

Volume 3 User Guide

Volume 3 of the Draft EIR/EIS provides a series of engineering drawings, figures, and tables. Volume 3 presents preliminary design information showing alignment, primary features, anticipated right-of-way requirements and temporary construction details in support of the proposed high-speed rail project. It provides a useful tool for stakeholders who want to understand the potential property, visual, and circulation impacts of the alignment options developed and analyzed in the Burbank to Los Angeles Project Section.



Organization of Volume 3

The 2019 Burbank to Los Angeles PEPP is separated by engineering discipline into eight volumes, and each volume has an index, key maps, and plans and profiles. Content of PEPP Engineering Plans, organized by volume, are:

ALL VOL.	VOLUME 1	VOLUME 2	VOLUME 3	VOLUME 4	VOLUME 5	VOLUME 6	VOLUME 7	VOLUME 8
General This section provides the Index of Drawings and a glossary of abbreviations.	Track Alignment Design information about the high-speed rail track alignment including typical sections and plans and profiles.	Right-of-Way Impact Sections, plans, and profiles showing where streets and roads are closed, added, redirected, extended, or where grade separations are applied at the rail alignment.	Tunnel Drawings showing the design and elevations of the tunnels proposed.	Retaining Walls Engineering plans showing design information for retaining walls.	Grade Separations Plan and section drawings of underpasses, overpasses for the high-speed rail tracks.	Roadway Improvements Plans and profiles, along with sections, are shown along the track alignment. Plans show necessary road realignment, and road profiles are shown at each modified or new grade separation.	Utilities Drawings showing existing and proposed utilities near the project site. These plans also identify utilities that need to be relocated for the construction of the tracks and roadways.	Grading and Drainage Engineering plans showing design information for moving earth, drain pipes and box culverts.
Communication System Site Design drawings showing the locations, typical site layout plans for all communication sites and facility sites required for high-speed train operations.	Automatic Train Control Site Design information showing the locations of communication equipment used during the operation of locomotives on the track.	Stations Two new HSR stations and two existing Metrolink stations are located within this segment. The two existing Metrolink stations will have no major modifications required.	Maintenance Facilities Drawings showing the locations of planned maintenance facilities where track maintenance would be staged.	Trackside Access Design plans show the proposed access roads for track access and the system support facility sites.	Construction Phasing Plans Engineering plans for detours, temporary structures, temporary roadways, and roadway closures at specific locations where these temporary measures are necessary during construction.	Burbank Airport Station The HSR station at the Burbank Airport is being designed by the Palmdale to Burbank segment. The end of the HSR platform is the defined interface between the Palmdale to Burbank and the Burbank to Los Angeles segments.	Link Union Station (Link US) by LA Metro LA Metro is creating the design plans for this station, which will interface with the HSR segment just south of Main Street on the north side of LAUS. Construction work within the LAUS limits will consist of raising the two dedicated HSR platforms and electrifying the approach tracks.	

How to Find a Location in Volume 3

Readers may seek information about impacts that the project option may have on specific areas or communities. Each part of Volume 3 identifies locations where different types of work will be completed. For a more complete understanding of the project, the reader should repeat the process shown below for each engineering discipline.

