



Executive Summary





Executive Summary

This section of the Subsequent Environmental Impact Report (SEIR) summarizes the characteristics of the proposed Tri-Valley San Joaquin Valley Regional Rail Authority's (Authority) revised Valley Link Rail Project (Proposed Project), environmental impacts, mitigation measures, and residual impacts with the Proposed Project.

The Authority, acting as lead agency under the California Environmental Quality Act (CEQA), prepared a Draft Environmental Impact Report (EIR) for the initial Valley Link Project, which focused on the 2021 Proposed Project. The Authority Board certified the Final EIR and approved the staff-recommended alternative to the 2021 Proposed Project on May 12, 2021 (the 2021 Certified Alternative modified the 2021 Proposed Project to substitute the Southfront Station Alternative for the Greenville Road Station and the Mountain House Station Alternative for the Mountain House Station). The 2021 Certified Alternative was a 42-mile, seven-station passenger rail project that would connect the existing Dublin/Pleasanton Bay Area Rapid Transit (BART) Station in Alameda County to the approved Altamont Corridor Express (ACE) North Lathrop Station in San Joaquin County. This alternative was anticipated to utilize existing transportation corridors: the existing Interstate 580 (I-580) corridor in the Tri-Valley, the Alameda Countyowned former Southern Pacific Railroad corridor through the Altamont Pass, and the existing Union Pacific Railroad (UPRR) corridor in northern San Joaquin County.

The Draft EIR for the previous project also included two initial operating segments (IOS). The Mountain House Station Alternative IOS is the basis of the Proposed Project evaluated in this SEIR. The Final EIR evaluated four vehicle technology variants (Diesel Multiple Unit, Hybrid Multiple Unit, Battery-Electric Multiple Unit, and Diesel Locomotive Haul); however, the 2021-Certified Alternative did not include a preferred vehicle technology. The preferred power source identified was one that would minimize air quality degradation and greenhouse gas (GHG) emissions and meet the desired performance criteria (including train speed and acceleration/deceleration rate). It was also recognized at that time that development of zero-emission vehicle technologies to meet these objectives was rapidly

advancing in the marketplace. A zero-emission hydrogen-powered vehicle that meets project goals and requirements is now available and has been identified.

The Authority has advanced design and analysis from the Mountain House Station Alternative IOS that was identified in the 2021 CEQA EIR to include a new alignment segment that would align with the potential Interstate 205 (I-205) rail corridor and responds to requests by the community of Mountain House for a relocated station. This new segment would enable improved station access and facilitate the advancement of transit-oriented development. This segment also includes a new Layover Facility (LF) at the east end of the alignment. These revisions to the project are now part of the Authority's Proposed Project. Extension of service beyond Mountain House would be subject to future environmental documentation.

This SEIR is intended to provide decision-makers and the public with information that enables them to intelligently consider the environmental consequences of the proposed action. This SEIR identifies significant or potentially significant environmental effects, as well as ways in which those impacts can be reduced to less than significant levels, through the imposition of mitigation measures, or through the implementation of alternatives to the Proposed Project.

Project Summary

The Proposed Project would establish a new passenger rail service along a 22-mile corridor in Northern California between the existing Dublin/Pleasanton BART Station in Alameda County and the proposed Mountain House Community Station in San Joaquin County. The Proposed Project would provide an all-day bi-directional passenger rail service at frequent intervals using zero-emission multiple unit vehicles. The alignment would be constructed within a combination of the existing I-580 freeway median, the existing transportation corridor owned by Alameda County (former Southern Pacific Transcontinental Railroad alignment), existing Caltrans right-of-way (ROW) adjacent to westbound I-580, and new ROW to be acquired for the Proposed Project.



The Proposed Project includes the construction and operation of four stations listed below:

- Dublin/Pleasanton Station would be constructed south of the eastbound I-580 freeway lanes in proximity to the existing Dublin/Pleasanton BART Station and would be designed to provide seamless intermodal passenger service between Valley Link, BART, and local bus transit services.
- **Isabel Station** would be constructed within the I-580 median with adjacent parking on a 24-acre site along East Airway Boulevard south of I-580 and east of the Isabel Avenue I-580 overcrossing in Livermore.
- Southfront Road Station in Livermore would be constructed within the I-580 median with adjacent parking located south of I-580 on a seven-acre site along Southfront Road between McGraw Avenue and Franklin Lane.
- Mountain House Community Station would be constructed north of I-205 on an approximately 54acre site west of Mountain House Parkway near the I-205/Mountain House Parkway interchange. The location of this station responds to stakeholder requests received throughout all phases of project development for a station in closer proximity to or within the Mountain House community.

Facilities to support the operations and maintenance and ancillary project activities are planned at the three locations described below.

- The Altamont Maintenance of Way (MOW) Staging Area would be constructed on a 10-acre portion of the Alameda County Transportation Corridor ROW, approximately 2,250 feet east of Dyer Road. The MOW may be used as a contractor staging area during construction and would ultimately be designed to support the short-term storage of vehicle rolling stock, non-revenue vehicles, and material laydown areas for maintenance of rail and systems infrastructure during the revenue operations period.
- The Mountain House LF would be constructed on an approximately 75-acre site east of Mountain House Parkway and north of I-205 to support train layovers, storage, and light maintenance. Access to the site would be provided from Mountain House

Parkway at a proposed four-way intersection that provides access to the Mountain House Community Station to the West and the Mountain House LF to the East. The Mountain House LF would also contain an Operations building and a vehicle maintenance building.

