 to 1929. In addition, this historical resource is listed in the Sacramento Register of Historical and Cultural Resources as the Station Historic District. The Sacramento SPRR Station District retains integrity of location, design, materials, workmanship, feeling and association. The integrity of setting from the period of significance has been lost, but that is not a key aspect of the historic property's integrity. The Sacramento SPRR Station District retains sufficient integrity to convey its significance.

Because the Sacramento SPRR Station is listed in the NRHP, and the Sacramento SPRR Station District has a determination of eligibility, it is automatically listed in the CRHR under Criteria 1 and 3. The Sacramento SPRR Station is considered a historical resource for the purposes of CEQA.

Sacramento River East Levee (34-000490)

The Sacramento River East Levee is significant under NRHP Criterion A and CRHR Criterion 1, at the local level, for its association with early advances in water management in California that resulted in making settlement and expansion of infrastructure in the region possible between 1850 and 1911. The structure is still located in its historic setting, retains its historic alignment, shows evolution of levee construction, and continues to function as a flood control structure. As such of levee appears to retain its integrity of location, design, materials, workmanship, feeling, association. Overall, this segment of the Sacramento River East Levee retains sufficient integrity to convey its significance.

Because the Sacramento River East Levee has a determination of eligibility under NRHP and CRHR Criteria A/1. The Sacramento River East Levee is considered a historical resource for the purposes of CEQA.

Discussion

a. Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?

The project would construct new structural features with the potential to impact historical resources. Those project features are summarized in Table 11.

Table 11. Project Activities within the Vicinity of Each Resource

Historical Resource	Project Activity
I Street Bridge (Bridge No. 22C0153) (34-002349)	The project would not physically alter the I Street Bridge. The proposed project would retain portions of the roadway approach ramp structures that attach to each end of the upper deck of the existing I Street Bridge and span over the railroad tracks (with the project, those approach ramp portions would not be removed by the separate I Street Bridge Replacement Project). The proposed project would construct new ADA-compliant ramps that would attach to the retained approach ramp portions. The approach ramps are not character-defining features of the historical resource. The project would install new ramps within setting of the resource that would connect to the retained portions of the approach ramps.
Sacramento Southern Pacific Railroad Station District	The project would alter existing pedestrian connection facilities and require construction staging within the boundary of the historic district.
Sacramento River East Levee (34-000490)	The project would install new access ramps within setting of the resource. Construction equipment use and repaving of bike lanes would occur within the boundary of the resource, but the resource would be restored to existing conditions as part of the project.

The proposed project has no potential to physically affect the I Street Bridge. The roadway approach ramps that will be removed by the separate I Street Bridge Replacement Project are not character-defining features of the historical resource. The construction of new ramp structures that would attach to retained portions of the roadway approach ramps has the potential to impact the I Street Bridge by building new ramps within the setting of the historical resource. The existing roadway approaches were in place when the bridge was listed in the NRHP and the proposed ramps maintain access to the upper bridge deck, though on a smaller scale (see Appendix A). Furthermore, the setting of the I Street Bridge is not a key aspect of the historical resource's integrity, so adding to features within the setting would not adversely affect the bridge. The project would result in a less-than-significant impact on the I Street Bridge.

Because the setting of the Sacramento River East Levee has not been identified as key aspects of its integrity, the project activities within its setting would not cause an impact. Furthermore, the construction of the northeast ramp would be a consistent change within the setting of the historical resource. No changes to the levee are proposed as part of the project, and the resource and all existing features would be restored to existing conditions. The project would result in a less-than-significant impact on the Sacramento River East Levee.

The alteration of the existing pedestrian connection between the Sacramento Valley Station parking lot and the westbound I Street Bridge roadway approach ramp structure for the interim phase of the

project would be within the setting of the Sacramento SPRR Station District but does not have the potential to impact the historical resource. The pedestrian connection has not been identified as a character-defining feature of the district, nor has it been identified as a district contributor. The project would not impact the Sacramento SPRR Station District.

Construction-generated vibration has the potential to impact historical resources where those resources are particularly susceptible to damage from vibration, such as adobe or masonry buildings that are in a deteriorated state. The only historical resource close enough to be impacted by construction-generated vibrations is the I Street Bridge, which is not vulnerable to this level of vibration. As a railroad and vehicular bridge, it was designed to withstand vibration and is not a fragile historical resource. No other construction activities or operation of the proposed project could result in potential impacts on historic resources. No mitigation is necessary.

b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?

There are no known archaeological resources located within the project study area. If any buried resources were encountered and damaged during construction, the destruction of buried archaeological resources would be a **potentially significant impact**. Implementation of Mitigation Measure CUL-1 would reduce this impact to a less-than-significant level. This impact is considered **less than significant with mitigation incorporated**.

Mitigation Measure CUL-1: Implement Measures to Protect Previously Unidentified Cultural Resources

The project proponent shall ensure that construction specifications include the following information in the grading notes.

- Construction shall stop if potential cultural resources are encountered. It is possible that previous activities have obscured surface evidence of cultural resources. If signs of an archeological site, such as any unusual amounts of stone, bone, or shell, are uncovered during grading or other construction activities, work will be halted within 100 feet of the find and the City of West Sacramento will be notified. A qualified archeologist will be consulted for an onsite evaluation. If the site appears to be eligible for listing in state or federal registers, additional mitigation, such as further testing for evaluation or data recovery, may be necessary.
- In the event resources are discovered, the City of West Sacramento will retain a qualified archaeologist to assess the find and to determine whether the resource requires further study. Any previously undiscovered resources found during construction will be recorded on appropriate California Department of Parks and Recreation 523 forms and evaluated for significance under all applicable regulatory criteria.
- All work will stop in the immediate vicinity of the find, and, if the find is determined to be an important cultural resource, the City of West Sacramento will make available contingency funding and a time allotment sufficient to allow recovery of an archaeological sample or to implement an avoidance measure. Construction work may continue on other parts of the project while archaeological mitigation takes place.

c. Disturb any human remains, including those interred outside of dedicated cemeteries?

There are no known formal cemeteries within the project site, and neither the results of the records search, Native American outreach, or the pedestrian survey indicates that human remains are present within the project site. However, there is always the possibility that ground-disturbing activities during construction may uncover previously unknown buried human remains; such disturbance would be considered a **potentially significant impact**. Implementation of Mitigation Measure CUL-2 would reduce this impact to a less-than-significant level. This impact is considered **less than significant with mitigation incorporated**.

Mitigation Measure CUL-2: Implement Measures if Construction Activities Inadvertently Discover or Disturb Human Remains

The project proponent will ensure that construction specifications include the following in the grading notes.

- If human remains are discovered during any phase of construction, including disarticulated or cremated remains, the construction contractor will immediately cease all ground-disturbing activities within 100 feet of the remains and notify the City of West Sacramento.
- In accordance with California State Health and Safety Code Section 7050.5, no further disturbance will occur until the following steps have been completed.
    - The County Coroner has made the necessary findings as to origin and disposition pursuant to Public Resources Code Section 5097.98.
    - If the remains are determined by the County Coroner to be Native American, NAHC will be notified within 24 hours, and the treatment and disposition of the remains will comply with NAHC guidelines.
- It is further recommended that a professional archaeologist with Native American burial experience conduct a field investigation of the specific site and consult with the Most Likely Descendant (MLD), if any, identified by NAHC. As necessary and appropriate, a professional archaeologist may provide technical assistance to the MLD, including excavation and removal of the human remains.

VI. Energy

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:					
a.	Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?			X	
b.	Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?				X

Affected Environment

Project construction would primarily consume diesel and gasoline through operation of heavy-duty construction equipment, material deliveries, and debris hauling. Energy use associated with project construction is estimated to result in the total short-term consumption of fuel from diesel and gasoline-powered construction equipment. This demand would cease once construction is complete.

Under operation of the project, non-vehicular transportation would be encouraged by offering an additional bicycle and pedestrian route for residents and commuters.

Discussion

a. Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

The proposed project would require temporary energy consumption during construction, including fuel for construction and personnel equipment and vehicles. During operation, the pedestrian/bicycle ramps would be lit at night for safety purposes. The additional energy demand for this type of lighting would be low. In addition, as described in Section I, *Aesthetics*, the Jibboom Street and I Street approaches, and their associated lighting, would be removed under the separate I Street Bridge Replacement Project. Also, new lighting would be designed in accordance with the Cities of Sacramento and West Sacramento lighting design guidelines that include energy saving features/components.

The proposed project would not result in impacts on energy demand or energy resources. When balancing the energy used during construction against the energy saved by offering an alternative to vehicular route across the river, the project would not result in substantial energy impacts. The project's use of energy during construction would be necessary to provide for improved bicycle and pedestrian transportation and would not be wasteful or inefficient. Therefore, the project would not result in an inefficient, wasteful, and unnecessary consumption of energy, and impacts on energy would be less than significant. No mitigation is required.

b. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

The project does not obstruct state or local plans for renewable energy or energy efficiency. There would be no impact.

VII. Geology, Soils, and Paleontological Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:				
a. Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				X
1. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.				X
2. Strong seismic ground shaking?				X
3. Seismic-related ground failure, including liquefaction?				X
4. Landslides?				X
b. Result in substantial soil erosion or the loss of topsoil?				X
c. Be located on a geologic unit or soil that is unstable or that would become unstable as a result of the project and potentially result in an onsite or offsite landslide, lateral spreading, subsidence, liquefaction, or collapse?				X
d. Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?				X
e. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems in areas where sewers are not available for the disposal of wastewater?				X
f. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?		X		

Affected Environment

The proposed project lies within the study area for the *Preliminary Geotechnical and Foundation Report I Street Bridge Replacement Sacramento, California* prepared for the I Street Bridge Replacement project (GEI Consultants 2014). This section summarizes information in the I Street Bridge Replacement report, and where data from other sources have been used, those sources are also cited.

Geology and Soils

The project site is situated within the Great Valley geomorphic province of California. The Great Valley is a gently-sloping to flat alluvial plain east of the Coast Ranges and west of the Sierra Nevada. It is a northwest-trending structural trough that was formed by the westward tilting of the Sierra Nevada block.

The Sacramento Valley in general is underlain by alluvial, lacustrine, and marine sedimentary deposits that have accumulated as the structural trough formed and the adjacent mountain ranges were elevated. The thickness of the sediments varies from a thin veneer along the valley margins to thousands of feet at the axis of the trough (GEI Consultants 2014).

According to the Geologic Map of Late Cenozoic Deposits of the Sacramento Valley and Northern Sierran Foothills (Helley and Harwood 1985), the site is immediately underlain by Holocene-age (less than 11,000 years old) alluvial deposits. The natural alluvial deposits in the area typically consist of unconsolidated silt, sand, and gravel, which were deposited by the complex Sacramento and American River system. Recent alluvial deposits are horizontally bedded, channeled, and relatively thin. These recent alluvial deposits are underlain by older (Pleistocene-age) alluvium of the Riverbank and/or Turlock Lake Formations estimated to be between 11,000 and 1.8 million years old. The deeper formations consist of semi-consolidated silt, sand, and gravel deposited as alluvial fans by the streams and rivers that drained the Sacramento Valley and Sierra Nevada. The general vicinity of the site is reclaimed land that was filled-in from approximately the 1860s to the 1900s. The magnitude of the fill material that was placed at that time is unknown (GEI Consultants 2014).

Primary Seismic Hazards

The State of California considers two aspects of earthquake events primary seismic hazards: surface fault rupture (disruption at the ground surface as a result of fault activity) and seismic ground shaking. The risk of fault rupture in the project area is very low because no faults are mapped at or near the project site. The nearest fault is the Dunnigan Hills Fault to the east, near Woodland (GEI Consultants 2014). The site is not in an Alquist-Priolo Special Studies Zone. However, the site is in a seismically active area and strong shaking could be expected in the life of the facility.

Secondary Seismic Hazards

Secondary seismic hazards refer to seismically induced liquefaction, landsliding, and related types of ground failure. These hazards are addressed briefly below.

Liquefaction

Liquefaction is the process in which soils and sediments lose shear strength and fail during seismic ground shaking. The susceptibility of an area to liquefaction is determined largely by the depth to groundwater and the properties (e.g., texture and density) of the soil and sediment within and above the groundwater.

There is a risk of liquefaction at the project site. Based on historic exploratory borings, the project site is underlain by clean to silty sands in a loose to medium-dense condition below the groundwater table. The clean to silty sand layer starts at an approximate elevation of 0 to 10 feet (NAVD 88) and ranges from 35 to 45 feet thick. This soil layer was found to be prone to liquefaction. Liquefaction analyses were performed on several historical explorations that include this silty sandy layer (GEI Consultants 2014).

Landslides

A review of the California Department of Conservation online maps for landslide hazards reveals that no information is available for the project area (California Department of Conservation 2016). However, the area does not appear particularly susceptible for landslides given its relatively flat topography.

Paleontological Resources

As described above, geological units of the project are Holocene-age alluvial deposits. The paleontological sensitivity of alluvial deposits is likely low because of the young age of the unit (i.e., less than 11,000 years old). Paleontological resources are considered to be older than recorded human history and/or older than middle Holocene (i.e., older than about 5,000 radiocarbon years) (Society of Vertebrate Paleontology 2010). However, it is possible that lower portions of the unit contain paleontological resources.

Discussion

a.1. Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving: Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.

a.2. Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving: Strong seismic ground shaking?

a.3. Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving: Seismic-related ground failure, including liquefaction?

a.4. Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving: Landslides?

c. Be located on a geologic unit or soil that is unstable or that would become unstable as a result of the project and potentially result in an onsite or offsite landslide, lateral spreading, subsidence, liquefaction, or collapse?

Checklist items a and c. There are no known active faults in or near the project site. The risk of strong seismic ground shaking is low. Compliance with the appropriate building regulations would ensure that the bridge, road, and other project features are not damaged as a result of seismic activity. The project site is nearly level, so there is little risk of landslides. The project would comply with California Building Standards Code (CBSC) to ensure that all required soil stabilization, earthquake design, and construction measures are implemented. There would be no impact.

b. Result in substantial soil erosion or the loss of topsoil?

Ground-disturbing earthwork associated with project construction may increase erosion rates or loss of topsoil. However, the project would be required to obtain a National Pollution Discharge Elimination System (NPDES) Construction General Permit (Order No. 2009-0009-DWQ [as amended by 2010-0014-DWQ and 2012-0006-DWQ]), which requires preparation of a SWPPP to implement sediment, erosion, and pollution prevention control measures. Compliance with these erosion-related requirements would ensure that the construction activities do not result in substantial erosion rates or loss of topsoil. There would be no impact.

d. Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?

Expansive soil, as defined in Table 18-1 of the Uniform Building Code (1994), does not appear to be extensive in the project area but could occur locally; the potential impact on project structures would be evaluated during soil classification as required by the CBSC. All construction would be done in compliance with appropriate building regulations. There would be no impact.

e. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems in areas where sewers are not available for the disposal of wastewater?

No aspect of the project would include the use of septic tanks or alternative wastewater disposal systems; therefore, there would be no impact.

f. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

If fossils are present in the project area, they could be damaged by earth-disturbing activities (i.e., excavation and grading) during construction. Although the paleontological sensitivity of the Holocene alluvial deposit is likely low, the lower portion of the unit could contain fossils. Substantial damage to or destruction of significant paleontological resources, as defined by the Society of Vertebrate Paleontology (2010), would be a **potentially significant impact**. Implementation of Mitigation Measure GEO-1 would reduce this impact to a less-than-significant level. This impact is considered **less than significant with mitigation incorporated**.

Mitigation Measure GEO-1: 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 qualified professional paleontologist can assess the nature and importance of the find and 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 also include preparation of a report

for publication describing the finds. The project proponent will be responsible for ensuring that recommendations regarding treatment and reporting are implemented.

VIII. Greenhouse Gas Emissions

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:					
a.	Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?			X	
b.	Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?				X

Affected Environment

Regulatory Background

Climate change is a complex phenomenon with the potential to alter local climatic patterns and meteorology. Increases in anthropogenic greenhouse gas (GHG) emissions have been unequivocally linked to recent warming and climate shifts (Intergovernmental Panel on Climate Change 2007). Although modeling indicates that climate change will result globally and regionally, characterizing the precise *local* climate characteristics and predicting precisely how various ecological and social systems will react to any changes in the existing climate at the local level remain uncertain. Regardless of this uncertainty in precise predictions, it is widely understood that some degree of climate change is expected as a result of past and future GHG emissions.

The most common GHGs resulting from transportation projects are carbon dioxide (CO_2), methane (CH_4), and nitrous oxide (N_2O). Although no current federal law specifically relates to climate change or the reduction of GHGs, the USEPA is developing proposed regulations under the Federal Clean Air Act (FCAA). California has adopted statewide legislation addressing various aspects of climate change and GHG emissions mitigation. Much of this establishes a broad framework for the State's long-term GHG reduction and climate change adaptation program. Of particular importance is AB 32, which establishes a statewide goal to reduce GHG emissions back to 1990 levels by 2020. Senate Bill (SB) 375 supports AB 32 through coordinated transportation and land use planning with the goal of more sustainable communities. SB 32 extends the state's GHG policies and establishes a near-term GHG reduction goal of 40 percent below 1990 emissions levels by 2030. Executive Order (EO) B-55-18 identifies a longer-term goal for 2045.[3]

[3] EO B-55-18 has set forth a reduction target to achieve carbon neutrality by 2045. This target has not been legislatively adopted.

Greenhouse Gas Thresholds

The State CEQA Guidelines do not indicate what amount of GHG emissions would constitute a significant impact on the environment. Instead, they authorize the lead agency to consider thresholds of significance previously adopted or recommended by other public agencies, or recommended by experts, provided the decision of the lead agency to adopt such thresholds is supported by substantial evidence (State CEQA Guidelines Sections 15064.4(a) and 15064.7(c)). The California Supreme Court decision in the *Centers for Biological Diversity et al. vs. California Department of Fish and Wildlife, the Newhall Land and Farming Company* (November 30, 2015, Case No. S217763) confirmed that there are multiple potential pathways for evaluating project-level GHG emissions consistent with CEQA, depending on the circumstances of a given project. These potential pathways include reliance on a business-as-usual (BAU) model, tiering from a qualified climate action plan CAP, use of numeric thresholds, and compliance with regulatory programs. Use of a BAU threshold is most applicable to land use development projects with emission sources covered by the AB 32 scoping plan.

The City of West Sacramento is currently preparing a comprehensive update to its original draft Climate Action Plan (WSCAP) that was prepared in 2009 but was never adopted. The WSCAP will demonstrate the City's commitment to reducing GHG emissions in a manner that is consistent with the State of California's ambitious GHG reduction goals and reflective of the local community context.

The City of Sacramento adopted the Sacramento Climate Action Plan (CAP) in 2012 to reduce community-wide GHG emissions, then incorporated the CAP into the 2035 General Plan adopted on March 3, 2015 (City of Sacramento 2015). However, the individual measures outlined in the CAP primarily apply to land use development projects, as opposed to new roadway projects. Accordingly, this analysis evaluates GHG emissions using a combination of numeric thresholds and compliance with regulatory programs. Numeric thresholds considered include those adopted by SMAQMD (as applicable to transportation projects) and net zero above existing conditions. The most applicable GHG regulation to transportation projects is SB 375. SB 375 was enacted to reduce GHG emissions from automobiles and light trucks through integrated transportation, land use, housing, and environmental planning. Under this law, SACOG is tasked with developing a sustainable communities strategy that provides a plan for meeting per capita CO_2 emissions levels allocated to SACOG by CARB. These levels are 7 percent below 2005 emissions levels by 2020 and 19 percent below 2005 levels by 2035. Accordingly, the targets established by SB 375 address not only near-term (2020) emissions but also long-term (2035) emissions consistent with statewide executive orders, judicial attention, and recommendations made by the Association of Environmental Professionals Climate Change Committee. As applicable, this analysis also considers project consistency with the larger goals and objectives of the City of Sacramento's CAP.

Furthermore, the SMAQMD has adopted a construction threshold of 1,100 metric tons of carbon dioxide equivalent (CO_2e) per year for construction projects (Sacramento Metropolitan Air Quality Management District 2021). YSAQMD has not adopted any construction or operational GHG thresholds, thus the project's construction GHG emissions were analyzed against the SMAQMD threshold.

Discussion

a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

Construction Emissions

Construction activities would generate short-term emissions of CO_2, CH_4, and N_2O from the use of equipment (e.g., graders) and on-road vehicles (e.g., employee commuter cars). GHG emissions generated by construction activities were estimated using SMAQMD's RoadMoD. Tables 12 and 13 show that the total construction-period GHG emissions associated with phase one and phase two would be approximately 3,864 metric tons of CO_2e. These emissions would be generated between 2024 and 2027. As such, the proposed project would emit approximately 966 metric tons of CO_2e per year prorated over 4 years, or 129 metric tons of CO_2e per year prorated over a 30-year project life (Sacramento Metropolitan Air Quality District 2014).[4]

Table 12. Phase One Construction-Period GHG Emissions Estimates (Metric Tons)

Phase	CO_2	CH_4	N_2O	CO_2e
Site Preparation	23	<1	<1	24
Grading/Excavation	32	<1	<1	32
Drainage/Utilities/Landscaping	26	<1	<1	26
Paving Activities	1,833	<1	<1	1,859
Project Total (2022)	*1,913*	*<1*	*<1*	*1,941*

Note: Emissions estimated using SMAQMD RoadMod Version 9.0.0. Refer to Appendix 3-1.

Table 13. Phase Two Construction-Period GHG Emissions Estimates (Metric Tons)

Phase	CO_2	CH_4	N_2O	CO_2e
Site Preparation	23	<1	<1	23
Grading/Excavation	30	<1	<1	31
Drainage/Utilities/Landscaping	18	<1	<1	19
Paving Activities	1,823	<1	<1	1,850
Project Total (2022)	*1,895*	*<1*	*<1*	*1,923*

Note: Emissions estimated using SMAQMD RoadMod Version 9.0.0. Refer to Appendix 3-1.

As discussed above, construction of the project would generate an average of 953 metric tons of CO_2e per year for approximately 4 years, or 129 metric tons of CO_2e per year over a 30-year project lifetime, which is below SMAQMD's construction threshold. This impact would be less than significant. While not required to achieve a less-than-significant impact conclusion, implementation of SMAQMD's recommended BMPs (Minimization Measure GHG-1) would further reduce short-term construction emissions, consistent with the City of Sacramento's commitment to GHG mitigation.

[4] Currently, there are limited options to mitigate construction GHG emissions on site. After applying on-site mitigation, a project may consider amortizing the construction emissions over the life of the project and adding the emissions to the operational GHG emissions.

Minimization Measure GHG-1: Implement SMAQMD's Recommended Construction GHG BMPs

The project proponent will implement the following SMAQMD's recommended GHG reduction measures, to the extent feasible.

- Improve fuel efficiency from construction equipment.
    - 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.
    - 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.
    - Train equipment operators in proper use of equipment.
    - Use the proper size of equipment for the job.
    - Use equipment with new technologies (repowered engines, electric drive trains).
- Perform onsite 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 a CARB-approved low carbon fuel for construction equipment. (NO_x 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.
- Use SmartWay certified trucks for deliveries and equipment transport.
- Develop a plan to efficiently use water for adequate dust control.

Operational Emissions

The project would not materially change traffic volume, fleet mix, speed, or any other factor that would cause an increase in emissions relative to the no build alternative. Therefore, the project would not result in an increase in operational emissions.

