

Measure A Sac I-5/I-80 Interchange Modification Project

SACRAMENTO COUNTY, CALIFORNIA
DISTRICT 3 – SAC – 5/80, (PM I-5: 25.2/27.8 I-80: M1.3/M3.8)
03-2C990

Draft Environmental Impact Report/ Environmental Assessment



Prepared by the
State of California Department of Transportation

The environmental review, consultation, and any other action required in accordance with applicable federal laws for this project is being, or has been, carried out by Caltrans under its assumption of responsibility pursuant to 23 U.S. Code 327.

February 2010



General Information About This Document

What's in this document?

The California Department of Transportation (Caltrans), as assigned by the Federal Highway Administration (FHWA), has prepared this Environmental Impact Report/Environmental Assessment (EIR/EA), which examines the potential environmental impacts of the alternatives being considered for the proposed project located in Sacramento County, California. The document tells you why the project is being proposed, what alternatives we have considered for the project, how the existing environment could be affected by the project, the potential impacts of each of the alternatives, and the proposed avoidance, minimization, and/or mitigation measures.

What should you do?

- Please read the document.
- Additional copies of the Draft EIR/EA and the supporting technical studies are available for review at the Caltrans District 3 office located at 2800 Gateway Oaks Drive, Sacramento, CA 95833. The Draft EIR/EA is available for review at the following locations:

Central Library
828 I Street
Sacramento, CA 95814

South Natomas Library
2901 Truxel Road
Sacramento, CA 95833

North Natomas Library
2500 New Market Drive
Sacramento, CA 95835

- Attend the open house between 4-8 pm, **March 10, 2010** at 2800 Gateway Oaks Drive, Sacramento, CA 95833.
- We'd like to hear what you think. If you have any comments regarding the proposed project, please attend the Open House and/or send your written comments to Caltrans by April 8, 2010.
- Submit comments via postal mail to:
Mr. Lupe Jimenez, Senior Environmental Planner, Branch S4
California Department of Transportation
2800 Gateway Oaks Drive
Sacramento, CA 95833
- Submit comments via email to: lupe_jimenez@dot.ca.gov
- Be sure to submit comments by: **April 8, 2010**

What happens next?

After comments are received from the public and reviewing agencies, Caltrans, as assigned by the Federal Highway Administration, may: (1) give environmental approval to the proposed project, (2) do additional environmental studies, or (3) abandon the project. If the project is given environmental approval and funding is appropriated, Caltrans could design and construct all or part of the project.

For individuals with sensory disabilities, this document is available in Braille, large print, on audiocassette, or computer disk. To obtain a copy in one of these alternate formats, please call or write to Caltrans, Attn: Mr. Lupe Jimenez, Branch S4, 2800 Gateway Oaks Drive, Sacramento, CA 95833; (916) 274-0557 Voice, or use the California Relay Service TTY number, by dialing 711, or (800) 735-2929 (TTY to Voice) or (800) 735-2922 (Voice to TTY).

Measure A Sac I-5/I-80 Interchange Modification Project

At the Interstate 5 (I-5) and Interstate 80 (I-80) Interchange in Sacramento County from Garden Highway to Arena
Boulevard on I-5 and from West El Camino Avenue to Truxel Road on I-80.
(Postmile 25.2/27.8 on I-5 and M1.3/3.8 on M1-80)

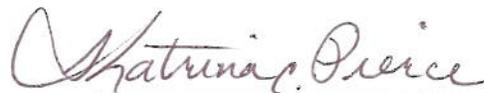
DRAFT ENVIRONMENTAL IMPACT REPORT/ENVIRONMENTAL ASSESSMENT

Submitted Pursuant to: (State) Division 13, California Public Resources Code
(Federal) 42 USC 4332(2) C

THE STATE OF CALIFORNIA
Department of Transportation

2/3/2010

Date of Approval



KATRINA C. PIERCE, Division Chief
North Region Environmental Planning
California Department of Transportation

Summary

The proposed project is a joint project by the California Department of Transportation (Caltrans) and the Federal Highway Administration (FHWA), and is subject to state and federal environmental review requirements. Project documentation, therefore, has been prepared in compliance with both the California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA). Caltrans is the lead agency under CEQA. In addition, FHWA's responsibility for environmental review, consultation, and any other action required in accordance with applicable Federal laws for this project is being, or has been, carried out by Caltrans under its assumption of responsibility pursuant to 23 U.S.C. 327.

