

VTA'S BART SILICON VALLEY PHASE II EXTENSION PROJECT

**Draft Supplemental Environmental Impact Statement/
Subsequent Environmental Impact Report
and Draft Section 4(f) Evaluation
Volume II: Appendices**

December 2016



**U. S. DEPARTMENT OF TRANSPORTATION
FEDERAL TRANSIT ADMINISTRATION**



SANTA CLARA VALLEY TRANSPORTATION AUTHORITY

VTA's BART Silicon Valley Phase II Extension Project

Draft
Supplemental Environmental Impact Statement/
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Volume II: Appendices

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**U.S. DEPARTMENT OF TRANSPORTATION
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SANTA CLARA VALLEY TRANSPORTATION AUTHORITY

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Appendix A

Notice of Preparation



NOTICE OF PREPARATION

January, 30, 2015

To:
Reviewing Agencies and Organizations

From:
Santa Clara Valley Transportation Authority
Environmental Programs and Resources
Management
3331 North 1st Street, Building B-2
San Jose, CA 95134

SUBJECT: Notice of Preparation of a 3rd Draft Supplemental Environmental Impact Report for VTA's BART Silicon Valley – Phase II Extension Project

The Santa Clara Valley Transportation Authority (VTA), as the lead agency, will prepare a 3rd Supplemental Environmental Impact Report (SEIR) for the project identified below. We need to know the views of your agency regarding the scope and content of the environmental information that is germane to your agency's statutory responsibilities in connection with the proposed project. The 3rd SEIR will supplement the Final EIR, the 1st Final SEIR, and the 2nd Final SEIR which were certified by the VTA Board of Directors on December 9, 2004; June 7, 2007; and March 3, 2011, respectively. Your agency will need to use the Final EIR, 1st Final SEIR, and 3rd SEIR prepared by our agency when considering your permit or other approvals for the project.

The project description, location, overview, and potential environmental effects are contained in the attached materials. A copy of the initial study is is not attached.

Because of time limits mandated by state law, your response must be sent at the earliest possible date but not later than 30 days after receipt of this notice.

Please send your response to Thomas W. Fitzwater at the address shown above. Please provide the name of a contact person in your agency.

Project Title: VTA's BART Silicon Valley – Phase II Extension Project

Project Applicant, if any: Santa Clara Valley Transportation Authority

Project Description: See attachment

Date: 1/30/2015 Signature:

Name: Thomas W. Fitzwater

Title: Manager, Environmental Programs and Resources Management

Telephone: (408) 321-5705

Reference: California Code of Regulations, Title 14, (State CEQA Guidelines) Sections 15082(a), 15103, 15375.

NOTICE OF PREPARATION

ATTACHMENT

3rd Supplemental Environmental Impact Report for VTA's BART Silicon Valley – Phase II Extension Project

Lead Agency: Santa Clara Valley Transportation Authority

Project Description and Location

VTA's Bay Area Rapid Transit (BART) Silicon Valley – Phase II Extension Project (Phase II Project) would be constructed in Santa Clara County. The 6-mile-long Phase II Project would begin at the terminus of the BART Silicon Valley – Phase I Berryessa Extension Project (Phase I Project) (currently under construction and scheduled to be operational in late 2017) south of Mabury Road in the City of San Jose. The Phase II Project would be at grade where it connects to the Phase I Project and then descend into approximately 5-mile-long subway tunnels that continue through downtown San Jose and terminate at grade in the City of Santa Clara near the Santa Clara Caltrain Station (see Figure 1). Four stations are proposed, three in San Jose, the Alum Rock, Downtown San Jose, and Diridon Stations, and one in Santa Clara, the Santa Clara Station. Parking structures are proposed at the Alum Rock and Santa Clara Stations; "kiss-and-ride" (passenger drop-off) facilities are proposed at Alum Rock, Diridon, and Santa Clara Stations. The station facilities would include electrical and ventilation systems as well as communication equipment. A maintenance yard is proposed near the Santa Clara Station.

Several project changes have occurred since the 1st SEIR was approved in 2007. In the 2007 1st SEIR, the project was a 16-mile-long extension of the BART system from the Warm Springs Station in the City of Fremont to Santa Clara and was called the Silicon Valley Rapid Transit Corridor Project (SVRTC Project). The 16-mile-long SVRTC Project is now called the BART Silicon Valley Program. In 2010, VTA decided to construct the BART Silicon Valley Program in phases. The 2nd SEIR, approved in 2011, addressed design changes applicable to the Phase I Project only. The Phase I Project consists of the first 10 miles of the BART Silicon Valley Program and is currently under construction and scheduled to open in late 2017. The Phase I Project begins at the future BART Warm Springs Station in the City of Fremont, continues through the Cities of Milpitas and San Jose, and terminates just north of U.S. 101 in San Jose. The Phase I Project followed the former Union Pacific Railroad (UPRR) right-of-way (ROW) owned by VTA.

The Phase II Project, the remaining 6 miles of the BART Silicon Valley Program from the terminus of the Phase I Project to Santa Clara, is now being considered for clearance.

3rd SEIR and Supplemental Environmental Impact Statement

In accordance with the California Environmental Quality Act (CEQA), VTA intends to prepare a 3rd SEIR for the BART Silicon Valley – Phase II Extension Project. The 3rd SEIR will be prepared as a joint document with a Supplemental Environmental Impact Statement (SEIS) that will be prepared in accordance with the National Environmental Policy Act (NEPA). The Federal Transit Administration (FTA) will serve as the federal lead agency.

The 3rd SEIR will evaluate the impacts of the proposed Project in light of design changes as well as changes to the regulatory and environmental settings that have occurred since certification of the 1st Final SEIR on June 7, 2007. Generally, the changes include (1) vertical and horizontal alignment changes, (2) revised station designs and configurations, (3) refinements to the design and location of system facilities, (4) changes in the existing conditions and regulatory setting, and (5) project schedule changes.

Environmental Process Background

In February 2002, VTA initiated the environmental process by conducting scoping meetings for the Silicon Valley Rapid Transit Corridor (SVRTC) Project. In March 2004, the Draft Environmental Impact Statement/Draft Environmental Impact Report (EIS/EIR) was released for public review, in accordance with state and federal law. Following circulation of the Draft EIS/EIR in April 2004, it was determined that the opportunity for securing federal funds at that time was limited. The Final EIR was certified by the VTA Board of Directors on December 9, 2004. Following certification of the Final EIR, design continued. A Draft SEIR was released for public review in January 2007. The Final SEIR was certified by the VTA Board of Directors on June 7, 2007. The federal environmental document, the Environmental Impact Statement, was processed separately. The Draft EIS was released on March 13, 2009. FTA signed the Record of Decision for the Phase I Project on June 24, 2010. In 2011, a 2nd Supplemental FEIR was certified by the VTA Board of Directors to address design changes applicable to the Phase I Project. The Phase I Project is under construction, and revenue service is forecast for late 2017. The remaining phase of the BART Silicon Valley Program from the Berryessa area in San Jose to Santa Clara is now being considered for clearance under a combined CEQA/NEPA document.

Probable Effects

The purpose of the 3rd SEIR is to disclose the environmental consequences of the proposed Phase II Project. The 3rd SEIR will determine the extent to which the Phase II Project, as defined, would result in environmental impacts and discuss actions to reduce or eliminate such impacts. Probable effects to be examined in the 3rd SEIR are related to air quality; biological resources and wetlands; community services and facilities; cultural resources; electromagnetic fields; energy; geology, soils, and seismicity; greenhouse gas emissions; hazards/hazardous materials; land use; noise and vibration; safety and security; transportation, including transit, parking, pedestrians, bicycles, and traffic; utilities; visual quality and aesthetics; and water resources, water quality, and floodplains. Impacts resulting from project and setting changes will be identified for both long-term operation of the project and the construction period. To ensure that the full range of issues is addressed and all significant impacts are identified, comments and suggestions are invited from all interested parties.

Comment Due Date

Written scoping comments must be received no later than 30 days after receipt of this notice and sent to:

Thomas W. Fitzwater, Manager, Environmental Programs and Resources Management
Santa Clara Valley Transportation Authority
3331 North First Street
San Jose, CA 95134-1927

They can also be sent via email to BARTphase2EIS-EIR@vta.org.

Scoping Meetings

Scoping will continue through correspondence and discussions with interested persons; organizations; and federal, state, and local agencies. In addition, public scoping meetings will be held on:

- Thursday, February 12, 2015; 5:30 p.m. to 7:30 p.m. at Santa Clara City Council Chambers, 1500 Warburton Avenue, Santa Clara, CA 95050.
(This location is served by VTA Bus, 22, 32, 60, and 522)
- Tuesday, February 17, 2015; 5:30 p.m. to 7:30 p.m. at VTA Customer Service Center, 55 West Santa Clara Street, San Jose, CA 95113
(This location is served by VTA Bus, 22, 63, 66, 68, 72, 73, 81, 82, 522 and Light Rail)
- Thursday, February 19, 2015; 5:30 p.m. to 7:30 p.m. at School of Arts and Culture at Mexican Heritage Plaza, 1700 Alum Rock Ave, San Jose, CA 95116
(This location is served by VTA Bus, 22, 23, 77, and 522)

Project information will be presented at the meetings. Scoping material will be available as well. Persons with disabilities will be able to access the buildings used for the scoping meetings. Individuals who require language translation, American Sign Language, or other assistance are requested to contact VTA Community Outreach at (408) 321-7575, TTY (408) 321-2330, at least five (5) business days before the public information meeting. All meeting facilities are accessible to persons with disabilities.

For Further Information

Contact Mr. Thomas W. Fitzwater at the address above, at (408) 321-5705, or at BARTphase2EIS-EIR@vta.org to be included on the Project mailing list and receive additional information about the Project.

Issued on: Jan. 30, 2015.



Thomas W. Fitzwater
Manager, Environmental Programs and Resources Management



SAN JOSE



VTA's BART Silicon Valley – Phase II Extension Project

Appendix B

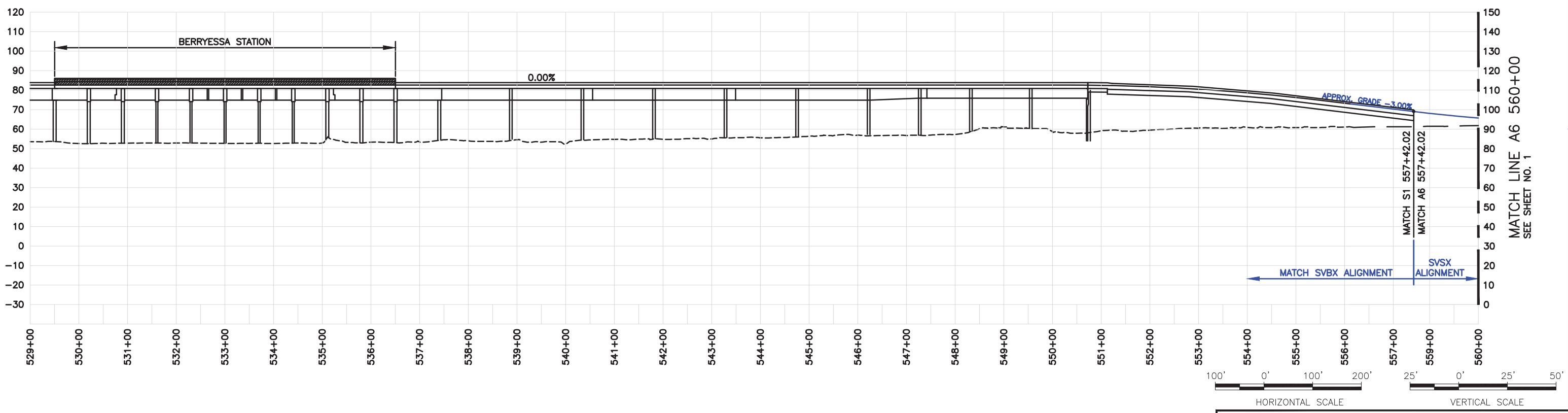
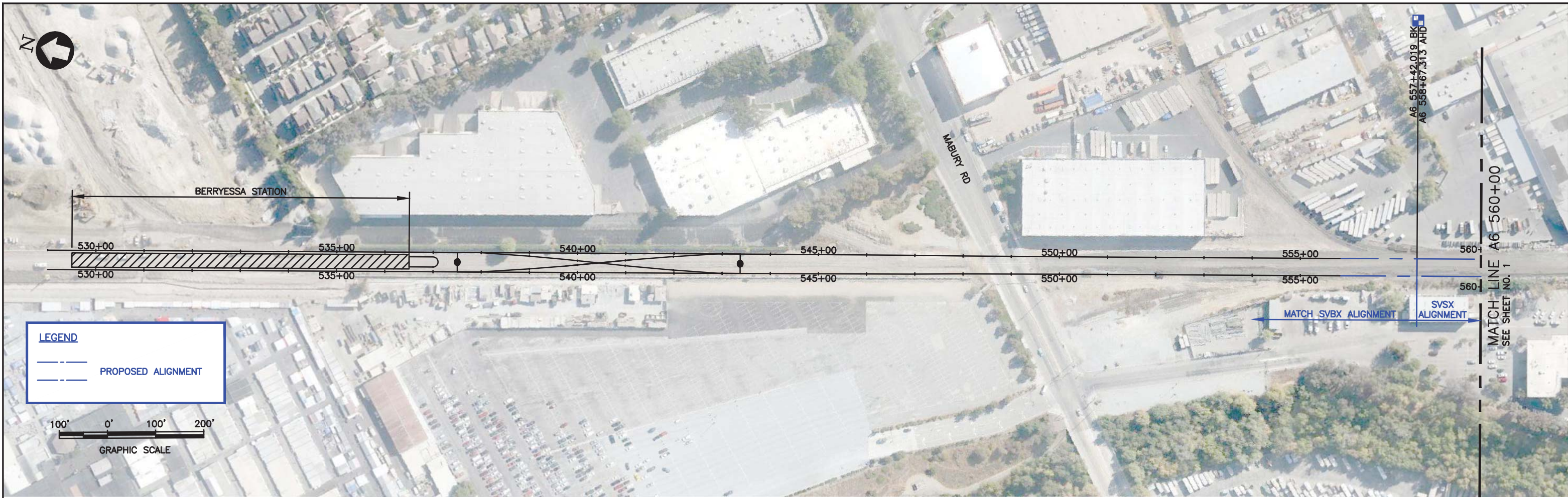
Project Plans and Profiles

B1 – Twin-Bore Tunnel Plans and Profiles

**SILICON VALLEY PHASE II EXTENSION
TWIN-BORE OPTION PLANS AND PROFILES
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2	ALIGNMENT AT ALUM ROCK/ 28 th STREET STATION	9A & 9B	ALIGNMENT NEAR HEDDING STREET DIRIDON STATION SOUTH OPTION
3	ALIGNMENT EAST OF COYOTE CREEK	9C & 9D	ALIGNMENT NEAR HEDDING STREET DIRIDON STATION NORTH OPTION
4	ALIGNMENT WEST OF COYOTE CREEK	10A & 10B	ALIGNMENT NORTH OF I-880 DIRIDON STATION SOUTH OPTION
5A & 5C	DOWNTOWN SAN JOSE STATION EAST OPTION	10C & 10D	ALIGNMENT NORTH OF I-880 DIRIDON STATION NORTH OPTION
5B & 5D	DOWNTOWN SAN JOSE STATION WEST OPTION	11A & 11B	ALIGNMENT SOUTH OF BROKAW ROAD DIRIDON STATION SOUTH OPTION
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B SERIES = DOWNTOWN SAN JOSE STATION WEST OPTION & DIRIDON STATION SOUTH OPTION
C SERIES = DOWNTOWN SAN JOSE STATION EAST OPTION & DIRIDON STATION NORTH OPTION
D SERIES = DOWNTOWN SAN JOSE STATION WEST OPTION & DIRIDON STATION NORTH OPTION
A & B SERIES = DIRIDON STATION SOUTH ALIGNMENT
C & D SERIES = DIRIDON STATION NORTH ALIGNMENT

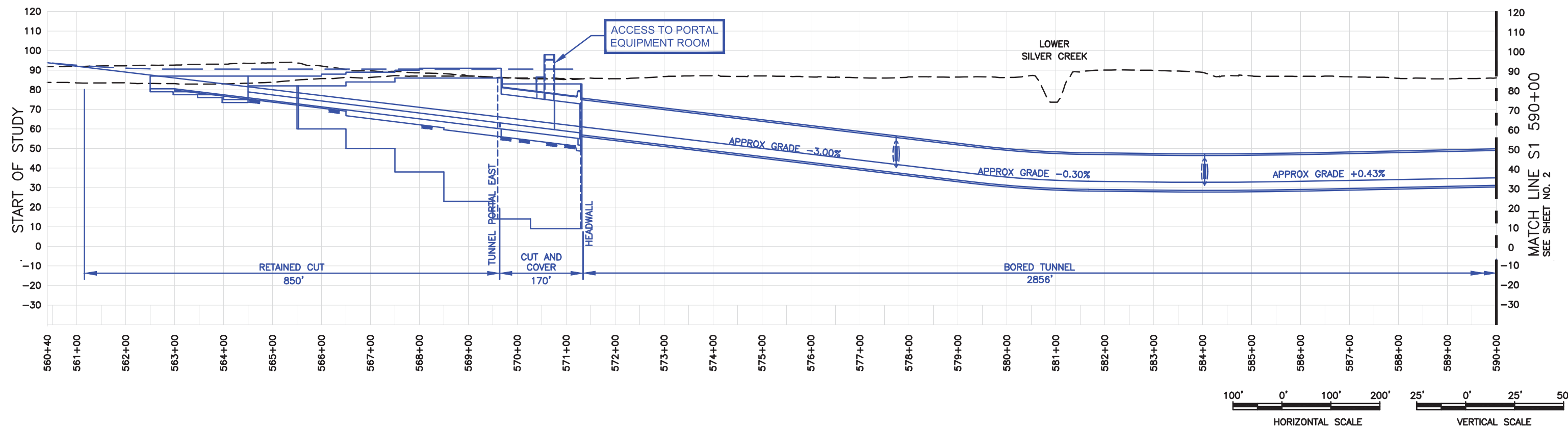
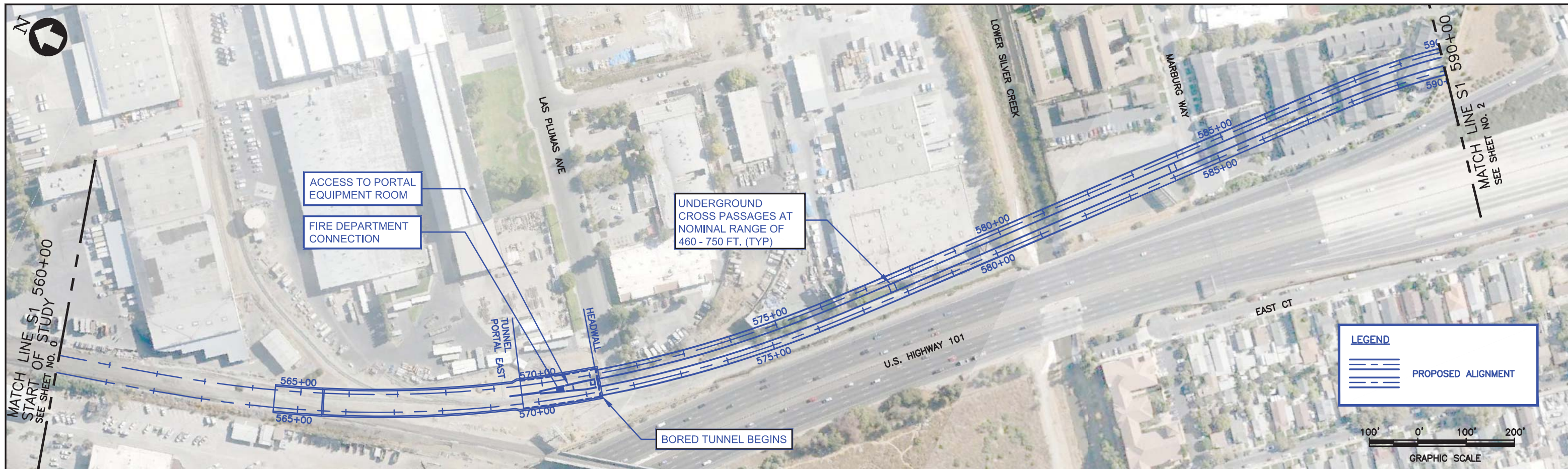


CONCEPTUAL PLANS

**SILICON VALLEY SANTA CLARA EXTENSION
CONNECTION TO PHASE I**

PLAN & PROFILE
SHEET 0

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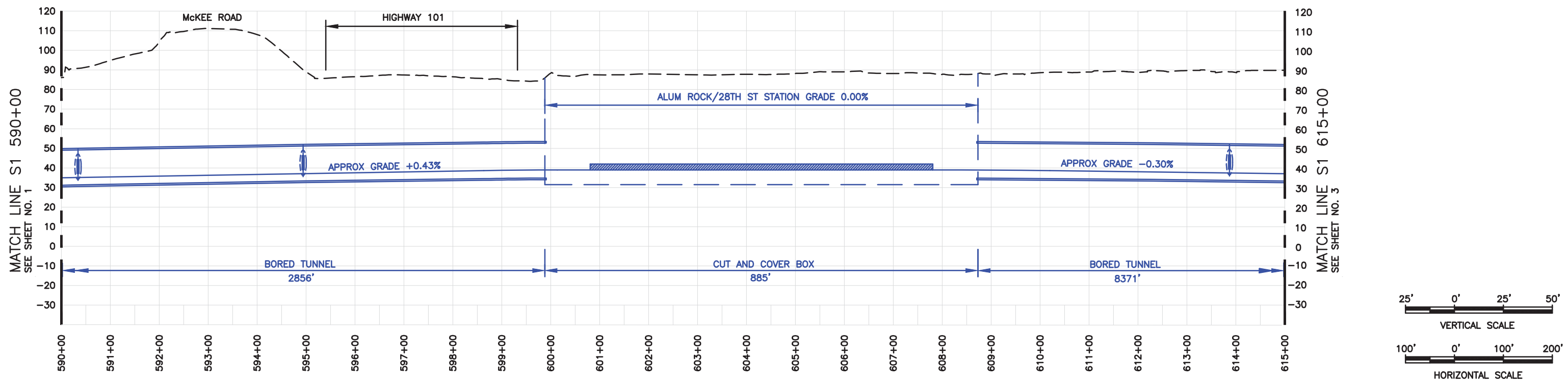
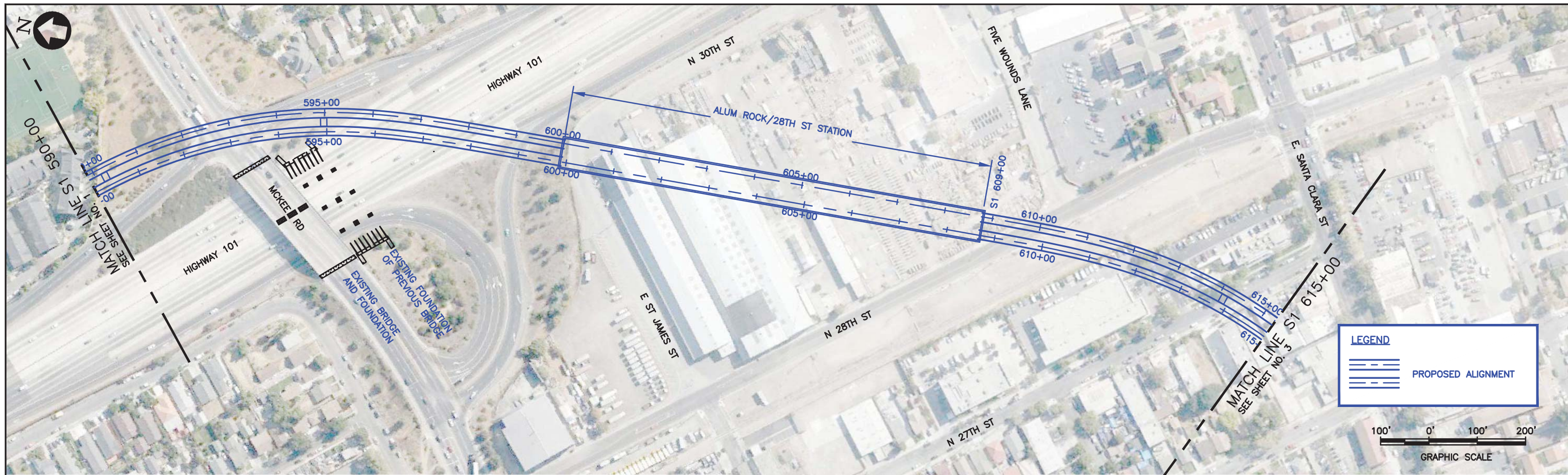


CONCEPTUAL PLANS

**SILICON VALLEY SANTA CLARA EXTENSION
ALIGNMENT NEAR LAS PLUMAS AVE**

PLAN & PROFILE
SHEET 1

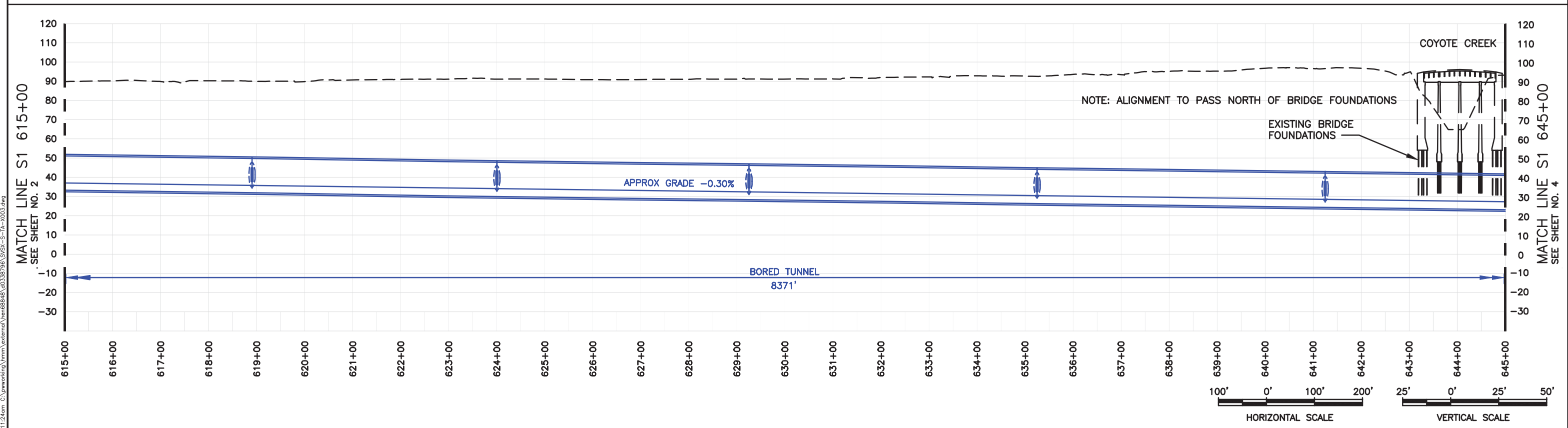
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CONCEPTUAL PLANS

**SILICON VALLEY SANTA CLARA EXTENSION
ALIGNMENT AT ALUM ROCK/28TH ST STATION**

PLAN & PROFILE
SHEET 2

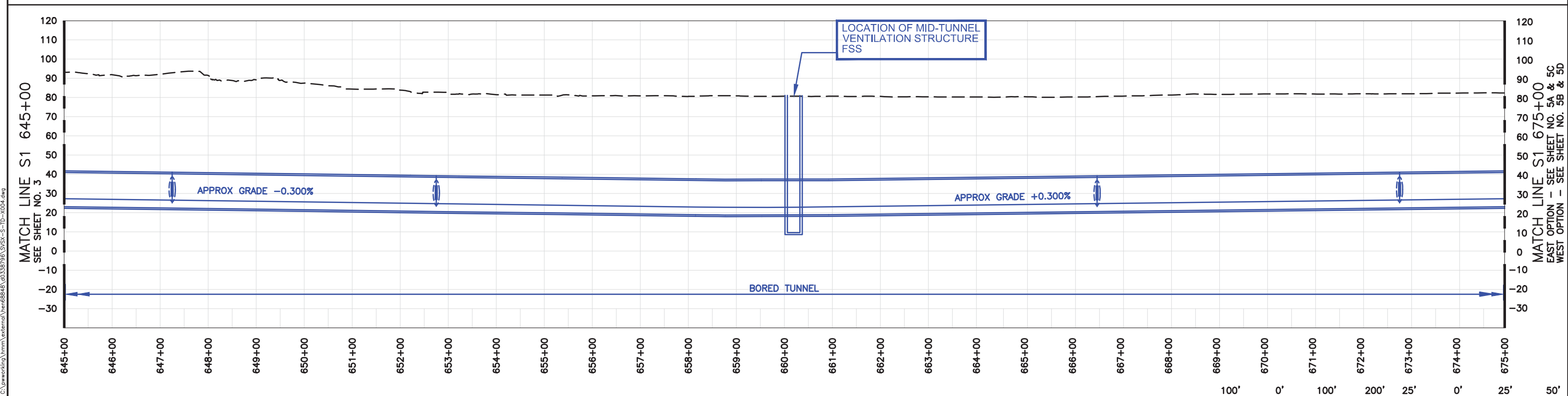
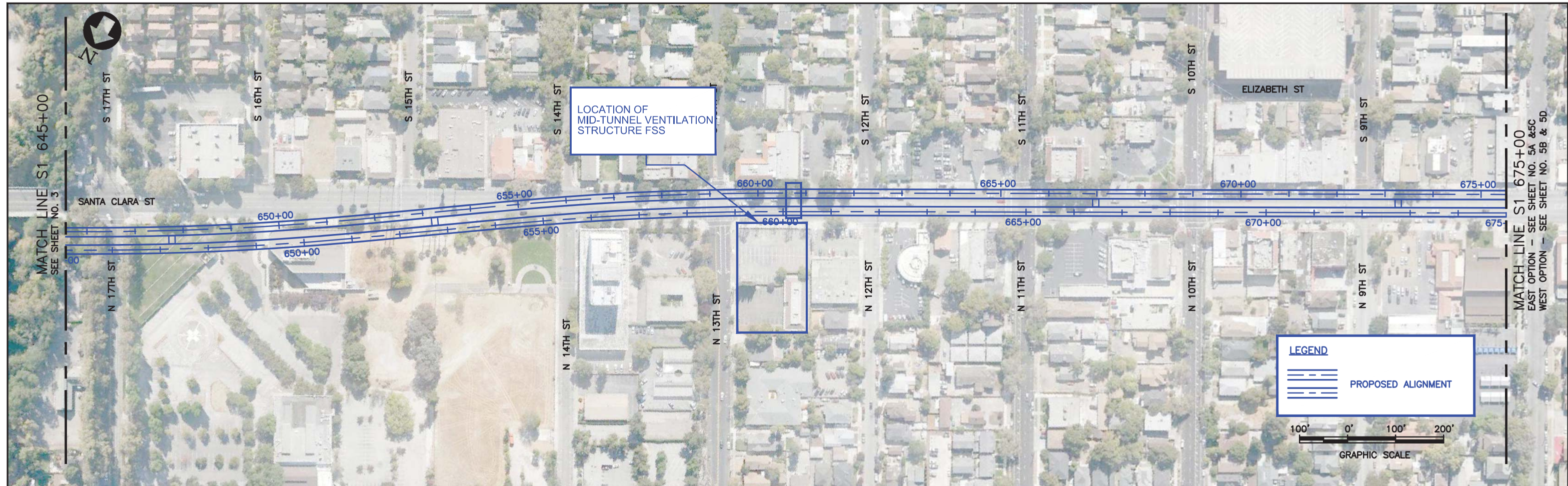


CONCEPTUAL PLANS

**SILICON VALLEY SANTA CLARA EXTENSION
ALIGNMENT EAST OF COYOTE CREEK**

PLAN & PROFILE
SHEET 3

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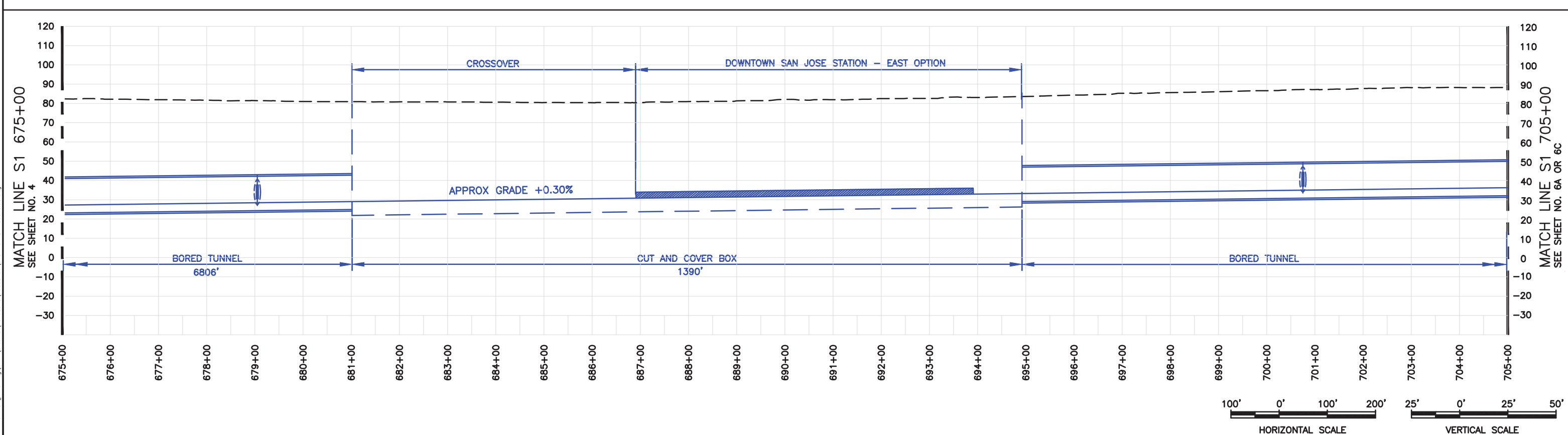
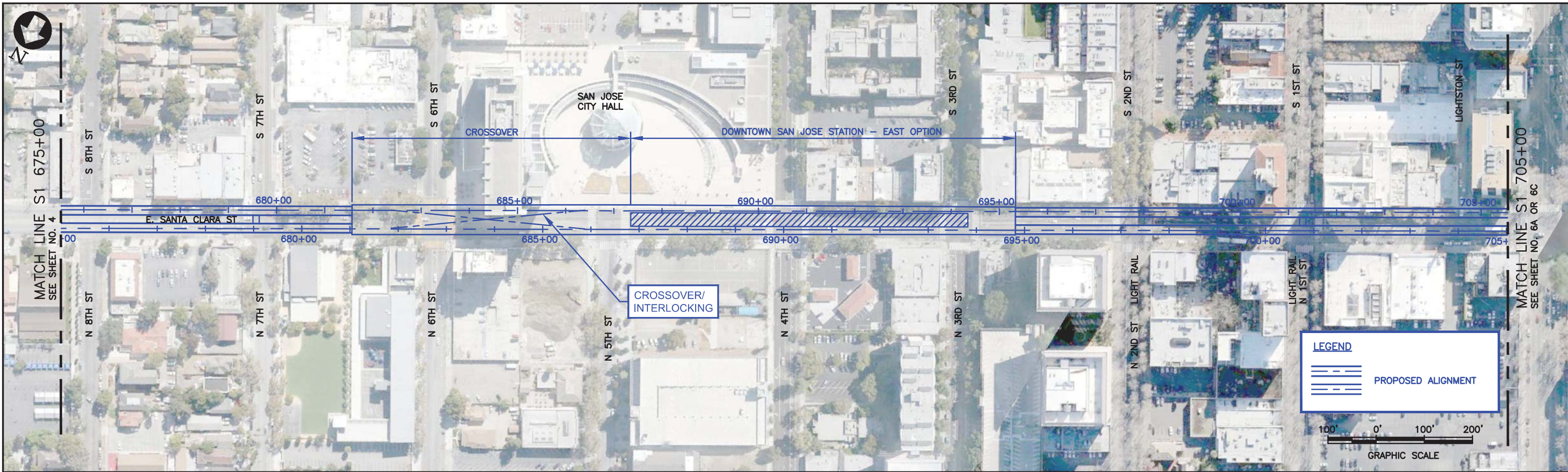


CONCEPTUAL PLANS



**SILICON VALLEY SANTA CLARA EXTENSION
ALIGNMENT WEST OF COYOTE CREEK**

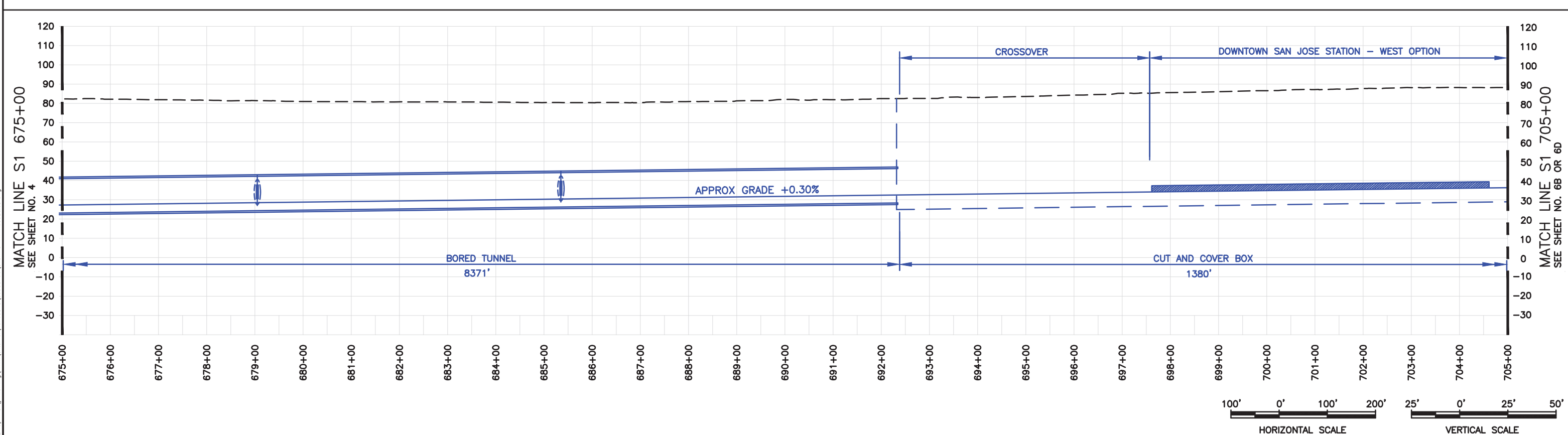
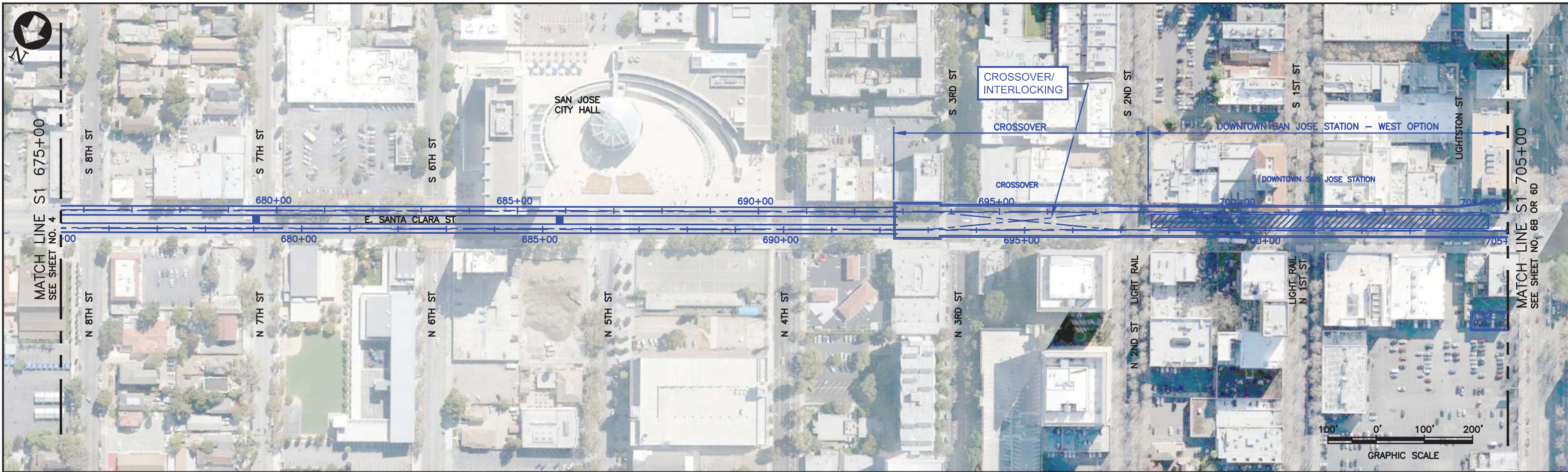
PLAN & PROFILE
SHEET 4



CONCEPTUAL PLANS

**SILICON VALLEY SANTA CLARA EXTENSION
DOWNTOWN SAN JOSE STATION EAST OPTION**

PLAN & PROFILE
SHEET 5A & 5C

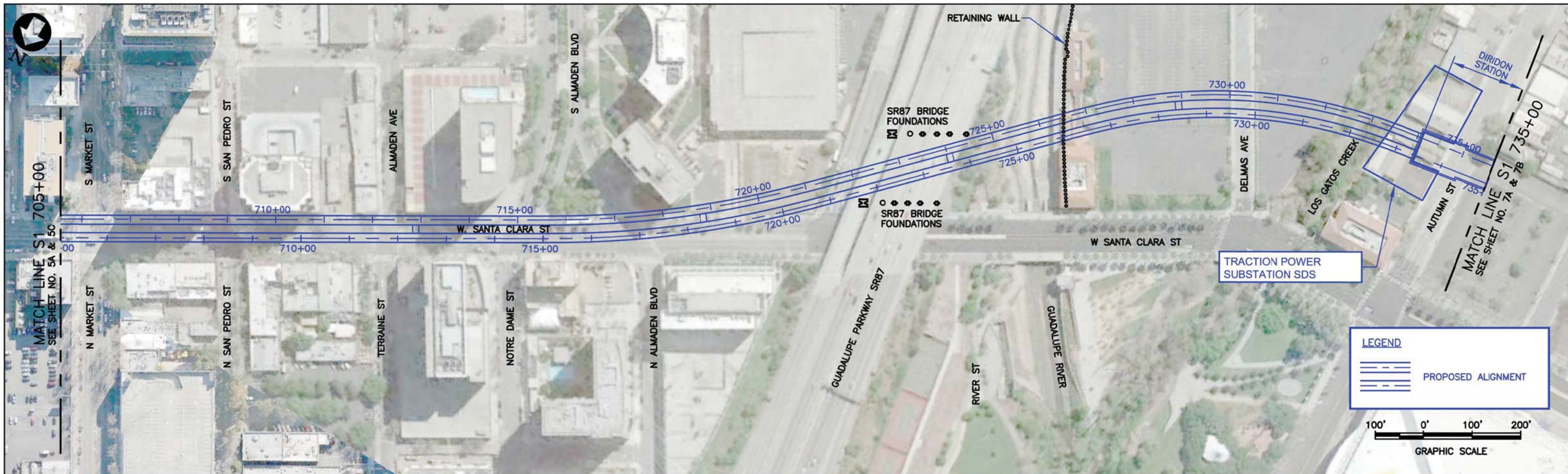


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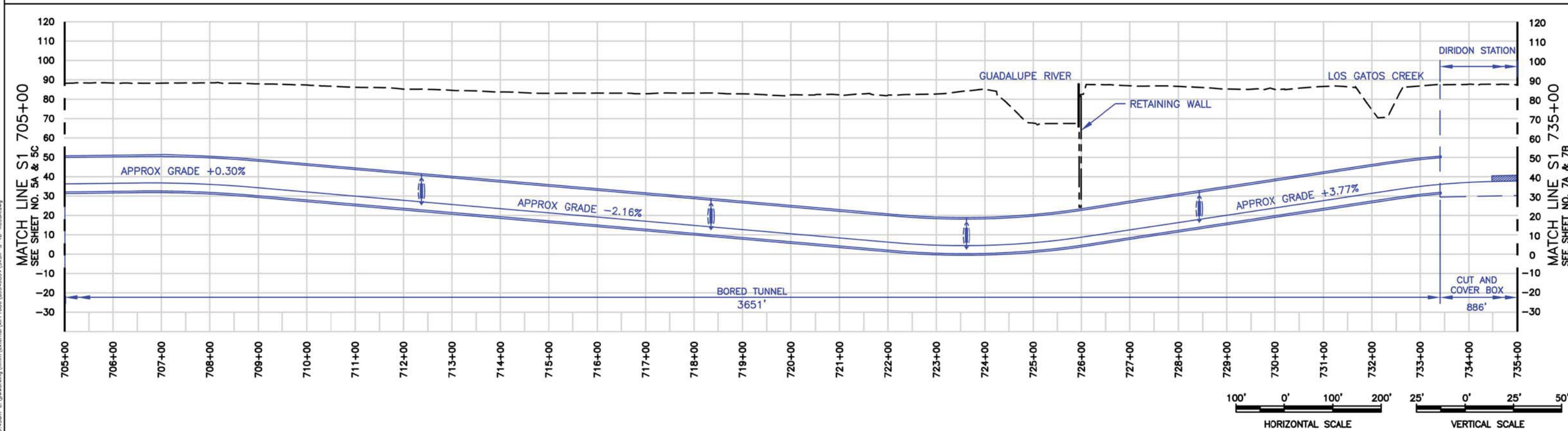
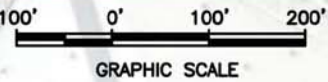
PLAN & PROFILE
SHEET 5B & 5D

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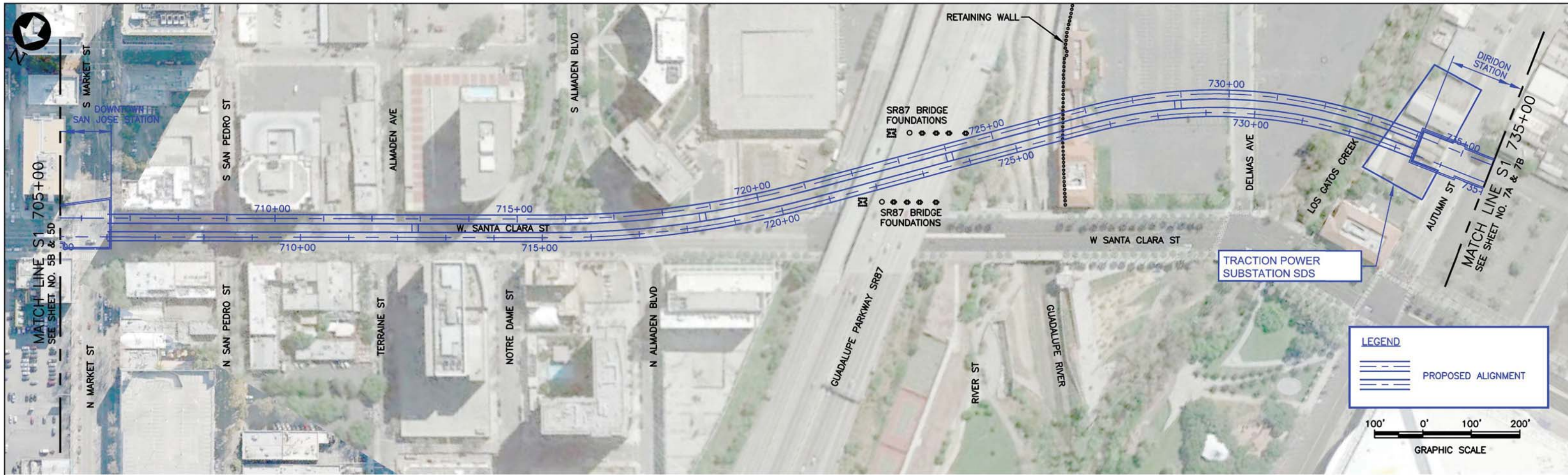
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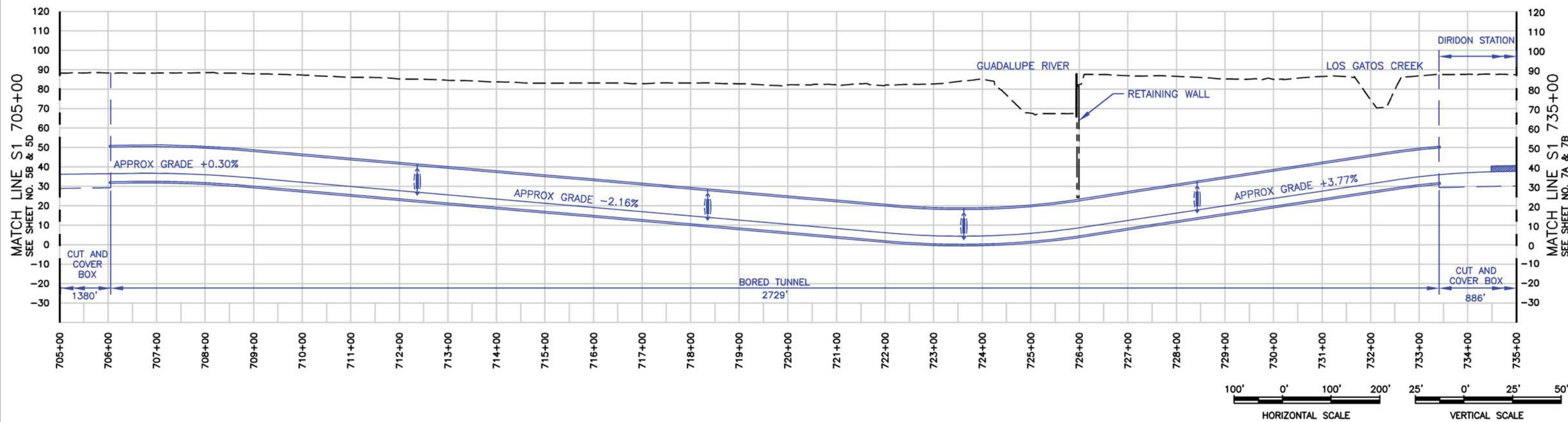
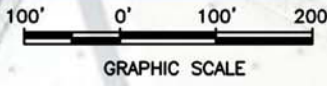
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**SILICON VALLEY SANTA CLARA EXTENSION
DOWNTOWN SAN JOSE STATION EAST OPTION
DIRIDON STATION SOUTH OPTION
PLAN & PROFILE
SHEET 6A**



