

Valley Transportation Authority												BSV Phase II - Environmental Commitments Record											
Mitigation Monitoring & Reporting Program																							
Env Doc Chapter / Mitigation Topic	Environmental Document Chapter	Mitigation Topic	MMRP Code		Source Document	Summary	Mitigation Measure	Location	Implementation				2024 Q3		Quarter Mitigation Completed								
			Chrono #	Measure #					Timeframe: Design (D)	Timeframe: Construction (C)	Timeframe: Post-construction (P)	Responsible Party	Compliance Status										
Noise and Vibration/ Adhere to Local Jurisdiction Construction Time Periods, to the Extent Feasible	Noise and Vibration	Adhere to Local Jurisdiction Construction Time Periods, to the Extent Feasible	116	-MMRP-NV-CNST-H	-	Vol-1, ROD	Adhere to Local Jurisdiction Construction Time Periods	Program-wide	C		VTA/C	IC			<p>The four contract packages and current design status is as follows: For CP-1 Systems, CP-3-Newhall Yard/Santa Clara Station, and CP-4 Underground Stations, a General Engineering Consultant (GEC) has been selected and is preparing the three Design-Bid-Build plan, specification, and estimate (PS&E) packages.</p> <p>For CP-2 Tunnel and Trackwork: Quarterly updates to the Construction Noise and Vibration Monitoring Plan (CNVMP) list the construction activities, noise levels, and measures taken to keep noise and vibration levels within the applicable thresholds. The Q2 2024 CNVMP update can be found in the project folder 109-135 NV-Noise & Vibration. The Construction Transportation Management Plan (CTMP) for CP2 Early Works-West Tunnel Portal has been approved and includes the approved work hours.</p> <p>Early works construction continued in Q3 2024 with site preparation, grading, and clearing and disposal of debris and excess/contaminated soils at the West Tunnel Portal, and KST adhered to local jurisdiction construction time periods to the extent feasible. Daily noise monitoring is performed to verify adherence to noise thresholds.</p>								
Noise and Vibration/ Perform Preconstruction Ambient Noise Measurements at All CSAs	Noise and Vibration	Perform Preconstruction Ambient Noise Measurements at All CSAs	117	-MMRP-NV-CNST-I	-	Vol-1, ROD	Perform Preconstruction Ambient Noise Measurements at Construction Staging Areas (CSA)	Program-wide	D		VTA/C	IC			<p>The four contract packages and current design status is as follows: For CP-1 Systems, CP-3-Newhall Yard/Santa Clara Station, and CP-4 Underground Stations, a General Engineering Consultant (GEC) has been selected and is preparing the three Design-Bid-Build plan, specification, and estimate (PS&E) packages.</p> <p>For CP-2 Tunnel and Trackwork: Preconstruction ambient noise monitoring was performed on December 1, 2022, and continued through December 10, 2022 at the West Portal.</p> <p>Further preconstruction noise monitoring will be performed in future quarters at the underground stations and East Tunnel portal.</p>								
Noise and Vibration/ Implement a Construction Noise Control and Monitoring Plan	Noise and Vibration	Implement a Construction Noise Control and Monitoring Plan	118	-MMRP-NV-CNST-J	-	Vol-1, ROD	Implement a Construction Noise Control and Monitoring Plan	Program-wide	D	C	VTA/C	IC			<p>The four contract packages and current design status is as follows: For CP-1 Systems, CP-3-Newhall Yard/Santa Clara Station, and CP-4 Underground Stations, a General Engineering Consultant (GEC) has been selected and is preparing the three Design-Bid-Build plan, specification, and estimate (PS&E) packages.</p> <p>For CP-2 Tunnel and Trackwork: Quarterly updates to the Construction Noise and Vibration Monitoring Plan (CNVMP) and the Construction Noise and Vibration Control Plan (CNVCP) list the construction activities, noise levels, and measures taken to keep noise and vibration levels within the applicable thresholds. Daily construction noise monitoring was initiated on April 22, 2024 and is provided to VTA each week.</p>								
Noise and Vibration/ Require Minimum Qualifications for the Acoustical Engineer	Noise and Vibration	Require Minimum Qualifications for the Acoustical Engineer	119	-MMRP-NV-CNST-K	-	Vol-1, ROD	Require Minimum Qualifications for the Acoustical Engineer	Program-wide	D	C	VTA/C	CC-CP2			<p>The four contract packages and current design status is as follows: For CP-1 Systems, CP-3-Newhall Yard/Santa Clara Station, and CP-4 Underground Stations, a General Engineering Consultant (GEC) has been selected and is preparing the three Design-Bid-Build plan, specification, and estimate (PS&E) packages.</p> <p>For CP-2 Tunnel and Trackwork: In Q4 2022, the CP-2 contractor submitted and approved the qualifications of an Acoustical Engineer in accordance with this measure.</p> <p>THIS MEASURE IS COMPLETE FOR CP2. See Q2 2024.</p>	CP2 - Q2 2024							

