

Volume III User Guide

Volume III of the Environmental Impact Report/Environmental Impact Statement (EIR/EIS) provides a series of engineering drawings, figures, and tables for the four project alternatives for the San Jose to CVY Project Section. It presents preliminary design information showing alignment, primary features, anticipated right-of-way requirements and temporary construction easement details in support of the proposed high-speed rail project.

Volume III is a part of the EIR/EIS document: it delineates the extents of the work proposed in the EIR/EIS. It also provides a useful tool for stakeholders who want to understand potential property, visual, and circulation impacts of the four project alternatives.

Organization of Volume III

Volume III has been split into several books for readability and navigation. Each book begins with an index of drawings included in that book, and an associated key map. The General Information Book has the full index of drawings while each Project Alternative Book only includes the index for that book.

General Information Book

The Volume III General Information Book provides the index of drawings, the key maps, and several general elements including notes, a glossary of abbreviations, wildlife crossing details, systems information, the plan for quad gates (at-grade crossings where traffic lanes in both directions are protected by safety gates), and typical sections. It provides information that is common to the four alternatives.

Project Alternative Books

In addition to the General Information Book, detailed Volume III books are available for each project alternative.

Contents of Project Alternative Books

The following information is included in the Project Alternative Books:

- Composite Plan, Profile, and Cross Sections:** Engineering drawings of the corridor and detailed plans that show the rail design and effects on adjacent rights-of-way and properties.
- Stations:** Illustrations of the planned stations, showing tracks, station platforms, parking lots, transit facilities, and station design elements. Includes tables describing each station program.
- Structures:** Plan and section drawings of underpasses, overpasses, viaducts, and tunnels.
- Roadways:** Plan drawings showing where streets and roads are closed, added, redirected, extended, or where grade separations are applied at the rail alignment.
- Maintenance of Way:** Drawings that illustrate the design of the planned maintenance-of-way facility, where track maintenance would be staged.
- Tunnel:** Drawings showing the design and elevations of the Pacheco Pass tunnel, an element of all four Project Alternatives.
- Construction Staging:** Engineering plans for detours, temporary structures, temporary roadways, and roadway closures at specific locations where these temporary measures are necessary during construction.
- Alignment Data Table:** Design information about track guideway curves and geometry, train design speeds, superelevations, and track stationing.

List of Project Alternative Books

Each set of Project Alternative Books is labeled based on the project alternative number, as listed below:

Alternative 1 Books

- 1A Composite Plan, Profile, and Cross Sections
- 1B Composite Plan, Profile, Cross Sections, Stations, and Structures
- 1C Roadways, Maintenance of Way, and Tunnels
- 1D Construction Staging and Alignment Data Tables

Alternative 2 Books

- 2A Composite Plan, Profile, and Cross Sections
- 2B Composite Plan, Profile, Cross Sections, Stations, and Structures
- 2C Roadways
- 2D Roadways, Maintenance of Way, and Tunnels
- 2E Construction Staging and Alignment Data Tables

Alternative 3 Books

- 3A Composite Plan, Profile, and Cross Sections
- 3B Composite Plan, Profile, Cross Sections, and Stations
- 3C Structures and Roadways
- 3D Roadways, Maintenance of Way, and Tunnels
- 3E Construction Staging
- 3F Alignment Data Tables

Alternative 4 Books

- 4A Composite Plan, Profile, and Cross Sections
- 4B Composite Plan, Profile, and Cross Sections
- 4C Stations
- 4D Structures, Roadways, and Maintenance of Way
- 4E Tunnels, Construction Staging, and Alignment Data Tables

Because some alternatives have more books and others have fewer, information may not be in the same books across alternatives. For example, information on structures is in Books 1B, 2B, 3C, and 4D.



How to Find a Property in Volume III

You can use Volume III to identify impacts that project alternatives may have on specific areas. This information is contained in the drawings showing the high-speed rail project alternative alignments, which are shown in **Composite Plan, Profile, and Cross Sections**. These drawings are in Volume III Books A and B for each of the alternatives (e.g., see Books 1A and 1B for Alternative 1 drawings, 2A and 2B for Alternative 2 drawings, etc.). The composite plans include technical drawings to illustrate high-speed rail's design and its footprint (the footprint refers to the land used for the rail line, station construction, electric equipment, facilities, access roads, and other rail amenities).

The Key Map

The Key Map orients users to identify specific drawings along the corridor. Key Maps for all four project alternatives are shown in the Volume III General Information Book on the four sheets immediately following the Index.

