4.21 SUMMARY OF IMPACTS

4.21.1 NEW IMPACTS AND PROPOSED MITIGATION

The changes to the Project made during the Preliminary Engineering design phase result in changes to the environmental impacts that were described in Section 6.2.2, Significant Effects and Mitigation, of the FEIR. These changes in impacts are discussed in the preceding sections of this chapter and summarized below in Table 4.21-1. The table also includes an indication of the level of significance under CEQA for each new or revised impact, the mitigation measures proposed to address the new or revised impact, and the level of significance under CEQA after mitigation is applied.

Table 4.21-1 uses the following abbreviations to classify impacts by level of significance:

- N → No impact
- LS → Less than significant impact (impact below threshold levels either before or after mitigation is applied
- S → Significant or potentially significant impact (before mitigation)
- SU → Significant unavoidable impact (impact above threshold levels where feasible mitigation would not reduce to less than significant)

see Table 4.21 >>

TABLE 4.21-1:

Summary of New Significant Impacts and Proposed Mitigation for the BART Extension Project

IMPACT	SIGNIFICANCE	MITIGATION	SIGNIFICANCE AFTER MITIGATION
4.2 TRANSPORTATION AND TRANSIT			
TRANSIT			
No new significant impacts would result.	N	No new mitigation is necessary.	N
PARKING			
No new significant impacts would result.	N	No new mitigation is necessary.	N
PEDESTRIANS AND BICYCLES			
No new significant impacts would result.	N	No new mitigation is necessary.	N
VEHICULAR TRAFFIC–FREEWAYS			
Design Change 52. Santa Clara Station *(No Parking Option at Diridon/ Arena Station)* The Project would add new trips totaling more than 1 percent of the freeway capacity on four of the 21 directional freeway segments identified to operate at LOS F under 2030 Without Project conditions ▪ I-880, Bascom Avenue to The Alameda (northbound AM peak hour) ▪ I-880, The Alameda to Coleman Avenue (northbound AM peak hour) ▪ I-880, Coleman Avenue to The Alameda (southbound PM peak hour) ▪ I-800, The Alameda to Bascom Avenue (southbound PM peak hour)	S	The mitigation necessary to reduce significant impacts at these freeway segments is the widening of the freeway. Due to the substantial cost, this measure is not considered feasible, resulting in a significant unavoidable impact to freeways.	SU
VEHICULAR TRAFFIC–INTERSECTIONS			
Design Change 17. Montague/ Capitol Station *(With the South Calaveras Future Station)* Great Mall Parkway and Montague Expressway* (No Cost-Effective Feasible Mitigation Measures) (Map location #1) The level of service would be an unacceptable LOS F during both the AM and PM peak hours under 2030 Without Project with Improvements conditions, and the intersection would experience an increase in critical-movement delay of 4 or more seconds and an increase in the V/C of .01 or more under 2030 BART Extension Project conditions. This constitutes a significant impact by CMP standards.	S	No other cost-effective feasible improvements can be made at this intersection beyond those identified under the 2030 Without Project conditions. The identified 2030 Without Project improvement includes the addition of an exclusive southbound right-turn lane. Because the Project would contribute to traffic congestion at this intersection, the Project will contribute a "fair share" amount toward the implementation of this traffic improvement. The necessary improvement to mitigate the Project impact at this intersection to an acceptable level will require grade separation of the intersection. It should be noted that the grade separation of this intersection is included in the Valley Transportation Plan 2030 (VTP 2030) project list. However, this improvement was not included as part of the year 2030 roadway network, as it was not included in the VTA 2030 (SVRTC) traffic model used for this analysis. Thus, as a	SU

IMPACT	SIGNIFICANCE	MITIGATION	SIGNIFICANCE AFTER MITIGATION
[Design Change 17, cont'.] Milpitas Boulevard and Yosemite Drive The level of service would be an unacceptable LOS F and E during the AM and the PM peak hours, respectively, under 2030 Without Project with Improvements conditions, and the intersection would experience an increase in critical-movement delay of 4 or more seconds and an increase in the V/C of .01 or more during both peak hours under 2030 Project conditions. This constitutes a significant impact by City of Milpitas standards.	S	No other cost-effective feasible improvements can be made at this intersection beyond those identified under the 2030 Without Project conditions. Because the Project would contribute to the need for improvements at this intersection, the Project will contribute a "fair share" amount toward the implementation of traffic improvements. The Project would cause a significant unavoidable impact at this intersection.	SU
Milpitas Boulevard and Montague Expressway The level of service would be an unacceptable LOS F under 2030 Without Project with Improvements conditions, and the intersection would experience an increase in critical-movement delay of 4 or more seconds and an increase in the V/C of .01 or more during the PM peak hour under 2030 Project conditions. This constitutes a significant impact by CMP standards.	S	No other cost-effective feasible improvements can be made at this intersection beyond those identified under the 2030 Without Project conditions. Because the Project would contribute to the need for improvements at this intersection, the Project will contribute a "fair share" amount toward the implementation of traffic improvements. The Project would cause a significant unavoidable impact at this intersection.	SU
Dempsey Road and Landess Avenue The level of service would be an unacceptable LOS E during the AM peak hour under 2030 Without Project with Improvements conditions, and the intersection would experience an increase in critical-movement delay of 4 or more seconds and an increase in the V/C of .01 or more under 2030 Project conditions. This constitutes a significant impact by City of Milpitas standards.	S	No other cost-effective feasible improvements can be made at this intersection beyond those identified under the 2030 Without Project conditions. Because the Project would contribute to the need for improvements at this intersection, the Project will contribute a "fair share" amount toward the implementation of traffic improvements. The Project would cause a significant unavoidable impact at this intersection.	SU

IMPACT	SIGNIFICANCE	MITIGATION	SIGNIFICANCE AFTER MITIGATION
Park Victoria Drive and Landess Avenue The level of service would be an unacceptable LOS E and F during the AM and the PM peak hour, respectively, under 2030 Without Project with Improvements conditions, and the intersection would degrade to LOS F during the AM peak hour and experience an increase in critical-movement delay of 4 or more seconds and an increase in the V/C of .01 or more during the PM peak hour under 2030 Project conditions. This constitutes a significant impact by City of Milpitas standards.	S	No other cost-effective feasible improvements can be made at this intersection beyond those identified under the 2030 Without Project conditions. Because the Project would contribute to the need for improvements at this intersection, the Project will contribute a "fair share" amount toward the implementation of traffic improvements. The Project would cause a significant unavoidable impact at this intersection.	SU
Old Oakland/Main Street and Montague Expressway The level of service would be an unacceptable LOS F under 2030 Without Project with Improvements conditions, and the intersection would experience an increase in the V/C of .01 or more during the AM peak hour under 2030 Project conditions. This constitutes a significant impact by CMP standards.	S	No other cost-effective feasible improvements can be made at this intersection beyond those identified under the 2030 Without Project conditions. Because the Project would contribute to the need for improvements at this intersection, the Project will contribute a "fair share" amount toward the implementation of traffic improvements. The Project would cause a significant unavoidable impact at this intersection.	SU
Milpitas Boulevard and Calaveras Boulevard The level of service would be an unacceptable LOS F during both the AM and PM peak hours under 2030 Without Project with Improvements conditions, and the intersection would experience an increase in critical-movement delay of 4 or more seconds and an increase in the V/C of .01 or more during both peak hours under 2030 Project conditions. This constitutes a significant impact by CMP standards.	S	No other cost-effective feasible improvements can be made at this intersection beyond those identified under the 2030 Without Project conditions. Because the Project would contribute to the need for improvements at this intersection, the Project will contribute a "fair share" amount toward the implementation of traffic improvements. The Project would cause a significant unavoidable impact at this intersection.	SU
Hillview Drive and Calaveras Boulevard The level of service would be LOS D under 2030 Without Project with Improvements conditions, and the intersection would degrade to an unacceptable LOS E during the PM peak hour under 2030 Project conditions. This constitutes a significant impact by City of Milpitas standards.	S	No other cost-effective feasible improvements can be made at this intersection beyond those identified under the 2030 Without Project conditions. Because the Project would contribute to the need for improvements at this intersection, the Project will contribute a "fair share" amount toward the implementation of traffic improvements. The Project would cause a significant unavoidable impact at this intersection.	SU

