

California High-Speed Rail Authority

# *Merced to Fresno Section: Central Valley Wye*

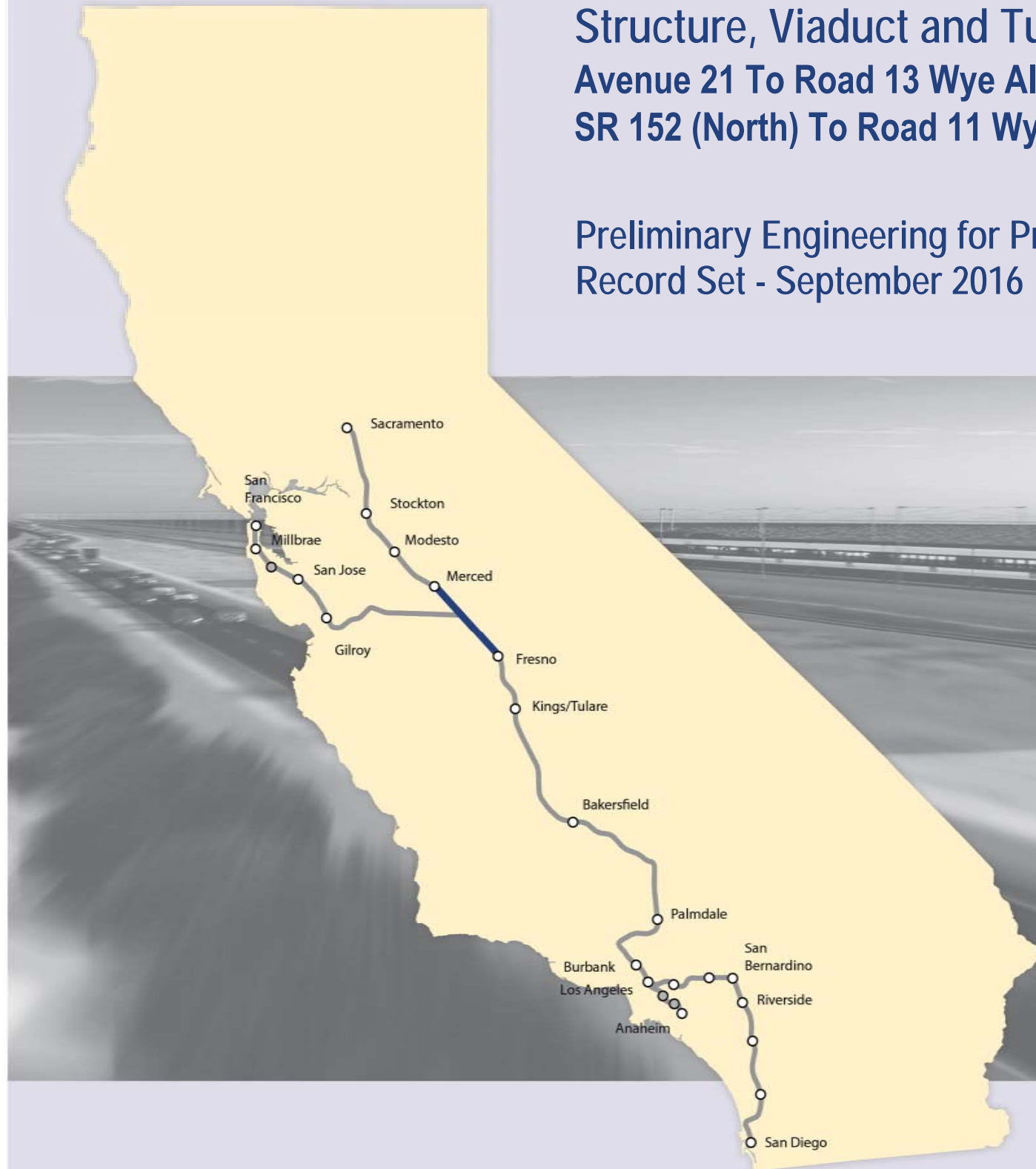
Structure, Viaduct and Tunnel Plans (Book 2 of 2)

Avenue 21 To Road 13 Wye Alternative

SR 152 (North) To Road 11 Wye Alternative

Preliminary Engineering for Project Definition

Record Set - September 2016



INDEX OF DRAWINGS				
DRAWING NO.	SECTION	ALIGNMENT / PLAN SET	TITLE	DESCRIPTION
GENERAL				
ST-B0001	CENTRAL VALLEY WYE	STRUCTURE, VIADUCT AND TUNNEL PLANS	COVER	
ST-B0002	CENTRAL VALLEY WYE	STRUCTURE, VIADUCT AND TUNNEL PLANS	INDEX OF DRAWINGS	SHEET 1 OF 8
ST-B0003	CENTRAL VALLEY WYE	STRUCTURE, VIADUCT AND TUNNEL PLANS	INDEX OF DRAWINGS	SHEET 2 OF 8
ST-B0004	CENTRAL VALLEY WYE	STRUCTURE, VIADUCT AND TUNNEL PLANS	INDEX OF DRAWINGS	SHEET 3 OF 8
ST-B0005	CENTRAL VALLEY WYE	STRUCTURE, VIADUCT AND TUNNEL PLANS	INDEX OF DRAWINGS	SHEET 4 OF 8
ST-B0006	CENTRAL VALLEY WYE	STRUCTURE, VIADUCT AND TUNNEL PLANS	INDEX OF DRAWINGS	SHEET 5 OF 8
ST-B0007	CENTRAL VALLEY WYE	STRUCTURE, VIADUCT AND TUNNEL PLANS	INDEX OF DRAWINGS	SHEET 6 OF 8
ST-B0008	CENTRAL VALLEY WYE	STRUCTURE, VIADUCT AND TUNNEL PLANS	INDEX OF DRAWINGS	SHEET 7 OF 8
ST-B0009	CENTRAL VALLEY WYE	STRUCTURE, VIADUCT AND TUNNEL PLANS	INDEX OF DRAWINGS	SHEET 8 OF 8
ST-B0010	CENTRAL VALLEY WYE	STRUCTURE, VIADUCT AND TUNNEL PLANS	ABBREVIATIONS	SHEET 1 OF 2
ST-B0011	CENTRAL VALLEY WYE	STRUCTURE, VIADUCT AND TUNNEL PLANS	ABBREVIATIONS	SHEET 2 OF 2
ST-B4000	CENTRAL VALLEY WYE	STRUCTURE, VIADUCT AND TUNNEL PLANS	LOCATION PLAN	
SR 152 (NORTH) TO ROAD 13 WYE ALTERNATIVE				
ST-B4001-A	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 13 WYE ALTERNATIVE	KEY MAP OF STRUCTURAL PLANS	SHEET 1 OF 2
ST-B4002-A	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 13 WYE ALTERNATIVE	KEY MAP OF STRUCTURAL PLANS	SHEET 2 OF 2
ST-K1050-A	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 13 WYE ALTERNATIVE	GENERAL PLAN (SJD-FRE)	INDIANA ROAD OVERHEAD
ST-K1060-A	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 13 WYE ALTERNATIVE	GENERAL PLAN (SJD-FRE)	WILLIS ROAD UNDERPASS
ST-K1065-A	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 13 WYE ALTERNATIVE	GENERAL PLAN (SJD-FRE)	SAN JOAQUIN RIVER BRIDGE - 1 OF 2
ST-K3065-A	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 13 WYE ALTERNATIVE	TYPICAL SECTION (SJD-FRE)	SAN JOAQUIN RIVER BRIDGE - 2 OF 2
ST-K1070-A	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 13 WYE ALTERNATIVE	GENERAL PLAN (SJD-FRE)	MARIPOSA SLOUGH BRIDGE
ST-K1075-A	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 13 WYE ALTERNATIVE	GENERAL PLAN (SJD-FRE)	HARMON ROAD UNDERPASS
ST-K1080-A	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 13 WYE ALTERNATIVE	GENERAL PLAN (SJD-FRE)	AERIAL #1 - EASTSIDE BYPASS IRRIGATION DITCH - 1 OF 2
ST-K3080-A	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 13 WYE ALTERNATIVE	TYPICAL SECTION (SJD-FRE)	AERIAL #1 - EASTSIDE BYPASS IRRIGATION DITCH - 2 OF 2
ST-K1100-A	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 13 WYE ALTERNATIVE	GENERAL PLAN (SJD-FRE)	SR 59 / SR 152 INTERCHANGE - 1 OF 4
ST-K1101-A	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 13 WYE ALTERNATIVE	GENERAL PLAN (SJD-FRE)	SR 59 / SR 152 INTERCHANGE - 2 OF 4
ST-K3101-A	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 13 WYE ALTERNATIVE	TYPICAL SECTIONS (SJD-FRE)	SR 59 / SR 152 INTERCHANGE - 3 OF 4
ST-K1102-A	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 13 WYE ALTERNATIVE	GENERAL PLAN (SJD-FRE)	SR 59 / SR 152 INTERCHANGE - 4 OF 4
ST-K1110-A	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 13 WYE ALTERNATIVE	GENERAL PLAN (SJD-FRE)	LINCOLN ROAD (ROAD 4) OVERHEAD
ST-K1160-A	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 13 WYE ALTERNATIVE	GENERAL PLAN (SJD-FRE)	HEMLOCK ROAD (ROAD 9) INTERCHANGE - 1 OF 2
ST-K3160-A	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 13 WYE ALTERNATIVE	TYPICAL SECTIONS (SJD-FRE)	HEMLOCK ROAD (ROAD 9) INTERCHANGE - 2 OF 2
ST-K1170-A	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 13 WYE ALTERNATIVE	GENERAL PLAN (SJD-FRE)	ASH SLOUGH BRIDGE - 1 OF 2
ST-K3170-A	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 13 WYE ALTERNATIVE	TYPICAL SECTION (SJD-FRE)	ASH SLOUGH BRIDGE - 2 OF 2
ST-K1190-A	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 13 WYE ALTERNATIVE	GENERAL PLAN (SJD-FRE)	ELM ROAD (ROAD 12) UNDERPASS
ST-K1195-A	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 13 WYE ALTERNATIVE	GENERAL PLAN (SJD-FRE)	SR 152 (ROAD 12) UNDERCROSSING
ST-K1210-A	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 13 WYE ALTERNATIVE	GENERAL PLAN (SJD-FRE)	ROBERTSON BOULEVARD (SR 233) INTERCHANGE - 1 OF 2
ST-K3210-A	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 13 WYE ALTERNATIVE	TYPICAL SECTIONS (SJD-FRE)	ROBERTSON BOULEVARD (SR 233) INTERCHANGE - 2 OF 2
ST-K1220-A	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 13 WYE ALTERNATIVE	GENERAL PLAN (SJD-FRE)	BERENDA SLOUGH BRIDGE - 1 OF 2
ST-K3220-A	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 13 WYE ALTERNATIVE	TYPICAL SECTION (SJD-FRE)	BERENDA SLOUGH BRIDGE - 2 OF 2
ST-K1230-A	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 13 WYE ALTERNATIVE	GENERAL PLAN (SJD-FRE)	BERENDA WAY (ROAD 16) UNDERPASS
ST-K1235-A	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 13 WYE ALTERNATIVE	GENERAL PLAN (SJD-FRE)	BERENDA WAY (ROAD 16) INTERCHANGE - 1 OF 2
ST-K3235-A	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 13 WYE ALTERNATIVE	TYPICAL SECTION (SJD-FRE)	BERENDA WAY (ROAD 16) INTERCHANGE - 2 OF 2
ST-K1240-A	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 13 WYE ALTERNATIVE	GENERAL PLAN (SJD-FRE)	ROAD 17 1/2 OVERHEAD

p005133c 16-AUG-2016 0:58 MF-ST-B0002.dgn

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**M. BRATT**  
DRAWN BY  
**A. M.**  
CHECKED BY  
**K. CHARAN**  
IN CHARGE  
**C. LEMLEY**  
DATE  
**08/12/2016**

**RECORD SET**  
15% DESIGN  
SUBMITTAL  
  
**NOT FOR  
CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO SECTION**  
CENTRAL VALLEY WYE  
STRUCTURE, VIADUCT AND TUNNEL PLANS  
INDEX OF DRAWINGS  
SHEET 1 OF 8

CONTRACT NO.  
**HSR08-05**  
DRAWING NO.  
**ST-B0002**  
SCALE  
**NO SCALE**  
SHEET NO.

p005133c 16-AUG-2016 07:49 MF-ST-B0003.dgn

INDEX OF DRAWINGS				
DRAWING NO.	SECTION	ALIGNMENT / PLAN SET	TITLE	DESCRIPTION
ST-K1250-A	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 13 WYE ALTERNATIVE	GENERAL PLAN (SJD-FRE)	AERIAL #2 - SR 99 / UPRR - 1 OF 3
ST-K1251-A	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 13 WYE ALTERNATIVE	GENERAL PLAN (SJD-FRE)	AERIAL #2 - SR 99 / UPRR - 2 OF 3
ST-K3250-A	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 13 WYE ALTERNATIVE	TYPICAL SECTIONS (SJD-FRE)	AERIAL #2 - SR 99 / UPRR - 3 OF 3
ST-K1260-A	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 13 WYE ALTERNATIVE	GENERAL PLAN (SJD-FRE)	ROAD 20 OVERHEAD
ST-K1280-A	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 13 WYE ALTERNATIVE	GENERAL PLAN (SJD-FRE)	ROAD 22 OVERHEAD
ST-K1310-A	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 13 WYE ALTERNATIVE	GENERAL PLAN (SJD-FRE)	AVENUE 20 1/2 OVERHEAD
ST-K1330-A	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 13 WYE ALTERNATIVE	GENERAL PLAN (SJD-FRE)	DRY CREEK BRIDGE
ST-K1420-A	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 13 WYE ALTERNATIVE	GENERAL PLAN (MER-FRE)	AERIAL #3 - SOUTHBOUND OVER HST MAINLINE - 1 OF 6
ST-K1421-A	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 13 WYE ALTERNATIVE	GENERAL PLAN (MER-FRE)	AERIAL #3 - SOUTHBOUND OVER HST MAINLINE - 2 OF 6
ST-K1422-A	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 13 WYE ALTERNATIVE	GENERAL PLAN (MER-FRE)	AERIAL #3 - SOUTHBOUND OVER HST MAINLINE - 3 OF 6
ST-K3420-A	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 13 WYE ALTERNATIVE	TYPICAL SECTION (MER-FRE)	AERIAL #3 - SOUTHBOUND OVER HST MAINLINE - 4 OF 6
ST-K3421-A	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 13 WYE ALTERNATIVE	TYPICAL SECTION (MER-FRE)	AERIAL #3 - SOUTHBOUND OVER HST MAINLINE - 5 OF 6
ST-K3422-A	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 13 WYE ALTERNATIVE	TYPICAL SECTIONS (MER-FRE)	AERIAL #3 - SOUTHBOUND OVER HST MAINLINE - 6 OF 6
ST-K1430-A	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 13 WYE ALTERNATIVE	GENERAL PLAN (MER-FRE)	RAILROAD DRIVE UNDERPASS (HST NB)
ST-K1433-A	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 13 WYE ALTERNATIVE	GENERAL PLAN (MER-FRE)	ROBERTSON BOULEVARD (SR 233) UNDERPASS
ST-K1436-A	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 13 WYE ALTERNATIVE	GENERAL PLAN (MER-FRE)	MADISON ROAD (AVENUE 23 1/2) UNDERPASS
ST-K1450-A	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 13 WYE ALTERNATIVE	GENERAL PLAN (MER-FRE)	WASHINGTON ROAD (AVENUE 25) UNDERPASS - 1 OF 2
ST-K3450-A	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 13 WYE ALTERNATIVE	TYPICAL SECTION (MER-FRE)	WASHINGTON ROAD (AVENUE 25) UNDERPASS - 2 OF 2
ST-K1455-A	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 13 WYE ALTERNATIVE	GENERAL PLAN (MER-FRE)	ASH SLOUGH BRIDGE - 1 OF 2
ST-K3455-A	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 13 WYE ALTERNATIVE	TYPICAL SECTION (MER-FRE)	ASH SLOUGH BRIDGE - 2 OF 2
ST-K1460-A	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 13 WYE ALTERNATIVE	GENERAL PLAN (MER-FRE)	AVENUE 26 1/2 UNDERPASS
ST-K1470-A	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 13 WYE ALTERNATIVE	GENERAL PLAN (MER-FRE)	CHOWCHILLA RIVER BRIDGE - 1 OF 2
ST-K3470-A	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 13 WYE ALTERNATIVE	TYPICAL SECTION (MER-FRE)	CHOWCHILLA RIVER BRIDGE - 2 OF 2
ST-K1475-A	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 13 WYE ALTERNATIVE	GENERAL PLAN (MER-FRE)	VISTA AVENUE (ROAD 13) UNDERPASS
ST-K1490-A	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 13 WYE ALTERNATIVE	GENERAL PLAN (MER-FRE)	DUTCHMAN CREEK BRIDGE
ST-K1495-A	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 13 WYE ALTERNATIVE	GENERAL PLAN (MER-FRE)	ROAD 11 BRIDGE
ST-T1500-A	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 13 WYE ALTERNATIVE	GENERAL PLAN (MER-FRE)	RETAINED CUT - SANDY MUSH ROAD - 1 OF 2
ST-T3500-A	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 13 WYE ALTERNATIVE	TYPICAL SECTIONS (MER-FRE)	RETAINED CUT - SANDY MUSH ROAD - 2 OF 2
ST-K1500-A	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 13 WYE ALTERNATIVE	GENERAL PLAN (MER-FRE)	SANDY MUSH ROAD OVERHEAD
ST-K1620-A	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 13 WYE ALTERNATIVE	GENERAL PLAN (SJD-MER)	AERIAL #4 - NORTHBOUND OVER HST MAINLINE - 1 OF 6
ST-K1621-A	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 13 WYE ALTERNATIVE	GENERAL PLAN (SJD-MER)	AERIAL #4 - NORTHBOUND OVER HST MAINLINE - 2 OF 6
ST-K1622-A	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 13 WYE ALTERNATIVE	GENERAL PLAN (SJD-MER)	AERIAL #4 - NORTHBOUND OVER HST MAINLINE - 3 OF 6
ST-K1623-A	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 13 WYE ALTERNATIVE	GENERAL PLAN (SJD-MER)	AERIAL #4 - NORTHBOUND OVER HST MAINLINE - 4 OF 6
ST-K3620-A	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 13 WYE ALTERNATIVE	TYPICAL SECTIONS (SJD-MER)	AERIAL #4 - NORTHBOUND OVER HST MAINLINE - 5 OF 6
ST-K3621-A	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 13 WYE ALTERNATIVE	TYPICAL SECTIONS (SJD-MER)	AERIAL #4 - NORTHBOUND OVER HST MAINLINE - 6 OF 6
ST-K1630-A	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 13 WYE ALTERNATIVE	GENERAL PLAN (SJD-MER)	ELM ROAD (ROAD 12) UNDERPASS
ST-K1635-A	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 13 WYE ALTERNATIVE	GENERAL PLAN (SJD-MER)	MADISON ROAD (AVENUE 23 1/2) OVERHEAD
ST-K1650-A	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 13 WYE ALTERNATIVE	GENERAL PLAN (SJD-MER)	AERIAL #5 - NORTHBOUND OVER HST MERCED TO FRESNO - 1 OF 5
ST-K1651-A	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 13 WYE ALTERNATIVE	GENERAL PLAN (SJD-MER)	AERIAL #5 - NORTHBOUND OVER HST MERCED TO FRESNO - 2 OF 5
ST-K1652-A	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 13 WYE ALTERNATIVE	GENERAL PLAN (SJD-MER)	AERIAL #5 - NORTHBOUND OVER HST MERCED TO FRESNO - 3 OF 5
ST-K3650-A	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 13 WYE ALTERNATIVE	TYPICAL SECTIONS (SJD-MER)	AERIAL #5 - NORTHBOUND OVER HST MERCED TO FRESNO - 4 OF 5
ST-K3651-A	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 13 WYE ALTERNATIVE	TYPICAL SECTIONS (SJD-MER)	AERIAL #5 - NORTHBOUND OVER HST MERCED TO FRESNO - 5 OF 5

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**M. BRATT**  
DRAWN BY  
**A. M.**  
CHECKED BY  
**K. CHARAN**  
IN CHARGE  
**C. LEMLEY**  
DATE  
**08/12/2016**

RECORD SET  
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**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO SECTION**  
CENTRAL VALLEY WYE  
STRUCTURE, VIADUCT AND TUNNEL PLANS  
INDEX OF DRAWINGS  
SHEET 2 OF 8

CONTRACT NO.  
HSR08-05  
DRAWING NO.  
ST-B0003  
SCALE  
NO SCALE  
SHEET NO.

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DRAWING NO.	SECTION	ALIGNMENT / PLAN SET	TITLE	DESCRIPTION
ST-K1655-A	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 13 WYE ALTERNATIVE	GENERAL PLAN (SJD-MER)	HST SB BRIDGE OVER ASH SLOUGH - 1 OF 2
ST-K3655-A	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 13 WYE ALTERNATIVE	TYPICAL SECTION (SJD-MER)	HST SB BRIDGE OVER ASH SLOUGH - 2 OF 2
SR 152 (NORTH) TO ROAD 19 WYE ALTERNATIVE				
ST-B4001-B	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 19 WYE ALTERNATIVE	KEY MAP OF STRUCTURAL PLANS	SHEET 1 OF 2
ST-B4002-B	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 19 WYE ALTERNATIVE	KEY MAP OF STRUCTURAL PLANS	SHEET 2 OF 2
ST-K1050-B	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 19 WYE ALTERNATIVE	GENERAL PLAN (SJD-FRE)	INDIANA ROAD OVERHEAD
ST-K1060-B	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 19 WYE ALTERNATIVE	GENERAL PLAN (SJD-FRE)	WILLIS ROAD UNDERPASS
ST-K1065-B	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 19 WYE ALTERNATIVE	GENERAL PLAN (SJD-FRE)	SAN JOAQUIN RIVER BRIDGE - 1 OF 2
ST-K3065-B	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 19 WYE ALTERNATIVE	TYPICAL SECTION (SJD-FRE)	SAN JOAQUIN RIVER BRIDGE - 2 OF 2
ST-K1070-B	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 19 WYE ALTERNATIVE	GENERAL PLAN (SJD-FRE)	MARIPOSA SLOUGH BRIDGE
ST-K1075-B	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 19 WYE ALTERNATIVE	GENERAL PLAN (SJD-FRE)	HARMON ROAD UNDERPASS
ST-K1080-B	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 19 WYE ALTERNATIVE	GENERAL PLAN (SJD-FRE)	AERIAL #1 - EASTSIDE BYPASS IRRIGATION DITCH - 1 OF 2
ST-K3080-B	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 19 WYE ALTERNATIVE	TYPICAL SECTION (SJD-FRE)	AERIAL #1 - EASTSIDE BYPASS IRRIGATION DITCH - 2 OF 2
ST-K1100-B	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 19 WYE ALTERNATIVE	GENERAL PLAN (SJD-FRE)	SR 59 / SR 152 INTERCHANGE - 1 OF 4
ST-K1101-B	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 19 WYE ALTERNATIVE	GENERAL PLAN (SJD-FRE)	SR 59 / SR 152 INTERCHANGE - 2 OF 4
ST-K3101-B	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 19 WYE ALTERNATIVE	TYPICAL SECTIONS (SJD-FRE)	SR 59 / SR 152 INTERCHANGE - 3 OF 4
ST-K1102-B	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 19 WYE ALTERNATIVE	GENERAL PLAN (SJD-FRE)	SR 59 / SR 152 INTERCHANGE - 4 OF 4
ST-K1110-B	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 19 WYE ALTERNATIVE	GENERAL PLAN (SJD-FRE)	LINCOLN ROAD (ROAD 4) OVERHEAD
ST-K1160-B	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 19 WYE ALTERNATIVE	GENERAL PLAN (SJD-FRE)	HEMLOCK ROAD (ROAD 9) INTERCHANGE - 1 OF 2
ST-K3160-B	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 19 WYE ALTERNATIVE	TYPICAL SECTIONS (SJD-FRE)	HEMLOCK ROAD (ROAD 9) INTERCHANGE - 2 OF 2
ST-K1170-B	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 19 WYE ALTERNATIVE	GENERAL PLAN (SJD-FRE)	ASH SLOUGH BRIDGE
ST-K1190-B	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 19 WYE ALTERNATIVE	GENERAL PLAN (SJD-FRE)	ELM ROAD (ROAD 12) OVERHEAD
ST-K1210-B	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 19 WYE ALTERNATIVE	GENERAL PLAN (SJD-FRE)	ROBERTSON BOULEVARD (SR 233) INTERCHANGE - 1 OF 2
ST-K3210-B	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 19 WYE ALTERNATIVE	TYPICAL SECTIONS (SJD-FRE)	ROBERTSON BOULEVARD (SR 233) INTERCHANGE - 2 OF 2
ST-K1220-B	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 19 WYE ALTERNATIVE	GENERAL PLAN (SJD-FRE)	BERENDA SLOUGH BRIDGE
ST-K1230-B	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 19 WYE ALTERNATIVE	GENERAL PLAN (SJD-FRE)	BERENDA WAY (ROAD 16) UNDERPASS
ST-K1235-B	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 19 WYE ALTERNATIVE	GENERAL PLAN (SJD-FRE)	BERENDA WAY (ROAD 16) INTERCHANGE - 1 OF 2
ST-K3235-B	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 19 WYE ALTERNATIVE	TYPICAL SECTION (SJD-FRE)	BERENDA WAY (ROAD 16) INTERCHANGE - 2 OF 2
ST-K1240-B	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 19 WYE ALTERNATIVE	GENERAL PLAN (SJD-FRE)	ROAD 17 1/2 UNDERPASS
ST-K1245-B	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 19 WYE ALTERNATIVE	GENERAL PLAN (SJD-FRE)	SR 152 (ROAD 17 1/2) UNDERCROSSING
ST-K1250-B	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 19 WYE ALTERNATIVE	GENERAL PLAN (SJD-FRE)	AERIAL #2 - SR 99 / UPRR - 1 OF 3
ST-K1251-B	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 19 WYE ALTERNATIVE	GENERAL PLAN (SJD-FRE)	AERIAL #2 - SR 99 / UPRR - 2 OF 3
ST-K3250-B	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 19 WYE ALTERNATIVE	TYPICAL SECTIONS (SJD-FRE)	AERIAL #2 - SR 99 / UPRR - 3 OF 3
ST-K1260-B	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 19 WYE ALTERNATIVE	GENERAL PLAN (SJD-FRE)	ROAD 20 UNDERPASS
ST-K1280-B	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 19 WYE ALTERNATIVE	GENERAL PLAN (SJD-FRE)	ROAD 22 OVERHEAD
ST-K1310-B	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 19 WYE ALTERNATIVE	GENERAL PLAN (SJD-FRE)	AVENUE 20 1/2 OVERHEAD
ST-K1320-B	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 19 WYE ALTERNATIVE	GENERAL PLAN (SJD-FRE)	DRY CREEK BRIDGE
ST-K1420-B	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 19 WYE ALTERNATIVE	GENERAL PLAN (MER-FRE)	AERIAL #3 - SOUTHBOUND OVER HST MAINLINE - 1 OF 5
ST-K1421-B	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 19 WYE ALTERNATIVE	GENERAL PLAN (MER-FRE)	AERIAL #3 - SOUTHBOUND OVER HST MAINLINE - 2 OF 5
ST-K1422-B	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 19 WYE ALTERNATIVE	GENERAL PLAN (MER-FRE)	AERIAL #3 - SOUTHBOUND OVER HST MAINLINE - 3 OF 5
ST-K3420-B	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 19 WYE ALTERNATIVE	TYPICAL SECTIONS (MER-FRE)	AERIAL #3 - SOUTHBOUND OVER HST MAINLINE - 4 OF 5
ST-K3421-B	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 19 WYE ALTERNATIVE	TYPICAL SECTIONS (MER-FRE)	AERIAL #3 - SOUTHBOUND OVER HST MAINLINE - 5 OF 5
ST-K1425-B	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 19 WYE ALTERNATIVE	GENERAL PLAN (MER-FRE)	ROAD 20 UNDERPASS (HST NB)

16-AUG-2016 07:49 MF-ST-B0004.dgn

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**M. BRATT**  
DRAWN BY  
**A. M.**  
CHECKED BY  
**K. CHARAN**  
IN CHARGE  
**C. LEMLEY**  
DATE  
**08/12/2016**

RECORD SET  
15% DESIGN  
SUBMITTAL  
  
NOT FOR  
CONSTRUCTION



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO SECTION**  
CENTRAL VALLEY WYE  
STRUCTURE, VIADUCT AND TUNNEL PLANS  
INDEX OF DRAWINGS  
SHEET 3 OF 8

CONTRACT NO.  
HSR08-05  
DRAWING NO.  
ST-B0004  
SCALE  
NO SCALE  
SHEET NO.

16-AUG-2016 07:49 MF-ST-B0005.dgn

INDEX OF DRAWINGS				
DRAWING NO.	SECTION	ALIGNMENT / PLAN SET	TITLE	DESCRIPTION
ST-K1430-B	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 19 WYE ALTERNATIVE	GENERAL PLAN (MER-FRE)	MADISON ROAD (AVENUE 23 1/2) UNDERPASS
ST-K1435-B	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 19 WYE ALTERNATIVE	GENERAL PLAN (MER-FRE)	AVENUE 24 UNDERPASS
ST-K1450-B	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 19 WYE ALTERNATIVE	GENERAL PLAN (MER-FRE)	BERENDA SLOUGH BRIDGE - 1 OF 2
ST-K3450-B	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 19 WYE ALTERNATIVE	TYPICAL SECTION (MER-FRE)	BERENDA SLOUGH BRIDGE - 2 OF 2
ST-K1455-B	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 19 WYE ALTERNATIVE	GENERAL PLAN (MER-FRE)	FAUST ROAD (AVENUE 26) UNDERPASS
ST-K1460-B	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 19 WYE ALTERNATIVE	GENERAL PLAN (MER-FRE)	ASH SLOUGH BRIDGE - 1 OF 2
ST-K3460-B	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 19 WYE ALTERNATIVE	TYPICAL SECTION (MER-FRE)	ASH SLOUGH BRIDGE - 2 OF 2
ST-K1465-B	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 19 WYE ALTERNATIVE	GENERAL PLAN (MER-FRE)	ROAD 19 UNDERPASS
ST-K1480-B	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 19 WYE ALTERNATIVE	GENERAL PLAN (MER-FRE)	CHOWCHILLA RIVER BRIDGE - 1 OF 2
ST-K3480-B	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 19 WYE ALTERNATIVE	TYPICAL SECTION (MER-FRE)	CHOWCHILLA RIVER BRIDGE - 2 OF 2
ST-K1510-B	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 19 WYE ALTERNATIVE	GENERAL PLAN (MER-FRE)	MINTURN ROAD (ROAD 15) OVERHEAD
ST-T1520-B	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 19 WYE ALTERNATIVE	GENERAL PLAN (MER-FRE)	CUT AND COVER TUNNEL AT SR 99 - 1 OF 5
ST-T1521-B	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 19 WYE ALTERNATIVE	GENERAL PLAN (MER-FRE)	CUT AND COVER TUNNEL AT SR 99 - 2 OF 5
ST-T1522-B	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 19 WYE ALTERNATIVE	GENERAL PLAN (MER-FRE)	CUT AND COVER TUNNEL AT SR 99 - 3 OF 5
ST-T3520-B	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 19 WYE ALTERNATIVE	TYPICAL SECTION (MER-FRE)	CUT AND COVER TUNNEL AT SR 99 - 4 OF 5
ST-T3521-B	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 19 WYE ALTERNATIVE	TYPICAL SECTION (MER-FRE)	CUT AND COVER TUNNEL AT SR 99 - 5 OF 5
ST-T1530-B	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 19 WYE ALTERNATIVE	GENERAL PLAN (MER-FRE)	CUT AND COVER TUNNEL AT UPRR - 1 OF 5
ST-T1531-B	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 19 WYE ALTERNATIVE	GENERAL PLAN (MER-FRE)	CUT AND COVER TUNNEL AT UPRR - 2 OF 5
ST-T1532-B	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 19 WYE ALTERNATIVE	GENERAL PLAN (MER-FRE)	CUT AND COVER TUNNEL AT UPRR - 3 OF 5
ST-T3530-B	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 19 WYE ALTERNATIVE	TYPICAL SECTION (MER-FRE)	CUT AND COVER TUNNEL AT UPRR - 4 OF 5
ST-T3531-B	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 19 WYE ALTERNATIVE	TYPICAL SECTION (MER-FRE)	CUT AND COVER TUNNEL AT UPRR - 5 OF 5
ST-T1540-B	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 19 WYE ALTERNATIVE	GENERAL PLAN (MER-FRE)	CUT AND COVER TUNNEL AT SANDY MUSH ROAD - 1 OF 2
ST-T3540-B	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 19 WYE ALTERNATIVE	TYPICAL SECTION (MER-FRE)	CUT AND COVER TUNNEL AT SANDY MUSH ROAD - 2 OF 2
ST-K1620-B	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 19 WYE ALTERNATIVE	GENERAL PLAN (SJD-MER)	AERIAL #4 - NORTHBOUND OVER HST MAINLINE - 1 OF 5
ST-K1621-B	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 19 WYE ALTERNATIVE	GENERAL PLAN (SJD-MER)	AERIAL #4 - NORTHBOUND OVER HST MAINLINE - 2 OF 5
ST-K1622-B	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 19 WYE ALTERNATIVE	GENERAL PLAN (SJD-MER)	AERIAL #4 - NORTHBOUND OVER HST MAINLINE - 3 OF 5
ST-K3620-B	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 19 WYE ALTERNATIVE	TYPICAL SECTIONS (SJD-MER)	AERIAL #4 - NORTHBOUND OVER HST MAINLINE - 4 OF 5
ST-K3621-B	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 19 WYE ALTERNATIVE	TYPICAL SECTIONS (SJD-MER)	AERIAL #4 - NORTHBOUND OVER HST MAINLINE - 5 OF 5
ST-K1625-B	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 19 WYE ALTERNATIVE	GENERAL PLAN (SJD-MER)	ROAD 17 1/2 UNDERPASS (HST SB)
ST-K1630-B	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 19 WYE ALTERNATIVE	GENERAL PLAN (SJD-MER)	AERIAL #5 - SOUTHBOUND OVER UPRR / SR 99 - 1 OF 2
ST-K3630-B	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 19 WYE ALTERNATIVE	TYPICAL SECTIONS (SJD-MER)	AERIAL #5 - SOUTHBOUND OVER UPRR / SR 99 - 2 OF 2
ST-K1635-B	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 19 WYE ALTERNATIVE	GENERAL PLAN (SJD-MER)	AERIAL #6 - NORTHBOUND OVER UPRR / SR 99 - 1 OF 2
ST-K3635-B	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 19 WYE ALTERNATIVE	TYPICAL SECTION (SJD-MER)	AERIAL #6 - NORTHBOUND OVER UPRR / SR 99 - 2 OF 2
ST-K1640-B	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 19 WYE ALTERNATIVE	GENERAL PLAN (SJD-MER)	AVENUE 24 UNDERPASS
ST-K1650-B	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 19 WYE ALTERNATIVE	GENERAL PLAN (SJD-MER)	AERIAL #7 - NORTHBOUND OVER HST MERCED TO FRESNO - 1 OF 4
ST-K1651-B	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 19 WYE ALTERNATIVE	GENERAL PLAN (SJD-MER)	AERIAL #7 - NORTHBOUND OVER HST MERCED TO FRESNO - 2 OF 4
ST-K3650-B	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 19 WYE ALTERNATIVE	TYPICAL SECTIONS (SJD-MER)	AERIAL #7 - NORTHBOUND OVER HST MERCED TO FRESNO - 3 OF 4
ST-K3651-B	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 19 WYE ALTERNATIVE	TYPICAL SECTION (SJD-MER)	AERIAL #7 - NORTHBOUND OVER HST MERCED TO FRESNO - 4 OF 4
AVENUE 21 TO ROAD 13 WYE ALTERNATIVE				
ST-B4001-C	CENTRAL VALLEY WYE	AVENUE 21 TO ROAD 13 WYE ALTERNATIVE	KEY MAP OF STRUCTURAL PLANS	SHEET 1 OF 2
ST-B4002-C	CENTRAL VALLEY WYE	AVENUE 21 TO ROAD 13 WYE ALTERNATIVE	KEY MAP OF STRUCTURAL PLANS	SHEET 2 OF 2
ST-K1050-C	CENTRAL VALLEY WYE	AVENUE 21 TO ROAD 13 WYE ALTERNATIVE	GENERAL PLAN (SJD-FRE)	INDIANA ROAD OVERHEAD

REV	DATE	BY	CHK	APP	DESCRIPTION

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ST-K1070-C	CENTRAL VALLEY WYE	AVENUE 21 TO ROAD 13 WYE ALTERNATIVE	GENERAL PLAN (SJD-FRE)	SAN JOAQUIN RIVER BRIDGE - 1 OF 2
ST-K3070-C	CENTRAL VALLEY WYE	AVENUE 21 TO ROAD 13 WYE ALTERNATIVE	TYPICAL SECTION (SJD-FRE)	SAN JOAQUIN RIVER BRIDGE - 2 OF 2
ST-K1080-C	CENTRAL VALLEY WYE	AVENUE 21 TO ROAD 13 WYE ALTERNATIVE	GENERAL PLAN (SJD-FRE)	AERIAL #1 - FRESNO RIVER AND MARIPOSA SLOUGH - 1 OF 2
ST-K3080-C	CENTRAL VALLEY WYE	AVENUE 21 TO ROAD 13 WYE ALTERNATIVE	TYPICAL SECTION (SJD-FRE)	AERIAL #1 - FRESNO RIVER AND MARIPOSA SLOUGH - 2 OF 2
ST-K1085-C	CENTRAL VALLEY WYE	AVENUE 21 TO ROAD 13 WYE ALTERNATIVE	GENERAL PLAN (SJD-FRE)	SR 152 UNDERPASS
ST-K1090-C	CENTRAL VALLEY WYE	AVENUE 21 TO ROAD 13 WYE ALTERNATIVE	GENERAL PLAN (SJD-FRE)	FLANAGAN ROAD UNDERPASS
ST-K1100-C	CENTRAL VALLEY WYE	AVENUE 21 TO ROAD 13 WYE ALTERNATIVE	GENERAL PLAN (SJD-FRE)	AERIAL #2 - EASTSIDE BYPASS IRRIGATION DITCH - 1 OF 2
ST-K3100-C	CENTRAL VALLEY WYE	AVENUE 21 TO ROAD 13 WYE ALTERNATIVE	TYPICAL SECTION (SJD-FRE)	AERIAL #2 - EASTSIDE BYPASS IRRIGATION DITCH - 2 OF 2
ST-K1120-C	CENTRAL VALLEY WYE	AVENUE 21 TO ROAD 13 WYE ALTERNATIVE	GENERAL PLAN (SJD-FRE)	LINCOLN ROAD (ROAD 4) OVERHEAD
ST-K1150-C	CENTRAL VALLEY WYE	AVENUE 21 TO ROAD 13 WYE ALTERNATIVE	GENERAL PLAN (SJD-FRE)	JUNIPER ROAD (ROAD 7) UNDERPASS
ST-K1155-C	CENTRAL VALLEY WYE	AVENUE 21 TO ROAD 13 WYE ALTERNATIVE	GENERAL PLAN (SJD-FRE)	ASH SLOUGH BRIDGE - 1 OF 2
ST-K3155-C	CENTRAL VALLEY WYE	AVENUE 21 TO ROAD 13 WYE ALTERNATIVE	TYPICAL SECTION (SJD-FRE)	ASH SLOUGH BRIDGE - 2 OF 2
ST-K1160-C	CENTRAL VALLEY WYE	AVENUE 21 TO ROAD 13 WYE ALTERNATIVE	GENERAL PLAN (SJD-FRE)	HEMLOCK ROAD (ROAD 9) OVERHEAD
ST-K1200-C	CENTRAL VALLEY WYE	AVENUE 21 TO ROAD 13 WYE ALTERNATIVE	GENERAL PLAN (SJD-FRE)	ROBERTSON BOULEVARD OVERHEAD
ST-K1210-C	CENTRAL VALLEY WYE	AVENUE 21 TO ROAD 13 WYE ALTERNATIVE	GENERAL PLAN (SJD-FRE)	ROAD 14 UNDERPASS
ST-K1220-C	CENTRAL VALLEY WYE	AVENUE 21 TO ROAD 13 WYE ALTERNATIVE	GENERAL PLAN (SJD-FRE)	BERENDA SLOUGH BRIDGE
ST-K1230-C	CENTRAL VALLEY WYE	AVENUE 21 TO ROAD 13 WYE ALTERNATIVE	GENERAL PLAN (SJD-FRE)	BERENDA WAY (ROAD 16) OVERHEAD
ST-K1260-C	CENTRAL VALLEY WYE	AVENUE 21 TO ROAD 13 WYE ALTERNATIVE	GENERAL PLAN (SJD-FRE)	ROAD 19 OVERHEAD
ST-K1270-C	CENTRAL VALLEY WYE	AVENUE 21 TO ROAD 13 WYE ALTERNATIVE	GENERAL PLAN (SJD-FRE)	ROAD 20 UNDERPASS
ST-K1275-C	CENTRAL VALLEY WYE	AVENUE 21 TO ROAD 13 WYE ALTERNATIVE	GENERAL PLAN (SJD-FRE)	AERIAL #3 - SR 99 / UPRR - 1 OF 2
ST-K3275-C	CENTRAL VALLEY WYE	AVENUE 21 TO ROAD 13 WYE ALTERNATIVE	TYPICAL SECTIONS (SJD-FRE)	AERIAL #3 - SR 99 / UPRR - 2 OF 2
ST-K1290-C	CENTRAL VALLEY WYE	AVENUE 21 TO ROAD 13 WYE ALTERNATIVE	GENERAL PLAN (SJD-FRE)	ROAD 22 OVERHEAD
ST-K1300-C	CENTRAL VALLEY WYE	AVENUE 21 TO ROAD 13 WYE ALTERNATIVE	GENERAL PLAN (SJD-FRE)	AVENUE 20 1/2 OVERHEAD
ST-K1320-C	CENTRAL VALLEY WYE	AVENUE 21 TO ROAD 13 WYE ALTERNATIVE	GENERAL PLAN (SJD-FRE)	DRY CREEK BRIDGE
ST-K1420-C	CENTRAL VALLEY WYE	AVENUE 21 TO ROAD 13 WYE ALTERNATIVE	GENERAL PLAN (MER-FRE)	AERIAL #4 - SOUTHBOUND OVER HST MAINLINE - 1 OF 6
ST-K1421-C	CENTRAL VALLEY WYE	AVENUE 21 TO ROAD 13 WYE ALTERNATIVE	GENERAL PLAN (MER-FRE)	AERIAL #4 - SOUTHBOUND OVER HST MAINLINE - 2 OF 6
ST-K1422-C	CENTRAL VALLEY WYE	AVENUE 21 TO ROAD 13 WYE ALTERNATIVE	GENERAL PLAN (MER-FRE)	AERIAL #4 - SOUTHBOUND OVER HST MAINLINE - 3 OF 6
ST-K1423-C	CENTRAL VALLEY WYE	AVENUE 21 TO ROAD 13 WYE ALTERNATIVE	GENERAL PLAN (MER-FRE)	AERIAL #4 - SOUTHBOUND OVER HST MAINLINE - 4 OF 6
ST-K3420-C	CENTRAL VALLEY WYE	AVENUE 21 TO ROAD 13 WYE ALTERNATIVE	TYPICAL SECTIONS (MER-FRE)	AERIAL #4 - SOUTHBOUND OVER HST MAINLINE - 5 OF 6
ST-K3421-C	CENTRAL VALLEY WYE	AVENUE 21 TO ROAD 13 WYE ALTERNATIVE	TYPICAL SECTIONS (MER-FRE)	AERIAL #4 - SOUTHBOUND OVER HST MAINLINE - 6 OF 6
ST-K1426-C	CENTRAL VALLEY WYE	AVENUE 21 TO ROAD 13 WYE ALTERNATIVE	GENERAL PLAN (MER-FRE)	HST NB BRIDGE OVER BERENDA SLOUGH
ST-K1430-C	CENTRAL VALLEY WYE	AVENUE 21 TO ROAD 13 WYE ALTERNATIVE	GENERAL PLAN (MER-FRE)	ROAD 14 UNDERPASS (HST NB)
ST-K1435-C	CENTRAL VALLEY WYE	AVENUE 21 TO ROAD 13 WYE ALTERNATIVE	GENERAL PLAN (MER-FRE)	AVENUE 21 1/2 OVERHEAD
ST-K1440-C	CENTRAL VALLEY WYE	AVENUE 21 TO ROAD 13 WYE ALTERNATIVE	GENERAL PLAN (MER-FRE)	ROBERTSON BOULEVARD UNDERPASS
ST-K1445-C	CENTRAL VALLEY WYE	AVENUE 21 TO ROAD 13 WYE ALTERNATIVE	GENERAL PLAN (MER-FRE)	AVENUE 22 1/2 UNDERPASS
ST-K1450-C	CENTRAL VALLEY WYE	AVENUE 21 TO ROAD 13 WYE ALTERNATIVE	GENERAL PLAN (MER-FRE)	SR 152 UNDERPASS - 1 OF 2
ST-K3450-C	CENTRAL VALLEY WYE	AVENUE 21 TO ROAD 13 WYE ALTERNATIVE	TYPICAL SECTION (MER-FRE)	SR 152 UNDERPASS - 2 OF 2
ST-K1470-C	CENTRAL VALLEY WYE	AVENUE 21 TO ROAD 13 WYE ALTERNATIVE	GENERAL PLAN (MER-FRE)	WASHINGTON ROAD (AVENUE 25) UNDERPASS
ST-K1475-C	CENTRAL VALLEY WYE	AVENUE 21 TO ROAD 13 WYE ALTERNATIVE	GENERAL PLAN (MER-FRE)	ASH SLOUGH BRIDGE - 1 OF 2
ST-K3475-C	CENTRAL VALLEY WYE	AVENUE 21 TO ROAD 13 WYE ALTERNATIVE	TYPICAL SECTION (MER-FRE)	ASH SLOUGH BRIDGE - 2 OF 2
ST-K1480-C	CENTRAL VALLEY WYE	AVENUE 21 TO ROAD 13 WYE ALTERNATIVE	GENERAL PLAN (MER-FRE)	AVENUE 26 1/2 UNDERPASS
ST-K1490-C	CENTRAL VALLEY WYE	AVENUE 21 TO ROAD 13 WYE ALTERNATIVE	GENERAL PLAN (MER-FRE)	CHOWCHILLA RIVER BRIDGE - 1 OF 2
ST-K3490-C	CENTRAL VALLEY WYE	AVENUE 21 TO ROAD 13 WYE ALTERNATIVE	TYPICAL SECTION (MER-FRE)	CHOWCHILLA RIVER BRIDGE - 2 OF 2

16-AUG-2016 07:49 MF-ST-B0006.dgn

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STRUCTURE, VIADUCT AND TUNNEL PLANS  
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SHEET 5 OF 8

CONTRACT NO.  
**HSR08-05**  
DRAWING NO.  
**ST-B0006**  
SCALE  
**NO SCALE**  
SHEET NO.

INDEX OF DRAWINGS

DRAWING NO.	SECTION	ALIGNMENT / PLAN SET	TITLE	DESCRIPTION
ST-K1495-C	CENTRAL VALLEY WYE	AVENUE 21 TO ROAD 13 WYE ALTERNATIVE	GENERAL PLAN (MER-FRE)	VISTA AVENUE (ROAD 13) UNDERPASS
ST-K1510-C	CENTRAL VALLEY WYE	AVENUE 21 TO ROAD 13 WYE ALTERNATIVE	GENERAL PLAN (MER-FRE)	DUTCHMAN CREEK BRIDGE
ST-K1515-C	CENTRAL VALLEY WYE	AVENUE 21 TO ROAD 13 WYE ALTERNATIVE	GENERAL PLAN (MER-FRE)	ROAD 11 BRIDGE
ST-T1520-C	CENTRAL VALLEY WYE	AVENUE 21 TO ROAD 13 WYE ALTERNATIVE	GENERAL PLAN (MER-FRE)	RETAINED CUT - SANDY MUSH ROAD - 1 OF 2
ST-T3520-C	CENTRAL VALLEY WYE	AVENUE 21 TO ROAD 13 WYE ALTERNATIVE	TYPICAL SECTIONS (MER-FRE)	RETAINED CUT - SANDY MUSH ROAD - 2 OF 2
ST-K1520-C	CENTRAL VALLEY WYE	AVENUE 21 TO ROAD 13 WYE ALTERNATIVE	GENERAL PLAN (MER-FRE)	SANDY MUSH ROAD OVERHEAD
ST-K1620-C	CENTRAL VALLEY WYE	AVENUE 21 TO ROAD 13 WYE ALTERNATIVE	GENERAL PLAN (SJD-MER)	AERIAL #5 - NORTHBOUND OVER HST MAINLINE - 1 OF 5
ST-K1621-C	CENTRAL VALLEY WYE	AVENUE 21 TO ROAD 13 WYE ALTERNATIVE	GENERAL PLAN (SJD-MER)	AERIAL #5 - NORTHBOUND OVER HST MAINLINE - 2 OF 5
ST-K1622-C	CENTRAL VALLEY WYE	AVENUE 21 TO ROAD 13 WYE ALTERNATIVE	GENERAL PLAN (SJD-MER)	AERIAL #5 - NORTHBOUND OVER HST MAINLINE - 3 OF 5
ST-K3620-C	CENTRAL VALLEY WYE	AVENUE 21 TO ROAD 13 WYE ALTERNATIVE	TYPICAL SECTIONS (SJD-MER)	AERIAL #5 - NORTHBOUND OVER HST MAINLINE - 4 OF 5
ST-K3621-C	CENTRAL VALLEY WYE	AVENUE 21 TO ROAD 13 WYE ALTERNATIVE	TYPICAL SECTIONS (SJD-MER)	AERIAL #5 - NORTHBOUND OVER HST MAINLINE - 5 OF 5
ST-K1630-C	CENTRAL VALLEY WYE	AVENUE 21 TO ROAD 13 WYE ALTERNATIVE	GENERAL PLAN (SJD-MER)	AVENUE 21 1/2 OVERHEAD
ST-K1640-C	CENTRAL VALLEY WYE	AVENUE 21 TO ROAD 13 WYE ALTERNATIVE	GENERAL PLAN (SJD-MER)	AERIAL #6 - NORTHBOUND OVER HST MERCED TO FRESNO - 1 OF 6
ST-K1641-C	CENTRAL VALLEY WYE	AVENUE 21 TO ROAD 13 WYE ALTERNATIVE	GENERAL PLAN (SJD-MER)	AERIAL #6 - NORTHBOUND OVER HST MERCED TO FRESNO - 2 OF 6
ST-K1642-C	CENTRAL VALLEY WYE	AVENUE 21 TO ROAD 13 WYE ALTERNATIVE	GENERAL PLAN (SJD-MER)	AERIAL #6 - NORTHBOUND OVER HST MERCED TO FRESNO - 3 OF 6
ST-K1643-C	CENTRAL VALLEY WYE	AVENUE 21 TO ROAD 13 WYE ALTERNATIVE	GENERAL PLAN (SJD-MER)	AERIAL #6 - NORTHBOUND OVER HST MERCED TO FRESNO - 4 OF 6
ST-K3640-C	CENTRAL VALLEY WYE	AVENUE 21 TO ROAD 13 WYE ALTERNATIVE	TYPICAL SECTIONS (SJD-MER)	AERIAL #6 - NORTHBOUND OVER HST MERCED TO FRESNO - 5 OF 6
ST-K3641-C	CENTRAL VALLEY WYE	AVENUE 21 TO ROAD 13 WYE ALTERNATIVE	TYPICAL SECTIONS (SJD-MER)	AERIAL #6 - NORTHBOUND OVER HST MERCED TO FRESNO - 6 OF 6
ST-K1646-C	CENTRAL VALLEY WYE	AVENUE 21 TO ROAD 13 WYE ALTERNATIVE	GENERAL PLAN (SJD-MER)	AVENUE 22 1/2 UNDERPASS (HST SB)
SR 152 (NORTH) TO ROAD 11 WYE ALTERNATIVE				
ST-B4001-D	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 11 WYE ALTERNATIVE	KEY MAP OF STRUCTURAL PLANS	SHEET 1 OF 2
ST-B4002-D	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 11 WYE ALTERNATIVE	KEY MAP OF STRUCTURAL PLANS	SHEET 2 OF 2
ST-K1050-D	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 11 WYE ALTERNATIVE	GENERAL PLAN (SJD-FRE)	INDIANA ROAD OVERHEAD
ST-K1055-D	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 11 WYE ALTERNATIVE	GENERAL PLAN (SJD-FRE)	WOOD SLOUGH BRIDGE
ST-K1060-D	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 11 WYE ALTERNATIVE	GENERAL PLAN (SJD-FRE)	WILLIS ROAD UNDERPASS
ST-K1065-D	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 11 WYE ALTERNATIVE	GENERAL PLAN (SJD-FRE)	SAN JOAQUIN RIVER BRIDGE - 1 OF 2
ST-K3065-D	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 11 WYE ALTERNATIVE	TYPICAL SECTION (SJD-FRE)	SAN JOAQUIN RIVER BRIDGE - 2 OF 2
ST-K1070-D	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 11 WYE ALTERNATIVE	GENERAL PLAN (SJD-FRE)	MARIPOSA SLOUGH BRIDGE
ST-K1075-D	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 11 WYE ALTERNATIVE	GENERAL PLAN (SJD-FRE)	HARMON ROAD UNDERPASS
ST-K1080-D	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 11 WYE ALTERNATIVE	GENERAL PLAN (SJD-FRE)	AERIAL #1 - EASTSIDE BYPASS IRRIGATION DITCH - 1 OF 2
ST-K3080-D	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 11 WYE ALTERNATIVE	TYPICAL SECTION (SJD-FRE)	AERIAL #1 - EASTSIDE BYPASS IRRIGATION DITCH - 2 OF 2
ST-K1100-D	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 11 WYE ALTERNATIVE	GENERAL PLAN (SJD-FRE)	SR 59 / SR 152 INTERCHANGE - 1 OF 4
ST-K1101-D	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 11 WYE ALTERNATIVE	GENERAL PLAN (SJD-FRE)	SR 59 / SR 152 INTERCHANGE - 2 OF 4
ST-K3101-D	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 11 WYE ALTERNATIVE	TYPICAL SECTIONS (SJD-FRE)	SR 59 / SR 152 INTERCHANGE - 3 OF 4
ST-K1102-D	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 11 WYE ALTERNATIVE	GENERAL PLAN (SJD-FRE)	SR 59 / SR 152 INTERCHANGE - 4 OF 4
ST-K1110-D	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 11 WYE ALTERNATIVE	GENERAL PLAN (SJD-FRE)	LINCOLN ROAD (ROAD 4) OVERHEAD
ST-K1160-D	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 11 WYE ALTERNATIVE	GENERAL PLAN (SJD-FRE)	HEMLOCK ROAD (ROAD 9) UNDERPASS
ST-K1161-D	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 11 WYE ALTERNATIVE	GENERAL PLAN (SJD-FRE)	HEMLOCK ROAD (ROAD 9) INTERCHANGE - 1 OF 2
ST-K3161-D	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 11 WYE ALTERNATIVE	TYPICAL SECTIONS (SJD-FRE)	HEMLOCK ROAD (ROAD 9) INTERCHANGE - 2 OF 2
ST-K1170-D	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 11 WYE ALTERNATIVE	GENERAL PLAN (SJD-FRE)	ASH SLOUGH BRIDGE - 1 OF 2
ST-K3170-D	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 11 WYE ALTERNATIVE	TYPICAL SECTION (SJD-FRE)	ASH SLOUGH BRIDGE - 2 OF 2
ST-K1190-D	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 11 WYE ALTERNATIVE	GENERAL PLAN (SJD-FRE)	ELM ROAD (ROAD 12) UNDERPASS
ST-K1195-D	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 11 WYE ALTERNATIVE	GENERAL PLAN (SJD-FRE)	SR 152 (ROAD 12) UNDERCROSSING

16-AUG-2016 07:49 MF-ST-B0007.dgn

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**M. BRATT**  
DRAWN BY  
**A. M.**  
CHECKED BY  
**K. CHARAN**  
IN CHARGE  
**C. LEMLEY**  
DATE  
**08/12/2016**

**RECORD SET**  
15% DESIGN  
SUBMITTAL  
  
**NOT FOR  
CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO SECTION**  
CENTRAL VALLEY WYE  
STRUCTURE, VIADUCT AND TUNNEL PLANS  
INDEX OF DRAWINGS  
SHEET 6 OF 8

CONTRACT NO.  
HSR08-05  
DRAWING NO.  
ST-B0007  
SCALE  
NO SCALE  
SHEET NO.

p005133c 16-AUG-2016 0:59 MF-ST-B0008.sgn

INDEX OF DRAWINGS				
DRAWING NO.	SECTION	ALIGNMENT / PLAN SET	TITLE	DESCRIPTION
ST-K1210-D	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 11 WYE ALTERNATIVE	GENERAL PLAN (SJD-FRE)	ROBERTSON BOULEVARD (SR 233) INTERCHANGE - 1 OF 2
ST-K3210-D	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 11 WYE ALTERNATIVE	TYPICAL SECTIONS (SJD-FRE)	ROBERTSON BOULEVARD (SR 233) INTERCHANGE - 2 OF 2
ST-K1220-D	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 11 WYE ALTERNATIVE	GENERAL PLAN (SJD-FRE)	BERENDA SLOUGH BRIDGE - 1 OF 2
ST-K3220-D	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 11 WYE ALTERNATIVE	TYPICAL SECTION (SJD-FRE)	BERENDA SLOUGH BRIDGE - 2 OF 2
ST-K1230-D	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 11 WYE ALTERNATIVE	GENERAL PLAN (SJD-FRE)	BERENDA WAY (ROAD 16) UNDERPASS
ST-K1235-D	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 11 WYE ALTERNATIVE	GENERAL PLAN (SJD-FRE)	BERENDA WAY (ROAD 16) INTERCHANGE - 1 OF 2
ST-K3235-D	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 11 WYE ALTERNATIVE	TYPICAL SECTION (SJD-FRE)	BERENDA WAY (ROAD 16) INTERCHANGE - 2 OF 2
ST-K1240-D	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 11 WYE ALTERNATIVE	GENERAL PLAN (SJD-FRE)	ROAD 17 1/2 OVERHEAD
ST-K1250-D	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 11 WYE ALTERNATIVE	GENERAL PLAN (SJD-FRE)	AERIAL #2 - SR 99 / UPRR - 1 OF 3
ST-K1251-D	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 11 WYE ALTERNATIVE	GENERAL PLAN (SJD-FRE)	AERIAL #2 - SR 99 / UPRR - 2 OF 3
ST-K3250-D	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 11 WYE ALTERNATIVE	TYPICAL SECTIONS (SJD-FRE)	AERIAL #2 - SR 99 / UPRR - 3 OF 3
ST-K1260-D	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 11 WYE ALTERNATIVE	GENERAL PLAN (SJD-FRE)	ROAD 20 OVERHEAD
ST-K1280-D	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 11 WYE ALTERNATIVE	GENERAL PLAN (SJD-FRE)	ROAD 22 OVERHEAD
ST-K1300-D	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 11 WYE ALTERNATIVE	GENERAL PLAN (SJD-FRE)	BERENDA CREEK BRIDGE
ST-K1310-D	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 11 WYE ALTERNATIVE	GENERAL PLAN (SJD-FRE)	AVENUE 20 1/2 OVERHEAD
ST-K1330-D	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 11 WYE ALTERNATIVE	GENERAL PLAN (SJD-FRE)	DRY CREEK BRIDGE
ST-K1410-D	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 11 WYE ALTERNATIVE	GENERAL PLAN (MER-FRE)	AERIAL #3 - SOUTHBOUND OVER HST MAINLINE - 1 OF 6
ST-K1411-D	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 11 WYE ALTERNATIVE	GENERAL PLAN (MER-FRE)	AERIAL #3 - SOUTHBOUND OVER HST MAINLINE - 2 OF 6
ST-K1412-D	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 11 WYE ALTERNATIVE	GENERAL PLAN (MER-FRE)	AERIAL #3 - SOUTHBOUND OVER HST MAINLINE - 3 OF 6
ST-K3410-D	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 11 WYE ALTERNATIVE	TYPICAL SECTION (MER-FRE)	AERIAL #3 - SOUTHBOUND OVER HST MAINLINE - 4 OF 6
ST-K3411-D	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 11 WYE ALTERNATIVE	TYPICAL SECTION (MER-FRE)	AERIAL #3 - SOUTHBOUND OVER HST MAINLINE - 5 OF 6
ST-K3412-D	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 11 WYE ALTERNATIVE	TYPICAL SECTIONS (MER-FRE)	AERIAL #3 - SOUTHBOUND OVER HST MAINLINE - 6 OF 6
ST-K1430-D	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 11 WYE ALTERNATIVE	GENERAL PLAN (MER-FRE)	ROAD 12 UNDERPASS
ST-K1435-D	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 11 WYE ALTERNATIVE	GENERAL PLAN (MER-FRE)	MADISON ROAD (AVENUE 23 1/2) UNDERPASS
ST-K1440-D	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 11 WYE ALTERNATIVE	GENERAL PLAN (MER-FRE)	ASH SLOUGH BRIDGE - 1 OF 2
ST-K3440-D	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 11 WYE ALTERNATIVE	TYPICAL SECTION (MER-FRE)	ASH SLOUGH BRIDGE - 2 OF 2
ST-K1450-D	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 11 WYE ALTERNATIVE	GENERAL PLAN (MER-FRE)	WASHINGTON ROAD (AVENUE 25) UNDERPASS - 1 OF 2
ST-K3450-D	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 11 WYE ALTERNATIVE	TYPICAL SECTION (MER-FRE)	WASHINGTON ROAD (AVENUE 25) UNDERPASS - 2 OF 2
ST-K1455-D	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 11 WYE ALTERNATIVE	GENERAL PLAN (MER-FRE)	CHOWCHILLA RIVER BRIDGE
ST-K1460-D	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 11 WYE ALTERNATIVE	GENERAL PLAN (MER-FRE)	AVENUE 26 UNDERPASS
ST-K1490-D	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 11 WYE ALTERNATIVE	GENERAL PLAN (MER-FRE)	DUTCHMAN CREEK BRIDGE
ST-K1495-D	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 11 WYE ALTERNATIVE	GENERAL PLAN (MER-FRE)	SANDY MUSH ROAD UNDERPASS
ST-K1510-D	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 11 WYE ALTERNATIVE	GENERAL PLAN (MER-FRE)	DEADMAN CREEK BRIDGE No. 1
ST-K1515-D	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 11 WYE ALTERNATIVE	GENERAL PLAN (MER-FRE)	DEADMAN CREEK BRIDGE No. 2
ST-K1610-D	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 11 WYE ALTERNATIVE	GENERAL PLAN (SJD-MER)	AERIAL #4 - NORTHBOUND OVER HST MAINLINE - 1 OF 5
ST-K1611-D	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 11 WYE ALTERNATIVE	GENERAL PLAN (SJD-MER)	AERIAL #4 - NORTHBOUND OVER HST MAINLINE - 2 OF 5
ST-K1612-D	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 11 WYE ALTERNATIVE	GENERAL PLAN (SJD-MER)	AERIAL #4 - NORTHBOUND OVER HST MAINLINE - 3 OF 5
ST-K3610-D	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 11 WYE ALTERNATIVE	TYPICAL SECTIONS (SJD-MER)	AERIAL #4 - NORTHBOUND OVER HST MAINLINE - 4 OF 5
ST-K3611-D	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 11 WYE ALTERNATIVE	TYPICAL SECTIONS (SJD-MER)	AERIAL #4 - NORTHBOUND OVER HST MAINLINE - 5 OF 5
ST-K1620-D	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 11 WYE ALTERNATIVE	GENERAL PLAN (SJD-FRE)	HEMLOCK ROAD (ROAD 9) UNDERPASS
ST-K1630-D	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 11 WYE ALTERNATIVE	GENERAL PLAN (SJD-MER)	MADISON ROAD (AVENUE 23 1/2) OVERHEAD
ST-K1640-D	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 11 WYE ALTERNATIVE	GENERAL PLAN (SJD-MER)	AERIAL #5 - NORTHBOUND OVER HST MERCED TO FRESNO - 1 OF 6

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**M. BRATT**  
DRAWN BY  
**A. M.**  
CHECKED BY  
**K. CHARAN**  
IN CHARGE  
**C. LEMLEY**  
DATE  
**08/12/2016**

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**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO SECTION**  
CENTRAL VALLEY WYE  
STRUCTURE, VIADUCT AND TUNNEL PLANS  
INDEX OF DRAWINGS  
SHEET 7 OF 8

CONTRACT NO.  
HSR08-05  
DRAWING NO.  
ST-B0008  
SCALE  
NO SCALE  
SHEET NO.



INDEX OF DRAWINGS				
DRAWING NO.	SECTION	ALIGNMENT / PLAN SET	TITLE	DESCRIPTION
ST-K1641-D	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 11 WYE ALTERNATIVE	GENERAL PLAN (SJD-MER)	AERIAL #5 - NORTHBOUND OVER HST MERCED TO FRESNO - 2 OF 6
ST-K1642-D	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 11 WYE ALTERNATIVE	GENERAL PLAN (SJD-MER)	AERIAL #5 - NORTHBOUND OVER HST MERCED TO FRESNO - 3 OF 6
ST-K1643-D	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 11 WYE ALTERNATIVE	GENERAL PLAN (SJD-MER)	AERIAL #5 - NORTHBOUND OVER HST MERCED TO FRESNO - 4 OF 6
ST-K3640-D	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 11 WYE ALTERNATIVE	TYPICAL SECTIONS (SJD-MER)	AERIAL #5 - NORTHBOUND OVER HST MERCED TO FRESNO - 5 OF 6
ST-K3641-D	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 11 WYE ALTERNATIVE	TYPICAL SECTIONS (SJD-MER)	AERIAL #5 - NORTHBOUND OVER HST MERCED TO FRESNO - 6 OF 6
ST-K1650-D	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 11 WYE ALTERNATIVE	GENERAL PLAN (SJD-MER)	ROAD 11 UNDERPASS
ST-K1653-D	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 11 WYE ALTERNATIVE	GENERAL PLAN (SJD-MER)	WASHINGTON ROAD (AVENUE 25) UNDERPASS
ST-K1656-D	CENTRAL VALLEY WYE	SR 152 (NORTH) TO ROAD 11 WYE ALTERNATIVE	GENERAL PLAN (SJD-MER)	CHOWCHILLA RIVER BRIDGE

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REV	DATE	BY	CHK	APP	DESCRIPTION

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**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO SECTION**  
CENTRAL VALLEY WYE  
STRUCTURE, VIADUCT AND TUNNEL PLANS  
INDEX OF DRAWINGS  
SHEET 8 OF 8

CONTRACT NO.  
**HSR08-05**

DRAWING NO.  
**ST-B0009**

SCALE  
**NO SCALE**

SHEET NO.

A

C

D CONTINUED

F CONTINUED

J CONTINUED

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

CAA CABLE ANCHOR ASSEMBLY  
 CAP CORRUGATED ALUMINUM PIPE  
 CAPA CORRUGATED ALUMINUM PIPE ARCH  
 CAS CONSTRUCTION AREA SIGN  
 CB CONCRETE BARRIER  
 CBW CONCRETE BLOCK WALL  
 C-C CENTER TO CENTER  
 CHSRA CALIFORNIA HIGH-SPEED RAIL  
 CHSR CALIFORNIA HIGH-SPEED RAIL  
 CHST CALIFORNIA HIGH-SPEED TRAIN  
 CG CENTER OF GRAVITY  
 CHNL CHANNEL  
 CI CAST IRON  
 CIDH CAST-IN-DRILLED-HOLE  
 CIP CAST-IN-PLACE, CAST IRON PIPE  
 CIPCP CAST-IN-PLACE CONCRETE PIPE  
 CISS CAST-IN-STEEL SHELL  
 CJP COMPLETE JOINT PENETRATION  
 CL CHAIN LINK, CLASS  
 CL-6 CHAIN LINK FENCE (6 FT)  
 CLR CLEAR, CLEARANCE  
 CM CORRUGATED METAL  
 CMP CORRUGATED METAL PIPE  
 CO COUNTY  
 COL COLUMN  
 CONC CONCRETE  
 COND CONDUIT  
 CONN CONNECTOR  
 CONST CONSTRUCT, CONSTRUCTION  
 CONT CONTINUOUS  
 COORD COORDINATE  
 CP CANDLEPOWER  
 CP1 CONSTRUCTION PACKAGE 1  
 CR CREEK  
 CRCP CONTINUOUS REINFORCED CONCRETE PAVEMENT  
 CRSP CONCRETED ROCK SLOPE PROTECTION  
 CRZ CLEAR RECOVERY ZONE  
 CS CURVE SPIRAL POINT  
 CSP CORRUGATED STEEL PIPE  
 CSPA CORRUGATED STEEL PIPE ARCH  
 CTB CEMENT TREATED BASE  
 CTPB CEMENT TREATED PERMEABLE BASE  
 CTPM CEMENT TREATED PERMEABLE MATERIAL  
 CTRS CENTERS  
 CULV CULVERT  
 @ CENTERLINE

D

D DEPTH  
 DD DOWNDRAIN  
 DBL DOUBLE  
 DEG DEGREE  
 DEL DELINEATOR

DET DETAIL, DETOUR  
 DF DOUGLAS FIR, DIRECT FIXATION  
 DI DRAINAGE INLET, DROP INLET  
 DIA DIAMETER  
 DIAPHR DIAPHRAGM  
 DIST DISTANCE, DISTRICT  
 DMBB DOUBLE METAL BEAM BARRIER  
 DR DRIVE  
 DTBB DOUBLE THRIE BEAM BARRIER  
 DWY DRIVEWAY

E

E EAST  
 EA ACTUAL SUPERELEVATION  
 EASE EASEMENT  
 EB END OF BRIDGE, EASTBOUND  
 EC END HORIZONTAL CURVE  
 ECR END CURB RETURN  
 ED EDGE DRAIN  
 EDC EDGE DRAIN CLEANOUT  
 EDO EDGE DRAIN OUTLET  
 EDV EDGE DRAIN VENT  
 ELEC ELECTROLIER  
 ELECT ELECTRIC  
 ELEV ELEVATION  
 EMB EMBANKMENT  
 ENGR ENGINEER  
 EOD EDGE OF DECK  
 EP EDGE OF PAVEMENT  
 EQ EQUATION  
 ES EDGE OF SHOULDER  
 ET END TUNNEL  
 ETW EDGE OF TRAVELED WAY  
 EU UNBALANCED SUPERELEVATION  
 EVC END VERTICAL CURVE  
 EW ENDWALL  
 EXC EXCAVATION  
 EXIST, (E) EXISTING  
 EXP EXPANSION, EXPRESSWAY  
 EXP JT EXPANSION JOINT  
 EXT EXTERIOR

F

F & C FRAME AND COVER  
 F & G FRAME AND GRATE  
 FB FLOOR BEAM  
 FDN FOUNDATION  
 FEBT FACING EASTBOUND TRAFFIC  
 FES FLARED END SECTION  
 FF FILTER FABRIC  
 FG FINISHED GRADE  
 FH FIRE HYDRANT  
 FIG FIGURE  
 FL FLOW LINE

FNTB FACING NORTHBOUND TRAFFIC  
 FOB FREE ON BOARD  
 FOC FACE OF CONCRETE  
 FR RD FRONTAGE ROAD  
 FRE FRESNO  
 FS FAR SIDE, FINISHED SURFACE  
 FSBT FACING SOUTHBOUND TRAFFIC  
 FTG FOOTING  
 FWBT FACING WESTBOUND TRAFFIC  
 FWY FREEWAY

G

G GRADE, ACCELERATION DUE TO GRAVITY  
 GA GAGE  
 GALV GALVANIZED  
 GP GRADING PLANE  
 GR GUARD RAILING  
 GRDR GIRDER  
 GSP GALVANIZED STEEL PIPE  
 GTR GUTTER

H

H HEIGHT  
 H, HR HOUR  
 HD HORIZONTAL DRAIN  
 HDWL HEADWALL  
 HEX HD HEXAGONAL HEAD  
 HMA HOT MIXED ASPHALT  
 HORIZ HORIZONTAL  
 HP HINGE POINT, HORSEPOWER  
 HPS HIGH PERFORMANCE STEEL  
 HS HIGH STRENGTH  
 HSR HIGH-SPEED RAIL  
 HST HIGH-SPEED TRAIN  
 HW HEADWALL,  
 100-YR HIGH WATER (UNLESS NOTED OTHERWISE)  
 HWM HIGH WATER MARK  
 HWY HIGHWAY

I

IB IMPORTED BORROW  
 ID INSIDE DIAMETER  
 IF INSIDE FACE  
 INT INTERIOR  
 INV INVERT  
 IRR IRRIGATION  
 IS INTERLOCKING SITE

J

JCT JUNCTION  
 JP JOINT POLE  
 JPCP JOINTED PLAIN CONCRETE PAVEMENT

JS JUNCTION STRUCTURE  
 JT JOINT  
 L LENGTH  
 LAT LATITUDE  
 LCB LEAN CONCRETE BASE  
 LLT LAST LONG TIE  
 LN LANE  
 LOC LOCATION  
 LOL LAYOUT LINE  
 LONG LONGITUDE  
 LONGIT LONGITUDINAL  
 LS LUMP SUM, LENGTH OF SPIRAL  
 LT LEFT  
 LVC LENGTH OF VERTICAL CURVE

M

MAINT MAINTENANCE  
 MAX MAXIMUM  
 MB METAL BEAM  
 MBB METAL BEAM BARRIER  
 MBGR METAL BEAM GUARD RAILING  
 MED MEDIAN  
 MER MERCED  
 MF MERCED TO FRESNO  
 MH MANHOLE  
 MIN MINIMUM  
 MISC MISCELLANEOUS  
 MISC I & S MISCELLANEOUS IRON AND STEEL  
 MKR MARKER  
 MOD MODIFIED, MODIFY  
 MON MONUMENT  
 MOW MAINTENANCE-OF-WAY FACILITY  
 MP METAL PLATE  
 MPGR METAL PLATE GUARD RAILING  
 MPH MILES PER HOUR  
 MR MOVEMENT RATING  
 MSE MECHANICALLY STABILIZED EARTH  
 MTL MATERIAL

N

N NORTH  
 NB NORTHBOUND  
 NC NORMAL CROWN  
 NIC NOT IN CONTRACT  
 NO. NUMBER (MUST HAVE PERIOD)  
 NOS. NUMBERS (MUST HAVE PERIOD)  
 NPS NOMINAL PIPE SIZE  
 NS NEAR SIDE  
 NTS NOT TO SCALE

O

OBLR OBLITERATE

16-AUG-2016 1:16 MF-ST-B0010.dgn

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**C. LEMLEY**  
 DRAWN BY  
**J. KIDWELL**  
 CHECKED BY  
**A. M.**  
 IN CHARGE  
**C. LEMLEY**  
 DATE  
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**CALIFORNIA HIGH-SPEED TRAIN PROJECT  
MERCED TO FRESNO SECTION**

CENTRAL VALLEY WYE  
STRUCTURE, VIADUCT AND TUNNEL PLANS  
ABBREVIATIONS  
SHEET 1 OF 2

CONTRACT NO.  
HSR08-05  
DRAWING NO.  
ST-B0010  
SCALE  
NO SCALE  
SHEET NO.

O CONTINUED

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

P

P PAGE  
 PAP PERFORATED ALUMINUM PIPE  
 PB PULL BOX, PHASE BREAK  
 PC POINT OF CURVATURE, PRECAST  
 PCC POINT OF COMPOUND CURVE, PORTLAND CEMENT CONCRETE  
 PCP PERFORATED CONCRETE PIPE, PRESTRESSED CONCRETE PIPE  
 PCVC POINT OF COMPOUND VERTICAL CURVE  
 PED PEDESTRIAN  
 PED OC PEDESTRIAN OVERCROSSING  
 PED UC PEDESTRIAN UNDERCROSSING  
 PERM MTL PERMEABLE MATERIAL  
 PG PROFILE GRADE  
 PG&E PACIFIC GAS AND ELECTRIC  
 PI POINT OF INTERSECTION  
 PITO POINT OF INTERSECTION TURNOUT  
 PJP PARTIAL JOINT PENETRATION  
 PL, PL PLATE  
 P/L PROPERTY LINE  
 PM POST MILE, TIME FROM NOON TO MIDNIGHT  
 PN PAVING NOTCH  
 POB POINT OF BEGINNING  
 POC POINT OF HORIZONTAL CURVE  
 POE POINT OF END  
 POT POINT OF TANGENT  
 POVC POINT OF VERTICAL CURVE  
 PP PIPE PILE, PLASTIC PIPE, POWER POLE  
 PPL PREFORMED PERMEABLE LINER  
 PPP PERFORATED PLASTIC PIPE  
 PRC POINT OF REVERSE CURVE  
 PRF PAVEMENT REINFORCING FABRIC  
 PRVC POINT OF REVERSE VERTICAL CURVE  
 PS&E PLANS, SPECIFICATIONS AND ESTIMATES  
 PS, P/S POINT OF SWITCH, PRESTRESSED, PARALLELING STATION  
 PSP PERFORATED STEEL PIPE  
 PT POINT OF TANGENCY  
 PVC POLYVINYL CHLORIDE, POINT OF VERTICAL CURVE

P CONTINUED

PVI POINT OF VERTICAL INTERSECTION  
 PVMT PAVEMENT  
 PVT POINT OF VERTICAL TANGENT

Q

QTY QUANTITY

R

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

S

S SOUTH, SUPPLEMENT  
 SAE STRUCTURE APPROACH EMBANKMENT  
 SALV SALVAGE  
 SAPP STRUCTURAL ALUMINUM PLATE PIPE  
 SB SOUTHBOUND  
 SC SAND CUSHION, SPIRAL CURVE POINT  
 SCSP SLOTTED CORRUGATED STEEL PIPE  
 SD STORM DRAIN  
 SEC SECOND, SECTION  
 SEP SEPARATION  
 SG SUBGRADE  
 SHLD SHOULDER  
 SHT SHEET  
 SIM SIMILAR  
 SJD SAN JOSE DIRIDON STATION

S CONTINUED

SJM SAN JOSE TO MERCED  
 SJV SAN JOAQUIN VALLEY  
 S STATION LINE  
 SM SELECTED MATERIAL  
 SPEC SPECIAL, SPECIFICATIONS  
 SPP SLOTTED PLASTIC PIPE  
 SR STATE ROUTE  
 SRS STANDALONE RADIO SITE  
 SS SLOPE STAKE, SUBSTATION  
 SSBM STRAP AND SADDLE BRACKET METHOD  
 SSD STRUCTURAL SECTION DRAIN  
 SSPA STRUCTURAL STEEL PLATE ARCH  
 SSPP STRUCTURAL STEEL PLATE PIPE  
 SSPPA STRUCTURAL STEEL PLATE PIPE ARCH  
 SSRP STEEL SPIRAL RIB PIPE  
 ST STREET, SPIRAL TANGENT POINT  
 STA STATION  
 STBB SINGLE THRIE BEAM BARRIER  
 STD STANDARD  
 STR STRUCTURE  
 SURF SURFACING  
 SW SIDEWALK, SOUND WALL  
 SWR SEWER  
 SWS SWITCHING STATION  
 SYM SYMMETRICAL  
 S4S SURFACE 4 SIDES

T

T SEMI-TANGENT  
 TAB TABLET  
 TAN TANGENT  
 TBB THRIE BEAM BARRIER  
 TBD TO BE DETERMINED  
 TBR TIMBER  
 TC TOP OF CURB, TRAIN CONTROL  
 TCB TRAFFIC CONTROL BOX  
 TCE TEMPORARY CONSTRUCTION EASEMENT  
 TEL TELEPHONE  
 TEMP TEMPORARY  
 TG TOP OF GRADE  
 TM TECHNICAL MEMORANDUM  
 TO TURNOUT  
 TOT TOTAL  
 TP TELEPHONE POLE  
 TPB TREATED PERMEABLE BASE  
 TPF TRACTION POWER FACILITY  
 TPM TREATED PERMEABLE MATERIAL  
 TPSS TRACTION POWER SUBSTATION  
 T/R TOP OF RAIL  
 TRANS TRANSITION  
 TRK TRACK

T CONTINUED

TS TRANSVERSE, TRAFFIC SIGNAL, TUBULAR STEEL, TANGENT SPIRAL POINT  
 TYP TYPICAL

U

UC UNDERCROSSING  
 UD UNDERDRAIN  
 UON UNLESS OTHERWISE NOTED  
 UP UNDERPASS  
 UPRR UNION PACIFIC RAILROAD  
 UXO UNIVERSAL CROSSOVER

V

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

W

W WEST, WIDTH  
 WB WESTBOUND  
 WCB WORLD COORDINATE BEARING  
 WH WEEP HOLE  
 WM WIRE MESH  
 WS WATER SURFACE  
 WSP WELDED STEEL PIPE  
 WT WEIGHT  
 WV WATER VALVE  
 WW WINGWALL  
 WWL WINGWALL LAYOUT LINE

X

X SEC CROSS SECTION  
 XING CROSSING  
 XO CROSSOVER

Y

YR YEAR  
 YRS YEARS

16-AUG-2016 1:16 MF-ST-B0011.dgn

0005133g

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**C. LEMLEY**  
 DRAWN BY  
**J. KIDWELL**  
 CHECKED BY  
**A. M.**  
 IN CHARGE  
**C. LEMLEY**  
 DATE  
**08/12/2016**

**RECORD SET**  
 15% DESIGN  
 SUBMITTAL

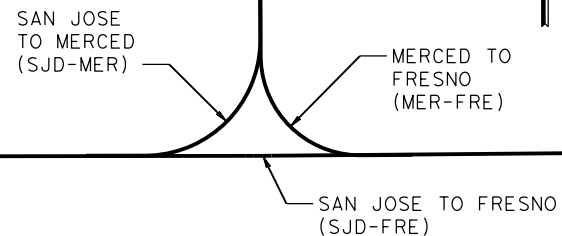
**NOT FOR  
 CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO SECTION**  
 CENTRAL VALLEY WYE  
 STRUCTURE, VIADUCT AND TUNNEL PLANS  
 ABBREVIATIONS  
 SHEET 2 OF 2

CONTRACT NO.  
HSR08-05  
 DRAWING NO.  
ST-B0011  
 SCALE  
NO SCALE  
 SHEET NO.

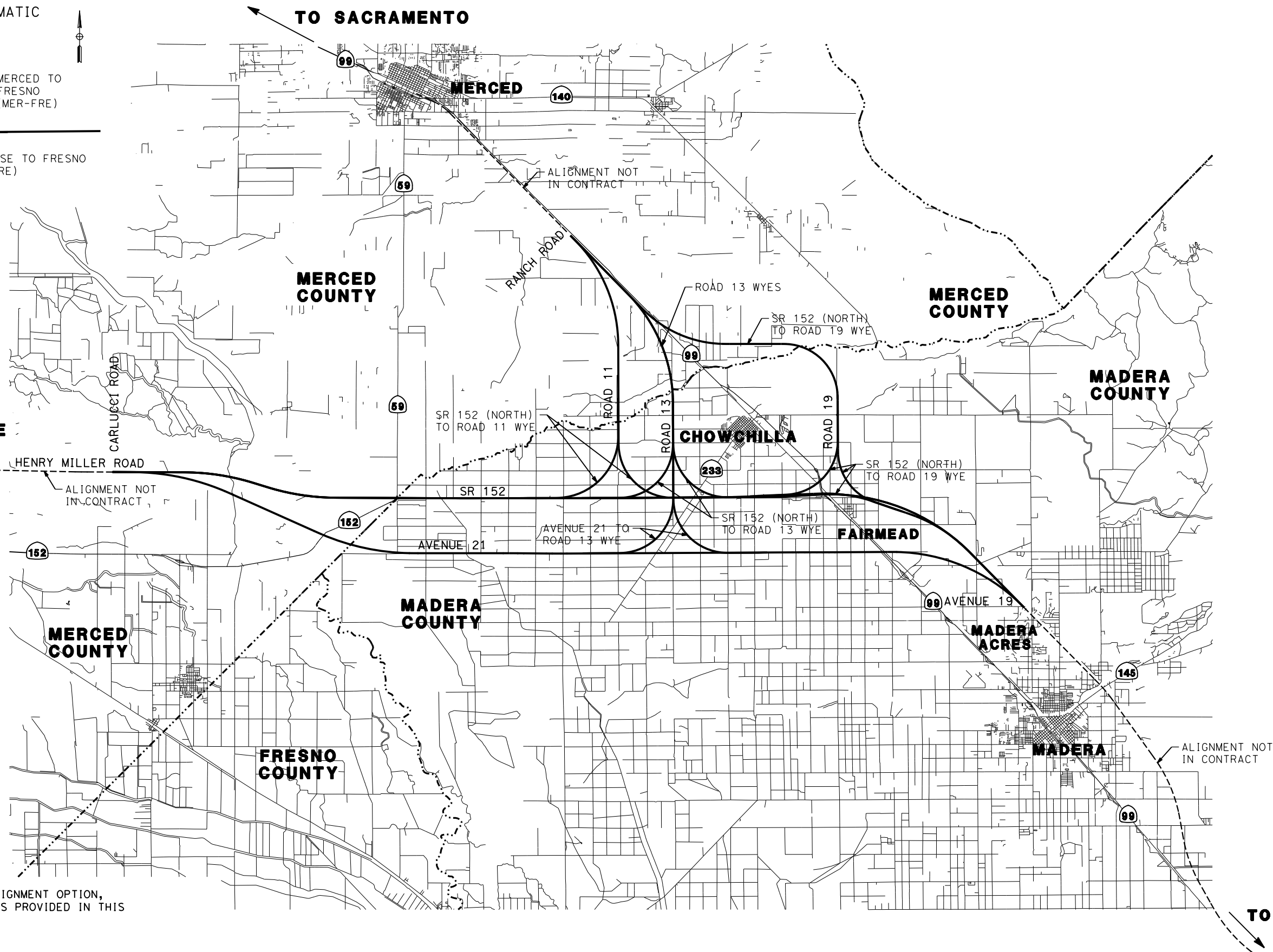
WYE CONNECTIONS SCHEMATIC



TO SAN JOSE

TO SACRAMENTO

TO FRESNO



NOTE:  
FOR LARGE SCALE VIEW OF EACH ALIGNMENT OPTION,  
PLEASE REFER TO KEY MAP DRAWINGS PROVIDED IN THIS  
PACKAGE FOR EACH OPTION.

16-AUG-2016 10:17:50 MF-ST-B4000.dgn

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**C. LEMLEY**  
DRAWN BY  
**J. KIDWELL**  
CHECKED BY  
**A. GURA**  
IN CHARGE  
**C. LEMLEY**  
DATE  
**08/12/2016**

**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**  
  
**NOT FOR**  
**CONSTRUCTION**

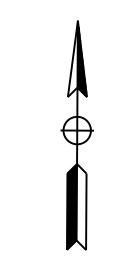


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO SECTION**  
CENTRAL VALLEY WYE  
STRUCTURE, VIADUCT AND TUNNEL PLANS  
LOCATION PLAN

CONTRACT NO.  
HSR08-05  
DRAWING NO.  
ST-B4000  
SCALE  
NTS  
SHEET NO.



**NOTES:**  
 ST-K - INDICATES AERIAL, CROSSING, AND GRADE SEPARATION DRAWINGS  
 ST-T - INDICATES RETAINED CUT DRAWINGS



**KEY PLAN**

17-MAR-2016 10:29 MF-ST-B4001-C.dgn  
 P005133A

REV	DATE	BY	CHK	APP	DESCRIPTION

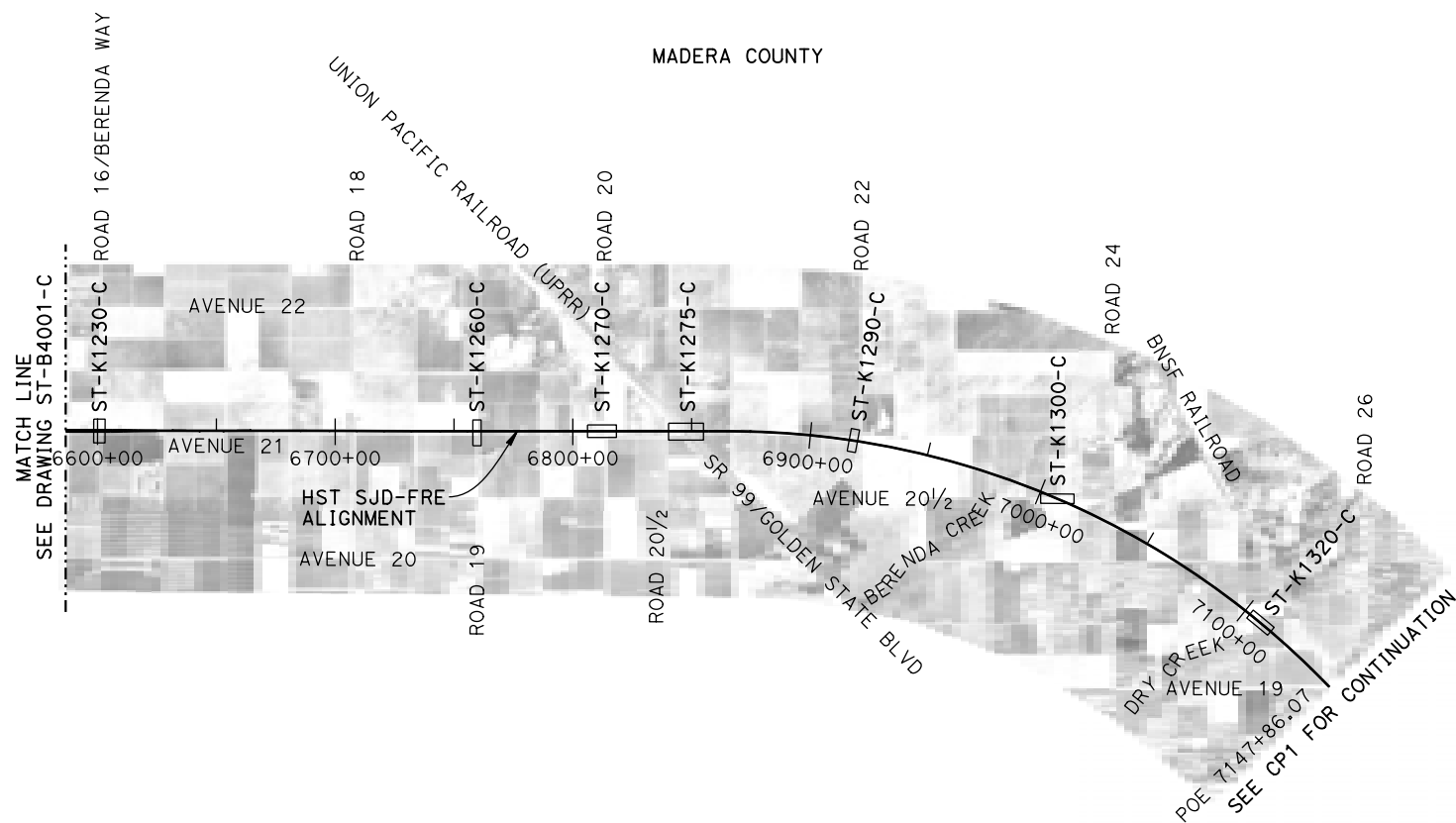
DESIGNED BY  
**S. J. S**  
 DRAWN BY  
**R. M.**  
 CHECKED BY  
**O. EDEWOR**  
 IN CHARGE  
**C. LEMLEY**  
 DATE  
**03/18/2016**

**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**  
  
**NOT FOR**  
**CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO SECTION**  
 CENTRAL VALLEY WYE  
 AVENUE 21 TO ROAD 13 WYE ALTERNATIVE  
 KEY MAP OF STRUCTURAL PLANS  
 SHEET 1 OF 2

CONTRACT NO.  
 HSR08-05  
 DRAWING NO.  
 ST-B4001-C  
 SCALE  
 N. T. S.  
 SHEET NO.



**KEY PLAN**

**NOTES:**

ST-K - INDICATES AERIAL, CROSSING, AND GRADE SEPARATION DRAWINGS

17-MAR-2016 8:02 MF-ST-B4002-C.dgn

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**S. J. S**

DRAWN BY  
**R. M.**

CHECKED BY  
**A. GURA**

IN CHARGE  
**C. LEMLEY**

DATE  
**03/18/2016**

**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**

**NOT FOR**  
**CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO SECTION**

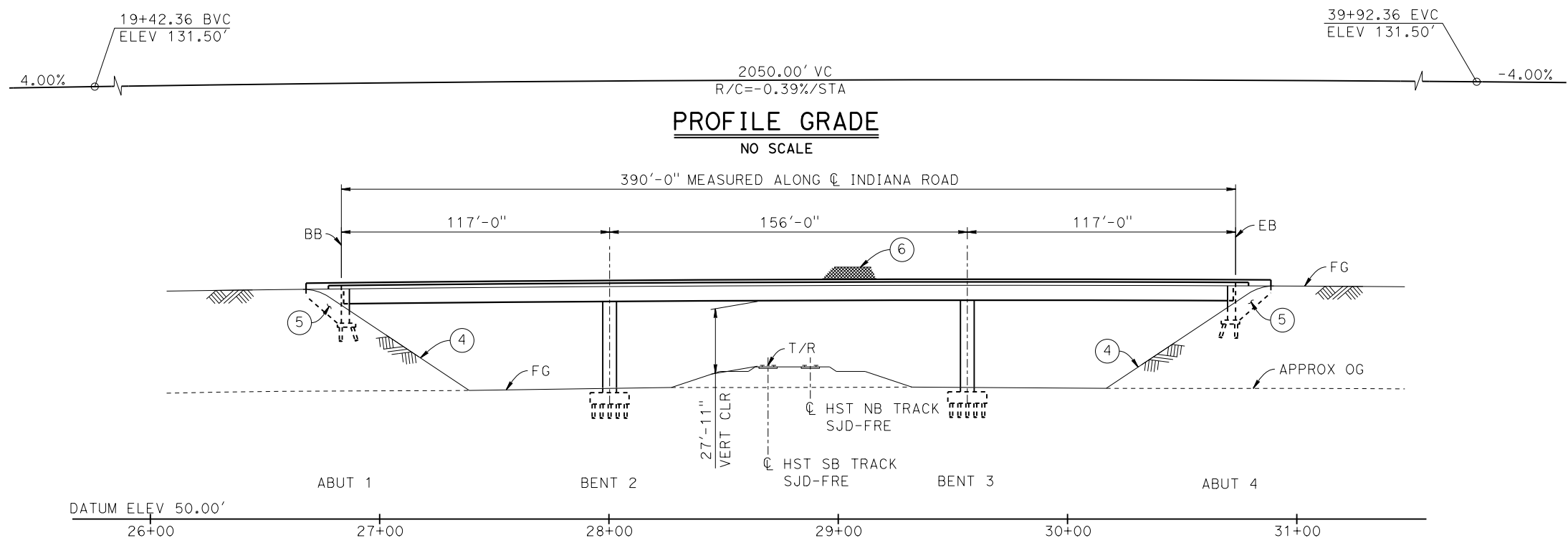
CENTRAL VALLEY WYE  
AVENUE 21 TO ROAD 13 WYE ALTERNATIVE  
KEY MAP OF STRUCTURAL PLANS  
SHEET 2 OF 2

CONTRACT NO.  
HSR08-05

DRAWING NO.  
ST-B4002-C

SCALE  
N. T. S.

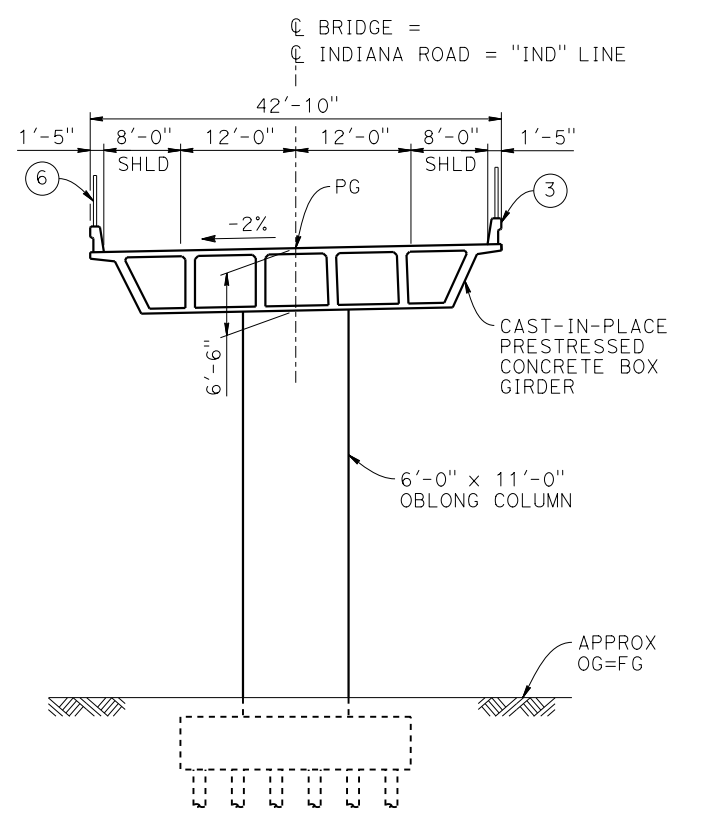
SHEET NO.



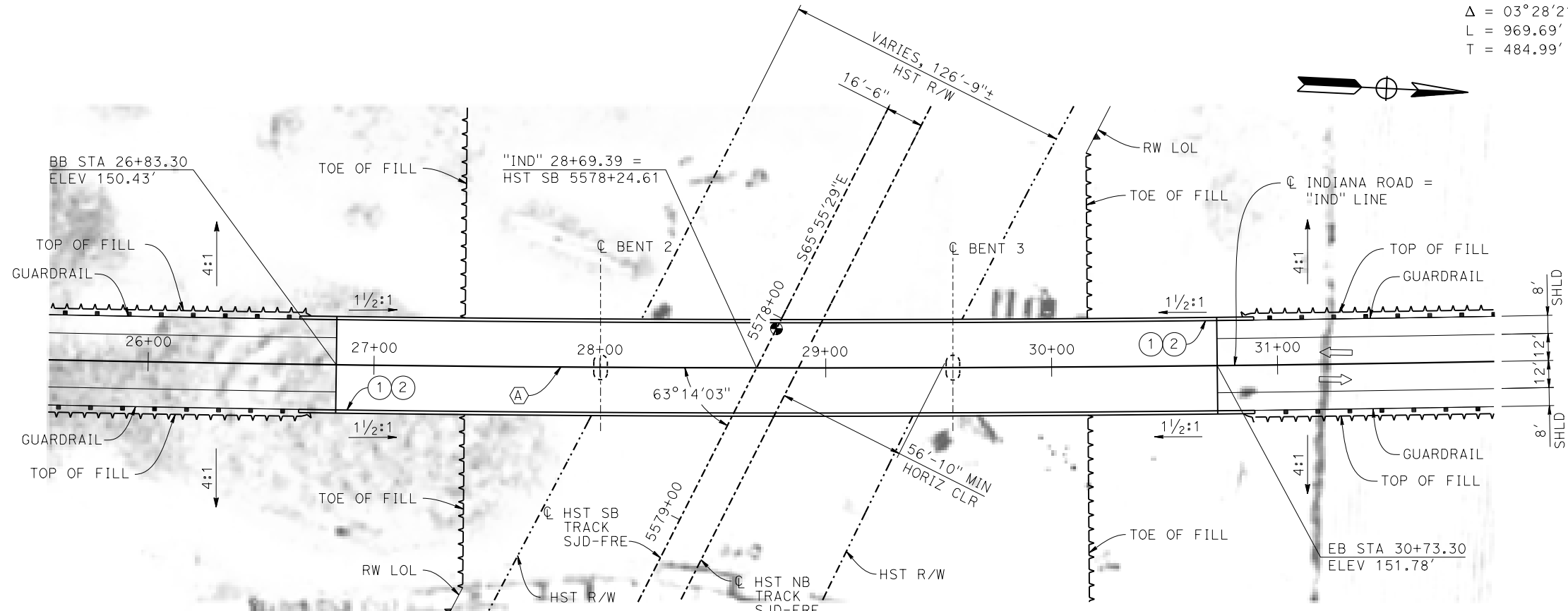
**PROFILE GRADE**  
NO SCALE

**DEVELOPED ELEVATION**  
1" = 30'

**CURVE NO. 050-02** (A)  
R = 16,000.00'  
Δ = 03° 28' 21"  
L = 969.69'  
T = 484.99'



**TYPICAL SECTION**  
1" = 10'



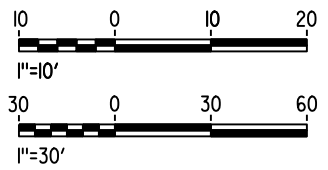
**PLAN**  
1" = 30'

**LEGEND:**

- ⊕ INDICATES POINT OF MINIMUM VERTICAL CLEARANCE
- ➔ INDICATES DIRECTION OF TRAFFIC
- ① PAINT "INDIANA ROAD OVERHEAD"
- ② PAINT "BRIDGE NO. XX-XXXX"
- ③ CONCRETE BARRIER TYPE 736 MOD
- ④ SLOPE PAVING (1 1/2H:1V)
- ⑤ WINGWALL
- ⑥ AR FENCE WITH SOLID PLATE

**NOTES:**

1. ASSUME CLASS 140 PILES AT ABUTMENT AND BENT FOUNDATIONS. PILE LENGTHS TO BE DETERMINED.
2. FOR UTILITY DISPOSITION, SEE CIVIL AND GRADE SEPARATION PLANS; DRAWING CV-S1050-C.
3. FOR GUARDRAILS, SEE CIVIL AND GRADE SEPARATION PLANS; DRAWING CV-S1050-C.
3. FOR RETAINING WALLS, SEE CIVIL AND GRADE SEPARATION PLANS; DRAWING CV-S1050-C.



04-FEB-2015 01:28 MF-ST-K1050-C.dgn

REV	DATE	BY	CHK	APP	DESCRIPTION

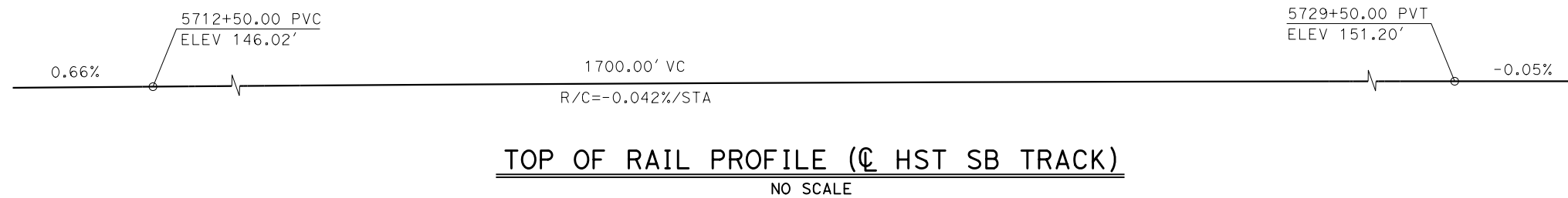
DESIGNED BY  
**S. J. S.**  
DRAWN BY  
**W. JOHNSEN**  
CHECKED BY  
**O. EDEWOR**  
IN CHARGE  
**C. LEMLEY**  
DATE  
**02/13/2015**

**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**  
  
**NOT FOR**  
**CONSTRUCTION**

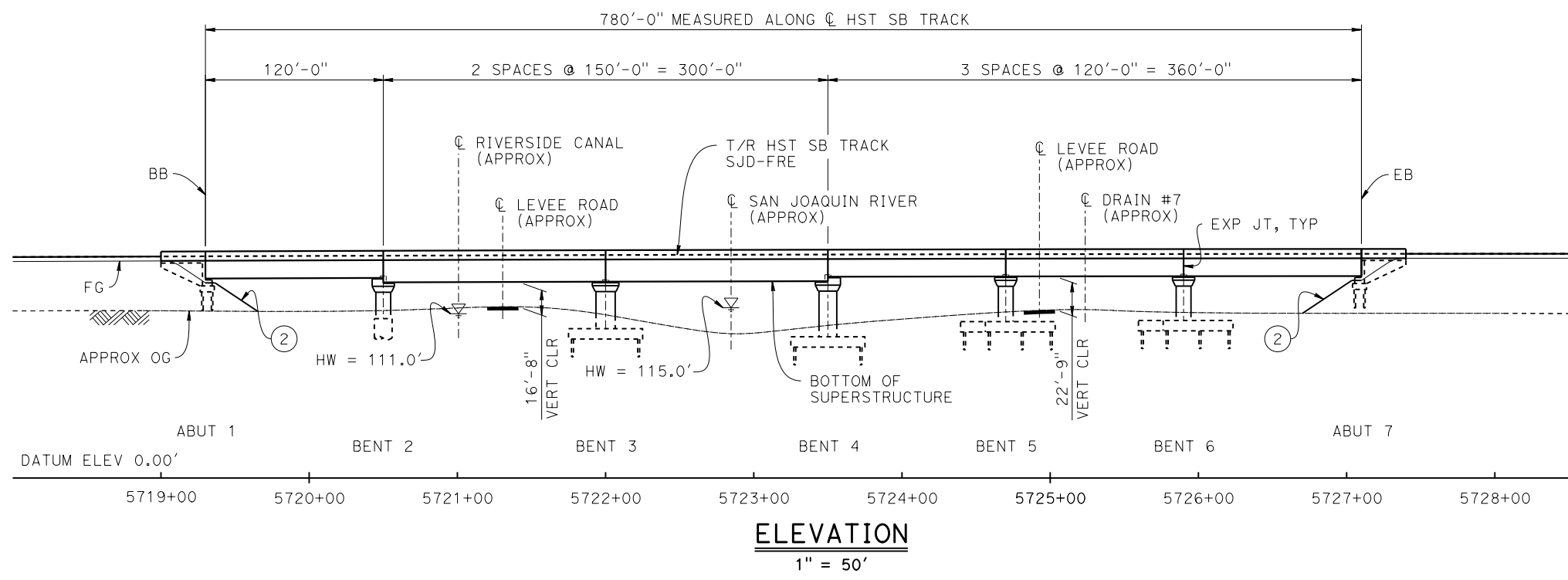


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO SECTION**  
CENTRAL VALLEY WYE  
AVENUE 21 TO ROAD 13 WYE ALTERNATIVE  
GENERAL PLAN (SJD-FRE)  
INDIANA ROAD OVERHEAD

CONTRACT NO.  
HSR08-05  
DRAWING NO.  
ST-K1050-C  
SCALE  
AS SHOWN  
SHEET NO.



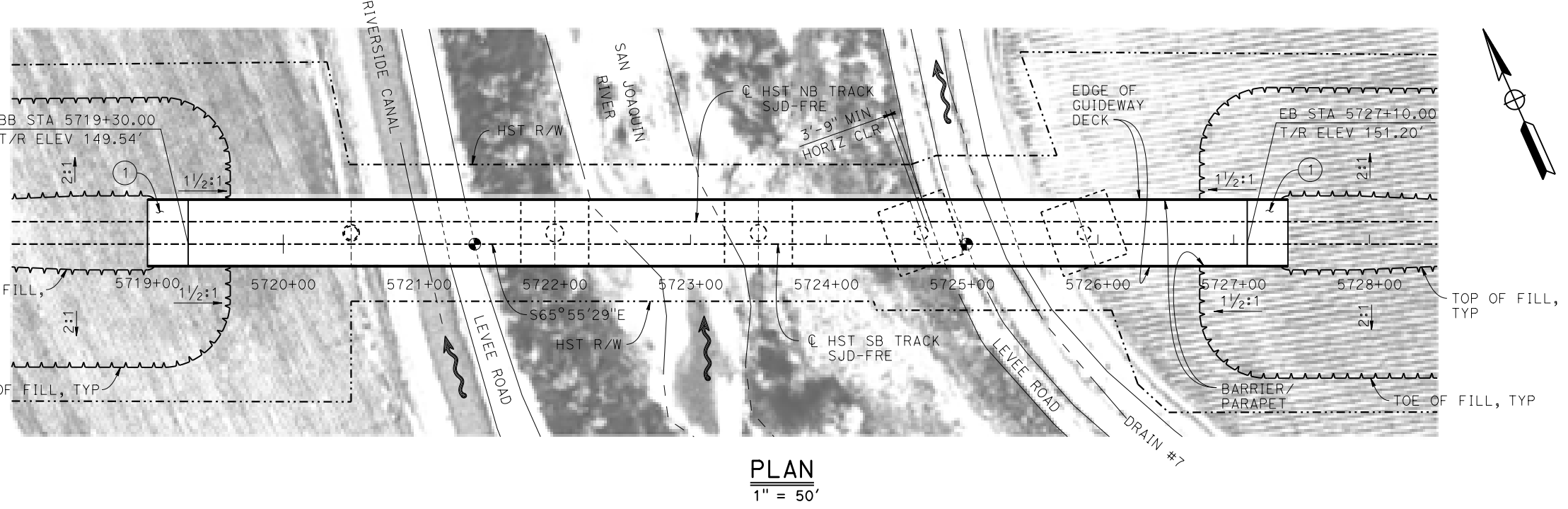
- LEGEND:**
- INDICATES POINT OF MINIMUM VERTICAL CLEARANCE
  - ➔ INDICATES DIRECTION OF FLOW
  - ① STRUCTURE APPROACH
  - ② SLOPE PAVING (1 1/2 H:1 V)



**TEMPORARY TRAFFIC OPENINGS**

VEHICULAR TRAFFIC			
1. — TRAFFIC WILL BE DETOURED AWAY FROM THE SITE.			
2. X TRAFFIC WILL PASS UNDER THE STRUCTURE ON:			
ST OR ROAD NAME AND LOCATION	FALSEWORK OPENING REQD (HORIZ X VERT)		
LEVEE ROAD 5721+27	20'X16.5'	-	-
LEVEE ROAD 5724+90	20'X16.5'	-	-
3. X TEMP TRAFFIC LANE REDUCTION FOR FTG EXC.			

- NOTES:**
- 16"Ø PIPE PILES ASSUMED FOR ABUTMENT AND BENT FOUNDATIONS UNLESS OTHERWISE NOTED. PILE AND DRILLED SHAFT LENGTHS TO BE DETERMINED.
  - FOR SECTION AND BENT COLUMN SCHEDULE, SEE DRAWING ST-K3070-C.
  - ANY EXISTING DIRT ROAD THAT CONFLICTS WITH NEW CONSTRUCTION SHALL BE REALIGNED.
  - FOR UTILITY DISPOSITIONS, SEE CIVIL AND GRADE SEPARATION PLANS; DRAWING CV-S1070-C.



