

California High-Speed Rail Authority

Palmdale to Burbank Project Section

PEPD RECORD SET ADDENDUM SR14A / E1A / E2A

Railway Systems Plans

April 2024



The environmental review, consultation, and other actions required by applicable federal environmental laws for this project are being or have been carried out by the State of California pursuant to 23 U.S.C. 327 and a Memorandum of Understanding dated July 23, 2019, and executed by the Federal Railroad Administration and the State of California.

c:\pwworking\chsr\vdms28532\PB-TP-B0002.dgn

1/26/2021 8:44:33 AM

0400074

A

AB AGGREGATE BASE
ABBC ASBESTOS BONDED BITUMINOUS COATED
ABM AIR-BLOWN MORTAR
ABN ABANDON
ABUT ABUTMENT
AC ASPHALT CONCRETE
ACB ASPHALT CONCRETE BASE
ACP ASBESTOS CEMENT PIPE
ADL ADDED DEAD LOAD
ADJ ADJUST
AFES ALTERNATIVE FLARED END SECTION
AHD AHEAD
ALT ALTERNATE
AM TIME FROM MIDNIGHT TO NOON
AP ALTERNATIVE PIPE
APC ALTERNATIVE PIPE CULVERT
APPROX APPROXIMATE
APU ALTERNATIVE PIPE UNDERDRAIN
ARS ACCELERATION RESPONSE SPECTRUM
AR ACCESS RESTRICTION
AS AGGREGATE SUBBASE
ASRP ALUMINUM SPIRAL RIB PIPE
ASSY ASSEMBLY
ATPB ASPHALT TREATED PERMEABLE BASE
ATPM ASPHALT TREATED PERMEABLE MATERIAL
AVE AVENUE
AVG AVERAGE
@ AT

B

BAGR BRIDGE APPROACH GUARD RAILING
BB BEGINNING OF BRIDGE
BC BEGIN HORIZONTAL CURVE
BCC BALANCED CANTILEVER CONSTRUCTION
BCR BEGIN CURB RETURN
BEG BEGIN
BIT CTD BITUMINOUS COATED
BK BACK
BKF BACKFILL
BLDG BUILDING
BLM BRIDGE-LOG MILE
BLVD BOULEVARD
BM BENCH MARK
BND BOUND
BOT BOTTOM
BR BRIDGE
BRG BEARING
BTU BRITISH THERMAL UNIT
BVC BEGIN VERTICAL CURVE
BW BARBED WIRE

C

CAA CABLE ANCHOR ASSEMBLY
CAP CORRUGATED ALUMINUM PIPE
CAPA CORRUGATED ALUMINUM PIPE ARCH
CAS CONSTRUCTION AREA SIGN
CB CONCRETE BARRIER
CBW CONCRETE BLOCK WALL
C-C CENTER TO CENTER

C CONTINUED

CHSRA CALIFORNIA HIGH SPEED RAIL AUTHORITY
CHST CALIFORNIA HIGH SPEED TRAIN
CHSR CALIFORNIA HIGH SPEED RAIL
CG CENTER OF GRAVITY
CHNL CHANNEL
CI CAST IRON
CIDH CAST-IN-DRILLED-HOLE
CIP,C-I-P CAST-IN-PLACE, CAST IRON PIPE
CIPCP CAST IN PLACE CONCRETE PIPE
CISS CAST-IN-STEEL-SHELL
CJP COMPLETE JOINT PENETRATION
CL CENTERLINE, CLASS
CL CENTERLINE
CL2 CLASS 2
CL-6 CHAIN LINK FENCE (6 FT)
CLR CLEAR, CLEARANCE
CM CORRUGATED METAL
CM CORRUGATED METAL PIPE
CO COUNTY
COL COLUMN
CONC CONCRETE
COND CONDUIT
CONN CONNECTOR
CONST CONSTRUCT, CONSTRUCTION
CONT CONTINUOUS
COORD COORDINATE
CP CANDLEPOWER
CR CREEK
CRCP CONTINUOUS REINFORCED CONCRETE PAVT
CRSP CONCRETED ROCK SLOPE PROTECTION
CS CURVE TO SPIRAL
CSP CORRUGATED STEEL PIPE
CSPA CORRUGATED STEEL PIPE ARCH
CTB CEMENT TREATED BASE
CTPB CEMENT TREATED PERMEABLE BASE
CTPM CEMENT TREATED PERMEABLE MATERIAL
CTRS CENTERS
CULV CULVERT
CVFPB CENTRAL VALLEY FLOOD PROTECTION BOARD

D

D DEPTH
DD DOWNDRAIN, DIRECTIVE DRILLING
DBL DOUBLE
DEG DEGREE
DEL DELINEATOR
DET DETAIL, DETOUR
DF DOUGLAS FIR
DI DRAINAGE INLET, DROP INLET
DIA DIAMETER
DIAPH DIAPHRAGM
DIST DISTANCE, DISTRICT
DMBB DOUBLE METAL BEAM BARRIER
DR DRIVE
DTBB DOUBLE THRIE BEAM BARRIER
DWY DRIVEWAY

E

E EAST, EASTING
EA ACTUAL SUPERELEVATION
EU UNBALANCED SUPERELEVATION

E CONTINUED

EASE EASEMENT
EB END OF BRIDGE, EASTBOUND
EC END HORIZONTAL CURVE
ECR END CURB RETURN
ED EDGE DRAIN
EDC EDGE DRAIN CLEANOUT
EDO EDGE DRAIN OUTLET
EDV EDGE DRAIN VENT
ELEC ELECTROLIER
ELECT ELECTRIC
ELEV ELEVATION
ELLN EXTRALEGAL LEAD NETWORK
EMB EMBANKMENT
ENGR ENGINEER
EOD EDGE OF DECK
EP EDGE OF PAVEMENT
EO EQUATION, EQUAL
ES EDGE OF SHOULDER
ETW EDGE OF TRAVELED WAY
EVC END VERTICAL CURVE
EW ENDWALL
EXC EXCAVATION
EXIST, EX. EXISTING
EXP EXPANSION
EXP JT EXPANSION JOINT
EXT EXTERIOR
EXWY EXPRESSWAY

F

F & C FRAME AND COVER
F & G FRAME AND GRATE
FB FLOOR BEAM
F-B FRESNO TO BAKERSFIELD
FDN FOUNDATION
FEBT FACING EASTBOUND TRAFFIC
FES FLARED END SECTION
FF FILTER FABRIC
FG FINISHED GRADE
FH FIRE HYDRANT
FIG FIGURE
FL FLOW LINE
FNBT FACING NORTHBOUND TRAFFIC
FOC FACE OF CONCRETE
FPLM FULL SPAN PRECAST LAUNCHING METHOD FRONTAGE ROAD
FR RD FAR SIDE, FINISHED SURFACE
FS FACING SOUTHBOUND TRAFFIC
FSBT FACING SOUTHBOUND TRAFFIC
FT FOOT, FEET
FTG FOOTING
FUT FUTURE
FWBT FACING WESTBOUND TRAFFIC
FWY FREEWAY

G

G ACCELERATION DUE TO GRAVITY
GAGE GAGE
GALV GALVANIZED
GP GRADING PLANE
GR GUARD RAILING
GSP GALVANIZED STEEL PIPE
GTR GUTTER

H

H HEIGHT
HD HORIZONTAL DRAIN
HDC HIGH DESERT CORRIDOR
HDWL HEADWALL
HEX HD HEXAGONAL HEAD
HMA HOT MIXED ASPHALT
HORIZ HORIZONTAL
HP HINGE POINT, HORSEPOWER
HPS HIGH PERFORMANCE STEEL
HR HOUR
HS HIGH STRENGTH
HSR HIGH SPEED RAIL
HST HIGH SPEED TRAIN
HW HEADWALL, HIGH WATER
HWM HIGH WATER MARK
HWY HIGHWAY

I

IB IMPORTED BORROW
ID INSIDE DIAMETER
IF INSIDE FACE
IN INCH, INCHES
INT INTERIOR
INV INVERT
IRR IRRIGATION

J

JCT JUNCTION
JP JOINT POLE
JPCP JOINTED PLAIN CONCRETE PAVEMENT
JS JUNCTION STRUCTURE
JT JOINT

K

K DISTANCE TO ACHIEVE 1% GRADE CHANGE

L

L LENGTH
LAT LATITUDE
LC LENGTH OF CURVE
LCB LEAN CONCRETE BASE
LMF LIGHT MAINTENANCE FACILITY
LN LANE
LOC LOCATION
LOL LAYOUT LINE
LONG LONGITUDE
LONGIT LONGITUDINAL
LS LENGTH OF SPIRAL
LT LEFT

M

MAINT MAINTENANCE
MAX MAXIMUM
MB METAL BEAM
MBB METAL BEAM BARRIER
MBGR METAL BEAM GUARD RAILING
MED MEDIAN
M-F MERCED TO FRESNO
MH MANHOLE
MIN MINIMUM
MISC MISCELLANEOUS
MISC I & S MISCELLANEOUS IRON AND STEEL
MKR MARKER
M/L MAIN LINE (RAILWAY)

M CONTINUED

MOD MODIFIED, MODIFY
MON MONUMENT
MP METAL PLATE
MPGR METAL PLATE GUARD RAILING
MPH MILES PER HOUR
MR MOVEMENT RATING
MSE MECHANICALLY STABILIZED EARTH
MSS MOVING SCAFFOLDING SYSTEM
MT MAIN TRACK
MTL MATERIAL

N

N NORTH, NORTHING
N/A NOT APPLICABLE
NB NORTHBOUND
NO. NUMBER (MUST HAVE PERIOD)
NOS. NUMBERS (MUST HAVE PERIOD)
NPS NOMINAL PIPE SIZE
NS NEAR SIDE
NTS NOT TO SCALE

O

OBLR OBLITERATE
OC OVERCROSSING
OCS OVERHEAD CONTACT SYSTEM
OD OUTSIDE DIAMETER
OF OUTSIDE FACE
OG ORIGINAL GROUND
OGAC OPEN GRADED ASPHALT CONCRETE
OH OVERHEAD
O-O OUT TO OUT
OPP OPPOSITE

P

P PAGE
PAP PERFORATED ALUMINUM PIPE
PB PULL BOX
PC POINT OF CURVATURE, PRECAST
PCC POINT OF COMPOUND CURVE, PORTLAND CEMENT CONCRETE
PCP PERFORATED CONCRETE PIPE, PRESTRESSED CONCRETE PIPE
PCVC POINT OF COMPOUND VERTICAL CURVE
PED PEDESTRIAN
PED OC PEDESTRIAN OVERCROSSING
PED UC PEDESTRIAN UNDERCROSSING
PERM MTL PERMEABLE MATERIAL
PG PROFILE GRADE
PI POINT OF INTERSECTION
PJP PARTIAL JOINT PENETRATION
P,PL PLATE
P/L PROPERTY LINE
PM POST MILE, TIME FROM NOON TO MIDNIGHT
PN PAVING NOTCH
POB POINT OF BEGINNING
POC POINT OF HORIZONTAL CURVE
POE POINT OF ENDING
POT POINT OF TANGENT
POVC POINT OF VERTICAL CURVE
PP PIPE PILE, PLASTIC PIPE, POWER POLE
PPL PREFORMED PERMEABLE LINER
PPP PERFORATED PLASTIC PIPE
PRC POINT OF REVERSE CURVE

DESIGNED BY
R. RODRIGUEZ
DRAWN BY
F. VASQUEZ
CHECKED BY
A. RELANO
IN CHARGE
A. RELANO
DATE
02/26/2021

PEPD RECORD SET
ADDENDUM
SR14A/E1A/E2A

NOT FOR
CONSTRUCTION



CALIFORNIA HIGH-SPEED RAIL PROJECT
PALMDALE TO BURBANK

ALIGNMENT "SR14A/E1A/E2A"
GENERAL
ABBREVIATIONS

CONTRACT NO.
HSR14-42
DRAWING NO.
TP-B0002
SCALE
NO SCALE
SHEET NO.

REV	DATE	BY	CHK	APP	DESCRIPTION

P CONTINUED

PRF PAVEMENT REINFORCING FABRIC
 PROP PROPOSED
 PRVC POINT OF REVERSE VERTICAL CURVE
 PS&E PLANS, SPECIFICATIONS AND ESTIMATES
 PS, P/S PRESTRESSED, PARALLEL STATION
 PSP PERFORATED STEEL PIPE
 PT POINT OF TANGENCY
 PVC POLYVINYL CHLORIDE
 PVI POINT OF VERTICAL INTERSECTION
 PVMT PAVEMENT
 PVP MAINTENANCE VEHICLE PULLOUT

Q
R

QTY QUANTITY
 R RADIUS
 R & D REMOVE AND DISPOSE
 R & S REMOVE AND SALVAGE
 R/C RATE OF CHANGE
 RCA REINFORCED CONCRETE ARCH
 RCB REINFORCED CONCRETE BOX
 RCP REINFORCED CONCRETE PIPE
 RCPA REINFORCED CONCRETE PIPE ARCH
 RD ROAD
 REINF REINFORCED, REINFORCEMENT, REINFORCING
 REL RELOCATE
 REPL REPLACEMENT
 RET RETAINING
 REV REVISED
 RDWY ROADWAY
 RM ROAD-MIXED
 R/W, ROW RIGHT OF WAY
 RP RADIUS POINT, REFERENCE POINT
 RR RAILROAD
 RSP ROCK SLOPE PROTECTION
 RT RIGHT
 RTE ROUTE
 RW REDWOOD, RETAINING WALL
 RWY RAILWAY

S

S SOUTH, SUPPLEMENT, STATION LINE
 SAE STRUCTURE APPROACH EMBANKMENT
 SALV SALVAGE
 SAPP STRUCTURAL ALUMINUM PLATE PIPE
 SB SOUTHBOUND
 SC SPIRAL TO CURVE
 SCRRRA SOUTHERN CALIFORNIA REGIONAL RAIL AUTHORITY
 SCSP SLOTTED CORRUGATED STEEL PIPE
 SD STORM DRAIN
 SEC SECOND
 SECT SECTION
 SEP SEPARATION
 SG SUBGRADE
 SHLD SHOULDER
 SHT SHEET
 SIM SIMILAR
 SM SELECTED MATERIAL
 SPEC SPECIAL, SPECIFICATIONS
 SPP SLOTTED PLASTIC PIPE
 SS SLOPE STAKE, SPIRAL TO SPIRAL

S CONTINUED

SSBM STRAP AND SADDLE BRACKET METHOD
 SSD STRUCTURAL SECTION DRAIN
 SSPA STRUCTURAL STEEL PLATE ARCH
 SSPP STRUCTURAL STEEL PLATE PIPE
 SSPPA STRUCTURAL STEEL PLATE PIPE ARCH
 SSRP STEEL SPIRAL RIB PIPE
 SR STATE ROUTE
 ST STREET, SPIRAL TO TANGENT
 STA STATION
 STBB SINGLE THRIE BEAM BARRIER
 STD STANDARD
 STR STRUCTURE
 SRS STAND ALONE RADIO SITE
 SURF SURFACING
 SW SIDEWALK, SOUND WALL
 SWR SEWER
 SWS SWITCHING STATION
 SYM SYMMETRICAL
 S4S SURFACE 4 SIDES

