# **CHAPTER 5 DRAFT SEIR-2 ERRATA**

# 5.1 DRAFT SEIR-2 TEXT AND FIGURE ERRATA

This Chapter contains text and figure changes to the Draft 2<sup>nd</sup> Supplemental Environmental Impact Report (SEIR-2) as a result of comments received on the document and updated information. Text changes related to the nine design refinements are shown in **Chapter 2, Design Refinements**, of this Final SEIR-2. Text that has been deleted from the Draft SEIR-2 is shown with a <del>strikeout</del> through the deleted text. Text that has been added is shown with <u>bold-</u> <u>underline</u>. The locations of the revisions are indicated by the headings, subheadings, paragraph numbers, page numbers, or other reference to assist the reader in locating the changes to the Draft SEIR-2. Where a revision is in response to a comment, it has been noted. The revised Draft SEIR-2 figures are included at the end of this Chapter.

# 5.1.1 REVISIONS TO CHAPTER 1, EXECUTIVE SUMMARY

4.13 Noise and Vibration			
Phase 1 Alignment Noise Impacts: Six sSingle- family residences located on Berryessa Street and two multi-family buildings located at the Parc Metropolitan Condominium complex would be expected to experience increases in noise levels resulting in a Severe Impact. The area of effect due to UPRR trains and warning horns at the Dixon Landing Road crossing currently includes residences at the Spinnaker Apartments and at the Friendly Village Mobile Home Park. Eliminating warning horns from trains would limit the area of effect to within the UPRR ROW.	۵۶ ۱	Mitigation Measure NV-1: Noise mitigation includes sound walls, absorptive walls, absorptive acoustical materials for retaining walls, and track absorption. Sound walls shall be installed to mitigate noise levels near residences affected by Phase 1. Table 4.13-5 indicates the location of <u>noise mitigation</u> <u>measures</u> . recommended sound walls. At one location (STA 459+50 to STA 487+00), there is an option for either track level sound absorption panels or a middle sound barrier that would be placed between the two BART alignment tracks. Approximately <u>13,000 to 15,000</u> <u>12,500</u> linear feet of sound walls would be needed, <u>depending on the</u> <u>mitigation option selected</u> . with each sound wall ranging in length from <u>250 to 1,730 feet</u> . Typically, the location of a sound wall is either 10 or 13 feet from the track centerline, depending on the track profile (10 feet for the retained open cut track <u>portions</u> and the aerial guideway, and 13 feet for the at grade and embankment tracks <u>portions of the Phase 1</u> <u>alignment</u> ). In areas where a sound wall is recommended on both sides of the alignment, absorptive sound walls are the recommended noise mitigation. The locations of the <u>noise mitigation</u> sound walls are depicted in Figures 4.13-3A through	LTS

**Table 1-2**, under the row heading "4.13 Noise and Vibration" on pages 1-20 to 1-22 of the Draft SEIR-2 has been revised as follows:

		4.13-3 <u>K</u> in the SEIR-2. Figures 4.13-3H and 4.13-3I show the location of the track level sound absorption panel noise mitigation option and Figures 4.13-3H(a) and 4.13-3I(a) shows the location of the middle sound barrier noise mitigation option.	
Phase 1 Alignment Noise	S	Mitigation Measure NV-2: Approximately 2,500 2,000	LTS
Impacts: Between		feet of slab track acoustical absorption at track level	
Hostetter Road and Sierra		shall be used to reduce adverse noise effects in the	
Road. The Berryessa		area of the alignment between Hostetter Road and	
Station would include an 8-		Sierra Road. This mitigation shall occur between civil	
foot high community wall		station STA 459+50 and 486+50 as indicated in Table	
near the residential areas to		4.13-6.	
the east, which would		Alternatively, a middle sound barrier could be	
reduce noise impacts. The		installed between STA 459+50 and 486+50 and	
community wall would need		designed to achieve a similar reduction in noise	
to be extended northward		levels. A two-sided, absorptive sound barrier in the	
to reduce noise impacts for		middle of S1 and S2 tracks with a minimum height	
residences on Salamoni		of five feet above the top of rail is an alternative to	
Court and Mabury Road.		track level absorptive panels. In addition to the	
The need for additional		middle sound barrier, sound absorptive material	
noise insulation of at the		would be required on both retaining walls of the	
nearby residences would		retained cut. The sound absorptive material on the	
be determined on an		retaining walls would be placed as low as possible	
individual basis.		and cover a minimum of four feet in vertical extent.	
In the area of the alignment		The material should possess a minimum noise	
between Hostetter Road		reduction coefficient of 0.65 and a minimum	
and Sierra Road, it was		absorption coefficient of 0.60 at 500 Hz. Should an	
determined that a sound		alternative noise mitigation measure be evaluated	
wall would not be a		and selected, that mitigation measure would be	
practical noise mitigation		required to provide a comparable noise reduction.	
measure because receptors		Figures 4.13-3H and 4.13-3H(a) and 4.13-3I and 4.13-	
in this area have an existing		<u>3I(a) show the location of the noise mitigation</u>	
sound wall at their backyard		options between Hostetter Road and Sierra Road.	
property line. It is		Mitigation Measure NV-3: During the project start-up	
estimated that the		phase and prior to revenue operations, VTA will carry	
receptor's sound walls		out noise testing along the civil stations where slab	
would provide shielding of		track acoustical absorption is being used as a	
dB which is the maximum		mitigation measure. The testing is to ensure that the	
reduction of a sound wall		sound absorber is adequately attenuating the increased	
recognized by the $FTA$ for a		noise from the slab track. VTA will deliver a technical	
single noise barrier As		memo to the $\vdash$ I A on the results of the testing. The	
shown in <b>Table 4.13-4</b>		testing will also serve to inform the need for additional	
receptors in this area are		wayside residential noise mitigation mentioned in	
projected to encounter a		ivilligation ivieasures INV-1 and INV-4.	
noise level increase of		Residences located on or at the second floor or higher	
Moderate Impact. This is		would continue to experience noise levels that exceed	
primarily due to the 3 dBA		THE FIA CRITERIA, EVEN WITH THE RECOMMENDED SOUND	
increase in noise levels		wall mitigation, which is considered to be at the	
associated with the FST.		maximum reasible neight. Approximately 425	
Implementation of track-		in multi family regidences (including single-tamily and individual Units	
level acoustical absorption		In multi-ramily residences) in 281 buildings Would	
would eliminate the		for a Sovere Impact. Where needed these residences	
increased noise levels.		would be considered for improved building insulation as	
II	I	would be considered for improved building insulation as	

		an additional mitigation. Individual residence-specific analysis of residual noise impacts would be conducted during final design to determine the noise attenuation provided by the existing windows and exterior walls of each affected residence and the specific upgrades required to achieve an interior noise level of 45 Ldn.	
Noise Impact: Residences located on or at the second floor or higher would continue to experience noise levels that exceed the FTA criteria, even with the recommended sound wall mitigation, which is considered to be at the maximum feasible height. Approximately 425 residences (including single-family and individual units in multi- family residences) in 281 buildings would remain exposed to noise in excess of the FTA criteria for a Severe Impact.	S	<b>Mitigation Measure NV-4</b> : Noise insulation and other measures shall be provided for residences with second floors or higher that are exposed to noise levels in excess of the FTA criteria. The mitigation will be designed to achieve an interior noise level of 45 Ldn where feasible. In addition to the recommended sound walls and retrofitting of multi-story residences with improved exterior sound isolation, sound absorptive material on the trackway structure would be necessary. This mitigation would primarily be needed in areas where the alignment runs in a retained cut. To further reduce noise impacts to multi-story residences, a sound wall would be constructed on both sides of the track where the corridor is narrow (50 feet or less). Installation of sound absorptive material on the inside face of retaining walls and sound walls would further reduce sound levels by as much as 2 dBA. Otherwise, potentially significant noise impacts could result in noise levels in excess of the FTA criteria. Table 4.13-7 identifies the location and length of recommended sound wall absorptive material that would be necessary in addition to the absorptive sound wall specified in Table 4.13-5, as required by Mitigation Measure NV-1. Figures 4.13-3A through 4.13-3KJ show the locations of <b>noise mitigation</b> sound walls and sound walls and sound absorptive material show the locations of <b>noise mitigation</b> sound walls and sound walls and sound absorptive material sound absorptive material sound walls and sound walls and sound walls provide the sound walls and sound walls and sound walls provide the sound walls and sound walls and sound wall specified in Table 4.13-5, as required by Mitigation Measure NV-1.	LTS
Vibration Impacts: A total of 60 residences are would be affected by the Dixon Landing Road At Grade Option at Dixon Landing Road as compared to 24 residences with the Retained Cut option at Dixon Landing Road. The Retained Cut option has been selected as the preferred alignment.	S	Mitigation Measure NV-5: Table 4.13-9 summarizes the vibration mitigation necessary to achieve the FTA criteria. The proposed mitigation is tire derived aggregate and 8-Hz FST. The locations of vibration mitigation are depicted on Figures 4.13-3A through 4.13-3 <u>K</u> J. Mitigation Measure NV-6: Upon project start-up, VTA will perform further testing on tire derived aggregate underlayment at its Vasona LRT Line. The vibration testing should replicate the testing presented to the FTA in 2009. The technical evaluation will then be presented to the FTA for review and comment	LTS