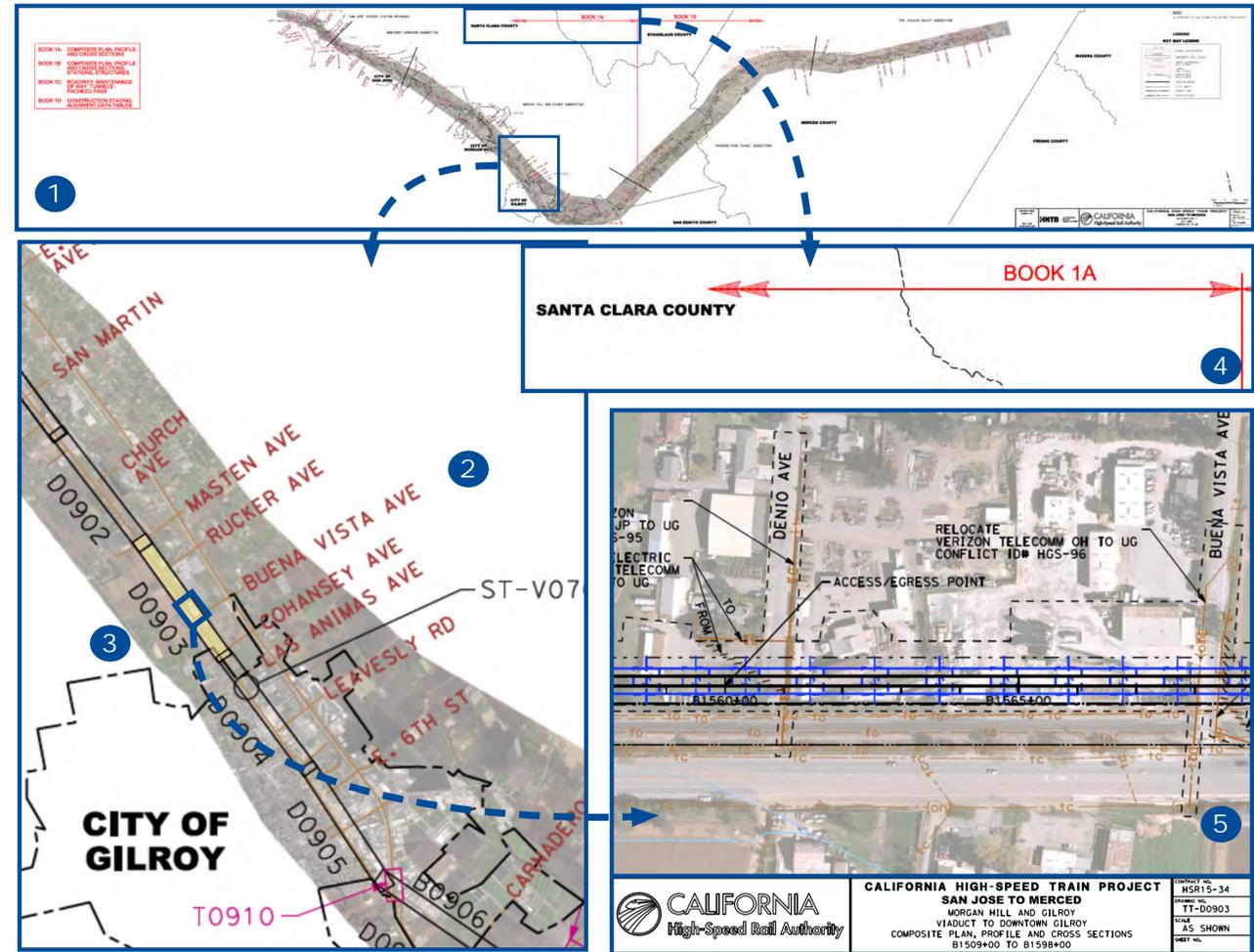
To find a property adjacent to a high-speed rail alignment alternative:

- Check the Key Map**
The Key Map illustrates the drawing numbers for all of the detailed engineering drawings.
- Look for the City and Cross Streets**
On the Key Map, find cross streets and other landmarks to help you locate the part of the map where you want to take a closer look.
- Find the Drawing Number**
Each narrow rectangle represents the boundary of a detailed engineering drawing and is labeled with a unique drawing number.