IMPACT	SIGNIFICANCE	MITIGATION	SIGNIFICANCE AFTER MITIGATION
Park Victoria Drive and Calaveras Boulevard The level of service would be LOS E during the AM peak hour under 2030 Without Project with Improvements conditions and the intersection would experience an increase in critical-movement delay of 4 or more seconds and an increase in the V/C of .01 or more under 2030 Project conditions. This constitutes a significant impact by City of Milpitas standards.	S	No other cost-effective feasible improvements can be made at this intersection beyond those identified under the 2030 Without Project conditions. Because the Project would contribute to the need for improvements at this intersection, the Project will contribute a "fair share" amount toward the implementation of traffic improvements. The Project would cause a significant unavoidable impact at this intersection.	SU
Milpitas Boulevard and Escuela Drive The level of service would be LOS D during the AM peak hour under 2030 Without Project with Improvements conditions, and the intersection would degrade to an unacceptable LOS E under 2030 Project conditions. This constitutes a significant impact by City of Milpitas standards.	S	The necessary improvements to mitigate the Project impact at this intersection consist of the addition of an exclusive northbound right-turn lane on Milpitas Boulevard. The implementation of this improvement will improve intersection level of service to an acceptable LOS D during the AM peak hour. Because the Project would contribute to traffic congestion at this intersection, the Project will contribute a "fair share" amount toward the implementation of this traffic improvement. With the implementation of the above traffic improvement, the Project would result in a less-than-significant impact.	LS
Milpitas Boulevard and Los Coches Street The level of service would be LOS C during the PM peak hour under 2030 Without Project with Improvements conditions, and the intersection would degrade to an unacceptable LOS E under 2030 Project conditions. This constitutes a significant impact by City of Milpitas standards.	S	The necessary improvements to mitigate the Project impact at this intersection consist of the modification of the east and west legs of the intersection (Los Coches Street) to provide two left-turn lanes and one shared through/right-turn lane in the eastbound direction; and one left-turn lane, one through lane, and one right-turn lane in the westbound direction. This improvement will upgrade the intersection level of service to an acceptable LOS D during the PM peak hour. Because the Project would contribute to traffic congestion at this intersection, the Project will contribute a "fair share" amount toward the implementation of this traffic improvement. With the implementation of the above traffic improvement, the Project would result in a less-than-significant impact.	LS

IMPACT	SIGNIFICANCE	MITIGATION	SIGNIFICANCE AFTER MITIGATION
Design Change 23. Berryessa Station			
Flickinger Avenue and Berryessa Road The level of service would be LOS D during the AM peak hour under 2030 Without Project with Improvements conditions, and the intersection would degrade to an unacceptable LOS E under 2030 Project conditions. This constitutes a significant impact by City of San Jose standards.	S	The necessary improvement to mitigate the Project impact at this intersection to an acceptable level consists of the addition of a second eastbound left-turn lane on Berryessa Road. The implementation of this improvement will improve intersection level of service to an acceptable LOS D during the AM peak hour. Because the Project would contribute to traffic congestion at this intersection, the Project will contribute a "fair share" amount toward the implementation of this traffic improvement. With the implementation of the above traffic improvement, the Project would result in a less-than-significant impact.	LS
Lundy Avenue and Berryessa Road The level of service would be LOS F during both the AM and PM peak hours under 2030 Without Project with Improvements conditions, and the intersection would experience an increase in critical-movement delay of 4 or more seconds and an increase in the V/C of .01 or more under 2030 Project conditions. This constitutes a significant impact by CMP standards.	S	No other cost-effective feasible improvements can be made at this intersection beyond those identified under the 2030 Without Project conditions. Because the Project would contribute to the need for improvements at this intersection, the Project will contribute a "fair share" amount toward the implementation of traffic improvements. The Project would cause a significant unavoidable impact at this intersection.	SU
King Road and Mabury Road The level of service would be an unacceptable LOS E during the PM peak hour under 2030 Without Project with Improvements conditions, and the intersection would degrade to LOS F under 2030 Project conditions. This constitutes a significant impact by City of San Jose standards.	S	No other cost-effective feasible improvements can be made at this intersection beyond those identified under the 2030 Without Project conditions. Because the Project would contribute to the need for improvements at this intersection, the Project will contribute a "fair share" amount toward the implementation of traffic improvements. The Project would cause a significant unavoidable impact at this intersection.	SU
Design Change 33. Alum Rock Station			
US 101 and Julian Street The level of service would be LOS D during the AM peak hour under 2030 Without Project with Improvements conditions, and the intersection would degrade to an unacceptable LOS E under 2030 Project conditions. This constitutes a significant impact by City of San Jose standards.	S	The necessary improvement to mitigate the Project impact at this intersection to an acceptable level consists of the addition of an exclusive eastbound right-turn lane on Julian Street. Because the Project would contribute to traffic congestion at this intersection, the Project will contribute a "fair share" amount toward the implementation of this traffic improvement. The implementation of this improvement would improve intersection level of service to an acceptable LOS C.	LS

IMPACT	SIGNIFICANCE	MITIGATION	SIGNIFICANCE AFTER MITIGATION
US 101 and McKee Road The level of service would be LOS D during the AM peak hour under 2030 Without Project with Improvements conditions, and the intersection would degrade to an unacceptable LOS E under 2030 Project conditions. This constitutes a significant impact by City of San Jose standards.	S	The necessary improvement to mitigate the Project impact at this intersection to an acceptable level consists of the conversion of the northbound shared right and through lane on the US 101 off-ramp to an all-movement lane. Because the Project would contribute to traffic congestion at this intersection, the Project will contribute a "fair share" amount toward the implementation of this traffic improvement. The implementation of this improvement would improve intersection level of service to an acceptable LOS D.	LS
24th Street and Santa Clara Street The level of service would be an unacceptable LOS E during the PM peak hour under 2030 Without Project with Improvements conditions, and the intersection would degrade to LOS F under 2030 Project conditions. This constitutes a significant impact by City of San Jose standards.	S	No other cost-effective feasible improvements can be made at this intersection beyond those identified under the 2030 Without Project conditions. Because the Project would contribute to the need for improvements at this intersection, the Project will contribute a "fair share" amount toward the implementation of traffic improvements. The Project would cause a significant unavoidable impact at this intersection.	SU
US 101 and Santa Clara Street The level of service would be LOS E during the PM peak hour under 2030 Without Project with Improvements conditions, and the intersection would degrade to LOS F under 2030 Project conditions. This constitutes a significant impact by CMP standards.	S	The necessary improvement to mitigate the Project impact at this intersection to an acceptable level consists of the conversion of the eastbound right-turn lane on Santa Clara Street to a free-right-turn lane. The unacceptable level of service condition at this intersection is due to the significantly high eastbound traffic volume accessing the US 101 southbound on-ramp. However, the addition of a free-right-turn lane would not be feasible due to its inability to operate as a free-right-turn movement with the ramp metering in operation. Should a feasible improvement be determined, a "fair share" contribution will be evaluated at that time. The Project would cause a significant unavoidable impact at this intersection.	SU
McLaughlin Avenue and Story Road The level of service would be an unacceptable LOS E under 2030 Without Project with Improvements conditions, and the intersection would experience an increase in critical-movement delay of 4 or more seconds and an increase in the V/C of .01 or more during the AM peak hour under 2030 Project conditions. This constitutes a significant impact by City of San Jose standards.	S	No other cost-effective feasible improvements can be made at this intersection beyond those identified under the 2030 Without Project conditions. Because the Project would contribute to the need for improvements at this intersection, the Project will contribute a "fair share" amount toward the implementation of traffic improvements. The Project would cause a significant unavoidable impact at this intersection.	SU