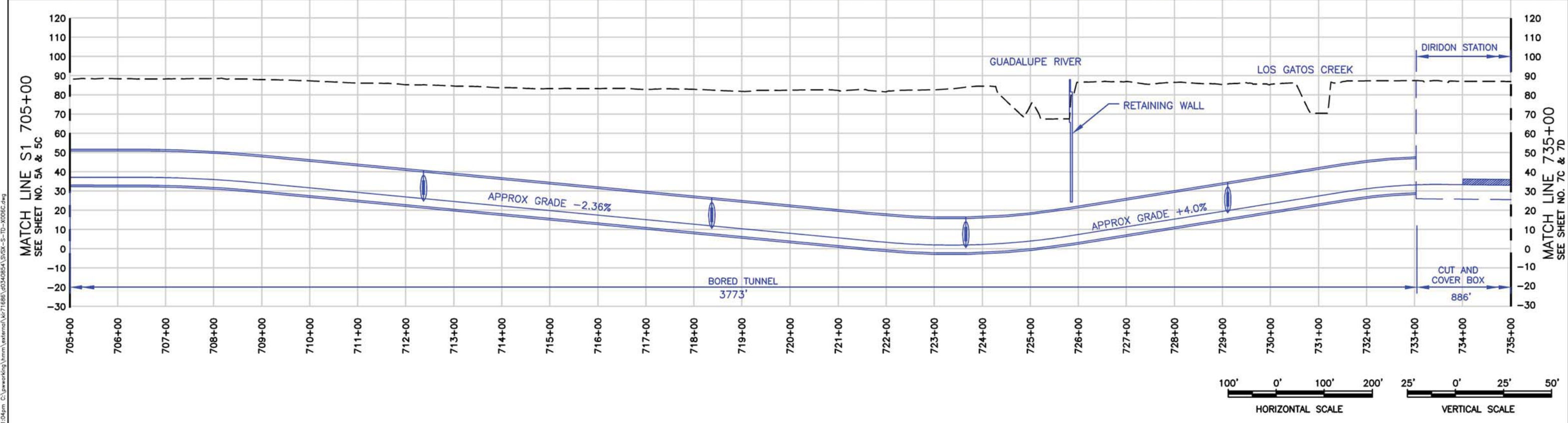
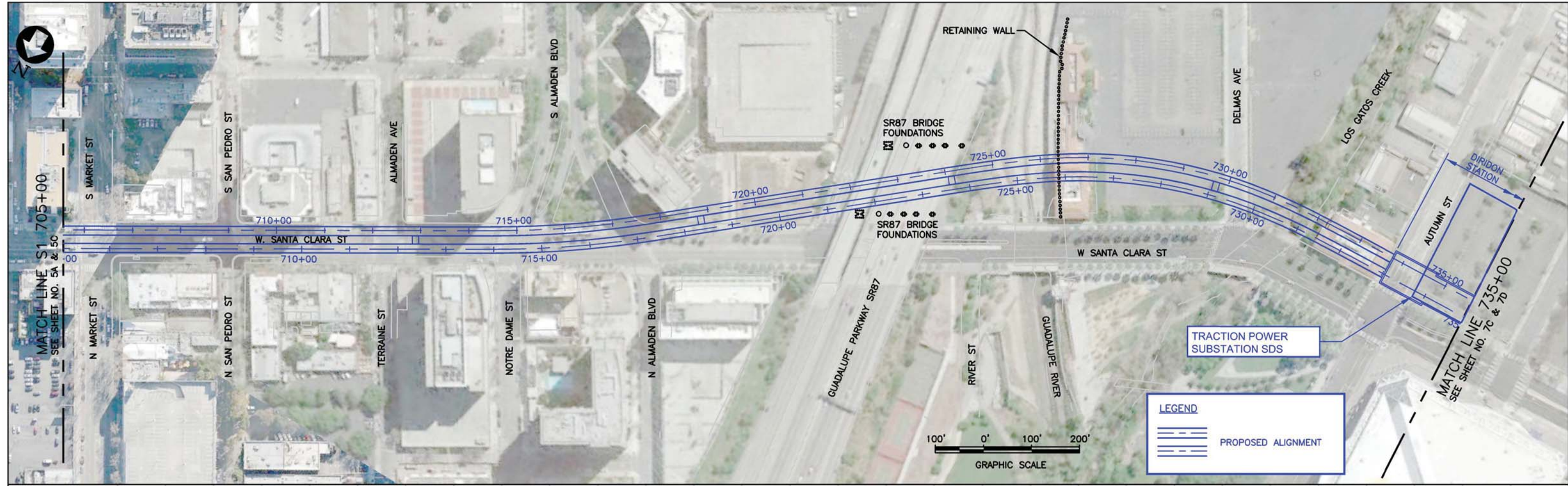
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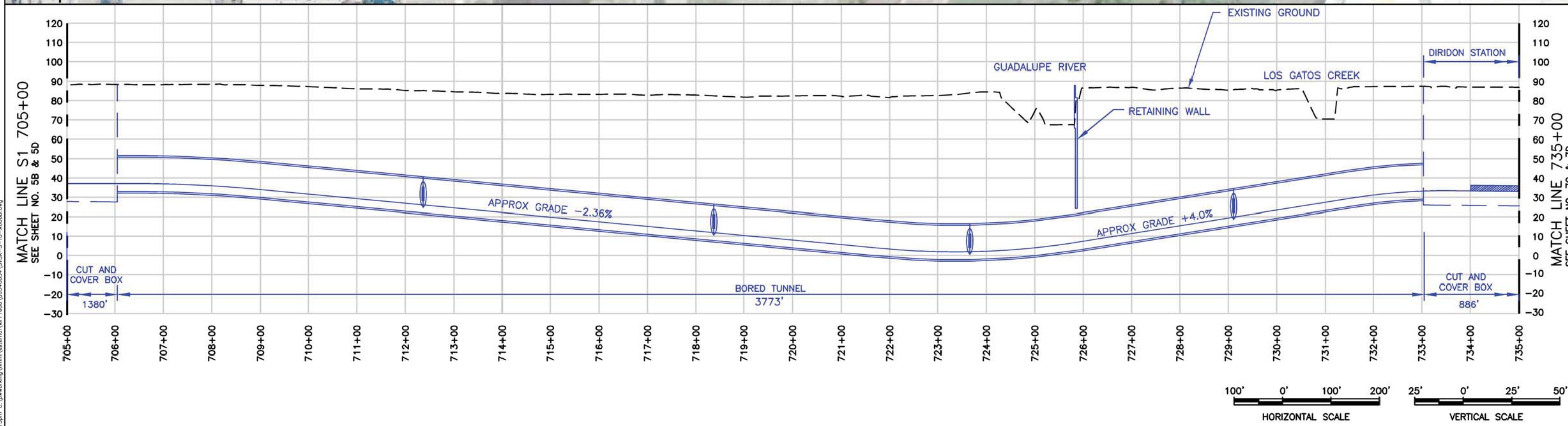
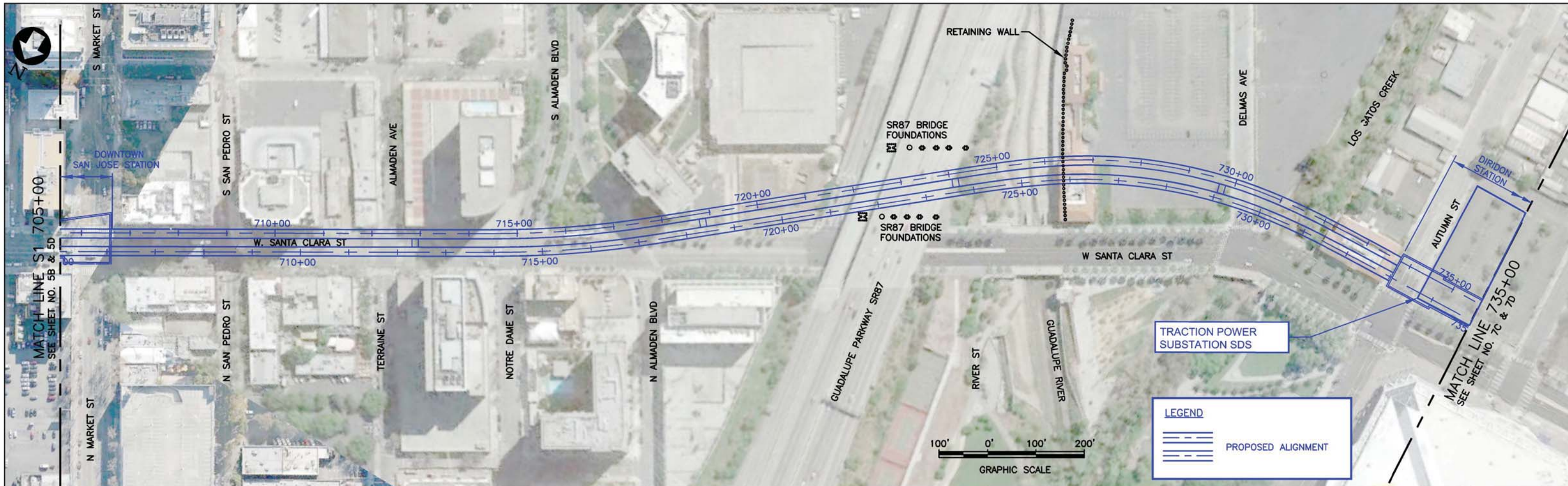
SILICON VALLEY SANTA CLARA EXTENSION
 DOWNTOWN SAN JOSE STATION WEST OPTION
 DIRIDON STATION SOUTH OPTION
 PLAN & PROFILE
 SHEET 6B



CONCEPTUAL PLANS

**SILICON VALLEY SANTA CLARA EXTENSION
DOWNTOWN SAN JOSE STATION EAST OPTION
DIRIDON STATION NORTH OPTION
PLAN & PROFILE
SHEET 6C**

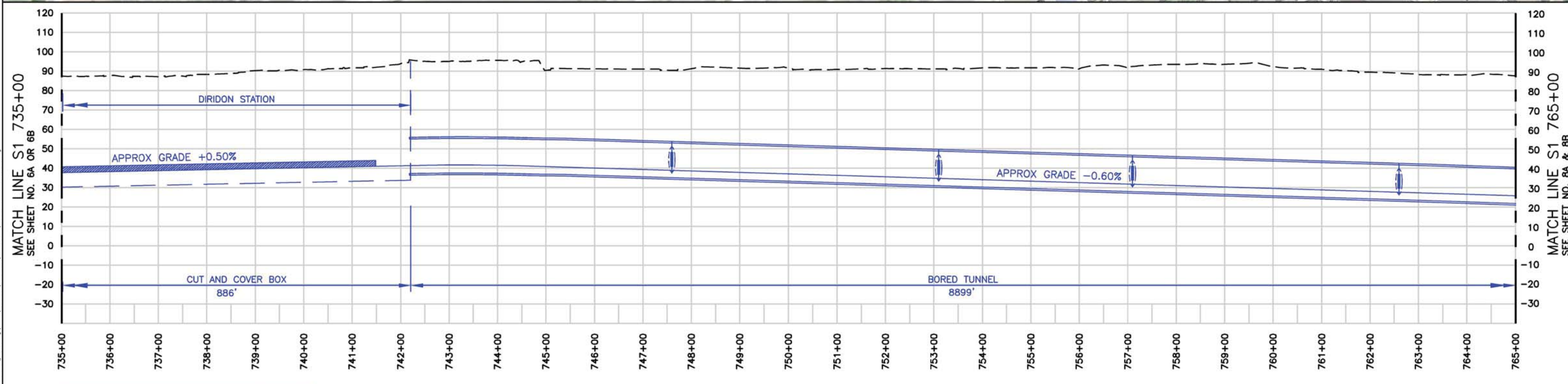
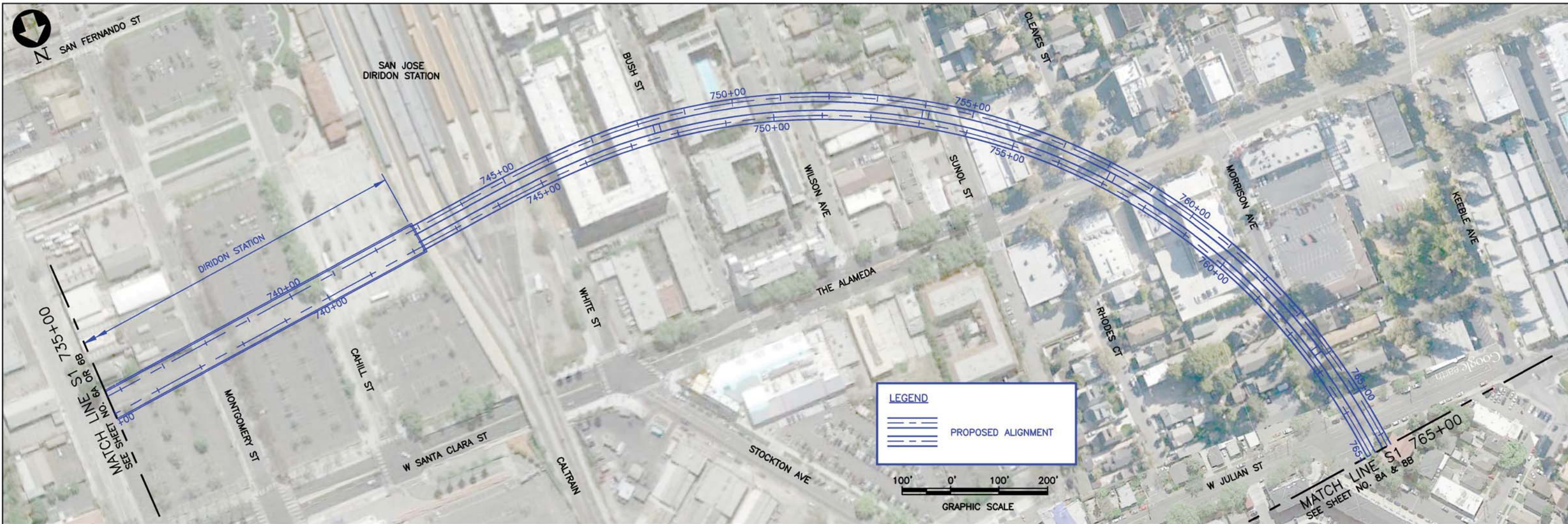
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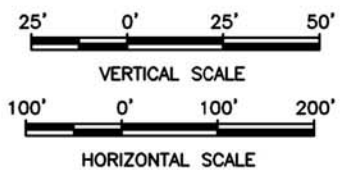
CONCEPTUAL PLANS

**SILICON VALLEY SANTA CLARA EXTENSION
DOWNTOWN SAN JOSE STATION WEST OPTION
DIRIDON STATION NORTH OPTION
PLAN & PROFILE
SHEET 6D**

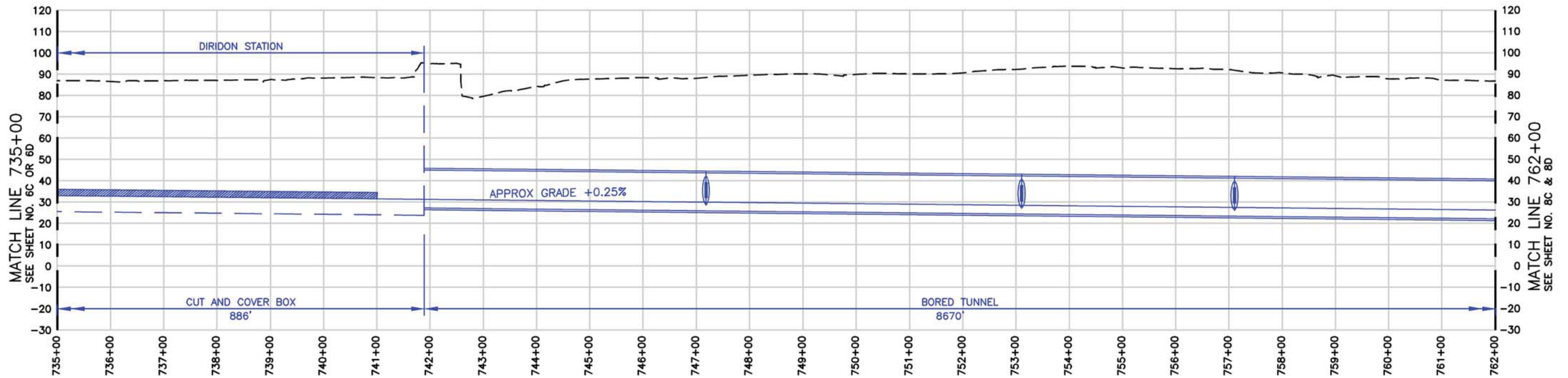
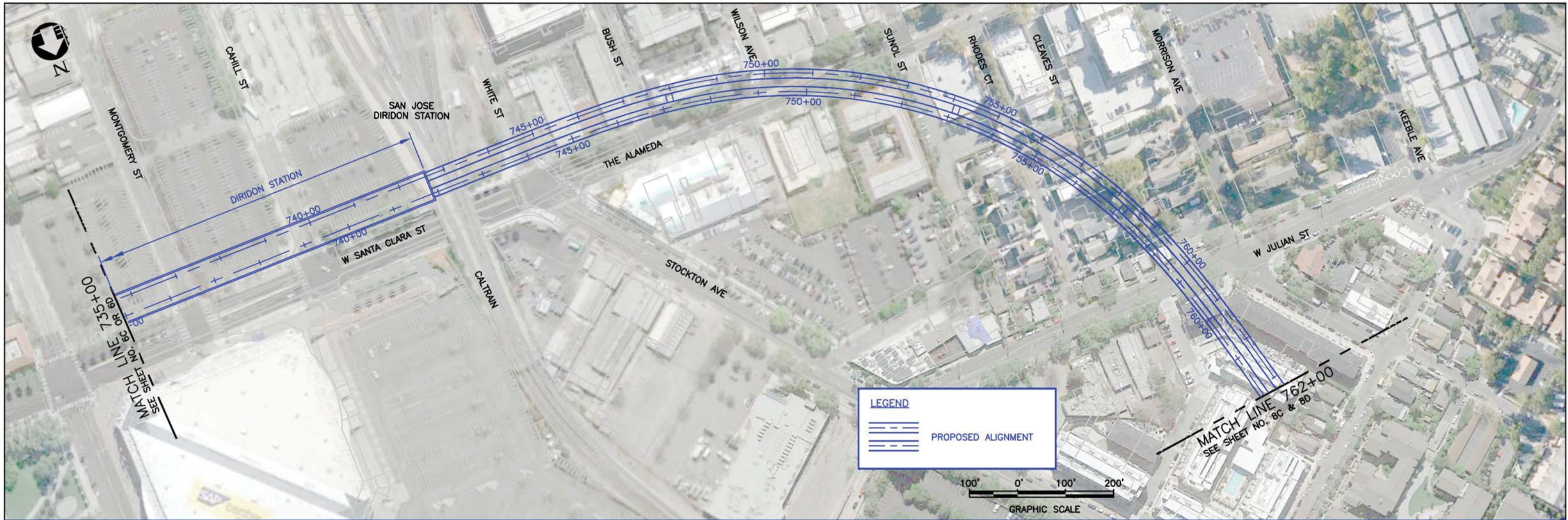
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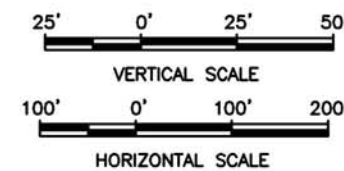
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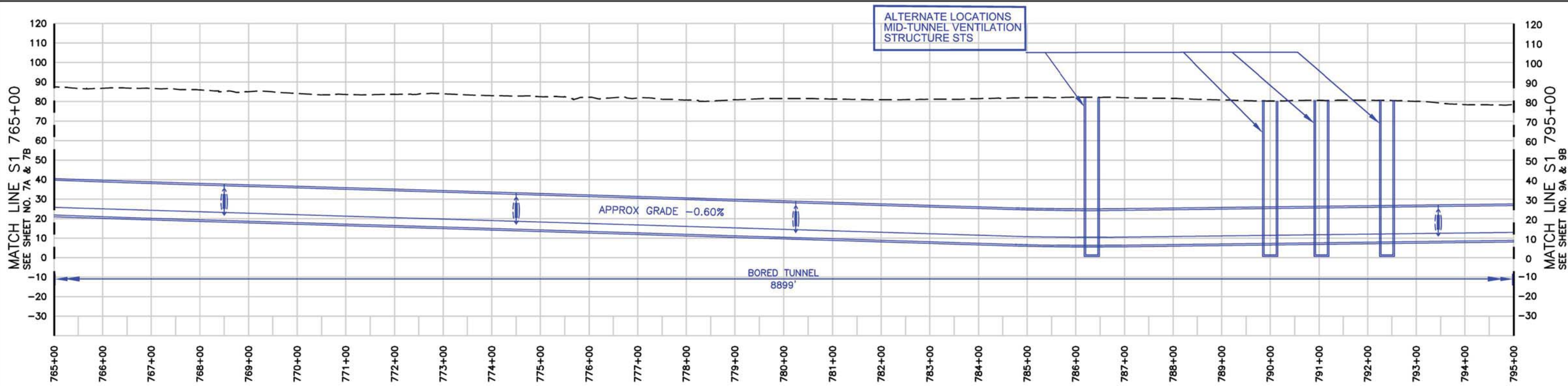
**SILICON VALLEY SANTA CLARA EXTENSION
ALIGNMENT NEAR THE ALAMEDA
DIRIDON STATION SOUTH OPTION
PLAN & PROFILE
SHEET 7A & 7B**



CONCEPTUAL PLANS



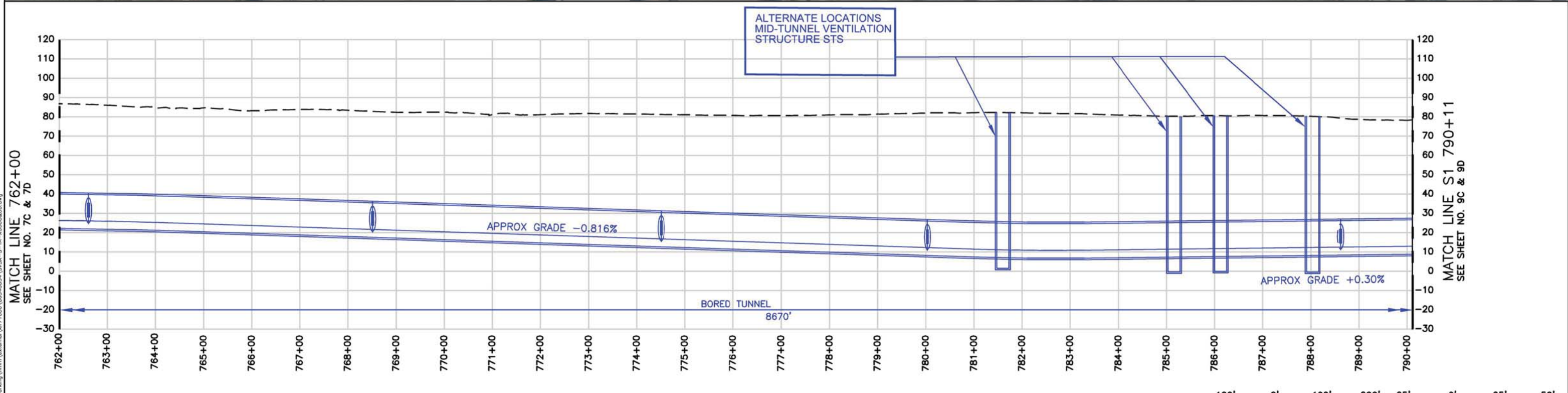
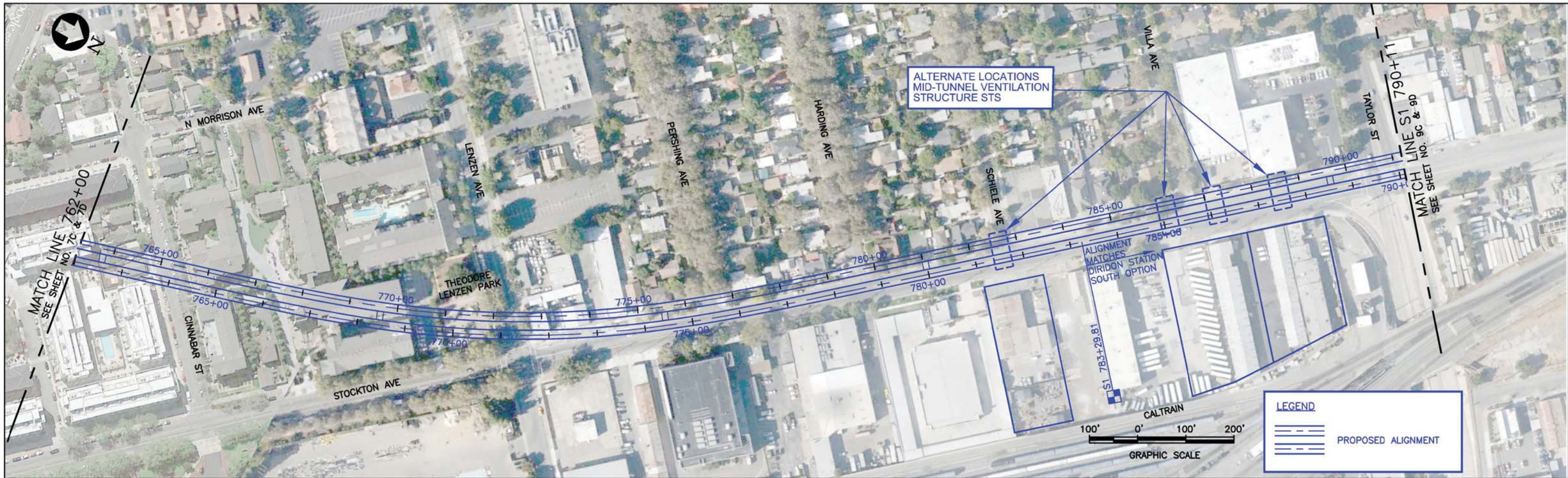
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ALIGNMENT NEAR THE ALAMEDA
DIRIDON STATION NORTH OPTION
PLAN & PROFILE
SHEET 7C & 7D**



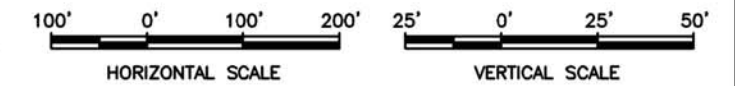
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CONCEPTUAL PLANS

SILICON VALLEY SANTA CLARA EXTENSION
ALIGNMENT NEAR STOCKTON AVENUE
DIRIDON STATION SOUTH OPTION
 PLAN & PROFILE
 SHEET 8A & 8B



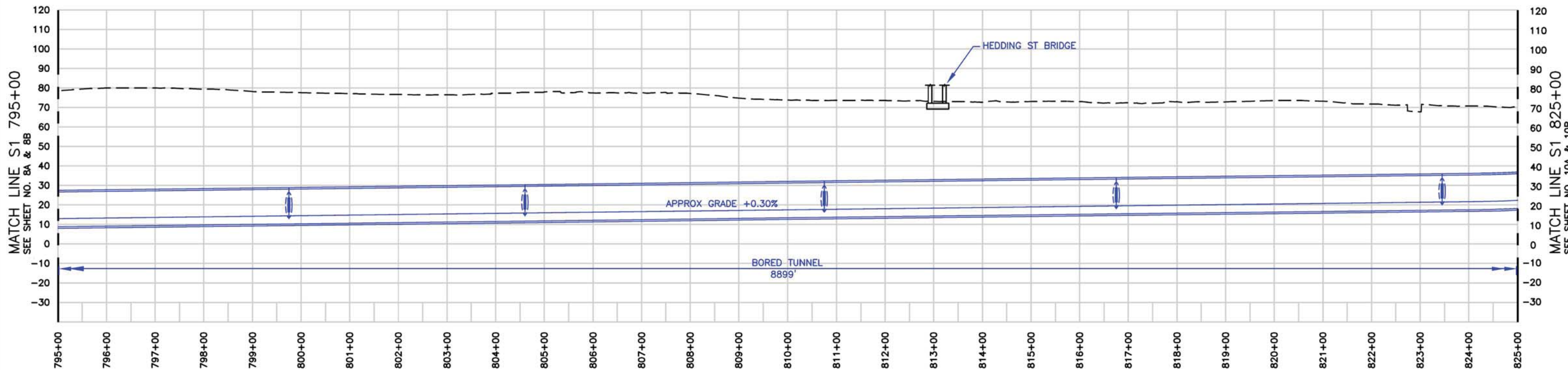
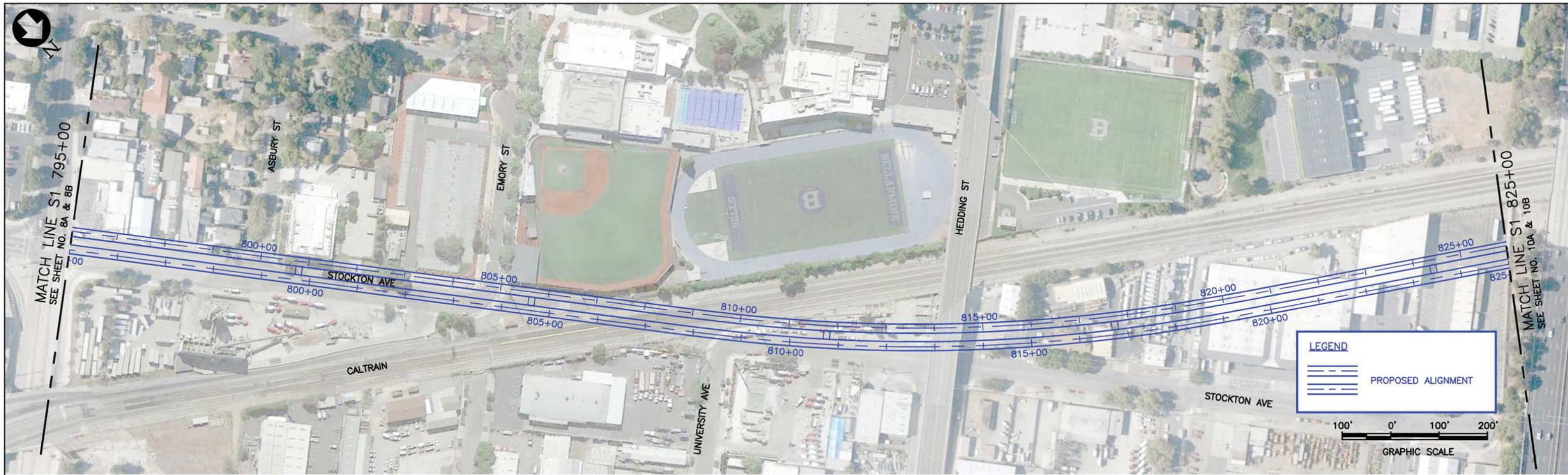
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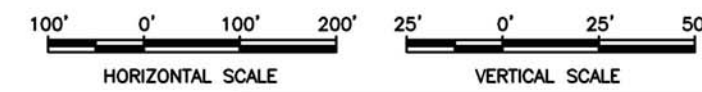
CONCEPTUAL PLANS

**SILICON VALLEY SANTA CLARA EXTENSION
 ALIGNMENT NEAR STOCKTON AVENUE
 DIRIDON STATION NORTH OPTION
 PLAN & PROFILE
 SHEET 8C & 8D**

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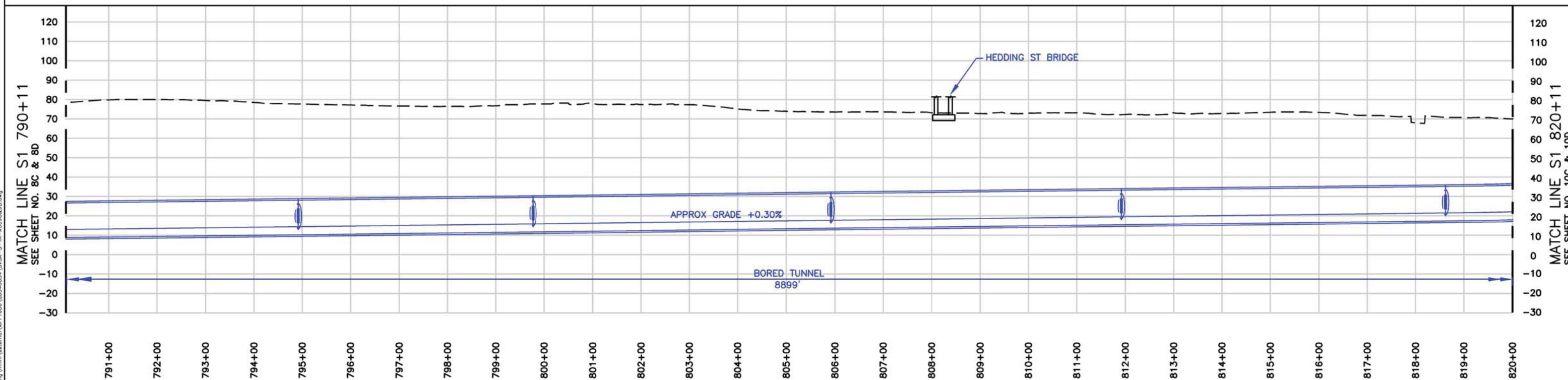
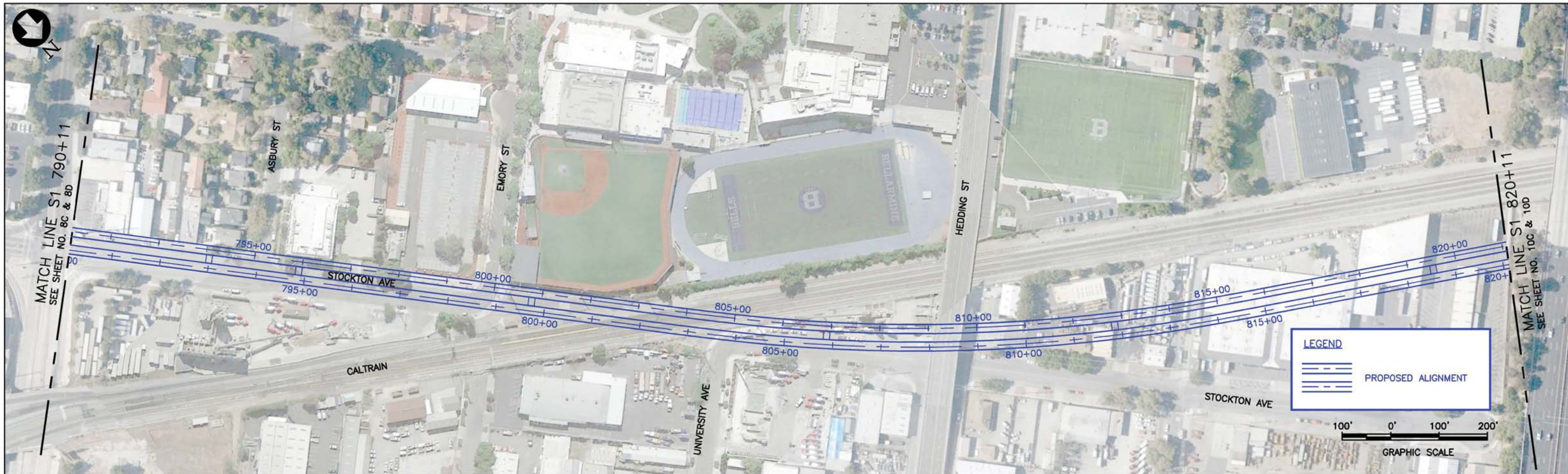
NOTE: DUE TO THE DIFFERENCE IN LENGTH OF THE ENTIRE PROJECT ALIGNMENT OF THE DIRIDON STATION NORTH OPTION VS. THE DIRIDON STATION SOUTH OPTION, THE STATION NUMBERING IS DIFFERENT BETWEEN THE TWO OPTIONS.



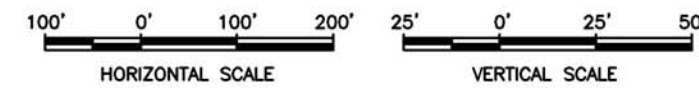
CONCEPTUAL PLANS

**SILICON VALLEY SANTA CLARA EXTENSION
ALIGNMENT NEAR HEDDING STREET
DIRIDON STATION SOUTH OPTION
PLAN & PROFILE
SHEET 9A & 9B**

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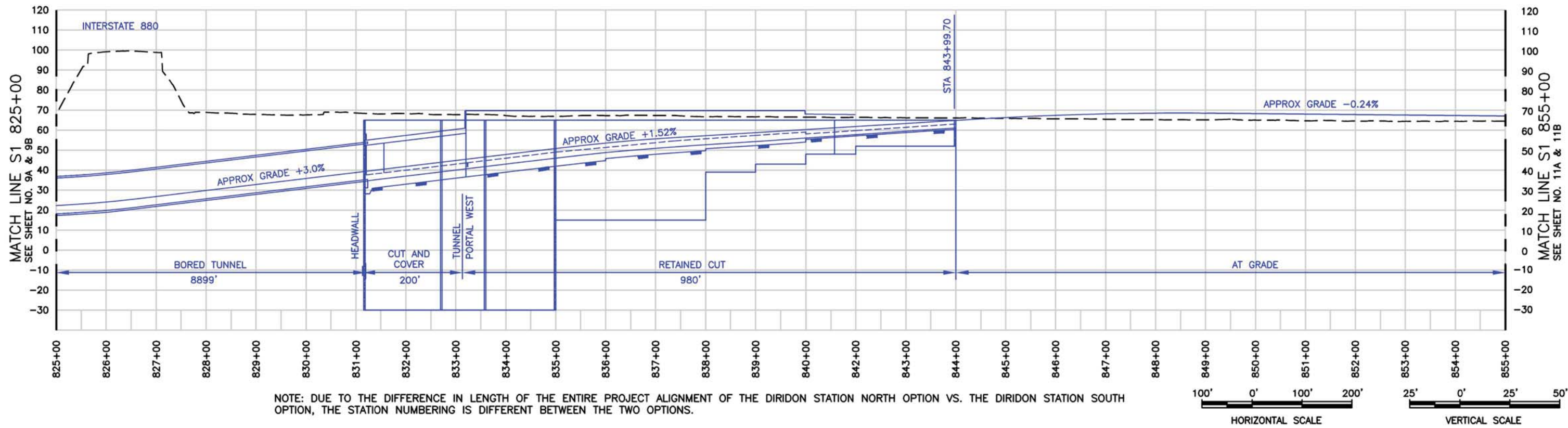


NOTE: DUE TO THE DIFFERENCE IN LENGTH OF THE ENTIRE PROJECT ALIGNMENT OF THE DIRIDON STATION NORTH OPTION VS. THE DIRIDON STATION SOUTH OPTION, THE STATION NUMBERING IS DIFFERENT BETWEEN THE TWO OPTIONS.



CONCEPTUAL PLANS

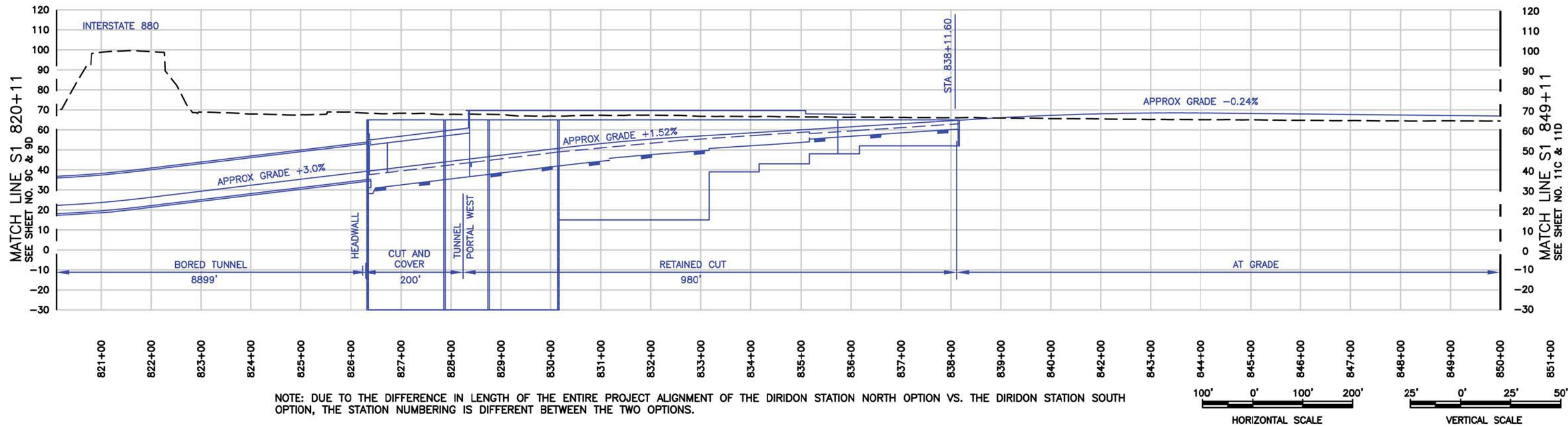
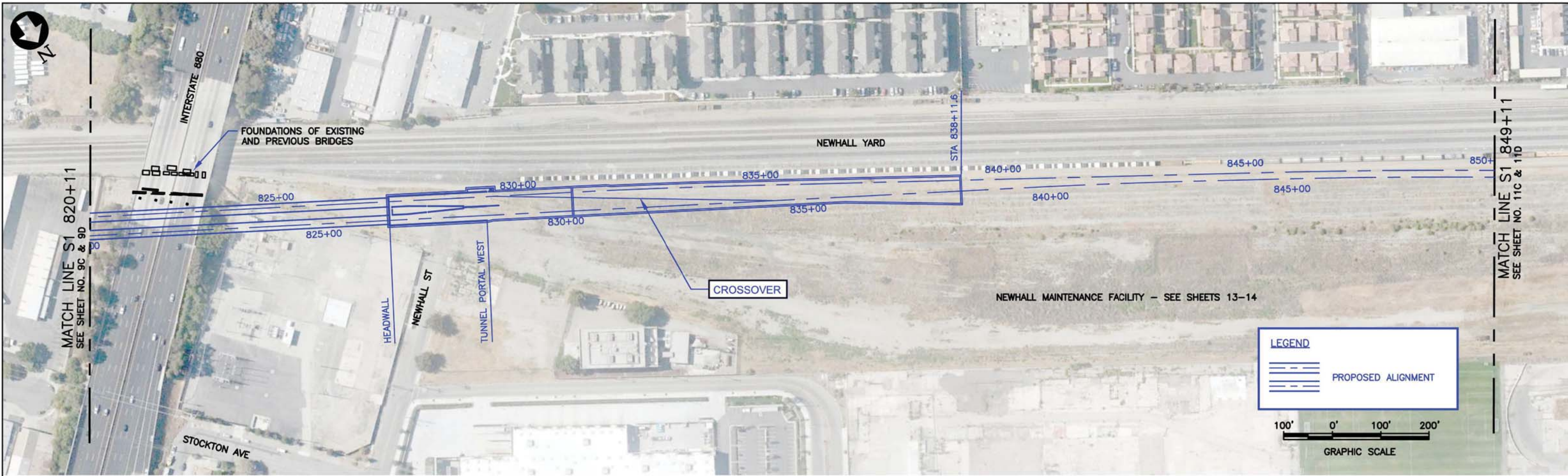
**SILICON VALLEY SANTA CLARA EXTENSION
ALIGNMENT NEAR HEDDING STREET
DIRIDON STATION NORTH OPTION
PLAN & PROFILE
SHEET 9C & 9D**



NOTE: DUE TO THE DIFFERENCE IN LENGTH OF THE ENTIRE PROJECT ALIGNMENT OF THE DIRIDON STATION NORTH OPTION VS. THE DIRIDON STATION SOUTH OPTION, THE STATION NUMBERING IS DIFFERENT BETWEEN THE TWO OPTIONS.

CONCEPTUAL PLANS

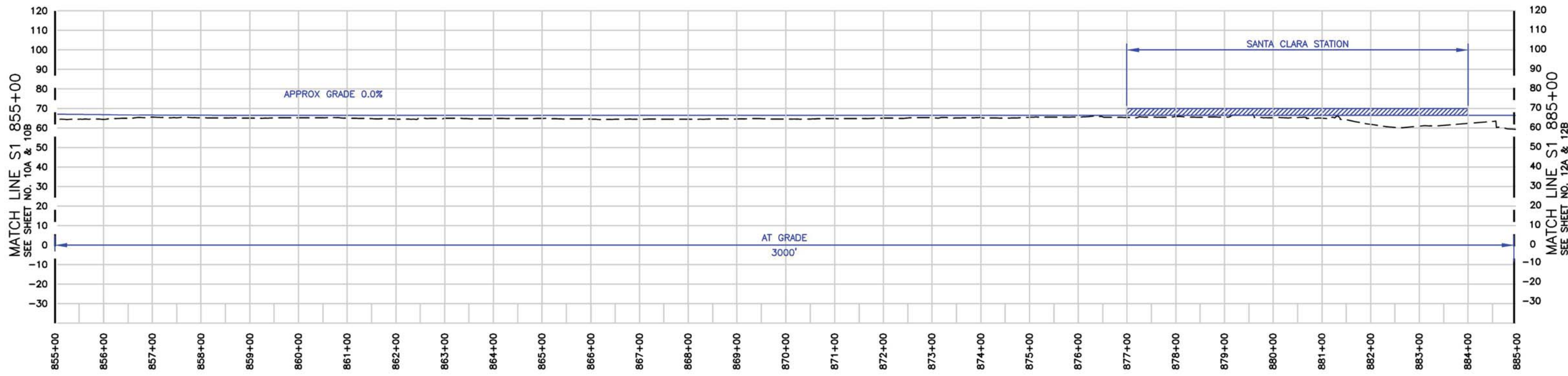
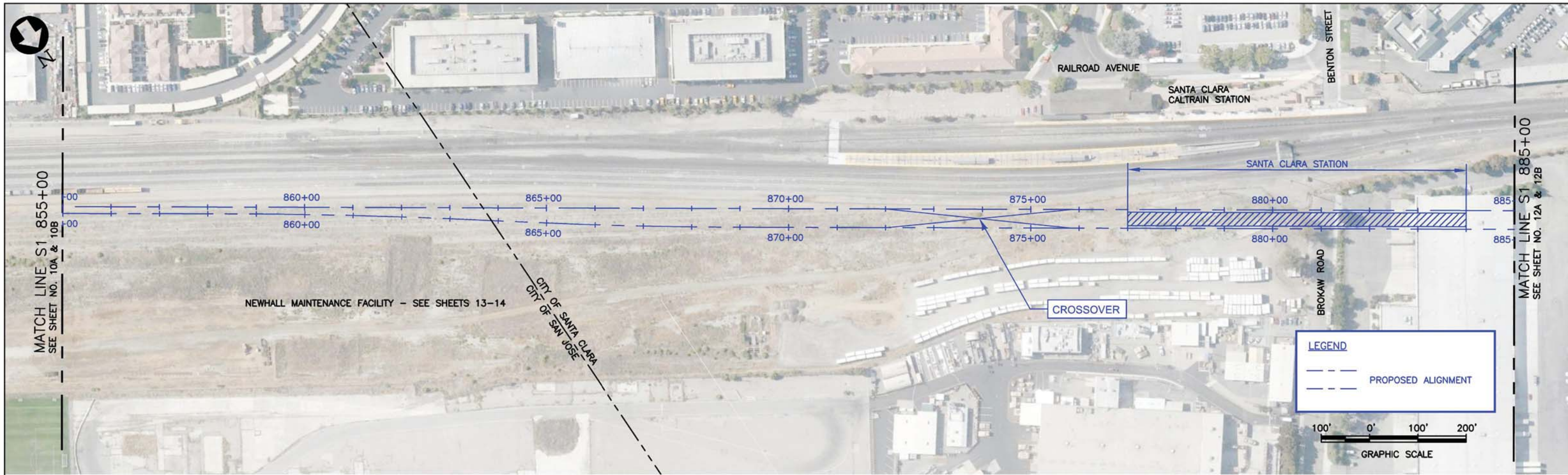
**SILICON VALLEY SANTA CLARA EXTENSION
ALIGNMENT NORTH OF I-880
DIRIDON STATION SOUTH OPTION
PLAN & PROFILE
SHEET 10A & 10B**



NOTE: DUE TO THE DIFFERENCE IN LENGTH OF THE ENTIRE PROJECT ALIGNMENT OF THE DIRIDON STATION NORTH OPTION VS. THE DIRIDON STATION SOUTH OPTION, THE STATION NUMBERING IS DIFFERENT BETWEEN THE TWO OPTIONS.

CONCEPTUAL PLANS

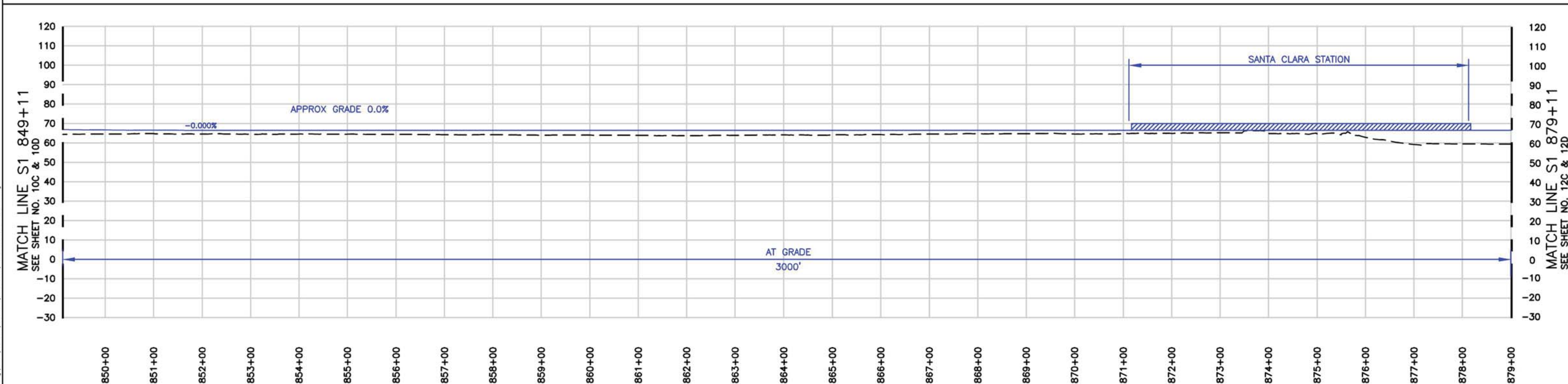
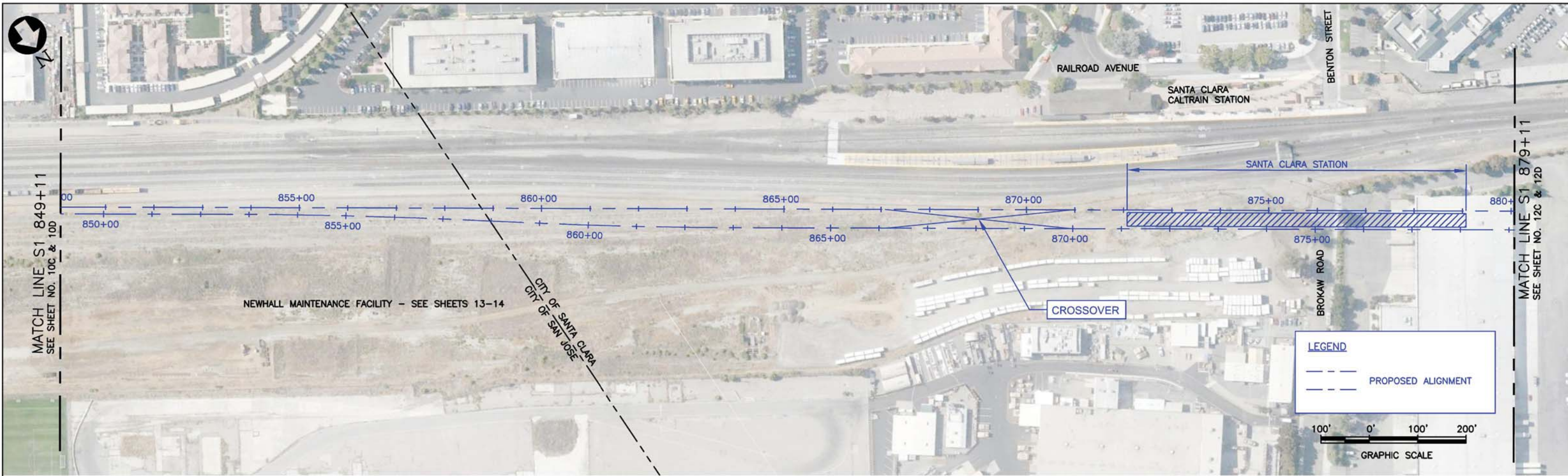
**SILICON VALLEY SANTA CLARA EXTENSION
ALIGNMENT NORTH OF I-880
DIRIDON STATION NORTH OPTION
PLAN & PROFILE
SHEET 10C & 10D**



NOTE: DUE TO THE DIFFERENCE IN LENGTH OF THE ENTIRE PROJECT ALIGNMENT OF THE DIRIDON STATION NORTH OPTION VS. THE DIRIDON STATION SOUTH OPTION, THE STATION NUMBERING IS DIFFERENT BETWEEN THE TWO OPTIONS.

