Appendix A

Mitigation Monitoring Plan

MITIGATION MEASURES	Party Responsible for Implementation	Implementation Timing	Monitoring Agency
Aesthetics			
Mitigation Measure AES-1: Implement Project Landscaping Plan to Provide a Visual Buffer and to Improve Aesthetics The construction contractor will adhere to the following practices in implementing the project landscaping plan that will address replacement of removed landscaping within the right of way and to creating a landscaped buffer for residences: • The species composition will reflect species that are consistent with other plant species in the surrounding developments. The species list should include trees, shrubs, and a herbaceous understory of varying heights, as well as evergreen and deciduous types. Plant variety will increase the effectiveness of the screen by providing multiple layers, seasonality, more diverse habitat, and reduced susceptibility to disease. • The planting design will be consistent with the surrounding development. Where appropriate the planting design shall be randomized to mimic natural patterns. • Vegetation will be planted as part of the project construction. • An irrigation and maintenance program will be implemented during the plant establishment period.	Construction contractor	Concurrent with construction	The agency responsible for construction[1]—Quality Assurance/Quality Control (QA/QC) project manager
Mitigation Measure AES-2: Implement Aesthetic Treatments on Proposed Retaining Walls The construction contractor will use a roughened wall surface on all retaining walls for the berm at the approaches to the passenger rail station to soften the verticality of the wall face by providing visual texture and reducing the amount of smooth surface that can reflect light. Choosing earth-toned colors for the wall surface would be less distracting to viewers and help the wall blend with planted vegetation as it matures. Adding a design motif to the wall face would reduce visual monotony, soften verticality, and be more visually pleasing than a plain wall surface. The involvement of local residents in the selection of aesthetic treatments may be considered, as they would be the most affected by the installation of retaining walls.	Construction contractor	Concurrent with construction	The agency responsible for construction—QA/QC project manager

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Mitigation Measure AES-3: Shield Construction Lighting and Direct it away from Sensitive Uses and the Sky To reduce the effects of night illumination, the construction contractor will assure that all construction lighting is shielded and directed away from sensitive uses and the sky.	The agency responsible for construction[1]	Concurrent with construction activities.	The agency responsible for construction—QA/QC project manager
Mitigation Measure Air-1: Implement Dust and Vehicle Emission Control Measures The construction contractor will implement feasible control measures presented in Table 3.2-3 of the DEIR to control dust emissions during construction.	The agency responsible for construction	Concurrent with construction commencement.	The agency responsible for construction—QA/QC project manager and BAAQMD
Mitigation Measure BIO-1: Conduct Mandatory Contractor/Worker Awareness Training for Construction Personnel. Before any work occurs in the project area, including grading, a qualified biologist will conduct mandatory contractor/worker awareness training for construction personnel. The awareness training will be provided to all construction personnel to brief them on the need to avoid impacts on biological resources, particularly wetlands and riparian habitat, and the penalties for not complying with biological mitigation requirements. If new construction personnel are added to the project, the contractor will ensure that the personnel receive the mandatory training before starting work.	The agency responsible for construction	Prior to construction commencement.	The agency responsible for construction—QA/QC project manager
Mitigation Measure BIO-2: Install Construction Barrier Fencing to Protect Wetlands, Riparian Habitat, and Other Sensitive Biological Resources Adjacent to the Construction Zone. The contractor will install orange construction barrier fencing to identify environmentally sensitive areas. The construction specifications will require that a qualified biologist identify wetlands, riparian habitat, and other sensitive biological habitat on site and identify areas to avoid during construction. Sensitive communities within the area that would generally be required for construction, including staging and access, should be fenced off to avoid disturbance in these areas. Wetlands adjacent to the project area are present at the Industrial connection. Riparian habitat is present at Alameda Creek and Dry Creek. Before construction, the construction contractor will work with the project engineer and a resource	The agency responsible for construction	Prior to construction commencement.	The agency responsible for construction—QA/QC project manager

