VTA's BART Silicon Valley—Phase II Extension Project

Finding of Effect for Architectural Resources

Prepared for:

Santa Clara Valley Transportation Authority
Federal Transit Administration

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Executive Summary

This Findings of Effect (FOE) report has been prepared for the Santa Clara Valley Transportation Authority's (VTA) Bay Area Rapid Transit (BART) Silicon Valley – Phase II Extension Project (Phase II Project). The purpose of this FOE is to assist the Project proponent, VTA, and the lead federal agency, the Federal Transit Administration (FTA), to comply with Section 106 of the National Historic Preservation Act (NHPA) and the implementing regulations of the Advisory Council on Historic Preservation, as these pertain to federally-funded undertakings and their impacts on historic properties.

This FOE satisfies a requirement for federally-funded projects and provides the analysis only for the NEPA BART Extension Alternative as described below. VTA's transit-oriented joint development (TOJD) has no federal nexus, and it is not included in this FOE. Therefore, for purposes of this FOE, the word "Project" refers to the NEPA BART Extension Alternative.

The NEPA BART Extension Alternative proposes an approximately 6-mile extension of the BART system in Santa Clara County, beginning near US 101 and Mabury Road in eastern San Jose, continuing through downtown San Jose, and terminating in the City of Santa Clara (Maps 1 through 3; Appendix A). Implementation of the NEPA BART Extension Alternative, if selected, would construct the second phase of VTA's BART Silicon Valley Program, which extends BART 16 miles from the City of Fremont in southwestern Alameda County though the cities of Milpitas, San Jose, and Santa Clara in Santa Clara County, California.

This FOE follows the guidelines for documentation as presented in 36 CFR 800.11. This report summarizes the federal undertaking, as well as the identification and evaluation efforts to date and consultation with interested parties (Chapter 2 and Chapter 3). Chapter 4 presents brief descriptions of the historic significance and current status of the historic properties described. The criteria of adverse effect applied to historic properties are in Chapter 5. This FOE addresses 32 individual historic properties – some of which are contributors to the San Jose Downtown Commercial District, a National Register-listed historic district – that are located within the architectural Area of Potential Effects (APE) and as identified within the report entitled *VTA's BART Silicon Valley – Phase II Extension Project Supplemental Built Environment Survey Report (*SBESR*),* prepared by JRP Historical Consulting, LLC (JRP) in September 2016, and the *Addendum to the 2016 Supplement Built Environmental Survey Report* (SBESR Addendum) prepared by JRP in October 2017. Maps depicting the architectural APE are attached in Appendix A of this report. The SBESR and SBER Addendum are supplements to the original *Historical Resources Evaluation Report* (HRER) that JRP produced in January 2003, which received concurrence from the State Historic Preservation Officer (SHPO) on June 9, 2003. The SHPO concurred with the findings of

the 2016 SBESR on October 28, 2016 (refer to Appendix B for the concurrence letters for both the 2003 and 2016 survey reports). It is concluded that the undertakings would have ***no adverse effect with conditions*** on any of the 32 historic properties or the San Jose Downtown Commercial District.

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Chapter 1
Description of Undertaking

1.1 Project Overview

The NEPA BART Extension Alternative would consist of an approximately 6-mile extension of the BART system from the terminus of VTA's BART Silicon Valley—Phase I Berryessa Extension Project (Phase I Project) in San Jose to Santa Clara. The general Project vicinity and alignment are shown in Maps 1 and 2 (Appendix A). The Phase I Project is currently under construction and scheduled to be operational in mid-2018. The Phase II extension would descend into an approximately five-mile-long underground tunnel alignment, continue through downtown San Jose, and terminate at grade near the Santa Clara Caltrain Station, as shown in Map 2 (Appendix A). Four passenger stations are proposed, and service would start in 2025, assuming funding is available.

There are two tunneling methodologies proposed to construct the BART extension: the Twin-Bore and Single-Bore Options. Both options have a length of approximately 4.5 miles. Under the Twin-Bore Option, two twin-bore tunnels, with one track in each, would be excavated. Each tunnel bore would have an internal diameter of approximately 18 feet (with an outer diameter of approximately 20 feet). The depth of the tunnel would be between 10 feet to 75 feet below ground surface. The crown, or top, of the tunnel of the Twin-Bore Option would be, on average, 40 feet below the surface.

Under the Single-Bore Option, one large-diameter tunnel bore would be excavated. The tunnel bore would have an internal diameter of approximately 40 feet (with an outer diameter of approximately 45 feet) with the tunnel depth at about 70 feet (average) below ground. The crown, or top, of the tunnel of the Single-Bore Option would be, on average, 90 feet below the surface. See Section 1.2.1 for more information on the bored tunnel alignment.

1.1.1 Alignment and Station Features by City

1.1.1.1 City of San Jose

Connection to Phase I Berryessa Extension

The BART Extension would begin where the Phase I tail tracks end. The at-grade tail tracks would be partially removed to allow for construction of the bored tunnels, East Tunnel Portal, and supporting facilities.

The alignment would transition from a retained-fill configuration east of U.S. 101 and south of Mabury Road near the end of the Phase I alignment into a retained-cut configuration and enter the East Tunnel Portal near Las Plumas Avenue.

South of the portal, the alignment would pass beneath North Marburg Way, then approximately 25 feet below the creek bed of Lower Silver Creek for the Twin-Bore Option, or approximately 30 feet for the Single-Bore Option, just to the east of U.S. 101, then curve under U.S. 101 south of the McKee Road overpass, and enter Alum Rock/28th Street Station.

Alum Rock/28th Street Station

Alum Rock/28th Street Station would be located between U.S. 101 and North 28th Street and between McKee Road and Santa Clara Street. The approximately 11-acre station campus would include station facilities, such as a parking structure, systems facilities, and roadway improvements to North 28th Street. The station would be underground with street-level entrance portals with elevators, escalators, and stairs covered by canopy structures. The station would have a minimum of two entrances. Under the Single-Bore Option, an underground concourse level would span between the two entrances adjacent to the tunnel. A parking structure of up to seven levels would accommodate BART park-and-ride demand with 1,200 parking spaces. Systems facilities would be located above-ground and underground.

From Alum Rock/28th Street Station, the alignment would curve under North 28th Street, North 27th Street, and North 26th Street before aligning under Santa Clara Street. The alignment would continue under the Santa Clara Street right-of-way (ROW) until the alignment approaches Coyote Creek.

Tunnel Alignment near Coyote Creek

For the Twin-Bore Option, the alignment would transition north of Santa Clara Street beginning just west of 22nd Street and pass approximately 20 feet beneath the creekbed of Coyote Creek to the north of Santa Clara Street and avoid the Coyote Creek/Santa Clara Street bridge foundations. The alignment would transition back into the Santa Clara Street ROW near 13th Street, west of Coyote Creek. However, for the Single-Bore Option, the alignment would continue directly under Santa Clara Street and pass approximately 55 feet beneath the creekbed of Coyote Creek and approximately 20 feet below the existing bridge foundations.

13th Street Ventilation Structure

A systems facility site would be located at the northwest corner of Santa Clara and 13th Streets. This site would include a tunnel ventilation structure, which would be an above-ground structure with an associated ventilation shaft.

Downtown San Jose Station

The alignment would continue beneath Santa Clara Street to the Downtown San Jose Station. There are two station location options for the Downtown San Jose Station: the Downtown San Jose Station East Option and the Downtown San Jose Station West

Option, as described below. The alignment for this area would be the same irrespective of the station option.

The station would consist of boarding platform levels and some systems facilities within the tunnel beneath Santa Clara Street, and entrances at street level. Vertical circulation elements including elevators, escalators, and stairs that provide pedestrian access to the mezzanine would be at station portal entrances. Escalators and stairs would be covered by canopy structures. Systems facilities would be located above-ground and underground. The station would not have dedicated park-and-ride facilities.

Downtown San Jose Station East Option

For the Twin Bore Option, the Downtown San Jose Station East Option would be located between 5th and 2nd Streets, while for the Single Bore Option, the station platforms would be located between 7th and 4th Streets.

Downtown San Jose Station West Option

The Downtown San Jose Station West Option would be located between 2nd and Market Streets for the Twin-Bore Option and between Market and 3rd Streets for the Single-Bore Option.

Tunnel Alignment into Diridon Station

There are two station location options at Diridon Station: the Diridon Station South Option and the Diridon Station North Option, as described in detail below. The alignment into Diridon Station varies between the Diridon Station North and South Options and between the Twin-Bore and Single-Bore Options for the tunnel as described below.

Tunnel Alignment into Diridon Station South Option

The alignment would continue from the Downtown San Jose Station beneath Santa Clara Street and shift south beginning just west of South Almaden Boulevard to pass between the State Route (SR) 87 bridge foundations. For the Twin-Bore Option, the alignment would pass 45 feet below the riverbed of the Guadalupe River, pass beneath a retaining wall west of the river, and more than 20 feet below the creekbed of Los Gatos Creek. For the Single-Bore Option, the alignment would pass approximately 50 feet below the riverbed of the Guadalupe River, pass under the retaining wall, and approximately 35 feet below the creekbed of Los Gatos Creek. After passing under Los Gatos Creek, the alignment for both options would enter the Diridon Station between Los Gatos Creek and Autumn Street.

Tunnel Alignment east of Diridon Station North Option

Under the Twin-Bore Option, the alignment would continue beneath Santa Clara Street, continue approximately 45 feet below the riverbed of the Guadalupe River and 30 feet below the creekbed of Los Gatos Creek. After passing under Los Gatos Creek, the

alignment would enter Diridon Station between Autumn and Montgomery Streets and directly south of Santa Clara Street. The Diridon Station North Option is closer to Santa Clara Street in comparison to the South Option.

Under the Single-Bore Option, the alignment would remain beneath Santa Clara Street, and continue 45 feet below the riverbed of the Guadalupe River and 40 feet below the creekbed of Los Gatos Creek. The boarding platforms, within the Single-Bore tunnel, would be located between Montgomery and White Streets.

Diridon Station

The station would consist of a boarding platform level, a concourse level, and entrances at street-level portals. Under the Single-Bore Option, an underground concourse level would span between the two entrances adjacent to the tunnel. Entrances would have elevators, escalators, and stairs covered by canopy structures. No park-and-ride parking would be provided. Street-level station entrance portals would provide pedestrian linkages to the Diridon Caltrain Station and SAP Center.

The existing VTA bus transit center would be reconfigured for better access and circulation to accommodate projected bus and shuttle transfers to and from the BART station. Kiss-and-ride facilities would be located along Cahill Street.

There are two station location options for the Diridon Station: the Diridon Station South Option and the Diridon Station North Option, as described below. The alignment varies by station location.

Diridon Station South Option

The Diridon Station South Option would be located between Los Gatos Creek to the east, the San Jose Diridon Caltrain Station to the west, Santa Clara Street to the north, and West San Fernando Street to the south.

West of the station, the alignment for both the Twin-Bore and Single-Bore Options would continue beneath the Diridon Caltrain Station train tracks and White Street. The alignment would then turn towards the north, crossing under The Alameda at Cleaves Avenue and under West Julian Street at Morrison Avenue before aligning under Stockton Avenue.

Diridon Station North Option

For both the Twin-Bore and Single-Bore Options, the Diridon Station North Option would generally be located between Autumn Street to the east, White Street to the west, Santa Clara Street to the north, and West San Fernando Street to the south. Under the Twin-Bore Option, the underground station platforms would be located adjacent to, and just south of, Santa Clara Street.

Under the Single-Bore Option, the underground station platforms would be located directly under Santa Clara Street. Under the Twin-Bore Option, the underground station platforms

would be located adjacent to, and just south of, Santa Clara Street. Under the Single-Bore Option, the underground station platforms would be located directly under Santa Clara Street.

Under the Twin-Bore Option, west of the station, the alignment would continue under White and Bush Streets south of The Alameda. The alignment would then turn towards the north, crossing under The Alameda at Sunol Street and under West Julian Street at Morrison Avenue Street before aligning under Stockton Avenue.

Under the Single-Bore Option, west of the station, the alignment would continue under Santa Clara Street/The Alameda. The alignment would then turn towards the north at Wilson Avenue, crossing under Rhodes Court and under West Julian Street before aligning under Stockton Avenue.

Tunnel Alignment along Stockton Avenue

Around Pershing Avenue, all of the options—the Twin-Bore and Single-Bore Options and the Diridon Station South and North Options—converge back onto the same alignment under Stockton Avenue. The alignment is the same for all four options mentioned above after Pershing Avenue. On the east side of Stockton Avenue between Schiele Avenue and West Taylor Street, there are three alternate locations for a systems facility site.

The alignment would continue north and cross under the Caltrain tracks then under Hedding Street. The alignment would continue on the east side of the Caltrain tracks and cross under Interstate 880 (I-880) before ascending and exiting the West Tunnel Portal near Newhall Street.

Crossover tracks would be located in the retained-cut trench just outside the West Tunnel Portal. The alignment would then transition to an at-grade configuration as it enters the Newhall Maintenance Facility and the Santa Clara Station to the north.

A high-voltage substation, a traction power substation (TPSS), and a train control communications room (TCCR) would be located at a systems facility site above the West Tunnel Portal and near the Pacific Gas & Electric Company (PG&E) FMC Substation. A 115-kiloVolt (kV) line from PG&E's existing FMC Substation would serve the high-voltage substation. There are two alternate routes for this 115-kV line connection. The first alternate route would begin at the high-voltage substation, run north to Newhall Street, then run east on upgraded poles along Newhall Street, then south on an existing line along Stockton Avenue. A second alternate route would also run north to Newhall Street and then run east on upgraded poles along Newhall Street, but a new line would be constructed to traverse the PG&E substation site. The 115-kV line would require approximately 80- to 115-foot-high galvanized tapered tubular steel poles or wood poles spaced approximately every 150 to 300 feet.

1.1.1.2 City of Santa Clara

The BART Extension Alternative in Santa Clara would include the Newhall Maintenance Facility and the Santa Clara Station. The San Jose/Santa Clara city boundary is located approximately midway through the Newhall Maintenance Facility.

Newhall Maintenance Facility

The Newhall Maintenance Facility is approximately 40 acres and would begin north of the West Tunnel Portal at Newhall Street in San Jose and extend to De La Cruz Boulevard near the Santa Clara Station in Santa Clara. A single tail track would extend north from the Santa Clara Station and cross under the De La Cruz Boulevard overpass and terminate on the north side of the overpass. The maintenance facility would serve two purposes: (1) general maintenance, running repairs, and storage of up to 200 BART revenue vehicles, and (2) general maintenance of non-revenue vehicles. The facility would also include maintenance and engineering offices and a yard control tower. Several buildings and numerous transfer and storage tracks would be constructed.

Santa Clara Station

The closest streets to the Santa Clara Station would be De La Cruz Boulevard to the northwest, Coleman Avenue to the northeast, and Brokaw Road to the east. The station would be at grade, centered at the west end of Brokaw Road, and would contain an at-grade boarding platform with a concourse one level below. Access to the boarding platform would be provided via elevators, escalators, and stairs covered by canopy structures. A pedestrian underpass would connect from the concourse level of the BART station to the Santa Clara Caltrain plaza. In addition, a pedestrian underpass would connect from the station concourse level to a new BART plaza near Brokaw Road. Kiss-and-ride, bus, and shuttle loading areas would be provided on Brokaw Road.

A parking structure of up to five levels would be located north of Brokaw Road and east of the Caltrain tracks within the approximately 10-acre station campus area and would accommodate 500 BART park-and-ride parking spaces in addition to public facilities on the site.

1.2 Definition of Undertakings Proposed

This section describes the types of construction for the BART extension that would occur near historic properties found within the architectural APE. All historic properties are located within the City of San Jose and City of Santa Clara at various points along the Project alignment. Five types of construction would be used near historic properties: bored tunnel; stations; maintenance facility; tiebacks; and construction staging areas

(CSAs).[1] Potential effects of these construction types are generalized in this section, while an analysis of potential effects is provided for each individual property in Section 5.3.

1.2.1 Bored Tunnel Alignment

Two tunnel construction methodology options are being considered for the bored tunnel alignment of the Project: the Twin-Bore Option and Single-Bore Option. For both the Twin-Bore and Single-Bore Options, a pressurized closed-faced tunnel boring machine (TBM) would excavate the tunnel(s) between the two tunnel portals. The average length of the tunnel(s) would be approximately 4.5 miles.

Under the Twin-Bore Option, twin-bore tunnels, approximately 20 feet in diameter, would contain one track in each tunnel, and the depth would be between 10 feet below ground surface at the tunnel portals to 75 feet below the surface to avoid obstructions such as bridge and retaining wall foundations. The crown (top) of the tunnel would be on average 40 feet below grade.

Under the Single-Bore Option, the single-bore tunnel would measure approximately 45 feet in diameter. The tunnel would include two tracks that, depending on the location, would be side-by-side or stacked vertically within the single tunnel. The crown (top) of the tunnel would be, on average, 60 feet below grade.

The single- and twin-bore tunnels would be lined with precast concrete segmental linings, which would be installed behind the TBM as it moves forward, and would serve as the permanent support for the tunnel. The purpose of a closed-face TBM is to balance the surrounding ground pressure by creating a pressure within the excavation chamber at the front of the TBM. Closed-face TBMs keep out groundwater, stabilize the tunnel face, and minimize settlement.

Excavated material called muck is removed and transported through the tunnel and out the tunnel portals. Once outside the tunnel, the muck is stockpiled for use as fill material or loaded onto trucks for disposal. Muck may also be temporarily stored within CSAs.

Construction of the tunnel would extend from 2018 through 2024.[2]

[1] ICF International, *VTA's BART Silicon Valley—Phase II Extension Project, Draft Supplemental Environmental Impact Statement/3rd Supplemental Environmental Impact Report*, "Project Description," Chapter 5, December 2017.

[2] ICF International, *VTA's BART Silicon Valley—Phase II Extension Project, Supplemental Environmental Impact Statement/3rd Supplemental Environmental Impact Report*, "Project Description," Chapter 5, December 2017.

1.2.2 Stations

1.2.2.1 Alum Rock/28th Street

The 11-acre station site would be generally bordered by East St. James Street to the north, North 30th Street to the east, North 28th Street to the west, and Five Wounds Lane to the south. Please refer to Appendix A for the conceptual plans for this station. This station includes different configurations for the Single- and Twin-Bore Tunnel Options. The site would include an underground station with two entrances generally located just northeast of the intersection North 28th Street and Five Wounds Lane and southwest of the intersection of East St. James and 30th streets. These street-level entrance portals would include elevators, escalators, and stairs covered by canopy structures. Station entrances would measure approximately between 8 and 24 feet wide, 10 and 40 feet long, and approximately 15 feet high. Access to the station would be primarily from the northern and southern ends of the station (McKee Road/North 28th Street and East Santa Clara/North 28th Streets, respectively). Station improvements would include a pedestrian connection at the south end of the site; bicycle facilities, lighting, street trees, wide sidewalks; the construction of the Five Wounds Trail along North 28th Street; and new or modified traffic signals. Additionally, the station would include a new parking structure of up to seven stories in height, and automobile passenger drop off areas.

Other station amenities would include system facilities near station entrance portals consisting of electrical, ventilation, and communication equipment; a TPSS; a TCCR; an auxiliary power substation; and an emergency generator. These facilities would be primarily belowground, though some may be located above ground. The TPSS would measure (at minimum) approximately 60 feet by 200 feet and be 15 feet in height. System facilities within public view would be concealed behind a 9-foot-high concrete-block wall. The station would include emergency exhaust ventilation facilities and ventilation shafts at either end of the station. Each location would include one or more ventilation shafts that extend between 10 and 15 feet above grade and measure approximately 15 by 20 feet. Fresh air intake/exhaust hatches at grade would be near the emergency ventilation facilities; shafts would measure 10 by 10 feet and extend approximately 18 feet above ground.

Projected construction for stations would extend from 2018 through 2024.[3]

1.2.2.2 Downtown San Jose Station—East Option

The Downtown San Jose Station—East Option would be located underground beneath East Santa Clara Street, generally between 7th and 2nd Streets. Please refer to Appendix A for the conceptual plans for this station. This station includes different configurations

[3] ICF International, *VTA's BART Silicon Valley—Phase II Extension Project, Supplemental Environmental Impact Statement/3rd Supplemental Environmental Impact Report,* "Project Description," Chapter 5, December 2017.

for the Single- and Twin-Bore Tunnel Options. The station would include at least two entrances with above-ground entrance portals. Under the Twin-Bore Option, several entrance options would be located within sidewalks along Santa Clara Street between 2nd and 7th Streets, and all entrance options would include portal entrances covered by canopy shelters that would measure approximately between 8 and 24 feet wide, 10 and 40 feet long, and approximately 15 feet high. Under the Single-Bore Option, which would be sited between 7th and 4th Streets, an entrance with an underground concourse would be sited at the southeast corner of Santa Clara and 4th Streets. The entrance would measure approximately 45 feet by 45 feet. A second entrance measuring approximately 190 feet in length and 170 feet in width would be located at the southeast corner of 6th and Santa Clara Streets. Stairs and escalators would be located at each entrance under the Downtown San Jose—East Option, and elevators would be provided near the end of each station.

Both the Single-Bore and Twin-Bore Options would include system facilities that would be both aboveground and underground. These facilities would consist of a TPSS, an auxiliary power substation, ventilation facilities (including emergency exhaust ventilation), and a TCCR. Most of these facilities would be below ground for both Single- and Twin-Bore Options and would be generally sited at either end of the station. Emergency exhaust ventilation facilities would consist of ventilation shafts and fresh air intake/exhaust hatches. Ventilation shafts would extend between 10 and 15 feet above grade and measure approximately 15 by 20 feet. Fresh air intake/exhaust hatches at grade would be near the emergency ventilation facilities; shafts would measure 10 by 10 feet and extend approximately 18 feet above ground. Under both the Single- and Twin-Bore Options, above-ground system facilities would be located within a new, one-story building at the southwest corner of Santa Clara and 3rd Streets. Under the Single-Bore Option a new two-story entrance structure would house these system facilities at the northeast corner of Santa Clara and 6th Street.

This station option would also include streetscape improvements (guided by San Jose's Master Streetscape Plan) along Santa Clara Street between 7th and 1st Streets.

Projected construction for stations would extend from 2018 through 2024.[4]

1.2.2.3 Downtown San Jose Station—West Option

The Downtown San Jose Station—West Option would be generally located underground beneath East Santa Clara Street, between Market and 4th Streets. Please refer to Appendix A for the conceptual plans for this station. This station includes different configurations for the Single- and Twin-Bore Tunnel Options. The station would include at least two entrances with above-ground entrance portals. Several entrance

[4] ICF International, *VTA's BART Silicon Valley—Phase II Extension Project, Draft Supplemental Environmental Impact Statement/3rd Supplemental Environmental Impact Report,* "Project Description," Chapter 5, December 2017.

options would be located within sidewalks along Santa Clara Street and cross streets between Market and 3rd Streets for the Twin-Bore Option. All entrance options would include portal entrances covered by canopy shelters that would measure approximately between 8 and 24 feet wide, 10 and 40 feet long, and approximately 15 feet high. Under the Single-Bore Option, which would be sited between Market and 3rd Streets, an entrance would be sited midblock on the north side of Santa Clara Street between Market and 1st Street; a second entrance would be located midblock between 1st and 2nd Streets. Stairs and escalators would be located at each entrance under the Downtown San Jose—East Option and elevators would be provided near the end of each station.

The station would include both underground and above-ground system facilities generally located at either station end. Most of these system facilities, which would include a TPSS, an auxiliary power substation, ventilation facilities, and a TCCR, would be located underground under both Single- and Twin-Bore Options. Emergency exhaust ventilation facilities would consist of ventilation shafts and fresh air intake/exhaust hatches. Ventilation shafts would extend between 10 and 15 feet above grade and measure approximately 15 by 20 feet. Fresh air intake/exhaust hatches at grade would be near the emergency ventilation facilities; shafts would measure 10 by 10 feet and extend approximately 18 feet above ground. Under the Single- and Twin-Bore Options, a new, one-story building would house the system facilities at the southwest corner of Santa Clara and 3rd Streets, while the system facilities would be set back off Santa Clara Street behind two-story entrance façades between Market and 1st Streets and 1st and 2nd Streets.

This station option would also include streetscape improvements (guided by San Jose's Master Streetscape Plan) along East Santa Clara Street between 4th and Market Streets.

Projected construction for stations would extend from 2019 through 2025.[5]

1.2.2.4 Diridon Station

Diridon Station South Option

The underground Diridon Station South Option would be located between West Santa Clara Street, San Fernando Street, Los Gatos Creek, and the San Jose Diridon Caltrain Station. Please refer to Appendix A for the conceptual plans for this station. This station includes different configurations for the Single- and Twin-Bore Tunnel Options. The 9-acre station would include a boarding platform; a concourse level; a minimum of two street-level station entrances; and underground and/or above-ground ancillary areas at

[5] ICF International, *VTA's BART Silicon Valley—Phase II Extension Project, Draft Supplemental Environmental Impact Statement/3rd Supplemental Environmental Impact Report,* "Project Description," Chapter 5, December 2017.

station ends. Entrances would be located at or near both ends of the station and include portal entrance canopy structures that shelter elevators, escalators, and stairs. Entrance canopy structures would measure approximately between 8 and 24 feet wide, 10 and 40 feet long, and approximately 15 feet high. Access to the station would be West Santa Clara Street and West San Fernando Street. The extant VTA bus transit center would be reconfigured for improved access and circulation.

Above-ground and underground system facilities would be located at each end of the station and would include ventilation facilities; a TCCR; a TPSS; and an auxiliary power substation. Most of these facilities would be located underground for both the Single- and Twin-Bore Options. Above-ground system facilities would also include emergency exhaust ventilation hatches and ventilation shafts. Ventilation shafts would extend between 10 and 15 feet above grade and measure approximately 15 by 20 feet. Fresh air intake/exhaust hatches at grade would be near the emergency ventilation facilities; shafts would measure 10 by 10 feet and extend approximately 18 feet above ground. At the east end of the station would be a system facilities site that would include a TPSS, auxiliary power substation, emergency generator, and ventilation structures. The TPSS would measure (at minimum) 60 by 200 feet and would be 15 feet in height. System facilities within public view would be surrounded by a concrete masonry fence approximately 9 feet high.

Projected construction for stations would extend from 2019 through 2025.[6]

Diridon Station North Option

The Diridon Station North Option would be bordered by Autumn Street to the east, White Street to the west, West Santa Clara Street to the north, and West San Fernando Street to the south. Please refer to Appendix A for the conceptual plans for this station. Under the Single-Bore Option, the underground station would generally extend from just west of Autumn Street west to the Caltrain Station tracks and directly below Santa Clara Street. The Twin-Bore Option would be located adjacent to and just south of Santa Clara Street and would extend beneath the Caltrain Station tracks to White Street. For both configurations, the underground station would include boarding platform and mezzanine levels, a concourse level, and street-level entrance portals with elevators, escalators, and stairs covered by canopy structures. The station would have a minimum of two entrances, one located at or near each end of the station. Primary access to each would be from West Santa Clara Street.

System facilities would be located at each end of the station and would include a TPSS, an auxiliary power substation, ventilation facilities, associated ventilation shafts, and a TCCR. Although most of these facilities would be underground, some would be above

[6] ICF International, *VTA's BART Silicon Valley—Phase II Extension Project, Draft Supplemental Environmental Impact Statement/3rd Supplemental Environmental Impact Report,* "Project Description," Chapter 5, December 2017.

ground. The station would also include emergency exhaust ventilation facilities with ventilation shafts and fresh air intake/exhaust hatches. Ventilation shafts would extend between 10 and 15 feet above grade and measure approximately 15 by 20 feet. Fresh air intake/exhaust hatches at grade would be near the emergency ventilation facilities; shafts would measure 10 by 10 feet and extend approximately 18 feet above ground. The TPSS would measure (at minimum) 60 by 200 feet and would be 15 feet in height. System facilities within public view would be surrounded by a concrete masonry fence approximately 9 feet high.

Projected construction for stations would extend from 2019 through 2025.[7]

1.2.2.5 Santa Clara Station

The 10-acre Santa Clara Station would be located north of the existing Santa Clara Caltrain Station and is generally centered perpendicularly to the west end of Brokaw Road. Please refer to Appendix A for the conceptual plans for this station. The station would be at grade and include a boarding platform with a mezzanine level below, which would be accessed by elevators, escalators, and stairs covered by at-grade portal entrance canopy structures. The entrance would measure approximately between 8 and 24 feet wide, 10 and 40 feet long, and approximately 15 feet high. A pedestrian tunnel would connect the mezzanine level to the Santa Clara Caltrain plaza; a similar tunnel would connect the mezzanine level to a new BART plaza near Brokaw Road, where kiss-and ride, bus, and shuttle loading areas would be located. The station would also include the construction of a parking structure up to 5 stories in height north of Brokaw Road. Brokaw Road would be widened, and the intersection of Coleman Avenue and Brokaw Road would be reconfigured under this station.

System facilities, which would include a TPSS train control room and auxiliary power substation located within a 27,000-square-foot site north of the proposed station, would typically range between 12 and 20 feet in height and be surrounded by fencing measuring between 9 to 12 feet high. In addition, the station would include a 150-foot-tall radio tower.

Projected construction for stations would extend from 2019 through 2025.[8]

1.2.3 Newhall Maintenance Facility

The Newhall Maintenance Facility would extend west from the West Tunnel Portal (at Newhall Street) to De La Cruz Boulevard, adjacent to the Santa Clara Station and built on the former Union Pacific Railroad Newhall Yard. The main entrance to the facility

[7] ICF International, *VTA's BART Silicon Valley—Phase II Extension Project, Draft Supplemental Environmental Impact Statement/3rd Supplemental Environmental Impact Report*, "Project Description," Chapter 5, December 2017.

[8] ICF International, *VTA's BART Silicon Valley—Phase II Extension Project, Draft Supplemental Environmental Impact Statement/3rd Supplemental Environmental Impact Report*, "Project Description," Chapter 5, December 2017.

would be from Newhall Drive. System facilities within this site would include an 11,000-square-foot TPSS; a 3,000-square-foot auxiliary power substation; two gap breaker stations measuring 3,200 and 3,800 square feet; and a 3,300-square-foot TCCR. These system facilities would be 12 feet in height with the exception of the TCRR, which would be 35 feet high. A 9-foot-high fence would surround system facilities within public view. Two detention basins would also be located within the maintenance facility.

Other features of the maintenance facility include: train car washer; 3-story yard control tower; inspection pit; blowdown facility; wheel truing facility; 70,000-square-foot, 2-story revenue vehicle maintenance shop; turntable; non-revenue vehicle maintenance shop and maintenance and engineering offices; train control house; gap breaker station; 150-foot-tall radio tower; and high-voltage substation.

Projected construction for the Newhall Maintenance Facility would extend from 2023 through 2025.[9]

1.2.4 Tiebacks

The following would be constructed with a cut-and-cover construction method:

- For both the Twin-Bore and Single-Bore Options: the two tunnel portals and two mid-tunnel ventilation structures;
- For the Twin-Bore Option only: three underground stations (Alum Rock/28th Street, Downtown San Jose Station—East Option, and Downtown San Jose Station—West Option) and one underground downtown crossover; and
- For the Single-Bore Option only, off-street portions of the three underground stations.

Due to the nature of soft soils, presence of high groundwater, and proximity to adjacent buildings particularly in downtown San Jose, temporary shoring walls would be installed to support the sides of cut-and-cover excavations. Several methods can be used for temporary shoring walls including soil-cement mix wall and slurry diaphragm wall.

Support for the walls is typically provided through the use of tiebacks and/or internal bracing. Tieback anchors are long metal rods or bundled tendons drilled and grouted into the ground to brace construction support walls and adjacent property and/or structures during excavation of underground facilities. Tiebacks may remain in the ground after completion of construction. The tiebacks are estimated to be up to 110 feet in length with the last 50 feet farthest away from the trench secured in place. Tiebacks are typically spaced at 4 to 6 feet on center horizontally and 5 to 8 feet on center vertically. Tieback installation could start at approximately 3 feet below grade. Tiebacks

[9] ICF International, *VTA's BART Silicon Valley—Phase II Extension Project, Draft Supplemental Environmental Impact Statement/3rd Supplemental Environmental Impact Report,* "Project Description," Chapter 5, December 2017.

are generally installed at downward angle 15 degrees from the horizontal. The tiebacks would be installed below historic properties (beneath basements and/or foundations) and would not physically touch any of the 32 historic buildings analyzed in this FOE.

1.2.5 Construction Staging Areas

Construction staging areas (CSAs) would be required along the alignment to construct the BART extension. These areas may be used for construction of permanent facilities, construction vehicle parking, tunnel muck drying and storage, construction equipment storage and usage, and materials storage and assembly. Each of the permanent facilities of the BART extension, such as the four stations, two tunnel portals, two mid-tunnel ventilation structures, and end-of-the-line maintenance facility would be used as construction staging areas during construction. In addition to the permanent facilities, several additional staging areas have been identified.

Chapter 2
Efforts to Identify Historic Properties

The identification of historic buildings, structures, and objects undertaken by JRP was presented in the *Technical Memorandum Historical Resources Evaluation Report for SVRTC EIS/EIR Alternatives Historical Resources Evaluation Report* (HRER), prepared by JRP in January 2003[10], and *VTA's BART Silicon Valley—Phase II Extension Project Supplemental Built Environmental Survey Report* (SBESR), prepared by JRP in September 2016.[11] The SHPO concurred with the findings of the SBESR in October 2016. See Appendix A for project mapping, including the architectural Area of Potential Effects (APE), and Appendix B for SHPO concurrence letters for both the 2003 HRER and 2016 SBESR. The Project was subsequently refined after the 2016 SHPO concurrence, which required the preparation of the *Addendum to the 2016 Supplemental Built Environmental Survey Report* (SBESR Addendum) by JRP in October 2017.

As part of the process to identify historic resources within the architectural APE, JRP reviewed the National Register of Historic Places (National Register), the California Register of Historical Resources (California Register), the California Historical Landmarks, and the California Points of Historic Interest lists to identify previously evaluated historic properties within the architectural APE. JRP also examined previous historic resource inventory and evaluation surveys and reports. Given that there has long been a strong historic preservation presence in the City of San Jose and Santa Clara County, JRP found many historic resource inventory and evaluation records on properties within the architectural APE, particularly those located in or near downtown San Jose. Most of these previous studies are on file with the City of San Jose Public Library, the City of San Jose Planning Department Historic Preservation Office, and the archives of "History San Jose" in Kelly Park. In addition, JRP reviewed the literature of previously conducted cultural resources reports in or near the architectural APE and on file with the California Historical Resources Information System (CHRIS) Northwest Information Center housed at Sonoma State University. No known traditional cultural properties were identified during the inventory and evaluation efforts for built environment resources for this Project.

Thirty-two resources documented as part of this identification efforts for this Project are listed in the National Register, determined eligible for the National Register, or are considered eligible for the National Register for the purposes of this Project. Some of

[10] JRP Historical Consulting, Draft Technical Memorandum Historical Resources Evaluation Report for SVRTC EIS/EIR Alternatives, prepared for Santa Clara Valley Transportation Authority (January 2003).
[11] JRP Historical Consulting, LLC, *VTA's BART Silicon Valley—Phase II Extension Project Supplemental Built Environmental Survey Report* (September 2016).

these properties are eligible as contributors to the San Jose Downtown Commercial District, a National Register-listed historic district. This FOE applies the Criteria of Effect and Adverse Effect (36 CFR 800.5) to the 32 historic properties and the San Jose Downtown Commercial District (see **Table 4-1** through **Table 4-3**, below).

Chapter 3
Coordination and Public Participation

VTA, in cooperation with FTA, coordinated public participation for this Project pursuant to Section 106 of the National Historic Preservation Act (NHPA). At the initiation of the Project, VTA contacted interested parties through a notification letter circulated in November 2002, with follow-up correspondence in January 2003. Letters were also sent to 25 local historical agencies and organizations requesting information regarding known or potential historic resources in the Project vicinity. These agencies and organizations included the following:

- Santa Clara County Planning Office
- Alameda County Planning Department
- City of San Jose Planning Department
- City of San Jose Historic Preservation Officer
- City of Milpitas Planning Department
- Alameda County Historical Society
- Santa Clara County Historical Heritage Commission
- Heritage Council of Santa Clara County
- Milpitas Cultural Resources Preservation Board
- Milpitas Historical Society
- Historical Preservation Society of Santa Clara
- History San Jose and Historical Association
- Preservation Action Council of San Jose
- San Jose Historic Landmarks Commission
- San Jose Redevelopment Agency, East
- Santa Clara Street Revitalization Committee
- Los Fundadores–Santa Clara
- Victorian Preservation Association
- City of Santa Clara
- City of Santa Clara Historical and Landmarks Commission
- Santa Clara County Historical and Genealogical Society
- South Bay Historical Railroad Society
- California Trolley and Railroad Corporation
- National Railroad Historical Society
- Central Coast Chapter
- Caltrain/Peninsula Corridor Joint Powers Board (JPB)

Responses were received from Los Fundadores–Santa Clara and the City of Milpitas. Follow-up meetings were held with the City of San Jose Historic Preservation Officer, Preservation Action Council of San Jose, San Jose Historic Landmarks Commission, City of Santa Clara Historical and Landmarks Commission, South Bay Historical Railroad Society, and JPB. Comment letters related to the 2004 Environmental Impact Report (EIR) and 2007 Supplemental EIR were received from City of San Jose Planning

Department, City of San Jose Historic Preservation Officer, Preservation Action Council of San Jose, San Jose Historic Landmarks Commission, City of Santa Clara Historical and Landmarks Commission, and South Bay Historical Railroad Society. Coordination with the historical agencies and organizations remains ongoing and interested parties (as identified above) remain on the mailing list for public notices for the Project.

FTA and VTA are coordinating with SHPO regarding the inventory of cultural resources within the Project APE, the eligibility of these resources for listing on the National Register, and the impacts of the alternatives to such eligible resources. Meetings with the SHPO were held on October 30, 2003, January 26, 2009, December 17, 2009, January 17, 2014, February 29, 2016, May 5, 2016, and June 8, 2016.

In addition, VTA, FTA, and JRP have worked closely with Ms. Lorie Garcia of the South Bay Historic Railroad Society (SBHRS), whose headquarters are located within the Santa Clara Station. VTA, principals of JRP, representatives of local communities, and Ms. Garcia also participated in a meeting and site visit on July 25, 2002, of both the National Register-listed railroad stations within the architectural APE: Diridon (Cahill) Station and Santa Clara Station. The SBHRS is the covenant holder for both these stations, which are currently part of the Caltrain system. VTA and FTA will continue to consult with the SBHRS for this Project and provide the SBHRS the opportunity comment on the findings regarding historic properties for this undertaking.

Starting in 2015, VTA re-initiated three Community Working Groups (CWGs) – one for the Alum Rock/28th Street Station area, one for the Downtown San Jose/Diridon Station area, and one for the Santa Clara Station area – to communicate project information to key members of the community and provide feedback on strategies related to successfully delivering and completing the BART Extension. CWGs receive briefings on technical areas and project updates and act as a conduit for communications with the community at large. Group members include the leaders of neighborhood and business associations, community organizations, advocacy groups, major property owners, and planning commissioners. VTA invited Mr. Jack Morash, who has been a Santa Clara CWG member since June 11, 2015, as a representative of the SBHRS. Mr. Morash provides project updates to Lorie Garcia and contributes to the CWGs by notifying VTA staff of the SBHRS concerns about the Project.

On January 30, 2015, VTA distributed a Notice of Preparation (NOP) to advise interested agencies and the public that VTA intended to prepare a Supplemental Environmental Impact Statement/Supplemental Environmental Impact Report (SEIS/SEIR) for the Phase II Project. VTA distributed the NOP to approximately 225 agencies, elected officials, and interested parties and organizations in the general study area. VTA also notified potentially interested individuals and organizations regarding the scoping process and public scoping meetings for the Phase II Project. VTA used multiple methods to announce the scoping process and public meetings, including display advertisements in local newspapers, mailings to addresses located in the vicinity

of the Phase II Project, emails sent to recipients on the VTA emailing list, news releases posted on the VTA website, and social media postings on VTA's Facebook page and Twitter account.

VTA conducted three formal environmental scoping meetings to gather input and comments prior to the development of the SEIS/SEIR. Meetings were held on February 12, 17, and 19, 2015, in Santa Clara, downtown San Jose, and east San Jose. Each public scoping meeting included a sign-in/open house portion of the meeting, where the public could view Phase II Project informational display boards of the alignment and concept exhibits for the proposed stations, and a presentation portion of the meeting during which VTA staff provided an overview of the Project and environmental process in PowerPoint format. Following the presentation, formal public comments on the presented materials were documented. Oral comments provided at the meetings were transcribed by a court reporter. Written comments were accepted at the meetings and via mail or email to VTA until the comment deadline.

VTA and FTA are continuing to conduct consultation with interested historic groups pursuant to Section 106. In early January 2017, at the beginning of the public review period of the Draft SEIS/SEIR, VTA provided copies of the Draft SEIS/SEIR, Volumes I and II; the Archaeological Resources Technical Report (ARTR); SBESR; Preliminary Finding of Effect (FOE); Draft Programmatic Agreement (PA); and Draft Archaeological Resources Treatment Plan (ARTP) to the City of San Jose's Historic Landmarks Commission (HLC), the City of Santa Clara's Historical & Landmarks Commission (HLC), and the South Bay Historical Railroad Society (SBHRS). Follow-up phone calls were made to these groups to confirm that the copies had been received. All recipients confirmed receipt of their packages. All three groups requested to be kept informed and to be included in ongoing consultation regarding historic resources. A presentation of the Project and anticipated effects on historic resources was provided to both the cities' HLCs. A representative of the SBHRS was invited to both presentations but did not attend. The HLCs had the opportunity to ask questions about the Project and anticipated effects.

VTA and FTA will continue to consult with SHPO and local historical agencies and organizations, as necessary, throughout the duration of the project.

Chapter 4
Description of Historic Properties

4.1 Historic Properties within the Architectural Area of Potential Effects

The architectural APE includes a total of 32 historic-period built environment resources that are historic properties or are considered to be historic properties for this Project under Section 106 of the NHPA. This FOE evaluates impacts to those 32 historic properties, which are listed in **Table 4-1** through **Table 4-3** and are summarized as follows:

- 12 properties listed in the National Register, whose eligibility was confirmed by SHPO during consultation for the 2003 HRER prepared for the VTA's BART Silicon Valley Program;
- 14 properties previously determined eligible for the National Register, whose eligibility was confirmed by SHPO during consultation for the 2003 HRER prepared for the VTA's BART Silicon Valley Program;
- 1 property previously determined eligible for the National Register by consensus through the Section 106 process;
- 2 properties determined eligible for the National Register as part of the 2016 SBESR prepared for the Phase II Project; SHPO concurred with the eligibility of these historic properties in October 2016, and;
- 3 properties that FTA assumes eligible for the National Register for the purposes of this Project.

Twenty-seven of the 32 historic properties summarized above were identified as listed in or determined eligible for the National Register through previous surveys, federal agency and Office of Historic Preservation (OHP) determinations, and/or National Register nominations. Of the 27, ten are listed in the National Register as contributors to a National Register-listed historic district (the Downtown San Jose Commercial District) but are not individually eligible for the National Register. These 27 historic properties are listed in **Table 4-1** below. Two of the 32 historic properties (Map Reference E-27 and Map Reference F-22) were determined eligible for the National Register as part of the 2016 SBESR (**Table 4-2**). The remaining three properties, listed in **Table 4-3**, are considered eligible for the National Register for the purposes of this Project only. The below tables are arranged by the map reference number assigned to each property and shown in Map 3 (Appendix A).

Table 4-1. Properties Previously Listed in or Determined Eligible for the National Register of Historic Places and California Register of Historical Resources:

Map Reference	APN	Street Address	Year Built	NR Status Code	Date of Determination or listing
C-25	467-08-007 467-08-009 467-08-014	1375-1401 East Santa Clara Street	1916-60	2S2	6/9/2003
C-26	467-10-043	1191 East Santa Clara Street	1949	2S2	6/9/2003
C-27	467-10-046	1169 (1167) East Santa Clara Street	1888	2S2	6/9/2003
D-03	467-57-082	227-247 East Santa Clara Street	1928	2S2 2S3	2/6/2006
E-08*	467-23-035	142-150 East Santa Clara Street	1913	1D	1/1/1983
E-09*	467-23-036	138 East Santa Clara Street	1905	1D	1/1/1983
E-10*	467-23-038	124-126 East Santa Clara Street	1900	1D	1/1/1983
E-11*	467-23-039	114-118 East Santa Clara Street	1920	1D	1/1/1983
E-12*	467-23-089	100 East Santa Clara Street	1912	1D	1/1/1983
E-13*	467-22-149	96 East Santa Clara Street[12]	ca. 1883	1D	1/1/1983
E-14*	467-22-148	52 East Santa Clara Street	1900	1D	1/1/1983
E-15	467-21-028	19 East 2nd Street	1925	2S2	1/1/1981
E-18*	467-22-041 467-22-042	42-48 East Santa Clara Street	1930s	1D	1/1/1983
E-19*	467-22-158	36-40 East Santa Clara Street	1869	1D	1/1/1983

[12] This property is also known as 82 East Santa Clara Street.

Map Reference	APN	Street Address	Year Built	NR Status Code	Date of Determination or listing
E-20	467-54-001 through 467-54-034	22 North 1st Street[13]	1926	2S2	8/3/1981
E-21*	467-62-001 467-62-007 through 467-62-020	8-14 South 1st Street	1926	1D	1/1/1983
E-22	259-40-038	34 West Santa Clara Street	ca. 1880 1910s 1920s	2S2	6/9/2003
E-23	259-34-018	81 W. Santa Clara Street	1926	2S2	6/9/2003
E-24	259-34-046	101 West Santa Clara Street	1942	2S2	6/9/2003
E-25	259-38-128	374 West Santa Clara Street	1934	2D2	5/29/1990
E-35[14]	259-35-05	151-155 West Santa Clara Street	ca. 1884 1930 ca. 1970	2S2	2/6/2006
E-36	259-35-035	161-167 West Santa Clara Street	1883	2S	6/4/1996
F-13	261-34-020	Cahill Station and Santa Clara / Alameda Underpass	1935	1D	4/1/1993
F-14	261-33-020	848 The Alameda	ca. 1884	2S	6/9/2003
F-15	261-01-074	176 North Morrison Avenue	ca. 1898	2S2	6/9/2003
I-01	230-06-031 230-06-032 230-06-050 230-06-051	1 Railroad Avenue (Santa Clara Station)	1863-64 1877	1S	2/28/1985
I-02	230-06-040	Benton And Railroad (Santa Clara Tower, Speeder Shed, & Tool House)	1904 1927	2S2 2D	6/9/2003

* Eligible as a contributor to the San Jose Downtown Commercial District, which was listed in the National Register of Historic Places in 1983.

[13] This property is also known as 28 North First Street.

[14] The legal parcel documented on this form includes three buildings; however only the Farmers Union Building at 151-155 West Santa Clara Street is eligible for listing in the National Register and California Register.

Table 4-2. Properties Determined Eligible for Listing in the National Register of Historic Places and California Register of Historical Resources as Part of the 2016 SBESR:

Map Reference	APN	Street Address	Year Built	NR Status Code
E-27	467-20-078	30 North 3rd Street	ca. 1903	2S2
F-22	261-01-063	179-181 Rhodes Court	1948	2S2

Table 4-3. Properties that are Assumed Eligible for Listing in the National Register of Historic Places as Part of this Project:

Map Reference	APN	Street Address	Year Built	NR Status Code
E-33	261-33-047	734 The Alameda	1930	2*
F-34	261-33-048	88 Bush Street	ca. 1915-1947	2*
F-35	261-010-068	865 The Alameda	1930	n/a**

*Previously determined eligible (prior to a residential conversion project); assumed remains eligible for listing in the National Register for the purposes of this Project.
**Assumed eligible for listing in the National Register for the purposes of this Project.

4.2 Description of Historic Properties

The 32 historic properties within the architectural APE that are listed in the National Register, determined eligible for listing in the National Register, or are considered eligible for the National Register for the purposes of this Project are described below. All properties are located in or around downtown San Jose and in Santa Clara. The historic properties are generally arranged by map reference number. The contributing buildings within the San Jose Downtown Commercial District, a National Register-listed historic district (Section 4.2.5), are described as a group, as are the multiple-resource properties referred to as the Cahill Station (Southern Pacific Depot) and the Santa Clara Depot complex (Sections 4.2.15 and 4.2.22, respectively). Each section below outlines the significance of the property or district and the characteristics that contribute to that significance.

4.2.1 1375-1401 East Santa Clara Street (Map Reference C-25)

The Five Wounds Portuguese National Church, hereafter referred to as Church of the Five Wounds, at 1375-1401 East Santa Clara Street was determined eligible for listing

in the National Register under Criteria A and C.[15] Built between 1916 and 1919 by members of the local Portuguese community, the two-story church replaced a smaller chapel erected in 1914 at the same site by the congregation of the Five Wounds Portuguese National Church. Architect John J. Foley designed the Church of the Five Wounds in the Portuguese Baroque Revival style, based upon the Holy Cross Church in Braga, Portugal. The church, sheathed in stucco, is the largest building on the site and the focal point of an ecclesiastical complex that now includes a rectory, convent, and school. Architectural Historian Ward Hill described the church as follows:

> The church has a cruciform plan composed of high gabled wings projecting to the front (nave), rear (chancel-apse), and sides (transepts). The nave is five bays long; the chancel-apse, three bays long; the transepts, two bays long. Low shed-roofed extensions containing side aisles and shrines flank the front and rear wings. Doric pilasters at each corner of the building rise to the height of the frieze, which is demarcated by cornice moldings that also limn the four gables. Narrower pilasters articulate window bays on each wing. Each gable has a cross finial, and each side and rear gable has a louvered round attic vent. The Church contains approximately 50 stained glass windows of varying shapes and sizes. The building's overall composition and Renaissance-Baroque ornament are derived from a common Catholic church type dating back to St. Peter's Basilica in Rome.
>
> The symmetrical front of the church consists of two square bell towers flanking a gabled central section incorporating a tripartite entry and a round-arched organ-loft window…The entry contains three doorways with paneled wood double doors with transoms. Four fluted Doric pilasters (half-columns) and a Doric cornice enframe the entry. This pseudo-peristyle is surmounted by four flat and fluted Ionic pilasters with a denticulated cornice incorporating a central arch for the loft window – a Palladian composition…The shed-roofed sections along the sides of the church are lined with stepped-arch windows (a total of 14) echoed by smaller clerestory windows (a total of 12) beneath the frieze. Each transept contains two quatrefoil and four clerestory windows on the sides and a single large quatrefoil window on the end…The exterior appears to be intact except for addition of metal railing to the front stairs, a ramp at the east transept doorway, and a tile-roofed open porch at the west transept doorway.[16]

[15] Ward Hill, DPR 523 Form for the Church of the Five Wounds, 1375-1401 East Santa Clara Street, prepared for Basin Research Associates, Inc., "Historic Properties Survey Report for the VTA Santa Clara/Alum Rock Light Rail Project," June 2002; Dr. Knox Mellon, State Historic Preservation Officer, Letter to Leslie T. Rogers, Federal Transportation Administration, Region IX, re: Silicon Valley Transit Corridor Project, (FTA030325A), June 9, 2003.
[16] Hill, DPR 523 Form for the Church of the Five Wounds.

Hill described three other buildings on the parcel as well, all sheathed in stucco. The rectory, built in 1949-1950, is a two-story, U-plan building topped by a hipped roof, with a one-story gabled office wing and hip-roof garage attached on the west side. The one-story convent, built in 1957-1958, served as a pre-school and day care facility. The congregation also constructed a school in 1958, a one-story rectangular building with a low pitch gable roof, which Hill described as being "essentially joined" to the convent building. The previous survey stated that the church, rectory, convent, and school buildings appear to retain much of their historic integrity to the time of their respective construction dates, having undergone few alterations in the intervening years.

The Five Wounds Church building (**Photograph 4-1)** meets Criterion C as a "major architectural monument in East San Jose," an "exceptional church design in San Jose," and "probably the only Portuguese Baroque Revival Church in the Bay Area."[17] Furthermore, because of the church's importance as a "central institution in the history of San Jose's Portuguese community," Hill contended that the church and associated rectory appear to meet Criterion A for listing in the National Register, and that these two buildings also meet National Register Criteria Consideration A for religious properties. Criteria Consideration A provides that a religious property may be eligible "if it derives its primary significance from architectural or artistic distinction or historical importance."[18] The evaluation of the church and rectory do not specifically identify the way in which these buildings meet the criteria consideration; however, it does state that they are "consistent" with the consideration. This finding of effect document assumes that the buildings meet the consideration for their association with the Portuguese community and for the architectural design of the church.

Photograph 4-1: Church of the Five Wounds (1375-1401 East Santa Clara Street).

[17] Hill, DPR 523 Form for the Church of the Five Wounds.

[18] U.S. Department of the Interior, National Park Service, "How to Apply the National Register Criteria for Evaluation," *National Register Bulletin* 15: 26.

At the time of this property's eligibility determination in 2003, the convent and school buildings were less than 50 years old and did not appear to meet the criteria in 2002; however, Hill stated that they "may become eligible … when [they are] over 50 years old." [19] The congregation demolished the convent in 2015 for the construction of a new school building. Therefore, for the purpose of this effects analysis, the school building, which is now over 50 years of age, is assumed eligible for the National Register under Criterion A. The period of significance for the church and the rectory in the 2003 determination was identified as 1918-50; however, with the addition of the school, for this FOE the period has been extended to 1958 when that building was completed. The character-defining features of the property include its Baroque Revival ornamentation, stained glass windows, and two square bell towers. The historic property boundary is its legal parcel. In addition, this property is a City of San Jose landmark.[20]

See Section 5.3.1 for the application of the Criteria of Adverse Effect [36 CFR 800.5(a)] to the Five Wounds Church at 1375-1401 East Santa Clara Street.