T

T SEMI-TANGENT
 TAB TABLET
 TAN TANGENT
 TBB THRIE BEAM BARRIER
 TBR TIMBER
 TC TOP OF CURB, TANGENT TO CURVE
 TCB TRAFFIC CONTROL BOX
 TEL TELEPHONE
 TEMP TEMPORARY
 TG TOP OF GRADE
 TM TECHNICAL MEMORANDUM
 TOT TOTAL
 TP TELEPHONE POLE
 TPB TREATED PERMEABLE BASE
 TPM TREATED PERMEABLE MATERIAL
 TPSS TRACTION POWER SUPPLY STATION
 TRANS TRANSITION, TRANSVERSE
 TANGENT TO SPIRAL
 TSMF TERMINAL STORAGE AND MAINTENANCE FACILITY
 TYP TYPICAL
 TOR TOP OF RAIL

U

UC UNDERCROSSING
 UD UNDERDRAIN
 UON UNLESS OTHERWISE NOTED
 UP UNDERPASS
 UPRR UNION PACIFIC RAILROAD
 USFWS UNITED STATES FISH AND WILDLIFE SERVICE

V

V VALVE,
 DESIGN SPEED
 VAR VARIABLE
 VC VERTICAL CURVE
 VCP VITRIFIED CLAY PIPE
 VERT VERTICAL
 VIA VIADUCT
 VOL VOLUME

W

W WEST,
 WIDTH
 WB WESTBOUND
 WH WEEP HOLE
 WM WIRE MESH
 WS WATER SURFACE
 WSP WELDED STEEL PIPE
 WT WEIGHT
 WV WATER VALVE
 WW WINGWALL
 WWLWL WINGWALL LAYOUT LINE
 W/ WITH

X

X SEC CROSS SECTION
 XING CROSSING

Y

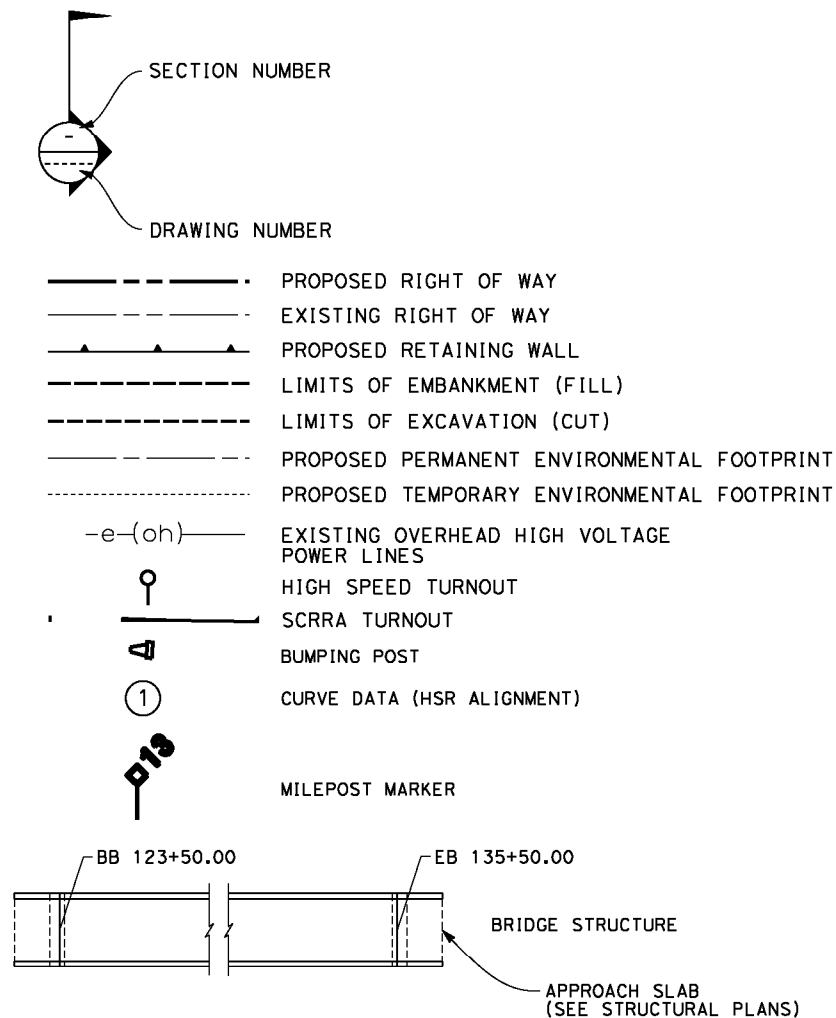
YR YEAR
 YRS YEARS

GENERAL NOTES

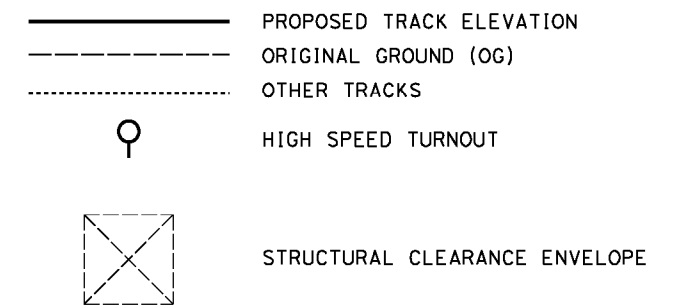
1. TRACK PROFILE IS DESIGNED AS CENTERLINE AT THE TOP OF THE SB LOW RAIL.
2. MINIMUM VERTICAL CLEARANCE REQUIREMENTS TO CANALS AND DITCHES ARE NOT KNOWN. FURTHER CONSULTATION WITH THE WATERCOURSE OWNERS WILL BE REQUIRED TO DETERMINE NECESSARY CLEARANCES. 3'-0" FREEBOARD HAS BEEN ALLOWED OVER THE 100-YEAR FLOOD LEVEL ELEVATIONS OF THE WASHES AND LA RIVER.
3. THE FOLLOWING ARE ROADWAY DESIGN STANDARD AND GUIDELINES:
 A. CALTRANS HIGHWAY DESIGN MANUAL (2006)
 B. AASHTO ROADSIDE DESIGN GUIDE (2006)
 C. APPLICABLE LOCAL DESIGN STANDARD AND GUIDELINES (I.E., CITY OF LOS ANGELES)
4. FOR ROADWAY IMPROVEMENTS, SEE ROADWAY PLANS.
5. FINAL SLOPES TO BE DEFINED AT A LATER STAGE, WHEN THE GEOTECHNICAL STUDY IS AVAILABLE.
6. STRUCTURE DIMENSIONS ARE INDICATIVE.
7. STA 296+82.67 (SPRUCE CT) IS THE NORTHERN LIMIT OF THE PALMDALE-BURBANK ENVIRONMENTAL DOCUMENT. NORTH OF THIS POINT REFER TO BAKERSFIELD-PALMDALE ENVIRONMENTAL DOCUMENT. DESIGN FEATURES BETWEEN STA 265+00.00 AND STA 296+82.67 (SPRUCE CT) SHOWN FOR REFERENCE ONLY.

LEGEND

PLAN



PROFILE



c:\pwworking\chsr\dms28532\PB-TP-B0003.dgn

3/30/2021 4:31:30 PM

0400074

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
R. RODRIGUEZ
 DRAWN BY
F. VASQUEZ
 CHECKED BY
A. RELANO
 IN CHARGE
A. RELANO
 DATE
02/26/2021

**PEPD RECORD SET
 ADDENDUM
 SR14A/E1A/E2A**
**NOT FOR
 CONSTRUCTION**



**CALIFORNIA HIGH-SPEED RAIL PROJECT
 PALMDALE TO BURBANK**

ALIGNMENT SR14A/E1A/E2A"
 GENERAL
 ABBREVIATIONS AND LEGEND

CONTRACT NO.
HSR14-42
 DRAWING NO.
TP-B0003
 SCALE
NO SCALE
 SHEET NO.

LEGEND

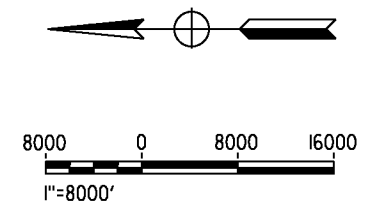
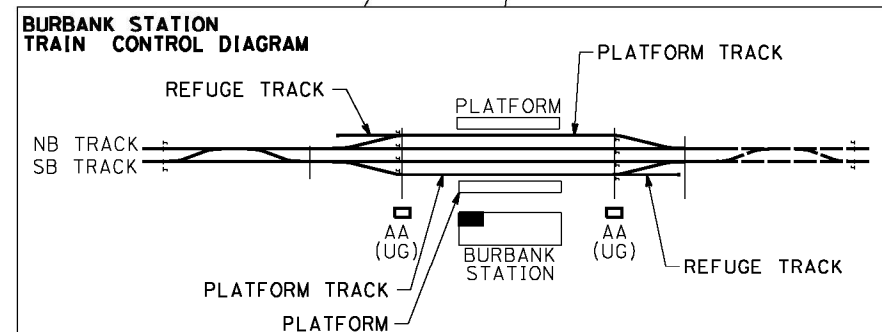
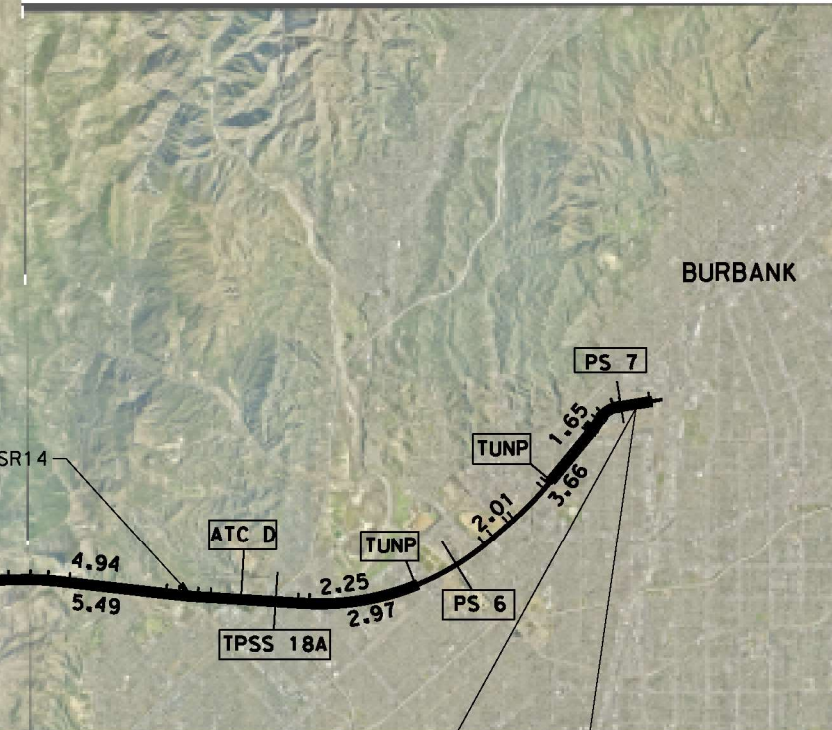
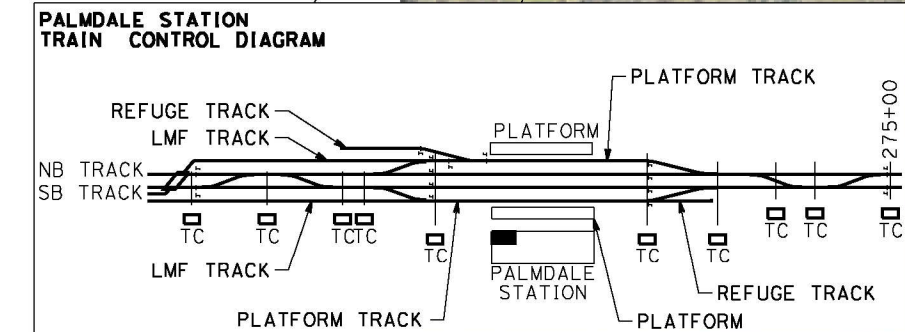
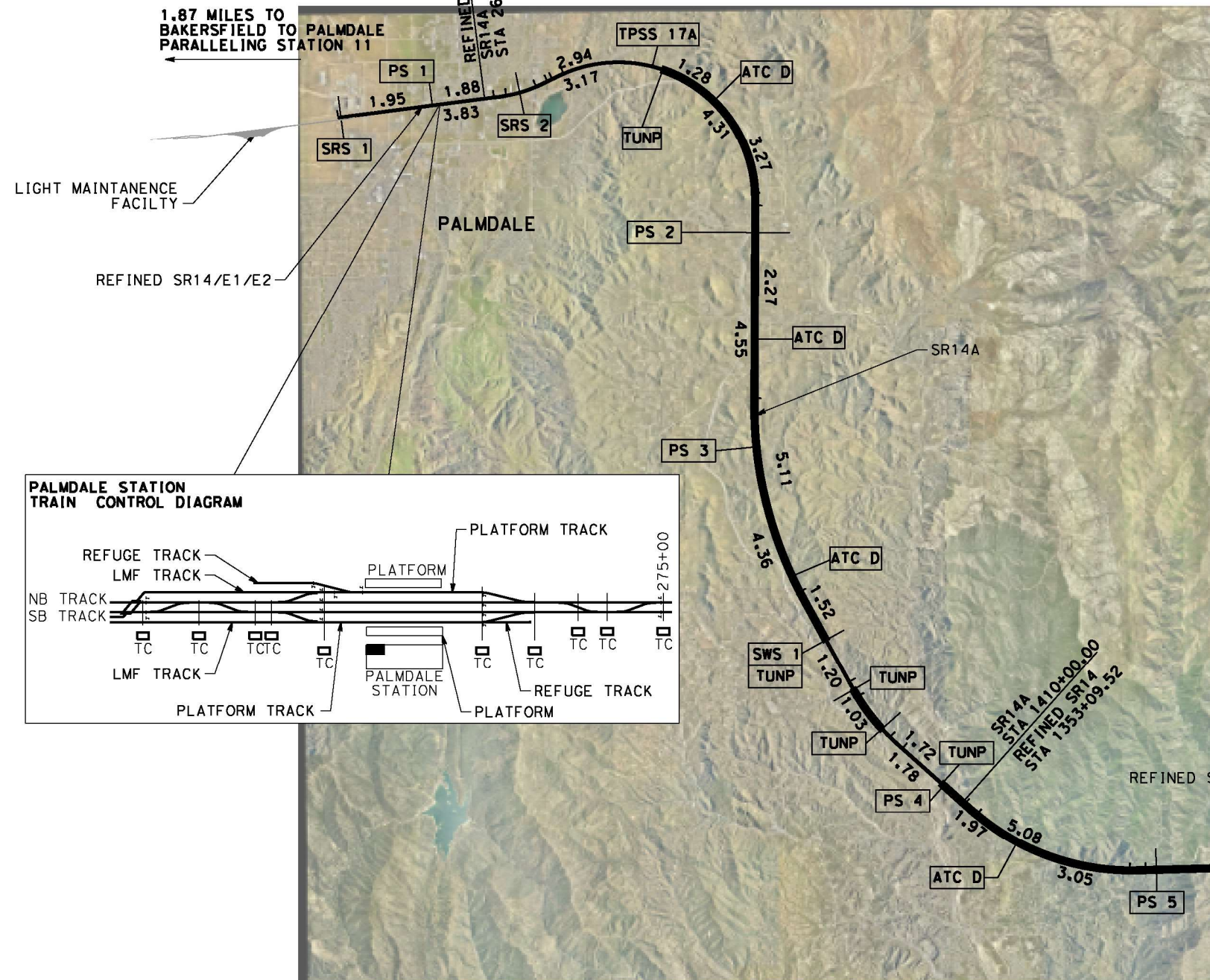
RAILWAY SYSTEMS FACILITY	5.0
SPACING (MILES)	
AT- GRADE / ELEVATED	———
UNDERGROUND	=====