• Tracy Operations and Maintenance Facility/Operations Support Site (OMF/OSS) would be constructed on part of an approximately 200-acre property along West Schulte Road just west of the Owens-Brockway Glass Container Plant west of Tracy. The site would accommodate heavy maintenance vehicle and component rebuilds, non-revenue vehicle maintenance, buildings and stations maintenance, warehouse storage, as well as a Backup Control Center. The OMF/OSS would also include a material laydown area.

Consistent with the project purpose and need and implementing strategies identified in the Authority Board's adopted Sustainability Policy, the Proposed Project includes the use of zero-emission multiple unit vehicles. The use of hydrogen vehicles is assumed for environmental documentation given recent State procurement activities and consistency with the State Rail Plan.

Classification of Environmental Impacts

Under CEQA, a "significant impact" represents a substantial or potentially substantial adverse physical change to the environment. In evaluating specific effects, this SEIR identifies thresholds of significance for each effect, evaluates the potential environmental change associated with each effect, and then characterizes the effects as impacts in the following categories:

- Less than Significant—Results in no substantial adverse change to existing environmental conditions.
- Potentially Significant—Constitutes a substantial adverse change to existing environmental conditions that can be mitigated to less than significant levels by implementation of proposed potentially feasible mitigation measures or by the selection of an environmentally superior project alternative.



 Significant and Unavoidable—Constitutes a substantial adverse change to existing environmental conditions that cannot be fully mitigated by implementation of all feasible mitigation measures.

Alternatives

CEQA guidelines require a comparison of alternatives analyzed in an EIR and identification of an environmentally superior alternative. The environmentally superior alternative is the alternative (other than the Proposed Project) that would avoid or substantially lessen, to the greatest extent, the environmental impacts associated with the Proposed Project while feasibly obtaining most of the major project objectives. As required by CEQA Guidelines Section 15126.6(a) and recent court cases, an EIR must:

Describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project and evaluate the comparative merits of the alternatives.

Further, CEQA Guidelines Section 15126.6(b) states:

The discussion of alternatives shall focus on alternatives to the project or its location which are capable of avoiding or substantially lessening any significant effects of the project, even if these alternatives would impede to some degree the attainment of the project objectives or would be more costly.

The 2021 EIR evaluated the following four station alternatives, one OMF alternative, and one alignment alternative at an equal level of detail in the 2021 EIR as the 2021 Proposed Project:

• The Stone Cut Alignment Alternative would be the same as the 2021 Proposed Project, except for the alignment at the top of the Altamont Pass. Compared to the 2021 Proposed Project, this alternative would have slightly greater construction impacts due to a greater amount of earthwork. The Stone Cut Alignment Alternative's operations would produce less train fuel use and yield greater ridership (due to shorter service times). In turn, these operational impacts would have greater criteria pollutants, GHG emissions, and energy use

reductions. The Stone Cut Alignment Alternative would have greater visual effects because it would be more visible along eastbound I-580 at one location. The Stone Cut Alignment Alternative was included as part of the staff-recommended CEQA-Certified Alternative.

- The Southfront Road Station Alternative would be the same as the 2021 Proposed Project, except a new station would be constructed at Southfront Road rather than at Greenville Road. The Southfront Road Station Alternative would also result in higher ridership than the CEQA-Certified Alternative. The Southfront Road Station Alternative was included as part of the staff-recommended CEQA-Certified Alternative.
- The Mountain House Station Alternative would have lower impacts on biological resources and wildlife movement, important farmland, and land use and planning compared to the Mountain House Station included in the 2021 Proposed Project.
- The West Tracy OMF Alternative would be the same as the 2021 Proposed Project, except for the OMF location.
- The Downtown Tracy Parking Alternative 1 would be the same as the 2021 Proposed Project, except for use of a south garage.
- The Downtown Tracy Parking Alternative 2 would be the same as the 2021 Proposed Project, except for use of a north garage.

The following three alternatives, including the No Project Alternative, were analyzed in the 2021 EIR at a lesser level of detail than the 2021 Proposed Project.

- The No Project Alternative, which is assessed in this SEIR, would result in no new rail transit or other transit connection being established between the Central Valley and Bay Area. In this alternative, Phase I of the ACE Extension would be operational by 2026. Existing transit services between the Central Valley and Bay Area would continue, including ACE between Stockton and San Jose, BART, and the various existing bus connections to BART.
- The Bus/Bus Rapid Transit with Managed Lanes
 Alternative would require less new infrastructure
 than a rail project since it would use existing
 roadways to a large extent for express bus service.





This alternative would have substantially lower upfront capital costs than a rail project due to lower construction costs. Between Greenville Road and Dublin/Pleasanton BART Station, buses would operate in the existing I-580 Express Lanes. This alternative was determined to have less reductions of criteria pollutant emissions, GHG emissions, energy use, and VMT compared to the 2021 Proposed Project, resulting in its dismissal from further analysis.