CONCEPTUAL PLANS

**SILICON VALLEY SANTA CLARA EXTENSION
ALIGNMENT SOUTH OF BROKAW ROAD
DIRIDON STATION SOUTH OPTION
PLAN & PROFILE
SHEET 11A & 11B**

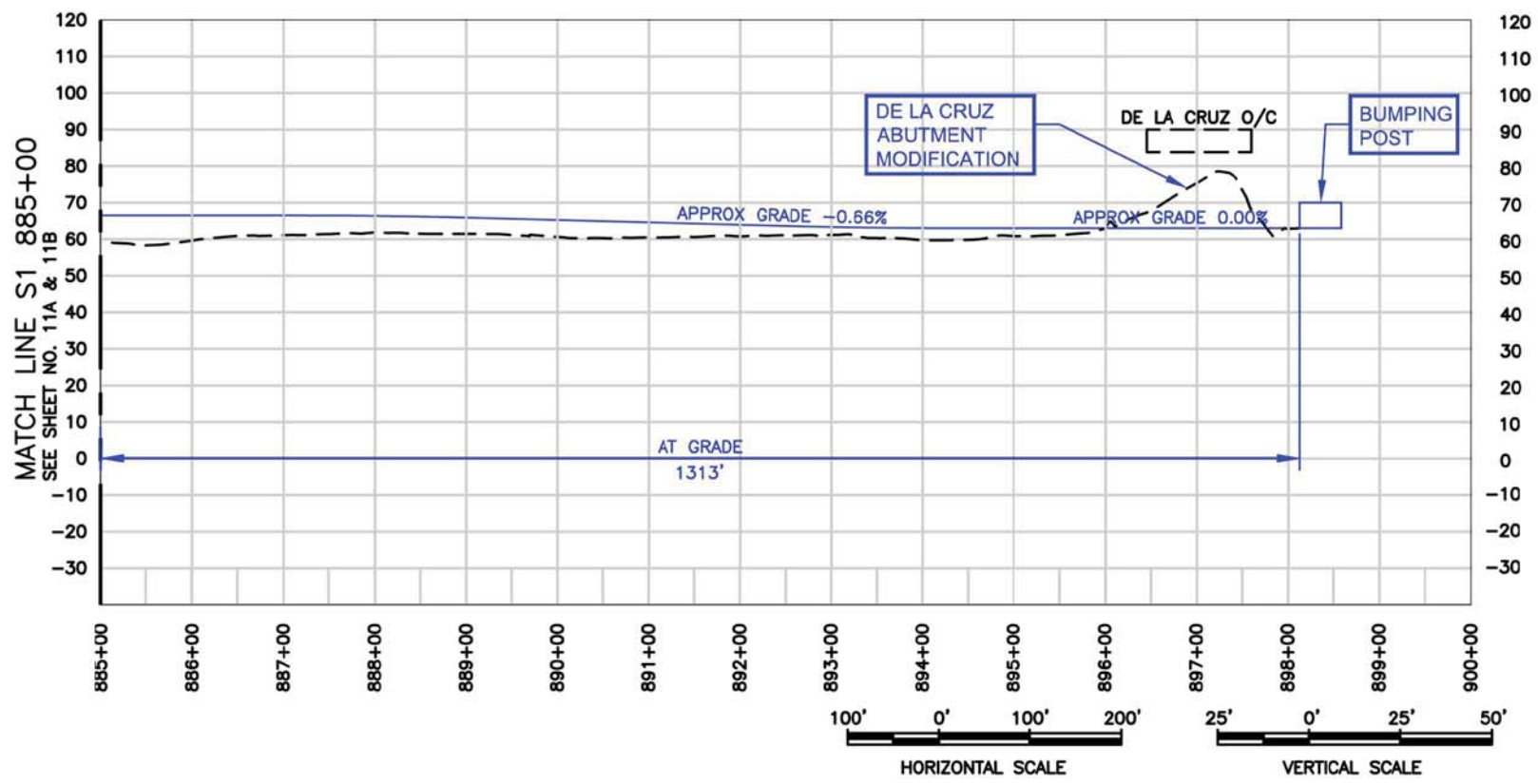


NOTE: DUE TO THE DIFFERENCE IN LENGTH OF THE ENTIRE PROJECT ALIGNMENT OF THE DIRIDON STATION NORTH OPTION VS. THE DIRIDON STATION SOUTH OPTION, THE STATION NUMBERING IS DIFFERENT BETWEEN THE TWO OPTIONS.

CONCEPTUAL PLANS

**SILICON VALLEY SANTA CLARA EXTENSION
ALIGNMENT SOUTH OF BROKAW ROAD
DIRIDON STATION NORTH OPTION
PLAN & PROFILE
SHEET 11C & 11D**

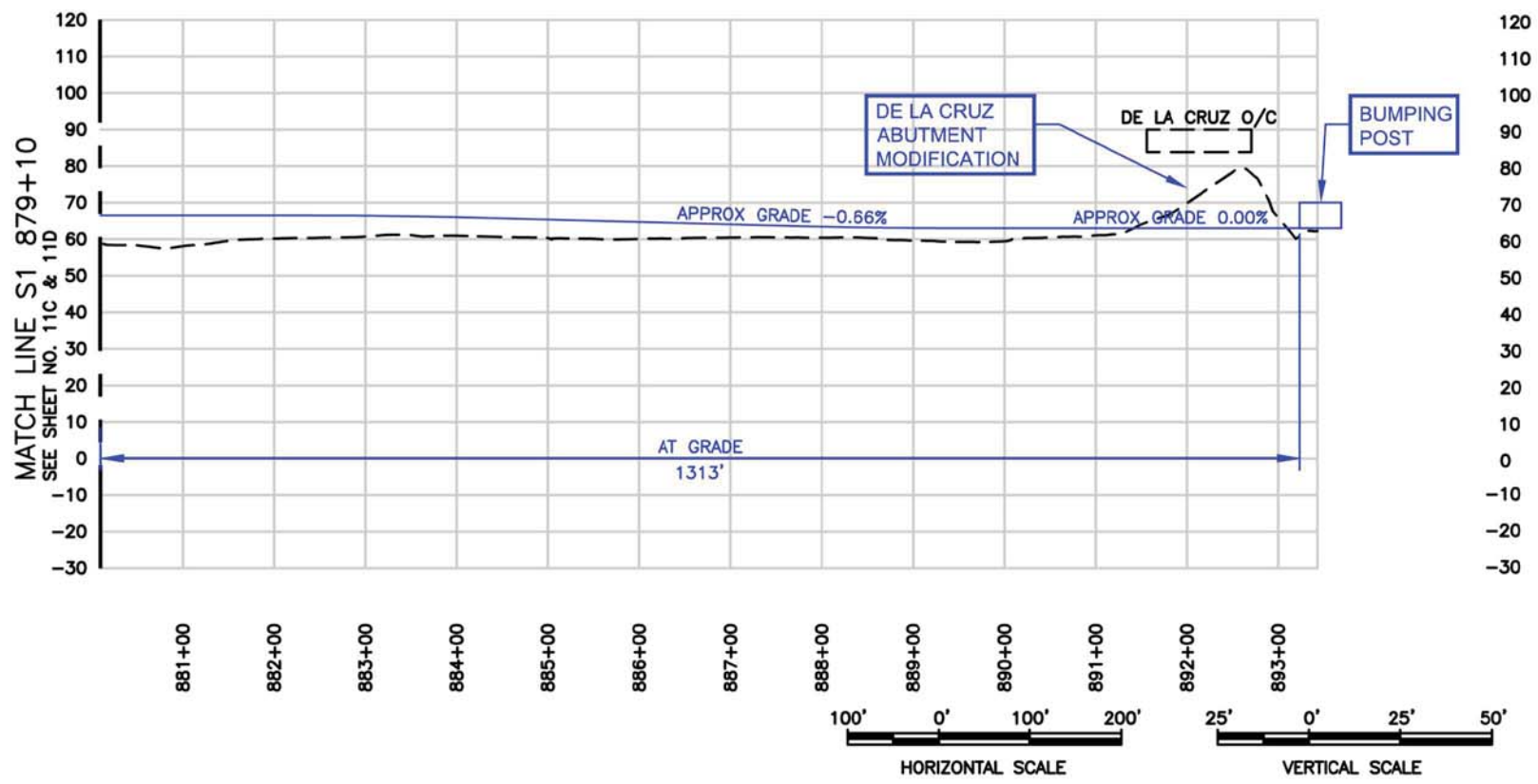
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NOTE: DUE TO THE DIFFERENCE IN LENGTH OF THE ENTIRE PROJECT ALIGNMENT OF THE DIRIDON STATION NORTH OPTION VS. THE DIRIDON STATION SOUTH OPTION, THE STATION NUMBERING IS DIFFERENT BETWEEN THE TWO OPTIONS.

CONCEPTUAL PLANS

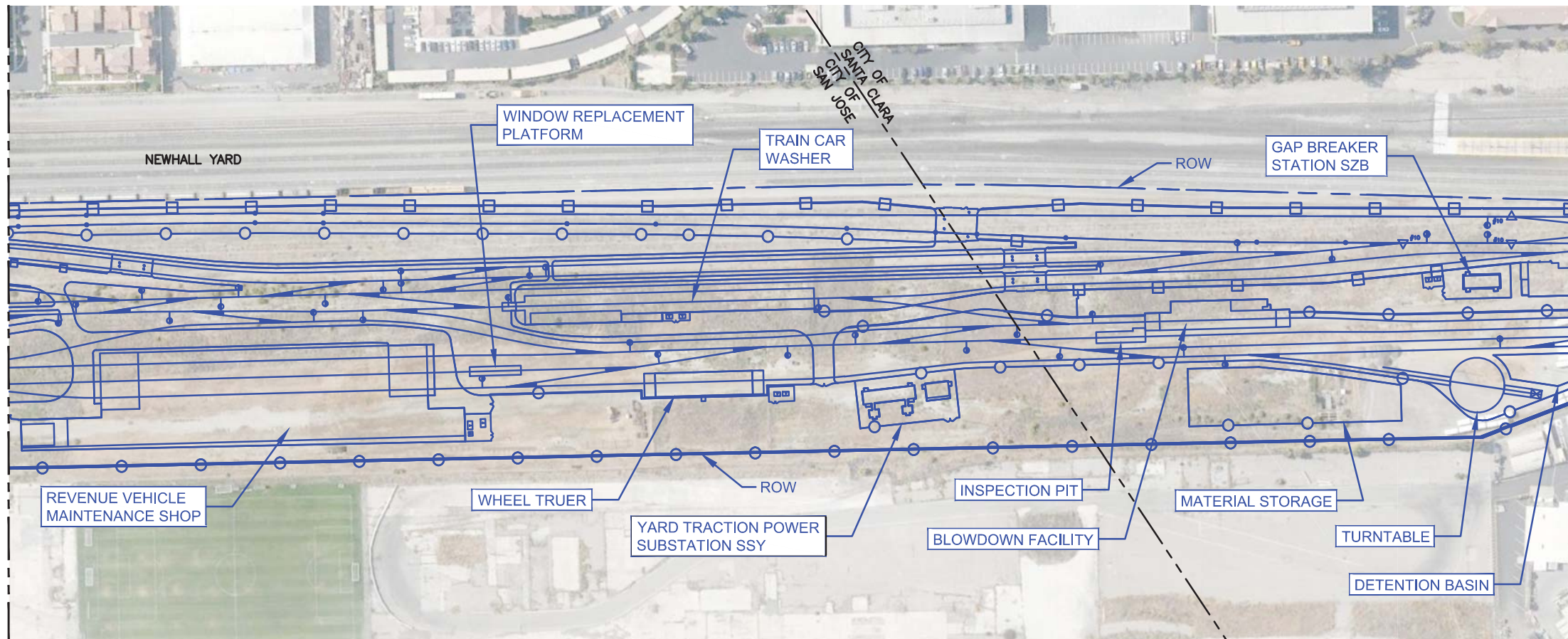
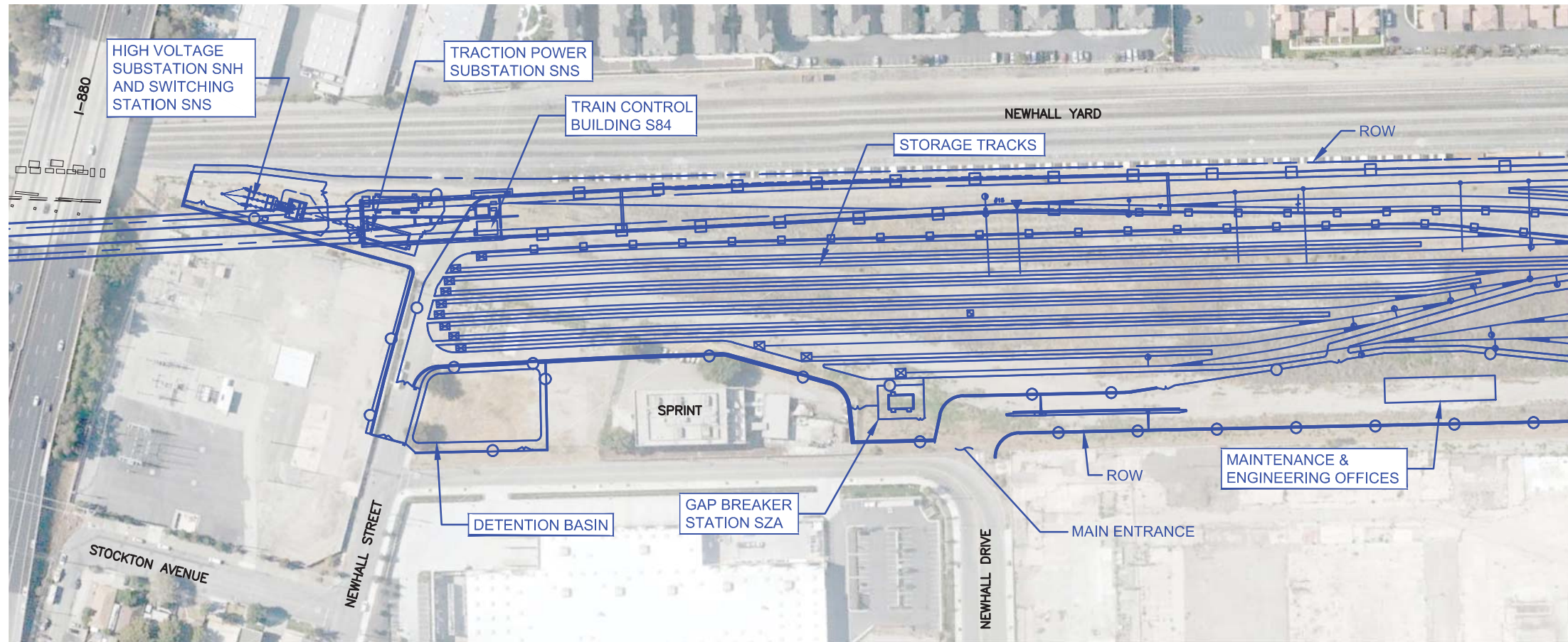
**SILICON VALLEY SANTA CLARA EXTENSION
ALIGNMENT NEAR DE LA CRUZ BOULEVARD
DIRIDON STATION SOUTH OPTION
PLAN & PROFILE
SHEET 12A & 12B**



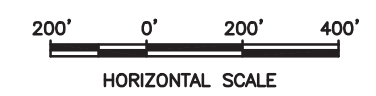
NOTE: DUE TO THE DIFFERENCE IN LENGTH OF THE ENTIRE PROJECT ALIGNMENT OF THE DIRIDON STATION NORTH OPTION VS. THE DIRIDON STATION SOUTH OPTION, THE STATION NUMBERING IS DIFFERENT BETWEEN THE TWO OPTIONS.

CONCEPTUAL PLANS

**SILICON VALLEY SANTA CLARA EXTENSION
ALIGNMENT NEAR DE LA CRUZ BOULEVARD
DIRIDON STATION NORTH OPTION
PLAN & PROFILE
SHEET 12C & 12D**



LEGEND	
	PROPOSED ALIGNMENT
	PROPOSED IMPROVEMENTS

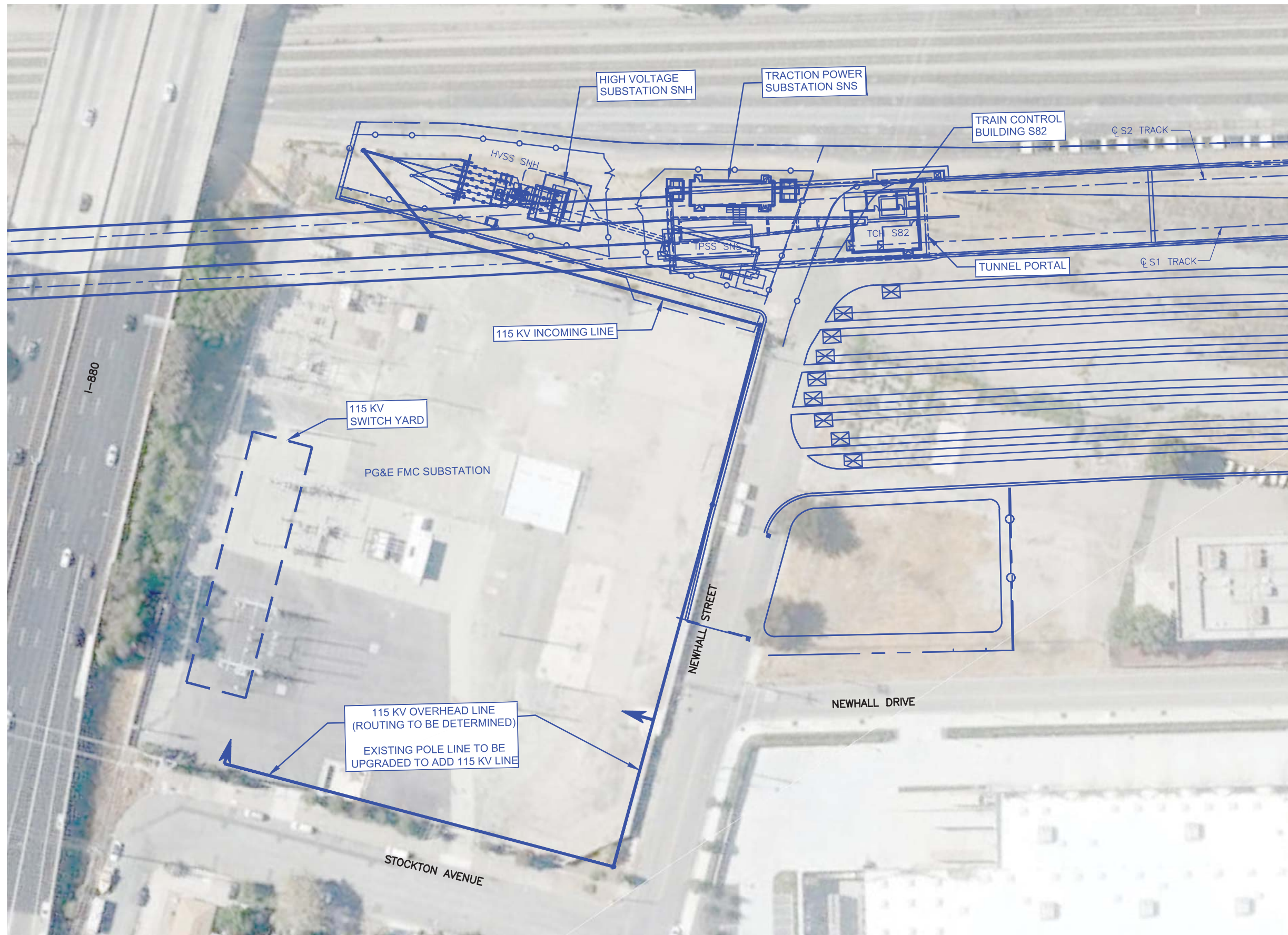


CONCEPTUAL PLANS

**SILICON VALLEY SANTA CLARA EXTENSION
NEWHALL MAINTENANCE FACILITY**

PLAN
SHEET 13

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LEGEND	
	PROPOSED ALIGNMENT
	PROPOSED IMPROVEMENTS



CONCEPTUAL PLANS

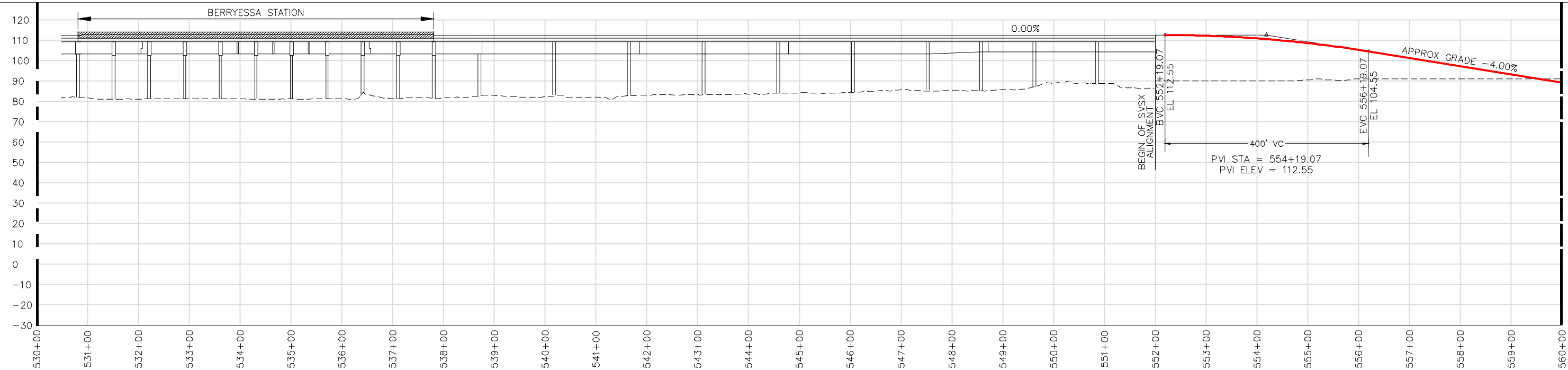
**SILICON VALLEY SANTA CLARA EXTENSION
115-kV LINE AND SYSTEMS FACILITIES
NORTH OF I-880**
SITE PLAN
SHEET 15

B.2 – Single-Bore Tunnel Plans and Profiles

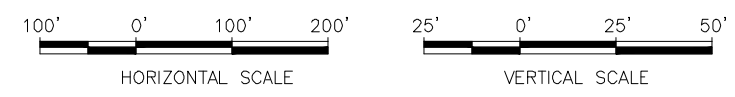
**SILICON VALLEY PHASE II EXTENSION
SINGLE-BORE OPTION PLANS AND PROFILES
INDEX OF DRAWINGS**

Sheet No.	Title	Sheet No.	Title
0	CONNECTION TO PHASE I	8A & 8B	ALIGNMENT NEAR STOCKTON STREET DIRIDON STATION SOUTH OPTION
1	ALIGNMENT NEAR LAS PLUMAS AVE	8C & 8D	ALIGNMENT NEAR STOCKTON STREET DIRIDON STATION NORTH OPTION
2	ALIGNMENT AT ALUM ROCK/ 28 th STREET STATION	9A & 9B	ALIGNMENT NEAR HEDDING STREET DIRIDON STATION SOUTH OPTION
3	ALIGNMENT EAST OF COYOTE CREEK	9C & 9D	ALIGNMENT NEAR HEDDING STREET DIRIDON STATION NORTH OPTION
4	ALIGNMENT WEST OF COYOTE CREEK	10A & 10B	ALIGNMENT NORTH OF I-880 DIRIDON STATION SOUTH OPTION
5A & 5C	DOWNTOWN SAN JOSE STATION EAST OPTION	10C & 10D	ALIGNMENT NORTH OF I-880 DIRIDON STATION NORTH OPTION
5B & 5D	DOWNTOWN SAN JOSE STATION WEST OPTION	11A & 11B	ALIGNMENT SOUTH OF BROKAW ROAD DIRIDON STATION SOUTH OPTION
6A	DOWNTOWN SAN JOSE STATION EAST OPTION DIRIDON STATION SOUTH OPTION	11C & 11D	ALIGNMENT SOUTH OF BROKAW ROAD DIRIDON STATION NORTH OPTION
6B	DOWNTOWN SAN JOSE STATION WEST OPTION DIRIDON STATION SOUTH OPTION	12A & 2B	ALIGNMENT NEAR DE LA CRUZ BOULEVARD DIRIDON STATION SOUTH OPTION
6C	DOWNTOWN SAN JOSE STATION EAST OPTION DIRIDON STATION NORTH OPTION	12C & 12D	ALIGNMENT NEAR DE LA CRUZ BOULEVARD DIRIDON STATION SOUTH OPTION
6D	DOWNTOWN SAN JOSE STATION WEST OPTION DIRIDON STATION NORTH OPTION	13	NEWHALL MAINTENANCE FACILITY
7A & 7B	ALIGNMENT NEAR THE ALAMEDA DIRIDON STATION SOUTH OPTION	14	NEWHALL MAINTENANCE FACILITY AND TRAIL TRACK
7C & 7D	ALIGNMENT NEAR THE ALAMEDA DIRIDON STATION NORTH OPTION	15	115-KV LINE AND SYSTEMS FACILITIES NORTH OF I-880

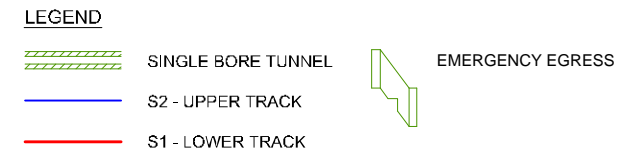
A SERIES = DOWNTOWN SAN JOSE STATION EAST OPTION & DIRIDON STATION SOUTH OPTION
B SERIES = DOWNTOWN SAN JOSE STATION WEST OPTION & DIRIDON STATION SOUTH OPTION
C SERIES = DOWNTOWN SAN JOSE STATION EAST OPTION & DIRIDON STATION NORTH OPTION
D SERIES = DOWNTOWN SAN JOSE STATION WEST OPTION & DIRIDON STATION NORTH OPTION
A & B SERIES = DIRIDON STATION SOUTH ALIGNMENT
C & D SERIES = DIRIDON STATION NORTH ALIGNMENT



CONCEPTUAL PLANS

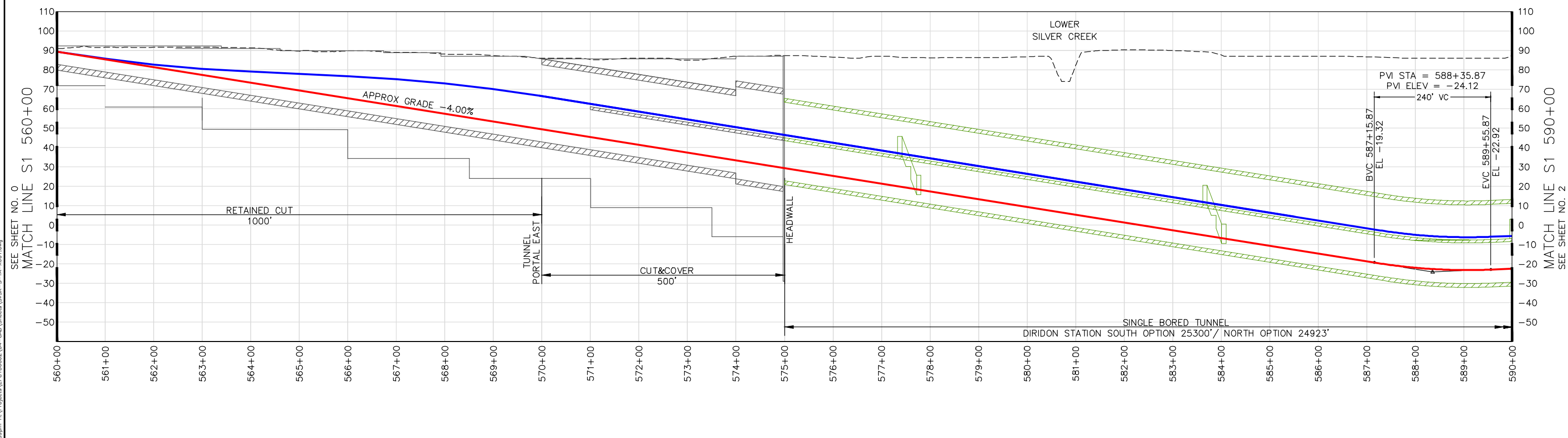
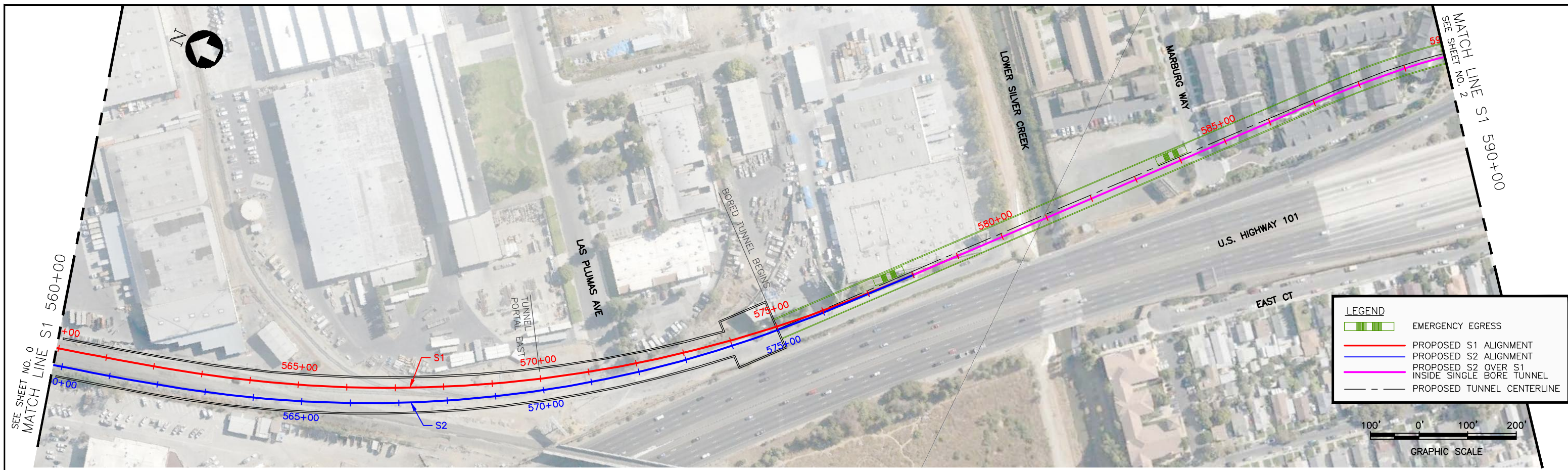


SINGLE BORE



SILICON VALLEY SANTA CLARA EXTENSION
CONNECTION TO PHASE I
PLAN & PROFILE
SHEET 0

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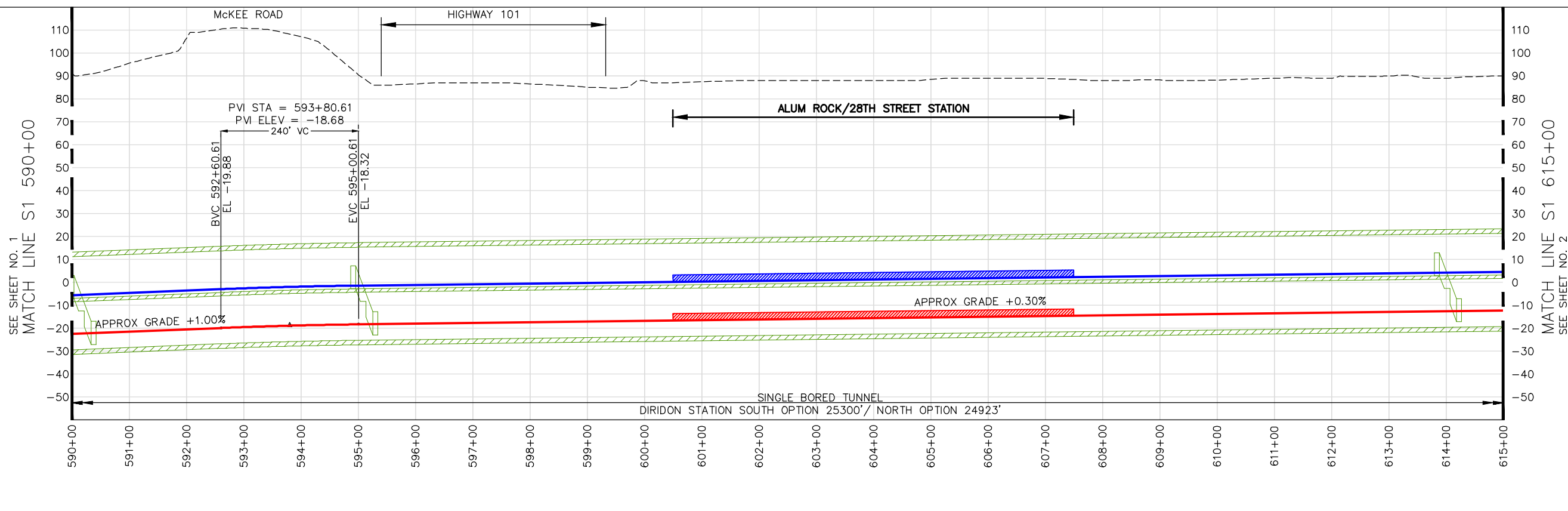
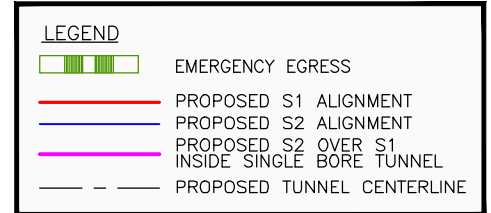
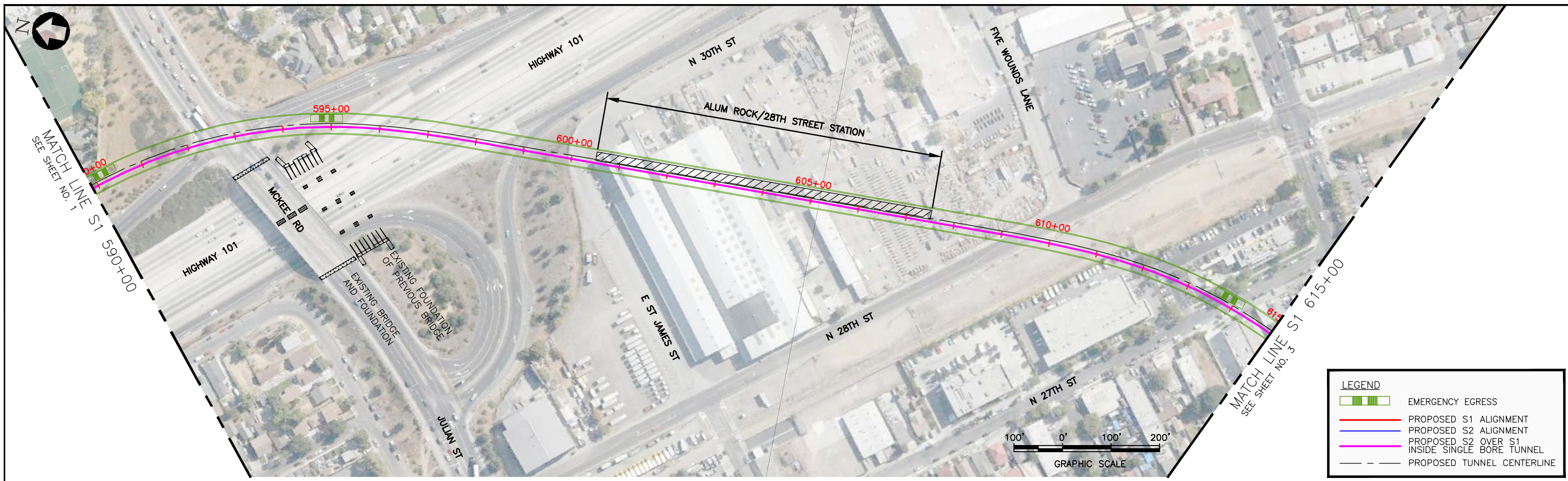
CONCEPTUAL PLANS



SILICON VALLEY SANTA CLARA EXTENSION
ALIGNMENT NEAR LAS PLUMAS AVE

PLAN & PROFILE
SHEET 1

May 13, 2016 - 12:59pm H:\Projects\EPIC150602\04-CAD\Sheets\SVSK-S-7A-1001.dwg
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CONCEPTUAL PLANS



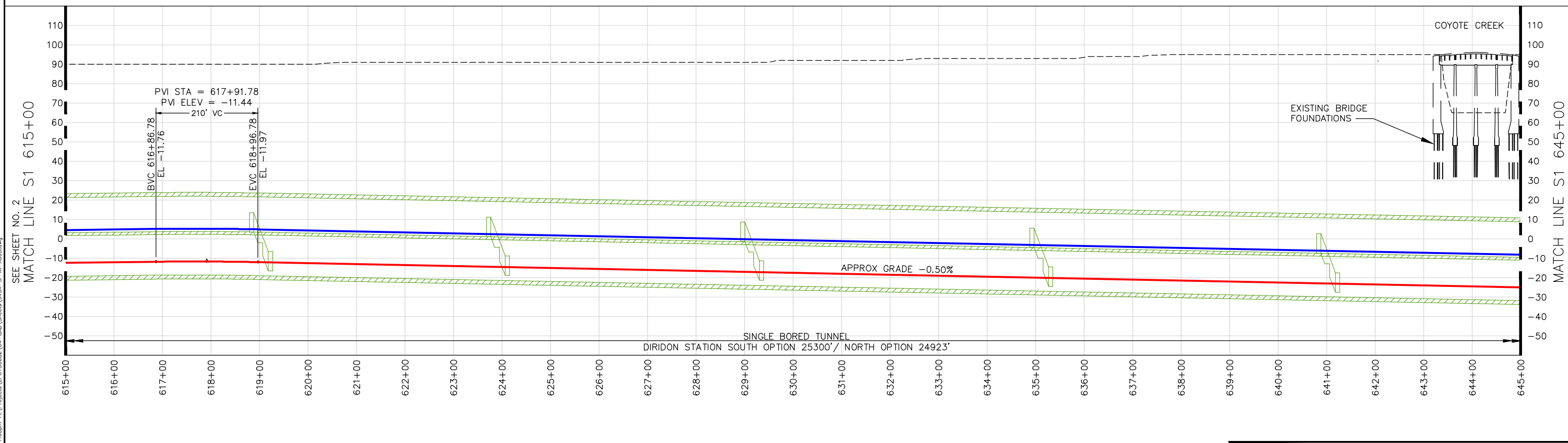
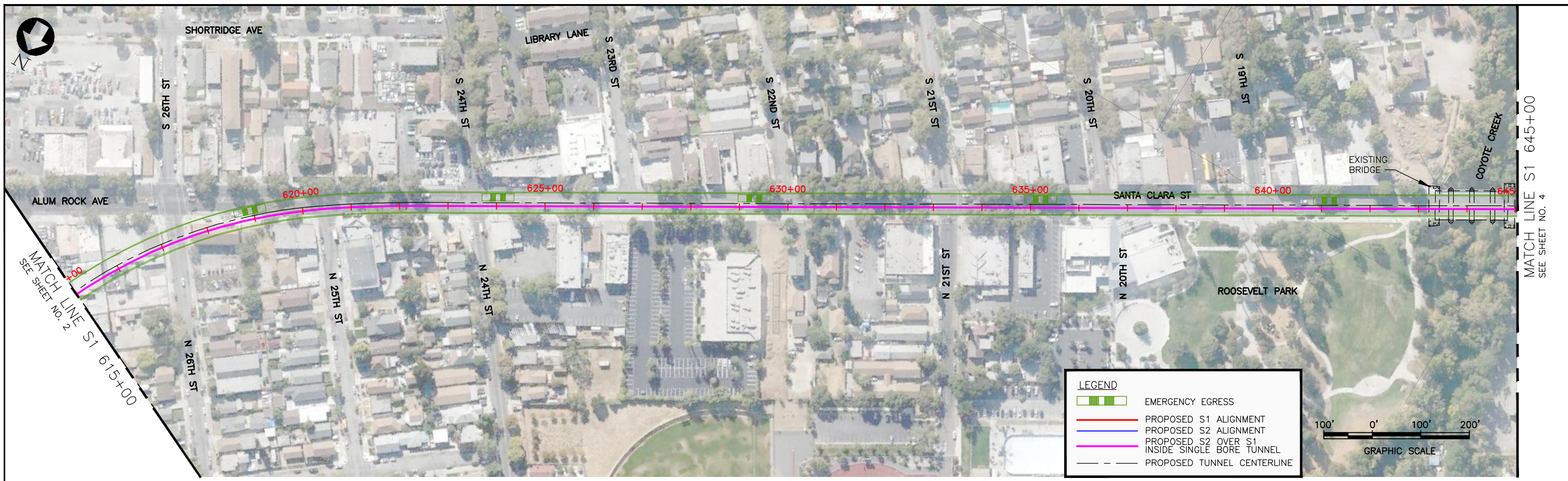
SINGLE BORE



SILICON VALLEY SANTA CLARA EXTENSION
ALIGNMENT AT ALUM ROCK/28TH STREET STATION

PLAN & PROFILE
SHEET 2

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CONCEPTUAL PLANS



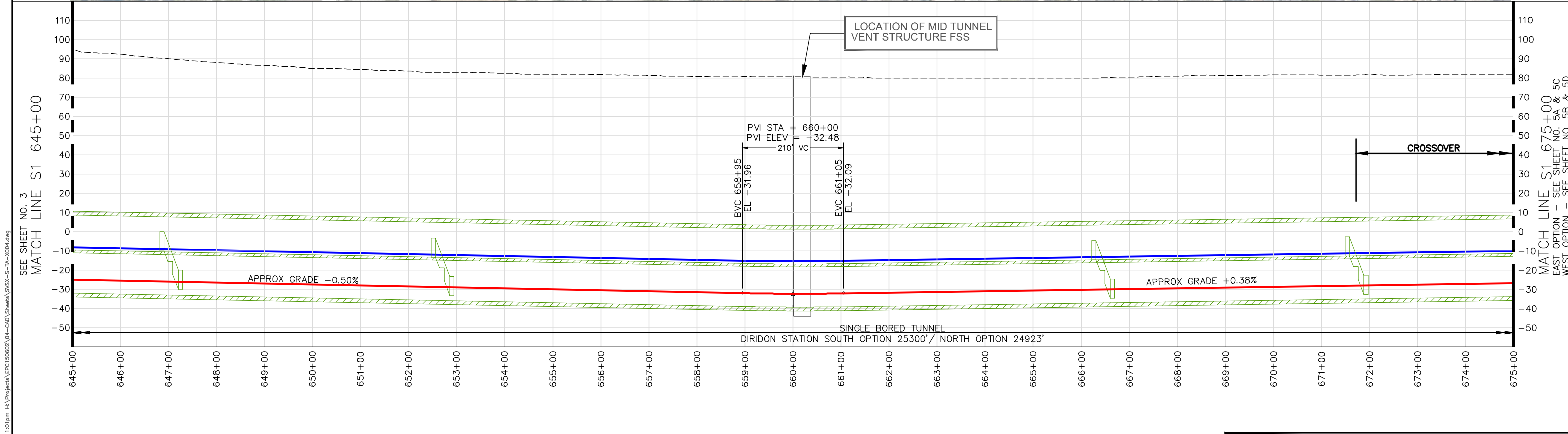
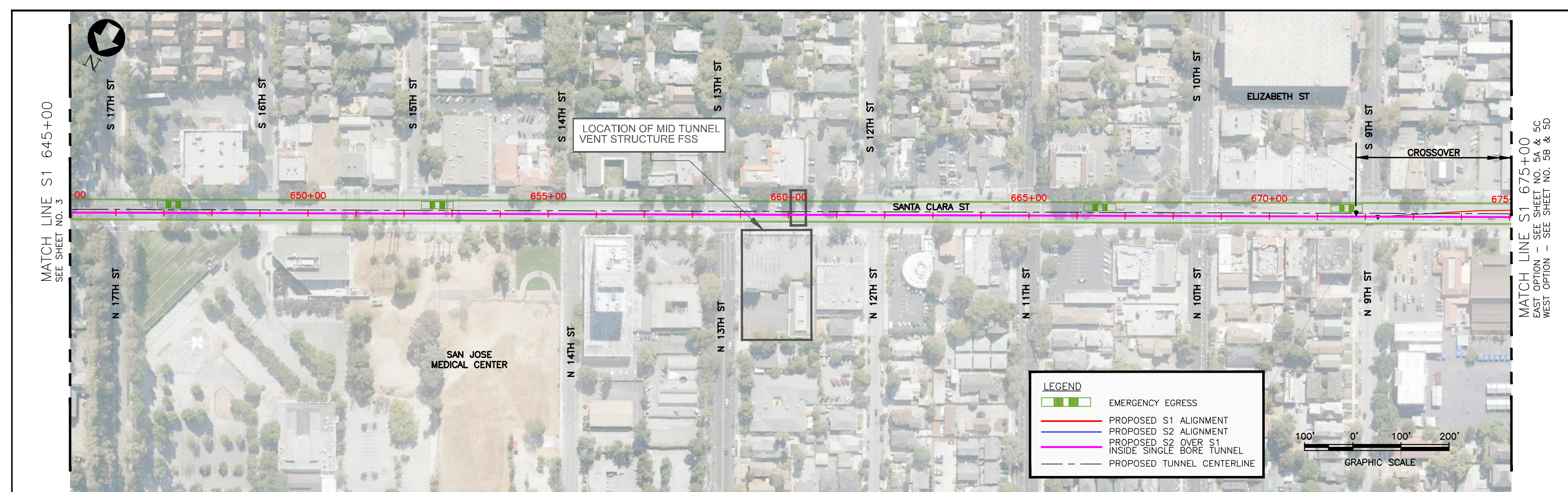
SINGLE BORE



SILICON VALLEY SANTA CLARA EXTENSION
ALIGNMENT EAST OF COYOTE CREEK

PLAN & PROFILE
SHEET 3

May 13, 2016 - 1:00pm H:\Projects\EPIC150602\04-CAO\Sheets\SVSX-S-1A-X003.dwg



CONCEPTUAL PLANS

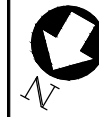
**SILICON VALLEY SANTA CLARA EXTENSION
ALIGNMENT WEST OF COYOTE CREEK**

PLAN & PROFILE
SHEET 4

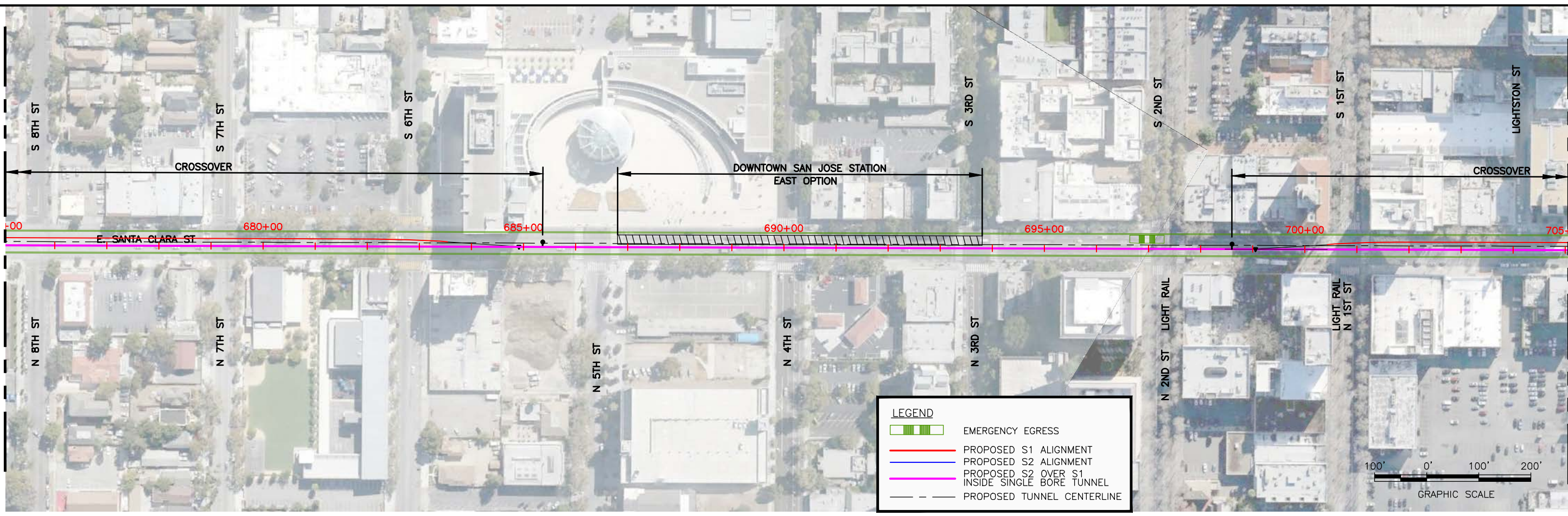
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MATCH LINE S1 675+00
 EAST OPTION - SEE SHEET NO. 5A & 5C
 WEST OPTION - SEE SHEET NO. 5B & 5D

MATCH LINE S1 675+00
 EAST OPTION - SEE SHEET NO. 5A & 5C
 WEST OPTION - SEE SHEET NO. 5B & 5D

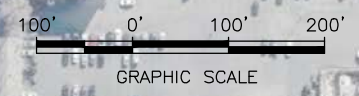


MATCH LINE S1 675+00
SEE SHEET NO. 4



LEGEND

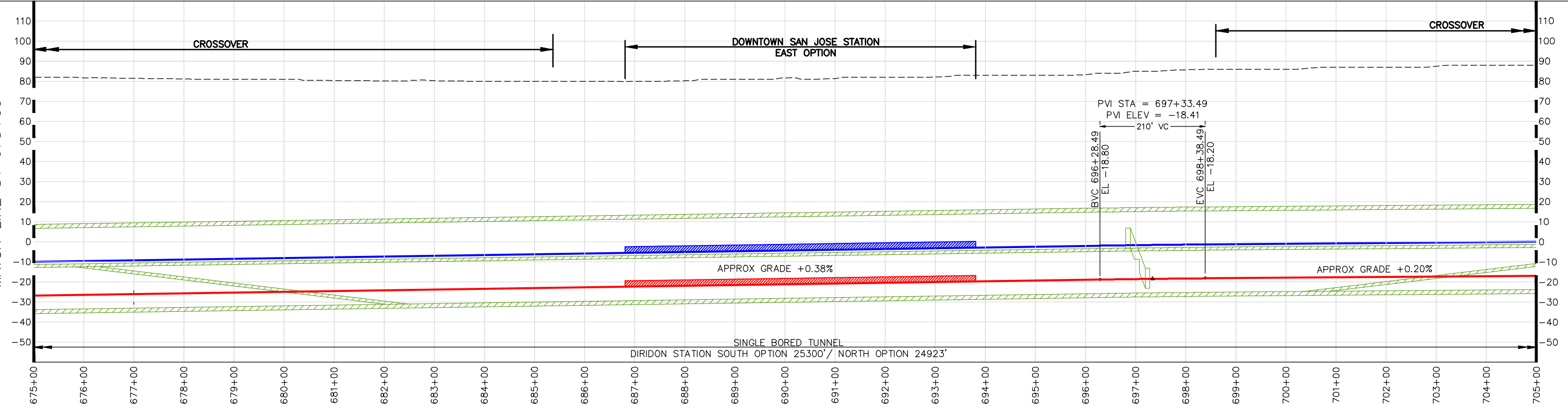
- EMERGENCY EGRESS
- PROPOSED S1 ALIGNMENT
- PROPOSED S2 ALIGNMENT
- PROPOSED S2 OVER S1 INSIDE SINGLE BORE TUNNEL
- PROPOSED TUNNEL CENTERLINE



MATCH LINE S1 705+00
SEE SHEET NO. 6A OR 6C

May 13, 2016 1:02pm H:\Projects\EPC150602\04-CAO\Sheets\SVSX-S-TA-X005AC.dwg

SEE SHEET NO. 4
MATCH LINE S1 675+00



MATCH LINE S1 705+00
SEE SHEET NO. 6A OR 6C

CONCEPTUAL PLANS



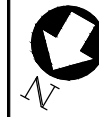
SINGLE BORE

LEGEND

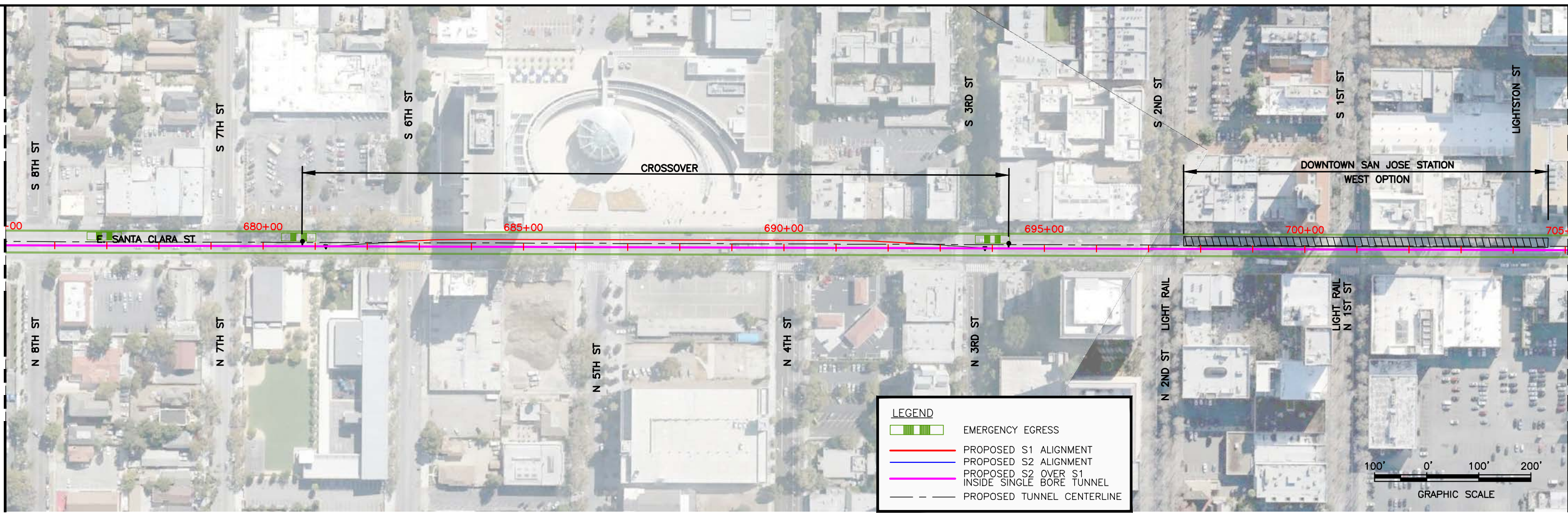
- SINGLE BORE TUNNEL
- S2 - UPPER TRACK
- S1 - LOWER TRACK
- EMERGENCY EGRESS

SILICON VALLEY SANTA CLARA EXTENSION
DOWNTOWN SAN JOSE STATION EAST OPTION

PLAN & PROFILE
SHEET 5A & 5C



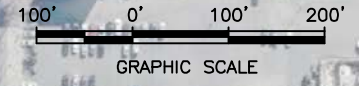
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SEE SHEET NO. 4