ABBREVIATIONS:

TPSS:	TRACTION POWER SUBSTATION
PS:	PARALLELING STATION
SWS:	SWITCHING STATION
TUNP:	TUNNEL PORTAL FACILITIES
SRS:	STANDALONE RADIO SITE
TC:	TRAIN CONTROL FACILITY
ATC:	AUTOMATIC TRAIN CONTROL

NOTES:

1. SITE STATIONING GIVEN IS APPROXIMATE AND WILL BE FINALIZED IN FUTURE DESIGN PHASE.
2. IN UNDERGROUND SECTIONS, RF COMMUNICATION WILL BE USING DIRECTIONAL ANTENNAS OR RADIANT CABLES.
3. TRACTION POWER FACILITIES HAVE RADIO ANTENNAS.
4. ALL TUNNEL PORTALS (TUNP) REQUIRE SPACE FOR RADIO MASTS AS WELL AS ANTENNAS, PLUS AN ASSOCIATED CABIN TO HOUSE RADIO EQUIPMENT. ATC EQUIPMENT CABINS WILL BE LOCATED AT THESE LOCATIONS TOO.
5. RADIO EQUIPMENT WITHIN TUNNELS WILL BE INSTALLED IN CROSS PASSAGES EQUIPMENT ROOMS AND AT PARALLELING STATIONS.



c:\pwworking\vehisr\vdms28532\PB-TP-D0001-SR14A.dgn

3/11/2021 2:29:31 PM

0400074

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
R. RODRIGUEZ
DRAWN BY
F. VASQUEZ
CHECKED BY
A. RELAÑO
IN CHARGE
A. RELAÑO
DATE
02/26/2021

**PEPD RECORD SET
ADDENDUM
SR14A/E1A/E2A**

**NOT FOR
CONSTRUCTION**



CALIFORNIA HIGH-SPEED RAIL PROJECT
PALMDALE TO BURBANK
ALIGNMENT "SR14A"

TRACTION POWER FACILITIES
LOCATION LAYOUT

CONTRACT NO.
HSR14-42

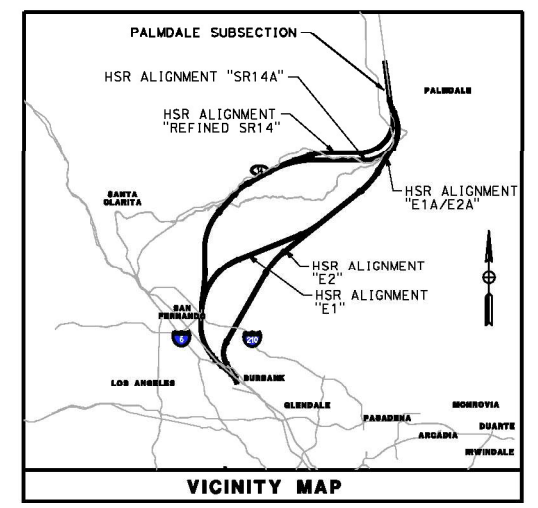
DRAWING NO.
TP-D0001-14A

SCALE
AS SHOWN

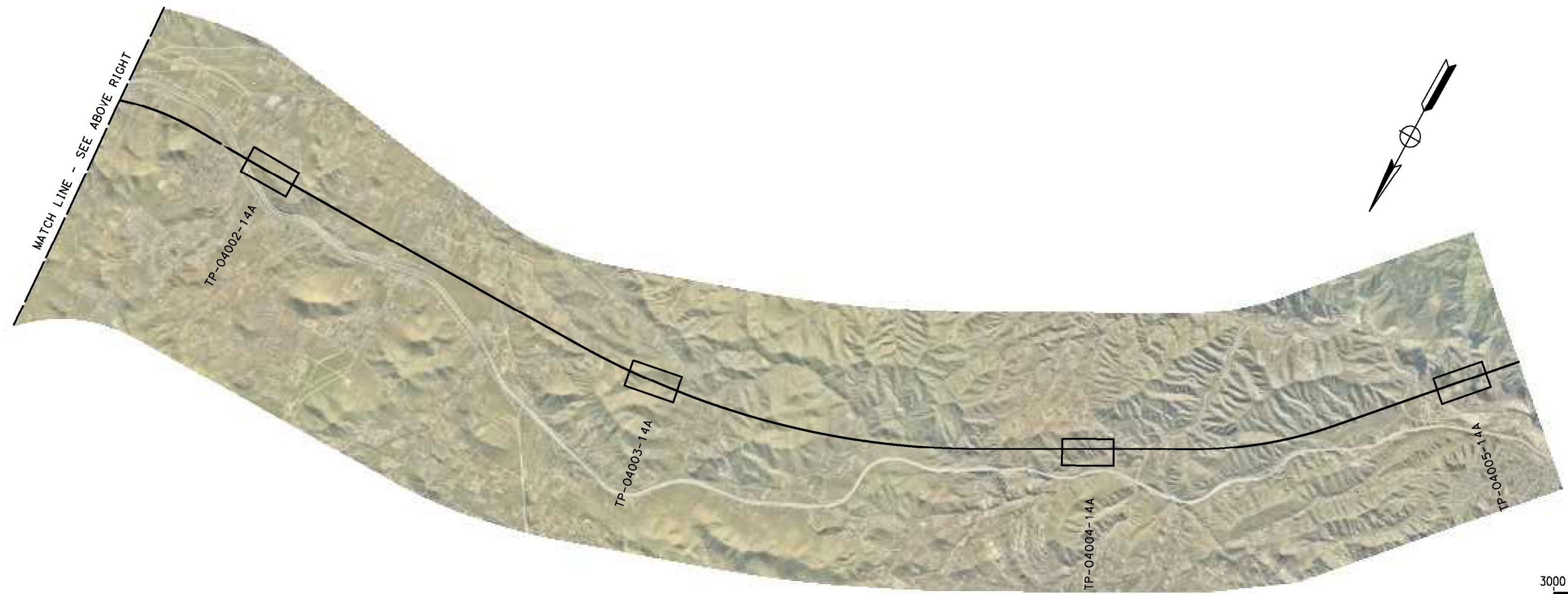
SHEET NO.



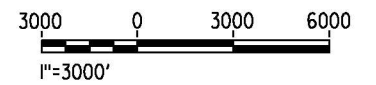
MATCH LINE - SEE BELOW LEFT



VICINITY MAP



MATCH LINE - SEE ABOVE RIGHT



c:\pwworking\chris\dms28532\FB-TP-B6001-SR14A.dgn

3/4/2021 12:16:00 PM

0400074

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
R. RODRIGUEZ
DRAWN BY
F. VASQUEZ
CHECKED BY
A. RELANO
IN CHARGE
A. RELANO
DATE
02/26/2021

PEPD RECORD SET
ADDENDUM
SR14A/E1A/E2A

NOT FOR
CONSTRUCTION



CALIFORNIA HIGH-SPEED RAIL PROJECT
PALMDALE TO BURBANK
ALIGNMENT "SR14A"

RAILWAY SYSTEMS
KEY MAP

CONTRACT NO.
HSR14-42
DRAWING NO.
TP-B6001-14A
SCALE
AS SHOWN
SHEET NO.



MATCH LINE - SEE TP-F4001-14A

TRACTION POWER SUBSTATION 17A

c:\pwworking\chsr\dms28532\pb-tp-f4001-sr14a.dgn

3/4/2021 12:12:53 PM

0400074

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
R. RODRIGUEZ

DRAWN BY
F. VASQUEZ

CHECKED BY
A. RELANO

IN CHARGE
A. RELANO

DATE
02/26/2021

**PEPD RECORD SET
ADDENDUM
SR14A/E1A/E2A**

**NOT FOR
CONSTRUCTION**



CALIFORNIA HIGH-SPEED RAIL PROJECT
PALMDALE TO BURBANK
 ALIGNMENT "SR14A"
 TRACTION POWER FACILITIES
 TRACTION POWER SUBSTATION 17A
 VINCENT SUBSTATION 1 OF 2

CONTRACT NO.
HSR14-42

DRAWING NO.
TP-F4001-14A

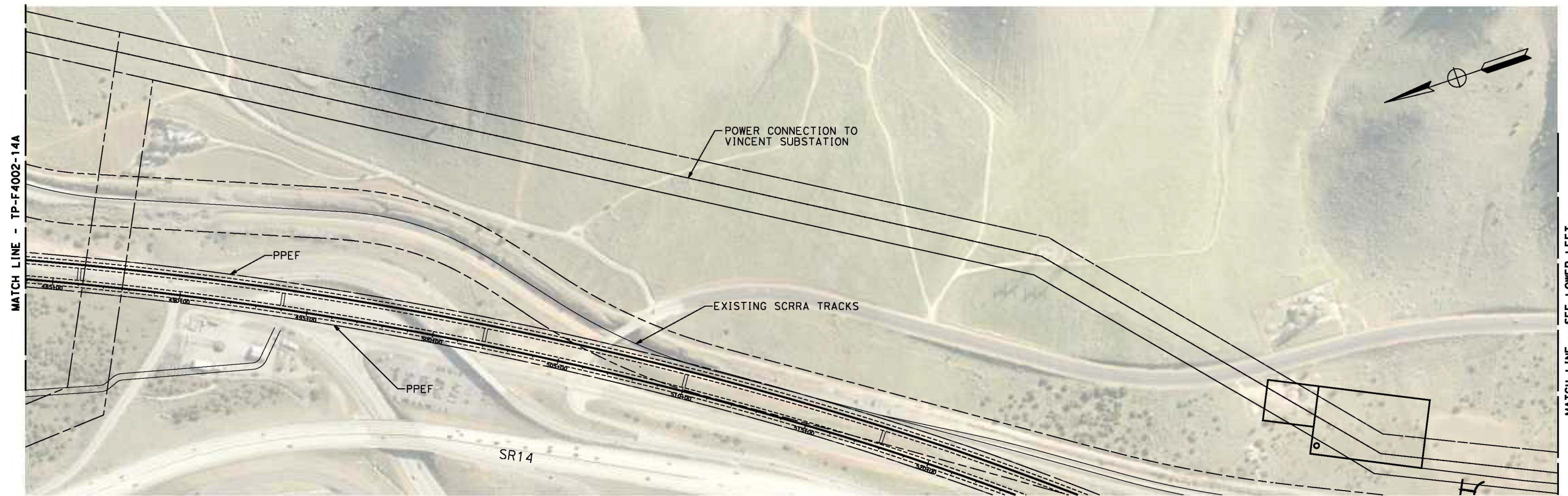
SCALE
AS SHOWN

SHEET NO.

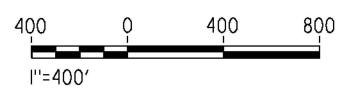
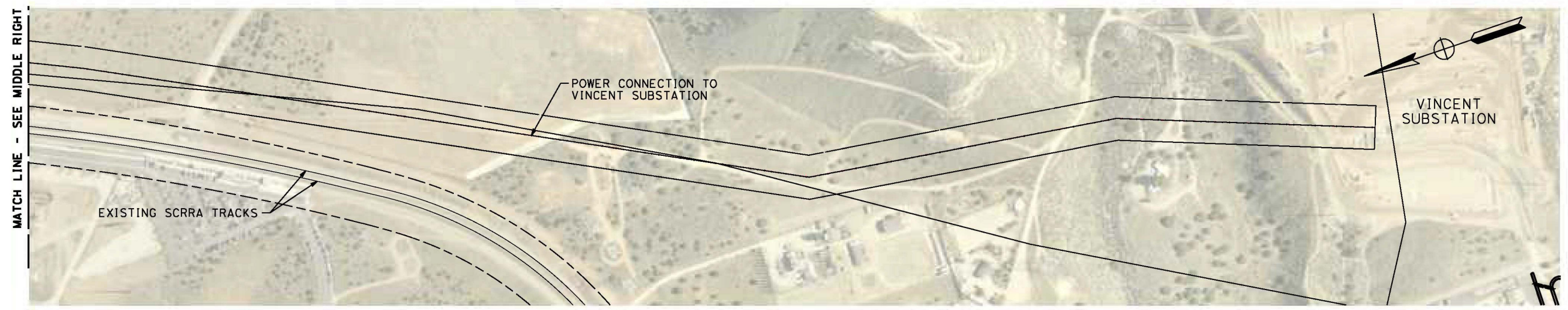
c:\pwworking\chsr\dms28532\TP-F4002-SR14A.dgn

3/4/2021 12:08:45 PM

0400074



MATCH LINE - SEE LOWER LEFT



TRACTION POWER SUBSTATION 17A

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
R. RODRIGUEZ
DRAWN BY
F. VASQUEZ
CHECKED BY
A. RELANO
IN CHARGE
A. RELANO
DATE
02/26/2021

PEPD RECORD SET
ADDENDUM
SR14A/E1A/E2A

NOT FOR
CONSTRUCTION



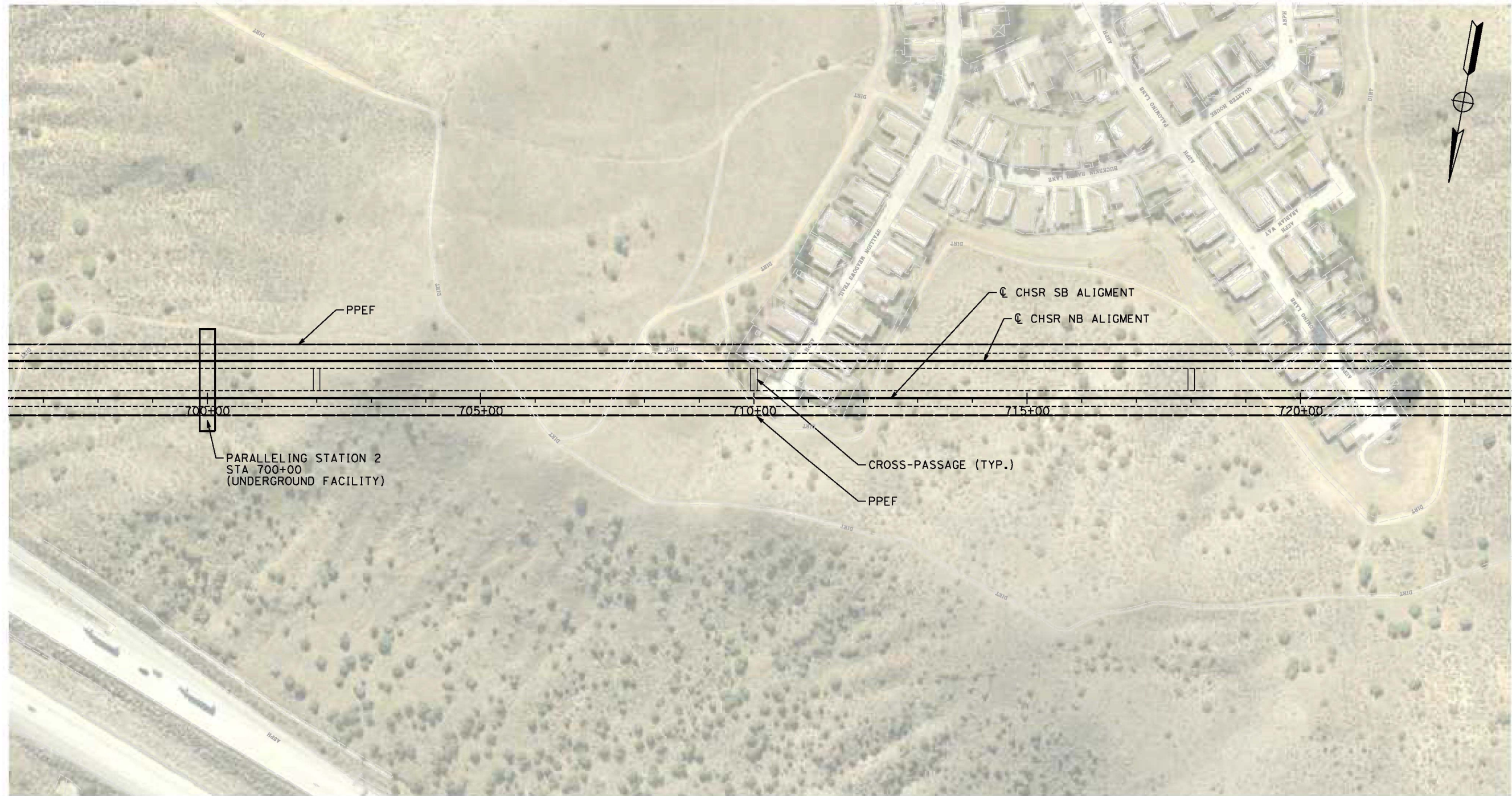
CALIFORNIA HIGH-SPEED RAIL PROJECT
PALMDALE TO BURBANK
ALIGNMENT "SR14A"
TRACTION POWER FACILITIES
TRACTION POWER SUBSTATION 17A
VINCENT SUBSTATION 2 OF 2