## 5.1.2 **REVISIONS TO SECTION 4.2, TRANSPORTATION**

In response to comment R-1.1, **subsection 4.2.2.1**, page 4.2-2 of the Draft SEIR-2 has been revised as follows:

#### Air Traffic Safety

No airports are located within ¼-mile of the Phase 1 area. The closest airport is the San Jose International Airport located approximately 2.3 miles west of the proposed Berryessa Station site. <u>The Reid Hillview</u> <u>Santa Clara County Airport is located 3.3 miles southeast of the terminus of Phase 1 near the Berryessa Station site.<sup>1</sup></u>

In response to comment S-3.4, **Subsection 4.2.2.2**, paragraphs 1 and 2, on page 4.2-2 of the Draft SEIR-2 have been revised as follows:

Phase 1 does not include any changes to local streets or intersections that could create a design hazard. All roadway geometrics and BART alignment features have been designed to conform with applicable city, county, or Caltrans standards and would therefore meet the necessary design safety requirements. Further, any modifications to the existing Union Pacific Railroad (UPRR) freight crossings with local roadways have been designed in accordance with the California Public Utilities Commission (CPUC) standards and will be subject to CPUC approval prior to construction. There are three existing at grade UPRR crossings with local roadways along the Phase 1 alignment: Mission Boulevard (State Route 262), Kato Road, and Dixon Landing Road. The Mission Boulevard (State Route 262) and Kato Road UPRR crossings will be grade separated by other agencies. Depending on the option selected for the Dixon Landing Road Alignment per Design Change 8-7, the existing UPRR crossing at Dixon Landing Road would either remain at grade or would be grade separated. The Retained Cut Option has been selected as the preferred alignment where the UPRR crossing at Dixon Landing Road would remain at grade. Therefore, Phase 1 would not substantially increase hazards due to a design feature. No mitigation is required.

<sup>&</sup>lt;sup>1</sup> According to the Reid-Hillview Airport Comprehensive Land Use Plan, the Phase 1 alignment would not be within the Airport Influence Area.

In response to comment S-3.4, **subsection 4.2.4.1** on page 4.2-9, paragraph 4 of the Draft SEIR-2 has been revised as follows to refer to Mission Boulevard as State Route 262:

AC Transit operates bus service in the eastern portions of Alameda and Contra Costa counties and transbay commuter bus service to downtown San Francisco. Various local routes provide weekday and weekend service in Fremont, Newark, and to a lesser extent, Union City. Line 217 provides bus service between Fremont and Milpitas from the Fremont BART Station to the Great Mall Transit Center in Milpitas, via Mission **Boulevard (State Route 262)** and Warm Springs b<u>B</u>oulevards on 30minute headway.

In response to comment S-1.2 and to correct an error in the Draft SEIR-2, **subsection 4.2.4.1** under the headings "Intercounty Movements: Santa Clara County-Alameda County Screenline Volumes" and "New Linked Transit Trips ("New Riders")" on pages 4.2-16 and 4.2-17 of the Draft SEIR-2 have been revised. A new **Table 4.2-12** has been added.

#### Intercounty Movements: Santa Clara County-Alameda County Screenline Volumes

An important movement in the SVRTC is intercounty travel, primarily between Santa Clara and Alameda counties. Santa Clara County, being job-rich, tends to draw commuters from adjacent counties, with the highest volumes coming from Alameda County. Phase 1 would make intercounty commuting on transit more attractive.

#### New Linked Transit Trips ("New Riders")

**Table 4.2-11** summarizes estimated transit ridership in 2030 on transit services offering connections between Santa Clara County and southern Alameda County under both the 2030 No Project conditions and Phase 1. Transit services used for this comparison include "Valley" express buses destined to/from Santa Clara County, VTA express buses, VTA light rail, ACE, and BART. Approximately 25,000 riders would cross the county line on intercity transit services on the typical weekday in 2030 in order to access work, home or other locations in Santa Clara County under the 2030 No Project conditions. The number would increase to over 53,000 following implementation of BART service provided by Phase 1. This represents over a 100 percent increase in intercounty trips made on transit. Many of these trips represent auto trips on congested I-880 and I-680 that are diverted to BART.

# Table 4.2-11: Total Weekday Transit Trips Crossing Santa Clara County Alameda County Line in 2030

Performance Measure	2030 No Project Conditions	Phase 1
Weekday Transit Trips Across Screenline	24,727	53,383
Change from 2030 No Project Conditions	NA	28,656

Source: Travel Demand Forecasts, Hexagon Transportation Consultants, Inc., February 2008.

#### New Linked Transit Trips ("New Riders")

Table 4.2-12 compares the year 2030 transit ridership forecasts for the No Project condition and Phase 1 in terms of new linked transit trips. Linked transit trips exclude transfer boardings so that a transit rider who uses more than one transit line or mode is counted only as one trip. New linked transit trips are primarily trips that are diverted from the automobile, but can include trips previously made on other non-transit modes (pedestrian and bicycle) or trips that are entirely new.

Phase 1 would generate a considerable number of new linked transit trips, approximately 27,135 on the average weekday. The row labeled "Weekday Boardings: All Operators in Area" represents total daily linked transit ridership for all the transit operators within the modeled area, including transit users coming over the Altamont Pass on either ACE trains or express buses.

Table 4.2-12:	Total Weekday	<u>/ Boardings</u>	and New	Linked	Transit	<u>Trips in</u>
<u>2030</u>						

Performance Measure	<u>No Project</u> Condition	Phase 1
<u>Weekday Boardings: All</u> Operators in Area <sup>a</sup>	<u>2,116,784</u>	<u>2,143,919</u>
New Linked Transit Trips <sup>b</sup>	NA	<u>27,135</u>

<sup>a</sup> Includes total daily transit boardings for the all transit operators within the modeled area, including transit users coming over the Altamont Pass on either ACE or express buses.

<sup>b</sup> Linked transit trips exclude transfer boardings, they are diverted almost entirely from auto trips and represent new riders on transit.

Source: Travel Demand Forecasts, Hexagon Transportation Consultants, Inc., February 2008.

To address the addition of the new **Table 4.2-12** in the Draft SEIR-2, all subsequent table numberings in **Section 4.2, Transportation**, of the Draft SEIR-2 have been revised as follows:

- Table 4.2-12, Daily Travel Time Savings in 2030, on page 4.2-17 has been changed to Table 4.2-13.
- Table 4.2-13, 2030 AM Peak Door-to-Door Travel Time (Minutes) for Selected Origin-Destination Pairs: 2030 No project Conditions vs. Phase 1 Conditions, on page 4.2-19 has been changed to Table 4.2-14.
- Table 4.2-14, Projected Bicycle Parking Demand for Phase 1, on page 4.2-29 has been changed to Table 4.2-15.
- Table 4.2-15, Freeway Segment Level of Service Definitions Based on Density, on page 4.2-31 has been changed to Table 4.2-16.
- Table 4.2-16, Intersection Level of Service Definitions Based on Delay, on page 4.2-32 has been changed to Table 4.2-17.
- Table 4.2-17, Existing Freeway Level of Service Results Summary, on page 4.2-35 has been changed to Table 4.2-18.
- Table 4.2-18, Existing Intersection Levels of Service Results Summary, on page 4.2-36 has been changed to Table 4.2-19.
- Table 4.2-19, 2015 and 2030 Transportation Network Improvements, on page 4.2-42 has been changed to Table 4.2-20.
- Table 4.2-20, 2030 No Project Freeway Levels of Service Results Summary, on page 4.2-43 has been changed to Table 4.2-21.
- Table 4.2-21, 2030 No Project Intersection Levels of Service Results Summary, on page 4.2-46 has been changed to Table 4.2-22.
- Table 4.2-22, 2030 No Project Conditions with Improvements Intersection LOS Results Summary, on page 4.2-48 has been changed to Table 4.2-23.
- Table 4.2-23, Phase 1 Freeway Level of Service Results Summary, on page 4.2-61 has been changed to Table 4.2-24.
- Table 4.2-24, Phase 1 Intersection Level of Service Results Summary, on page 4.2-63 has been changed to Table 4.2-25.
- Table 4.2-25, Phase 1 with Mitigations Intersection Level of Service Results Summary, on page 4.2-75 has been changed to Table 4.2-26.