4.2.2 1191 East Santa Clara Street (Map Reference C-26)

Constructed in 1949, the Mayfair Theater Building at 1191 East Santa Clara Street is currently used as a church. Despite this change in function, the building retains much of its integrity and was determined eligible for the National Register in 2003.[21] Designed by well-known Northern California theater architect Otto Deichman of San Francisco and built by contractor and engineer Aldo P. Savio, the one-story building was constructed in the Moderne style. The character-defining features of the theater, all part of its façade, are the marquee, ticket booth and corner tower. The marquee (**Photograph 4-2**) is triangular with neon stars and stripes, and cantilevered over the sidewalk. A molded, neon-accented plaster bracket at the façade surmounts the marquee. The octagonal ticket booth, centrally located in the recessed foyer, sits on a flagstone and glass block base, with a wrap-around glass top and an aluminum-faced canopy. The round tower is the most visually prominent aspect of the building. Located on the southeast corner of the building, this futuristic tower has "a flagstone and glass block base, a stucco-clad shaft, and a metal finial outlined with neon tubing. The

[19] Hill also evaluated three buildings adjacent to the Church of the Five Wounds on the east that were constructed by the *Irmandade do Espirito Santo do Lestse de San Jose* (IES), a Holy Ghost society. Hill asserted that none of these buildings appeared to retain sufficient integrity to qualify for listing in the National Register. (Hill, DPR 523 Form for the Church of the Five Wounds.)

[20] The Church of the Five Wounds was designated City Landmark, File #HL 92-63 by the San Jose City Council in 1992, under the theme of Social, Arts, and Recreation (San Jose City Council, "List of City Landmarks and City Historic Districts Designated by the City Council," ca. 2002.

[21] Ward Hill, DPR 523 Form for 1191 East Santa Clara Street, prepared for Basin Research Associates, "Historic Properties Survey Report for the VTA Santa Clara/Alum Rock Light Rail Project," June 2002. SHPO concurred that this resource was eligible for its architectural significance under Criterion C of the National Register, not for its association with historical events or trends (Dr. Knox Mellon, SHPO, to Leslie Rogers, FTA, re: Silicon Valley Rapid Transit Corridor Project, [FTA030325A], June 9, 2003).

cylindrical shaft steps up to a smaller metal cylinder capped with five saucer-like elements stacked one atop the other, culminating in a tiny sphere and spire. The imagery is evocative of rocket ships and flying saucers, which were subjects of public fascination when the theater was built."[22]

The theater building is eligible for listing in the National Register under Criterion C as an exceptional Moderne style building in San Jose, and as a "rare intact example of a pre-1950 neighborhood movie theater, many of which have been demolished or extensively remodeled in recent years." The theater also appears to be eligible under Criterion A, because it is significant as a rare example of a neighborhood theater within San Jose, and thus associated with "themes of historical or cultural significance."[23] Its period of significance is 1949, its date of construction. The historic property boundary is its legal parcel.

Section 5.3.2 includes a discussion of the application of the Criteria of Adverse Effect [36 CFR 800.5(a)] to the Mayfair Theater building at 1191 East Santa Clara Street.

Photograph 4-2: The Mayfair Theater (1191 East Santa Clara Street).

[22] Hill, DPR 523 Form for 1191 East Santa Clara Street.

[23] Hill, DPR 523 Form for 1191 East Santa Clara Street; SHPO concurred that this resource was eligible for its architectural significance under Criterion C of the National Register, not for its association with historical events or trends (Dr. Knox Mellon, SHPO, to Leslie Rogers, FTA, re: Silicon Valley Rapid Transit Corridor Project, [FTA030325A], June 9, 2003)

4.2.3 1169 East Santa Clara Street (Map Reference C-27)

The residence at 1169 East Santa Clara Street was determined eligible for listing in the National Register in 2003. The two-story Queen Anne residence (**Photograph 4-3**) has a roughly rectangular footprint topped by an irregular roof plan. Constructed by retired physician Benjamin F. Allen, the building features walls clad in channel-rustic siding with corner boards and a water table. A high pyramidal roof tops the central, main portion of the building, which also features an angled corner at the façade. Subsidiary gables appear over two-story bays projecting at the front and sides, and a hipped roof tops a single-story rear extension. A hipped and gabled porch shelters the recessed main entry. Fenestration consists of tall rectangular, double-hung windows, fixed-pane windows, and twenty-light pane windows, all simply framed. Its character-defining elements include milled wood ornaments at the porch, bands of shingles at the second story spandrel and frieze level, fish-scale shingles beneath the gables, and large curved brackets with pendants. The residence meets Criterion C for its Queen Anne architectural style. It retains its original ornamental details, virtually all of its original windows, and has had very few exterior alterations.[24] Its period of significance is 1888, its construction date. The historic property boundary is its legal parcel.

Section 5.3.3 includes a discussion of the application of the Criteria of Adverse Effect [36 CFR 800.5(a)] to the residence at 1169 East Santa Clara Street.

Photograph 4-3: Residence at 1169 East Santa Clara Street.

[24] Ward Hill, DPR 523 Form for 1169 East Santa Clara Street, prepared for Basin Research Associates, Inc., "Historic Properties Survey Report for the VTA Santa Clara/Alum Rock Light Rail Project," June 2002. SHPO concurred that this resource was eligible for the National Register only under Criterion C (Dr. Knox Mellon, SHPO, to Leslie Rogers, FTA, re: Silicon Valley Rapid Transit Corridor Project, [FTA030325A], June 9, 2003).

4.2.4 227-247 East Santa Clara Street (Map Reference D-03)

The Vintage Towers building at 227-247 East Santa Clara Street (also known as the Medico Dental Building) was determined eligible for listing in the National Register in 1986 under Criteria A and C [25] and in 2006.[26] The historic property boundary is its legal parcel. The building, one of San Jose's first four skyscrapers, was designed by architect William Weeks. A group of doctors and dentists financed the construction in 1928, seeking to apply merchandizing and convenience marketing concepts to medical services by constructing the first "one-stop" medical facility in the Bay Area. The building served as San Jose's central medical facility until the 1960s, by which time most of the original tenants had retired, and the building was sold.

Weeks designed the Vintage Towers building, shown in **Photograph 4-4**, in the Art Deco style, incorporating Spanish Colonial Revival ornamental elements throughout the exterior and interior of the building. The reinforced-concrete building is eleven stories tall, with strong vertical elements. The character-defining features include the ornamentation on the first floor, which is sheathed in terra cotta and features elaborate Spanish Colonial details, much of which centers around the main entrance. A series of vertically articulated concrete piers set symmetrically around a central element rise ten stories above the ground floor, with fenestration and spandrels recessed between the piers, accentuating the vertical nature of the building. Terra cotta torches and shields appear on the roof crest of the tallest, central tower, which also features a ten-foot winged figure, made of terra cotta and cast stone sections, at its center. [27]

In the 1986 Historic Preservation Certification Application, the Vintage Towers building was described as the "best example of a modernistic high rise building in the Santa Clara Valley," exhibiting "the change in form from Classical tall buildings to those of soaring height with unbroken lines, forerunners of the modern skyscraper." Maryln Bourne Lortie, a historian for OHP who commented upon the application, agreed that

[25] Neither the CHRIS Northwest Information Center at Sonoma State University nor OHP had a National Register Inventory-Nomination Form for this property at the time of inquiry. OHP issued a determination of eligibility, National Register status code "2," in 1986. The Northwest Information Center has parts 1 and 2 of a "Historic Preservation Certification Application," dating to 1986, on file for this building (Office of Historic Preservation. *California Historic Properties Directory Listing (Santa Clara County)*. April 25, 2002; and "State Review Sheet, Historic Preservation Certification Application, Vintage Tower, 235-241 Santa Clara Street, San Jose, California," January 8, 1986, CHRIS Northwest Information Center, Sonoma State University).

[26] Office of Historic Preservation. *California Historic Properties Directory Listing (Santa Clara County)*. April 5, 2012. In 1986, the San Jose City Council designated the building as a City Landmark, File Number HL 86-39, under the theme of Government and Public Services (City of San Jose Historic Landmark File for Vintage Towers / Medico-Dental Building, City of San Jose Planning Department).

[27] "State Review Sheet, Historic Preservation Certification Application – Part 1, Vintage Tower, 235-241 Santa Clara Street, San Jose, California," January 8, 1986, CHRIS Northwest Information Center, Sonoma State University; and Basin Research Associates, Inc., Ward Hill, Glory Anne Laffey, and Charlene Duval, "Cultural Resources Assessment, Civic Plaza Redevelopment Plan Area Between Third to Seventh Streets and East St. John to East San Fernando Streets, City of San Jose, Santa Clara County, California," prepared for David J. Powers & Associates, November 1998.

the building appeared eligible under Criterion C. Lortie also suggested that the building may be eligible under Criterion A for its association with "the development of medical service delivery as it is the first 'medical-dental' building in San Jose, concentrating medical offices in one location. It may also reflect a growth in medical specialty practice."[28]

Section 5.3.4 includes a discussion of the application of the Criteria of Adverse Effect [36 CFR 800.5(a)] to the historic property at 227-248 East Santa Clara Street.

Photograph 4-4: Vintage Towers (Medico Dental Building) at 227-247 East Santa Clara Street.

4.2.5 San Jose Downtown Commercial District Map References E-08 through E14, E-18, E-19, and E-21)

The San Jose Downtown Commercial District was listed in the National Register as a historic district in 1983, at the local level of significance.[29] The nomination described the district as "unique in its broad representation of historic California commercial

[28] "State Review Sheet, Historic Preservation Certification Application, Vintage Tower, 235-241 Santa Clara Street, San Jose, California," January 8, 1986, CHRIS Northwest Information Center, Sonoma State University.

[29] Bonnie Bamburg, "National Register of Historic Places Inventory-Nomination Form for the San Jose Downtown Commercial District," August 1980; and Office of Historic Preservation. *California Historic Properties Directory Listing (Santa Clara County)*. April 25, 2002.

architecture, unsurpassed in Santa Clara County," and as representing "the remaining vestages [sic] of late nineteenth and early twentieth century commercial structures in the downtown." The district includes buildings of a wide range of architectural styles, dating from the 1870s through the 1920s. These buildings reflect various periods of San Jose's development as an emerging commercial center, a prosperous regional city, and as a modern urban hub and included the area's first skyscrapers. The district encompasses roughly two city blocks (over 11 acres) within the City of San Jose, bound on the north by East Santa Clara Street, on the south by East San Fernando Street, on the east by South 3rd Street, and on the west by South 1st Street. Ten of the 28 contributing elements of the district are within the architectural APE. These properties are listed in **Table 4-4**, below, arranged by the map reference number assigned to each property and shown on Sheet E of Map 3 (Appendix A).[30] For the individual contributors, their historic property boundaries are each legal parcel.

Table 4-4: Contributors of the San Jose Downtown Commercial District Located within the APE.

Map Reference	Street	Street #	APN	Year Built
E-08	E. Santa Clara Street	142-150*	467-23-035	1913
E-09	E. Santa Clara Street	138	467-23-036	1905
E-10	E. Santa Clara Street	124-126	467-23-038	1900
E-11	E. Santa Clara Street	114-118	467-23-039	1920
E-12	E. Santa Clara Street	100	467-23-089	1912
E-13	E. Santa Clara Street	96	467-22-149	ca. 1883
E-14	E. Santa Clara Street	52*	467-22-046	1900
E-18	E. Santa Clara Street	42-48	467-22-041 467-22-042	1930s
E-19	E. Santa Clara Street	36-40	467-22-158	1869
E-21	S. 1st Street	8-14*	467-62-001 467-62-007 through 467-962-020 (formerly 467-22-097)	1926
*City of San Jose Landmark[31]				

There has been some confusion over the past two decades regarding the status of one of these thirteen buildings, the building at 36-40 East Santa Clara Street (Map

[30] JRP, "Technical Memorandum – Historic Resources Evaluation Report for SVRTC EIS/EIR Alternatives," (Draft), January 2003.

[31] Four of these 10 properties were also designated City Landmarks by the San Jose City Council. The State Meat Market, at 142-150 Santa Clara Street (Map Reference E-08), was designated City Landmark File #HL 92-70 in 1992, under the theme of Commerce. The Odd Fellows Building, at 96 (82) East Santa Clara Street (Map Reference E-13), was designated City Landmark File #HL 80-12 in 1980, under the theme of Social, Arts and Recreation. The New Century Block, at 52 East Santa Clara Street (Map Reference E-14), was designated City Landmark File #HL 80-15 in 1980, under the theme of Commerce. The Bank of Italy, at 8-14 South 1st Street (Map Reference E-21), was designated City Landmark File #HS 84-27, under the theme of Commerce. (San Jose City Council, "List of City Landmarks and City Historic Districts Designated by the City Council," ca. 2002.)

Reference E-19, shown in **Photograph 4-5**). The Inventory-Nomination Form for the district included this address on a list of *non-contributing* structures and sites. However, the map reference number given to this property on that list, "3," is shown on the accompanying graphic as the adjacent parcel at 32 East Santa Clara Street. This map itself depicted the parcel at 36-40 East Santa Clara as a *contributing* structure, with a map reference number of "4." Possibly because of this confusion within the Inventory-Nomination Form itself, the building was assigned a National Register status code of "6" (not eligible for the National Register or of local interest) on the CHRIS list.

An inventory and evaluation of this building conducted in January 2002 concluded that new information suggested that the building appeared to be eligible for the National Register as a contributing structure to the San Jose Downtown Commercial District, for its "early association with the commercial development of the downtown, and as one of the few remaining commercial structures in the area from the circa 1870 time period."[32] For the purposes of the current Project, it has been assumed that the original intent of the nomination form was to include the building at 36-40 East Santa Clara Street as a contributing structure, and that the building would, at a minimum, appear to be eligible based on the 2002 evaluation.

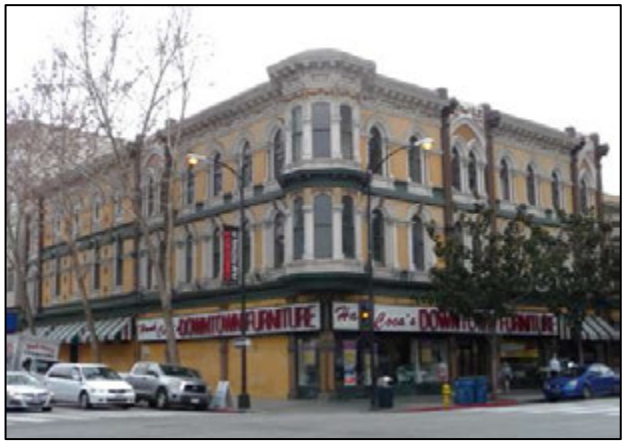
Photograph 4-5: Contributors to the San Jose Commercial Historic District, 36-40 East Santa Clara Street and 28 East Santa Clara Street. The unlabeled building in-between is a noncontributory.

The San Jose Downtown Commercial District's Inventory-Nomination Form emphasized that the San Jose downtown commercial area has served as a financial and mercantile hub of the Santa Clara Valley for more than one hundred years. The buildings are arranged along the street pattern of downtown San Jose, which has remained virtually

[32] Franklin Maggi, DPR 523 Form for 36-40 East Santa Clara Street, prepared for Dill Design Group, "Historic Resources Assessment for the Mixed-Use Project and Expansion of the Century Center Redevelopment Plan Area EIR, for Michael Brandman and Associates," January 2002.

unchanged since initial surveys in the late 1840s. The nomination cited the three-story Italianate Odd Fellows Building at 96 East Santa Clara Street (Map Reference E-13, also known as 82 East Santa Clara Street and shown in **Photograph 4-6**) as the "best remaining example of downtown commercial architecture" of the 1870s and 1880s period. The heavily ornamented facades of these buildings, including classical cornices, pediments and even a domed turret, appear along the East Santa Clara Street and South 1st Street sides of the district, and are the major character-defining elements of the district.

By the 1880s, downtown commercial activity centered along East Santa Clara and South 1st Streets, supported by the construction of single and double tracked horse-drawn railway systems along both of these streets. Romanesque architecture dominated South 1st Street during this period. New styles such as Edwardian architecture began to dominate commercial architecture by the twentieth century, featuring cleaner lines than the elaborate Victorian, Romanesque and Italianate styles of the nineteenth century.



Photographs 4-6 and 4-7: Odd Fellows Building (96 East Santa Clara Street, shown left) and commercial building at 52 East Santa Clara Street (right).

The nomination for the district cited the Bank of America building at 8-14 South 1st Street[33] (Map Reference E-21, **Photograph 4-8**) as a dominant contributor at the intersection of East Santa Clara and South 1st Streets. Built in 1926 and designed by H. A. Minton, this thirteen-story-plus-tower building was San Jose's first skyscraper and one of the first earthquake-proof buildings in the area. The nomination also noted the Moderne Drug Company building at 50 East Santa Clara Street (what is now 42-48 East Santa Clara Street, Map Reference E-18) for its streamlined design and its 1930s reflection of the "machine age." The nomination concluded:

> The historic downtown commercial district remains…the highest concentration of older buildings in the downtown which reflect the best

[33] This property is also known as 12 South 1st Street.

examples of architecture from almost every period in the growth of the 'American City.'... Because the structures included within the district represent a variety of architectural styles found nowhere else within the county, and because of the historical significance of the development of the commercial core of San Jose as can be seen in their various styles, the district deserves to be included on the National Register of Historic Places.[34]

Section 5.3.5 includes a discussion of the application of the Criteria of Adverse Effect [36 CFR 800.5(a)] to the San Jose Downtown Commercial District.

Photograph 4-8: The Bank of America building at 8-14 South 1st Street.

4.2.6 19 North 2nd Street (Map Reference E-15)

The Realty Building, located at 19 North 2nd Street, was determined individually eligible for the National Register in 1981, and is also a City of San Jose Landmark.[35] The two-

[34] Bamburg, "National Register of Historic Places Inventory-Nomination Form for the San Jose Downtown Commercial District," August 1980.

[35] Office of Historic Preservation. *California Historic Properties Directory Listing (Santa Clara County)*. April 25, 2002. The Realty Building was also designated City Landmark File #HL01-136 by the San Jose City Council in 2001, under the theme of Commerce (San Jose City Council, "List of City Landmarks and City Historic Districts Designated by the City Council," ca. 2002).

story, concrete commercial office building designed by architects Wolfe and Higgins and constructed in 1925, has been home to several realty offices, as well as local surveyors McMillan & McMillan, architect W.E. Higgins, and the Wright-Eley Printing Company.

Four storefront bays (two of which are shown in **Photograph 4-9**) dominate the façade. The bays, framed by pilasters with beaded corners and leafed capitals, are arranged around a central recessed entry. The pilasters rise to a multi-layered cornice, including a frieze with a leaf design framing the building name and a dentil course with egg-and-dart molding under the cornice. Above this ledger is a row of sculpted objects in an alternating pattern."[36] The storefronts themselves consist of wood-frame picture windows with multi-paned transoms. Tile trim and marble panels appear under each picture window. Fenestration on the second floor includes Chicago windows (a commercial window type consisting of a large central fixed pane flanked on each side by narrow operable windows). The main entry is recessed and consists of double glass doors under a round arched fixed transom. A short balconette with a cast-iron rail appears over this doorway. The building appears to retain a high degree of integrity to the time of its construction, and the ornate detailing and fenestration of the façade are its character-defining features.[37]

Photograph 4-9: Detail of west side of the Realty Building's main façade (19 North 2nd Street).

The building is significant for its architecture, under Criterion C, with a period of significance of 1925, its construction date. The historic property boundary is its legal

[36] Franklin Maggi, DPR 523 Form for 19 North 2nd Street, prepared for the Dill Design Group, "San Jose Downtown Historic Survey, for the City of San Jose," August 2000.

[37] At the time that a "Request for Determination of Eligibility For Inclusion in the National Register of Historic Places" was written for this building, it was described as having "no apparent exterior alterations," while in 2000, Franklin Maggi noted that the building was restored in 1984, and thus "is in excellent condition." ("Request for Determination of Eligibility for Inclusion in the National Register of Historic Places," CHRIS Northwest Information Center, Sonoma State University; and Maggi, DPR 523 Form for 19 North 2nd Street.)

parcel. In addition, a circa 1981 "Historic Resources Survey Sheet" stated that the Realty Building "is eligible as a contributing structure within an historic district in the downtown commercial center" (probably the San Jose Downtown Commercial District discussed above in Section 4.2.5). Franklin Maggi also supported this conclusion in his 2000 inventory and evaluation of the building, stating that the Realty Building appeared "to be eligible under Criterion C as a work of high artistic value and under Criterion A as associated with the larger Downtown Commercial District located nearly [sic] south of East Santa Clara Street."[38]

Section 5.3.6 includes a discussion of the application of the Criteria of Adverse Effect [36 CFR 800.5(a)] to this historic property.

4.2.7 22 North 1st Street (Map Reference E-20)

The ten-story steel reinforced-concrete building (known as the Commercial Building) at 22 North 1st Street (also listed as 28 North 1st Street and shown in **Photograph 4-10**), built in 1926, was determined individually eligible for listing in the National Register in 1981, and is a City of San Jose Landmark.[39] In August 2000, the building was re-evaluated and that survey concluded that the Commercial Building appears to contribute to the San Jose Downtown Commercial District (discussed above in Section 4.2.5) under National Register Criteria A and C."[40]

The Commercial Building's name stems from the company that both initiated its construction and occupied its top two floors until the 1940s, the Commercial Club of Santa Clara County. The other floors housed offices and stores, functions that continue today. Designed by architects William Binder and Ernest Curtis, the building is a three part commercial block with classical details, a form common to urban center construction of the first quarter of the twentieth century.[41] The "Request for Determination of Eligibility for Inclusion in the National Register of Historic Places" regarding the Commercial Building stated that the building is "one of San Jose's more notable structures," largely for its three-part design and Classical ornamentation that

[38]The National Register status code of "2S2" was assigned to the building in 1981 and is documented by a "Historic Resources Inventory Sheet" and "Request for Determination of Eligibility for Inclusion in the National Register of Historic Places," on file with the CHRIS Northwest Information Center, Sonoma State University [Historic Resources Survey Sheet, 19 North 2nd Street (Realty Building), ca. 1981, CHRIS Northwest Information Center, Sonoma State University; and Maggi, DPR 523 Form for 19 North 2nd Street].

[39] Office of Historic Preservation. *California Historic Properties Directory Listing (Santa Clara County)*. April 25, 2002. The Commercial Building at 22 North 1st Street was also designated City Landmark, File #HL01-140 by the San Jose City Council in 2001, under the theme of Commerce (San Jose City Council, "List of City Landmarks and City Historic Districts Designated by the City Council," ca. 2002).

[40] Franklin Maggi, DPR 523 Form for 22 North 1st Street, prepared for Dill Design Group, "San Jose Downtown Historic Survey, for the City of San Jose," August 2000.

[41] Maggi, DPR 523 Form for 22 North 1st Street.

includes dentilated cornices, modillions, and symmetrical fenestration. These features appear to be the character-defining elements of the building.[42]

Photograph 4-10: The Commercial Building (22 North 1st Street).

The Commercial Building is significant for its architectural merit (Criterion C) and for its historical associations with downtown San Jose (Criterion A), despite modifications made to the ground floor. The Commercial Building retains enough integrity to convey its significance as one of San Jose's earliest skyscrapers, and one of the first skyscrapers of reinforced steel construction. The building is also an example of the work of the significant local architectural firm of Binder and Curtis and is associated with the history of economic growth in downtown San Jose during the 1920s. Franklin Maggi's 2000 evaluation of the building asserted that the Commercial Building appears

[42] "Historic Resources Inventory Sheet," and "Request for Determination of Eligibility for Inclusion in the National Register of Historic Places" for the Commercial Building, 22 North 1st Street, Northwest Information Center, Sonoma State University.

to contribute to the San Jose Downtown Commercial District under both Criteria A and C.[43] The historic property boundary is its legal parcel.

Section 5.3.7 includes a discussion of the application of the Criteria of Adverse Effect [36 CFR 800.5(a)] to this historic property.

4.2.8 34 West Santa Clara Street (Map Reference E-22)

The two-story brick commercial building at 34 West Santa Clara Street was determined individually eligible for the National Register under Criteria A and C in 2003, and is a City of San Jose Landmark.[44] This building (**Photograph 4-11**) appears to be significant architecturally, as an early twentieth century commercial building (Criterion C), and for its association with James A. Clayton and Company (Criterion A), an influential local real estate and development firm established in San Jose in 1867. James A. Clayton and Company had their offices here for nearly one hundred years between the 1870s and 1970s. The company handled many of the real estate transactions in San Jose during the last half of the nineteenth century, and was one of the first companies of its kind in Santa Clara County. The identified period of significance extends from the buildings construction around 1880 to 1952, and the historic property boundary is its legal parcel.

Photograph 4-11: The James Clayton Building (34 West Santa Clara Street).

[43] Maggi, DPR 523 Form for 22 North 1st Street; and "Historic Resources Inventory Sheet," and a "Request for Determination of Eligibility for Inclusion in the National Register of Historic Places" for the Commercial Building, 22 North 1st Street, Northwest Information Center, Sonoma State University.

[44] Glory Anne Laffey, Historic Resources Inventory Form for 34 West Santa Clara Street, prepared for Archives and Architecture, "Un-reinforced Masonry Survey," 1991. Prior to Laffey's survey, in 1990, the City of San Jose designated this building a City Historic Landmark (File #88-45), under the theme of Commerce (San Jose City Council, "List of City Landmarks and City Historic Districts Designated by the City Council," ca. 2002).

The two-part commercial block building, constructed around 1880, has a double storefront with plate glass windows over a marble lower wall. Both entrances to the building are recessed. Above the storefront windows and extending the width of the building is a leaded glass clerestory, with three hopper sashes. A marble sign engraved with the building name appears above the clerestory, while a cartouche inscribed with the year 1867, the year the Clayton Company was founded, is located on the west side of the sign. The second floor contains three sets of Chicago windows (recessed fixed wood frame windows flanked by single light casements and fixed windows above). The façade ornamentation, including a dentilated cornice at the stringcourse and parapet roof, is the character-defining element of this building. The current appearance of the building is the result of many alterations over the course of its existence. By around 1915, the leaded glass clerestory was added to the western portion of the façade (34 West Santa Clara Street). In 1922, the façade was heavily altered, resulting in the building's current appearance.[45]

Although a previous evaluation concluded that this building appeared to be significant as a distinct example of a nineteenth century commercial building,[46] JRP's evaluation stated that the extensive remodeling of the building's façade changed its original nineteenth century design. The core of the building likely dates to the 1870s, but the building does not otherwise retain integrity of materials, workmanship, feeling, and association to that period. Nevertheless, as a 1920s building, it appears to be an important example of early twentieth century commercial construction (Criterion C), and retains integrity to convey that significance. This building also appears to be significant for its association with the influential real estate firm of James A. Clayton and Company (Criterion A). The alterations were made during the time of this company's association with the building and, therefore, these changes do not detract from its significance.[47]

Section 5.3.8 includes a discussion of the application of the Criteria of Adverse Effect [36 CFR 800.5(a)] to this historic property.

4.2.9 81 West Santa Clara Street (Map Reference E-23)

The San Jose Building and Loan building at 81 West Santa Clara Street was determined individually eligible for the National Register under Criterion C in 2003. Its period of significance is 1926, its construction date, and the historic property boundary

[45] Historic Building Permits for 34 West Santa Clara Street, Permit #577, on file at History San Jose, Kelly Park; and Toni Webb, DPR 523 Form for 34 West Santa Clara Street, prepared for JRP, "Technical Memorandum: Historical Resources Evaluation Report for SVRTC EIS/EIR Alternatives," Draft, January 2003.

[46] Laffey, Historic Resources Inventory Form for 34 West Santa Clara Street. JRP revisited the building because this previous survey was more than five years old.

[47] Webb, DPR 523 Form for 34 West Santa Clara Street.

is its legal parcel. The building is also a City of San Jose Landmark.[48] Dr. C.W. Breyfogle formed his building and loan company in 1885 and it was the first such business in the city. The San Jose Building and Loan Association ultimately financed the construction of hundreds, if not thousands of buildings in the City of San Jose. The company had this small but handsome Beaux-Arts concrete and steel frame bank building built in 1926 and it appears to retain integrity to that time. It has a square, symmetrical façade, as seen in **Photograph 4-12**, and consists of a tall single story. The building's façade is sheathed in concrete over brick, while the building's other exterior walls are exposed concrete. The character-defining features of the building consist of the prominent arched windows, elaborate cornice and parapet as well as other Beaux Arts ornamentation:

> The inset stone doorframe is highly ornate; it is carved with urns, acanthus, swags, and fruit motifs. Of particular note are the two buffalo nickels mirroring each other above the door. Above the door header, a tablet is flanked by two volutes and topped by a sculpted eagle.[49]

Photograph 4-12: San Jose Building and Loan (81 West Santa Clara Street).

This building embodies the distinctive characteristics of the Beaux Arts style and appears eligible under Criterion C. Popular for about fifty years between the 1880s and 1930, this architectural style employs eclectic classical design elements and is typified

[48] Franklin Maggi, DPR 523 Form for 81 West Santa Clara Street, prepared for Dill Design Group, "Historic Resources Assessment for the Mixed-Use Project and Expansion of the Century Center Redevelopment Plan Area EIR," January 2002. The building at 81 West Santa Clara Street was also designated City Landmark, File #HL 91-55 by the San Jose City Council in 1991, under the theme of Commerce (San Jose City Council, "List of City Landmarks and City Historic Districts Designated by the City Council," ca. 2002; and Toni Webb, DPR 523 Form Update, 81 West Santa Clara Street, prepared for JRP, "Technical Memorandum: Historical Resources Evaluation Report for SVRTC EIS/EIR Alternatives," Draft, January 2003). SHPO concurred that this resource was eligible for its architectural significance under Criterion C of the National Register, not for associations with historical events or trends (Dr. Knox Mellon, SHPO, to Leslie Rogers, FTA, re: Silicon Valley Rapid Transit Corridor Project, [FTA030325A], June 9, 2003).

[49] Maggi, DPR 523 Form for 81 West Santa Clara Street.

by its symmetrical façade, roof-line balustrade, cartouches, elaborate decorative details utilizing floral designs in swags and in highlighting the surrounds of arched windows. This property also appears eligible as one of the earliest designs of prominent San Francisco architect Albert F. Roller. A prolific, self-taught architect known as one of the first modernists in the region, Roller practiced for over fifty-five years, until his death in San Francisco at the age of ninety.

Section 5.3.9 includes a discussion of the application of the Criteria of Adverse Effect [36 CFR 800.5(a)] to this historic property.

4.2.10 101 West Santa Street (Map Reference E-24)

The bank building at 101 West Santa Clara Street (**Photograph 4-13**) was determined eligible for listing in the National Register in 2003. The building is significant under Criteria A and C, and is also a City of San Jose Landmark.[50] Ralph Wyckoff, a locally prominent architect, designed the two-story, concrete building in the Art Deco style. Built in 1942, the building has a flat roof and a façade dominated by two-story fluted pilasters rising from a marble base that separate large two-story metal-framed windows. The pilasters and prominent windows are the character-defining features of the building. The main entry, a set of aluminum framed glass doors recessed under a cantilevered concrete canopy, appears on the south side.[51]

Photograph 4-13: San Jose National Bank (101 West Santa Clara Street).

[50] Franklin Maggi, DPR 523 Form for 101 West Santa Clara Street, prepared for Dill Design Group, "San Jose Downtown Historic Survey, for the City of San Jose," August 2000. The San Jose National Bank was also designated City Landmark, File #HL01-132 by the San Jose City Council in 2001, under the theme of Commerce (San Jose City Council, "List of City Landmarks and City Historic Districts Designated by the City Council," ca. 2002).

[51] Maggi, DPR 523 Form for 101 West Santa Clara Street.

The original name of the banking group responsible for the construction of this building was Grower's Bank, established in the 1870s. In 1929, the bank became San Jose National, and then Anglo California National Bank, changing its name yet again in 1955 when it merged with Crocker First National Bank to become Crocker Anglo National Bank. Franklin Maggi argued that because of the long-time association of this banking group with downtown San Jose, and the fact that a bank has occupied the building at 101 West Santa Clara Street since its construction in 1942, the building is eligible for listing in the National Register under Criterion A. This evaluation also concluded that the "building retains a high degree of integrity with the Wyckoff design, and is a significant implementation of late Art Deco architecture," and therefore qualifies for listing under Criterion C.[52]

Section 5.3.10 includes a discussion of the application of the Criteria of Adverse Effect [36 CFR 800.5(a)] to this historic property.

4.2.11 374 West Santa Clara Street (Map Reference E-25)

The San Jose Water Works Building, located at 374 West Santa Clara Street, was determined eligible for listing in the National Register in 1990.[53] It is also a City of San Jose Landmark.[54] The San Jose Water Works Building is significant under Criterion A for its association with the oldest privately-owned water utility in California, an important aspect of development in the area. The property is also significant under Criterion C architecturally and as the work of a master. It is "an excellent example of a distinctive type of office building of its period" and illustrates "a melding of the Moderne, Spanish Colonial Revival and vestigial classicism in a distinctive manner that is characteristic of the period and region." The building was designed by master architect Ernest C. Curtis, of the firm of Curtis & Binder, who is "perhaps San Jose's leading architect between the 1920s and the 1950s."[55]

The building, shown in **Photograph 4-14**, was constructed in two phases in 1934 and 1940, both phases designed by Ernest N. Curtis. The two-story, rectangular building combines elements of the Moderne and Spanish Colonial Revival styles. It features

[52] Maggi, DPR 523 Form for 101 West Santa Clara Street; Dr. Knox Mellon, State Historic Preservation Officer, Letter to Leslie T. Rogers, Federal Transportation Administration, Region IX, re: Silicon Valley Transit Corridor Project, (FTA030325A), June 9, 2003.

[53] Office of Historic Preservation. *California Historic Properties Directory Listing (Santa Clara County)*. April 25, 2002; and Woodruff Minor, National Register of Historic Places Inventory-Nomination Form for the San Jose Water Works Building, prepared for Basin Research Associates, September 13, 1989, in the City of San Jose Historic Landmark File for the San Jose Water Works Building, City of San Jose Planning Department.

[54] The San Jose Water Works building was designated City Landmark, File #HL 91-57, by the San Jose City Council in 1991, under the theme of Resource Exploitation and Environmental Management (San Jose City Council, "List of City Landmarks and City Historic Districts Designated by the City Council," ca. 2002).

[55] Minor, National Register of Historic Places Inventory-Nomination Form for the San Jose Water Works Building (September 1989).

three sections, all two stories in height, including a central section with a flat roof concealed by a parapet, which is flanked by slightly higher hip roof wings clad in terra cotta tile. The exterior of the building retained a large degree of historic integrity at the time of the determination: steel-sash windows on both floors are flanked by fluted piers; a cast-stone Moderne frieze band of rondels and chevrons; and a sculptural pediment in the form of a ship's prow over the main entryway that retains its original glass-paneled wood doors, sidelights and transoms. Other ornamentation includes cast-iron tri-partite panels with a water-themed bas-relief pattern over some windows and wrought-iron grilles in curved and wavy patterns over other windows. The property includes an attached pump house and transformer house built in 1913, a breezeway and Data Processing Building constructed in 1984-85, and a detached concrete cistern dating from between about 1920 and 1940. The determination of eligibility listed in OHP's database does not indicate whether these buildings contribute to the property, however the city's landmark designation does include "subsequent building additions."[56] The historic property boundary is its legal parcel.

Section 5.3.11 includes a discussion of the application of the Criteria of Adverse Effect [36 CFR 800.5(a)] to this historic property.

Photograph 4-14: San Jose Water Works (374 West Santa Clara Street).

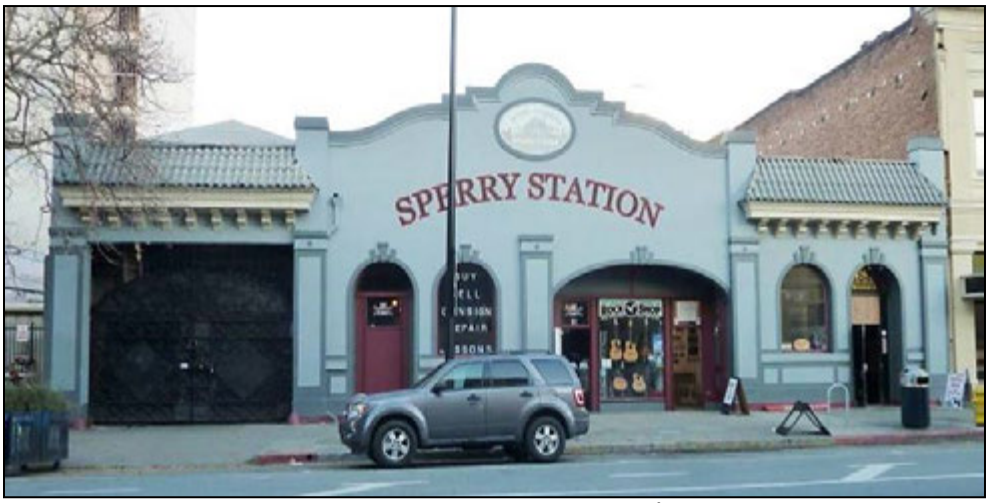
4.2.12 30 North 3rd Street (Map Reference E-27)

Constructed ca. 1903, the Mission Revival-style, one-story industrial building historically known as the Sperry Flour Company distribution warehouse (**Photograph 4-15**) was

[56] Minor, National Register of Historic Places Inventory-Nomination Form for the San Jose Water Works Building; and City of San Jose Historic Landmark File for the San Jose Water Works Building, City of San Jose Planning Department.

determined eligible for listing in the National Register under Criterion C in 2016.[57] The building is significant as a distinctive, rare, and relatively early local example of a Mission Revival industrial building – popular from the 1890s to about 1920. The building exhibits several key characteristics of the Mission Revival style, such as its shaped parapet, arched window and door openings with decorative keystones, and stucco exterior finish, but in keeping with Wolfe & McKenzie's predilection to mix styles, it also has elements of Spanish Revival and Colonial Revival styles, including its parapet center roof section with "Sperry Flour" tile medallion flanked by tiled clad projecting roof sections with brackets, pilasters with horizontal bands, arched window and door openings with decorative keystones, and low-relief geometrical designs on the pilasters and lower portion of façade. The building is also significant under Criterion C as an excellent example of master architectural firm Wolfe & McKenzie's work in an industrial building, illustrating their tendency to mix architectural styles. Wolfe & McKenzie largely designed residences and this building is a rare example of an industrial building within the firm's portfolio. The Sperry Flour Building appears eligible at the local level with a period of significance of ca. 1903, the approximate year it was constructed. The historic property boundary is its legal parcel.[58]

Section 5.3.12 includes a discussion of the application of the Criteria of Adverse Effect [36 CFR 800.5(a)] to this historic property.



Photograph 4-15: Sperry Flour Company (30 North 3rd Street).

[57] Julianne Polanco, SHPO, Letter to Letter to Leslie T. Rogers, Federal Transportation Administration, re: Santa Clara Valley Transportation Authority BART Silicon Valley Phase II Extension Project (Phase II Project), San Jose and Santa Clara, Santa Clara County, CA (FTA_2016_0308_001), October 28, 2016

[58] JRP Historical Consulting, LLC, DPR 523 Form for Sperry Flour Company, 30 North 3rd Street, prepared for JRP *BART Silicon Valley – Phase II Extension Project Supplemental Built Environment Survey Report* (September 2016).

4.2.13 151-155 West Santa Clara Street (Map Reference E-35)

The Farmer's Union Building at 151 West Santa Clara Street (**Photograph 4-16**) was determined eligible for the National Register in 2006 under Criteria A, B, and C.[59] The building is also a City of San Jose Landmark.[60] A previous evaluation of the building did not enumerate the features of the building that appear to make it eligible under each of these criteria, although it provided a description of the building and its history. For this effects analysis, it is assumed that the building appears to qualify under Criterion A for its association with commercial development in San Jose, and under Criterion C for its retention of integrity and Spanish Colonial Revival detailing. It is also the work of master architect William Weeks, who "was especially noted for his Spanish Colonial Revival designs." The building's potential eligibility under Criterion B is less obvious, however. The people listed as being associated with the building were Farmer's Union presidents Frank Leib and John P. McEnery, John and Thomas McEnery (who took over the company after their father John McEnery died), and philanthropist Robert F. Benson. None of these men, however, were identified as individually important figures in local, state or national history.[61]

Photograph 4-16: Farmer's Union Building (151 West Santa Clara Street).

Constructed in 1930 by the Farmer's Union, the building replaced the original Farmer's Union building constructed on the site in 1877. This cooperative of farmers formed in

[59] Office of Historic Preservation. *California Historic Properties Directory Listing (Santa Clara County)*. April 5, 2012; Franklin Maggi, DPR 523 Form for 151 West Santa Clara Street, prepared for Dill Design Group, "San Jose Downtown Historic Survey, for the City of San Jose," August 2000.

[60] The San Jose City Council designated the Farmer's Union Building at 151 West Santa Clara Street as City Landmark, File #HL01-139, in 2001, effective in July 2002, under the theme of Commerce (San Jose City Council, "List of City Landmarks and City Historic Districts Designated by the City Council," ca. 2002).

[61] Maggi, DPR 523 Form for 151 West Santa Clara Street.

1874 to buy and sell groceries, produce, hardware, and agricultural equipment. In 1929, the president of the Union, Frank Leib, directed that the old building be demolished, and a new building constructed at the same site. The new building, of concrete construction, was designed by architect William Weeks and built by contractor J.S. Sampson. This three-story Spanish Colonial Revival building features a smooth stucco finish and terra cotta roof tile trim. The upper floors have metal frame casement windows surmounted by fixed transoms, and wrought iron balconies link three sets of windows on both the south and north sides. The plane of these upper floors is slightly set back from that of the ground floor. The walls that face North San Pedro Street are topped by urns, and large storefront windows appear on the ground floor. Other decorative features include panels of glazed ceramic tile, decorative ceramic tile wainscots on the ground floor, and tile work on the floors of some of the entryways. The Spanish Colonial Revival ornamentations of red roof tiles and set-back façade are also character-defining features of the building.[62]

Section 5.3.13 includes a discussion of the application of the Criteria of Adverse Effect [36 CFR 800.5(a)] to this historic property.

4.2.14 161-167 West Santa Clara Street (Map Reference E-36)

The Lefranc Building (also known as the Masson Building) at 161-167 West Santa Clara Street, shown in **Photograph 4-17**, was determined individually eligible for the National Register in 1996 under Criteria B and C, and is a City of San Jose Landmark.[63] Designed by Theodore Lenzen in 1883 for Charles Lefranc, the building served as an office, wine cellar, and sales room. A survey of the building by Glory Anne Laffey in 1995 noted that arched niches around the foundation of the building are unique because the cellar appears to have been designed for storing large wine vats. Lefranc, a pioneer vineyardist and winemaker in the Santa Clara Valley, owned the Almaden Vineyard. After his death, the business passed on to his partner and son-in-law Paul Masson, in 1887. Masson established a champagne vineyard in 1896 and become one of California's premier champagne producers. Masson continued to operate the business from the Lefranc Building until his death in 1940. In 1930, he commissioned noted California architect William Weeks to remodel the façade in the Art Deco style, which completely obscured the Lenzen design.[64]

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[62] Maggi, DPR 523 Form for 151 West Santa Clara Street.

[63] Dr. Knox Mellon, SHPO, to Leslie Rogers, FTA, re: Silicon Valley Rapid Transit Corridor Project, (FTA030325A), July 9, 2003; Glory Anne Laffey, Historic Resources Inventory Form for 161 West Santa Clara Street, prepared for Archives and Architecture, "Historic Resources Evaluation Report, 161 West Santa Clara Avenue," September 1995. The Lefranc Block at 161-167 West Santa Clara Street was designated as City Landmark, File #HL01-138, in 2001, effective in July 2002, under the theme of Commerce (San Jose City Council, "List of City Landmarks and City Historic Districts Designated by the City Council," ca. 2002).

[64] Laffey, Historic Resources Inventory Form for 161 West Santa Clara Street.

The three-story brick building has a symmetrical, three-part façade made up of three elements (a central set-back element flanked by slightly projecting blocks on each side). Decorative features on the end blocks include window enclosures with a stepped design and octagonal medallions, and recessed metal casement windows with decorated terra cotta lintels and spandrels. Decorative features on the central element include three tall pilasters that extend beyond the parapet, decorated lintels, plain spandrels, a belt course between ground floor and the upper stories featuring a crown molding and plain frieze, and a brick transom strip surmounting the glass storefronts and recessed entrances on the ground floor.[65]

Photograph 4-17: Lefranc Building (161-167 West Santa Clara).

JRP revisited this property in 2002 for the current Project because the previous survey was more than five years old. This update clarified that the Lefranc Building appears to meet the criteria for listing in the National Register under Criteria B, for its association with Paul Masson and Charles Lefranc, significant winemakers in Santa Clara Valley, and Criterion C, as a significant example of both Art Deco architecture and the work of William Weeks. As such, the basement storage niches and the Art Deco façade are the character-defining features of the building.[66] The boundary of the property is its legal parcel.

[65] Laffey, Historic Resources Inventory Form for 161 West Santa Clara Street.

[66] Amanda Blosser, DPR 523 Form Update for 161 West Santa Clara Avenue, prepared for JRP, "Technical Memorandum: Historical Resources Evaluation Report for SVRTC EIS/EIR Alternatives," Draft, January 2003.

Section 5.3.14 includes a discussion of the application of the Criteria of Adverse Effect [36 CFR 800.5(a)] to this historic property.

4.2.15 Cahill Station and Santa Clara/Alameda Underpass (Map Reference F-13)

The Southern Pacific Depot on Cahill Street in San Jose was listed in the National Register in 1993, and is also a City of San Jose Landmark.[67] The depot (presently known as Diridon Station) is eligible under Criterion C for its architectural value, at the state level of significance, with a period of significance of 1932-1935. The Italian Renaissance Revival building (**Photographs 4-18**), with brick walls and terra cotta roof, was designed by John C. Christie and built by E.C. Morrison. It replaced a much older station on Market Street in San Jose. The building is described as follows by Elizabeth McKee in her 1992 National Register registration form for the property:

> The Southern Pacific Depot on Cahill Street in San Jose is a multi-level combination (passenger and freight) railroad depot constructed in the Italian Renaissance Revival style. Built in 1935, it consists of a three-story central section flanked by two-story wings. The building, a compilation of rectangular sections, is 390 feet long and varies in width from 40 feet to 78 feet. The central section, which contains the passenger waiting room, measures 40 by 80 feet and 33 feet in height. The high center pavilion housing the waiting room is constructed of steel columns and trusses. The side wings are framed with wood. The roofs of the three main sections are hipped with medium boxed eaves and covered with terra cotta tile in varied shades of red and sunset. The south and rear wings are flat roofed and only trimmed with terra cotta tile. The exterior walls are clad with tapestry brick of varied colors and arranged in an English bonding pattern. The foundation walls are concrete. …The property is in fair condition and has been altered very little since its construction.[68]

Several appurtenant buildings and structures were listed as contributors to the station property at the time of its nomination, including an iron gate on the north side of the depot, a wall and fence system, the tracks, two butterfly passenger sheds, a water tank, and a wood-clad compressor house, as well as a car cleaners' shack south of the depot and a herder's shack near the Santa Clara/Alameda Underpass. The herder's shed has since been removed. In addition, it appears the water tank and compressor house have

[67] Elizabeth A. McKee, National Register of Historic Places Registration Form for San Jose Southern Pacific Railroad Station, San Jose, April 1992. The Cahill / Diridon Station was also designated City Landmark, File #HL 94-100 by the San Jose City Council in 1994, under the theme of Communication and Transportation (San Jose City Council, "List of City Landmarks and City Historic Districts Designated by the City Council," ca. 2002).

[68] McKee, National Register of Historic Places Registration Form for San Jose Southern Pacific Railroad Station.

also been removed within the last ten years. The nomination also listed the Santa Clara/Alameda Underpass (**Photographs 4-18** and **Photographs 4-19**) as a contributing structure to the station:

> The Santa Clara Underpass (referred to as the San Jose Underpass, Bridge #37-45) … is located about 500 feet to the north of the depot. … It is comprised of 43 simple span rolled steel beams on a reinforced concrete pier with windows, and double-walled abutments with pedestrian passages. Its two spans total 82 feet in length, and carry three tracks of the Southern Pacific Depot's north yard throat over Route 82, crossing the roadway at right angles (no skew). The bridge has solid parapet railings, with a large enameled Southern Pacific herald placed above the center pier. Railing ends posts are surmounted by Beaux-Arts luminaries cast by the Joshua Hendy Iron Works at Sunnyvale.[69]

Photographs 4-18 and 4-19: Cahill/Diridon Station (top) and Santa Clara/Alameda Underpass (bottom).

In April 1992, the Peninsula Corridor Joint Powers Board (JPB) and the South Bay Historical Railroad Society (SBHRS) signed a preservation covenant regarding the Cahill Station. This preservation covenant lists the following as "significant features" for Cahill Station:

[69] McKee, National Register of Historic Places Registration Form for San Jose Southern Pacific Railroad Station.

> Exterior: All historic features … including brick masonry and mortar; roof; windows and doors and their frames, sashes, and glass; terra cotta cornice and decorative elements; wrought iron fencing; subway and ramps from station to platforms; entrance marquis; flag pole, paint color of gate, grille, and fence; historic trees.[70]

Section 5.3.15 includes a discussion of the application of the Criteria of Adverse Effect [36 CFR 800.5(a)] to these historic properties.

4.2.16 848 The Alameda (Map Reference F-14)

The two-story Italianate brick commercial building at 848 The Alameda was determined individually eligible for listing in the National Register in 2003. The building is significant under Criterion C as an intact example of early 1880s commercial architecture.[71] The building was inventoried and evaluated in 1991, and since that time, it has been designated as a San Jose City Landmark.[72]

Photograph 4-20: Commercial building at 848 The Alameda.

Constructed circa 1884, the building (**Photograph 4-20**) served first as a grocery store with a residence on the second floor, until the late 1920s when Van Dalsem Brothers Plumbing started to operate their business from the building. In 1936, Albert Schurra, a

[70] Preservation Covenant, San Jose Station (Cahill), Appendix 2, "Description of Significant Features."

[71] Dr. Knox Mellon, State Historic Preservation Officer, Letter to Leslie T. Rogers, Federal Transportation Administration, Region IX, re: Silicon Valley Transit Corridor Project, (FTA030325A), June 9, 2003; Glory Anne Laffey, Historic Resources Inventory Form for 848 The Alameda, prepared for Archives and Architecture, "Un-reinforced Masonry Survey," 1991; Meta Bunse, DPR 523 Form for 848 The Alameda, prepared for JRP, "Technical Memorandum: Historical Resources Evaluation Report for SVRTC EIS/EIR Alternatives," Draft, January 2003.

[72] The building at 848 The Alameda was designated City Landmark, File # 92-71, by the San Jose City Council in 1992 (San Jose City Council, "List of City Landmarks and City Historic Districts Designated by the City Council," ca. 2002).

candy maker whose first store opened in the area in 1912, purchased the building. Schurra eventually sold the business to Hank Viehweger, although the business retained the name “Schurra’s.” This building is rectangular in plan with one central storefront facing The Alameda. The flat roof is accented by a wooden cornice with paired brackets. A similar, secondary wooden cornice caps the ground floor storefront. A central recessed entry divides the elaborate storefront, which is glazed with plate glass decorated with cast iron pilasters. The second floor of the façade contains two sets of paired 1/1 double hung windows with pedimented hoods. Similar pedimented hoods also appear over the door and windows on the west side of the building. A modern fire escape system enclosed by a brick wall has been added to the rear, during a recent renovation.

Under Criterion C, this building is a significant example of the Italianate two-part commercial block style, as well as an important example of late nineteenth century commercial architecture outside of the downtown commercial district. The building’s overall massing and architectural detailing indicate many of the character-defining features of the style, such as elongated double hung windows with pedimented hoods supported by brackets, repeated use of this fenestration pattern, overhanging wooden eaves and cornices with brackets, and iron pilasters on the elaborate storefront.[73] Its period of significance is its year of construction, 1884, and the historic property boundary is its legal parcel.

Section 5.3.16 includes a discussion of the application of the Criteria of Adverse Effect [36 CFR 800.5(a)] to this historic property.

4.2.17 176 North Morrison Avenue (Map Reference F-15)

The residence at 176 North Morrison Avenue was determined eligible for listing in the National Register in 2003.[74] The two-story house, built circa 1898, is significant under Criterion C as an example of Queen Anne residential architecture (**Photograph 4-21**). The house’s massing and irregular footprint, shaped by both gables and hipped roof components, porches, and bay windows, provide the residence with the distinctive form typical of the Queen Anne style, in addition to its extensive decorative detailing, with Eastlake influences**.** Its overall plan and these decorative elements are the character-defining features of the building. The walls are clad in wood board siding that is finished with corner boards and decorative carved panels. A band of fish scale shingles delineates the two stories and decorative verge boards dominate the gable peaks on each side of the building. An arched focal window, consisting of a square, fixed pane flanked and topped by stained glass windows, appears under the main gable on the

[73] Bunse, DPR 523 Form for 848 The Alameda.

[74] Dr. Knox Mellon, State Historic Preservation Officer, Letter to Leslie T. Rogers, Federal Transportation Administration, Region IX, re: Silicon Valley Transit Corridor Project, (FTA030325A), June 9, 2003.

house's façade (west side). Beneath the focal window is a cutout bay window, featuring a stained-glass transom separated from the main window by a metal awning. A bay window on the west side separates the house's two entrances, both of which are set in recessed porches decorated with arched spindle work, beading, large turned posts, and balustrades ornamented with beadwork. A south-facing, dormer-like balcony appears above the western porch, its balustrade mirroring the porch's spindle work.[75]

Photograph 4-21: Residence at 176 North Morrison Avenue.

The house embodies distinctive architectural characteristics representative of Queen Anne-style architecture constructed for middle class residents in San Jose during the 1890s. Its elaborate ornamentation and contrasting decorative wall surfaces give the house individuality and variety that distinguishes it within the range of examples of the style in San Jose. Overall, the house retains integrity, is an important example of building practices of the late nineteenth century, and is an important example of the style in western San Jose.[76] The period of significance for this building is ca. 1898, its approximate construction date, and the historic property boundary is its legal parcel.

Section 5.3.17 includes a discussion of the application of the Criteria of Adverse Effect [36 CFR 800.5(a)] to this historic property.

[75] Christopher McMorris, DPR 523 Form for 176 North Morrison Avenue, prepared for JRP, "Technical Memorandum: Historical Resources Evaluation Report for SVRTC EIS/EIR Alternatives," Draft, January 2003.
[76] McMorris, DPR 523 Form for 176 North Morrison Avenue.