Some impacts determined to be significant under CEQA may not lead to a determination of significance under NEPA. Because NEPA is concerned with the significance of the project as a whole, it is quite often the case that a "lower level" document is prepared for NEPA. One of the most commonly seen joint document types is an Environmental Impact Report/Environmental Assessment (EIR/EA).

Following receipt of public comments on the Draft EIR/EA and circulation of the Final EIR/EA, Caltrans will be required to take actions regarding the environmental document. Caltrans will determine whether to certify the EIR and possibly issue Findings and a Statement of Overriding Considerations under CEQA and whether to issue a Finding of No Significant Impact (FONSI) or require an Environmental Impact Statement (EIS) under NEPA.

Overview of Project Area

The project limits on Interstate 5 (I-5) are from the Garden Highway southbound off-ramp to the Arena Boulevard northbound off-ramp and on I-80, from West El Camino Avenue to the Truxel Road on-ramp. The existing I-5/I-80 interchange is a freeway-to freeway interchange, constructed in 1968. Within the project limits, I-5 is an eight-lane divided freeway with auxiliary lanes to and from the adjacent interchanges. I-80 is a six-lane divided freeway within the project limits. A portion of the eastbound I-80 mainline between I-5 and the San Juan Road Overcrossing is reduced to two lanes. The portion of I-80 east of the interchange has auxiliary lanes to and from the Truxel Road interchange. The surrounding area is primarily urban. Agricultural uses take place in some isolated portions of the project study area.

Purpose and Need

The purpose of the proposed project is to:

- Provide congestion relief.
- Improve safety and interchange operations.

- Promote the use of high occupancy vehicles (HOV).
- Support the goals of the SACOG 2035 Metropolitan Transportation Plan by providing greater connectivity with the existing and proposed HOV network in the Sacramento region.

Traffic on both I-5 and I-80 has steadily increased over the last few decades. Presently, congestion is experienced during peak periods on I-5 (in both directions), as well as eastbound I-80, near the interchange. Further development along the I-5 and I-80 corridors and increasing traffic volumes will further erode operating conditions of this interchange.

I-5 plays a critical role in California's economy by supporting a high volume of commuter and interregional traffic as well as trucks moving goods to destinations in and outside the state. The I-5/I-80 interchange connects major regional routes in Northern California and must operate effectively in order to serve commuter traffic, truck traffic and regional traffic. Interstate 5 is designated as part of the "National Network" for trucks and as the primary north-south route in California serves interregional and interstate travel.

Proposed Action

Caltrans and the FHWA, in cooperation with the Sacramento Transportation Authority (STA), propose to improve the operation of the I-5/I-80 interchange with the addition of auxiliary lanes; the elimination of one loop ramp; the addition of a HOV flyover; HOV lanes on I-5; and the addition of a mixed flow flyover between I-5 and I-80.

The project limits on I-5 are from the Garden Highway southbound off-ramp to the Arena Boulevard northbound off-ramp (Postmile (PM) 25.2/27.8) and on I-80, from West El Camino Avenue to the Truxel Road eastbound on-ramp (PM 1.3/3.8). The total length of the project is 2.6 miles on I-5 and 2.5 miles on I-80 and includes a direct two-lane fly-over connector for the eastbound (EB) I-80 to northbound (NB) I-5 movement and a direct bi-directional fly-over HOV connector for the westbound (WB) I-80 to southbound (SB) I-5 and NB I-5 to EB I-80 movements. Other operational improvements include configuring the interchange for the future construction of continuous HOV lanes on I-5 from downtown Sacramento to the I-5/State Route (SR) 99 Interchange; improving the connectors in the southwest and northeast quadrants of the I-5/I-80 interchange; eliminating the lane drop on EB I-80 and providing other auxiliary lanes. The project is described in detail in Chapter 1 and Figure 1 shows the project vicinity and location maps.

Other Proposed Actions in the Project Vicinity

This section provides a summary list of transportation and other proposed actions within the immediate project vicinity. For a more comprehensive list of projects, including more detailed project descriptions for the projects listed below; please see Section 2.29 ("Cumulative Impacts") of this document.

