

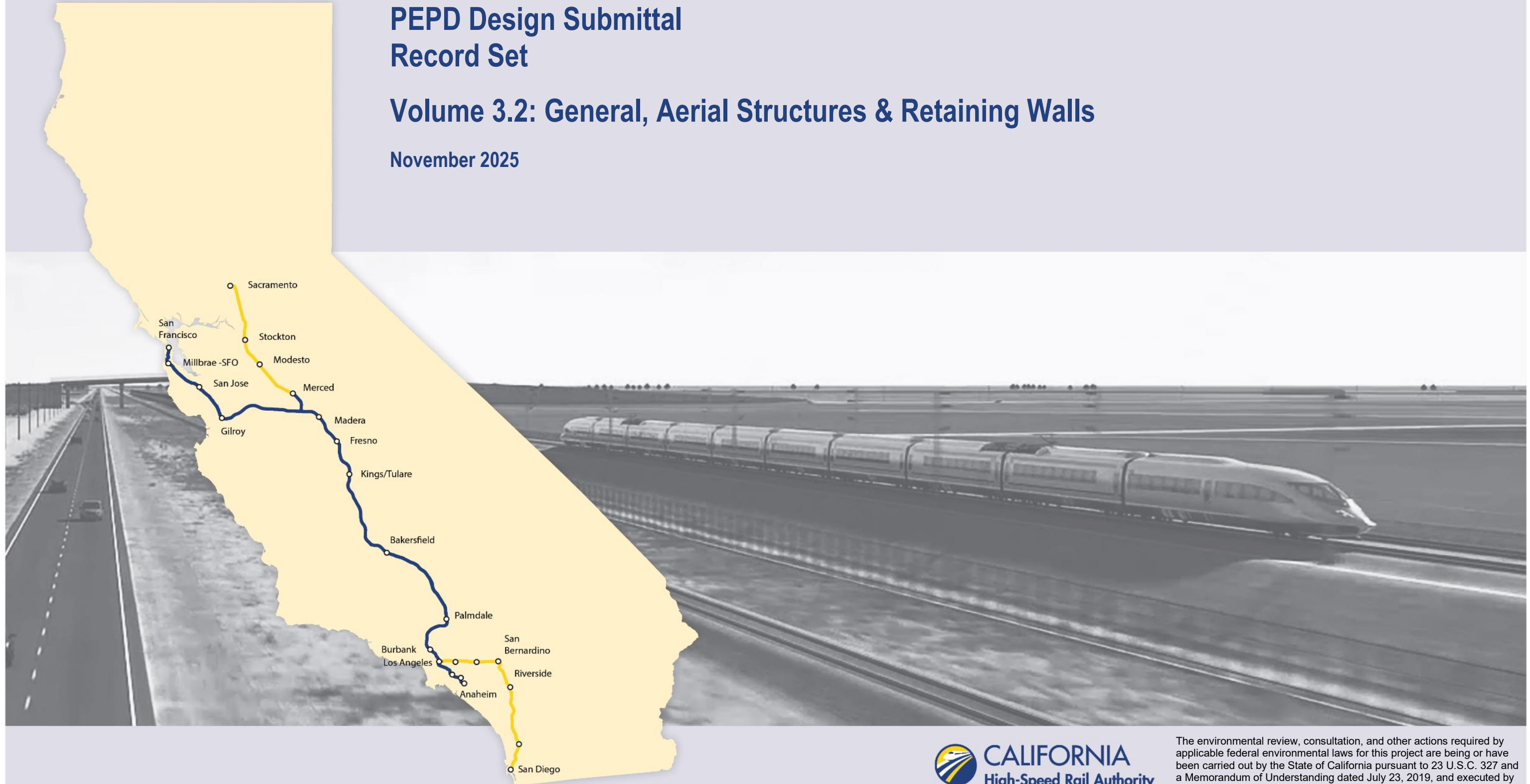
California High-Speed Rail Authority

Los Angeles to Anaheim Project Section

PEPD Design Submittal
Record Set

Volume 3.2: General, Aerial Structures & Retaining Walls

November 2025

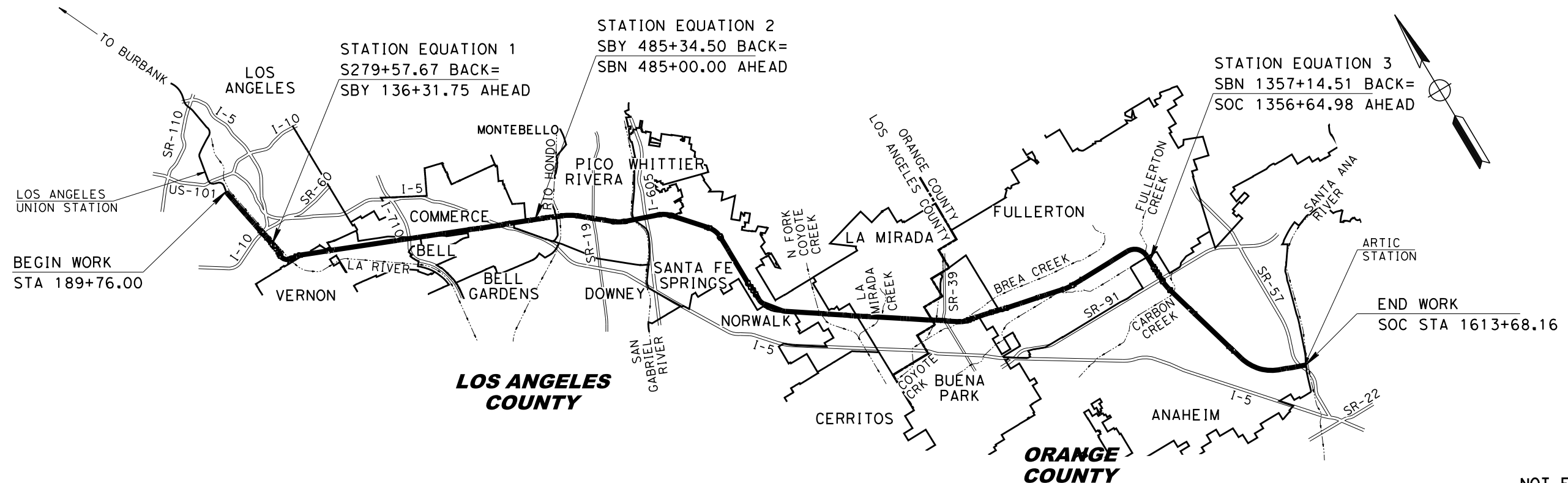




CALIFORNIA
HIGH-SPEED RAIL AUTHORITY



PRELIMINARY ENGINEERING FOR PROJECT DEFINITION (PEPD)
CALIFORNIA HIGH-SPEED TRAIN PROJECT
TONGVA SUBDIVISION
LOS ANGELES TO ANAHEIM
VOLUME 3.2
GENERAL, AERIAL STRUCTURES, BRACED TRENCH, & RETAINING WALLS



NOT FOR CONSTRUCTION
FOR INTERNAL USE ONLY

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
M. MAMAWAL
DRAWN BY
M. MAMAWAL
CHECKED BY
J. SWANSON
IN CHARGE
J. SWANSON
DATE

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CALIFORNIA HIGH-SPEED TRAIN PROJECT
LOS ANGELES TO ANAHEIM
RECORD SET
PRELIMINARY ENGINEERING FOR PROJECT DEFINITION
PROJECT LOCATION MAP

CONTRACT NO.
HSR06-0005
DRAWING NO.
GE-A0201
SCALE
NO SCALE
SHEET NO.

PEPD INDEX OF VOLUMES

VOLUME NO.	CONTENT
VOLUME 3.1	GENERAL
	TRACK ALIGNMENT
	RIGHT-OF-WAY IMPACT
VOLUME 3.2	GENERAL
	AERIAL STRUCTURES
	BRACED TRENCH
	RETAINING WALLS
VOLUME 3.3	GENERAL
	GRADE SEPARATIONS
VOLUME 3.3A	GENERAL
	STATE COLLEGE GRADE SEPARATION (BY OCTA)
VOLUME 3.4	GENERAL
	UTILITIES
	GRADING AND DRAINAGE
	TRACTION POWER FACILITY SITE
	COMMUNICATION SYSTEM SITE
VOLUME 3.5	GENERAL
	STATIONS

VOLUME NO.	CONTENT
VOLUME 3.6	15TH ST LIGHT MAINTENANCE FACILITY III & STATIONS (NON-PREFERRED OPTIONS)
	GENERAL
	TRACK ALIGNMENT
	RIGHT-OF-WAY IMPACT
	STATIONS
	GRADE SEPARATIONS
	ROADWAY WORK
	UTILITIES
VOLUME 3.7	NOT USED
VOLUME 3.8	GENERAL
	LINK UNION STATION (LINK US) BY LA METRO

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**CALIFORNIA HIGH-SPEED TRAIN PROJECT
LOS ANGELES TO ANAHEIM**

RECORD SET
PRELIMIN-RY ENGINEERING FOR PROJECT DEFINITION
INDEX OF VOLUMES

CONTR-CT NO. HSR06-0005
DR-WING NO. GE--0210
SC-LE AS SHOWN
SHEET NO.

VOLUME 3.2 - GENERAL, AERIAL STRUCTURES, TUNNELS & RETAINING WALLS

GENERAL	
DRAWING NO.	DRAWING TITLE
GE-A0200	COVER SHEET - VOLUME 3.2
GE-A0201	PROJECT LOCATION MAP
GE-A0210	INDEX OF VOLUMES
GE-A0211	INDEX OF DRAWINGS VOLUME 3.2 - SHEET 1 OF 3
GE-A0212	INDEX OF DRAWINGS VOLUME 3.2 - SHEET 2 OF 3
GE-A0213	INDEX OF DRAWINGS VOLUME 3.2 - SHEET 2 OF 3
GE-D0201	VOLUME 3.2 - KEY MAP AERIAL STRUCTURES & TUNNELS - SHEET 1 OF 2
GE-D0202	VOLUME 3.2 - KEY MAP AERIAL STRUCTURES & TUNNELS - SHEET 2 OF 2
GE-D0211	VOLUME 3.2 - KEY MAP RETAINING WALL - SHEET 1 OF 3
GE-D0212	VOLUME 3.2 - KEY MAP RETAINING WALL - SHEET 2 OF 3
GE-D0213	VOLUME 3.2 - KEY MAP RETAINING WALL - SHEET 3 OF 3
GE-B0201	BASIS OF DESIGN SUMMARY
GE-C0201	ACRONYMS AND ABBREVIATIONS 1
GE-C0202	ACRONYMS AND ABBREVIATIONS 2
GE-C0203	ACRONYMS AND ABBREVIATIONS 3
GE-C0204	ACRONYMS AND ABBREVIATIONS 4
GE-C0205	ACRONYMS AND ABBREVIATIONS 5
GE-C0211	SYMBOLS 1
GE-C0212	SYMBOLS 2
GE-B0211	GENERAL NOTES 1 OF 1
GE-D6201	TRACK SCHEMATIC
GE-D6202	TRACK SCHEMATIC - 26TH STREET LMF III OPTION

AERIAL STRUCTURES, TUNNELS & RETAINING WALLS

DRAWING NO.	DRAWING TITLE
ST-J0011	TYPICAL AERIAL STRUCTURE SECTION SHEET 1 OF 8
ST-J0012	TYPICAL AERIAL STRUCTURE SECTION SHEET 2 OF 8
ST-J0013	TYPICAL AERIAL STRUCTURE SECTION SHEET 3 OF 8
ST-J0014	TYPICAL AERIAL STRUCTURE SECTION SHEET 4 OF 8
ST-J0015	TYPICAL AERIAL STRUCTURE SECTION SHEET 5 OF 8
ST-J0016	TYPICAL AERIAL STRUCTURE SECTION SHEET 6 OF 8
ST-J0017	TYPICAL AERIAL STRUCTURE SECTION SHEET 7 OF 8
ST-J0018	TYPICAL AERIAL STRUCTURE SECTION SHEET 8 OF 8
ST-G0021	RETAINING WALL TYPICAL SECTION SHEET 1 OF 2
ST-G0022	RETAINING WALL TYPICAL SECTION SHEET 2 OF 2
ST-J1531	HST AERIAL STRUCTURE #3 STA SBY 355+00 TO STA SBY 367+50
ST-J1532	HST AERIAL STRUCTURE #3 STA SBY 367+50 TO STA SBY 380+00
ST-J1533	HST AERIAL STRUCTURE #3 STA SBY 380+00 TO STA SBY 392+50
ST-J1534	HST AERIAL STRUCTURE #3 STA SBY 392+50 TO STA SBY 405+00
ST-J1535	HST AERIAL STRUCTURE #3 STA SBY 405+00 TO STA SBY 417+50
ST-J1536	HST AERIAL STRUCTURE #3 STA SBY 417+50 TO STA SBY 430+00
ST-J1552	AERIAL STRUCTURE #2 STA SBN 763+00 TO STA SBN 774+75
ST-J1553	AERIAL STRUCTURE #2 STA SBN 774+75 TO STA SBN 786+75
ST-J1554	AERIAL STRUCTURE #2 STA SBN 786+75 TO STA SBN 798+75
ST-J1555	AERIAL STRUCTURE #2 STA SBN 798+75 TO STA SBN 811+00
ST-J1556	AERIAL STRUCTURE #2 STA SBN 811+00 TO STA SBN 823+00
ST-J1557	AERIAL STRUCTURE #2 STA SBN 823+00 TO STA SBN 835+25
ST-J1558	AERIAL STRUCTURE #2 STA SBN 835+25 TO STA SBN 847+50
ST-J1559	AERIAL STRUCTURE #2 STA SBN 847+50 TO STA SBN 859+50
ST-J1560	AERIAL STRUCTURE #2 STA SBN 859+50 TO STA SBN 871+50
ST-J1561	AERIAL STRUCTURE #2 STA SBN 871+50 TO STA SBN 883+75
TN-C1585	DALE ST TO GILBERT ST BRACED TRENCH PLAN & PROFILE STA SBN 1114+56 TO STA SBN 1125+00
TN-C1586	DALE ST TO GILBERT ST BRACED TRENCH PLAN & PROFILE STA SBN 1125+00 TO STA SBN 1137+00
TN-C1587	DALE ST TO GILBERT ST BRACED TRENCH PLAN & PROFILE STA SBN 1137+00 TO STA SBN 1149+00
TN-C1588	DALE ST TO GILBERT ST BRACED TRENCH PLAN & PROFILE STA SBN 1149+00 TO STA SBN 1159+51
TN-C1589	DALE ST TO GILBERT ST BRACED TRENCH GRADE LEVEL PLANS 1 OF 2
TN-C1590	DALE ST TO GILBERT ST BRACED TRENCH GRADE LEVEL PLANS 2 OF 2
TN-C3585	DALE ST TO GILBERT ST BRACED TRENCH TRENCH SECTION
TN-C3586	DALE ST TO GILBERT ST BRACED TRENCH TRANSITION SECTION TYPE 1
TN-C3587	DALE ST TO GILBERT ST BRACED TRENCH TRANSITION SECTION TYPE 2
TN-C3588	DALE ST TO GILBERT ST BRACED TRENCH CUT AND COVER SECTION

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M. MAMAWAL

CHECKED BY
J. SWANSON

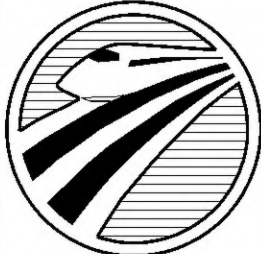
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CALIFORNIA
HIGH-SPEED RAIL AUTHORITY

CALIFORNIA HIGH-SPEED TRAIN PROJECT
LOS ANGELES TO ANAHEIM

RECORD SET
PRELIMINARY ENGINEERING FOR PROJECT DEFINITION
INDEX OF DRAWINGS
VOLUME 3.2 - SHEET 1 OF 3

CONTRACT NO.
HSR06-0005

DRAWING NO.
GE-A0211

SCALE
AS SHOWN

SHEET NO.

REV

DATE

BY

CHK

APP

DESCRIPTION

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VOLUME 3.2 - GENERAL, AERIAL STRUCTURES, TUNNELS & RETAINING WALLS

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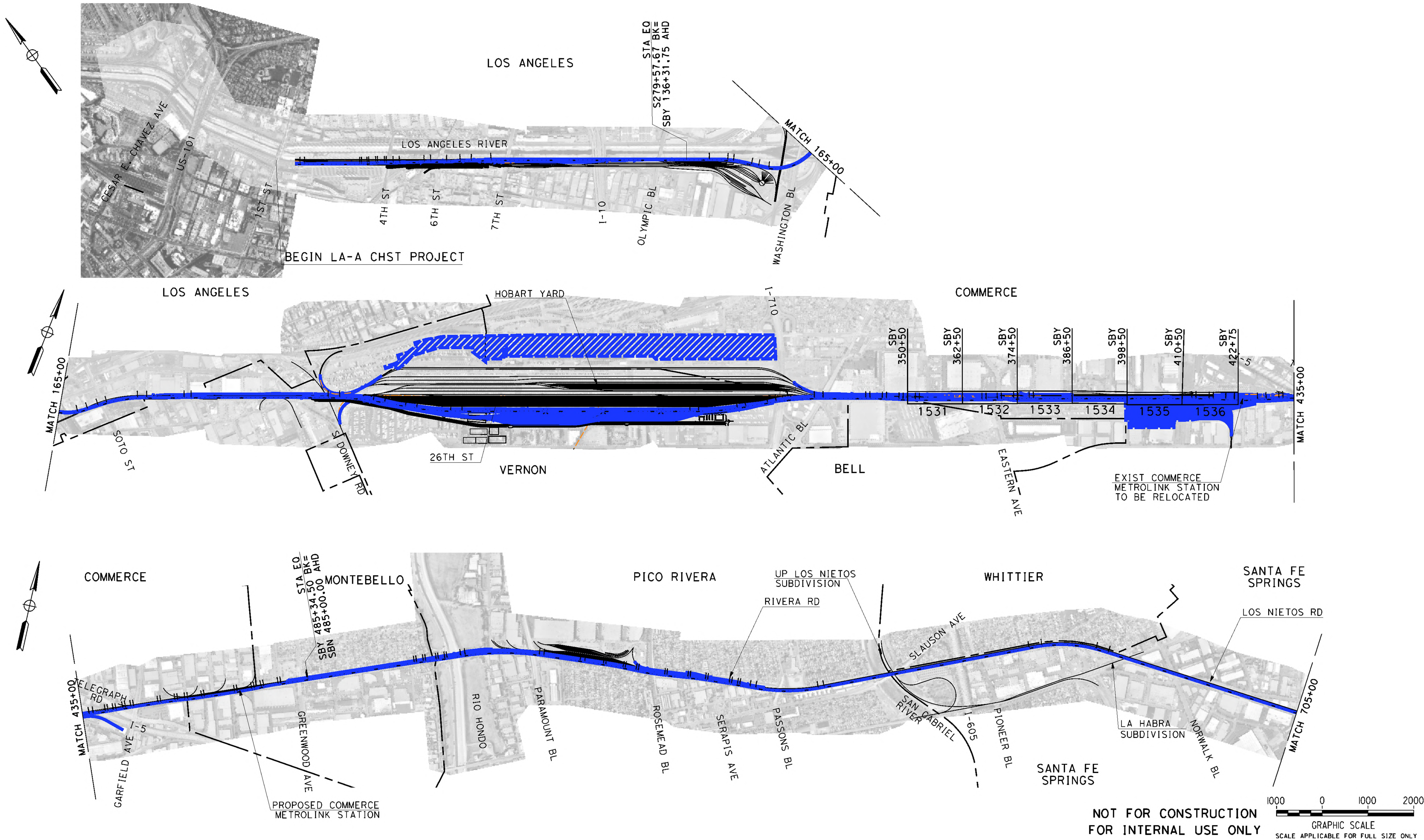
						DESIGNED BY M. MAMAWAL	PEPD SUBMITTAL FOR INTERNAL USE ONLY			CALIFORNIA HIGH-SPEED TRAIN PROJECT LOS ANGELES TO ANAHEIM RECORD SET PRELIMINARY ENGINEERING FOR PROJECT DEFINITION INDEX OF DRAWINGS VOLUME 3.2 - SHEET 2 OF 3	CONTRACT NO. HSR06-0005
						DRAWN BY M. MAMAWAL					DRAWING NO. GE-A0212
						CHECKED BY J. SWANSON					SCALE AS SHOWN
						IN CHARGE J. SWANSON					SHEET NO.
REV	DATE	BY	CHK	APP	DESCRIPTION	DATE					

VOLUME 3.2 - GENERAL, AERIAL STRUCTURES, TUNNELS & RETAINING WALLS

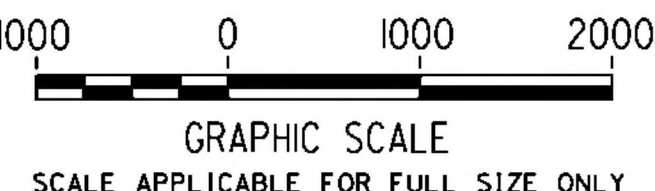
AERIAL STRUCTURES, TUNNELS & RETAINING WALLS	
DRAWING NO.	DRAWING TITLE
ST-G1106	RETAINING WALL STA SBN 1256+00 TO STA SBN 1268+00
ST-G1107	RETAINING WALL STA SBN 1268+00 TO STA SBN 1280+00
ST-G1108	RETAINING WALL STA SBN 1280+00 TO STA SBN 1292+00
ST-G1109	RETAINING WALL STA SBN 1292+00 TO STA SBN 1304+00
ST-G1110	RETAINING WALL STA SBN 1304+00 TO STA SBN 1316+00
ST-G1134	RETAINING WALL STA SOC 1590+00 TO STA SOC 1602+00
ST-G1135	RETAINING WALL STA SOC 1602+00 TO STA SOC 1614+00

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						DR-WN BY M. M-MAW-L					DR-WING NO. GE-A0213
						CHECKED BY J. SW-NSON					SC-LE AS SHOWN
						IN CH-RGE J. SW-NSON					SHEET NO.
						DATE					
	REV	D-TE	BY	CHK	-PP	DESCRIPTION					



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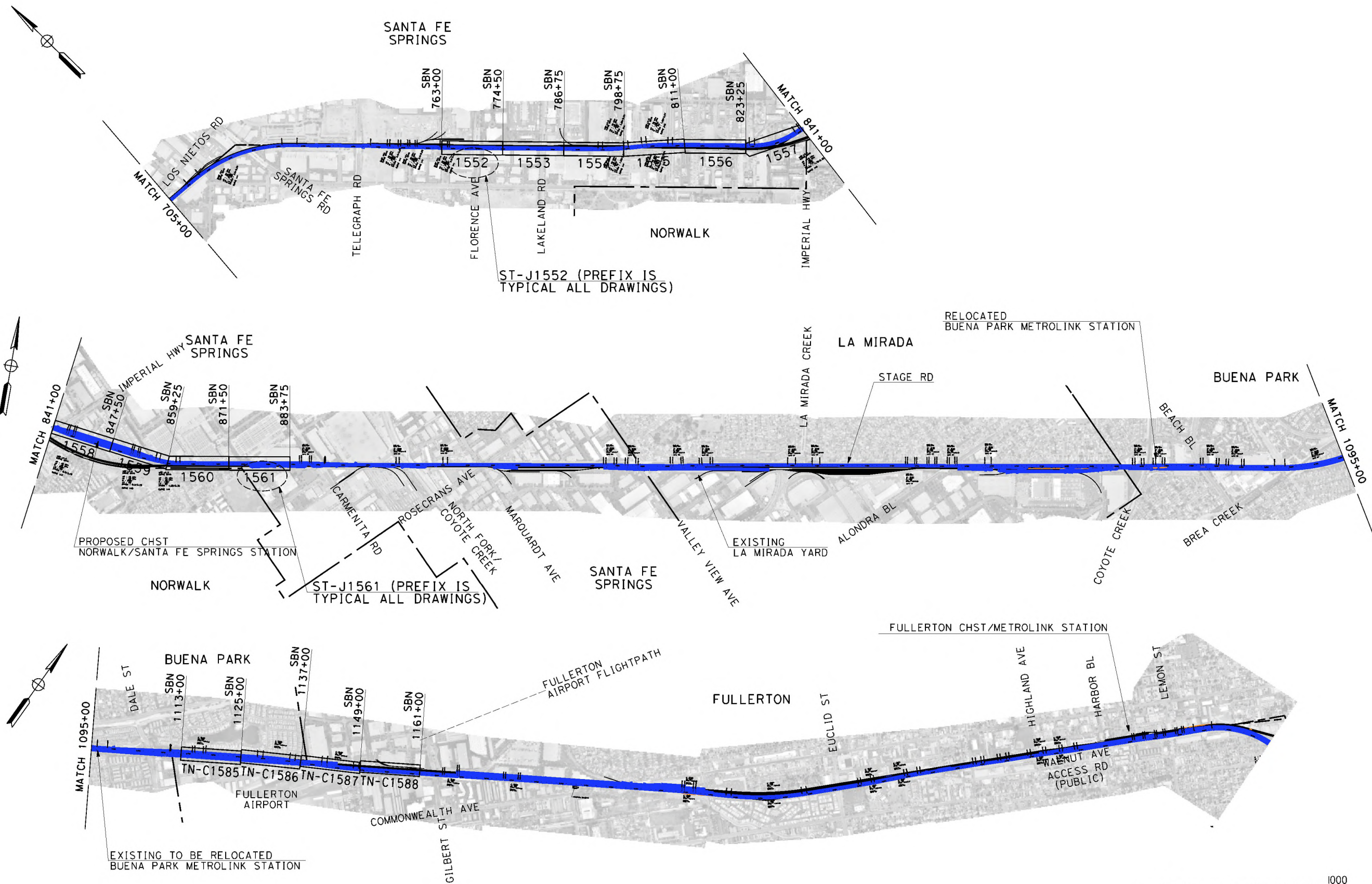
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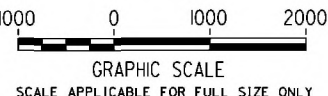


CALIFORNIA HIGH-SPEED TRAIN PROJECT
LOS ANGELES TO ANAHEIM
RECORD SET
PRELIMINARY ENGINEERING FOR PROJECT DEFINITION
VOLUME 3.2 - KEY MAP
AERIAL STRUCTURES & TUNNELS - SHEET 1 OF 2

CONTRACT NO.
HSR06-0005
DRAWING NO.
GE-D0201
SCALE
1"= 1000'
SHEET NO.



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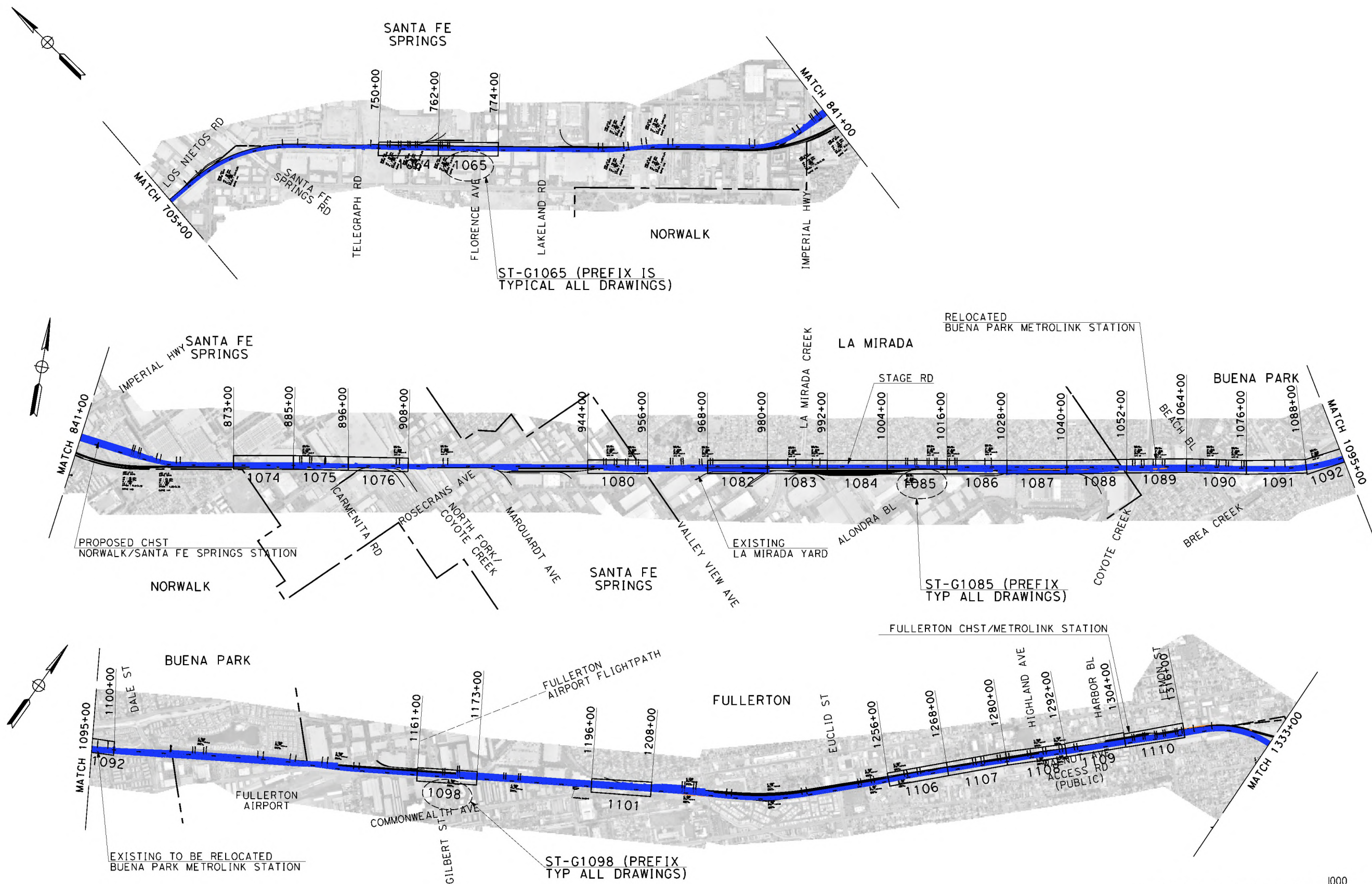
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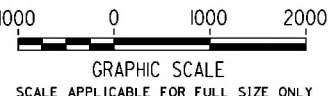


CALIFORNIA HIGH-SPEED TRAIN PROJECT
LOS ANGELES TO ANAHEIM
RECORD SET
PRELIMINARY ENGINEERING FOR PROJECT DEFINITION
VOLUME 3.2 - KEY MAP
AERIAL STRUCTURES & TUNNELS - SHEET 2 OF 2

CONTRACT NO.
HSR06-0005
DRAWING NO.
GE-D0202
SCALE
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SHEET NO.



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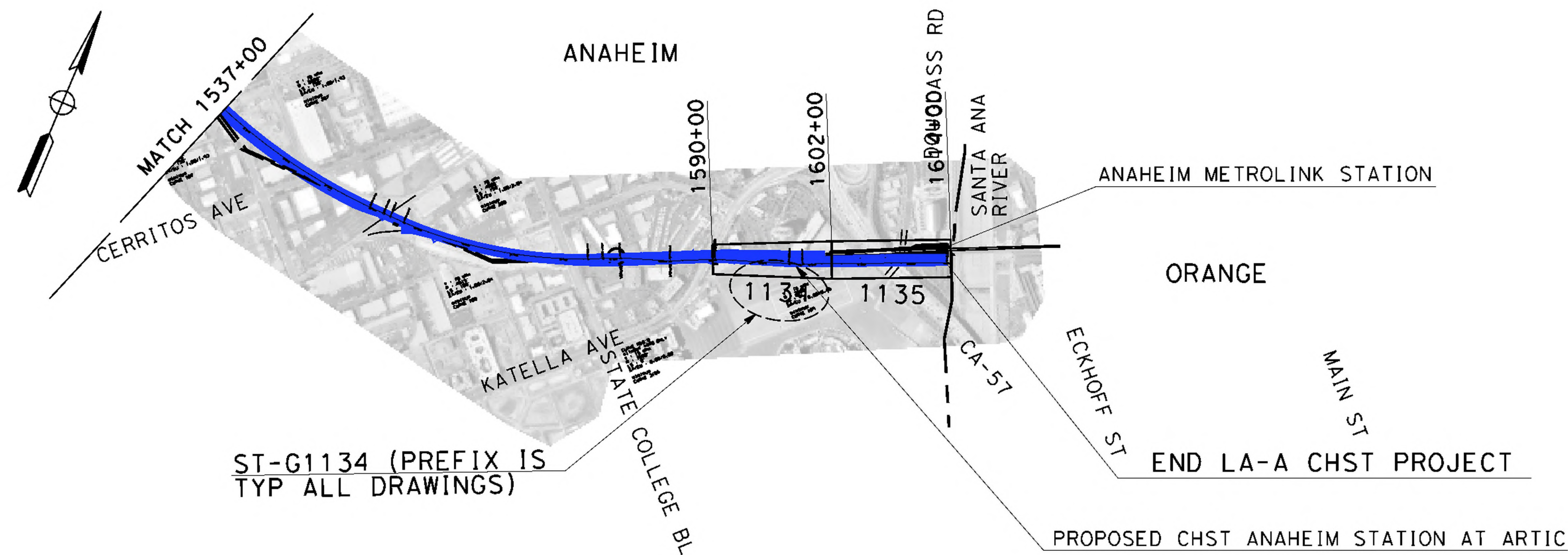
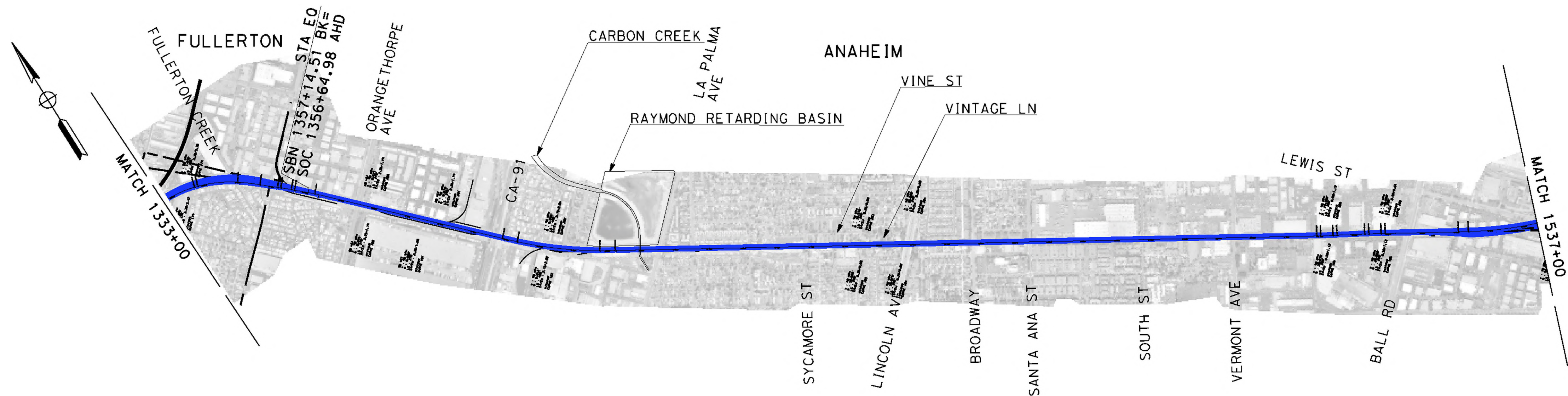
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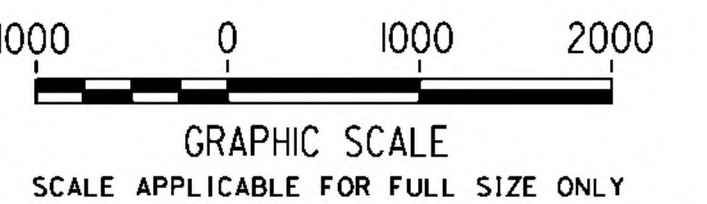


CALIFORNIA HIGH-SPEED TRAIN PROJECT
LOS ANGELES TO ANAHEIM
RECORD SET
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VOLUME 3.2 - KEY MAP
RETAINING WALLS - SHEET 2 OF 3

CONTRACT NO.
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CALIFORNIA
HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT
LOS ANGELES TO ANAHEIM**

RECORD SET
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VOLUME 3.2 - KEY MAP
RETAINING WALLS - SHEET 3 OF 3

CONTRACT NO.
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BASIS OF DESIGN SUMMARY

FOR THE LOS ANGELES TO ANAHEIM SEGMENT (LOSSAN CORRIDOR), THE CALIFORNIA HIGH-SPEED RAIL AUTHORITY (AUTHORITY) HAS ADOPTED A STRATEGY TO 'BLEND' HIGH SPEED WITH EXISTING RAIL SYSTEMS ON SHARED INFRASTRUCTURE TO ACCELERATE AND BROADEN BENEFITS, IMPROVE EFFICIENCY, MINIMIZE COMMUNITY IMPACTS AND REDUCE CONSTRUCTION COST. THE TECHNICAL REQUIREMENTS NECESSARY TO ALLOW JOINT OPERATION OF HIGH-SPEED RAIL, CONVENTIONAL PASSENGER RAIL, AND FREIGHT RAIL WITHIN THE BLENDED SYSTEM CORRIDOR BETWEEN UNION STATION IN LOS ANGELES AND THE ANAHEIM REGIONAL TRANSPORTATION INTERMODAL CENTER IN ANAHEIM ARE BASED ON:

- 1. TECHNICAL MEMORANDUM (TM) 0.3.1 BASIS OF DESIGN FOR BLENDED OPERATION IN THE LA-A CORRIDOR, RO DATED AUGUST 20, 2016.

INFRASTRUCTURE REQUIREMENTS

THE AUTHORITY HAS ESTABLISHED PERFORMANCE REQUIREMENTS TO GUIDE THE DEVELOPMENT OF THE HIGH-SPEED RAIL SYSTEM IN BLENDED CORRIDORS BASED ON THE FRA TIER STRUCTURE FOR PASSENGER SYSTEMS DESCRIBED IN THE "HIGH-SPEED PASSENGER RAIL SAFETY STRATEGY (2009)."

THE REQUIREMENTS FOR MAJOR DESIGN ELEMENTS ARE LISTED BELOW:

1. INTEROPERABILITY

REQUIRED LEVEL OF INTEROPERABILITY BETWEEN THE PASSENGER AND FREIGHT RAILROADS THAT OPERATE IN THE LA-A CORRIDOR WILL BE MAINTAINED.

THE RAILROAD OPERATORS AND RIGHT-OF-WAY OWNERS ARE:

AUTHORITY
METROLINK
AMTRAK/LOSSAN
LA METRO
OCTA
BNSF RAILWAY
UNION PACIFIC RAILROAD

THE DESIGNS PROPOSED DO NOT PRECLUDE THE PROPOSED FUTURE OPERATIONS BY OTHER RAIL OPERATORS AND/OR AGENCIES SUCH AS:

COACHELLA VALLEY RAIL SERVICE BY RCTC

2. DESIGN SPEEDS

DESIGN SPEED: MAXIMUM ALLOWED PER EXISTING ALIGNMENT/ROW CONSTRAINTS WITH A NOT TO EXCEED MAXIMUM OF 110 MPH.

3. TRACK CENTER SPACING

14'-0" MINIMUM IN CERTAIN AREAS ALONG ALIGNMENT

4. INTRUSION PROTECTION

INTRUSION DETECTION WILL BE PROVIDED AT LOCATIONS WHERE IT IS APPROPRIATE TO MITIGATE AN INTRUSION HAZARD BASED ON HAZARD ASSESSMENT.

5. ACCESS CONTROL

FULL ACCESS CONTROL IS NOT PRACTICAL IN THIS SEGMENT, INTRUSION PROTECTION AND/OR INTRUSION MONITORING WILL BE EMPLOYED WITH MITIGATIONS AS REQUIRED TO PROMOTE SAFE AND RELIABLE OPERATION.

6. TRACK ALIGNMENT

THE LA-A CORRIDOR IS PLANNED TO OPERATE AS A CLASS 5/6 SERVICE (SPEEDS UP TO 110 MPH) WITH A POSSIBLE AT-GRADE ROADWAY CROSSINGS. TRACK ALIGNMENT DESIGN STANDARDS ARE GENERALLY BASED ON HOST RAILROAD STANDARDS UNLESS OTHERWISE NOTED ON GEOMETRY TABLES.

RAIL PROFILES DEPICT THE TOP OF RAIL ELEVATION. ON SUPERELEVATED HORIZONTAL CURVES, THE TOP OF RAIL ELEVATION IS THE LOW RAIL.

7. AT-GRADE ROADWAY-RAIL CROSSING

SELECT AT-GRADE ROADWAY-RAIL CROSSINGS IN THE CITY OF ANAHEIM WILL REMAIN AT-GRADE AS TRAINS WILL NOT EXCEED OPERATING SPEEDS GREATER THAN 125 MPH AS DEFINED BY FRA.

8. GRADE SEPARATIONS

SELECT EXISTING AT-GRADE ROADWAY/RAIL CROSSINGS WILL BE GRADE SEPARATED WHERE ADDITIONAL TRACKS EXCEEDS THREE OR MORE AND/OR AS REQUIRED TO ACCOMMODATE HSR OPERATIONS.

THE AUTHORITY HAS DEVELOPED A LIST OF EARLY PROJECTS THAT ARE CURRENTLY IN EITHER DESIGN OR CONSTRUCTION AND THAT ARE TO BE ENVIRONMENTALLY CLEARED BY THIS HSR EIR/EIS. THOSE CROSSINGS ARE:

1. STATE COLLEGE

ALL OTHER CROSSINGS NEW OR REQUIRING MODIFICATIONS WILL BE CLEARED ENVIRONMENTALLY BY HSR EXCEPT FOR:

1. LAKELAND (HSR ON AERIAL STRUCTURE)

9. TERMINAL AND INTERMEDIATE STATION(S)

THE FOLLOWING STATION IN THE CORRIDOR IS DESIGNATED AS A TERMINAL STATION:

ANAHEIM STATION AT ARTIC

THE FOLLOWING STATIONS ARE DESIGNATED AS POSSIBLE INTERMEDIATE STATIONS:

SANTA FE SPRINGS/NORWALK AND FULLERTON

10. TRACK AND PLATFORM CONFIGURATION

BASED ON NOTICE TO DESIGNERS NO. 13-STATION PLATFORM AND TRACK LAYOUT (RELEASED ON SEPTEMBER 7, 2016), THE STATION PASSENGER PLATFORMS ARE PLANNED FOR A LENGTH OF APPROXIMATELY 800 TO 1410 FEET TO ACCOMMODATE A RANGE OF HIGH-SPEED TRAINSETS. PLATFORM LENGTHS SHOWN IN PLANS ARE BASED ON COORDINATED STATION PLANNING WITH AUTHORITY AND STAKEHOLDERS.

INTERMEDIATE STATION PLATFORM CONFIGURATIONS WILL ENSURE CUSTOMER SAFETY AS TRAINS MAY OPERATE THROUGH OR IN PROXIMITY TO THE STATION PLATFORM WITHOUT STOPPING.

11. VEHICLE STORAGE AND MAINTENANCE

UNDER CURRENT OPERATING ASSUMPTION, FLEET STORAGE, CLEANING, SERVICING, INSPECTION, MAINTENANCE, AND REPAIR REQUIREMENTS WILL BE SUPPORTED AT:

TERMINAL STORAGE AND MAINTENANCE FACILITY (LEVEL III) THAT PROVIDES IN-SERVICE INSPECTION, CLEANING AND MAINTENANCE WITH A LOCATION IN PROXIMITY TO LOS ANGELES UNION STATION.

LAYOVER TRACKS FOR OVERNIGHT LAYUP AND TURNAROUND AT LOS ANGELES UNION STATION AND ARTIC STATION IN ANAHEIM.

12. SHARED RAIL OPERATIONS

IN THE LOS ANGELES TO ANAHEIM CORRIDOR HSR WILL OPERATE IN A SHARED RIGHT-OF-WAY CORRIDOR AND ON SHARED TRACKS. FREIGHT OPERATORS WILL CROSS OVER THE ELECTRIFIED TRACKS AT DEFINED LOCATIONS UTILIZING OWL DIAMONDS AND WILL ALSO BE ALLOWED TO UTILIZE THE TWO ELECTRIFIED TRACKS AT DEFINED TIMES OR IN CASE OF EMERGENCIES.

13. SHARED RIGHT OF WAY (ROW)

ALONG THIS RAIL CORRIDOR, THE RIGHT-OF-WAY AND TRACKS ARE OWNED EITHER BY THE BNSF FREIGHT RAILWAY, METRO, AND OCTA WITH FREIGHT OPERATIONS OCCURRING SIMULTANEOUSLY THROUGHOUT THE DAY.

14. DIAMOND (AT-GRADE) CROSSINGS

THE USE OF ONE-WAY LOW SPEED "OWL" DIAMOND CROSSINGS WILL BE PROVIDED AT LOCATIONS WHERE OPERATING SPEEDS AS SHOWN ON THE PLANS AND AS DETERMINED BY BNSF AND UPRR RAILROADS.

15. STRUCTURAL DESIGN

A.PEPD STRUCTURE DESIGN WILL BE BASED ON CHSTP CP 2-3 DESIGN CRITERIA MANUAL REV 3 DATED FEBRUARY, 2016.

B.DESIGN LIFE = 100 YEARS

16. EXISTING PRIMARY TYPE 2 OVERHEAD STRUCTURES

A.WILL MEET THE NON-COLLAPSE PERFORMANCE FOR MAXIMUM CONSIDERED EARTHQUAKE (MCE).

B.TO REMAIN ELASTIC FOR ONE THIRD OF MCE SPECTRA.

17. SURVEY

- A. HORIZONTAL AND VERTICAL DATUM:
 - i. CALIFORNIA COORDINATE SYSTEM OF 1983 (CCS83) FOR COORDINATE SYSTEM.
 - ii. THE NORTH AMERICAN DATUM OF 1988 (NAVD88) FOR HORIZONTAL DATUM.
 - iii. THE NORTH AMERICAN DATUM OF 1988 (NAVD88) FOR VERTICAL DATUM.
- B. CITY OF LA IS GRANTOR WITHIN THEIR CITY LIMITS.

SYSTEM REQUIREMENTS

1. SYSTEMS

DESIGN ELEMENTS RELATED TO ELECTRIFICATION/TRACTION POWER SUPPLY SYSTEM (TPSS), TRAIN CONTROL SYSTEMS AND COMMUNICATIONS ARE NOT PART OF THIS CONTRACT AND THESE DESIGN ELEMENTS WILL BE DESIGNED BY OTHERS.

ELEMENT LOCATIONS WILL BE DEFINED AS PART OF THIS CONTRACT.

AUTHORITY SYSTEMS TEAM DIRECTED THE FOLLOWING UPDATES AT A SEPTEMBER 15, 2016 WORKSHOP:

ELIMINATE ALTERNATE SITE OPTIONS

ELIMINATE BACK TO BACK PARALLELING STATION;

MAINTAIN STANDARD LAYOUT TPSS-TPPS-TPSWS-TPPS-TPSS INTRODUCE A PORTAL / BRIDGE STRUCTURE EVERY MILE IN SEGMENTS UTILIZING THE DOUBLE CANTILEVER CATENARY POLE.

RIGHT-OF-WAY FOR THESE SYSTEMS AND SUB-SYSTEMS WILL BE DEFINED BY THE AUTHORITY AND SUBJECT TO CHANGE.

PRELIMINARY POWER SOURCES ARE SHOWN AND SUBJECT TO CHANGE WITH FINAL DETERMINATION BASED ON DISCUSSIONS BETWEEN THE AUTHORITY AND UTILITY OWNER.

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\$PLOT \$							DESIGNED BY M. MAMAWAL	PEPD SUBMITTAL FOR INTERNAL USE ONLY			CALIFORNIA HIGH-SPEED TRAIN PROJECT LOS ANGELES TO ANAHEIM RECORD SET PRELIMINARY ENGINEERING FOR PROJECT DEFINITION BASIS OF DESIGN SUMMARY	CONTRACT NO. HSR06-0005
							DRAWN BY M. MAMAWAL					DRAWING NO. GE-B0201
							CHECKED BY J. SWANSON					SCALE NO SCALE
							IN CHARGE J. SWANSON					SHEET NO.
							DATE					
	REV	DATE	BY	CHK	APP	DESCRIPTION						

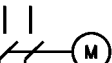
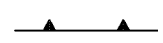
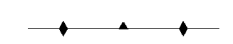
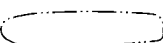
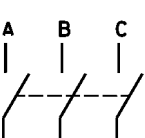
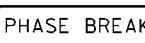
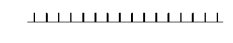
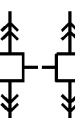
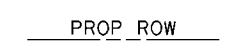
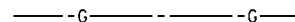
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@	ADT	AB	ABBC	ABM	ABN	ABUT	ABV	AC	ACB	ACMB	ACOUS	ACP	ACS	ACSR	AD	ADJ	ADL	ADP	ADT	A&E	AEC	AED	AFC	AFES	A/G	AGW	AHD	AL	ALIGN	ALT	AM	ANC	ANI	ANN	ANS	AP	APC	APE	APEFZ	API	APPROX	APU	AR	ARCH	ARS	AS	ASPH	ASRP	ASSY	AT	ATC	ATEL	ATM	ATO	ATP	ATPB	ATPM	ATR	ATS	AUX	AVE	AVG	AVL	AWG	BAGR	BAR	BAT	BB	B-B	BC	BCR	BD	BDA	BDD	AT	AVERAGE ANNUAL DAILY TRAFFIC	AGGREGATE BASE, ANCHOR BOLT	ASBESTOS BONDED BITUMINOUS COATED	AIR-BLOWN MORTAR	AIR-BLOWN MORTAR	ABANDON	ABUTMENT	ABOVE	ALTERNATING CURRENT, ASPHALT CONCRETE	ASPHALT CONCRETE BASE	AC DISTRIBUTION PANEL MAIN BREAKER	ACOUSTICAL	ASBESTOS CEMENT PIPE	ACCESS CONTROL ROOM	ALUMINUM CONDUCTOR STEEL REINFORCED	AREA DRAIN	ADJACENT, ADJUST, ADJUSTABLE	ADDED DEAD LOAD	AC DISTRIBUTION PANEL	AVERAGE DAILY TRAFFIC	ARCHITECTURAL AND ENGINEERING	AERIAL EARTH (GROUND) CONDUCTOR	AUTOMATED EXTERNAL DEFIBRILLATOR	AUTOMATIC FARE COLLECTION	ALTERNATIVE FLARED END SECTION	AT-GRADE	AERIAL GROUND WIRE	AHEAD	ALUMINUM	ALIGNMENT	ALTERNATE	TIME FROM MIDNIGHT TO NOON	ANCHOR	AUTOMATIC NUMBER IDENTIFICATION	ANNUNCIATOR	AMBIENT NOISE SENSOR	ALTERNATIVE PIPE	ALTERNATIVE PIPE CULVERT	AREA OF POTENTIAL EFFECTS	ALQUIST-PRIOLO EARTHQUAKE FAULT ZONE	APPLICATION PROGRAMMING INTERFACE	APPROXIMATE	ALTERNATIVE PIPE UNDERDRAIN	ACCESS RESTRICTION	ARCHITECTURAL	ACCELERATION RESPONSE SPECTRUM	AGGREGATE SUBBASE	ASPHALT	ALUMINUM SPIRAL RIB PIPE	ASSEMBLY	AUTOTRANSFORMER, AUTOMATIC TENSION	AUTOMATIC TRAIN CONTROL	ADMINISTRATIVE TELEPHONE	ALONG TRACK MOVEMENT	AUTOMATIC TRAIN OPERATION	AUTOMATIC TRAIN PROTECTION	ASPHALT TREATED PERMEABLE BASE	ASPHALT TREATED PERMEABLE MATERIAL	ABOVE TOP OF RAIL	AUTOMATIC TRAIN SUPERVISION, AUTO TENSIONED SYSTEM	AUXILIARY	AVENUE	AVERAGE	AUTOMATIC VEHICLE LOCATION	AMERICAN WIRE GAUGE	BDP	BRIDGE DESIGN PRACTICE (CALTRANS)	BDS	BRIDGE DESIGN SPECIFICATIONS (CALTRANS)	BEC	BURIED EARTH (GROUND) CONDUCTOR	BEG	BFA	BYPASS FEEDER ANCHOR	BIL	BASIC IMPULSE INSULATION LEVEL	BITUM	BITUMINOUS	BK	BACK	BKF	BACKFILL	BKR	BREAKER	BL	BASELINE	BLDG	BUILDING	BLKG	BLOCKING	BLM	BRIDGE-LOG MILE	BLST	BALLAST	BLVD	BOULEVARD	BM	BENCHMARK	BN	BACKBONE NETWORK	BND	BOUND	BOC	BOTTOM OF CURB	BOCC	BACK-UP OPERATIONAL CONTROL CENTER	BOS	BOTTOM OF SLOPE	BOT	BOTTOM	BOW	BOTTOM OF WALL	BR	BRIDGE, BRIDGE CURVE	BRG	BEARING	BRKT	BRACKET	BRS	BROADBAND RADIO SYSTEM	BRT	BUS RAPID TRANSIT	BS	BODY SPAN WIRE	BSC	BASE STATION CONTROLLER	B/SPAN	BODY SPAN	BT	BUS TIE	BTM	BOTTOM	BTS	BASE TRANCEIVER STATION	BTWN	BETWEEN	BVC	BEGINNING OF VERTICAL CURVE	BW	BARBED WIRE, BALANCE WEIGHT	B/W	BLACK AND WHITE	BWA	BALANCE WEIGHT ANCHOR	BWLAN	BROADBAND WIRELESS LOCAL AREA NETWORK	BZ	BRONZE	CI	CAST IRON	CIC	COMMUNICATIONS INTERFACE CABINET	CIDH	CAST-IN-DRILLED-HOLE	CIF	COMMON INTERMEDIATE FORMAT	CIP	CAST IRON PIPE	C-I-P	CAST-IN-PLACE	CIPCP	CAST-IN-PLACE CONCRETE PIPE	CIS	CUSTOMER INFORMATION SIGN	CISS	CAST-IN-STEEL-SHELL	CJ	CONSTRUCTION JOINT	CJP	COMPLETE JOINT PENETRATION	CKT	CIRCUIT	CL	CLASS	CL2	CLASS 2	CL-6	CHAIN LINK FENCE (6 FT)	CLG	CEILING	CLK	CHAIN LINK	CLKG	CAULKING	CLO	CLOSET	CLR	CLEAR, CLEARANCE	CM	CONTROL MODULE, CORRUGATED METAL	CMP	CORRUGATED METAL PIPE	CMU	CONCRETE MASONRY UNIT	CNTR	COUNTER	CO	CLEANOUT, COUNTY	COL	COLUMN	COMM	COMMUNICATIONS	CONC	CONCRETE	COND	CONDUIT	CONN	CONNECTOR, CONNECTION	CONST	CONSTRUCT, CONSTRUCTION	CONT	CONTINUOUS, CONTINUATION	CONTR	CONTRACTOR	COORD	COORDINATE	CORR	CORRIDOR	CP	CONTROL POINT	CPT	CONE PENETRATION TEST, CONTROL POWER TRANSFORMER	CPU	CENTRAL PROCESSING UNIT	CR	CREEK, CONDUIT RISER	CRC	COMBINED RELAY AND CONTROL PANEL	CRCP	CONTINUOUS REINFORCED CONCRETE PAVEMENT	CRSP	CONCRETED ROCK SLOPE PROTECTION	CRZ	CLEAR RECOVERY ZONE	CS	CONTROL SWITCH, CURVE TO SPIRAL	CSA	CONSTRUCTION STAGING AREA	CSP	CORRUGATED STEEL PIPE	CSPA	CORRUGATED STEEL PIPE ARCH	CT	CERAMIC TILE, CURVE TO TANGENT, COURT, CURRENT TRANSFORMER/TRANSDUCER	CTB	CEMENT TREATED BASE	CTPB	CEMENT TREATED PERMEABLE BASE	CTPM	CEMENT TREATED PERMEABLE MATERIAL	CTR	CENTER	CTSK	COUNTERSUNK	CTVT	COMBINED CURRENT TRANSFORMER AND VOLTAGE TRANSFORMER	CTW	COUNTER WEIGHT TAIL WIRE	CU	COPPER	CULV	CULVERT	CV	CURVE	CVR	COVER	CW	CONTACT WIRE	CWA	CONTACT WIRE ANCHOR	CWH	CONTACT WIRE HEIGHT	CWR	CONTINUOUSLY WELDED RAIL	CWT	COUNTER WEIGHT	D	DEPTH	DB	DESIGN-BUILD	DBE	DESIGN BASIS EARTHQUAKE	DBL	DOUBLE	DC	DIRECT CURRENT	DCMB	DC DISTRIBUTION PANEL MAIN BREAKER	DCP	DC DISTRIBUTION PANEL	DD	DOWNDRAIN, DEVICE DRIVER	DE	DEAD END	DEL	DELINEATOR	DEMO	DEMOLISH	DEPT	DEPARTMENT	DET	DETOUR	DF	DIRECT FIXATION, DRINKING FOUNTAIN	DGA	DOWN GUY ANCHOR	DHV	DESIGN HOURLY VOLUME	DI	DRAINAGE INLET	DIAG	DIAGONAL	DIAPH	DIAPHRAGM	DIFF	DIFFERENTIAL	DIM	DIMENSION	DIN	DROP INLET	DIP	DUCTILE IRON PIPE	DIR	DIRECTION	DISC	DISCONNECT	DISP	DISPENSER	DIST	DISTANCE	DISTR	DISTRIBUTION	DMBB	DOUBLE METAL BEAM BARRIER	DN	DOWN	DNS	DOMAIN NAME SYSTEM	DO	DOOR OPENING	DPDT	DOUBLE-POLE DOUBLE-THROW	DR	DRIVE	DS	DOWNSPOUT, DISCONNECT SWITCH	DSC	DIFFERING SITE CONDITIONS	DSCW	DIRECT SUSPENSION CONTACT WIRE	DSG	DISCONNECT SWITCH GROUP	DSHA	DETERMINISTIC SEISMIC HAZARD ANALYSIS	DST	DISTRICT	DTBB	DOUBLE THRIE BEAM BARRIER	DTM	DIGITAL TERRAIN MODEL	DVR	DIGITAL VIDEO RECORDERS	DWG	DRAWING	DWY	DRIVEWAY	DXO	DOUBLE CROSSOVER	E	APPLIED CANT	E	UNBALANCED CANT	EA	EAST	EB	EACH	EC	EASTBOUND, END OF BRIDGE	ECR	END HORIZONTAL CURVE, ELECTRICAL CONDUCTOR	EE	END CURB RETURN	EF	EACH END	EGS	EACH FACE	EHS	EMERGENCY GROUND SWITCH	EI	EXTRA HIGH STRENGTH	EJ	EMERGENCY INTERCOM	E-LAN	EXPANSION JOINT	ELAST	ETHERNET LAN	ELEC	ELASTOMERIC	ELECT	ELECTRICAL, ELECTRIC	ELECT	ELECTROLIER	ELEV	ELEVATION	ELOCK	ELECTRONIC LOCK	EMB	EMBANKMENT	EMC	ELECTROMAGNETIC COMPATIBILITY	EMER	EMERGENCY	EMF	ELECTROMAGNETIC FIELD	EMI	ELECTROMAGNETIC INTERFERENCE	EMS	ELEMENT MANAGEMENT SYSTEM	EMU	ELECTRIC MULTIPLE UNIT	ENCL	ENCLOSURE	ENGR	ENGINEER, ENGINEERING	EO	BEND OF BRIDGE	EOD	EDGE OF DECK	EOS	ELECTRICAL OPERATED BRIDGE	EOW	END OF WALL
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BAGR	BRIDGE APPROACH GUARD RAILING	BAR	BARRIER	BAT	BATTERY	BB	BEGINNING OF BRIDGE	B-B	BACK-TO-BACK	BC	BEGINNING OF CURVE, BOLT CIRCLE	BCR	BEGIN CURB RETURN	BD	BOARD	BDA	BI-DIRECTIONAL AMPLIFIER	BDD	BRIDGE DESIGN DETAILS (CALTRANS)	CB	CATCH BASIN, CIRCUIT BREAKER, CONCRETE BARRIER	CBTC	COMMUNICATIONS BASED TRAIN CONTROL	CBW	CONCRETE BLOCK WALL	C&C	CUT AND COVER	C-C	CENTERLINE TO CENTERLINE	CCO	CONTRACT CHANGE ORDER	CCS	CALIFORNIA COORDINATE SYSTEM	CCTV	CLOSED CIRCUIT TELEVISION	CCVT	COUPLING CAPACITOR VOLTAGE TRANSFORMER	CEG	CERTIFIED ENGINEERING GEOLOGIST	CEM	CEMENT	CER	COMMUNICATIONS EQUIPMENT ROOM	C&G	CURB AND GUTTER	CG	CENTER OF GRAVITY	CGS	CALIFORNIA GEOLOGICAL SURVEY	CHNL	CHANNEL	CI	CAST IRON	CIC	COMMUNICATIONS INTERFACE CABINET	CIDH	CAST-IN-DRILLED-HOLE	CIF	COMMON INTERMEDIATE FORMAT	CIP	CAST IRON PIPE	C-I-P	CAST-IN-PLACE	CIPCP	CAST-IN-PLACE CONCRETE PIPE	CIS	CUSTOMER INFORMATION SIGN	CISS	CAST-IN-STEEL-SHELL	CJ	CONSTRUCTION JOINT	CJP	COMPLETE JOINT PENETRATION	CKT	CIRCUIT	CL	CLASS	CL2	CLASS 2	CL-6	CHAIN LINK FENCE (6 FT)	CLG	CEILING	CLK	CHAIN LINK	CLKG	CAULKING	CLO	CLOSET	CLR	CLEAR, CLEARANCE	CM	CONTROL MODULE, CORRUGATED METAL	CMP	CORRUGATED METAL PIPE	CMU	CONCRETE MASONRY UNIT	CNTR	COUNTER	CO	CLEANOUT, COUNTY	COL	COLUMN	COMM	COMMUNICATIONS	CONC	CONCRETE	COND	CONDUIT	CONN	CONNECTOR, CONNECTION	CONST	CONSTRUCT, CONSTRUCTION	CONT	CONTINUOUS, CONTINUATION	CONTR	CONTRACTOR	COORD	COORDINATE	CORR	CORRIDOR	CP	CONTROL POINT	CPT	CONE PENETRATION TEST, CONTROL POWER TRANSFORMER	CPU	CENTRAL PROCESSING UNIT	CR	CREEK, CONDUIT RISER	CRC	COMBINED RELAY AND CONTROL PANEL	CRCP	CONTINUOUS REINFORCED CONCRETE PAVEMENT	CRSP	CONCRETED ROCK SLOPE PROTECTION	CRZ	CLEAR RECOVERY ZONE	CS	CONTROL SWITCH, CURVE TO SPIRAL	CSA	CONSTRUCTION STAGING AREA	CSP	CORRUGATED STEEL PIPE	CSPA	CORRUGATED STEEL PIPE ARCH	CT	CERAMIC TILE, CURVE TO TANGENT, COURT, CURRENT TRANSFORMER/TRANSDUCER	CTB	CEMENT TREATED BASE	CTPB	CEMENT TREATED PERMEABLE BASE	CTPM	CEMENT TREATED PERMEABLE MATERIAL	CTR	CENTER	CTSK	COUNTERSUNK	CTVT	COMBINED CURRENT TRANSFORMER AND VOLTAGE TRANSFORMER	CTW	COUNTER WEIGHT TAIL WIRE	CU	COPPER	CULV	CULVERT	CV	CURVE	CVR	COVER	CW	CONTACT WIRE	CWA	CONTACT WIRE ANCHOR	CWH	CONTACT WIRE HEIGHT	CWR	CONTINUOUSLY WELDED RAIL	CWT	COUNTER WEIGHT	D	DEPTH	DB	DESIGN-BUILD	DBE	DESIGN BASIS EARTHQUAKE	DBL	DOUBLE	DC	DIRECT CURRENT	DCMB	DC DISTRIBUTION PANEL MAIN BREAKER	DCP	DC DISTRIBUTION PANEL	DD	DOWNDRAIN, DEVICE DRIVER	DE	DEAD END	DEL	DELINEATOR	DEMO	DEMOLISH	DEPT	DEPARTMENT	DET	DETOUR	DF	DIRECT FIXATION, DRINKING FOUNTAIN	DGA	DOWN GUY ANCHOR	DHV	DESIGN HOURLY VOLUME	DI	DRAINAGE INLET	DIAG	DIAGONAL	DIAPH	DIAPHRAGM	DIFF	DIFFERENTIAL	DIM	DIMENSION	DIN	DROP INLET	DIP	DUCTILE IRON PIPE	DIR	DIRECTION	DISC	DISCONNECT	DISP	DISPENSER	DIST	DISTANCE	DISTR	DISTRIBUTION	DMBB	DOUBLE METAL BEAM BARRIER	DN	DOWN	DNS	DOMAIN NAME SYSTEM	DO	DOOR OPENING	DPDT	DOUBLE-POLE DOUBLE-THROW	DR	DRIVE	DS	DOWNSPOUT, DISCONNECT SWITCH	DSC	DIFFERING SITE CONDITIONS	DSCW	DIRECT SUSPENSION CONTACT WIRE	DSG	DISCONNECT SWITCH GROUP	DSHA	DETERMINISTIC SEISMIC HAZARD ANALYSIS	DST	DISTRICT	DTBB	DOUBLE THRIE BEAM BARRIER	DTM	DIGITAL TERRAIN MODEL	DVR	DIGITAL VIDEO RECORDERS	DWG	DRAWING	DWY	DRIVEWAY	DXO	DOUBLE CROSSOVER	E	APPLIED CANT	E	UNBALANCED CANT	EA	EAST	EB	EACH	EC	EASTBOUND, END OF BRIDGE	ECR	END HORIZONTAL CURVE, ELECTRICAL CONDUCTOR	EE	END CURB RETURN	EF	EACH END	EGS	EACH FACE	EHS	EMERGENCY GROUND SWITCH	EI	EXTRA HIGH STRENGTH	EJ	EMERGENCY INTERCOM	E-LAN	EXPANSION JOINT	ELAST	ETHERNET LAN	ELEC	ELASTOMERIC	ELECT	ELECTRICAL, ELECTRIC	ELECT	ELECTROLIER	ELEV	ELEVATION	ELOCK	ELECTRONIC LOCK	EMB	EMBANKMENT	EMC	ELECTROMAGNETIC COMPATIBILITY	EMER	EMERGENCY	EMF	ELECTROMAGNETIC FIELD	EMI	ELECTROMAGNETIC INTERFERENCE	EMS	ELEMENT MANAGEMENT SYSTEM	EMU	ELECTRIC MULTIPLE UNIT	ENCL	ENCLOSURE	ENGR	ENGINEER, ENGINEERING	EO	BEND OF BRIDGE	EOD	EDGE OF DECK	EOS	ELECTRICAL OPERATED BRIDGE	EOW	END OF WALL																																																																																																																																																																												
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T CONTINUED					W CONTINUED					TRACK GEOMETRY - HORIZONTAL					UNITS OF MEASUREMENT				
TSI	TECHNICAL SPECIFICATIONS FOR INTEROPERABILITY				WW	WINGWALL, WALKWAY				BC	BEGIN HORIZONTAL CURVE				Ac	ACRES			
TSM	TRAFFIC SYSTEMS MANAGEMENT														AMP	AMPERES			
TSMP	TRAFFIC SYSTEMS MANSgement PLAN				WWF	WELDED WIRE FABRIC				CC	COMPOUND CURVE								
TTC	TWO TRACK CANTILEVER				WWLOL	WINGWALL LAYOUT LINE				CS	POINT OF CHANGE FROM CIRCULAR CURVE TO SPIRAL				BTU	BRITISH THERMAL UNIT			
TTEL	TRAIN EMERGENCY SPEAKERPHONE				WWM	WELDED WIRE MESH				CT	POINT OF CHANGE FROM CURVE TO TANGENT								
TV	TELEVISION														CAL	CALIPER			
TVS(S)	TICKET VENDING MACHINE(S)									K1	TANGENT DISTANCE PF SHIFT PC REFERENCE TO THE TS				CF	CUBIC FEET			
TW	TIE WIRE,									K2	TANGENT DISTANCE PF SHIFT PT REFERENCE TO THE ST				CP	CANDLE POWER			
TYP	TIME WARNER CABLE														CY	CUBIC YARD			
	TYPICAL				X/CAT	CROSS CANTENARY									dB	DECIBEL			
					XD	TRANSDUCER									DEG	DEGREE			
					XFMR	TRANSFORMER				LC	LENGTH OF CIRCULAR CURVE				DIA	DIAMETER			
					XO	CROSSOVER				Ls1	LENGTH OF SPIRAL								
					XOST	CROSSOVER SPRING TENSIONER				Ls2	LENGTH OF SPIRAL FROM TS TO SC								
					XSEC	CROSS SECTION				LSc	LENGTH OF COMPOUND SPIRAL FROM CS TO SC								
					X/SPAN	CROSS SPAN									Eu	UNBALANCED SUPERELEVATION			
					XING	CROSSING													
					XMITTER	TRANSMITTER				p1	OFFSET FROM INITIAL TANGENT TO PC OF THE SHIFTED CIRCLE OF SPIRALIZED CURVE				F	FARENHEIT			
										p2	OFFSET FROM INITIAL TANGENT TO PT OF THE SHIFTED CIRCLE OF SPIRALIZED CURVE				FT	FOOT, FEET			
										PC	POINT OF CURVE								
										PCC	POINT OF COMPOUND CURVE				g	ACCELERATION DUE TO GRAVITY			
										PF	POINT OF FROG				GA	GAUGE			
										PI	POINT OF INTERSECTION				GAL	GALLON			
										PITO	POINT OF INTERSECTION TURNOUT				GB	GIGABYTE			
										POB	POINT OF BEGINNING				GBPS	GIGABITS PER SECOND			
										POC	POINT ON HORIZONTAL CURVE				GHZ	GIGAHERTZ			
										POE	POINT OF ENDING								
										POS	POINT ON SPIRAL				HR	HOUR			
										POVC	POINT ON VERTICAL CURVE				HT	HEIGHT			
										POVT	POINT ON VERTICAL TANGENT				HZ	HERTZ			
										PRC	POINT OF REVERSE CURVE								
										PRVC	POINT OF REVERSE VERTICAL CURVE				ID	INSIDE DIAMETER			
										PS	POINT OF SWITCH				IF	INSIDE FACE			
										PT	POINT OF TANGENT				IN	INCHES			
															IR	INSIDE RADIUS			
										SC	POINT OF CHANGE FROM SPIRAL TO CIRCULAR CURVE				K	KIPS (1000 POUNDS)			
										SPO	POINT ON ORIGIN OF COMPOUND SPIRAL				KCMIL	THOUSAND CIRCULAR MILS			
										SS	POINT OF CHANGE BETWEEN SPIRALS				KHZ	KILOHERTZ			
										SSC	SPIRAL TO SPIRAL POINT OF CURVATURE				KSF	KIPS PER SQUARE FOOT			
										ST	POINT OF CHANGE FROM SPIRAL TO TANGENT				KSI	KIPS PER SQUARE INCH			
															KV	KILOVOLTS			
										TC	POINT OF CHANGE FROM TANGENT TO CURVE				KVA	KILOVOLTS-AMPERE			
										TS	POINT OF CHANGE FROM TANGENT TO SPIRAL				KVAR	KILOVOLTS-AMPERE REACTIVE			
										Ts1	TANGENT DISTANCE FROM TS TO P1				KW	KILOWATT			
										Ts2	TANGENT DISTANCE FROM ST TO P1				KWH/D	KILOWATT HOUR / DEMAND			
										Xs1	TANGENT OFFSET AT THE SC				L	LENGTH			
										Xs2	TANGENT OFFSET AT THE CS				LB	POUNDS			
															LB/FT	POUNDS PER FOOT			
										Δ	TOTAL CENTRAL ANGLE OF THE SPIRALIZED CURVE				LF	LINEAR FOOT			
										Δc	CENTRAL ANGLE OF CIRCULAR CURVE (Lc) FROM SC TO CS								
										Δc1	CENTRAL ANGLE OF FIRST CIRCULAR CURVE OF COMPOUND CURVATURE				m	METER			
										Δc2	CENTRAL ANGLE OF SECOND CIRCULAR CURVE OF COMPOUND CURVATURE				MBPS	MEGABITS PER SECOND			
															MCM	THOUSAND CIRCULAR MILS			
										θs1	CENTRAL ANGLE OF SPIRAL LENGTH Ls1 OR SPIRAL ANGLE OF FIRST SPIRAL IN SPIRALIZED CURVE				MHz	MEGAHERTZ			
										θs2	CENTRAL ANGLE OF SPIRAL LENGTH Ls2 OR SPIRAL ANGLE OF SECOND SPIRAL IN SPIRALIZED CURVE				mm	MILLIMETER			
										θsc	CENTRAL ANGLE OF COMPOUND SPIRAL OR COMPOUND SPIRAL ANGLE FROM CS TO SC				MPH	MILES PER HOUR			
															MVA	MEGAVOLT-AMPERE			
															MW	MEGAWATT			
															OD	OUTSIDE DIAMETER			
															PSF	POUNDS PER SQUARE FOOT			
															PSI	POUNDS PER SQUARE INCH			
															PSIG	POUNDS PER SQUARE INCH GAUGE			
															SEC	SECOND			
										BVC	BEGIN VERTICAL CURVE				SF	SQUARE FEET			
															SY	SQUARE YARD			
										Eo	ACTUAL SUPERELEVATION								
										EVC	END VERTICAL CURVE				TF	TRACK FEET			
										PCVC	POINT OF COMPOUND VERTICAL CURVE				VA	VOLTS			
										POVC	POINT OF VERTICAL INTERSECTION				VAC	VOLT-AMPERE			
										POVT	POINT ON VERTICAL CURVE								
										PVI	POINT ON VERTICAL TANGENT				Y	YARDS			
															YR(S)	YEAR(S)			
										VC	VERTICAL CURVE								
										VPI	VERTICAL POINT OF INTERSECTION								