MF-ST-K1070-C.dgn 04-FEB-2015 01:28 P005133G

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**S. J. S.**

DRAWN BY  
**J. KIDWELL**

CHECKED BY  
**O. EDEWOR**

IN CHARGE  
**C. LEMLEY**

DATE  
**02/13/2015**

**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**

**NOT FOR**  
**CONSTRUCTION**



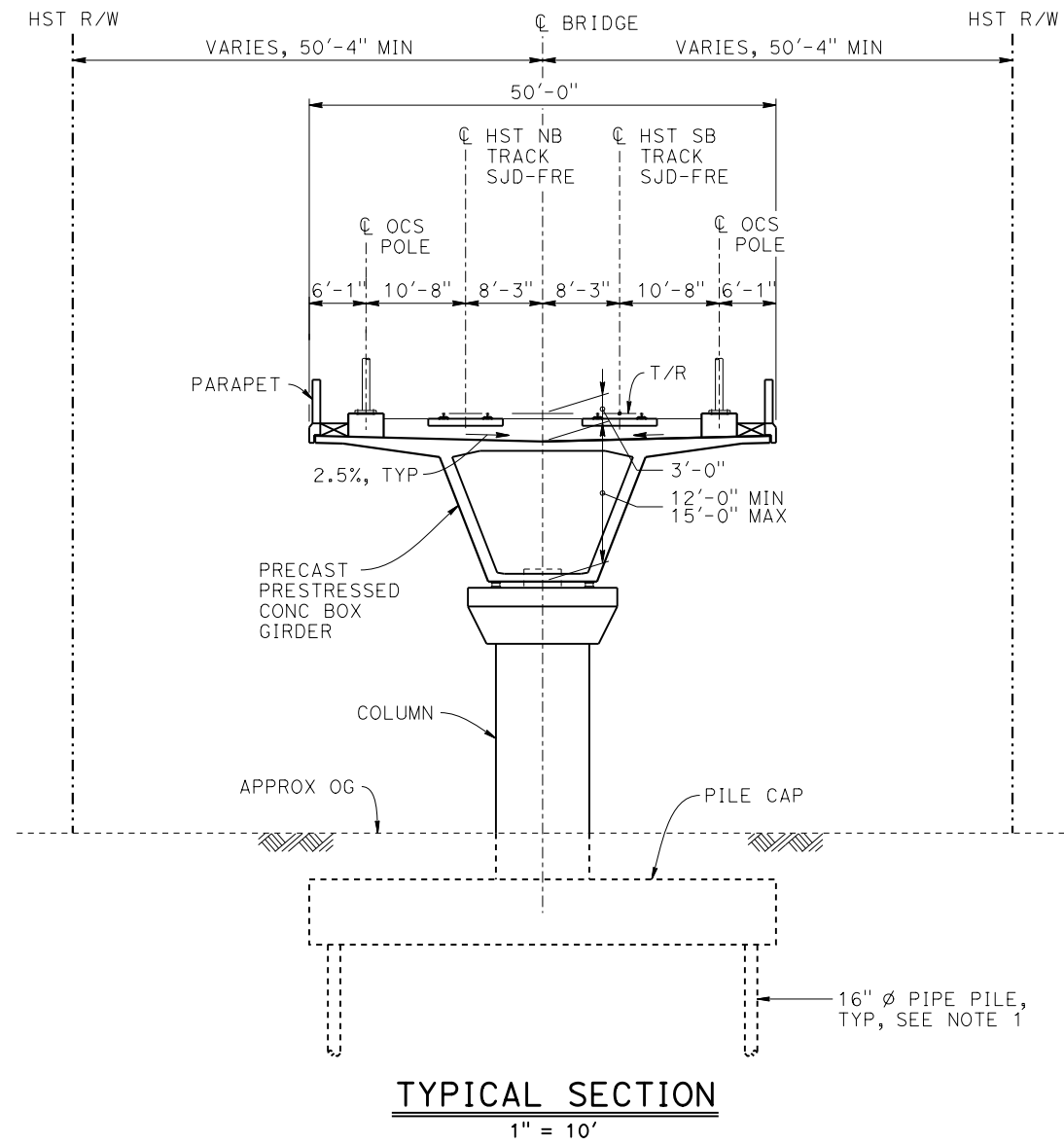
**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO SECTION**

CENTRAL VALLEY WYE  
AVENUE 21 TO ROAD 13 WYE ALTERNATIVE  
GENERAL PLAN (SJD-FRE)  
SAN JOAQUIN RIVER BRIDGE - 1 OF 2

CONTRACT NO. HSR08-05
DRAWING NO. ST-K1070-C
SCALE AS SHOWN
SHEET NO.

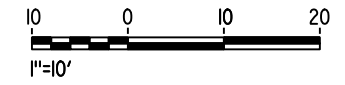


MF-ST-K3070-C.dgn  
 05-FEB-2015 11:45  
 P005133g



BENT COLUMN SCHEDULE		
BENT	COLUMN TYPE	CIDH TYPE
2	10'-0"Ø	12'-0"Ø
3	13'-0"Ø	
4	12'-0"Ø	
5 - 6	10'-0"Ø	

**NOTES:**  
 1. PILE AND DRILLED SHAFT LENGTHS TO BE DETERMINED.



REV	DATE	BY	CHK	APP	DESCRIPTION

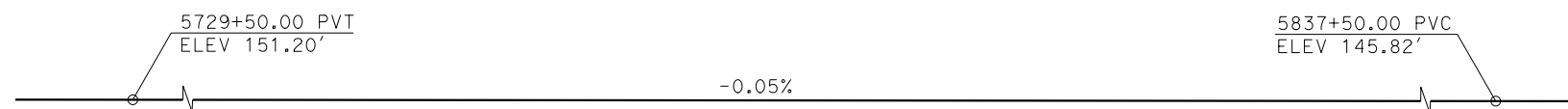
DESIGNED BY  
**S. J. S.**  
 DRAWN BY  
**J. KIDWELL**  
 CHECKED BY  
**O. EDEWOR**  
 IN CHARGE  
**C. LEMLEY**  
 DATE  
**02/13/2015**

**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**  
  
**NOT FOR**  
**CONSTRUCTION**



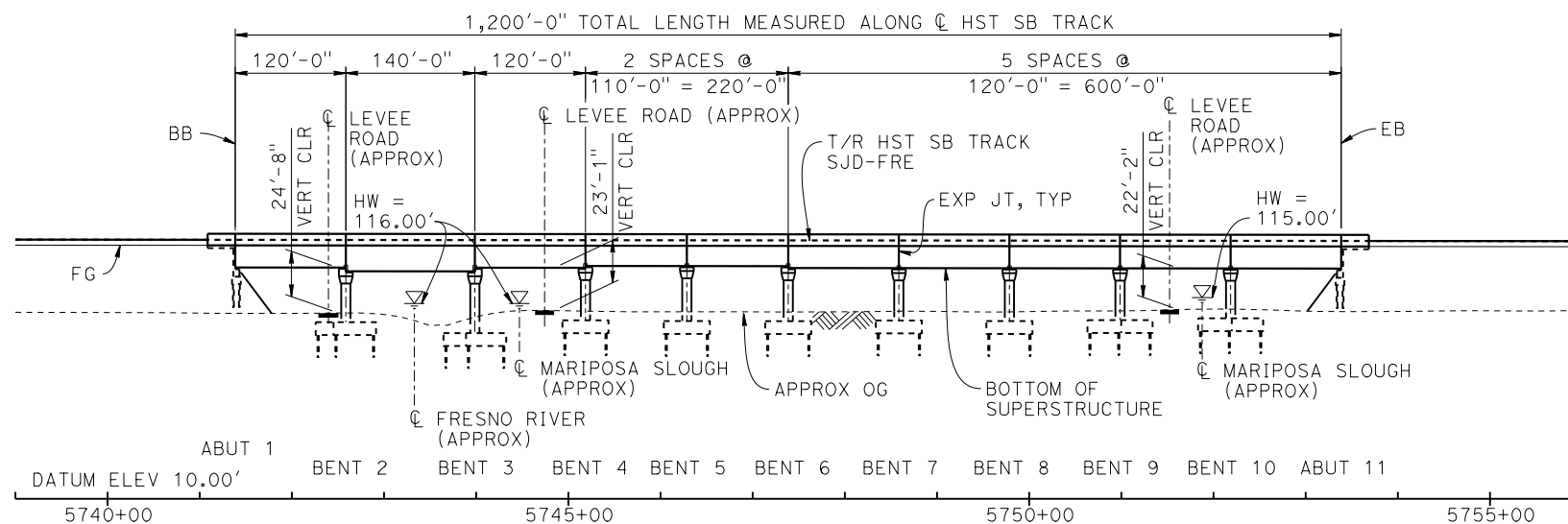
**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO SECTION**  
 CENTRAL VALLEY WYE  
 AVENUE 21 TO ROAD 13 WYE ALTERNATIVE  
 TYPICAL SECTION (SJD-FRE)  
 SAN JOAQUIN RIVER BRIDGE - 2 OF 2

CONTRACT NO.  
 HSR08-05  
 DRAWING NO.  
 ST-K3070-C  
 SCALE  
 AS SHOWN  
 SHEET NO.



**TOP OF RAIL PROFILE (☉ HST SB TRACK)**

NO SCALE



**DEVELOPED ELEVATION**

VERT: 1" = 50' HORIZ: 1" = 100'

**TEMPORARY TRAFFIC OPENINGS**

**VEHICULAR TRAFFIC**

1. — TRAFFIC WILL BE DETOURED AWAY FROM THE SITE.
2.  TRAFFIC WILL PASS UNDER THE STRUCTURE ON:

ST OR ROAD NAME AND LOCATION		FALSEWORK OPENING REQD (HORIZ X VERT)	
LEVEE ROAD	5742+40	20'X16.5'	-
LEVEE ROAD	5744+72	20'X16.5'	-
LEVEE ROAD	5751+52	20'X16.5'	-

3.  TEMP TRAFFIC LANE REDUCTION FOR FTG EXC.

**NOTES:**

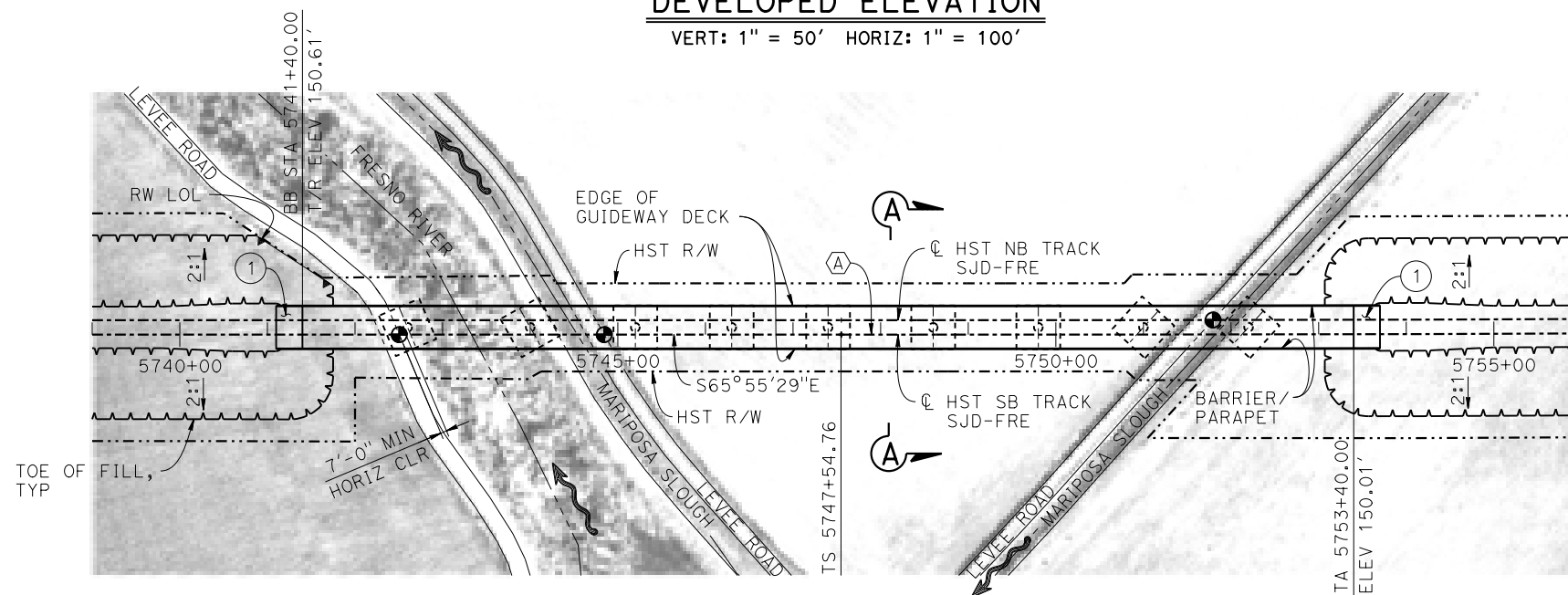
1. 16"Ø PIPE PILES ASSUMED FOR ABUTMENT AND BENT FOUNDATIONS. PILE LENGTHS TO BE DETERMINED.
2. FOR SECTION, SEE DRAWING ST-K3080-C.
3. ANY EXISTING DIRT ROAD THAT CONFLICTS WITH NEW CONSTRUCTION SHALL BE REALIGNED.
4. FOR UTILITY DISPOSITIONS, SEE CIVIL AND GRADE SEPARATION PLANS; DRAWING CV-S1080-C.
5. FOR RETAINING WALLS, SEE CIVIL AND GRADE SEPARATION PLANS; DRAWING CV-S1080-C.

**LEGEND:**

- INDICATES POINT OF MINIMUM VERTICAL CLEARANCE
- INDICATES DIRECTION OF FLOW
- STRUCTURE APPROACH
- SLOPE PAVING (1½H:1V)

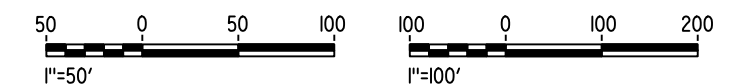
**CURVE SJD-FRE 2 SB (A)**

R = 45,016.50'  
LS = 1,650.00'



**PLAN**

1" = 100'



MF-ST-K1080-C.dgn

04-FEB-2015 01:29

P005133G

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**S. J. S.**

DRAWN BY  
**J. KIDWELL**

CHECKED BY  
**O. EDEWOR**

IN CHARGE  
**C. LEMLEY**

DATE  
**02/13/2015**

**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**

**NOT FOR**  
**CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO SECTION**

CENTRAL VALLEY WYE  
AVENUE 21 TO ROAD 13 WYE ALTERNATIVE  
GENERAL PLAN (SJD-FRE)

AERIAL #1 - FRESNO RIVER AND MARIPOSA SLOUGH - 1 OF 2

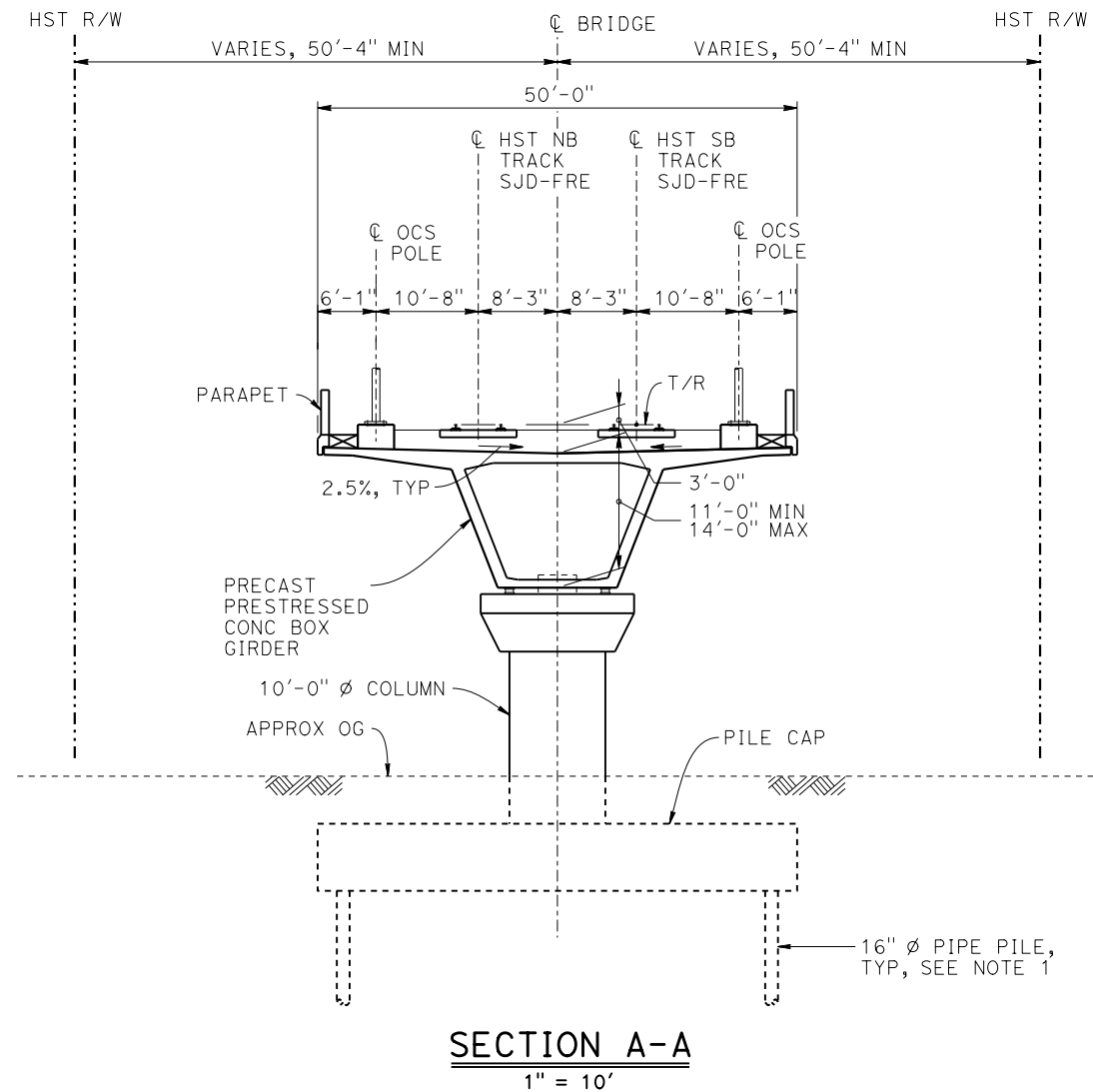
CONTRACT NO.  
HSR08-05

DRAWING NO.  
ST-K1080-C

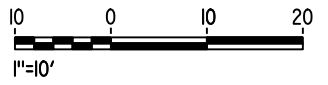
SCALE  
AS SHOWN

SHEET NO.

MF-ST-K3080-C.dgn  
 05-FEB-2015 11:45  
 P005133g



- NOTES:**
1. PILE LENGTHS TO BE DETERMINED.
  2. FOR TRACK SUPERELEVATION DETAILS, SEE ALIGNMENT AND TYPICAL SECTION PLANS; DRAWING TT-B0050-C.



REV	DATE	BY	CHK	APP	DESCRIPTION

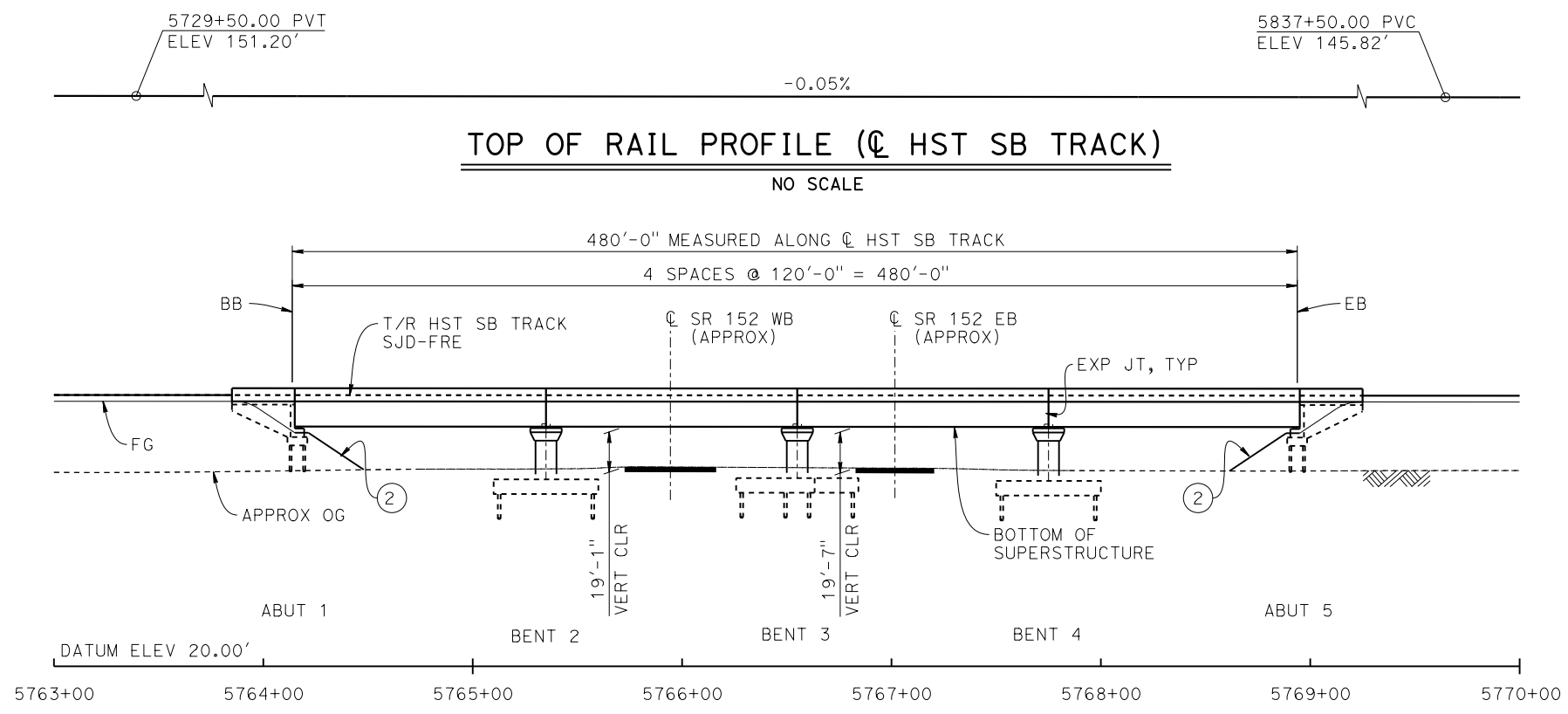
DESIGNED BY  
**S. J. S.**  
 DRAWN BY  
**J. KIDWELL**  
 CHECKED BY  
**O. EDEWOR**  
 IN CHARGE  
**C. LEMLEY**  
 DATE  
**02/13/2015**

**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**  
  
**NOT FOR**  
**CONSTRUCTION**

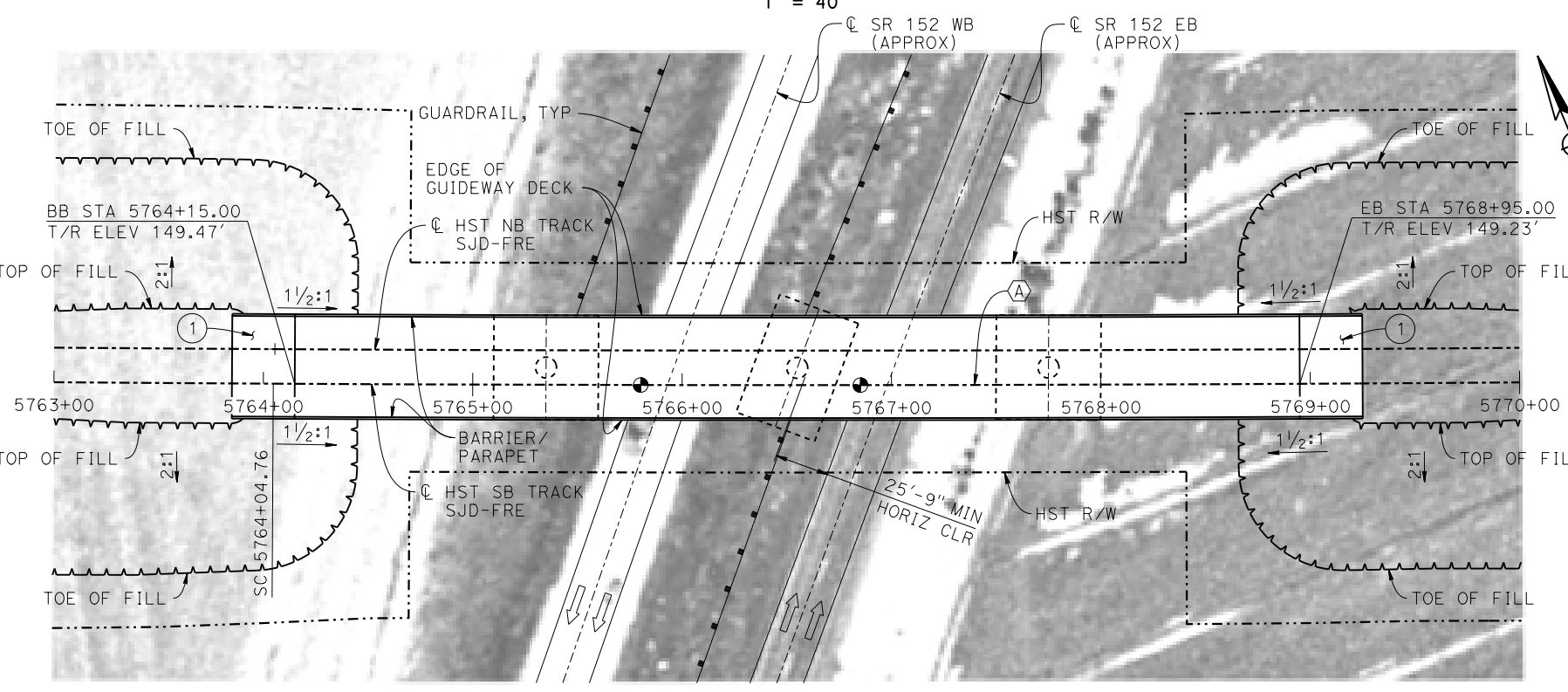


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO SECTION**  
 CENTRAL VALLEY WYE  
 AVENUE 21 TO ROAD 13 WYE ALTERNATIVE  
 TYPICAL SECTION (SJD-FRE)  
 AERIAL #1 - FRESNO RIVER AND MARIPOSA SLOUGH - 2 OF 2

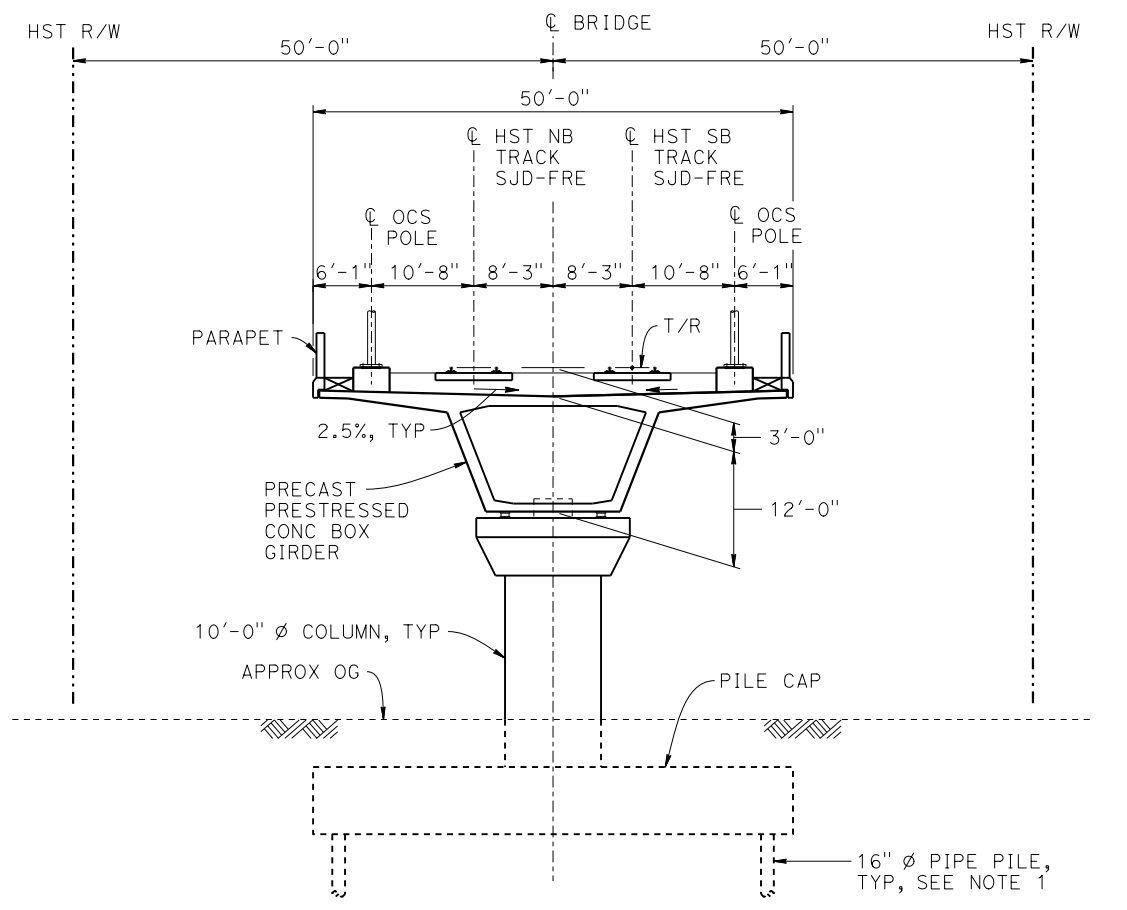
CONTRACT NO.  
 HSR08-05  
 DRAWING NO.  
 ST-K3080-C  
 SCALE  
 AS SHOWN  
 SHEET NO.



**DEVELOPED ELEVATION**  
1" = 40'



**PLAN**  
1" = 40'



**TYPICAL SECTION**  
1" = 10'

**NOTES:**

- 16"Ø PIPE PILES ASSUMED FOR ABUTMENT AND BENT FOUNDATIONS. PILE LENGTHS TO BE DETERMINED.
- FOR UTILITY DISPOSITIONS, SEE CIVIL AND GRADE SEPARATION PLANS; DRAWING CV-S1080-C.
- FOR GUARDRAILS, SEE CIVIL AND GRADE SEPARATION PLANS; DRAWING CV-S1080-C.
- FOR TRACK SUPERELEVATION DETAILS, SEE ALIGNMENT AND TYPICAL SECTION PLANS; DRAWING TT-B0050-C.

**LEGEND:**

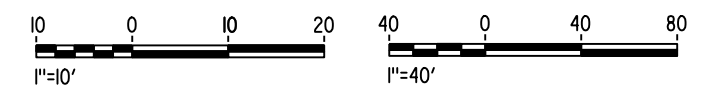
- INDICATES POINT OF MINIMUM VERTICAL CLEARANCE
- ⇒ INDICATES DIRECTION OF TRAFFIC
- ① STRUCTURE APPROACH
- ② SLOPE PAVING (1 1/2 H:1 V)

**TEMPORARY TRAFFIC OPENINGS**

VEHICULAR TRAFFIC			
1. — TRAFFIC WILL BE DETOURED AWAY FROM THE SITE.			
2. X TRAFFIC WILL PASS UNDER THE STRUCTURE ON:			
ST OR ROAD NAME AND LOCATION	FALSEWORK OPENING RECD (HORIZ X VERT)		
SR 152	5765+93	40'X16.5'	W BND
SR 152	5766+98	40'X16.5'	E BND
3. — TEMP TRAFFIC LANE REDUCTION FOR FTG EXC.			

**CURVE SJD-FRE 2 SB (A)**

R = 45,016.50'  
LS = 1,650.00'



MF-ST-K1085-C.dgn 28-APR-2015 09:11 P005133G

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**S. J. S.**  
DRAWN BY  
**J. KIDWELL**  
CHECKED BY  
**O. EDEWOR**  
IN CHARGE  
**C. LEMLEY**  
DATE  
**05/08/2015**

**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**  
  
**NOT FOR**  
**CONSTRUCTION**

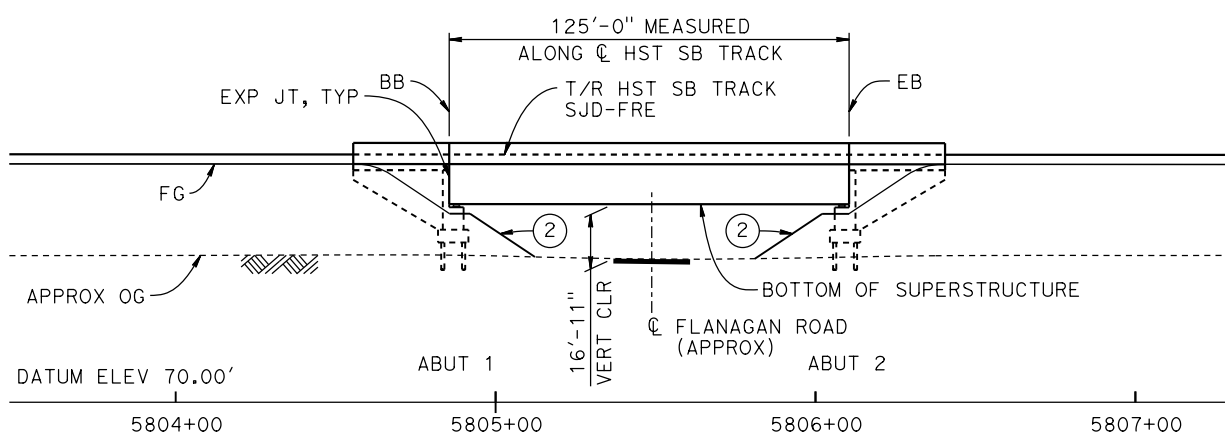


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO SECTION**  
CENTRAL VALLEY WYE  
AVENUE 21 TO ROAD 13 WYE ALTERNATIVE  
GENERAL PLAN (SJD-FRE)  
SR 152 UNDERPASS

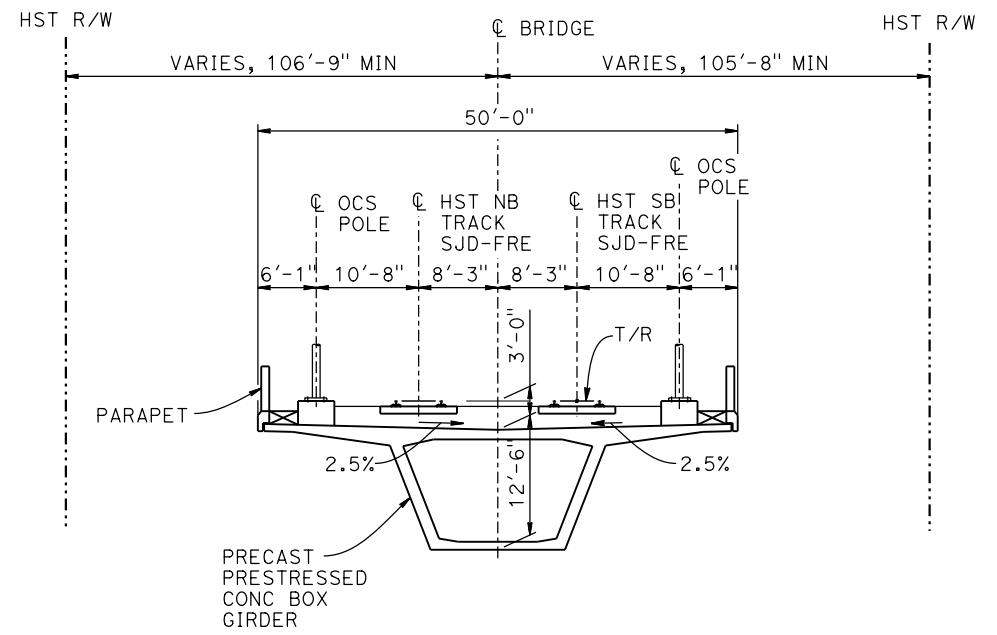
CONTRACT NO.  
HSR08-05  
DRAWING NO.  
ST-K1085-C  
SCALE  
AS SHOWN  
SHEET NO.

5729+50.00 PVT ELEV 151.20' -0.05% 5837+50.00 PVC ELEV 145.82'

**TOP OF RAIL PROFILE (C HST SB TRACK)**  
NO SCALE



**DEVELOPED ELEVATION**  
1" = 30'

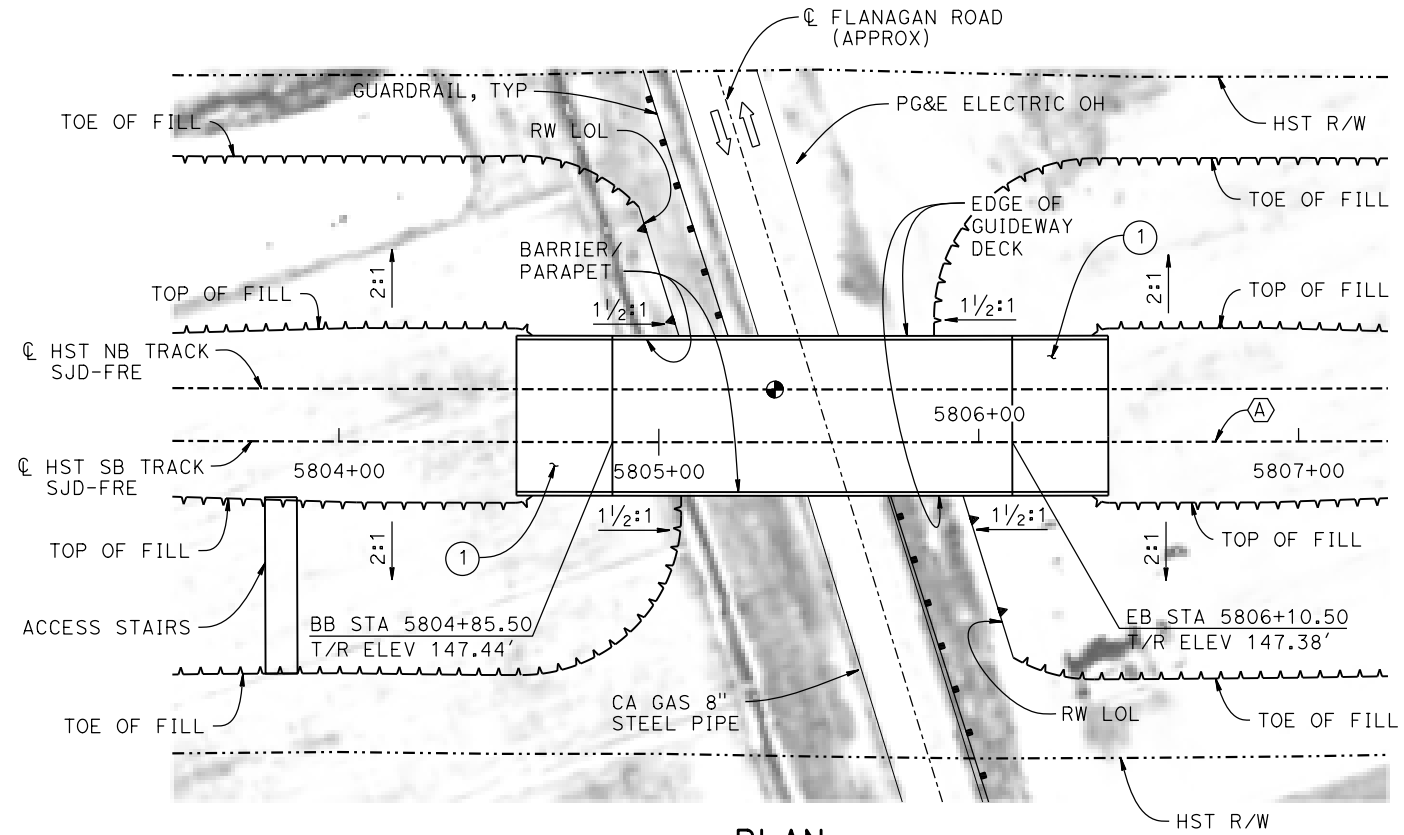


**TYPICAL SECTION**  
1"=10'

**TEMPORARY TRAFFIC OPENINGS**

VEHICULAR TRAFFIC			
1. <u>  </u> TRAFFIC WILL BE DETOURED AWAY FROM THE SITE.			
2. <u>  </u> TRAFFIC WILL PASS UNDER THE STRUCTURE ON:			
ST OR ROAD NAME AND LOCATION		FALSEWORK OPENING REQD (HORIZ X VERT)	
FLANAGAN ROAD	5805+51	32'X16.5'	2-WAY
3. <u>  </u> TEMP TRAFFIC LANE REDUCTION FOR FTG EXC.			

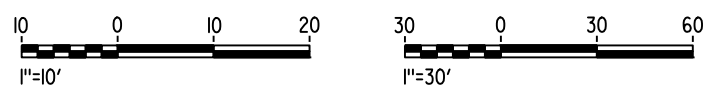
**CURVE SJD-FRE 2 SB (A)**  
R = 45,016.50'  
LS = 1,650.00'



**PLAN**  
1" = 30'

- LEGEND:**
- ⊕ INDICATES POINT OF MINIMUM VERTICAL CLEARANCE
  - ⇒ INDICATES DIRECTION OF TRAFFIC
  - ① STRUCTURE APPROACH
  - ② SLOPE PAVING (1 1/2H:1V)

- NOTES:**
1. 16"Ø PIPE PILES ASSUMED FOR ABUTMENT FOUNDATIONS. PILE LENGTHS TO BE DETERMINED.
  2. FOR UTILITY DISPOSITIONS, SEE CIVIL AND GRADE SEPARATION PLANS; DRAWING CV-S1090-C.
  3. FOR RETAINING WALLS, SEE CIVIL AND GRADE SEPARATION PLANS; DRAWING CV-S1090-C.
  4. FOR GUARDRAILS, SEE CIVIL AND GRADE SEPARATION PLANS; DRAWING CV-S1090-C.
  5. FOR TRACK SUPERELEVATION DETAILS, SEE ALIGNMENT AND TYPICAL SECTION PLANS; DRAWING TT-B0050-C.



17-MAR-2016 10:29 MF-ST-K1090-C.dgn

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**S. J. S.**

DRAWN BY  
**W. JOHNSEN**

CHECKED BY  
**O. EDEWOR**

IN CHARGE  
**C. LEMLEY**

DATE  
**05/08/2015**

**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**

**NOT FOR**  
**CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO SECTION**

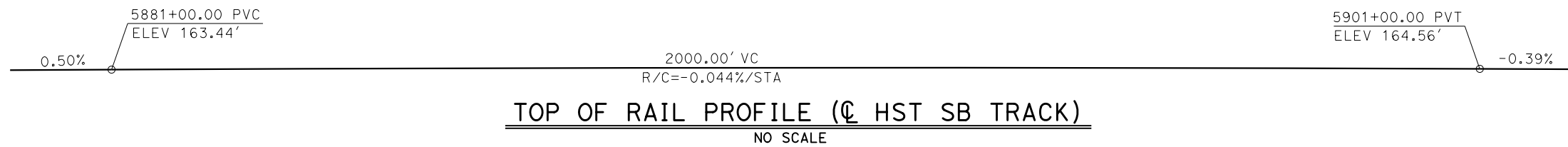
CENTRAL VALLEY WYE  
AVENUE 21 TO ROAD 13 WYE ALTERNATIVE  
GENERAL PLAN (SJD-FRE)  
FLANAGAN ROAD UNDERPASS

CONTRACT NO.  
HSR08-05

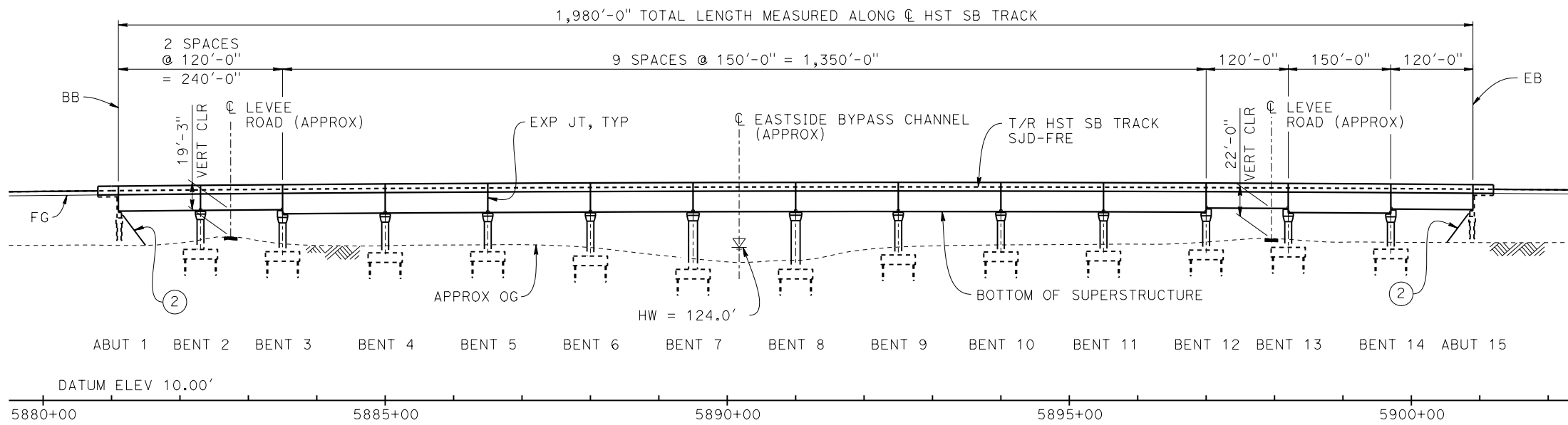
DRAWING NO.  
ST-K1090-C

SCALE  
AS SHOWN

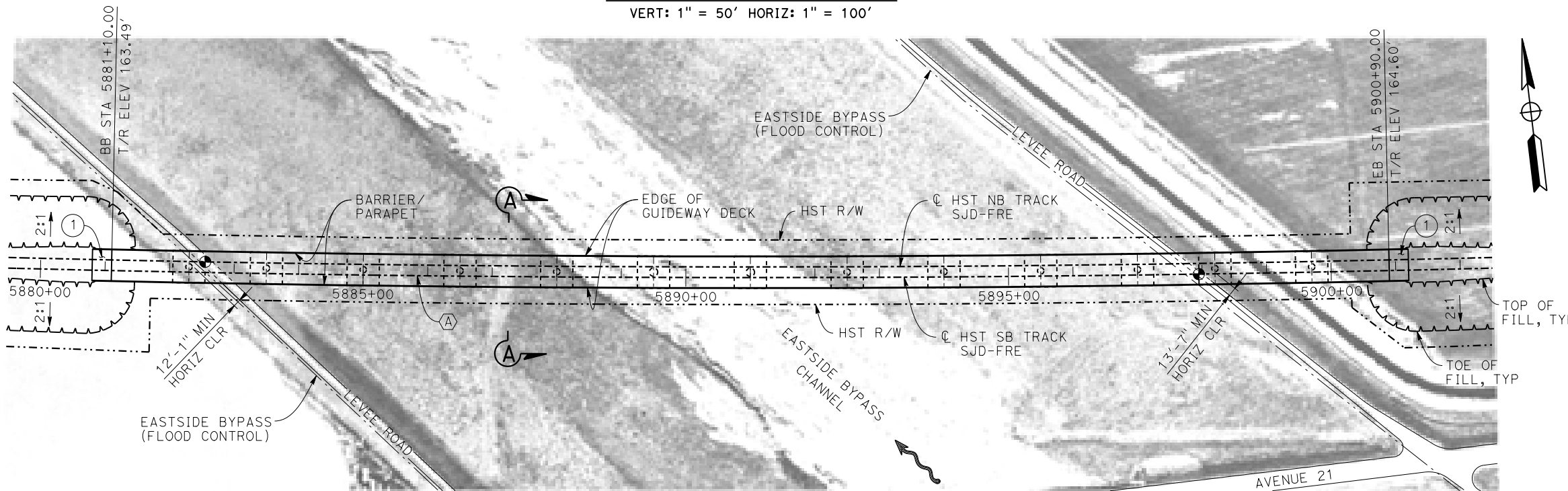
SHEET NO.



- LEGEND:**
- ⊕ INDICATES POINT OF MINIMUM VERTICAL CLEARANCE
  - ~ INDICATES DIRECTION OF FLOW
  - ① STRUCTURE APPROACH
  - ② SLOPE PAVING (1 1/2 H:1 V)



**DEVELOPED ELEVATION**  
VERT: 1" = 50' HORIZ: 1" = 100'



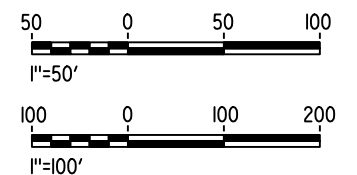
**PLAN**  
1" = 100'

**CURVE SJD-FRE 2 SB (A)**  
R = 45,016.50'  
LS = 1,650.00'

**TEMPORARY TRAFFIC OPENINGS**

VEHICULAR TRAFFIC			
1. <u>  </u> TRAFFIC WILL BE DETOURED AWAY FROM THE SITE.			
2. <u>  </u> TRAFFIC WILL PASS UNDER THE STRUCTURE ON:			
ST OR ROAD NAME AND LOCATION		FALSEWORK OPENING REQD (HORIZ X VERT)	
LEVEE ROAD	5882+72	20'X16.5'	-
LEVEE ROAD	5897+94	20'X16.5'	-
3. <u>  </u> TEMP TRAFFIC LANE REDUCTION FOR FTG EXC.			

- NOTES:**
- 16" Ø PIPE PILES ASSUMED FOR ABUTMENT AND BENT FOUNDATIONS. PILE LENGTHS TO BE DETERMINED.
  - FOR SECTION AND BENT COLUMN SCHEDULE, SEE DRAWING ST-K3100-C.
  - ANY EXISTING DIRT ROAD THAT CONFLICTS WITH NEW CONSTRUCTION SHALL BE REALIGNED.
  - FOR UTILITY DISPOSITIONS, SEE CIVIL AND GRADE SEPARATION PLANS; DRAWINGS CV-S1100-C AND CV-S1110-C.



MF-ST-K1100-C.dgn 04-FEB-2015 01:32 P005133G

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**S. J. S.**

DRAWN BY  
**W. JOHNSEN**

CHECKED BY  
**O. EDEWOR**

IN CHARGE  
**C. LEMLEY**

DATE  
**02/13/2015**

**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**

**NOT FOR**  
**CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO SECTION**

CENTRAL VALLEY WYE  
AVENUE 21 TO ROAD 13 WYE ALTERNATIVE  
GENERAL PLAN (SJD-FRE)

AERIAL #2 - EASTSIDE BYPASS IRRIGATION DITCH - 1 OF 2

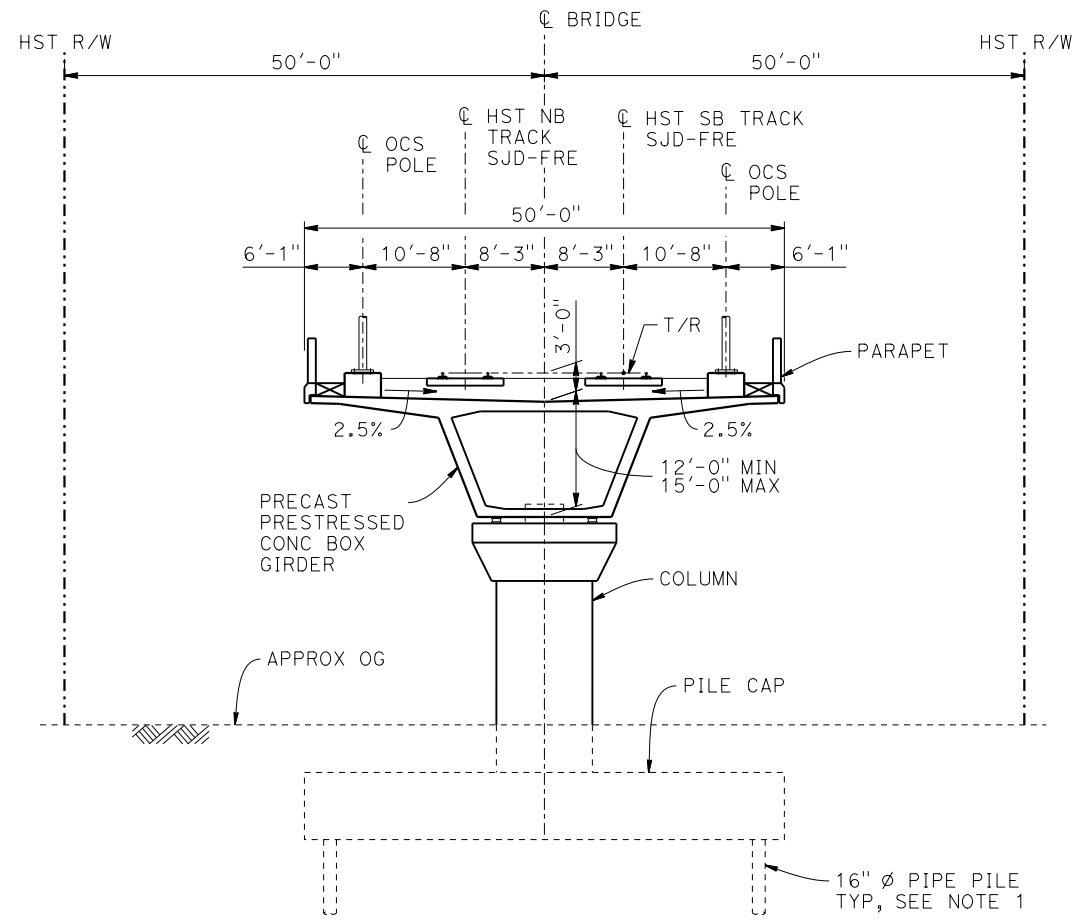
CONTRACT NO.  
HSR08-05

DRAWING NO.  
ST-K1100-C

SCALE  
AS SHOWN

SHEET NO.

05-FEB-2015 11:45 MF-ST-K3100-C.dgn  
 P005133g



**SECTION A-A**  
1" = 10'

BENT COLUMN SCHEDULE	
BENT	COLUMN TYPE
2 - 6	10'-0"Ø
7 - 8	13'-0"Ø
9 - 14	10'-0"Ø

**NOTES:**

1. PILE LENGTHS TO BE DETERMINED.
2. FOR TRACK SUPERELEVATION DETAILS, SEE ALIGNMENT AND TYPICAL SECTION PLANS; DRAWING TT-B0050-C.



REV	DATE	BY	CHK	APP	DESCRIPTION

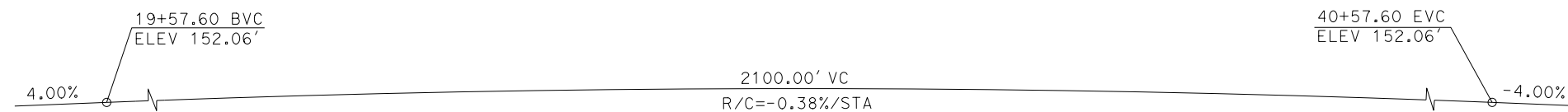
DESIGNED BY  
**S. J. S.**  
 DRAWN BY  
**W. JOHNSEN**  
 CHECKED BY  
**O. EDEWOR**  
 IN CHARGE  
**C. LEMLEY**  
 DATE  
**02/13/2015**

**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**  
  
**NOT FOR**  
**CONSTRUCTION**

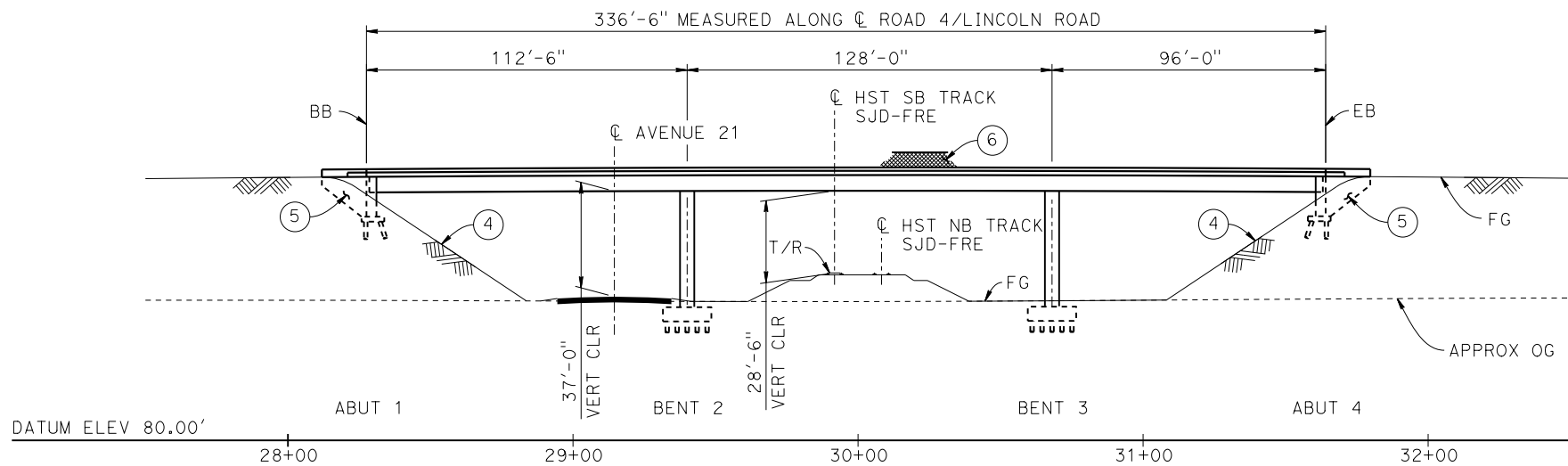


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO SECTION**  
 CENTRAL VALLEY WYE  
 AVENUE 21 TO ROAD 13 WYE ALTERNATIVE  
 TYPICAL SECTION (SJD-FRE)  
 AERIAL #2 - EASTSIDE BYPASS IRRIGATION DITCH - 2 OF 2

CONTRACT NO.  
 HSR08-05  
 DRAWING NO.  
 ST-K3100-C  
 SCALE  
 AS SHOWN  
 SHEET NO.



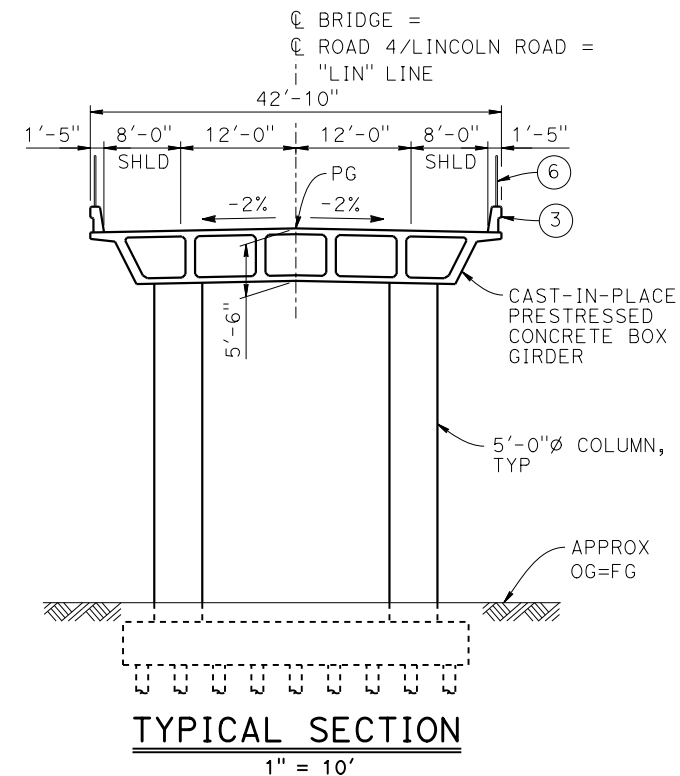
**PROFILE GRADE**  
NO SCALE



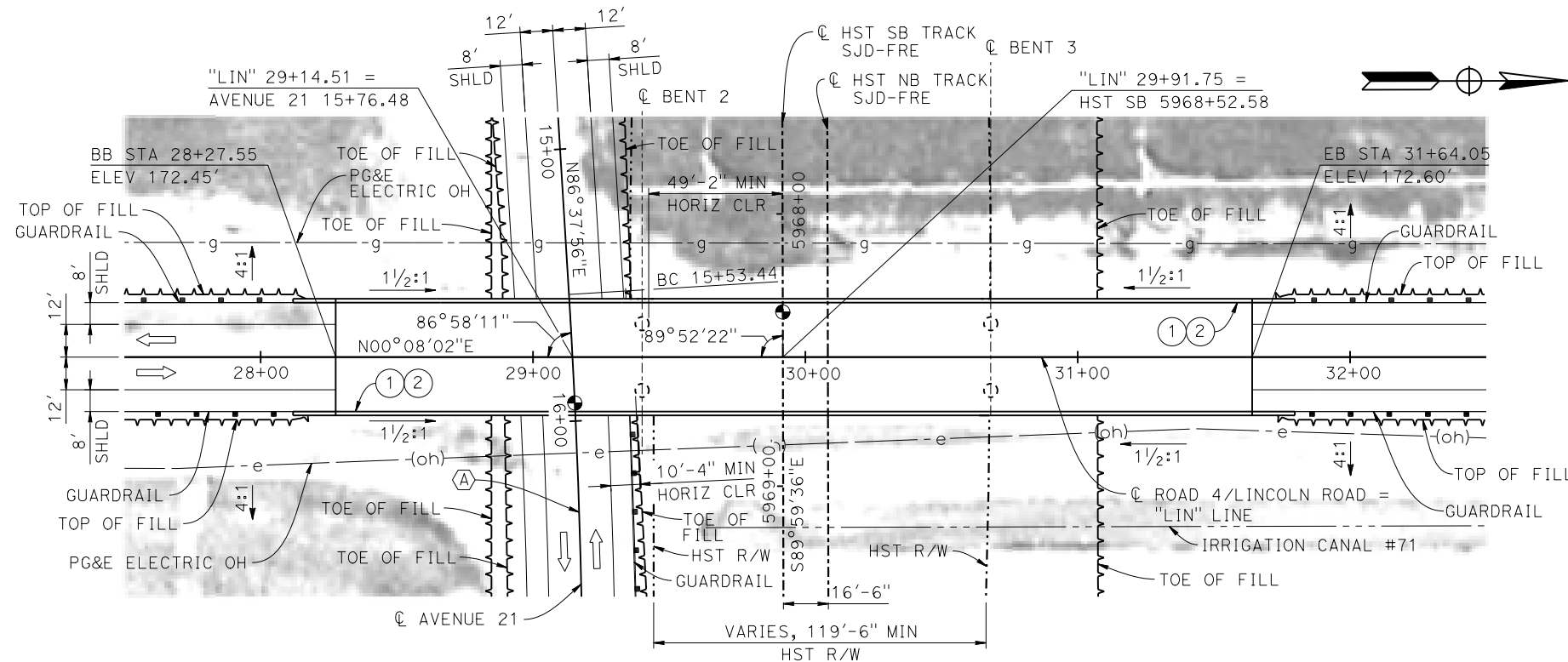
**ELEVATION**  
1" = 30'

**CURVE NO. 121-02 (A)**

R = 2,800.00'  
Δ = 03°32'53"  
L = 173.39'  
T = 86.72'



**TYPICAL SECTION**  
1" = 10'



**PLAN**  
1" = 30'

**LEGEND:**

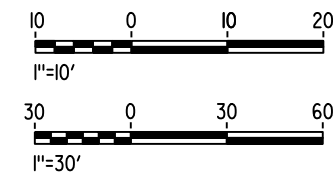
- INDICATES POINT OF MINIMUM VERTICAL CLEARANCE
- ➔ INDICATES DIRECTION OF TRAFFIC
- ① PAINT "LINCOLN ROAD OVERHEAD"
- ② PAINT "BRIDGE NO. XX-XXXX"
- ③ CONCRETE BARRIER TYPE 736 MOD
- ④ SLOPE PAVING (1/2H:1V)
- ⑤ WINGWALL
- ⑥ AR FENCE WITH SOLID PLATE

**NOTES:**

1. ASSUME CLASS 140 PILES AT ABUTMENT AND BENT FOUNDATIONS. PILE LENGTHS TO BE DETERMINED.
2. FOR UTILITY DISPOSITION, SEE CIVIL AND GRADE SEPARATION PLANS; DRAWING CV-S1120-C.
3. FOR GUARDRAILS, SEE CIVIL AND GRADE SEPARATION PLANS; DRAWING CV-S1120-C.

**TEMPORARY TRAFFIC OPENINGS**

VEHICULAR TRAFFIC		FALSEWORK OPENING REQD (HORIZ X VERT)	
1. —	TRAFFIC WILL BE DETOURED AWAY FROM THE SITE.		
2. X	TRAFFIC WILL PASS UNDER THE STRUCTURE ON:		
		ST OR ROAD NAME AND LOCATION	FALSEWORK OPENING REQD (HORIZ X VERT)
		AVENUE 21 15+76	32'x15' 2-WAY
3. X	TEMP TRAFFIC LANE REDUCTION FOR FTG EXC.		



MF-ST-K1120-C.dgn 05-MAY-2015 6:23 P005133G

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**S. J. S.**  
DRAWN BY  
**A. M.**  
CHECKED BY  
**O. EDEWOR**  
IN CHARGE  
**C. LEMLEY**  
DATE  
**05/08/2015**

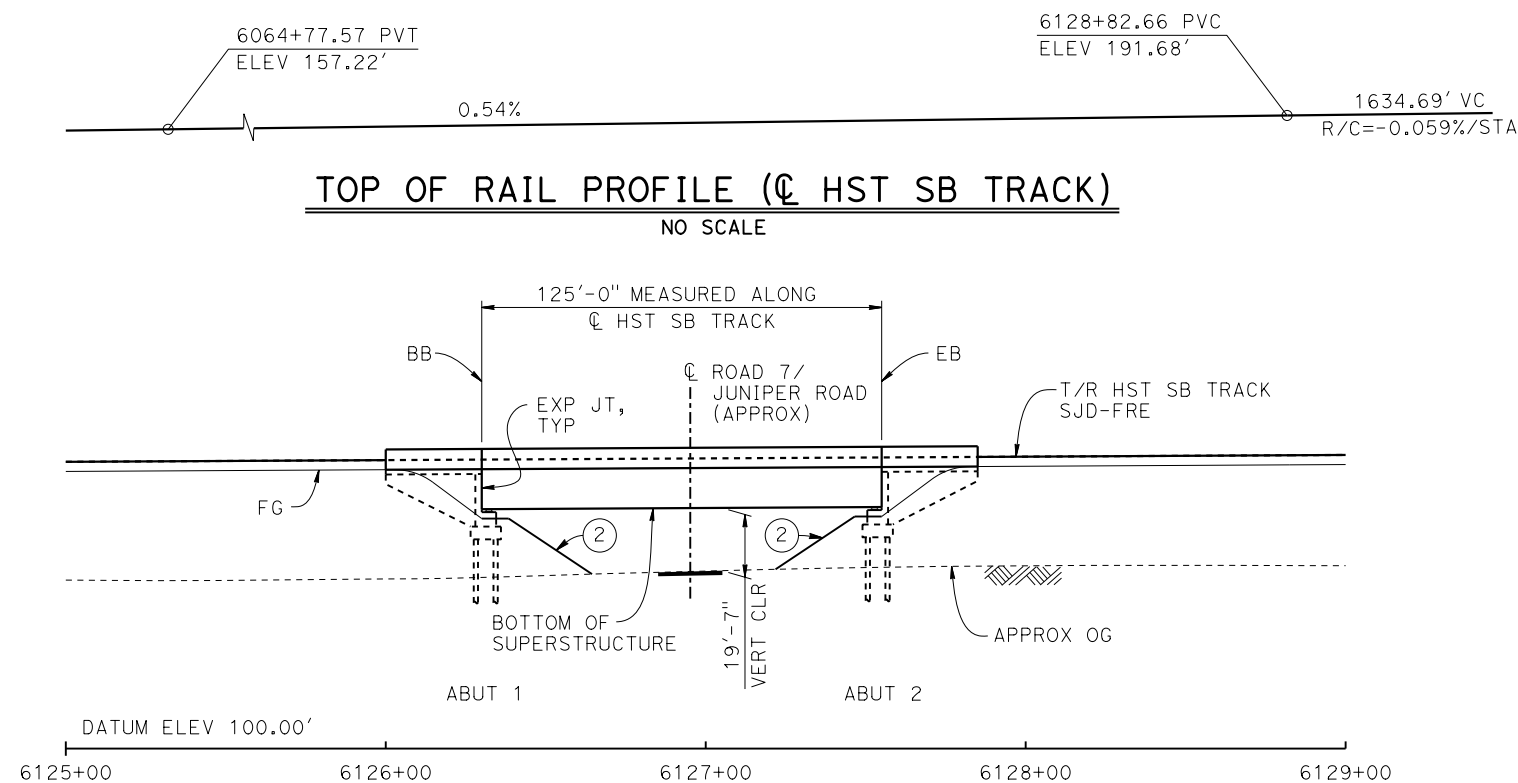
**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**  
  
**NOT FOR**  
**CONSTRUCTION**



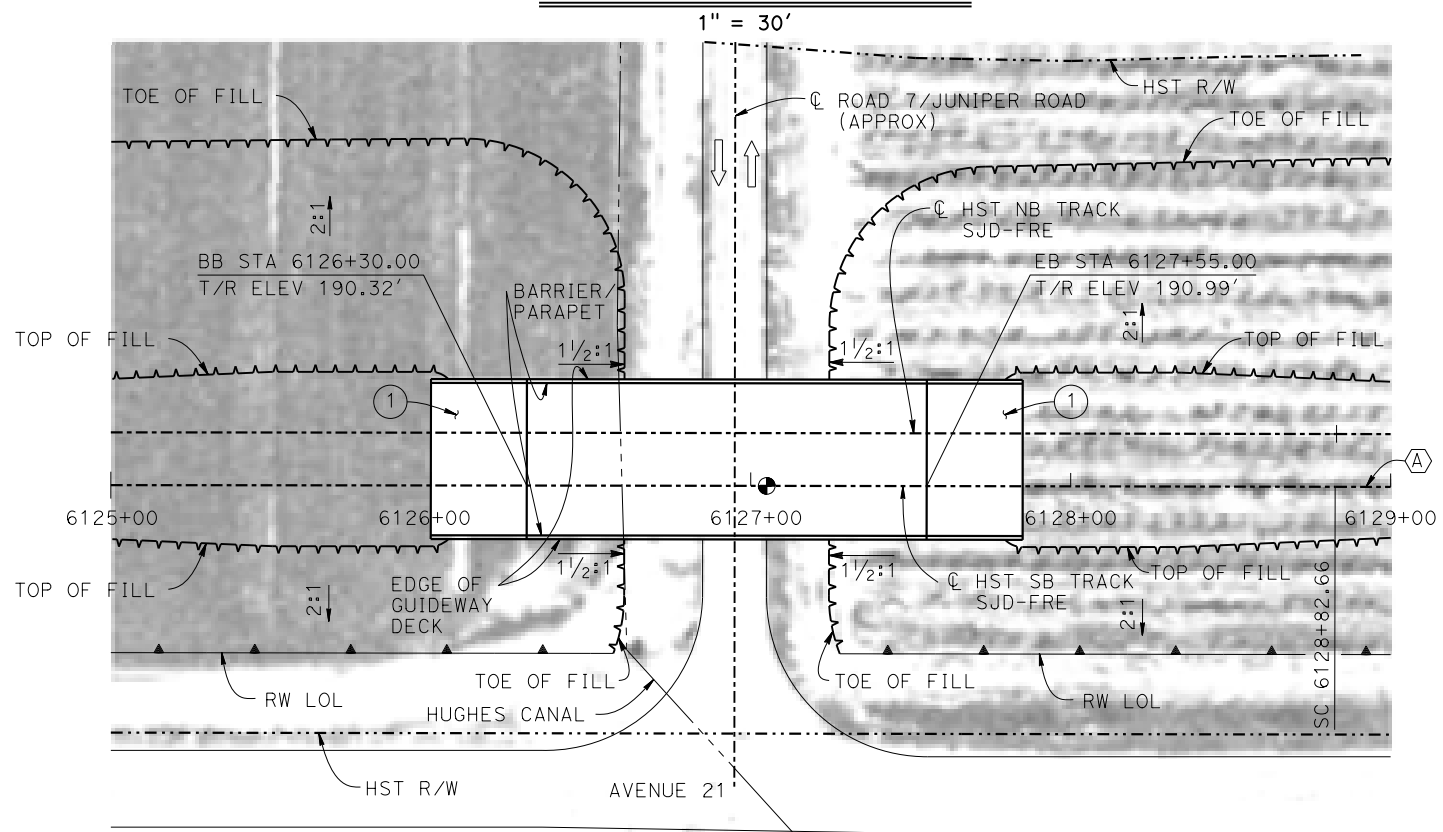
**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO SECTION**  
CENTRAL VALLEY WYE  
AVENUE 21 TO ROAD 13 WYE ALTERNATIVE  
GENERAL PLAN (SJD-FRE)  
LINCOLN ROAD (ROAD 4) OVERHEAD

CONTRACT NO.  
**HSR08-05**  
DRAWING NO.  
**ST-K1120-C**  
SCALE  
**AS SHOWN**  
SHEET NO.

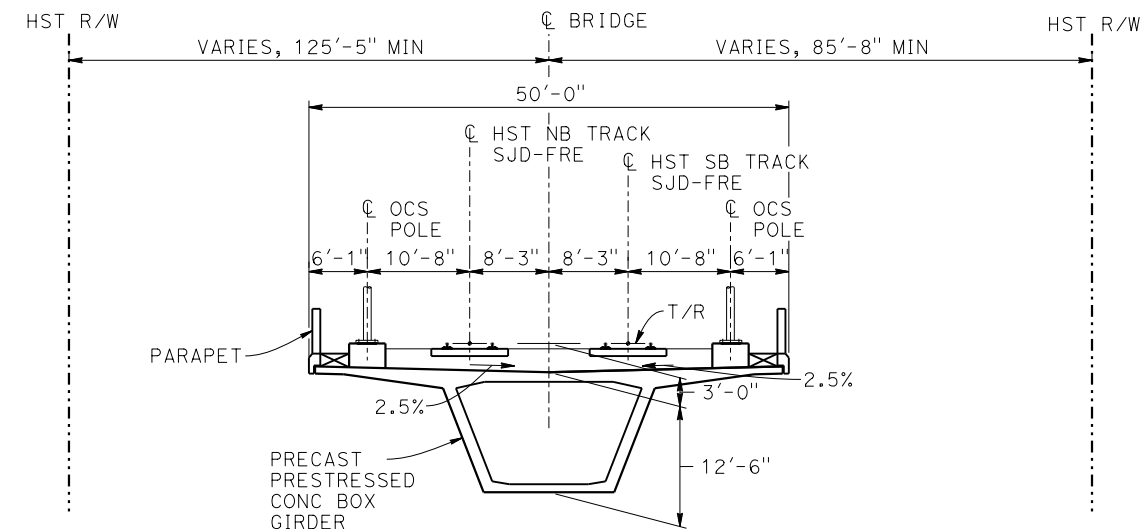




**DEVELOPED ELEVATION**



**PLAN**  
1" = 30'



**TYPICAL SECTION**  
1" = 10'

**TEMPORARY TRAFFIC OPENINGS**

VEHICULAR TRAFFIC			
1. <input type="checkbox"/> TRAFFIC WILL BE DETOURED AWAY FROM THE SITE.			
2. <input checked="" type="checkbox"/> TRAFFIC WILL PASS UNDER THE STRUCTURE ON:			
ST OR ROAD NAME AND LOCATION		FALSEWORK OPENING REQD (HORIZ X VERT)	
ROAD 7/JUNIPER ROAD	6126+95	25'X16.5'	2-WAY
3. <input type="checkbox"/> TEMP TRAFFIC LANE REDUCTION FOR FTG EXC.			

**LEGEND:**

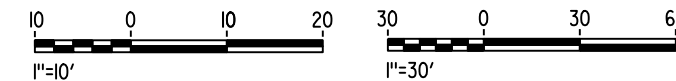
- INDICATES POINT OF MINIMUM VERTICAL CLEARANCE
- ⇒ INDICATES DIRECTION OF TRAFFIC
- ① STRUCTURE APPROACH
- ② SLOPE PAVING (1 1/2H:1V)

**CURVE SJD-FRE 3 SB (A)**

R = 320,000.00'  
LS = 1,150.00'

**NOTES:**

1. 16" Ø PIPE PILES ASSUMED FOR ABUTMENT FOUNDATIONS. PILE LENGTHS TO BE DETERMINED.
2. FOR RETAINING WALLS, SEE CIVIL AND GRADE SEPARATION PLANS; DRAWING CV-S1150-C.
3. ANY EXISTING DIRT ROAD THAT CONFLICTS WITH NEW CONSTRUCTION SHALL BE REALIGNED.
4. FOR UTILITY DISPOSITIONS, SEE CIVIL AND GRADE SEPARATION PLANS; DRAWING CV-S1150-C.
5. FOR TRACK SUPERELEVATION DETAILS, SEE ALIGNMENT AND TYPICAL SECTION PLANS; DRAWING TT-B0050-C.



MF-ST-K1150-C.dgn  
28-APR-2015 09:13  
P005133G

REV	DATE	BY	CHK	APP	DESCRIPTION

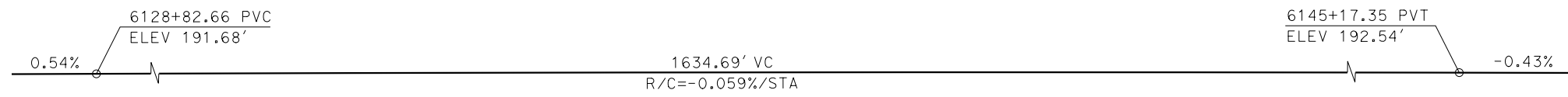
DESIGNED BY  
**S. J. S.**  
DRAWN BY  
**A. M.**  
CHECKED BY  
**O. EDEWOR**  
IN CHARGE  
**C. LEMLEY**  
DATE  
**05/08/2015**

**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**  
  
**NOT FOR**  
**CONSTRUCTION**

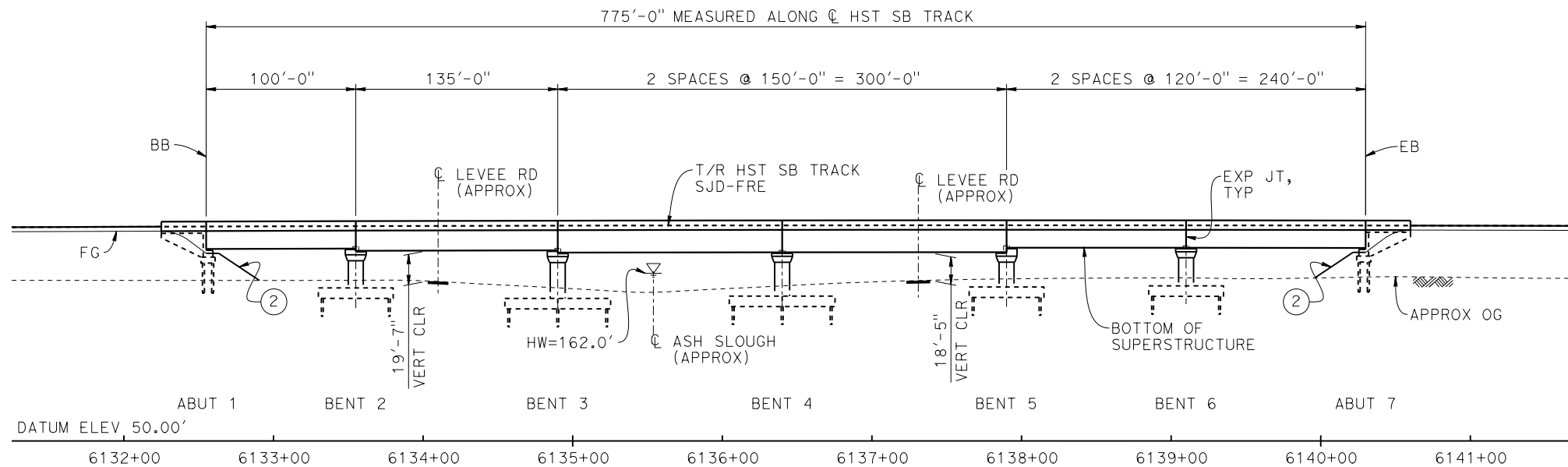


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO SECTION**  
CENTRAL VALLEY WYE  
AVENUE 21 TO ROAD 13 WYE ALTERNATIVE  
GENERAL PLAN (SJD-FRE)  
JUNIPER ROAD (ROAD 7) UNDERPASS

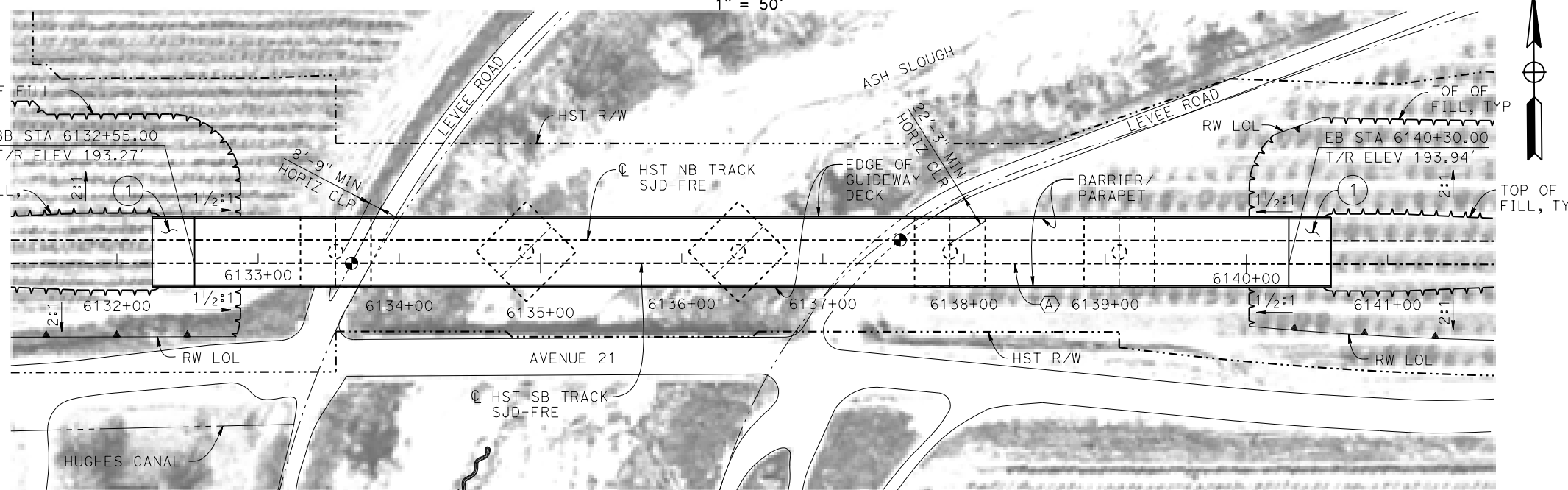
CONTRACT NO.  
**HSR08-05**  
DRAWING NO.  
**ST-K1150-C**  
SCALE  
**AS SHOWN**  
SHEET NO.



**TOP OF RAIL PROFILE (CL HST SB TRACK)**  
NO SCALE



**DEVELOPED ELEVATION**  
1" = 50'



**PLAN**  
1" = 50'

**LEGEND:**

- INDICATES POINT OF MINIMUM VERTICAL CLEARANCE
- INDICATES DIRECTION OF FLOW
- ① STRUCTURE APPROACH
- ② SLOPE PAVING (1½H:1V)

**TEMPORARY TRAFFIC OPENINGS**

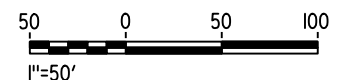
VEHICULAR TRAFFIC			
1. — TRAFFIC WILL BE DETOURED AWAY FROM THE SITE.			
2. X TRAFFIC WILL PASS UNDER THE STRUCTURE ON:			
ST OR ROAD NAME AND LOCATION		FALSEWORK OPENING REQD (HORIZ X VERT)	
LEVEE ROAD	6133+73	20'X16.5'	-
LEVEE ROAD	6137+31	20'X16.5'	-
3. X TEMP TRAFFIC LANE REDUCTION FOR FTG EXC.			

**NOTES:**

1. 16" Ø PIPE PILES ASSUMED FOR ABUTMENT AND BENT FOUNDATIONS. PILE LENGTHS TO BE DETERMINED.
2. FOR SECTION, SEE DRAWING ST-K3155-C.
3. FOR RETAINING WALLS, SEE CIVIL AND GRADE SEPARATION PLANS; DRAWING CV-S1150-C.
4. ANY EXISTING DIRT ROAD THAT CONFLICTS WITH NEW CONSTRUCTION SHALL BE REALIGNED.
5. FOR UTILITY DISPOSITIONS, SEE CIVIL AND GRADE SEPARATION PLANS; DRAWING CV-S1150-C.

**CURVE SJD-FRE 3 SB (A)**

R = 320,000.00'  
LS = 1,150.00'



04-FEB-2015 01:35 MF-ST-K1155-C.dgn

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**M. SUN**  
DRAWN BY  
**J. KIDWELL**  
CHECKED BY  
**O. EDEWOR**  
IN CHARGE  
**C. LEMLEY**  
DATE  
**02/13/2015**

**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**

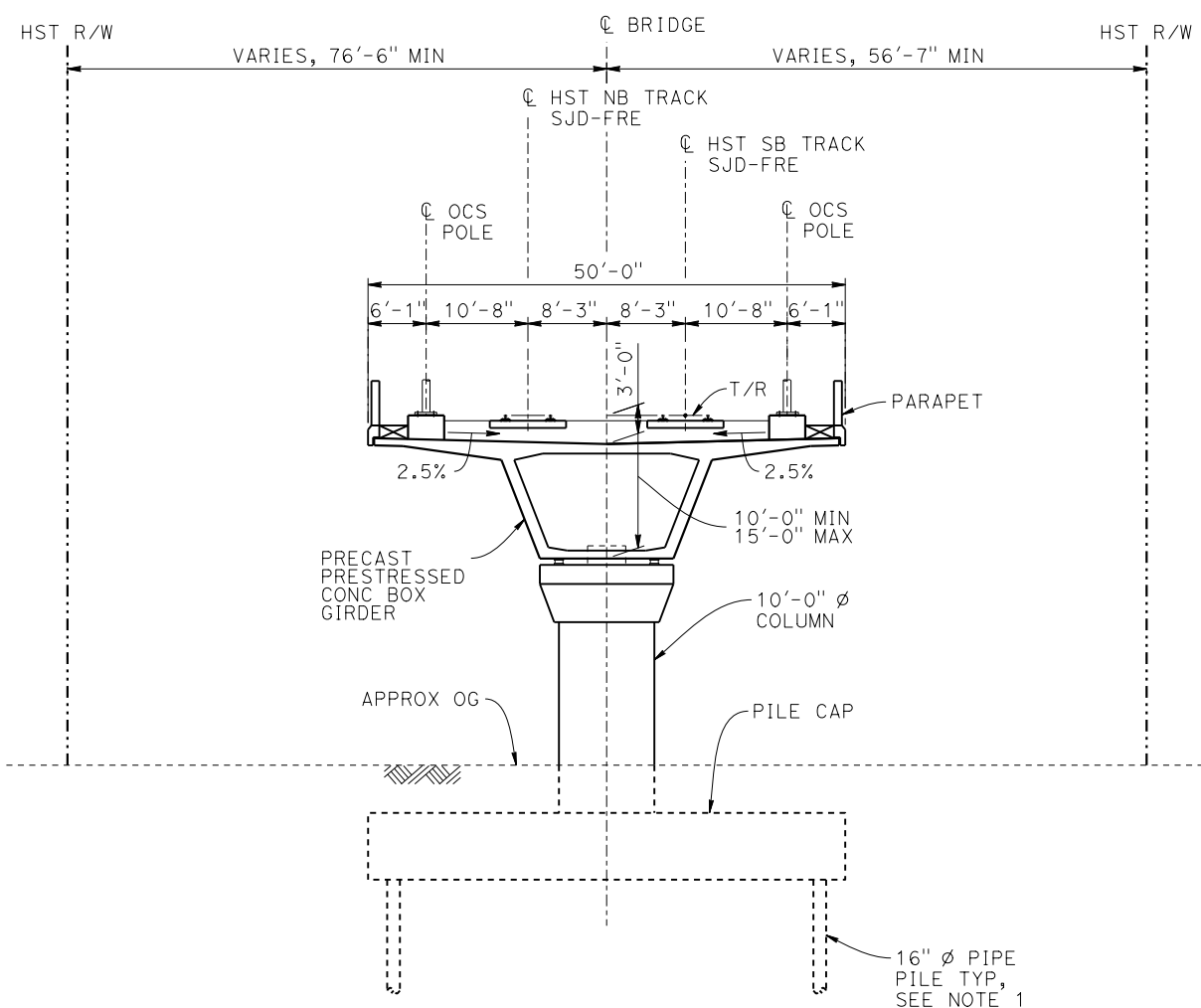
**NOT FOR**  
**CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO SECTION**  
CENTRAL VALLEY WYE  
AVENUE 21 TO ROAD 13 WYE ALTERNATIVE  
GENERAL PLAN (SJD-FRE)  
ASH SLOUGH BRIDGE - 1 OF 2

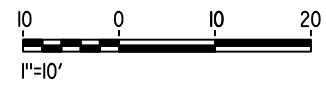
CONTRACT NO.  
**HSR08-05**  
DRAWING NO.  
**ST-K1155-C**  
SCALE  
**AS SHOWN**  
SHEET NO.

MF-ST-K3155-C.dgn  
 05-FEB-2015 11:46  
 P005133g



**TYPICAL SECTION**  
 1" = 10'

- NOTES:**
1. PILE LENGTHS TO BE DETERMINED.
  2. FOR TRACK SUPERELEVATION DETAILS, SEE ALIGNMENT AND TYPICAL SECTION PLANS; DRAWING TT-B0050-C.



REV	DATE	BY	CHK	APP	DESCRIPTION

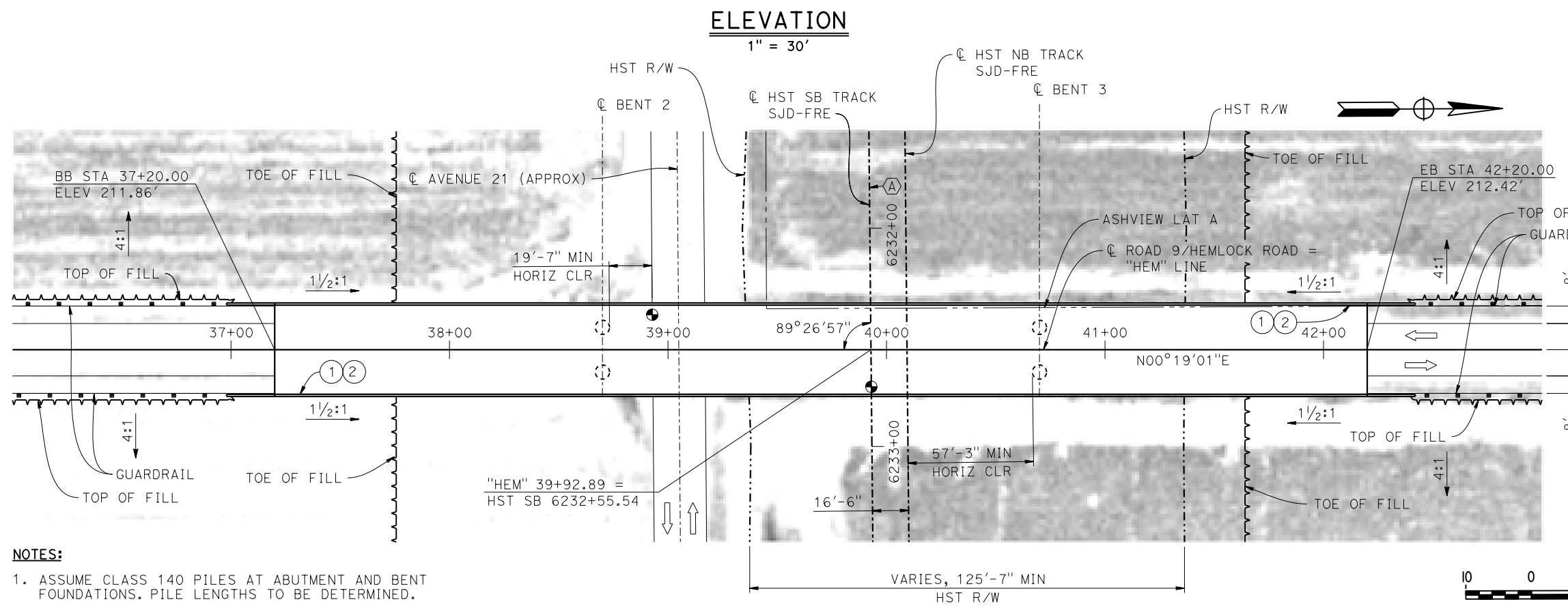
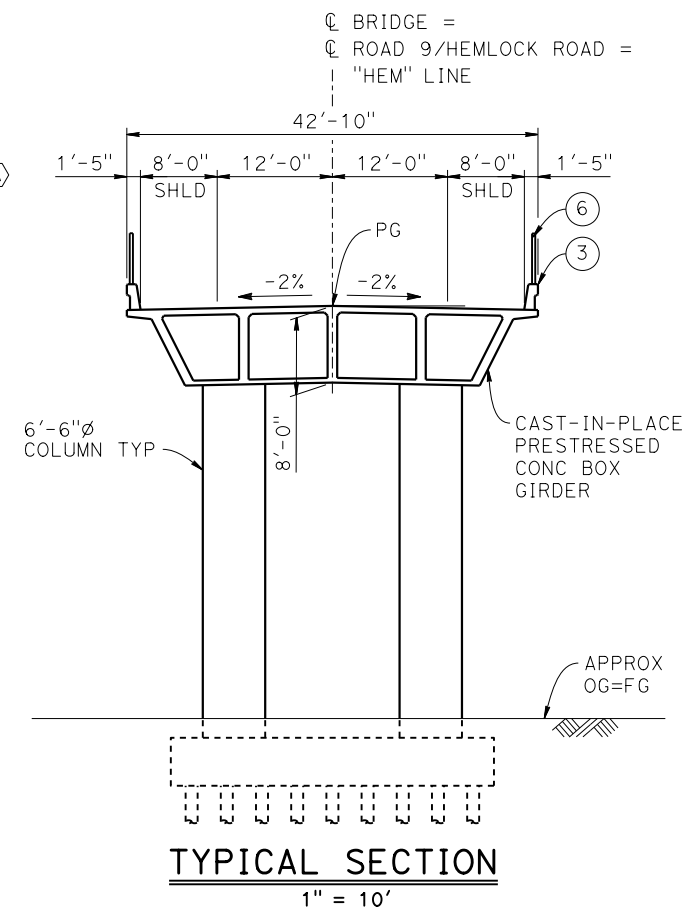
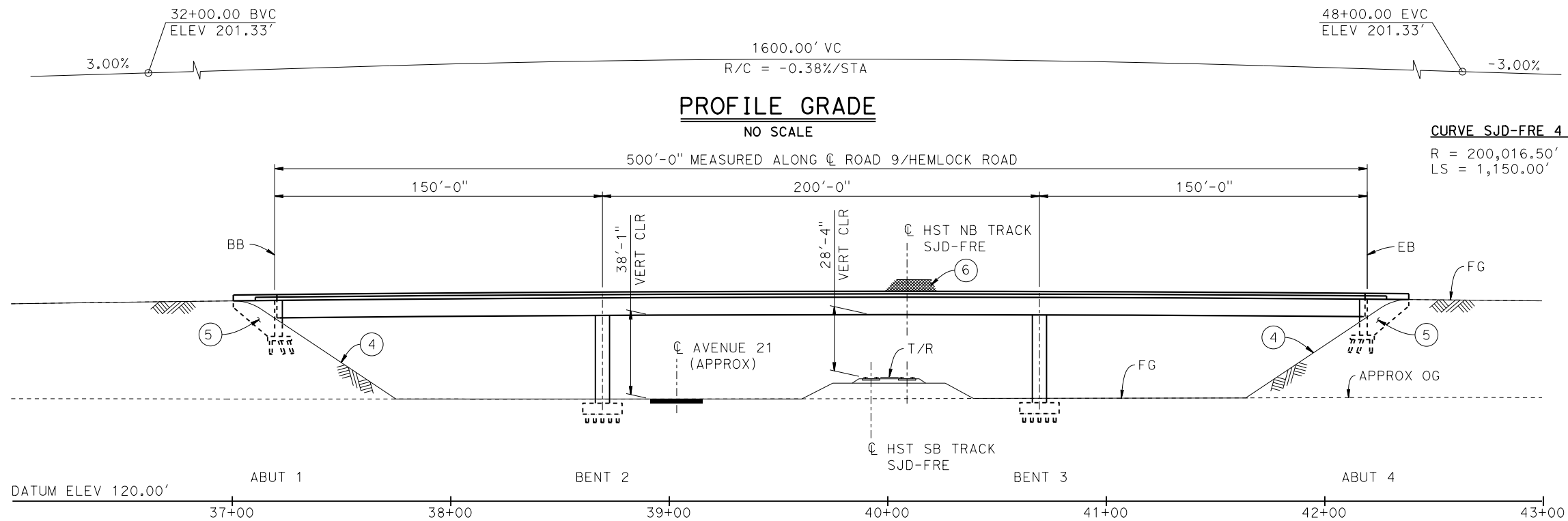
DESIGNED BY  
**M. SUN**  
 DRAWN BY  
**J. KIDWELL**  
 CHECKED BY  
**O. EDEWOR**  
 IN CHARGE  
**C. LEMLEY**  
 DATE  
**02/13/2015**

**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**  
  
**NOT FOR**  
**CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO SECTION**  
 CENTRAL VALLEY WYE  
 AVENUE 21 TO ROAD 13 WYE ALTERNATIVE  
 TYPICAL SECTION (SJD-FRE)  
 ASH SLOUGH BRIDGE - 2 OF 2

CONTRACT NO.  
 HSR08-05  
 DRAWING NO.  
 ST-K3155-C  
 SCALE  
 AS SHOWN  
 SHEET NO.

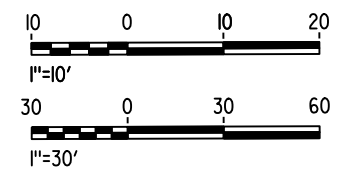


- NOTES:**
1. ASSUME CLASS 140 PILES AT ABUTMENT AND BENT FOUNDATIONS. PILE LENGTHS TO BE DETERMINED.
  2. FOR GUARDRAILS, SEE CIVIL AND GRADE SEPARATION PLANS; DRAWING CV-S1160-C.
  3. FOR UTILITY DISPOSITION, SEE CIVIL AND GRADE SEPARATION PLANS. DRAWING CV-S1160-C.

- LEGEND:**
- INDICATES POINT OF MINIMUM VERTICAL CLEARANCE
  - ⇒ INDICATES DIRECTION OF TRAFFIC
  - ① PAINT "HEMLOCK ROAD OVERHEAD"
  - ② PAINT "BRIDGE NO. XX-XXXX"
  - ③ CONCRETE BARRIER TYPE 736 MOD
  - ④ SLOPE PAVING (1 1/2H:1V)
  - ⑤ WINGWALL
  - ⑥ AR FENCE WITH SOLID PLATE

**TEMPORARY TRAFFIC OPENINGS**

VEHICULAR TRAFFIC			
1. — TRAFFIC WILL BE DETOURED AWAY FROM THE SITE.			
2. <input checked="" type="checkbox"/> TRAFFIC WILL PASS UNDER THE STRUCTURE ON:			
ST OR ROAD NAME AND LOCATION	FALSEWORK OPENING RECD (HORIZ X VERT)		
AVENUE 21 39+05	32'X16.5'	2-WAY	
3. — TEMP TRAFFIC LANE REDUCTION FOR FTG EXC.			



MF-ST-K1160-C.dgn 28-APR-2015 09:14 P005133G

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**M. SUN**

DRAWN BY  
**J. KIDWELL**

CHECKED BY  
**O. EDEWOR**

IN CHARGE  
**C. LEMLEY**

DATE  
**05/08/2015**

**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**

**NOT FOR**  
**CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO SECTION**

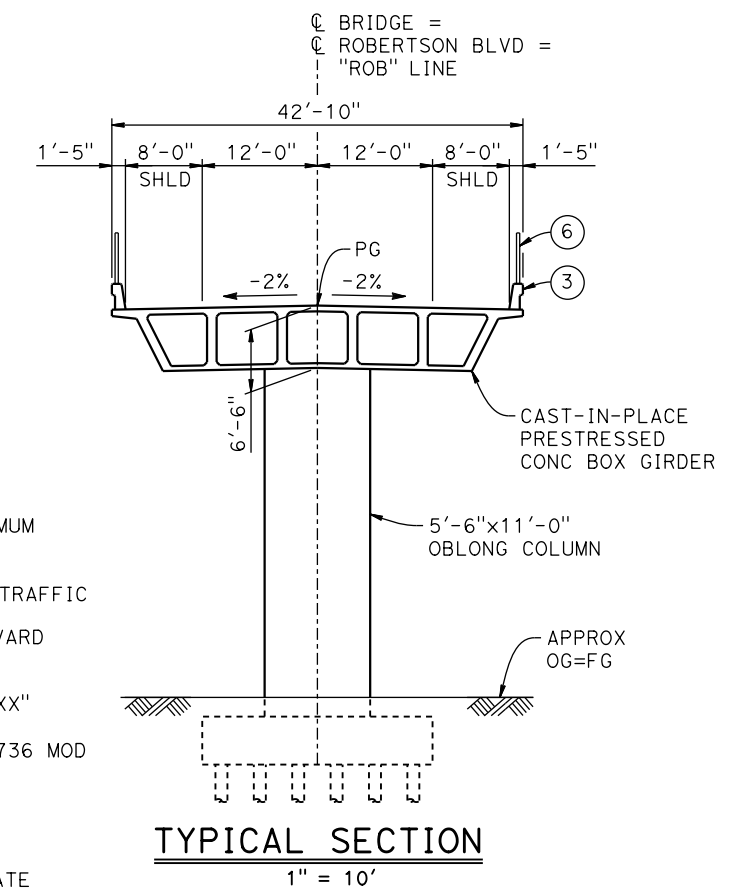
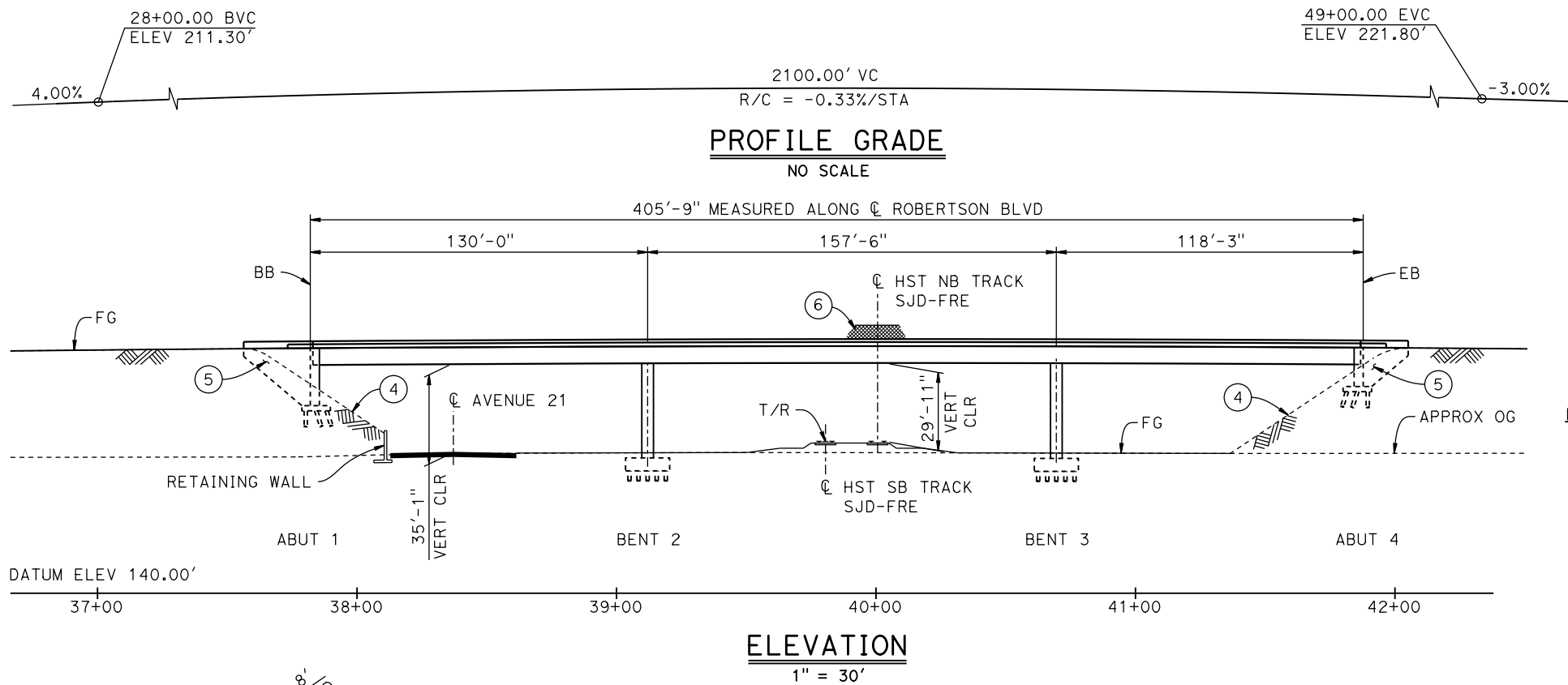
CENTRAL VALLEY WYE  
AVENUE 21 TO ROAD 13 WYE ALTERNATIVE  
GENERAL PLAN (SJD-FRE)  
HEMLOCK ROAD (ROAD 9) OVERHEAD

CONTRACT NO.  
**HSR08-05**

DRAWING NO.  
**ST-K1160-C**

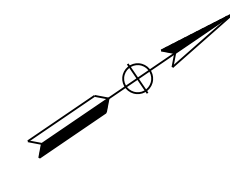
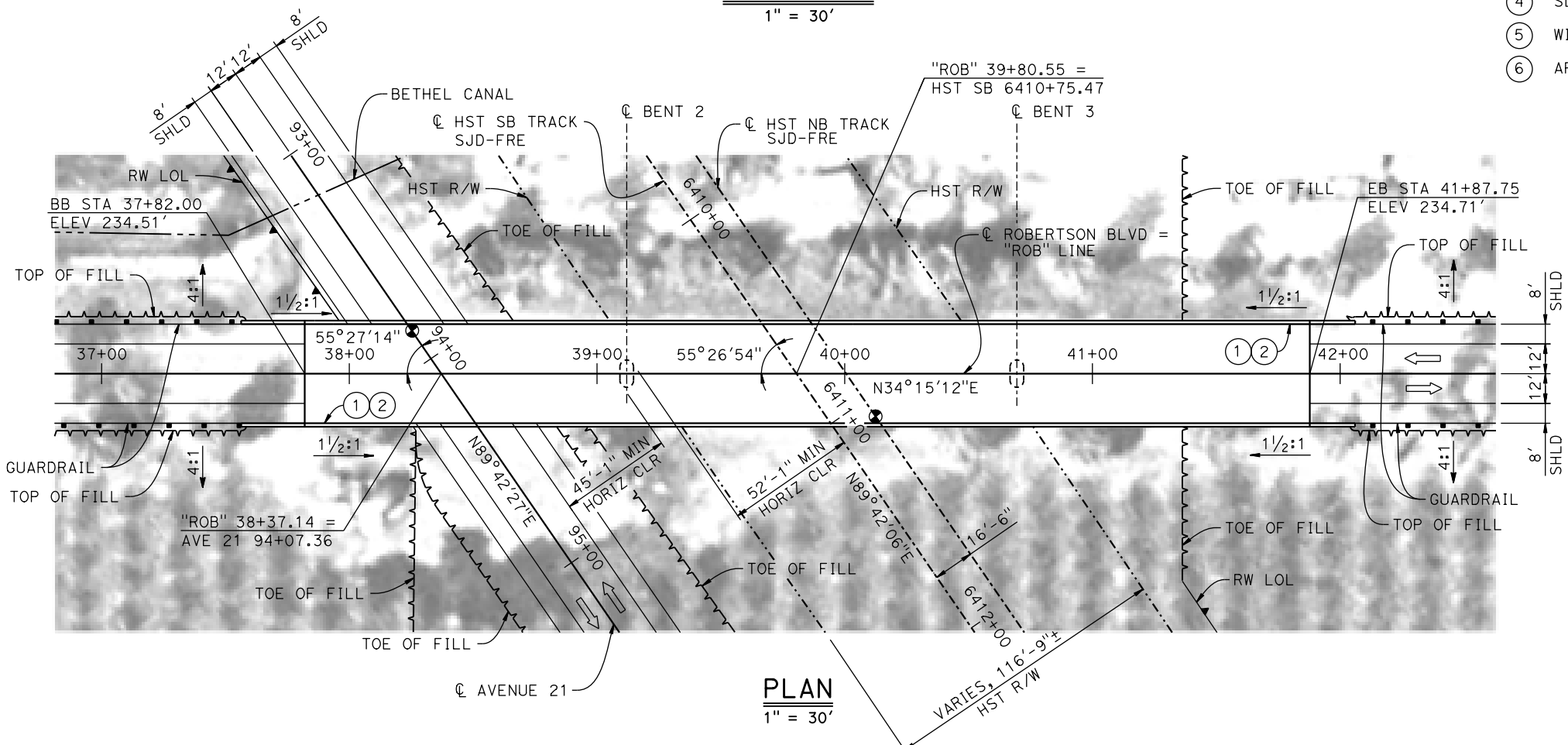
SCALE  
**AS SHOWN**

SHEET NO.



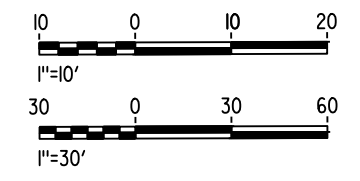
- LEGEND:**
- INDICATES POINT OF MINIMUM VERTICAL CLEARANCE
  - ➔ INDICATES DIRECTION OF TRAFFIC
  - ① PAINT "ROBERTSON BOULEVARD OVERHEAD"
  - ② PAINT "BRIDGE NO. XX-XXXX"
  - ③ CONCRETE BARRIER TYPE 736 MOD
  - ④ SLOPE PAVING (1 1/2H:1V)
  - ⑤ WINGWALL
  - ⑥ AR FENCE WITH SOLID PLATE

- NOTES:**
1. ASSUME CLASS 140 PILES AT ABUTMENT AND BENT FOUNDATIONS. PILE LENGTHS TO BE DETERMINED.
  2. FOR UTILITY DISPOSITION, SEE CIVIL AND GRADE SEPARATION PLANS; DRAWING CV-S1200-C.
  3. FOR GUARDRAILS, SEE CIVIL AND GRADE SEPARATION PLANS; DRAWING CV-S1200-C.
  4. FOR RETAINING WALLS, SEE CIVIL AND GRADE SEPARATION PLANS; DRAWING CV-S1200-C.



**TEMPORARY TRAFFIC OPENINGS**

VEHICULAR TRAFFIC			
1. — TRAFFIC WILL BE DETOURED AWAY FROM THE SITE.			
2. <input checked="" type="checkbox"/> TRAFFIC WILL PASS UNDER THE STRUCTURE ON:			
ST OR ROAD NAME AND LOCATION		FALSEWORK OPENING REQD (HORIZ X VERT)	
AVENUE 21	38+37	32'x16.5'	2-WAY
3. — TEMP TRAFFIC LANE REDUCTION FOR FTG EXC.			