For example, the narrow rectangle highlighted in yellow shows the section of the rail alignment between Masten Ave. and Cohansey Ave. D0903, the label next to this rectangle, means drawing number TT-D0903 is the technical drawing for this area (Note: the Key Map omits the "TT-" on the drawing number reference).
- Locate the Book Number**
The red arrow at the top of the Key Map shows where you'll find the detailed engineering drawing you seek.

If you want to see drawing TT-D0903, you'll find it in Book 1A.
- Go to the Engineering Drawing**
Find each detailed engineering drawing on its own page.

Open Book 1A and turn to drawing TT-D0903. This detailed drawing shows the entire section between Masten Ave. and Cohansey Ave. If you're searching for a property impacted by the project footprint near Buena Vista Ave., you can locate it by finding Buena Vista Ave. on the engineering drawing.



The Index

Each book begins with an index of drawings included in that book, and an associated key map. The General Information book includes a complete index. The complete index of drawings lists all of the pages (called "sheets") in numerical order. The different columns show the boundary or information available on each page. After finding a property on the Key Map, you can check the index for the composite plans (shown in the example below) to find additional information.

BOOK	SHEET NO	DRAWING NO	SUBSECTION	GEOGRAPHIC LOCATION OR FEATURE	ALIGNMENT OR FEATURE	SHEET DESCRIPTION	ADDITIONAL DESCRIPTION
COVER, INDEX OF DRAWING AND KEY MAPS							
BOOK 1A	A	COVER	SAN JOSE TO MERCED SECTION	N/A	SAN JOSE TO CENTRAL VALLEY WYE	ALTERNATIVE 1	
BOOK 1A	B	GE-A0101	SAN JOSE DIRIDON STATION APPROACH, MONTEREY CORRIDOR, MORGAN HILL AND GILROY	SCOTT BLVD TO PACHECO PASS HWY	INDEX OF DRAWING	SHEET 1 OF 7	
BOOK 1A	C	GE-00101	GENERAL	ENTIRE ALTERNATIVE	KEY MAP	COMPOSITE PLAN	
BOOK 1A	D	GE-00102	GENERAL	ENTIRE ALTERNATIVE	KEY MAP	SYSTEMS SITES	
COMPOSITE PLANS							
SAN JOSE DIRIDON STATION APPROACH							
BOOK 1A	1	TT-D0151	SAN JOSE DIRIDON STATION APPROACH	SCOTT BLVD TO BROKAW RD	VIADUCT TO I-880	COMPOSITE PLAN, PROFILE AND CROSS SECTIONS	B2250+00 TO B2340+00
BOOK 1A	2	TT-D0152	SAN JOSE DIRIDON STATION APPROACH	I-880 TO W TAYLOR ST	VIADUCT TO I-880	COMPOSITE PLAN, PROFILE AND CROSS SECTIONS	B2340+00 TO B2430+00
BOOK 1A	3	TT-D0153	SAN JOSE DIRIDON STATION APPROACH	CINNABAR ST TO PARK AVE	VIADUCT TO I-880	COMPOSITE PLAN, PROFILE AND CROSS SECTIONS	B2430+00 TO B58+00
BOOK 1A	4	TT-D0301	SAN JOSE DIRIDON STATION APPROACH	PARK AVE TO WILLOW ST	VIADUCT TO I-880	COMPOSITE PLAN, PROFILE AND CROSS SECTIONS	B58+00 TO B125+00
MONTEREY CORRIDOR							
BOOK 1A	5	TT-D0401	MONTEREY CORRIDOR	WILLOW ST, CURTNER AVE	VIADUCT/AT-GRADE	COMPOSITE PLAN, PROFILE AND CROSS SECTIONS	B125+00 TO B211+00

Need Assistance?
Call us: 1-800-455-8166
Email us: san.jose_merced@hsr.ca.gov

Viewing Volume III as a PDF online? Downloaded a PDF from the High-Speed Rail Authority website?

