Eastridge to BART Regional Connector

Second Addendum to the Final Second Supplemental Environmental Impact Report

State Clearinghouse #2001092014

Prepared by:

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Section 1 Introduction

1.1 Purpose of the Addendum

The California Environmental Quality Act (CEQA) recognizes that between the date projects are approved and the date they are constructed one or more of the following changes may occur: 1) the scope of the project may change, 2) the environmental setting in which the project is located may change, 3) certain environmental laws, regulations, or policies may change, and 4) previously unknown information may be identified. CEQA requires that lead agencies evaluate these changes to determine whether or not they are significant.

The mechanism for assessing the significance of these changes is found in CEQA Guidelines Sections 15162 - 15164. Under these Guidelines, a lead agency should prepare a subsequent or supplemental CEQA document if the triggering criteria set forth in CEQA Guidelines Section 15162 and 15163 are met. These criteria include a determination whether any changes to the project, or the circumstances under which the project will be undertaken, involve new significant environmental effects or a substantial increase in the severity of previously identified significant effects. In addition, a subsequent or supplemental CEQA document may be prepared if "new information" meeting certain standards under Guidelines Section 15162 is presented. If the changes do not meet these criteria, or if no "new information of substantial importance" is presented, then an Addendum per CEQA Guidelines Section 15164 is prepared to document any minor corrections to the Environmental Impact Report (EIR) or Initial Study/Mitigated Negative Declaration (MND). CEQA does not require that an Addendum be circulated for public review.

As discussed in Section 3 of this document, the implementation of the design changes described in Section 2 will not result in new significant environmental effects or a substantial increase in the severity of previously identified significant effects. Therefore, the preparation of a Supplemental EIR, as defined by CEQA, is not warranted and an Addendum is the appropriate environmental document.

1.2 Overview of the Eastridge to BART Regional Connector Project

The Eastridge to BART Regional Connector (EBRC) Project will extend light rail along Capitol Expressway between the existing Alum Rock Light Rail Station and Eastridge Transit Center, a distance of approximately 2.4 miles. Light rail will operate primarily in the median of Capitol Expressway within exclusive and semi-exclusive rights-of-way. To provide the additional right-of-way to accommodate light rail, high-occupancy vehicle lanes will be removed between Story Road and Tully Road. The Project will include new light rail stations at Story Road (aerial) and Eastridge Transit Center (at-grade). The Project will also include traction power substations at Ocala Avenue and Eastridge Transit Center. Relocation and replacement of a number of 115-kilovolt steel lattice electrical transmission towers with Tubular Steel Poles (TSP) will be required for the Project.

Figure 1 shows the location of the EBRC Project.

1.3 Previous Environmental Studies

The federal and state environmental process for the Capitol Expressway Light Rail (CELR) Project was initiated in September 2001 with the publishing of a Notice of Intent to prepare an Environmental Impact Statement (EIS) in the federal register and the filing of the Notice of Preparation of an EIR with the State Clearinghouse. A Draft EIS/EIR was circulated in April 2004, but only a Final EIR was completed as a result of limited opportunities for securing federal funds.

In May 2005, the VTA Board of Directors certified the Final EIR (hereafter referred to as the "2005 Final EIR") and approved the Light Rail Alternative. As a result of preliminary engineering, the Light Rail Alternative was modified to address agency comments, improve operations, minimize right-of-way acquisition and lower costs. To address these modifications, the VTA Board of Directors prepared and certified a Final Supplemental EIR (Final SEIR) and approved the modifications in August 2007 (hereafter referred to as the "2007 Final SEIR").

Due to unprecedented declines in revenues beginning in 2008, the implementation plan for the Light Rail Alternative was modified to construct the Project in phases. A Revised Addendum to the Final SEIR was approved in June 2010 that included the installation of pedestrian and bus improvements as Phase 1 and the extension of light rail along Capitol Expressway as Phase 2.

In addition to the state environmental process, VTA reinitiated the federal environmental process on September 9, 2009, with a Notice of Intent to prepare a Supplemental Draft EIS. The Supplemental Draft EIS was circulated on May 18, 2012, for 45 days with comments due on July 3, 2012. The federal environmental process under the National Environmental Policy Act (NEPA) was suspended in 2017 as a result of limited opportunities for securing federal funds.

A Subsequent Initial Study (IS)/Mitigated Negative Declaration (MND) was approved in March 2014 (hereafter referred to as the "2014 Subsequent IS/MND") that eliminated the Ocala Station, eliminated sidewalk widening and sound wall relocation north of Ocala Avenue, and expanded the Eastridge Park-and-Ride lot.

A Second Supplemental EIR (SEIR-2) and Second Subsequent IS was approved in June 2019 (hereafter referred to as the "2019 Final SEIR-2") to address major changes to the Project as well as incorporate changed circumstances and new information.

This Second Addendum evaluates design changes as a result of advances in engineering and electrical designs.

1.4 Scope of the Second Addendum

The scope of the Second Addendum is limited to the following changes to the Project that are further described in Section 2:

- **Design Change #1 - Maintain an existing second left-turn lane on northbound Capitol Expressway at Ocala Avenue**
- **Design Change #2 - Add a supplemental feeder system and increase the size of two new traction power substations**
- **Design Change #3 - Modify PG&E electrical distribution service for two new traction power substations**
- **Design Change #4 - Provide in-lieu funds instead of replacing trees removed as part of Project**
- **Design Change #5 – Include parking canopies with photovoltaic system at Eastridge Park-and-Ride Lot**

The Second Addendum will describe the effects of the design changes on the environmental setting, impacts, and mitigation measures.

Section 2 Proposed Changes to the Project

This section describes the proposed changes to the Project since the approval of the prior environmental documents.

- **Design Change #1 - Maintain an existing second left-turn lane on northbound Capitol Expressway at Ocala Avenue**
  VTA is proposing to maintain a second left-turn lane on northbound Capitol Expressway at Ocala Avenue that was previously going to be removed by the Project (Figure 2). This design change will improve traffic operations compared to the original design. Maintaining the second left-turn lane will require that the roadway and aerial guideway alignment be shifted to provide the space needed. Both of the northbound left-turn lanes will be moved from the east to the west side of the aerial guideway (bridge) column and will require the relocation of the existing southbound Bus Rapid Transit (BRT) shelter, and sidewalk. Appropriate safety measures, such as crash cushions and energy absorption devices, will be included in the design. This change will result in an increase to the roadway easement required from the County of Santa Clara.

- **Design Change #2 - Add a supplemental feeder system and increase the size of two new traction power substations**
  This change will add additional electrical wires on existing overhead catenary poles from Traction Power Substation (TPSS) #27 near the Penitencia Creek Station and TPSS #28 near the Alum Rock Station to the new TPSS #33 at Ocala Avenue and TPSS #34 at Eastridge Transit Center. In addition, the size of the new traction power substations (TPSS #33 and TPSS #34) will be increased from 1.5 MW to 2.5 MW. The additional wires and increased substation size are required to support planned operations on the corridor for BART and special events at Levi's Stadium. No additional right of way is required for this change.

- **Design Change #3 - Modify PG&E electrical distribution service for two new traction power substations**
  The Project will be installing two new Traction Power Substations, one at the Southwest corner of Ocala Avenue and Capitol Expressway (TPSS #33) and one at Eastridge Transit Center (TPSS #34). PG&E will need to supply power to the two TPSSs. In order to serve TPSS #34, PG&E will have to extend its electrical underground system from Quimby Road along Capitol Expressway to Eastridge Transit Center. In order to serve TPSS #33, PG&E is considering two options to provide service. The first option will use a combination of overhead and underground construction to continue the extension of its electrical system from Eastridge Transit Center to Ocala Avenue along the west side of Capitol Expressway and Swift Ave. The second option is to provide service from King Road, which is not evaluated in this Addendum due to insufficient design information from PG&E. No additional right-of-way is required for this change.

- **Design Change #4 - Provide in-lieu funds instead of replacing trees removed as part of Project**
  The Project is required to replace approximately 150 trees that will be removed along the Capitol Avenue and Capitol Expressway Corridor with 175 trees. Because of the limited area available for planting trees within the Project right-of-way, VTA is proposing to provide in-lieu funds to Our City Forest or San Jose Beautiful for off-site tree planting in the community per the City of San Jose's Guidelines for Inventorying, Evaluating, and Mitigating Impacts to Landscaping Trees in the City of San Jose. According to City of San Jose staff, the donation amount is currently $750 per mitigation tree. These funds will be used for tree planting and maintenance of planted trees for approximately three years. As a condition of the in-lieu payment, VTA will require that the trees be replaced within 2 miles of the Project corridor to the maximum extent practicable. The trees may be planted on public or private property with the owner's permission.

- **Design Change #5 – Include parking canopies with photovoltaic system at Eastridge Park-and-Ride Lot**
  The Project will include a 92 kW photovoltaic system on parking canopies located in the Eastridge Park-and-Ride lot to reduce the grid electricity requirements of the light rail station and park-and-ride lot (Figure 3).

Section 3 Environmental Setting, Impacts, and Mitigation

3.1 Transportation

This section evaluates the potential for transportation impacts. Design Change #1 (Maintain an existing second left-turn lane on northbound Capitol Expressway at Ocala Avenue) is the only change that could have a potential impact on transportation. The approved Project reduced the existing dual northbound left-turn lanes on Capitol Expressway to Ocala Avenue to a single left-turn lane. Design Change #1 maintains the dual left-turn lanes and provides more storage than both existing conditions and the approved Project. In a memorandum dated October 18, 2019, Hexagon Consultants analyzed the effect of the change on Intersection Level of Service/Delay, Vehicular Queuing, Corridor Average Travel Time and Speed, and Safety. Hexagon's conclusion was that Design Change #1 would result in either the same, or beneficial impacts. As a result, none of the design changes would result in new significant environmental effects or a substantial increase in the severity of previously identified significant effects related to transportation.

3.2 Air Quality

This section evaluates the potential for air quality and climate change impacts. The Project is located within the San Francisco Bay Area Air Basin. The air pollutants of greatest concern in this area are ozone, particulate matter less than or equal to 2.5 microns in diameter (PM2.5), particulate matter less than or equal to 10 microns in diameter (PM10), and carbon monoxide (CO). Motor vehicles are the dominate source of these pollutants. None of the design changes would substantially increase vehicle miles traveled, intersection level of service, delay, or volume-to-capacity ratios. As a result, the design changes would not result in new significant environmental effects or a substantial increase in the severity of previously identified significant effects related to air quality.

3.3 Biological Resources

This section evaluates the potential for impacts to biological resources. Design Change #3 (Modify PG&E electrical distribution service for two new traction power substations) and Design Change #4 (Provide in-lieu funds instead of replacing trees removed as part of Project) are the two design changes that could affect biological resources. Design Change #3 would involve trenching on the west side of Capitol Expressway between Ocala Avenue and Tully Road where habitat for the Western burrowing owl (*Athena cunicularia hypugea*), which is a state wildlife species of special concern, has been identified. The Western burrowing owl may be found in open lots with short vegetation near Lake Cunningham and Reid Hillview Airport. Burrowing owls use burrows created by other animals, usually grown squirrels, to nest underground. With the incorporation of the following mitigation measure from previously

approved environmental documents for the EBRC Project, Design Change #3 would not result in any new significant biological impacts or a substantial increase in the severity of previously identified significant effects to biological resources:

> **Mitigation Measure BIO-7: Conduct Preconstruction Surveys for Nesting and Wintering Western Burrowing Owls and Implement Measures to Avoid or Minimize Adverse Effects if Owls Are Present**
> Preconstruction surveys for Western burrowing owls shall be conducted by a qualified ornithologist before any development within the habitat identified in Figure 3.3-1 of the 2019 Final SEIR-2. These surveys, which shall include any potentially suitable habitat within 250 feet of construction areas, shall be conducted no more than 30 days before the start of site grading, regardless of the time of year in which grading occurs. If breeding owls are located on or immediately adjacent to the site, a construction-free buffer zone (typically 250 feet) around the active burrow must be established as determined by the ornithologist in consultation with California Department of Fish and Wildlife (CDFW). No activities, including grading or other construction work or relocation of owls, would proceed that may disturb breeding owls. If owls are resident within 250 feet of the Project Area during the nonbreeding season, a qualified ornithologist, in consultation with CDFG, shall passively relocate (evict) the owls to avoid the loss of any individuals if the owls are close enough that they or their burrows could potentially be harmed by associated activities.