AGENCIES/ORGANIZATIONS/REFERENCE						AGENCIES/ORGANIZATIONS/REFERENCE CONTINUED						SEGMENT/COUNTY CODES AND SUBDIVISIONS					
AAR	ASSOCIATION OF AMERICAN RAILROADS	NENA	NATIONAL EMERGENCY NUMBER ASSOCIATION	A-J	ALTAMONT PASS	NESC	NATIONAL ELECTRICAL SAFETY CODE	B-P	BAKERSFIELD TO PALMDALE	OSHA	OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION	S-M	SACRAMENTO TO MERCED				
AASHTO	AMERICAN ASSOCIATION OF STATE HIGHWAY TRANSPORTATION OFFICIALS	NFPA	NATIONAL FIRE PROTECTION ASSOCIATION	F-B	FRESNO TO BAKERSFIELD	NIST	NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY	F-J	SAN FRANCISCO TO SAN JOSE	PEER	PACIFIC EARTHQUAKE ENGINEER RESEARCH						
ACI	AMERICAN CONCRETE INSTITUTE	OCFCD	ORANGE COUNTY FLOOD CONTROL DISTRICT	J-M	SAN JOSE TO MERCED	PG&E	PACIFIC GAS AND ELECTRIC COMPANY	L-D	LOS ANGELES TO SAN DIEGO	PUC	PUBLIC UTILITIES COMMISSION						
ADA	AMERICAN WITH DISABILITIES ACT (FEDERAL)	OCTA	ORANGE COUNTY TRANSPORTATION AUTHORITY	L-O	LOS ANGELES TO ANAHEIM	RSIA	RAIL SAFETY IMPROVEMENT ACT (2008)	M-F	MERCED TO FRESNO	RWQCB	REGIONAL WATER QUALITY CONTROL BOARD (STATE)	B	BAY SUBDIVISION				
AISC	AMERICAN INSTITUTE OF STEEL CONSTRUCTION	SAVE	SOCIETY OF AMERICAN VALUE ENGINEERS	P	PACHECO SUBDIVISION	SCE	SOUTHERN CALIFORNIA EDISON	P-L	PALMDALE TO LOS ANGELES	SCRRA	SOUTHERN CALIFORNIA REGIONAL RAIL AUTHORITY	C	CAPITAL SUBDIVISION				
AMTRAK	NATIONAL RAILROAD PASSANGER CORPORATION	SDG&E	SAN DIEGO GAS AND ELECTRIC COMPANY	S	SIERRA SUBDIVISION	SDNR	SAN DIEGO NORTHERN RAILWAY	T	TONGVA SUBDIVISION	SDG&E	SAN DIEGO GAS AND ELECTRIC COMPANY	D	DESERT SUBDIVISION				
ANSI	AMERICAN NATIONAL STANDARDS INSTITUTE	SHOPP	STATE HIGHWAY OPERATION AND PROTECTION PROGRAM (FORMERLY HSOPP)	ALA	ALAMEDA	SHPO	STATE HISTORIC PRESERVATION OFFICER (STATE)	ALA	ALAMEDA	SMUD	SACRAMENTO MUNICIPAL UTILITY DISTRICT	AMA	AMADOR				
ANSS	ADVANCED NATIONAL SEISMIC SYSTEM	SJRRA	SAN JOAQUIN REGIONAL RAIL AUTHORITY	ALP	ALPINE	SPTC	SOUTHERN PACIFIC TRANSPORTATION COMPANY	BUT	BUTTE	SJORC	SAN JOAQUIN REGIONAL RAIL AUTHORITY	CAL	CALAVERAS				
APWA	AMERICAN PUBLIC WORKS ASSOCIATION	SSCOM	SEISMIC SAFETY COMMISSION	IMP	IMPERIAL	SVBX	SILICON VALLEY BERRYESSA EXTENSION	CAL	CALAVERAS	SVRT	SILICON VALLEY RAPID TRANSIT	CC	CONTRA COSTA				
AREA	AMERICAN RAILWAY ENGINEERING ASSOCIATION	US	UNITED STATES	INY	INYO	UPRR	UNION PACIFIC RAILROAD	COL	COLUSA	US	UNITED STATES	CC	CONTRA COSTA				
AREMA	AMERICAN RAILWAY ENGINEERING AND MAINTENANCE-OF-WAY ASSOCIATION	USCE	UNITED STATES (ARMY) CORP OF ENGINEERS	KER	KERN	USCG	UNITED STATES COAST GUARD	DN	DEL NORTE	USCS	UNITED STATES COAST GUARD	COL	COLUSA				
ARTIC	ANAHEIM REGIONAL TRANSPORTATION INTERMODAL CENTER	VTA	SANTA CLARA VALLEY TRANSPORTATION AUTHORITY	KIN	KINGS	VTA	SANTA CLARA VALLEY TRANSPORTATION AUTHORITY	ED	EL DORADO			ED	EL DORADO				
ASCE	AMERICAN SOCIETY OF CIVIL ENGINEERS			LA	LOS ANGELES			FRE	FRESNO			GLE	GLENN				
ASTM	ASTM INTERNATIONAL			LAK	LAKE			GLE	GLENN			HUM	HUMBOLT				
ATC	APPLIED TECHNOLOGY COUNCIL			LAS	LASSEN			HUM	HUMBOLT			IMP	IMPERIAL				
AWS	AMERICAN WELDING SOCIETY			MAD	MADERA			IMP	IMPERIAL			INY	INYO				
BART	SAN FRANCISCO BAY AREA RAPID TRANSIT DISTRICT			MEN	MENDOCINO			INY	INYO			KER	KERN				
BDA	BRIDGE DESIGN AIDS (CALTRANS)			MER	MERCED			KIN	KINGS			KIN	KINGS				
BDD	BRIDGE DESIGN DETAILS (CALTRANS)			MNO	MONO			LA	LOS ANGELES			LAK	LAKE				
BDP	BRIDGE DESIGN PRACTICE (CALTRANS)			MOD	MODOC			LAS	LASSEN			LAK	LAKE				
BDS	BRIDGE DESIGN SPECIFICATIONS (CALTRANS)			MON	MONTEREY			MAD	MADERA			LAS	LASSEN				
BNSF	BURLINGTON NORTHERN SANTA FE RAILWAY, BNSF RAILWAY			MPA	MARIPOSA			MEN	MENDOCINO			MAD	MADERA				
CALNET	CALIFORNIA INTEGRATED TELECOMMUNICATIONS NETWORK			MRN	MARIN			MER	MERCED			MEN	MENDOCINO				
CALTRANS	CALIFORNIA DEPARTMENT OF TRANSPORTATION			NAP	NAPA			MNO	MONO			MER	MERCED				
CBC	CALIFORNIA BUILDING CODE			NEV	NEVADA			MOD	MODOC			MNO	MONO				
CBDM	CALIFORNIA DEPARTMENT OF TRANSPORTATION-BRIDGE DESIGN MANUAL			ORA	ORANGE			MON	MONTEREY			MOD	MODOC				
CCR	CALIFORNIA CODE OF REGULATIONS			PLA	PLACER			MPA	MARIPOSA			MON	MONTEREY				
CDC	CALIFORNIA HIGH-SPEED TRAIN DESIGN CRITERIA			PLU	PLUMAS			MRN	MARIN			MPA	MARIPOSA				
CEC	CALIFORNIA ELECTRIC CODE			RIV	RIVERSIDE			NAP	NAPA			MRN	MARIN				
CEQA	CALIFORNIA ENVIRONMENTAL QUALITY ACT			SAC	SACRAMENTO			NEV	NEVADA			NAP	NAPA				
CFR	CODE OF FEDERAL REGULATIONS			SB	SANTA BARBARA			ORA	ORANGE			NEV	NEVADA				
CHD	COUNTY HEALTH DEPARTMENT			SBD	SAN BERNARDINO			PLA	PLACER			ORA	ORANGE				
CHP	CALIFORNIA DEPARTMENT OF HIGHWAY PATROL (STATE)			SBT	SAN BENITO			PLU	PLUMAS			PLA	PLACER				
CHST	CALIFORNIA HIGH-SPEED TRAIN			SCL	SANTA CLARA			RIV	RIVERSIDE			PLU	PLUMAS				
CHSTP	CALIFORNIA HIGH-SPEED TRAIN PROJECT			SCR	SANTA CRUZ			SAC	SACRAMENTO			RIV	RIVERSIDE				
CIWMB	CALIFORNIA INTEGRATED WASTE MANAGEMENT BOARD			SD	SAN DIEGO			SB	SANTA BARBARA			SAC	SACRAMENTO				
CPH	CALIFORNIA PERMIT HANDBOOK			SF	SAN FRANCISCO			SBD	SAN BERNARDINO			SB	SANTA BARBARA				
CPUC	CALIFORNIA PUBLIC UTILITIES COMMISSION			SHA	SHASTA			SBT	SAN BENITO			SBD	SAN BERNARDINO				
CRR	COMMUTER RAIL PROGRAM (STATE)			SIE	SIERRA			SCL	SANTA CLARA			SBT	SAN BENITO				
DOD	DEPARTMENT OF DEFENSE (FEDERAL)			SIS	SISKIYOU			SCR	SANTA CRUZ			SCL	SANTA CLARA				
DOT	DEPARTMENT OF TRANSPORTATION (FEDERAL)			SJ	SAN JOAQUIN			SD	SAN DIEGO			SCR	SANTA CRUZ				
DTX	DOWNTOWN EXTENSION (CALTRAIN)			SLO	SAN LUIS OBISPO			SF	SAN FRANCISCO			SD	SAN DIEGO				
EIRENE	EUROPEAN INTEGRATED RADIO ENHANCED NETWORK			SM	SAN MATEO			SHA	SHASTA			SF	SAN FRANCISCO				
ERTMS	EUROPEAN RAIL TRAFFIC MANAGEMENT SYSTEM			SOL	SOLANO			SIE	SIERRA			SHA	SHASTA				
FAA	FEDERAL AVIATION ADMINISTRATION			SON	SONOMA			SIS	SISKIYOU			SIE	SIERRA				
FCC	FEDERAL COMMUNICATIONS COMMISSION			STA	STANISLAUS			SJ	SAN JOAQUIN			SIS	SISKIYOU				
FEMA	FEDERAL EMERGENCY MANAGEMENT AGENCY			SUT	SUTTER			SLO	SAN LUIS OBISPO			SJ	SAN JOAQUIN				
FHWA	FEDERAL HIGHWAY ADMINISTRATION			TEH	TEHAMA			SM	SAN MATEO			SLO	SAN LUIS OBISPO				
FMFCD	FRESNO METROPOLITAN FLOOD CONTROL DISTRICT			TRI	TRINITY			SOL	SOLANO			SM	SAN MATEO				
FRA	FEDERAL RAILROAD ADMINISTRATION			TUL	TULARE			SON	SONOMA			SOL	SOLANO				
FSTIP	FEDERAL STATEWIDE TRANSPORTATION IMPROVEMENT PROGRAM			TUO	TUOLUMNE			STA	STANISLAUS			SON	SONOMA				
FTA	FEDERAL TRANSIT ADMINISTRATION			VEN	VENTURA			SUT	SUTTER			STA	STANISLAUS				
GBR	GEOTECHNICAL BASELINE REPORT			YOL	YOLO			TEH	TEHAMA			SUT	SUTTER				
GBR-B	GEOTECHNICAL BASELINE REPORT FOR BIDDING			YUB	YUBA			TRI	TRINITY			TEH	TEHAMA				
GBR-C	GEOTECHNICAL BASELINE REPORT FOR CONSTRUCTION							TUL	TULARE			TRI	TRINITY				
GDR	GEOTECHNICAL DATA REPORT							TUO	TUOLUMNE			TUL	TULARE				
IEEE	INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS							VEN	VENTURA			TUL	TULARE				
ISO	INTERNATIONAL ORGANIZATION FOR STANDARDIZATION							YOL	YOLO			TUO	TUOLUMNE				
LACDPW	LOS ANGELES COUNTY DEPT OF PUBLIC WORKS							YUB	YUBA			VEN	VENTURA				
LADWP	LOS ANGELES DEPARTMENT OF WATER AND POWER											YOL	YOLO				
LAUS	LOS ANGELES UNION STATION											YUB	YUBA				
LTC	LOCAL TRANSPORTATION COMMISSION																
METRO	LOS ANGELES COUNTY METROPOLITAN TRANSIT AUTHORITY																
MTA	METROPOLITAN TRANSIT AUTHORITY																
MUTCD	MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES																
MWD	METROPOLITAN WATER DISTRICT																
NAAQS	NATIONAL AMBIENT AIR QUALITY STANDARDS																
NAC	NOISE ABATEMENT CRITERIA																
NBSSR	NOISE BARRIER SCOPE SUMMARY REPORT																
NEMA	NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION																

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DESIGNED BY M. MAMAWAL	PEPD SUBMITTAL FOR INTERNAL USE ONLY			CALIFORNIA HIGH-SPEED TRAIN PROJECT LOS ANGELES TO ANAHEIM RECORD SET PRELIMINARY ENGINEERING FOR PROJECT DEFINITION ACRONYMS AND ABBREVIATIONS 5	CONTRACT NO. HSR06-0005
DRAWN BY D. BARRAZA					DRAWING NO. GE-C0205
CHECKED BY J. SWANSON					SCALE NO SCALE
IN CHARGE J. SWANSON					SHEET NO.
DATE					
REV	DATE	BY	CHK	APP	DESCRIPTION

CIVIL CONTINUED		UNDERGROUND UTILITIES		TRACTION POWER			
	POLE AND WIRES		EXIST ELECTRICAL		SINGLE-POLE MOTOR OPERATED SECTIONALIZING SWITCH (NORMALLY CLOSED)		CABLE TERMINATION OR STRESS CONE
	POLE WITH WIRES AND ANCHOR		EXIST FIBER OPTIC		SINGLE-POLE MOTOR OPERATED SECTIONALIZING SWITCH (NORMALLY OPEN)		DOUBLE-POLE MOTORIZED DISCONNECT SWITCH
	VALVE		EXIST GASOLINE		SINGLE-POLE MANUAL SECTIONALIZING SWITCH (NORMALLY OPEN)		OCS SECTION GAP
	VENT		EXIST NATURAL GAS		SINGLE-POLE MANUAL SECTIONALIZING SWITCH (NORMALLY CLOSED)		KEY-INTERLOCK
	VERTICAL CONTROL MONUMENT		EXIST OIL		SINGLE-POLE MOTOR OPERATED SECTIONALIZING SWITCH WITH GROUND		DIRECTION OF CONTROL OR RELAY INFLUENCE LINE
	WALL		EXIST SEWER		SINGLE-POLE MANUAL SECTIONALIZING SWITCH WITH GROUND		MANUALLY OPERATED GROUNDING SWITCH
	WALL ON BARRIER		EXIST STEAM		GANGED GROUNDING DISCONNECT SWITCHES		NO LOAD BREAK MANUALLY OPERATED DISCONNECT SWITCH
	WATER EDGE, LAKE, POND, SWAMP		EXIST STORM DRAIN		ELECTRICAL CONNECTION		HV 3 PHASE DISCONNECT SWITCH
	WATER METER		EXIST TELEMETER CABLE		SECTION INSULATOR		SINGLE-POLE HIGH VOLTAGE POWER CIRCUIT BREAKER
	WELL		EXIST TELEPHONE		JUMPERED SECTION INSULATOR		DOUBLE-POLE HIGH VOLTAGE POWER CIRCUIT BREAKER
	YARD BOX ELECTRICAL		EXIST TELEVISION		SECTION INSULATOR WITH BY-PASS SWITCH		DRAW-OUT FUSED (VT)
RIGHT-OF-WAY			EXIST WATER		PHASE BREAK		DRAW-OUT TYPE MEDIUM VOLTAGE SINGLE-POLE CIRCUIT BREAKER
	CHSR PROPOSED RIGHT-OF-WAY		NEW ELECTRICAL		LOW VOLTAGE CIRCUIT BREAKER		DRAW-OUT TYPE MEDIUM VOLTAGE DOUBLE-POLE CIRCUIT BREAKER
	OTHER PROPOSED RIGHT-OF-WAY		NEW FIBER OPTIC		FUSE		INSULATOR
	EXISTING EASEMENT		NEW GASOLINE		FUSED DISCONNECT SWITCH		BREAK LINE
	PROPOSED TEMPORARY CONSTRUCTION EASEMENT		NEW NATURAL GAS		TRANSFORMER		
AERIAL UTILITIES			NEW OIL		AUTOTRANSFORMER		
	EXIST ELECTRICAL		NEW SEWER		VOLTAGE TRANSFORMER (VT)		
	EXIST FIBER OPTIC		NEW STEAM		COUPLING CAPACITOR VOLTAGE TRANSFORMER		
	EXIST TELEMETER CABLE		NEW STORM DRAIN		MANHOLE OR HANDHOLE		
	EXIST TELEPHONE		NEW TELEMETER CABLE		CAPACITOR		
	EXIST TELEVISION		NEW TELEPHONE		CURRENT TRANSFORMER (CT)		
	NEW ELECTRICAL		NEW TELEVISION		GROUND CONNECTION		
	NEW FIBER OPTIC		NEW WATER		SURGE ARRESTER		
	NEW TELEMETER CABLE						
	NEW TELEPHONE						
	NEW TELEVISION						
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						DESIGNED BY M. MAMAWAL	PEPD SUBMITTAL FOR INTERNAL USE ONLY NOT FOR CONSTRUCTION	\$PLOT\$  CALIFORNIA HIGH-SPEED TRAIN PROJECT LOS ANGELES TO ANAHEIM RECORD SET PRELIMINARY ENGINEERING FOR PROJECT DEFINITION SYMBOLS 2				CONTRACT NO. HSR06-0005
						DRAWN BY D. BARRAZA						DRAWING NO. GE-C0212
						CHECKED BY J. SWANSON						SCALE NO SCALE
						IN CHARGE J. SWANSON						SHEET NO.
						DATE						
REV	DATE	BY	CHK	APP	DESCRIPTION							

GENERAL NOTES

GENERAL

1. VOLUMES 3.1 THRU 3.5 PRESENT THE ENGINEERING PLANS FOR THE PREFERRED SHARED TRACK OPTIONS BETWEEN LOS ANGELES AND ANAHEIM. THESE OPTIONS CONSIST OF:
- A. NO HSR INTERMEDIATE STATIONS AT NORWALK/SANTA FE SPRINGS AND FULLERTON.
 - B. 26TH STREET LIGHT MAINTENANCE FACILITY III
2. NON-PREFERRED OPTIONS ARE PRESENTED IN VOLUME 3.6. THESE CONSIST OF:
- A. HSR INTERMEDIATE STATIONS AT NORWALK/SANTA FE SPRINGS AND FULLERTON.
 - B. 15TH STREET LIGHT MAINTENANCE FACILITY III
3. FOR PURPOSES OF THIS PEPD VOLUME 3, THE GEOGRAPHIC NORTHERN LIMITS OF THIS LA-A PEPD AND FOR THIS EIR/EIS ARE AT THE NORTHERN EDGE OF THE PROPOSED US-101 VIADUCT, NOTWITHSTANDING ANY INDIVIDUAL NOTE IN THIS PEPD OR IN THE EIR TO THE CONTRARY.
4. THE FOLLOWING TYPES OF REFINEMENTS TO ELEMENTS OF SHARED PASSENGER TRACK ALTERNATIVE A AND SHARED PASSENGER TRACK ALTERNATIVE B HAVE BEEN IDENTIFIED BECAUSE OF ONGOING VALUE ENGINEERING REVIEW. BASED ON PRELIMINARY REVIEW, THESE TYPES OF REFINEMENTS ARE LIKELY MINOR AND ARE UNLIKELY TO AFFECT DEIR/DEIS IMPACT FINDINGS. SUBJECT TO FINAL REVIEW CONFIRMING THESE PRELIMINARY FINDINGS, VALUE ENGINEERING REFINEMENTS MAY BE INCORPORATED IN A REVISED HSR LAA PEPD RECORD SET TO BE ISSUED WITH THE FINAL EIR/EIS. THE BELOW ARE EXAMPLES OF REFINEMENTS THAT COULD BE IDENTIFIED AS PART OF VALUE ENGINEERING REVIEW BETWEEN THE DEIR/DEIS AND FINAL EIR/EIS.

HSR TRACK ALIGNMENT
INCREASE PROFILE GRADE TO 3.0% ON AERIAL STRUCTURES AND TRENCH AT THE LOCATIONS LISTED BELOW, TO REDUCE THEIR TOTAL LENGTHS, WITH NO REVISION TO PROJECT FOOTPRINT:

- SANTA FE SPRINGS FLYOVER: CURRENT GRADE -1.9% PROPOSED -3.0%, ON THE SOUTH END. THE NORTH APPROACH WON'T BE CHANGED DUE TO THE PROXIMITY TO THE ROADWAY GRADE SEPARATIONS AT FLORENCE AVE AND LAKELAND RD.
- FULLERTON TRENCH: CURRENT GRADE -2.5% PROPOSED -3.0% ON THE NORTH AND 2.7% CURRENT TO 3.0% PROPOSED, ON THE SOUTH APPROACHES.

LIGHT MAINTENANCE FACILITIES (LMF)
REDUCTION IN TRAIN CAPACITY, WITH NO REVISION TO PROJECT FOOTPRINT:

- 26TH STREET LMF: CURRENTLY DESIGNED TO ACCOMMODATE 36 TRAINS (24 IN YARD, 12 IN SHOP). PROPOSED DOWNSIZING TO 30 TRAINS (20 IN YARD, 10 IN SHOP).
- 15TH STREET LMF: CURRENTLY DESIGNED TO ACCOMMODATE 32 TRAINS (20 IN YARD, 12 IN SHOP). PROPOSED DOWNSIZING TO 30 TRAINS (20 IN YARD, 10 IN SHOP).

VOLUME 3.1

1. RAIL ALIGNMENT BETWEEN MAIN STREET, UNION STATION, AND 1ST STREET IS BEING DESIGNED BY METRO'S LINKUS TEAM. THE ALIGNMENT THAT IS SHOWN IS BASED ON LATEST COORDINATION WITH THEIR TEAM, SHOWN FOR REFERENCE ONLY AND SUBJECT TO CHANGE. SEE VOLUME 3.8.

VOLUME 3.2

VOLUME 3.3

1. NONE

VOLUME 3.3A

1. STATE COLLEGE ENGINEERING PLANS BASED ON 35% OCTA DESIGN PLANS AND WILL BE ENVIRONMENTALLY CLEARED AS PART OF THIS HSR LA-A EIR/EIS.

VOLUME 3.4

EXISTING COMPOSITE UTILITY NOTES:

1. UTILITY CONFLICTS ON CROSSING STREETS AT EXISTING GRADE SEPARATIONS ARE NOT ANTICIPATED.
2. ONLY THE FOLLOWING UTILITIES SHALL BE CONSIDERED MAJOR AND ARE IDENTIFIED IN THE UTILITY CONFLICTS MATRIX ON THE DRAWINGS.
- A. WET UTILITIES:
 - I. SEWER, WATER, STORM DRAIN GREATER THAN OR EQUAL TO 12".
 - II. ALL OIL LINES.
 - III. ALL FUEL (GASOLINE) LINES.
 - IV. ALL GAS LINES.
 - B. DRY UTILITIES:
 - I. ALL FIBER OPTIC LINES.
 - II. ALL ELECTRIC LINES GREATER THAN 240V.
 - III. ALL DUCT BANKS WITH 6 OR MORE DUCTS.
 - IV. EXCLUDE INDIVIDUAL TELEPHONE, CABLE LINES.
 - C. ALL OTHER CONFLICTS ARE CONSIDERED MINOR AND ARE NOT SHOWN IN THE UTILITY CONFLICTS MATRIX.
 - D. UTILITIES AT GRADE SEPARATIONS ARE NOT SHOWN IN THE UTILITY CONFLICTS MATRIX EVEN IF THEY FALL UNDER THE ABOVE CRITERIA SINCE VOLUME 3.3 OFFERS MORE SPECIFIC AND ACCURATE INFORMATION REGARDING THE DESIGN.
 - E. ALL NEW OR RELOCATION OF EXISTING UTILITIES WILL FOLLOW THE CITY, STATE, AND FEDERAL REQUIREMENTS AND GUIDELINES FOR SEPARATION, PROTECTION, AND CONSTRUCTION.

VOLUME 3.5

1. DESIGN PLANS PROVIDED IN THIS VOLUME REPRESENT UNIQUE DESIGN ELEMENTS SPECIFICALLY RELATED TO THE NON-PREFERRED OPTIONS.

VOLUME 3.6

1. NONE

VOLUME 3.7

1. THIS VOLUME NOT USED

VOLUME 3.8

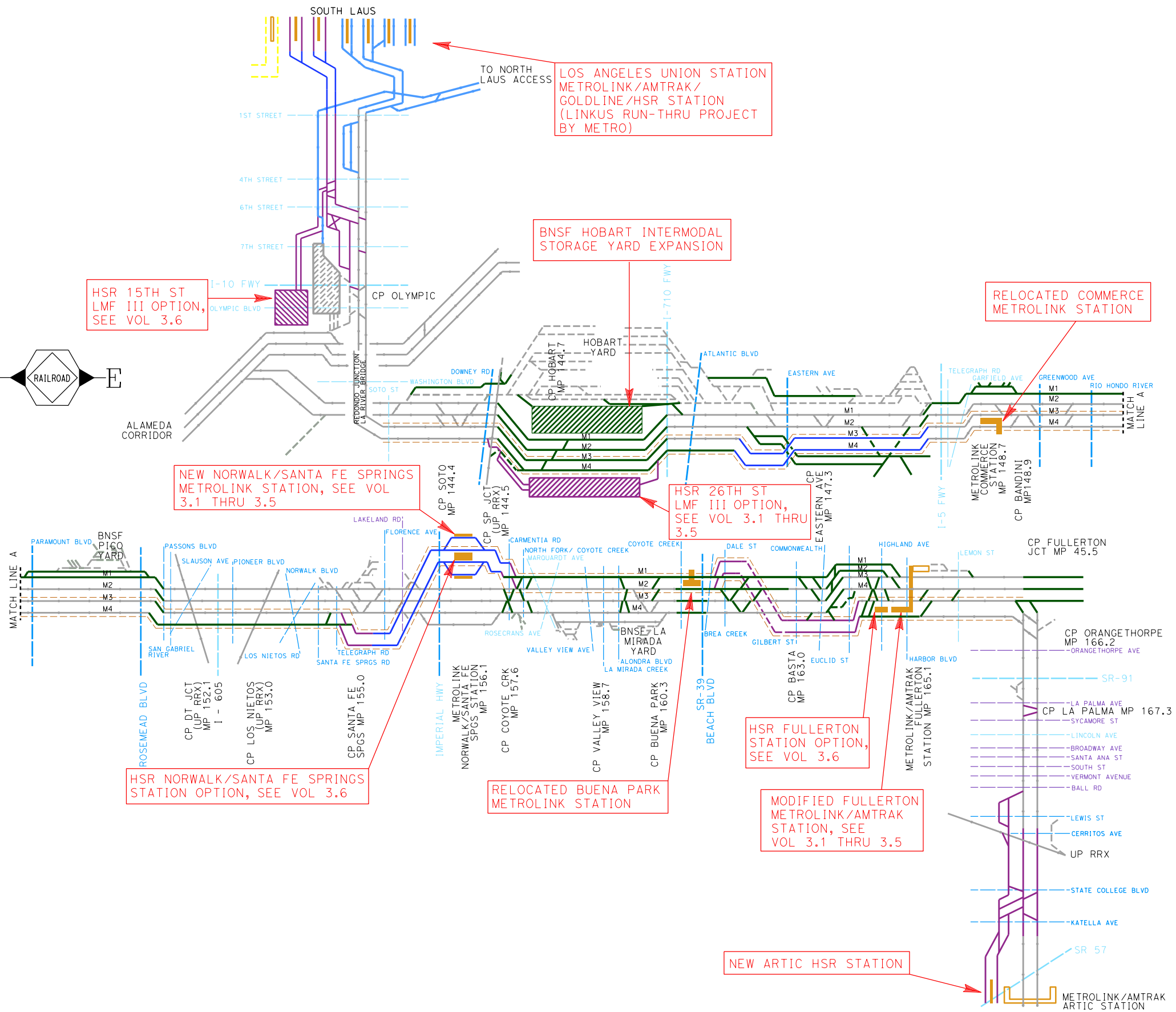
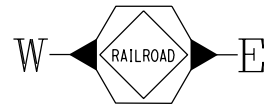
1. PLANS PROVIDED IN THIS VOLUME REPRESENT ELEMENTS THAT HSR AUTHORITY WILL BE ENVIRONMENTALLY CLEARING AS PART OF METRO'S LINKUS PROJECT.

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						DESIGNED BY M. MAMAWAL	PEPD SUBMITTAL FOR INTERNAL USE ONLY			CALIFORNIA HIGH-SPEED TRAIN PROJECT LOS ANGELES TO ANAHEIM RECORD SET PRELIMINARY ENGINEERING FOR PROJECT DEFINITION GENERAL NOTES 1 OF 1	CONTRACT NO. HSR06-0005
						DRAWN BY M. MAMAWAL					DRAWING NO. GE-B0211
						CHECKED BY J. SWANSON					SCALE NO SCALE
						IN CHARGE J. SWANSON					SHEET NO.
						DATE 08/29/25					

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LEGEND (TRACKWORK)

- EXISTING FREIGHT/PASSENGER MAINLINE TRACK
- EXISTING FREIGHT/PASSENGER SECONDARY TRACK
- EXISTING GOLDLINE
- NEW MAINLINE/SECONDARY TRACK ON BNSF ROW
- NEW AMTRAK/METROLINK ONLY TRACK
- NEW HSR/PASSENGER TRACK ELEVATED
- NEW HSR/PASSENGER TRACK AT GRADE
- NEW HSR/PASSENGER TRACK TRENCH/TUNNEL

- EXISTING STATION PLATFORM
- EXISTING STATION PLATFORM WITH PEDESTRIAN BRIDGE/TUNNEL
- NEW STATION PLATFORM
- NEW STATION PLATFORM WITH PEDESTRIAN BRIDGE/TUNNEL

- ELECTRIFIED TRACK ON BNSF

LEGEND (ROADWAY/WATER)

- EXISTING AT-GRADE CROSSING
- EXISTING GRADE SEPARATION (LOCAL STREET)
- EXISTING GRADE SEPARATION (MAJOR HWY/FREEWAY)
- NEW OR MODIFY GRADE SEPARATION/BRIDGE

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REV	DATE	BY	SUB	APP	DESCRIPTION

DESIGNED BY D. RAMIREZ
DRAWN BY D. RAMIREZ
CHECKED BY A. BOSCH
IN CHARGE J. SWANSON
DATE 08/29/25

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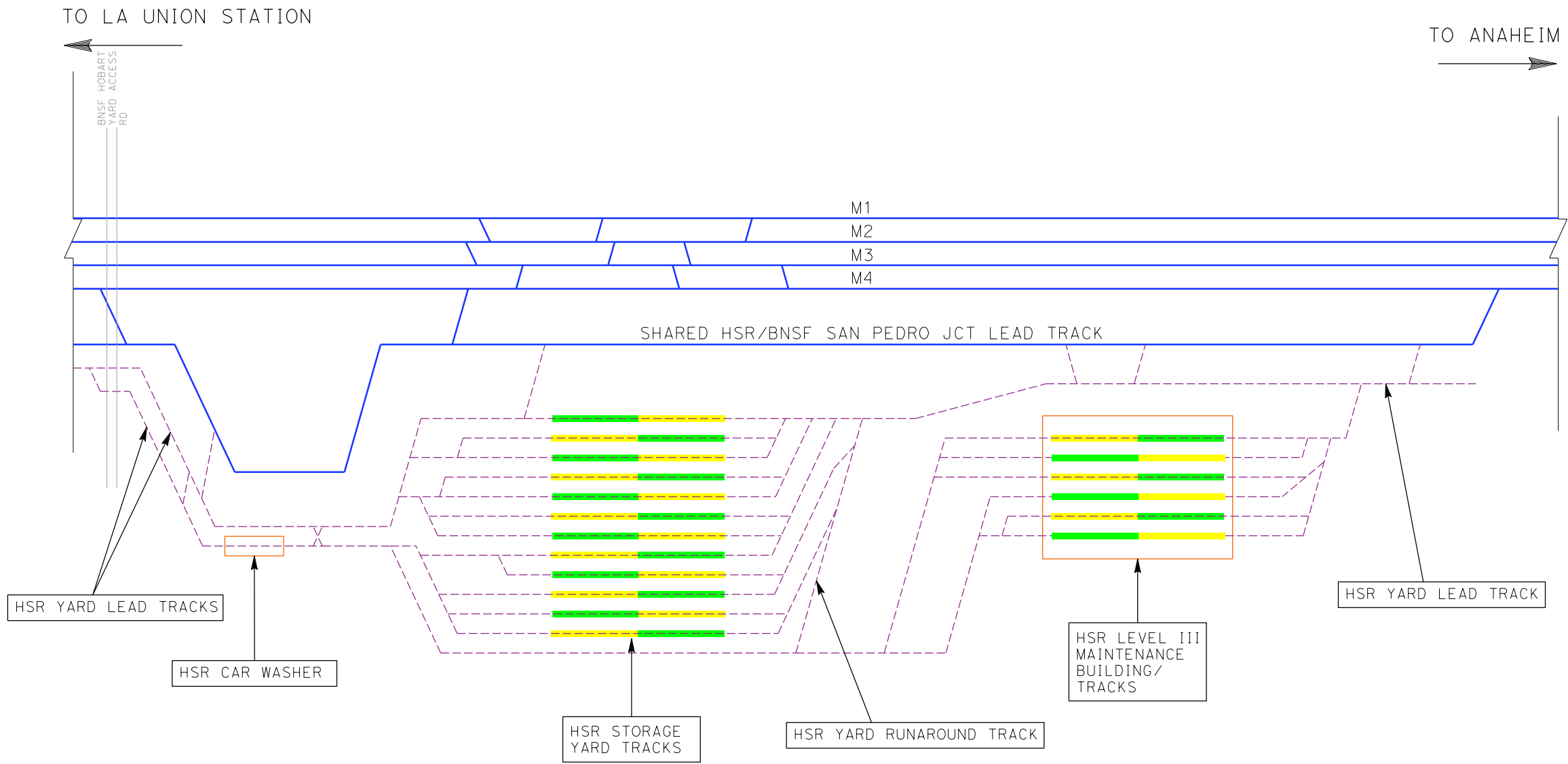


CALIFORNIA
HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT
LOS ANGELES TO ANAHEIM**
RECORD SET
PRELIMINARY ENGINEERING FOR PROJECT DEFINITION
TRACK SCHEMATIC
ALIGNMENT FROM LA TO ANAHEIM

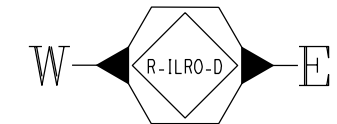
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LEGEND

- NEW HSR LMF III LEAD/YARD TRACKS
- NEW HSR TRACKS
- EXISTING RR TRACK
- REALIGNED/NEW AMTRAK/METROLINK TRACKS
- EXISTING ROADWAY/FREEWAY OVERPASS BRIDGE
- - - EXISTING AMTRAK MAINTENANCE FACILITY(S)
- NEW HSR MAINTENANCE FACILITY(S)
- HSR TRAINSET (673' EACH) (24 TRAINSETS TOTAL YARD STORAGE CAPACITY)



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REV	D - TE	BY	SUB	- PP	DESCRIPTION

DESIGNED BY D. RAMIREZ
DR - WN BY D. RAMIREZ
CHECKED BY A. BOSCH
IN CH - RGE J. SWANSON
DATE 08/29/25

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SUBMITTAL
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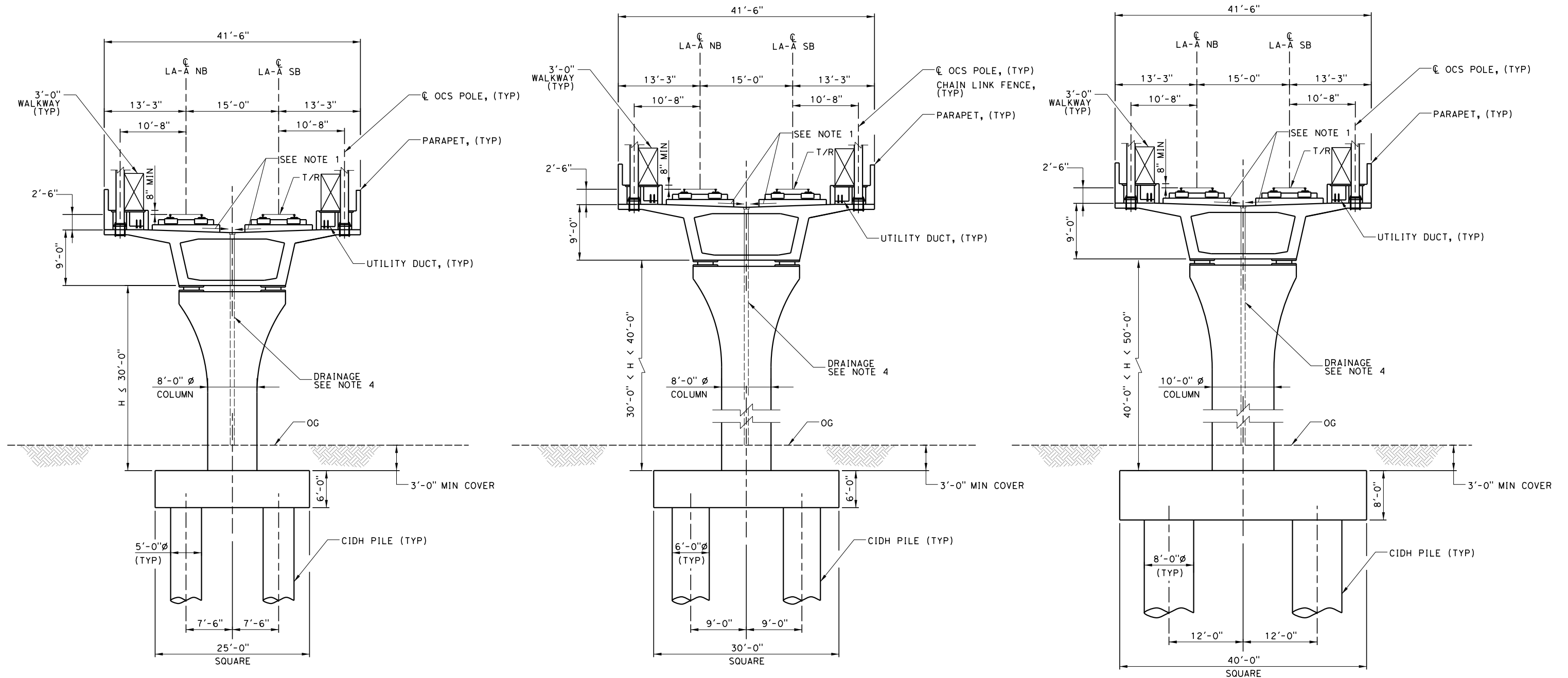


**CALIFORNIA HIGH-SPEED TRAIN PROJECT
LOS ANGELES TO ANAHEIM**

RECORD SET
PRELIMINARY ENGINEERING FOR PROJECT DEFINITION
TRACK SCHEMATIC
26TH STREET LMF III OPTION

CONTR-CT NO. HSR06-0005
DR-WING NO. GE-D6202
SC-LE NO SCALE
SHEET NO.

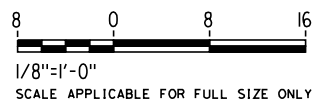
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TYPICAL PC/PS CONCRETE SPAN - NORMAL BENT
SCALE: 1/8" = 1'-0"

- NOTES:
1. DRAINAGE CROSS SLOPE SHALL BE 2%.
 2. 15' MAINTENANCE ACCESS WILL BE PROVIDED WHERE POSSIBLE ALONG ALIGNMENT.
 3. MAINTENANCE ACCESS WILL BE PROVIDED AT LOCAL ROADS WHEREVER POSSIBLE.
 4. FOR DRAINAGE CONNECTION SEE GRADING AND DRAINAGE PLANS IN VOLUME 3.4.

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CHECKED BY D. SARETSKY
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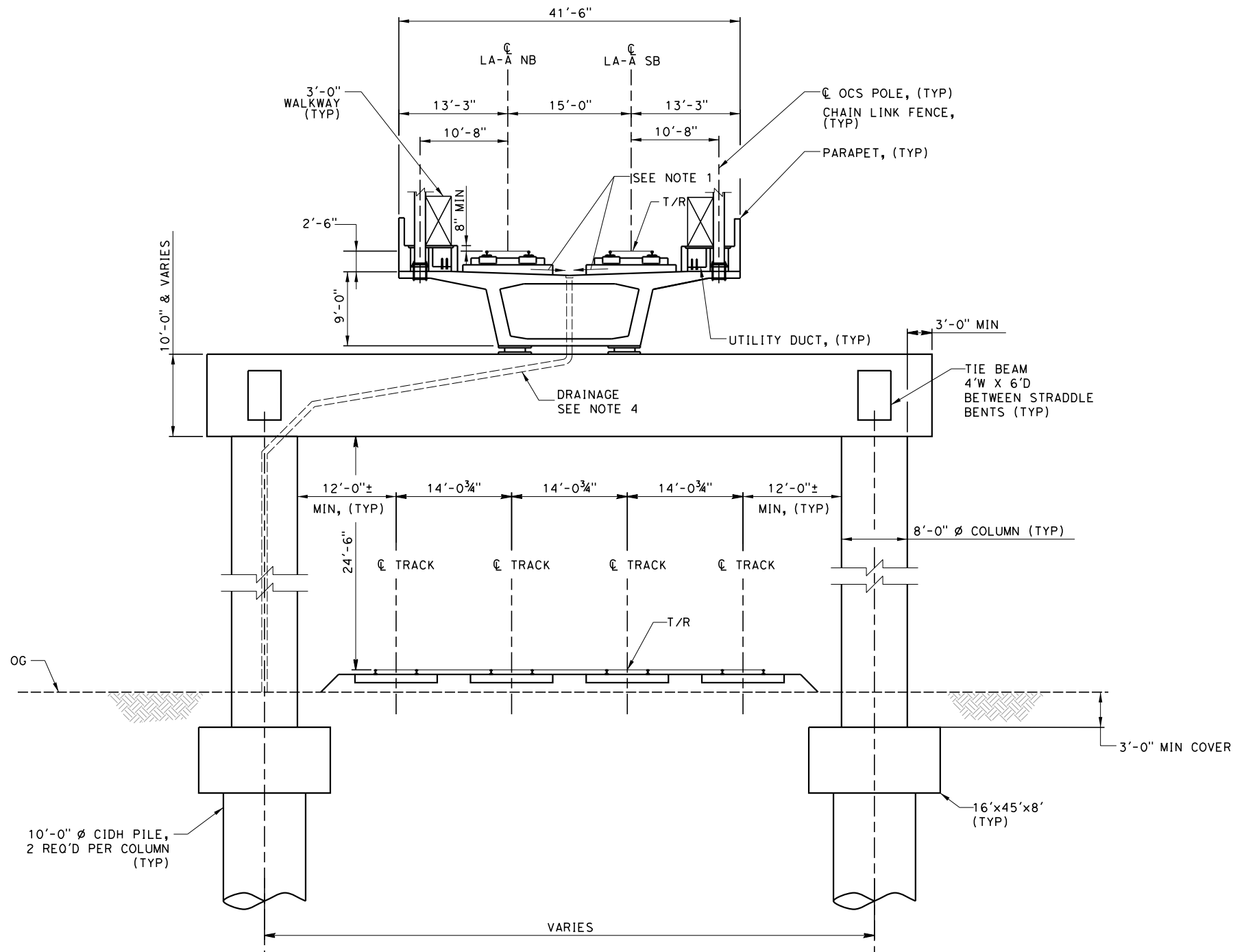
CALIFORNIA
HIGH-SPEED RAIL AUTHORITY

CALIFORNIA HIGH-SPEED TRAIN PROJECT
LOS ANGELES TO ANAHEIM

RECORD SET
PRELIMINARY ENGINEERING FOR PROJECT DEFINITION
TYPICAL HST AERIAL STRUCTURE SECTION
SHEET 1 OF 8

CONTRACT NO. HSR06-0005
DRAWING NO. ST-J0011
SCALE AS SHOWN
SHEET NO.

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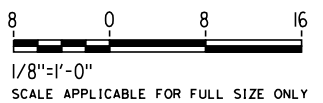
TYPICAL CONCRETE STRADDLE BENT - PC/PS CONCRETE GIRDER SPAN

SCALE: 1/8" = 1'-0"

NOTES:

1. DRAINAGE CROSS SLOPE SHALL BE 2%
2. 4-TRACKS SHOWN
3. 15' MAINTENANCE ACCESS WILL BE PROVIDED WHERE POSSIBLE ALONG ALIGNMENT.
4. FOR DRAINAGE CONNECTION SEE GRADING AND DRAINAGE PLAN IN VOLUME 3.4.

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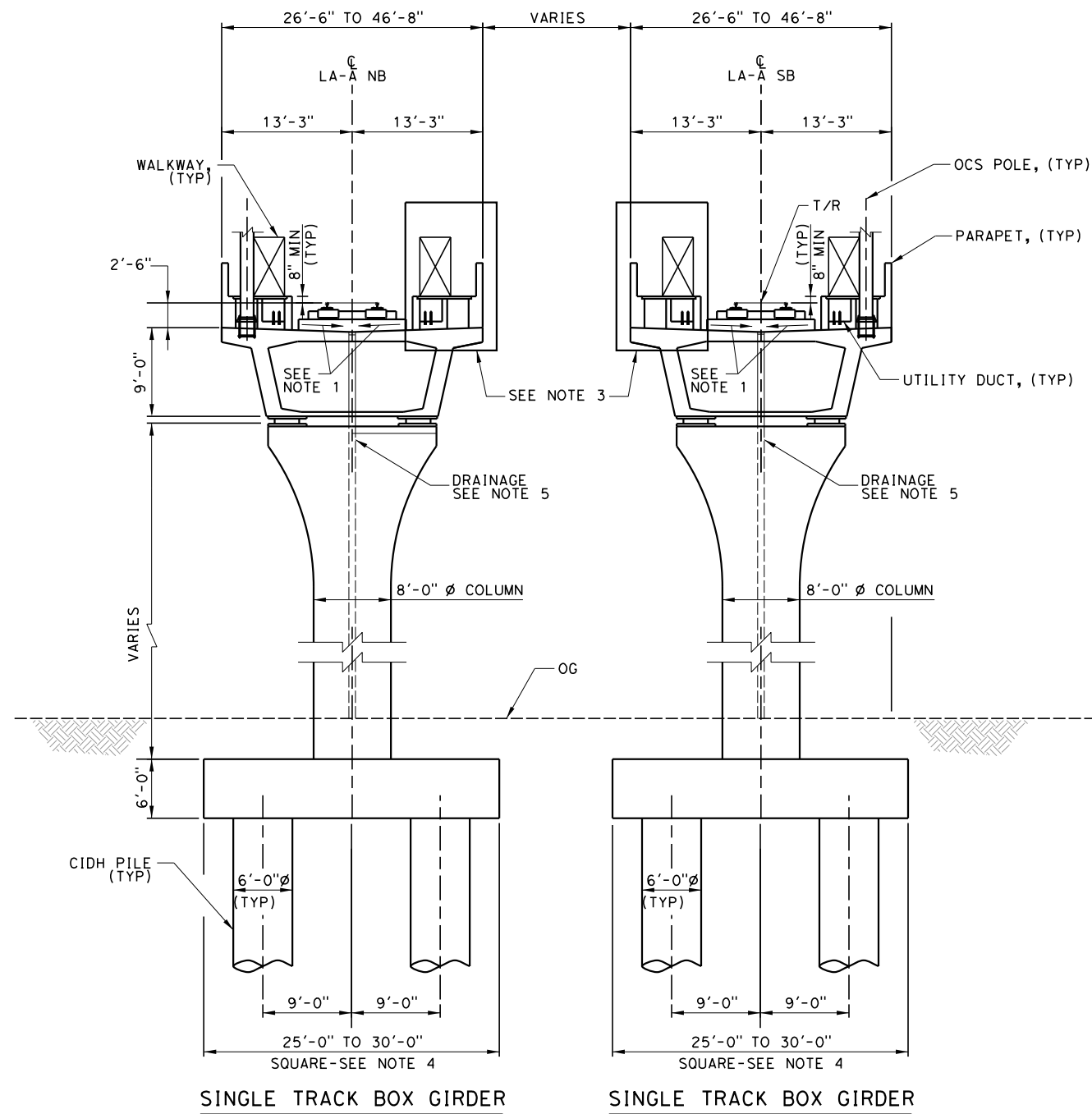
CALIFORNIA
HIGH-SPEED RAIL AUTHORITY

CALIFORNIA HIGH-SPEED TRAIN PROJECT
LOS ANGELES TO ANAHEIM

RECORD SET
PRELIMINARY ENGINEERING FOR PROJECT DEFINITION
TYPICAL HST AERIAL STRUCTURE SECTION
SHEET 2 OF 8

CONTRACT NO. HSR06-0005
DRAWING NO. ST-J0012
SCALE AS SHOWN
SHEET NO.

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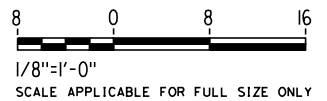


TYPICAL CONCRETE SPAN - VARIOUS BRIDGE WIDTH
SCALE: 1/8" = 1'-0"

NOTES:

1. DRAINAGE CROSS SLOPE SHALL BE 2%.
2. 15' MAINTENANCE ACCESS WILL BE PROVIDED WHERE POSSIBLE ALONG ALIGNMENT.
3. OPTIONAL WALKWAY.
4. FOR FOOTING SIZE SEE DRAWINGS ST-J0011.
5. FOR DRAINAGE CONNECTION SEE GRADING AND DRAINAGE PLANS IN VOLUME 3.4.

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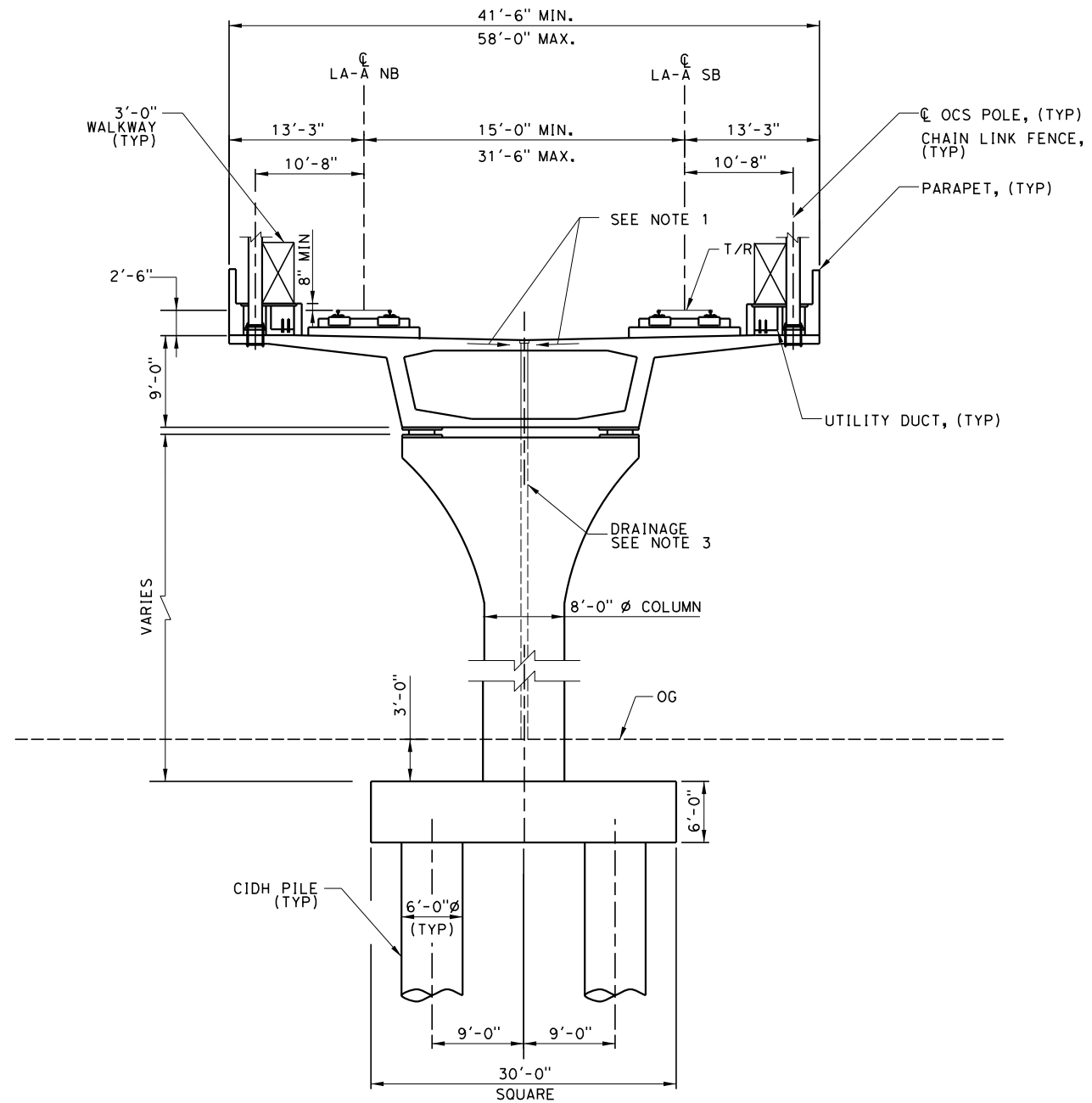
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**CALIFORNIA HIGH-SPEED TRAIN PROJECT
LOS ANGELES TO ANAHEIM**
RECORD SET
PRELIMINARY ENGINEERING FOR PROJECT DEFINITION
TYPICAL HST AERIAL STRUCTURE SECTION
SHEET 3 OF 8

CONTRACT NO. HSR06-0005
DRAWING NO. ST-J0013
SCALE AS SHOWN
SHEET NO.



SINGLE-CELL BOX GIRDER

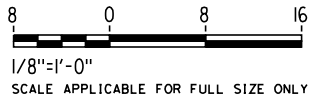
TYPICAL CONCRETE SPAN - VARIOUS BRIDGE WIDTH

SCALE: 1/8" = 1'-0"

NOTE:

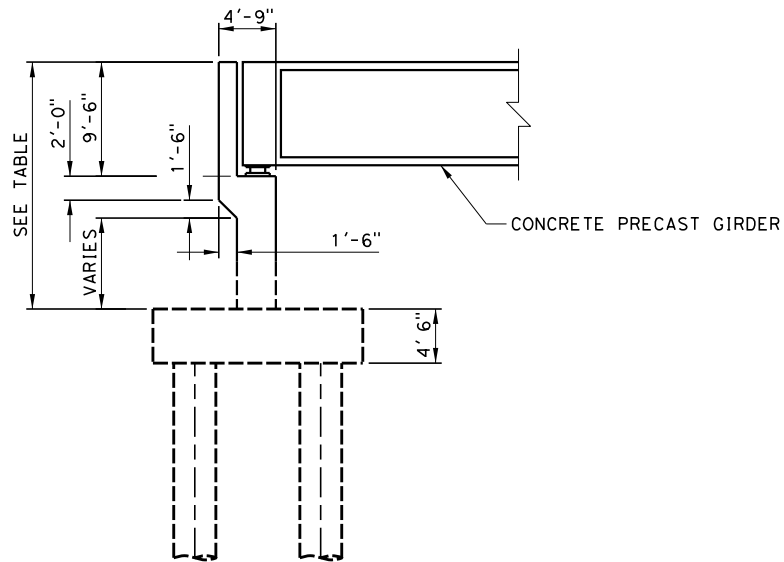
1. DRAINAGE CROSS SLOPE SHALL BE 2%
2. 15' MAINTENANCE ACCESS WILL BE PROVIDED WHERE POSSIBLE
ALONG ALIGNMENT.
3. FOR DRAINAGE CONNECTION SEE GRADING AND DRAINAGE PLANS
IN VOLUME 3.4.

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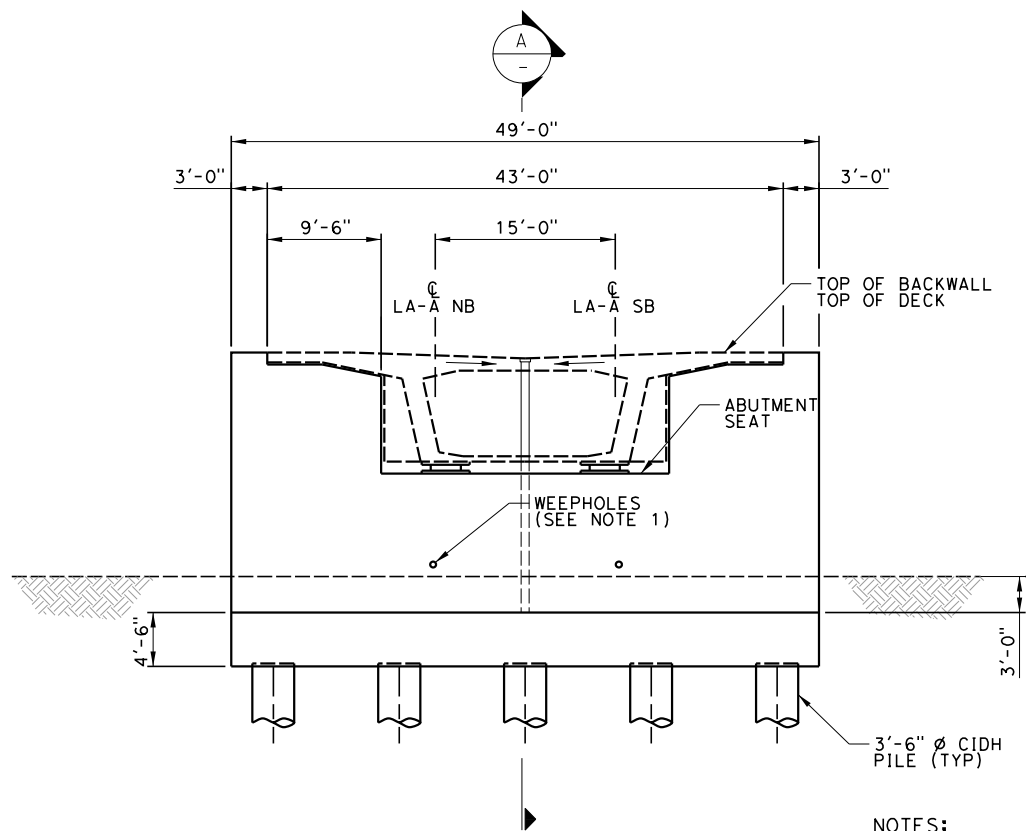
						DESIGNED BY M. RODRIGUEZ	PEPD SUBMITTAL FOR INTERNAL USE ONLY NOT FOR CONSTRUCTION		 CALIFORNIA HIGH-SPEED RAIL AUTHORITY	CALIFORNIA HIGH-SPEED TRAIN PROJECT LOS ANGELES TO ANAHEIM RECORD SET PRELIMINARY ENGINEERING FOR PROJECT DEFINITION TYPICAL HST AERIAL STRUCTURE SECTION SHEET 4 OF 8	CONTRACT NO. HSR06-0005
						DRAWN BY Z. OHN					DRAWING NO. ST-J0014
						CHECKED BY D. SARETSKY					SCALE AS SHOWN
						IN CHARGE J. SWANSON					SHEET NO.
REV	DATE	BY	SUB	APP	DESCRIPTION	DATE 08/29/25					

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SECTION A
SCALE: 1/8" = 1'-0"

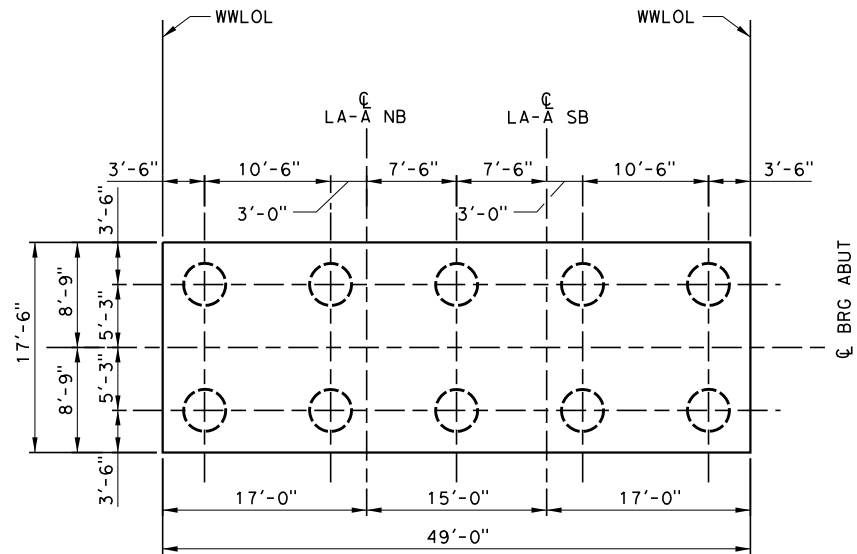
AERIAL STRUCTURE ABUTMENT HEIGHTS		
ABUTMENT	#2	#3
1	20'-0"	23'-6"
71	N/A	26'-8"
114	18'-6"	N/A



ABUTMENT ELEVATION
SCALE: 1/8" = 1'-0"

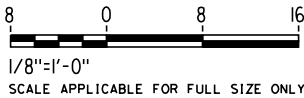
NOTES:

- FOR ABUTMENT DRAINAGE DETAILS SEE GRADING AND DRAINAGE PLANS IN VOLUME 3.4.
- FOR LIMITS OF ABUTMENT BACKFILL, SEE DRAWINGS ST-J1552, AND ST-J1561.