The Electric Multiple Unit with Overhead Catenary System Alternative would generally be the same as the 2021 Proposed Project in terms of alignment, stations, frequency, ridership, and general operations. While the 2021 Proposed Project would use Diesel Multiple Unit, Hybrid Multiple Unit, Battery Electric Multiple Unit, or Diesel Locomotive Haul technology variants, the Electric Multiple Unit with Overhead Catenary System Alternative would use Electric Multiple Unit trainsets. These Electric Multiple Unit trainsets would receive electric power from an overhead catenary system consisting of wires running continuously above the alignment, supported by a series of poles placed immediately along the rail alignment (assumed to be within the same footprint as the Proposed Project). Although some Electric Multiple Unit trains are powered by a third rail, a third-rail system requires a completely enclosed right-of-way. An Electric Multiple Unit powered by a third rail was considered but dismissed from further analysis due to such concerns.

As the analysis for the other alternatives has not changed since preparation of the 2021 EIR and existing conditions on the alternatives are consistent with those described in the 2021 EIR, impacts identified for the alternatives in the 2021 EIR remain substantially true. Therefore, this SEIR provides analysis for the No Project Alternative, where additional analysis is required in order to comply with revised regulations or conditions have changed.

Summary of Impacts and Mitigation Measures

Pursuant to CEQA Guidelines Section 15123(b)(1), Table ES-1 contains a summary of environmental impacts associated with the Proposed Project, mitigation measures that would reduce or avoid those effects, and

the level of significance of the impacts following the implementation of mitigation measures.





Table ES-1: Summary of Impacts and Mitigation Measures

| Impacts | Significance before Mitigation | Mitigation Measures | Significance after Mitigation | Chapter |
|---|-----------------------------------|---|----------------------------------|----------------|
| Impact AES-1a: The construction of the Proposed Project would substantially degrade the existing visual character or quality of public views of the site and its surroundings in a non-urbanized area, including scenic vistas. | Potentially Significant | MM-AES-1: Install Visual Barriers between Construction Work Areas and Sensitive Residential and Recreational Viewers MM-AES-2: Limit Construction near Residences to Daylight Hours MM-AES-3: Minimize Fugitive Light from Portable Sources used for Construction MM-AES-4: Use Selective Grading and Planting Techniques in the Altamont Section | Less than Significant | 3.1 Aesthetics |
| Impact AES-1b: The operation of the Proposed Project could substantially degrade the existing visual character or quality of public views of the site and its surrounding in a non-urbanized area, including scenic vistas. | Potentially Significant | MM-AES-5: Landscape Parking Facilities at Stations MM-AES-6: Apply Aesthetic Design Treatments to Pedestrian Overcrossings, Viaduct Structures, and Retaining Walls with High Visibility Along I-580 and from Roadways in the Altamont Section MM-AES-7: Underground New Electric Transmission Lines in Visually Sensitive Areas MM-AES-8: Apply Aesthetic Surface Treatments to Certain Structures in Visually Sensitive Areas | Less than Significant | 3.1 Aesthetics |





| Impacts | Significance before Mitigation | Mitigation Measures | Significance after Mitigation | Chapter |
|--|-----------------------------------|---|----------------------------------|----------------|
| Impact AES-2: The Proposed Project could conflict with applicable zoning and other regulations governing scenic quality in an urbanized area, including scenic vistas. | Potentially Significant | MM-AES-5: Landscape Parking Facilities at Stations MM-AES-6: Apply Aesthetic Design Treatments to Pedestrian Overcrossings, Viaduct Structures, and Retaining Walls with High Visibility Along I580 and from Roadways in the Altamont Section MM-AES-7: Underground New Electric Transmission Lines in Visually Sensitive Areas MM-AES-8: Apply Aesthetic Surface Treatments to Certain Structures in Visually Sensitive Areas MM-AES-9: Replace Disturbed Vegetation Along Landscaped Freeways | Less than Significant | 3.1 Aesthetics |
| Impact AES-3: The Proposed Project could substantially damage scenic resources within a State Scenic Highway. | Potentially Significant | MM-AES-5: Landscape Parking Facilities at Stations MM-AES-6: Apply Aesthetic Design Treatments to Pedestrian Overcrossings, Viaduct Structures, and Retaining Walls with High Visibility Along I580 and from Roadways in the Altamont Section MM-AES-7: Underground New Electric Transmission Lines in Visually Sensitive Areas | Less than Significant | 3.1 Aesthetics |



| Impacts | Significance before Mitigation | Mitigation Measures | Significance after Mitigation | Chapter |
|--|-----------------------------------|---|----------------------------------|-------------------------------|
| | | MM-AES-8: Apply Aesthetic Surface Treatments to Certain Structures in Visually Sensitive Areas MM-AES-9 Replace Disturbed Vegetation Along Landscaped Freeways | | |
| Impact AES-4: The Proposed Project could create a new source of substantial light or glare that would adversely affect daytime or nighttime views near the Project improvements. | Potentially Significant | MM-AES-4: Use Selective Grading and Planting Techniques in the Altamont Section MM-AES-5: Landscape Parking Facilities at Stations MM-AES-8: Apply Aesthetic Surface Treatments to Certain Structures in Visually Sensitive Areas MM-AES-9 Replace Disturbed Vegetation Along Landscaped Freeways MM-AES-10: Apply Minimum Lighting Standards | Less than Significant | 3.1 Aesthetics |
| Impact-AG-1: Implementation of the Proposed Project would convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the FMMP of the California Resources Agency, to nonagricultural use. | Potentially Significant | MM-AG-1: Restore Important Farmlands used for Temporary Construction Activities MM-AG-2: Conserve Important Farmlands (Prime Farmland and Unique Farmland) | Less than Significant | 3.2 Agricultural Resources |