4.2.18 179-181 Rhodes Court (Map Reference F-22)

The two-story duplex located at 179-181 Rhodes Court was determined eligible for listing in the National Register in 2016.[77] This historic property meets Criterion C as an early and distinguished example of the Mid-Century Modern style in San Jose and for possessing distinctive characteristics of a type, period, or method of construction. The building (**Photograph 4-22**) is important because it combines elements of the Mid-Century style in a way not typically used in residential areas of San Jose, and reflects the early post-World War II influences of San Francisco architecture on builders and designers in San Jose. Character-defining features of this postwar duplex include its two-story massing, asymmetrical façade, flat and shed roof elements with cantilevered eaves and canopies, exterior wall siding, original windows and door configurations. The period of significance for this building is 1948, the year it was constructed, and the boundary of the historic property is its legal parcel.[78]

Section 5.3.18 includes a discussion of the application of the Criteria of Adverse Effect [36 CFR 800.5(a)] to this historic property.

Photograph 4-22: Duplex at 179-181 Rhodes Court.

[77] Julianne Polanco, SHPO, Letter to Letter to Leslie T. Rogers, Federal Transportation Administration, re: Santa Clara Valley Transportation Authority BART Silicon Valley Phase II Extension Project (Phase II Project), San Jose and Santa Clara, Santa Clara County, CA (FTA_2016_0308_001), October 28, 2016

[78] Leslie Trew, DPR 523 Form for 179-181 Rhodes Court, prepared for JRP *BART Silicon Valley – Phase II Extension Project Supplemental Built Environment Survey Report* (September 2016).

4.2.19 Cal Pak District Manager's Office (Map Reference F-33)

The Cal Pak District Manager's Office was previously determined eligible for the National Register as part of the larger Del Monte / Cal Pak Plant #51 complex (see Section 4.2.20), a finding that SHPO concurred with in 1999.[79] While the larger complex has been altered since that determination, for the purposes of this Project this historic building at 807 The Alameda (**Photograph 4-23**) is assumed eligible for listing in the National Register under National Register Criteria A and C. The larger complex was an integral part of the Del Monte / California Packing Corporation (Cal Pak) operation in Santa Clara County, and thus in the fruit processing industry that was so important to the area in the twentieth century. The building's period of significance as identified in previous evaluations extends between 1930, when the office was built, and 1948, which at the time of the previous evaluation marked a 50-year threshold established by the National Park Service for the evaluation of historic-era resources. The boundary of this historic property is its legal parcel. Character-defining features include its location, size and massing, and original architectural details, including but not limited to brick construction and fenestration.

Section 5.3.19 includes a discussion of the application of the Criteria of Adverse Effect [36 CFR 800.5(a)] to this historic property.

Photograph 4-23: Cal Pak Manager's Office at 801 The Alameda.

[79] Office of Historic Preservation, Historic Resources Inventory Directory for Santa Clara County, updated April 2012.

4.2.20 Del Monte / Cal Pak Plant #51 (Map Reference F-34)

This property was previously determined eligible for the National Register as part of the larger Del Monte / Cal Pak Plant #51 complex, a finding that SHPO concurred with in 1999.[80] While the larger complex has been altered since that determination, for the purposes of this Project the remaining former plant buildings at 88 Bush Street (**Photograph 4-24** and **Photograph 4-25**) are assumed eligible for listing in the NRHP under Criteria A and C. As a fruit processing plant, the buildings were an integral part of the Del Monte / California Packing Corporation (Cal Pak) operation in Santa Clara County, and thus in the fruit processing industry that was so important to the area in the twentieth century. This property's period of significance would extend between 1915, the year the first building was constructed on this site, and 1948, which at the time of the previous evaluation marked a 50-year threshold established by the National Park Service for the evaluation of historic era resources. The boundary of this historic property is defined by Laurel Grove Lane to the south, Bush Street to the west, White Street to the east, and to the north by the legal parcels that front The Alameda. Character-defining features include any extant buildings within the plant site and any remaining architectural details of those buildings, including but not limited to brick construction and fenestration.

Section 5.3.20 includes a discussion of the application of the Criteria of Adverse Effect [36 CFR 800.5(a)] to this historic property.

Photographs 4-24 and 4-25: Del Monte/Cal Pak Plant #51 at 88 Bush Street.

[80] Office of Historic Preservation, Historic Resources Inventory Directory for Santa Clara County, updated April 2012.

4.2.21 865 The Alameda (Map Reference F-35)

The commercial building at 865 The Alameda was originally constructed in 1929 as an automobile showroom. Evaluated as part of the 2003 HRER, the building was found ineligible for the National Register. FTA agreed with that finding and the SHPO concurred with FTA's determination of National Register-ineligibility through the Section 106 process in June 2003.[81] After that determination, the building was altered in 2009 and those modifications may have been completed according to Secretary of the Interior's Standards for Rehabilitation or Restoration (**Photograph 4-26**). Therefore, for the purposes of this Project, this building is assumed eligible for the National Register under Criterion C for its architectural merit as a 1930 Spanish Revival commercial building. The period of significance for this historic property is its date of construction, 1930, and its boundary is its legal parcel. Character-defining features include its original size and massing and all architectural features that contribute to its Spanish Revival style.

Section 5.3.21 includes a discussion of the application of the Criteria of Adverse Effect [36 CFR 800.5(a)] to 865 The Alameda.

Photograph 4-26: Commercial building at 865 The Alameda.

4.2.22 Santa Clara Depot and Control Tower (Map Reverences I-01 and I-02)

The Santa Clara Depot (Map Reference I-01), also known as Santa Clara Station, and the Santa Clara Control Tower, which includes the Maintenance of Way Speeder Shed

[81] Dr. Knox Mellon, State Historic Preservation Officer, Letter to Leslie T. Rogers, Federal Transportation Administration, Region IX, re: Silicon Valley Transit Corridor Project, (FTA030325A), June 9, 2003.

and Maintenance of Way Section Tool House (Map Reference I-02) are addressed together for the purposes of this FOE. The buildings share a related function and setting as part of the early development of the Bay Area's railroad transportation system and are managed as a complex by the South Bay Historical Railroad Society and the City of Santa Clara. The Santa Clara Station was listed on the National Register in 1985 as an individual property, and is significant as the "oldest continually operating passenger depot in California dating back to January 1864."[82] The Santa Clara Control Tower was determined eligible for the National Register as an individual property in 2003 and as a contributor to the Santa Clara Depot in 2016. The Speeder Shed and Tool House were determined eligible for listing in the National Register as contributors to the Santa Clara Depot in 2016.[83]

Photograph 4-27: Santa Clara Station (1 Railroad Avenue).

The Santa Clara Station consists of a single building, formed by a passenger depot and attached freight warehouse and loading dock. The San Francisco & San Jose Railroad Company (SF&SJ) constructed the passenger depot in 1863-1864 (**Photograph 4-27**).[84] In the 1870s, the Southern Pacific Railroad Company (SPRR) purchased the SF&SJ and subsequently moved this building to the west side of the tracks in about 1877, at which time it added the freight warehouse section of the building. The station has been in this configuration and location since that time. SBHRS restored the station in 1990 to the Secretary of the Interior's standards for rehabilitation. The station is

[82] Ted Olin Warrison, "A Determination of Eligibility for the Santa Clara Depot of the Southern Pacific Railroad Company," May 19, 1981. See: Part 8, "Statement of Significance."

[83] Dr. Knox Mellon, State Historic Preservation Officer, Letter to Leslie T. Rogers, Federal Transportation Administration, Region IX, re: Silicon Valley Transit Corridor Project, (FTA030325A), July 9, 2003; Julianne Polanco, SHPO, Letter to Letter to Leslie T. Rogers, Federal Transportation Administration, re: Santa Clara Valley Transportation Authority BART Silicon Valley Phase II Extension Project (Phase II Project), San Jose and Santa Clara, Santa Clara County, CA (FTA_2016_0308_001), October 28, 2016.

[84] OHP's CHRIS list for Santa Clara County (April 25, 2002) gives a date of construction for the Santa Clara Station as 1876. The Nomination Form for the resource, however, gives a construction date of 1864 as part of the discussion of significance (Office of Historic Preservation. *California Historic Properties Directory Listing (Santa Clara County)*. April 25, 2002; and Warrison, "A Determination of Eligibility for the Santa Clara Depot of the Southern Pacific Railroad Company.")

significant under Criterion C, for its architectural merit, and Criterion A, for its association with the original development of rail transportation in California and the Bay Area.[85] Its significant features, according to a 1992 preservation covenant signed by JPB and SBHRS, include "all exterior features of the Passenger Depot / Freight House building, including board-and-batten walls; wood shingle roof; panel and freight doors; double-hung windows; exterior light fixtures; signage; paint colors; and loading dock." Contributing interior features include "interior wood wall panelling in agent's office; counter in bay window; panelling and cornice mouldings in baggage room; freight and baggage door hardware [sic]."[86]

Photograph 4-28: Santa Clara Control Tower (top), Speeder Shed (bottom left), and Section Tool House (bottom right).

The Santa Clara Control Tower, Maintenance of Way Speeder Shed, and Maintenance of Way Section Tool House (**Photograph 4-28**) are approximately 500 feet northwest of the depot building. None of these buildings were mentioned in either the National Register Nomination Form or the 1992 preservation covenant regarding the Santa Clara

[85] Warrison, "A Determination of Eligibility for the Santa Clara Depot of the Southern Pacific Railroad Company."
[86] Preservation Covenant, Santa Clara Caltrain Station, Appendix 2, "Description of Significant Features."

Station, but by 1996 the City of Santa Clara had designated these three buildings and the depot the "Santa Clara Historic Railroad Complex."[87]

The Santa Clara Control Tower has been surveyed and evaluated several times over the last decade. Caltrans District 4 historian Elizabeth McKee prepared an Architectural Inventory / Evaluation Form for the tower in 1991, and Lorie Garcia of SBHRS prepared a Historic Resources Inventory Form for the property in 1993. McKee described the tower as a "Harriman Standard #4" signal tower:

> The Santa Clara Tower is a two-story wood frame building with pyramidal hip roof and broad eaves. The walls are sheathed with horizontal siding with vertical corner boards. Shallow modillions support a bell-cast skirt of narrow rustic siding directly below large banked second story double-hung windows. These windows are set on three elevations so that plant operators have an unobstructed view of the tracks they control. The first story is lit by paired double-hung windows on the elevation facing the tracks and single double-hung windows on the side elevations. Entry is gained at the rear through doorways into each story, the second story accessed by an exterior wooden stairway.[88]

The building's character-defining features are its pyramidal roof, four-sided observation room and standardized plan.

The forms differ on the suggested construction date of the tower. Garcia stated that the building was likely constructed in 1904 and the interlock mechanism installed in 1928, while McKee dated the property to 1927. Both agree that the building's design is like other towers constructed during the period that Edward Henry Harriman led SPRR through modernization (between 1901 and 1909) and instituted expansive infrastructure improvement policies. Years later, SPRR built an extensive freight yard terminal in Santa Clara in 1926 as part of another improvement program that included this expansion of the Santa Clara facility, as well as construction of the Cahill Station in San Jose. The Santa Clara Control Tower was one of five interlocking plants that controlled engine and train movements around San Jose in the late 1920s. McKee found that there had been a tower at Santa Clara prior to 1927, but that it had been located across the tracks. It is unclear whether the current tower, which was in place by 1927 or 1928, was moved from the other site across the tracks or was new construction.

Both McKee and Garcia emphasized the tower's intact architectural qualities, and in a personal interview in November 2000, Garcia added that the interlocking mechanism is

[87] "Finding of Effect for the Proposed Upgrade of Santa Clara Depot in Compliance with Americans with Disabilities Act (ADA) and California State Code (Title 24)," March 18, 1996.

[88] Elizabeth McKee, California Department of Transportation Architectural Inventory / Evaluation Form for the Santa Clara Tower, November 1991.

still in working order although it is no longer connected to actual track controls. According to Garcia, the City of Santa Clara purchased the tower from the Joint Powers Board (JPB) in 1993. While both Garcia and McKee concluded that the building appeared to be eligible for listing in the National Register, they differed on how it should be listed. The evolution of decisions and evaluations regarding this building are as follows:

- 1985: Santa Clara Southern Pacific Depot was listed in the National Register as an individual property. The property's nomination form did not mention the control tower.
- 1991: Caltrans District 4 Architectural Historian Elizabeth McKee evaluated the Santa Clara Tower and concluded that it appeared to be eligible for listing in the National Register. McKee expressly stated that the control tower was individually eligible because it was not historically associated with the adjacent Santa Clara depot. This eligibility conclusion does not appear to have been processed through OHP because the CHRIS historic property data file for Santa Clara County does not list the tower.
- 1992: JPB and SBHRS signed a historic preservation covenant regarding some of the historic train depots along the former SPRR route between San Francisco and San Jose, including the Santa Clara depot. This document did not specifically mention the control tower or the two sheds.
- 1993: Lorie Garcia, of SBHRS, prepared a Historic Resources Inventory form for the Santa Clara Tower as an "addendum to 'Santa Clara Railroad Station,' 1 Railroad Avenue, Santa Clara." This title suggests that it was intended as an addendum to the Santa Clara Depot National Register listing.

JRP revisited the railroad properties in 2002 as part of the inventory and evaluation survey for this Project and concluded that the Control Tower appeared to be eligible for listing in the National Register as a separate property under Criterion C, on the state level and SHPO confirmed that eligibility determination in 2003.[89] The Santa Clara Control Tower and nearby sheds were not built during the same period as the depot, but the buildings are related by the fact that they have more than eighty years of shared history and share the same setting. For planning and project review purposes, the tower and sheds are taken into account here as part of the larger Santa Clara Station property because they appear to be eligible for listing on the National Register.[90] In 2016, the

[89] Dr. Knox Mellon, SHPO, to Leslie Rogers, FTA, re: Silicon Valley Rapid Transit Corridor Project, (FTA030325A), July 9, 2003.

[90] Christopher McMorris, DPR 523 Form for the Santa Clara Control Tower, prepared for JRP, "Technical Memorandum: Historical Resources Evaluation Report for SVRTC EIS/EIR Alternatives," Draft, January 2003.

SHPO concurred that the Speeder and Tool Sheds are eligible for the National Register as contributors to the larger Santa Clara Depot historic property.[91]

Section 5.3.22 includes a discussion of the application of the Criteria of Adverse Effect [36 CFR 800.5(a)] to these historic properties.

[91] Julianne Polanco, SHPO, Letter to Letter to Leslie T. Rogers, Federal Transportation Administration, re: Santa Clara Valley Transportation Authority BART Silicon Valley Phase II Extension Project (Phase II Project), San Jose and Santa Clara, Santa Clara County, CA (FTA_2016_0308_001), October 28, 2016.

Chapter 5
Application of the Criteria of Effect

5.1 Definition of Effect and Criteria of Effect

The definition of effect is contained within 36 CFR Part 800: "*Effect* means alteration to the characteristics of a historic property qualifying it for inclusion in or eligibility for the National Register." An adverse effect occurs "when an undertaking may alter, directly or indirectly, any of the characteristics of a historic property that qualify the property for inclusion in the National Register in a manner that would diminish the integrity of the property's location, design, setting, materials, workmanship, feeling, or association…Adverse effects may include reasonably foreseeable effects caused by the undertaking that may occur later in time, be farther removed in distance or be cumulative."[92] Examples of adverse effects may include, but are not limited to, the following:

i. Physical destruction of or damage to all or part of the property;

ii. Alteration of a property, including restoration, rehabilitation, repair, maintenance, stabilization, hazardous material remediation, and provision of handicapped access, that is not consistent with the Secretary's standards for the treatment of historic properties (36 CFR part 68) and applicable guidelines;

iii. Removal of property from its historic location;

iv. Change of the character of the property's use or of physical features within the property's setting that contribute to its historic significance;

v. Introduction of visual, atmospheric or audible elements that diminish the integrity of the property's significant historic features;

vi. Neglect of a property which causes its deterioration, except where such neglect and deterioration are recognized qualities of a property of religious and cultural significance to an Indian tribe or Native Hawaiian organization; and

vii. Transfer, lease, or sale of property out of Federal ownership or control without adequate and legally enforceable restrictions or conditions to ensure long-term preservation of the property's historic significance.[93]

An effect is noted in this document only when it poses the potential to alter the characteristics of the historic property that qualify it for inclusion in the National Register. Of the seven examples of adverse effects listed above, two are not applicable to this Project because the undertaking would not result in the neglect of a historic

[92] 36 CFR 800.5(a)(1).
[93] 36 CFR 800.5(a)(2)(i through vii).

property (36 CFR 800.5[a][2][vi] and none of the 32 historic properties are federally owned or controlled (36 CFR 800.5[a][2][vii].

5.2 Conditions to Avoid Adverse Effects

This FOE identifies effects on the identified historic properties in the APE for the Phase II Project and concludes that the Project will have no adverse effect because, with conditions, the effects of the undertaking do not meet the Criteria of Adverse Effect described in Section 5.1. These conditions, or treatment measures, will avoid potential effects and reduce the degree of adverse effect or impacts on historic properties. The FTA will implement conditions and treatments for historic properties as programmatic avoidance and minimization measures during the design, construction, and post-construction phases of the Project, as described below.

The conditions are included in the Programmatic Agreement (PA) for the project, which also stipulates that the progress of implementation of the conditions and treatment measures for historic properties will be summarized in a *Programmatic Agreement Status Report* (PA Status Report). The status report will be submitted to FTA and SHPO on an annual basis and made available to the agreement signatories.

5.2.1 Design Phase

5.2.1.1 Review of Designs

VTA will retain the services of Qualified Cultural Resources Professional(s) (QCRPs) with experience in built environment cultural resources management to review project designs and design changes for Project elements adjacent to architectural historic properties, both individual properties and those within the San Jose Downtown Commercial District Historic District, hereafter referred to as the San Jose Downtown Commercial District. The QCRP reviews will help ensure the avoidance of adverse effects on character-defining features of the historic properties and the historic district. If the QCRP identifies design changes that have the potential to affect historic properties, the QCRP will work with VTA to develop measures to avoid effects. If the design changes have the potential to result in an adverse effect on historic properties, and altering the design to avoid those potential adverse effects is not feasible, VTA will notify FTA and SHPO.

5.2.1.2 Geotechnical Investigations

During final design, VTA will conduct geotechnical investigations to evaluate soil, groundwater, and seismic conditions along the alignment. This analysis will assist in the development of appropriate support mechanisms and measures for cut-and-cover construction areas. The subsurface investigation will also identify areas that could

cause differential settlement during operation of a tunnel boring machine (TBM) under historic properties.

The results of the geotechnical investigations will be provided to the Project designers, as well as a QCRP who will use the information to inform the avoidance conditions for historic properties, such as design reviews, vibration monitoring program, protection measures, response to inadvertent damage plan, or other conditions. The QCRP will review proposed shoring designs for cut-and-cover areas that are based on the results of the geotechnical investigations for consistency with the *Secretary of Interior's Standards for the Treatment of Historic Properties* (SOI Standards).

If the geotechnical investigation results indicate the potential to cause more than cosmetic damage to a historic property through differential settlement, an engineer will recommend measures to avoid such effects through ground treatment, or shoring, or other methods. The QCRP will review the recommended measures for consistency with SOI Standards. The QCRP will prepare a memorandum describing any proposed refinements to the avoidance measures for submittal to VTA, who will ensure that those measures are included in the construction documents. The memorandum will be included in the annual PA Status Report.

5.2.1.3 Pre-Construction Building Survey

VTA will conduct a pre-construction survey of historic properties that may be affected by construction activities, either through proximity to the potential settlement trough, or proximity to construction that may cause ground-borne vibration. These properties include buildings located directly over or adjacent to the tunnel alignment (TBM path) and buildings adjacent to cut-and-cover excavation areas. The pre-construction survey will establish the baseline, or pre-construction visible condition, for historic properties for the purposes of construction monitoring. The detailed content of the pre-construction surveys will be conducted or overseen by QCRP, who will present the results of the survey in Pre-construction Condition Assessment Reports (Pre-construction CAR). In addition to the design reviews and geotechnical data, the results of Project elevation surveys and conclusions of a qualified structural engineer will be provided to the QCRP to inform in the Pre-construction CARs.

The QCRP will work in consultation with the other technical professionals (e.g., surveyors, geotechnical specialists, and structural engineers) to determine baseline conditions of historic properties prior to any construction activities and will report these conclusions in the Pre-construction CARs. The professional team will identify which historic buildings are vibration sensitive or susceptible to potential damage from ground settlement. The Pre-construction CARS will identify which historic properties will require monitoring during construction, and post-construction elevation surveys, or other conditions. Pre-construction CARs will include written description of conditions and photography (video and/or still), and may also include drawings or plans, as necessary

and provided by the Project team. VTA will maintain Pre-construction CARs on file and will supply electronic copies to SHPO and signatory parties to the PA.

Results of the Pre-construction CARs and other studies will be used by a structural engineer to help identify building-specific construction vibration thresholds to ensure the Project avoids adverse effects on those historic properties. The QCRP will coordinate with the structural engineer to prepare a memorandum listing the vibration thresholds for specific historic properties for submittal to VTA. VTA will ensure that those thresholds will be included in the construction documents. The memorandum will be included in the PA Status Report.

5.2.1.4 Response to Inadvertent Damage and Historic Property Vibration Monitoring Plans

A Response to Inadvertent Damage Plan will be prepared and implemented as a treatment to minimize inadvertent adverse effects on historic properties caused by Project construction activities. The plan content will be developed by the QCRP before construction begins, with input from other disciplines as needed. The plan will refer to the base-line conditions reported in the Pre-construction CAR, or any other pre-construction photographic documentation prepared by the Project. The plan will describe the protocols for documentation of inadvertent damage (should it occur), as well as notification, coordination, and reporting to the SHPO and the owner of the historic property. The plan will direct that inadvertent damage to historic properties will be repaired in accordance with the Secretary of the Interior's (SOI) Standards for the Treatment of Historic Properties (U.S. Department of the Interior 1995). The plan will be developed in coordination with the VTA and FTA, and will be submitted to the SHPO for review and comment.

A comprehensive Construction Vibration Control and Monitoring Plan for historic properties will be developed by the construction contractor prior to active work, and the monitoring requirements will be included in the contract documents. The Construction Vibration Control and Monitoring Plan will incorporate the structural engineer’s thresholds for vibration (see in Section 5.2.1.3). The plan will outline the protocol for the continuous, real-time monitoring of vibration levels near historic properties during construction and will include a protocol for monitoring of existing cracks in buildings, all overseen by the QCRP. Reporting on implementation and progress of the both the Response to Inadvertent Damage Plan and the Construction Vibration Control and Monitoring Plan will be included in the in the annual PA Status Report during the Construction Phase.

5.2.2 Construction Phase

5.2.2.1 Vibration and Settlement Monitoring

The Geotechnical Investigation and the Pre-construction CAR outlined in Section 5.2.1.3 above will identify those historic properties that may be adversely affected by vibration-producing construction activities or settlement. The applicable conditions to avoid these potential impacts are outlined below.

Construction Vibration:

The vibration analysis conducted for this Project concludes that impacts caused by construction vibration may exceed the FTA thresholds of 0.12 inch/second (in/sec) peak particle velocity (PPV) for buildings that are extremely susceptible to vibration damage, or 0.2 in/sec PPV for non-engineered, timber, or masonry structures. Construction vibration at or below 0.2 in/sec PPV may cause damage to historic properties. Therefore, to ensure that no adverse damage from construction vibration will affect historic properties, a structural engineer will establish building-specific construction vibration thresholds for historic buildings near the Project based on the results of the Pre-construction CARs and other studies, as outlined above in Section 5.2.1.3.

VTA will implement the monitoring programs described in detail in the Construction Vibration Control and Monitoring Plan, as identified above in Section 5.2.1.4, to track construction vibration caused by the Project. The monitoring plan will include field observation of building conditions during construction, comparison of observations with the baseline survey (Pre-construction CAR), as well as real-time monitoring of ground-borne vibration and regular reporting of crack monitoring. Vibration monitoring will include real-time notification of construction supervisors and the QCRP overseeing compliance to alert them to exceedance of the vibration threshold. The contractor will follow the protocol of the Construction Vibration Control and Monitoring Plan to address the vibration levels. The vibration monitoring programs will be implemented by technical specialists for vibration monitoring, overseen by a QCRP.

Surface Settlement during Construction

As described in the *Geotechnical Memorandum* prepared for the Project by Parikh Consultants (February 2014), the Project may result in some surface settlement from construction of the tunnel with a TBM or with cut-and-cover construction of the stations (Twin-Bore Option only), station entrances, tunnel portals, and mid-tunnel vent structures. Ground-settlement reduction techniques, such as pressurized closed-face TBM, the addition of conditioning agents to the soils around the face of the TBM, and use of a combination of soil-cement mix or slurry diaphragm walls, ground treatment, strengthening of structures, and underpinning of structures, would be implemented during construction around historic properties. Construction of the Twin-Bore Option could result in a maximum settlement of approximately 0.50 inches occurring at the

centerline between the two bores, while the maximum predicted settlement for the Single-Bore Option would be 1 inch. For cut-and-cover construction, surface settlement would vary with distance from the excavation, with a maximum of approximately 1.4 inches at areas adjacent to open cut-and-cover excavations.[94]

The use of the above-ground settlement reduction methods during construction are not anticipated to cause adverse effects on any historic properties. However, to ensure no ground settlement caused by the above-mentioned construction methods would affect historic properties, results of the geotechnical investigations, recommendations of the Pre-construction CARs, and other studies described above in Section 5.2.1 will be reviewed by a structural engineer to identify which historic properties may be sensitive to ground settlement. VTA will implement settlement monitoring that will include field observation of building conditions during construction, comparison of observations with the baseline elevation surveys and the Pre-construction CARs, and regular re-survey of elevation to monitor differential settlement, if any.

If settlement from tunneling or cut-and-cover activities causes more than cosmetic damage to historic buildings, then ground treatment methods that would reduce further settlement will be employed. The settlement monitoring program will include regular reporting of elevation survey data. The monitoring program will be conducted by certified surveyors, overseen by a QCRP.

5.2.3 Post-Construction Phase

5.2.3.1 Post-Construction Building Survey

VTA will conduct a post-construction building survey of all historic properties that were subject to the pre-construction building survey. The post-construction survey will document the visible condition of historic properties after the Project is complete, including visible damage, if any occurred during construction. The preparation of the post-construction surveys will be conducted or overseen by QCRP, who will present the results in Post-construction Condition Assessment Reports (Post-construction CAR). Post-construction CARs will provide a record of conditions following construction activities and identify inadvertent damage to historic properties, if any. The Post-construction CARs will focus on any changed conditions in comparison to the Pre-construction CARS using written description and photography (video and/or still).

Inadvertent damage caused to any historic property from Project construction, should it occur, will be repaired in accordance with the Secretary of the Interior's *Standards for the Treatment of Historic Properties* (SOI Standards), and will follow the repair of inadvertent damage plan for the Project, as described in Section 5.2.1.4.

[94] EPC Consultants, Inc., *SVSX Single-Bore Feasibility Study*, January 2016.

5.3 Analysis of Adverse Effects

This section applies the criteria of adverse effects described in Section 5.1 and the conditions described in Section 5.2 to the historic properties located in the architectural APE. The following subsections address potential effects on each individual historic property or district. As described in Section 1.2, five types of construction would occur near historic properties: bored tunnel; stations; maintenance facility; tiebacks; and construction staging areas. Those construction types that are located near a historic property and that have potential to affect a historic property are analyzed in the subsections below. **Table 5-1** below provides a summary of the analysis of effects for each historic property within the architectural APE.

Construction and operational noise have the potential to cause indirect adverse effects *only* for historic properties that have an inherent quiet quality that is part of their historic character and significance (e.g., churches, parks, or National Historic Landmarks with significant outdoor use). Of the 32 historic properties addressed in this report, only one, the Church of Five Wounds (Map Reference C-25), is considered to have an inherent quiet quality. The analysis of adverse effects for that property (Section 5.3.1) discusses potential effects from the construction and operational noise; however, all other historic properties, which consist of commercial, transportation, industrial, and residential properties, do not have an inherent quiet quality. The Project would result in no adverse indirect effects on the other 31 historic properties from construction or operational noise (36 CFR 800.5[a][2][iv] and [v]); therefore, no further analysis is provided in the sections below with respect to construction or operational noise effects.

According to the FTA Guidance Manual, operational ground-borne vibration primarily causes human annoyance or interference with use of equipment sensitive to vibration. Damage to historic buildings from vibration resulting from train operation is "unlikely, except when the track will be very close to the structure." In these cases, the FTA Guidance Manual provides direction to use the construction vibration threshold of 0.12 in/sec PPV – or alternatively an RMS velocity level of 90 decibels (VdB) – for those structures.[95] Operational vibration levels at all 32 historic properties would be below 90 VdB, thus there are no anticipated adverse effects on any historic properties from Project operational vibration.[96] No further analysis is provided with respect to operational noise effects for the 32 historic properties in the following sections.

This FOE addresses each of the individual 32 historic properties identified during the inventory and evaluation survey conducted for this Project. It is concluded that this

[95] Federal Transit Administration, *Transit Noise and Vibration Impact Assessment*, Report No. FTA-VA-90-1003-06 (Washington, DC: US Department of Transportation, FTA, Office of Planning and Environment, May 2006), 8-3, 8-4, and 12-13.

[96] Wilson Ihrig, *VTA's BART Silicon Valley—Phase II Extension Project, Noise and Vibration Technical Report,* November 2017.

Project would have no adverse effect, with conditions, on the 32 historic properties and the San Jose Downtown Commercial District, to which ten of the individual historic properties contribute.

Table 5-1. Summary of Effects by Criteria of Effects:

Map Reference	APN	Street Address	Physical destruction of or damage to all or part of the property	Alteration that is not consistent with Secretary of the Interior's standards for the treatment of historic properties	Removal of the property from its historic location	Change in character of property's use or physical features within the property's setting that contribute to its historic significance	Introduction of visual, atmospheric, or audible elements that diminish the integrity of property's significant historic features	Neglect of a property which causes its deterioration	Transfer, lease, or sale of property out of Federal ownership or control
C-25	467-08-007 467-08-009 467-08-014	1375-1401 East Santa Clara Street	No Adverse Effect	No Adverse Effect	No Adverse Effect	No Adverse Effect	No Adverse Effect	No Adverse Effect	No Adverse Effect
C-26	467-10-043	1191 East Santa Clara Street	No Adverse Effect	No Adverse Effect	No Adverse Effect	No Adverse Effect	No Adverse Effect	No Adverse Effect	No Adverse Effect
C-27	467-10-046	1169 (1167) East Santa Clara Street	No Adverse Effect	No Adverse Effect	No Adverse Effect	No Adverse Effect	No Adverse Effect	No Adverse Effect	No Adverse Effect
D-03	467-57-082	227-247 East Santa Clara Street	No Adverse Effect	No Adverse Effect	No Adverse Effect	No Adverse Effect	No Adverse Effect	No Adverse Effect	No Adverse Effect
E-08*	467-23-035	142-150 East Santa Clara Street	No Adverse Effect	No Adverse Effect	No Adverse Effect	No Adverse Effect	No Adverse Effect	No Adverse Effect	No Adverse Effect
E-09*	467-23-036	138 East Santa Clara Street	No Adverse Effect	No Adverse Effect	No Adverse Effect	No Adverse Effect	No Adverse Effect	No Adverse Effect	No Adverse Effect
E-10*	467-23-038	124-126 East Santa Clara Street	No Adverse Effect	No Adverse Effect	No Adverse Effect	No Adverse Effect	No Adverse Effect	No Adverse Effect	No Adverse Effect
E-11*	467-23-039	114-118 East Santa Clara Street	No Adverse Effect	No Adverse Effect	No Adverse Effect	No Adverse Effect	No Adverse Effect	No Adverse Effect	No Adverse Effect

Map Reference	APN	Street Address	Physical destruction of or damage to all or part of the property	Alteration that is not consistent with Secretary of the Interior's standards for the treatment of historic properties	Removal of the property from its historic location	Change in character of property's use or physical features within the property's setting that contribute to its historic significance	Introduction of visual, atmospheric, or audible elements that diminish the integrity of property's significant historic features	Neglect of a property which causes its deterioration	Transfer, lease, or sale of property out of Federal ownership or control
E-12*	467-23-089	100 East Santa Clara Street	No Adverse Effect	No Adverse Effect	No Adverse Effect	No Adverse Effect	No Adverse Effect	No Adverse Effect	No Adverse Effect
E-13*	467-22-149	96 East Santa Clara Street	No Adverse Effect	No Adverse Effect	No Adverse Effect	No Adverse Effect	No Adverse Effect	No Adverse Effect	No Adverse Effect
E-14*	467-22-148	52 East Santa Clara Street	No Adverse Effect	No Adverse Effect	No Adverse Effect	No Adverse Effect	No Adverse Effect	No Adverse Effect	No Adverse Effect
E-15	467-21-028	19 East 2nd Street	No Adverse Effect	No Adverse Effect	No Adverse Effect	No Adverse Effect	No Adverse Effect	No Adverse Effect	No Adverse Effect
E-18*	467-22-041 467-22-042	42-48 East Santa Clara Street	No Adverse Effect	No Adverse Effect	No Adverse Effect	No Adverse Effect	No Adverse Effect	No Adverse Effect	No Adverse Effect
E-19*	467-22-158	36-40 East Santa Clara Street	No Adverse Effect	No Adverse Effect	No Adverse Effect	No Adverse Effect	No Adverse Effect	No Adverse Effect	No Adverse Effect
E-20	467-54-001 through 467-54-034	22 North 1st Street	No Adverse Effect	No Adverse Effect	No Adverse Effect	No Adverse Effect	No Adverse Effect	No Adverse Effect	No Adverse Effect
E-21*	467-62-001 467-62-007 through 467-62-020	8-14 South 1st Street	No Adverse Effect	No Adverse Effect	No Adverse Effect	No Adverse Effect	No Adverse Effect	No Adverse Effect	No Adverse Effect
E-22	259-40-038	34 West Santa Clara Street	No Adverse Effect	No Adverse Effect	No Adverse Effect	No Adverse Effect	No Adverse Effect	No Adverse Effect	No Adverse Effect

Map Reference	APN	Street Address	Physical destruction of or damage to all or part of the property	Alteration that is not consistent with Secretary of the Interior's standards for the treatment of historic properties	Removal of the property from its historic location	Change in character of property's use or physical features within the property's setting that contribute to its historic significance	Introduction of visual, atmospheric, or audible elements that diminish the integrity of property's significant historic features	Neglect of a property which causes its deterioration	Transfer, lease, or sale of property out of Federal ownership or control
E-23	259-34-018	81 W. Santa Clara Street	No Adverse Effect	No Adverse Effect	No Adverse Effect	No Adverse Effect	No Adverse Effect	No Adverse Effect	No Adverse Effect
E-24	259-34-046	101 West Santa Clara Street	No Adverse Effect	No Adverse Effect	No Adverse Effect	No Adverse Effect	No Adverse Effect	No Adverse Effect	No Adverse Effect
E-25	259-38-128	374 West Santa Clara Street	No Adverse Effect	No Adverse Effect	No Adverse Effect	No Adverse Effect	No Adverse Effect	No Adverse Effect	No Adverse Effect
E-35	259-35-05	151-155 West Santa Clara Street	No Adverse Effect	No Adverse Effect	No Adverse Effect	No Adverse Effect	No Adverse Effect	No Adverse Effect	No Adverse Effect
E-27	467-20-078	30 North 3rd Street	No Adverse Effect	No Adverse Effect	No Adverse Effect	No Adverse Effect	No Adverse Effect	No Adverse Effect	No Adverse Effect
E-36	259-35-035	161-167 West Santa Clara Street	No Adverse Effect	No Adverse Effect	No Adverse Effect	No Adverse Effect	No Adverse Effect	No Adverse Effect	No Adverse Effect
F-13	261-34-020	Cahill Station and Santa Clara / Alameda Underpass	No Adverse Effect	No Adverse Effect	No Adverse Effect	No Adverse Effect	No Adverse Effect	No Adverse Effect	No Adverse Effect
F-14	261-33-020	848 The Alameda	No Adverse Effect	No Adverse Effect	No Adverse Effect	No Adverse Effect	No Adverse Effect	No Adverse Effect	No Adverse Effect
F-15	261-01-074	176 North Morrison Avenue	No Adverse Effect	No Adverse Effect	No Adverse Effect	No Adverse Effect	No Adverse Effect	No Adverse Effect	No Adverse Effect

Map Reference	APN	Street Address	Physical destruction of or damage to all or part of the property	Alteration that is not consistent with Secretary of the Interior's standards for the treatment of historic properties	Removal of the property from its historic location	Change in character of property's use or physical features within the property's setting that contribute to its historic significance	Introduction of visual, atmospheric, or audible elements that diminish the integrity of property's significant historic features	Neglect of a property which causes its deterioration	Transfer, lease, or sale of property out of Federal ownership or control
F-22	261-01-063	179-181 Rhodes Court	No Adverse Effect	No Adverse Effect	No Adverse Effect	No Adverse Effect	No Adverse Effect	No Adverse Effect	No Adverse Effect
F-33	261-33-047	734 The Alameda	No Adverse Effect	No Adverse Effect	No Adverse Effect	No Adverse Effect	No Adverse Effect	No Adverse Effect	No Adverse Effect
F-34	261-62-001 through 261-62-115; 261-623-001 through 261-63-50	88 Bush Street	No Adverse Effect	No Adverse Effect	No Adverse Effect	No Adverse Effect	No Adverse Effect	No Adverse Effect	No Adverse Effect
F-35	261-010-68	865 The Alameda	No Adverse Effect	No Adverse Effect	No Adverse Effect	No Adverse Effect	No Adverse Effect	No Adverse Effect	No Adverse Effect
I-01	230-06-031 230-06-032 230-06-050 230-06-051	1 Railroad Avenue (Santa Clara Station)	No Adverse Effect	No Adverse Effect	No Adverse Effect	No Adverse Effect	No Adverse Effect	No Adverse Effect	No Adverse Effect
I-02	230-06-040	Benton And Railroad (Santa Clara Tower, Speeder Shed, & Tool House)	No Adverse Effect	No Adverse Effect	No Adverse Effect	No Adverse Effect	No Adverse Effect	No Adverse Effect	No Adverse Effect

5.3.1 1375-1401 East Santa Clara Street, Church of Five Wounds (Map Reference C-25)

In the vicinity of this historic property, the Project would consist of the construction of Alum Rock/28th Street Station and a tunnel alignment under either the Single-Bore or Twin-Bore Option. Construction and operation of the Project would not result in direct or indirect adverse effects on the Church of Five Wounds as described below.

5.3.1.1 Single-Bore Option

Direct Effects

Neither the construction nor operation of the Single-Bore Option would result in the partial removal of, physical destruction of, or damage to this historic property under 36 CFR 800.5(a)(2)(i), (ii) and (iii) because all project component under this option would be located outside of the historic property boundary. Therefore, the proposed Project would not cause a direct adverse effect on the Church of Five Wounds.

Indirect Effects

The Single-Bore Option would not cause indirect adverse effects on the Church of Five Wounds under 36 CFR 800.5(a)(2)(iv) and (v) from the introduction of visual elements. The tunnel alignment would be below ground and would not cause any indirect adverse visual effects on the historic property. The 11-acre Alum Rock/28th Street Station would consist of an underground station; above-ground facilities including portal entrance canopy structures, system facilities (electrical, ventilation, and communication equipment, a TPSS, auxiliary power substation and an emergency generator), a seven-story parking structure, and passenger drop off areas; as well as other improvements (roadway modifications, pedestrian connection; bicycle facilities, lighting, street trees, wide sidewalks; and construction of the Five Wounds Trail along North 28th Street).

The closest above-ground component of the station (a one-story entrance portal sited on the northeast side of t North 28th Street northwest of Five Wounds Lane) would be approximately 285 feet northwest of the historic property's northern boundary and more than 400 feet northwest of its closest contributing structure (the school building), as shown in **Figure 5-1** below. All other components of the station for the Single-Bore Option would be more than 300 feet north of the church's other contributing elements. A perimeter wall encloses the church property along most of its north and west sides; therefore, the majority of the above-ground features of this station would not be visible from the historic property. The perimeter wall, however, does not extend north of the church school building. Some Project components, such as the northern station entrance portal, seven-story parking structure along North 28th Street (**Figure 5-1**), and system facilities would be visible when looking north and northwest from the northern façade of that contributing structure and from the upper floors of the main church.

However, these Project components would be a considerable distance (more than 300 feet) away from the contributing school structure. The removal of nearby industrial buildings that are approximately 100 feet north of the historic property for construction of the station and its proposed above-ground facilities would not adversely alter the viewshed surrounding this historic property. Similarly, while other Project improvements, such as roadway modifications, sidewalks, and the Five Wounds Trail, would be visible from the either the church's rectory or the school, these modifications would not adversely alter the viewshed or setting of this historic property because these additions are small in scale and will be consistent with the current use of the area as a heavily-trafficked transportation corridor. The integrity of the property's significant historic features and its use, both of which contribute to its historic significance, would remain unchanged.

The 11-acre station site would also be the site of a construction staging area that would be visible when looking north and northwest from the school building, west from the rectory, and west and north from the upper floors of the church. However, this proposed Project component would be temporary and would not cause adverse indirect visual effects on the historic property under 36 CFR 800.5(a)(2)(iv) and (v).

No adverse impacts are anticipated from the introduction of vibration or noise elements caused by construction of the Project utilizing the Single-Bore Option tunneling methodology at the location of this historic property (36 CFR 800.5[a][2][iv] and [v]).[97] Implementation of avoidance measures, described in detail in Section 5.2 above, would result in no indirect adverse effect on historic properties from Project construction vibration.

Impacts from construction of the underground station for the Alum Rock/28th Street Station for the Single-Bore Option is anticipated to produce noise levels above the FTA threshold of 85 A-weighted decibels (dBA) at the location of this historic property's school building. However, application of mitigation measures would avoid adverse effect on this historic property. Mitigation identified in the Project's *Noise and Vibration Technical Report* includes installation of a temporary noise wall or noise curtain (a flexible barrier hung from frames) and restriction on noise-generating construction activity hours. The temporary noise or curtain wall would be high enough to block equipment generating noise and result in an anticipated 5 dBA reduction in construction noise level.[98] Implementation of these measures would avoid indirect adverse effects on this historic property.

Further, any inadvertent damage to historic properties resulting from construction impacts will be repaired according to SOI Standards (Section 5.2) resulting in a finding

[97] Wilson Ihrig, *VTA's BART Silicon Valley—Phase II Extension Project, Noise and Vibration Technical Report.*

[98] Wilson Ihrig, *VTA's BART Silicon Valley—Phase II Extension Project, Noise and Vibration Technical Report.*

of no indirect adverse effects on historic properties (36 CFR 800.5[a][2][iv] and [v]) from construction of the Single-Bore Option.

Operational noise has the potential to cause indirect adverse effect *only* on historic properties that have an inherent quiet quality that is part of a property's historic character and significance (e.g. churches, parks, and National Historic Landmarks with significant outdoor use). At the location of this historic church, the predicted operational noise level would reach up to 25 dBA, a level less than the FTA threshold of 40 dBA for institutional buildings and historic buildings with an indoor use that involves mediation and study (e.g., a church or school).[99] Therefore, the Single-Bore Option would result in no adverse indirect effects from construction or operational noise or vibration.

5.3.1.2 Twin-Bore Option

Direct Effects

The Twin-Bore Option would include the same project components as the Single-Bore Option. For the reasons outlined above under Single-Bore Option, the Twin-Bore Option would not result in any direct or indirect adverse effects. All project construction activities would be located outside the historic property boundary and thus would not result in any direct adverse effects under 36 CFR 800.5(a)(2)(i), (ii) and (iii).

Indirect Effects

There would be no indirect visual adverse effects from the construction or operation of the Twin Bore Option. The underground tunnel alignment would not be visible from the historic property and thus would not result in and indirect adverse visual effects under 36 CFR 800.5(a)(2)(iv) and (v). The closest above-ground component of the station would be an entrance portal sited on the southwest side of the intersection North 28th Street and Five Wounds Lane. It would be approximately 115 feet from the historic property's boundary and more than 330 feet northwest of the closest contributors (church and rectory), as shown in **Figure 5-2** and **Figure 5-3** below. All other above-ground components of this station option would be of equal or greater distance away from the historic property boundary and/or its contributing buildings. The extant perimeter fence around the north and west sides of the historic property would block most above-ground components of the Twin-Bore Option; those that would be visible when looking north and northwest from the school and from the upper floors of the church would not adversely alter the viewshed or setting of this historic property. Those project components would be far enough away from the historic property (more than 300 feet) and thus would not cause any indirect adverse effect from the introduction of new visual elements (36 CFR 800.5[a][2][iv] and [v]).

[99] Wilson Ihrig, *VTA's BART Silicon Valley—Phase II Extension Project, Noise and Vibration Technical Report*, Federal Transit Administration, *Transit Noise and Vibration Impact Assessment*, 3-7, 3-8, and 8-3.

The roadway modifications, sidewalks, and construction of Five Wounds Trail would also not result in any indirect adverse effects. Although they might be visible from the rectory or the school buildings, these modifications would not adversely alter the viewshed or setting of the Church of Five Wounds in an adverse manner (36 CFR 800.5[a][2][iv] and [v]). Further, while the construction staging area that would encompass the entire station site under the Twin-Bore Option would be visible from the historic property, it would be temporary and would not cause adverse indirect visual effects on the historic property.

There would be no indirect adverse effects from construction noise or vibration under the Twin-Bore Option for the same reasons as described above for the Single-Bore Tunnel. Any adverse effect (36 CFR 800.5[a][2][iv] and [v]) on this historic property from construction noise and vibration will be avoided by the implementation of measures outlined above in Section 5.2.

Further, any inadvertent damage to historic properties resulting from construction impacts will be repaired according to SOI Standards (Section 5.2) resulting in a finding of no indirect adverse effects on historic properties (36 CFR 800.5[a][2][iv] and [v]) from construction of the Twin-Bore Option.

Operational noise level at the location of this historic church is predicted to reach up to 25 dBA, a level less than the FTA threshold of 40 dBA for institutional buildings and historic buildings with an indoor use that involves mediation and study (e.g. a church or school), and would not result in any indirect adverse effects on this historic property.[100] Furthermore, as described in Section 5.2, treatments and measures to reduce ground settlement during construction would avoid indirect adverse effects on this historic property.

In conclusion, under both the Single- and Twin-Bore Options, the Project would result in a finding of ***No Adverse Effect*** on this historic property. Refer to Map 3 in Appendix A for the location of this historic property as well as the conceptual plans for the proposed Alum Rock/28th Street Station and **Figure 5-1, Figure 5-2,** and **Figure 5-3** below for existing and simulated views.

[100] Wilson Ihrig, *VTA's BART Silicon Valley—Phase II Extension Project, Noise and Vibration Technical Report*, Federal Transit Administration, *Transit Noise and Vibration Impact Assessment*, 3-7, 3-8, and 8-3.

Figure 5-1: Church of Five Wounds, Existing View (top) and Simulated View (bottom) of proposed Alum Rock/28th Street Station (Single-Bore Option) looking north along North 28th Street from East Santa Clara Street.

Figure 5-2: Church of Five Wounds, Existing View (top) and Simulated View (bottom) of proposed Alum Rock/28th Street Station (Twin-Bore Option) looking north along North 28th Street from East Santa Clara Street.

Figure 5-3: Church of Five Wounds, Existing View (top) and Simulated View (bottom) of proposed Alum Rock/28th Street Station (Twin-Bore Option) looking south along North 28th Street from just north of Five Wounds Lane.

5.3.2 1191 East Santa Clara Street (Map Reference C-26)

In the vicinity of this historic property, the Project would consist of the construction of a tunnel alignment beneath East Santa Clara Street under either the Single- or Twin-Bore Option. The construction and operation of the Project would not result in direct or indirect adverse effects on the Mayfair Theater at 1191 East Santa Clara Street, as described below.

Direct Effects

The tunnel for either the Single- or Twin-Bore Options would not result in the partial removal of, physical destruction of, or damage to this historic property under 36 CFR 800.5(a)(2)(i), (ii) and (iii) because all construction activities would be located outside the boundary of this historic property. Therefore, there would be no direct adverse effect on the Mayfair Theater building from the construction of either tunnel option.

Indirect Effects

The proposed Project would not cause indirect adverse effects on this historic property from the introduction of visual elements under either option. The Single- and Twin-Bore tunnel alignments would be underground and not visible from the historic building, thus neither option would result in any indirect adverse effects from the introduction of new visual elements under 36 CFR 800.5(a)(2)(iv) and (v).

Furthermore, there are no predicted vibration or noise impacts from the construction or operation of either the Single- or Twin-Bore Options at the location of this historic property (36 CFR 800.5[a][2][iv] and [v]).[101] As described in Section 5.2 above, implementation of avoidance measures would result in no indirect adverse effect on historic properties from Project construction vibration.

The Project will employ treatments that would reduce ground settlement related to construction of the tunnel with the TBM and cut-and-cover construction around historic properties, thus avoiding indirect adverse effects on historic properties under both the Single- and Twin-Bore Options. Refer to Section 5.2 for the details of avoidance measures for potential ground settlement impacts. Implementation of these measures would minimize and/or avoid indirect adverse effects on historic properties (36 CFR 800.5[a][2][iv] and [v]) from Project construction.

Further, any inadvertent damage to historic properties from construction impacts will be repaired according to SOI Standards (Section 5.2) resulting in a finding of no indirect

[101] Wilson Ihrig, *VTA's BART Silicon Valley—Phase II Extension Project, Noise and Vibration Technical Report.*

adverse effects on historic properties (36 CFR 800.5[a][2][iv] and [v]) from Project construction under either the Single-Bore Option or Twin-Bore Option.

In conclusion, under both the Single- and Twin-Bore Options, the Project would result in a finding of ***No Adverse Effect*** on this historic property. Please refer to Map 3 in Appendix A for the location of this historic property.

5.3.3 1169 East Santa Clara Street (Map Reference C-27)

Near this historic property, the Project would consist of the construction of a tunnel alignment beneath East Santa Clara Street under either the Single- or Twin-Bore Option. The construction and operation of the Project would not result in direct or indirect adverse effects on the residence at 1169 East Santa Clara Street, as described below.

Direct Effects

The tunnel alignment for both the Single- or Twin-Bore Options would not result in the partial removal of, physical destruction of, or damage to this historic property under 36 CFR 800.5(a)(2)(i), (ii) and (iii) because all construction activities would be located outside the boundary of this historic property. Therefore, there would not be any direct adverse effect on this historic residence from construction of either tunnel option.

Indirect Effects

The proposed Project would not cause indirect adverse effects on this historic property from the introduction of visual elements under either the Single- or Twin-Bore Option. Both tunnel alignments under either option would be below grade and not visible from the historic building. Therefore, neither the Single- or Twin-Bore Option would result in any indirect adverse effects at this location from the introduction of new visual elements under 36 CFR 800.5(a)(2)(iv) and (v).

There are no predicted vibration or noise impacts from the construction or operation of the Single- or Twin-Bore Options at the location of this historic property (36 CFR 800.5[a][2][iv] and [v]).[102] Implementation of avoidance measures described in Section 5.2 would result in no indirect adverse effect on historic properties from Project construction vibration. The Project will also employ treatments that would reduce ground settlement related to construction of the tunnel with the TBM and cut-and-cover construction around historic properties under both the Single- or Twin-Bore Options, thus avoiding indirect adverse effects on historic properties under 36 CFR 800.5(a)(2)(iv) and (v). Refer to Section 5.2,for the details of avoidance measures for potential ground settlement impacts.

[102] Wilson Ihrig, *VTA's BART Silicon Valley—Phase II Extension Project, Noise and Vibration Technical Report.*

Further, any inadvertent damage to historic properties from construction impacts will be repaired according to SOI Standards (Section 5.2) resulting in no adverse effects from construction of either the Single- or Twin-Bore Option. (36 CFR 800.5[a][2][iv] and [v])

In conclusion, under both the Single- and Twin-Bore Options, the Project would result in a finding of ***No Adverse Effect*** on this historic property. Please refer to Map 3 in Appendix A for the location of this historic property.

5.3.4 227-247 East Santa Clara Street (Map Reference D-03)

Near this historic property, the Project would include of the construction of a station and tunnel alignment beneath East Santa Clara Street, and include construction staging area under either the Single- or Twin-Bore Option. The construction and operation of the Project would not result in direct or indirect adverse effects on the Vintage Towers building at 227-247 East Santa Clara Street under either option as described below.

5.3.4.1 Single-Bore Option

Direct Effects

Under the Single-Bore Option, the tunnel alignment, Downtown San Jose Station—East Option, and construction staging area would be located outside of the Vintage Towers' historic property boundary and therefore would not cause any direct adverse effects because these Project components would not result in the partial removal of, physical destruction of, or damage to this historic property under 36 CFR 800.5(a)(2)(i), (ii) and (iii).

Indirect Effects

The tunnel alignment would be below grade and would not be visible from the historic property, thus it would not result in any indirect adverse visual effects from its construction or operation under the Single-Bore Option. While the construction staging area would be visible when looking south, east, and west from the historic property, this proposed Project component would be temporary and would not diminish the integrity of the property's significant historic features. Therefore, neither the tunnel alignment nor construction staging area would cause adverse indirect visual effects on the historic commercial building (36 CFR 800.5[a][2][iv] and [v]).

The Downtown San Jose Station—East Option would include an underground station with above-ground facilities consisting of a station entrance, system facilities (emergency exit and exhaust generator, ventilation shafts, fresh air intake and exhaust shafts), and streetscape improvements (as shown in **Figure 5-4** below) near this historic property. Construction of the underground station and its entrances would employ cut-and-cover construction with tiebacks to secure shoring walls. The tiebacks would extend

underground beneath the historic property while the station would be directly below Santa Clara Street. The underground station and entrances, along with the other station components noted above, would not result in any direct adverse effects on the Vintage Towers building because all would be located outside of its historic property boundary and would not result in the partial removal of, physical destruction of, or damage to this historic property under 36 CFR 800.5(a)(2)(i), (ii) and (iii).