MITIGATION MEASURES	Party Responsible for Implementation	Implementation Timing	Monitoring Agency
specialist to identify the locations for the barrier fencing, and will place stakes around the sensitive resource sites to indicate these locations. The protected area will be designated an environmentally sensitive area and clearly identified on the construction specifications. The fencing will be installed before construction activities are initiated and will be maintained throughout the construction period. The following paragraph will be included in the construction specifications: The Contractor's attention is directed to the areas designated "environmentally sensitive areas." These areas are protected, and no entry by the Contractor for any purpose will be allowed unless specifically authorized in writing by The agency responsible for construction. The Contractor will take measures to ensure that Contractor's forces do not enter or disturb these areas, including giving written notice to employees and subcontractors. Temporary fences around the environmentally sensitive areas will be installed as the first order of work. Temporary fences will be furnished, constructed, maintained, and removed as shown on the plans, as specified in the special provisions, and as directed by the project engineer. The fencing will be commercial-quality woven polypropylene, orange in color, and at least 4 feet high (Tensor Polygrid or equivalent). The fencing will be tightly strung on posts with a maximum 10-foot spacing.			
Mitigation Measure BIO-3: Retain a Biologist to Monitor Construction Activities. The agency responsible for construction will retain a biologist to make a monthly monitoring visit to the project site whenever construction is being conducted at the Industrial connection or in the vicinity of Alameda Creek or Dry Creek. The biologist will assist the construction crew, as needed, to comply with all project implementation restrictions and guidelines. In addition, the biologist will be responsible for ensuring that the contractor maintains the staked and flagged perimeters of the construction area and staging areas adjacent to sensitive biological resources identified through Mitigation Measure BIO-2.	The agency responsible for construction	Prior to construction commencement and during applicable construction activities.	The agency responsible for construction—QA/QC project manager and qualified biologist

MITIGATION MEASURES	Party Responsible for Implementation	Implementation Timing	Monitoring Agency
Mitigation Measure BIO-4: Restore, Create, and Protect Wetland Habitat to Mitigate Temporary or Permanent Loss of Wetland Habitat The Proposed Project is not expected to temporarily or permanently affect wetland habitat. In the event that such loss proves unavoidable, in order to ensure that implementation of the Proposed Project results in no net loss of wetland habitat functions and values, the agency responsible for construction will compensate for the loss of wetland habitat through either onsite restoration/creation and/or offsite protection and enhancement of wetland habitat. The size and location(s) of the area(s) to be restored/created will be determined based on appropriate mitigation ratios derived in consultation with the Corps. A mitigation plan will be prepared by a biologist experienced in mitigation and restoration. The plan will be implemented under the biologist's guidance. Subject to approval by the Corps, the wetland mitigation plan will address temporary and permanent impacts. Factors that will be considered in developing an effective mitigation plan in consultation with the Corps include the following. • Function and values: Wildlife species, percentage of vegetative cover and/or density, approximate plant height; plant and animal species diversity, root development, and canopy stratification. • Hydrological regime: Sources of water, discharge points, areas affected by seasonal flooding, direction of flow, and size of watershed. Specific measurable criteria for the above factors will be incorporated into the plan in conformance with applicable regulatory requirements and the Corps' Guidelines. Such criteria cannot be specifically identified at this stage, however, because the Corps has not visited the site. Prior to any work that could disturb wetland or creek habitat within the project corridor, the agency responsible for construction will obtain the following permits as required. • U.S. Army Corps of Engineers – Nationwide or individual permit as required under Clean Water Act Section 404. • San Francisco Bay Regional Water Quality Control Board – Water quality certification or waiver under Clean Water Act Section 401. • California Department of Fish and Game – Streambed Alteration Agreement.	The agency responsible for construction	Prior to construction commencement.	The agency responsible for construction—QA/QC project manager and U.S Army Corps of Engineers.

