Findings of Fact and Statement of Overriding Considerations

Valley Rail Sacramento Extension Project

Prepared for:

San Joaquin Regional Rail Commission

San Joaquin Joint Powers Authority

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Table of Contents

List of Acronyms

ACE	Altamont Corridor Express
BMPs	Best Management Practices
CCR	California Code of Regulations
CO_2	carbon dioxide
CRMP	construction risk management plan
CVFPB	Central Valley Flood Protection Board
CVFPP	Central Valley Flood Protection Plan
DPM	diesel particulate matter
DPS	Distinct Population Segment
DWR	California Department of Water Resources
EIR	Environmental Impact Report
Farmland	Prime Farmland, Unique Farmland, or Farmland of Statewide Importance
FEMA	Federal Emergency Management Agency
FTA	Federal Transit Administration
GHGs	greenhouse gas
HSR	high-speed rail
I-5	Interstate 5
LRT	light rail transit
MMRP	mitigation monitoring and reporting program
MS4	Municipal Separate Storm Sewer System
MT CO_2e/year	metric tons of carbon dioxide equivalents per year
NAHC	Native American Heritage Commission
NEMDC	Natomas East Main Drainage Canal
NO_X	nitrogen oxides
NPDES	National Pollutant Discharge Elimination System

PM_{10}	particulate matter with a diameter of 10 microns
PM2.5	particulate matter with a diameter of 2.5 microns
PPDG	Project Planning and Design Guide
PUB. RES. CODE	Public Resources Code
RD	Reclamation District
ROG	reactive organic gases
ROW	right-of-way
SacRT	Sacramento Regional Transit District
SJJPA	San Joaquin Joint Powers Authority
SJRRC	San Joaquin Regional Rail Commission
SJVAPCD	San Joaquin Valley Air Pollution Control District
SMAQMD	Sacramento Metropolitan Air Quality Management District
SR	State Route
SWPPP	Storm Water Pollution Prevention Plan
TACs	toxic air contaminants
TOD	transit-oriented development
UPRR	Union Pacific Railroad
UPRR	Union Pacific Railroad
VELB	Valley Elderberry Longhorn Beetle
VMT	vehicle miles traveled

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1 Introduction

The San Joaquin Joint Powers Authority (SJJPA) and the San Joaquin Regional Rail Commission (SJRRC) are jointly undertaking the planning, design, and environmental review of the Valley Rail Sacramento Extension Project (proposed project), a proposed passenger rail service between Stockton and Sacramento. SJRRC has prepared for certification a Final EIR for the proposed project.

The proposed project would expand Amtrak San Joaquins and ACE passenger rail services to the greater Sacramento area through the construction of five new rail stations and track improvements along the Union Pacific Railroad (UPRR) Sacramento Subdivision. The proposed stations would include one new station in Lodi and four new stations in Sacramento: City College, Midtown Sacramento, Old North Sacramento, and Natomas/Sacramento Airport. Increased passenger rail service would include one additional round trip of Amtrak San Joaquins service between the existing Fresno Amtrak Station and the proposed Natomas/Sacramento Airport Station, and one additional round trip of Amtrak San Joaquins service between the existing Bakersfield Amtrak Station and the proposed Natomas/Sacramento Airport Station. The proposed project would also include one additional round trip of ACE service between the proposed Natomas/Sacramento Airport Station and the existing San Jose Diridon Station, one additional round trip between the proposed Natomas/Sacramento Airport Station and the existing the Stockton Downtown/ACE Station, and three round trips between the proposed Ceres ACE Station (included in the ACE Extension Lathrop to Ceres/Merced project) and the proposed Natomas/Sacramento Airport Station.[1] For a detailed description of the proposed project, see Chapter 2, *Project Description*, of the Final EIR.

Section 1 of this document provides a summary of the environmental review process. Section 2 describes the alternatives considered in the 2020 Final EIR. Section 3 contains SJRRC's findings for each significant environmental effect of the proposed project identified in the Final EIR, as required by CEQA. Section 3 also describes the reasons why the project alternatives analyzed in the Final EIR ultimately have been rejected. Section 4 consists of a statement of overriding considerations, as required by State CEQA Guidelines Section 15093, stating the specific circumstances that support SJRRC's determination that the unavoidable significant environmental effects of the proposed project are acceptable because specific benefits of the proposed project outweigh those effects.

[1] On August 2, 2018, the SJRRC Board certified the environmental impact report (EIR) and approved the ACE Extension Lathrop to Ceres/Merced project. Operation of Phase I of the ACE Extension Lathrop to Ceres/Merced project (which includes the Ceres Station) is anticipated to begin between 2020 and 2023.

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2 CEQA Process

SJRRC analyzed the proposed project on the basis of the California Environmental Quality Act (CEQA, Public Resources Code Section 21000 et seq.) and the State CEQA Guidelines (14 California Code of Regulations [CCR] 15000, et seq.). The Final EIR prepared by SJRRC determined that the proposed project could have potentially significant effects on the environment, including significant effects that cannot be avoided.

As required by CEQA, the Draft EIR for the proposed project was made available to the public and regulatory agencies for review and comment between March 30, 2020 and June 5, 2020. Virtual open houses were held on April 23, 2020, April 28, 2020, and May 11, 2020 to receive comments on the Draft EIR. All written comments received during the public review period were responded to in Appendix H, *Responses to Comments* of the Final EIR.

Prior to approving the proposed project, SJRRC must certify that it has considered the Final EIR, that the Final EIR adequately meets the requirements of CEQA, and that the Final EIR reflects the independent judgment of SJRRC. Upon approving the proposed project, SJRRC must adopt the following findings of fact regarding the significant effects identified in the Final EIR, the range of alternatives analyzed in the Final EIR, and statement of overriding considerations explaining the benefits that outweigh the significant unavoidable effects identified in the Final EIR.

Pursuant to Public Resources Code (PUB. RES. CODE) Section 21081.6, SJRRC is also adopting a mitigation monitoring and reporting program (MMRP) for the mitigation measures that are SJRRC's responsibility to implement. The MMRP establishes a program to ensure that the adopted mitigation measures identified in the Final EIR will be implemented.

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3 Alternatives Considered

SJRRC conducted a comprehensive alternative identification and screening process to identify which alternatives to analyze in the proposed project EIR. During the scoping process and with the release of the Notice of Preparation, SJRRC solicited input from the public, agencies, and stakeholders about potential alternatives for consideration. As discussed in Chapter 5 of the EIR, SJRRC considered a wide range of alternatives suggested during the scoping process to select the alternatives to be analyzed in the EIR. Alternatives determined to be infeasible, to not avoid or substantially reduce one or more significant impacts of the proposed project, or to not meet all or most of the project's purpose and need were dismissed from further analysis.

Based on the screening process results, the proposed project EIR analyzed the following alternatives:

- Alternatives described in Chapter 2, *Project Description*, and analyzed in Chapter 3, *Environmental Impact Analysis* and Chapter 4, *Other CEQA-Required Analysis*:
    - Lodi Station South Alternative
- Alternatives described and analyzed in Chapter 5, No Project Alternative and Alternatives Considered and Dismissed:
    - No Project Alternative
    - No Lodi Station Alternative
    - Alternative Railroad Alignment
    - Elk Grove Station Alternatives
    - Lodi Station Alternatives
    - Natomas/Sacramento Airport Station Alternatives

The Lodi Station South Alternative is summarized below. All Chapter 5 alternatives are also summarized below, as well as reasons why these alternatives are ultimately rejected as infeasible.

3.1 No-Project Alternative

State CEQA Guidelines Section 15126.6(e)(2) states that the "no project analysis shall discuss the existing conditions at the time the notice of preparation is published as well as what would be reasonably expected to occur in the foreseeable future if the project were not approved, based on current plans and consistent with available infrastructure and community services."

Under the No Project Alternative, none of the Valley Rail Sacramento Extension Project improvements (or their alternatives/variants) would be constructed and there would be no improvements to the existing UPRR Sacramento Subdivision. There would be no extension of Amtrak San Joaquins or ACE operations to serve the project area.

Under the No Project Alternative, the San Joaquins service would continue to operate over the BNSF Stockton Subdivision, with trains stopping at the existing Amtrak stations along the subdivision before terminating at either Fresno or Bakersfield. There would be no adjustments to the schedules of the Amtrak services or Amtrak Thruway Bus services.

Under the No Project Alternative, ACE services would continue between the San Jose Diridon and Stockton Downtown/ACE stations as they are currently occurring, as well as to the proposed Ceres Station, including in the ACE Extension Lathrop to Ceres/Merced project.

3.2 Lodi Station South Alternative

Under the Lodi Station South Alternative, the station would be constructed on a 15-acre site along the northern side of West Harney Lane just east of the UPRR alignment. The site is currently being used for agriculture. Access to the station would be provided from along West Harney Lane and Devries Road. As shown in Figure 2-2B of the Final EIR, improvements that would be constructed as part of the Lodi Station South Alternative include:

- Construction of a 30-foot-wide by 1,000-foot-long at-grade center loading passenger platform.
- Construction of a surface parking lot providing approximately 240 parking spaces and 3 bus bays.
- Construction of a pedestrian undercrossing with ramps and stairs near the center of the platform (approximately 12 feet below existing grade), and a separate at-grade walkway at the northern end of the platform providing access from the parking lot to the passenger platform.
- Construction of station access driveways from West Harney Lane and Devries.
- Construction of a stormwater basin north of West Harney Lane.

Also shown in Figure 2-2B are project-related track improvements proposed in the vicinity of the Lodi Station South Alternative. Similar to the Lodi Station, the Lodi Station South Alternative would also include passenger amenities such as platform shelters (approximately 8 to 10 feet high), benches, lighting, security cameras, signage, ticketing machines, bicycle storage facilities, landscaping, and emergency call boxes.

3.3 No Lodi Station Alternative

The only potentially significant and unavoidable operational impacts of the proposed project relate to the loss of agricultural land from construction of the Lodi Station (or Lodi Station South Alternative).

Due to the nature of land uses along the rail corridor in the vicinity of Lodi, the significant and unavoidable impact to agriculture is anticipated to occur under both Lodi Station alternatives described in Chapter 2, *Project Description*, as well as any other potential station locations in this vicinity. One alternative to avoid this significant impact would therefore be to not construct any station in the vicinity of Lodi. While such an alternative would avoid the potentially significant impact associated with loss of agricultural land, no viable station site has been identified within a reasonable distance to serve the population in or near the City of Lodi that would avoid or reduce impacts to agricultural land. Therefore, this alternative was dismissed as it was determined that a Lodi Station is necessary to meet the proposed project's goals to improve connectivity in the Central Valley and serve the target ridership in and near the City of Lodi.

3.4 Alternative Railroad Alignment

Also considered was the use of the UPRR Fresno Subdivision (located approximately parallel to, but east of the Sacramento Subdivision) as an alternative alignment to provide the project upgrade to ACE and San Joaquins services. This alternative was dismissed from further consideration due to the following reasons:

- Opportunities for increased passenger rail service on the Fresno Subdivision, where UPRR operates its mainline service, are limited due to a lack of additional capacity. In addition, UPRR does not support additional passenger service along the Fresno Subdivision and would likely not grant trackage rights.
- Construction of a new track outside the existing UPRR right-of-way (ROW) along the Fresno Subdivision to accommodate the proposed project would potentially result in increased environmental impacts and costs, and would not enable a phased implementation program to provide additional, near-term service to and from Sacramento.
- The Fresno Subdivision does not extend north beyond downtown Sacramento and would therefore not facilitate the extension of ACE or San Joaquins service to the Natomas area or provide the opportunity for a convenient shuttle connection to the Sacramento International Airport.

Use of the Sacramento Subdivision (as included in the proposed project) would have the following additional benefits not available from the Fresno Subdivision:

- Unlike the Fresno Subdivision, there is excess capacity on the Sacramento Subdivision and UPRR is willing to work with SJJPA and the state to enable passenger service on that line;
- better access to the State Capitol and surrounding businesses (via the proposed Midtown Station) and serves a greater population near proposed stations;
- easy access to existing SacRT Light Rail Stations at three stations, including, the 16th Street Station via the proposed Midtown Sacramento Station, City College Station with direct platform-to-platform connectivity, and the Globe Avenue Station with the proposed Old North Sacramento Station; and
- a connection to Sacramento International Airport via shuttles from the proposed Natomas/Sacramento Airport Station.

3.5 Elk Grove Station Alternatives

A number of location alternatives were considered during the planning process for the Elk Grove Station, including alternatives evaluated in the City of Elk Grove's Multimodal Facility Feasibility Study. These alternatives are described below.

Bilby Road/Willard Parkway (W1) alternative. This alternative considered track improvements and a new platform on a 12-acre site of three parcels north of Bilby Road and bordered by UPRR ROW to the west and Willard Parkway to the east. Site access for vehicles would be provided via a driveway connecting to the intersection of Willard Parkway and Matina Drive. This alternative was dismissed due to a lack of support from adjacent neighborhoods.

Elk Grove Boulevard/Franklin Boulevard (W2) alternative. This alternative considered track improvements and a new platform on a site located within the Stone Lakes National Wildlife Refuge bounded by UPRR ROW to the west, Franklin Boulevard to the east, and Elk Grove Boulevard to the north. Site access for vehicles would be provided via a driveway connecting to the intersection of Franklin Boulevard and Blossom Ridge Drive. This alternative was dismissed due to its location within the Stone Lakes National Wildlife Refuge and a lack of support from adjacent neighborhoods.

Laguna Boulevard/Dwight Road (W3) alternative. This alternative considered track improvements and a new platform on a combination of three parcels bounded by UPRR ROW to the east, Laguna Boulevard to the south, and Dwight Road to the west. Site access for vehicles would be provided via a driveway along Dwight Road. This alternative was dismissed due to difficulties in the procurement process for self-storage type facilities.

Dwight Boulevard (W4) alternative. This alternative considered track improvements and a new platform on Dwight Road on a site bounded by UPRR ROW to the east, Dwight Road to the west, and the Elk Grove city limit to the north. This alternative was dismissed due to site specific complexities related to parcel ownership.

Willard Parkway/Kammerer Road (planned) (W5). This alternative considered track improvements and a new platform in the southern portion of Elk Grove, south of Hood Franklin Road. Site access for vehicles would be provided via a driveway connecting to the future Willard Parkway extension. This alternative was dismissed due to its remote location, and potential impacts to important agricultural lands.

Franklin Boulevard/Bilby Road. This alternative considered track improvements and a new platform in the southern portion of Elk Grove, south of Bilby Road and east of Franklin Boulevard. Site access would be provided via a new eastern leg of Hood Franklin Road and from Bilby Road. This alternative was dismissed due to its remote location and lack of community support.

Sims Road. This alternative considered track improvements and a new platform along Sims Road on Sacramento Regional Sanitation Bufferlands property. Access was proposed from Sims Road. This alternative was dismissed due to opposition from the Sacramento Regional Sanitation District.

North Elk Grove Station. This alternative considered construction of a new station (with variants) to be constructed on a 32-acre site beneath the Cosumnes Boulevard/Morrison Creek Viaduct near the existing SacRT Franklin LRT Station in Sacramento. This alternative was dismissed following circulation of the Draft EIR due to opposition from the Sacramento Regional Sanitation District, the City of Sacramento, the Delta Stewardship Council, the Freeport Water Agency, Reclamation District 1000, Sacramento Flood Control Agency, and the Central Valley Bird Club, as well as lack of community support.

3.6 Lodi Station Location Alternatives

Various location alternatives were considered during the planning process for the Lodi Station, including a location to the west of the existing UPRR ROW, just north of West Kingdon Road. This western alternative was ultimately found by the design team to be less suitable than the two Lodi alternatives considered in the EIR based on its proximity to Turner Elementary and the longer

travel distance to the station from Central Lodi. In addition, any alternative Lodi Station location would not avoid the significant and unavoidable loss of agricultural land as the majority of parcels bordering the UPRR ROW and suitable for a station in the vicinity of Lodi are agricultural land.

3.7 Natomas/Sacramento Airport Station west of Levee Road

This alternative considered the development of a station on a 47-acre site south of West Elkhorn Boulevard, west of Levee Road, and just east of the Natomas residential development. In response to community input and concern during the public scoping period, this station was dismissed from further consideration.

3.8 Natomas/Sacramento Airport Interim Station

This alternative considered the development of an interim station on a 20-acre site south of Cement Way and east of Sorento Road. In response to potential right-of-way impacts to local businesses, as well as community input and concern raised during the public scoping period, this station was dismissed from further consideration.

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4 Findings

4.1 CEQA Requirements

CEQA requires the lead agency to make written findings about the disposition of the project's effects whenever it decides to approve a project for which an EIR has been certified (PUB. RES. CODE Section 21081). Regarding these findings, Section 15091 of the State CEQA Guidelines states, in part:

(a) No public agency shall approve or carry out a project for which an EIR has been certified which identifies one or more significant environmental effects of the project unless the public agency makes one or more written findings for each of those significant effects, accompanied by a brief explanation of the rationale for each finding. The possible findings are:

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

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

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

(b) The findings required by subsection (a) shall be supported by substantial evidence in the record.

The "changes or alterations" referred to in the State CEQA Guidelines may be mitigation measures, alternatives to the project, or changes to the project by the project proponent. The Final EIR for the proposed project identifies mitigation measures that will reduce significant effects of the proposed project or mitigate other potential effects that may not be, strictly speaking, environmental effects under CEQA. These mitigation measures will be incorporated into the design of the proposed project. An MMRP will also be adopted by SJRRC to ensure that the mitigation measures identified in the Final EIR and these findings will be implemented.

The documents and other materials that constitute the record upon which SJRRC's decision and these findings are based can be reviewed in person at the following location:

San Joaquin Regional Rail Commission
949 East Channel Street
Stockton, CA 95202
Contact: Kevin Sheridan
kevin@acerail.com

4.2 Findings Regarding Independent Review and Judgment

Each member of SJRRC was provided a complete copy of the Final EIR for the proposed project in advance of the hearing on the project. SJRRC hereby finds that the Final EIR reflects its independent judgment. SJRRC also finds that it has independently reviewed and analyzed the Final EIR prior to taking final action with respect to the proposed project.

4.3 Findings Regarding the Proposed Project

4.3.1 Findings Regarding Significant and Unavoidable Effects

SJRRC determines that the following significant effects cannot be avoided. Feasible mitigation measures included in the Final EIR will lessen the effects, but will not result in complete mitigation of the effects to a less-than-significant level. The following identifies the pertinent mitigation measures by number and summary title. The full text of each of the mitigation measures cited below is found in the Final EIR and that text is hereby incorporated by reference.

Agricultural Resources

Significant Effect: Impact AG-4. The proposed project would conflict with existing zoning for an agricultural use.

Findings: SJRRC hereby makes findings (a)(1) and (a)(3) (described above), as required by PUB. RES. CODE 21081 and stated in State CEQA Guidelines Section 15091, with respect to the above identified effect.

Facts in Support of Findings: The Lodi Station and Lodi Station South Alternative sites are zoned AG-40. The AG-40 zoning designation is established to preserve agricultural lands for the continuation of commercial agricultural enterprises. Transportation services are not permitted in the AG-40 zone. This zoning designation was adopted for the purpose of avoiding a physical environmental effect. The Lodi Station and Lodi Station South Alternative Station would conflict with existing agricultural zoning by converting land zoned for agricultural uses to transit uses.

The following measures mitigate this impact to the extent feasible, but not to a less-than-significant level.

- AG-2.1: Conserve Important Farmlands (Prime Farmland, Farmland of Statewide Importance, and Unique Farmland).
- AG-4.1: Consult with the San Joaquin County Community Development Department and Board of Supervisors on the adoption of a change in zoning designation for the parcels proposed for the Lodi Station or the Lodi Station South Alternative.