16-MAR-2016 09:17 MF-ST-K1200-C.dgn

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**M. SUN**

DRAWN BY  
**J. KIDWELL**

CHECKED BY  
**O. EDEWOR**

IN CHARGE  
**C. LEMLEY**

DATE  
**05/08/2015**

**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**

**NOT FOR**  
**CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO SECTION**

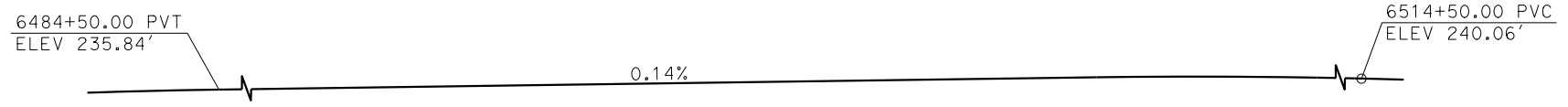
CENTRAL VALLEY WYE  
AVENUE 21 TO ROAD 13 WYE ALTERNATIVE  
GENERAL PLAN (SJD-FRE)  
ROBERTSON BOULEVARD OVERHEAD

CONTRACT NO.  
HSR08-05

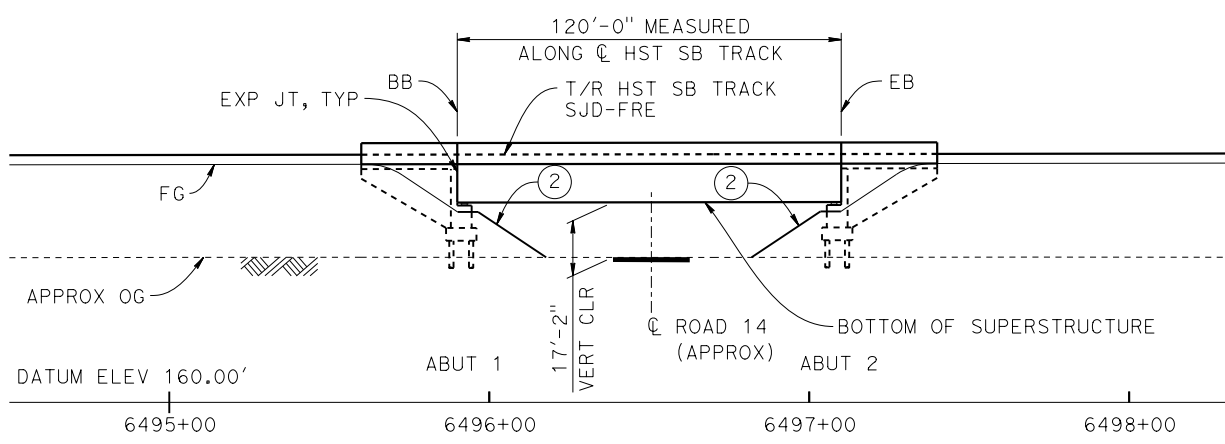
DRAWING NO.  
ST-K1200-C

SCALE  
AS SHOWN

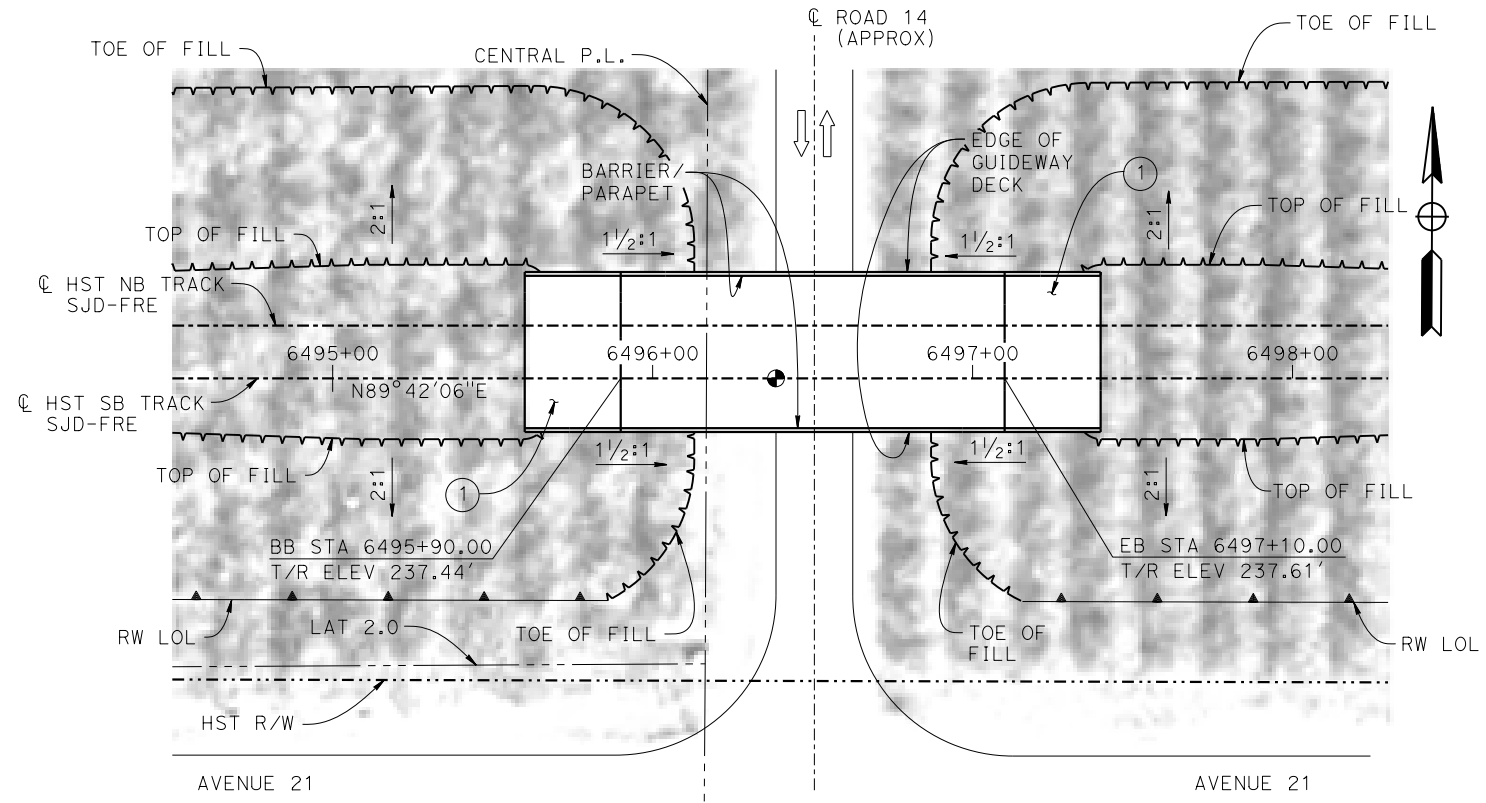
SHEET NO.



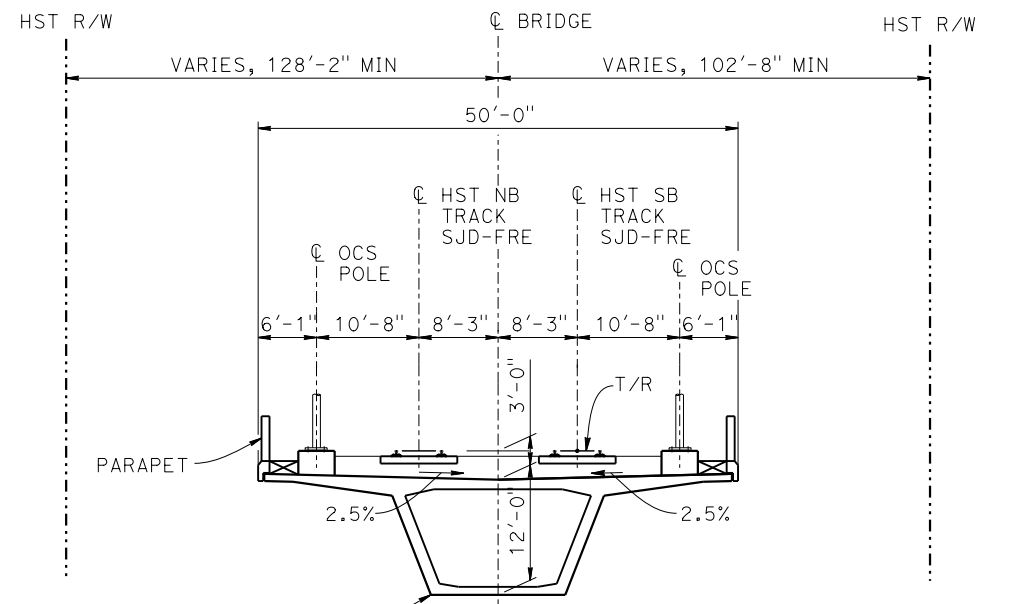
**TOP OF RAIL PROFILE (C HST SB TRACK)**  
NO SCALE



**ELEVATION**  
1" = 30'



**PLAN**  
1" = 30'



**TYPICAL SECTION**  
1"=10'

**TEMPORARY TRAFFIC OPENINGS**

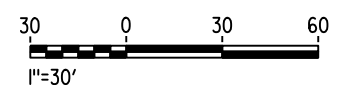
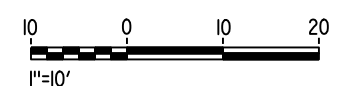
VEHICULAR TRAFFIC	
1. TRAFFIC WILL BE DETOURED AWAY FROM THE SITE.	
2. X TRAFFIC WILL PASS UNDER THE STRUCTURE ON:	
ST OR ROAD NAME AND LOCATION	FALSEWORK OPENING REQD (HORIZ X VERT)
ROAD 14	6496+50 32'X16.5' 2-WAY
3. TEMP TRAFFIC LANE REDUCTION FOR FTG EXC.	

**LEGEND:**

- INDICATES POINT OF MINIMUM VERTICAL CLEARANCE
- ⇨ INDICATES DIRECTION OF TRAFFIC
- ① STRUCTURE APPROACH
- ② SLOPE PAVING (1 1/2 H:1 V)

**NOTES:**

1. 16" Ø PIPE PILES ASSUMED FOR ABUTMENT FOUNDATIONS. PILE LENGTHS TO BE DETERMINED.
2. FOR UTILITY DISPOSITIONS, SEE CIVIL AND GRADE SEPARATION PLANS; DRAWING CV-S1210-C.
3. FOR RETAINING WALLS, SEE CIVIL AND GRADE SEPARATION PLANS; DRAWING CV-S1210-C.



p005133g MF-ST-K1210-C.dgn 28-APR-2015 9:16

REV	DATE	BY	CHK	APP	DESCRIPTION

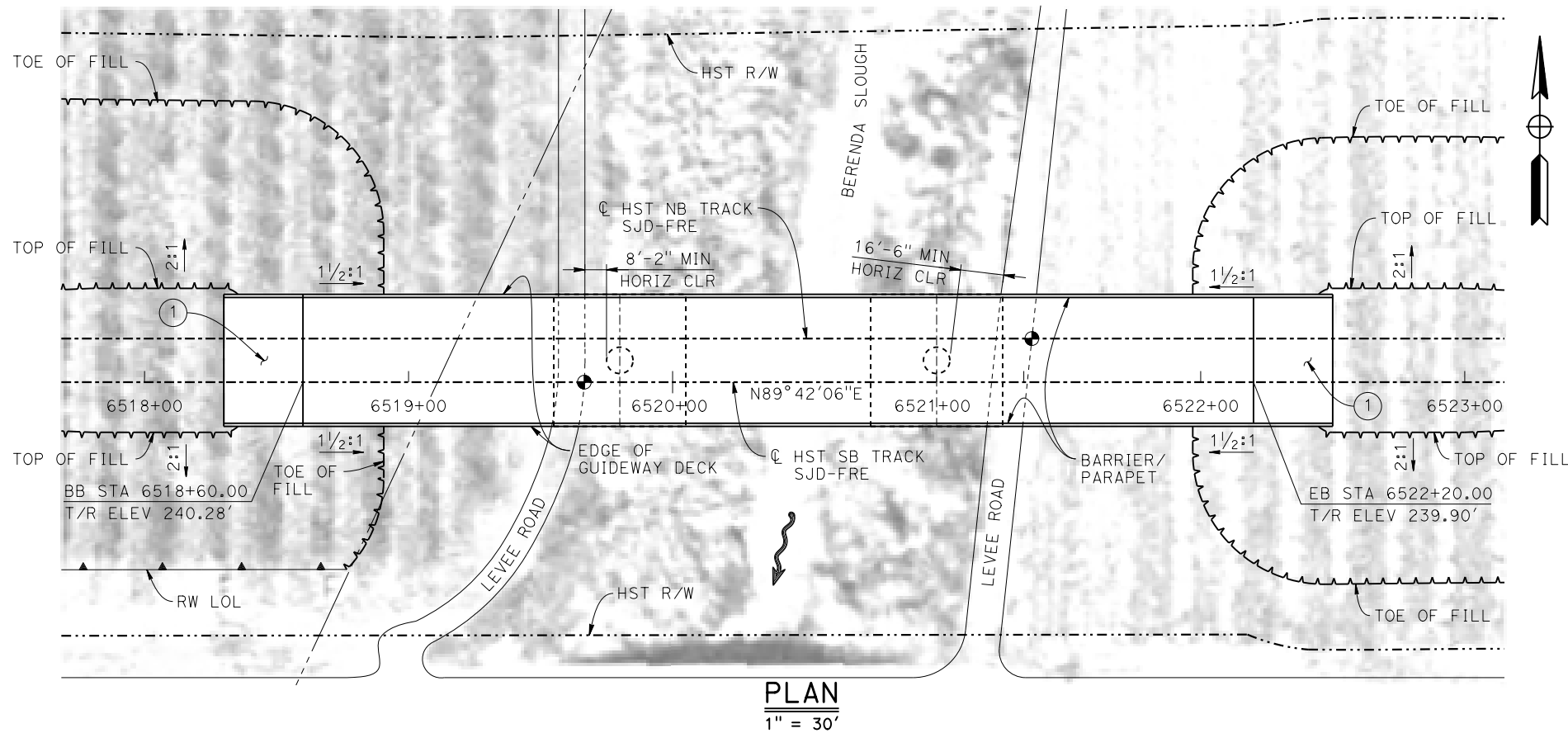
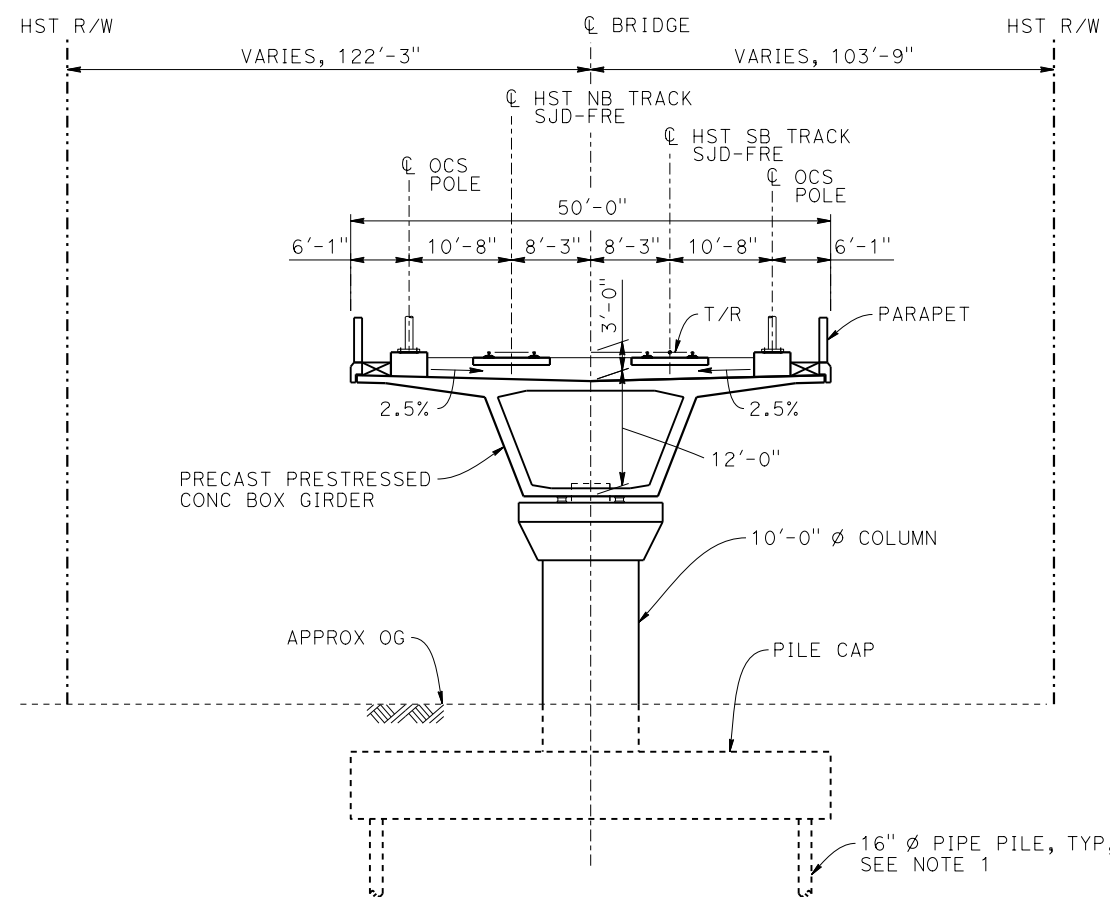
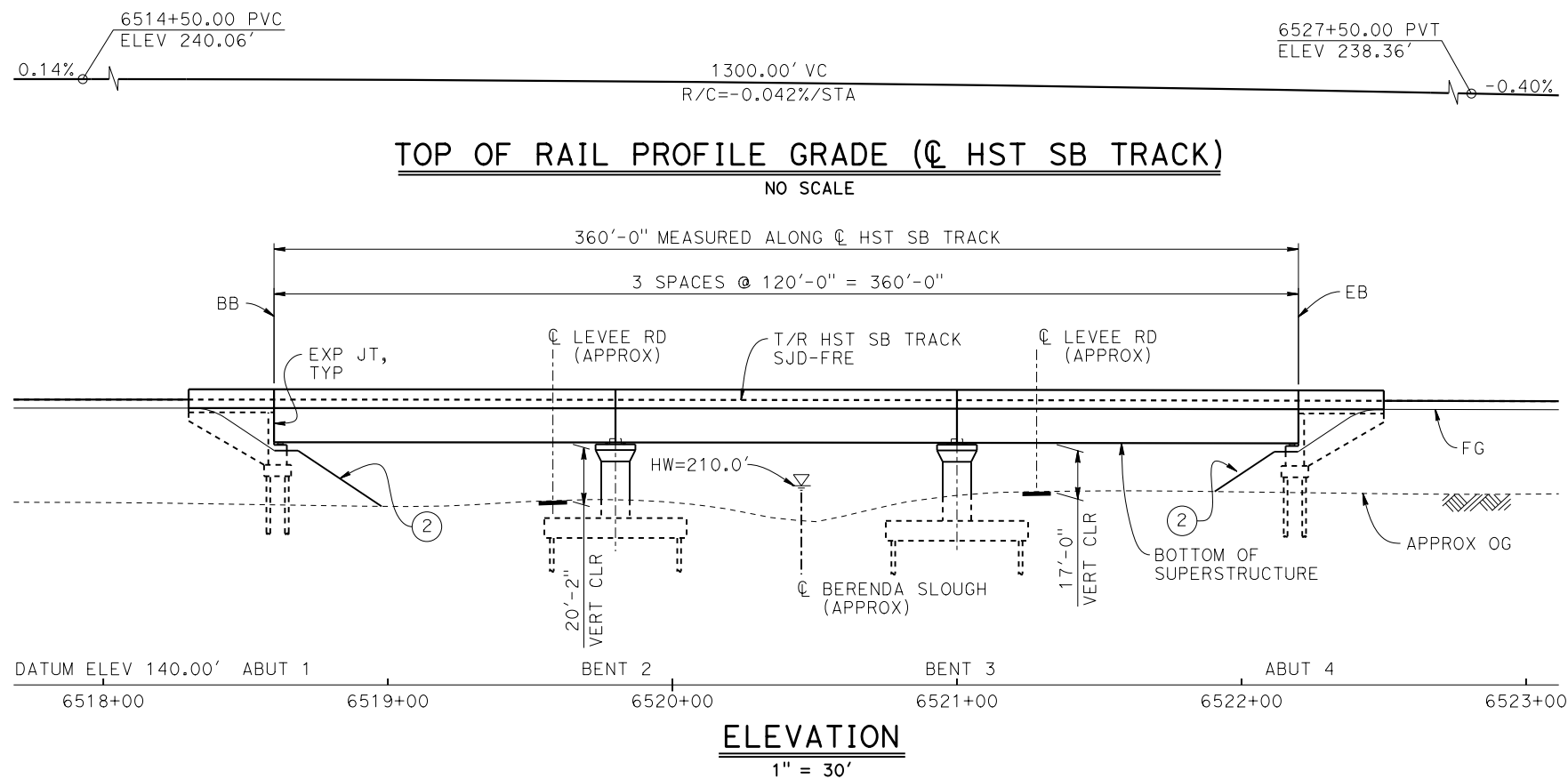
DESIGNED BY  
**M. SUN**  
DRAWN BY  
**W. JOHNSEN**  
CHECKED BY  
**O. EDEWOR**  
IN CHARGE  
**C. LEMLEY**  
DATE  
**05/08/2015**

**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**  
  
**NOT FOR**  
**CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO SECTION**  
CENTRAL VALLEY WYE  
AVENUE 21 TO ROAD 13 WYE ALTERNATIVE  
GENERAL PLAN (SJD-FRE)  
ROAD 14 UNDERPASS

CONTRACT NO.  
HSR08-05  
DRAWING NO.  
ST-K1210-C  
SCALE  
AS SHOWN  
SHEET NO.

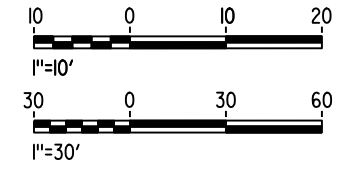


**TEMPORARY TRAFFIC OPENINGS**

VEHICULAR TRAFFIC			
1. — TRAFFIC WILL BE DETOURED AWAY FROM THE SITE.			
2. X TRAFFIC WILL PASS UNDER THE STRUCTURE ON:			
ST OR ROAD NAME AND LOCATION		FALSEWORK OPENING REQD (HORIZ X VERT)	
LEVEE ROAD	6519+63	20'X16.5'	-
LEVEE ROAD	6521+33	20'X16.5'	-
3. X TEMP TRAFFIC LANE REDUCTION FOR FTG EXC.			

- LEGEND:**
- INDICATES POINT OF MINIMUM VERTICAL CLEARANCE
  - INDICATES DIRECTION OF FLOW
  - ① STRUCTURE APPROACH
  - ② SLOPE PAVING (1 1/2H:1V)

- NOTES:**
- 16" Ø PIPE PILES ASSUMED FOR ABUTMENT AND BENT FOUNDATIONS. PILE LENGTHS TO BE DETERMINED.
  - ANY EXISTING DIRT ROAD THAT CONFLICTS WITH NEW CONSTRUCTION SHALL BE REALIGNED.
  - FOR UTILITY DISPOSITIONS, SEE CIVIL AND GRADE SEPARATION PLANS; DRAWING CV-S1220-C
  - FOR RETAINING WALL, SEE CIVIL AND GRADE SEPARATION PLANS; DRAWING CV-S1220-C.



MF-ST-K1220-C.dgn 04-FEB-2015 01:39 P005133G

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**M. SUN**  
DRAWN BY  
**A. M.**  
CHECKED BY  
**O. EDEWOR**  
IN CHARGE  
**C. LEMLEY**  
DATE  
**02/13/2015**

**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**

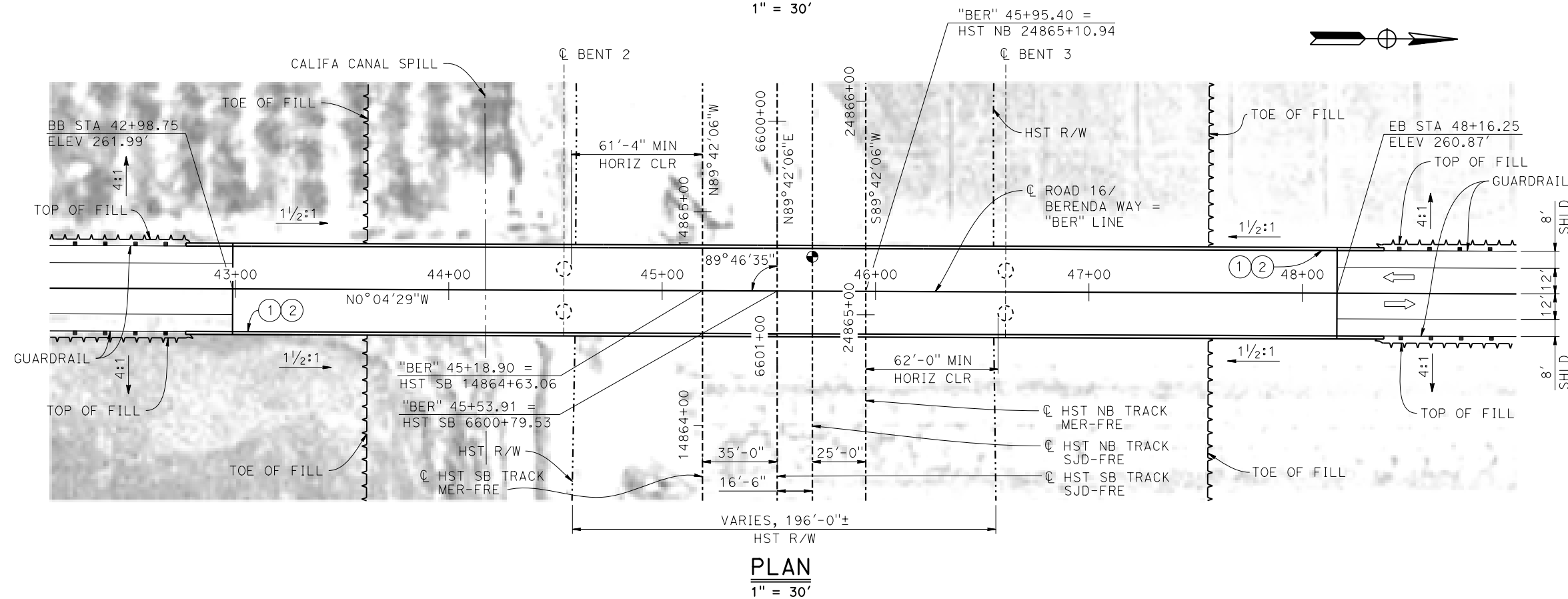
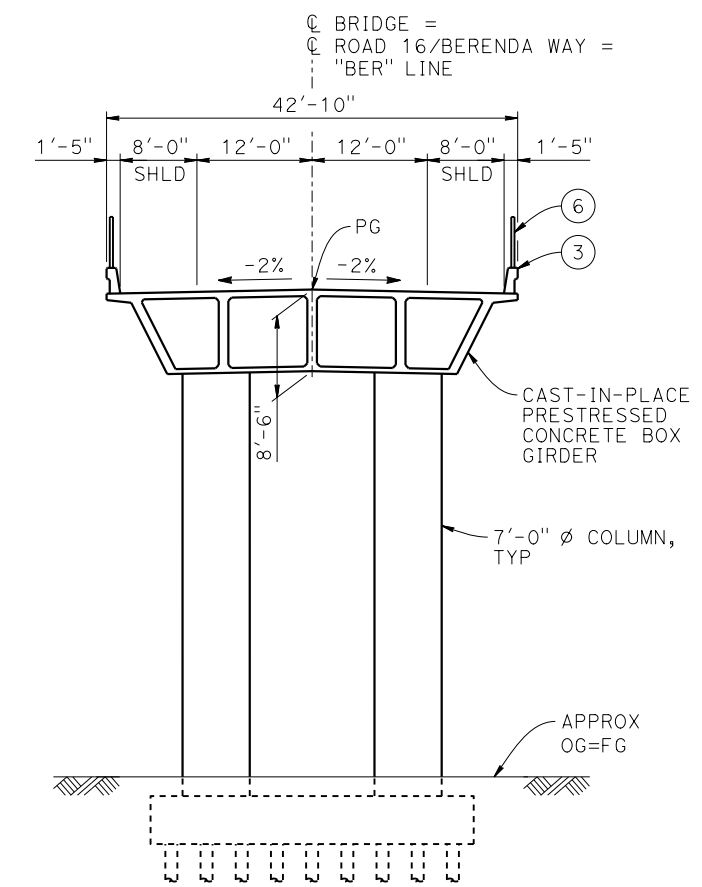
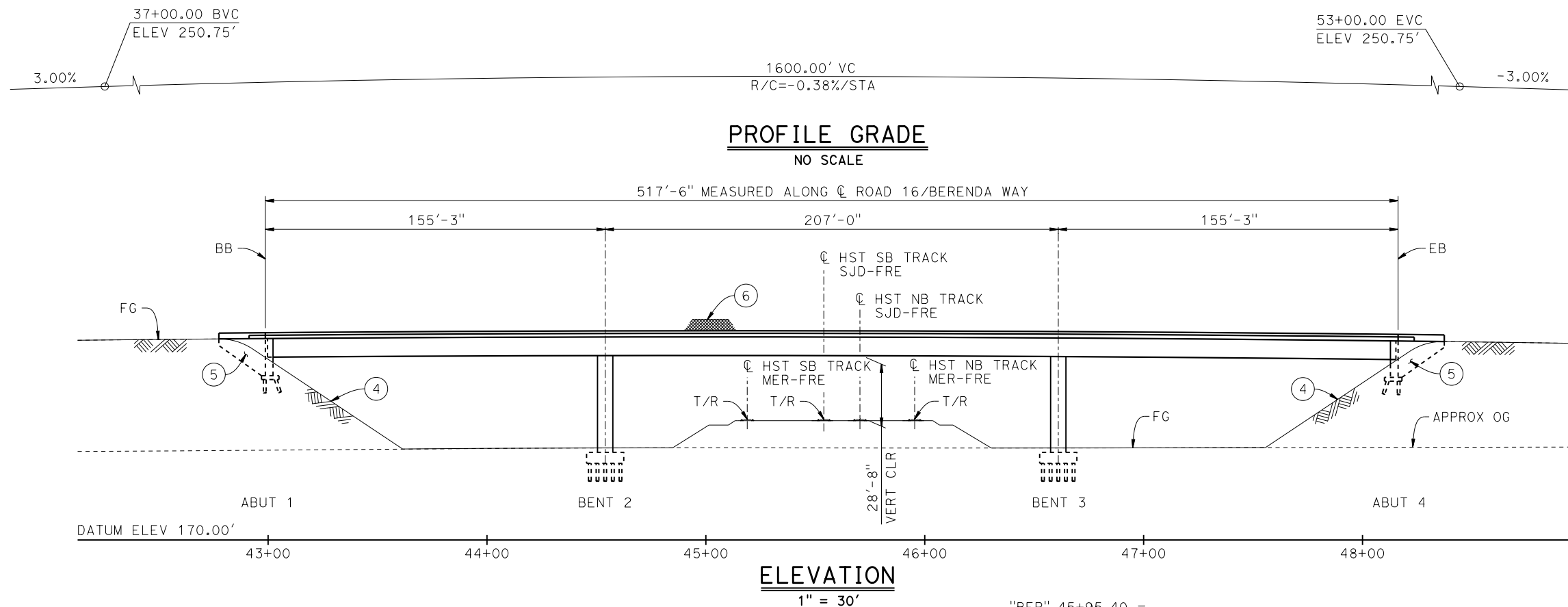
**NOT FOR**  
**CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO SECTION**

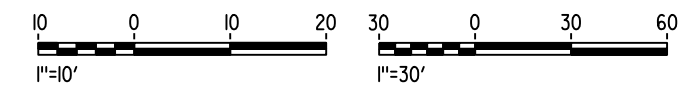
CENTRAL VALLEY WYE  
AVENUE 21 TO ROAD 13 WYE ALTERNATIVE  
GENERAL PLAN (SJD-FRE)  
BERENDA SLOUGH BRIDGE

CONTRACT NO.  
HSR08-05  
DRAWING NO.  
ST-K1220-C  
SCALE  
AS SHOWN  
SHEET NO.



- LEGEND:**
- INDICATES POINT OF MINIMUM VERTICAL CLEARANCE
  - ➔ INDICATES DIRECTION OF TRAFFIC
  - ① PAINT "BERENDA WAY OVERHEAD"
  - ② PAINT "BRIDGE NO. XX-XXXX"
  - ③ CONCRETE BARRIER TYPE 736 MOD
  - ④ SLOPE PAVING (1 1/2 H:1 V)
  - ⑤ WINGWALL
  - ⑥ AR FENCE WITH SOLID PLATE

- NOTES:**
1. ASSUME CLASS 140 PILES AT ABUTMENT AND BENT FOUNDATIONS. PILE LENGTHS TO BE DETERMINED.
  2. FOR GUARDRAILS, SEE CIVIL AND GRADE SEPARATION PLANS; DRAWING CV-S1230-C.
  3. FOR UTILITY DISPOSITIONS, SEE CIVIL AND GRADE SEPARATION PLANS; DRAWING CV-S1230-C.



05-MAY-2015 15:16:24 MF-ST-K1230-C.dgn

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**M. SUN**

DRAWN BY  
**J. KIDWELL**

CHECKED BY  
**O. EDEWOR**

IN CHARGE  
**C. LEMLEY**

DATE  
**05/08/2015**

**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**

**NOT FOR**  
**CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO SECTION**

CENTRAL VALLEY WYE  
AVENUE 21 TO ROAD 13 WYE ALTERNATIVE  
GENERAL PLAN (SJD-FRE)  
BERENDA WAY (ROAD 16) OVERHEAD

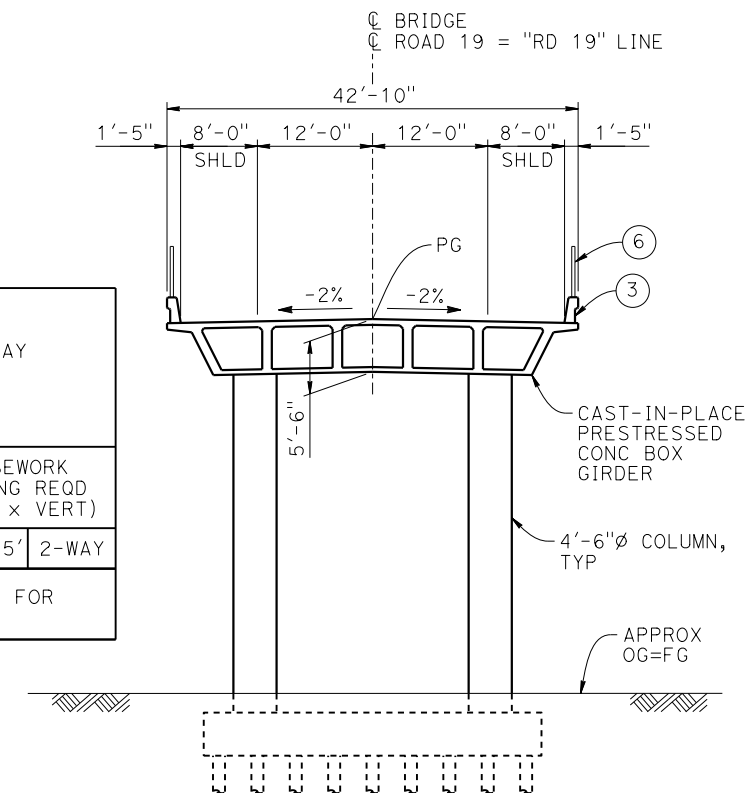
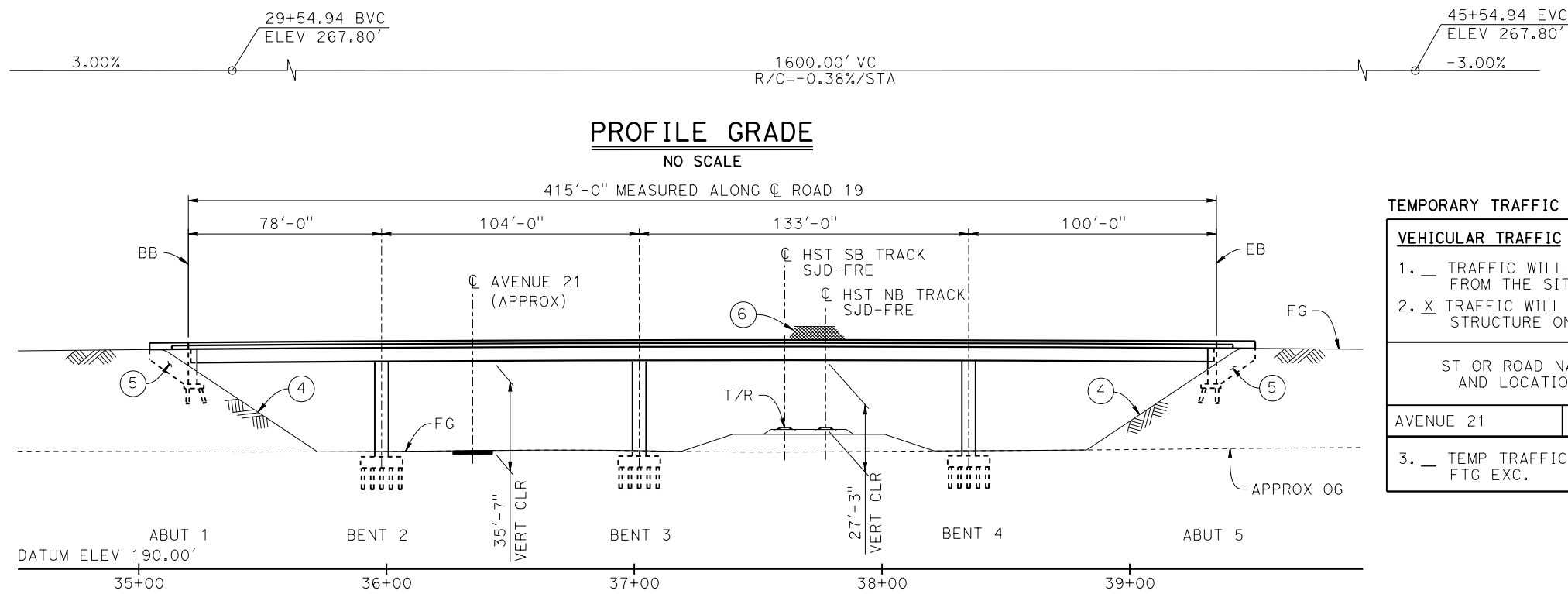
CONTRACT NO.  
**HSR08-05**

DRAWING NO.  
**ST-K1230-C**

SCALE  
**AS SHOWN**

SHEET NO.

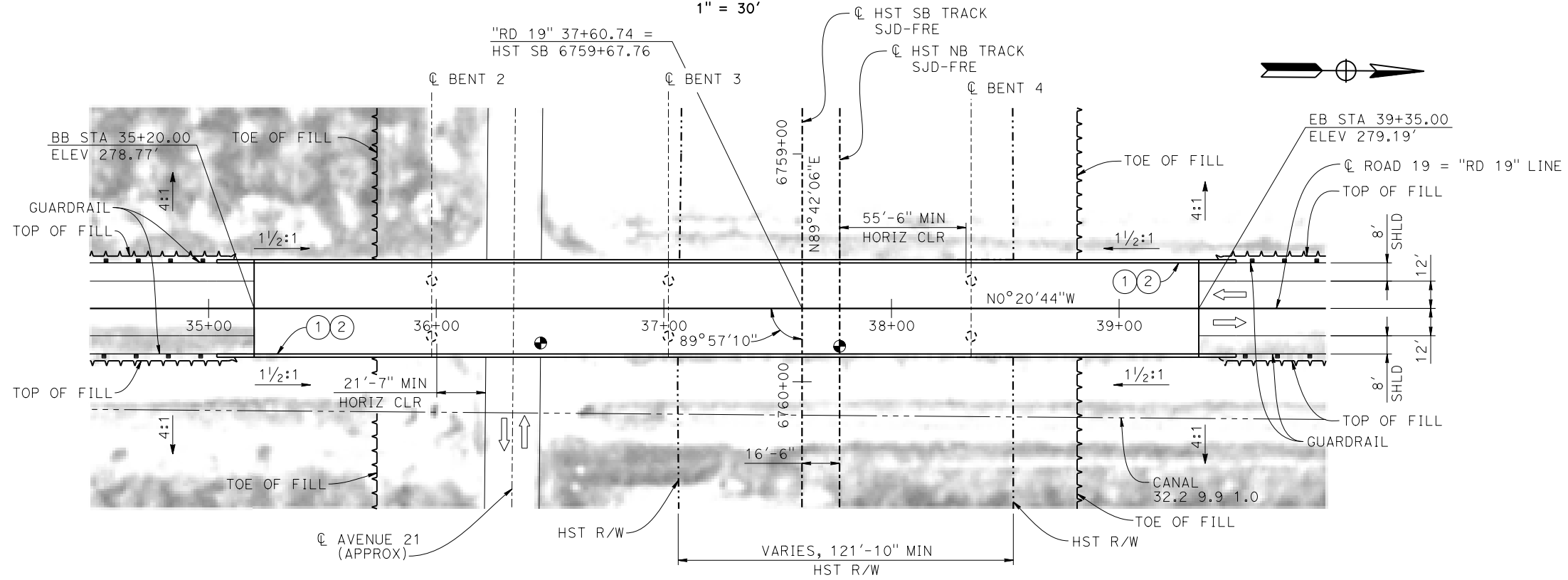




**TEMPORARY TRAFFIC OPENINGS**

VEHICULAR TRAFFIC	
1. — TRAFFIC WILL BE DETOURED AWAY FROM THE SITE.	
2. X TRAFFIC WILL PASS UNDER THE STRUCTURE ON:	
ST OR ROAD NAME AND LOCATION	FALSEWORK OPENING REQD (HORIZ X VERT)
AVENUE 21	36+34 32'x16.5' 2-WAY
3. — TEMP TRAFFIC LANE REDUCTION FOR FTG EXC.	

**ELEVATION**  
1" = 30'

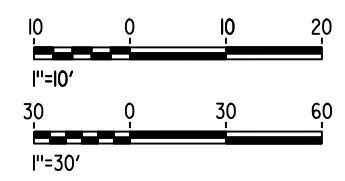


**LEGEND:**

- INDICATES POINT OF MINIMUM VERTICAL CLEARANCE
- ⇨ INDICATES DIRECTION OF TRAFFIC
- ① PAINT "ROAD 19 OVERHEAD"
- ② PAINT "BRIDGE NO. XX-XXXX"
- ③ CONCRETE BARRIER TYPE 736 MOD
- ④ SLOPE PAVING (1/2H:1V)
- ⑤ WINGWALL
- ⑥ AR FENCE WITH SOLID PLATE

**NOTES:**

1. ASSUME CLASS 140 PILES AT ABUTMENT AND BENT FOUNDATIONS. PILE LENGTHS TO BE DETERMINED.
2. FOR UTILITY DISPOSITIONS, SEE CIVIL AND GRADE SEPARATION PLANS; DRAWING CV-S1260-S.
3. FOR GUARDRAILS, SEE CIVIL AND GRADE SEPARATION PLANS; DRAWING CV-S1260-S.



MF-ST-K1260-C.dgn 28-APR-2015 09:17 P005133G

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**M. SUN**

DRAWN BY  
**W. JOHNSEN**

CHECKED BY  
**O. EDEWOR**

IN CHARGE  
**C. LEMLEY**

DATE  
**05/08/2015**

**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**

**NOT FOR**  
**CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO SECTION**

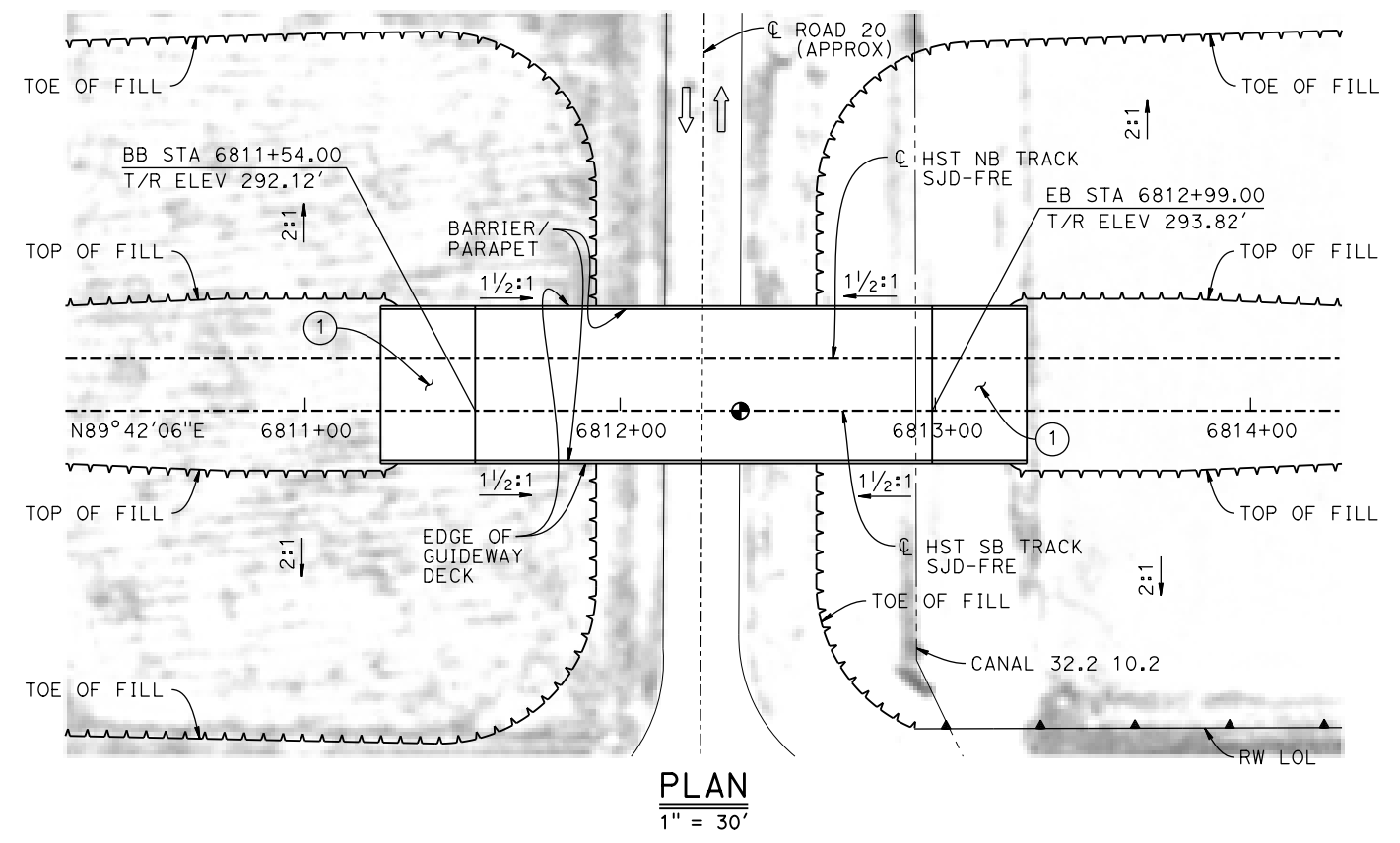
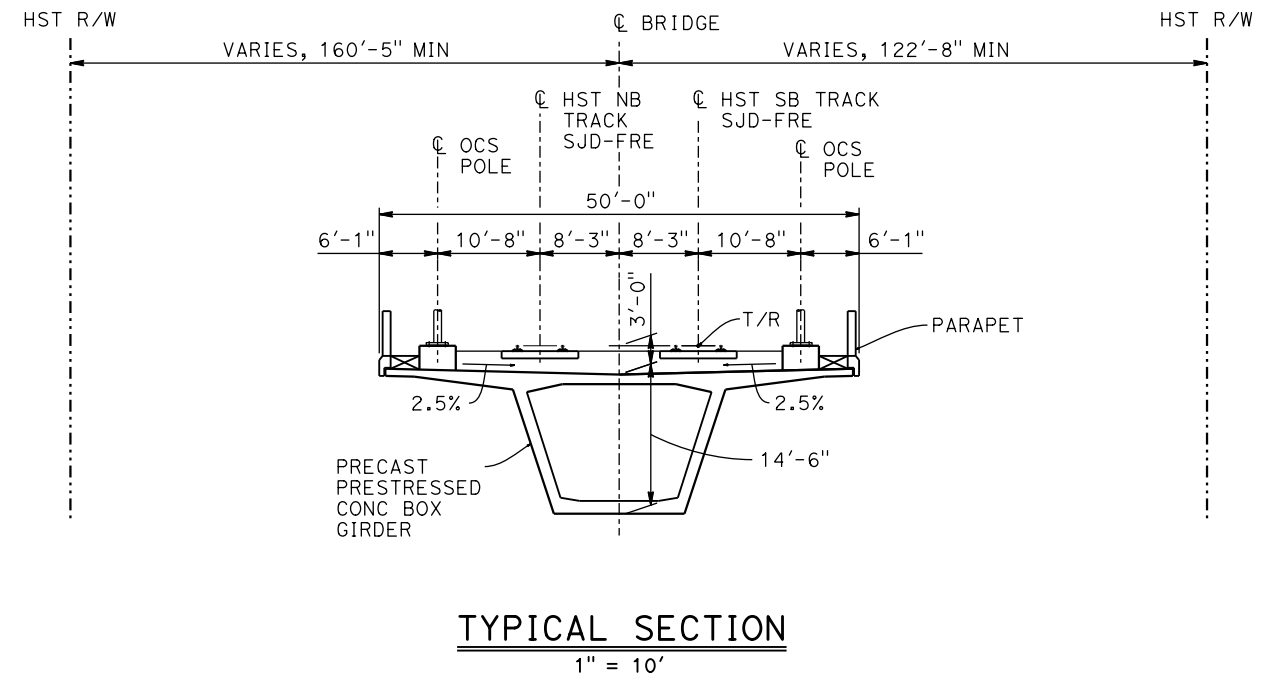
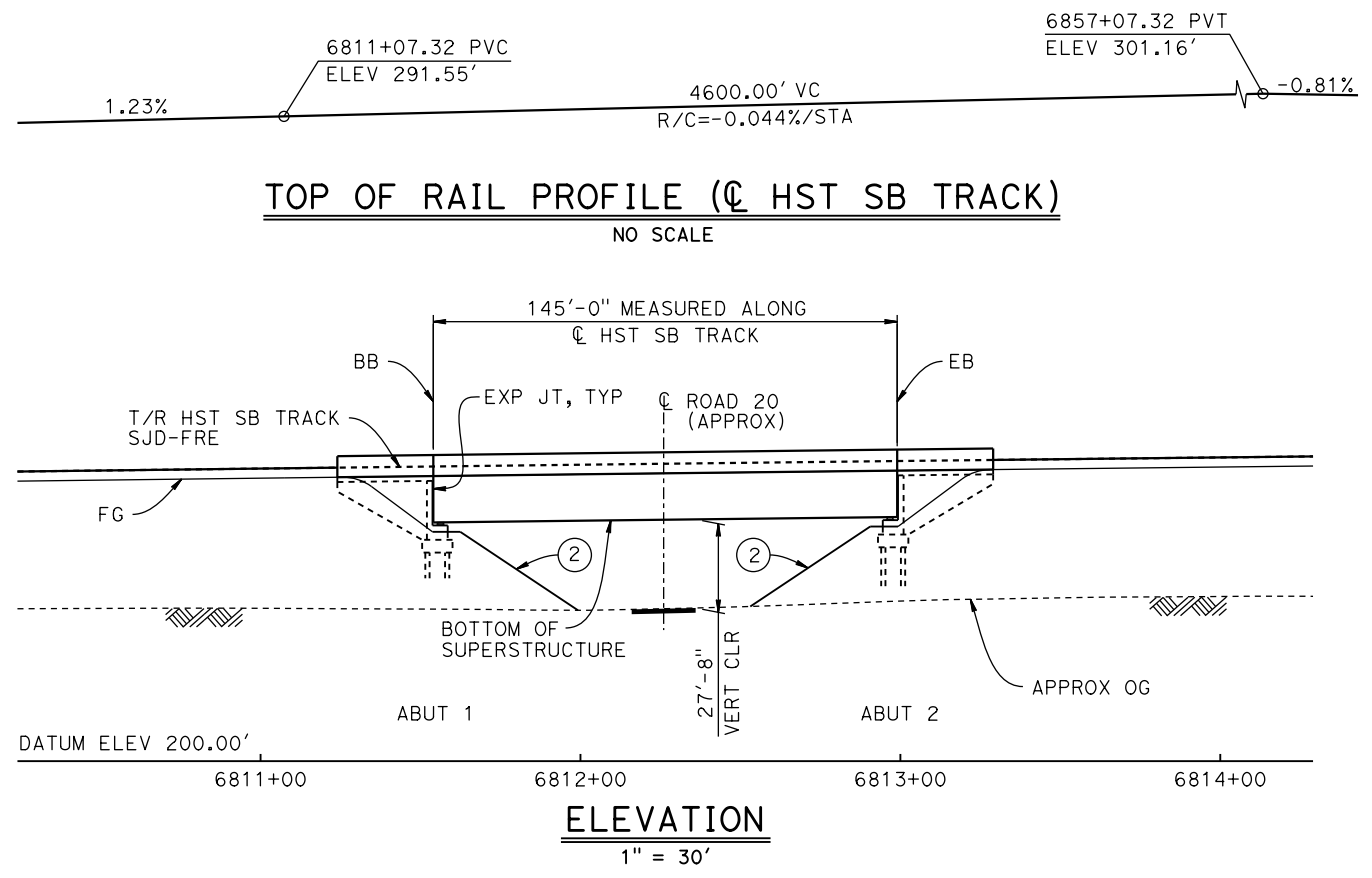
CENTRAL VALLEY WYE  
AVENUE 21 TO ROAD 13 WYE ALTERNATIVE  
GENERAL PLAN (SJD-FRE)  
ROAD 19 OVERHEAD

CONTRACT NO.  
HSR08-05

DRAWING NO.  
ST-K1260-C

SCALE  
AS SHOWN

SHEET NO.



TEMPORARY TRAFFIC OPENINGS

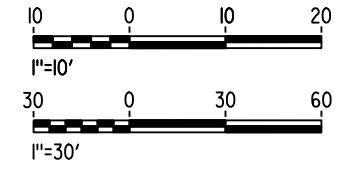
VEHICULAR TRAFFIC			
1. <u>  </u> TRAFFIC WILL BE DETOURED AWAY FROM THE SITE.			
2. <u>  </u> TRAFFIC WILL PASS UNDER THE STRUCTURE ON:			
ST OR ROAD NAME AND LOCATION		FALSEWORK OPENING REQD (HORIZ X VERT)	
ROAD 20	6812+26	32'X16.5'	2-WAY
3. <u>  </u> TEMP TRAFFIC LANE REDUCTION FOR FTG EXC.			

LEGEND:

- INDICATES POINT OF MINIMUM VERTICAL CLEARANCE
- ⇨ INDICATES DIRECTION OF TRAFFIC
- ① STRUCTURE APPROACH
- ② SLOPE PAVING (1 1/2H:1V)

NOTES:

1. 16" Ø PIPE PILES ASSUMED FOR ABUTMENT FOUNDATIONS. PILE LENGTHS TO BE DETERMINED.
2. ANY EXISTING DIRT ROAD THAT CONFLICTS WITH NEW CONSTRUCTION SHALL BE REALIGNED.
3. FOR UTILITY DISPOSITIONS, SEE CIVIL AND GRADE SEPARATION PLANS; DRAWING CV-S1270-C.
4. FOR RETAINING WALL, SEE CIVIL AND GRADE SEPARATION PLANS; DRAWING CV-S1270-C.



16-MAR-2016 09:18 MF-ST-K1270-C.dgn

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
S. J. S.

DRAWN BY  
J. C.

CHECKED BY  
O. EDEWOR

IN CHARGE  
C. LEMLEY

DATE  
05/08/2015

**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**

**NOT FOR**  
**CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO SECTION**

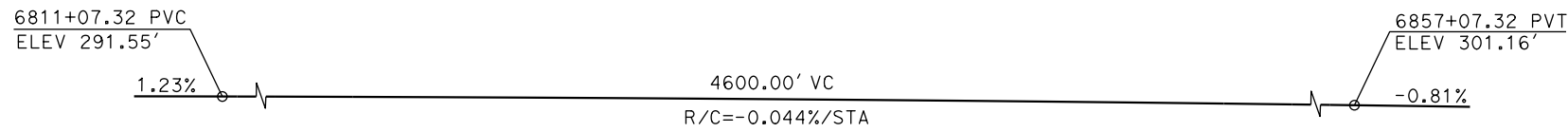
CENTRAL VALLEY WYE  
AVENUE 21 TO ROAD 13 WYE ALTERNATIVE  
GENERAL PLAN (SJD-FRE)  
ROAD 20 UNDERPASS

CONTRACT NO.  
HSR08-05

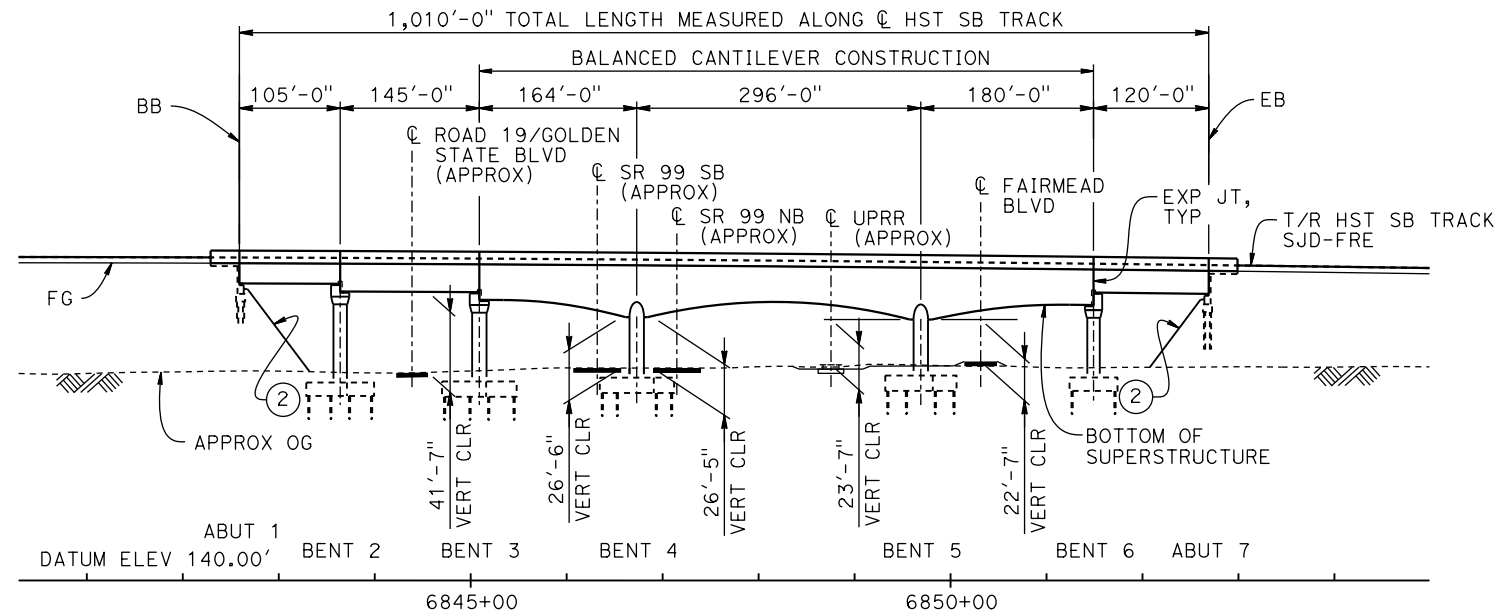
DRAWING NO.  
ST-K1270-C

SCALE  
AS SHOWN

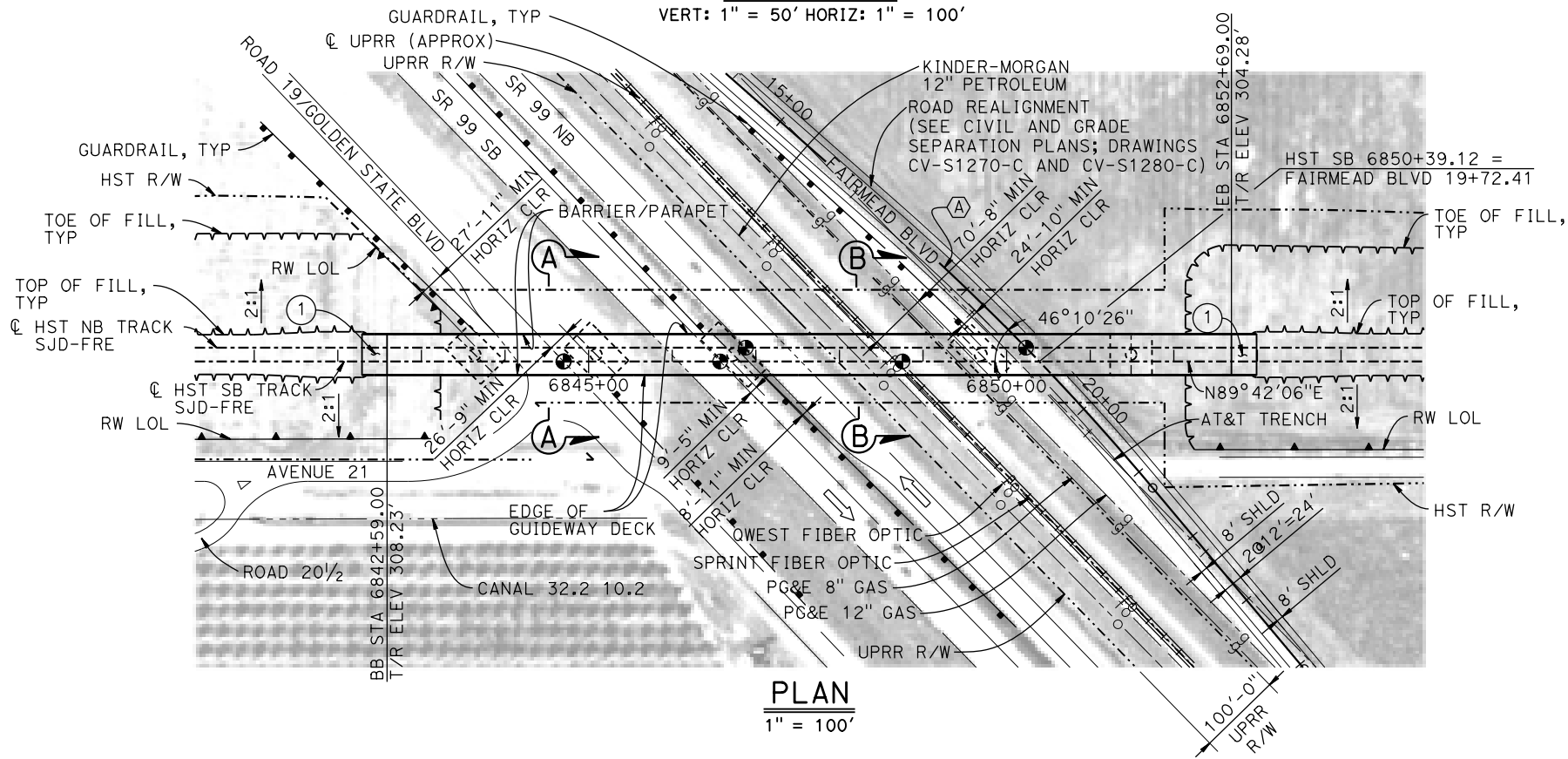
SHEET NO.



**TOP OF RAIL PROFILE (CL HST SB TRACK)**  
NO SCALE



**ELEVATION**  
VERT: 1" = 50' HORIZ: 1" = 100'



**PLAN**  
1" = 100'

**LEGEND:**

- INDICATES POINT OF MINIMUM VERTICAL CLEARANCE
- ➔ INDICATES DIRECTION OF TRAFFIC
- ① STRUCTURE APPROACH
- ② SLOPE PAVING (1 1/2H:1V)

**TEMPORARY TRAFFIC OPENINGS**

VEHICULAR TRAFFIC			
1. — TRAFFIC WILL BE DETOURED AWAY FROM THE SITE.			
2. X TRAFFIC WILL PASS UNDER THE STRUCTURE ON:			
ST OR ROAD NAME AND LOCATION		FALSEWORK OPENING REQD (HORIZ X VERT)	
ROAD 19/GOLDEN STATE BLVD	6844+40	40'x16.5'	2-WAY
SR 99	6846+35	52'x16.5'	S BND
SR 99	6847+30	52'x16.5'	N BND
FAIRMEAD BLVD	6850+39	32'x16.5'	2-WAY
3. X TEMP TRAFFIC LANE REDUCTION FOR FTG EXC.			

**TEMPORARY TRAFFIC OPENINGS**

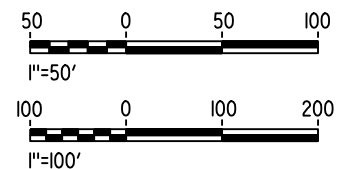
RAILROAD TRAFFIC		
FALSEWORK OPENING REQUIRED ON:		
NAME OF RR AND LOCATION		FALSEWORK OPENING REQD (HORIZ X VERT)
UPRR	6848+68	24'x21'

**NOTES:**

- 16" Ø PIPE PILES ASSUMED FOR ABUTMENT AND BENT FOUNDATIONS. PILE LENGTHS TO BE DETERMINED.
- FOR SECTIONS AND BENT COLUMN SCHEDULE, SEE DRAWING ST-K3275-C.
- ANY EXISTING DIRT ROAD THAT CONFLICTS WITH NEW CONSTRUCTION SHALL BE REALIGNED.
- FOR UTILITY DISPOSITIONS, SEE CIVIL AND GRADE SEPARATION PLANS; DRAWINGS CV-S1270-C AND CV-S1280-C.
- FOR GUARDRAILS, SEE CIVIL AND GRADE SEPARATION PLANS; DRAWINGS CV-S1270-C AND CV-S1280-C.
- FOR RETAINING WALLS, SEE CIVIL AND GRADE SEPARATION PLANS; DRAWINGS CV-S1270-C AND CV-S1280-C.

**CURVE NO. 270-02 (A)**

R = 3,000.00'  
 $\Delta = 1^\circ 54' 35''$   
 L = 454.11'  
 T = 227.49'



16-MAR-2016 09:19 MF-ST-K1275-C.dgn

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**M. SUN**

DRAWN BY  
**S. HICKS**

CHECKED BY  
**O. EDEWOR**

IN CHARGE  
**C. LEMLEY**

DATE  
**05/08/2015**

**RECORD SET**  
15% DESIGN SUBMITTAL

**NOT FOR CONSTRUCTION**



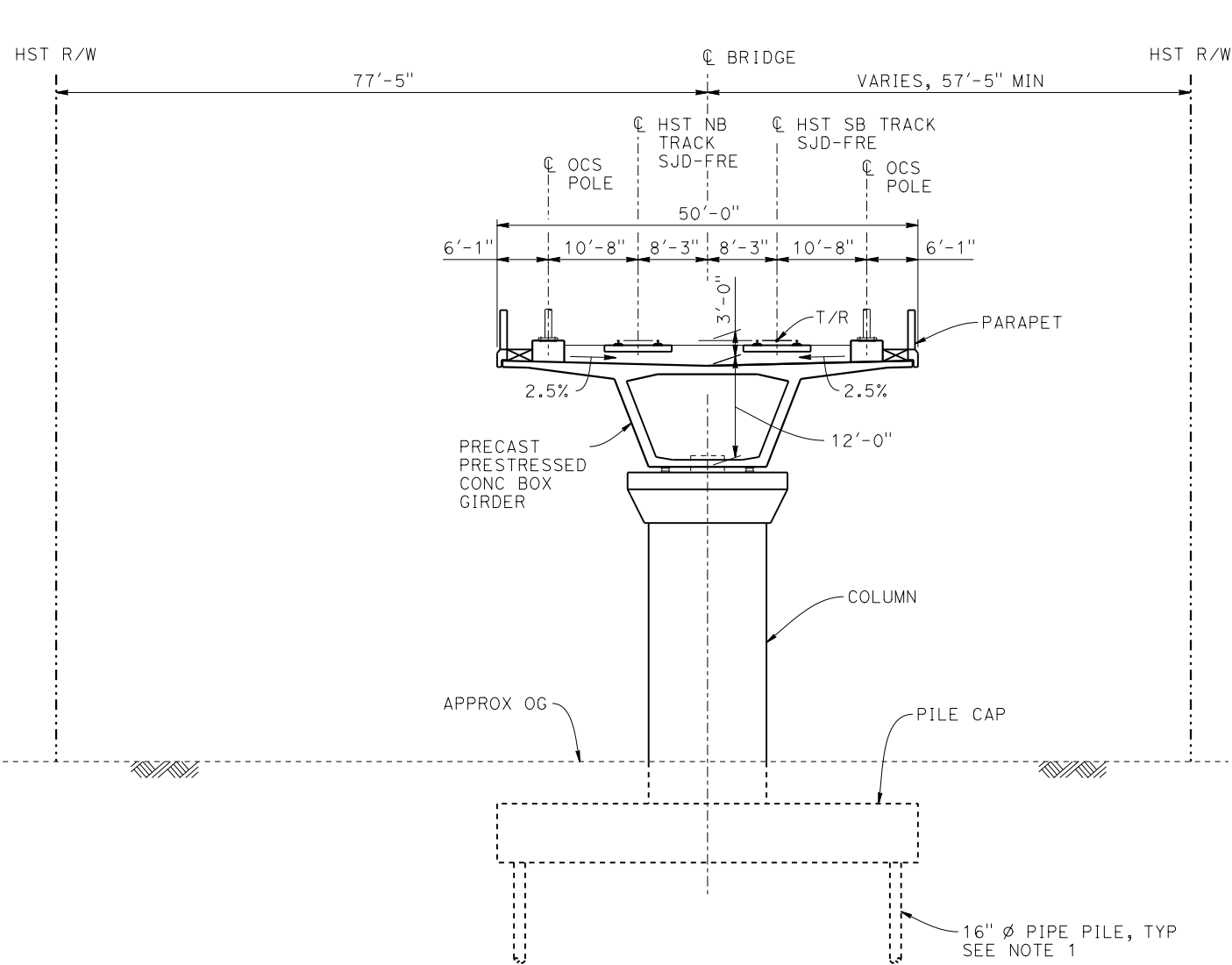
**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO SECTION**  
 CENTRAL VALLEY WYE  
 AVENUE 21 TO ROAD 13 WYE ALTERNATIVE  
 GENERAL PLAN (SJD-FRE)  
 AERIAL #3 - SR 99 / UPRR - 1 OF 2

CONTRACT NO.  
HSR08-05

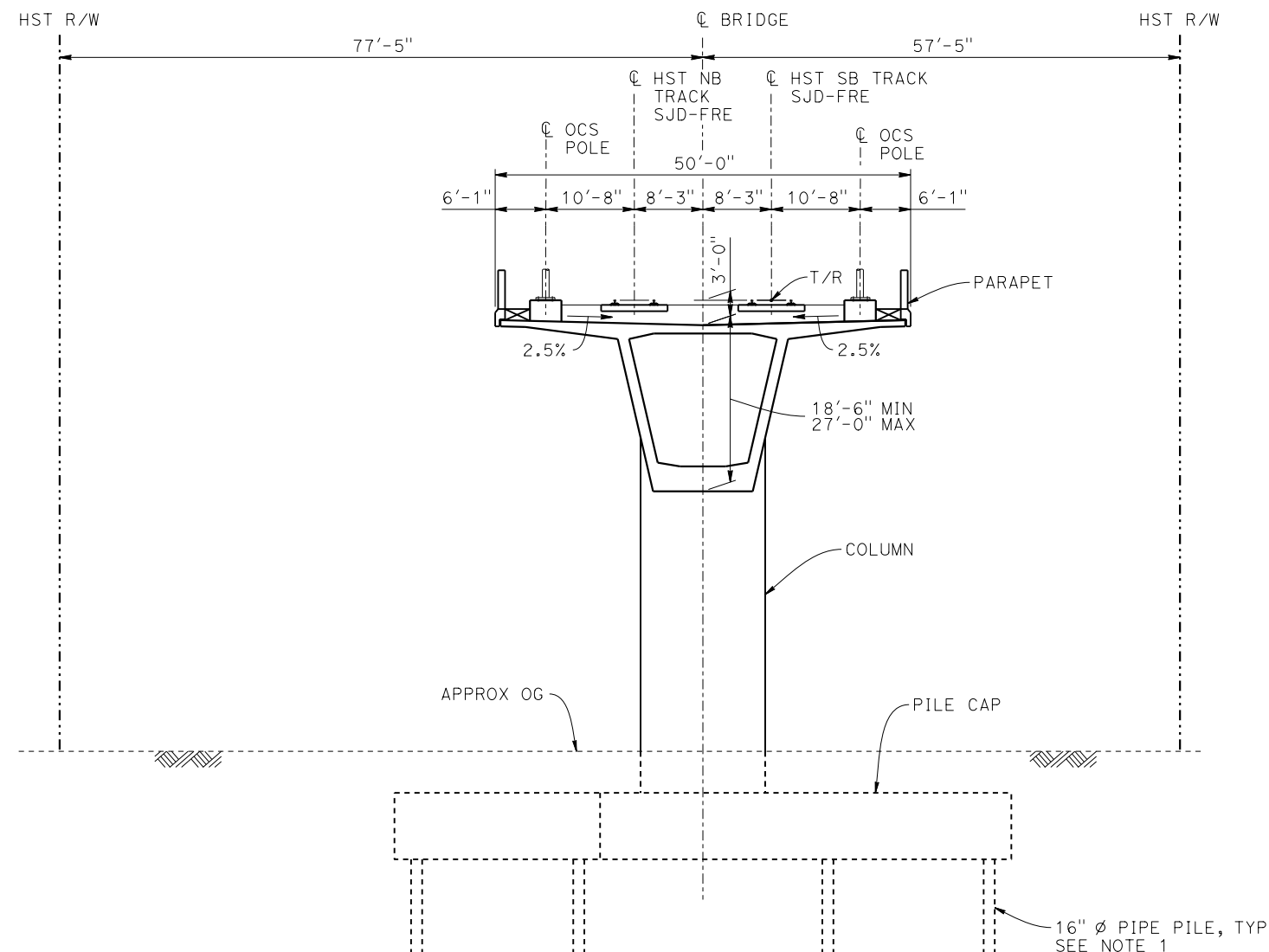
DRAWING NO.  
ST-K1275-C

SCALE  
AS SHOWN

SHEET NO.



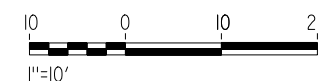
**SECTION A-A**  
1" = 10'



**SECTION B-B**  
1" = 10'

BENT COLUMN SCHEDULE	
BENT	COLUMN TYPE
2 - 3	14'-0" $\phi$
4 - 5	15'-0" $\phi$
6	13'-0" $\phi$

**NOTES:**  
1. PILE LENGTHS TO BE DETERMINED.



05-FEB-2015 11:46 MF-ST-K3275-C.dgn

REV	DATE	BY	CHK	APP	DESCRIPTION

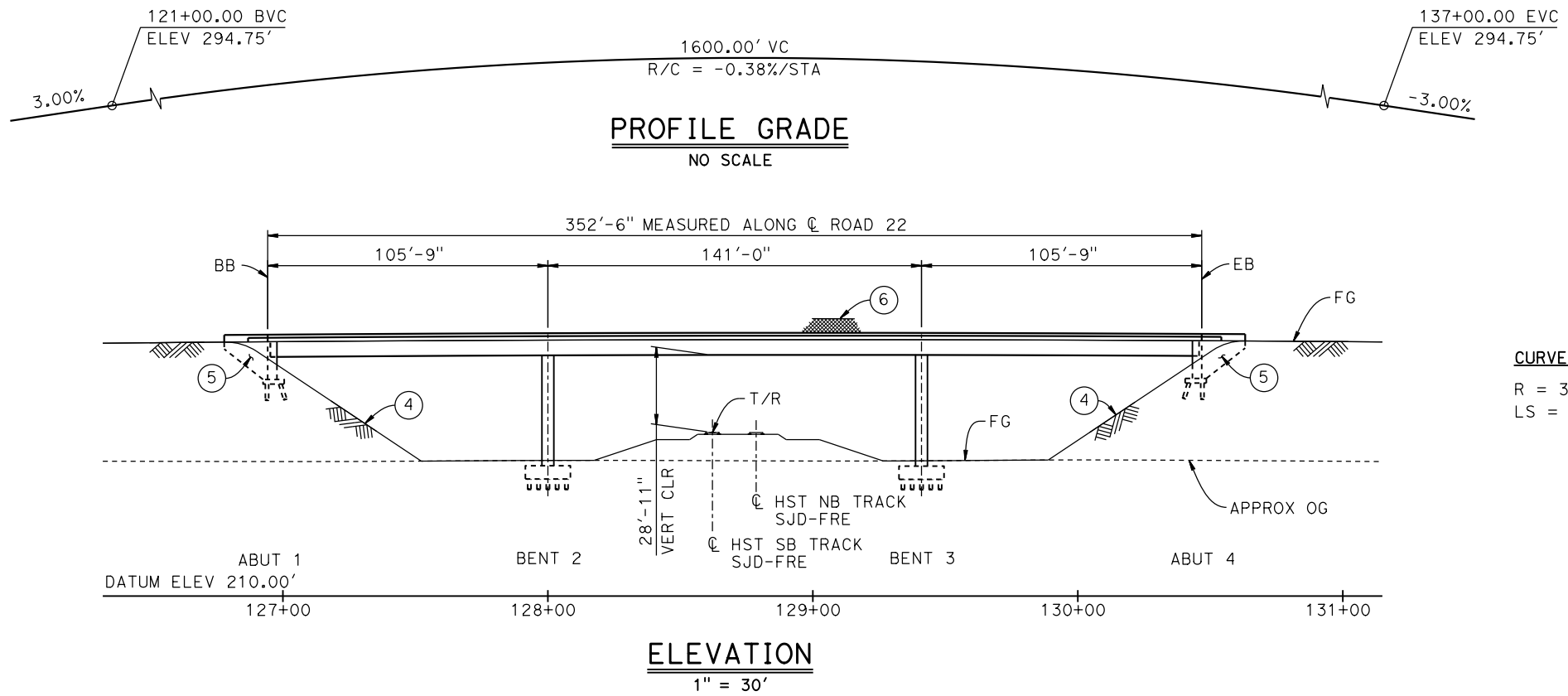
DESIGNED BY  
**M. SUN**  
DRAWN BY  
**S. HICKS**  
CHECKED BY  
**O. EDEWOR**  
IN CHARGE  
**C. LEMLEY**  
DATE  
**02/13/2015**

**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**  
  
**NOT FOR**  
**CONSTRUCTION**

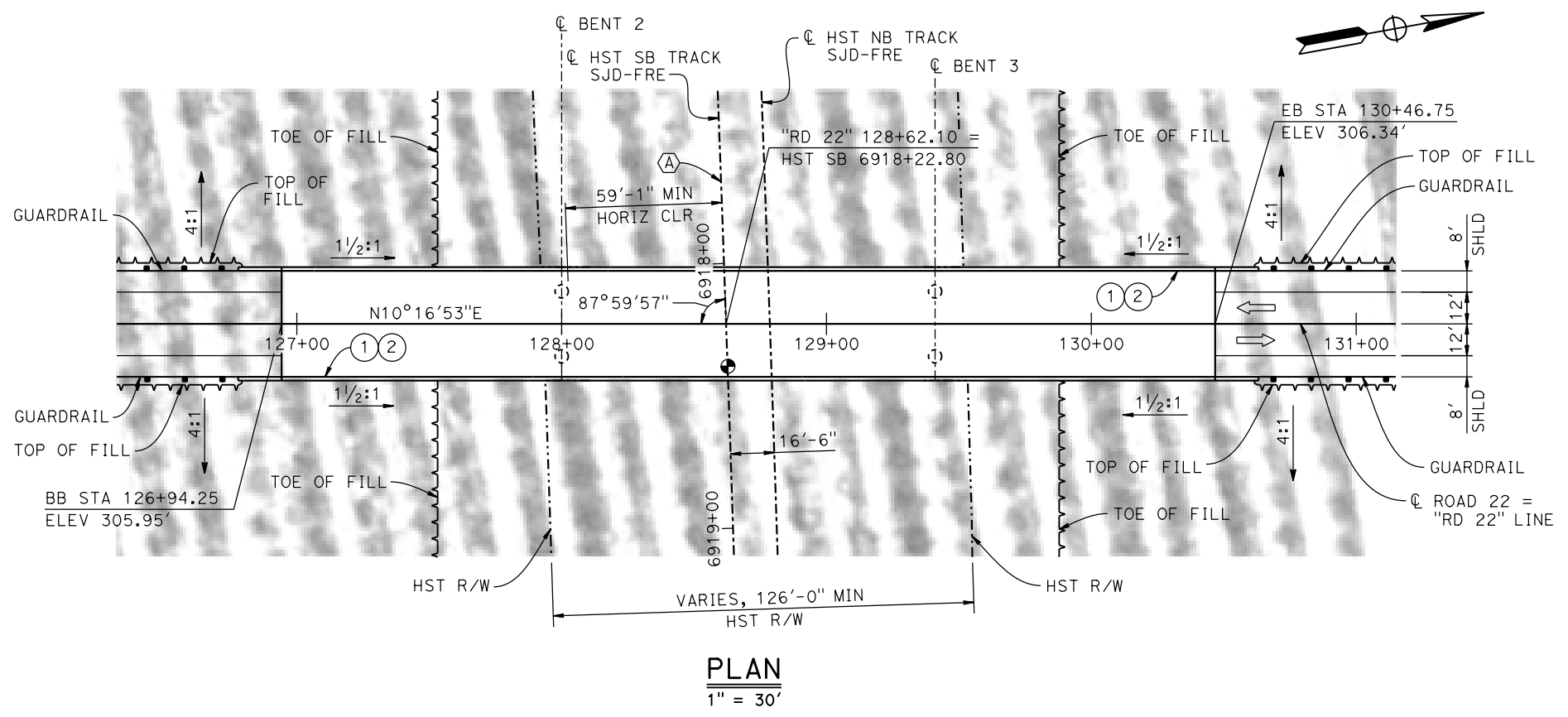
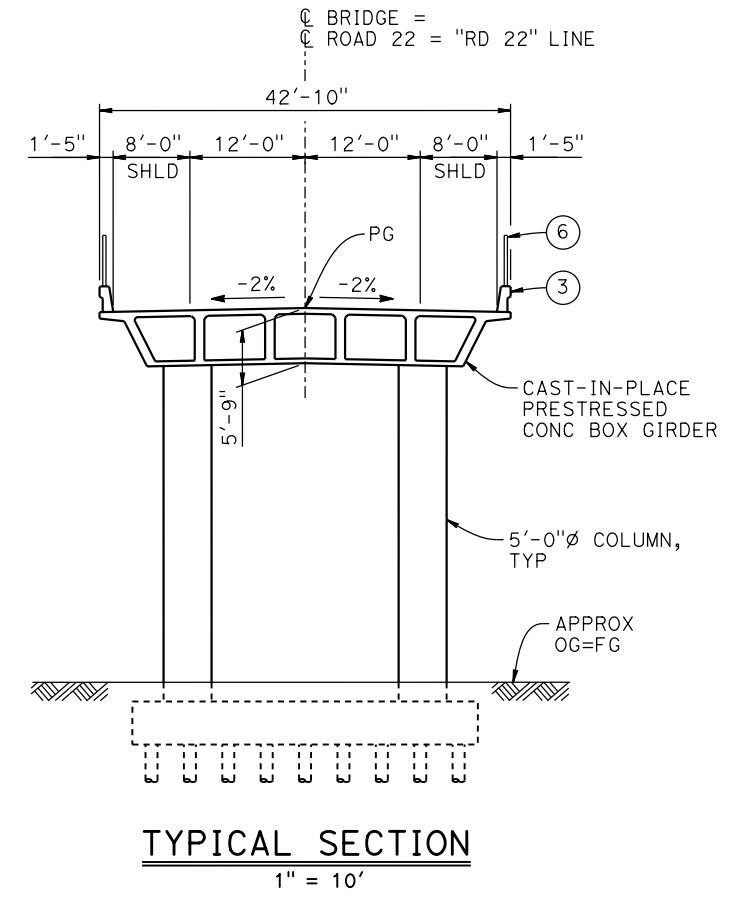


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO SECTION**  
CENTRAL VALLEY WYE  
AVENUE 21 TO ROAD 13 WYE ALTERNATIVE  
TYPICAL SECTIONS (SJD-FRE)  
AERIAL #3 - SR 99 / UPRR - 2 OF 2

CONTRACT NO.  
HSR08-05  
DRAWING NO.  
ST-K3275-C  
SCALE  
AS SHOWN  
SHEET NO.

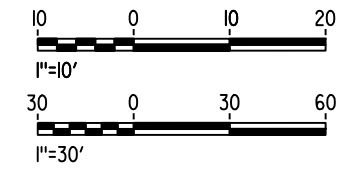


**CURVE SJD-FRE 7 SB (A)**  
R = 35,000.00'  
LS = 1,750.00'



- LEGEND:**
- INDICATES POINT OF MINIMUM VERTICAL CLEARANCE
  - INDICATES DIRECTION OF TRAFFIC
  - ① PAINT "ROAD 22 OVERHEAD"
  - ② PAINT "BRIDGE NO. XX-XXXX"
  - ③ CONCRETE BARRIER TYPE 736 MOD
  - ④ SLOPE PAVING (1 1/2H:1V)
  - ⑤ WINGWALL
  - ⑥ AR FENCE WITH SOLID PLATE

- NOTES:**
1. ASSUME CLASS 140 PILES AT ABUTMENT AND BENT FOUNDATIONS. PILE LENGTHS TO BE DETERMINED.
  2. FOR UTILITY DISPOSITIONS, SEE CIVIL AND GRADE SEPARATION PLANS; DRAWING CV-S1290-C.
  3. FOR GUARDRAILS, SEE CIVIL AND GRADE SEPARATION PLANS; DRAWING CV-S1290-C.



10-MAR-2016 7:33 MF-ST-K1290-C.dgn

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**M. SUN**

DRAWN BY  
**W. JOHNSEN**

CHECKED BY  
**O. EDEWOR**

IN CHARGE  
**C. LEMLEY**

DATE  
**03/18/2016**

**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**

**NOT FOR**  
**CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO SECTION**

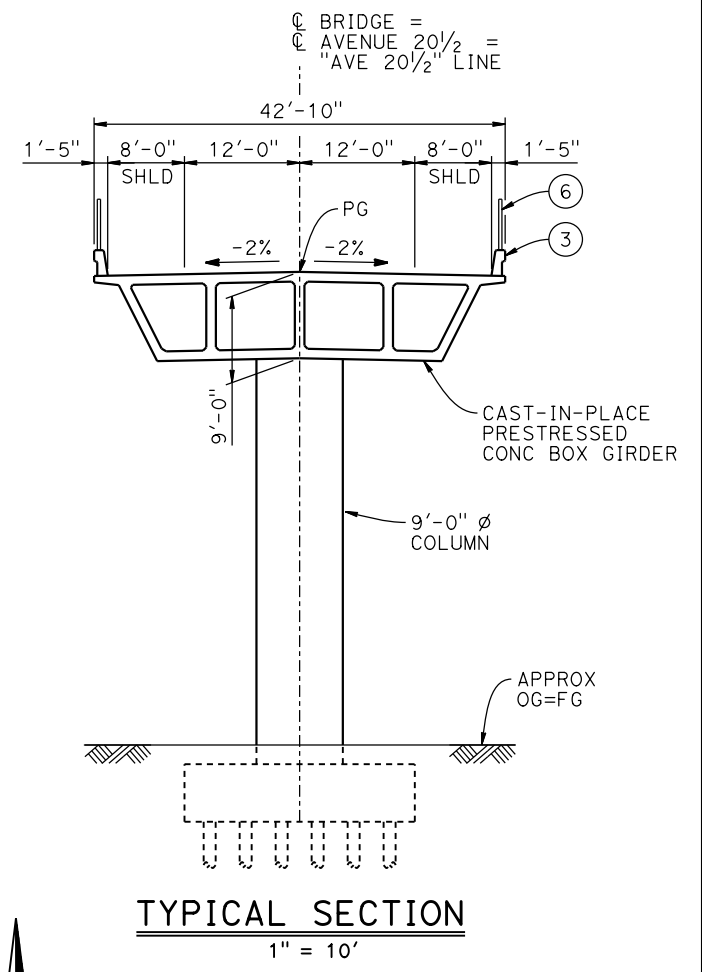
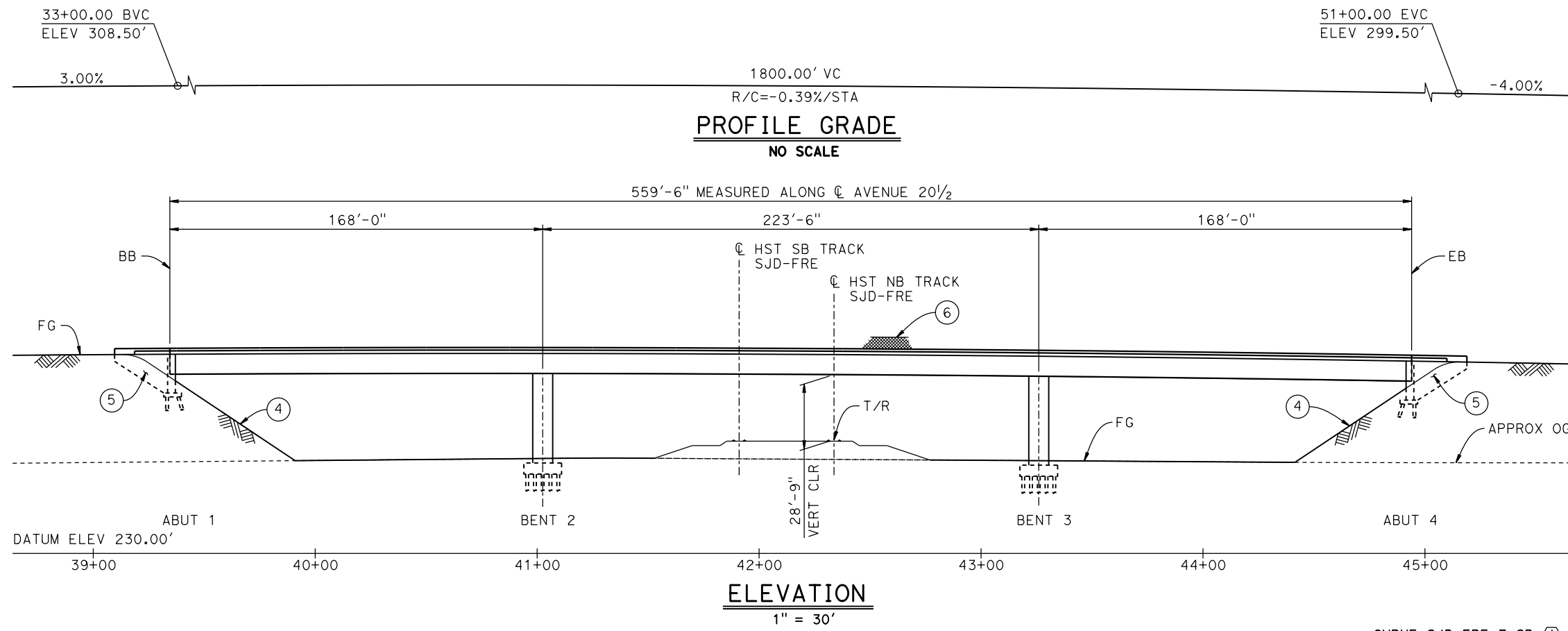
CENTRAL VALLEY WYE  
AVENUE 21 TO ROAD 13 WYE ALTERNATIVE  
GENERAL PLAN (SJD-FRE)  
ROAD 22 OVERHEAD

CONTRACT NO.  
HSR08-05

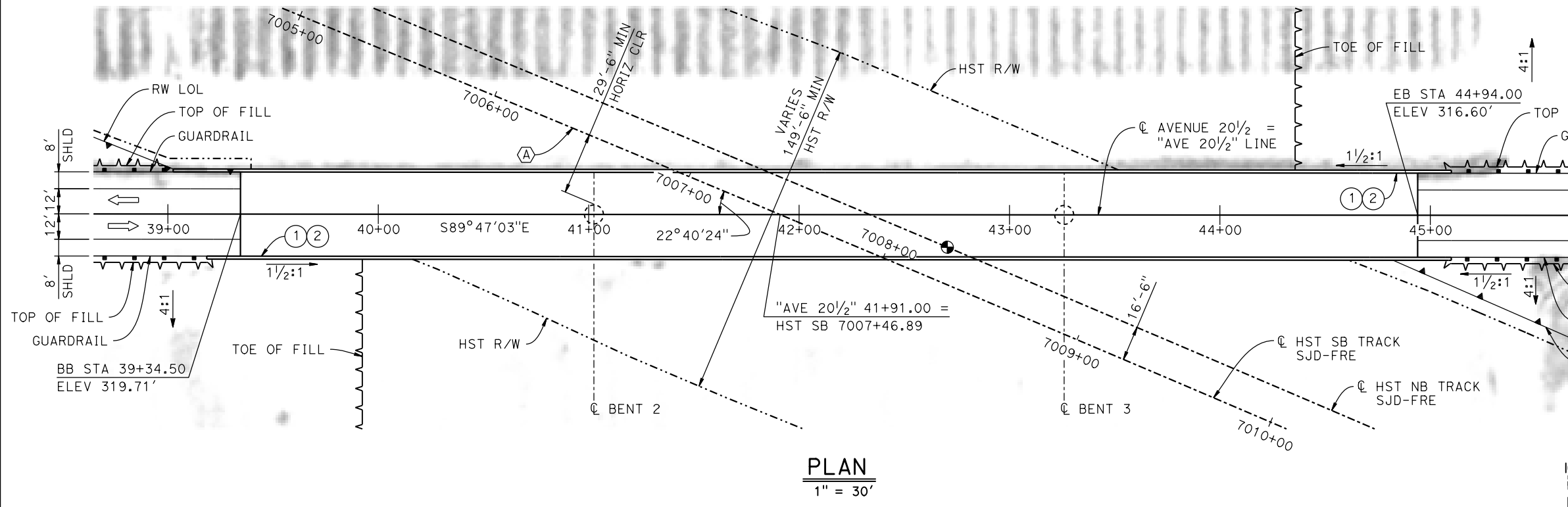
DRAWING NO.  
ST-K1290-C

SCALE  
AS SHOWN

SHEET NO.

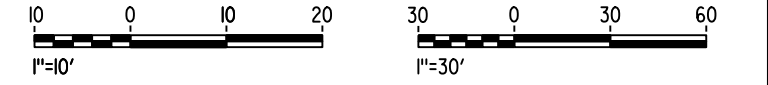


CURVE SJD-FRE 7 SB (A)  
 R = 35,000.00'  
 LS = 1,750.00'



- LEGEND:**
- INDICATES POINT OF MINIMUM VERTICAL CLEARANCE
  - ➔ INDICATES DIRECTION OF TRAFFIC
  - ① PAINT "AVENUE 20 1/2 OVERHEAD"
  - ② PAINT "BRIDGE NO. XX-XXXX"
  - ③ CONCRETE BARRIER TYPE 736 MOD
  - ④ SLOPE PAVING (1 1/2 H:1 V)
  - ⑤ WINGWALL
  - ⑥ AR FENCE WITH SOLID PLATE

- NOTES:**
1. ASSUME CLASS 140 PILES AT ABUTMENT AND BENT FOUNDATIONS. PILE LENGTHS TO BE DETERMINED.
  2. FOR UTILITY DISPOSITIONS, SEE CIVIL AND GRADE SEPARATION PLANS; DRAWING CV-S1300-C.
  3. FOR GUARDRAILS, SEE CIVIL AND GRADE SEPARATION PLANS; DRAWING CV-S1300-C.
  4. FOR RETAINING WALLS, SEE CIVIL AND GRADE SEPARATION PLANS; DRAWING CV-S1300-C.



10-MAR-2016 7:33 MF-ST-K1300-C.dgn

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**M. SUN**

DRAWN BY  
**W. JOHNSON**

CHECKED BY  
**O. EDEWOR**

IN CHARGE  
**C. LEMLEY**

DATE  
**03/18/2016**

**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**

**NOT FOR**  
**CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO SECTION**

CENTRAL VALLEY WYE  
 AVENUE 21 TO ROAD 13 WYE ALTERNATIVE  
 GENERAL PLAN (SJD-FRE)  
 AVENUE 20 1/2 OVERHEAD

CONTRACT NO.  
HSR08-05

DRAWING NO.  
ST-K1300-C

SCALE  
AS SHOWN

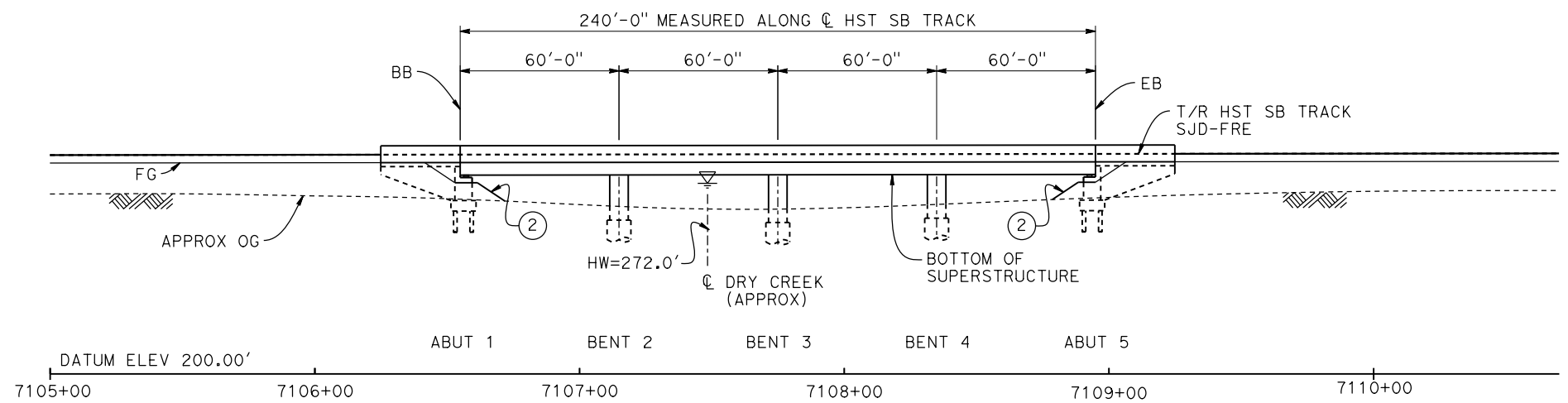
SHEET NO.

7086+00.00 PVT  
ELEV 280.56'

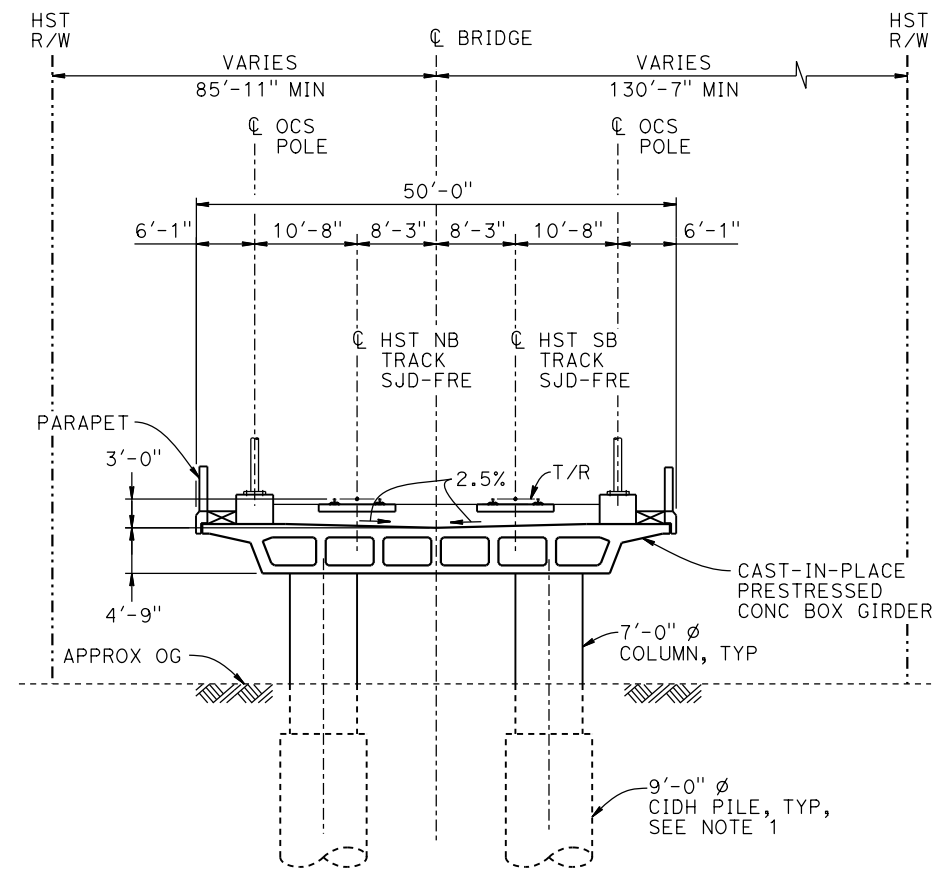
7280+94.14 PVC  
ELEV 302.17'

0.11%

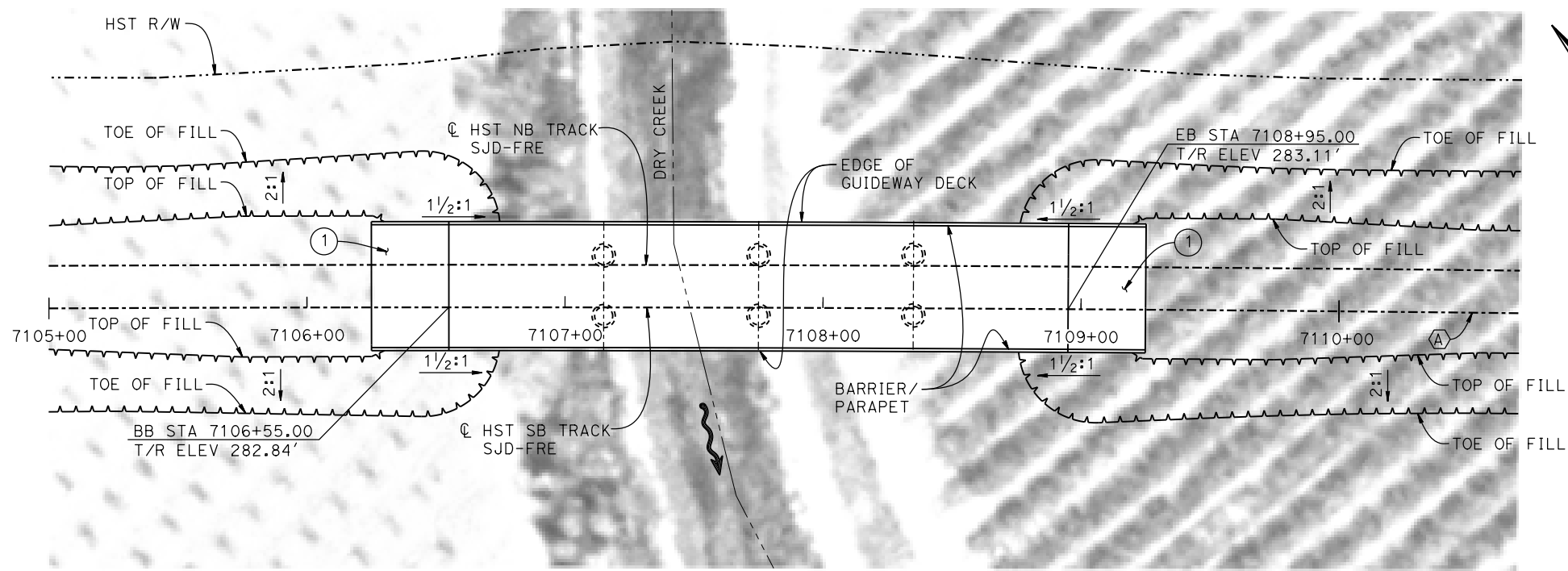
**TOP OF RAIL PROFILE (CL HST SB TRACK)**  
NO SCALE



**DEVELOPED ELEVATION**  
1" = 30'



**TYPICAL SECTION**  
1" = 10'



**PLAN**  
1" = 30'

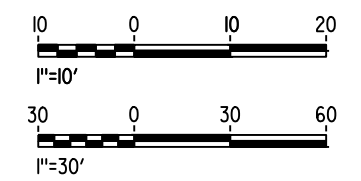
**LEGEND:**

- INDICATES DIRECTION OF FLOW
- ① STRUCTURE APPROACH
- ② SLOPE PAVING (1 1/2H:1V)

**NOTES:**

1. 16"Ø PIPE PILES ASSUMED FOR ABUTMENT FOUNDATIONS. PILE AND DRILLED SHAFT LENGTHS TO BE DETERMINED.
2. FOR UTILITY DISPOSITIONS, SEE CIVIL AND GRADE SEPARATION PLANS; DRAWING CV-S1320-C.
3. ANY EXISTING DIRT ROAD THAT CONFLICTS WITH NEW CONSTRUCTION SHALL BE REALIGNED.
4. FOR TRACK SUPERELEVATION DETAILS, SEE ALIGNMENT AND TYPICAL SECTION PLANS; DRAWING TT-BO052-C.

CURVE SJD-FRE 7 SB (A)  
R = 35,000.00'  
LS = 1,750.00'



10-MAR-2016 7:34 MF-ST-K1320-C.dgn

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**S. J. S.**

DRAWN BY  
**A. M.**

CHECKED BY  
**O. EDEWOR**

IN CHARGE  
**C. LEMLEY**

DATE  
**03/18/2016**

**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**

**NOT FOR**  
**CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO SECTION**

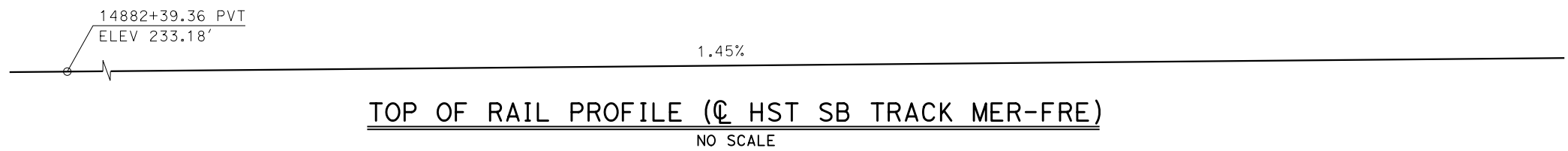
CENTRAL VALLEY WYE  
AVENUE 21 TO ROAD 13 WYE ALTERNATIVE  
GENERAL PLAN (SJD-FRE)  
DRY CREEK BRIDGE

CONTRACT NO.  
HSR08-05

DRAWING NO.  
ST-K1320-C

SCALE  
AS SHOWN

SHEET NO.

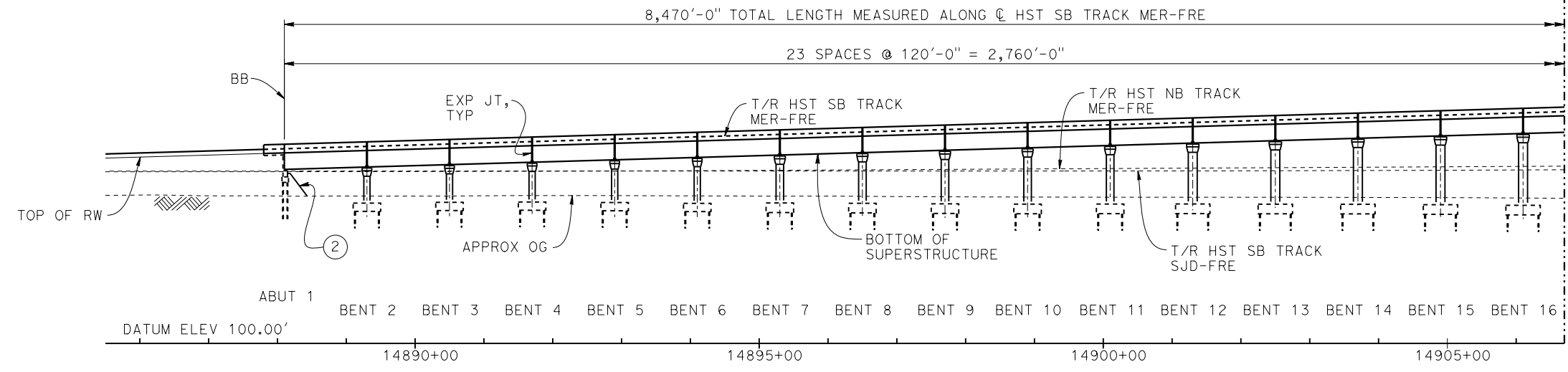


- LEGEND:**
- ⊕ INDICATES POINT OF MINIMUM VERTICAL CLEARANCE
  - INDICATES DIRECTION OF FLOW
  - ① STRUCTURE APPROACH
  - ② SLOPE PAVING (1 1/2 H:1 V)

**CURVE MER-FRE 1 SB (A)**  
 R = 10,375.00'  
 LS = 1,500.00'

**TEMPORARY TRAFFIC OPENINGS**

VEHICULAR TRAFFIC			
1. <u>  </u> TRAFFIC WILL BE DETOURED AWAY FROM THE SITE.			
2. <u>  </u> TRAFFIC WILL PASS UNDER THE STRUCTURE ON:			
ST OR ROAD NAME AND LOCATION		FALSEWORK OPENING REQD (HORIZ X VERT)	
LEVEE ROAD	14943+78	20'X16.5'	-
LEVEE ROAD	14945+62	20'X16.5'	-
ROAD 14	14971+49	32'X16.5'	2-WAY
3. <u>  </u> TEMP TRAFFIC LANE REDUCTION FOR FTG EXC.			



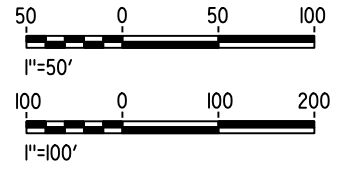
**DEVELOPED ELEVATION**  
 VERT: 1" = 50' HORIZ: 1" = 100'



**PLAN**  
 1" = 100'

**NOTES:**

1. 16" Ø PIPE PILES ASSUMED FOR ABUTMENT AND BENT FOUNDATIONS, UNLESS OTHERWISE NOTED. PILE LENGTHS TO BE DETERMINED.
2. FOR SECTIONS AND BENT COLUMN SCHEDULE, SEE DRAWINGS ST-K3420-C AND ST-K3421-C.
3. ANY EXISTING DIRT ROAD THAT CONFLICTS WITH NEW CONSTRUCTION SHALL BE REALIGNED.
4. FOR UTILITY DISPOSITIONS, SEE CIVIL AND GRADE SEPARATION PLANS; DRAWINGS CV-S1410-C, CV-S1420-C AND CV-S1430-C.
5. FOR RETAINING WALLS, SEE CIVIL AND GRADE SEPARATION PLANS; DRAWINGS CV-S1410-C, CV-S1420-C, AND CV-S1430-C.
6. FOR GUARDRAILS, SEE CIVIL AND GRADE SEPARATION PLAN; DRAWINGS CV-S1410-C, CV-S1420-C AND CV-S1430-C.
7. FOR HST NB BRIDGE OVER BERENDA SLOUGH GENERAL PLAN AND TYPICAL SECTION, SEE DRAWING ST-K1426-C.
8. FOR ROAD 14 UNDERPASS (HST NB) GENERAL PLAN AND TYPICAL SECTION, SEE DRAWING ST-K1430-C.