Design Change #4 would provide in-lieu funds to replace the trees removed by the Project outside of the right-of-way limits. Because the trees would be replaced within two miles of the project corridor, Design Change #4 would not result in any new significant environmental effects or a substantial increase in the severity of previously identified significant effects to biological resources.

In summary, the design changes are not anticipated to result in new significant environmental effects or a substantial increase in the severity of previously identified significant effects to biological resources.

3.4 Community Services

This section evaluates the potential for the design changes to result in impacts and benefits to community facilities (schools, fire stations, police stations, hospitals, libraries, civic/community centers, parks, religious institutions, and museums). Since none of the design changes would result in the provision or need for new or physically altered government facilities, the design changes would not result in any new significant environmental effects or a substantial increase in the severity of previously identified significant effects to community services.

3.5 Cultural Resources

This section evaluates the potential for the design changes to result in impacts to cultural resources. There are no known archaeological resources located within the approved Project limits, which includes the footprint for the proposed design changes. Similarly, no isolated remains, cemeteries, or archaeological resources that contain human remains have been identified within the Project limits. As such, the design changes would not result in additional impacts to known archaeological resources (including human remains). However, a desktop geoarchaeological sensitivity analysis revealed that the Project footprint is underlain by landforms that have sensitivity for containing unknown buried archaeological resources. In case of an inadvertent discovery of buried cultural resources, standard practice, which is to stop work immediately, will be followed as described in Section 3.5 of the 2019 Final SEIR-2. In addition, there will be a Native American monitor required during construction involving subsurface excavation between Cunningham Avenue and Quimby Avenue. This requirement will apply to Design Change #3 (Modify PG&E electrical distribution service for two new traction power substations) and #4 (Provide in-lieu funds instead of replacing trees removed as part of Project). With the inclusion of these standard practices and Native American monitoring, the design changes would not result in any new significant environmental effects or a substantial increase in the severity of previously identified significant effects to cultural resources.

3.6 Electromagnetic Fields

This section generally evaluates the potential for the design changes to have health effects from electromagnetic fields (EMF). EMF is associated with electromagnetic radiation from natural and human-made sources (electronics, telecommunications, and other electrically powered devices). Several design changes will add new sources of EMF and include Design Change #2 (Add a supplemental feeder system and increasing the size of two new traction power substations), Design Change #3 (Modify PG&E electrical distribution service for two new traction power substations), and Design Change #5 (Include parking canopies with photovoltaic system at Eastridge Park-and-Ride Lot). Based on measurements conducted for the Vasona Corridor, the AC and DC magnetic fields for VTA's light rail system are far below the standards of the International Commission on Non-Ionizing radiation Protection (ICNIRP) and the American Conference of Governmental Industrial Hygienists (ACGIH). In addition, the new sources of EMF are not adjacent to any structures or land uses where prolonged human exposure is anticipated. As a result, the design changes are not anticipated to result in a new significant environmental effect or a substantial increase in the severity of previously identified significant effects to EMF.

3.7 Energy

This section evaluates the potential to place a substantial demand on the regional energy supply, require substantial additional capacity, or significantly increase peak and base period electricity

demand. Several design changes will affect energy resources and include Design Change #2 (Add a supplemental feeder system and increasing the size of two new traction power substations), Design Change #3 (Modify PG&E electrical distribution service for two new traction power substations), and Design Change #5 (Include parking canopies with photovoltaic system at Eastridge Park-and-Ride Lot). While Design Change #2 and #3 would add supplemental feeders and increase the size of the new substations that would allow for more frequent light rail service, the incremental increase in electricity demand associated with the increased service is not anticipated to significantly impact regional energy supply, require additional capacity, or significantly increase peak and base period electricity demand. Design Change #5 is anticipated to have a beneficial effect on energy by decreasing demand for grid electricity at the Eastridge Station and Park-and-Ride. As a result, the design changes are not anticipated to result in a new significant environmental effect or a substantial increase in the severity of previously identified effects to energy resources.

3.8 Environmental Justice

This section evaluates the potential for disproportionately high and adverse effects on minority and low income populations. An evaluation of the potential for each design change to result in a disproportionately high and adverse effect on minority and low income populations is as follows:

- Design Change #1 (Maintain an existing second left-turn lane on northbound Capitol Expressway at Ocala Avenue): This design change will have an effect on all populations that use Capitol Expressway regardless of minority or low income status. The effect of the design change is anticipated to be similar to or beneficial compared to the original design. As a result, this design change is not expected to cause a disproportionately high and adverse effect on minority and low income populations.
- Design Change #2 (Add a supplemental feeder system and increase the size of two new traction power substations): This design change will have an effect on all populations located along Capitol Avenue and Capitol Expressway between Penitencia Creek and Eastridge Transit Center regardless of their minority or low income status. The effect of the design change is not anticipated to be significant especially with regard to EMF, energy, and visual resources. As a result, this design change is not expected to cause a disproportionately high and adverse effect on minority and low income populations.
- Design Change #3 (Modify PG&E electrical distribution service for two new traction power substations): This design change will be located in the vicinity of populations along Capitol Expressway between Quimby Road and Ocala Avenue, which are predominately minority but not low income. The improvements associated with this design change will occur within the Capitol Expressway roadway, and will primarily be adjacent to commercial properties and not residential properties. As a result, this design change is not expected to cause a disproportionately high and adverse effect on minority and low income populations.
- Design Change #4 (Provide in-lieu funds instead of replacing trees removed as part of Project): This design change will have a visual effect on all populations that live and travel along the Capitol Avenue and Capitol Expressway corridor, regardless of their minority or

low income status. While VTA will request that the in-lieu funds be used to replace trees within 2 miles of the Project corridor, the inability to replace trees within the Project corridor will have a visual effect. Since there will be other plantings within the Project corridor that will lessen the significance of this effect, this design change is not expected to cause a disproportionately high and adverse effect on minority and low income populations.

- Design Change #5 (Include parking canopies with photovoltaic system at Eastridge Park-and-Ride Lot): This design change is located in a census tract with minority populations but no low income populations. This design change will primarily affect users of the Eastridge Park-and-Ride lot, employees and customers of the VTA Paratransit Offices, and Eastridge Mall, which are all located adjacent to the photovoltaic system. While this design change will have a visual effect, it is minor since the system is smaller in scope and scale to a similar photovoltaic system located on the south side of the Eastridge Access Road. As a result, this design change is not expected to cause a disproportionately high and adverse effect on minority and low income populations.

In summary, the design changes are not expected to cause a disproportionately high and adverse effect on minority and low income populations.

3.9 Geology, Soils and Seismicity

This section evaluates the potential to increase the hazards related to geology, soils, and seismicity. The topography of the area is relatively flat. There are no significant or unique geologic conditions (e.g., faults, landslides, steep slopes, etc.) on or adjacent to the Capitol Expressway Corridor that would require special mitigation. Although the Project is located in a seismically active region, this fact applies to the greater Bay Area and is not unique to this site. None of the design changes would involve the construction of any large-scale structures and facilities. As a result, the design changes are not anticipated to result in a new significant environmental effect or a substantial increase in the severity of previously identified significant effects to geology, soils and seismicity.

3.10 Hazardous Materials

This section evaluates the potential to encounter hazardous materials during construction of the design changes. Several of the design changes would involve subsurface excavation along portions of the Capitol Expressway Corridor. These include Design Change #1 (Maintain an existing second left-turn lane on northbound Capitol Expressway at Ocala Avenue), Design Change #3 (Modify PG&E electrical distribution service for two new traction power substations), and Design Change #5 (Include parking canopies with photovoltaic system at Eastridge Park-and-Ride Lot).

Two recent hazardous materials reports that involve soil and groundwater sampling were conducted in 2011 and 2018. The reports are titled 2011 *Soil Sample Report for the Capital*

Expressway Light Rail Bus Improvement Project and the 2018 Draft *Preliminary Site Investigation and Hazardous Materials Assessment Report*.

The 2011 *Soil Sample Report for the Capital Expressway Light Rail Bus Improvement Project* concluded that the Former JC Penny Tire, Battery, and Automotive Facility (now VTA Paratransit Office at the Eastridge Park-and-Ride) had analytes detected above the laboratory reporting limit concentrations but not exceeding the Regional Water Quality Control Board (RWQCB) Environmental Screening Levels (ESLs) or TriCities Landfill acceptance criteria. The report also concluded that there were anomalous lead results on the west side of Capitol Expressway near Ocala Avenue. However, after resampling, the lead concentrations were found to be below regulatory levels such that soil excavated at the site would not be classified as California or Resource, Conservation, and Recovery Act (RCRA) hazardous waste.

The 2018 Draft *Preliminary Site Investigation and Hazardous Materials Assessment Report* did not identify any concerns in the vicinity of the design changes that involve subsurface excavation.

Based on the 2011 and 2018 reports, the design changes are not anticipated to result in a new significant environmental effect or a substantial increase in the severity of previously identified significant effects from hazardous materials.

3.11 Hydrology and Water Quality

This section evaluates the potential of the design changes to affect existing flooding hazards, impair water quality, and create additional sources of runoff. Design Change #1 (Maintain an existing second left-turn lane on northbound Capitol Expressway at Ocala Avenue), Design Change #3 (Modify PG&E electrical distribution service for two new traction power substations), and Design Change #5 (Include parking canopies with photovoltaic system at Eastridge Park-and-Ride Lot) have the greatest potential to affect hydrology and water quality, especially during construction.

As with the approved Project, the design changes are currently located within the 100-year flood hazard zone of Silver Creek. However, it is anticipated that the flood insurance maps will be updated once the Lower Silver Creek Flood Protection Project is complete (estimated to be October 2019) and that 3,800 parcels will no longer be required by law to purchase flood insurance.

Design Change #1 is anticipated to result in a minimal increase in the amount of impervious area because of the addition of a second northbound left-turn lane. Post-construction runoff from new pavement will be managed in accordance with National Pollutant Discharge Elimination System permit requirements for VTA's MS4 permit. In addition, Design Change #1, #3, and #5 are anticipated to result in soil disturbance, excavation, cutting/filling, stockpiling, and grading activities that could result in increased erosion and sedimentation to surface waters. These

design changes could also require dewatering and the associated discharge of groundwater or dewatering effluent.

The following mitigation measure identified in previous environmental documents would still apply to the design changes:

Mitigation Measure HYD-11 (Comply with All Applicable Regulations and Subsequent Permit Programs Related to Water Quality Control)

As a result of the inclusion of this mitigation measure, the design changes are not anticipated to result in a new significant environmental effect or a substantial increase in the severity of previously identified significant effects related to hydrology and water quality.

3.12 Land Use

This section evaluates the potential of the design changes to be incompatible with existing adjacent land uses or be inconsistent with applicable plans, programs and policies. None of the design changes are anticipated to result in a new significant effect or a substantial increase in the severity of previously identified significant effects related to land use.

3.13 Noise and Vibration

This section evaluates the potential of the design changes to result in noise or vibration impacts that would exceed criteria used by VTA and the Federal Transit Administration (FTA). None of the design changes are anticipated to result in a new significant environmental effect or a substantial increase in the severity of previously identified significant effects related to noise and vibration.