Table 1 Current Completed (2008) and Proposed Projects Within Study Area

| Project Name | Project Description | Year Completed or proposed construction |
|--|--|---|
| Transit Projects | | |
| Downtown Light Rail Station Enhancements | Design and construct light rail station enhancements, including better signage, lighting, pedestrian access, and ADA access to encourage greater transit usage. | 2009 |
| Northeast Corridor Enhancements | Improve alignment of Northeast Corridor LRT, upgrade the traction power system and signaling to provide limited-stop service, make enhancements to yard track and maintenance facility, and installation of communications infrastructure. | 2010 |
| Downtown-Natomas Rail Extension-MOS-1A | This extends light rail via a single track from Downtown Sacramento to Richards Boulevard, a distance of just over 1.1 miles, but stopping short of a crossing of the American River. | 2010 |
| Downtown Sac to West Sac Streetcar | Streetcar Capital to provide starter line service | 2014 |
| DNA Light Rail – Overall Study | Provide for additional advanced planning, value engineering, project delivery strategies, advanced conceptual engineering, and update the alternatives analysis. Project includes potential hardship right-of-way acquisition activities.[Phase 1 (MOS-1A) Construction is REG17320,Phase 2 is REG17935, and Phase 3 is REG17325.] | 2017 |
| Downtown-Natomas-Airport Rail Extension-MOS2 | Extend rail from Richards Boulevard to Natomas Town Center | 2017 |
| Downtown-Natomas-Airport Rail Extension-MOS3 | Extend rail from Natomas Town Center to Sacramento International Airport. | 2020 |
| State and Interstate Highway Projects | | |
| I-5 | Add HOV and auxiliary lanes from Elk Grove Boulevard to downtown Sacramento | 2015 |
| I-80 | New HOV lanes from RT Station (Longview) to the Yolo County line/Sacramento River (western terminus). | 2015 |
| I-5 | Widen: add NB auxiliary lane from Del Paso Rd. to SR 99. | 2016 |
| I-5/I-80 | Reconstruct I-5/I-80 Interchange, including high occupancy vehicle (HOV) lane connectors, and construction of HOV lanes from the I-5/I-80 Interchange to downtown Sacramento | 2018 |
| U.S. 50 HOV | HOV lanes from Watt Ave. to Downtown Sacramento. | 2020 |
| I-5 | Add HOV lanes from I-80 to SR 70/SR 99. Add Bus/HOV lanes between I-80 and | 2020 |

| Project Name | Project Description | Year Completed or proposed construction |
|-------------------------------|---|---|
| | downtown Sacramento (CAL18410). | |
| I-5/SR 99 | I-5/SR 99 interchange | 2023 |
| U.S. 50/SR 99 | Oak Park Interchange, including HOV lane connectors | 2027 |
| I-5/U.S. 50 | I-5/U.S. 50 Riverfront Interchange | 2029 |
| Local Streets Projects | | |
| Del Paso Rd. | Widen: 6 lanes from El Centro Rd. to SB I-5 offramp. | 2008 |
| Del Paso Rd. | Widen: 6 lanes from 500 feet east of Truxel Rd. to Town Center. (Complete frontage improvements and construct a raised/landscaped median). | 2008 |
| El Centro Rd. | Widen: 4 lanes from Del Paso Rd. to Arena Boulevard. | 2008 |
| El Centro Rd. | Widen: 4 lanes from Arena Boulevard to San Juan Rd. | 2008 |
| Main Ave. | Bridge Replacement: Main Ave. Bridge over Natomas east Main Drain: replace existing 2-lane bridge with a 4-lane bridge. | 2008 |
| Ninos Pkwy. | Bike trail: develop a pedestrian bike trail within the Ninos Pkwy. between San Juan Rd. and Edmonton Dr. | 2008 |
| Sacramento River Bike Trail | Bike Trail: construct from R St. to Miller Park and from Garcia Bend Park to south city limits along the east levee of the Sacramento River. | 2008 |
| I-80 | Bike/pedestrian bridge: across I-80 at the West Canal, as well as across the West Canal. | 2011 |
| Metro Air Pkwy. | The County of Sacramento is planning to construct an interchange on I-5 at Metro Air Parkway, a new arterial that will serve the planned Metro Air Park development. The proposed interchange would be located about halfway between the Airport Boulevard and SR 99 interchanges. | 2011 |
| Del Paso Rd. | Widen: from I-5 NB off-ramp to East Commerce (north side only). | 2016 |
| I-5 | New Bridge: Construct connection over I-5 between approximately Capitol Ave. to "O" St. | 2016 |
| Richards Boulevard | Richards Boulevard/I-5 reconstruct Interchange | 2017 |
| Sacramento River Crossing | New all-modal river crossing (Auto, Transit, Bike & Pedestrian) from Sacramento across the Sacramento River to West Sacramento. The crossing was modeled between Broadway in Sacramento & 15th Street in West Sacramento, but final alignment options will be studied in subsequent planning efforts. Additional 50% of estimated cost identified as a City of West Sacramento project. | 2019 |
| Lower American River Crossing | New all-modal river crossing (Transit, Auto, Bike & Pedestrian) across the Lower American River between downtown Sacramento and South Natomas | 2019 |
| Northgate Boulevard | Extend: Northgate Boulevard/I-80 Interchange: Extend existing I-5 WB off-ramp onto Northgate Boulevard.; add auxiliary lane to WB on-ramp | 2020 |