| Impacts | Significance before Mitigation | Mitigation Measures | Significance after Mitigation | Chapter |
|---|-----------------------------------|---------------------|----------------------------------|-------------------------------|
| Impact-AG-2: Implementation of the Proposed Project would not conflict with existing zoning for agricultural use, or a Williamson Act contract. | No Impact | None required | | 3.2 Agricultural Resources |
| Impact-AG-3: Implementation of the Proposed Project would not conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code § 12220(g)), timberland (as defined by Public Resources Code § 4526), or timberland zoned Timberland Production (as defined by Government Code § 51104[g]). | No Impact | None required | | 3.2 Agricultural Resources |
| Impact-AG-4: Implementation of the Proposed Project would not result in the loss of forest land or conversion of forest land to non- forest land use. | No Impact | None required | | 3.2 Agricultural Resources |
| Impact-AG-5: Implementation of the Proposed Project would not involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use. | No Impact | None required | | 3.2 Agricultural Resources |



| Impacts | Significance before Mitigation | Mitigation Measures | Significance after Mitigation | Chapter |
|---|-----------------------------------|--|----------------------------------|-----------------|
| Impacts Impacts Impacts Impacts Impacts Impacts Implementation of the Proposed Project could conflict with or obstruct implementation of the applicable air quality plans. | Potentially Significant | MM-AQ-1: Implement advanced emissions controls for off-road equipment during construction. MM-AQ-1: Implement Advanced Emissions Controls for Off-Road Equipment During Construction MM-AQ-2: Implement Off-Road Equipment Engine Maintenance and Idling Restrictions During Construction MM-AQ-3: Implement Fugitive Dust Controls During Construction MM-AQ-4: Offset Project Construction Emissions in the SFBAAB | Less than Significant | 3.3 Air Quality |
| Impact AQ-2: Construction of the Proposed Project could result in a cumulatively considerable net increase of any criteria air pollutant for which the Project region is designated a nonattainment area under an applicable federal or state ambient air quality standard. | Potentially Significant | MM-AQ-1: Implement advanced emissions controls for off-road equipment during construction. MM-AQ-1: Implement Advanced Emissions Controls for Off-Road Equipment During Construction MM-AQ-2: Implement Off-Road Equipment Engine Maintenance and Idling Restrictions During Construction MM-AQ-3: Implement Fugitive Dust Controls During Construction MM-AQ-4: Offset Project Construction Emissions in the SFBAAB | Less than Significant | 3.3 Air Quality |
| Impact AQ-3: Operation of the Proposed Project would not result in a cumulatively | Less than Significant | None required | | 3.3 Air Quality |





| Impacts | Significance before Mitigation | Mitigation Measures | Significance after Mitigation | Chapter |
|--|-----------------------------------|--|----------------------------------|-----------------------------|
| considerable net increase of any criteria air pollutant for which the Project region is designated a nonattainment area under an applicable federal or state ambient air quality standard. | | | | |
| Impact AQ-4: Construction of the Proposed Project would not expose sensitive receptors to substantial pollutant concentrations. | Less than Significant | None required | | 3.3 Air Quality |
| Impact AQ-5: Operation of the Proposed Project could expose sensitive receptors to substantial pollutant concentrations. | Less than Significant | None required | | 3.3 Air Quality |
| Impact AQ-6: Construction and operation of the Proposed Project would not result in other emissions (such as those leading to odors) adversely affecting a substantial number of people. | Less than Significant | None required | | 3.3 Air Quality |
| Impact BIO-General: Construction of the Proposed Project could result in impacts to sensitive species and habitat, as well as to common biological resources. | Potentially Significant | MM-BIO-1 Worker Environmental Awareness Training MM-BIO-2 Preconstruction Surveys and On-site Monitoring MM-BIO-3 Protect Sensitive Natural Communities, Including Riparian Habitat, During Construction | Less than Significant | 3.4 Biological Resources |



| Impacts | Significance before Mitigation | Mitigation Measures | Significance after Mitigation | Chapter |
|---|-----------------------------------|---|----------------------------------|-----------------------------|
| | | MM-BIO-4 Construction Work, Access, and Staging Areas MM-BIO-5 Construction Discharges MM-BIO-6 Vegetation Removal MM-BIO-7- Replant, Reseed, and Restore Disturbed Areas MM-BIO-8 Prevent Introduction or Spread of Invasive Plant Species MM-BIO-9 Implementation of Water Quality/Erosion Control Best Management Practices MM-BIO-10 Construction Site BMPs | | |
| Impact BIO-1a: Construction of the Proposed Project could have a substantial adverse effect, either directly or through habitat modifications, on any plant species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS. | Potentially Significant | MM-BIO-11: Conduct Preconstruction Surveys Specific to Special-Status Plant Species MM-BIO-12: Document Affected Special-Status Plant Species MM-BIO-13: Protect Vernal Pool- Endemic Species MM-BIO-14: Prepare a Salvage, Relocation, or Propagation and Monitoring Plan for Special-Status Plant Species | Less than Significant | 3.4 Biological Resources |
| Impact BIO-1b: Construction of the Proposed Project could have a substantial adverse effect, either directly or through habitat modifications, on any wildlife | Potentially Significant | MM-BIO-1: Worker Environmental Awareness Training MM-BIO-13: Protect Vernal Pool- Endemic Species | Less than Significant | 3.4 Biological Resources |