28-APR-2015 09:24 MF-ST-K1420-C.dgn

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**M. SUN**

DRAWN BY  
**A. M.**

CHECKED BY  
**O. EDEWOR**

IN CHARGE  
**C. LEMLEY**

DATE  
**05/08/2015**

**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**

**NOT FOR**  
**CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO SECTION**

CENTRAL VALLEY WYE  
 AVENUE 21 TO ROAD 13 WYE ALTERNATIVE  
 GENERAL PLAN (MER-FRE)

AERIAL #4 - SOUTHBOUND OVER HST MAINLINE - 1 OF 6

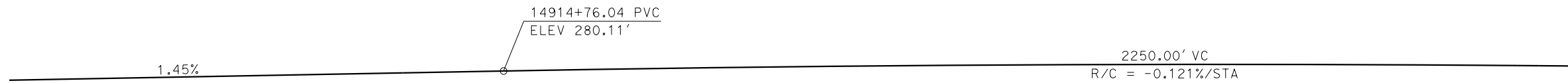
CONTRACT NO.  
HSR08-05

DRAWING NO.  
ST-K1420-C

SCALE  
AS SHOWN

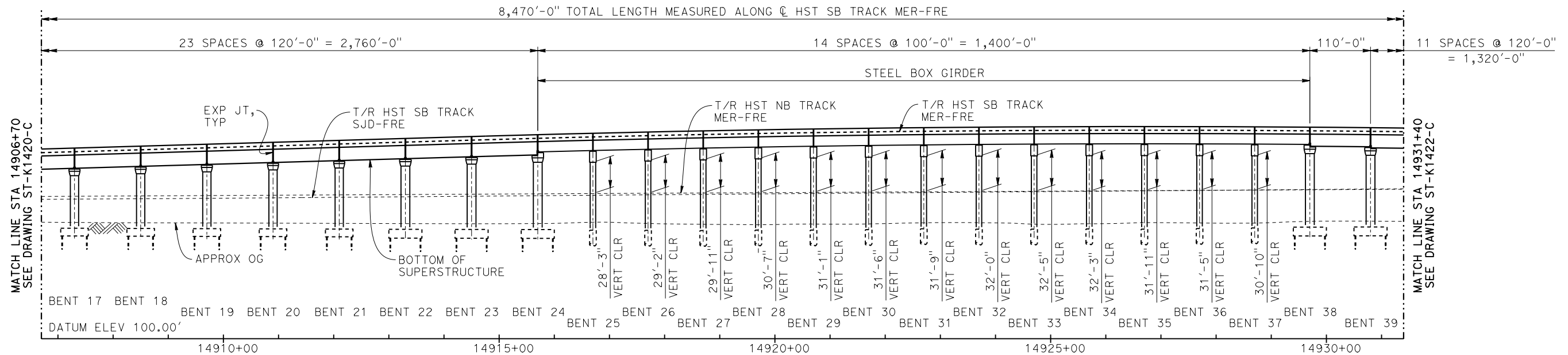
SHEET NO.





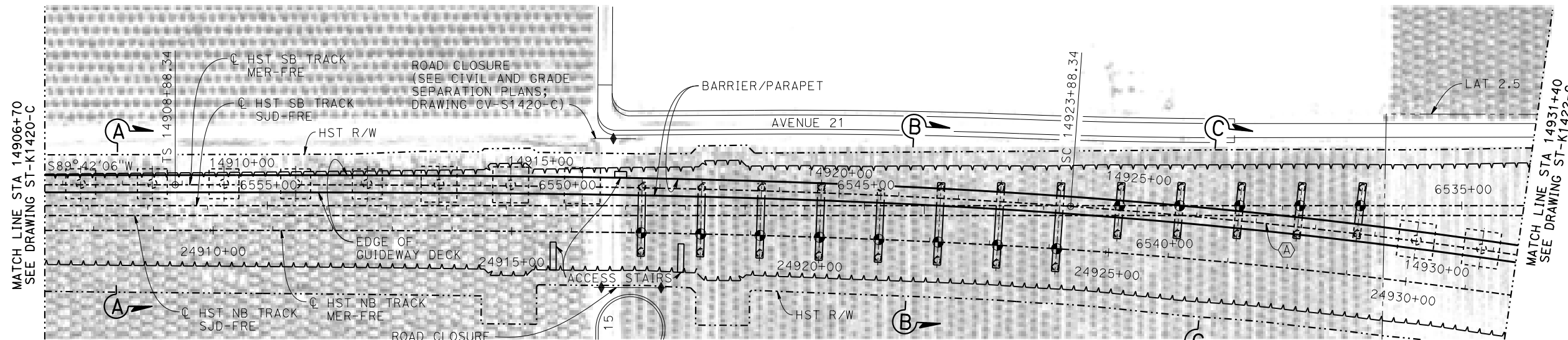
**TOP OF RAIL PROFILE (☉ HST SB TRACK MER-FRE)**

NO SCALE



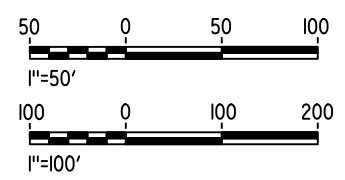
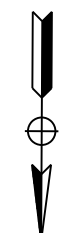
**DEVELOPED ELEVATION**

VERT: 1" = 50' HORIZ: 1" = 100'



**PLAN**

1" = 100'



MF-ST-K1421-C.dgn  
 28-APR-2015 09:25  
 P005133G

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**M. SUN**  
 DRAWN BY  
**A. M.**  
 CHECKED BY  
**O. EDEWOR**  
 IN CHARGE  
**C. LEMLEY**  
 DATE  
**05/08/2015**

**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**  
  
**NOT FOR**  
**CONSTRUCTION**



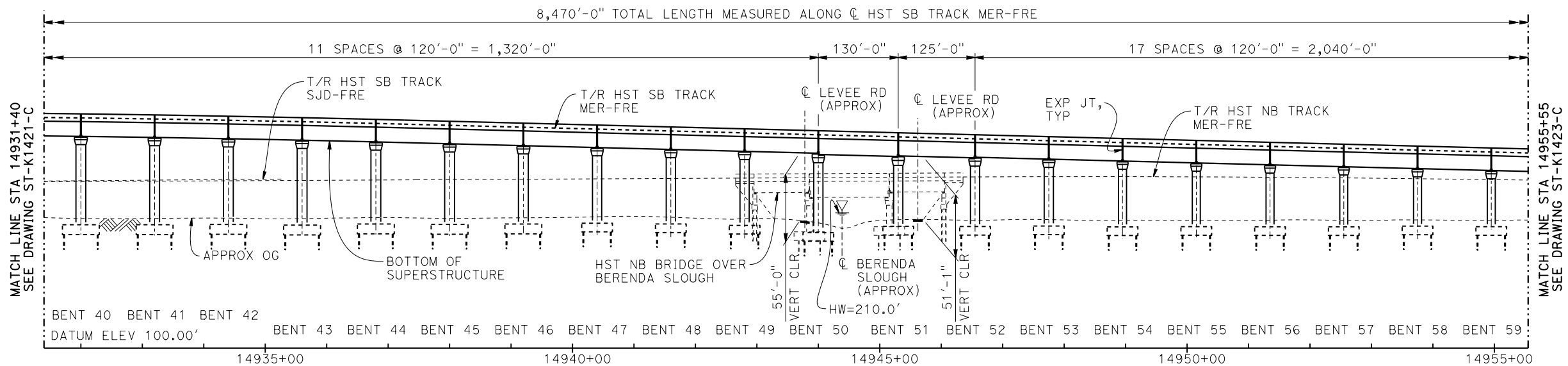
**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO SECTION**  
 CENTRAL VALLEY WYE  
 AVENUE 21 TO ROAD 13 WYE ALTERNATIVE  
 GENERAL PLAN (MER-FRE)  
 AERIAL #4 - SOUTHBOUND OVER HST MAINLINE - 2 OF 6

CONTRACT NO.  
**HSR08-05**  
 DRAWING NO.  
**ST-K1421-C**  
 SCALE  
**AS SHOWN**  
 SHEET NO.



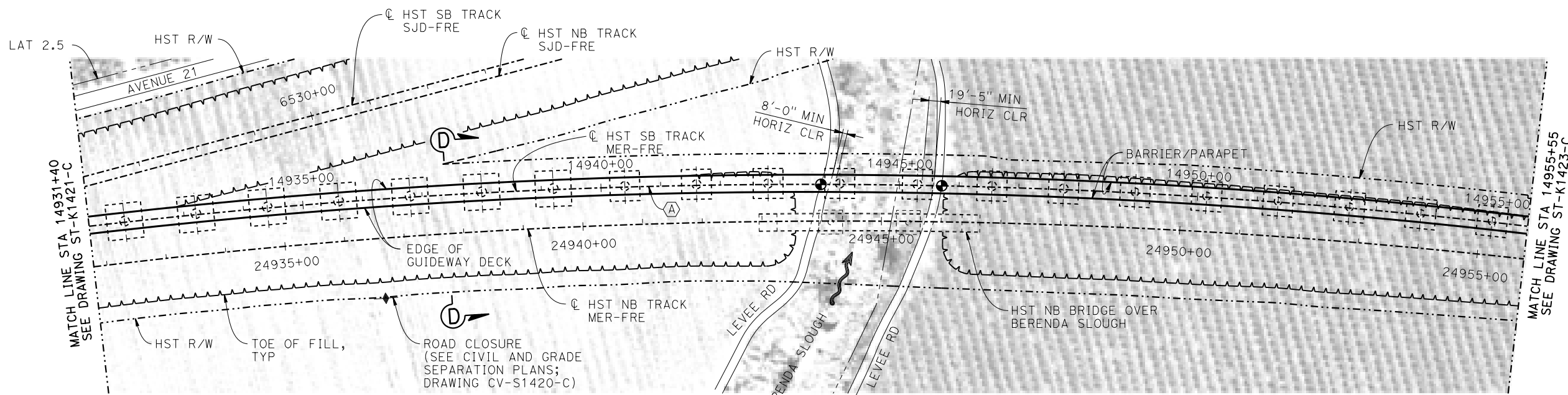
**TOP OF RAIL PROFILE (☉ HST SB TRACK MER-FRE)**

NO SCALE



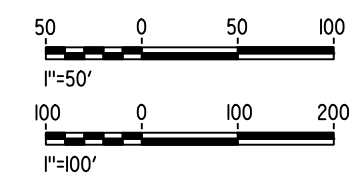
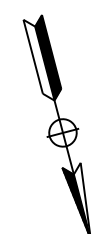
**DEVELOPED ELEVATION**

VERT: 1" = 50' HORIZ: 1" = 100'



**PLAN**

1" = 100'



MF-ST-K1422-C.dgn 28-APR-2015 09:26 P005133G

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**M. SUN**

DRAWN BY  
**A. M.**

CHECKED BY  
**O. EDEWOR**

IN CHARGE  
**C. LEMLEY**

DATE  
**05/08/2015**

**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**

**NOT FOR**  
**CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO SECTION**

CENTRAL VALLEY WYE  
AVENUE 21 TO ROAD 13 WYE ALTERNATIVE  
GENERAL PLAN (MER-FRE)

AERIAL #4 - SOUTHBOUND OVER HST MAINLINE - 3 OF 6

CONTRACT NO.  
HSR08-05

DRAWING NO.  
ST-K1422-C

SCALE  
AS SHOWN

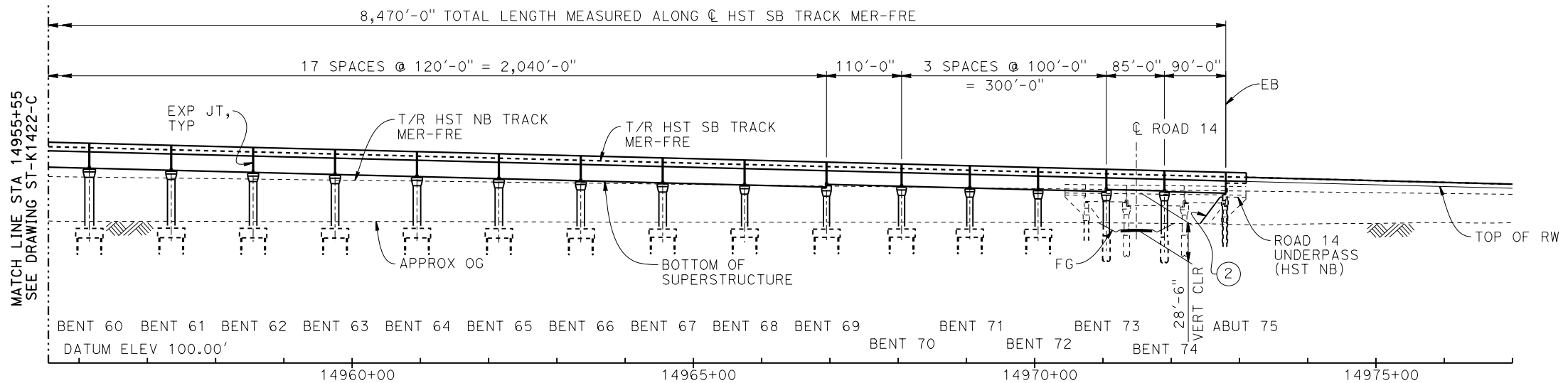
SHEET NO.

14982+82.76 PVC  
ELEV 223.65'

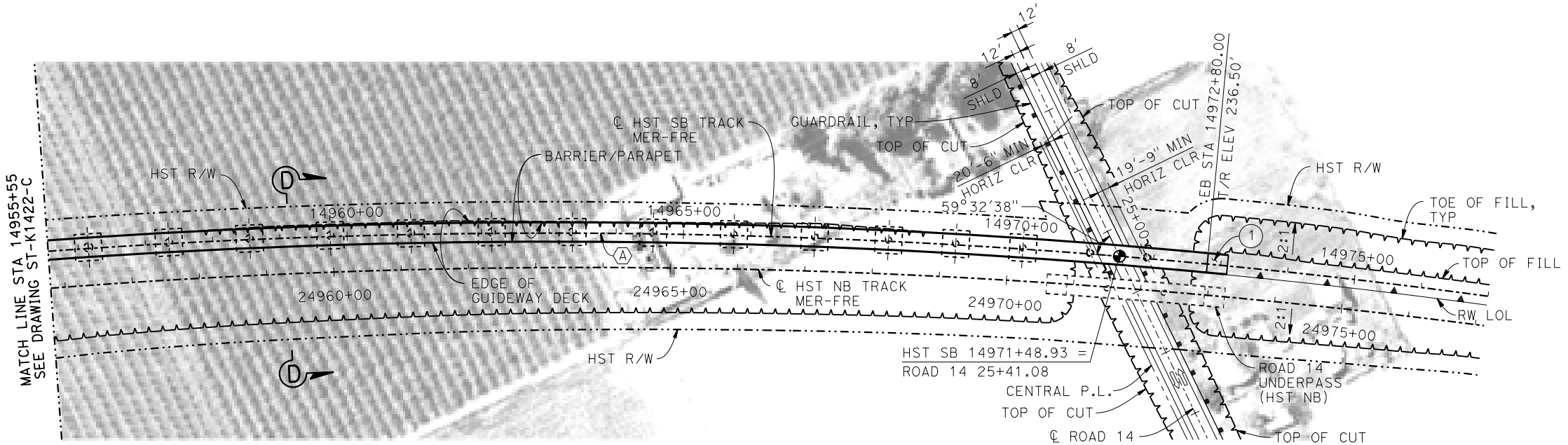
-1.28%

**TOP OF RAIL PROFILE (© HST SB TRACK MER-FRE)**

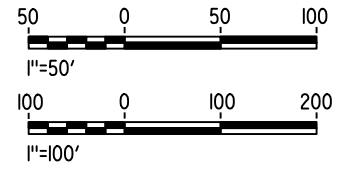
NO SCALE



**DEVELOPED ELEVATION**  
VERT: 1" = 50' HORIZ: 1" = 100'



**PLAN**  
1" = 100'



28-APR-2015 09:27 MF-ST-K1423-C.dgn

REV	DATE	BY	CHK	APP	DESCRIPTION

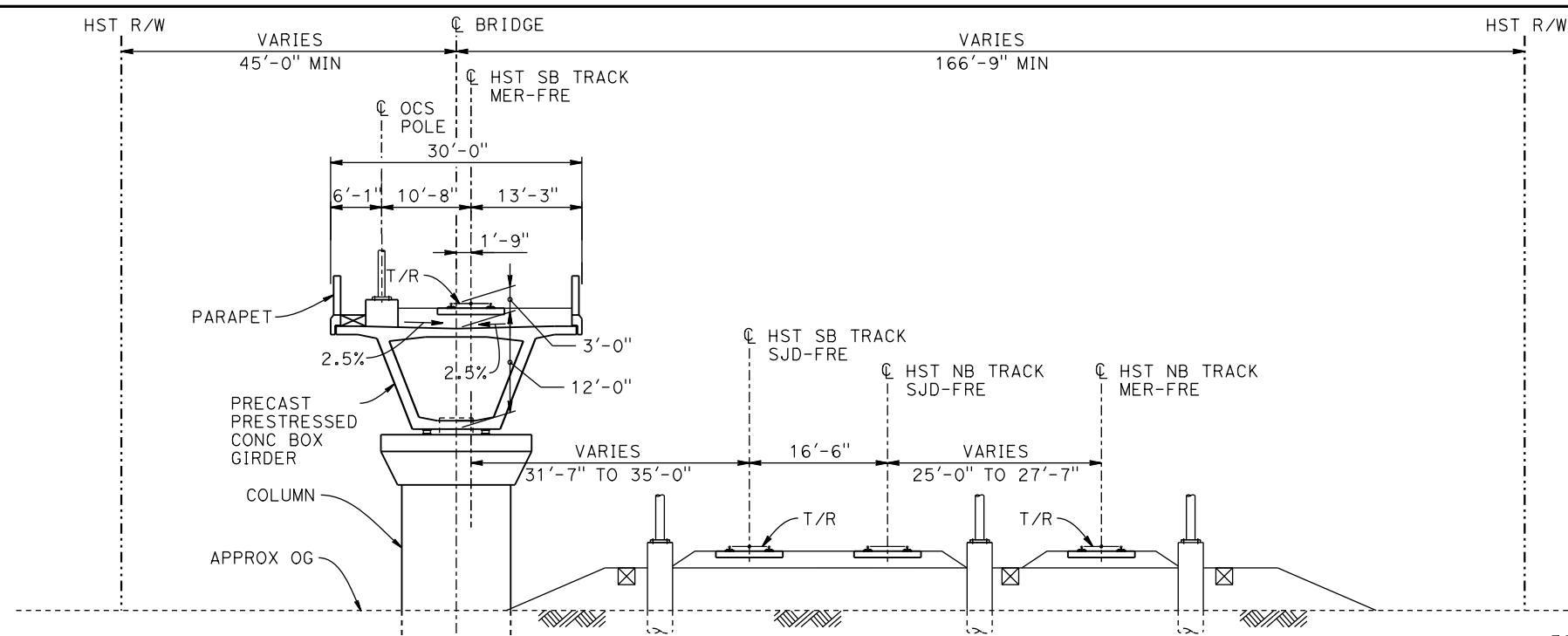
DESIGNED BY  
**M. SUN**  
DRAWN BY  
**A. M.**  
CHECKED BY  
**O. EDEWOR**  
IN CHARGE  
**C. LEMLEY**  
DATE  
**05/08/2015**

**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**  
  
**NOT FOR**  
**CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO SECTION**  
CENTRAL VALLEY WYE  
AVENUE 21 TO ROAD 13 WYE ALTERNATIVE  
GENERAL PLAN (MER-FRE)  
AERIAL #4 - SOUTHBOUND OVER HST MAINLINE - 4 OF 6

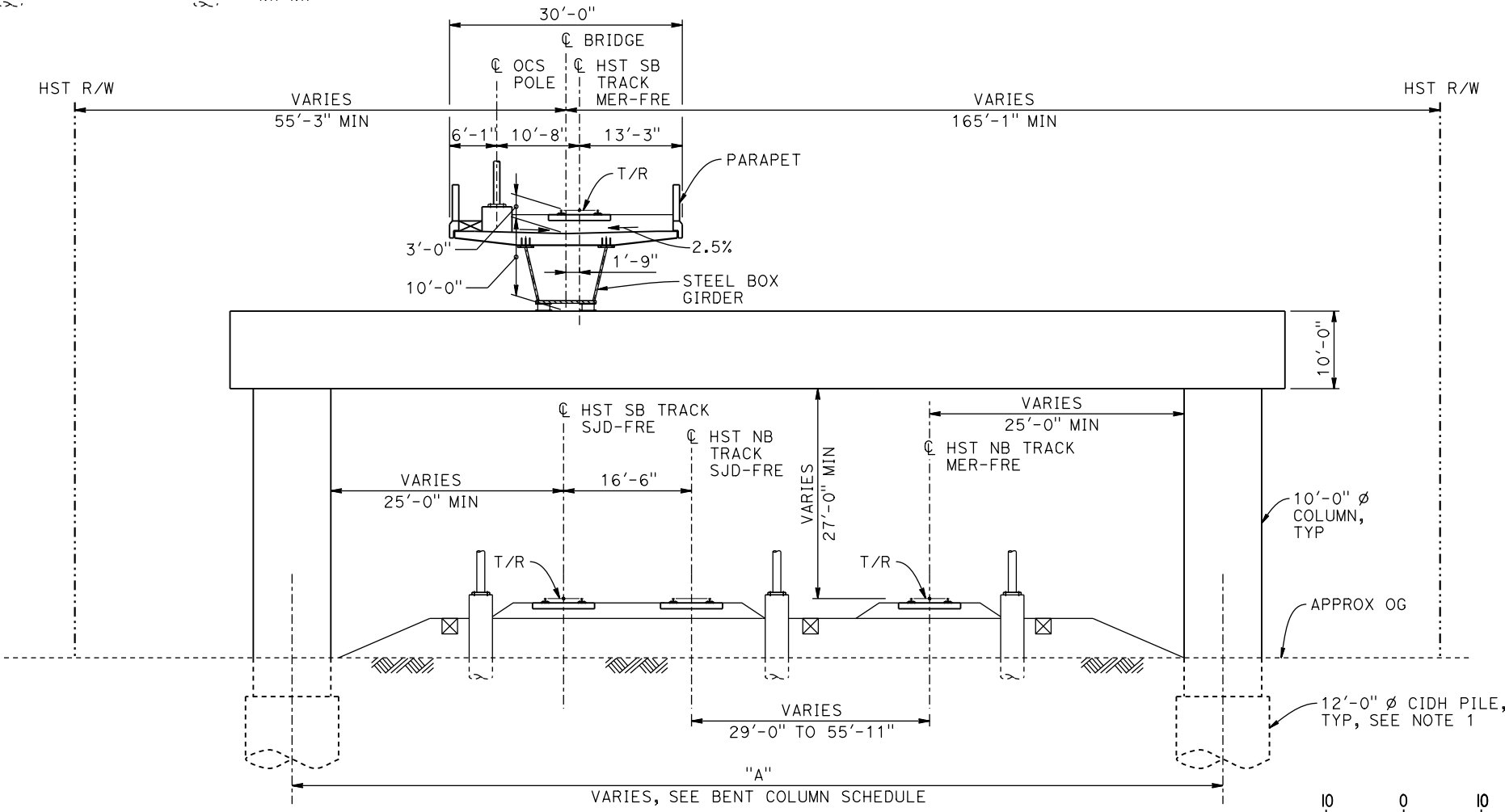
CONTRACT NO.  
HSR08-05  
DRAWING NO.  
ST-K1423-C  
SCALE  
AS SHOWN  
SHEET NO.



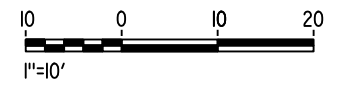
**SECTION A-A**  
1" = 10'

BENT COLUMN SCHEDULE		
BENT	COLUMN TYPE	"A"
2 - 6	9'-0"Ø	
7 - 11	11'-0"Ø	
12 - 16	13'-0"Ø	
17 - 21	15'-0"Ø	
22 - 24	16'-0"Ø	
25 - 26	2 - 10'-0"Ø	108'-0"
27	2 - 10'-0"Ø	110'-0"
28	2 - 10'-0"Ø	114'-0"
29	2 - 10'-0"Ø	117'-0"
30	2 - 10'-0"Ø	122'-0"
31	2 - 10'-0"Ø	127'-0"
32	2 - 10'-0"Ø	133'-0"
33 - 37	2 - 10'-0"Ø	78'-0"

BENT COLUMN SCHEDULE		
BENT	COLUMN TYPE	CIDH TYPE
38 - 46	16'-0"Ø	
47 - 53	15'-0"Ø	
54 - 60	13'-0"Ø	
61 - 67	11'-0"Ø	
68 - 72	9'-0"Ø	
73 - 74	9'-0"Ø	11'-0"Ø



**SECTION B-B**  
1" = 10'



- NOTES:**
1. DRILLED SHAFT AND PILE LENGTHS TO BE DETERMINED.
  2. FOR TRACK SUPERELEVATION DETAILS, SEE ALIGNMENT AND TYPICAL SECTION PLANS; DRAWING TT-B0056-C.

16-MAR-2016 09:19 MF-ST-K3420-C.dgn

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**M. SUN**

DRAWN BY  
**A. M.**

CHECKED BY  
**O. EDEWOR**

IN CHARGE  
**C. LEMLEY**

DATE  
**05/08/2015**

**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**

**NOT FOR**  
**CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO SECTION**

CENTRAL VALLEY WYE  
AVENUE 21 TO ROAD 13 WYE ALTERNATIVE  
TYPICAL SECTIONS (MER-FRE)

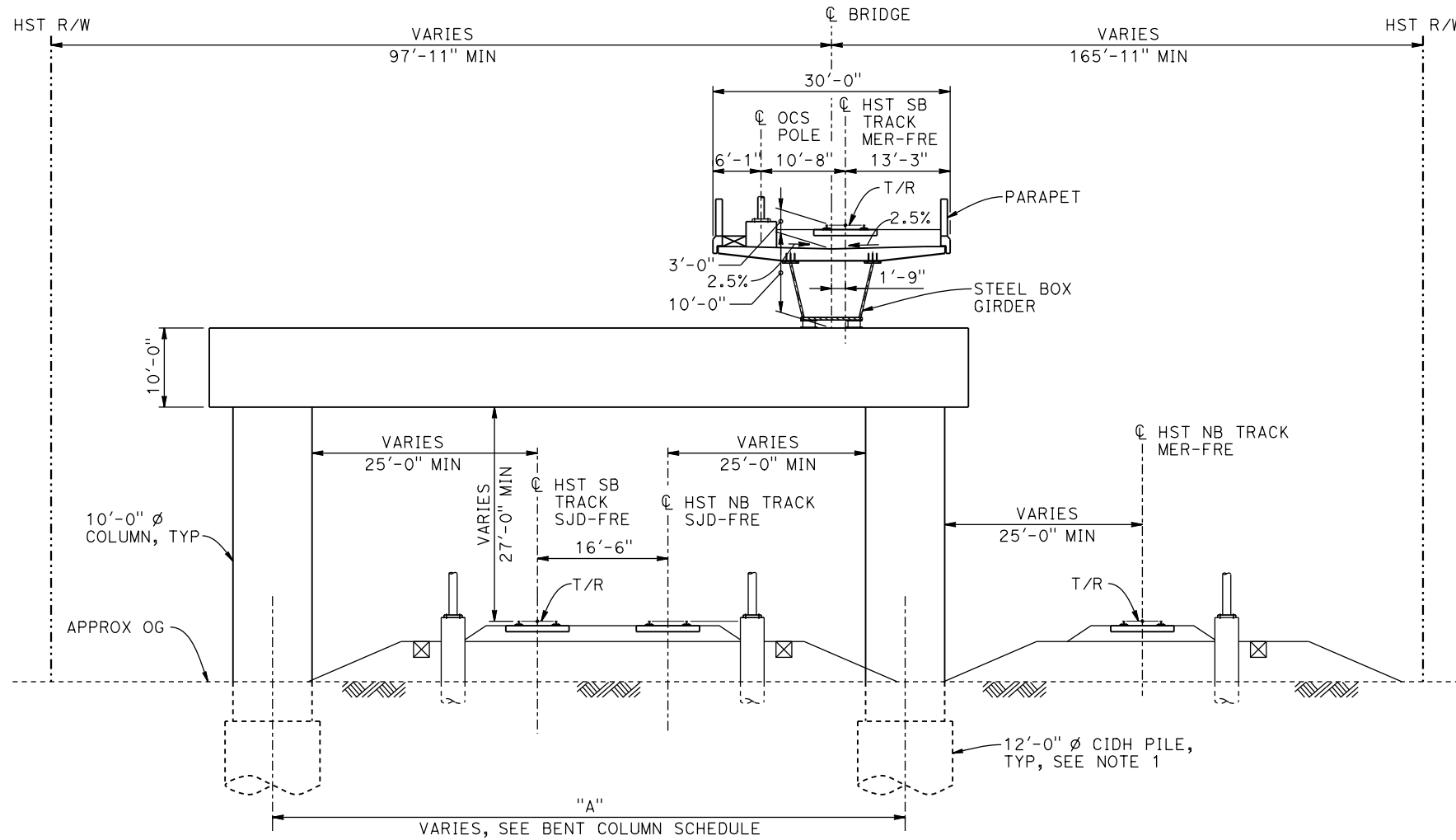
AERIAL #4 - SOUTHBOUND OVER HST MAINLINE - 5 OF 6

CONTRACT NO.  
HSR08-05

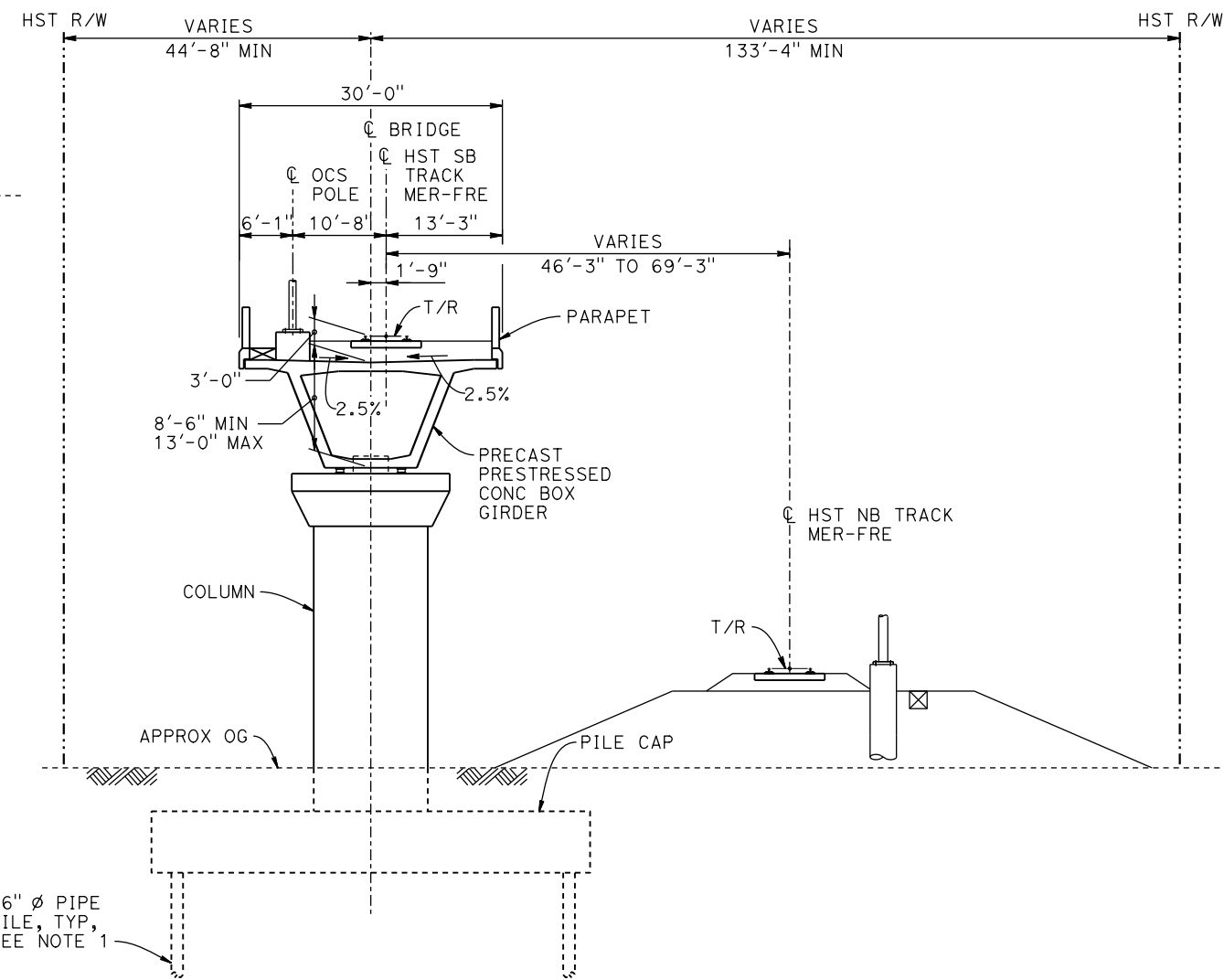
DRAWING NO.  
ST-K3420-C

SCALE  
AS SHOWN

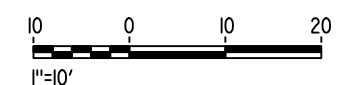
SHEET NO.



**SECTION C-C**  
1" = 10'



**SECTION D-D**  
1" = 10'



**NOTES:**

1. DRILLED SHAFT AND PILE LENGTHS TO BE DETERMINED.
2. FOR TRACK SUPERELEVATION DETAILS, SEE ALIGNMENT AND TYPICAL SECTION PLANS; DRAWING TT-B0056-C.

17-MAR-2016 8:38 MF-ST-K3421-C.dgn

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**M. SUN**

DRAWN BY  
**A. M.**

CHECKED BY  
**O. EDEWOR**

IN CHARGE  
**C. LEMLEY**

DATE  
**05/08/2015**

**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**

**NOT FOR**  
**CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO SECTION**

CENTRAL VALLEY WYE  
AVENUE 21 TO ROAD 13 WYE ALTERNATIVE  
TYPICAL SECTIONS (MER-FRE)

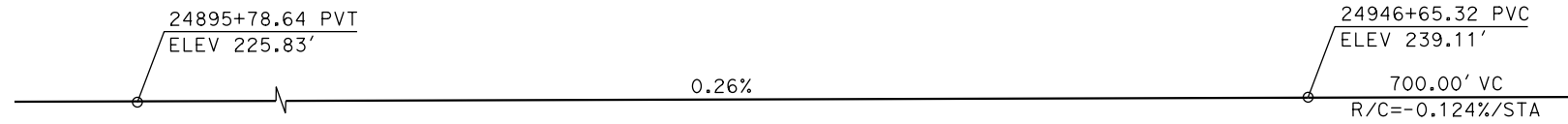
AERIAL #4 - SOUTHBOUND OVER HST MAINLINE - 6 OF 6

CONTRACT NO.  
HSR08-05

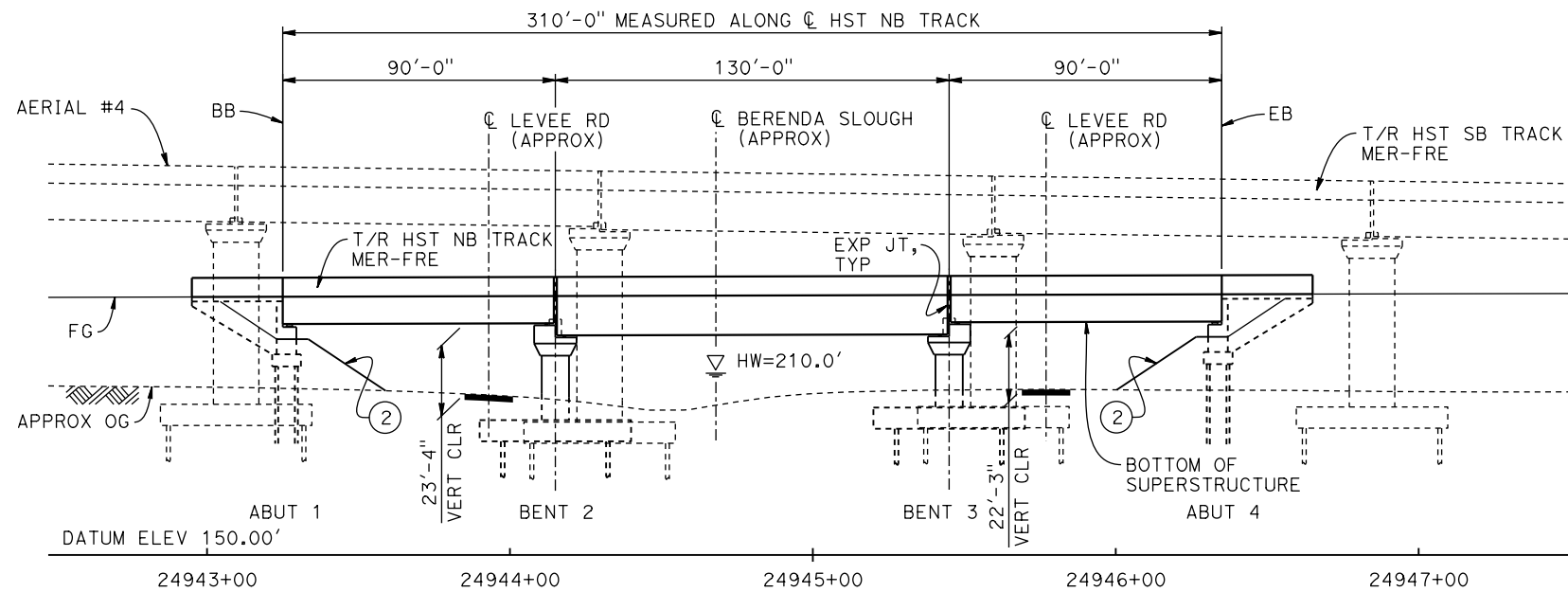
DRAWING NO.  
ST-K3421-C

SCALE  
AS SHOWN

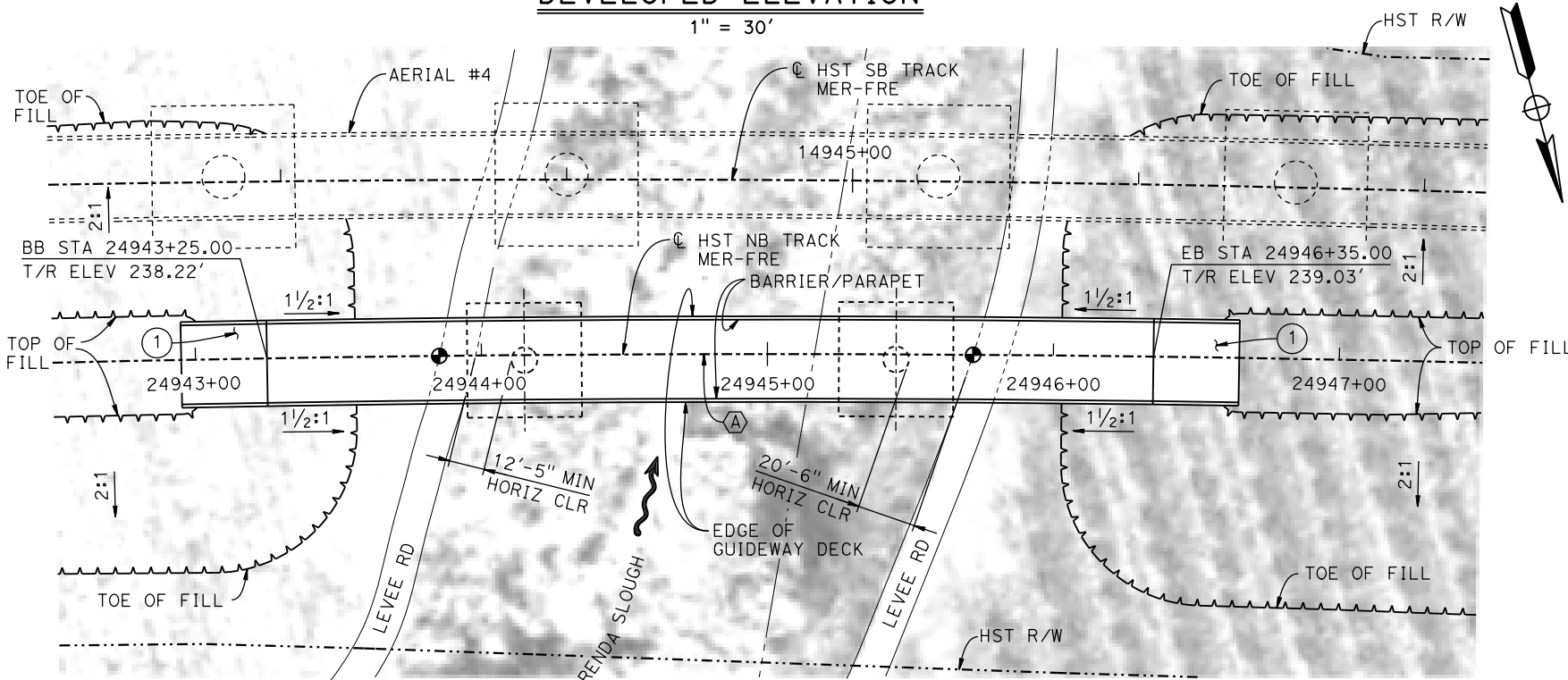
SHEET NO.



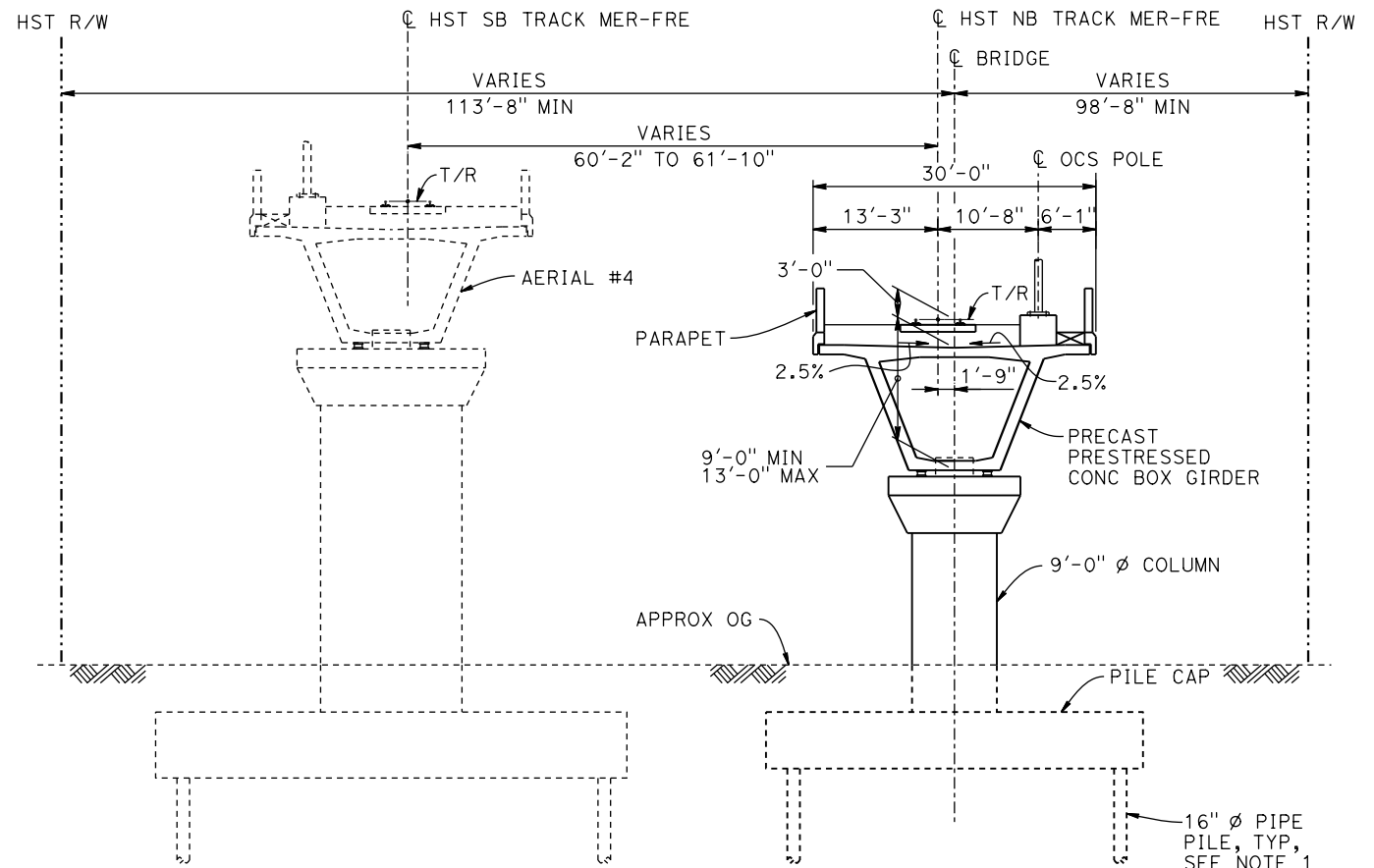
**TOP OF RAIL PROFILE (C HST NB TRACK)**  
NO SCALE



**DEVELOPED ELEVATION**  
1" = 30'



**PLAN**  
1" = 30'



**TYPICAL SECTION**  
1" = 10'

**LEGEND:**

- INDICATES POINT OF MINIMUM VERTICAL CLEARANCE
- ~ INDICATES DIRECTION OF FLOW
- ① STRUCTURE APPROACH
- ② SLOPE PAVING (1/2H:1V)

**CURVE MER-FRE 1 NB (A)**

R = 10,300.00'  
LS = 1,500.00'

**NOTES:**

1. 16" Ø PIPE PILES ASSUMED FOR ABUTMENT AND BENT FOUNDATIONS. PILE LENGTHS TO BE DETERMINED.
2. FOR UTILITY DISPOSITIONS, SEE CIVIL AND GRADE SEPARATION PLANS; DRAWING CV-S1420-C.
3. ANY EXISTING DIRT ROAD THAT CONFLICTS WITH NEW CONSTRUCTION SHALL BE REALIGNED.
4. FOR AERIAL #4 - SOUTHBOUND OVER HST MAINLINE GENERAL PLAN AND TYPICAL SECTIONS, SEE DRAWINGS ST-K1420-C TO ST-K1423-C, ST-K3420-C, AND ST-K3421-C.
5. FOR TRACK SUPERELEVATION DETAILS, SEE ALIGNMENT AND TYPICAL SECTION PLANS; DRAWING TT-B0057-C.

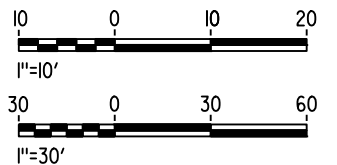
**TEMPORARY TRAFFIC OPENINGS**

**VEHICULAR TRAFFIC**

1. — TRAFFIC WILL BE DETOURED AWAY FROM THE SITE.
2. X TRAFFIC WILL PASS UNDER THE STRUCTURE ON:

ST OR ROAD NAME AND LOCATION	FALSEWORK OPENING REQD (HORIZ X VERT)
LEVEE ROAD 24943+93	20'X16.5' -
LEVEE ROAD 24945+77	20'X16.5' -

3. X TEMP TRAFFIC LANE REDUCTION FOR FTG EXC.



16-MAR-2010 10:09:20 MF-ST-K1426-C.dgn

REV	DATE	BY	CHK	APP	DESCRIPTION

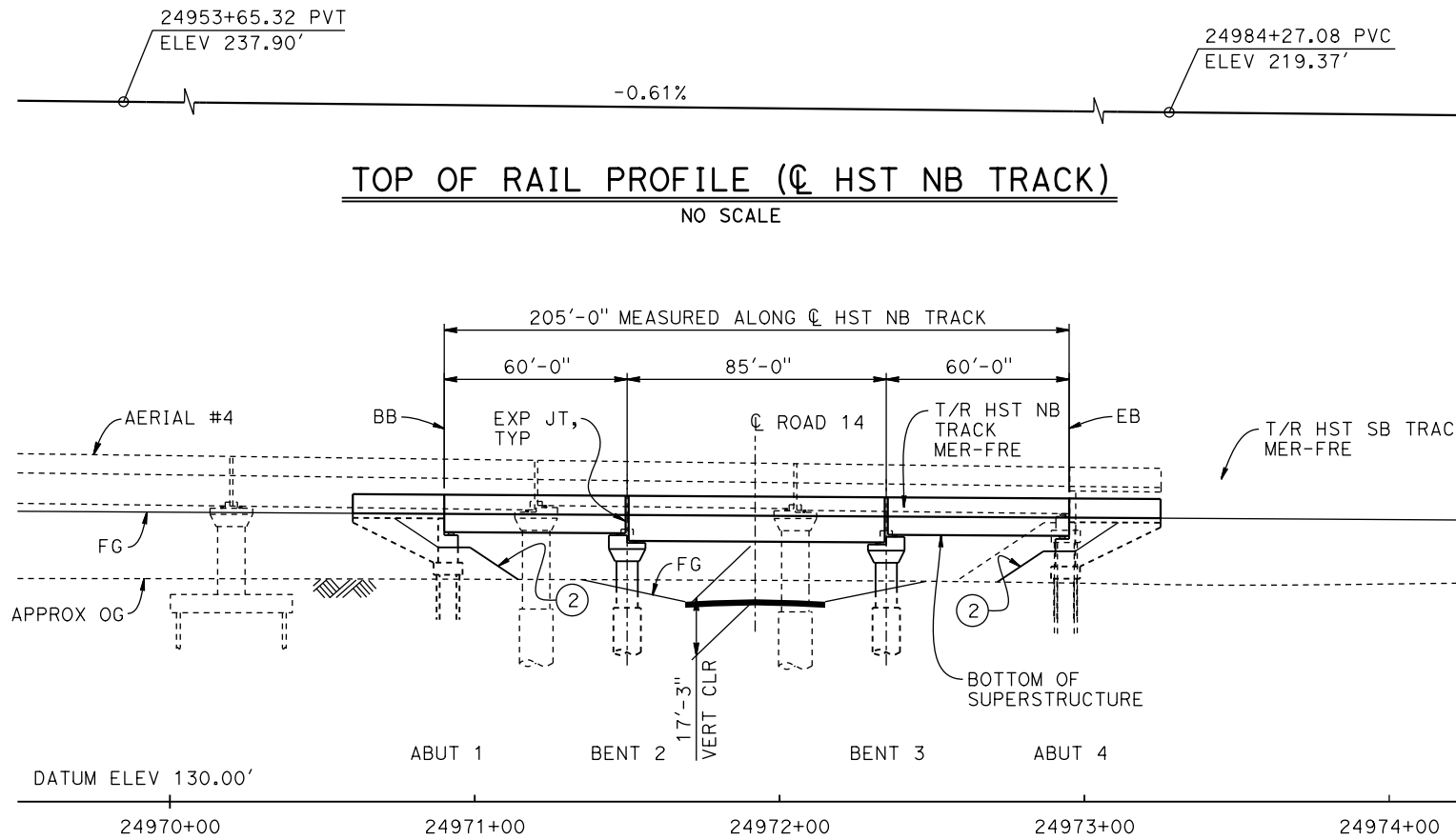
DESIGNED BY  
**M. SUN**  
DRAWN BY  
**A. M.**  
CHECKED BY  
**O. EDEWOR**  
IN CHARGE  
**C. LEMLEY**  
DATE  
**05/08/2015**

**RECORD SET**  
**15% DESIGN SUBMITTAL**  
  
**NOT FOR CONSTRUCTION**

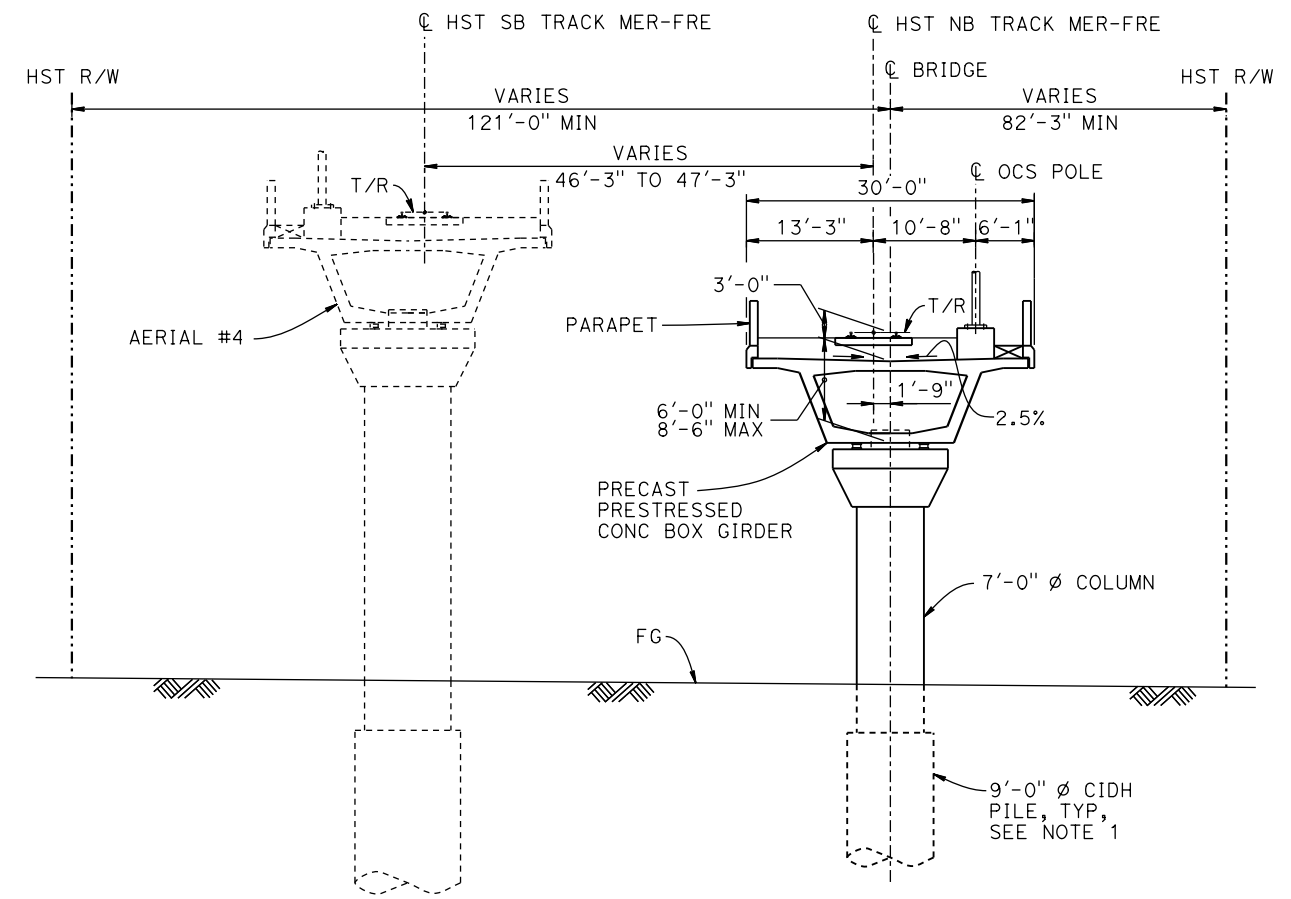
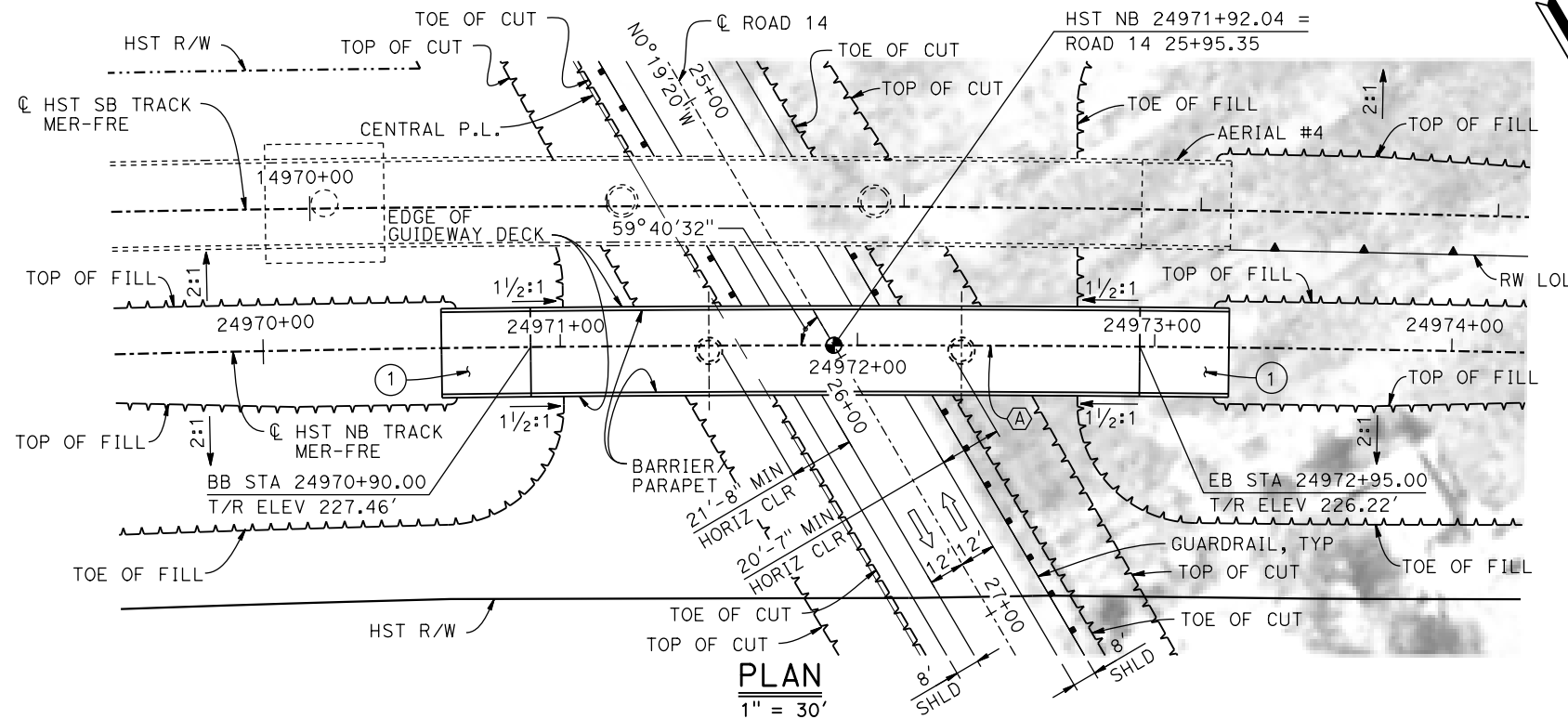


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO SECTION**  
CENTRAL VALLEY WYE  
AVENUE 21 TO ROAD 13 WYE ALTERNATIVE  
GENERAL PLAN (MER-FRE)  
HST NB BRIDGE OVER BERENDA SLOUGH

CONTRACT NO.  
HSR08-05  
DRAWING NO.  
ST-K1426-C  
SCALE  
AS SHOWN  
SHEET NO.



**DEVELOPED ELEVATION**  
1" = 30'



**LEGEND:**

- INDICATES POINT OF MINIMUM VERTICAL CLEARANCE
- ➔ INDICATES DIRECTION OF TRAFFIC
- ① STRUCTURE APPROACH
- ② SLOPE PAVING (1 1/2H:1V)

**CURVE MER-FRE 1 NB (A)**

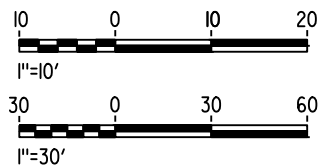
R = 10,300.00'  
LS = 1,500.00'

**NOTES:**

1. 16" Ø PIPE PILES ASSUMED FOR ABUTMENT FOUNDATIONS. PILE AND DRILLED SHAFT LENGTHS TO BE DETERMINED.
2. FOR UTILITY DISPOSITIONS, SEE CIVIL AND GRADE SEPARATION PLANS; DRAWING CV-S1430-C.
3. FOR RETAINING WALL, SEE CIVIL AND GRADE SEPARATION PLANS; DRAWING CV-S1430-C.
4. FOR GUARDRAILS, SEE CIVIL AND GRADE SEPARATION PLANS; DRAWING CV-S1430-C.
5. FOR AERIAL #4 - SOUTHBOUND OVER HST MAINLINE GENERAL PLAN AND TYPICAL SECTIONS, SEE DRAWINGS ST-K1420-C TO ST-K1423-C, ST-K3420 AND ST-K3421-C.
6. FOR TRACK SUPERELEVATION DETAILS, SEE ALIGNMENT AND TYPICAL SECTION PLANS; DRAWING TT-B0057-C.

**TEMPORARY TRAFFIC OPENINGS**

VEHICULAR TRAFFIC		FALSEWORK OPENING REQD (HORIZ X VERT)	
1. —	TRAFFIC WILL BE DETOURED AWAY FROM THE SITE.		
2. X	TRAFFIC WILL PASS UNDER THE STRUCTURE ON:		
		ST OR ROAD NAME AND LOCATION	FALSEWORK OPENING REQD (HORIZ X VERT)
		ROAD 14 24971+92	32'X16.5' 2-WAY
3. —	TEMP TRAFFIC LANE REDUCTION FOR FTG EXC.		



16-MAR-2016 09:20 MF-ST-K1430-C.dgn

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**M. SUN**

DRAWN BY  
**A. M.**

CHECKED BY  
**O. EDEWOR**

IN CHARGE  
**C. LEMLEY**

DATE  
**05/08/2015**

**RECORD SET**  
15% DESIGN SUBMITTAL

**NOT FOR CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO SECTION**

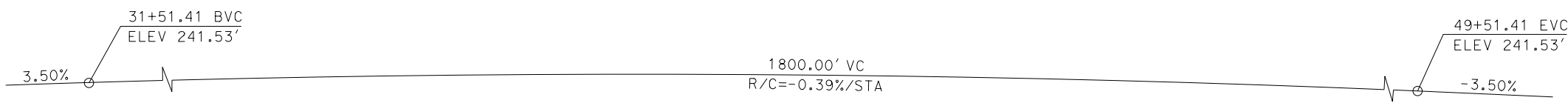
CENTRAL VALLEY WYE  
AVENUE 21 TO ROAD 13 WYE ALTERNATIVE  
GENERAL PLAN (MER-FRE)  
ROAD 14 UNDERPASS (HST NB)

CONTRACT NO.  
HSR08-05

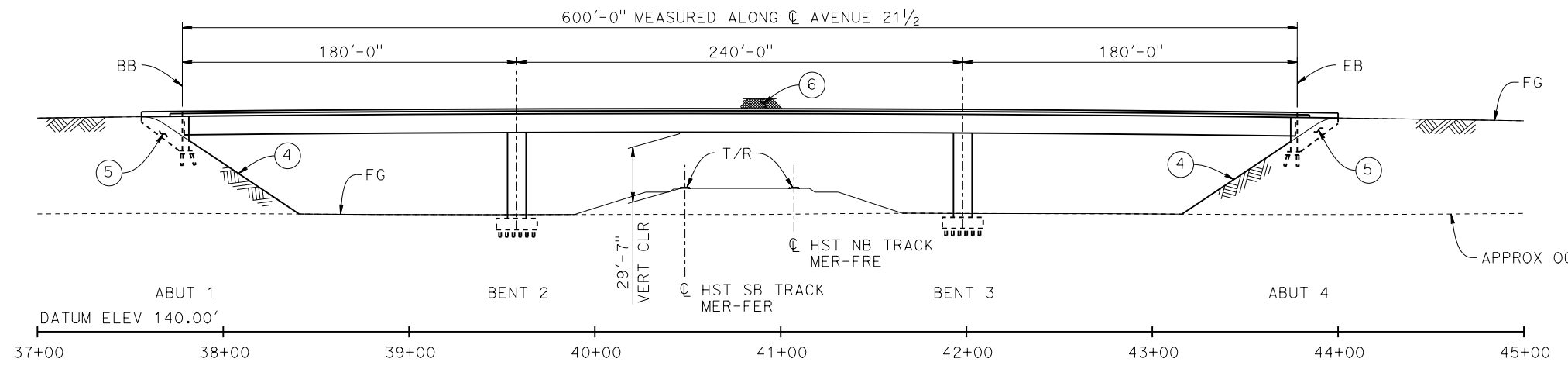
DRAWING NO.  
ST-K1430-C

SCALE  
AS SHOWN

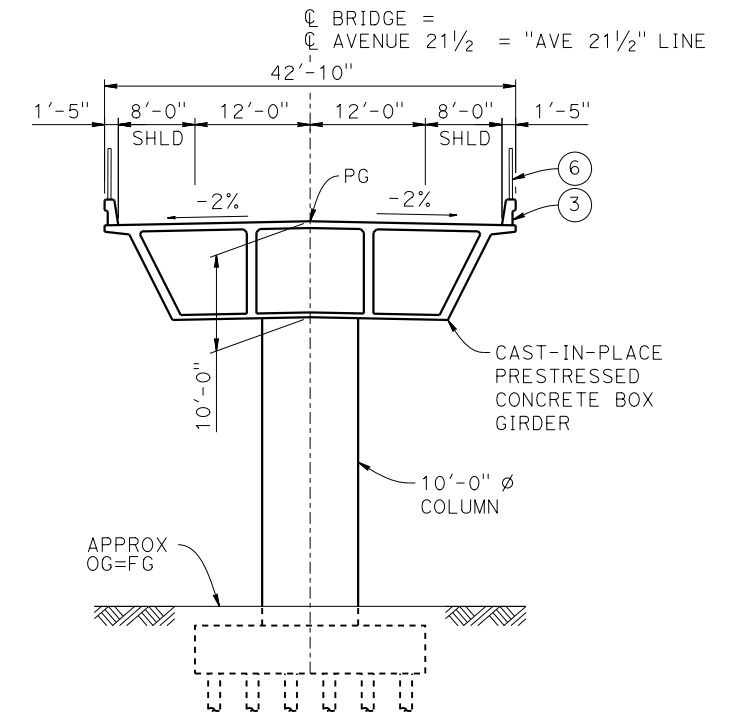
SHEET NO.



**PROFILE GRADE**  
NO SCALE



**ELEVATION**  
1" = 40'



**TYPICAL SECTION**  
1" = 10'

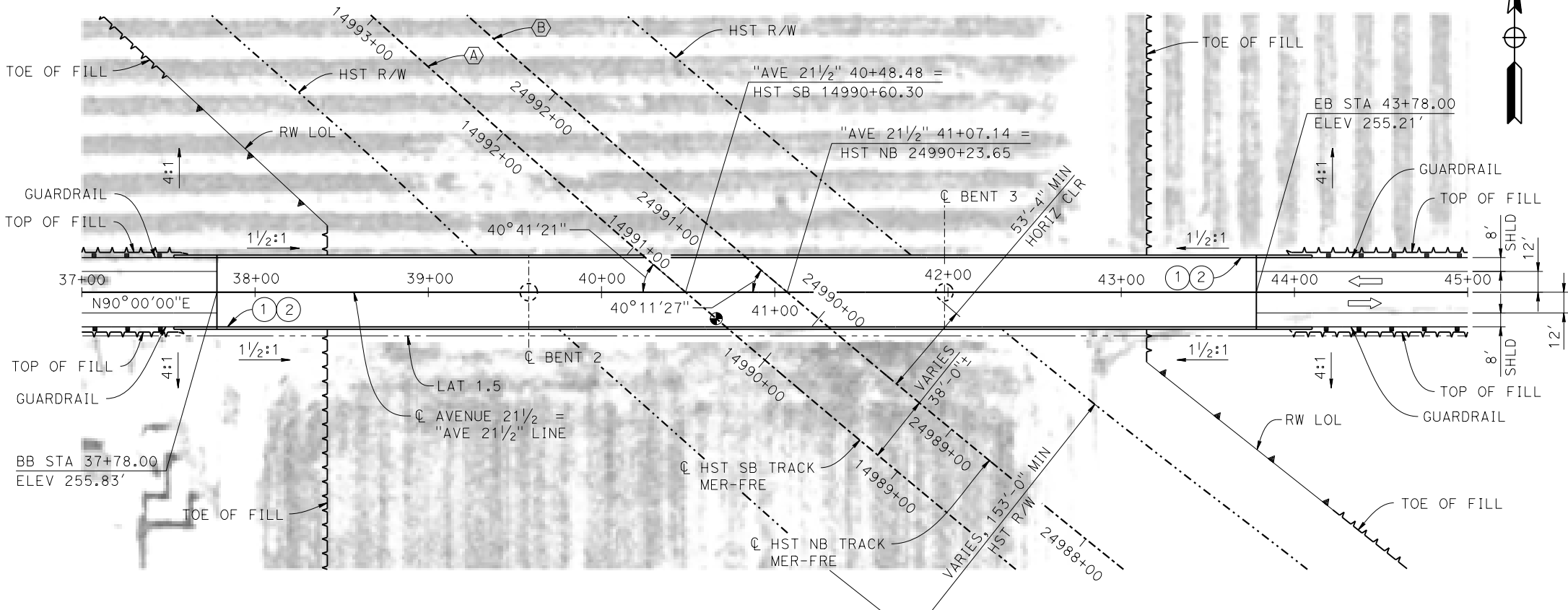
**CURVE MER-FRE 1 SB (A)**      **CURVE MER-FRE 1 NB (B)**  
 R = 10,375.00'      R = 10,300.00'  
 LS = 1,500.00'      LS = 1,500.00'

**LEGEND:**

- ⊙ INDICATES POINT OF MINIMUM VERTICAL CLEARANCE
- ➔ INDICATES DIRECTION OF TRAFFIC
- ① PAINT "AVENUE 21 1/2 OVERHEAD"
- ② PAINT "BRIDGE NO. XX-XXXX"
- ③ CONCRETE BARRIER TYPE 736 MOD
- ④ SLOPE PAVING (1 1/2 H:1 V)
- ⑤ WINGWALL
- ⑥ AR FENCE WITH SOLID PLATE

**NOTES:**

1. ASSUME CLASS 140 PILES AT ABUTMENT AND BENT FOUNDATIONS. PILE LENGTHS TO BE DETERMINED.
2. FOR UTILITY DISPOSITIONS, SEE CIVIL AND GRADE SEPARATION PLANS; DRAWING CV-S1430-C.
3. FOR GUARDRAILS, SEE CIVIL AND GRADE SEPARATION PLANS; DRAWING CV-S1430-C.
4. FOR RETAINING WALLS, SEE CIVIL AND GRADE SEPARATION PLANS; DRAWING CV-S1430-C.



**PLAN**  
1" = 40'

MF-ST-K1435-C.dgn 04-FEB-2015 11:11 P005133G

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**M. SUN**  
 DRAWN BY  
**W. JOHNSEN**  
 CHECKED BY  
**O. EDEWOR**  
 IN CHARGE  
**C. LEMLEY**  
 DATE  
**02/13/2015**

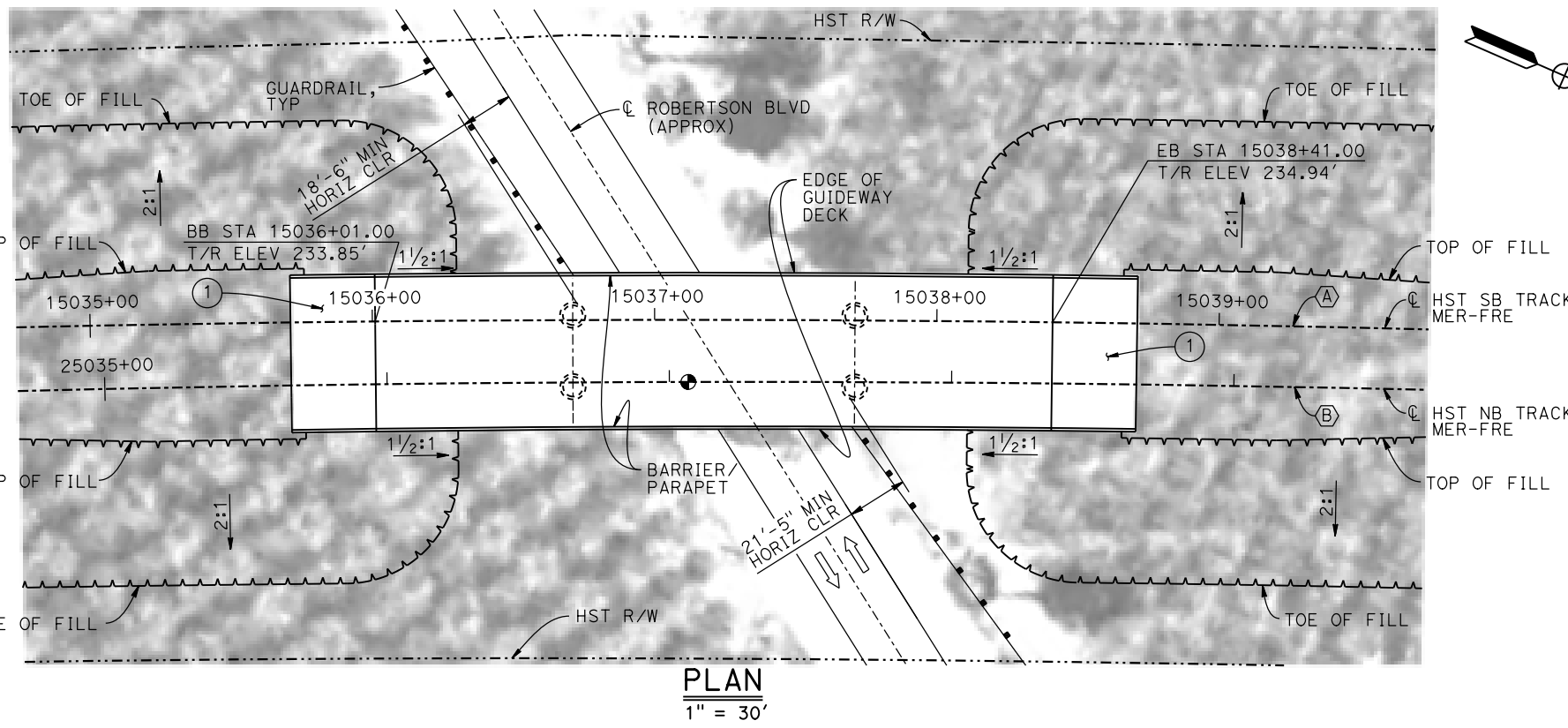
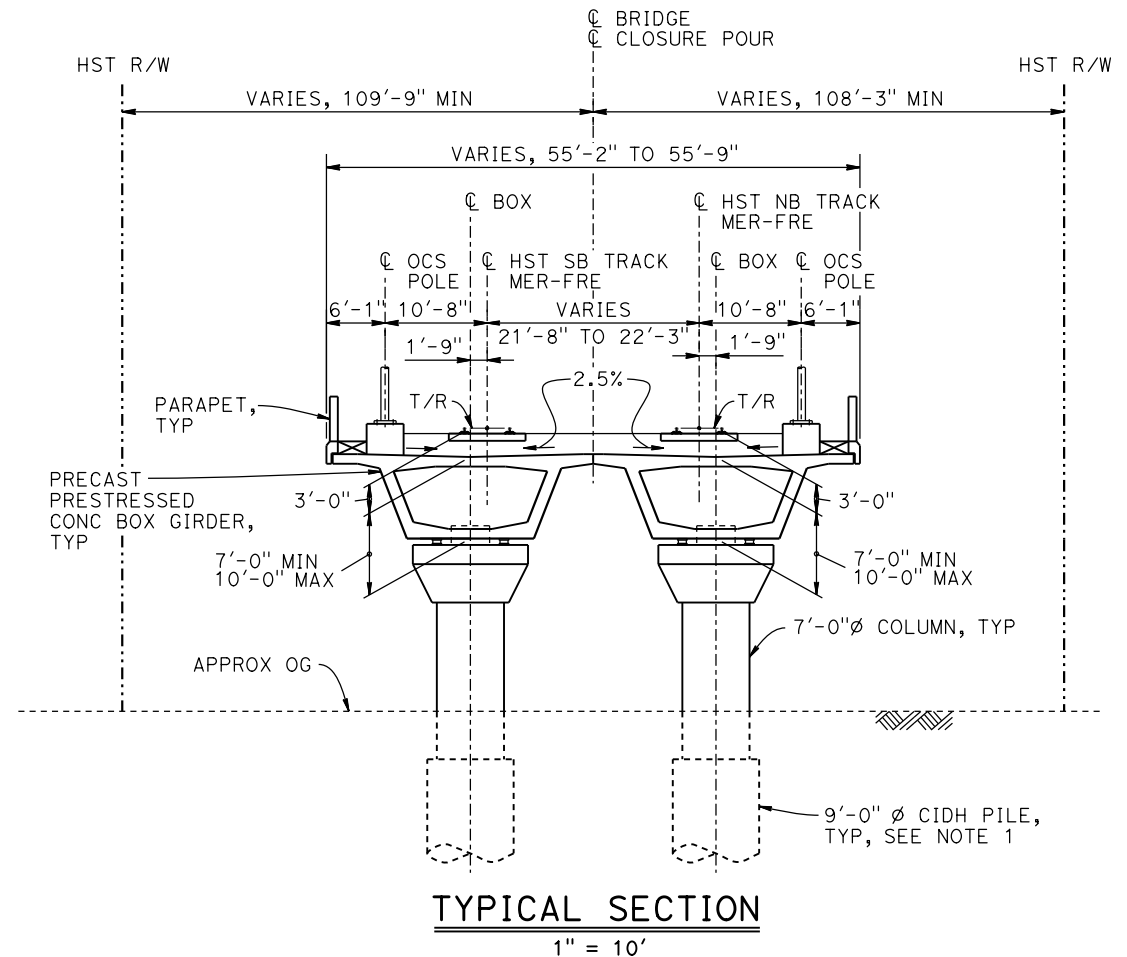
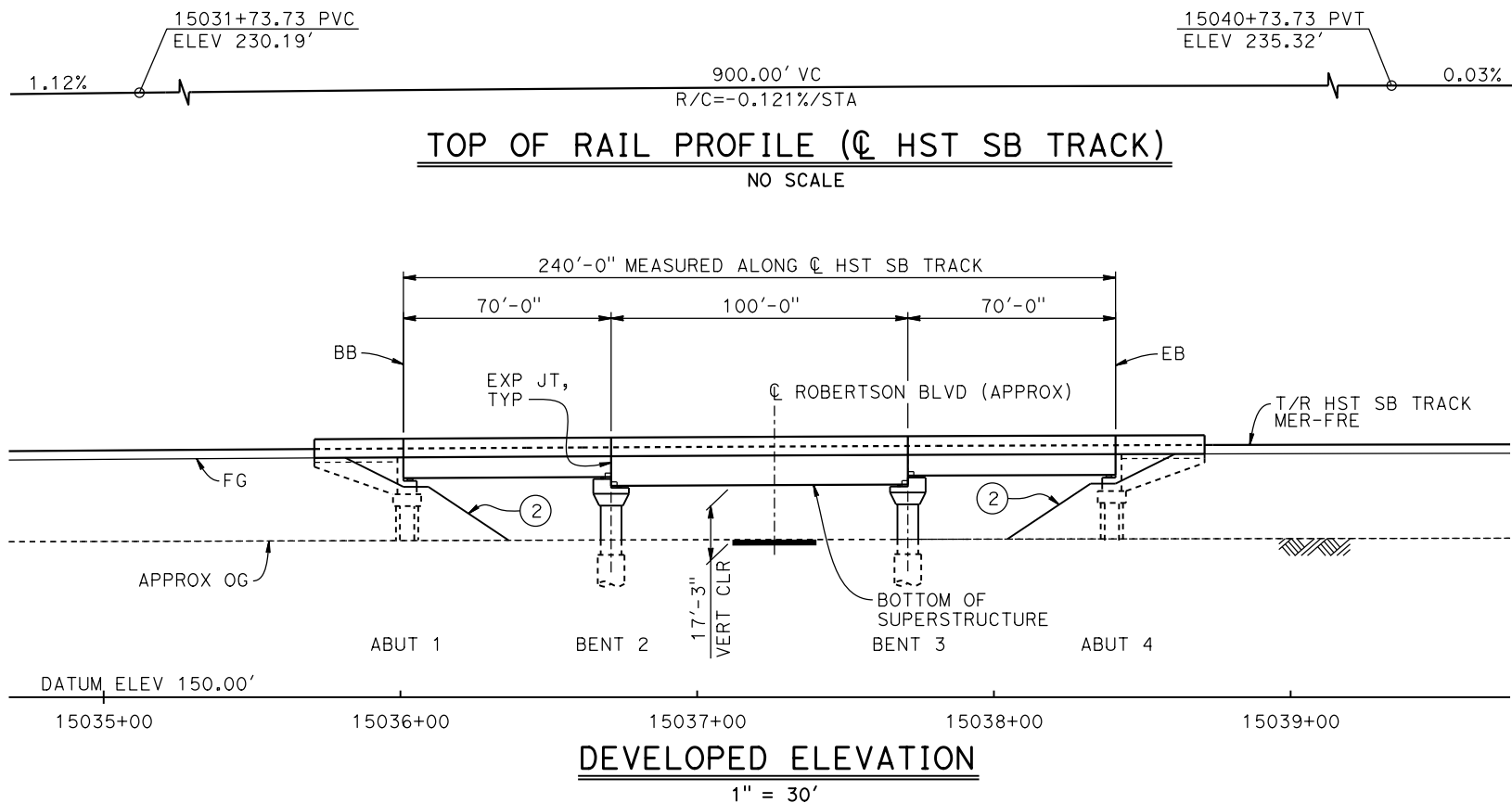
**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**  
  
**NOT FOR**  
**CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO SECTION**  
 CENTRAL VALLEY WYE  
 AVENUE 21 TO ROAD 13 WYE ALTERNATIVE  
 GENERAL PLAN (MER-FRE)  
 AVENUE 21 1/2 OVERHEAD

CONTRACT NO.  
HSR08-05  
 DRAWING NO.  
ST-K1435-C  
 SCALE  
AS SHOWN  
 SHEET NO.





**CURVE MER-FRE 1 SB (A)**  
 R = 10,375.00'  
 LS = 1,500.00'

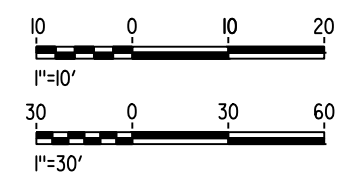
**CURVE MER-FRE 1 NB (B)**  
 R = 10,300.00'  
 LS = 1,500.00'

**TEMPORARY TRAFFIC OPENINGS**

VEHICULAR TRAFFIC			
1. <input type="checkbox"/> TRAFFIC WILL BE DETOURED AWAY FROM THE SITE.			
2. <input checked="" type="checkbox"/> TRAFFIC WILL PASS UNDER THE STRUCTURE ON:			
ST OR ROAD NAME AND LOCATION		FALSEWORK OPENING REQD (HORIZ X VERT)	
ROBERTSON BLVD	15037+14	32'x16.5'	2-WAY
3. <input type="checkbox"/> TEMP TRAFFIC LANE REDUCTION FOR FTG EXC.			

- LEGEND:**
- INDICATES POINT OF MINIMUM VERTICAL CLEARANCE
  - ➔ INDICATES DIRECTION OF TRAFFIC
  - ① STRUCTURE APPROACH
  - ② SLOPE PAVING (1 1/2 H:1 V)

- NOTES:**
1. 16" Ø PIPE PILES ASSUMED FOR ABUTMENT FOUNDATIONS. PILE AND DRILLED SHAFT LENGTHS TO BE DETERMINED.
  2. FOR UTILITY DISPOSITIONS, SEE CIVIL AND GRADE SEPARATION PLANS; DRAWING CV-S1440-C.
  3. FOR GUARDRAILS, SEE CIVIL AND GRADE SEPARATION PLANS; DRAWING CV-S1440-C.
  4. FOR TRACK SUPERELEVATION DETAILS, SEE ALIGNMENT AND TYPICAL SECTION PLANS; DRAWINGS TT-B0056-C AND TT-B0057-C.



17-MAR-2016 1:01 MF-ST-K1440-C.dgn

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**M. SUN**

DRAWN BY  
**A. M.**

CHECKED BY  
**O. EDEWOR**

IN CHARGE  
**C. LEMLEY**

DATE  
**05/08/2015**

**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**

**NOT FOR**  
**CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO SECTION**

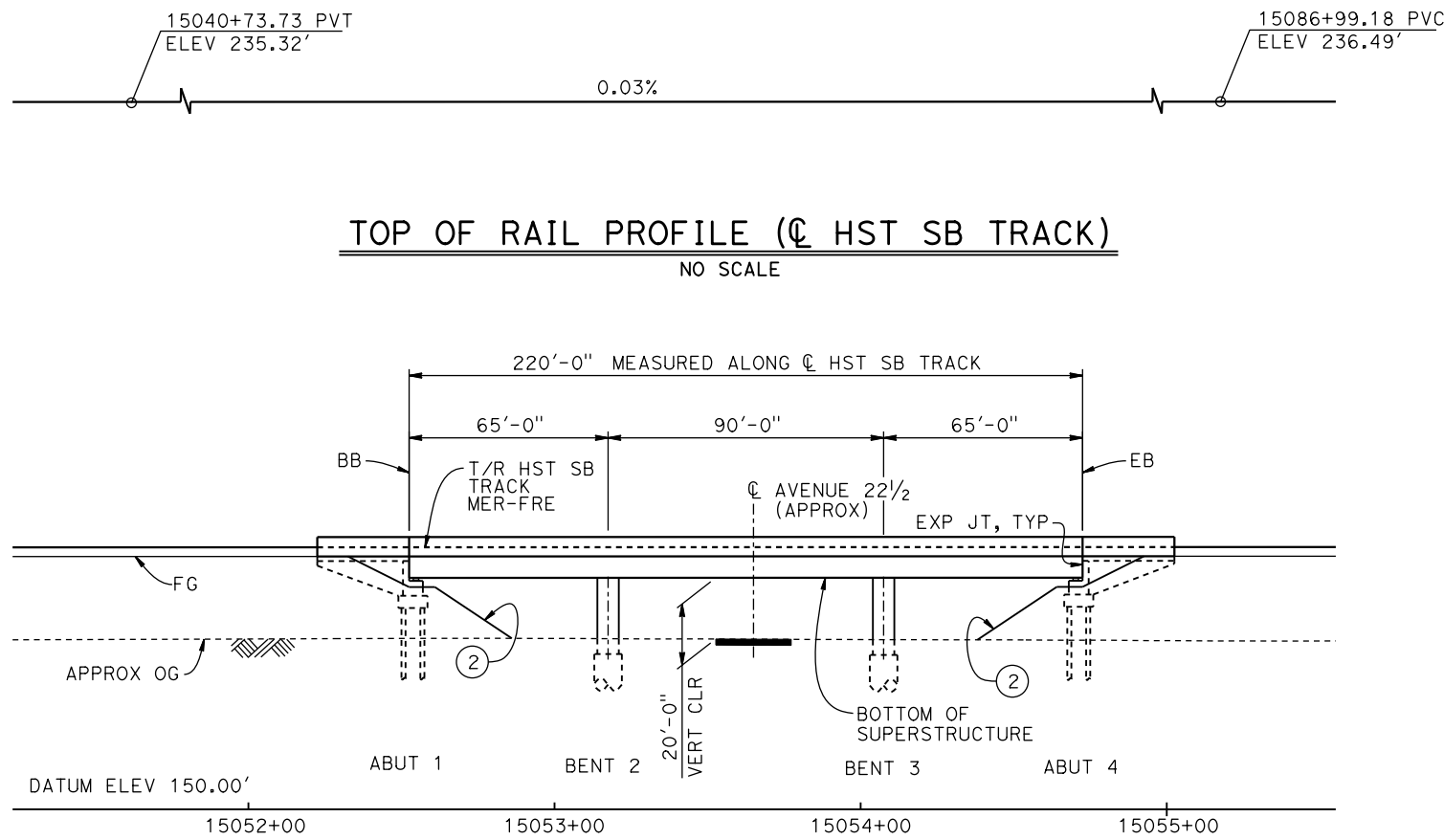
CENTRAL VALLEY WYE  
 AVENUE 21 TO ROAD 13 WYE ALTERNATIVE  
 GENERAL PLAN (MER-FRE)  
 ROBERTSON BOULEVARD UNDERPASS

CONTRACT NO.  
HSR08-05

DRAWING NO.  
ST-K1440-C

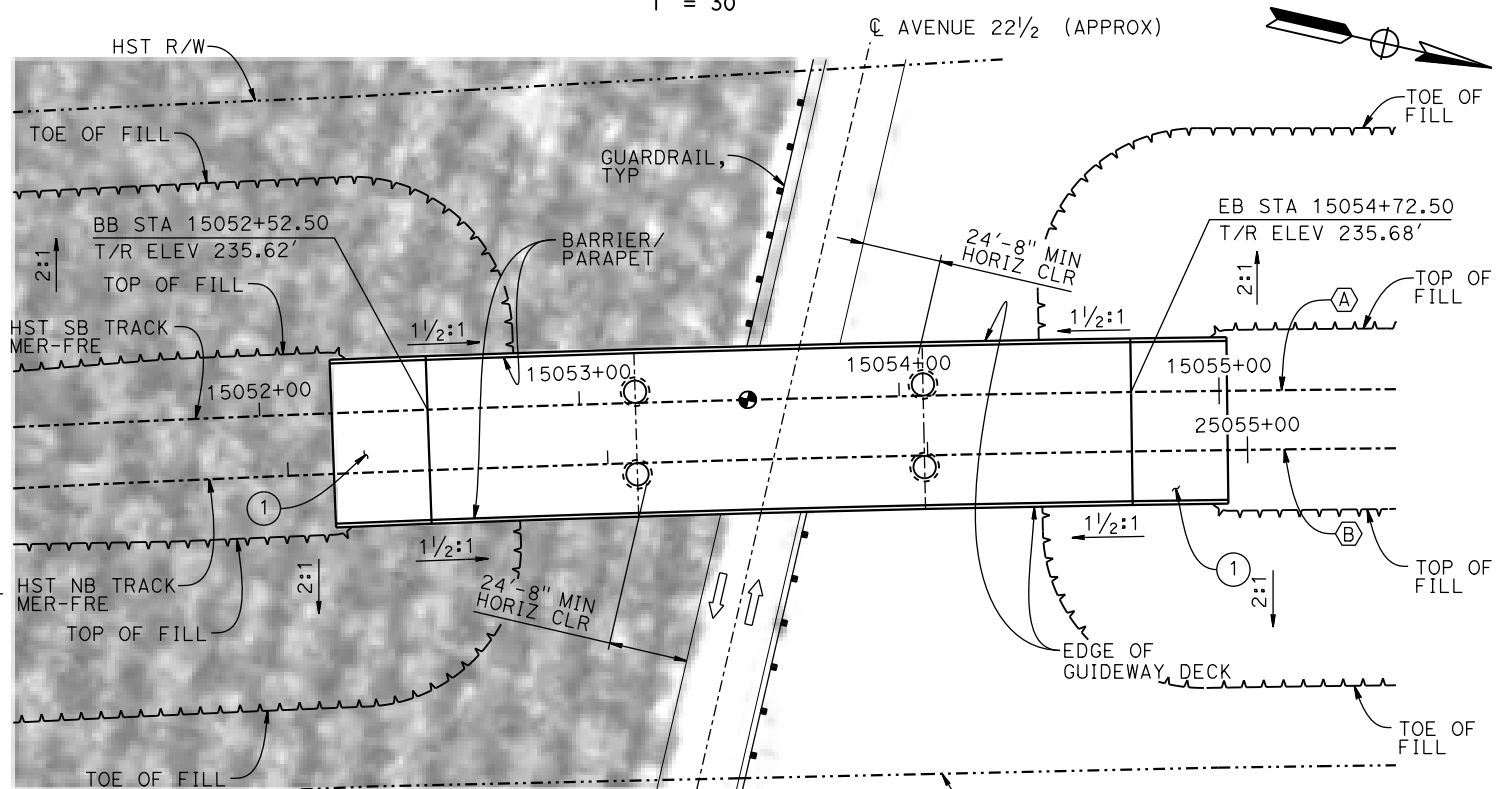
SCALE  
AS SHOWN

SHEET NO.



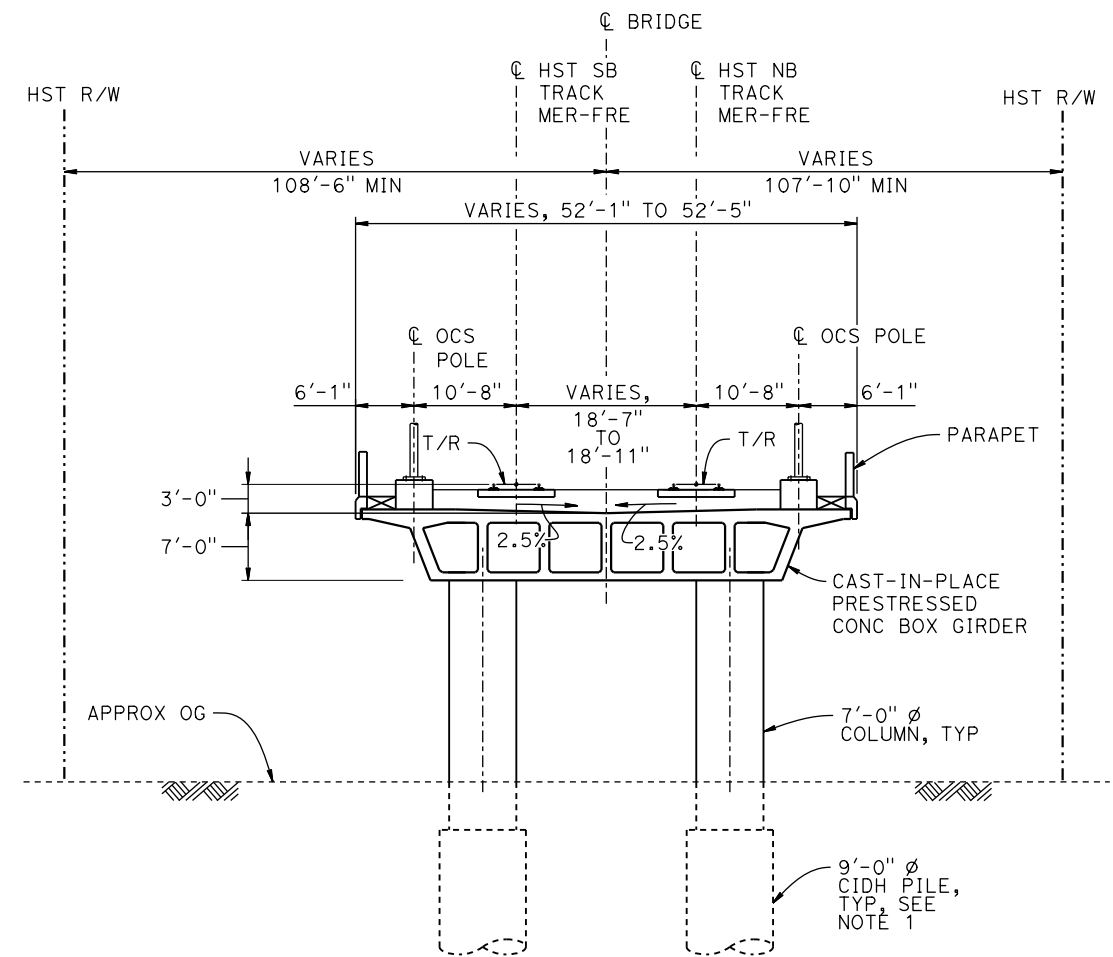
**DEVELOPED ELEVATION**

1" = 30'



**PLAN**

1" = 30'



**TYPICAL SECTION**

1" = 10'

**LEGEND:**

- ⊙ INDICATES POINT OF MINIMUM VERTICAL CLEARANCE
- ➔ INDICATES DIRECTION OF TRAFFIC
- ① STRUCTURE APPROACH
- ② SLOPE PAVING (1/2H:1V)

**CURVE MER-FRE 1 SB (A)**

R = 10,375.00'  
LS = 1,500.00'

**CURVE MER-FRE 1 NB (B)**

R = 10,300.00'  
LS = 1,500.00'

**NOTES:**

1. 16" Ø PIPE PILES ASSUMED FOR ABUTMENT FOUNDATIONS. PILE AND DRILLED SHAFT LENGTHS TO BE DETERMINED.
2. FOR UTILITY DISPOSITIONS, SEE CIVIL AND AND GRADE SEPARATION PLANS; DRAWING CV-S1440-C.
3. FOR GUARDRAILS, SEE CIVIL AND GRADE SEPARATION PLANS; DRAWING CV-S1440-C.
4. FOR TRACK SUPERELEVATION DETAILS, SEE ALIGNMENT AND TYPICAL SECTION PLANS; DRAWINGS TT-B0056-C AND TT-B0057-C.

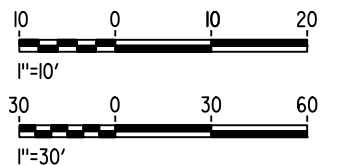
**TEMPORARY TRAFFIC OPENINGS**

**VEHICULAR TRAFFIC**

1. — TRAFFIC WILL BE DETOURED AWAY FROM THE SITE.
2. X TRAFFIC WILL PASS UNDER THE STRUCTURE ON:

ST OR ROAD NAME AND LOCATION	FALSEWORK OPENING REQD (HORIZ X VERT)
AVENUE 22 1/2 15053+65	32'x16.5' 2-WAY

3. — TEMP TRAFFIC LANE REDUCTION FOR FTG EXC.



16-MAR-2016 09:48 MF-ST-K1445-C.dgn

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY <b>M. SUN</b>
DRAWN BY <b>A. M.</b>
CHECKED BY <b>O. EDEWOR</b>
IN CHARGE <b>C. LEMLEY</b>
DATE <b>05/08/2015</b>

**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**

**NOT FOR**  
**CONSTRUCTION**



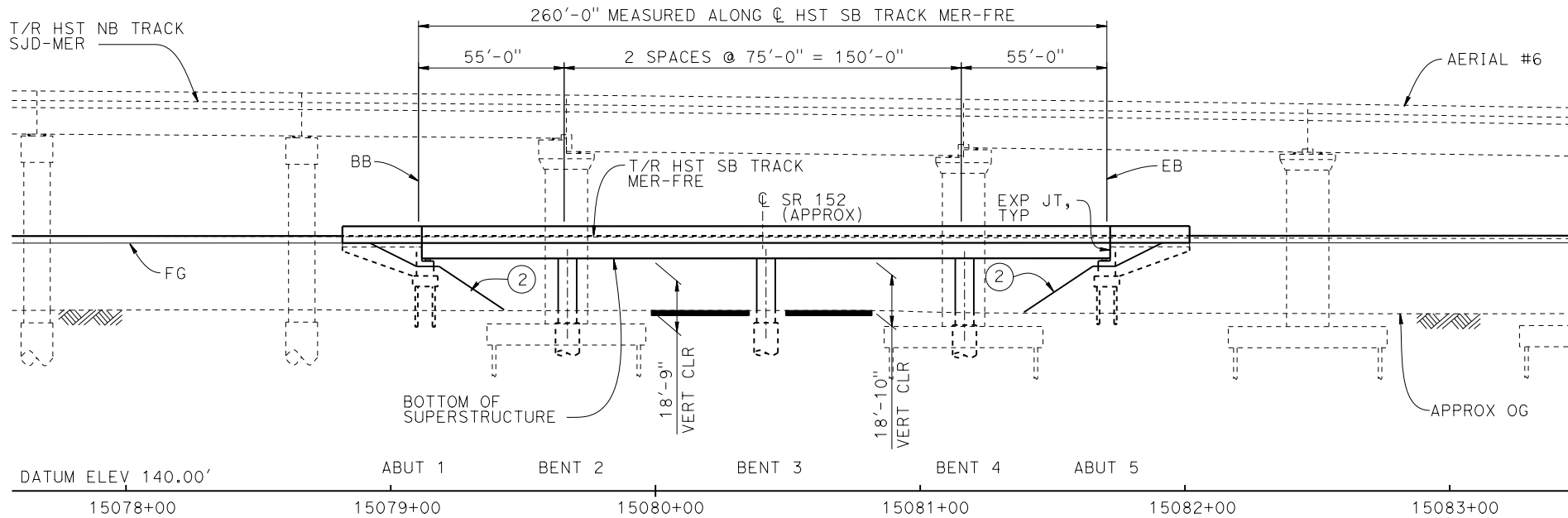
**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO SECTION**

CENTRAL VALLEY WYE  
AVENUE 21 TO ROAD 13 WYE ALTERNATIVE  
GENERAL PLAN (MER-FRE)  
AVENUE 22 1/2 UNDERPASS

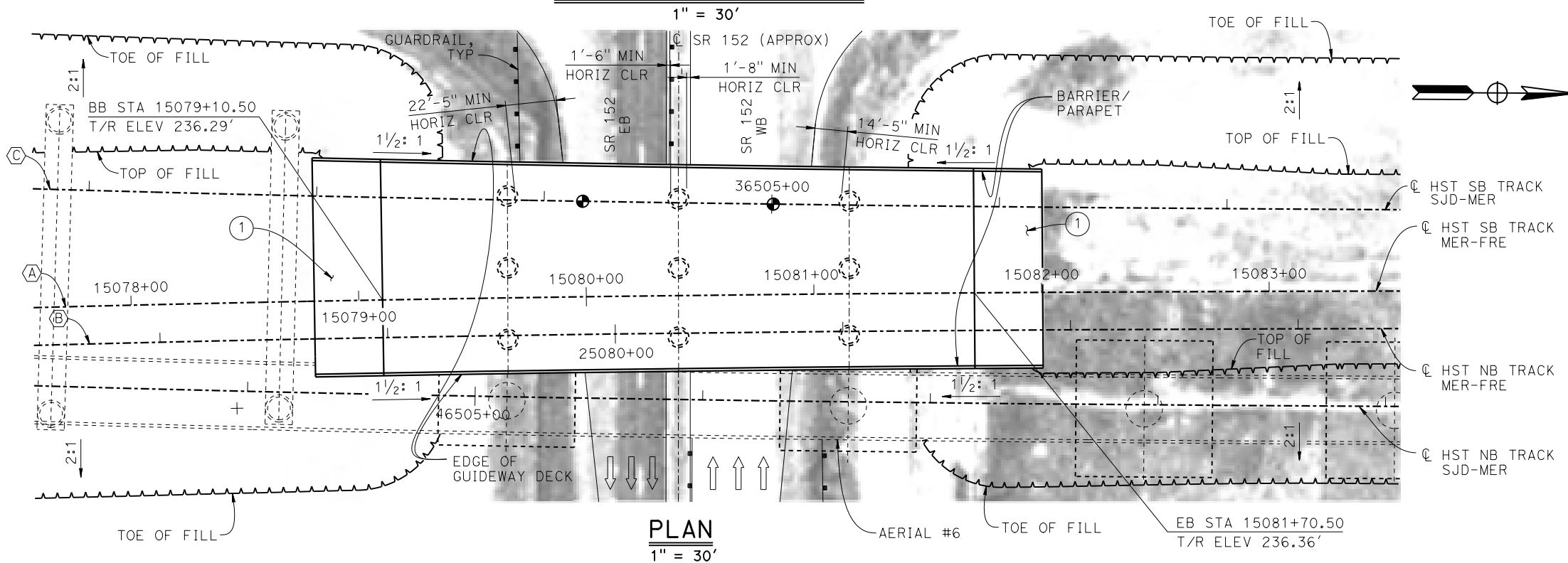
CONTRACT NO. HSR08-05
DRAWING NO. ST-K1445-C
SCALE AS SHOWN
SHEET NO.



**TOP OF RAIL PROFILE (C HST SB TRACK MER-FRE)**  
NO SCALE



**DEVELOPED ELEVATION**  
1" = 30'



**PLAN**  
1" = 30'

**TEMPORARY TRAFFIC OPENINGS**

VEHICULAR TRAFFIC			
1. — TRAFFIC WILL BE DETOURED AWAY FROM THE SITE.			
2. X TRAFFIC WILL PASS UNDER THE STRUCTURE ON:			
ST OR ROAD NAME AND LOCATION		FALSEWORK OPENING REQD (HORIZ X VERT)	
SR 152	15080+23	52'x15.5'	E BND
SR 152	15080+69	52'x15.5'	W BND
3. X TEMP TRAFFIC LANE REDUCTION FOR FTG EXC.			

**LEGEND:**

- INDICATES POINT OF MINIMUM VERTICAL CLEARANCE
- ➔ INDICATES DIRECTION OF TRAFFIC
- ① STRUCTURE APPROACH
- ② SLOPE PAVING (1 1/2H:1V)

**NOTES:**

1. 16" Ø PIPE PILES ASSUMED FOR ABUTMENT FOUNDATIONS. PILE LENGTHS TO BE DETERMINED.
2. FOR TYPICAL SECTION, SEE DRAWING ST-K3450-C.
3. FOR UTILITY DISPOSITIONS, SEE CIVIL AND GRADE SEPARATION PLANS; DRAWING CV-S1450-C.
4. FOR GUARDRAILS, SEE CIVIL AND GRADE SEPARATION PLANS; DRAWING CV-S1450-C.
5. FOR AERIAL #6 - NORTHBOUND OVER HST MERCED TO FRESNO GENERAL PLAN AND TYPICAL SECTIONS, SEE DRAWINGS ST-K1640-C TO ST-K1643-C, ST-K3640-C AND ST-K3641-C.

**CURVE MER-FRE 1 SB (A)**

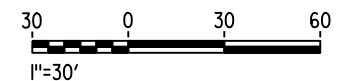
R = 10,375.00'  
LS = 1,500.00'

**CURVE MER-FRE 1 NB (B)**

R = 10,300.00'  
LS = 1,500.00'

**CURVE SJD-MER 1 SB (C)**

R = 10,300.00'  
LS = 1,500.00'



MF-ST-K1450-C.dgn 05-FEB-2015 7:33 P005133G

REV	DATE	BY	CHK	APP	DESCRIPTION

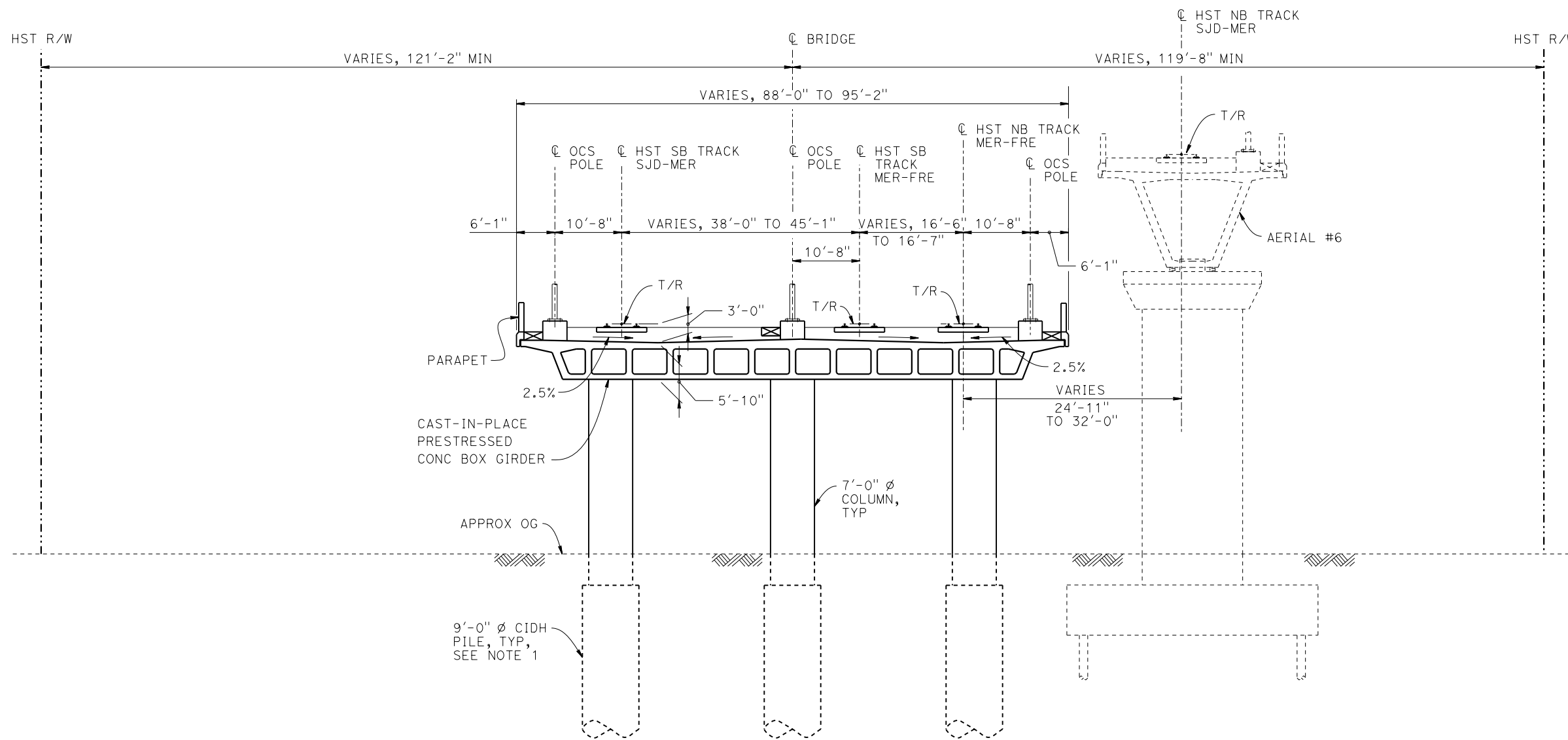
DESIGNED BY  
**M. SUN**  
DRAWN BY  
**A. M.**  
CHECKED BY  
**O. EDEWOR**  
IN CHARGE  
**C. LEMLEY**  
DATE  
**02/13/2015**

**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**  
  
**NOT FOR**  
**CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO SECTION**  
CENTRAL VALLEY WYE  
AVENUE 21 TO ROAD 13 WYE ALTERNATIVE  
GENERAL PLAN (MER-FRE)  
SR 152 UNDERPASS - 1 OF 2

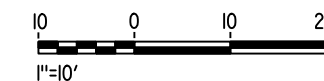
CONTRACT NO.  
HSR08-05  
DRAWING NO.  
ST-K1450-C  
SCALE  
AS SHOWN  
SHEET NO.