3.14 Safety and Security

This section evaluates potential safety and security impacts associated with the design changes. Design Change #1 (Maintain an existing second left-turn lane on northbound Capitol Expressway at Ocala Avenue) will place the two northbound left-turn lanes to the west of the aerial guideway columns, which could increase the chance of collisions. Therefore, the appropriate safety measures, such as crash cushions or energy absorption devices, are included in this design change. As a result, the design changes are not anticipated to result in a new significant environmental effect or a substantial increase in the severity of previously identified significant effects related to safety and security.

3.15 Socioeconomics

This section evaluates the potential for the design changes to negatively affect the population, household, and community characteristics of an area through physical divisions, disruption of efforts to economically revitalize the area, growth inducement, displacement of businesses and housing, and increased demand for housing. Design Change #1 (Maintain an existing second left-turn lane on northbound Capitol Expressway at Ocala Avenue), which will require an increase to the roadway easement from the County of Santa Clara, is the only design change that is anticipated to require additional right-of-way. As a result, the design changes are not expected to result in a new significant environmental effect or a substantial increase in the severity of previously identified significant effects related to socioeconomics.

3.16 Utilities

This section evaluates the potential for the design changes to affect utilities. Design Change #2 (Add a supplemental feeder system and increase the size of two new traction power substations) will increase the new service requirements for the Project. Design Change #3 (Modify PG&E electrical distribution service for two new traction power substations) is the new service for the two traction power substations that are included in the Project. Neither of these design options is anticipated to cause a disruption in utility service for a period of 24 hours or more. As a result, the design changes are not expected to result in a new significant environmental effect or a substantial increase in severity of previously identified significant effects related to utilities.

3.17 Visual Quality

This section evaluates the potential to degrade the existing visual character and quality of the Project corridor, negatively affect scenic vistas, and introduce new sources of light and glare. Design Change #2 (Add a supplemental feeder system from two existing traction power substations), Design Change #4 (Provide in-lieu funds instead of replacing trees removed as part of Project), and Design Change #5 (Include parking canopies with photovoltaic system at Eastridge Park-and-Ride Lot) will have an effect on the visual environment. Design Change #2 will add wires to existing and new poles, which will be a minor change to the visual environment. In Design Change #4, trees that are removed as part of the Project will not be replaced within the Project limits. While this design change will have a negative effect on the visual environment, it will be lessened by the other types of vegetation and landscaping that will be planted as part of the Project. Design Change #5 will add a small parking canopy with photovoltaic system at the Eastridge Park-and-Ride Lot, which will be a minor change to the visual environment which has a general urban character. As a result, the design changes are not anticipated to result in a new significant environmental effect or a substantial increase in severity of previously identified significant effects related to visual quality.

3.18 Construction Impacts

This section evaluates the potential construction impacts associated with the design changes. With the inclusion of the mitigation measures related to construction activities from previous approved environmental documents for this Project, the design changes are not anticipated to result in a new significant environmental effect or a substantial increase in severity of previously identified significant effects related to construction.

3.19 Cumulative Impacts

This section evaluates the incremental effect of the design changes on the environment when considered in conjunction with closely related past, present, and reasonably foreseeable future projects. Given the relatively small scope and scale of the design changes, it is not anticipated that the design changes will result in a new significant cumulative effect or a substantial increase in the severity of previously identified significant cumulative effects.

3.20 Growth-Inducing Impacts

This section evaluates the potential of the design changes to directly or indirectly induce economic, population or housing growth in the surrounding environment. Given the relatively small scope and scale of the design changes, the design changes are not anticipated to result in a new significant environmental effect or a substantial increase in the severity of previously identified significant effects as relates to growth inducement.

Section 5 Conclusion

Based upon the evaluation of the design changes, it has been determined that there will be no new significant environmental effects nor substantial increases in the severity of any previously identified significant effects. Therefore, an Addendum is the appropriate environmental document.

Section 6 References

GeoCon Consultants, Inc. December 2011. *Soil Sample Report, Capital Expressway Light Rail Bus Improvement Project*.

GeoCon Consultants, Inc. November 2018. *Preliminary Site Investigation and Hazardous Materials Report*. Draft.

Hexagon Transportation Consultants. 2019. *Dual Northbound Left Turn Lanes on Capitol Expressway at Ocala Avenue for the Proposed Capitol Expressway Light Rail Project*.

Santa Clara Valley Transportation Authority. 2005. *Environmental Impact Report for the Capitol Expressway Corridor.* State Clearinghouse #2001092014. Final. April. (J&S 01-277.) San Jose, CA.

Santa Clara Valley Transportation Authority. 2007. *Supplemental Environmental Impact Report for the Capitol Expressway Light Rail.* State Clearinghouse #2001092014. Final. April. (J&S 01-277.) San Jose, CA.

Santa Clara Valley Transportation Authority. 2010. *Revised Addendum to the Supplemental Environmental Impact Report*. State Clearinghouse #2001092014. June.

Santa Clara Valley Transportation Authority. 2014. *Subsequent Initial Study/Mitigated Negative Declaration*. State Clearinghouse #2001092014. February.

Santa Clara Valley Transportation Authority. 2019. *Final Second Supplemental Environmental Impact Report*. State Clearinghouse #2001092014. Final. May.

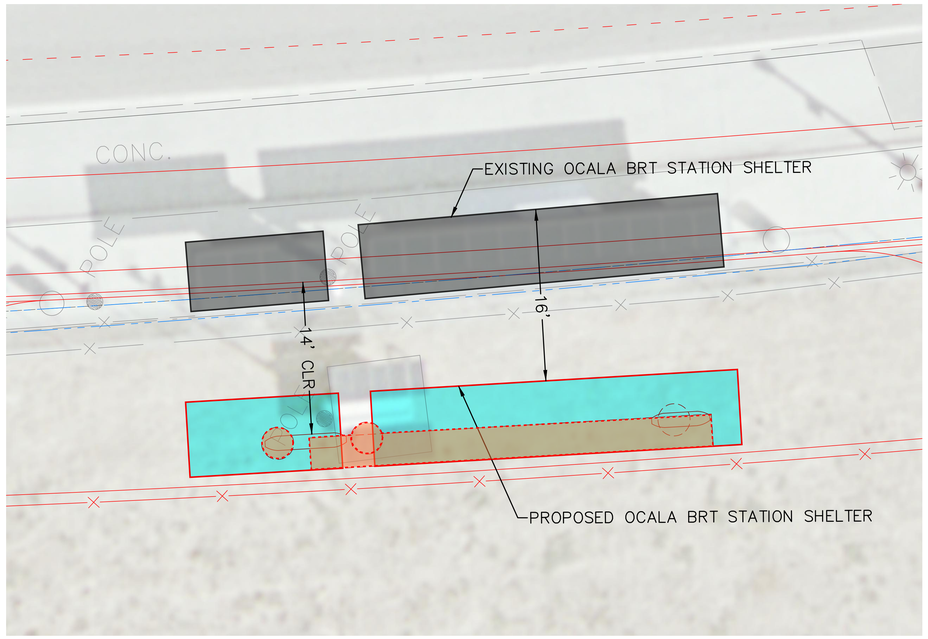
Figures

Source: Korve Engineering 2003; VTA 2016; revised by ICF 2019.

Figure 1
Eastridge to BART Regional Connector Project

UNCHECKED / IN PROGRESS - FOR DISCUSSION ONLY

FIGURE 2 - NB OCALA DOUBLE LEFT TURN EXHIBIT



DETAIL A
OCALA BRT EXISTING AND PROPOSED

MATCH LINE SEE BELOW

MATCH LINE SEE ABOVE

S. CAPITOL AVENUE

CAPITOL EXPRESSWAY

CUNNINGHAM AVE

OCALA AVE

JOHN MONTGOMERY DR

(2) 530' STORAGE LANES

120'

190'

210'

2.8' OFFSET

PROPOSED 65% R/W

DETAIL A

23' & VAR (ADDITIONAL R/W REQUIRED COMPARED WITH 65% SUBMITTAL)

8' PLANTING STRIP

10' SIDEWALK

7' SHOULDER

EXISTING R/W

11'-11'-11'-13'

10'-11'

1030+00 1031+00 1032+00 1033+00 1034+00 1035+00 1036+00 1037+00 1038+00 1039+00 1040+00 1041+00 1042+00 1043+00 1044+00 1045+00 1046+00 1047+00 1048+00 1049+00 1050+00 1051+00

LEGEND:

65% DESIGN

95% DESIGN

95% TRACK CENTER LINE

40' 0' 40' 80'
GRAPHIC SCALE

OCTOBER 23, 2019

EASTRIDGE TO BART REGIONAL CONNECTOR
CAPITOL EXPRESSWAY LIGHT RAIL PROJECT

HERN Oct. 25, 2019 – 9:27am C:\cadd\lp\e\phernandez\west\d0128537\20191023_Ocala-Double Left.dwg

UNCHECKED / IN PROGRESS - FOR DISCUSSION ONLY

EASTRIDGE TO BART REGIONAL CONNECTOR
CAPITOL EXPRESSWAY LIGHT RAIL PROJECT

CAPITOL EXPRESSWAY

6X41 PANELS
±92 KW MAX

EXISTING VTA
BUILDING

MATCH LINE
SEE RIGHT

MATCH LINE
SEE LEFT

PLAN
SCALE: 1" = 20'

LEGEND

- (E) INLET
- (E) MANHOLE
- (E) LIGHT
- (P) BIORETENTION AREA
- (P) CANOPY COLUMN
- (P) HARDSCAPE
- SOLAR PANEL ARRAY (4.08' x 6.58' EA)
- (P) PLANTING / PLANTING RESTORATION
- RIGHT OF WAY

EASTRIDGE PARKING STALL SUMMARY TABLE

	EXISTING	PROPOSED
ACCESSIBLE PARKING STALL	1	1
STANDARD PARKING STALL	118	215

BkF 100 YEARS
ENGINEERS / SURVEYORS / PLANNERS

20' 0' 20' 40'
GRAPHIC SCALE

JAN 07, 2020

EASTRIDGE PARKING LOT EXHIBIT

Appendices

Appendix A	**Hexagon Memo on Dual Northbound Left Turn Lanes on Capitol Expressway at Ocala Avenue for the Proposed Capitol Expressway Light Rail Project**
Appendix B	**Summary of Significant Environment Impacts and Mitigation Measures**
Appendix C	**Description of the Light Rail Alternative**

HEXAGON TRANSPORTATION CONSULTANTS, INC.

Memorandum

Date: October 18, 2019

To: Christina Jaworski, VTA

From: Brett Walinski, T.E.

Subject: *Dual Northbound Left Turn Lanes on Capitol Expressway at Ocala Avenue for the Proposed Capitol Expressway Light Rail Project*

Per your request, Hexagon Transportation Consultants, Inc. has completed this analysis of the proposed change to the *Eastridge to BART Regional Connector: Capitol Expressway Light Rail Project.* The *Supplemental Transportation Analysis* for the subject project dated April 29, 2019 (hereafter referred to as the "Prior Project") assumed that the existing dual northbound left turn lanes on Capital Expressway to Ocala Avenue would be reduced to a single left turn lane. Since that analysis was completed, the project plans have been revised, and the current plans show the project maintaining dual left turn lanes at the subject location (hereafter referred to as the "Current Project"). The purpose of this memorandum is to describe the effect of this change on the results summarized in the *Supplemental Transportation Analysis,* including changes to level of service/delay, vehicular queueing, corridor average travel time/speed, and safety. Our analysis of each of these metrics is described below.

#1 Intersection Level of Service/Delay. The dual left turn lane would expand vehicular capacity at the intersection (relative to the Prior Project) because it would allow for roughly twice the number of vehicles to enter the intersection at one time. Vehicles making the subject left turn movement would clear the intersection faster, enabling more green time to be allocated to other movements at the intersection. It is expected that vehicular delays at the Capitol Expressway/Ocala Avenue intersection under the Current Project would decrease from that of the Prior Project. Thus, the proposed change would have a beneficial impact on intersection level of service and average vehicular delay.