IMPACT	SIGNIFICANCE	MITIGATION	SIGNIFICANCE AFTER MITIGATION
King Road and Mabury Road The level of service would be an unacceptable LOS E during the PM peak hour under 2030 Without Project with Improvements conditions, and the intersection would degrade to LOS F under 2030 Project conditions. This constitutes a significant impact by City of San Jose standards.	S	No other cost-effective feasible improvements can be made at this intersection beyond those identified under the 2030 Without Project conditions. Because the Project would contribute to the need for improvements at this intersection, the Project will contribute a "fair share" amount toward the implementation of traffic improvements. The Project would cause a significant unavoidable impact at this intersection.	SU
Design Change 42. Diridon/Arena Station and Alignment *(Parking Structure Option).* The Alameda and Taylor Street/ Naglee Avenue The level of service would be LOS F under 2030 Without Project with Improvements conditions, and the intersection would experience an increase in critical-movement delay of 4 or more seconds and an increase in the V/C of .01 or more during both the AM and PM peak hours under 2030 Project conditions. This constitutes a significant impact by CMP standards.	S	No other cost-effective feasible improvements can be made at this intersection beyond those identified under the 2030 Without Project conditions. Because the Project would contribute to the need for improvements at this intersection, the Project will contribute a "fair share" amount toward the implementation of traffic improvements. The Project would cause a significant unavoidable impact at this intersection.	SU
Race Street and The Alameda The level of service would be LOS E and F during the AM and PM peak hours, respectively, under 2030 Without Project with Improvements conditions. The intersection would degrade to an unacceptable LOS F during the AM peak hour, and the intersection would experience an increase in critical-movement delay of 4 or more seconds and an increase in the V/C of .01 or more during the PM -peak hour under 2030 Project conditions. This constitutes a significant impact by CMP standards.	S	The identified 2030 Without Project possible improvement includes the addition of second westbound left-turn lane. Because the Project would contribute to traffic congestion at this intersection, the Project will contribute a "fair share" amount toward the implementation of these traffic improvements. With the Project traffic, a possible improvement includes the addition of an exclusive northbound right-turn lane. Because the Project would contribute to traffic congestion at this intersection, the Project will contribute a "fair share" amount toward the implementation of this traffic improvement. Although intersection operations would improve to an acceptable LOS E during the AM peak hour with this improvement, the level of service would remain at an unacceptable LOS F during the PM peak hour for both the Without Project and Project. The unacceptable level of service condition at this intersection is due to the significantly high non-Project related eastbound right-turn movement volume. The necessary improvement to improve intersection operations to acceptable levels consists of the addition of a fourth eastbound lane on The Alameda. However, this improvement would require the widening of The Alameda and Race Street, which is not feasible due to right-of-way constraints and not required to mitigate Project related traffic impacts. With the implementation of the above traffic improvement, the Project would result in a less-than-significant impact.	LS

IMPACT	SIGNIFICANCE	MITIGATION	SIGNIFICANCE AFTER MITIGATION
Cahill Street and Santa Clara Street The level of service would be LOS C under 2030 Without Project with Improvements conditions, and the intersection would degrade to an unacceptable LOS F during both the AM and PM peak hours under 2030 Project conditions. This constitutes a significant impact by City of San Jose standards.	S	The necessary improvements to mitigate the Project impact at this intersection to an acceptable level consist of the addition of a second northbound left-turn lane on Cahill Street, and the addition of an exclusive left-turn and right-turn lane on the eastbound approach on Santa Clara Street. The implementation of these improvements will improve intersection level of service to an acceptable LOS C and D during the AM and PM peak hours, respectively. Because the Project would contribute to traffic congestion at this intersection, the Project will contribute a "fair share" amount toward the implementation of this traffic improvement. With the implementation of the above traffic improvement, the Project would result in a less-than-significant impact.	LS
Design Change 42. Diridon/Arena Station and Alignment The Alameda and Taylor Street/ Naglee Avenue This intersection was projected to be impacted during both the AM and PM peak hours with the Parking Structure Option at the Diridon/Arena Station. However, with the elimination of the parking structure at the Diridon/Arena Station, this intersection would only be impacted during the PM peak hour.	S	There are no cost effective feasible improvements that can be made to mitigate Project impacts at this intersection. Should a feasible improvement be determined, a "fair share" contribution will be evaluated at that time. The Project would cause a significant unavoidable impact at this intersection.	SU
Autumn Street and Julian Street This intersection would not be impacted by the Parking Structure Option at the Diridon/Arena Station. However, with the No Parking Option at the Diridon/ Arena Station, this intersection would be impacted. The LOS would be an unacceptable LOS E during the PM peak hour under 2030 Without Project with Improvements conditions and the intersection would experience an increase in critical-movement delay of four or more seconds and an increase in the demand-to-capacity ratio (V/C) of .01 or more under the No Parking Option. This constitutes a significant impact by City of San Jose standards. The impact at this intersection would be a direct result of the shift in PNR traffic from the Diridon/Arena Station to the Santa Clara Station. Traffic projections show station traffic accessing the Santa Clara Station via this intersection.	S	Mitigation will include adding a third eastbound through lane to reduce impacts. Because the Project would contribute to traffic congestion at this intersection, the Project will contribute a "fair share" amount toward the implementation of this traffic improvement. With the implementation of the above traffic improvement, the Project would result in a less-than-significant impact.	LS

IMPACT	SIGNIFICANCE	MITIGATION	SIGNIFICANCE AFTER MITIGATION
Cahill Street and Santa Clara Street This intersection was projected to be impacted during both the AM and PM peak hours with the Parking Structure Option at the Diridon/Arena Station. The LOS analysis shows that this intersection would continue to be impacted by the Project during both peak hours with the No Parking Option at the Diridon/Arena Station. However, the magnitude of this impact would be less with the No Parking Option than with the Parking Structure Option at the Diridon/Arena Station. With the Parking Structure Option, the level of service at this intersection would go from a LOS C under the year 2030 Without Project conditions to an unacceptable LOS F during both peak hours with the Project. However, the LOS at this intersection with the No Parking Option would deteriorate to an unacceptable LOS E and F during the AM and PM peak hours, respectively. Therefore, the increase in critical delay at the intersection would be less with the No Parking Option at the Diridon/Arena Station. This is a direct result of the decrease in station traffic accessing the Diridon/Arena Station via this intersection.	S	The necessary mitigation measures to mitigate the Project impact at this intersection include the addition of a second northbound left-turn lane and the addition of an exclusive left-turn and right-turn lane on the eastbound approach. Because the Project would contribute to traffic congestion at this intersection, the Project will contribute a "fair share" amount toward the implementation of this traffic improvement. With the implementation of the above traffic improvement, the Project would result in a less-than-significant impact.	LS
Design Change 52. Santa Clara Station. *(With Parking Structure Option at Diridon/Arena Station).* San Tomas Expressway and El Camino Real The level of service would be an unacceptable LOS F under 2030 Without Project with Improvements conditions, and the intersection would experience an increase in critical-movement delay of 4 or more seconds and an increase in the V/C of .01 or more during the PM peak hour under 2030 Project conditions. This constitutes a significant impact by CMP standards.	S	No other cost-effective feasible improvements can be made at this intersection beyond those identified under the 2030 Without Project conditions. Because the Project would contribute to the need for improvements at this intersection, the Project will contribute a "fair share" amount toward the implementation of traffic improvements. The Project would cause a significant unavoidable impact at this intersection.	SU
Lafayette Street and Benton Street The level of service would be an acceptable LOS D during the PM peak hour under 2030 Without Project with Improvements conditions, and the intersection would degrade to an unacceptable LOS E under 2030 Project conditions. This constitutes a significant impact by City of Santa Clara standards.	S	The identified 2030 Without Project possible improvements include the addition of an exclusive left-turn lane on the northbound direction, second through lanes on the northbound and southbound approaches, addition of an exclusive eastbound right-turn lane, and providing protected left-turn phasing on all approaches to the intersection. While these improvements would upgrade operations to acceptable levels, they may not be feasible due to right-of-way constraints and the current reversible lane on Lafayette Street.	LS