| Impacts | Significance before Mitigation | Mitigation Measures | Significance after Mitigation | Chapter |
|--|-----------------------------------|--|----------------------------------|---------|
| species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS. | | MM-BIO-15: Compensate for impacts to Vernal Pool Species MM-BIO-16: Protect Crotch's Bumble Bee and Western Bumble Bee Nesting Habitat and Floral Resources MM-BIO-17: Encourage Growth of Nectar and Pollen-Producing Plants MM-BIO-18: Protect California Tiger Salamander, Foothill Yellow-Legged Frog, Western Spadefoot Toad, and California Red-legged Frog MM-BIO-19: Compensate for California | | |
| | | Red-legged Frog, Foothill Yellow- legged Frog, and Western Spadefoot Habitat Loss MM-BIO-20: Compensate for California Tiger Salamander Habitat Loss | | |
| | | MM-BIO-21: Protect California Glossy Snake, Coast Horned Lizard, and San Joaquin Coachwhip | | |
| | | MM-BIO-22: Protect Northwestern Pond Turtle | | |
| | | MM-BIO-23: Protect Nesting Birds | | |
| | | MM-BIO-24: Protect Golden Eagles | | |
| | | MM-BIO-25: Protect Swainson's Hawk Nests | | |
| | | MM-BIO-26: Protect Burrowing Owls and Burrowing Owl Habitat | | |



| Impacts | Significance before Mitigation | Mitigation Measures | Significance after Mitigation | Chapter |
|---|-----------------------------------|---|----------------------------------|-----------------------------|
| | | MM-BIO-27: Compensate for Swainson's Hawk Foraging Habitat Loss MM-BIO-28: Compensate for Burrowing Owl Habitat Loss MM-BIO-29: Protect American Badger, San Joaquin Kit Fox, Mountain Lion, and their Habitat MM-BIO-30: Avoid Use of Second-Generation Anticoagulant Rodenticides MM-BIO-31: Develop Feasibility Study for Wildlife Movement Corridors MM-BIO-32: Protect Roosting Bats MM-BIO-33: Protect Roosting Bats During Maintenance Activities MM-BIO-34: Compensate for American Badger, San Joaquin Kit Fox, and Mountain Lion Habitat Loss | | |
| Impact BIO-2: Implementation of the Proposed Project could have a substantial adverse effect on riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the CDFW or USFWS. | Potentially Significant | MM-BIO-1 Worker Environmental Awareness Training MM-BIO-2 Preconstruction Surveys and On-site Monitoring MM-BIO-3 Protect Sensitive Natural Communities, Including Riparian Habitat, During Construction MM-BIO-4 Construction Work, Access, and Staging Areas MM-BIO-5 Construction Discharges MM-BIO-6 Vegetation Removal | Less than Significant | 3.4 Biological Resources |





| Impacts | Significance before Mitigation | Mitigation Measures | Significance after Mitigation | Chapter |
|--|-----------------------------------|---|----------------------------------|-----------------------------|
| | | MM-BIO-7 Replant, Reseed, and Restore Disturbed Areas MM-BIO-8 Prevent Introduction or Spread of Invasive Plant Species MM-BIO-9 Implementation of Water Quality/Erosion Control Best Management Practices MM-BIO-10 Construction Site BMPs | | |
| Impact BIO-3: Implementation of the Proposed 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. | Potentially Significant | MM-BIO-3: Protect Sensitive Natural Communities, Including Riparian Habitat, During Construction MM-BIO-35: Protect Wetlands During Construction MM-BIO-36: Compensate for Impacts on Jurisdictional Wetlands and Nonwetland Waters of the United States (Aquatic Resources) Prior to Impacts during Construction | Less than Significant | 3.4 Biological Resources |
| Impact BIO-4: Implementation of the Proposed Project would not interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites. | Less than Significant | None required | | 3.4 Biological Resources |



| Impacts | Significance before Mitigation | Mitigation Measures | Significance after Mitigation | Chapter |
|--|-----------------------------------|--|----------------------------------|-----------------------------|
| Impact BIO-5: Implementation of the Proposed Project would not be in conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance. | Potentially Significant | MM-BIO-37 – Compensate for Tree removal during Construction | Less than Significant | 3.4 Biological Resources |
| Impact BIO-6: Implementation of the Proposed Project would not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state Habitat Conservation Plan. | Less than Significant | None required | | 3.4 Biological Resources |
| Impact CUL-1: Construction and operation of the Proposed Project would not directly or indirectly cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5. | Less than Significant | None required | | 3.5 Cultural Resources |
| Impact CUL-2: Construction and operation of the Proposed Project could cause a substantial adverse change in the significance of an archaeological resource. | Potentially Significant | MM-CUL-1: Conduct Cultural Resources Awareness Training.MM- CUL-2: Develop an Archaeological Monitoring Plan MM-CUL-3: Conduct Archaeological Monitoring | Less than Significant | 3.5 Cultural Resources |