#2 Vehicular Queuing. The dual left turn lane would expand vehicle storage capacity relative to the Prior Project. Under existing conditions, there are two lanes with a total of 700 feet of storage. Under the Prior Project, there was one left turn lane with 800 feet of total storage. Under the Current Project, there would be two left turn lanes with a total of 1,060 feet of storage. Thus, the Current Project would provide more storage than both (1) existing conditions and (2) the Prior Project. The proposed change would have a beneficial impact on vehicular queueing storage for the northbound left turn movement.

#3 Corridor Average Travel time and Speed. As noted in metric #1, the Current Project would expand capacity at the Capitol Expressway/Ocala Avenue intersection, resulting in more green time for other vehicular movements at the intersection. It is expected that the average travel times in the Capitol Expressway corridor would either decrease slightly or stay the same relative to the Prior Project. Similarly, average travel speeds could be expected to increase slightly or stay the same relative to the prior project. Thus, the proposed change would most likely have a slightly beneficial impact on travel times and speeds on Capitol Expressway.

#4 Safety. As noted in metric #2, the Current Project would expand the amount of vehicular storage for the northbound left turn movement, reducing the probability that vehicles would spill out of the left turn pocket and into the adjacent through lane. This would be a safety benefit. Another potential safety issue would be the pedestrian crossing distance in the crosswalk on the south leg of the Capitol Expressway/Ocala Avenue intersection. Under existing conditions, the Prior Project, and the Current Project, the total pedestrian crossing distance at the south leg would remain unchanged, resulting in no change in pedestrian safety at the intersection.

Overall, it is our assessment that the conversion of the single northbound left turn pocket under the Prior Project to a dual left turn pocket under the Current Project would result in either the same, or beneficial impacts to level of service/delay, vehicular queueing, corridor average travel time/speed, and safety. Thus, the implementation of the Current Project would not require an update to the April 29, 2019 *Supplemental Transportation Analysis.* If you have any questions, please feel free to give us a call.

Appendix B Summary of Significant Environmental Impacts and Mitigation Measures

Significant Impact[1]	Mitigation Measures	Level of Significance[2]			
		2005 Final EIR	2007 SEIR	2014 Subsequent IS/MND	SEIR-2 or Second Subsequent IS
Transportation (SEIR-2)					
Impact TRN-2a (Traffic Impact at Capitol Expressway/ Story Road in 2018 (now 2023))	No mitigation is feasible	**Significant and Unavoidable**	**Significant and Unavoidable**	Less than Significant with Mitigation	**Significant and Unavoidable**
Impact TRN-2b (Traffic Impact at Capitol Expressway/Ocala Avenue in 2018 (now 2023))	No mitigation is feasible	**Significant and Unavoidable**	**Significant and Unavoidable**	**Significant and Unavoidable**	**Significant and Unavoidable**
Impact TRN-2c (Traffic Impact at Capitol Expressway/ Tully Road in 2018 (now 2023))	Mitigation Measure TRN-2c (Maintain eight lanes on Capitol Expressway at Tully Road Intersection	Less than Significant with Mitigation	Less than Significant with Mitigation	N/A	Not evaluated
Impact TRN-8b (Traffic Impact at Capitol Expressway/ Story road in 2025 (now 2043))	No mitigation is feasible	**Significant and Unavoidable**	**Significant and Unavoidable**	N/A	**Significant and Unavoidable**
Impact TRN-8c (Traffic Impact at Capitol Expressway/ Ocala Avenue in 2025 (now 2043))	No mitigation is feasible	**Significant and Unavoidable**	**Significant and Unavoidable**	**Significant and Unavoidable**	**Significant and Unavoidable**
Impact TRN-8d (Traffic Impact at Capitol Expressway/Tully Road in 2025 (now 2043))	Mitigation Measure TRN-2c (Maintain eight lanes on Capitol Expressway at Tully Road Intersection)	Less than Significant with Mitigation	Less than Significant with Mitigation	N/A	Not evaluated

Significant Impact[1]	Mitigation Measures	Level of Significance[2]			
		2005 Final EIR	**2007 SEIR**	**2014 Subsequent IS/MND**	**SEIR-2 or Second Subsequent IS**
Impact TRN (CON) -1 (Long-Term Street or Lane Closure)	Mitigation Measures TRN (CON)-2a (Prepare Traffic Management Plan), TRN (CON)-2b (Inform Public of Traffic Detours), and TRN (CON)-2c (Inform Public of Transit Service Changes)	Less than Significant with Mitigation	Less than Significant with Mitigation	Less than Significant with Mitigation	**Significant and Unavoidable**
Impact TRN (CON)-2 (Long-Term Loss of Parking or Access Essential for Business Operations)	Mitigation Measures TRN (CON)-2a (Prepare Traffic Management Plan), TRN (CON)-2b (Inform Public of Traffic Detours), and TRN (CON)-2c (Inform Public of Transit Service Changes)	Less than Significant with Mitigation	Less than Significant with Mitigation	Less than Significant with Mitigation	Less than Significant with Mitigation
Air Quality and Climate Change (SEIR-2)					
Impact AQ (CON)-1 (Temporary Increase in Construction-Related Emissions during Grading and Construction Activities)	Mitigation Measures AQ (CON)-1 (BAAQMD's BMPs to reduce particulate matter emissions from construction activities) and AQ (CON)-2 (BAAQMD's BMPs to reduce GHG emissions from construction equipment) and AQ (CON)-3 use Tier 3 or Tier 4 equipment where possible.	Less than Significant with Mitigation	Less than Significant with Mitigation	Less than Significant with Mitigation	Less than Significant with Mitigation
Impact AQ (CON)-3 (Cumulative PM2.5 Concentrations During Construction)	Mitigation Measures CON-1 (AQ) (BAAQMD's BMPs to reduce particulate matter emissions from construction activities) and CON-2 (AQ)	Not evaluated	Not evaluated	Not evaluated	Significant and Unavoidable

Significant Impact[1]	Mitigation Measures	Level of Significance[2]			
		2005 Final EIR	2007 SEIR	2014 Subsequent IS/MND	SEIR-2 or Second Subsequent IS
	(BAAQMD's BMPs to reduce GHG emissions from construction equipment) and AQ (CON)-3 (Use Tier 3 or Tier 4 equipment where possible).				
Biological Resources (Second Subsequent IS)					
Impact BIO-7 (Permanent Loss of Habitat and Disturbance to Species)	Mitigation Measure BIO-7 (Conduct Preconstruction Surveys for Western Burrowing Owls and Implement Measures to Avoid or Minimize Adverse Effects if Owls are Present)	Less than Significant with Mitigation	Less than Significant with Mitigation	Less than Significant with Mitigation	Less than Significant with Mitigation
Impact BIO-8 (Temporary Disturbance of Riparian Forest)	Mitigation Measures BIO-8a Conduct Preconstruction Surveys to Identify Environmentally Sensitive habitat areas) and BIO-8b (Compensate for Disturbed Riparian Forest)	Less than Significant with Mitigation	Less than Significant with Mitigation	N/A	N/A
Impact BIO-10 (Temporary Degradation of Water Quality)	Mitigation Measure BIO-10 (Implement Water Quality Measures)	Less than Significant with Mitigation	Less than Significant with Mitigation	N/A	N/A
Impact BIO-11 (Loss or Disturbance of California Red-Legged Frog Habitat)	Mitigation Measures BIO-11a (Avoid and Minimize Effects to California Red-Legged Frog) and BIO-11b (Compensate for Loss of Aquatic Habitat for	Less than Significant with Mitigation	Less than Significant with Mitigation	N/A	N/A

Significant Impact[1]	Mitigation Measures	Level of Significance[2]			
		2005 Final EIR	2007 SEIR	2014 Subsequent IS/MND	SEIR-2 or Second Subsequent IS
	California Red-Legged Frog)				
Impact BIO-12 (Permanent Loss of Aquatic Habitat, Temporary Disturbance of Riparian Habitat, and Temporary Disturbance of Southwestern Pond Turtle)	Mitigation Measure BIO-12 (Conduct Preconstruction Surveys for and Implement Measures to Avoid or Minimize Adverse Effects to Southwestern Pond Turtles if Present)	Less than Significant with Mitigation	Less than Significant with Mitigation	N/A	Less than Significant with Mitigation
Impact BIO-14 (Temporary Disturbance of Nesting Raptors)	Mitigation Measures BIO-14a (Conduct a Preconstruction Survey for Nesting Raptors) and BIO-14b (Avoid Active Raptor Nests)	Less than Significant with Mitigation	Less than Significant with Mitigation	Less than Significant with Mitigation	Less than Significant with Mitigation
Impact BIO-15 (Temporary Disturbance to Nesting Habitat for Migratory Birds)	Mitigation Measure BIO-15 (Conduct Preconstruction Surveys for Nesting Migratory Birds and Stop Construction until the Young have Fledged or the Nest is Removed in Accordance with CDFG)	Less than Significant with Mitigation	Less than Significant with Mitigation	Less than Significant with Mitigation	Less than Significant with Mitigation
Impact BIO-18 (Loss of Trees)	Mitigation Measure BIO-18a (Conduct a Tree Survey) and BIO-18b (Replace Trees)	Less than Significant with Mitigation	Less than Significant with Mitigation	Less than Significant with Mitigation	Less than Significant with Mitigation

Significant Impact[1]	Mitigation Measures	Level of Significance[2]			
		2005 Final EIR	**2007 SEIR**	**2014 Subsequent IS/MND**	**SEIR-2 or Second Subsequent IS**
Cultural Resources (Second Subsequent IS)					
Impact CR-5 (Direct or Indirect Impacts to an Archaeological Resource)	Mitigation Measure CR-5a (Develop and Implement a Historic Properties Treatment Plan Prior to Construction Activities)	Less than Significant with Mitigation	Less than Significant with Mitigation	Less than Significant with Mitigation	No Impact (with inclusion of standard practice procedures)
Energy (Second Subsequent IS)					
Impact E (CON)-1 (Consumption of Nonrenewable Energy Resources in a Wasteful, Inefficient, and/or Unnecessary Manner from Project Construction)	Mitigation Measure E (CON)-1 (Adopt Energy Conservation Measures)	Less than Significant with Mitigation	Less than Significant with Mitigation	Less than Significant with Mitigation	Less than Significant with Mitigation
Environmental Justice (SEIR-2)					
Impact EJ-1 (Environmental Justice)	No mitigation is feasible	No Impact	Significant and Unavoidable	N/A	**Significant and Unavoidable**
Geology, Soils, and Seismicity (Second Subsequent IS)					
Impact GEO-4 (Risk Caused by Strong Seismic Ground Shaking)	Mitigation Measure GEO-4 (Incorporate Caltrans Seismic Design Criteria)	Less than Significant with Mitigation	Less than Significant with Mitigation	Less than Significant with Mitigation	Less than Significant with Mitigation
Impact GEO-5 (Risk Caused by Seismic-Related Ground Failure, Including Liquefaction)	Mitigation Measure GEO-5 (Incorporate Liquefaction Minimization Methods	Less than Significant with Mitigation	Less than Significant with Mitigation	Less than Significant with Mitigation	Less than Significant with Mitigation
Impact GEO-6 (Risks from Lateral Spreading,	Mitigation Measure GEO-6 (Minimize Risk of Lateral	Less than Significant with Mitigation	Less than Significant with Mitigation	Less than Significant with Mitigation	Less than Significant with Mitigation