Mitigation Measure AG-2.1 would reduce project impacts from permanent conversion of agricultural land by requiring purchase of agricultural conservation easements, some of which could be zoned AG-40. However, conversion of agricultural land zoned for the continuation of agricultural uses to transit uses would still occur. Implementation of Mitigation Measure AG-4.1 would reduce the proposed project's impact by changing the zoning designation from AG-40 to a designation that allows transit. However, SJRRC cannot guarantee successful implementation of the mitigation measure, since it is not responsible for approval of zoning designations in San

Joaquin County. Therefore, the proposed project's impact from conflicts with existing zoning for an agricultural use would be significant and unavoidable.

Significant Effect: Cumulative Impact C-AG-1: Implementation of the proposed project, in combination with other foreseeable projects in the surrounding area, could result in a significant cumulative impact on agriculture.

Findings: SJRRC hereby makes findings (a)(1) and (a)(3) (described above), as required by PUB. RES. CODE 21081 and stated in State CEQA Guidelines Section 15091, with respect to the above identified effect.

Facts in Support of Findings: Past, present, and future projects throughout the region have, and will continue to convert, existing agricultural land to other uses—predominantly urban use. Future urban development projects identified in county and city general plans, as well as local and regional transportation projects in San Joaquin County and throughout the Sacramento Valley, would contribute to the cumulative loss of agricultural resources, including Prime Farmland, Farmland of Statewide Importance, and Unique Farmland. Construction of the Lodi Station would directly and permanently convert approximately 10.9 acres of Prime Farmland, and construction of the Lodi Station South Alternative would directly and permanently convert 3.3 acres of Prime Farmland and 7.2 acres of Unique Farmland, to a non-agricultural use. Furthermore, these uses would conflict with existing agricultural zoning by converting land zoned for agricultural uses to transit uses. These conversions would contribute to the incremental decline of Important Farmland in the county, region, and state, and result in the irreversible conversion of this agricultural land.

The following measures mitigate this impact to the extent feasible, but not to a less-than-significant level.

- AG-2.1: Conserve Important Farmlands (Prime Farmland, Farmland of Statewide Importance, and Unique Farmland).
- AG-4.1: Consult with the San Joaquin County Community Development Department and Board of Supervisors on the adoption of a change in zoning designation for the parcels proposed for the Lodi Station or the Lodi Station South Alternative.

Implementation of Mitigation Measure AG-2.1 would reduce the proposed project's impacts from permanent conversion of Important Farmland; however, conversion of agricultural land zoned for the continuation of agricultural uses to transit uses would still occur. There is no additional feasible mitigation available that would reduce impacts associated with conflict with existing zoning for agricultural uses to a less-than-significant level. Therefore, the contribution to cumulative impacts associated with conflicts with an agricultural zoning would be considerable, and the impact would be cumulatively significant and unavoidable.

Noise

Significant Effect: Impact NOI-1: Construction of the proposed project could expose sensitive receptors to substantial increases in noise levels.

Findings: SJRRC hereby makes findings (a)(1) and (a)(3) (described above), as required by PUB. RES. CODE 21081 and stated in State CEQA Guidelines Section 15091, with respect to the above identified effect.

Facts in Support of Findings: As shown in Table 3.12-8 of the Final EIR, the operation of certain construction equipment and construction activities could generate noise exposure in excess of FTA thresholds for residences PUB. RES. CODE within 135 to 270 feet from a project construction site, depending on the activity. The potential for noise impacts would be greatest during structures work at locations where pile driving is required for bridge construction. Nighttime construction near residential uses would have larger impacts than daytime construction and would result in a potentially significant impact.

The following measure mitigates this impact to the extent feasible, but not to a less-than-significant level.

- NOI-1.1: Implement a construction noise control plan.

Implementation of Mitigation Measure NOI-1.1 would reduce the proposed project's impact from construction noise because it requires implementation of a construction noise plan. The construction noise plan will include performance standards in the form of construction best management practices, such as those listed below, that will be incorporated in the construction scope of work and specifications:

- Install temporary construction site sound barriers near noise sources.
- Use moveable sound barriers at the source of the construction activity.
- Avoid the use of impact pile drivers where possible near noise-sensitive areas or use quieter alternatives (e.g., drilled piles) where geological conditions permit.
- Locate stationary construction equipment as far as possible from noise-sensitive sites.
- Re-route construction-related truck traffic along roadways that will cause the least disturbance to residents.
- Use low-noise emission equipment.
- Implement noise-deadening measures for truck loading and operations.
- Line or cover storage bins, conveyors, and chutes with sound-deadening material.
- Use acoustic enclosures, shields, or shrouds for equipment and facilities.
- Use high-grade engine exhaust silencers and engine-casing sound insulation.
- Minimize the use of generators to power equipment.
- Limit use of public address systems.
- Grade surface irregularities on construction sites.
- Monitor and maintain equipment to meet noise limits.
- Establish an active community liaison program to keep residents informed about construction and to provide a procedure for addressing complaints.

Although the best management practices that would be implemented under the construction noise plan specified in Mitigation Measure NOI-1.1 would generally reduce the construction noise levels, the measures would not necessarily guarantee that noise-sensitive residential receptors would not be exposed to noise levels exceeding the 80-dBA limit during the day or the 70-dBA limit at night. Specifically, because project improvements are located within or near an active railroad, it

is probable that construction near some residential areas would have to be conducted at night to avoid disruption of freight and passenger rail operations that is unacceptable to the Union Pacific Railroad (UPRR) and to complete construction on schedule. Furthermore, a temporary soundwall may be effective in certain locations, but in many cases the nature of the construction work makes use of such soundwalls infeasible. Therefore, the proposed project's construction noise impact would be significant and unavoidable.

Significant Effect: Cumulative Impact C-NOI-1: Construction of the proposed project, in combination with other foreseeable projects in the surrounding area, would result in a significant cumulative impact on noise.

Findings: SJRRC hereby makes findings (a)(1) and (a)(3) (described above), as required by PUB. RES. CODE 21081 and stated in State CEQA Guidelines Section 15091, with respect to the above identified effect.

Facts in Support of Findings: Although the cumulative rail projects would be the largest contributor to operational noise increases, cumulative other regional transportation and land development projects would also contribute to increasing noise levels and would affect sensitive receptors in the vicinity of the project alignment. Because there would be other cumulative projects simultaneously under construction adjacent to the project alignment, the construction noise generated by the proposed project would result in a considerable contribution to a cumulative noise impact during construction.

The following measure mitigates this impact to the extent feasible, but not to a less-than-significant level.

- NOI-1.1: Implement a construction noise control plan.

Implementation of Mitigation Measure NOI-1.1 would reduce the proposed project's cumulative construction noise impacts because it requires implementation of a construction noise control plan. The construction noise plan will include performance standards in the form of construction best management practices, such as those listed above under Impact NOI-1. However, Implementation of Mitigation Measure NOI-1.1 would not necessarily reduce all noise impacts at all times during construction to a less-than-significant level, particularly with the likelihood of substantial nighttime construction expected with the proposed project. There is no additional feasible mitigation available that would reduce impacts associated with substantial construction noise to a less-than-significant level. Therefore, the contribution to cumulative impacts associated with construction noise would be considerable, and the proposed project's impact would be cumulatively significant and unavoidable.

4.3.2 Findings Regarding Significant Effects Mitigated to Less-Than-Significant Levels

SJRRC has determined that, for the following effects, mitigation measures included in the Final EIR will mitigate the effects of the proposed project to a less-than-significant level. The following identifies the pertinent mitigation measures by number and summary title. The full text of each of the mitigation measures cited below is found in the Final EIR and that text is hereby incorporated by reference.

Aesthetics

Significant Effect: Impact AES-3. The proposed project would 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 a publicly accessible vantage point.) Where the proposed project is in an urbanized area, project improvements would conflict with applicable zoning and other regulations governing scenic quality.

Finding: SJRRC hereby makes finding (a)(1) (described in Section 3.1 above), as required by PUB. RES. CODE 21081 and stated in State CEQA Guidelines Section 15091, with respect to the above identified effect.

Facts in Support of Findings: The Lodi Station and the Lodi Station South Alternative would be constructed in rural areas that are designated and zoned for agricultural uses. The proposed project would also require the construction of several bridges and above-grade crossings; these facilities tend to be larger, more massive structures that stand out in the landscape due to their size and elevation above the ground. These facilities could degrade the existing visual character and quality.

The following measures mitigate this impact to a less-than-significant level.

- AE-3.1: Landscape all station parking lots.
- AE-3.2: Apply aesthetic design treatments to pedestrian overcrossings, aerial structures, tunnel openings, bridges, and retaining walls.
- AE-3.3: Apply aesthetic surface treatments to fencing, pedestrian bridge safety barriers, light standards, cable railings, pedestrian shelters, and signal houses.

Implementation of Mitigation Measures AE-3.1, AE-3.2, and AE-3.3 would reduce project impacts associated with degradation of visual character and quality to a less-than-significant level because trees would be planted in the station parking lots to soften the views and provide a blending effect with the surrounding landscape; pedestrian overcrossings would blend with and complement the surrounding landscape; darker fencing would improve visibility through the barrier compared with standard gray metal surfaces; appropriately colored overhead light standards and pedestrian shelters would recede into the view; and bridges and above-grade crossings would employ the use of colored concrete to better match the existing landscape.

Significant Effect: Impact AE-4. The proposed project could create a source of substantial light or glare that would adversely affect daytime or nighttime views in the area.

Finding: SJRRC hereby makes finding (a)(1) (described above), as required by PUB. RES. CODE 21081 and stated in State CEQA Guidelines Section 15091, with respect to the above identified effect.

Facts in Support of Findings: Nighttime lighting during the proposed project's construction phase may be required in areas where track improvements would occur in order to avoid conflicts with rail traffic on existing rail lines. Most residences in the vicinity of the project improvements are screened from the existing UPRR tracks and areas of project-related track improvements either by tall concrete block walls or tall trees. However, there are multiple single-family residences along Franklin Road within 300 feet of the Pollock Siding Upgrade that have no visual screening.

In addition, multiple residences on the east side of the Midtown track upgrades, between R and P Streets, have no visual screening. Work on the Del Paso Siding Upgrade/Extension would occur on top of the Natomas East Main Drainage Canal (NEMDC) east levee, which is approximately 18 to 24 feet above the ground surface as compared to the at-grade residences that back up to the east side of the NEMDC levee. Nighttime lighting would require the use of high-intensity lighting directed at the work area, which could result in light spillover resulting in sleep disruption for nearby residents.

The following measure mitigates this impact to a less-than-significant level.

- AE-4.1: Install screened construction fencing between residents and nighttime work areas where no visual screening is present.

Implementation of Mitigation Measure AE-4.1 would reduce the proposed project's short-term temporary impacts from nighttime construction lighting to a less-than-significant level, because nighttime lighting for construction activities would be screened from affected residences.

Significant Effect: Cumulative Impact C-AE-1: Implementation of the proposed project, in combination with other foreseeable projects in the surrounding area, could result in a significant cumulative impact on aesthetics.

Finding: SJRRC hereby makes finding (a)(1) (described in above), as required by PUB. RES. CODE 21081 and stated in State CEQA Guidelines Section 15091, with respect to the above identified effect.

Facts in Support of Findings: Nighttime lighting during the proposed project's construction phase may be required in areas where track improvements would occur. High-intensity nighttime lighting in close proximity to existing residences where there is no existing visual screening would result in nighttime glare, and could result in sleep disruption. Other cumulative projects along the project alignment may also require nighttime lighting during construction. Therefore, the proposed project, in combination with the cumulative projects, could result in a significant cumulative impact from new sources of construction-related nighttime lighting.

The following measure mitigates this impact to a less-than-significant level.

- AE-4.1: Install screened construction fencing between residents and nighttime work areas where no visual screening is present.

Implementation of Mitigation Measure AE-4.1 would reduce the proposed project's impact, in combination with the impacts of the other cumulative projects, because visual barriers would be installed between project construction activities and sensitive receptors where no existing visual screening is present during times when construction-related nighttime lighting is required. Therefore, the proposed project's contribution to cumulative aesthetics impacts as a result of construction would be less-than-considerable.

Agricultural Resources

Significant Effect: Impact AG-1. The proposed project would temporarily 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 during construction.

Finding: SJRRC hereby makes finding (a)(1) (described in above), as required by PUB. RES. CODE 21081 and stated in State CEQA Guidelines Section 15091, with respect to the above identified effect.

Facts in Support of Findings: Construction of the Lodi Station or the Lodi South Alternative Station could temporarily convert Important Farmland to nonagricultural uses where construction access, material laydown, and staging areas are located on Important Farmland. In addition, preconstruction and construction activities that occur on active farmland (i.e., land currently being prepared or used for agricultural production) could temporarily disrupt existing agricultural operations, remove land from agricultural production, and result in a temporary loss in agricultural productivity. If temporary staging areas are not immediately restored to former agricultural use (preconstruction condition) after construction, disruption in agricultural use may become permanent and result in permanent conversion of Important Farmland to nonagricultural use.

The following measure mitigates these impacts to a less-than-significant level.

- AG-1.1: Restore Important Farmlands used for temporary staging areas.

Implementation of Mitigation Measure AG-1.1 would reduce project impacts from temporary use of Important Farmland during construction to a less-than-significant level by requiring any Important Farmland temporarily used for construction access, mobilization, material laydown, and staging to be returned to a condition equal to the preconstruction condition. The required restoration plan and SJRRC's oversight, ensuring that the restoration plan is properly implemented, would maintain Important Farmland in equal quantities to those at the beginning of construction.

Significant Effect: Impact AG-2. The proposed project would permanently 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 nonagricultural use.

Finding: SJRRC hereby makes finding (a)(1) (described in above), as required by PUB. RES. CODE 21081 and stated in State CEQA Guidelines Section 15091, with respect to the above identified effect.

Facts in Support of Findings: Construction of platforms, parking lots, and bus drop-off and pickup areas would permanently convert approximately 10.9 acres of Important Farmland to nonagricultural use at the Lodi Station site or approximately 10.5 acres at the Lodi Station South Alternative site. The total conversion of Important Farmland would be small in the context of the county's entire agricultural land base and would not cause a substantial reduction in the county's total agricultural production. However, Appendix G of the CEQA Guidelines considers the conversion of Prime Farmland, Farmland of Statewide Importance, and Unique Farmland a significant impact under CEQA.

The following measures mitigate these impacts to a less than significant level.

- AG-2.1: Conserve Important Farmlands (Prime Farmland, Farmland of Statewide Importance, and Unique Farmland).

Implementation of Mitigation Measure AG-2.1 would reduce project impacts from permanent conversion of Important Farmland to a less-than-significant level by requiring purchase of

agricultural conservation easements at a ratio of 1:1 for direct use of Important Farmland. This mitigation measure would be effective in minimizing the overall permanent conversion of Important Farmland to a nonagricultural use because it would preserve Important Farmland in an amount commensurate with the quantity and quality of the converted farmlands and within the same agricultural regions where the impacts would occur.

Air Quality

Significant Effect: Impact AQ-1. Implementation of the proposed project could conflict with or obstruct implementation of applicable air quality plans.

Finding: SJRRC hereby makes finding (a)(1) (described above), as required by PUB. RES. CODE 21081 and stated in State CEQA Guidelines Section 15091, with respect to the above identified effect.

Facts in Support of Findings: Construction of project improvements within the San Joaquin Valley Air Pollution Control District (SJVAPCD) jurisdiction would exceed SJVAPCD-recommended significance thresholds for maximum daily and annual emissions of nitrogen oxides (NO_X). In addition, although emissions estimates do not exceed SJVAPCD-recommended thresholds for particulate matter with a diameter of 10 microns (PM_{10}) or 2.5 microns ($PM_{2.5}$) or less, SJVAPCD requires the implementation of fugitive dust control measures, as detailed in SJVAPCD Regulation VIII, on construction sites of 1 acre or greater. Construction of the proposed project within the Sacramento Metropolitan Air Quality Management District (SMAQMD) jurisdiction would exceed SMAQMD-recommended significance thresholds for maximum daily emissions of NO_X, PM_{10}, and $PM_{2.5}$. SMAQMD requires that all construction projects implement SMAQMD's Basic Construction Emission Control Practices. SJVAPCD's and SMAQMD's thresholds were established to help prevent emissions from new projects from contributing to regional violations of the ambient air quality standards. Without incorporation of SJVAPCD's Regulation VIII fugitive dust control measures and SMAQMD's Basic Construction Emission Control Practices, and because NO_X emissions would exceed the SJVAPCD and SMAQMD thresholds and PM_{10} and $PM_{2.5}$ emissions would exceed the SMAQMD threshold, project construction could conflict with the applicable air quality plans.

The following measures mitigate these impacts to a less-than-significant level.

- AQ-2.1: Implement advanced emissions controls for off-road equipment.
- AQ-2.2: Implement advanced emissions controls for locomotives used for construction.
- AQ-2.3: Implement fugitive dust control measures at all construction and staging areas to reduce construction-related fugitive dust, consistent with SJVAPCD Regulation VIII and SMAQMD Basic Emission Control Practices.
- AQ-2.4: Offset construction NO_X emissions.

Implementation of Mitigation measures AQ-2.1 through AQ-2.3 would reduce the proposed project's emissions of NO_X and PM generated from on-site use of construction equipment and use of locomotives for construction-support and on-site earthwork to a less-than-significant level. Mitigation Measures AQ-2.1 and AQ-2.2 would reduce emissions of NO_X, as well as reactive organic gases (ROG) and exhaust PM from on-site equipment use; these reductions would reduce construction-related emissions in both air districts to a level that would not exceed the

respective air district-recommended thresholds of significance for NO_X. Mitigation measure AQ-2.3 would reduce PM_{10} and $PM_{2.5}$ emissions associated with fugitive dust to a level that would not exceed the air district-recommended thresholds of significance for PM and would ensure compliance with the SJVAPCD and SMAQMD requirements for the implementation of fugitive dust management measures at construction sites. Mitigation Measure AQ-2.4 is included as a contingency in the case that Tier 4 construction equipment cannot be obtained and that construction-related emissions would otherwise exceed SJVAPCD- or SMAQMD-recommended thresholds. Therefore, if after application of Mitigation Measure AQ-2.1, emissions would still exceed the SJVAPCD- or SMAQMD-recommended threshold for NO_X during construction, SJRRC shall implement Mitigation Measure AQ-2.4 to offset NO_X emissions and would ensure the reduction of the project's impacts related to construction-generated emissions of NO_X to a less-than-significant level. Therefore, project construction would not conflict with applicable air quality plans with implementation of Mitigation Measures AQ-2.1 through AQ-2.4, and this impact would be reduced to a less-than-significant level.

Significant Effect: Impact AQ-2. Implementation of the proposed project could result in a cumulatively considerable net increase of criteria pollutants for which the project region is nonattainment under an applicable federal or state ambient air quality standard.

Finding: SJRRC hereby makes finding (a)(1) (described above), as required by PUB. RES. CODE 21081 and stated in State CEQA Guidelines Section 15091, with respect to the above identified effect.

Facts in Support of Findings: EIR Tables 3.3-5 and 3.3-6 identify construction-related emissions from each project improvement and associated alternative/variant (as applicable). Impacts are based on total maximum emissions from the construction of all improvements within each air district. Modeling indicates that construction of project improvements within San Joaquin County would exceed SJVAPCD-recommended significance thresholds for maximum daily and annual emissions of NO_X. In addition, although emissions estimates do not exceed SJVAPCD-recommended thresholds for PM_{10} or $PM_{2.5}$, SJVAPCD requires the implementation of fugitive dust control measures, as detailed in SJVAPCD Regulation VIII, on construction sites of 1 acre or greater. Construction of project elements within Sacramento County would exceed SMAQMD-recommended significance thresholds for maximum daily emissions of NO_X, PM_{10}, and $PM_{2.5}$. SMAQMD requires that all construction projects implement SMAQMD's Basic Construction Emission Control Practices. Without incorporation of SJVAPCD's Regulation VIII fugitive dust control measures and SMAQMD's Basic Construction Emission Control Practices, project-generated NO_X emissions would exceed the SJVAPCD and SMAQMD thresholds and PM_{10} and $PM_{2.5}$ emissions would exceed the SMAQMD threshold.