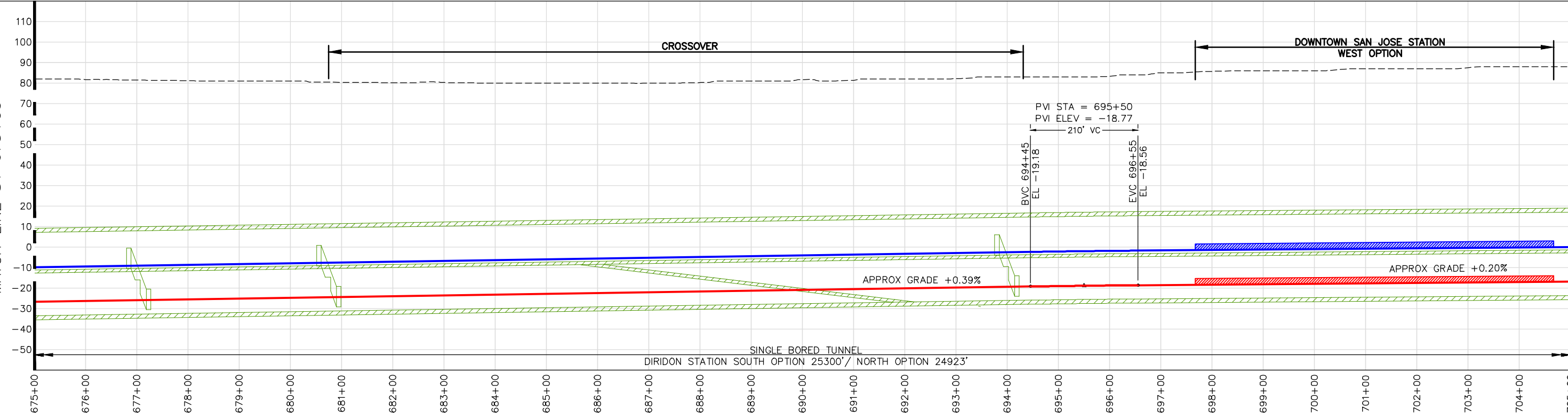
MATCH LINE S1 705+00
SEE SHEET NO. 6B OR 6D

LEGEND

- EMERGENCY EGRESS
- PROPOSED S1 ALIGNMENT
- PROPOSED S2 ALIGNMENT
- PROPOSED S2 OVER S1 INSIDE SINGLE BORE TUNNEL
- PROPOSED TUNNEL CENTERLINE



SEE SHEET NO. 4
MATCH LINE S1 675+00



MATCH LINE S1 705+00
SEE SHEET NO. 6B OR 6D

CONCEPTUAL PLANS



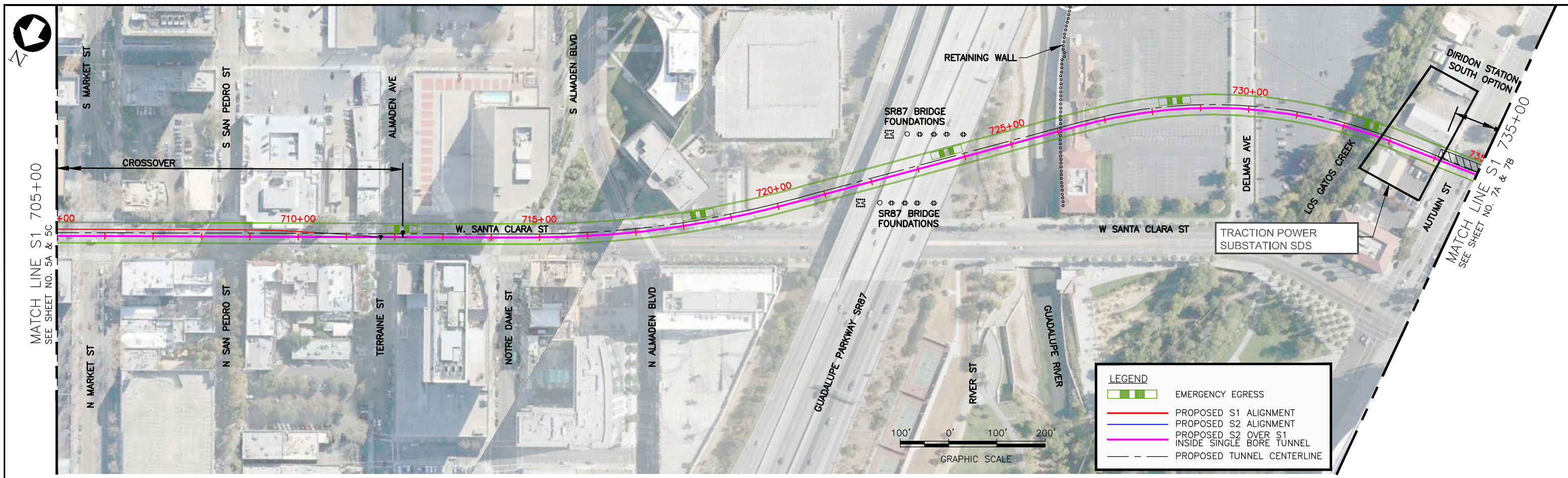
SINGLE BORE

LEGEND

- SINGLE BORE TUNNEL
- S2 - UPPER TRACK
- S1 - LOWER TRACK
- EMERGENCY EGRESS

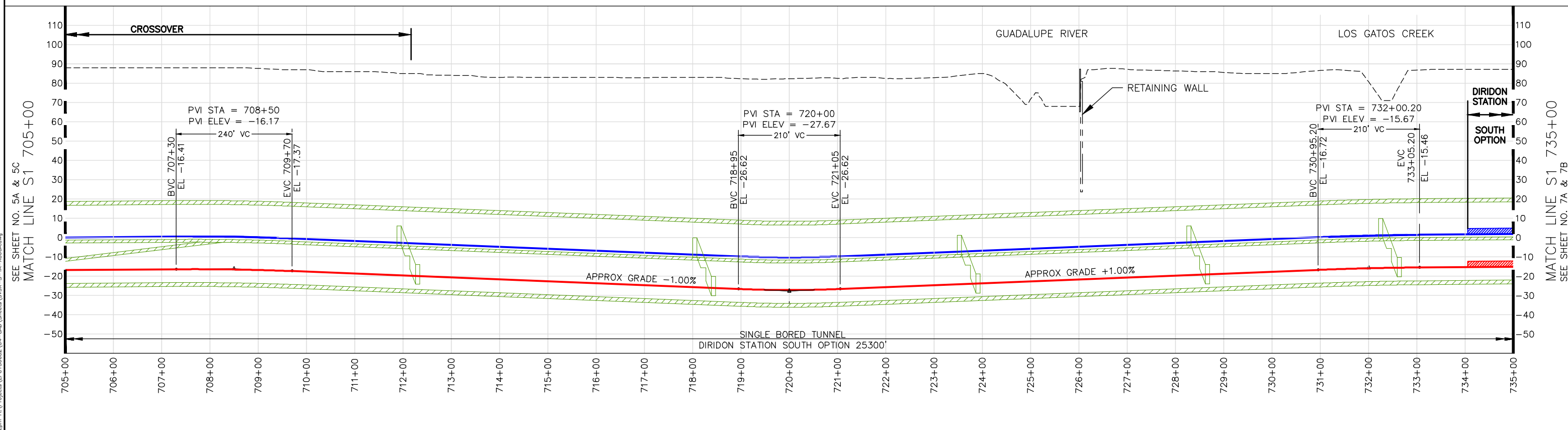
SILICON VALLEY SANTA CLARA EXTENSION
DOWNTOWN SAN JOSE STATION WEST OPTION

PLAN & PROFILE
SHEET 5B & 5D



LEGEND

- EMERGENCY EGRESS
- PROPOSED S1 ALIGNMENT
- PROPOSED S2 ALIGNMENT
- PROPOSED S2 OVER S1 INSIDE SINGLE BORE TUNNEL
- PROPOSED TUNNEL CENTERLINE



CONCEPTUAL PLANS



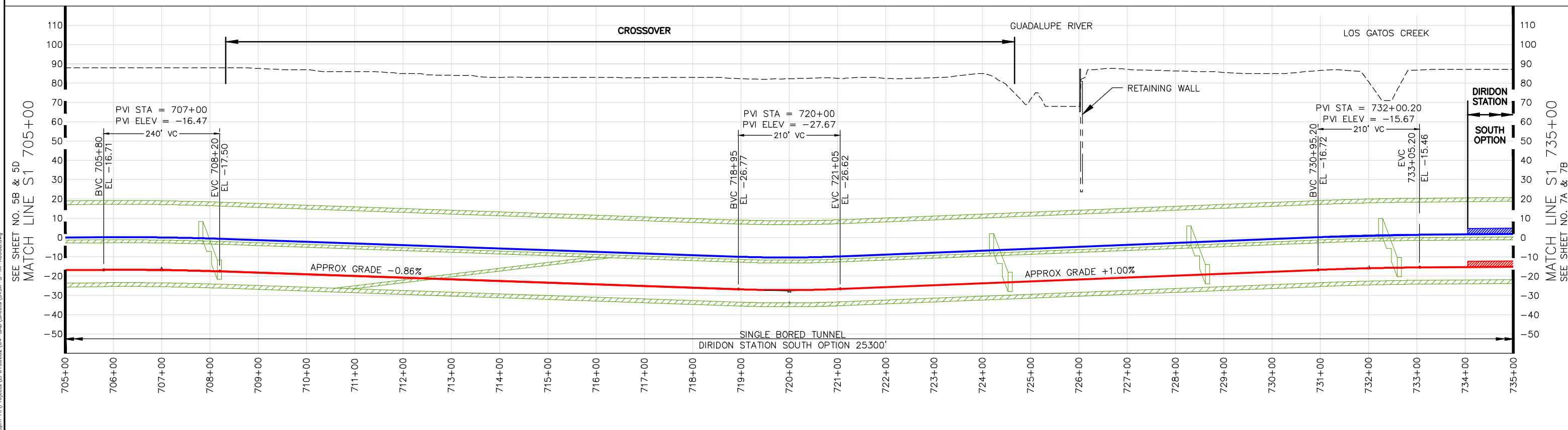
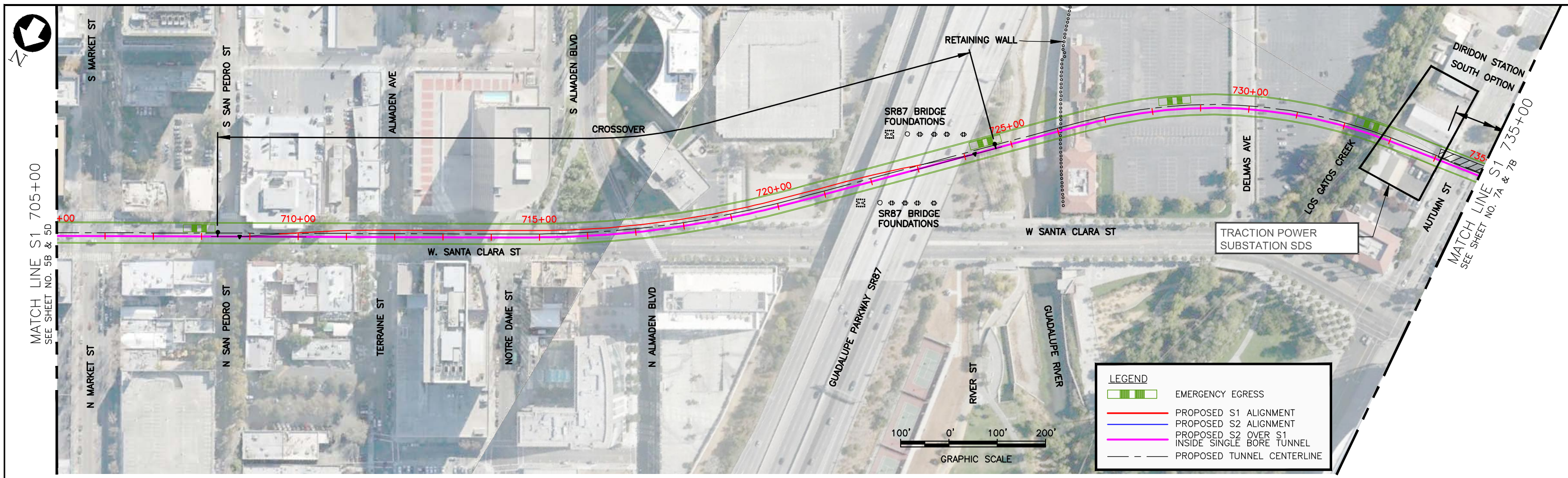
SINGLE BORE

LEGEND

- SINGLE BORE TUNNEL
- S2 - UPPER TRACK
- S1 - LOWER TRACK
- EMERGENCY EGRESS

SILICON VALLEY SANTA CLARA EXTENSION
 DOWNTOWN SAN JOSE STATION EAST OPTION
 DIRIDON STATION SOUTH OPTION
 PLAN & PROFILE
 SHEET 6A

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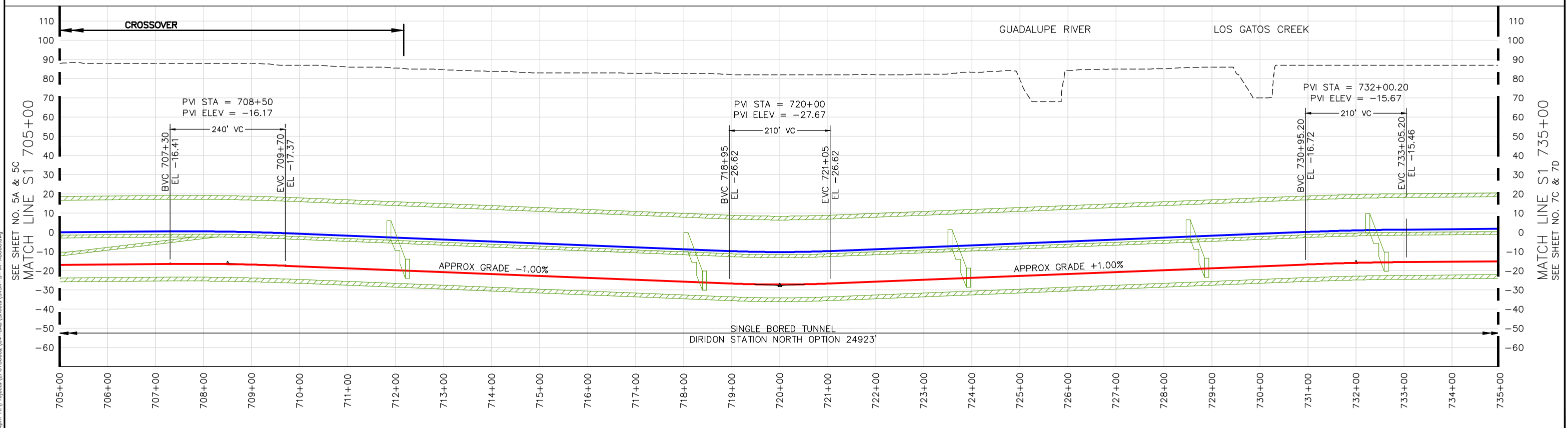
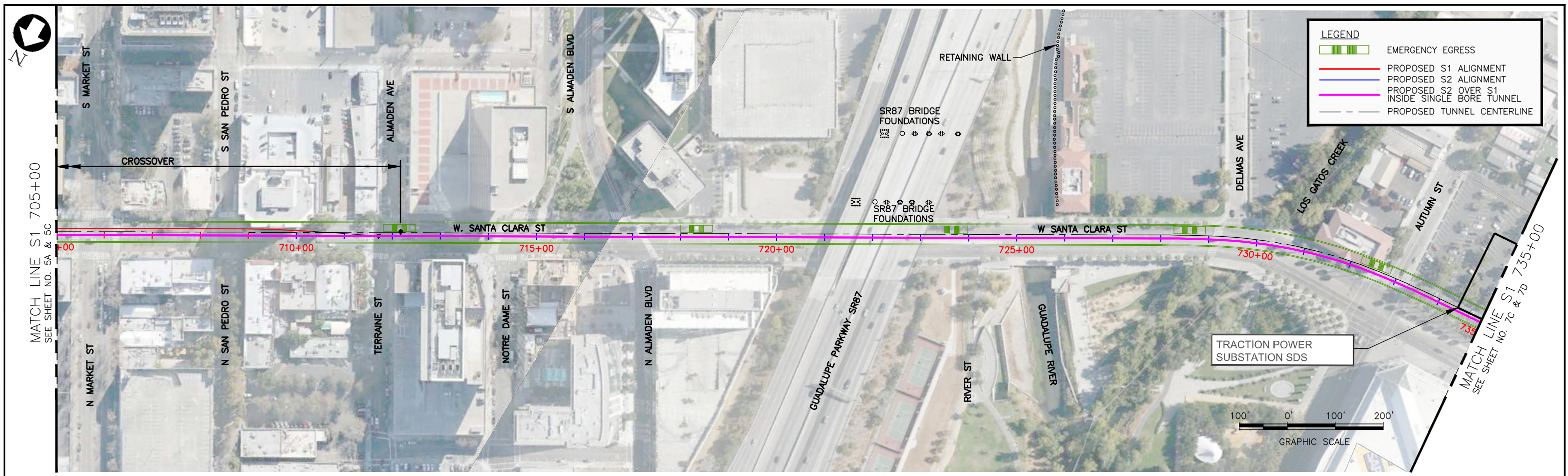


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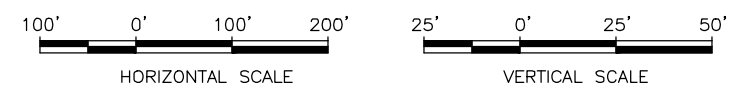


SILICON VALLEY SANTA CLARA EXTENSION
 DOWNTOWN SAN JOSE STATION WEST OPTION
 DIRIDON STATION SOUTH OPTION
 PLAN & PROFILE
 SHEET 6B

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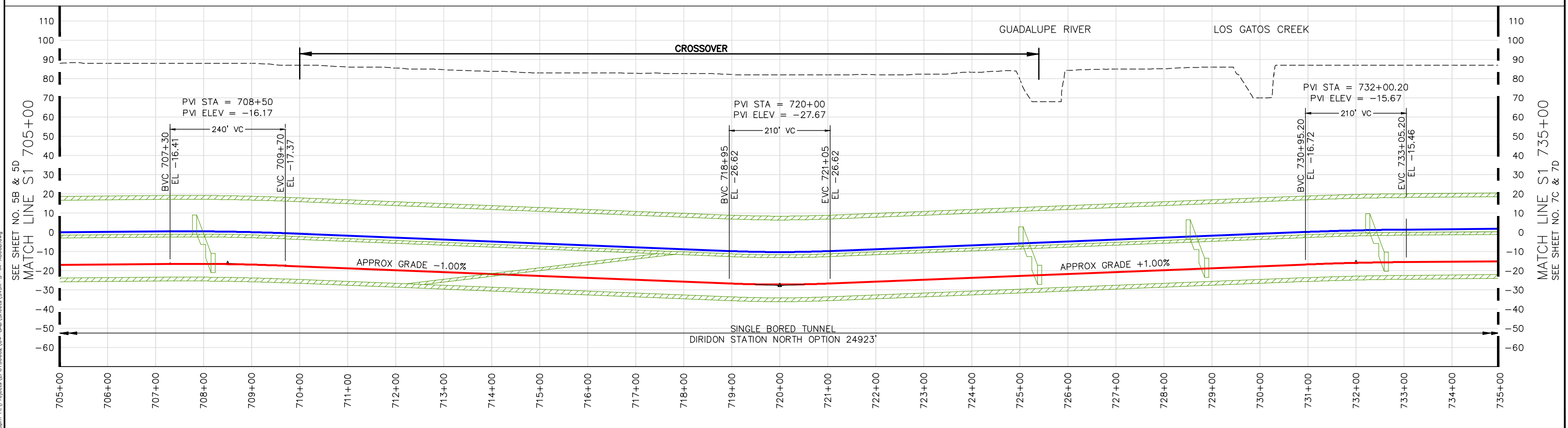
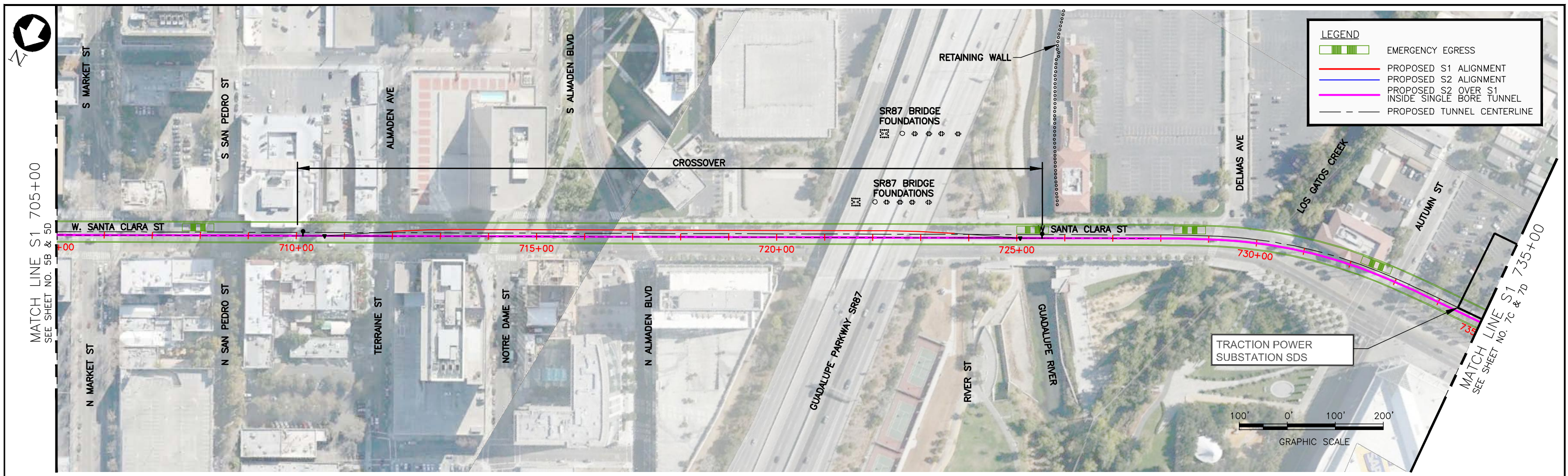
CONCEPTUAL PLANS



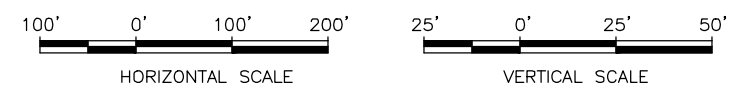
SINGLE BORE



SILICON VALLEY SANTA CLARA EXTENSION
 DOWNTOWN SAN JOSE STATION EAST OPTION
 DIRIDON STATION NORTH OPTION
 PLAN & PROFILE
 SHEET 6C



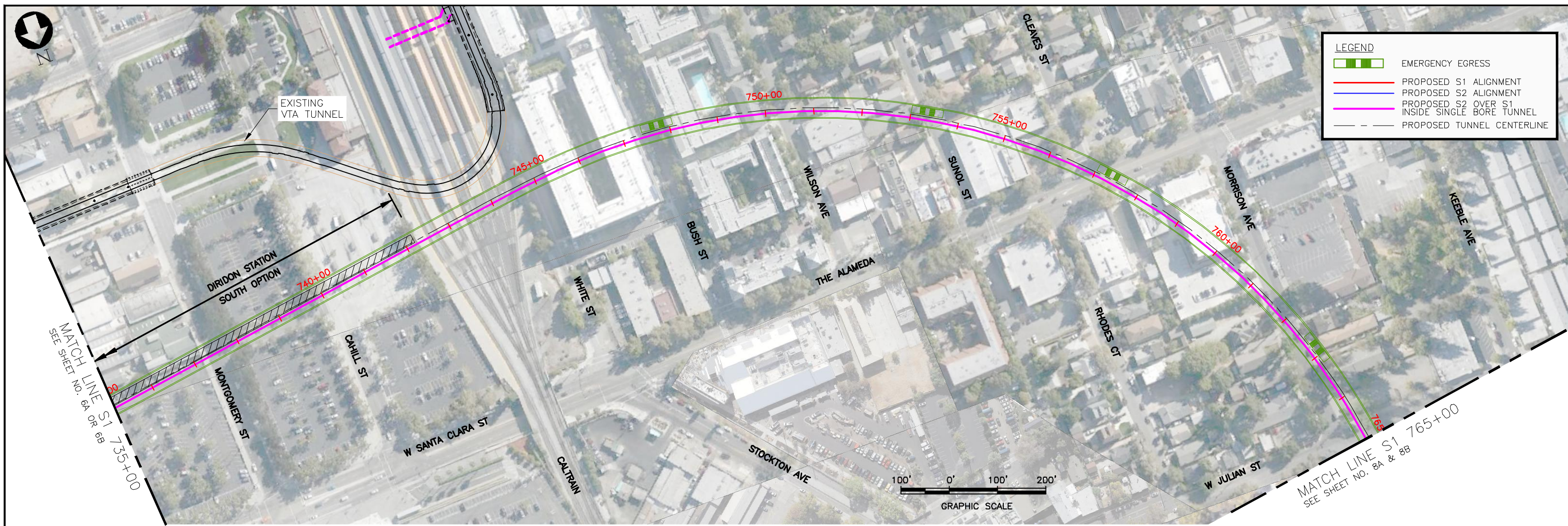
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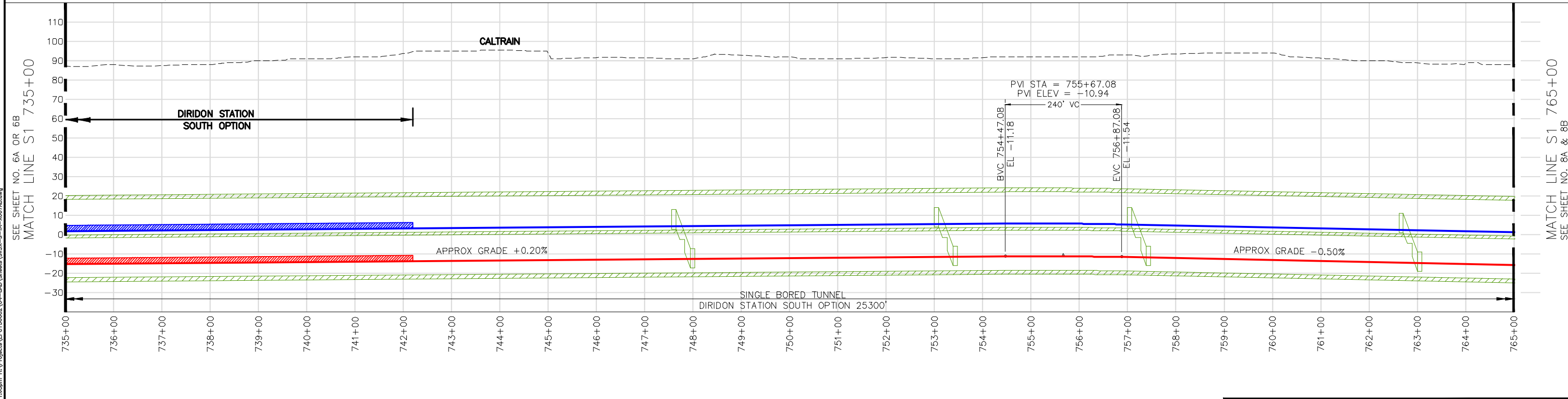
SINGLE BORE



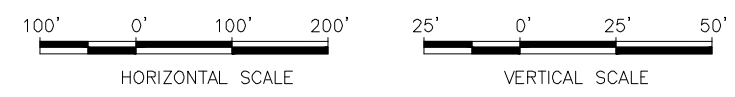
SILICON VALLEY SANTA CLARA EXTENSION
 DOWNTOWN SAN JOSE STATION WEST OPTION
 DIRIDON STATION NORTH OPTION
 PLAN & PROFILE
 SHEET 6D



LEGEND	
	EMERGENCY EGRESS
	PROPOSED S1 ALIGNMENT
	PROPOSED S2 ALIGNMENT
	PROPOSED S2 OVER S1 INSIDE SINGLE BORE TUNNEL
	PROPOSED TUNNEL CENTERLINE



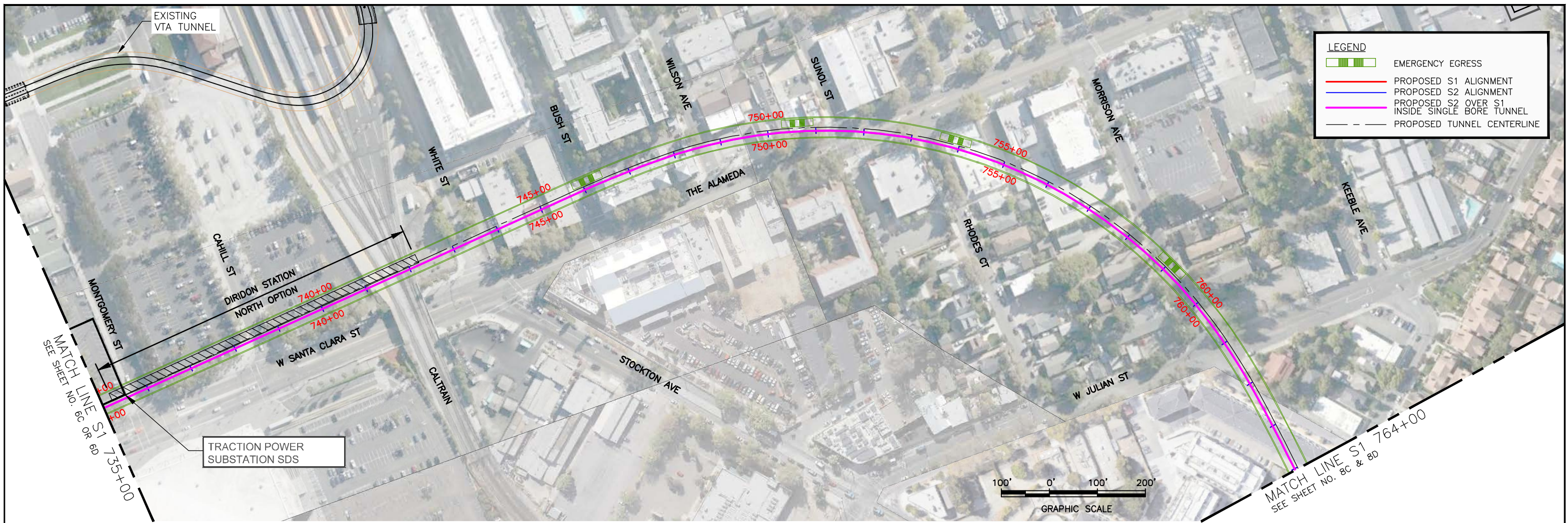
CONCEPTUAL PLANS



LEGEND	
	SINGLE BORE TUNNEL
	S2 - UPPER TRACK
	S1 - LOWER TRACK
	EMERGENCY EGRESS

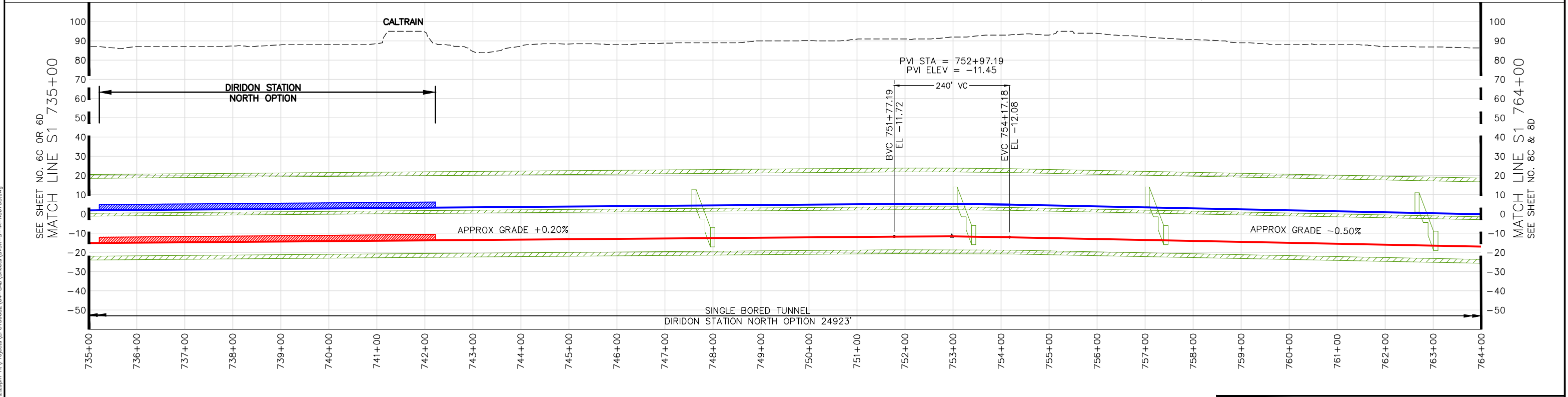
SILICON VALLEY SANTA CLARA EXTENSION
ALIGNMENT NEAR THE ALAMEDA
DIRIDON STATION SOUTH OPTION
PLAN & PROFILE
SHEET 7A & 7B

May 13, 2016 - 1:05pm H:\Projects\EPC160602\04-CAO\Sheets\SV6X-S-7A-X007\AB.dwg
 c:\hask



LEGEND

- EMERGENCY EGRESS
- PROPOSED S1 ALIGNMENT
- PROPOSED S2 ALIGNMENT
- PROPOSED S2 OVER S1 INSIDE SINGLE BORE TUNNEL
- PROPOSED TUNNEL CENTERLINE



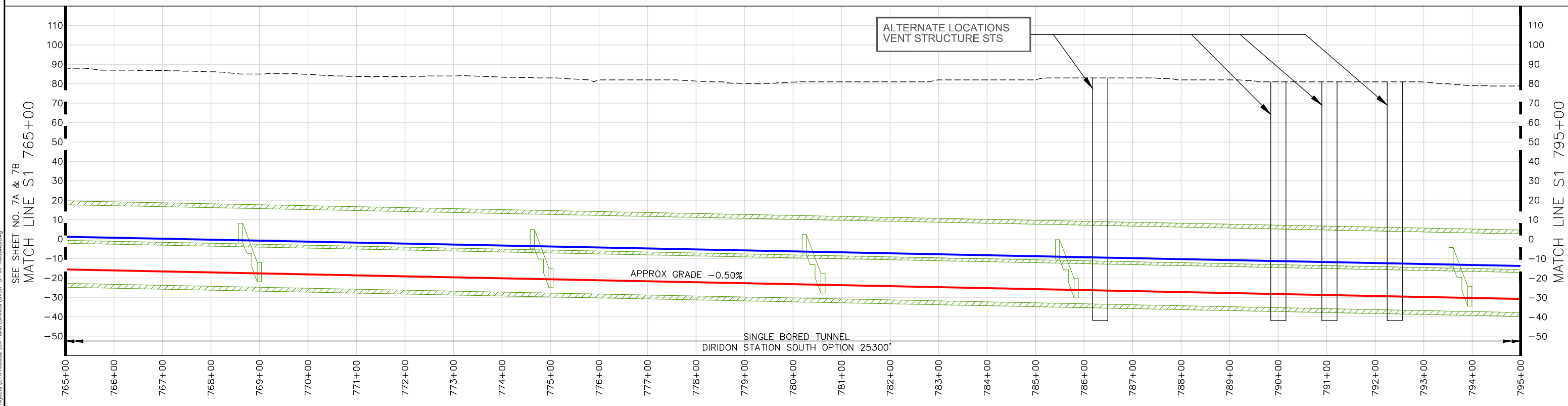
CONCEPTUAL PLANS

LEGEND

- SINGLE BORE TUNNEL
- S2 - UPPER TRACK
- S1 - LOWER TRACK
- EMERGENCY EGRESS

SILICON VALLEY SANTA CLARA EXTENSION
ALIGNMENT NEAR THE ALAMEDA
DIRIDON STATION NORTH OPTION
PLAN & PROFILE
SHEET 7C AND 7D

May 13, 2016 - 2:29pm H:\Projects\EPC150602\04-CAO\Sheets\SVSX-S-TA-X007C0D.dwg
 coheuk



CONCEPTUAL PLANS

NOTE: THE ALIGNMENT FOR THE DIRIDON STATION NORTH AND DIRIDON STATION SOUTH OPTIONS CONVERGES AT THIS POINT AND OVERLAPS UNTIL THE PROJECT TERMINUS. HOWEVER, THE LENGTH OF THE ENTIRE PROJECT ALIGNMENT IS SLIGHTLY LONGER FOR THE DIRIDON STATION SOUTH OPTION COMPARED TO THE NORTH OPTION; THEREFORE, THE STATION NUMBERING IS DIFFERENT BETWEEN THE TWO OPTIONS.

LEGEND

- SINGLE BORE TUNNEL
- EMERGENCY EGRESS
- S2 - UPPER TRACK
- S1 - LOWER TRACK

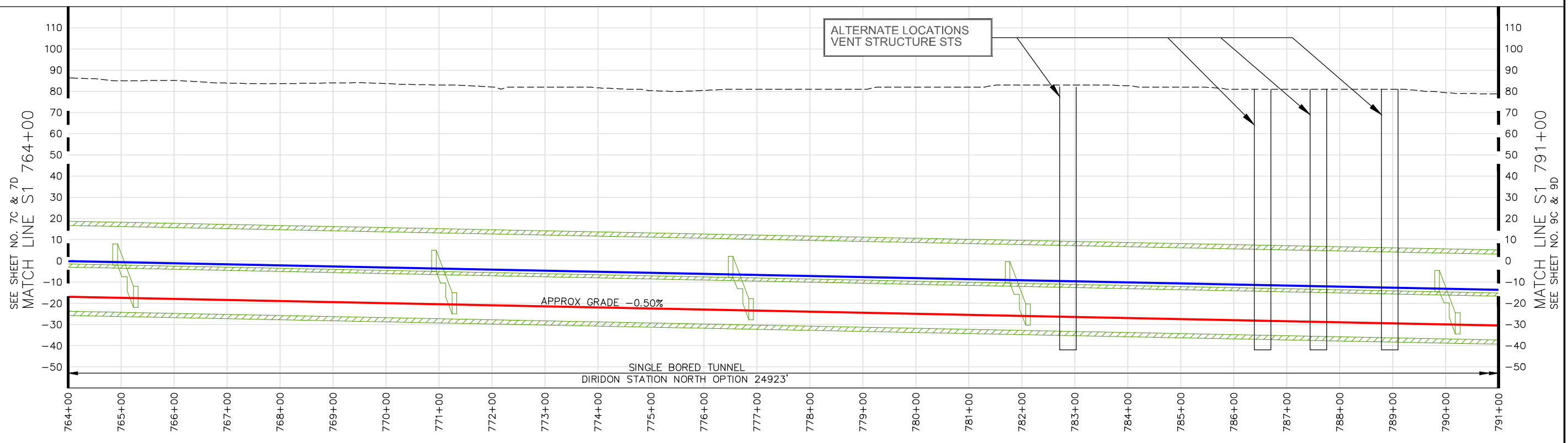
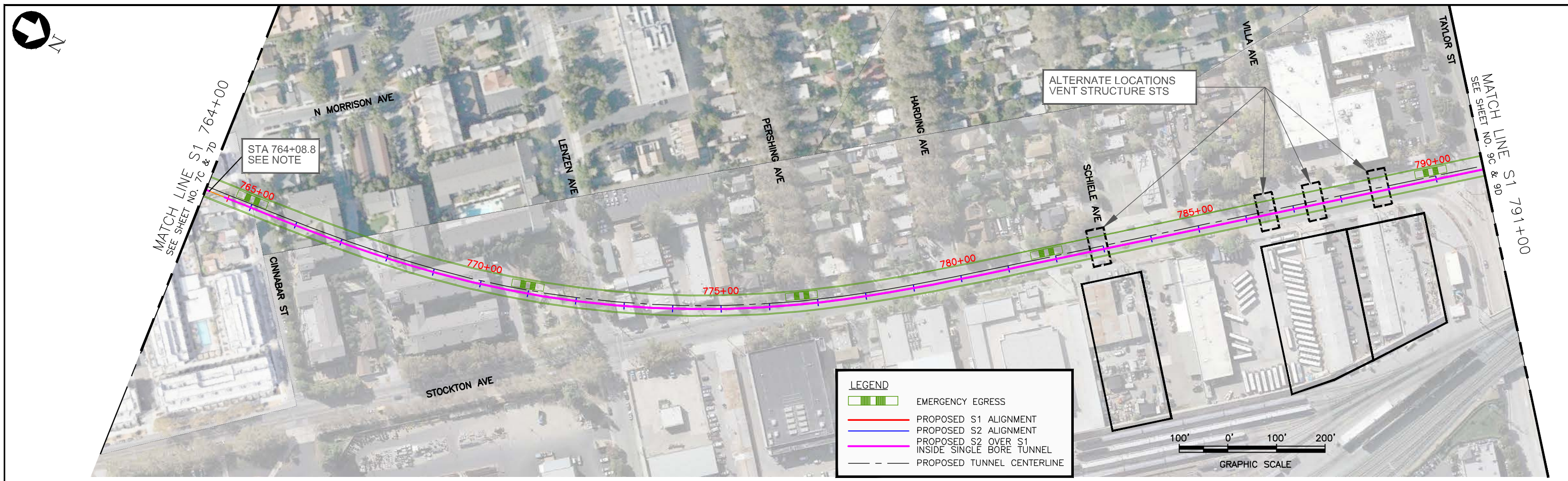
HORIZONTAL SCALE: 100' 0' 100' 200'

VERTICAL SCALE: 25' 0' 25' 50'

SINGLE BORE

**SILICON VALLEY SANTA CLARA EXTENSION
ALIGNMENT NEAR STOCKTON STREET
DIRIDON STATION SOUTH OPTION
PLAN & PROFILE
SHEET 8A & 8B**

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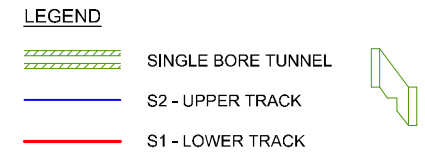


NOTE: THE ALIGNMENT FOR THE DIRIDON STATION NORTH AND DIRIDON STATION SOUTH OPTIONS CONVERGES AT THIS POINT AND OVERLAPS UNTIL THE PROJECT TERMINUS. HOWEVER, THE LENGTH OF THE ENTIRE PROJECT ALIGNMENT IS SLIGHTLY LONGER FOR THE DIRIDON STATION SOUTH OPTION COMPARED TO THE NORTH OPTION; THEREFORE, THE STATION NUMBERING IS DIFFERENT BETWEEN THE TWO OPTIONS.

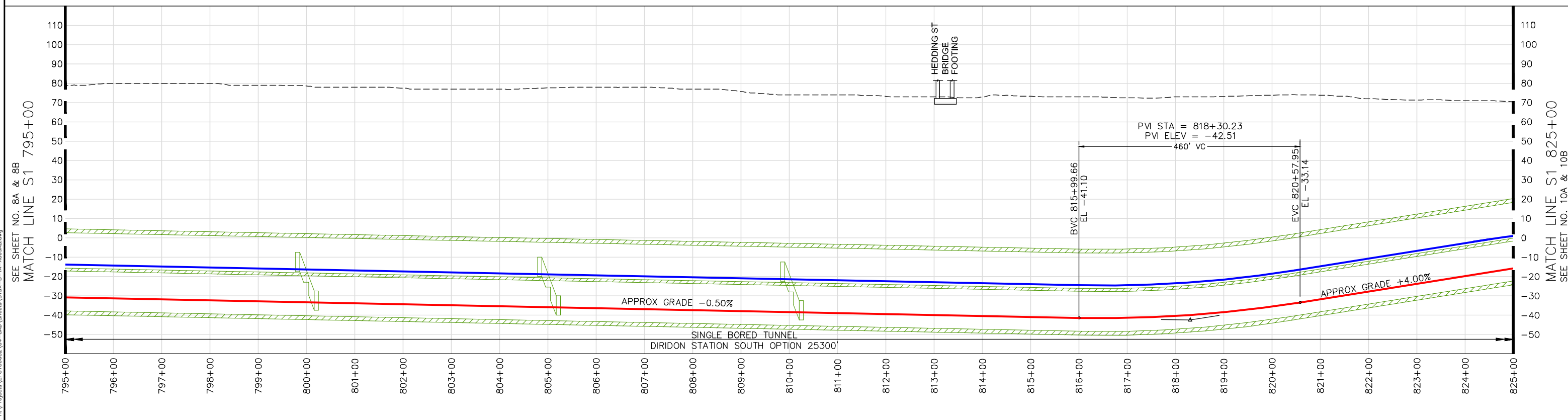
CONCEPTUAL PLANS



SINGLE BORE



**SILICON VALLEY SANTA CLARA EXTENSION
ALIGNMENT NEAR STOCKTON STREET
DIRIDON STATION NORTH OPTION
PLAN & PROFILE
SHEET 8C & 8D**



CONCEPTUAL PLANS

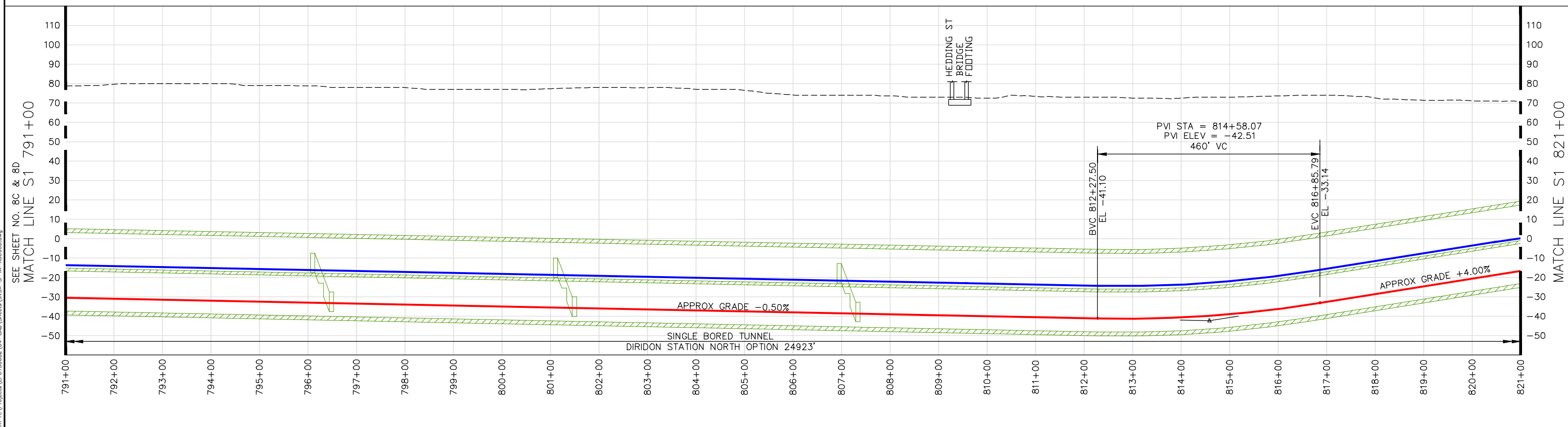
NOTE: DUE TO THE DIFFERENCE IN LENGTH OF THE ENTIRE PROJECT ALIGNMENT OF THE DIRIDON STATION NORTH OPTION VS. THE DIRIDON STATION SOUTH OPTION, THE STATION NUMBERING IS DIFFERENT BETWEEN THE TWO OPTIONS.



SINGLE BORE



SILICON VALLEY SANTA CLARA EXTENSION
ALIGNMENT NEAR HEDDING STREET
DIRIDON STATION SOUTH OPTION
PLAN & PROFILE
SHEET 9A & 9B



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 coheuk

CONCEPTUAL PLANS

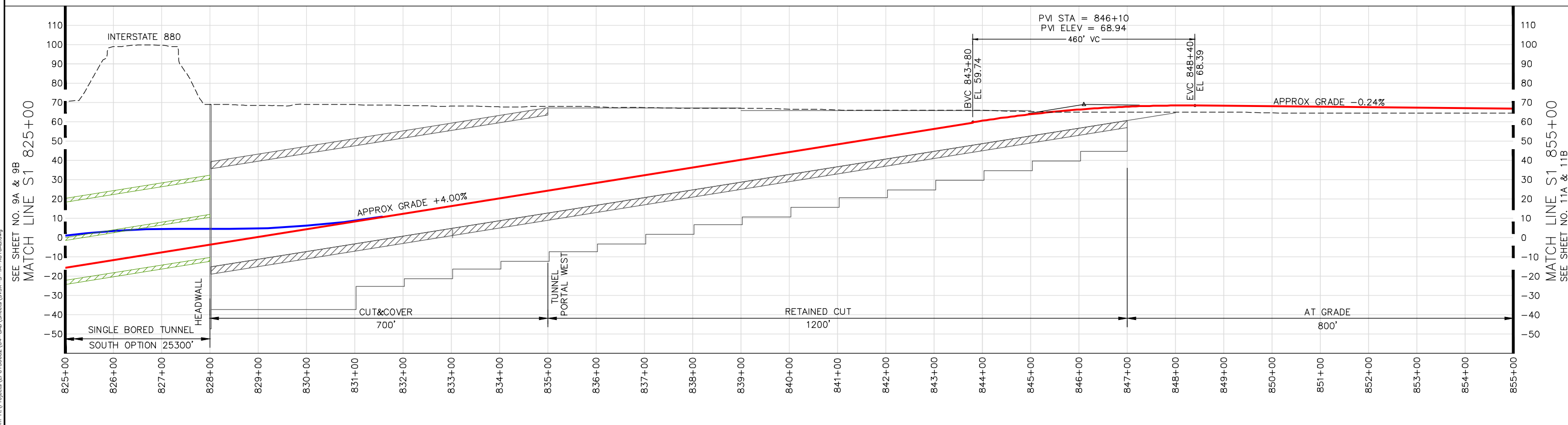
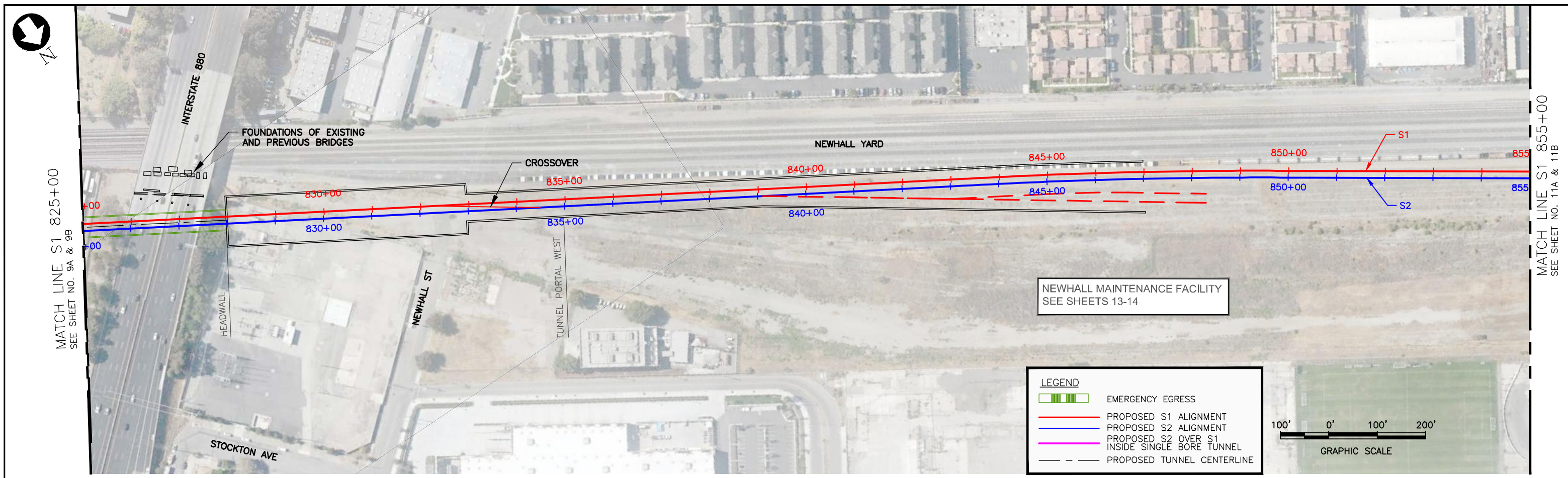
NOTE: DUE TO THE DIFFERENCE IN LENGTH OF THE ENTIRE PROJECT ALIGNMENT OF THE DIRIDON STATION NORTH OPTION VS. THE DIRIDON STATION SOUTH OPTION, THE STATION NUMBERING IS DIFFERENT BETWEEN THE TWO OPTIONS.