IMPACT	SIGNIFICANCE	MITIGATION	SIGNIFICANCE AFTER MITIGATION
Lafayette Street and Benton Street *(continued)*		The necessary improvement, to mitigate the Project impact at this intersection beyond the Without Project condition, consists of the addition of an exclusive southbound right-turn lane on Lafayette Street. The implementation of this improvement would improve intersection level of service to an acceptable LOS D. Because the Project would contribute to traffic congestion at this intersection, the Project will contribute a "fair share" amount toward the implementation of these traffic improvements. With the implementation of the above traffic improvement, the Project would result in a less-than-significant impact.	
Coleman Avenue and Brokaw Road The level of service would be an acceptable LOS D during the PM peak hour under 2030 Without Project with Improvements conditions, and the intersection would degrade to an unacceptable LOS F under 2030 Project conditions. This constitutes a significant impact by City of Santa Clara standards.	S	The identified 2030 Without Project necessary improvement includes the addition of third southbound through lane. The necessary improvement to mitigate the Project impact at this intersection consists of the addition of a second eastbound left-turn lane on Brokaw Road. The implementation of this improvement would improve intersection level of service to an acceptable LOS D. Because the Project would contribute to traffic congestion at this intersection, the Project will contribute a "fair share" amount toward the implementation of both of these traffic improvements. With the implementation of the above traffic improvement, the Project would result in a less-than-significant impact.	LS
De La Cruz Boulevard and Central Expressway The level of service would be LOS F under 2030 Without Project with Improvements conditions, and the intersection would experience an increase in critical-movement delay of 4 or more seconds and an increase in the V/C of .01 or more during the PM peak hour under 2030 Project conditions. This constitutes a significant impact by CMP standards.	S	No other cost-effective feasible improvements can be made at this intersection beyond those identified under the 2030 Without Project conditions. Because the Project would contribute to the need for improvements at this intersection, the Project will contribute a "fair share" amount toward the implementation of traffic improvements. The Project would cause a significant unavoidable impact at this intersection.	SU
Monroe Street and Benton Street The level of service would be an unacceptable LOS E and F during the AM and the PM peak hour, respectively, under 2030 Without Project with Improvements conditions, and the intersection would degrade to LOS F during the AM peak hour and experience an increase in critical-movement delay of 4 or more seconds and an increase in the V/C of .01 or more during the PM peak hour under 2030 Project conditions. This constitutes a significant impact by City of Santa Clara standards.	S	Possible improvements include the addition of exclusive northbound and southbound right-turn lanes on Monroe Street. This improvement may be challenging due to right-of-way constraints along Monroe Street, but it is included as possible improvement. Although intersection operation levels will improve with the implementation of these improvements to conditions better than Without Project, the intersection level of service would remain at an unacceptable LOS F during the PM peak hour. Because the Project would contribute to traffic congestion at this intersection, the Project will contribute a "fair share" amount	LS

IMPACT	SIGNIFICANCE	MITIGATION	SIGNIFICANCE AFTER MITIGATION
Monroe Street and Benton Street *(continued)*		toward the implementation of these traffic improvements. With the implementation of the above traffic improvement, the Project would result in a less-than-significant impact.	
De La Cruz Boulevard and Martin Avenue The level of service would be an unacceptable LOS E during the PM peak hour under 2030 Without Project with Improvements conditions, and the intersection would experience an increase in critical-movement delay of 4 or more seconds and an increase in the V/C of .01 or more under 2030 Project conditions. This constitutes a significant impact by City of Santa Clara standards.	S	No other cost-effective feasible improvements can be made at this intersection beyond those identified under the 2030 Without Project conditions. Because the Project would contribute to the need for improvements at this intersection, the Project will contribute a "fair share" amount toward the implementation of traffic improvements. The Project would cause a significant unavoidable impact at this intersection.	SU
Design Change 52. Santa Clara Station *(No Parking Option at Diridon/ Arena Station).* San Tomas Expressway and El Camino Real The level of service would be an unacceptable LOS F under 2030 Without Project with Improvements conditions, and the intersection would experience an increase in critical-movement delay of 4 or more seconds and an increase in the V/C of .01 or more during the PM peak hour under 2030 Project conditions. This constitutes a significant impact by CMP standards.	S	No other cost-effective feasible improvements can be made at this intersection beyond those identified under the 2030 Without Project conditions. Because the Project would contribute to the need for improvements at this intersection, the Project will contribute a "fair share" amount toward the implementation of traffic improvements. The Project would cause a significant unavoidable impact at this intersection.	SU
Lafayette Street and Benton Street The level of service would be an acceptable LOS D during the PM peak hour under 2030 Without Project with Improvements conditions, and the intersection would degrade to an unacceptable LOS E under 2030 Project conditions. This constitutes a significant impact by City of Santa Clara standards.	S	The identified 2030 Without Project possible improvements include the addition of an exclusive left-turn lane on the northbound direction, second through lanes on the northbound and southbound approaches, addition of an exclusive eastbound right-turn lane, and providing protected left-turn phasing on all approaches to the intersection. While these improvements would upgrade operations to acceptable levels, they may not be feasible due to right-of-way constraints and the current reversible lane on Lafayette Street. The necessary improvement, to mitigate the Project impact at this intersection beyond the Without Project condition, consists of the addition of an exclusive southbound right-turn lane on Lafayette Street. The implementation of this improvement would improve intersection level of service to an acceptable LOS D. Because the Project would contribute to traffic congestion at this intersection, the Project will contribute a "fair share" amount toward the implementation of these traffic improvements. With the implementation of the above traffic improvement, the Project would result in a less-than-significant impact.	LS

IMPACT	SIGNIFICANCE	MITIGATION	SIGNIFICANCE AFTER MITIGATION
Coleman Avenue and Brokaw Road This intersection would degrade from an LOS D under the year 2030 Without Project conditions to an unacceptable LOS F during the PM peak hour with the Parking Structure Option at the Diridon/Arena Station. With the No Parking Option at the Diridon/Arena Station, this intersection would continue to degrade (the intersection would experience a greater increase in critical delay.)	S	The necessary improvement to mitigate the Project impact at this intersection consists of the addition of a second eastbound left-turn lane. With implementation of this improvement, the intersection level of service would improve to an acceptable LOS D, assuming the Parking Structure Option at the Diridon/Arena Station. With the No Parking Option, the proposed mitigation for this intersection would not be sufficient to mitigate the Project impact. The intersection of Coleman/Brokaw would continue to operate at an unacceptable LOS E with the implementation of the proposed second eastbound left-turn lane. The additional improvement needed to mitigate the No Parking Option Project impact at this intersection consists of the addition of an exclusive right-turn lane, the intersection level of service would improve to LOS D. In addition, although the AM peak hour is not projected to be impacted by the Project, a significant amount of northbound left-turn lane would be needed at this intersection. This will help serve station traffic more efficiently and avoid lengthy vehicle queues for this movement. Because the Project would contribute to traffic congestion at this intersection, the Project will contribute a "fair share" amount toward the implementation of these traffic improvements. With the implementation of the above traffic improvement, the Project would result in a less-than-significant impact.	LS
De La Cruz Boulevard and Central Expressway The level of service would be LOS F under 2030 Without Project with Improvements conditions, and the intersection would experience an increase in critical-movement delay of 4 or more seconds and an increase in the V/C of .01 or more during the PM peak hour under 2030 Project conditions. This constitutes a significant impact by CMP standards.	S	No other cost-effective feasible improvements can be made at this intersection beyond those identified under the 2030 Without Project conditions. Because the Project would contribute to the need for improvements at this intersection, the Project will contribute a "fair share" amount toward the implementation of traffic improvements. The Project would cause a significant unavoidable impact at this intersection.	SU
Monroe Street and Benton Street The level of service would be an unacceptable LOS E and F during the AM and the PM peak hour, respectively, under 2030 Without Project with Improvements conditions, and the intersection would degrade to LOS F during the AM peak hour and experience an increase in critical-movement delay of 4 or more seconds and an increase in the V/C of .01 or more during the PM peak hour under 2030 Project conditions. This constitutes a significant impact by City of Santa Clara standards.	S	Possible improvements include the addition of exclusive northbound and southbound right-turn lanes on Monroe Street. This improvement may be challenging due to right-of-way constraints along Monroe Street, but it is included as possible improvement. Although intersection operation levels will improve with the implementation of these improvements to conditions better than Without Project, the intersection level of service would remain at an unacceptable LOS F during the PM peak hour. Because the Project would contribute to traffic congestion at this intersection, the Project will contribute a "fair share" amount	LS