The following measures mitigate these impacts to a less-than-significant level.

- AQ-2.1: Implement advanced emissions controls for off-road equipment.
- AQ-2.2: Implement advanced emissions controls for locomotives used for construction.
- AQ-2.3: Implement fugitive dust control measures at all construction and staging areas to reduce construction-related fugitive dust, consistent with SJVAPCD Regulation VIII and SMAQMD Basic Emission Control Practices.
- AQ-2.4: Offset construction NO_X emissions.

Implementation of Mitigation measures AQ-2.1 through AQ-2.3 would reduce the proposed project's emissions of NO_X, ROG, and PM generated from on-site use of construction equipment and use of locomotives for construction-support and on-site earthwork to a less-than-significant level. Mitigation Measures AQ-2.1 and AQ-2.2 would reduce emissions of NO_X, as well as reactive organic gases (ROG) and exhaust PM, from on-site equipment use; these reductions would reduce construction-related emissions in both air districts to a level that would not exceed the respective air district-recommended thresholds of significance for NO_X. Mitigation measure AQ-2.3 would reduce PM_{10} and $PM_{2.5}$ emissions associated with fugitive dust to a level that would not exceed the air district-recommended thresholds of significance for PM and would ensure compliance with the SJVAPCD and SMAQMD requirements for the implementation of fugitive dust management measures at construction sites. Mitigation Measure AQ-2.4 is included as a contingency in the case that Tier 4 construction equipment cannot be obtained and that construction-related emissions would otherwise exceed SJVAPCD- or SMAQMD-recommended thresholds. Therefore, if after application of Mitigation Measure AQ-2.1, emissions would still exceed the SJVAPCD- or SMAQMD-recommended threshold for NO_X during construction, SJRRC shall implement Mitigation Measure AQ-2.4 to offset NO_X emissions and would ensure the reduction of the proposed project's impacts related to construction-generated emissions of NO_X to a less-than-significant level. Therefore, project construction would not result in a cumulatively considerable net increase of criteria pollutants for which the project region is nonattainment with implementation of Mitigation Measures AQ-2.1 through AQ-2.4, and this impact would be reduced to a less-than-significant level. Furthermore, when considering the displaced vehicle miles traveled (VMT) that would result from increased rail use and reduced on-road travel, the proposed project would result in a net reduction in emissions of most pollutants, and therefore this transportation mode shift would provide a regional air quality benefit.

Significant Effect: Impact AQ-3. Implementation of the proposed project could expose sensitive receptors to substantial pollutant concentrations.

Finding: SJRRC hereby makes finding (a)(1) (described above), as required by PUB. RES. CODE 21081 and stated in State CEQA Guidelines Section 15091, with respect to the above identified effect.

Facts in Support of Findings: Construction would generate diesel particulate matter (DPM) emissions from the use of off-road diesel-powered equipment required for site work, rail work, and structural work. These activities may expose nearby receptors to toxic air contaminants (TACs), including residents in adjacent areas. The results of a Health Risk Assessment performed in support of the EIR indicate that without use of Tier 4 engines, operation of the off-road equipment and supporting locomotives for project construction would result in emissions of DPM (i.e., PM_{10}) that would range from about 15 to 20 times greater than with use of Tier 4 engines. An increase in DPM emissions without use of Tier 4 engines from construction of the proposed project could result in an exceedance of the significance thresholds for maximum excess cancer risk at off-site sensitive receptors.

The following measures mitigate this impact to a less-than-significant level.

- AQ-2.1: Implement advanced emissions controls for off-road equipment.
- AQ-2.2: Implement advanced emissions controls for locomotives used for construction.

Implementation of Mitigation Measures AQ-2.1 and AQ-2.2 would reduce the proposed project's impact from exposure of sensitive receptors to TACs to a less-than-significant level, because the use of engines on heavy-duty off-road construction equipment and supporting locomotives that meet Tier 4 emissions standards would be required. This would, in turn, reduce the DPM emissions associated with on-site construction activities throughout the project alignment. Furthermore, the proposed project is expected to result in a transportation mode shift (i.e., attract passengers who otherwise would have driven cars) that would reduce travel by highway vehicles, thereby reducing mobile source emissions and congestion. Reduced congestion would also serve to reduce the emissions associated with on-road trucks that emit DPM and contribute to the existing health risks. Therefore, this transportation mode shift would provide a regional air quality benefit.

Significant Effect: Cumulative Impact C-AQ-1. Implementation of the proposed project, in combination with other foreseeable projects in the surrounding area, could result in a significant cumulative impact on air quality.

Finding: SJRRC hereby makes finding (a)(1) (described above), as required by PUB. RES. CODE 21081 and stated in State CEQA Guidelines Section 15091, with respect to the above identified effect.

Facts in Support of Findings: The San Joaquin Valley Air Basin and Sacramento Federal Ozone Nonattainment Area are in nonattainment for ozone and PM. Ongoing development and operation of new land uses would generate additional emissions of ozone precursors (ROG, NO_X,) and PM, which may adversely affect the ability of each region to achieve attainment with the applicable air quality standards, representing a significant cumulative impact. Operation of the cumulative rail projects, including the proposed project, provide alternatives to vehicular travel, and freight rail provides an alternative to trucking, thereby usually resulting in a net reduction in criteria pollutant emissions relative to vehicular travel or trucking. However, project construction would exceed SJVAPCD and SMAQMD emissions thresholds.

In addition, construction of other rail improvements and other cumulative projects along the project corridor, along with the proposed project, would emit TACs (in the form of diesel particulate matter) from the use of construction equipment and vehicles, which could adversely affect the health of sensitive receptors along the corridor.

The following measures mitigate these impacts to a less-than-significant level.

- AQ-2.1: Implement advanced emissions controls for off-road equipment.
- AQ-2.2: Implement advanced emissions controls for locomotives used for construction.
- AQ-2.3: Implement fugitive dust control measures at all construction and staging areas to reduce construction-related fugitive dust, consistent with SJVAPCD Regulation VIII and SMAQMD Basic Emission Control Practices.
- AQ-2.4: Offset construction NO_X emissions.

Implementation of Mitigation Measures AQ-2.1, AQ-2.2, AQ-2.3, and AQ-2.4 would reduce the proposed project's construction-related NO_X, PM_{10} and $PM_{2.5}$ emissions below applicable thresholds for each air district, and ensure compliance with the SJVAPCD and SMAQMD requirements for implementation of fugitive dust management measures at construction sites.

Therefore, the proposed project's contribution to cumulative impacts on air quality during construction would be less than considerable.

Implementation of Mitigation Measures AQ-2.1 and AQ-2.2 would also reduce the proposed project's cumulative impact from exposure of sensitive receptors to TACs, because the use of engines on heavy-duty off-road construction equipment and supporting locomotives that meet Tier 4 emissions standards would be required. This would, in turn, reduce the DPM emissions associated with on-site construction activities throughout the project alignment. Therefore, the proposed project's contribution to cumulative impacts on TACs during construction would be less than considerable.

Biological Resources

Significant Effect: Impact BIO-1. The proposed project could have a substantial adverse effect, either directly or through habitat modifications, on 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 the U.S. Fish and Wildlife Service.

Special-Status Plants

Finding: SJRRC hereby makes finding (a)(1) (described above), as required by PUB. RES. CODE 21081 and stated in State CEQA Guidelines Section 15091, with respect to the above identified effect.

Facts in Support of Findings: If and where special-status plant species are present throughout the project alignment, ground-disturbing construction activities could result in the direct mortality of individuals from the temporary or permanent removal of vegetation, crushing or trampling, or competition from the introduction of nonnative or invasive plants. Other construction-related indirect impacts could include reduced plant vigor from potential construction-generated dust (e.g., site preparation, grading), habitat degradation associated with runoff of sediment and contaminants (e.g., oil, grease, concrete), or accidental spills from equipment into adjacent areas that could support special-status plant species. With the conservative assumption that disturbance to and loss of habitats for special-status plants would occur at the highest estimates provided in EIR Table 3.4-3, up to 19 species of special-status plants could experience potentially significant losses as a result of project construction.

The following measures mitigate this impact to a less-than-significant level.

- BIO-1.1: Minimize the temporary construction impact footprint.
- BIO-1.2: Conduct a Worker Environmental Awareness Training Program for construction personnel.
- BIO-1.3: Conduct preconstruction botanical surveys for special-status plants; avoid and minimize impacts during construction.
- BIO-1.4: Develop and implement a revegetation and weed control plan.
- BIO-1.5: Document affected special-status plant species and prepare a salvage, relocation, or propagation and monitoring plan for special-status plant species.

- AQ-2.3: Implement fugitive dust control measures at all construction and staging areas to reduce construction-related fugitive dust, consistent with SJVAPCD Regulation VIII and SMAQMD Basic Emission Control Practices.
- HYD-1.1: Avoid water quality impacts from groundwater or dewatering discharges.
- HYD-1.2: Avoid water quality impacts from construction adjacent to, within, and crossing over surface waters.

Implementation of Mitigation Measures BIO-1.1, BIO-1.2, BIO-1.3, BIO-1.4, and BIO-1.5 would reduce the proposed project's direct impacts on special-status plant species during construction to a less-than-significant level. Mitigation Measures BIO-1.1 and BIO-1.2 require minimization of the temporary project footprint to avoid sensitive habitats to the greatest extent feasible, and require a preconstruction worker environmental awareness training for the identification and avoidance of sensitive habitats. Mitigation Measure BIO-1.3 requires preconstruction surveys and implementation of a variety of site-specific avoidance measures. Mitigation Measure BIO-1.4 requires implementation of a variety of site-specific measures designed to prevent the spread of invasive plants, along with revegetation at the conclusion of construction activities. If complete avoidance is not possible, Mitigation Measure BIO-1.5 requires compensation for impacts on special-status plants through translocation or propagation and monitoring of special-status plant populations, and compensation for loss of special-status plant populations consistent with regional conservation plans, where applicable.

Implementation of Mitigation Measures AQ-2.3, HYD-1.1, and HYD-1.2 would reduce the proposed project's indirect impacts on special-status plant species during construction to a less-than-significant level. Mitigation Measure AQ-2.3 requires contractors to implement fugitive dust control measures at all construction and staging areas such as watering surfaces, installing wind barriers, limiting vehicle speeds, covering haul trucks transporting loose materials, and paving roadways, all of which would reduce the potential impact of fugitive dust on neighboring habitats and vegetation. Mitigation Measures HYD-1.1 and HYD-1.2 require groundwater to be tested for hazardous materials and sediment and detention in storage tanks, along with implementation of the required National Pollutant Discharge Elimination System (NPDES) Construction General Stormwater Permit and associated Best Management Practices (BMPs) to minimize and/or avoid the potential for sedimentation, run-off, and discharge of pollutants from construction activities (which could in turn adversely affect sensitive habitats).

Special-Status Wildlife

Finding: SJRRC hereby makes finding (a)(1) (described above), as required by PUB. RES. CODE 21081 and stated in State CEQA Guidelines Section 15091, with respect to the above identified effect.

Facts in Support of Findings: Most of the proposed project would be constructed in the existing disturbed UPRR right-of-way and adjacent areas with limited potential to support special-status wildlife species. However, potentially suitable habitat for 24 special-status wildlife species is present in the study area. Impacts on special-status wildlife include direct loss of habitat from construction of track improvements and stations; direct mortality or injury during construction activities; and direct disturbance to nesting and foraging behavior due to increased construction noise. Indirect impacts include loss of sensitive habitat from invasive weeds and construction-

generated dust (e.g., site preparation, grading), habitat degradation associated with runoff of sediment and contaminants (e.g., oil, grease, concrete), or accidental spills from equipment and hazardous materials storage into adjacent areas that contain sensitive habitat or support special-status wildlife species. Mitigation measures for each species are listed below.

Vernal Pool Fairy Shrimp and Vernal Pool Tadpole Shrimp

The following measures mitigate these impacts to a less-than-significant level.

- BIO-1.1: Minimize the temporary construction impact footprint.
- BIO-1.2: Conduct a Worker Environmental Awareness Training Program for construction personnel.
- BIO-1.4: Develop and implement a revegetation and weed control plan.
- BIO-1.6: Avoid and minimize impacts on, and compensate for loss of, potentially-occupied habitat for vernal pool fairy shrimp and vernal pool tadpole shrimp through consultation with the U.S. Fish and Wildlife Service and implementation of appropriate mitigation.
- AQ-2.3: Implement fugitive dust control measures at all construction and staging areas to reduce construction-related fugitive dust, consistent with SJVAPCD Regulation VIII and SMAQMD Basic Emission Control Practices.
- HAZ-2.3: Implement a construction risk management plan (CRMP).
- HYD-1.1: Avoid water quality impacts from groundwater or dewatering discharges.
- HYD-1.2: Avoid water quality impacts from construction adjacent to, within, and crossing over surface waters.

Valley Elderberry Longhorn Beetle (VELB)

The following measures mitigate this impact to a less-than-significant level.

- BIO-1.1: Minimize the temporary construction impact footprint.
- BIO-1.2: Conduct a Worker Environmental Awareness Training Program for construction personnel.
- BIO-1.4: Develop and implement a revegetation and weed control plan.
- BIO-1.7: Conduct a preconstruction VELB shrub survey, establish avoidance buffers, and/or compensate for removal of potentially-occupied habitat for VELB through consultation with the U.S. Fish and Wildlife Service and implementation of appropriate mitigation.
- AQ-2.3: Implement fugitive dust control measures at all construction and staging areas to reduce construction-related fugitive dust, consistent with SJVAPCD Regulation VIII and SMAQMD Basic Emission Control Practices.

Steelhead – Central Valley Distinct Population Segment (DPS)

The following measures mitigate this impact to a less-than-significant level.

- BIO-1.1: Minimize the temporary construction impact footprint.

- BIO-1.2: Conduct a Worker Environmental Awareness Training Program for construction personnel.
- BIO-1.4: Develop and implement a revegetation and weed control plan.
- BIO-1.8: Avoid and minimize impacts on special-status fish while pile driving and implement seasonal restrictions for in-water work.
- BIO-2.1: Avoid and minimize impacts on sensitive natural communities and riparian habitat.
- BIO-2.2: Comply with the Section 1600 Streambed Alteration Agreement.
- BIO-2.3: Implement siting constraint measures.
- BIO-3.1: Avoid and minimize impacts on wetlands and other waters.
- BIO-3.2: Compensate for impacts on wetlands and other waters.
- AQ-2.3: Implement fugitive dust control measures at all construction and staging areas to reduce construction-related fugitive dust, consistent with SJVAPCD Regulation VIII and SMAQMD Basic Emission Control Practices.
- HAZ-2.3: Implement a construction risk management plan (CRMP).
- HYD-1.1: Avoid water quality impacts from groundwater or dewatering discharges.
- HYD-1.2: Avoid water quality impacts from construction adjacent to, within, and crossing over surface waters.

Western Pond Turtle and Giant Garter Snake

The following measures mitigate these impacts to a less-than-significant level.

- BIO-1.1: Minimize the temporary construction impact footprint.
- BIO-1.2: Conduct a Worker Environmental Awareness Training Program for construction personnel.
- BIO-1.4: Develop and implement a revegetation and weed control plan.
- BIO-1.9: Minimize impacts on wildlife and retain biological monitors during construction.
- BIO-1.10: Implement measures to avoid western pond turtle and giant garter snake during construction.
- AQ-2.3: Implement fugitive dust control measures at all construction and staging areas to reduce construction-related fugitive dust, consistent with SJVAPCD Regulation VIII and SMAQMD Basic Emission Control Practices.
- HAZ-2.3: Implement a construction risk management plan (CRMP).
- HYD-1.1: Avoid water quality impacts from groundwater or dewatering discharges.
- HYD-1.2: Avoid water quality impacts from construction adjacent to, within, and crossing over surface waters.

Swainson's Hawk and White-Tailed Kite

The following measures mitigate these impacts to a less-than-significant level.

- BIO-1.1: Minimize the temporary construction impact footprint.
- BIO-1.2: Conduct a Worker Environmental Awareness Training Program for construction personnel.
- BIO-1.4: Develop and implement a revegetation and weed control plan.
- BIO-1.9: Minimize impacts on wildlife and retain biological monitors during construction.
- BIO-1.11: Conduct a preconstruction survey for Swainson's hawk and white-tailed kite, and implement avoidance measures, as needed. Compensate for loss of Swainson's hawk and white-tailed kite foraging habitat.
- AQ-2.3: Implement fugitive dust control measures at all construction and staging areas to reduce construction-related fugitive dust, consistent with SJVAPCD Regulation VIII and SMAQMD Basic Emission Control Practices.
- HAZ-2.3: Implement a construction risk management plan (CRMP).
- HYD-1.1: Avoid water quality impacts from groundwater or dewatering discharges.
- HYD-1.2: Avoid water quality impacts from construction adjacent to, within, and crossing over surface waters.

Western Burrowing Owl

The following measures mitigate this impact to a less-than-significant level.

- BIO-1.1: Minimize the temporary construction impact footprint.
- BIO-1.2: Conduct a Worker Environmental Awareness Training Program for construction personnel.
- BIO-1.4: Develop and implement a revegetation and weed control plan.
- BIO-1.12: Conduct preconstruction surveys for western burrowing owl and implement avoidance measures, as needed.
- AQ-2.3: Implement fugitive dust control measures at all construction and staging areas to reduce construction-related fugitive dust, consistent with SJVAPCD Regulation VIII and SMAQMD Basic Emission Control Practices.
- HAZ-2.3: Implement a construction risk management plan (CRMP).
- HYD-1.1: Avoid water quality impacts from groundwater or dewatering discharges.
- HYD-1.2: Avoid water quality impacts from construction adjacent to, within, and crossing over surface waters.

Greater Sandhill Crane

The following measures mitigate this impact to a less-than-significant level.

- BIO-1.1: Minimize the temporary construction impact footprint.

- BIO-1.2: Conduct a Worker Environmental Awareness Training Program for construction personnel.
- BIO-1.4: Develop and implement a revegetation and weed control plan.
- BIO-1.9: Minimize impacts on wildlife and retain biological monitors during construction.
- BIO-1.13: Conduct a preconstruction survey for greater sandhill crane roost sites and implement avoidance measures, as needed.

Other Special-Status Birds, Migratory Birds, and Other Raptors

The following measures mitigate these impacts to a less-than-significant level.

- BIO-1.1: Minimize the temporary construction impact footprint.
- BIO-1.2: Conduct a Worker Environmental Awareness Training Program for construction personnel.
- BIO-1.4: Develop and implement a revegetation and weed control plan.
- BIO-1.9: Minimize impacts on wildlife and retain biological monitors during construction.
- BIO-1.14: Conduct a preconstruction survey for nesting birds and other raptors, and implement avoidance measures, as needed.
- BIO-2.1: Avoid and minimize impacts on sensitive natural communities and riparian habitat.
- BIO-2.2: Comply with the Section 1600 Streambed Alteration Agreement.
- BIO-2.3: Implement siting constraint measures.

Implementation of Mitigation Measures BIO-1.1, BIO-1.2, and BIO-1.4 would reduce the proposed project's direct impacts on special-status wildlife species during construction to a less-than-significant level. Mitigation Measures BIO-1.1 and BIO-1.2 require minimization of the temporary project footprint to avoid sensitive habitats to the greatest extent feasible, and require a preconstruction worker environmental awareness training for the identification and avoidance of sensitive habitats.