The project also is consistent with state (SB 375) and local (e.g., City of Sacramento's CAP) plans to reduce GHG emissions from mobile sources. The proposed project would improve connectivity to, and accessibility of, businesses, residential uses, and new development opportunity sites in West Sacramento and Sacramento. The upper deck conversion would provide alternative modes of transportation for crossing the Sacramento River that would not have GHG emissions. This is consistent with the City of Sacramento's CAP to support connected neighborhoods and alternative transportation.

The proposed project (ID YOL19424) is listed in the 2020 MTP/SCS (Sacramento Area Council of Governments 2019a). The Final EIR for the 2020 MTP/SCS demonstrates that projects identified in the 2020 MTP/SCS meet the CARB's issued SB 375 GHG targets for the SACOG region in 2020 and 2035 (Sacramento Area Council of Governments 2019b). GHG emissions associated with the 2020 MTP/SCS, including those projects identified in the 2020 MTP/SCS, therefore would be considered less than significant. The design concept and scope of the proposed project are consistent with the project description in both documents. Because the proposed project is identified and consistent with SACOG's 2020 MTP/SCS, which was found to have a less-than-significant GHG impact, project-level GHG emissions would be consistent with SB 375 and would be considered less than significant.

b. Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Based on the analysis shown above, the proposed project is consistent with SB 375, SACOG's 2020 MTP/SCS, and the goals and objectives of the City of Sacramento's CAP to reduce GHG emissions from mobile sources. There would be no impact.

IX. Hazards and Hazardous Materials

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:					
a.	Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?			X	
b.	Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?		X		
c.	Emit hazardous emissions or involve handling hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?				X
d.	Be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?		X		
e.	Be located within an airport land use plan area or, where such a plan has not been adopted, be within two miles of a public airport or public use airport, and result in a safety hazard or excessive noise for people residing or working in the project area?				X
f.	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?			X	
g.	Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?				X

Affected Environment

The setting and subsequent analysis for hazards and hazardous materials relied on the results of the Initial Site Assessment (ISA) Update, Sacramento California, prepared for the I Street Bridge Replacement Project (Blackburn Consulting 2016). The ISA assessed whether potential sources or indications of hazardous waste contamination are present within the I Street Bridge Replacement Project footprint, within part of which the proposed project is located. A records search of the State Water Resources Control Board's GeoTracker database was also conducted for areas of the proposed project the ISA did not cover (State Water Resources Control Board 2021). No hazardous waste sites or facilities were identified as a result of the GeoTracker database search.

Lead Based Paint and Asbestos Containing Materials

Prior to 1978, lead compounds were commonly used in interior and exterior paints. Prior to the 1980s, building materials often contained asbestos fibers, which were used to provide strength and fire resistance. Demolition or modification of older structures has the potential to release lead particles or asbestos fibers to the air where they may be inhaled by construction workers and the general public. Federal and state regulations govern the demolition and disposal of structures containing lead-based paint (LBP) and/or asbestos containing materials (ACM). Loose and peeling paint must be disposed of as a California and/or federal hazardous waste if the concentration of lead exceeds applicable waste thresholds. Activities that disturb materials containing any amount of asbestos are subject to certain requirements of the California Division of Occupational Safety and Health (Cal/OSHA) asbestos standard found in 8 CCR 1529.

The Hazardous Materials Survey Final Report (Entek Consulting Group, Inc. 2015) prepared for the I Street Bridge Replacement Project concluded that paint containing more than 5,000 parts per million (ppm) of lead and classified as LBP is present on the railings of the northeast approach roadways. In addition, the gaskets at the base of light boxes on the northeast bridge approach structure was determined to be pure lead. The report also concluded that ACM are present in the railing gaskets and the fastener sealants of the bridge (Entek Consulting Group, Inc. 2015).

Aerially Deposited Lead

Aerially deposited lead (ADL) has been found to occur in soils adjacent to highways and high use roadways. The lead is presumably from the historical use of leaded gasoline and subsequent exhaust emissions. The ISA identified the potential for encountering ADL in soil in West Sacramento along C Street, 2nd Street, and at the bridge approach/viaduct leading from C Street. In addition, the existing I Street Bridge approach in Sacramento leading from I Street has been present since 1916 and, therefore, also has the potential to be contaminated with ADL.

Areas with Known Recognized Environmental Conditions

West Sacramento

Project components north of the bridge on the west side of the river are located in an area identified in the ISA as “Area B” (Assessor Parcel Numbers [APNs] 010-372-001 and -002). The ISA did not identify any specific issues in regulatory databases. And although historical site development can be an indication of potential contamination sources such as leach fields, septic tanks, buried heating oil tanks, and pesticide usage, the ISA considered the risk at these parcels to be low.

The area located under the raised approach of the I Street Bridge was identified in the ISA as “Area Y.” This area is located near parcels that have documented soil and groundwater impacts from metals and total petroleum hydrocarbons (TPH) due to historic releases from Capital Plating. Although Area Y has not been identified in regulatory records searches, its proximity to known soil and groundwater contamination increases the potential to encounter hazardous materials. However, only a small part of the temporary disturbance limits extends into this site. No excavation or ground disturbance would occur in this area. As a result, the risk of encountering hazardous materials in this area is low.

Project components south of the UPRR tracks are in an area not identified by the ISA. No listings for hazardous materials waste sites were identified in the GeoTracker database (State Water Resources

Control Board 2021). Regardless, soils next to railroad tracks have typically been affected by heavy metals, TPHs as diesel, fuel oil, and polychlorinated biphenyls (PCBs). Soils along railroad tracks may be affected by railroad ties (polynuclear aromatics) or slag ballast used to set the ties (heavy metals). As a result, it is possible that soils in the immediate area of the railroad tracks are contaminated.

Sacramento

Most of the footprints the proposed northeast and southeast ramps are within an area identified by the ISA as "Area X" and are associated with the Sacramento Railyards, an area historically developed as a locomotive maintenance and rebuilding facility from the 1860s to the early 1990s. Previous operations resulted in underlying soil and groundwater impacts.

During the 1980s and 1990s, remediation activities included demolition of several structures, removal of railroad tracks, excavation and removal of contaminated soil, and the formation of multiple ponds in low areas formerly associated with a lagoon. Recognized environmental conditions (REC)[5] in this area include potential soil contamination of halogenated organic compounds (HOCs), volatile organic compounds (VOCs), TPHs, and metals. Remediation activities are complete, and mitigation measures are applied by engineering controls and land use covenants. The Sacramento Station contains part of the South Plume Groundwater Study Area, where groundwater remediation is ongoing.

A land use covenant (LUC) was executed in 2015 for the Sacramento Railyards (California Department of Toxic Substances Control 2015), and the California Department of Toxic Substances Control (DTSC) concluded that the area, as remediated and when used in compliance with the environmental restrictions of the LUC, does not present an unacceptable risk to present and future human health or safety or the environment. The LUC includes the following relevant restrictions and requirements for soil, soil vapor, and groundwater management.

4.02 Soil Management

(a) No activities that will disturb the soil (e.g., excavation, grading, removal, trenching, earth movement, mining, or drilling) shall be allowed on the Property without a [soil management plan] (SMP) approved in writing by the [DTSC].

(b) Any soil brought to the surface (including but not limited to by grading, excavation, trenching or backfilling) shall be managed in compliance with all applicable provisions of state and federal law and a SMP approved in writing by the [DTSC].

4.03. Prohibited Activities. the following activities shall not be conducted at the Property:

(b) Extraction of groundwater except as approved of in advance in writing by the [DTSC] in a groundwater management plan.

4.05 Vapor Intrusion Mitigation Management. Any enclosed building or enclosed structure (including tunnels) or utility corridors to be constructed within the Vapor Mitigation Areas must be designed and constructed to include Vapor Mitigation (as hereinafter defined) unless such area is exempted from such requirement by the [DTSC].

Portions of the project footprint in Sacramento are located on three parcels outside the Sacramento Railyards and jurisdiction of the LUC: APNs 006-0011-006, 002-0010-028, and 002-010-023. The

[5] *Recognized environmental condition*: hazardous substances or petroleum products on a property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances into structures or into the ground, ground water, or surface water of a property.

ISA did not identify any RECs for APN 006-0011-006. APN 002-0010-028 is outside the ISA search boundaries. However, no listings for hazardous materials waste sites were identified in the GeoTracker database (State Water Resources Control Board 2021).

APN 002-010-023 is in an area identified as high risk for RECs. A known REC is located on this parcel near the levee. Historically, this area included industrial operations involving a metal shop and the Jibboom Street Junkyard. The ISA indicated that soils in this area could be contaminated, and the risk to encounter TPHs and PCBs is considered high.

Discussion

a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

Construction of the proposed project would involve the transportation, storage, and use of small quantities of common hazardous materials, such as fuels and oils used to operate construction equipment. Accidental releases of small quantities of these substances could contaminate soils and degrade the quality of surface water and groundwater, or they could be released into the air, resulting in a potential public safety hazard. Consistent with applicable laws and regulations, the transportation, handling, and disposal of these materials would comply with regulations enforced by the California Unified Program—a consolidation of six environmental programs at the local level—and Cal-OSHA. In addition, implementation of standard BMPs under the SWPPP would further reduce the potential of accidental release or exposure. This impact is considered less than significant. No mitigation is required.

b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

Lead Based Paint and Asbestos Containing Materials

Materials containing levels of lead or asbestos known to be hazardous to human health could be released if disturbed during construction. Work on the remaining portions of the bridge approach structures to connect the new ramps and reconstruction of the pedestrian connection from the Sacramento Valley Station to build the interim ramp in Sacramento could result in the release of LBP or ACM. To meet USEPA and air district rules, development and implementation of a lead and asbestos abatement plan would be required. Compliance with federal and state regulations governing the demolition and disposal of structures containing LBP and/or ACM is required as is proper disposal of loose and peeling paint with concentrations of lead exceeding applicable waste thresholds. Accordingly, this impact is considered less than significant. Also see the discussion in Section III, *Air Quality*. No mitigation is required.

Aerially Deposited Lead

Although previous ground disturbance for road and building construction and utility installation has occurred in the project area, the potential remains for encountering ADL during construction and grading activities in all areas within the project footprint where bare soil is exposed. Release of ADL during construction could pose serious health risks to humans and the environment. This would be a **potentially significant impact**. Implementation of Mitigation Measures HAZ-1 and HAZ-2 would reduce this impact to a less-than-significant level because they would ensure worker safety and

require the testing and proper disposal for contaminated soil. This impact is considered **less than significant with mitigation incorporated**.

Areas with Known Recognized Environmental Conditions

West Sacramento Union Pacific Railroad

Construction of the southwest ramp would include ground disturbance along the south side of the UPRR line in West Sacramento. As previously discussed, soils next to railroad tracks are often contaminated with TPHs, PCBs, and heavy metals. Ground disturbing activities, such as grading and excavation, may expose construction workers and the public to hazardous materials that may result in health effects. Similarly, if soils adjacent to railroad tracks are disturbed during construction, workers could be exposed to heavy metals, TPHs, and PCBs. This would be a **potentially significant impact**. Implementation of Mitigation Measures HAZ-1 and HAZ-3 would reduce impacts related to hazardous materials exposure to a less-than-significant level. This impact is considered **less than significant with mitigation incorporated**.

Sacramento Railyards

As described above, portions of the project (both new ramps in Sacramento) are located within the area identified as "Area X" in the ISA, an area historically developed as a locomotive maintenance and rebuilding facility from the 1860s to the early 1990s. Previous operations resulted in underlying soil and groundwater impacts. However, according to the 2015 LUC and the DTSC, the area, as remediated and when used in compliance with the environmental restrictions of the LUC, does not present an unacceptable risk to present and future human health or safety or the environment.

Any project work conducted in this area must and would comply with the LUC. Therefore, potential impacts related to this parcel are considered **less than significant**. No mitigation is required.

Assessor Parcel Number 002-010-023

Construction of the northeast ramp would include installation of a column, bridge abutment, and grading activities in this parcel. The ISA identified this parcel as high risk for encountering to encounter TPH and PCBs in soils and groundwater due to previous land uses such as a metal shop and the Jibboom Street Junkyard. Ground disturbance of any kind could expose toxic contaminants endangering human health or release hazardous materials into the environment. This would be a **potentially significant impact**. Implementation of Mitigation Measures HAZ-1 and HAZ-3 would reduce this impact to a less-than-significant level because they would ensure worker safety and require testing and remediation (if needed) for metals, TPHs, and PCB impacts for all construction activities that would result in soil excavation at this parcel. This impact is considered **less than significant with mitigation incorporated**.

Mitigation Measure HAZ-1: Develop and Implement a Health and Safety Plan

The project proponent will develop and implement a health and safety plan to address worker safety when working with potentially hazardous materials, including potential ADL, TPHs, PCBs, and other construction-related materials within the ROW during any soil-disturbing activity. The plan will include identification of appropriate fueling and maintenance areas for equipment, daily equipment inspection schedule, a spill response plan, spill response supplies to be

maintained on site, and a complete list of the agencies to be notified (with their telephone numbers).

Mitigation Measure HAZ-2: 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 leading from I Street. If soils contain ADL in excess of established thresholds, soils will be handled in a manner compliant with the County Certified Unified Program Agency regulatory requirements and disposed of properly. The testing may be conducted in conjunction with testing required for the separate I Street Bridge Replacement Project.

Mitigation Measure HAZ-3: Perform a Phase II Environmental Site Assessment Prior to Construction Activities and Remediate if Necessary

Prior to construction, the project proponent will conduct a Phase II environmental site assessment in conformance with the American Society for Testing and Materials Standard Practice E1527-05. All environmental investigation, sampling, and remediation activities associated with the project will be conducted under a work plan approved by the regulatory oversight agency and will be conducted by the appropriate environmental professional consistent with Phase II environmental site assessment requirements. The environmental site assessment may occur in conjunction with the Phase II assessment conducted for the separate I Street Bridge Replacement Project.

The Phase II environmental assessment will include sampling and laboratory analysis to confirm the presence of hazardous materials and may include the following.

- Collection of original surface and/or subsurface samples of soil, groundwater to analyze for quantities of various contaminants.
- Subsurface soil borings.
- An analysis to determine the vertical and horizontal extent of contamination (if the evidence from sampling shows contamination).

If contamination is uncovered as part of Phase II environmental site assessment, remediation will be required. Any contaminated soil identified on a project site must be properly disposed of in accordance with DTSC regulations in effect at the time.

If, during construction, soil or groundwater contamination is suspected, construction activities will cease and appropriate health and safety procedures will be implemented, including the use of appropriate personal protective equipment (e.g., respiratory protection, protective clothing, helmets, goggles).

c. Emit hazardous emissions or involve handling hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

There are no existing or planned schools within 0.25 mile of the proposed project site. The nearest school is the Elkhorn Village Elementary School in West Sacramento at 750 Cummins Way approximately 0.85-mile northwest of the project. Therefore, the project would not emit hazardous

emissions or handle hazardous materials within 0.25 mile of an existing or proposed school, and there would be no impact.

d. Be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

As described under checklist item "b" above, the project is within an area designated as the Railyards Superfund Site. Disturbance in this area during construction activities could expose humans and the environment to contaminated soil and/or groundwater. This would be a **potentially significant impact**. Implementation of Mitigation Measures HAZ-1 and HAZ-3 would reduce potential impacts to a less-than-significant level. This impact is considered **less than significant with mitigation incorporated**.

Mitigation Measure HAZ-1: Develop and Implement a Health and Safety Plan

The full text of this measure is provided under checklist item "b" above.

Mitigation Measure HAZ-3: Perform a Phase II Environmental Site Assessment Prior to Construction Activities and Remediate if Necessary

The full text of this measure is provided under checklist item "b" above.

e. Be located within an airport land use plan area or, where such a plan has not been adopted, be within two miles of a public airport or public use airport, and result in a safety hazard or excessive noise for people residing or working in the project area?

The closest airport to the project area is the Sacramento Executive Airport located approximately 4.2 miles south. The project is not located within an airport land use plan or within 2 miles of a public airport or public use airport. There would be no impact.

f. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

Designated evacuation routes in the project area in West Sacramento include Sacramento Avenue and Tower Bridge Gateway (Yolo County n.d.). In Sacramento, Jibboom Street, eastbound J Street, westbound I Street, and westbound L Street are the designated evacuation routes near the project area (City of Sacramento 2008).

The project would construct ramps for pedestrians, bicycles, and maintenance vehicles and would not affect emergency services or evacuation routes under operation. During construction, areas potentially impacted include 2nd Street in West Sacramento. However, it is not anticipated that project construction would cause any changes in emergency access. Existing City requirements for construction projects require signage and an access plan to ensure continued emergency access during construction. Provisions for maintaining traffic during construction would be implemented, requiring the preparation of a TMP that would ensure there is no interference with emergency vehicles/services or response/evacuation plans. Accordingly, this impact would be less than significant. No mitigation is required.

g. Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?

CALFIRE's Fire Hazard Severity Zones Maps indicate that the proposed project is not located in or near a state responsibility area or lands classified by CALFIRE as very high fire hazard severity zones (CALFIRE 2007). The project is in a local responsibility area. Land uses are primarily urbanized and at low risk for wildland fires. The proposed project would not introduce a wildland fire risk or expose people or structures to an increased risk for wildland fire. There is no impact.

X. Hydrology and Water Quality

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:				
a. Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?			X	
b. Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?				X
c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner that would:				
1. Result in substantial erosion or siltation on or off site;			X	
2. Substantially increase the rate or amount of surface runoff in a manner that would result in flooding on or off site;			X	
3. Create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or			X	
4. Impede or redirect flood flows?			X	
d. In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?			X	
e. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?				X

Affected Environment

The project is located in the Sacramento River Basin. Within the basin, the project site is located within the Lower Sacramento Valley Watershed. The basin drains the eastern slopes of the Coast Ranges, Mount Shasta, the western slopes of the southernmost region of the Cascades, and the northern portion of the Sierra Nevada. The Sacramento Valley Watershed is approximately 5,500 square miles (Sacramento River Watershed Program 2021).

In West Sacramento, the project area is served by the City's separate stormwater system to the Deep Water Ship Channel; and in Sacramento, the combined sewer system serves the project area. Stormwater is discharged directly into local waterways within the Lower Sacramento River watershed.

The project area is within Federal Emergency Management Agency (FEMA) Zone X unshaded. This area is subject to minimal flooding outside of the 500-year flood zone.

Discussion

a. Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?

The proposed project would be required to obtain an NPDES Construction General Permit (Order No. 2009-009-DWQ, as amended by 2010-0014-DWQ and 2012-0006-DWQ), which requires preparation of a SWPPP to implement sediment, erosion, and pollution prevention control measures.

Dewatering activities may be required for construction activities related to column and ramp abutment construction. Proper dewatering procedures would be followed as required per the General Waste Discharge Requirements (WDR)/NPDES Permits for Limited Threat Discharges to Surface Waters (Order R5-2016-0076-01/NPDES Permit No. CAG995002). The project would have no substantial impact on groundwater or water quality. The impact would be less than significant.

b. Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

Construction of the proposed project would introduce new impervious surfaces to the project area, which could reduce rainwater infiltration and subsequent groundwater recharge. However, it is not expected that these surfaces would result in a substantial reduction in groundwater recharge given that the overall footprint of new impervious areas would be minimal (see Figure 2 and Appendix A). Major groundwater recharge for the subbasin in the project area is the Sacramento River, and infiltration of precipitation is a relatively minor source of groundwater recharge in the area. Groundwater dewatering would not be necessary for project operation and maintenance activities. There would be no impact.

c.1. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner that would: Result in substantial erosion or siltation on or off site?

Project components would only create minimal new impervious surfaces with an on-ground footprint limited to structure column footings, ramp abutments, and the portions of the proposed

ramps placed on fill to merge with existing ground levels. As described above under checklist item "a," the project would be required to obtain a NPDES Construction General Permit and a SWPPP to implement sediment, erosion, and pollution prevention control measures. Compliance with these erosion-related requirements would ensure that the construction activities do not result in substantial erosion or siltation. This impact would be less than significant.

c.2. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner that would: Substantially increase the rate or amount of surface runoff in a manner that would result in flooding on or off site?

c.3. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner that would: Create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?

c.4. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner that would: Impede or redirect flood flows?

Checklist items c.2, c.3, and c.4. Project components would only create minimal new impervious surfaces as a result of the limited project footprint. This would not result in a significant reduction in the amount of natural soil surfaces available for infiltration of rainfall and runoff, thereby generating little, if any, additional runoff and associated flooding during storm events. Nor would the project contribute to runoff that would exceed the capacity of existing drainage systems. Pollution prevention control measures as required in the SWPPP would reduce the potential for polluted runoff. This impact would be less than significant.

d. In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?

The project site is within Federal Emergency Management Agency flood designation Zone X, which is an area with minimal flood hazard and outside the Special Flood Hazard Area. The proposed project is not located within a tsunami or seiche zone. Compliance with the NPDES SWPPP described above would ensure that the project would not increase the risk of release of pollutants due to project inundation. This impact would be less than significant.

e. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

The project would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan. Therefore, there would be no impacts related to hydrology and water quality plans.

XI. Land Use and Planning

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:					
a.	Physically divide an established community?				X
b.	Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?				X

Affected Environment

The project area contains land uses that are primarily recreational. The land in the project area is designated in West Sacramento as Public/Quasi-Public and Recreation and Parks. The project area in Sacramento is designated as Parks, Public/Quasi-Public, and Central Business District.

Discussion

a. Physically divide an established community?

The project would not construct any new structures or roadways that alter the division that already exists between West Sacramento and Sacramento because of the Sacramento River. The project would increase connectivity for bicyclists and pedestrians by providing another option for getting across the river. These are project benefits. There would be no impact.

b. Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

The project is a collaboration between the Cities of West Sacramento and Sacramento to construct ramps on each side of the bridge to improve bicyclist and pedestrian connectivity between the two communities. The relevant adopted local planning documents contain goals and policies that define future development and infrastructure. The project is consistent with, and supports the goals and policies of, the adopted documents.

- *City of West Sacramento General Plan 2035*
- *West Sacramento Bicycle, Pedestrian, and Trails Master Plan*
- *Bridge District Specific Plan*
- *Sacramento 2035 General Plan*
- *Sacramento Riverfront Master Plan*
- *Broadway Complete Streets Plan*
- *West Broadway Specific Plan*
- *City of Sacramento Pedestrian Master Plan*
- *City of Sacramento Bicycle Master Plan*

The project would not affect or conflict with existing land use designations, zoning, or the implementation of adopted plans. As such, there would be no land use impacts.

XII. Mineral Resources

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:					
a.	Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?				X
b.	Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?				X

Affected Environment

The Surface Mining and Reclamation Act of 1975 (SMARA) provides for the evaluation of an area's mineral resources using a system of Mineral Resource Zone (MRZ) classifications that reflect the known or inferred presence and significance of a given mineral resource. Most of the project area, on both sides of the river, is classified as MRZ 1, an area where adequate information indicates that no significant mineral deposits are present, or where it is judged that little likelihood exists for their presence (California Department of Conservation 2016; City of Sacramento 2015:6-94). In West Sacramento, there is a band of MRZ-3 (unknown) along the river (City of West Sacramento 2016). There are no mines regulated under SMARA in the planning area (California Department of Conservation 2016).

No areas designated as MRZ-2 (likelihood of significant mineral deposits) are present within the project area. Further, no land uses designated for mineral resource extraction and no mines of value to the region occur within the project limits.

Discussion

a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?

b. Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?