Significant Impact[1]	Mitigation Measures	Level of Significance[2]			
		2005 Final EIR	2007 SEIR	2014 Subsequent IS/MND	SEIR-2 or Second Subsequent IS
Subsidence, and Collapse)	Spreading, Subsidence, and Collapse)				
Impact GEO-7 (Risk Caused by Expansive Soil)	Mitigation Measure GEO-7 (Minimize Risk of Soil Expansivity)	Less than Significant with Mitigation	Less than Significant with Mitigation	Less than Significant with Mitigation	Less than Significant with Mitigation
Hazardous Materials (Second Subsequent IS)					
Impact HAZ-9 (Hazard to the Public or Environment through Reasonable Foreseeable Upset and Accident Conditions Caused by the Release of Hazardous Materials)	Mitigation Measures HAZ-9a/(CON)-1a (Conduct Subsurface Investigations in Areas of the Corridor That May Be Underlain by Contaminated Soil or Groundwater) and HAZ-9b (Control Contamination Resulting from Previously Unidentified Hazardous Waste Materials)	Less than Significant with Mitigation	Less than Significant with Mitigation	Less than Significant with Mitigation	Less than Significant with Mitigation
Impact HAZ (CON)-1 (Release of Hazardous materials into the Environment)	Mitigation Measures HAZ (CON)-1a (Conduct subsurface Investigations), HAZ (CON)-1b (Control Contamination), and HAZ (CON)-1c (Conduct Lead and Asbestos Surveys Prior to Building Demolition or Renovation),	Less than Significant with Mitigation	Less than Significant with Mitigation	Less than Significant with Mitigation	Less than Significant with Mitigation
Hydrology and Water Quality (Second Subsequent IS)					
Impact HYD-11 (Violation of Water Quality Standards or	Mitigation Measure HYD-11 (Comply with All Applicable Regulations and	Less than Significant with Mitigation	Less than Significant with Mitigation	Less than Significant with Mitigation	N/A

Significant Impact[1]	Mitigation Measures	Level of Significance[2]			
		2005 Final EIR	2007 SEIR	2014 Subsequent IS/MND	SEIR-2 or Second Subsequent IS
Waste Discharge Requirements)	Subsequent Permit Programs Related to Water Quality Control)				
Impact HYD-12 (Creation of Additional Runoff)	Mitigation Measure HYD-12 (Maintain Operational Water Quality)	Less than Significant with Mitigation	Less than Significant with Mitigation	N/A	Less than Significant with Mitigation
Impact HYD-13 (Alterations in Existing Drainage Patterns)	Mitigation Measures HYD-11 (Comply with All Applicable Regulations and Subsequent Permit Programs Related to Water Quality Control) and HYD-14 (Construct Facilities to Minimize Flood Impacts)	Less than Significant with Mitigation	Less than Significant with Mitigation	N/A	Less than Significant with Mitigation
Impact HYD-14 (Exposure to Flood Hazards)	Mitigation Measure HYD-14 (Minimize Flood Impacts)	Less than Significant with Mitigation	Less than Significant with Mitigation	Less than Significant with Mitigation	N/A
Impact HYD (CON)-1 (Impair Water Quality)	Mitigation Measure HYD (CON)-1 (Implement Water Quality Control Measures)	Less than Significant with Mitigation	Less than Significant with Mitigation	Less than Significant with Mitigation	Less than Significant with Mitigation
Impact HYD (CON)-2 (Depletion of Groundwater Supplies)	Mitigation Measure HYD (CON)-2 (Use Non-Potable Water)	N/A	N/A	Less than Significant with Mitigation	Less than Significant with Mitigation
Noise and Vibration (SEIR-2)					
Impact NV-1 (Noise Levels from Transit Operations That Would Be Considered a Severe Impact by Federal Transit Administration Criteria)	Mitigation Measures NV-1a (Construct Soundwalls) and NV-1c (Provide Quiet Pavement)	Less than Significant with Mitigation	Less than Significant with Mitigation	Less than Significant with Mitigation	Less than Significant with Mitigation

Significant Impact[1]	Mitigation Measures	Level of Significance[2]			
		2005 Final EIR	2007 SEIR	2014 Subsequent IS/MND	SEIR-2 or Second Subsequent IS
Impact NV-4 (Vibration Levels in Buildings from Transit Operations That Exceed Federal Transit Administration Criteria)	Mitigation Measure NV-4b (Use Vibration-Dampening Track Construction Materials). No additional mitigation is recommended.	Less than Significant with Mitigation	**Significant and Unavoidable**	Less than Significant with Mitigation	**Significant and Unavoidable**
Impact NV (CON)-1: (Generation of Noise or Vibration That Substantially Affects Nearby Sensitive Receptors) (Noise)	Mitigation Measures NV (CON)-1a (Notify Residents of Construction Activities), NV (CON)-1b (Construct Temporary Noise Barriers During Construction), NV (CON)-1c (Restrict Pile Driving), NV (CON)-1d (Use Noise Suppression Devices), NV (CON)-1e (Locate Stationary Construction Equipment as Far as Possible from Sensitive Receptors), NV (CON)-1f (Reroute Construction-Related Truck Traffic), and NV (CON)-1g (Develop Construction Noise Mitigation Plan), NV (CON)-2, and NV (CON)-1h (Use Impact Cushions)	Less than Significant with Mitigation	**Significant and Unavoidable**	**Significant and Unavoidable**	Less than Significant with Mitigation
Impact NV (CON)-1: (Generation of Noise or Vibration That Substantially Affects	Mitigation Measures NV (CON)-1a (Notify Residents of Construction Activities), NV (CON)-1c (Restrict Pile Driving), NV (CON)-1e	Less than Significant with Mitigation	**Significant and Unavoidable**	**Significant and Unavoidable**	**Significant and Unavoidable**

Significant Impact[1]	Mitigation Measures	Level of Significance[2]			
		2005 Final EIR	2007 SEIR	2014 Subsequent IS/MND	SEIR-2 or Second Subsequent IS
Nearby Sensitive Receptors) (Vibration)	(Locate Stationary Construction Equipment as Far as Possible from Sensitive Receptors), and NV (CON)-2				
Safety and Security (Second Subsequent IS)					
Impact SS-3 (Pedestrian and/or Bicycle Safety Risks at Gated Crossings)	Mitigation Measure SS-3 (Incorporate Pedestrian Friendly Features)	Less than Significant with Mitigation	Less than Significant with Mitigation	Less than Significant with Mitigation	N/A
Impact SS-4 (Inadequate Lighting or Visual Obstructions at Park-and-Ride Lots)	Mitigation Measures SS-4a (Implement Measures to Deter Crime), SS-4b (Use Lighting, Cameras, and Security Patrols to Enhance Safety), and SS-4c (Define Fire and Life Safety Procedures and Develop Evacuation Plans)	Less than Significant with Mitigation	Less than Significant with Mitigation	Less than Significant with Mitigation	Less than Significant with Mitigation
Impact SS (CON)-1 (Potential for Safety Risks during Construction)	Mitigation Measure SS (CON)-1 (Implement Construction BMPs to Protect Workers and the Public)	Less than Significant with Mitigation	Less than Significant with Mitigation	Less than Significant with Mitigation	Less than Significant with Mitigation
Socioeconomics (Second Subsequent IS)					
Impact SOC-16 (Displacement of Existing Businesses or Housing)	Mitigation Measures SOC-16a (Comply with Legislation for Acquisition and Relocation) and SOC-16b (Inform Residents and Businesses of Project Status)	Less than Significant with Mitigation	Less than Significant with Mitigation	Less than Significant with Mitigation	Less than Significant with Mitigation

Significant Impact[1]	Mitigation Measures	Level of Significance[2]			
		2005 Final EIR	2007 SEIR	2014 Subsequent IS/MND	SEIR-2 or Second Subsequent IS
Utilities (Second Subsequent IS)					
Impact UTL-3 (Require Construction of New Stormwater Drainage Facilities or Expansion of Existing Facilities)	Mitigation Measure HYD-14 (Maintain Operational Water Quality)	Less than Significant with Mitigation	Less than Significant with Mitigation	Less than Significant with Mitigation	Less than Significant with Mitigation
Impact UTL (CON)-1 (Disrupt a Utility Service for a Period of 24 Hours or More)	Mitigation Measure UTL (CON)-1 (Coordinate with Utility Service Providers Prior to Construction of Light Rail Facilities)	Less than Significant with Mitigation	Less than Significant with Mitigation	Less than Significant with Mitigation	Less than Significant with Mitigation
Visual Quality (Second Subsequent IS)					
Impact VQ (CON)-1 (Creation of a New Source of Substantial Light or Glare	Mitigation Measure VQ (CON)-1 (Direct Lighting toward Construction Areas)	Less than Significant with Mitigation	Less than Significant with Mitigation	Less than Significant with Mitigation	Less than Significant with Mitigation
Impact VQ-1 (Creation of Substantial Light or Glare)	Mitigation Measure VQ-1 (Minimize Light and Glare)	Less than Significant with Mitigation	Less than Significant with Mitigation	Less than Significant with Mitigation	Less than Significant with Mitigation
Impact VQ-3 (Degradation of Existing Visual Quality)	Mitigation Measures VQ-3 (Involve Public in Station Design) and VQ-4 (Incorporate Landscaping)	Less than Significant with Mitigation	Less than Significant with Mitigation	Less than Significant with Mitigation	Less than Significant with Mitigation
Construction (SEIR-2)					
See construction-related impacts in the resource areas identified above.					

Significant Impact[1]	Mitigation Measures	Level of Significance[2]			
		2005 Final EIR	**2007 SEIR**	**2014 Subsequent IS/MND**	**SEIR-2 or Second Subsequent IS**
Cumulative Effects (SEIR-2)					
See Transportation, Air Quality and Climate Change, Environmental Justice, and Noise and Vibration.					
Impact E-Cum-9 (Increase Demand on Electricity Transmission Infrastructure)	No mitigation is feasible	No Impact	**Significant and Unavoidable**	N/A	N/A
Impacts NV-Cum-2 (Generate Noise from Pile Driving) and NV-Cum-3 (Generate Vibration from Pile Driving)	Mitigation Measures NV-Cum-2 and NV-Cum-3 (Coordinate activities with other construction projects where feasible and reasonable)	No Impact	Less than Significant with Mitigation	N/A	N/A

Description of the Eastridge to BART Regional Connector Project

The following section integrates the approved components of the Eastridge to BART Regional Connector (EBRC) Project from the 2005 Final Environmental Impact Report (EIR), 2007 Supplemental EIR, 2010 Revised Addendum, the 2014 Subsequent Mitigated Negative Declaration (MND), and the 2019 Final Second Supplemental EIR with the proposed design changes to provide a complete project description of the EBRC Project.

Eastridge to BART Regional Connector Project

The EBRC Project would extend light rail along Capitol Expressway from the existing Alum Rock Light Rail Station to the Eastridge Transit Center a distance of approximately 2.4 miles. Light rail will operate primarily in the median of Capitol Expressway within exclusive and semi-exclusive rights-of-way. Property acquisition for the project would be minimized through the removal of two high-occupancy vehicle (HOV) lanes on Capitol Expressway between Story Road and Tully Road. The project will include new light rail stations at Story Road (aerial) and Eastridge Transit Center (at-grade). The project will also include traction power substations at Ocala Avenue and Eastridge Transit Center. Relocation and replacement of a number of 115-kilovolt steel lattice electrical transmission towers with Tubular Steel Poles (TSP).

Figure 1 shows the location of the EBRC Project.

Benefits of the EBRC Project are related to speed and travel time. The light rail trains would travel at high speeds and would be minimally impacted by roadway congestion. As a result, travel times for the EBRC Project would generally be faster, more reliable and dependable than other modes.

In addition, the EBRC Project would benefit transit users by providing a direct light rail connection to the Bay Area Rapid Transit (BART) at the Milpitas BART Station.

Figure 1
Eastridge to BART Regional Connector Project

Background. The Eastridge to BART Regional Connector Project is the last portion of the larger Capitol Expressway Corridor Project that transforms Capitol Expressway into a multi-modal boulevard offering pedestrian improvements, bus rapid transit (BRT), light rail transit (LRT), and convenient connections to the regional transit system. VTA first addressed pedestrian access and improved safety measures along Capitol Expressway between Quimby Road and Capitol Avenue. This was completed in Fall 2012 and included new sidewalks, street lighting, and landscaping . VTA also replaced the Eastridge Transit Center, which was completed in 2015.