| Project Name | Project Description | Year Completed or proposed construction |
|------------------------|--|---|
| W. El Camino Ave./I-80 | West El Camino Interchange on I-80: Widen 4 lanes and modify ramps | 2020 |
| W. El Camino Ave. | West El Camino Interchange on I-5: new NB entrance ramp and SB exit ramp. Modify: NB I-5 to I-80 ramp to accommodate the proposed interchange ramps. | 2030 |

Source: Appendix A1 and A2 from the MTP 2035,

<http://sacog.org/mtp/2035/finaldocs/mtp/Appendices%20A-%20Project%20Lists/Appendix%20A1%20&%20A2%2010-15-08.pdf>

In addition, the following project is not included on the list above, but is in the initial stages of being studied, thus information is limited.

- 3E580K- Restripe I-5 in the “Boat Section” postmiles 22.5/23.6.

Areas of Potential Controversy

CEQA Guidelines (Section 15123) and NEPA Regulations (40 Code of Federal Regulations [CFR] 1502.12) require the Summary to identify areas of controversy known to the lead agency including issues raised by other agencies and the public.

Local environmental or community organizations have, in the past, opposed some HOV projects in the Sacramento metropolitan region, contending that HOV lanes would contribute to urban sprawl, induced travel with resultant impacts on air quality, noise or community impacts, and that the money would be better spent on transit oriented projects.

Potential Environmental Consequences and Avoidance, Minimization, and/or Mitigation Measures

Table 2 summarizes the potential significant impacts (under CEQA) of the proposed project and proposed mitigation measures to reduce significant impacts. Details for each environmental category are presented in Chapter 2 (Affected Environment, Environmental Consequences, and Avoidance, Minimization and/or Mitigation Measures) of this document.

Permits and Approvals Needed

The following permits, reviews, and approvals would be required for project construction:

- California Department of Fish and Game, 2080.1 consultation under Fish and Game Code Section 2080.
- United States Army Corps of Engineers (USACE) Section 404 authorization under the Federal Clean Water Act.
- Central Valley Regional Water Quality Control Board (RWQCB) Section 401 certification.

- United States Fish and Wildlife Service (USFWS) formal consultation under Section 7 of the Federal Endangered Species Act.
- National Emissions Standards for Hazardous Air Pollutants (NESHAP) notification to the Sacramento Metropolitan Air Quality Management District for Asbestos Demolition and Renovation.

Table 2 Summary of Potential Significant Impacts (Under CEQA) and Proposed Mitigation Measures

| Affected Resources | Potential Significant Impacts (Under CEQA) | Mitigation Measures | Significance After Mitigation | See Section |
|-----------------------------------|---|--|-------------------------------|-------------|
| Threatened and Endangered Species | The project will permanently impact 1.80 acres of Giant Garter Snake (<i>Thamnophis gigas</i>) upland habitat. There will also be 3.83 acres of temporary impacts to upland habitat due to construction activities. | <p>Compensatory mitigation shall be determined according to the “Standard Avoidance and Minimization Measures During Construction Activities in Giant Garter Snake Habitat” (USFWS 2005a). Temporary impacts are expected to last for one season and will be revegetated following the measures outlined in Section 2.26.10</p> <p>Permanent impacts will be compensated for at a 3:1 ratio. A total of 5.28 acres of giant garter snake upland habitat mitigation will be required to fully compensate for project impacts. All mitigation will be completed within the Sacramento River watershed and will be approved by USFWS.</p> | Less than significant | 2.26.7 |
| Threatened and Endangered Species | There are a total of 89.93 acres of Swainson’s hawk (<i>Buteo swainsoni</i>) foraging habitat within the environmental study limits. The project will impact 9.85 acres of Swainson’s hawk foraging habitat. | <p>Compensatory mitigation for impacts to Swainson’s hawk foraging habitat will follow the Staff Report Regarding Mitigation for Impacts to Swainson’s Hawks in the Central Valley of California (DFG, 1994). As outlined, impacts to foraging habitat shall be mitigated for at a 1:1 ratio for impacts within one mile of an active nest.</p> <p>Impacts are currently estimated at 9.85 acres all within one mile of an active nest. Based on these amounts, 9.85 acres of Swainson’s hawk foraging habitat mitigation will be needed.</p> | Less than significant | 2.26.2 |
| Visual/Aesthetics | Removal of vegetation | All disturbed areas will be replanted with trees, shrubs, grasses, and new irrigation will be installed. In addition, 19 acres of new trees, shrubs, and irrigation will be installed between the property line and the new auxiliary lanes to compensate for the increased hard surface. | Less than significant | 2.11.4 |