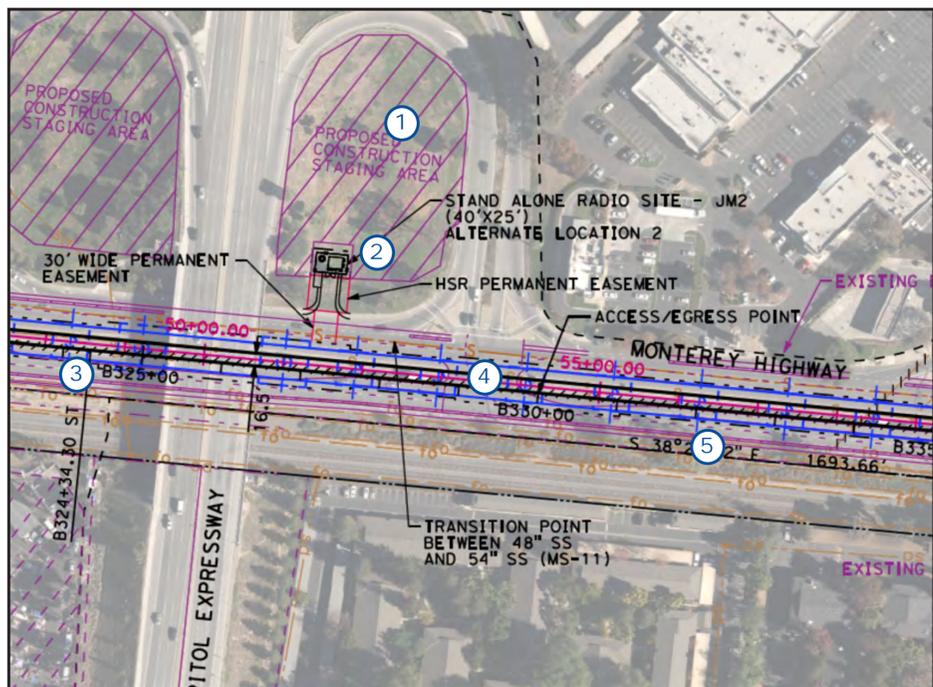
You can use built-in PDF tools like bookmarks to navigate the document and the find function to locate places.
For example, use the find function (Ctrl+F on a PC; ⌘+F on a Mac) to search for a cross street. All instances of the street label will show up, including those in maps and engineering drawings.

Understanding the Information in Volume III

Plans

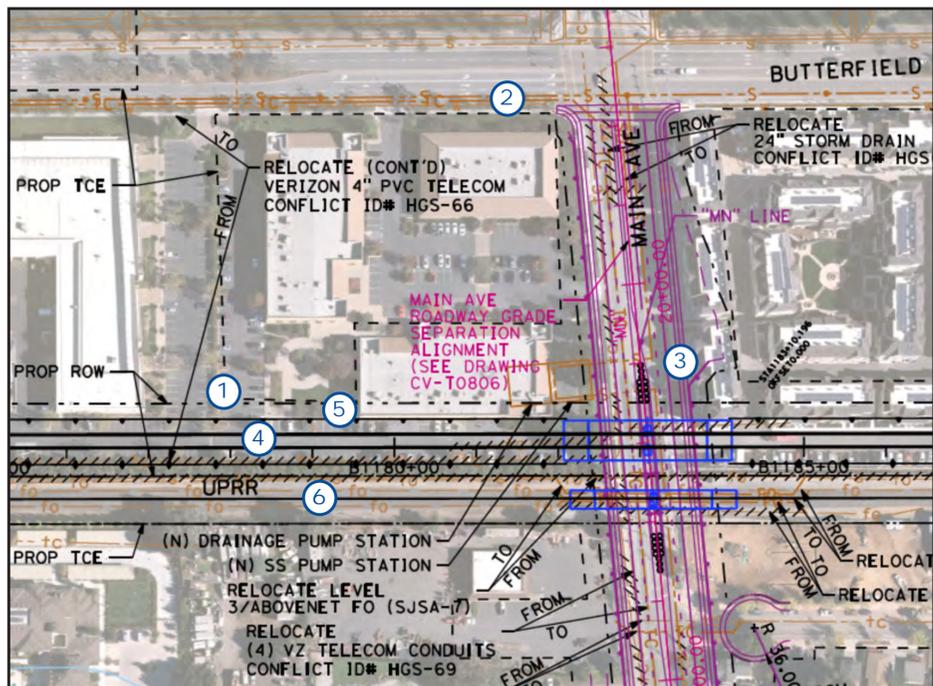
The plans in Volume III are detailed drawings of the project corridor that show the location of proposed high-speed rail infrastructure, existing and proposed rights-of-way, road alignments, utility lines, planned developments, and other features. Four enlarged examples from several plans are annotated below to highlight the different features that are labeled on these drawings.