Implementation of Mitigation Measures BIO-1.6, BIO-1.7, BIO-1.8, BIO-1.9, BIO-1.10, BIO-1.11, BIO-1.12, BIO-1.13, and BIO-1.14 would also reduce the proposed project's direct impacts on special-status wildlife species during construction to a less-than-significant level. Mitigation Measure BIO-1.6 requires avoidance and minimization of impacts on, and compensation for loss of, potentially-occupied habitat for vernal pool fairy shrimp and vernal pool tadpole shrimp through consultation with the U.S. Fish and Wildlife Service and implementation of appropriate mitigation. Mitigation Measure BIO-1.7 requires that a qualified biologist conduct a preconstruction VELB shrub survey, establish avoidance buffers, and/or compensate for removal of potentially-occupied habitat for VELB through consultation with the U.S. Fish and Wildlife Service and implementation of appropriate mitigation. Mitigation Measure BIO-1.8 requires avoidance and minimization of impacts on special-status fish while pile driving and implementation of seasonal restrictions for in-water work. Mitigation Measure BIO-1.9 requires implementation of various site-specific measures to minimize impacts on wildlife and implementation of biological monitoring during construction. Mitigation Measure BIO-1.10 requires implementation of various site-specific

measures to avoid western pond turtle and giant garter snake during construction. Mitigation Measure BIO-1.11 requires that a qualified biologist conduct a preconstruction survey for Swainson's hawk and white-tailed kite, and that a variety of site-specific avoidance measures be implemented, as needed. Compensation for loss of Swainson's hawk and white-tailed kite foraging habitat is also required. Mitigation Measure BIO-1.12 requires a qualified biologist to conduct preconstruction surveys for western burrowing owl, and that a variety of site-specific avoidance measures be implemented, as needed. Mitigation Measure BIO-1.13 requires that a qualified biologist conduct a preconstruction survey for greater sandhill crane roost sites, and that a variety of site-specific avoidance measures be implemented, as needed. Mitigation Measure BIO-1.14 requires that a qualified biologist conduct preconstruction surveys for nesting birds and other raptors, and that a variety of site-specific avoidance measures be implemented, as needed.

Implementation of Mitigation Measures BIO-2.1, BIO-2.2, BIO-2.3, BIO-3.1, and BIO-3.2 would further reduce the proposed project's direct impacts on special-status wildlife species during construction to a less-than-significant level. Mitigation Measure BIO-2.1 requires implementation of a suite of site-specific measures designed avoid and minimize impacts on sensitive natural communities and riparian habitat. Mitigation Measure BIO-2.2 requires compliance with the terms and conditions of the Section 1600 Streambed Alteration Agreement, including any requirements for compensatory mitigation for loss of riparian habitat. Mitigation Measure BIO-2.3 requires implementation of a suite of site-specific measures designed to avoid and minimize impacts on wetlands and other waters related to City and County General Plan requirements. Mitigation Measure BIO-3.1 requires preparation and submittal of wetland delineation(s) to the U.S. Army Corps of Engineers for verification, along with acquisition of appropriate regulatory permits, and compensatory mitigation for loss of wetlands (if required). Mitigation Measure BIO-3.2 requires no net loss of wetlands and other waters, and compensation in the form of habitat restoration or preservation at a minimum ratio of at least 1:1 (the exact ratio, which may be greater, to be determined through consultation with the appropriate regulatory agencies).

Implementation of Mitigation Measures BIO-1.4, AQ-2.3, HAZ-2.3, HYD-1.1, and HYD-1.2 would reduce the proposed project's indirect impacts on special-status wildlife species during construction to a less-than-significant level. Mitigation Measure BIO-1.4 would minimize indirect impacts on special-status wildlife and habitat by preventing the spread of invasive plants (which compete with native plants that serve as a food source for wildlife), and requires revegetation at the conclusion of construction. Mitigation Measure AQ-2.3 requires contractors to implement fugitive dust control measures at all construction and staging areas such as watering surfaces, installing wind barriers, limiting vehicle speeds, covering haul trucks transporting loose materials, and paving roadways, all of which would reduce the potential impact of fugitive dust on neighboring habitats and vegetation. Mitigation Measure HAZ-2.3 requires implementation of a Construction Risk Management Plan that would include measures to prevent and contain spills of hazardous materials and sediment from construction work areas and construction staging areas. Mitigation Measures HYD-1.1 and HYD-1.2 require groundwater to be tested for hazardous materials and sediment and detention in storage tanks, along with implementation of the required National Pollutant Discharge Elimination System (NPDES) Construction General Stormwater Permit and associated Best Management Practices (BMPs) to minimize and/or avoid the potential for sedimentation, run-off, and discharge of pollutants from construction activities (which could in turn adversely affect sensitive habitats).

Significant Effect: Impact BIO-2. The proposed project could have a substantial adverse effect on riparian habitat or other sensitive natural communities identified in local or regional plans, policies, or regulations or by the California Department of Fish and Game or the U.S. Fish and Wildlife Service.

Finding: SJRRC hereby makes finding (a)(1) (described above), as required by PUB. RES. CODE 21081 and stated in State CEQA Guidelines Section 15091, with respect to the above identified effect.

Facts in Support of Findings: Riparian habitats that could be affected by the proposed project include vegetation present in drainages, ditches, and canals that follow along the toe of ballast slope or in creeks and waterways that cross beneath track bridges throughout the project alignment. Project-related construction impacts include temporary disturbance (i.e., construction access and staging) and permanent removal of habitat. Riparian habitats within 200 feet of construction and staging activities may be indirectly affected by clearing and grading that results in alterations to existing topography and hydrology regimes; accumulation of fugitive dust on vegetation; disruptions to native seed banks from ground disturbance; and potential colonization of disturbed areas of the project site by nonnative, invasive plant species that compete with native habitat species. Furthermore, Standard NR-1.2c of the City of Elk Grove General Plan requires that development adjacent to a natural stream must provide a 50-foot-wide “stream buffer zone” along the stream. “Natural streams” defined by the City include Morrison Creek in the vicinity of the Track Curve Reconstruction North of Elk Grove. Construction-related direct and indirect impacts on riparian habitat, including rail bridge crossings and culvert installations that would fall under the jurisdiction of Section 1600 of the California Fish and Game Code, would be potentially significant.

The following measures mitigate these impacts to a less-than-significant level.

- BIO-1.1: Minimize the temporary construction impact footprint.
- BIO-1.2: Conduct a Worker Environmental Awareness Training Program for construction personnel.
- BIO-1.4: Develop and implement a revegetation and weed control plan.
- BIO-1.9: Minimize impacts on wildlife and retain biological monitors during construction.
- BIO-2.1: Avoid and minimize impacts on sensitive natural communities and riparian habitat.
- BIO-2.2: Comply with the Section 1600 Streambed Alteration Agreement.
- BIO-2.3: Implement siting constraint measures.
- AQ-2.3: Implement fugitive dust control measures at all construction and staging areas to reduce construction-related fugitive dust, consistent with the SJVAPCD Regulation VIII and SMAQMD Basic Emission Control Practices.
- HAZ-2.3: Implement a construction risk management plan (CRMP).
- HYD-1.1: Avoid water quality impacts from groundwater or dewatering discharges.
- HYD-1.2: Avoid water quality impacts from construction adjacent to, within, and crossing over surface waters.

Implementation of Mitigation Measures BIO-1.1, BIO-1.2, BIO-1.3, BIO-1.4, and BIO-1.9 would reduce the proposed project's direct impacts on riparian habitat or other sensitive natural communities during construction to a less-than-significant level. Mitigation Measures BIO-1.1 and BIO-1.2 require minimization of the temporary project footprint to avoid sensitive habitats to the greatest extent feasible, and require a preconstruction worker environmental awareness training for the identification and avoidance of sensitive habitats. Mitigation Measure BIO-1.3 requires preconstruction surveys and implementation of a variety of site-specific avoidance measures. Mitigation Measure BIO-1.4 requires implementation of a variety of site-specific measures designed to prevent the spread of invasive plants and require revegetation at the conclusion of construction activities. Mitigation Measure BIO-1.9 requires implementation of various site-specific measures to minimize impacts on wildlife and habitat, and implementation of biological monitoring during construction.

Implementation of Mitigation Measures BIO-2.1, BIO-2.2, and BIO-2.3 would also reduce the proposed project's direct impacts on riparian habitat or other sensitive natural communities during construction to a less-than-significant level. Mitigation Measure BIO-2.1 requires implementation of a suite of site-specific measures designed avoid and minimize impacts on sensitive natural communities and riparian habitat. Mitigation Measure BIO-2.2 requires compliance with the terms and conditions of the Section 1600 Streambed Alteration Agreement, including any requirements for compensatory mitigation for loss of riparian habitat. Mitigation Measure BIO-2.3 requires implementation of a suite of site-specific measures designed to avoid and minimize impacts on wetlands and other waters related to City and County General Plan requirements, including the requirement that a qualified biologist be assigned to flag or fence environmentally sensitive areas in the immediate vicinity of construction activity, avoidance of which would be communicated to construction workers during implementation of the Worker Environmental Awareness Training Program required in Mitigation Measure BIO-1.2.

Implementation of Mitigation Measures AQ-2.3, HAZ-2.3, HYD-1.1, and HYD-1.2 would reduce the project's indirect impacts on riparian habitat or other sensitive natural communities during construction to a less-than-significant level. Mitigation Measure AQ-2.3 requires contractors to implement fugitive dust control measures at all construction and staging areas such as watering surfaces, installing wind barriers, limiting vehicle speeds, covering haul trucks transporting loose materials, and paving roadways, all of which would reduce the potential impact of fugitive dust on neighboring habitats and vegetation. Mitigation Measure HAZ-2.3 requires implementation of a Construction Risk Management Plan that would include measures to prevent and contain spills of hazardous materials and sediment from construction work areas and construction staging areas. Mitigation Measures HYD-1.1 and HYD-1.2 require groundwater to be tested for hazardous materials and sediment and detention in storage tanks, along with implementation of the required NPDES Construction General Stormwater Permit and associated BMPs to minimize and/or avoid the potential for sedimentation, run-off, and discharge of pollutants from construction activities (which could in turn adversely affect sensitive habitats).

Significant Effect: Impact BIO-3. The project could have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.

Finding: SJRRC hereby makes finding (a)(1) (described above), as required by PUB. RES. CODE 21081 and stated in State CEQA Guidelines Section 15091, with respect to the above identified effect.

Facts in Support of Findings: A complete, formal wetland delineation for the proposed project has not been conducted. Aquatic resources mapped in the project area as part of land cover mapping and habitat assessment surveys include features that may meet the U.S. Army Corps of Engineers' definition of wetlands, as well as other features, such as open water and drainages (perennial, intermittent, and ephemeral) that may qualify as waters of the United States and/or state. As presented in EIR Table 3.4-4, project-related construction could result in approximately 5.27 acres of temporary impacts and 1.94 acres of permanent impacts on aquatic resources. The types of aquatic resources affected by the project consist of: agricultural ditch/ditch, canal, cattail marsh, ephemeral drainage, perennial open water, and seasonal wetland. Permanent direct impacts on wetlands and other waters consist of fill. Temporary direct impacts on wetlands and other waters would be associated with ground disturbance, primarily during the construction phase. Activities are considered temporary if wetlands and other waters of the United States are not filled or replaced; the site hydrology is not permanently altered; and restoration is deemed feasible before project implementation. Indirect impacts on wetlands and other waters consist of transport of sediment, and runoff of contaminants (e.g., fuel, lubricants) into receiving waters, disturbance of wetland vegetation, soil erosion, degradation of water quality and/or loss of wetland functions and services, and changes in hydrology.

The following measures mitigate these impacts to a less-than-significant level.

- BIO-1.1: Minimize the temporary construction impact footprint.
- BIO-1.2: Conduct a Worker Environmental Awareness Training Program for construction personnel.
- BIO-1.4: Develop and implement a revegetation and weed control plan.
- BIO-2.2: Comply with the Section 1600 Streambed Alteration Agreement.
- BIO-2.3: Implement siting constraint measures.
- BIO-3.1: Avoid and minimize impacts on wetlands and other waters.
- BIO-3.2: Compensate for impacts on wetlands and other waters.
- AQ-2.3: Implement fugitive dust control measures at all construction and staging areas to reduce construction-related fugitive dust, consistent with the SJVAPCD Regulation VIII and SMAQMD Basic Emission Control Practices.
- HAZ-2.3: Implement construction risk management plan (CRMP).
- HYD-1.1: Avoid water quality impacts from groundwater or dewatering discharges.
- HYD-1.2: Avoid water quality impacts from construction adjacent to, within, and crossing over surface waters.

Implementation of Mitigation Measures BIO-1.1, BIO-1.2, and BIO-1.4 would reduce the proposed project's direct impacts on wetlands during construction to a less-than-significant level. Mitigation Measures BIO-1.1 and BIO-1.2 require minimization of the temporary project footprint to avoid sensitive habitats to the greatest extent feasible, and require a preconstruction worker

environmental awareness training for the identification and avoidance of sensitive habitats. Mitigation Measure BIO-1.4 requires implementation of a variety of site-specific measures designed to prevent the spread of invasive plants.

Implementation of Mitigation Measures BIO-2.2, BIO-2.3, BIO-3.1, and BIO-3.2 would also reduce the proposed project's direct impacts on wetlands during construction to a less-than-significant level. Mitigation Measure BIO-2.2 requires compliance with the terms and conditions of the Section 1600 Streambed Alteration Agreement, including any requirements for compensatory mitigation for loss of riparian habitat. Mitigation Measure BIO-2.3 requires implementation of a suite of site-specific measures designed to avoid and minimize impacts on wetlands and other waters related to City and County General Plan requirements, including the requirement that a qualified biologist be assigned to flag or fence environmentally sensitive areas in the immediate vicinity of construction activity, avoidance of which would be communicated to construction workers during implementation of the Worker Environmental Awareness Training Program required in Mitigation Measure BIO-1.2. Mitigation Measure BIO-3.1 requires preparation and submittal of wetland delineation(s) to the U.S. Army Corps of Engineers for verification, along with acquisition of appropriate regulatory permits, and compensatory mitigation for loss of wetlands (if required). Mitigation Measure BIO-3.2 requires no net loss of wetlands and other waters, and compensation in the form of habitat restoration or preservation at a minimum ratio of at least 1:1 (the exact ratio, which may be greater, to be determined through consultation with the appropriate regulatory agencies).

Implementation of Mitigation Measures AQ-2.3, HAZ-2.3, HYD-1.1, and HYD-1.2 would reduce the proposed project's indirect impacts on wetlands during construction to a less-than-significant level. Mitigation Measure AQ-2.3 requires contractors to implement fugitive dust control measures at all construction and staging areas such as watering surfaces, installing wind barriers, limiting vehicle speeds, covering haul trucks transporting loose materials, and paving roadways, all of which would reduce the potential impact of fugitive dust on neighboring habitats and vegetation. Mitigation Measure HAZ-2.3 requires implementation of a Construction Risk Management Plan that would include measures to prevent and contain spills of hazardous materials and sediment from construction work areas and construction staging areas. Mitigation Measures HYD-1.1 and HYD-1.2 require groundwater to be tested for hazardous materials and sediment and detention in storage tanks, along with implementation of the required NPDES Construction General Stormwater Permit and associated BMPs to minimize and/or avoid the potential for sedimentation, run-off, and discharge of pollutants from construction activities (which could in turn adversely affect wetlands).

Significant Effect: Impact BIO-4. The proposed project could interfere 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.

Finding: SJRRC hereby makes finding (a)(1) (described above), as required by PUB. RES. CODE 21081 and stated in State CEQA Guidelines Section 15091, with respect to the above identified effect.

Facts in Support of Findings: Given the high degree of development and disturbance in the region, the various unimproved roads, ruderal areas, and railroad track alignments that traverse the region may facilitate wildlife movements at a local scale for larger animals, while limiting

movement of smaller animals or those that rely on connected aquatic habitat (such as giant garter snake). Linear aquatic features that traverse the project area, such as ditches, sloughs, canals, creeks, rivers, and drainages, likely provide the best options for continuous habitat linkages for aquatic species, reptiles, birds, and some mammals. The use of these areas for project construction and staging could temporarily impede wildlife movement and nursery sites in small areas because they would involve: (1) the loss of available terrestrial habitat, (2) potential disturbance of wildlife and potential wildlife collisions with construction equipment; and (3) potential disturbance of a known nursery site consisting of purple martin colonies at the Sutterville Road overpass that crosses over the northern extent of the South Sacramento Siding Upgrade.

The following measures mitigate these impacts to a less-than-significant level.

- BIO-1.1: Minimize the temporary construction impact footprint.
- BIO-1.2: Conduct a Worker Environmental Awareness Training Program for construction personnel.
- BIO-1.4: Develop and implement a revegetation and weed control plan.
- BIO-1.9: Minimize impacts on wildlife and retain biological monitors during construction.
- BIO-1.14: Conduct a preconstruction survey for nesting birds and other raptors, and implement avoidance measures, as needed.
- BIO-2.3: Implement siting constraint measures.

Implementation of Mitigation Measures BIO-1.1, BIO-1.2, BIO-1.4, BIO-1.9, BIO-1.14, and BIO-2.3, would reduce project impacts from interference with wildlife corridors or nursery sites to a less-than-significant level. Mitigation Measure BIO-1.1 requires the proposed project to be designed to use existing roadways and urban areas as much as possible for equipment staging and laydown areas. Mitigation Measure BIO-1.2 requires implementation of a Worker Environmental Awareness Training Program for construction personnel related to avoidance of wildlife, plants, sensitive habitats, and wetlands. Mitigation Measure BIO-1.4 would reduce temporary construction-related disturbance of existing habitats, such as clearing and grading for staging and laydown areas, because they would be reclaimed to natural habitat after construction concludes. Mitigation Measure BIO-1.9 would reduce the potential for wildlife collisions with construction vehicles and equipment with implementation of measures such as limiting traffic to daytime hours and speeds of less than 15 miles per hour. Mitigation Measure BIO-1.14 requires that a qualified biologist conduct preconstruction surveys for nesting birds and other raptors, and that a variety of site-specific avoidance measures be implemented, as needed. Mitigation Measure BIO-2.3 requires a qualified biologist to be assigned to flag or fence environmentally sensitive areas in the immediate vicinity of construction activity, avoidance of which would be communicated to construction workers during implementation of the Worker Environmental Awareness Training Program required in Mitigation Measure BIO-1.2.

Significant Effect: Impact BIO-5. The proposed project may conflict with local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.

Finding: SJRRC hereby makes finding (a)(1) (described above), as required by PUB. RES. CODE 21081 and stated in State CEQA Guidelines Section 15091, with respect to the above identified effect.

Facts in Support of Findings: Protected trees could be damaged as a result of project-related trenching, grading, and/or filling within the dripline of these trees, and/or protected trees may require removal. Project-related impacts to locally protected trees, including native oak trees, could occur at the following locations that are outside the existing UPRR right-of-way: Midtown Sacramento Station, Old North Sacramento Station, and Natomas/Sacramento Airport Station. These sites are subject to the City of Sacramento Tree Protection Ordinance and the Sacramento County Tree Protection Ordinance, respectively, because they are outside of the UPRR right-of-way.

The following measures mitigate these impacts to a less-than-significant level.

- BIO-5.1: City of Sacramento Code compliance for trees.
- BIO-5.2: Sacramento County Code compliance for trees.

Implementation of Mitigation Measures BIO-5.1 and BIO-5.2 would reduce project impacts related to conflicts with local tree protection ordinances to a less-than-significant level because they require compliance with City and County code related to tree protection and preservation, including obtaining tree permits and consulting with appropriate City and County regulatory personnel.

Significant Effect: Cumulative Impact C-BIO-1: Implementation of the proposed project, in combination with other foreseeable projects in the surrounding area, could result in a significant cumulative impact on biological resources.

Finding: SJRRC hereby makes finding (a)(1) (described above), as required by PUB. RES. CODE 21081 and stated in State CEQA Guidelines Section 15091, with respect to the above identified effect.

Facts in Support of Findings: Construction in the project corridor, in combination with the other cumulative projects, could have significant, adverse, direct and indirect impacts on special-status plant, wildlife, and fish species; wetlands/other aquatic resources; riparian habitat; and protected trees (for the same reasons discussed in detail in Impacts BIO-1, BIO-2, BIO-3, BIO-4, and BIO-5, above).

The following measures mitigate these impacts to a less-than-significant level.