FOOTING PLAN
SCALE: 1/8" = 1'-0"

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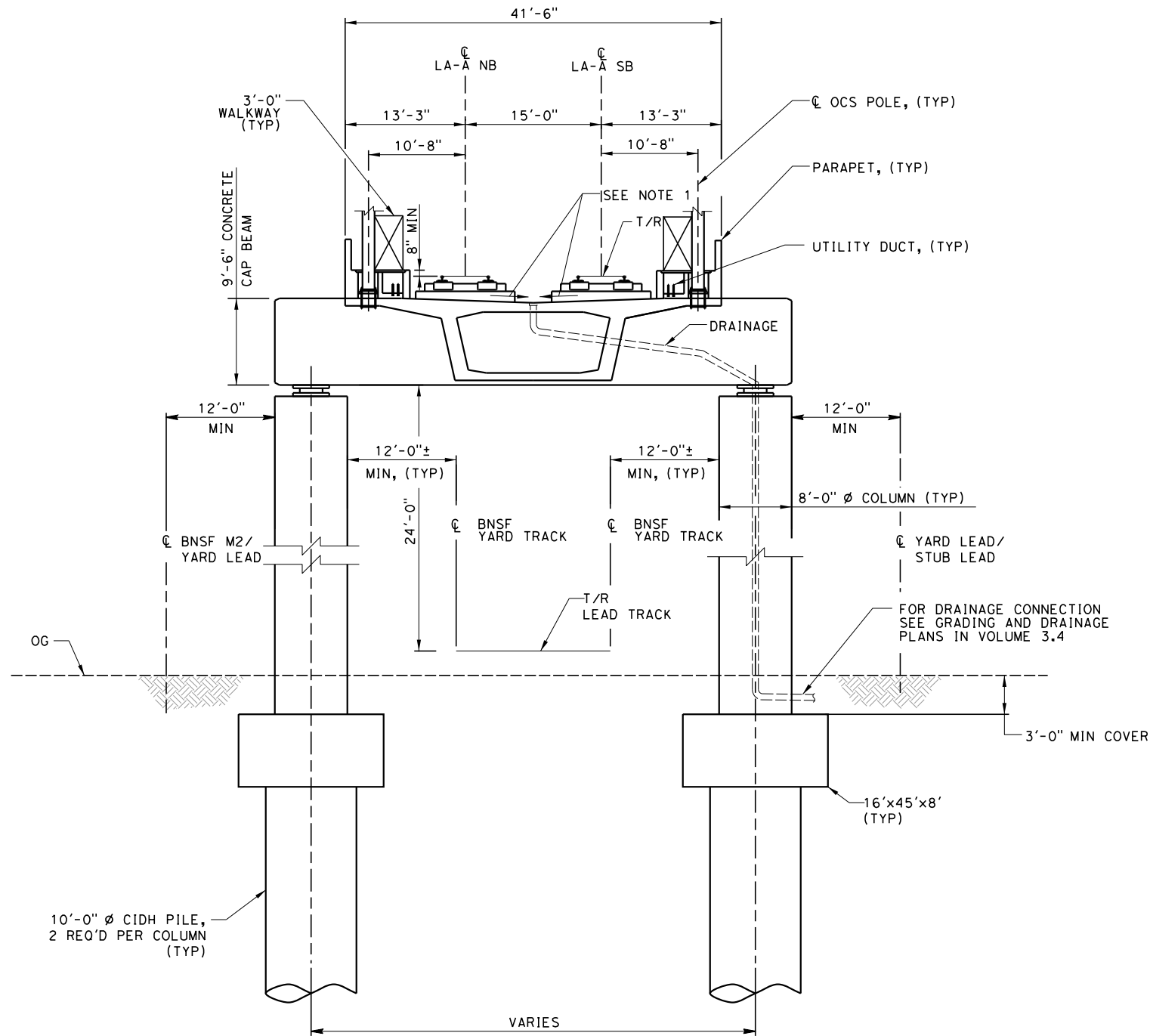
CALIFORNIA
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CALIFORNIA HIGH-SPEED TRAIN PROJECT
LOS ANGELES TO ANAHEIM

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TYPICAL HST AERIAL STRUCTURE SECTION
SHEET 5 OF 8

CONTRACT NO. HSR06-0005
DRAWING NO. ST-J0015
SCALE AS SHOWN
SHEET NO.

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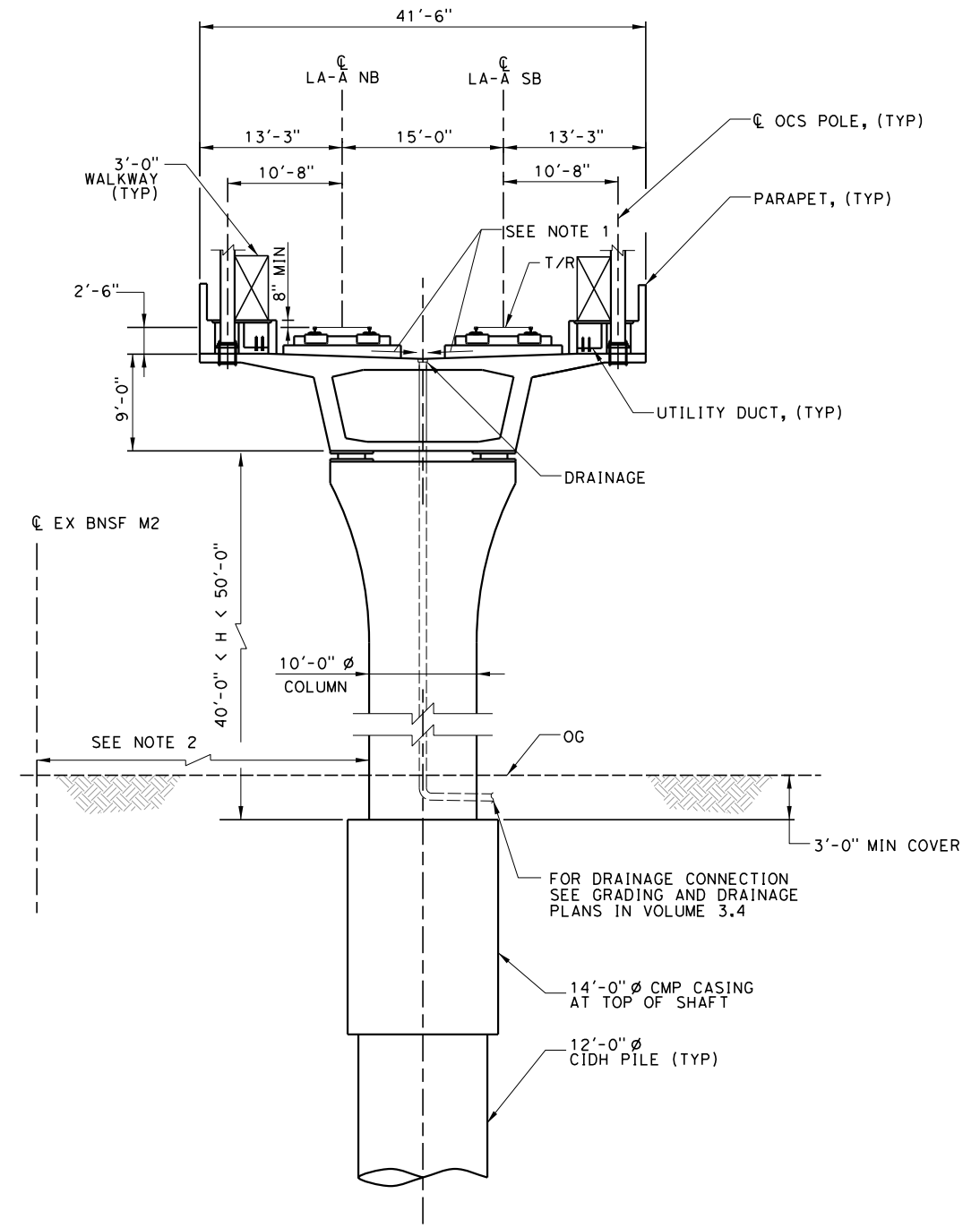


TYPICAL STRADDLE BENT - CONCRETE GIRDER SPAN

SCALE: 1/8" = 1'-0"

NOTES:

1. DRAINAGE CROSS SLOPE SHALL BE 2%



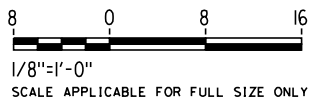
TYPICAL SINGLE CIDH BENT - CONCRETE GIRDER SPAN

SCALE: 1/8" = 1'-0"

NOTES:

1. DRAINAGE CROSS SLOPE SHALL BE 2%.
2. FOR CLEARANCE BETWEEN COLUMN AND CENTERLINE OF BNSF TRACK SEE PLAN DRAWINGS.

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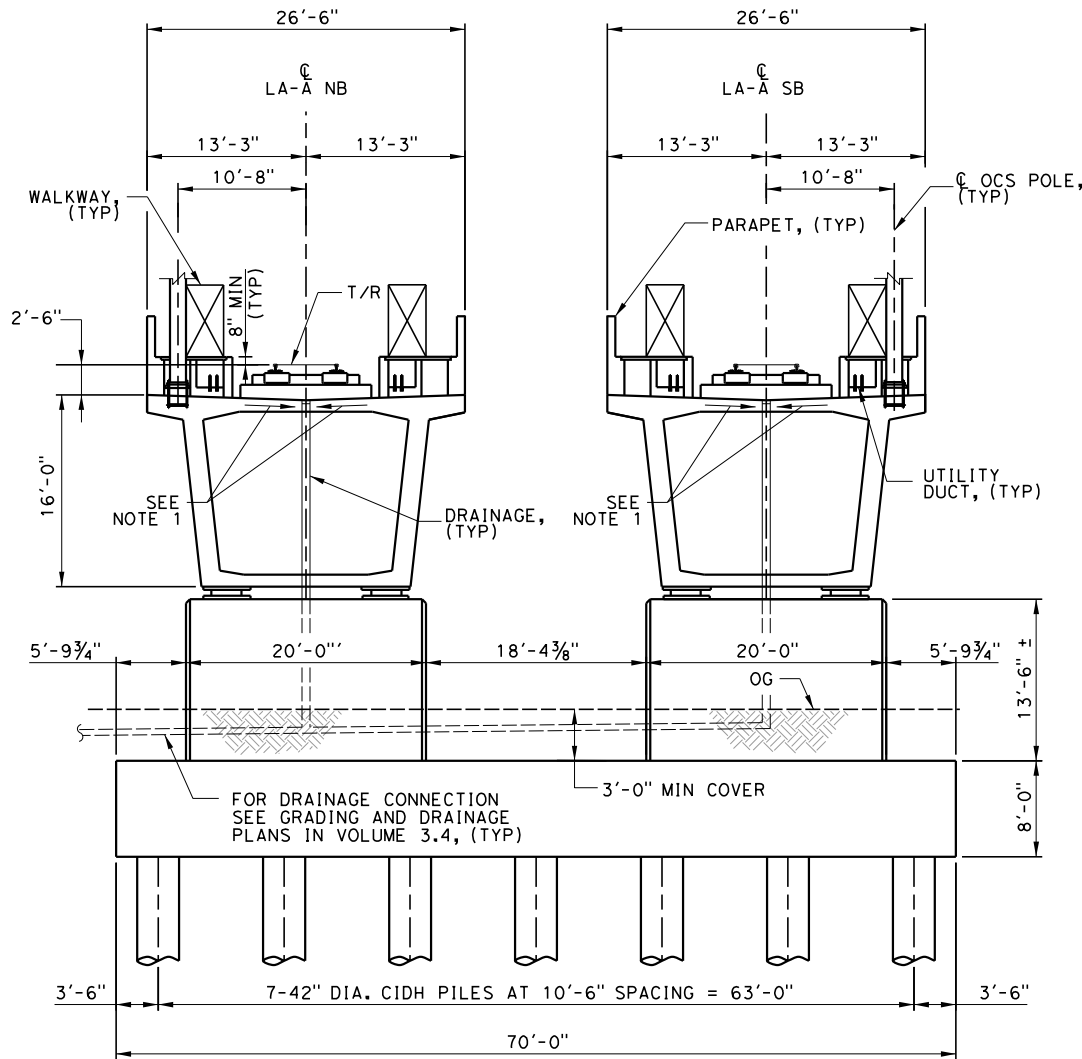
CALIFORNIA
HIGH-SPEED RAIL AUTHORITY

CALIFORNIA HIGH-SPEED TRAIN PROJECT
LOS ANGELES TO ANAHEIM

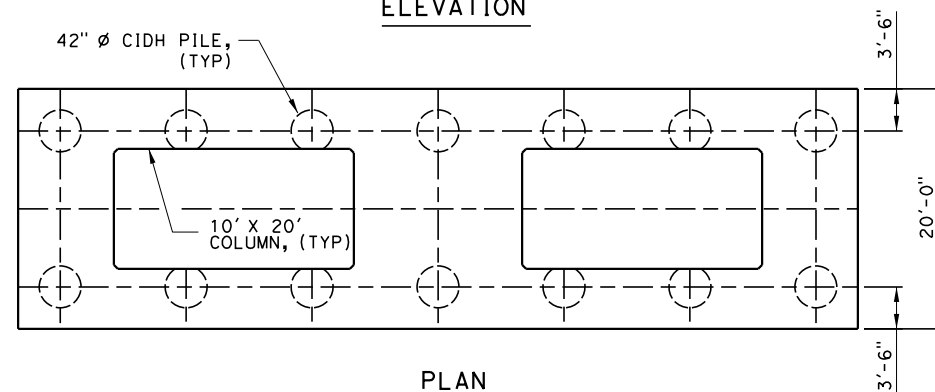
RECORD SET
PRELIMINARY ENGINEERING FOR PROJECT DEFINITION
TYPICAL HST AERIAL STRUCTURE SECTION
SHEET 6 OF 8

CONTRACT NO. HSR06-0005
DRAWING NO. ST-J0016
SCALE AS SHOWN
SHEET NO.

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ELEVATION



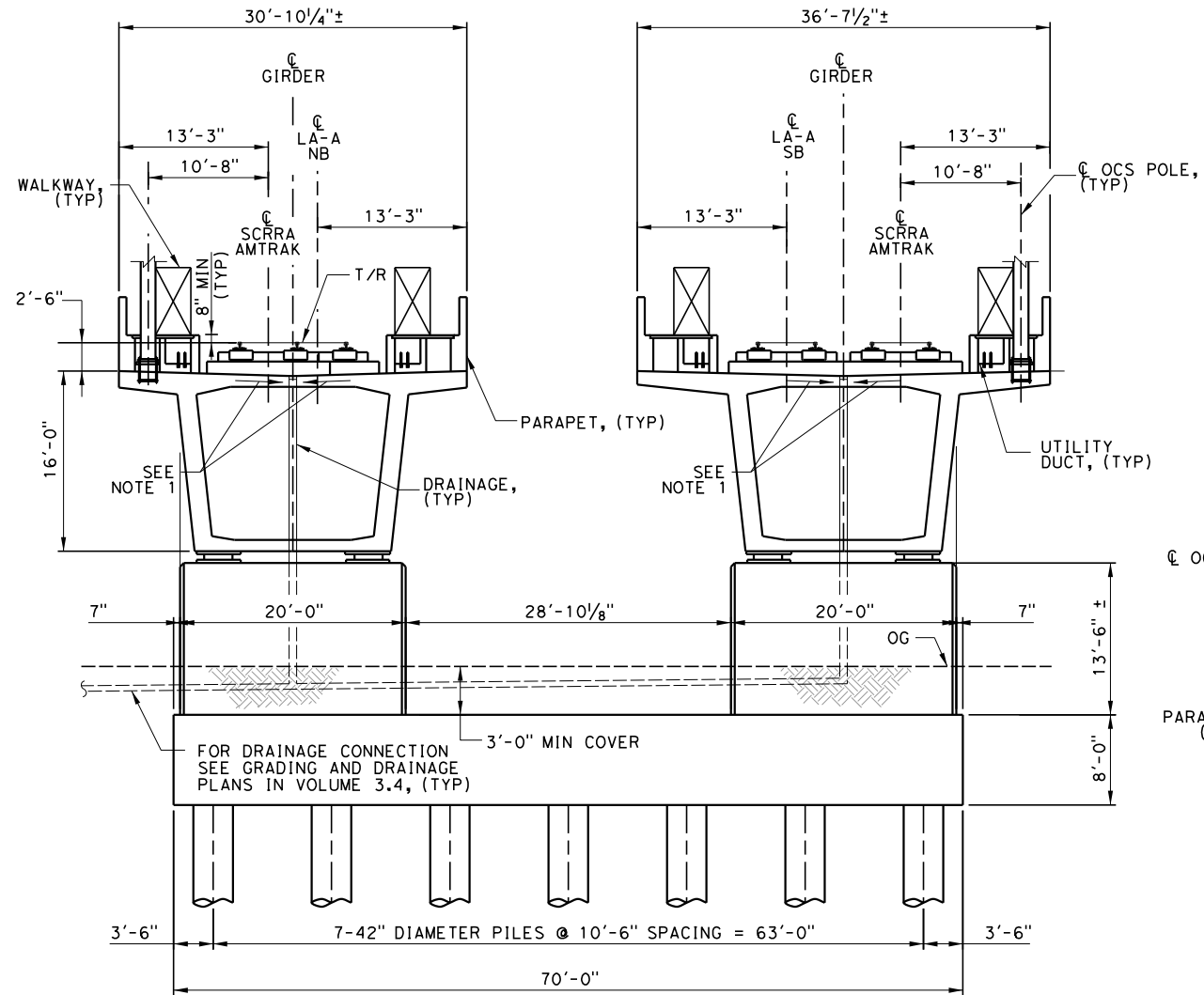
PLAN

BENT 71 - HAUNCHED PC/PS CONCRETE GIRDER SPAN DETAILS

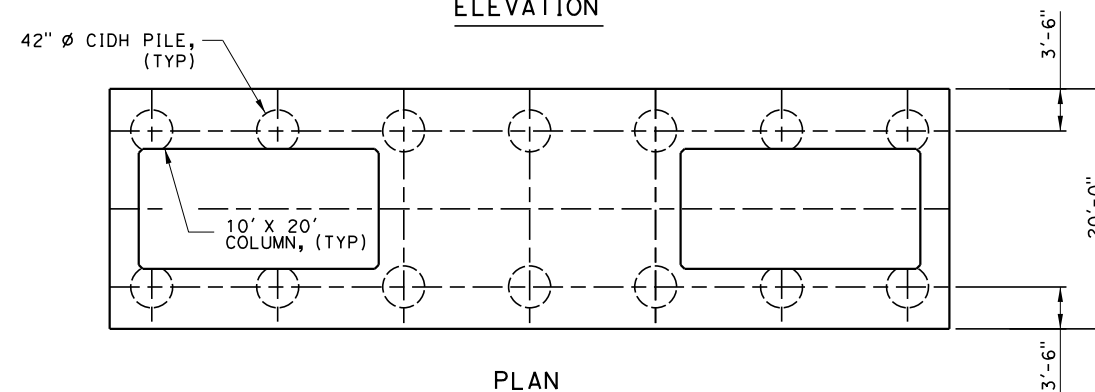
SCALE: 1/8" = 1'-0"

NOTES:

1. DRAINAGE CROSS SLOPE SHALL BE 2%.



ELEVATION



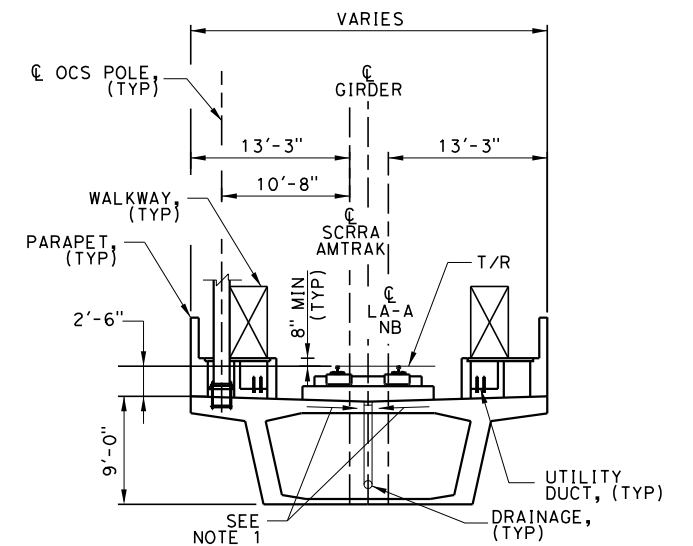
PLAN

BENT 72 - HAUNCHED PC/PS CONCRETE GIRDER SPAN DETAILS

SCALE: 1/8" = 1'-0"

NOTES:

1. DRAINAGE CROSS SLOPE SHALL BE 2%.



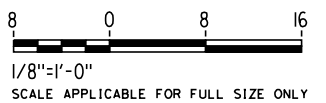
TYPICAL MID-SPAN SECTION

SCALE: 1/8" = 1'-0"

NOTES:

1. DRAINAGE CROSS SLOPE SHALL BE 2%.
2. NORTHBOUND SECTION SHOWN, SOUTHBOUND SECTION SIMILAR.

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CALIFORNIA HIGH-SPEED TRAIN PROJECT
LOS ANGELES TO ANAHEIM

RECORD SET
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TYPICAL HST AERIAL STRUCTURE SECTION
SHEET 7 OF 8

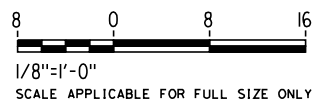
CONTRACT NO. HSR06-0005
DRAWING NO. ST-J0017
SCALE AS SHOWN
SHEET NO.



SCALE: $1/8" = 1'-0"$

1. DRAINAGE CROSS SLOPE SHALL BE 2%.
2. SCRRRA SIDE PLATFORM IS FOR BENTS 78 TO BENT 85.
3. NOT USED
4. FOR STATION DRAWINGS SEE VOLUME 3.5, GENERAL AND STATIONS.
5. DIMENSION SHOWN IS FOR STATION LIMITS AND DOES NOT INCLUDE BENTS 74,75,88 AND 89.
6. DIMENSION SHOWN IS FOR STATION LIMITS AND INCLUDES BENTS 74,75,88 AND 89.

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**CALIFORNIA HIGH-SPEED TRAIN PROJECT
LOS ANGELES TO ANAHEIM**

RECORD SET
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TYPICAL HST AERIAL STRUCTURE SECTION
SHEET 8 OF 8

CONTRACT NO.	HSR06-0005
DRAWING NO.	ST-J0018
SCALE	AS SHOWN
SHEET NO.	



SCALE: 1/8" = 1'-0"

1. DRAINAGE CROSS SLOPE SHALL BE 2%. FOR DRAINAGE DETAILS SEE VOLUME 3.4.
2. EXISTING ROW VARIES ALONG ALIGNMENT. REFER TO PLAN AND ELEVATION DRAWINGS FOR LOCATION AND CLEARANCE FROM EDGE OF STRUCTURE TO ROW LINE.

TABLE OF DIMENSIONS FOR H=4' TO H=12'					
DESIGN H	4'	6'	8'	10'	12'
W	5'-0"	5'-0"	6'-6"	8'-0"	9'-6"
B	6'-0"	6'-0"	6'-0"	6'-0"	6'-0"
F SPREAD FOOTING	1'-4"	1'-4"	1'-6"	1'-6"	1'-10"
TOP OF WALL THICKNESS	11"	11"	11"	11"	11"
BATTER	NONE	NONE	NONE	1/2:12	1/2:12
KEY (HEIGHT X WIDTH)	8"X16"	8"X16"	8"X16"	8"X16"	1'X2'



SCALE: 1/8" = 1'-0"

1. DRAINAGE CROSS SLOPE SHALL BE 2%. FOR DRAINAGE DETAILS SEE VOLUME 3.4.
2. EXISTING ROW VARIES ALONG ALIGNMENT. REFER TO PLAN AND ELEVATION DRAWINGS FOR LOCATION AND CLEARANCE FROM EDGE OF STRUCTURE TO ROW LINE.
3. HEIGHT TO WALL (H) VARIES FROM 6'-0" TO 23'-0".
4. THICKNESS OF WALL (T) SHALL BE AS PER MANUFACTURER'S RECOMMENDATION.

8 0 8 16
1/8"=1'-0"
SCALE APPLICABLE FOR FULL SIZE ONLY

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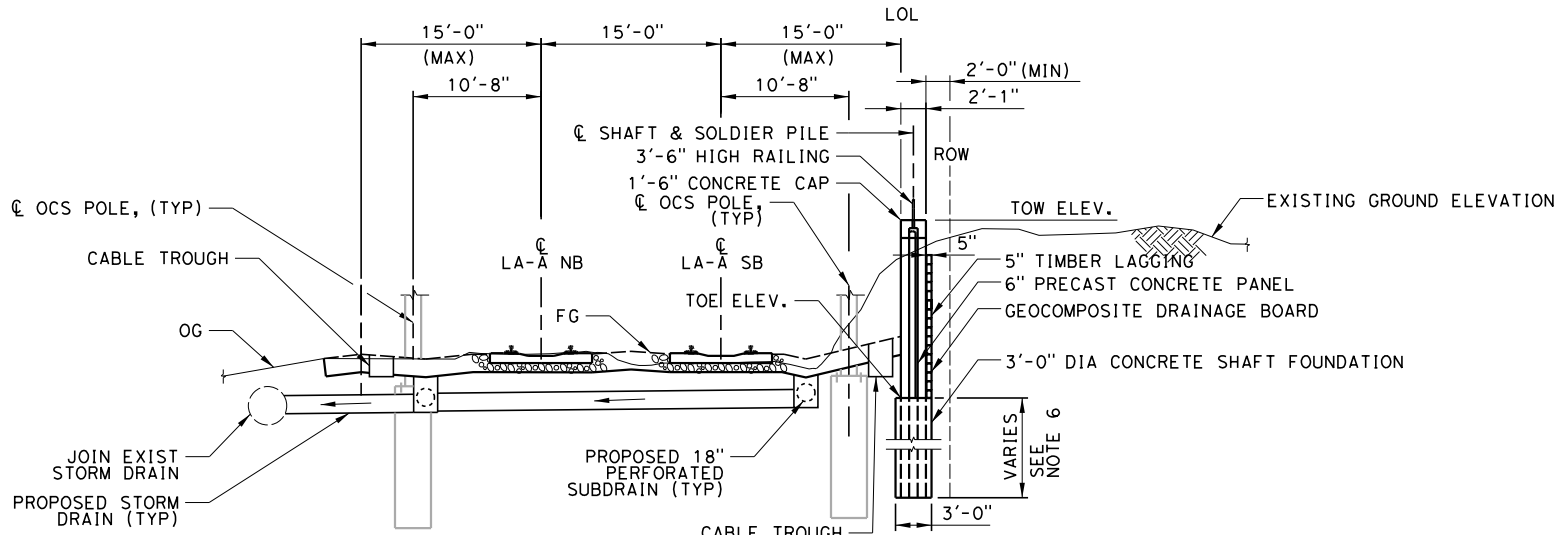


CALIFORNIA
HIGH-SPEED RAIL AUTHORITY

RECORD SET
PRELIMINARY ENGINEERING FOR PROJECT DEFINITION
RETAINING WALL TYPICAL SECTIONS 1

CONTRACT NO.	HSR06-0005
DRAWING NO.	ST-G0021
SCALE	AS SHOWN
SHEET NO.	

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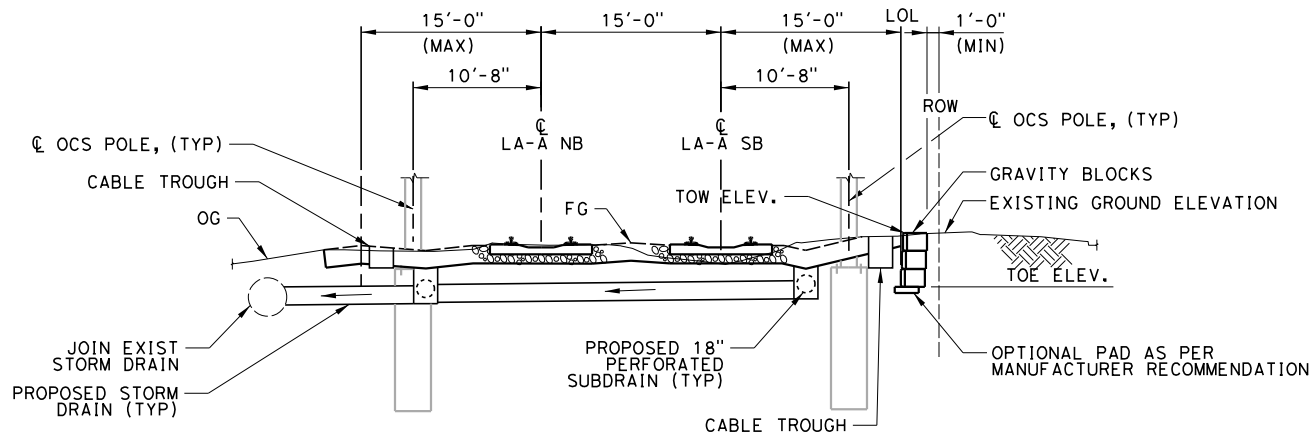


TYPICAL RETAINING WALL SECTION TYPE 3 - CUTWALL

SCALE: 1/8" = 1'-0"

NOTES:

1. FOR TYPE 1 RETAINING WALL SEE DWG ST-G0021.
2. FOR TYPE 2 RETAINING WALL SEE DWG ST-G0021.
3. ALL DIMENSIONS TO BE FIELD VERIFIED.
4. FOR LOCATION AND HEIGHT OF RETAINING WALL, SEE DWGS ST-G1008 TO ST-G1135. HEIGHT OF WALL VARIES FROM 5'-0" TO 26'-0".
5. SEE VOLUME 3.4, GRADING AND DRAINAGE SHEETS FOR PROPOSED DRAINAGE PIPE LAYOUT.
6. PILE DEPTH SUBJECT TO FINAL FOUNDATION DESIGN.



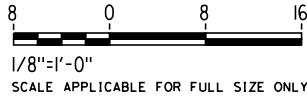
TYPICAL RETAINING WALL SECTION TYPE 4 - CUTWALL

SCALE: 1/8" = 1'-0"

NOTES:

1. ALL DIMENSIONS TO BE FIELD VERIFIED.
2. FOR LOCATION AND HEIGHT OF RETAINING WALLS, SEE DWGS ST-G1008 TO ST-G1135. HEIGHT OF WALL CANNOT EXCEED 3 FEET.
3. SEE VOLUME 3.4 GRADING AND DRAINAGE SHEETS FOR PROPOSED DRAINAGE PIPE LAYOUT.

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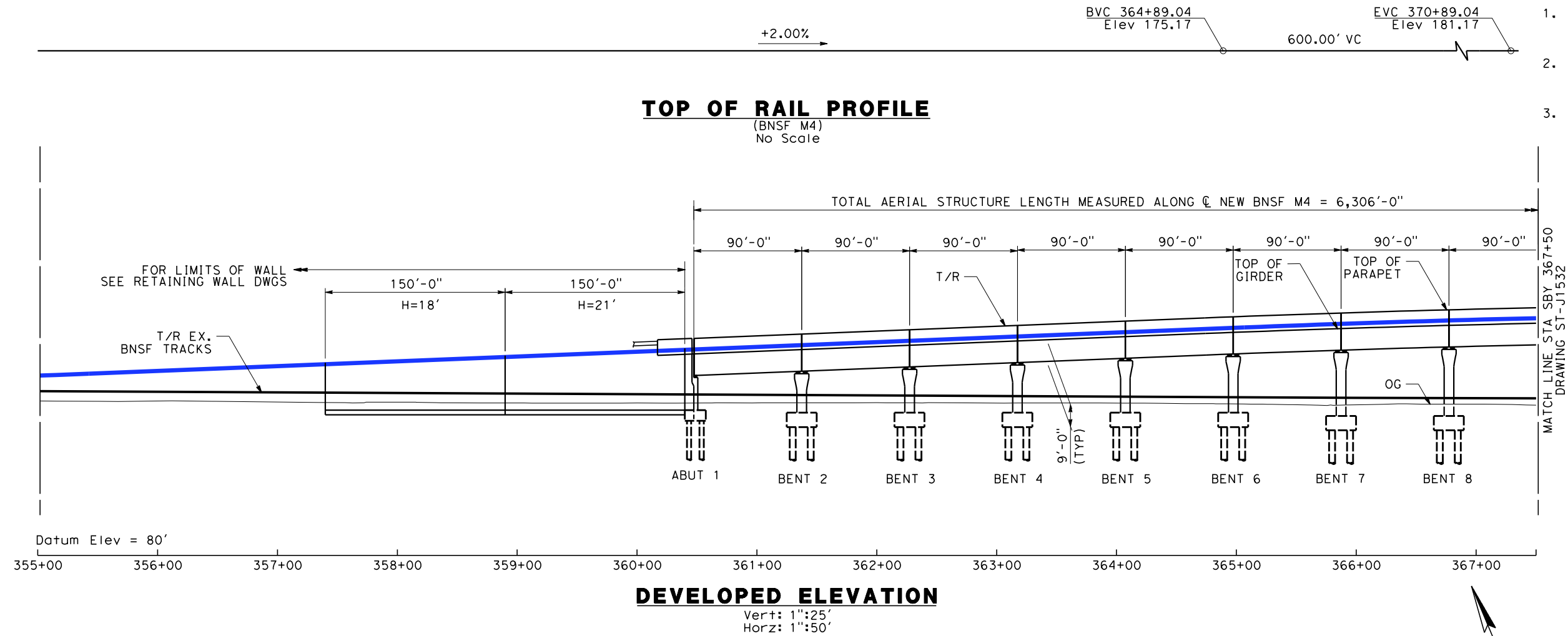
CALIFORNIA
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LOS ANGELES TO ANAHEIM

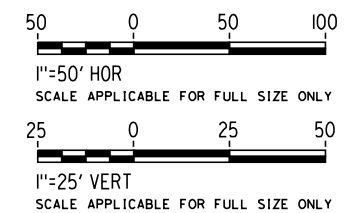
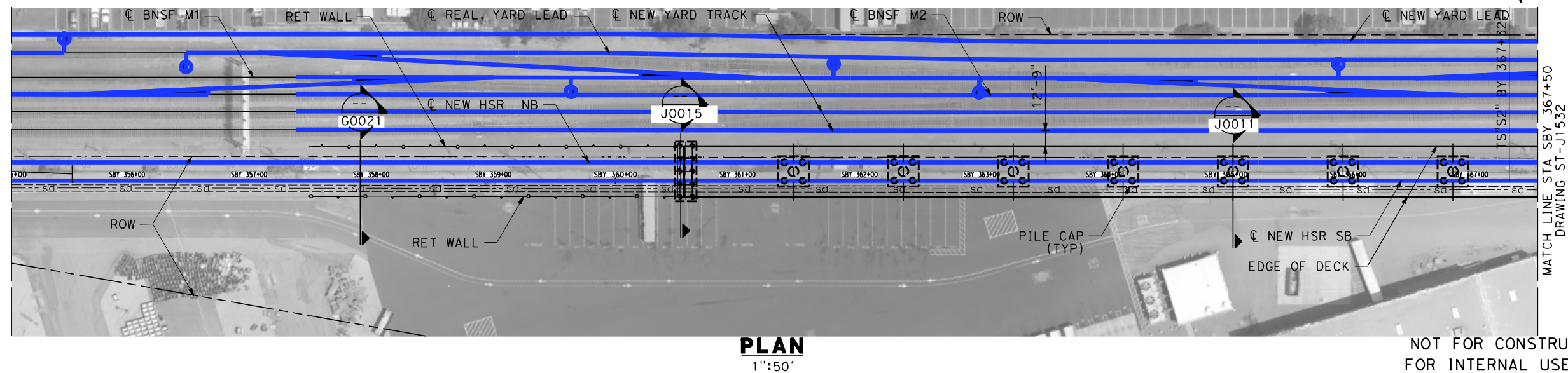
RECORD SET
PRELIMINARY ENGINEERING FOR PROJECT DEFINITION
RETAINING WALL TYPICAL SECTIONS 2

CONTRACT NO. HSR06-0005
DRAWING NO. ST-G0022
SCALE AS SHOWN
SHEET NO.

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- NOTES:**
1. AERIAL STRUCTURE SPAN LENGTHS ARE MEASURED ALONG ϕ NEW BNSF M4 UNLESS NOTED OTHERWISE.
 2. PRECAST PRESTRESSED CONCRETE BOX GIRDER SPANS ARE USED UNLESS NOTED OTHERWISE.
 3. RET WALL SOUTH ELEVATION IS SHOWN, RET WALL NORTH ELEVATION IS SIMILAR.



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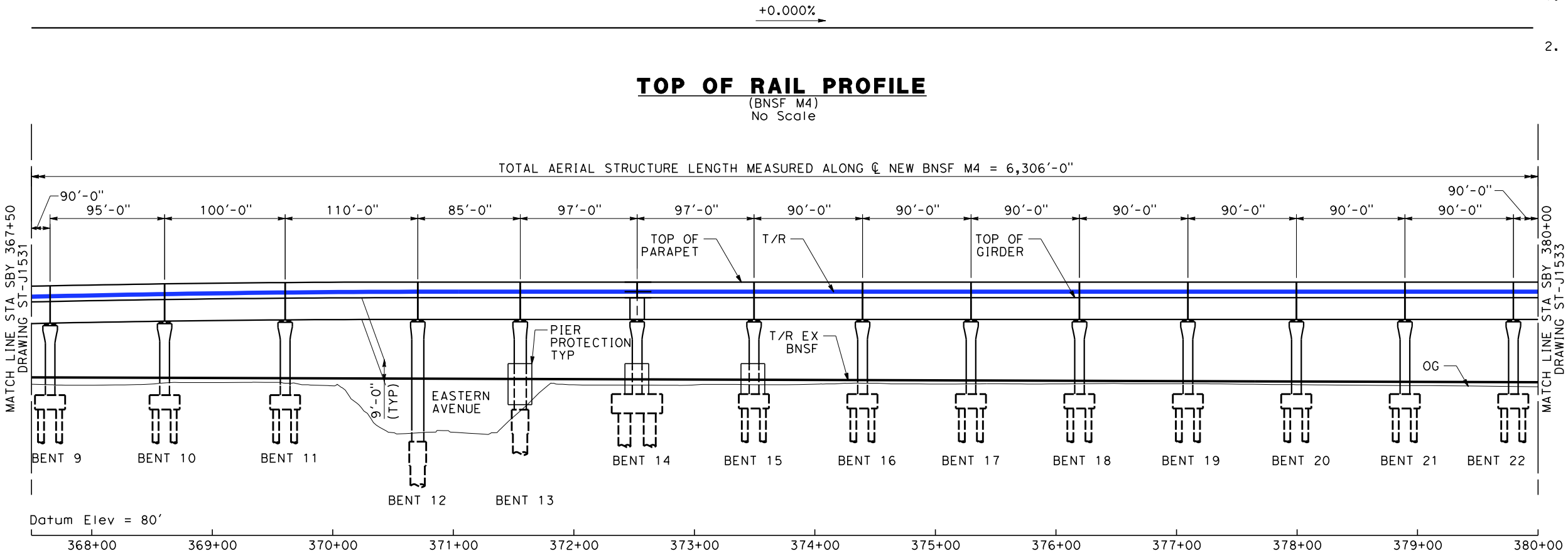


CALIFORNIA
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CALIFORNIA HIGH-SPEED TRAIN PROJECT
LOS ANGELES TO ANAHEIM
RECORD SET
PRELIMINARY ENGINEERING FOR PROJECT DEFINITION
HST AERIAL STRUCTURE #3
STA SBY 355+00 TO STA SBY 367+50

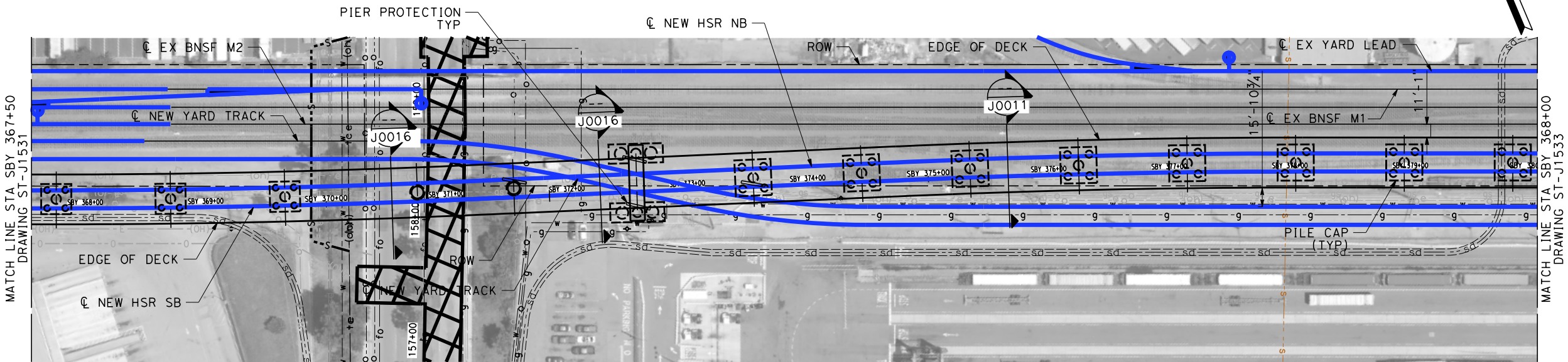
CONTRACT NO. HSR06-0005
DRAWING NO. ST-J1531
SCALE AS SHOWN
SHEET NO.

- NOTES:
- 1. AERIAL STRUCTURE SPAN LENGTHS ARE MEASURED ALONG ϕ NEW BNSF M4 UNLESS NOTED OTHERWISE.
 - 2. PRECAST PRESTRESSED CONCRETE BOX GIRDER SPANS ARE USED UNLESS NOTED OTHERWISE.



DEVELOPED ELEVATION

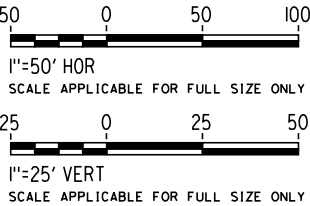
Vert: 1":25'
Horz: 1":50'



PLAN

1":50'

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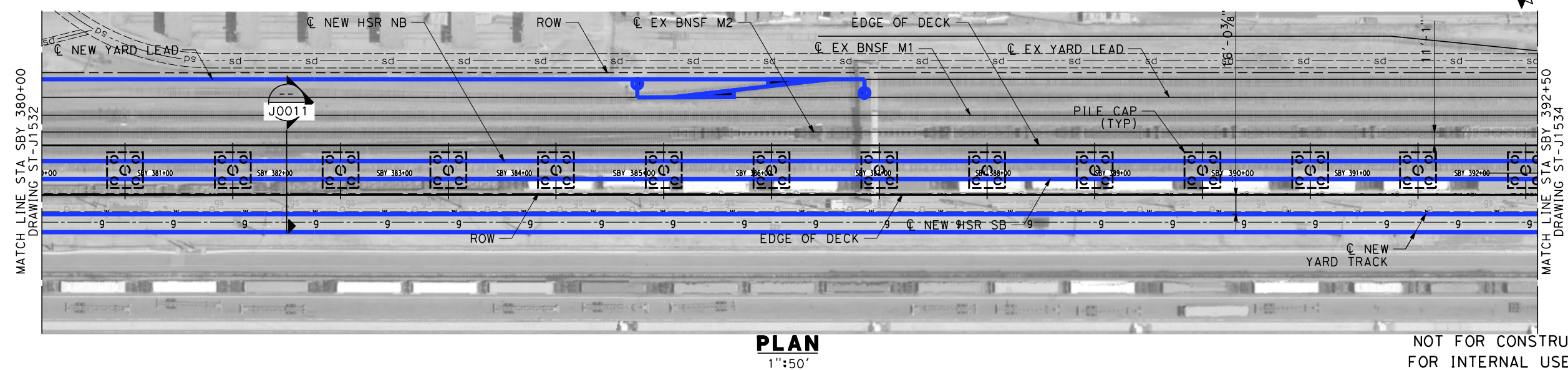
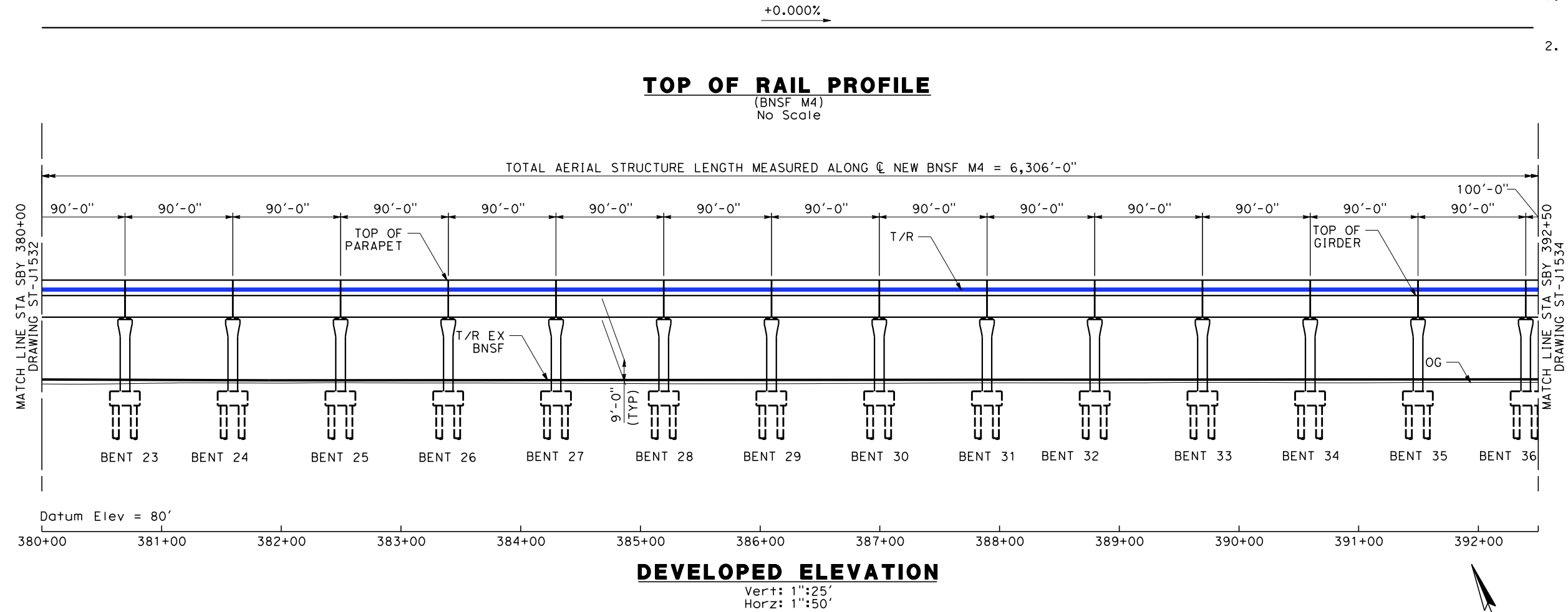
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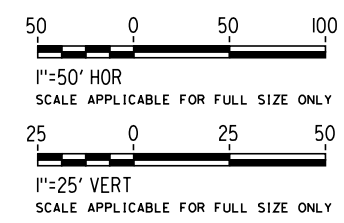
**CALIFORNIA HIGH-SPEED TRAIN PROJECT
LOS ANGELES TO ANAHEIM**
RECORD SET
PRELIMINARY ENGINEERING FOR PROJECT DEFINITION
HST AERIAL STRUCTURE #3
STA SBY 367+50 TO STA SBY 380+00

CONTRACT NO.
HSR06-0005
DRAWING NO.
ST-J1532
SCALE
AS SHOWN
SHEET NO.

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- NOTES:**
1. AERIAL STRUCTURE SPAN LENGTHS ARE MEASURED ALONG ϕ NEW BNSF M4 UNLESS NOTED OTHERWISE.
 2. PRECAST PRESTRESSED CONCRETE BOX GIRDER SPANS ARE USED UNLESS NOTED OTHERWISE.



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REV	DATE	BY	SUB	APP	DESCRIPTION

DESIGNED BY M. RODRIGUEZ
DRAWN BY Z. OHN
CHECKED BY D. SARETSKY
IN CHARGE J. SWANSON
DATE 02/28/25

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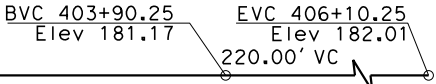
**CALIFORNIA HIGH-SPEED TRAIN PROJECT
LOS ANGELES TO ANAHEIM**

RECORD SET

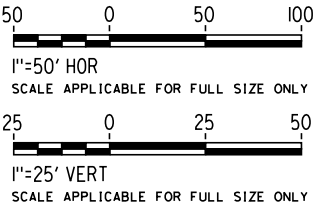
PRELIMINARY ENGINEERING FOR PROJECT DEFINITION

HST AERIAL STRUCTURE #3
STA SBY 380+00 TO STA SBY 392+50

CONTRACT NO. HSR06-0005
DRAWING NO. ST-J1533
SCALE AS SHOWN
SHEET NO.



- NOTES:**
1. AERIAL STRUCTURE SPAN LENGTHS ARE MEASURED ALONG C NEW BNSF M4 UNLESS NOTED OTHERWISE.
 2. PRECAST PRESTRESSED CONCRETE BOX GIRDER SPANS ARE USED UNLESS NOTED OTHERWISE.



REV	DATE	BY	SUB	APP	DESCRIPTION
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DATE 02/28/25

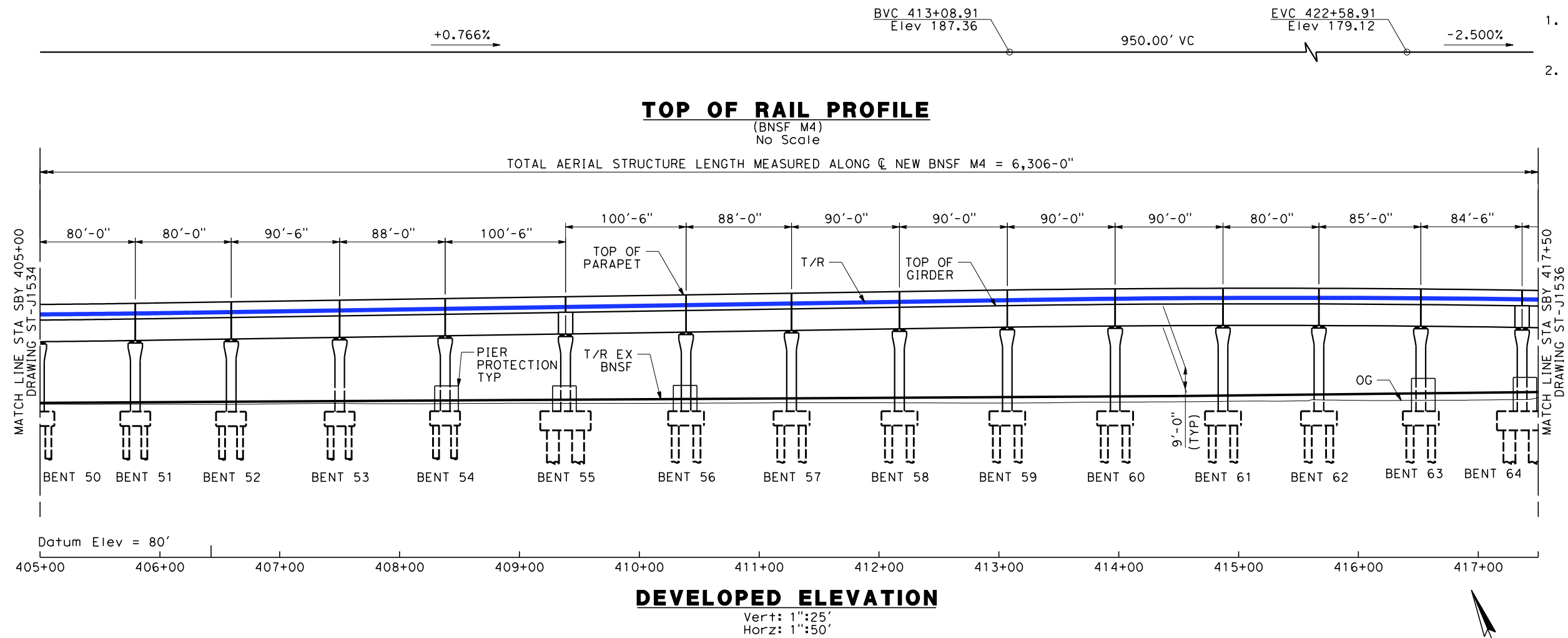
**NOT FOR
CONSTRUCTION**



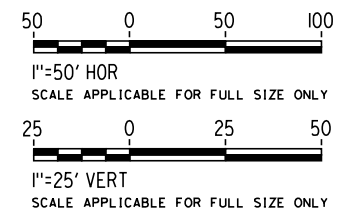
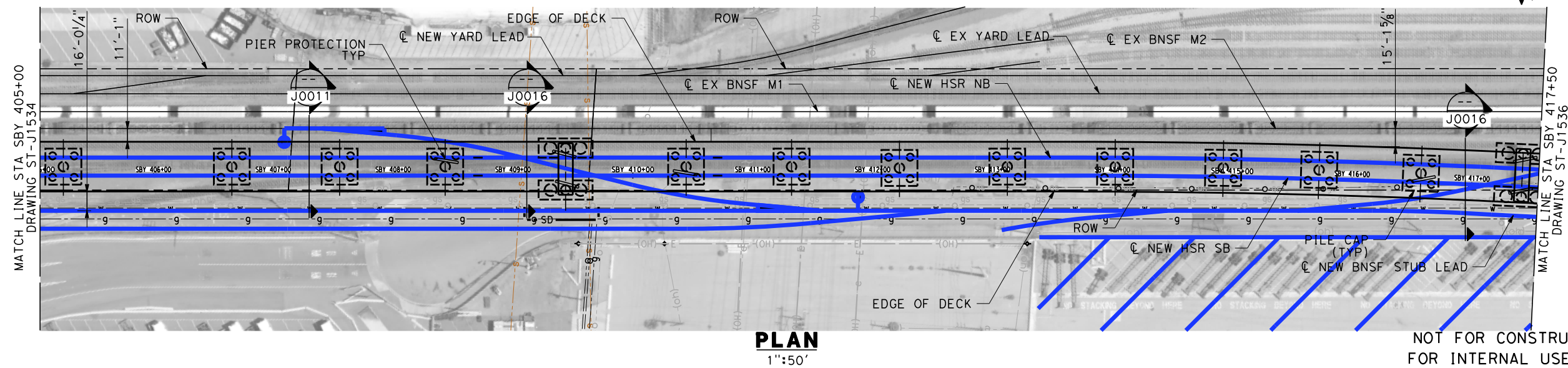
CALIFORNIA
HIGH-SPEED RAIL AUTHORITY

PRELIMINARY ENGINEERING FOR PROJECT DEFINITION
HST AERIAL STRUCTURE #3
STA SBY 392+50 TO STA SBY 405+00

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- NOTES:
1. AERIAL STRUCTURE SPAN LENGTHS ARE MEASURED ALONG ϕ NEW BNSF M4 UNLESS NOTED OTHERWISE.
 2. PRECAST PRESTRESSED CONCRETE BOX GIRDER SPANS ARE USED UNLESS NOTED OTHERWISE.



REV	DATE	BY	SUB	APP	DESCRIPTION

DESIGNED BY M. RODRIGUEZ
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IN CHARGE J. SWANSON
DATE 02/28/25

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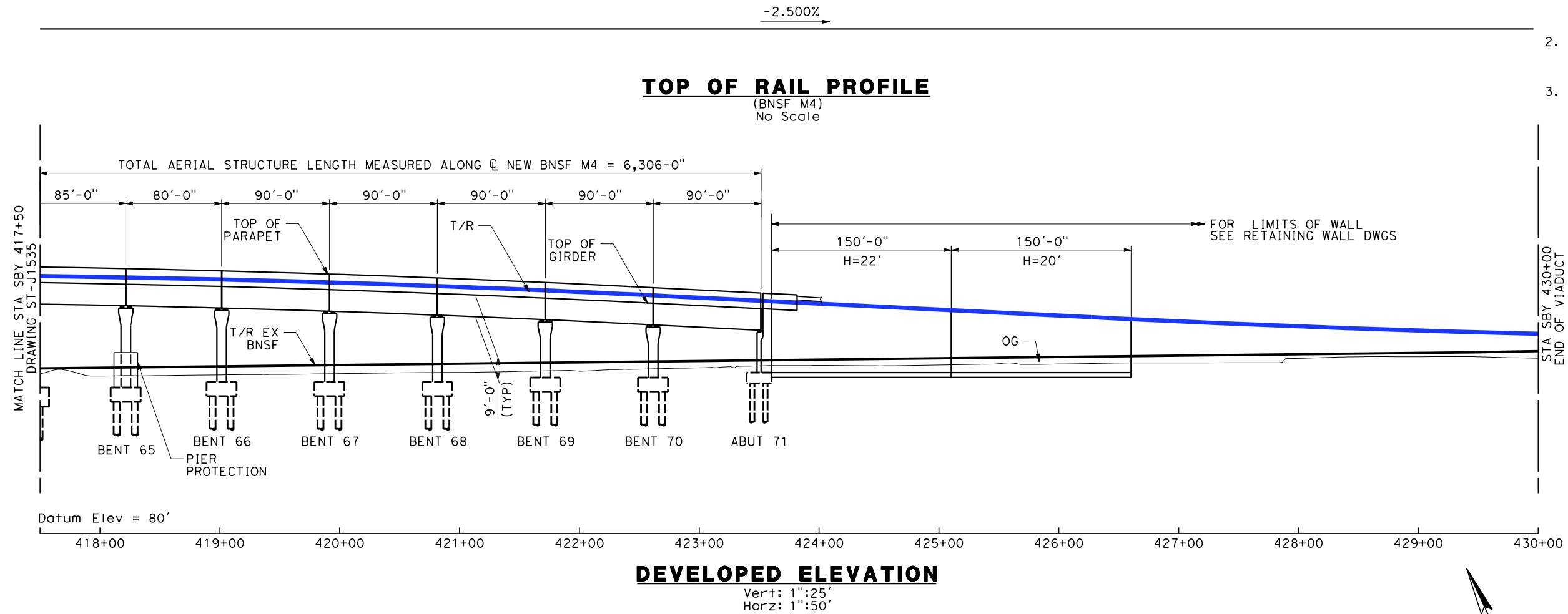
CALIFORNIA
HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT
LOS ANGELES TO ANAHEIM**

RECORD SET
PRELIMINARY ENGINEERING FOR PROJECT DEFINITION
HST AERIAL STRUCTURE #3
STA SBY 405+00 TO STA SBY 417+50

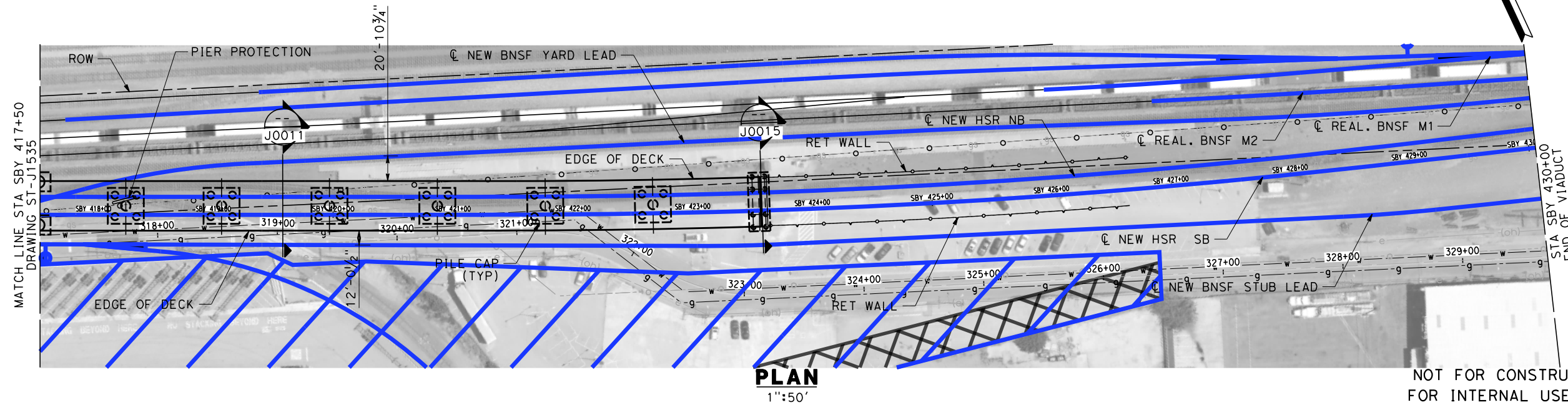
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DRAWING NO. ST-J1535
SCALE AS SHOWN
SHEET NO.

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NOTES:

1. VIADUCT SPAN LENGTHS ARE MEASURED ALONG ϕ NEW BNSF M4 UNLESS NOTED OTHERWISE.
2. PRECAST PRESTRESSED CONCRETE BOX GIRDER SPANS ARE USED UNLESS NOTED OTHERWISE.
3. RET WALL SOUTH ELEVATION IS SHOWN. RET WALL NORTH ELEVATION IS SIMILAR.



REV	DATE	BY	SUB	APP	DESCRIPTION

DESIGNED BY M. RODRIGUEZ
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IN CHARGE J. SWANSON
DATE 02/28/25

PEPD
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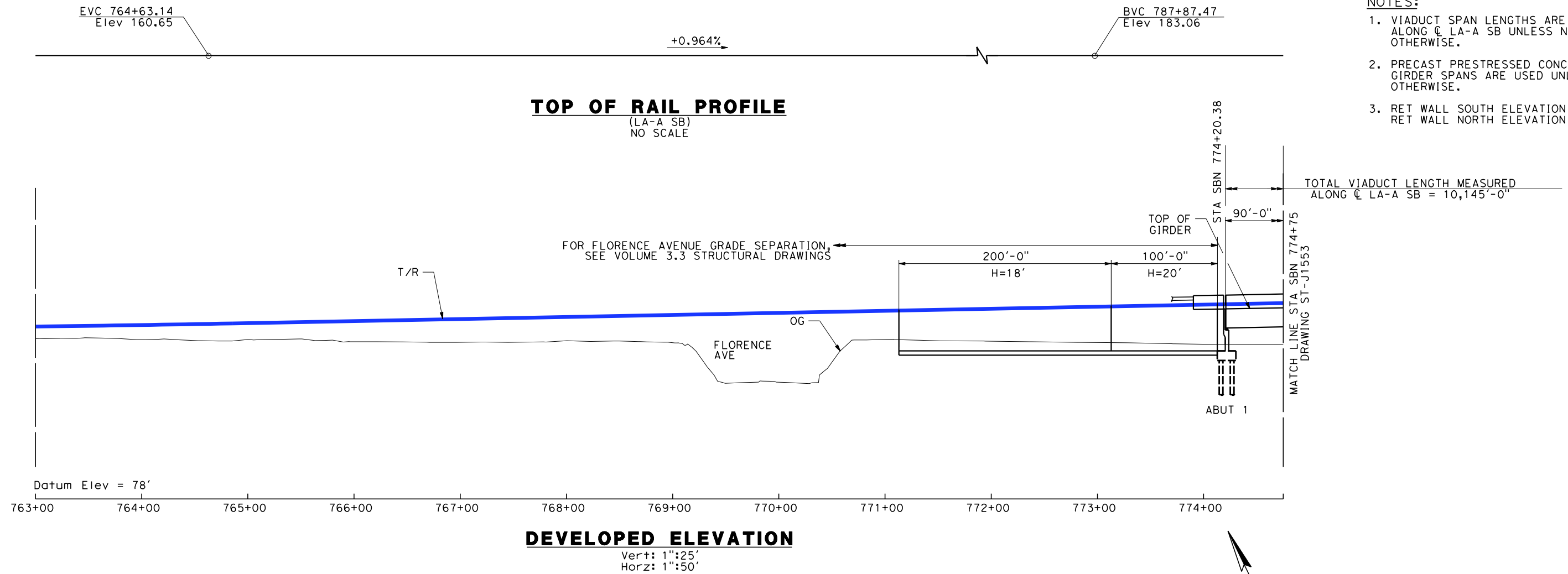


CALIFORNIA
HIGH-SPEED RAIL AUTHORITY

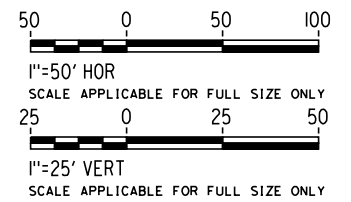
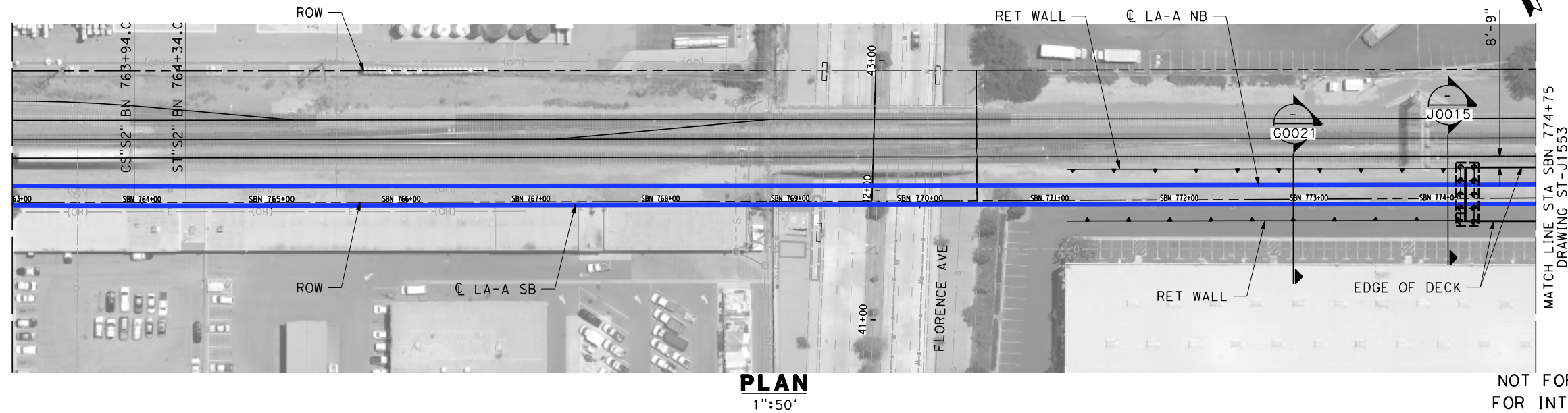
CALIFORNIA HIGH-SPEED TRAIN PROJECT
LOS ANGELES TO ANAHEIM
RECORD SET
PRELIMINARY ENGINEERING FOR PROJECT DEFINITION
HST AERIAL STRUCTURE #3
STA SBY 417+50 TO STA SBY 430+00

CONTRACT NO. HSR06-0005
DRAWING NO. ST-J1536
SCALE AS SHOWN
SHEET NO.

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- NOTES:
1. VIADUCT SPAN LENGTHS ARE MEASURED ALONG CL LA-A SB UNLESS NOTED OTHERWISE.
 2. PRECAST PRESTRESSED CONCRETE BOX GIRDER SPANS ARE USED UNLESS NOTED OTHERWISE.
 3. RET WALL SOUTH ELEVATION IS SHOWN. RET WALL NORTH ELEVATION IS SIMILAR.