Checklist items a and b. There are no designated MRZs of state or regional importance in the project area, and the project would not impede the extraction of any known mineral resources. There would be no impacts on mineral resources.

XIII. Noise

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:					
a.	Generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in a local general plan or noise ordinance or applicable standards of other agencies?			X	
b.	Generate excessive groundborne vibration or groundborne noise levels?			X	
c.	Be located within the vicinity of a private airstrip or an airport land use plan, or, where such a plan has not been adopted, within two miles of a public airport or public use airport and expose people residing or working in the project area to excessive noise levels?				X

Affected Environment

Existing Land Uses

The proposed project is located in an urban setting within West Sacramento and Sacramento. The proposed I Street Bridge Upper Deck ramp locations in West Sacramento are at the western terminus of the bridge, adjacent to a waterfront park with walking and bicycle trails. Several multi-family residences and apartments are located to the northwest, about 500 feet away from the bridge, and a neighborhood of single-family residences and commercial buildings lies to the west of the bridge.

The ramps at the eastern terminus of I Street Bridge in the City of Sacramento are adjacent to a waterfront park and walking and bicycle trails. One of the ramps crosses an interchange from I-5 to downtown Sacramento. Surrounding land uses consist of the Sacramento Valley Station, museums and commercial uses. The nearest sensitive receptor is a hotel about 750 feet to the southeast of the nearest limit of construction.

Ambient Noise Levels

A measurement of 24-hour noise levels was conducted as part of the separate I Street Bridge Replacement Project in April 2015 (ICF 2015). The measurement was done at the corner of 2nd Street and C Street in West Sacramento, in the vicinity of the residences nearest to the proposed upper deck ramps on the West Sacramento side. The measured data at this site indicated hourly average noise levels during the daytime hours of 7:00 a.m. to 10:00 p.m. in the range of 59 to 68 dBA (A-weighted decibels) L_{eq} (equivalent sound level), and an overall day-night noise level of 70 dBA L_{dn}.

West Sacramento General Plan

Noise is addressed in the Health and Safety element of the current West Sacramento General Plan. The primary purpose of the noise portion of the Health and Safety element is to protect city residents from the harmful effects of excessive noise (City of West Sacramento 2016). The noise guidance in the Health and Safety element serves to set land use compatibility standards for new developments or land uses related to noise exposure. The City's current General Plan applies the noise standards in the city municipal code as land use compatibility standards for new development.

The City's development policies for specific neighborhoods are set forth in plan documents for those areas, which are subordinate to the General Plan. These include the Bridge District Specific Plan, Grand Gateway Master Plan, Southport Framework Plan, and Washington Specific Plan.

City of West Sacramento Noise Ordinance

The City's performance standards for noise are the primary enforcement tool for the operation of locally regulated noise sources, such as construction activity or outdoor recreation facilities, and is set forth in Chapter 17.32 of the City Municipal Code. This section of the Municipal Code sets noise level performance standards for non-transportation noise sources, which are summarized in Table 14. Examples of non-transportation noise sources are construction equipment, industrial operations, outdoor recreation facilities, heating, ventilation, and air-conditioning units, and loading docks. City performance standards do not specify an exemption for temporary daytime construction activity, so the daytime and nighttime limits specified in the noise ordinance are considered to apply to all construction activities. City transportation noise level standards are listed in Table 15. Exterior incremental noise standards related to an increase in noise levels are shown in Table 16.

Table 14. City of West Sacramento Noise Level Standards for Non-Transportation Uses

		Exterior Noise Levels		Interior Noise Levels	
Land Use	**Noise Level Descriptor**	**Daytime (7:00 a.m. to 10:00 p.m.)**	**Nighttime (10:00 p.m. to 7:00 a.m.)**	**Daytime (7:00 a.m. to 10:00 p.m.)**	**Nighttime (10:00 p.m. to 7:00 a.m.)**
Residential	Hourly L_{eq}, dBA	50	45	45	35
	Max. level, dBA	70	65	–	–
Transient lodging	Hourly L_{eq}, dBA	–	–	45	35
Hospital, nursing homes	Hourly L_{eq}, dBA	–	–	45	35
Theaters, auditoriums, music halls	Hourly L_{eq}, dBA	–	–	35	35
Churches, meeting halls	Hourly L_{eq}, dBA	–	–	40	40
Office buildings	Hourly L_{eq}, dBA	–	–	45	45
Schools, libraries, museum	Hourly L_{eq}, dBA	–	–	45	45

Note: Each noise level specified above will be lowered by 5 decibels for simple tone noises, noises consisting primarily of speech or music, or for recurring impulsive noises. These noise level standards do not apply to residential units established in conjunction with industrial or commercial uses (e.g., caretaker dwellings).
dBA = A-weighted decibel.
L_{eq} = equivalent sound level.

Table 15. City of West Sacramento Maximum Allowable Noise Exposure for Transportation Noise Sources

	Outdoor Activity Areas[a]	Interior Spaces	
Land Use	**L_{dn}/CNEL, dB**	**L_{dn}/CNEL, dB**	**L_{eq}, dB[b]**
Residential	60[c, d]	45	–
Transient lodging	60[c, d]	45	–
Hospitals, nursing homes	60[c, d]	45	–
Theaters, auditoriums, music halls	–	–	35
Churches, meeting halls	60[c]	–	40
Office buildings	–	–	45
Schools, libraries, museum	–	–	45
Playgrounds, neighborhood parks	70	–	–

dB = decibels.
L_{dn} = day-night level.
L_{eq} = equivalent sound level.
CNEL = community noise equivalent level.

[a] Where the location of outdoor activity is unknown, the exterior noise level standard must be applied to the property line of the receiving land use.

[b] As determined for a typical worst-case hour during period of use.

[c] Where it is not possible to reduce noise in outdoor activity areas to 60 dB L_{dn}/CNEL or less using a practical application of the best-available noise reduction measures, an exterior noise level of up to 65 dB L_{dn}/CNEL may be allowed, provided that practical exterior noise level reduction measures have been implemented and that interior noise levels are in compliance with this table.

[d] Where it is not possible to reduce noise in outdoor activity areas to 65 dB L_{dn}/CNEL or less using a practical application of the best-available noise reduction measures, an exterior noise level of up to 70 dB L_{dn}/CNEL may be allowed, provided that practical exterior noise level reduction measures have been implemented and that interior noise levels are in compliance with this table.

In addition, the Municipal Code stipulates that no operation may be installed that by its construction or nature habitually or consistently produces noticeable vibration beyond the property line. At or above 0.25 in/sec peak particle velocity (PPV), transient vibration sources (such as impact pile driving) typically become "distinctly perceptible" to humans (California Department of Transportation 2013).

Table 16. General Plan Exterior Incremental Noise Impact Standards for Noise-Sensitive Uses

Residences and Buildings Where People Normally Sleep[a]		Institutional Land Uses with Primarily Daytime and Evening Uses[b]	
Existing L_{dn}	Allowable Noise Increment (dBA)	Existing Peak Hour L_{eq}	Allowable Noise Increment (dBA)
45	8	45	12
50	5	50	9
55	3	55	6
60	2	60	5
65	1	65	3
70	1	70	3
75	0	75	1
80	0	80	0

Sources: City of West Sacramento 2016; City of Sacramento 2015.
dBA = A-weighted decibel.
L_{dn} = day night average level.
L_{eq} = equivalent sound level.
[a] This category includes homes, hospitals, and hotels where a nighttime sensitivity to noise is assumed to be of utmost importance.
[b] This category includes schools, libraries, theaters, and churches where it is important to avoid interference with such activities as speech, meditation, and concentration on reading material.

City of Sacramento General Plan

The most recent update to the Sacramento 2035 General Plan was adopted in March of 2015. The goals and policies related to noise are intended to help control and reduce environmental noise in the city. The general plan also includes land use compatibility guidelines to help direct new development to occur only in areas with noise levels that are suitable for the types of development proposed (City of Sacramento 2015). The guidelines are 60 dBA L_{dn} for single-family residential uses and 65 dBA L_{dn} for multi-family residential and hotel/motel uses. Schools, hospitals and nursing homes are considered compatible with exterior noise levels of up to 70 dBA L_{dn}. Refer to Table 17 for the exterior noise compatibility standards for land uses in Sacramento. Sacramento's exterior incremental noise standards related to an increase in noise levels are shown in Table 16.

The Sacramento General Plan noise policies pertaining to the project include the following.

> **Policy EC 3.1.1:** Exterior Noise Standards. The City shall require noise mitigation for all development where the projected exterior noise levels exceed those shown in Table EC 1 [Table 4, General Plan Exterior Noise Compatibility Standards for Various Land Uses, below], to the extent feasible.
>
> **Policy EC 3.1.3:** Interior Noise Standards. The City shall require new development to include noise mitigation to assure acceptable interior noise levels appropriate to the land use type: 45 dB(A) L_{dn} for residential, transient lodgings, hospitals, nursing homes and other uses where people normally sleep; and 45 dB(A) L_{dn} (peak hour) for office buildings and similar uses.
>
> **Policy EC 3.1.5:** Interior Vibration Standards. The City shall require construction projects anticipated to generate significant amount of vibration to ensure acceptable interior vibration levels at nearby residential and commercial uses based on the current City or Federal Transit Administration (FTA) criteria.
>
> **Policy EC 3.1.7:** Vibration. The City shall require an assessment of the damage potential of vibration-induced construction activities, highways, and rail lines in close proximity to historic buildings and

archaeological sites and require all feasible mitigation measures be implemented to ensure no damage would occur.

Policy EC 3.1.10: Construction Noise. The City shall require development projects subject to discretionary approval to assess potential construction noise impacts on nearby sensitive uses and to minimize impacts on these uses, to the extent feasible. (City of Sacramento 2015)

Table 16. General Plan Exterior Noise Compatibility Standards for Various Land Uses

Land Use Type	Highest Level of Noise Exposure regarded as "Normally Acceptable"[a] (L_{dn}[b] or CNEL[c])
Residential—Low Density Single Family, Duplex, Mobile Homes	60 dBA[d, e]
Residential—Multi-family[g]	65 dBA
Urban Residential Infill[h] and Mixed-Use Projects[i, j]	70 dBA
Transient Lodging—Motels, Hotels	65 dBA
Schools, Libraries, Churches, Hospitals, Nursing Homes	70 dBA
Auditoriums, Concert Halls, Amphitheaters	Mitigation based on site-specific study
Sports Arena, Outdoor Spectator Sports	Mitigation based on site-specific study
Playgrounds, Neighborhood Parks	70 dBA
Golf Courses, Riding Stables, Water Recreation, Cemeteries	75 dBA
Office Buildings—Business, Commercial and Professional	70 dBA
Industrial, Manufacturing, Utilities, Agriculture	75 dBA

Source: City of Sacramento 2015.

dBA = A-weighted decibel.

L_{dn} = day night average level.

CNEL = community noise equivalent level.

[a] As defined in the Governor's Office of Planning and Research Guidelines, "Normally Acceptable" means that the "specified land use is satisfactory, based upon the assumption that any building involved is of normal conventional construction, without any special noise insulation requirements."

[b] L_{dn}, or day night average level, is an average 24-hour noise measurement that factors in day and night noise levels.

[c] CNEL, or community noise equivalent level, measurements are a weighted average of sound levels gathered throughout a 24-hour period.

[d] Applies to the primary open space area of a detached single-family home, duplex, or mobile home, which is typically the backyard or fenced side yard, as measured from the center of the primary open space area (not the property line). This standard does not apply to secondary open space areas, such as front yards, balconies, stoops, and porches.

[e] dBA, or A-weighted decibel scale, is a measurement of noise levels.

[f] The exterior noise standard for the residential area west of McClellan Airport known as McClellan Heights/Parker Homes is 65 dBA.

[g] Applies to the primary open space areas of townhomes and multi-family apartments or condominiums (private year yards for townhomes; common courtyards, roof gardens, or gathering spaces for multi-family developments).These standards do not apply to balconies or small attached patios in multistoried multi-family structures.

[h] With land use designations of Central Business District, Urban Neighborhood (Low, Medium, or High) Urban Center (Low or High), Urban Corridor (Low or High).

[i] All mixed-use projects located anywhere in the city of Sacramento.

[j] See notes d and g above for definition of primary open space areas for single-family and multi-family developments.

Sacramento City Code Noise Ordinance

Chapter 8.68 of the Sacramento City Code governs noise and vibration within the city. Noise thresholds from the City Municipal Code are shown below.

8.68.060 Exterior Noise Standards

A. The following noise standards unless otherwise specifically indicated in this article shall apply to all agricultural and residential properties.

   1. From 7 AM to 10 PM the exterior noise standard shall be 55 dBA.

   2. From 10 PM to 7 AM the exterior noise standard shall be 50 dBA.

B. It is unlawful for any person at any location to create any noise which causes the noise levels when measured on agricultural or residential property to exceed for the duration of time set forth following, the specified exterior noise standards in any 1 hour by:

Cumulative Duration of the Intrusive Sound	Allowable Decibels
1. Cumulative period of 30 minutes per hour	0
2. Cumulative period of 15 minutes per hour	+5
3. Cumulative period of 5 minutes per hour	+10
4. Cumulative period of 1 minute per hour	+15
5. Level not to be exceeded for any time per hour	+20

C. Each of the noise limits specified in subsection B of this section shall be reduced by five dBA for impulsive or simple tone noises, or for noises consisting of speech or music.

D. If the ambient noise level exceeds that permitted by any of the first four noise limit categories specified in subsection B of this section, the allowable noise limit shall be increased in five dBA increments in each category to encompass the ambient noise level. If the ambient noise level exceeds the fifth noise level category, the maximum ambient noise level shall be the noise limit for that category. (Prior code § 66.02.201)

8.68.080 Exemptions

The following applicable activities shall be exempted from the provisions of this chapter:

C. Any mechanical device, apparatus or equipment related to or connected with emergency activities or emergency work.

D. Noise sources due to the erection (including excavation), demolition, alteration or repair of any building or structure between the hours of 7 AM and 6 PM, on Monday, Tuesday, Wednesday, Thursday, Friday and Saturday, and between 9 AM and 6 PM on Sunday; provided, however, that the operation of an internal combustion engine shall not be exempt pursuant to this subsection if such engine is not equipped with suitable exhaust and intake silencers which are in good working order. The director of building inspections may permit work to be done during the hours not exempt by this subsection in the case of urgent necessity and in the interest of public health and welfare for a period not to exceed three days. Application for this exemption may be made in conjunction with the application for the work permit or during progress of the work.

8.68.200 Specific unlawful noises.

Notwithstanding any other provision of the chapter to the contrary, the following acts, among others, are declared to be loud, disturbing, and unnecessary noises in violation of this chapter, but such enumeration shall not be deemed to be exclusive, namely:

A. Pile Drivers, Hammers, Etc. The operation between the hours of ten p.m. and seven a.m. of any pile driver, steam shovel, pneumatic hammer, derrick, steam or electric hoist or other appliance, the use of which is attended by loud or unusual noise.

B. Tools. The use or operation between the hours of ten p.m. and seven a.m. of any power saw, power planer, or other powered tool or appliance or saw or hammer, or other tool, so as to disturb the quiet, comfort, or repose of persons in any dwelling, hotel, motel, apartment, or other type of residence, or of any person in the vicinity.

Discussion

a. ***Generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in a local general plan or noise ordinance or applicable standards of other agencies?***

The assessment of potential construction noise levels was based on the general assessment methodology developed by FTA (Federal Transit Administration 2018). Table 18 summarizes typical noise levels produced by heavy equipment that would be used during construction. Individual types of construction equipment are expected to generate maximum noise levels ranging from 80 to 95 dBA at a distance of 50 feet.

Table 17. Typical Construction Equipment Noise Emission Levels

Equipment Type	Typical Equipment Noise Level at a Distance of 50 Feet from the Source, dBA
Dump Truck	84
Loader	80
Rock Drill	95
Bulldozer	85
Crawler crane	80
Roller	80
Excavator	85
Paver	85
Air compressor	81
Grader	85
Generator	82

Source: Federal Transit Administration 2018.
dBA = A-weighted decibel.

Construction of the project is expected to take approximately 18 months to complete, and heavy equipment would be used for 8 hours a day for 24 days per month. The analysis assumes that use of heavy equipment would follow typical daytime schedule (i.e., weekdays between the hours of 7:00 a.m. and 10:00 p.m.), and that no nighttime work would be required.

To characterize a conservative noise condition for construction, noise levels of the two loudest pieces of equipment were combined to calculate an overall noise level value from simultaneously operating equipment. The highest noise levels are expected to occur during foundation building, which is estimated to take 140 days, and would require use of a pile drill rig. Estimated noise levels from the project construction site as a function of distance are shown in Table 19. Noise levels were calculated based on point-source attenuation over soft ground for receptors in West Sacramento.

Table 18. Heavy Equipment Noise Levels by Construction Phase, West Sacramento

Construction Phase	Heavy Equipment Used[a]	Combined Source Level at 50 feet (L_{eq}, dBA)[b]	Combined Source Level at 300 feet (L_{eq}, dBA/L_{dn} dBA)[b]	Combined Source Level at 500 feet (L_{eq}, dBA/L_{dn} dBA)[b]
Grubbing and Clearing	Bulldozer, Dump Truck	85	64/62	58/56
Grading and Excavation	Bulldozer, Dump Truck	85	64/62	58/56
Draining, Utilities, Subgrade	Excavator, Dump Truck	85	64/62	58/56
Paving	Paver, Dump Truck	85	64/62	58/56
Foundations	Pile Drill Rig[c], Crane	89	68/66	62/60
Ramp Construction	Generator, Crane	83	62/60	56/54

Note: Distance calculation do not include the effects, if any, of local shielding from walls, topography or other barriers which may further reduce sound levels.

L_{eq} = equivalent sound level.

dBA = A-weighted decibel.

L_{dn} = day night average level.

[a] The two loudest pieces of equipment that may operate in one location simultaneously.

[b] Based on usage factors of 20 to 50 percent, for types of equipment used.

[c] The analysis assumes a maximum level of 95 dBA for a pile drill rig.

The nearest noise sensitive locations are single-family residences, multifamily residences and apartment buildings to the west and northwest of the proposed ramp locations. The nearest single-family residences are about 300 feet to the west, and the nearest multi-family residences are about 500 feet to the northwest. The conservative analysis in Table 19 indicates that noise levels from construction may be up to 89 dBA L_{eq} at a distance of 50 feet during the foundations phase, and up to 68 dBA L_{eq} at the nearest residence 300 feet away. Assuming heavy equipment would not be used during the nighttime hours of 10:00 p.m. to 7:00 a.m., the loudest construction equipment phase would have a day-night value of 66 dBA L_{dn}. Noise from heavy equipment during construction of the project may be intermittently noticeable at the nearest residences in West Sacramento and may be intermittently noticeable above ambient noise levels from existing traffic noise in the area, which were measured to be between 59 to 68 dBA L_{eq}(h), and with a day-night value of 70 dBA L_{dn}. The combination of construction noise with existing ambient levels would result in an overall level of 71 dBA L_{dn}. This represents an increase of 1 decibel, which is equal to the allowable noise increment above 70 dBA L_{dn}, as shown in Table 16. Therefore, noise from construction is expected to be within allowable thresholds for the City of West Sacramento.

The nearest receptor in Sacramento is a hotel about 750 feet to the southeast of the nearest proposed construction limits. Heavy equipment noise levels as a function of distance during the loudest phase of construction based on point-source attenuation over hard ground is shown in Table 20. At a distance of 750 feet, noise levels from heavy equipment would potentially be up to 65 dBA L_{eq} or 63 dBA L_{dn}, assuming no acoustical shielding from surrounding structures. Noise levels from the construction site are unlikely to be audible at the nearest receptor, given the presence of surrounding structures, and traffic noise from I-5 and surface streets. Construction is expected occur only during daytime hours when noise from construction is not regulated by the City of Sacramento. As such, construction is unlikely to be noticeable at the nearest receptors on the Sacramento side of

the project, and noise from construction is expected to be within allowable thresholds for the City of Sacramento.

Table 19. Heavy Equipment Noise Levels, Foundation Phase, Sacramento

Distance between Source and Receiver (feet)	Combined Noise Levels during Use of Heavy Construction Equipment,[a] Calculated dBA L_{eq} (1-hour)
50	89
100	83
200	76
400	70
500	69
750	65
1,000	63
1,500	59
2,000	56

[a] Calculations are based on FTA methodology (Federal Transit Administration 2018). Calculations do not include the effects, if any, of local shielding from walls, topography, or other barriers that may reduce sound levels further.
L_{eq} (1-hour) = hourly-equivalent sound level over 1 hour.
dBA = A-weighted decibel.

Construction noise associated with the project would be temporary and intermittent and would cease once construction is complete. As described earlier, construction would occur during daytime work hours, and no work is expected to occur during nighttime hours or weekends. Therefore, the impact of the temporary increase in ambient noise levels during construction of the project is less than significant. No mitigation is required.

b. Generate excessive groundborne vibration or groundborne noise levels?

Construction of the bridge improvements would involve the use of heavy equipment that could generate perceptible levels of groundborne vibration immediately adjacent to the source. Typical vibration levels associated with heavy equipment at reference distances of 25 feet to 100 feet are listed in Table 21.

Table 20. Typical Vibration Source Levels for Construction Equipment

Equipment	PPV at 25 Feet	PPV at 50 Feet	PPV at 75 Feet	PPV at 100 Feet
Pile drill rig	0.089	0.032	0.017	0.011
Hoe ram	0.089	0.032	0.017	0.011
Large bulldozer	0.089	0.032	0.017	0.011
Loaded trucks	0.076	0.027	0.015	0.010
Jackhammer	0.035	0.012	0.007	0.004
Small bulldozer	0.003	0.001	0.001	< 0.001

Source: Federal Transit Administration 2018.
PPV = peak particle velocity in inches per second (in/sec).

The piece of construction equipment with the potential to produce the highest level of vibration is a pile drill rig, which would be used for construction of the ramp foundations. Locations within 100 feet of pile driving activity could be exposed to vibration levels of 0.011 inches per second PPV or

greater, which potentially would be perceptible inside building structures. The residences nearest to the limits of construction are more than 300 feet away, and vibration would not be noticeable at this distance. Therefore, vibration during construction is not expected to exceed thresholds related to structural damage for any of the buildings nearest to construction areas or result in impacts on sensitive receptors from vibration. This impact is considered less than significant. No mitigation is required.

c. Be located within the vicinity of a private airstrip or an airport land use plan, or, where such a plan has not been adopted, within two miles of a public airport or public use airport and expose people residing or working in the project area to excessive noise levels?

The nearest airport is Sacramento Executive, located approximately 4 miles southwest of the project and adjacent sensitive receivers. The project would not involve development of land use that would require consideration of noise compatibility issues. There would be no impact.

XIV. Population and Housing

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:					
a.	Induce substantial unplanned population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure)?				X
b.	Displace a substantial number of existing people or housing, necessitating the construction of replacement housing elsewhere?				X

Affected Environment

As described in Chapter 1, *Introduction/Project Description*, the proposed project is adjacent to developed and recreational areas in West Sacramento and Sacramento. The project does not include, and is not adjacent to, any housing. Land uses and plans for population growth are addressed in the respective West Sacramento and Sacramento general plans.

Discussion

a. Induce substantial unplanned population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure)?