SINGLE BORE

- LEGEND**
- SINGLE BORE TUNNEL
 - S2 - UPPER TRACK
 - S1 - LOWER TRACK
 - EMERGENCY EGRESS

SILICON VALLEY SANTA CLARA EXTENSION
ALIGNMENT NEAR HEDDING STREET
DIRIDON STATION NORTH OPTION
 PLAN & PROFILE
 SHEET 9C & 9D



CONCEPTUAL PLANS

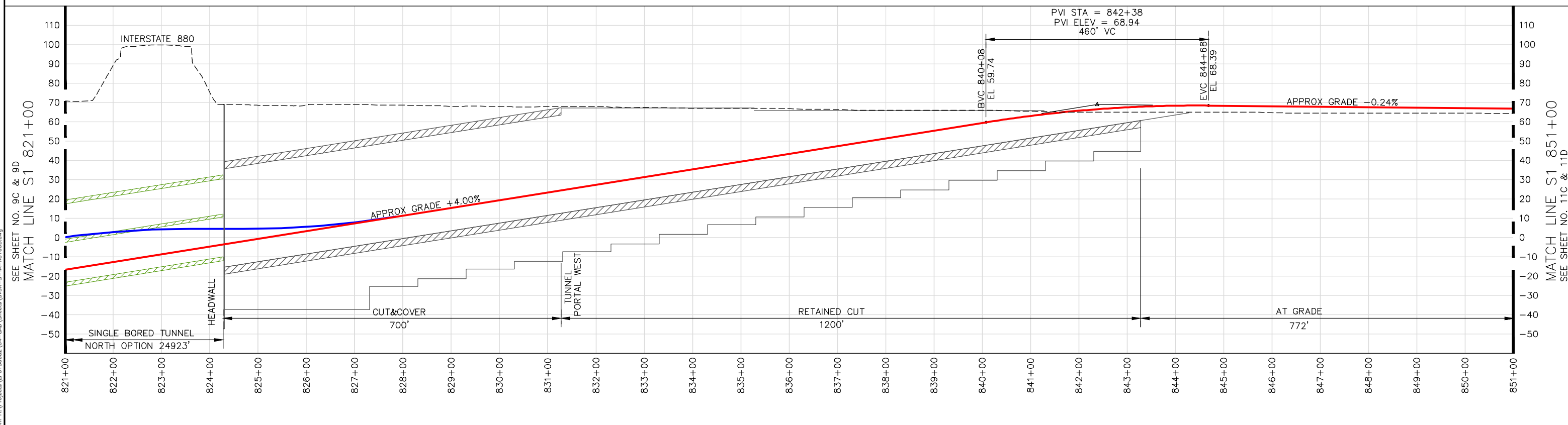
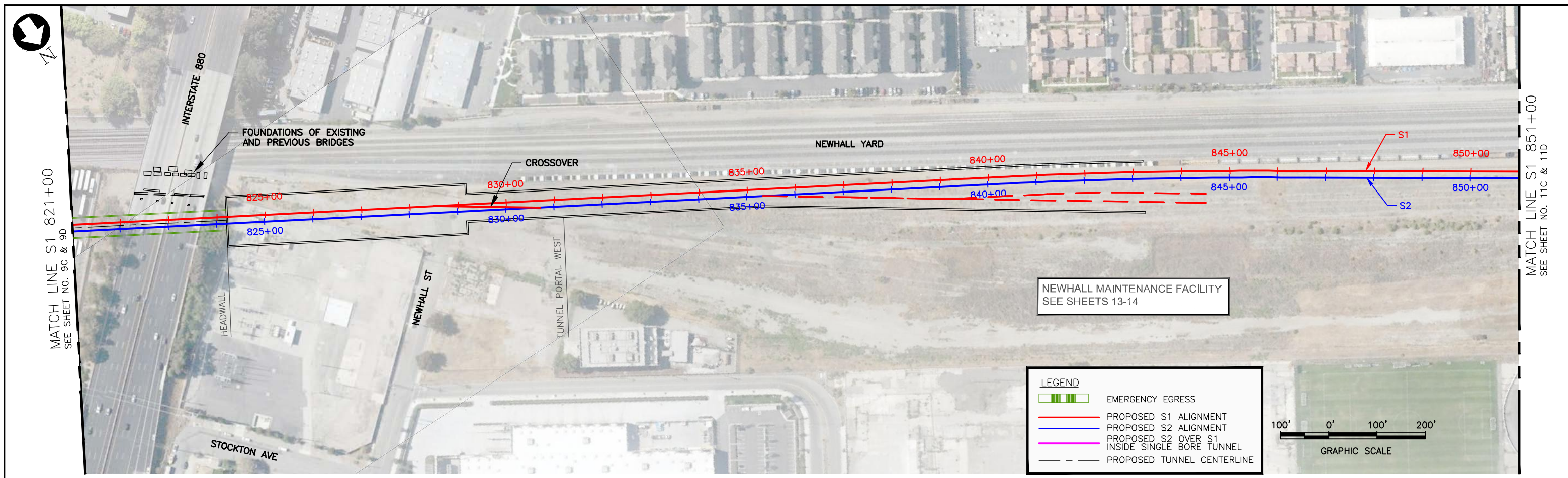
NOTE: DUE TO THE DIFFERENCE IN LENGTH OF THE ENTIRE PROJECT ALIGNMENT OF THE DIRIDON STATION NORTH OPTION VS. THE DIRIDON STATION SOUTH OPTION, THE STATION NUMBERING IS DIFFERENT BETWEEN THE TWO OPTIONS.



SINGLE BORE

- LEGEND**
- SINGLE BORE TUNNEL
 - S2 - UPPER TRACK
 - S1 - LOWER TRACK
 - EMERGENCY EGRESS

SILICON VALLEY SANTA CLARA EXTENSION
ALIGNMENT NORTH OF I-880
DIRIDON STATION SOUTH OPTION
PLAN & PROFILE
SHEET 10A & 10B



CONCEPTUAL PLANS

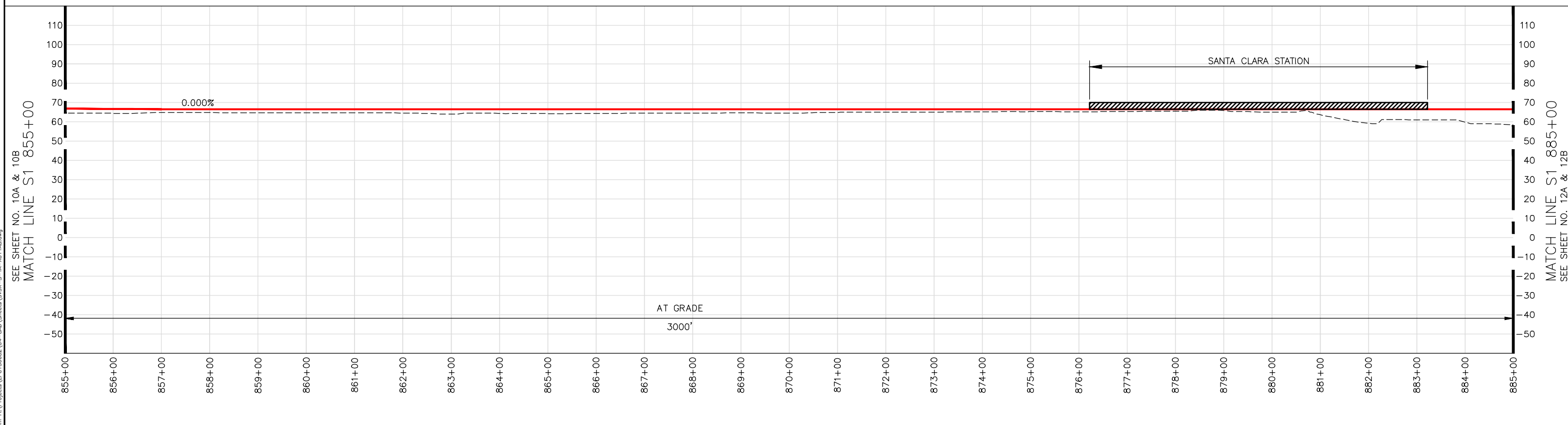
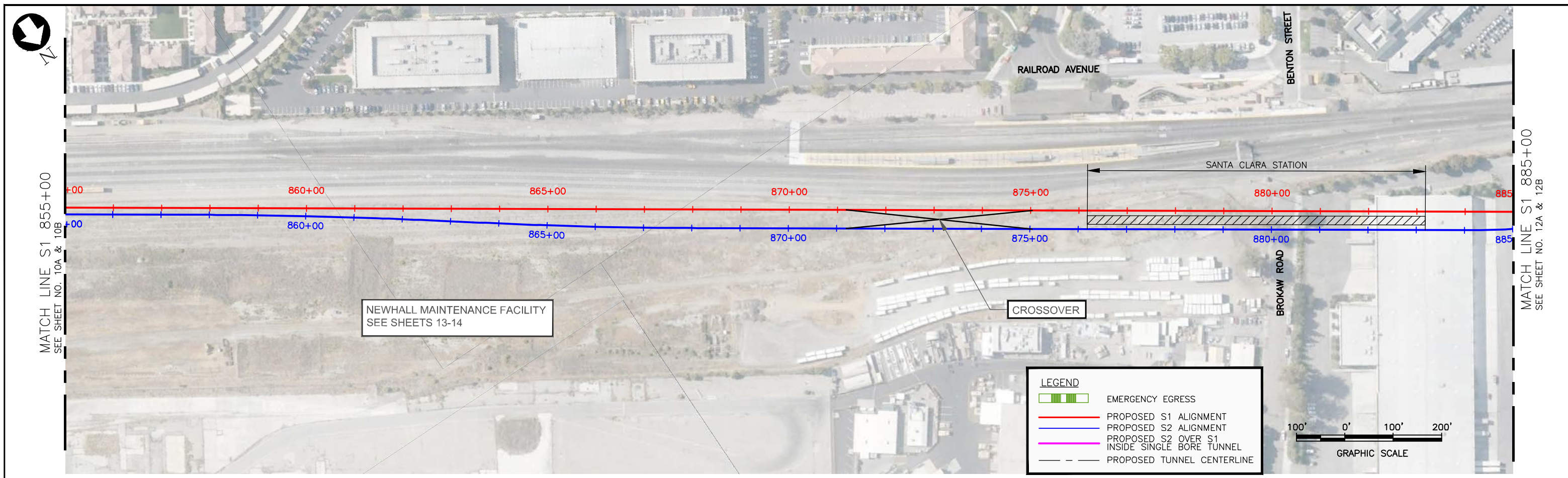
NOTE: DUE TO THE DIFFERENCE IN LENGTH OF THE ENTIRE PROJECT ALIGNMENT OF THE DIRIDON STATION NORTH OPTION VS. THE DIRIDON STATION SOUTH OPTION, THE STATION NUMBERING IS DIFFERENT BETWEEN THE TWO OPTIONS.



SINGLE BORE

- LEGEND**
- SINGLE BORE TUNNEL
 - S2 - UPPER TRACK
 - S1 - LOWER TRACK
 - EMERGENCY EGRESS

SILICON VALLEY SANTA CLARA EXTENSION
ALIGNMENT NORTH OF I-880
DIRIDON STATION NORTH OPTION
PLAN & PROFILE
SHEET 10C & 10D

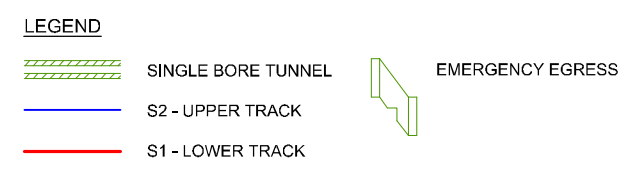


CONCEPTUAL PLANS

NOTE: DUE TO THE DIFFERENCE IN LENGTH OF THE ENTIRE PROJECT ALIGNMENT OF THE DIRIDON STATION NORTH OPTION VS. THE DIRIDON STATION SOUTH OPTION, THE STATION NUMBERING IS DIFFERENT BETWEEN THE TWO OPTIONS.



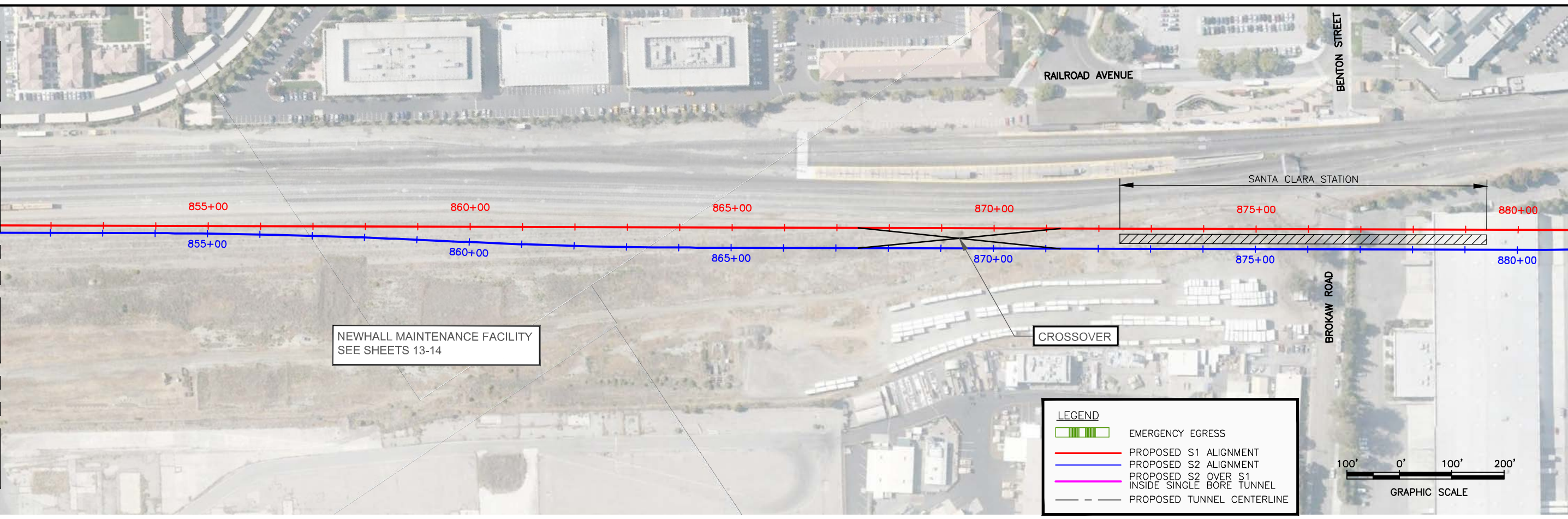
SINGLE BORE



SILICON VALLEY SANTA CLARA EXTENSION
ALIGNMENT SOUTH OF BROKAW ROAD
DIRIDON STATION SOUTH OPTION
PLAN & PROFILE
SHEET 11A & 11B



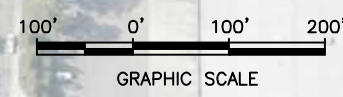
MATCH LINE S1 851+00
SEE SHEET NO. 10C & 10D



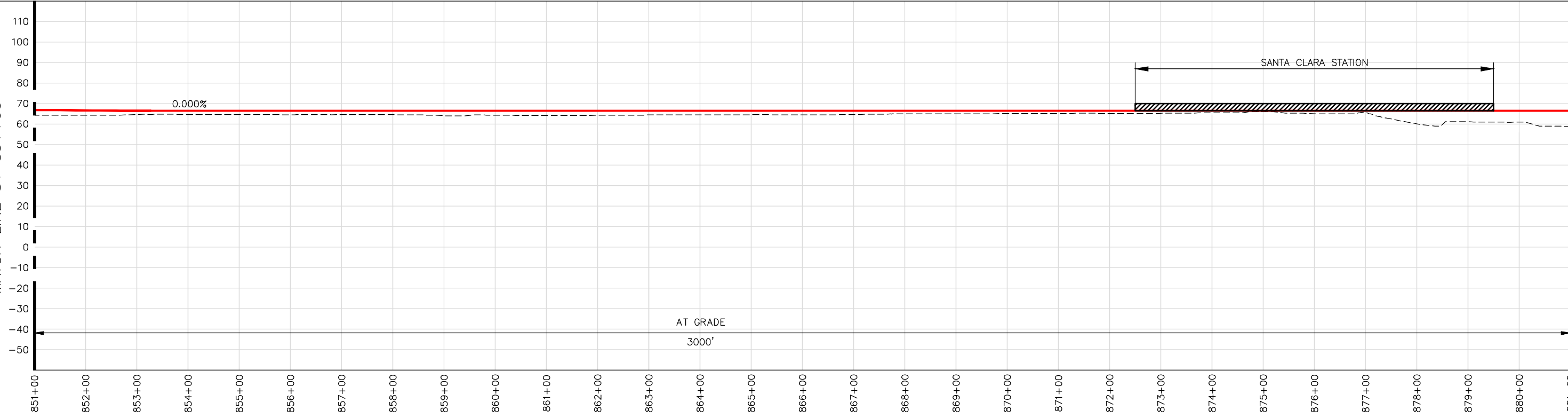
MATCH LINE S1 881+00
SEE SHEET NO. 12C & 12D

LEGEND

- EMERGENCY EGRESS
- PROPOSED S1 ALIGNMENT
- PROPOSED S2 ALIGNMENT
- PROPOSED S2 OVER S1 INSIDE SINGLE BORE TUNNEL
- PROPOSED TUNNEL CENTERLINE



SEE SHEET NO. 10C & 10D
MATCH LINE S1 851+00



MATCH LINE S1 881+00
SEE SHEET NO. 12C & 12D

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CONCEPTUAL PLANS

NOTE: DUE TO THE DIFFERENCE IN LENGTH OF THE ENTIRE PROJECT ALIGNMENT OF THE DIRIDON STATION NORTH OPTION VS. THE DIRIDON STATION SOUTH OPTION, THE STATION NUMBERING IS DIFFERENT BETWEEN THE TWO OPTIONS.

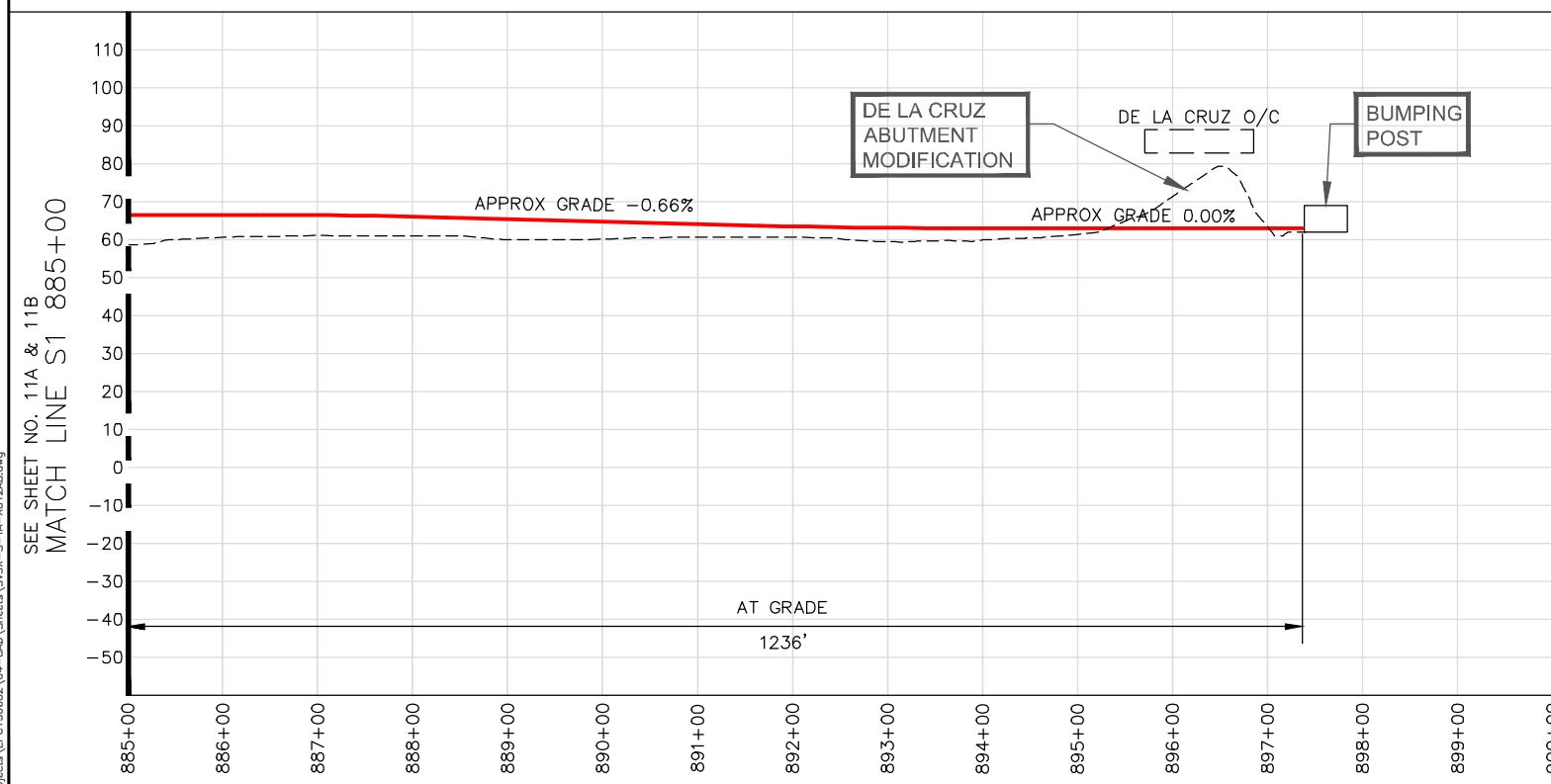
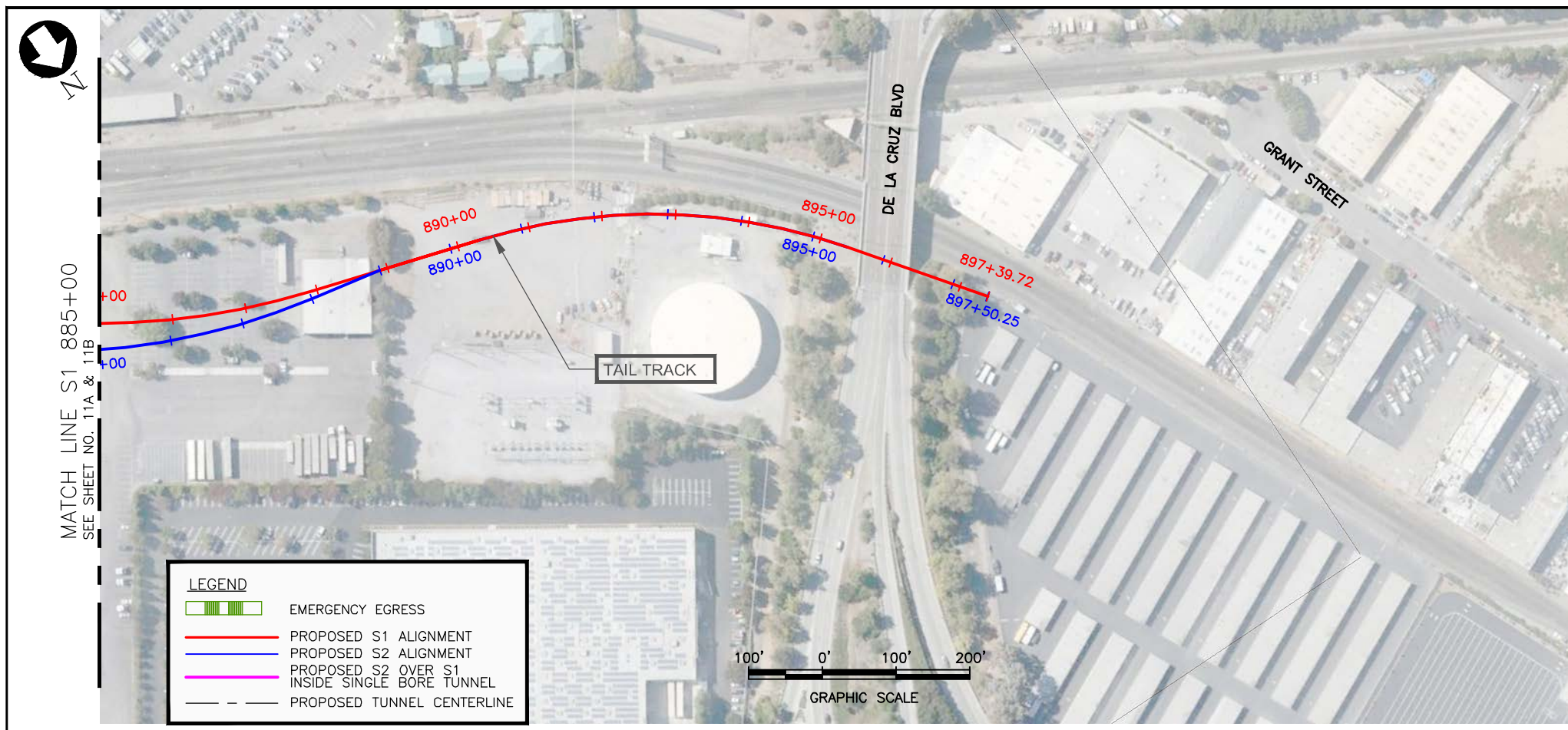


SINGLE BORE

LEGEND

- SINGLE BORE TUNNEL
- S2 - UPPER TRACK
- S1 - LOWER TRACK
- EMERGENCY EGRESS

**SILICON VALLEY SANTA CLARA EXTENSION
ALIGNMENT SOUTH OF BROKAW ROAD
DIRIDON STATION NORTH OPTION
PLAN & PROFILE
SHEET 11C & 11D**



CONCEPTUAL PLANS

NOTE: DUE TO THE DIFFERENCE IN LENGTH OF THE ENTIRE PROJECT ALIGNMENT OF THE DIRIDON STATION NORTH OPTION VS. THE DIRIDON STATION SOUTH OPTION, THE STATION NUMBERING IS DIFFERENT BETWEEN THE TWO OPTIONS.



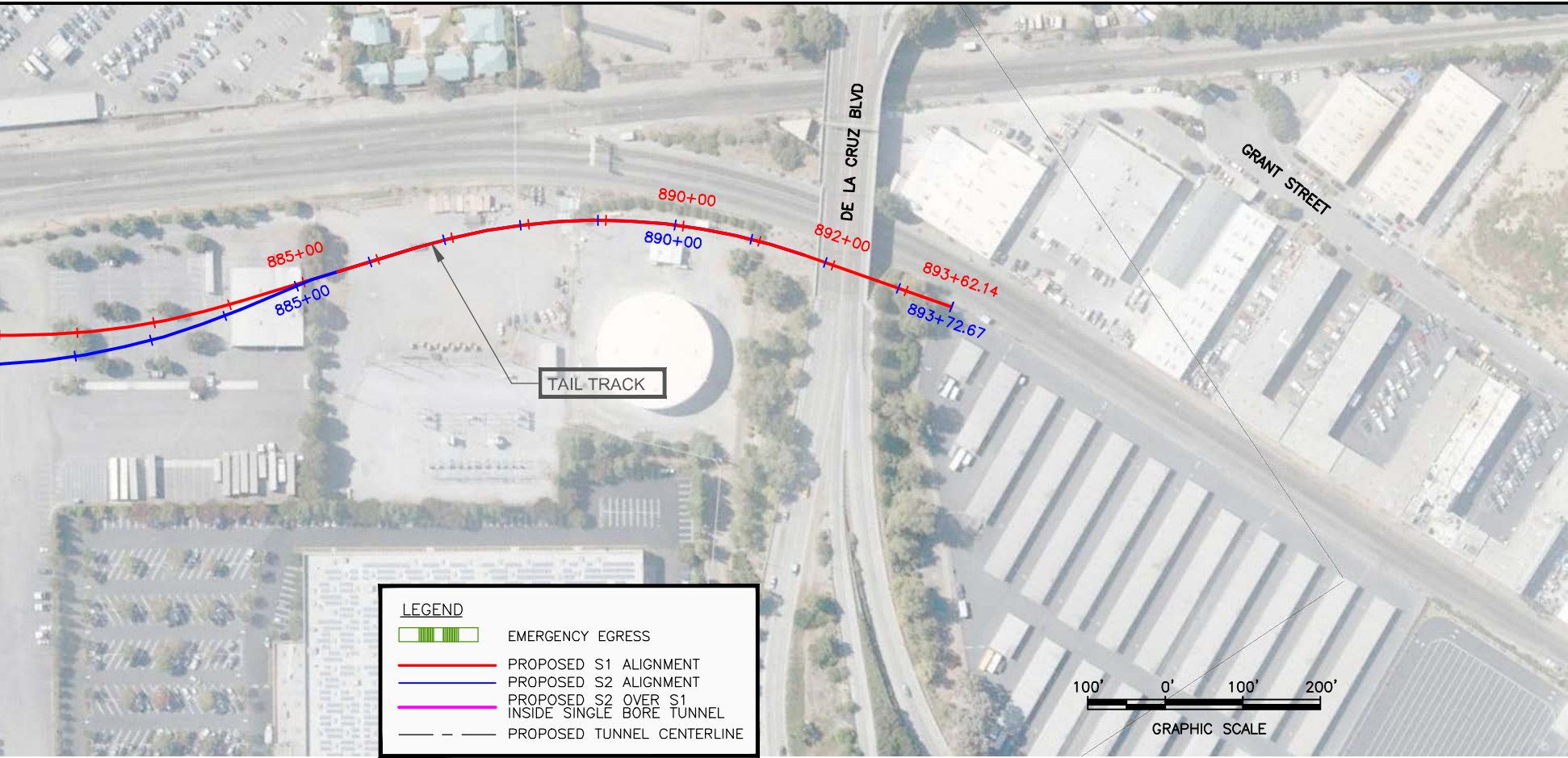
SINGLE BORE

SILICON VALLEY SANTA CLARA EXTENSION
ALIGNMENT NEAR DE LA CRUZ BOULEVARD
DIRIDON STATION SOUTH OPTION
PLAN & PROFILE
SHEET 12A & 12B

May 13, 2016 - 2:04pm H:\Projects\EFC150602\04-CAO\Sheeta\SVSX-S-TA-X012AB.dwg
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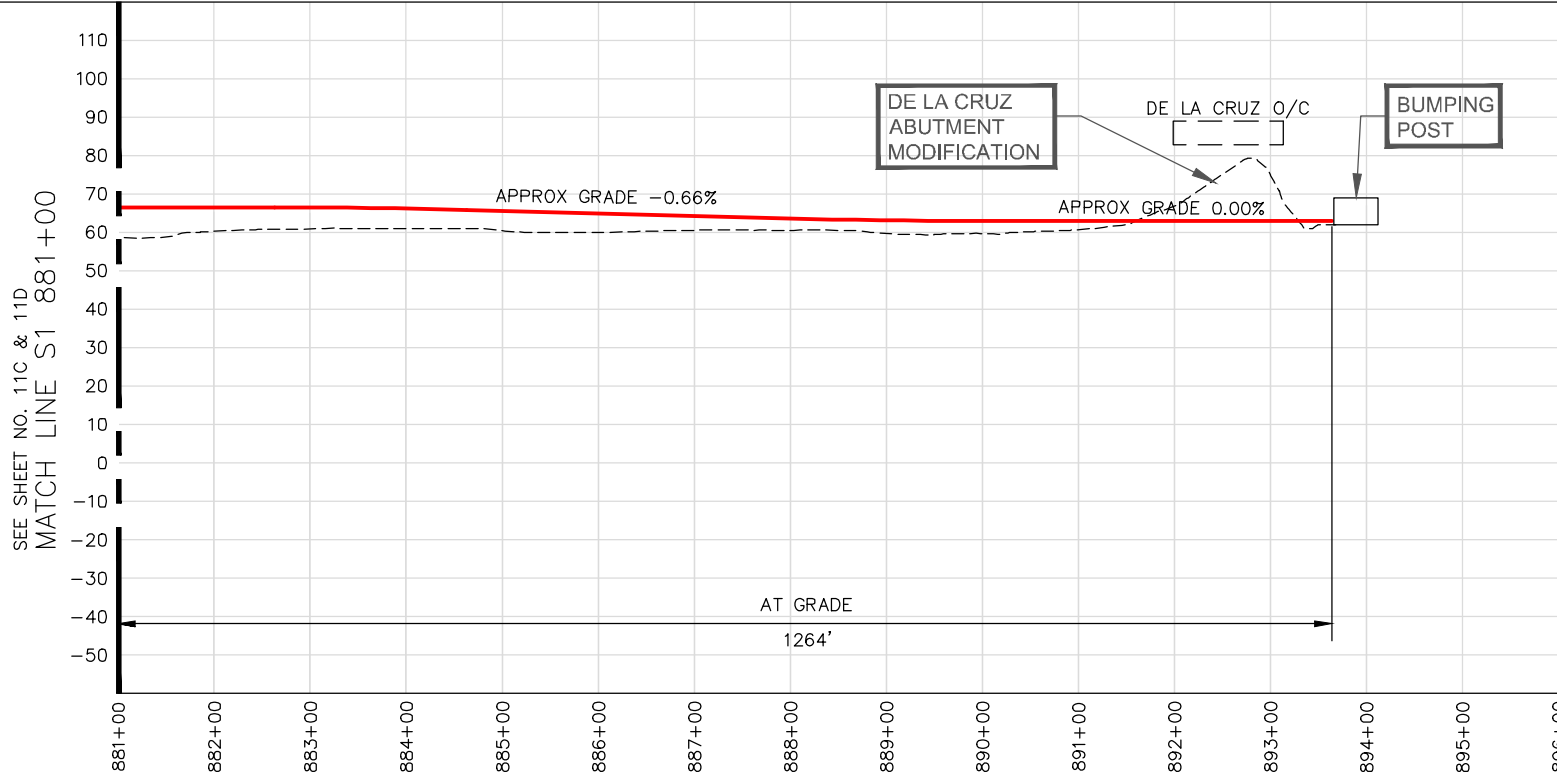


MATCH LINE S1 881+00
SEE SHEET NO. 11C & 11D



LEGEND

- EMERGENCY EGRESS
- PROPOSED S1 ALIGNMENT
- PROPOSED S2 ALIGNMENT
- PROPOSED S2 OVER S1 INSIDE SINGLE BORE TUNNEL
- PROPOSED TUNNEL CENTERLINE



CONCEPTUAL PLANS

NOTE: DUE TO THE DIFFERENCE IN LENGTH OF THE ENTIRE PROJECT ALIGNMENT OF THE DIRIDON STATION NORTH OPTION VS. THE DIRIDON STATION SOUTH OPTION, THE STATION NUMBERING IS DIFFERENT BETWEEN THE TWO OPTIONS.

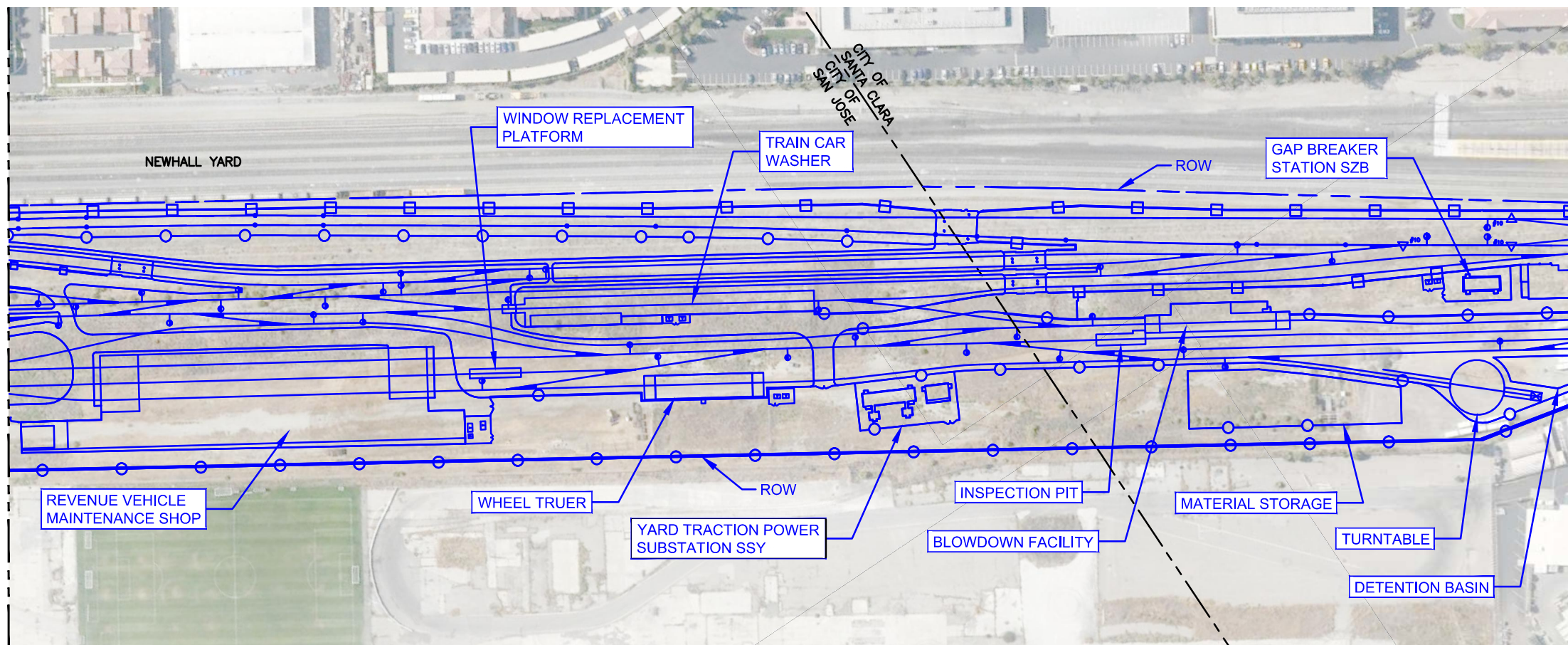
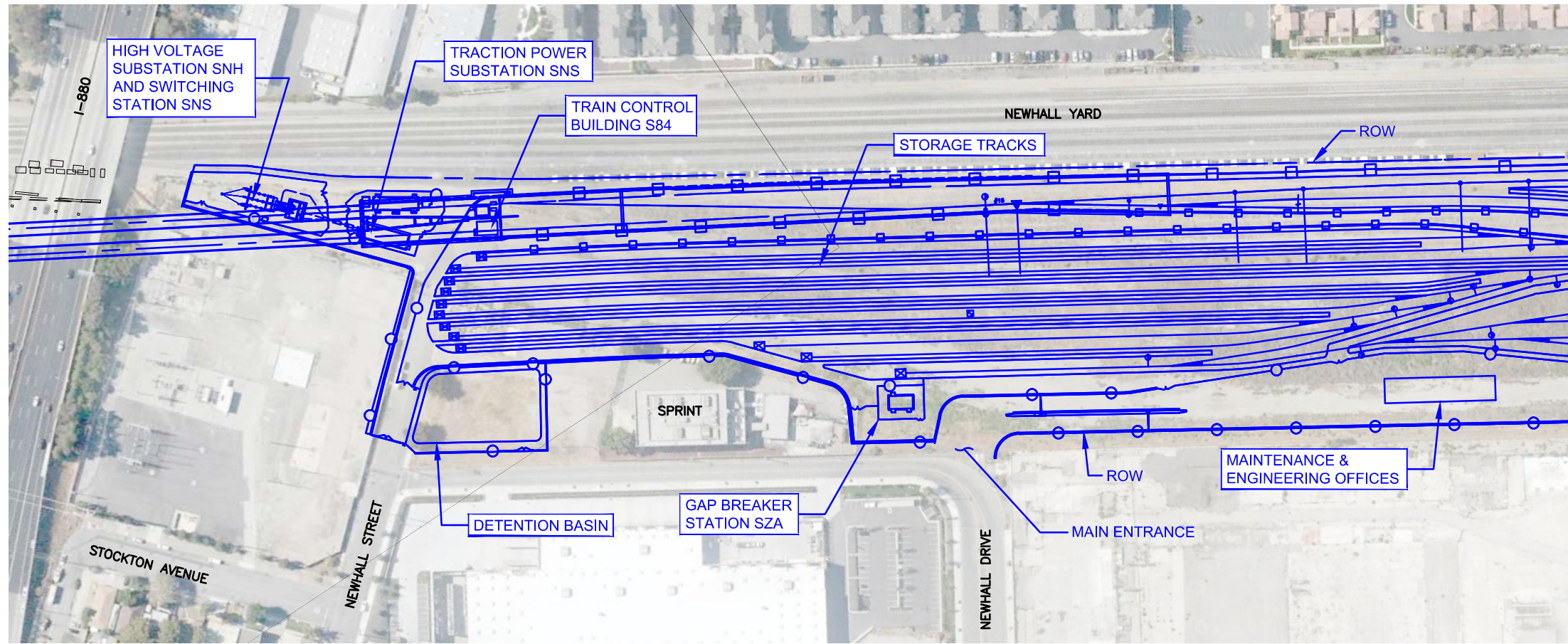


SINGLE BORE

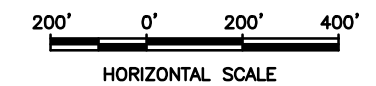
LEGEND

- SINGLE BORE TUNNEL
- S2 - UPPER TRACK
- S1 - LOWER TRACK
- EMERGENCY EGRESS

**SILICON VALLEY SANTA CLARA EXTENSION
ALIGNMENT NEAR DE LA CRUZ BOULEVARD
DIRIDON STATION NORTH OPTION**
PLAN & PROFILE
SHEET 12C & 12D



LEGEND	
	PROPOSED ALIGNMENT
	PROPOSED IMPROVEMENTS

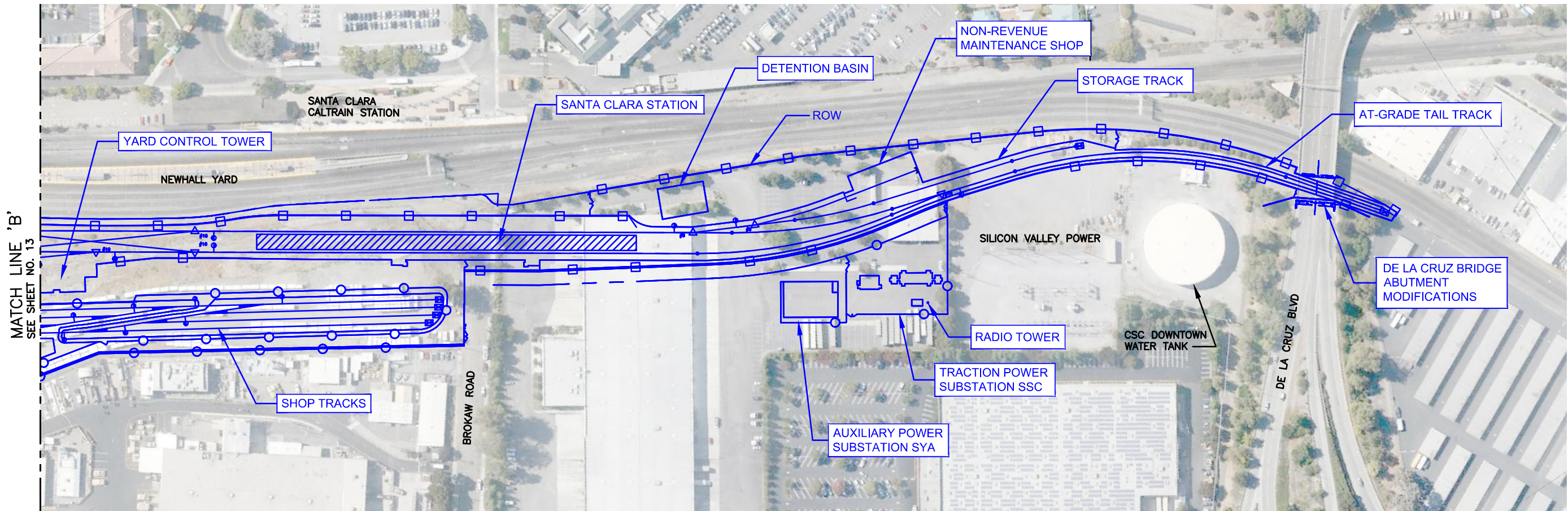


CONCEPTUAL PLANS

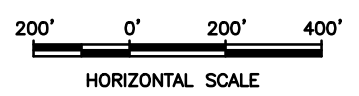
**SILICON VALLEY SANTA CLARA EXTENSION
NEWHALL MAINTENANCE FACILITY**

PLAN
SHEET 13

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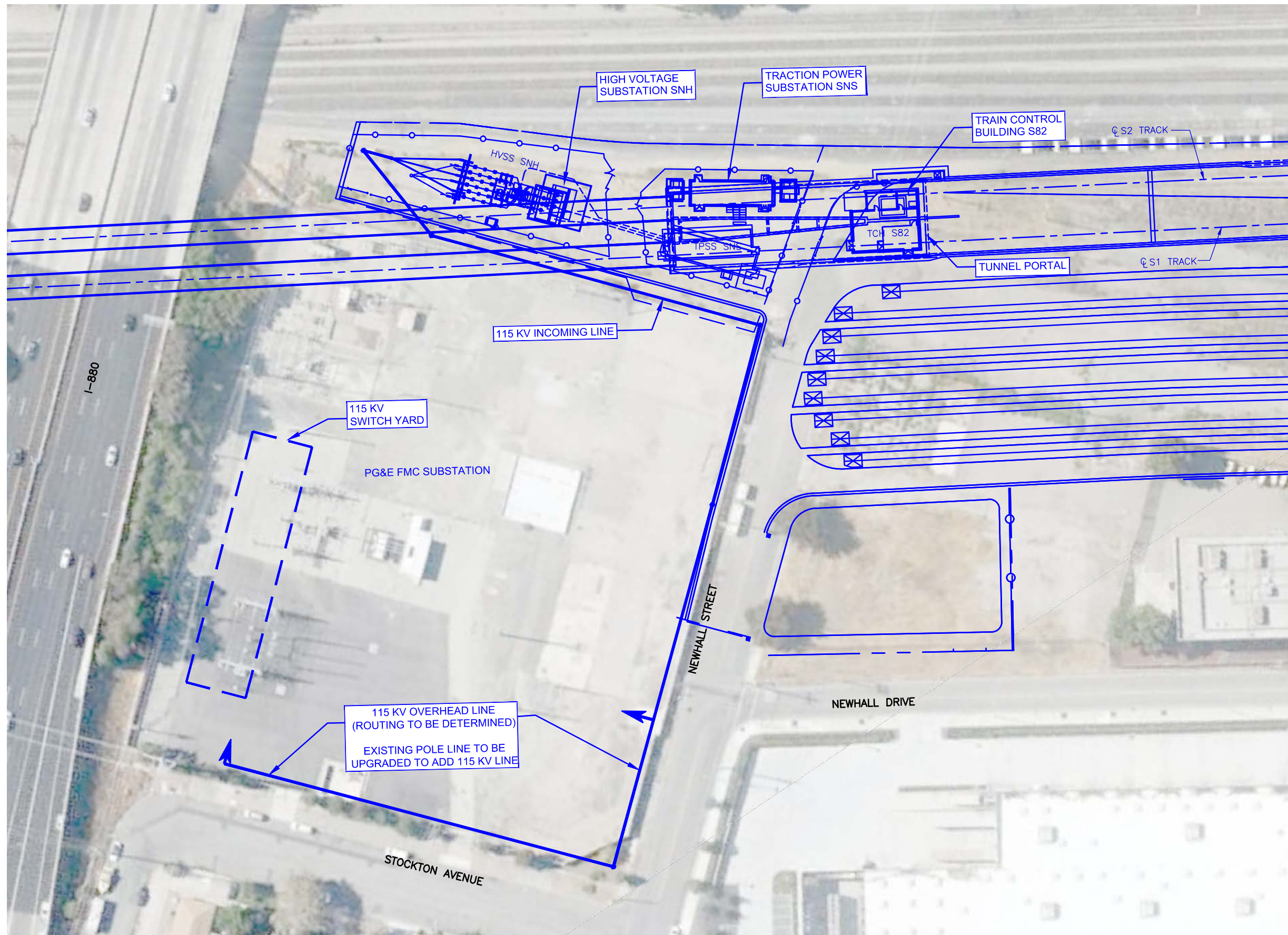
LEGEND	
	PROPOSED ALIGNMENT
	PROPOSED IMPROVEMENTS