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DATE 02/28/25

PEPD
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FOR INTERNAL
USE ONLY

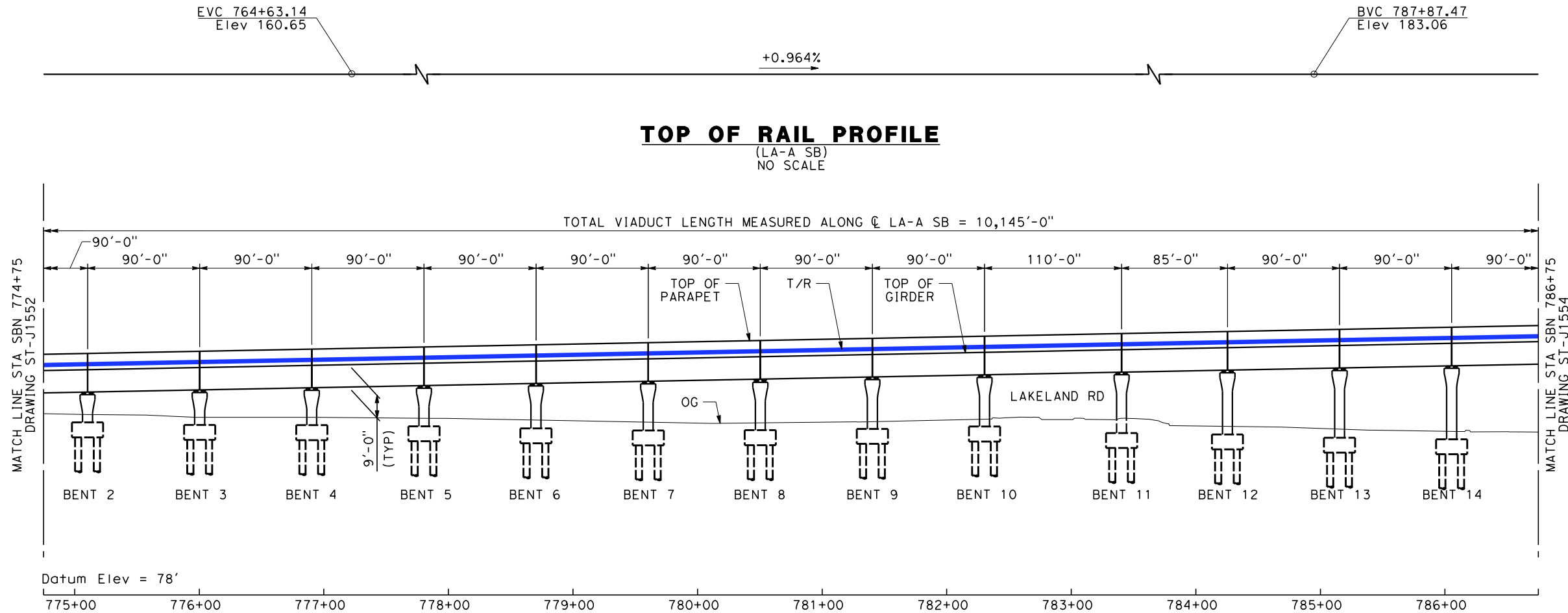
NOT FOR
CONSTRUCTION



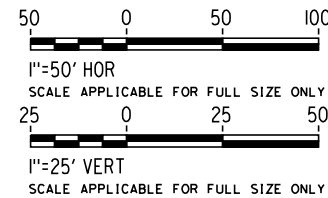
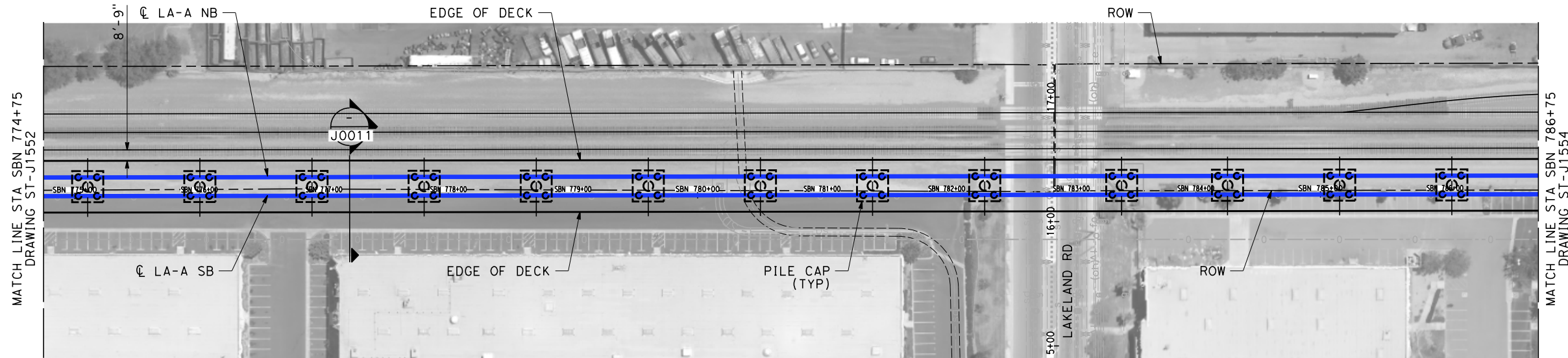
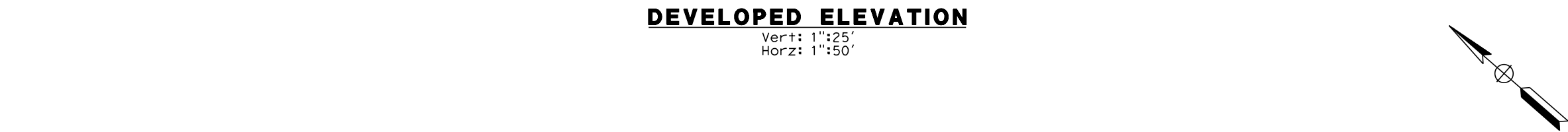
CALIFORNIA HIGH-SPEED TRAIN PROJECT
LOS ANGELES TO ANAHEIM
RECORD SET
PRELIMINARY ENGINEERING FOR PROJECT DEFINITION
HST AERIAL STRUCTURE #2
STA SBN 763+00 TO STA SBN 774+75

CONTRACT NO. HSR06-0005
DRAWING NO. ST-J1552
SCALE AS SHOWN
SHEET NO.

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- NOTES:
- VIADUCT SPAN LENGTHS ARE MEASURED ALONG ϕ LA-A SB UNLESS NOTED OTHERWISE.
 - PRECAST PRESTRESSED CONCRETE BOX GIRDER SPANS ARE USED UNLESS NOTED OTHERWISE.



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CALIFORNIA
HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT
LOS ANGELES TO ANAHEIM**

RECORD SET

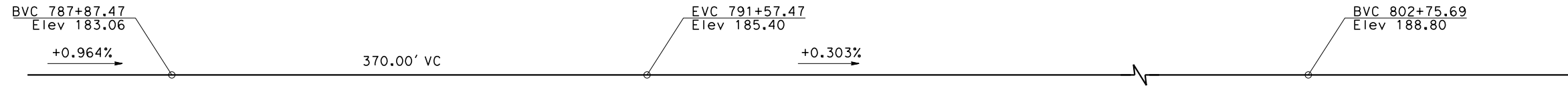
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HST AERIAL STRUCTURE #2

STA SBN 774+75 TO STA SBN 786+75

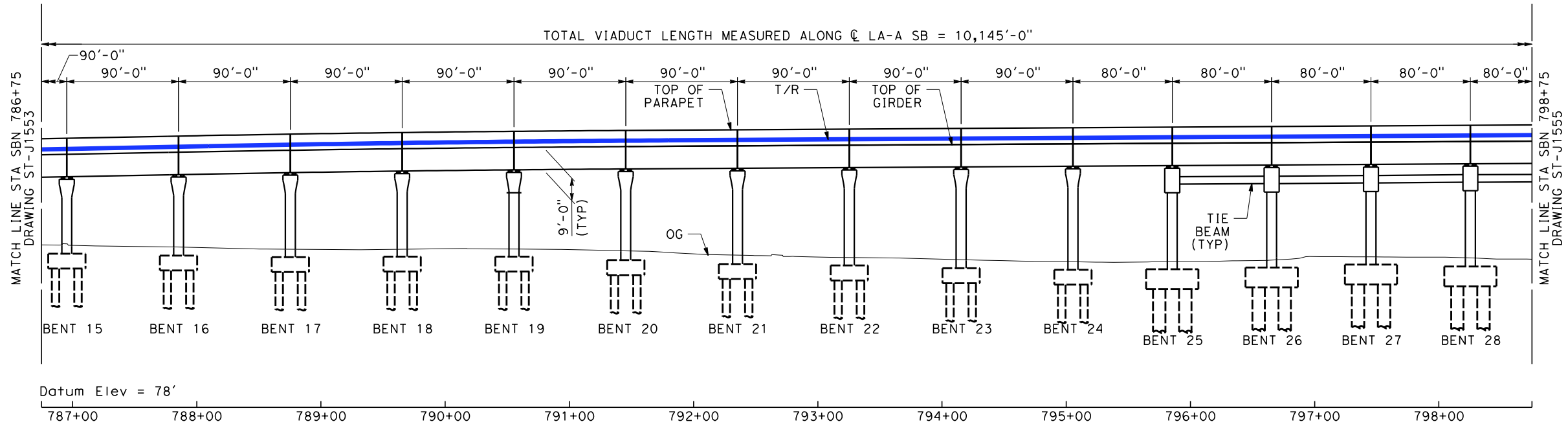
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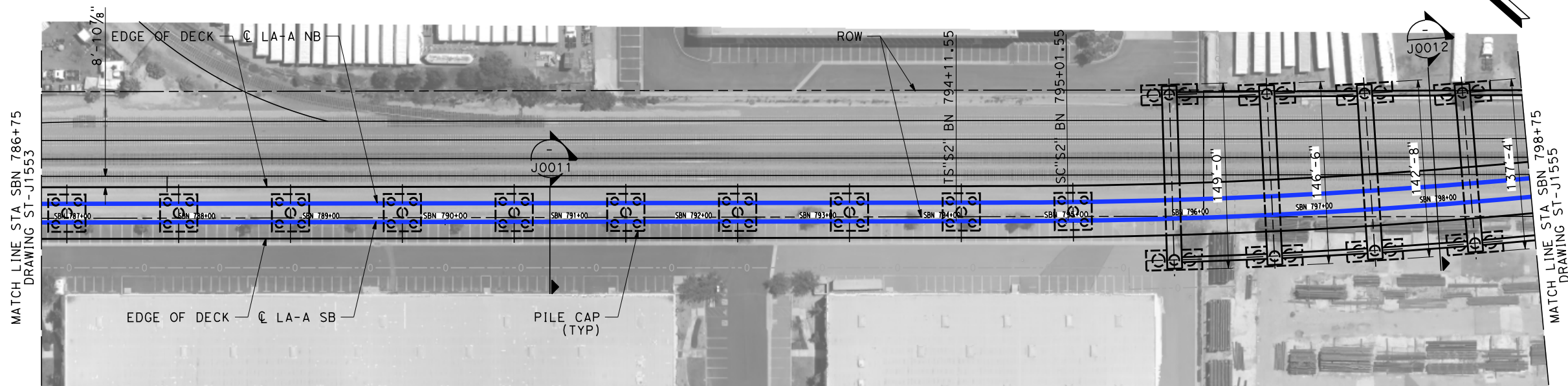
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(LA-A SB)
NO SCALE



DEVELOPED ELEVATION

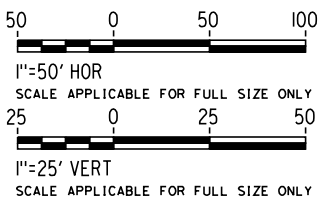
Vert: 1"=25'
Horz: 1"=50'



PLAN

1"=50'

NOT FOR CONSTRUCTION
FOR INTERNAL USE ONLY



NOTES:

- VIADUCT SPAN LENGTHS ARE MEASURED ALONG CL LA-A SB UNLESS NOTED OTHERWISE.
- PRECAST PRESTRESSED CONCRETE BOX GIRDER SPANS ARE USED UNLESS NOTED OTHERWISE.

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DATE 02/28/25

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CONSTRUCTION

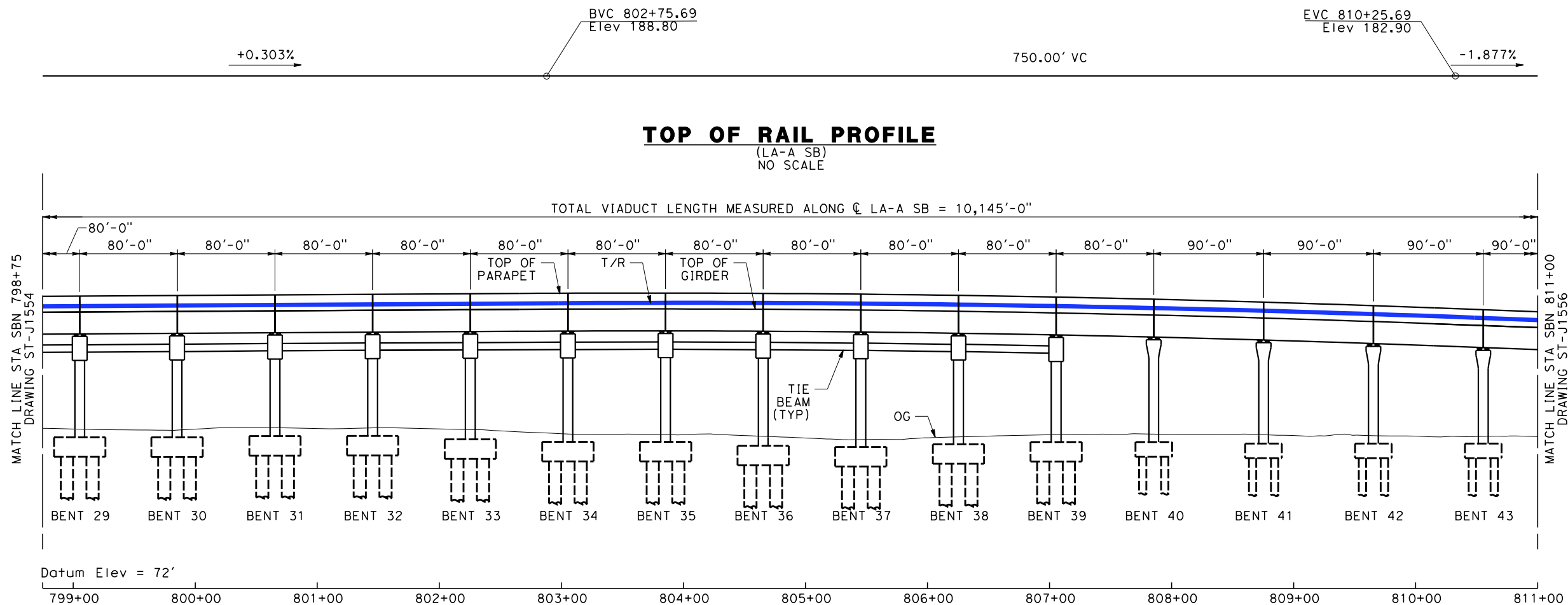


CALIFORNIA
HIGH-SPEED RAIL AUTHORITY

CALIFORNIA HIGH-SPEED TRAIN PROJECT
LOS ANGELES TO ANAHEIM
RECORD SET
PRELIMINARY ENGINEERING FOR PROJECT DEFINITION
HST AERIAL STRUCTURE #2
STA SBN 786+75 TO STA SBN 798+75

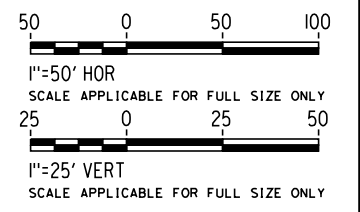
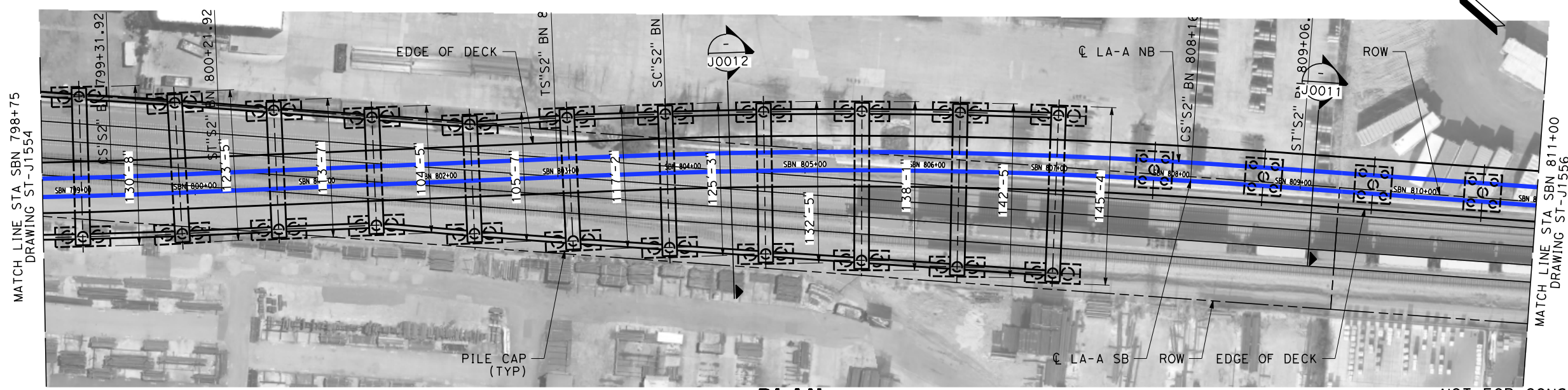
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SCALE AS SHOWN
SHEET NO.

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- NOTES:**
1. VIADUCT SPAN LENGTHS ARE MEASURED ALONG ϕ LA-A SB UNLESS NOTED OTHERWISE.
 2. PRECAST PRESTRESSED CONCRETE BOX GIRDER SPANS ARE USED UNLESS NOTED OTHERWISE.

DEVELOPED ELEVATION
Vert: 1"=25'
Horz: 1"=50'



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IN CHARGE J. SWANSON
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**CALIFORNIA HIGH-SPEED TRAIN PROJECT
LOS ANGELES TO ANAHEIM**

RECORD SET

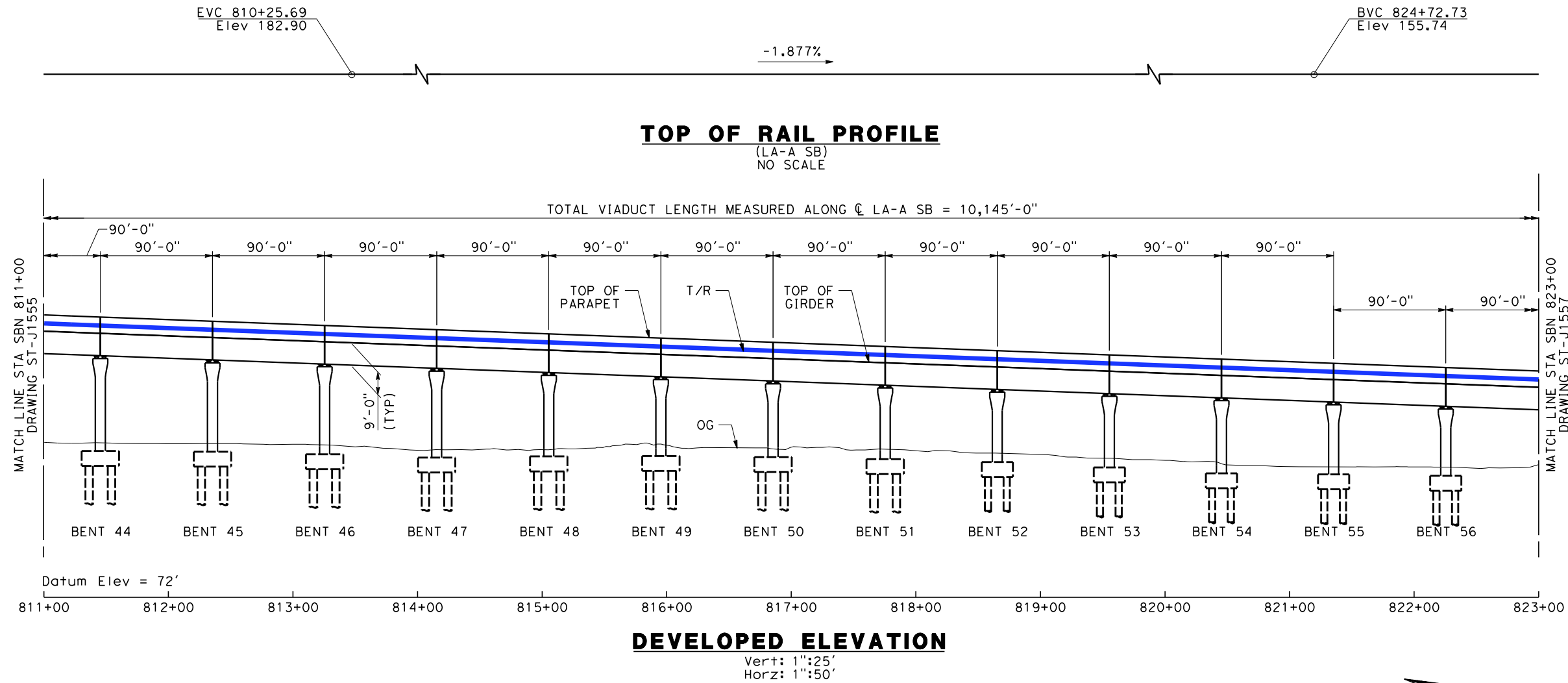
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HST AERIAL STRUCTURE #2

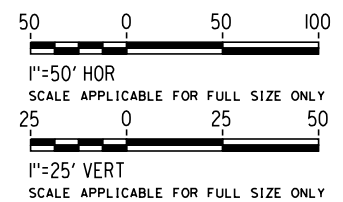
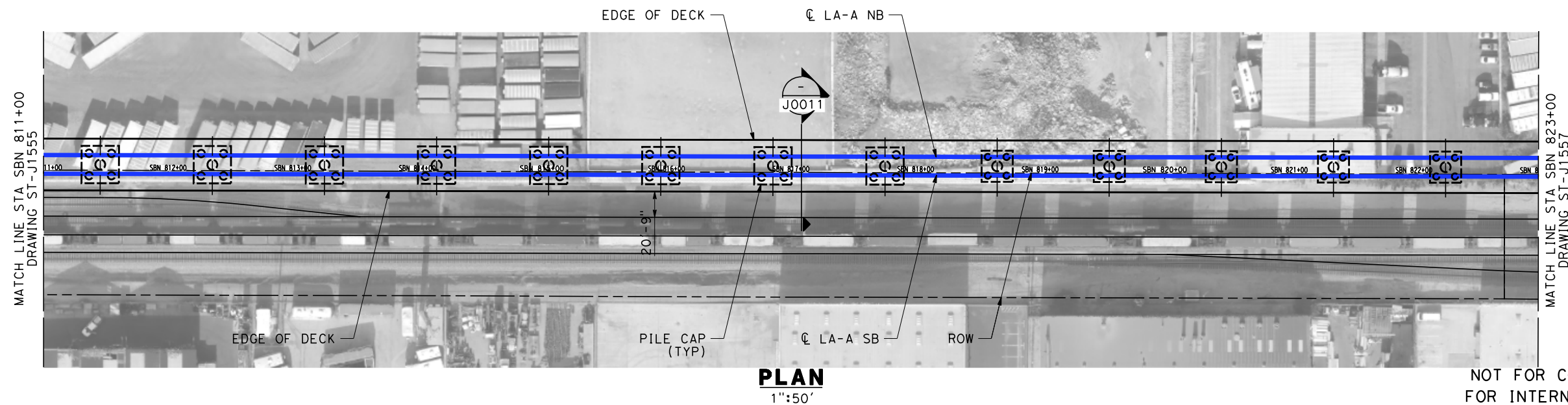
STA SBN 798+75 TO STA SBN 811+00

CONTRACT NO. HSR06-0005
DRAWING NO. ST-J1555
SCALE AS SHOWN
SHEET NO.

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- NOTES:**
1. VIADUCT SPAN LENGTHS ARE MEASURED ALONG CL LA-A SB UNLESS NOTED OTHERWISE.
 2. PRECAST PRESTRESSED CONCRETE BOX GIRDER SPANS ARE USED UNLESS NOTED OTHERWISE.



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REV	DATE	BY	SUB	APP	DESCRIPTION

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**CALIFORNIA HIGH-SPEED TRAIN PROJECT
LOS ANGELES TO ANAHEIM**

RECORD SET

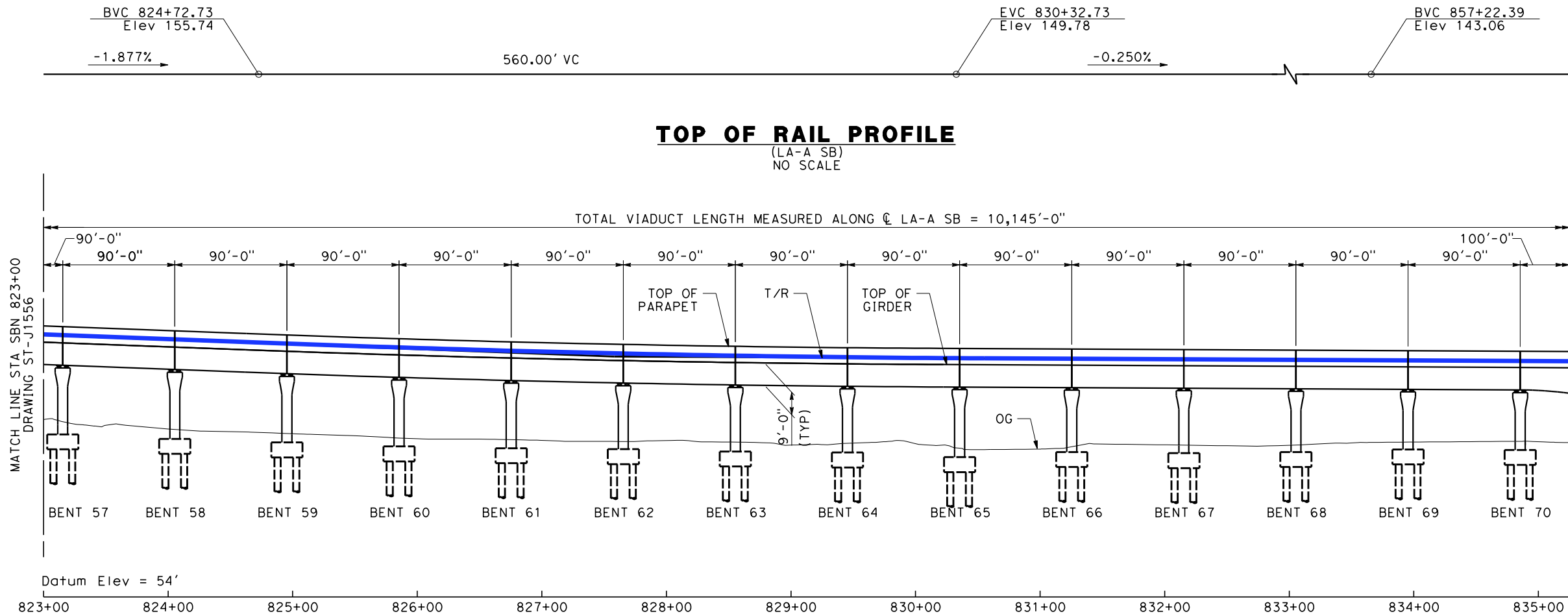
PRELIMINARY ENGINEERING FOR PROJECT DEFINITION

HST AERIAL STRUCTURE #2

STA SBN 811+00 TO STA SBN 823+00

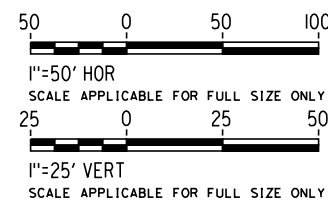
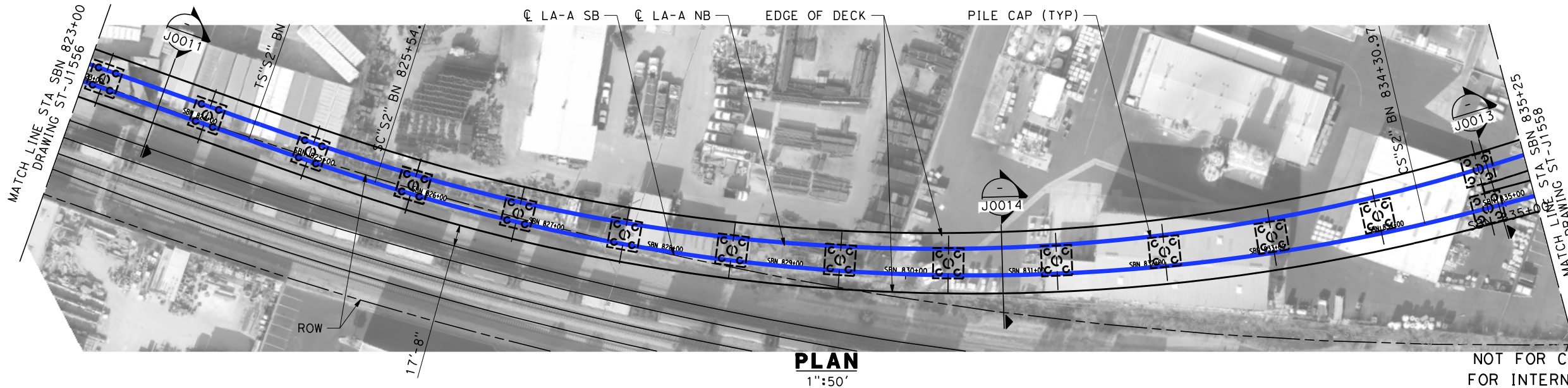
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DRAWING NO. ST-J1556
SCALE AS SHOWN
SHEET NO.

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- NOTES:
1. VIADUCT SPAN LENGTHS ARE MEASURED ALONG ϕ LA-A SB UNLESS NOTED OTHERWISE.
 2. PRECAST PRESTRESSED CONCRETE BOX GIRDER SPANS ARE USED UNLESS NOTED OTHERWISE.

DEVELOPED ELEVATION
Vert: 1"=25'
Horz: 1"=50'



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DATE

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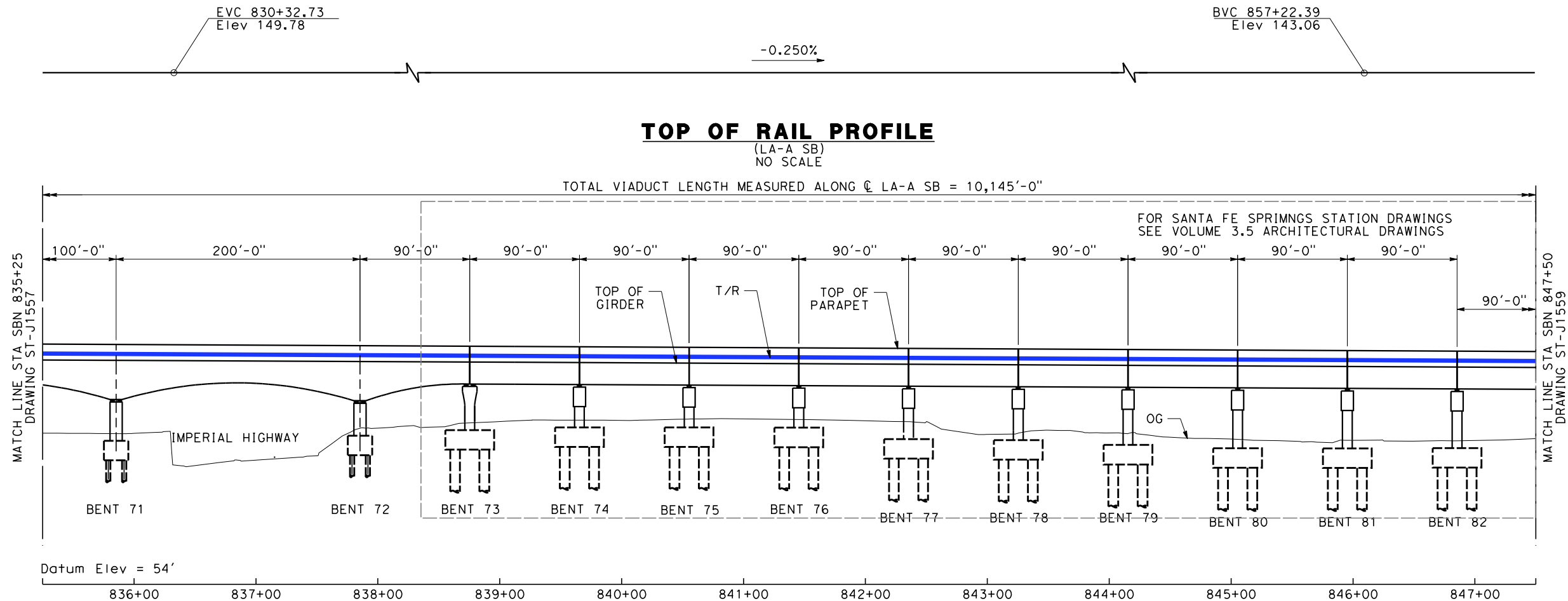
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CONSTRUCTION



CALIFORNIA HIGH-SPEED TRAIN PROJECT
LOS ANGELES TO ANAHEIM
RECORD SET
PRELIMINARY ENGINEERING FOR PROJECT DEFINITION
HST AERIAL STRUCTURE #2
STA SBN 823+00 TO STA SBN 835+25

CONTRACT NO. HSR06-0005
DRAWING NO. ST-J1557
SCALE AS SHOWN
SHEET NO.

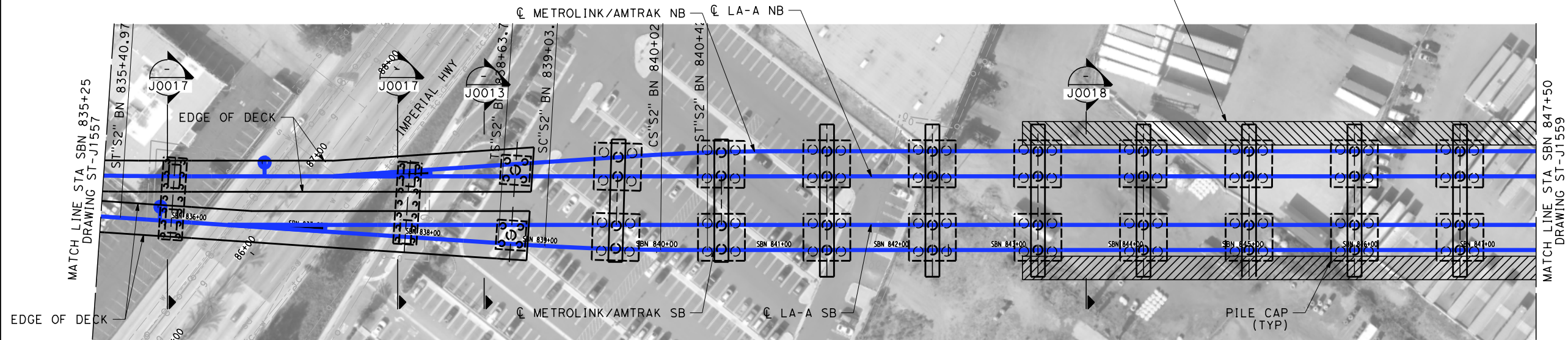
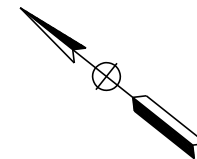
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DEVELOPED ELEVATION

Vert: 1"=25'
Horz: 1"=50'

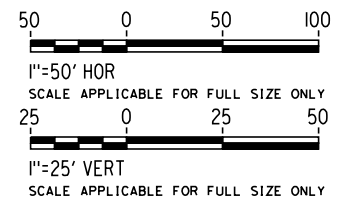
FOR INFORMATION REGARDING
PLATFORM LENGTH
SEE ARCHITECTURAL DRAWINGS IN
VOLUME 3.5 (TYP)



PLAN

1"=50'

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NOTES:

- VIADUCT SPAN LENGTHS ARE MEASURED ALONG C LA-A SB UNLESS NOTED OTHERWISE.
- PRECAST PRESTRESSED CONCRETE BOX GIRDER SPANS ARE USED UNLESS NOTED OTHERWISE.

REV	DATE	BY	SUB	APP	DESCRIPTION

DESIGNED BY M. RODRIGUEZ
DRAWN BY Z. OHN
CHECKED BY D. SARETSKY
IN CHARGE J. SWANSON
DATE 02/28/25

PEPD
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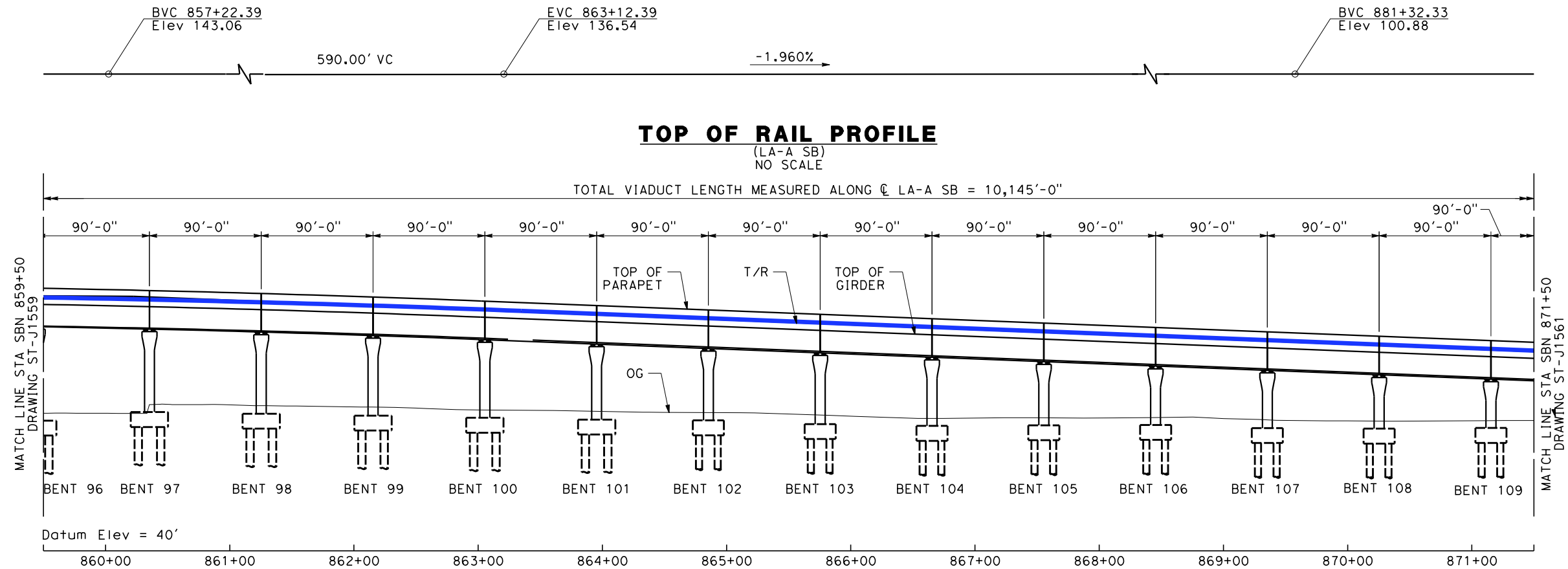


CALIFORNIA
HIGH-SPEED RAIL AUTHORITY

CALIFORNIA HIGH-SPEED TRAIN PROJECT
LOS ANGELES TO ANAHEIM
RECORD SET
PRELIMINARY ENGINEERING FOR PROJECT DEFINITION
HST AERIAL STRUCTURE #2
STA SBN 835+25 TO STA SBN 847+50

CONTRACT NO. HSR06-0005
DRAWING NO. ST-J1558
SCALE AS SHOWN
SHEET NO.

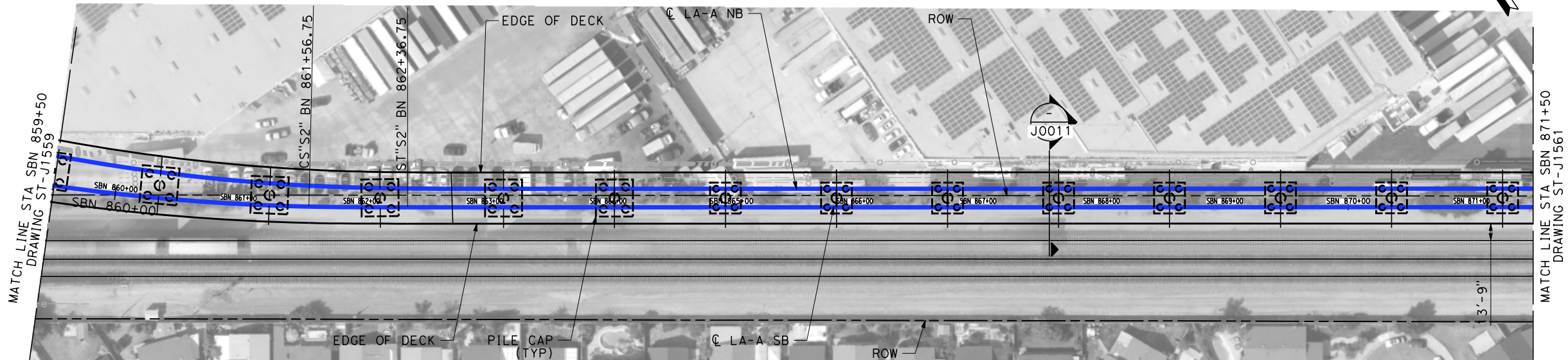
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- NOTES:
- VIADUCT SPAN LENGTHS ARE MEASURED ALONG CL LA-A SB UNLESS NOTED OTHERWISE.
 - PRECAST PRESTRESSED CONCRETE BOX GIRDER SPANS ARE USED UNLESS NOTED OTHERWISE.

DEVELOPED ELEVATION

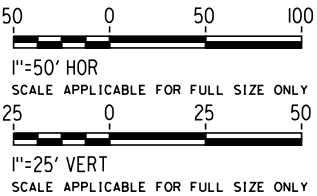
Vert: 1"=25'
Horz: 1"=50'



PLAN

1"=50'

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DESIGNED BY M. RODRIGUEZ
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IN CHARGE J. SWANSON
DATE 02/28/25

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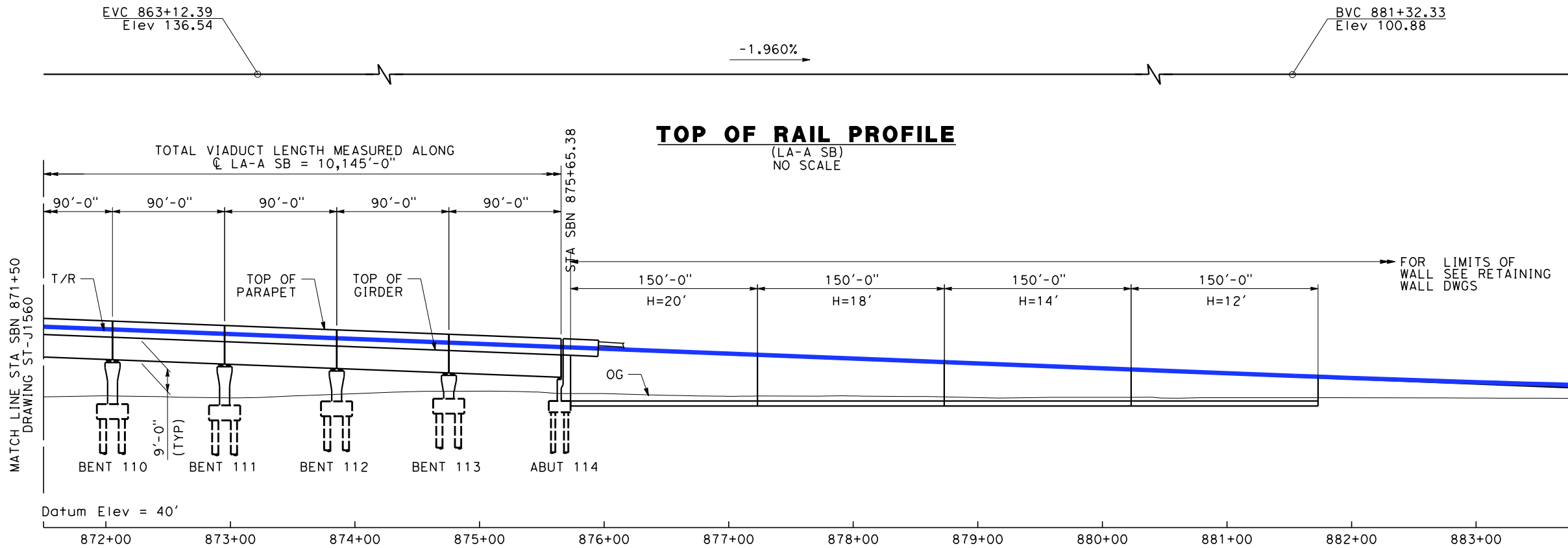
NOT FOR
CONSTRUCTION



CALIFORNIA HIGH-SPEED TRAIN PROJECT
LOS ANGELES TO ANAHEIM
RECORD SET
PRELIMINARY ENGINEERING FOR PROJECT DEFINITION
HST AERIAL STRUCTURE #2
STA SBN 859+50 TO STA SBN 871+50

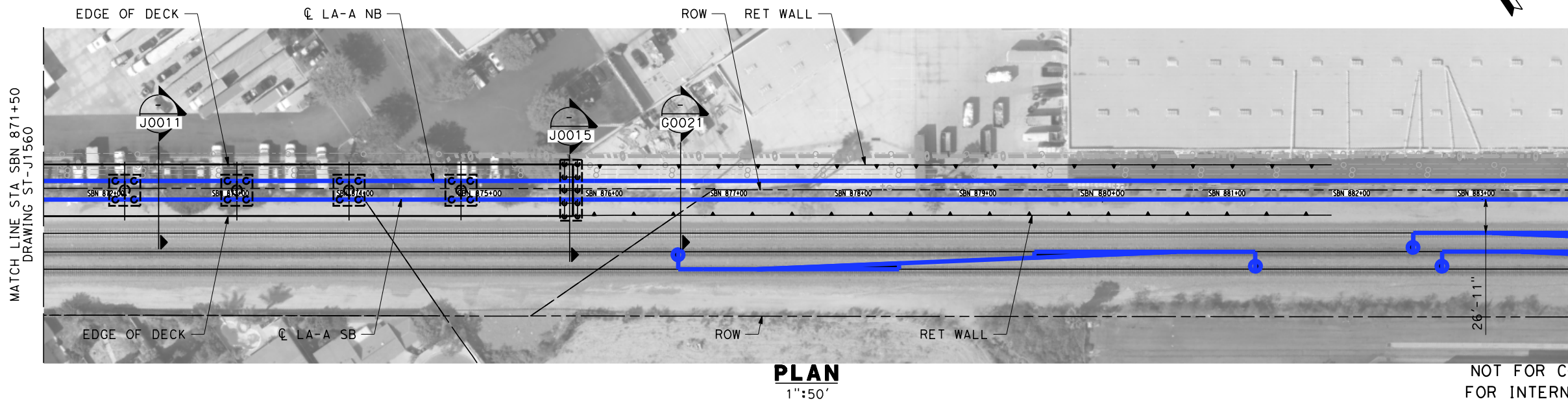
CONTRACT NO. HSR06-0005
DRAWING NO. ST-J1560
SCALE AS SHOWN
SHEET NO.

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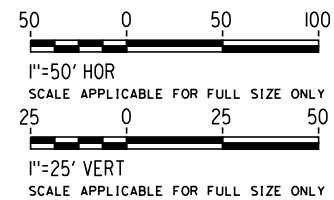


- NOTES:
1. VIADUCT SPAN LENGTHS ARE MEASURED ALONG CL LA-A SB UNLESS NOTED OTHERWISE.
 2. PRECAST PRESTRESSED CONCRETE BOX GIRDER SPANS ARE USED UNLESS NOTED OTHERWISE.
 3. RET WALL SOUTH ELEVATION IS SHOWN. RET WALL NORTH ELEVATION IS SIMILAR.

DEVELOPED ELEVATION
Vert: 1"=25'
Horz: 1"=50'



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DESIGNED BY M. RODRIGUEZ
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CHECKED BY D. SARETSKY
IN CHARGE J. SWANSON
DATE 02/28/25

PEPD
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NOT FOR
CONSTRUCTION



CALIFORNIA
HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT
LOS ANGELES TO ANAHEIM**

RECORD SET

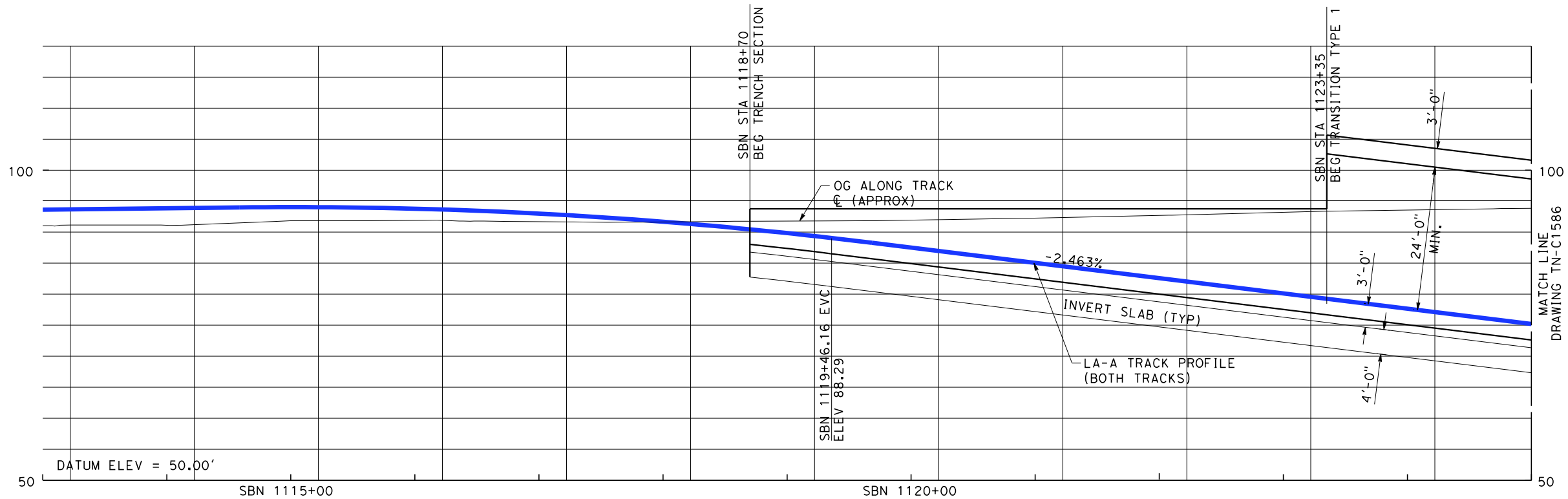
PRELIMINARY ENGINEERING FOR PROJECT DEFINITION

HST AERIAL STRUCTURE #2

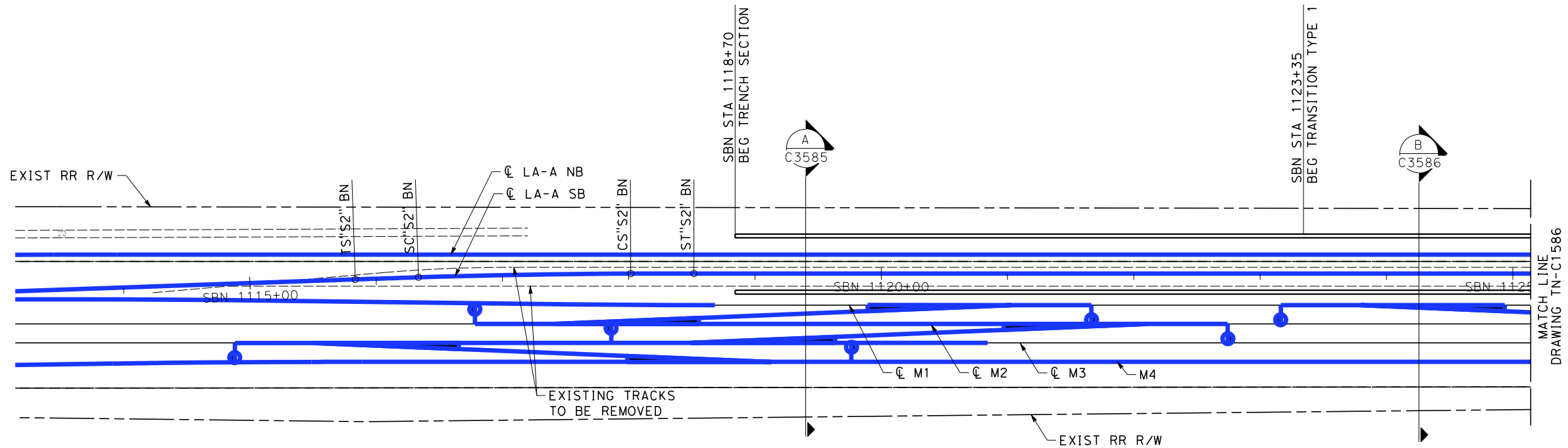
STA SBN 871+50 TO STA SBN 883+75

CONTRACT NO. HSR06-0005
DRAWING NO. ST-J1561
SCALE AS SHOWN
SHEET NO.

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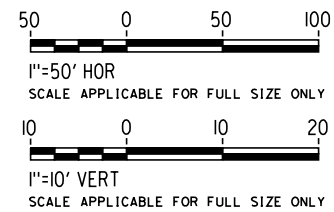


ELEVATION
Vert: 1"=10'
Horz: 1"=50'



PLAN
1"=50'

NOT FOR CONSTRUCTION
FOR INTERNAL USE ONLY

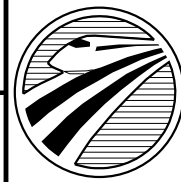


REV	DATE	BY	SUB	APP	DESCRIPTION

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CHECKED BY K. ABEY
IN CHARGE G. DAVIDSON
DATE 02/28/25

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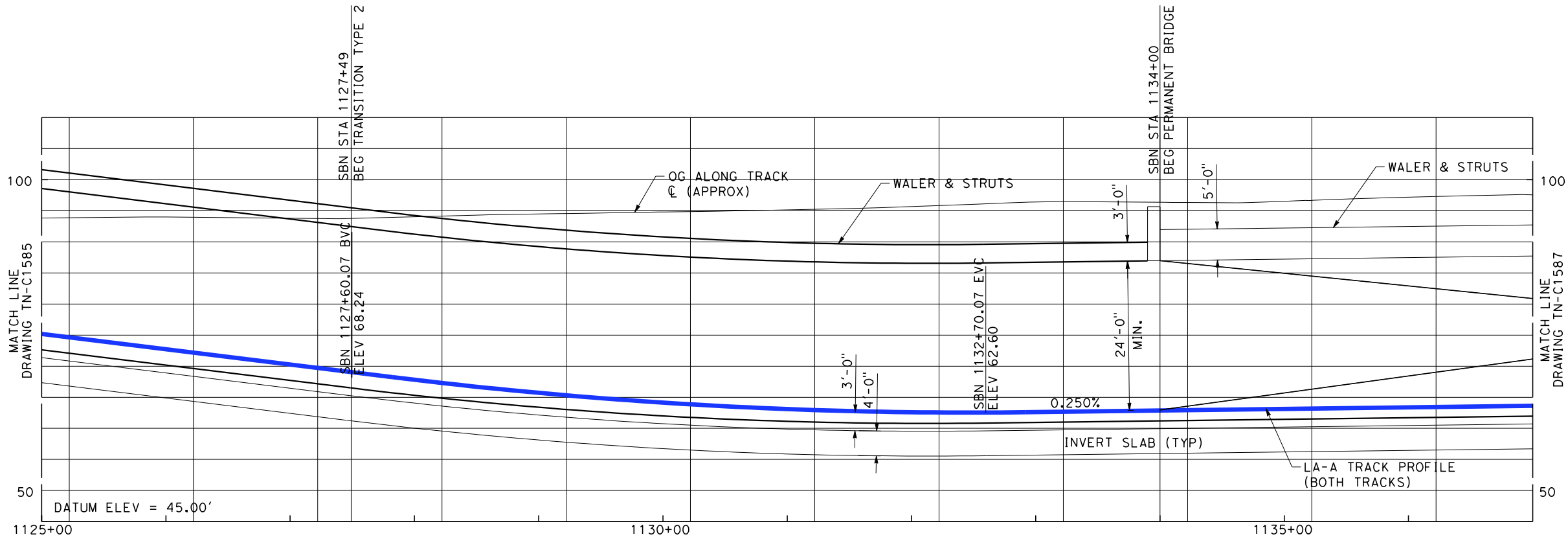
CALIFORNIA
HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT
LOS ANGELES TO ANAHEIM**

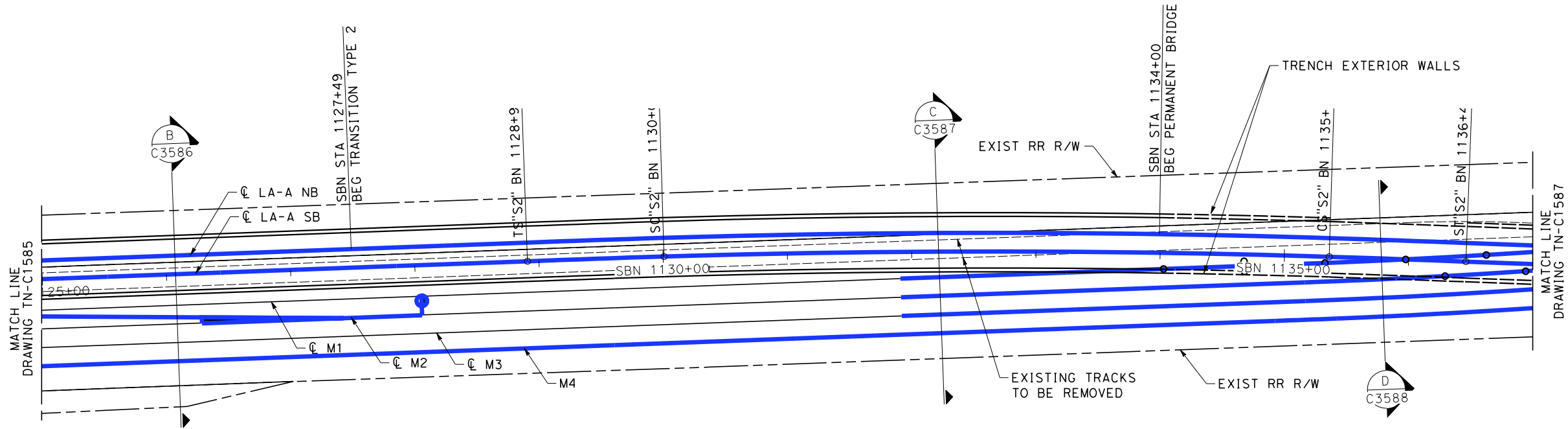
RECORD SET
PRELIMINARY ENGINEERING FOR PROJECT DEFINITION
DALE ST TO GILBERT ST INVERT LEVEL PLAN
SBN STA 1114+56 TO SBN STA 1125+00

CONTRACT NO. HSR06-0005
DRAWING NO. TN-C1585
SCALE AS SHOWN
SHEET NO.

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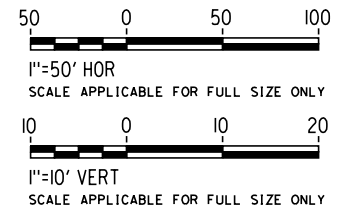


ELEVATION
Vert: 1"=10'
Horz: 1"=50'



PLAN
1"=50'

NOT FOR CONSTRUCTION
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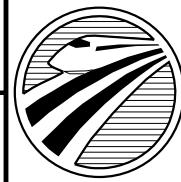


REV	DATE	BY	SUB	APP	DESCRIPTION

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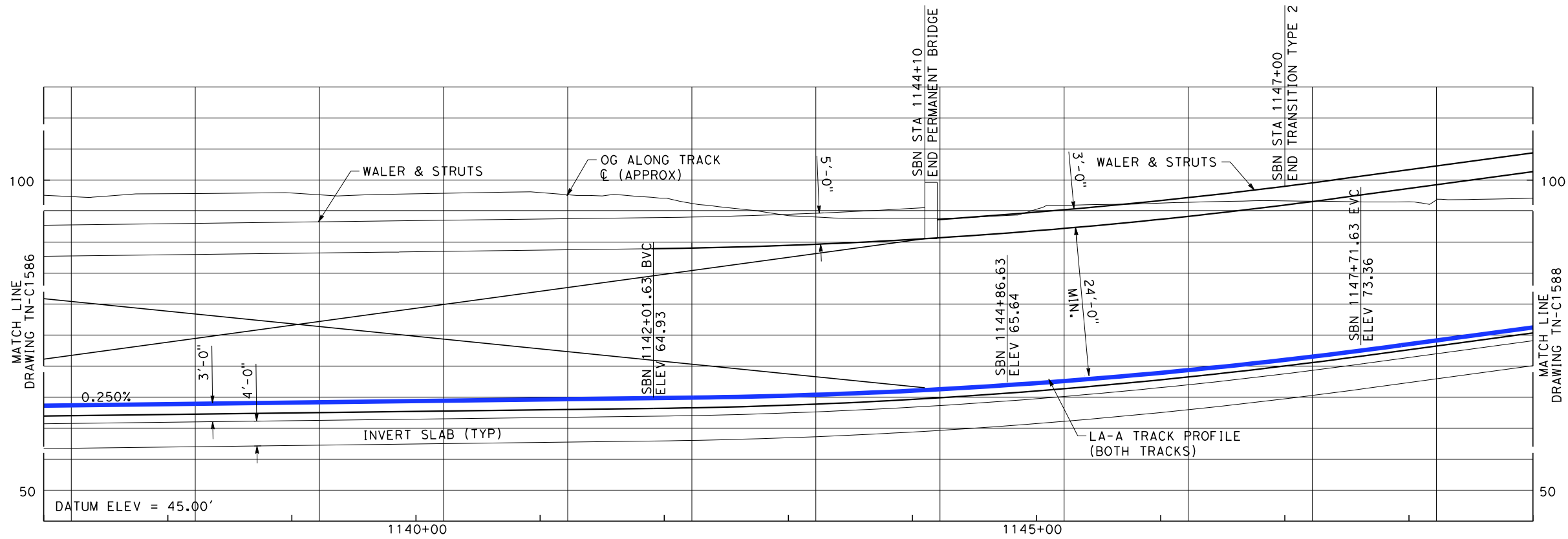
CALIFORNIA
HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT
LOS ANGELES TO ANAHEIM**

RECORD SET
PRELIMINARY ENGINEERING FOR PROJECT DEFINITION
DALE ST TO GILBERT ST INVERT LEVEL PLAN
SBN STA 1125+00 TO SBN STA 1137+00

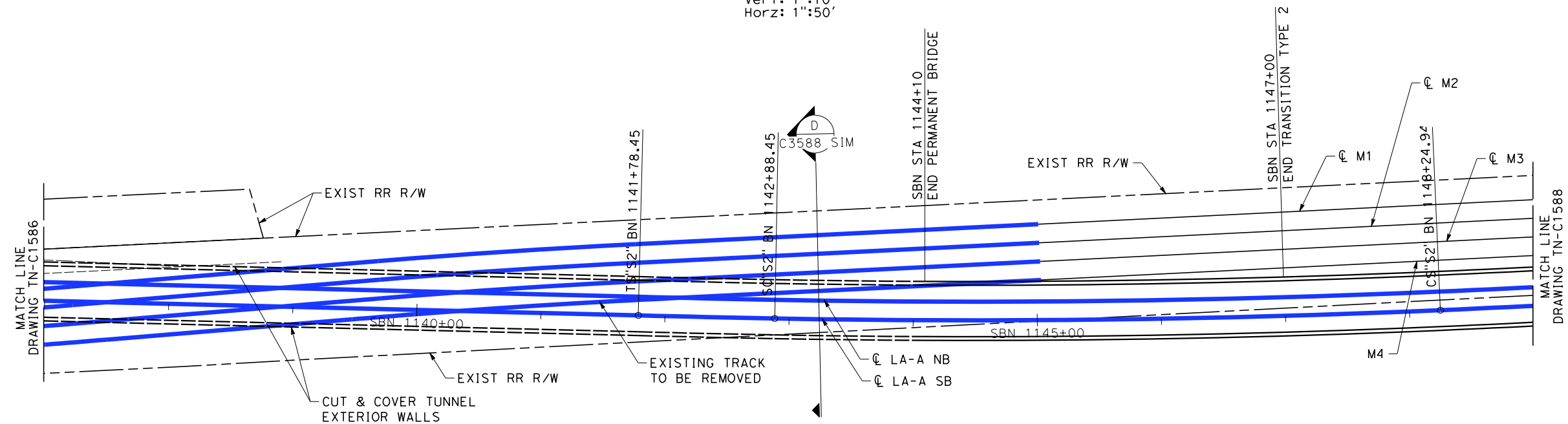
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SCALE AS SHOWN
SHEET NO.

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ELEVATION

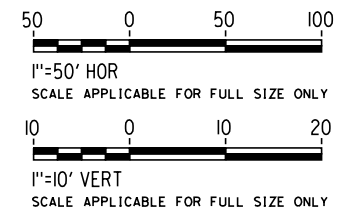
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Horz: 1"=50'



PLAN

1"=50'

NOT FOR CONSTRUCTION
FOR INTERNAL USE ONLY

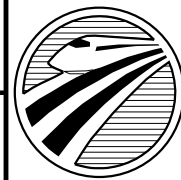


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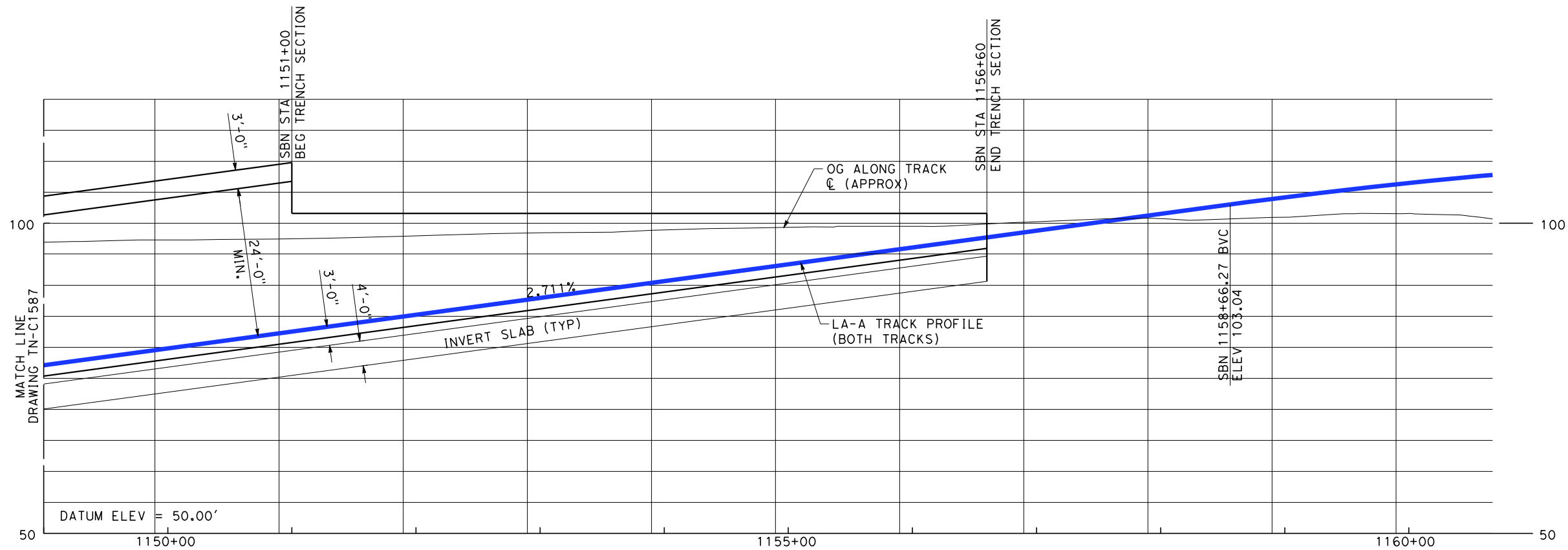
CALIFORNIA
HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT
LOS ANGELES TO ANAHEIM**

RECORD SET
PRELIMINARY ENGINEERING FOR PROJECT DEFINITION
DALE ST TO GILBERT ST INVERT LEVEL PLAN
SBN STA 1137+00 TO SBN STA 1149+00

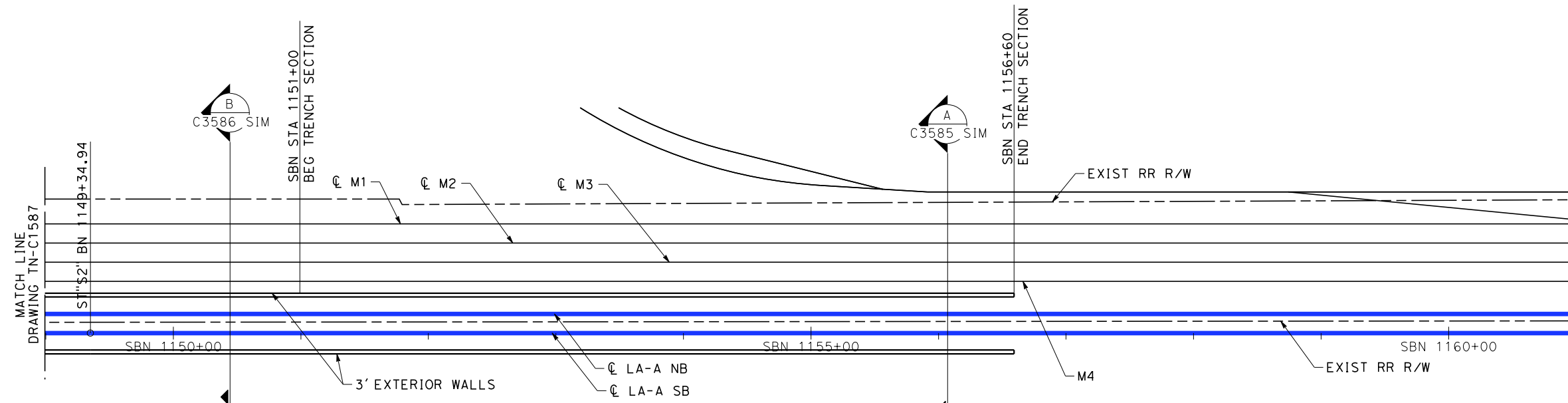
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DRAWING NO. TN-C1587
SCALE AS SHOWN
SHEET NO.