The proposed station would be below grade and not visible from this historic property; therefore, it would not result in any indirect adverse effects from the introduction of new visual elements (36 CFR 800.5[a][2][iv] and [v]). The historic property would be approximately 125 feet northwest of (and cattycorner across Santa Clara Street) the entrance structure, which would be sited at the southeast corner of Santa Clara and 6th Streets. The two-story entrance, which would measure approximately 165 by 190 feet, would house an emergency exit, fresh air intake, and tunnel ventilation shafts. Concealed within the station entrance structure, these system facilities would not be visible when looking northeast from the historic property. Although the station entrance would be visible when looking northeast from Vintage Tower, this Project component would not adversely alter the viewshed or setting of the historic property. The entrance structure would be located a considerable distance away from the historic property, and across two well-trafficked thoroughfares (East Santa Clara and 6th Streets). The historic property's setting and view have already been altered by the introduction of modern buildings (including the expansive 18-story San Jose City Hall building and complex) and street amenities in its immediate vicinity. The introduction of similar modern facilities of a lesser scale would blend in with the existing setting, and would not diminish the integrity of the property's significant historic features and its use, both of which contribute to its historic significance, and would not result in any indirect adverse visual effects under the Single-Bore Option (36 CFR 800.5[a][2][iv] and [v]). Additionally, small-scale streetscape improvements consistent in use and scale with existing pedestrian infrastructure along Santa Clara Street between 1st and 7th Streets (immediately adjacent to the historic property's main façade) would also not cause any adverse visual effects on this historic property.

There are no predicted vibration or noise impacts from the construction or operation of the Single-Bore Option at the location of this historic property (36 CFR 800.5[a][2][iv] and [v]).[103] Implementation of avoidance measures described in Section 5.2, above would result in no indirect adverse effect on historic properties from Project construction vibration.

The Project will also employ treatments that would reduce ground settlement related to construction of the tunnel with the TBM and cut-and-cover construction around historic properties, thus avoiding indirect adverse effects on historic properties under the Single-

[103] Wilson Ihrig, *VTA's BART Silicon Valley—Phase II Extension Project, Noise and Vibration Technical Report.*

Bore Option. Refer to Section 5.2, for details of avoidance measures for potential ground settlement impacts. Implementation of the above measures would minimize and/or avoid indirect adverse effects on historic properties (36 CFR 800.5[a][2][iv] and [v]) from Project construction.

Further, any inadvertent damage to historic properties from construction impacts will be repaired according to SOI Standards (Section 5.2) resulting in a finding of no indirect adverse effects on historic properties (36 CFR 800.5[a][2][iv] and [v]) from construction of the Single-Bore Option.

5.3.4.2 Twin-Bore Option

Direct Effects

Like the Single-Bore Option, the tunnel alignment and construction staging area under the Twin-Bore Option would be located outside of the Vintage Towers building historic property boundary. The Twin-Bore Option may result in the partial removal of some sub-sidewalk features (basements and/or freight access elevators located within the public right-of-way) associated with buildings located adjacent to the cut-and-cover construction areas. The exact location of the sub-sidewalk structures, if they exist, is presently unknown; therefore, the Project will conduct pre-construction surveys of all historic buildings adjacent to cut-and-cover construction areas to identify historic properties that may have these sub-sidewalk features within the public right-of-way. A qualified structural engineer, in consultation with an architectural historian or historic architect who meets SOI Professional Qualification Standards (36 C.F.R. 61), will design the removal of the sub-surface features in a manner that will not cause more than cosmetic damage to historic buildings. The structural designs will be reviewed by an architectural historian or historic architect for consistency with SOI Standards. Implementation of this treatment will avoid direct adverse effects on this historic property. Cut-and-cover construction of the Downtown San Jose Station Station—East Option's underground station and its entrances would employ cut-and-cover construction with tiebacks to secure shoring walls. The tiebacks would extend underground beneath the historic property and would not result in any direct adverse effect on the Vintage Tower. Therefore, there are no predicted direct adverse effects on this historic property under 36 CFR 800.5(a)(2)(i), (ii) and (iii).

Indirect Effects

The Twin-Bore Option would not cause any indirect adverse effects from the introduction of new visual elements at the location of this historic property. For the same reasons noted above under the Single-Bore Option, the tunnel alignment and construction staging areas would not result in any indirect adverse visual effects on the historic commercial building (36 CFR 800.5[a][2][iv] and [v]).

Downtown San Jose Station Station—East Option (Twin-Bore Tunnel)

Under the Twin-Bore Tunnel Option, the Downtown San Jose Station—East Option would consist of an underground station and above-ground facilities consisting of portal entrance canopy structures, system facilities (TPSS, auxiliary power substation, emergency exhaust generator, ventilation shafts, and fresh air intake and exhaust shafts), and streetscape improvements as shown in **Figure 5-5** below. None of these Project components would result in adverse visual effects on the Vintage Towers building. Because the station would be below grade, it would not result in any indirect adverse effects from the introduction of new visual elements (36 CFR 800.5[a][2][iv] and [v]). The historic property would be more than 100 feet southwest of the E4 portal entrance option, approximately 150 feet northwest of the E5 portal entrance option, and more than 235 feet northwest of fresh air intake, TPSS, and the auxiliary power substation that would be located near the east end of the station (along the south side of East Santa Clara Street between 6th and 7th Streets). While the one-story canopy structures and shafts, which would be approximately 15 and 12 feet tall, respectively, would be visible when looking southeast from Vintage Tower, none of these components would adversely alter the viewshed or setting of the historic property. These structures would be located a considerable distance away from the historic property, and across two well-trafficked thoroughfares (East Santa Clara and 6th Streets). The historic property's setting and view have already been altered by the introduction of modern buildings and street amenities in its immediate vicinity, and the introduction of other similar modern facilities would not diminish the integrity of the property's significant historic features and its use, both of which contribute to its historic significance.

For the same reasons outlined above under the Single-Bore Option, there are no predicted vibration or noise impacts from the construction or operation of the Twin-Bore Option at the location of this historic property (36 CFR 800.5[a][2][iv] and [v]).[104] Implementation of avoidance measures described in Section 5.2, would avoid and/or minimize indirect adverse effect on historic properties from Project construction vibration and ground settlement. Further, any inadvertent damage to historic properties from construction impacts will be repaired according to SOI Standards (Section 5.2); thus, there would be no indirect adverse effects on historic properties (36 CFR 800.5[a][2][iv] and [v]) from construction of the Twin-Bore Option.

In conclusion, under both the Single- and Twin-Bore Options, the Project would result in a finding of ***No Adverse Effect*** on this historic property. Please refer to Map 3 in Appendix A for the location of this historic property as well as conceptual plans for the proposed Downtown San Jose Station—East Option and **Figure 5-4** and **Figure 5-5** below for existing and simulated views.

[104] Wilson Ihrig, *VTA's BART Silicon Valley—Phase II Extension Project, Noise and Vibration Technical Report.*

Figure 5-4: 227-247 East Santa Clara Street, Existing View (top) and Simulated View (bottom) of the Downtown San Jose Station – East Option (Single-Bore Tunnel Alignment) looking northeast along East Santa Clara Street toward 6th Street .

Figure 5-5: 227-247 East Santa Clara Street, Existing View (top) and Simulated View (bottom) of the Downtown San Jose Station – East Option (Twin-Bore Tunnel Alignment) looking northeast along East Santa Clara Street toward 6th Street.

5.3.5 San Jose Downtown Commercial District Map References E-08 through E14, E-18, E-19, and E-21)

In the vicinity of this National Register-listed historic district, the Project would include the construction of a station and tunnel alignment beneath East Santa Clara Street, as well as construction staging areas under either the Single-Bore or Twin-Bore Option. The construction and operation of the Project would not result in direct or indirect adverse effects on the San Jose Downtown Commercial District or to any of the 10 contributing buildings located within the architectural APE as described below.

5.3.5.1 Single-Bore Option

Direct Effects

Under the Single- Bore Option, the tunnel alignment, the Downtown San Jose Station—East Option, and Downtown San Jose Station—West Option would not be located within any parcels containing buildings that contribute to the significance of the San Jose Downtown Commercial District. The construction of the Downtown San Jose Station—East Option and Downtown San Jose Station—West Option would employ cut-and-cover construction with tiebacks to secure shoring walls. The tiebacks would extend underground beneath the historic property and would not directly affect any of the historic district's contributing buildings. While some of the construction staging area under the Downtown San Jose Station—West Option would encompass a small area of both 2nd and 3rd Streets within the historic district boundary, the staging area would be temporary and would not cause the partial removal of, physical destruction of, or damage to the historic district or its contributors. Therefore, these project components would not result in a direct adverse effect on the historic district on the historic district or its contributors under 36 CFR 800.5(a)(2)(i), (ii) and (iii).

Indirect Effects

The Single-Bore Option would not cause indirect adverse effects on the historic district or any of its contributors from the introduction of new visual, vibration, or noise elements. The tunnel alignment would be below grade and not visible from the historic district; thus, it would not result in any indirect adverse visual effects under 36 CFR 800.5(a)(2)(iv) and (v).

Downtown San Jose Station—East Option

The construction or operation of the Downtown San Jose Station—East Option would not result in an indirect adverse effect on the historic district or its 10 contributing buildings from the introduction of new visual elements. The station would be below grade and therefore would not result in any indirect adverse effects from the introduction of new visual elements (36 CFR 800.5[a][2][iv] and [v]). The construction staging area

proposed under this station option would be located along Santa Clara Street roughly between 2nd and 8th Streets. Although adjacent to the historic district, the staging area would be temporary and would not cause adverse indirect visual effects on the historic district.

The closest above-ground feature of the proposed station would be system facilities at the southwest corners of Santa Clara and North 3rd Streets and Santa Clara and North 4th Streets, and a station entrance at the southeast corner of Santa Clara and 4th Streets. These project components are located outside the historic district boundary. A TPSS would be sited off 3rd Street; a smaller system facilities area off North 4th Street would include an auxiliary power substation. Both the TPSS and the substation would be sited within the northernmost portion of these system facilities areas set back a considerable distance from Santa Clara Street. The TPSS and substation sites would be approximately 180 and 230 feet, respectively, northwest of the historic district boundary and its closest contributing buildings. While these facilities may be visible when looking northwest and southwest from the historic district, they would be far enough away (more than 180 feet) and across East Santa Clara, a well-trafficked thoroughfare, that they would not adversely alter the viewshed or setting of this historic district or any of its 10 contributors.

Similarly, the proposed E1 station entrance would also not adversely alter the view or setting of the district or its contributors. The station entrance would be located within the modern San Jose City Hall complex, set back more than 50 feet from 4th Street. Measuring approximately 45 by 45 feet and up to 15 feet in height, the entrance would include an elevator and be constructed using transparent materials. The entrance's scale and massing are consistent with the contributing buildings within the historic district. Furthermore, the ground-level emergency exit would be located within a small (approximately 500 square feet) system facilities area to the southeast and would not be visible from the historic district. Therefore, the proposed system facilities and station entrance near the historic district under the Downtown San Jose Station—East Option would not cause indirect adverse visual effect on this historic property (36 CFR 800.5[a][2][iv] and [v]).

Streetscape improvements along East Santa Clara Street between 7th and 1st Streets (immediately adjacent to the historic district) for the Downtown San Jose Station—East Option would also not cause any adverse visual effects on this historic property (36 CFR 800.5[a][2][iv] and [v]). Set in a dense urban setting, the streets within and adjacent to this historic district have already been altered by the construction of modern buildings, structures, and infrastructure, including the addition and/or replacement of light standards, mailboxes, signage, traffic and pedestrian lights, transit shelters, parking meters, and sidewalk improvements (including sidewalk extensions, curb replacement, etc.). The small-scale streetscape features would be consistent with the current character of the area as a heavily-trafficked pedestrian and automobile corridor,

and would blend into this existing setting. Therefore, this Project component would not cause any indirect adverse effects on this historic district (36 CFR 800.5[a][2][i], [ii], [iii], and [v]).

Downtown San Jose Station—West Option

The construction or operation of the Downtown San Jose Station—West Option would not result in an indirect adverse effect on the historic district or its contributing elements from the introduction of new visual elements. For the same reasons as described above under the Downtown San Jose Station—East Option, the underground station and construction staging areas would not have any indirect adverse visual effects on the historic district.

Near the historic district this station option's closest above-ground components would include two station entrances (E1 and E2) and a system facilities area, all of which are located well outside the historic district boundary. The E1 station entrance would be located more 475 feet southwest of the historic district. Negligibly visible from its southwestern boundary, the entrance would not cause an adversely affect to the district or its contributors. The E2 station entrance would be located midblock between 1st and 2nd Streets across Santa Clara Street, a well-trafficked thoroughfare, and approximately 175 feet from the district boundary and its closest contributors. Its façade would be approximately two-stories in height, like the two non-historic structures that it would replace (**Figure 5-6**).

The system facilities would be located on the southwest corner of 3rd and Santa Clara Streets and would include a TPSS, auxiliary power substation, emergency exit, and a fresh air intake facility. All would be housed within a new one-story building that would replace an existing non-historic two-story building. While the shafts of the fresh air intake could rise to 18 feet in height, they will mostly be concealed, along with the TPSS and substation and emergency exit, by the new structure, which would be approximately 200 feet north of the historic district. The entrances and system facilities are sited within a dense urban setting that has already been altered by modern infill construction and infrastructure. The scale and massing of the proposed entrance structure and new building that would house the system facilities is consistent with the other buildings in this area (including those that contribute to the historic district). Neither the entrances nor system facilities would adversely alter the view or setting of the historic district and would not cause any indirect adverse visual effects on the historic district and its 10 contributing buildings located within the APE (36 CFR 800.5[a][2][iv] and [v]).

For the same reasons described above for the Downtown San Jose Station—East Option, the streetscape improvements along Santa Clara Street between 1st and 4th Streets (immediately adjacent to the historic district) would also not cause indirect adverse visual effects on the district or its 10 contributors (36 CFR 800.5[a][2][iv] and [v]).

Furthermore, there are no predicted vibration or noise impacts from the construction or operation of the Single-Bore Option on the historic district (36 CFR 800.5[a][2][iv] and [v]).[105] Implementation of avoidance measures described in Section 5.2, would result in no indirect adverse effect on historic properties from Project construction vibration.

The Project will employ treatments that would reduce ground settlement related to construction of the tunnel with the TBM and cut-and-cover construction around historic properties, thus avoiding indirect adverse effects on historic properties. Refer to Section 5.2, for details of avoidance measures for potential ground settlement impacts. Implementation of these measures would minimize and/or avoid indirect adverse effects on historic properties (36 CFR 800.5[a][2][iv] and [v]) from construction ground settlement.

Further, any inadvertent damage to historic properties resulting from construction impacts will be repaired according to SOI Standards (Section 5.2) resulting in a finding of no indirect adverse effects on historic properties (36 CFR 800.5[a][2][iv] and [v]) from construction of the Single-Bore Option.

5.3.5.2 Twin-Bore Option

Direct Effects

Under the Twin- Bore Option, the tunnel alignment would not be located within any parcels containing buildings that contribute to the significance of the San Jose Downtown Commercial District. Therefore, the tunnel alignment under the Twin-Bore Option would not cause any direct adverse effects on this historic property under 36 CFR 800.5(a)(2)(i), (ii) and (iii).

Downtown San Jose Station—East Option

Construction of this station option would use cut-and-cover construction methods, which may require the partial removal of some sub-sidewalk features (basements and/or freight access elevators located within the public right-of-way) in buildings adjacent the cut-and-cover construction. Implementation of measures described above for the tunnel alignment would avoid adverse effects on historic properties. Cut-and-cover construction of the Downtown San Jose Station Station—East Option's underground station and its entrances would include tiebacks to secure shoring walls. The tiebacks would extend underground beneath historic buildings and would not result in any direct adverse effect on the historic district's contributing buildings. Therefore, this station option would not result in direct adverse effects on the historic district or any of its contributing buildings that are adjacent to cut-and-cover construction for the underground station under 36 CFR 800.5(a)(2)(i), (ii) and (iii).

[105] Wilson Ihrig, *VTA's BART Silicon Valley—Phase II Extension Project, Noise and Vibration Technical Report.*

The construction staging area under the Downtown San Jose Station—East Option would encompass some sidewalk and street area along 2nd and 3rd Streets within the historic district boundary; however, the staging area would be temporary and would not cause the partial removal of, physical destruction of, or damage to the historic district or its contributors under 36 CFR 800.5(a)(2)(i), (ii) and (iii).

Only one entrance portal structure (E1) would be located within the boundaries of the historic district. Located on the south side of East Santa Clara Street between 2nd and 3rd Streets, the E1 entrance would be adjacent to (north of) two contributors to the historic district: 96 East Santa Clara Street (Map Reference E-13) and 52 East Santa Clara Street (Map Reference E-14). The E1 station entrance (**Figure 5-7**) would measure approximately between 8 and 24 feet wide, 10 and 40 feet long, and approximately 15 feet in height. This station entrance would be located within the sidewalk and would not alter these two contributing elements of the historic district. However, the station entrance may alter the landscaping, infrastructure, and hardscape (e.g., sidewalks, curbs, light standards, and street furniture) within the public right-of-way, but these street features have already been altered and/or replaced over time and are not considered contributing elements of the district because they post-date the district's period of significance. Given the size of the historic district (28 contributing structures in total located within a more than two-square-block area over 11 acres), and that there is only one location (as noted above) where an above-ground structure is proposed for this station option within or immediately adjacent to the historic district, any potential alteration of the street features within the public right-of-way would not present an adverse effect on the overall historic district. Overall, changes to the integrity of setting, location, association, and feeling of the historic district and its contributors would be negligible. Set in a dense urban setting, the historic district has already been altered by the construction of modern buildings, structures, and infrastructure, including the addition and/or replacement of light standards, mailboxes, signage, traffic and pedestrian light, bus shelters, parking meters, and sidewalk improvements. Therefore, this station option would not result in a direct adverse effect on the historic district or its contributing elements because it would not cause the partial removal of, physical destruction of, or damage to the historic district or its contributors under 36 CFR 800.5(a)(2)(i), (ii) and (iii).

Downtown San Jose Station—West Option

As described under direct effects from the tunnel alignment, cut-and-cover of the underground station may require the partial removal of some sub-sidewalk features in buildings adjacent the cut-and-cover construction. However, the Project will implement measures (outlined above for the cut-and-cover construction) that would avoid adverse effects on historic properties. Similarly, the use of tiebacks for cut-and-cover construction of the station and its entrances would not cause any direct adverse effect on any of the historic district's contributors because the tiebacks would be below the

historic buildings. Therefore, this station option would not result in direct adverse effects on the historic district or any of its contributing buildings that are adjacent to cut-and-cover construction for the underground station under 36 CFR 800.5(a)(2)(i), (ii) and (iii).

While some of the construction staging area under this station option would encompass a small area of both 2nd and 3rd Streets and adjacent sidewalks within the historic district boundary, the staging area would be temporary and would not cause the partial removal of, physical destruction of, or damage to the historic district or its contributors. Therefore, this project components would not result in a direct adverse effect on the historic district or its contributors under 36 CFR 800.5(a)(2)(i), (ii) and (iii).

The construction of the Downtown San Jose Station—West Option would not result in a direct adverse effect on the historic district or its contributing elements. None of the Project components under this station option would be located within the boundaries of any parcels containing buildings that contribute to the significance of the San Jose Downtown Commercial District. Some components (E4 and E6 station entrance options – see **Figure 5-8** for simulated view of the E6 entrance; an emergency access shaft; and a construction staging area) of the Downtown San Jose Station—West Option would be located within the boundaries of the historic district. The E4 entrances (**Figure 5-9**) would be located adjacent to 42-48 East Santa Clara Street (Map References E-18), a contributor to the historic district; and the E-6 station entrance (**Figure 5-8**) option would be adjacent to the contributor at 52 East Santa Clara Street (Map Reference E-14). The at-grade emergency access shaft would be located near the corner of Santa Clara and 3rd Streets, adjacent to one contributor: 100 East Santa Clara (Map Reference E-12).

The construction of these station entrances and access shaft would be located within the sidewalk, and would not directly alter the buildings described above. The station entrances and access shaft may alter the landscaping, infrastructure, and hardscape (e.g., sidewalks, curbs, light standards, and street furniture) within the public right-of-way in front of and adjacent to these buildings; however, these features have already been altered and/or replaced over time are not considered contributing elements of the district. Given the size of the historic district (28 contributing structures in total located within a more than two-square-block area over 11 acres), and that there are only three station location entrances (as identified above) for this station option that would be located within or immediately adjacent to the historic district, any potential alteration of the street features within the public right-of-way would not present an adverse effect on the overall historic district. Overall, the changes to integrity of setting, location, association, and feeling of the historic district and its contributors would be negligible. Set in a dense urban setting, the historic district has already been altered by the construction of modern (i.e., not dating to the historic district's period of significance) buildings, structures, and infrastructure, including the addition and/or replacement of light standards, mailboxes, signage, traffic and pedestrian light, bus shelters, parking

meters, and sidewalk improvements. There will be no direct adverse effect on any of the historic district properties (36 CFR 800.5[a][2][i], [ii], and [iii]) from the construction of the station entrances or emergency access shaft for Downtown San Jose Station—West Option under the Twin-Bore Option. Therefore, this proposed component of the Project would not cause a direct adverse effect on this historic district.

Indirect Effects

The Twin-Bore Option would not cause indirect adverse effects on historic district or any of its 10 contributors located within the APE from the introduction of new visual, vibration, or noise elements. The tunnel alignment would be below grade and not visible from the historic district and thus would not cause indirect adverse visual effects. Therefore, the Twin-Bore Option would not result in any indirect adverse effects on the historic district and its contributor from the introduction of new visual elements under 36 CFR 800.5(a)(2)(iv) and (v).

Downtown San Jose Station—East Option

The construction or operation of the Downtown San Jose Station—East Option would not result in indirect adverse effects on the historic district or its 10 contributing elements from the introduction of new visual elements. The station would be below grade and therefore would not result in any indirect adverse effects from the introduction of new visual elements (36 CFR 800.5[a][2][iv] and [v]).

Under the Twin-Bore Option, this station would include the E1 station entrance, which as noted above would be located within the boundaries of the historic district; and the E2 and E3 entrance options, which would be located near, but outside of, the historic district. The E1 option would include two separate entrance portal structures on the north and south sides of East Santa Clara Street, mid-block between 2nd and 3rd Streets; the E2 entrance option, which would be located on the northeast side of East Santa Clara Street east of 4th Street (see **Figure 5-7** and **Figure 5-10** for the E1 and E2 entrances); and the E3 entrance option that would be sited on the southeast side of East Santa Clara Street just northeast of 4th Street. Each of these entrance options would include canopy structures that would measure approximately between 8 and 24 feet wide, 10 and 40 feet long, and approximately 15 feet in height. The E2 and E3 options would also include an elevator and canopy structures.

None of these station entrances would cause an indirect adverse effect on any of the 10 historic properties located within the Project APE or their associated historic district from the introduction of new visual elements (36 CFR 800.5[a][2][iv] and [v]). All 10 historic properties are located along well-trafficked pedestrian and automobile routes and a modern transit mall (along South 2nd Street) that serves both bus and light rail passengers. Construction of the station entrances would not significantly or importantly alter the relationship of any historic building or associated district to its transportation corridors. These proposed station entrances would be located within the existing curb

line and sidewalk. Considering the distance between the entrances and the historic buildings, and the use of transparent glass walls for the proposed shelters which are designed to minimize their visual impact, the shelters would not noticeably block views when looking to or from historic properties, nor would they alter the character-defining features for which the historic properties or the district were found to be historically significant. While canopy structures over each station entrance option would be visible from one or more of the 10 contributing buildings, none would adversely alter the existing setting or integrity of those historic properties or the overall historic district. The introduction of an entrance canopy would be consistent with the character of the existing transportation corridors and the dense, urban setting of the area for which change is a constant. Construction of station entrances would not cause any change in use or physical features of setting that may contribute to the significance of the 10 historic properties within the Downtown San Jose Commercial District that are located within the Project APE, or the overall historic district.

Above-ground system facilities under this station option located near the historic district would include tunnel ventilation, fresh air intake, and equipment access shafts, and an emergency exits. All of these components would be at the northwest corner of East Santa Clara and 3rd Streets and would be housed in a new, one-story structure that would replace non-historic buildings of a similar size (**Figure 5-7**). While the shafts could rise to 18 feet in height, they would be set back approximately 150 feet off Santa Clara Street (more than 300 feet away from the historic district) and mostly be concealed, along with the emergency exit, by a new structure, which would be approximately 170 feet north of the historic district. These system facilities are sited within a dense urban setting that has already been altered by modern infill construction and infrastructure. The scale and massing of the proposed new building that would house the system facilities is consistent with the other buildings in this area (including those that contribute to the historic district). The system facilities would not adversely alter the view or setting of the historic property and would not cause any indirect adverse visual effects on the historic district and its 10 contributing buildings located within the APE (36 CFR 800.5[a][2][iv] and [v]).

The Downtown San Jose Station—East Option site would also be used as construction staging area and would be visible when looking northeast, northwest, and southwest from northernmost border of the historic district; however, this proposed Project component would be temporary and would not cause adverse indirect visual effects on the historic district or any of the 10 contributors (36 CFR 800.5[a][2][iv] and [v]).

Streetscape improvements along East Santa Clara Street adjacent to the historic district for the Downtown San Jose Station—East Option would also not cause any adverse visual effects on this historic property (36 CFR 800.5[a][2][iv] and [v]). The streets within and adjacent to this historic district have already been altered by the construction of modern buildings, structures, and infrastructure, including the addition and/or

replacement of light standards, mailboxes, signage, traffic and pedestrian lights, transit shelters, parking meters, and sidewalk improvements (including sidewalk extensions, curb replacement, etc.). Therefore, this Project component would not cause any indirect adverse effects on this historic district (36 CFR 800.5[a][2][i], [ii], [iii], and [v]).

Furthermore, there are no predicted vibration or noise impacts from the construction or operation of the Downtown San Jose Station—East Option at the location of this historic district (36 CFR 800.5[a][2][iv] and [v]).[106] Implementation of avoidance measures would result in no indirect adverse effect on historic properties from Project construction vibration. The Project will employ treatments that would reduce ground settlement related to construction of the tunnel with the TBM and cut-and-cover construction around historic properties, thus avoiding indirect adverse effects on historic properties. Refer to Section 5.2, for details of avoidance measures for construction vibration and potential ground settlement impacts. Implementation of those measures would minimize and/or avoid indirect adverse effects on this historic district and its contributing buildings (36 CFR 800.5[a][2][iv] and [v]) from the construction of this station option.

Further, any inadvertent damage to historic properties resulting from Project construction impacts will be repaired according to SOI Standards, thus resulting in a finding of no indirect adverse effects on historic properties (36 CFR 800.5[a][2][iv] and [v]) from construction of this station option.

Downtown San Jose Station—West Option

The construction or operation of the Downtown San Jose Station—West Option would not result in an indirect adverse effect on the historic district or its contributing elements from the introduction of new visual elements. For the same reasons as described above under the Downtown San Jose Station—East Option, the underground station and construction staging areas would not have any indirect adverse visual effects on the historic district.

The Downtown San Jose Station—West Option's above-ground components would consist of four entrance options (E4, E5, E6, and E7), a system facility (TPSS, fresh air intake, auxiliary power substation, and an emergency exit), an emergency access shaft, construction staging area, and streetscape improvements in or near the historic district.

The E4 station entrance option would consist of one entrance portal structure located along the north side of Fountain Alley (**Figure 5-9**), just west of the South Second Street Transit Mall, which was added in the late 1990s. This canopy structure would be sited near the southeast (secondary) side of the contributing commercial building located at 42-48 East Santa Clara Street (Map Reference E-18). The E6 entrance option (**Figure 5-8**) would be sited on the northeast side of South Second Street Transit Mall, adjacent

to the district contributor at 52 East Santa Clara Street (Map Reference E-14). The E5 and E7 entrance options would be located outside the historic district boundary on North 2nd and North 3rd Streets, respectively, across the northeast side of East Santa Clara Street. Each of these entrance options would include canopy structures that would measure approximately between 8 and 24 feet wide, 10 and 40 feet long, and approximately 15 feet in height.

For the same reasons outlined above under the analysis of indirect visual effects from construction station entrances for the Downtown San Jose Station—East Option, the station entrances listed above would not cause any indirect adverse effects on any of the 10 historic properties located within the Project APE or associated historic district from the introduction of new visual elements (36 CFR 800.5[a][2][iv] and [v]). Likewise, the construction of the equipment access shaft on South 3rd Street (at the southeast corner of East Santa Clara and South 3rd Street) near the district contributor located at 100 East Santa Clara Street (Map Reference E-12) would not result in any indirect adverse visual effects on the historic district (36 CFR 800.5[a][2][iv] and [v]).

Above-ground system facilities at 3rd and Santa Clara Streets (outside the historic district boundary) would be housed in a new one-story building. The new building would replace two non-historic buildings. While the shafts for the fresh air intake could rise to 18 feet in height, they would be set back off Santa Clara Street (more than 200 feet away from the historic district), and mostly concealed, along with the emergency exit, by the new structure that would be approximately 170 feet north of the historic district. The new structure would be of a similar size to the extant buildings at that location. While the building and shafts would be visible when looking northwest and southwest from the historic district, they would be far enough away (more than 200 feet) and across East Santa Clara, a well-trafficked thoroughfare, that they would not adversely alter the viewshed or setting of this historic district or any of its 10 contributors. These system facilities are sited within a dense urban setting that has already been altered by modern infill construction and infrastructure. The scale and massing of the proposed new building that would house the system facilities is consistent with the other buildings in this area (including those that contribute to the historic district). The system facilities would not adversely alter the view or setting of the historic property and would not cause any indirect adverse visual effects on the historic district and its 10 contributing buildings located within the APE (36 CFR 800.5[a][2][iv] and [v]).

Streetscape improvements proposed under the Downtown San Jose Station—West Option along West Santa Clara Street between 1st and 4th Streets (immediately adjacent to the historic district) would also not cause any adverse visual effects on this historic property (36 CFR 800.5[a][2][iv] and [v]). Set in a dense urban setting, the streets within and adjacent to this historic district have already been altered by the construction of modern buildings and structures and infrastructure, including the addition and/or replacement of light standards, mailboxes, signage, traffic and pedestrian light, transit

shelters, parking meters, and sidewalk improvements (including sidewalk extensions, curb replacement, etc.). Therefore, this Project component would not cause any indirect adverse effects on any part of this historic district (36 CFR 800.5[a][2][i], [ii], [iii], and [v]).

For the same reasons described above under the Downtown San Jose Station—East Option, there are no predicted impacts from vibration, ground settlement,or noise from the construction or operation of the Downtown San Jose Station—West Option at the location of this historic district (36 CFR 800.5[a][2][iv] and [v]).[107] Refer to Section 5.2 for avoidance measures for construction vibration and ground settlement. Implementation of measures would avoid indirect adverse effects on historic properties from Project construction.

Further, any inadvertent damage to historic properties resulting from Project construction will be repaired according to SOI Standards (Section 5.2), thus resulting in a finding of no indirect adverse effects on historic properties (36 CFR 800.5[a][2][iv] and [v]) from Project construction.

In conclusion, under both the Single- and Twin-Bore Options, the Project would result in a finding of ***No Adverse Effect*** on this historic property. Please refer to Map 3 in Appendix A for the location of the historic district and its contributors as well as conceptual plans for the proposed Downtown San Jose Station—East Option and Downtown San Jose Station—West Option under both Single- and Twin-Bore Option, and **Figure 5-6** through **Figure 5-10** below for existing and simulated views.

[107] Wilson Ihrig, *VTA's BART Silicon Valley—Phase II Extension Project, Noise and Vibration Technical Report.*


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Figure 5-6: San Jose Downtown Commercial District, Existing View (top) and Simulated Views (bottom) of the Downtown San Jose Station—West Option (Single-Bore Option) E2 entrance option looking southwest along East Santa Clara Street from 2nd Street showing Map References E-18, E-19, and E-21 (left)

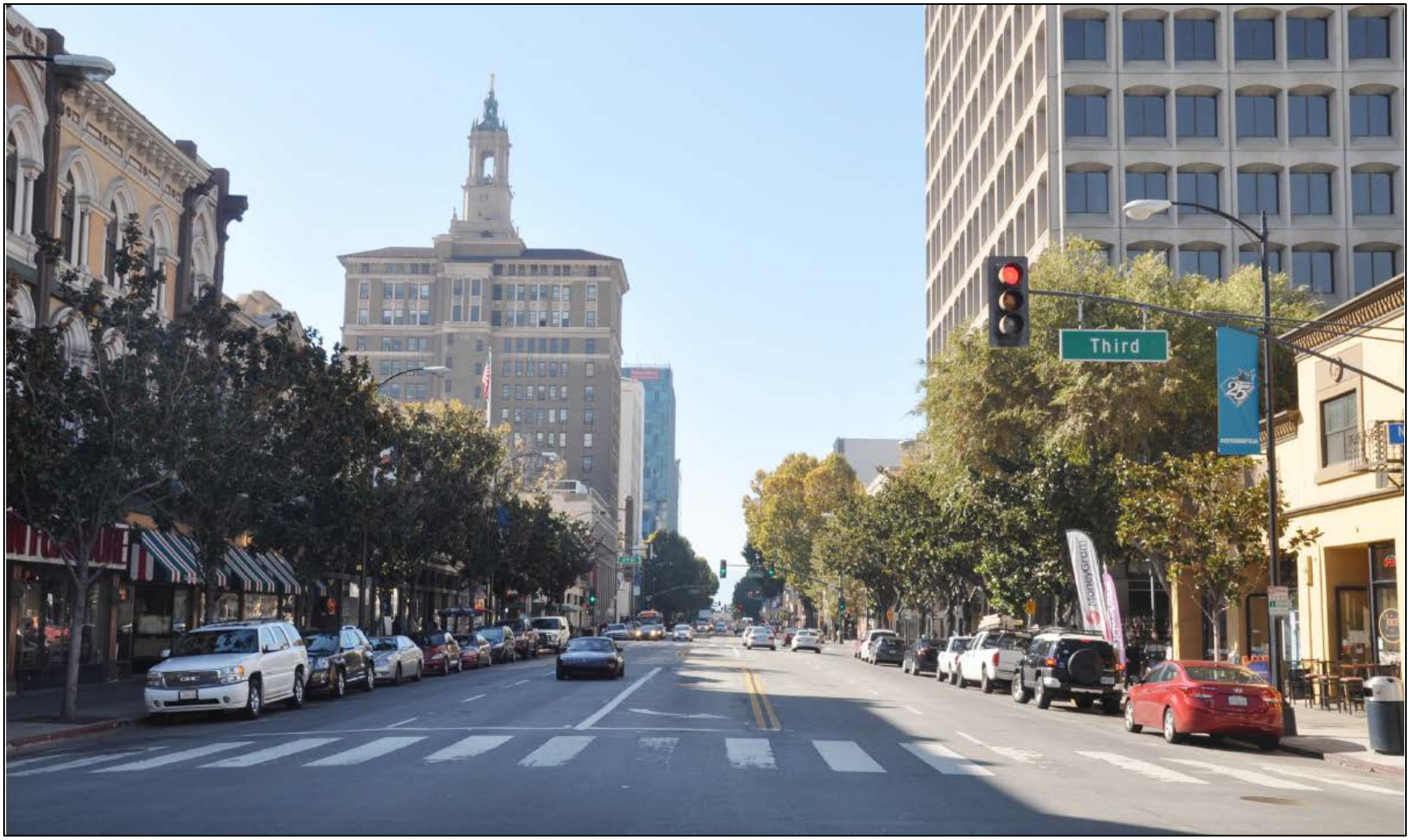
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Figure 5-7: San Jose Downtown Commercial District, Existing View (top) and Simulated View (bottom) of the Downtown San Jose Station—East Option (Twin-Bore Option) E1 (left) and E2 (right) entrance option with building that would house system facilities at right. Views are looking southwest along Santa Clara Street showing historic district contributors (Map Reference E-13) at left.


2ND ST

Figure 5-8: San Jose Downtown Commercial District, Existing View (top) and Simulated View (bottom) of the Downtown San Jose Station—West Option (Twin-Bore Option) E6 entrance option. Views are looking southeast along Santa Clara Street showing South 3rd Street (far right) and historic district contributor (Map Reference E-13, middle right, and Map Reference E-14, middle left.


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Figure 5-9: San Jose Downtown Commercial District, Existing View (top) and Simulated Views (bottom) of the Downtown San Jose Station—West Option (Twin-Bore Option) E4 entrance option looking north along South 2nd Street Transit Mall and showing Map References E-14 (middle right) and E-18 (middle left).

Figure 5-10: San Jose Downtown Commercial District, Existing View (top) and Simulated Views (middle and bottom) of the Downtown San Jose Station—East Option (Twin-Bore Option) E2 entrance option. Views are looking northeast along Santa Clara Street showing historic district contributors (Map Reference E-08 through E-10) at far right.

5.3.6 19 North 2nd Street (Map Reference E-15)

Construction and operation of the Project would not result in direct or indirect adverse effects on the Realty Building (19 North 2nd Street). Only those project components under either the Single- or Twin-Bore Option are analyzed below.

5.3.6.1 Single-Bore Option

Direct Effects

The Single-Bore Option would consist of the construction of a tunnel alignment beneath East Santa Clara Street and the Downtown San Jose Station—West Option near this historic property. The construction of the Downtown San Jose Station Station—West Option's underground station and its entrances would employ cut-and-cover construction methods with tiebacks to secure shoring walls. The tiebacks would extend underground beneath the historic property and would not result in any direct adverse effect on the Realty Building. All Project construction would be conducted outside of the Realty Building's historic property boundary and would not result in the partial removal of, physical destruction of, or damage to the historic property under 36 CFR 800.5(a)(2)(i), (ii) and (iii). Therefore, the under the Single-Bore Option would not cause a direct adverse effect on this historic property.

Indirect Effects

The Single-Bore Option would not cause indirect adverse effects on this historic property from the introduction of visual elements. The tunnel alignment under this option would be underground and not visible from the historic building, thus it would not result in any indirect adverse effects from the introduction of new visual elements under 36 CFR 800.5(a)(2)(iv) and (v).

Downtown San Jose Station—West Option

The closest above-ground component of the Downtown San Jose Station—West Option under the Single-Bore Option would be the E-2 station entrance that would be located midblock along East Santa Clara Street between 1st and 2nd Streets. The station entrance would face Santa Clara Street and only a small portion of its northeastern and northwestern walls would border the rear (southeastern and southwestern) walls of this historic property. The E2 entrance would be approximately the same height of the two-story historic building and would be visible when looking southwest from the historic building's rear second-floor windows. While the station would alter the view from the historic property, it would not do so in an adverse manner, as the viewshed or setting of this historic property as they have already been altered by modern multi-story buildings immediately adjacent (along North 2nd Street) and nearby along Santa Clara Street (36 CFR 800.5[a][2][iv] and [v]).

The streetscape improvements proposed along Santa Clara Street under this station option near (southeast of) this historic building directly adjacent (northwest) to the historic building would also not cause any adverse effects on this historic property as they would be far enough away so as to not have any adverse visual effect on this historic property (36 CFR 800.5[a][2][iv] and [v]).

The station site would also be used as construction staging area, which would be located along Santa Clara and North 2nd Streets. Although this project component would be visible when looking northwest and southeast from the historic property, the staging area would be temporary and would not cause adverse indirect visual effects on the historic commercial building (36 CFR 800.5[a][2][iv] and [v]). All other components for this station option would be a considerable distance away and would not cause any adverse effects on this historic property. Therefore, construction or operation of the Downtown San Jose Station—West Option under the Single-Bore Option would not cause any cause adverse visual effects under 36 CFR 800.5(a)(2)(iv) and (v).

Furthermore, there are no predicted vibration or noise impacts from the construction or operation of the proposed Project at the location of this historic property (36 CFR 800.5[a][2][iv] and [v]).[108] As described in Section 5.2 above, implementation of avoidance measures would result in no indirect adverse effect on historic properties from Project construction vibration.

The Project will employ treatments that would reduce ground settlement related to construction of the tunnel with the TBM and cut-and-cover construction around historic properties, thus avoiding indirect adverse effects on historic properties. Refer to Section 5.2 for details of avoidance measures for potential ground settlement impacts. Implementation of the above measures would minimize and/or avoid indirect adverse effects on historic properties (36 CFR 800.5[a][2][iv] and [v]) from Project construction.

Further, any inadvertent damage to historic properties resulting from construction impacts will be repaired according to SOI Standards (Section 5.2); thus resulting in a finding of no indirect adverse effects on historic properties (36 CFR 800.5[a][2][iv] and [v]) from Project construction.

5.3.6.2 Twin-Bore Option

Direct Effects

Like the Single-Bore Option analyzed above, the Twin-Bore Option would consist of the construction of a tunnel alignment beneath East Santa Clara Street and the Downtown San Jose Station—West Option near this historic property. All Project construction would be conducted outside of the Realty Building's historic property boundary and tiebacks used in the construction of the underground station and its entrances would

[108] Wilson Ihrig, *VTA's BART Silicon Valley—Phase II Extension Project, Noise and Vibration Technical Report.*

extend underground beneath the historic property. Therefore, these project components would not result in any direct adverse effect on the Realty Building because they would not result in the partial removal of, physical destruction of, or damage to the historic property under 36 CFR 800.5(a)(2)(i), (ii) and (iii). Therefore, the under the Single-Bore Option would not cause a direct adverse effect on this historic property.

Indirect Effects

Downtown San Jose Station—West Option

The closest above-ground Project component of the Downtown San Jose Station—West Option under the Twin-Bore Option would be the E-5 entrance option that would be located directly across 2nd Street (approximately 60 feet away) from this historic property (**Figure 5-11**). While the two one-story canopy structures, which would be up to 15 feet high, would be visible from the façade of this historic property, they would be partially sheltered from sight by trees and other streetscape amenities. Construction and operation of these canopy structures would not adversely alter the viewshed or setting of this historic property, as the view and setting have already been changed by the construction of a modern 14-story high-rise building adjacent to this historic property. This station option would also include streetscape improvements along West Santa Clara Street directly adjacent (northwest) to the historic building. For similar reasons outlined above for under the Single-Bore Option's Downtown San Jose Station—West Option, this Project component would also not cause any adverse effects on this historic property. Therefore, this station component would not result in any indirect adverse visual effects on this historic property (36 CFR 800.5[a][2][iv] and [v]).

The station site would also be used as construction staging area and would be visible when looking west and northeast from the historic property; however, the staging area would be temporary and would not cause adverse indirect visual effects on the historic commercial building (36 CFR 800.5[a][2][iv] and [v]). All other components for this station option would be a considerable distance away and would not cause any adverse effects on this historic property. Therefore, construction or operation of the Downtown San Jose Station—West Option under the Twin-Bore Option would not cause any cause adverse visual effects under 36 CFR 800.5(a)(2)(iv) and (v).

Furthermore, there are no predicted vibration or noise impacts from the construction or operation of the proposed Project at the location of this historic property (36 CFR 800.5[a][2][iv] and [v]).[109] As described in Section 5.2 above, implementation of avoidance measures would result in no indirect adverse effect on historic properties from Project construction vibration.

[109] Wilson Ihrig, *VTA's BART Silicon Valley—Phase II Extension Project, Noise and Vibration Technical Report.*

The Project will employ treatments that would reduce ground settlement related to construction of the tunnel with the TBM and cut-and-cover construction around historic properties, thus avoiding indirect adverse effects on historic properties. Refer to Section 5.2 for details of avoidance measures for potential ground settlement impacts. Implementation of the above measures would minimize and/or avoid indirect adverse effects on historic properties (36 CFR 800.5[a][2][iv] and [v]) from Project construction.

Further, any inadvertent damage to historic properties resulting from construction impacts will be repaired according to SOI Standards (Section 5.2), thus resulting in a finding of no indirect adverse effects on historic properties (36 CFR 800.5[a][2][iv] and [v]) from Project construction.

In conclusion, under both the Single- and Twin-Bore Options, the Project would result in a finding of ***No Adverse Effect*** on this historic property. Please refer to Map 3 in Appendix A for the location of this historic property as well as conceptual plans for the proposed Downtown San Jose Station—West Option under the Single- and Twin-Bore Options, and **Figure 5-11** below for existing and simulated views.

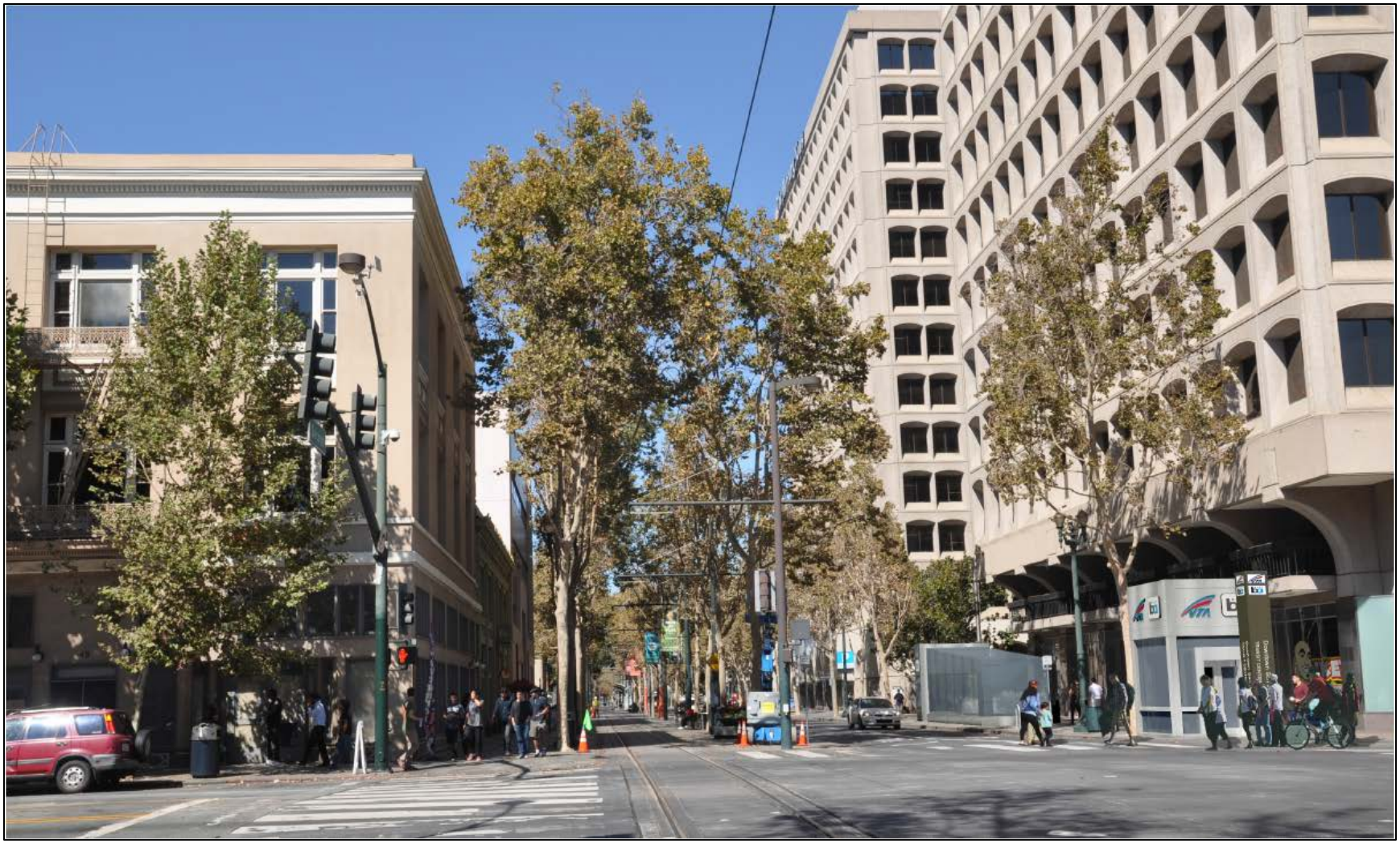

Figure 5-11: 19 North 2nd Street, Existing View (top) and Simulated View (bottom) of Downtown San Jose Station—West Option (Twin-Bore Option) E5 entrance option, looking northwest along North 2nd Street.

5.3.7 22 North 1st Street (Map Reference E-20)

Construction and operation of the Project would not result in direct or indirect adverse effects on the historic property located at 22 North 1st Street, as described below.

5.3.7.1 Single-Bore Option

Direct Effects

Construction and operation of the Single-Bore would not result in direct adverse effects on the historic property located at 22 North 1st Street. Near this property, the Single-Bore Option would consist of the construction of a tunnel alignment beneath East Santa Clara Street, and construction of either the Downtown San Jose Station—East Option or Downtown San Jose Station—West Option. All Project construction under the Single-Bore Option would be conducted outside of this historic property's boundary and would not result in the partial removal of, physical destruction of, or damage to the historic property under 36 CFR 800.5(a)(2)(i), (ii) and (iii). Therefore, the Project would not cause a direct adverse effect on this historic property.

Indirect Effects

The Single-Bore Option would not cause indirect adverse effects on this historic property from the introduction of new visual, vibration, or noise elements. The tunnel alignment would be below grade and therefore would not be visible from the historic property, thus it would not result in any indirect adverse visual effects from its construction or operation under the Single-Bore Option (36 CFR 800.5[a][2][iv] and [v]).

Downtown San Jose Station—East Option

A construction staging area under this station option would be located near this historic property. Located between North 1st and Market Streets, across the street from this historic property, the staging area would be visible when looking west and northwest from the historic property; however, the Project component would be temporary and would not cause adverse indirect visual effects on the historic commercial building. Streetscape improvements along West Santa Clara Street would also not cause any adverse effects on this historic property. All other components of this station option would be a considerable distance away from the historic property and would not result in an adverse visual effect (36 CFR 800.5[a][2][iv] and [v]).

Downtown San Jose Station—West Option

Under the Single-Bore Option's Downtown San Jose Station—West Option, the closest above-ground project components would include the underground station, the E2 entrance option, construction staging area between North 1st and Market Streets, and streetscape improvements. For the same reasons outlined above under the Downtown

San Jose Station—East Option, the underground station, construction staging area and streetscape improvements along Santa Clara Street would not result in an adverse visual effect on this historic property.

The E-2 station entrance would be located midblock along East Santa Clara Street between 1st and 2nd Streets. The station entrance would face Santa Clara Street and only a small portion of its southwestern walls would border the rear (northeastern) boundary of this historic property. The E2 entrance would be considerably smaller in scale and massing to this 10-story commercial building. While the station entrance would be visible when looking northeast from the historic building's rear windows, the station entrance would not adversely alter the view from the historic property or its setting. The viewshed and setting of this historic property has have already been altered by modern multi-story buildings immediately adjacent (on North 2nd Street) and nearby along Santa Clara Street. All other components of this station option would be underground and/or a considerable distance away and out of view of this historic property. Therefore, the construction or operation of the Downtown San Jose Station—West Option would not cause any cause adverse visual effects under 36 CFR 800.5(a)(2)(iv) and (v).

There are no predicted vibration or noise impacts from the construction or operation of the Single-Bore Option at the location of this historic property (36 CFR 800.5[a][2][iv] and [v]).[110] As described in Section 5.2 above, implementation of avoidance measures would result in no indirect adverse effect on historic properties from Project construction vibration under the Single-Bore Option.

The Project will also employ treatments that would reduce ground settlement related to construction of the tunnel with the TBM and cut-and-cover construction around historic properties, thus avoiding indirect adverse effects on historic properties. Refer to Section 5.2 for details of avoidance measures for potential ground settlement impacts. Implementation of those measures would minimize and/or avoid potential indirect adverse effects on historic properties (36 CFR 800.5[a][2][iv] and [v]) from ground settlement under the Single-Bore Option.

Furthermore, any inadvertent damage to historic properties resulting from construction impacts will be repaired according to SOI Standards (Section 5.2), thus resulting in no indirect adverse effects on historic properties (36 CFR 800.5[a][2][iv] and [v]) from construction of the Single-Bore Option.

[110] Wilson Ihrig, *VTA's BART Silicon Valley—Phase II Extension Project, Noise and Vibration Technical Report.*

5.3.7.2 Twin-Bore Option

Direct Effects

Construction and operation of the Twin-Bore would not result in direct adverse effects on the historic property located at 22 North 1st Street. Under the Twin-Bore Option, there would be no direct adverse effects from the construction of the tunnel alignment beneath East Santa Clara Street, the Downtown San Jose Station—East Option or Downtown San Jose Station—West Option. All Project construction under the Twin-Bore Option would be conducted outside of this historic property's boundary and would not result in the partial removal of, physical destruction of, or damage to the historic property under 36 CFR 800.5(a)(2)(i), (ii) and (iii). Therefore, the Project would not cause a direct adverse effect on this historic property.

Indirect Effects

The tunnel alignment under the Twin-Bore Option would be below grade and therefore would not be visible from the historic property, thus it would not result in any indirect adverse visual effects from its construction or operation.

Downtown San Jose Station—East Option

Under this station option, the closest above-ground project component would be a construction staging area roughly between North 1st, Market, and East Santa Clara Streets. The staging area would be across the street from this historic property and although visible when looking west and northwest from the historic building; the Project component would be temporary and would not cause adverse indirect visual effects on the historic commercial building. Streetscape improvements along Santa Clara Street would also not cause any adverse effects on this historic property. All other components of this station option would be a considerable distance away from the historic property and would not result in an adverse visual effect (36 CFR 800.5[a][2][iv] and [v]).

Downtown San Jose Station—West Option

The only above-ground project components near this historic property would be for the Downtown San Jose Station—East Option, the construction staging area along North 1st, Market, and East Santa Clara Streets and Santa Clara Street streetscape improvements under this station option would not cause any an adverse visual effect (36 CFR 800.5[a][2][iv] and [v]). For the same reasons outlined above none of these project components, nor the underground station, would not cause any adverse visual underground station under 36 CFR 800.5(a)(2)(iv) and (v)

Furthermore, there are no predicted vibration or noise impacts from the construction or operation of Twin-Bore Option at the location of this historic property (36 CFR 800.5[a][2][iv] and [v]).[111] As described in Section 5.2 above, implementation of

[111] Wilson Ihrig, *VTA's BART Silicon Valley—Phase II Extension Project, Noise and Vibration Technical Report.*

avoidance measures would result in no indirect adverse effect on historic properties from Project construction vibration. .