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Consultation with these agencies will govern how the disturbance of wetland and creek habitats will be mitigated.			
Mitigation Measure BIO-5: Enhance, Recreate, or Restore Riparian Forest to Compensate for the Loss of Riparian Forest Habitat The Proposed Project is not expected to temporarily or permanently affect riparian habitat. In the event that such loss proves unavoidable, the agency responsible for construction will compensate for the permanent loss of riparian forest habitat at Alameda Creek and Dry Creek through offsite or onsite restoration/creation of forested riparian habitat elsewhere. Compensation will be provided at a minimum ratio of 1:1 (1 acre restored or created for every acre removed). Restoration activities will occur after construction. The agency responsible for construction will retain a qualified restoration ecologist to develop a conceptual restoration and monitoring plan that describes how riparian habitat will be enhanced or recreated and monitored over a minimum period of time. The agency responsible for construction will be responsible for ensuring that the restoration and monitoring plan is implemented. After restoration and revegetation are completed, monitoring will be conducted for a minimum of 5 years to ensure that the success criteria identified below are met and to identify any necessary remedial actions. The revegetation/restoration plan for riparian habitats will be considered successful when the following criteria are met. • The restored site is composed of a mix of species similar to that removed during the construction activity. • The restored site has at least 75% of the absolute cover of native vegetation present in areas immediately adjacent to the construction corridor. • Plantings are self-sustaining without human support (e.g., weed control, rodent and deer control, irrigation). • Functions and values of the restored habitat are comparable to those of adjacent undisturbed riparian habitat. Remedial action will be required if any of the above criteria are not met during the monitoring period. The purpose of the remedial action will be to ensure that the above criteria are met.	The agency responsible for construction	After construction activities have ceased.	The agency responsible for construction—QA/QC project manager

MITIGATION MEASURES	Party Responsible for Implementation	Implementation Timing	Monitoring Agency
Mitigation Measure BIO-6: Conduct a Tree Survey to Assess Tree Resources Affected by the Proposed Project The agency responsible for construction will retain a certified arborist to conduct a tree survey of the project corridor, including potential contractor laydown areas, and identify and evaluate trees, including any landmark trees as identified by the City of Fremont or Union City, that will be removed. If the arborist's survey does not identify any protected trees or known landmark trees that would be removed or damaged as a result of the Proposed Project, no further mitigation is necessary. However, if the Proposed Project would remove or damage any protected tree(s), Mitigation Measure BIO-7 as described below will also be implemented.	The agency responsible for construction	Prior to commencing construction	The agency responsible for construction—QA/QC project manager
Mitigation Measure BIO-7: Compensate for Removal of Protected Trees For any protected tree with a trunk diameter in excess of 4 inches measured at 4 feet above ground level that is removed as a result of the Proposed Project, the agency responsible for construction will ensure that replacement trees are planted in the project corridor. At a minimum, each removed tree that meets the 4-inch size standard will be replaced with either (i) one replacement tree of 24-inch box size, or (ii) three replacement trees of 15-gallon size. Replacement trees will belong to a native species such as coast live oak (*Quercus agrifolia*), California buckeye (*Aesculus californica*), California bay laurel (*Umbellularia californica*), or other appropriate species consistent with existing landscaping. Trees will be planted in close proximity to removal sites, in locations suitable for the replacement species. Selection of replacement sites and installation of replacement plantings will be supervised by a qualified botanist or the City arborist of the jurisdiction in which the planting is proposed. Newly planted trees will be monitored by a qualified botanist/arborist at least once a year for 5 years. Each year, any trees that do not survive will be replaced. Any trees planted as remediation for failed plantings will be planted as stipulated here for original plantings, and will be monitored for a period of 5 years following installation. Tree replacement will occur as part of project construction.	The agency responsible for construction	Concurrent with construction activities.	The agency responsible for construction—QA/QC project manager
Mitigation Measure BIO-8: Conduct a Preconstruction Survey for Western Pond Turtle in Suitable Habitat The agency responsible for construction shall retain a qualified biologist to conduct a preconstruction western pond turtle survey in suitable habitat throughout the project area. The pre-construction survey shall be conducted at most 24 hours before the	The agency responsible for construction/qualified biologist	24 hours prior to commencing construction.	The agency responsible for construction—QA/QC project manager