CONTRACT NO.
HSR14-42
DRAWING NO.
TP-F4002-14A
SCALE
AS SHOWN
SHEET NO.

c:\pwworking\chsr\dms28532\PB-TP-04002-SR14A.dgn

3/4/2021 12:05:37 PM

0400074



PLAN

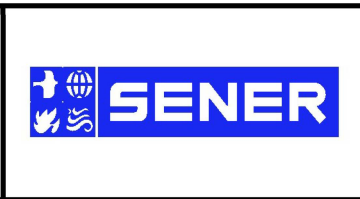


REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
R. RODRIGUEZ
DRAWN BY
F. VASQUEZ
CHECKED BY
A. RELANO
IN CHARGE
A. RELANO
DATE
02/26/2021

**PEPD RECORD SET
ADDENDUM
SR14A/E1A/E2A**

**NOT FOR
CONSTRUCTION**



**CALIFORNIA HIGH-SPEED RAIL PROJECT
PALMDALE TO BURBANK**

**ALIGNMENT "SR14A"
TRACTION POWER FACILITIES
PARALLELING STATION 2**

CONTRACT NO.
HSR14-42

DRAWING NO.
TP-04002-14A

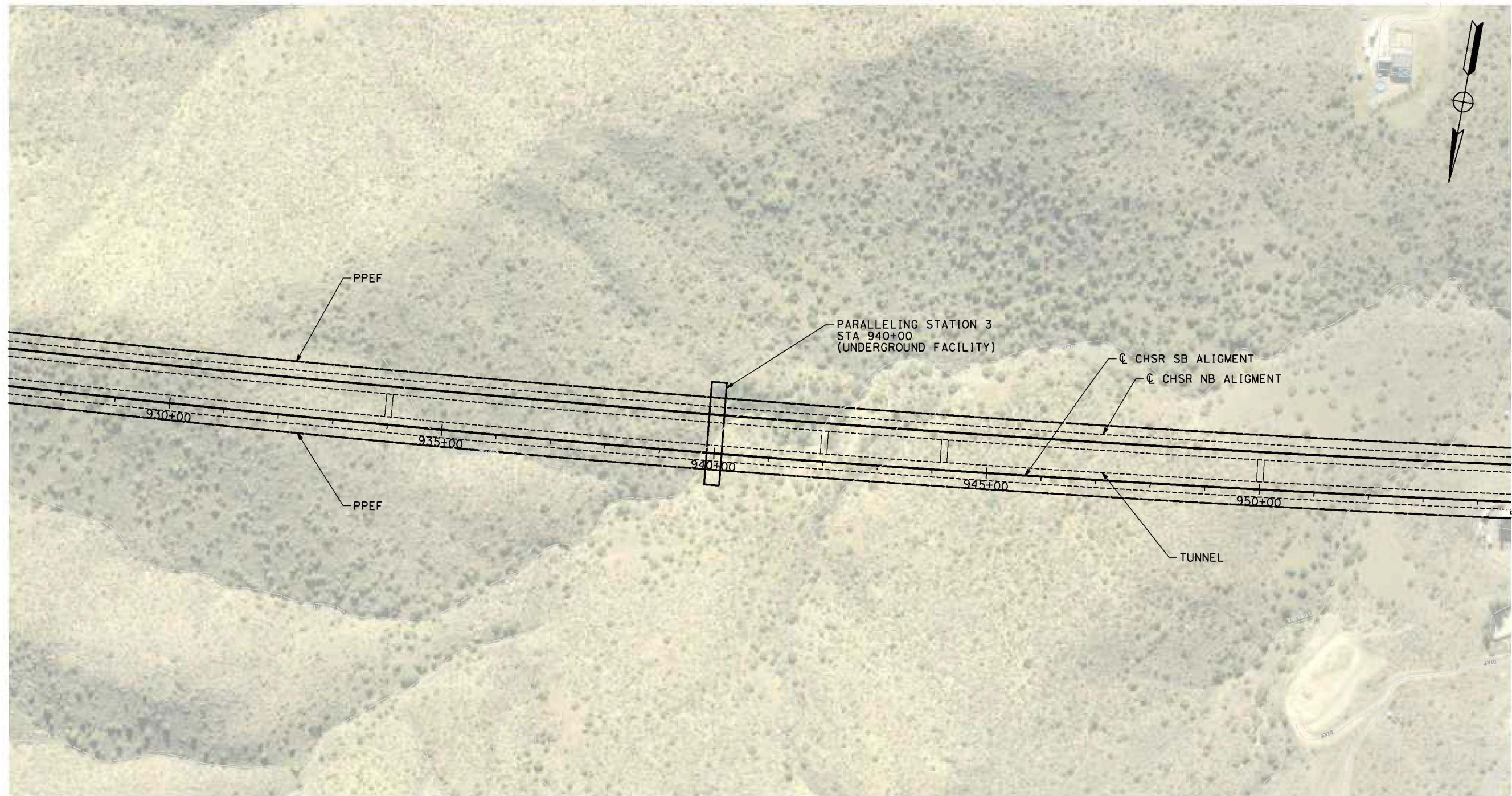
SCALE
AS SHOWN

SHEET NO.

c:\pwworking\chsr\dms28532\PB-TP-04003-SR14A.dgn

3/4/2021 12:02:21 PM

0400074



PLAN

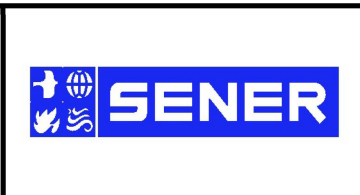


REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
R. RODRIGUEZ
DRAWN BY
F. VASQUEZ
CHECKED BY
A. RELANO
IN CHARGE
A. RELANO
DATE
02/26/2021

**PEPD RECORD SET
ADDENDUM
SR14A/E1A/E2A**

**NOT FOR
CONSTRUCTION**



**CALIFORNIA HIGH-SPEED RAIL PROJECT
PALMDALE TO BURBANK**

**ALIGNMENT "SR14A"
TRACTION POWER FACILITIES
PARALLELING STATION 3**

CONTRACT NO.
HSR14-42

DRAWING NO.
TP-04003-14A

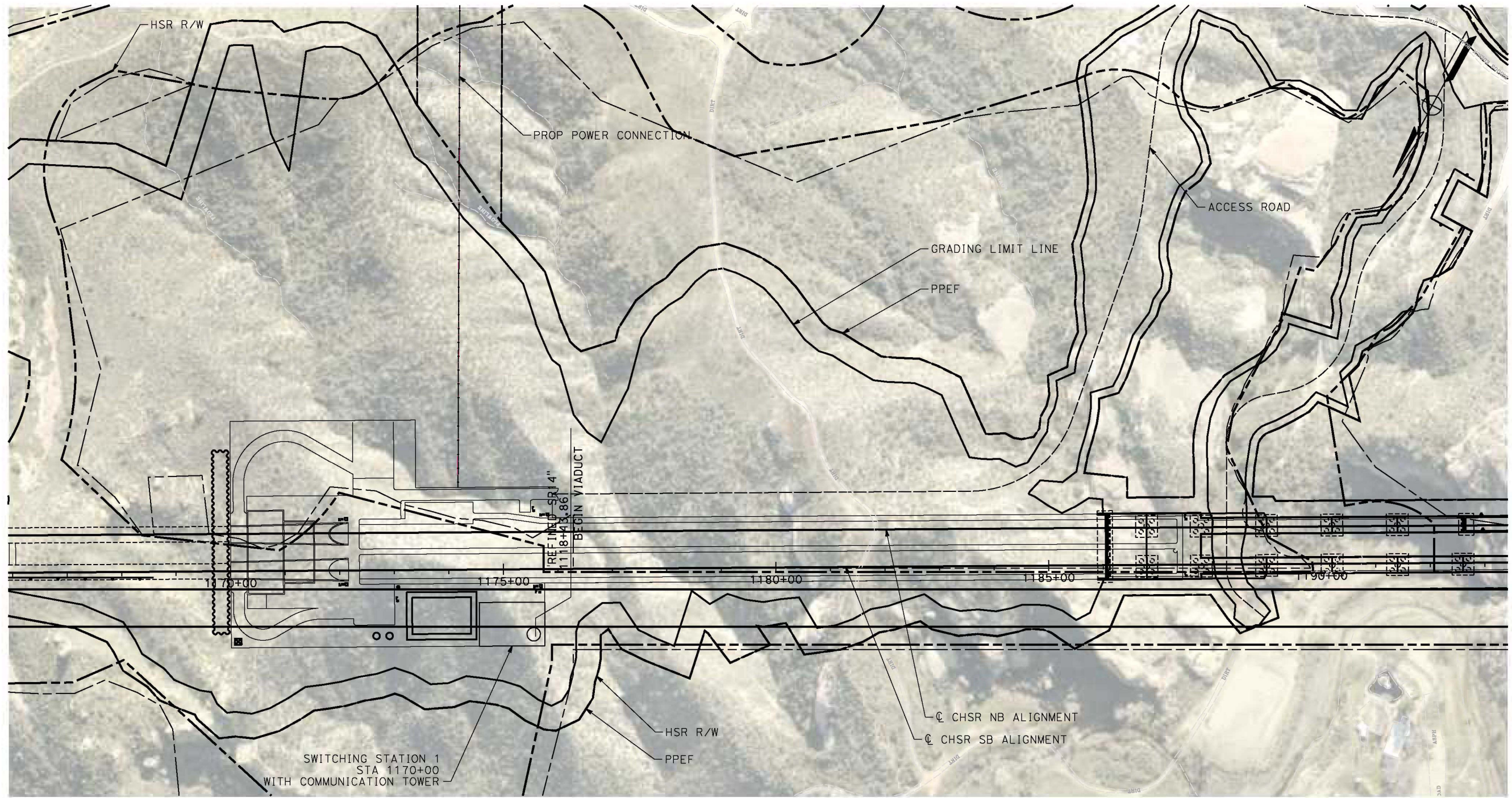
SCALE
AS SHOWN

SHEET NO.

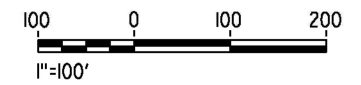
c:\pwworking\chsr\dms28532\TP-04004-SR14A.dgn

3/4/2021 11:58:23 AM

0400074



PLAN

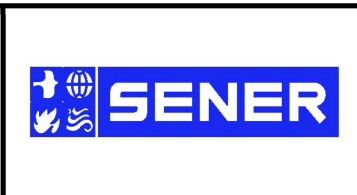


REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
R. RODRIGUEZ
DRAWN BY
F. VASQUEZ
CHECKED BY
A. RELANO
IN CHARGE
A. RELANO
DATE
02/26/2021

**PEPD RECORD SET
ADDENDUM
SR14A/E1A/E2A**

**NOT FOR
CONSTRUCTION**



**CALIFORNIA HIGH-SPEED RAIL PROJECT
PALMDALE TO BURBANK**

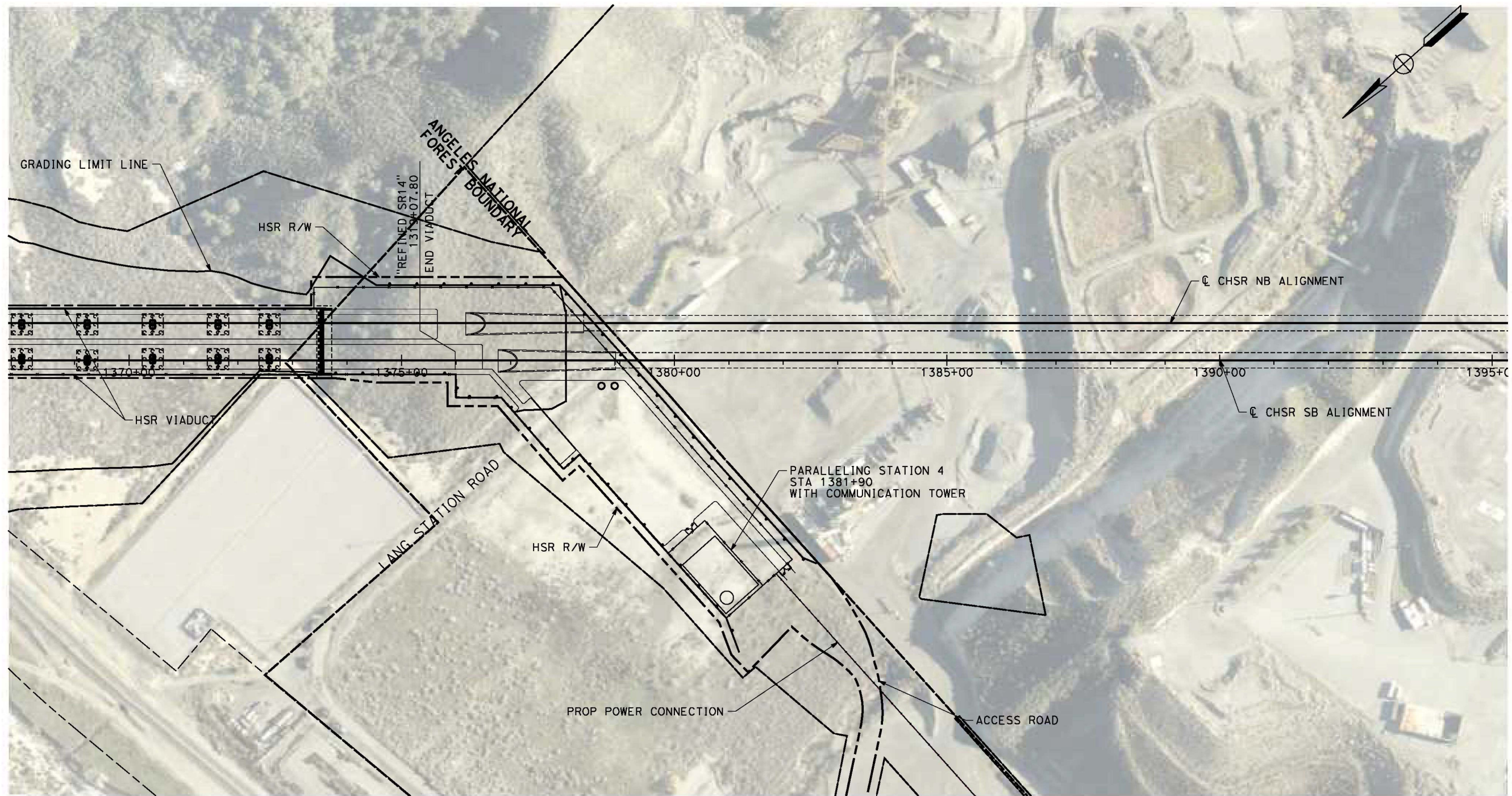
**ALIGNMENT "SR14A"
TRACTION POWER FACILITIES
SWITCHING STATION 1**

CONTRACT NO.
HSR14-42

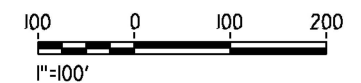
DRAWING NO.
TP-04004-14A

SCALE
AS SHOWN

SHEET NO.