- BIO-1.1: Minimize the temporary construction impact footprint.
- BIO-1.2: Conduct a Worker Environmental Awareness Training Program for construction personnel.
- BIO-1.3: Conduct preconstruction botanical surveys for special-status plants; avoid and minimize impacts during construction.
- BIO-1.4: Develop and implement a revegetation and weed control plan.
- BIO-1.5: Document affected special-status plant species and prepare a salvage, relocation, or propagation and monitoring plan for special-status plant species.
- BIO-1.6: Avoid and minimize impacts on, and compensate for loss of, potentially-occupied habitat for vernal pool fairy shrimp and vernal pool tadpole shrimp through consultation with the U.S. Fish and Wildlife Service and implementation of appropriate mitigation.

- BIO-1.7: Conduct a preconstruction VELB shrub survey, establish avoidance buffers, and/or compensate for removal of potentially-occupied habitat for VELB through consultation with the U.S. Fish and Wildlife Service and implementation of appropriate mitigation.
- BIO-1.8: Avoid and minimize impacts on special-status fish while pile driving and implement seasonal restrictions for in-water work.
- BIO-1.9: Minimize impacts on wildlife and retain biological monitors during construction.
- BIO-1.10: Implement measures to avoid western pond turtle and giant garter snake during construction.
- BIO-1.11: Conduct a preconstruction survey for Swainson's hawk and white-tailed kite, and implement avoidance measures, as needed. Compensate for loss of Swainson's hawk and white-tailed kite foraging habitat.
- BIO-1.12: Conduct preconstruction surveys for western burrowing owl and implement avoidance measures, as needed.
- BIO-1.13: Conduct a preconstruction survey for greater sandhill crane roost sites and implement avoidance measures, as needed.
- BIO-1.14: Conduct a preconstruction survey for nesting birds and other raptors, and implement avoidance measures, as needed.
- BIO-2.1: Avoid and minimize impacts on sensitive natural communities and riparian habitat.
- BIO-2.2: Comply with the Section 1600 Streambed Alteration Agreement.
- BIO-2.3: Implement siting constraint measures.
- BIO-3.1: Avoid and minimize impacts on wetlands and other waters.
- BIO-3.2: Compensate for impacts on wetlands and other waters.
- BIO-5.1: City of Sacramento Code compliance for trees.
- BIO-5.2: Sacramento County Code compliance for trees.
- AQ-2.3: Implement fugitive dust control measures at all construction and staging areas to reduce construction-related fugitive dust, consistent with the SJVAPCD Regulation VIII and SMAQMD Basic Emission Control Practices.
- HAZ-2.3: Implement construction risk management plan (CRMP).
- HYD-1.1: Avoid water quality impacts from groundwater or dewatering discharges.
- HYD-1.2: Avoid water quality impacts from construction adjacent to, within, and crossing over surface waters.

Implementation of Mitigation Measures BIO-1.8, BIO-1.9, BIO-1.10, HYD-1.1, HYD-1.2, and HAZ-2.3 would avoid and minimize project impacts on aquatic habitat, including compensation for impacts on riparian habitat and wetlands; and require special procedures for in-water work during bridge construction to avoid direct impacts on special-status species and allow migration of anadromous fish. Therefore, the proposed project's contribution to cumulative impacts on

sensitive aquatic resources as a result of construction would be less than significant with mitigation.

Implementation of Mitigation Measures BIO-1.1 through BIO-1.5, HYD-1.1, HYD-1.2, AQ-2.3, and HAZ-2.3 for special-status plant species; BIO-1.6 through BIO-1.13 for special-status wildlife species; BIO-2.1, BIO-2.2, and BIO-2.3 for riparian habitat and sensitive natural communities; BIO-3.1 and BIO-3.2 for wetlands and other aquatic resources; BIO-1.1, BIO-1.2, BIO-1.4, BIO-1.9, BIO-1.14 and BIO-2.3 for species movement and nursery sites; and BIO-5.1 and BIO-5.2 for conflicts with local policies and ordinances; would avoid and minimize project construction impacts. Generally, because construction in the project corridor would not occur in pristine areas, but rather in a developed rail corridor or highly urbanized or otherwise disturbed areas, impacts would be limited to remnant biological resources. With implementation of the mitigation measures listed above, the proposed project's residual construction impacts would be limited in scale and extent. Therefore, the proposed project's contribution to cumulative impacts on biological resources as a result of construction would be less-than-considerable.

Cultural Resources

Significant Effect: Impact CUL-2: The proposed project could cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5.

Finding: SJRRC hereby makes finding (a)(1) (described above), as required by PUB. RES. CODE 21081 and stated in State CEQA Guidelines Section 15091, with respect to the above identified effect.

Facts in Support of Findings: No known archaeological resources would be affected by the proposed project. However, project construction would involve ground-disturbing activities that could result in the discovery or damage of as-yet undiscovered archaeological resources, which would constitute a potentially significant impact. In addition, during project consultation with Native American Tribes, the request was made that pre-construction cultural resources sensitivity training be conducted, as well as an opportunity to review the final design of the proposed project, as it has only been designed to 15 percent completion. This would allow tribal cultural representatives to assess areas that may require further review and then request tribal monitors be present during ground disturbing activities. In addition, the Shingle Springs Bank of Miwok Indians requested that interpretive outreach be considered for incorporation at station locations.

The following measures mitigate these impacts to a less-than-significant level.

- CUL-2.1: Worker cultural resources training.
- CUL-2.2: Native American monitoring.
- CUL-2.3: Inadvertent archaeological discovery.

Implementation of Mitigation Measures CUL-2.1 and CUL-2.2 would reduce project impacts on as-yet undiscovered archaeological resources to a less-than-significant level because cultural awareness training would be provided for construction personnel, and Native American monitors would have the opportunity to be present during ground-disturbing activities, to address the concerns expressed during Native American consultation with SJRRC.

Implementation of Mitigation Measure CUL-2.3 would avoid and reduce project impacts on as-yet undiscovered unique archaeological resources to a less-than-significant level because if any resources are encountered, work would be halted, a qualified archaeologist and a Tribal Representative would assess the find. If the resources are determined to be significant, either the resource(s) would be preserved in place, or a data recovery plan would be implemented in accordance with CEQA Guidelines Section 15126.4 (b)(3)(C) and in consultation with a Tribal Representative if the resource is a Tribal Cultural Resource.

Significant Effect: Impact CUL-3. The proposed project could disturb human remains, including those interred outside of formal cemeteries.

Finding: SJRRC hereby makes finding (a)(1) (described above), as required by PUB. RES. CODE 21081 and stated in State CEQA Guidelines Section 15091, with respect to the above identified effect.

Facts in Support of Findings: There are no known archaeological resources or formal cemeteries recorded in the project footprint; however, grave sites and Native American remains can occur outside of formal cemeteries or burial sites. Although there is no indication that human remains are present in the project footprint, there is always a possibility that ground-disturbing activities during construction may uncover previously unknown buried human remains. The disturbance/destruction of human remains would be a potentially significant impact.

The following measure mitigates these impacts to a less-than-significant level.

- CUL-3.1: Discovery of previously unknown human remains.

Implementation of Mitigation Measure CUL-3.1 would reduce project impacts on human remains to a less-than-significant level because it requires compliance with state laws relating to Native American remains in the event human remains of Native American origin are discovered during construction. Protocols include informing the county coroner and contacting the Native American Heritage Commission (NAHC) for identification of descendants.

Significant Effect: Cumulative Impact C-CUL-1: Implementation of the proposed project, in combination with other foreseeable projects in the surrounding area, could result in a significant cumulative impact on cultural resources.

Finding: SJRRC hereby makes finding (a)(1) (described above), as required by PUB. RES. CODE 21081 and stated in State CEQA Guidelines Section 15091, with respect to the above identified effect.

Facts in Support of Findings: Construction of some of the cumulative projects, including road, other transportation improvements, and land development projects, could affect built-environment historical resources, but these effects would be outside the project footprint and its immediate vicinity. Construction of the cumulative rail transportation projects, including California High Speed Rail, Amtrak San Joaquin Corridor Service improvements, and the Capital South East Connector, along with the proposed project, would include activities that overlap or intersect the project corridor. Construction activities associated with these cumulative projects and the proposed project could adversely affect archaeological, tribal cultural resources, or human remains in or adjacent to the project corridor.

The following measures mitigate these impacts to a less-than-significant level.

- CUL-2.1: Worker cultural resources training.
- CUL-2.2: Native American monitoring.
- CUL-2.3: Inadvertent archaeological discovery.
- CUL-3.1: Discovery of previously unknown human remains.

Implementation of Mitigation Measures CUL-2.1, CUL-2.2, CUL-2.3, and CUL-3.1 would avoid and reduce project impacts on archaeological, tribal cultural resources, or human remains. Mitigation Measures CUL-2.1 and CUL-2.2 require implementation of cultural awareness training for construction personnel, and Native American monitors would have the opportunity to be present during ground-disturbing activities, to address the concerns expressed during Native American consultation with SJRRC. Mitigation Measure CUL-2.3 requires that if any resources are encountered, work must be halted, a qualified archaeologist and a Tribal Representative would assess the find. If the resources are determined to be significant, either the resource(s) would be preserved in place, or a data recovery plan would be implemented in accordance with CEQA Guidelines Section 15126.4 (b)(3)(C) and in consultation with a Tribal Representative if the resource is a Tribal Cultural Resource. Mitigation Measure CUL-3.1 requires compliance with state laws relating to Native American remains in the event human remains of Native American origin are discovered during construction. Protocols include informing the county coroner and contacting the NAHC for identification of descendants. Therefore, the proposed project's contribution to cumulative impacts on archaeological, tribal cultural resources, and human remains as a result of construction would be less than considerable.

Geology and Soils

Significant Effect: Impact GEO-2: The proposed project could result in substantial soil erosion or the loss of topsoil.

Finding: SJRRC hereby makes finding (a)(1) (described above), as required by PUB. RES. CODE 21081 and stated in State CEQA Guidelines Section 15091, with respect to the above identified effect.

Facts in Support of Findings: During project construction, activities such as grading, excavation, trenching, drilling, and clearing and grubbing of brush, shrubs, and other types of vegetation would expose soil to the erosive forces of wind and water, and therefore substantial soil erosion or the loss of topsoil could occur.

The following measure mitigates this impact to a less-than-significant level.

- GEO-2.1: Implement Best Management Practices to reduce soil erosion.

Implementation of Mitigation Measure GEO-2.1 would reduce project impacts from soil erosion and loss of topsoil to a less-than-significant level because National Pollutant Discharge and Elimination System (NPDES) requirements would be implemented, including preparation of a Storm Water Pollution Prevention Plan (SWPPP) and implementation of site-specific Best Management Practices such as gravel bags, straw rolls, and geotixiles to prevent erosion caused by stormwater runoff, along with dust control measures to present soil loss caused by wind.

Significant Effect: Impact GEO-6: The proposed project could directly or indirectly destroy a unique paleontological resource or site, or a unique geologic feature.

Finding: SJRRC hereby makes finding (a)(1) (described above), as required by PUB. RES. CODE 21081 and stated in State CEQA Guidelines Section 15091, with respect to the above identified effect.

Facts in Support of Findings: As shown in EIR Figures 3.7.1A, 3.7.1B, and 3.7.1C, earthmoving activities for the following project-related improvements would occur in the Pleistocene-age Modesto and Riverbank formations: Lodi Station, Lodi Station South Alternative, City College Station, Midtown Sacramento Station, Natomas/Sacramento Airport Station, and portions of the track improvements in all three project segments. Because numerous vertebrate fossils have been recovered from the Modesto and Riverbank formations throughout the Central Valley, these formations are considered to be paleontologically sensitive. Therefore, earthmoving activities in the Modesto and Riverbank Formations could result in accidental damage to or destruction of unique paleontological resources.

The following measure mitigates this impact to a less-than-significant level.

- GEO-6.1: Conduct construction personnel education and implement periodic monitoring; stop work if paleontological resources are discovered; assess the significance of the find, and prepare and implement a recovery plan, as required.

Implementation of Mitigation Measure GEO-6.1 would reduce project impacts on unique paleontological resources to a less-than-significant level because it requires training for construction crews to better recognize paleontological resources; periodic monitoring during construction; stopping work if paleontological resources are discovered; evaluating those resources by a qualified paleontologist; and as appropriate, preparing and implementing a recovery plan.

Significant Effect: Cumulative Impact C-GEO-1. Implementation of the proposed project, in combination with other foreseeable projects in the surrounding area, could result in a significant cumulative impact on geology and soils.

Finding: SJRRC hereby makes finding (a)(1) (described above), as required by PUB. RES. CODE 21081 and stated in State CEQA Guidelines Section 15091, with respect to the above identified effect.

Facts in Support of Findings: The proposed project, along with all of the cumulative projects, could increase soil erosion during construction from actions such as grading, excavating, trenching drilling, and clearing of vegetation that would disturb soil and result in the potential for increased erosion, from wind during the summer months and stormwater runoff during the winter rainy season.

The following measure mitigates this impact to a less-than-significant level.

- GEO-2.1: Implement Best Management Practices to reduce soil erosion.

Implementation of Mitigation Measure GEO-2.1 would reduce project impacts from soil erosion and loss of topsoil because NPDES requirements would be implemented, including preparation of a SWPPP and implementation of site-specific Best Management Practices such as gravel bags, straw rolls, and geotixiles to prevent erosion caused by stormwater runoff, along with dust control measures to present soil loss caused by wind. Therefore, the proposed project's contribution to

cumulative impacts related to soil erosion as a result of construction would be less than considerable.

Significant Effect: Cumulative Impact C-GEO-2. Implementation of the proposed project, in combination with other foreseeable projects in the surrounding area, could result in a significant cumulative impact on paleontological resources.

Finding: SJRRC hereby makes finding (a)(1) (described above), as required by PUB. RES. CODE 21081 and stated in State CEQA Guidelines Section 15091, with respect to the above identified effect.

Facts in Support of Findings: The Modesto, Riverbank, and Turlock Lake Formations are widespread throughout the Central Valley and are paleontologically sensitive. In addition to the proposed project, any or all of the cumulative projects could be, and likely are, located in these paleontologically sensitive rock formations. Because all of the cumulative projects would require earthwork, including grading and excavation activities, they all have the potential to encounter and potentially damage or destroy unique paleontological resources during project-related construction activities, similar to the proposed project.

The following measure mitigates this impact to a less-than-significant level.

- GEO-6.1: Conduct construction personnel education and implement periodic monitoring; stop work if paleontological resources are discovered; assess the significance of the find, and prepare and implement a recovery plan, as required.

Implementation of Mitigation Measure GEO-6.1 would reduce project impacts on unique paleontological resources because it requires training for construction crews to better recognize paleontological resources; periodic monitoring during construction; stopping work if paleontological resources are discovered; evaluating those resources by a qualified paleontologist; and as appropriate, preparing and implementing a recovery plan. Therefore, the proposed project's contribution to cumulative construction impacts on unique paleontological resources would be less-than-considerable.

Greenhouse Gas Emissions

Significant Effect: Impact GHG-1: The proposed project could generate greenhouse gas (GHGs) emissions , either directly or indirectly, that may have a significant impact on the environment.

Finding: SJRRC hereby makes finding (a)(1) (described above), as required by PUB. RES. CODE 21081 and stated in State CEQA Guidelines Section 15091, with respect to the above identified effect.

Facts in Support of Findings: Project implementation would generate short-term construction and long-term operational GHG emissions. Construction would generate GHG impacts through the use of heavy-duty equipment, construction worker vehicle trips, and truck hauling trips. The GHG emissions from construction activity would be temporary, and would cease when construction is complete. Operations have the potential to generate GHG emissions through passenger rail, shuttle bus, and station electricity use and waste generation activity. However, operations would also improve passenger rail opportunities for the region, which would remove on-road vehicles from the transportation network. Although SJVAPCD has not set a recommended threshold for

construction-period emissions, the SMAQMD-recommended threshold is 1,100 metric tons of carbon dioxide (CO_2) equivalents per year (MT CO_2e/year). Although construction-related emissions of GHGs would exceed this threshold, when amortized over a 25-year project lifetime, construction-related emissions would not exceed the SMAQMD-recommended threshold. In order to be conservative, the proposed project's contribution to this cumulative impact is assumed to be significant.

The following measure mitigates this impact to a less-than-significant level.

- GHG-1.1: Implement construction emission reductions to minimize construction-related GHG emissions.

Implementation of Mitigation Measure GHG-1.1 would reduce the proposed project's GHG emissions from off-road and on-road construction vehicles by improving fuel efficiency from construction equipment. Furthermore, GHG emission reductions achieved through project operation would offset the proposed project's temporary construction emissions within the first year of operation. Emission savings achieved thereafter would contribute to a regional reduction in GHG emissions. This reduction would be an environmental benefit, and would assist the State in meeting larger statewide GHG reduction goals outlined under Assembly Bill 32, Senate Bill 32, and California Executive Order S-03-05. Therefore, the proposed project's contribution to cumulative GHG emissions would be less-than-considerable.

Significant Effect: Cumulative Impact C-GHG-1: Implementation of the proposed project, in combination with other foreseeable projects in the surrounding area, could result in cumulatively considerable GHG emissions.

Finding: SJRRC hereby makes finding (a)(1) (described above), as required by PUB. RES. CODE 21081 and stated in State CEQA Guidelines Section 15091, with respect to the above identified effect.

Facts in Support of Findings: Construction would generate GHG impacts through the use of heavy-duty equipment, construction worker vehicle trips, and truck hauling trips. The GHG emissions from construction activity would be temporary, and would cease when construction is complete. Operations have the potential to generate GHG emissions through passenger rail, shuttle bus, and station electricity use and waste generation activity. However, operations would also improve passenger rail opportunities for the region, which would remove on-road vehicles from the transportation network.

Although SJVAPCD has not set a recommended threshold for construction-period emissions, the SMAQMD-recommended threshold is 1,100 metric tons of carbon dioxide (CO_2) equivalents per year (MT CO_2e/year). Although construction-related emissions of GHGs would exceed this threshold, when amortized over a 25-year project lifetime, construction-related emissions would not exceed the SMAQMD-recommended threshold. In order to be conservative, the proposed project's contribution to this cumulative impact is assumed to be significant.

The following measure mitigates this impact to a less-than-significant level.

- GHG-1.1: Implement construction emission reductions to minimize construction-related GHG emissions.

Implementation of Mitigation Measure GHG-1.1 would reduce the proposed project's GHG emissions from off-road and on-road construction vehicles by improving fuel efficiency from construction equipment. Furthermore, GHG emission reductions achieved through project operation would offset the proposed project's temporary construction emissions within the first year of operation. Emission savings achieved thereafter would contribute to a regional reduction in GHG emissions. This reduction would be an environmental benefit, and would assist the State in meeting larger statewide GHG reduction goals outlined under Assembly Bill 32, Senate Bill 32, and California Executive Order S-03-05. Therefore, the proposed project's contribution to cumulative GHG emissions would be less-than-considerable.

Hazards and Hazardous Materials

Significant Effect: Impact HAZ-2. The proposed project could create a significant hazard to the public or the environment through reasonably foreseeable upset and/or accident conditions involving the release of hazardous materials into the environment.

Finding: SJRRC hereby makes finding (a)(1) (described above), as required by PUB. RES. CODE 21081 and stated in State CEQA Guidelines Section 15091, with respect to the above identified effect.

Facts in Support of Findings: As summarized in EIR Table 3.9-3, a variety of hazardous materials in the study area may have affected existing conditions in the footprint of any or all of the project components. Project construction may involve the disturbance of existing hazardous materials in soil, ballast, groundwater, roadway, and railroad structures, which could result in the release of hazardous materials into the environment.

The following measures mitigate these impacts to a less-than-significant level.

- HAZ-2.1: Implement voluntary oversight agreement.
- HAZ-2.2: Conduct site investigations.
- HAZ-2.3: Implement a construction risk management plan (CRMP).
- AQ-2.3: Implement fugitive dust control measures at all construction and staging areas to reduce construction-related fugitive dust, consistent with SJVAPCD Regulation VIII and SMAQMD Basic Emission Control Practices.