MITIGATION MEASURES	Party Responsible for Implementation	Implementation Timing	Monitoring Agency
start of construction activities at the channels. If a western pond turtle is located in the construction area, the biologist shall relocate the turtle and an exclusion fence shall be installed to prevent the movement of turtles back into the construction area.			
Mitigation Measure BIO-9: Conduct a Focused Preconstruction Survey for Raptor Nests and Nesting Birds Before the onset of construction activities and during the raptor nesting season (March 1 through August 15), a qualified biologist shall conduct a focused survey for raptor nests in areas potentially affected by project activities. If construction is scheduled to occur during the raptor breeding season, no construction activity shall take place within 500 feet of an active nest until the young have fledged (as determined by a qualified biologist). If an active raptor nest is identified on site, Mitigation Measure BIO-10 will be implemented. If construction activities occur during the non-breeding season, then no surveys or further mitigation would be required for these species.	The agency responsible for construction	Prior to commencing construction activities and during the nesting season (March 1 – August 15).	The agency responsible for construction—QA/QC project manager
Mitigation Measure BIO-10: Avoid Disturbance of Nesting Special Status and Non–Special Status Migratory Birds and Raptors If active nests are found in the project area, and if construction activities must occur during the nesting period, the agency responsible for construction shall consult DFG to determine and implement appropriate "no-disturbance" buffers around the nest sites until the young have fledged (as determined by a qualified biologist).	The agency responsible for construction	Prior to construction activities and during the nesting period (March 1 – August 15)	The agency responsible for construction—QA/QC project manager and California Department of Fish and Game (DFG)
Mitigation Measure BIO-11: Avoid Disturbance of Nesting Swallows To avoid impacts on nesting swallows, the agency responsible for construction shall implement the following avoidance and minimization measures. • To the extent possible, construction activities that could disturb nesting swallows shall be conducted outside the breeding season (which generally occurs between March 1 and September 1) for these species. • If construction activities are to take place during the swallows' breeding season, the agency responsible for construction shall hire a qualified biologist to inspect the railroad bridge at Dry Creek crossing during the swallows' nonbreeding season. If nests are found and are abandoned, they may be removed. To avoid damaging active nests, nests must be removed before the breeding season begins	The agency responsible for construction	Prior to construction activities and during the breeding season (March 1 – September 1).	The agency responsible for construction—QA/QC project manager, DFG, and U.S Fish and Wildlife Service

MITIGATION MEASURES	Party Responsible for Implementation	Implementation Timing	Monitoring Agency
(March 1). A permit from DFG and USFWS is required if active nests must be removed. • After nests are removed, the underside of the bridge may be covered with 0.5- to 0.75-inch mesh net or poultry wire. All net installation shall occur before March 1. The netting shall be anchored so swallows cannot attach their nests to the bridge through gaps in the net. • If netting of the bridge does not occur by March 1 and swallows colonize the bridge, modifications to this structure shall not begin before September 1 of that year or until the young have fledged and all nest use has been completed. • If appropriate steps are taken to prevent swallows from constructing new nests, work can proceed at any time of the year.			
Mitigation Measure BIO-12: Conduct Preconstruction Surveys for Nesting and Wintering Western Burrowing Owls and Implement Measures to Avoid or Minimize Adverse Effects if Owls Are Present A qualified biologist shall conduct preconstruction surveys for western burrowing owls before any ground disturbing activities occur within suitable owl habitat. Ground disturbing activities include both laying new track and replacing existing track. These surveys, which shall include any potentially suitable habitat within 250 feet of construction areas, shall be conducted no more than 1-2 weeks before the start of construction, regardless of the time of year in which construction occurs. If breeding owls are located on or immediately adjacent to the site, a construction-free buffer zone (typically 250 feet) around the active burrow must be established as determined by the biologist in consultation with CDFG. No activities may occur within this buffer area until a qualified biologist has determined that the young have fledged. If owls are resident within 160 feet of the project area during the nonbreeding season, a qualified biologist, in consultation with CDFG, shall passively relocate the owls to avoid the loss of any individuals if the owls are close enough to areas affected by the proposed alternatives that they or their burrows could potentially be harmed associated activities.	The agency responsible for construction	1–2 weeks prior to commencement of construction.	The agency responsible for construction—QA/QC project manager and DFG