IMPACT	SIGNIFICANCE	MITIGATION	SIGNIFICANCE AFTER MITIGATION
Monroe Street and Benton Street *(continued)*		toward the implementation of these traffic improvements. With the implementation of the above traffic improvement, the Project would result in a less-than-significant impact.	
De La Cruz Boulevard and Martin Avenue The level of service would be an unacceptable LOS E during the PM peak hour under 2030 Without Project with Improvements conditions, and the intersection would experience an increase in critical-movement delay of 4 or more seconds and an increase in the V/C of .01 or more under 2030 Project conditions. This constitutes a significant impact by City of Santa Clara standards.	S	No other cost-effective feasible improvements can be made at this intersection beyond those identified under the 2030 Without Project conditions. Because the Project would contribute to the need for improvements at this intersection, the Project will contribute a "fair share" amount toward the implementation of traffic improvements. The Project would cause a significant unavoidable impact at this intersection.	SU
4.3 AIR QUALITY			
No new significant impacts would result.	N	No new mitigation is necessary.	N
4.4 BIOLOGICAL RESOURCES AND WETLANDS			
Impacts to Congdon's tarplant may be greater than that described in the FEIR due to the difference in the number of living plants identified in the 2002 and 2005 surveys (12 and 100, respectively). Mitigation will be implemented to reduce any temporary or permanent impacts to Congdon's tarplant.	S	VTA will design all facilities to avoid temporary and permanent impacts to Congdon's tarplant to the maximum extent practicable. If avoidance is not feasible, a focused botanical survey will be conducted by a qualified plant biologist to ascertain the presence or absence of the species in the Project area during the initial blooming period (August) that occurs prior to the construction. VTA will mitigate the permanent loss of Congdon's tarplants at a minimum ratio of 1:1 (replacement plants: lost plants), or at a ratio determined in consultation with resource agency personnel. VTA will also mitigate in accordance with the California Native Plant Society's recommended measures for mitigating impacts to Congdon's tarplant.	LS
The revised wetland delineation completed in the fall 2006 identified an additional 2.79 acres of wetlands and waters of the United States compared to the information presented in the FEIR (Table 4.4.2-2). Of this additional acreage, 0.92 acres is attributed to drainage ditches running along the railroad corridor that were not previously identified (see photo). An additional 0.76 acres is attributed to the design change at Berryessa Creek where a larger area would be impacted by construction of a multi-cell box culvert (see below). Confirmation of the revised delineation by the Army Corps of Engineers is pending. Mitigation is proposed that replaces the information in the FEIR.	S	VTA will design all Project facilities to avoid temporary and permanent impacts to wetlands and waters of the United States to the maximum extent practicable. If avoidance is not feasible, VTA will mitigate the permanent loss of wetlands at a minimum 2:1 ratio (replacement area: loss area) and the temporary loss of wetlands at a minimum 1:1 ratio, or at higher ratios determined in consultation with resource agency personnel. Permanent and temporary impacts to waters of the United States will be mitigated at minimum 1:1 ratio, or at a higher ratio determined in consultation with resource agency personnel. Mitigation will be on-site and in-kind to the maximum extent practicable. If mitigation cannot be accommodated entirely on-site, VTA will investigate other mitigation opportunities in coordination with resource agency personnel within the impacted watershed, if possible. A qualified biologist, in coordination with resource agency personnel, will prepare a mitigation and monitoring plan for impacts to wetlands and waters of the United States due to the Project. Alternatively, VTA may purchase credits in an approved mitigation bank.	LS

IMPACT	SIGNIFICANCE	MITIGATION	SIGNIFICANCE AFTER MITIGATION
Design Change 9. Berryessa Creek. The FEIR includes an access road from Berryessa Road to the Berryessa Station area west of railroad ROW. During Preliminary Engineering, this road was relocated to the east of the railroad ROW. Under both configurations the road breaches the 150 foot riparian setback from Upper Penitencia Creek. Impacts to Upper Penitencia Creek associated with the access road discussed previously in the FEIR remain applicable in the SEIR, as the road would still cross the creek and affect the same types of biological resources, although approximately 650 feet farther east. Mitigation is proposed to replace riparian habitat, which supplements the information in the FEIR.	S	VTA will design all Project facilities to avoid temporary and permanent impacts to riparian habitat to the maximum extent practicable. If avoidance is not feasible, impacts to the riparian habitat will be mitigated at ratios based on the quality of habitat to be impacted. Impact ratios of 3:1, 2:1, and 1:1 (replacement area: loss area) will be applied for impacts to high-quality, medium-quality, and lower-quality habitats, respectively. Mitigation for impacts to riparian habitat will be in-kind, except that non-native species will be replaced with commercially available native species common to the planting area, and on-site to the maximum extent practicable. If mitigation cannot be accommodated entirely on-site, VTA will coordinate with resource agency personnel to identify other potential riparian mitigation sites within the impacted watershed, if possible. A qualified biologist, in coordination with resource agency personnel, will prepare a mitigation and monitoring plan for impacts to riparian habitat due to the Project.	LS
4.5 COMMUNITY SERVICES AND FACILITIES			
No new significant impacts would result.	N	No new mitigation is necessary.	N
4.6 CULTURAL AND HISTORIC RESOURCES			
ARCHAEOLOGICAL RESOURCES Archaeological resources are expected to occur within the revised APE.	S	ARCHAEOLOGICAL RESOURCES A Memorandum of Agreement (MOA) and supporting Cultural Resources Treatment Plan (CRTP) will be developed for the archaeological sites in consultation with the Native American community, Hispanic historical organizations, appropriate city and county historic preservation bodies, SHPO, and ACHP. Mitigation measures may include subsurface excavations, focused archival research, site protection, on-site monitoring, following procedures in CRTP, curation, and public interpretation.	LS
ARCHITECTURAL RESOURCES **Design Change 40. Downtown San Jose Station** Three new impacts to historic or architectural resources would result from the station entrance options for the Downtown San Jose Station: Station entrance options M-1A, M-1B, and M-1C would be constructed on historic properties, the Ravioli Building at 28 East Santa Clara Street; the Bank of America Building at 8-14 South First Street; and the Western Dental Building at 42-48 East Santa Clara Street, respectively, buildings listed on the NRHP as contributors to a historic district, the San Jose Downtown Commercial Historic District. Construction of any station entrance may require the substantial alteration of a historic property which would constitute a substantial adverse change to a component of the historic district as it would change the physical features within the setting and visual linkage to the District and possibly diminish the integrity of the District.	S	ARCHITECTURAL RESOURCES Mitigation measures for the historic properties will be set forth in a MOA to be executed by appropriate government and historic preservation bodies. Other elements of the mitigation measures and MOA described in the FEIR are applicable.	S

IMPACT	SIGNIFICANCE	MITIGATION	SIGNIFICANCE AFTER MITIGATION
4.7 ELECTROMAGNETIC FIELDS			
No new significant impacts would result.	N	No new mitigation is necessary.	N
4.8 ENERGY			
The demand for electricity by the Project can not be accomodated during peak periods without potential disruptions recognizing the deficiencies in the statewide transmission infrastructure.	S	No cost effective feasible mitigation.	SU
4.9 GEOLOGY, SOILS, AND SEISMICITY			
No new significant impacts would result.	N	No new mitigation is necessary.	N
4.10 HAZARDOUS MATERIALS			
No new significant impacts would result.	N	No new mitigation is necessary.	N
4.11 LAND USE			
No new significant impacts would result.	N	No new mitigation is necessary.	N
4.12 NOISE			
LINE PORTION For baseline conditions the first floor of 132 residences would be impacted under the FTA criteria. The second floor and higher floors of 425 residences would be impacted under the FTA criteria.	S	Approximately 9,100 linear feet of sound walls, 10-13 feet high, and 2,850 linear feet of sound absorptive material on retaining walls will reduce noise impacts to less than significant levels.	LS
Design Change 4. Crossover Tracks near Kato Road. This design change would result in four residences impacted at the Castilleja Subdivision. In addition, the second floor of 9 residences would be impacted. For comparison, the baseline did not have any noise impacts.	S	Approximately 340 feet of 14-foot high sound walls and noise insulation for the second and higher floors will reduce noise impacts to less than significant levels.	LS
Design Change 8. Dixon Landing Road Alignment. This design change with the Retained Cut Option would result in 14 residences impacted at the ground floor and 57 residences with second and higher floors. For comparison, the At Grade Option has 16 residences impacted at the ground floor and 114 residences with second and higher floors.	S	The Retained Cut Option requires approximately 350 linear feet of 8-foot high sound walls and noise insulation for the second and higher floors. The At Grade Option requires approximately 720 linear feet of 7- to 8-foot high sound walls and noise insulation for the second and higher floors. These mitigation measures will reduce noise to less than significant levels.	LS