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Noise and Vibration/ Prohibit Operation of Noise-Generating Equipment Prior to Acceptance of Noise Control and Monitoring Plan	Noise and Vibration	Prohibit Operation of Noise-Generating Equipment Prior to Acceptance of Noise Control and Monitoring Plan	120	-MMRP-NV-CNST-L	-	Vol-1, ROD	Prohibit Operation of Noise-Generating Equipment Prior to Acceptance of Noise Plan	Program-wide	C	C		VTA/C	IC	The four contract packages and current design status is as follows: For CP-1 Systems, CP-3-Newhall Yard/Santa Clara Station, and CP-4 Underground Stations, a General Engineering Consultant (GEC) has been selected and is preparing the three Design-Bid-Build plan, specification, and estimate (PS&E) packages. For CP-2 Tunnel and Trackwork: The Construction Noise and Vibration Monitoring Plan (CNVMP) and the Construction Noise and Vibration Control Plan (CNVCP) were accepted in Q2 2024 prior to the start of construction. In Q3 2024 , early works construction continued with grading, excavation, backfill, utility work and installation of instrumentation at the West Tunnel Portal. No noise-generating equipment was operated on site prior to the acceptance of these plans. This measure will be implemented in future quarters at the underground stations and East Tunnel portal.									
Noise and Vibration/ Install Long-Term Noise Monitors at CSAs during all Construction Phases	Noise and Vibration	Install Long-Term Noise Monitors at CSAs during all Construction Phases	121	-MMRP-NV-CNST-M-01	M-01	Vol-1, ROD	Install Stationary Long-Term Noise Monitors at Construction Staging Areas (CSA)	Program-wide	D	C		VTA/C	IC	The four contract packages and current design status is as follows: For CP-1 Systems, CP-3-Newhall Yard/Santa Clara Station, and CP-4 Underground Stations, a General Engineering Consultant (GEC) has been selected and is preparing the three Design-Bid-Build plan, specification, and estimate (PS&E) packages. For CP-2 Tunnel and Trackwork: Long-term noise monitors have been installed at 2 locations by sensitive noise-receptors at the West Tunnel Portal. Noise monitoring data has been provided to VTA on a weekly basis in Q3 2024, and includes the construction activities, the daytime and nighttime noise levels, and spot-check noise monitoring locations and data. This measure will be implemented in future quarters at the underground stations and East Tunnel portal.									
Noise and Vibration/ Install Long-Term Noise Monitors at CSAs during all Construction Phases	Noise and Vibration	Install Long-Term Noise Monitors at CSAs during all Construction Phases	122	-MMRP-NV-CNST-M-02	M-02	Vol-1, ROD	Conduct Weekly Noise Sampling with Hand-Held Monitors	Program-wide	D	C		VTA/C	IC	The four contract packages and current design status is as follows: For CP-1 Systems, CP-3-Newhall Yard/Santa Clara Station, and CP-4 Underground Stations, a General Engineering Consultant (GEC) has been selected and is preparing the three Design-Bid-Build plan, specification, and estimate (PS&E) packages. For CP-2 Tunnel and Trackwork: In Q3 2024 , 30-minute hand-held noise monitoring data has been provided to VTA on a weekly basis, and includes the construction activities, the daytime and nighttime noise levels, and spot-check noise monitoring locations and data.									
Noise and Vibration/ Ensure Equipment is Pre-certified to Meet Noise Limits	Noise and Vibration	Ensure Equipment is Pre-certified to Meet Noise Limits	123	-MMRP-NV-CNST-N	-	Vol-1, ROD	Ensure Equipment is Pre-certified to Meet Noise Limits	Program-wide	D	C		VTA/C	IC	The four contract packages and current design status is as follows: For CP-1 Systems, CP-3-Newhall Yard/Santa Clara Station, and CP-4 Underground Stations, a General Engineering Consultant (GEC) has been selected and is preparing the three Design-Bid-Build plan, specification, and estimate (PS&E) packages. For CP-2 Tunnel and Trackwork: The Construction Noise and Vibration Control Plan (CNVCP) lists the construction activities, equipment to be used during these activities, and the noise levels for the activities and the equipment. The equipment listed in the CNVCP has been guaranteed by the vendor to meet the noise limits for the work location and project. The Q3 2024 quarterly update to the CNVCP included the construction activities, equipment, and noise levels for Q3 2024, confirming construction equipment does not exceed the noise limits.									