In June 2016, VTA Board of Directors approved $70 million to complete design, acquire right of way and relocate utilities for the project. In October 2016, VTA Board of Directors approved a full funding plan for the project. In June 2018, voters approved Regional Measure 3, which included $130 million in funding for the project.

URBAN DESIGN

Since the conceptual engineering phase of the Capitol Expressway Corridor Project, there has been a consistent effort to incorporate attractive, urban design elements into the EBRC Project. These principles reflect the policy guidance of the Policy Advisory Board for this Project. The following section highlights the key urban design elements of the EBRC Project.

Urban Design Principles

- Transform the expressway from an auto-oriented corridor to a multi-modal boulevard.
- Establish pedestrian and bicycle linkages along and across the corridor to connect neighborhoods to activity centers.
- Design stations to facilitate safe and convenient pedestrian access and to convey the personality and identity of adjacent neighborhoods.
- Introduce special treatments along the edges of the boulevard to reduce visual and noise impacts and to create a more positive relationship with adjacent neighborhoods.
- Promote opportunities for transit-oriented development that will enhance ridership and the quality of life of the surrounding community.

STATIONS AS NEIGHBORHOOD GATEWAYS

The design of stations and their relationship with the adjacent neighborhoods is critical to promote a viable transit environment. Convenience, safety, and ease of access for residents and employees arriving by foot, bike, bus, or car are primary design objectives. Additionally, stations can create identities and gateways to communities. Stations can also provide opportunities for neighborhood-serving retail

uses and/or a mix of commercial, residential, and recreational uses. The EBRC Project will be consistent with the goal to integrate high-quality design enhancements, designed by artists and project architects, that reflect the identity of the communities and neighborhoods in which they are located.

There are numerous examples of community influenced design enhancements that have been incorporated into VTA's existing light rail stations. For example, at Alum Rock Station, artists working in coordination with the community designed special railings, shelter canopy glass, pavers, art tile benches, and entry markers.

ALIGNMENT DESCRIPTION

The EBRC Project would be designed to reduce travel time and to support higher speed transit operations with signal priority or grade separation at congested intersections. Construction of the light rail would alter the roadway geometry along some portions of Capitol Expressway. Perhaps the most dramatic change would be the removal of existing HOV lanes between Story Road and Tully Road to provide the additional right-of-way to accommodate light rail. While some property needs would be required for improvements and for utility relocations, especially at stations and substations, the removal of the HOV lanes would minimize the need for additional property for the EBRC Project and would be consistent with past policy decisions in the City of San Jose's Evergreen Specific Plan, Evergreen Specific Plan Transportation Improvements EIR and the Evergreen-East Hills Development Policy.

Alum Rock LRT Station to Story Road

The light rail alignment would begin at the existing Alum Rock LRT Station on the Santa Teresa to Alum Rock LRT Line. In this section of the corridor, an aerial guideway would be constructed for the full distance from south of the Alum Rock LRT Station to south of Story Road to support higher speed transit operations and minimize congestion at major intersections. The guideway would be located largely in the median of Capitol Avenue and Capitol Expressway. The aerial guideway would include concrete columns supported on piled foundations. The aerial guideway would also include aerial sound walls where necessary to mitigate noise levels. At its northern end, the aerial structure would cross the northbound lanes of Capitol Avenue and Capitol Expressway and transition to an alignment in the median of Capitol Expressway. The light rail alignment would continue on the aerial structure over Story Road.

Story Road to Eastridge Transit Center

From south of Story Road, the light rail alignment would continue on an aerial guideway for 1.25 miles to north of Tully Road. Before reaching Tully Road, the aerial guideway would transition from median-running north of Tully Road to side-running south of Tully Road. The light rail alignment would continue on the aerial structure over Tully Road and return to grade on an embankment structure as it terminates at the Eastridge Transit Center

CROSSINGS

The EBRC Project would include rail crossings along the corridor as shown in Table 1.

STATIONS AND PARK-AND-RIDE FACILITIES

Two new stations are included with the EBRC Project between the northern terminus at the existing Alum Rock LRT Station and the southern terminus at the existing Eastridge Transit Center. The stations would be located approximately 1.0 miles apart. The placement of the stations was based on the desire to balance convenient passenger access and minimize travel time delay. The following sections describe each station along the alignment of the EBRC Project.

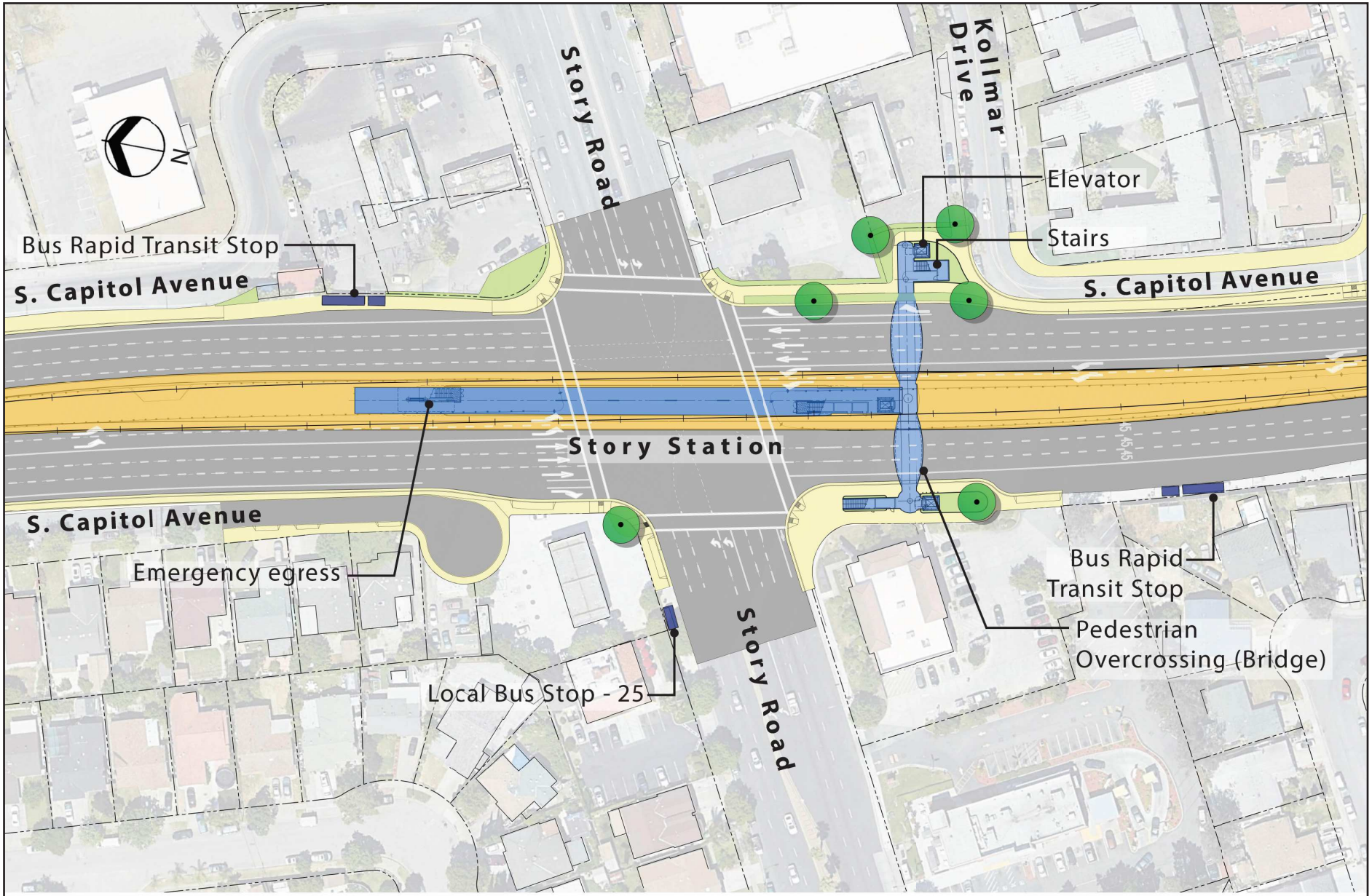
Alum Rock LRT Station (existing)

At its northern end, the EBRC Project would connect to the existing light rail network at the Alum Rock LRT Station on the Mountain View to Alum Rock Line. The two lines would meet at the station, and the Mountain View to Alum Rock Line would be through-routed with the EBRC Project. Both lines would share the existing station platform and could operate in the same corridor. No improvements are anticipated at this station.

Story Station (new)

The EBRC Project includes a two-level station in the median of Story Road with a mezzanine level and an elevated center platform. Since the traffic volumes and pedestrian/bicycle activity at the Story Road intersection are high, a single set of pedestrian overcrossings (POC) would be located south of Story Road connecting the southern corners of the intersections to the station. From the mezzanine level, an elevator and stairs would provide access to the station platform. The EBRC Project would restrict pedestrian access to the Story Station at the median to emergency purposes only.

Figure 2 shows the project features at Story Station.



Source: BKF Engineers 2019.

ICF Graphics 00011.18 (4/29/19) AB

Figure 0
Story Station

Table 1 Rail Crossings of the EBRC Project

Cross Street	Track Stationing	Number of Tracks	Pedestrians	Automobiles	Safety Risks	Proposed Crossing Type	Proposed Safety Devices (At Grade Crossings)
Wilbur Avenue/Nuestra Castillo Court	+965+00	2	1 Crosswalk	2 Lanes	VTA buses, Left turns from Wilbur to southbound Capitol Avenue	At-grade (existing crossing with t-signals)	T-signals, Traffic signals
Northbound Capitol Avenue	+974+00	2	2 Sidewalks	2 Lanes	High roadway traffic volumes	Grade separated, Aerial	n/a
Northbound Capitol Expressway	+978+00	2	1 Sidewalk	4 Lanes	High roadway traffic volumes	Grade separated, Aerial	n/a
Story Road	+995+00	2	2 Crosswalks	6 Through lanes, 4 turn lanes	High auto and pedestrian traffic volumes. Left turn movements	Grade separated, Aerial	n/a
Ocala Avenue	+1037+00	2	2 Crosswalks	4 Through lanes, 2 Turn lanes	School children, School buses, Heavy volume of LT movements	Grade separated, Aerial	n/a
Cunningham Avenue	+1050+00	2	2 Crosswalks	2 Lanes	Light traffic volumes, low risk	Grade separated, Aerial	n/a
SB Capitol Expressway	+1067+00	2	1 Sidewalk	3 Lanes	Heavy roadway traffic volumes	Grade separated, Aerial	n/a

Table 1 Rail Crossings of the EBRC Project

Cross Street	Track Stationing	Number of Tracks	Pedestrians	Automobiles	Safety Risks	Proposed Crossing Type	Proposed Safety Devices (At Grade Crossings)
Swift Lane	+1073+00	2	2 Sidewalks	2 Lanes	Light traffic volumes, low risk	Grade separated, Aerial	n/a
Tully Road	+1078+00	2	2 Sidewalks	6 Lanes, 4 Turn lanes	Heavy roadway traffic volumes	Grade separated, Aerial	n/a
Northern Pedestrian Crossing to Platform	+1086+00	1	1 Crossing of SB track	None	Incoming and departing trains	At-grade	Crossing gates, Flashing Lights, and Bells
Southern Pedestrian Crossing to Platform	+1089+80	1	1 Crossing of SB track	None	Train movements in and out of tail track	At-grade	Crossing gates, Flashing Lights, and Bells

Source: VTA, 2018.