The Project will employ treatments that would reduce ground settlement related to construction of the tunnel with the TBM and cut-and-cover construction around historic properties, thus avoiding indirect adverse effects on historic properties. Implementation of avoidance measures described in Section 5.2 for potential ground settlement impacts would minimize and/or avoid indirect adverse effects on historic properties (36 CFR 800.5[a][2][iv] and [v]) under the Twin-Bore Option.

Furthermore, any inadvertent damage to historic properties resulting from construction impacts will be repaired according to SOI Standards (Section 5.2), thus resulting in no indirect adverse effects on historic properties (36 CFR 800.5[a][2][iv] and [v]) from construction of the Twin-Bore Option.

In conclusion, under the Single- and Twin-Bore Options, the Project would result in a finding of ***No Adverse Effect*** on this historic property. Please refer to Map 3 in Appendix A for the location of this historic property as well as conceptual plans for the proposed Downtown San Jose Station—East Option and Downtown San Jose Station—West Option.

5.3.8 34 West Santa Clara Street (Map Reference E-22)

Construction and operation of the Project would not result in direct or indirect adverse effects on the historic property located at 34 West Santa Clara Street.

5.3.8.1 Single-Bore Option

Direct Effects

In the vicinity of this historic property, the Single-Bore Option would consist of the construction of a tunnel alignment beneath West Santa Clara Street and the construction of either the Downtown San Jose Station—East Option or Downtown San Jose Station—West Option. All Project construction under the Single-Bore Option would be conducted outside of this historic property's boundary and would not result in the partial removal of, physical destruction of, or damage to the historic property under 36 CFR 800.5(a)(2)(i), (ii) and (iii). While both station options would employ cut-and-cover construction methods with tiebacks to secure shoring walls, the tiebacks would extend underground beneath the historic property and would not direct effect any of the historic district's contributing buildings and would not result in any direct adverse effect on this historic property. Therefore, the Single-Bore Option would not cause a direct adverse effect on this historic property.

Indirect Effects

None of the Project components listed above would cause an indirect adverse effect on this historic property from the introduction of visual elements. The bored tunnel alignment would be below grade and therefore would not result in any indirect adverse effects from the introduction of new visual elements under 36 CFR 800.5(a)(2)(iv) and (v).

Downtown San Jose Station—East Option

The station under the Downtown San Jose Station—East Option, would be underground and would not be visible from this historic property and thus would not cause any indirect adverse visual effects. The closest above-ground station components would be streetscape improvements along Santa Clara Street and a construction staging area located roughly between North 1st, Market, and Santa Clara Streets. Streetscape improvements along Santa Clara Street under this station option would not cause any adverse effects on this historic property. Only a small portion of the staging area would front Santa Clara Street, across the street from this historic property. Although visible when looking southwest from this historic building; this Project component would be temporary and would not cause adverse indirect visual effects on the historic commercial building. All other components of this station option would be a considerable distance away from the historic property and would not result in an adverse visual effect (36 CFR 800.5[a][2][iv] and [v]).

Downtown San Jose Station—West Option

The station under the Downtown San Jose Station—West Option, would be underground and would not be visible from this historic property and thus would not cause any indirect adverse visual effects. The only above-ground features of this station option that would be near this historic property are the E1 station entrance that would include above-ground system facilities (tunnel ventilation and fresh air intake shafts and an emergency exit), and a construction staging area and streetscape improvements along West Santa Clara Street.

The E1 station entrance option and system facilities would be located on the northwest side of West Santa Clara Street, approximately 100 feet northwest of this historic property. The construction of both Project components would require the demolition of a modern bank building. The freestanding entrance structure would be approximately 160 feet wide and 25 feet in height. It would be set back approximately 5 feet from the adjacent buildings along Santa Clara Street. Its façade (**Figure 5-12** in Section 5.3.9) would be constructed of glass and metal panels. The station entrance would not block views when looking to or from the historic property, and the setting of the historic property would not be altered in an adverse manner. The scale and massing of the entrance is consistent with other historic (and modern) buildings within this block of West Santa Clara Street, in which the setting has already been altered by the addition

of modern infill construction. The entrance structure would encompass the system facilities noted above. The ventilation and fresh air intake shafts would extend up to 18 feet above grade; however, both shafts would be set back more than 50 feet from the entrance façade and would concealed behind the entrance façade. Because of the distance and placement behind within the entrance structure, the shafts and emergency exit for the station system facilities would be not visible from the historic property. Thus, the E1 station entrance for the Downtown San Jose Station—West Option under the Single-Bore would not cause any indirect adverse visual effect (36 CFR 800.5[a][2][iv] and [v]) to this historic property.

The staging area and streetscape improvements would be directly adjacent to this historic property. While the staging area would be visible when looking north and southwest from the historic property, it would be temporary and would not cause adverse indirect visual effects on the historic commercial building. Streetscape improvements would also not cause any adverse effects on this historic property. All other above-ground components of this station option would be a considerable distance away from the historic property and would not result in adverse visual effect (36 CFR 800.5[a][2][iv] and [v]).

Furthermore, there are no predicted vibration or noise impacts from the construction or operation of the Single-Bore Option at the location of this historic property (36 CFR 800.5[a][2][iv] and [v]).[112] Implementation of measures described in Section 5.2 would avoid adverse effects on this historic property from Project construction vibration and therefore would result in no indirect adverse effect on this historic property under the Single-Bore Option.

The Project will also employ treatments that would reduce ground settlement related to construction of the tunnel with the TBM and cut-and-cover construction around historic properties, thus avoiding indirect adverse effects on historic properties. Refer to Section 5.2 for details of avoidance measures for potential ground settlement impacts. Implementation of those measures would minimize and/or avoid indirect adverse effects on this historic property (36 CFR 800.5[a][2][iv] and [v]).

Further, any inadvertent damage to historic properties resulting from construction impacts will be repaired according to SOI Standards (Section 5.2), thus resulting in no indirect adverse effects on historic properties (36 CFR 800.5[a][2][iv] and [v]) from construction of the Single-Bore Option.

[112] Wilson Ihrig, *VTA's BART Silicon Valley—Phase II Extension Project, Noise and Vibration Technical Report.*

5.3.8.2 Twin-Bore Option

Direct Effects

In the vicinity of this historic property, the Twin-Bore Option would consist of the construction of a tunnel alignment beneath West Santa Clara Street and the construction of either the Downtown San Jose Station—East Option or Downtown San Jose Station—West Option. The tunnel alignment would be located outside the boundary of this historic property; thus, it would not cause any direct adverse effects on this historic property under 36 CFR 800.5(a)(2)(i), (ii) and (iii).

Downtown San Jose Station—West Option

Construction of this station option would use cut-and-cover construction methods, which may require the partial removal of some sub-sidewalk features (basements and/or freight access elevators located within the public right-of-way) in buildings adjacent the cut-and-cover construction. Implementation of measures described above for the tunnel alignment, would avoid adverse effects on historic properties. Cut-and-cover construction of the Downtown San Jose Station Station—West Option's underground station and its entrances would include tiebacks to secure shoring walls. The tiebacks would extend underground beneath historic buildings and would not result in any direct adverse effect on the historic district's contributing buildings. No other proposed station component near this historic property would cause the partial removal of, physical destruction of, or damage to this historic property. Therefore, this station option would not result in direct adverse effects on this historic property under 36 CFR 800.5(a)(2)(i), (ii) and (iii).

Indirect Effects

None of the proposed station components listed above would cause an indirect adverse effect on this historic property from the introduction of visual elements. The bored tunnel alignment would be below grade and therefore would not result in any indirect adverse effects from the introduction of new visual elements under 36 CFR 800.5(a)(2)(iv) and (v).

Downtown San Jose Station—East Option

Under this station option, the closest above-ground project component would be a construction staging area across Santa Clara Street and roughly between North 1st, Market, and Santa Clara Streets and streetscape improvements along Santa Clara Street. Only a small portion of the staging area would front Santa Clara Street and although visible when looking southwest from this historic building; this Project component would be temporary and would not cause adverse indirect visual effects on the historic property. Streetscape improvements along Santa Clara Street under this station option would also not cause any adverse effects on this historic property. All other components of this station option would be a considerable distance away from the

historic property and would not result in an adverse visual effect (36 CFR 800.5[a][2][iv] and [v]).

Downtown San Jose Station—West Option

The underground station under the Downtown San Jose Station—West Option, would not be visible from this historic property and thus would not cause any indirect adverse visual effects on this historic property. The closest above-ground features of this station would be the E3 station entrance, above-ground system facilities (fresh air intake, TPSS, and auxiliary power substation), and a construction staging area and streetscape improvements along West Santa Clara Street.

The E3 station entrance option and system facilities would be located on the northwest side of West Santa Clara Street, approximately 100 feet northwest of this historic property. The construction of these Project components would require the demolition of a modern bank building. The entrance would include two above-ground structures—a canopy structure that would measure approximately 40 feet long and 24 feet wide and an elevator structure that would be 10 by 10 feet. Both structures would be up to 15 feet in height and would be set back behind a free-standing, one-story, glass and metal curtain wall (**Figure 5-13** in Section 5.3.9) that would measure approximately 160 feet wide and would be approximately 20 feet in height. Located across a well-trafficked street (Santa Clara Street) it would not block views when looking to or from this historic property, and the setting of the historic property would not be altered in an adverse manner. The scale and massing of the curtain wall is consistent with other historic (and modern) buildings within this block of West Santa Clara Street, in which the setting has already been altered by the addition of modern infill construction. The system facilities would also be located behind the curtain wall. While these facilities could rise to 18 feet in height, they would be set back off Santa Clara Street and would not be visible from this historic property because they would be lower in height than the curtain wall. Thus, the E3 station entrance would not cause any indirect adverse visual effect (36 CFR 800.5[a][2][iv] and [v]) to this historic property.

The staging area and streetscape improvements would be directly adjacent to this historic property. While the staging area would be visible when looking north from the historic property, it would be temporary and would not cause adverse indirect visual effects on the historic commercial building. Streetscape improvements would also not cause any adverse effects on this historic property. All other above-ground components of this station option would be a considerable distance away from the historic property and would not result in adverse visual effect (36 CFR 800.5[a][2][iv] and [v]).

Furthermore, there are no predicted vibration or noise impacts from the construction or operation of the Twin-Bore Option at the location of this historic property (36 CFR

800.5[a][2][iv] and [v]).[113] As described in Section 5.2 above, implementation of avoidance measures would result in no indirect adverse effect on historic properties from Project construction vibration.

The Project will also employ treatments that would reduce ground settlement related to construction of the tunnel with the TBM and cut-and-cover construction around historic properties, thus avoiding indirect adverse effects on historic properties. I Refer to Section 5.2 for details of avoidance measures for potential ground settlement impacts. Implementation of those measures would minimize and/or avoid indirect adverse effects on historic properties (36 CFR 800.5[a][2][iv] and [v]) from potential ground settlement impact under the Twin-Bore Option.

Further, any inadvertent damage to historic properties resulting from construction impacts will be repaired according to SOI Standards (Section 5.2), thus resulting in no indirect adverse effects on historic properties (36 CFR 800.5[a][2][iv] and [v]) from construction of the Twin-Bore Option.

In conclusion, under both the Single- and Twin-Bore Options, the Project would result in a finding of ***No Adverse Effect*** on this historic property. Please refer to Map 3 in Appendix A for the location of this historic property as well as conceptual plans for the proposed Downtown San Jose Station—East Option and Downtown San Jose Station—West Option.

5.3.9 81 West Santa Clara Street (Map Reference E-23)

Construction and operation of the Project would not result in direct or indirect adverse effects on the San Jose Building and Loan building at 81 West Santa Clara Street.

5.3.9.1 Single-Bore Option

Direct Effects

Near this historic property, the Single-Bore Option would consist of the construction of a tunnel alignment beneath West Santa Clara Street and the construction of either the Downtown San Jose Station—East Option or Downtown San Jose Station—West Option. All Project construction under the Single-Bore Option would be conducted outside of this historic property's boundary and would not result in the partial removal of, physical destruction of, or damage to the historic property under 36 CFR 800.5(a)(2)(i), (ii) and (iii). While both station options would employ cut-and-cover construction methods with tiebacks to secure shoring walls, the tiebacks would extend underground beneath the historic property and would not direct effect any of the historic district's contributing buildings and would not result in any direct adverse effect on this historic

[113] Wilson Ihrig, *VTA's BART Silicon Valley—Phase II Extension Project, Noise and Vibration Technical Report.*

property. Therefore, the Single-Bore Option would not cause a direct adverse effect on this historic property.

Indirect Effects

None of the components of the Single-Bore Option listed above would cause an indirect adverse effect on this historic property from the introduction of visual elements. The bored tunnel alignment would be below grade and therefore would not result in an indirect adverse effect from the introduction of new visual elements under 36 CFR 800.5(a)(2)(iv) and (v).

Downtown San Jose Station—East Option

The station under the Downtown San Jose Station—East Option, would be underground and would not be visible from this historic property and thus would not cause any indirect adverse visual effects. The closest above-ground station components would be a construction staging area located roughly between North 1st, Market, and Santa Clara Streets and streetscape improvements along Santa Clara Street. The staging area, which would front Santa Clara and Market Streets, would be immediately adjacent to this historic building. While visible when looking toward this historic building, this Project component would be temporary and would not cause adverse indirect visual effects on the historic property. The proposed streetscape improvements along Santa Clara Street under this station option would not cause any adverse effects on this historic property. All other components of this station option would be a considerable distance away from the historic property and would not result in an adverse visual effect (36 CFR 800.5[a][2][iv] and [v]).

Downtown San Jose Station—West Option

The construction of the Downtown San Jose Station—East Option would not result in indirect adverse visual effect on this historic property. The underground station would not be visible from this property; thus, it would not have an adverse visual effect on the historic bank building. Near this historic building, this station option would include the following above-ground components: the E1 station entrance (including above-ground system facilities), a construction staging area and streetscape improvements.

The E1 station entrance option and system facilities would be located on the northwest side of West Santa Clara Street, immediately adjacent to this historic property. These station components would use extant vacant parcels and require the demolition of a modern bank building. The freestanding entrance structure would form an L-shape, wrapping from its main façade along Santa Clara Street to a secondary façade on Market Street. The entrance structure would be constructed with glass and metal panels and would be approximately 25 feet in height with its Market and Santa Clara Street facades measuring approximately 35 feet and 160 feet in width, respectively. Set back approximately 5 feet from historic property along Santa Clara Street (**Figure 5-12**), the

station entrance would not block views when looking to or from the historic property, and the setting of the historic property would not be altered in an adverse manner. The scale and massing of the entrance, which is consistent with other historic (and modern) buildings within this block of West Santa Clara Street, as well as transparent glass in its construction, would not diminish the integrity of the historic property's significant historic features nor would it adversely alter the setting. The setting of this block along Santa Clara Street has already been altered by the addition of modern infill construction, including an 8-story high-rise building across Santa Clara Street. The entrance structure would encompass system facilities including tunnel ventilation and fresh air intake shafts and an emergency exit. The ventilation and fresh air intake shafts would extend up to 18 feet above grade; however, both shafts would be set back more than 50 feet from the entrance façade and would concealed behind the entrance façade. Because of the distance and placement behind within the entrance structure, the shafts and emergency exit for the station system facilities would be not visible when looking to or from the historic property. Thus, the E1 station entrance for the Downtown San Jose Station—West Option under the Single-Bore would not cause any indirect adverse visual effect (36 CFR 800.5[a][2][iv] and [v]) to this historic property.

The staging area and streetscape improvements would be directly adjacent to this historic property. While the staging area would be visible when looking to and from the historic property, it would be temporary and would not cause adverse indirect visual effects on the historic commercial building. Streetscape improvements would also not cause any adverse effects on this historic property. All other above-ground components of this station option would be a considerable distance away from the historic property and would not result in adverse visual effect (36 CFR 800.5[a][2][iv] and [v]).

There are no predicted vibration or noise impacts from the construction or operation of the Single-Bore Option at the location of this historic property (36 CFR 800.5[a][2][iv] and [v]).[114] Implementation of measures described in Section 5.2 would avoid adverse effects on this historic property from Project construction vibration and therefore would result in no indirect adverse effect on this historic property under the Single-Bore Option.

The Project will also employ treatments that would reduce ground settlement related to construction of the tunnel with the TBM and cut-and-cover construction around historic properties, thus avoiding indirect adverse effects on historic properties. Refer to Section 5.2 for details of avoidance measures for potential ground settlement impacts. Implementation of those measures would minimize and/or avoid indirect adverse effects on this historic property (36 CFR 800.5[a][2][iv] and [v]).

[114] Wilson Ihrig, *VTA's BART Silicon Valley—Phase II Extension Project, Noise and Vibration Technical Report.*

Further, any inadvertent damage to historic properties resulting from construction impacts will be repaired according to SOI Standards (Section 5.2), thus resulting in no indirect adverse effects on historic properties (36 CFR 800.5[a][2][iv] and [v]) from construction of the Single-Bore Option.

5.3.9.2 Twin-Bore Option

Direct Effects

In the vicinity of this historic property, the Twin-Bore Option would consist of the construction of tunnel alignment beneath West Santa Clara Street, and the construction of either the Downtown San Jose Station—East Option or Downtown San Jose Station—West Option. The tunnel alignment be located outside the boundary of this historic property and therefore would not cause any direct adverse effects on this historic property under 36 CFR 800.5(a)(2)(i), (ii) and (iii) under the Twin-Bore Option.

Downtown San Jose Station—West Option

Construction of this station option would use cut-and-cover construction methods, which may require the partial removal of some sub-sidewalk features (basements and/or freight access elevators located within the public right-of-way) in buildings adjacent the cut-and-cover construction. Implementation of measures described above for the tunnel alignment, would avoid adverse effects on historic properties. Cut-and-cover construction of the Downtown San Jose Station Station—West Option's underground station and its entrances would include tiebacks to secure shoring walls. The tiebacks would extend underground beneath historic buildings and would not result in any direct adverse effect on the historic district's contributing buildings. No other proposed station component near this historic property would cause the partial removal of, physical destruction of, or damage to this historic property. Therefore, this station option would not result in direct adverse effects on this historic property under 36 CFR 800.5(a)(2)(i), (ii) and (iii).

All other construction under the Twin-Bore Option, including the streetscape improvements and construction staging areas under both the Downtown San Jose Station—East Option and Downtown San Jose Station—West Option would be conducted outside of this historic property's boundary and would not cause a direct adverse effect on this historic property under 36 CFR 800.5(a)(2)(i), (ii) and (iii).

Indirect Effects

None of the Project components listed above would cause indirect adverse effects on this historic property from the introduction of visual elements. The tunnel alignment under the Twin-Bore Option would be below grade and therefore would not result in any indirect adverse effects from the introduction of new visual elements under 36 CFR 800.5(a)(2)(iv) and (v).

Downtown San Jose Station—East Option

The station under the Downtown San Jose Station—East Option, would be underground and would not be visible from this historic property and thus would not cause any indirect adverse visual effects on this historic property. The closest above-ground station components would be a construction staging area located roughly between North 1st, Market, and Santa Clara Streets and streetscape improvements along Santa Clara Street. The staging area, which would front Santa Clara and Market Streets, would be immediately adjacent to this historic building. While visible when looking toward this historic building; this Project component would be temporary and would not cause adverse indirect visual effects on the historic property. The proposed streetscape improvements along Santa Clara Street under this station option would also not cause any adverse effects on this historic property. All other components of this station option would be a considerable distance away from the historic property and would not result in an adverse visual effect (36 CFR 800.5[a][2][iv] and [v]).

Downtown San Jose Station—West Option

The underground station under the Downtown San Jose Station—West Option would not be visible from this historic property; therefore, it would not cause any indirect adverse visual effects on the historic bank building. In the area of this property, the above-ground components of the Downtown San Jose Station—West Option would include the E3 station entrance, system facilities (fresh air intake, TPSS, and auxiliary power substation), a construction staging area, and streetscape improvements. The E3 station entrance option and system facilities would be sited immediately adjacent this historic property. Both station components would utilize an extant vacant parcel and would also require the demolition of a modern bank building to the northeast. The station entrance option would include two above-ground structures—a canopy structure that would measure approximately 40 feet long and 24 feet wide and an elevator structure that would be 10 by 10 feet. Both structures would be up to 15 feet in height and would be set back from Santa Clara Street and concealed behind a free-standing, one-story glass and metal curtain wall (**Figure 5-13**) that would measure approximately 20 feet in height and extend approximately 160 feet from the southeast corner of the historic building's main façade to the southwest corner of the building located at the northwest corner of West Santa Clara Street and North 1st Street. The small scale of the station entrance structures, their use of transparent glass walls, as well as transparent glass used in the curtain wall, would not diminish the integrity of the historic property's significant historic features. The station entrance would not block views when looking to or from the historic property, and the setting of the historic property would not be altered in an adverse manner. The setting has already been altered by the construction of modern infill construction, including a building eight stories or more in height, adjacent to and across the street from this historic property.

The system facilities would also be located behind the free-standing curtain wall. While these facilities could rise to 18 feet in height, they would be set back off Santa Clara Street and would not be visible when looking toward this historic property because they would be lower in height than the curtain wall. In addition, a tunnel ventilation shaft would be located directly northwest of the historic building near its secondary façades and within a vacant parcel. The shaft would extend approximately 12 to 18 feet above grade and measure between approximately 10 by 10 feet to 15 by 20 feet. With no window openings along its secondary sides, the above-ground ventilation shaft would not be visible from the historic property. Thus, the E3 station entrance option and above-ground system facilities would not cause any indirect adverse visual effect (36 CFR 800.5[a][2][iv] and [v]) to this historic property.

The station site would also include a construction staging area, which would be adjacent to the southeast and northeast sides of this historic property. The staging area would be visible when looking southwest and southeast from the historic property's main entrance; however, this station component would be temporary and would not cause adverse indirect visual effects on the historic property under 36 CFR 800.5(a)(2)(iv) and (v). Streetscape improvements along West Santa Clara Street (immediately adjacent to the historic property's main façade) would also not cause any adverse visual effects on this historic property (36 CFR 800.5[a][2][iv] and [v]).

There are no predicted vibration or noise impacts from the construction or operation of the proposed Project at the location of this historic property (36 CFR 800.5[a][2][iv] and [v]) under the Twin-Bore Option.[115] As described in Section 5.2 above, implementation of avoidance measures would result in no indirect adverse effect on historic properties from Project construction vibration.

The Project will also employ treatments that would reduce ground settlement related to construction of the tunnel with the TBM and cut-and-cover construction around historic properties, thus avoiding indirect adverse effects on historic properties. Refer to Section 5.2 for details of avoidance measures for potential ground settlement impacts. Implementation of those measures would minimize and/or avoid indirect adverse effects on this historic property (36 CFR 800.5[a][2][iv] and [v]).

Further, any inadvertent damage to historic properties resulting from construction impacts will be repaired according to SOI Standards (Section 5.2), thus resulting in no indirect adverse effects on historic properties (36 CFR 800.5[a][2][iv] and [v]) from construction of the Twin-Bore Option.

In conclusion, under both the Single-Bore Option and Twin-Bore Option, the Project would result in a finding of ***No Adverse Effect*** on this historic property. Please refer to Map 3 in Appendix A for the location of this historic property as well as conceptual plans

[115] Wilson Ihrig, *VTA's BART Silicon Valley—Phase II Extension Project, Noise and Vibration Technical Report.*

for the proposed Downtown San Jose Station—East Option and Downtown San Jose Station—West Option, and **Figure 5-12** and **Figure 5-13** below for existing and simulated views.


CHASE
SAN JOSE BUILDING AND LOAN ASSOCIATION
CHASE

Figure 5-12: 81 West Santa Clara Street, Existing View (top) and Simulated View (bottom) of Downtown San Jose Station—West Option (Single-Bore Tunnel Alignment) E1 entrance option, looking northwest from West Santa Clara Street.


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CHASE

Figure 5-13: 81 West Santa Clara Street, Existing View (top) and Simulated View (bottom) of Downtown San Jose Station—West Option (Twin-Bore Tunnel Alignment) E3 entrance option, looking northwest from West Santa Clara Street.

5.3.10 101 West Santa Street (Map Reference E-24)

Construction and operation of either the Single- or Twin-Bore Option would not result in direct or indirect adverse effects on historic property at 101 West Santa Clara Street.

5.3.10.1 Single-Bore Option

Direct Effects

Near this historic property, the Single-Bore Option would consist of the construction of a tunnel alignment beneath West Santa Clara Street and either the Downtown San Jose Station—West Option or Downtown San Jose Station—West Option. All Project construction would be conducted outside of this historic property's boundary and would not result in the partial removal of, physical destruction of, or damage to the historic property under 36 CFR 800.5(a)(2)(i), (ii) and (iii). Therefore, the Single-Bore Option would not cause a direct adverse effect on this historic property.

Indirect Effects

None of the Project components listed above would cause indirect adverse effects on this historic property from the introduction of visual elements. The tunnel alignment would be below grade and therefore would not result in any indirect adverse effects from the introduction of new visual elements under 36 CFR 800.5(a)(2)(iv) and (v).

Downtown San Jose Station—East Option

Under the Downtown San Jose Station—East Option, the station would be underground and would not be visible from this historic property and thus would not cause any indirect adverse visual effects on this historic property. The closest above-ground station components would be a construction staging area located roughly between North 1st, Market. The staging area, which would front Santa Clara and Market Streets, would be northwest of this historic property and across Market Street. While visible when looking northwest from historic building; this Project component would be temporary and would not cause adverse indirect visual effects on the historic property. All other components under this station option would be a considerable distance away from the historic property and would not result in an adverse visual effect (36 CFR 800.5[a][2][iv] and [v]).

Downtown San Jose Station—West Option

For the same reasons as described above for the Downtown San Jose Station—East Option, the underground station for Downtown San Jose Station—West Option would not cause any indirect adverse visual effects. Near this historic property, the above-ground features that have a potential to impact this property are the E1 station entrance that would include above-ground system facilities (tunnel ventilation and fresh air intake

shafts and an emergency exit), and a construction staging area and streetscape improvements along West Santa Clara Street.

The free-standing, L-shaped, E1 station entrance would be located northwest of this historic property and contain two street entrances. The entrance that would front North Market Street would the only of the two street entrances to be visible from this historic property, and would be approximately 120 feet away from the historic building's secondary (Market Street) façade. The Market Street entrance would be approximately 25 feet in height and 35 feet wide and would be constructed with glass and metal panels (**Figure 5-14**). Set back slightly from the street, the entrance would not block views when looking to or from the historic property, and the setting of the historic property would not be altered in an adverse manner. The scale and massing of the entrance, which is consistent with other historic (and modern) buildings along North Market and West Santa Clara Streets, as well as transparent glass in its construction, would not diminish the integrity of the historic property's significant historic features nor would it adversely alter the setting. The setting of this block along Santa Clara Street has already been altered by the addition of modern infill construction. While this entrance would encompass system facilities (including tunnel ventilation and fresh air intake shafts and an emergency exit), these project components would be blocked from the view of the historic building multi-story building located on the northwest corner of Market and Santa Clara Streets. Thus, the E1 station entrance for the Downtown San Jose Station—West Option under the Single-Bore would not cause any indirect adverse visual effect (36 CFR 800.5[a][2][iv] and [v]) to this historic property.

The construction staging area along Santa Clara and Market Streets would be visible when looking northwest and southeast from this historic property; however, this station component would be temporary and would not cause adverse indirect visual effects on the historic commercial building. The streetscape improvements proposed along Santa Clara Street between Market and 4th would also not cause any adverse effects on this historic property. All other above-ground components of this station option would be a considerable distance away from the historic property and would not result in adverse visual effect (36 CFR 800.5[a][2][iv] and [v]).

There are no predicted vibration or noise impacts from the construction or operation of the Single-Bore Option at the location of this historic property (36 CFR 800.5[a][2][iv] and [v]).[116] Implementation of measures described in Section 5.2 would avoid adverse effects on this historic property from Project construction vibration and therefore would result in no indirect adverse effect on this historic property under the Single-Bore Option.

[116] Wilson Ihrig, *VTA's BART Silicon Valley—Phase II Extension Project, Noise and Vibration Technical Report.*

The Project will also employ treatments that would reduce ground settlement related to construction of the tunnel with the TBM and cut-and-cover construction around historic properties, thus avoiding indirect adverse effects on historic properties. Refer to Section 5.2 for details of avoidance measures for potential ground settlement impacts. Implementation of those measures would minimize and/or avoid indirect adverse effects on this historic property (36 CFR 800.5[a][2][iv] and [v]).

Further, any inadvertent damage to historic properties resulting from construction impacts will be repaired according to SOI Standards (Section 5.2), thus resulting in no indirect adverse effects on historic properties (36 CFR 800.5[a][2][iv] and [v]) from construction of the Single-Bore Option.

5.3.10.2 Twin-Bore Option

Direct Effects

The Twin-Bore Option would include the construction of a tunnel alignment beneath West Santa Clara Street and the construction of either the Downtown San Jose Station—East Option or Downtown San Jose Station—West Option near this historic property. The tunnel alignment would be located outside the boundary of this historic property; thus, it would not cause any direct adverse effects on this historic property under 36 CFR 800.5(a)(2)(i), (ii) and (iii).

Downtown San Jose Station—West Option

Construction of this station option would use cut-and-cover construction methods, which may require the partial removal of some sub-sidewalk features (basements and/or freight access elevators located within the public right-of-way) in buildings adjacent the cut-and-cover construction. Implementation of measures described above for the tunnel alignment, would avoid adverse effects on historic properties. Cut-and-cover construction of the Downtown San Jose Station Station—West Option's underground station and its entrances would include tiebacks to secure shoring walls. The tiebacks would extend underground beneath historic buildings and would not result in any direct adverse effect on the historic district's contributing buildings. No other proposed station component near this historic property would cause the partial removal of, physical destruction of, or damage to this historic property. Therefore, this station option would not result in direct adverse effects on this historic property under 36 CFR 800.5(a)(2)(i), (ii) and (iii).

Indirect Effects

Downtown San Jose Station—East Option

This station option would include the same components as found in the Downtown San Jose Station Station—East Option under Single-Bore Option. For the same reasons outlined in that analysis (Section 5.3.10.1), the underground station and construction

staging near this historic property would not would not cause adverse indirect visual effects on the historic property. All other components under this station option would be a considerable distance away from the historic property and would not result in an adverse visual effect (36 CFR 800.5[a][2][iv] and [v]).

Downtown San Jose Station—West Option

The only above-ground components of the Downtown San Jose Station—West Option would include the E1 and E2 station entrance options, construction staging area and some system facilities located off North Market Street. The E1 and E2 station entrances would be located on the west and east sides of Market Street, south of West Santa Clara Street. Located a considerable distance southeast of the historic property (more than 150 feet), only the entrance canopy on the east side of Market Street would be visible when looking southeast from historic property; however, it would not adversely alter the viewshed or setting of the historic property. This structure would be located a considerable distance away from the historic property, and across two well-trafficked thoroughfares (East Santa Clara and Market Streets). The historic property's setting and view have already been altered by the introduction of modern, multi-storied buildings in its direct vicinity, and the introduction of a small-scale glass-walled structure for the proposed station entrance would not diminish the integrity of the property's significant historic features and its use, both of which contribute to its historic significance.

The construction staging area along West Santa Clara and Market Streets would be directly adjacent to this historic property. While visible when looking north and east from the historic property, the staging area would be temporary and would not cause adverse indirect visual effects on the historic commercial building (36 CFR 800.5[a][2][iv] and [v]).

The system facilities located on the north side of North Market Street would consist of an emergency exit, and fresh air intake and tunnel ventilation shafts. All of these station components would be set back off North Market Street more than 20 feet and would be blocked from view by the multi-story building located at the northwest corner of Market and Santa Clara Streets. Therefore, neither would result in any indirect adverse visual effects from the construction or operation of this station option. All other above-ground components of this station option would be a considerable distance away from the historic property and would not result in adverse visual effect (36 CFR 800.5[a][2][iv] and [v]).

Furthermore, under the Twin-Bore Option, there are no predicted vibration or noise impacts from the construction or operation of the proposed Project at the location of this historic property (36 CFR 800.5[a][2][iv] and [v]).[117] As described in Section 5.2 above,

[117] Wilson Ihrig, *VTA's BART Silicon Valley—Phase II Extension Project, Noise and Vibration Technical Report.*

implementation of avoidance measures would result in no indirect adverse effect on historic properties from Project construction vibration.

The Project will employ treatments that would reduce ground settlement related to construction of the tunnel with the TBM and cut-and-cover construction around historic properties, thus avoiding indirect adverse effects on historic properties. Refer to Section 5.2 for details of avoidance measures for potential ground settlement impacts. Implementation of those measures would minimize and/or avoid indirect adverse effects on historic properties (36 CFR 800.5[a][2][iv] and [v]) under the Twin-Bore Option.

Further, any inadvertent damage to historic properties resulting from construction impacts will be repaired according to SOI Standards (Section 5.2), thus resulting in no indirect adverse effects on historic properties (36 CFR 800.5[a][2][iv] and [v]) from construction of the Twin-Bore Option.

In conclusion, under both the Single-Bore and Twin-Bore Options, the Project would result in a finding of ***No Adverse Effect*** on this historic property. Please refer to Map 3 in Appendix A for the location of this historic property as well as conceptual plans for the Downtown San Jose Station—East Option and Downtown San Jose Station—West Option and **Figure 5-14** below for existing and simulated views.

Figure 5-14: San Jose National Bank (101 West Santa Clara Street), Existing View (top) and Simulated View (bottom) of proposed Downtown San Jose Station—West Option (Single-Bore Tunnel Alignment) E1 entrance option looking northwest along North Market Street.

5.3.11 374 West Santa Clara Street (Map Reference E-25)

5.3.11.1 Single-Bore Option

Direct Effects

Construction and operation of the Single-Bore Option would not result in direct or indirect adverse effects on the San Jose Water Works building at located at 374 West Santa Clara Street. In the vicinity of this historic property, the Single-Bore Option would consist of the construction of a tunnel alignment beneath this historic property. The depth of the single-bore tunnel would be approximately 60 feet below ground surface. Construction of this tunnel would not result in the partial removal of, physical destruction of, or damage to this historic property under 36 CFR 800.5(a)(2)(i), (ii) and (iii). Therefore, the Single-Bore Option would not cause a direct adverse effect on this historic property.

Indirect Effects

The Single-Bore Option would not cause indirect adverse effects on this historic property from the introduction of visual elements. The tunnel alignment would be below grade and therefore would not result in any indirect adverse effects from the introduction of new visual elements under 36 CFR 800.5(a)(2)(iv) and (v). All other above-ground Project components would be a considerable distance away (more than 520 feet east) from this historic property and would not result in any indirect adverse effects from the introduction of new visual elements under 36 CFR 800.5(a)(2)(iv) and (v).

Furthermore, there are no predicted vibration or noise impacts from the construction or operation of the proposed Project at the location of this historic property (36 CFR 800.5[a][2][iv] and [v]).[118] As described in Section 5.2 above, implementation of avoidance measures would result in no indirect adverse effect on historic properties from Project construction vibration under the Single-Bore Option. .

The Project will employ treatments that would reduce ground settlement related to construction of the tunnel with the TBM and cut-and-cover construction around historic properties, thus avoiding indirect adverse effects on historic properties. Implementation of measures described in Section 5.2 would minimize and/or avoid indirect adverse effects on historic properties (36 CFR 800.5[a][2][iv] and [v]) from potential ground settlement impacts under the Single-Bore Option.

Further, any inadvertent damage to historic properties resulting from construction impacts will be repaired according to SOI Standards (Section 5.2), thus resulting in no

[118] Wilson Ihrig, *VTA's BART Silicon Valley—Phase II Extension Project, Noise and Vibration Technical Report.*

indirect adverse effects on historic properties (36 CFR 800.5[a][2][iv] and [v]) from construction of the Single-Bore Option.

5.3.11.2 Twin-Bore Option

Direct Effects

Construction and operation of the Single-Bore Option would not result in direct or indirect adverse effects on this historic property. At this location, the Twin-Bore Option would include of the construction of a tunnel alignment beneath West Santa Clara Street (adjacent to this historic property). The depth of the single-bore tunnel would be approximately 40 feet below ground on average. Construction of this tunnel would not result in the partial removal of, physical destruction of, or damage to this historic property under 36 CFR 800.5(a)(2)(i), (ii) and (iii). Therefore, the Twin-Bore Option would not cause a direct adverse effect on this historic property.

Indirect Effects

For the same reasons outlined above under the Single-Bore Option (Section 5.3.11.1), the Twin-Bore Option would not cause indirect adverse effects on this historic property from the introduction of visual, vibration, ground settlement, or noise elements under 36 CFR 800.5(a)(2)(iv) and (v). Implementation of measures described in Section 5.2 would avoid and/or minimize adverse effects from vibration and ground settlement impacts from construction of the Twin-Bore Option. Further, any inadvertent damage to historic properties resulting from construction impacts will be repaired according to SOI Standards (Section 5.2), thus resulting in no indirect adverse effects on historic properties (36 CFR 800.5[a][2][iv] and [v]) from construction of the Twin-Bore Option.

All other above-ground Project components would be a considerable distance away (more than 520 feet east) from this historic property and would not result in any indirect adverse effects from the introduction of new visual elements under 36 CFR 800.5(a)(2)(iv) and (v).

In conclusion, under both the Single-Bore and Twin-Bore Options, the Project would result in a finding of ***No Adverse Effect*** on this historic property. Please refer to Map 3 in Appendix A for the location of this historic property.

5.3.12 30 North 3rd Street (Map Reference E-27)

Construction and operation of the Single- or Twin-Bore Options would not result in direct or indirect adverse effects on the Sperry Building at located at 30 North 3rd Street, as described below.

5.3.12.1 Single-Bore Option

Direct Effects

In the vicinity of this historic property, the Single-Bore Option would consist of the construction of a tunnel alignment beneath East Santa Clara Street and the construction of either the Downtown San Jose Station—East Option or Downtown San Jose Station—West Option. All construction activities under this option would be conducted outside the boundaries of this historic property and would not result in the partial removal of, physical destruction of, or damage to this historic property under 36 CFR 800.5(a)(2)(i), (ii) and (iii). Therefore, the Single-Bore Option would not cause a direct adverse effect on the historic property.

Indirect Effects

The Single-Bore Option would not cause indirect adverse effects on the Sperry Building from the introduction of new visual, vibration, or noise elements. The tunnel alignment would be below grade and not visible from the historic property; thus, it would not result in any indirect adverse visual effects.

Downtown San Jose Station—East Option

The construction or operation of the Downtown San Jose Station—East Option would not result in indirect adverse effects on this historic property from the introduction of new visual elements. The station would be below grade and not visible from the Sperry Building, thus it would not result in any indirect adverse effects from the introduction of new visual elements (36 CFR 800.5[a][2][iv] and [v]). The above-ground components of this station option nearest to this historic property are two system facilities located at the southwest corners of East Santa Clara and 3rd Streets and East Santa Clara and 4th Streets, a construction staging area, and streetscape improvements.

The system facilities sited along 4th Street would include an auxiliary power substation that would replace a modern gas station. The substation would be located approximately 80 feet northeast of the historic building's rear façade, which has no window or door openings. Therefore, this system facilities site would not be visible from the historic property and would not cause indirect adverse visual effects under 36 CFR 800.5(a)(2)(iv) and (v).

The 3rd Street system facilities site would be located directly across 3rd Street and approximately 75 feet southwest of the historic property and would include a TPSS housed within a new, one-story building that would replace two existing one- and two-story, non-historic buildings (**Figure 5-15**). Set back approximately 100 feet from Santa Clara Street, the TPSS would be concealed within the new building and would not be visible when looking southwest from this historic property. The scale and massing of the proposed new building that would house the system facilities is consistent with the Sperry Building and other buildings in this area. While it would somewhat alter the

historic building's current setting and view, it would be far enough away (75 feet or more) from the property so as not to affect the building in an adverse manner. Therefore, this station component would not cause any indirect adverse visual effects on this historic property (36 CFR 800.5[a][2][iv] and [v]).

The construction staging areas for this station option would be located along East Santa Clara (approximately 100 feet southwest), and along the southwest sides of 3rd and 4th Streets. While visible when looking south and southwest from the historic property's main façade, the staging areas would be temporary and would not cause adverse indirect visual effects on the historic commercial building. Streetscape improvements proposed along East Santa Clara Street would be far enough away to not have any adverse visual effect on this historic property. All other above-ground components of this station option would be a considerable distance away from the historic property and would not result in adverse visual effect (36 CFR 800.5[a][2][iv] and [v]).

Downtown San Jose Station—West Option

The Downtown San Jose Station—West Option under the Single-Bore Option would not cause indirect adverse visual effects on the Sperry Building. The station would be below grade and not visible from this historic property, thus it would not result in any indirect adverse effects from the introduction of new visual elements (36 CFR 800.5[a][2][iv] and [v]). The closest above-ground station components to this historic property is a system facilities site located at the southwest corners of East Santa Clara and 3rd Streets, a construction staging area, and streetscape improvements.

The system facilities would include a TPSS, auxiliary power substation, emergency exit and fresh air intake shaft that would extend approximately 12 to 18 feet above grade. These facilities would be concealed within a new one-story building that would replace existing one- and two-story, non-historic buildings (**Figure 5-15**). All system components would be set back approximately 60 feet from 3rd Street (and more than 100 feet southwest of the Sperry Building) and would not be visible when looking southeast from the historic property. Although the new building would somewhat alter the current view and setting of the historic building, it would be far enough away from the property so as not to affect the building in an adverse manner. The new building's scale and massing would be consistent with the Sperry Building and other historic and modern buildings in the vicinity. Therefore, this station component would not cause any indirect adverse visual effects on this historic property (36 CFR 800.5[a][2][iv] and [v]).

The construction staging area for this station option would be located along East Santa Clara and along the southwest sides of 3rd and 4th Streets. While visible when looking south and southwest from the historic property's main façade, the staging area would be temporary and would not cause adverse indirect visual effects on the historic commercial building. Streetscape improvements proposed along East Santa Clara Street would be far enough away (more than 100 feet) to not have any adverse visual

effect on this historic property. All other above-ground components of this station option would be a considerable distance away from the historic property and would not result in adverse visual effect (36 CFR 800.5[a][2][iv] and [v]).

Furthermore, there are no predicted vibration or noise impacts from the construction or operation of the Single-Bore Option the location of this historic property (36 CFR 800.5[a][2][iv] and [v]).[119] As described in Section 5.2 above, implementation of avoidance measures would result in no indirect adverse effect on historic properties from Project construction vibration.

The Project will employ treatments that would reduce ground settlement related to construction of the tunnel with the TBM and cut-and-cover construction around historic properties, thus avoiding indirect adverse effects on historic properties. Refer to Section 5.2 for details of avoidance measures for potential settlement impacts. Implementation of those measures would minimize and/or avoid indirect adverse effects on historic properties (36 CFR 800.5[a][2][iv] and [v]) from potential ground settlement under the Single-Bore Option.

Further, any inadvertent damage to historic properties resulting from construction impacts will be repaired according to SOI Standards (Section 5.2), thus resulting in no indirect adverse effects on historic properties (36 CFR 800.5[a][2][iv] and [v]) from construction of the Single-Bore Option.

5.3.12.2 Twin-Bore Option

Direct Effects

The Twin-Bore Option would consist of the construction of a tunnel alignment beneath East Santa Clara Street and the construction of either the Downtown San Jose Station—East Option or Downtown San Jose Station—West Option near this historic property. For the same reasons described above under the Single-Bore Option (Section 5.3.12.1) the construction and operation of the Twin-Bore Option would not result in direct adverse effects under 36 CFR 800.5(a)(2)(i), (ii) and (iii).

Indirect Effects

The Twin-Bore Option would not cause indirect adverse effects on this historic property from the introduction of visual elements. The bored tunnel alignments of the proposed Project would be below grade and therefore would not result in any indirect adverse effects from the introduction of new visual elements under 36 CFR 800.5(a)(2)(iv) and (v).

[119] Wilson Ihrig, *VTA's BART Silicon Valley—Phase II Extension Project, Noise and Vibration Technical Report.*

Downtown San Jose Station—East Option

The construction or operation of the Downtown San Jose Station—East Option would not result in indirect adverse effects on this historic property from the introduction of new visual elements. The station would be below grade and not visible from the Sperry building, thus it would not result in any indirect adverse effects from the introduction of new visual elements (36 CFR 800.5[a][2][iv] and [v]). The above-ground features nearest this historic property would include the E1 and E2 station entrances, system facilities areas that would include fresh air intake, tunnel ventilation, equipment access shafts, and an emergency exit, construction staging areas and streetscape improvements. The historic property would be approximately 145 feet northeast and 110 feet northwest of the E1 and E2 station entrances, which would consist of one-story portal entrance structures. Neither of these station entrance options would be visible from the historic building. The E1 entrance is located on the northwest and southeast sides of East Santa Clara Street southwest of 3rd Street. This entrance would be blocked from view by the proposed new building that would house above-ground system facilities (analyzed below). Similarly, the E2 entrance would be located on the northwest side of East Santa Clara Street, southeast of the buildings rear façade which has no window or door openings; therefore, the E2 station entrance option would not be visible from the historic property.

The above-ground system facilities (identified above) would located on the south side of 3rd Street, near the corner of Santa Clara Street. The shafts would extend approximately 12 to 18 feet above grade and measure between approximately 10 by 10 feet to 15 by 20 feet. These facilities would be concealed within a new one-story building that would replace existing one- and two-story, non-historic buildings (**Figure 5-15**). The fresh air intake and tunnel ventilation shafts would set back from 3rd Street and would not be visible when looking southeast from the historic property. Although the new building would somewhat alter the current view and setting of the historic building, it would be far enough away from the property so as not to affect the building in an adverse manner. The new building's scale and massing would be consistent with the Sperry Building and other historic and modern buildings in the vicinity. For similar reasons as outline above for the station entrances, the system facilities would not result in any indirect adverse visual effects on the Sperry Building (36 CFR 800.5[a][2][iv] and [v]).

Near the Sperry Building, construction staging areas for the east station option would be located along East Santa Clara (approximately 100 feet southwest), and along the southwest sides of 3rd and 4th Streets. While this Project component would be visible when looking south and southwest from the historic property's main façade; the staging areas would be temporary and would not cause adverse indirect visual effects on the historic commercial building. Streetscape improvements proposed along East Santa Clara Street would be far enough away to not have any adverse visual effect on this historic property. All other above-ground components of this station option would be a

considerable distance away from the historic property and would not result in adverse visual effect (36 CFR 800.5[a][2][iv] and [v]).

Downtown San Jose Station—West Option

The construction or operation of the Downtown San Jose Station—West Option would not result in indirect adverse effects on this historic property from the introduction of new visual elements. The station would be below grade and not visible from the Sperry Building, thus it would not result in any indirect adverse effects from the introduction of new visual elements (36 CFR 800.5[a][2][iv] and [v]). The only above-ground features of this station option near this historic property would be the E7 station entrance, system facilities (fresh air intake, emergency exit, TPSS, and auxiliary power substation) that would be located at the northwest corner of East Santa Clara and 3rd Streets and housed in a new one-story building, construction staging areas and streetscape improvements. The historic property would be located approximately 60 feet northeast of, and across 3rd Street from, the E7 entrance option (**Figure 5-16**). The entrance would be one-story in height and measure approximately between 8 and 24 feet wide, 10 and 40 feet long, and would be up to15 feet high and include a separate elevator shelter. The new building that would house the system facilities at this location would replace existing one and two-story buildings. For the same reasons outline above in the analysis of the system facilities under the Downtown San Jose Station—East Option, this project component would not cause indirect adverse visual effect on the Sperry Building. Similarly, streetscape improvements proposed along East Santa Clara Street would not have any adverse visual effect on this historic property.

Construction staging areas for this station option would be located along East Santa Clara (100 feet southwest), and along the southwest sides of 3rd and 4th Streets. While this Project component would be visible when looking south and southwest from the historic property's main façade, the staging areas would be temporary and would not cause adverse indirect visual effects on the historic commercial building. All other above-ground components of this station option would be a considerable distance away from the historic property and would not result in adverse visual effect (36 CFR 800.5[a][2][iv] and [v]).

Furthermore, there are no predicted vibration or noise impacts from the construction or operation of the Twin-Bore Option the location of this historic property (36 CFR 800.5[a][2][iv] and [v]).[120] As described in Section 5.2 above, implementation of avoidance measures would result in no indirect adverse effect on historic properties from construction vibration under the Twin-Bore Option.

The Project will employ treatments that would reduce ground settlement related to construction of the tunnel with the TBM and cut-and-cover construction around historic

[120] Wilson Ihrig, *VTA's BART Silicon Valley—Phase II Extension Project, Noise and Vibration Technical Report.*

properties, thus avoiding indirect adverse effects on historic properties. Refer to Section 5.2 for details of avoidance measures for potential settlement impacts. Implementation of those measures would minimize and/or avoid indirect adverse effects on historic properties (36 CFR 800.5[a][2][iv] and [v]) from potential ground settlement impacts under the Twin-Bore Option.

Further, any inadvertent damage to historic properties resulting from construction impacts will be repaired according to SOI Standards (Section 5.2), thus resulting in no indirect adverse effects on historic properties (36 CFR 800.5[a][2][iv] and [v]) from construction of the Twin-Bore Options.

In conclusion, under both the Single-Bore and Twin-Bore Options, the Project would result in a finding of ***No Adverse Effect*** on this historic property. Please refer to Map 3 in Appendix A for the location of this historic property as well as conceptual plans for the proposed Downtown San Jose Station—East Option and Downtown San Jose Station—West Option, and **Figure 5-15** and **Figure 5-16** below for existing and simulated views.


Santa Clara

Figure 5-15: The Sperry Building (30 North 3rd Street), Existing View (top) and Simulated View (bottom) for the Downtown San Jose Station—East Option (Twin- and Single-Bore Options), facing northeast on North 3rd Street.


Santa Clara
E Santa Clara St

Figure 5-16: The Sperry Building (30 North 1st Street), Existing View (top) and Simulated View (bottom) for the Downtown San Jose Station—West Option (Twin-Bore Tunnel Alignment), facing northeast on North 1st Street.

5.3.13 151-155 West Santa Clara Street (Map Reference E-35)

Direct Effects

Construction and operation of the Project would not result in direct or indirect adverse effects on the Farmer's Union Building (151 West Santa Clara Street). Near this historic property, the Project would consist of the construction of a tunnel alignment beneath West Santa Clara Street for either the Single- or Twin-Bore Options. The construction of the either underground tunnel would not result in the partial removal of, physical destruction of, or damage to the historic property under 36 CFR 800.5(a)(2)(i), (ii) and (iii) because all construction activities would be located outside the boundary of this historic property. Therefore, the Single-Bore or Twin-Bore Options would not cause a direct adverse effect on this historic property.

Indirect Effects

The tunnel alignment under both the Single- and Twin-Bore Options would be underground and therefore would not cause indirect adverse effects on this historic property from the introduction of visual elements under CFR 800.5(a)(2)(iv) and (v). All other project components under either option would be a considerable distance away (more than 250 feet) northeast of the historic property, and do not have potential to visually affect this historic property in an adverse manner (36 CFR 800.5[a][2][iv] and [v]).

Furthermore, there are no predicted vibration or noise impacts from the construction or operation of the either Single- or Twin-Bore Options at the location of this historic property (36 CFR 800.5[a][2][iv] and [v]).[121] As described in Section 5.2 above, implementation of avoidance measures would result in no indirect adverse effect on historic properties from Project construction vibration under the Single- and Twin-Bore Options.

Under the Single- or Twin-Bore Options, the Project will also employ treatments that would reduce ground settlement related to construction of the tunnel with the TBM and cut-and-cover construction around historic properties, thus avoiding indirect adverse effects on historic properties. Refer to Section 5.2 for details of avoidance measures for potential ground settlement impacts. Implementation of those measures would minimize and/or avoid indirect adverse effects on historic properties (36 CFR 800.5[a][2][iv] and [v]) from ground settlement under both the Single-Bore and Twin-Bore Options.

Further, any inadvertent damage to historic properties resulting from construction impacts will be repaired according to SOI Standards (Section 5.2), thus resulting in no

[121] Wilson Ihrig, *VTA's BART Silicon Valley—Phase II Extension Project, Noise and Vibration Technical Report.*

indirect adverse effects on historic properties (36 CFR 800.5[a][2][iv] and [v]) from construction of either the Single-Bore or Twin-Bore Options.

In conclusion, under the Single-Bore Option and the Twin-Bore Option, the Project would each result in a finding of ***No Adverse Effect*** on this historic property. Please refer to Map 3 in Appendix A for the location of this historic property.

5.3.14 161-167 West Santa Clara Street (Map Reference E-36)

Direct Effects

Construction and operation of the Project would not result in direct or indirect adverse effects on the Lefranc Building (161-167 West Santa Clara Street). Near this historic property, the Project would consist of the construction of a tunnel alignment beneath West Santa Clara Street under either the Single- or Twin-Bore Option. The construction of either tunnel would not result in the partial removal of, physical destruction of, or damage to the historic property under 36 CFR 800.5(a)(2)(i), (ii) and (iii) because all construction activities would be located outside the boundary of this historic property. Therefore, the Single-Bore or Twin-Bore Options would not cause a direct adverse effect on this historic property.

Indirect Effects

Neither the Single- and Twin-Bore Options would cause indirect adverse effects on this historic property from the introduction of visual elements. The bored tunnel alignments would be below grade and therefore would not result in any indirect adverse effects from the introduction of new visual elements under 36 CFR 800.5(a)(2)(iv) and (v). All other project components under either option would be a considerable distance away (more than 250 feet) northeast of the historic property, and do not have potential to visually affect this historic property in an adverse manner (36 CFR 800.5[a][2][iv] and [v]).

Furthermore, there are no predicted vibration or noise impacts from the construction or operation of the either the Single-Bore or Twin-Bore Options at the location of this historic property (36 CFR 800.5[a][2][iv] and [v]).[122]

The Under both the Single- and Twin-Bore Options, the Project will employ treatments that would reduce ground settlement related to construction of the tunnel with the TBM and cut-and-cover construction around historic properties, thus avoiding indirect adverse effects on historic properties. Refer to Section 5.2 for details of avoidance measures for Project construction vibration and potential ground settlement impacts. Implementation of those measures would minimize and/or avoid indirect adverse effects

[122] Wilson Ihrig, *VTA's BART Silicon Valley—Phase II Extension Project, Noise and Vibration Technical Report.*

on historic properties (36 CFR 800.5[a][2][iv] and [v]) from construction under either the Single-Bore or Twin-Bore Option.