In response to comment L-2.7, **Figure 4.2-4** of the Draft SEIR-2 has been revised to include the existing and planned bikeway improvements within the City of Milpitas. The revised **Figure 4.2-4** is included at the end of this Chapter.

In response to comment S-3.3, page 4.2-36, paragraph 4 of the Draft SEIR-2 has been revised as follows:

The results of the intersection level of service analysis under existing conditions for the proposed BART Stations is summarized in **Table 4.2-18**. The results show that 3-2 of the 48 study intersections currently operate at an unacceptable level of service (LOS E or F for local intersections and LOS F for CMP intersections) during at least one of the peak hours. CMP intersections are denoted with an asterisk (\*). The results are described by proposed station area.

## 5.1.3 REVISIONS TO SECTION 4.11, HAZARDOUS MATERIALS

**Subsection 4.11.4.4** on page 4.11-5 of the Draft SEIR-2 has been revised as follows to clarify that Phase 1 would be subject to the Statewide Construction General Storm Water permit:

As described in the FEIR and SEIR-1, accumulated water (including potentially contaminated water) would be pumped out on a regular basis. During the construction phase, the groundwater at this location would be tested for contaminants. If contaminants were shown to be present, an NPDES <u>and/or Statewide Construction General Storm Water permit</u> would be required for pumping activities during the operational phase, and the pump station would be equipped with a properly designed, operated, maintained, and monitored treatment system appropriate for the contaminants detected. No additional hazardous materials impacts are anticipated at the alternate pump station locations for the Dixon Landing Road BART Retained Cut Option.

**Subsection 4.11.4.5**, paragraph 3, on page 4.11-6 of the Draft SEIR-2 has been revised as follows to clarify that Phase 1 would be subject to the Statewide Construction General Storm Water permit:

The impacts, design requirements, and BMPs included in the FEIR and SEIR-1 related to maintenance procedures during the operational phase (including dewatering activities where existing soil and groundwater contamination and/or contaminated surface water runoff may be present) remains applicable in the SEIR-2. The discharge of any water from dewatering activities would comply with NPDES and/or municipal storm sewer system (MS4) <u>Statewide Construction General Storm Water</u> permit requirements, if applicable. Development and implementation of a worker health and safety plan and, if required, HAZWOPER training also remain applicable. As mentioned under Design Change & <u>7</u>, Dixon Landing Road Alignment, <u>the</u> pump stations in <u>the</u> retained cuts would be equipped with properly designed, operated, maintained, and monitored

treatment systems appropriate for the contaminants detected at specific locations. No additional hazardous materials impacts are anticipated due to the retained cut configurations from Curtis Avenue to Trade Zone Boulevard under this design change.

#### 5.1.4 REVISIONS TO SECTION 4.13, NOISE AND VIBRATION

This subsection shows the revisions to **Section 4.13**, **Noise and Vibration**, of the Draft SEIR-2 as a result of an additional noise mitigation option to the proposed track level sound absorption panels that is being considered as part of this Final SEIR-2. Revisions to **Section 4.13**, from the nine design refinements, are shown in **Chapter 2**, **Design Refinements**, of this Final SEIR-2.

Subsequent noise analysis since the Draft SEIR-2 has shown that a two-sided, absorptive sound barrier in the middle of the BART alignment tracks with a minimum of five feet above the top of the rail, along with sound absorptive material on both retaining walls, would have a comparable noise reduction to the proposed track level sound absorption panels. The sound absorptive material on the retaining wall would need to be placed as low as possible and cover a minimum of four vertical feet.<sup>2</sup> Based on this analysis, both of these noise mitigation options are being carried forward through subsequent engineering phases for Phase 1. The vibration mitigation has also been revised, based on additional analyses since the Draft SEIR-2. The vibration mitigation has been revised to achieve the FTA vibration impact criteria. In some cases, the length of the floating slab track was extended to facilitate constructability. The floating slab track provides greater vibration reduction that tire derived aggregate. The revisions to **Section 4.13, Noise and Vibration**, of the Draft SEIR-2 reflect this additional noise mitigation option.

Mitigation Measure NV-1 in **subsection 4.13.4.1** on page 4.13-20 of the Draft SEIR-2 has been revised as follows:

Mitigation Measure NV-1: <u>Noise mitigation includes sound walls,</u> <u>absorptive sound walls, absorptive acoustical materials for retaining</u> <u>walls, and track absorption.</u> Sound walls shall be installed to mitigate noise levels near residences affected by Phase 1. Table 4.13-5 indicates the location of <u>the noise mitigation.</u> recommended sound walls. <u>At one</u> <u>location (STA 459+50 to STA 487+00), there is an option for either</u> <u>track level sound absorption panels or a middle sound barrier that</u> <u>would be placed between the two BART alignment tracks.</u> Approximately <u>13,000 to 15,000</u> <del>12,500</del> linear feet of sound walls would be needed, <u>depending on the mitigation option selected.</u> with each sound wall ranging in length from 250 to 1,730 feet. Typically, the location

<sup>&</sup>lt;sup>2</sup> Wilson Ihrig and Associates. SVRT Berryessa Extension – Final Noise and Vibration Mitigation Recommendations Memorandum. January 19, 2011.

of a sound wall is either 10 or 13 feet from the track centerline, depending on the track profile (10 feet for the retained open cut track **portions** and the aerial guideway, and 13 feet for the at grade and embankment tracks **portions of the Phase 1 alignment**). In areas where a sound wall is recommended on both sides of the alignment, absorptive sound walls are the recommended noise mitigation. The locations of the **noise mitigation sound walls** are depicted in **Figures 4.13-3A** through **4.13-3KJ**. **Figures 4.13-3H and 4.13-3I show the location of the track level sound absorption panel noise mitigation option and Figures 4.13-3H(a) and 4.13-3I(a) shows the location of the middle sound barrier noise mitigation option**.

 Table 4.13-5
 on page 4.13-21
 of the Draft SEIR-2 has been revised as follows:

Option	Beginning Civil Station Number	Ending Civil Station Number	Side of Track	Height (feet)	Length (feet)
<del>N/A</del>	<del>168+20</del>	<del>176+50</del>	<del>- 82</del>	<del>14-15</del>	<del>830</del>
At Grade Option at Dixon Landing	<del>181+00</del>	<del>184+00</del>	<del>\$2</del>	7	<del>300</del>
Retained Cut Option at Dixon Landing	<del>181+00</del>	<del>184+00</del>	<del>82</del>	8	<del>300</del>
N/A	<del>186+00</del>	<del>192+20</del>	<del>\$2</del>	8	<del>620</del>
<u>N/A</u>	<u>167+00</u>	<u>169+00</u>	<u>S2</u>	<u>4</u>	<u>200</u>
<u>N/A</u>	<u>180+00</u>	<u>186+00</u>	<u>S2</u>	<u>8</u>	<u>1,170</u>
N/A	230+80	245+00	S1	4 <sup>c</sup>	1,420
N/A	246+50	254+00	S1	4	750
N/A	330+00	337+50	S1	12 <sup><u>b</u> a</sup>	750
N/A	409+00	412+50	S2	7 <sup>c</sup>	350
N/A	412+50	423+00	S2	7 <u>a</u>	1,050
N/A	423+00	440+30	S2	9 <u>a</u>	1,730
N/A	440+30	447+50	S2	8 <sup>e</sup>	720
N/A	447+50	452+30	S2	10	480
<u>N/A</u>	<u>458+00</u>	<u>n/a</u>	TPSS <sup>e</sup>	<u>8</u>	<u>n/a</u>

Table 4.13-5: Noise Wall Mitigation for Phase 1 (Mitigation Measure NV-1)