Eastridge Station (new)

The Eastridge Transit Center is currently the second busiest transfer point in the VTA system, with significant bus transfer activity and a Park-and-Ride lot. Most bus routes serving the Downtown/East Valley area terminate at or pass through the center. The EBRC Project includes an at-grade station with one platform, tail tracks, and one traction power substation at the Eastridge Station. Additional project work at the Eastridge Station would include the following:

- Tail tracks, including a pocket track;
- Diamond crossover on the ballasted section of track;
- Passenger access at north and south ends of station;
- Platform raised on retained fill; and

Figure 3 shows the proposed project features at the Eastridge Station.

Park-and-Ride Facilities

Two existing Park-and-Ride lots are located along the alignment: Alum Rock Station and Eastridge Transit Center.

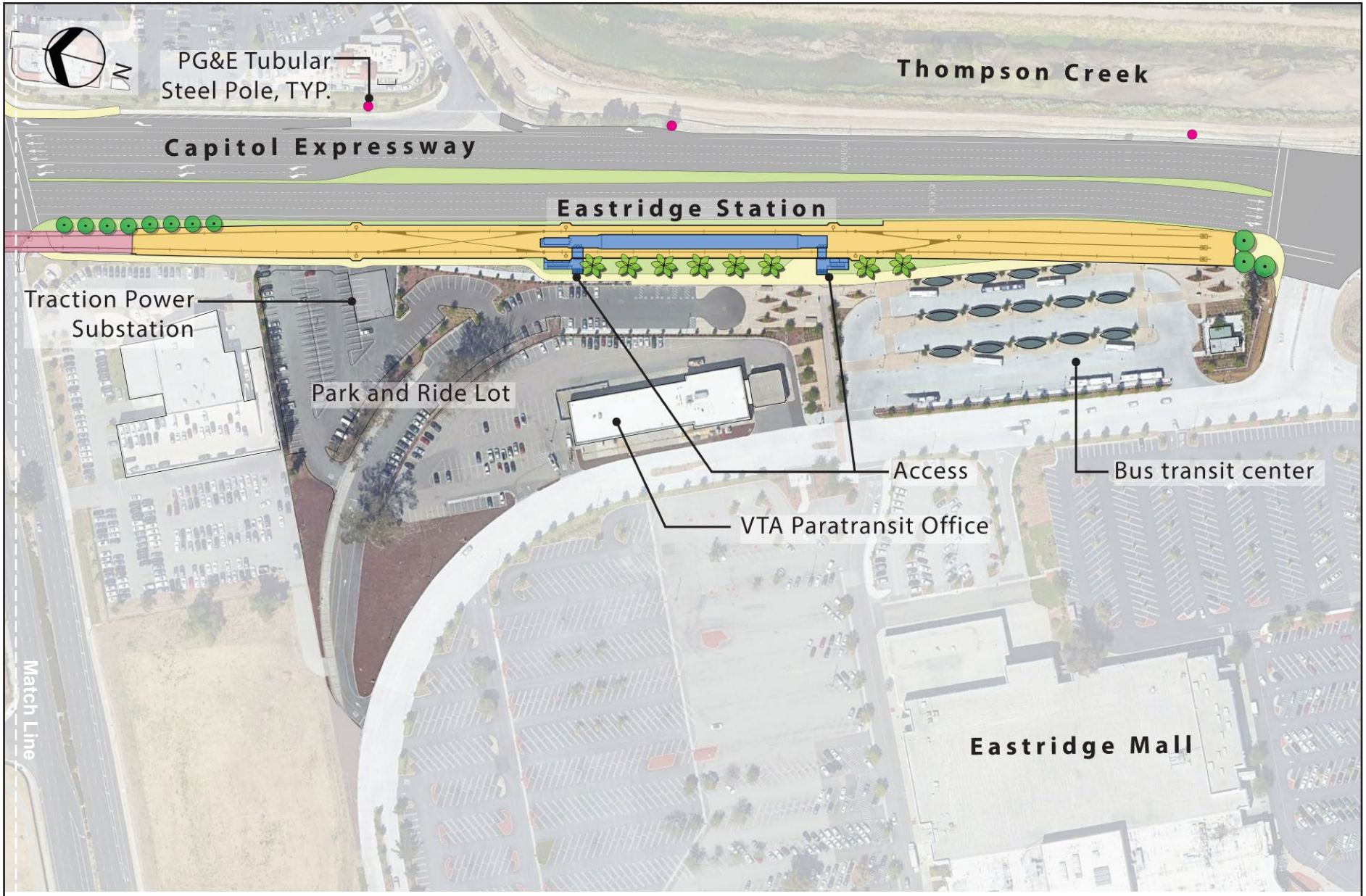
To serve the EBRC Project, there would be no increase in parking at Alum Rock Station due to space constraints. The Eastridge Park-and-Ride Lot currently includes 180 parking spaces due to the relocation of VTA Paratransit staff and vehicles to a remodeled building at this location in September 2017. VTA is proposing to increase the parking to approximately 200 spaces.

SUPPORT SYSTEMS

In addition to the primary alignment, stations, and Park-and-Ride facilities, the EBRC Project would incorporate light rail support systems, including traction power and substations, overhead contact, supplemental feeders, communications, signaling, gates, Intrusion Detection System, closed-circuit television (CCTV) cameras, a fare collection system, and noise and vibration abatement. Support systems are described in the following sections.

Traction Power System and Substations

A traction power system is a distribution system that converts high-voltage commercial electrical power received from substations to medium-voltage direct current (DC) and distributes it to the light rail vehicles via the overhead catenary or contact wire as they travel along the alignment. A traction power system consists of the power distribution mechanism and electrical substations. For the EBRC Project, the traction power system



ICF Graphics 00011.18 (8/27/18)

Source: BKF Engineers 2018.

Figure 3
Castridge Station

would provide the potential for three-car light rail trains operating at speeds up to 55 mph on approximately 5-minute headways, as provided by VTA Service Design Guidelines. During peak periods of use, such as during special events, the traction power system is anticipated to accommodate 3-minute headways.

The alignment would require a total of two substations, not including one existing substation south of the Alum Rock LRT Station near the Park-and-Ride lot shown in Figure 2.

Locations for new substations include the following:

- Southwest corner of Capitol Expressway and Ocala Avenue
- Eastridge Transit Center

Electrical power would be supplied to each traction power substation (TPSS) by an underground feeder from the electrical utility distribution system. Alternate substations would be equipped with two primary feeders from the utility company and an automatic transfer switch to supply reliable power to the substation. Each TPSS would be contained in a prefabricated substation housing that is factory wired to accommodate internal components and built on a concrete foundation. Foundations would be equipped with embedded conduit to accommodate incoming alternating current primary power cables, control and communication cables, and the DC feeder cables to the overhead contact system.

The estimated size for each TPSS building would be approximately 650–750 square feet in area and 12–15 feet in height. Parcels used as substation sites would need to be large enough to provide for side clearance from passing trains and automobiles and to allow a service vehicle to park, unless convenient parking is available on an adjacent roadway.

Overhead Contact System

The overhead contact system (OCS) would be an auto-tensioned simple catenary (ATSC) consisting of a contact wire, a messenger wire, and counterweight terminations (see Figure 4). This configuration represents the typical application for the VTA light rail system. The height of the contact wire would conform to the requirements of *VTA Light Rail Design Criteria Manual* and the California Public Utilities Commission's (CPUC's) General Order 95 (California Public Utilities Commission 1941). All OCS poles, except counterweight poles, would be constructed as tubular, hollow, tapered, round poles made of rigid galvanized steel.

Figure 4 Overhead Contact System at Alum Rock Station

Counterweight poles would be nontapered. The pole height would be adjusted to suit the contact wire height and match the existing system as closely as possible. The OCS poles would be located between the tracks or on the outside of the tracks, depending on space restrictions.

Communications Systems

The communications equipment and design would be fully compatible with the communications system that serves VTA's existing light rail operations. A wayside cable system, fiber optic cable, and two-way radio system would link light rail

stations and TPSSs with the existing Operations Control Center. The communications system would consist of the following main components:

- Public address system with two-way voice announcement linking the Operations Control Center and the light rail stations.
- Two-way radio system with two-way voice announcement linking the Operations Control Center and light rail vehicles.
- Capability to monitor and control the TPSS switchgear functions from the Operations Control Center via the remote terminal units and wayside cable system.
- Cable transmission system designed to incorporate both the backbone communications distribution (fiber optics) and metallic distribution.

Wayside cabling would utilize a combined systems duct installed continuously along the corridor.

Signaling and Gates System

The signal system for the EBRC Project would be an extension of the existing light rail signal system and functionally compatible with the existing lines. The signal system would include a wayside color light aspect with no cab signal and Automatic Block Signaling (ABS). (*Wayside color light aspect* refers to a signal at the side of the tracks indicating the next block is either clear or occupied.) The signal system would be designed to support the train headway goals of the EBRC Project. Generally, the alignment would not be gated except at the at-grade pedestrian crossing at Eastridge Station.

Intrusion Detection System

Intrusion detection would be provided at the ends of the station platforms and at the aerial guideway approach embankments to provide warning of people either trespassing or walking in restricted areas. This information would be provided to VTA Operations Control Center to initiate a response from VTA security and to alert train operators to proceed with caution.

VEHICLE STORAGE FACILITIES

The EBRC Project does not include any new vehicle maintenance and overnight storage facilities. Heavy maintenance activities for vehicles used on this line would continue to be performed at the existing Guadalupe Light Rail Division on Younger Street in San Jose.

PEDESTRIAN AND LANDSCAPING ENHANCEMENTS

A separate project constructed pedestrian and landscaping improvements at various locations along Capitol Expressway between Capitol Avenue and Quimby Road. The

EBRC Project will relocate or upgrade these improvements where there are conflicts with the proposed alignment, especially where additional right-of-way is required for aerial guideways, stations, and utility relocations. The enhancements could include sidewalk, landscaping, or a multi-use path consisting of sidewalk, landscaping, and street lighting.

Between Foxdale Drive and Ocala Avenue, VTA will not replace the existing sidewalk along the west side of Capitol Expressway with a new multi-use path and landscaping for a distance of about 1,500 feet in order to minimize the acquisition of property from the backyards of adjacent residences.

To accommodate bicyclists to the greatest extent possible, curb lanes on both sides of Capitol Expressway will be 17–18 feet for the entire length to allow use of the shoulders by bicycles.

CAPITOL EXPRESSWAY ROADWAY LANE CONFIGURATIONS.

In addition to restriping, a slight reduction in lane width, and minor modifications to traffic lanes, the Project would revise the roadway lane configurations along Capitol Expressway. The Project could include resurfacing Capitol Expressway with rubberized, open-graded asphalt concrete (OGAC).[1] Detailed track plans and profiles showing the proposed geometric design changes are included in Attachment C of the 2019 Final SEIR-2. The proposed roadway lane configuration includes the following.

- *Four traffic lanes in each direction north of Story Road.* Both of the existing high-occupancy vehicle lanes (one northbound and one southbound) would be converted to general purpose traffic lanes, resulting in a total of four general purpose lanes in each direction between Story Road and Capitol Avenue. One southbound inner general purpose lane would end at the introduction of the left turn pockets at Story Road. This would be accomplished by the widening of Capitol Expressway and a reduction of the median.

- *Right turn lanes.* Exclusive right turn lanes on Capitol Expressway would be added at Story Road, Cunningham Avenue, and Tully Road intersections.

- *Bicycle Slot.* At the locations where exclusive right turn lanes are added or maintained on Capitol Expressway, bicycle slots would be included to the left of the right turn lanes. Figure 5 includes pictures of a typical bicycle slot with bicycle detector.

- *Left turn lanes.* Longer left turn lanes on Capitol Expressway would be added at the following intersections: northbound and southbound at Story Road, northbound at Ocala Avenue, and southbound at Tully Road.

[1] Recent studies by Caltrans indicate that OGAC produces noticeably less vehicle noise than other pavement types (i.e., concrete and conventional asphalt).