MITIGATION MEASURES	Party Responsible for Implementation	Implementation Timing	Monitoring Agency
Mitigation Measure BIO-13: Document Populations of Congdon's Spikeweed As part of the environmental review process, the agency responsible for construction shall retain a qualified botanist to document the presence or absence of special-status plant species before implementing the project. If Congdon's spikeweed or other special status plants species are identified in the project corridor the agency responsible for construction will implement Mitigation Measure BIO-14.	The agency responsible for construction	During the environmental review process.	The agency responsible for construction—QA/QC project manager
Mitigation Measure BIO-14: Avoid or Minimize Impacts on Congdon's Spikeweed Populations by Redesigning the Project, Protecting Populations, and Developing a Transplantation Plan (if Necessary) The agency responsible for construction shall implement the following measures to avoid or minimize impacts on Congdon's spikeweed. • The project will be redesigned or modified to avoid direct and indirect impacts on Congdon's spikeweed, if feasible. • Congdon's spikeweed populations near the project site will be protected by installing environmentally sensitive area fencing (orange construction barrier fencing) around the special-status plant species populations. The environmentally sensitive area fencing shall be installed at least 20 feet from the edge of the population where feasible. The location of the fencing shall be marked in the field with stakes and flagging and shown on the construction drawings. The construction specifications shall contain clear language that prohibits construction-related activities, vehicle operation, material and equipment storage, and other surface-disturbing activities within the fenced environmentally sensitive area. The agency responsible for construction will coordinate with the appropriate resource agencies and local experts to determine whether transplantation of individual Congdon's spikeweed plants is feasible. If the agencies concur that it is a feasible mitigation measure, the botanist shall develop and implement a transplantation plan in coordination with the appropriate agencies. The transplantation plan shall involve identifying a suitable transplant site, moving the plant material and seed bank to the transplant site, collecting seed material and propagating it in a nursery, and monitoring the transplant sites to document recruitment and survival rates.	The agency responsible for construction	During the environmental review process.	The agency responsible for construction—QA/QC project manager

MITIGATION MEASURES	Party Responsible for Implementation	Implementation Timing	Monitoring Agency
Cultural Resources			
Mitigation Measure CR-1: Monitor Construction and Stop Work in Proximity to Archaeological Discoveries The Proposed Project would result in little if any disturbance of native soils. Areas where grading would occur include the Industrial and Shinn connections, the optional Decoto Road grade separation, and the passenger rail station. These areas have all been previously disturbed by construction of rail lines, roadways, and industrial facilities. Archeological monitoring of these sites is not required because of low sensitivity or previous ground disturbance. However, project construction will automatically be halted in the event that buried materials such as chipped stone or groundstone, historic debris, building foundations, or human bone, are inadvertently discovered. Work will stop in that area and within a 100-foot radius of the find until a qualified archaeologist can assess the significance of the find.	The agency responsible for construction	Concurrent with construction activities.	The agency responsible for construction—QA/QC project manager
Hazardous Substances			
Mitigation Measure HAZ-1: Conduct Subsurface Investigations in Areas of the Project Corridor That May Be Underlain by Contaminated Soil or Groundwater The agency responsible for construction shall conduct Phase II site investigations, if necessary, to determine whether any chemicals of concern are present in areas where grading is planned (i.e., Industrial and Shinn connections, optional Decoto Road grade separation). If necessary, a risk assessment shall be prepared and procedures established before construction to address the identification, excavation, handling, and disposal of hazardous substances. If contaminated soil or groundwater is encountered, the agency responsible for construction shall notify the appropriate local environmental management agencies (to include ACWD) and local fire departments. The agency responsible for construction shall ensure that any identified environmental site conditions that may represent a risk to public health and safety will be remediated in accordance with federal, state, and local environmental laws and regulations. Before construction activities, soil samples shall be taken at all sites where grading is planned to determine the presence or absence of California Title 22 Metals (CAM-17), semivolatile organic carbons, petroleum hydrocarbons (i.e. TPH-gas, diesel, BTEX and MTBE), and banned herbicides and pesticides. Soils that are detected to	The agency responsible for construction	Prior to commencement of construction	The agency responsible for construction—QA/QC project manager