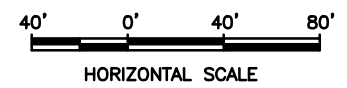
CONCEPTUAL PLANS

SILICON VALLEY SANTA CLARA EXTENSION
 NEWHALL MAINTENANCE FACILITY & TAIL TRACK
 PLAN
 SHEET 14

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LEGEND	
	PROPOSED ALIGNMENT
	PROPOSED IMPROVEMENTS

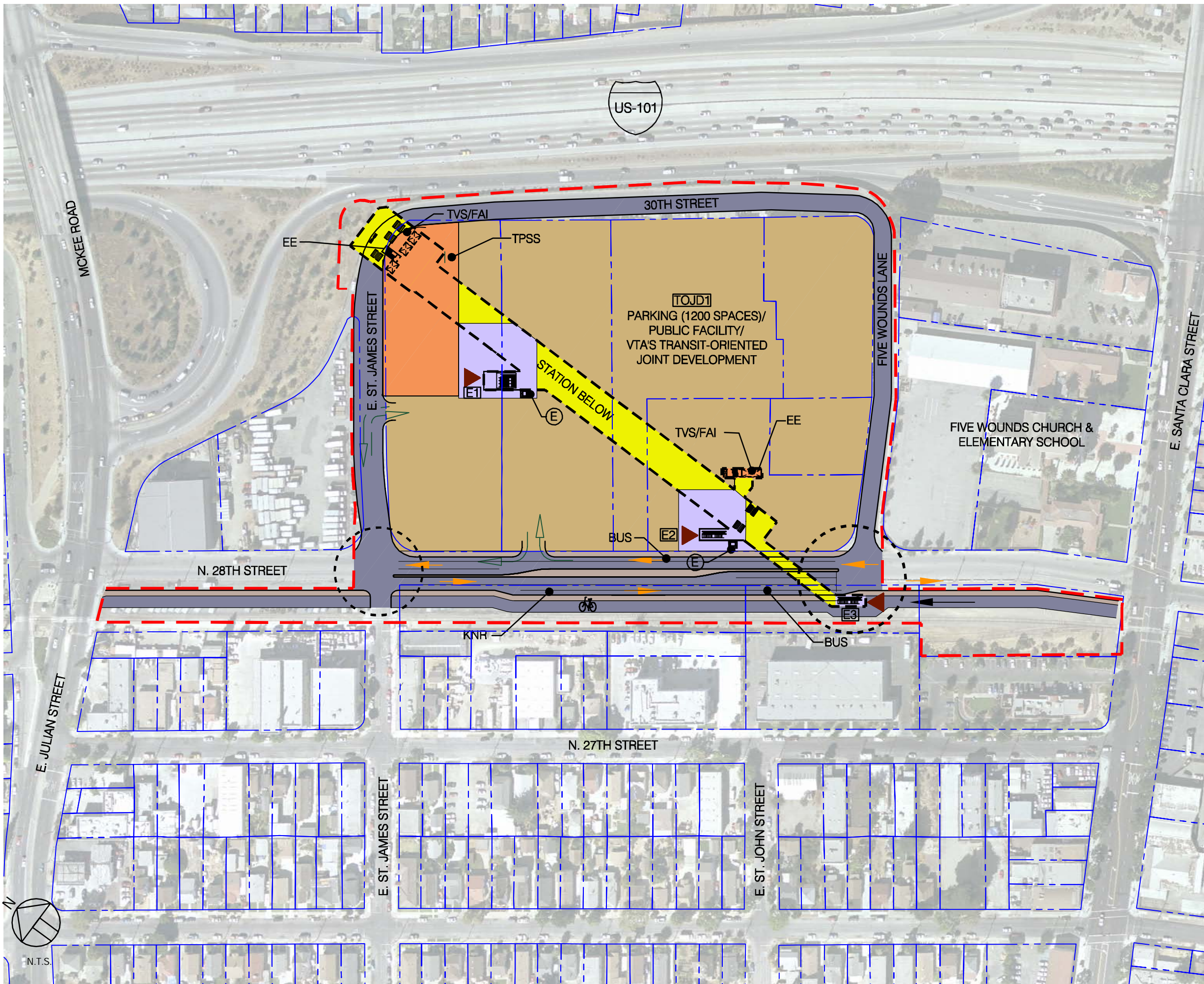


CONCEPTUAL PLANS




















**SILICON VALLEY SANTA CLARA EXTENSION
115-kV LINE AND SYSTEMS FACILITIES
NORTH OF I-880**
SITE PLAN
SHEET 15

Appendix C

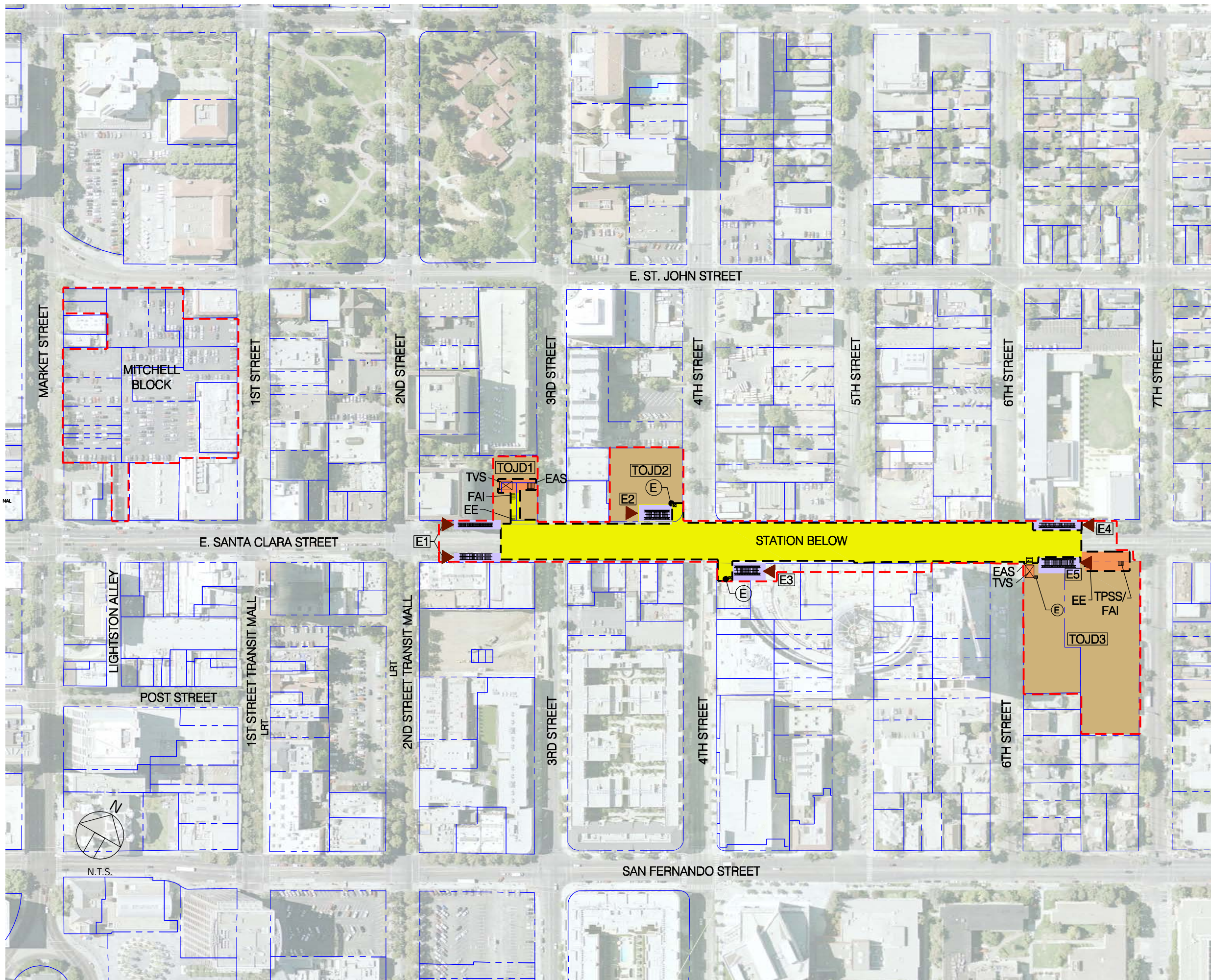
BART Station Site Plan Concepts
















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
-  CONSTRUCTION STAGING AREA
-  KEY PEDESTRIAN LINKAGE
-  BUS CIRCULATION
-  VEHICLE ACCESS
-  NEW SIGNALIZED INTERSECTION
-  BIKE FACILITY
-  ELEVATOR OPTIONS
-  EMERGENCY EXIT (PASSENGER; SERVICE ENTRY)
-  ENTRANCE OPTION #
-  FRESH AIR INTAKE
-  KISS-AND-RIDE
-  VTA'S TRANSIT-ORIENTED JOINT DEVELOPMENT LOCATION #
-  TRACTION POWER SUBSTATION
-  TUNNEL VENTILATION SHAFT

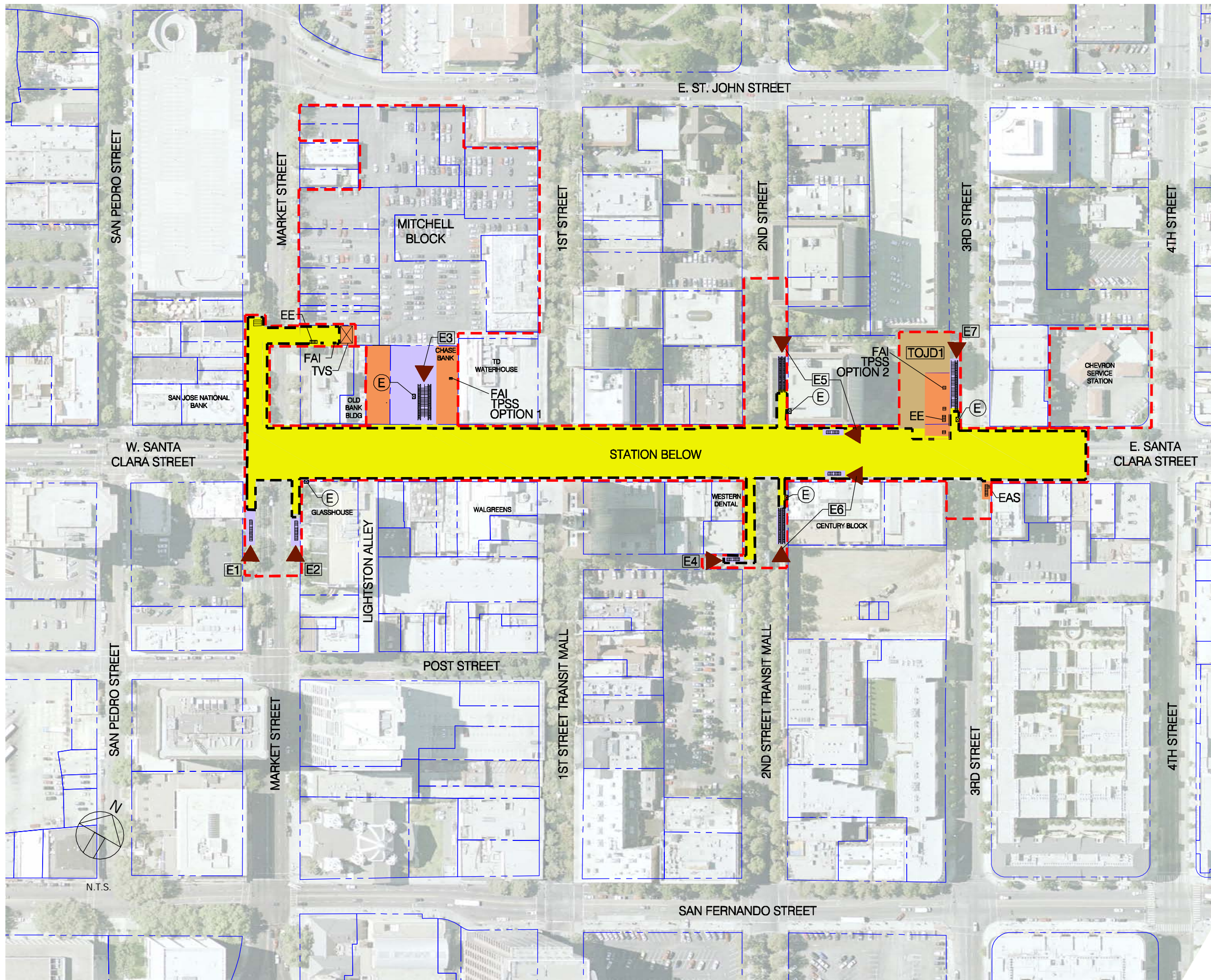
DRAFT CONCEPTUAL PLANS
ALUM ROCK/28TH STREET STATION
 SINGLE & TWIN BORE TUNNEL
 10/26/16
















LEGEND

-  STATION ENTRANCE OPTIONS
-  UNDERGROUND STATION & SYSTEM FACILITIES
-  ABOVE AND BELOW GROUND SYSTEMS FACILITIES
-  PUBLIC FACILITY/ VTA'S TRANSIT-ORIENTED JOINT DEVELOPMENT
-  CONSTRUCTION STAGING AREA
-  ELEVATOR OPTIONS
-  EMERGENCY EXIT (PASSENGER; SERVICE ENTRY)
-  ENTRANCE OPTION #
-  EQUIPMENT ACCESS SHAFT
-  FRESH AIR INTAKE
-  VTA'S TRANSIT-ORIENTED JOINT DEVELOPMENT LOCATION #
-  TRACTION POWER SUBSTATION
-  TUNNEL VENTILATION SHAFT

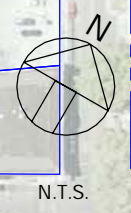
DRAFT CONCEPTUAL PLANS
DOWNTOWN SAN JOSE STATION
EAST OPTION
 SINGLE & TWIN BORE TUNNEL
 10/26/2016

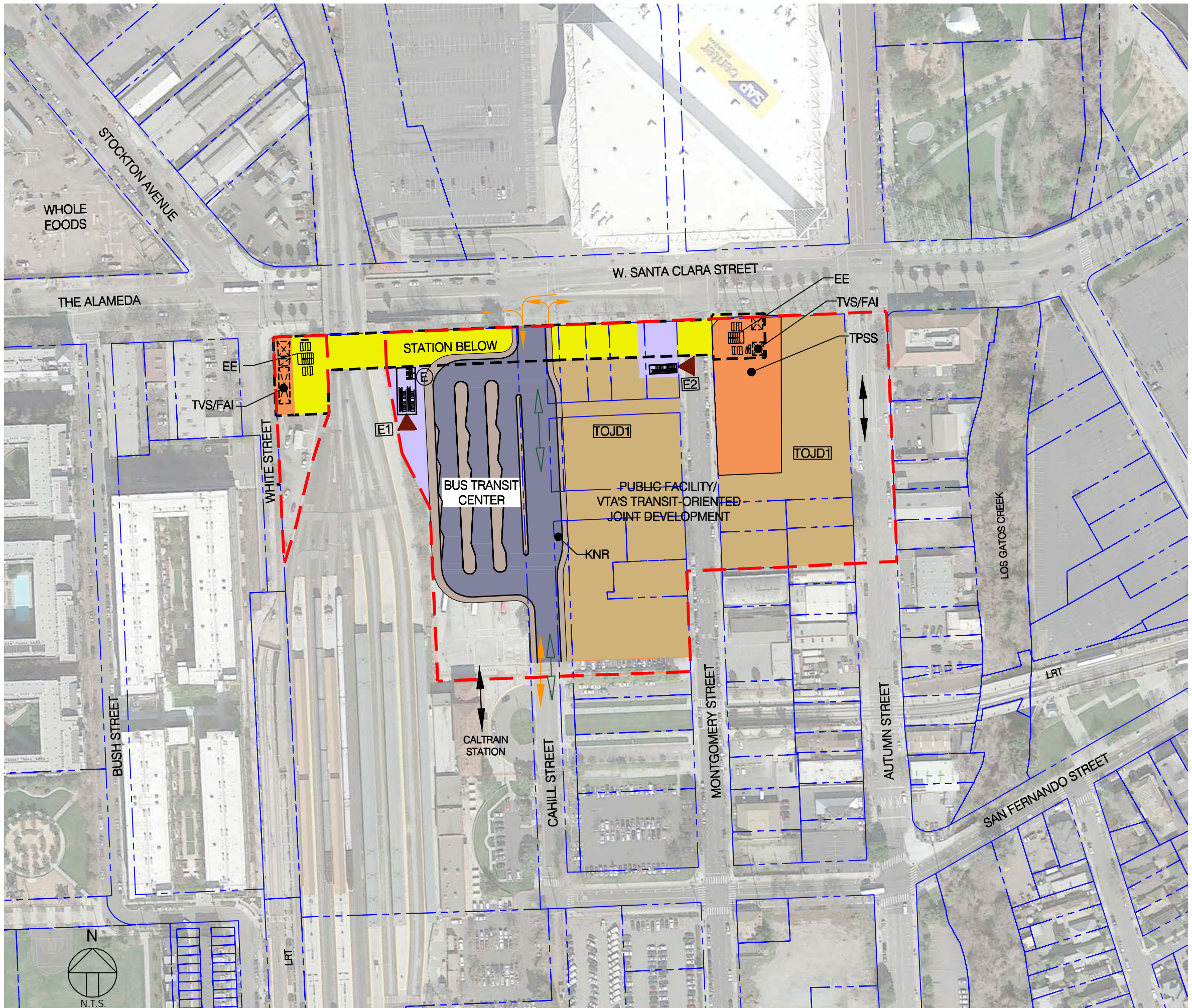


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










-  STATION ENTRANCE OPTIONS
-  UNDERGROUND STATION & SYSTEM FACILITIES
-  ABOVE AND BELOW GROUND SYSTEMS FACILITIES
-  PUBLIC FACILITY/ VTA'S TRANSIT-ORIENTED JOINT DEVELOPMENT
-  CONSTRUCTION STAGING AREA
-  ELEVATOR OPTIONS
-  EMERGENCY EXIT (PASSENGER; SERVICE ENTRY)
-  ENTRANCE OPTION #
-  FRESH AIR INTAKE
-  VTA'S TRANSIT-ORIENTED JOINT DEVELOPMENT LOCATION #
-  TRACTION POWER SUBSTATION
-  TUNNEL VENTILATION SHAFT
-  EMERGENCY ACCESS SHAFT

**DRAFT CONCEPTUAL PLANS
DOWNTOWN SAN JOSE STATION
WEST OPTION
SINGLE & TWIN BORE TUNNEL
10/26/2016**



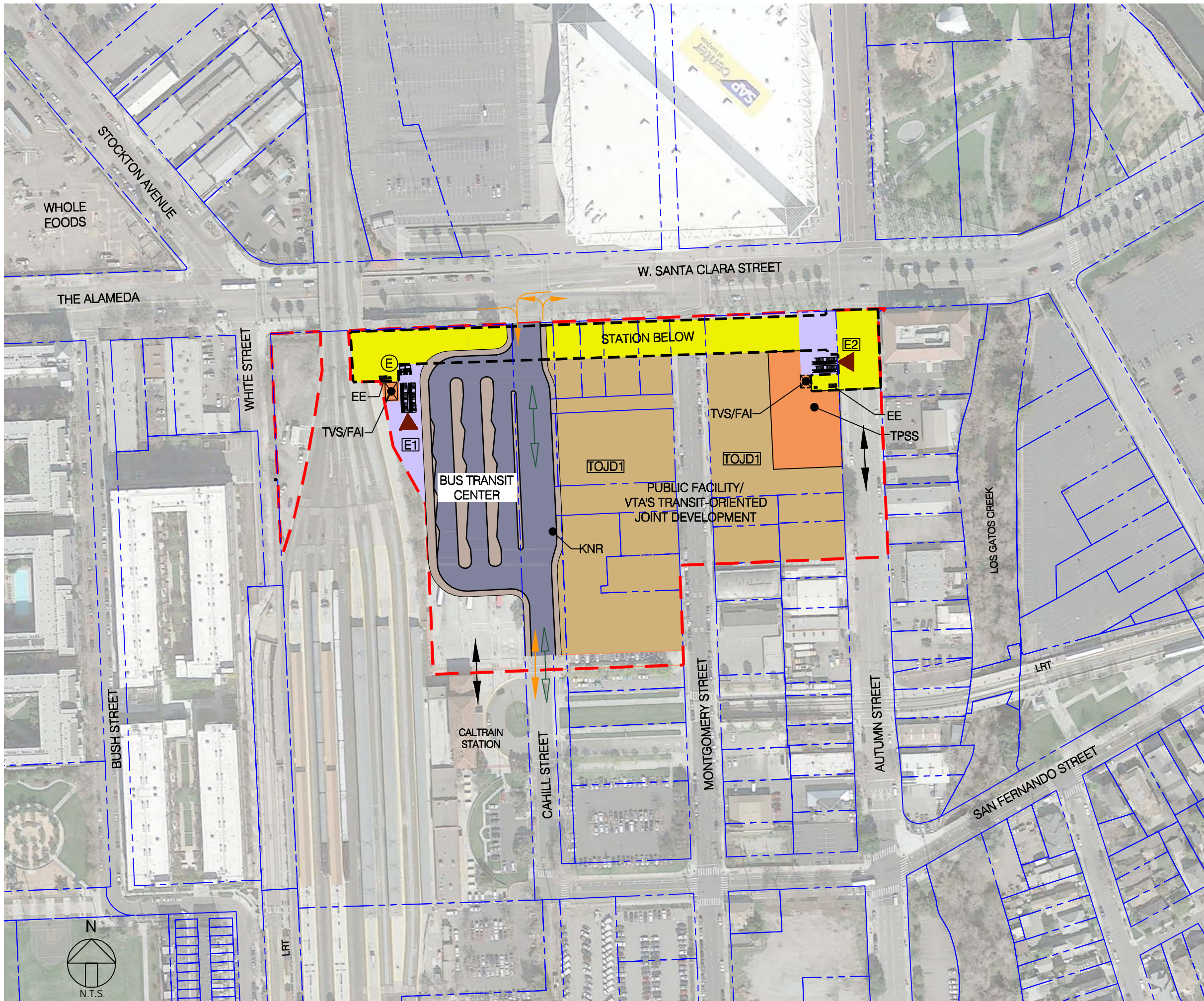


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










-  STATION ENTRANCE OPTIONS
-  UNDERGROUND STATION & SYSTEM FACILITIES
-  ABOVE AND BELOW GROUND SYSTEMS FACILITIES
-  PUBLIC FACILITY/ VTA'S TRANSIT-ORIENTED JOINT DEVELOPMENT
-  ROADWAY MODIFICATIONS
-  CONSTRUCTION STAGING AREA
-  KEY PEDESTRIAN LINKAGE
-  BUS CIRCULATION
-  VEHICLE ACCESS
-  ELEVATOR OPTIONS
-  EMERGENCY EXIT (PASSENGER; SERVICE ENTRY)
-  ENTRANCE OPTION #
-  FRESH AIR INTAKE
-  KISS-AND-RIDE
-  VTA'S TRANSIT-ORIENTED JOINT DEVELOPMENT LOCATION #
-  TRACTION POWER SUBSTATION
-  TUNNEL VENTILATION SHAFT

DRAFT CONCEPTUAL PLANS
DIRIDON STATION
NORTH OPTION
SINGLE BORE TUNNEL
 10/26/2016

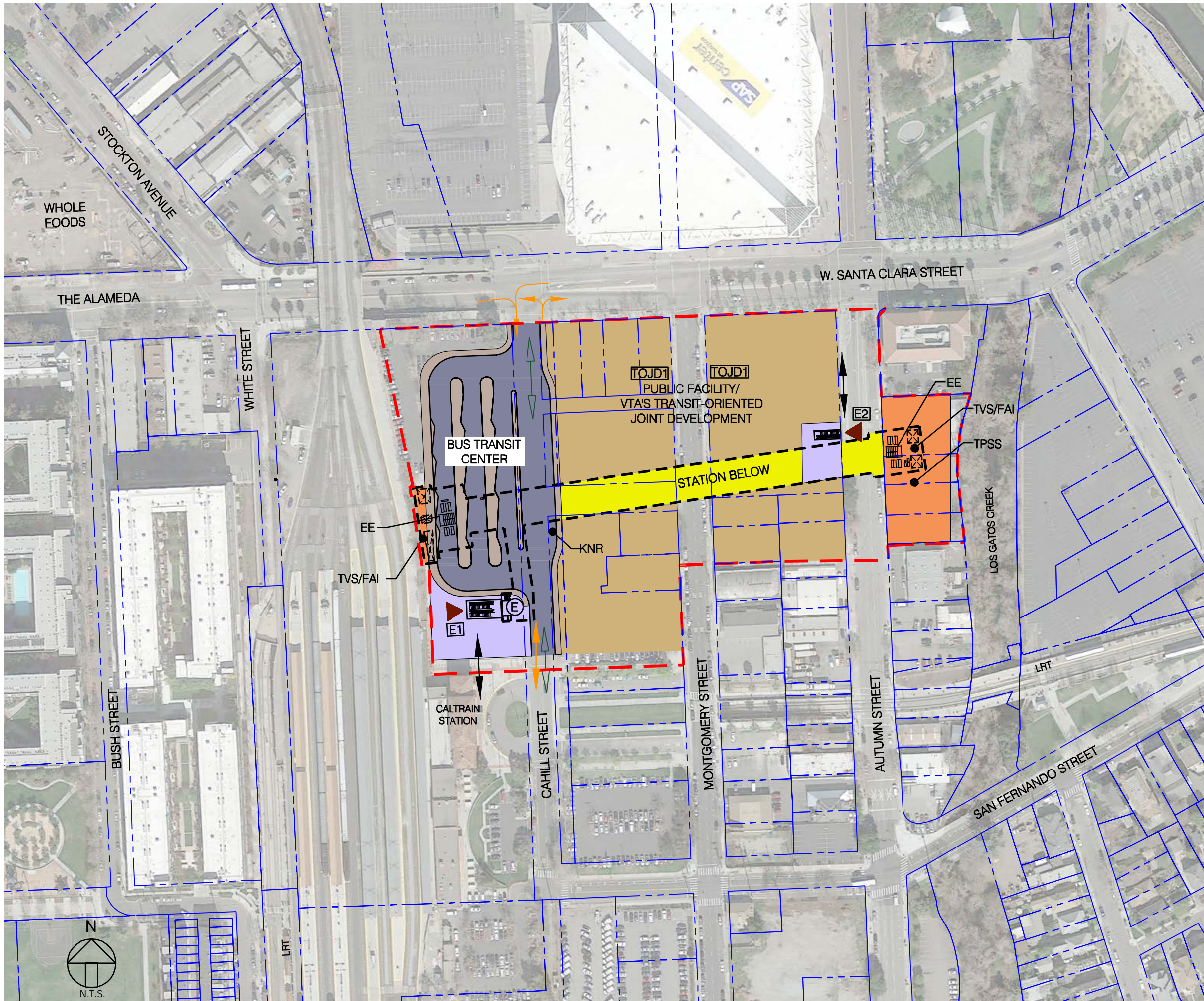





















LEGEND

-  STATION ENTRANCE OPTIONS
-  UNDERGROUND STATION & SYSTEM FACILITIES
-  ABOVE AND BELOW GROUND SYSTEMS FACILITIES
-  PUBLIC FACILITY/ VTA'S TRANSIT-ORIENTED JOINT DEVELOPMENT
-  ROADWAY MODIFICATIONS
-  CONSTRUCTION STAGING AREA
-  KEY PEDESTRIAN LINKAGE
-  BUS CIRCULATION
-  VEHICLE ACCESS
-  ELEVATOR OPTIONS
-  EMERGENCY EXIT (PASSENGER; SERVICE ENTRY)
-  ENTRANCE OPTION #
-  FRESH AIR INTAKE
-  KISS-AND-RIDE
-  VTA'S TRANSIT-ORIENTED JOINT DEVELOPMENT LOCATION #
-  TRACTION POWER SUBSTATION
-  TUNNEL VENTILATION SHAFT

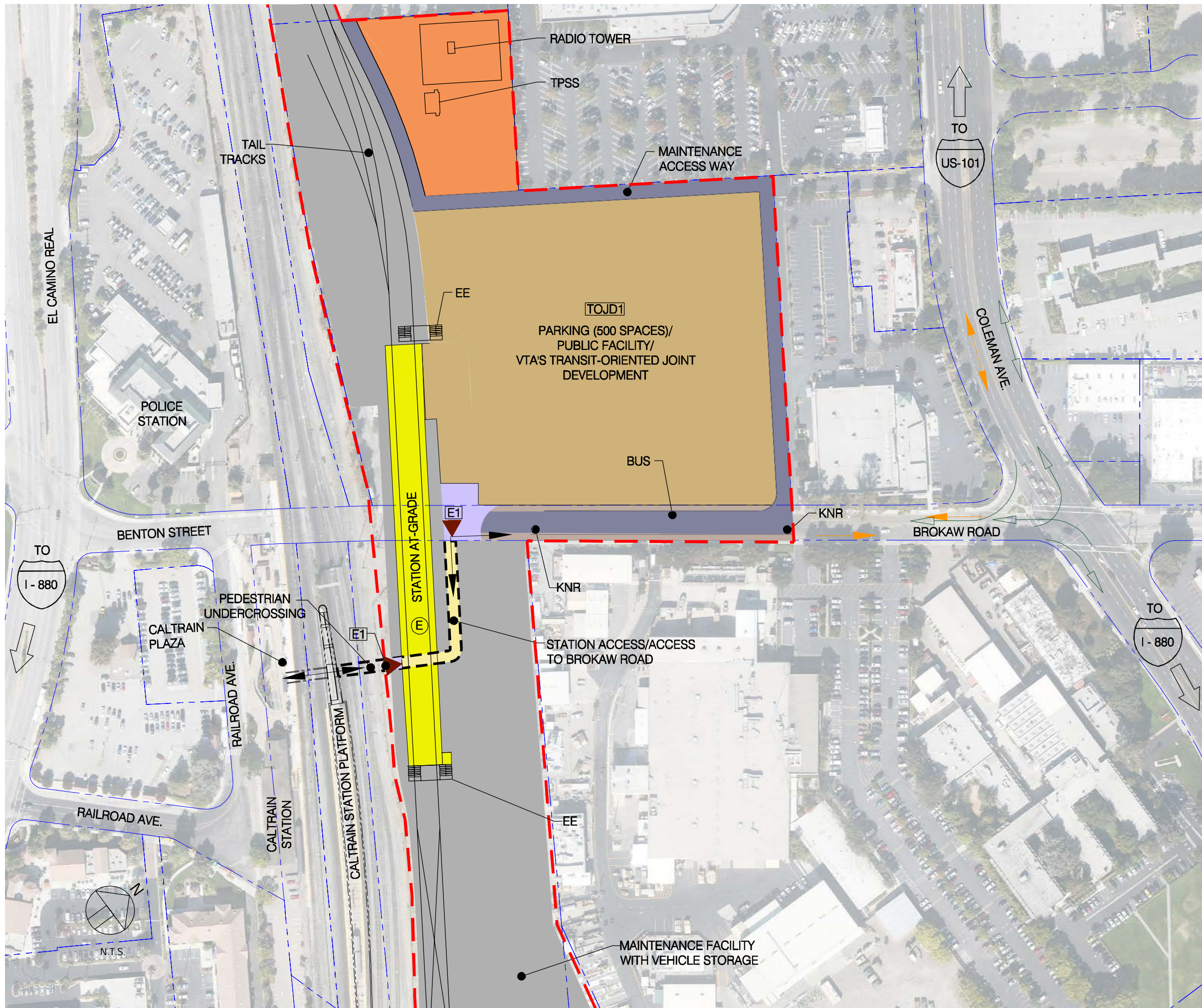
DRAFT CONCEPTUAL PLANS
DIRIDON STATION
 NORTH OPTION
 TWIN BORE TUNNEL
 10/26/2016










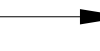








LEGEND

-  STATION ENTRANCE OPTIONS
-  UNDERGROUND STATION & SYSTEM FACILITIES
-  ABOVE AND BELOW GROUND SYSTEMS FACILITIES
-  PUBLIC FACILITY/ VTA'S TRANSIT-ORIENTED JOINT DEVELOPMENT
-  ROADWAY MODIFICATIONS
-  CONSTRUCTION STAGING AREA
-  KEY PEDESTRIAN LINKAGE
-  BUS CIRCULATION
-  VEHICLE ACCESS
-  ELEVATOR OPTIONS
-  EMERGENCY EXIT (PASSENGER; SERVICE ENTRY)
-  ENTRANCE OPTION #
-  FRESH AIR INTAKE
-  KISS-AND-RIDE
-  VTA'S TRANSIT-ORIENTED JOINT DEVELOPMENT LOCATION #
-  TRACTION POWER SUBSTATION
-  TUNNEL VENTILATION SHAFT

DRAFT CONCEPTUAL PLANS
DIRIDON STATION
SOUTH OPTION
 SINGLE & TWIN BORE TUNNEL
 10/26/2016



LEGEND

-  STATION ENTRANCE OPTIONS
-  AT GRADE STATION
-  ABOVE GROUND SYSTEMS FACILITIES
-  PARKING/PUBLIC FACILITY/ VTA'S TRANSIT-ORIENTED JOINT DEVELOPMENT
-  MAINTENANCE FACILITY WITH VEHICLE STORAGE / TAIL TRACKS
-  ROADWAY MODIFICATIONS
-  CONSTRUCTION STAGING AREA
-  KEY PEDESTRIAN LINKAGE
-  BUS CIRCULATION
-  VEHICLE ACCESS
-  (E) ELEVATOR OPTIONS
-  EE EMERGENCY EXIT
-  [E1] ENTRANCE OPTION #
-  KNR KISS-AND-RIDE
-  [TOJD1] VTA'S TRANSIT-ORIENTED JOINT DEVELOPMENT LOCATION #
-  TPSS TRACTION POWER SUBSTATION

**DRAFT CONCEPTUAL PLANS
SANTA CLARA STATION
SINGLE & TWIN BORE TUNNEL**

9/28/2016

Appendix D

Cultural Resources Area of Potential Effects Maps

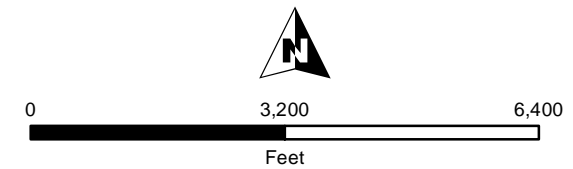
*D.1 – Architectural/Built Resources Area of Potential Effects
Map*

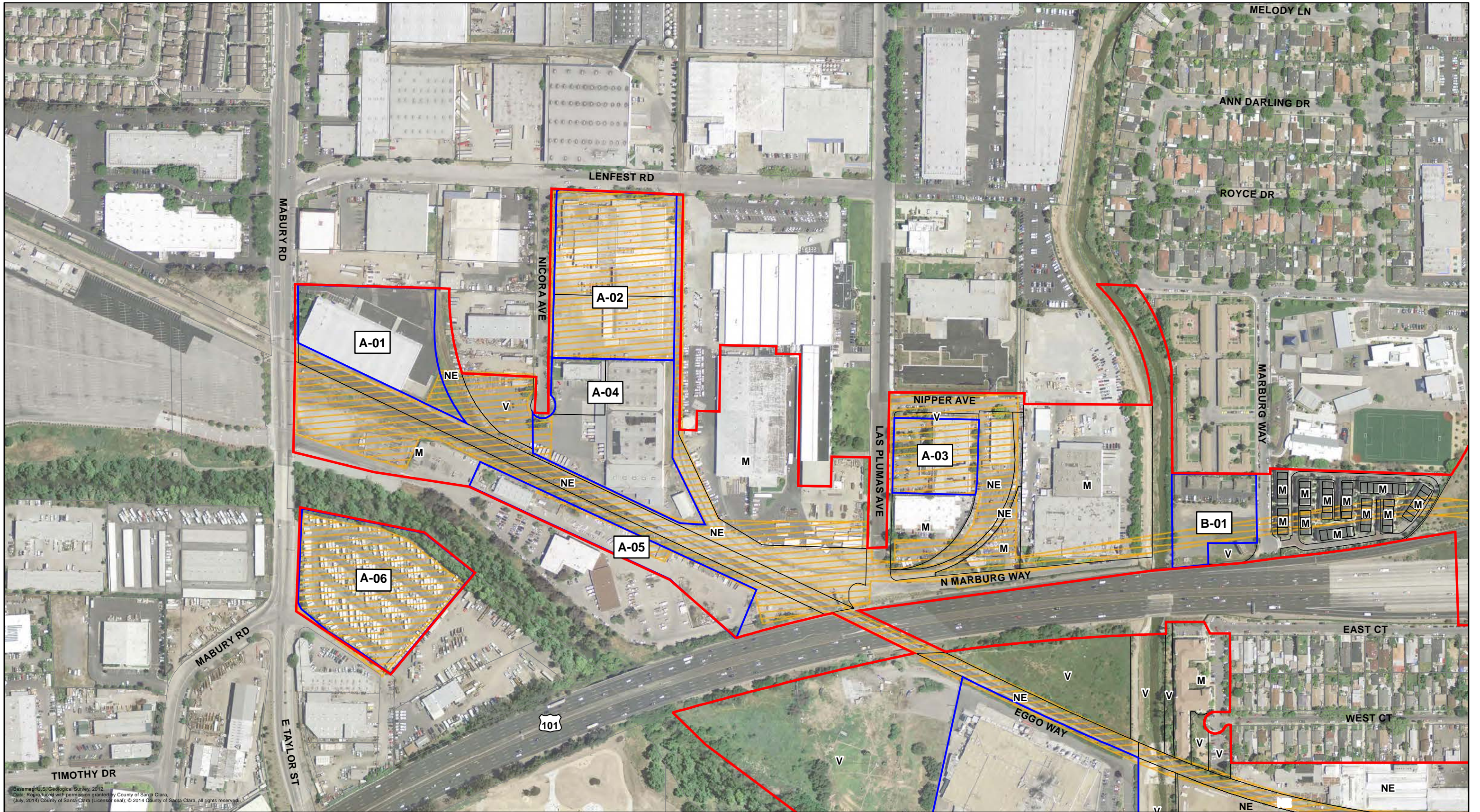


Basemap: U.S. Geological Survey, 2012.
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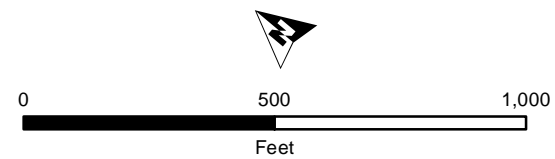
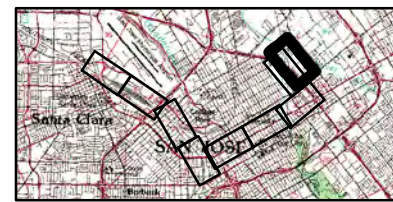
Figure D.1-INDEX. Architectural APE

 Architectural APE  Map Sheet





Base map: U.S. Geological Survey, 2012.
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- Architectural APE
- Historic District
- Project Footprint

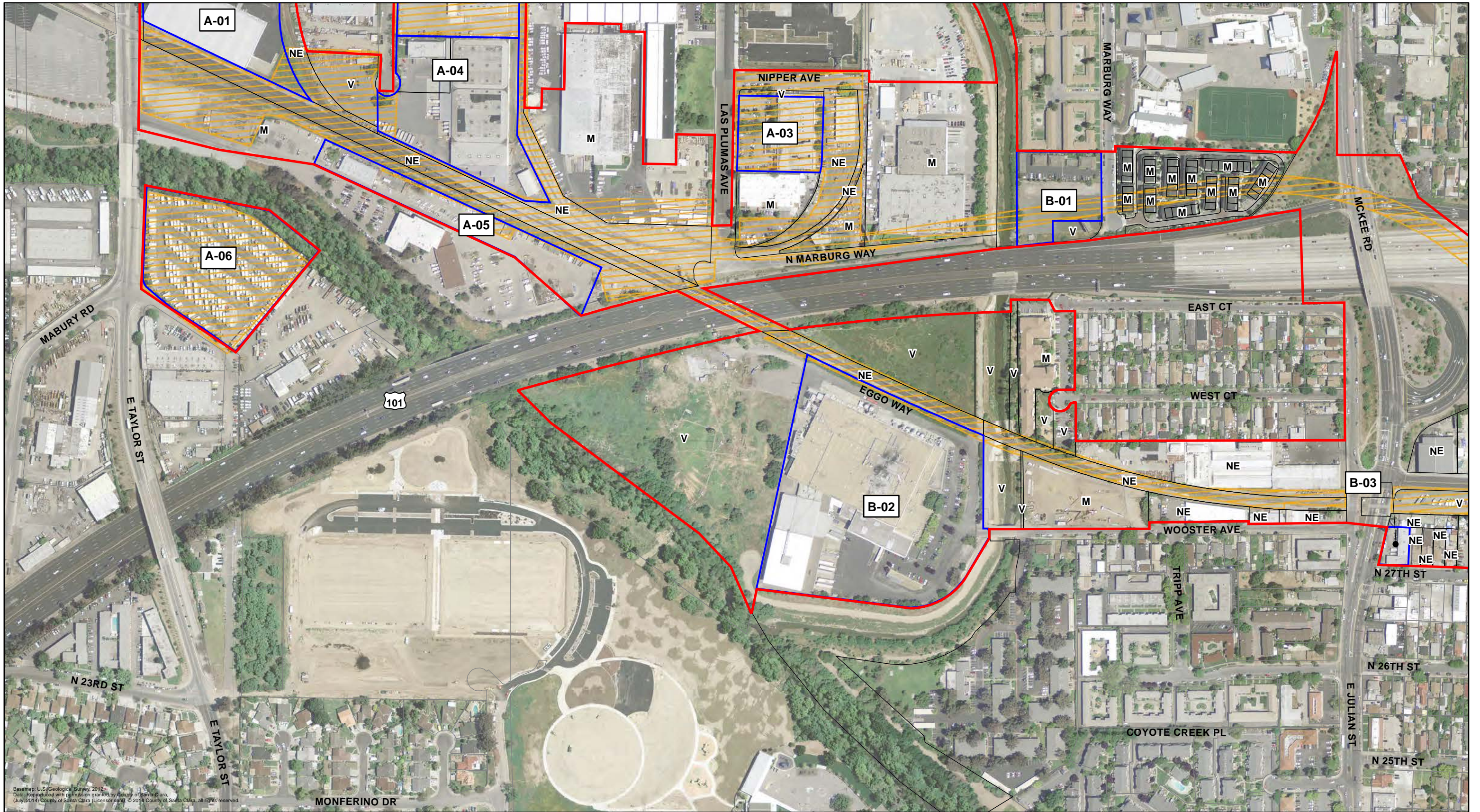
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- A-01 Map Reference Number (Eligible) Previously determined eligible for or listed in the NRHP and CRHR per 2003 HRER

- A-01 Map Reference Number (CEQA only) Historical Resource for the purposes of CEQA only
- A-01 Map Reference Number (Not Eligible) Not eligible for listing in NRHP or CRHR as per current survey

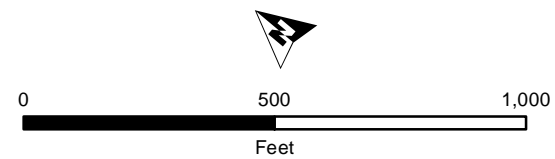
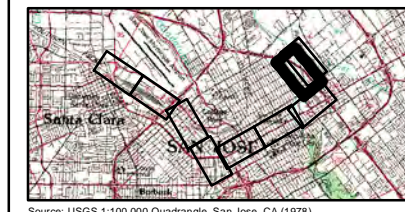
Figure D.1-A. Architectural APE

V = Vacant
 M = Modern (built after 1975)
 NE = Previously Determined Not Eligible with SHPO Concurrence (2003)

Source: USGS 1:100,000 Quadrangle, San Jose, CA (1978).



Basemap: U.S. Geological Survey, 2012.
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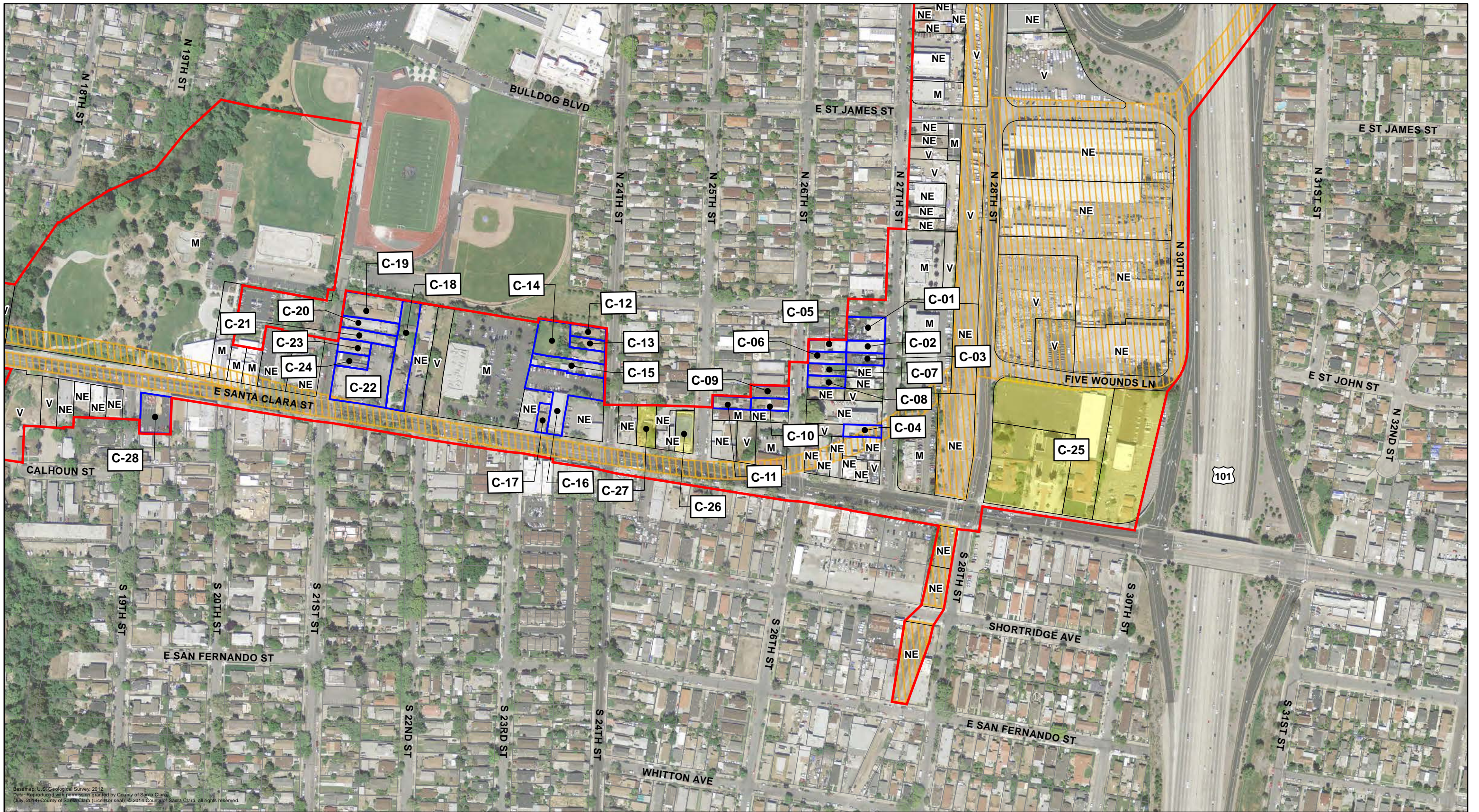
- Architectural APE
- Historic District
- Project Footprint

- B-01 Map Reference Number (Eligible)
Eligible for or listed in the NRHP and CRHR as per current survey
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Previously determined eligible for or listed in the NRHP and CRHR per 2003 HRER

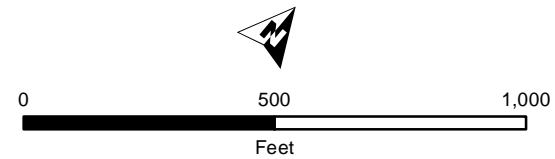
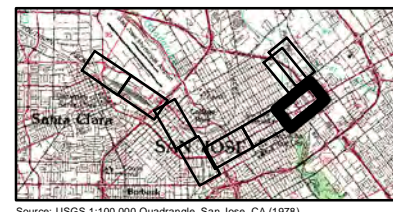
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Historical Resource for the purposes of CEQA only
- B-01 Map Reference Number (Not Eligible)
Not eligible for listing in NRHP or CRHR as per current survey

Figure D.1-B. Architectural APE

V = Vacant
 M = Modern (built after 1975)
 NE = Previously Determined Not Eligible with SHPO Concurrence (2003)



Base map: U.S. Geological Survey, 2012.
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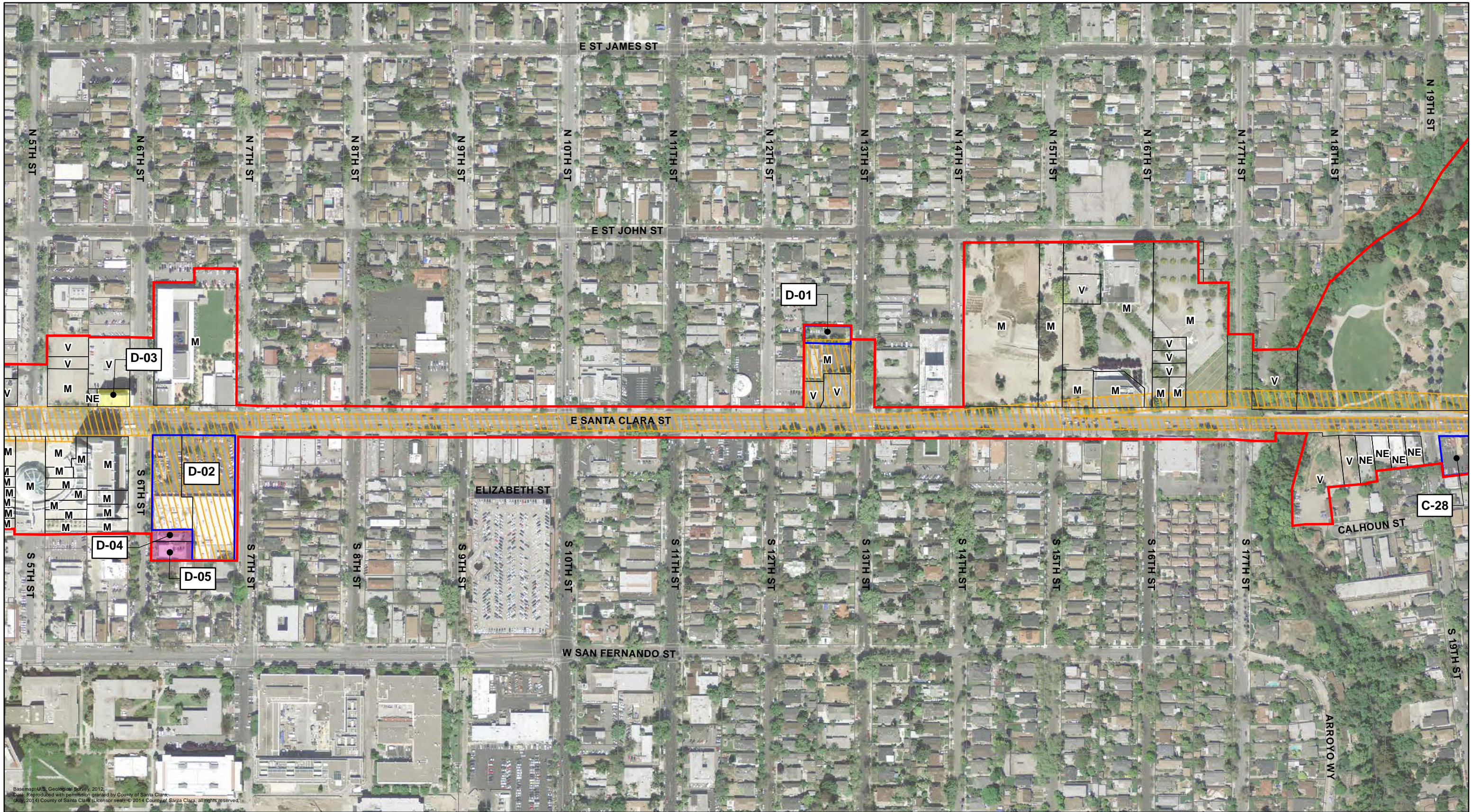
- Architectural APE
- Historic District
- Project Footprint

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Previously determined eligible for or listed in the NRHP and CRHR per 2003 HRER

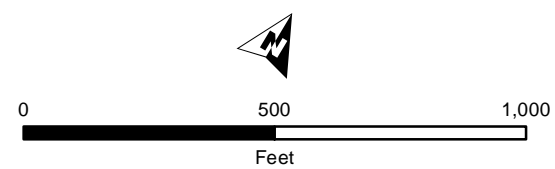
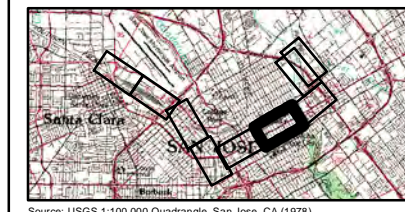
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Not eligible for listing in NRHP or CRHR as per current survey

V = Vacant
 M = Modern (built after 1975)
 NE = Previously Determined Not Eligible with SHPO Concurrence (2003)

Figure D.1-C. Architectural APE



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- Architectural APE
- Historic District
- Project Footprint

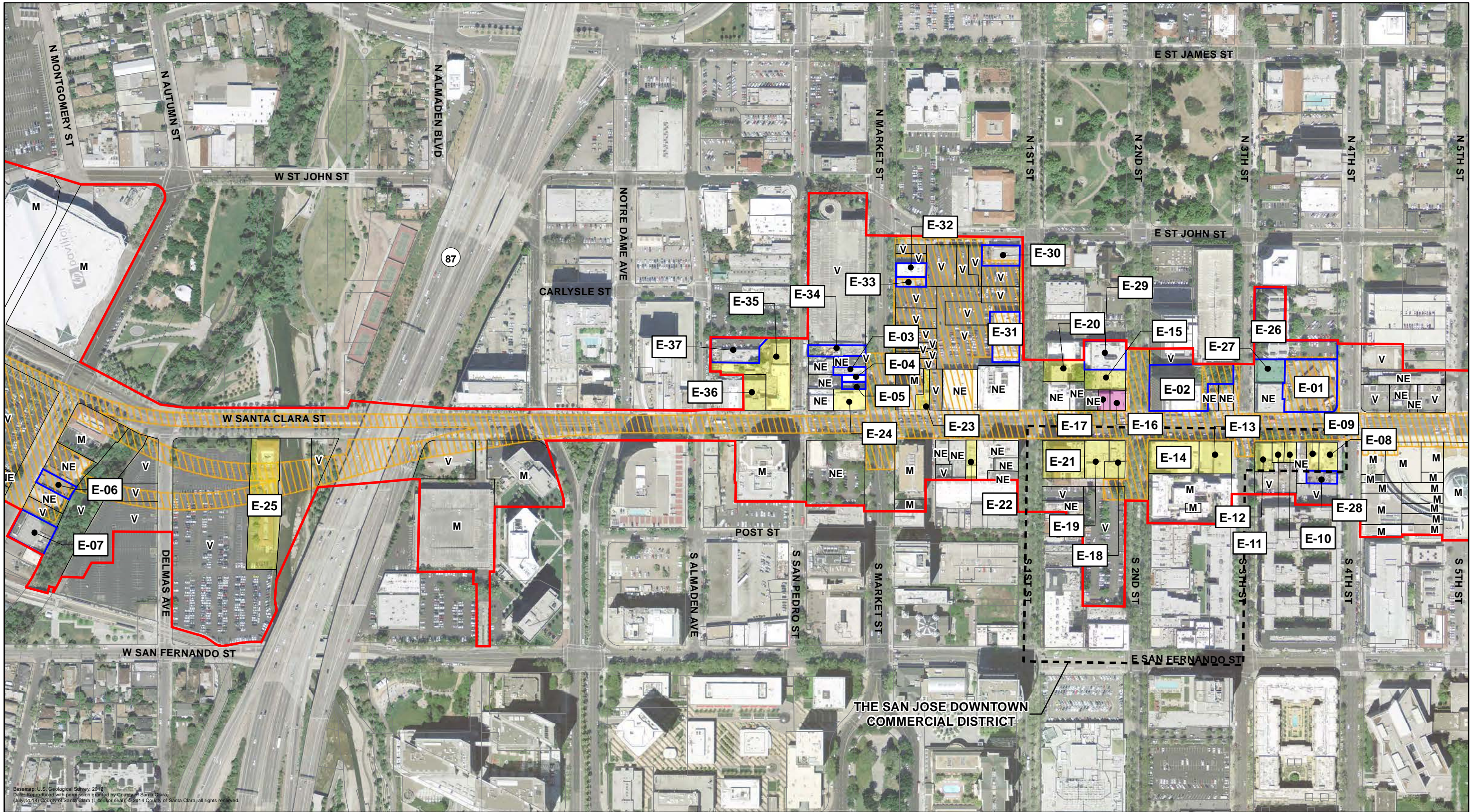
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Previously determined eligible for or listed in the NRHP and CRHR per 2003 HRER

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Historical Resource for the purposes of CEQA only
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Not eligible for listing in NRHP or CRHR as per current survey

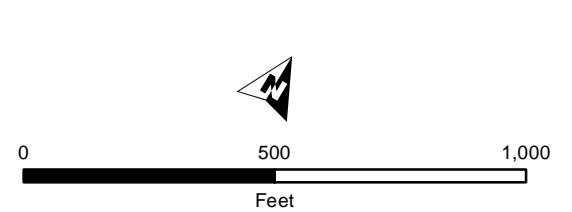
Figure D.1-D. Architectural APE

V = Vacant
 M = Modern (built after 1975)
 NE = Previously Determined Not Eligible with SHPO Concurrence (2003)

Source: USGS 1:100,000 Quadrangle, San Jose, CA (1978).