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ELEVATION

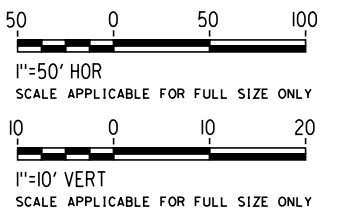
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Horz: 1"=50'



PLAN

1"=50'

NOT FOR CONSTRUCTION
FOR INTERNAL USE ONLY



REV	DATE	BY	SUB	APP	DESCRIPTION

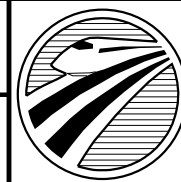
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CHECKED BY K. ABEY
IN CHARGE G. DAVIDSON
DATE 02/28/25

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stv

McMILLEN
JACOBS
ASSOCIATES



CALIFORNIA
HIGH-SPEED RAIL AUTHORITY

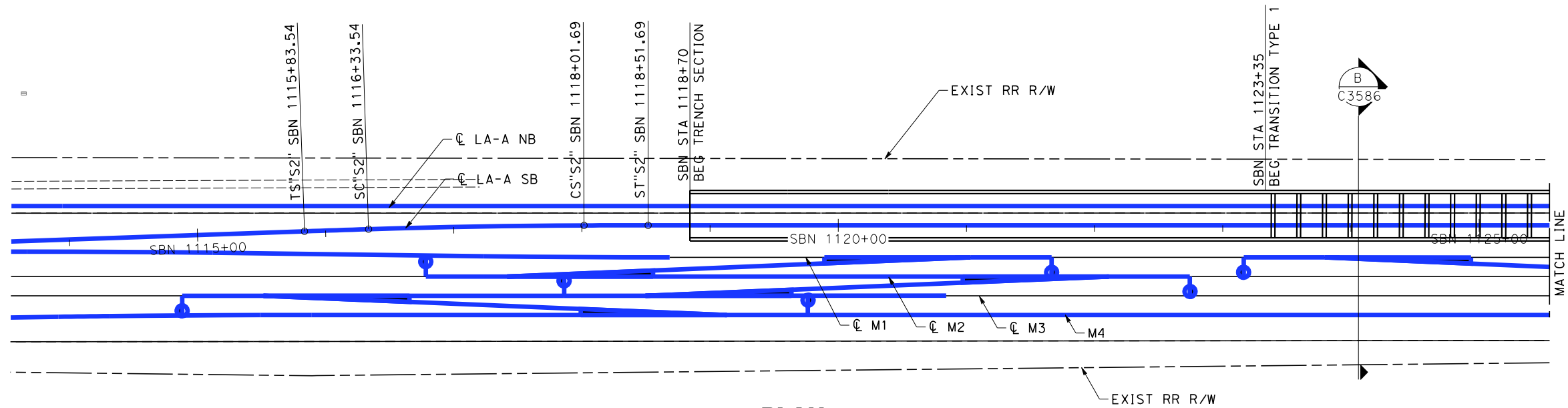
CALIFORNIA HIGH-SPEED TRAIN PROJECT LOS ANGELES TO ANAHEIM

RECORD SET
PRELIMINARY ENGINEERING FOR PROJECT DEFINITION
DALE ST TO GILBERT ST INVERT LEVEL PLAN
SBN STA 1149+00 TO SBN STA 1159+51

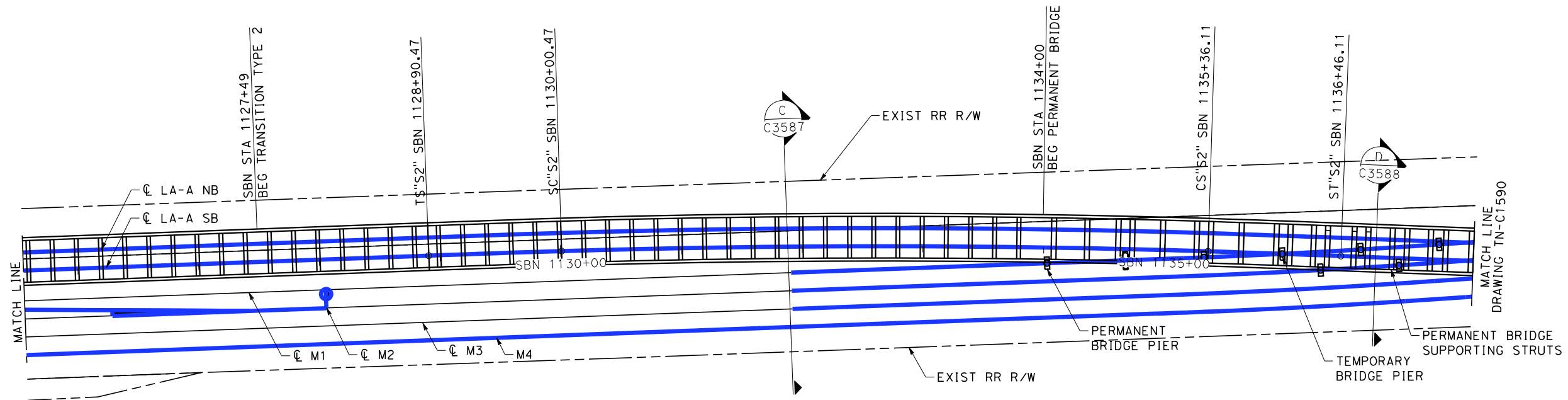
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DRAWING NO. TN-C1588
SCALE AS SHOWN
SHEET NO.

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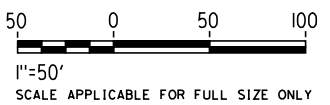
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PLAN
1"=50'



PLAN
1"=50'



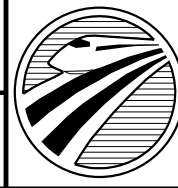
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DATE 02/28/25

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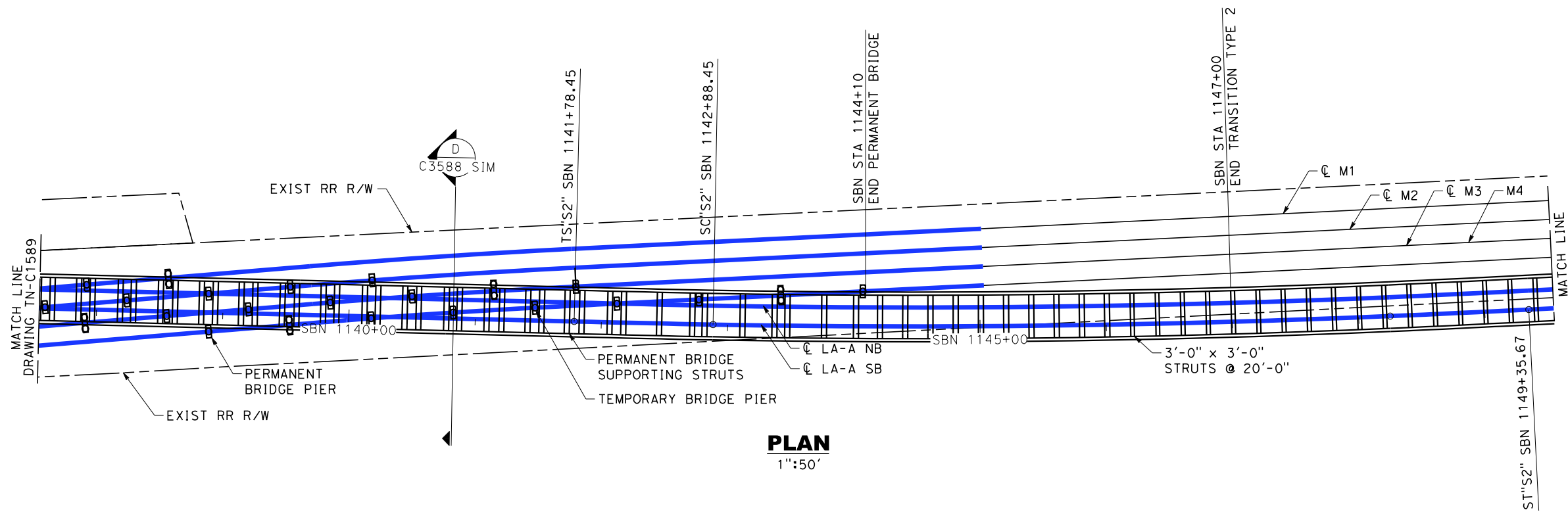
CALIFORNIA
HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT
LOS ANGELES TO ANAHEIM**

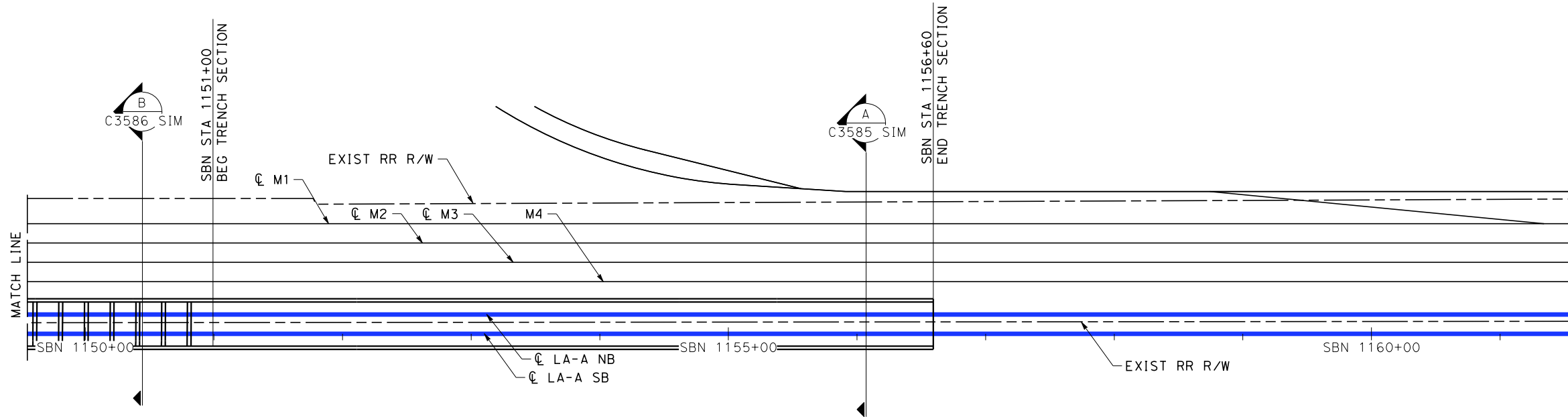
RECORD SET
PRELIMINARY ENGINEERING FOR PROJECT DEFINITION
DALE ST TO GILBERT ST
GRADE LEVEL PLANS - 1 OF 2

CONTRACT NO. HSR06-0005
DRAWING NO. TN-C1589
SCALE AS SHOWN
SHEET NO.

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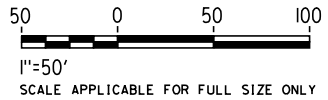


PLAN
1"=50'



PLAN
1"=50'

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FOR INTERNAL USE ONLY



REV	DATE	BY	SUB	APP	DESCRIPTION

DESIGNED BY G. ROGOFF
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IN CHARGE G. DAVIDSON
DATE 02/28/25

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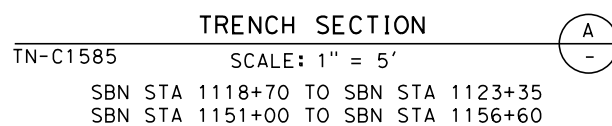
CALIFORNIA
HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT
LOS ANGELES TO ANAHEIM**

RECORD SET

PRELIMINARY ENGINEERING FOR PROJECT DEFINITION
DALE ST TO GILBERT ST
GRADE LEVEL PLANS - 2 OF 2

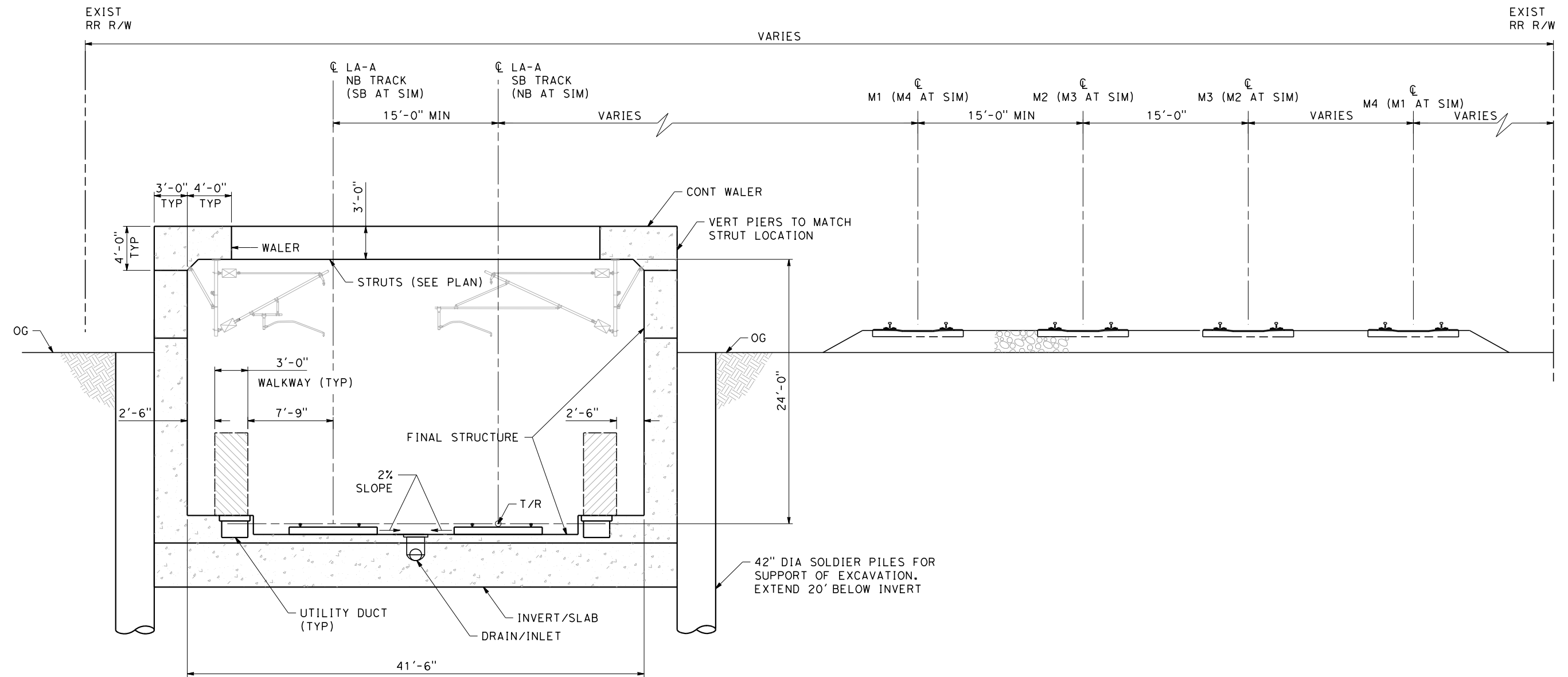
CONTRACT NO. HSR06-0005
DRAWING NO. TN-C1590
SCALE AS SHOWN
SHEET NO.



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1"=5'
SCALE APPLICABLE FOR FULL SIZE ONLY

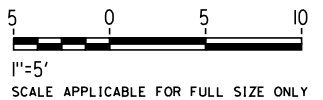
						DESIGNED BY G. ROGOFF	PEPD SUBMITTAL FOR INTERNAL USE ONLY NOT FOR CONSTRUCTION				CALIFORNIA HIGH-SPEED TRAIN PROJECT LOS ANGELES TO ANAHEIM RECORD SET PRELIMINARY ENGINEERING FOR PROJECT DEFINITION DALE ST TO GILBERT ST TRENCH SECTION	CONTRACT NO. HSR06-0005
					DRAWN BY W. OSTERMANN	DRAWING NO. TN-C3585						
					CHECKED BY K. ABEY	SCALE AS SHOWN						
					IN CHARGE G. DAVIDSON	SHEET NO.						
REV	DATE	BY	SUB	APP	DESCRIPTION	DATE 02/28/25						

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TRANSITION SECTION - TYPE 1 (B)
TN-C1585 SCALE: 1" = 5'
TN-C1586
TN-C1589
SBN STA 1123+35 TO SBN STA 1127+50
SBN STA 1147+00 TO SBN STA 1151+00

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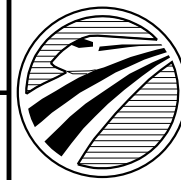


REV	DATE	BY	SUB	APP	DESCRIPTION

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DATE 02/28/25

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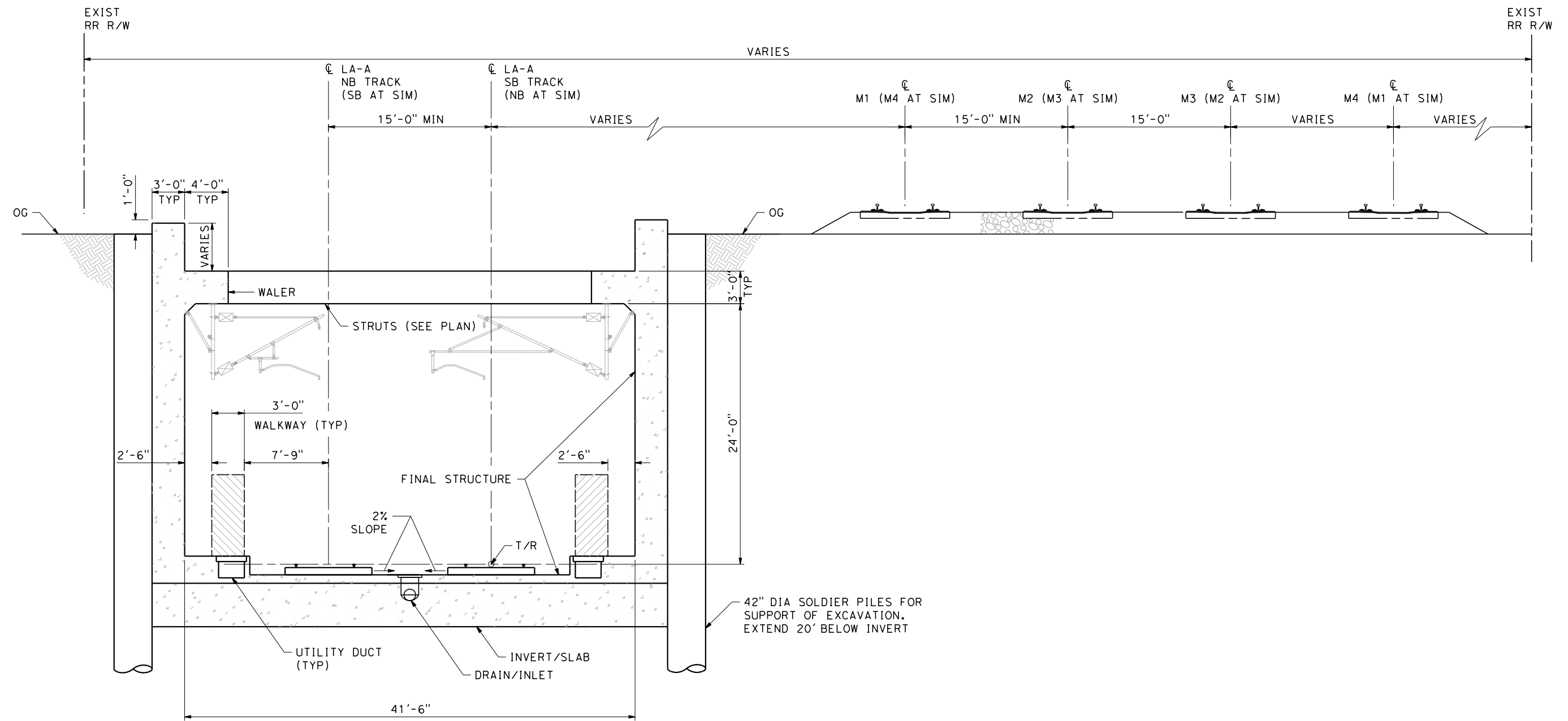
CALIFORNIA
HIGH-SPEED RAIL AUTHORITY

CALIFORNIA HIGH-SPEED TRAIN PROJECT
LOS ANGELES TO ANAHEIM

RECORD SET
PRELIMINARY ENGINEERING FOR PROJECT DEFINITION
DALE ST TO GILBERT ST
TRANSITION SECTION TYPE 1 BRACED TRENCH

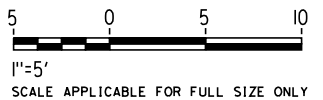
CONTRACT NO. HSR06-0005
DRAWING NO. TN-C3586
SCALE AS SHOWN
SHEET NO.

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TRANSITION SECTION - TYPE 2 (C)
TN-C1585 SCALE: 1" = 5'
TN-C1586
TN-C1589
SBN STA 1127+49 TO SBN STA 1134+00
SBN STA 1144+10 TO SBN STA 1147+00

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FOR INTERNAL USE ONLY

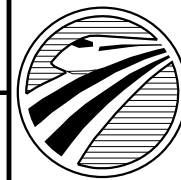


REV	DATE	BY	SUB	APP	DESCRIPTION

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CHECKED BY K. ABEY
IN CHARGE G. DAVIDSON
DATE 02/28/25

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CONSTRUCTION



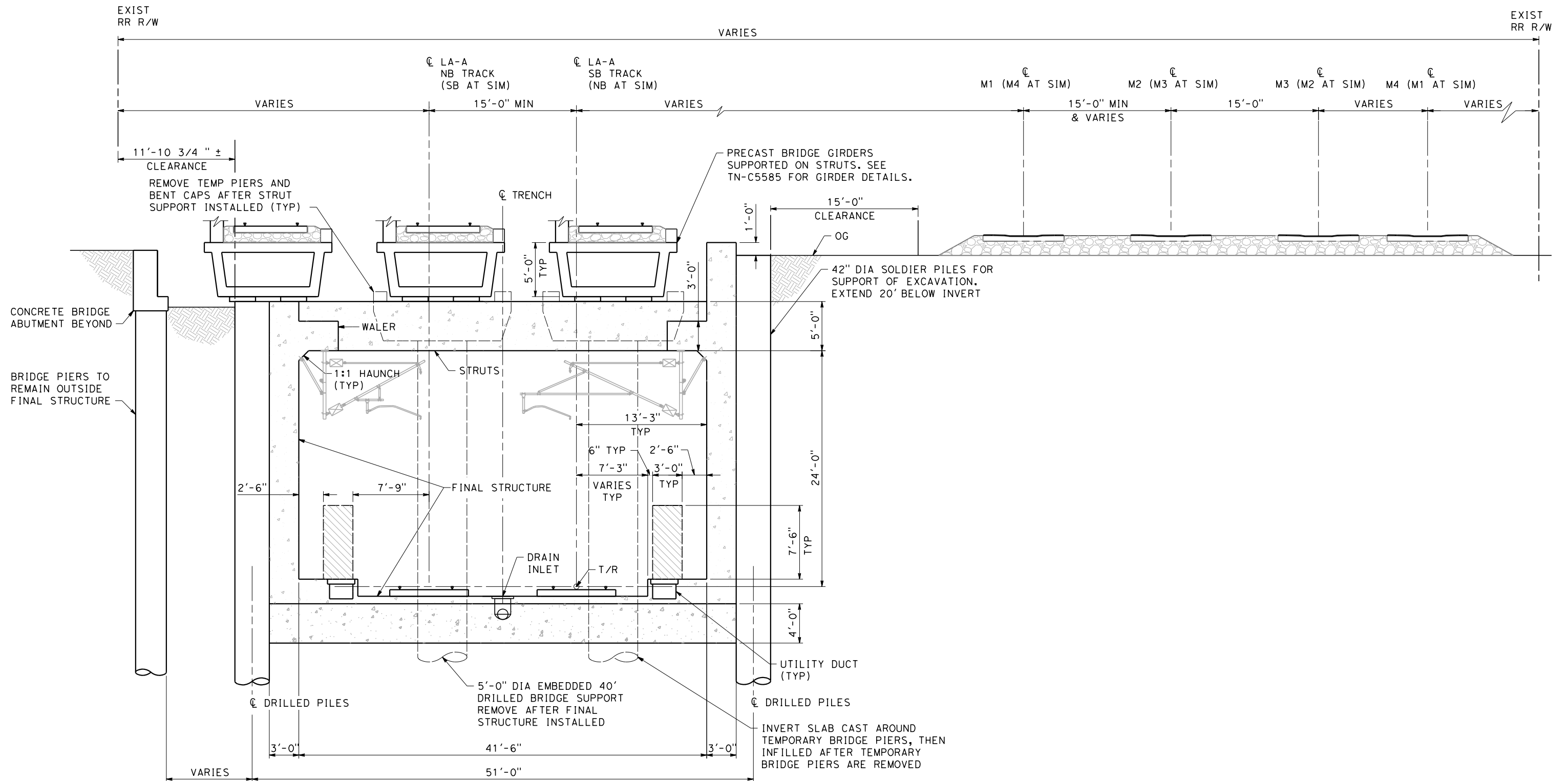
CALIFORNIA
HIGH-SPEED RAIL AUTHORITY

CALIFORNIA HIGH-SPEED TRAIN PROJECT
LOS ANGELES TO ANAHEIM

RECORD SET
PRELIMINARY ENGINEERING FOR PROJECT DEFINITION
DALE ST TO GILBERT ST
TRANSITION SECTION TYPE 2 BRACED TRENCH

CONTRACT NO. HSR06-0005
DRAWING NO. TN-C3587
SCALE AS SHOWN
SHEET NO.

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PERMANENT BRIDGE SECTION

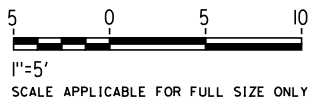


TN-C1586
TN-C1587
TN-C1589

SCALE: 1" = 5'

SBN STA 1134+00 TO SBN STA 1144+10

NOT FOR CONSTRUCTION
FOR INTERNAL USE ONLY

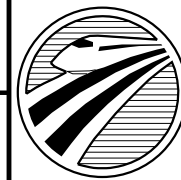


REV	DATE	BY	SUB	APP	DESCRIPTION

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DATE 02/28/25

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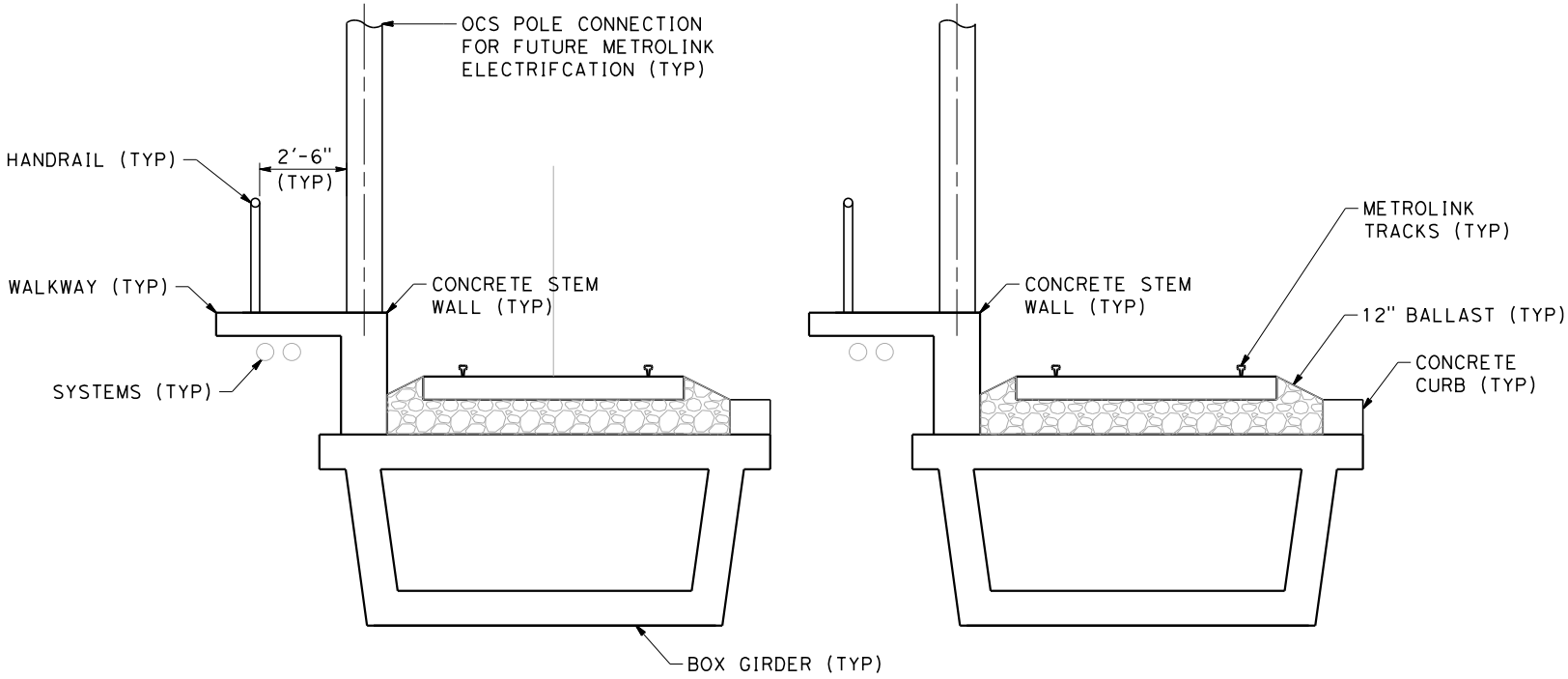
CALIFORNIA
HIGH-SPEED RAIL AUTHORITY

CALIFORNIA HIGH-SPEED TRAIN PROJECT
LOS ANGELES TO ANAHEIM

RECORD SET
PRELIMINARY ENGINEERING FOR PROJECT DEFINITION
DALE ST TO GILBERT ST BRACED TRENCH
BRIDGE OVER BRACED TRENCH SECTION

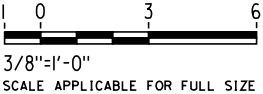
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DRAWING NO. TN-C3588
SCALE AS SHOWN
SHEET NO.

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DETAIL
SCALE: 3/8" = 1'-0"

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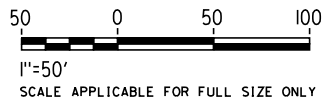
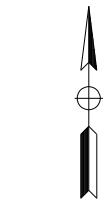
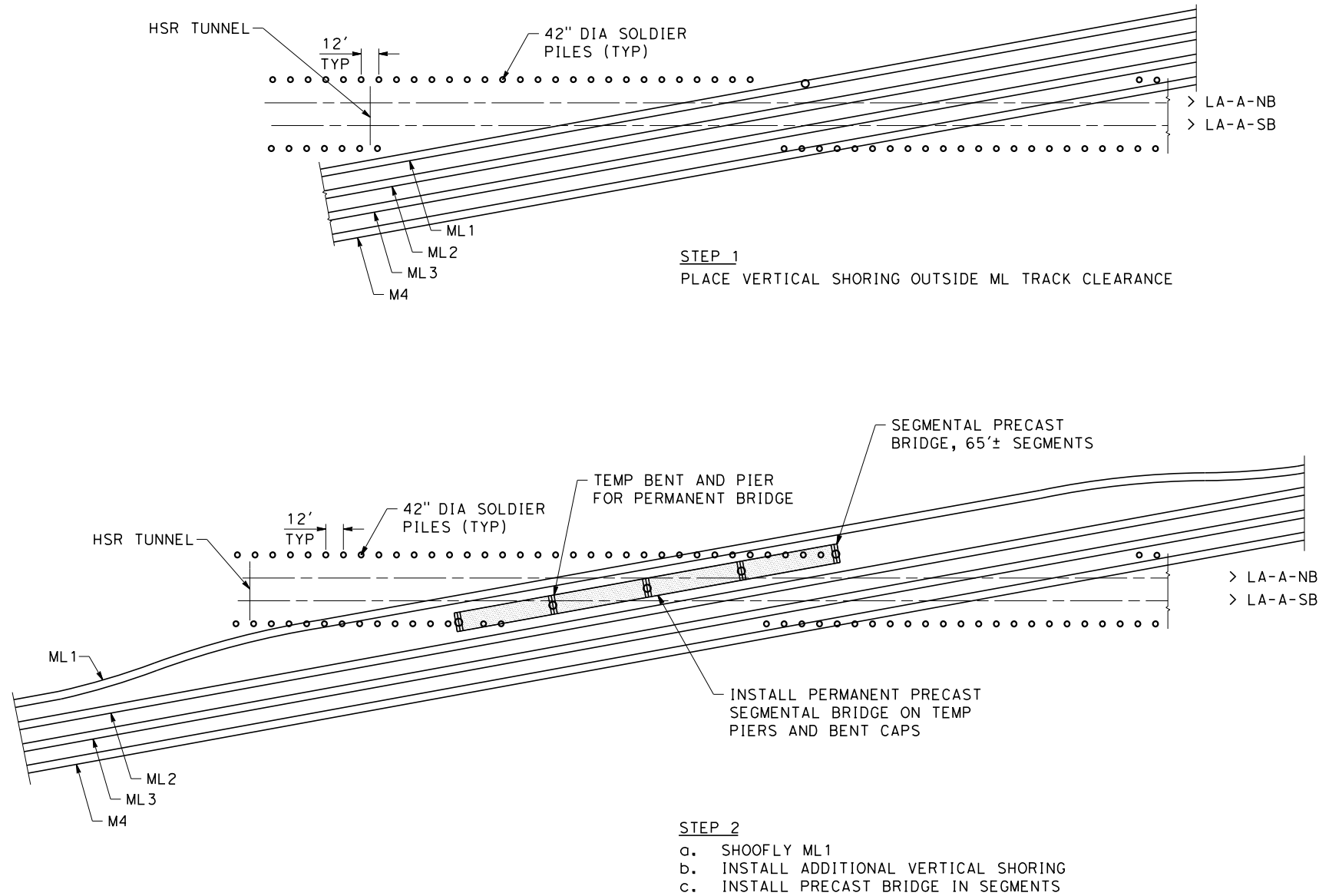
NOT FOR
CONSTRUCTION



**CALIFORNIA HIGH-SPEED TRAIN PROJECT
LOS ANGELES TO ANAHEIM**
RECORD SET
PRELIMINARY ENGINEERING FOR PROJECT DEFINITION
DALE ST TO GILBERT ST
BRIDGE GIRDER DETAIL

CONTRACT NO. HSR06-0005
DRAWING NO. TN-C5585
SCALE AS SHOWN
SHEET NO.

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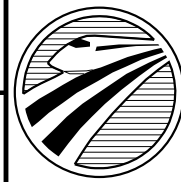
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REV	DATE	BY	SUB	APP	DESCRIPTION

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CHECKED BY K. ABEY
IN CHARGE G. DAVIDSON
DATE 02/28/25

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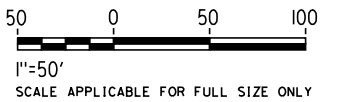
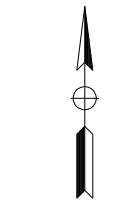
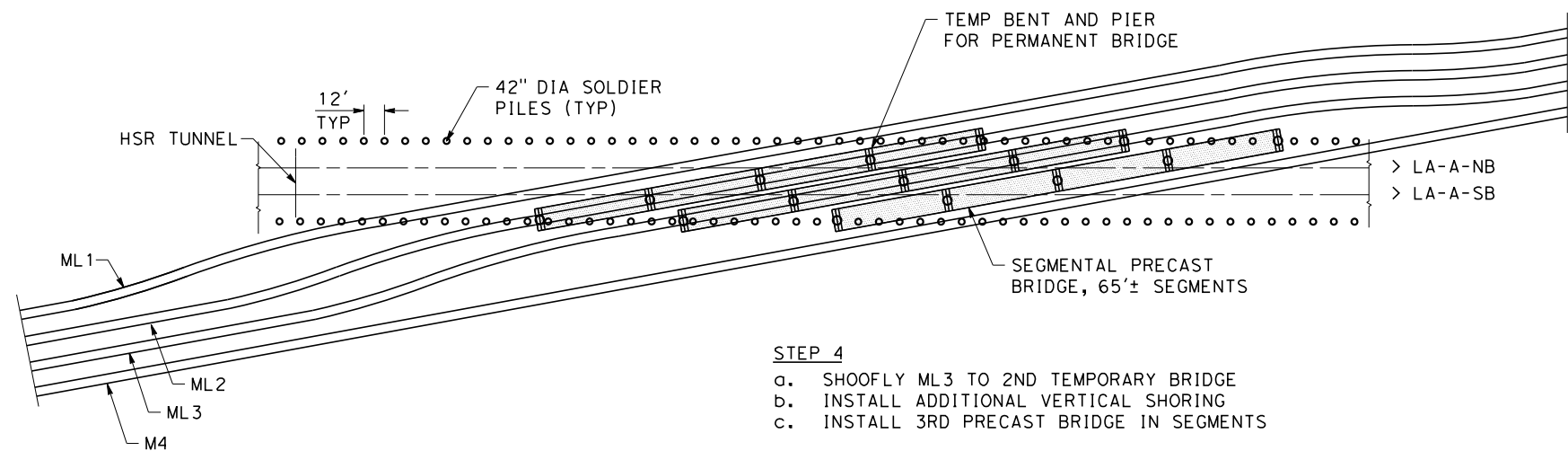
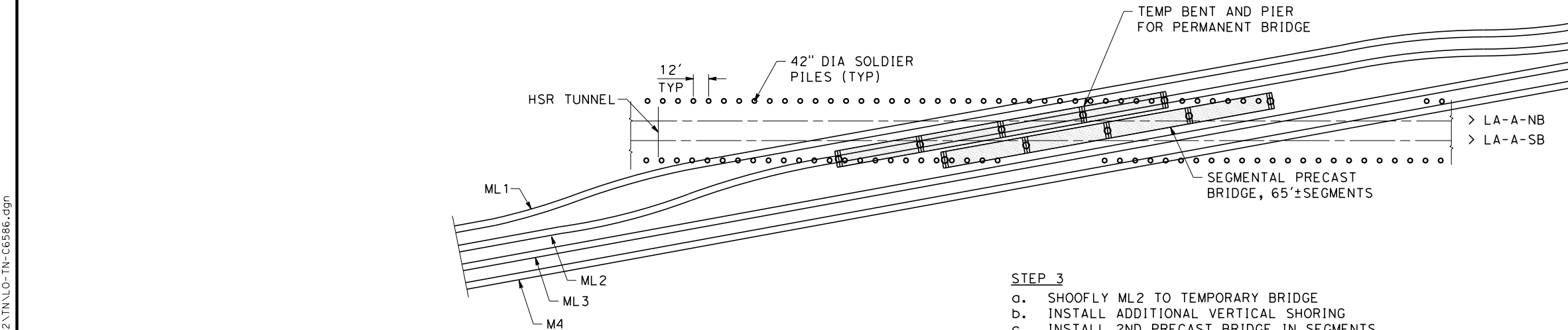


CALIFORNIA
HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT
LOS ANGELES TO ANAHEIM**
RECORD SET
PRELIMINARY ENGINEERING FOR PROJECT DEFINITION
DALE ST TO GILBERT ST
CONSTRUCTION SEQUENCE SCHEMATIC STEP 1 & 2

CONTRACT NO. HSR06-0005
DRAWING NO. TN-C6585
SCALE AS SHOWN
SHEET NO.

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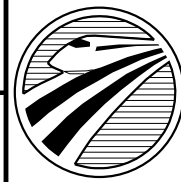
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FOR INTERNAL USE ONLY

REV	DATE	BY	SUB	APP	DESCRIPTION

DESIGNED BY G. ROGOFF
DRAWN BY W. OSTERMANN
CHECKED BY K. ABEY
IN CHARGE G. DAVIDSON
DATE 02/28/25

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SUBMITTAL
FOR INTERNAL
USE ONLY

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CONSTRUCTION



CALIFORNIA
HIGH-SPEED RAIL AUTHORITY

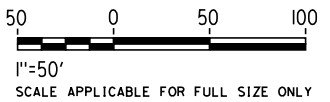
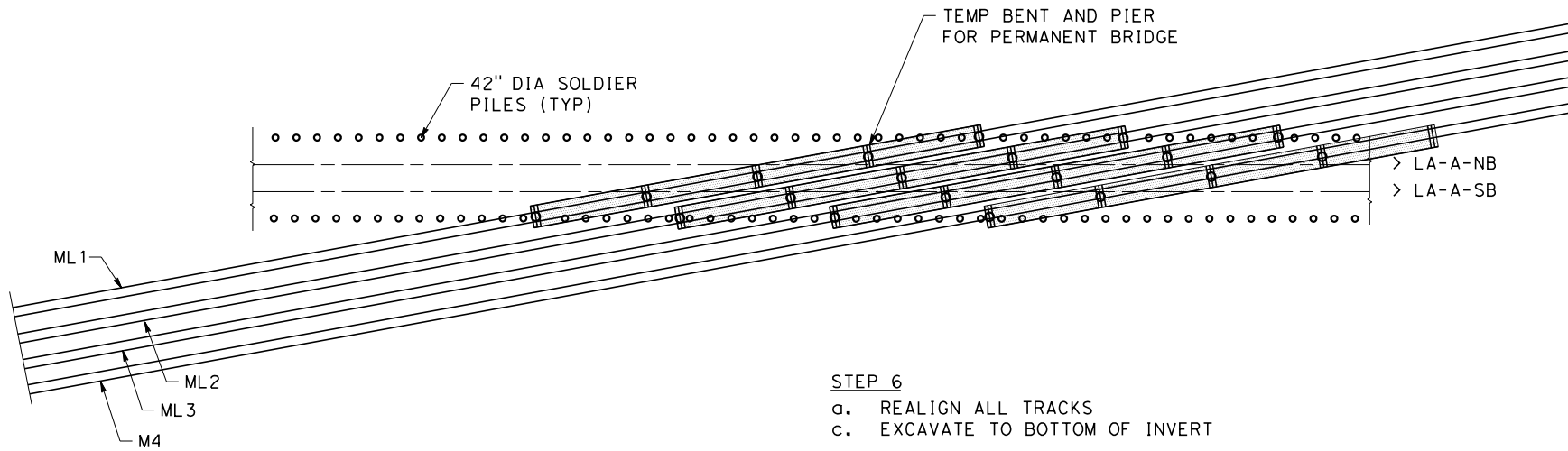
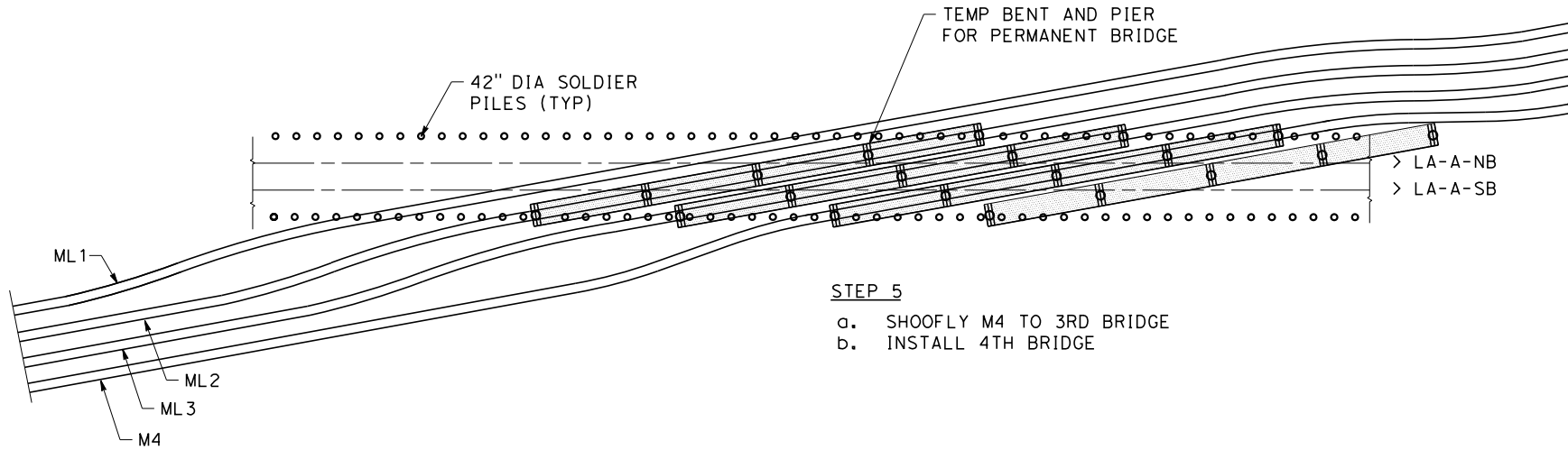
**CALIFORNIA HIGH-SPEED TRAIN PROJECT
LOS ANGELES TO ANAHEIM**

RECORD SET
PRELIMINARY ENGINEERING FOR PROJECT DEFINITION
DALE ST TO GILBERT ST
CONSTRUCTION SEQUENCE SCHEMATIC STEP 3 & 4

CONTRACT NO. HSR06-0005
DRAWING NO. TN-C6586
SCALE AS SHOWN
SHEET NO.

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CHECKED BY K. ABEY
IN CHARGE G. DAVIDSON
DATE 02/28/25

PEPD
SUBMITTAL
FOR INTERNAL
USE ONLY

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CONSTRUCTION



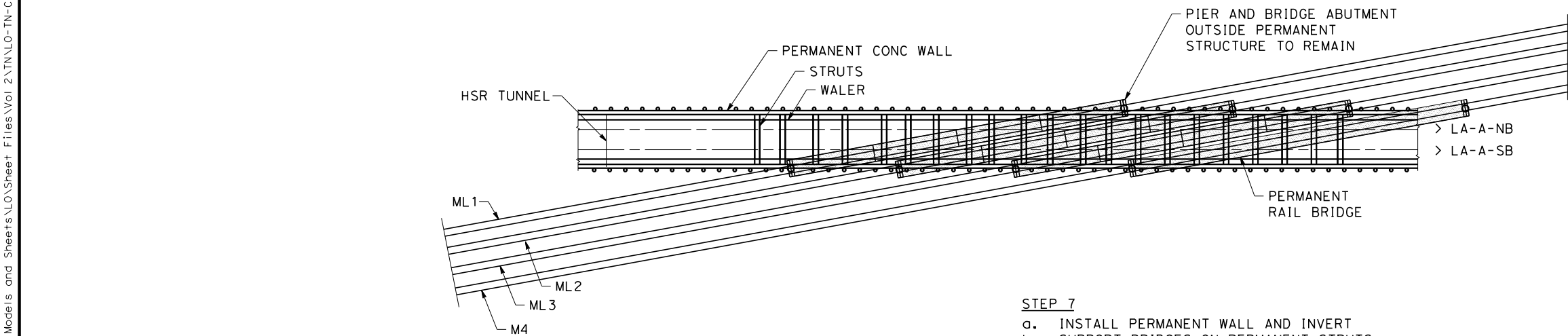
CALIFORNIA
HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT
LOS ANGELES TO ANAHEIM**

RECORD SET
PRELIMINARY ENGINEERING FOR PROJECT DEFINITION
DALE ST TO GILBERT ST
CONSTRUCTION SEQUENCE SCHEMATIC STEP 5 & 6

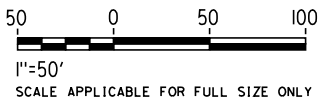
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DRAWING NO. TN-C6587
SCALE AS SHOWN
SHEET NO.

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STEP 7

- a. INSTALL PERMANENT WALL AND INVERT
- b. SUPPORT BRIDGES ON PERMANENT STRUTS
- c. REMOVE TEMPORARY PIERS AND BENT CAPS
- d. FILL BLOCK INVERT BLOCKOUTS AT TEMPORARY PIERS



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REV	DATE	BY	SUB	APP	DESCRIPTION

DESIGNED BY G. ROGOFF
DRAWN BY W. OSTERMANN
CHECKED BY K. ABEY
IN CHARGE G. DAVIDSON
DATE 02/28/25

PEPD
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McMILLEN
JACOBS
ASSOCIATES

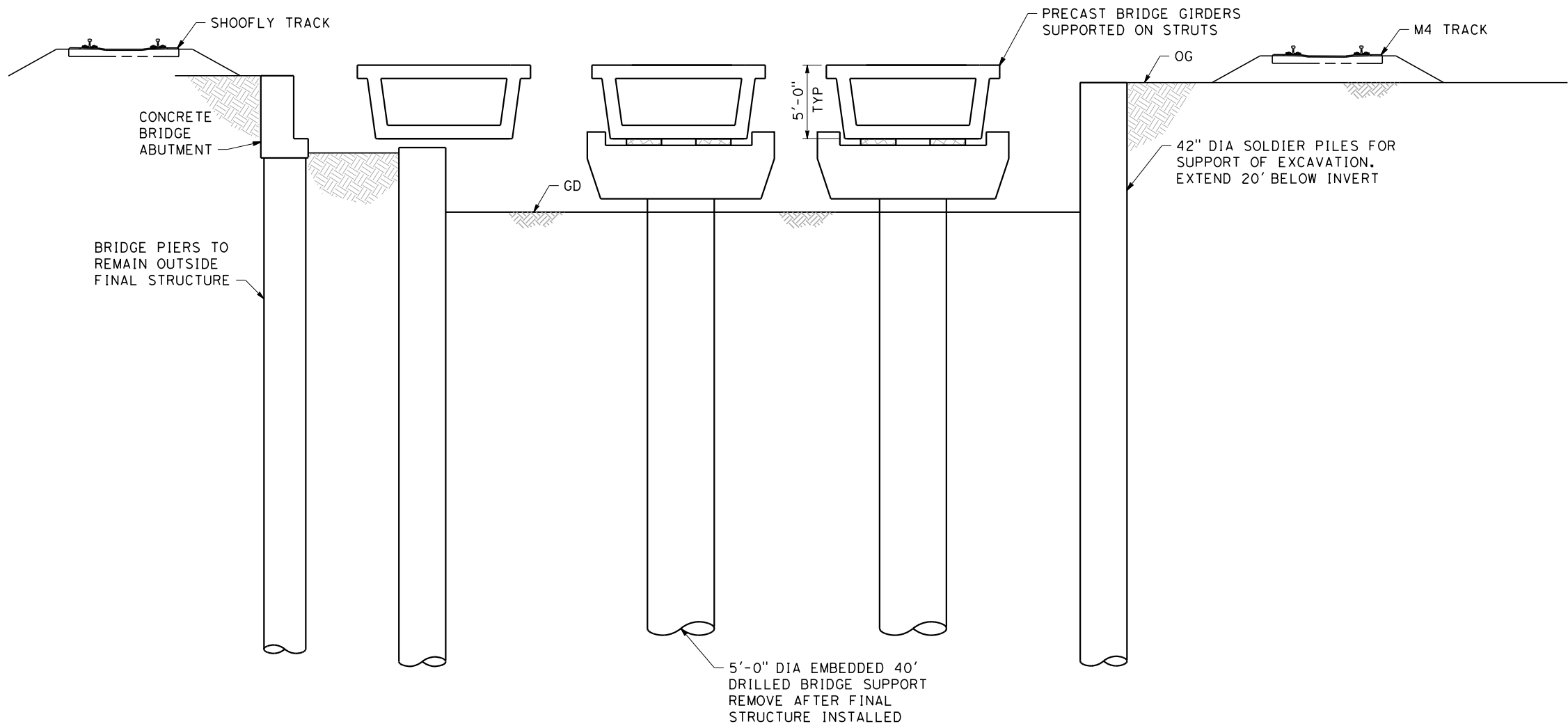


CALIFORNIA
HIGH-SPEED RAIL AUTHORITY

CALIFORNIA HIGH-SPEED TRAIN PROJECT
LOS ANGELES TO ANAHEIM
RECORD SET
PRELIMINARY ENGINEERING FOR PROJECT DEFINITION
DALE ST TO GILBERT ST
CONSTRUCTION SEQUENCE SCHEMATIC STEP 7

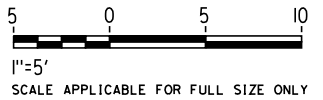
CONTRACT NO. HSR06-0005
DRAWING NO. TN-C6588
SCALE AS SHOWN
SHEET NO.

7/16/2025 10:03:29 AM I:\Projects\4017456\4017456_0001\90_CAD Models and Sheets\LO\Sheet Files\Vol 2\TN\LO-TN-C6589.dgn romired



EXCAVATION UNDER TEMPORARY BRIDGE PIERS SECTION
SCALE: 1" = 5'

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REV	DATE	BY	SUB	APP	DESCRIPTION

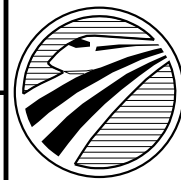
DESIGNED BY G. ROGOFF
DRAWN BY W. OSTERMANN
CHECKED BY K. ABEY
IN CHARGE G. DAVIDSON
DATE 02/28/25

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JACOBS
ASSOCIATES



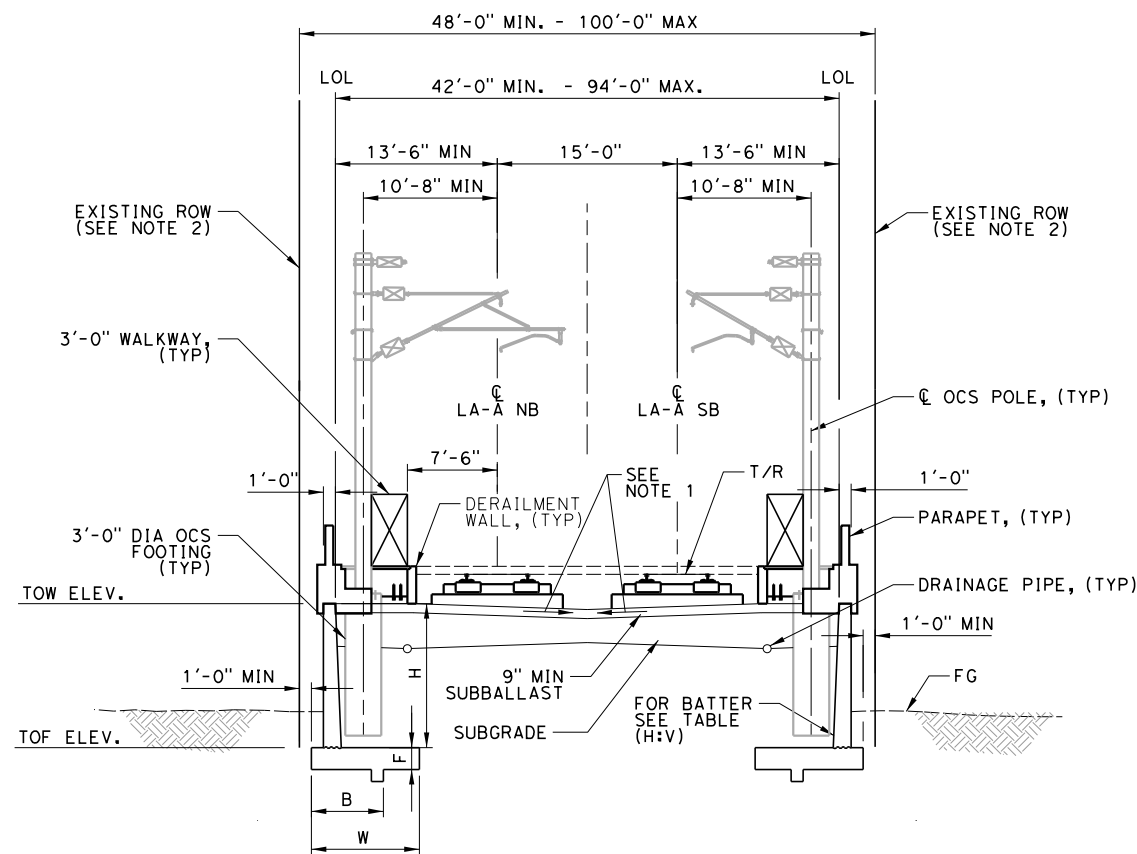
CALIFORNIA
HIGH-SPEED RAIL AUTHORITY

CALIFORNIA HIGH-SPEED TRAIN PROJECT
LOS ANGELES TO ANAHEIM

RECORD SET
PRELIMINARY ENGINEERING FOR PROJECT DEFINITION
DALE ST TO GILBERT ST
CONSTRUCTION SEQUENCE SECTION

CONTRACT NO. HSR06-0005
DRAWING NO. TN-C6589
SCALE AS SHOWN
SHEET NO.

1/29/2025 1:49:25 PM I:\Projects\4017456\4017456_0001\90_CAD Models and Sheets\LO\Sheet Files\Vol 2\ST\LO-ST-G0021.dgn romired



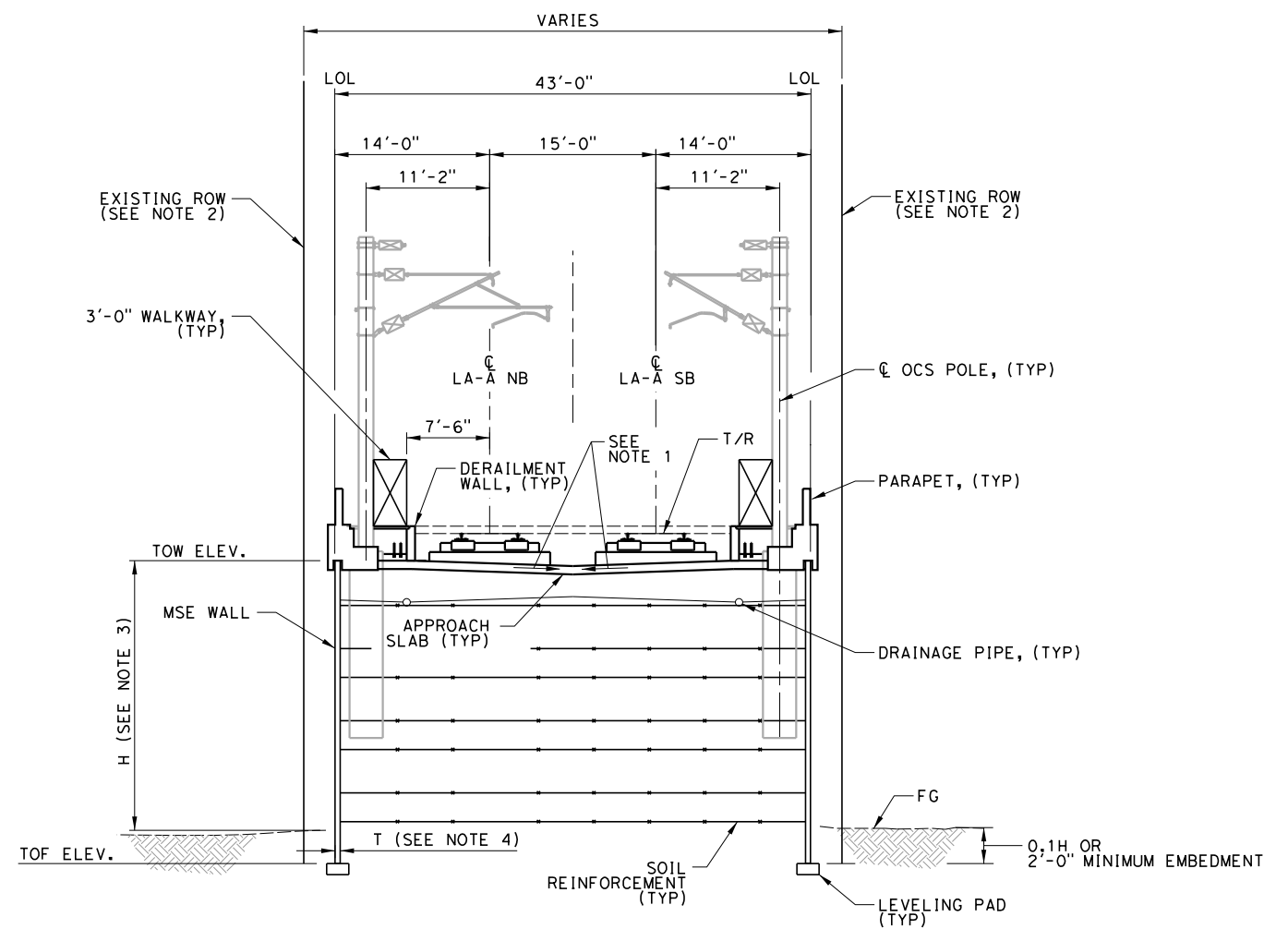
RETAINING WALL SECTION TYPE 1

SCALE: 1/8" = 1'-0"

NOTES:

1. DRAINAGE CROSS SLOPE SHALL BE 2%. FOR DRAINAGE DETAILS SEE VOLUME 3.4.
2. EXISTING ROW VARIES ALONG ALIGNMENT. REFER TO PLAN AND ELEVATION DRAWINGS FOR LOCATION AND CLEARANCE FROM EDGE OF STRUCTURE TO ROW LINE.

TABLE OF DIMENSIONS FOR H=4' TO H=12'					
DESIGN H	4'	6'	8'	10'	12'
W	5'-0"	5'-0"	6'-6"	8'-0"	9'-6"
B	6'-0"	6'-0"	6'-0"	6'-0"	6'-0"
F SPREAD FOOTING	1'-4"	1'-4"	1'-6"	1'-6"	1'-10"
TOP OF WALL THICKNESS	11"	11"	11"	11"	11"
BATTER	NONE	NONE	NONE	1/2:12	1/2:12
KEY (HEIGHT X WIDTH)	8"X16"	8"X16"	8"X16"	8"X16"	1'X2'



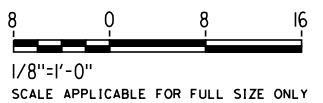
RETAINING WALL SECTION TYPE 2

SCALE: 1/8" = 1'-0"

NOTES:

1. DRAINAGE CROSS SLOPE SHALL BE 2%. FOR DRAINAGE DETAILS SEE VOLUME 3.4.
2. EXISTING ROW VARIES ALONG ALIGNMENT. REFER TO PLAN AND ELEVATION DRAWINGS FOR LOCATION AND CLEARANCE FROM EDGE OF STRUCTURE TO ROW LINE.
3. HEIGHT TO WALL (H) VARIES FROM 6'-0" TO 23'-0".
4. THICKNESS OF WALL (T) SHALL BE AS PER MANUFACTURER'S RECOMMENDATION.

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REV	DATE	BY	SUB	APP	DESCRIPTION

DESIGNED BY M. RODRIGUEZ
DRAWN BY Z. OHN
CHECKED BY D. SARETSKY
IN CHARGE J. SWANSON
DATE 02/28/25

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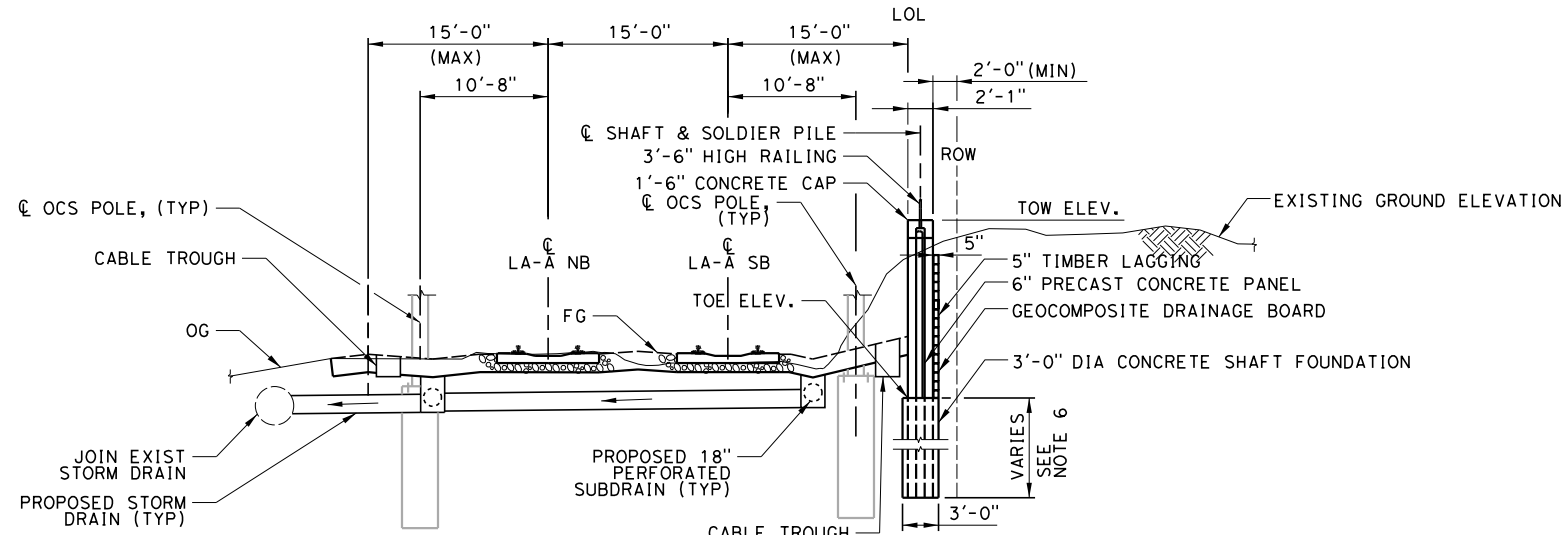
CALIFORNIA
HIGH-SPEED RAIL AUTHORITY

CALIFORNIA HIGH-SPEED TRAIN PROJECT
LOS ANGELES TO ANAHEIM

RECORD SET
PRELIMINARY ENGINEERING FOR PROJECT DEFINITION
RETAINING WALL TYPICAL SECTIONS 1

CONTRACT NO. HSR06-0005
DRAWING NO. ST-G0021
SCALE AS SHOWN
SHEET NO.

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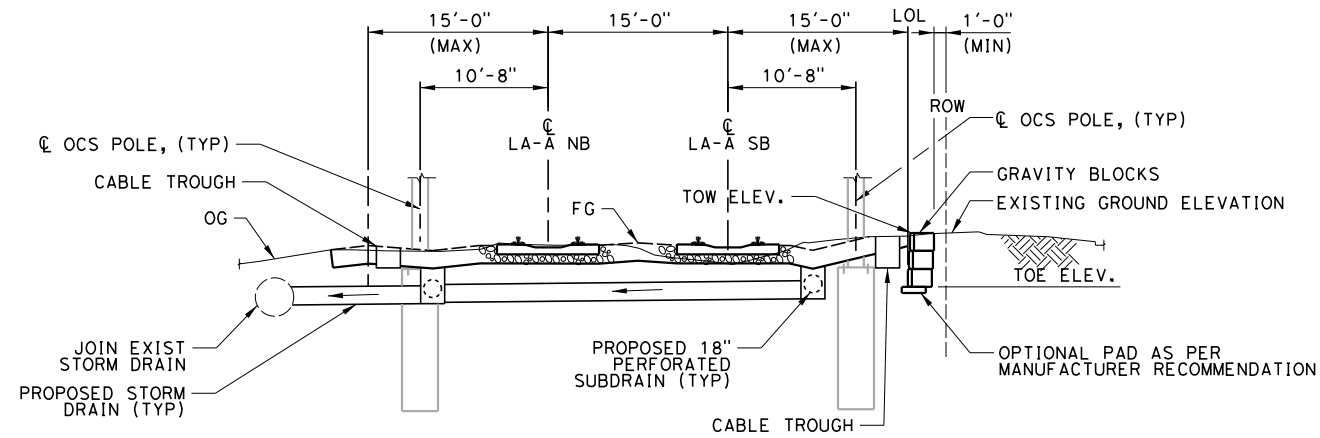


TYPICAL RETAINING WALL SECTION TYPE 3 - CUTWALL

SCALE: 1/8" = 1'-0"

NOTES:

1. FOR TYPE 1 RETAINING WALL SEE DWG ST-G0021.
2. FOR TYPE 2 RETAINING WALL SEE DWG ST-G0021.
3. ALL DIMENSIONS TO BE FIELD VERIFIED.
4. FOR LOCATION AND HEIGHT OF RETAINING WALL, SEE DWGS ST-G1008 TO ST-G1135. HEIGHT OF WALL VARIES FROM 5'-0" TO 26'-0".
5. SEE VOLUME 3.4, GRADING AND DRAINAGE SHEETS FOR PROPOSED DRAINAGE PIPE LAYOUT.
6. PILE DEPTH SUBJECT TO FINAL FOUNDATION DESIGN.