The addition of ramps to the existing bridge could increase bicycle and pedestrian capacity; however, this new access would serve as an additional option for existing residents of West Sacramento and Sacramento and is not anticipated to increase growth or result in population changes in a manner different from already adopted land use plans. There would be no impact.

b. Displace a substantial number of existing people or housing, necessitating the construction of replacement housing elsewhere?

No people or housing would be displaced by the proposed project. There would be no impact.

XV. Public Services

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:				
a. Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities or a need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the following public services:				
Fire protection?				X
Police protection?				X
Schools?				X
Parks?				X
Other public facilities?				X

Affected Environment

The West Sacramento and Sacramento Police and Fire Departments provide law and traffic enforcement, emergency response and fire protection in their respective cities. West Sacramento's Parks and Recreation Department manages the River Walk Park and the River Walk Trail (existing and proposed) to which the proposed project would connect. The City of Sacramento Youth, Parks and Community Enrichment Department manages the Sacramento River Parkway and Trail, to which the proposed project would connect. The Old Sacramento State Historic Park and the State Railroad Museum are just south of the project area. No schools or other governmental public facilities are within the immediate vicinity of the proposed project.

Discussion

a. Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities or a need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any public services:

The proposed project would not result in the need to construct new or expanded governmental facilities to maintain existing performance objectives. It is expected that most public and

government services and facilities, including emergency services, would be unaffected by the proposed project. During construction, implementation of the proposed TMP would maintain adequate response times of emergency service providers (including law enforcement, fire protection, and ambulance service providers). Temporary, and short-term trail detours during construction at the new connections to the Class I trails on each side of the Sacramento River may be necessary but would not require construction of temporary facilities and would not result in an increased demand for public facilities in the area.

Once Phase One of the project is constructed and in use, vehicular emergency response to the I Street Bridge upper deck would be available from the southeast ramp in Sacramento. As such, there would be no impacts on police and fire facilities.

XVI. Recreation

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:					
a.	Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?				X
b.	Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?				X

Affected Environment

West Sacramento

River Walk Park is located along the west bank of the Sacramento River between the Tower Bridge and the existing I Street Bridge. There are picnic areas, an area for special events available for rent, and a restroom facility. The proposed extension of the River Walk Trail would be located at the top of the levee north of the I Street Bridge.

Sacramento

In Sacramento, the proposed project would be just north of the Old Sacramento State Historic Park and the State Railroad Museum. The Sacramento River Parkway and Bike Trail pass under the I Street Bridge along the east bank of the Sacramento River.

Discussion

a. Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

Although people on bicycles and pedestrians can currently use the I Street Bridge, the project would provide improved access to the bridge and new direct connections to existing and proposed facilities in each city. An increase in use of the I Street Bridge by active transportation modes is anticipated as it is an objective of the proposed project; however it would not be so substantial as to cause physical deterioration to existing recreational facilities. There would be no impact.

b. Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?

The proposed project is the construction of facilities that connect to recreational uses (e.g., existing and proposed Class I trail systems). During project construction and the connection of the proposed ramps to existing facilities in each city, temporary detours or closures, including at the River Walk Trail and the Sacramento River Bike Trail, may be necessary. However, any disruption of trail access would be temporary and minor and would not require construction of any additional or expanded recreational facilities. There would be no impact.

XVII. Transportation

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:					
a.	Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?				X
b.	Conflict or be inconsistent with State CEQA Guidelines section 15064.3, subdivision (b)?			X	
c.	Substantially increase hazards because of a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?				X
d.	Result in inadequate emergency access?				X

Affected Environment

Bicycle and Pedestrian Facilities

Bicycle facilities in the project area include multi use paved paths (Class I) separated from roadways; on-street bike lanes (Class II) designated through striping and signage; and on-street bike routes (Class III) which are designated by signage for shared bicycle use with vehicles. In West Sacramento, The River Walk Trail, a Class I path, runs along the riverfront through River Walk Park

from the I Street Bridge south to Tower Bridge Gateway and continues south to Mill Street. An extension of the trail to the north of the I Street Bridge along the top of the levee is separately planned. In addition, a Class III bike route is designated along C Street. Bicycle facilities in Sacramento include the Sacramento River Parkway Trail, a Class I bike and pedestrian path that runs along the river from J Street north through the project area, and Class II bike lanes on Jibboom Street and Railyards Boulevard.

Sidewalks and crosswalks exist along most of the roadways in and around the project area. In West Sacramento, these include 3rd Street, C Street, and part of D Street. There are fewer sidewalks in the immediate project area in Sacramento with the exception of those on the existing I Street Bridge, which has narrow sidewalks that do not comply with current design standards, and on the Jibboom Street and I Street approach roadways proposed for removal by the separate I Street Bridge Replacement project. Pedestrians that currently use the I Street Bridge to cross the river into Sacramento connect to the sidewalks on city roadway via the bridge approach structures.

Roadway System

The West Sacramento roadway network consists of a grid system of two-way streets built to serve mostly local traffic, except for the Tower Bridge Gateway, which provides a direct connection from US 50 into West Sacramento and downtown Sacramento across the Tower Bridge. Local roads immediately adjacent to the project area include 2nd Street, 3rd Street, C Street, and D Street.

The Sacramento roadway network consists of a grid system of mostly two-way streets, and a few one-way couplets leading to and from the freeways. Local roads immediately adjacent to the project area include Jibboom Street, 2nd Street, and I Street.

In Sacramento, I-5 and the northbound on-ramp from I Street to I-5 pass over (above) the proposed locations of the new bicycle and pedestrian ramp connections to the I Street Bridge.

Discussion

a. Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?

The project would provide pedestrian and bicycle connectivity and would not result in changes to traffic volume on local roadways. During construction, equipment and vehicles would be present and could temporarily alter access or require detours. However, as described in Chapter 1, preparation of a TMP is part of the proposed project and would ensure that traffic continues to flow smoothly and not conflict with any circulation policies or plans. There would be no impact.

b. Conflict or be inconsistent with State CEQA Guidelines section 15064.3, subdivision (b)?

As a project constructing facilities for non-motorized modes of transportation by enhancing an existing route across the Sacramento River for active transportation modes, the proposed project would not increase vehicle miles travelled. This impact is considered less than significant. No mitigation is required.

c. Substantially increase hazards because of a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

The geometric design of the proposed project must and would meet the standards of the City of West Sacramento, City of Sacramento, State of California, and USACE—within each agency's

jurisdiction. Compliance with each respective standard would prevent geometric design-related hazards and incompatible uses. There would be no impact.

d. Result in inadequate emergency access?

The proposed project includes preparation and implementation of a TMP for use during project construction (see Chapter 1). Standard traffic, pedestrian, and bicycle control measures, such as installing signage and using flaggers, would be implemented to minimize disturbance to traffic flow. Emergency access along the surface streets would be maintained during project construction, staging, and access activities. There would be no impact.

XVIII. Tribal Cultural Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
a. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or		X		
b. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.		X		

Affected Environment

In response to the Notice of Preparation, the Native American Heritage Commission (NAHC) responded with a letter detailing requirements pertaining to AB 52 and recommended consultation with tribes affiliated with the project area. A summary of events related to communication pursuant to the AB 52 consultation process between the Tribes and the City is provided below. The City initiated AB 52 consultation by contacting the Tribes that had previously requested consultation on City projects. Tribes contacted include United Auburn Indian Community (UAIC), Yoche Dehe Wintun Nation (YDWN), and the Wilton Rancheria.

Yoche Dehe Wintun Nation

On behalf of the YDWN, Laverne Bill, Director of Cultural Resources, requested consultation on November 18, 2021. On December 9, 2021, a virtual meeting was held with representatives from UAIC, the City, ICF, and project engineers. Laverne Bill representing the YDWN mentioned other concurrent projects on the West Sacramento side of the project and stated that the YDWN was only concerned about the West Sacramento side of the project. No known tribal cultural resources were mentioned by YDWN as being in the project area. The same day of the virtual meeting, the City provided Mr. Bill with Tribal Cultural Resource unanticipated discovery language for mitigation measures to be used in the environmental document for the project that was agreed upon by the City and UAIC as mentioned below. On January 14 and 24, 2022, the City reached out to Mr. Bill again to confirm the language for the mitigation measures and request to formally close AB 52 consultation with the YDWN. On January 24, 2022, Mr. Bill responded and agreed to the mitigation measure language.

United Auburn Indian Community

On behalf of UAIC, Anna Starkey, Cultural Regulatory Specialist, requested consultation on May 20, 2021. After coordination of schedules, a virtual meeting was held with representatives from UAIC, the City, ICF, and project engineers on July 29, 2021. During the call, the project was described in detail to UAIC representative Anna Starkey, and information was gathered regarding potential mitigation measures, project design, and tribal input. As a result of the meeting, it was identified that the project was more culturally affiliated with the Yocha Dehe Wintun Nation and, therefore, Ms. Starkey deferred to the YDWN regarding AB 52 consultation. Additionally, no known tribal cultural resources were mentioned by UAIC as being in the project. Following the meeting, Ms. Starkey provided unanticipated discovery mitigation measures to be used in the environmental document for the project. The language was revised by the City so that the mitigation measures were not specific to the UAIC. Ms. Starkey approved of the changes on July 29, 2021, and determined that no further consultation with UAIC was necessary.

Wilton Rancheria

On behalf of the Wilton Rancheria, Mariah Mayberry of the Cultural Preservation Department responded to a follow-up email from the City on June 22, 2021, stating that the tribe had identified cultural resource near the project and requested a tribal monitor be present during all ground disturbance. The City responded on January 14, 2022, with an email providing previous documents associated with the I Street replacement project, a description of the project and asked to set up a consultation meeting. On January 24, 2022, the City reached out again to Ms. Mayberry and discussed that consultation with UAIC and YDWN had occurred. The City then provided the agreed upon mitigation measures to Ms. Mayberry for her review. Ms. Mayberry responded stating that no resources were located in the project area, but in fact, were nearby. In response to the mitigation measures, Ms. Mayberry stated that the Wilton Rancheria agreed upon the mitigation measure language and agreed to conclude AB 52 consultation.

Discussion

a. Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the

landscape, sacred place, or object with cultural value to a California Native American tribe, and that is: Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)?

As a result of consultation efforts with the Yocha Dehe Wintun Nation, the United Auburn Indian Community, and the Wilton Rancheria, no tribal cultural resources listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k) were identified in the project; however, there is the potential to encounter buried tribal cultural resources in the project area during ground disturbing activities. As a result of consultation efforts, the City and consulting tribes have agreed upon **Mitigation Measure TCR-1** to be implemented in the unlikely chance that significant tribal cultural resources are identified during ground disturbing activities.

If any buried tribal cultural resources were encountered and damaged during construction, the destruction of buried tribal cultural resources would be a **potentially significant impact**. Implementation of Mitigation Measure TCR-1 would reduce this impact to a less-than-significant level. This impact is considered **less than significant with mitigation incorporated**.

Mitigation Measure TCR-1: Implement Measures to Protect Previously Unidentified Tribal Cultural Resources

If any suspected tribal cultural resources are discovered during ground disturbing construction activities, all work shall cease within 100 feet of the find, or an agreed upon distance based on the project area and nature of the find. A Tribal Representative from a California Native American tribe that is traditionally and culturally affiliated with a geographic area shall be immediately notified and shall determine if the find is a tribal cultural resource (Pub. Resources Code Section 21074). The Tribal Representative will make recommendations for further evaluation and treatment as necessary.

When avoidance is infeasible, preservation in place is the preferred option for mitigation of tribal cultural resources under CEQA, and every effort shall be made to preserve the resources in place, including through project redesign, if feasible. Culturally appropriate treatment may be, but is not limited to, processing materials for reburial, minimizing handling of cultural objects, leaving objects in place within the landscape, or returning objects to a location within the project area where they will not be subject to future impacts. Permanent curation of tribal cultural resources will not take place unless approved in writing by the California Native American tribe that is traditionally and culturally affiliated with the project area.

The contractor will implement any measures deemed by the City of West Sacramento to be necessary and feasible to preserve in place, avoid, or minimize impacts to the resource, including, but not limited to, facilitating the appropriate tribal treatment of the find, as necessary. Treatment that preserves or restores the cultural character and integrity of a Tribal Cultural Resource may include Tribal Monitoring, culturally appropriate recovery of cultural objects, and reburial of cultural objects or cultural soil.

Work at the discovery location cannot resume until all necessary investigation and evaluation of the discovery under the requirements of the CEQA, including AB 52, have been satisfied.

b. Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place,

cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is: A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1?

As a result of consultation efforts with the Yocha Dehe Wintun Nation, the United Auburn Indian Community, and the Wilton Rancheria, no tribal cultural resources determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1 were identified in the project area; however, there is the potential to encounter buried tribal cultural resources in the project area during ground disturbing activities. As a result of consultation efforts, the City and consulting tribes have agreed upon **Mitigation Measure TCR-1** to be implemented in the unlikely chance that significant tribal cultural resources are identified during ground disturbing activities.

If any buried tribal cultural resources were encountered and damaged during construction, the destruction of buried tribal cultural resources would be a **potentially significant impact**. Implementation of Mitigation Measure TCR-1 would reduce this impact to a less-than-significant level. This impact is considered **less than significant with mitigation incorporated**.

Mitigation Measure TCR-1: Implement Measures to Protect Previously Unidentified Tribal Cultural Resources

The full text of this measure is provided under checklist item “a” above.

XIX. Utilities and Service Systems

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:					
a.	Require or result in the relocation or construction of new or expanded water, wastewater treatment, stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?				X
b.	Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?				X
c.	Result in a determination by the wastewater treatment provider that serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?				X
d.	Generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?				X
e.	Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?			X	

Affected Environment

The project involves retaining portions of ramp structures on each end of the existing I Street Bridge to be used as raised platforms to which pedestrian ramps would be attached. One ramp in Sacramento would be designed to accommodate UPRR maintenance vehicles access to the bridge for routine maintenance activities.

Discussion

a. Require or result in the relocation or construction of new or expanded water, wastewater treatment, stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?

The project would not require the construction of new or expanded utility or service facilities. The project would not result in an increased demand for water, water supply, or wastewater treatment. New impervious surfaces would be minimal and not substantial enough to cause an increase in stormwater flows that would burden existing drainage systems. There would be no impact.

b. Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?

c. Result in a determination by the wastewater treatment provider that serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

Checklist items b and c. Other than water used for dust suppression and consumption by workers during construction, the project would not require water or wastewater service. Water for construction would be provided by water trucks. There would be no impact.

d. Generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?

e. Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

Checklist items d and e. Waste generated by construction would be recycled to the extent possible. Materials that cannot be recycled would be taken to a landfill permitted to accept construction material and disposed of in compliance with federal, state, and local management and reduction statutes and regulations. Construction waste that is not recycled would likely be disposed of at the Yolo County Central Landfill or the Sacramento Recycling and Transfer Station. The project would not generate waste in excess of local standards. The Yolo County Central Landfill has adequate capacity for this project in addition to other projects in Yolo County and general waste from residential, commercial, industrial, and other activities (Yolo County Planning and Public Works Department 2012:1).

The Sacramento Recycling and Transfer Station in Sacramento handles the recycling and disposal needs for the City of Sacramento and surrounding region. The facility includes a transfer station, recycling center, household hazardous waste, and e-waste collection site. As of 2012, long-range planning and diversion programs reaching 71 percent has left the Sacramento County with at least 65 years of disposal capacity (Sacramento County Department of Waste Management & Recycling 2012:19). This impact is less than significant. No mitigation is required.

XX. Wildfire

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:				
a. Substantially impair an adopted emergency response plan or emergency evacuation plan?				X
b. Due to slope, prevailing winds, and other factors, exacerbate wildfire risks of, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?				X
c. Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines, or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts on the environment?				X
d. Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?				X

Affected Environment

The proposed project is not located in or near a state responsibility area or lands classified as very high fire hazard severity zones (CALFIRE 2007). Land uses are primarily industrial, commercial, and parkland.

Discussion

a. Substantially impair an adopted emergency response plan or emergency evacuation plan?

b. Due to slope, prevailing winds, and other factors, exacerbate wildfire risks of, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?

c. Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines, or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts on the environment?

d. Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?

Checklist items a though d. The project is located adjacent to an urbanized area at low risk for wildland fires. During construction, the use and staging of equipment would follow standard

construction safety protocols to prevent fire or sparks that could cause fire. Therefore, construction of the proposed project would not increase the risk of wildland fire. Operation of the proposed project would not involve any changes to the bridge that could increase the risk of wildland fire. As such, there would be no impact.

XXI. Mandatory Findings of Significance

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

Affected Environment

The lead agency shall find that a project may have a significant effect on the environment and thereby require an EIR to be prepared where there is substantial evidence, in light of the whole record, that any of the following conditions may occur. Where prior to commencement of the environmental analysis, a project proponent agrees to mitigation measures or project modifications that would avoid any significant effect on the environment or would mitigate the significant environmental effects, a lead agency need not prepare an EIR solely because without mitigation the environmental effects would have been significant (per State CEQA Guidelines, Section 15065).

Discussion

a. Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community,

substantially reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?

As described in Section IV, *Biological Resources*, the project would not significantly affect fish or wildlife habitat; cause a fish or wildlife population to drop below self-sustaining levels; threaten to eliminate a plant or animal community; or reduce the number or restrict the range of an endangered, rare, or threatened species. With implementation of Mitigation Measures BIO-1 through BIO-13, as well as construction BMPs, the minor, brief, and localized impacts on special-status species and their habitats would be less than significant.

The project's potential effects on historic and archaeological resources are described in Section V, *Cultural Resources*, and Section XVIII, *Tribal Cultural Resources*. Implementation of the project is not anticipated to adversely affect cultural resources. However, there is the potential for the project to affect previously undiscovered tribal cultural resources and/or human remains. With implementation of Mitigation Measures CUL-1, CUL-2, and TCR-1 impacts on previously undiscovered cultural/tribal resources and human remains would be less than significant. This impact is considered **less than significant with mitigation incorporated**.

b. Does the project have impacts that are individually limited but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)

The impacts of the project would be individually limited and not cumulatively considerable. As provided in this initial study, the project has the potential to significantly affect aesthetics; air quality; biological resources; cultural resources; geology, soils, and paleontological resources; hazards and hazardous materials; and tribal cultural resources. However, measures have been identified that would reduce these impacts to less-than-significant levels. All environmental impacts that could occur as a result of the project would be reduced to less-than-significant levels with implementation of the mitigation measures recommended throughout this initial study. When viewed in conjunction with other closely related past, present, or reasonably foreseeable future projects, development of this project would not cumulatively contribute to impacts. This impact is considered **less than significant with mitigation incorporated**.

c. Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?

The project would maintain and improve active transportation use on the upper deck of the existing I Street Bridge by constructing two ramps on each side of the bridge to provide enhanced connectivity for bicycles and pedestrians. As described in this initial study, implementation the project could result in temporary impacts on the following resources: aesthetics; air quality; biological resources; cultural resources; geology, soils, and paleontological resources; hazards and hazardous materials; hydrology and water quality; noise; recreation; tribal cultural resources; and utilities. With the implementation of mitigation measures and compliance with existing federal, state, and local regulations, the project would not result in adverse effects on human beings, either directly or indirectly, and this impact would be less than significant. This impact is considered **less than significant with mitigation incorporated**.

Chapter 3
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None.

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XI. Land Use and Planning

None.

XII. Mineral Resources

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XIV. Population and Housing

None.

XV. Public Services

None.

XVI. Recreation

None.

XVII. Transportation

None.

XVIII. Tribal Cultural Resources

None.

XIX. Utilities and Service Systems

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XX. Wildfire

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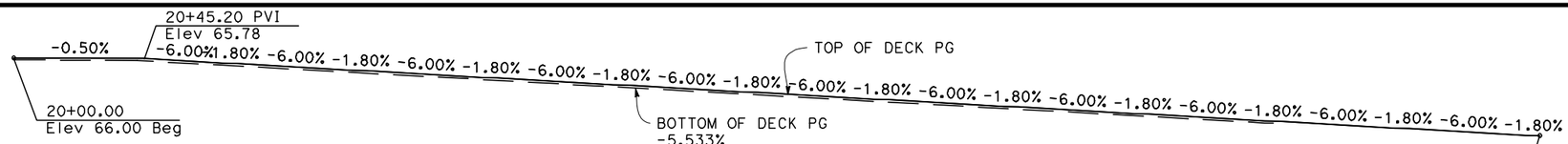
XXI. Mandatory Findings of Significance

None.