Base map: U.S. Geological Survey, 2012.
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- Architectural APE
- Historic District
- Project Footprint

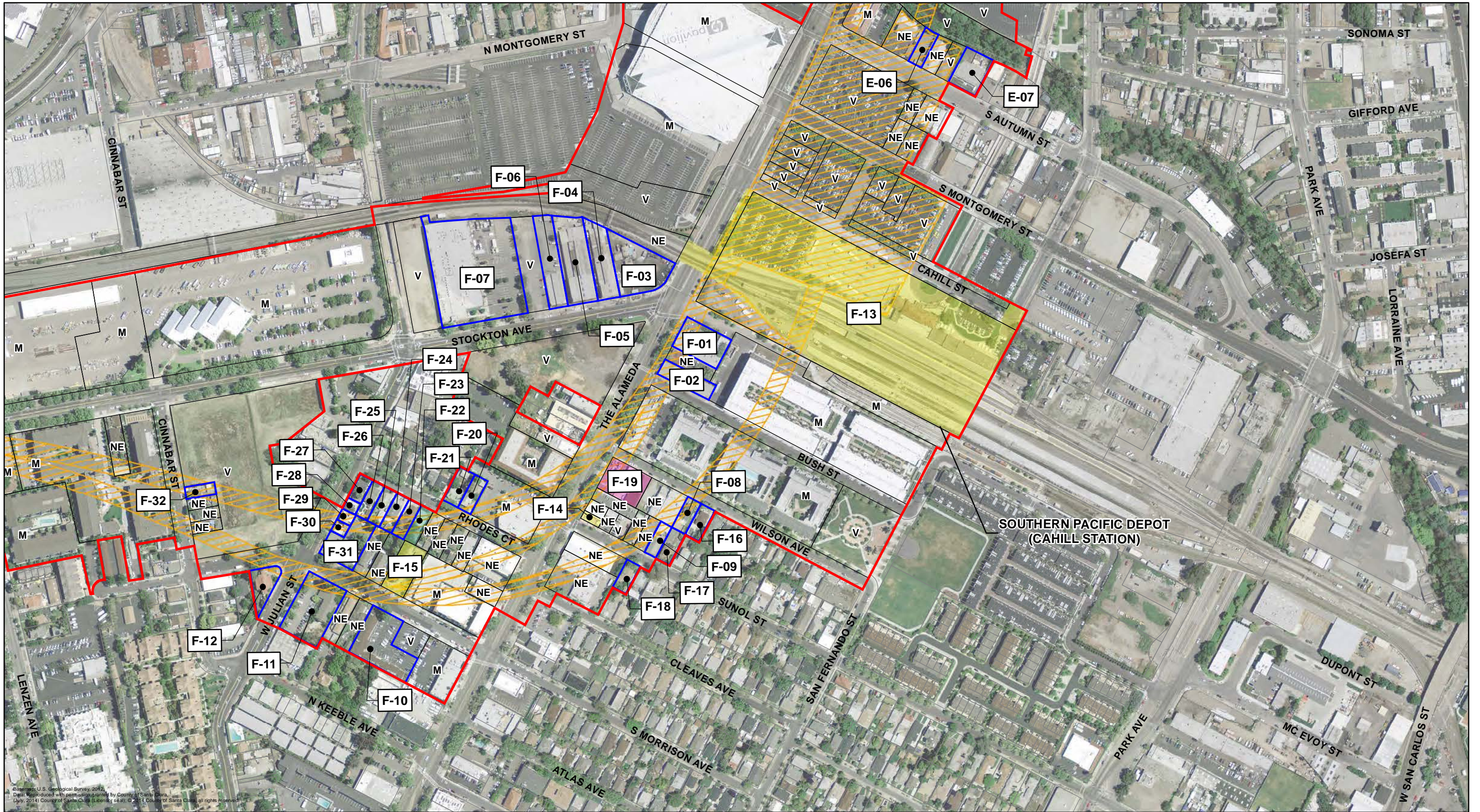
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Previously determined eligible for or listed in the NRHP and CRHR per 2003 HRER

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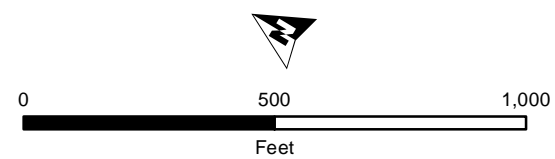
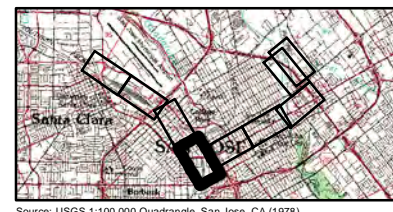
Figure D.1-E. Architectural APE

V = Vacant
 M = Modern (built after 1975)
 NE = Previously Determined Not Eligible with SHPO Concurrence (2003)

Source: USGS 1:100,000 Quadrangle, San Jose, CA (1978).



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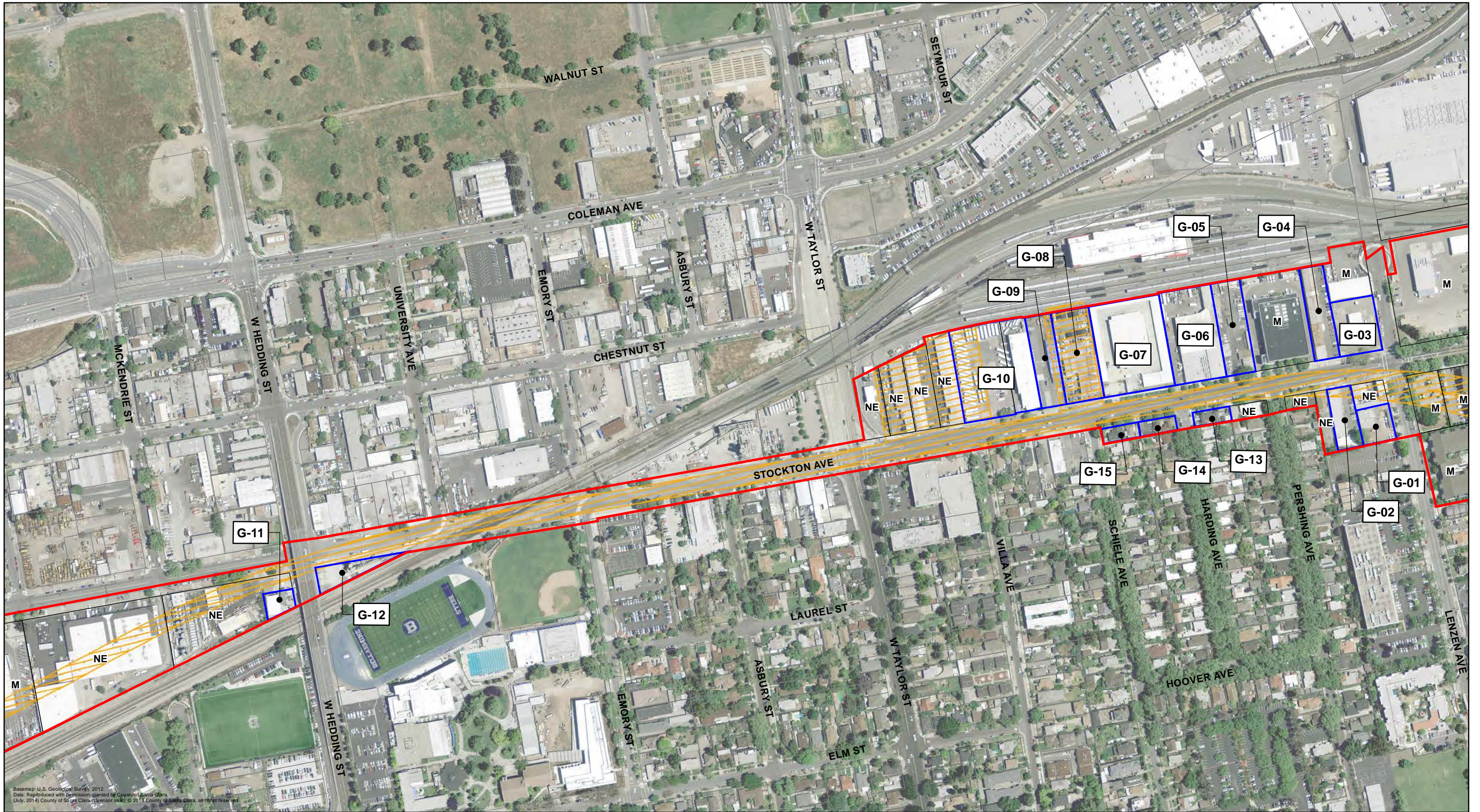
- Architectural APE
- Historic District
- Project Footprint

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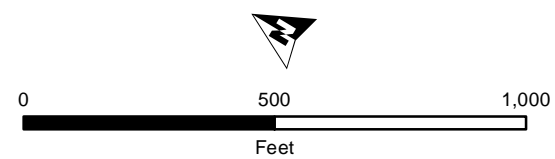
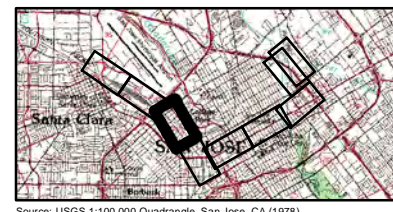
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Figure D.1-F. Architectural APE

V = Vacant
 M = Modern (built after 1975)
 NE = Previously Determined Not Eligible with SHPO Concurrence (2003)



Base map: U.S. Geological Survey, 2012
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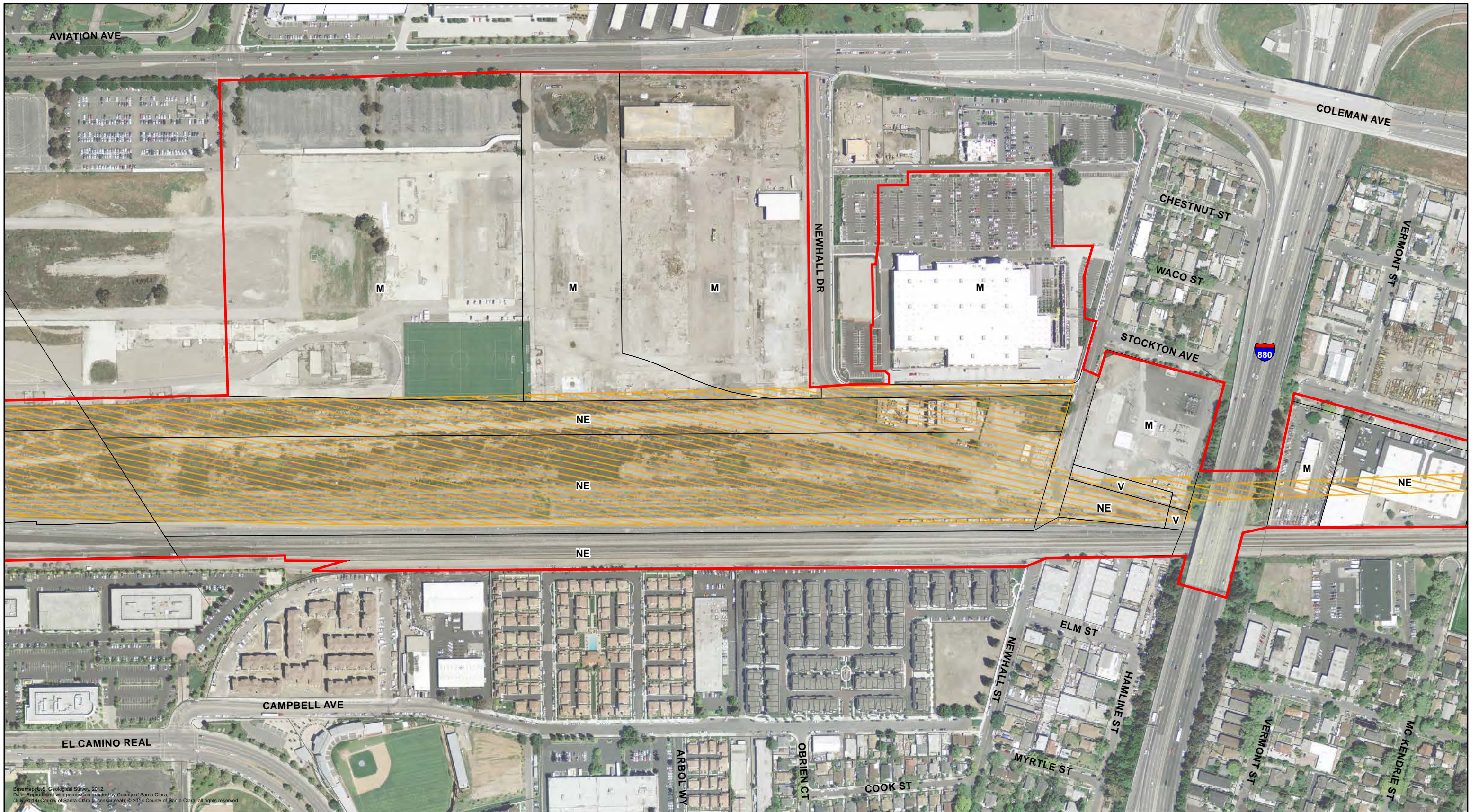
- Architectural APE
- Historic District
- Project Footprint

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Previously determined eligible for or listed in the NRHP and CRHR per 2003 HRER

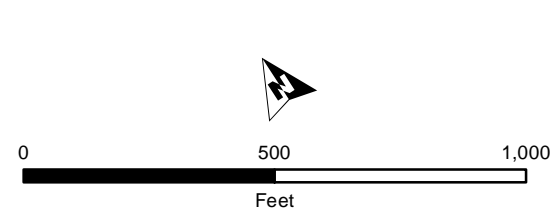
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- G-01 Map Reference Number (Not Eligible)
Not eligible for listing in NRHP or CRHR as per current survey

Figure D.1-G. Architectural APE

V = Vacant
 M = Modern (built after 1975)
 NE = Previously Determined Not Eligible with SHPO Concurrence (2003)



Base map: U.S. Geological Survey, 2012.
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- Architectural APE
- Historic District
- Project Footprint

- H-01 Map Reference Number (Eligible)
Eligible for or listed in the NRHP and CRHR as per current survey
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Previously determined eligible for or listed in the NRHP and CRHR per 2003 HRER

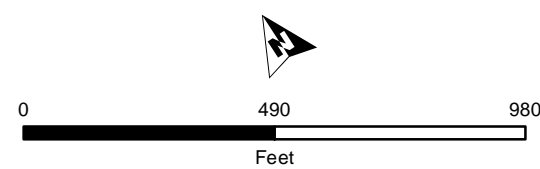
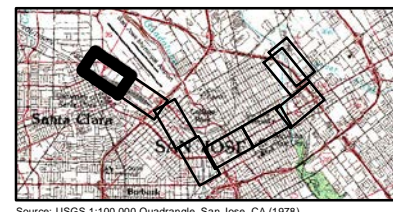
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- H-01 Map Reference Number (Not Eligible)
Not eligible for listing in NRHP or CRHR as per current survey

Figure D.1-H. Architectural APE

V = Vacant
 M = Modern (built after 1975)
 NE = Previously Determined Not Eligible with SHPO Concurrence (2003)



Base map: U.S. Geological Survey, 2012.
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- Architectural APE
- Historic District
- Project Footprint

- I-01 Map Reference Number (Eligible) Eligible for or listed in the NRHP and CRHR as per current survey
- I-01 Map Reference Number (Eligible) Previously determined eligible for or listed in the NRHP and CRHR per 2003 HRER

- I-01 Map Reference Number (CEQA only) Historical Resource for the purposes of CEQA only
- I-01 Map Reference Number (Not Eligible) Not eligible for listing in NRHP or CRHR as per current survey

Figure D.1-I. Architectural APE

V = Vacant
 M = Modern (built after 1975)
 NE = Previously Determined Not Eligible with SHPO Concurrence (2003)

D.2 – Archaeological Resources Area of Potential Effects Map

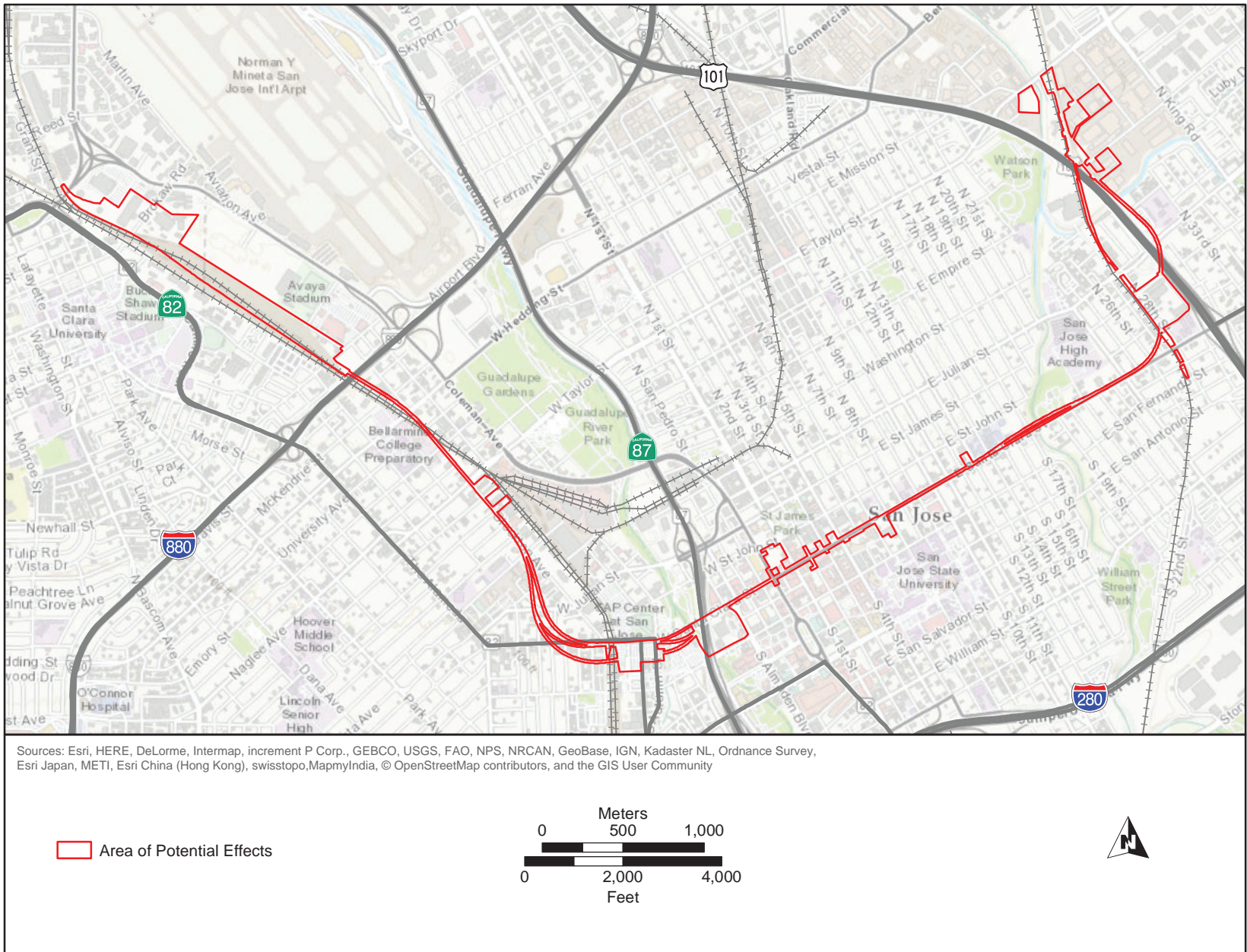
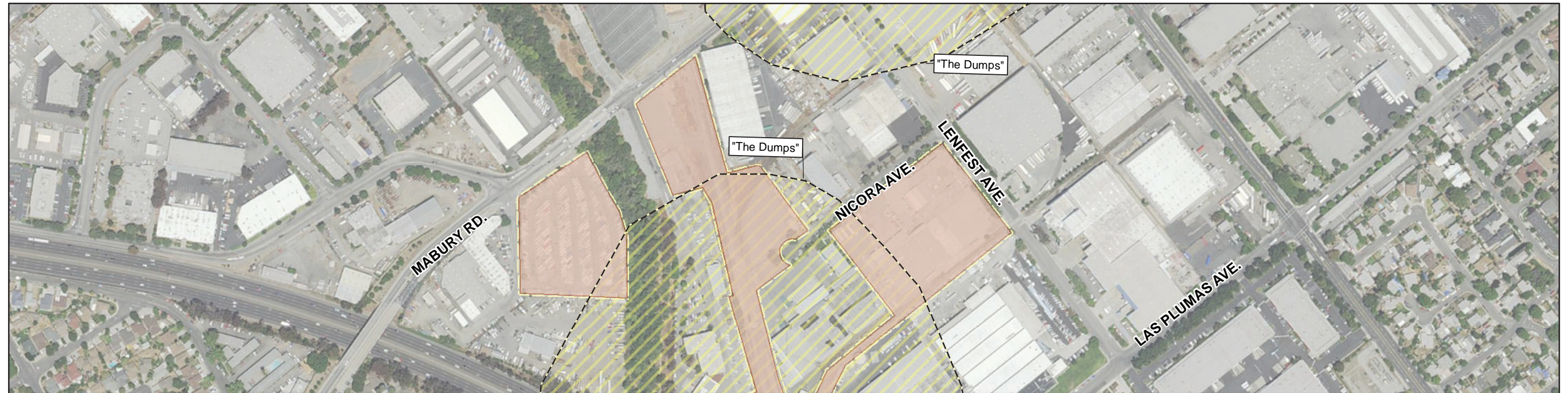


Figure D.2. Archaeological Area of Potential Effects.

Twin-Bore Option



Single-Bore Option

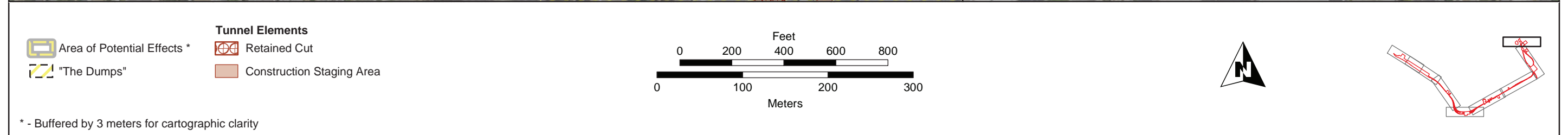
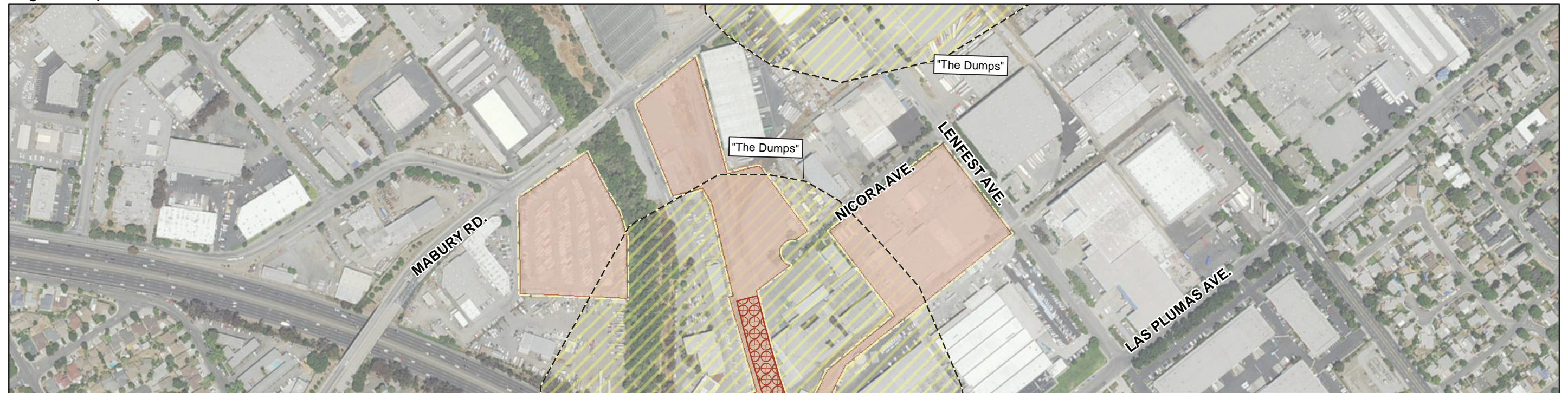


Figure D.2-A. Archaeological Area of Potential Effects Showing Construction Detail (1 of 8).

Twin-Bore Option



Single-Bore Option

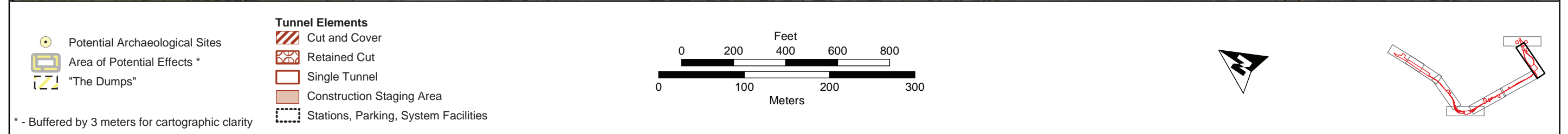


Figure D.2-B. Archaeological Area of Potential Effects Showing Construction Detail (2 of 8).

Twin-Bore Option



Single-Bore Option

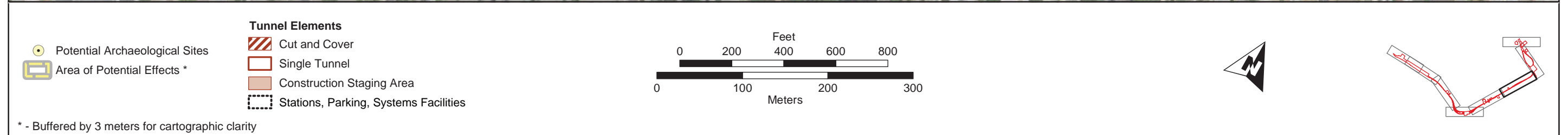
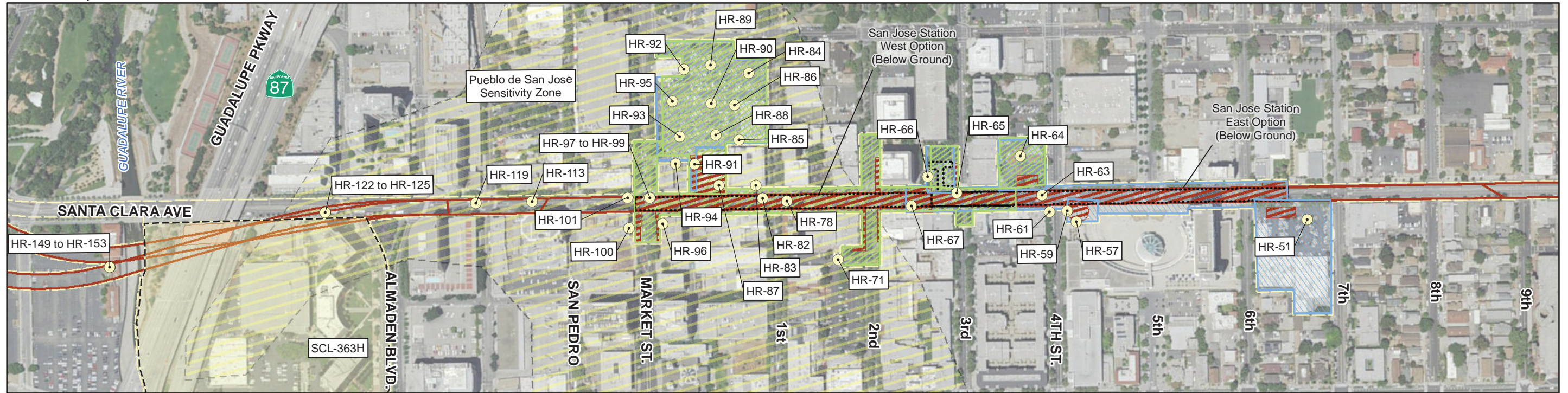


Figure D.2-C. Archaeological Area of Potential Effects Showing Construction Detail (3 of 8).

Twin-Bore Option



Single-Bore Option

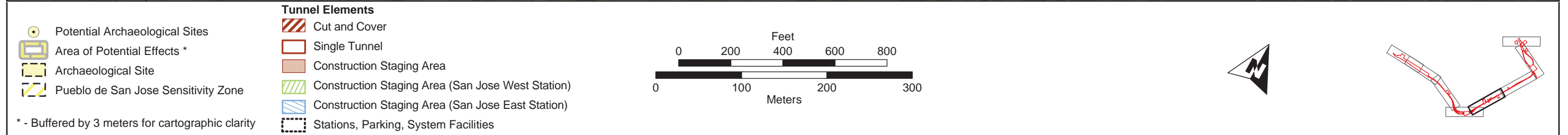
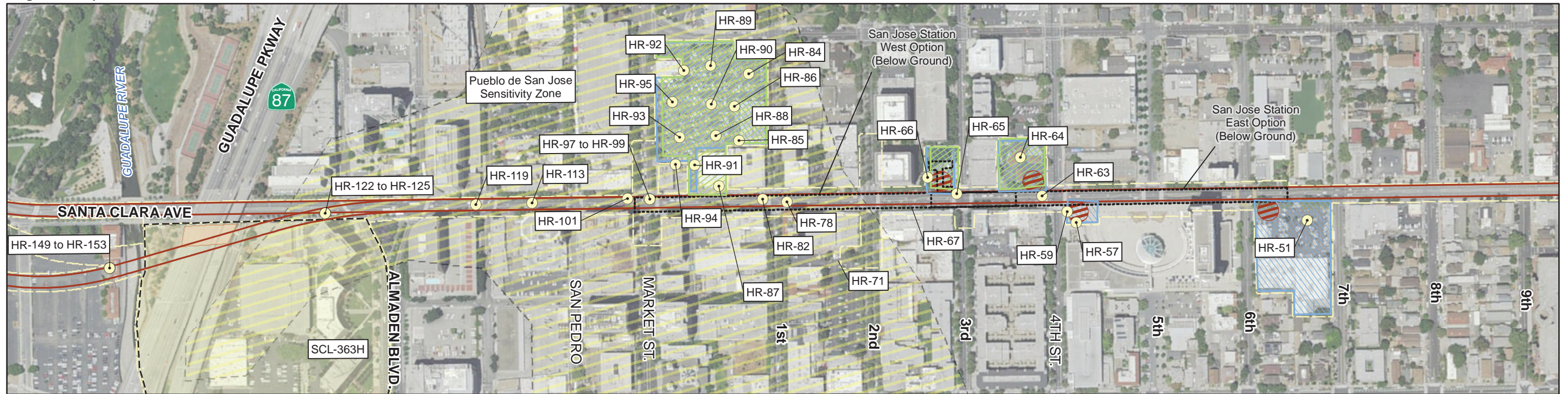
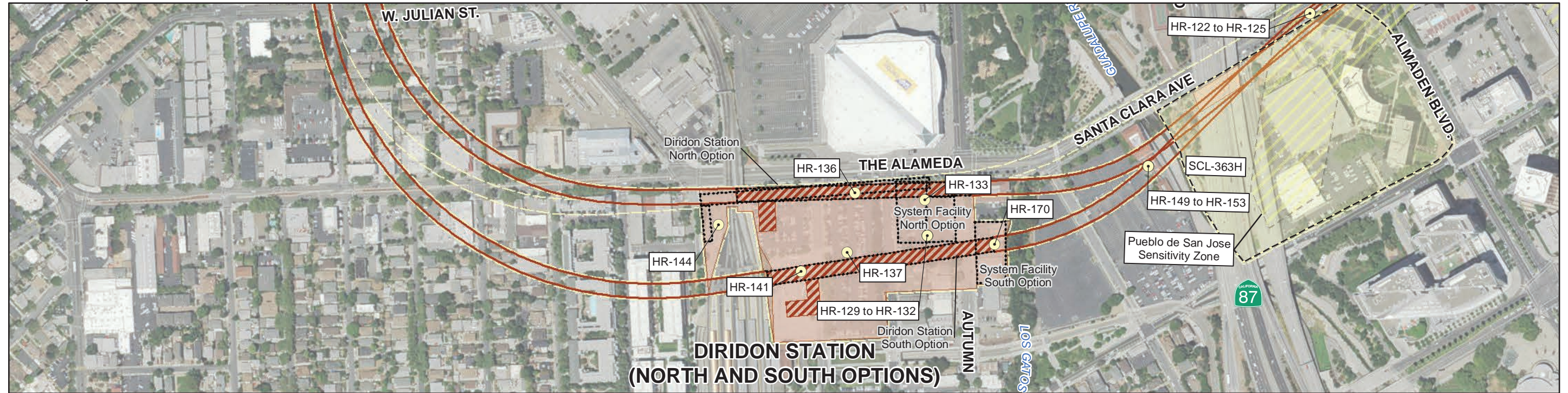


Figure D.2-D. Archaeological Area of Potential Effects Showing Construction Detail (4 of 8).

Twin-Bore Option



Single-Bore Option

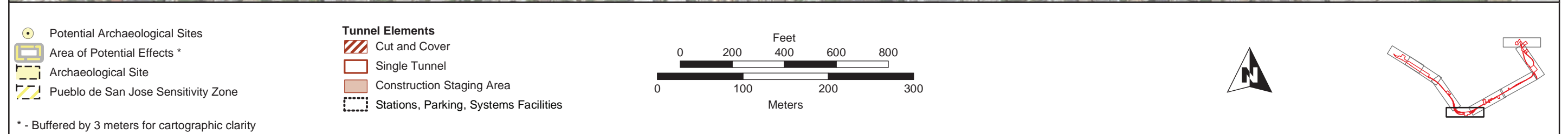
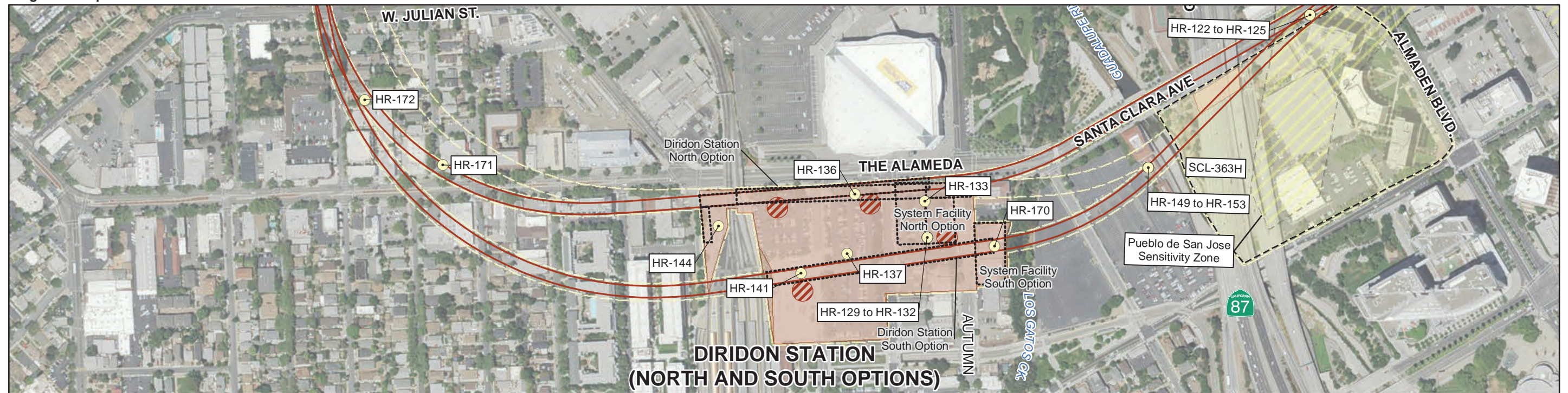
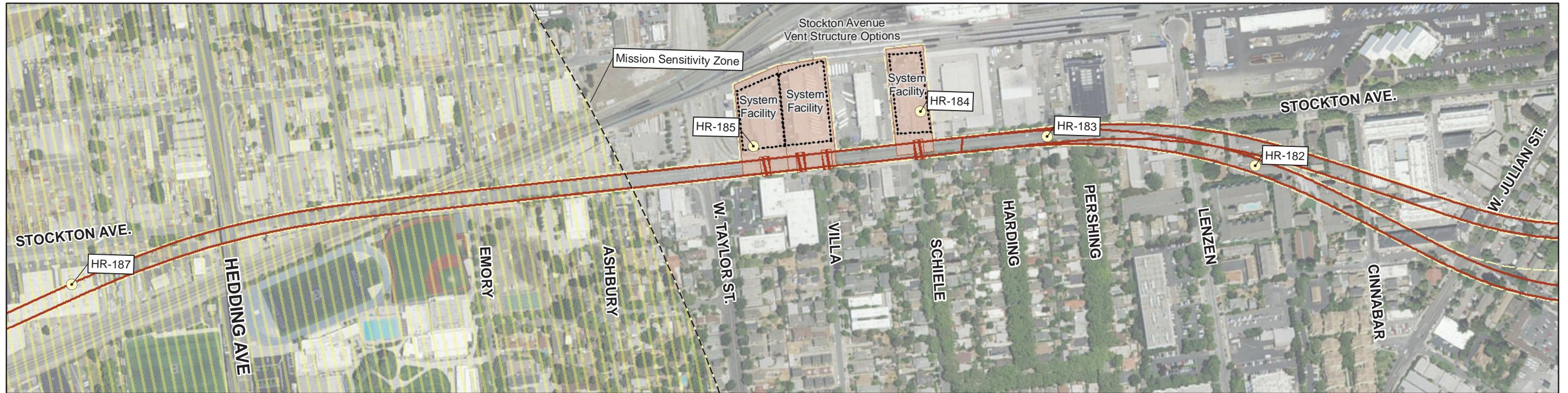


Figure D.2-E. Archaeological Area of Potential Effects Showing Construction Detail (5 of 8).

Twin-Bore Option



Single-Bore Option

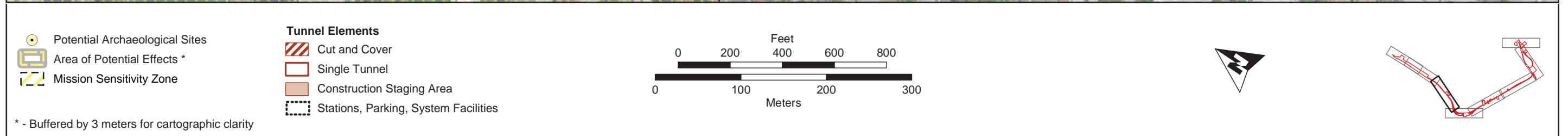
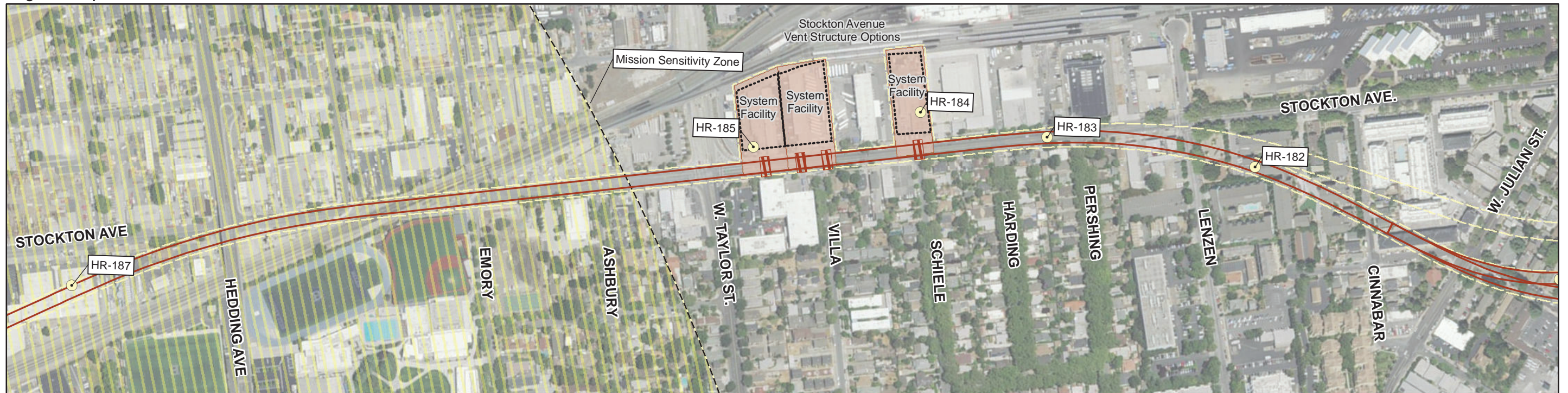


Figure D.2-F. Archaeological Area of Potential Effects Showing Construction Detail (6 of 8).

Twin-Bore Option



Single-Bore Option

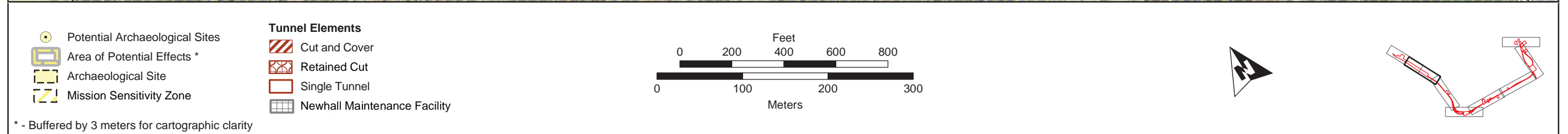
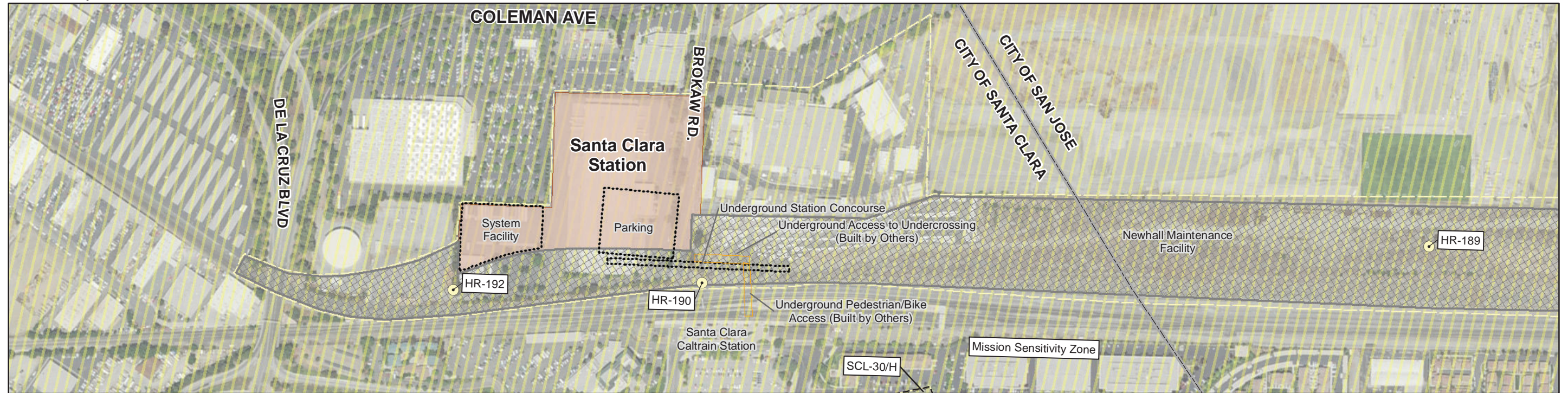


Figure D.2-G. Archaeological Area of Potential Effects Showing Construction Detail (7 of 8).

Twin-Bore Option



Single-Bore Option

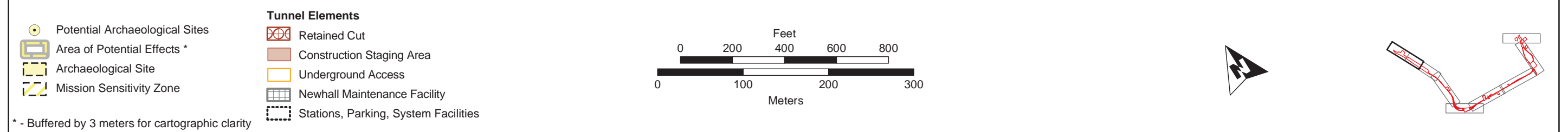
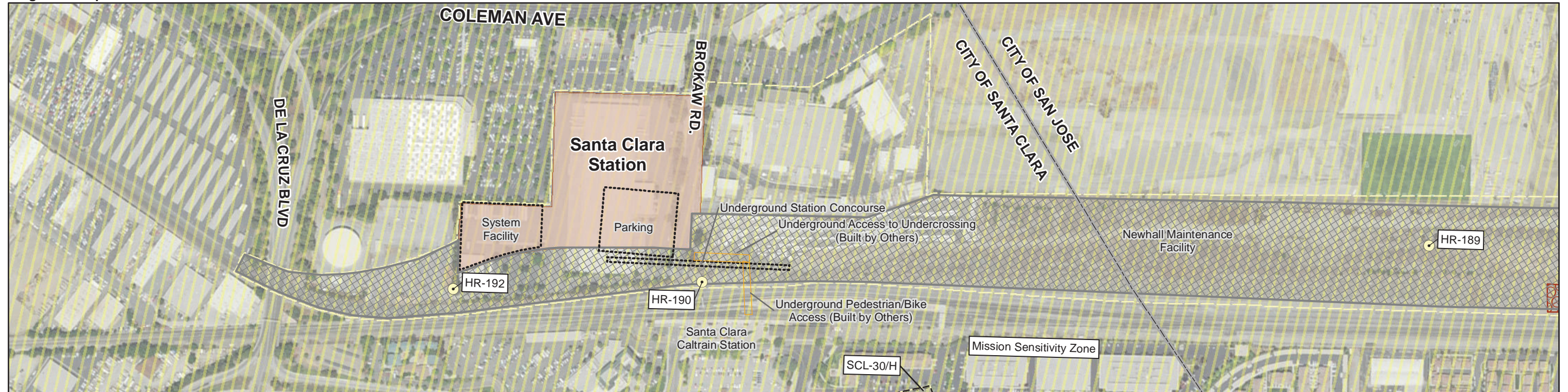


Figure D.2-H. Archaeological Area of Potential Effects Showing Construction Detail (8 of 8).

Appendix D.3 – Draft Programmatic Agreement

**DRAFT PROGRAMMATIC AGREEMENT
AMONG THE FEDERAL TRANSIT ADMINISTRATION,
THE CALIFORNIA STATE HISTORIC PRESERVATION OFFICER,
SANTA CLARA VALLEY TRANSPORTATION AUTHORITY,
THE CALIFORNIA DEPARTMENT OF TRANSPORTATION,
AND THE ADVISORY COUNCIL ON HISTORIC PRESERVATION
REGARDING THE BART SILICON VALLEY – PHASE II EXTENSION PROJECT
IN SANTA CLARA COUNTY, CALIFORNIA**

WHEREAS, the Santa Clara Valley Transportation Authority (VTA) plans to carry out the Bay Area Rapid Transit (BART) Silicon Valley – Phase II Extension Project (Undertaking) in Santa Clara County, California; and the Undertaking consists of an approximately six-mile extension of the BART system from the terminus of the BART Silicon Valley – Phase I Berryessa Extension Project at the Berryessa Station in the City of San Jose to the Santa Clara Caltrain Station in the City of Santa Clara; and

WHEREAS, the Federal Transit Administration (FTA) may provide funding to VTA, and FTA is the lead Federal agency and has determined that the BART Silicon Valley – Phase II Extension Project constitutes an undertaking under 36 CFR 800.16(y), which requires compliance with Section 106 of the National Historic Preservation Act (54 U.S.C. § 300101) and its implementing regulations in 36 C.F.R. Part 800; and

WHEREAS, FTA, in consultation with the California State Historic Preservation Officer (SHPO), has defined the Undertaking’s area of potential effects (APE) as described in Attachment A; and

WHEREAS, the project vicinity is known to contain Native American human remains and the APE is known to include one recorded archaeological site, the Amesquita Adobe (CA-SCL-363H), and locations where archaeological remains are likely to be found; and

WHEREAS, FTA, in consultation with the SHPO, has determined that the Amesquita Adobe (CA-SCL-365H) is eligible for inclusion in the National Register of Historic Places (NRHP); and

WHEREAS, FTA, in consultation with the SHPO, has determined that the Undertaking has no adverse effect on historic properties, but may adversely affect as yet unidentified archaeological sites; and

WHEREAS, FTA and VTA have chosen to conduct the identification and evaluation of potential historic properties and the resolution of any adverse effects on historic properties within the APE in phases pursuant to 36 CFR 800.4(b)(2) and 36 CFR 800.5(a)(3), subsequent to the approval of the Undertaking, because the Undertaking consists of a corridor and large land areas and areas where access to properties is restricted, and the portions of the corridor include areas of sensitivity for buried archaeological deposits and features; and

WHEREAS, the SHPO is authorized to enter this Agreement in order to fulfill its role of advising and assisting Federal agencies in carrying out Section 106 responsibilities under the National Historic Preservation Act, as amended, and pursuant to 36 C.F.R. Part 800, regulations

implementing Section 106, at Parts 800.2(c)(1)(i) and 800.6(b), and the SHPO is a Signatory to this Agreement; and

WHEREAS, in accordance with 36 C.F.R. § 800.6(a)(1), FTA has notified the Advisory Council on Historic Preservation (ACHP) of its intent for the phased identification of historic resources with specified documentation and the ACHP [has chosen/has not chosen] to participate in the consultation pursuant to 36 C.F.R. § 800.6(a)(1)(iii); and

WHEREAS, VTA, as the grantee and project sponsor, is an Invited Signatory to this Agreement; and

WHEREAS, the Undertaking crosses under United States Highway 101 (US 101), California State Route 87 (SR 87), and Interstate 880 (I-880) administered by the California Department of Transportation (Caltrans), and Caltrans is an Invited Signatory to the Agreement; and

WHEREAS, the FTA has consulted with the Native American Heritage Commission and Native American groups, including the Muwekma Ohlone Indian Tribe of the San Francisco Bay Area; the Ohlone Indian Tribe; the Trina Marine Ruano Family; the Amah Mutsun Tribal Band; the Indian Canyon Mutsun Band of Costanoan; the Amah Mutsun Tribal Band of Mission San Juan Bautista; as well as others, including those who identified themselves as Ohlone/Costanoan, Northern Valley Yokuts, Bay Miwok, Plains Miwok, and/or Patwin, that may attach religious or cultural importance to affected properties have been consulted [pursuant to 36 CFR § 800.2(c)(2)(ii)(A-F)], and has invited these Native American groups to be Concurring Parties to this Agreement; and the Amah Mutsun Tribal Band has deferred to the Muwekma Ohlone Indian Tribe of the San Francisco Bay Area; and

WHEREAS, this Agreement was developed with public involvement pursuant to 36 CFR 800.2(d) and 800.6(a), and the public was provided opportunities to comment on the Undertaking and its adverse effects; and

NOW, THEREFORE, FTA, SHPO, [the ACHP, if participating], VTA, and Caltrans agree that the Undertaking shall be implemented in accordance with the following Stipulations to take into account the effects of the Undertaking on historic properties.