IMPACT	SIGNIFICANCE	MITIGATION	SIGNIFICANCE AFTER MITIGATION
Design Change 14. Curtis Avenue to Trade Zone Boulevard.			
This design change and options would result in the following impacts: Retained Cut Long Option - 19 residences; Retained Cut Short Option - 19 residences; Aerial Long Option - 68 residences; and Aerial Short Option - 70 residences. Residences with second and higher floors would also be impacted.	S	The Retained Cut Long Option requires approximately 1,150 linear feet of 13- to 16-foot high sound walls. The Retained Cut Short Option requires approximately 1,850 linear feet of 10- to 16-foot high sound walls. The Aerial Long Option requires approximately 3,120 linear feet of 10- to 16-foot high sound walls. The Aerial Short Option requires approximately 3,040 linear feet of 10- to 16-foot high sound walls. All of these options require noise insulation for the second and higher floors. These mitigation measures will reduce noise to less than significant levels.	LS
TUNNEL PORTION For the baseline conditions 133 residences would be impacted by groundborne noise under the FTA criteria.	S	Approximately 5,500 linear feet of highly resilient direct fixation fasteners and 10,500 linear feet of rail suspension fasteners or equivalent measures will reduce groundborne noise impacts to less than significant levels.	LS
VIBRATION			
LINE PORTION Approximately 172 single family and 171 multi-family residences would be impacted under the FTA criteria.	S	Approximately 6,260 linear feet of tire derived aggregate and 8,225 linear feet of 8 Hz floating slab or equivalent measures will reduce vibration impacts to less than significant levels	LS
Design Change 4. Crossover Tracks near Kato Road.			
This design change would result in 29 residences impacted under the FTA criteria compared to 25 residences without crossover tracks.	S	Approximately 700 linear feet of tire derived aggregate and 300 feet of 8 Hz floating slab or equivalent measures compared to approximately 1,000 linear feet of tire derived aggregate without the crossover tracks will reduce vibration impacts to less than significant levels.	LS
Design Change 8. Dixon Landing Road Alignment.			
This design change with the Retained Cut Option would result in 24 residences impacted under the FTA criteria compared to 59 residences with the At Grade Option.	S	The Retained Cut Option will require approximately 480 linear feet of tire derived aggregate and 880 feet of 8 Hz floating slab or equivalent measures. The At-Grade Option at Dixon Landing Road will require approximately 2,030 linear feet of tire derived aggregate and 560 feet of 8 Hz floating slab or equivalent measures. These mitigation measures will reduce vibration impacts to less than significant levels.	LS
Design Change 14. Curtis Avenue to Trade Zone Boulevard.			
This design change with the Retained Cut Long, Retained Cut Short, Aerial Long, and Aerial Short options all result in vibration impacts to 32 residences.	S	The Retained Cut Long Option will require 575 linear feet of 8 Hz floating slab or equivalent measure. The Retained Cut Short Option will require 590 linear feet of 8 Hz floating slab or equivalent measure. The Aerial Long Option will require 630 linear feet of 8 Hz floating slab or equivalent measure. The Aerial Short Option will require 590 linear feet of 8 Hz floating slab or equivalent measure. With mitigation, all of the options result in two residences at the Terrace Gardens Senior Housing complex continuing to have vibration impacts that would exceed the FTA criteria by 1 VdB.	LS

IMPACT	SIGNIFICANCE	MITIGATION	SIGNIFICANCE AFTER MITIGATION
TUNNEL PORTION The tunnel portion would not result In any vibration impacts under the FTA criteria.	N	No new mitigation is necessary.	N
4.13 SECURITY AND SYSTEM SAFETY			
No new significant impacts would result.	N	No new mitigation is necessary.	N
4.14 SOCIOECONOMICS			
No new significant impacts would result.	N	No new mitigation is necessary.	N
4.15 UTILITIES			
No new significant impacts would result.	N	No new mitigation is necessary.	N
4.16 VISUAL QUALITY AND AESTHETICS			
No new significant impacts would result.	N	No new mitigation is necessary.	N
4.17 WATER RESOURCES, WATER QUALITY, AND FLOODPLAINS			
No new significant impacts would result.	N	No new mitigation is necessary.	N
4.18 CONSTRUCTION			
TRANSPORTATION AND TRANSIT			
VEHICULAR TRAFFIC **Design Change 5. Kato Road Underpass.** Construction of the Kato Road underpass would cause full closure of Kato Road for approximately 6 months in the area near the BART alignment. Increased traffic congestion would result from both the diversion of east-west traffic from the Kato Road/ Milmont Drive intersection and the inability of existing regional commute cut-through traffic to use the Kato Road -Milmont Drive path. The full closure would impact traffic at the following two intersections: *Dixon Landing Road/North Milpitas Boulevard*. Currently, the southbound right-turn volume increases considerably in the morning peak and the eastbound left turn volume increases in the evening peak. The southbound approach (north leg) is currently striped with a wide shoulder that is used as a bike lane and right turn lane, two through lanes, and one left turn lane. The eastbound approach (west leg) is currently striped with one left-turn lane, one through lane, and one shared through-right lane.	S	Mitigation measures to reduce impacts to less than significant levels are not feasible due to ROW constraints and additional project cost. Therefore, construction at this location would result in a significant unavoidable impact. During construction, the southbound approach will be modified to two right turn lanes, a bike pocket, one through lane, and one left turn lane. Temporary warning signs will be provided for bicyclists entering the bike pocket and southbound drivers turning right to yield to pedestrians. The eastbound approach will be modified to one left-turn lane, one shared left-through lane, and one through-right lane, and the traffic signal phasing will be modified to an east/west "split" phasing to accommodate the shared left-through lane. The combined effect of re-striping and traffic signal phase sequence modifications results in an LOS E operation. To achieve LOS D, road widening would be required, which is not feasible since it would add additional project cost and impact adjacent private property.	SU