PLAN



c:\pwworking\chsr\dms28532\pb-tp-04005-SR14A.dgn

3/4/2021 11:55:14 AM

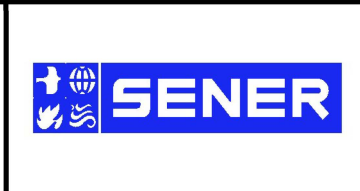
0400074

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
R. RODRIGUEZ
DRAWN BY
F. VASQUEZ
CHECKED BY
A. RELANO
IN CHARGE
A. RELANO
DATE
02/26/2021

**PEPD RECORD SET
ADDENDUM
SR14A/E1A/E2A**

**NOT FOR
CONSTRUCTION**



**CALIFORNIA HIGH-SPEED RAIL PROJECT
PALMDALE TO BURBANK**

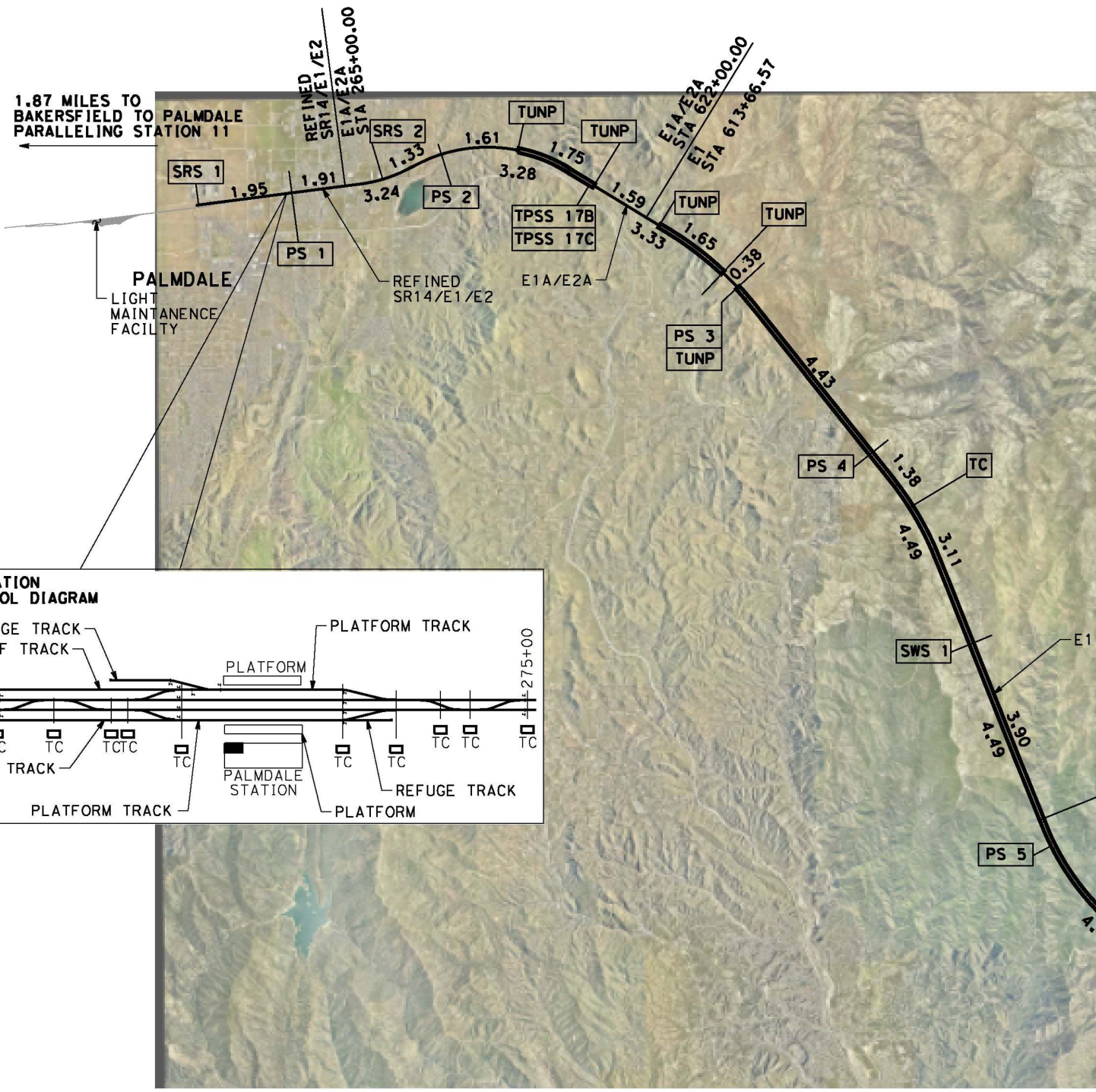
**ALIGNMENT "SR14A"
TRACTION POWER FACILITIES
PARALLELING STATION 4**

CONTRACT NO.
HSR14-42

DRAWING NO.
TP-04005-14A

SCALE
AS SHOWN

SHEET NO.



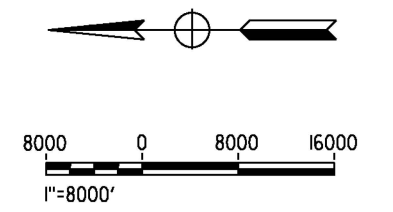
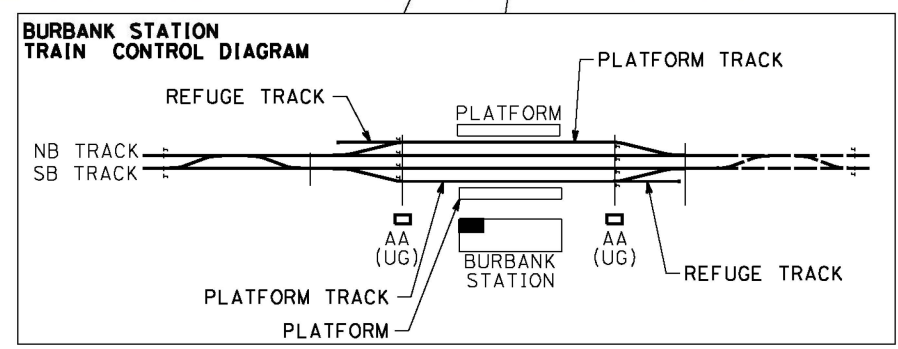
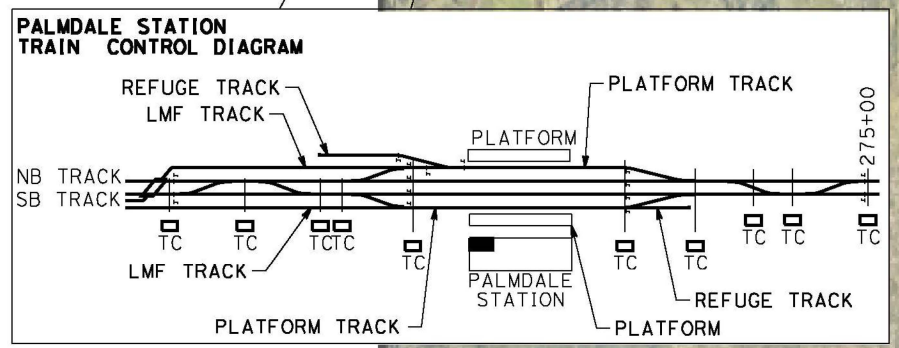
LEGEND

RAILWAY SYSTEMS FACILITY	5.0
SPACING (MILES)	
AT-GRADE / ELEVATED	———
UNDERGROUND	=====

ABBREVIATIONS:

TPSS:	TRACTION POWER SUBSTATION
PS:	PARALLELING STATION
SWS:	SWITCHING STATION
TUNP:	TUNNEL PORTAL FACILITIES
SRS:	STANDALONE RADIO SITE
TC:	TRAIN CONTROL FACILITY
ATC:	AUTOMATIC TRAIN CONTROL

- NOTES:**
1. SITE STATIONING GIVEN IS APPROXIMATE AND WILL BE FINALIZED IN FUTURE DESIGN PHASE.
 2. IN UNDERGROUND SECTIONS, RF COMMUNICATION WILL BE USING DIRECTIONAL ANTENNAS OR RADIANT CABLES.
 3. TRACTION POWER FACILITIES HAVE RADIO ANTENNAS.
 4. ALL TUNNEL PORTALS (TUNP) REQUIRE SPACE FOR RADIO MASTS AS WELL AS ANTENNAS, PLUS AN ASSOCIATED CABIN TO HOUSE RADIO EQUIPMENT. ATC EQUIPMENT CABINS WILL BE LOCATED AT THESE LOCATIONS TOO.
 5. RADIO EQUIPMENT WITHIN TUNNELS WILL BE INSTALLED IN CROSS PASSAGES EQUIPMENT ROOMS AND AT PARALLELING STATIONS.



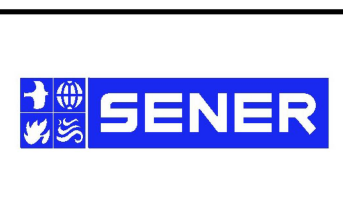
c:\pwworking\chsr\dms28523\PB-TP-D0001-E1A.dgn 3/11/2021 2:38:59 PM 0400074

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
R. RODRIGUEZ
DRAWN BY
F. VASQUEZ
CHECKED BY
A. RELANO
IN CHARGE
A. RELANO
DATE
02/26/2021

PEPD RECORD SET
ADDENDUM
SR14A/E1A/E2A

NOT FOR CONSTRUCTION



CALIFORNIA HIGH-SPEED RAIL PROJECT
PALMDALE TO BURBANK
ALIGNMENT "E1A"

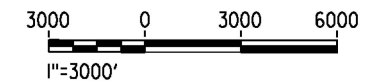
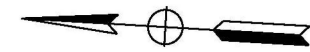
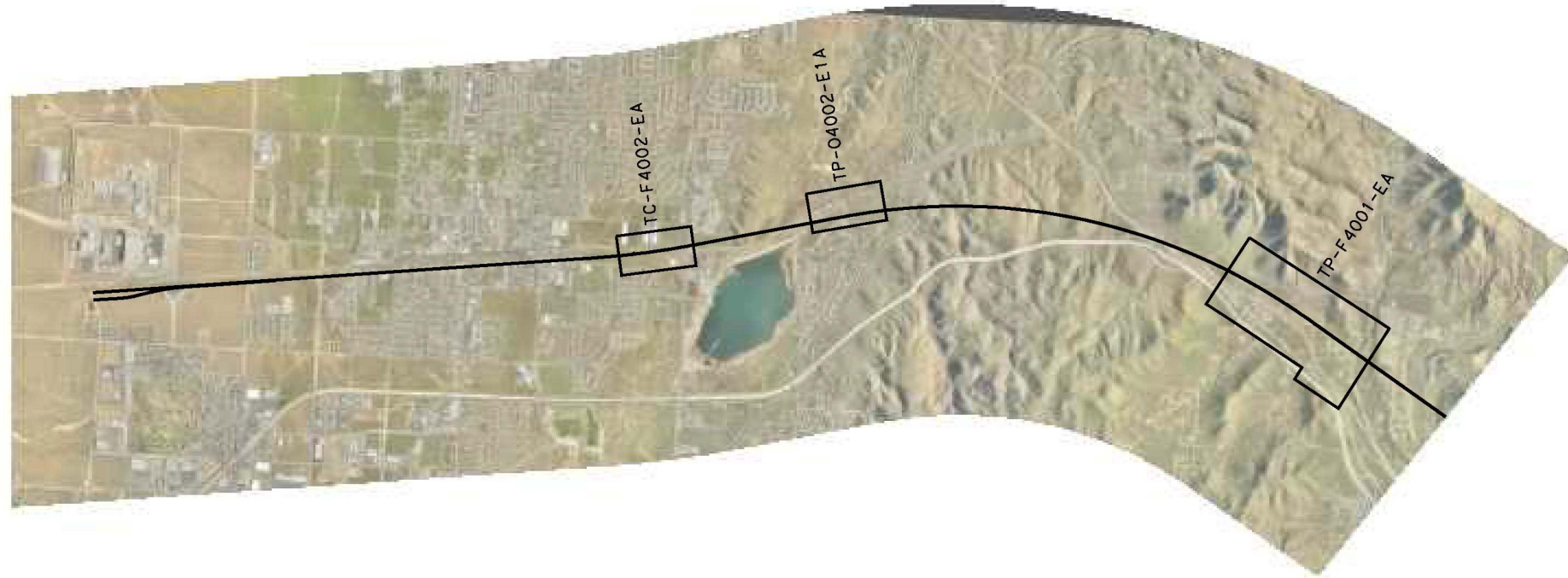
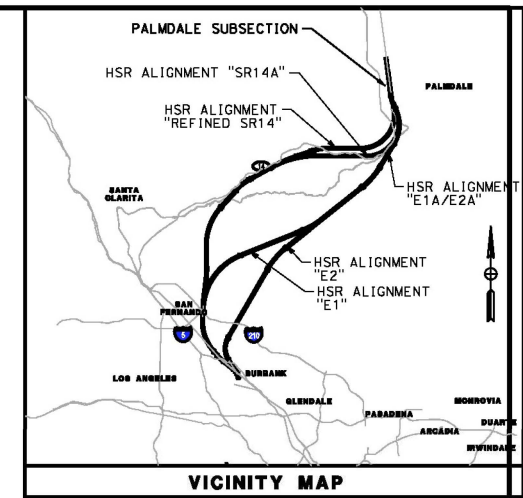
TRACTION POWER FACILITIES
LOCATION LAYOUT

CONTRACT NO.
HSR14-42
DRAWING NO.
TP-D0001-E1A
SCALE
AS SHOWN
SHEET NO.

c:\pwworking\chsr\dms28523\PB-TP-B6001-E1A.dgn

3/4/2021 11:48:00 AM

0400074



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
R. RODRIGUEZ
DRAWN BY
F. VASQUEZ
CHECKED BY
A. RELANO
IN CHARGE
A. RELANO
DATE
02/26/2021