Appendix A
Design Drawings

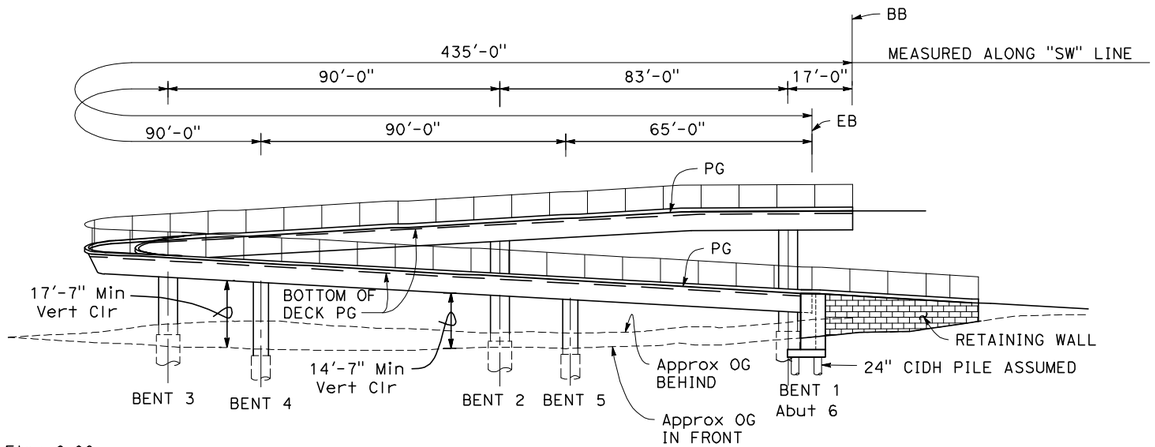


PROFILE GRADE

1" = 20'

NOTES:

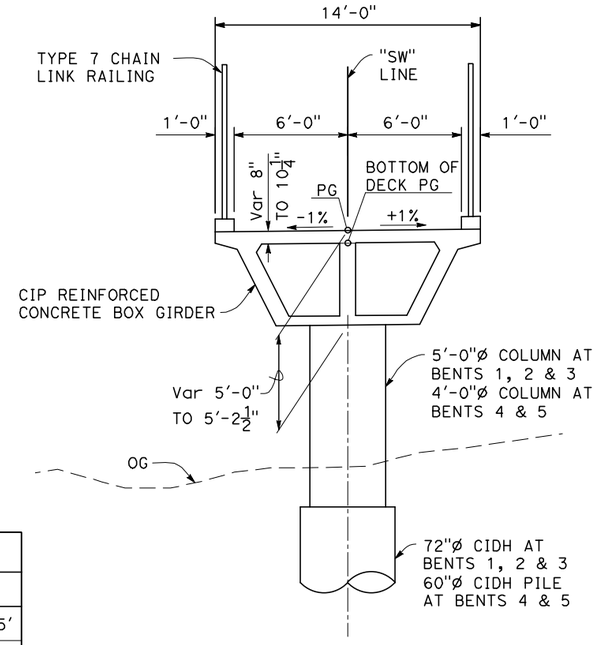
1. -1.80% SLOPES are: L = 5'-0".
2. -6.00% SLOPES are: L = 40'-0"



ELEVATION

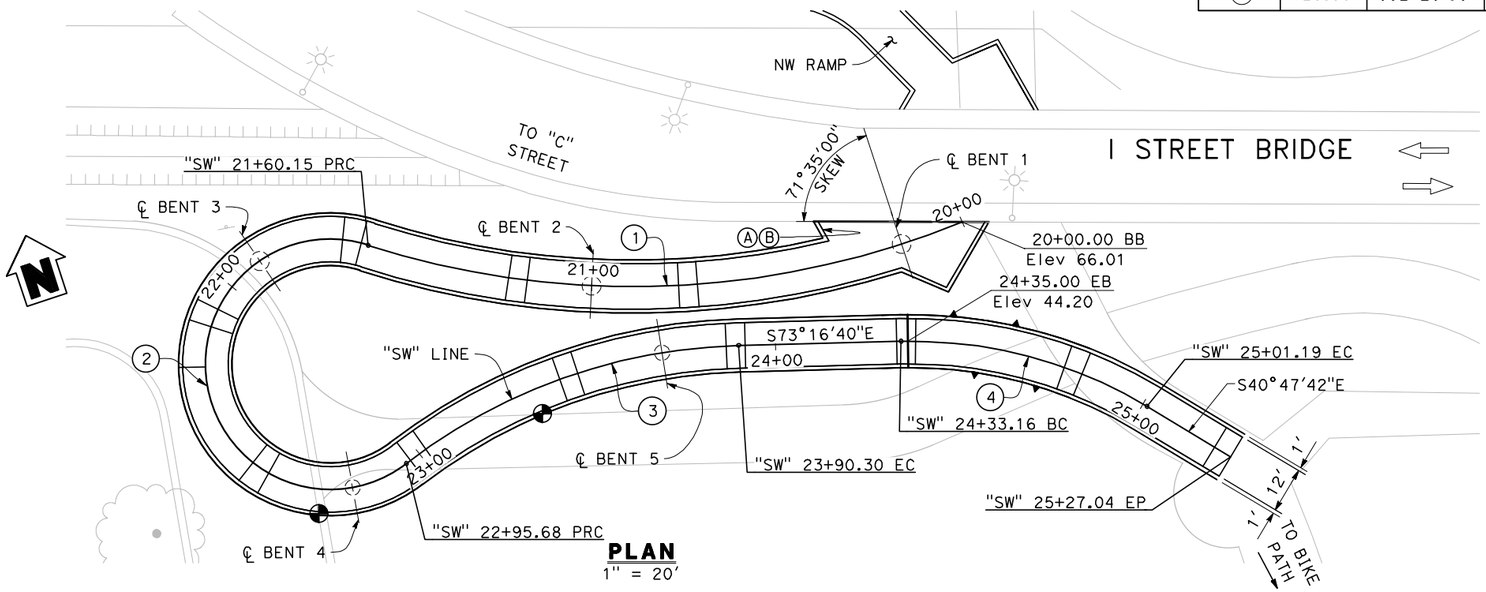
1" = 20'

CURVE DATA				
No. Ⓧ	R	Δ	T	L
①	230.00'	039°53'44"	83.48'	160.15'
②	33.00'	235°18'10"	62.99'	135.52'
③	150.00'	036°08'43"	48.95'	94.63'
④	120.00'	032°28'58"	34.96'	68.03'



TYPICAL SECTION

1/4" = 1'-0"



PLAN

1" = 20'

NOTES:

Ⓐ Paint "SW RAMP"

Ⓑ Paint "BR NO. 03-NEW" & "YEAR CONSTRUCTED"

1. The contractor shall verify all controlling field dimensions before ordering or fabricating any material.
2. For "INDEX TO PLANS" and "GENERAL NOTES", see "DECK CONTOURS" sheet.
3. For "HYDROLOGIC SUMMARY" and "PILE DATA TABLE", see "FOUNDATION PLAN" sheet.

SCALE: PER PLAN

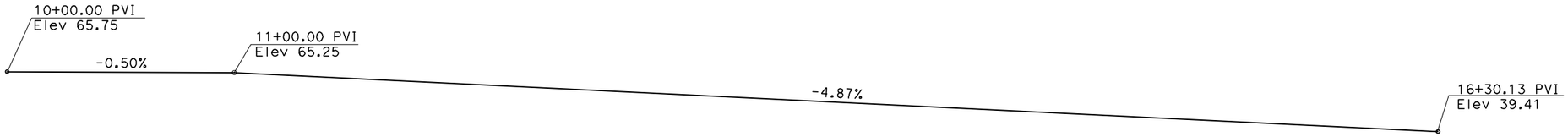
SHEET XX

I STREET DECK CONVERSION

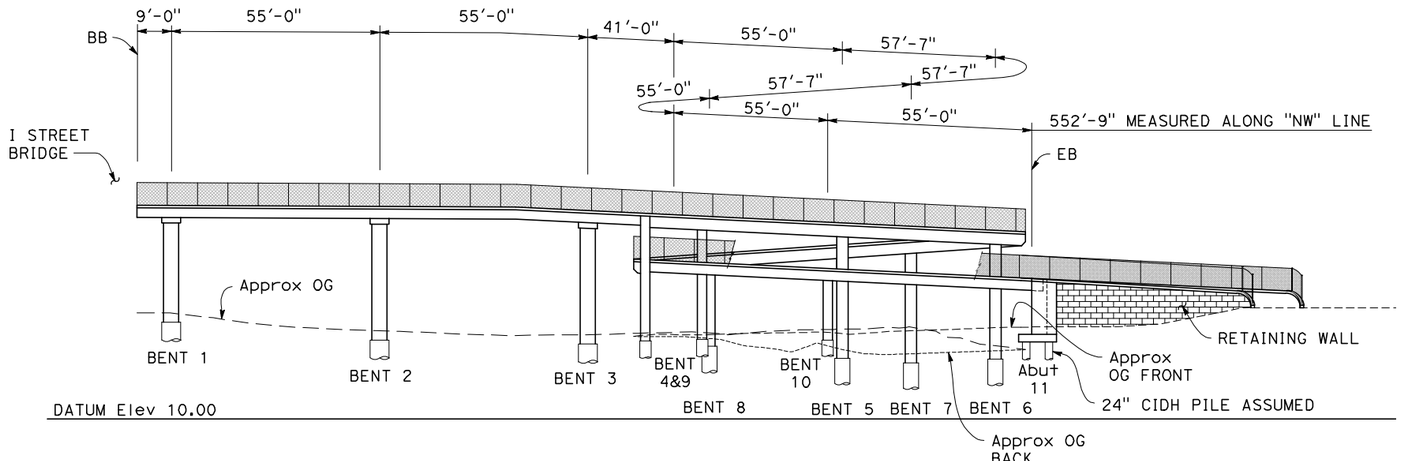
SW RAMP GENERAL PLAN

CITY OF WEST SACRAMENTO | City of SACRAMENTO | MARK THOMAS

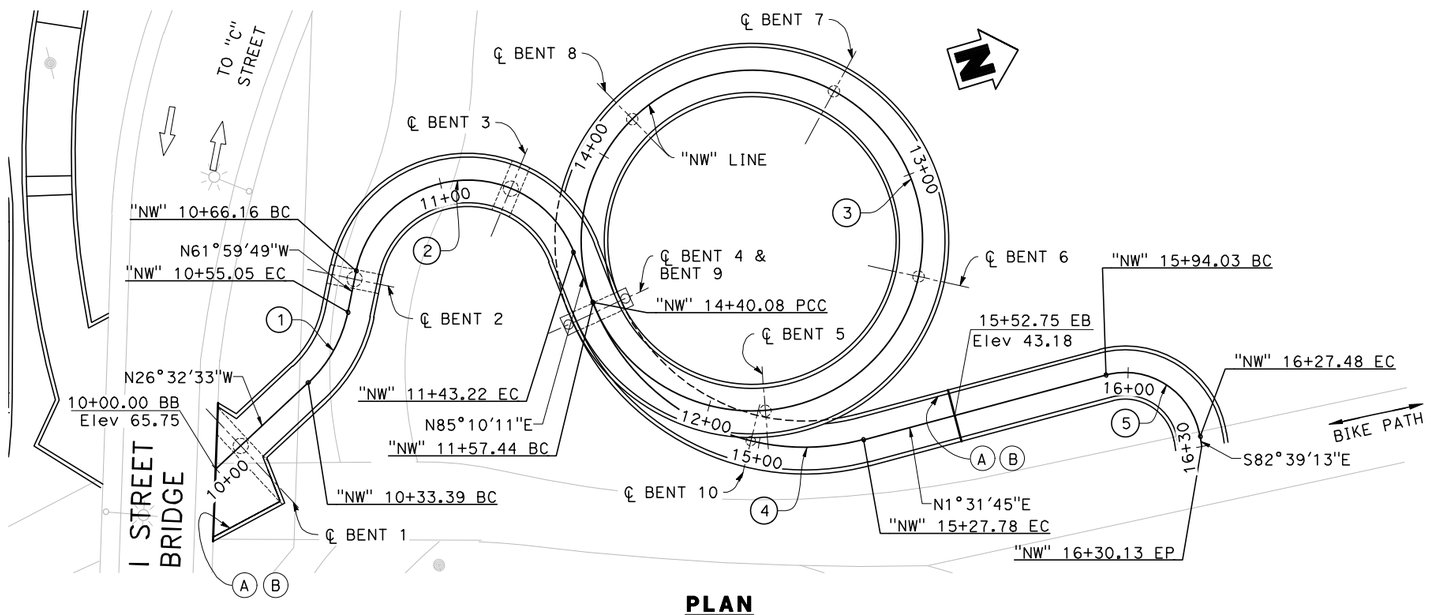
JANUARY 2021



PROFILE GRADE
NO SCALE



ELEVATION
Horz: 1" = 20'



PLAN
1" = 20'

CURVE DATA				
No. Ⓧ	R	Δ	T	L
①	35.00′	035°27′16"	11.19′	21.66′
②	30.00′	147°10′00"	101.82′	77.06′
③	45.00′	359°51′22"	0.06′	282.63′
④	60.00′	083°44′55"	53.79′	87.70′
⑤	20.00′	095°49′01"	22.14′	33.45′

NOTES:

Ⓐ Paint "NW POC"

Ⓑ Paint "BR NO. 03-NEW" & "YEAR CONSTRUCTED"

1. The contractor shall verify all controlling field dimensions before ordering or fabricating any material.
2. For "INDEX TO PLANS" and "GENERAL NOTES", see "DECK CONTOURS" sheet.
3. For "HYDROLOGIC SUMMARY" and "PILE DATA TABLE", see "FOUNDATION PLAN" sheet.

SCALE: PER PLAN

SHEET XX

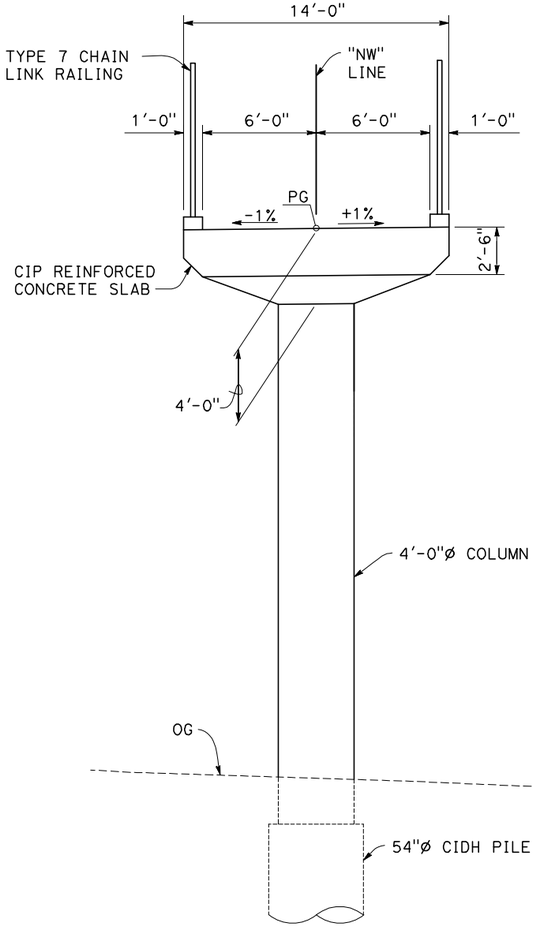
I STREET DECK CONVERSION
NW RAMP GENERAL PLAN No. 1

JANUARY 2021

CITY OF WEST SACRAMENTO

City of SACRAMENTO

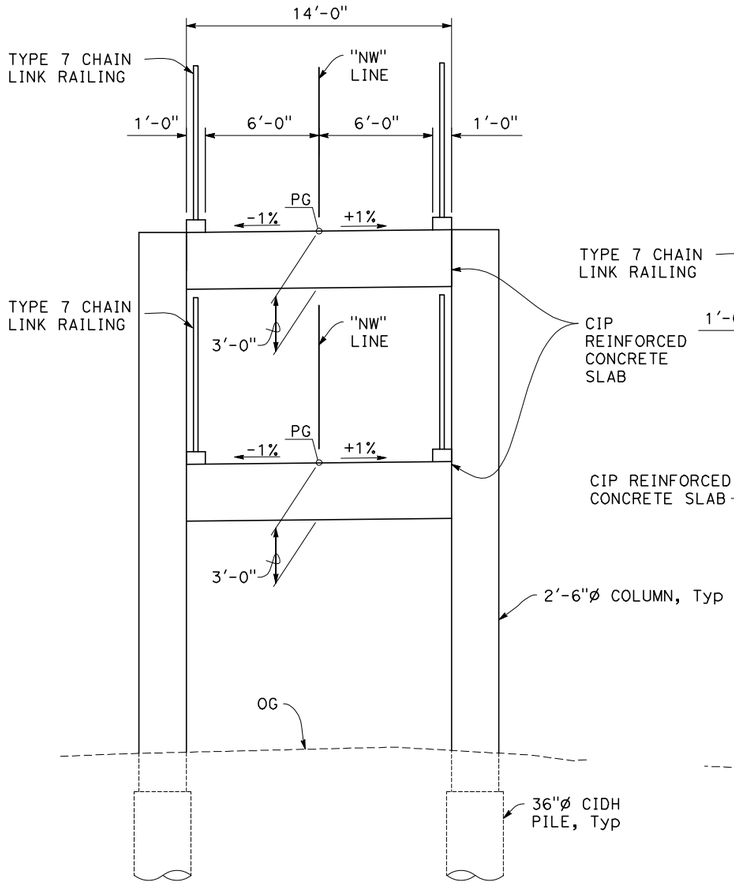
MARK THOMAS



BENTS 1, 2 & 3

TYPICAL SECTION

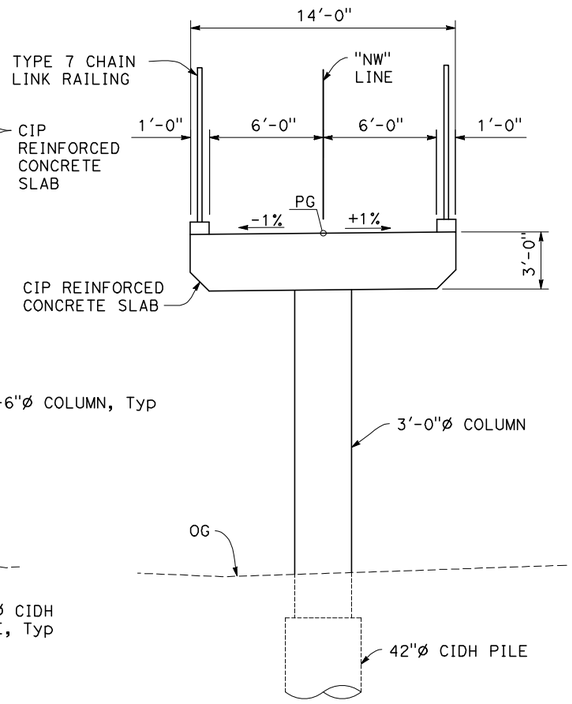
1/4" = 1'-0"



BENTS 4 & 9

TYPICAL SECTION

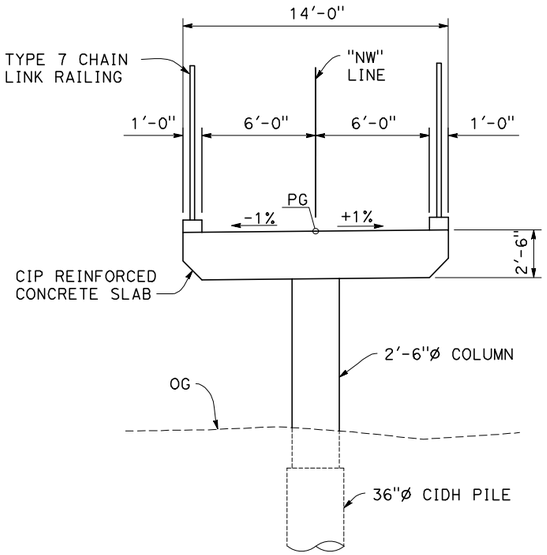
1/4" = 1'-0"



BENTS 5, 6, 7 & 8

TYPICAL SECTION

1/4" = 1'-0"



BENT 10

TYPICAL SECTION

1/4" = 1'-0"

SCALE: PER PLAN

SHEET XX

JANUARY 2021

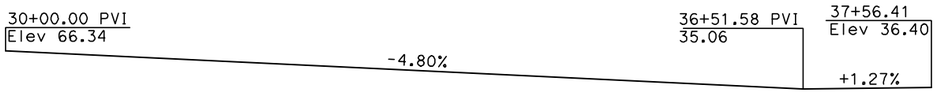
I STREET DECK CONVERSION

NW RAMP GENERAL PLAN No. 2

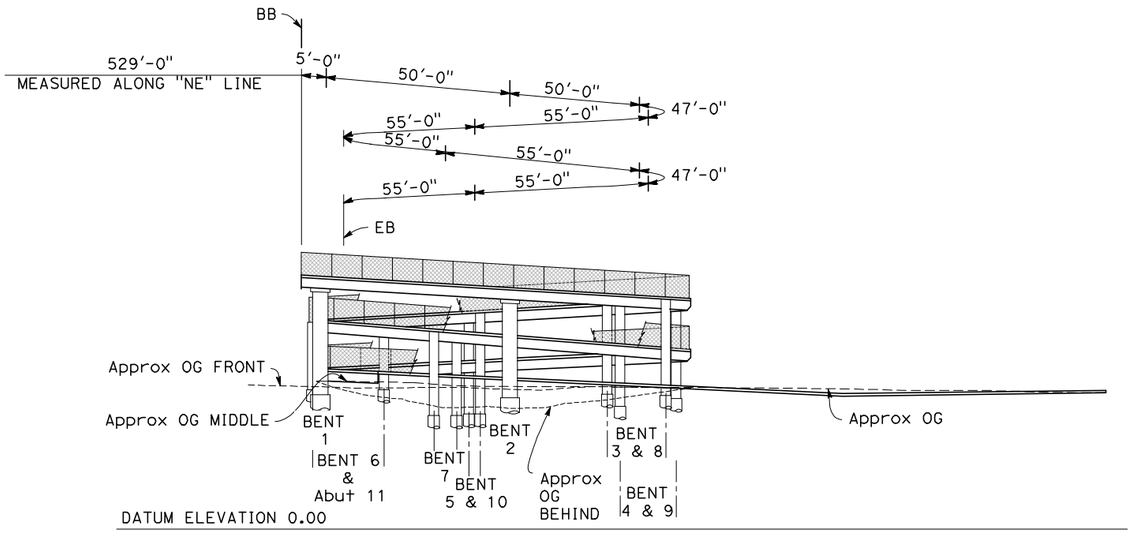
CITY OF WEST SACRAMENTO

City of SACRAMENTO

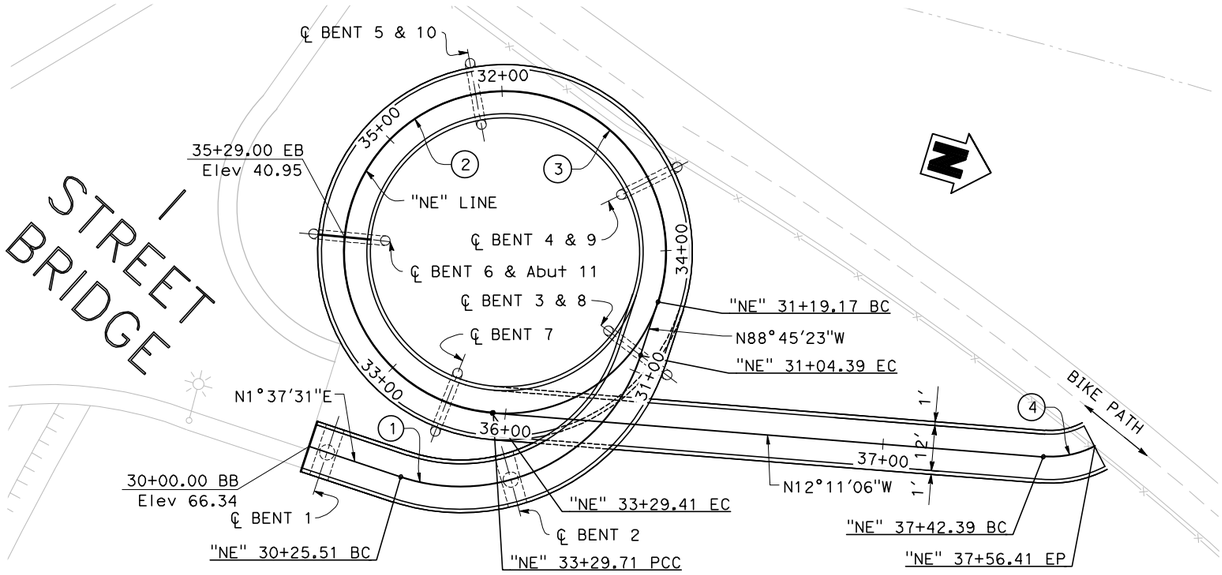
MARK THOMAS



PROFILE GRADE
NO SCALE



ELEVATION
1" = 20'



PLAN
1" = 20'

CURVE DATA				
No. Ⓧ	R	Δ	T	L
①	50.00'	090°22'54"	50.33'	78.87'
②	42.50'	283°50'06"	33.30'	210.54'
③	42.50'	359°35'29"	0.15'	266.73'
④	25.00'	032°08'52"	7.20'	14.03'

NOTES:

1. The contractor shall verify all controlling field dimensions before ordering or fabricating any material.
2. For "INDEX TO PLANS" and "GENERAL NOTES", see "DECK CONTOURS" sheet.
3. For "HYDROLOGIC SUMMARY" and "PILE DATA TABLE", see "FOUNDATION PLAN" sheet.