**TYPICAL SECTION**  
1" = 10'

**NOTES:**

1. DRILLED SHAFT LENGTHS TO BE DETERMINED.
2. FOR TRACK SUPERELEVATION DETAILS, SEE ALIGNMENT AND TYPICAL SECTION PLANS; DRAWINGS TT-B0056-C AND TT-B0057-C.



p005133g 28-APR-2015 09:43 MF-ST-K3450-C.dgn

REV	DATE	BY	CHK	APP	DESCRIPTION

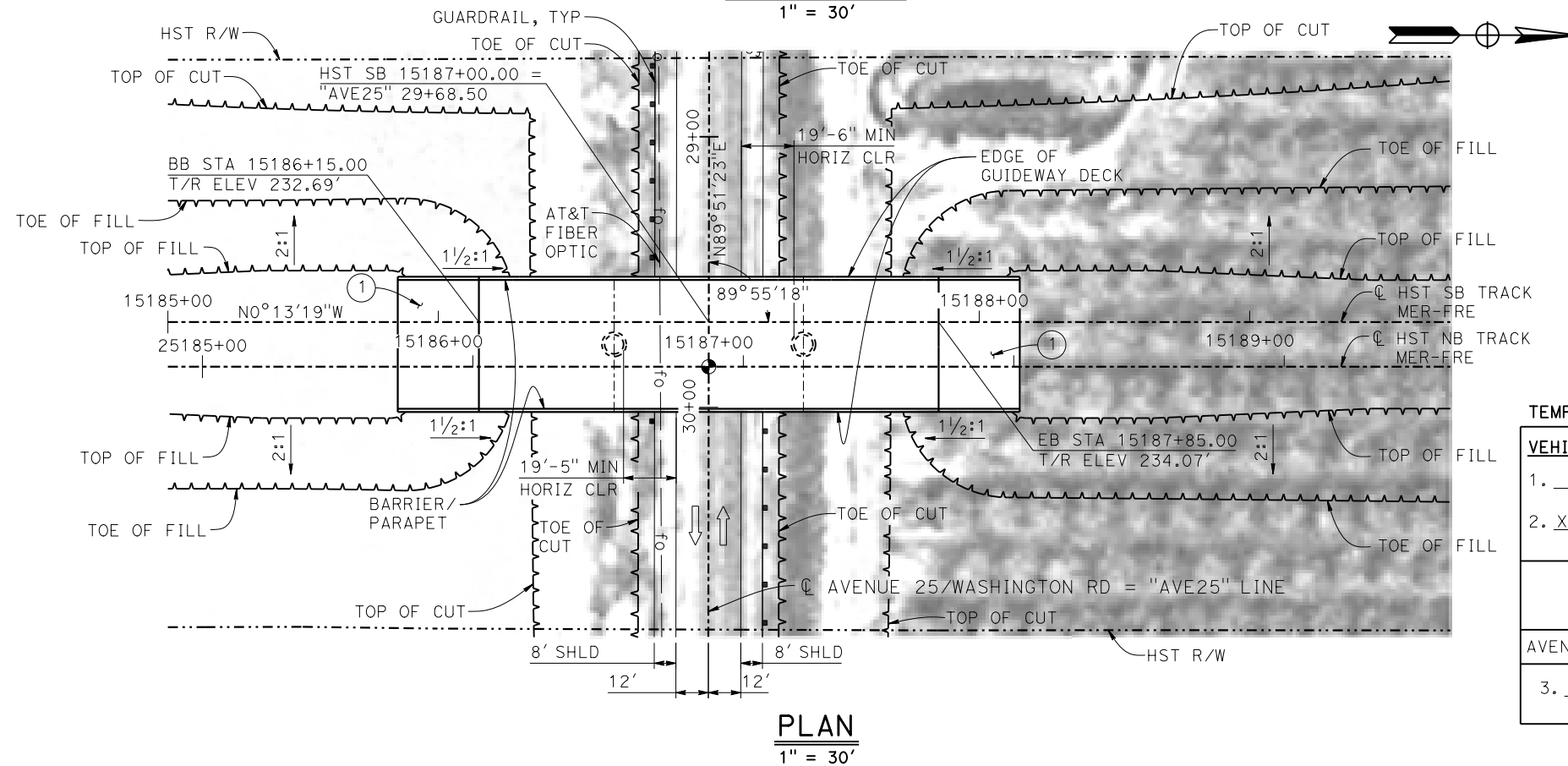
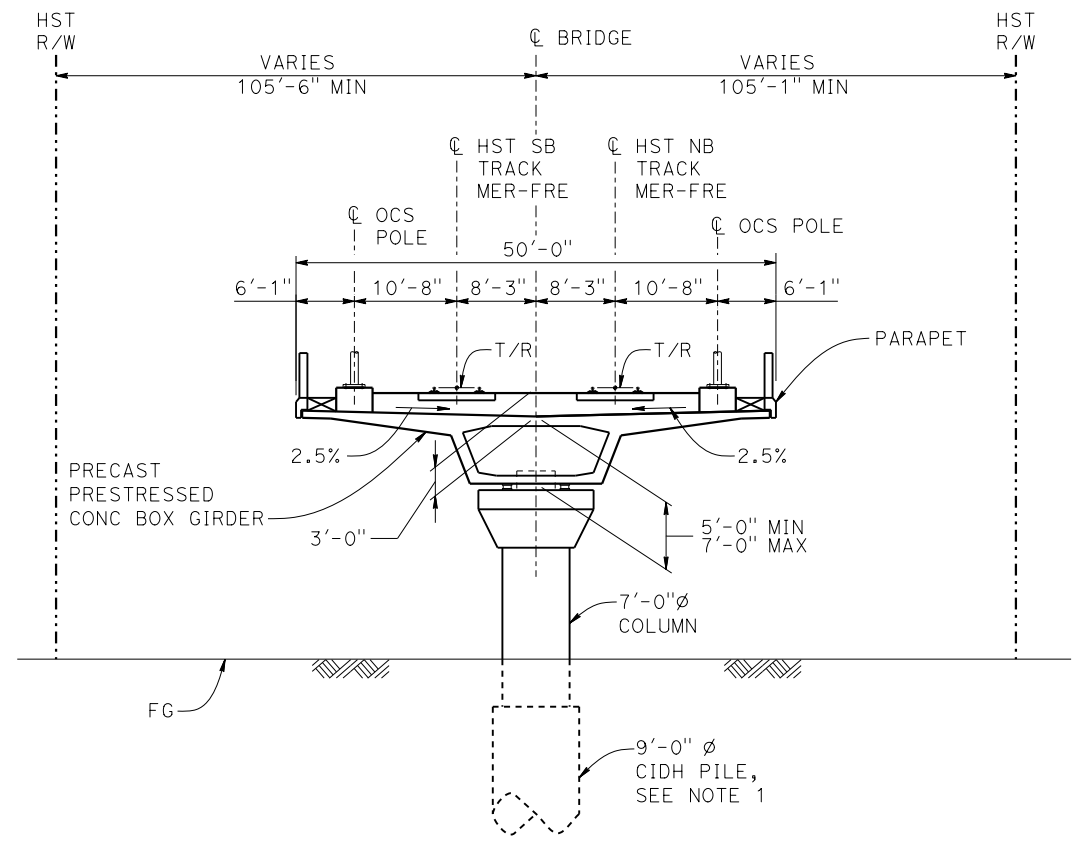
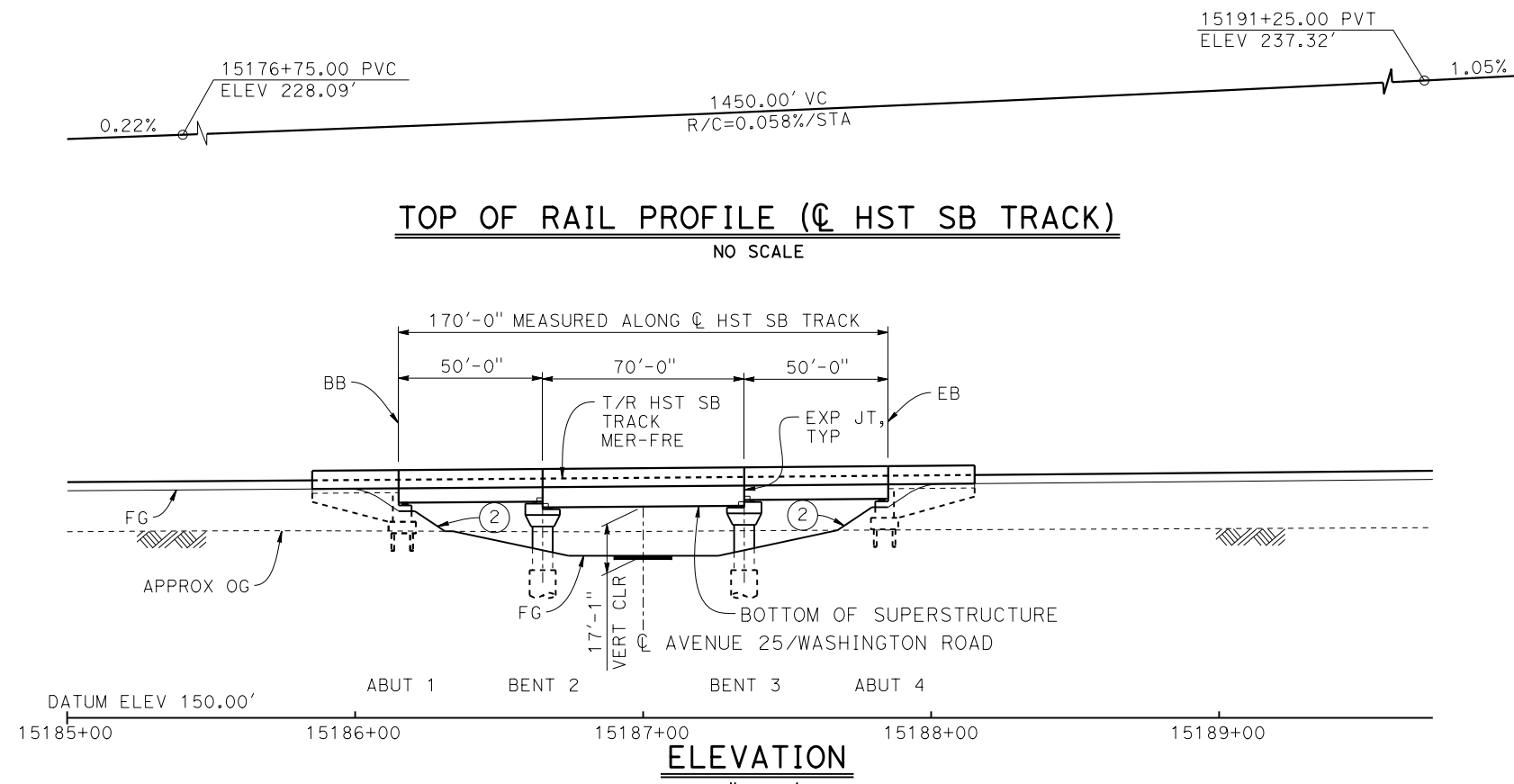
DESIGNED BY  
**M. SUN**  
DRAWN BY  
**A. M.**  
CHECKED BY  
**O. EDEWOR**  
IN CHARGE  
**C. LEMLEY**  
DATE  
**05/08/2015**

**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**  
  
**NOT FOR**  
**CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO SECTION**  
CENTRAL VALLEY WYE  
AVENUE 21 TO ROAD 13 WYE ALTERNATIVE  
TYPICAL SECTION (MER-FRE)  
SR 152 UNDERPASS - 2 OF 2

CONTRACT NO.  
HSR08-05  
DRAWING NO.  
ST-K3450-C  
SCALE  
AS SHOWN  
SHEET NO.



**TYPICAL SECTION**  
1" = 10'

**LEGEND:**

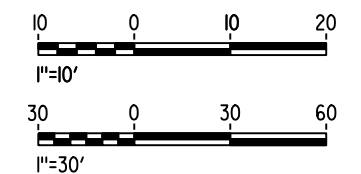
- INDICATES POINT OF MINIMUM VERTICAL CLEARANCE
- ➔ INDICATES DIRECTION OF TRAFFIC
- ① STRUCTURE APPROACH
- ② SLOPE PAVING (1 1/2H:1V)

**TEMPORARY TRAFFIC OPENINGS**

VEHICULAR TRAFFIC			
1. — TRAFFIC WILL BE DETOURED AWAY FROM THE SITE.			
2. <input checked="" type="checkbox"/> TRAFFIC WILL PASS UNDER THE STRUCTURE ON:			
STREET OR ROAD NAME AND LOCATION		FALSEWORK OPENING RECD (HORIZ X VERT)	
AVENUE 25/WASHINGTON RD	15187+00	32'x16.5'	2-WAY
3. — TEMP TRAFFIC LANE REDUCTION FOR FTG EXC.			

**NOTES:**

1. 16" Ø PIPE PILES ASSUMED FOR ABUTMENT FOUNDATIONS. PILE AND DRILLED SHAFT LENGTHS TO BE DETERMINED.
2. FOR UTILITY DISPOSITIONS, SEE CIVIL AND GRADE SEPARATION PLANS; DRAWING CV-S1470-C.
3. FOR GUARDRAILS, SEE CIVIL AND GRADE SEPARATION PLANS; DRAWING CV-S1470-C.



MF-ST-K1470-C.dgn 28-APR-2015 09:30 P005133G

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**M. SUN**

DRAWN BY  
**W. JOHNSEN**

CHECKED BY  
**O. EDEWOR**

IN CHARGE  
**C. LEMLEY**

DATE  
**05/08/2015**

**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**

**NOT FOR**  
**CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO SECTION**

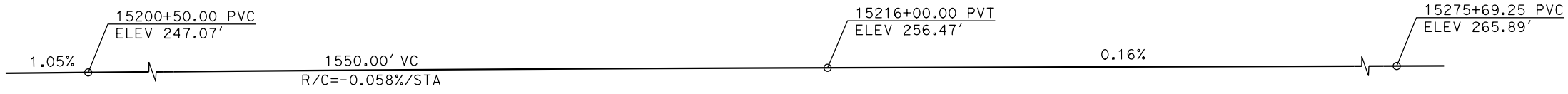
CENTRAL VALLEY WYE  
AVENUE 21 TO ROAD 13 WYE ALTERNATIVE  
GENERAL PLAN (MER-FRE)  
WASHINGTON ROAD (AVENUE 25) UNDERPASS

CONTRACT NO.  
HSR08-05

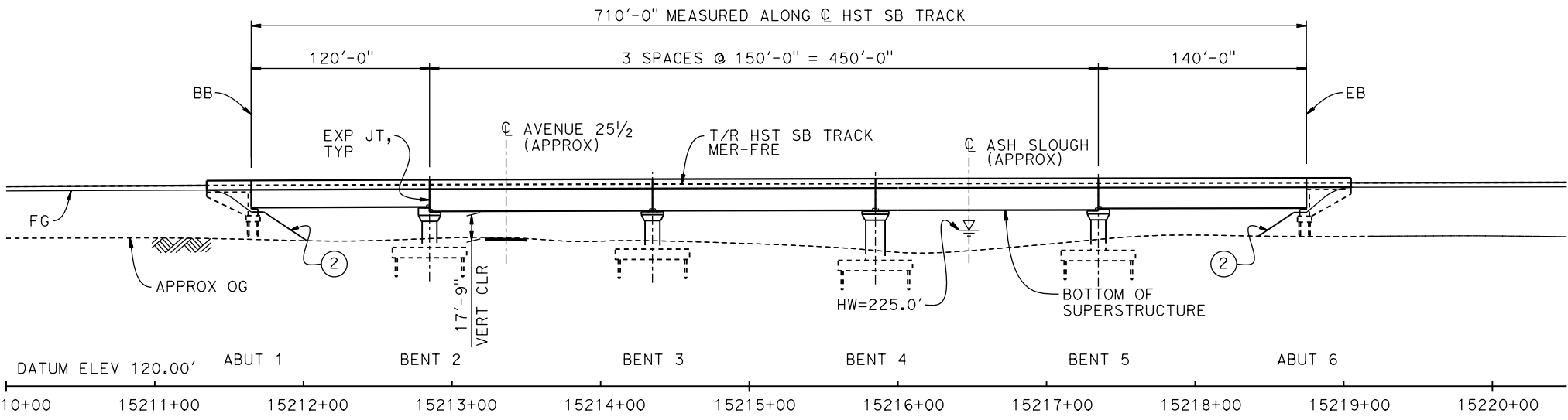
DRAWING NO.  
ST-K1470-C

SCALE  
AS SHOWN

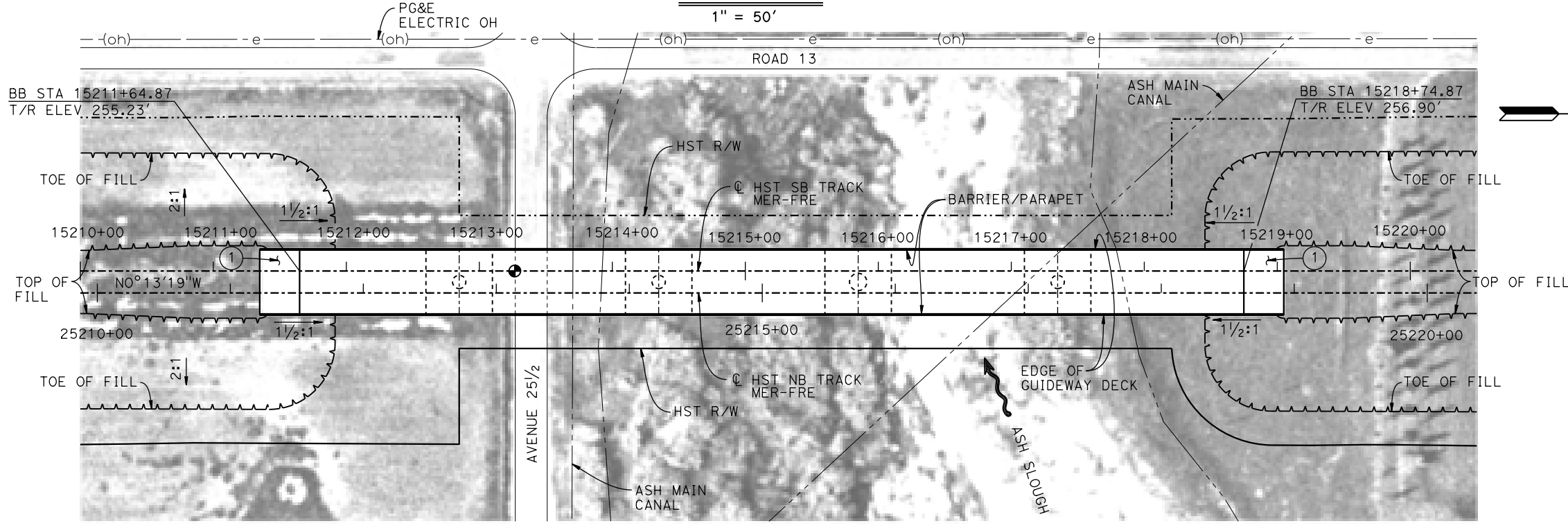
SHEET NO.



**TOP OF RAIL PROFILE (C HST SB TRACK)**  
NO SCALE



**ELEVATION**  
1" = 50'



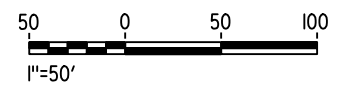
**PLAN**  
1" = 50'

- LEGEND:**
- ⊕ INDICATES POINT OF MINIMUM VERTICAL CLEARANCE
  - INDICATES DIRECTION OF FLOW
  - ① STRUCTURE APPROACH
  - ② SLOPE PAVING (1 1/2 H:1 V)

**TEMPORARY TRAFFIC OPENINGS**

VEHICULAR TRAFFIC		FALSEWORK OPENING REQD (HORIZ X VERT)	
1. _	TRAFFIC WILL BE DETOURED AWAY FROM THE SITE.		
2. X	TRAFFIC WILL PASS UNDER THE STRUCTURE ON:		
	ST OR ROAD NAME AND LOCATION		
	AVENUE 25 1/2	15213+39	32'X16.5' 2-WAY
3. _	TEMP TRAFFIC LANE REDUCTION FOR FTG EXC.		

- NOTES:**
- 16" Ø PIPE PILES ASSUMED FOR ABUTMENT AND BENT FOUNDATIONS. PILE LENGTHS TO BE DETERMINED.
  - FOR SECTION AND BENT COLUMN SCHEDULE, SEE DRAWING ST-K3475-C.
  - ANY EXISTING DIRT ROAD THAT CONFLICTS WITH NEW CONSTRUCTION SHALL BE REALIGNED.
  - FOR UTILITY DISPOSITIONS, SEE CIVIL AND GRADE SEPARATION PLANS; DRAWING CV-S1470-C.



16-MAR-2015 10:21 MF-ST-K1475-C.dgn

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**S. J. S.**

DRAWN BY  
**A. M.**

CHECKED BY  
**O. EDEWOR**

IN CHARGE  
**C. LEMLEY**

DATE  
**05/08/2015**

**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**

**NOT FOR**  
**CONSTRUCTION**

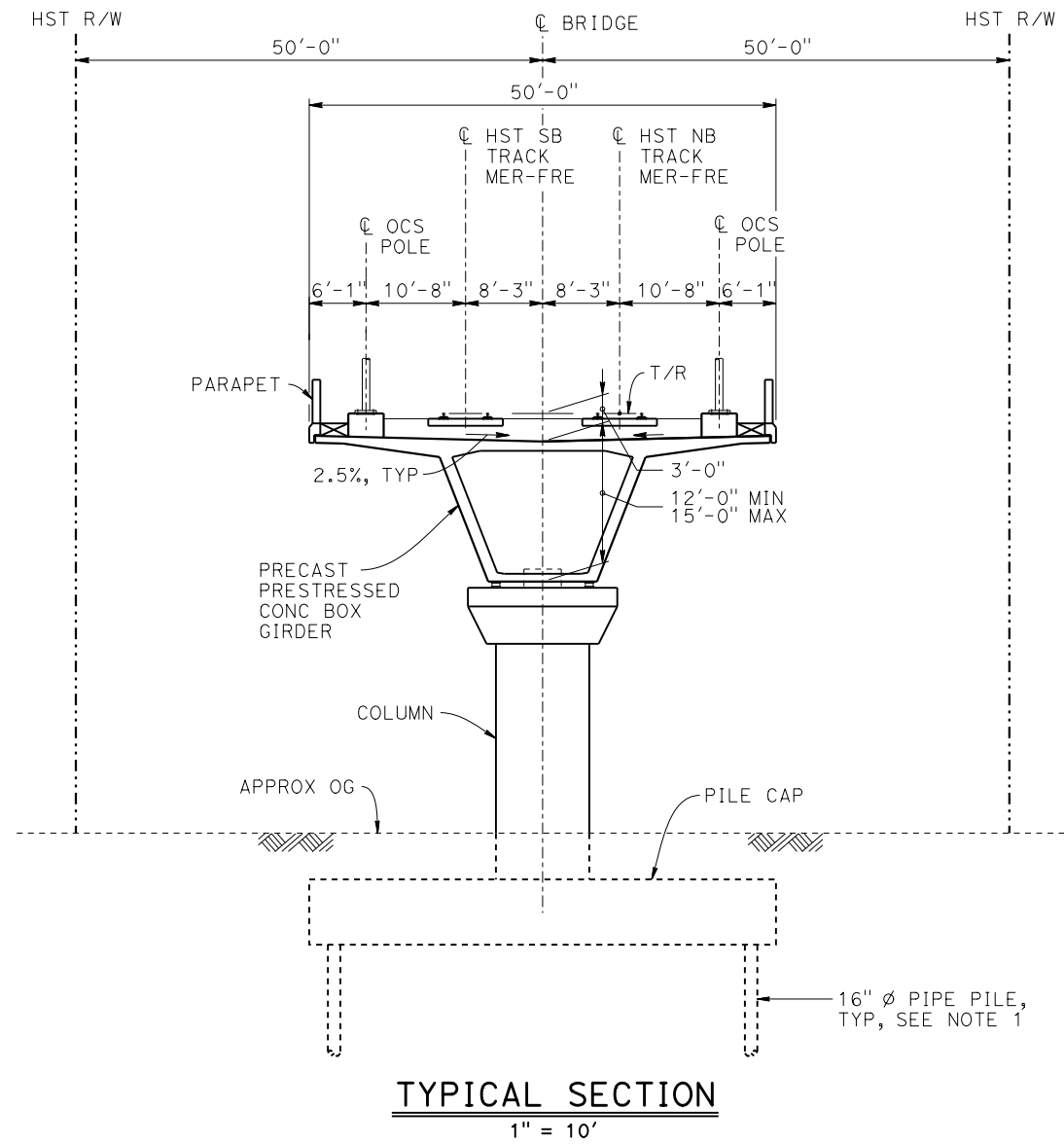


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO SECTION**

CENTRAL VALLEY WYE  
AVENUE 21 TO ROAD 13 WYE ALTERNATIVE  
GENERAL PLAN (MER-FRE)  
ASH SLOUGH BRIDGE - 1 OF 2

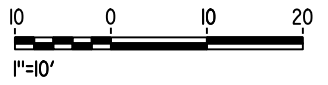
CONTRACT NO. HSR08-05
DRAWING NO. ST-K1475-C
SCALE AS SHOWN
SHEET NO.

MF-ST-K3475-C.dgn  
 05-FEB-2015 11:47  
 P005133G



BENT COLUMN SCHEDULE	
BENT	COLUMN TYPE
2 - 3	10'-0"Ø
4	13'-0"Ø
5	10'-0"Ø

**NOTES:**  
1. PILE LENGTHS TO BE DETERMINED.



REV	DATE	BY	CHK	APP	DESCRIPTION

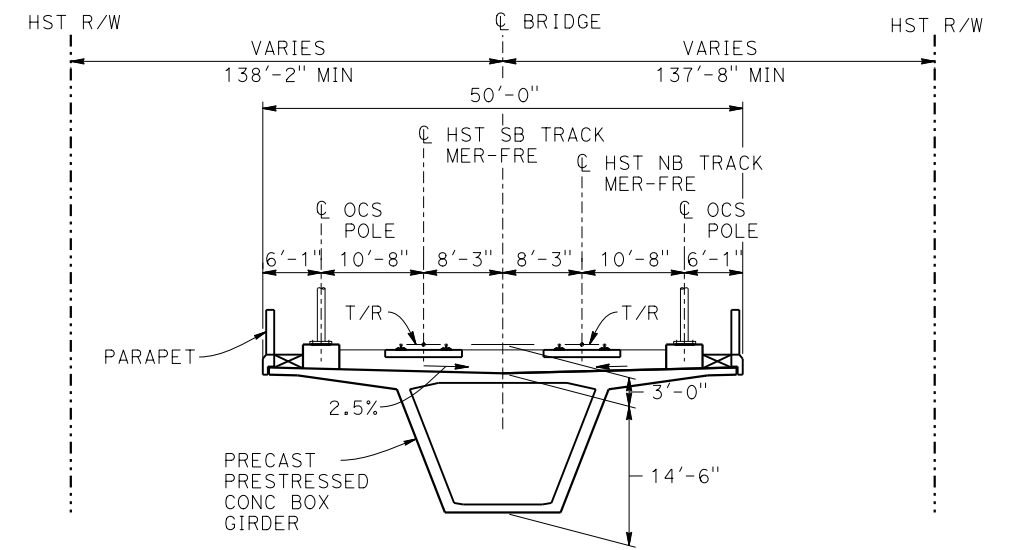
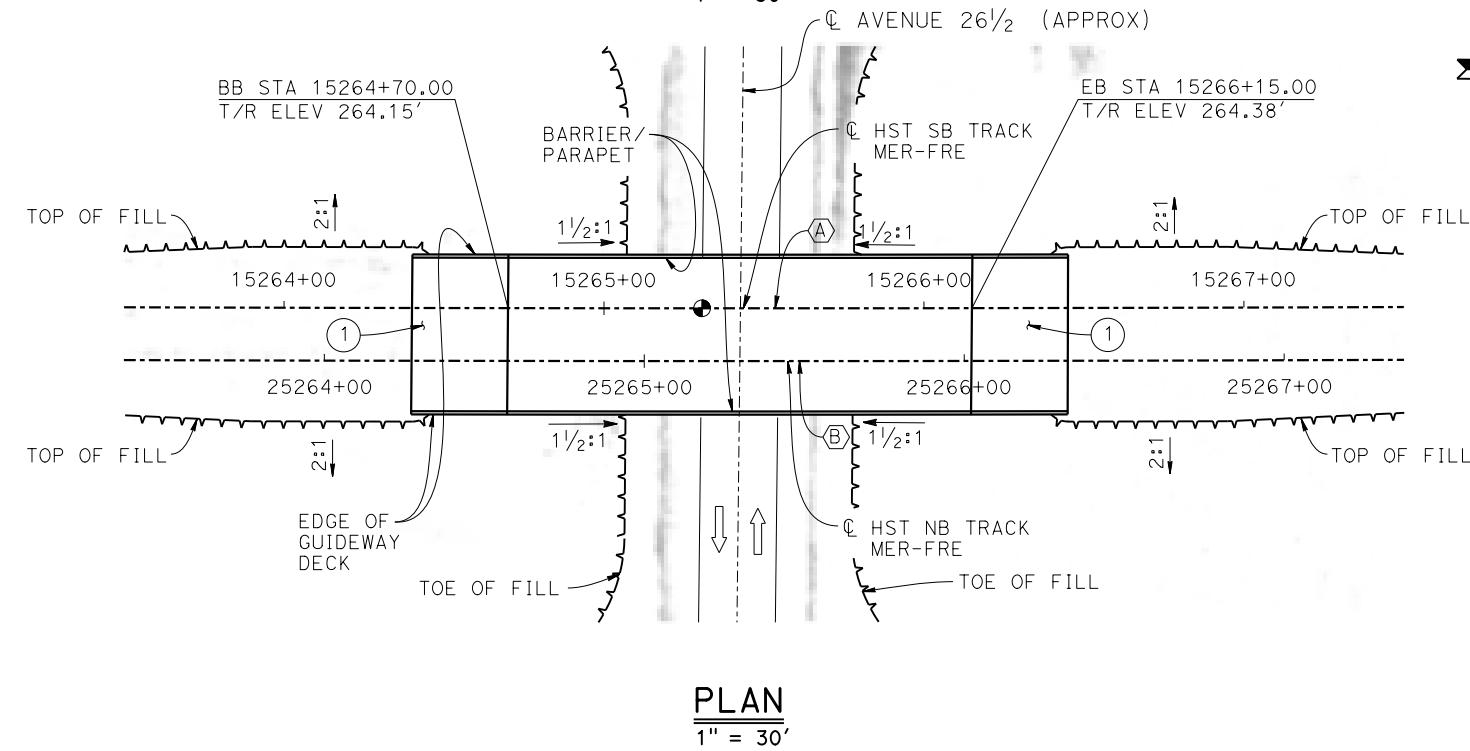
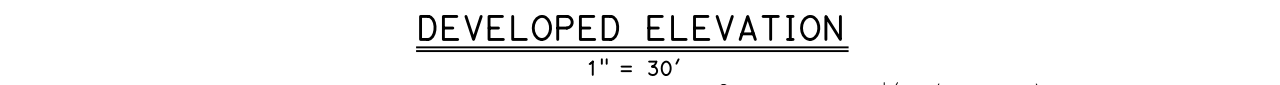
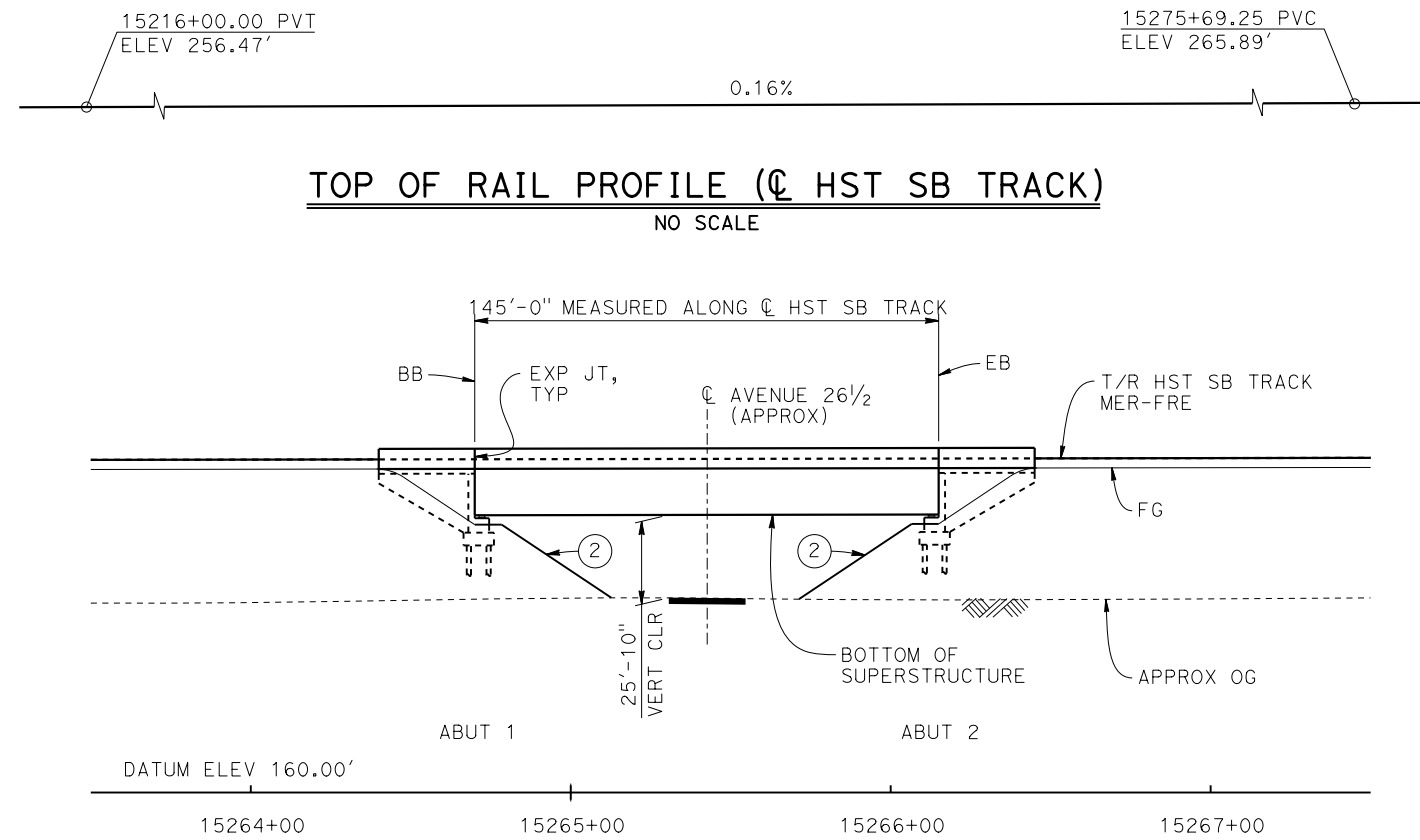
DESIGNED BY  
**S. J. S.**  
 DRAWN BY  
**A. M.**  
 CHECKED BY  
**O. EDEWOR**  
 IN CHARGE  
**C. LEMLEY**  
 DATE  
**02/13/2015**

**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**  
  
**NOT FOR**  
**CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO SECTION**  
 CENTRAL VALLEY WYE  
 AVENUE 21 TO ROAD 13 WYE ALTERNATIVE  
 TYPICAL SECTION (MER-FRE)  
 ASH SLOUGH BRIDGE - 2 OF 2

CONTRACT NO.  
 HSR08-05  
 DRAWING NO.  
 ST-K3475-C  
 SCALE  
 AS SHOWN  
 SHEET NO.



**TYPICAL SECTION**  
1" = 10'

- LEGEND:**
- INDICATES POINT OF MINIMUM VERTICAL CLEARANCE
  - ➔ INDICATES DIRECTION OF TRAFFIC
  - ① STRUCTURE APPROACH
  - ② SLOPE PAVING (1 1/2H:1V)

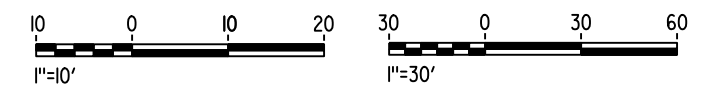
**TEMPORARY TRAFFIC OPENINGS**

VEHICULAR TRAFFIC			
1. <u>  </u> TRAFFIC WILL BE DETOURED AWAY FROM THE SITE.			
2. <u>  </u> TRAFFIC WILL PASS UNDER THE STRUCTURE ON:			
ST OR ROAD NAME AND LOCATION	FALSEWORK OPENING REQD (HORIZ X VERT)		
AVENUE 26 1/2	15265+43	32'X16.5'	2-WAY
3. <u>  </u> TEMP TRAFFIC LANE REDUCTION FOR FTG EXC.			

- CURVE MER-FRE 2 SB (A)**  
R = 30,000.00'  
LS = 2,250.00'
- CURVE MER-FRE 2 SB (B)**  
R = 30,016.50'  
LS = 2,250.00'

**NOTES:**

1. 16"  $\phi$  PIPE PILES ASSUMED FOR ABUTMENT FOUNDATIONS. PILE LENGTHS TO BE DETERMINED.
2. ANY EXISTING DIRT ROAD THAT CONFLICTS WITH NEW CONSTRUCTION SHALL BE REALIGNED.
3. FOR UTILITY DISPOSITIONS, SEE CIVIL AND GRADE SEPARATION PLANS; DRAWING CV-S1480-C.
4. FOR TRACK SUPERELEVATION DETAILS, SEE ALIGNMENT AND TYPICAL SECTION PLANS; DRAWINGS TT-B0056-C AND TT-B0057-C.



07-MAY-2015 15:51:35 MF-ST-K1480-C.dgn

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**S. J. S.**

DRAWN BY  
**A. M.**

CHECKED BY  
**O. EDEWOR**

IN CHARGE  
**C. LEMLEY**

DATE  
**05/08/2015**

**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**

**NOT FOR**  
**CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO SECTION**

CENTRAL VALLEY WYE  
AVENUE 21 TO ROAD 13 WYE ALTERNATIVE  
GENERAL PLAN (MER-FRE)  
AVENUE 26 1/2 UNDERPASS

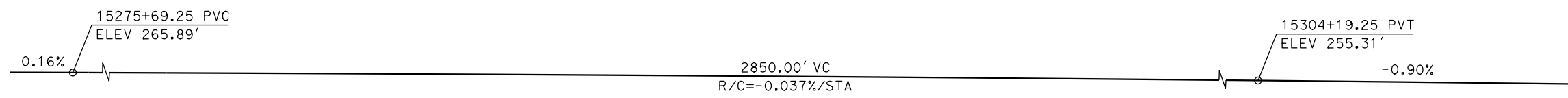
CONTRACT NO.  
HSR08-05

DRAWING NO.  
ST-K1480-C

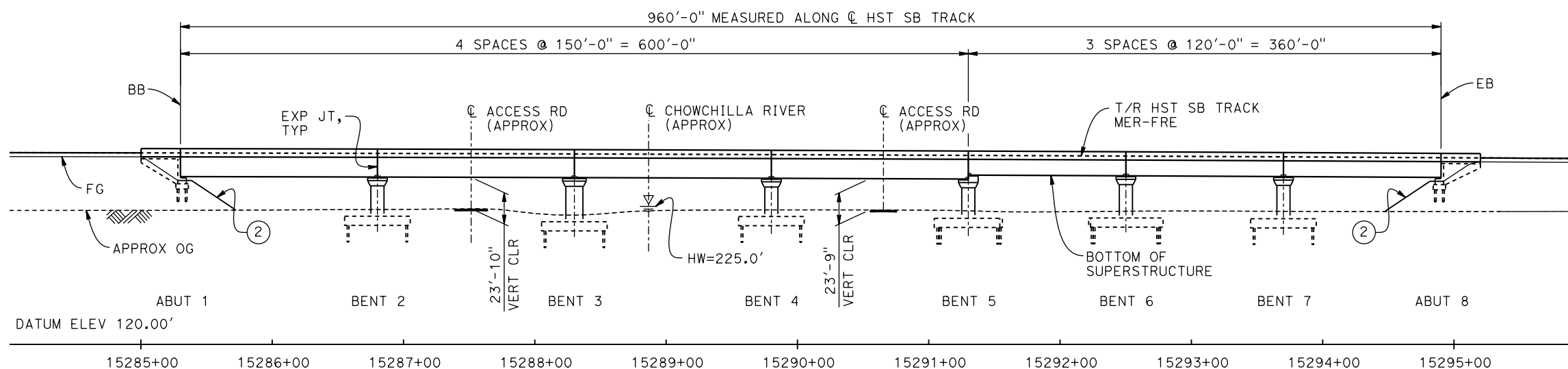
SCALE  
AS SHOWN

SHEET NO.





**TOP OF RAIL PROFILE (☉ HST SB TRACK)**  
NO SCALE



**DEVELOPED ELEVATION**  
1" = 50'

- LEGEND:**
- ⊙ INDICATES POINT OF MINIMUM VERTICAL CLEARANCE
  - ➔ INDICATES DIRECTION OF TRAFFIC
  - ➞ INDICATES DIRECTION OF FLOW
  - ① STRUCTURE APPROACH
  - ② SLOPE PAVING (1/2H:1V)

**CURVE MER-FRE 2 SB (A)      CURVE MER-FRE 2 NB (B)**  
R = 30,000.00'      R = 30,016.50'  
LS = 2,250.00'      LS = 2,250.00'

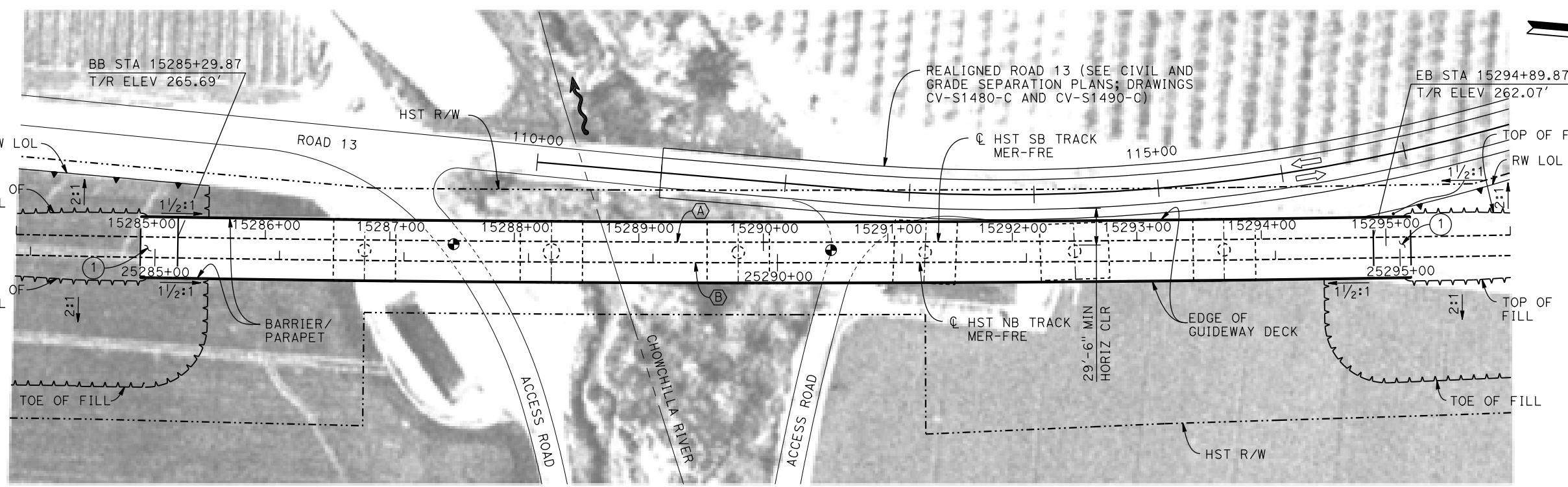
**TEMPORARY TRAFFIC OPENINGS**

**VEHICULAR TRAFFIC**

1.    TRAFFIC WILL BE DETOURED AWAY FROM THE SITE.
2.    TRAFFIC WILL PASS UNDER THE STRUCTURE ON:

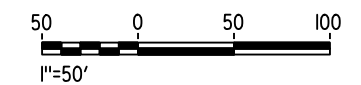
ST OR ROAD NAME AND LOCATION	FALSEWORK OPENING REQD (HORIZ X VERT)
ACCESS ROAD 15287+38	20'X16.5' -
ACCESS ROAD 15290+66	20'X16.5' -

3.    TEMP TRAFFIC LANE REDUCTION FOR FTG EXC.



**PLAN**  
1" = 50'

- NOTES:**
1. 16" ø PIPE PILES ASSUMED FOR ABUTMENT AND BENT FOUNDATIONS. PILE LENGTHS TO BE DETERMINED.
  2. FOR SECTION AND BENT COLUMN SCHEDULE, SEE DRAWING ST-K3490-C.
  3. ANY EXISTING DIRT ROAD THAT CONFLICTS WITH NEW CONSTRUCTION SHALL BE REALIGNED.
  4. FOR UTILITY DISPOSITIONS, SEE CIVIL AND GRADE SEPARATION PLANS; DRAWINGS CV-S1480-C AND CV-S1490-C.
  5. FOR RETAINING WALLS, SEE CIVIL AND GRADE SEPARATION PLANS; DRAWINGS CV-S1480-C AND CV-S1490-C.



16-MAR-2015 10:09:22 MF-ST-K1490-C.dgn

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**S. J. S.**

DRAWN BY  
**A. M.**

CHECKED BY  
**O. EDEWOR**

IN CHARGE  
**C. LEMLEY**

DATE  
**05/08/2015**

**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**

**NOT FOR**  
**CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO SECTION**  
CENTRAL VALLEY WYE  
AVENUE 21 TO ROAD 13 WYE ALTERNATIVE  
GENERAL PLAN (MER-FRE)  
CHOWCHILLA RIVER BRIDGE - 1 OF 2

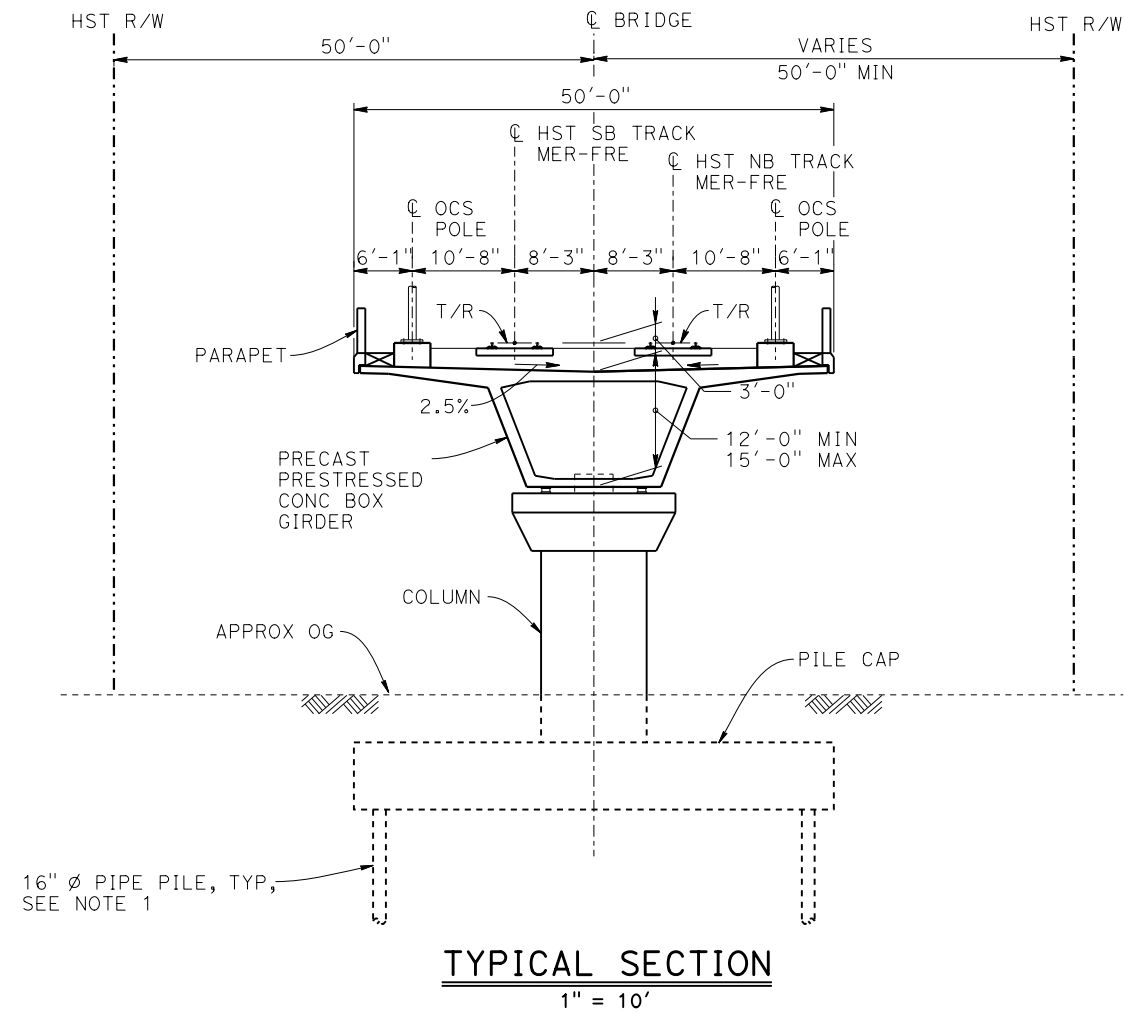
CONTRACT NO.  
HSR08-05

DRAWING NO.  
ST-K1490-C

SCALE  
AS SHOWN

SHEET NO.

BENT COLUMN SCHEDULE	
BENT	COLUMN TYPE
2	10'-0"Ø
3	13'-0"Ø
4 - 7	10'-0"Ø



**NOTES:**

1. PILE LENGTHS TO BE DETERMINED.
2. FOR TRACK SUPERELEVATION DETAILS, SEE ALIGNMENT AND TYPICAL SECTION PLANS; DRAWINGS TT-B0056-C AND TT-B0057-C.



05-FEB-2015 11:47 MF-ST-K3490-C.dgn

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**S. J. S.**

DRAWN BY  
**A. M.**

CHECKED BY  
**O. EDEWOR**

IN CHARGE  
**C. LEMLEY**

DATE  
**02/13/2015**

**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**

**NOT FOR**  
**CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO SECTION**

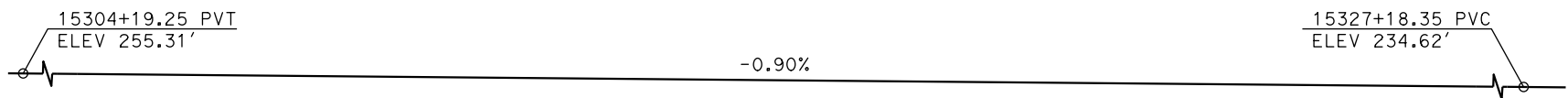
CENTRAL VALLEY WYE  
AVENUE 21 TO ROAD 13 WYE ALTERNATIVE  
TYPICAL SECTION (MER-FRE)  
CHOWCHILLA RIVER BRIDGE - 2 OF 2

CONTRACT NO.  
HSR08-05

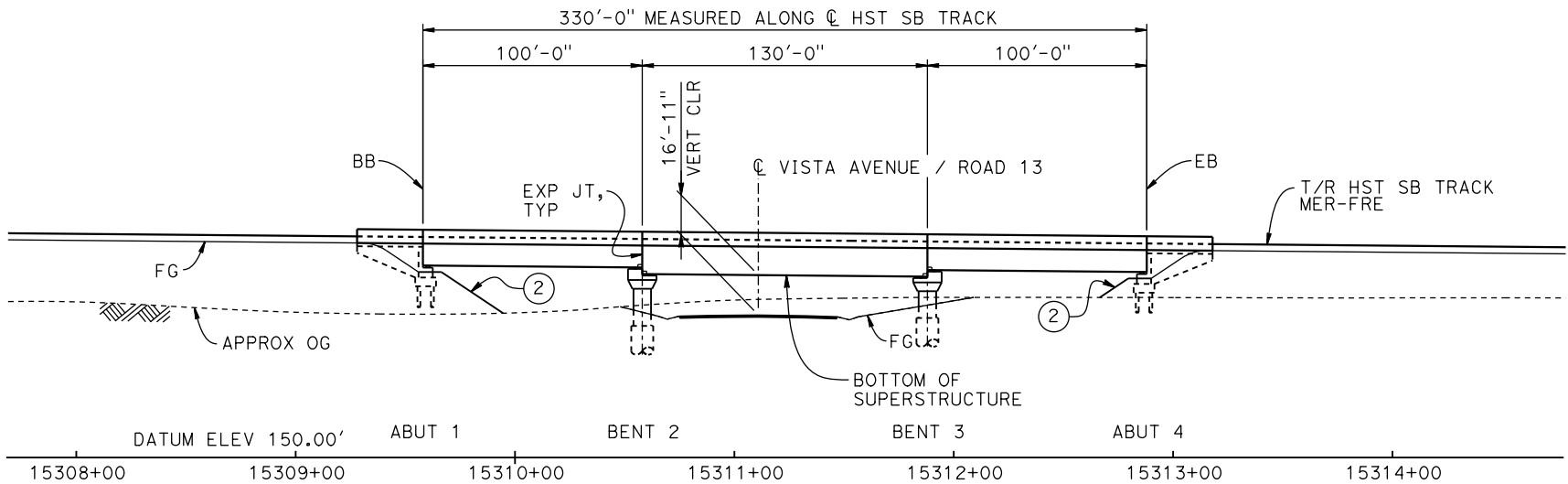
DRAWING NO.  
ST-K3490-C

SCALE  
AS SHOWN

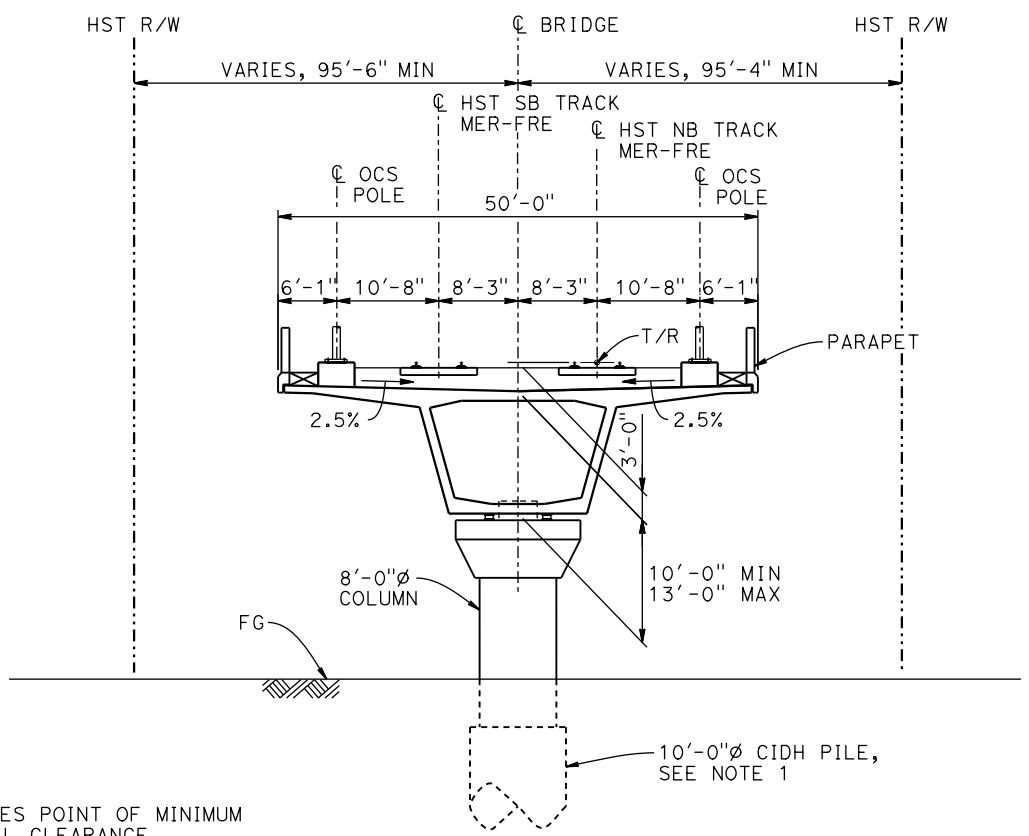
SHEET NO.



**TOP OF RAIL PROFILE (C HST SB TRACK)**  
NO SCALE



**DEVELOPED ELEVATION**  
1" = 40'



**TYPICAL SECTION**  
1" = 10'

- LEGEND:**
- ⊕ INDICATES POINT OF MINIMUM VERTICAL CLEARANCE
  - ➔ INDICATES DIRECTION OF TRAFFIC
  - ① STRUCTURE APPROACH
  - ② SLOPE PAVING (1 1/2 H:1 V)

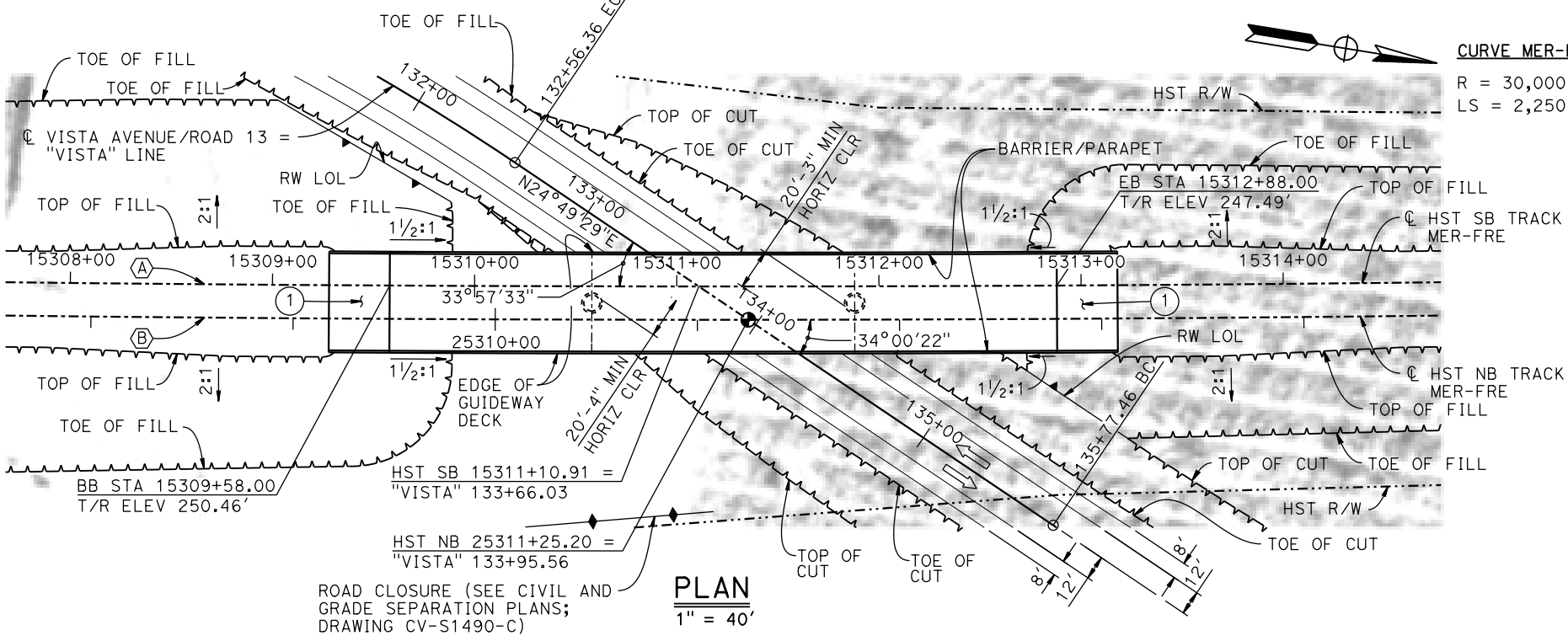
**CURVE MER-FRE 2 SB (A)**    **CURVE MER-FRE 2 NB (B)**

R = 30,000.00'    R = 30,016.50'  
LS = 2,250.00'    LS = 2,250.00'

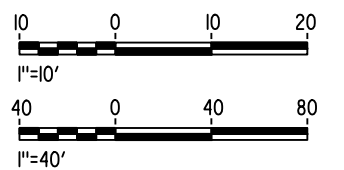
- NOTES:**
1. 16" Ø PIPE PILES ASSUMED FOR ABUTMENT FOUNDATIONS. PILE AND DRILLED SHAFT LENGTHS TO BE DETERMINED.
  2. ANY EXISTING DIRT ROAD THAT CONFLICTS WITH NEW CONSTRUCTION SHALL BE REALIGNED.
  3. FOR UTILITY DISPOSITIONS, SEE CIVIL AND GRADE SEPARATION PLANS; DRAWING CV-S1490-C.
  4. FOR GUARDRAILS, SEE CIVIL AND GRADE SEPARATION PLANS; DRAWING CV-S1490-C.
  5. FOR TRACK SUPERELEVATION DETAILS, SEE ALIGNMENT AND TYPICAL SECTION PLAN DRAWINGS TT-B0056-C AND TT-B0057-C.
  6. FOR RETAINING WALLS, SEE CIVIL AND GRADE SEPARATION PLANS; DRAWING CV-S1490-C.

**TEMPORARY TRAFFIC OPENINGS**

VEHICULAR TRAFFIC		FALSEWORK OPENING REQD (HORIZ X VERT)	
1. — TRAFFIC WILL BE DETOURED AWAY FROM THE SITE.			
2. X TRAFFIC WILL PASS UNDER THE STRUCTURE ON:			
ST OR ROAD NAME AND LOCATION			
VISTA AVENUE/ROAD 13	15311+11	32'X16.5'	2-WAY
3. — TEMP TRAFFIC LANE REDUCTION FOR FTG EXC.			



**PLAN**  
1" = 40'



16-MAR-2011 09:22 MF-ST-K1495-C.dgn

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**S. J. S.**

DRAWN BY  
**R. M.**

CHECKED BY  
**O. EDEWOR**

IN CHARGE  
**C. LEMLEY**

DATE  
**05/08/2015**

**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**

**NOT FOR**  
**CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO SECTION**

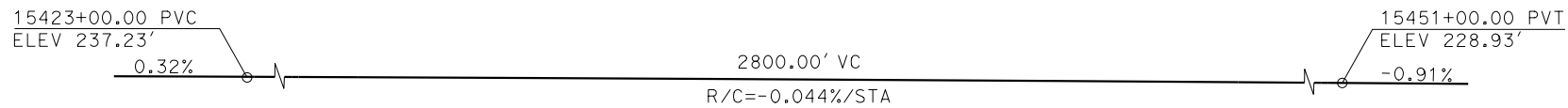
CENTRAL VALLEY WYE  
AVENUE 21 TO ROAD 13 WYE ALTERNATIVE  
GENERAL PLAN (MER-FRE)  
VISTA AVENUE (ROAD 13) UNDERPASS

CONTRACT NO.  
HSR08-05

DRAWING NO.  
ST-K1495-C

SCALE  
AS SHOWN

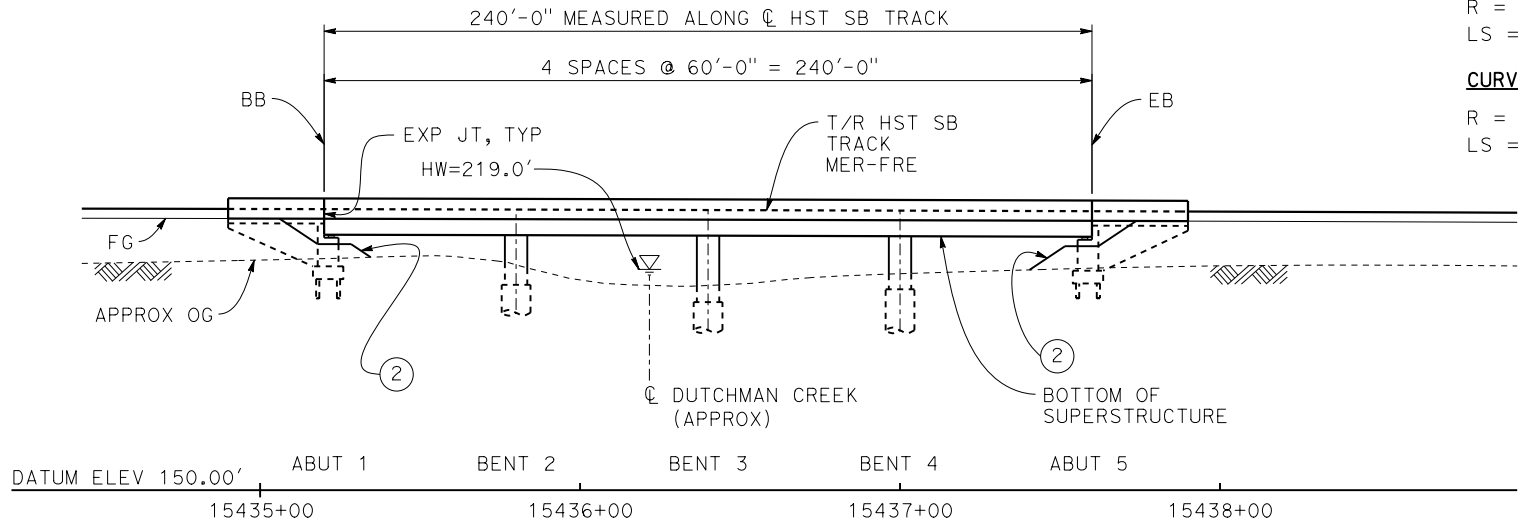
SHEET NO.



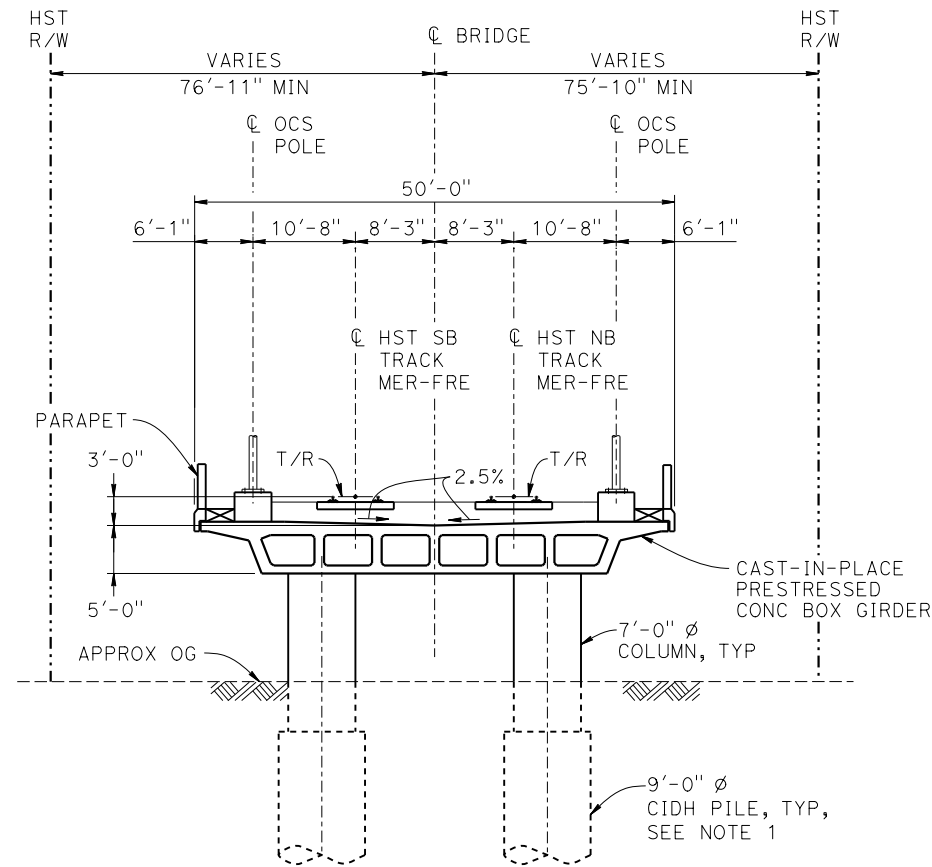
**TOP OF RAIL PROFILE (C HST SB TRACK)**  
NO SCALE

**CURVE MER-FRE 2 SB (A)**  
R = 30,000.00'  
LS = 2,250.00'

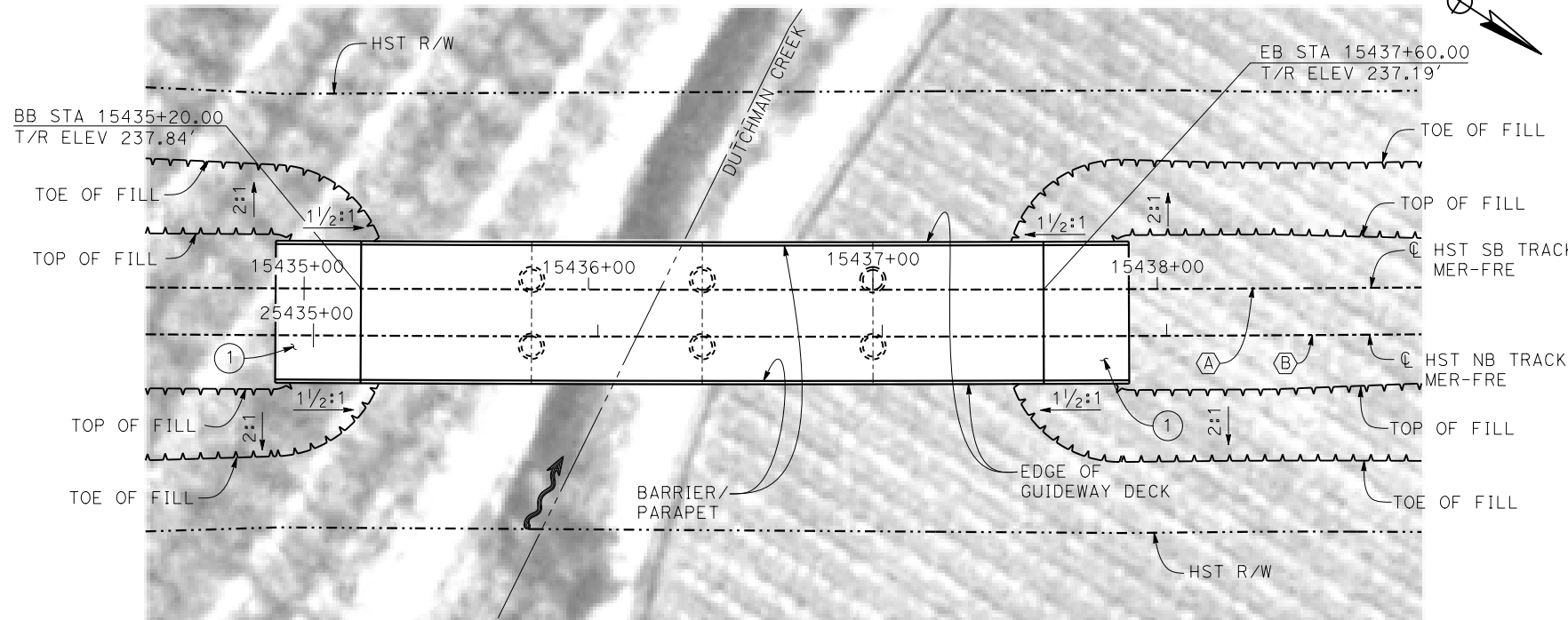
**CURVE MER-FRE 2 NB (B)**  
R = 30,016.50  
LS = 2,250.00'



**DEVELOPED ELEVATION**  
1" = 30'



**TYPICAL SECTION**  
1" = 10'



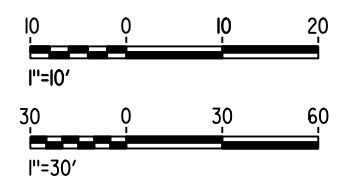
**PLAN**  
1" = 30'

**LEGEND:**

- INDICATES DIRECTION OF FLOW
- ① STRUCTURE APPROACH
- ② SLOPE PAVING (1 1/2H:1V)

**NOTES:**

1. 16" Ø PIPE PILES ASSUMED FOR ABUTMENT FOUNDATIONS. PILE AND DRILLED SHAFT LENGTHS TO BE DETERMINED.
2. FOR UTILITY DISPOSITION, SEE CIVIL AND GRADE SEPARATION PLANS; DRAWING CV-S1510-C.
3. ANY EXISTING DIRT ROAD THAT CONFLICTS WITH NEW CONSTRUCTION SHALL BE REALIGNED.
4. FOR TRACK SUPERELEVATION DETAILS, SEE ALIGNMENT AND TYPICAL SECTION PLANS; DRAWINGS TT-B0056-C AND TT-B0057-C.



04-FEB-2015 11:19 MF-ST-K1510-C.dgn

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**M. SUN**

DRAWN BY  
**W. JOHNSEN**

CHECKED BY  
**O. EDEWOR**

IN CHARGE  
**C. LEMLEY**

DATE  
**02/13/2015**

**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**

**NOT FOR**  
**CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO SECTION**

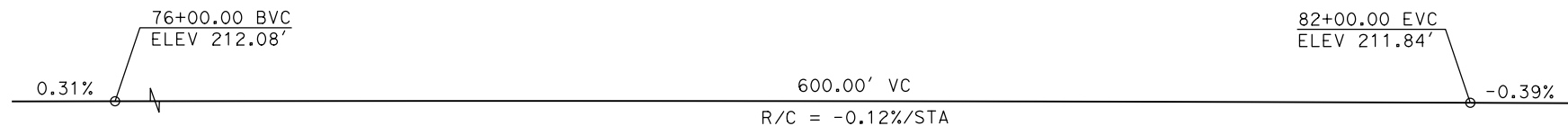
CENTRAL VALLEY WYE  
AVENUE 21 TO ROAD 13 WYE ALTERNATIVE  
GENERAL PLAN (MER-FRE)  
DUTCHMAN CREEK BRIDGE

CONTRACT NO.  
HSR08-05

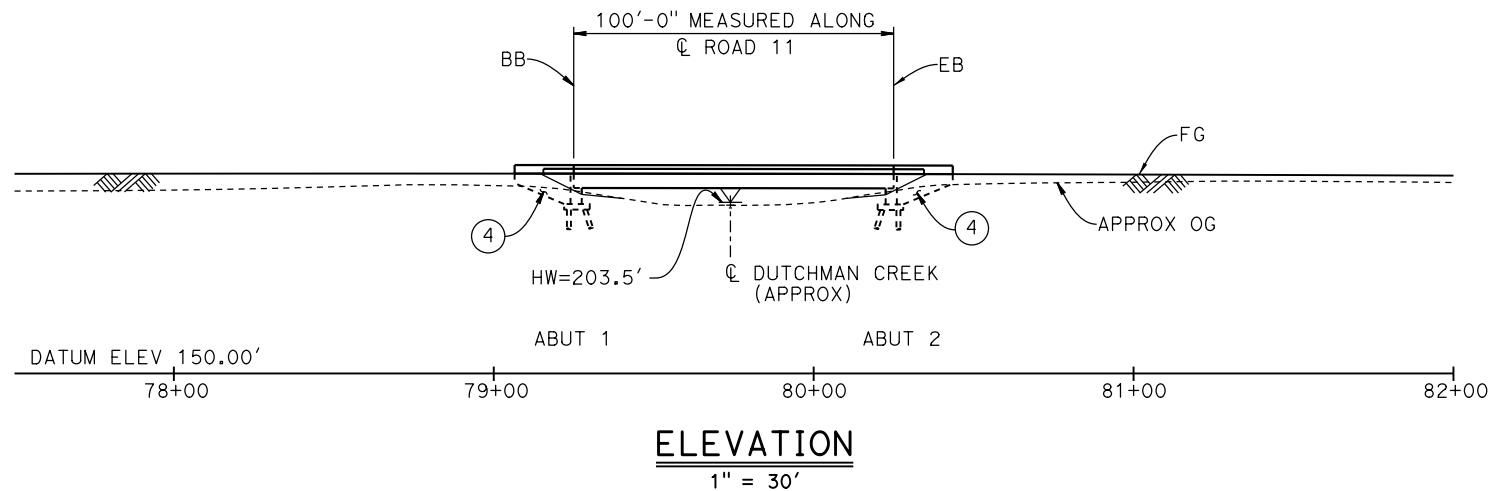
DRAWING NO.  
ST-K1510-C

SCALE  
AS SHOWN

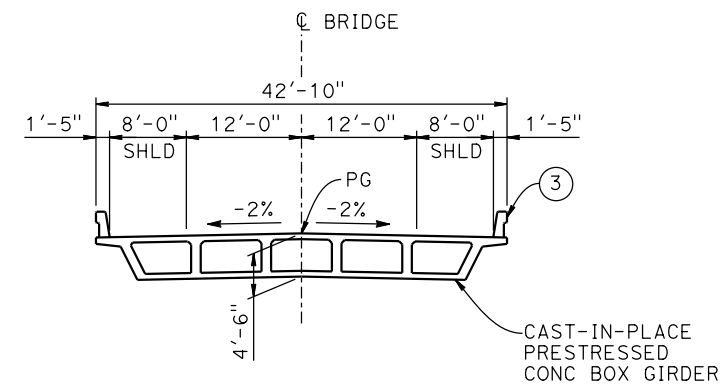
SHEET NO.



**PROFILE GRADE**  
NO SCALE



**ELEVATION**  
1" = 30'



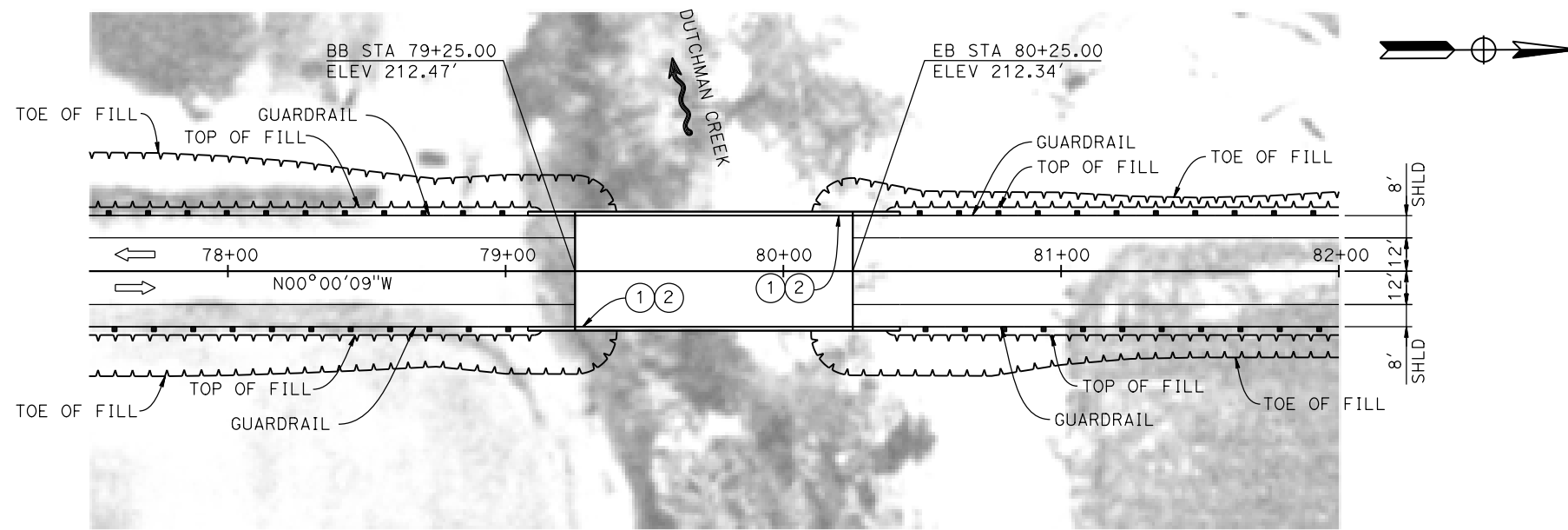
**TYPICAL SECTION**  
1" = 10'

**LEGEND:**

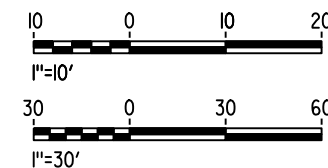
- INDICATES DIRECTION OF FLOW
- INDICATES DIRECTION OF TRAFFIC
- ① PAINT "ROAD 11 BRIDGE"
- ② PAINT "BRIDGE NO. XX-XXXX"
- ③ CONCRETE BARRIER TYPE 732
- ④ WINGWALL

**NOTES:**

1. ASSUME CLASS 140 PILES AT ABUTMENT AND BENT FOUNDATIONS. PILE LENGTHS TO BE DETERMINED.
2. FOR UTILITY DISPOSITIONS, SEE CIVIL AND GRADE SEPARATION PLANS; DRAWING CV-R1512-C.
3. FOR GUARDRAILS, SEE CIVIL AND GRADE SEPARATION PLANS; DRAWING CV-R1512-C.



**PLAN**  
1" = 30'



10-MAR-2016 7:35 MF-ST-K1515-C.dgn

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**S. J. S.**

DRAWN BY  
**A. M.**

CHECKED BY  
**K. CHARAN**

IN CHARGE  
**C. LEMLEY**

DATE  
**03/18/2016**

**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**

**NOT FOR**  
**CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO SECTION**

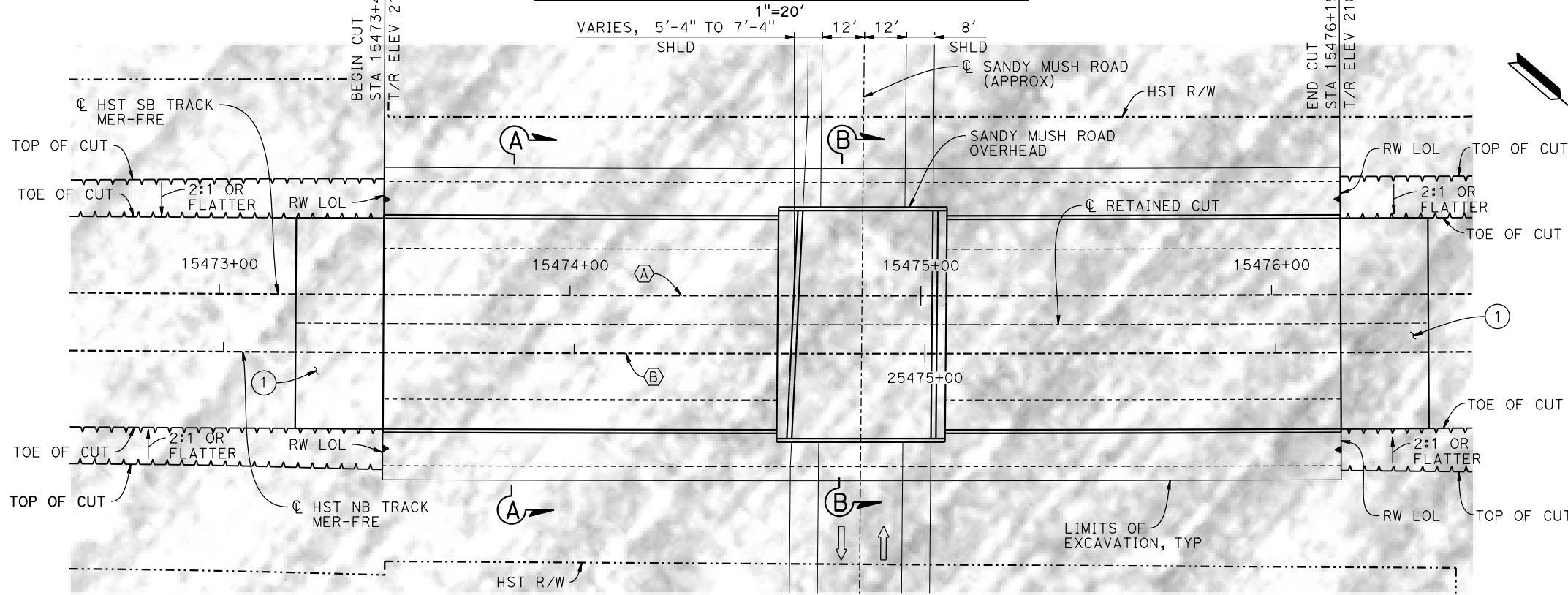
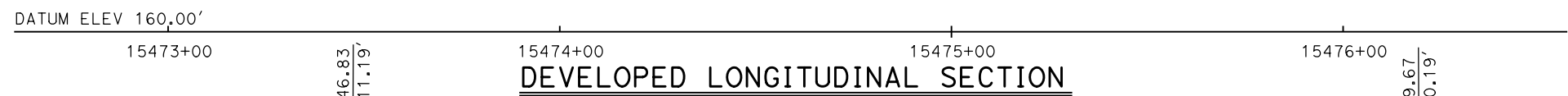
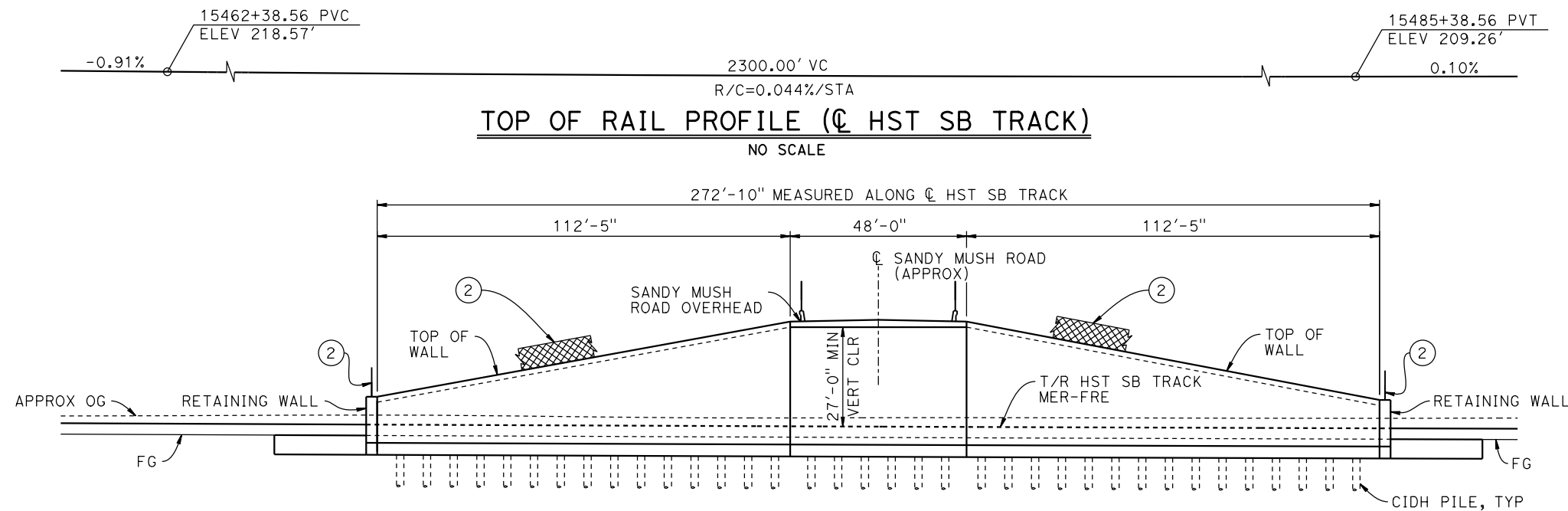
CENTRAL VALLEY WYE  
AVENUE 21 TO ROAD 13 WYE ALTERNATIVE  
GENERAL PLAN (MER-FRE)  
ROAD 11 BRIDGE

CONTRACT NO.  
HSR08-05

DRAWING NO.  
ST-K1515-C

SCALE  
AS SHOWN

SHEET NO.

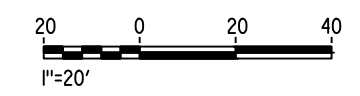


**CURVE MER-FRE 2 SB (A)**  
 R = 30,000.00'  
 LS = 2,250.00'

**CURVE MER-FRE 2 NB (B)**  
 R = 30,016.50'  
 LS = 2,250.00'

- NOTES:**
1. FOR SECTIONS, SEE DRAWING ST-T3520-C.
  2. PILE LENGTH AND LAYOUT TO BE DETERMINED ONCE A SITE SPECIFIC ASSESSMENT OF GROUNDWATER CONDITIONS IS AVAILABLE.
  3. FOR UTILITY DISPOSITIONS, SEE CIVIL AND GRADE SEPARATION PLANS; DRAWING CV-S1520-C.
  4. FOR RETAINING WALLS, SEE CIVIL AND GRADE SEPARATION PLANS; DRAWING CV-S1520-C.
  5. FOR SANDY MUSH ROAD OVERHEAD GENERAL PLAN AND TYPICAL SECTION, SEE DRAWING ST-K1520-C.

- LEGEND:**
- ➡ INDICATES DIRECTION OF TRAFFIC
  - (1) STRUCTURE APPROACH
  - (2) AR FENCE WITH SOLID PLATE



18-MAY-2015 9:23 MF-ST-T1520-C.dgn

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**O. EDEWOR**

DRAWN BY  
**J. KIDWELL**

CHECKED BY  
**S.S./K.C.**

IN CHARGE  
**C. LEMLEY**

DATE  
**05/08/2015**

**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**

**NOT FOR**  
**CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO SECTION**

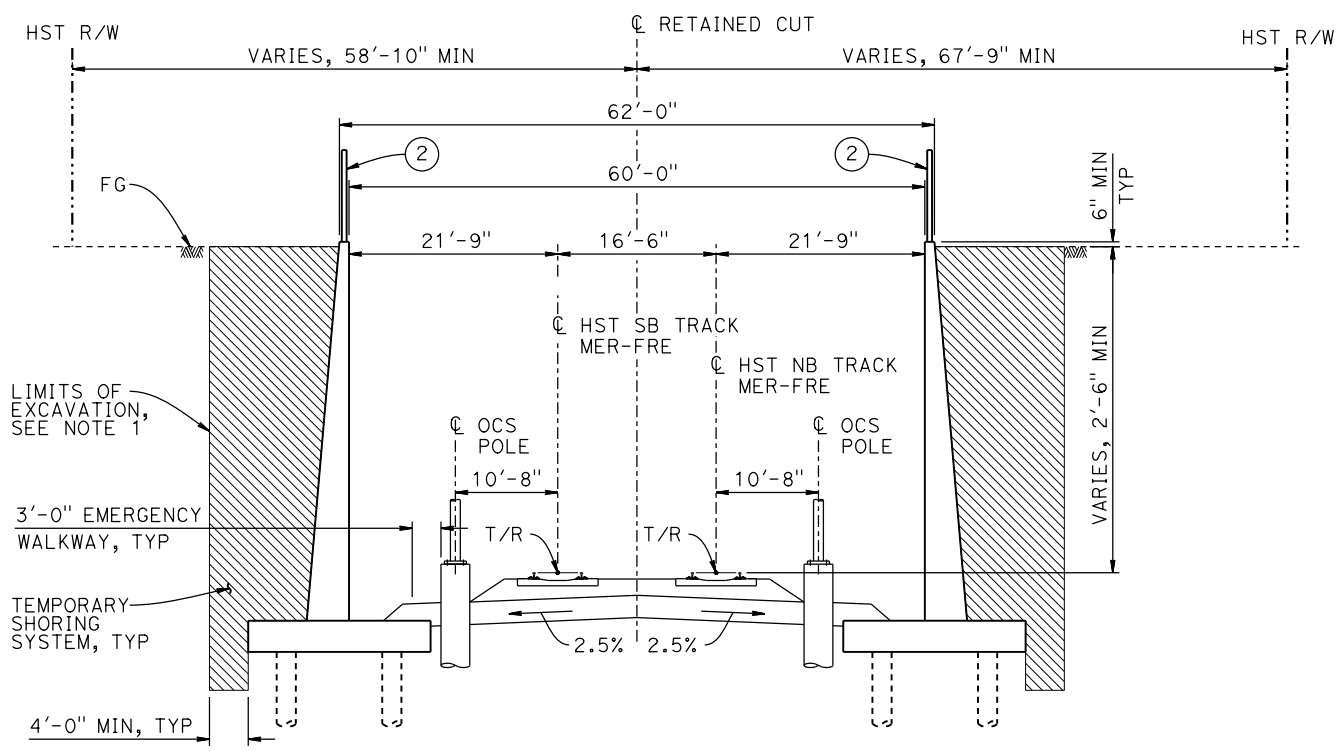
CENTRAL VALLEY WYE  
 AVENUE 21 TO ROAD 13 WYE ALTERNATIVE  
 GENERAL PLAN (MER-FRE)  
 RETAINED CUT - SANDY MUSH ROAD - 1 OF 2

CONTRACT NO.  
HSR08-05

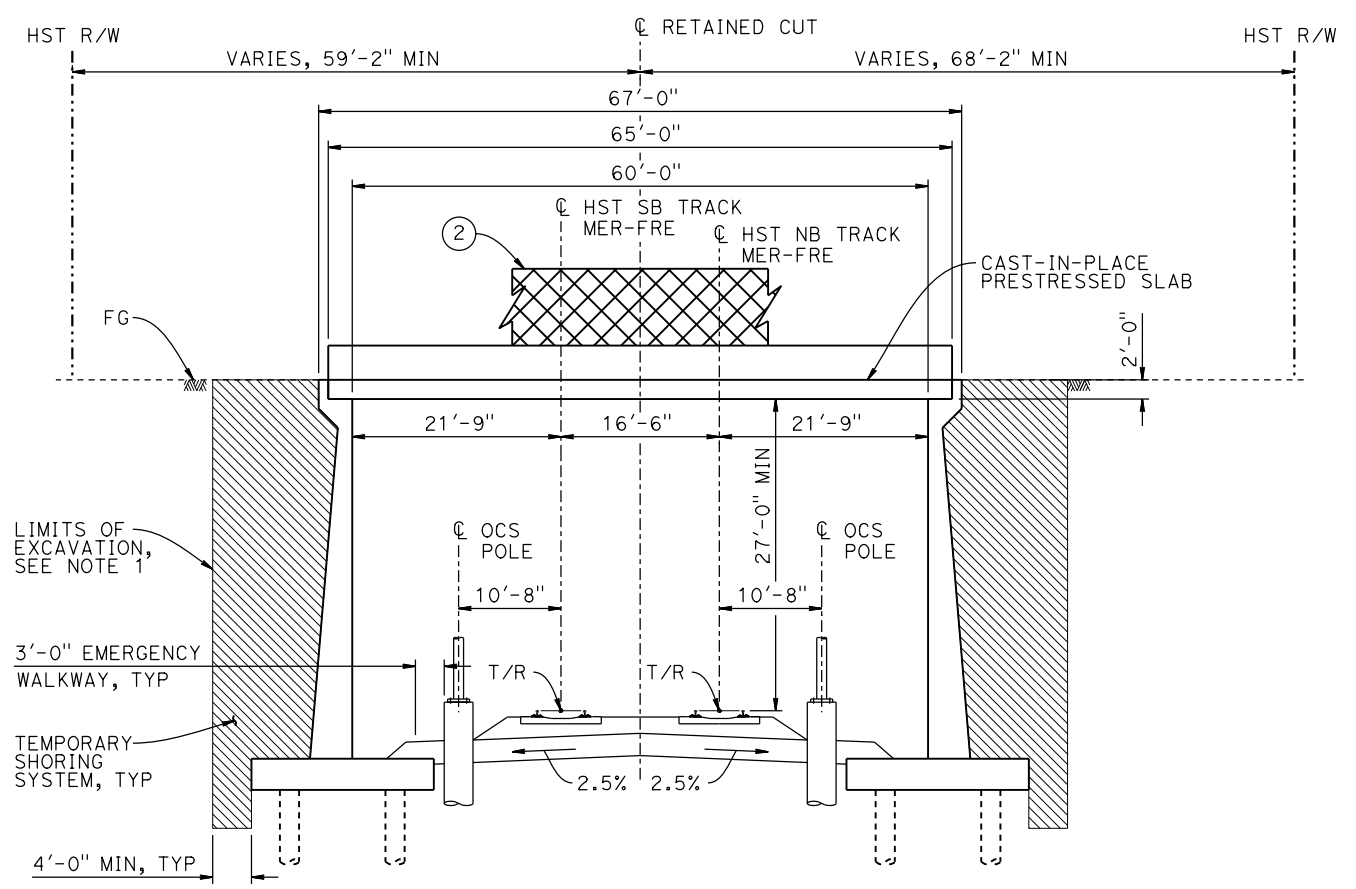
DRAWING NO.  
ST-T1520-C

SCALE  
AS SHOWN

SHEET NO.

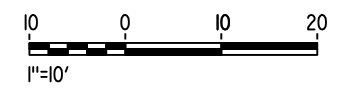


**SECTION A-A**  
1" = 10'



**SECTION B-B**  
1" = 10'

- NOTES:**
1. LIMITS OF EXCAVATION SHALL NOT EXTEND BEYOND HST R/W.
  2. PILE LENGTH AND LAYOUT TO BE DETERMINED ONCE A SITE SPECIFIC ASSESSMENT OF GROUNDWATER CONDITIONS IS AVAILABLE.
  3. FOR TRACK SUPERELEVATION DETAILS, SEE ALIGNMENT AND TYPICAL SECTION PLANS; DRAWINGS TT-B0056-C AND TT-B0057-C.



18-MAY-2015 9:14 MF-ST-T3520-C.dgn

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**O. EDEWOR**  
DRAWN BY  
**J. KIDWELL**  
CHECKED BY  
**S.S./K.C.**  
IN CHARGE  
**C. LEMLEY**  
DATE  
**05/08/2015**

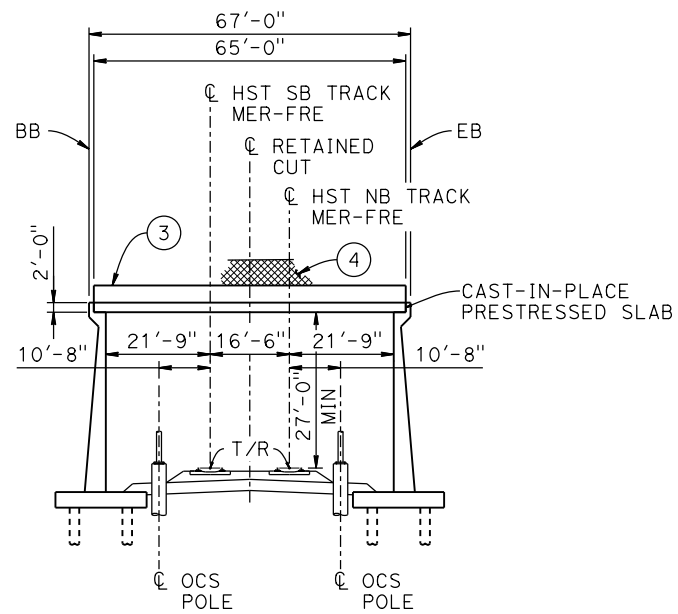
**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**

**NOT FOR**  
**CONSTRUCTION**



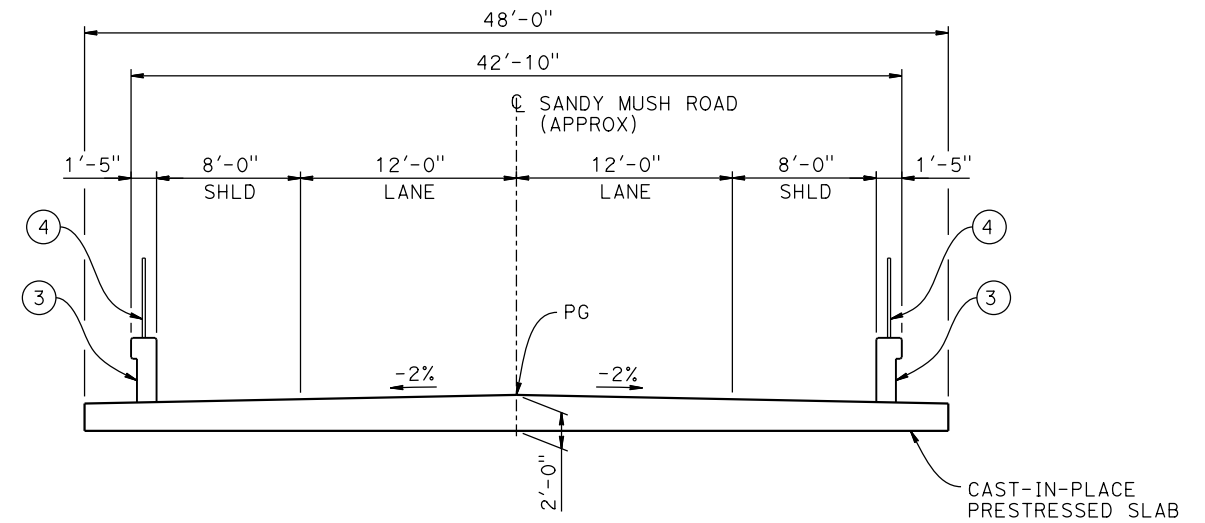
**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO SECTION**  
CENTRAL VALLEY WYE  
AVENUE 21 TO ROAD 13 WYE ALTERNATIVE  
TYPICAL SECTIONS (MER-FRE)  
RETAINED CUT - SANDY MUSH ROAD - 2 OF 2

CONTRACT NO.  
HSR08-05  
DRAWING NO.  
ST-T3520-C  
SCALE  
AS SHOWN  
SHEET NO.

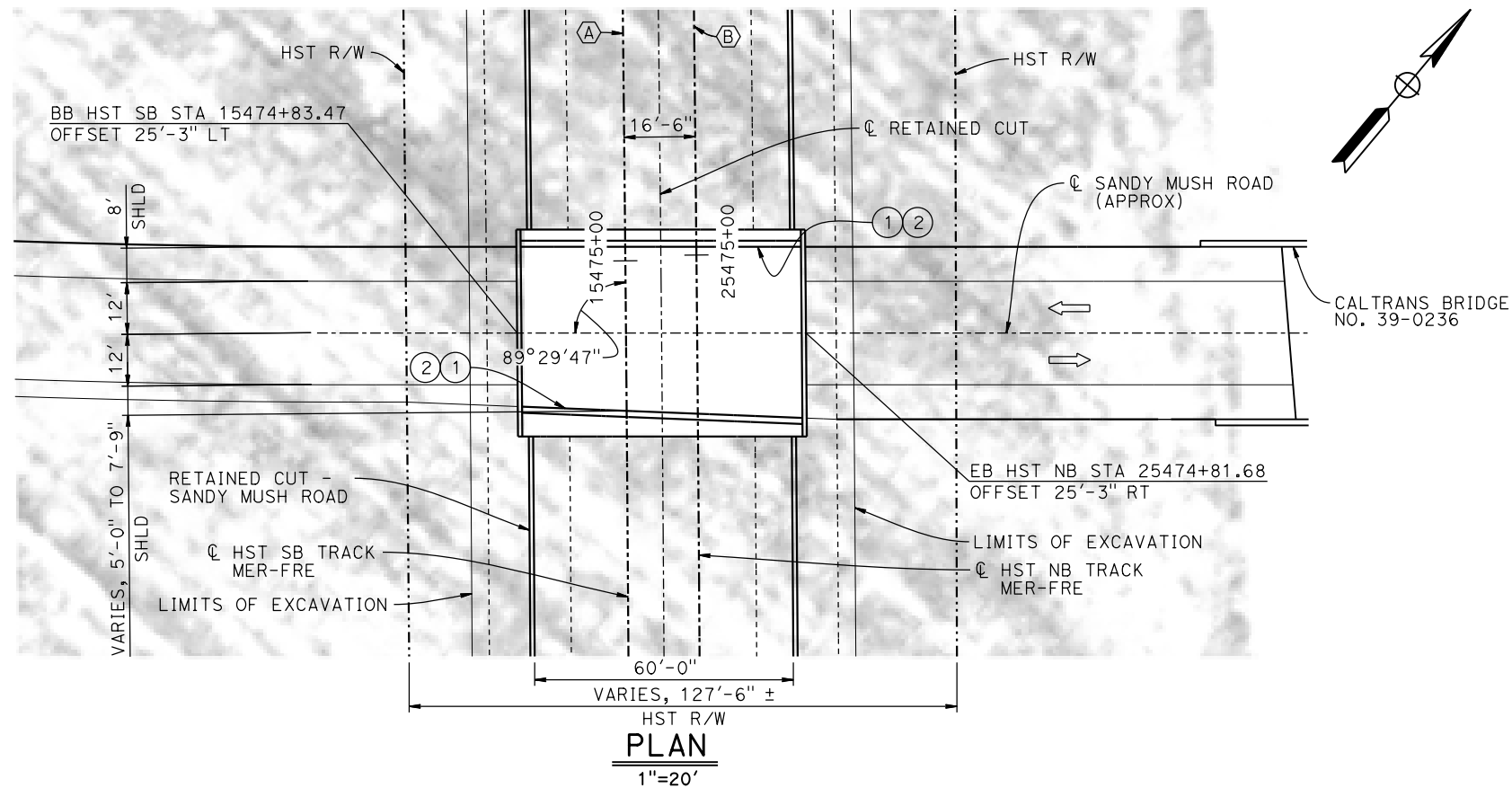


DATUM ELEV 160.00'

**ELEVATION**  
1"=20'



**TYPICAL SECTION**  
3/16"=1'-0"



**PLAN**  
1"=20'

**LEGEND:**

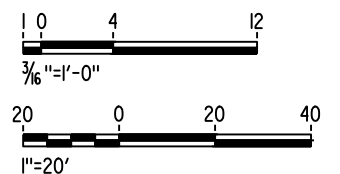
- ➔ INDICATES DIRECTION OF TRAFFIC
- ① PAINT "SANDY MUSH ROAD OVERHEAD"
- ② PAINT "BRIDGE NO. XX-XXXX"
- ③ CONCRETE BARRIER TYPE 736 MOD
- ④ AR FENCE WITH SOLID PLATE

**NOTES:**

1. FOR UTILITY DISPOSITIONS, SEE CIVIL AND GRADE SEPARATION PLANS; DRAWING CV-S1520-C.
2. PILE LENGTH AND LAYOUT TO BE DETERMINED ONCE A SITE SPECIFIC ASSESSMENT OF GROUNDWATER CONDITIONS IS AVAILABLE.
3. FOR RETAINED CUT - SANDY MUSH ROAD GENERAL PLAN AND TYPICAL SECTIONS, SEE DRAWINGS ST-T1520-C AND ST-T3520-C.

**CURVE MER-FRE 2 SB** (A)  
R = 30,000.00'  
LS = 2,250.00'

**CURVE MER-FRE 2 NB** (B)  
R = 30,016.50'  
LS = 2,250.00'



18-MAY-2015 9:17 MF-ST-K1520-C.dgn

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**O. EDEWOR**  
DRAWN BY  
**J. KIDWELL**  
CHECKED BY  
**S.S./K.C.**  
IN CHARGE  
**C. LEMLEY**  
DATE  
**05/08/2015**

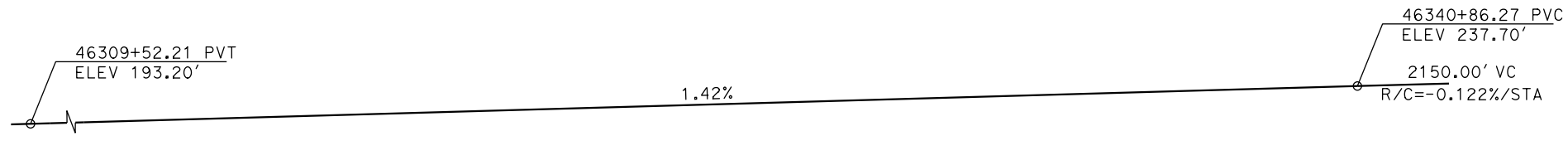
**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**  
  
**NOT FOR**  
**CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO SECTION**  
CENTRAL VALLEY WYE  
AVENUE 21 TO ROAD 13 WYE ALTERNATIVE  
GENERAL PLAN (MER-FRE)  
SANDY MUSH ROAD OVERHEAD

CONTRACT NO.  
HSR08-05  
DRAWING NO.  
ST-K1520-C  
SCALE  
AS SHOWN  
SHEET NO.





**TOP OF RAIL PROFILE (C HST NB TRACK SJD-MER)**

NO SCALE

**LEGEND:**

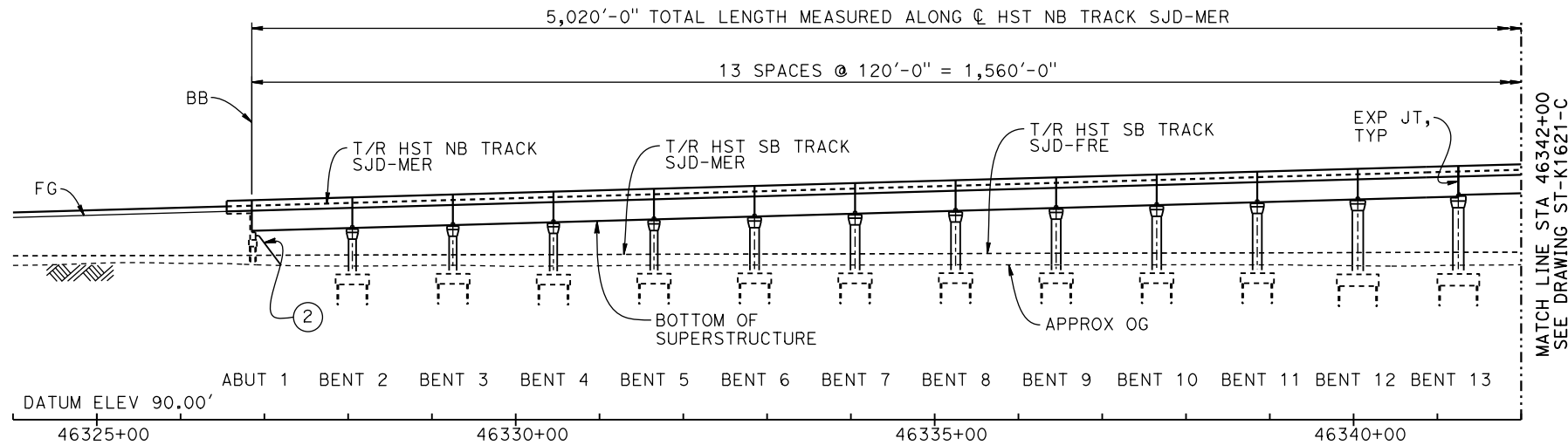
- INDICATES POINT OF MINIMUM VERTICAL CLEARANCE
- ① STRUCTURE APPROACH
- ② SLOPE PAVING (1½H:1V)

**CURVE SJD-MER 1 NB (A)**

R = 10,376.50'  
LS = 1,500.00'

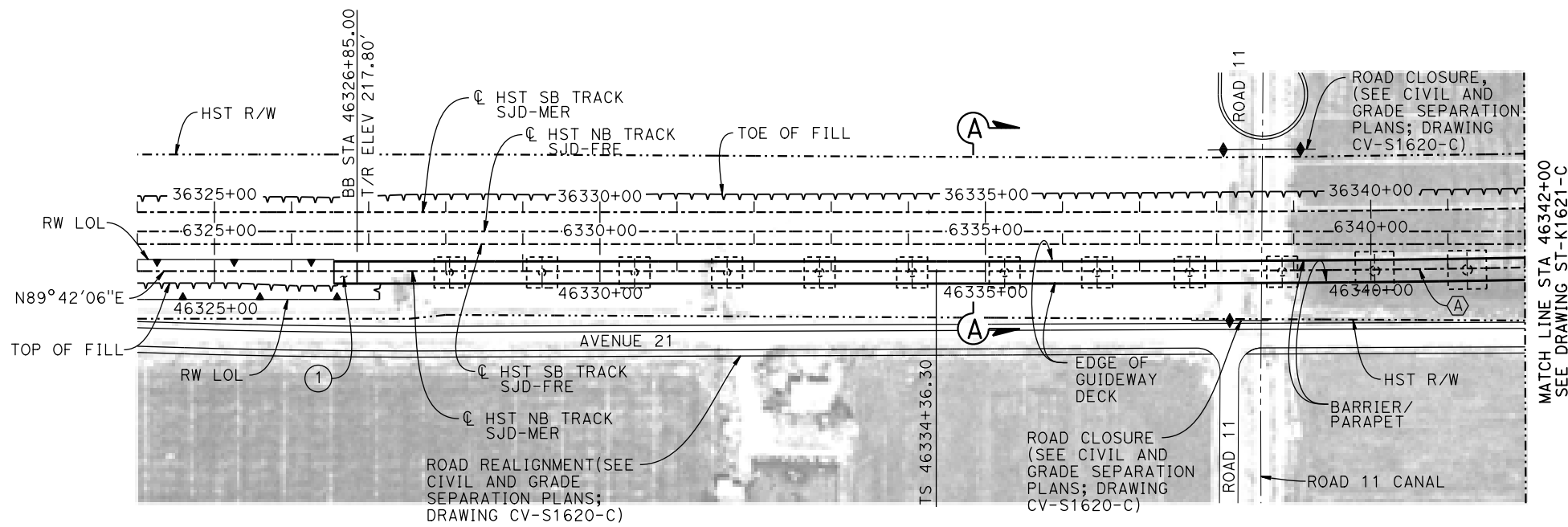
**NOTES:**

1. 16" Ø PIPE PILES ASSUMED FOR ABUTMENT AND BENT FOUNDATIONS, UNLESS OTHERWISE NOTED. PILE LENGTHS TO BE DETERMINED.
2. FOR SECTIONS AND BENT COLUMN SCHEDULE, SEE DRAWINGS ST-K3620-C AND ST-K3621-C.
3. FOR RETAINING WALLS, SEE CIVIL AND GRADE SEPARATION PLANS; DRAWING CV-S1620-C.
4. FOR UTILITY DISPOSITIONS, SEE CIVIL AND GRADE SEPARATION PLANS; DRAWING CV-S1620-C.
5. ANY EXISTING DIRT ROAD THAT CONFLICTS WITH NEW CONSTRUCTION SHALL BE REALIGNED.