**PEPD RECORD SET
ADDENDUM
SR14A/E1A/E2A**

**NOT FOR
CONSTRUCTION**



CALIFORNIA HIGH-SPEED RAIL PROJECT
PALMDALE TO BURBANK
ALIGNMENT "E1A/E2A"

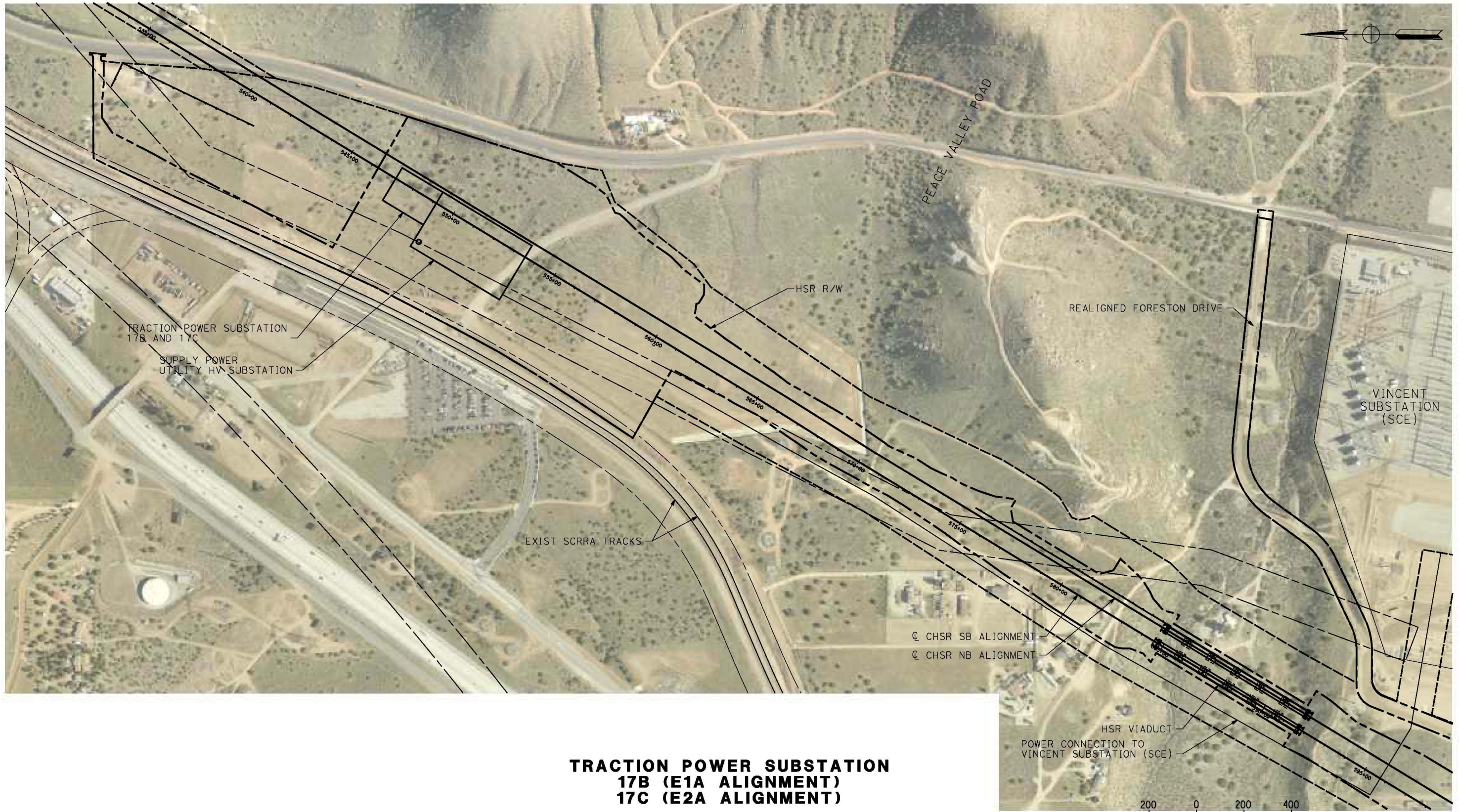
**RAILWAY SYSTEMS
KEY MAP**

CONTRACT NO.
HSR14-42

DRAWING NO.
TP-B6001-EA

SCALE
AS SHOWN

SHEET NO.



**TRACTION POWER SUBSTATION
17B (E1A ALIGNMENT)
17C (E2A ALIGNMENT)**



c:\pwworking\chsr\dms28523\PB-TP-F4001-E1A.dgn

3/4/2021 11:46:15 AM

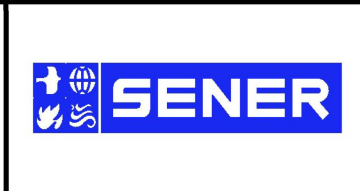
0400074

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
R. RODRIGUEZ
DRAWN BY
F. VASQUEZ
CHECKED BY
A. RELANO
IN CHARGE
A. RELANO
DATE
02/26/2021

**PEPD RECORD SET
ADDENDUM
SR14A/E1A/E2A**

**NOT FOR
CONSTRUCTION**



**CALIFORNIA HIGH-SPEED RAIL PROJECT
PALMDALE TO BURBANK**

ALIGNMENT "E1A/E2A"
TRACTION POWER FACILITIES
TRACTION POWER SUBSTATION 17B/17C
VINCENT SUBSTATION

CONTRACT NO.
HSR14-42

DRAWING NO.
TP-F4001-EA

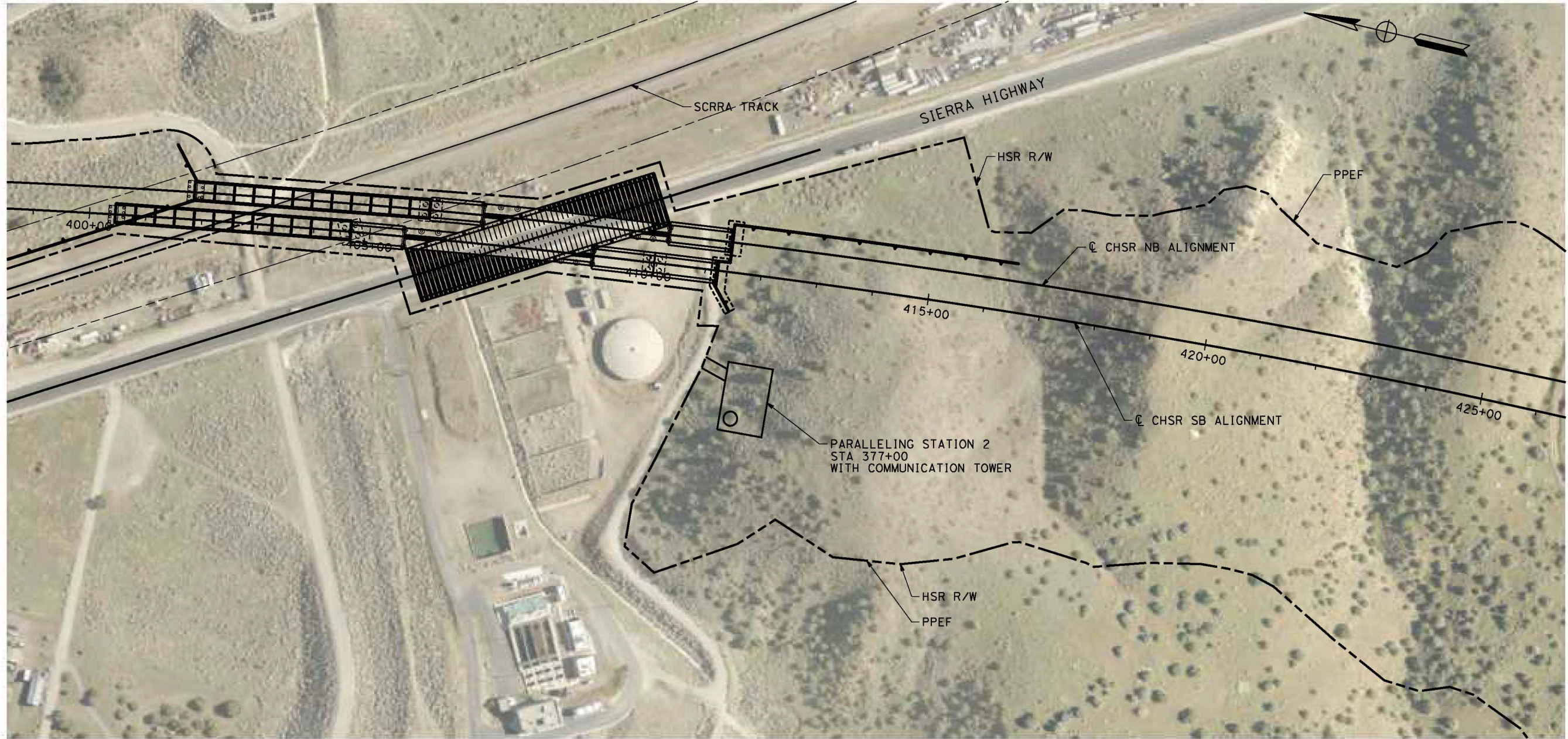
SCALE
AS SHOWN

SHEET NO.

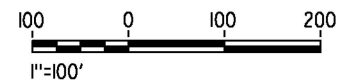
c:\pwworking\chsr\dms28523\PB-TP-04002-E1A.dgn

3/4/2021 11:42:40 AM

0400074



PLAN



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
R. RODRIGUEZ
DRAWN BY
F. VASQUEZ
CHECKED BY
A. RELANO
IN CHARGE
A. RELANO
DATE
02/26/2021

**PEPD RECORD SET
ADDENDUM
SR14A/E1A/E2A**

**NOT FOR
CONSTRUCTION**



**CALIFORNIA HIGH-SPEED RAIL PROJECT
PALMDALE TO BURBANK**

**ALIGNMENT "E1A"
TRACTION POWER FACILITIES
PARALLELING STATION 2**

CONTRACT NO.
HSR14-42

DRAWING NO.
TP-04002-E1A

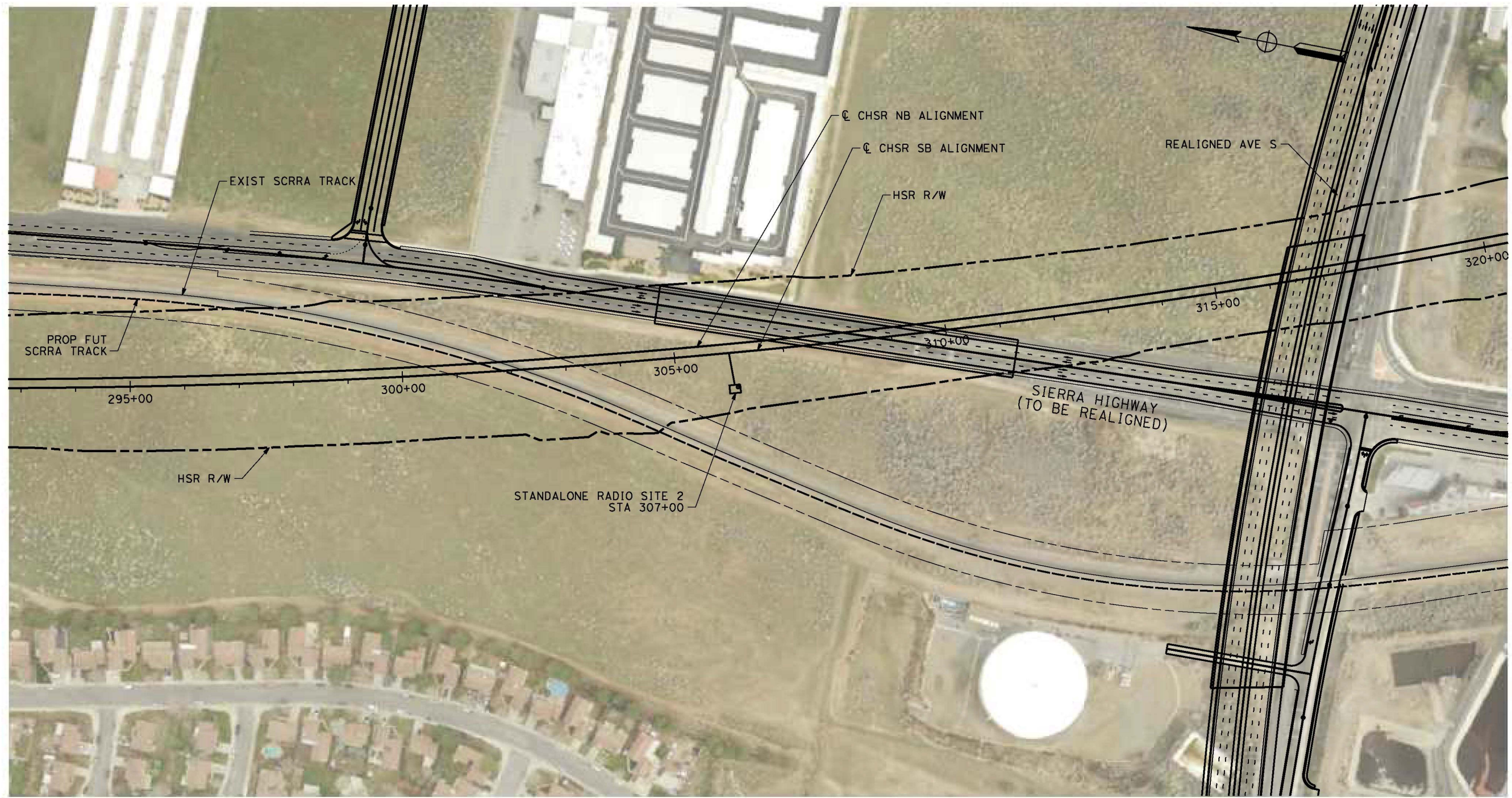
SCALE
AS SHOWN

SHEET NO.