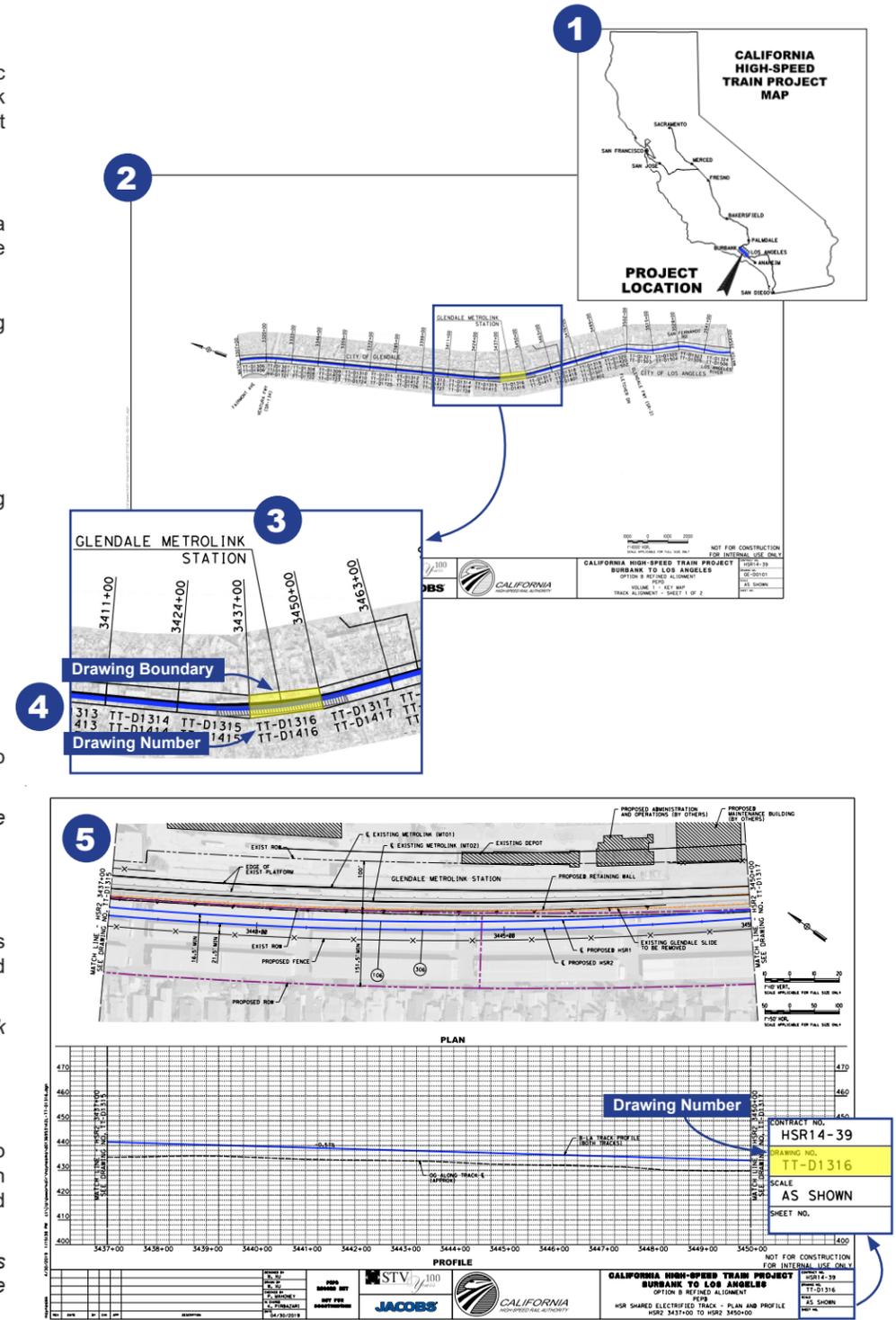
The Key Map

The Key Map for each engineering discipline and design option is like a table of contents: a master map of detailed engineering drawings that serves as a “key” for readers to find the detailed map they seek.

The Key Map contains a Vicinity Map showing the project location as well as surrounding roads and populated areas.

There are Key Maps for all parts of Volume 3.

- 1 Identify the Location of the Project**
Use the Vicinity Map to identify where the project is located compared to surrounding areas.
- 2 Check the Key Map**
The Key Map illustrates the drawings numbers for all of the maps.
The Track Alignment section Key Map shows the proposed track alignment.
- 3 Look for Cities, Highways, and Landmarks**
Look at the city and town names, highways, or landmarks to find the part of the map where you want to take a closer look.
For example, you may want to look in more detail at the alignment near the Glendale Metrolink Station.
- 4 Find the Drawing Number**
The narrow rectangles represent engineering drawing boundaries. Each boundary has an associated drawing number that will direct you to a sheet that shows the detailed drawing.
The highlighted area shows the high-speed rail alignment at the Glendale Metrolink Station. The Drawing Number associated with that location is TT-D1316.
- 5 Go to the Engineering Drawing**
Use the drawing number to locate engineering drawing. Use the Index of Drawings to find the specific drawing. Alternatively, find the correct page by looking through the plan sheets immediately after the Key Map in that section. The drawing number is located near the bottom right of the drawing.
In this example, Alignment drawing TT-D1316 shows more detail about how the tracks are aligned near the station. This could lead the user to look at other sections for more information.