| Impacts | Significance before Mitigation | Mitigation Measures | Significance after Mitigation | Chapter |
|--|-----------------------------------|---|----------------------------------|---------------------------|
| | | MM-CUL-4: Implement Procedures in case of Unanticipated Discoveries | | |
| Impact CUL-3: Construction of the Proposed Project could disturb human remains, including those interred outside of formal cemeteries. | Potentially Significant | MM-CUL-5: Comply with State Laws relating to Native American Remains | Less than Significant | 3.5 Cultural Resources |
| Impact CUL-4: Construction of the Proposed Project could cause a substantial adverse change in the significance of a Tribal Cultural Resource. | Potentially Significant | MM-CUL-1: Conduct Cultural Resources Awareness Training.MM- CUL-2: Develop an Archaeological Monitoring Plan MM-CUL-3: Conduct Archaeological Monitoring MM-CUL-4: Implement Procedures in case of Unanticipated Discoveries MM-CUL-5: Comply with State Laws relating to Native American Remains | Less than Significant | 3.5 Cultural Resources |
| Impact EN-1: The Proposed Project would not result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation. | Less than Significant | None required | | 3.6 Energy |
| Impact EN-2: The Proposed Project would not conflict with or obstruct a state of local plan | Less than Significant | None required | | 3.6 Energy |



| Impacts | Significance before Mitigation | Mitigation Measures | Significance after Mitigation | Chapter |
|--|-----------------------------------|---------------------|----------------------------------|---|
| for renewable energy or energy efficiency. | | | | |
| Impact GEO-1: Implementation of the Proposed Project would not directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault. | Less than Significant | None required | | 3.7 Geology, Soils, Mineral, and Paleontological Resources |
| Impact GEO-2: Implementation of the Proposed Project would expose people and/or structures to potentially substantial adverse effects resulting from strong seismic ground shaking or seismic-related ground failure. | Less than Significant | None required | | 3.7 Geology, Soils, Mineral, and Paleontological Resources |
| Impact GEO-3: Implementation of the Proposed Project could directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death, involving landslides. | Less than Significant | None required | | 3.7 Geology, Soils, Mineral, and Paleontological Resources |





| Impacts | Significance before Mitigation | Mitigation Measures | Significance after Mitigation | Chapter |
|--|-----------------------------------|---------------------|----------------------------------|---|
| Impact GEO-4: Implementation of the Proposed Project could result in soil erosion or the loss of topsoil. | Less than Significant | None required | | 3.7 Geology, Soils, Mineral, and Paleontological Resources |
| Impact GEO-5: Implementation of the Proposed Project would be located on a geographic unit or soil that is unstable, or that would become unstable as a result of the Project, and potentially result in on- or offsite landslide, lateral spreading, subsidence, liquefaction, or collapse. | Less than Significant | None required | | 3.7 Geology, Soils, Mineral, and Paleontological Resources |
| Impact GEO-6: Implementation of the Proposed Project would be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property. | Less than Significant | None required | | 3.7 Geology, Soils, Mineral, and Paleontological Resources |
| Impact GEO-7: Implementation of the Proposed Project could have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater. | Less than Significant | None required | | 3.7 Geology, Soils, Mineral, and Paleontological Resources |



| Impacts | Significance before Mitigation | Mitigation Measures | Significance after Mitigation | Chapter |
|--|---|--|----------------------------------|---|
| Impact GEO-8: Implementation of the Proposed Project would not result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state. | No Impact | None required | | 3.7 Geology, Soils, Mineral, and Paleontological Resources |
| Impact GEO-9: Implementation of the Proposed Project would directly or indirectly destroy a unique paleontological resource or site or unique geologic feature. | Potentially Significant | MM-GEO-1: Authority Shall Monitor for discovery of Paleontological Resources, Evaluate Found Resources, and Prepare and Follow A Recovery Plan for Found Resources | Less than Significant | 3.7 Geology, Soils, Mineral, and Paleontological Resources |
| Impact GHG-1: The Proposed Project could generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment. | Less than Cumulatively Considerable | None required | | 3.8 Greenhouse Gas Emissions |
| Impact GHG-2: The Proposed Project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs. | Less than Cumulatively Considerable | None required | | 3.8 Greenhouse Gas Emissions |
| Impact HAZ-1: Implementation of the Proposed Project would not create significant hazards to the public or the environment through the routine transport, | Less than Significant | None required | | 3.9 Hazards and Hazardous Materials |