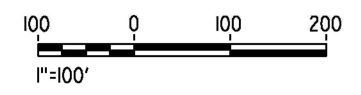
c:\pwworking\chsr\dms28523\PB-TC-F4002-E1A.dgn

3/4/2021 11:36:48 AM

0400074



PLAN

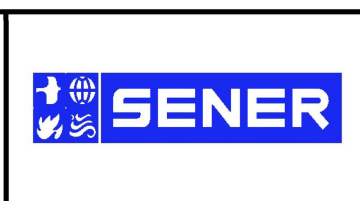


REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
R. RODRIGUEZ
DRAWN BY
F. VASQUEZ
CHECKED BY
A. RELANO
IN CHARGE
A. RELANO
DATE
02/26/2021

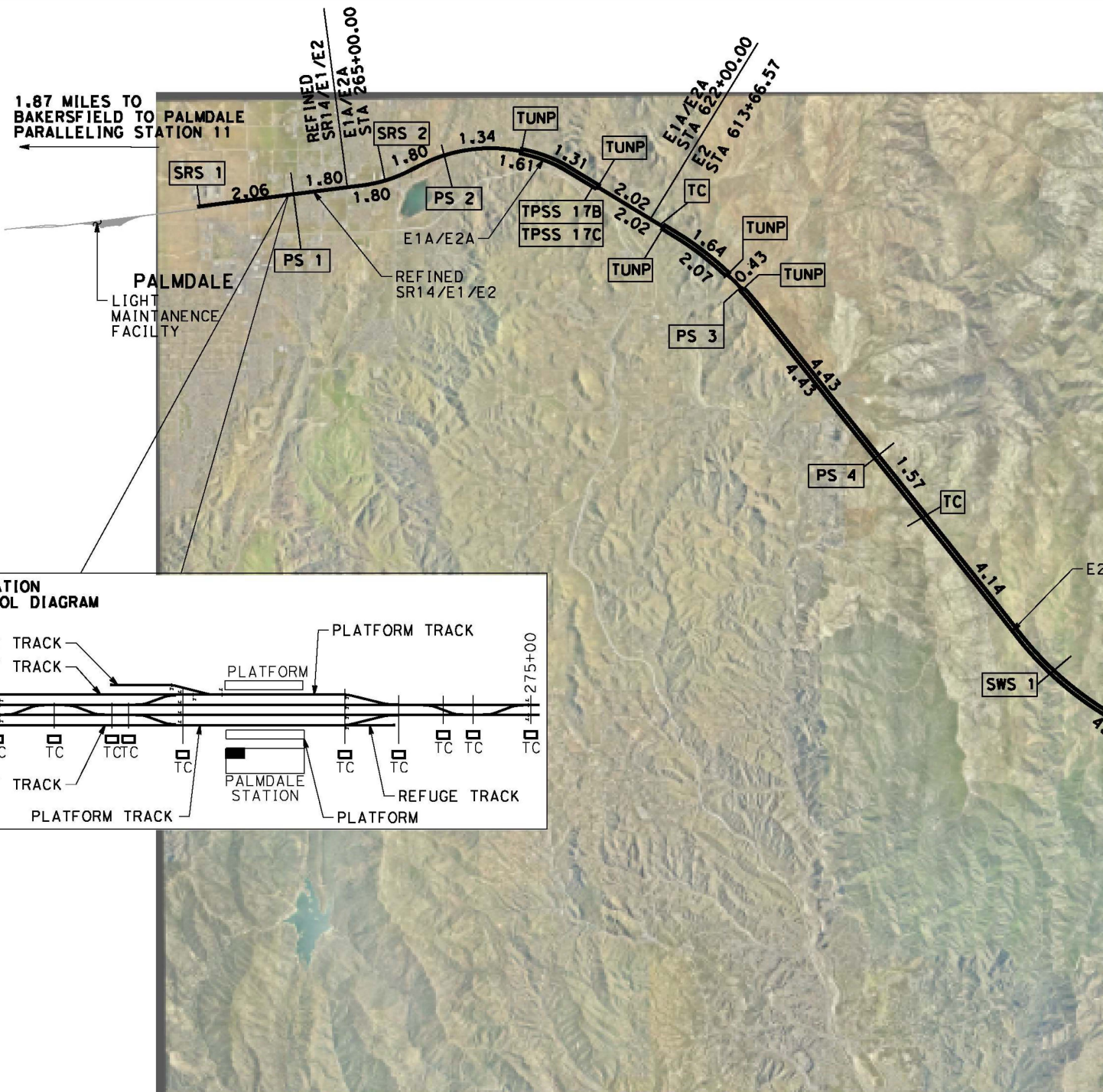
**PEPD RECORD SET
ADDENDUM
SR14A/E1A/E2A**

**NOT FOR
CONSTRUCTION**



**CALIFORNIA HIGH-SPEED RAIL PROJECT
PALMDALE TO BURBANK**
ALIGNMENT "E1A/E2A"
TRAIN CONTROL SYSTEM
STANDALONE RADIO SITE 2

CONTRACT NO.
HSR14-42
DRAWING NO.
TC-F4002-EA
SCALE
AS SHOWN
SHEET NO.



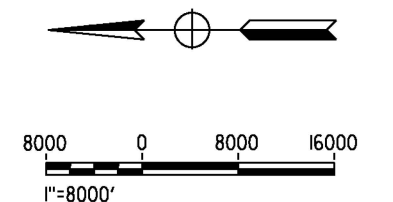
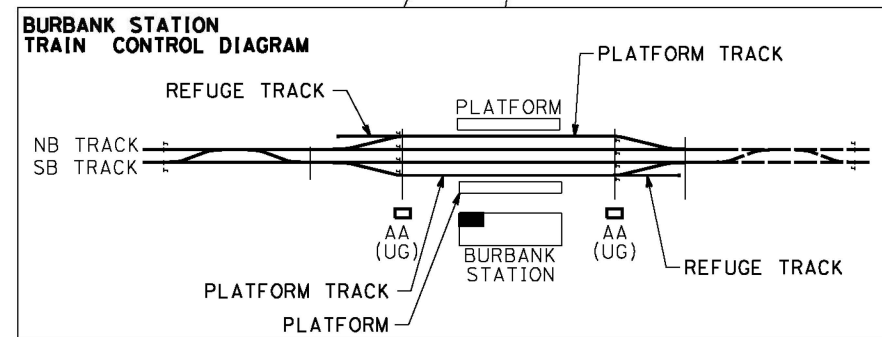
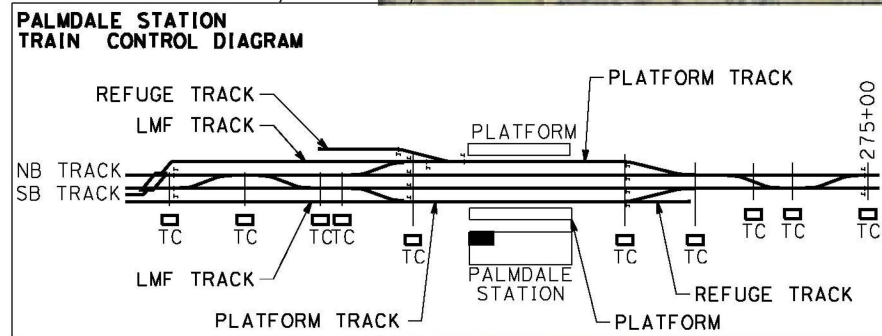
LEGEND

RAILWAY SYSTEMS FACILITY	5.0
SPACING (MILES)	
AT-GRADE / ELEVATED	———
UNDERGROUND	=====

ABBREVIATIONS:

TPSS:	TRACTION POWER SUBSTATION
PS:	PARALLELING STATION
SWS:	SWITCHING STATION
TUNP:	TUNNEL PORTAL FACILITIES
SRS:	STANDALONE RADIO SITE
TC:	TRAIN CONTROL FACILITY
ATC:	AUTOMATIC TRAIN CONTROL

- NOTES:**
1. SITE STATIONING GIVEN IS APPROXIMATE AND WILL BE FINALIZED IN FUTURE DESIGN PHASE.
 2. IN UNDERGROUND SECTIONS, RF COMMUNICATION WILL BE USING DIRECTIONAL ANTENNAS OR RADIANT CABLES.
 3. TRACTION POWER FACILITIES HAVE RADIO ANTENNAS.
 4. ALL TUNNEL PORTALS (TUNP) REQUIRE SPACE FOR RADIO MASTS AS WELL AS ANTENNAS, PLUS AN ASSOCIATED CABIN TO HOUSE RADIO EQUIPMENT. ATC EQUIPMENT CABINS WILL BE LOCATED AT THESE LOCATIONS TOO.
 5. RADIO EQUIPMENT WITHIN TUNNELS WILL BE INSTALLED IN CROSS PASSAGES EQUIPMENT ROOMS AND AT PARALLELING STATIONS.



c:\pwworking\chsr\dms28523\PB-TP-D0001-E2A.dgn

3/11/2021 2:41:41 PM

0400074

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
R. RODRIGUEZ

DRAWN BY
F. VASQUEZ

CHECKED BY
A. RELANO

IN CHARGE
A. RELANO

DATE
02/26/2021

**PEPD RECORD SET
ADDENDUM
SR14A/E1A/E2A**

**NOT FOR
CONSTRUCTION**



CALIFORNIA HIGH-SPEED RAIL PROJECT

PALMDALE TO BURBANK

ALIGNMENT "E2A"

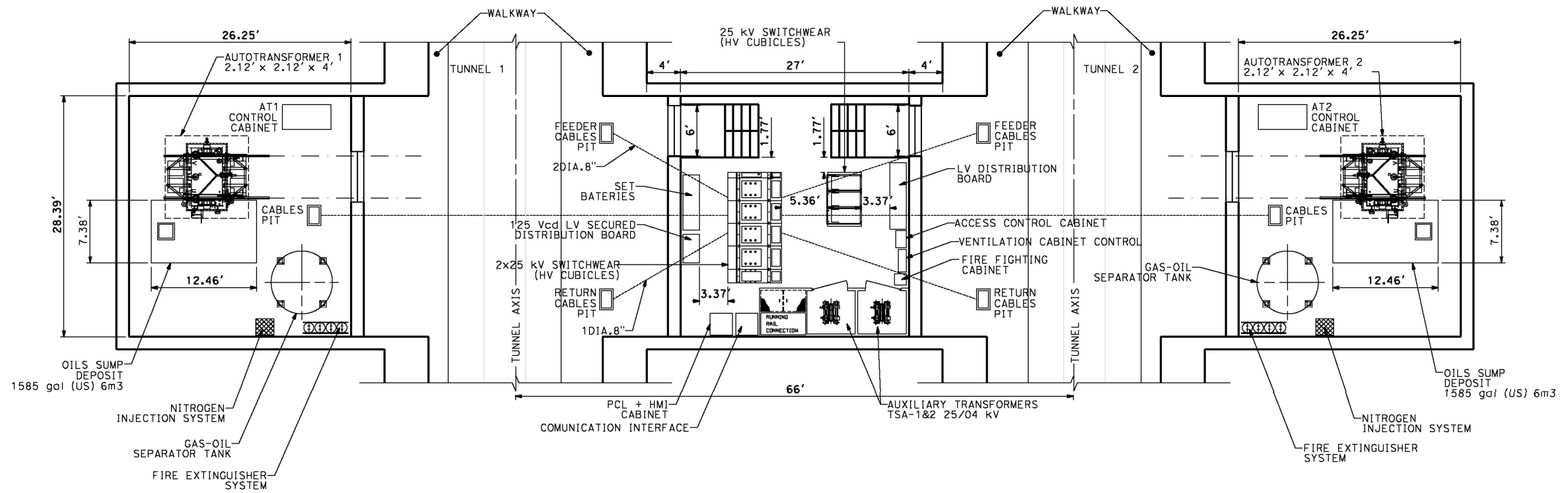
TRACTION POWER FACILITIES
LOCATION LAYOUT

CONTRACT NO.
HSR14-42

DRAWING NO.
TP-D0001-E2A

SCALE
AS SHOWN

SHEET NO.



UNDERGROUND PARALLELING STATION

c:\pwworking\chsr\dms28892\p-d5001.dgn

1/26/2021 10:27:05 AM

0400074

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
R. RODRIGUEZ
DRAWN BY
F. VASQUEZ
CHECKED BY
A. RELANO
IN CHARGE
A. RELANO
DATE
02/26/2021

**PEPD RECORD SET
ADDENDUM
SR14A/E1A/E2A**

**NOT FOR
CONSTRUCTION**



**CALIFORNIA HIGH-SPEED RAIL PROJECT
PALMDALE TO BURBANK
ALIGNMENT "SR14A/E1A/E2A"**

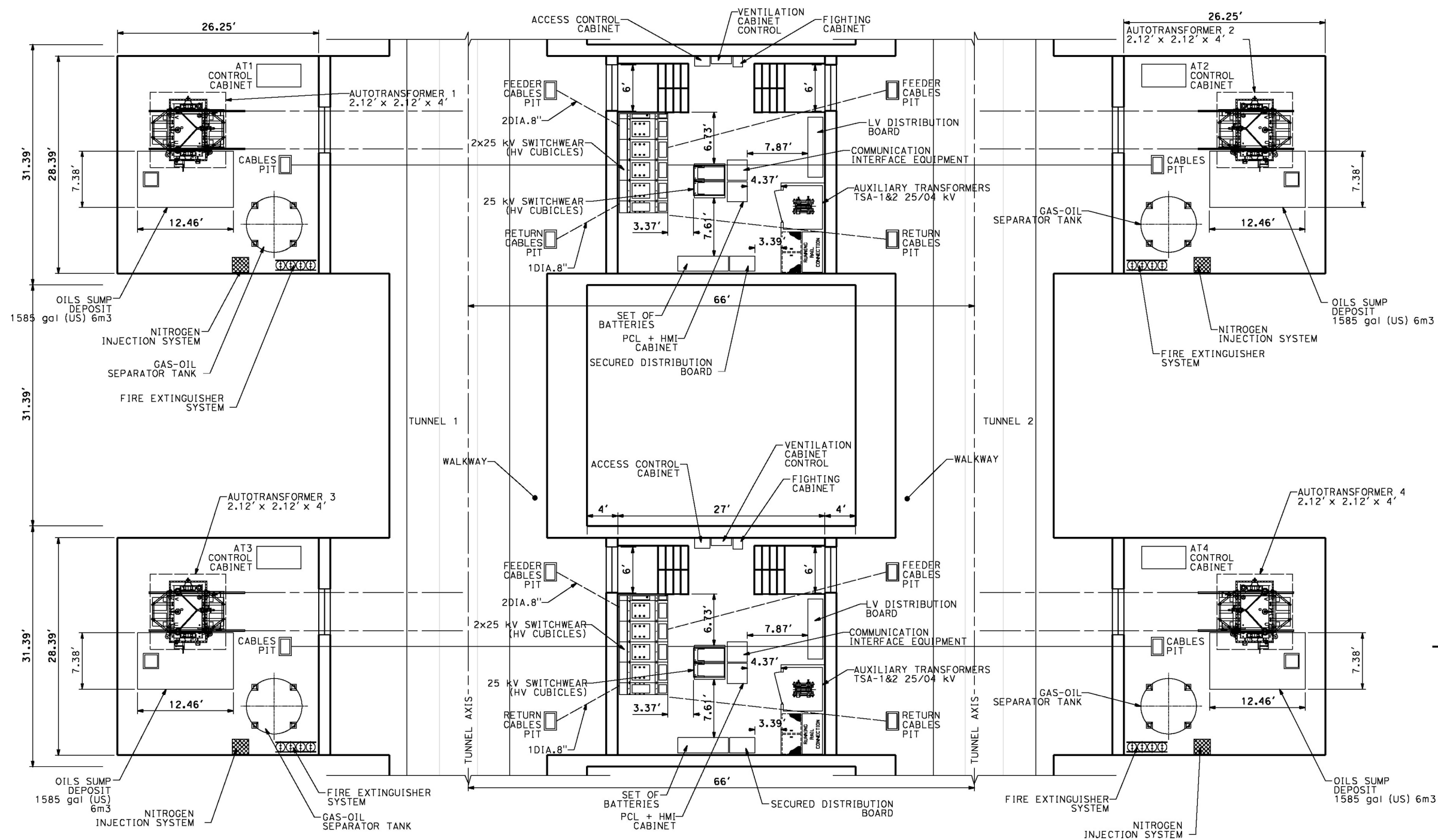
**UNDERGROUND TRACTION POWER FACILITIES
DETAIL 1**

CONTRACT NO.
HSR14-42

DRAWING NO.
TP-D5001

SCALE
NOT TO SCALE

SHEET NO.