Example 1: Portions of Drawings GE-A0101 and TT-D1316

TRACK ALIGNMENT	
DRAWING NO.	DRAWING TITLE
TT-D1105	HSR DEDICATED - PLAN AND PROFILE HSR2 3099+00 TO HSR2 3112+00
TT-D1106	HSR DEDICATED - PLAN AND PROFILE HSR2 3112+00 TO HSR2 3125+00
TT-D1107	HSR DEDICATED - PLAN AND PROFILE HSR2 3125+00 TO HSR2 3138+00

Each drawing has a **drawing number**. Drawing numbers on the Key Maps identify which maps illustrate specific geographic locations.

The **drawing title** refers to the type of information presented on the sheet, as well as specific station limits, as appropriate.

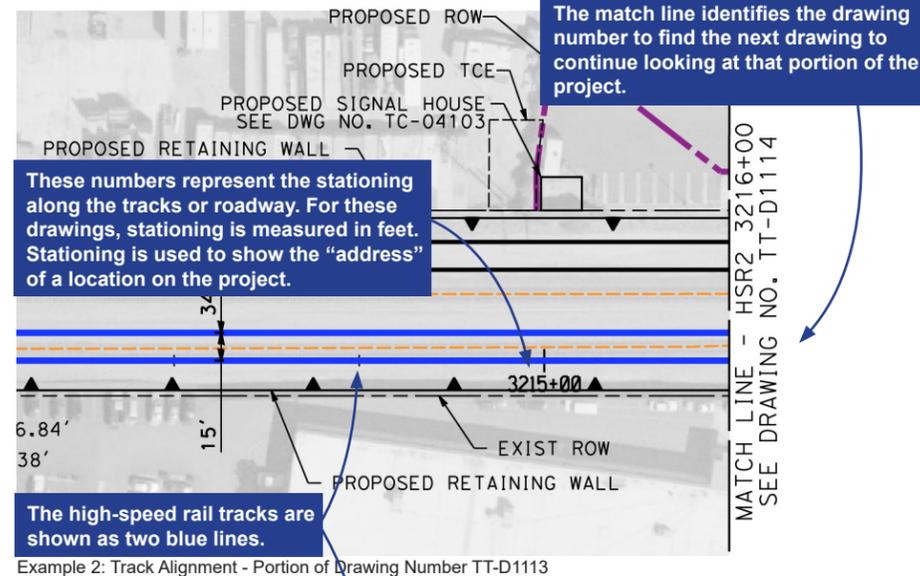
The Index of Drawings

Each of the parts of Volume 3 has an Index of Drawings that is located in the General part of each document. The Index, broken down by the engineering disciplines within each volume, lists the pages (called “drawings”) in numerical order, with a column containing a descriptive title. After finding a location on a Key Map, one may consult the Index of Drawings for the location of the drawing.

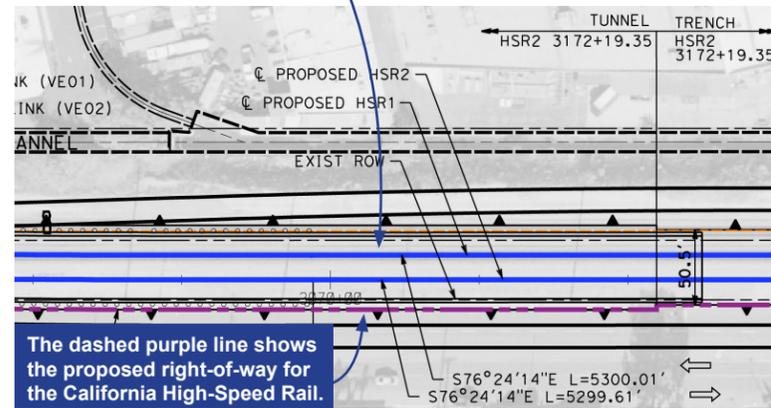
Understanding the Information in Volume 3