| Impacts | Significance before Mitigation | Mitigation Measures | Significance after Mitigation | Chapter |
|---|-----------------------------------|---|----------------------------------|---|
| use, or disposal of hazardous materials. | | | | |
| Impact HAZ-2: Implementation of the Proposed Project would not create significant hazards to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials. | Less than Significant | None required | | 3.9 Hazards and Hazardous Materials |
| Impact HAZ-3: Implementation of the Proposed Project would emit hazardous materials or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school. | Potentially Significant | MM-HAZ-1 – Implement Construction Risk Management Plan | Less than Significant | 3.9 Hazards and Hazardous Materials |
| Impact HAZ-4: Implementation of the Proposed Project would be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would create a significant hazard to the public or the environment. | Potentially Significant | MM-HAZ-1 – Implement Construction Risk Management Plan | Less than Significant | 3.9 Hazards and Hazardous Materials |
| Impact HYD-1: Construction and operation of the Proposed | Less than Significant | None required | | 3.10 Hydrology and Water Quality |



| Impacts | Significance before Mitigation | Mitigation Measures | Significance after Mitigation | Chapter |
|---|-----------------------------------|---|----------------------------------|-------------------------------------|
| Project would not violate water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality. | | | | |
| Impact HYD-2: Construction and operation of the Proposed Project would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the Project may impede sustainable groundwater management of the basin. | Less than Significant | None required | | 3.10 Hydrology and Water Quality |
| Impact HYD-3: Construction and operation of the Proposed Project would not substantially alter existing drainage patterns, through the addition of impervious surfaces, in a manner that would result in substantial erosion or siltation on- or offsite. | Less than Significant | None required | | 3.10 Hydrology and Water Quality |
| Impact HYD-4: Construction and operation of the Proposed Project could alter existing drainage patterns, through the addition of impervious surfaces, and substantially increase the rate or amount of surface runoff in a manner that could result in | Potentially Significant | MM-HYD-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 | Less than Significant | 3.10 Hydrology and Water Quality |





| Impacts | Significance before Mitigation | Mitigation Measures | Significance after Mitigation | Chapter |
|---|-----------------------------------|--|----------------------------------|-------------------------------------|
| on- or off-site flooding and impede or redirect flood flows. | | MM-HYD-2: Perform Hydrologic and Hydraulic Studies for Project Improvements to be Located in Floodplains | | |
| Impact HYD-5: Construction and operation of the Proposed Project could substantially alter the existing drainage patterns, through the addition of impervious surfaces, in a manner that would provide substantial additional sources of polluted runoff. | Potentially Significant | MM-HYD-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. | Less than Significant | 3.10 Hydrology and Water Quality |
| Impact HYD-6: Implementation of the Proposed Project in flood hazard zones could risk the release of pollutants due to Project inundation. | Potentially Significant | MM-HYD-3: Prevent Construction Materials from being exposed to Storm Flooding Hazards | Less than Significant | 3.10 Hydrology and Water Quality |
| Impact HYD-7: Implementation of the Proposed Project would not release pollutants due to inundation from a tsunami or seiche. | No Impact | None required | | 3.10 Hydrology and Water Quality |
| Impact HYD-8: Implementation of the Proposed Project would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan. | No Impact | None required | | 3.10 Hydrology and Water Quality |



| Impacts | Significance before Mitigation | Mitigation Measures | Significance after Mitigation | Chapter |
|---|-----------------------------------|---|----------------------------------|-------------------------------|
| Impact LU-1: Implementation of the Proposed Project would not physically divide an established community. | Less than Significant | None required | | 3.11 Land Use and Planning |
| Impact LU-2: Implementation of the Proposed Project would not cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect. | Less than Significant | None required | | 3.11 Land Use and Planning |
| Impact NV-1: Construction activities associated with the Proposed Project would result in a temporary increase in noise levels in excess of applicable standards. | Potentially Significant | MM-NV-1: Develop and Implement a Construction Noise Reduction Plan | Less than Significant | 3.12 Noise and Vibration |
| Impact NV-2: Construction activities could result in an increase in vibration levels in excess of applicable standards. | Potentially Significant | MM-NV-2: Develop and Implement a Construction Vibration Reduction Plan | Less than Significant | 3.12 Noise and Vibration |
| Impact NV-3: Operation of the Proposed Project would result in an increase in noise levels in excess of applicable standards. | Less than Significant | None required | | 3.12 Noise and Vibration |
| Impact NV-4: Operation of the Proposed Project would not | Less than Significant | None required | | 3.12 Noise and Vibration |





| Impacts | Significance before Mitigation | Mitigation Measures | Significance after Mitigation | Chapter |
|--|-----------------------------------|---------------------|----------------------------------|-----------------------------|
| result in an increase in vibration levels in excess of applicable standards. | | | | |
| Impact NV-5: The Proposed Project would not expose people residing or working in the project area to excessive noise levels due to airport operations. | Less than Significant | None required | | 3.12 Noise and Vibration |
| Impact POP-1: Implementation of the Proposed Project would not induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example through extension of roads or other infrastructure.) | Less than Significant | None required | | 3.13 Population and Housing |
| Impact POP-2: Implementation of the Proposed Project could displace existing housing, or housing necessitating the construction of replacement housing elsewhere. | Less than Significant | None required | | 3.13 Population and Housing |
| Impact PS-1: Implementation of the Proposed Project would not result in substantial adverse physical impacts associated with the provision of, or need for, new or physically altered fire | Less than Significant | None required | | 3.14 Public Services |