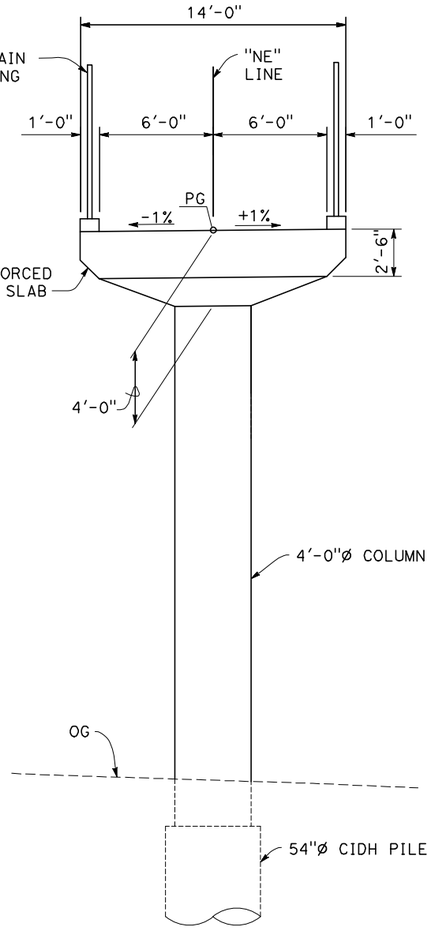
SCALE: PER PLAN

SHEET 01

I STREET DECK CONVERSION
NE RAMP GENERAL PLAN No. 1

JANUARY 2021

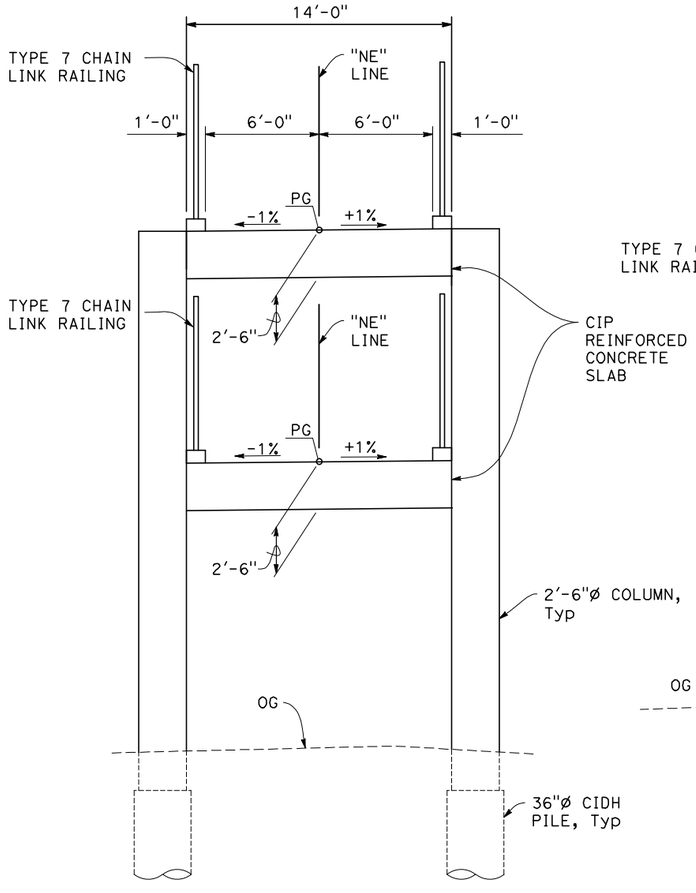
CITY OF WEST SACRAMENTO | City of SACRAMENTO | MARK THOMAS



BENTS 1 & 2

TYPICAL SECTION

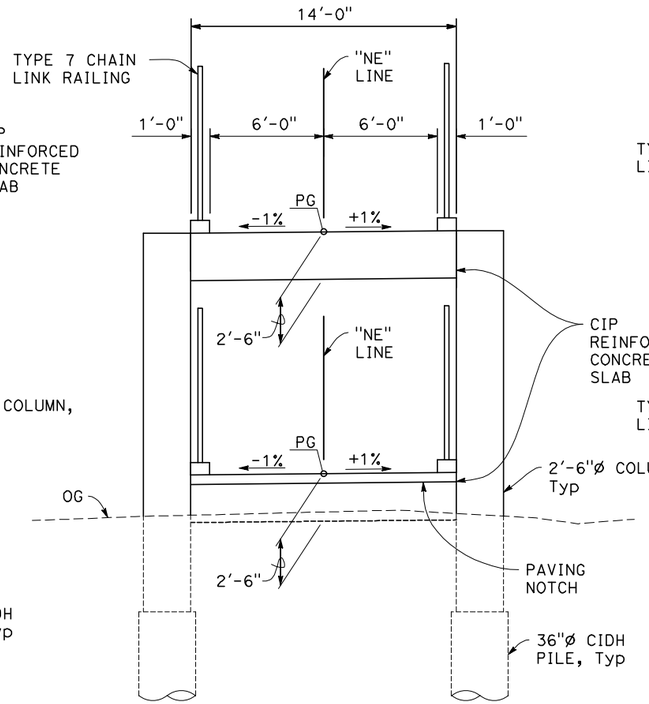
1/4" = 1'-0"



BENTS 3 & 8, 4 & 9 AND 5 & 10

TYPICAL SECTION

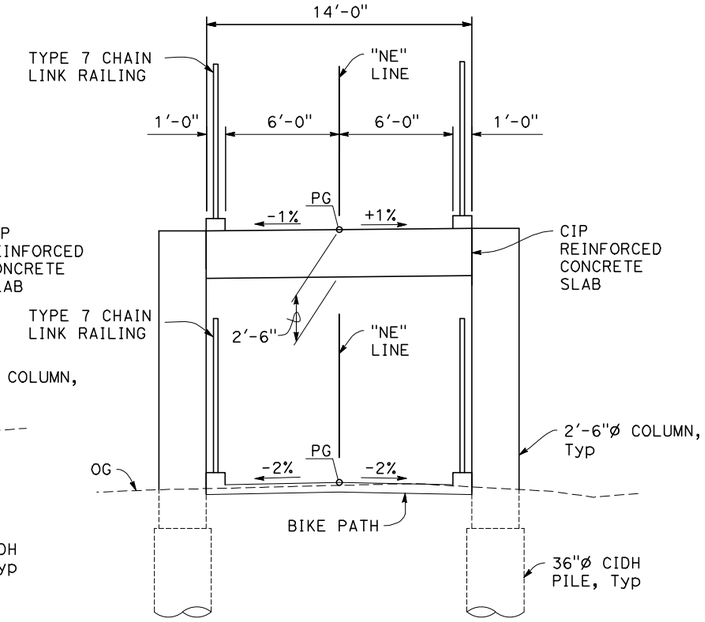
1/4" = 1'-0"



BENT 6 & ABUTMENT 11

TYPICAL SECTION

1/4" = 1'-0"



BENT 7

TYPICAL SECTION

1/4" = 1'-0"

SCALE: PER PLAN

SHEET 02

JANUARY 2021

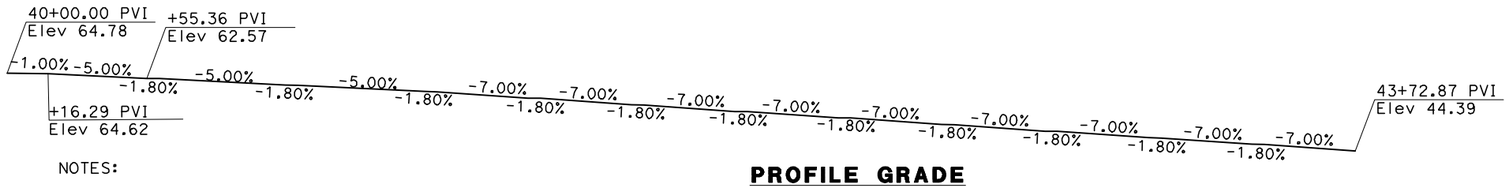
I STREET DECK CONVERSION

NE RAMP GENERAL PLAN No. 2

CITY OF WEST SACRAMENTO

City of SACRAMENTO

MARK THOMAS

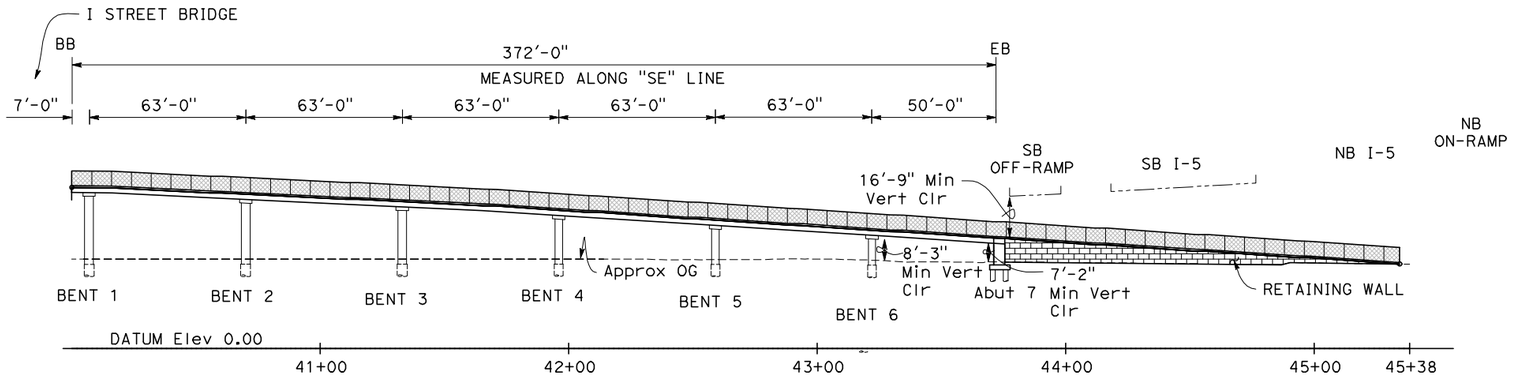


NOTES:

1. -1.80% SLOPES are: L = 5'-1"
2. -5.00% SLOPES are: L = 50'-1" unless noted otherwise
3. -7.00% SLOPES are L = 36'-0"

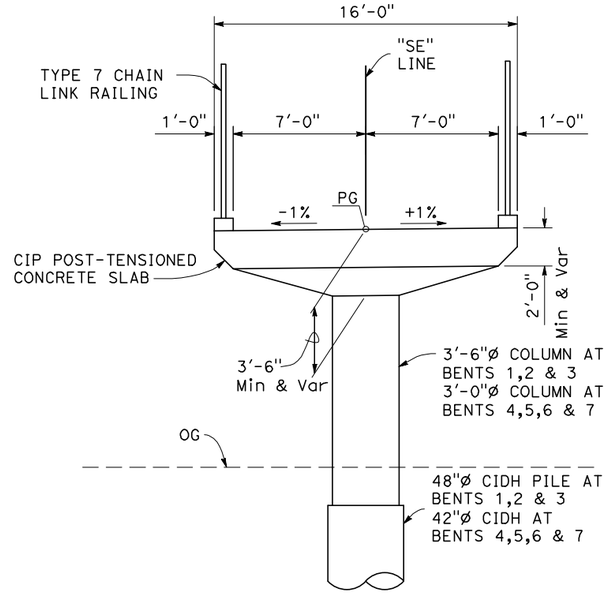
PROFILE GRADE

NO SCALE



DEVELOPED ELEVATION

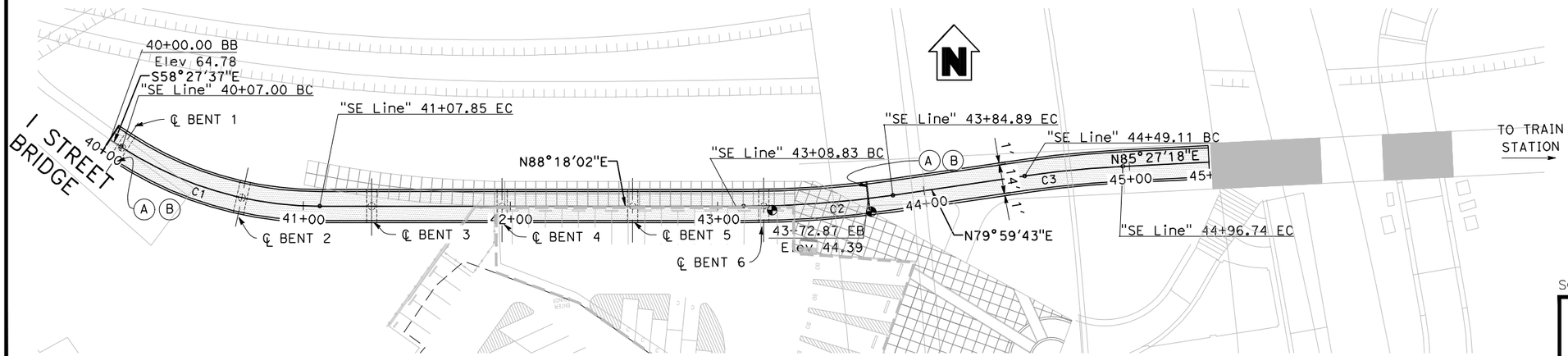
1" = 30'



TYPICAL SECTION

1/4" = 1'-0"

CURVE DATA				
No. (X)	R	Δ	T	L
(C1)	175.00'	033°14'22"	52.24'	101.52'
(C2)	500.00'	008°18'19"	36.30'	72.48'
(C3)	500.00'	005°27'36"	23.84'	47.65'



PLAN

1" = 30'

NOTES:

(A) Paint "BRIDGE NAME"

(B) Paint "BR NO. 03-NEW" & "YEAR COMPLETED"

1. The contractor shall verify all controlling field dimensions before ordering or fabricating any material.
2. For "INDEX TO PLANS" and "GENERAL NOTES", see "DECK CONTOURS" sheet.
3. For "PILE DATA TABLE", see "FOUNDATION PLAN" sheet.

SCALE: PER PLAN

SHEET XX

I STREET DECK CONVERSION

SE RAMP GENERAL PLAN

JANUARY 2021

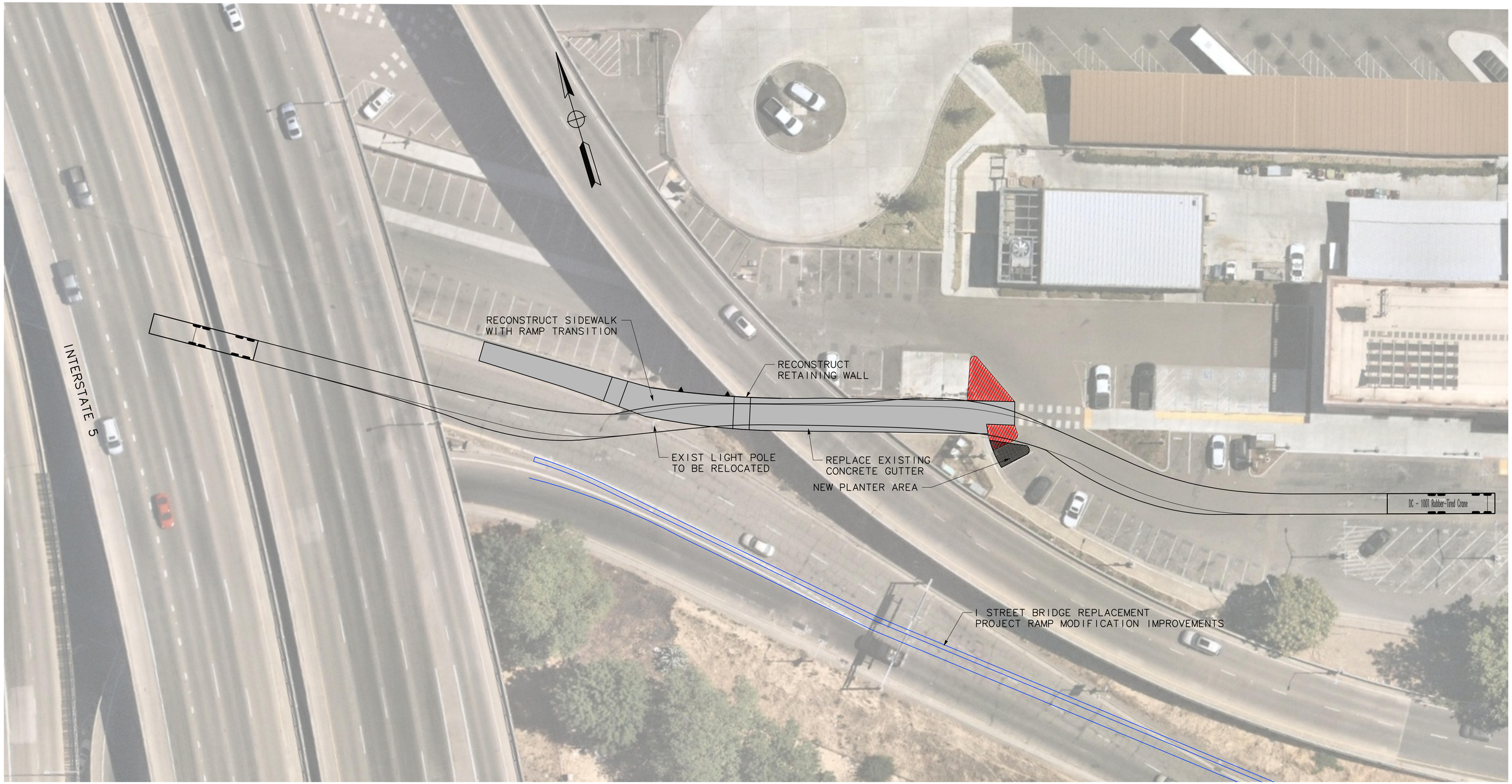
CITY OF WEST SACRAMENTO

City of SACRAMENTO

MARK THOMAS

Interim Ramp

Sacramento Valley Station Vehicle Access Exhibits



LEGEND

SIDEWALK

REMOVE PLANTER

SACRAMENTO
WEST BOUND

SCALE: 1" = 20'

JUNE 2021

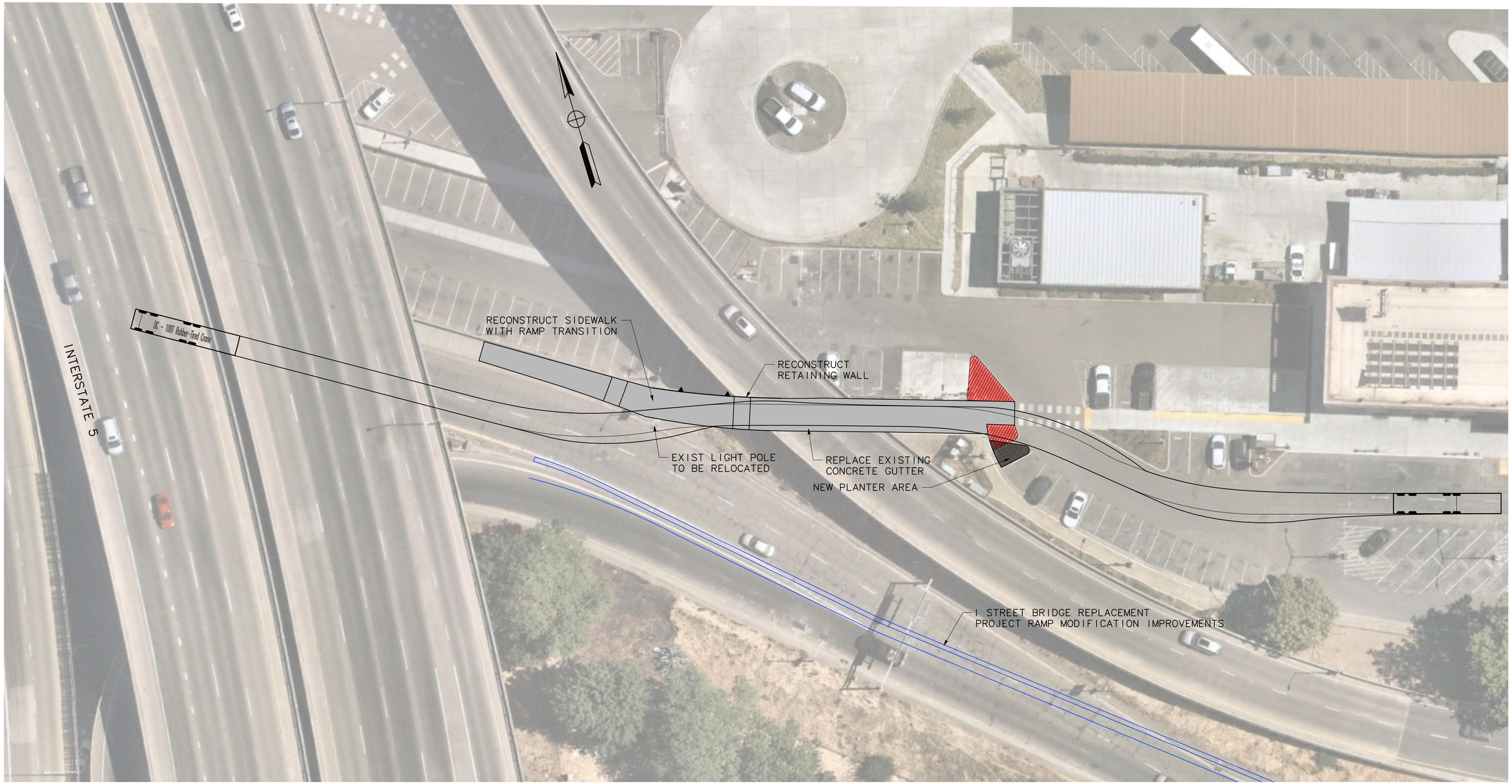
I STREET DECK CONVERSION

SACRAMENTO VALLEY STATION VEHICLE ACCESS

CITY OF WEST SACRAMENTO

City of SACRAMENTO

MARK THOMAS



LEGEND

SIDEWALK

REMOVE PLANTER

SACRAMENTO
EAST BOUND

SCALE: 1" = 20'

JUNE 2021

I STREET DECK CONVERSION

SACRAMENTO VALLEY STATION VEHICLE ACCESS

CITY OF WEST SACRAMENTO

City of SACRAMENTO

MARK THOMAS

Appendix B
Species Lists

Selected Elements by Scientific Name

California Department of Fish and Wildlife

California Natural Diversity Database

Query Criteria: Quad IS (Sacramento West (3812155) OR Sacramento East (3812154) OR Clarksburg (3812145) OR Saxon (3812146) OR Rio Linda (3812164) OR Taylor Monument (3812165) OR Grays Bend (3812166) OR Davis (3812156) OR Florin (3812144))

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Accipiter cooperii Cooper's hawk	ABNKC12040	None	None	G5	S4	WL
Acipenser medirostris pop. 1 green sturgeon - southern DPS	AFCAA01031	Threatened	None	G2T1	S1	
Agelaius tricolor tricolored blackbird	ABPBXB0020	None	Threatened	G1G2	S1S2	SSC
Ammodramus savannarum grasshopper sparrow	ABPBXA0020	None	None	G5	S3	SSC
Antrozous pallidus pallid bat	AMACC10010	None	None	G4	S3	SSC
Archoplites interruptus Sacramento perch	AFCQB07010	None	None	G1	S1	SSC
Ardea alba great egret	ABNGA04040	None	None	G5	S4	
Ardea herodias great blue heron	ABNGA04010	None	None	G5	S4	
Astragalus tener var. ferrisiae Ferris' milk-vetch	PDFAB0F8R3	None	None	G2T1	S1	1B.1
Astragalus tener var. tener alkali milk-vetch	PDFAB0F8R1	None	None	G2T1	S1	1B.2
Athene cunicularia burrowing owl	ABNSB10010	None	None	G4	S3	SSC
Atriplex cordulata var. cordulata heartscale	PDCHE040B0	None	None	G3T2	S2	1B.2
Atriplex depressa brittlescale	PDCHE042L0	None	None	G2	S2	1B.2
Bombus crotchii Crotch bumble bee	IIHYM24480	None	None	G2	S1S2	
Bombus occidentalis western bumble bee	IIHYM24250	None	None	G2G3	S1	
Branchinecta conservatio Conservancy fairy shrimp	ICBRA03010	Endangered	None	G2	S2	
Branchinecta lynchi vernal pool fairy shrimp	ICBRA03030	Threatened	None	G3	S3	
Branchinecta mesovallensis midvalley fairy shrimp	ICBRA03150	None	None	G2	S2S3	