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Noise and Vibration/ Implement a Complaint Resolution Procedure	Noise and Vibration	Implement a Complaint Resolution Procedure	124	-MMRP-NV-CNST-0	-	Vol-1, ROD	Implement a Noise and Vibration Complaint Resolution Procedure	Program-wide	D	C		VTA/C	CC/CP2	<p>The four contract packages and current design status is as follows: For CP-1 Systems, CP-3-Newhall Yard/Santa Clara Station, and CP-4 Underground Stations, a General Engineering Consultant (GEC) has been selected and is preparing the three Design-Bid-Build plan, specification, and estimate (PS&E) packages.</p> <p>For CP-2 Tunnel and Trackwork: The contractor developed a complaint resolution procedure in Q2 2024 to address noise and vibration concerns. A project representative's phone number is publicly available to contact for any concerns, and the representative will follow up with the person that filed the complaint to determine next steps and remediate any issues.</p> <p>Therefore, THIS MEASURE IS COMPLETE FOR CP2.</p>	CP2 - Q2 2024								
Noise and Vibration/ Implement a Construction Vibration Control and Monitoring Plan	Noise and Vibration	Implement a Construction Vibration Control and Monitoring Plan	125	-MMRP-NV-CNST-P-01		Vol-1, ROD	Prepare a Construction Vibration Control and Monitoring Plan The Construction Vibration Control and Monitoring Plan will also outline the monitoring equipment and procedures the contractor will use to perform vibration measurements for vibration-sensitive receptors in the vicinity of construction operations, including details regarding the vibration measurement locations, frequency, and duration of measurements at each location. The plan will outline the protocol for monitoring existing cracks in buildings over time, to determine any construction-related impacts. At a minimum, crack gauges will be installed on existing cracks prior to construction, and monitoring of the gauges will be performed continuously over the course of construction to assess whether new construction-related damage has occurred. The contractor must obtain approval from VTA and the QP to install any crack gauges on or in historic buildings that require alteration of the building.	Program-wide	D	C		VTA/C	IC	<p>The four contract packages and current design status is as follows: For CP-1 Systems, CP-3-Newhall Yard/Santa Clara Station, and CP-4 Underground Stations, a General Engineering Consultant (GEC) has been selected and is preparing the three Design-Bid-Build plan, specification, and estimate (PS&E) packages.</p> <p>For CP-2 Tunnel and Trackwork: The Construction Noise and Vibration Monitoring Plan (CNVMP) and Construction Noise and Vibration Control Plan (CNVCP) were both accepted in Q2 2024. The plans outline monitoring equipment, procedures, measurement locations, frequencies, and durations, and will be updated quarterly, once construction begins, in accordance with Section 1.07.8.5 in 01 81 20 Noise and Vibration Control. Results will be documented and submitted to VTA as required in 01 81 20 Noise and Vibration Control.</p> <p>The contractor has installed continuous vibration monitoring equipment at 2 locations at the West Tunnel Portal in Q3 2024, and provides daily monitoring data to VTA on a weekly basis. Vibration levels did not exceed the thresholds for any sensitive structures, utilities, or buildings Q3 2024.</p>									
Noise and Vibration/ Implement a Construction Vibration Control and Monitoring Plan	Noise and Vibration	Implement a Construction Vibration Control and Monitoring Plan	126	-MMRP-NV-CNST-P-02		Vol-1, ROD	Halt Construction if Levels Exceed Allowable Vibration Limits The contractor will initially conduct vibration monitoring daily at the nearest affected buildings during any construction activities that could induce vibration impacts, typically within 100 feet of any building. Vibration will also be monitored where vibration is expected to approach the applicable limit based on the building type and condition, as determined by VTA in coordination with the structural engineer for non-historic buildings, and VTA and the historic QP for historic buildings. Monitoring of utilities that are sensitive to vibration will be coordinated with the utility companies and performed for the nearest affected vibration-sensitive utilities during any construction activities that could induce vibration impacts.	Program-wide	D	C		VTA/C	IC	Please refer to the documentation under MMRP-NV-CNST-P-01.									