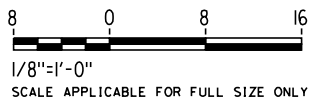
TYPICAL RETAINING WALL SECTION TYPE 4 - CUTWALL

SCALE: 1/8" = 1'-0"

NOTES:

1. ALL DIMENSIONS TO BE FIELD VERIFIED.
2. FOR LOCATION AND HEIGHT OF RETAINING WALLS, SEE DWGS ST-G1008 TO ST-G1135. HEIGHT OF WALL CANNOT EXCEED 3 FEET.
3. SEE VOLUME 3.4 GRADING AND DRAINAGE SHEETS FOR PROPOSED DRAINAGE PIPE LAYOUT.

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FOR INTERNAL USE ONLY



REV	DATE	BY	SUB	APP	DESCRIPTION

DESIGNED BY M. RODRIGUEZ
DRAWN BY Z. OHN
CHECKED BY D. SARETSKY
IN CHARGE J. SWANSON
DATE 02/28/25

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CALIFORNIA
HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT
LOS ANGELES TO ANAHEIM**

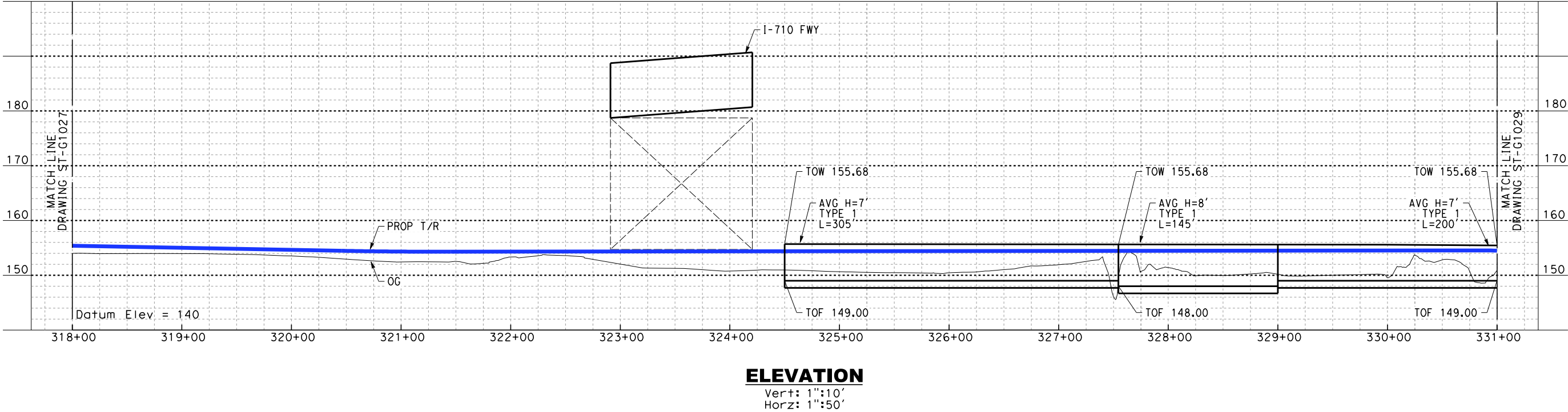
RECORD SET

PRELIMINARY ENGINEERING FOR PROJECT DEFINITION
RETAINING WALL TYPICAL SECTIONS 2

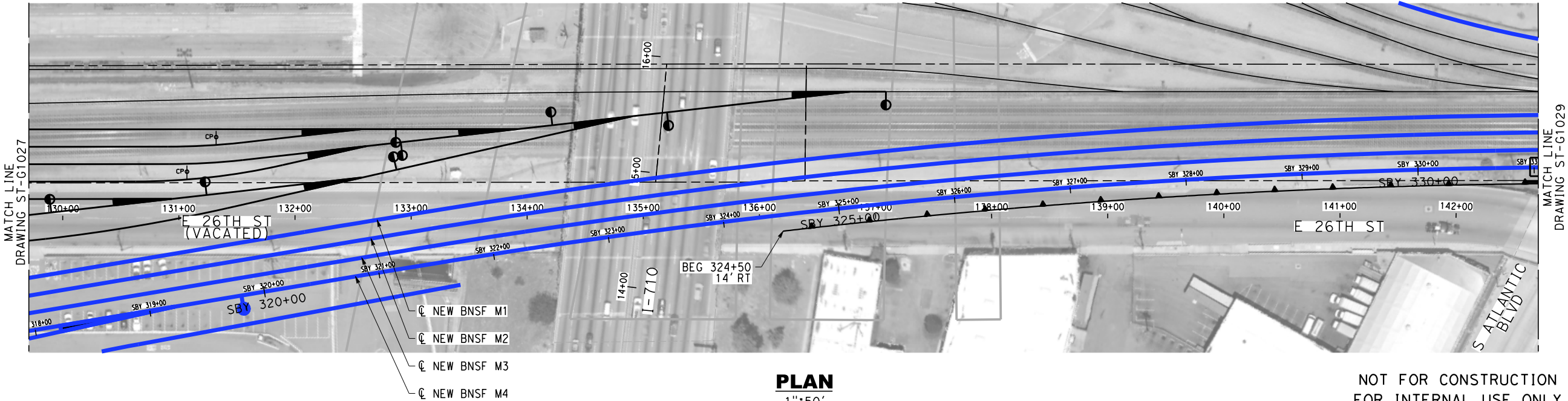
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DRAWING NO. ST-G0022
SCALE AS SHOWN
SHEET NO.

1/29/2025 1:49:23 PM I:\Projects\4017456\4017456_0001\90_CAD Models and Sheets\LO\Sheet Files\Vol 2\ST\LO-ST-G1028.dgn

- NOTES:
- 1. FOR TYPE 1 & 2 WALLS, SEE DWG. NO. ST-G0021 FOR DETAILS.
 - 2. FOR TYPE 3 & 4 WALLS, SEE DWG. NO. ST-G0022 FOR DETAILS.
 - 3. FOR GRADE SEPARATION SHEETS, SEE VOLUME 3.3.
 - 4. FOR AERIAL STRUCTURE SHEETS, SEE VOLUME 3.2.



ELEVATION
Vert: 1"=10'
Horz: 1"=50'



PLAN
1"=50'

NOT FOR CONSTRUCTION
FOR INTERNAL USE ONLY

REV	DATE	BY	SUB	APP	DESCRIPTION

DESIGNED BY R. WONG
DRAWN BY Z. OHN
CHECKED BY M. SATISH
IN CHARGE J. SWANSON
DATE 02/28/25

PEPD
SUBMITTAL
FOR INTERNAL
USE ONLY

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CONSTRUCTION

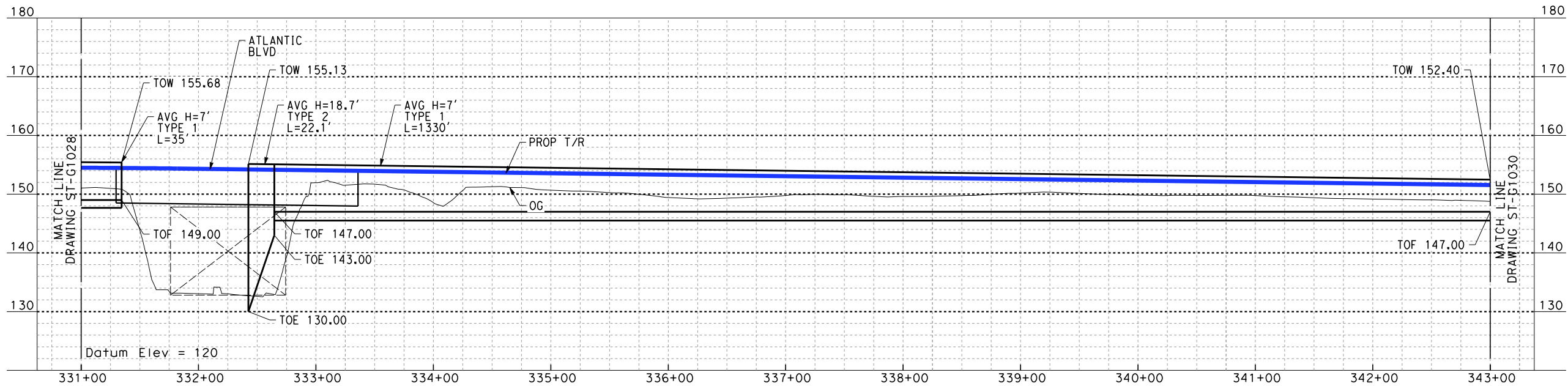


**CALIFORNIA HIGH-SPEED TRAIN PROJECT
LOS ANGELES TO ANAHEIM**
RECORD SET
PRELIMINARY ENGINEERING FOR PROJECT DEFINITION
RETAINING WALL
STA SBY 318+00 TO STA SBY 331+00

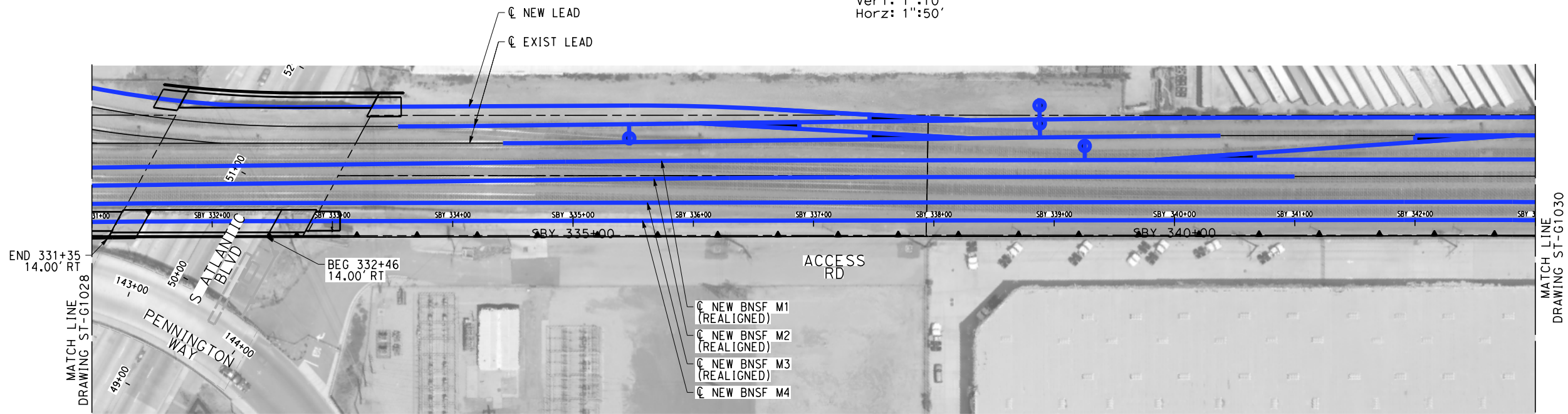
CONTRACT NO. HSR06-0005
DRAWING NO. ST-G1028
SCALE AS SHOWN
SHEET NO.

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- NOTES:
- 1. FOR TYPE 1 & 2 WALLS, SEE DWG. NO. ST-G0021 FOR DETAILS.
 - 2. FOR TYPE 3 & 4 WALLS, SEE DWG. NO. ST-G0022 FOR DETAILS.
 - 3. FOR GRADE SEPARATION SHEETS, SEE VOLUME 3.3.
 - 4. FOR AERIAL STRUCTURE SHEETS, SEE VOLUME 3.2.

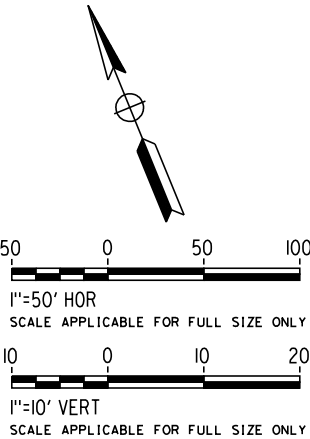


ELEVATION
Vert: 1"=10'
Horz: 1"=50'



PLAN
1"=50'

NOT FOR CONSTRUCTION
FOR INTERNAL USE ONLY



REV	DATE	BY	SUB	APP	DESCRIPTION

DESIGNED BY R. WONG
DRAWN BY Z. OHN
CHECKED BY M. SATISH
IN CHARGE J. SWANSON
DATE 02/28/25

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CALIFORNIA
HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT
LOS ANGELES TO ANAHEIM**

RECORD SET

PRELIMINARY ENGINEERING FOR PROJECT DEFINITION

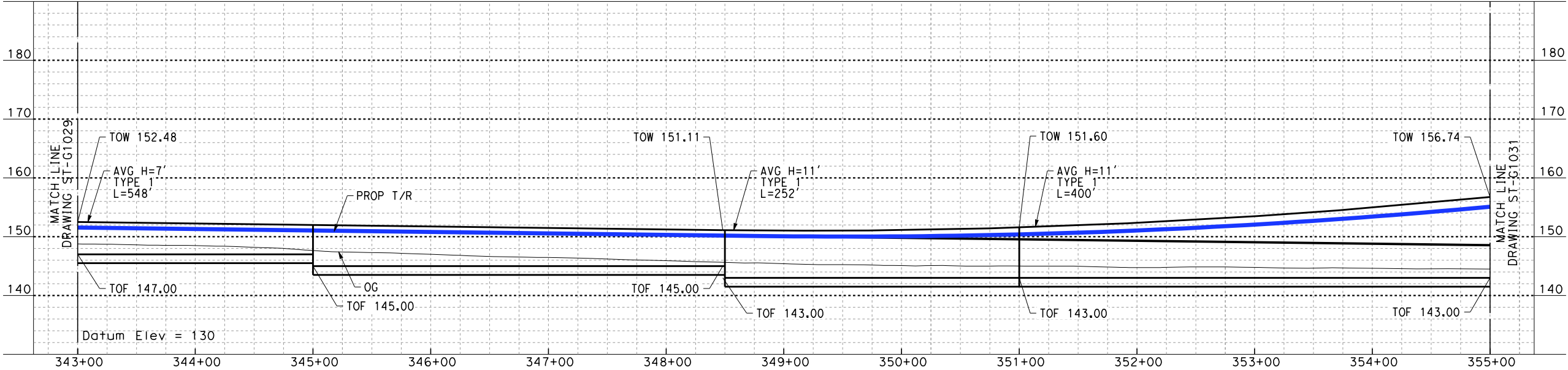
RETAINING WALL

STA SBY 331+00 TO STA SBY 343+00

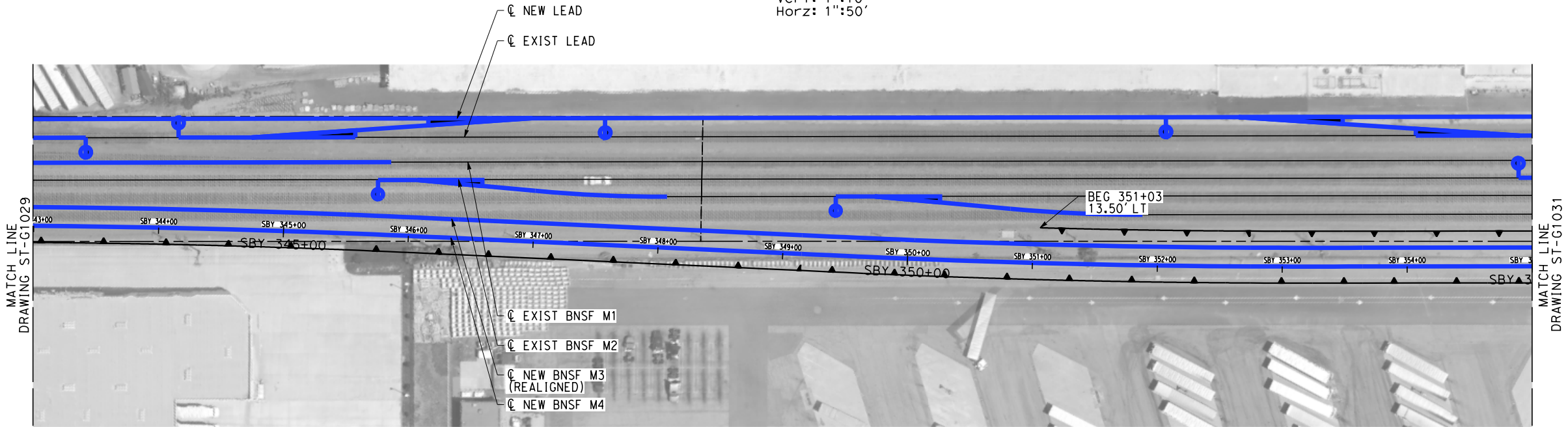
CONTRACT NO. HSR06-0005
DRAWING NO. ST-G1029
SCALE AS SHOWN
SHEET NO.

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- NOTES:
1. FOR TYPE 1 & 2 WALLS, SEE DWG. NO. ST-G0021 FOR DETAILS.
 2. FOR TYPE 3 & 4 WALLS, SEE DWG. NO. ST-G0022 FOR DETAILS.
 3. FOR GRADE SEPARATION SHEETS, SEE VOLUME 3.3.
 4. FOR AERIAL STRUCTURE SHEETS, SEE VOLUME 3.2.

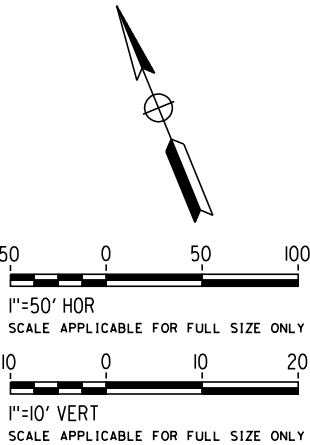


ELEVATION
Vert: 1"=10'
Horz: 1"=50'



PLAN
1"=50'

NOT FOR CONSTRUCTION
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REV	DATE	BY	SUB	APP	DESCRIPTION

DESIGNED BY R. WONG
DRAWN BY Z. OHN
CHECKED BY M. SATISH
IN CHARGE J. SWANSON
DATE 02/28/25

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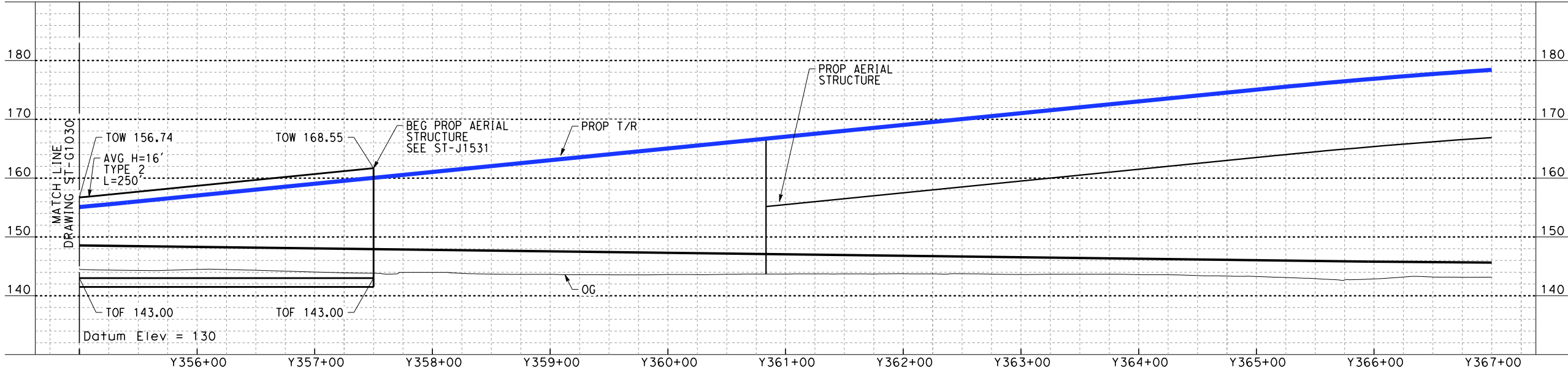
CALIFORNIA HIGH-SPEED TRAIN PROJECT
LOS ANGELES TO ANAHEIM
RECORD SET
PRELIMINARY ENGINEERING FOR PROJECT DEFINITION
RETAINING WALL
STA SBY 343+00 TO STA SBY 355+00

CONTRACT NO. HSR06-0005
DRAWING NO. ST-G1030
SCALE AS SHOWN
SHEET NO.

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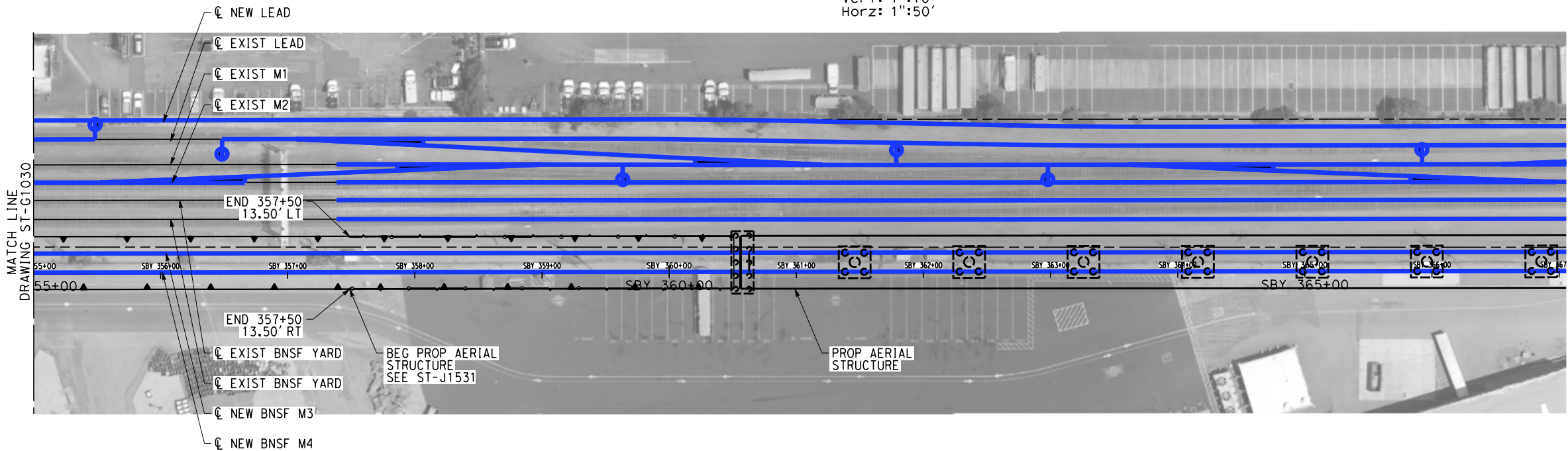
NOTES:

1. FOR TYPE 1 & 2 WALLS, SEE DWG. NO. ST-G0021 FOR DETAILS.
2. FOR TYPE 3 & 4 WALLS, SEE DWG. NO. ST-G0022 FOR DETAILS.
3. FOR GRADE SEPARATION SHEETS, SEE VOLUME 3.3.
4. FOR AERIAL STRUCTURE SHEETS, SEE VOLUME 3.2.



ELEVATION

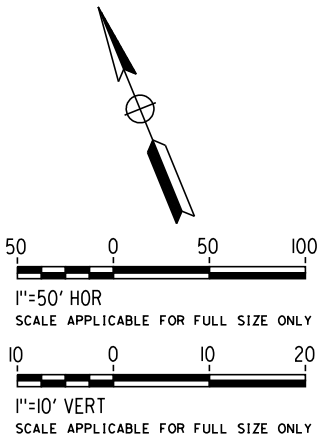
Vert: 1"=10'
Horz: 1"=50'



PLAN

1"=50'

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REV	DATE	BY	SUB	APP	DESCRIPTION

DESIGNED BY R. WONG
DRAWN BY Z. OHN
CHECKED BY M. SATISH
IN CHARGE J. SWANSON
DATE 02/28/25

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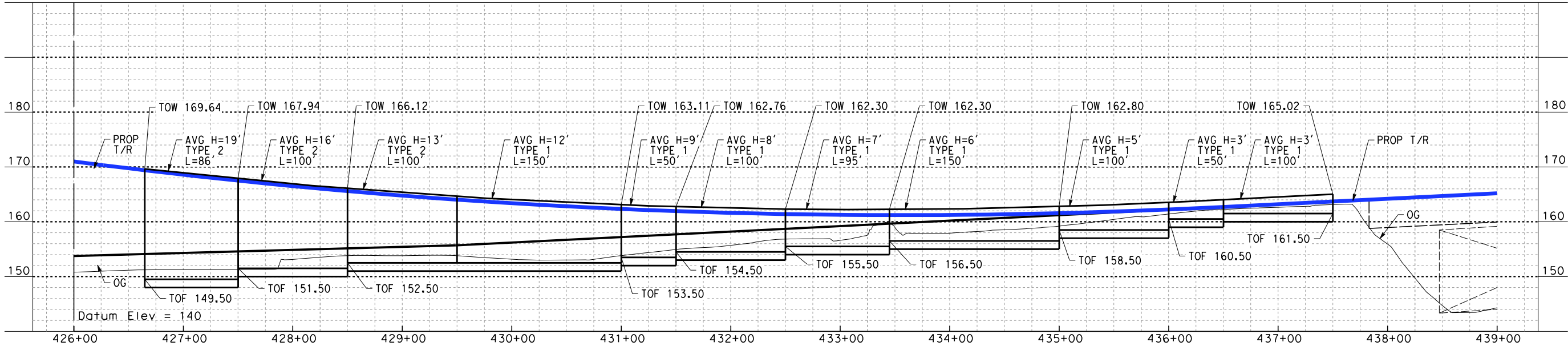


CALIFORNIA
HIGH-SPEED RAIL AUTHORITY

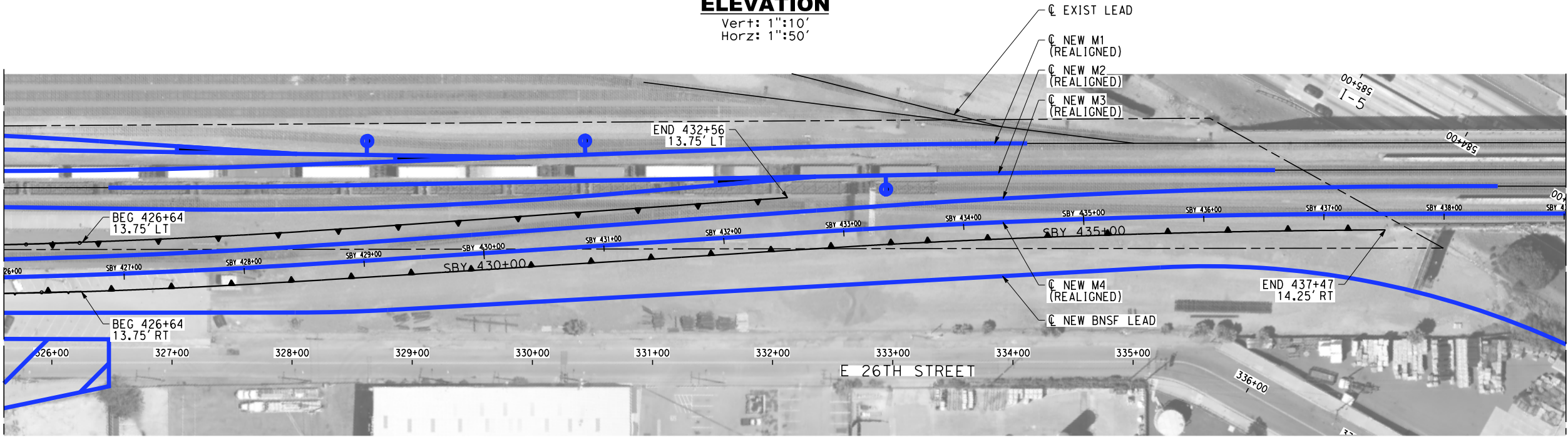
**CALIFORNIA HIGH-SPEED TRAIN PROJECT
LOS ANGELES TO ANAHEIM**
RECORD SET
PRELIMINARY ENGINEERING FOR PROJECT DEFINITION
RETAINING WALL
STA SBY 355+38 TO STA SBY 367+05

CONTRACT NO. HSR06-0005
DRAWING NO. ST-G1031
SCALE AS SHOWN
SHEET NO.

- NOTES:
- 1. FOR TYPE 1 & 2 WALLS, SEE DWG. NO. ST-G0021 FOR DETAILS.
 - 2. FOR TYPE 3 & 4 WALLS, SEE DWG. NO. ST-G0022 FOR DETAILS.
 - 3. FOR GRADE SEPARATION SHEETS, SEE VOLUME 3.3.
 - 4. FOR AERIAL STRUCTURE SHEETS, SEE VOLUME 3.2.

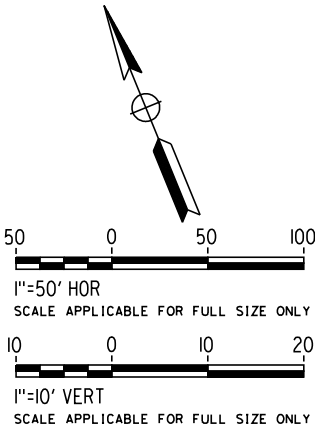


ELEVATION
Vert: 1"=10'
Horz: 1"=50'



PLAN
1"=50'

NOT FOR CONSTRUCTION
FOR INTERNAL USE ONLY



REV	DATE	BY	SUB	APP	DESCRIPTION

DESIGNED BY R. WONG
DRAWN BY Z. OHN
CHECKED BY M. SATISH
IN CHARGE J. SWANSON
DATE 02/28/25

PEPD
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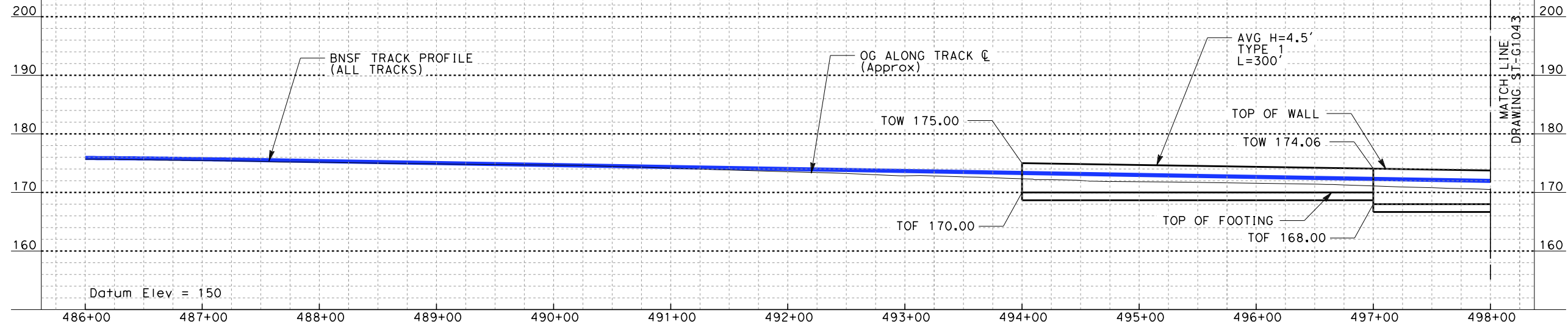
NOT FOR
CONSTRUCTION



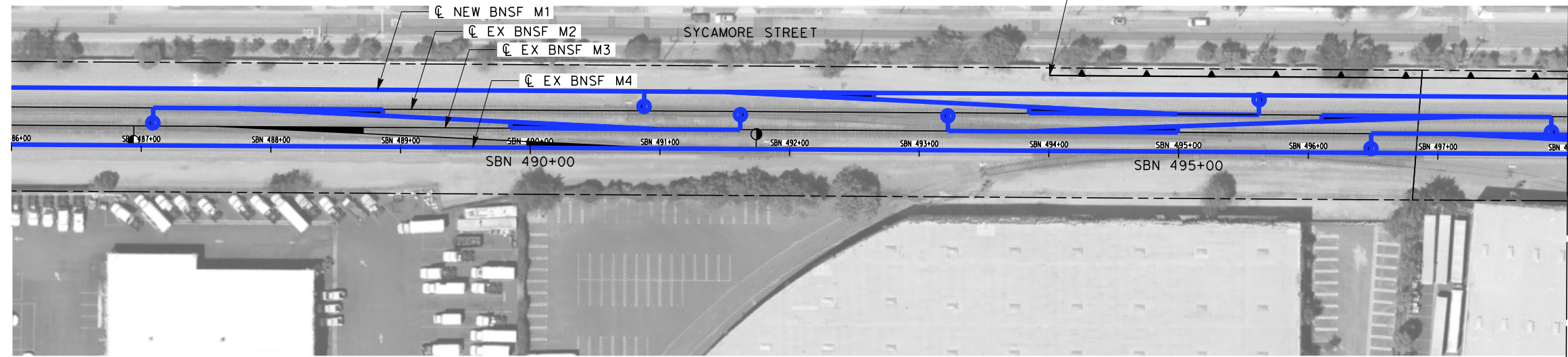
CALIFORNIA HIGH-SPEED TRAIN PROJECT
LOS ANGELES TO ANAHEIM
RECORD SET
PRELIMINARY ENGINEERING FOR PROJECT DEFINITION
RETAINING WALL
STA SBY 426+00 TO STA SBY 439+00

CONTRACT NO. HSR06-0005
DRAWING NO. ST-G1037
SCALE AS SHOWN
SHEET NO.

1. FOR TYPE 1 & 2 WALLS, SEE
DWG. NO. ST-G0021 FOR DETAILS.
2. FOR TYPE 3 & 4 WALLS, SEE
DWG. NO. ST-G0022 FOR DETAILS.
3. FOR GRADE SEPARATION SHEETS,
SEE VOLUME 3.3.
4. FOR AERIAL STRUCTURE SHEETS,
SEE VOLUME 3.2.

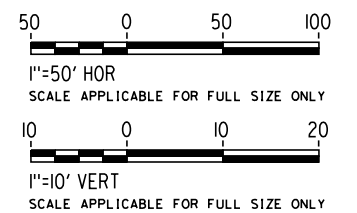


Vert: 1":10'
Horz: 1":50'



1":50'

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FOR INTERNAL USE ONLY



REV	DATE	BY	SUB	APP	DESCRIPTION

DESIGNED BY	R. WONG
DRAWN BY	Z. OHN
CHECKED BY	M. SATISH
IN CHARGE	J. SWANSON
DATE	02/28/25

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CONSTRUCTION**



CALIFORNIA
HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT
LOS ANGELES TO ANAHEIM**

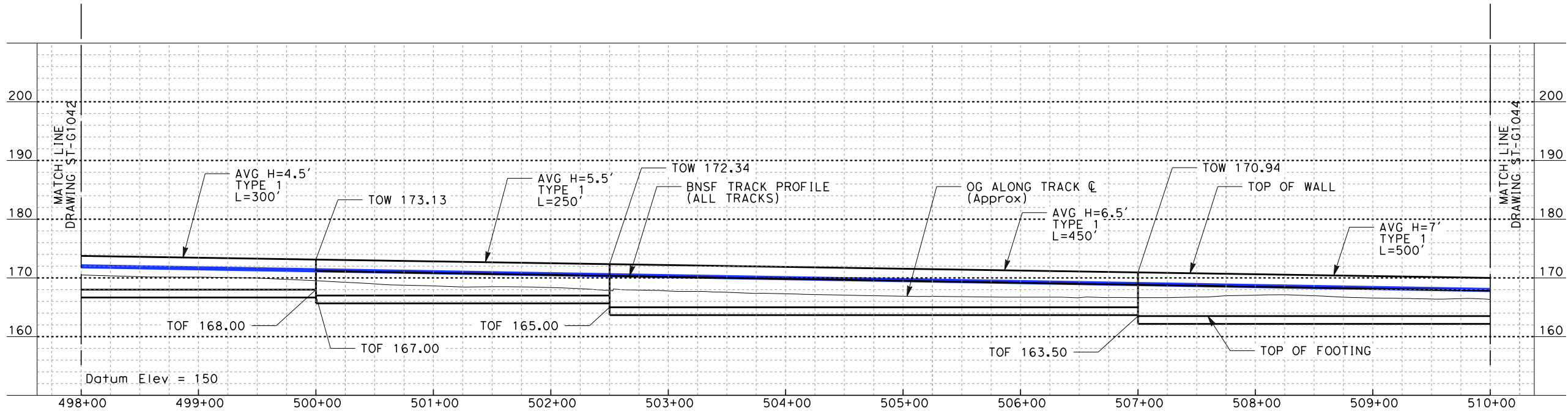
RECORD SET
PRELIMINARY ENGINEERING FOR PROJECT DEFINITION
RETAINING WALL
STA SBN 486+00 TO STA SBN 498+00

CONTRACT NO.	HSR06-0005
DRAWING NO.	ST-G1042
SCALE	AS SHOWN
SHEET NO.	

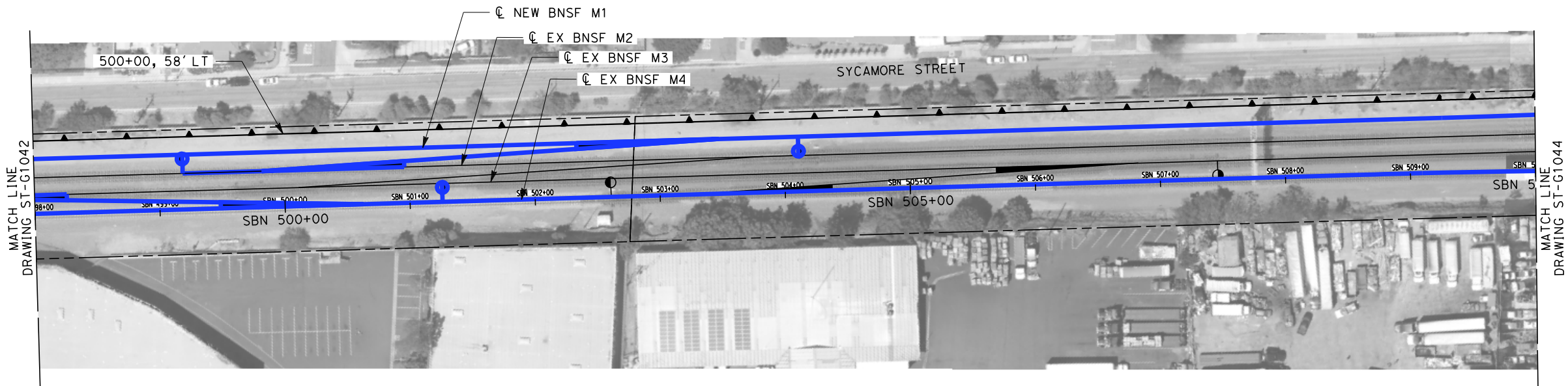
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NOTES:

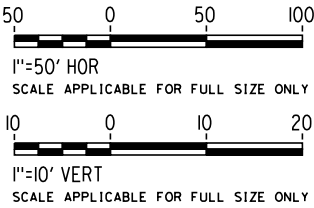
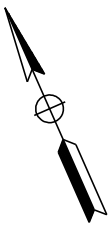
1. FOR TYPE 1 & 2 WALLS, SEE DWG. NO. ST-G0021 FOR DETAILS.
2. FOR TYPE 3 & 4 WALLS, SEE DWG. NO. ST-G0022 FOR DETAILS.
3. FOR GRADE SEPARATION SHEETS, SEE VOLUME 3.3.
4. FOR AERIAL STRUCTURE SHEETS, SEE VOLUME 3.2.



ELEVATION
Vert: 1"=10'
Horz: 1"=50'



PLAN
1"=50'



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REV	DATE	BY	SUB	APP	DESCRIPTION

DESIGNED BY R. WONG
DRAWN BY Z. OHN
CHECKED BY M. SATISH
IN CHARGE J. SWANSON
DATE 02/28/25

PEPD
SUBMITTAL
FOR INTERNAL
USE ONLY

NOT FOR
CONSTRUCTION



CALIFORNIA
HIGH-SPEED RAIL AUTHORITY

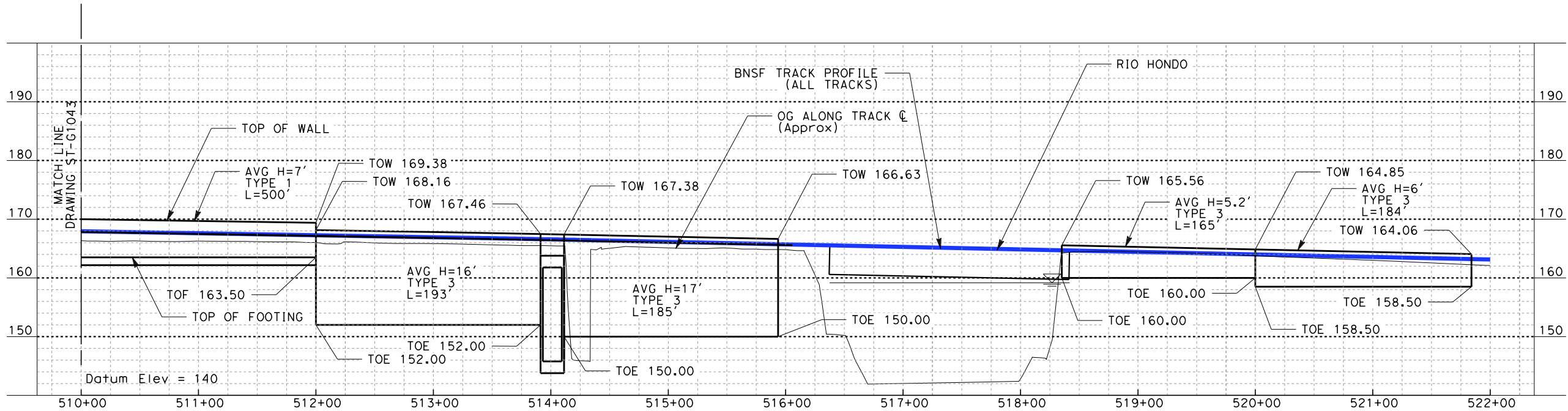
CALIFORNIA HIGH-SPEED TRAIN PROJECT
LOS ANGELES TO ANAHEIM
RECORD SET
PRELIMINARY ENGINEERING FOR PROJECT DEFINITION
RETAINING WALL
STA SBN 498+00 TO STA SBN 510+00

CONTRACT NO. HSR06-0005
DRAWING NO. ST-G1043
SCALE AS SHOWN
SHEET NO.

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NOTES:

1. FOR TYPE 1 & 2 WALLS, SEE DWG. NO. ST-G0021 FOR DETAILS.
2. FOR TYPE 3 & 4 WALLS, SEE DWG. NO. ST-G0022 FOR DETAILS.
3. FOR GRADE SEPARATION SHEETS, SEE VOLUME 3.3.
4. FOR AERIAL STRUCTURE SHEETS, SEE VOLUME 3.2.



ELEVATION

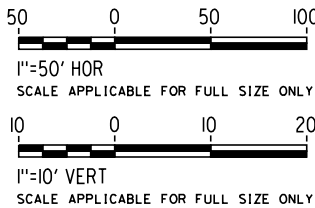
Vert: 1"=10'
Horz: 1"=50'



PLAN

1"=50'

NOT FOR CONSTRUCTION
FOR INTERNAL USE ONLY



REV	DATE	BY	SUB	APP	DESCRIPTION

DESIGNED BY R. WONG
DRAWN BY Z. OHN
CHECKED BY M. SATISH
IN CHARGE J. SWANSON
DATE 02/28/25

PEPD
SUBMITTAL
FOR INTERNAL
USE ONLY

NOT FOR
CONSTRUCTION



CALIFORNIA
HIGH-SPEED RAIL AUTHORITY

CALIFORNIA HIGH-SPEED TRAIN PROJECT
LOS ANGELES TO ANAHEIM
RECORD SET
PRELIMINARY ENGINEERING FOR PROJECT DEFINITION
RETAINING WALL
STA SBN 510+00 TO STA SBN 522+00

CONTRACT NO. HSR06-0005
DRAWING NO. ST-G1044
SCALE AS SHOWN
SHEET NO.

1. FOR TYPE 1 & 2 WALLS, SEE
DWG. NO. ST-G0021 FOR DETAILS.
2. FOR TYPE 3 & 4 WALLS, SEE
DWG. NO. ST-G0022 FOR DETAILS.
3. FOR GRADE SEPARATION SHEETS,
SEE VOLUME 3.3.
4. FOR AERIAL STRUCTURE SHEETS,
SEE VOLUME 3.2.



**PEPD
SUBMITTAL
FOR INTERNAL
USE ONLY**

**NOT FOR
CONSTRUCTION**



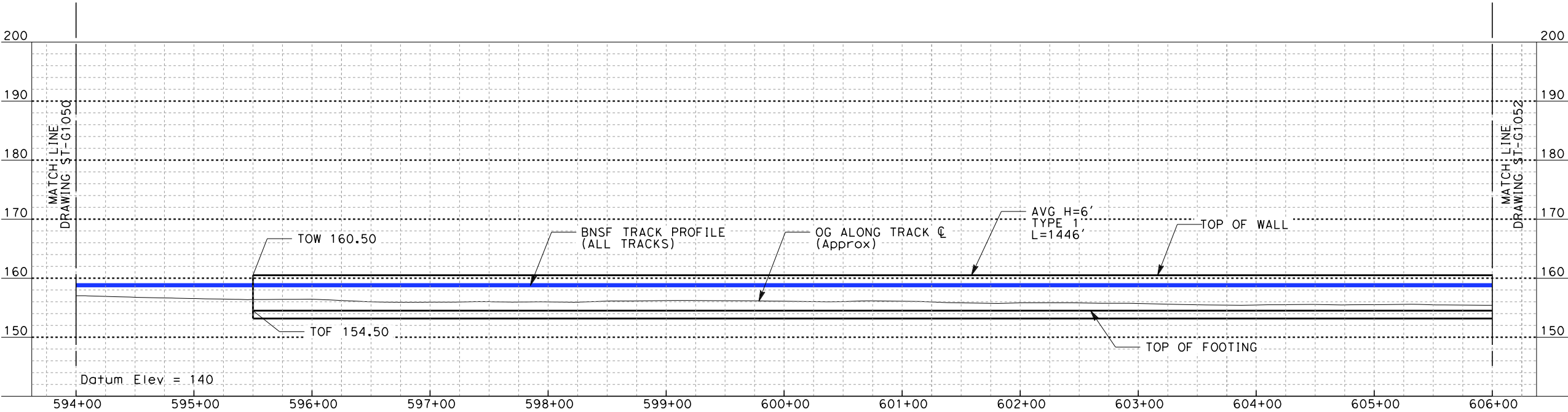
CALIFORNIA
HIGH-SPEED RAIL AUTHORITY

PRELIMINARY ENGINEERING FOR PROJECT DEFINITION
RETAINING WALL
STA SBN 581+00 TO STA SBN 594+00

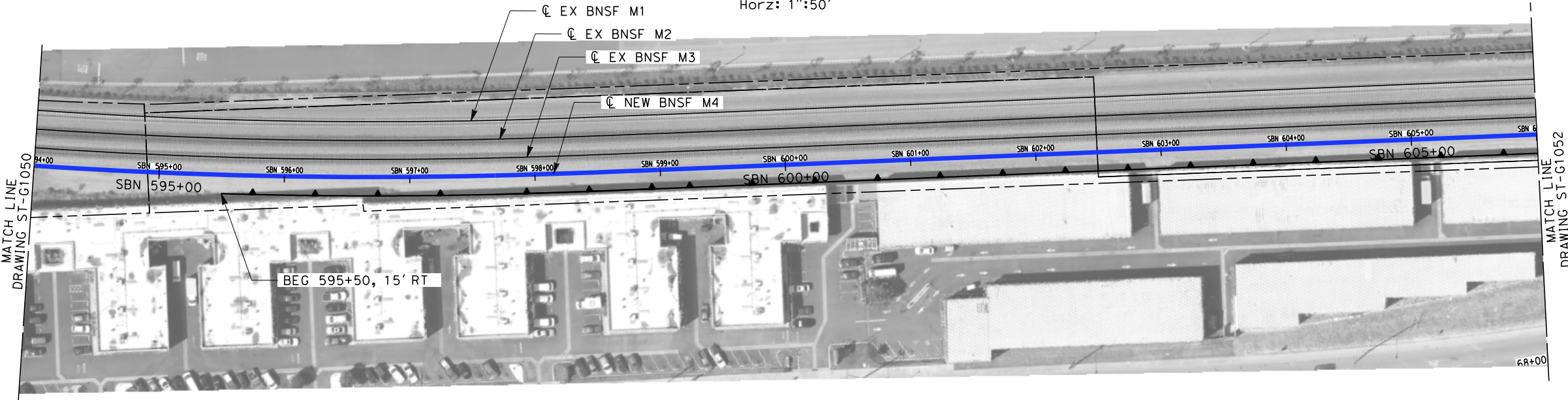
CONTRACT NO.	HSR06-0005
DRAWING NO.	ST-G1050
SCALE	AS SHOWN
SHEET NO.	

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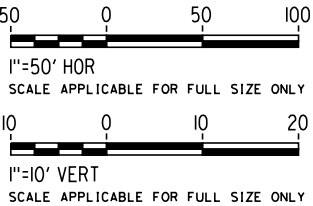
- NOTES:
1. FOR TYPE 1 & 2 WALLS, SEE DWG. NO. ST-G0021 FOR DETAILS.
 2. FOR TYPE 3 & 4 WALLS, SEE DWG. NO. ST-G0022 FOR DETAILS.
 3. FOR GRADE SEPARATION SHEETS, SEE VOLUME 3.3.
 4. FOR AERIAL STRUCTURE SHEETS, SEE VOLUME 3.2.



ELEVATION
Vert: 1"=10'
Horz: 1"=50'



PLAN
1"=50'



NOT FOR CONSTRUCTION
FOR INTERNAL USE ONLY

REV	DATE	BY	SUB	APP	DESCRIPTION

DESIGNED BY R. WONG
DRAWN BY Z. OHN
CHECKED BY M. SATISH
IN CHARGE J. SWANSON
DATE 02/28/25

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SUBMITTAL
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USE ONLY

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CONSTRUCTION

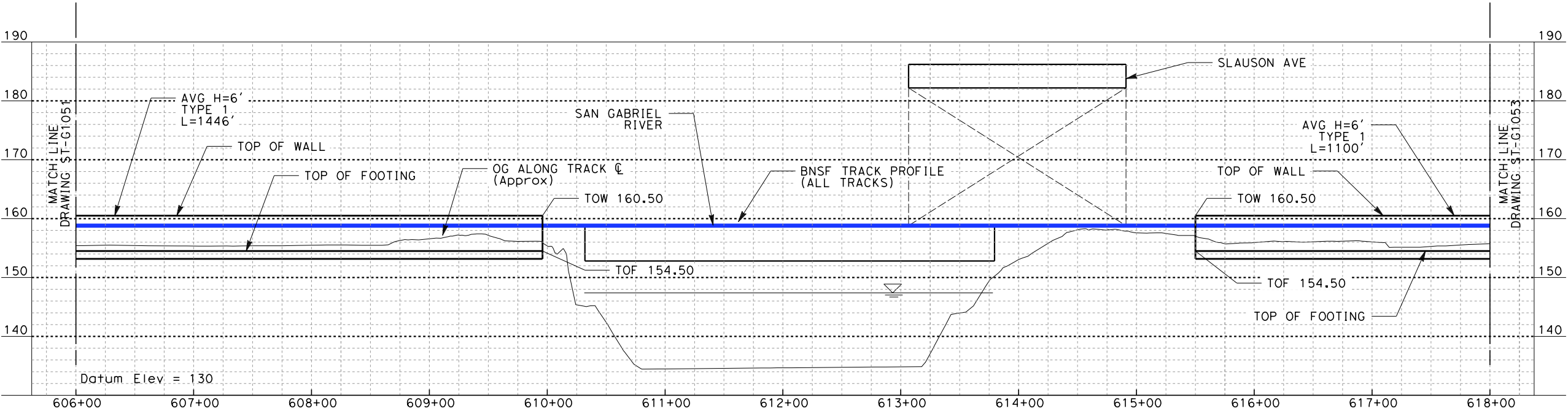


CALIFORNIA HIGH-SPEED TRAIN PROJECT
LOS ANGELES TO ANAHEIM
RECORD SET
PRELIMINARY ENGINEERING FOR PROJECT DEFINITION
RETAINING WALL
STA SBN 594+00 TO STA SBN 606+00

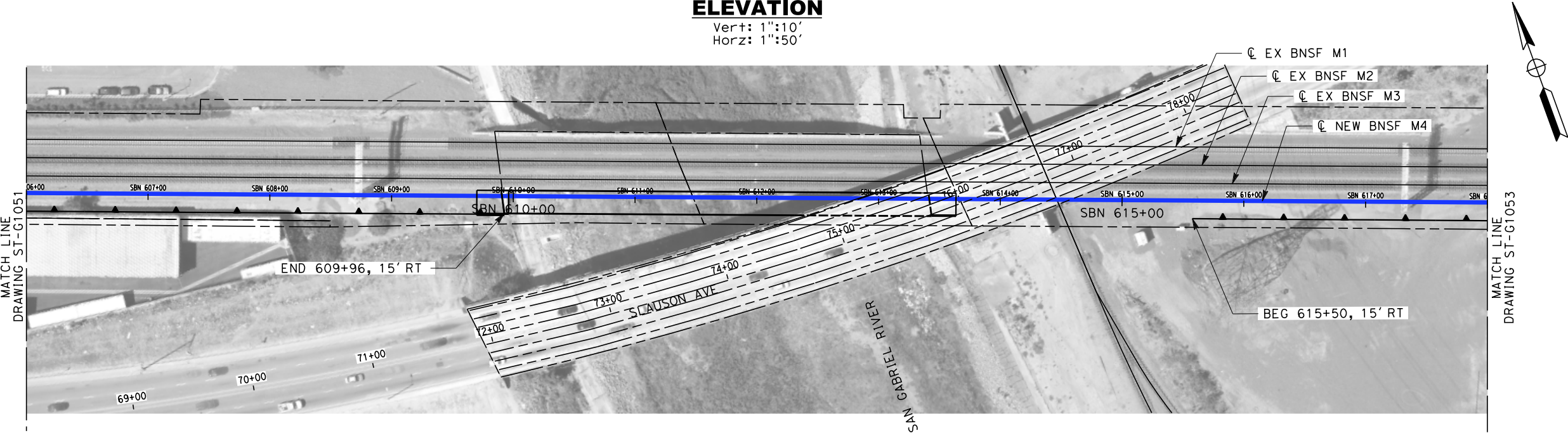
CONTRACT NO. HSR06-0005
DRAWING NO. ST-G1051
SCALE AS SHOWN
SHEET NO.

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- NOTES:
1. FOR TYPE 1 & 2 WALLS, SEE DWG. NO. ST-G0021 FOR DETAILS.
 2. FOR TYPE 3 & 4 WALLS, SEE DWG. NO. ST-G0022 FOR DETAILS.
 3. FOR GRADE SEPARATION SHEETS, SEE VOLUME 3.3.
 4. FOR AERIAL STRUCTURE SHEETS, SEE VOLUME 3.2.

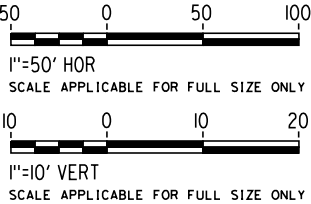


ELEVATION
Vert: 1"=10'
Horz: 1"=50'



PLAN
1"=50'

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REV	DATE	BY	SUB	APP	DESCRIPTION

DESIGNED BY R. WONG
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DATE 02/28/25

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CONSTRUCTION

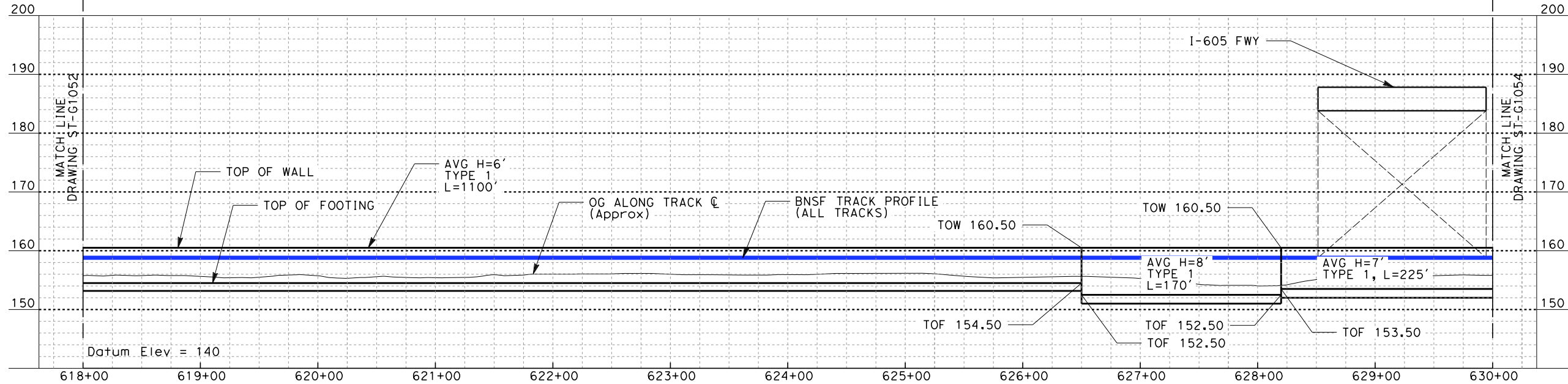


CALIFORNIA
HIGH-SPEED RAIL AUTHORITY

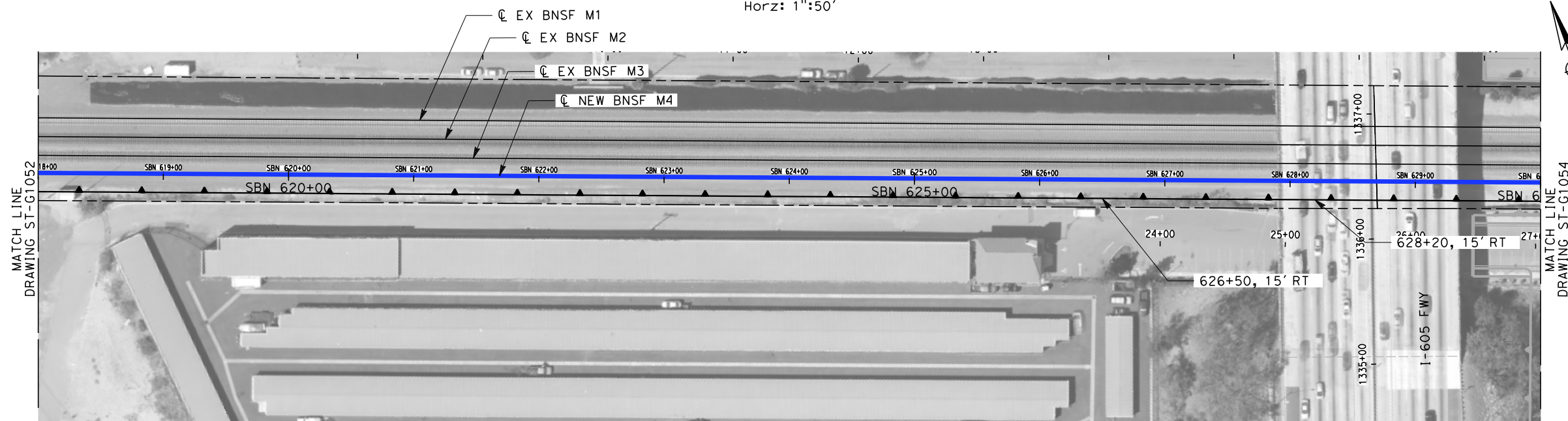
**CALIFORNIA HIGH-SPEED TRAIN PROJECT
LOS ANGELES TO ANAHEIM**
RECORD SET
PRELIMINARY ENGINEERING FOR PROJECT DEFINITION
RETAINING WALL
STA SBN 606+00 TO STA SBN 618+00

CONTRACT NO. HSR06-0005
DRAWING NO. ST-G1052
SCALE AS SHOWN
SHEET NO.

4. FOR AERIAL STRUCTURE SHEETS,
SEE VOLUME 3.2.

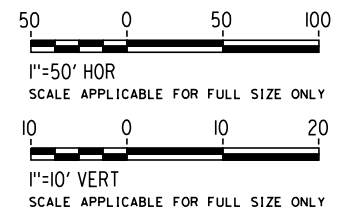


Vert: 1":10'
Horz: 1":50'



1":50'

NOT FOR CONSTRUCTION
FOR INTERNAL USE ONLY



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DRAWN BY	Z. OHN
CHECKED BY	M. SATISH
IN CHARGE	J. SWANSON
DATE	02/28/25

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USE ONLY**

**NOT FOR
CONSTRUCTION**



CALIFORNIA
HIGH-SPEED RAIL AUTHORITY

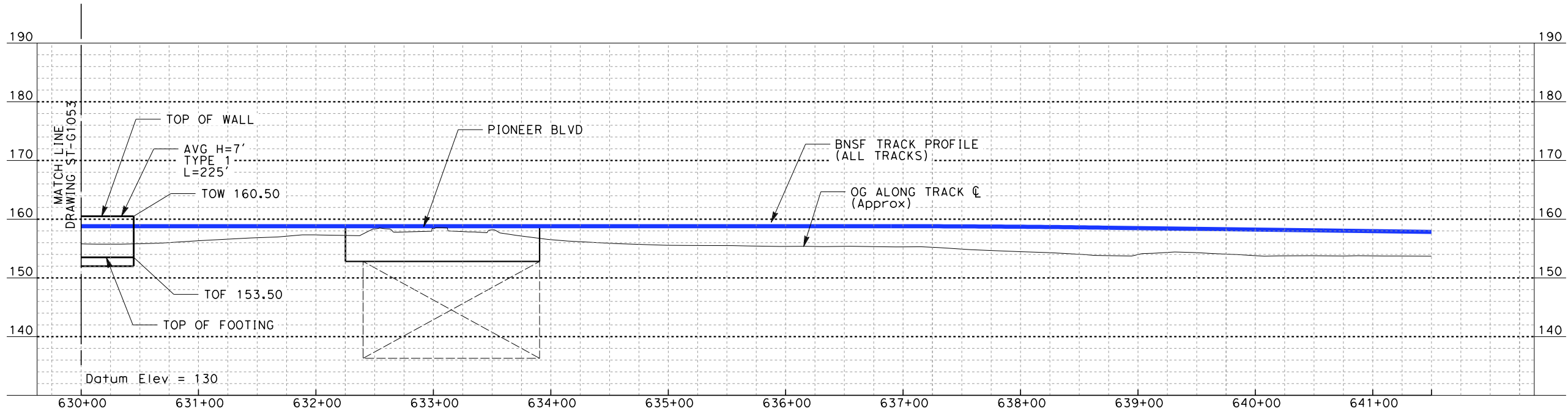
**CALIFORNIA HIGH-SPEED TRAIN PROJECT
LOS ANGELES TO ANAHEIM**

RECORD SET
PRELIMINARY ENGINEERING FOR PROJECT DEFINITION
RETAINING WALL
STA SBN 618+00 TO STA SBN 630+00

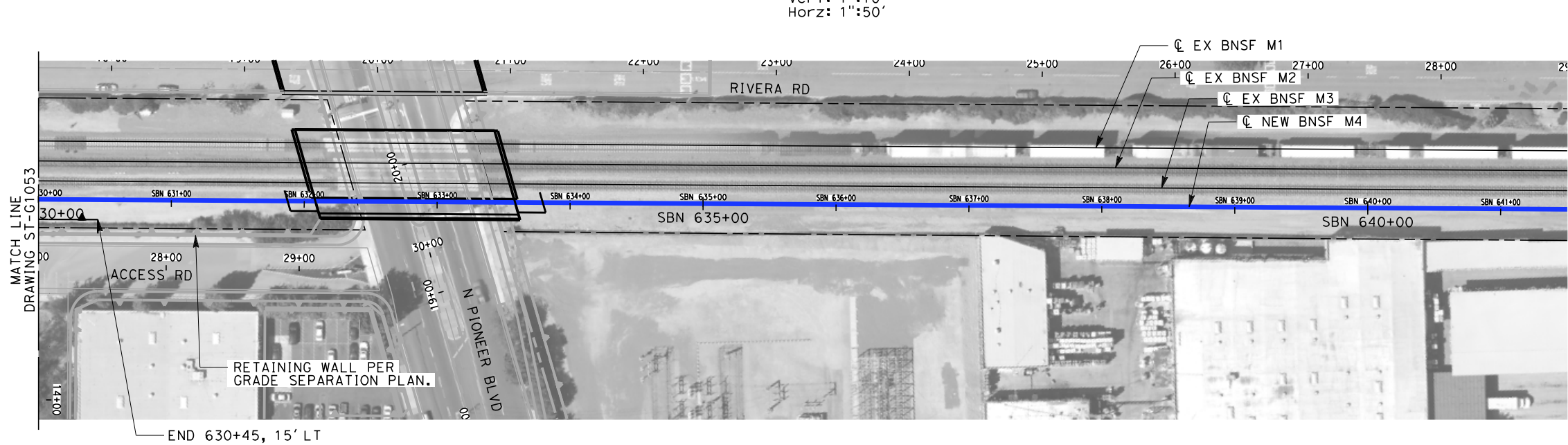
CONTRACT NO.	HSR06-0005
DRAWING NO.	ST-G1053
SCALE	AS SHOWN
SHEET NO.	

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- NOTES:
1. FOR TYPE 1 & 2 WALLS, SEE DWG. NO. ST-G0021 FOR DETAILS.
 2. FOR TYPE 3 & 4 WALLS, SEE DWG. NO. ST-G0022 FOR DETAILS.
 3. FOR GRADE SEPARATION SHEETS, SEE VOLUME 3.3.
 4. FOR AERIAL STRUCTURE SHEETS, SEE VOLUME 3.2.