UNDERGROUND SWITCHING STATION

c:\pwworking\chsr\dms28892\p\TP-D5002.dgn
 1/26/2021 10:27:09 AM
 0400074

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
R. RODRIGUEZ
 DRAWN BY
F. VASQUEZ
 CHECKED BY
A. RELANO
 IN CHARGE
A. RELANO
 DATE
02/26/2021

**PEPD RECORD SET
 ADDENDUM
 SR14A/E1A/E2A**

**NOT FOR
 CONSTRUCTION**



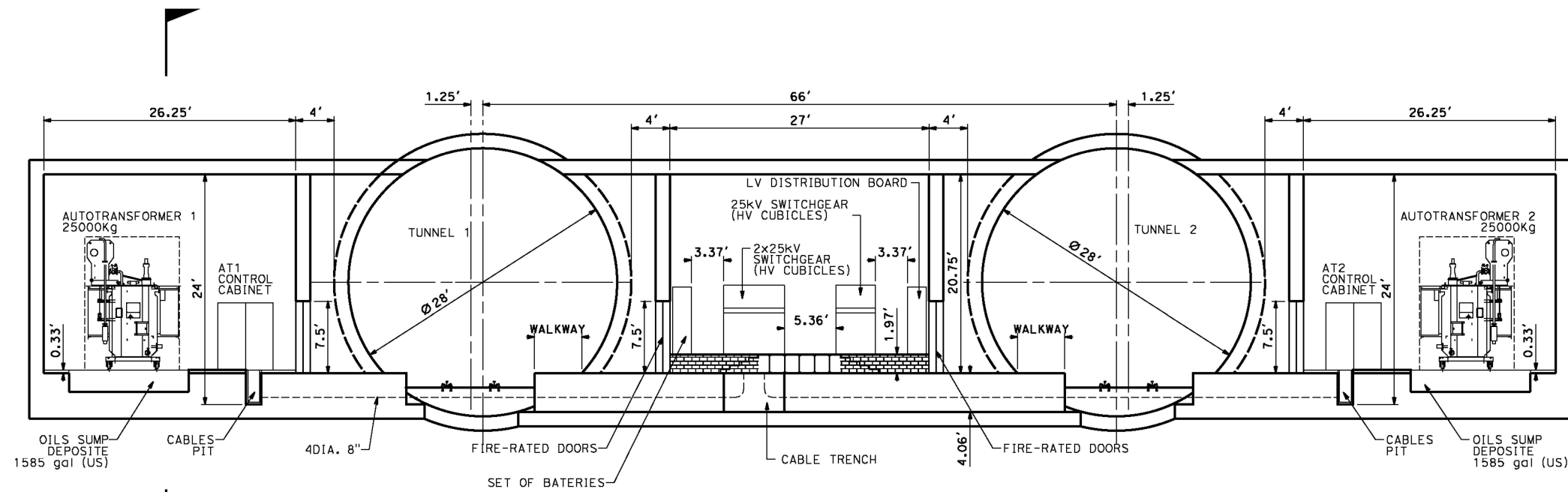
CALIFORNIA HIGH-SPEED RAIL PROJECT
PALMDALE TO BURBANK
 ALIGNMENT "SR14A/E1A/E2A"
 UNDERGROUND TRACTION POWER FACILITIES
 DETAIL 2

CONTRACT NO.
HSR14-42
 DRAWING NO.
TP-D5002
 SCALE
NOT TO SCALE
 SHEET NO.

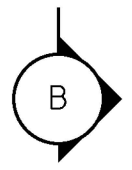
c:\pwworking\chsr\dms28892\PB-TP-D5003.dgn

1/26/2021 10:27:13 AM

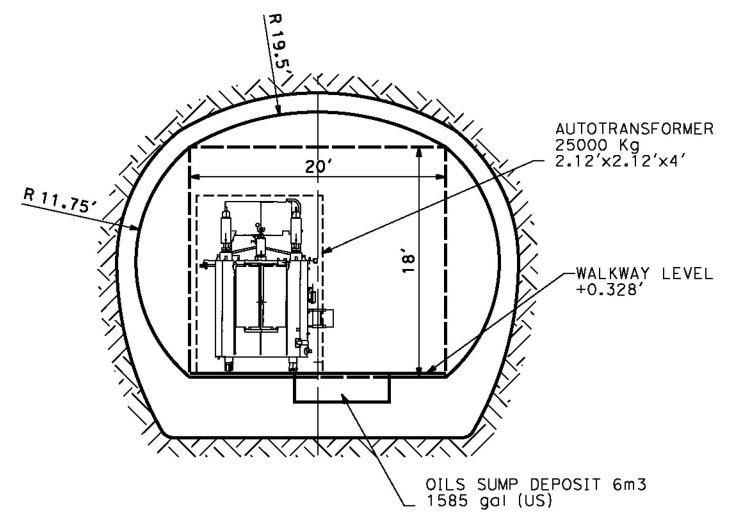
0400074



GENERAL TEXT
(0.140 x Scale)



SECTION A



SECTION B

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
R. RODRIGUEZ
DRAWN BY
F. VASQUEZ
CHECKED BY
A. RELANO
IN CHARGE
A. RELANO
DATE
02/26/2021

PEPD RECORD SET
ADDENDUM
SR14A/E1A/E2A

NOT FOR
CONSTRUCTION



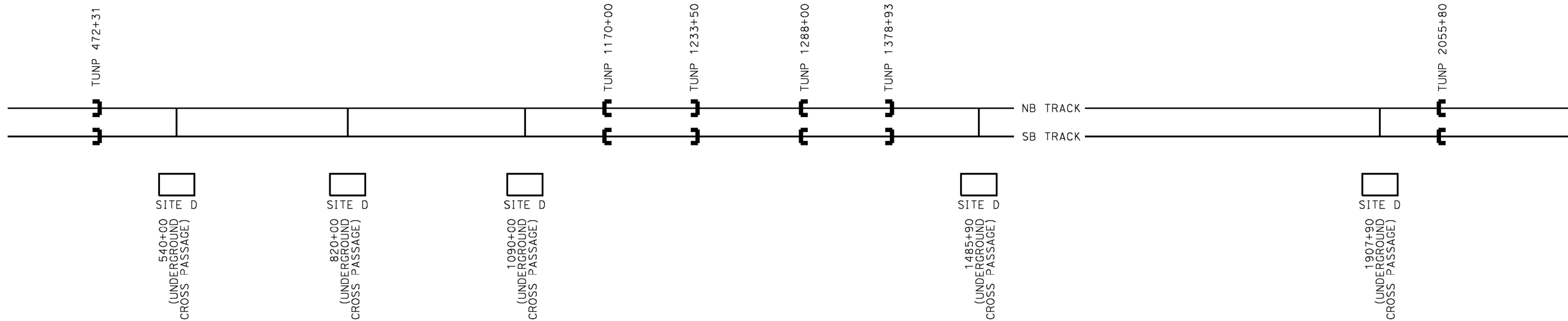
CALIFORNIA HIGH-SPEED RAIL PROJECT
PALMDALE TO BURBANK
ALIGNMENT "SR14A/E1A/E2A"

UNDERGROUND TRACTION POWER FACILITIES
DETAIL 3

CONTRACT NO.
HSR14-42
DRAWING NO.
TP-D5003
SCALE
NOT TO SCALE
SHEET NO.

← TO PALMDALE STATION

TO BURBANK STATION →



SR14A ALIGNMENT

c:\pwworking\chsr\dms2892\PB-TC-E6002.dgn

1/26/2021 10:26:50 AM

0400074

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
R. RODRIGUEZ
DRAWN BY
F. VASQUEZ
CHECKED BY
A. RELANO
IN CHARGE
A. RELANO
DATE
02/26/2021

**PEPD RECORD SET
ADDENDUM
SR14A/E1A/E2A**

**NOT FOR
CONSTRUCTION**

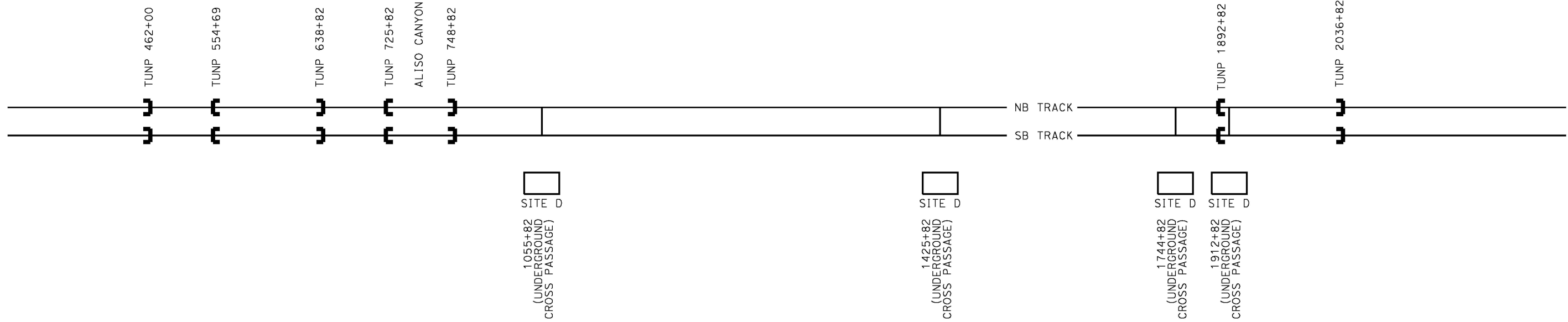


**CALIFORNIA HIGH-SPEED RAIL PROJECT
PALMDALE TO BURBANK**
ALIGNMENT "SR14A"
TRAIN CONTROL SYSTEM
INTERLOCKING SITES
"SITE D" LOCATIONS

CONTRACT NO.
HSR14-42
DRAWING NO.
TC-E6002
SCALE
NOT TO SCALE
SHEET NO.

← TO PALMDALE STATION

TO BURBANK STATION →



E1A ALIGNMENT

c:\pwworking\chsr\dms28892\PB-TC-E6003.dgn

1/26/2021 10:26:54 AM

0400074

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
R. RODRIGUEZ
DRAWN BY
F. VASQUEZ
CHECKED BY
A. RELANO
IN CHARGE
A. RELANO
DATE
02/26/2021

**PEPD RECORD SET
ADDENDUM
SR14A/E1A/E2A**

**NOT FOR
CONSTRUCTION**

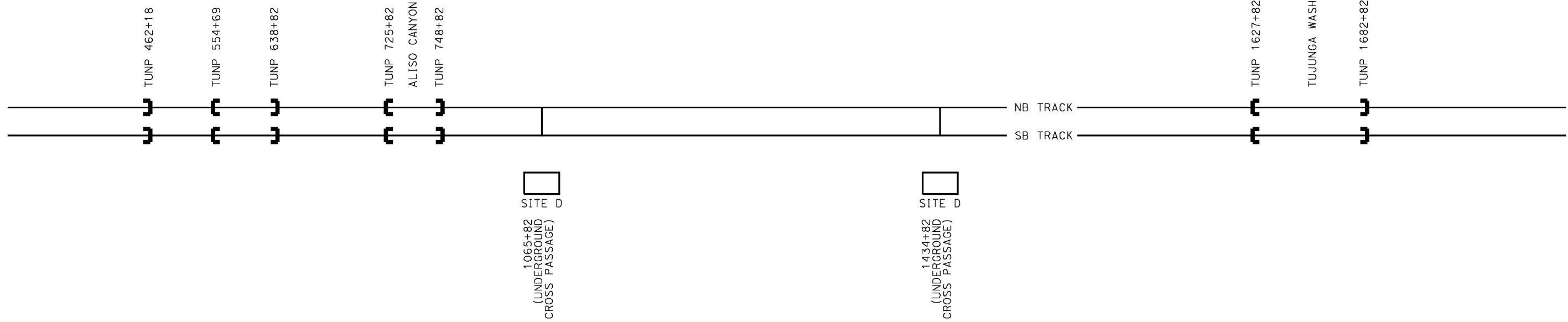


**CALIFORNIA HIGH-SPEED RAIL PROJECT
PALMDALE TO BURBANK**
ALIGNMENT "E1A"
TRAIN CONTROL SYSTEM
INTERLOCKING SITES
"SITE D" LOCATIONS

CONTRACT NO.
HSR14-42
DRAWING NO.
TC-E6003
SCALE
NOT TO SCALE
SHEET NO.

← TO PALMDALE STATION

TO BURBANK STATION →



E2A ALIGNMENT

c:\pwworking\chsr\dms28892\PB-TC-E6004.dgn

1/26/2021 10:26:58 AM

0400074

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
R. RODRIGUEZ
DRAWN BY
F. VASQUEZ
CHECKED BY
A. RELANO
IN CHARGE
A. RELANO
DATE
02/26/2021

PEPD RECORD SET
ADDENDUM
SR14A/E1A/E2A

NOT FOR CONSTRUCTION



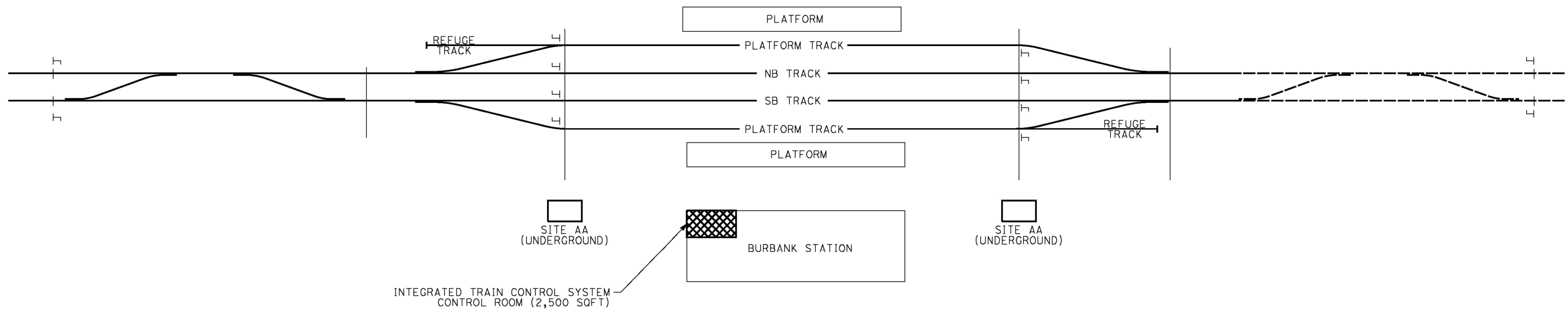
CALIFORNIA HIGH-SPEED RAIL PROJECT
PALMDALE TO BURBANK
ALIGNMENT "E2A"
TRAIN CONTROL SYSTEM
INTERLOCKING SITES
"SITE D" LOCATIONS

CONTRACT NO.
HSR14-42
DRAWING NO.
TC-E6004
SCALE
NOT TO SCALE
SHEET NO.

c:\pwworking\chsr\dms28892\PB-TC-E6005.dgn

3/4/2021 11:29:18 AM

0400074



BURBANK STATION

NOTE:

1. THIS SCHEMATIC DIAGRAM IS APPLICABLE TO ALL ALTERNATIVES.

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
R. RODRIGUEZ
DRAWN BY
F. VASQUEZ
CHECKED BY
A. RELANO
IN CHARGE
A. RELANO
DATE
02/26/2021

**PEPD RECORD SET
ADDENDUM
SR14A/E1A/E2A**

**NOT FOR
CONSTRUCTION**



**CALIFORNIA HIGH-SPEED RAIL PROJECT
PALMDALE TO BURBANK**

**TRAIN CONTROL SYSTEM
INTERLOCKING SITES
BURBANK STATION**

CONTRACT NO.
HSR14-42

DRAWING NO.
TC-E6005

SCALE
NOT TO SCALE

SHEET NO.