Option	Beginning Civil Station Number	Ending Civil Station Number	Side of Track	Height (feet)	Length (feet)
<del>N/A</del>	<del>457+00</del>	<del>461+00</del>	<del>82</del>	8e	Traction Power Substation east, south, and west property line
With Track Level Absorption	<u>459+50</u>	<u>466+50</u>	<u>S1 &amp;</u> <u>S2</u>	<u>TLA</u>	<u>700</u>
With Track Level Absorption	<u>472+30</u>	<u>474+30</u>	<u>S1 &amp;</u> <u>S2</u>	<u>TLA</u>	<u>200</u>
With Track Level Absorption	<u>475+50</u>	<u>486+50</u>	<u>S1 &amp;</u> <u>S2</u>	<u>TLA</u>	<u>1,100</u>
With Track Level Absorption	<u>470+00</u>	<u>475+00</u>	<u>S1</u>	<u>12</u>	<u>500</u>
Without Track Level Absorption	<u>459+50</u>	<u>487+00</u>	<u>Middle</u>	<u>5<sup>d</sup></u>	<u>2,750</u>
N/A	493+50	506+00	S1 <u>&amp;</u> <u>S2</u>	10 <sup>ª b</sup>	<u>1,250</u> -1,100
<del>N/A</del>	<del>497+00</del>	<del>506+00</del>	<del>82</del>	<del>10<sup>b</sup></del>	<del>900</del>
N/A	506+00	508+50	S1	9 <u>a</u> b	250
N/A	506+00	508+50	S2	10 <sup>_<b>a</b> b</sup>	250
N/A	508+50	512+00	S2	6	350
N/A	512+00	<u>521+00</u> 515+50	S2	4	<u>900</u> 350
<del>N/A</del>	<del>515+00</del>	<del>521+00</del>	<del>S2</del>	4	<del>550</del>
<u>N/A</u>	<u>521+00</u>	<u>548+00</u>	<u>Station</u>	<u>8°</u>	<u>n/a</u>

<sup>a</sup> <u>Absorptive sound wall</u> sound wall part of UPRR relocation project

<sup>b</sup> Referenced to CL and T/R of UPRR track absorptive sound wall

<sup>c</sup> Sound wall along station property line sound wall to mitigate Moderate Impacts

<sup>d</sup> Two sided, absorptive sound wall plus absorption on both retaining walls

<sup>e</sup> Perimeter of traction power substation

S1 = southbound track; S2 = northbound track; **TLA = track level sound absorptive panels** Source: Wilson, Ihrig & Associates, Inc., <u>2011</u> 2008a.

**Figures 4.13-A** through **4.13-3J** of the Draft SEIR-2 have been revised to show the updated noise mitigation locations. New **Figures 4.13-3H(a)** and **4.13-3I(a)** have been added to the Draft SEIR-2 to show the middle sound barrier noise mitigation option in lieu of the track level sound absorption panels. A new **Figure 4.13-3K** has also been added to the Draft SEIR-2 to show the noise mitigation location at the Berryessa Station. These revised and new figures are shown at the end of this Chapter. Mitigation Measure NV-2 in **subsection 4.13.4.1** on page 4.13-32 of the Draft SEIR-2 has been revised as follows:

**Mitigation Measure NV-2:** Approximately <u>**2,500**</u> <del>2,000</del> feet of slab track acoustical absorption at track level shall be used to reduce adverse noise effects in the area of the alignment between Hostetter Road and Sierra Road. This mitigation shall occur between <del>civil station</del> <u>**STA**</u> 459+50 and 486+50 as indicated in **Table 4.13-6**.

Alternatively, a middle sound barrier could be installed between STA 459+50 and 486+50 and designed to achieve a similar reduction in noise levels. A two-sided, absorptive sound barrier in the middle of S1 and S2 tracks with a minimum height of five feet above the top of rail is an alternative to track level absorptive panels. In addition to the middle sound barrier, sound absorptive material would be required on both retaining walls of the retained cut. The sound absorptive material on the retaining walls would be placed as low as possible and cover a minimum of four feet in vertical extent. The material should possess a minimum noise reduction coefficient of 0.65 and a minimum absorption coefficient of 0.60 at 500 Hz. Should an alternative noise mitigation measure be evaluated and selected, that mitigation measure would be required to provide a comparable noise reduction.

Figures 4.13-3H and 4.13-3H(a) and 4.13-3I and 4.13-3I(a) show the location of the noise mitigation options between Hostetter Road and Sierra Road.

Table 4.13-6: Locations for Track Level Acoustical Absorption (MitigationMeasure NV-2)

Civil Station	Side of Track	Length (feet)
459+50 to 466+50	S1 & S2	700
472+30 to 474+30	S1 & S2	200
475+50 to 486+50	S1 & S2	1,100
470+00 to 475+00	<u>S1</u>	<u>500</u>

Source: Wilson, Ihrig & Associates, Inc., 2011 2010.

Mitigation Measure NV-4 in **subsection 4.13.4.1** on pages 4.13-32 and 4.13-33 of the Draft SEIR-2 has been revised as follows:

**Mitigation Measure NV-4**: Noise insulation and other measures shall be provided for residences with second floors or higher that are exposed to noise levels in excess of the FTA criteria. The mitigation will be designed to achieve an interior noise level of 45 Ldn where feasible.

In addition to the recommended sound walls and retrofitting of multi-story residences with improved exterior sound isolation, sound absorptive material on the trackway structure would be necessary. This mitigation would primarily be needed in areas where the alignment runs in a retained cut. To further reduce noise impacts to multi-story residences, a sound wall would be constructed on both sides of the track where the corridor is narrow (50 feet or less). Installation of sound absorptive material on the inside face of retaining walls and sound walls would further reduce sound levels by as much as 2 dBA. Otherwise, potentially significant noise impacts could result in noise levels in excess of the FTA criteria. **Table 4.13-7** identifies the location and length of recommended sound wall absorptive material that would be necessary in addition to the absorptive sound wall specified in **Table 4.13-5**, as required by Mitigation Measure NV-1. **Figures 4.13-3A** through **4.13-3KJ** show the locations of **noise mitigation** sound walls and sound absorptive materials.

Civil Station	Side of Track	Length (feet)
412+50 to 440+30	<u>S2</u>	<u>2,780</u>
460+80 to 487+00	<del>S1 &amp; S2</del>	<del>2620</del>
491+80 to 508+50	S1 & S2	<u>1,500</u> <del>1670</del>

 Table 4.13-7: Locations for Sound Absorptive Material (Mitigation Measure NV-4)

Source: Wilson, Ihrig & Associates, Inc., 2011 2008a.

Mitigation Measure NV-5 in **subsection 4.13.4.2** on page 4.13-43 of the Draft SEIR-2 has been revised as follows:

**Mitigation Measure NV-5: Table 4.13-9** summarizes the vibration mitigation necessary to achieve the FTA criteria. The proposed mitigation is tire derived aggregate and 8-Hz FST. The locations of vibration mitigation are depicted on **Figures 4.13-3A** through **4.13-3**<u>K</u>**J**.

Table 4.13-9 on page 4.13-44 of the Draft SEIR-2 has been revised as follows:

Option	Civil Station	Mitigation
N/A	<del>167+00 to 169+79 <sup>a</sup></del>	Tire Derived Aggregate
N/A	<del>169+79<sup>ª</sup> to 172+80<sup>ª</sup></del>	8-Hz Floating Slab Track
N/A	172+80 <sup>ª</sup> to 177+00	Tire Derived Aggregate
At Grade Option at Dixon Landing	<del>179+60 to 181+50</del>	Tire Derived Aggregate <sup>b</sup>
At Grade Option at Dixon Landing	<del>181+50 to 183+60</del>	8-Hz Floating Slab
At Grade Option at Dixon Landing	<del>183+60 to 185+00</del>	Tire Derived Aggregate <sup>b</sup>
At Grade Option at Dixon Landing	<del>188+50 to 192+00</del>	8-Hz Floating Slab
At Grade Option at Dixon Landing	<del>192+00 to 209+00</del>	Tire Derived Aggregate <sup>b</sup>
	<u>167+92<sup>b</sup> to 173+00</u>	8-Hz Floating Slab Track
	<u>173+00 to 177+00</u>	Tire Derived Aggregate
Retained Cut Option at Dixon Landing	181+50 to- <u>184+10</u> 183+60	8-Hz Floating Slab Track
Retained Cut Option at Dixon Landing	<del>197+50 to 204+20</del>	8-Hz Floating Slab Track
Retained Cut Option at Dixon Landing	<u><b>197+50</b></u> <del>204+20</del> to 209+00	Tire Derived Aggregate <sup>b</sup>
N/A	264+00 to 266+30	Tire Derived Aggregate <sup>b</sup>
N/A	266+30 to 287+00	8-Hz Floating Slab
N/A	331+50 to 337+40	8-Hz Floating Slab
N/A	418+00 to <u>448+00</u> 4 <del>32+00</del>	Tire Derived Aggregate- <sup>b</sup>
N/A	432+00 to 448+00	Tire Derived Aggregate <sup>b</sup>
N/A	448+00 to 452+00	8-Hz Floating Slab
N/A	459+50 to 466+50	8-Hz Floating Slab
<del>N/A</del>	472+30 to 474+30	8-Hz Floating Slab
N/A	475+50 to 486+50	8-Hz Floating Slab
N/A	493+30 to <u><b>519+50</b></u> <del>506+00</del>	8-Hz Floating Slab
<del>N/A</del>	<del>506+00 to 519+50</del> <sup>€</sup>	8-Hz Floating Slab