Further, any inadvertent damage to historic properties resulting from construction impacts will be repaired according to SOI Standards (Section 5.2), thus resulting in no indirect adverse effects on historic properties (36 CFR 800.5[a][2][iv] and [v]) from construction of either the Single-Bore or Twin-Bore Options.

In conclusion, under both the Single-Bore and Twin-Bore Options, the Project would result in a finding of ***No Adverse Effect*** on this historic property. Please refer to Map 3 in Appendix A for the location of this historic property.

5.3.15 Cahill Station and Santa Clara/Alameda Underpass (Map Reference F-13)

In the vicinity of this historic district, the Project would include the construction of a station and tunnel alignment and station under either the Single-Bore or Twin-Bore Option. The construction and operation of the Single-Bore or Twin-Bore Options would not result in direct or indirect adverse effects on the Cahill Station (presently known as Diridon Station), as described below.

5.3.15.1 Single-Bore Option

Direct Effects

The Diridon Station North and Diridon Station South Options and their associated tunnel alignments proposed under the Single-Bore Option will be constructed within the boundary of this historic property; however, all construction would be located within areas already altered by the modern improvements, namely the construction of the VTA bus transit center, which was completed around 2000. None of the buildings, structures or objects that contribute to the historic property would be physically altered, demolished, or removed as a result of the construction of the Single-Bore Option. The bored tunnels would pass approximately 40 feet and 90 feet below grade on average, respectively, beneath the historic station's tracks, and the construction of these tunnels would not result in any physical alteration, demolition or removal of any contributing element of the historic property. Therefore, the Single-Bore Option would not cause any direct adverse effects on this historic property under 36 CFR 800.5(a)(2)(i), (ii), and (iii).

Indirect Effects

The Single-Bore Option would not cause indirect adverse effects on this historic property from the introduction of new visual, vibration, or noise elements. As stated above, the Single-Bore Option's tunnel alignments at the location of this historic property would be located below grade and therefore would not result in any indirect

adverse effects from the introduction of new visual elements under 36 CFR 800.5(a)(2)(iv) and (v).

Diridon Station South Option

The station proposed for the Diridon Station South Option would be below grand and not visible from this historic property. Thus, it would not cause any indirect adverse visual effects under 36 CFR 800.5(a)(2)(iv) and (v). Above-ground features of this proposed 9-acre Diridon Station would include the E1 and E2 station entrances and system facilities at each end of the underground station. The E1 and E2 station entrances each would include an elevator, stairs and escalators. The E1 station entrance option (**Figure 5-17**) would be located within the boundary of the historic property, north of the depot. The proposed station entrance would be located within an area of the station property (VTA bus transit center) that has been heavily altered by modern construction. It would be more than 190 feet from the historic property's primary contributor, more than 110 feet east of the historic wrought-iron fence and tracks, and approximately 200 feet northeast of passenger sheds. The use of translucent glass for the walls of the entrance structure would not adversely block the view from any contributing element of this historic property, and the size, scale, and massing of the one-story canopy structures would be consistent with the overall historic property.

The E2 station entrance option would be located along the west side of Autumn Street, south of West Santa Clara Street. It would be located more than 450 feet east and outside of the historic property boundary. The view of this entrance when looking northeast from the historic property's contributing elements would be buffered by a large parking lot with trees, and/or one-and two-story buildings sited along Montgomery and South Autumn Streets.

The introduction of either the E1 or E2 entrance options would not diminish the integrity of the property's significant historic features or the historic use of this transportation property, and they would not have an indirect adverse effect on the design, setting, feeling, and viewshed of this property (36 CFR 800.5[a][2][iv] and [v]).

At the western end of the underground station, tunnel ventilation and fresh air shafts would extend approximately 12 feet above ground. These shafts would be located within the present VTA bus transit center (added to the Cahill Station around 2000) and just east of a wrought-iron fence (a significant historic feature of the historic property) between the transit center and tracks. While the introduction of the shafts, which would measure between 10 by 10 feet and 15 by 20 feet each and would be concealed an approximately 9-foot-high concrete masonry wall, would somewhat alter the setting and view of the historic property, however, they would not do so in an adverse manner. The placement of the shafts in an area already heavily altered by the extant transit center, and at a distance (between approximately 50 to 150 feet) from the key contributors (station, passenger sheds, and tracks) would not obscure any historic features of the

historic property's contributors nor would they diminish the qualities of the overall historic property that qualify it for listing in the National Register. Therefore, the ventilation and fresh air intake shafts would not result in any indirect adverse effects from the introduction of new visual elements under 36 CFR 800.5(a)(2)(iv) and (v).

The system facilities site at the eastern end of the underground station would include a TPSS within a 1,500-square-foot AC house, a 3,300-square-foot DC house with transformers, an auxiliary power substation, and tunnel ventilation and fresh air shafts, all of which would be at grade and approximately 12 feet in height. These Project components would be located on the east side of South Autumn Street, more than 600 feet east of all contributing features of the historic property. The view of these Project components when looking east, southeast and northeast from the contributing elements of the historic property would be buffered historic property by a large parking lot with trees, and/or one-and two-story buildings sited along Montgomery and South Autumn Streets. Therefore, the systems facility site would not result in any indirect adverse effects from the introduction of new visual elements under 36 CFR 800.5(a)(2)(iv) and (v).

The station would also include the reconfiguration of the modern VTA bus transit center, which would include kiss-and-ride facilities, located between the tracks, West Santa Clara and Cahill Streets. The new bus transit center would include reconstructed bus shelters similar in size and massing to the extant bus shelters; therefore, they would not alter the view or setting of the historic property and would not result in any indirect adverse effects from the introduction of new visual elements under 36 CFR 800.5(a)(2)(iv) and (v).

Diridon Station North Option

The Diridon Station North Option would have much of the same facilities as the Diridon Station South Option (described above). The underground station would not visible from this historic property and thus would not cause any indirect adverse visual effects under 36 CFR 800.5(a)(2)(iv) and (v). Above-ground features of the proposed station would include the E1 and E2 station entrances and systems facilities (tunnel ventilation and fresh air intake shafts, TPSS, auxiliary power substation, and emergency exit) at the east and west ends of the underground station. The E1 and E2 station entrances each would consist of an elevator, stairs and escalators. The E1 station entrance option (**Figure 5-18**) would be located within the boundary of the historic property, approximately 500 feet north of the depot, the historic property's primary contributor. The entrance would be approximately 40 feet east of the historic wrought-iron fence, approximately 70 feet east of the tracks, and approximately 75 feet south of the undercrossing, all of which contribute to the significance of the property. The use of translucent glass for the walls of the canopy structures would not adversely block the view from any contributing element of this historic property, and the size, scale, and

massing of the one-story canopy structures would be consistent with the overall historic property.

The E2 station entrance option would be located more than 450 feet east of the E1 entrance, at the southeast corner of the Montgomery and West Santa Clara Streets intersection and outside the historic property boundary. The view of this Project component when looking northeast from the historic property's contributing elements would be buffered by a large parking lot with trees, and/or one-and two-story buildings sited along Montgomery and South Autumn Streets. The introduction of either the E1 or E2 entrance options would not diminish the integrity of the property's significant historic features or the historic use of this transportation property, and would not have an indirect adverse effect on the design, setting, feeling, and viewshed of this property (36 CFR 800.5[a][2][iv] and [v]).

Above-ground system facilities at the western end of the underground station would be sited at the southeast corner of the Stockton Avenue and White Street intersection. The facilities at this location would include tunnel ventilation and fresh air intake shafts, all of which would be housed in a small, one-story building to be constructed as part of the Project (**Figure 5-19**). These facilities would be located on the western side (and within approximately 50 feet) of the contributing tracks and undercrossing and outside the historic property boundary. Their placement outside the historic property boundary, in an area already altered by modern construction, together with the small size and scale of the proposed building, would not present any adverse visual effects on the overall historic property or its nearby contributing features (e.g., tracks and undercrossing). The integrity of the property's significant historic features and its historic transportation use would not be diminished. Within the historic district and just west of the E1 entrance, the Project proposes the construction of an emergency exit. The exit would be near the historic property's contributing iron fence; however, it would consist of an at-grade hatch and would not present adverse visual effects on the historic property.

The above-ground system facilities at the east end of the underground station, which would the same components as the system facilities at the station's west end, will also include a TPSS. Located on the east side of Montgomery Street just south of West Santa Clara, this site would be more than 700 feet from any contributing feature of the historic property. The view of facility when looking east, northeast from contributing elements of the historic property would be buffered by a large parking lot with trees. Therefore, none of the above-ground system facilities proposed as part of the Diridon Station North Option under the Single-Bore Option would not have an indirect adverse effect on the design, setting, feeling, and viewshed of this property (36 CFR 800.5[a][2][iv] and [v]).

For the same reasons as described above under the Diridon Station South Option, the reconfiguration of a modern VTA bus transit center would not alter the view or setting of

the historic property and would not result in any indirect adverse effects from the introduction of new visual elements under 36 CFR 800.5(a)(2)(iv) and (v).

Furthermore, there are no predicted vibration or noise impacts from the construction or operation of the Single-Bore Option at the location of this historic district (36 CFR 800.5[a][2][iv] and [v]).[123] As described in Section 5.2 above, implementation of avoidance measures would result in no indirect adverse effect on historic properties from Project construction vibration under the Single-Bore Option.

The Project will employ treatments that would reduce ground settlement related to construction of the tunnel with the TBM and cut-and-cover construction around historic properties, thus avoiding indirect adverse effects on historic properties. Refer to Section 5.2 for details of avoidance measures for potential ground settlement impacts. Implementation of those measures would minimize and/or avoid indirect adverse effects on historic properties (36 CFR 800.5[a][2][iv] and [v]) from ground settlement impacts under the Single-Bore Option.

Further, any inadvertent damage to historic properties resulting from construction impacts will be repaired according to SOI Standards (Section 5.2), thus resulting in no indirect adverse effects on historic properties (36 CFR 800.5[a][2][iv] and [v]) from construction of the Single-Bore Option.

5.3.15.2 Twin-Bore Option

Direct Effects

Under the Twin-Bore Option, the Diridon Station North and Diridon Station South Options and their associated tunnel alignments will be constructed within the boundary of this historic property; however, for the same reasons outlined above under the Single-Bore Option, neither proposed stations or tunnel alignments would cause any direct adverse effects on this historic property under 36 CFR 800.5(a)(2)(i), (ii), and (iii).

Indirect Effects

The Twin-Bore Option would not cause indirect adverse effects on this historic property from the introduction of new visual, vibration, or noise elements. As stated above, the Twin-Bore Option's tunnel alignments at the location of this historic property would be located below grade and therefore would not result in any indirect adverse effects from the introduction of new visual elements under 36 CFR 800.5(a)(2)(iv) and (v).

Diridon Station South Option

Under the Diridon Station South Option the underground station would not cause any indirect adverse visual effects under 36 CFR 800.5(a)(2)(iv) and (v) because it would

[123] Wilson Ihrig, *VTA's BART Silicon Valley—Phase II Extension Project, Noise and Vibration Technical Report.*

not be visible from this historic property. Above-ground features of this proposed 9-acre Diridon Station would include the E1 and E2 station entrances and system facilities at either end of the underground station. The E1 and E2 station entrances each would include an elevator, stairs, and escalators. The E1 station entrance option (**Figure 5-20**) would be located within the boundary of the historic property, within an area of the station property (VTA bus transit center) that has been heavily altered by modern construction. It would be more than 75 feet north of the historic property's primary contributor (the depot), and 100 feet or more east of the historic wrought-iron fence, tracks and passenger sheds. The use of translucent glass for the walls of the entrance structure would not adversely block the view from any contributing element of this historic property, and the size, scale, and massing of the one-story canopy structures would be consistent with the overall historic property.

The E2 station entrance option would be located along the west side of Autumn Street, south of West Santa Clara Street, would more than 650 feet east and outside of the historic property boundary, and would be blocked from view by a large parking lot with trees, and/or one-and two-story buildings sited along Montgomery and South Autumn Streets when looking northeast from the historic property's contributing elements.

The introduction of either the E1 or E2 entrance options would not diminish the integrity of the property's significant historic features or the historic use of this transportation property, and they would not have an indirect adverse effect on the design, setting, feeling, and viewshed of this property (36 CFR 800.5[a][2][iv] and [v]).

System facilities at the western end of the underground station would include tunnel ventilation and fresh air shafts that would extend approximately 12 feet above ground. These shafts would be located within the present VTA bus transit center and just east of the contributing wrought-iron fence that borders the transit center and tracks. While the introduction of the shafts, which would measure between 10 by 10 feet and 15 by 20 feet each and would be concealed an approximately 9-foot-high concrete masonry wall, would somewhat alter the setting and view of the historic property, they would not do so in an adverse manner. The placement of the shafts in an area already heavily altered by the extant transit center, and at a distance from the key contributors (station, passenger sheds, and tracks) would not obscure any historic features of the historic property's contributors nor would they diminish the qualities of the overall historic property that qualify it for listing in the National Register. Therefore, the ventilation and fresh air intake shafts would not result in any indirect adverse effects from the introduction of new visual elements under 36 CFR 800.5(a)(2)(iv) and (v).

The system facilities site at the eastern end of the underground station would include a TPSS within a 1,500-square-foot AC house, a 3,300-square-foot DC house with transformers, an auxiliary power substation, and tunnel ventilation and fresh air shafts, all of which would be at grade and approximately 12 feet in height. These Project

components would be located on the east side of South Autumn Street, more than 700 feet east of all contributing features of the historic property. The view of these Project components when looking east, southeast and northeast from the contributing elements of the historic property would be buffered historic property by a large parking lot with trees, and/or one-and two-story buildings sited along Montgomery and South Autumn Streets. Therefore, the systems facility site would not result in any indirect adverse effects from the introduction of new visual elements under 36 CFR 800.5(a)(2)(iv) and (v).

The station would also include the reconfiguration of the modern VTA bus transit center, which would include kiss-and-ride facilities, located between the tracks, West Santa Clara and Cahill Streets. The new bus transit center would include reconstructed bus shelters similar in size and massing to the extant bus shelters; therefore, they would not alter the view or setting of the historic property and would not result in any indirect adverse effects from the introduction of new visual elements under 36 CFR 800.5(a)(2)(iv) and (v).

Diridon Station North Option

This station option would include the same Project components as described above in the Diridon Station North Option (Single-Bore Tunnel). Subsurface construction for the underground station that would extend beneath the station tracks has the potential to affect the tracks and wrought-iron fence (both of which contribute feature of the historic property). The Project will select alternative construction methods that would minimize and/or avoid indirect adverse effects on this property. Therefore, there would be no indirect adverse effect from the construction of the station. Further, the underground station would not be visible from the historic property; therefore, it would not cause any indirect adverse visual effects (36 CFR 800.5[a][2][iv] and [v]).

The E1 station entrance option (**Figure 5-21**) would be located within the boundary of the historic property near the property's northwestern corner, and approximately 470 feet north of the contributing depot. The E1 entrance canopy would be approximately 60 feet east of the historic contributing wrought-iron fence, more than 100 feet east of the tracks, and more than 130 feet southeast of the contributing undercrossing. The use of translucent glass for the walls of the canopy structures would not adversely block the view from any contributing element of this historic property and the size, scale, and massing of the one-story canopy structures would be consistent with the overall historic property. The introduction of the E1 entrance options would not diminish the integrity of the property's significant historic features or the historic use of this transportation property.

The E2 station entrance option would be located at the southwest corner of the Autumn and West Santa Clara streets intersection and outside the historic property boundary. The entrance would be far enough away (165 feet) from the historic property's eastern

boundary and more than 375 feet from any contributing element that it would not present any adverse visual effects on the historic station. Therefore, neither entrance option would not have an indirect adverse effect on the design, setting, feeling, and viewshed of this property (36 CFR 800.5[a][2][iv] and [v]).

Above-ground system facilities at the west end of the station would be sited at the southeast corner of Stockton Avenue and White Street. It would include an emergency exist, tunnel ventilation and fresh air ventilation shafts, TPSS, and an auxiliary power substation, all of which would be housed in a small, one-story building to be constructed as part of the Project (**Figure 5-19**). The facilities would be approximately 50 feet west of the contributing tracks and undercrossing but outside the historic property boundary. Their placement outside the historic property boundary, in an area already altered by modern construction, together with the small size and scale of the proposed building, would not present any adverse visual effects on the overall historic property or its nearby contributing features (e.g., tracks and undercrossing). The integrity of the property's significant historic features and its historic transportation use would not be diminished.

For the same reasons outlined above for the Diridon Station North Option (Single-Bore Tunnel) and Diridon Station South Option, the system facilities at the eastern end of this station option and the reconfiguration of the modern VTA bus transit center would not alter the view or setting of the historic property and would not result in any indirect adverse effects from the introduction of new visual elements under 36 CFR 800.5(a)(2)(iv) and (v).

Furthermore, there are no predicted vibration or noise impacts from the construction or operation of the proposed Twin-Bore Option at the location of this historic property (36 CFR 800.5[a][2][iv] and [v]).[124] As described in Section 5.2 above, implementation of avoidance measures would result in no indirect adverse effect on historic properties from construction vibration under the Twin-Bore Option.

The Project will employ treatments that would reduce ground settlement related to construction of the tunnel with the TBM and cut-and-cover construction around historic properties, thus avoiding indirect adverse effects on historic properties. Implementation of measures described in Section 5.2 would minimize and/or avoid indirect adverse effects on historic properties (36 CFR 800.5[a][2][iv] and [v]) from potential ground settlement impact under the Twin-Bore Option.

Further, any inadvertent damage to historic properties resulting from construction impacts will be repaired according to SOI Standards (Section 5.2), thus resulting in no

[124] Wilson Ihrig, *VTA's BART Silicon Valley—Phase II Extension Project, Noise and Vibration Technical Report.*

indirect adverse effects on historic properties (36 CFR 800.5[a][2][iv] and [v]) from construction of the Twin-Bore Option.

In conclusion, under both the Single-Bore and Twin-Bore Option, the Project would result in a finding of ***No Adverse Effect*** on this historic property. Please refer to Map 3 in Appendix A for the location of this historic property as well as conceptual plans for the Diridon Station North Options and Diridon Station South Options, and **Figure 5-17** through **Figure 5-21** below for existing and simulated views.

Figure 5-17: Existing View (top) and Simulated View (bottom) of the Diridon Station South Option (Single-Bore Option) E1 station entrance option looking north along Cahill Street showing the Southern Pacific Depot (left).

Figure 5-18: Existing View (top) and Simulated View (bottom) of the Diridon Station North Option (Single-Bore Tunnel Alignment) E1 station entrance looking northwest showing the contributing wall and fence system (background).

Figure 5-19: Existing View (top) and Simulated View (bottom) of the Diridon North Station Option (Single- and Twin-Bore Tunnel Alignments) looking southeast from the intersection of The Alameda and White Street showing the contributing Santa Clara/Alameda Underpass (left).

Figure 5-20: Existing View (top) and Simulated View (bottom) of the Diridon Station South Option (Twin-Bore Option) E1 station entrance option looking north along Cahill Street showing the Southern Pacific Depot (left).

Figure 5-21: Existing View (top) and Simulated View (bottom) of the Diridon Station North Option (Twin-Bore Tunnel Alignment) E1 station entrance looking northwest showing the contributing wall and fence system (background).

5.3.16 848 The Alameda (Map Reference F-14)

Construction and operation of the either the Single-Bore or Twin-Bore Option would not result in direct or indirect adverse effects on the commercial building located at 848 The Alameda, as described below.

Direct Effects

At this location the Project would consist of the construction of tunnel alignments under both the Single- and Twin-Bore Options. All tunnel alignments under either Single- or Twin-Bore Option would be located outside (45 feet or more away from) the boundary of this historic property, thus neither option would result in the partial removal of, physical destruction of, or damage to the historic property under 36 CFR 800.5(a)(2)(i), (ii) and (iii). Therefore, the Single- and Twin-Bore Options would not cause a direct adverse effect on this historic property.

Indirect Effects

The bored tunnel alignments under both Single- and Twin-Bore Options would be below grade and would not result in any indirect adverse effects from the introduction of new visual elements under 36 CFR 800.5(a)(2)(iv) and (v). Furthermore, there are no predicted vibration or noise impacts from the construction or operation of the proposed Project at the location of this historic property (36 CFR 800.5[a][2][iv] and [v]).[125] As described in Section 5.2 above, implementation of avoidance measures would result in no indirect adverse effect on historic properties from Project construction vibration under either the Single-Bore or Twin-Bore Option. Further, any inadvertent damage to historic properties resulting from construction impacts will be repaired according to SOI Standards, as described in Section 5.2, thus resulting in no indirect adverse effects on historic properties (36 CFR 800.5[a][2][iv] and [v]) from construction of either the Single-Bore or Twin-Bore Options..

In conclusion, under both the Single- or Twin-Bore Options, the Project would result in a finding of ***No Adverse Effect*** on this historic property. Please refer to Map 3 in Appendix A for the location of this historic property.

5.3.17 176 North Morrison Avenue (Map Reference F-15)

Construction and operation of either the Single-Bore or Twin-Bore Options would not result in direct or indirect adverse effects on the residence located at 176 North Morrison Avenue, as described below.

[125] Wilson Ihrig, *VTA's BART Silicon Valley—Phase II Extension Project, Noise and Vibration Technical Report.*

Direct Effects

Under both the Single- and Twin-Bore Options, the Project would consist of the construction of tunnel alignments that would pass underneath this historic property. For the Single-Bore Option, the proposed tunnel crowns would be approximately 60 feet below grade on average, while the Twin-Bore tunnel crowns would be approximately 40 feet belowground on average. Under each option, tunnel construction would not result in the partial removal of, physical destruction of, or damage to the historic property under 36 CFR 800.5(a)(2)(i), (ii) and (iii). Therefore, the neither the Single- or Twin-Bore would cause a direct adverse effect on this historic property.

Indirect Effects

The bored tunnel alignments of under both the Single- and Twin-Bore Options would be below grade and therefore would not result in any indirect adverse effects from the introduction of new visual elements under 36 CFR 800.5(a)(2)(iv) and (v). Furthermore, there are no predicted vibration or noise impacts from the construction or operation of the proposed Project at the location of this historic property (36 CFR 800.5[a][2][iv] and [v]).[126] As described in Section 5.2 above, implementation of avoidance measures would result in no indirect adverse effect on historic properties from Project construction vibration under both the Single-Bore and Twin-Bore Options.

The Project will employ treatments that would reduce ground settlement related to construction of the tunnel with the TBM and cut-and-cover construction around historic properties, thus avoiding indirect adverse effects on historic properties. Refer to Section 5.2 for details of avoidance measure for potential ground settlement impacts. Implementationof measures described in Section 5.2 would minimize and/or avoid indirect adverse effects on historic properties (36 CFR 800.5[a][2][iv] and [v]) from ground settlement impacts under either the Single-Bore or Twin-Bore Option.

Further, any inadvertent damage to historic properties resulting from construction impacts will be repaired according to SOI Standards (Section 5.2), thus resulting in no indirect adverse effects on historic properties (36 CFR 800.5[a][2][iv] and [v]) from construction of either the Single-Bore or Twin-Bore Options.

In conclusion, both the Single-Bore and Twin-Bore Options result in a finding of ***No Adverse Effect*** on this historic property. Please refer to Map 3 in Appendix A for the location of this historic property.

[126] Wilson Ihrig, *VTA's BART Silicon Valley—Phase II Extension Project, Noise and Vibration Technical Report.*

5.3.18 179-181 Rhodes Court (Map Reference F-22)

The construction and operation of either the Single-Bore or Twin-Bore Options would not result in direct or indirect adverse effects on the duplex located at 179-181 Rhodes Court, as described below.

Direct Effects

Near this historic property, both the Single-Bore and Twin-Bore Options would consist of the construction of tunnel alignments that would pass beneath or near this historic property. For the Single-Bore Option, the proposed tunnel crowns would be approximately 60 feet below grade on average, while the Twin-Bore tunnel crowns would be approximately 40 feet belowground on average. Under each option, tunnel construction would not result in the partial removal of, physical destruction of, or damage to the historic property under 36 CFR 800.5(a)(2)(i), (ii) and (iii). Therefore, the neither the Single- or Twin-Bore would cause a direct adverse effect on this historic property.

Indirect Effects

The bored tunnel alignments under both the Single- and Twin-Bore Options would be below grade and therefore would not result in any indirect adverse effects from the introduction of new visual elements under 36 CFR 800.5(a)(2)(iv) and (v). Furthermore, there are no predicted vibration or noise impacts from the construction or operation of the proposed Project at the location of this historic property (36 CFR 800.5[a][2][iv] and [v]).[127] As described in Section 5.2 above, implementation of avoidance measures would result in no indirect adverse effect on historic properties from Project construction vibration under either the Single- or Twin-Bore Option.

The Project will employ treatments that would reduce ground settlement related to construction of the tunnel with the TBM and cut-and-cover construction around historic properties, thus avoiding indirect adverse effects on historic properties. Implementation of measures described in Section 5.2 would minimize and/or avoid indirect adverse effects on historic properties (36 CFR 800.5[a][2][iv] and [v]) from ground settlement impacts under either the Single- or Twin-Bore Options.

Further, any inadvertent damage to historic properties resulting from construction impacts will be repaired according to SOI Standards (Section 5.2), thus resulting in no indirect adverse effects on historic properties (36 CFR 800.5[a][2][iv] and [v]) from construction of either the Single-Bore or Twin-Bore Options.

[127] Wilson Ihrig, *VTA's BART Silicon Valley—Phase II Extension Project, Noise and Vibration Technical Report.*

In conclusion, both the Single- or Twin-Bore Options result in a finding of ***No Adverse Effect*** on this historic property. Please refer to Map 3 in Appendix A for the location of this historic property.

5.3.19 Cal Pak District Manager's Office (Map Reverence F-33)

The construction and operation of either the Single-Bore or Twin-Bore Options would not result in direct or indirect adverse effects on the Cal Pak District Manager's Office, as described below.

Direct Effects

Near this historic property, the Twin-Bore Options would consist of the construction of tunnel alignments that would pass beneath this historic property. The tunnel crowns would be approximately 40 feet belowground on average and would not result in the partial removal of, physical destruction of, or damage to the historic property under 36 CFR 800.5(a)(2)(i), (ii) and (iii). Therefore, the Twin-Bore would cause a direct adverse effect on this historic property.

Indirect Effects

The tunnel alignments under the Twin-Bore Options would be below grade and therefore would not result in any indirect adverse effects from the introduction of new visual elements under 36 CFR 800.5(a)(2)(iv) and (v). Furthermore, there are no predicted vibration or noise impacts from the construction or operation of the proposed Project at the location of this historic property (36 CFR 800.5[a][2][iv] and [v]).[128] As described in Section 5.2 above, implementation of avoidance measures would result in no indirect adverse effect on historic properties from Project construction vibration under the Twin-Bore Option.

The Project will employ treatments that would reduce ground settlement related to construction of the tunnel with the TBM and cut-and-cover construction around historic properties, thus avoiding indirect adverse effects on historic properties. Refer to Section 5.2 for detail on avoidance measures for potential ground settlement impacts. Implementation of measures described in Section 5.2 would minimize and/or avoid indirect adverse effects on historic properties (36 CFR 800.5[a][2][iv] and [v]) from ground settlement impacts for the Twin-Bore Option.

Further, any inadvertent damage to historic properties resulting from construction impacts will be repaired according to SOI Standards (Section 5.2), thus resulting in no indirect adverse effects on historic properties (36 CFR 800.5[a][2][iv] and [v]) from construction of the Twin-Bore Option.

[128] Wilson Ihrig, *VTA's BART Silicon Valley—Phase II Extension Project, Noise and Vibration Technical Report.*

In conclusion, under the Twin-Bore Option, the Project would result in a finding of ***No Adverse Effect*** on this historic property. Please refer to Map 3 in Appendix A for the location of this historic property.

5.3.20 Del Monte / Cal Pak Plant #51 (Map Reverence F-34)

The construction and operation of either the Single-Bore or Twin-Bore Options would not result in direct or indirect adverse effects on the Del Monte/Cal Pak Plant #51, as described below.

Direct Effects

Near this historic property, both the Single-Bore and Twin-Bore Options would consist of the construction of tunnel alignments that would pass beneath or near this historic property. For the Single-Bore Option, the proposed tunnel crowns would be approximately 60 feet below grade on average, while the Twin-Bore tunnel crowns would be approximately 40 feet belowground on average. Under each option, tunnel construction would not result in the partial removal of, physical destruction of, or damage to the historic property under 36 CFR 800.5(a)(2)(i), (ii) and (iii). Therefore, the neither the Single- or Twin-Bore would cause a direct adverse effect on this historic property.

Indirect Effects

The bored tunnel alignments under both the Single- and Twin-Bore Options would be below grade and therefore would not result in any indirect adverse effects from the introduction of new visual elements under 36 CFR 800.5(a)(2)(iv) and (v). Furthermore, there are no predicted vibration or noise impacts from the construction or operation of the proposed Project at the location of this historic property (36 CFR 800.5[a][2][iv] and [v]).[129] Implementation of avoidance measures described in Section 5.2 would result in no indirect adverse effect on historic properties from Project construction vibration under either the Single- or Twin-Bore Option.

The Project will employ treatments that would reduce ground settlement related to construction of the tunnel with the TBM and cut-and-cover construction around historic properties, thus avoiding indirect adverse effects on historic properties. Refer to Section 5.2 for detail on avoidance measures for potential ground settlement impacts. Implementation of measures described in Section 5.2 would minimize and/or avoid indirect adverse effects on historic properties (36 CFR 800.5[a][2][iv] and [v]) from ground settlement impacts for either the Single- or Twin-Bore Options.

[129] Wilson Ihrig, *VTA's BART Silicon Valley—Phase II Extension Project, Noise and Vibration Technical Report.*

Further, any inadvertent damage to historic properties resulting from construction impacts will be repaired according to SOI Standards (Section 5.2), thus resulting in no indirect adverse effects on historic properties (36 CFR 800.5[a][2][iv] and [v]) from construction of the Single- and Twin-Bore Options.

In conclusion, under both the Single- or Twin-Bore Options, the Project would result in a finding of ***No Adverse Effect*** on this historic property. Please refer to Map 3 in Appendix A for the location of this historic property.

5.3.21 865 The Alameda (Map Reverence F-35)

The construction and operation of either the Single-Bore or Twin-Bore Options would not result in direct or indirect adverse effects on the commercial building at 865 The Alameda, as described below.

Direct Effects

Near this historic property, both the Single-Bore and Twin-Bore Options would consist of the construction of tunnel alignments that would pass beneath or near this historic property. For the Single-Bore Option, the proposed tunnel crowns would be approximately 60 feet below grade on average, while the Twin-Bore tunnel crowns would be approximately 40 feet belowground on average. Under each option, tunnel construction would not result in the partial removal of, physical destruction of, or damage to the historic property under 36 CFR 800.5(a)(2)(i), (ii) and (iii). Therefore, the neither the Single- or Twin-Bore would cause a direct adverse effect on this historic property.

Indirect Effects

The bored tunnel alignments under both the Single- and Twin-Bore Options would be below grade and therefore would not result in any indirect adverse effects from the introduction of new visual elements under 36 CFR 800.5(a)(2)(iv) and (v). Furthermore, there are no predicted vibration or noise impacts from the construction or operation of the proposed Project at the location of this historic property (36 CFR 800.5[a][2][iv] and [v]).[130] As described in Section 5.2 above, implementation of avoidance measures would result in no indirect adverse effect on historic properties from construction vibration from either the Single- or Twin-Bore Options.

The Project will employ treatments that would reduce ground settlement related to construction of the tunnel with the TBM and cut-and-cover construction around historic properties, thus avoiding indirect adverse effects on historic properties. Refer to Section 5.2 for detail on avoidance measures for potential ground settlement impacts.

[130] Wilson Ihrig, *VTA's BART Silicon Valley—Phase II Extension Project, Noise and Vibration Technical Report.*

Implementation of the above measures would minimize and/or avoid indirect adverse effects on historic properties (36 CFR 800.5[a][2][iv] and [v]) from construction of either the Single- or Twin-Bore Options.

Further, any inadvertent damage to historic properties resulting from construction impacts will be repaired according to SOI Standards (Section 5.2), thus resulting in no indirect adverse effects on historic properties (36 CFR 800.5[a][2][iv] and [v]) from construction of the Single- and Twin-Bore Options.

In conclusion, under both the Single- or Twin-Bore Options, the Project would result in a finding of ***No Adverse Effect*** on this historic property. Please refer to Map 3 in Appendix A for the location of this historic property.

5.3.22 Santa Clara Depot and Control Tower (Map Reverences I-01 and I-02)

Construction and operation of either the Single-Bore or Twin-Bore Options would not result in direct or indirect adverse effects on the Santa Clara Depot and Control Tower or the Maintenance of Way Speeder Shed and Maintenance of Way Section Tool House, as described below. At the location of this historic property, both the Single- and Twin-Bore Options are indistinguishable.

Direct Effects

Near these historic properties, the Single- and Twin-Bore Options would consist of the construction of an at-grade track alignment, the Santa Clara Station platform and canopy, and the proposed Newhall Maintenance Facility. All of these Project components would be located more than 150 feet away from the four above-mentioned historic properties and would not result in the partial removal of, physical destruction of, or damage to these historic properties under 36 CFR 800.5(a)(2)(i), (ii) and (iii). Therefore, neither the Single- nor Twin-Bore Options would cause direct adverse effects on Santa Clara Depot and Control Tower or the Maintenance of Way Speeder Shed and Maintenance of Way Section Tool House.

Under both the Single- and Twin-Bore Options, the 10-acre station would include one-story portal entrance canopy structures that would access the mezzanine level of the proposed station and a pedestrian tunnel that would connect from the mezzanine level of the proposed station to the Santa Clara Caltrain plaza located west of the extant railroad corridor (**Figure 5-22** through **Figure 5-24**). This pedestrian tunnel connection would be below grade and would not be visible from any of the historic properties. All other components of the proposed station such as a one-story boarding platform, a parking structure up to five stories in height, and two system facilities that would include buildings and equipment between 12 and 20 feet high (TPSS, auxiliary power substation, etc.) would be more than 270 feet north and northwest from all historic

properties. The Newhall Maintenance Facility would extend from Newhall Street northwest to De La Cruz Boulevard, and would be constructed on the site of a former rail maintenance yard (Newhall Yard). It would consist of at-grade tracks, office and maintenance buildings, control tower and system facilities (TPSS), auxiliary power substation, gap breaker stations, radio tower, and TCCR), and detention basins. The proposed tracks, maintenance yard, and station platform would be visible from the east, northeast, northwest, and southeast sides all four historic buildings; however, the historic buildings would be a considerable distance (more than 150 feet) from these Project components and would not adversely diminish the viewshed of the industrial and rail transportation setting of these historic properties. These historic buildings were originally constructed along a nineteenth century, at-grade railroad, and the introduction of a similar rail line and its associated station and maintenance facilities nearby would not diminish the qualities of these historic properties that qualify them for listing in the National Register. Therefore, the Project would not result in any adverse effects on the Santa Clara Depot, Control Tower, Maintenance of Way Speeder Shed, or Maintenance of Way Section Tool House under 36 CFR 800.5(a)(2)(iv) and (v).

Furthermore, there are no predicted vibration or noise impacts from the construction or operation of any of the above described components of the Single- or Twin-Bore Options at the location of these historic properties (36 CFR 800.5[a][2][iv] and [v]).[131] As described in Section 5.2 above, implementation of avoidance measures would result in no indirect adverse effect on historic properties from Project construction vibration.

The Project will employ treatments that would reduce ground settlement related to construction of the tunnel with the TBM and cut-and-cover construction around historic properties, thus avoiding indirect adverse effects on historic properties. See Section 5.2 for details on avoidance measure for potential ground settlement impacts. Further, any inadvertent damage to historic properties resulting from construction impacts will be repaired according to SOI Standards (Section 5.2). Implementation of the avoidance measures would minimize and/or avoid indirect adverse effects on historic properties (36 CFR 800.5[a][2][iv] and [v]) from construction of the Single- and Twin-Bore Options.

In conclusion, under both the Single- and Twin-Bore Options, the Project would result in a finding of ***No Adverse Effect*** on these historic properties. Please refer to Map 3 in Appendix A for the location of these historic properties as well as conceptual plans for the proposed Santa Clara Station and **Figure 5-22** through **Figure 5-24** below for existing and simulated views.

[131] Wilson Ihrig, *VTA's BART Silicon Valley—Phase II Extension Project, Noise and Vibration Technical Report.*

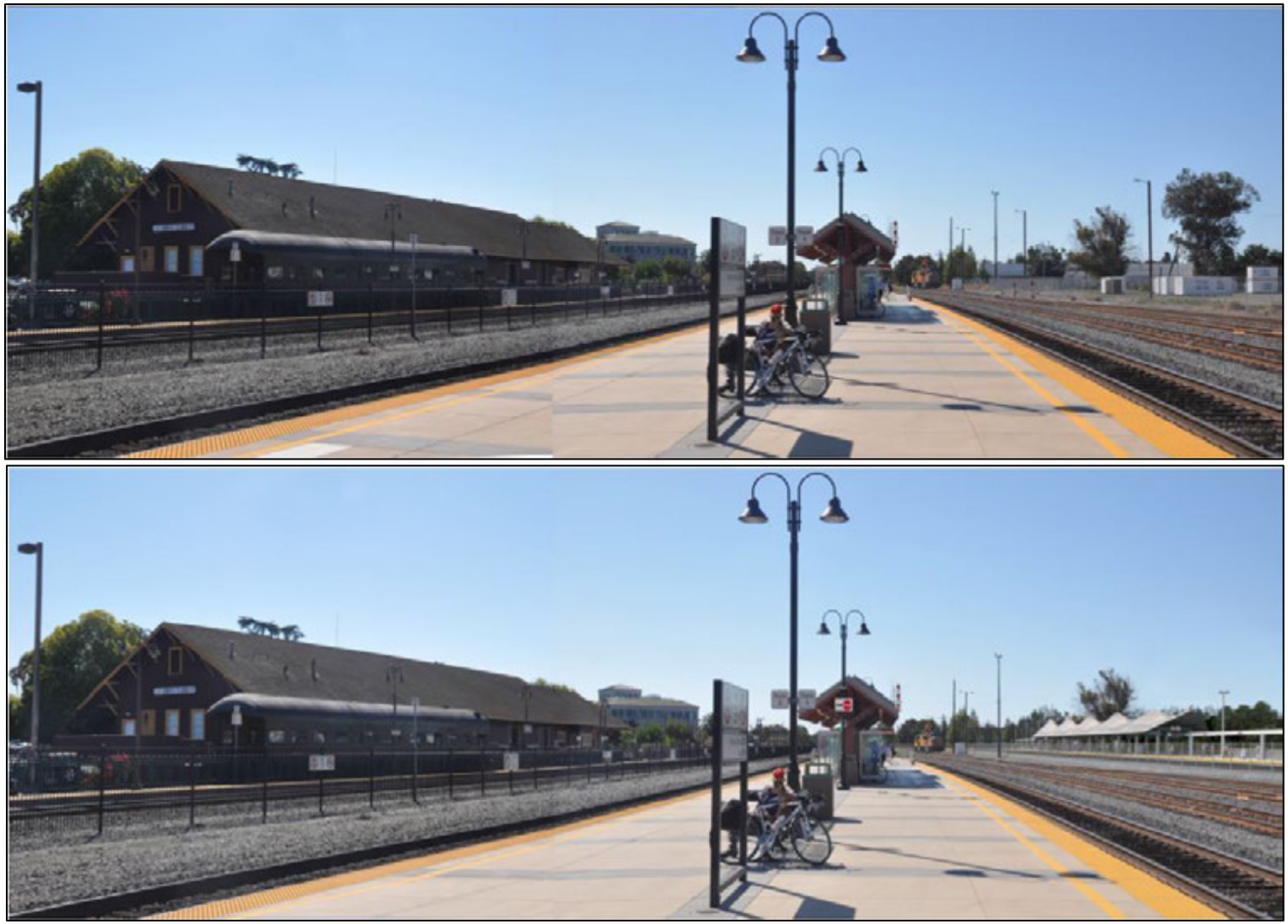

Figure 5-22: Existing View (top) and Simulated View (bottom) of the Santa Clara Depot (left) looking northwest from the Caltrain station platform, showing the proposed at-grade tracks and Santa Clara Depot platform (far right) under both the Single- and Twin Bore Options.

Figure 5-23: Existing View (top) and Simulated View (bottom) looking north from of the Santa Clara Depot (right) for both the Single- and Twin-Bore Options. The Santa Clara Caltrain plaza is at center and the proposed at-grade tracks and Santa Clara Depot platform are shown in background right.

Figure 5-24: Existing View (top) and Simulated View (bottom) looking north from the intersection of El Camino Real and Railroad Avenue toward the Control Tower, Maintenance of Way Speeder Shed, and Maintenance of Way Section Tool House (center right) and showing the proposed Santa Clara Depot platform in background for both the Single- and Twin-Bore Options.

Chapter 6
Conclusions

This document applies the criteria of adverse effect [36 CFR Part 800.5(a)(1)] from the proposed undertaking and its effect on historic properties as identified in the *BART Silicon Valley – Phase II Extension Project Supplemental Built Environment Survey Report* (September 2016). This FOE concludes that the proposed undertaking would result in *no adverse effect, with conditions,* to the 32 historic properties or San Jose Downtown Commercial District within the architectural APE for this Project.

Table 6-1. Summary of Effects:

Map Reference	APN	Street Address	Findings
C-25	467-08-007 467-08-009 467-08-014	1375-1401 East Santa Clara Street	No Adverse Effect
C-26	467-10-043	1191 East Santa Clara Street	No Adverse Effect
C-27	467-10-046	1169 (1167) East Santa Clara Street	No Adverse Effect
D-03	467-57-082	227-247 East Santa Clara Street	No Adverse Effect
E-08*	467-23-035	142-150 East Santa Clara Street	No Adverse Effect
E-09*	467-23-036	138 East Santa Clara Street	No Adverse Effect
E-10*	467-23-038	124-126 East Santa Clara Street	No Adverse Effect
E-11*	467-23-039	114-118 East Santa Clara Street	No Adverse Effect
E-12*	467-23-089	100 East Santa Clara Street	No Adverse Effect
E-13*	467-22-149	96 East Santa Clara Street	No Adverse Effect
E-14*	467-22-148	52 East Santa Clara Street	No Adverse Effect

Map Reference	APN	Street Address	Findings
E-15	467-21-028	19 East 2nd Street	No Adverse Effect
E-18*	467-22-041 467-22-042	42-48 East Santa Clara Street	No Adverse Effect
E-19*	467-22-158	36-40 East Santa Clara Street	No Adverse Effect
E-20	467-54-001 through 467-54-034	22 North 1st Street	No Adverse Effect
E-21*	467-62-001 467-62-007 through 467-62-020	8-14 South 1st Street	No Adverse Effect
E-22	259-40-038	34 West Santa Clara Street	No Adverse Effect
E-23	259-34-018	81 W. Santa Clara Street	No Adverse Effect
E-24	259-34-046	101 West Santa Clara Street	No Adverse Effect
E-25	259-38-128	374 West Santa Clara Street	No Adverse Effect
E-33	261-33-047	734 The Alameda	No Adverse Effect
E-35	259-35-05	151-155 West Santa Clara Street	No Adverse Effect
E-27	467-20-078	30 North 3rd Street	No Adverse Effect
E-36	259-35-035	161-167 West Santa Clara Street	No Adverse Effect
F-13	261-34-020	Cahill Station and Santa Clara / Alameda Underpass	No Adverse Effect
F-14	261-33-020	848 The Alameda	No Adverse Effect

Map Reference	APN	Street Address	Findings
F-15	261-01-074	176 North Morrison Avenue	No Adverse Effect
F-22	261-01-063	179-181 Rhodes Court	No Adverse Effect
F-34	261-33-048	88 Bush Street	No Adverse Effect
F-35	261-10-068	865 The Alameda	No Adverse Effect
I-01	230-06-031 230-06-032 230-06-050 230-06-051	1 Railroad Avenue (Santa Clara Station)	No Adverse Effect
I-02	230-06-040	Benton And Railroad (Santa Clara Tower, Speeder Shed, & Tool House)	No Adverse Effect

* Denotes contributor to Downtown San Jose Commercial District

Chapter 7
List of Preparers

Rebecca Meta Bunse (M.A., History–Public History, California State University, Sacramento) meets the Secretary of the Interior's standards for both historian and architectural historian (as defined in 36 CFR Part 61). Ms. Bunse, who is a partner at JRP Historical Consulting, LLC, has more than 27 years of experience as a consulting historian on a wide variety of historical research and cultural resource management projects.

Bryan Larson (M.A. in Public History, California State University, Sacramento), a partner at JRP, has been conducting historic survey and evaluation studies since 1998. Based on his education and experience, he qualifies as a historian/architectural historian under the Secretary of the Interior's Professional Qualification Standards.

Toni Webb, a JRP architectural historian, received a BFA in Historic Preservation from the Savannah College of Art & Design and has more than 17 years of experience in public history and historic preservation. Based on her level of experience and education, Ms. Webb qualifies as an architectural historian under the Secretary of the Interior's Professional Qualification Standards.

Chapter 8
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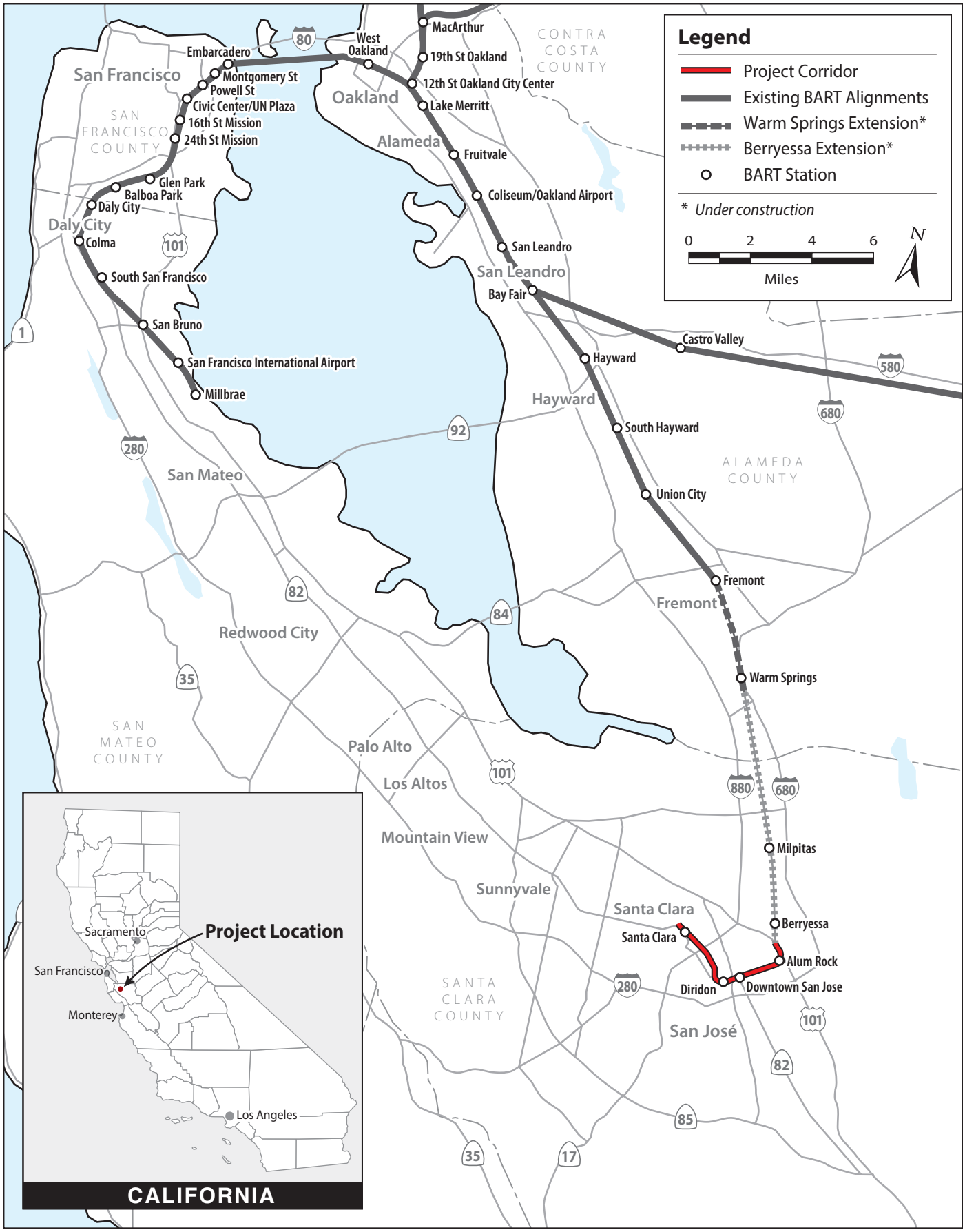
36 CFR 800 et seq.