Plans

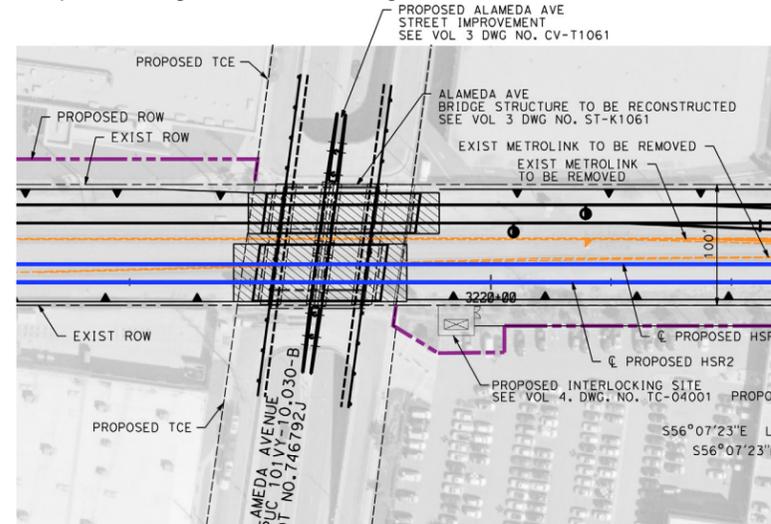
Plans show portions of the project as seen from above. The plans in Volume 3 are detailed drawings of the project corridor that show the location of proposed high-speed rail infrastructure, as well as the extent of existing and proposed rights-of-way, existing road alignments and proposed realignments, utility lines, and other features considered by designers. Enlarged sections from several plans are annotated below to help readers understand the different features that are labeled on these drawings.



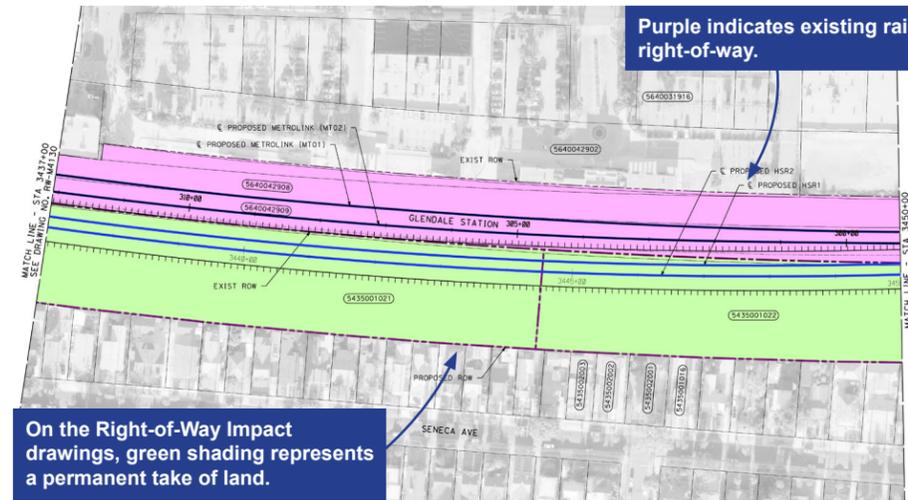
Example 2: Track Alignment - Portion of Drawing Number TT-D1113



Example 3: Track Alignment - Portion of Drawing Number TT-D1102



Example 4: Track Alignment - Portion of Drawing Number TT-D1114



Example 5: Right-of-Way Impact - Portion of Drawing Number RW-M4131

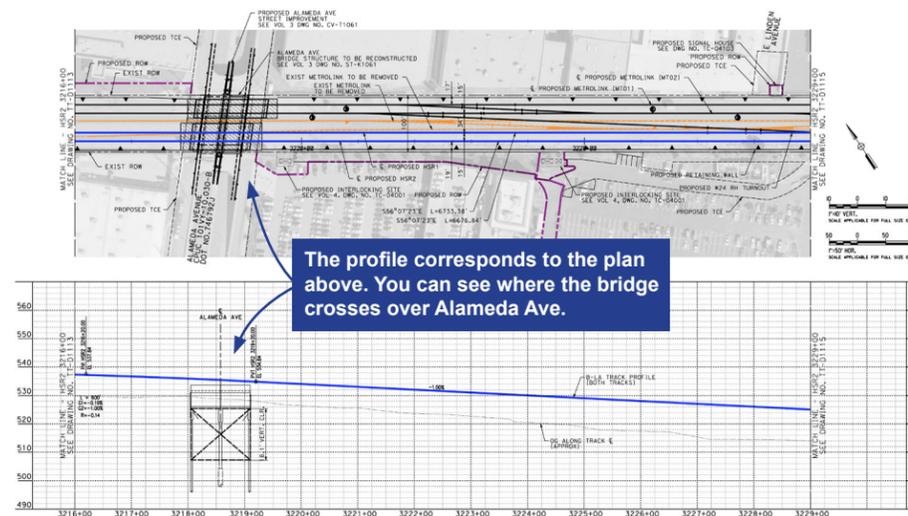
Legend

The legend defines the meanings of graphics and lines that are shown in the plans and profiles. Legends are provided for each engineering discipline of Volume 3.