 Table 4.13-9:
 Vibration Mitigation (Mitigation Measure NV-5)

<sup>a</sup> <u>Civil Stations shown relative to S1 track, identical mitigation is recommended for</u> <u>adjacent S2 track segments</u> extents of proposed crossover

<sup>b</sup> South end of Kato Road bridge structure Tire derived aggregates or comparable mitigation will be implemented

<sup>c</sup> North end of <u>Berryessa Station aerial structure</u> bridge structure over Berryessa Road Source: Wilson, Ihrig & Associates, Inc., <u>2011</u> <del>2006a</del>.

# 5.1.5 REVISIONS TO SECTION 4.15, SOCIOECONOMICS

In response to comment P-9.14, **Subsection 4.15.4.1**, under heading "City of Milpitas" and subheading "Design Change 10. Systems Facilities Alternate Location B (STA 260+00)" on page 4.15-8 of the Draft SEIR-2 has been revised as follows:

Near Railroad Court in Milpitas, High Voltage Substation SRC, Traction Power Substation SRR/Switching Station SRR, Train Control Building S28, and a PG&E tower would be constructed west of the UPRR ROW. Construction of these facilities as described in the SEIR 1 would have caused the displacement of one light industrial business, which included 135 vehicle storage customers. Upon further refinement of the systems facilities at this location, now these facilities would cause the displacement of up to approximately 25 storage units at one light industrial business (a recreational vehicle (RV) storage area), but would not displace the entire light industrial business. This design change would no longer impact the cell tower at this location. These facilities would also cause the displacement of up to approximately 40 30 parking spaces from an adjacent industrial use; however, the loss of parking would not cause the displacement of this industrial business (Figure C-14, STA 258+00 in **Appendix C**). Because no displacements of residences or businesses would result from this design change, the impact would be less than significant.

Based on refined engineering by VTA staff since publication of the Draft SEIR-2, **Table 4.15-5** on page 4.15-12 of the Draft SEIR-2 has been revised as follows:

PIN #	APN	Туре	Impact
BXXXX	<u>519-1310-</u> <u>002-01</u>	IEE	Less than significant impact.
BXXXX	<u>519-1310-</u> <u>049</u>	IEE	Loss of landscaping. <sup>a</sup> Less than significant impact.
<u>B2544</u>	<u>519-0850-</u> 062-02	IEE	Less than significant impact.
B2050A	519-1010- 136	SDE, IEE	Temporary loss of 2 parking spaces and landscaping <sup>a</sup> for up to 3 years. Less than significant impact.
B2050A	519-1010- 140	IEE	Less than significant impact.
<del>B2166</del>	<del>519-1010-</del> <del>021</del>	<del>UE</del>	Less than significant impact.
B2078	022-02-003	UE	Less than significant impact.
<u>B2603A</u>	<u>022-31-000</u>	IEE	Less than significant impact.

Table 4.15-5: Phase 1 – Summa	ry of Impacts due	to Permanent Easements
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PIN #	APN	Туре	Impact
<u>B2594</u>	022-31-021	IEE	Less than significant impact.
<u>B2017</u>	<u>028-20-001</u>	IEE	Less than significant impact.
<u>B2018</u>	<u>028-21-060</u>	IEE	Less than significant impact.
B2021	028-23-012	IEE	Less than significant impact.
<u>B2025</u>	086-24-060	UE	Less than significant impact.
<u>B2026</u>	<u>086-42-035</u>	<u>IEE,</u> <u>SDE,</u> <u>SSE</u>	Less than significant impact.
<u>B2028</u>	<u>086-32-037</u>	<u>PSE,</u> <u>SDE,</u> <u>UE, SSE</u>	Less than significant impact.
<u>B2029</u>	<u>086-32-019</u>	<u>PSE,</u> SDE, UE, SSE, JUE	Temporary closure of Piper Drive during construction for utility work and construction staging. Construction duration of up to 5 years. VTA will work with UPRR to schedule construction so as to minimize impacts to freight service. VTA will work with adjacent property owners to maintain access to businesses during business hours during construction. Less than significant impact.
<u>B2030</u>	<u>086-24-042,</u> <u>086-24-056</u>	<u>PSE</u>	Loss of landscaping. <sup>a</sup> Less than significant impact.
<u>B2239</u>	<u>086-32-036</u>	<u>PSE, UE</u>	Loss of landscaping. <sup>a</sup> Less than significant impact.
<u>B2084</u>	<u>092-08-077</u>	PSE	Loss of landscaping. <sup>a</sup> Less than significant impact.
B2255	<u>092-08-092</u>	PSE	Less than significant impact.
B2256	<u>092-08-057</u>	PSE	Less than significant impact.
<u>B2257</u>	092-08-084	PSE	Less than significant impact.
<u>B2250</u>	<u>092-08-096</u>	PSE, SDE, UE, SSE, JUE	Temporary removal of community wall for up to 5 years during construction. Community wall to be reconstructed after construction is completed. During construction, temporary safety fence with visual screening will be provided. Temporary loss of detention basin; during construction stormwater will be diverted around the active work areas. The detention basin will be restored to preconstruction conditions after construction is complete. Less than significant impact.
B2563	028-23-011	UE	Less than significant impact.

PIN #	APN	Туре	Impact
B2576	241-27-000	IEE	Permanent loss of up to 4 parking spaces and removal of approximately 50 feet of a 7-9 foot high soundwall. New soundwall to be provided adjacent to track. Refer to <u>Section 4.13 Noise</u> and Vibration for noise mitigation. Less than significant impact.
B2034	241-03-014	IEE	Less than significant impact.
<u>B2300</u>	<u>254-17-007</u>	<u>UE, JUE</u>	Permanent loss of Flea Market stalls - impacts previously analyzed. Less than significant impact.
<u>B2310</u>	<u>254-17-095</u>	<u>UE.</u> RWE	Permanent loss of Flea Market facilities/stalls - impacts previously analyzed. Less than significant impact.
<u>B2311</u>	<u>254-17-034</u>	<u>UE</u>	Less than significant impact.
<u>B2058</u>	<u>254-01-023</u>	<u>UE, PSE</u>	Temporary loss of parking for up to 3 years and loss of landscaping. <sup>a</sup> Less than significant impact.
B2144	254-03-016	PSE	Less than significant impact.
B3012	254-03-007	PSE	Less than significant impact. Temporary displacement of materials storage area for up to 3 years.
<del>B3100</del>	<del>254-03-027</del>	PSE	Less than significant impact.
B3062	254-02-000	PSE	Temporary closure of Marburg Way for up to 2 years. Access would be maintained to businesses south of this location on Marburg Way.

<sup>a</sup> Landscaping to be replaced after construction is complete at a 1:1 ratio where feasible. Refer to **Section 4.17, Visual Quality and Aesthetics**. Source: VTA, <u>2011</u> 2010.