Noise and Vibration/ Implement a Construction Vibration Control and Monitoring Plan	Noise and Vibration	Implement a Construction Vibration Control and Monitoring Plan	127	-MMRP-NV-CNST-P-03		Vol-1, ROD	Do Not Exceed the FTA Construction Vibration Damage Criteria The contractor will perform monitoring continuously at the closest receptor during all demolition and construction activities to ensure vibration levels will not exceed the FTA construction vibration damage criteria for applicable building type, as follows: 0.12 peak particle velocity (PPV) (inches/second) for buildings that are extremely susceptible to vibration damage, 0.2 PPV (inches/second) for non-engineered timber and masonry buildings, 0.3 PPV (inches/second) for engineered concrete and masonry (no plaster) buildings and 0.5 PPV (inches/second) for reinforced-concrete, steel or timber (no plaster) buildings. For historic buildings, the vibration threshold will likely be between 0.12 to 0.2 PPV (inches/second) depending on the buildings' condition. The results of the preconstruction surveys and Building Conditions Assessment Report as outlined in Mitigation Measure NV-CNST-R will be utilized to confirm the structure types and determine which vibration thresholds apply in consultation with a qualified structural engineer and the historic QP. For utilities, vibration thresholds will follow industry standards in coordination with utility companies, and typically adhere to a 0.5 PPV (inches/second) threshold.	Program-wide	D	C		VTA/C	IC	Please refer to the documentation under MMRP-NV-CNST-P-01.									

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Noise and Vibration/ Implement a Construction Vibration Control and Monitoring Plan	Noise and Vibration	Implement a Construction Vibration Control and Monitoring Plan	128	-MMRP- NV-CNST- 04	P- 04	Vol-1, ROD	Measure Building Vibration in Vertical Direction and Utilities In Accordance with Meter Instructions For non-historic structures, if construction vibration exceeds the structural or nuisance threshold, the contractor must stop construction and adjust construction methods to meet appropriate vibration limits so that the threshold is not exceeded again.	Program-wide	D	C		VTA/ C	IC	Please refer to the documentation under MMRP-NV-CNST-P-01.									
Noise and Vibration/ Implement a Construction Vibration Control and Monitoring Plan- Historic structures	Noise and Vibration	Implement a Construction Vibration Control and Monitoring Plan- Historic structures	129	-MMRP- NV-CNST- 05	P- 05	Vol-1, ROD	Notify Qualified Professional (QP) if Historic Building Construction Vibration Approaches Threshold Implement a Construction Vibration Control and Monitoring Plan- Historic structures: For historic structures, if construction vibration approaches the structural damage threshold, the historic QP will be notified immediately, in real time. If construction vibration exceeds the structural damage threshold, Contractor must notify the historic QP and VTA immediately, in real time, and stop all vibration-inducing construction work immediately to adjust methods. The contractor will adjust work methods and techniques to meet appropriate vibration limits so that the threshold is not exceeded again before work is restarted. In the event of inadvertent, construction-related damage to historic buildings, repairs will be conducted in accordance with the Secretary of the Interior's Standards for the Treatment of Historic Properties and consistent with 36 CFR 800.13(b). VTA and the historic QP will implement these repairs in consultation with FTA and SHPO.	Program-wide	D	C		VTA/ C	IC	The four contract packages and current design status is as follows: For CP-1 Systems, CP-3-Newhall Yard/Santa Clara Station, and CP-4 Underground Stations, a General Engineering Consultant (GEC) has been selected and is preparing the three Design-Bid-Build plan, specification, and estimate (PS&E) packages. For CP-2 Tunnel and Trackwork: The Construction Noise and Vibration Monitoring Plan (CNVMP) and Construction Noise and Vibration Control Plan (CNVCP) were both accepted in Q2 2024. The plans outline monitoring equipment, procedures, measurement locations, frequencies, and durations, and will be updated quarterly, once construction begins, in accordance with Section 1.07.B.5 in 01 81 20 Noise and Vibration Control. Results will be documented and submitted to VTA as required in 01 81 20 Noise and Vibration Control. The contractor has installed continuous vibration monitoring equipment at 2 locations at the West Tunnel Portal in Q3 2024. Vibration levels did not exceed the thresholds for any historic buildings in Q3 2024. If construction activities approach the vibration thresholds near historic buildings, the historic QP will be notified, and if they exceed the thresholds work will cease and the contractor will notify the historic QP and VTA.									
Noise and Vibration/ Perform Vertical Direction Vibration Monitoring	Noise and Vibration	Perform Vertical Direction Vibration Monitoring	130	-MMRP- NV-CNST- Q	-	Vol-1, ROD	Perform Vertical Direction Vibration Monitoring Perform Vertical Direction Vibration Monitoring: The contractor will perform continuous vertical direction vibration (root mean square) monitoring on the ground at the nearest representative residential structure during muck extraction and supply train operations in the tunnels. These measurements will be repeated for a minimum of 1 week at approximately 1-mile intervals along the tunnel construction until it is demonstrated that the levels are below the FTA thresholds.	Program-wide	D	C		VTA/ C	IC	The four contract packages and current design status is as follows: For CP-1 Systems, CP-3-Newhall Yard/Santa Clara Station, and CP-4 Underground Stations, a General Engineering Consultant (GEC) has been selected and is preparing the three Design-Bid-Build plan, specification, and estimate (PS&E) packages. For CP-2 Tunnel and Trackwork: The Construction Noise and Vibration Monitoring Plan (CNVMP) and Construction Noise and Vibration Control Plan (CNVCP) were both accepted in Q2 2024. The plans require continuous vertical direction vibration monitoring during muck extraction. In Q3 2024, no continuous vertical direction vibration monitoring was required because muck extraction has not yet commenced.									