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Buteo regalis ferruginous hawk	ABNKC19120	None	None	G4	S3S4	WL
Buteo swainsoni Swainson's hawk	ABNKC19070	None	Threatened	G5	S3	
Carex comosa bristly sedge	PMCYP032Y0	None	None	G5	S2	2B.1
Centromadia parryi ssp. parryi pappose tarplant	PDAST4R0P2	None	None	G3T2	S2	1B.2
Charadrius montanus mountain plover	ABNNB03100	None	None	G3	S2S3	SSC
Charadrius nivosus nivosus western snowy plover	ABNNB03031	Threatened	None	G3T3	S2	SSC
Chloropyron palmatum palmate-bracted bird's-beak	PDSCR0J0J0	Endangered	Endangered	G1	S1	1B.1
Cicindela hirticollis abrupta Sacramento Valley tiger beetle	IICOL02106	None	None	G5TH	SH	
Coccyzus americanus occidentalis western yellow-billed cuckoo	ABNRB02022	Threatened	Endangered	G5T2T3	S1	
Cuscuta obtusiflora var. glandulosa Peruvian dodder	PDCUS01111	None	None	G5T4?	SH	2B.2
Desmocerus californicus dimorphus valley elderberry longhorn beetle	IICOL48011	Threatened	None	G3T2T3	S3	
Downingia pusilla dwarf downingia	PDCAM060C0	None	None	GU	S2	2B.2
Egretta thula snowy egret	ABNGA06030	None	None	G5	S4	
Elanus leucurus white-tailed kite	ABNKC06010	None	None	G5	S3S4	FP
Elderberry Savanna Elderberry Savanna	CTT63440CA	None	None	G2	S2.1	
Emys marmorata western pond turtle	ARAAD02030	None	None	G3G4	S3	SSC
Eryngium jepsonii Jepson's coyote-thistle	PDAPI0Z130	None	None	G2	S2	1B.2
Extriplex joaquinana San Joaquin spearscale	PDCHE041F3	None	None	G2	S2	1B.2
Falco columbarius merlin	ABNKD06030	None	None	G5	S3S4	WL
Fritillaria agrestis stinkbells	PMLIL0V010	None	None	G3	S3	4.2
Gonidea angulata western ridged mussel	IMBIV19010	None	None	G3	S1S2	

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Gratiola heterosepala Boggs Lake hedge-hyssop	PDSCR0R060	None	Endangered	G2	S2	1B.2
Great Valley Cottonwood Riparian Forest Great Valley Cottonwood Riparian Forest	CTT61410CA	None	None	G2	S2.1	
Hibiscus lasiocarpos var. occidentalis woolly rose-mallow	PDMAL0H0R3	None	None	G5T3	S3	1B.2
Hypomesus transpacificus Delta smelt	AFCHB01040	Threatened	Endangered	G1	S1	
Lasionycteris noctivagans silver-haired bat	AMACC02010	None	None	G3G4	S3S4	
Lasiurus cinereus hoary bat	AMACC05030	None	None	G3G4	S4	
Lasthenia chrysantha alkali-sink goldfields	PDAST5L030	None	None	G2	S2	1B.1
Laterallus jamaicensis coturniculus California black rail	ABNME03041	None	Threatened	G3T1	S1	FP
Legenere limosa legenere	PDCAM0C010	None	None	G2	S2	1B.1
Lepidium latipes var. heckardii Heckard's pepper-grass	PDBRA1M0K1	None	None	G4T1	S1	1B.2
Lepidurus packardi vernal pool tadpole shrimp	ICBRA10010	Endangered	None	G4	S3S4	
Lilaeopsis masonii Mason's lilaeopsis	PDAPI19030	None	Rare	G2	S2	1B.1
Linderiella occidentalis California linderiella	ICBRA06010	None	None	G2G3	S2S3	
Melospiza melodia pop. 1 song sparrow ("Modesto" population)	ABPBXA3013	None	None	G5T3?Q	S3?	SSC
Myrmosula pacifica Antioch multilid wasp	IIHYM15010	None	None	GH	SH	
Nannopterum auritum double-crested cormorant	ABNFD01020	None	None	G5	S4	WL
Navarretia leucocephala ssp. bakeri Baker's navarretia	PDPLM0C0E1	None	None	G4T2	S2	1B.1
Neostapfia colusana Colusa grass	PMPOA4C010	Threatened	Endangered	G1	S1	1B.1
Northern Claypan Vernal Pool Northern Claypan Vernal Pool	CTT44120CA	None	None	G1	S1.1	
Northern Hardpan Vernal Pool Northern Hardpan Vernal Pool	CTT44110CA	None	None	G3	S3.1	
Nycticorax nycticorax black-crowned night heron	ABNGA11010	None	None	G5	S4	

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Oncorhynchus mykiss irideus pop. 11 steelhead - Central Valley DPS	AFCHA0209K	Threatened	None	G5T2Q	S2	
Oncorhynchus tshawytscha pop. 11 chinook salmon - Central Valley spring-run ESU	AFCHA0205L	Threatened	Threatened	G5T2Q	S2	
Oncorhynchus tshawytscha pop. 7 chinook salmon - Sacramento River winter-run ESU	AFCHA0205B	Endangered	Endangered	G5T1Q	S1	
Plagiobothrys hystriculus bearded popcornflower	PDBOR0V0H0	None	None	G2	S2	1B.1
Plegadis chihi white-faced ibis	ABNGE02020	None	None	G5	S3S4	WL
Pogonichthys macrolepidotus Sacramento splittail	AFCJB34020	None	None	G3	S3	SSC
Progne subis purple martin	ABPAU01010	None	None	G5	S3	SSC
Puccinellia simplex California alkali grass	PMPOA53110	None	None	G2	S2	1B.2
Riparia riparia bank swallow	ABPAU08010	None	Threatened	G5	S2	
Sagittaria sanfordii Sanford's arrowhead	PMALI040Q0	None	None	G3	S3	1B.2
Sidalcea keckii Keck's checkerbloom	PDMAL110D0	Endangered	None	G2	S2	1B.1
Spirinchus thaleichthys longfin smelt	AFCHB03010	Candidate	Threatened	G5	S1	
Symphyotrichum lentum Suisun Marsh aster	PDASTE8470	None	None	G2	S2	1B.2
Taxidea taxus American badger	AMAJF04010	None	None	G5	S3	SSC
Thamnophis gigas giant gartersnake	ARADB36150	Threatened	Threatened	G2	S2	
Trifolium hydrophilum saline clover	PDFAB400R5	None	None	G2	S2	1B.2
Tuctoria mucronata Crampton's tuctoria or Solano grass	PMPOA6N020	Endangered	Endangered	G1	S1	1B.1
Vireo bellii pusillus least Bell's vireo	ABPBW01114	Endangered	Endangered	G5T2	S2	
Xanthocephalus xanthocephalus yellow-headed blackbird	ABPBXB3010	None	None	G5	S3	SSC

Record Count: 79

Search Results

33 matches found. Click on scientific name for details

Search Criteria: 9-Quad include [**3812155:3812165:3812164:3812144:3812154:3812145:3812166:3812156:3812146**]

▲ SCIENTIFIC NAME	COMMON NAME	BLOOMING PERIOD	FED LIST	STATE LIST	GLOBAL RANK	STATE RANK	CA RARE PLANT RANK	GENERAL HABITATS	MICRO HABITATS	PHOTO
Astragalus pauperculus	depauperate milk-vetch	Mar-Jun	None	None	G4	S4	4.3	Chaparral, Cismontane woodland, Valley and foothill grassland	Vernally Mesic, Volcanic	 ©2012 Tim Kellison
Astragalus tener var. *ferrisiae*	Ferris' milk-vetch	Apr-May	None	None	G2T1	S1	1B.1	Meadows and seeps, Valley and foothill grassland		No Photo Available
Astragalus tener var. *tener*	alkali milk-vetch	Mar-Jun	None	None	G2T1	S1	1B.2	Playas, Valley and foothill grassland, Vernal pools	Alkaline	No Photo Available
Atriplex cordulata var. *cordulata*	heartscale	Apr-Oct	None	None	G3T2	S2	1B.2	Chenopod scrub, Meadows and seeps, Valley and foothill grassland	Alkaline (sometimes)	 © 1994 Robert E. Preston, Ph.D.
Atriplex depressa	brittlescale	Apr-Oct	None	None	G2	S2	1B.2	Chenopod scrub, Meadows and seeps, Playas, Valley and foothill grassland, Vernal pools	Alkaline, Clay	 © 2009 Zoya Akulova
Brodiaea rosea ssp. *vallicola*	valley brodiaea	Apr-May(Jun)	None	None	G5T3	S3	4.2	Valley and foothill grassland, Vernal pools	Alluvial Terraces, Gravelly, Sandy, Silt	 © 2011 Steven Perry
Carex comosa	bristly sedge	May-Sep	None	None	G5	S2	2B.1	Coastal prairie, Marshes and swamps, Valley and foothill grassland		 Dean Wm. Taylor 1997
Centromadia parryi ssp. *parryi*	pappose tarplant	May-Nov	None	None	G3T2	S2	1B.2	Chaparral, Coastal prairie, Marshes and swamps, Meadows and seeps, Valley and foothill grassland	Alkaline (often)	No Photo Available
Centromadia parryi ssp. *rudis*	Parry's rough tarplant	May-Oct	None	None	G3T3	S3	4.2	Valley and foothill grassland, Vernal pools	Alkaline, Roadsides (sometimes), Seeps, Vernally Mesic	No Photo Available
Chloropyron palmatum	palmate-bracted bird's-beak	May-Oct	FE	CE	G1	S1	1B.1	Chenopod scrub, Valley and foothill grassland	Alkaline	No Photo Available
Cuscuta obtusiflora var. *glandulosa*	Peruvian dodder	Jul-Oct	None	None	G5T4?	SH	2B.2	Marshes and swamps		No Photo Available

Downingia pusilla	dwarf downingia	Mar-May	None	None	GU	S2	2B.2	Valley and foothill grassland, Vernal pools		No Photo Available
Eryngium jepsonii	Jepson's coyote-thistle	Apr-Aug	None	None	G2	S2	1B.2	Valley and foothill grassland, Vernal pools	Clay	No Photo Available
Extriplex joaquinana	San Joaquin spearscale	Apr-Oct	None	None	G2	S2	1B.2	Chenopod scrub, Meadows and seeps, Playas, Valley and foothill grassland	Alkaline	No Photo Available
Fritillaria agrestis	stinkbells	Mar-Jun	None	None	G3	S3	4.2	Chaparral, Cismontane woodland, Pinyon and juniper woodland, Valley and foothill grassland	Clay, Serpentinite (sometimes)	 © 2016 Aaron Schusteff
Gratiola heterosepala	Boggs Lake hedge-hyssop	Apr-Aug	None	CE	G2	S2	1B.2	Marshes and swamps, Vernal pools	Clay	 ©2004 Carol W. Witham
Hesperevax caulescens	hogwallow starfish	Mar-Jun	None	None	G3	S3	4.2	Valley and foothill grassland, Vernal pools	Alkaline (sometimes)	 © 2017 John Doyen
Hibiscus lasiocarpos var. *occidentalis*	woolly rose-mallow	Jun-Sep	None	None	G5T3	S3	1B.2	Marshes and swamps		 © 2020 Steven Perry
Lasthenia chrysantha	alkali-sink goldfields	Feb-Apr	None	None	G2	S2	1B.1	Vernal pools	Alkaline	 © 2009 California State University, Stanislaus
Legenere limosa	legenere	Apr-Jun	None	None	G2	S2	1B.1	Vernal pools		 ©2000 John Game
Lepidium latipes var. *heckardii*	Heckard's pepper-grass	Mar-May	None	None	G4T1	S1	1B.2	Valley and foothill grassland		 2018 Jennifer Buck
Lilaeopsis masonii	Mason's lilaeopsis	Apr-Nov	None	CR	G2	S2	1B.1	Marshes and swamps, Riparian scrub		No Photo Available
Myosurus minimus ssp. *apus*	little mousetail	Mar-Jun	None	None	G5T2Q	S2	3.1	Valley and foothill grassland, Vernal pools		No Photo Available
Navarretia cotulifolia	cotula navarretia	May-Jun	None	None	G4	S4	4.2	Chaparral, Cismontane woodland, Valley and foothill grassland	Adobe	

										© 2020 Zoya Akulova
Navarretia leucocephala ssp. *bakeri*	Baker's navarretia	Apr-Jul	None	None	G4T2	S2	1B.1	Cismontane woodland, Lower montane coniferous forest, Meadows and seeps, Valley and foothill grassland, Vernal pools	Mesic	 © 2018 Barry Rice
Neostapfia colusana	Colusa grass	May-Aug	FT	CE	G1	S1	1B.1	Vernal pools		No Photo Available
Plagiobothrys hystriculus	bearded popcornflower	Apr-May	None	None	G2	S2	1B.1	Valley and foothill grassland, Vernal pools		No Photo Available
Puccinellia simplex	California alkali grass	Mar-May	None	None	G2	S2	1B.2	Chenopod scrub, Meadows and seeps, Valley and foothill grassland, Vernal pools	Alkaline, Flats, Lake Margins, Vernally Mesic	No Photo Available
Sagittaria sanfordii	Sanford's arrowhead	May-Oct(Nov)	None	None	G3	S3	1B.2	Marshes and swamps		 ©2013 Debra L. Cook
Sidalcea keckii	Keck's checkerbloom	Apr-May(Jun)	FE	None	G2	S2	1B.1	Cismontane woodland, Valley and foothill grassland	Clay, Serpentinite	No Photo Available
Symphyotrichum lentum	Suisun Marsh aster	(Apr)May-Nov	None	None	G2	S2	1B.2	Marshes and swamps		No Photo Available
Trifolium hydrophilum	saline clover	Apr-Jun	None	None	G2	S2	1B.2	Marshes and swamps, Valley and foothill grassland, Vernal pools		No Photo Available
Tuctoria mucronata	Crampton's tuctoria or Solano grass	Apr-Aug	FE	CE	G1	S1	1B.1	Valley and foothill grassland, Vernal pools		No Photo Available

Showing 1 to 33 of 33 entries

Suggested Citation:
California Native Plant Society, Rare Plant Program. 2022. Rare Plant Inventory (online edition, v9-01 1.5). Website https://www.rareplants.cnps.org [accessed 5 August 2022].

United States Department of the Interior

FISH AND WILDLIFE SERVICE
San Francisco Bay-Delta Fish And Wildlife
650 Capitol Mall
Suite 8-300
Sacramento, CA 95814
Phone: (916) 930-5603 Fax: (916) 930-5654
http://kim_squires@fws.gov

In Reply Refer To:
Project Code: 2022-0035689
Project Name: I Street Bridge Deck Conversion

April 26, 2022

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the

human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF

Migratory Birds: In addition to responsibilities to protect threatened and endangered species under the Endangered Species Act (ESA), there are additional responsibilities under the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA) to protect native birds from project-related impacts. Any activity, intentional or unintentional, resulting in take of migratory birds, including eagles, is prohibited unless otherwise permitted by the U.S. Fish and Wildlife Service (50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)). For more information regarding these Acts see https://www.fws.gov/birds/policies-and-regulations.php.

The MBTA has no provision for allowing take of migratory birds that may be unintentionally killed or injured by otherwise lawful activities. It is the responsibility of the project proponent to comply with these Acts by identifying potential impacts to migratory birds and eagles within applicable NEPA documents (when there is a federal nexus) or a Bird/Eagle Conservation Plan (when there is no federal nexus). Proponents should implement conservation measures to avoid or minimize the production of project-related stressors or minimize the exposure of birds and their resources to the project-related stressors. For more information on avian stressors and recommended conservation measures see https://www.fws.gov/birds/bird-enthusiasts/threats-to-birds.php.

In addition to MBTA and BGEPA, Executive Order 13186: *Responsibilities of Federal Agencies to Protect Migratory Birds*, obligates all Federal agencies that engage in or authorize activities that might affect migratory birds, to minimize those effects and encourage conservation measures that will improve bird populations. Executive Order 13186 provides for the protection of both migratory birds and migratory bird habitat. For information regarding the implementation of Executive Order 13186, please visit https://www.fws.gov/birds/policies-and-regulations/executive-orders/e0-13186.php.

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 et seq.), and projects affecting these species may require development of an eagle conservation plan (http://www.fws.gov/windenergy/eagle_guidance.html). Additionally, wind energy projects should follow the wind energy guidelines (http://www.fws.gov/windenergy/) for minimizing impacts to migratory birds and

bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at: http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm; http://www.towerkill.com; and http:// www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Code in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Note: IPaC has provided all available attachments because this project is in multiple field office jurisdictions.

Attachment(s):

- Official Species List
- USFWS National Wildlife Refuges and Fish Hatcheries
- Migratory Birds
- Wetlands

Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

San Francisco Bay-Delta Fish And Wildlife
650 Capitol Mall
Suite 8-300
Sacramento, CA 95814
(916) 930-5603

This project's location is within the jurisdiction of multiple offices. However, only one species list document will be provided for all offices. The species and critical habitats in this document reflect the aggregation of those that fall in each of the affiliated office's jurisdiction. Other offices affiliated with the project:

Sacramento Fish And Wildlife Office
Federal Building
2800 Cottage Way, Room W-2605
Sacramento, CA 95825-1846
(916) 414-6600

Project Summary

Project Code: 2022-0035689
Event Code: None
Project Name: I Street Bridge Deck Conversion
Project Type: Bridge - Maintenance
Project Description: Will convert the top deck of the existing I Street Bridge to pedestrian use and install approaches to the deck following the removal of existing ramps as part of another project (I Street Bridge Replacement).
Project Location:

Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@38.5864406,-121.50696392556684,14z

Counties: Sacramento and Yolo counties, California

Endangered Species Act Species

There is a total of 8 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries[1], as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

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1. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

Birds

NAME	STATUS
Least Bell's Vireo *Vireo bellii pusillus*	Endangered

There is **final** critical habitat for this species. The location of the critical habitat is not available.
Species profile: https://ecos.fws.gov/ecp/species/5945

Reptiles

NAME	STATUS
Giant Garter Snake *Thamnophis gigas*	Threatened

No critical habitat has been designated for this species.
Species profile: https://ecos.fws.gov/ecp/species/4482

Amphibians

NAME	STATUS
California Tiger Salamander *Ambystoma californiense*	Threatened

Population: U.S.A. (Central CA DPS)
There is **final** critical habitat for this species. The location of the critical habitat is not available.
Species profile: https://ecos.fws.gov/ecp/species/2076

Fishes

NAME	STATUS
Delta Smelt *Hypomesus transpacificus* There is **final** critical habitat for this species. Your location overlaps the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/321	Threatened

Insects

NAME	STATUS
Monarch Butterfly *Danaus plexippus* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9743	Candidate
Valley Elderberry Longhorn Beetle *Desmocerus californicus dimorphus* There is **final** critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/7850	Threatened

Crustaceans

NAME	STATUS
Vernal Pool Fairy Shrimp *Branchinecta lynchi* There is **final** critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/498	Threatened
Vernal Pool Tadpole Shrimp *Lepidurus packardi* There is **final** critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/2246	Endangered

Critical habitats

There is 1 critical habitat wholly or partially within your project area under this office's jurisdiction.

NAME	STATUS
Delta Smelt *Hypomesus transpacificus* https://ecos.fws.gov/ecp/species/321#crithab	Final

USFWS National Wildlife Refuge Lands And Fish Hatcheries

Any activity proposed on lands managed by the National Wildlife Refuge system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS OR FISH HATCHERIES WITHIN YOUR PROJECT AREA.

Migratory Birds

Certain birds are protected under the Migratory Bird Treaty Act[1] and the Bald and Golden Eagle Protection Act[2].

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described below.

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1. The Migratory Birds Treaty Act of 1918.
2. The Bald and Golden Eagle Protection Act of 1940.
3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

The birds listed below are birds of particular concern either because they occur on the USFWS Birds of Conservation Concern (BCC) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ below. This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the E-bird data mapping tool (Tip: enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found below.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
Clark's Grebe *Aechmophorus clarkii* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Jun 1 to Aug 31
Common Yellowthroat *Geothlypis trichas sinuosa* This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/2084	Breeds May 20 to Jul 31
Lawrence's Goldfinch *Carduelis lawrencei* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9464	Breeds Mar 20 to Sep 20

NAME	BREEDING SEASON
Marbled Godwit *Limosa fedoa* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9481	Breeds elsewhere
Nuttall's Woodpecker *Picoides nuttallii* This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/9410	Breeds Apr 1 to Jul 20
Oak Titmouse *Baeolophus inornatus* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9656	Breeds Mar 15 to Jul 15
Olive-sided Flycatcher *Contopus cooperi* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/3914	Breeds May 20 to Aug 31
Short-billed Dowitcher *Limnodromus griseus* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9480	Breeds elsewhere
Tricolored Blackbird *Agelaius tricolor* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/3910	Breeds Mar 15 to Aug 10
Wrentit *Chamaea fasciata* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Mar 15 to Aug 10
Yellow-billed Magpie *Pica nuttalli* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9726	Breeds Apr 1 to Jul 31

Probability Of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read and understand the FAQ "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week

months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

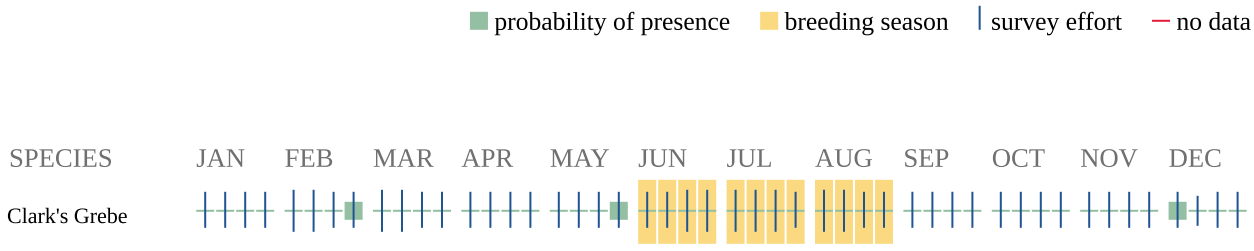
1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is 0.25/0.25 = 1; at week 20 it is 0.05/0.25 = 0.2.
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

Breeding Season (■)
Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort (|)
Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

No Data (–)
A week is marked as having no data if there were no survey events for that week.

Survey Timeframe
Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.



Additional information can be found using the following links:

- Birds of Conservation Concern https://www.fws.gov/program/migratory-birds/species
- Measures for avoiding and minimizing impacts to birds https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds
- Nationwide conservation measures for birds https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf

Migratory Birds FAQ

Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.

Nationwide Conservation Measures describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. Additional measures or permits may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the migratory birds potentially occurring in my specified location?
The Migratory Bird Resource List is comprised of USFWS Birds of Conservation Concern (BCC) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the Avian Knowledge Network (AKN). The AKN data is based on a growing collection of survey, banding, and citizen science datasets and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle (Eagle Act requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the AKN Phenology Tool.