Table 3 Summary of Potential Impacts and Avoidance and Minimization Measures

| Affected Resources | Potential Impacts | Avoidance/Minimization Measures | See Section |
|--|---|---|--------------------|
| Land Use | None | None Required | 2.1.3 |
| Growth | None | None Required | 2.4.3 |
| Community Impacts | Temporary construction-related impacts | <ul style="list-style-type: none"> • Preparation of a Transportation Management Plan • Avoidance and minimization measures for temporary effects to the community resulting from dust and noise are listed below under Air Quality and Noise | 2.5.4 |
| Environmental Justice | None | None Required | 2.7.4 |
| Utilities, Emergency Services, and Community Facilities | Temporary construction-related impacts | <ul style="list-style-type: none"> • Transportation management measures will be in place to minimize impacts on emergency services and transit operators. • All work affecting traffic lanes will be at night and off-peak hours. • Stage construction and temporary concrete barriers will be required. • Construction of viaducts and other structures will require detouring/shifting traffic around the areas under work. • A public awareness campaign, portable changeable message signs, and Construction Zone Enhanced Enforcement Program (COZEEP) will be included in the project. • Lane closure charts will be developed during the PS&E phase of the project | 2.8.3 |
| Traffic and Transportation/Pedestrian and Bicycle Facilities | Temporary construction-related impacts | <ul style="list-style-type: none"> • A public awareness campaign, portable changeable message signs, and Construction Zone Enhanced Enforcement Program (COZEEP) will be included in the project. • Lane closure charts will be developed during the PS&E phase of the project. | 2.9.4 |
| Visual/Aesthetic | Construction of flyover and retaining walls | The concrete retaining walls will have an aesthetic treatment to compensate for the additional height and visual impact. Integral brown color will be added to reduce glare and visual boredom. The chain link fence will have a dark coating to make it inconspicuous. | |

| Affected Resources | Potential Impacts | Avoidance/Minimization Measures | See Section |
|--------------------------------|-------------------|--|-------------|
| Cultural Resources | None | Provisions will be included in the contract specifications in the event that cultural materials are discovered during construction | 2.12.3 |
| Hydrology and Floodplains | None | The mixed-flow connector and the San Juan Road Bridge will be designed to minimize their impacts on the floodplain. | 2.14.4 |
| Water Quality and Storm Runoff | None | <ul style="list-style-type: none"> • The project will adhere to all applicable permit conditions • A Storm Water Pollution Prevention Plan will be implemented and will include provisions for the handling, storage, and disposal of contaminated soil and Portland Concrete Cement residues • The provisions of the Caltrans Storm Water Management Plan and the Project Planning and Design Guide will be implemented, as applicable • Treatment Best Management Practices will be considered, as applicable • A Waste Discharge Requirement will be obtained from the Central Valley Regional Water Quality Control Board (CVRWQCB), if required • The project will require a Section 401 Clean Water Certification from the CVRWQCB | 2.15.4 |
| Geology | None | <ul style="list-style-type: none"> • Roadways and bridges will be designed and constructed to the seismic design requirements for ground shaking specified in the Uniform Building Code for Seismic Zone 3. • A geologic and geotechnical investigation of the alignment of the build alternative and laboratory testing of the earth materials will be conducted during the final design phase. • Site-specific exploratory borings and laboratory testing during final design of any bridge structures will be conducted to delineate any potentially liquefiable materials. Potentially liquefiable materials will either be removed or engineered to reduce their liquefaction potential, or the engineering design will incorporate deep foundations that extend beyond soils with the potential for liquefaction. • Site-specific borings and testing will include identification of soils with high shrink-swell potential that could damage the roadway over time. Expansive soils will be over excavated and replaced with non-expansive fill or treated with appropriate soil amendments to reduce the potential for shrinking and swelling. • Soil and slope stability measures will prevent or reduce erosion. Erosion of soils during construction will be minimized using temporary hydro-seeding to provide a vegetation cover with straw bales, plastic sheeting slope cover, and other temporary drainage measures to prevent excessive slope runoff, as needed. | 2.16.4 |