- 1 Proposed construction staging areas are marked on the plans.
- 2 The proposed locations of facilities such as stand-alone radio sites and automatic train control sites are shown on the plans. In many cases, there are two potential locations for these facilities. In this example, alternate location 2 for the stand-alone radio site is shown (alternate location 1 is located 0.3 miles to the west). Ultimately, only one site will be selected.
- 3 Blue lines indicate the footprint of proposed structures, such as the viaduct shown in this example.
- 4 The high-speed rail tracks are shown as two black lines.
- 5 Magenta lines show how roadways, such as Monterey Highway in this example, will be realigned.



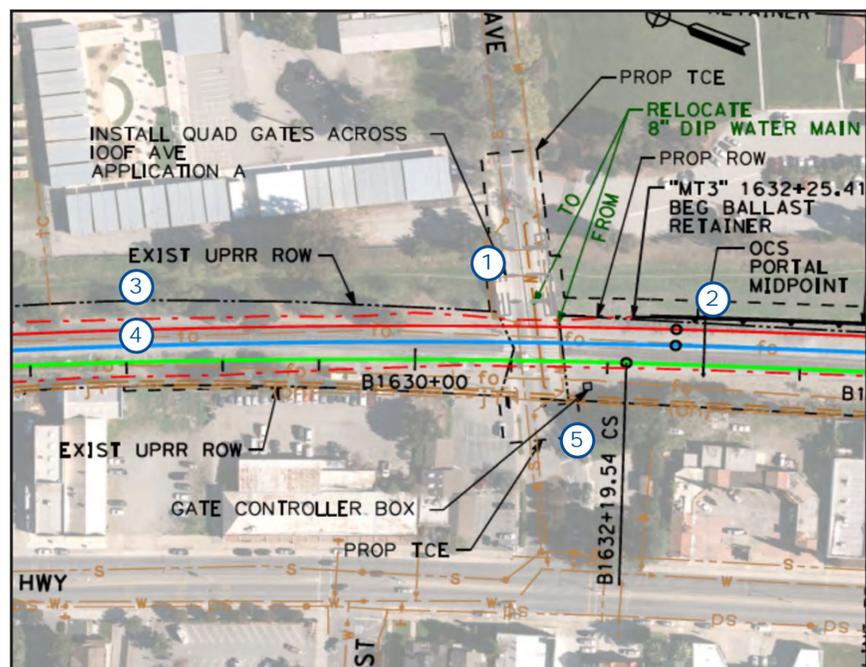
Example 1: Intersection of Capitol Expressway and Monterey Highway in San Jose

- 1 The dashed line labeled "PROP TCE" indicates a proposed temporary construction easement and the dashed line labeled "PROP ROW" indicates the boundary of the proposed high-speed rail right-of-way.
- 2 Brown lines mark utility features such as gas, water, sewer, and telecommunications lines.
- 3 Road realignments are shown by magenta lines. Note that a detailed drawing of the grade separation at E Main Avenue can be found on drawing CV-T0806.
- 4 The high-speed rail tracks are shown as two black lines.
- 5 The black lines with small triangles indicate the tracks are supported by retained fill.
- 6 The location of the UPRR track is labeled.