- *Left turn pocket.* A second left turn pocket would be maintained on northbound Capitol Expressway at Story Road and Ocala Avenue.

a. View of an example bike slot facing west at Lawrence Expressway and Cabrillo Avenue in the City of Santa Clara.

b. View of a bike detector embedded in a bike slot. The purpose of a bike detector is to detect a bicyclist approaching an intersection and communicate with the traffic signal cabinet to provide enough time for cyclists to safely cross an intersection.

Source: VTA and ICF 2018.

Figure 5 Representation Of Bicycle Slots

UTILITY RELOCATIONS

The Project will include minor utility relocations (e.g., water, gas, communications, electric lines, sanitary sewer, stormwater, etc.), as necessary.

In addition, 6 steel lattice towers and 2 Tubular Steel Poles [TSPs] carrying the Pacific Gas & Electric Company's (PG&E) McKee-Piercy and Milpitas-Swift sections of the 115 kilovolt transmission lines would need to be relocated between Ocala Avenue and north of Quimby Road. A total of 10 new TSPs would be installed. It is anticipated that the TSPs would need to be up to 121 feet in height in order to clear the aerial guideway. As a result of the increase in height of the TSPs and the proximity to Reid-Hillview Airport, PG&E may need to install red light-emitting diode (LED) obstruction lighting on some or all of the new or modified towers or poles in accordance with Federal Aviation Administration (FAA) requirements. These lights would be powered by either solar panels or local distribution electric lines. One of the TSPs (No. 54) may require right-of-way from the Santa Clara Valley Water District for placing the TSP and its foundation. The new TSPs would be mounted on a drilled foundation. Figures 6a and 6b show the proposed project work for the electrical transmission facilities.

The new TSPs would be mounted on a drilled foundation, and construction of the foundation for TSP No. 53A, 54, and 55 may require temporary closure of the Thompson Creek Trail for safety during drilling, and foundation operations. For TSPs located immediately adjacent to Capitol Expressway, a pull-out area will be provided for safe ingress and egress of PG&E maintenance vehicles.

PHOTOVOLTAIC SYSTEM

The Project will include a parking canopy with a 92 kW photovoltaic system at Eastridge Transit Center that will offset the electricity requirements of the light rail station, the Eastridge Park-and-Ride Lot, and the Eastridge Transit Center.

RIGHT-OF-WAY REQUIREMENTS

The majority of the improvements will be constructed within existing public right-of-way. There are a number of locations, however, where the EBRC Project will require minor amounts of additional right-of-way. Based on preliminary designs, the locations where additional right-of-way will be required are listed in Table 2.

Easements and other right-of-way requirements may change (i.e., increase or decrease in size, change type, and/or change from permanent to temporary, etc.) during final design while being within the scope of the project and minor in nature. It is the intent of this environmental document to environmentally clear easements and other right-of-way requirements that are generally indicative of the type of work required, recognizing some adjustments may be necessary based on final design and/or working with individual property owners during the real estate acquisition process. Should modifications beyond the scope of the project trigger the need for additional environmental review pursuant to CEQA and NEPA, subsequent environmental analysis would be required.

Figure 6a Electrical Transmission Facilities

Figure 6b Electrical Transmission Facilities

Table 2 Preliminary Right-of-Way Requirements for the EBRC Project

No.	Assessor's Parcel Number	Address	Existing Use	Right-of-Way Needed	Right-of-Way Requirement (square feet)		Partial or Full Right-of-Way Requirement
					Permanent	Temporary	
1	484-33-108	2701 Story Road	Business	TCE	0	237	Partial
2	488-01-041	2710 Story Road	Business	Partial Fee Take, TCE, Permanent Easement	1,175	1,845	Partial
3	488-01-002	1148 Kollmar Drive	Business	Partial or Full Fee Take,[1] TCE	2,428	1,523	Partial
4	488-01-004	2710 Kollmar Drive	Multi-Family	TCE	0	687	Partial
5	488-01-037	2709 Sussex Drive	Single-Family	TCE	0	74	Partial
6	491-01-016	SE Corner of Capitol Expressway & Cunningham Avenue	Public	Partial Fee Take, TCE[2]	514	701	Partial
7	491-02-073	3000 E. Capitol Expressway	Business	Partial Fee Take, TCE, Permanent Easement	2,246	1,757	Partial
8	491-02-074	3001 E. Capitol Expressway	Business	Partial Fee Take, TCE, Permanent Easement	8,496	10,582	Partial
9	491-02-069	2880 E. Capitol Expressway	Business	Permanent Easement	922	0	Partial
10	491-02-070	2950 E. Capitol Expressway	Business	Permanent Easement	1,582	0	Partial
11	491-02-071	2950 E. Capitol Expressway	Business	Permanent Easement	4,644	0	Partial
12	491-02-072	2990 E. Capitol Expressway	Business	TCE, Permanent Easement	1,194	1,917	Partial
13	491-02-066	Thompson Creek	Public	Permanent Easement	21,770	0	Partial
14	491-48-006	Thompson Creek	Public	Permanent Easement	4,706	0	Partial

Table 2 Preliminary Right-of-Way Requirements for the EBRC Project

No.	Assessor's Parcel Number	Address	Existing Use	Right-of-Way Needed	Right-of-Way Requirement (square feet)		Partial or Full Right-of-Way Requirement
					Permanent	Temporary	
15	484-45-060	2686 Lombard Avenue	Single-Family	TCE	0	465	Partial
16	484-45-061	353 S. Capitol Avenue	Single-Family	TCE	0	337	Partial
17	484-45-062	455 S. Capitol Avenue	Single-Family	TCE	0	310	Partial
18	484-45-116	461 S. Capitol Avenue	Business	Partial Fee Take, TCE	2,277	2,223	Partial
19	484-34-015	1017 S. Capitol Avenue	Single-Family	TCE	0	250	Partial
20	484-34-016	1033 S. Capitol Avenue	Single-Family	Partial Fee Take, TCE	22	250	Partial
21	484-34-017	1049 S. Capitol Avenue	Single-Family	Partial or Full Fee Take,[1] TCE	225	335	Partial
22	484-34-131	1091 & 1093 S. Capitol Avenue	Business	Partial or Full Fee Take[1], TCE	1,829	277	Partial
23	484-34-019	2695 Story Road	Business	Partial Fee Take, TCE	3,977	878	Partial
24	486-39-025	1330 Foxdale Loop	Multi-Family	TCE	0	4,593	Partial
25	486-43-106	2690 Story Road	Business	Partial Fee Take, TCE	1,479	3,343	Partial
26	486-43-108	2680 Story Road	Business	TCE. Permanent Easement	3	6	Partial
27	491-15-003	Reid-Hillview Airport	Public	Partial Fee Take, TCE, Permanent Easement	8,299	1,084	Partial
28	491-15-041	Swift Avenue	Utility	Partial Fee Take, TCE Permanent Easement[2]	1,817	816	Partial
29	491-13-009	Reid-Hillview Airport	Public	Permanent Easement	1,401	0	Partial

Table 2 Preliminary Right-of-Way Requirements for the EBRC Project

No.	Assessor's Parcel Number	Address	Existing Use	Right-of-Way Needed	Right-of-Way Requirement (square feet)		Partial or Full Right-of-Way Requirement
					Permanent	Temporary	
30	491-05-001	North of Airport Access Road	Public	TCE, Permanent Easement	1,699	106,481	Partial
31	491-05-020	Reid-Hillview Airport	Public	Partial Fee Take, Permanent Easement, TCE	16,598	5,169	Partial
32	491-04-012	290 E. Capitol Expressway	Business	Full Fee Take	3,030	0	Full
33	491-04-047	290 E. Capitol Expressway	Business	Full Fee Take	5,864	0	Full
34	484-33-110	2785 Mervyns Way	Public	Partial Fee Take, TCE	374	642	Partial
35	NA	NA[2]	Public Right-of-Way	Permanent Easement	32,575	0	Partial
36	NA	NA[2]	Public Right-of-Way	Permanent Easement	4,134	0	Partial
Total Right-of-Way Needed:					**135,280**	**146,782**	**NA**

Notes:
TCE = Temporary Construction Easement; NA = Not Applicable; IEE = Ingress Egress Easement
Partial Fee Take refers to the partial right-of-way need of a parcel; Full Fee Take refers to the full right-of-way need of a parcel.
[1] These areas are within public right-of-way, and do not have an Assessor's Parcel Number or address associated with them.
Source: BKF 2018.

OPERATING ASSUMPTIONS

For the purposes of environmental analysis, the operating assumptions are based on past, current, and reasonably foreseeable future service plans. The purpose is to assess the project's effect on the environment under the "worst-case" conditions. The key operating assumptions are as follows:

- The EBRC Project is assumed to operate on both the Santa Teresa to Alum Rock Line and the proposed new line from Mountain View to Alum Rock.
- The EBRC Project is assumed to operate one to three-car train consists depending on ridership demands. Initially, VTA plans to operate two-car trains during peak hours in this corridor.
- The hours of operation are assumed to be between 4:30 a.m. and 1:30 a.m.
- Initially, VTA plans to operate on 15 minute headways on each line for 7.5 minute combined headways for both lines during peak hours. For the segment of the alignment between the Alum Rock LRT Station and Eastridge Transit Center, the estimated running time would be approximately 4.3 minutes, as shown in Table 3.
- Generally, the EBRC Project will be designed for 55 mph operations.

Table 3 LRT Estimated Travel Time and Speed

LRT Segments	Distance/Average Speed/Time		
	Miles	mph	min.
Alum Rock TC to Story Station	0.6	25	1.4
Story Station to Eastridge Station	1.8	45	2.9
Corridor Total	2.4	35	4.3

Notes:
[1] Travel speed and time are assumed to be approximately the same for AM and PM hours as well as northbound and southbound directions as the aerial guideway would not be affected by vehicular traffic.
[2] Approximately 30 seconds of dwell time would be experienced at Story Station.
Source: BKF, 2018.

CONSTRUCTION SCENARIO

Project construction would take place over several years. Most of the construction work would occur in multiple locations along the project corridor between Alum Rock LRT Station and Eastridge Transit Center. Utility relocations would take place in 2019. Construction of the EBRC Project is anticipated to begin in 2020 and end in 2024. Construction would consist of clearing and grubbing, grading, structural work, trackwork, and paving. Major construction at Eastridge Mall during the holiday season will be minimized to the extent practicable.

At the height of construction, a number of construction employees and equipment would occupy portions of the street, including the median and potentially including parking spaces, at active construction locations. In the most active areas, construction activities would periodically reduce the capacity of Capitol Expressway to two lanes in the northbound direction, and one lane in the southbound direction during non-peak hours of travel. Three travel lanes in each direction are expected to stay open during peak hours of travel. One left turn lane in each travel direction may be closed at intersections temporarily during various construction events. Lane closures would be contingent on the requirements and restrictions of the County of Santa Clara and the City of San Jose. If lane closures for construction activities are further restricted, an increase of approximately one year would be anticipated in the duration of project construction, moving the construction completion from 2024 to 2025.

In addition, construction activities may be necessary during night, early morning, and weekend periods to minimize traffic disruption. Construction activities at night may involve partial or complete intersection closures along Capitol Expressway at Capitol Avenue, Story Road, Ocala Avenue, Cunningham Avenue, Swift Lane and Tully Road. Complete expressway closures at night may occur in each travel direction (northbound and southbound) of Capitol Expressway for work on the proposed pedestrian overcrossing.

The aerial guideway sections would require extensive pile driving. It is anticipated that 6 to 12 piles would be driven per day for 3 to 6 days at each column site. The column sites are spaced approximately 120 to 130 feet apart. Pile driving could occur simultaneously at 2 locations along the alignment.

The main construction staging area would likely occur on vacant airport property between Cunningham Avenue and Tully Road subject to the concurrence of Santa Clara County Roads and Airports, and also at Eastridge Transit Center. . The median of expressway would also be used as a staging area for daily activities.