Noise and Vibration/ Implement Preconstruction and Post-Construction Building Condition Surveys for Vibration	Noise and Vibration	Implement Preconstruction and Post-Construction Building Condition Surveys for Vibration	131	-MMRP- NV-CNST- 01	R- 01	Vol-1, ROD	Implement Preconstruction and Post-Construction Building Condition Surveys for Vibration Implement Preconstruction and Post-Construction Building Condition Surveys for Vibration: Prior to construction or release of the TBM and cut-and-cover construction contract(s), the contractor will survey all structures that may be potentially impacted by construction vibration and submit the results to VTA for approval. Preconstruction building condition surveys of the interiors and exteriors of these structures will be conducted by independent surveyors to assess the baseline condition of each property that could be affected by construction vibration. The surveys will include written and photographic (video and still) records, including written descriptions and photos of any cracks.	Program-wide	D	C	P	VTA/ C	IC	The four contract packages and current design status is as follows: For CP-1 Systems, CP-3-Newhall Yard/Santa Clara Station, and CP-4 Underground Stations, a General Engineering Consultant (GEC) has been selected and is preparing the three Design-Bid-Build plan, specification, and estimate (PS&E) packages. For CP-2 Tunnel and Trackwork: No preconstruction building condition surveys were performed in Q3 2024. This measure will be implemented in future quarters as necessary.									

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Noise and Vibration/ Implement Preconstruction and Post-Construction Building Condition Surveys for Vibration-Historic Buildings	Noise and Vibration	Implement Preconstruction and Post-Construction Building Condition Surveys for Vibration-Historic Buildings	132	-MMRP-NV-CNST-R-02	Vol-1, ROD	Prepare Condition Assessment Reports for Historic Buildings	<p>Implement Preconstruction and Post-Construction Building Condition Surveys for Vibration- Historic Buildings: For historic structures, the Condition Assessment Report in accordance with Section 106 will be prepared along with the preconstruction building condition surveys. The surveys will be performed prior to any vibration-inducing construction to establish baseline building conditions. The results of the preconstruction surveys will be utilized to establish the structure types and determine which vibration thresholds apply in consultation with a qualified structural engineer and a qualified architectural historian or a historic architect, as outlined in Mitigation Measure NV-CNST-P.</p> <p>Surveys will be conducted in all historic buildings or structures where vibration is expected to approach the applicable limit, and in non-historic buildings based on the building type and condition. VTA will determine the list of historic structures that may be affected by the project in consultation with a qualified structural engineer and the historic QP.</p> <p>Vibration will be monitored as required in Mitigation Measure NV-CNST-P to avoid adverse effects on properties during construction activities. The post-construction survey results will be compared with preconstruction condition surveys so that any construction vibration effects on structures can be assessed. For historic structures, a Condition Assessment Report in accordance with Section 106, will be conducted after construction is complete. In the event of inadvertent, construction-related damage to historic buildings, repairs will be conducted in accordance with the Secretary of the Interior's Standards for the Treatment of Historic Properties and consistent with 36 CFR 800.13(b). VTA and the historic QP will implement these repairs in consultation with FTA and SHPO.</p>	Program-wide	D	C	P	VTA/C	IC	<p>The four contract packages and current design status is as follows: For CP-1 Systems, CP-3-Newhall Yard/Santa Clara Station, and CP-4 Underground Stations, a General Engineering Consultant (GEC) has been selected and is preparing the three Design-Bid-Build plan, specification, and estimate (PS&E) packages.</p> <p>For CP-2 Tunnel and Trackwork: VTA received Condition Assessment Reports (CARs) for 5 locations in Q1 2023. In Q1 2024, VTA conducted surveys at 3 historic properties. In Q3 2024, the final CARs were completed for the 3 historic properties, and an additional historic property was updated to reflect the changed conditions of the building.</p>									
Noise and Vibration/ Implement Measures to Reduce Vibration from Muck Extraction and Supply Trains	Noise and Vibration	Implement Measures to Reduce Vibration from Muck Extraction and Supply Trains	133	-MMRP-NV-CNST-S	Vol-1, ROD	Implement Measures to Reduce Vibration from Muck Extraction and Supply Trains	<p>Implement Measures to Reduce Vibration from Muck Extraction and Supply Trains: The contractor will ensure that muck extraction and supply train operations do not result in groundborne vibration in excess of 72 VdB at nearby residences. Measures that can be implemented include, but are not limited to, placement of ballast mats underneath tracks on which the muck extraction train rides or the use of a conveyor in place of a train.</p>	Tunnel Alignment		C		VTA/C	IC	<p>The relevant contract packages and current design status is as follows: For CP-1 Systems, CP-3-Newhall Yard/Santa Clara Station, and CP-4 Underground Stations, a General Engineering Consultant (GEC) has been selected and is preparing the three Design-Bid-Build plan, specification, and estimate (PS&E) packages.</p> <p>For CP-2 Tunnel and Trackwork - This mitigation measure was included in the CP2 Conformed set under Vol 1 General Requirements, Section 01 81 20 Noise and Vibration Control; limited Notice to Proceed 1 issued 6/09/22.</p> <p>This measure was not required in Q3 2024 because muck extraction has not yet commenced.</p>									