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?
The probability of presence graphs associated with your migratory bird list are based on data provided by the Avian Knowledge Network (AKN). This data is derived from a growing collection of survey, banding, and citizen science datasets .

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

How do I know if a bird is breeding, wintering, migrating or present year-round in my project area?
To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may refer to the following resources: The Cornell Lab of Ornithology All About Birds Bird Guide, or (if you are unsuccessful in locating the bird of interest there), the Cornell Lab of Ornithology Neotropical Birds guide. If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are Birds of Conservation Concern (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the Eagle Act requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

Details about birds that are potentially affected by offshore projects
For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the Northeast Ocean Data Portal. The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the Diving Bird Study and the nanotag studies or contact Caleb Spiegel or Pam Loring.

What if I have eagles on my list?
If your project has the potential to disturb or kill eagles, you may need to obtain a permit to avoid violating the Eagle Act should such impacts occur.

Proper Interpretation and Use of Your Migratory Bird Report
The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of

certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

Wetlands

Impacts to NWI wetlands and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local U.S. Army Corps of Engineers District.

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

RIVERINE

- R2UBH

FRESHWATER FORESTED/SHRUB WETLAND

- PSSC

IPaC User Contact Information

Agency:	Sacramento city
Name:	John Howe
Address:	980 9th Street
Address Line 2:	Suite 1200
City:	Sacramento
State:	CA
Zip:	95814
Email	john.howe@icf.com
Phone:	9167373000

Lead Agency Contact Information

Lead Agency: Federal Highway Administration

Appendix C
Mitigation Monitoring Plan

Mitigation Monitoring Plan
for the
I Street Bridge Deck Conversion
for Active Transportation

October 2022

I Street Bridge Deck Conversion for Active Transportation

MITIGATION MONITORING PLAN

Introduction

Public Resources Code section 21081.6 and section 15097 of the California Environmental Quality Act (CEQA) Guidelines require public agencies to establish monitoring or reporting programs for projects approved by a public agency whenever approval involves the adoption of either a mitigated negative declaration or specified environmental findings related to environmental impact reports.

The following is the Mitigation Monitoring Plan (MMP) for the I Street Bridge Deck Conversion for Active Transportation project (proposed project). The intent of the MMP is to aid the City of West Sacramento in its implementation and monitoring of mitigation measures adopted from the I Street Bridge Deck Conversion for Active Transportation Mitigated Negative Declaration.

Mitigation Measures

The mitigation measures are taken from the I Street Bridge Deck Conversion for Active Transportation Mitigated Negative Declaration. The MMP describes the actions that must take place to implement each mitigation measure, the timing of those actions, and the entities responsible for implementing and monitoring the actions.

MMP Components

The components of the attached table, which contains applicable mitigation measures, are addressed briefly, below.

Mitigation Measure: All mitigation measures identified in the I Street Bridge Deck Conversion for Active Transportation Mitigated Negative Declaration.

Action(s): For every mitigation measure, one or more actions are described. The actions delineate the means by which the mitigation measures will be implemented, and, in some instances, the criteria for determining whether a measure has been successfully implemented. Where mitigation measures are particularly detailed, the action may refer back to the measure.

Implementing Party: This item identifies the entity that will undertake the required action.

Timing: Implementation of the action must occur prior to or during some part of project design or construction, or on an ongoing basis. The timing for each measure is identified.

Monitoring Party: The City of West Sacramento is primarily responsible for ensuring that mitigation measures are successfully implemented. Within the City of West Sacramento, a number of departments and divisions would have responsibility for monitoring some aspect of the overall project. Other agencies, such as the Yolo-Solano 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.

Mitigation Measures	Action(s)	Implementing Party	Timing	Monitoring Party
Air Quality				
Mitigation Measure AIR-1: Implement Additional Control Measures for Construction Emissions of Fugitive Dust 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 included in and do not conflict with the requirements or other permits and authorizations 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 4 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. 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 included in, and do not conflict with, the requirements of other permits and authorizations issued for the project. The following measures are taken from SMAQMD's (2021) *Guide to Air Quality Assessment in Sacramento County* 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 2 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.	Comply with Yolo Solano Air Quality Management District's and Sacramento Metro Air Quality Management District's recommended list of dust control measures.	City of West Sacramento; contractor	During construction	City of West Sacramento

Mitigation Measures	Action(s)	Implementing Party	Timing	Monitoring Party
● Use wet power vacuum street sweepers to remove any visible track out 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, and 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.				
Biological Resources				
Mitigation Measure BIO-1: Install Orange Construction Fencing between the Construction Area and Adjacent Sensitive Biological Resources The project proponent and/or its 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.	Install orange construction fencing as a barrier between the construction area and adjacent sensitive biological resource areas	City of West Sacramento; contractor; resource specialist	Identify locations prior to construction Install prior to construction Maintain during construction	City of West Sacramento
Mitigation Measure 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, riparian habitat, 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 project area (including their life history, habitat requirements, and photographs of the species). The training will identify the portions of the project area 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	Retain a qualified biologist to conduct worker awareness training	City of West Sacramento; qualified biologist	Prior to construction During construction for new crewmembers	City of West Sacramento

Mitigation Measures	Action(s)	Implementing Party	Timing	Monitoring Party
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.				
Mitigation Measure 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 month 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.	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	City of West Sacramento; qualified biologist	During construction	City of West Sacramento
Mitigation Measure BIO-4: Conduct Preconstruction Surveys for Crotch Bumble Bee and Western Bumble Bee and Avoid Active Nests Pre-construction surveys for active bee nest colonies and associated floral resources (i.e., flowering vegetation on which bees from the colony are observed foraging) no more than 30 days prior to any ground disturbance between March and September. The purpose of this pre-construction survey would be to identify active nest colonies and associated floral resources in impact areas that could be avoided by construction personnel. The project biologist would establish, monitor, and maintain no-work buffers around nest colonies and floral resources identified during surveys. The size and configuration of the no-work buffer would be based on best professional judgment of the project biologist. At a minimum, the buffer would provide at least 20 feet of clearance around nest entrances and maintain disturbance-free airspace between the nest and nearby floral resources. Construction activities would not occur within the no-work buffers until the colony is no longer active (i.e., no bees are seen flying in or out of the nest for three consecutive days indicating the colony has completed its nesting season and the next season's queens have dispersed from the colony).	Retain a qualified biologist to perform preconstruction surveys and establish no-work buffers around nest colonies and floral resources	City of West Sacramento; qualified biologist	Prior to construction	City of West Sacramento

Mitigation Measures	Action(s)	Implementing Party	Timing	Monitoring Party
Mitigation Measure BIO-5: Protect Crotch Bumble Bee and Western Bumble Bee Food Plants from Herbicide and Pesticide Use To minimize impacts on Crotch bumble bee and western bumble bee from pesticide and herbicide drift, application of these chemicals will be limited to the extent feasible and will be conducted using handheld equipment. Herbicides and pesticides will be applied only by applicators with current licenses and/or certifications from the California Department of Pesticide Regulation. The applicator will follow the pesticide and herbicide label directions. Spray nozzles will be kept within 24 inches of target areas during spraying. The most current information on pesticide and herbicide toxicity on wildlife will be used to inform future decisions about their use during project operation.	Limit use of pesticides and herbicides Retain a qualified pesticide applicator	City of West Sacramento; licensed/certified pesticide applicator; contractor	Prior to and during construction	City of West Sacramento
Mitigation Measure BIO-6: Revegetate Temporary Impact Areas within Crotch Bumble Bee and Western Bumble Bee Habitat The project proponent will include suitable native nectar- and pollen-producing plants commonly used as food sources by Crotch bumble bee and western bumble bees in on-site revegetation and erosion control plans. Native plants of the following genera are appropriate for Crotch bumble bee: *Antirrhinum*, *Asclepias*, *Phacelia*, *Chaenactis*, *Clarkia*, *Dendromecon*, *Eriogonum*, *Eschscholzia*, *Lupinus*, *Medicago*, and *Salvia*. Native plants of the following taxa are appropriate for western bumble bee: Asteraceae, *Ceanothus*, *Centaurea*, *Chrysothamnus*, *Cirsium*, *Eriogonum*, *Geranium*, *Grindelia*, *Lupinus*, *Melilotus*, *Monardella*, *Rubus*, *Penstemon*, *Solidago*, and *Trifolium*.	Include native nectar- and pollen-producing plants favored by Crotch bumble bee when revegetating site.	City of West Sacramento; contractor	After construction and during revegetation	City of West Sacramento
Mitigation Measure 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 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 will 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.	Retain a qualified biologist to perform preconstruction surveys for western pond turtles Retain a qualified biologist to perform and 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.	City of West Sacramento; qualified biologist	Prior to and during construction	City of West Sacramento

Mitigation Measures	Action(s)	Implementing Party	Timing	Monitoring Party
Mitigation Measure 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 Mitigation Measure BIO-10) 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 structures, trees, shrubs, ruderal areas, and grassland vegetation that provide suitable nesting habitat within 50 feet of disturbance. 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.	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.	City of West Sacramento; qualified wildlife biologist; contractor	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 fledged and moved out of area	City of West Sacramento
Mitigation Measure 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 mitigation measures for Swainson's hawk, nesting birds, and roosting bats (see Mitigation Measures BIO-8 and BIO-10 through BIO-13. Implementation of the following measures will avoid and minimize impacts on purple martins, as well as other nesting birds and bats that use the approach structures.	Conduct tree removal activities during the non-breeding season (September 15 – October 31)	City of West Sacramento; contractor	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	City of West Sacramento

Mitigation Measures	Action(s)	Implementing Party	Timing	Monitoring Party
Mitigation Measure BIO-10: 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.	Retain a qualified biologist to determine the presence/absence of Swainson's Hawk	City of West Sacramento; wildlife biologist	Prior to project construction and from February to July	City of West Sacramento
Mitigation Measure BIO-11: Monitor Active Swainson's Hawk Nests during Construction Activities Active Swainson's hawk nests within 600 feet of the study area will be monitored during construction. Monitoring will be conducted by a wildlife biologist with experience in monitoring Swainson's hawk 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 are still in the nest, 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 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.	Retain a qualified biologist to monitor Swainson's Hawk nests during construction	City of West Sacramento; qualified wildlife biologist	During project construction	City of West Sacramento

Mitigation Measures	Action(s)	Implementing Party	Timing	Monitoring Party
Mitigation Measure BIO-12: Avoid and Minimize Impacts on Purple Martins during Construction Activities No construction activity that results in ground disturbance, 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.	From March 15 to August 15, keep all ground-disturbing, noisy, or vibratory construction activities 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	City of West Sacramento; contractor	During project construction activities between March 15 and August 15	City of West Sacramento
Mitigation Measure BIO-13: Conduct Preconstruction Surveys for Tree 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 construction noise and vibration, the project proponent will implement the following actions. **Preconstruction Surveys** One month prior to tree trimming or removal, a qualified biologist will examine trees to be removed or trimmed and trees or structures within the vicinity of construction activities (a minimum of 100 feet) for suitable bat roosting habitat. High-quality habitat features (e.g., crevices, large tree cavities, basal hollows, loose or peeling bark, larger snags) 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	Retain a qualified biologist to perform preconstruction surveys and establish protective measures for roosting bats Removal of trees or structures will not occur from September 15 to October 31 to avoid affecting maternal and hibernating bat roosts.	City of West Sacramento; qualified biologist; contractor	Install exclusion devices between September 15 and October 31 at trees planned for removal and buildings planned for demolition (prior to removal/demolition) Conduct preconstruction surveys within one month prior to tree trimming or removal, or any structure demolition Conduct evening visual emergence survey according to details in mitigation measure	City of West Sacramento

using appropriate software and prepare a report that will be submitted to the project proponent and CDFW. **Protective Measures** Protective measures may be necessary if it is determined that bats are using trees in the study area 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 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. ● Trees planned for removal 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. ● 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. ● 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 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 sledgehammer or an axe. Several minutes should pass before 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. ● No construction activity that results in ground disturbance, loud noises, and/or vibrations will be conducted within 100 feet of the edge of occupied roosts during the maternity season (April 1 to September 15). In addition, no construction-related vehicles or machinery shall be operated or stored beneath the colony				

Mitigation Measures	Action(s)	Implementing Party	Timing	Monitoring Party
during this period or until a qualified biologist determines that the purple martins have completed nesting and are no longer occupying the structure. ● Biologists experienced with bats will monitor construction activities within 100 feet of identified roosts to ensure that roosting bats are not disturbed.				
Mitigation Measure BIO-14: Avoid the Introduction and Spread of Invasive Plants The project proponent or its contractor will be responsible for avoiding the introduction of new invasive plants and the spread of invasive plants previously documented in the project's study area. 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 black locust trees from the riparian forest in and adjacent to the impact area on the Sacramento side of the bridge and any red sesbania trees in or adjacent to the impact area on the West Sacramento side.	Prevent the spread of aquatic invasive species according to protocol described in this mitigation measure	City of Sacramento; contractor	Prior to and during construction	City of West Sacramento
Mitigation Measure BIO-15: Compensate for Loss of Protected Trees Within 1 year prior to construction, the project proponent will conduct a preconstruction inventory of all protected trees to be removed within the project area. The inventory will include the location, species, diameter of all trunks, approximate height and canopy diameter, and approximate age, in support of a tree permit for removal of the protected trees. All conditions of the tree permit will be implemented. The project proponent will mitigate for the loss of protected trees using one or a combination of the two following options. ● If feasible, plant replacement trees at or near the location of the tree removal. 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. 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.	Conduct preconstruction tree inventory. Provide written documentation that heritage trees removed have been replaced at a ratio of 1:1	City of West Sacramento, certified arborist	Within 1 year prior to construction and immediately after construction	City of West Sacramento's tree administrator

Mitigation Measures	Action(s)	Implementing Party	Timing	Monitoring Party
● If adequate space is not 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, following the same replacement ratio, species, monitoring, and tree survival requirements described for the option above.				
Cultural Resources				
Mitigation Measure CUL-1: Implement Measures to Protect Previously Unidentified Cultural Resources ● Construction shall stop if potential cultural resources are encountered. It is possible that previous activities have obscured surface evidence of cultural resources. If signs of an archeological site, such as any unusual amounts of stone, bone, or shell, are uncovered during grading or other construction activities, work will be halted within 100 feet of the find and the City of West Sacramento will be notified. A qualified archeologist will be consulted for an onsite evaluation. If the site appears to be eligible for listing in state or federal registers, additional mitigation, such as further testing for evaluation or data recovery, may be necessary. ● In the event resources are discovered, the City of West Sacramento will retain a qualified archaeologist to assess the find and to determine whether the resource requires further study. Any previously undiscovered resources found during construction will be recorded on appropriate California Department of Parks and Recreation 523 forms and evaluated for significance under all applicable regulatory criteria. ● All work will stop in the immediate vicinity of the find, and, if the find is determined to be an important cultural resource, the City of West Sacramento will make available contingency funding and a time allotment sufficient to allow recovery of an archaeological sample or to implement an avoidance measure. Construction work may continue on other parts of the project while archaeological mitigation takes place.	Immediately cease all work activities within 100 feet of the discovery and follow the protocol described in Mitigation Measure CUL-1: *Implement Measures to Protect Previously Unidentified Cultural Resources.* Include cultural resources discovery, identification, and notification guidelines on grading and construction plans.	City of West Sacramento; qualified archaeologist; contractor	During ground-disturbing construction activities and immediately upon inadvertent archaeological discoveries	City of West Sacramento
Mitigation Measure CUL-2: Implement Measures if Construction Activities Inadvertently Discover or Disturb Human Remains ● If human remains are discovered during any phase of construction, including disarticulated or cremated remains, the construction contractor will immediately cease all ground-disturbing activities within 100 feet of the remains and notify the City of West Sacramento. ● In accordance with California State Health and Safety Code Section 7050.5, no further disturbance will occur until the following steps have been completed. ○ The County Coroner has made the necessary findings as to origin and disposition pursuant to Public Resources Code Section 5097.98. ○ If the remains are determined by the County Coroner to be Native American, NAHC will be notified within 24 hours, and the treatment and disposition of the remains will comply with NAHC guidelines.	Immediately cease all work activities within 100 feet of the discovery and follow the protocol described in Mitigation Measure CUL-2: *Implement Measures if Construction Activities Inadvertently*	City of West Sacramento; qualified archaeologist; contractor	During ground-disturbing construction activities and immediately upon inadvertent discovery of human remains	City of West Sacramento

Mitigation Measures	Action(s)	Implementing Party	Timing	Monitoring Party
● It is further recommended that a professional archaeologist with Native American burial experience conduct a field investigation of the specific site and consult with the Most Likely Descendant (MLD), if any, identified by NAHC. As necessary and appropriate, a professional archaeologist may provide technical assistance to the MLD, including excavation and removal of the human remains.	*Discover or Disturb Human Remains.* Include cultural resources discovery, identification, and notification guidelines on grading and construction plans.			
Geology, Soils, and Paleontological Resources				
Mitigation Measure GEO-1: 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 qualified professional paleontologist can assess the nature and importance of the find and 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 also include preparation of a report for publication describing the finds. The project proponent will be responsible for ensuring that recommendations regarding treatment and reporting are implemented.	Immediately cease all work activities around the immediate area of discovery and follow the protocol described in 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.	City of West Sacramento; contractor; qualified professional paleontologist	During ground-disturbing construction, immediately upon inadvertent paleontological discoveries	City of West Sacramento
Greenhouse Gas Emissions				
Minimization Measure GHG-1: Implement SMAQMD's Recommended Construction GHG BMPs The project proponent will implement the following SMAQMD's recommended GHG reduction measures, to the extent feasible. ● Improve fuel efficiency from construction equipment. ○ 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	Implement Sacramento Metro Air Quality Management District's recommended GHG reduction	City of West Sacramento; contractor	During construction	City of West Sacramento

Mitigation Measures	Action(s)	Implementing Party	Timing	Monitoring Party
2485 of the California Code of Regulations]). Provide clear signage that posts this requirement for workers at the entrances to the site. ○ 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. ○ Train equipment operators in proper use of equipment. ○ Use the proper size of equipment for the job. ○ Use equipment with new technologies (repowered engines, electric drive trains). ● Perform onsite 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 a CARB-approved low carbon fuel for construction equipment. (NO_x 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. ● Use SmartWay certified trucks for deliveries and equipment transport. ● Develop a plan to efficiently use water for adequate dust control.	best management practices			
Hazards and Hazardous Materials				
Mitigation Measure HAZ-1: Develop and Implement a Health and Safety Plan The project proponent will develop and implement a health and safety plan to address worker safety when working with potentially hazardous materials, including potential ADL, TPHs, PCBs, and other construction-related materials within the ROW during any soil-disturbing activity. The plan will include identification of appropriate	Develop and implement measures to address hazardous materials	City of West Sacramento; contractor	Prior to and during construction	City of West Sacramento

Mitigation Measures	Action(s)	Implementing Party	Timing	Monitoring Party
fueling and maintenance areas for equipment, daily equipment inspection schedule, a spill response plan, spill response supplies to be maintained on site, and a complete list of the agencies to be notified (with their telephone numbers).	unearthed during construction and designate appropriate areas for refueling			
Mitigation Measure HAZ-2: 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 leading from I Street. If soils contain ADL in excess of established thresholds, soils will be handled in a manner compliant with the County Certified Unified Program Agency regulatory requirements and disposed of properly. The testing may be conducted in conjunction with testing required for the separate I Street Bridge Replacement Project.	Conduct soil testing for aerially deposited lead (ADL) and implement proper disposal procedures as detailed in Mitigation Measure HAZ-2: *Perform Soil Testing and Appropriately Dispose of Soils Contaminated with ADL*.	City of West Sacramento; contractor	Prior to ground-disturbing activities	City of West Sacramento
Mitigation Measure HAZ-3: Perform a Phase II Environmental Site Assessment Prior to Construction Activities and Remediate if Necessary Prior to construction, the project proponent will conduct a Phase II environmental site assessment in conformance with the American Society for Testing and Materials Standard Practice E1527-05. All environmental investigation, sampling, and remediation activities associated with the project will be conducted under a work plan approved by the regulatory oversight agency and will be conducted by the appropriate environmental professional consistent with Phase II environmental site assessment requirements. The environmental site assessment may occur in conjunction with the Phase II assessment conducted for the separate I Street Bridge Replacement Project. The Phase II environmental assessment will include sampling and laboratory analysis to confirm the presence of hazardous materials and may include the following. ● Collection of original surface and/or subsurface samples of soil, groundwater to analyze for quantities of various contaminants. ● Subsurface soil borings. ● An analysis to determine the vertical and horizontal extent of contamination (if the evidence from sampling shows contamination).	Conduct a Phase II Environmental Site Assessment as detailed in Mitigation Measure HAZ-3: *Perform a Phase* II *Environmental Site Assessment Prior to Construction Activities and Remediate if Necessary*. Dispose of contaminated media according to California Department of Toxic Substances Control (DTSC) regulations.	City of West Sacramento; qualified environmental professional; contractor	Prior to and during construction	City of West Sacramento

Mitigation Measures	Action(s)	Implementing Party	Timing	Monitoring Party
If contamination is uncovered as part of Phase II environmental site assessment, remediation will be required. Any contaminated soil identified on a project site must be properly disposed of in accordance with DTSC regulations in effect at the time. If, during construction, soil or groundwater contamination is suspected, construction activities will cease and appropriate health and safety procedures will be implemented, including the use of appropriate personal protective equipment (e.g., respiratory protection, protective clothing, helmets, goggles).				
Tribal Cultural Resources				
Mitigation Measure TCR-1: Implement Measures to Protect Previously Unidentified Tribal Cultural Resources If any suspected tribal cultural resources are discovered during ground disturbing construction activities, all work shall cease within 100 feet of the find, or an agreed upon distance based on the project area and nature of the find. A Tribal Representative from a California Native American tribe that is traditionally and culturally affiliated with a geographic area shall be immediately notified and shall determine if the find is a tribal cultural resource (Pub. Resources Code Section 21074). The Tribal Representative will make recommendations for further evaluation and treatment as necessary. When avoidance is infeasible, preservation in place is the preferred option for mitigation of tribal cultural resources under CEQA, and every effort shall be made to preserve the resources in place, including through project redesign, if feasible. Culturally appropriate treatment may be, but is not limited to, processing materials for reburial, minimizing handling of cultural objects, leaving objects in place within the landscape, or returning objects to a location within the project area where they will not be subject to future impacts. Permanent curation of tribal cultural resources will not take place unless approved in writing by the California Native American tribe that is traditionally and culturally affiliated with the project area. The contractor will implement any measures deemed by the City of West Sacramento to be necessary and feasible to preserve in place, avoid, or minimize impacts to the resource, including, but not limited to, facilitating the appropriate tribal treatment of the find, as necessary. Treatment that preserves or restores the cultural character and integrity of a Tribal Cultural Resource may include Tribal Monitoring, culturally appropriate recovery of cultural objects, and reburial of cultural objects or cultural soil. Work at the discovery location cannot resume until all necessary investigation and evaluation of the discovery under the requirements of the CEQA, including AB 52, have been satisfied.	Immediately cease all work activities within 100 feet of the find and follow the protocol described in Mitigation Measure TCR-1: *Implement Measures to Protect Previously Unidentified Tribal Cultural Resources.* Implement treatment measures as directed by the City of West Sacramento.	City of West Sacramento; Tribal Representative; contractor	During ground-disturbing construction activities and immediately upon inadvertent discovery of tribal cultural resources	City of West Sacramento