| Affected Resources | Potential Impacts | Avoidance/Minimization Measures | See Section |
|---------------------|---|--|-------------|
| Paleontology | None | <ul style="list-style-type: none"> • A Paleontological Evaluation Report has been prepared to identify any avoidance measures needed • A Paleontological Monitoring and Curation Report has been prepared to address any monitoring and/or curation that may be deemed appropriate in the event that paleontological resources are discovered during construction | 2.17.4 |
| Hazardous Materials | <p>Aerially deposited lead (ADL), lead-based paint, asbestos containing materials (ACM), and yellow traffic stripe containing lead and other heavy metals such as chromium may be encountered during construction of the project.</p> <p>During construction, a number of materials will be used including gasoline, diesel fuel, oil, and lubricants for operation of construction equipment.</p> <p>Construction of all the “build” alternatives could potentially result in small fuel spills from construction or vehicles.</p> | <ul style="list-style-type: none"> • During project construction activities, removing ACMs must be accomplished by an appropriately certified contractor in a way that contains, collects, and disposes of the small quantity of ACM in accordance with state and federal law. Appropriate Special Provisions for this work should be included in the project’s construction contract; the Contractor is responsible to do this notification in a timely manner. • Surplus excavated soil if any, along I-80 with the exception of Truxel Road ramps, will not be disposed of outside the project limits without being sampled and tested to determine the level of ADL contamination in order to ensure that the waste soil is appropriately disposed of as a hazardous, regulated or unregulated waste, or whether the soils are suitable for reuse or disposal with no restrictions. • Caltrans will ensure that a Health and Safety Plan is implemented and addresses the potential effects of the various chemical compounds that could be encountered within the project area. The Health and Safety Plan will include evaluations of the suspected chemical hazards, including symptoms of exposure and emergency treatment, appropriate use of personal protection equipment, and air monitoring. • The Contractor shall prepare a project specific “Lead Compliance Plan” pursuant to Title 8 of the California Code of Regulations - Section 1532.1, to prevent or minimize worker exposure to lead. • Any removed yellow traffic stripe material will be tested prior to disposal at an appropriate waste facility. Appropriate Special Provisions for this work shall be included in the project’s construction contract. • The routine use of hazardous materials, such as gasoline or diesel fuel for construction equipment, will be required by the project. Equipment to clean up fuel leaks and spills will be available at each project construction location. The Contractor will be required to safely store materials and immediately clean up spills if they occur. | 2.18.4 |
| Air Quality | Temporary constructed-related emissions of particulate matter and | <ul style="list-style-type: none"> • The Contractor shall comply with Caltrans Standard Specifications Section 14-9.01 and Section 10 of Caltrans Standard Specifications (2006). • Water or dust palliative will be applied to the site and equipment as frequently as necessary to | 2.19.2 |