# 5.1.6 REVISIONS TO SECTION 4.17, VISUAL QUALITY AND AESTHETICS

In response to comment P-9.11, **subsection 4.17.4.3** on page 4.17-7 of the Draft SEIR-2 has been revised as follows:

Alternate Location B would shift the High Voltage Substation SRC and Switching Station SRR slightly south (less than 100 feet) of the system facilities identified under the approved project. No new scenic resources or vistas have been identified in the area, nor has the existing visual character of the area changed since certification of the SEIR-1. Thus, Alternate Location B would not result in any new impacts to visual quality or aesthetics beyond those already considered in the SEIR-1, and the SEIR-1 discussion remains applicable to this SEIR-2. <u>The Systems</u> Facilities Alternate Location B could be visible from the nearby residences, which are located east of the UPRR tracks and approximately 250 feet away from the facility. However, the residents already experience views of industrial and utilitarian visual elements to the west, including the UPRR tracks, paved storage yards, and large rectangular warehouse-style buildings. The addition of the systems facility would be consistent with the existing visual elements of the adjacent industrial developments. Therefore, Alternate Location B would have a less-than-significant impact related to scenic vistas, the existing visual character, scenic resources, and light and glare. Systems Facilities Alternate Location B has been selected as the preferred systems facilities location.

#### 5.1.7 REVISIONS TO 4.18, WATER RESOURCES, WATER QUALITY, AND FLOODPLAINS

**Section 4.18, Water Resources, Water Quality, and Floodplains**, of the Draft SEIR-2 has been updated to include a discussion of the Statewide Construction General Permit. Phase 1 will be subject to the permanent storm water treatment measures in the Statewide Construction General Permit rather than the Alameda County and Santa Clara County Municipal Separate Storm Sewer Systems (MS4) permits. The following revisions reflect this update.

Subsection 4.18.1, page 4.18-1 of the Draft SEIR-2 has been revised as follows:

This section updates information on water resources, water quality, and floodplains within or along the Phase 1 alignment since certification of the FEIR and SEIR-1. One notable change is the adoption of a new Municipal Regional Stormwater Statewide Construction General Storm Water Permit, as discussed below in subsection 4.18.3.

The second paragraph in **subsection 4.18.3** on pages 4.18-1 and 4.18-2 of the Draft SEIR-2 has been revised as follows:

The San Francisco Bay Regional Water Quality Control Board adopted a new National Pollutant Discharge Elimination System (NPDES), <u>Municipal</u> <u>Regional Stormwater Permit General Permit for Storm Water</u> <u>Discharges Associated with Construction and Land Disturbance</u> <u>Activities on October 14-September 2</u>, 2009 (Order <del>R2-2009-0074</del> <u>2009-009-DWQ</u> NPDES Permit No. CAS<u>000002</u> 612008) for the discharge of storm water runoff from municipal storm sewer systems for municipalities and local agencies ("the permittees") that have joined together to form the Alameda Countywide Clean Water Program and the Santa Clara Valley Urban Runoff Pollution Prevention Program. These programs are briefly described in subsection 4.18.3.5 of the FEIR. The new permit standardizes includes measures for post-construction BMP's for all

dischargers not already covered by a Municipal regional permit. Since VTA is not covered by the Municipal Regional Storm Water NPDES permit, and the requirements for municipalities and local agencies do not apply to the VTA's SVBX projects, the requirements in the Construction general permit are applicable. The permit requirements for post-construction BMP's take effect on September 2, 2012. storm water management requirements throughout the San Francisco Bay region. The intent of the permit is to reduce storm water runoff and pollution, protect water quality, and promote groundwater recharge. The Municipal Regional Stormwater Permit became effective on December 1, 2009 and will be implemented in phases. Of particular interest is the fact that all projects required to treat storm water must incorporate low-impact development methods to control onsite pollutants by reducing runoff and allowing infiltration of water. These methods include rainwater harvesting and reuse, infiltration, evapotranspiration,<sup>3</sup> or biotreatment,<sup>4</sup> among others. In addition, certain projects (such as uncovered parking areas, either stand-alone or part of another use) that create and/or replace 5,000 square feet or more of

Projects are required to show that the use of low-impact development would result in the same runoff volumes, or a "water balance", during pre- and post-development. For a projects on less than two acres of land, the projects must ensure that the length of the stream channels will not be reduced as a result of the project and that the water will take the same amount of time or longer to run off the site as compared to pre-construction conditions. In other words, the project must show the same or greater "runoff time of concentration. "impervious surface will be required to provide low-impact development treatment methods. During subsequent engineering phases, the design of Phase 1 will incorporate storm water treatment features for trackways, facilities, and stations that comply with the new permit.

The fifth paragraph of **subsection 4.18.4** on page 4.18-3 of the Draft SEIR-2 has been revised as follows:

Additionally, Phase 1 would include best management practices to reduce pollutants from storm water runoff that are consistent with the NPDES <u>Construction General Storm Water</u> <u>Municipal Regional Stormwater</u> permit, NPDES General Industrial Storm Water Permit, <u>MS4 permits</u>, and/or General Waste Discharge Requirements.

<sup>&</sup>lt;sup>3</sup> The return of water from the soil and from plants to the atmosphere by evaporation and transpiration.

<sup>&</sup>lt;sup>4</sup> Filtering stormwater through vegetation and soils before discharging to the storm drain system.

**Subsection 4.18.5** on page 4.18-9 of the Draft SEIR-2 has been revised as follows:

The design changes under Phase 1 would not expose people or structures to the risk of flooding, tsunami, seiche, or mudflow; violate water quality standards or waste discharge requirements; create or contribute runoff that would exceed the capacity of existing or planned drainage systems; provide substantial additional sources of polluted runoff; or substantially alter drainage patterns with a resultant increase in erosion or siltation. The design requirements and Best Management Practices related to water resources, water quality, and floodplains included in the FEIR and SEIR-1 remain applicable, and the requirements outlined in the new **Construction General Storm Water** Municipal Regional Stormwater Permit will be implemented. No new mitigation is necessary.

In response to comment L-2.3, **Figure 4.18-2** has been added to the Draft SEIR-2 to show the floodplains in the vicinity of Phase 1 in the City of Milpitas. The revised figure is shown at the end of this Chapter.

# 5.1.8 **REVISIONS TO SECTION 4.19, CONSTRUCTION**

A new figure, **Figure 4.19-5**, **Montague Expressway Construction Staging Area**, has been added to the Draft SEIR-2 to show the Montague Expressway CSA. The figure showing the Montague Expressway CSA is shown as **Figure 2-6** in **Chapter 2**, **Design Refinements**, of this Final SEIR-2.

A figure showing the Capitol Expressway CSA has also been added; this figure was incorrectly omitted from the Draft SEIR-2.<sup>5</sup> This new figure is shown as revised **Figure 4.19-6** at the end of this Chapter. The ordering of **Figures 4.19-2** through **4.19-9** has also been revised to correct an error in the Draft SEIR-2. The revised figure numbering sequence is as follows:

- **Figure 4.19-2**: Mission Falls Court Construction Staging Area (no change since Draft SEIR-2)
- Figure 4.19-3: Calaveras Boulevard Construction Staging Area (former Figure 4.19-6 in the Draft SEIR-2)
- **Figure 4.19-4**: Piper Drive Construction Staging Area (former **Figure 4.19-3** in the Draft SEIR-2)

<sup>&</sup>lt;sup>5</sup> The Capitol Expressway CSA was included as **Figure 4.19-4** in the electronic versions of the Draft SEIR-2, but incorrectly omitted from the print version of the Draft SEIR-2. These revisions correct the print version of the Draft SEIR-2.

- Figure 4.19-5: Montague Expressway Construction Staging Area (new figure added to Draft SEIR-2, shown as Figure 2-6 in Chapter 2, Design Refinements, of this Final SEIR-2)
- **Figure 4.19-6**: Capitol Avenue Construction Staging Area (new figure added to the Draft SEIR-2)
- **Figure 4.19-7**: Trade Zone Boulevard Construction Staging Area (former **Figure 4.19-5** of the Draft SEIR-2)
- Figure 4.19-8: Berryessa Road Construction Staging Area (former Figure 4.19-7 of the Draft SEIR-2)
- **Figure 4.19-9**: Mabury Road and US 101 Construction Staging Area (former **Figure 4.19-8** of the Draft SEIR-2)

Based on refined engineering by VTA staff since publication of the Draft SEIR-2, **Table 4.19-5** in **subsection 4.19.4.13** on page 4.19-39 of this Draft SEIR-2 has been revised as follows:

PIN #	APN	Туре	Impact
<del>B2050A</del>	<del>519-1010- 136, 519- 1010-140, 519,1010- 138</del>	TCE	Temporary loss of 2 parking spaces and landscaping <sup>a</sup> -for up to 3 years. Less than significant impact.
<u>B2612</u>	<u>519-1010-26</u>	TCE	Less than significant impact.
B2077	022-01-014	TCE	Soundwall would not be removed. Less than significant impact.
<u>B2024</u>	<u>086-49-000</u>	<u>TCE</u>	Temporary displacement of trash handling and playground equipment for up to 1 year, and loss of landscaping <sup>a</sup> . Less than significant impact.
<u>B2025</u>	086-24-060	TCE	Temporary impacts to Great Mall Drive during construction of retaining wall and relocated UPRR tracks, including temporary closure of one lane of Great Mall Drive for up to one year, not during the holiday season. This may require 1 way traffic control for portions of Great Mall Drive. Closure would be necessary for safety purposes only when workers are immediately adjacent to the roadway. Existing chain link fence with redwood slats to be removed during construction and replaced after construction on top of new retaining wall along Great Mall Drive. Permanent loss of landscaping for relocated UPRR tracks. Screening vegetation will be planted at the base of the retaining wall, if feasible. Less than significant impact.