IMPACT	SIGNIFICANCE	MITIGATION	SIGNIFICANCE AFTER MITIGATION
Kato Road-Scott Creek Road/Warm Springs Boulevard. Currently, the northbound right-turn volume and the westbound left-turn volumes increase considerably in the morning peak. The northbound approach (south leg) is currently striped for two left-turn lanes, two through lanes, and one right-turn lane. The westbound approach (east leg) is currently striped for one left-turn lane, two through lanes, and one right-turn lane. The combined effect of re-striping results in an LOS E operation. Both measures can be implemented within the existing street ROW.		During construction, the northbound approach will be modified to one left-turn lane, two through lanes, and two right-turn lanes. During construction, the westbound approach will be modified to two left-turn lanes, one through lane, and one right-turn lane. The combined effect of re-striping and traffic signal phase sequence modifications results in an LOS E operation. To achieve LOS D, road widening would be required, which is not feasible since it would add additional project cost and impact adjacent private property.	
Design Change 8. Dixon Landing Road Alignment.	S		SU
Construction of the Dixon Landing Road crossing would require full closure of Dixon Landing Road for approximately 6 months in the area near the BART alignment. Increased traffic congestion would result from the diversion of east-west traffic from Dixon Landing Road onto Kato Road. The full closure at Dixon Landing Road would impact traffic at the following three intersections:		Mitigation measures to reduce impacts to less than significant levels are not feasible due to ROW constraints and additional project cost. Therefore, construction at this location would result in a significant unavoidable impact.	
Dixon Landing Road/Milmont Drive. Under the Retained Cut option, the closure of the east leg of this intersection would improve intersection LOS by eliminating conflicting movements.		No mitigation is necessary.	
Under the At-Grade Option, roadway excavation at this intersection would allow for only one northbound and one southbound lane on Milmont Drive. Adequate intersection levels of service would not be provided given the traffic levels and roadway constraints.		The necessary improvements to provide acceptable levels of service for the At Grade Option consist of road widening, which is not feasible since it would add additional project cost and impact adjacent private property.	
Kato Road/Milmont Drive. Under both options, the northbound right-turn volume increases considerably in both the morning and evening peaks. The northbound approach (south leg) is currently striped for one left turn lane and one shared through-right lane.		During the construction of both options, the northbound approach will be modified to one shared through-left lane and one right turn lane. The southbound approach will be modified to one shared left-through-right lane. In addition, traffic signal phasing will be modified to allow the northbound right-turn movement to overlap with the westbound left turn movement. This will be implemented within existing street ROW to avoid impacts to adjacent properties.	
Kato Road-Scott Creek Road/Warm Springs Boulevard. Under both options, the eastbound right-turn volume increases considerably in both the morning and evening peaks. The eastbound approach (west leg) is currently striped for one left-turn lane, two through lanes, and one shared through right-turn lane.		During the construction of both options, the eastbound approach will be modified to one left turn lane, one through lane, one shared through right-turn lane, and one right turn lane. This will be implemented within existing street ROW to avoid impacts to adjacent properties.	

IMPACT	SIGNIFICANCE	MITIGATION	SIGNIFICANCE AFTER MITIGATION
Design Change 14. Curtis Avenue to Trade Zone Boulevard. The construction of either aerial option at the Capitol Avenue crossing would close all northbound lanes along Capitol Avenue for a period of 9 months during the construction of the lowered Capitol Avenue alignment. Once construction of the depressed northbound Capitol Avenue has been completed, the northbound lanes would re-open and all southbound lanes on Capitol Avenue would be closed for 9 months.	S	The necessary improvement to provide acceptable levels of service for the Aerial Option consists of widening Capitol Avenue; however, the widening of Capitol Avenue is not feasible due to right-of-way constraints and additional project cost. Therefore, construction at this location would cause a significant unavoidable impact.	SU
Design Change 40. Downtown San Jose Station. The construction of the Downtown San Jose Station would require long-term lane or street closures on East Santa Clara Street between 4th Street and San Pedro Street over the planned 4-year construction period. Construction of the Downtown San Jose Stations would cause the degradation of the following intersections to below LOS D during construction: · Santa Clara Street and 3rd Street · Santa Clara Street and 4th Street · Saint James Street and 5th Street The construction of the Downtown Station would cause a significant unavoidable impact to vehicular traffic due to long-term lane or street closures and degradation of the above intersections to below LOS D.	S	The necessary improvements to reduce impacts to less than significant levels are not feasible due to ROW constraints and additional project cost; therefore, construction of the Downtown San Jose Station would result in a significant unavoidable impact.	SU
Design Change 42. Diridon/Arena Station. The construction of the Diridon/Arena Station would require the long-term street closures of Autumn and Montgomery streets. Autumn Street south of Santa Clara Street around the station footprint would be closed for less than 1 month, while Montgomery Street would be closed for about 2 months.	S	The necessary improvements to reduce impacts to less than significant levels are not feasible due to ROW constraints and additional project cost; therefore, construction of the Diridon/Arena Station would result in a significant unavoidable impact.	SU

IMPACT	SIGNIFICANCE	MITIGATION	SIGNIFICANCE AFTER MITIGATION
Construction of the Diridon/Arena Station would cause the degradation of the following intersection to below LOS D during construction: • West Santa Clara Street and Autumn Street The construction of the Diridon/Arena Station would cause a significant unavoidable impact to vehicular traffic due to long-term street closures and degradation of the above intersection to below LOS D.			
PARKING			
Twenty-five to 30 percent of the parking for one office located south of Trade Zone Boulevard and east of the railroad ROW would be displaced for two to three years due to the Trade Zone Boulevard construction staging area. No readily available feasible alternate parking sites are in the vicinity.	S	VTA will work with the business owner to minimize parking impacts to the extent feasible. However, the temporary loss of parking for the office would cause a significant unavoidable impact.	SU
Approximately 400 off-street parking spaces would be displaced for more than three months due to the Downtown San Jose Station construction staging area. Parking spaces are very limited in this area and demand is high due to the use by local businesses. No readily available feasible alternate parking sites are in the vicinity.	S	VTA will work with business owners to minimize parking impacts to the extent feasible. However, the temporary loss of approximately 400 parking spaces in the Downtown San Jose Station area would be considered a significant unavoidable impact.	SU
Approximately 450 off-street parking spaces and up to 24 on-street parking spaces located south of West Santa Clara Street would be displaced for more than three months due construction of the Diridon/Arena Station and the construction staging area. If the Parking Structure Option were chosen, an additional 900 parking spaces would be displaced north of West Santa Clara Street. If the North Bus Transit Center Option were chosen, the property located north of San Fernando Street between Cahill and Montgomery streets (this is the proposed site for the South Bus Transit Center Option) would be used as a temporary bus transit center during construction of the permanent transit center, and would cause the displacement of approximately 90 parking spaces for more than three months. Parking demand is high from area uses such as the HP Pavilion, Caltrain, and other local businesses. No readily available feasible alternate parking sites are in the vicinity.	S	VTA will continue to work with the City of San Jose, JPB, and HP Pavilion to minimize parking impacts, such as providing shuttles to remote parking lots. However, the temporary loss of parking spaces in the Diridon/Arena Station area would be considered a significant unavoidable impact.	SU

IMPACT	SIGNIFICANCE	MITIGATION	SIGNIFICANCE AFTER MITIGATION
AIR QUALITY			
No new significant impacts would result.	N	No new mitigation is necessary.	N
BIOLOGICAL RESOURCES AND WETLANDS			
Fragments of nonnative grasslands and potential burrowing owl habitat exist along the alignment. Impacts to burrowing owls occur when construction activity is within 50 meters (approximately 165 feet) of an occupied burrow, destroys a natural or artificial burrow, or results in destruction or degradation of foraging habitat within 100 meters (approximately 330 feet) of an occupied burrow.	S	A preconstruction survey of suitable habitat within 250 feet of construction areas (access permitting) will be conducted per California Department of Fish and Game (CDFG) guidelines by a qualified biologist within 30 days prior to construction to determine the presence of burrowing owls. If burrowing owls are determined to be present, avoidance of occupied burrows is the preferred method of addressing potential impacts. If avoidance is not feasible, a qualified biologist, in consultation with CDFG, will use passive relocation techniques (e.g., installing one-way doors at burrow entrances) to displace burrowing owls from the construction area to avoid the loss of any individuals due to construction. If destruction of occup ied burrows is unavoidable, the loss of foraging, nesting, and roosting habitat will be mitigated through habitat preservation at a ratio of 6.5 acres of foraging habitat permanently preserved for each pair or unpaired resident bird displaced due to the Project. Such mitigation will be provided via preservation of the appropriate acreage of occupied burrowing owl habitat with a conservation easement, or the purchase of credits in a CDFG-approved conservation bank.	LS
Construction activities may impact nesting raptors in nonnative grassland and riparian areas. In addition, the removal of trees anywhere along the alignment may impact nesting raptors.	S	To the extent feasible, construction activities, including tree and shrub removal, will be scheduled between September and December to avoid the nesting season for most raptors, as well as other bird species. If construction can not be scheduled between September and December, preconstruction surveys for nesting raptors will be conducted by a qualified ornithologist during the nesting season (January through August) to ensure that no raptor nests will be disturbed during construction. The Surveys will be conducted no more than 14 days prior to the initiation of construction activities during the early part of the breeding season (January through April) and no more than 30 days prior to the initiation of these activities during the late part of the breeding season (May through August). During this survey, the ornithologist will inspect all trees and electrical towers in, and immediately adjacent to, the impact area for raptor nests. If an active raptor nest is found close enough to the construction area to be disturbed by these activities, the ornithologist, in consultation with CDFG, will determine the extent of a construction-free buffer zone, typically 250 feet, to be established around the nest until the chicks have fledged.	LS