TRACK	
—	EXISTING FREIGHT/PASSENGER TR
—	NEW MAINLINE AND/OR INDUSTRY (SEE TRACK PLANS FOR DESIGNAT
RIGHT-OF-WAY	
—	PROPOSED RIGHT-OF-WAY
---	EXISTING ROW
---	EXISTING EASEMENT
---	PROPOSED TEMPORARY CONSTRUCTION EASEMENT
CIVIL	
▲	RETAINING WALL
◆	WALL ON BARRIER

Cross Sections and Vertical Profiles

In addition to the plan view of the rail corridor, various drawings show the width or expanse of the rail alignment, the heights of bridges and viaducts, and the right-of way of the alignment in relation to adjacent homes, businesses, and other properties.

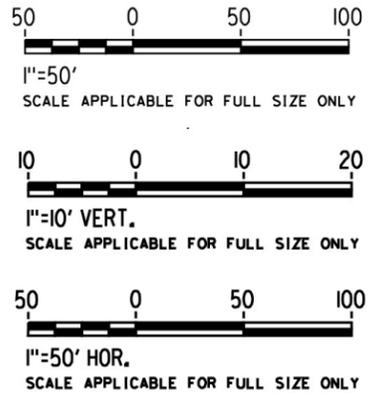


Example 6: Track Alignment - Portion of Drawing Number TT-D1114

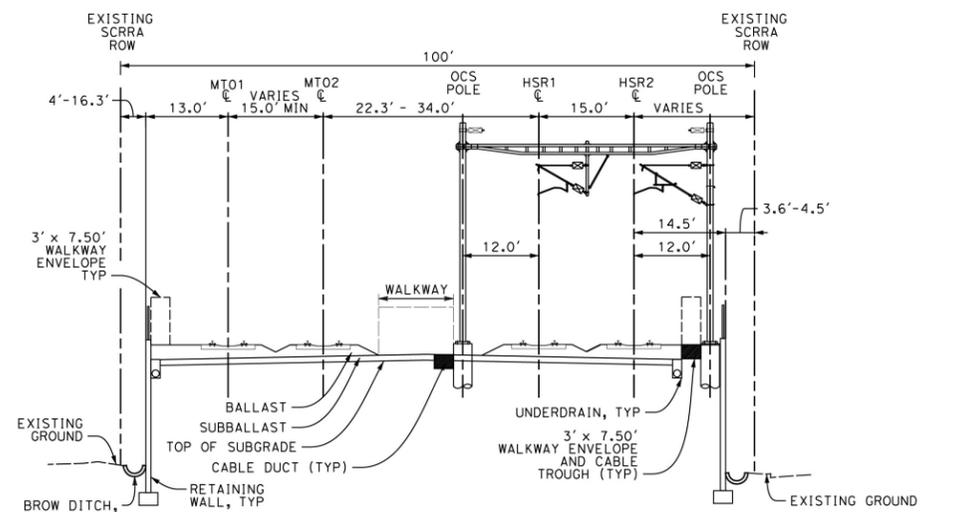
Scales

Various drawings show the width or expanse of the rail alignment, the heights of bridges and viaducts, and the right-of way of the alignment in relation to adjacent homes, businesses, and other properties.

The drawings 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 10 feet of real alignment. Most drawings show their scale or have real-world measurements depicted on the drawing. Some drawings have different horizontal and vertical scales. The abbreviations HOR for horizontal and VERT for vertical differentiate the scales. The horizontal scale measures distances in the North, South, East, or West directions. The vertical scale measures distances up and down as if you are looking at them from the side.



Some drawings have scales that read SCALE APPLICABLE FOR FULL SIZE ONLY. When drawings are printed on paper that is smaller than full size (22 inch by 34 inch), the nominal scale (1"=100' in the example) may not be accurate. Use a ruler to measure the lines on the graphic scale and use those lengths to find distances or heights.



Example 7: Track Alignment - Portion of Drawing Number TT-D3105

Shows the stretch of the alignment where this section is applicable.