 Table 4.19-5: Phase 1 – Summary of Temporary Displacements

PIN #	APN	Туре	Impact
<u>B2029</u>	<u>086-32-019</u>	TCE	Temporary closure of Piper Drive during construction for utility work and construction staging. Construction duration of up to 5 years. VTA will work with UPRR to schedule construction so as to minimize impacts to freight service. VTA will work with adjacent property owners to maintain access to businesses during business hours during construction. Less than significant impact.
<u>B2030</u>	<u>086-24-042,</u> <u>086-24-056</u>	TCE	Temporary loss of up to 2 parking spaces for up to 1 year and loss of landscaping. Less than significant impact.
<u>B2084</u>	<u>092-08-077</u>	<u>TCE</u>	Temporary loss of up to 25 parking spaces for up to 1 year and loss of landscaping. VTA will work with property owner to ensure sufficient parking is available for operation of the business. Less than significant impact.
<u>B2264</u>	<u>092-08-086</u>	TCE	Temporary loss of up to 3 parking spaces for up to 1 year and loss of landscaping. VTA will work with property owner to maintain access to business during business hours during construction. Less than significant impact.
<u>B2260</u>	<u>092-08-054</u>	TCE	Temporary loss of up to 4 parking spaces for up to 1 year and loss of landscaping. VTA will work with property owner to maintain access to business during business hours during construction. Less than significant impact.
<u>B2256</u>	<u>092-08-057</u>	<u>TCE</u>	Less than significant impact.
<del>B2081</del>	<del>022-01-006</del>	TCE	Temporary loss of up to 6 parking spaces and landscaping <sup>-a</sup> for up to 3 years. Site to be restored to pre-construction condition after construction complete. Less than significant impact.
<del>B2079</del>	<del>022-37-031</del>	TCE	Temporary loss of up to 6 parking spaces and landscaping. <sup>a</sup> for up to 3 years. Site to be restored to pre-construction condition after construction complete. Less than significant impact.
B2257	092-08-084	TCE	Temporary displacement of 13 parking spaces and loss of landscaping <sup>a</sup> for up to 3 years. Site to be restored to pre-construction condition when construction is complete. Less than significant impact.

PIN #	APN	Туре	Impact
<u>B2250</u>	<u>092-08-096</u>	TCE	Temporary removal of community wall for up to 5 years during construction. Community wall to be reconstructed after construction is completed. During construction, temporary safety fence with visual screening will be provided. Temporary loss of detention basin; during construction stormwater will be diverted around the active work areas. The detention basin will be restored to preconstruction conditions after construction is complete. Less than significant impact.
B2576	241-27-000	TCE	Temporary loss of up to 4 parking spaces and removal of approximately 40 feet of a 7 foot high soundwall. Soundwall to be provided on retained fill structure. Refer to <u>Section</u> 4.13 Noise and Vibration for noise mitigation. Less than significant impact.
<u>B2034</u>	<u>241-03-014,</u> <u>241-03-015,</u> <u>241-03-016</u>	<u>TCE,</u> TIEE	Less than significant impact.
<u>B2300</u>	<u>254-17-007</u>	<u>TCE</u>	Temporary loss of Flea Market stalls. Less than significant impact.
<u>B2310</u>	<u>254-17-095</u>	TCE	Loss of landscaping. <sup>a</sup> Less than significant impact.
<u>B3010</u>	<u>254-02-027</u>	TCE	Temporary displacement of materials storage area for up to 3 years. Less than significant impact.

<sup>a</sup> Landscaping to be replaced after construction is complete at a 1:1 ratio where feasible. Refer to <u>Section</u> 4.17 Visual Quality and Aesthetics.

Source: VTA, <u>2011</u> 2010.

**Subsection 4.19.4.16** on page 4.19-41, paragraph 3, of the Draft SEIR-2 has been revised as follows:

Construction of Phase 1 will require an NPDES Construction General Permit (State Water Resources Control Board, General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities, Order No. 2009-0009-DWQ, NPDES Permit No. CAS000002, September, 2009), and contractors must meet the substantive requirements for discharge of storm water runoff associated with construction activity. This permit, which went into effect on July 1, 2010, establishes three levels of risk possible for a construction site. Overall risk is calculated in two parts: 1) sediment risk and 2) receiving water risk. Sediment risk is based on the relative amount of sediment that may be

discharged, which is a function of scheduling and site characteristics. Receiving water risk is the risk sediment discharges pose to the receiving waters, particularly sediment sensitive waterbodies such as those listed as 303(d) list for waterbodies impaired for a sediment pollutant (e.g., total suspended solids, turbidity). The result of the calculation determines if a construction site is a Risk Level 1, 2 or 3. Risk Level 1 sites must implement best management practices such as: certain narrative effluent limitations; good "housekeeping"; non-storm water management; erosion, sediment, and run-on/runoff control; inspection, maintenance, and repair procedures; and certain monitoring requirements. Risk Level 2 sites must include these requirements plus certain numeric action levels for turbidity and pH; additional sediment controls, a Rain Event Action Plan, and additional monitoring. Risk Level 3 includes all of the above plus more stringent numeric effluent limitations action levels, sediment controls, and monitoring, including monitoring of receiving water if certain numeric effluent limitations action levels are exceeded. In some cases, bioassessment sampling and analysis may be required. Phase 1 construction is anticipated to be at Risk Level 2, though a final determination will be made at the time of the permit application.

**Subsection 4.19.4.16** on page 4.19-42, paragraphs 6 and 7, of the Draft SEIR-2 have been revised as follows:

As part of the SWPPP, an erosion and sediment control <u>BMPs will be</u> <u>selected and water pollution control plans</u> will be developed and implemented.\_\_for implementation by VTA and submitted to the RWQCB, Alameda County Flood Control and Water Conservation District (ACFCWCD), and Santa Clara Valley Water District (SCVWD) for review and comment. For earth-disturbing activities that occur during the rainy season, the erosion and sediment control plan <u>The SWPPP</u> will specifically address identify measures to be undertaken during this season year round to prevent erosion on site and control sediment <u>leaving the site</u>. As required by the NPDES permit, erosion and sediment control measures will include, but are not limited to, the following.

- Temporary and permanent seeding protection of disturbed areas and stockpiles
- Use of erosion control measures such as covers and blankets
- Stabilization of construction area entrances and exits
- Dust suppression
- Use of straw rolls, sediment fences, straw bales, and/or sediment traps

 Use of temporary dikes to redirect or control runoff <u>and to divert run</u> off away from disturbed areas

Construction of Phase 1 will also be consistent with the NPDES permits issued to the Alameda Countywide Clean Water Program and Santa Clara Valley Urban Runoff Pollution Prevention Program. These permits address non-point storm water pollutant runoff and include conditions that reduce storm water-borne pollutants at their source. Construction of Phase 1 would not violate water quality standards or waste discharge requirements or provide substantial additional sources of polluted runoff. Compliance with the **applicable** NPDES permits and implementation of a SWPPP **with water pollution** and an erosion and sediment-control plan<u>s</u> would avoid or reduce impacts to surface water resources during construction.