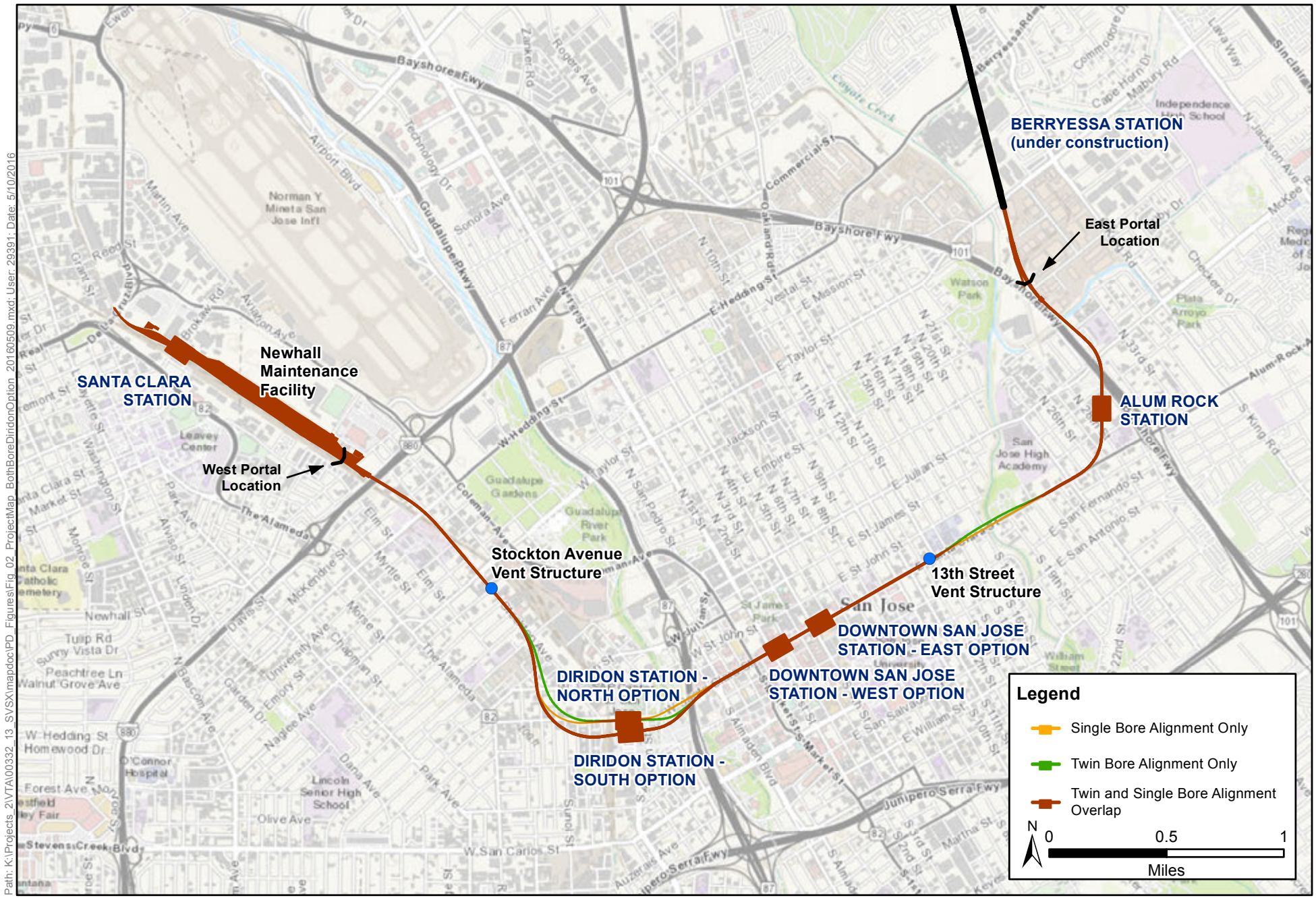
APPENDIX A:

Maps



Graphics... 33213 (2-23-2015)

Map 1
Regional Location
VTA's BART Silicon Valley–Phase II Extension Project



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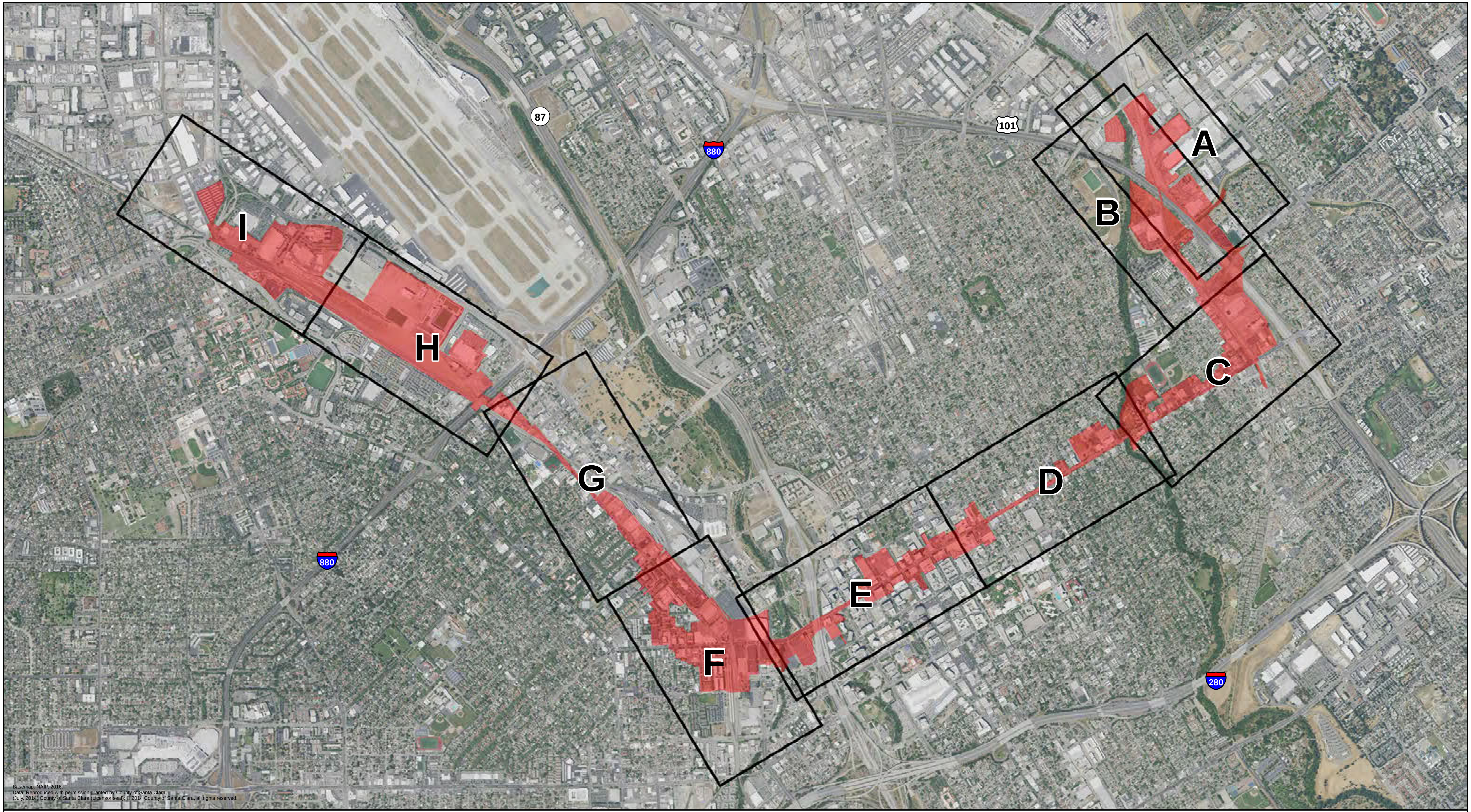
Source: Station and Track, VTA 2014; Basemap, ESRI 2015

Map 2
Project Map (with Options)
VTA's BART Silicon Valley – Phase II Extension Project



Map Sheet

Architectural APE

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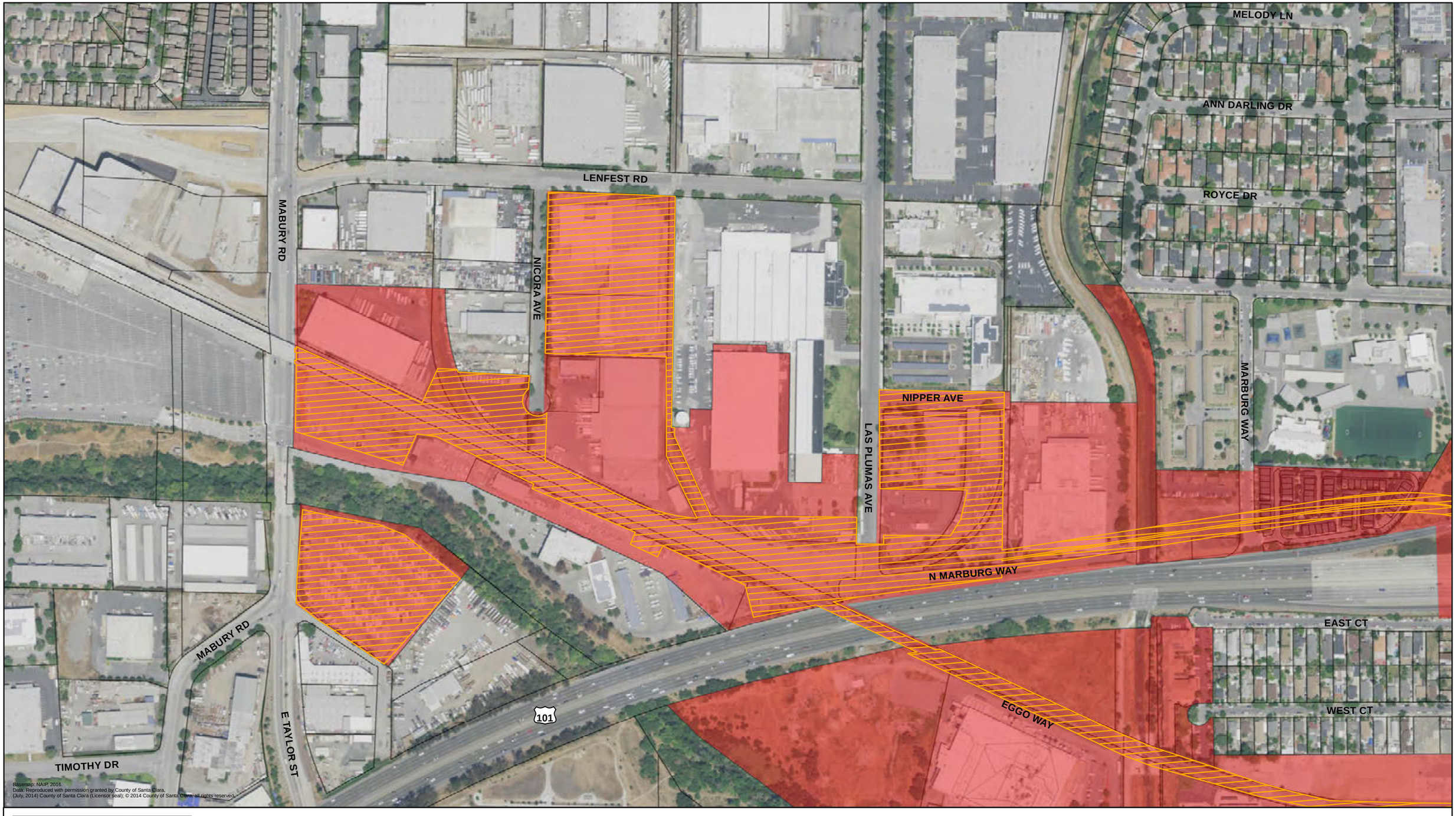
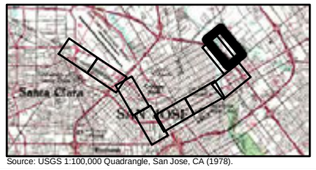
Map 3-INDEX.
Architectural APE / Location Map





Source: USGS 1:100,000 Quadrangle, San Jose, CA (1978).

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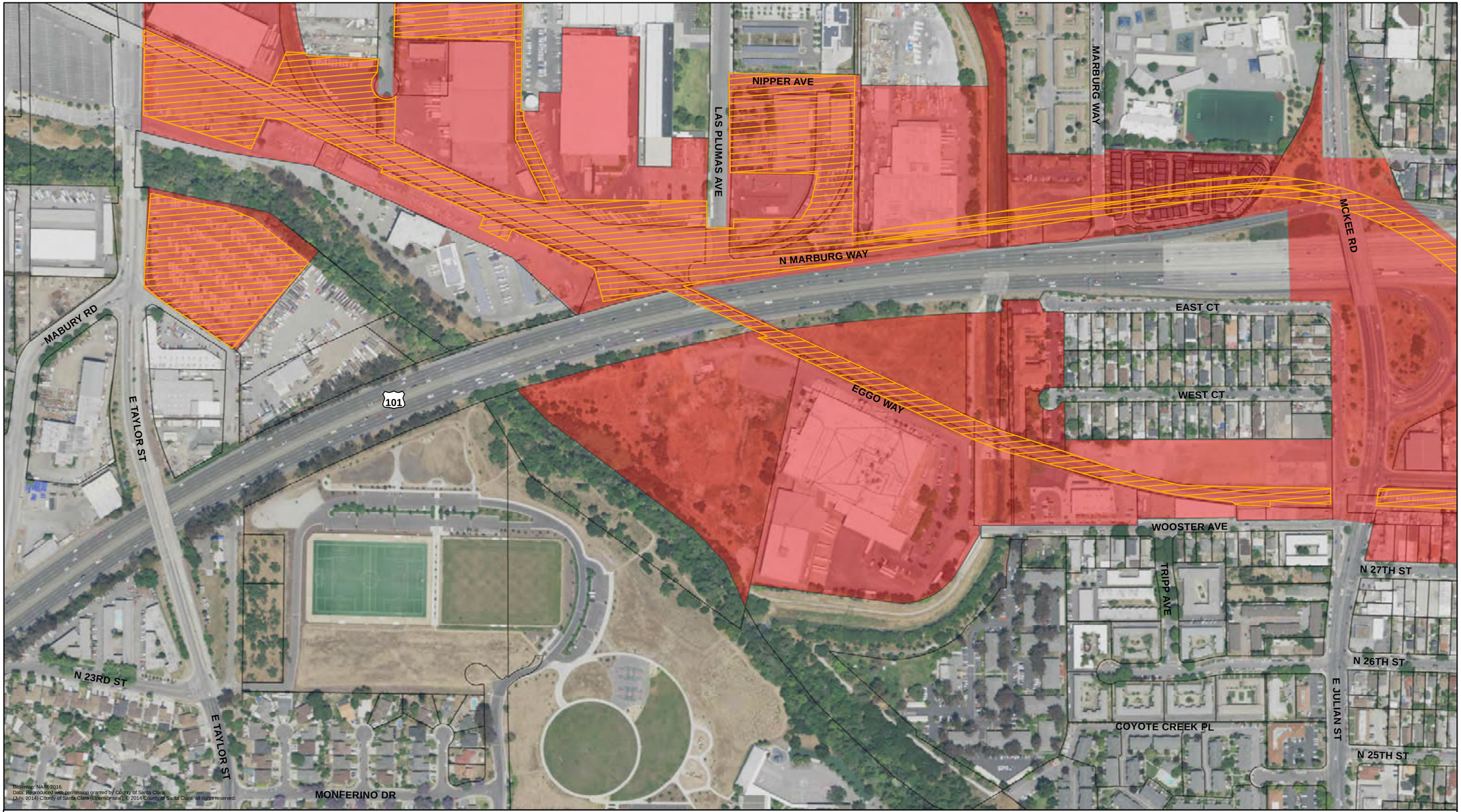
Architectural APE

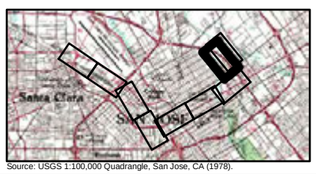
Historic Disctrict

A-01 Historic Properties

Project Footprint

Map 3-A.
Architectural APE / Location Map





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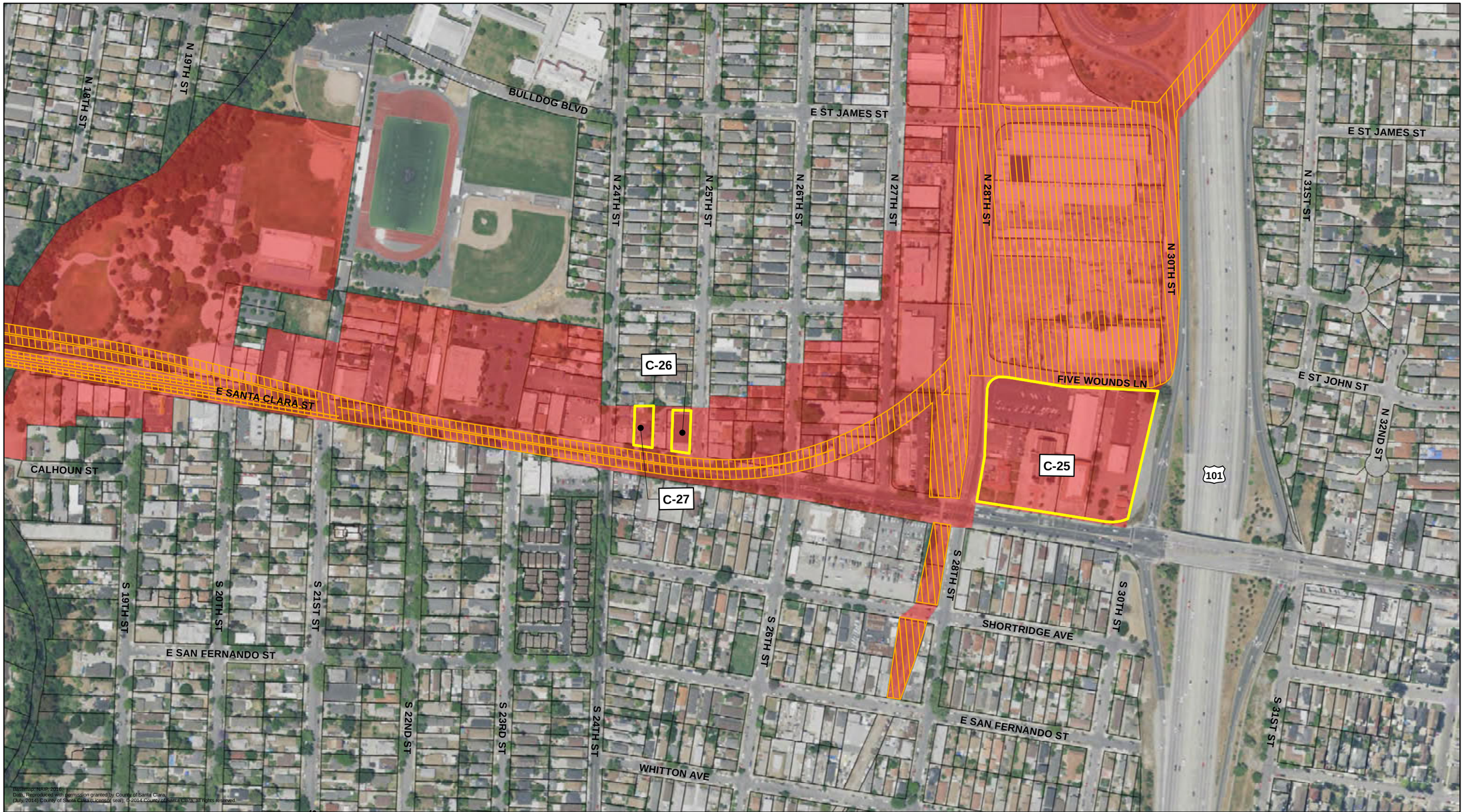
Architectural APE
Historic Disctrict
B-01 Historic Properties
Project Footprint

Map 3-B.
Architectural APE / Location Map



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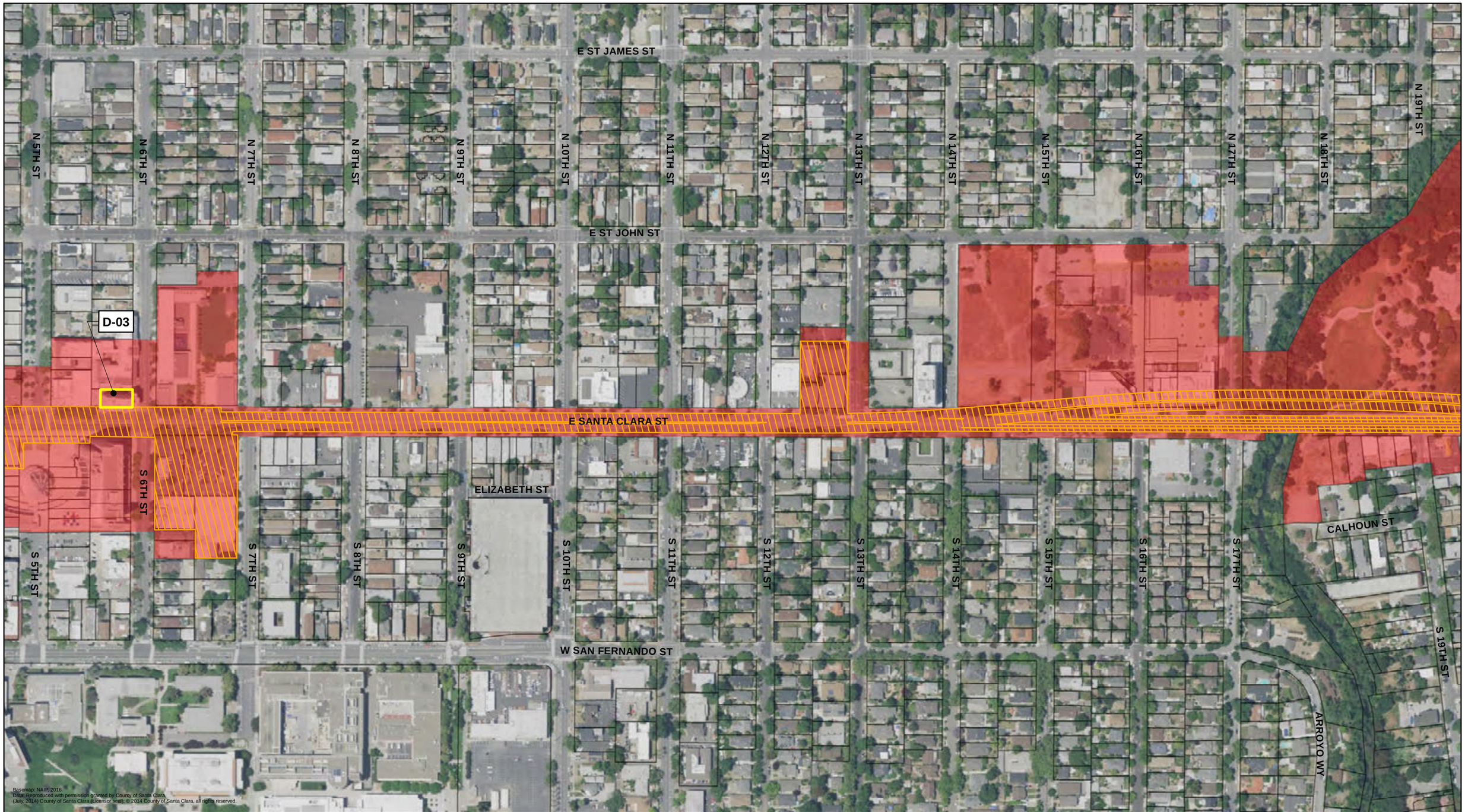
Architectural APE
Historic Disctrict
C-01 Historic Properties
Project Footprint

Map 3-C.
Architectural APE / Location Map



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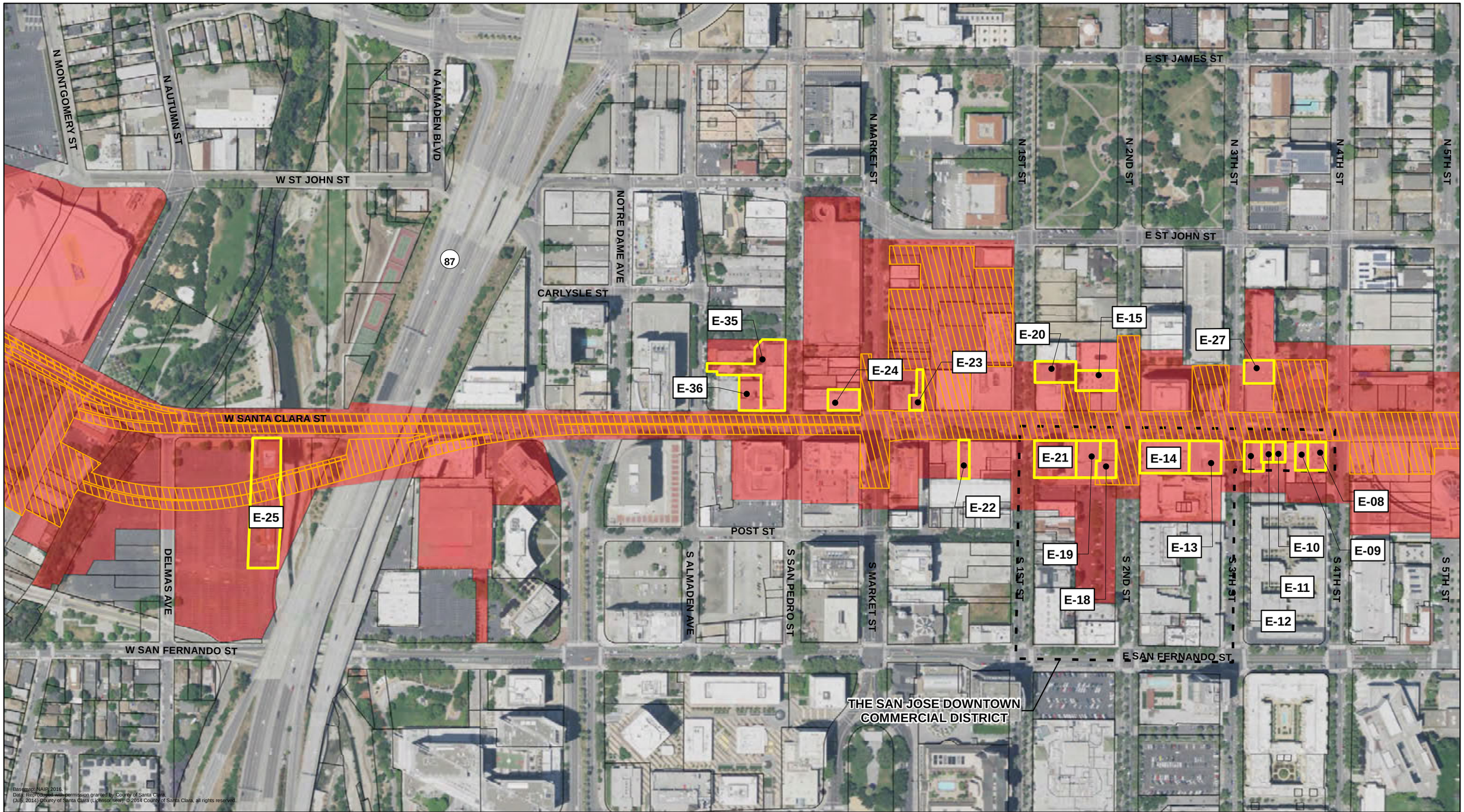
Architectural APE
Historic Disctrict
D-01 Historic Properties
Project Footprint

Map 3-D.
Architectural APE / Location Map



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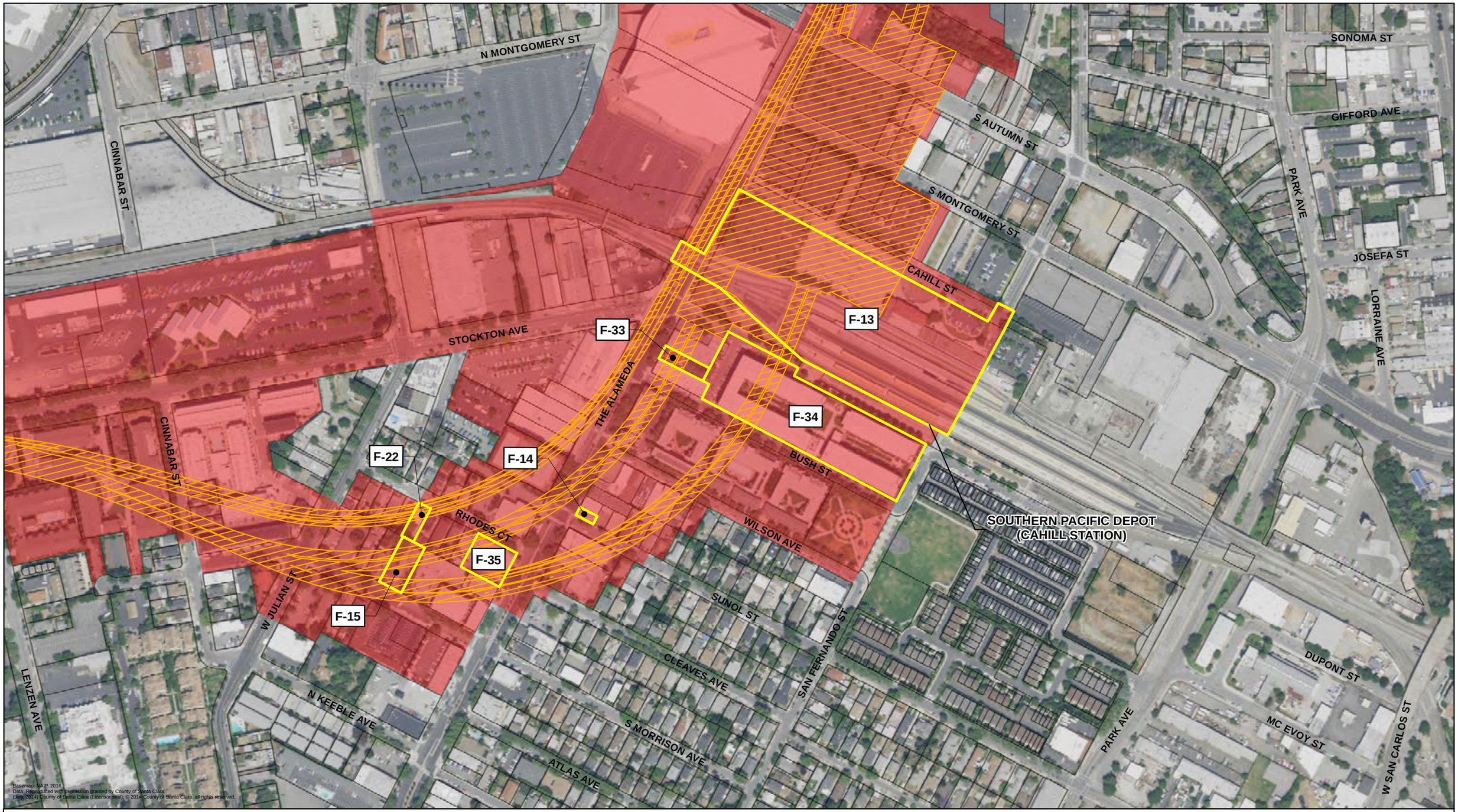
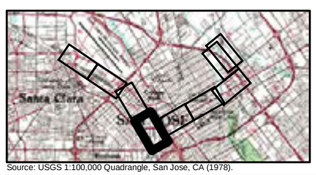
Architectural APE
Historic Disctrict
E-01 Historic Properties
Project Footprint

Map 3-E.
Architectural APE / Location Map





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Architectural APE
Historic Disctrict
F-01 Historic Properties
Project Footprint

Map 3-F.
Architectural APE / Location Map

WALNUT ST
COLEMAN AVE
SEYMOUR ST
W TAYLOR ST
ASBURY ST
EMORY ST
UNIVERSITY AVE
W HEDDING ST
MCKENDRIE ST
CHESTNUT ST
STOCKTON AVE
LAUREL ST
VILLA AVE
SCHIELE AVE
HARDING AVE
PERSHING AVE
LENZEN AVE
HOOVER AVE
ELM ST

Source: USGS 1:100,000 Quadrangle, San Jose, CA (1978).

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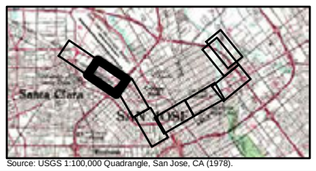
Feet

Architectural APE
Historic Disctrict
G-01 Historic Properties
Project Footprint

Map 3-G.
Architectural APE / Location Map

AVIATION AVE
COLEMAN AVE
NEWHALL DR
CHESTNUT ST
WACO ST
STOCKTON AVE
VERMONT ST
880
CAMPBELL AVE
EL CAMINO REAL
ARBOL WY
OBRIEN CT
COOK ST
NEWHALL ST
ELM ST
HAMLINE ST
MYRTLE ST
VERMONT ST
MC KENDRIE ST



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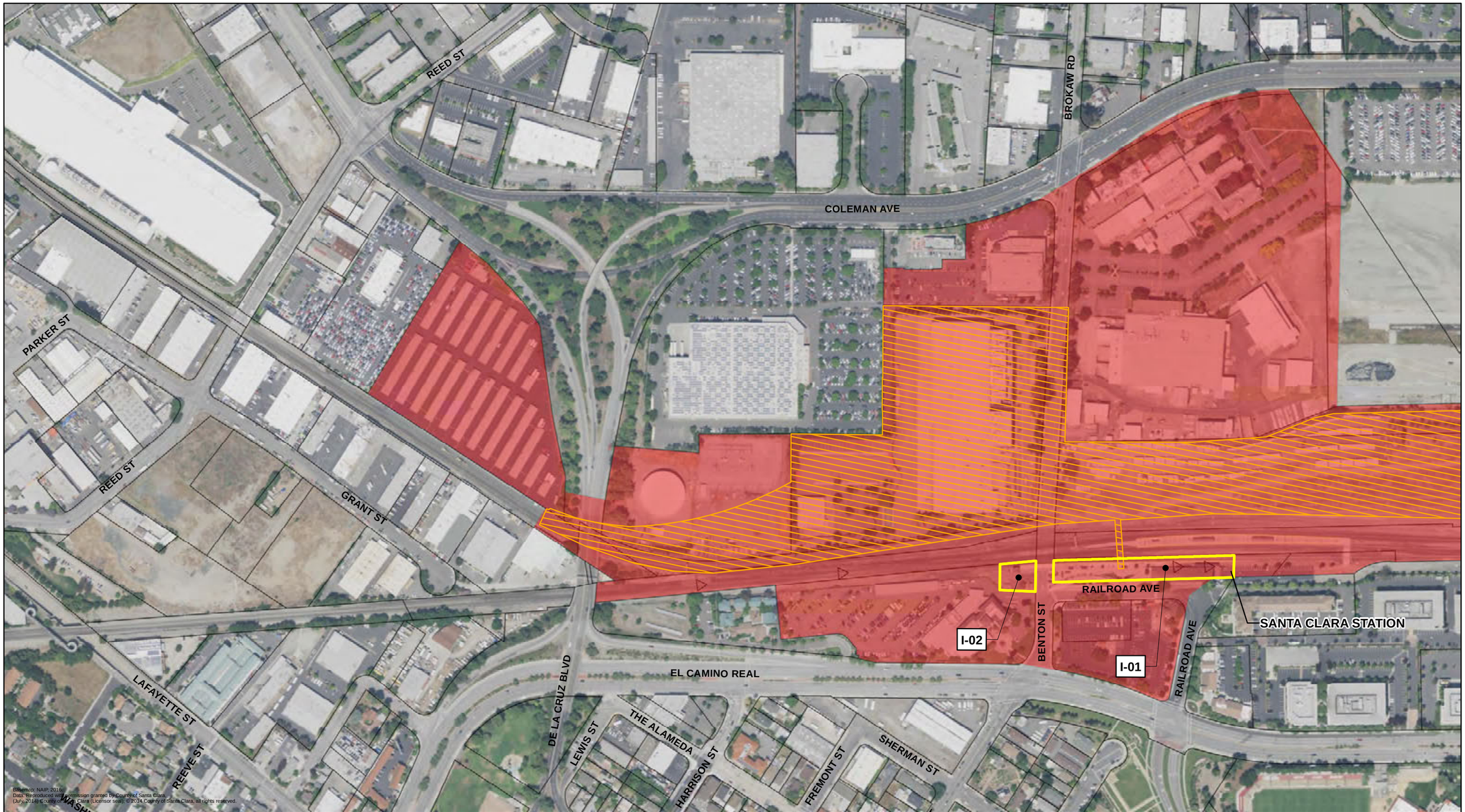
Architectural APE
Historic Disctrict
H-01 Historic Properties
Project Footprint

Map 3-H.
Architectural APE / Location Map



Source: USGS 1:100,000 Quadrangle, San Jose, CA (1978).

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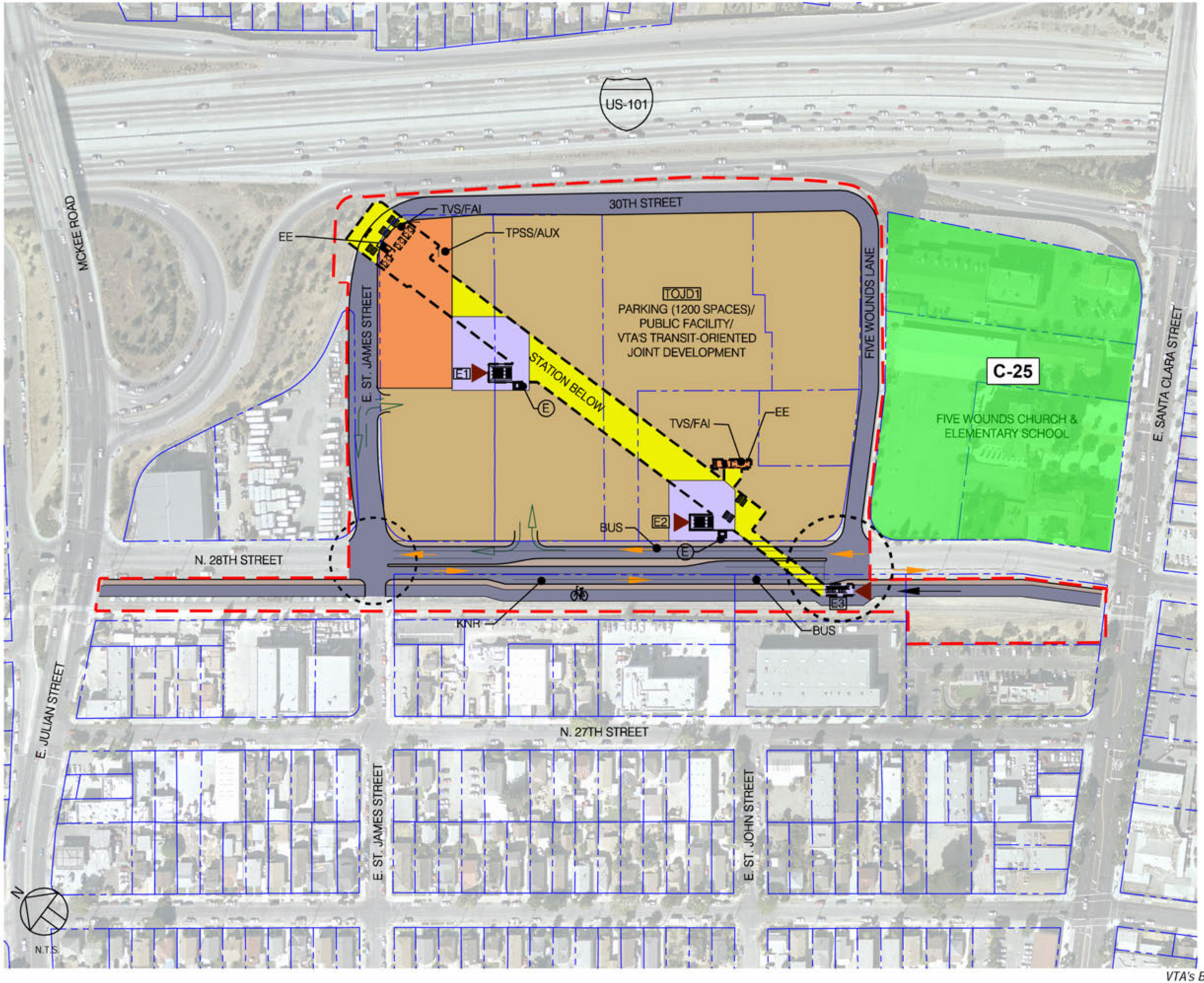
Feet

Architectural APE
Historic Disctrict
I-01 Historic Properties
Project Footprint

Map 3-I.
Architectural APE / Location Map

Station Conceptual Plans

The following station conceptual plans show proposed Transit-Oriented Joint Development (TOJD) sites. The TOJD is proposed as part of the CEQA BART Extension with TOJD Alternative, not as part of the NEPA BART Extension Alternative. This FOE satisfies a requirement for federally funded projects and provides the analysis only for the NEPA BART Extension Alternative. VTA's transit-oriented joint development (TOJD) has no federal nexus, and it is not included in this FOE.



LEGEND

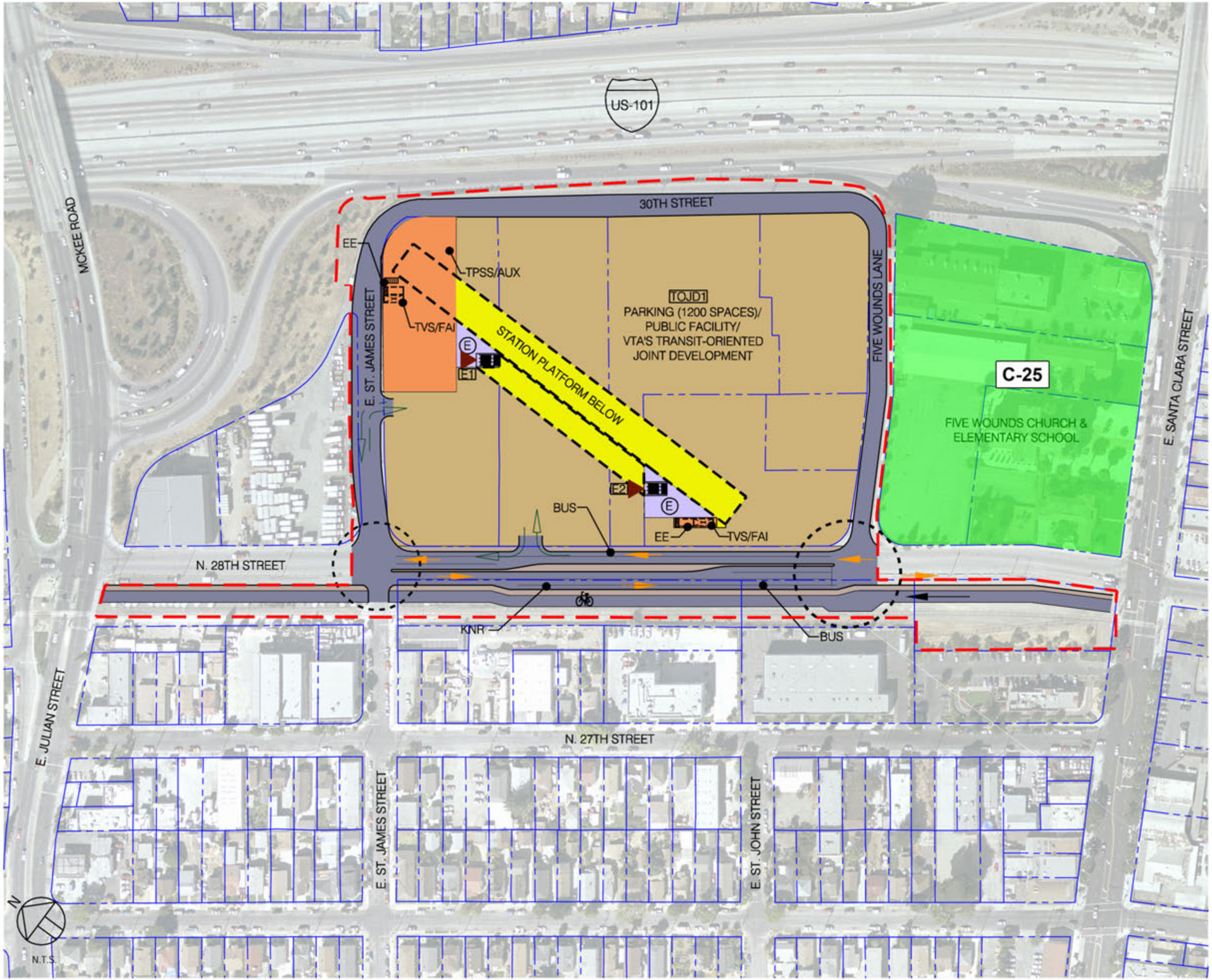
- STATION ENTRANCE OPTIONS
- UNDERGROUND STATION & SYSTEM FACILITIES
- ABOVE AND BELOW GROUND SYSTEMS FACILITIES
- PARKING/PUBLIC FACILITY/ VTA'S TRANSIT-ORIENTED JOINT DEVELOPMENT
- ROADWAY MODIFICATIONS
- HISTORIC PROPERTIES
- CONSTRUCTION STAGING AREA
- KEY PEDESTRIAN LINKAGE
- BUS CIRCULATION
- VEHICLE ACCESS
- NEW SIGNALIZED INTERSECTION
- BIKE FACILITY
- (E) ELEVATOR
- EE EMERGENCY EXIT (PASSENGER; SERVICE ENTRY)
- [E1] ENTRANCE OPTION #
- FAI FRESH AIR INTAKE
- KNR KISS-AND-RIDE
- [TOJD1] VTA'S TRANSIT-ORIENTED JOINT DEVELOPMENT LOCATION #
- TPSS TRACTION POWER SUBSTATION
- TVS TUNNEL VENTILATION SHAFT
- AUX AUXILIARY POWER SUBSTATION

DRAFT CONCEPTUAL EXHIBITS

ALUM ROCK/28TH STREET STATION

TWIN-BORE TUNNEL

05/08/2017



LEGEND

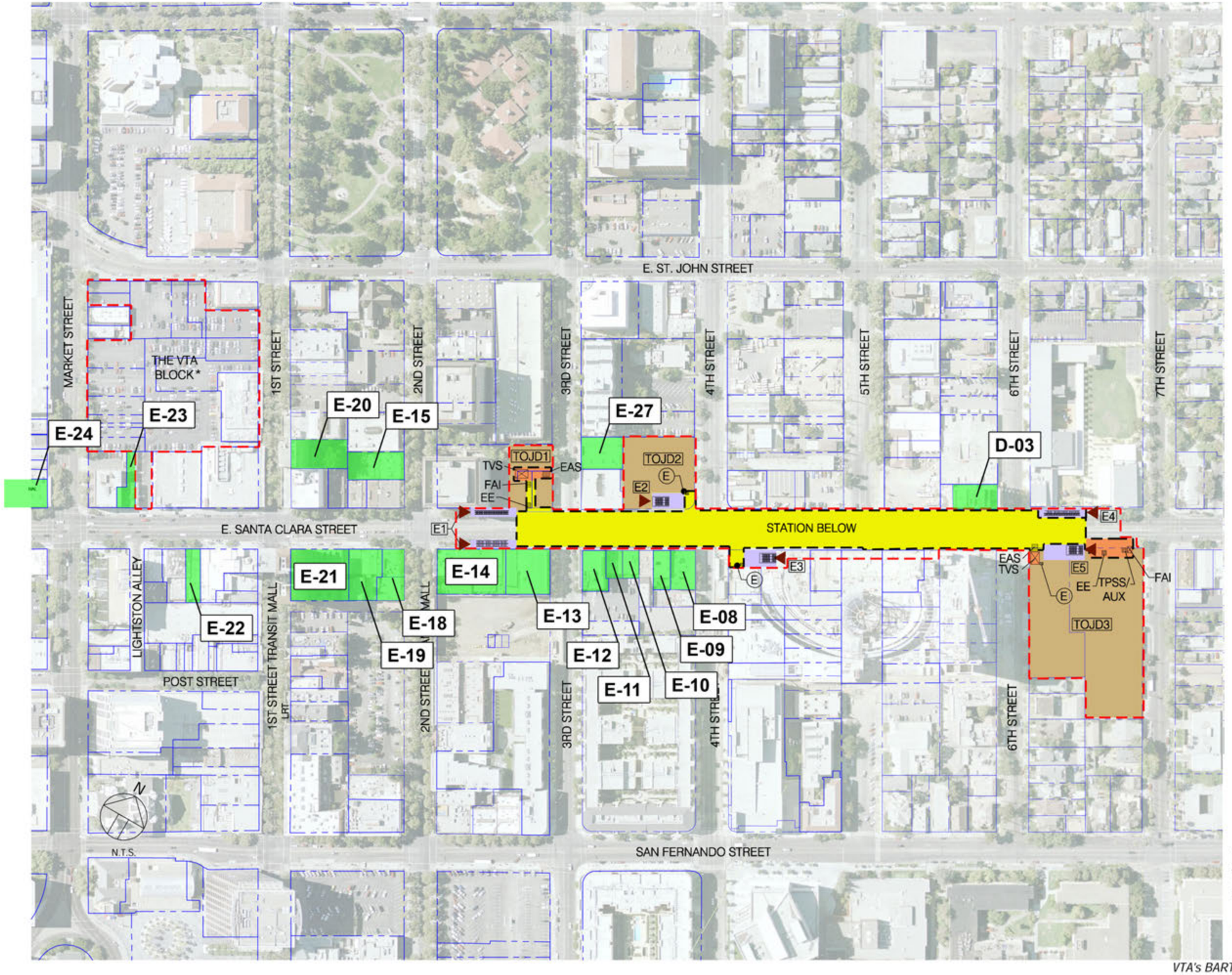
- STATION ENTRANCE OPTIONS
- UNDERGROUND STATION, CONCOURSE, & SYSTEM FACILITIES
- ABOVE AND BELOW GROUND SYSTEMS FACILITIES
- PARKING/PUBLIC FACILITY/ VTA'S TRANSIT-ORIENTED JOINT DEVELOPMENT
- ROADWAY MODIFICATIONS
- HISTORIC PROPERTIES
- CONSTRUCTION STAGING AREA
- KEY PEDESTRIAN LINKAGE
- BUS CIRCULATION
- VEHICLE ACCESS
- NEW SIGNALIZED INTERSECTION
- BIKE FACILITY
- (E) ELEVATOR
- EE EMERGENCY EXIT (PASSENGER; SERVICE ENTRY)
- [E1] ENTRANCE OPTION #
- FAI FRESH AIR INTAKE
- KNR KISS-AND-RIDE
- [TOJD1] VTA'S TRANSIT-ORIENTED JOINT DEVELOPMENT LOCATION #
- TPSS TRACTION POWER SUBSTATION
- TVS TUNNEL VENTILATION SHAFT
- AUX AUXILIARY POWER SUBSTATION

DRAFT CONCEPTUAL EXHIBITS

ALUM ROCK/28TH STREET STATION

SINGLE-BORE TUNNEL

05/08/2017



LEGEND

- STATION ENTRANCE OPTIONS
- UNDERGROUND STATION & SYSTEM FACILITIES
- ABOVE AND BELOW GROUND SYSTEMS FACILITIES
- PARKING/PUBLIC FACILITY/ VTA'S TRANSIT-ORIENTED JOINT DEVELOPMENT
- HISTORIC PROPERTIES
- CONSTRUCTION STAGING AREA
- (E) ELEVATOR OPTIONS
- EE EMERGENCY EXIT (PASSENGER; SERVICE ENTRY)
- E1 ENTRANCE OPTION #
- EAS EQUIPMENT ACCESS SHAFT
- FAI FRESH AIR INTAKE
- TOJD1 VTA'S TRANSIT-ORIENTED JOINT DEVELOPMENT LOCATION #
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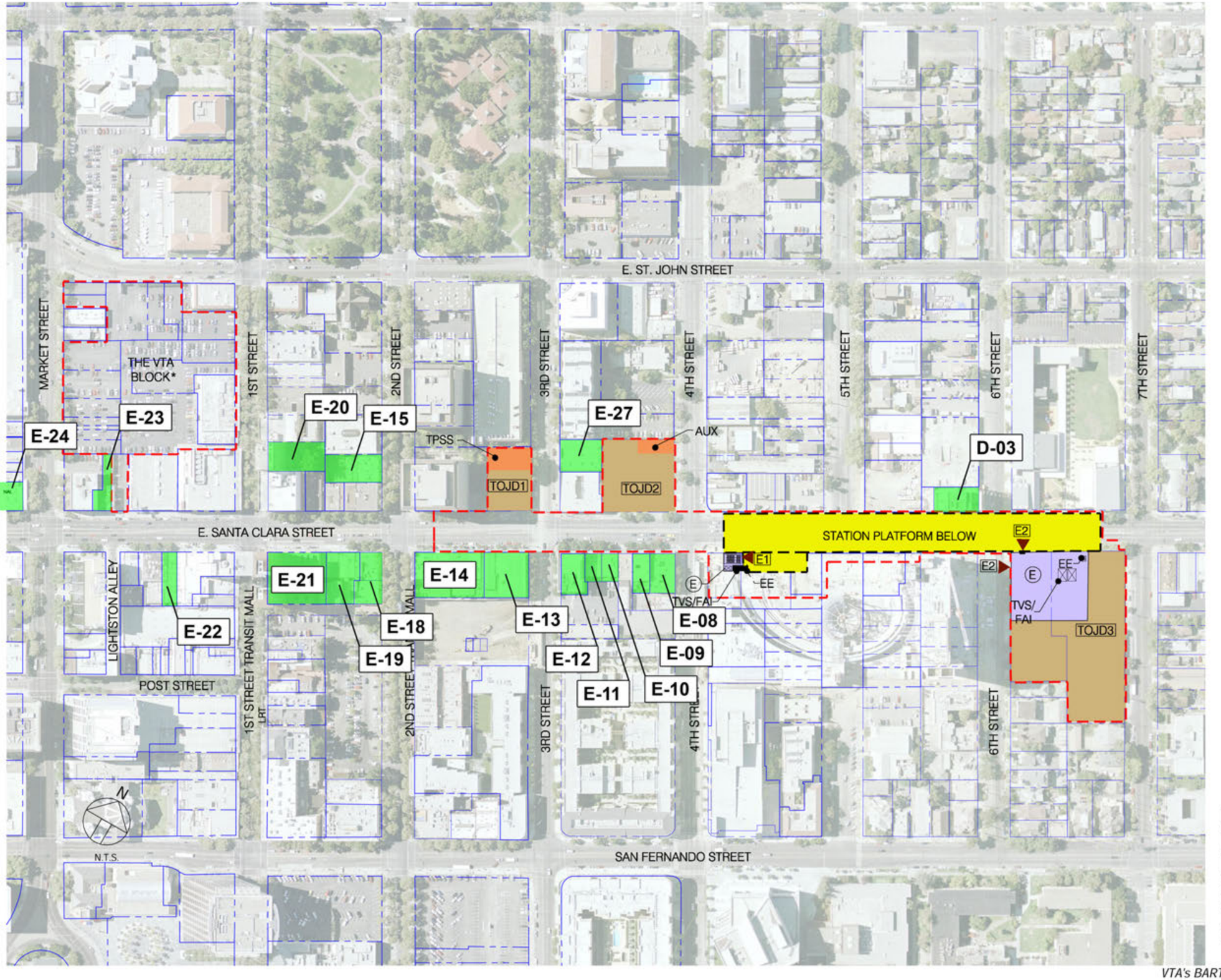
- TVS TUNNEL VENTILATION SHAFT
- AUX AUXILIARY POWER SUBSTATION
- * PROPERTY OWNED BY VTA

DOWNTOWN SAN JOSE STATION

EAST OPTION

TWIN-BORE TUNNEL

4/27/2017



LEGEND

- STATION ENTRANCE
- UNDERGROUND STATION, CONCOURSE, & SYSTEM FACILITIES
- ABOVE AND BELOW GROUND SYSTEMS FACILITIES
- PUBLIC FACILITY/ VTA'S TRANSIT-ORIENTED JOINT DEVELOPMENT
- HISTORIC PROPERTIES
- CONSTRUCTION STAGING AREA
- E — ELEVATOR
- EE — EMERGENCY EXIT (PASSENGER; SERVICE ENTRY)
- E1 — ENTRANCE #
- FAI — FRESH AIR INTAKE
- TOJD1 — VTA'S TRANSIT-ORIENTED JOINT DEVELOPMENT LOCATION #
- TPSS — TRACTION POWER SUBSTATION
- TVS — TUNNEL VENTILATION SHAFT
- AUX — AUXILIARY POWER SUBSTATION
- * — PROPERTY OWNED BY VTA