IMPACT	SIGNIFICANCE	MITIGATION	SIGNIFICANCE AFTER MITIGATION
The FEIR includes the development of stream diversion plans in accordance with VTA's Fish Friendly Channel Design Guidelines (March 2000). In the SEIR, this requirement extends to construction of the multi-cell box culvert at Berryessa Creek (Design Change # 9). The requirement also extends to Upper Penitencia Creek where, with implementation the Army Corps of Engineer's Upper Penitencia Creek Flood Control Project, which will widen the creek near the Berryessa Station, it would be necessary to construct columns within the channel to support both the BART aerial structure and roadway overpass at the station.	S	Construction within the channels that cross the Project alignment, including installation of temporary stream diversion structures, will be restricted to the dry season, which generally extends from June 1 to October 15 depending on the species present. In some cases, construction may begin earlier than June 15 or continue past October 15, as specified in regulatory agency permits and agreements or any authorized extensions.	LS
CULTURAL AND HISTORIC RESOURCES			
No new significant impacts would result.	N	No new mitigation is necessary.	N
GEOLOGY, SOILS AND SEISMICITY			
Surface settlements and ground movements may cause damage to structures, facilities, and utilities. However, the occurrence of settlement does not necessarily result in damage. Depending on the predicted degree of impact, probability of exceedance, structural sensitivity to movement, the Project would include ground treatment measures, strengthening of structures, and underpinning of structures on a case-by-case basis prior to tunnel boring or cut and cover construction. The Project also would employ earth pressure balance tunnel boring machines to minimize the risk of surface settlements and lateral ground movements. In addition to these design requirements, mitigation can be implemented to reduce the magnitude and likelihood of surface settlements and ground movements, physical damage, or functional impacts.	S	Pre-construction condition surveys of the interiors and exteriors of select structures within the settlement trough along the tunnel alignment and within the limit of influence around the cut and cover excavations will be conducted by independent surveyors to assess the condition of each property. These surveys will include written and photographic (video and still) records. The results of these surveys will be compared with post-construction condition surveys so that any effects of tunneling and cut and cover construction on structures can be assessed. For the tunnel activity, surveys will occur as close to the planned dates of tunneling as possible so that the results are as current as possible. Therefore, surveys will be performed prior to passage of the tunnel boring machines with some surveys conducted once tunneling has commenced. For the tunneling activity, ground surface monitoring will be performed prior to and during construction. Instrumentation will be installed to monitor ground movements and effects of tunnel boring on structures and utilities. Monitoring can be used to direct real-time modifications, as appropriate, to tunneling practices and procedures to assist in minimizing impacts along the tunnel alignment. Monitoring points will be mounted on select structures within the settlement trough along the tunnel alignment and within the limit of influence around the cut and cover excavations to monitor any effects of settlement. A pre-construction condition survey will be conducted of utilities deemed to be potentially at risk due to surface settlement or ground movement. Major utilities deemed to be at risk will be monitored during construction. Coordination with utility providers will be conducted prior to installation of utility monitoring points.	LS

IMPACT	SIGNIFICANCE	MITIGATION	SIGNIFICANCE AFTER MITIGATION
[Geology, Soils and Seismicity, cont'.]		The option of post construction repair is based on the probability of damage, predicted degree of damage, sensitivity of the structure or facility, and cost and ease of repair. If repair is not feasible, compensation may be necessary.	
HAZARDOUS MATERIALS			
No new significant impacts would result.	N	No new mitigation is necessary.	N
LAND USE			
No new significant impacts would result.	N	No new mitigation is necessary.	
NOISE AND VIBRATION			
Construction noise impacts would occur during site clearing, preparation of subgrade, retaining wall and aerial construction, layout of sub-ballast, and track installation for the line portion and during tunnel portal, station vent shaft and auxiliary facility construction.	S	A combination of temporary sound walls, noise control curtains, restrictions on work hours, or temporary relocation of impacted residents have been identified to achieve the construction noise criteria. Similar measures are identified to minimize noise impacts where it may not be feasible to reduce noise impacts to acceptable levels.	SU
Construction vibration impacts would occur from the use of vibratory pile drivers, large tracked dozers, compactors and other heavy equipment. Vibration impacts are a major concern for the construction of the Downtown San Jose Station because of the adjacent buildings. Vibration impacts are not anticipated from the tunnel boring machines.	S	The use of "resonant-free pile drivers" or other measures will be required if vibration levels exceed the criteria. Vibration monitoring during construction is proposed to ensure compliance.	LS
SECURITY AND SYSTEM SAFETY			
No new significant impacts would result.	N	No new mitigation is necessary.	N
SOCIOECONOMICS			
No new significant impacts would result.	N	No new mitigation is necessary.	N
UTILITIES			
No new significant impacts would result.	N	No new mitigation is necessary.	N
VISUAL QUALITY AND AESTHETICS			
No new significant impacts would result.	N	No new mitigation is necessary.	N
WATER RESOURCES, WATER QUALITY AND FLOODPLAINS			
No new significant impacts would result.	N	No new mitigation is necessary.	N

4.21.2 SIGNIFICANT UNAVOIDABLE ADVERSE EFFECTS UNDER CEQA

The significant unavoidable impacts identified in Table 4.21-1 are listed below. Where impacts cannot be mitigated to less than significant levels, CEQA Guidelines require the preparation of a Statement of Overriding Considerations in order for the SEIR to be certified. This statement provides a means to describe the balance between economic, legal, social or other benefits of a project and its unavoidable environmental effects.

Significant unavoidable traffic impacts would result at the following freeway segments and intersections.

- I-880 freeway segments (only if the No Parking Option at Diridon/Arena Station is selected):
  - I-880, Bascom Avenue to The Alameda (northbound AM peak hour)
  - I-880, The Alameda to Coleman Avenue (northbound AM peak hour)
  - I-880, Coleman Avenue to The Alameda (southbound PM peak hour)
  - I-880, The Alameda to Bascom Avenue (southbound PM peak hour)
- Great Mall Parkway and Montague Expressway
- Milpitas Boulevard and Yosemite Drive
- Milpitas Boulevard and Montague Expressway
- Dempsey Road and Landess Avenue
- Park Victoria Drive and Landess Avenue
- Old Oakland/Main Street and Montague Expressway
- Milpitas Boulevard and Calaveras Boulevard
- Hillview Drive and Calaveras Boulevard
- Park Victoria Drive and Calaveras Boulevard
- Lundy Avenue and Berryessa Road
- King Road and Mabury Road
- 24th Street and Santa Clara Street
- US 101 and Santa Clara Street
- McLaughlin Avenue and Story Road
- King Road and Mabury Road
- The Alameda and Taylor Street/ Naglee Avenue
- San Tomas Expressway and El Camino Real
- De La Cruz Boulevard and Central Expressway
- De La Cruz Boulevard and Martin Avenue

Significant unavoidable vibration impacts would result at the following locations:

- Two residences at the Terrace Gardens Senior Housing complex

Significant unavoidable traffic impacts during construction would result at the following locations:

- Kato Road near the BART alignment.
- Dixon Landing Road near the BART alignment.
- Capitol Avenue near the BART Alignment (only if the Aerial Option is selected).
- East Santa Clara Street between 4th Street and San Pedro Street and Saint James Street at 5th Street, near the Downtown San Jose Station
- West Santa Clara, Autumn, and Montgomery streets near the Diridon/Arena Station

Significant unavoidable parking impacts during construction would result at the following locations:

- One office located south of Trade Zone Boulevard and east of the railroad ROW at the Trade Zone Boulevard construction staging area
- Off-street parking at the Downtown San Jose Station construction staging area
- Off- and on-street parking south of West Santa Clara Street near the Diridon/Arena Station

Significant unavoidable noise impacts during construction would result at the following locations:

- Construction sites within the Project .