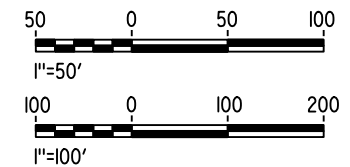
**DEVELOPED ELEVATION**

VERT: 1" = 50' HORIZ: 1" = 100'



**PLAN**

1" = 100'



16-MAR-2016 09:23 MF-ST-K1620-C.dgn

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY <b>M. SUN</b>
DRAWN BY <b>A. M.</b>
CHECKED BY <b>O. EDEWOR</b>
IN CHARGE <b>C. LEMLEY</b>
DATE <b>05/08/2015</b>

**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**

**NOT FOR**  
**CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO SECTION**

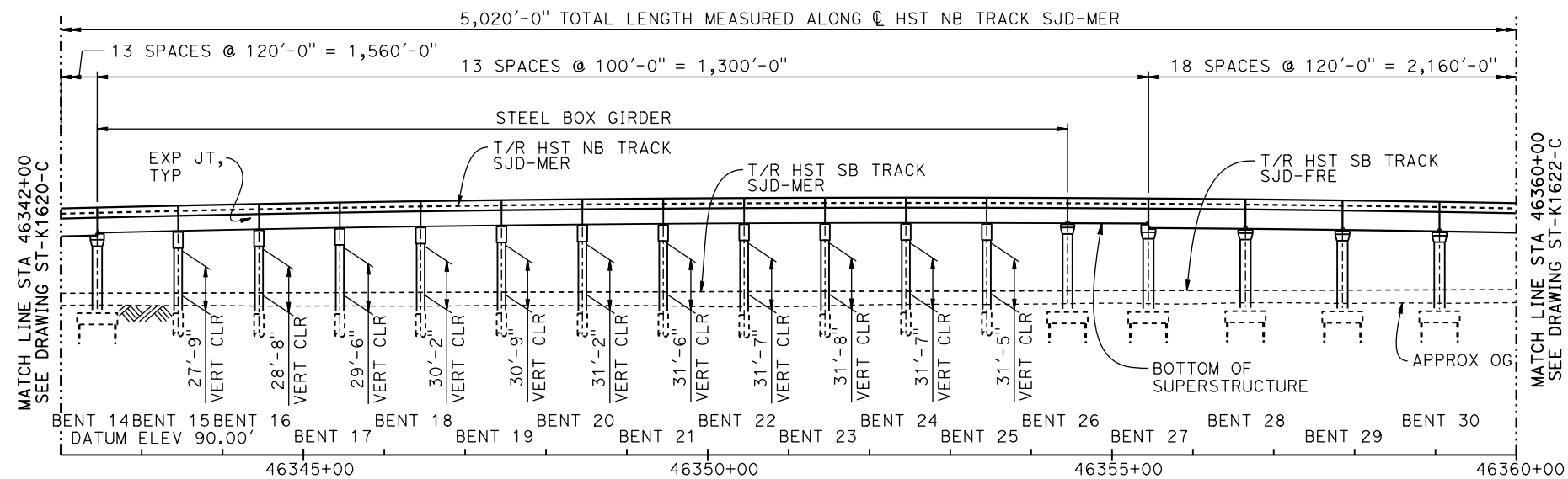
CENTRAL VALLEY WYE  
AVENUE 21 TO ROAD 13 WYE ALTERNATIVE  
GENERAL PLAN (SJD-MER)

AERIAL #5 - NORTHBOUND OVER HST MAINLINE - 1 OF 5

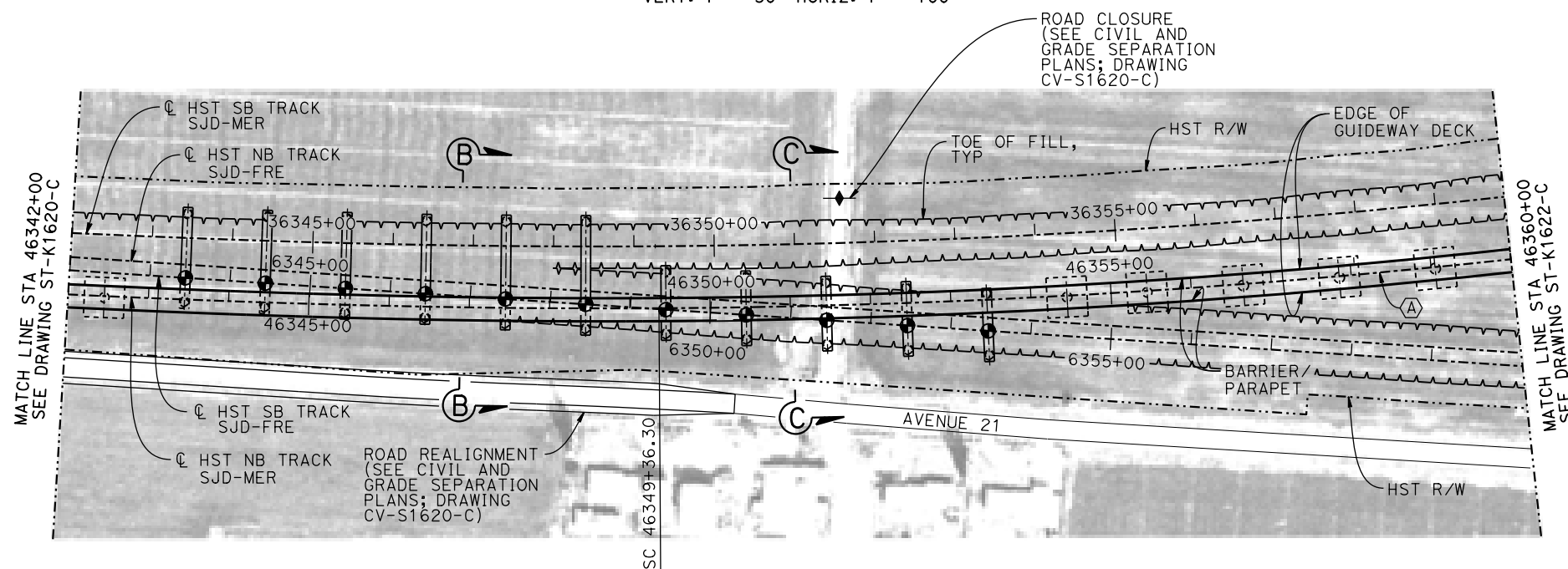
CONTRACT NO. HSR08-05
DRAWING NO. ST-K1620-C
SCALE AS SHOWN
SHEET NO.

2150.00' VC  
R/C=-0.122%/STA

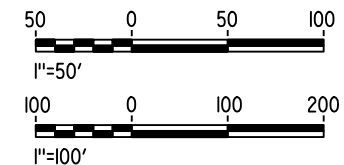
**TOP OF RAIL PROFILE (☉ HST NB TRACK SJD-MER)**  
NO SCALE



**DEVELOPED ELEVATION**  
VERT: 1" = 50' HORIZ: 1" = 100'



**PLAN**  
1" = 100'



16-MAR-2016 09:24 MF-ST-K1621-C.dgn

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY <b>M. SUN</b>
DRAWN BY <b>A. M.</b>
CHECKED BY <b>O. EDEWOR</b>
IN CHARGE <b>C. LEMLEY</b>
DATE <b>05/08/2015</b>

**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**

**NOT FOR**  
**CONSTRUCTION**

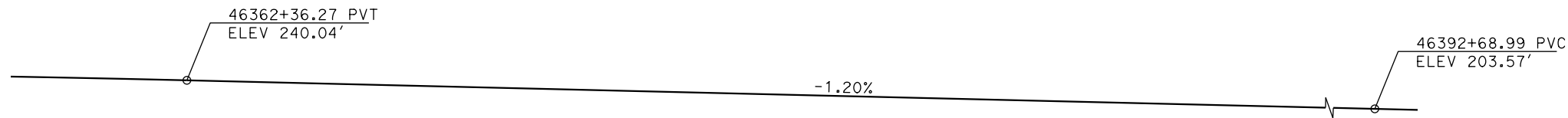


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO SECTION**

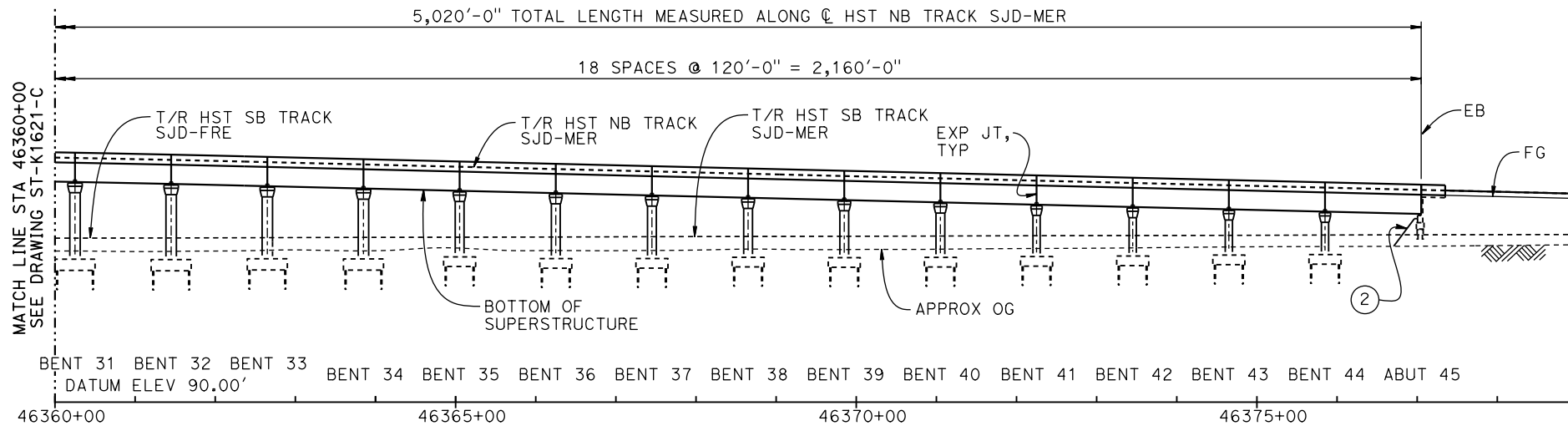
CENTRAL VALLEY WYE  
AVENUE 21 TO ROAD 13 WYE ALTERNATIVE  
GENERAL PLAN (SJD-MER)

AERIAL #5 - NORTHBOUND OVER HST MAINLINE - 2 OF 5

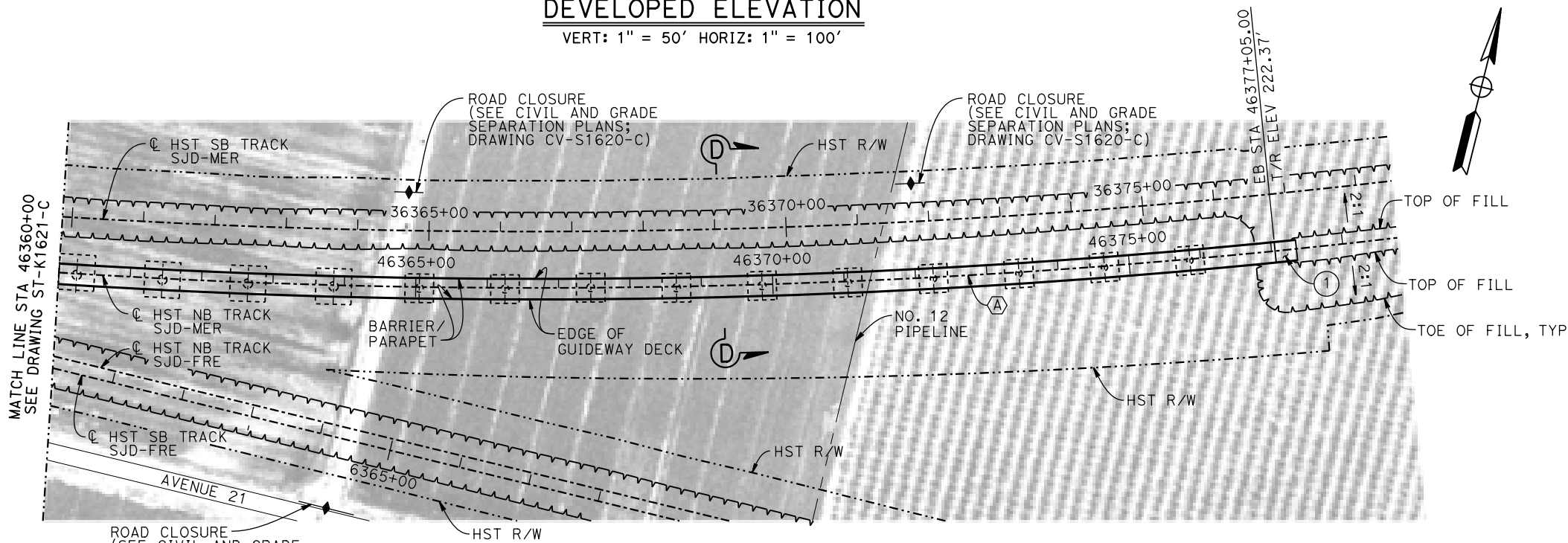
CONTRACT NO. HSR08-05
DRAWING NO. ST-K1621-C
SCALE AS SHOWN
SHEET NO.



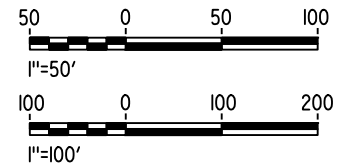
**TOP OF RAIL PROFILE (C HST NB TRACK SJD-MER)**  
NO SCALE



**DEVELOPED ELEVATION**  
VERT: 1" = 50' HORIZ: 1" = 100'



**PLAN**  
1" = 100'



16-MAR-2016 09:25 MF-ST-K1622-C.dgn

REV	DATE	BY	CHK	APP	DESCRIPTION

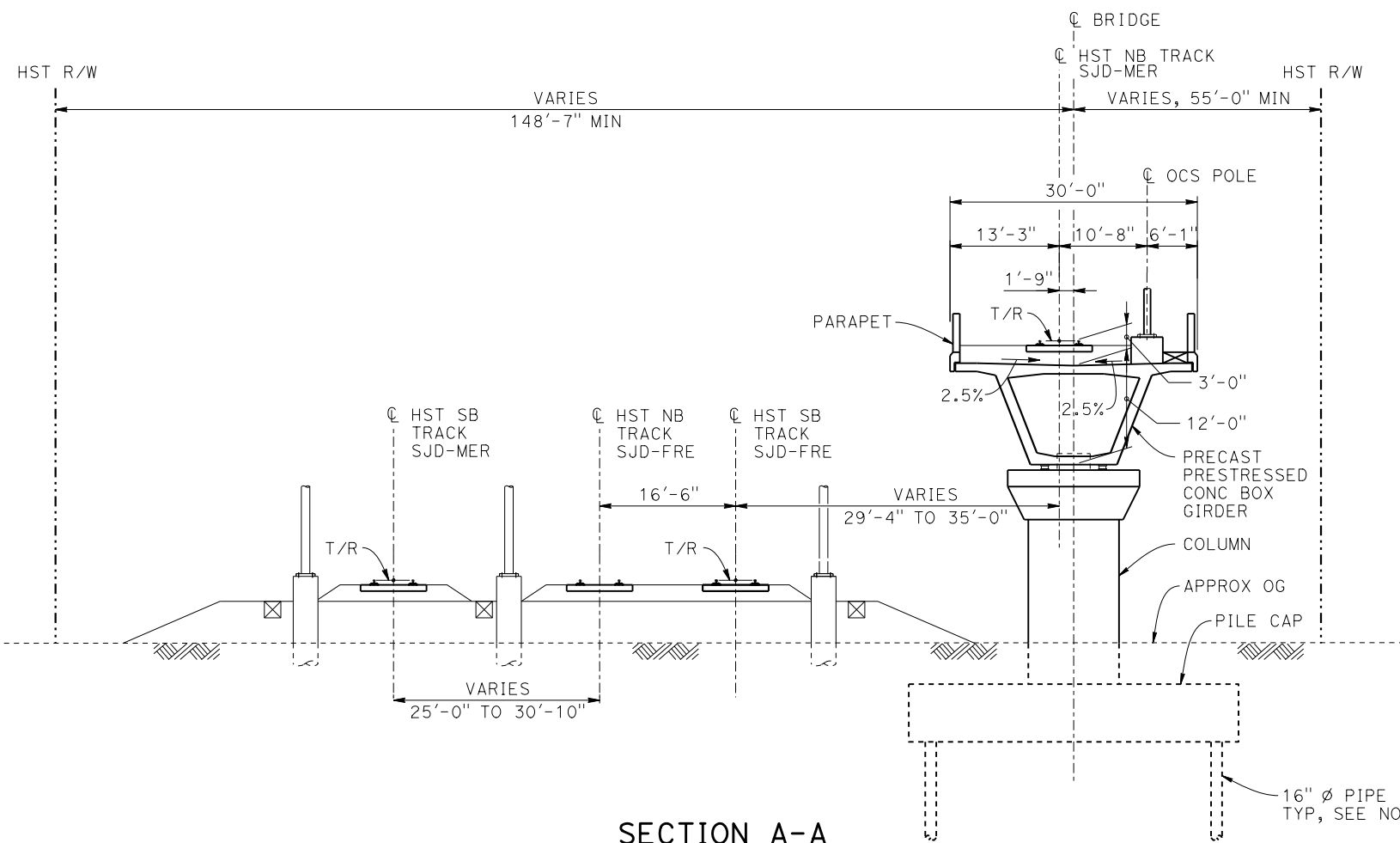
DESIGNED BY  
**M. SUN**  
DRAWN BY  
**A. M.**  
CHECKED BY  
**O. EDEWOR**  
IN CHARGE  
**C. LEMLEY**  
DATE  
**05/08/2015**

**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**  
  
**NOT FOR**  
**CONSTRUCTION**



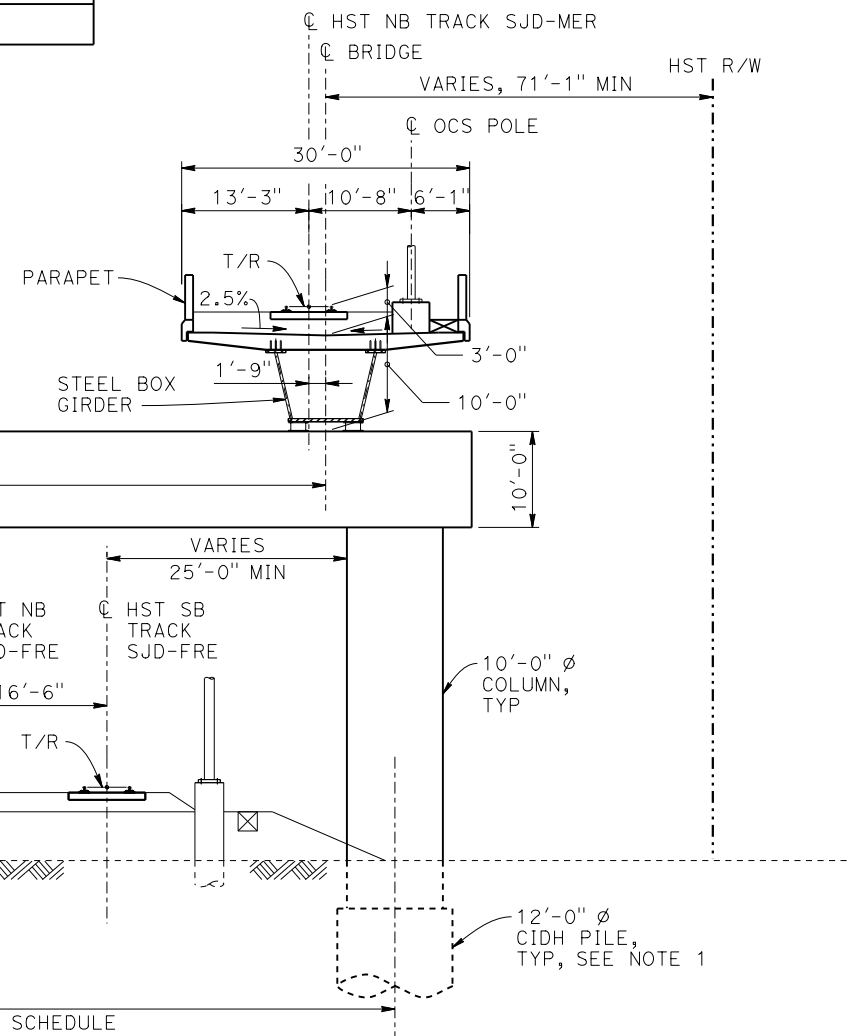
**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO SECTION**  
CENTRAL VALLEY WYE  
AVENUE 21 TO ROAD 13 WYE ALTERNATIVE  
GENERAL PLAN (SJD-MER)  
AERIAL #5 - NORTHBOUND OVER HST MAINLINE - 3 OF 5

CONTRACT NO.  
HSR08-05  
DRAWING NO.  
ST-K1622-C  
SCALE  
AS SHOWN  
SHEET NO.



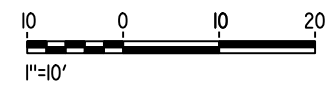
**SECTION A-A**  
1" = 10'

BENT COLUMN SCHEDULE		
BENT	COLUMN TYPE	"A"
2 - 5	9'-0"Ø	
6 - 11	11'-0"Ø	
12 - 13	13'-0"Ø	
14	12'-0"Ø	
15	2 - 10'-0"Ø	110'-0"
16	2 - 10'-0"Ø	113'-0"
17	2 - 10'-0"Ø	117'-0"
18	2 - 10'-0"Ø	121'-0"
19	2 - 10'-0"Ø	127'-0"
20	2 - 10'-0"Ø	133'-0"
21 - 25	2 - 10'-0"Ø	77'-0"
26 - 27	12'-0"Ø	
28 - 34	13'-0"Ø	
35 - 40	11'-0"Ø	
41 - 44	9'-0"Ø	



**SECTION B-B**  
1" = 10'

- NOTES:**
1. PILE AND DRILLED SHAFT LENGTHS TO BE DETERMINED.
  2. FOR TRACK SUPERELEVATION DETAILS, SEE ALIGNMENT AND TYPICAL SECTION PLANS; DRAWING TT-B0058-C.



06-MAY-2015 10:08:37 MF-ST-K3620-C.dgn

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**M. SUN**

DRAWN BY  
**A. M.**

CHECKED BY  
**O. EDEWOR**

IN CHARGE  
**C. LEMLEY**

DATE  
**05/08/2015**

**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**

**NOT FOR**  
**CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO SECTION**

CENTRAL VALLEY WYE  
AVENUE 21 TO ROAD 13 WYE ALTERNATIVE  
TYPICAL SECTIONS (SJD-MER)

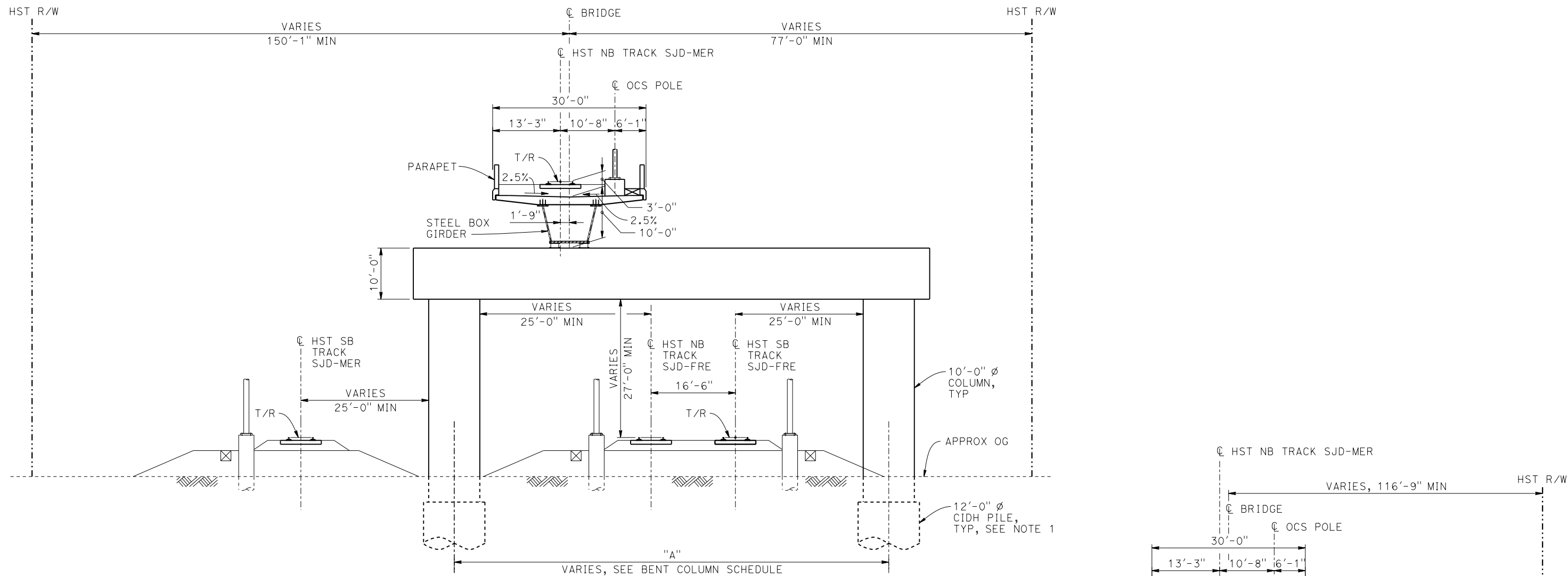
AERIAL #5 - NORTHBOUND OVER HST MAINLINE - 4 OF 5

CONTRACT NO.  
HSR08-05

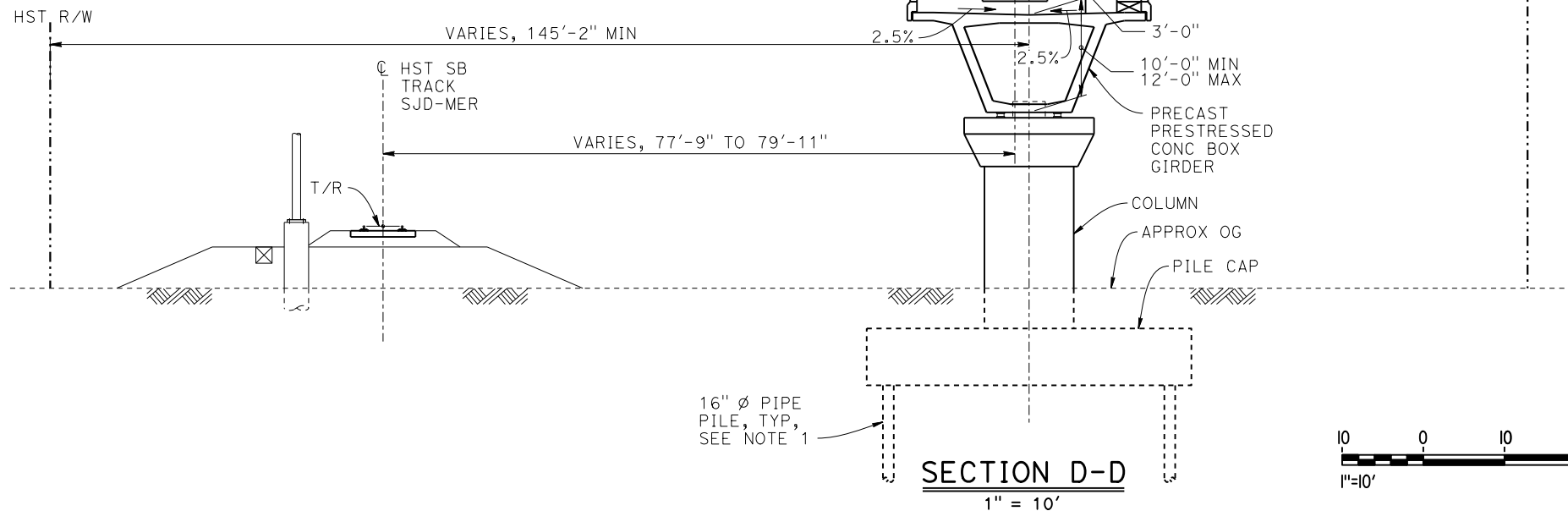
DRAWING NO.  
ST-K3620-C

SCALE  
AS SHOWN

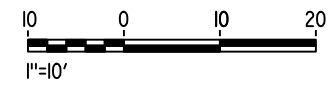
SHEET NO.



**SECTION C-C**  
1" = 10'



**SECTION D-D**  
1" = 10'



- NOTES:**
1. PILE AND DRILLED SHAFT LENGTHS TO BE DETERMINED.
  2. FOR TRACK SUPERELEVATION DETAILS, SEE ALIGNMENT AND TYPICAL SECTION PLANS; DRAWING TT-B0058-C.

28-APR-2015 09:43 MF-ST-K3621-C.dgn

REV	DATE	BY	CHK	APP	DESCRIPTION

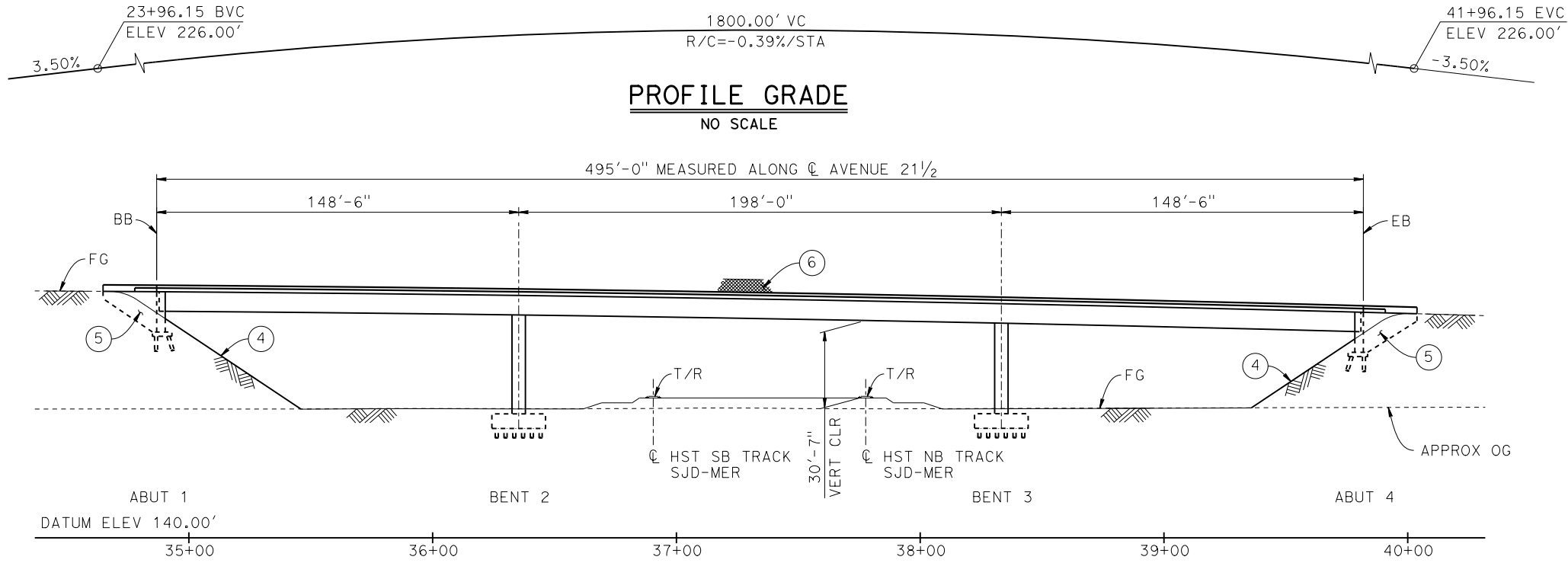
DESIGNED BY  
**M. SUN**  
DRAWN BY  
**A. M.**  
CHECKED BY  
**O. EDEWOR**  
IN CHARGE  
**C. LEMLEY**  
DATE  
**05/08/2015**

**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**  
  
**NOT FOR**  
**CONSTRUCTION**



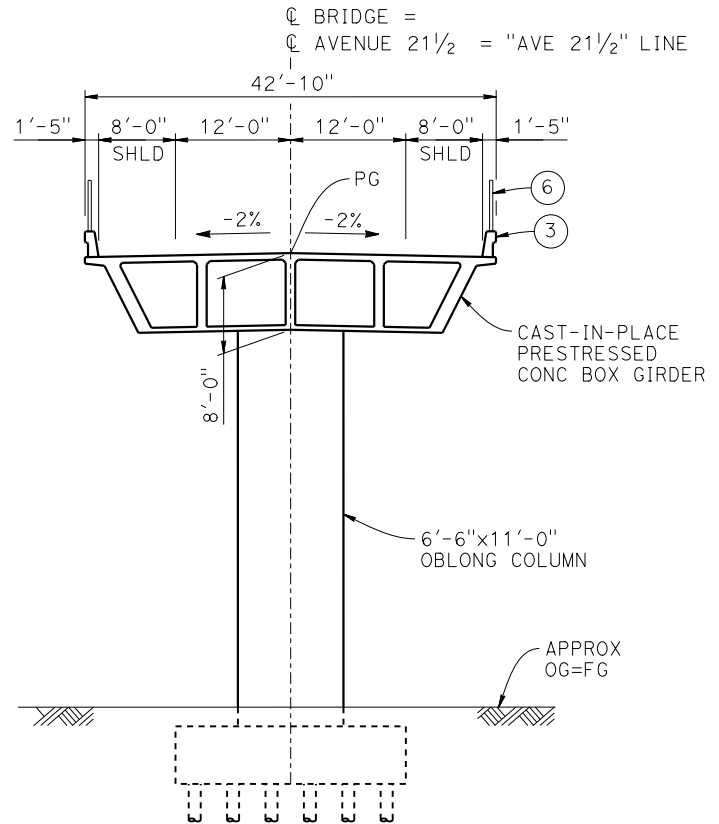
**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO SECTION**  
CENTRAL VALLEY WYE  
AVENUE 21 TO ROAD 13 WYE ALTERNATIVE  
TYPICAL SECTIONS (SJD-MER)  
AERIAL #5 - NORTHBOUND OVER HST MAINLINE - 5 OF 5

CONTRACT NO.  
HSR08-05  
DRAWING NO.  
ST-K3621-C  
SCALE  
AS SHOWN  
SHEET NO.



**PROFILE GRADE**  
NO SCALE

**ELEVATION**  
1" = 30'



**TYPICAL SECTION**  
1" = 10'

CURVE NO. 630-01 (C)

R = 1,900.00'  
Δ = 34°24'14"  
L = 1,140.87'  
T = 588.22'

CURVE SJD-MER 1 SB (A)

R = 10,300.00'  
LS = 1,500.00'

CURVE SJD-MER 1 NB (B)

R = 10,376.50'  
LS = 1,500.00'

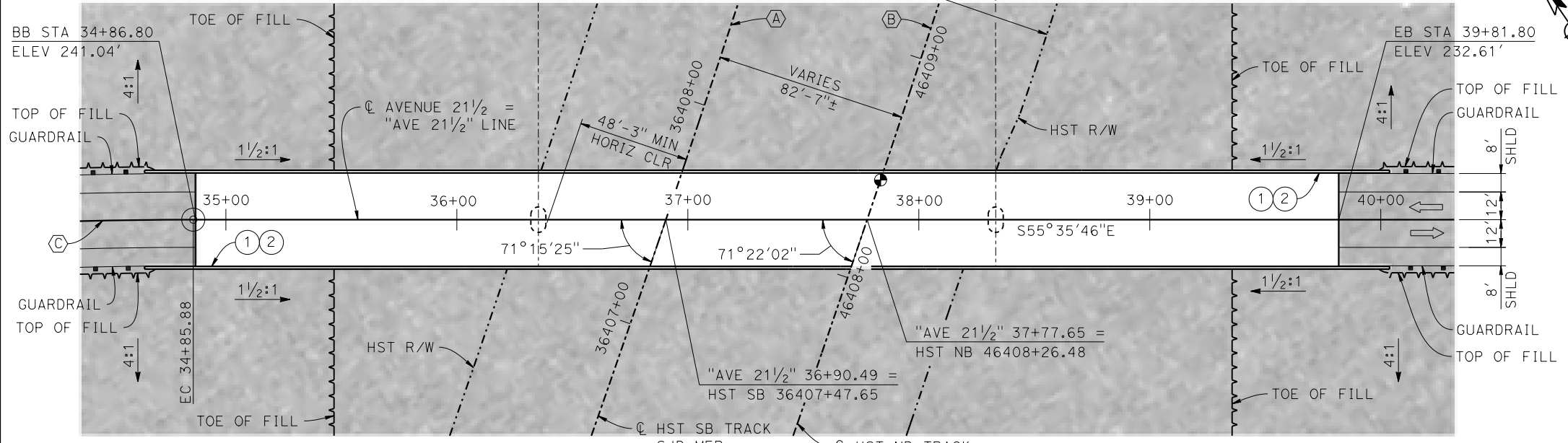
**LEGEND:**

- INDICATES POINT OF MINIMUM VERTICAL CLEARANCE
- ➔ INDICATES DIRECTION OF TRAFFIC
- ① PAINT "AVENUE 21 1/2 OVERHEAD"
- ② PAINT "BRIDGE NO. XX-XXXX"
- ③ CONCRETE BARRIER TYPE 736 MOD
- ④ SLOPE PAVING (1 1/2 H:1 V)
- ⑤ WINGWALL
- ⑥ AR FENCE WITH SOLID PLATE

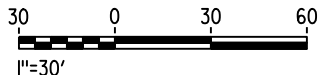
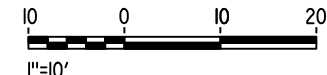
**NOTES:**

1. ASSUME CLASS 140 PILES AT ABUTMENT AND BENT FOUNDATIONS. PILE LENGTHS TO BE DETERMINED.
2. FOR UTILITY DISPOSITIONS, SEE CIVIL AND GRADE SEPARATION PLANS; DRAWING CV-S1630-C.
3. FOR GUARDRAILS, SEE CIVIL AND GRADE SEPARATION PLANS; DRAWING CV-S1630-C.

07-MAY-2015 15:51:36 MF-ST-K1630-C.dgn



**PLAN**  
1" = 30'



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**M. SUN**  
DRAWN BY  
**W. JOHNSEN**  
CHECKED BY  
**O. EDEWOR**  
IN CHARGE  
**C. LEMLEY**  
DATE  
**05/08/2015**

**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**  
  
**NOT FOR**  
**CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO SECTION**  
CENTRAL VALLEY WYE  
AVENUE 21 TO ROAD 13 WYE ALTERNATIVE  
GENERAL PLAN (SJD-MER)  
AVENUE 21 1/2 OVERHEAD

CONTRACT NO.  
HSR08-05  
DRAWING NO.  
ST-K1630-C  
SCALE  
AS SHOWN  
SHEET NO.



**TOP OF RAIL PROFILE (C HST NB TRACK SJD-MER)**

NO SCALE

**LEGEND:**

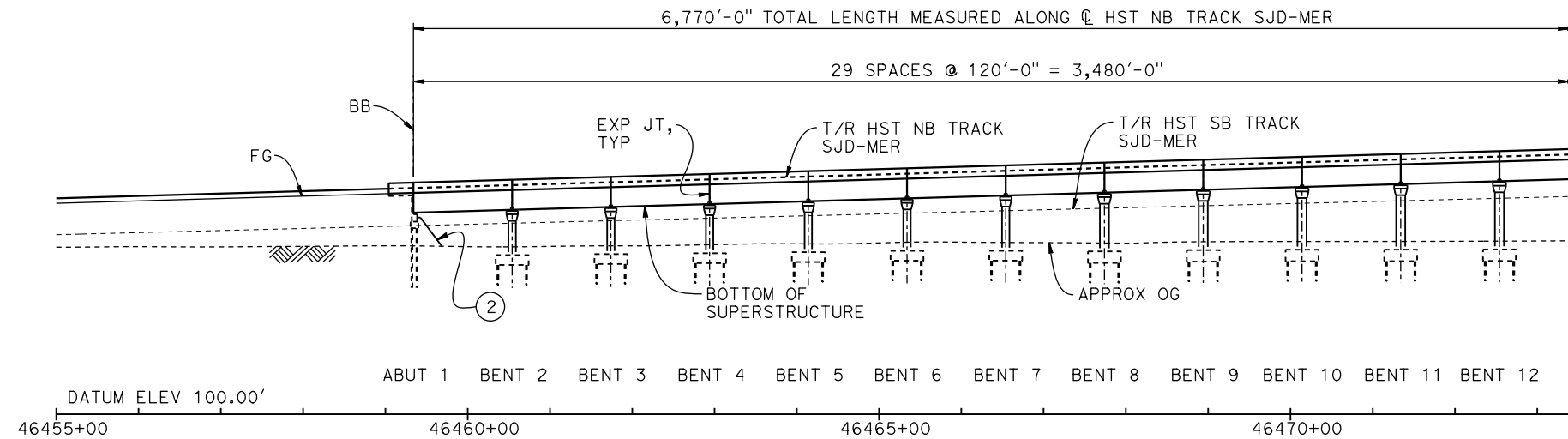
- INDICATES POINT OF MINIMUM VERTICAL CLEARANCE
- ➔ INDICATES DIRECTION OF TRAFFIC
- ① STRUCTURE APPROACH
- ② SLOPE PAVING (1½H:1V)

**CURVE SJD-MER 1 NB (A)**

R = 10,376.50'  
LS = 1,500.00'

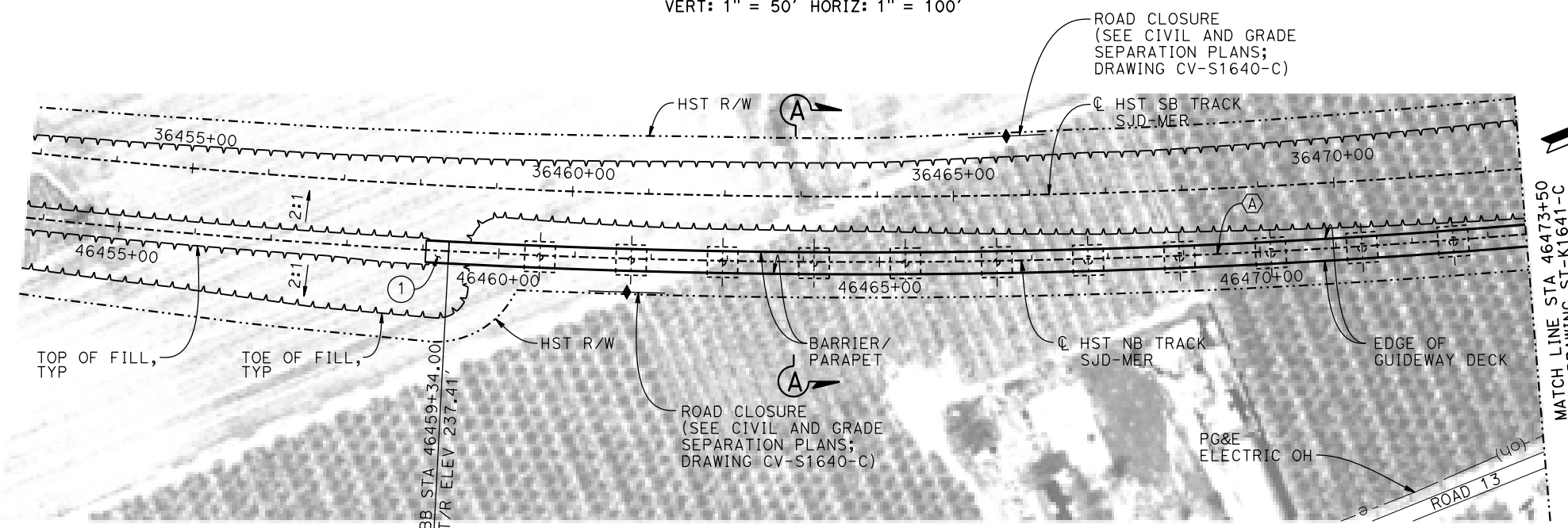
**TEMPORARY TRAFFIC OPENINGS**

VEHICULAR TRAFFIC			
1. — TRAFFIC WILL BE DETOURED AWAY FROM THE SITE.			
2. X TRAFFIC WILL PASS UNDER THE STRUCTURE ON:			
ST OR ROAD NAME AND LOCATION		FALSEWORK OPENING REQD (HORIZ X VERT)	
AVENUE 22½	46479+15	32'X16.5'	2-WAY
SR 152	46505+72	52'X16.5'	E BND
SR 152	46506+18	52'X16.5'	W BND
3. X TEMP TRAFFIC LANE REDUCTION FOR FTG EXC.			



**DEVELOPED ELEVATION**

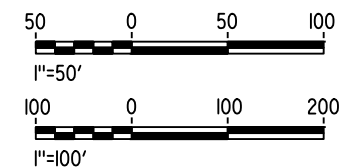
VERT: 1" = 50' HORIZ: 1" = 100'



**PLAN**  
1" = 100'

**NOTES:**

1. 16" Ø PIPE PILES ASSUMED FOR ABUTMENT AND BENT FOUNDATIONS, UNLESS OTHERWISE NOTED. PILE LENGTHS TO BE DETERMINED.
2. FOR SECTIONS AND BENT COLUMN SCHEDULE, SEE DRAWINGS ST-K3640-C AND ST-K3641-C.
3. ANY EXISTING DIRT ROAD THAT CONFLICTS WITH NEW CONSTRUCTION SHALL BE REALIGNED.
4. FOR UTILITY DISPOSITIONS, SEE CIVIL AND GRADE SEPARATION PLANS; DRAWINGS CV-S1640-C AND CV-S1650-C.
5. FOR GUARDRAILS, SEE CIVIL AND GRADE SEPARATION PLANS; DRAWINGS CV-S1640-C AND CV-S1650-C.
6. FOR RETAINING WALL, SEE CIVIL AND GRADE SEPARATION PLANS; DRAWINGS CV-S1640-C AND CV-S1650-C.
7. FOR AVENUE 22½ UNDERPASS (HST SB) GENERAL PLAN AND TYPICAL SECTION, SEE DRAWING ST-K1646-C.
8. FOR SR 152 UNDERPASS GENERAL PLAN AND TYPICAL SECTION, SEE DRAWINGS ST-K1450-C AND ST-K3450-C.



16-MAR-2016 09:25 MF-ST-K1640-C.dgn

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY <b>M. SUN</b>
DRAWN BY <b>A. M.</b>
CHECKED BY <b>O. EDEWOR</b>
IN CHARGE <b>C. LEMLEY</b>
DATE <b>05/08/2015</b>

**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**

**NOT FOR**  
**CONSTRUCTION**



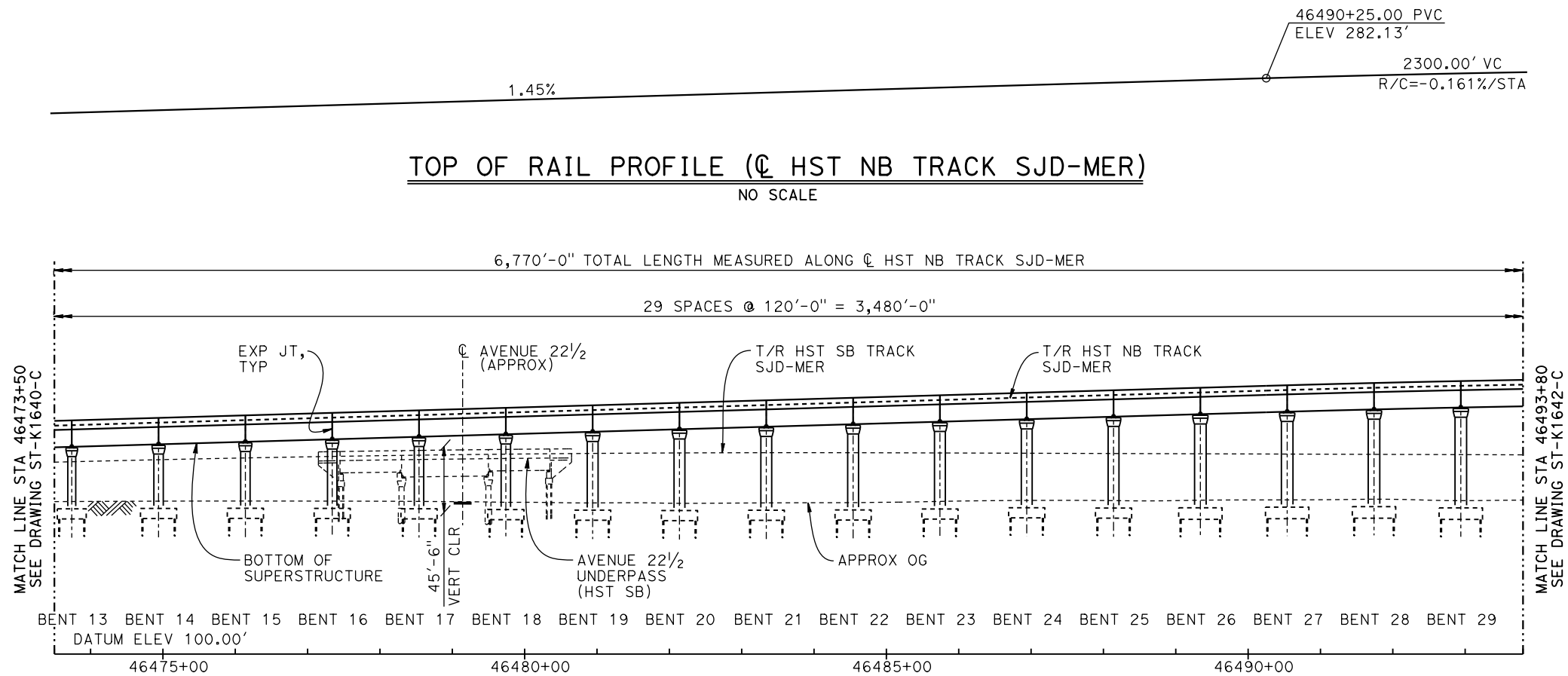
**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO SECTION**

CENTRAL VALLEY WYE  
AVENUE 21 TO ROAD 13 WYE ALTERNATIVE  
GENERAL PLAN (SJD-MER)

AERIAL #6 - NORTHBOUND OVER HST MERCED TO FRESNO - 1 OF 6

CONTRACT NO. HSR08-05
DRAWING NO. ST-K1640-C
SCALE AS SHOWN
SHEET NO.

16-MAR-2016 09:26 MF-ST-K1641-C.dgn



**TOP OF RAIL PROFILE (☉ HST NB TRACK SJD-MER)**

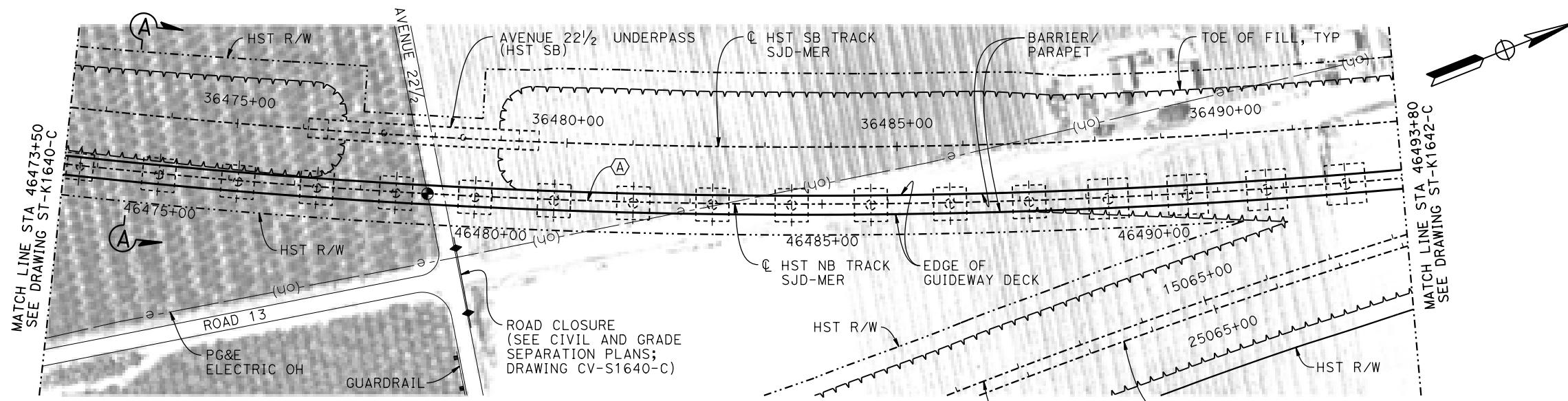
NO SCALE

6,770'-0" TOTAL LENGTH MEASURED ALONG ☉ HST NB TRACK SJD-MER

29 SPACES @ 120'-0" = 3,480'-0"

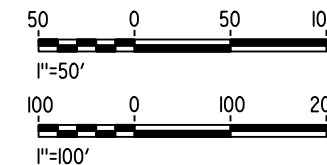
**DEVELOPED ELEVATION**

VERT: 1" = 50' HORIZ: 1" = 100'



**PLAN**

1" = 100'



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**M. SUN**

DRAWN BY  
**A. M.**

CHECKED BY  
**O. EDEWOR**

IN CHARGE  
**C. LEMLEY**

DATE  
**05/08/2015**

**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**

**NOT FOR**  
**CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO SECTION**

CENTRAL VALLEY WYE  
AVENUE 21 TO ROAD 13 WYE ALTERNATIVE  
GENERAL PLAN (SJD-MER)

AERIAL #6 - NORTHBOUND OVER HST MERCED TO FRESNO - 2 OF 6

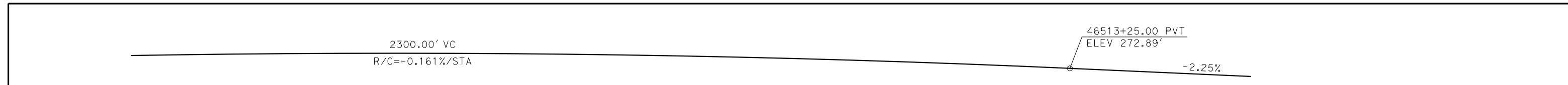
CONTRACT NO.  
HSR08-05

DRAWING NO.  
ST-K1641-C

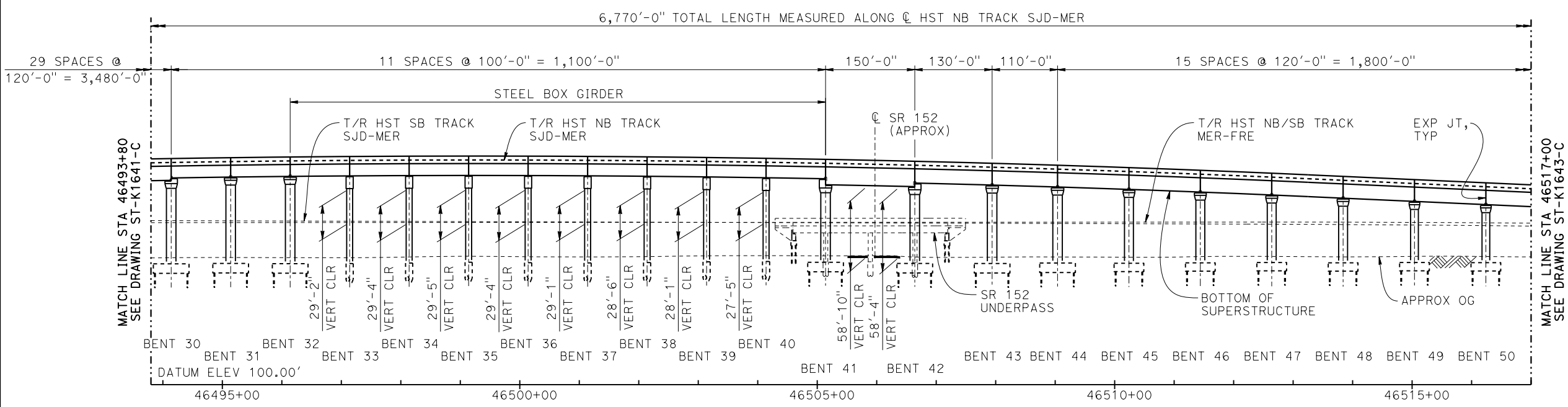
SCALE  
AS SHOWN

SHEET NO.

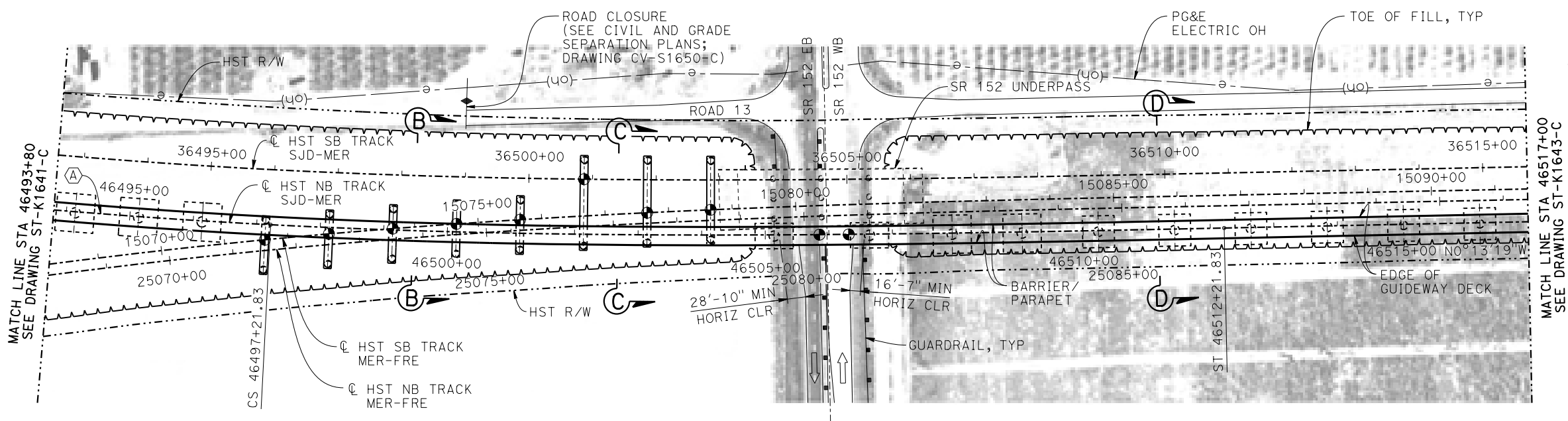




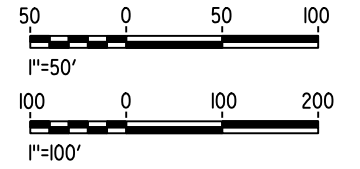
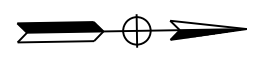
**TOP OF RAIL PROFILE (© HST NB TRACK SJD-MER)**  
NO SCALE



**DEVELOPED ELEVATION**  
VERT: 1" = 50' HORIZ: 1" = 100'



**PLAN**  
1" = 100'



MF-ST-K1642-C.dgn  
28-APR-2015 09:40  
P005133G

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**M. SUN**  
DRAWN BY  
**A. M.**  
CHECKED BY  
**O. EDEWOR**  
IN CHARGE  
**C. LEMLEY**  
DATE  
**05/08/2015**

**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**  
  
**NOT FOR**  
**CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO SECTION**  
CENTRAL VALLEY WYE  
AVENUE 21 TO ROAD 13 WYE ALTERNATIVE  
GENERAL PLAN (SJD-MER)  
AERIAL #6 - NORTHBOUND OVER HST MERCED TO FRESNO - 3 OF 6

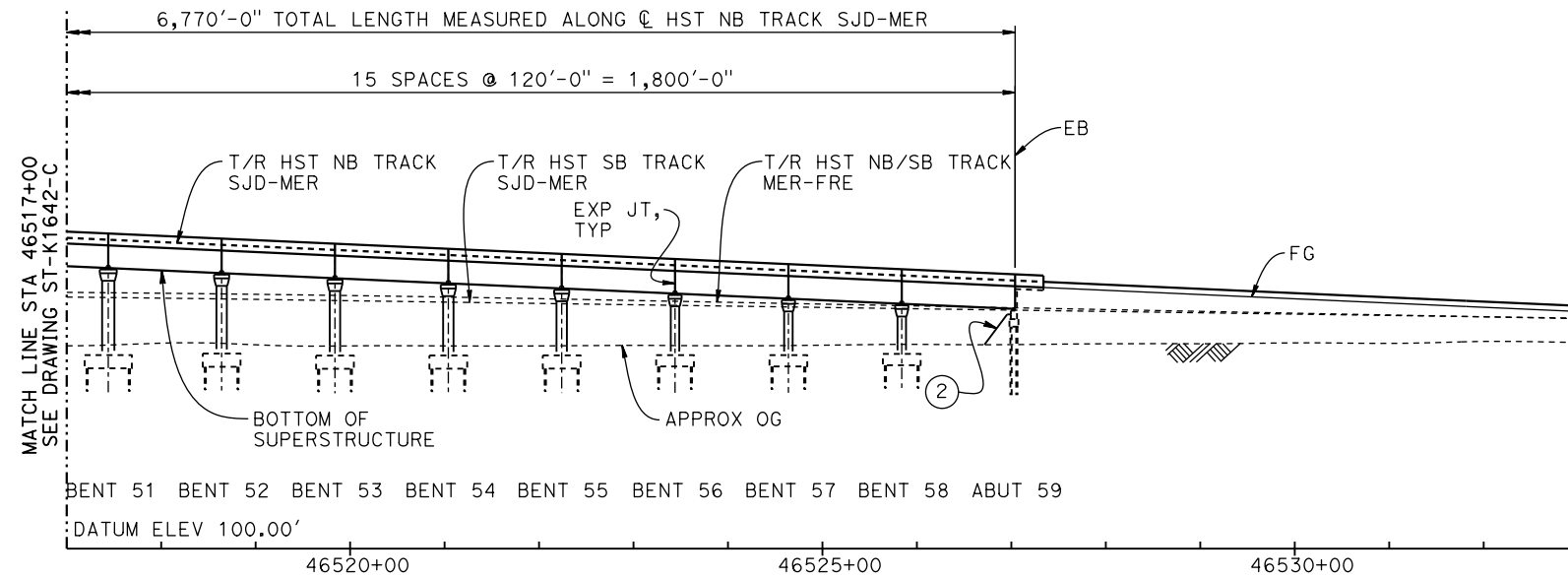
CONTRACT NO.  
HSR08-05  
DRAWING NO.  
ST-K1642-C  
SCALE  
AS SHOWN  
SHEET NO.

46531+81.57 PVC  
ELEV 231.12'

-2.25%

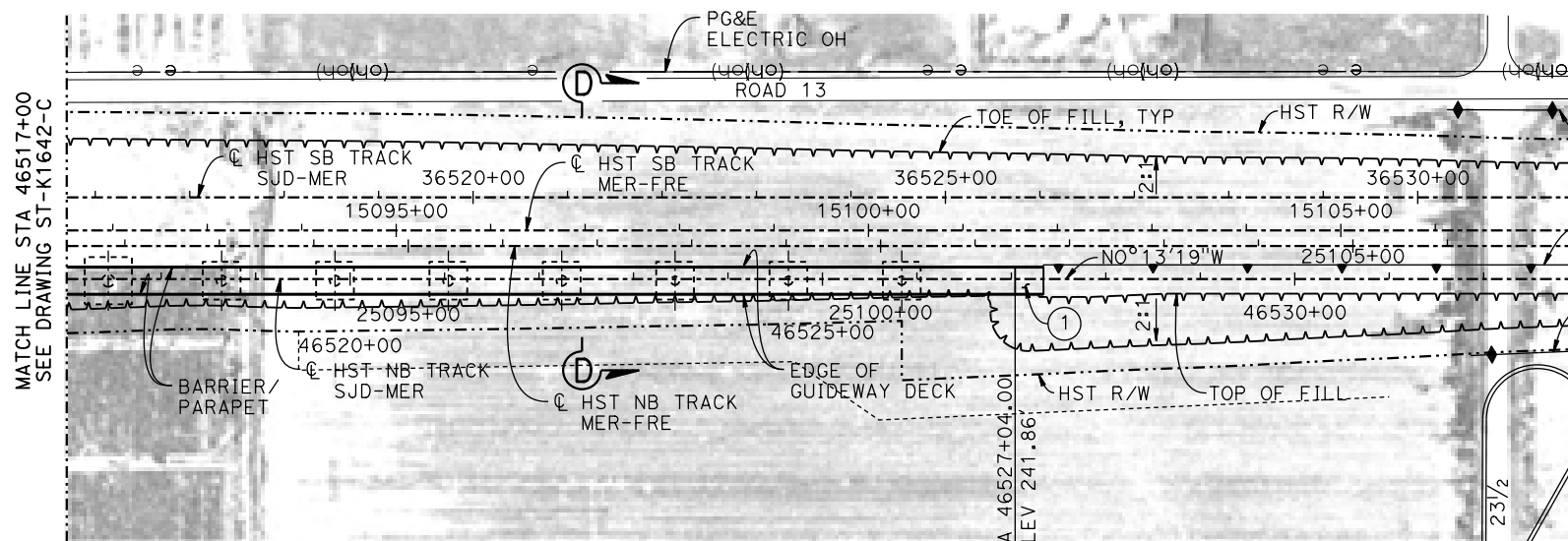
**TOP OF RAIL PROFILE (C HST NB TRACK SJD-MER)**

NO SCALE



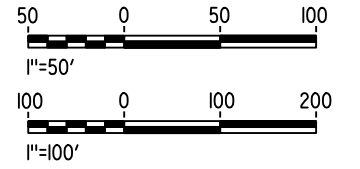
**DEVELOPED ELEVATION**

VERT: 1" = 50' HORIZ: 1" = 100'



**PLAN**

1" = 100'



16-MAR-2016 09:27 MF-ST-K1643-C.dgn

REV	DATE	BY	CHK	APP	DESCRIPTION

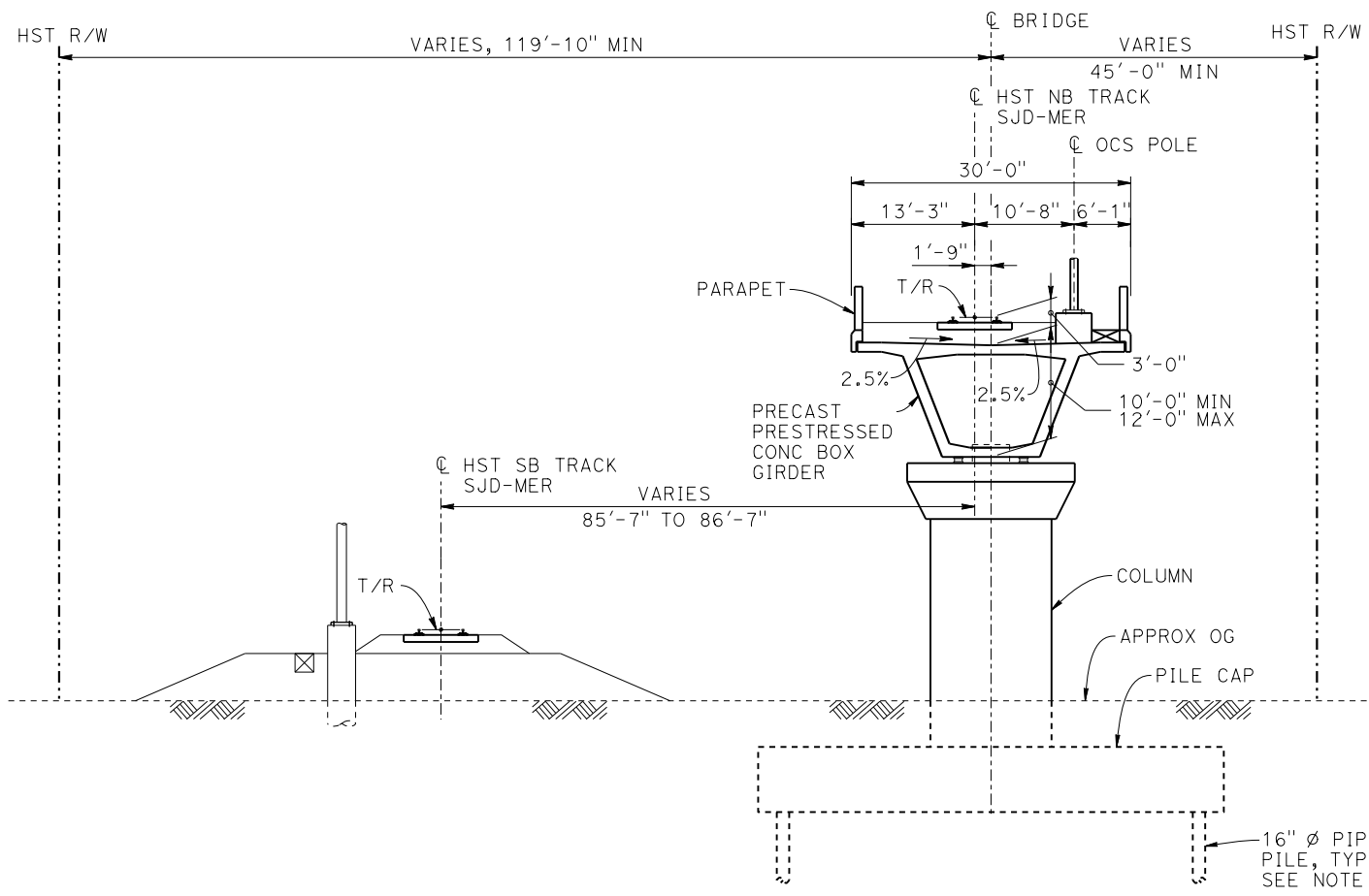
DESIGNED BY  
**M. SUN**  
DRAWN BY  
**A. M.**  
CHECKED BY  
**O. EDEWOR**  
IN CHARGE  
**C. LEMLEY**  
DATE  
**05/08/2015**

**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**  
  
**NOT FOR**  
**CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO SECTION**  
CENTRAL VALLEY WYE  
AVENUE 21 TO ROAD 13 WYE ALTERNATIVE  
GENERAL PLAN (SJD-MER)  
AERIAL #6 - NORTHBOUND OVER HST MERCED TO FRESNO - 4 OF 6

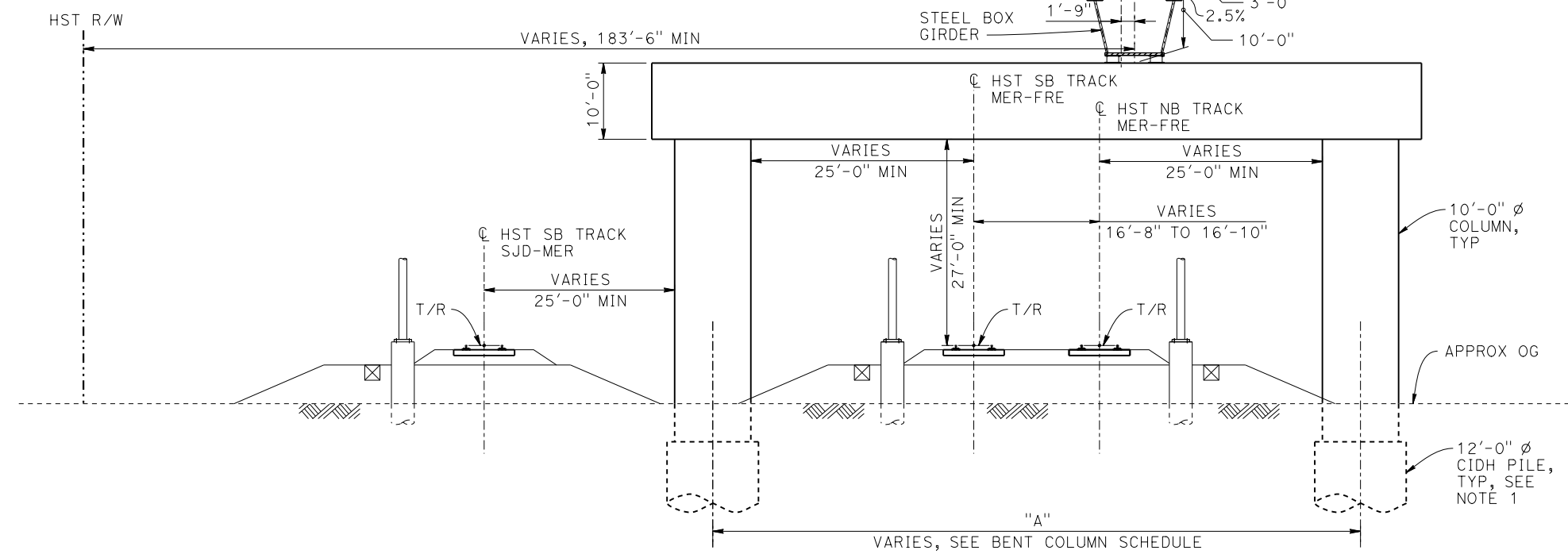
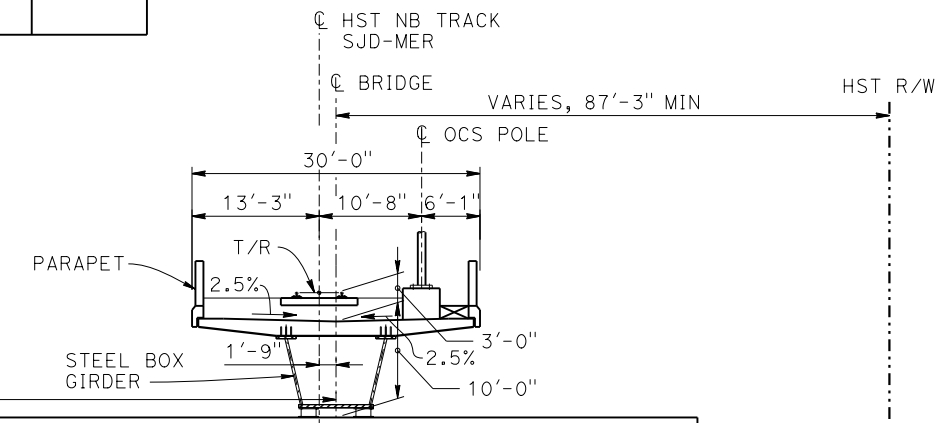
CONTRACT NO.  
HSR08-05  
DRAWING NO.  
ST-K1643-C  
SCALE  
AS SHOWN  
SHEET NO.



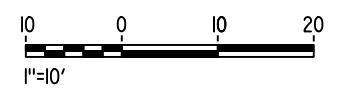
**SECTION A-A**  
1" = 10'

BENT COLUMN SCHEDULE		
BENT	COLUMN TYPE	"A"
2 - 7	9'-0"Ø	
8 - 13	11'-0"Ø	
14 - 18	13'-0"Ø	
19 - 25	15'-0"Ø	
26 - 32	16'-0"Ø	
33 - 37	2 - 10'-0"Ø	78'-0"
38	2 - 10'-0"Ø	135'-0"
39	2 - 10'-0"Ø	129'-0"
40	2 - 10'-0"Ø	124'-0"
41 - 44	16'-0"Ø	
45 - 48	15'-0"Ø	
49 - 51	13'-0"Ø	
52 - 55	11'-0"Ø	
56 - 58	9'-0"Ø	

- NOTES:**
- PILE AND DRILLED SHAFT LENGTHS TO BE DETERMINED.
  - FOR TRACK SUPERELEVATION DETAILS, SEE ALIGNMENT AND TYPICAL SECTION PLANS; DRAWING TT-B0058-C.



**SECTION B-B**  
1" = 10'



28-APR-2015 09:43 MF-ST-K3640-C.dgn

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**M. SUN**

DRAWN BY  
**A. M.**

CHECKED BY  
**O. EDEWOR**

IN CHARGE  
**C. LEMLEY**

DATE  
**05/08/2015**

**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**

**NOT FOR**  
**CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO SECTION**

CENTRAL VALLEY WYE  
AVENUE 21 TO ROAD 13 WYE ALTERNATIVE  
TYPICAL SECTIONS (SJD-MER)

AERIAL #6 - NORTHBOUND OVER HST MERCED TO FRESNO - 5 OF 6

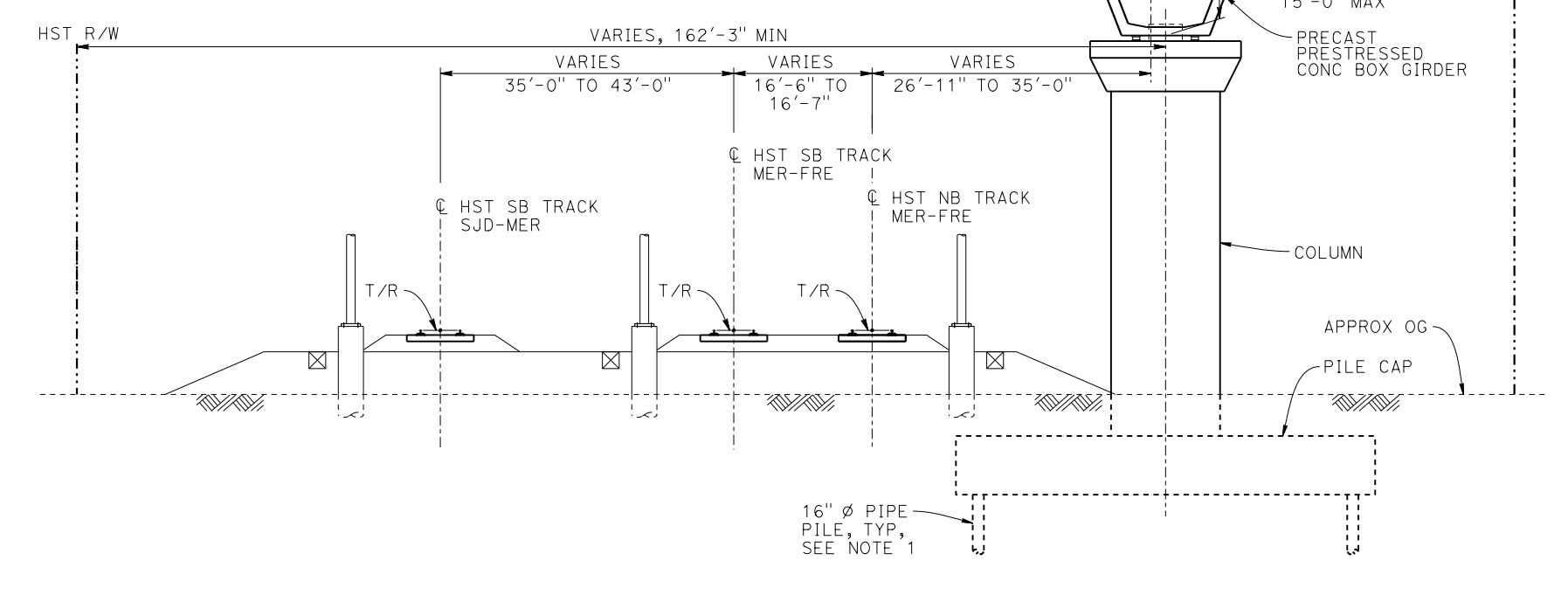
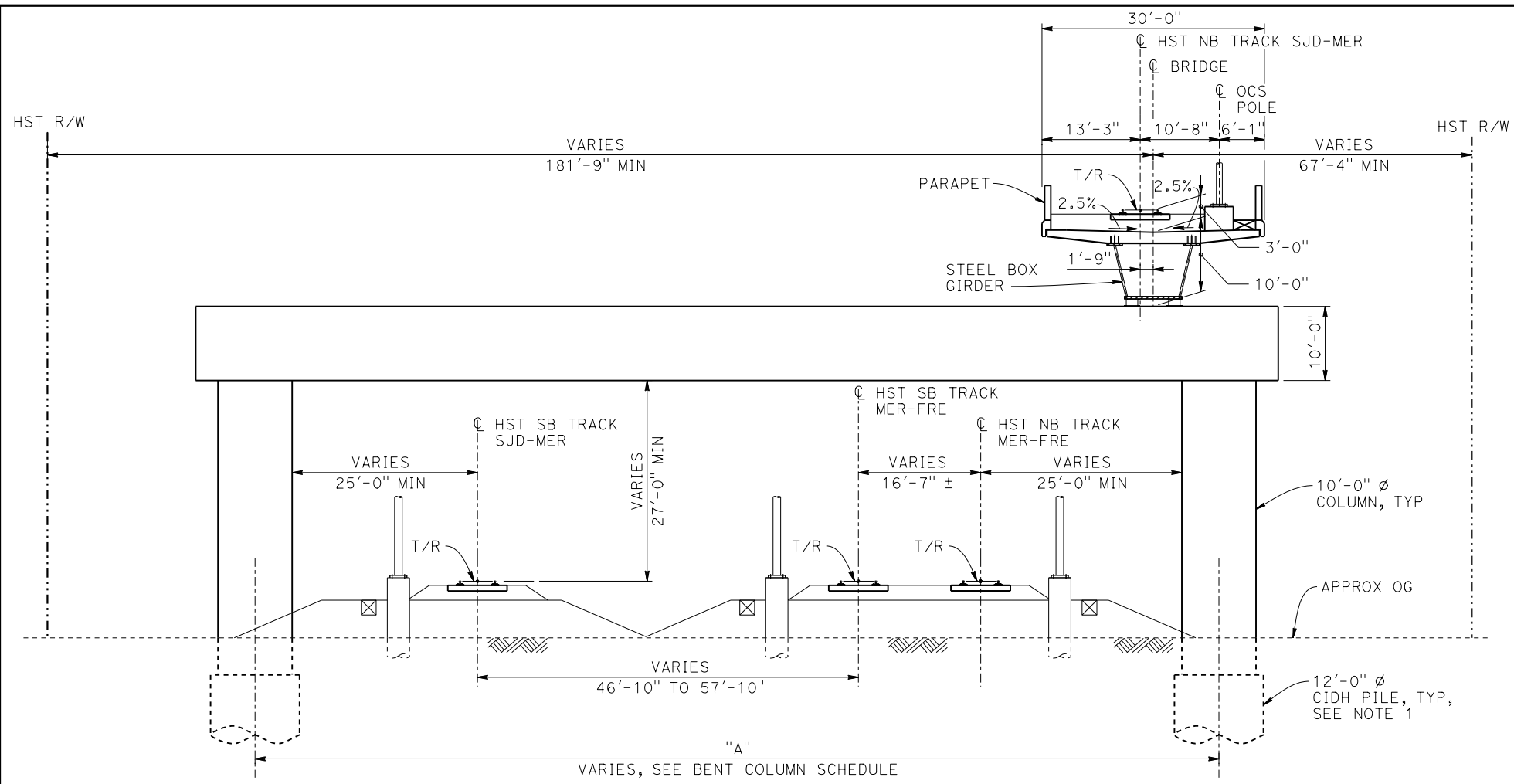
CONTRACT NO.  
HSR08-05

DRAWING NO.  
ST-K3640-C

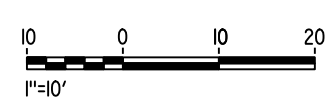
SCALE  
AS SHOWN

SHEET NO.

MF-ST-K3641-C.dgn  
 28-APR-2015 09:44  
 P005133G



- NOTES:**
1. PILE AND DRILLED SHAFT LENGTHS TO BE DETERMINED.
  2. FOR TRACK SUPERELEVATION DETAILS, SEE ALIGNMENT AND TYPICAL SECTION PLANS; DRAWING TT-B0058-C.



REV	DATE	BY	CHK	APP	DESCRIPTION

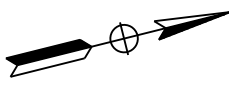
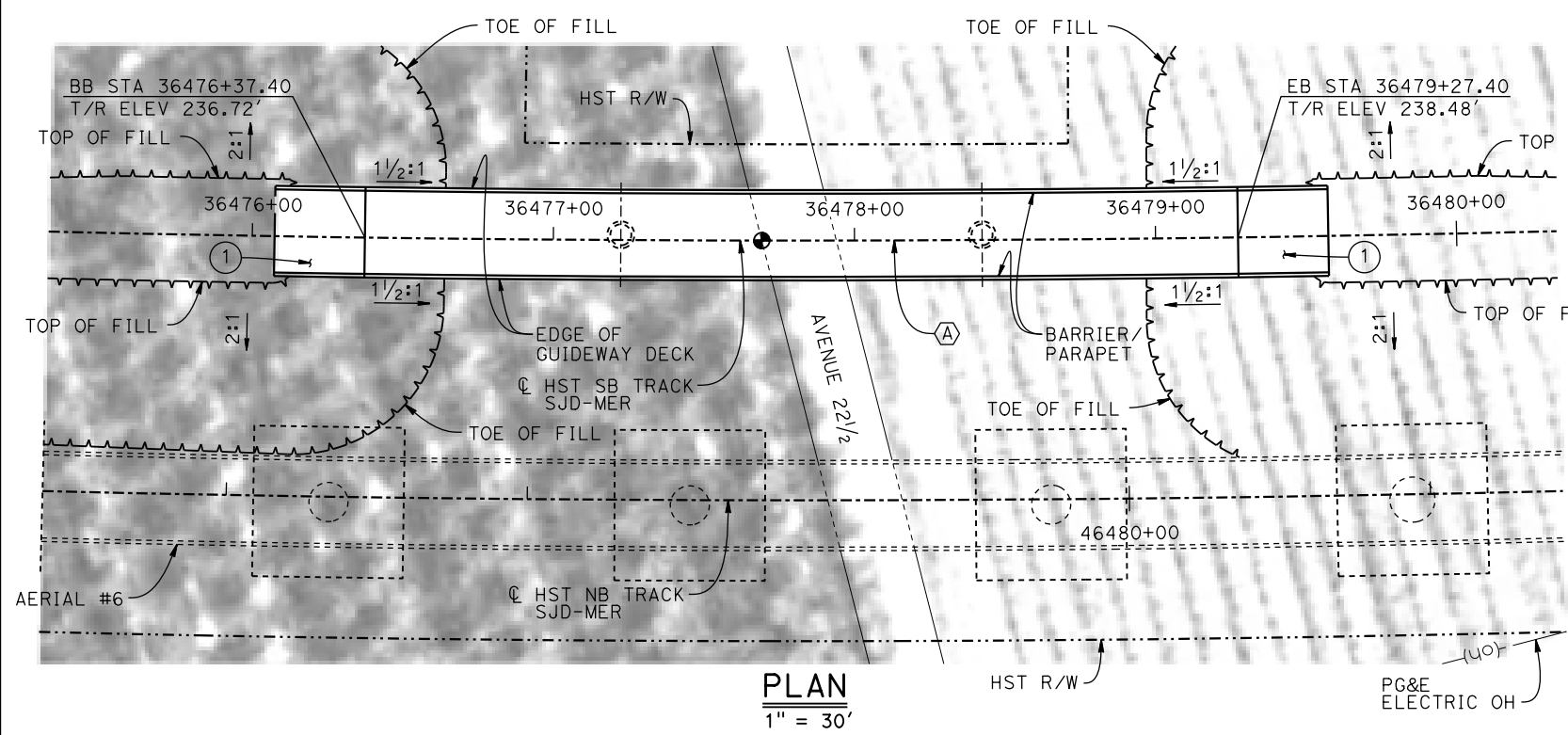
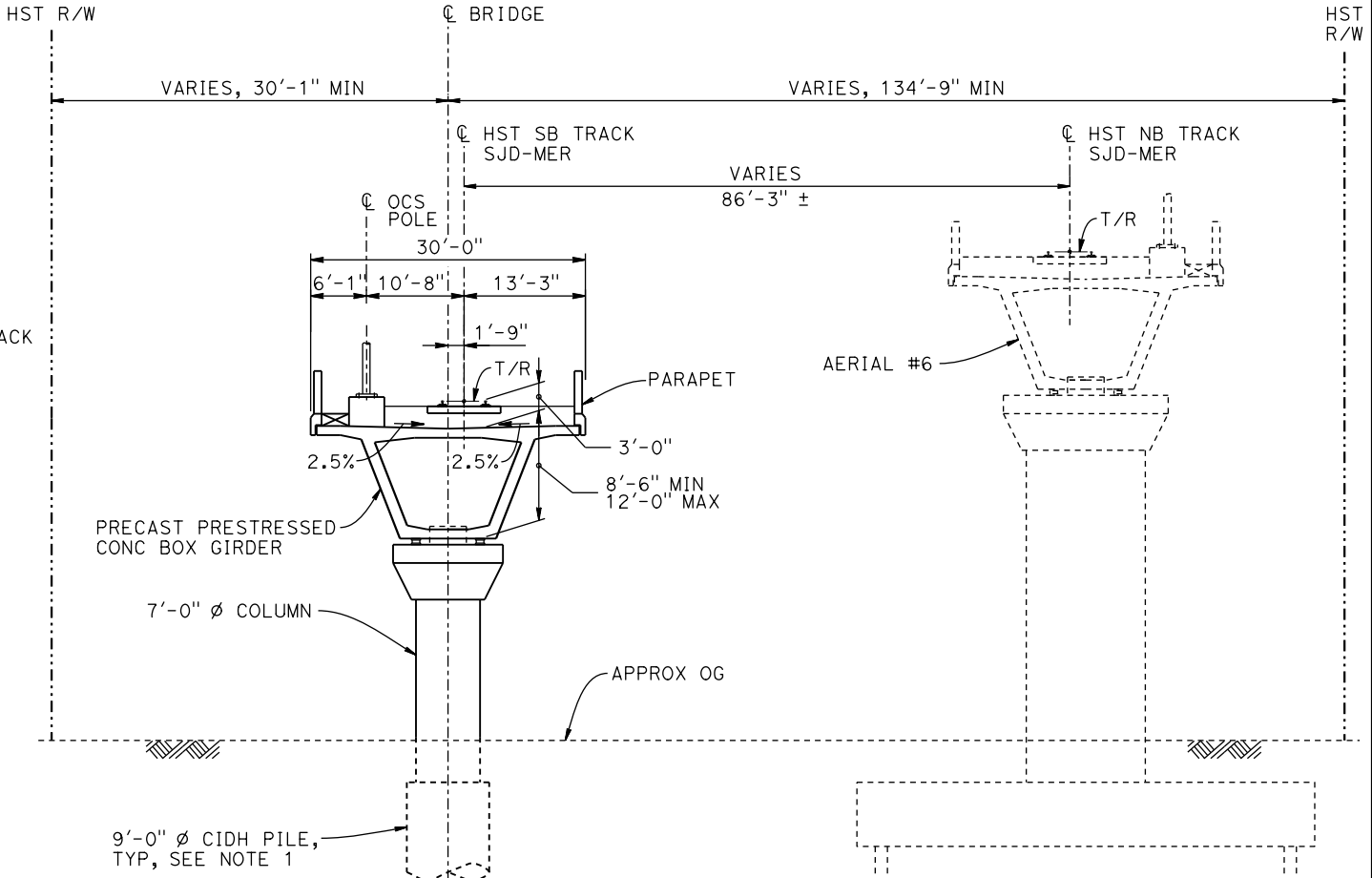
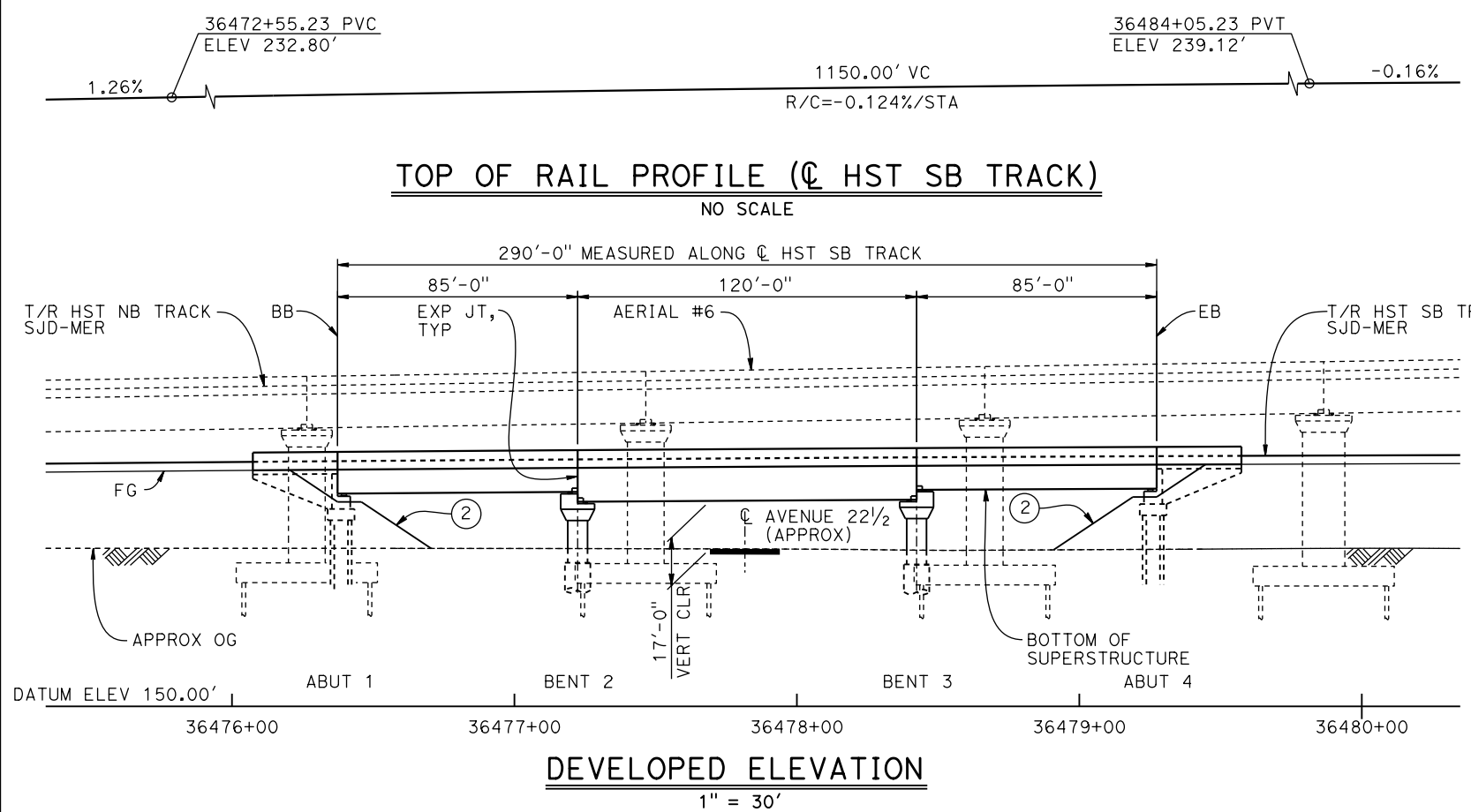
DESIGNED BY  
**M. SUN**  
 DRAWN BY  
**A. M.**  
 CHECKED BY  
**O. EDEWOR**  
 IN CHARGE  
**C. LEMLEY**  
 DATE  
**05/08/2015**

**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**  
  
**NOT FOR**  
**CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO SECTION**  
 CENTRAL VALLEY WYE  
 AVENUE 21 TO ROAD 13 WYE ALTERNATIVE  
 TYPICAL SECTIONS (SJD-MER)  
 AERIAL #6 - NORTHBOUND OVER HST MERCED TO FRESNO - 6 OF 6

CONTRACT NO.  
 HSR08-05  
 DRAWING NO.  
 ST-K3641-C  
 SCALE  
 AS SHOWN  
 SHEET NO.



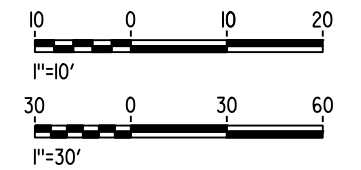
- LEGEND:**
- INDICATES POINT OF MINIMUM VERTICAL CLEARANCE
  - ① STRUCTURE APPROACH
  - ② SLOPE PAVING (1 1/2H:1V)

**CURVE SJD-MER 1 SB (A)**  
 R = 10,300.00'  
 LS = 1,500.00'

**TEMPORARY TRAFFIC OPENINGS**

VEHICULAR TRAFFIC	
1. — TRAFFIC WILL BE DETOURED AWAY FROM THE SITE.	
2. X TRAFFIC WILL PASS UNDER THE STRUCTURE ON:	
ST OR ROAD NAME AND LOCATION	FALSEWORK OPENING REQD (HORIZ X VERT)
AVENUE 22 1/2	36477+84 32'X16.5' 2-WAY
3. — TEMP TRAFFIC LANE REDUCTION FOR FTG EXC.	

- NOTES:**
- 16"  $\phi$  PIPE PILES ASSUMED FOR ABUTMENT FOUNDATIONS. PILE AND DRILLED SHAFT LENGTHS TO BE DETERMINED.
  - FOR UTILITY DISPOSITIONS, SEE CIVIL AND GRADE SEPARATION PLANS; DRAWING CV-S1640-C.
  - FOR TRACK SUPERELEVATION DETAILS, SEE ALIGNMENT AND TYPICAL SECTION PLANS; DRAWING TT-B0058-C.
  - FOR AERIAL #6 - NORTHBOUND HST OVER MERCED, SEE DRAWINGS ST-K1640-C TO ST-K1643-C, ST-K3640-C AND ST-K3641-C.



16-MAR-2016 09:27 MF-ST-K1646-C.dgn

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**M. SUN**

DRAWN BY  
**A. M.**

CHECKED BY  
**O. EDEWOR**

IN CHARGE  
**C. LEMLEY**

DATE  
**05/08/2015**

**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**

**NOT FOR**  
**CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO SECTION**  
 CENTRAL VALLEY WYE  
 AVENUE 21 TO ROAD 13 WYE ALTERNATIVE  
 GENERAL PLAN (SJD-MER)  
 AVENUE 22 1/2 UNDERPASS (HST SB)

CONTRACT NO.  
HSR08-05

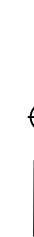
DRAWING NO.  
ST-K1646-C

SCALE  
AS SHOWN

SHEET NO.

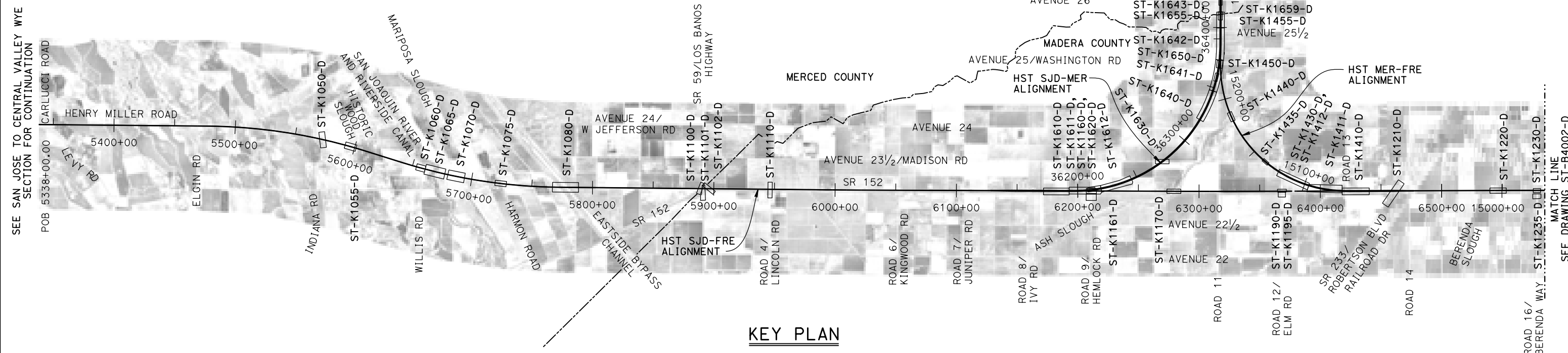
**NOTES:**

ST-K - INDICATES AERIAL, CROSSING, AND GRADE SEPARATION DRAWINGS



SEE SAN JOSE TO CENTRAL VALLEY WYE SECTION FOR CONTINUATION

SEE MERCED TO FRESNO RECORD SET HYBRID ALIGNMENT FOR CONTINUATION  
POE 15655+00.00 | POE 25655+00.00



**KEY PLAN**

16-AUG-2016 08:29 MF-ST-B4001-D.dgn

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY <b>M. BRATT</b>
DRAWN BY <b>A. M.</b>
CHECKED BY <b>K. CHARAN</b>
IN CHARGE <b>C. LEMLEY</b>
DATE <b>08/12/2016</b>

**RECORD SET  
15% DESIGN  
SUBMITTAL**

**NOT FOR  
CONSTRUCTION**



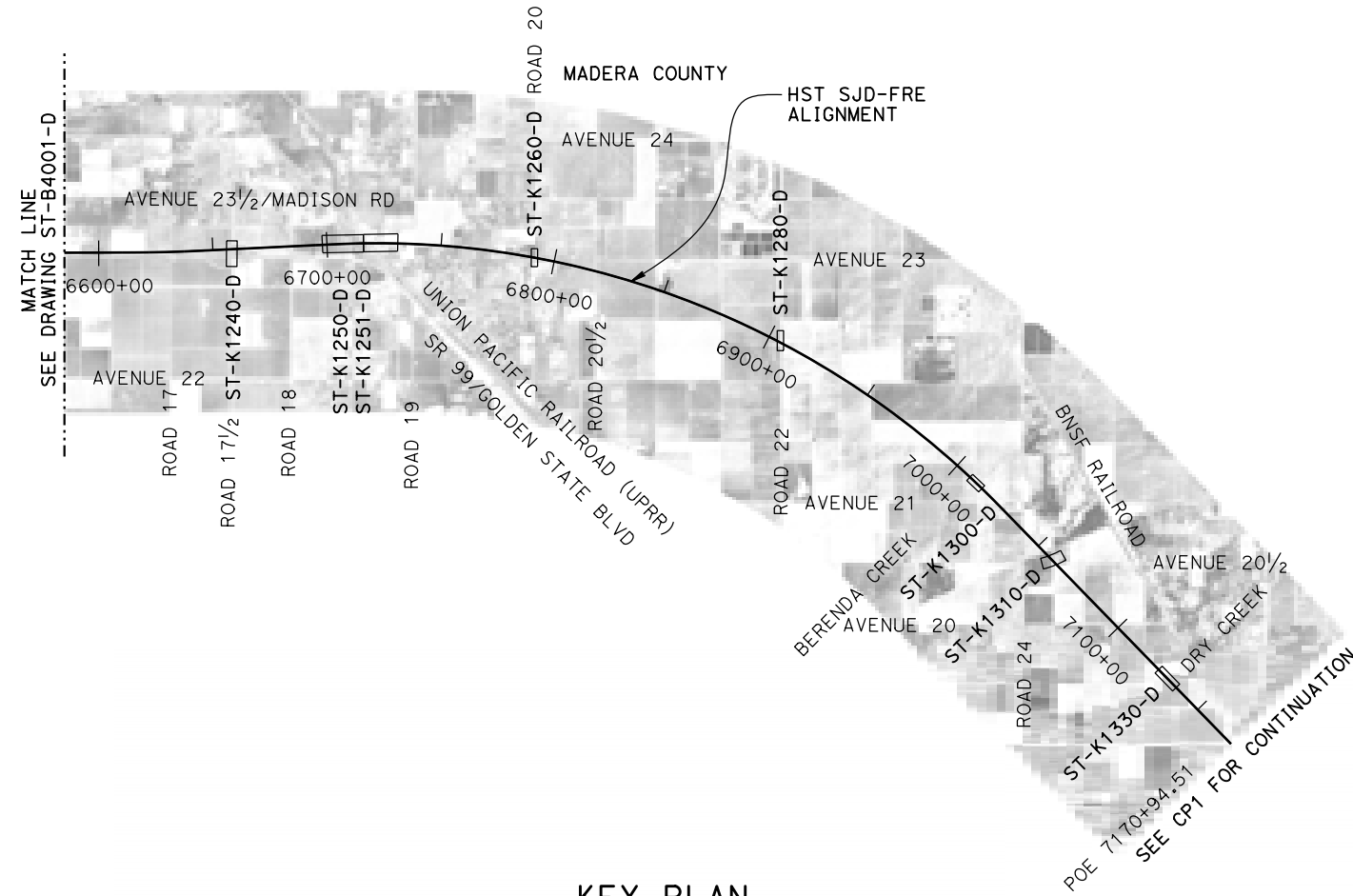
**CALIFORNIA HIGH-SPEED TRAIN PROJECT  
MERCED TO FRESNO SECTION**

CENTRAL VALLEY WYE  
SR 152 (NORTH) TO ROAD 11 WYE ALTERNATIVE  
KEY MAP OF STRUCTURAL PLANS  
SHEET 1 OF 2

CONTRACT NO. HSR08-05
DRAWING NO. ST-B4001-D
SCALE N. T. S.
SHEET NO.

**NOTES:**

ST-K - INDICATES AERIAL, CROSSING, AND GRADE SEPARATION DRAWINGS



**KEY PLAN**

15-AUG-2016 8:25 MF-ST-B4002-D.dgn

REV	DATE	BY	CHK	APP	DESCRIPTION

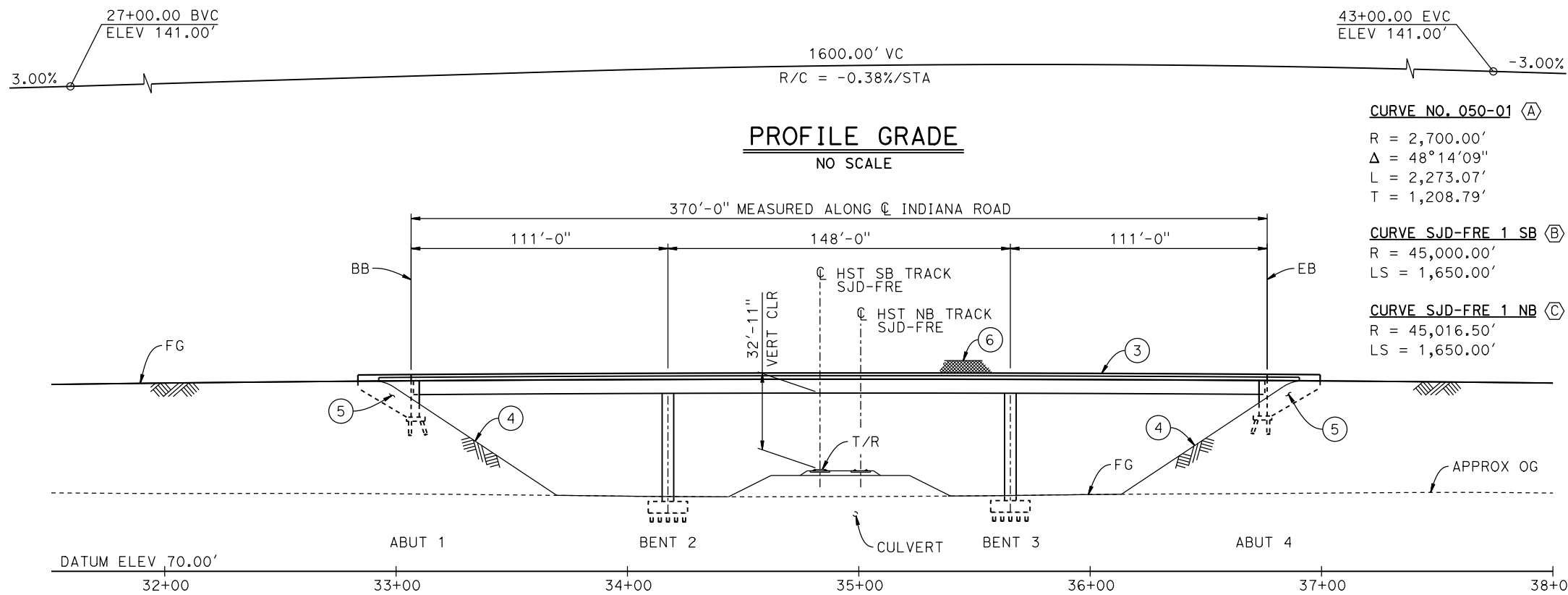
DESIGNED BY  
**M. BRATT**  
DRAWN BY  
**A. M.**  
CHECKED BY  
**K. CHARAN**  
IN CHARGE  
**C. LEMLEY**  
DATE  
**08/12/2016**

**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**  
  
**NOT FOR**  
**CONSTRUCTION**

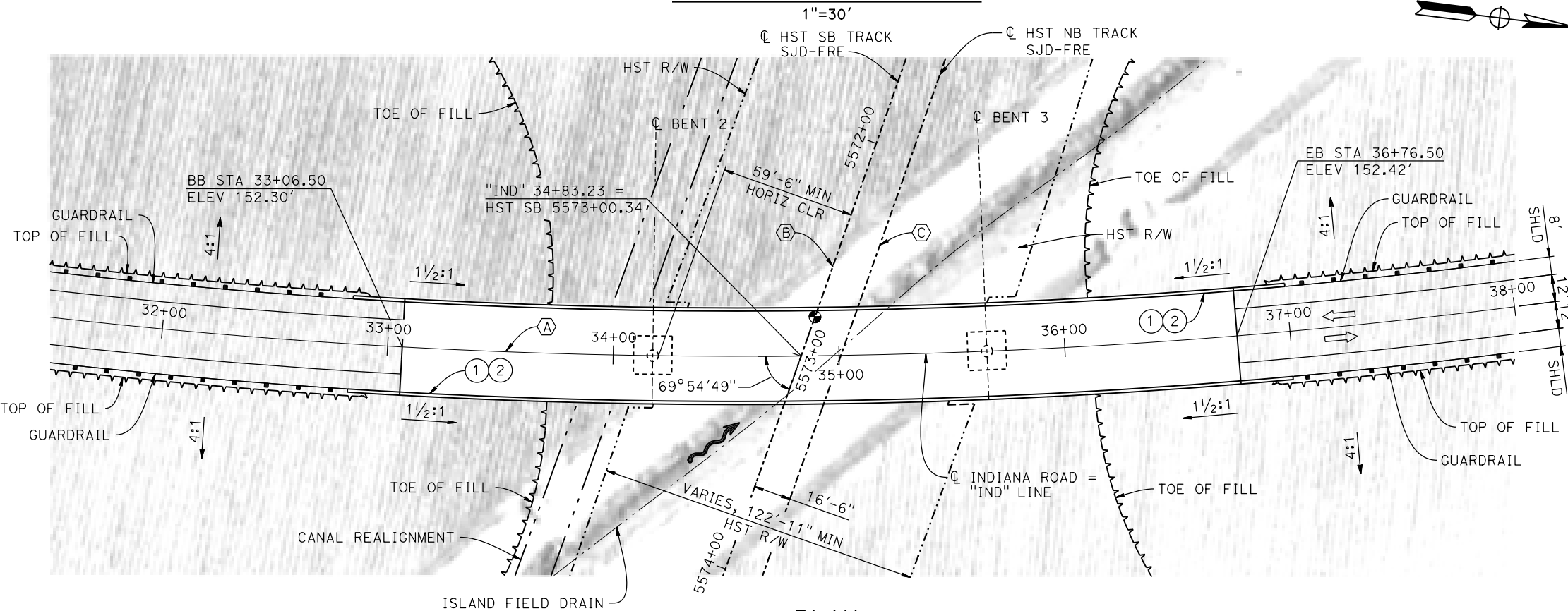


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO SECTION**  
CENTRAL VALLEY WYE  
SR 152 (NORTH) TO ROAD 11 WYE ALTERNATIVE  
KEY MAP OF STRUCTURAL PLANS  
SHEET 2 OF 2

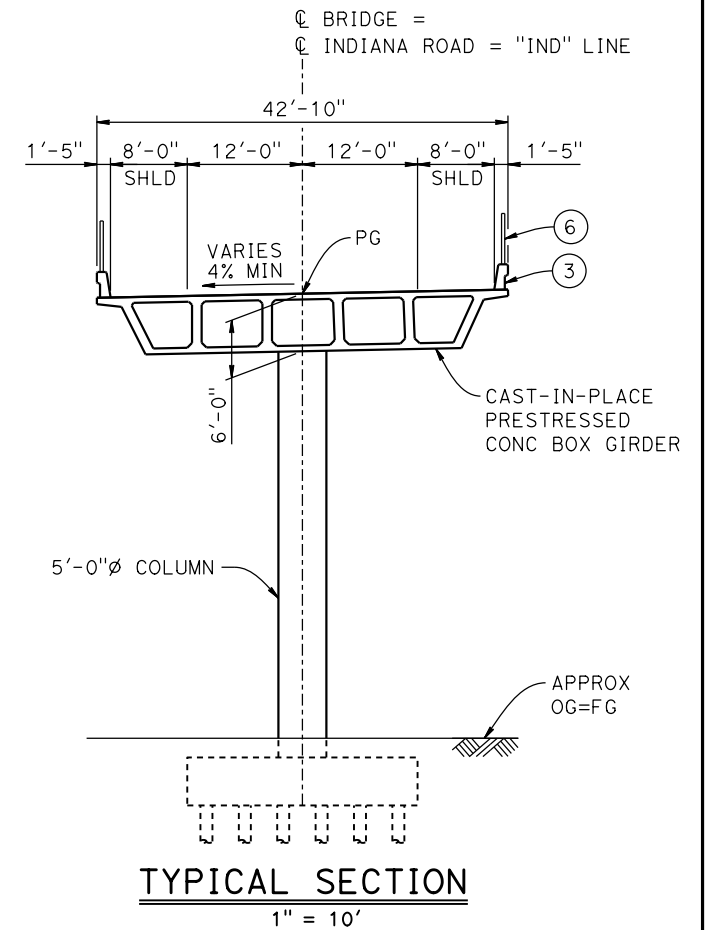
CONTRACT NO.  
HSR08-05  
DRAWING NO.  
ST-B4002-D  
SCALE  
N. T. S.  
SHEET NO.