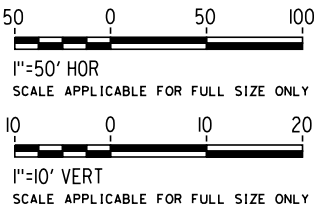


ELEVATION
Vert: 1"=10'
Horz: 1"=50'



PLAN
1"=50'

NOT FOR CONSTRUCTION
FOR INTERNAL USE ONLY



REV	DATE	BY	SUB	APP	DESCRIPTION

DESIGNED BY R. WONG
DRAWN BY Z. OHN
CHECKED BY M. SATISH
IN CHARGE J. SWANSON
DATE 02/28/25

PEPD
SUBMITTAL
FOR INTERNAL
USE ONLY

NOT FOR
CONSTRUCTION



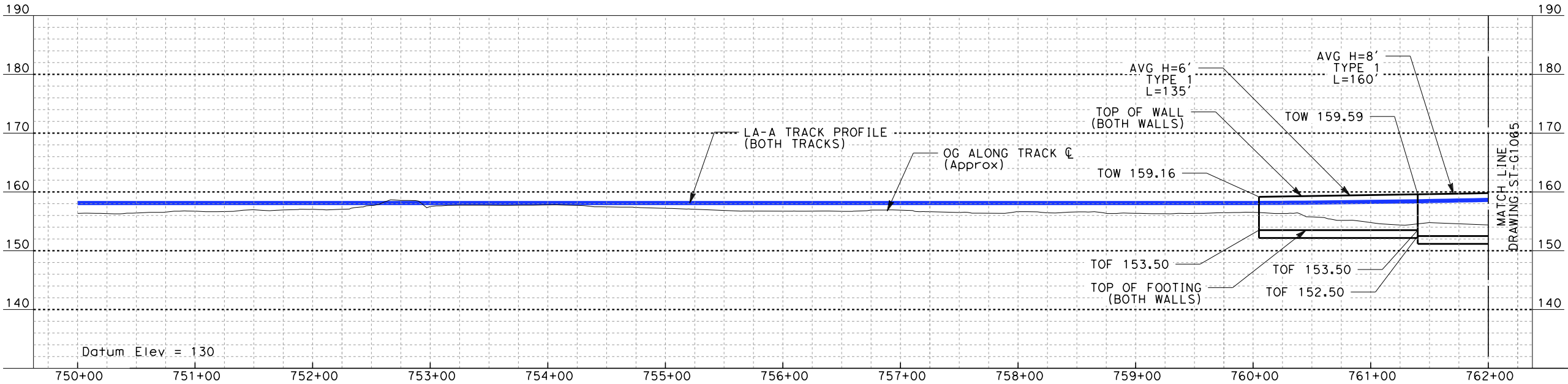
CALIFORNIA
HIGH-SPEED RAIL AUTHORITY

CALIFORNIA HIGH-SPEED TRAIN PROJECT
LOS ANGELES TO ANAHEIM
RECORD SET
PRELIMINARY ENGINEERING FOR PROJECT DEFINITION
RETAINING WALL
STA SBN 630+00 TO STA SBN 641+50

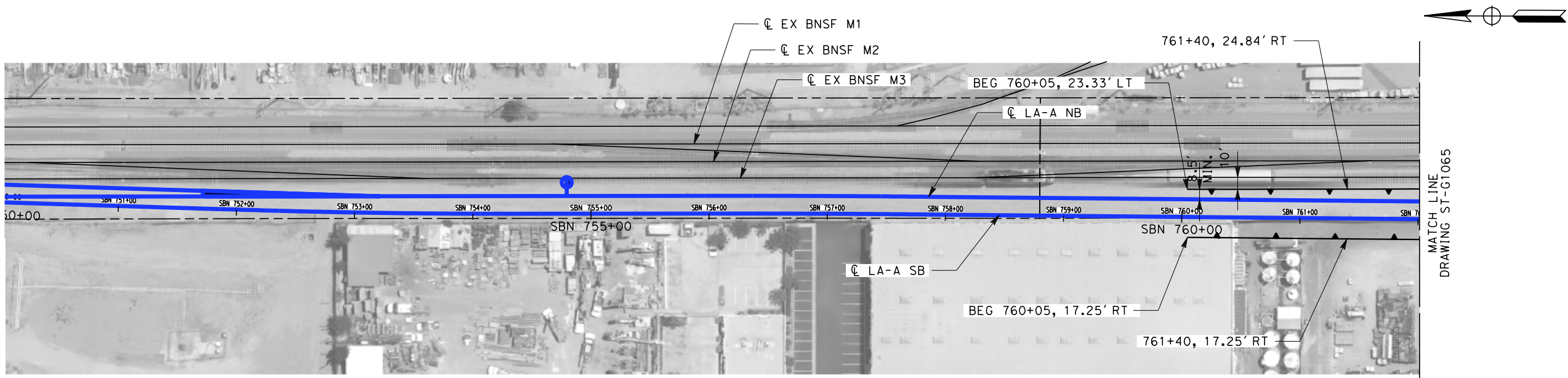
CONTRACT NO. HSR06-0005
DRAWING NO. ST-G1054
SCALE AS SHOWN
SHEET NO.

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- NOTES:
1. FOR TYPE 1 & 2 WALLS, SEE DWG. NO. ST-G0021 FOR DETAILS.
 2. FOR TYPE 3 & 4 WALLS, SEE DWG. NO. ST-G0022 FOR DETAILS.
 3. FOR GRADE SEPARATION SHEETS, SEE VOLUME 3.3.
 4. FOR AERIAL STRUCTURE SHEETS, SEE VOLUME 3.2.

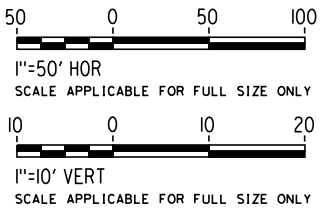


ELEVATION
Vert: 1"=10'
Horz: 1"=50'



PLAN
1"=50'

NOT FOR CONSTRUCTION
FOR INTERNAL USE ONLY



REV	DATE	BY	SUB	APP	DESCRIPTION

DESIGNED BY R. WONG
DRAWN BY Z. OHN
CHECKED BY M. SATISH
IN CHARGE J. SWANSON
DATE 02/28/25

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FOR INTERNAL
USE ONLY

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CONSTRUCTION



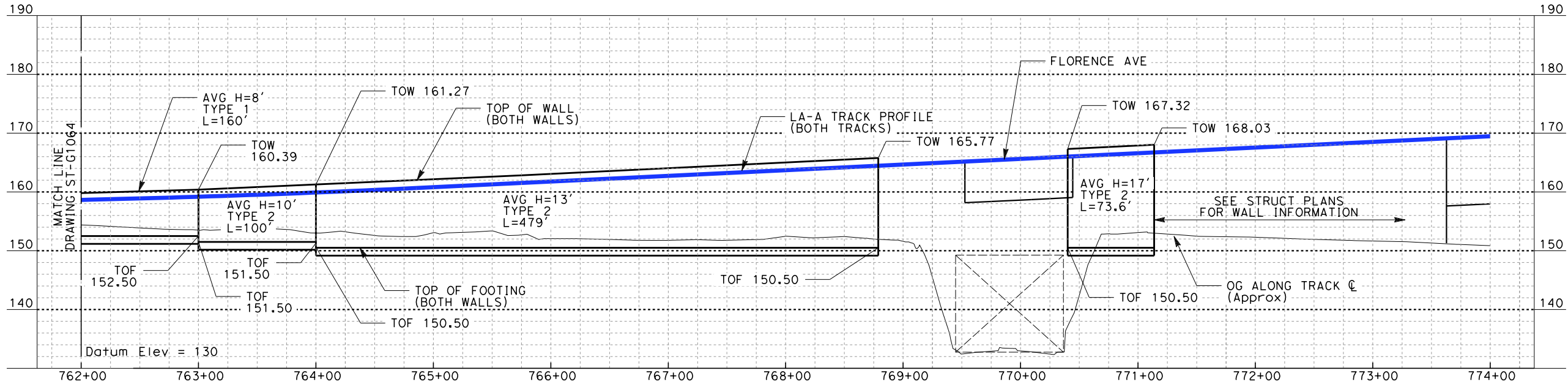
CALIFORNIA HIGH-SPEED TRAIN PROJECT
LOS ANGELES TO ANAHEIM
RECORD SET
PRELIMINARY ENGINEERING FOR PROJECT DEFINITION
RETAINING WALL
STA SBN 750+00 TO STA SBN 762+00

CONTRACT NO. HSR06-0005
DRAWING NO. ST-G1064
SCALE AS SHOWN
SHEET NO.

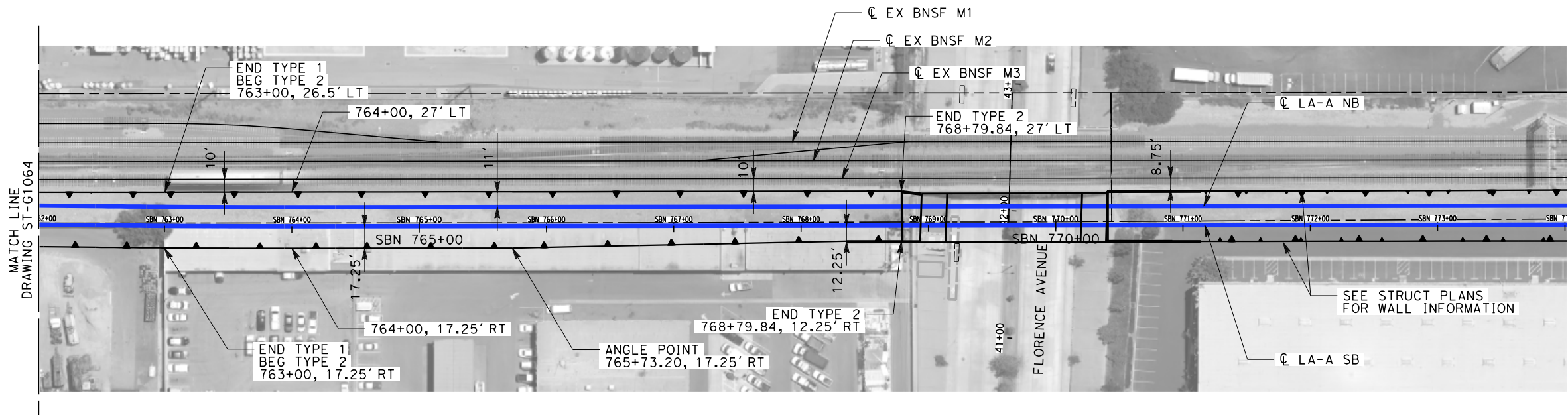
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NOTES:

1. FOR TYPE 1 & 2 WALLS, SEE DWG. NO. ST-G0021 FOR DETAILS.
2. FOR TYPE 3 & 4 WALLS, SEE DWG. NO. ST-G0022 FOR DETAILS.
3. FOR GRADE SEPARATION SHEETS, SEE VOLUME 3.3.
4. FOR AERIAL STRUCTURE SHEETS, SEE VOLUME 3.2.

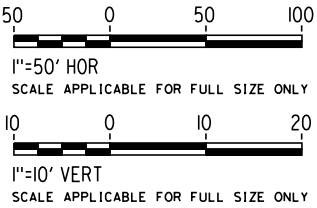


ELEVATION
Vert: 1"=10'
Horz: 1"=50'



PLAN
1"=50'

NOT FOR CONSTRUCTION
FOR INTERNAL USE ONLY



REV	DATE	BY	SUB	APP	DESCRIPTION

DESIGNED BY R. WONG
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CHECKED BY M. SATISH
IN CHARGE J. SWANSON
DATE 02/28/25

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FOR INTERNAL
USE ONLY

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CONSTRUCTION

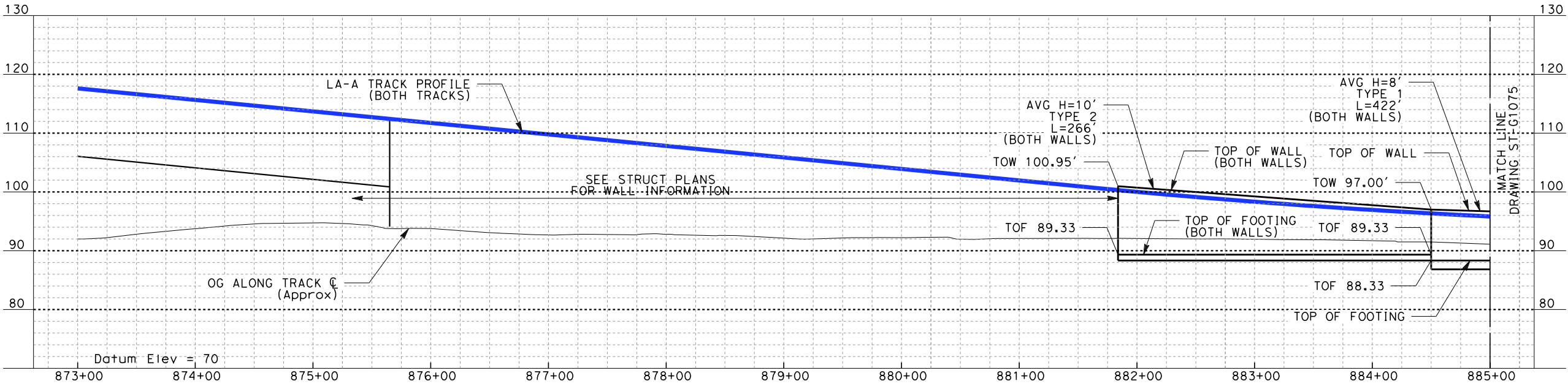


CALIFORNIA HIGH-SPEED TRAIN PROJECT
LOS ANGELES TO ANAHEIM
RECORD SET
PRELIMINARY ENGINEERING FOR PROJECT DEFINITION
RETAINING WALL
STA SBN 762+00 TO STA SBN 774+00

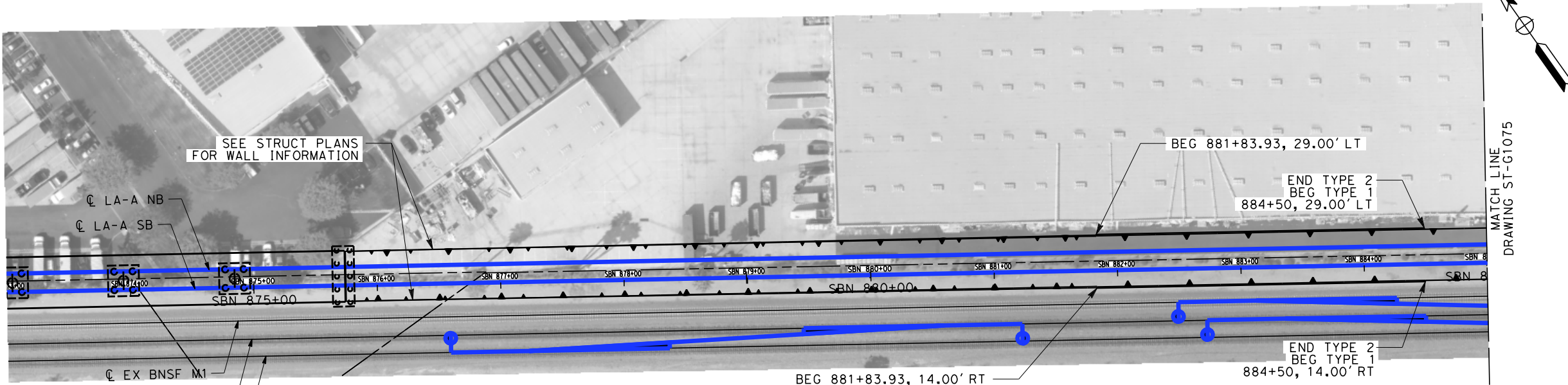
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DRAWING NO. ST-G1065
SCALE AS SHOWN
SHEET NO.

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- NOTES:
1. FOR TYPE 1 & 2 WALLS, SEE DWG. NO. ST-G0021 FOR DETAILS.
 2. FOR TYPE 3 & 4 WALLS, SEE DWG. NO. ST-G0022 FOR DETAILS.
 3. FOR GRADE SEPARATION SHEETS, SEE VOLUME 3.3.
 4. FOR AERIAL STRUCTURE SHEETS, SEE VOLUME 3.2.

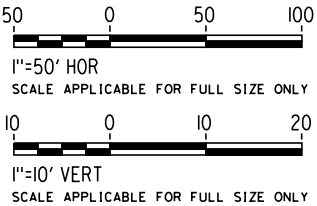


ELEVATION
Vert: 1"=10'
Horz: 1"=50'



PLAN
1"=50'

NOT FOR CONSTRUCTION
FOR INTERNAL USE ONLY



REV	DATE	BY	SUB	APP	DESCRIPTION

DESIGNED BY R. WONG
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CHECKED BY M. SATISH
IN CHARGE J. SWANSON
DATE 02/28/25

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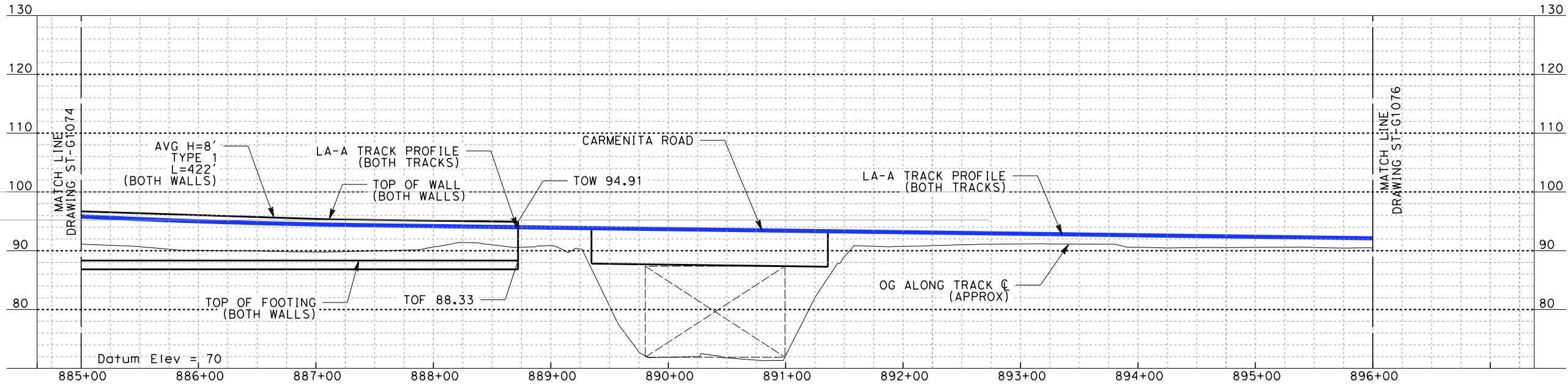
CALIFORNIA
HIGH-SPEED RAIL AUTHORITY

CALIFORNIA HIGH-SPEED TRAIN PROJECT
LOS ANGELES TO ANAHEIM
RECORD SET
PRELIMINARY ENGINEERING FOR PROJECT DEFINITION
RETAINING WALL
STA SBN 873+00 TO STA SBN 885+00

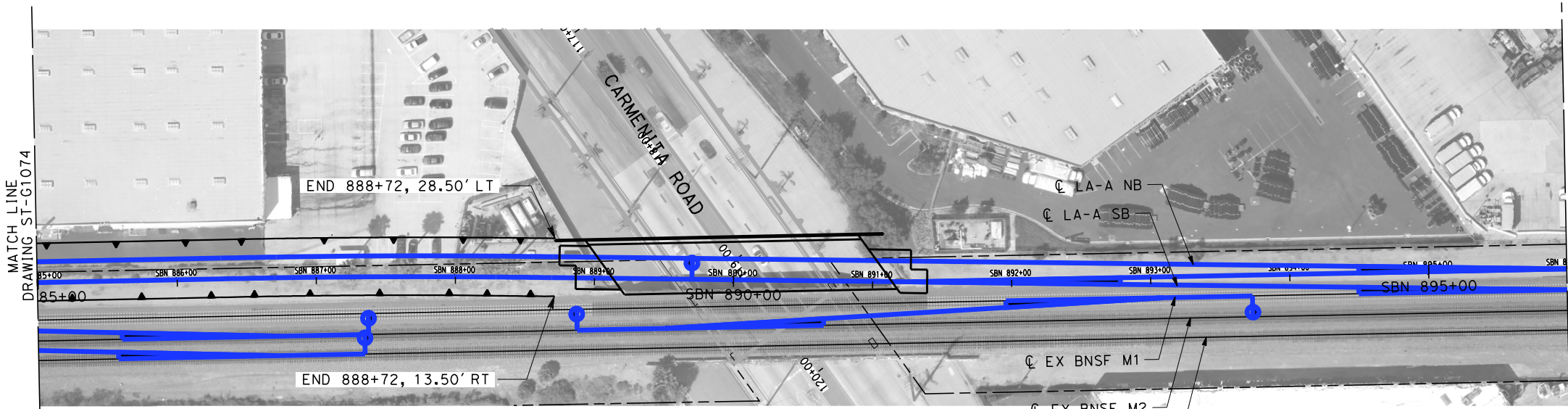
CONTRACT NO. HSR06-0005
DRAWING NO. ST-G1074
SCALE AS SHOWN
SHEET NO.

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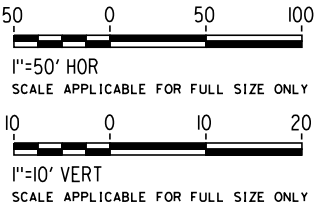
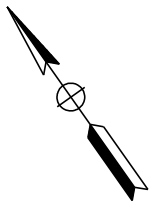
- NOTES:
- 1. FOR TYPE 1 & 2 WALLS, SEE DWG. NO. ST-G0021 FOR DETAILS.
 - 2. FOR TYPE 3 & 4 WALLS, SEE DWG. NO. ST-G0022 FOR DETAILS.
 - 3. FOR GRADE SEPARATION SHEETS, SEE VOLUME 3.3.
 - 4. FOR AERIAL STRUCTURE SHEETS, SEE VOLUME 3.2.



ELEVATION
Vert: 1"=10'
Horz: 1"=50'



PLAN
1"=50'



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REV	DATE	BY	SUB	APP	DESCRIPTION

DESIGNED BY R. WONG
DRAWN BY Z. OHN
CHECKED BY M. SATISH
IN CHARGE J. SWANSON
DATE 02/28/25

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FOR INTERNAL
USE ONLY

NOT FOR
CONSTRUCTION

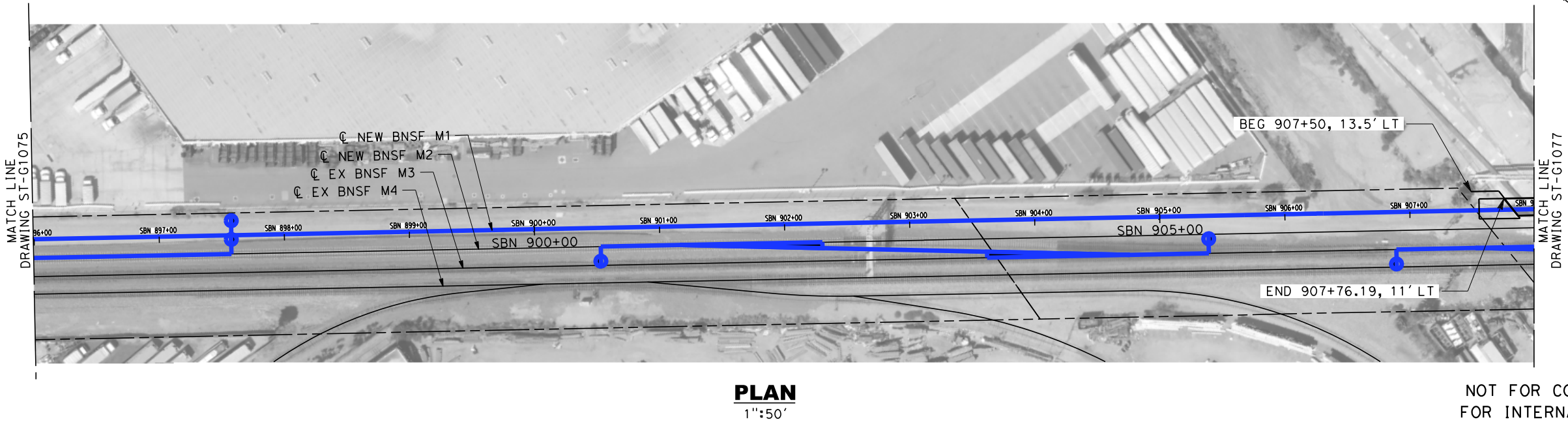
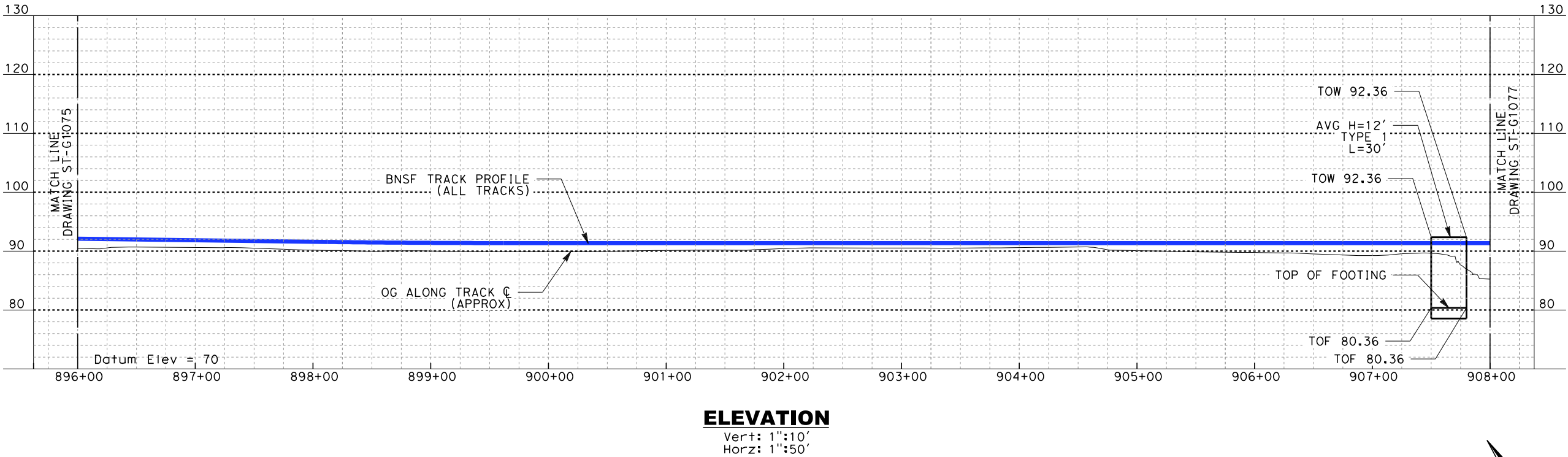


**CALIFORNIA HIGH-SPEED TRAIN PROJECT
LOS ANGELES TO ANAHEIM**
RECORD SET
PRELIMINARY ENGINEERING FOR PROJECT DEFINITION
RETAINING WALL
STA SBN 885+00 TO STA SBN 896+00

CONTRACT NO. HSR06-0005
DRAWING NO. ST-G1075
SCALE AS SHOWN
SHEET NO.

1/29/2025 1:52:27 PM I:\Projects\4017456\4017456_0001\90_CAD Models and Sheets\LO\Sheet Files\Vol 2\ST\LO-ST-G1076.dgn romired

- NOTES:
1. FOR TYPE 1 & 2 WALLS, SEE DWG. NO. ST-G0021 FOR DETAILS.
 2. FOR TYPE 3 & 4 WALLS, SEE DWG. NO. ST-G0022 FOR DETAILS.
 3. FOR GRADE SEPARATION SHEETS, SEE VOLUME 3.3.
 4. FOR AERIAL STRUCTURE SHEETS, SEE VOLUME 3.2.



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REV	DATE	BY	SUB	APP	DESCRIPTION

DESIGNED BY R. WONG
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CHECKED BY M. SATISH
IN CHARGE J. SWANSON
DATE 02/28/25

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SUBMITTAL
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CONSTRUCTION

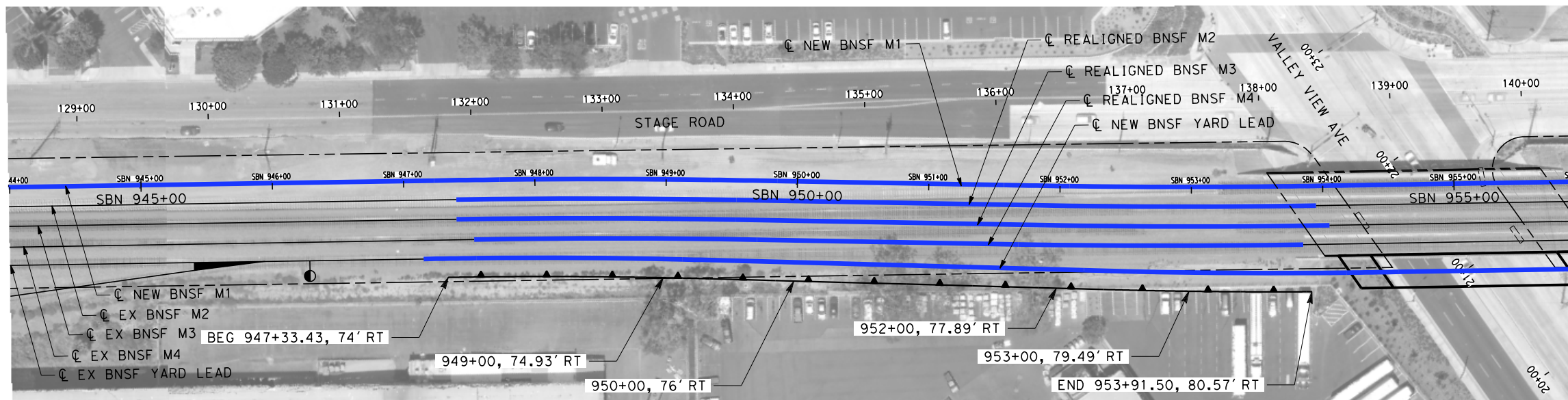


CALIFORNIA
HIGH-SPEED RAIL AUTHORITY

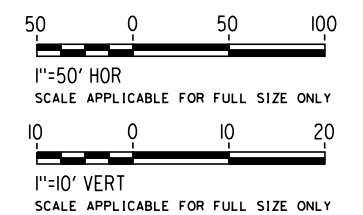
**CALIFORNIA HIGH-SPEED TRAIN PROJECT
LOS ANGELES TO ANAHEIM**
RECORD SET
PRELIMINARY ENGINEERING FOR PROJECT DEFINITION
RETAINING WALL
STA SBN 896+00 TO STA SBN 908+00

CONTRACT NO. HSR06-0005
DRAWING NO. ST-G1076
SCALE AS SHOWN
SHEET NO.

1. FOR TYPE 1 & 2 WALLS, SEE
DWG. NO. ST-G0021 FOR DETAILS.
2. FOR TYPE 3 & 4 WALLS, SEE
DWG. NO. ST-G0022 FOR DETAILS.
3. FOR GRADE SEPARATION SHEETS,
SEE VOLUME 3.3.
4. FOR AERIAL STRUCTURE SHEETS,
SEE VOLUME 3.2.



NOT FOR CONSTRUCTION
FOR INTERNAL USE ONLY

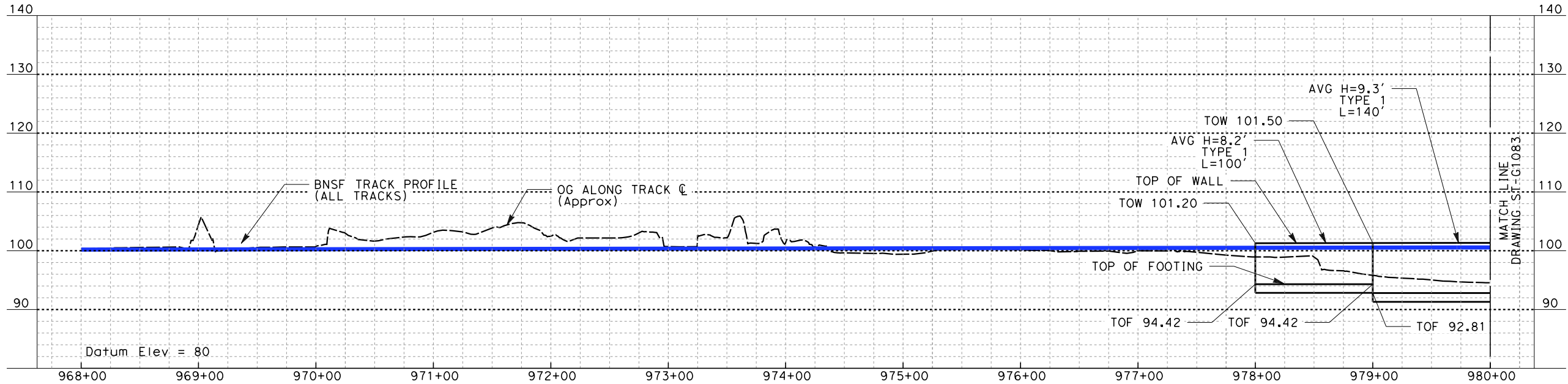


						DESIGNED BY R. WONG	PEPD SUBMITTAL FOR INTERNAL USE ONLY NOT FOR CONSTRUCTION			CALIFORNIA HIGH-SPEED TRAIN PROJECT LOS ANGELES TO ANAHEIM RECORD SET PRELIMINARY ENGINEERING FOR PROJECT DEFINITION RETAINING WALL STA SBN 944+00 TO STA SBN 956+00	CONTRACT NO. HSR06-0005
						DRAWN BY Z. OHN					DRAWING NO. ST-G1080
						CHECKED BY M. SATISH					SCALE AS SHOWN
						IN CHARGE J. SWANSON					SHEET NO.
REV	DATE	BY	SUB	APP	DESCRIPTION	DATE 02/28/25					

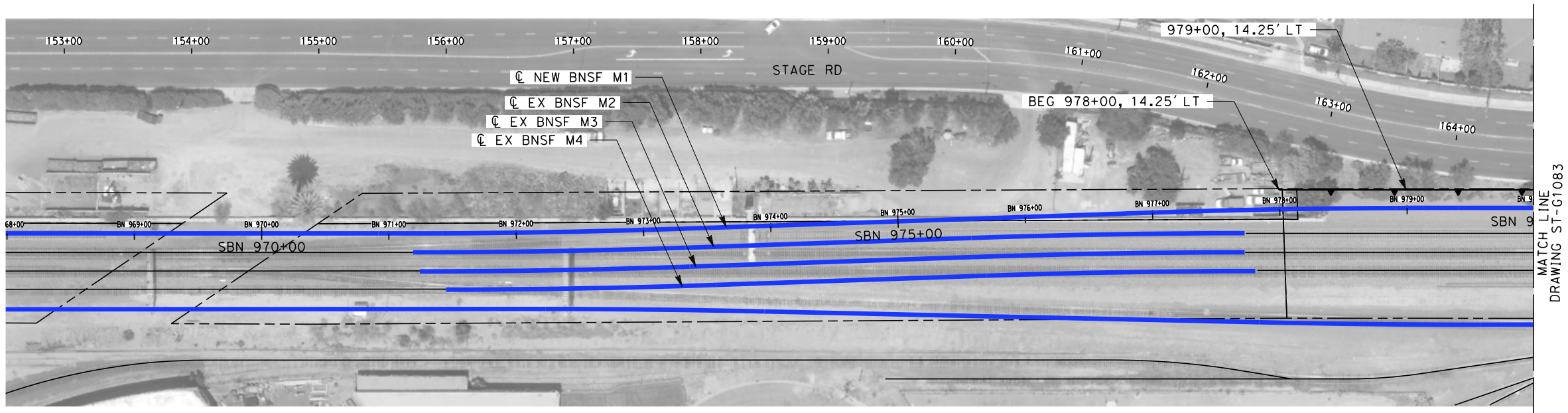
6/17/2025 2:39:41 PM I:\Projects\4017456\4017456_0001\90_CAD Models and Sheets\LO\Sheet Files\Vol 2\ST\LO-ST-G1082.dgn

NOTES:

1. FOR TYPE 1 & 2 WALLS, SEE DWG. NO. ST-G0021 FOR DETAILS.
2. FOR TYPE 3 & 4 WALLS, SEE DWG. NO. ST-G0022 FOR DETAILS.
3. FOR GRADE SEPARATION SHEETS, SEE VOLUME 3.3.
4. FOR AERIAL STRUCTURE SHEETS, SEE VOLUME 3.2.

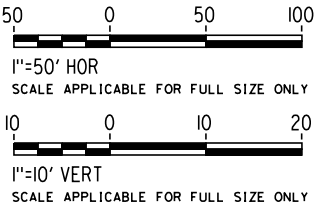


ELEVATION
Vert: 1"=10'
Horz: 1"=50'



PLAN
1"=50'

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FOR INTERNAL USE ONLY



REV	DATE	BY	SUB	APP	DESCRIPTION

DESIGNED BY R. WONG
DRAWN BY Z. OHN
CHECKED BY M. SATISH
IN CHARGE J. SWANSON
DATE 02/28/25

PEPD
SUBMITTAL
FOR INTERNAL
USE ONLY

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CONSTRUCTION



CALIFORNIA
HIGH-SPEED RAIL AUTHORITY

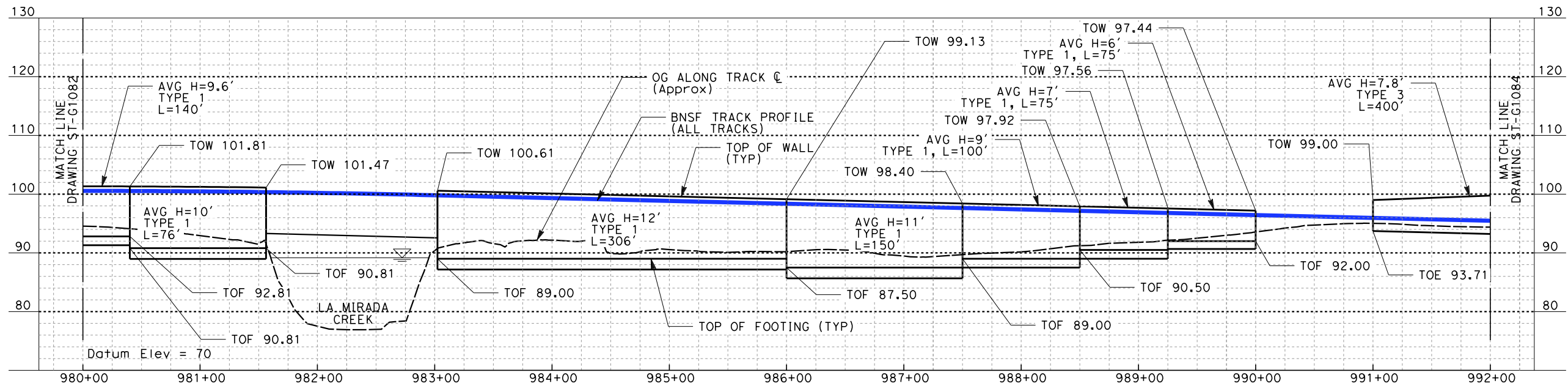
CALIFORNIA HIGH-SPEED TRAIN PROJECT
LOS ANGELES TO ANAHEIM
RECORD SET
PRELIMINARY ENGINEERING FOR PROJECT DEFINITION
RETAINING WALL
STA SBN 968+00 TO STA SBN 980+00

CONTRACT NO. HSR06-0005
DRAWING NO. ST-G1082
SCALE AS SHOWN
SHEET NO.

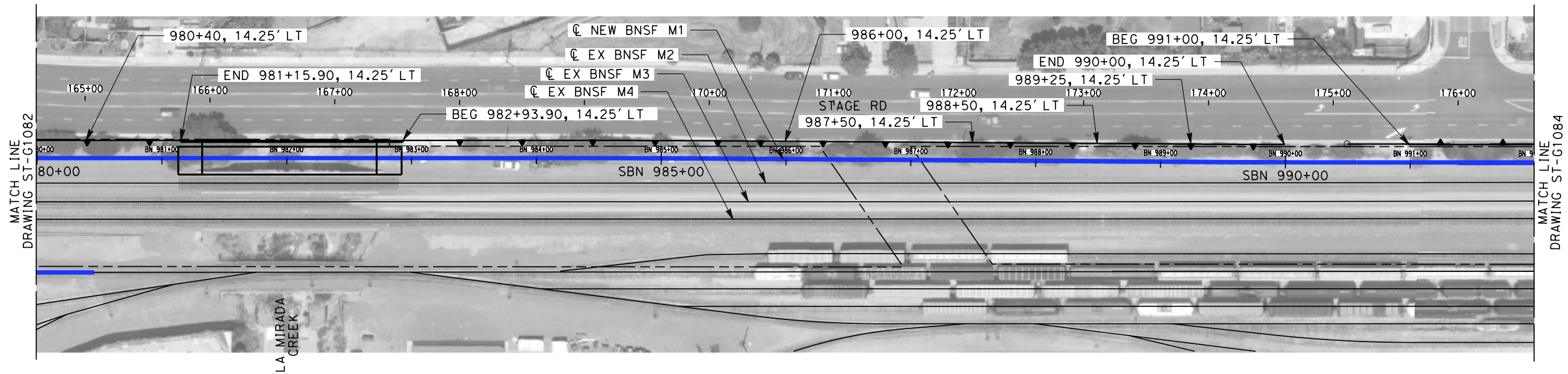
I:\Projects\4017456_0001\90_CAD Models and Sheets\LO-Sheet Files\Vol 2\ST\LO-ST-G1083.dgn 6/17/2025 2:36:29 PM Boschal

NOTES:

1. FOR TYPE 1 & 2 WALLS, SEE DWG. NO. ST-G0021 FOR DETAILS.
2. FOR TYPE 3 & 4 WALLS, SEE DWG. NO. ST-G0022 FOR DETAILS.
3. FOR GRADE SEPARATION SHEETS, SEE VOLUME 3.3.
4. FOR AERIAL STRUCTURE SHEETS, SEE VOLUME 3.2.

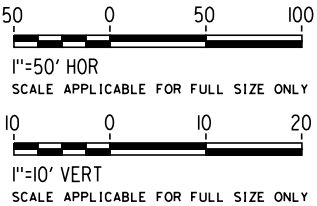


ELEVATION
Vert: 1"=10'
Horz: 1"=50'



PLAN
1"=50'

NOT FOR CONSTRUCTION
FOR INTERNAL USE ONLY



REV	DATE	BY	SUB	APP	DESCRIPTION

DESIGNED BY R. WONG
DRAWN BY Z. OHN
CHECKED BY M. SATISH
IN CHARGE J. SWANSON
DATE 02/28/25

PEPD
SUBMITTAL
FOR INTERNAL
USE ONLY

NOT FOR
CONSTRUCTION

stv

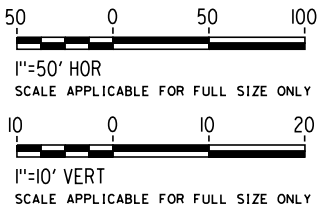
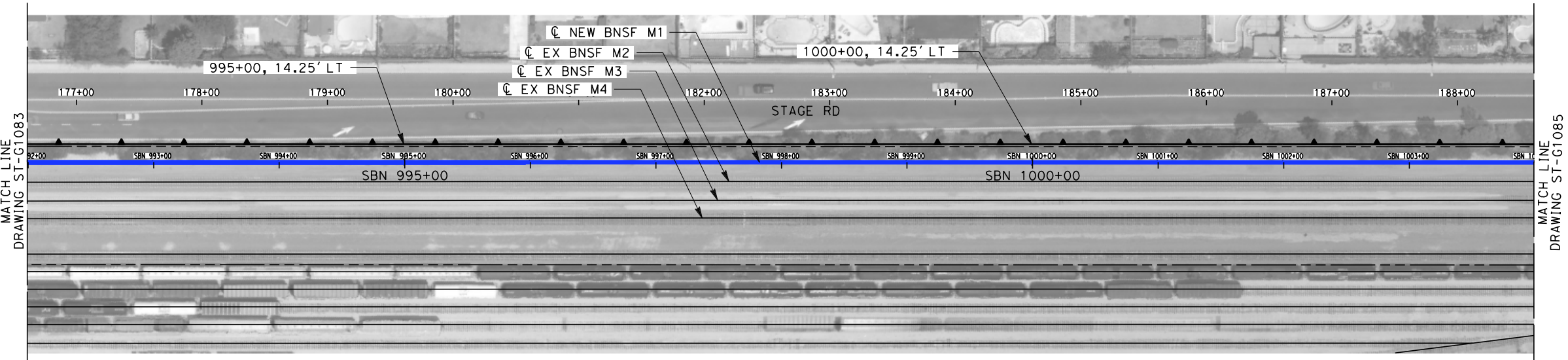
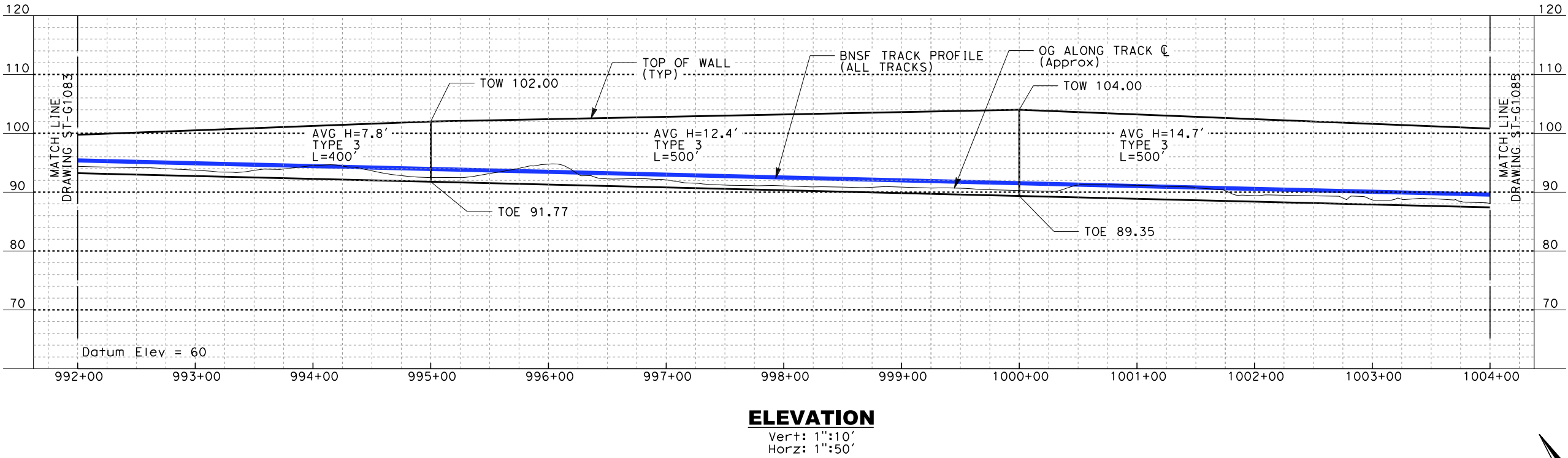


CALIFORNIA HIGH-SPEED TRAIN PROJECT
LOS ANGELES TO ANAHEIM
RECORD SET
PRELIMINARY ENGINEERING FOR PROJECT DEFINITION
RETAINING WALL
STA SBN 980+00 TO STA SBN 992+00

CONTRACT NO. HSR06-0005
DRAWING NO. ST-G1083
SCALE AS SHOWN
SHEET NO.

1/29/2025 1:51:52 PM I:\Projects\4017456_0001\90_CAD Models and Sheets\LO\Sheet Files\Vol 2\ST\LO-ST-G1084.dgn romired

- NOTES:
- 1. FOR TYPE 1 & 2 WALLS, SEE DWG. NO. ST-G0021 FOR DETAILS.
 - 2. FOR TYPE 3 & 4 WALLS, SEE DWG. NO. ST-G0022 FOR DETAILS.
 - 3. FOR GRADE SEPARATION SHEETS, SEE VOLUME 3.3.
 - 4. FOR AERIAL STRUCTURE SHEETS, SEE VOLUME 3.2.



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REV	DATE	BY	SUB	APP	DESCRIPTION

DESIGNED BY R. WONG
DRAWN BY Z. OHN
CHECKED BY M. SATISH
IN CHARGE J. SWANSON
DATE 02/28/25

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USE ONLY

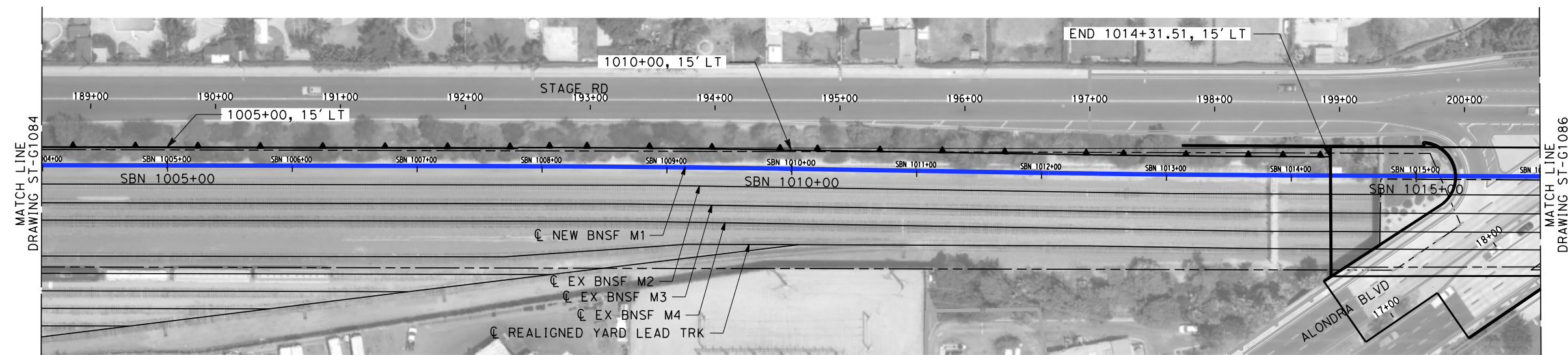
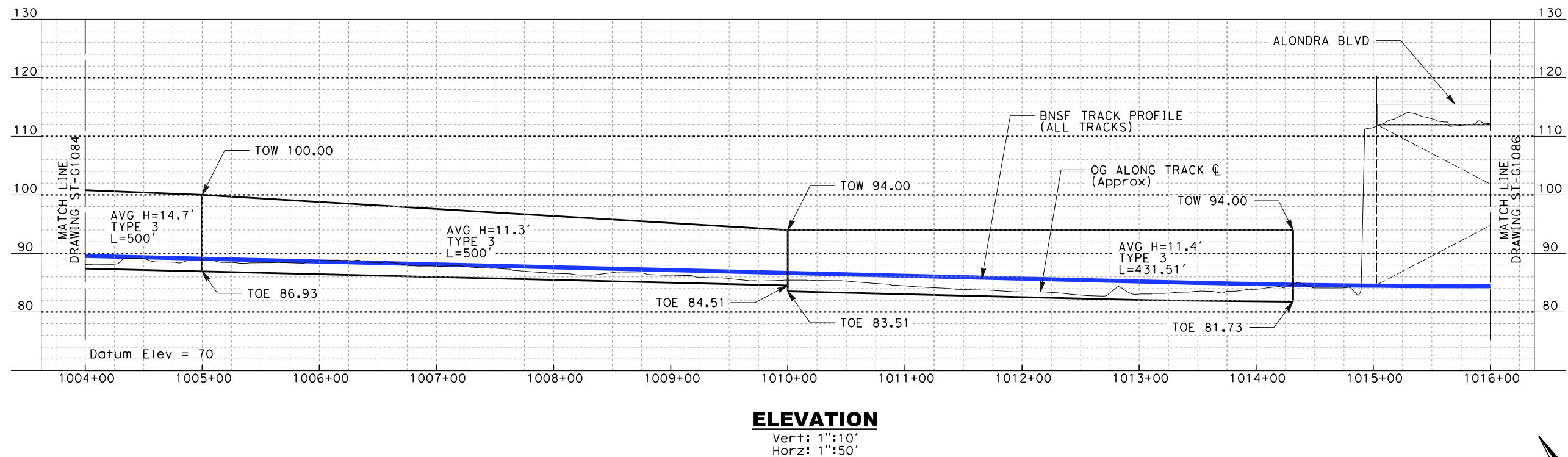
NOT FOR
CONSTRUCTION



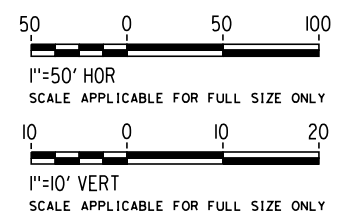
CALIFORNIA HIGH-SPEED TRAIN PROJECT
LOS ANGELES TO ANAHEIM
RECORD SET
PRELIMINARY ENGINEERING FOR PROJECT DEFINITION
RETAINING WALL
STA SBN 992+00 TO STA SBN 1004+00

CONTRACT NO. HSR06-0005
DRAWING NO. ST-G1084
SCALE AS SHOWN
SHEET NO.

1. FOR TYPE 1 & 2 WALLS, SEE
DWG. NO. ST-G0021 FOR DETAILS.
2. FOR TYPE 3 & 4 WALLS, SEE
DWG. NO. ST-G0022 FOR DETAILS.
3. FOR GRADE SEPARATION SHEETS,
SEE VOLUME 3.3.
4. FOR AERIAL STRUCTURE SHEETS,
SEE VOLUME 3.2.



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REV	DATE	BY	SUB	APP	DESCRIPTION

DESIGNED BY	R. WONG
DRAWN BY	Z. OHN
CHECKED BY	M. SATISH
IN CHARGE	J. SWANSON
DATE	02/28/25

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FOR INTERNAL
USE ONLY**

**NOT FOR
CONSTRUCTION**



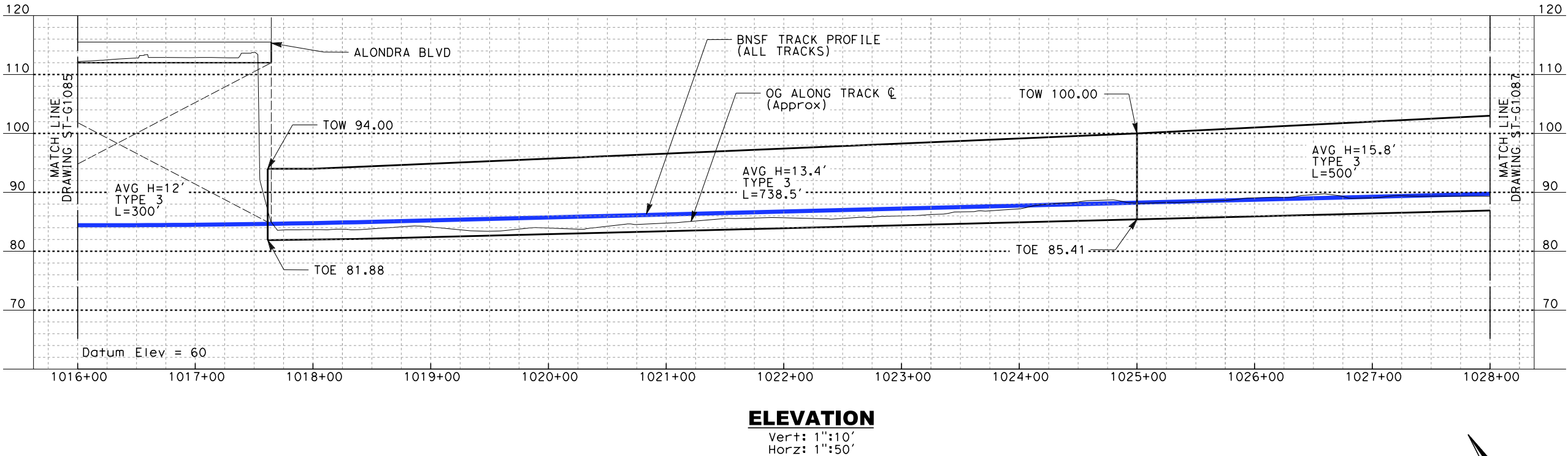
CALIFORNIA
HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT
LOS ANGELES TO ANAHEIM**

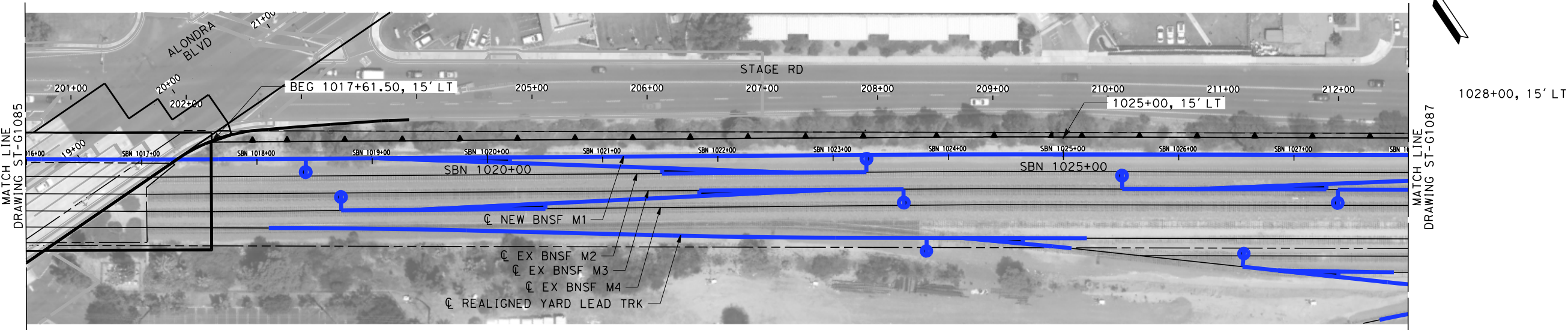
RECORD SET
PRELIMINARY ENGINEERING FOR PROJECT DEFINITION
RETAINING WALL
STA SBN 1004+00 TO STA SBN 1016+00

CONTRACT NO.	HSR06-0005
DRAWING NO.	ST-G1085
SCALE	AS SHOWN
SHEET NO.	

- NOTES:
- 1. FOR TYPE 1 & 2 WALLS, SEE DWG. NO. ST-G0021 FOR DETAILS.
 - 2. FOR TYPE 3 & 4 WALLS, SEE DWG. NO. ST-G0022 FOR DETAILS.
 - 3. FOR GRADE SEPARATION SHEETS, SEE VOLUME 3.3.
 - 4. FOR AERIAL STRUCTURE SHEETS, SEE VOLUME 3.2.

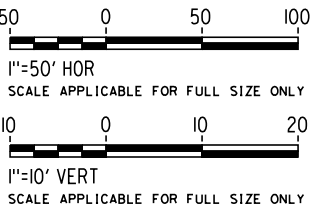


ELEVATION
Vert: 1"=10'
Horz: 1"=50'



PLAN
1"=50'

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REV	DATE	BY	SUB	APP	DESCRIPTION

DESIGNED BY R. WONG
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IN CHARGE J. SWANSON
DATE 02/28/25

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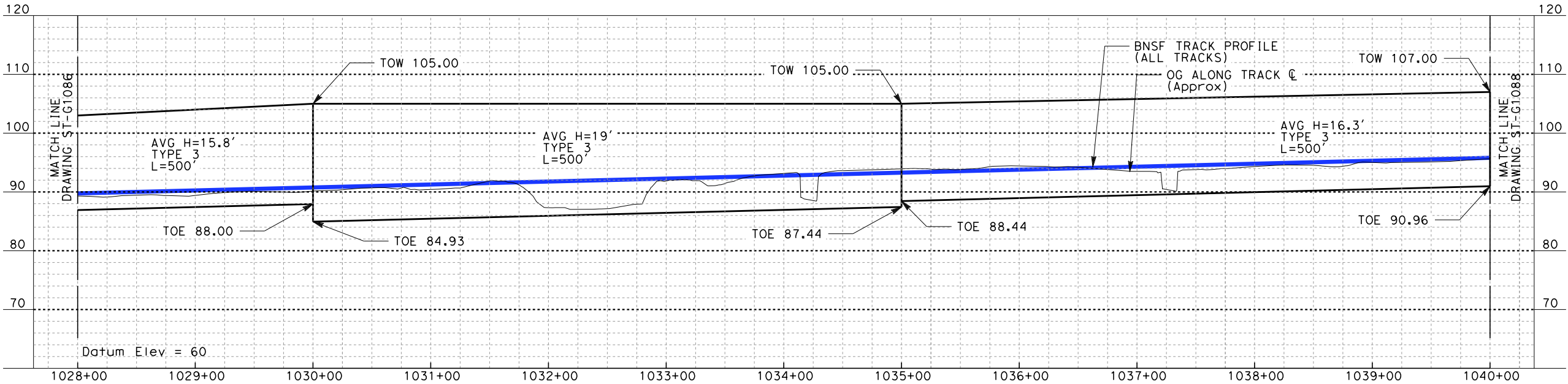
**CALIFORNIA HIGH-SPEED TRAIN PROJECT
LOS ANGELES TO ANAHEIM**

RECORD SET
PRELIMINARY ENGINEERING FOR PROJECT DEFINITION
RETAINING WALL
STA SBN 1016+00 TO STA SBN 1028+00

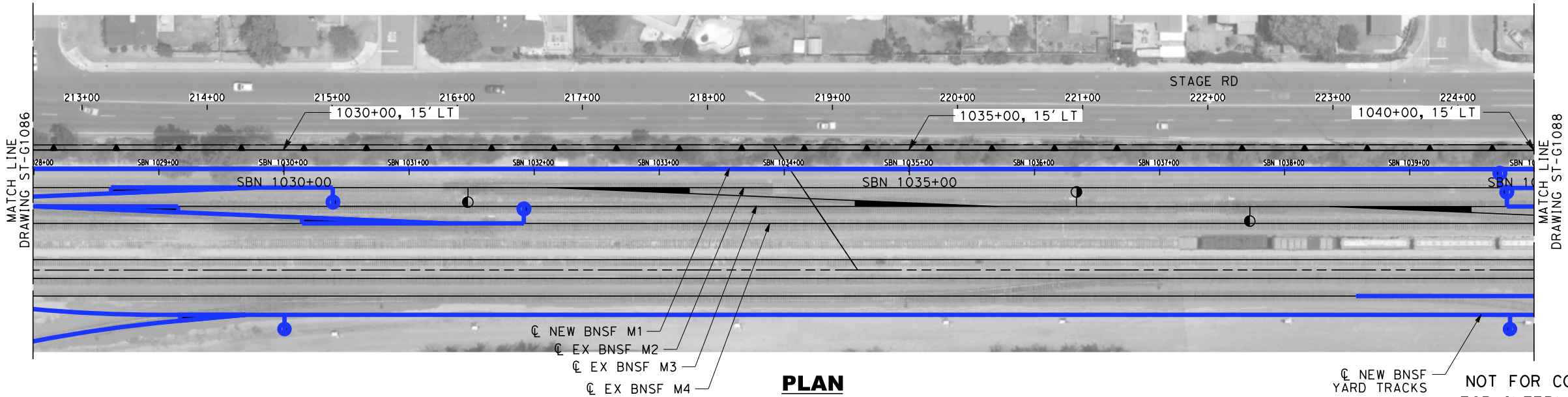
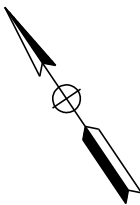
CONTRACT NO. HSR06-0005
DRAWING NO. ST-G1086
SCALE AS SHOWN
SHEET NO.

I:\Projects\4017456\4017456_0001\90_CAD Models and Sheets\LO\Sheet Files\Vol 2\ST\LO-ST-G1087.dgn 1/29/2025 1:51:30 PM romired

- NOTES:
- 1. FOR TYPE 1 & 2 WALLS, SEE DWG. NO. ST-G0021 FOR DETAILS.
 - 2. FOR TYPE 3 & 4 WALLS, SEE DWG. NO. ST-G0022 FOR DETAILS.
 - 3. FOR GRADE SEPARATION SHEETS, SEE VOLUME 3.3.
 - 4. FOR AERIAL STRUCTURE SHEETS, SEE VOLUME 3.2.

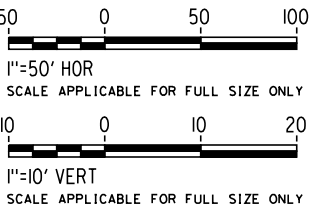


ELEVATION
Vert: 1"=10'
Horz: 1"=50'



PLAN
1"=50'

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REV	DATE	BY	SUB	APP	DESCRIPTION

DESIGNED BY R. WONG
DRAWN BY Z. OHN
CHECKED BY M. SATISH
IN CHARGE J. SWANSON
DATE 02/28/25

PEPD
SUBMITTAL
FOR INTERNAL
USE ONLY

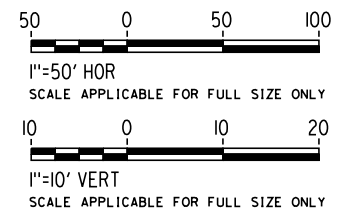
NOT FOR
CONSTRUCTION



CALIFORNIA HIGH-SPEED TRAIN PROJECT
LOS ANGELES TO ANAHEIM
RECORD SET
PRELIMINARY ENGINEERING FOR PROJECT DEFINITION
RETAINING WALL
STA SBN 1028+00 TO STA SBN 1040+00

CONTRACT NO. HSR06-0005
DRAWING NO. ST-G1087
SCALE AS SHOWN
SHEET NO.

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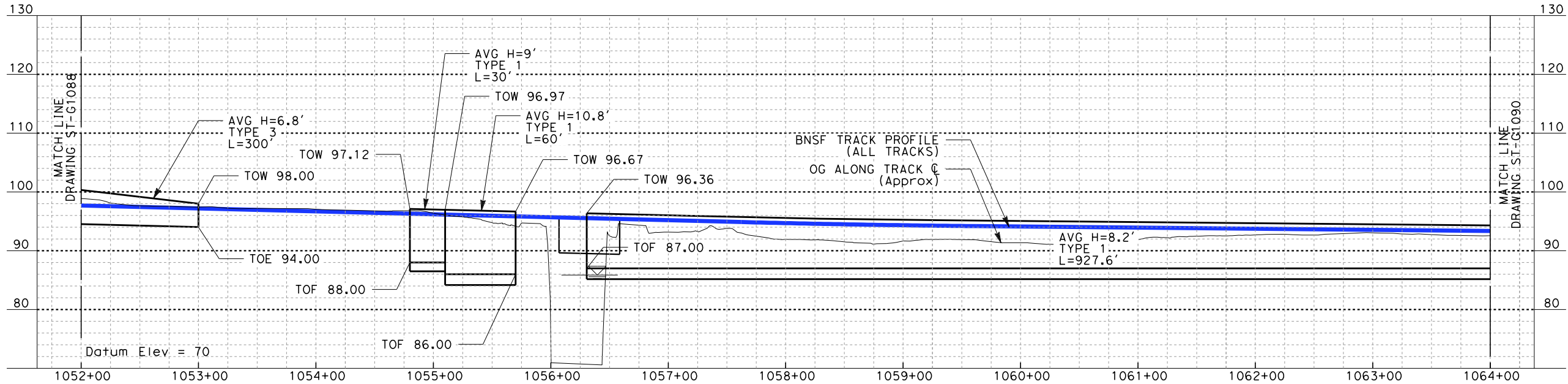


						DESIGNED BY R. WONG	PEPD SUBMITTAL FOR INTERNAL USE ONLY NOT FOR CONSTRUCTION	 CALIFORNIA HIGH-SPEED RAIL AUTHORITY	CALIFORNIA HIGH-SPEED TRAIN PROJECT LOS ANGELES TO ANAHEIM RECORD SET PRELIMINARY ENGINEERING FOR PROJECT DEFINITION RETAINING WALL STA SBN 1040+00 TO STA SBN 1052+00	CONTRACT NO. HSR06-0005
					DRAWN BY Z. OHN	DRAWING NO. ST-G1088				
					CHECKED BY M. SATISH	SCALE AS SHOWN				
					IN CHARGE J. SWANSON	SHEET NO.				
					DATE 02/28/25					
REV	DATE	BY	SUB	APP	DESCRIPTION					

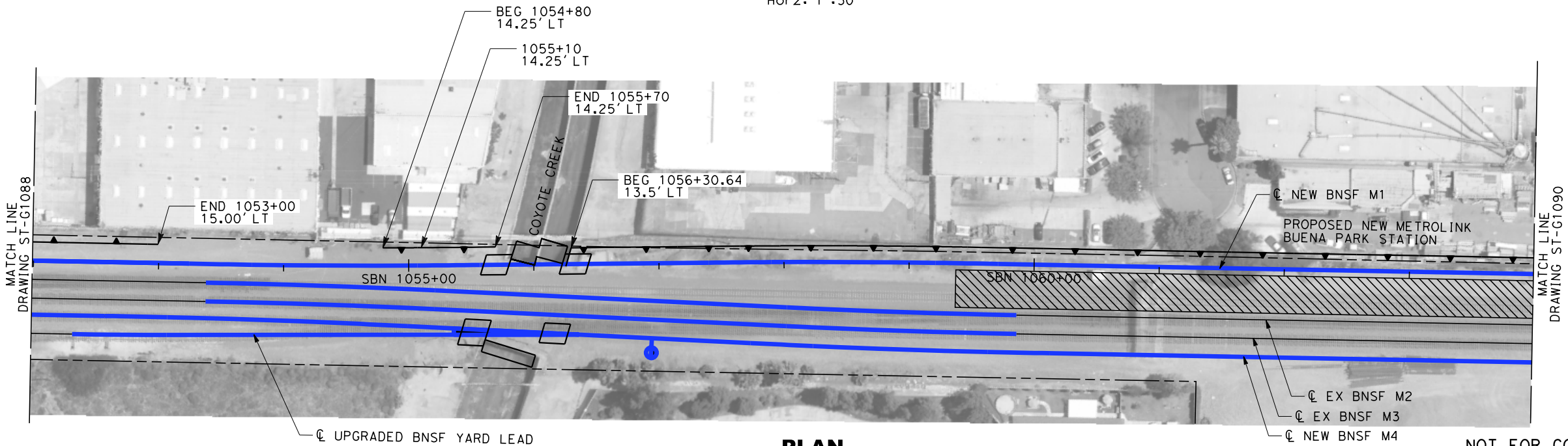
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NOTES:

1. FOR TYPE 1 & 2 WALLS, SEE DWG. NO. ST-G0021 FOR DETAILS.
2. FOR TYPE 3 & 4 WALLS, SEE DWG. NO. ST-G0022 FOR DETAILS.
3. FOR GRADE SEPARATION SHEETS, SEE VOLUME 3.3.
4. FOR AERIAL STRUCTURE SHEETS, SEE VOLUME 3.2.