In response to comment L-2.3, paragraphs 2 and 3 under the heading "Floodplains" on page 4.19-44 of the Draft SEIR-2 have been revised as follows:

The Phase 1 alignment passes through 100-year floodplain mapped by FEMA at several locations. Flood protection projects are planned and/or programmed (funded) to address flooding conditions in the Phase 1 area by the local flood control agencies. <u>Refer to subsection 4.20.2.4 of this SEIR-2 for a discussion of the specific flood protection programs within the vicinity of Phase 1.</u>

The objective of the flood control projects is to upgrade the creek channels and cross-drainage facilities to contain the 100-year flows within the channel. Once completed, these projects will eliminate flooding in the areas of improvements, which include along the Phase 1 alignment. In the event these flood control projects are not completed by the time Phase 1 is under construction, or if these projects are under construction concurrently with Phase 1, the construction sites could be subject to flooding if a 100-year flood event were to occur. The option of scheduling construction during the non-rainy season will be evaluated in floodplain areas, and temporary flood control measures will be implemented during construction if necessary. If needed, construction in the flood prone areas will be completed in stages to minimize flooding impacts. Scheduling of construction will consider wet weather constraints in the floodplain areas. VTA will coordinate with the local flood control agencies and cities on the design and implementation of the flood control measures during construction.

If the flood control projects are significantly delayed until after the Phase 1 is complete and the system is operational, VTA will reevaluate the floodplain conditions in this area and integrate flood mitigation measures in accordance with the local flood control agency requirements. VTA will coordinate with the local flood

# control agencies and cities on the design and implementation of the flood control measures during or after Phase 1 construction if the flood control projects are not implemented on Berryessa Creek.

VTA will coordinate with appropriate agencies to obtain updated information on the progress of the flood control projects. Depending on the schedule of flood control project and the Phase 1 construction, additional hydrologic and hydraulic studies would be performed as necessary to address any floodplain control measures during construction.

## 5.1.9 REVISIONS TO CHAPTER 6, AGENCY AND COMMUNITY PARTICIPATION

The following changes have been made to **Table 6-1** in **subsection 6.4.3** on pages 6-14 and 6-15 of the Draft SEIR-2:

Agency	Phase 1
U.S. Fish and Wildlife Service	Consultation for effects to federally protected wildlife and critical habitat. Consultation for effects to federally protected plant species. Approve compensation related to effects to federally protected species.
National Oceanic and Atmospheric Administration Fisheries Service	Consultation for effects to federally protected anadromous fish (steelhead and Chinook salmon) and critical habitat. Approve compensation related to effects to federally protected species.
U.S. Army Corps of Engineers	Approve individual Section 404 permit for effects to jurisdictional wetlands and other waters of the U.S. Approve mitigation related to effects to these resources.
Federal Railroad Administration	Coordination regarding common corridor and crossing Caltrain/UPRR ROW.
Federal Highway Administration	Approve plans for ramp modifications at US 101 and BART crossings of SR 237.
California Department of Fish and Game	Consultation for effects to state protected fish and wildlife and their habitats. Consultation for effects to state protected plant species. Approve mitigation related to effects to state protected species. Execute Streambed Alteration Agreement for work within creeks.
California Department of Transportation	Approve plans for ramp modifications at US 101 and BART crossings of <b>BART crossing under</b> SR 237. Encroachment permit for any work or traffic control within the State right-of-way.
State Office of Historic Preservation	Approval and execution of PA and CRTP describing procedures for protection and mitigation of impacts to cultural resources pursuant to Section 106 of the National Historic Preservation Act and 36 CFR Part 800

#### Table 6-1: Required Permits and Approvals

Agency	Phase 1
California Public Utilities Commission	Coordination regarding common corridor.
San Francisco Bay Area Rapid Transit District	Approve Phase 1 per VTA/BART Comprehensive Agreement
Regional Water Quality Control Board	Approve Section 401 Water Quality Certification, including Waste Discharge Requirements, if any. Approve mitigation related to effects to waters of the state. Approve Section 402 General Construction Activity NPDES Permit (includes developing and implementing a SWPPP) for construction phase impacts and Phase 1-specific compliance measures.
Santa Clara County	No permitting requirements identified.
Santa Clara Valley Water District	Issue encroachment permit if construction comes within specified limits of the top of bank of any Santa Clara County stream. Issue well permits for geotechnical and chemical investigations or groundwater monitoring. Issue permits for monitoring and dewatering well installations and destructions per District Ordinance 90- 1.
Alameda County Flood Control and Water Conservation District (Zone 7)	Issue encroachment permit if modifying culverts or drainage channels. Issue well permits for geotechnical and chemical investigations or groundwater monitoring. Issue permits for dewatering well installations and destructions.
City of Fremont	Encroachment permit for construction in city ROW.
City of Milpitas	Encroachment permit for construction in city ROW.
City of San Jose	Encroachment permit for construction in city ROW.

Note: N/A = Not Applicable.Source: VTA, 2010-2011.

# 5.1.10 REVISIONS TO CHAPTER 10, BIBLIOGRAPHY

The following sources have been added to **Chapter 10, Bibliography**, within the Transportation section on page 10-1 of the Draft SEIR-2:

#### <u>Kimley-Horn and Associates, Inc. Traffic Operations Comparison for</u> <u>the proposed Berryessa SVRT Station Memorandum. January 12,</u> <u>2011.</u>

Kimley-Horn and Associates, Inc. Traffic Operations Comparison for the proposed Milpitas SVRT Station Memorandum. December 16, 2010. The following sources have been added to **Chapter 10, Bibliography**, within the Noise and Vibration section on page 10-5 of the Draft SEIR-2:

#### Wilson Ihrig & Associates, Inc., Memorandum, SVRT Berryessa Extension – Additional Building Noise Insulation Locations, February 2011.

Wilson Ihrig & Associates. SVRT Berryessa Extension – Final Noise and Vibration Mitigation Recommendations Memorandum. January 14, 2011.

The following sources have been added to **Chapter 10, Bibliography**, within the General section on page 10-10 of the Draft SEIR-2:

Santa Clara Valley Transportation Authority. BART Silicon Valley Phase 1 – Berryessa Extension 2<sup>nd</sup> Supplemental Environmental Impact Report Environmental Scoping Report. February 2011.

# 5.1.11 REVISIONS TO APPENDIX D

Figure D-3 in **Appendix D** to the Draft SEIR-2 has been revised to reflect the most current conceptual station transverse section. The revised Figure D-3 from the Draft SEIR-2 is included at the end of this Chapter and is also shown as Figure C-3 in **Appendix C** to this Final SEIR-2.



Revised Figure 4.2-4: Existing and Planned Bicycle Improvements

#### BART Silicon Valley 2<sup>nd</sup> Supplemental EIR





BART Silicon Valley 2<sup>nd</sup> Supplemental EIR



Source: Wilson Ihrig, 2011. VTA, 2011.

Revised Figure 4.13-3B: Noise and Vibration Mitigation Locations





Source: Wilson Ihrig, 2008. VTA, 2010.

Revised Figure 4.13-3C: Noise and Vibration Mitigation Locations





Source: Wilson Ihrig, 2008. VTA, 2010.

Revised Figure 4.13-3D: Noise and Vibration Mitigation Locations



Source: Wilson Ihrig, 2008. VTA, 2010.







Source: Wilson Ihrig, 2008. VTA, 2010.





Source: Wilson Ihrig, 2008. VTA, 2010.

Revised Figure 4.13-3G: Noise and Vibration Mitigation Locations

BART Silicon Valley 2<sup>nd</sup> Supplemental EIR



Source: Wilson Ihrig, 2011. VTA, 2011.



#### BART Silicon Valley 2<sup>nd</sup> Supplemental EIR



Source: Wilson Ihrig, 2011. VTA, 2011.

Revised Figure 4.13-3H(a): Noise and Vibration Mitigation Locations

BART Silicon Valley 2<sup>nd</sup> Supplemental EIR



Source: Wilson Ihrig, 2011. VTA, 2011.

Revised Figure 4.13-3I: Noise and Vibration Mitigation Locations



Source: Wilson Ihrig, 2011. VTA, 2011.

Revised Figure 4.13-3I(a): Noise and Vibration Mitigation Locations

BART Silicon Valley 2<sup>nd</sup> Supplemental EIR



Source: Wilson Ihrig, 2011. VTA, 2011.

Revised Figure 4.13-3J: Noise and Vibration Mitigation Locations



Revised Figure 4.13-3K: Noise and Vibration Mitigation Locations







Source: VTA, 2011.

Revised Figure 4.19-6: Capitol Avenue Construction Staging Area



Source: VTA, 2011.

Revised Figure D-3: Milpitas Station Conceptual Transverse Section A-A Looking North

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