**DEVELOPED ELEVATION**  
1"=30'



**PLAN**  
1"=30'



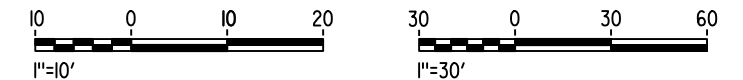
**TYPICAL SECTION**  
1" = 10'

**LEGEND:**

- ⊙ INDICATES POINT OF MINIMUM VERTICAL CLEARANCE
- INDICATES DIRECTION OF FLOW
- ⇨ INDICATES DIRECTION OF TRAFFIC
- ① PAINT "INDIANA ROAD OVERHEAD"
- ② PAINT "BRIDGE NO. XX-XXXX"
- ③ CONCRETE BARRIER TYPE 736 MOD
- ④ SLOPE PAVING (1 1/2H:1V)
- ⑤ WINGWALL
- ⑥ AR FENCE WITH SOLID PLATE

**NOTES:**

1. 16" Ø PIPE PILES ASSUMED AT ABUTMENT AND BENT FOUNDATIONS. PILE LENGTHS TO BE DETERMINED.
2. FOR UTILITY DISPOSITIONS, SEE CIVIL AND GRADE SEPARATION PLANS; DRAWING CV-S1050-D.
3. FOR GUARDRAILS, SEE CIVIL AND GRADE SEPARATION PLANS; DRAWING CV-S1050-D.
4. FOR CULVERT AND CANAL REALIGNMENT, SEE CIVIL AND GRADE SEPARATION PLANS; DRAWING CV-S1050-D.



16-AUG-2016 7:03 MF-ST-K1050-D.dgn

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**M. BRATT**  
DRAWN BY  
**A. M.**  
CHECKED BY  
**K. CHARAN**  
IN CHARGE  
**C. LEMLEY**  
DATE  
**08/12/2016**

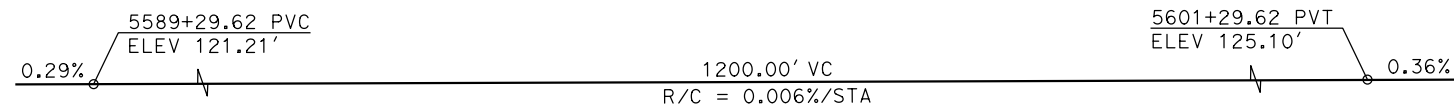
**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**  
  
**NOT FOR**  
**CONSTRUCTION**



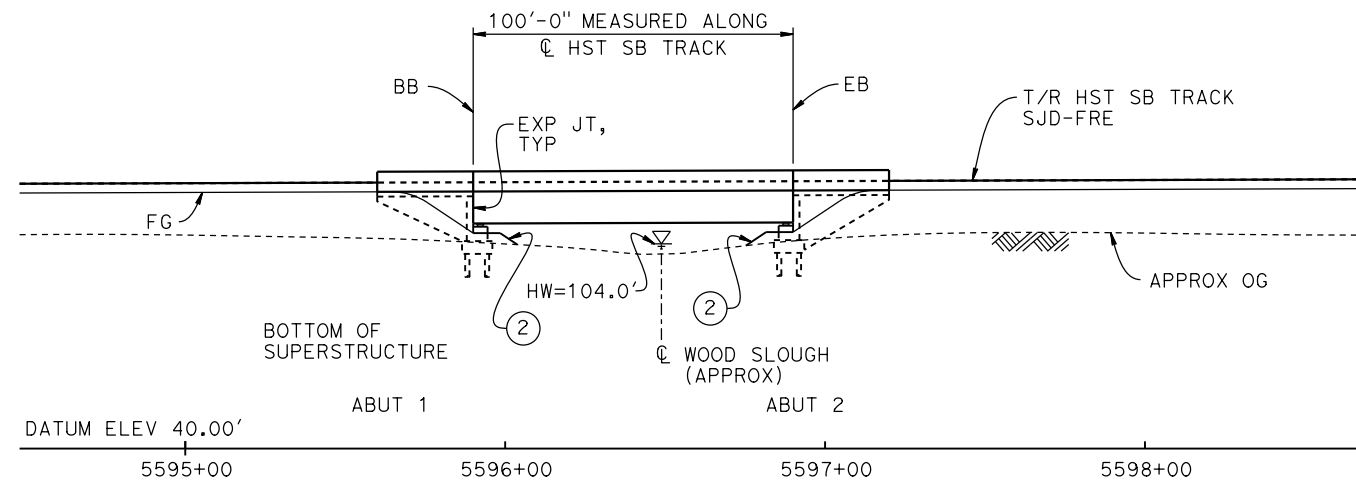
**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO SECTION**  
CENTRAL VALLEY WYE  
SR 152 (NORTH) TO ROAD 11 WYE ALTERNATIVE  
GENERAL PLAN (SJD-FRE)  
INDIANA ROAD OVERHEAD

CONTRACT NO.  
HSR08-05  
DRAWING NO.  
ST-K1050-D  
SCALE  
AS SHOWN  
SHEET NO.

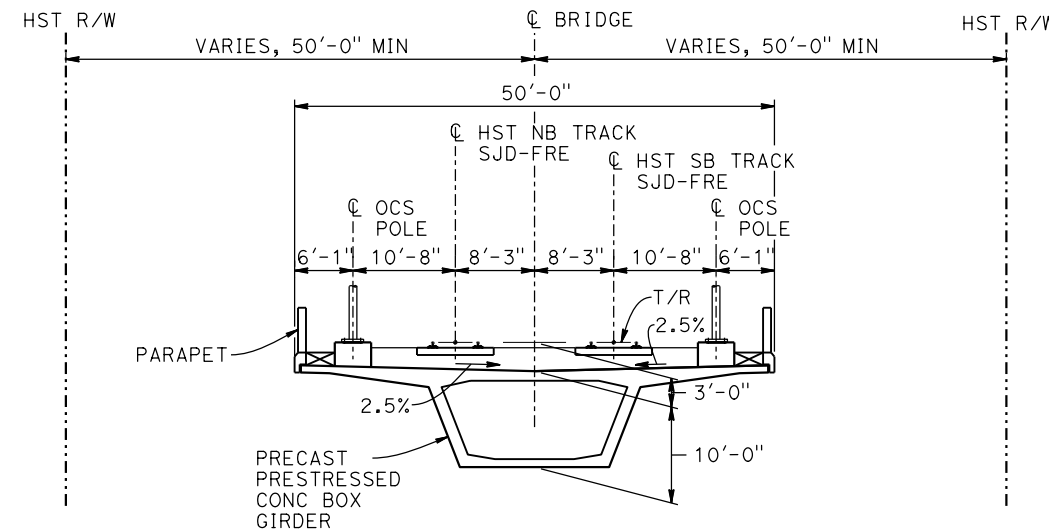




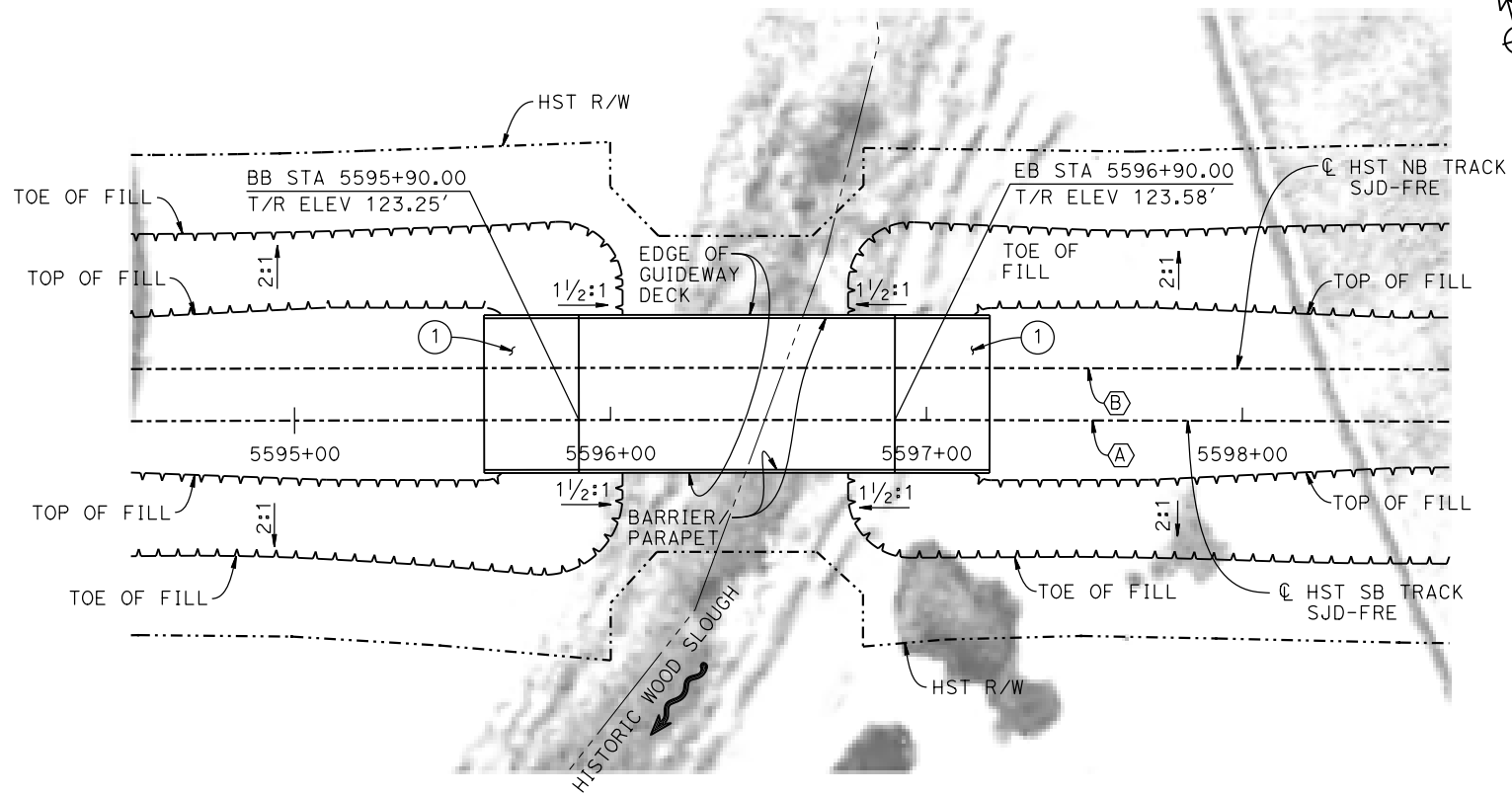
**TOP OF RAIL PROFILE (CL HST SB TRACK SJD-FRE)**  
NO SCALE



**DEVELOPED ELEVATION**  
1" = 30'



**TYPICAL SECTION**  
1" = 10'



**PLAN**  
1" = 30'

**LEGEND:**

- INDICATES DIRECTION OF FLOW
- ① STRUCTURE APPROACH
- ② SLOPE PAVING (1 1/2H:1V)

**NOTES:**

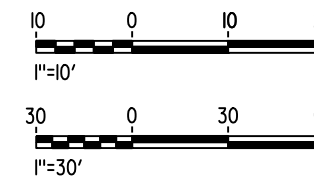
1. 16" Ø PIPE PILES ASSUMED FOR ABUTMENT FOUNDATIONS. PILE LENGTHS TO BE DETERMINED.
2. ANY EXISTING DIRT ROAD THAT CONFLICTS WITH NEW CONSTRUCTION SHALL BE REALIGNED.
3. FOR UTILITY DISPOSITIONS, SEE CIVIL AND GRADE SEPARATION PLANS; DRAWING CV-S1060-D.
4. FOR TRACK SUPERELEVATION DETAILS, SEE ALIGNMENT AND TYPICAL SECTION PLANS; DRAWINGS TT-B0050-D AND TT-B0052-D.

**CURVE SJD-FRE 2 SB (A)**

R = 45,000.00'  
LS = 1,650.00'

**CURVE SJD-FRE 2 NB (A)**

R = 45,016.50'  
LS = 1,650.00'



29-AUG-2016 16:21:08 MF-ST-K1055-D.dgn

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**M. BRATT**  
DRAWN BY  
**A. M.**  
CHECKED BY  
**K. CHARAN**  
IN CHARGE  
**C. LEMLEY**  
DATE  
**09/02/2016**

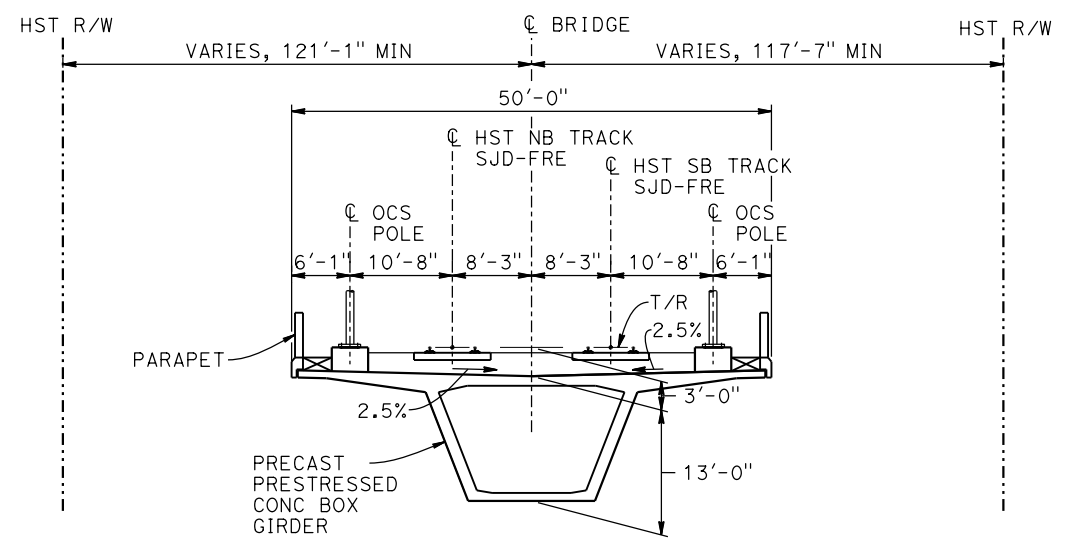
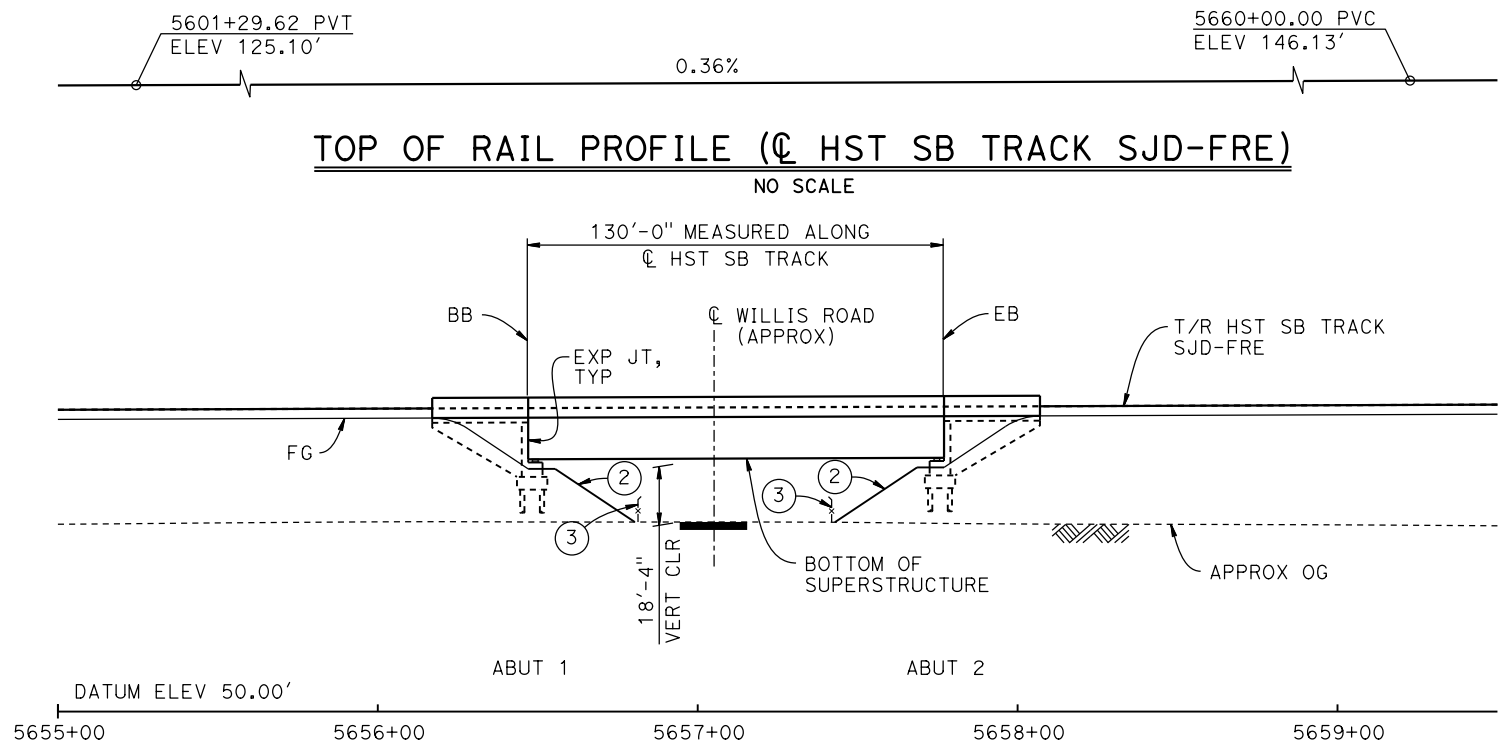
**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**  
  
**NOT FOR**  
**CONSTRUCTION**



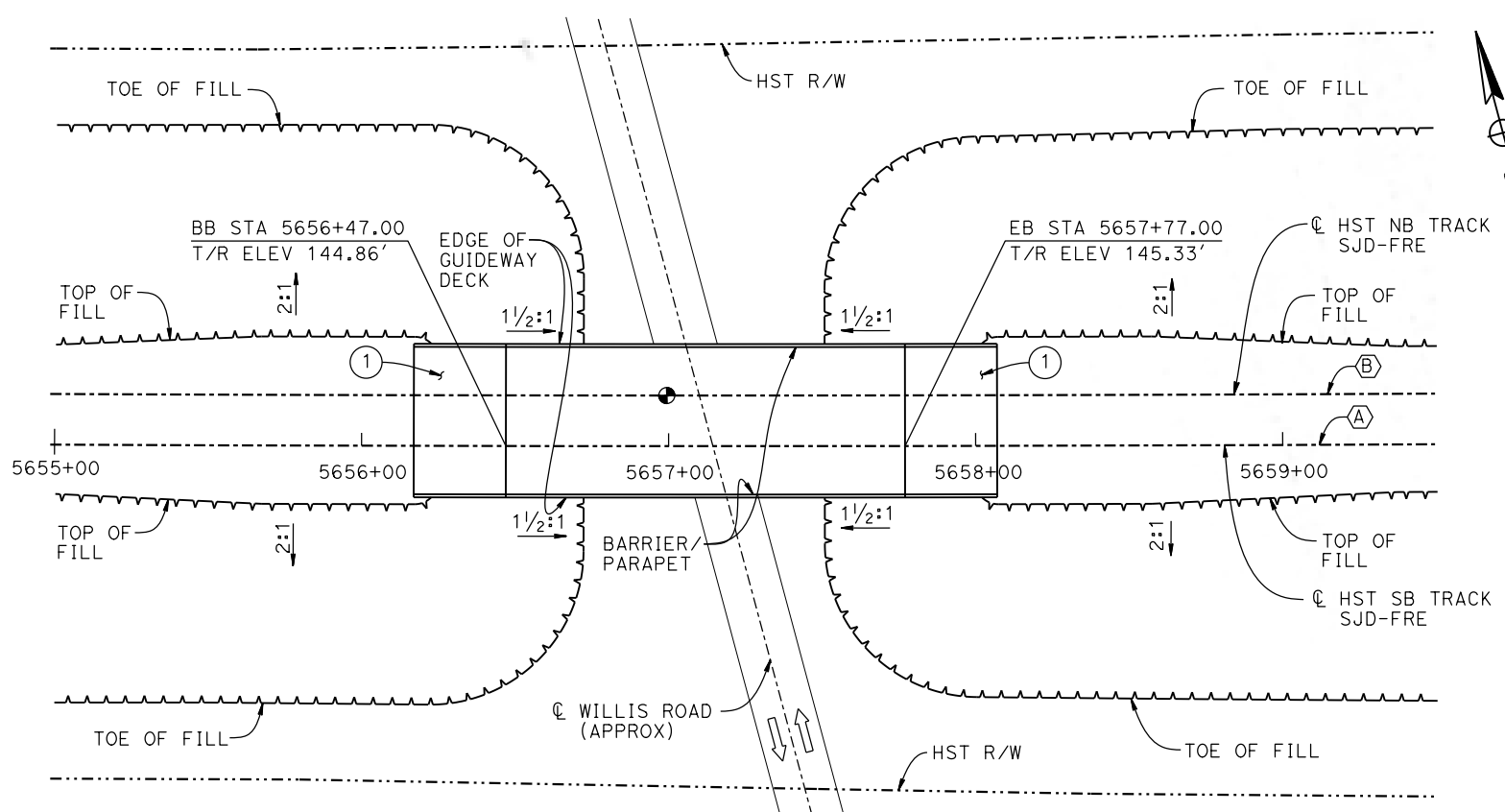
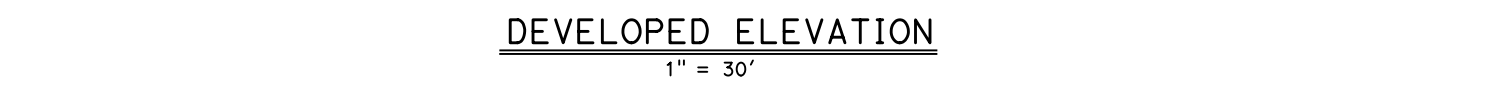
**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO SECTION**

CENTRAL VALLEY WYE  
SR 152 (NORTH) TO ROAD 11 WYE ALTERNATIVE  
GENERAL PLAN (SJD-FRE)  
WOOD SLOUGH BRIDGE

CONTRACT NO.  
HSR08-05  
DRAWING NO.  
ST-K1055-D  
SCALE  
AS SHOWN  
SHEET NO.



**TYPICAL SECTION**  
1" = 10'



**PLAN**  
1" = 30'

**TEMPORARY TRAFFIC OPENINGS**

VEHICULAR TRAFFIC	
1. TRAFFIC WILL BE DETOURED AWAY FROM THE SITE.	
2. X TRAFFIC WILL PASS UNDER THE STRUCTURE ON:	
ST OR ROAD NAME AND LOCATION	FALSEWORK OPENING REQD (HORIZ X VERT)
WILLIS ROAD	5657+14 32'X16.5' 2-WAY
3. TEMP TRAFFIC LANE REDUCTION FOR FTG EXC.	

**LEGEND:**

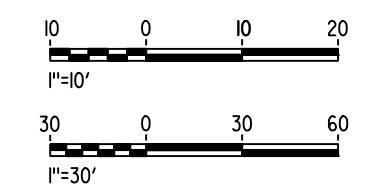
- INDICATES POINT OF MINIMUM VERTICAL CLEARANCE
- INDICATES DIRECTION OF TRAFFIC
- ① STRUCTURE APPROACH
- ② SLOPE PAVING (1 1/2H:1V)
- ③ AR FENCE, SEE TRACK PLANS; DRAWING TT-B0020-D

**NOTES:**

1. 16" Ø PIPE PILES ASSUMED FOR ABUTMENT FOUNDATIONS. PILE LENGTHS TO BE DETERMINED.
2. ANY EXISTING DIRT ROAD THAT CONFLICTS WITH NEW CONSTRUCTION SHALL BE REALIGNED.
3. FOR UTILITY DISPOSITIONS, SEE CIVIL AND GRADE SEPARATION PLANS; DRAWING CV-S1060-D.
4. FOR TRACK SUPERELEVATION, SEE ALIGNMENT AND TYPICAL SECTION PLANS; DRAWINGS TT-B0050-D AND TT-B0052-D.

**CURVE SJD-FRE 2 SB (A)**  
R = 45,016.50'  
LS = 1,550.00'

**CURVE SJD-FRE 2 NB (B)**  
R = 45,000.00'  
LS = 1,550.00'



15-AUG-2016 8:26 MF-ST-K1060-D.dgn

REV	DATE	BY	CHK	APP	DESCRIPTION

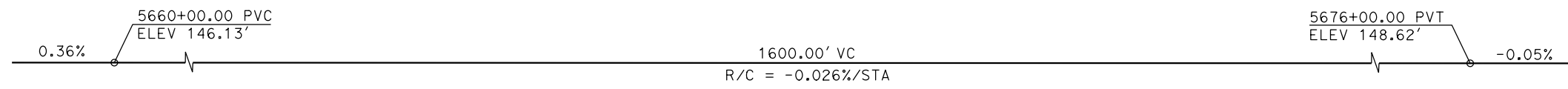
DESIGNED BY  
**M. BRATT**  
DRAWN BY  
**A. M.**  
CHECKED BY  
**K. CHARAN**  
IN CHARGE  
**C. LEMLEY**  
DATE  
**08/12/2016**

**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**  
  
**NOT FOR**  
**CONSTRUCTION**



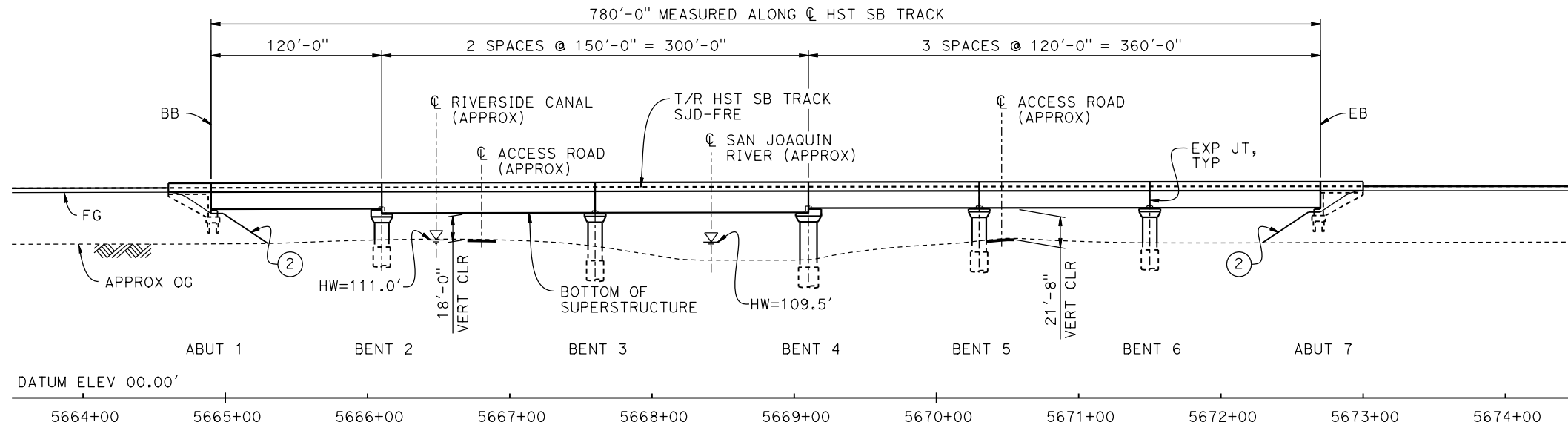
**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO SECTION**  
CENTRAL VALLEY WYE  
SR 152 (NORTH) TO ROAD 11 WYE ALTERNATIVE  
GENERAL PLAN (SJD-FRE)  
WILLIS ROAD UNDERPASS

CONTRACT NO.  
HSR08-05  
DRAWING NO.  
ST-K1060-D  
SCALE  
AS SHOWN  
SHEET NO.



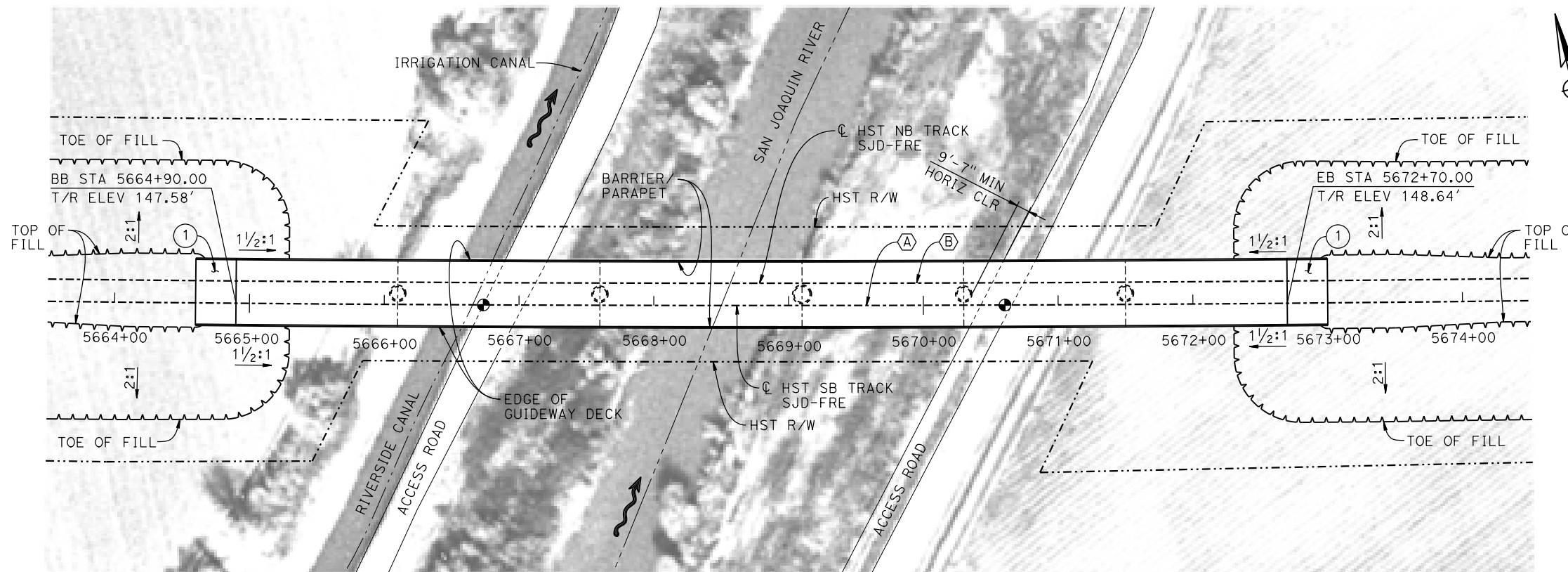
**TOP OF RAIL PROFILE (C HST SB TRACK SJD-FRE)**

NO SCALE



**DEVELOPED ELEVATION**

1" = 50'



**PLAN**

1" = 50'

**LEGEND:**

- ⊕ INDICATES POINT OF MINIMUM VERTICAL CLEARANCE
- INDICATES DIRECTION OF FLOW
- ① STRUCTURE APPROACH
- ② SLOPE PAVING (1 1/2 H:1 V)

**CURVE SJD-FRE 2 SB (A)**

R = 45,016.50'  
LS = 1,550.00'

**CURVE SJD-FRE 2 NB (B)**

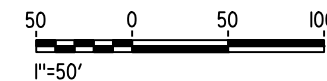
R = 45,000.00'  
LS = 1,550.00'

**TEMPORARY TRAFFIC OPENINGS**

VEHICULAR TRAFFIC			
1. <u>  </u> TRAFFIC WILL BE DETOURED AWAY FROM THE SITE.			
2. <u>  </u> TRAFFIC WILL PASS UNDER THE STRUCTURE ON:			
ST OR ROAD NAME AND LOCATION		FALSEWORK OPENING REQD (HORIZ X VERT)	
ACCESS ROAD	5666+85	20'X16.5'	-
ACCESS ROAD	5670+55	20'X16.5'	-
3. <u>  </u> TEMP TRAFFIC LANE REDUCTION FOR FTG EXC.			

**NOTES:**

1. 16" Ø PIPE PILES ASSUMED FOR ABUTMENT FOUNDATIONS, UNLESS OTHERWISE NOTED. PILE LENGTHS TO BE DETERMINED.
2. FOR SECTION AND BENT COLUMN SCHEDULE, SEE DRAWING ST-K3065-D.
3. ANY EXISTING DIRT ROAD THAT CONFLICTS WITH NEW CONSTRUCTION SHALL BE REALIGNED.
4. FOR UTILITY DISPOSITIONS, SEE CIVIL AND GRADE SEPARATION PLANS; DRAWING CV-S1060-D.



16-AUG-2016 7:03 MF-ST-K1065-D.dgn

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**M. BRATT**  
DRAWN BY  
**A. M.**  
CHECKED BY  
**K. CHARAN**  
IN CHARGE  
**C. LEMLEY**  
DATE  
**08/12/2016**

**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**

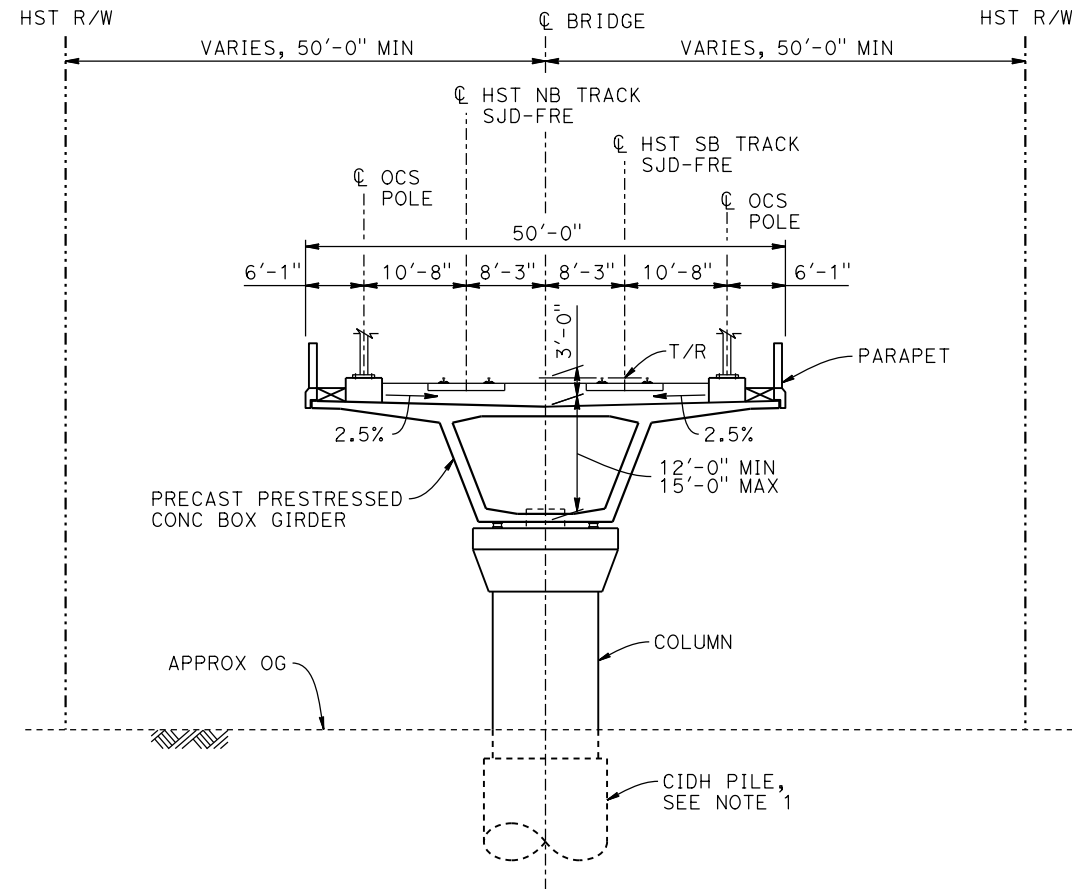
**NOT FOR**  
**CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO SECTION**

CENTRAL VALLEY WYE  
SR 152 (NORTH) TO ROAD 11 WYE ALTERNATIVE  
GENERAL PLAN (SJD-FRE)  
SAN JOAQUIN RIVER BRIDGE - 1 OF 2

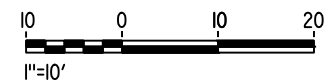
CONTRACT NO.  
HSR08-05  
DRAWING NO.  
ST-K1065-D  
SCALE  
AS SHOWN  
SHEET NO.



**TYPICAL SECTION**  
1" = 10'

BENT COLUMN SCHEDULE		
BENT	COLUMN TYPE	CIDH
2	13'-0" $\phi$	15'-0" $\phi$
3	14'-0" $\phi$	16'-0" $\phi$
4	13'-0" $\phi$	15'-0" $\phi$
5 - 6	11'-0" $\phi$	13'-0" $\phi$

- NOTES:**
- PILE AND DRILLED SHAFT LENGTHS TO BE DETERMINED.
  - FOR TRACK SUPERELEVATION DETAILS, SEE ALIGNMENT AND TYPICAL SECTION PLANS; DRAWING TT-B0050-D AND TT-B0052-D.



15-AUG-2016 16:18:47 MF-ST-K3065-D.dgn

REV	DATE	BY	CHK	APP	DESCRIPTION

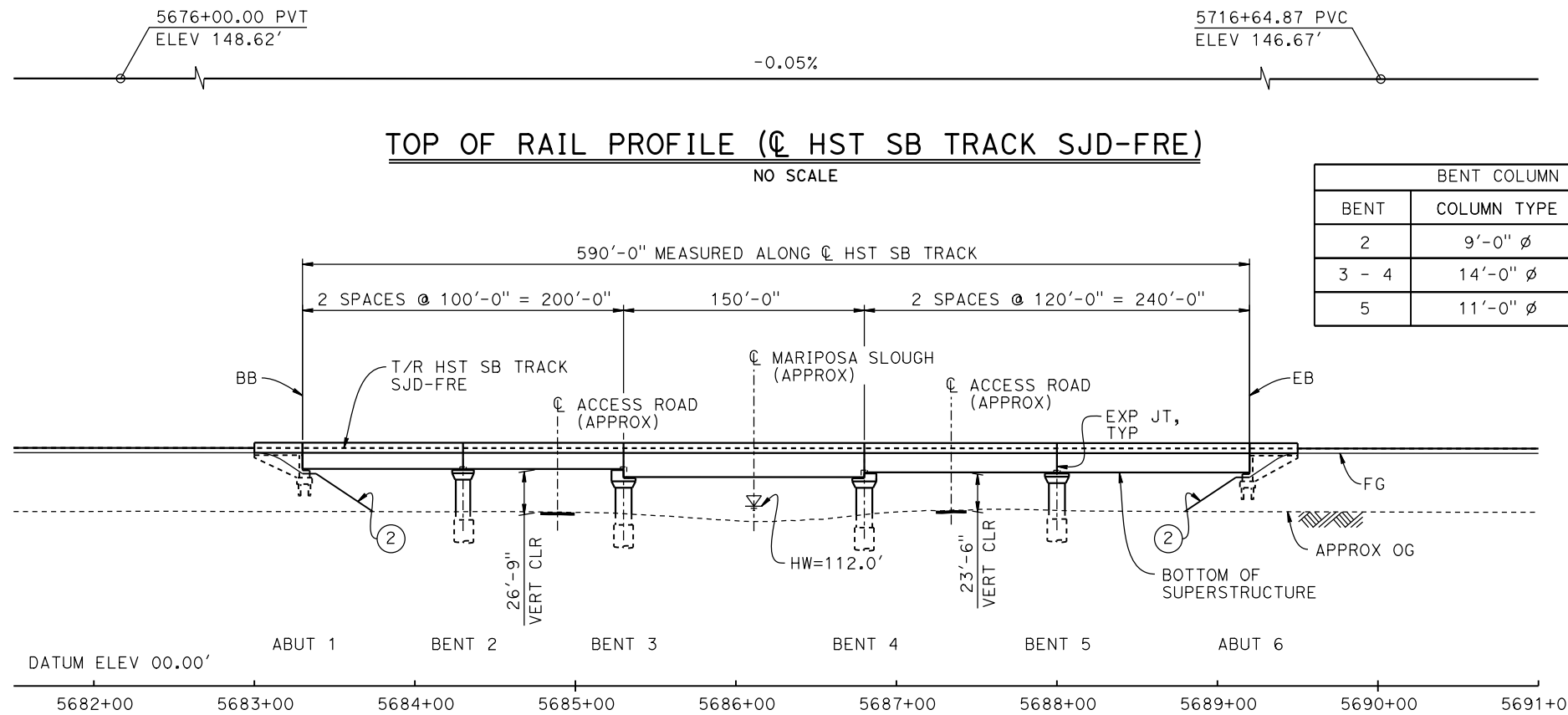
DESIGNED BY  
**M. BRATT**  
DRAWN BY  
**A. M.**  
CHECKED BY  
**K. CHARAN**  
IN CHARGE  
**C. LEMLEY**  
DATE  
**08/12/2016**

**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**  
  
**NOT FOR**  
**CONSTRUCTION**

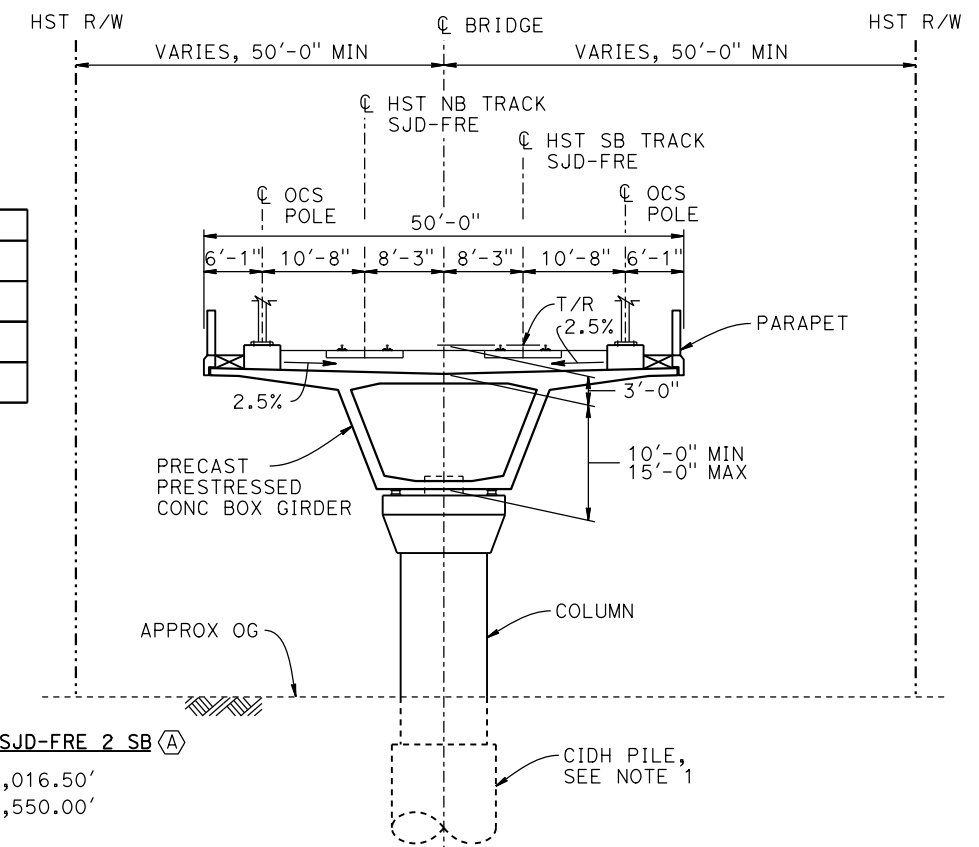


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO SECTION**  
CENTRAL VALLEY WYE  
SR 152 (NORTH) TO ROAD 11 WYE ALTERNATIVE  
TYPICAL SECTION (SJD-FRE)  
SAN JOAQUIN RIVER BRIDGE - 2 OF 2

CONTRACT NO.  
HSR08-05  
DRAWING NO.  
ST-K3065-D  
SCALE  
AS SHOWN  
SHEET NO.



BENT COLUMN SCHEDULE		
BENT	COLUMN TYPE	CIDH TYPE
2	9'-0" $\phi$	11'-0" $\phi$
3 - 4	14'-0" $\phi$	16'-0" $\phi$
5	11'-0" $\phi$	13'-0" $\phi$



**CURVE SJD-FRE 2 SB (A)**  
 R = 45,016.50'  
 LS = 1,550.00'

**CURVE SJD-FRE 2 NB (B)**  
 R = 45,000.00'  
 LS = 1,550.00'

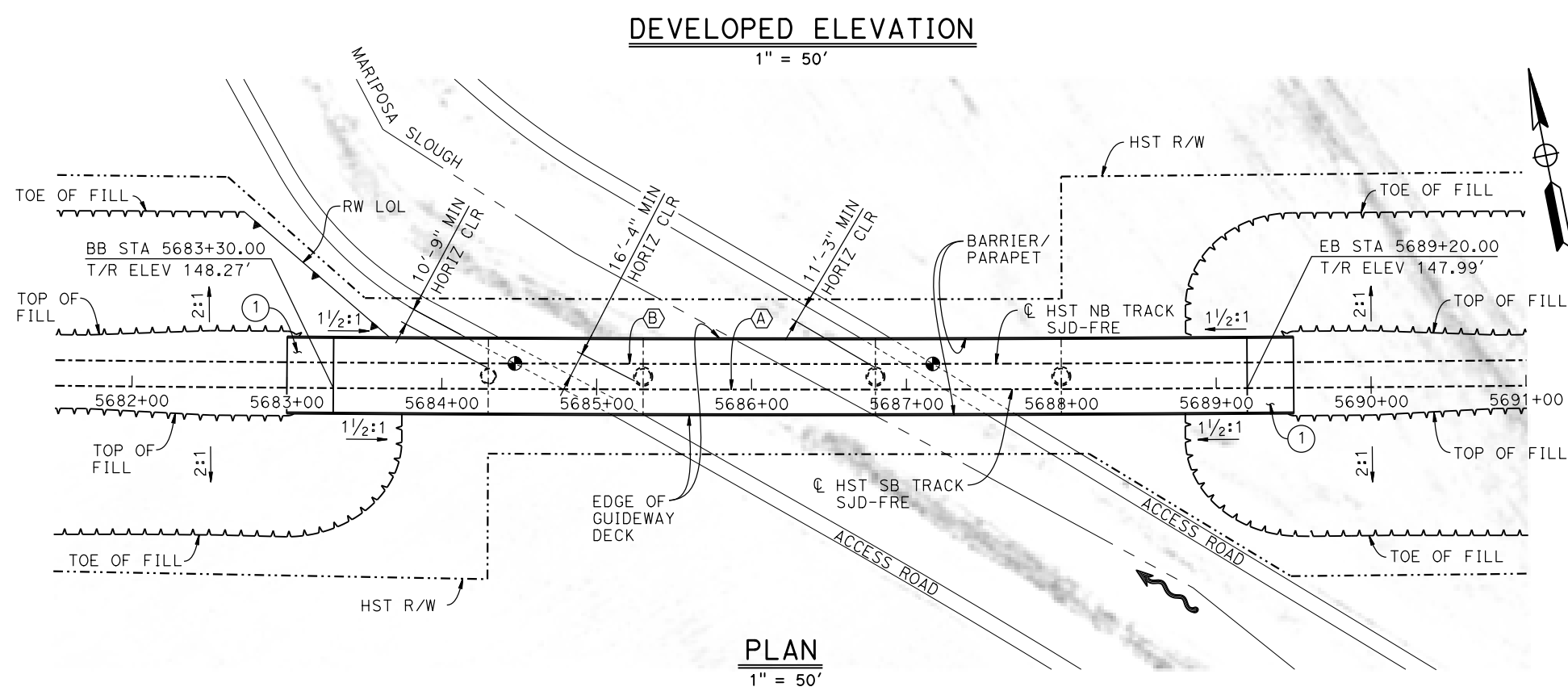
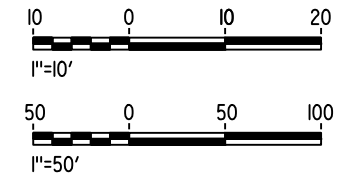
**TYPICAL SECTION**  
 1" = 10'

- NOTES:**
- 16" DIAM PIPE PILES ASSUMED FOR ABUTMENT FOUNDATIONS. PILE AND DRILLED SHAFT LENGTHS TO BE DETERMINED.
  - ANY EXISTING DIRT ROAD THAT CONFLICTS WITH NEW CONSTRUCTION SHALL BE REALIGNED.
  - FOR UTILITY DISPOSITIONS, SEE CIVIL AND GRADE SEPARATION PLANS; DRAWING CV-S1070-D.
  - FOR RETAINING WALL, SEE CIVIL AND GRADE SEPARATION PLANS; DRAWING CV-S1070-D.
  - FOR TRACK SUPERELEVATION, SEE ALIGNMENT AND TYPICAL SECTION PLANS; DRAWINGS TT-B0050-D AND TT-B0052-D.

- LEGEND:**
- INDICATES POINT OF MINIMUM VERTICAL CLEARANCE
  - INDICATES DIRECTION OF FLOW
  - ① STRUCTURE APPROACH
  - ② SLOPE PAVING (1/2H:1V)

**TEMPORARY TRAFFIC OPENINGS**

VEHICULAR TRAFFIC			
1. — TRAFFIC WILL BE DETOURED AWAY FROM THE SITE.			
2. X TRAFFIC WILL PASS UNDER THE STRUCTURE ON:			
ST OR ROAD NAME AND LOCATION		FALSEWORK OPENING REQD (HORIZ X VERT)	
ACCESS ROAD	5684+85	20'X16.5'	-
ACCESS ROAD	5687+40	20'X16.5'	-
3. X TEMP TRAFFIC LANE REDUCTION FOR FTG EXC.			



**PLAN**  
 1" = 50'

29-AUG-2016 16:33:33 MF-ST-K1070-D.dgn

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**M. BRATT**

DRAWN BY  
**A. M.**

CHECKED BY  
**K. CHARAN**

IN CHARGE  
**C. LEMLEY**

DATE  
**09/02/2016**

**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**

**NOT FOR**  
**CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO SECTION**

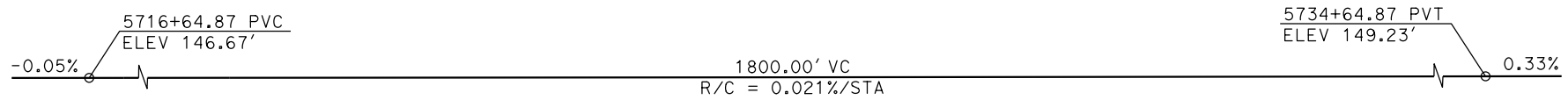
CENTRAL VALLEY WYE  
 SR 152 (NORTH) TO ROAD 11 WYE ALTERNATIVE  
 GENERAL PLAN (SJD-FRE)  
 MARIPOSA SLOUGH BRIDGE

CONTRACT NO.  
HSR08-05

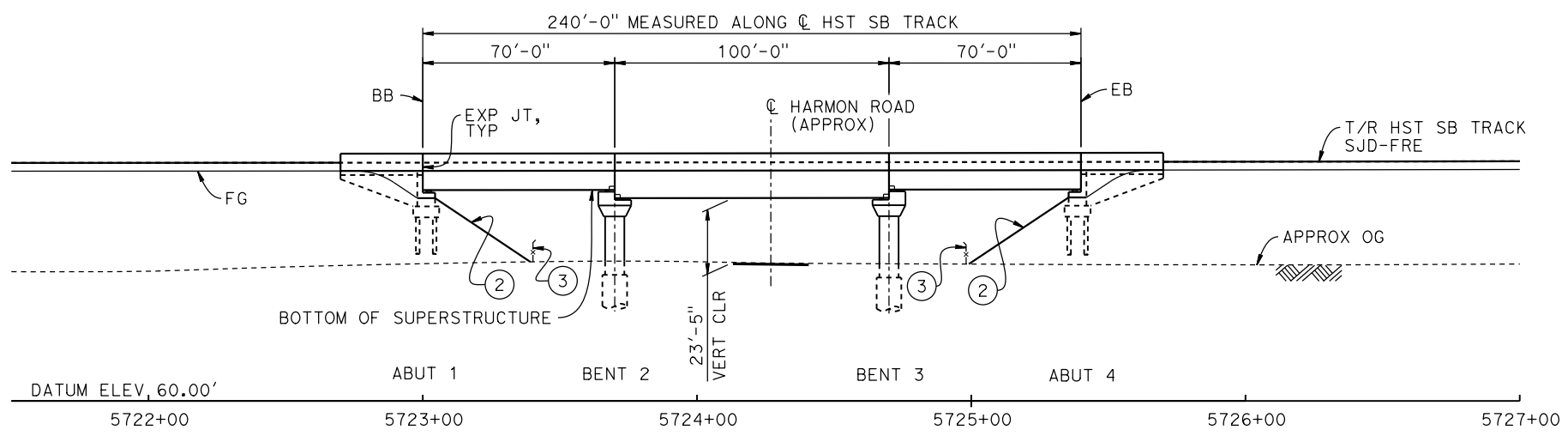
DRAWING NO.  
ST-K1070-D

SCALE  
AS SHOWN

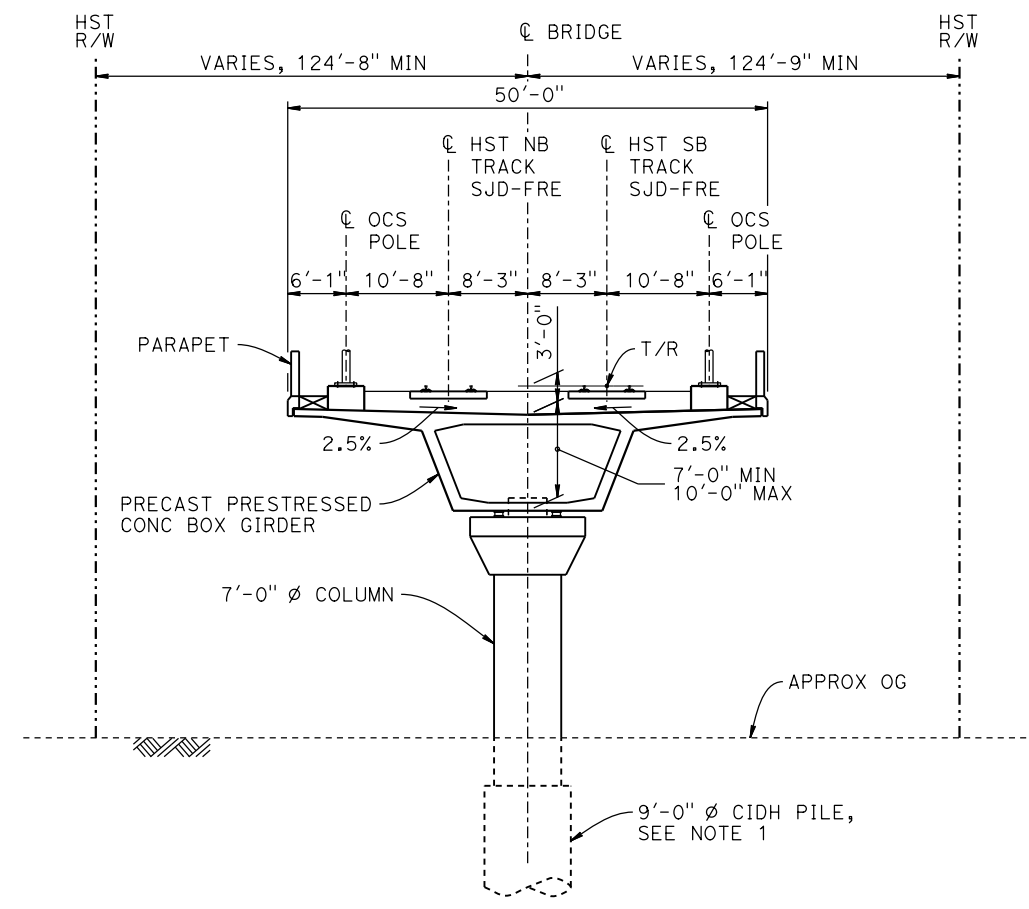
SHEET NO.



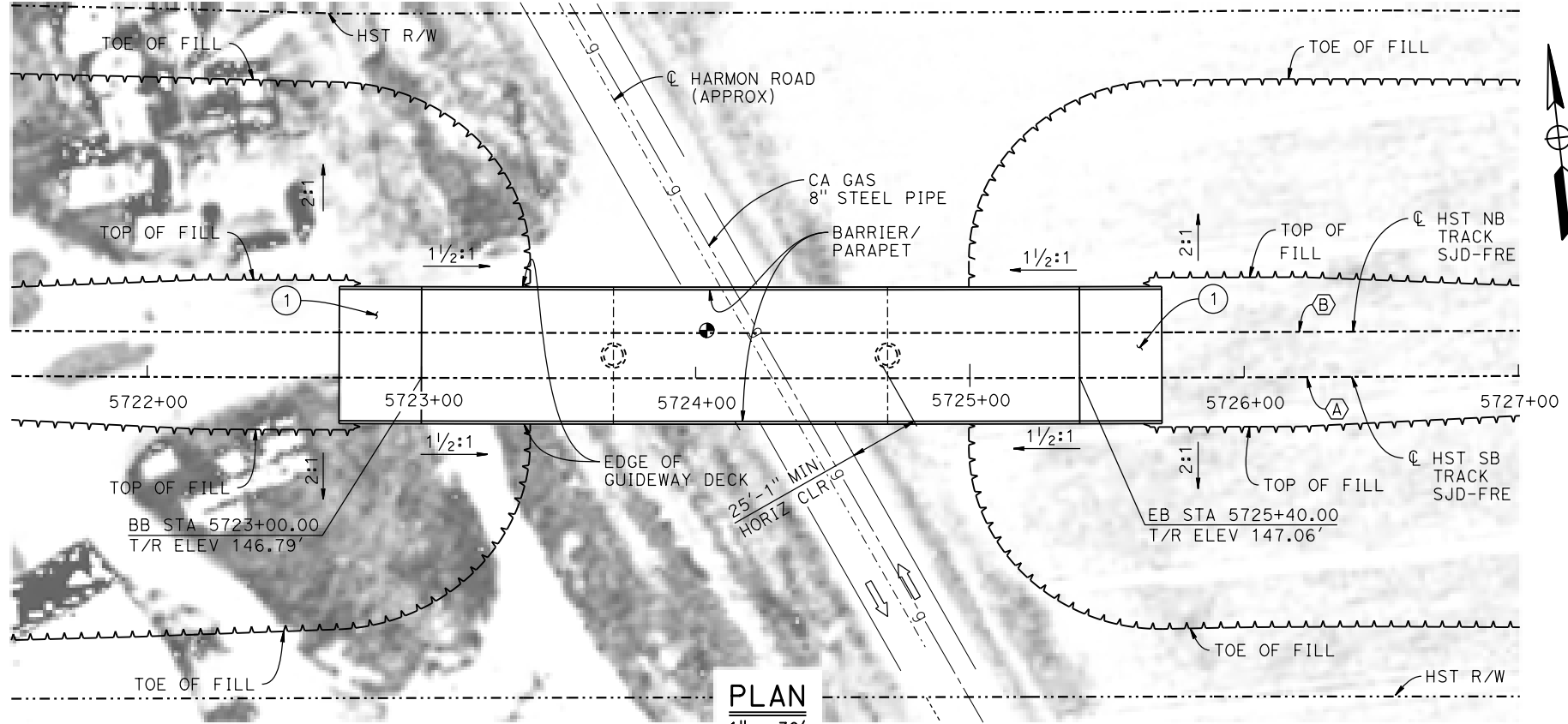
**TOP OF RAIL PROFILE (CL HST SB TRACK SJD-FRE)**  
NO SCALE



**DEVELOPED ELEVATION**  
1" = 30'



**TYPICAL SECTION**  
1" = 10'



**PLAN**  
1" = 30'

**LEGEND:**

- INDICATES POINT OF MINIMUM VERTICAL CLEARANCE
- ➔ INDICATES DIRECTION OF TRAFFIC
- ① STRUCTURE APPROACH
- ② SLOPE PAVING (1/2H:1V)
- ③ AR FENCE, SEE TRACK PLANS; DRAWING TT-B0020-D

**NOTES:**

1. 16" Ø PIPE PILES ASSUMED FOR ABUTMENT FOUNDATIONS. PILE AND DRILLED SHAFT LENGTHS TO BE DETERMINED.
2. FOR UTILITY DISPOSITIONS, SEE CIVIL AND GRADE SEPARATION PLANS; DRAWING CV-S1070-D.
3. ANY EXISTING DIRT ROAD THAT CONFLICTS WITH NEW CONSTRUCTION SHALL BE REALIGNED.
4. FOR TRACK SUPERELEVATION, SEE ALIGNMENT AND TYPICAL SECTION PLANS; DRAWINGS TT-B0050-D AND TT-B0052-D.

**TEMPORARY TRAFFIC OPENINGS**

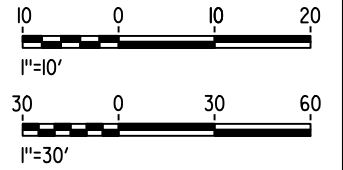
VEHICULAR TRAFFIC			
1. — TRAFFIC WILL BE DETOURED AWAY FROM THE SITE.			
2. X TRAFFIC WILL PASS UNDER THE STRUCTURE ON:			
ST OR ROAD NAME AND LOCATION		FALSEWORK OPENING REQD (HORIZ X VERT)	
HARMON RD	5724+27	32'x16.5'	2-WAY
3. — TEMP TRAFFIC LANE REDUCTION FOR FTG EXC.			

**CURVE SJD-FRE 2 SB (A)**

R = 45,016.50'  
LS = 1,550.00'

**CURVE SJD-FRE 2 NB (B)**

R = 45,000.00'  
LS = 1,550.00'



15-AUG-2016 8:28 MF-ST-K1075-D.dgn

REV	DATE	BY	CHK	APP	DESCRIPTION

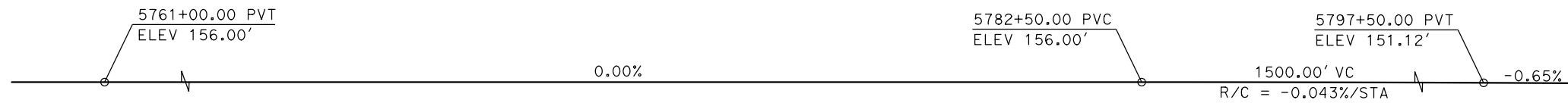
DESIGNED BY  
**M. BRATT**  
DRAWN BY  
**A. M.**  
CHECKED BY  
**K. CHARAN**  
IN CHARGE  
**C. LEMLEY**  
DATE  
**08/12/2016**

**RECORD SET**  
**15% DESIGN SUBMITTAL**  
  
**NOT FOR CONSTRUCTION**



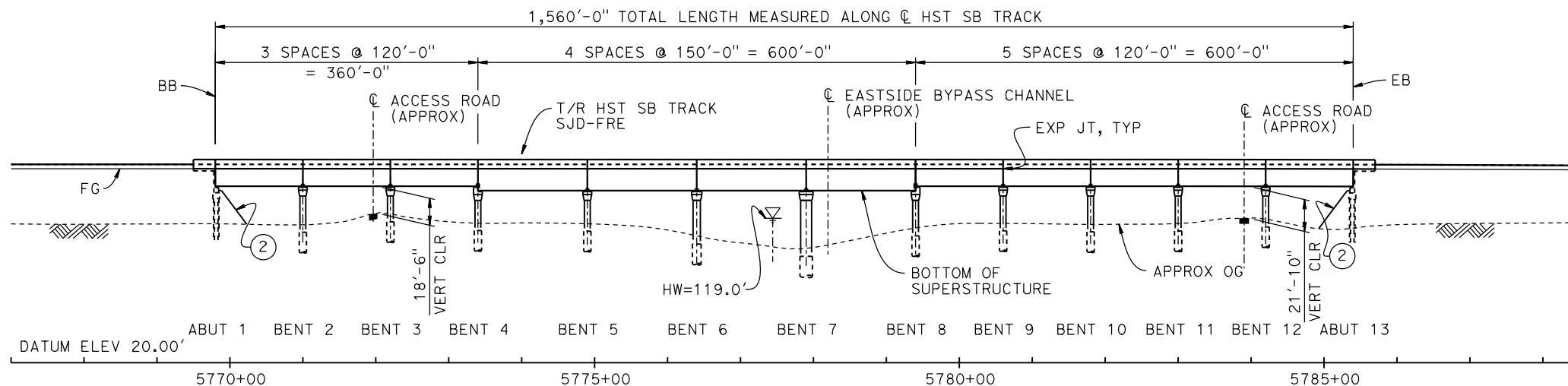
**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO SECTION**  
CENTRAL VALLEY WYE  
SR 152 (NORTH) TO ROAD 11 WYE ALTERNATIVE  
GENERAL PLAN (SJD-FRE)  
HARMON ROAD UNDERPASS

CONTRACT NO.  
HSR08-05  
DRAWING NO.  
ST-K1075-D  
SCALE  
AS SHOWN  
SHEET NO.



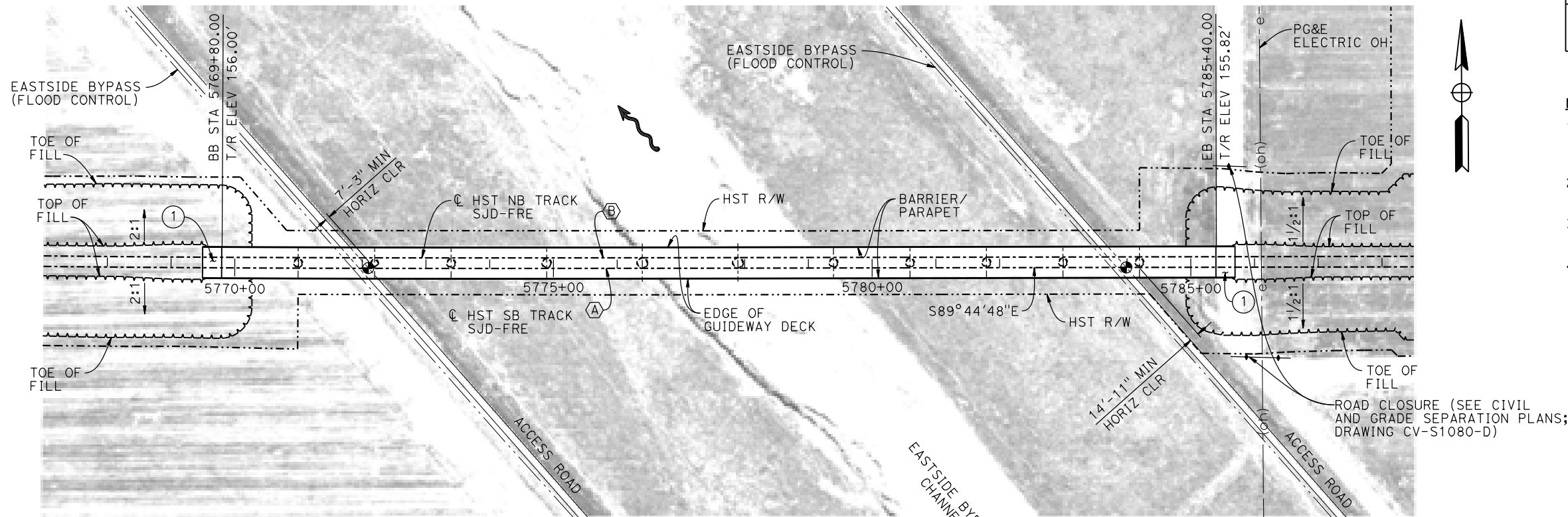
**TOP OF RAIL PROFILE (C HST SB TRACK SJD-FRE)**

NO SCALE



**DEVELOPED ELEVATION**

VERT: 1" = 50' HORIZ: 1" = 100'



**PLAN**

1" = 100'

**LEGEND:**

- INDICATES POINT OF MINIMUM VERTICAL CLEARANCE
- INDICATES DIRECTION OF FLOW
- ① STRUCTURE APPROACH
- ② SLOPE PAVING (1 1/2 H:1 V)

**CURVE SJD-FRE 2 SB (A)**

R = 45,016.50'  
LS = 1,550.00'

**CURVE SJD-FRE 2 NB (B)**

R = 45,000.00'  
LS = 1,550.00'

**TEMPORARY TRAFFIC OPENINGS**

**VEHICULAR TRAFFIC**

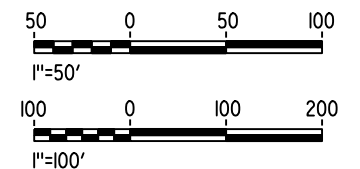
1.    TRAFFIC WILL BE DETOURED AWAY FROM THE SITE.
2.   X   TRAFFIC WILL PASS UNDER THE STRUCTURE ON:

ST OR ROAD NAME AND LOCATION	FALSEWORK OPENING REQD (HORIZ X VERT)
ACCESS ROAD 5772+00	20'X16.5' -
ACCESS ROAD 5783+90	20'X16.5' -

3.   X   TEMP TRAFFIC LANE REDUCTION FOR FTG EXC.

**NOTES:**

1. 16" Ø PIPE PILES ASSUMED FOR ABUTMENT AND BENT FOUNDATIONS. PILE LENGTHS TO BE DETERMINED.
2. FOR SECTION AND BENT COLUMN SCHEDULE, SEE DRAWING ST-K3080-D.
3. ANY EXISTING DIRT ROAD THAT CONFLICTS WITH THE NEW CONSTRUCTION SHALL BE REALIGNED.
4. FOR UTILITY DISPOSITIONS, SEE CIVIL AND GRADE SEPARATION PLANS; DRAWING CV-S1080-D.



29-AUG-2016 12:09 MF-ST-K1080-D.dgn

REV	DATE	BY	CHK	APP	DESCRIPTION

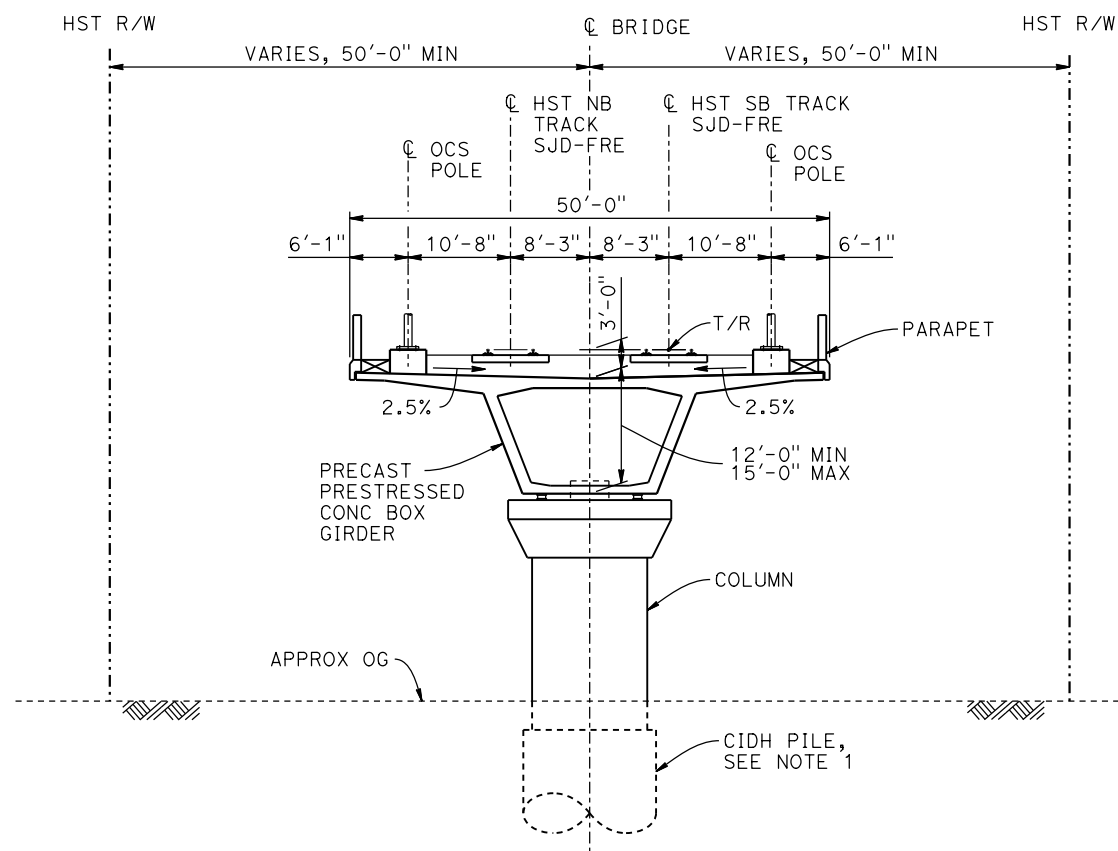
DESIGNED BY  
**M. BRATT**  
DRAWN BY  
**A. M.**  
CHECKED BY  
**K. CHARAN**  
IN CHARGE  
**C. LEMLEY**  
DATE  
**09/02/2016**

**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**  
  
**NOT FOR**  
**CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO SECTION**  
CENTRAL VALLEY WYE  
SR 152 (NORTH) TO ROAD 11 WYE ALTERNATIVE  
GENERAL PLAN (SJD-FRE)  
AERIAL #1 - EASTSIDE BYPASS IRRIGATION DITCH - 1 OF 2

CONTRACT NO.  
HSR08-05  
DRAWING NO.  
ST-K1080-D  
SCALE  
AS SHOWN  
SHEET NO.

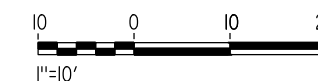


**TYPICAL SECTION**  
1" = 10'

BENT COLUMN SCHEDULE		
BENT	COLUMN TYPE	CIDH
2	10'-0" $\phi$	12'-0" $\phi$
3	9'-0" $\phi$	11'-0" $\phi$
4-5	10'-0" $\phi$	12'-0" $\phi$
6	11'-0" $\phi$	13'-0" $\phi$
7	13'-0" $\phi$	15'-0" $\phi$
8-10	10'-0" $\phi$	12'-0" $\phi$
11-12	9'-0" $\phi$	11'-0" $\phi$

**NOTES:**

- PILE LENGTHS TO BE DETERMINED.
- FOR TRACK SUPERELEVATION DETAILS, SEE ALIGNMENT AND TYPICAL SECTION PLANS; DRAWINGS TT-B0050-D AND TT-B0052-D.



15-AUG-2016 16:18:47 MF-ST-K3080-D.dgn

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**M. BRATT**  
DRAWN BY  
**A. M.**  
CHECKED BY  
**K. CHARAN**  
IN CHARGE  
**C. LEMLEY**  
DATE  
**08/12/2016**

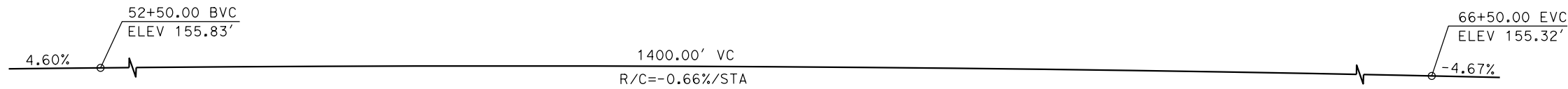
**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**  
  
**NOT FOR**  
**CONSTRUCTION**



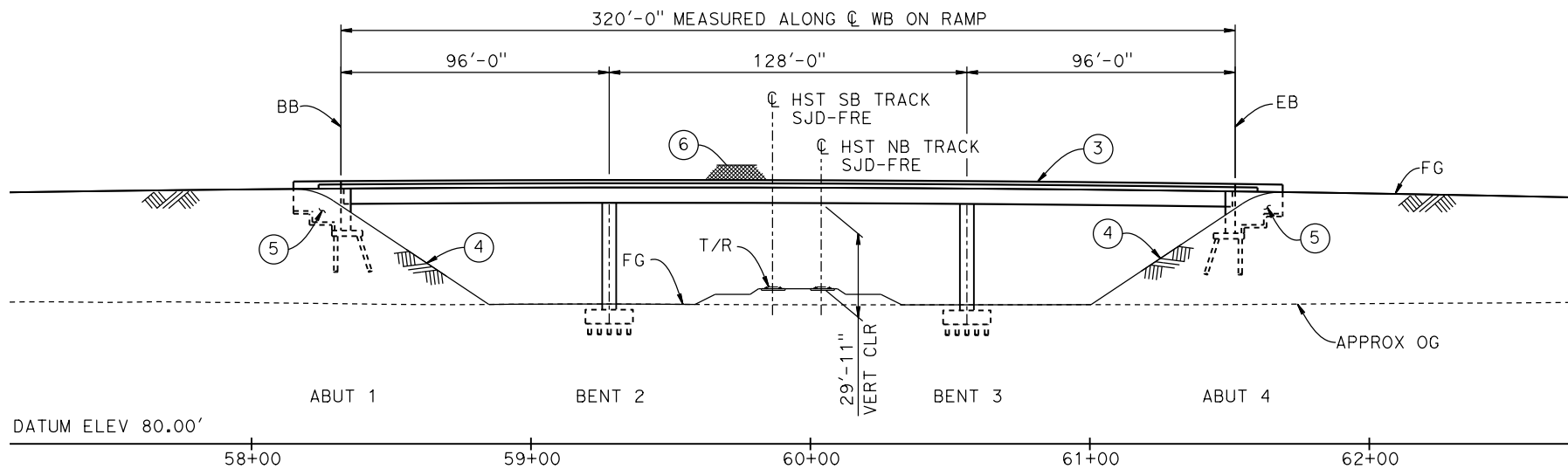
**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO SECTION**  
CENTRAL VALLEY WYE  
SR 152 (NORTH) TO ROAD 11 WYE ALTERNATIVE  
TYPICAL SECTION (SJD-FRE)  
AERIAL #1 - EASTSIDE BYPASS IRRIGATION DITCH - 2 OF 2

CONTRACT NO.  
HSR08-05  
DRAWING NO.  
ST-K3080-D  
SCALE  
AS SHOWN  
SHEET NO.

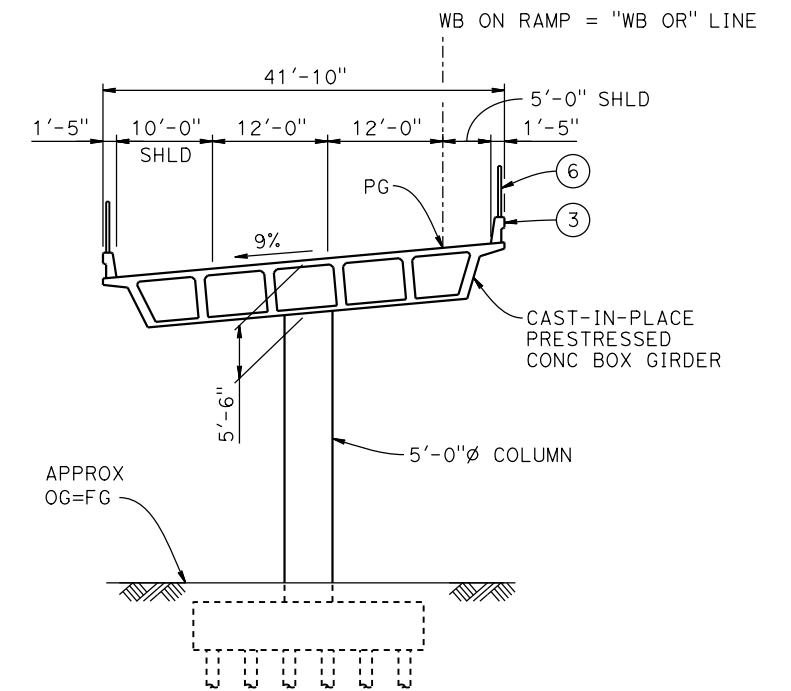




**PROFILE GRADE**  
NO SCALE



**DEVELOPED ELEVATION**



**TYPICAL SECTION**  
1" = 10'

**LEGEND:**

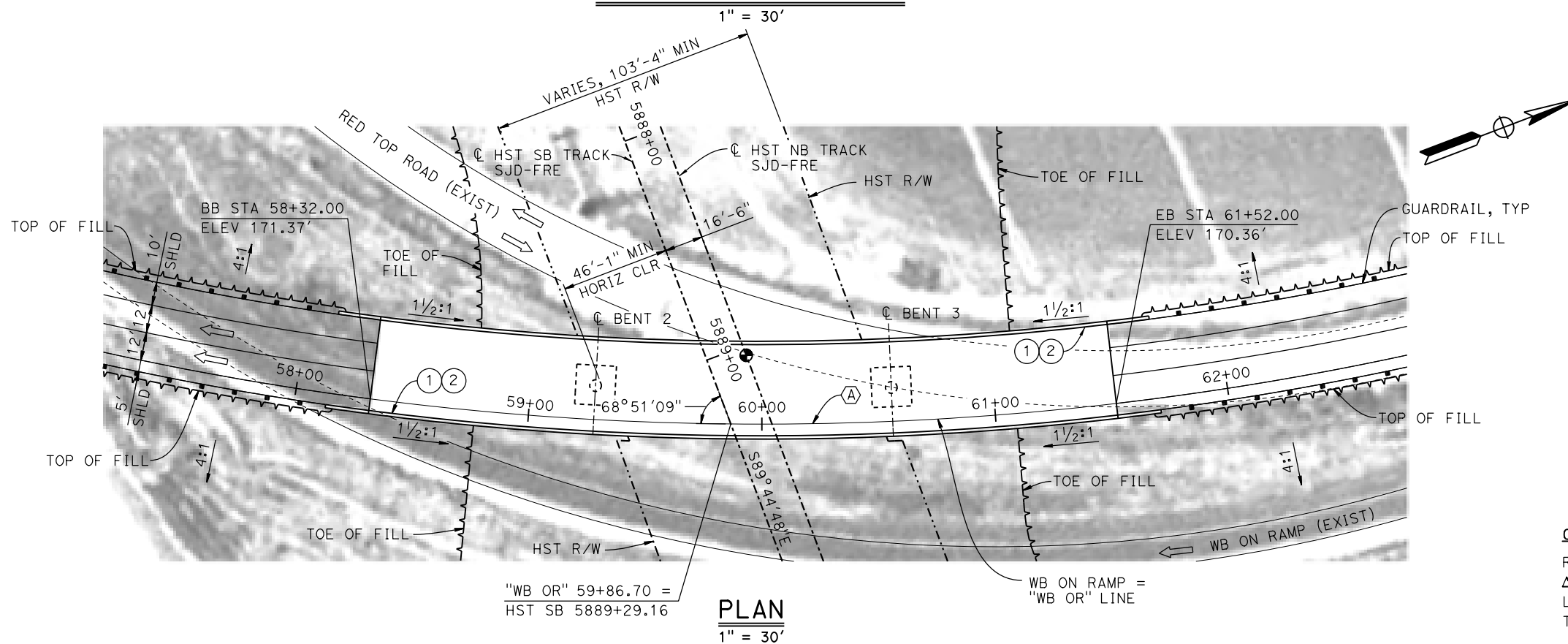
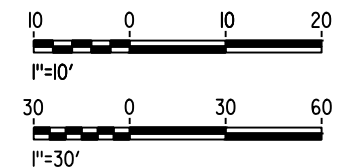
- INDICATES POINT OF MINIMUM VERTICAL CLEARANCE
- ⇒ INDICATES DIRECTION OF TRAFFIC
- ① PAINT "WB ON RAMP OVERHEAD"
- ② PAINT "BRIDGE NO. XX-XXXX"
- ③ CONCRETE BARRIER TYPE 742 MOD
- ④ SLOPE PAVING (1 1/2 H:1 V)
- ⑤ WINGWALL
- ⑥ AR FENCE WITH SOLID PLATE

**NOTES:**

1. 16" Ø PIPE PILES ASSUMED AT ABUTMENT AND BENT FOUNDATIONS. PILE LENGTHS TO BE DETERMINED.
2. FOR UTILITY DISPOSITIONS, SEE CIVIL AND GRADE SEPARATION PLANS; DRAWING CV-S1100-D.
3. FOR GUARDRAILS, SEE CIVIL AND GRADE SEPARATION PLANS; DRAWING CV-S1100-D.

**CURVE NO. 102-03 (A)**

R = 1,305.00'  
 $\Delta = 62^\circ 21' 49''$   
 L = 1,420.43'  
 T = 789.77'



**PLAN**  
1" = 30'

16-AUG-2016 7:04 MF-ST-K1100-D.dgn

REV	DATE	BY	CHK	APP	DESCRIPTION

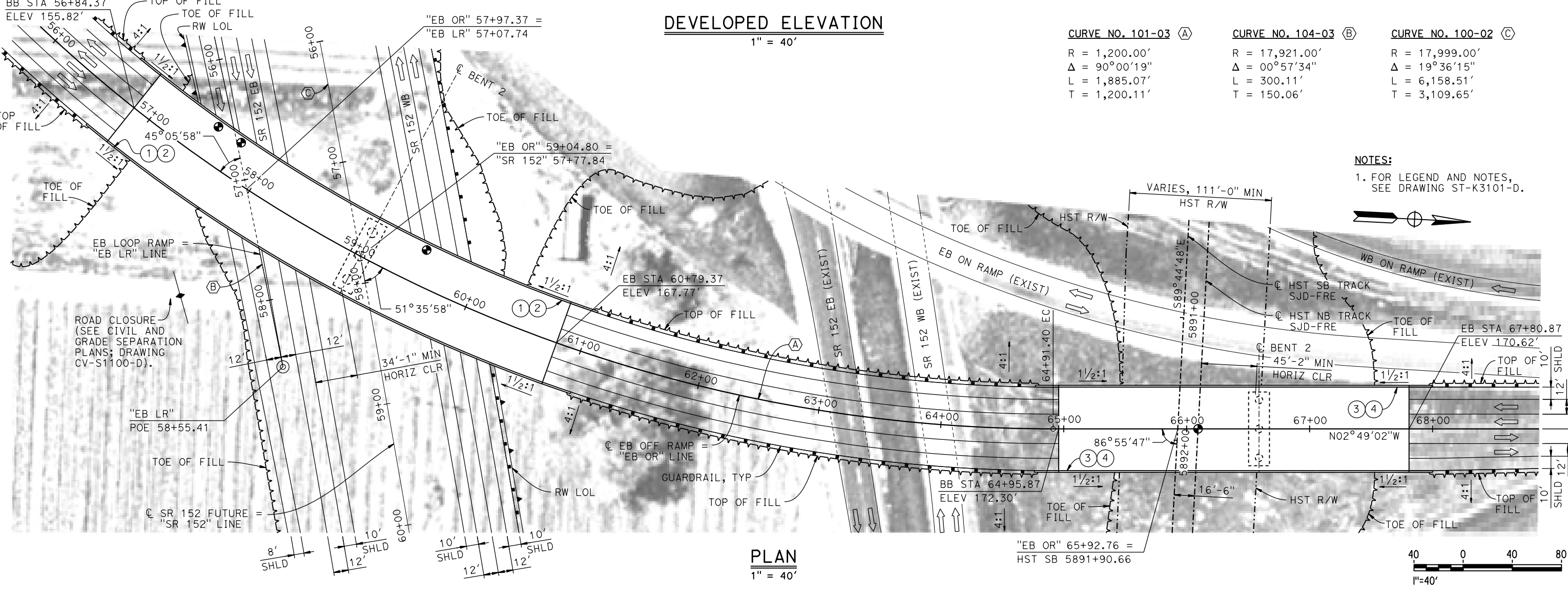
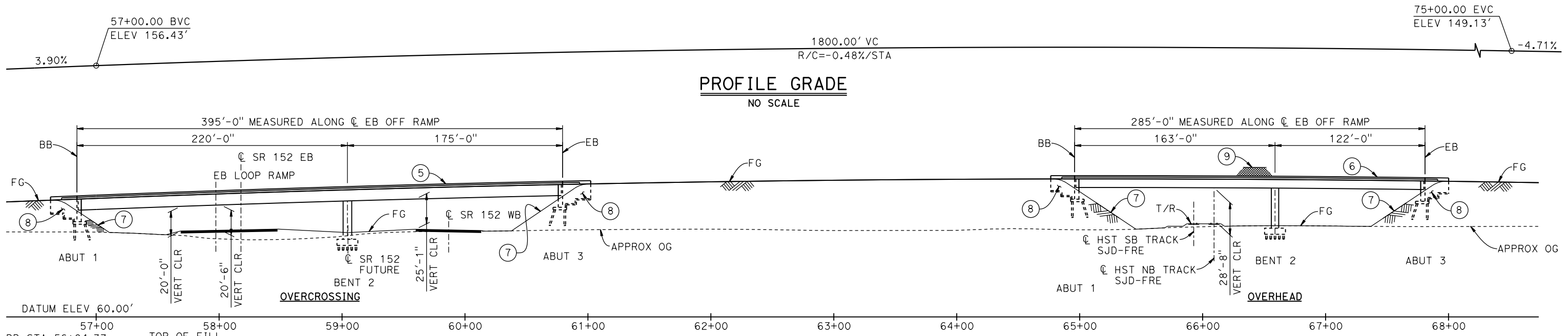
DESIGNED BY  
**M. BRATT**  
 DRAWN BY  
**A. M.**  
 CHECKED BY  
**K. CHARAN**  
 IN CHARGE  
**C. LEMLEY**  
 DATE  
**08/12/2016**

**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**  
  
**NOT FOR**  
**CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO SECTION**  
 CENTRAL VALLEY WYE  
 SR 152 (NORTH) TO ROAD 11 WYE ALTERNATIVE  
 GENERAL PLAN (SJD-FRE)  
 SR 59 / SR 152 INTERCHANGE - 1 OF 4

CONTRACT NO.  
HSR08-05  
 DRAWING NO.  
ST-K1100-D  
 SCALE  
AS SHOWN  
 SHEET NO.



CURVE NO. 101-03 (A)	CURVE NO. 104-03 (B)	CURVE NO. 100-02 (C)
R = 1,200.00'	R = 17,921.00'	R = 17,999.00'
Δ = 90°00'19"	Δ = 00°57'34"	Δ = 19°36'15"
L = 1,885.07'	L = 300.11'	L = 6,158.51'
T = 1,200.11'	T = 150.06'	T = 3,109.65'

**NOTES:**  
 1. FOR LEGEND AND NOTES, SEE DRAWING ST-K3101-D.

15-AUG-2016 8:29 MF-ST-K1101-D.dgn

REV	DATE	BY	CHK	APP	DESCRIPTION

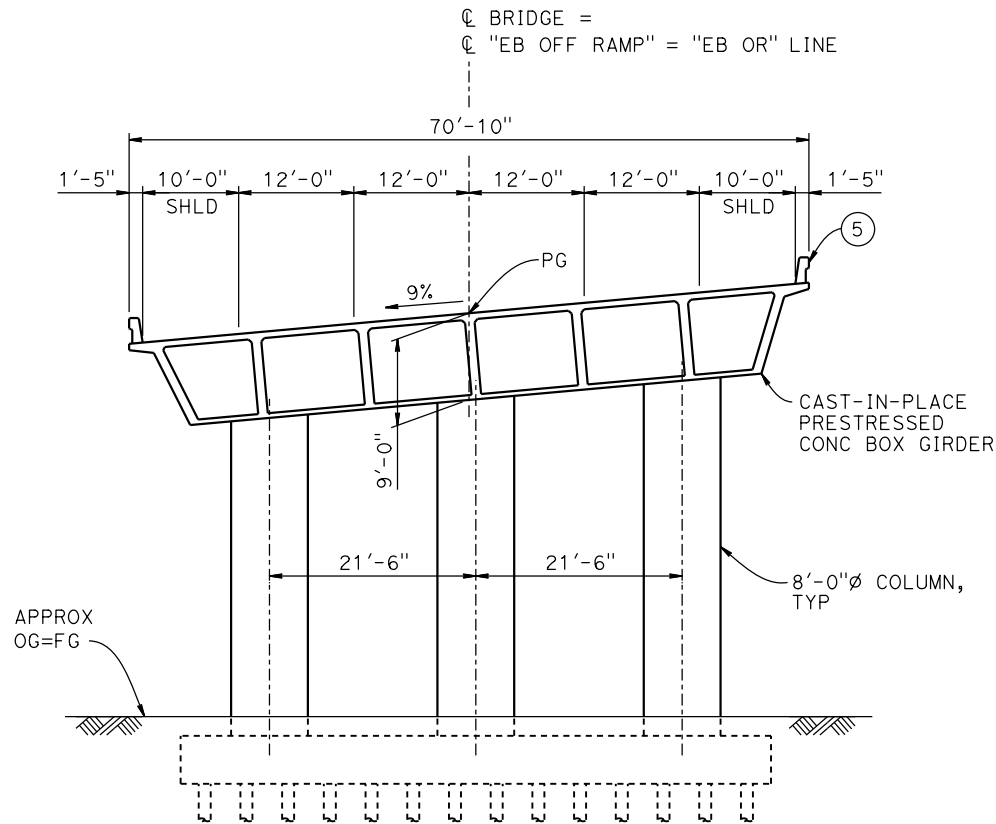
DESIGNED BY  
**M. BRATT**  
 DRAWN BY  
**A. M.**  
 CHECKED BY  
**K. CHARAN**  
 IN CHARGE  
**C. LEMLEY**  
 DATE  
**08/12/2016**

**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**  
  
**NOT FOR**  
**CONSTRUCTION**

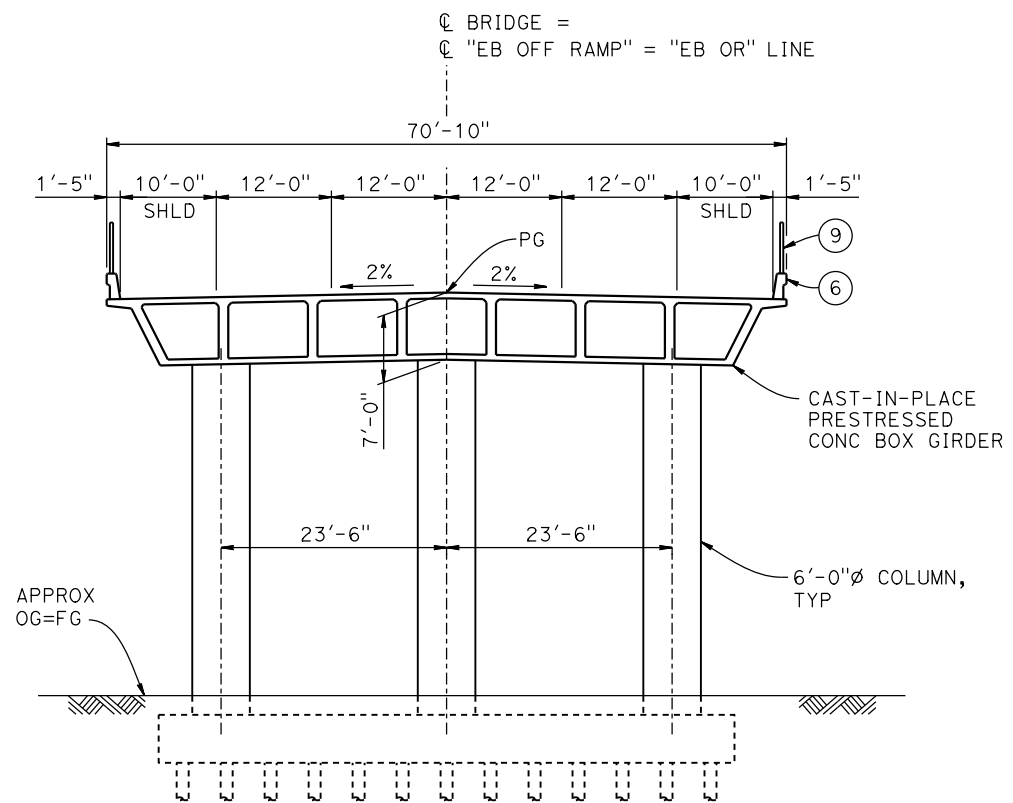


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO SECTION**  
 CENTRAL VALLEY WYE  
 SR 152 (NORTH) TO ROAD 11 WYE ALTERNATIVE  
 GENERAL PLAN (SJD-FRE)  
 SR 59 / SR 152 INTERCHANGE - 2 OF 4

CONTRACT NO.  
HSR08-05  
 DRAWING NO.  
ST-K1101-D  
 SCALE  
AS SHOWN  
 SHEET NO.



**TYPICAL SECTION AT OVERCROSSING**  
1" = 10'



**TYPICAL SECTION AT OVERHEAD**  
1" = 10'

**TEMPORARY TRAFFIC OPENINGS**

VEHICULAR TRAFFIC			
1. <input type="checkbox"/> TRAFFIC WILL BE DETOURED AWAY FROM THE SITE.			
2. <input checked="" type="checkbox"/> TRAFFIC WILL PASS UNDER THE STRUCTURE ON:			
ST OR ROAD NAME AND LOCATION		FALSEWORK OPENING REQD (HORIZ X VERT)	
SR 152	57+97	40'X16.5'	E BND
SR 152	59+88	40'X16.5'	W BND
3. <input type="checkbox"/> TEMP TRAFFIC LANE REDUCTION FOR FTG EXC.			

**LEGEND:**

- INDICATES POINT OF MINIMUM VERTICAL CLEARANCE
- ⇨ INDICATES DIRECTION OF TRAFFIC
- ① PAINT "EB OFF RAMP OVERCROSSING"
- ② PAINT "BRIDGE NO. XX-XXXX"
- ③ PAINT "EB OFF RAMP OVERHEAD"
- ④ PAINT "BRIDGE NO. XX-XXXX"
- ⑤ CONCRETE BARRIER TYPE 742
- ⑥ CONCRETE BARRIER TYPE 736 MOD
- ⑦ SLOPE PAVING (1½H:1V)
- ⑧ WINGWALL
- ⑨ AR FENCE WITH SOLID PLATE

**NOTES:**

1. 16" Ø PIPE PILES ASSUMED AT ABUTMENT AND BENT FOUNDATIONS. PILE LENGTHS TO BE DETERMINED.
2. FOR UTILITY DISPOSITIONS, SEE CIVIL AND GRADE SEPARATION PLANS; DRAWING CV-S1100-D.
3. FOR RETAINING WALLS, SEE CIVIL AND GRADE SEPARATION PLANS; DRAWING CV-S1100-D.
4. FOR GUARDRAILS, SEE CIVIL AND GRADE SEPARATION PLANS; DRAWING CV-S1100-D.



15-AUG-2016 8:48 MF-ST-K3101-D .dgn

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**M. BRATT**  
DRAWN BY  
**A. M.**  
CHECKED BY  
**K. CHARAN**  
IN CHARGE  
**C. LEMLEY**  
DATE  
**08/12/2016**

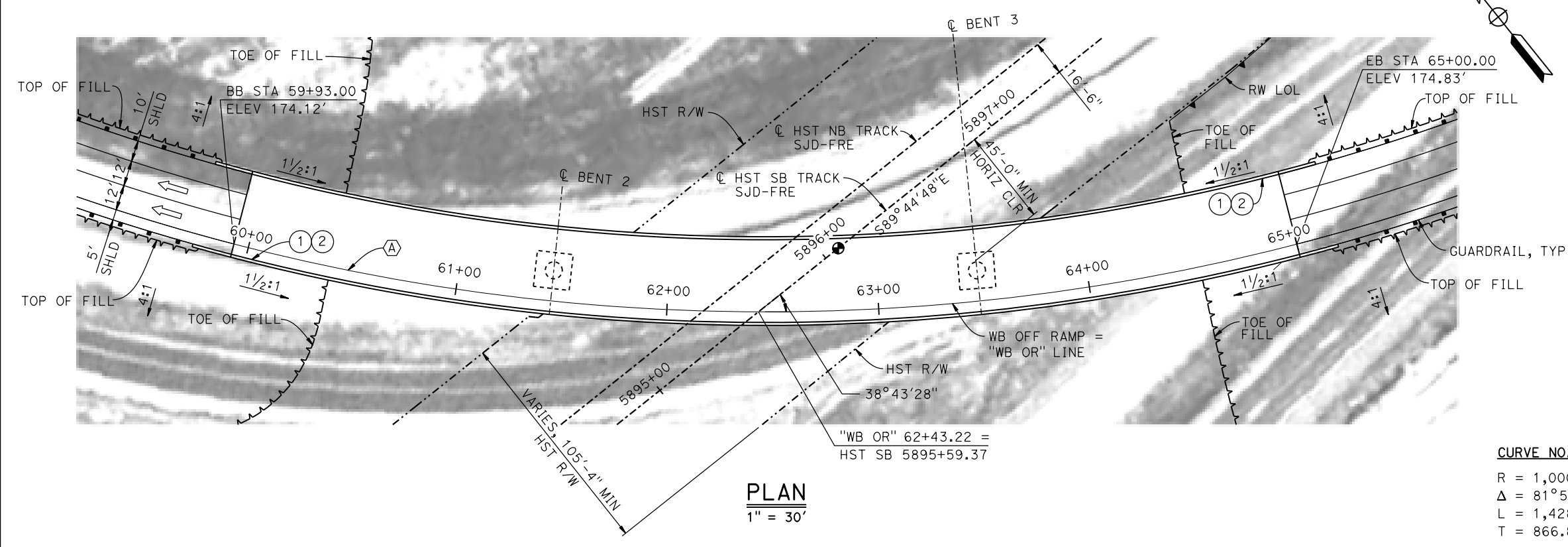
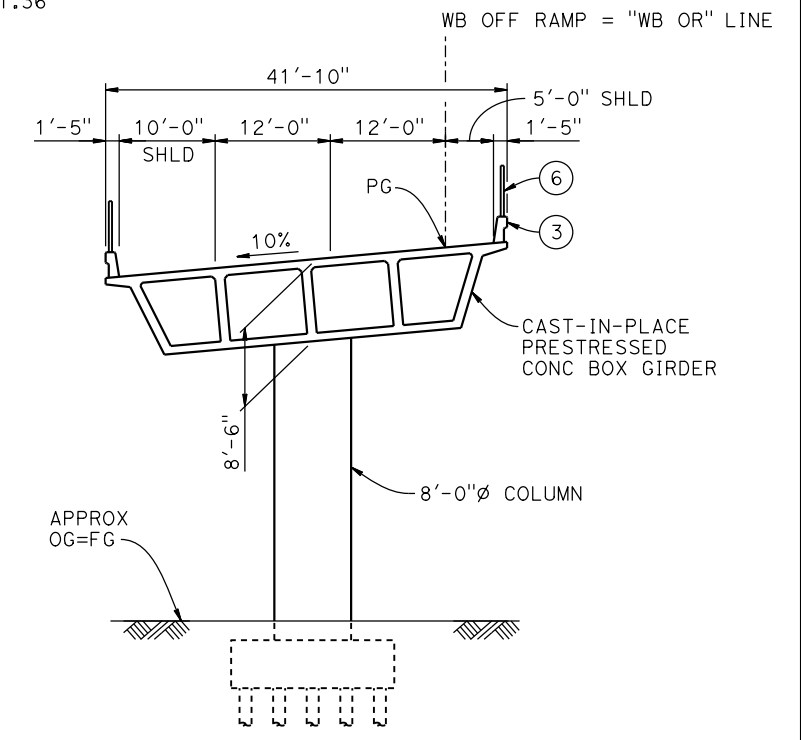
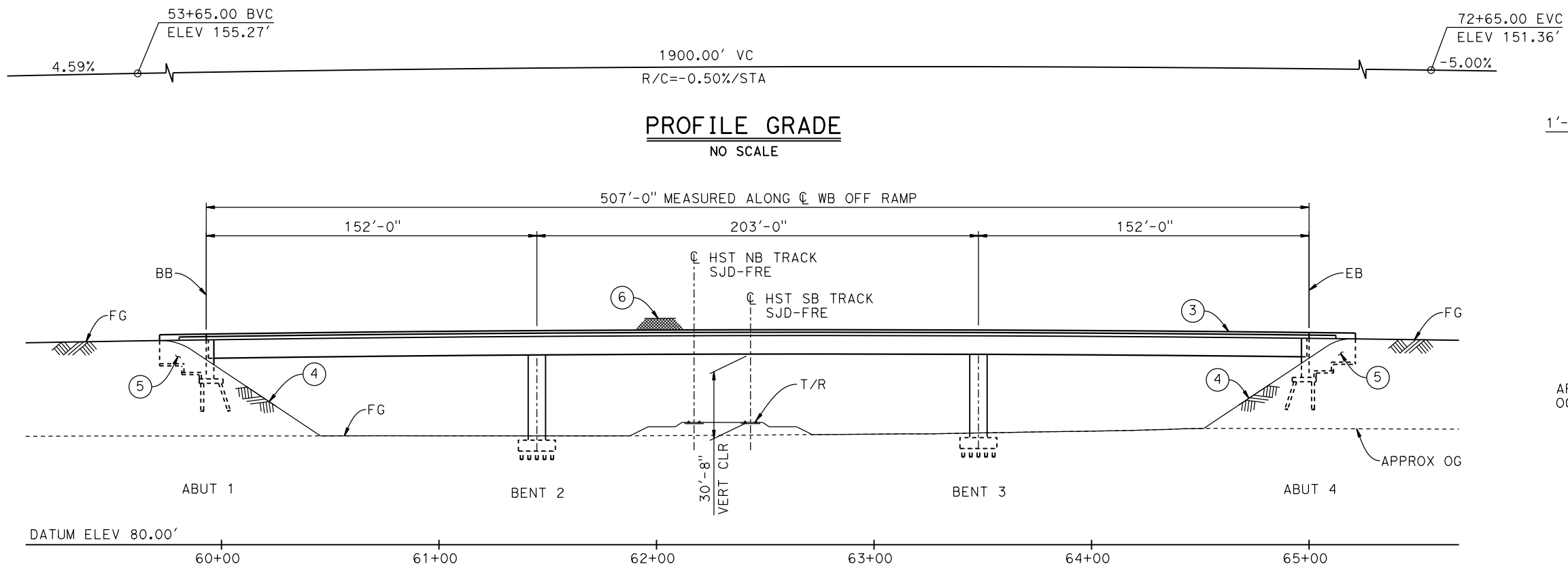
**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**

**NOT FOR**  
**CONSTRUCTION**



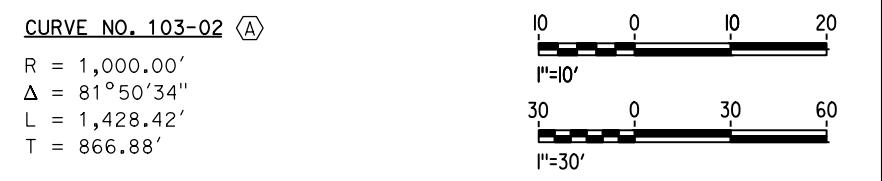
**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO SECTION**  
CENTRAL VALLEY WYE  
SR 152 (NORTH) TO ROAD 11 WYE ALTERNATIVE  
TYPICAL SECTIONS (SJD-FRE)  
SR 59 / SR 152 INTERCHANGE - 3 OF 4

CONTRACT NO.  
HSR08-05  
DRAWING NO.  
ST-K3101-D  
SCALE  
AS SHOWN  
SHEET NO.



- LEGEND:**
- INDICATES POINT OF MINIMUM VERTICAL CLEARANCE
  - ⇒ INDICATES DIRECTION OF TRAFFIC
  - ① PAINT "WB OFF RAMP OVERHEAD"
  - ② PAINT "BRIDGE NO. XX-XXXX"
  - ③ CONCRETE BARRIER TYPE 742 MOD
  - ④ SLOPE PAVING (1 1/2H:1V)
  - ⑤ WINGWALL
  - ⑥ AR FENCE WITH SOLID PLATE

- NOTES:**
1. 16" Ø PIPE PILES ASSUMED AT ABUTMENT AND BENT FOUNDATIONS. PILE LENGTHS TO BE DETERMINED.
  2. FOR UTILITY DISPOSITIONS, SEE CIVIL AND GRADE SEPARATION PLANS; DRAWING CV-S1100-D.
  3. FOR RETAINING WALLS, SEE CIVIL AND GRADE SEPARATION PLANS; DRAWING CV-S1100-D.
  4. FOR GUARDRAILS, SEE CIVIL AND GRADE SEPARATION PLANS; DRAWING CV-S1100-D.