Implementation of Mitigation Measures HAZ-2.1, HAZ-2.2, HAZ-2.3, and AQ-2.3, would reduce project impacts from the disturbance of potentially contaminated soil, ballast, groundwater, roadway, and railroad structures during construction to a less-than-significant level by requiring the implementation of a voluntary oversight agreement, site investigations, a construction risk management plan (CRMP), and fugitive dust controls. The CRMP will include performance standards that describe how to meet hazardous materials standards; require site investigations that include soil sampling and analytical results (along with indoor air quality exposure to vapor intrusion, if necessary); specify maximum acceptable contaminant levels for specific soil and ballast reuse scenarios; and define characterization, management, and discharge or groundwater encountered during construction and maintenance.

Significant Effect: Impact HAZ-3. The proposed project would emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school.

Finding: SJRRC hereby makes finding (a)(1) (described above), as required by PUB. RES. CODE 21081 and stated in State CEQA Guidelines Section 15091, with respect to the above identified effect.

Facts in Support of Findings: As identified in EIR Table 3.9-3, the Hammer Lane Siding Upgrade; Track Curve Reconstruction East March Lane to East Swain Road; Lodi Siding Variants; Pollock Siding Upgrade; South Sacramento Siding Upgrade; City College Station; and Midtown Sacramento Station improvements would be within 0.25 mile of one or more schools. The primary exposure pathway of concern for children at schools within 0.25 mile of a project improvement during project construction is through the inhalation of air contaminants, such as particulate matter. As described in EIR Section 3.3, air quality modeling indicates that emissions of diesel particulate matter from construction equipment would have a less-than-significant impact on the health of children at nearby schools. However, construction activities that disturb existing soil and/or ballast contamination could generate dust that poses a health risk to the public, which includes nearby schools. Construction of the Track Curve Reconstruction between East March Lane and East Swain Road; Hammer Lane Siding Upgrade; Lodi Siding Variants; Pollock Siding Upgrade; South Sacramento Siding Upgrade; City College Station; and Midtown Sacramento Station area improvements could generate dust from the disturbance of potentially contaminated soil and/or ballast that could adversely affect the health of children at nearby schools.

The following measures mitigate this impact to a less-than-significant level.

- AQ-2.3: Implement fugitive dust control measures at all construction and staging areas to reduce construction-related fugitive dust, consistent with SJVAPCD Regulation VIII and SMAQMD Basic Emission Control Practices.
- HAZ-2.3: Implement a construction risk management plan (CRMP).

Implementation of Mitigation Measures HAZ-2.3 and AQ-2.3 would reduce the proposed project's impact from handling or emitting hazardous materials within one-quarter mile of a school because dust control measures and air quality monitoring would be implemented during excavation in areas with elevated contaminants of concern. In addition, the CRMP will include performance standards that describe how to meet hazardous materials standards; require site investigations that include soil sampling and analytical results (along with indoor air quality exposure to vapor intrusion, if necessary); specify maximum acceptable contaminant levels for specific soil and ballast reuse scenarios; and define characterization, management, and discharge or groundwater encountered during construction and maintenance.

Significant Effect: Impact HAZ-4. Various project improvements would be located on sites that are included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5.

Finding: SJRRC hereby makes finding (a)(1) (described above), as required by PUB. RES. CODE 21081 and stated in State CEQA Guidelines Section 15091, with respect to the above identified effect.

Facts in Support of Findings: The Old North Sacramento Station footprint overlaps two listed hazardous materials sites. In addition, a contaminated groundwater plume associated with the former Central Concrete Supply Company is present immediately adjacent to and west of—and may be located directly underneath—the Natomas/Sacramento Airport Station (depending on final site design). The footprints of the track reconstruction in the vicinity of the Midtown Sacramento Station (on the southeastern side of I street) and the Del Paso Siding Upgrade/Extension (at the southern end) are both on a listed hazardous materials site. The footprints of the Track Curve Reconstruction between East March Lane and East Swain Road; South Sacramento Siding Upgrade; and City College Station are not on a listed hazardous materials site, but are within 0.25 mile of such a listed site; therefore, groundwater in these footprints may have been affected by contaminants from a listed site. Construction and maintenance activities that disturb existing soil and/or groundwater contamination from hazardous materials release sites could pose a health risk to construction workers, maintenance workers, the public, and/or the environment if not characterized, handled, and disposed of properly.

The following measures mitigate this impact to a less-than-significant level.

- HAZ-2.1: Implement voluntary oversight agreement.
- HAZ-2.2: Conduct site investigations.
- HAZ-2.3: Implement a construction risk management plan (CRMP).
- AQ-2.3: Implement fugitive dust control measures at all construction and staging areas to reduce construction-related fugitive dust, consistent with SJVAPCD Regulation VIII and SMAQMD Basic Emission Control Practices.

Implementation of Mitigation Measures HAZ-2.1, HAZ-2.2, HAZ-2.3, and AQ-2.3 would reduce the impact from construction in a Cortese-listed site to a less-than-significant level because they require implementation of a voluntary oversight agreement, site investigations, a CRMP, and fugitive dust controls. The CRMP will include performance standards that describe how to meet hazardous materials standards; require site investigations that include soil sampling and analytical results (along with indoor air quality exposure to vapor intrusion, if necessary); specify maximum acceptable contaminant levels for specific soil and ballast reuse scenarios; and define characterization, management, and discharge or groundwater encountered during construction and maintenance.

Hydrology and Water Quality

Significant Effect: Impact HYD-1. The proposed project could violate water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality.

Finding: SJRRC hereby makes finding (a)(1) (described above), as required by PUB. RES. CODE 21081 and stated in State CEQA Guidelines Section 15091, with respect to the above identified effect.

Facts in Support of Findings: Potentially significant impacts on water quality could occur during the construction of all project improvements, variants, and alternatives due to the potential for the discharge of groundwater or dewatering effluent to nearby surface waters, and the potential for soil, sediment, construction materials, and hazardous materials to be released into surface water during work adjacent to, within, or crossing surface water in all segments and for all elements and

alternatives. In addition, project operation and maintenance could cause potentially significant impacts to water quality that may violate water quality standards or waste discharge requirements. Such impacts could occur as a result of polluted surface runoff from operations and maintenance activities. Such runoff could substantially degrade surface or ground water quality and thereby violate water quality standards or exceed allowable waste discharge thresholds.

The following measures mitigate this impact to a less-than-significant level.

- HYD-1.1: Avoid water quality impacts from groundwater or dewatering discharges.
- HYD-1.2: Avoid water quality impacts from construction adjacent to, within, and crossing over surface waters.
- HAZ-2.2: Conduct site investigations.
- HAZ-2.3: Implement a construction risk management plan (CRMP).

Implementation of Mitigation Measures HYD-1.1, HYD-1.2, HAZ-2.2, and HAZ-2.3 would reduce project impacts on water quality during construction and operation to a less-than-significant level, because they require specific procedures for the discharge of groundwater or dewatering effluent and work adjacent to, within, or crossing surface water; design and construction of stormwater controls and treatment systems in accordance with the Caltrans *Storm Water Quality Handbooks, Project Planning and Design Guide* (PPDG) and the local Small Municipal Separate Storm Sewer System (MS4) Permit requirements for stormwater control and treatment; compliance with the post-construction requirements of the Construction General Permit; conducting investigations to characterize areas of hazardous materials; and the implementation of a CRMP (to ensure that hazardous materials do not pollute stormwater runoff, surface waters, or groundwater). The CRMP will include performance standards that describe how to meet hazardous materials standards; require site investigations that include soil sampling and analytical results (along with indoor air quality exposure to vapor intrusion, if necessary); specify maximum acceptable contaminant levels for specific soil and ballast reuse scenarios; and define characterization, management, and discharge or groundwater encountered during construction and maintenance.

Significant Effect: Impact HYD-3. The proposed project would 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 could result in substantial erosion or siltation on- or off-site; substantially increase the rate or amount of surface runoff in a manner that would result in flooding on- or offsite; 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.

Finding: SJRRC hereby makes finding (a)(1) (described above), as required by PUB. RES. CODE 21081 and stated in State CEQA Guidelines Section 15091, with respect to the above identified effect.

Facts in Support of Findings: The required sizes and types of new stormwater drainage systems and improvements over drainage courses associated with the proposed project would depend on the location (rural or urban), soil types, modeled rates and amounts of stormwater flows from project facilities, and local and state requirements for drainage systems. The necessary engineering and design of these project improvements have not yet been performed. Operation of all of the project facilities would increase runoff from new impervious surfaces, which has the

potential to exceed stormwater drainage capacity, result in downstream flooding, and/or result in an increased potential for the transport of onsite and offsite downstream pollutants. Compliance with the applicable MS4/NPDES Permit requirements, including post-construction requirements of the Construction General Permit, would ensure that the project operation would minimize increases in stormwater runoff compared to the existing conditions. However, increases in stormwater runoff could still result from improvements such as the creation of new pavement surfaces and the connection of trackside drainage ditches to existing storm drainage systems where previously no such connections existed. The new surfaces and connections to existing storm drainage systems could contribute toward the exceedance of the capacity of existing storm drainage systems and/or result in increased pollutant transport.

The following measure mitigates these impacts to a less-than-significant level.

- HYD-3.1: Perform detailed hydraulic evaluations and implement new or modify existing stormwater controls as required to prevent storm drainage system capacity exceedance and reduce pollutant transport.

Implementation of Mitigation Measure HYD-3.1, which would require detailed hydraulic evaluations that would be used to inform the design of necessary stormwater controls, and the modification of existing stormwater controls if required, would reduce project impacts related to the creation of new impervious surfaces that would in turn increase the rate or volume of stormwater runoff, which could result in the exceedance of storm drainage system capacity and/or downstream flooding and pollutant transport, to a less-than-significant level. The detailed hydraulic evaluations would be performed in accordance with the requirements of the latest edition of the Caltrans *Highway Design Manual* for track areas and station platforms, and in accordance with the regulations and design requirements of local municipalities (including the local MS4 Permit requirements) for other improvements associated with stations.

Significant Effect: Impact HYD-4. Project-related construction could create a risk for pollutant release due to project inundation in flood hazard, tsunami, or seiche zones.

Finding: SJRRC hereby makes finding (a)(1) (described above), as required by PUB. RES. CODE 21081 and stated in State CEQA Guidelines Section 15091, with respect to the above identified effect.

Facts in Support of Findings: The proposed project would include construction activities within drainage courses and/or 100- and 200-year flood zones, and within small-stream watercourses that are subject to high flow events during winter rainstorms. If storm-related flooding of construction areas occurs, stockpiled construction materials could be inundated and carried into onsite or offsite waterbodies, which could result in pollution of surface waters.

The following measure mitigates this impact to a less-than-significant level.

- HYD-4.1: Prevent construction materials from being exposed to storm flooding hazards.

Implementation of Mitigation Measure HYD-4.1 would reduce the proposed project's construction-related impacts from substantial sources of additional polluted runoff and the release of pollutants due to project inundation to a less-than-significant level, because it would prevent the storage of construction materials in areas that are exposed to storm flooding hazards.

Significant Effect: Impact HYD-5: The proposed project could conflict with or obstruct the implementation of a water quality control plan or sustainable groundwater management plan.

Finding: SJRRC hereby makes finding (a)(1) (described in Section 3.1 above), as required by PUB. RES. CODE 21081 and stated in State CEQA Guidelines Section 15091, with respect to the above identified effect.

Facts in Support of Findings: The proposed project could conflict with or obstruct the implementation of the Central Valley Basin Plan or the Delta Estuary Plan as a result of (1) the discharge of groundwater or dewatering effluent to nearby surface waters, and the potential for soil, sediment, construction materials, and hazardous materials to be released into surface water during work adjacent to, within, or crossing over surface waters; (2) increased stormwater runoff from new impervious surfaces, which could challenge the capacity of existing storm drainage systems and/or result in increased pollutant transport; and (3) storm-related flooding of stockpile areas and subsequent downstream pollutant transport.

The following measures mitigate these impacts to a less-than-significant level.

- HYD-1.1: Avoid water quality impacts from groundwater or dewatering discharges.
- HYD-1.2: Avoid water quality impacts from construction adjacent to, within, and crossing over surface waters.
- HAZ-2.2: Conduct site investigations.
- HAZ-2.3: Implement a construction risk management plan (CRMP).
- HYD-3.1: Perform detailed hydraulic evaluations and implement new or modify existing stormwater controls as required to prevent storm drainage system capacity exceedance and reduce pollutant transport.
- HYD-4.1: Prevent construction materials from being exposed to storm flooding hazards.

Implementation of Mitigation Measures HYD-1.1, HYD-1.2, HAZ-2.2, HAZ-2.3, HYD-3.1, and HYD-4.1 would reduce project impacts from conflicts with water quality control plans to a less-than-significant level, because they require specific procedures for the discharge of groundwater or dewatering effluent and work adjacent to, within, or crossing surface water; the implementation of a CRMP (to ensure that fill material and hazardous materials do not pollute stormwater runoff, surface waters, or groundwater); design and construction of stormwater controls and treatment systems in accordance with the Caltrans PPDG and the local MS4 Permit requirements for stormwater control and treatment; compliance with the post-construction requirements of the Construction General Permit; performance of site-specific hydraulic evaluations to design and construct appropriate storm drainage systems; and preventing the storage of construction materials in areas exposed to storm flooding hazards.

Significant Effect: Impact HYD-6. Operation of the proposed project could impede or redirect flood flows and result in the downstream transport of pollutants.

Finding: SJRRC hereby makes finding (a)(1) (described in Section 3.1 above), as required by PUB. RES. CODE 21081 and stated in State CEQA Guidelines Section 15091, with respect to the above identified effect.

Facts in Support of Findings: The construction and operation of a variety of project-related structures in 100- and 200-year floodplains could impede flood flows and increase upstream or downstream flooding, and would require work in or crossing through existing State Plan of Flood Control levees. The Natomas/Sacramento Airport Station would require protection from a 100- and 200-year flood. Furthermore, the operation of this facility could impede planned floodway improvements. This area is also part of Reclamation District (RD) 1000's forebay storage area, which is used for the detention and routing of drainage water, and project implementation could impede forebay storage. The Del Paso Siding Upgrade/Extension would require crossing over the Arcade and Magpie Creek drainage and floodways, and the entire siding upgrade and extension area is within the NEMDC/Dry Creek floodway; therefore, this facility could impede flood flows. All three of the above facilities would require work in State Plan of Flood Control levees. Furthermore, improvements at the Thornton Siding Upgrade/Extension require Delta Plan compliance with floodway improvements and could potentially reduce the effectiveness of flood improvements planned as part of the Central Valley Flood Protection Plan (CVFPP). The necessary engineering and design of these project improvements have not yet been finalized.

The following measure mitigates this impact to a less-than-significant level.

- HYD-6.1: Perform hydrologic and hydraulic studies for project improvements to be located in floodplains, implement appropriate engineering designs, coordinate with regulatory agencies, and obtain required permits.

Implementation of Mitigation Measure HYD-6.1 would reduce project impacts related to structures that would impede flood flows or result in pollutant transport during project operation to a less-than-significant level because it requires that (1) detailed, site-specific hydrologic and hydraulic studies be conducted and used to design project facilities such that stormwater flows would not be impeded or redirected; (2) SJRRC consult with RD 1000, the California Department of Water Resources (DWR), and the Central Valley Flood Protection Board (CVFPB) to ensure that all project improvements are designed so they will not interfere with flood protection efforts; and (3) SJRRC consult with, design, and obtain all necessary permits from agencies with regulatory authority over construction on and through levees.

Significant Effect: Cumulative Impact C-HYD-1: Implementation of the proposed project, in combination with other foreseeable projects in the surrounding area, could result in a significant cumulative impact on hydrology and water quality.

Construction-Related Water Quality and Erosion

Finding: SJRRC hereby makes finding (a)(1) (described above), as required by PUB. RES. CODE 21081 and stated in State CEQA Guidelines Section 15091, with respect to the above identified effect.

Facts in Support of Findings: Earthmoving activities associated with the proposed project and all of the cumulative projects have the potential to increase erosion, and for accidental spills of hazardous materials. During winter storm events, disturbed soils and hazardous materials could be transported to downstream receiving waterbodies, resulting in degradation of water quality from sedimentation and materials such as fuels, lubricants, and paints. Furthermore, the proposed project would also involve direct, in-water work for bridges and culverts in a variety of locations, which could also result in increased turbidity, sedimentation, and spills of hazardous materials.

Runoff and in-water construction work could substantially degrade surface or ground water quality and thereby violate water quality standards or exceed allowable waste discharge thresholds.

The following measures mitigate this impact to a less-than-significant level.

- HYD-1.1: Avoid water quality impacts from groundwater or dewatering discharges.
- HYD-1.2: Avoid water quality impacts from construction adjacent to, within, and crossing over surface waters.
- HAZ-2.2: Conduct site investigations.
- HAZ-2.3: Implement a construction risk management plan (CRMP).

Implementation of Mitigation Measures HYD-1.1, HYD-1.2, HAZ-2.2, and HAZ-2.3 would reduce project impacts on water quality during construction and operation, because these measures require specific procedures for the discharge of groundwater or dewatering effluent and work adjacent to, within, or crossing surface water; design and construction of stormwater controls and treatment systems in accordance with the Caltrans PPDG and the local MS4 Permit requirements for stormwater control and treatment; compliance with the post-construction requirements of the Construction General Permit; conducting investigations to characterize areas of hazardous materials; and the implementation of a CRMP (to ensure that hazardous materials do not pollute stormwater runoff, surface waters, or groundwater). The CRMP will include performance standards that describe how to meet hazardous materials standards; require site investigations that include soil sampling and analytical results (along with indoor air quality exposure to vapor intrusion, if necessary); specify maximum acceptable contaminant levels for specific soil and ballast reuse scenarios; outline appropriate containment procedures for handling and disposal of any encountered contaminated soil and groundwater, and incorporates limitations for use and handling near creeks, surface waters, or other aquatic habitats based on the findings of an ecological risk assessment; specify procedures for the construction of project improvements entailing the discharge of groundwater or dewatering effluent; and include procedures for construction of project improvements adjacent to, within, or crossing surface waters. (Additional actions that would also prevent degradation of water quality for in-water work, such as a Clean Water Act Section 401 Water Quality Certification, are discussed above under the heading *Biological Resources*.) Therefore, the proposed project's contribution to cumulative construction impacts on water quality from erosion would be less-than-considerable.

Construction-Related Water Quality and Flooding

Finding: SJRRC hereby makes finding (a)(1) (described above), as required by PUB. RES. CODE 21081 and stated in State CEQA Guidelines Section 15091, with respect to the above identified effect.

Facts in Support of Findings: The proposed project and the cumulative rail and regional transportation projects would require construction activities in 100-year or 200-year floodplains. In addition, construction activities associated with the proposed project and the cumulative projects would be required in or across other small urban or rural streams that could flood during winter storm events, even if those small streams are not designated as 100- or 200-year floodplains. If storm-related flooding of construction areas occurs, stockpiles of construction

materials could be inundated, and carried into on-site or off-site waterbodies, which could result in pollution of surface waters.

The following measure mitigates this impact to a less-than-significant level.

- HYD-4.1: Prevent construction materials from being exposed to storm flooding hazards.

Implementation of Mitigation Measure HYD-4.1 would reduce the proposed project's impact by preventing the storage of stockpiled construction materials, such as soil, fuels, and lubricants, in flood zones during the winter months when storms may occur. Therefore, the proposed project's contribution to cumulative construction impacts on water quality from flooding would be less-than-considerable.

Operational Water Quality and Stormwater Runoff

Finding: SJRRC hereby makes finding (a)(1) (described above), as required by PUB. RES. CODE 21081 and stated in State CEQA Guidelines Section 15091, with respect to the above identified effect.