Noise and Vibration/ Implement Noise Reduction Treatments at Ancillary Facilities	Noise and Vibration	Implement Noise Reduction Treatments at Ancillary Facilities	134	-MMRP-NV-A	Vol-1, ROD	Implement Noise Reduction Treatments at Ancillary Facilities	<p>Implement Noise Reduction Treatments at Ancillary Facilities: The contractor will implement noise reduction treatments at ancillary facilities such as tunnel ventilation shafts, pressure relief shafts, traction power substations, and emergency backup generators such that noise levels comply with applicable Cities of San Jose and Santa Clara noise criteria at nearby developed land uses. Treatments that will be implemented, if necessary, include but are not limited to:</p> <ul style="list-style-type: none"> • Sound attenuators and acoustical absorptive treatments in ventilation shafts and facilities. • Sound attenuators for the tunnel emergency ventilation fans. • Perimeter noise walls (nominally an 8-foot-high wall) placed around emergency generators. 	Systems (Ventilation Structures, Traction Power Substations, Emergency Backup Generators)		C		VTA/C	IC	<p>The four contract packages and current design status is as follows: For CP-1 Systems, CP-3-Newhall Yard/Santa Clara Station, and CP-4 Underground Stations, a General Engineering Consultant (GEC) has been selected and is preparing the three Design-Bid-Build plan, specification, and estimate (PS&E) packages.</p> <p>For CP-2 Tunnel and Trackwork: This measure was not required in Q3 2024 because construction at ancillary facilities has not commenced.</p>									
Noise and Vibration/ Reduce Groundborne Noise Levels	Noise and Vibration	Reduce Groundborne Noise Levels	135	-MMRP-NV-B	Vol-1, ROD	Reduce Groundborne Noise Levels	<p>Reduce Groundborne Noise Levels: The contractor will implement an Isolated Slab Track (IST) as the mitigation strategy for groundborne noise. An IST is a form of floating slab track (FST). The IST system is constructed with a continuous elastomeric mat instead of discrete elastomeric pads that are typically used for an FST system. An IST can be designed to provide from 10 to 13 dBA of noise reduction. This strategy can also be used under a crossover. The locations for implementing this measure are shown in Tables 4.12-21 through 4.12-25 (summarized in DRBMP-NV-A). The project's final design will determine the specific mitigation strategy, which could include alternative strategies that similarly achieve the FTA groundborne noise criteria.</p>	Tunnel Alignment		C		VTA/C	IC	<p>The relevant contract packages and current design status is as follows: For CP-1 Systems, CP-3-Newhall Yard/Santa Clara Station, and CP-4 Underground Stations, a General Engineering Consultant (GEC) has been selected and is preparing the three Design-Bid-Build plan, specification, and estimate (PS&E) packages.</p> <p>For CP-2 Tunnel and Trackwork - This mitigation measure was included in the CP2 Conformed set under Vol 2 Design Criteria Manual (DCM) Section 7.5 Trackway; limited Notice to Proceed 1 issued 6/09/22.</p> <p>This measure was not required in Q3 2024 because construction of trackways has not commenced.</p>									
Utilities/ Prepare a San Jose Water Supply Infrastructure Capacity Assessment and Participate in the Improvements	Utilities	Prepare a San Jose Water Supply Infrastructure Capacity Assessment	136	-MMRP-UTIL-A	Vol-1, ROD	Prepare a San Jose Water Supply Infrastructure Capacity Assessment	<p>Prepare a San Jose Water Supply Infrastructure Capacity Assessment and Participate in the Improvements: VTA will coordinate with San Jose Water Company (SJWC) and prepare a Cooperative Agreement to establish the BART Extension Alternative's participation in improvements to offsite water supply infrastructure. The SJWC may conduct a detailed engineering study and flow analysis to determine the extent of these impacts.</p> <p>The contractor will implement capacity-relief upgrades during the utility relocation phase of construction in accordance with SJWC requirements. The contractor will ensure that all construction activities follow the provisions outlined in this environmental document, including implementation of Mitigation Measure TRA-CNST-A to reduce potential impacts and increase participation.</p>	28th Street/Little Portugal Station (Alum Rock); Downtown San Jose Station; Diridon Station	D		P	VTA	IC	<p>TOD is not included in CP1 through CP4. Once TOD contracts are underway these measures will be addressed.</p>									

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			Chrono #	Measure #					Timeframe: Design (D)	Timeframe: Construction (C)	Timeframe: Post-construction (P)	Responsible Party	Compliance Status										