| lungete | Significance before Mitigation | Misigration Managemen | Significance after Mitigation | Chapter |
|---|-----------------------------------|-----------------------|----------------------------------|-------------------------|
| protection and emergency response facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for fire protection and emergency response. | Mitigation | Mitigation Measures | Mitigation | Cnapter |
| Impact PS-2: Implementation of the Proposed Project would not result in substantial adverse physical impacts associated with the provision of, or need for, new or physically altered police protection facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for police protection. | Less than Significant | None required | | 3.14 Public Services |
| Impact PS-3: The Proposed Project would not result in substantial adverse physical impacts associated with the provision of, or need for, new or physically altered school facilities and other public facilities, the | No Impact | None required | | 3.14 Public Services |





| Impacts | Significance before Mitigation | Mitigation Measures | Significance after Mitigation | Chapter |
|--|-----------------------------------|---------------------|----------------------------------|-----------------------------|
| construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for schools and other public facilities. | | | | |
| Impact REC-1: Implementation of the Proposed Project would not 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. | Less than Significant | None required | | 3.15 Recreation |
| Impact REC-2: Implementation of the Proposed Project would not include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment and/or result in substantial adverse physical effects on the environment. | No Impact | None required | | 3.15 Recreation |
| Impact SAF-1: Implementation of the Proposed Project would not impair implementation of or physically interfere with an | Less than Significant | None required | | 3.16 Safety and Security |



| Impacts | Significance before Mitigation | Mitigation Measures | Significance after Mitigation | Chapter |
|---|-----------------------------------|---------------------|----------------------------------|-----------------------------|
| adopted emergency response plan or emergency evacuation plan. | | | | |
| Impact SAF-2: Implementation of the Proposed Project would not result in a safety hazard or excessive noise for people residing or working in the project area, for a project located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport. | Less than Significant | None required | | 3.16 Safety and Security |
| Impact SAF-3: Implementation of the Proposed Project would not substantially increase hazards to workers, passengers, or adjacent human and environmental receptors along rail routes due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses. | Less than Significant | None required | | 3.16 Safety and Security |
| Impact SAF-4: Implementation of the Proposed Project could expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires. | Less than Significant | None required | | 3.16 Safety and Security |





| Impacts | Significance before Mitigation | Mitigation Measures | Significance after Mitigation | Chapter |
|--|-----------------------------------|---------------------|----------------------------------|-----------------------------|
| Impact SAF-5: If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, implementation of the Proposed Project would not substantially impair an adopted emergency response plan or emergency evacuation plan. | Less than Significant | None required | | 3.16 Safety and Security |
| Impact SAF-6: Implementation of the Proposed Project would not exacerbate wildfire risks and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire due to slope, prevailing winds, and other factors. | Less than Significant | None required | | 3.16 Safety and Security |
| Impact SAF-7: Implementation of the Proposed Project would not require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment. | Less than Significant | None required | | 3.16 Safety and Security |



| Impacts | Significance before Mitigation | Mitigation Measures | Significance after Mitigation | Chapter |
|---|-----------------------------------|---|----------------------------------|---------------------------------------|
| Impact SAF-8: Implementation of the Proposed Project would not expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes. | Less than Significant | None required | | 3.16 Safety and Security |
| Impact TRA-1: Implementation of the Proposed Project could conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities. | Potentially Significant | MM-TRA-1: Transportation Management Plan for Project Construction MM-TRA-2: Mainline Railway Disruption Control Plan for Project Construction MM-TRA-3: BART Railway Disruption Control Plan for Project Construction | Less than Significant | 3.17 Transportation and Traffic |
| Impact TRA-2: Implementation of the Proposed Project would not conflict or be inconsistent with CEQA Guideline Section 15064.3, subdivision (b). | Less than Significant | None required | | 3.17 Transportation and Traffic |
| Impact TRA-3: Implementation of the Proposed Project would not substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment). | Less than Significant | None required | | 3.17 Transportation and Traffic |





| Impacts | Significance before Mitigation | Mitigation Measures | Significance after Mitigation | Chapter |
|---|-----------------------------------|---------------------|----------------------------------|---------------------------------------|
| Impact TRA-4: Implementation of the Proposed Project would not result in inadequate emergency access. | Less than Significant | None required | | 3.17 Transportation and Traffic |
| Impact USS-1: Implementation of 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 telecommunication facilities, the construction or relocation of which could cause significant environmental effects. | Less than Significant | None required | | 3.18 Utilities and Service Systems |
| Impact USS-2: Implementation of the Proposed Project would have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years. | Less than Significant | None required | | 3.18 Utilities and Service Systems |
| Impact USS-3: Implementation of the Proposed Project could result in a determination by the wastewater treatment provider that serves or may serve the project that it does not have | Less than Significant | None required | | 3.18 Utilities and Service Systems |



| Impacts | Significance before Mitigation | Mitigation Measures | Significance after Mitigation | Chapter |
|---|-----------------------------------|---------------------|----------------------------------|---------------------------------------|
| adequate capacity to serve the project's projected demand in addition to the provider's existing commitments. | | | | |
| Impact USS-4: Implementation of the Proposed Project would not generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals. | Less than Significant | None required | | 3.18 Utilities and Service Systems |
| Impact USS-5: Implementation of the Proposed Project would comply with federal, state, and local management and reduction statutes and regulations related to solid waste. | No Impact | None required | | 3.18 Utilities and Service Systems |