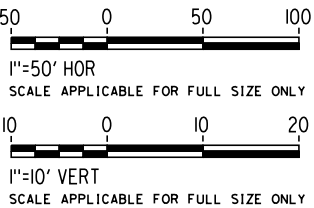


ELEVATION
Vert: 1"=10'
Horz: 1"=50'



PLAN
1"=50'

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FOR INTERNAL USE ONLY



REV	DATE	BY	SUB	APP	DESCRIPTION

DESIGNED BY R. WONG
DRAWN BY Z. OHN
CHECKED BY M. SATISH
IN CHARGE J. SWANSON
DATE 02/28/25

PEPD
SUBMITTAL
FOR INTERNAL
USE ONLY

NOT FOR
CONSTRUCTION

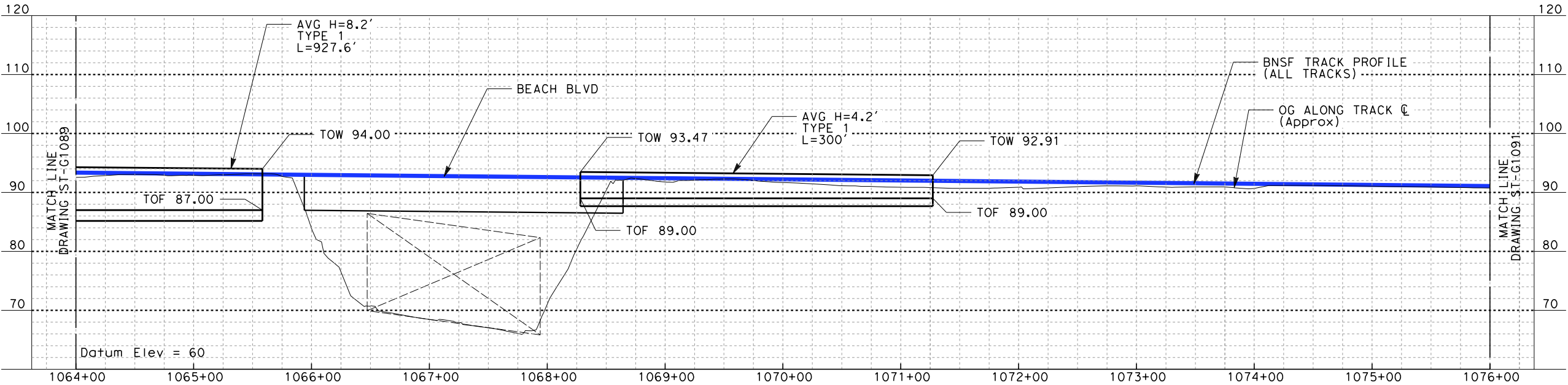


**CALIFORNIA HIGH-SPEED TRAIN PROJECT
LOS ANGELES TO ANAHEIM**
RECORD SET
PRELIMINARY ENGINEERING FOR PROJECT DEFINITION
RETAINING WALL
STA SBN 1052+00 TO STA SBN 1064+00

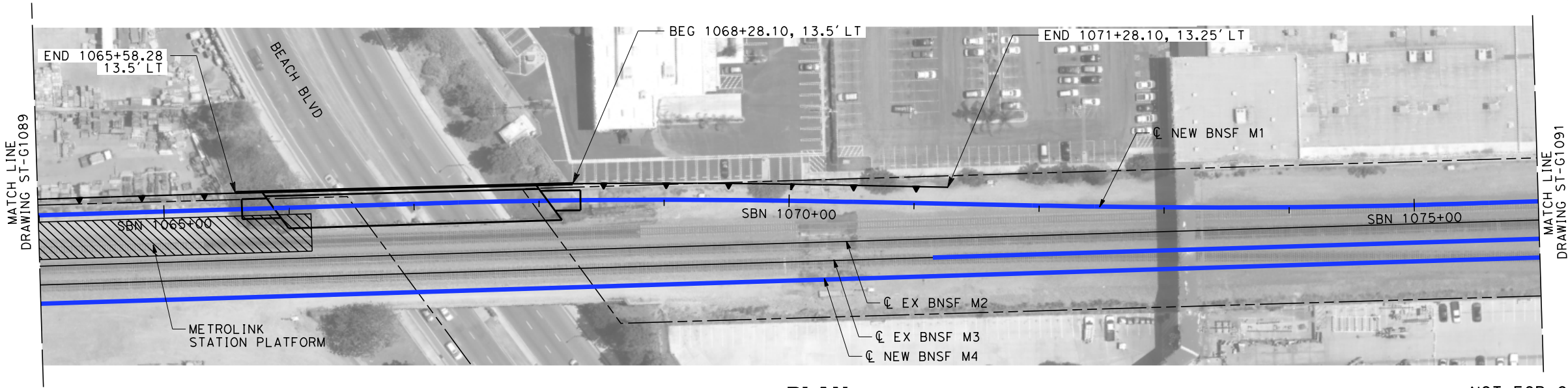
CONTRACT NO. HSR06-0005
DRAWING NO. ST-G1089
SCALE AS SHOWN
SHEET NO.

1/29/2025 1:51:07 PM I:\Projects\4017456\4017456_0001\90_CAD Models and Sheets\LO\Sheet Files\Vol 2\ST\LO-ST-G1090.dgn romared

- NOTES:
1. FOR TYPE 1 & 2 WALLS, SEE DWG. NO. ST-G0021 FOR DETAILS.
 2. FOR TYPE 3 & 4 WALLS, SEE DWG. NO. ST-G0022 FOR DETAILS.
 3. FOR GRADE SEPARATION SHEETS, SEE VOLUME 3.3.
 4. FOR AERIAL STRUCTURE SHEETS, SEE VOLUME 3.2.

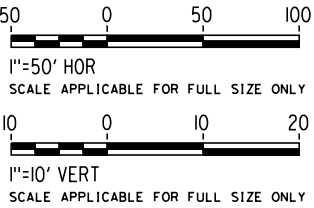


ELEVATION
Vert: 1"=10'
Horz: 1"=50'



PLAN
1"=50'

NOT FOR CONSTRUCTION
FOR INTERNAL USE ONLY



REV	DATE	BY	SUB	APP	DESCRIPTION

DESIGNED BY R. WONG
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IN CHARGE J. SWANSON
DATE 02/28/25

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CALIFORNIA
HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT
LOS ANGELES TO ANAHEIM**

RECORD SET

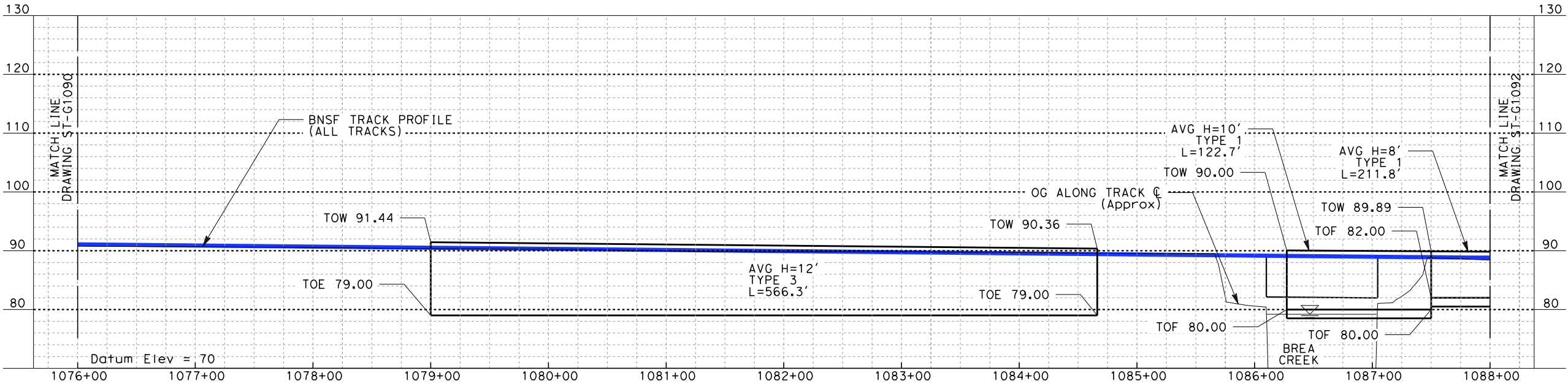
PRELIMINARY ENGINEERING FOR PROJECT DEFINITION
RETAINING WALL

STA SBN 1064+00 TO STA SBN 1076+00

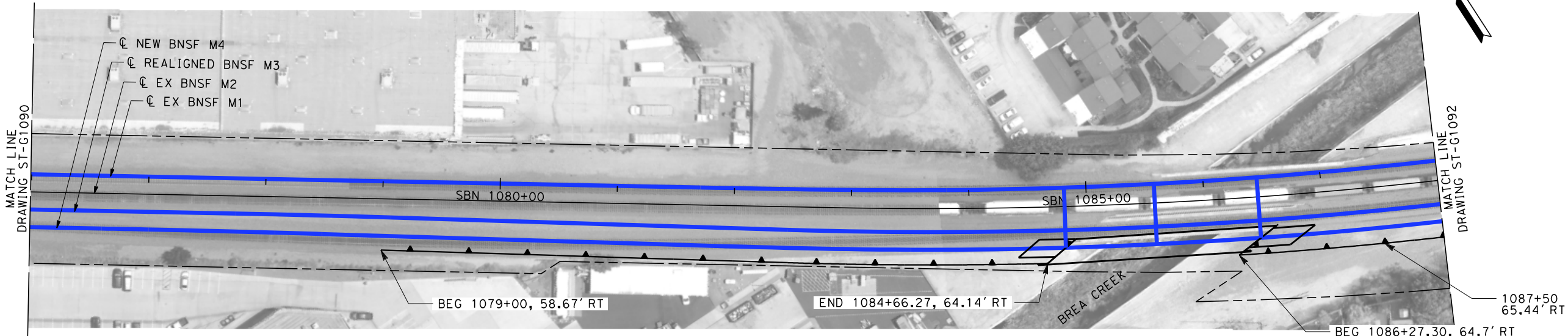
CONTRACT NO. HSR06-0005
DRAWING NO. ST-G1090
SCALE AS SHOWN
SHEET NO.

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- NOTES:
- 1. FOR TYPE 1 & 2 WALLS, SEE DWG. NO. ST-G0021 FOR DETAILS.
 - 2. FOR TYPE 3 & 4 WALLS, SEE DWG. NO. ST-G0022 FOR DETAILS.
 - 3. FOR GRADE SEPARATION SHEETS, SEE VOLUME 3.3.
 - 4. FOR AERIAL STRUCTURE SHEETS, SEE VOLUME 3.2.

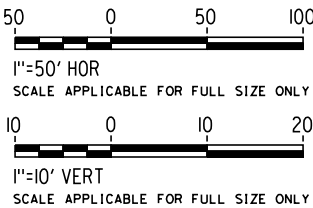


ELEVATION
Vert: 1"=10'
Horz: 1"=50'



PLAN
1"=50'

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REV	DATE	BY	SUB	APP	DESCRIPTION

DESIGNED BY R. WONG
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CHECKED BY M. SATISH
IN CHARGE J. SWANSON
DATE 02/28/25

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FOR INTERNAL
USE ONLY

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CONSTRUCTION

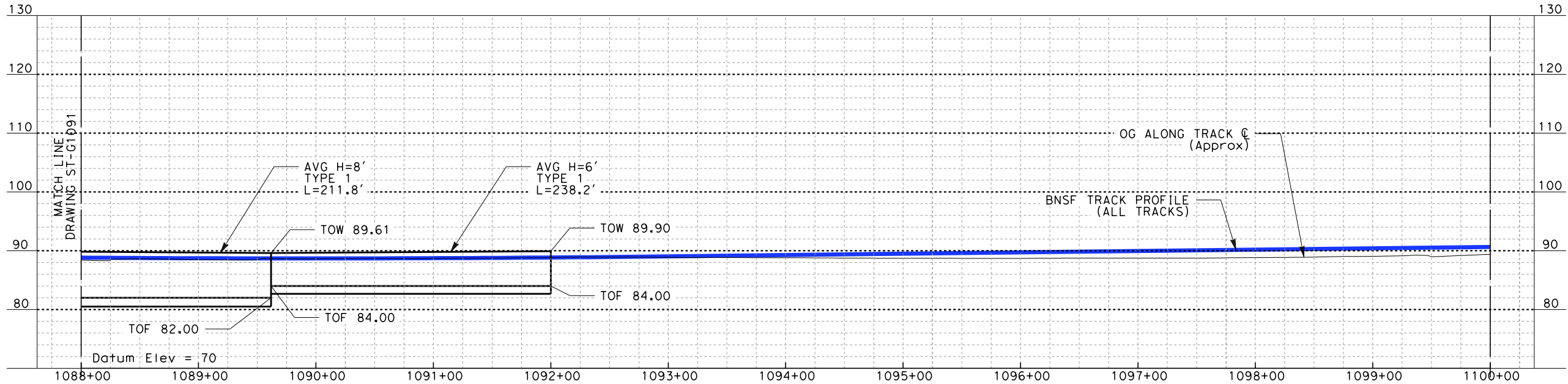


**CALIFORNIA HIGH-SPEED TRAIN PROJECT
LOS ANGELES TO ANAHEIM**
RECORD SET
PRELIMINARY ENGINEERING FOR PROJECT DEFINITION
RETAINING WALL
STA SBN 1076+00 TO STA SBN 1088+00

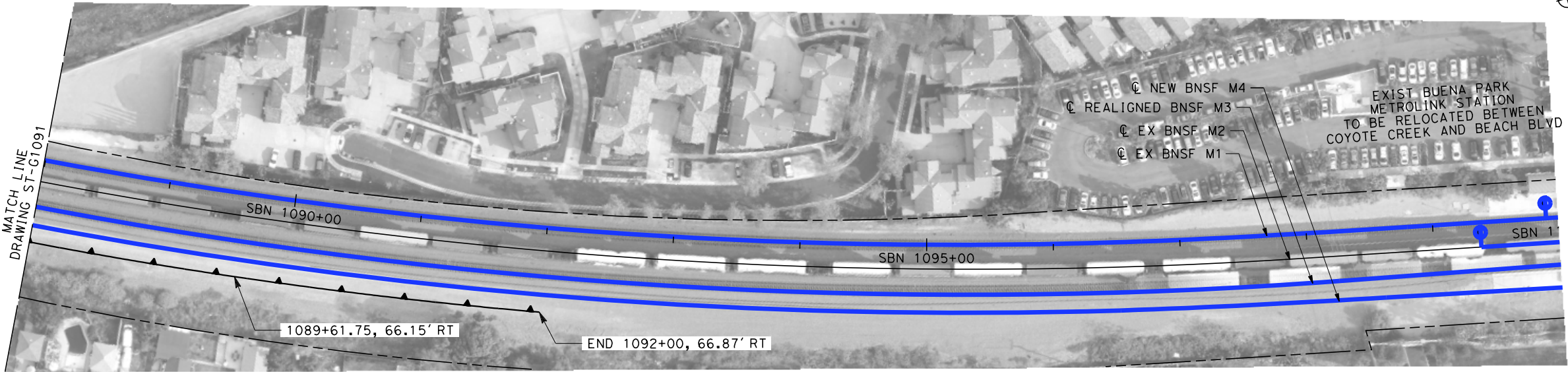
CONTRACT NO. HSR06-0005
DRAWING NO. ST-G1091
SCALE AS SHOWN
SHEET NO.

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- NOTES:
- 1. FOR TYPE 1 & 2 WALLS, SEE DWG. NO. ST-G0021 FOR DETAILS.
 - 2. FOR TYPE 3 & 4 WALLS, SEE DWG. NO. ST-G0022 FOR DETAILS.
 - 3. FOR GRADE SEPARATION SHEETS, SEE VOLUME 3.3.
 - 4. FOR AERIAL STRUCTURE SHEETS, SEE VOLUME 3.2.

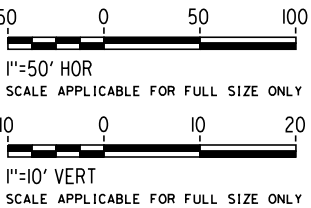


ELEVATION
Vert: 1"=10'
Horz: 1"=50'



PLAN
1"=50'

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REV	DATE	BY	SUB	APP	DESCRIPTION

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DATE 02/28/25

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USE ONLY

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CONSTRUCTION



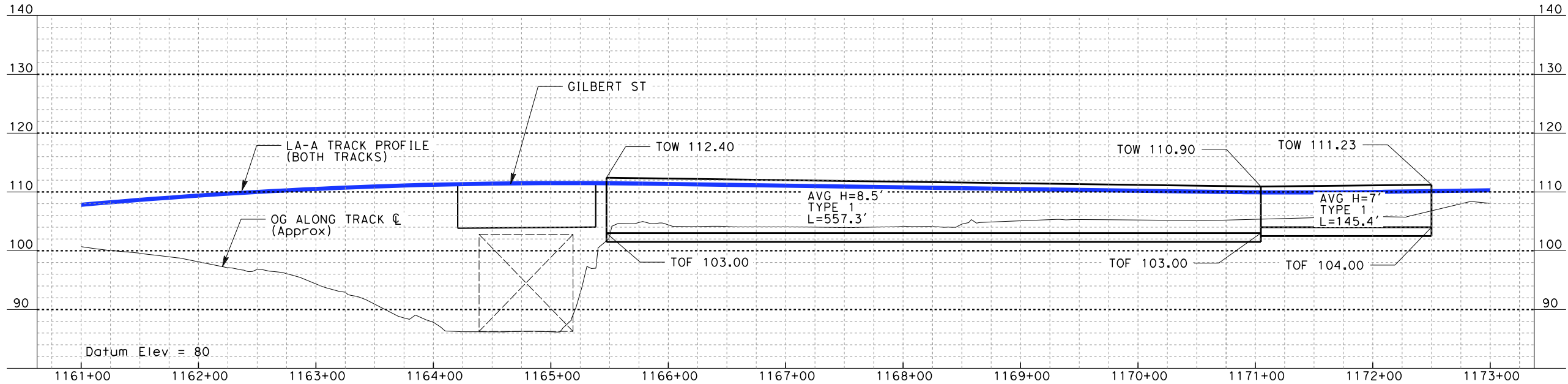
CALIFORNIA
HIGH-SPEED RAIL AUTHORITY

CALIFORNIA HIGH-SPEED TRAIN PROJECT
LOS ANGELES TO ANAHEIM
RECORD SET
PRELIMINARY ENGINEERING FOR PROJECT DEFINITION
RETAINING WALL
STA SBN 1088+00 TO STA SBN 1100+00

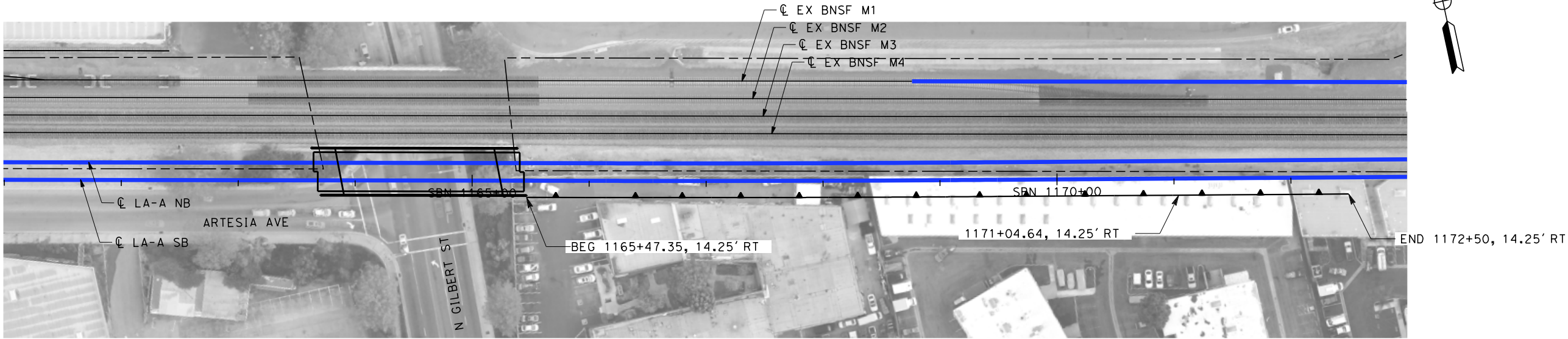
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SHEET NO.

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- NOTES:
1. FOR TYPE 1 & 2 WALLS, SEE DWG. NO. ST-G0021 FOR DETAILS.
 2. FOR TYPE 3 & 4 WALLS, SEE DWG. NO. ST-G0022 FOR DETAILS.
 3. FOR GRADE SEPARATION SHEETS, SEE VOLUME 3.3.
 4. FOR AERIAL STRUCTURE SHEETS, SEE VOLUME 3.2.

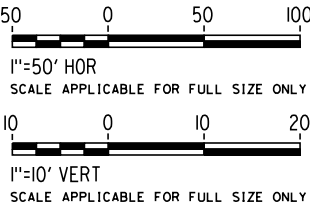


ELEVATION
Vert: 1"=10'
Horz: 1"=50'



PLAN
1"=50'

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REV	DATE	BY	SUB	APP	DESCRIPTION

DESIGNED BY R. WONG
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IN CHARGE J. SWANSON
DATE 02/28/25

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FOR INTERNAL
USE ONLY

NOT FOR
CONSTRUCTION



CALIFORNIA
HIGH-SPEED RAIL AUTHORITY

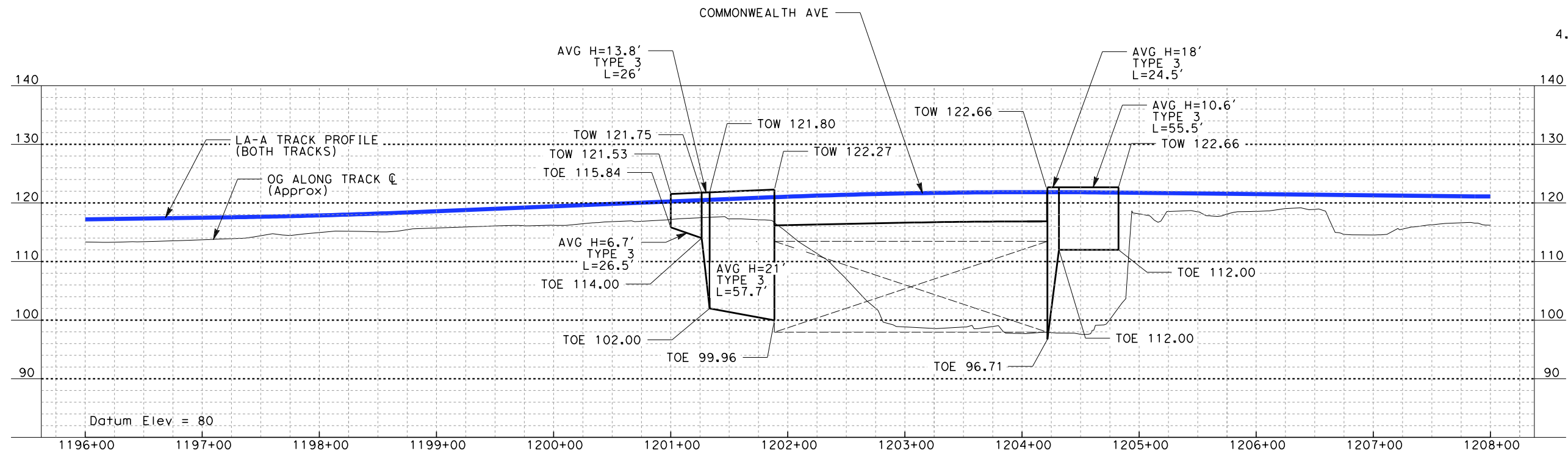
**CALIFORNIA HIGH-SPEED TRAIN PROJECT
LOS ANGELES TO ANAHEIM**
RECORD SET
PRELIMINARY ENGINEERING FOR PROJECT DEFINITION
RETAINING WALL
STA SBN 1161+00 TO STA SBN 1173+00

CONTRACT NO. HSR06-0005
DRAWING NO. ST-G1098
SCALE AS SHOWN
SHEET NO.

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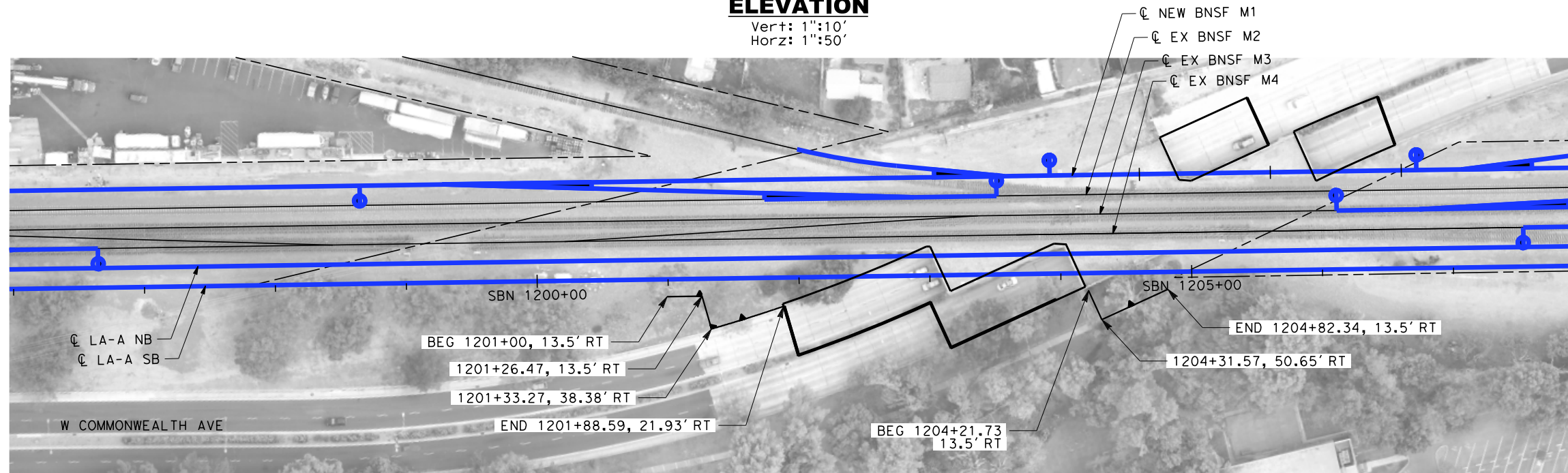
NOTES:

1. FOR TYPE 1 & 2 WALLS, SEE DWG. NO. ST-G0021 FOR DETAILS.
2. FOR TYPE 3 & 4 WALLS, SEE DWG. NO. ST-G0022 FOR DETAILS.
3. FOR GRADE SEPARATION SHEETS, SEE VOLUME 3.3.
4. FOR AERIAL STRUCTURE SHEETS, SEE VOLUME 3.2.



ELEVATION

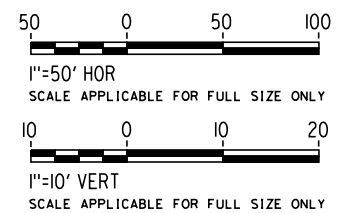
Vert: 1"=10'
Horz: 1"=50'



PLAN

1"=50'

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REV	DATE	BY	SUB	APP	DESCRIPTION

DESIGNED BY R. WONG
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DATE 02/28/25

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CALIFORNIA
HIGH-SPEED RAIL AUTHORITY

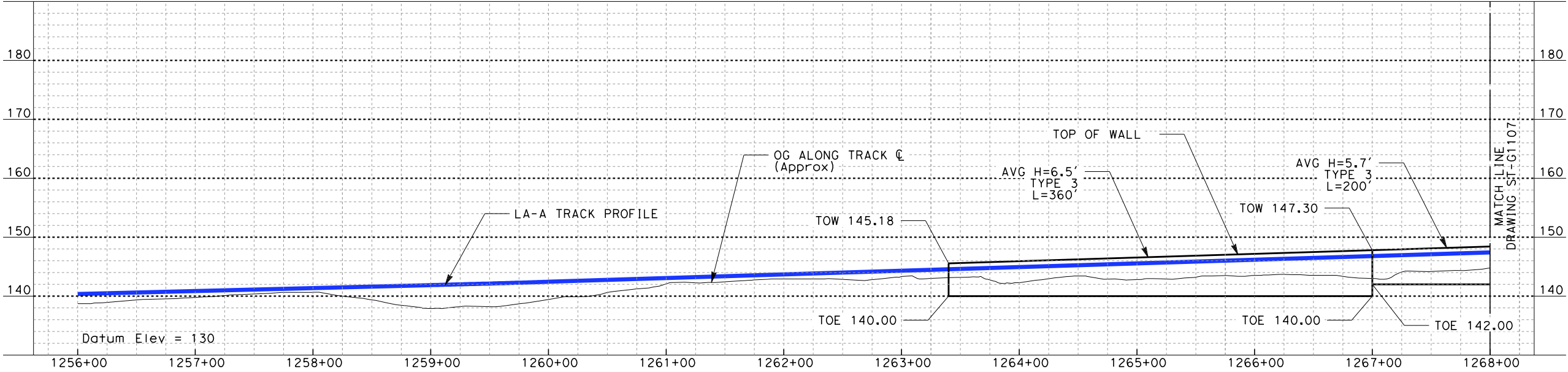
CALIFORNIA HIGH-SPEED TRAIN PROJECT
LOS ANGELES TO ANAHEIM

RECORD SET
PRELIMINARY ENGINEERING FOR PROJECT DEFINITION
RETAINING WALL
STA SBN 1196+00 TO STA SBN 1208+00

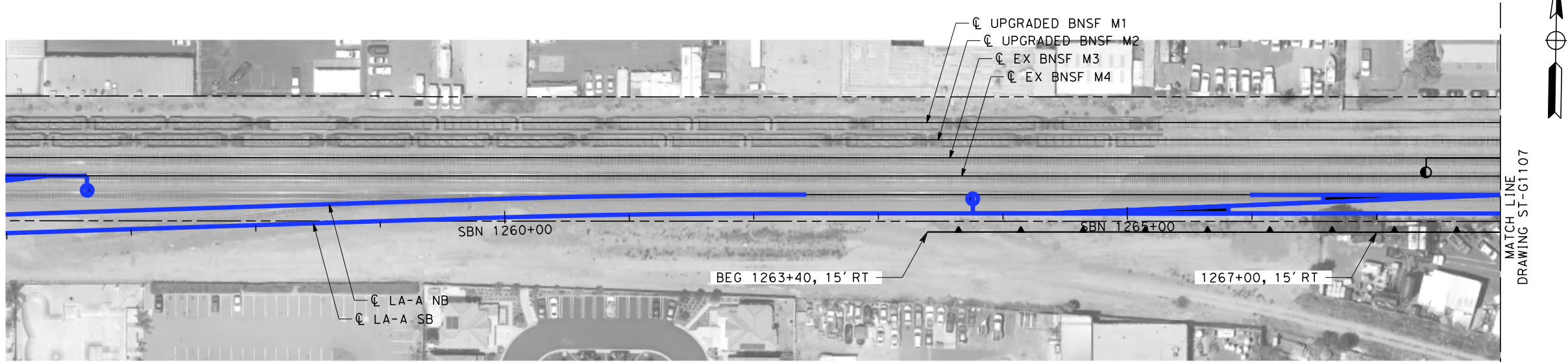
CONTRACT NO. HSR06-0005
DRAWING NO. ST-G1101
SCALE AS SHOWN
SHEET NO.

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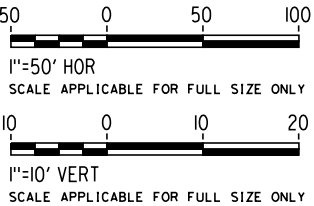
- NOTES:
1. FOR TYPE 1 & 2 WALLS, SEE DWG. NO. ST-G0021 FOR DETAILS.
 2. FOR TYPE 3 & 4 WALLS, SEE DWG. NO. ST-G0022 FOR DETAILS.
 3. FOR GRADE SEPARATION SHEETS, SEE VOLUME 3.3.
 4. FOR AERIAL STRUCTURE SHEETS, SEE VOLUME 3.2.



ELEVATION
Vert: 1"=10'
Horz: 1"=50'



PLAN
1"=50'



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REV	DATE	BY	SUB	APP	DESCRIPTION

DESIGNED BY R. WONG
DRAWN BY Z. OHN
CHECKED BY M. SATISH
IN CHARGE J. SWANSON
DATE 02/28/25

PEPD
SUBMITTAL
FOR INTERNAL
USE ONLY

NOT FOR
CONSTRUCTION



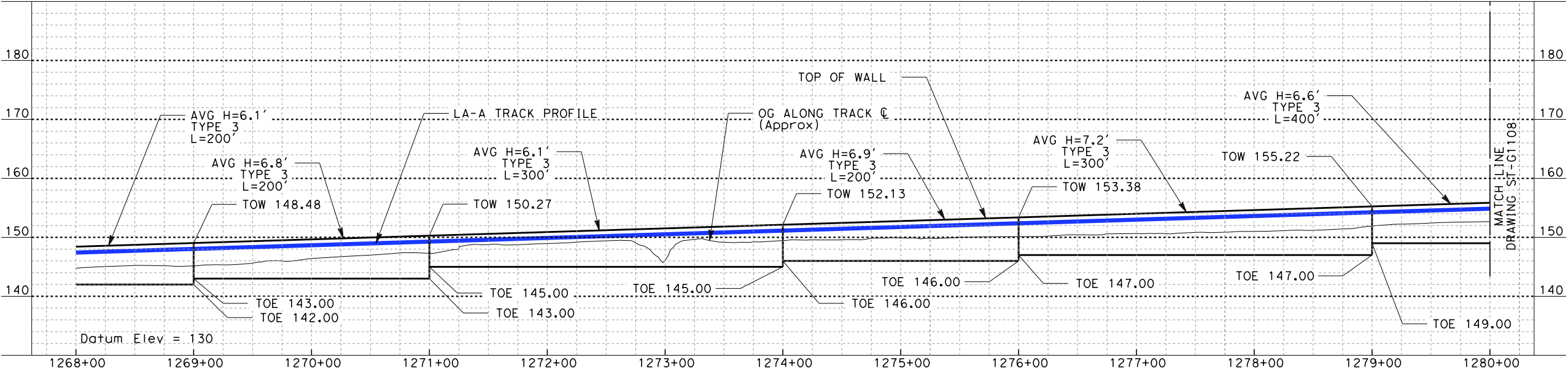
CALIFORNIA
HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT
LOS ANGELES TO ANAHEIM**
RECORD SET
PRELIMINARY ENGINEERING FOR PROJECT DEFINITION
RETAINING WALL
STA SBN 1256+00 TO STA SBN 1268+00

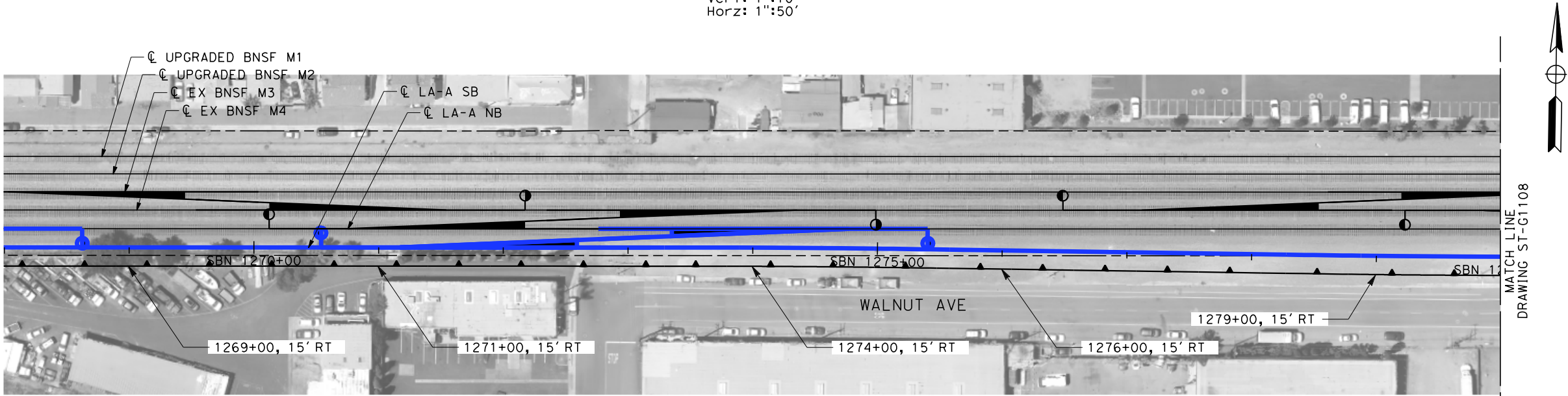
CONTRACT NO. HSR06-0005
DRAWING NO. ST-G1106
SCALE AS SHOWN
SHEET NO.

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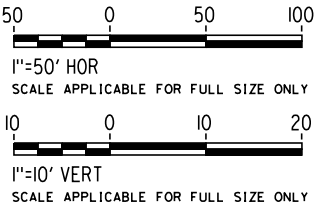
- NOTES:
1. FOR TYPE 1 & 2 WALLS, SEE DWG. NO. ST-G0021 FOR DETAILS.
 2. FOR TYPE 3 & 4 WALLS, SEE DWG. NO. ST-G0022 FOR DETAILS.
 3. FOR GRADE SEPARATION SHEETS, SEE VOLUME 3.3.
 4. FOR AERIAL STRUCTURE SHEETS, SEE VOLUME 3.2.



ELEVATION
Vert: 1"=10'
Horz: 1"=50'



PLAN
1"=50'



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REV	DATE	BY	SUB	APP	DESCRIPTION

DESIGNED BY R. WONG
DRAWN BY Z. OHN
CHECKED BY M. SATISH
IN CHARGE J. SWANSON
DATE 02/28/25

PEPD
SUBMITTAL
FOR INTERNAL
USE ONLY

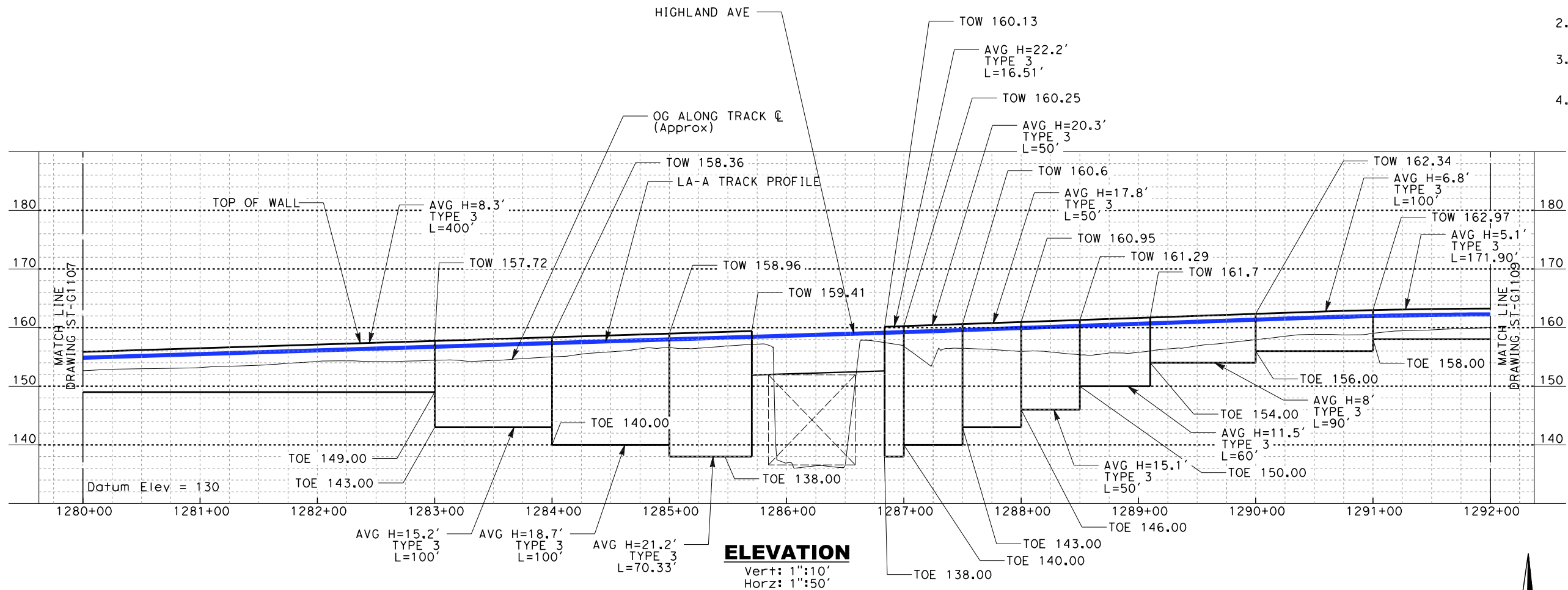
NOT FOR
CONSTRUCTION



CALIFORNIA HIGH-SPEED TRAIN PROJECT
LOS ANGELES TO ANAHEIM
RECORD SET
PRELIMINARY ENGINEERING FOR PROJECT DEFINITION
RETAINING WALL
STA SBN 1268+00 TO STA SBN 1280+00

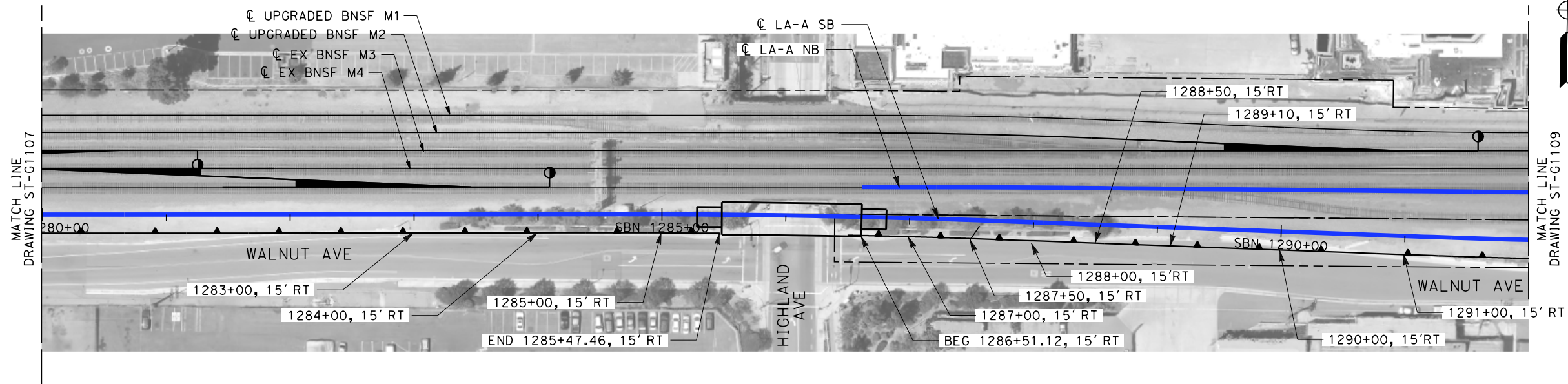
CONTRACT NO. HSR06-0005
DRAWING NO. ST-G1107
SCALE AS SHOWN
SHEET NO.

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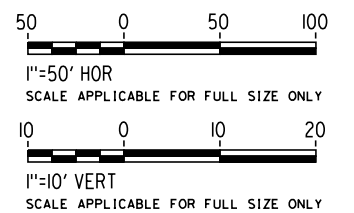
NOTES:

1. FOR TYPE 1 & 2 WALLS, SEE DWG. NO. ST-G0021 FOR DETAILS.
2. FOR TYPE 3 & 4 WALLS, SEE DWG. NO. ST-G0022 FOR DETAILS.
3. FOR GRADE SEPARATION SHEETS, SEE VOLUME 3.3.
4. FOR AERIAL STRUCTURE SHEETS, SEE VOLUME 3.2.



PLAN
1"=50'

NOT FOR CONSTRUCTION
FOR INTERNAL USE ONLY



REV	DATE	BY	SUB	APP	DESCRIPTION

DESIGNED BY R. WONG
DRAWN BY Z. OHN
CHECKED BY M. SATISH
IN CHARGE J. SWANSON
DATE 02/28/25

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CALIFORNIA
HIGH-SPEED RAIL AUTHORITY

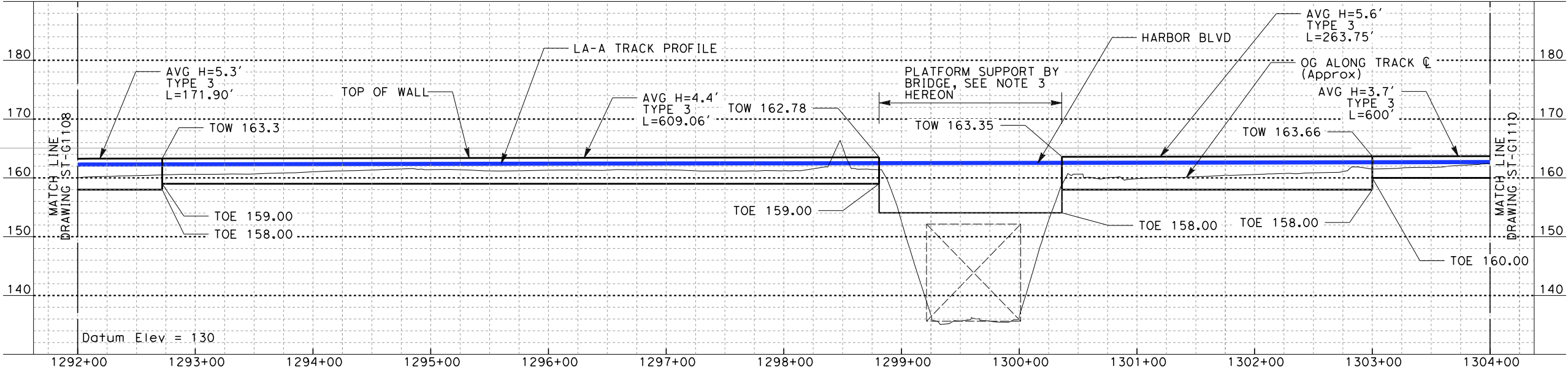
CALIFORNIA HIGH-SPEED TRAIN PROJECT
LOS ANGELES TO ANAHEIM

RECORD SET
PRELIMINARY ENGINEERING FOR PROJECT DEFINITION
RETAINING WALL
STA SBN 1280+00 TO STA SBN 1292+00

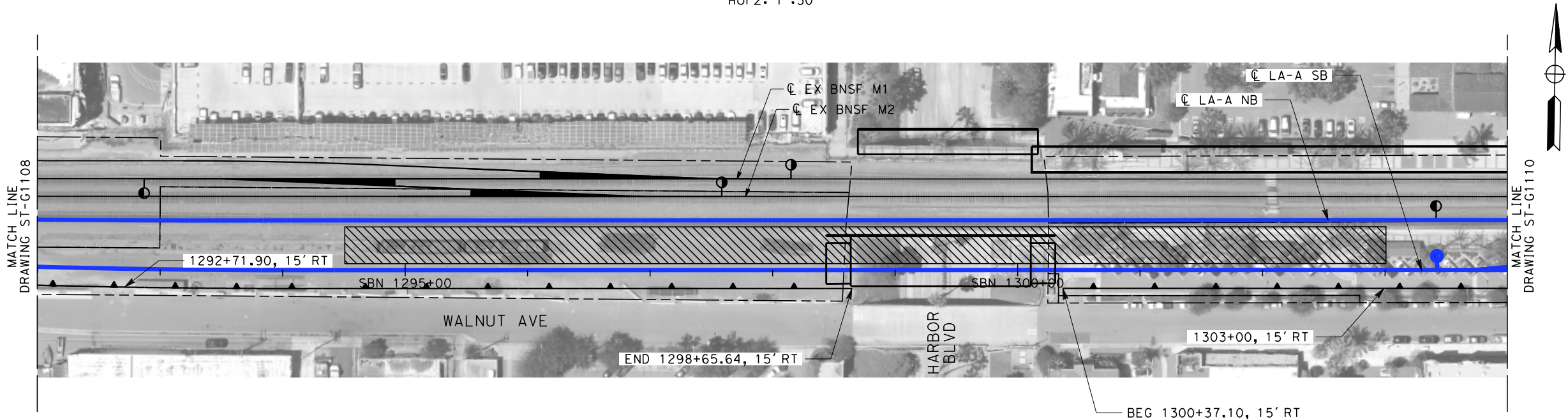
CONTRACT NO. HSR06-0005
DRAWING NO. ST-G1108
SCALE AS SHOWN
SHEET NO.

1/29/2025 1:49:59 PM I:\Projects\4017456\4017456_0001\90_CAD Models and Sheets\LO\Sheet Files\Vol 2\ST\LO-ST-G1109.dgn romired

- NOTES:
1. FOR TYPE 1 & 2 WALLS, SEE DWG. NO. ST-G0021 FOR DETAILS.
 2. FOR TYPE 3 & 4 WALLS, SEE DWG. NO. ST-G0022 FOR DETAILS.
 3. FOR GRADE SEPARATION SHEETS, SEE VOLUME 3.3.
 4. FOR AERIAL STRUCTURE SHEETS, SEE VOLUME 3.2.

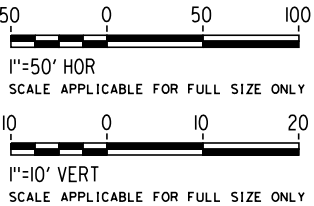


ELEVATION
Vert: 1"=10'
Horz: 1"=50'



PLAN
1"=50'

NOT FOR CONSTRUCTION
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REV	DATE	BY	SUB	APP	DESCRIPTION

DESIGNED BY R. WONG
DRAWN BY Z. OHN
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IN CHARGE J. SWANSON
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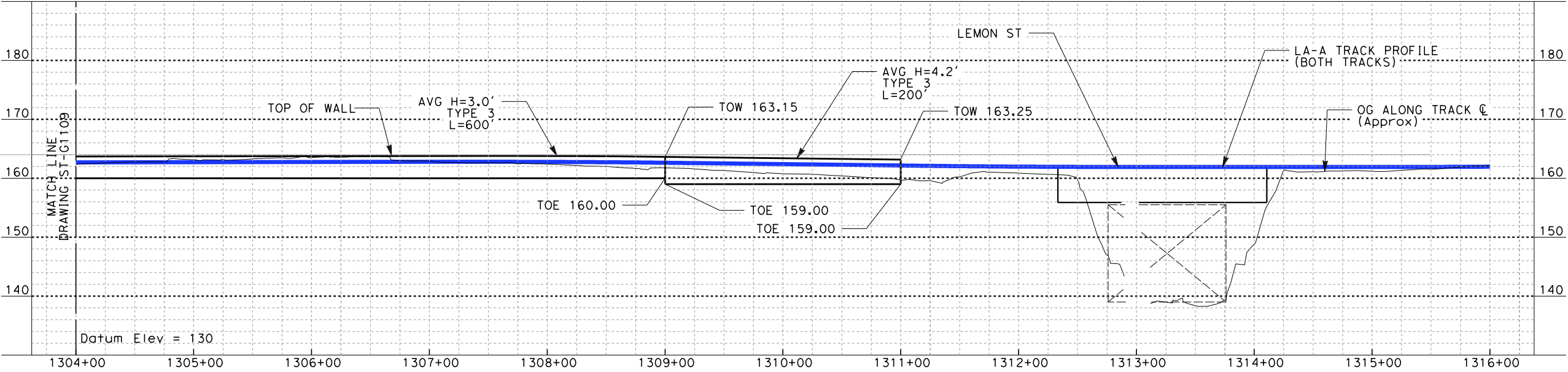
CALIFORNIA
HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT
LOS ANGELES TO ANAHEIM**
RECORD SET
PRELIMINARY ENGINEERING FOR PROJECT DEFINITION
RETAINING WALL
STA SBN 1292+00 TO STA SBN 1304+00

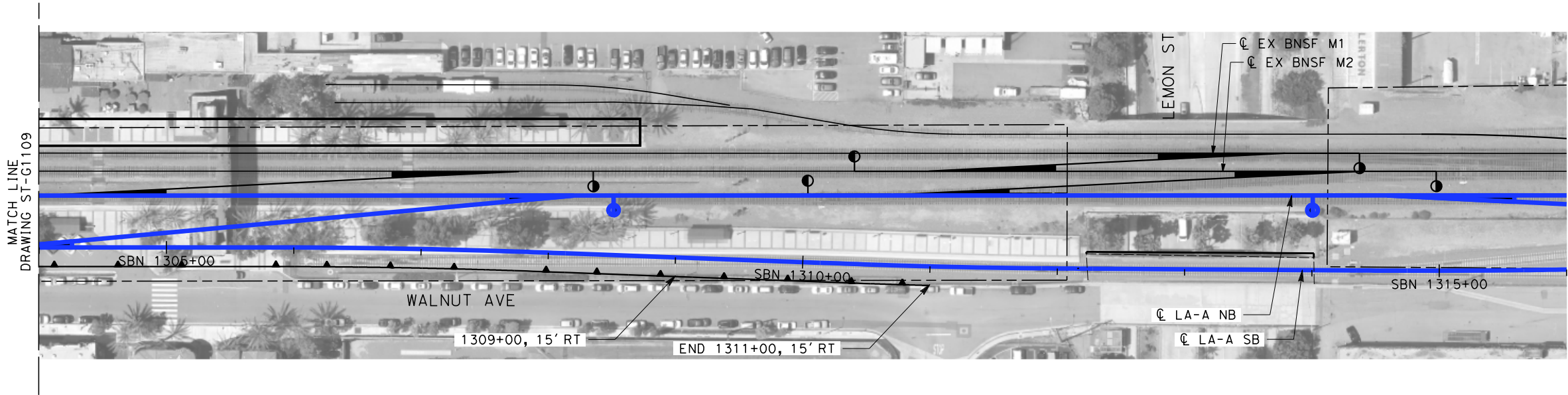
CONTRACT NO. HSR06-0005
DRAWING NO. ST-G1109
SCALE AS SHOWN
SHEET NO.

1/29/2025 1:49:52 PM I:\Projects\4017456\4017456_0001\90_CAD Models and Sheets\LO\Sheet Files\Vol 2\ST\LO-ST-G1110.dgn romired

- NOTES:
1. FOR TYPE 1 & 2 WALLS, SEE DWG. NO. ST-G0021 FOR DETAILS.
 2. FOR TYPE 3 & 4 WALLS, SEE DWG. NO. ST-G0022 FOR DETAILS.
 3. FOR GRADE SEPARATION SHEETS, SEE VOLUME 3.3.
 4. FOR AERIAL STRUCTURE SHEETS, SEE VOLUME 3.2.

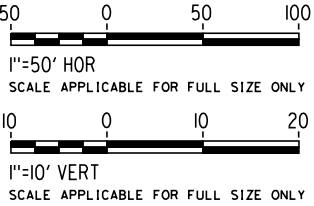


ELEVATION
Vert: 1"=10'
Horz: 1"=50'



PLAN
1"=50'

NOT FOR CONSTRUCTION
FOR INTERNAL USE ONLY



REV	DATE	BY	SUB	APP	DESCRIPTION

DESIGNED BY R. WONG
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IN CHARGE J. SWANSON
DATE 02/28/25

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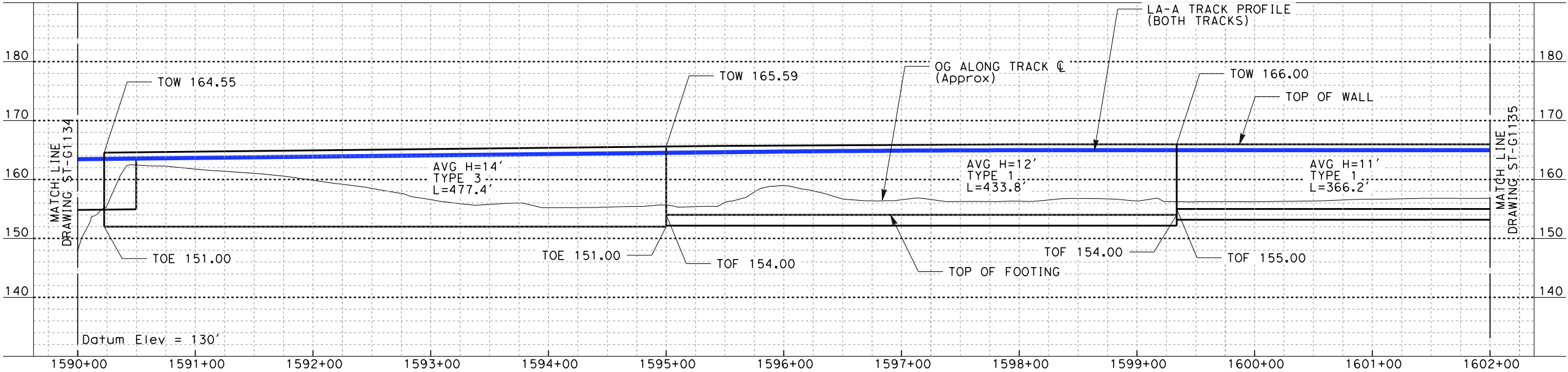


CALIFORNIA HIGH-SPEED TRAIN PROJECT LOS ANGELES TO ANAHEIM RECORD SET PRELIMINARY ENGINEERING FOR PROJECT DEFINITION RETAINING WALL STA SBN 1304+00 TO STA SBN 1316+00

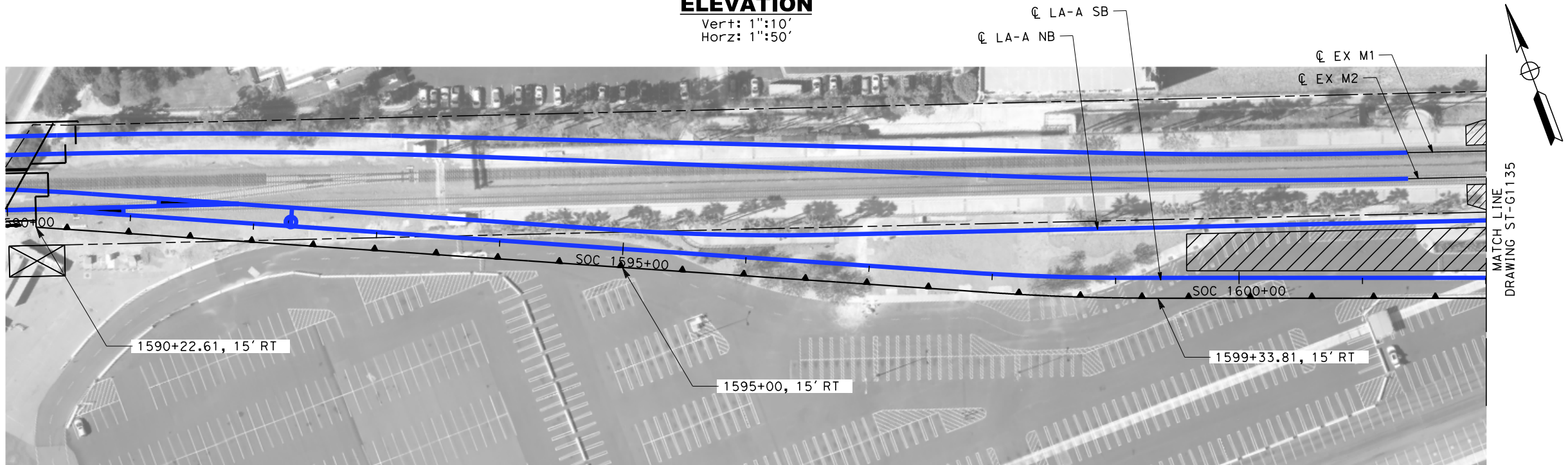
CONTRACT NO. HSR06-0005
DRAWING NO. ST-G1110
SCALE AS SHOWN
SHEET NO.

1/29/2025 1:49:41 PM I:\Projects\4017456\4017456_0001\90_CAD Models and Sheets\LO\Sheet Files\Vol 2\ST\LO-ST-G1134.dgn romired

- NOTES:
1. FOR TYPE 1 & 2 WALLS, SEE DWG. NO. ST-G0021 FOR DETAILS.
 2. FOR TYPE 3 & 4 WALLS, SEE DWG. NO. ST-G0022 FOR DETAILS.
 3. FOR GRADE SEPARATION SHEETS, SEE VOLUME 3.3.
 4. FOR AERIAL STRUCTURE SHEETS, SEE VOLUME 3.2.

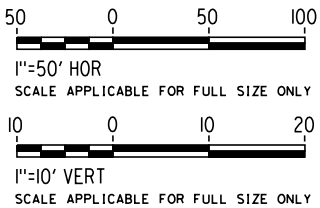


ELEVATION
Vert: 1"=10'
Horz: 1"=50'



PLAN
1"=50'

NOT FOR CONSTRUCTION
FOR INTERNAL USE ONLY



REV	DATE	BY	SUB	APP	DESCRIPTION

DESIGNED BY R. WONG
DRAWN BY Z. OHN
CHECKED BY M. SATISH
IN CHARGE J. SWANSON
DATE 02/28/25

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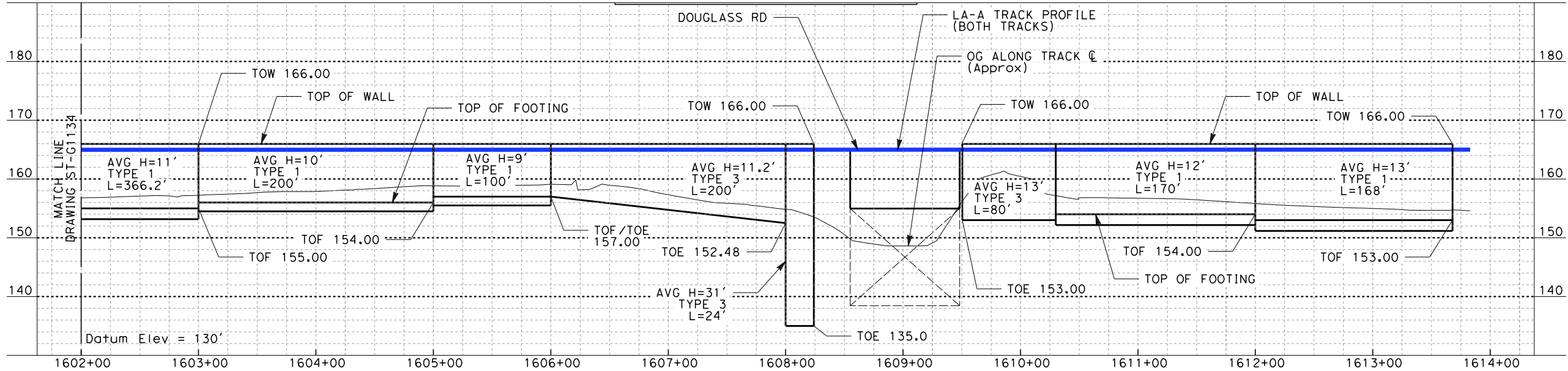


CALIFORNIA HIGH-SPEED TRAIN PROJECT
LOS ANGELES TO ANAHEIM
RECORD SET
PRELIMINARY ENGINEERING FOR PROJECT DEFINITION
RETAINING WALL
STA SOC 1590+00 TO STA SOC 1602+00

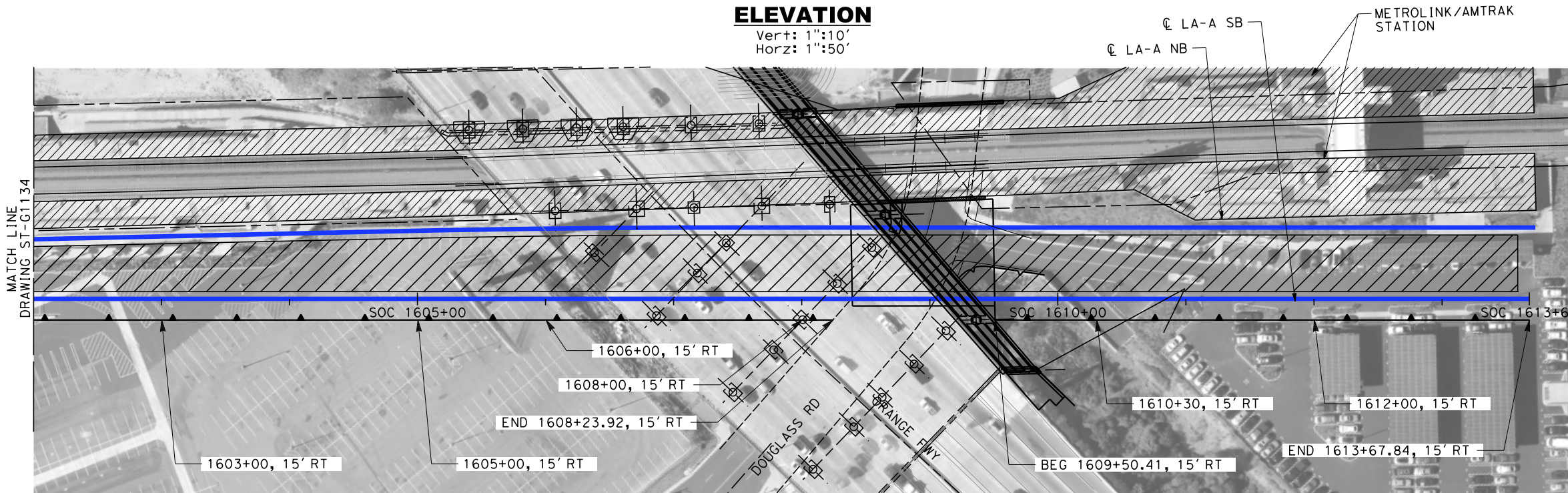
CONTRACT NO. HSR06-0005
DRAWING NO. ST-G1134
SCALE AS SHOWN
SHEET NO.

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- NOTES:
1. FOR TYPE 1 & 2 WALLS, SEE DWG. NO. ST-G0021 FOR DETAILS.
 2. FOR TYPE 3 & 4 WALLS, SEE DWG. NO. ST-G0022 FOR DETAILS.
 3. FOR GRADE SEPARATION SHEETS, SEE VOLUME 3.3.
 4. FOR AERIAL STRUCTURE SHEETS, SEE VOLUME 3.2.

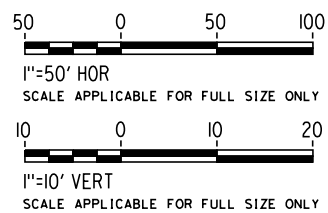


ELEVATION
Vert: 1"=10'
Horz: 1"=50'



PLAN
1"=50'

NOT FOR CONSTRUCTION
FOR INTERNAL USE ONLY



REV	DATE	BY	SUB	APP	DESCRIPTION

DESIGNED BY R. WONG
DRAWN BY Z. OHN
CHECKED BY M. SATISH
IN CHARGE J. SWANSON
DATE 02/28/25

PEPD
SUBMITTAL
FOR INTERNAL
USE ONLY

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CONSTRUCTION



CALIFORNIA HIGH-SPEED TRAIN PROJECT
LOS ANGELES TO ANAHEIM
RECORD SET
PRELIMINARY ENGINEERING FOR PROJECT DEFINITION
RETAINING WALL
STA SOC 1602+00 TO STA SOC 1614+00

CONTRACT NO. HSR06-0005
DRAWING NO. ST-G1135
SCALE AS SHOWN
SHEET NO.