STIPULATIONS

FTA will ensure that the terms of this Agreement are carried out and will require, as a condition of any approval of Federal funding for the Undertaking, adherence to the Stipulations set forth herein.

I. ROLES AND RESPONSIBILITIES

- A. **Signatory Parties.** Signatory Parties include Signatories and Invited Signatories to this Agreement. FTA, SHPO, [the ACHP, if participating], VTA, and Caltrans are the Signatory Parties (herein "Signatory Parties") to this Agreement. The Signatory Parties shall participate in the coordination process as specified in subsequent Stipulations of the Agreement.
- B. **Federal Transit Administration.** FTA will include the obligations set forth in this Agreement as part of its Record of Decision and a condition of FTA approval of any Federal funding issued for final design and construction of the Undertaking to ensure that

these measures will be implemented as part of the compliance with the Section 106 process and the subsequent design and construction of the Undertaking.

- C. **Santa Clara Valley Transportation Authority.** VTA shall coordinate all activities described in the Agreement to carry out the Stipulations below. VTA will consult with FTA and SHPO, as appropriate, in planning and implementing the Stipulations of this Agreement. VTA shall submit all plans and documents required by this Agreement in a timely and accurate manner to FTA and SHPO, as stipulated, for review. VTA shall also ensure that all treatment measures developed by VTA as a result of consultation are compliant with government-wide policies and regulations.

II. AREA OF POTENTIAL EFFECTS

The Undertaking's area of potential effects (APE) is depicted in Attachment A of this Agreement. The APE set forth hereunder may be amended through consultation among the Parties without amending the Agreement proper.

III. IDENTIFICATION OF ARCHAEOLOGICAL RESOURCES

Prior to construction of the Undertaking, VTA shall complete the fieldwork to identify historic properties (resources listed on or eligible for listing to the National Register of Historic Places) within the APE in accordance with 36 CFR 800.4 (b)(2).

- A. **Archaeological Resources Treatment Plan.** VTA shall develop a draft Archaeological Resources Treatment Plan (Treatment Plan) within 120 days of the execution of this Agreement. The objective of the Treatment Plan is to address the approaches that will be used in the identification and evaluation of archaeological resources and mitigation of impacts to archaeological resources that may be present within the APE.
1. After review by FTA, the draft Treatment Plan shall be submitted to all Parties to this Agreement, and ACHP if participating, for review. All Parties to this Agreement will have thirty (30) calendar days from receipt to review and provide written comments to FTA. If any Party does not respond within thirty (30) calendar days, FTA and VTA will follow up with the Party to see if they have any comments. If a Party does not respond within seven (7) calendar days of FTA or VTA's follow-up, FTA's responsibility under this Stipulation is fulfilled.
 2. Following the resolution of comments from all Parties on the draft Treatment Plan, VTA shall provide the revised Treatment Plan to all Parties, who shall have twenty (20) calendar days from receipt to review the revisions and provide written comments to FTA and VTA. If any Party does not respond within twenty (20) calendar days, FTA and VTA will follow up with the Party. If a Party does not respond within seven (7) calendar days of FTA or VTA's follow-up, FTA's responsibility under this Stipulation is fulfilled.
 3. VTA, in coordination with FTA, shall ensure that any written comments received are taken into account during the preparation of the final Treatment

Plan. VTA shall distribute the final Treatment Plan to all Parties to the Agreement.

4. Following the fulfilment of Stipulation III.A.3 and concurrence from SHPO, the final Treatment Plan may be implemented

The Treatment Plan will identify the scope of fieldwork for exploratory testing, testing/evaluation, data recovery/mitigation, analytical methods, and documentation; a schedule for implementation; inadvertent discovery protocol; protocol for the treatment of human remains in the event that human remains are discovered; and protocol for consultation with SHPO and consulting parties. The Treatment Plan will address thresholds of eligibility as well as the identification of and/or the exclusion from consideration of those resources that have been determined to not be NRHP eligible. Excluded resources will include such ubiquitous infrastructure elements as modern utilities (cistern, electric, gas, sewer, and water supply lines), transportation infrastructure (bridge piers, buried roadways, and rail segments), sidewalks, as well as concrete rubble, fill, or waste. An outline of the Treatment Plan may be found in Attachment B to this Agreement. The Treatment Plan set forth hereunder may be amended through consultation among the Parties without amending the Agreement proper.

B. Exploratory Testing A systematic subsurface archaeological survey was not conducted previously due to existing structures and pavement or lack of property access within areas of archaeological sensitivity. VTA shall conduct exploratory testing in areas previously not accessible once access has been granted, or after property acquisition and demolition, and prior to construction. The protocol and locations for the exploratory testing shall be developed in consultation with FTA, Caltrans, and SHPO and included in the Treatment Plan, described in Stipulation III. At minimum, the exploratory testing will include the following:

1. Sensitive areas identified in the ARTP will be examined by a qualified archaeologist following removal of pavement or other obstructions to inspect the ground for cultural materials.
2. When the final project design is completed, a qualified professional archaeologist will review the design to ensure that all potential impacts to eligible or unevaluated cultural resources have been identified.
3. Where avoidance of impacts is not feasible, a qualified professional archaeologist will conduct limited sub-surface assessment before any ground-disturbing project work is done within 50 meters of a known archaeological site. The objectives of the assessment will be to delineate the site boundary within the Undertaking's APE and determine whether the site requires evaluation. Evaluation and treatment of the site, if appropriate, will be conducted as outlined in the Treatment Plan.
4. In those areas with "high" or "very high" potential for buried sites, a qualified geoarchaeologist will conduct exploratory trenching or coring of areas where subsurface project disturbance is planned, prior to that disturbance.

5. Any cultural resources discovered during exploratory trenching or coring will be avoided or evaluated.

IV. EVALUATION AND TREATMENT OF HISTORIC PROPERTIES

Prior to construction of the Undertaking, VTA shall complete the fieldwork to identify, evaluate, and apply the criteria of adverse effect to historic properties within the APE in accordance with 36 CFR 800.4(b)(1), 800.4(c)-(d), and 800.5(a)(1). Evaluation of archaeological resources for the National Register, and data recovery of eligible resources that cannot be avoided, will follow the research design and recommendations presented in the Treatment Plan, as described above in Stipulation III

- A. Evaluation field work will be designed to assess the nature and potential significance of the archaeological deposit within the APE.
- B. Data Recovery mitigation will be undertaken at historic properties that cannot be avoided. The purpose is to obtain enough relevant data to characterize the portion of the site within the ADI (Area of Direct Impact; e.g., age, activities) prior to its destruction.
- C. Native American participation for prehistoric and ethnographic sites (including Mission-era sites) will involve those contacts identified by NAHC, including review of the Treatment Plan and monitoring of all archaeological excavations within such sites.

V. REPORTING REQUIREMENTS AND REVIEWS

- A. Within one year of completion of all fieldwork, VTA shall provide a draft technical report on the methods and results of inventory, geoarchaeological exploration, evaluation, and/or data recovery to FTA. After their review, FTA will provide the draft technical report to SHPO for review.
- B. SHPO shall have thirty (30) calendar days to review the draft and comment on the level of effort, results, and eligibility recommendations; those comments shall be incorporated into the final technical report, as appropriate. If SHPO does not respond within thirty (30) calendar days, FTA will follow up with the SHPO. If SHPO does not respond within seven (7) calendar days of FTA's follow-up, FTA's responsibility under this Stipulation is fulfilled and the technical report may be finalized.
- C. Within thirty (30) days of receipt of comments on the draft technical report, VTA shall submit the final technical report to FTA, SHPO, ACHP if participating, Caltrans, the appropriate California Historical Resources Information Center (CHRIS), the appropriate Native American contacts, and other Concurring Parties, and shall make it available to other interested persons who meet the confidentiality requirements. The technical report shall not be distributed to the general public, except in an abridged form that does not include sensitive information about site locations of human remains.
- D. All reports generated as a result of this Agreement and attachments shall be consistent with contemporary professional standards and the Secretary of the Interior's guidelines.

VI. NATIVE AMERICAN CONSULTATION

FTA and VTA have consulted with the Native American Heritage Commission (NAHC) and with individuals and groups identified by the NAHC regarding the proposed Undertaking and its effects on historic properties. FTA and VTA will continue to consult with these individuals and groups and will afford them, should they so desire, the opportunity to participate in the implementation of the Agreement and of the Undertaking.

VII. MITIGATION MONITORING AND REPORTING PLAN

During final design, VTA, in cooperation with its contractors, FTA, and SHPO will develop a Mitigation Monitoring and Reporting Plan (MMRP) for the Undertaking. The MMRP will include provisions to protect archaeological properties from any inadvertent damage. The MMRP will be finalized prior to the start of construction. This MMRP will reference the Agreement and include it as an appendix.

VIII. LATE DISCOVERIES AND UNANTICIPATED EFFECTS

- A. If either FTA or VTA determines, during implementation of the Treatment Plan or after construction of the Undertaking has commenced, that either the implementation of the Treatment Plan or the Undertaking will affect a previously unidentified property that may be eligible for the National Register of Historic Places, or affect a known historic property in an unanticipated manner, they will address the discovery or unanticipated effect in accordance with the Treatment Plan.
- B. Any human remains and related items discovered during the implementation of the terms of this Agreement and of the Undertaking will be treated in accordance with the requirements of Section 7050.5(b) of the California Health and Safety Code. If, pursuant to Section 7050.5(c) of the California Health and Safety Code, the county coroner/medical examiner determines that the human remains are or may be of Native American origin, then the discovery shall be treated in accordance with the provisions of Section 5097.98(a)-(d) of the California Public Resources Code. VTA shall ensure that the remains are not damaged or disturbed further until all Stipulations in Section 7050.5 and Section 5097.98 have been met. VTA shall notify FTA and SHPO within 48 hours if human remains are found, as well as Caltrans if any are encountered within their right-of-way.

IX. ADMINISTRATIVE PROVISIONS

A. STANDARDS

1. Definitions. The definitions provided in 36 CFR 800.16 are applicable throughout this Agreement.
2. Professional Qualifications. VTA shall ensure that historic, architectural, ethnographic, and archaeological work conducted pursuant to this Agreement is carried out by, or under the direct supervision of, persons meeting qualifications set forth in the Secretary of the Interior's Professional Qualification Standards (36 CFR 61).

VTA shall ensure that only individuals meeting the Secretary of the Interior's Professional Qualification Standards in the relevant field of study carry out or review appropriateness and quality of the actions and products required by this Agreement. However, nothing in this Stipulation may be interpreted to preclude FTA or any agent or contractor thereof from using the properly supervised services of persons who do not meet the PQS.

3. Documentation Standards. Written documentation of activities prescribed by Stipulation II of this Agreement shall conform to the *Secretary of the Interior's Standards and Guidelines for Archaeology and Historic Preservation* (48 FR 44716-44740), as well as to applicable standards and guidelines established by SHPO.
4. Curation Standards. VTA shall ensure that, to the extent permitted under Sections 5097.98 and 5097.991 of the California Public Resources Code, the materials and records resulting from the activities prescribed by this Agreement are curated in accordance with 36 CFR Part 79.

B. CONFIDENTIALITY

The Parties acknowledge that the historic properties covered by this Agreement are subject to the provisions of Section 304 of the National Historic Preservation Act and Section 6254.10 of the California Government Code (Public Records Act), relating to the disclosure of archaeological site information and, having so acknowledged, will ensure that all actions and documentation prescribed by this Agreement are consistent with said sections.

C. RESOLVING OBJECTIONS

1. Should any Party to this Agreement object at any time in writing to the manner in which the terms of this Agreement are implemented, to any action carried out or proposed with respect to implementation of the Agreement (other than the Undertaking itself), or to any documentation prepared in accordance with and subject to the terms of this Agreement, FTA shall immediately notify the other Parties of the objection, request their comments on the objection within 15 days following receipt of FTA's notification, and proceed to consult with the objecting Party for no more than 30 days to resolve the objection. FTA will honor the request of the other Parties to participate in the consultation and will take any comments provided by those Parties into account.
2. If the objection is resolved during the 30-day consultation period, FTA may proceed with the disputed action in accordance with the terms of such resolution.
3. If, at the end of the 30-day consultation period, FTA determines that the objection cannot be resolved through such consultation, then FTA shall forward all documentation relevant to the objection to the Advisory Council on Historic Preservation (ACHP), including FTA's proposed response to the

objection, with the expectation that the ACHP will, within 30 days after receipt of such documentation, do the following:

- a. Advise FTA that the ACHP concurs in FTA's proposed response to the objection, whereupon FTA will respond to the objection accordingly. The objection shall thereby be resolved; or
 - b. Provide FTA with recommendations, which FTA will take into account in reaching a final decision regarding its response to the objection. The objection shall thereby be resolved; or
 - c. Notify FTA that the objection will be referred for comment pursuant to 36 CFR 800.7(c) and proceed to refer the objection and comment. FTA shall take the resulting comments into account in accordance with 36 CFR 800.7(c)(4) and Section 110(1) of the National Historic Preservation Act. The objection shall thereby be resolved.
4. Should the ACHP not exercise one of the above options within 30 days after receipt of all pertinent documentation, FTA and SHPO may assume the ACHP's concurrence in the proposed response to the objection, and FTA may proceed to implement that response. The objection shall thereby be resolved.
 5. FTA shall take into account any of the ACHP's recommendations or comments provided in accordance with this Stipulation with reference only to the subject of the objection.
 6. FTA's responsibility to carry out all actions under this Agreement that are not the subjects of the objection shall remain unchanged.
 7. FTA shall provide all Parties to this Agreement, and the ACHP, if the ACHP has commented, with a copy of its final written decision regarding any objection addressed pursuant to this Stipulation.
 8. FTA may authorize any action subject to objection under this Stipulation to proceed after the objection has been resolved in accordance with the terms of this Stipulation.

D. AMENDMENTS

1. Any Signatory Party to this Agreement may propose that this Agreement be amended, whereupon all Signatory Parties shall consult for no more than 30 days to consider such amendment. The amendment will be effective on the date a copy signed by all of the original Signatories is filed with the ACHP. If the Signatories cannot agree to appropriate terms to amend the Agreement, any Signatory may terminate the Agreement in accordance with Section E of this Stipulation.

In the event that another federal agency not initially a Party to or subject to this Agreement receives an application for funding/license/permit for the Undertaking as described in this Agreement, that agency may fulfill its Section 106 responsibilities by stating in writing it concurs with the terms of this

Agreement and notifying the FTA, SHPO, [and the ACHP if participating] that it intends to do so. Such agreement shall be evidenced by filing with the ACHP, and implementation of the terms of this Agreement.

E. TERMINATION

1. If this Agreement is not amended as provided for in Section D of this Stipulation, or if any of the Signatories propose termination of this Agreement for other reasons, the Signatory Party proposing termination shall, in writing, notify the other Parties, explain the reasons for proposing termination, and consult with the other Parties for at least 30 days to seek alternatives to termination. Such consultation shall not be required if FTA proposes termination because the Undertaking no longer meets the definition set forth in 36 CFR 800.16(y).
2. Should such consultation result in an agreement on an alternative to termination, the Signatory Parties shall proceed in accordance with the terms of that agreement.
3. Should such consultation fail, the Signatory Party proposing termination may terminate this Agreement by promptly notifying the other Parties in writing. Termination hereunder shall render this Agreement without further force or effect.
4. If this Agreement is terminated hereunder, and if FTA determines that the Undertaking will nonetheless proceed, then FTA shall comply with the requirements of 36 CFR 800.3 through 800.6.

F. DURATION OF THE PROGRAMMATIC AGREEMENT

1. Unless terminated pursuant to Section E of this Stipulation, or unless it is superseded by an amended Agreement, this Agreement will be in effect following execution by the Signatory Parties until FTA, in consultation with the other Signatory Parties, determines that all of its Stipulations have been satisfactorily fulfilled.
2. The terms of this Agreement shall be satisfactorily fulfilled within ten years following the date of execution by the Signatory Parties. If FTA determines that this requirement cannot be met, the Parties will consult to reconsider its terms. Reconsideration may include continuation of the Agreement as originally executed, amendment of the Agreement, or termination. In the event of termination, FTA will comply with Section E.4 of this Stipulation if it determines that the Undertaking will proceed notwithstanding termination of this Agreement.
3. If the Undertaking has not been implemented within ten years following execution of this Agreement, this Agreement shall automatically terminate and have no further force or effect. In such event, FTA shall notify the other Signatory Parties in writing and, if it chooses to continue with the Undertaking, shall reinitiate review of the Undertaking in accordance with 36 CFR Part 800.

G. EFFECTIVE DATE

This Agreement will take effect on the date that it has been executed by FTA, SHPO, [the ACHP, if participating], VTA, and Caltrans.

H. EXECUTION

Execution of this Agreement by FTA, SHPO, [the ACHP, if participating], VTA, and Caltrans, its filing with the ACHP in accordance with 36 CFR 800.6(b)(1)(iv), and the submission of documentation and filing of this Agreement with the ACHP, pursuant to 36 CFR 800.6(c), shall further evidence prior to FTA's approval of the Undertaking that FTA has afforded the ACHP an opportunity to comment on the Undertaking and its effects on historic properties, and that FTA has taken into account the effects of the Undertaking on historic properties.

SIGNATORIES

We, as Signatories of this Programmatic Agreement, concur with its provisions and will follow the procedures and Stipulations outlined above.

Signatories

Federal Transit Administration

By: _____ Date: _____

Leslie T. Rogers
Region IX Administrator

California State Historic Preservation Officer

By: _____ Date: _____

Julianne Polanco
State Historic Preservation Officer

Invited Signatories

Santa Clara Valley Transportation Authority

By: _____ Date: _____

Nuria Fernandez
General Manager

California Department of Transportation

By: _____ Date: _____

Bijan Sartipi
Director, Caltrans District 4

Concurring Parties

Muwekma Ohlone Indian Tribe of the San Francisco Bay Area

By: _____ Date: _____
Rosemary Cambra
Chairperson

Ohlone Indian Tribe

By: _____ Date: _____
Andrew Galvan

Trina Marine Ruano Family

By: _____ Date: _____
Ramona Garibay
Representative

Indian Canyon Mutsun Band of Costanoan

By: _____ Date: _____
Ann Marie Sayers
Chairperson

Amah Mutsun Tribal Band of Mission San Juan Bautista

By: _____ Date: _____
Irene Zwielerlein
Chairperson

Ohlone/Costanoan

By: _____ Date: _____
Jakki Kehl

By: _____ Date: _____
Katherine Erolinda Perez

By: _____ Date: _____
Linda Yamane

San Jose Historic Landmarks Commission

By: _____ Date: _____
Edward Saum
Chair

Santa Clara Historic Landmarks Commission

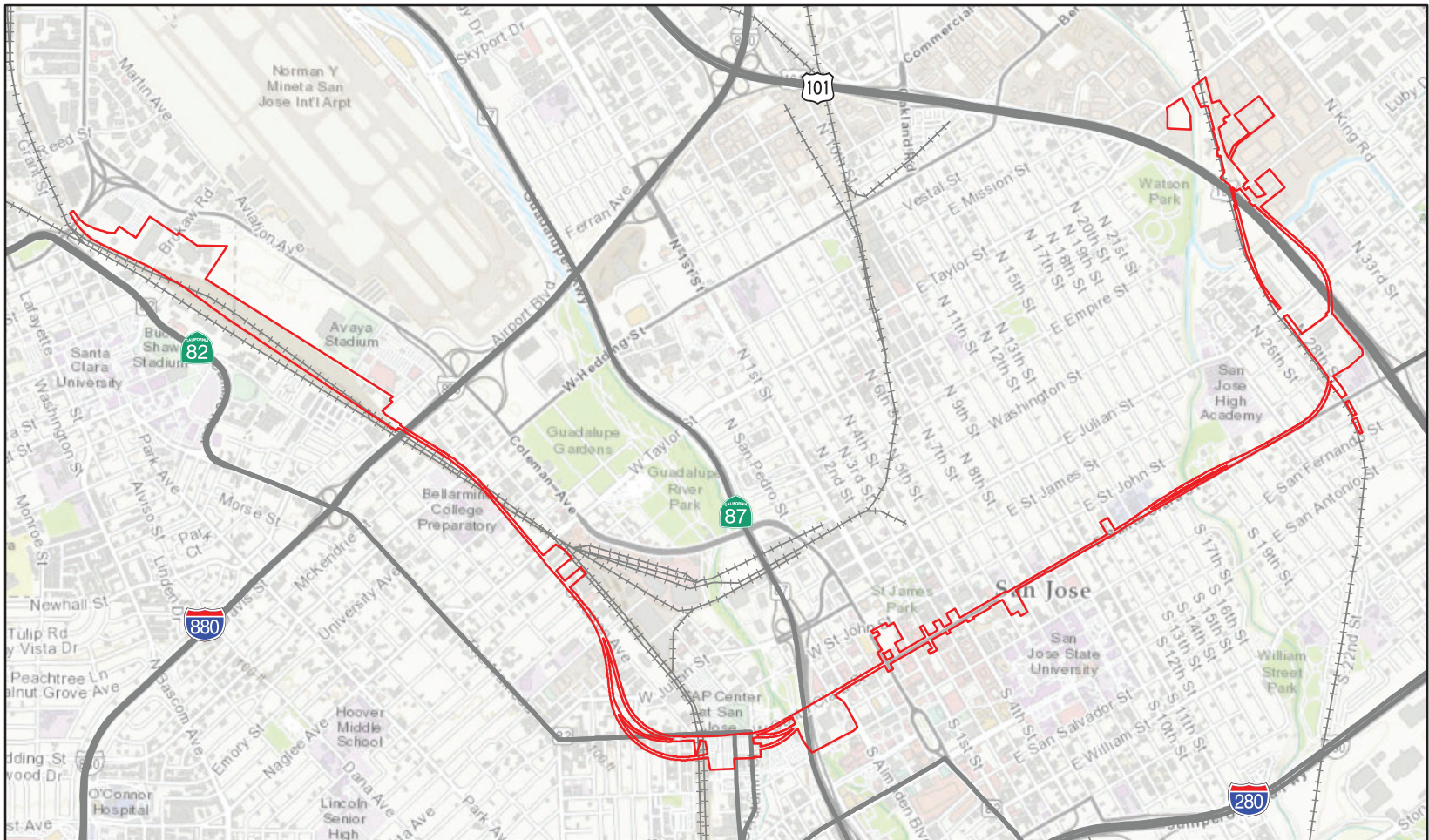
By: _____ Date: _____
Brian Johns
Chair

South Bay Historical Railroad Society

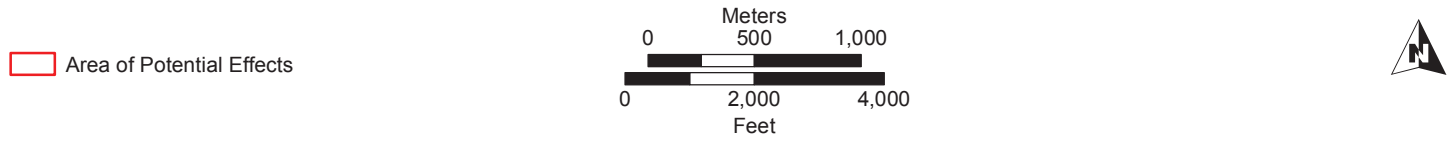
By: _____ Date: _____
Robert Marshall
President

- Attachment A: Archaeological APE
- Attachment B: Outline of the Archaeological Treatment Plan

Attachment A
Archaeological APE

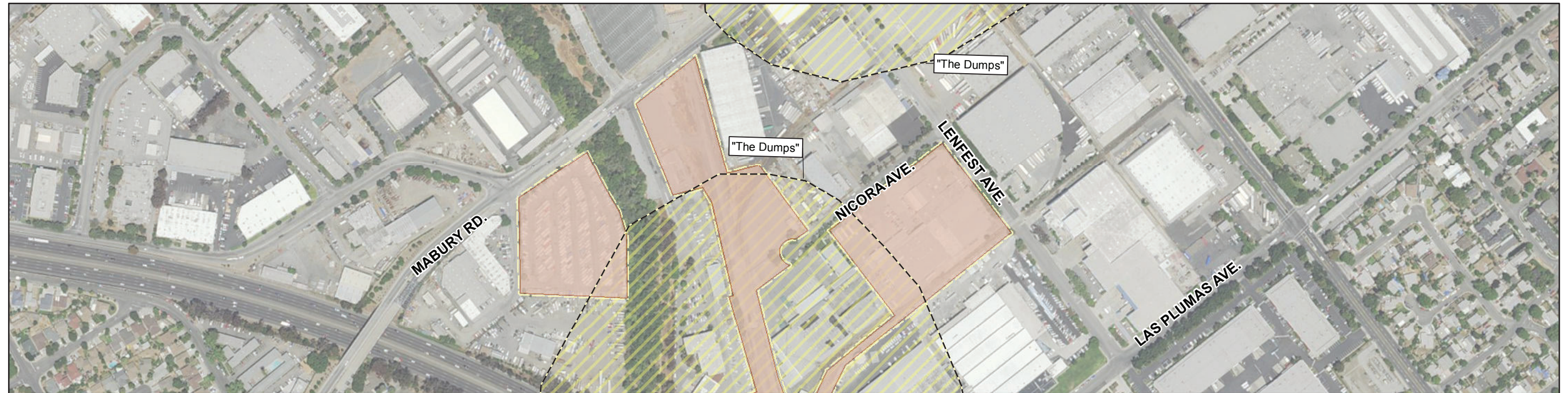


Sources: Esri, HERE, DeLorme, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, MapmyIndia, © OpenStreetMap contributors, and the GIS User Community

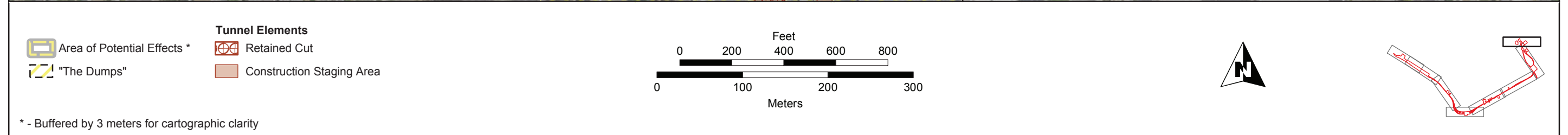
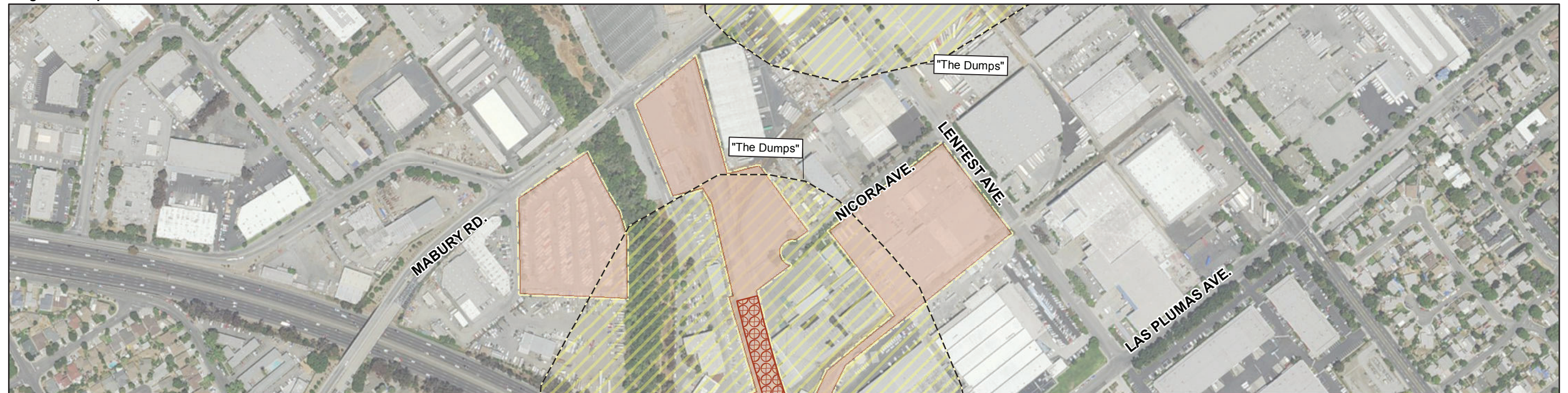


Archaeological Area of Potential Effects.

Twin-Bore Option



Single-Bore Option



Archaeological Area of Potential Effects Showing Construction Detail (1 of 8).

Twin-Bore Option



Single-Bore Option

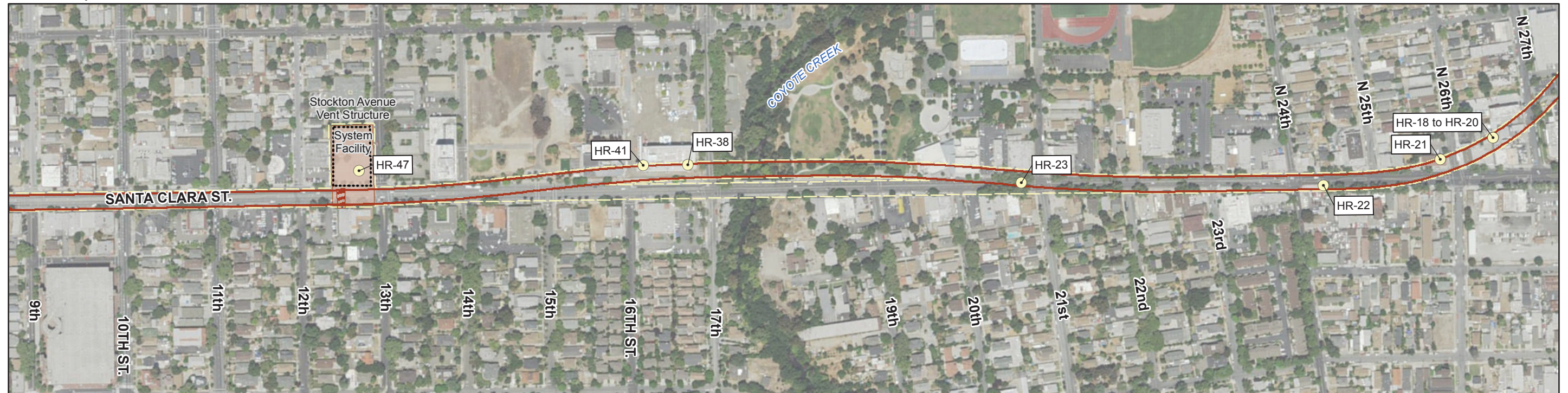


<ul style="list-style-type: none"> Potential Archaeological Sites Area of Potential Effects * "The Dumps" 	<p>Tunnel Elements</p> <ul style="list-style-type: none"> Cut and Cover Retained Cut Single Tunnel Construction Staging Area Stations, Parking, System Facilities 	<p>0 200 400 600 800 Feet</p> <p>0 100 200 300 Meters</p>		
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* - Buffered by 3 meters for cartographic clarity

Archaeological Area of Potential Effects Showing Construction Detail (2 of 8).

Twin-Bore Option



Single-Bore Option

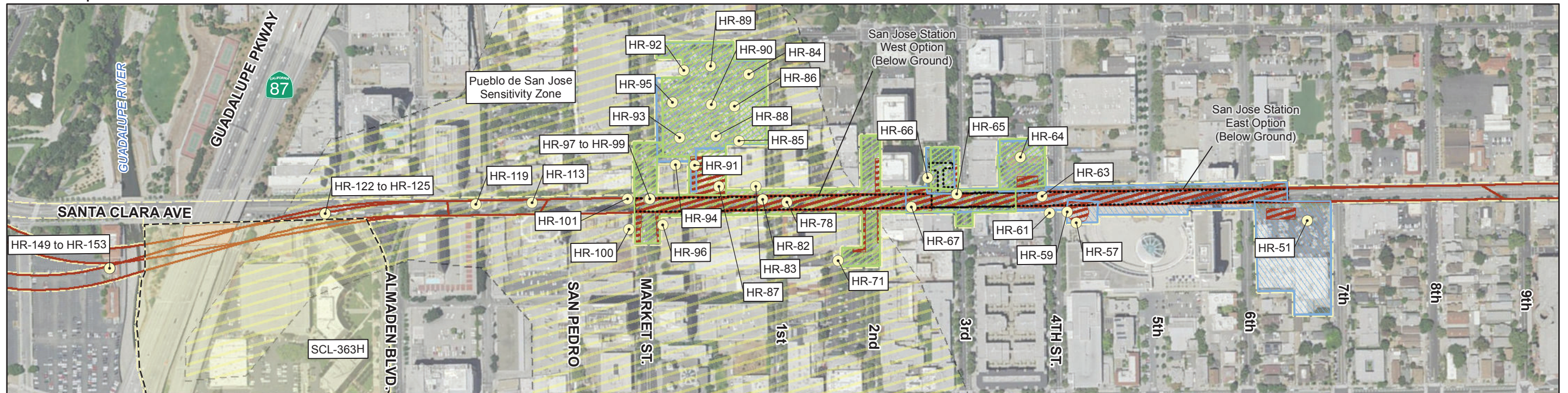


<ul style="list-style-type: none"> Potential Archaeological Sites Area of Potential Effects * 	<p>Tunnel Elements</p> <ul style="list-style-type: none"> Cut and Cover Single Tunnel Construction Staging Area Stations, Parking, Systems Facilities 	<p>0 200 400 600 800 Feet</p> <p>0 100 200 300 Meters</p>		
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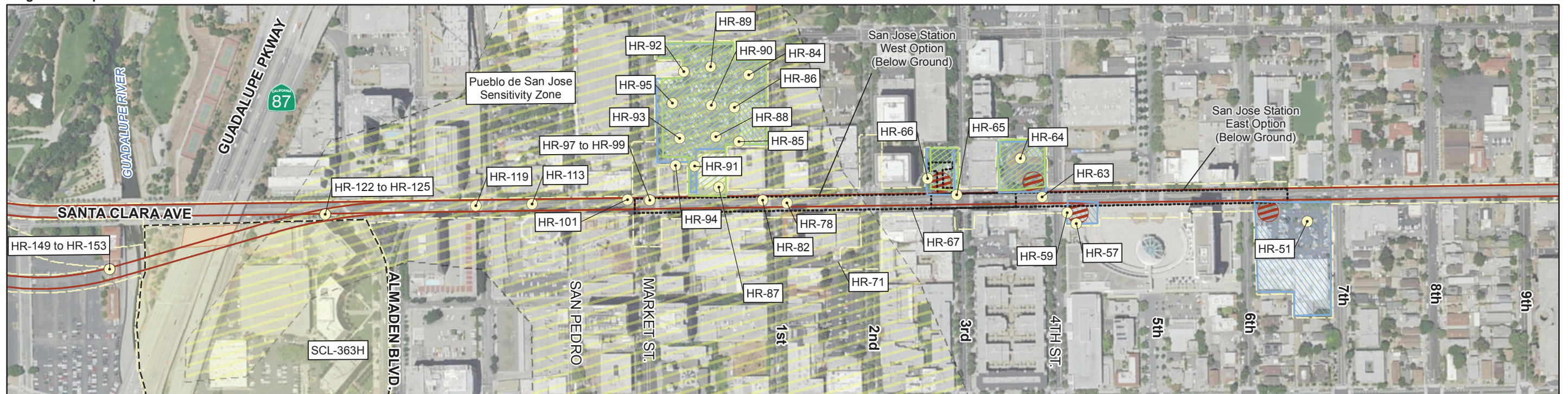
* - Buffered by 3 meters for cartographic clarity

Archaeological Area of Potential Effects Showing Construction Detail (3 of 8).

Twin-Bore Option



Single-Bore Option

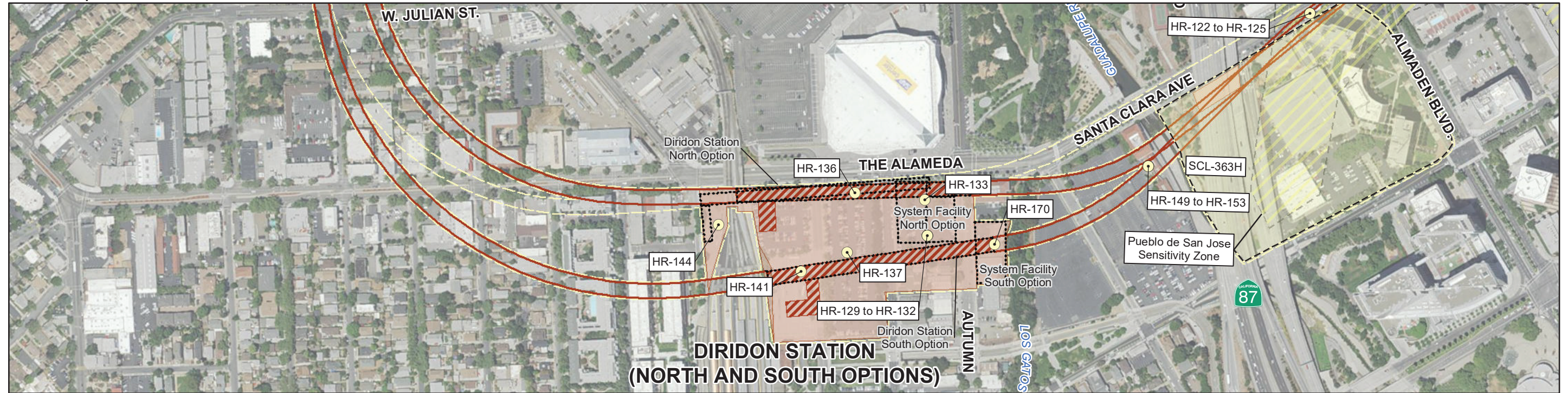


<ul style="list-style-type: none"> Potential Archaeological Sites Area of Potential Effects * Archaeological Site Pueblo de San Jose Sensitivity Zone 	<p>Tunnel Elements</p> <ul style="list-style-type: none"> Cut and Cover Single Tunnel Construction Staging Area Construction Staging Area (San Jose West Station) Construction Staging Area (San Jose East Station) Stations, Parking, System Facilities 	<p>0 200 400 600 800</p> <p>Feet</p> <hr style="width: 100%; border: 1px solid black;"/> <p>0 100 200 300</p> <p>Meters</p>		
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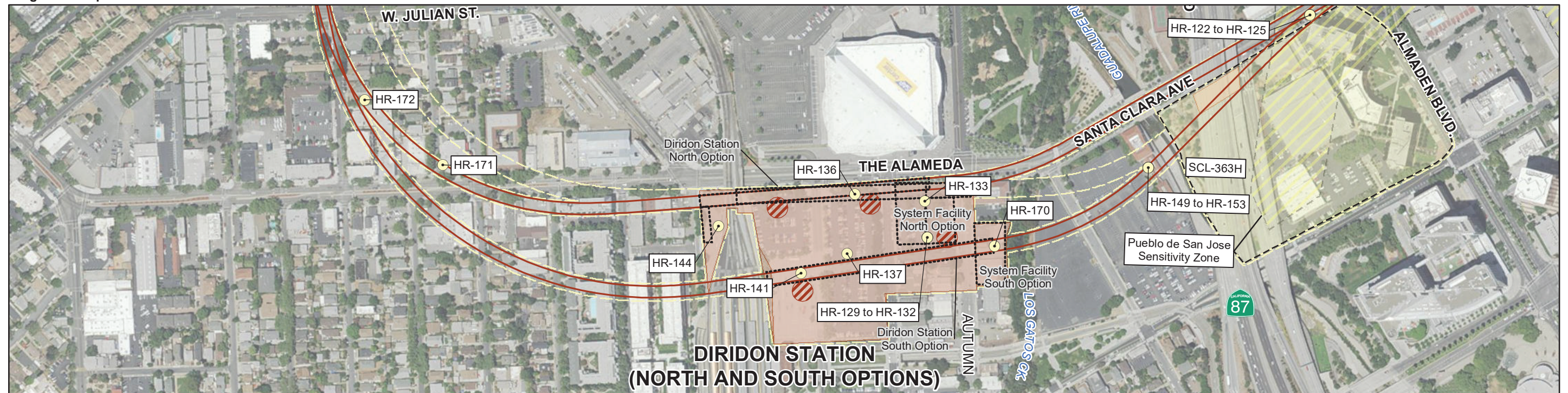
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Archaeological Area of Potential Effects Showing Construction Detail (4 of 8).

Twin-Bore Option



Single-Bore Option

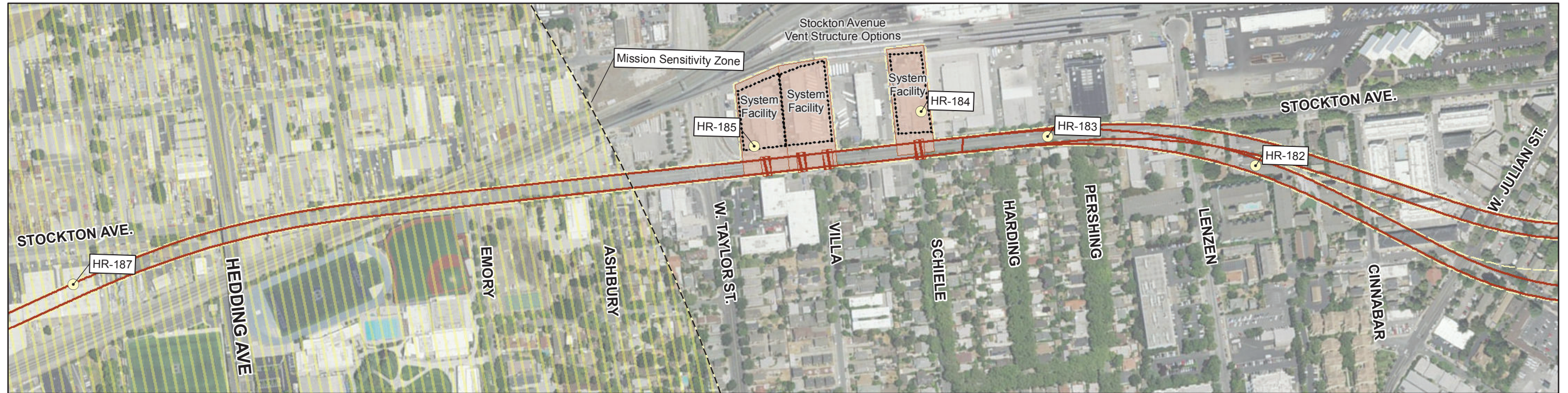


<ul style="list-style-type: none"> Potential Archaeological Sites Area of Potential Effects * Archaeological Site Pueblo de San Jose Sensitivity Zone 	<p>Tunnel Elements</p> <ul style="list-style-type: none"> Cut and Cover Single Tunnel Construction Staging Area Stations, Parking, Systems Facilities 	<p>Feet</p> <p>Meters</p>		
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* - Buffered by 3 meters for cartographic clarity

Archaeological Area of Potential Effects Showing Construction Detail (5 of 8).

Twin-Bore Option



Single-Bore Option



<ul style="list-style-type: none"> Potential Archaeological Sites Area of Potential Effects * Mission Sensitivity Zone 	<p>Tunnel Elements</p> <ul style="list-style-type: none"> Cut and Cover Single Tunnel Construction Staging Area Stations, Parking, System Facilities 	<p>0 200 400 600 800</p> <p>0 100 200 300</p> <p>Feet Meters</p>		
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* - Buffered by 3 meters for cartographic clarity

Archaeological Area of Potential Effects Showing Construction Detail (6 of 8).

Twin-Bore Option



Single-Bore Option

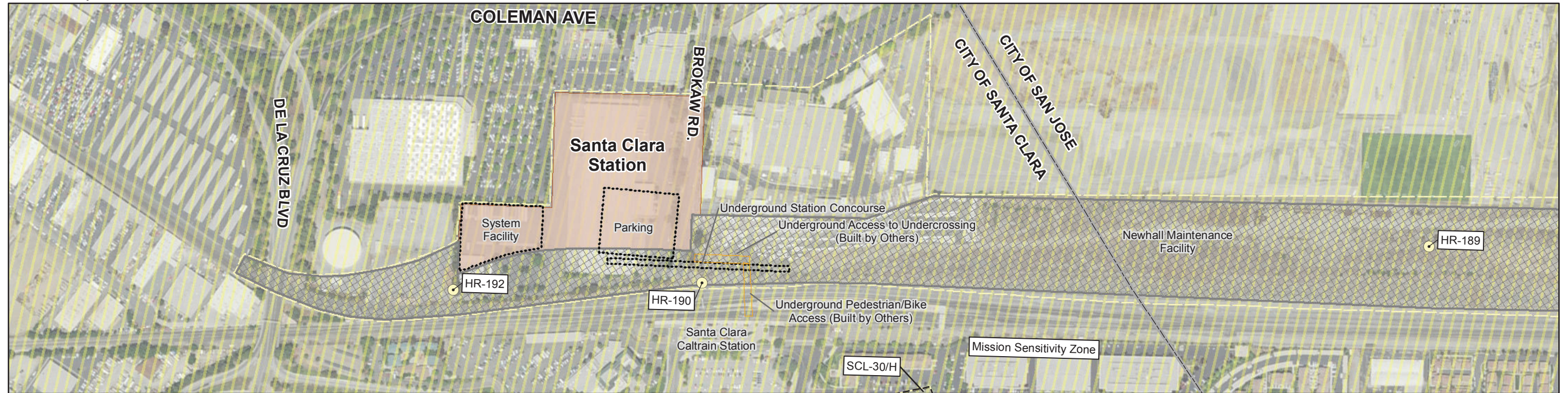


<ul style="list-style-type: none"> Potential Archaeological Sites Area of Potential Effects * Archaeological Site Mission Sensitivity Zone 	<p>Tunnel Elements</p> <ul style="list-style-type: none"> Cut and Cover Retained Cut Single Tunnel Newhall Maintenance Facility 	<p>0 200 400 600 800 Feet</p> <p>0 100 200 300 Meters</p>		
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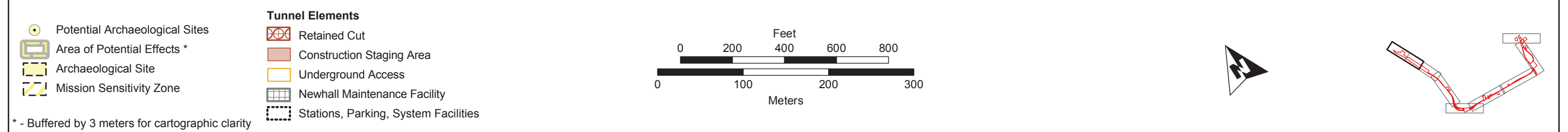
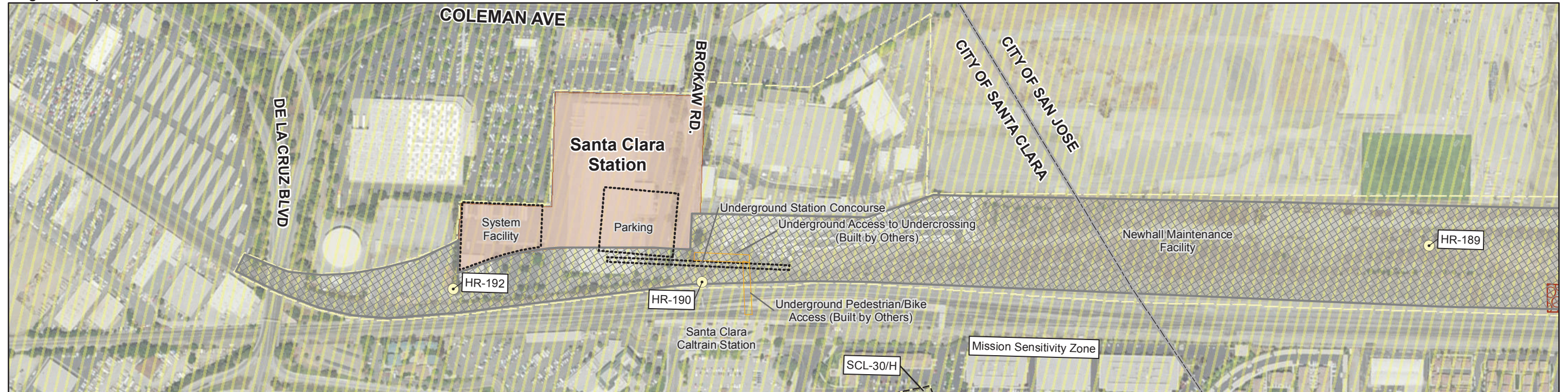
* - Buffered by 3 meters for cartographic clarity

Archaeological Area of Potential Effects Showing Construction Detail (7 of 8).

Twin-Bore Option



Single-Bore Option



Archaeological Area of Potential Effects Showing Construction Detail (8 of 8).

Attachment B
Outline of the Archaeological Treatment Plan

DRAFT VTA'S BART SILICON VALLEY – PHASE II EXTENSION PROJECT ARCHAEOLOGICAL RESOURCES TREATMENT PLAN

Prepared by Far Western Anthropological Research Group, Inc., and Albion Environmental, Inc.

September 2016

REPORT OUTLINE

- I.** Introduction
- II.** Project Description and Archaeological Area of Potential Effects
 - A. Project Description
 - 1. Project Overview
 - 2. Impact Depths
 - 3. Construction Staging Areas
 - B. Archaeological Area of Potential Effects
- III.** Project Area Cultural Resources
 - A. Identified Resources
 - B. Potential Historic-Era Resources
- IV.** Background
 - A. Natural Setting
 - B. The Issue of Buried Archaeological Sites in Santa Clara Valley
 - 1. Project Area Geomorphology
 - 2. Project Area Landscape Evolution
 - C. Prehistoric Context
 - 1. San Francisco Bay Region Temporal Framework
 - 2. Terminal Pleistocene (13,500–11,700 cal BP)
 - 3. Early Holocene (11,700–8200 cal BP)
 - 4. Middle Holocene (8200–4200 cal BP)
 - 5. Late Holocene (4200–180 cal BP)
 - D. Ethnographic Context
 - E. Historic-Era Context
 - 1. The Spanish Period (1777–1822)
 - 2. The Mexican Period (1822–1846)
 - 3. The Early American Period (1846–1869)
 - 4. Late American Period (1870–1906)
 - 5. Early Twentieth Century (1906–1945)
 - 6. Late Twentieth Century (1945–Present)
- V.** Research Design
 - A. Regulatory Context and Evaluation Criteria
 - 1. Eligibility Criteria
 - 2. Regulatory Setting
 - 3. Criteria for Determining Significance of Effects
 - B. Evaluating Prehistoric Sites
 - 1. Research Issues
 - C. Evaluating Historic-Era Sites

1. Characterizing Historic-Era Land Use
2. Predicted Property Types
3. Assessing the Historical Archaeological Research Potential
4. Research Themes

VI. Implementation Plan

- A. Personnel Qualifications
- B. Field Investigations for Prehistoric Resources
 1. Testing and Evaluation
 2. Data Recovery
 3. Field Methods for Surface or Near-Surface Sites
 4. Field Methods for Testing for Buried Prehistoric Sites
 5. Exploratory Techniques for Buried Resources
 6. Field Documentation
- C. Field Investigations for Historic-Era Resources
 1. Testing Plan
- D. Procedures in the Event of Area of Potential Effects Alteration
- E. Construction Monitoring Plan
 1. Cultural Resources Awareness Training for Construction Crews
 2. Field Monitoring Procedures
 3. Inadvertent Discoveries
- F. Safety and Security Issues
- G. Native American Participation
 1. Treatment of Human Remains
- H. Laboratory Processing and Data Analysis Procedures
 1. Prehistoric Materials
 2. Historic-Era Materials
- I. Technical Reporting
- J. Curation and Deaccession Policy
- K. References Cited
- L. Appendices