Utilities/ Prepare a Santa Clara Water Supply Infrastructure Capacity Assessment and Participate in the Improvements	Utilities	Prepare a Santa Clara Water Supply Infrastructure Capacity Assessment	137	-MMRP-UTIL-B	Vol-1, ROD	Prepare a Santa Clara Water Supply Infrastructure Capacity Assessment	Prepare a Santa Clara Water Supply Infrastructure Capacity Assessment and Participate in the Improvements: VTA will coordinate with the City of Santa Clara Water and Sewer Utility (SCWSU) and prepare a Cooperative Agreement to establish the BART Extension Alternative's participation in improvements to offsite water supply infrastructure. The SCWSU may conduct a detailed engineering study and flow analysis to determine the extent of these impacts and participation. The contractor will implement capacity-relief upgrades during the utility relocation phase of construction in accordance with Chapter 17.15.2.10 of the Santa Clara City Code. The contractor will ensure that all construction activities follow the provisions outlined in this environmental document, including implementation of the construction education and outreach plan, to reduce potential impacts.	Santa Clara Station	D	P	VTA	IC	TOD is not included in CP1 through CP4. Once TOD contracts are underway these measures will be addressed.										
Utilities/ Prepare a San Jose Sewer Capacity Assessment and Participate in the Improvements	Utilities	Prepare a San Jose Sewer Capacity Assessment	138	-MMRP-UTIL-C	Vol-1, ROD	Prepare a San Jose Sewer Capacity Assessment	Prepare a San Jose Sewer Capacity Assessment and Participate in the Improvements: VTA will coordinate with the San Jose Department of Public Works (SJPW) to prepare a Cooperative Agreement to establish the BART Extension Alternative's participation in improvements to offsite sanitary sewer capacity deficiencies. SJPW may conduct a detailed engineering study and hydraulic analysis to determine the extent of these impacts. VTA will mitigate impacts on downstream sewer systems in San Jose through payment of the Sanitary Sewer Connection Fee, as required, which is used to rehabilitate and enhance sewer capacity through San Jose's Sanitary Sewer Capital Improvement Program. If payment to the Sanitary Sewer Connection Fee does not adequately mitigate potential offsite sewer capacity impacts related to the BART Extension, VTA will be responsible for direct upgrades to the sewer system. If sewer system overcapacity is a result of projected cumulative development, San Jose and VTA will develop a Cooperative Agreement to determine the BART Extension Alternative's participation in upgrades to the current system. The contractor will implement capacity-relief upgrades during the BART Extension's construction phase in accordance with applicable San Jose standards regarding sewer infrastructure improvements. Generally, the contractor will locate sewer infrastructure improvements within the existing public right-of-way, with minimal potential to impact sensitive environmental resources. The contractor will ensure that construction activities follow the provisions outlined in this environmental document, including implementation of the construction education and outreach plan, to reduce potential impacts.	28th Street/Little Portugal Station (Alum Rock); Downtown San Jose Station; Dividon Station	D	P	VTA	IC	TOD is not included in CP1 through CP4. Once TOD contracts are underway these measures will be addressed.										
Utilities/ Prepare a Santa Clara Sewer Capacity Assessment and Participate in the Improvements	Utilities	Prepare a Santa Clara Sewer Capacity Assessment	139	-MMRP-UTIL-D	Vol-1, ROD	Prepare a Santa Clara Sewer Capacity Assessment	Prepare a Santa Clara Sewer Capacity Assessment and Participate in the Improvements: VTA will coordinate with SCWSU to prepare a Cooperative Agreement to establish the BART Extension Alternative's participation in improvements to offsite sanitary sewer capacity deficiencies. SCWSU may conduct a detailed engineering study and hydraulic analysis to determine the extent of these impacts. VTA will mitigate impacts on downstream sewer systems in Santa Clara through payment of the Sanitary Sewer Connection Charge, as required, which is used to rehabilitate and enhance sewer capacity through Santa Clara's Capital Improvement Program. If payment to the Sanitary Sewer Connection Charge does not adequately mitigate potential offsite sewer capacity impacts related to the BART Extension, VTA will be responsible for direct upgrades to the sewer system. If sewer system overcapacity is a result of cumulative development, Santa Clara and VTA will develop a Cooperative Agreement to determine the BART Extension Alternative's proportional participation to the upgrades to current system capacity. The contractor will implement capacity-relief upgrades improvements during the BART Extension's construction phase in accordance with Chapter 17.15.2.10-280 of the Santa Clara City Code. Generally, the contractor will locate sewer infrastructure improvements within the existing public right-of-way, with minimal potential to impact sensitive environmental resources. The contractor will ensure that construction activities follow the provisions outlined in this environmental document, including implementation of the construction education and outreach plan, to reduce potential impacts.	Santa Clara Station	D	P	VTA	IC	TOD is not included in CP1 through CP4. Once TOD contracts are underway these measures will be addressed.										