Facts in Support of Findings: Operation of the proposed project and all of the cumulative projects could degrade water quality due to an increase in impervious surfaces (which would increase the amount of stormwater runoff) and handling of hazardous materials (which could contaminate the stormwater runoff). Increases in stormwater runoff could cause downstream erosion and sedimentation, and increase turbidity in receiving waters, depending on waterway conditions. Contaminated stormwater runoff would result in increased pollutant loading due to contact with petroleum and other contaminants deposited on impervious surfaces. In addition, cumulative rail and other regional transportation projects would increase the potential for leakage of diesel, oil, and grease, and for accidental spills of herbicides, that could further degrade surface water quality. Design of stormwater control systems in compliance with existing regulations (e.g., the State Water Board's NPDES Construction General Permit; Caltrans' NPDES permit; requirements for MS4 Permits; and Industrial General Permits) would ensure that stormwater runoff from the proposed project and the cumulative projects would not cause erosion and sedimentation in receiving waters, and that runoff from impervious surface areas would be managed and treated to remove contaminants.

The following measure mitigates this impact to a less-than-significant level.

- HAZ-2.3: Implement a construction risk management plan (CRMP).

Implementation of Mitigation Measure HAZ-2.3 would reduce the proposed project's impacts by requiring implementation of a CRMP with performance standards outlining appropriate containment procedures for handling and disposal of any encountered contaminated soil and groundwater, and incorporating limitations for use and handling near creeks, surface waters, or other aquatic habitats based on the findings of an ecological risk assessment. Therefore, the proposed project's contribution to cumulative operational impacts on water quality and stormwater runoff would be less-than-considerable.

Operational Exceedance of Stormwater Drainage Systems

Finding: SJRRC hereby makes finding (a)(1) (described above), as required by PUB. RES. CODE 21081 and stated in State CEQA Guidelines Section 15091, with respect to the above identified effect.

Facts in Support of Findings: Railway improvements for the proposed project and the cumulative rail projects would alter drainage patterns by altering or creating trackside ditches and drainage systems. Other project improvements such as new station boarding platforms, parking lots, parking structures, roadways, bridges, and operations and maintenance facilities, along with buildings, parking lots, and railway facilities associated with all of the related projects, would also create new impervious surfaces and stormwater drainage systems, which would alter drainage patterns and create new sources of runoff. If stormwater control systems are not appropriately designed for these improvements, stormwater runoff could exceed the capacity of stormwater drainage systems and result in degradation of water quality.

The following measure mitigates this impact to a less-than-significant level.

- HYD-3.1: Perform detailed hydraulic evaluations and implement new or modify existing stormwater controls as required to prevent storm drainage system capacity exceedance and reduce pollutant transport.

Implementation of Mitigation Measure HYD-3.1 would reduce the proposed project's impact because it requires detailed hydraulic evaluations to ensure that new and/or modified stormwater infrastructure would be appropriately designed, and that runoff from project improvements would not exceed the capacity of storm drainage systems and result in water quality degradation. Therefore, the proposed project's contribution to cumulative operational impacts from exceedance of stormwater drainage systems and degradation of water quality would be less-than-considerable.

Operational Flooding

Finding: SJRRC hereby makes finding (a)(1) (described above), as required by PUB. RES. CODE 21081 and stated in State CEQA Guidelines Section 15091, with respect to the above identified effect.

Facts in Support of Findings: Project facilities, along with other facilities constructed as part of the cumulative projects, would increase the rate and amount of stormwater runoff from alteration of drainage patterns and creation of impervious surfaces, which could result in flooding. Project and cumulative project facilities would also be located in 100- and 200-year floodplains, and would require crossing over small urban or rural streams. Portions of the proposed project would be constructed in the Legal Delta (particularly adjacent to the Cosumnes River at Thornton), and portions of the California High Speed Rail Project would also be constructed in the Legal Delta. Finally, the proposed project and the California High Speed Rail Project and the Greenline Downtown to the Airport Project would encroach on levees and floodways under the jurisdiction of the CVFPB and other agencies such as the Federal Emergency Management Agency (FEMA), U.S. Army Corps of Engineers, California Department of Water Resources (DWR), and local reclamation districts including RD 1000.

The following measures mitigate this impact to a less-than-significant level.

- HYD-3.1: Perform detailed hydraulic evaluations and implement new or modify existing stormwater controls as required to prevent storm drainage system capacity exceedance and reduce pollutant transport.
- HYD-6.1: Perform hydrologic and hydraulic studies for project improvements to be located in floodplains, implement appropriate engineering designs, coordinate with regulatory agencies, and obtain required permits.

Implementation of Mitigation Measure HYD-3.1 would reduce the proposed project's impact because it requires detailed hydraulic evaluations to ensure that new and/or modified stormwater infrastructure would be appropriately designed, and that runoff from project improvements would not exceed the capacity of storm drainage systems and result in flooding. Implementation of Mitigation Measure HYD-6.1 would reduce the proposed project's impact because it requires site-specific detailed hydrologic and hydraulic studies for project improvements that would be located in the 100- and 200-year floodplains. The results of these studies would be used to inform the design of project facilities, so that they are specifically designed to pass 100- and 200-year flows without impedance, as required by local flood protection agencies such as Reclamation District (RD) 1000, as well as FEMA, DWR, U.S. Army Corps of Engineers, and CVFBP standards, so that upstream, on-site, and downstream flooding would not occur. Mitigation Measure HYD-6.1 also requires the Commission to consult with RD 1000, DWR, and CVFBP regarding project-related work that would occur within floodplains, to ensure that project facilities are designed so they will not interfere with flood protection efforts. Finally, Mitigation Measure HYD-6.1 requires the Commission to obtain all necessary permits, consult with any necessary agencies with levee jurisdiction, and perform work in accordance with the terms of the permits, which would contain measures to protect public safety and water quality, as issued by the applicable regulatory agency. Therefore, the proposed project's contribution to cumulative operational impacts related to flooding would be less-than-considerable.

Noise

Significant Effect: Impact NOI-3. The new passenger service could result in substantial increases in groundborne vibration levels.

Finding: SJRRC hereby makes finding (a)(1) (described above), as required by PUB. RES. CODE 21081 and stated in State CEQA Guidelines Section 15091, with respect to the above identified effect.

Facts in Support of Findings: As shown in EIR Figures 3.12-9 and 3.12-10, project-related vibration impacts would occur in two locations. The Thornton Siding Upgrade and Extension is projected to generate vibration at levels exceeding FTA thresholds at one residence along the northbound side of the alignment between North New Hope Road and Mokelumne River, due to the proximity to the new turnout from the extension of the siding. In addition, the New Crossover Track just south of the City College Station is projected to generate vibration at levels exceeding FTA thresholds at one residence along the northbound side of the alignment between Fruitridge Road and Sutterville Road, due to the proximity of the new crossover.

The following measure mitigates these impacts to a less-than-significant level.

- NOI-3.1: Conduct a detailed design-level vibration analysis.

Implementation of Mitigation Measure NOI-3.1 would reduce project impacts resulting from operational vibration to a less-than-significant level because a detailed design-level vibration analysis will be performed, and the analysis will include design features to reduce the vibration levels. These design features could include relocating crossovers/turnouts to areas without sensitive receptors, or the use of special trackwork at these locations to eliminate the gap in the tracks which causes the increase in vibration levels.

Significant Effect: Impact NOI-4: Construction of track improvements could expose sensitive receptors to substantial increases in groundborne vibration levels.

Finding: SJRRC hereby makes finding (a)(1) (described above), as required by PUB. RES. CODE 21081 and stated in State CEQA Guidelines Section 15091, with respect to the above identified effect.

Facts in Support of Findings: EIR Table 3.12-11 provides the approximate distances within which receptors could experience construction-related vibration annoyance effects based on FTA methodology. Project-related vibration impacts would extend to distances of 230 to 630 feet from pile-driving operations, 100 to 240 feet from compacting, and less than 130 feet from bulldozers, depending on the vibration sensitivity of the land use category. It is expected that project-related groundborne vibration from construction activities would cause only intermittent localized disturbance along the rail corridor. Although processes such as earthmoving with bulldozers or the use of vibratory compaction rollers can create annoying vibration, there should be only isolated cases where it is necessary to use this type of equipment in close proximity to residential buildings. It is possible that project-related construction activities involving pile drivers occurring at the edge of or slightly outside of the current right-of-way could result in vibration damage.

The following measure mitigates this impact to a less-than-significant level.

- NOI-4.1: Implement a construction vibration control plan.

Implementation of Mitigation Measure NOI-4.1 would reduce project impacts resulting from construction vibration to a less-than-significant level because it requires the preparation and implementation of a construction vibration control plan. This plan includes performance standards to incorporate practices into the construction scope of work that would reduce the impacts of construction vibration on nearby vibration-sensitive land uses. In the event building damage occurs due to construction, repairs would be made, or compensation would be provided. The plan would include, at a minimum, the following performance standards:

- Avoid the use of impact pile-drivers where possible near vibration-sensitive areas, or use alternative construction methods (e.g., drilled piles) where geological conditions permit.
- Avoid vibratory compacting/rolling in close proximity to structures.
- Require vibration monitoring during vibration-intensive activities.
- In the event building damage occurs due to construction, repairs would be made, or compensation would be provided.

Significant Effect: Cumulative Impact C-NOI-1. Operation of the proposed project, in combination with other foreseeable projects in the surrounding area, could result in a significant cumulative impact on noise.

Finding: SJRRC hereby makes finding (a)(1) (described above), as required by PUB. RES. CODE 21081 and stated in State CEQA Guidelines Section 15091, with respect to the above identified effect.

Facts in Support of Findings: Land development projects along the project alignment would introduce more sensitive receptors that would be subject to the cumulative vibration levels from increased cumulative rail service. The proposed project would result in operational vibration impacts at one location due to the operation of the crossover track south of the City College Station. Operation of the cumulative rail projects would also increase vibration levels in proximity to sensitive receptors.

The following measure mitigates this impact to a less-than-significant level.

- NOI-3.1: Conduct a detailed design-level vibration analysis.

Implementation of Mitigation Measure NOI-3.1 would reduce project impacts resulting from operational vibration because a detailed design-level vibration analysis will be performed, and the analysis will include design features to reduce the vibration levels. These design features could include relocating crossovers/turnouts to areas without sensitive receptors, or the use of special trackwork at these locations to eliminate the gap in the tracks which causes the increase in vibration levels. Therefore, the proposed project's contribution to cumulative operational vibration impacts would be less-than-considerable.

Recreation

Significant Effect: Impact REC-1. The proposed project could 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.

Finding: SJRRC hereby makes finding (a)(1) (described above), as required by PUB. RES. CODE 21081 and stated in State CEQA Guidelines Section 15091, with respect to the above identified effect.

Facts in Support of Findings: Construction noise associated with the City College Station and Track Improvements, and the Old North Sacramento Station improvements, could affect ball fields at several parks such as Airport Park, Redwood Park, and Johnston Park, as well as the athletic facilities at City College (tennis courts and stadium), because these recreational facilities are located adjacent to the proposed project's environmental footprint. Therefore, project construction could displace users from these facilities to other parks/facilities.

The Sacramento Northern Bike Trail crosses the northern part of the environmental footprint of the Old North Sacramento Station improvements. Construction of the station may result in an increase in dust and noise on the trail. Due to trail users' brief presence in the construction area while on the trail and the vast mileage of trail unaffected by construction, construction-related noise and dust would not be expected to result in substantial displacement of trail use from this trail. However, construction activities could temporarily close the existing at-grade crossing for trail users, resulting in temporary displacement of trail use to other area trails, such as the nearby Jedediah Smith Memorial Trail.

The following measures mitigate these impacts to a less-than-significant level.

- REC-1.1: Coordinate with the officials with jurisdiction over potentially impacted recreational facilities during the construction phase to minimize impacts to organized athletic events/practices.
- REC-1.2: Coordinate with the City of Sacramento to maintain access for the Sacramento Northern Bike Trail.

Implementation of Mitigation Measures REC-1.1 and REC-1.2 would reduce construction-period impacts on nearby recreational resources to a less-than-significant level, because SJRRC would coordinate with agencies with jurisdiction over the affected recreational resources to ensure that advance notification of construction activities is provided, thus allowing for potential rescheduling of recreational activities. In addition, a safe detour that would provide continued access to the Sacramento Northern Bike Trail through or around the construction site at the Old North Sacramento Station would be provided.

Significant Effect: Cumulative Impact C-REC-1: Implementation of the proposed project, in combination with other foreseeable projects in the surrounding area, could result in a significant cumulative impact on recreation.

Finding: SJRRC hereby makes finding (a)(1) (described above), as required by PUB. RES. CODE 21081 and stated in State CEQA Guidelines Section 15091, with respect to the above identified effect.

Facts in Support of Findings: Project-related construction noise could affect use of the athletic facilities at City College; implementation of some of the cumulative projects could also affect these facilities. Therefore, construction of the proposed project, when considered in combination with the cumulative projects, could contribute to a cumulative displacement of recreationists from these facilities to other facilities.

The following measure mitigates this impact to a less-than-significant level.

- REC-1.1: Coordinate with the officials with jurisdiction over potentially impacted recreational facilities during the construction phase to minimize impacts to organized athletic events/practices.

Implementing Mitigation Measure REC-1 would reduce the proposed project's impact by avoiding construction during organized games/practices at the City College athletic facilities to the extent feasible. Occasional use of the City College athletic facilities may still be displaced during construction, but the level of use that could be displaced would be minimal, and would not increase the use of existing neighborhood and regional parks or other recreational facilities to the extent that substantial physical deterioration of other facilities would occur, or be accelerated. Therefore, the proposed project's contribution to cumulative construction-related recreation impacts would be less-than-considerable.

Transportation and Traffic

Significant Effect: Impact TRA-1: The proposed project could conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities.

Finding: SJRRC hereby makes finding (a)(1) (described above), as required by PUB. RES. CODE 21081 and stated in State CEQA Guidelines Section 15091, with respect to the above identified effect.

Facts in Support of Findings: The overall increase in project-related train traffic would be marginal, consisting of up to two daily Amtrak San Joaquins roundtrips and up to five daily ACE roundtrips; therefore, it is unlikely that new or additional transit infrastructure would be required beyond what is already included as part of the proposed project. SJRRC will coordinate with the Sacramento Regional Transit District (SacRT) during subsequent stages of the proposed project to ensure that construction and operation of relevant project elements adjacent to SacRT light rail facilities and right-of-way—such as the back-side platform extension at City College Station—satisfy SacRT design guidelines and specifications and minimize disruptions to light rail operations. Overall, the proposed project would be consistent with the vision of applicable programs, plans, ordinances, and policies such as the 2018 California State Rail Plan.

Project-related access improvements would enhance bicycle and pedestrian safety and access and encourage activate transportation, through construction of new bicycle/pedestrian facilities (e.g., sidewalks, signalized crossings, bicycle/pedestrian paths) and upgrades to existing bicycle/pedestrian facilities. Furthermore, the proposed project includes a new bicycle/pedestrian path that would be constructed adjacent to and in the existing Union Pacific Railroad (UPRR) right-of-way from the Midtown Station north to C Street. This new bicycling/pedestrian path would provide additional bicycling and walking facilities that connect the Midtown Station to other popular areas in Sacramento, thus providing new recreation opportunities and access.

The proposed project would reduce VMT and associated greenhouse gas emissions by inducing a mode shift from automobiles to public transit, which would decrease traffic congestion along parallel roadways such as Interstate 5 (I-5) and State Route (SR) 99, thereby benefitting traffic operations and goods movement along these corridors. There may be temporary roadway closures (e.g., overnight or weekend) to accommodate specific activities such as construction of new track at-grade crossings, but these closures would be coordinated with local agencies to minimize disruptions to the circulation system.

Regular coordination meetings between SJRRC and UPRR would take place throughout the entire design and construction stages of the proposed project, and would address construction-related effects on existing freight rail operations, such as scheduling of construction activities in the right-of-way.

Project improvements would generally conform to and support—and would not conflict with—programs, plans, ordinances, and policies addressing the circulation system, and the associated impacts of project operation related to the regulatory setting presented in the EIR would be less than significant. However, in recognition of potential disruptions to the circulation system during project construction, the associated impacts of construction have been conservatively deemed potentially significant.

The following measures mitigate these impacts to a less-than-significant level.

- TRA-1.1: Transportation Management Plan for project construction.
- TRA-1.2: Freight rail disruption control plan for project construction.

- TRA-1.3: Light rail disruption control plan for project construction.

Implementation of Mitigation Measures TRA-1.1, TRA-1.2, and TRA-1.3 would reduce project conflicts with a program, plan, ordinance, or policy addressing the circulation system, because they require development of a transportation management plan, a freight rail disruption control plan, and a light rail disruption control plan for project construction to minimize construction-related impacts to transit, roadway, bicycle, and pedestrian facilities and to freight rail and light rail operations. These plans would include the following performance standards (among others):

- Limiting the number of simultaneous street closures and consequent detours of transit and automobile traffic in each immediate vicinity;
- Implementing traffic control measures to minimize traffic conflicts for all roadway users (regardless of mode);
- Providing advance notice of all construction-related street closures, durations, and detours to local jurisdictions, emergency service providers, and motorists;
- Limiting the number of simultaneous track closures in each immediate vicinity, with closure timeframe limited as much as feasible for each closure, unless bypass tracks or alternative routes are available;
- Providing safety measures for freight rail operations through construction zones;
- Requiring contractors to coordinate with rail dispatch to minimize disruption of rail service in the corridor;
- Providing safety measures for light rail operation through construction zones;
- Requiring contractors to coordinate with SacRT dispatch to minimize disruption of light rail service; and
- Where feasible, limiting the closure of any tracks for construction activities to periods when light rail service is not scheduled or is less frequent (e.g., weekends or weekday evenings).

Significant Effect: Cumulative Impact C-TRA-1: Implementation of the proposed project, in combination with other foreseeable projects in the surrounding area, could result in a significant cumulative impact on transportation.

Finding: SJRRC hereby makes finding (a)(1) (described above), as required by PUB. RES. CODE 21081 and stated in State CEQA Guidelines Section 15091, with respect to the above identified effect.

Facts in Support of Findings: Considering the proposed project in conjunction with the cumulative projects, potential effects on transportation may be amplified where construction activities are concentrated in close proximity, or when they take place concurrently. Standard construction practices and regulations require construction contractors to work with relevant parties (e.g., public works departments, transportation agencies, transit service providers) to coordinate construction activities, and identify, avoid, and minimize disruptions to the circulation system. Despite these requirements, however, it is possible that cumulative construction effects could reach the level of a significant impact. The impacts of project construction on transportation were conservatively deemed significant, in recognition of potential disruptions during project

construction to the circulation system, to SacRT light rail operations, and to freight rail operations along UPRR right-of-way.

The following measures mitigate these impacts to a less-than-significant level.

- TRA-1.1: Transportation Management Plan for project construction.
- TRA-1.2: Freight rail disruption control plan for project construction.
- TRA-1.3: Light rail disruption control plan for project construction.

Implementation of Mitigation Measures TRA-1.1, TRA-1.2, and TRA-1.3 would reduce project impacts from conflicts with a program, plan, ordinance, or policy addressing the circulation system, because they require development of a transportation management plan, a freight rail disruption control plan, and a light rail disruption control plan for project construction to minimize construction-related impacts to transit, roadway, bicycle, and pedestrian facilities and to freight rail and light rail operations. These plans will include site-specific performance standards that will reduce construction noise levels (as detailed in Impact TRA-1, above). Therefore, the proposed project's contribution to cumulative construction-related traffic impacts would be less-than-considerable.

Tribal Cultural Resources

Significant Effect: Impact TRI-1: The proposed project could cause a substantial adverse change in the significance of a tribal cultural resource, as defined in Public Resources Code section 21074, 5020.1(k), or 5024.1(c).

Finding: SJRRC hereby makes finding (a)(1) (described above), as required by PUB. RES. CODE 21081 and stated in State CEQA Guidelines Section 15091, with respect to the above identified effect.