Example 2: Intersection of Butterfield Ave and E Main Ave in Morgan Hill

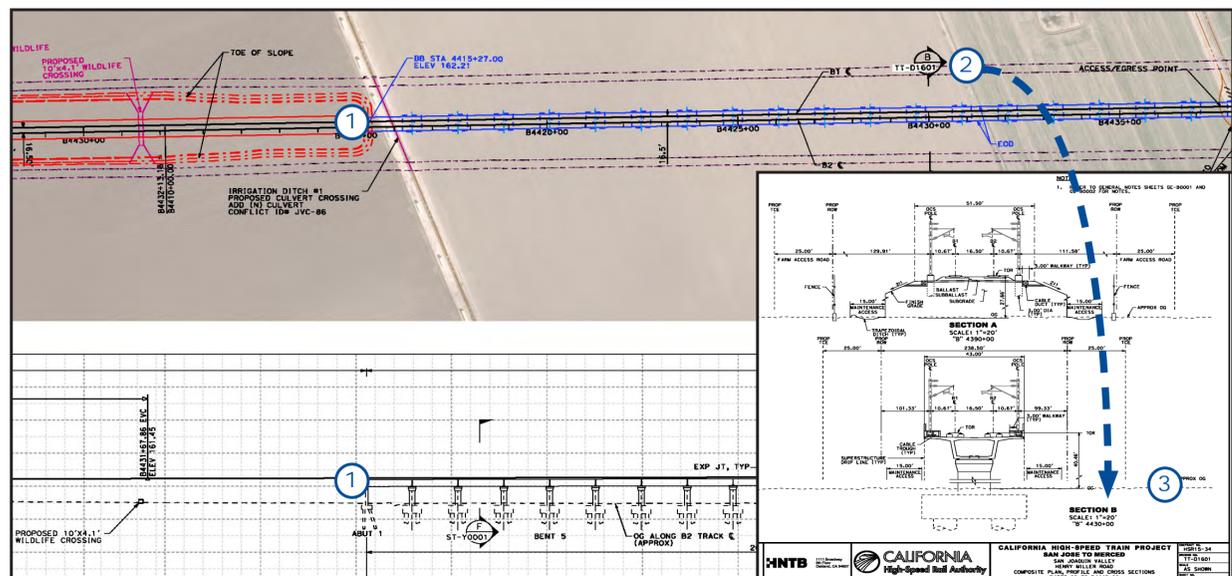
- 1 The location and style of quad gates that will be installed on IOOF Ave are labeled. The General Information Book contains drawings of the different configurations of quad gates.
- 2 The location of overhead contact system (OCS) portals are labeled as "OCS PORTAL MIDPOINT." These will require a small (10 foot by 10 foot) area of right-of-way.
- 3 The dashed line labeled "EXIST UPRR ROW" indicates the existing UPRR right-of-way.
- 4 The red line indicates the relocated UPRR freight track. The blue line marks the northbound passenger track and the green line marks the southbound passenger track.
- 5 The dashed line labeled "PROP TCE" indicates a proposed temporary construction easement.



Example 3: Intersection of IOOF Ave and Monterey Rd in Gilroy

Cross Sections and Vertical Profiles

In addition to the plan view of the rail corridor, Volume III composite plan sheets include cross sections and a vertical profile of the alignment. Cross sections are shown on each sheet to represent the track configuration at a specific location on that drawing. A vertical profile is an engineering drawing representing what the design would look like from the side, or profile, of the alignment. An example is shown below.



Example 4: East of Fahey Road Crossing

- 1 The profile corresponds to the plan above. You can see where the alignment transitions from being on embankment (red lines on the plan, which show the width of the embankment) to viaduct (blue lines on the plan) in the profile drawing.
- 2 Look for this symbol on the plan to indicate the location of a cross section drawing. In this case, Cross Section B shows a drawing of the viaduct at point B on the plan.
- 3 The dashed line in the vertical profile indicates ground level.

Colors/Legend

A legend for the composite plans can be found on sheet 38 of the General Information Book. The four previous examples highlight the most common markings that are found on the composite plans, but the legend may be referenced to help understand the information depicted in the plans.

- "MT" means main track and "B" indicates alignment stationing of the southbound passenger track with tick marks at 100' intervals.
- A 100-year flood event has a 1 in 100 (1%) chance of happening in any given year.
- Caltrain station platforms and high-speed rail station platforms are distinguished by different styles of hatching.
- Utilities are marked with brown lines.
- Structural features, marked with blue lines, generally refer to viaducts and other bridges.
- Realigned roadways are drawn in magenta.
- Embankments are shown with dashed red lines, and cuts are shown with dashed green lines.
- Grade separation features include proposed wildlife crossings.
- Tunnel sections (found only in the Pacheco Pass area) are indicated by a black outline.

NEW/RELOCATED:	EXIST:	
		UPRR/MT1/FREIGHT TRACK
		YARD TRACK
		NON ELECTRIFIED TRACK
		HSR B1 NORTHBOUND TRACK
		HSR B2 SOUTHBOUND TRACK
		HSR MT2 NORTHBOUND TRACK
		HSR MT3 SOUTHBOUND TRACK
		100-YEAR FLOOD ZONE LIMIT
		CALTRAIN PLATFORM
		PROPOSED HSR PLATFORM
		EXISTING UTILITY FEATURES
		PROPOSED UTILITY FEATURES
		PROPOSED STRUCTURAL FEATURES
		PROPOSED ROADWAY GEOMETRY
		PROPOSED TRACK ALIGNMENT
		PROPOSED EMBANKMENT
		PROPOSED CUT
		PROPOSED GRADE SEPARATION FEATURES
		PROPOSED TUNNEL FEATURES

Scale

The drawings in Volume III are scaled, meaning the measurements in these drawings are in proportion to the actual locations they represent. For example, one inch of a drawing might represent 600 feet of the real alignment. All drawings show their scale. Note that some drawings have different horizontal and vertical scales, and these are shown on the drawing.