Visual Quality and Aesthetics/ Replace Trees	Visual Quality and Aesthetics	Replace Trees	140	-MMRP-AES-CNST-A	Vol-1, ROD	Replace Trees	Replace Trees: The contractor will inventory trees that will be removed due to construction activities and will note each tree on construction plans before construction begins. VTA will compensate for any trees removed according to the following ratios. VTA will replace all urban trees that are to be removed or lost as a result of the BART Extension to the extent feasible. VTA will replace trees with a diameter of less than 12 inches at a 2:1 ratio, and trees with a diameter of 12 inches or more at a 3:1 ratio. If urban trees (nonnatives and ornamentals) are replaced with native trees, VTA will use a reduced mitigation ratio of 1:1 for all trees smaller than 12 inches in diameter, and 2:1 for all trees with a diameter of 12 inches or more. VTA will irrigate and maintain these trees for a period of no less than 3 years. If VTA cannot replace trees at the stated ratios along the alignment, VTA will pay in-lieu fees. For any landscaping adjacent to the creeks and on VTA right-of-way (ROW), VTA will adhere to the SCWDW's Guidelines and Standards for Land Use Near Streams regarding the use of native species near the creeks.	Program-wide	D	C	VTA/C	IC	The four contract packages and current design status is as follows: For CP-1 Systems, CP-3-Newhall Yard/Santa Clara Station, and CP-4 Underground Stations, a General Engineering Consultant (GEC) has been selected and is preparing the three Design-Bid-Build plan, specification, and estimate (PS&E) packages. For CP-2 Tunnel and Trackwork: In Q3 2024 six (6) Mexican Fan Palms (<i>Washingtonia Robusta</i>) and one (1) Tree of Heaven (<i>Ailanthus Altissima</i>) were removed from the Newhall Maintenance Yard. The inventory for the removed trees, including the size, if they are invasive/native, and the replacement ratio, can be found in the project sharepoint under the applicable ECR measure folder.										

Valley Transportation Authority											BSV Phase II - Environmental Commitments Record										
											Mitigation Monitoring & Reporting Program										
Env Doc Chapter / Mitigation Topic	Environmental Document Chapter	Mitigation Topic	MMRP Code			Source Document	Summary	Mitigation Measure	Location	Implementation				2024 Q3		Quarter Mitigation Completed					
			Chrono #	Measure #									Timeframe: Design (D)	Timeframe: Construction (C)	Timeframe: Post-construction (P)		Responsible Party	Compliance Status			
Visual Quality and Aesthetics/ Minimize Light and Glare (for TOJD)	Visual Quality and Aesthetics	Minimize Light and Glare (for TOJD)	141	-MMRP-AES-A	-	Vol-1, ROD	Minimize Light and Glare (for TOJD)	TOJD	D	C			IC	TOJD is not included in CP1 through CP4. Once TOD contracts are underway these measures will be addressed.							
Water Resources, Water Quality, and Floodplains/ Design and Implement Stormwater Control Measures	Water Resources, Water Quality, and Floodplains	Design and Implement Stormwater Control Measures	142	-MMRP-WQ-A	-	Vol-1, ROD	Design and Implement Stormwater Control Measures	Program-wide	D	C	P	VTA/C	IC	<p>The four contract packages and current design status is as follows: For CP-1 Systems, CP-3 Newhall Yard/Santa Clara Station, and CP-4 Underground Stations, a General Engineering Consultant (GEC) has been selected and is preparing the three Design-Bid-Build plan, specification, and estimate (PS&E) packages.</p> <p>For CP-2 Tunnel and Trackwork: A combined programmatic SWPPP as well as a site-specific SWPPP for West Tunnel Portal were updated and accepted in Q2 2024. The SWPPP for the West Tunnel Portal was amended in Q3 2024 to reflect changes in work phasing and site winterization.</p>							