| Affected Resources | Potential Impacts | Avoidance/Minimization Measures | See Section |
|--------------------|--|--|-------------|
| | CO, nitrous oxides, volatile organic compounds, and toxic air contaminants | <p>control fugitive dust emissions.</p> <ul style="list-style-type: none"> • Soil binder will be spread on any unpaved roads used for construction purposes, and all project construction parking areas. • Trucks will be washed off as they leave the right of way as necessary to control fugitive dust emissions. • Construction equipment and vehicles shall be properly tuned and maintained. Low-sulfur fuel shall be used in all construction equipment as provided in California Code of Regulations Title 17, Section 93114. • Develop a dust control plan documenting sprinkling, temporary paving, speed limits, and expedited revegetation of disturbed slopes as needed to minimize construction impacts to existing communities. • Locate equipment and materials storage sites as far away from residential and park uses as practical. Keep construction areas clean and orderly. • To the extent feasible, establish ESAs for sensitive air receptors within which construction activities involving extended idling of diesel equipment would be prohibited. • Use track-out reduction measures such as gravel pads at project access points to minimize dust and mud deposits on roads affected by construction traffic. • Cover all transported loads of soils and wet materials prior to transport, or provide adequate freeboard (space from the top of the material to the top of the truck) to reduce PM10 and deposition of particulate during transportation. • Remove dust and mud that are deposited on paved, public roads due to construction activity and traffic to decrease particulate matter. • To the extent feasible, route and schedule construction traffic to reduce congestion and related air quality impacts caused by idling vehicles along local roads during peak travel times. • Install mulch or plant vegetation as soon as practical after grading to reduce windblown particulate in the area. • If NOA is found during construction, rules and regulation of the Sacramento Metropolitan Air Quality Management District regarding NOA must be adhered to when handling this material. | |
| Noise | Temporary construction-related noise impacts and noise levels that will approach or exceed the federal Noise Abatement | <ul style="list-style-type: none"> • The Contractor shall comply with all local sound control and noise level rules, regulations, and ordinances which apply to any work performed pursuant to the contracts, and that each internal combustion engine, used for any purpose on the job or related to the job, shall be equipped with a muffler of a type recommended by the manufacturer and that no internal combustion engine shall be operated on the project without a muffler | 2.20.8 |

| Affected Resources | Potential Impacts | Avoidance/Minimization Measures | See Section |
|-----------------------------------|--|--|--------------------|
| | Criteria | | |
| Wetlands and other waters | Minor temporary and permanent impacts to wetlands and other waters. (Mitigation for wetlands is required for permits, however, it is not considered a significant impact under CEQA) | <ul style="list-style-type: none"> • The proposed project footprint was designed to minimize the addition of paved and disturbed areas where possible. The proposed interchange modification includes flyover connectors which have a much smaller footprint than standard ramp connectors, decreasing potential impacts to wetlands. Work within bridge areas, with the exception of the San Juan Bridge, has been designed within the limits of the existing structures. • In order to avoid permanent impacts to the East Natomas DC, the replacement of the San Juan Bridge was redesigned to follow the existing alignment. This design change avoided 0.006 acres of impacts to the East Natomas DC which is classified as 'Other Waters of the US and under the jurisdiction of the USACE. • Roadside ditches that are affected by this project will be re-graded at the toe of slope of the widened structure. • Environmentally Sensitive Areas (ESAs) will be identified around Wetlands and Other Waters of the US that will not be affected by the project. ESA fencing will be installed to prevent unintentional impacts to these areas. | 2.23.4 |
| Special-Status Animal Species | Potential impacts to burrowing owls, raptors and other migratory birds | <ul style="list-style-type: none"> • Establish Environmentally Sensitive Areas • Containment Measures/Construction Site Best Management Practices • Restrict Timing of Woody Vegetation Removal • Nesting Bird Surveys • Pre-construction Burrowing Owl Surveys. If burrowing owls or signs of burrowing owls are detected, CDFG shall be contacted to determine the best course of action. | 2.25.5 and 2.27.4 |
| Threatened and Endangered Species | Potential impacts to Giant Garter Snake (GGS) and Swainson's hawk | <ul style="list-style-type: none"> • Establish Environmentally Sensitive Areas • Limit Vegetation Removal • Containment Measures/Construction Site Best Management Practices • Restore Wetland, Riparian, and Stream Habitat Disturbed by Construction • Dewatering Activities • Restrict Timing of In-Stream Activities • Restrict Timing of Woody Vegetation Removal • Nesting Bird Surveys • Pre-construction Surveys and Construction Monitoring for Swainson's Hawks • Giant Garter Snake Avoidance and Minimization Measures | 2.26.5 and 2.26.10 |

| Affected Resources | Potential Impacts | Avoidance/Minimization Measures | See Section |
|--------------------|--|--|-------------|
| | | <ul style="list-style-type: none"> • Giant Garter Snake Habitat Restoration | |
| Invasive Species | Potential introduction and/or spread of invasive species | <ul style="list-style-type: none"> • Weed Free Construction Equipment • Proper Disposal of Soil and Plant Material • Weed Free Erosion Control Treatments | 2.28.4 |
| Cumulative Impacts | None | No avoidance or minimization measures are required. | 2.29.4 |