MITIGATION MEASURES	Party Responsible for Implementation	Implementation Timing	Monitoring Agency
have hazardous levels of these substances will be excavated by properly trained personnel and handled in accordance with state and federal regulations.			
Hydrology and Water Quality			
Mitigation Measure WQ-1: Obtain Authorization under the NPDES Permit for Permanent Post-Construction Best Management Practices The agency responsible for construction shall avoid or minimize long-term water quality impacts through development and implementation of permanent stormwater quality BMPs for the project area, pursuant to the NPDES stormwater permit. A storm water pollution prevention plan (SWPPP) for the project shall be implemented in accordance with the State Water Resources Control Board (SWRCB) regulations. The SWPPP and project design documents shall describe measures to accommodate the additional drainage discharges and avoid adverse effects such as offsite erosion, sedimentation, or water quality impairments. Potential flooding impacts from drainage pattern alteration would be avoided through compliance with applicable federal, state, and local policies and programs, including FEMA requirements. These are covered in Mitigation Measure W-1 in the Redevelopment Plan EIR (Jones & Stokes 2001a). Implementing Mitigation Measure W-1 should accommodate potential increases in runoff. Compliance with the NPDES permit would ensure that long-term surface water quality is not altered such that the value of fish and wildlife habitat in Alameda Creek is substantially diminished.	The agency responsible for construction	Prior to commencement of construction	The agency responsible for construction—QA/QC project manager and RWQCB
Mitigation Measure WQ-2: Implement Water Quality Protection Measures during Construction Activities The agency responsible for construction shall obtain coverage under the state's General Construction Stormwater Permit, and shall comply with any local jurisdiction requirements relative to land grading and erosion control. As part of obtaining coverage under the permit, the construction contractor shall develop and implement a Stormwater Pollution Prevention Plan (SWPPP) in accordance with the State Water Resources Control Board (SWRCB) regulations. These regulations include performance standards to ensure that impacts on water quality as a result of erosion are below significance thresholds. In addition, the agency responsible for construction shall require the contractor to submit and implement an approved erosion and sedimentation control plan to control	The agency responsible for construction	During construction activities	RWQCB

MITIGATION MEASURES	Party Responsible for Implementation	Implementation Timing	Monitoring Agency
erosion and prevent water pollution during project construction. No ground-disturbing activities shall be performed until such a plan is accepted. The plan shall emphasize standard temporary erosion control measures to reduce sedimentation and turbidity of surface runoff from disturbed areas. Each rainy season (October 1 to May 1), the contractor shall have in place desilting basins for runoff from areas disturbed by cleaning, grubbing, and grading operations. Finally, the agency responsible for construction shall require the contractor to submit a spill prevention, containment, and clean-up (SPCC) plan for fuels, oils, lubricants, and other hazardous substances that may be used during construction. The SPCC shall require that all contractors transport, store and handle construction-related hazardous materials in a manner consistent with relevant regulations and guidelines, including those recommended and enforced by the DOT, the Regional Water Quality Control Board (RWQCB), and city and/or county regulations. Recommendations may include, but are not limited to, transporting and storing materials in appropriate and approved containers, maintaining required clearances, and handling materials using the applicable federal, state and/or local regulatory agency protocols. The SPCC shall also require that all contractors immediately control the source of any leak and immediately contain any spill using appropriate spill containment and countermeasures. Contaminated media shall be collected and disposed of at an off-site facility approved to accept such media. No construction activities shall be performed until such a plan is accepted. All plans shall cover activities that would occur near Dry Creek, the L-Line and M-Line channels, and the Alameda Creek Flood Control Channel (ACFCC).			
Land Use			
No mitigation is required.			
Noise and Vibration			
Mitigation Measure NV-1: Install Friction Modifiers along the Proposed Shinn Connection The agency responsible for construction of the Shinn Connection shall install wayside devices to apply friction modifier to the top of rail along the proposed Shinn Connection to minimize the occurrence of wheel squeal along the curve. There are many documented cases where use of use of special friction modifiers has virtually eliminated wheel squeal on tight radius curves. Installing wayside applicators on both ends of the curve on the Shinn connection should minimize potential wheel	The agency responsible for construction	Prior to rail operations on the Shinn connection	The agency responsible for construction—QA/QC project manager and Union Pacific Rail Road