Facts in Support of Findings: Based on the background research, field efforts, and SJRRC's consultation with the Shingle Springs Band of Miwok Indians and the United Auburn Indian Community, no tribal cultural resources were identified in the project area. However, project construction would involve ground-disturbing activities that could result in the discovery or damage of as-yet undiscovered tribal cultural resources, which would be a potentially significant impact.

The following measures mitigate these impacts to a less-than-significant level.

- CUL-2.1: Worker cultural resources training.
- CUL-2.2: Native American monitoring.
- CUL-2.3: Inadvertent archaeological discovery.
- CUL-3.1: Discovery of previously unknown human remains.

Implementation of Mitigation Measures CUL-2.1, CUL-2.2, CUL-2.3, and CUL-3.1 would reduce project impacts on as-yet undiscovered Tribal Cultural Resources to a less-than-significant level because cultural awareness training would be provided for construction personnel, and Native American monitors would have the opportunity to be present during ground-disturbing activities, to address the concerns expressed during Native American consultation with SJRRC. In addition,

Mitigation Measure CUL-2.3 requires that if any resources are encountered, work would be halted, and a qualified archaeologist and a Tribal Representative would assess the find. If the resources are determined to be significant, either the resource(s) would be preserved in place, or a data recovery plan would be implemented in accordance with CEQA Guidelines Section 15126.4 (b)(3)(C) and in consultation with a Tribal Representative if the resource is a Tribal Cultural Resource. Finally, Mitigation Measure CUL-3.1 requires compliance with state laws relating to Native American remains in the event human remains of Native American origin are discovered during construction. Protocols include informing the county coroner and contacting the NAHC for identification of descendants.

Utilities and Service Systems

Significant Effect: Impact UT-1: The proposed project could require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities.

Finding: SJRRC hereby makes finding (a)(1) (described above), as required by PUB. RES. CODE 21081 and stated in State CEQA Guidelines Section 15091, with respect to the above identified effect.

Facts in Support of Findings: Construction of the proposed project may affect existing overhead and underground utilities. Construction of new tracks or upgrades to existing track would involve grading for the track subgrade with graders and excavators and the placement of subballast and ballast. Track construction could encounter existing utility lines. Construction activities associated with station platforms and parking lots would involve rough grading. Grading may disturb underground utilities. Project construction would require the relocation of existing utilities. Other utilities in the environmental footprint would be protected in-place. It is possible that relocation or accidental disruption during construction could disrupt utility service or damage utilities.

The following measure mitigates these impacts to a less-than-significant level.

- UT-1.1: Implement a Utility Relocation Plan.

Implementation of Mitigation Measure UT-1.1 would reduce project impacts to utilities to a less-than-significant level because SJRRC would coordinate with utility providers to address the potential for utility disruption and minimize service interruptions. SJRRC would also work with utility owners during final engineering design and construction to relocate utilities or protect them in-place, and SJRRC would assist utility owners in preparing communications materials to inform end users of planned service interruptions.

Significant Effect: Cumulative Impact C-UT-1. Implementation of the proposed project, in combination with other foreseeable projects in the surrounding area, could result in a significant cumulative impact on utilities and service systems.

Finding: SJRRC hereby makes finding (a)(1) (described above), as required by PUB. RES. CODE 21081 and stated in State CEQA Guidelines Section 15091, with respect to the above identified effect.

Facts in Support of Findings: Construction activities associated with the proposed project and the cumulative rail projects could disrupt utility service systems in a planned or unplanned manner.

Standard construction practices and regulations require construction contractors to identify and avoid unplanned disruptions to utilities, and to work with utility owners to coordinate construction to avoid damage and utility outages. However, it is possible that relocation or accidental disruption during cumulative construction activities could disrupt utility service or damage utility lines.

The following measure mitigates these impacts to a less-than-significant level.

- UT-1.1: Implement a Utility Relocation Plan.

Implementation of Mitigation Measure UT-1.1 would reduce project impacts to utilities because SJRRC would coordinate with utility providers to address the potential for utility disruption and minimize service interruptions. SJRRC would also work with utility owners during final engineering design and construction to relocate utilities or protect them in-place, and SJRRC would assist utility owners in preparing communications materials to inform end users of planned service interruptions. Therefore, the proposed project's contribution to cumulative construction-related utility impacts would be less-than-considerable.

Start ICF

4.4 Findings Regarding the Alternatives

As required by CEQA, a discussion of possible alternatives to the proposed project, including the No-Project Alternative, was included in the proposed project EIR. With adoption of the proposed project, SJRRC makes the following findings to support its rejection of the project alternatives.

As noted above, Section 15091 (a)(3) of the State CEQA Guidelines describes that one of the findings that a lead agency can make concerning significant project impacts is that specific economic, legal, social, technological, or other considerations, make infeasible the project alternatives identified in the Final EIR. In the Final EIR, Chapter 5, *Alternatives*, the alternatives were screened for technical, logistical, and financial feasibility, but the alternatives were not evaluated for all economic, legal, social or other considerations that make up the broader definition of "feasibility" in Section 15091 (a)(3). Thus, the use of the term "infeasible" in the findings below concerning the alternatives is more expansive than reference to "feasible" in Chapter 5 of the proposed project EIR, which was limited to technical, logistical and financial feasibility. An alternative may have been determined to be technically, logistically, and financially "feasible" in the Final EIR and still ultimately be concluded by SJRRC to meet the definition of "infeasibility" per Section 15091 (a)(3) when all considerations are taken into account. The term "infeasible" in the findings below uses the broader definition in Section 15091 (a)(3), which is consistent with case law interpreting this provision of CEQA. The determination of infeasibility "involves a balancing of various 'economic, environmental, social, and technological factors.'" (*City of Del Mar v. City of San Diego* (1982) 133 Cal.App.3d 401, 417). Where there are competing and conflicting interests to be resolved, the determination of infeasibility "is not a case of straightforward questions of legal or economic feasibility," but rather, based on policy considerations. (*Cal. Native Plant Society v. City of Santa Cruz* (2009) 177 Cal.App.4th 957, 1001-

02). “[A]n alternative that is impractical or undesirable from a policy standpoint may be rejected as infeasible.” (*Id*. at p. 1002, citing 2 Kostka & Zischke, Practice Under the Cal. Environmental Quality Act, (Cont. Ed. Bar 2010) section 17.29, p. 824).

For the purpose of the EIR, the following basic goals are considered to be the primary objectives of the proposed project identified in Chapter 1 of the EIR. These are integrated objectives, meaning that an alternative must satisfy all of them in order to meet the standard of the proposed project. Improved rail service is intended to provide an alternative to vehicle travel that will meet statewide objectives for air quality improvement and greenhouse gas (GHG) reduction (as expressed in the air quality standards of the Sacramento Metropolitan Air Quality Management District, the San Joaquin Valley Air Pollution Control District, and the Air Resources Board’s SB 32 Scoping Plan), as well as regional objectives for reducing traffic congestion and improving transportation sustainability (as expressed in the Regional Transportation Plans/Sustainable Communities Strategies adopted by the San Joaquin, Stanislaus, and Merced County Metropolitan Planning Organizations).

- Enhanced intercity and commuter rail service;
- Improved connectivity;
- Improved regional air quality;
- Improved access; and
- Transit Oriented Development.

4.4.1 No-Project Alternative

Findings: SJRRC hereby finds that this alternative is determined to be infeasible for the following reasons.

Facts in Support of Findings: Under the No Project Alternative, none of the Valley Rail Sacramento Extension Project improvements would be constructed and there would be no improvements to the existing UPRR Sacramento Subdivision. There would be no extension of Amtrak San Joaquins or ACE operations to serve the project area.

Under the No Project Alternative, the San Joaquins service would continue to operate over the BNSF Stockton Subdivision, with trains stopping at the existing Amtrak stations along the subdivision before terminating at either Fresno or Bakersfield. There would be no adjustments to the schedules of the Amtrak services or Amtrak Thruway Bus services.

Under the No Project Alternative, ACE services would continue between the San Jose Diridon and Stockton Downtown/ACE stations as they are currently occurring, as well as to the proposed Ceres Station, including in the ACE Extension Lathrop to Ceres/Merced project.

The No-Project Alternative would not meet the proposed project’s objectives listed above. Intercity and commuter rail service and transit connectivity would remain at existing levels and therefore would not be enhanced. Traffic congestion, regional air quality, and GHG emissions would not be improved beyond existing baseline levels. Further, the No-Project Alternative would not substantially reduce vehicle miles travelled (VMT) from baseline levels. That will retard progress in reducing GHG levels to meet statewide goals under Assembly Bill 32 and Senate Bill 32. For these reasons, the No-Project Alternative is determined to be infeasible.

4.4.2 No Lodi Station Alternative

Findings: SJRRC hereby finds that this alternative is determined to be infeasible for the following reasons.

Facts in Support of Findings: Under this alternative, the proposed project would not include the construction of any station in the vicinity of Lodi. While such an alternative would avoid the potentially significant impact associated with loss of agricultural land associated with the proposed project, no viable station site has been identified within a reasonable distance to serve the population in or near the City of Lodi that would avoid or reduce impacts to agricultural land. Therefore, this alternative is determined to be infeasible since it would not meet the proposed project's goals to improve connectivity in the Central Valley and serve the target ridership in and near the City of Lodi.

4.4.3 Alternative Railroad Alignment

Findings: SJRRC hereby finds that this alternative is determined to be infeasible for the following reasons.

Facts in Support of Findings: The proposed project includes the use of the UPRR Sacramento Subdivision between the proposed Natomas/Sacramento Airport Station and the Stockton Downtown/ACE Station. Use of the UPRR Fresno Subdivision (located approximately parallel to, but east of the Sacramento Subdivision) as an alternative alignment to provide the project upgrade to ACE and San Joaquins services was also considered. This alternative is determined to be infeasible due to the following reasons:

- Opportunities for increased passenger rail service on the Fresno Subdivision, where UPRR operates its mainline service, are limited due to a lack of additional capacity. In addition, UPRR does not support additional passenger service along the Fresno Subdivision and would likely not grant trackage rights.
- Construction of a new track outside the existing UPRR right-of-way (ROW) along the Fresno Subdivision to accommodate the proposed project would potentially result in increased environmental impacts and costs, and would not enable a phased implementation program to provide additional, near-term service to and from Sacramento.
- The Fresno Subdivision does not extend north beyond downtown Sacramento and would therefore not facilitate the extension of ACE or San Joaquins service to the Natomas area or provide the opportunity for a convenient shuttle connection to the Sacramento International Airport.

Use of the Sacramento Subdivision (as included in the proposed project) would have the following additional benefits not available from the Fresno Subdivision:

- Unlike the Fresno Subdivision, there is excess capacity on the Sacramento Subdivision and UPRR is willing to work with SJJPA and the state to enable passenger service on that line;
- better access to the State Capitol and surrounding businesses (via the proposed Midtown Station) and serves a greater population near proposed stations;

- easy access to existing SacRT Light Rail Stations at three stations, including, the 16th Street Station via the proposed Midtown Sacramento Station, City College Station with direct platform-to-platform connectivity, and the Globe Avenue Station with the proposed Old North Sacramento Station; and

4.4.4 Elk Grove Station Alternatives

Findings: SJRRC hereby finds that these alternative are determined to be infeasible for the following reasons.

Facts in Support of Findings: A number of location alternatives were considered during the planning process for the Elk Grove Station, including alternatives evaluated in the City of Elk Grove's Multimodal Facility Feasibility Study. These alternatives included:

- **Bilby Road/Willard Parkway (W1) alternative.** This alternative considered track improvements and a new platform on a 12-acre site of three parcels north of Bilby Road and bordered by UPRR ROW to the west and Willard Parkway to the east. Site access for vehicles would be provided via a driveway connecting to the intersection of Willard Parkway and Matina Drive. This alternative is determined to be infeasible due to a lack of support from adjacent neighborhoods.
- **Elk Grove Boulevard/Franklin Boulevard (W2)** alternative. This alternative considered track improvements and a new platform on a site located within the Stone Lakes National Wildlife Refuge bounded by UPRR ROW to the west, Franklin Boulevard to the east, and Elk Grove Boulevard to the north. Site access for vehicles would be provided via a driveway connecting to the intersection of Franklin Boulevard and Blossom Ridge Drive. This alternative is determined to be infeasible due to its location within the Stone Lakes National Wildlife Refuge and a lack of support from adjacent neighborhoods.
- **Laguna Boulevard/Dwight Road (W3).** This alternative considered track improvements and a new platform on a combination of three parcels bounded by UPRR ROW to the east, Laguna Boulevard to the south, and Dwight Road to the west. Site access for vehicles would be provided via a driveway along Dwight Road. This alternative is determined to be infeasible due to difficulties in the procurement process for self-storage type facilities and a lack of support from adjacent neighborhoods.
- **Dwight Boulevard (W4) alternative.** This alternative considered track improvements and a new platform on Dwight Road on a site bounded by UPRR ROW to the east, Dwight Road to the west, and the Elk Grove city limit to the north. This alternative is determined to be infeasible due to site specific complexities related to parcel ownership, as well as a lack of support from adjacent neighborhoods.
- **Willard Parkway/Kammerer Road (planned) (W5).** This alternative considered track improvements and a new platform in the southern portion of Elk Grove, south of Hood Franklin Road. Site access for vehicles would be provided via a driveway connecting to the future Willard Parkway extension. This alternative is determined to be infeasible due to its remote location, lack of community support, and potential impacts to important agricultural lands.
- **Franklin Boulevard/Bilby Road.** This alternative considered track improvements and a new platform in the southern portion of Elk Grove, south of Bilby Road and east of Franklin

Boulevard. Site access would be provided via a new eastern leg of Hood Franklin Road and from Bilby Road. This alternative is determined to be infeasible due to its remote location and lack of community support.

- **Sims Road.** This alternative considered track improvements and a new platform along Sims Road on Sacramento Regional Sanitation Bufferlands property. Access was proposed from Sims Road. This alternative is determined to be infeasible due to opposition from the Sacramento Regional Sanitation District and lack of community support.
- **North Elk Grove Station.** This alternative considered construction of a new station (with variants) to be constructed on a 32-acre site on Sacramento Regional Sanitation Bufferlands property in Sacramento beneath the Cosumnes Boulevard/Morrison Creek Viaduct near the existing SacRT Franklin LRT Station. This alternative is determined to be infeasible due to opposition from the Sacramento Regional Sanitation District, the City of Sacramento, the Delta Stewardship Council, the Freeport Water Agency, RD1000, Sacramento Flood Control Agency, and the Central Valley Bird Club, as well as lack of community support.

4.4.5 Natomas/Sacramento Airport Station west of Levee Road

Findings: SJRRC hereby finds that this alternative is determined to be infeasible for the following reasons.

Facts in Support of Findings: This alternative to the Natomas/Sacramento Airport Station was considered that included the development of a station on a 47-acre site south of West Elkhorn Boulevard, west of Levee Road, and just east of the Natomas residential development. This station alternative is determined to be infeasible due to overwhelming negative community input and concern during the public scoping period.

4.4.6 Natomas/Sacramento Airport Interim Station

Findings: SJRRC hereby finds that this alternative is determined to be infeasible for the following reasons.

Facts in Support of Findings: This alternative to the Natomas/Sacramento Airport Station was considered that included the development of an interim station on a 20-acre site south of Cement Way and east of Sorento Road. This station alternative is determined to be infeasible due to right-of-way impacts to local businesses, as well as negative community input and concern raised during the public scoping period.

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5 Overriding Considerations

5.1 Introduction

CEQA requires decision-makers to balance the economic, legal, social, technological, or other benefits of a proposed project against its unavoidable environmental risks when determining whether to approve a project. If the specific economic, legal, social, technological or other benefits of the project outweigh the unavoidable adverse environmental effects, the adverse environmental effects may be considered acceptable (State CEQA Guidelines 15093). In this case, the lead agency must state in writing the specific reasons to support its action. This "statement of overriding considerations" shall be supported by substantial evidence in the record, shall be included in the record of the project approval, and should be mentioned in the notice of determination. Pursuant to Section 15093 of the CEQA Guidelines, a Statement of Overriding Considerations has been prepared for the project.

5.1 Statements of Fact in Support of Overriding Considerations

SJRRC hereby finds that the following social, legal, environmental and economic benefits of the proposed project outweigh the significant unavoidable impacts for the following reasons. These benefits, viewed both individually and collectively, outweigh the significant unavoidable adverse effects of implementing the proposed project. As summarized in Final EIR Chapter 1:

The proposed project would support enhanced intercity and commuter rail service between the Sacramento region, the Central Valley, and the San Francisco Bay Area by implementing direct passenger rail service between Sacramento and the cities of Stockton, San Jose, and Merced.

The proposed project would provide direct rail connections between the Sacramento area, the South San Francisco Bay Area, and the Central Valley via ACE and Amtrak San Joaquins rail services. The proposed project would also increase connectivity to other transportation networks throughout California via potential transfers at the San Jose Diridon Station to Caltrain, the Amtrak Capitol Corridor, and Santa Clara Valley Transportation Authority transit services; transfers to local transportation networks in Sacramento, including Sacramento Regional Transit (SacRT) light rail trains and buses at the proposed City College Station, Midtown Sacramento Station, and Old North Sacramento Station; transfers to the Sacramento International Airport via a shuttle from the proposed Natomas/Sacramento Airport Station; and transfers to the future California HSR system at the San Jose Diridon Station and Merced.

The expanded and improved San Joaquins and ACE services would provide transportation alternatives to automobile use along highway corridor segments on SR 99, SR 120, I-205, I-580, I-680, and I-880. As summarized in in Final EIR Section 3.16, *Transportation*, implementation of the proposed project would reduce VMT by inducing a mode shift from personal (household) automobiles to public transit, including for long-distance commute and intercity trips between Sacramento, the San Joaquin Valley, and the Bay Area. Based on forecasted ridership between each station pair on the route, the proposed project is expected to result in an annual VMT reduction of approximately 65,204,100 vehicle miles in 2025, including approximately 29,400,000

vehicle miles due to Amtrak San Joaquins service improvements and 35,804,100 vehicle miles due to ACE service improvements.

Project-related reductions in VMT would lead to improved regional air quality and reductions in GHG emissions. Reductions in air pollutant emissions can lead to long-term health benefits for residents and employees along the existing rail corridors, addressing health problems associated with air pollution such as lung irritation, inflammation, asthma, heart and lung disease, and worsening of existing chronic health conditions. In addition, reduction of GHG emissions would help California meet its goals under Assembly Bill 32 (the California Global Warming Solutions Act of 2006) as well as GHG emissions reduction goals beyond 2020. As summarized in Final EIR Section 3.3, *Air Quality*, implementation of the proposed project would improve existing passenger rail opportunities, which would reduce on-road VMT in the transportation network. When considering the displaced VMT that would result from increased rail use and reduced on-road travel, the proposed project would result in a net reduction in emissions of most pollutants. This transportation mode shift would be a regional air quality benefit of the proposed project.

The proposed project would improve access to economic opportunities and affordable housing all along the corridors of service and would particularly benefit the disadvantaged communities it would serve. The proposed project is well positioned to dramatically increase employment access to residents throughout the service area, particularly access for disadvantaged communities. The existing ACE service corridor from Stockton to San Jose provides access to approximately 1.04 million jobs in a 2.5-mile radius of the stations; existing San Joaquins service provides access to just under 600,000 jobs in the same station area radius. The proposed service expansions north and south of Stockton would provide access to an additional half-million jobs. All told, residents in the combined service areas would have access to more than 2.25 million jobs.

California's high housing costs make it difficult for many to find affordable housing. The combined service area would also provide rail connectivity to nearly 9,000 units of affordable housing within a half-mile of station areas.

Implementation of ACE and San Joaquins service on the Sacramento Subdivision would serve key transit-oriented development (TOD) opportunities in Central Sacramento. By 2020, more than 1,100 residential units and 1.3 million square feet of commercial development are planned within a 1-mile radius of the proposed City College Station, Midtown Sacramento Station, and Old North Sacramento Station.