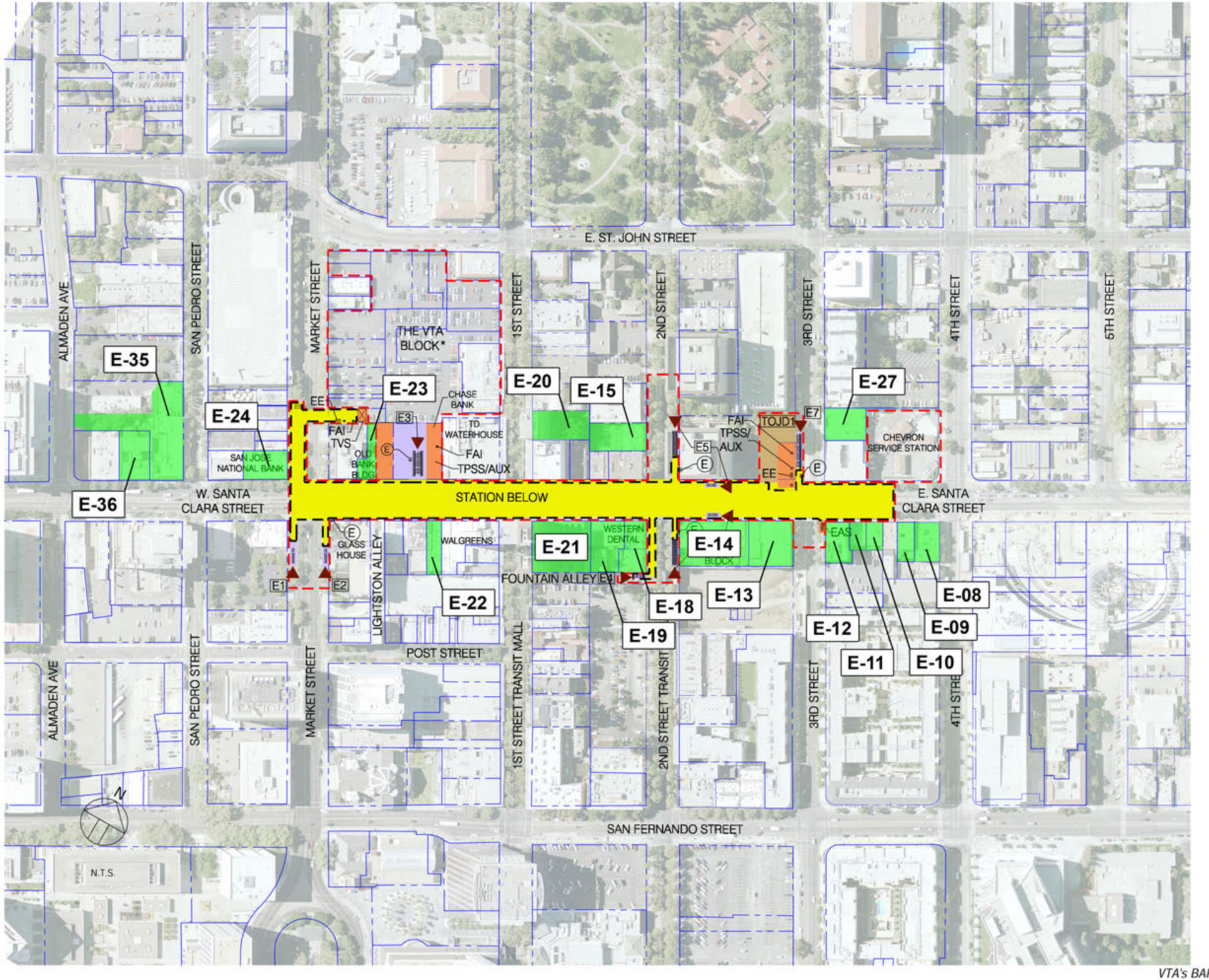
DRAFT CONCEPTUAL EXHIBITS

DOWNTOWN SAN JOSE STATION

EAST OPTION

SINGLE-BORE TUNNEL

05/08/2017



LEGEND

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- UNDERGROUND STATION & SYSTEM FACILITIES
- ABOVE AND BELOW GROUND SYSTEMS FACILITIES
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- TPSS TRACTION POWER SUBSTATION
- TVS TUNNEL VENTILATION SHAFT
- EAS EMERGENCY ACCESS SHAFT
- AUX AUXILIARY POWER SUBSTATION
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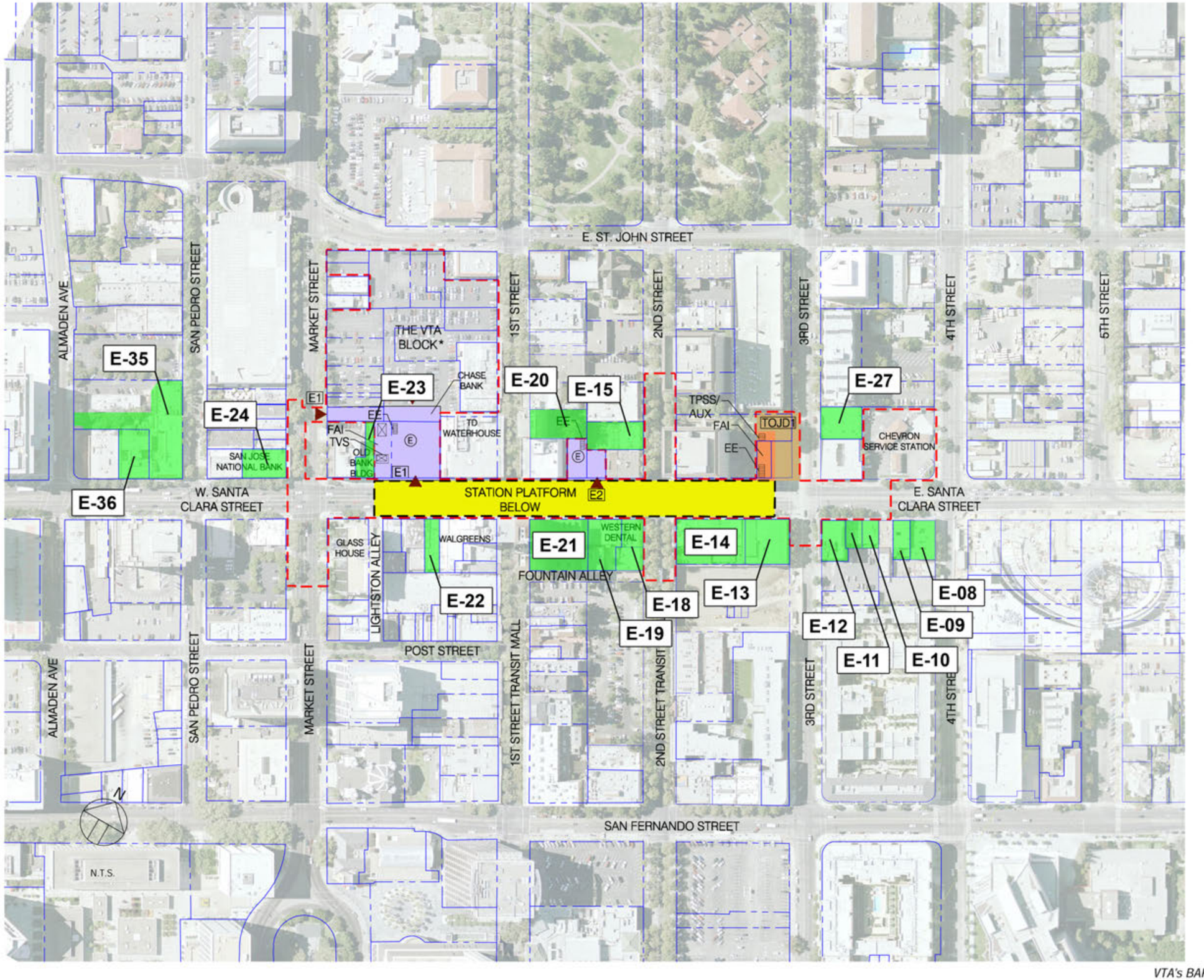
DRAFT CONCEPTUAL EXHIBITS

DOWNTOWN SAN JOSE STATION

WEST OPTION

TWIN-BORE TUNNEL

05/08/2017



LEGEND

- STATION ENTRANCE
- UNDERGROUND STATION & SYSTEM FACILITIES
- ABOVE AND BELOW GROUND SYSTEMS FACILITIES
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- HISTORIC PROPERTIES
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- EE EMERGENCY EXIT (PASSENGER SERVICE ENTRY)
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- AUX AUXILIARY POWER SUBSTATION
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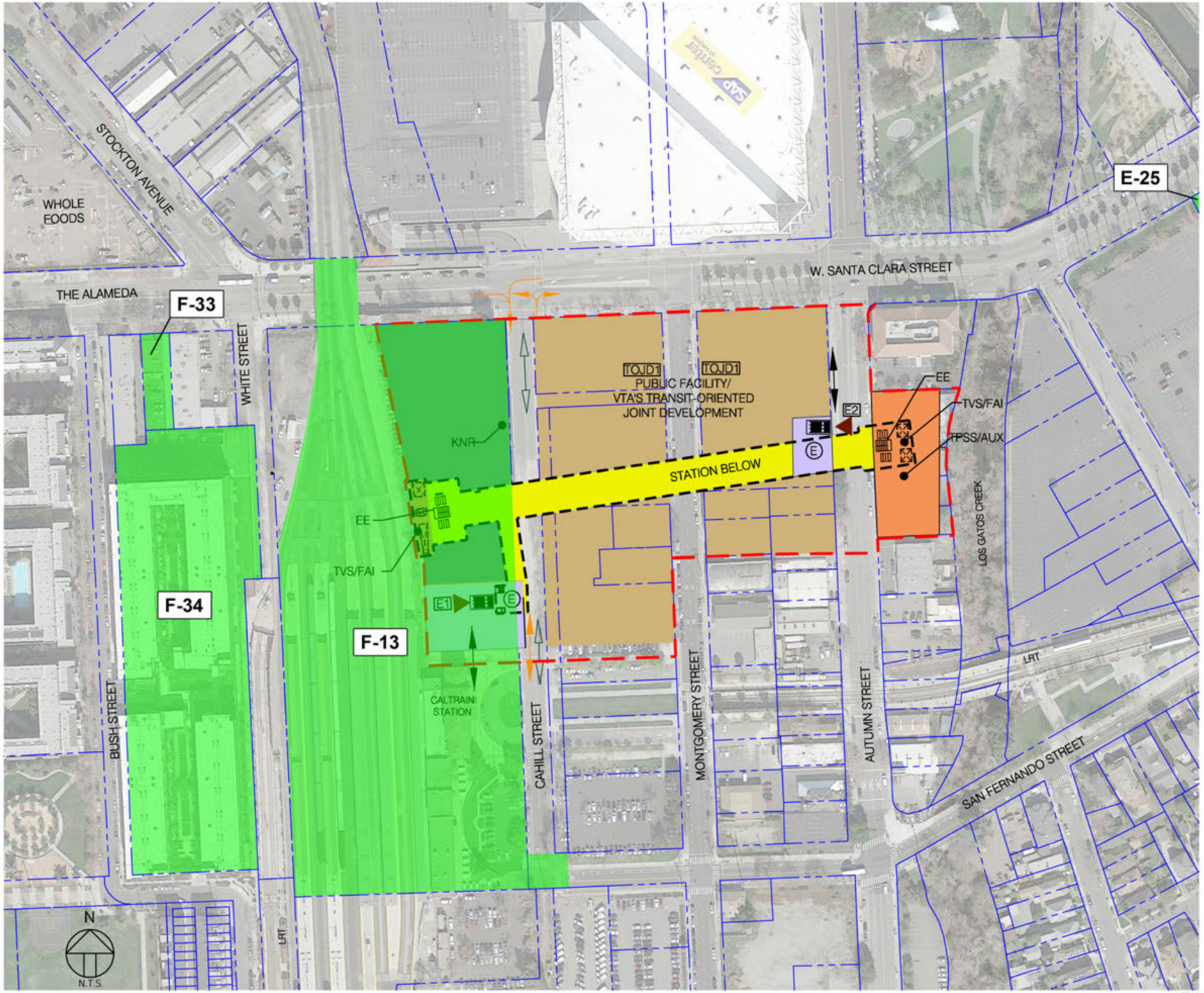
DRAFT CONCEPTUAL EXHIBITS

DOWNTOWN SAN JOSE STATION

WEST OPTION

SINGLE-BORE TUNNEL

05/08/2017



LEGEND

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- UNDERGROUND STATION & SYSTEM FACILITIES
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- BUS CIRCULATION
- VEHICLE ACCESS
- (E) ELEVATOR
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- AUX AUXILIARY POWER SUBSTATION

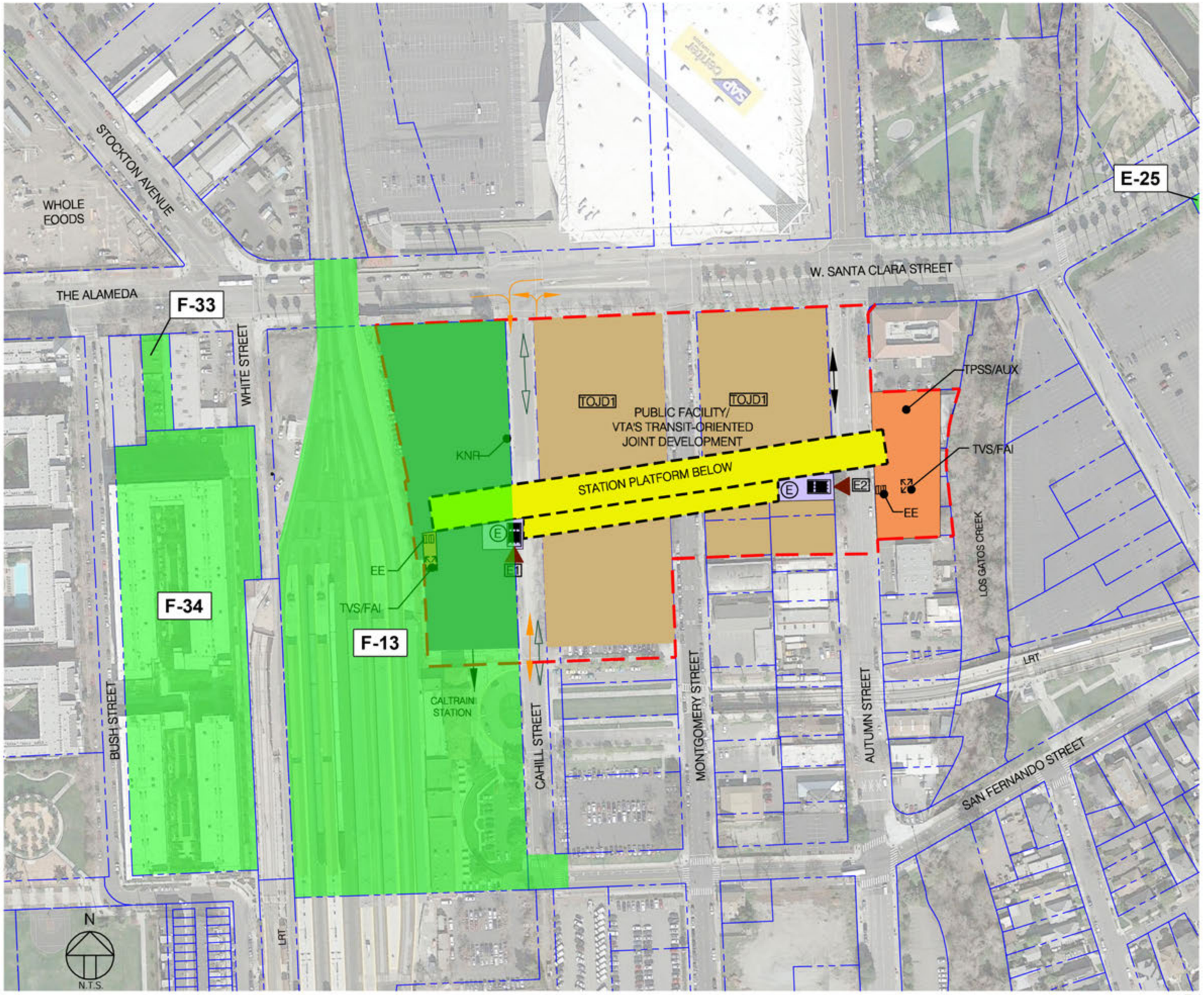
DRAFT CONCEPTUAL EXHIBITS

DIRIDON STATION

SOUTH OPTION

TWIN-BORE TUNNEL

05/08/2017



LEGEND

- STATION ENTRANCE
- UNDERGROUND STATION, CONCOURSE, & SYSTEM FACILITIES
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- BUS CIRCULATION
- VEHICLE ACCESS

(E)	ELEVATOR
EE	EMERGENCY EXIT (PASSENGER; SERVICE ENTRY)
E1	ENTRANCE #
FAI	FRESH AIR INTAKE
KNR	KISS-AND-RIDE
TOJD1	VTA'S TRANSIT-ORIENTED JOINT DEVELOPMENT LOCATION #
TPSS	TRACTION POWER SUBSTATION
TVS	TUNNEL VENTILATION SHAFT
AUX	AUXILIARY POWER SUBSTATION

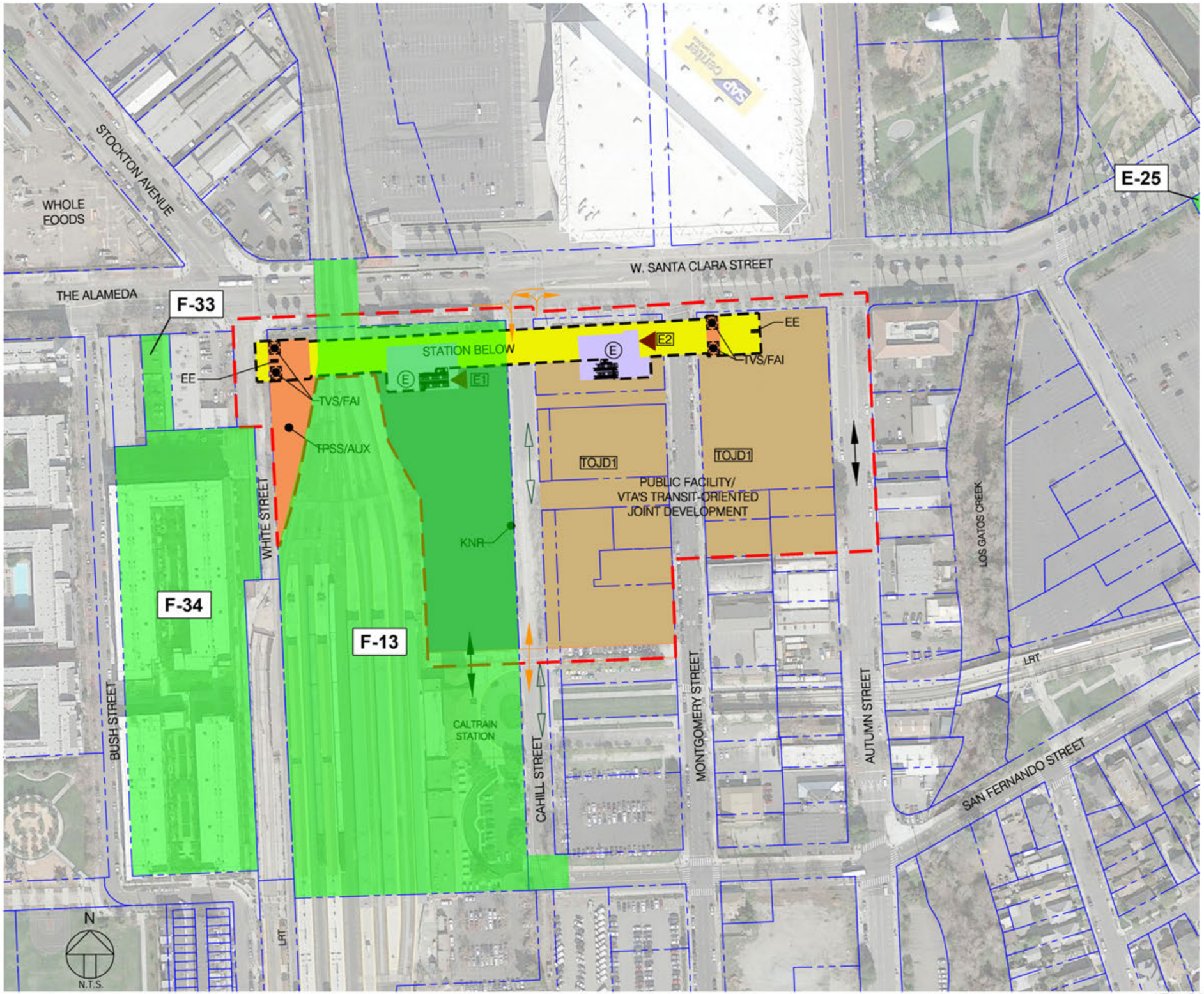
DRAFT CONCEPTUAL EXHIBITS

DIRIDON STATION

SOUTH OPTION

SINGLE-BORE TUNNEL

05/08/2017



LEGEND

- STATION ENTRANCE
- UNDERGROUND STATION & SYSTEM FACILITIES
- ABOVE AND BELOW GROUND SYSTEMS FACILITIES
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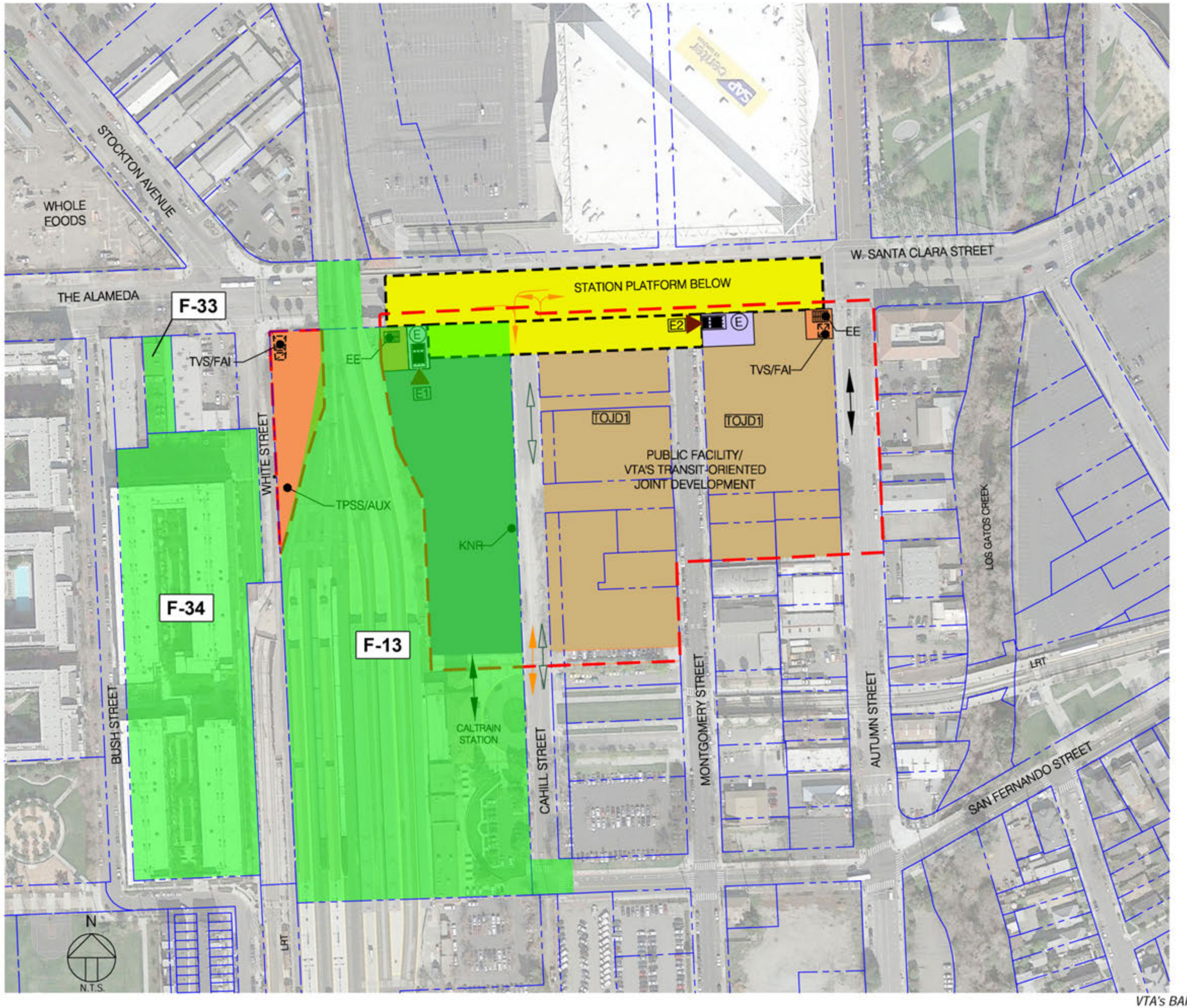
DRAFT CONCEPTUAL EXHIBIT

DIRIDON STATION

NORTH OPTION

TWIN-BORE TUNNEL

05/08/2017



LEGEND

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- VEHICLE ACCESS

(E)	ELEVATOR
EE	EMERGENCY EXIT (PASSENGER; SERVICE ENTRY)
E1	ENTRANCE #
FAI	FRESH AIR INTAKE
KNR	KISS-AND-RIDE
TQJD1	VTA'S TRANSIT-ORIENTED JOINT DEVELOPMENT LOCATION #
TPSS	TRACTION POWER SUBSTATION
TVS	TUNNEL VENTILATION SHAFT
AUX	AUXILIARY POWER SUBSTATION

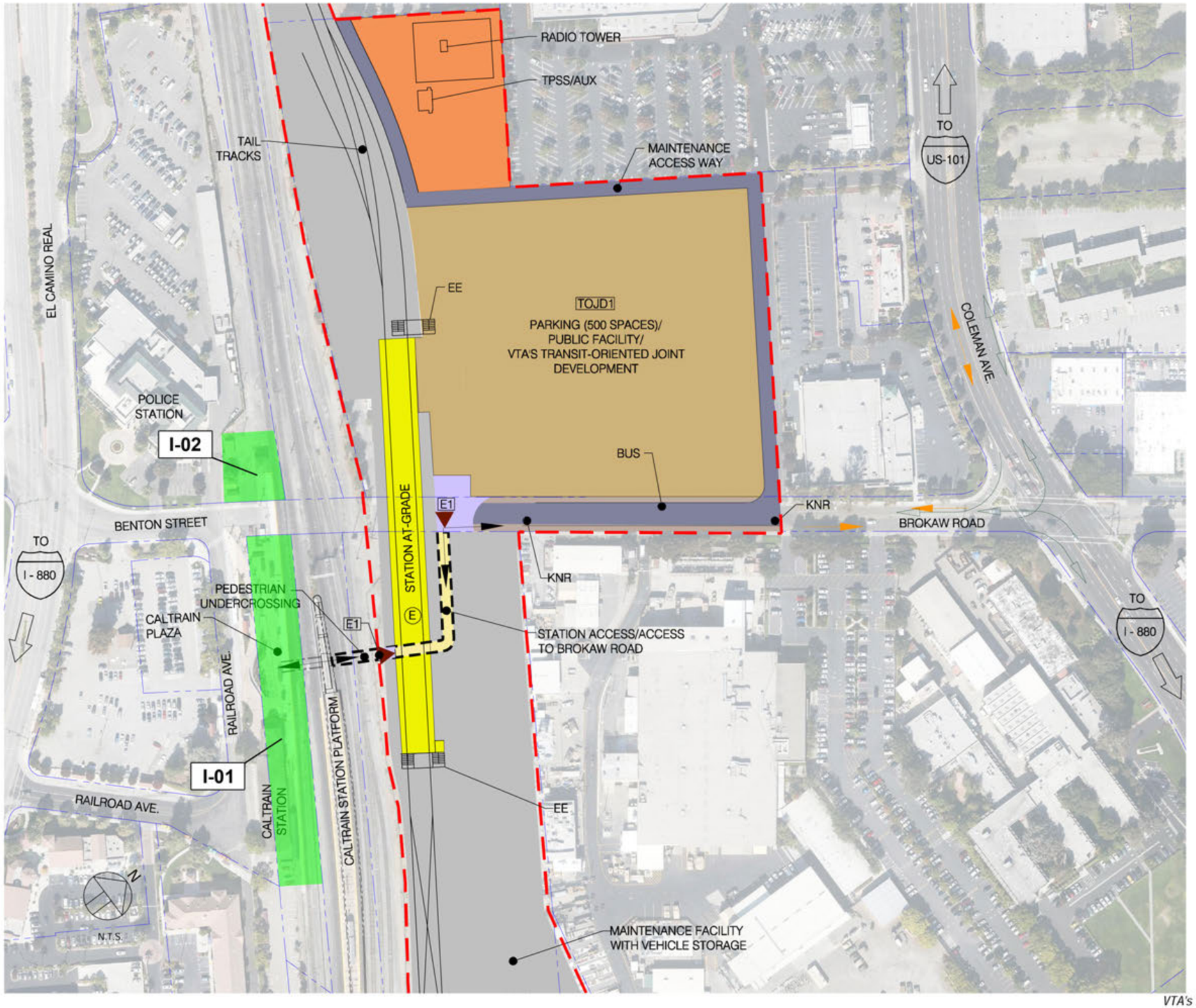
DRAFT CONCEPTUAL EXHIBITS

DIRIDON STATION

NORTH OPTION

SINGLE-BORE TUNNEL

05/08/2017



LEGEND

- STATION ENTRANCE
- AT GRADE STATION
- ABOVE AND BELOW GROUND SYSTEMS FACILITIES
- PARKING/PUBLIC FACILITY/ VTA'S TRANSIT-ORIENTED JOINT DEVELOPMENT
- MAINTENANCE FACILITY WITH VEHICLE STORAGE / TAIL TRACKS
- ROADWAY MODIFICATIONS
- HISTORIC PROPERTIES
- CONSTRUCTION STAGING AREA
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- TPSS TRACTION POWER SUBSTATION
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DRAFT CONCEPTUAL EXHIBITS

SANTA CLARA STATION

SINGLE- & TWIN-BORE TUNNEL

04/27/2017

APPENDIX B:

SHPO Concurrence Letters

OFFICE OF HISTORIC PRESERVATION
DEPARTMENT OF PARKS AND RECREATION
P.O. BOX 942896
SACRAMENTO, CA 94296-0001
(916) 653-6624 Fax: (916) 653-9824
calshpo@ohp.parks.ca.gov
www.ohp.parks.ca.gov

October 28, 2016

Reply To: FTA_2016_0308_001

Leslie Rogers
Regional Administrator
Federal Transit Administration
90 Seventh Street, Suite 15-300
San Francisco, CA 94103-6701

Re: Santa Clara Valley Transportation Authority BART Silicon Valley Phase II Extension Project (Phase II Project), San Jose and Santa Clara, Santa Clara County, CA

Dear Mr. Rogers:

Thank you for the letter received October 3, 2016, continuing consultation for the above-referenced undertaking in order to comply with Section 106 of the National Historic Preservation Act of 1966 (54 U.S.C. § 300101) and its implementing regulation at 36 CFR § 800. Included with the consultation package was the following documentation:

- Revised Archaeological APE Maps
- Revised Architectural APE Maps
- Revised *VTA's BART Silicon Valley Phase II Extension Project—Archaeological Resources Technical Report,* prepared by ICF International in September, 2016 (ARTR)
- Revised *VTA's BART Silicon Valley Phase II Extension Project—Supplemental Built Environment Survey Report,* prepared by JRP Historical Consulting, LLC in September, 2016 (SBESR)
- Comment/Response Matrix addressing comments from the April 6, 2016 consultation letter from the SHPO to the Federal Transit Administration (FTA)

The Santa Clara Valley Transportation Authority (VTA) proposes to construct an approximately 5 mile-long subway through downtown San Jose which includes four new stations (Alum Rock, Downtown San Jose, Diridon, and Santa Clara). FTA is providing funding for the undertaking. The Phase II Extension Project would begin at the terminus of the BART Silicon Valley Phase I Berryessa Extension (Phase I) Project, east of US 101 and south of Mabury Road in San Jose. The Phase II Project would begin at grade where it would connect to the Phase I Project terminus and then descend into an approximately 5-mile–long subway tunnel that continues through downtown San Jose and terminates at grade in the City of Santa Clara near the Santa Clara Caltrain Station. Two tunneling options have been proposed, a single-bore option and a twin-bore option. The construction details are fully described in the consultation package.

Previous correspondence from my office in April, 2016, provided comments on the Area of Potential Effect (APE) and identification efforts. The APE has since been revised to reflect the changes in the project description as discussed in the consultation package. The APE encompasses the approximately 6-mile long rail alignment, including five miles of tunnel, four stations, two mid-tunnel vent structures, two tunnel portals, a maintenance yard, construction staging areas, historic districts, cultural landscapes, and all areas that could be directly or indirectly affected by the proposes undertaking.

In response to the comments of the April, 2016 letter, the ARTR was revised to include additional geoarchaeological and buried site sensitivity data, historic context and updated prehistoric background, expanded methods section, and details on archival research in relation to buried historic-period site locations. No additional previously identified archaeological resources were identified within the revised APE; one resource was identified within 500 feet of the revised APE. Archival research identified 84 locations where historic-period archaeological sites potentially exist within or immediately adjacent to the APE. Finally, 26 archaeological sites were recorded outside of the APE but within 0.5 miles of the Phase II project area.

Buried site sensitivity was modeled for the entire project area and determined that several project facilities are within areas of high buried site sensitivity. These locations of high sensitivity are located under existing, occupied structures or on private property. Presence/absence testing is not feasible at this time.

The SBER identified 14 new potential built environment resources in the revised APE. Twenty-nine historic properties listed in, determined eligible for listing in, or recommended as eligible for listing in the National Register of Historic Places (NRHP) were also identified within the revised APE. Two properties (30 North 3rd Street and 179-181 Rhodes Court) were determined eligible for the NRHP and CRHR as part of the 2016 SBESR. Ninety-five properties were recommended as not eligible for listing in the NRHP, as shown on the attached table.

The FTA is requesting my comments on the revised Area of Potential Effect (APE) for the undertaking and concurrence with the eligibility determinations described above. FTA has also proposed the development of a Programmatic Agreement (PA) and Cultural Resources Treatment Plan to address the phased archaeological identification efforts. After reviewing the information submitted with your letter, I offer the following comments:

- I agree that the revised APE as described in the consultation package is appropriate, per 36 CFR § 800.4(a)(2).
- I concur, per 36 CFR § 800.4(c)(2), that:
    - The Santa Clara Control Tower and the Maintenance of Way Speeder Shed and Maintenance of Way Section Tool House are <u>eligible</u> for the NRHP <u>as contributing elements</u> of the Santa Clara Station property, per 36 CFR § 800.4(c)(2).
    - 30 North 3rd Street (APN 467-20-078) in San Jose is <u>eligible</u> for listing in the NRHP under Criterion C at the local level of significance as a

distinctive, rare, and relatively early local example of a Mission Revival industrial building.

- 179-181 Rhodes Court (APN 261-01-063) in San Jose is eligible for listing in the NRHP under Criterion C as an early and distinguished example of the Mid-Century Modern Style in San Jose.
- The Old Mill Building at 25-29 North San Pedro Street and the Pedro Square Properties building at 35 North San Pedro Street (APN 259-35-057) are not eligible for listing in the NRHP, while the Farmers Union Building on the same parcel remains eligible.
- 48-52 South 6th Street and 58 South 6th Street in San Jose, and the 95 properties listed on the attached table are not eligible for listing in the NRHP.

- I also concur that FTA and VTA's identification efforts to date are appropriate for this undertaking, and that the development of a Programmatic Agreement (PA) and Cultural Resources Treatment Plan to address the phased archaeological identification efforts per 36 CFR § 800.14(b)(1)(ii) is appropriate.

Thank you for considering historic properties in your planning process, and I look forward to continuing this consultation with you. If you have any questions, please contact Kathleen Forrest, Historian, at (916) 445-7022 or at kathleen.forrest@parks.ca.gov or Alicia Perez, Archaeologist, at (916) 445-7020 or Alicia.perez@parks.ca.gov.

Sincerely,

Julianne Polanco
State Historic Preservation Officer

Table 7. Survey Population Properties that Are Not Eligible for Listing in the National Register of Historic Places or California Register of Historical Resources

Map Reference	APN	Street Address		City	Year Built	NR Status Code	CEQA Resource
A-01	254-02-044	1460	Mabury Road	San Jose	1971	6Z	No
A-02	254-02-029; 254-02-057	665	Lenfest Road	San Jose	1956	6Z	No
A-03	254-03-039	1590-1600	Las Plumas Avenue	San Jose	1957	6Z	No
A-04	254-02-076; 245-02-77	1480	Nicora Avenue	San Jose	ca. 1963	6Z	No
A-05	254-01-023	1404	Mabury Road	San Jose	ca. 1968-73	6Z	No
A-06	245-01-024	1354	E. Taylor Street	San Jose	ca. 1968-73	6Z	No
B-01	254-12-011	1505	Marburg Way	San Jose	1971	6Z	No
B-02	249-64-028	475	Eggo Way	San Jose	1962	6Z	No
B-03	467-07-024	1304	E. Julian Street	San Jose	ca. 1949, 1956	6Z	No
C-01	467-09-031	1298	E. St. John Street	San Jose	1960	6Z	No
C-02	467-09-032	85	N. 27th Street	San Jose	1966	6Z	No
C-03	467-09-033	83	N. 27th Street	San Jose	1947	6Z	No
C-04	467-09-039	23	N. 27th Street	San Jose	1964	6Z	No
C-05	467-09-051	88, 90	N. 26th Street	San Jose	ca. 1937, 1964	6Z	No
C-06	467-09-050	74	N. 26th Street	San Jose	1949	6Z	No

Table 7. Survey Population Properties that Are Not Eligible for Listing in the National Register of Historic Places or California Register of Historical Resources (continued)

Map Reference	APN	Street Address		City	Year Built	NR Status Code	CEQA Resource
C-07	467-09-049	60	N. 26th Street	San Jose	1940	6Z	No
C-08	467-09-048	50	N. 26th Street	San Jose	1926	6Z	No
C-09	467-10-007	33-35	N. 26th Street	San Jose	1924	6Z	No
C-10	467-10-008	25	N. 26th Street	San Jose	1918	6Z	No
C-11	467-10-014	30	N. 25th Street	San Jose	1937	6Z	No
C-12	467-11-014	89	N. 24th Street	San Jose	1918	6Z	No
C-13	467-11-015	81	N. 24th Street	San Jose	1928	6Z	No
C-14	467-11-040	75	N. 24th Street	San Jose	1928	6Z	No
C-15	467-11-018	29	N. 24th Street	San Jose	1918	6Z	No
C-16	467-11-037	1121	E. Santa Clara Street	San Jose	1957	6Y	No
C-17	467-11-023	1119	E. Santa Clara Street	San Jose	1929	6Z	No
C-18	467-11-028	1047	E. Santa Clara Street	San Jose	1887, 1924	6Z	No
C-19	467-11-035	32-36	N. 21st Street	San Jose	1924, 1965	6Z	No
C-20	467-11-034	28	N. 21st Street	San Jose	1938	6Z	No
C-21	467-11-033	24-26	N. 21st Street	San Jose	1921	6Z	No

Table 7. Survey Population Properties that Are Not Eligible for Listing in the National Register of Historic Places or California Register of Historical Resources (continued)

Map Reference	APN	Street Address		City	Year Built	NR Status Code	CEQA Resource
C-22	467-11-038	1001	E. Santa Clara Street	San Jose	1946	6Z	No
C-23	467-11-032	18-20	N. 21st Street	San Jose	1952	6Z	No
C-24	467-11-031	16	N. 21st Street	San Jose	1930	6Z	No
C-28	467-30-037	902	E. Santa Clara Street	San Jose	1967	6Z	No
D-01	467-16-097	57	N. 13th Street	San Jose	1920	6Z	No
D-02	467-24-110; 467-24-111	264-272	E. Santa Clara Street	San Jose	1966	6Z	No
E-01	467-20-079	147	E. Santa Clara Street	San Jose	1969	6Z	No
E-02	467-21-040	2	N. 2nd Street	San Jose	1972	6Z	No
E-03	259-34-043	19	N. Market Street	San Jose	ca. 1900-15	6Z	No
E-04	259-34-044	15	N. Market Street	San Jose	1927	6Z	No
E-05	259-34-045	9-11	N. Market Street	San Jose	1946	6Z	No
E-06	259-38-124	24	S. Autumn Street	San Jose	ca. 1969	6Z	No
E-07	259-38-119	50-52	S. Autumn Street	San Jose	1960	6Z	No
E-26	467-20-080	60	N. 3rd Street	San Jose	1971-73	6Z	No
E-28	467-23-034	15-19	S. 4th Street	San Jose	1939	6Z	No

Table 7. Survey Population Properties that Are Not Eligible for Listing in the National Register of Historic Places or California Register of Historical Resources (continued)

Map Reference	APN	Street Address		City	Year Built	NR Status Code	CEQA Resource
E-29	467-21-029	31	N. 2nd Street	San Jose	ca. 1922, 1983-86	6Z	No
E-30	259-34-010	99	N. 1st Street	San Jose	1973-75	6Z	No
E-31	259-34-014	25-55	N. 1st Street	San Jose	ca. 1877, 1947	6Z	No
E-32	259-34-029	84-90	N. Market Street	San Jose	1903	6Z	No
E-33	259-34-028	80	N. Market Street	San Jose	ca. 1903	6Z	No
E-34	259-34-040	31	N. Market Street	San Jose	1956	6Z	No
E-37	259-35-058	20	N. Almaden Avenue	San Jose	1945	6Z	No
F-01	261-33-040	730	The Alameda	San Jose	1964	6Z	No
F-02	261-33-039	746-748	The Alameda	San Jose	1965	6Z	No
F-03	259-28-001	32	Stockton Avenue	San Jose	ca. 1954	6Z	No
F-04	259-28-002	60-62	Stockton Avenue	San Jose	ca. 1920	6Z	No
F-05	259-28-003	106-120	Stockton Avenue	San Jose	1917	6Z	No
F-06	259-28-004	138	Stockton Avenue	San Jose	ca. 1930	6Z	No
F-07	259-28-024	250	Stockton Avenue	San Jose	ca. 1948	6Z	No
F-08	261-033-025	49	Wilson Avenue	San Jose	ca. 1890	6Z	No

Table 7. Survey Population Properties that Are Not Eligible for Listing in the National Register of Historic Places or California Register of Historical Resources (continued)

Map Reference	APN	Street Address		City	Year Built	NR Status Code	CEQA Resource
F-09	261-33-015	30	Sunol Street	San Jose	1915	6Z	No
F-10	261-02-060	173	N. Morrison Avenue	San Jose	1955	6Z	No
F-11	261-02-062	950	W. Julian Street	San Jose	1973	6Z	No
F-12	261-02-053	945	W. Julian Street	San Jose	ca. 1966	6Z	No
F-16	261-33-026	51	Wilson Avenue	San Jose	ca. 1884-90	6Z	No
F-17	261-33-014	34	Sunol Street	San Jose	ca. 1887	6Z	No
F-18	261-32-059	27	Sunol Street	San Jose	1912	6Z	No
F-20	261-01-013	128	Rhodes Court	San Jose	1921	6Z	No
F-21	261-01-014	152	Rhodes Court	San Jose	1920	6Z	No
F-23	261-01-062	201-203	Rhodes Court	San Jose	1963	6Z	No
F-24	261-01-061	229	Rhodes Court	San Jose	1920	6Z	No
F-25	261-01-060	253	Rhodes Court	San Jose	1920	6Z	No
F-26	261-01-059	275	Rhodes Court	San Jose	1920	6Z	No
F-27	261-01-058	295	Rhodes Court	San Jose	1924	6Z	No
F-28	261-01-081	908	West Julian Street	San Jose	ca. 1930	6Z	No

Table 7. Survey Population Properties that Are Not Eligible for Listing in the National Register of Historic Places or California Register of Historical Resources (continued)

Map Reference	APN	Street Address		City	Year Built	NR Status Code	CEQA Resource
F-29	261-01-080	920	West Julian Street	San Jose	1930	6Z	No
F-30	261-01-079	936	West Julian Street	San Jose	1930	6Z	No
F-31	261-01-093	264	North Morrison Avenue	San Jose	1963	6Z	No
F-32	261-01-047	850	Cinnabar Street	San Jose	ca. 1892	6Z	No
G-01	261-04-005	707-725	Lenzen Avenue	San Jose	1946	6Z	No
G-02	261-04-039	475	Stockton Avenue	San Jose	1963	6Z	No
G-03	259-10-023	645	Lenzen Avenue	San Jose	ca. 1954	6Z	No
G-04	259-10-002	478	Stockton Avenue	San Jose	1953	6Z	No
G-05	259-10-004	530	Stockton Avenue	San Jose	1940	6Z	No
G-06	259-10-016	534-536	Stockton Avenue	San Jose	1946	6Z	No
G-07	259-10-021	580	Stockton Avenue	San Jose	1925	6Z	No
G-08	259-10-008	600	Stockton Avenue	San Jose	1967	6Z	No
G-09	259-10-009	610	Stockton Avenue	San Jose	1945	6Z	No
G-10	259-10-010; 259-10-011	630-644	Stockton Avenue	San Jose	1948	6Z	No
G-11	230-41-004	707	W. Hedding Street	San Jose	1950	6Z	No

Table 7. Survey Population Properties that Are Not Eligible for Listing in the National Register of Historic Places or California Register of Historical Resources (continued)

Map Reference	APN	Street Address		City	Year Built	NR Status Code	CEQA Resource
G-12	261-11-003	889	Stockton Avenue	San Jose	ca. 1965	6Z	No
G-13	261-05-034	700	Harding Avenue	San Jose	ca. 1929	6Z	No
G-14	261-05-035	551	Stockton Avenue	San Jose	ca. 1928	6Z	No
G-15	261-05-068	597-599	Stockton Avenue	San Jose	1924-29, 1962-65	6Z	No
I-03	230-46-069	1205	Coleman Avenue	Santa Clara	1961-93	6Y	No

5.3 GENERAL DISCUSSION OF HISTORICAL SIGNIFICANCE OF PROPERTIES IN THE CURRENT SURVEY POPULATION

5.3.1 151-155 W. SANTA CLARA STREET / 17-35 N. SAN PEDRO STREET (MAP REFERENCE # E-35)

One property, the Farmers Union Building located at 151-155 W. Santa Clara Street / 17-35 N. San Pedro Street (Map Reference # E-35), has been previously determined eligible for the NRHP under Criteria A, B, and C (**Table 2**). It has been assigned NR Status Code 2S2, signifying that the property has been determined eligible for the NRHP and CRHR by consensus through the Section 106 process. The building is also listed as a San Jose City Landmark. The building is eligible for the NRHP at the local level of significance with a period of significance of 1930-1960. This resource is also considered a historical resource for the purposes of CEQA.

JRP updated the original form[35] in order to survey and evaluate two additional historic-period buildings located on the same legal parcel that had not previously been evaluated for NRHP or CRHR eligibility, and concluded that while the Farmers Union Building remains eligible, the two newly recorded buildings are not eligible for either

[35] Franklin Maggi, DPR 523 Form for the Farmer's Union Building (Resource ID SJCHS132), in: Dill Design Group, "San Jose Downtown Historic Survey for the City of San Jose," August 2000.

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June 9, 2003

REPLY TO: FTA030325A

Leslie T, Rogers, Regional Administrator
Federal Transit Administration, Region IX
201 Mission Street, Suite 2210
SAN FRANCISCO CA 94105-1839

Re: Silicon Valley Rapid Transit Corridor Project, San Jose, Santa Clara County.

Dear Mr. Rogers:

Thank you for submitting to our office your March 19, 2003 letter, Historic Resources Evaluation Report (HRER), and Archeological Survey and Sensitivity Report (ASSR) regarding the proposed Silicon Valley Rapid Transit Corridor Project (SVRTC) in the City of San Jose, Santa Clara County. The SVRTC would enhance regional connectivity through expanded, interconnected rapid transit services between Bay Area Rapid Transit (BART) in Fremont and light rail and Caltrain in Silicon Valley. The project would improve public transit services by providing increased transit capacity, more convenient access to services, and the alleviation of severe and ever-increasing traffic congestion on the Interstate 880 (I-880), and I-680 freeways between Alameda and the Silicon Valley.

The SVRTC includes two "build" alternatives that would meet the project purpose and need. The "build" alternatives include:

- The "New Starts" Baseline Alternative, which would build upon existing, planned, and programmed transportation improvements in the corridor with additional express bus service and other associated improvements.

- The BART Extension Alternative, which would extend the BART system approximately 16.3 miles from the planned Warms Springs BART Station in Fremont, south along the Union Pacific Railroad (UPRR) to Santa Clara Street in San Jose, then west in a subway under public and private property through east and downtown San Jose, to terminate at grade near the Santa Clara Caltrain Station. This alternative would include seven stations plus one optional station along the alignment.

The architectural and archeological Areas of Potential Effects (APEs) for these project alternatives extend from Fremont southward through the City of Milpitas to eastern San Jose, where it turns west running through San Jose and then northwest into the City of Santa Clara. The APEs also encompass an area at the north end of the project between I-680 and I-880, as well as a discontiguous area at the I-880/Montague Expressway interchange. The APEs include the Union Pacific Railroad (UPRR) right-of-way from Fremont to San Jose to encompass BART extension alignment tracks. Much of this portion will contain areas to allow for BART operational stations and substations, parking areas, and turn-around tracks. For the archeological APE, where the alignment

is a subway, parcels surrounding facilities that connect from the surface to the 40-50 foot deep tunnel are included; and the bored tunnel is not. For the architectural APE a buffer zone immediately adjacent to surface construction and the legal parcels immediately above the work for tunneled portions of the project are included. The project APEs, with one exception, appear adequate and meet the definitions set forth in 36 CFR 800.16(d). I recommend that the FTA either revise the archeological APE for the BART Extension Alternative to include the bored, 40-50 foot deep tunnel, or make explicit the agency's rationale for excluding the tunnel from that APE.

FTA is seeking my comments on its determination of the eligibility of 250 pre-1962 architectural buildings and structures within the architectural APE for inclusion on the National Register of Historic Places (NRHP) in accordance with 36 CFR 800, regulations implementing Section 106 of the National Historic Preservation Act. A review of the HRER leads me to make the following comments regarding these properties:

- The twenty (20) architectural properties noted in the HRER as listed on the NRHP or previously determined, by consensus, to be eligible for inclusion on the NRHP are still eligible properties under applicable criteria established by 36 CFR 60.4.

- I concur that the following architectural properties are eligible for inclusion on the NRHP under applicable criteria established by 3 CFR 60.4:

    1. Five Wounds Church, 1375 East Santa Clara Street, San Jose, Criteria A and C.

    2. Mayfair Theater, 1191 East Santa Clara Street, San Jose, Criterion C.

    3. Residence at 1169 East Santa Clara Street, San Jose, Criterion C

    4. Fox Building, 40 N. 4th Street, San Jose, Criterion C.

    5. San Jose Building and Loan, 81 West Santa Clara Street, San Jose, Criterion C.

    6. James Clayton Building, 34 West Santa Clara Street, San Jose, Criteria A and C.

    7. Structure at 51 N. San Pedro Street (Spaghetti Factory), San Jose, Criterion A.

    8. Calpak/Del Monte Plant #51, 50 Bush Street, San Jose, Criterion A and C.

    9. 848 The Alameda, San Jose, Criterion C

    10. Residence at 176 North Morrison Avenue, San Jose, Criterion C

    11. Muirson Label and Crate Company building, 421-435 Stockton Avenue, San Jose, Criterion A and C.

The Five Wounds Church building and its attached Rectory have strong

associations with the cultural and social history of San Jose's Portuguese community. The church building is probably the only religious structure in the Bay Area that fully exhibits the elements of the Portuguese Baroque Revival architectural style. The remaining structures eligible under Criterion A have strong associations with the development of significant commercial enterprises in the San Jose area that involved food processing, banking, and agriculture-associated manufacturing. These structures eligible under Criterion C appear to have retained sufficient integrity of design, materials, and workmanship to convey both their architectural style and historic period of significance.

A number of other structures were deemed eligible in the HRER under Criterion A. However, I felt the HRER did not provide compelling evidence of any of these structures' associations with significant historical events. The historical themes cited for their significance under Criterion A were not sufficiently developed to justify these properties inclusion on the NRHP. As a result these structures are included with the remaining pre-1962 structures cited in the HRER that are not eligible for inclusion on the NRHP under any of the criteria established by 36 CFR 60.4. The structures have no strong associations with significant historical events or persons and are not examples of outstanding architectural or engineering design or function.

FTA is also seeking my concurrence on the adequacy of the archeological inventory and the ASSR, and is requesting that I endorse the agency's proposed strategy for the further identification and management of archeological properties. The inventory of archeological in the ASSR would be adequate as the first part of a phased process of identification and evaluation under 36 CFR 800.4(b)(2) if FTA were to propose such a process. I would reconsider FTA's strategy for the further identification and management of archeological properties to present potential subsequent phases of that process, and I would want to consult with FTA on those subsequent phases.

Thank you again for seeking my comments on your project. If you have any question, please contact staff historian Clarence Caesar by phone at (916) 653-8902, or by e-mail at ccaes@ohp.parks.ca.gov.

Sincerely,

Dr. Knox Mellon
State Historic Preservation Officer

STATE OF CALIFORNIA – THE RESOURCES AGENCY

GRAY DAVIS, *Governor*

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July 9, 2003

REPLY TO: FTA030325A

Leslie T, Rogers, Regional Administrator
Federal Transit Administration, Region IX
201 Mission Street, Suite 2210
SAN FRANCISCO CA 94105-1839

Re: Silicon Valley Rapid Transit Corridor Project, San Jose, Santa Clara County.

Dear Mr. Rogers:

It has been brought to my attention by Meta Bunse of JRP Historical Consulting (JRP) that further clarification is needed regarding my concurrence on the National Register of Historic Places (NRHP) eligibility of seven architectural properties located within the Area of Potential Effects (APE) of the Silicon Valley Rapid Transit Project in the City of San Jose in Santa Clara County. In my letter of June 9, 2003 I provided comments on the NRHP eligibility of architectural properties evaluated in Volumes I and II of the Historic Resources Evaluation Report (HRER) (JRP, January 2003) provided for my review by the Federal Transit Administration (FTA). My letter apparently neglected to include comments on the NRHP eligibility of seven architectural properties noted in the HRER. Due to this oversight, I am providing FTA with the following supplemental comments regarding the aforementioned properties:

- 884 E. Santa Clara Street - This property is not eligible for inclusion on the NRHP under any of the criteria established by 36 CFR 60.4. The structure has no strong associations with significant historical events or persons, and is an interesting, but not outstanding, example of its architectural type (Romanesque/Baroque).

- 17-25 E. Santa Clara Street - This property is not eligible for inclusion on the NRHP under any of the criteria established by 36 CFR 60.4. The structure has undergone numerous changes to its exterior and interior and does not retain sufficient integrity of design, materials, and workmanship to individually qualify for inclusion on the NRHP.

- 127-145 Post Street and 33-45 S. Market Street --These properties are not individually or collectively eligible for inclusion on the NRHP under any of the criteria established by 36 CFR 60.4. These structures have associations with the development of the early commercial development in the downtown San Jose area, but are not distinguished representatives of any particular architectural type. Both structures have also undergone numerous changes to their exteriors and interiors and do not retain sufficient integrity to convey their associations with their historic periods of significance.

- 101 W. Santa Clara Street - This building is eligible for inclusion on the NRHP under Criterion C as defined in 36 CFR 60.4. The building is a good example of the late Art Deco architectural style and has retained its integrity of design, materials, workmanship, feeling and association with its historic period of significance (1942 to 1953).

- 151 W. Santa Clara Street - Given the number of uses this building has served during its existence, it is unclear from the documentation how extensive any alterations to the structure may have been. Until this issue is clarified by additional documentation, I recommend that, for purposes of this project, the structure retain its status of appearing eligible for inclusion on the NRHP.

- 161-167 W. Santa Clara - In our letter of June 4, 1996 (HUD960122C), this property was determined, by consensus, to be ineligible for inclusion on the NRHP. A review of the HRER provides no evidence that compels me to reverse my original consensus finding on this property's NRHP eligibility.

- Santa Clara Tower, Benton Street and Railroad Avenue - As noted in my letter of December 9, 2002 (FTA021021A), I concurred with FTA's determination that this property was eligible for inclusion on the NRHP under Criterion C as defined by 36 CFR 60.4. I stand by my finding of NRHP eligibility for this structure.

Thank you again for providing me the opportunity to clarify my comments on the above properties. If you have any questions, please contact staff historian Clarence Caesar by phone at (916) 653-8902, or by e-mail at ccaes@ohp.parks.ca.gov.

Sincerely,

Dr. Knox Mellon
State Historic Preservation Officer

Cc: Meta Bunse, JRP Historical Consulting