MITIGATION MEASURES	Party Responsible for Implementation	Implementation Timing	Monitoring Agency
squeal and help prevent future noise levels from exceeding the significant impact threshold of 64 dBA Ldn. Fully controlling the wheel squeal may also require the installation of applicators to apply a lubricant on the gauge face of the rail. Maintenance of the wayside applicators will be included in the maintenance agreement between the passenger rail users and the track owners (at this time the track is owned by the Union Pacific Railroad and the future passenger rail users are expected to be the Capitol Corridor rail service and DRC). The passenger rail services using the project corridor shall include in the maintenance agreement with the rail owner the requirement to conduct periodic noise monitoring following construction of the proposed project at residences in close proximity to the Shinn connection curve to determine the effectiveness of mitigation measures implemented to reduce wheel squeal. It is difficult to accurately estimate the amount of wheel squeal generated on a tight-radius curve or the amount of noise reduction provided by friction modifiers. Both depend on the condition of the track and wheels, the radius of the curve, the speed of the train, relative humidity, and other environmental conditions. If the proposed friction modifiers are not effective at reducing squeal noise, the following steps shall be evaluated and implemented as necessary: • Develop an appropriate wheel/rail profile, • Rail grinding/wheel truing, and • Modifying track design.			
Mitigation Measure NV-2: Install Ballast Mats or Shredded Tire Underlay The agency responsible for construction will install ballast mats and/or shredded tire underlay between the Alameda Creek Bridge and the Union City Passenger Rail Station as needed to reduce vibration impacts to below the FTA impact threshold. It is important to note that where the predicted vibration levels exceed the impact threshold, they exceed the threshold by 2 VdB or less. Because the predictions are based on general information regarding freight and passenger rail reference levels and do not account for site-specific factors that may enhance or diminish the vibration levels at each location, there is a good chance that more detailed studies during subsequent design stages will show that mitigation is not needed to keep future vibration levels below the FTA impact threshold.	The agency responsible for construction	During construction	The agency responsible for construction—QA/QC project manager and rail owner

MITIGATION MEASURES	Party Responsible for Implementation	Implementation Timing	Monitoring Agency
Mitigation Measure NV-3: Develop and Implement a Construction Noise Abatement/Mitigation Plan The agency responsible for construction shall develop a construction noise abatement/mitigation plan to reduce adverse noise effects from construction activity. Key elements of the plan shall include, but not be limited to, the following: • Construction contractors shall comply with all relevant provisions of applicable local noise policies and ordinances, including limitations on nighttime construction when feasible. • All construction equipment shall have sound-control devices no less effective than those provided on the original equipment. No equipment shall have an unmuffled exhaust. As directed by the local lead agency, the contractor shall implement appropriate additional noise mitigation measures including, but not limited to, changing the location of stationary construction equipment, shutting off idling equipment, rescheduling construction activity, notifying adjacent residents in advance of construction work, rerouting heavy truck traffic, and/or installing acoustic barriers around stationary construction noise sources or construction sites. In the event that the construction engineer is unable to mitigate construction-related noise to the local noise standards for construction noise, the construction contractor shall offer to temporarily relocate residents (i.e., provide hotel vouchers).	The agency responsible for construction	The noise abatement/mitigation plan will be prepared prior to commencement of construction and appropriate mitigation measures will be employed during construction activities	The agency responsible for construction—QA/QC project manager
Transportation and Circulation			
Mitigation Measure TC-1: The construction contractor shall implement traffic control measures. A set of comprehensive traffic control measures will be prepared before issuance of building permits. These measures include scheduling of major truck trips; establishing lane closure procedures, including signs, cones, and other warning devices for drivers; and identifying construction access routes and detours. On-site parking will be provided for all construction workers to minimize the impact on area roads. When on-site parking cannot be provided, alternative parking and shuttle systems will be developed and verified.	The agency responsible for construction	Created before commencement of construction and implemented during construction activity.	The agency responsible for construction—QA/QC project manager

The following mitigation measures were incorporated by reference unchanged from the Redevelopment Plan EIR and were included in the mitigation monitoring plan for that document. They are therefore not included in this mitigation monitoring plan.

- Mitigation Measure IMT-1: Implement Site-Specific Roadway and Intersection Improvements
- Mitigation Measure IMT1-A: Implement Site-Specific Transit Improvements

1. No final decision has been made to date regarding the agencies that would be responsible for construction of the various elements of the Proposed Project. Multiple agencies would have responsibility for constructing the various components of the Proposed Project. Rail improvements would be funded primarily through the Metropolitan Transportation Commission (MTC) with Regional Measure 2 (RM2) funds. Construction activities would be coordinated with Capitol Corridor Joint Powers Authority (CCJPA), Union Pacific Railroad (UPRR), Bay Area Rapid Transit (BART), Alameda County Water District (ACWD), Department of Toxic Substances Control (DTSC), cities of Hayward, Union City, and Fremont, and other agencies.