15-AUG-2016 8:29 MF-ST-K1102-D.dgn

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**M. BRATT**

DRAWN BY  
**A. M.**

CHECKED BY  
**K. CHARAN**

IN CHARGE  
**C. LEMLEY**

DATE  
**08/12/2016**

**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**

**NOT FOR**  
**CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO SECTION**

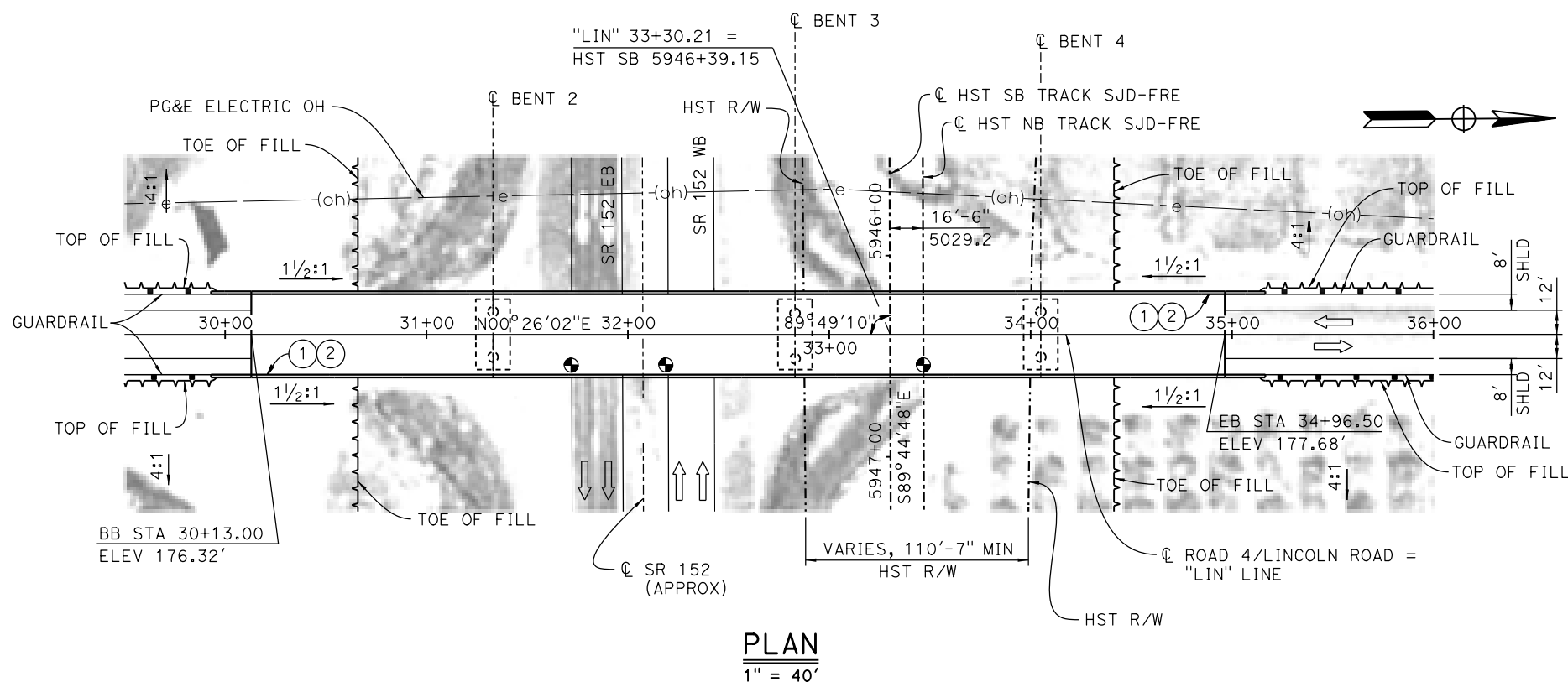
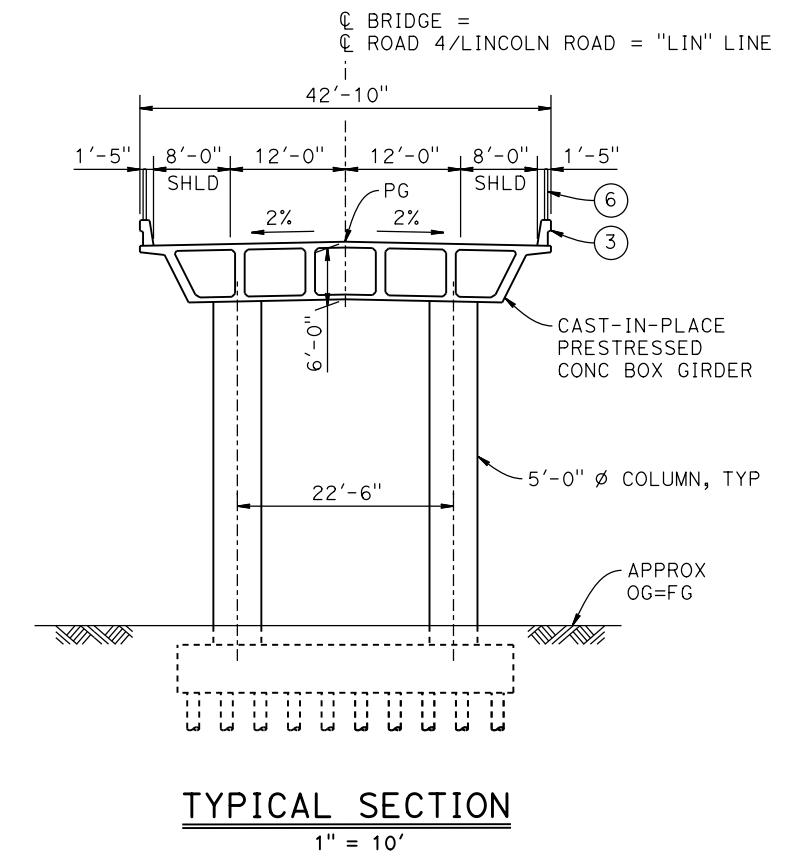
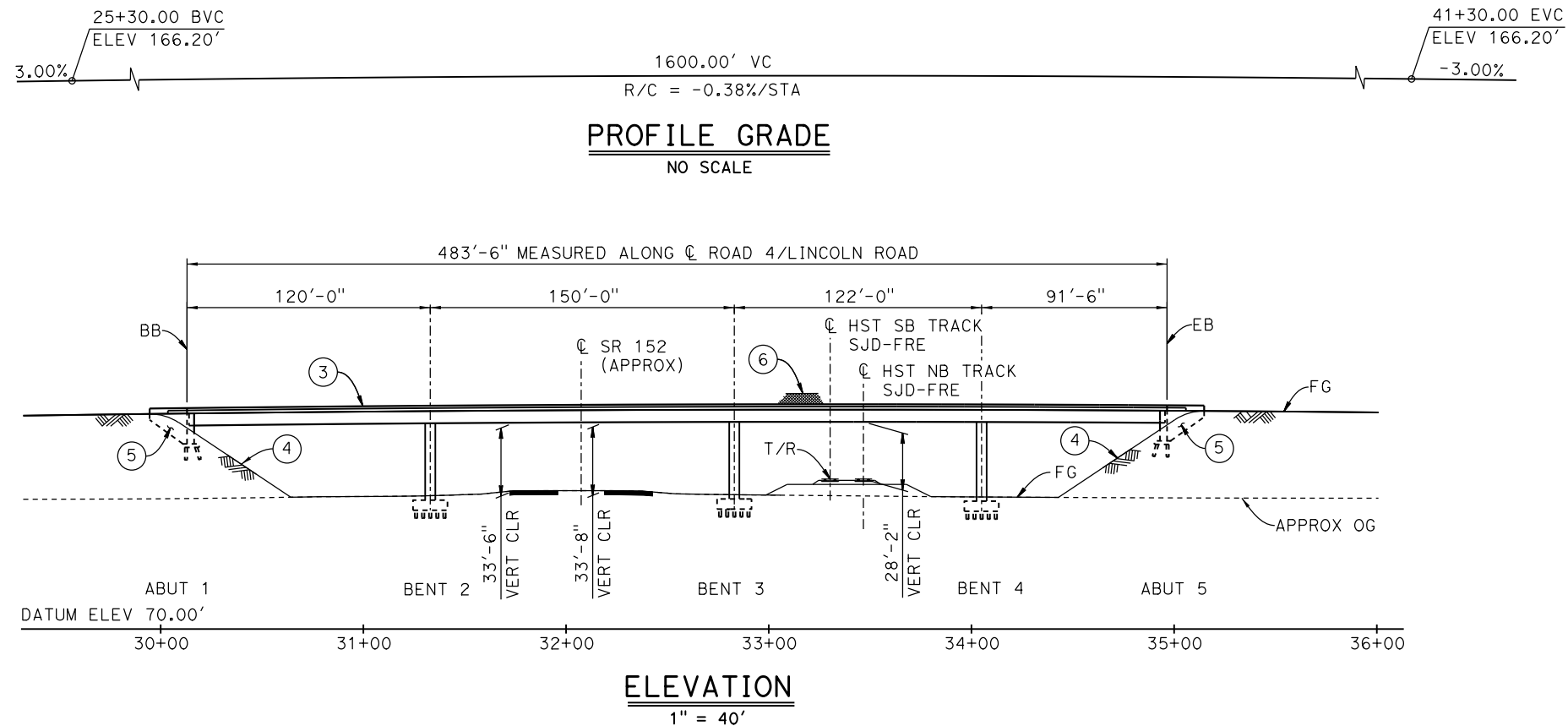
CENTRAL VALLEY WYE  
SR 152 (NORTH) TO ROAD 11 WYE ALTERNATIVE  
GENERAL PLAN (SJD-FRE)  
SR 59 / SR 152 INTERCHANGE - 4 OF 4

CONTRACT NO.  
HSR08-05

DRAWING NO.  
ST-K1102-D

SCALE  
AS SHOWN

SHEET NO.



**TEMPORARY TRAFFIC OPENINGS**

**VEHICULAR TRAFFIC**

- TRAFFIC WILL BE DETOURED AWAY FROM THE SITE.
- TRAFFIC WILL PASS UNDER THE STRUCTURE ON:

ST OR ROAD NAME AND LOCATION	FALSEWORK OPENING REQD (HORIZ X VERT)
SR 152 31+83	40'x16.5' E BND
SR 152 32+30	40'x16.5' W BND

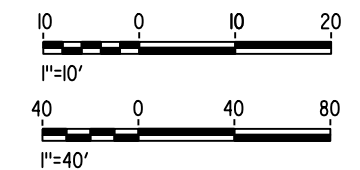
- TEMP TRAFFIC LANE REDUCTION FOR FTG EXC.

**LEGEND:**

- INDICATES POINT OF MINIMUM VERTICAL CLEARANCE
- ➔ INDICATES DIRECTION OF TRAFFIC
- ① PAINT "LINCOLN ROAD OVERHEAD"
- ② PAINT "BRIDGE NO. XX-XXXX"
- ③ CONCRETE BARRIER TYPE 736 MOD
- ④ SLOPE PAVING (1/2H:1V)
- ⑤ WINGWALL
- ⑥ AR FENCE WITH SOLID PLATE

**NOTES:**

- 16" Ø PIPE PILES ASSUMED AT ABUTMENT AND BENT FOUNDATIONS. PILE LENGTHS TO BE DETERMINED.
- FOR UTILITY DISPOSITIONS, SEE CIVIL AND GRADE SEPARATION PLANS; DRAWING CV-S1110-D.
- FOR GUARDRAILS, SEE CIVIL AND GRADE SEPARATION PLANS, DRAWING CV-S1110-D.



15-AUG-2016 8:29 MF-ST-K1110-D.dgn

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**M. BRATT**

DRAWN BY  
**A. M.**

CHECKED BY  
**K. CHARAN**

IN CHARGE  
**C. LEMLEY**

DATE  
**08/12/2016**

**RECORD SET**  
15% DESIGN SUBMITTAL

**NOT FOR CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO SECTION**

CENTRAL VALLEY WYE  
SR 152 (NORTH) TO ROAD 11 WYE ALTERNATIVE  
GENERAL PLAN (SJD-FRE)  
LINCOLN ROAD (ROAD 4) OVERHEAD

CONTRACT NO.  
HSR08-05

DRAWING NO.  
ST-K1110-D

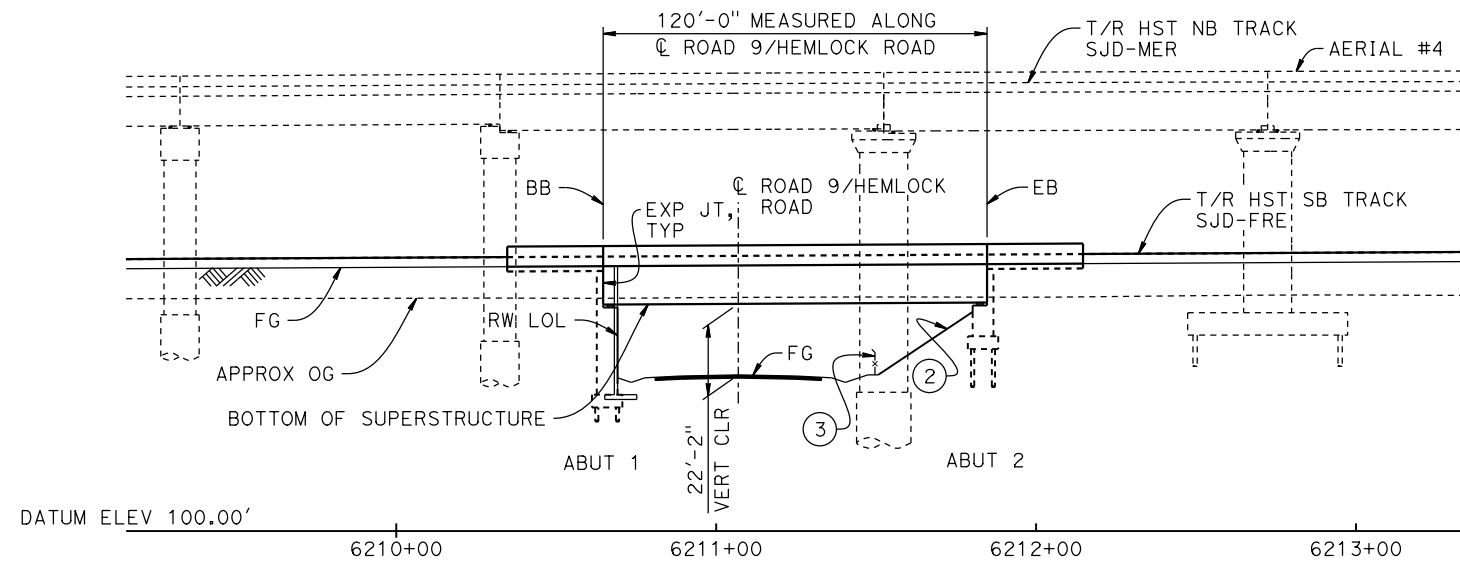
SCALE  
AS SHOWN

SHEET NO.

6203+33.05 PVT ELEV 181.89'      6272+75.73 PVC ELEV 218.92'

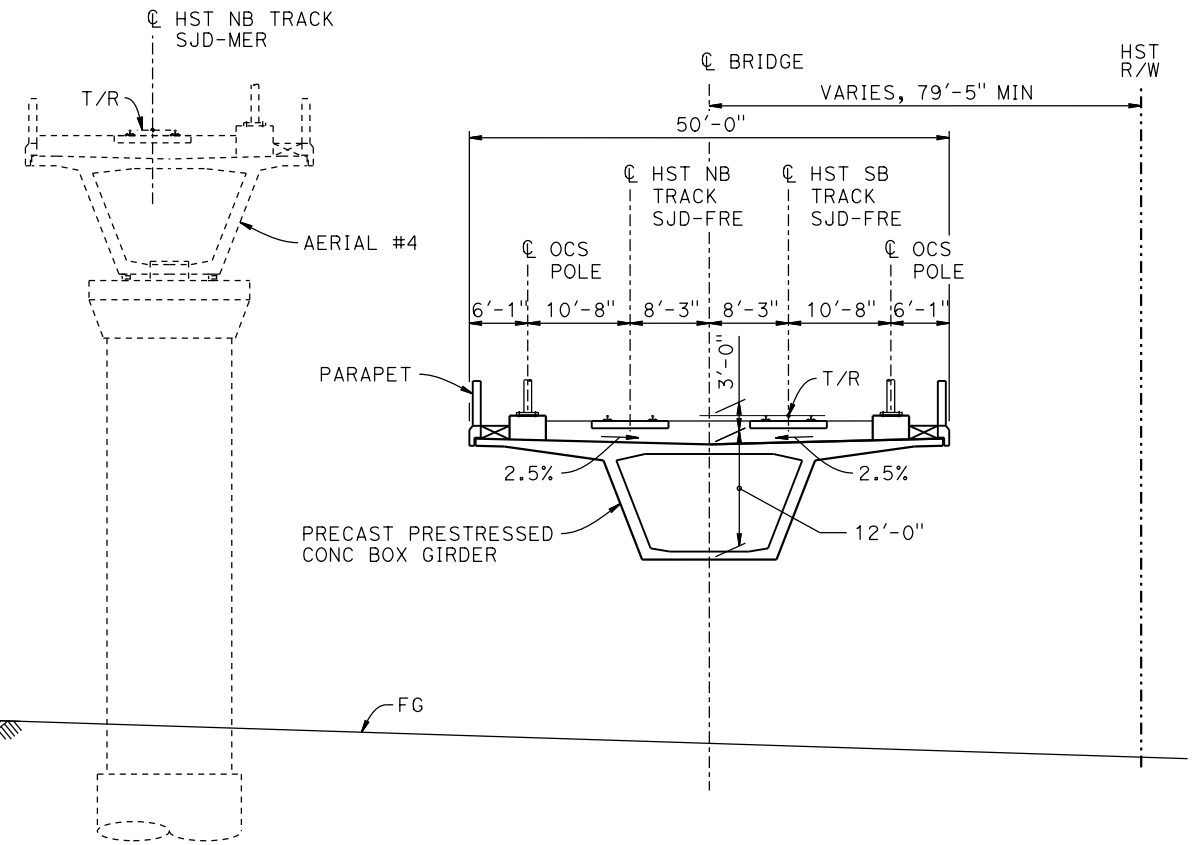
**TOP OF RAIL PROFILE (C HST SB SJD-FRE)**

NO SCALE



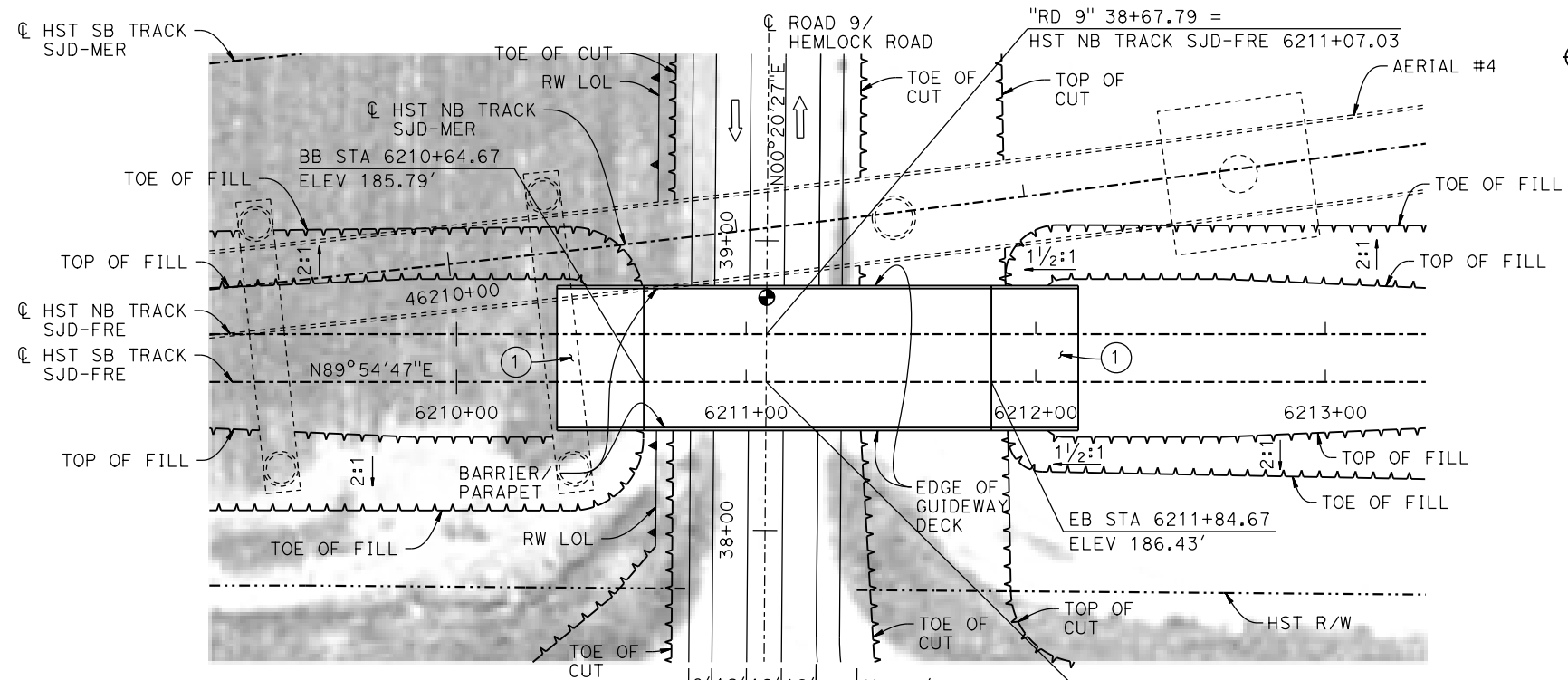
**ELEVATION**

1" = 30'



**TYPICAL SECTION**

1" = 10'



**PLAN**

1" = 30'

**LEGEND:**

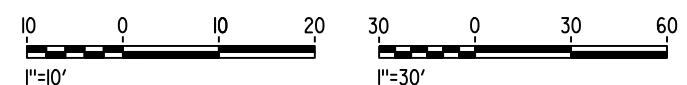
- INDICATES POINT OF MINIMUM VERTICAL CLEARANCE
- ➔ INDICATES DIRECTION OF TRAFFIC
- ① STRUCTURE APPROACH
- ② SLOPE PAVING (1 1/2H:1V)
- ③ AR FENCE, SEE TRACK PLANS; DRAWING TT-B0020-D.

**NOTES:**

1. 16" Ø PIPE PILES ASSUMED FOR ABUTMENT FOUNDATIONS. PILE LENGTHS TO BE DETERMINED.
2. FOR UTILITY DISPOSITIONS, SEE CIVIL AND GRADE SEPARATION PLANS; DRAWING CV-S1160-D.
3. FOR AERIAL #4 GENERAL PLAN AND TYPICAL SECTIONS, SEE DRAWINGS ST-K1610-D TO ST-K1612-D AND ST-K3610-D TO ST-K3611-D.
4. FOR SJD-MER SB BRIDGE GENERAL PLAN AND TYPICAL SECTION, SEE DRAWING ST-K1620-D.
5. FOR RETAINING WALLS, SEE CIVIL & GRADE SEPARATION PLANS; DRAWING CV-R1160-D.

**TEMPORARY TRAFFIC OPENINGS**

VEHICULAR TRAFFIC			
1. <u>X</u> TRAFFIC WILL BE DETOURED AWAY FROM THE SITE.			
2. <u>  </u> TRAFFIC WILL PASS UNDER THE STRUCTURE ON:			
ST OR ROAD NAME AND LOCATION	FALSEWORK OPENING REQD (HORIZ X VERT)		
HEMLOCK RD	6211+07	32'x16.5'	2-WAY
3. <u>  </u> TEMP TRAFFIC LANE REDUCTION FOR FTG EXC.			



16-AUG-2016 7:05 MF-ST-K1160-D.dgn

REV	DATE	BY	CHK	APP	DESCRIPTION

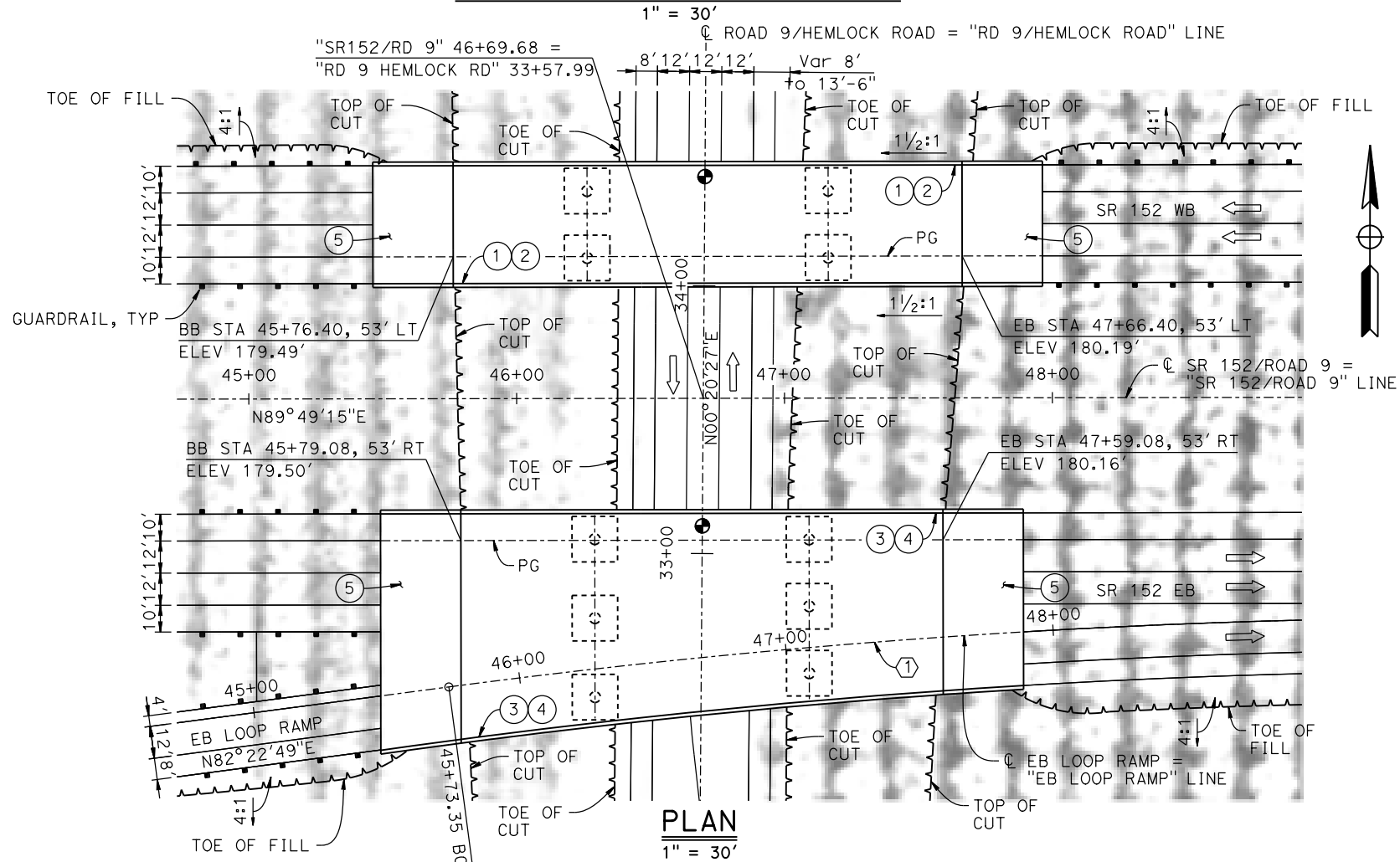
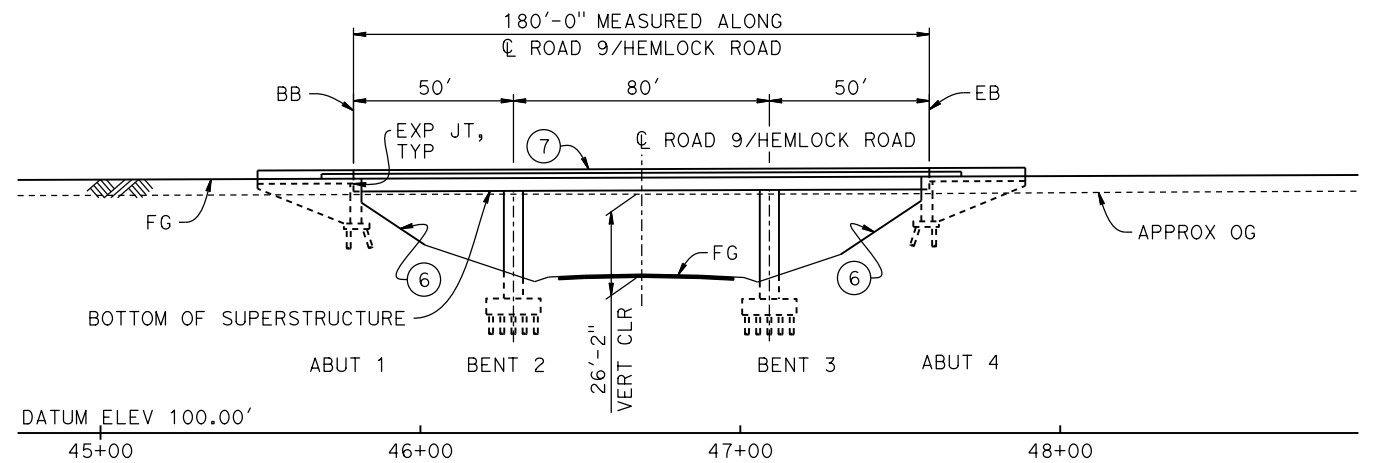
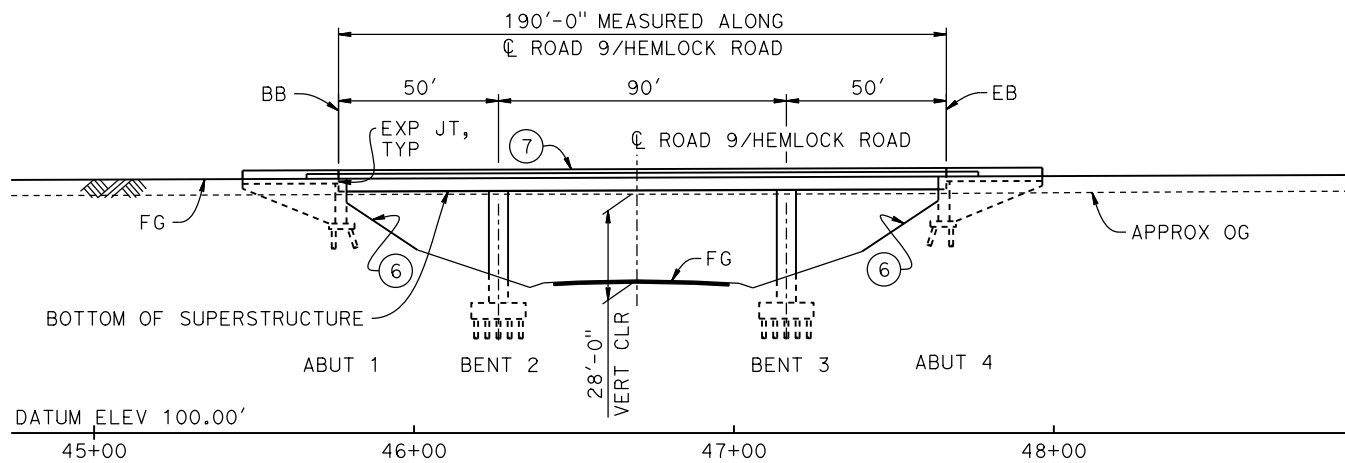
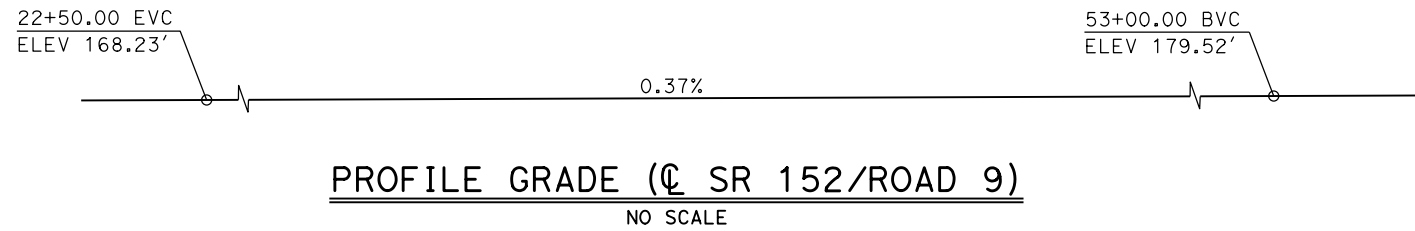
DESIGNED BY  
**M. BRATT**  
DRAWN BY  
**A. M.**  
CHECKED BY  
**K. CHARAN**  
IN CHARGE  
**C. LEMLEY**  
DATE  
**08/12/2016**

**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**  
  
**NOT FOR**  
**CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO SECTION**  
CENTRAL VALLEY WYE  
SR 152 (NORTH) TO ROAD 11 WYE ALTERNATIVE  
GENERAL PLAN (SJD-FRE)  
HEMLOCK ROAD (ROAD 9) UNDERPASS

CONTRACT NO.  
HSR08-05  
DRAWING NO.  
ST-K1160-D  
SCALE  
AS SHOWN  
SHEET NO.



**LEGEND:**

- INDICATES POINT OF MINIMUM VERTICAL CLEARANCE
- ⇨ INDICATES DIRECTION OF TRAFFIC
- ① PAINT "OVERCROSSING"
- ② PAINT "BRIDGE NO. XX-XXXX"
- ③ PAINT "OVERCROSSING"
- ④ PAINT "BRIDGE NO. XX-XXXX"
- ⑤ STRUCTURE APPROACH
- ⑥ SLOPE PAVING (1 1/2 H:1 V)
- ⑦ CONCRETE BARRIER TYPE 732

**NOTES:**

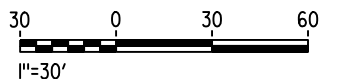
1. 16" Ø PIPE PILES ASSUMED FOR ABUTMENT AND BENT FOUNDATIONS. PILE LENGTHS TO BE DETERMINED.
2. FOR UTILITY DISPOSITIONS, SEE CIVIL AND GRADE SEPARATION PLANS; DRAWING CV-S1160-D.
3. FOR GUARDRAILS, SEE CIVIL AND GRADE SEPARATION PLANS; DRAWING CV-S1160-D.
4. FOR SECTIONS, SEE DRAWING ST-K3161-D.

**CURVE DATA** ①

R = 3000.00'  
 Δ = 06°17'42"  
 L = 329.61'  
 T = 169.70'

**TEMPORARY TRAFFIC OPENINGS**

VEHICULAR TRAFFIC			
1. X TRAFFIC WILL BE DETOURED AWAY FROM THE SITE.			
2. _ TRAFFIC WILL PASS UNDER THE STRUCTURE ON:			
ST OR ROAD NAME AND LOCATION	FALSEWORK OPENING REQD (HORIZ X VERT)		
HEMLOCK RD	46+70	32'x16.5'	2-WAY
3. _ TEMP TRAFFIC LANE REDUCTION FOR FTG EXC.			



15-AUG-2016 8:30 MF-ST-K1161-D.dgn

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**M. BRATT**  
 DRAWN BY  
**A. M.**  
 CHECKED BY  
**K. CHARAN**  
 IN CHARGE  
**C. LEMLEY**  
 DATE  
**08/12/2016**

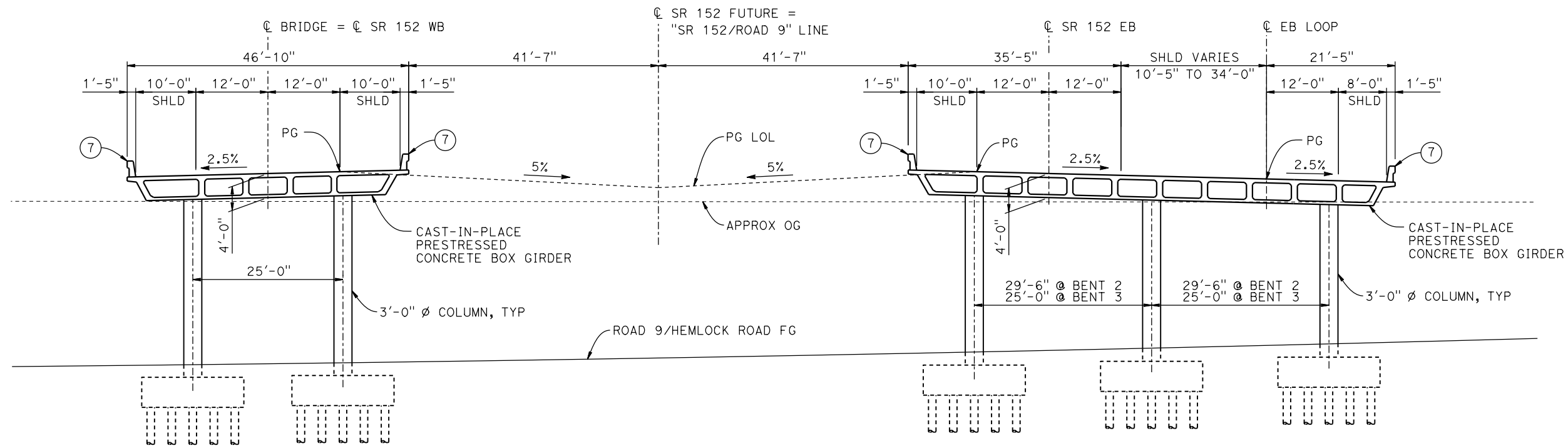
**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**

**NOT FOR**  
**CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO SECTION**  
 CENTRAL VALLEY WYE  
 SR 152 (NORTH) TO ROAD 11 WYE ALTERNATIVE  
 GENERAL PLAN (SJD-FRE)  
 HEMLOCK ROAD (ROAD 9) INTERCHANGE - 1 OF 2

CONTRACT NO.  
HSR08-05  
 DRAWING NO.  
ST-K1161-D  
 SCALE  
AS SHOWN  
 SHEET NO.



**TYPICAL SECTION**  
1" = 10'

**NOTES:**  
1. FOR NOTES AND LEGEND, SEE DRAWING ST-K1161-D.



15-AUG-2016 16:18:48 MF-ST-K3161-D.dgn

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**M. BRATT**  
DRAWN BY  
**A. M.**  
CHECKED BY  
**K. CHARAN**  
IN CHARGE  
**C. LEMLEY**  
DATE  
**08/12/2016**

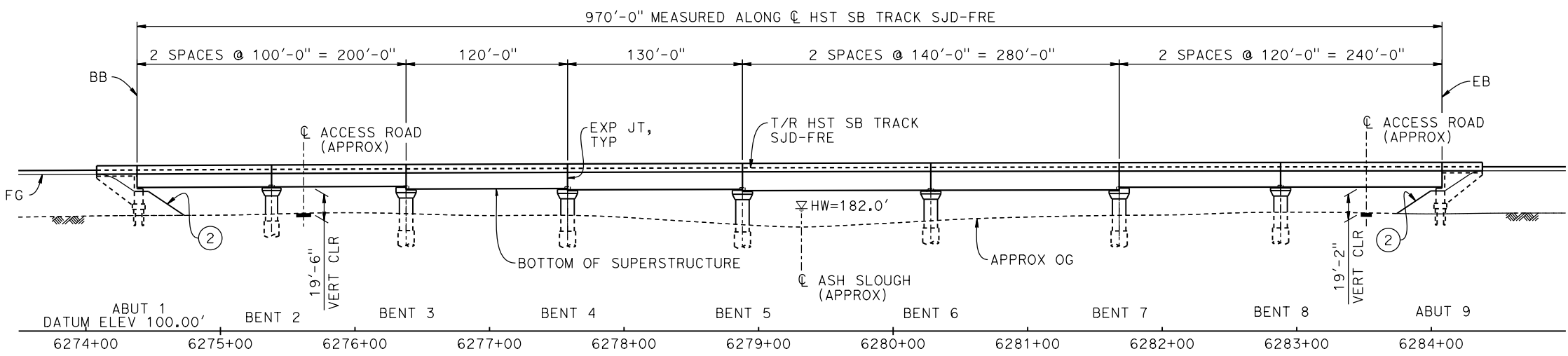
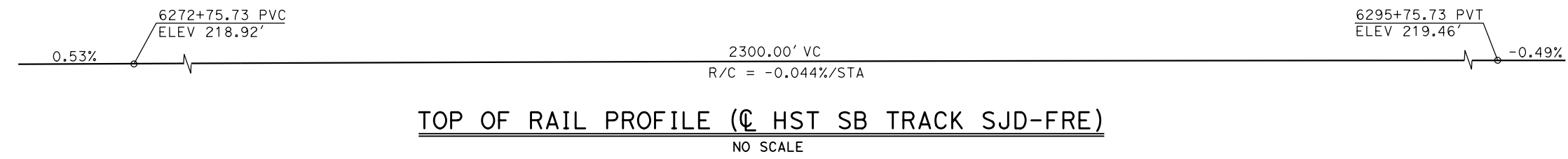
**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**  
  
**NOT FOR**  
**CONSTRUCTION**



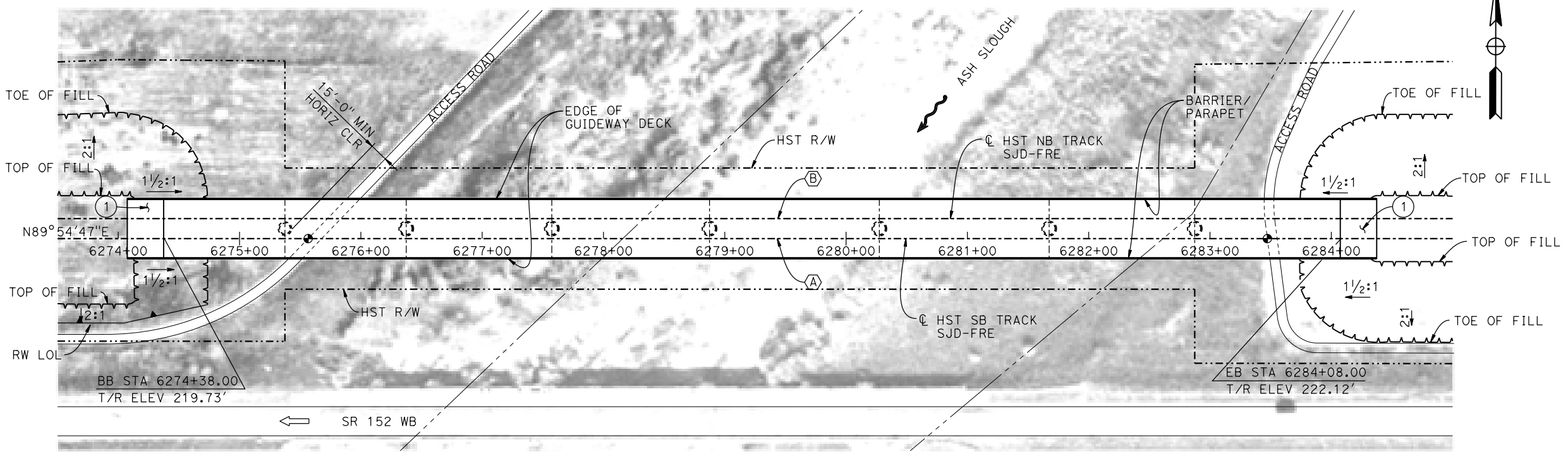
**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO SECTION**  
CENTRAL VALLEY WYE  
SR 152 (NORTH) TO ROAD 11 WYE ALTERNATIVE  
TYPICAL SECTION (SJD-FRE)  
HEMLOCK ROAD (ROAD 9) INTERCHANGE - 2 OF 2

CONTRACT NO.  
HSR08-05  
DRAWING NO.  
ST-K3161-D  
SCALE  
AS SHOWN  
SHEET NO.





**DEVELOPED ELEVATION**  
1" = 50'



**PLAN**  
1" = 50'

**TEMPORARY TRAFFIC OPENINGS**

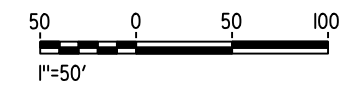
VEHICULAR TRAFFIC			
1. — TRAFFIC WILL BE DETOURED AWAY FROM THE SITE.			
2. X TRAFFIC WILL PASS UNDER THE STRUCTURE ON:			
ST OR ROAD NAME AND LOCATION	FALSEWORK OPENING REQD (HORIZ X VERT)		
ACCESS ROAD 6275+62	20'X16.5'	-	
ACCESS ROAD 6283+62	20'X16.5'	-	
3. — TEMP TRAFFIC LANE REDUCTION FOR FTG EXC.			

- LEGEND:**
- INDICATES POINT OF MINIMUM VERTICAL CLEARANCE
  - ➔ INDICATES DIRECTION OF TRAFFIC
  - INDICATES DIRECTION OF FLOW
  - ① STRUCTURE APPROACH
  - ② SLOPE PAVING (1 1/2 H:1 V)

- NOTES:**
1. 16" Ø PIPE PILES ASSUMED FOR ABUTMENT FOUNDATIONS. PILE AND DRILLED SHAFT LENGTHS TO BE DETERMINED.
  2. FOR TYPICAL SECTION AND BENT COLUMN SCHEDULE, SEE DRAWING ST-K3170-D.
  3. ANY EXISTING DIRT ROAD THAT CONFLICTS WITH NEW CONSTRUCTION SHALL BE REALIGNED.
  4. FOR UTILITY DISPOSITIONS, SEE CIVIL AND GRADE SEPARATION PLANS; DRAWING CV-S1170-D.
  5. FOR RETAINING WALLS, SEE CIVIL AND GRADE SEPARATION PLANS; DRAWINGS CV-S1170-D.

**CURVE SJD-FRE 4 SB (A)**  
R = 325,016.50'  
LS = 1,150.00'

**CURVE SJD-FRE 4 NB (B)**  
R = 325,000.00'  
LS = 1,150.00'



15-AUG-2016 8:31 MF-ST-K1170-D.dgn

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**M. BRATT**

DRAWN BY  
**A. M.**

CHECKED BY  
**K. CHARAN**

IN CHARGE  
**C. LEMLEY**

DATE  
**08/12/2016**

**RECORD SET**  
15% DESIGN SUBMITTAL

**NOT FOR CONSTRUCTION**

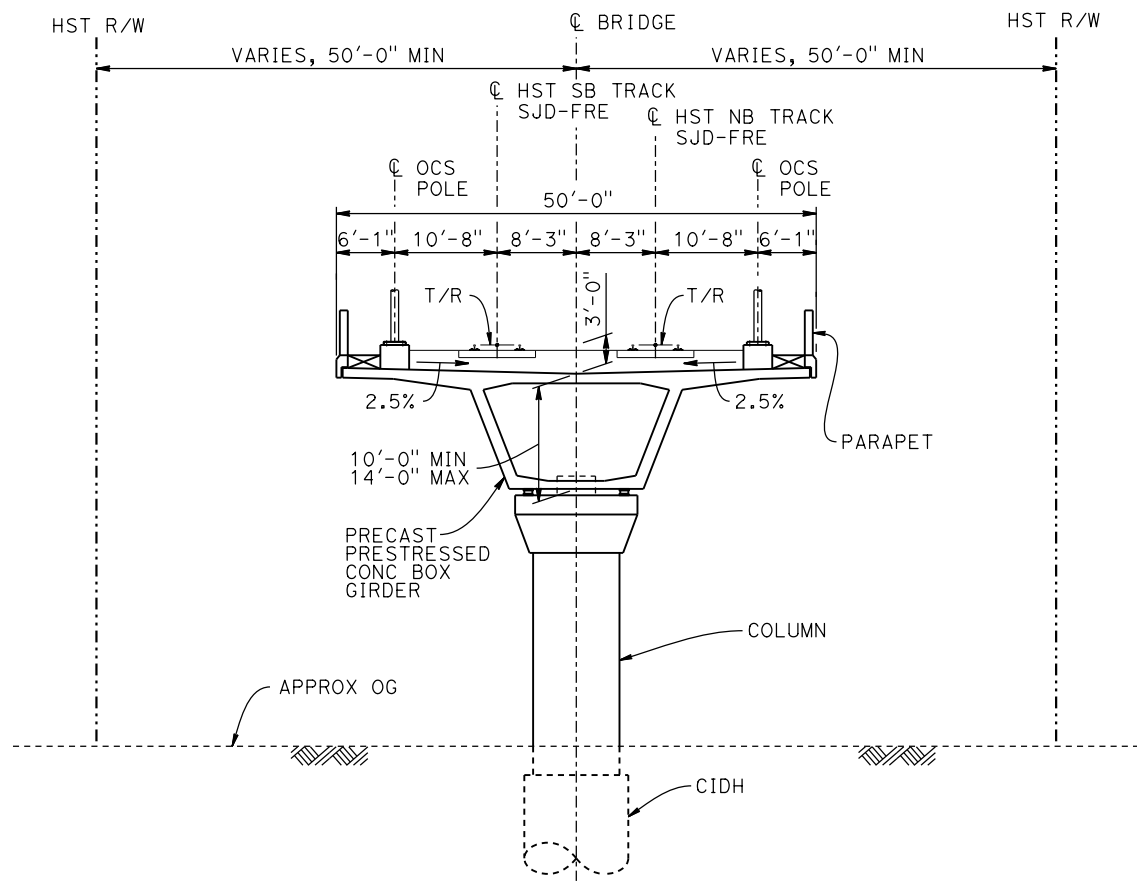


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO SECTION**

CENTRAL VALLEY WYE  
SR 152 (NORTH) TO ROAD 11 WYE ALTERNATIVE  
GENERAL PLAN (SJD-FRE)  
ASH SLOUGH BRIDGE - 1 OF 2

CONTRACT NO. HSR08-05
DRAWING NO. ST-K1170-D
SCALE AS SHOWN
SHEET NO.

15-AUG-2016 16:18:48 MF-ST-K3170-D.dgn



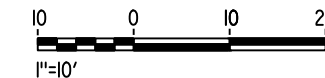
**TYPICAL SECTION**

1" = 10'

BENT COLUMN SCHEDULE		
BENT	COLUMN TYPE	CIDH
2	9'-0" $\phi$	11'-0" $\phi$
3 - 8	10'-0" $\phi$	12'-0" $\phi$

**NOTES:**

1. DRILLED SHAFT LENGTHS TO BE DETERMINED.
2. FOR TRACK SUPERELEVATION DETAILS, SEE ALIGNMENT AND TYPICAL SECTION PLANS; DRAWINGS TT-B0051-D AND TT-B0053-D.



REV	DATE	BY	CHK	APP	DESCRIPTION

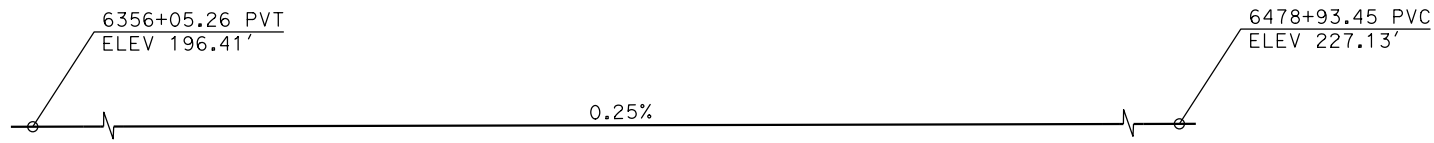
DESIGNED BY  
**M. BRATT**  
DRAWN BY  
**A. M.**  
CHECKED BY  
**K. CHARAN**  
IN CHARGE  
**C. LEMLEY**  
DATE  
**08/12/2016**

**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**  
  
**NOT FOR**  
**CONSTRUCTION**

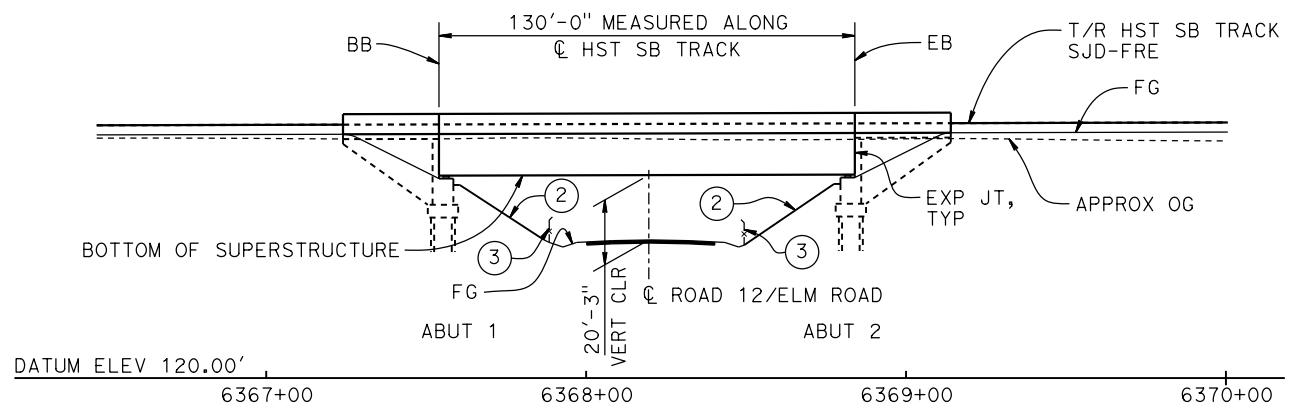


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO SECTION**  
CENTRAL VALLEY WYE  
SR 152 (NORTH) TO ROAD 11 WYE ALTERNATIVE  
TYPICAL SECTION (SJD-FRE)  
ASH SLOUGH BRIDGE - 2 OF 2

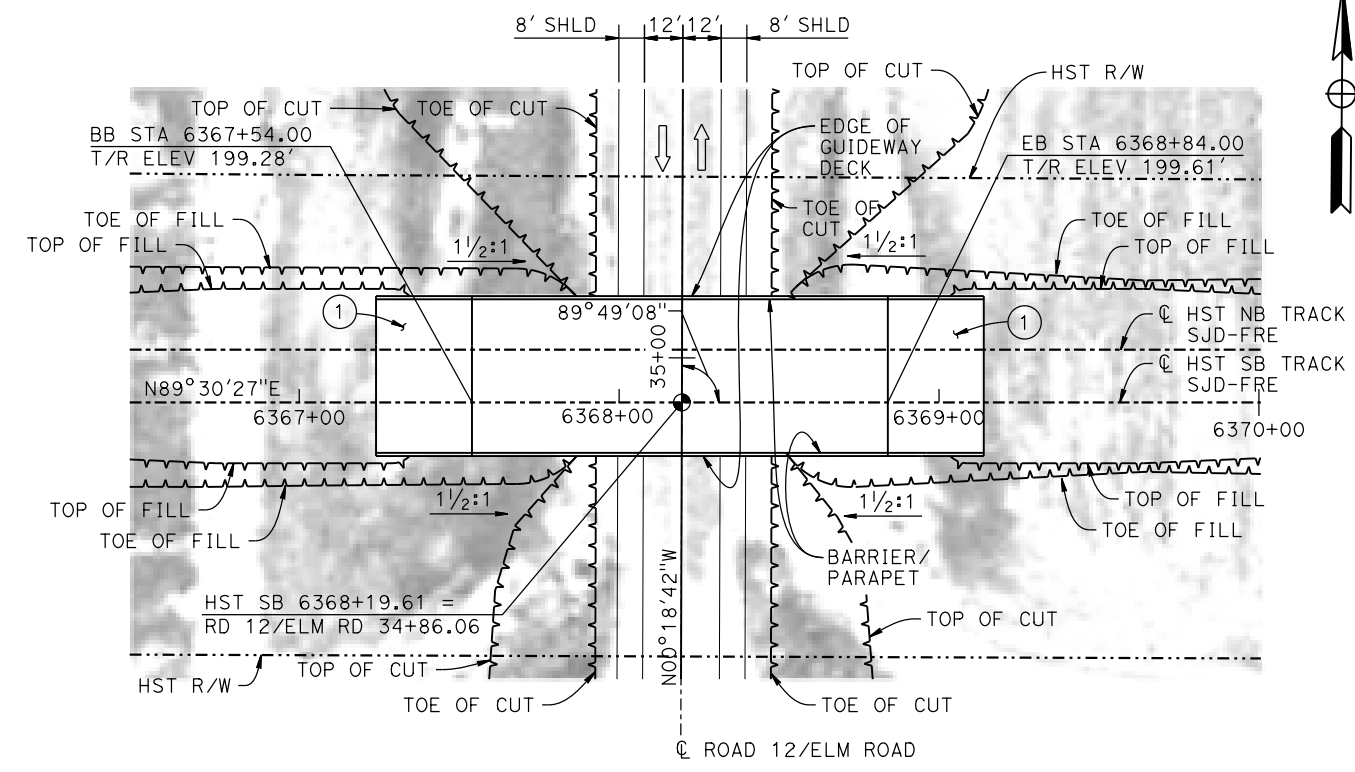
CONTRACT NO.  
HSR08-05  
DRAWING NO.  
ST-K3170-D  
SCALE  
AS SHOWN  
SHEET NO.



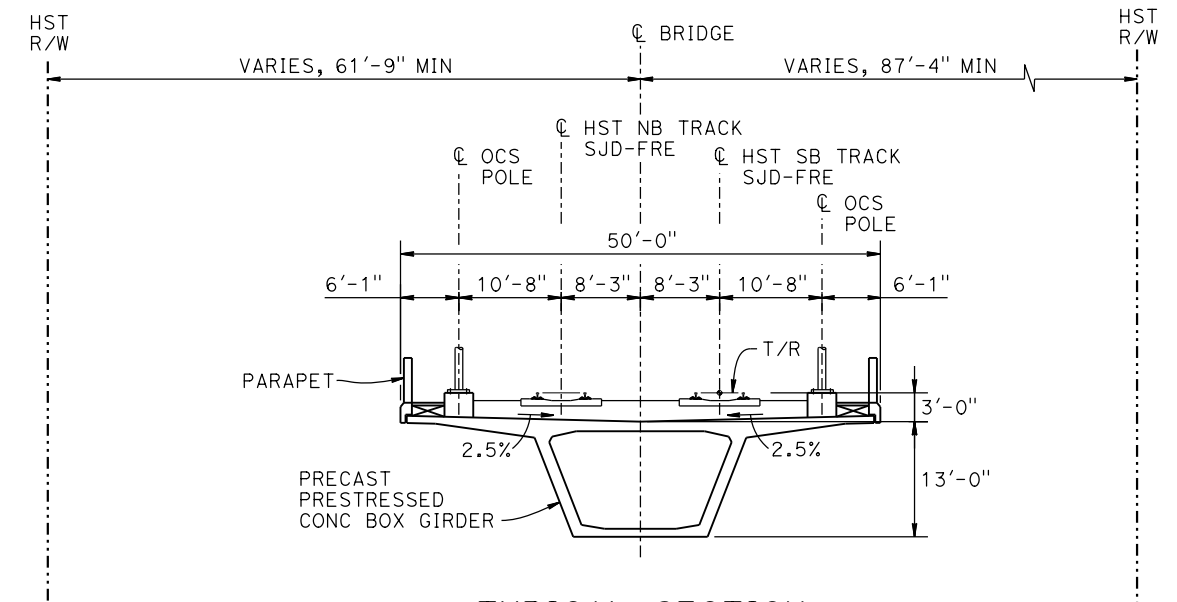
**TOP OF RAIL PROFILE (C HST SB TRACK SJD-FRE)**  
NO SCALE



**ELEVATION**  
1" = 30'



**PLAN**  
1" = 30'



**TYPICAL SECTION**  
1"=10'

**TEMPORARY TRAFFIC OPENINGS**

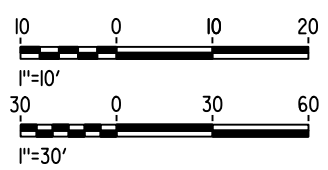
VEHICULAR TRAFFIC			
1. X TRAFFIC WILL BE DETOURED AWAY FROM THE SITE.			
2. _ TRAFFIC WILL PASS UNDER THE STRUCTURE ON:			
STREET OR ROAD NAME AND LOCATION		FALSEWORK OPENING REQD (HORIZ X VERT)	
ROAD 12/ELM ROAD	6368+20	32'x16.5'	2-WAY
3. _ TEMP TRAFFIC LANE REDUCTION FOR FTG EXC.			

**LEGEND:**

- INDICATES POINT OF MINIMUM VERTICAL CLEARANCE
- ➡ INDICATES DIRECTION OF TRAFFIC
- ① STRUCTURE APPROACH
- ② SLOPE PAVING (1 1/2 H:1 V)
- ③ AR FENCE, SEE TRACK PLANS; DRAWING TT-B0020-D

**NOTES:**

1. 16"Ø PIPE PILES ASSUMED FOR ABUTMENT FOUNDATIONS. PILE LENGTHS TO BE DETERMINED.
2. FOR UTILITY DISPOSITIONS, SEE CIVIL AND GRADE SEPARATION PLANS; DRAWING CV-S1190-D.



15-AUG-2016 8:31 MF-ST-K1190-D.dgn

REV	DATE	BY	CHK	APP	DESCRIPTION

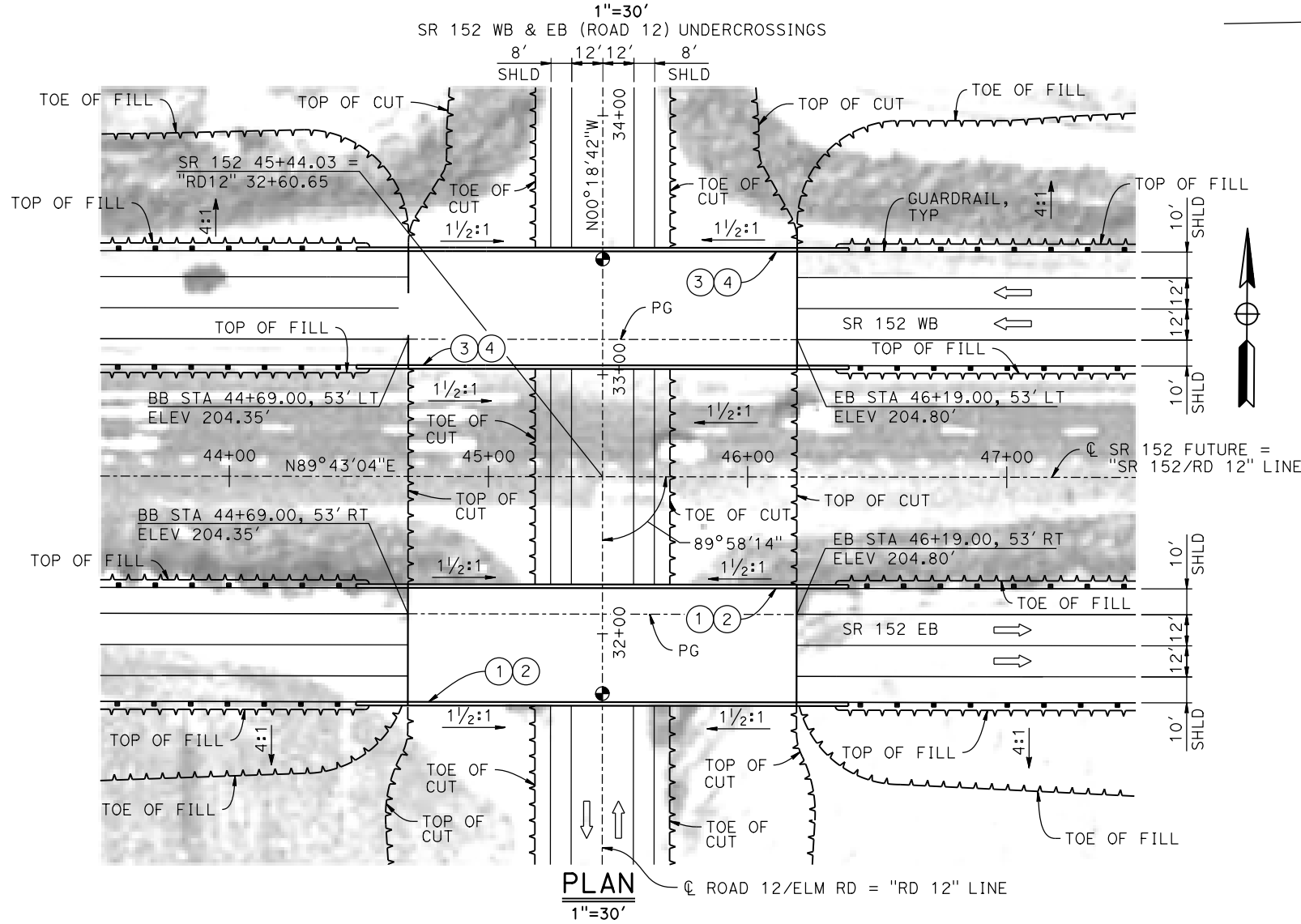
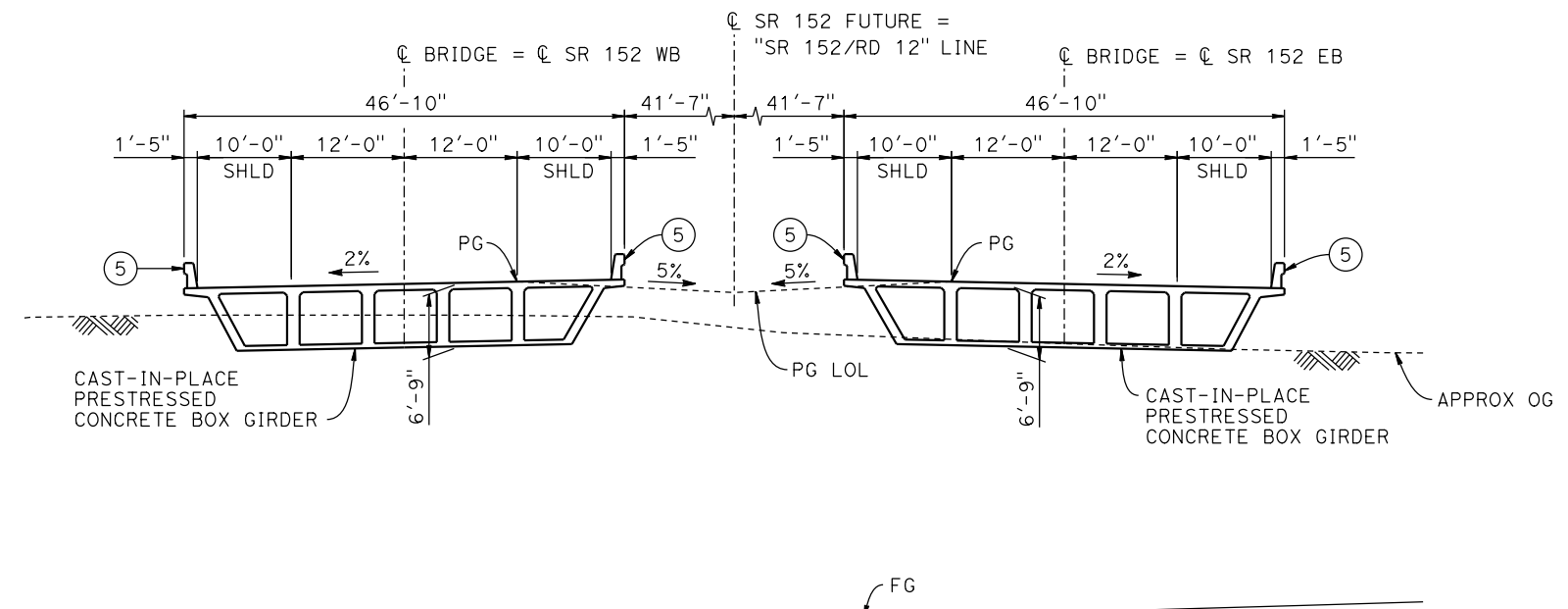
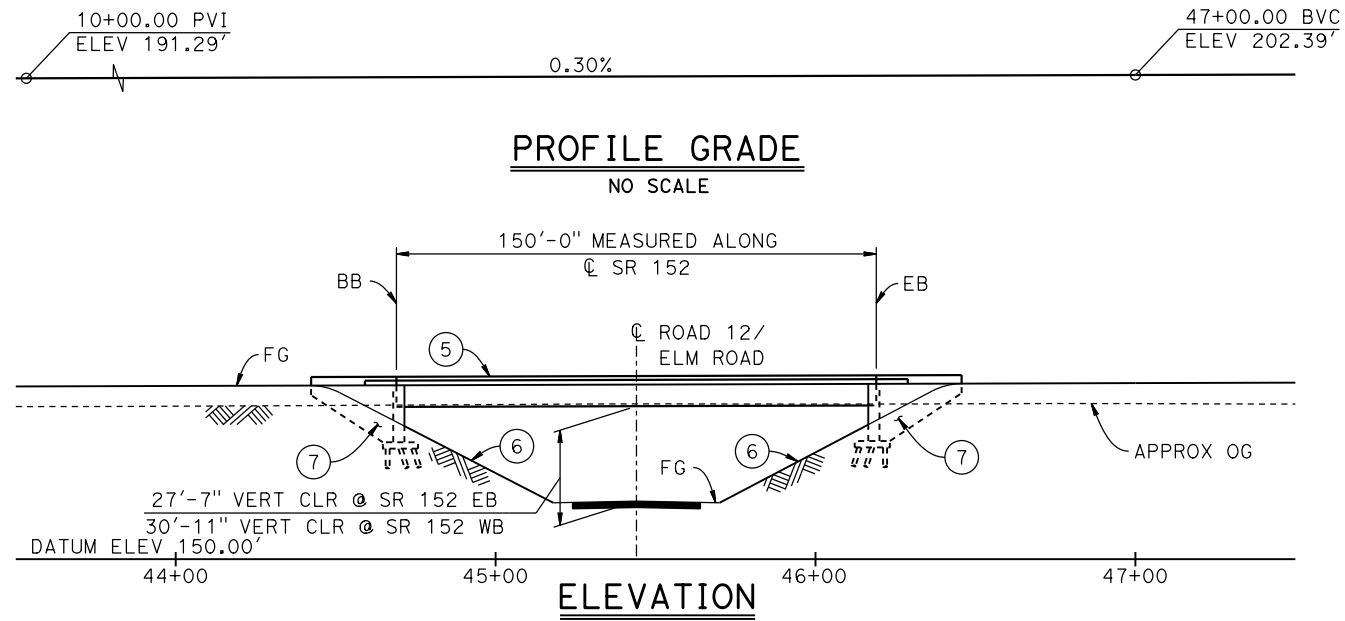
DESIGNED BY  
**M. BRATT**  
DRAWN BY  
**A. M.**  
CHECKED BY  
**K. CHARAN**  
IN CHARGE  
**C. LEMLEY**  
DATE  
**08/12/2016**

**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**  
  
**NOT FOR**  
**CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO SECTION**  
CENTRAL VALLEY WYE  
SR 152 (NORTH) TO ROAD 11 WYE ALTERNATIVE  
GENERAL PLAN (SJD-FRE)  
ELM ROAD (ROAD 12) UNDERPASS

CONTRACT NO.  
HSR08-05  
DRAWING NO.  
ST-K1190-D  
SCALE  
AS SHOWN  
SHEET NO.



TEMPORARY TRAFFIC OPENINGS

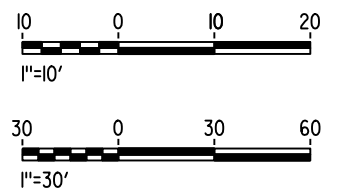
VEHICULAR TRAFFIC			
1. X TRAFFIC WILL BE DETOURED AWAY FROM THE SITE.			
2. — TRAFFIC WILL PASS UNDER THE STRUCTURE ON:			
ST OR ROAD NAME AND LOCATION	FALSEWORK OPENING REQD (HORIZ X VERT)		
ROAD 12/ELM ROAD 45+44	-	-	
3. — TEMP TRAFFIC LANE REDUCTION FOR FTG EXC.			

LEGEND:

- INDICATES POINT OF MINIMUM VERTICAL CLEARANCE
- ⇨ INDICATES DIRECTION OF TRAFFIC
- ① PAINT "SR 152 EB (ROAD 12) UNDERCROSSING"
- ② PAINT "BRIDGE NO. XX-XXXX"
- ③ PAINT "SR 152 WB (ROAD 12) UNDERCROSSING"
- ④ PAINT "BRIDGE NO. XX-XXXX"
- ⑤ CONCRETE BARRIER TYPE 732
- ⑥ SLOPE PAVING (1/2H:1V)
- ⑦ WINGWALL

NOTES:

1. 16" Ø PIPE PILES ASSUMED AT ABUTMENT FOUNDATIONS. PILE LENGTHS TO BE DETERMINED.
2. FOR UTILITY DISPOSITION, SEE CIVIL AND GRADE SEPARATION PLANS; DRAWING CV-S1195-D.
3. FOR GUARDRAILS, SEE CIVIL AND GRADE SEPARATION PLANS; DRAWING CV-S1195-D.



15-AUG-2016 8:31 MF-ST-K1195-D.dgn

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**M. BRATT**  
DRAWN BY  
**A. M.**  
CHECKED BY  
**K. CHARAN**  
IN CHARGE  
**C. LEMLEY**  
DATE  
**08/12/2016**

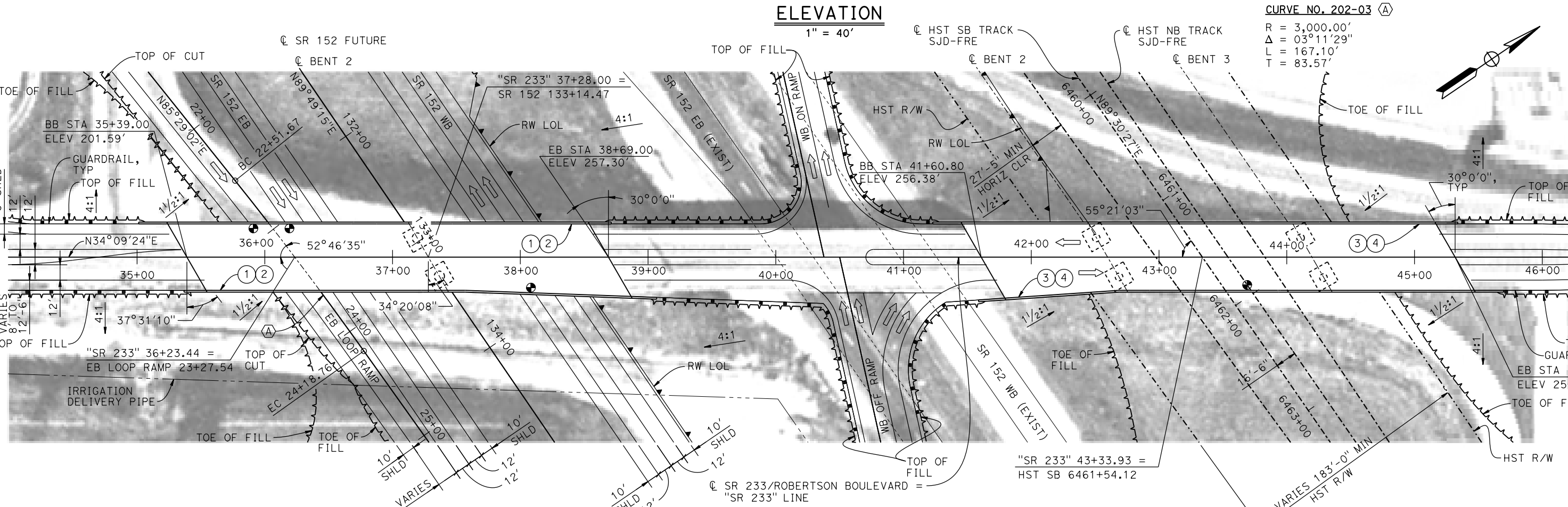
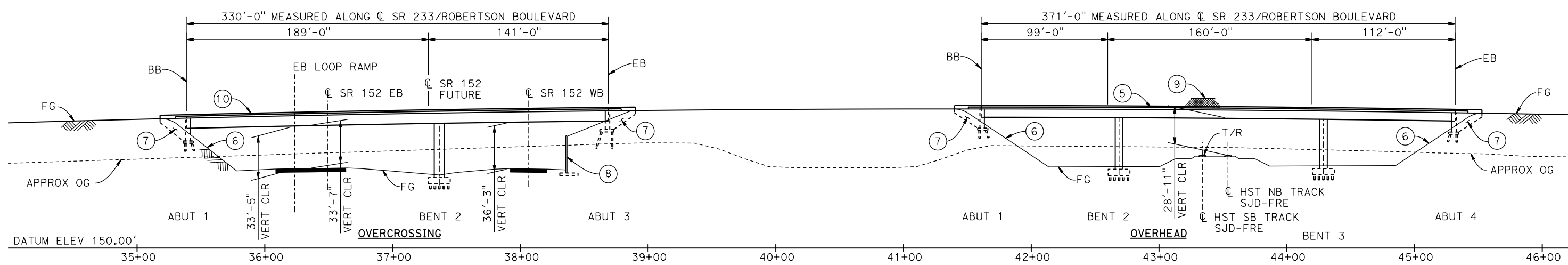
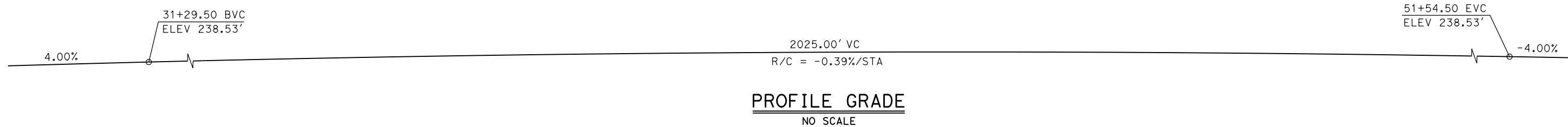
**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**

**NOT FOR**  
**CONSTRUCTION**



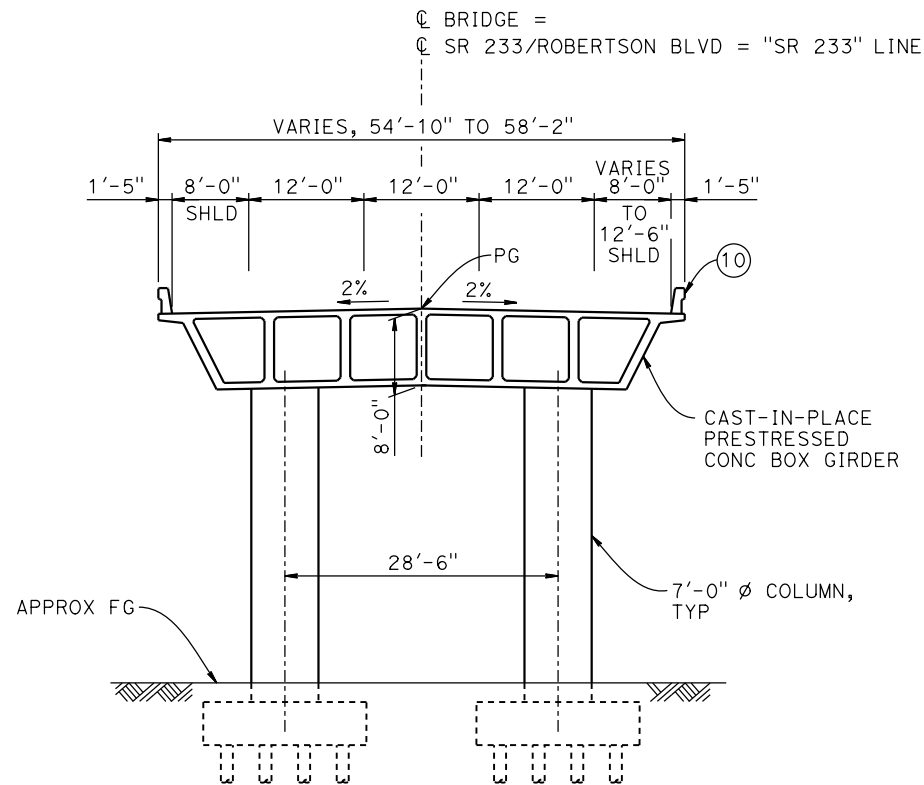
**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO SECTION**  
CENTRAL VALLEY WYE  
SR 152 (NORTH) TO ROAD 11 WYE ALTERNATIVE  
GENERAL PLAN (SJD-FRE)  
SR 152 (ROAD 12) UNDERCROSSING

CONTRACT NO.  
HSR08-05  
DRAWING NO.  
ST-K1195-D  
SCALE  
AS SHOWN  
SHEET NO.



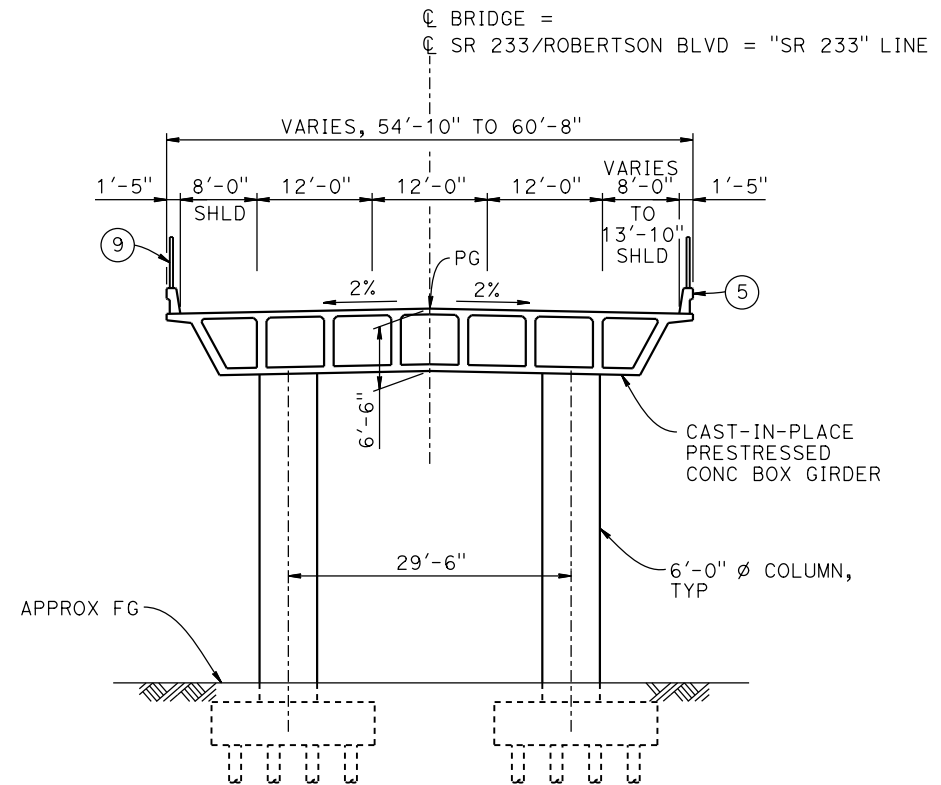
<table border="1"> <tr><td>DESIGNED BY</td><td>M. BRATT</td></tr> <tr><td>DRAWN BY</td><td>A. M.</td></tr> <tr><td>CHECKED BY</td><td>K. CHARAN</td></tr> <tr><td>IN CHARGE</td><td>C. LEMLEY</td></tr> <tr><td>DATE</td><td>08/12/2016</td></tr> </table>					DESIGNED BY	M. BRATT	DRAWN BY	A. M.	CHECKED BY	K. CHARAN	IN CHARGE	C. LEMLEY	DATE	08/12/2016	<p><b>RECORD SET</b> 15% DESIGN SUBMITTAL</p> <p><b>NOT FOR CONSTRUCTION</b></p>				<p><b>CALIFORNIA HIGH-SPEED TRAIN PROJECT</b> <b>MERCED TO FRESNO SECTION</b></p> <p>CENTRAL VALLEY WYE SR 152 (NORTH) TO ROAD 11 WYE ALTERNATIVE GENERAL PLAN (SJD-FRE) ROBERTSON BOULEVARD (SR 233) INTERCHANGE - 1 OF 2</p>		<p>CONTRACT NO. HSR08-05</p> <p>DRAWING NO. ST-K1210-D</p> <p>SCALE AS SHOWN</p> <p>SHEET NO.</p>	
DESIGNED BY	M. BRATT																					
DRAWN BY	A. M.																					
CHECKED BY	K. CHARAN																					
IN CHARGE	C. LEMLEY																					
DATE	08/12/2016																					
REV	DATE	BY	CHK	APP	DESCRIPTION																	

15-AUG-2016 8:32 MF-ST-K1210-D.dgn



**TYPICAL SECTION AT OVERCROSSING**

1" = 10'



**TYPICAL SECTION AT OVERHEAD**

1" = 10'

**TEMPORARY TRAFFIC OPENINGS**

VEHICULAR TRAFFIC			
1. <input type="checkbox"/> TRAFFIC WILL BE DETOURED AWAY FROM THE SITE.			
2. <input checked="" type="checkbox"/> TRAFFIC WILL PASS UNDER THE STRUCTURE ON:			
ST OR ROAD NAME AND LOCATION		FALSEWORK OPENING REQD (HORIZ X VERT)	
SR 152	36+49	40'X16.5'	E BND
SR 152	38+08	40'X16.5'	W BND
3. <input type="checkbox"/> TEMP TRAFFIC LANE REDUCTION FOR FTG EXC.			

**LEGEND:**

- ⊕ INDICATES POINT OF MINIMUM VERTICAL CLEARANCE
- ⇒ INDICATES DIRECTION OF TRAFFIC
- ① PAINT "ROBERTSON BLVD OVERCROSSING"
- ② PAINT "BRIDGE NO. XX-XXXX"
- ③ PAINT "ROBERTSON BLVD OVERHEAD"
- ④ PAINT "BRIDGE NO. XX-XXXX"
- ⑤ CONCRETE BARRIER TYPE 736 MOD
- ⑥ SLOPE PAVING (1½H:1V)
- ⑦ WINGWALL
- ⑧ RETAINING WALL
- ⑨ AR FENCE WITH SOLID PLATE
- ⑩ CONCRETE BARRIER TYPE 732 MOD

**NOTES:**

1. 16" Ø PIPE PILES ASSUMED AT ABUTMENT AND BENT FOUNDATIONS. PILE LENGTHS TO BE DETERMINED.
2. FOR UTILITY DISPOSITIONS, SEE CIVIL AND GRADE SEPARATION PLANS; DRAWING CV-S1210-D.
3. FOR RETAINING WALLS, SEE CIVIL AND GRADE SEPARATION PLANS; DRAWING CV-S1210-D.
4. FOR GUARDRAILS, SEE CIVIL AND GRADE SEPARATION PLANS; DRAWING CV-S1210-D.



15-AUG-2016 8:48 MF-ST-K3210-D.dgn

REV	DATE	BY	CHK	APP	DESCRIPTION

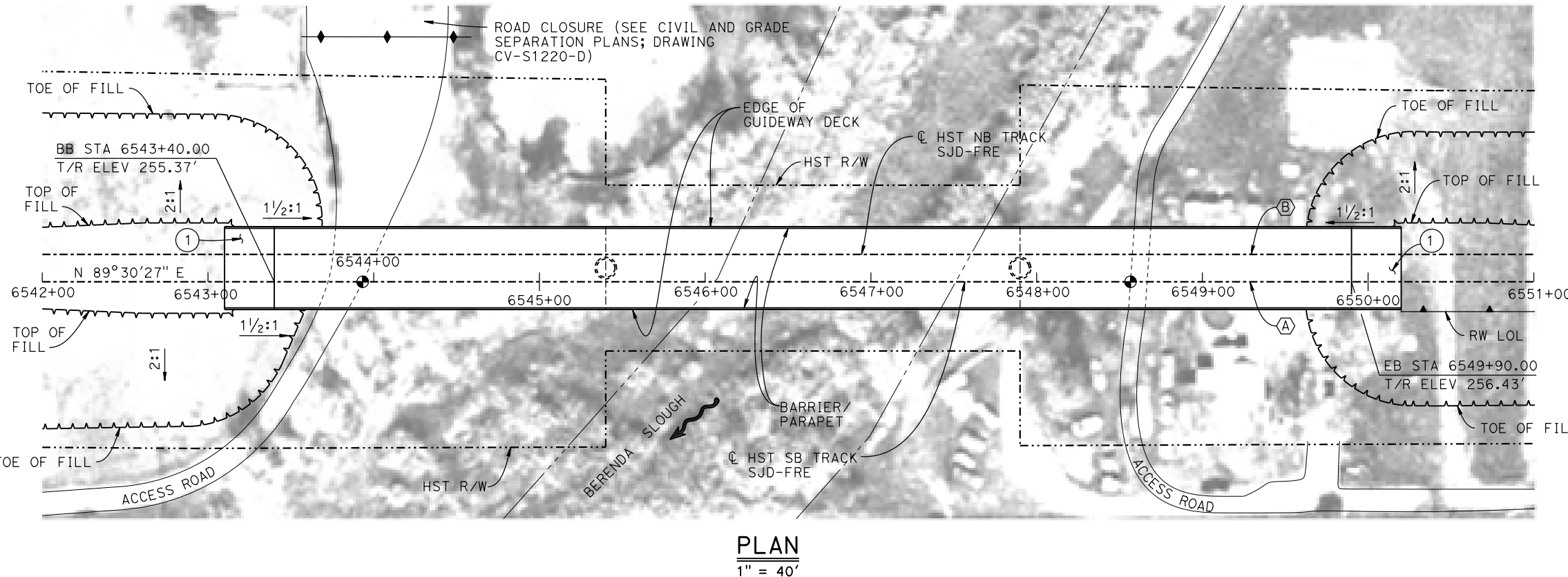
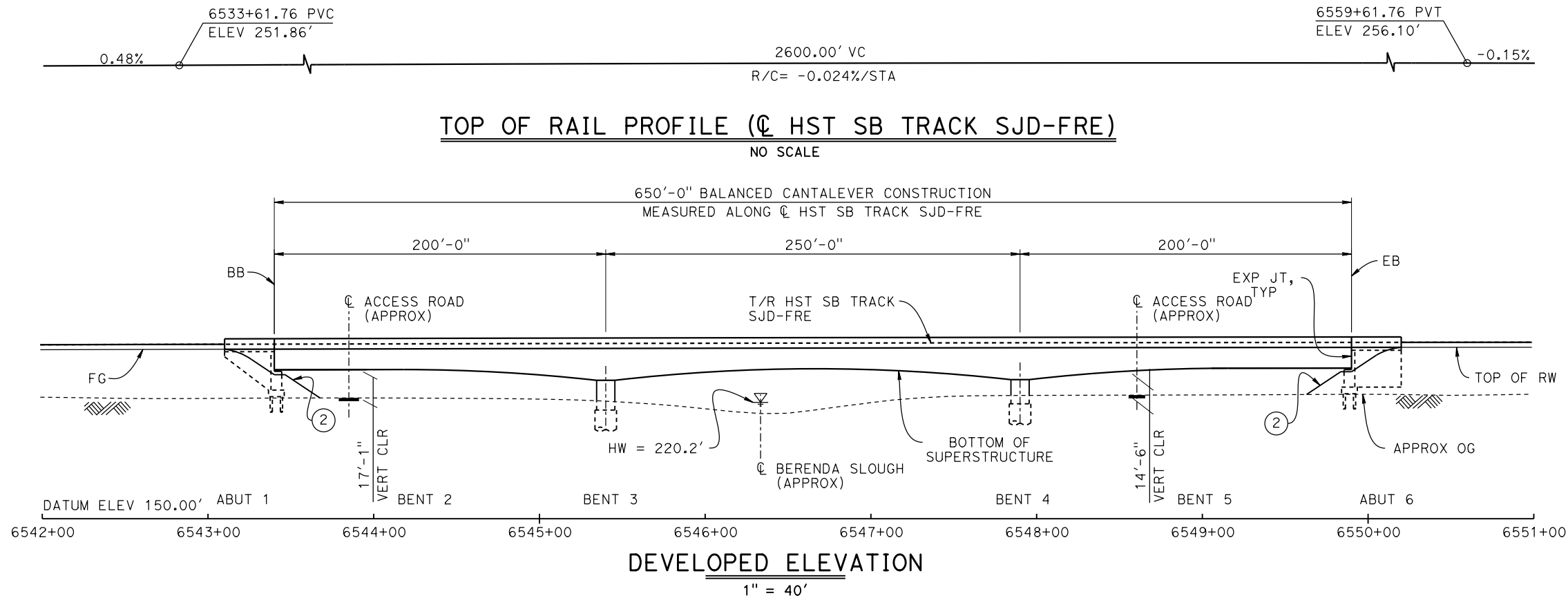
DESIGNED BY  
**M. BRATT**  
DRAWN BY  
**A. M.**  
CHECKED BY  
**K. CHARAN**  
IN CHARGE  
**C. LEMLEY**  
DATE  
**08/12/2016**

**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**  
  
**NOT FOR**  
**CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO SECTION**  
CENTRAL VALLEY WYE  
SR 152 (NORTH) TO ROAD 11 WYE ALTERNATIVE  
TYPICAL SECTIONS (SJD-FRE)  
ROBERTSON BOULEVARD (SR 233) INTERCHANGE - 2 OF 2

CONTRACT NO.  
HSR08-05  
DRAWING NO.  
ST-K3210-D  
SCALE  
AS SHOWN  
SHEET NO.



**TEMPORARY TRAFFIC OPENINGS**

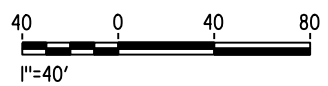
VEHICULAR TRAFFIC			
1. — TRAFFIC WILL BE DETOURED AWAY FROM THE SITE.			
2. <u>X</u> TRAFFIC WILL PASS UNDER THE STRUCTURE ON:			
ST OR ROAD NAME AND LOCATION		FALSEWORK OPENING REQD (HORIZ X VERT)	
ACCESS ROAD	6543+85	20'x16.5'	-
ACCESS ROAD	6548+29	20'x16.5'	-
3. — TEMP TRAFFIC LANE REDUCTION FOR FTG EXC.			

- LEGEND:**
- INDICATES POINT OF MINIMUM VERTICAL CLEARANCE
  - ➔ INDICATES DIRECTION OF FLOW
  - ① STRUCTURE APPROACH
  - ② SLOPE PAVING (1 1/2H:1V)

- NOTES:**
1. 16" Ø PIPE PILES ASSUMED FOR ABUTMENT FOUNDATIONS. PILE AND DRILLED SHAFT LENGTHS TO BE DETERMINED.
  2. FOR TYPICAL SECTION AND BENT COLUMN SCHEDULE, SEE DRAWING ST-K3220-D.
  3. ANY EXISTING DIRT ROAD THAT CONFLICTS WITH NEW CONSTRUCTION SHALL BE REALIGNED.
  4. FOR UTILITY DISPOSITIONS, SEE CIVIL AND GRADE SEPARATION PLANS; DRAWING CV-S1220-D.
  5. FOR RETAINING WALL, SEE CIVIL AND GRADE SEPARATION PLANS; DRAWING CV-S1220-D.

**CURVE SJD-FRE 4 SB (A)**  
 R = 325,016.50'  
 LS = 1,150.00'

**CURVE SJD-FRE 4 NB (B)**  
 R = 325,000.00'  
 LS = 1,150.00'



15-AUG-2016 8:32 MF-ST-K1220-D.dgn

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**M. BRATT**

DRAWN BY  
**A. M.**

CHECKED BY  
**K. CHARAN**

IN CHARGE  
**C. LEMLEY**

DATE  
**08/12/2016**

**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**

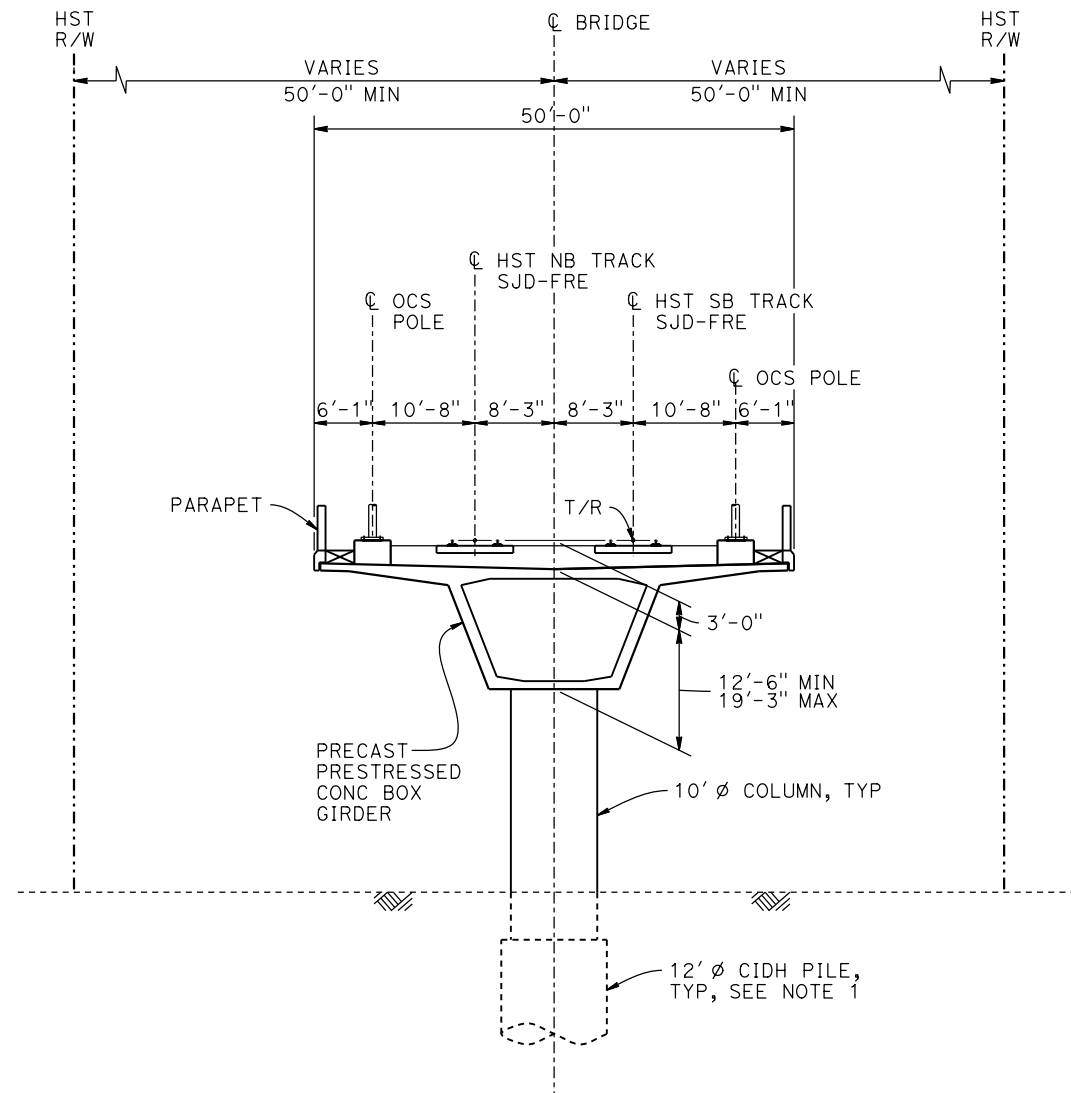
**NOT FOR**  
**CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO SECTION**  
 CENTRAL VALLEY WYE  
 SR 152 (NORTH) TO ROAD 11 WYE ALTERNATIVE  
 GENERAL PLAN (SJD-FRE)  
 BERENDA SLOUGH BRIDGE - 1 OF 2

CONTRACT NO. HSR08-05
DRAWING NO. ST-K1220-D
SCALE AS SHOWN
SHEET NO.

15-AUG-2016 16:18:48 MF-ST-K3220-D.dgn



**TYPICAL SECTION**  
1" = 10'

**NOTE:**

1. DRILLED SHAFT LENGTHS TO BE DETERMINED.
2. FOR TRACK SUPERELEVATION DETAILS, SEE ALIGNMENT AND TYPICAL SECTION PLANS; DRAWINGS TT-B0051-D AND TT-B0053-D.



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**M. BRATT**  
DRAWN BY  
**A. M.**  
CHECKED BY  
**K. CHARAN**  
IN CHARGE  
**C. LEMLEY**  
DATE  
**08/12/2016**

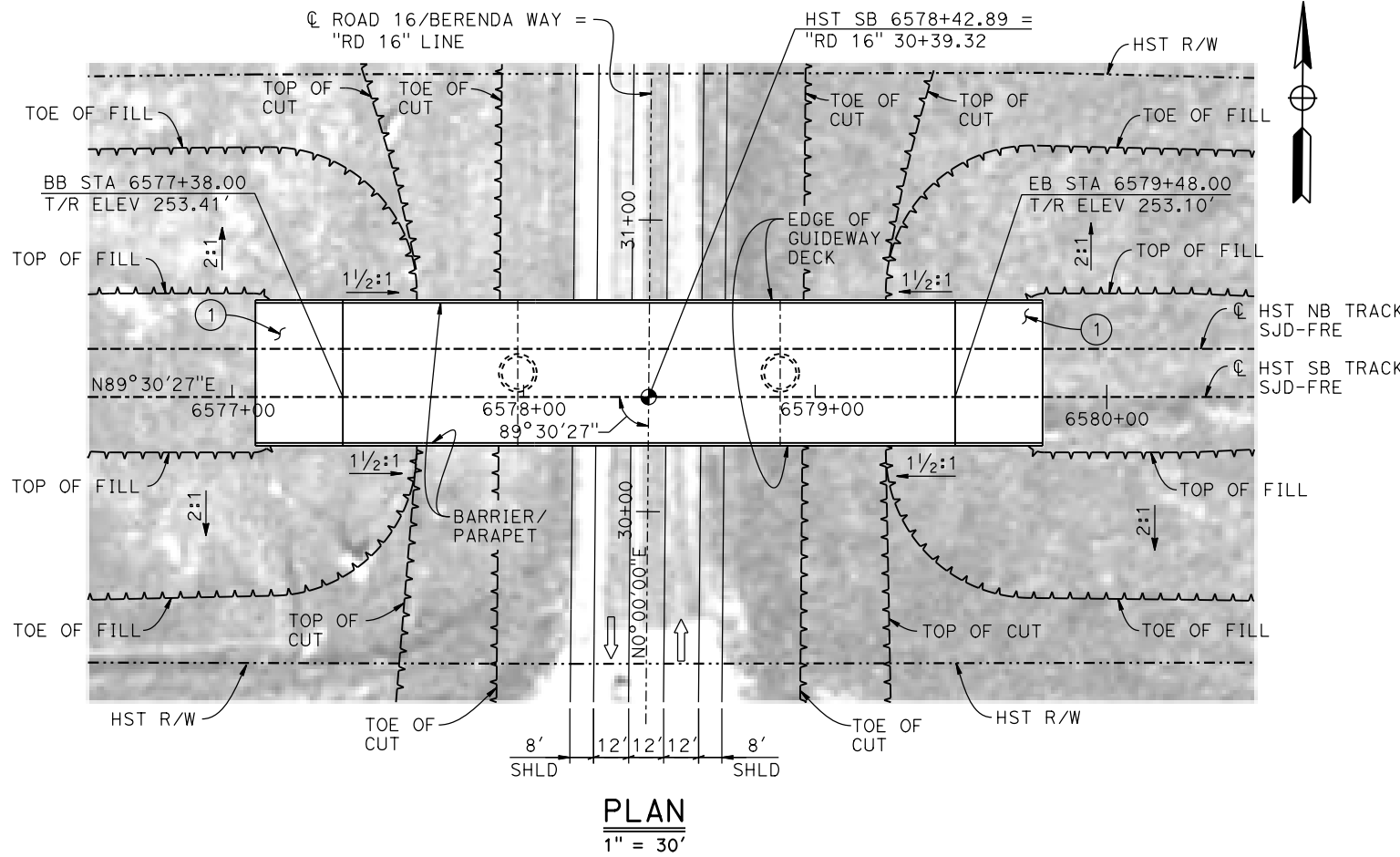
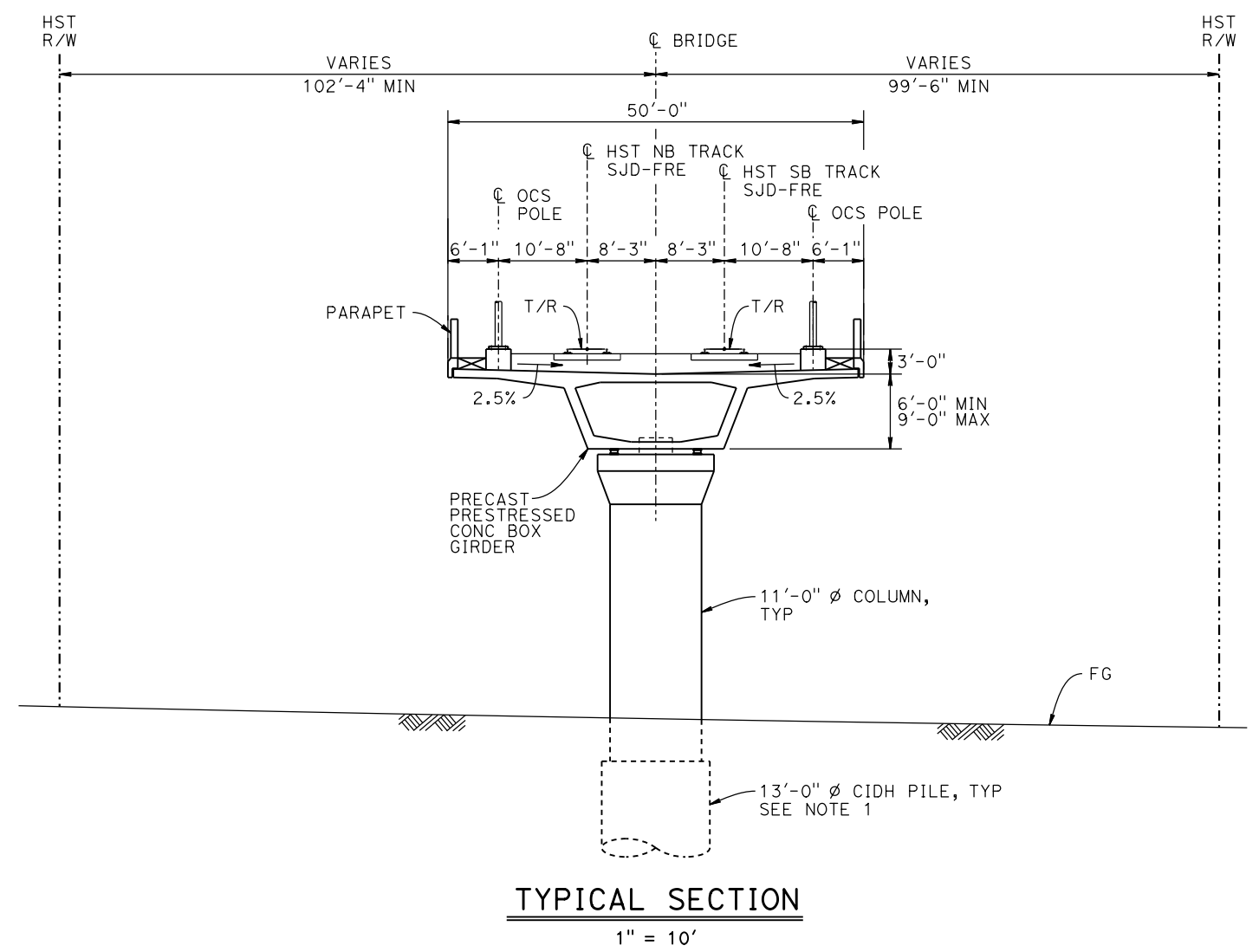
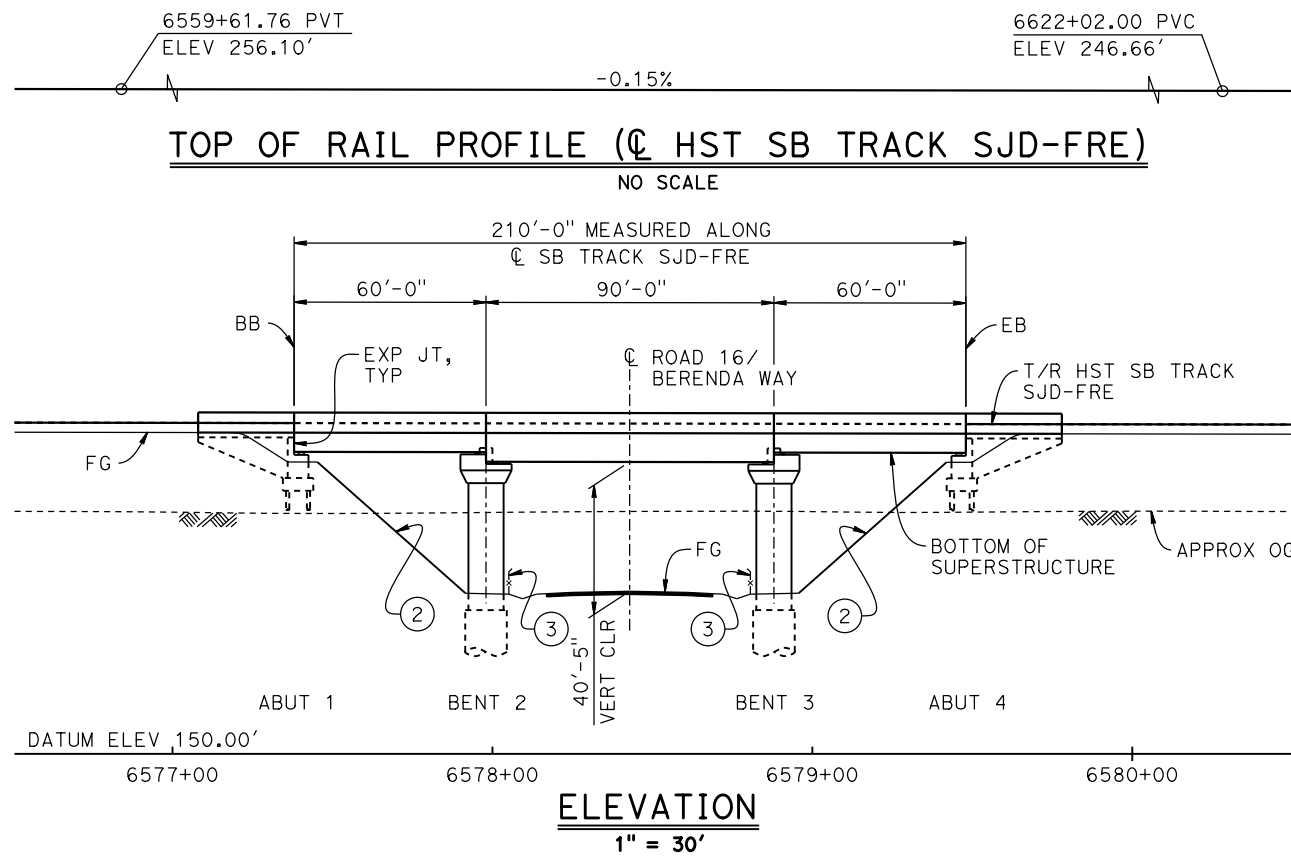
**RECORD SET**  
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**NOT FOR**  
**CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO SECTION**  
CENTRAL VALLEY WYE  
SR 152 (NORTH) TO ROAD 11 WYE ALTERNATIVE  
TYPICAL SECTION (SJD-FRE)  
BERENDA SLOUGH BRIDGE - 2 OF 2

CONTRACT NO.  
HSR08-05  
DRAWING NO.  
ST-K3220-D  
SCALE  
AS SHOWN  
SHEET NO.





**NOTES:**

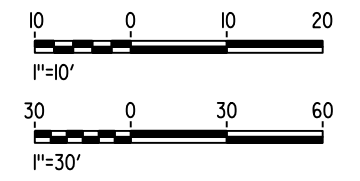
1. 16"  $\phi$  PIPE PILES ASSUMED FOR ABUTMENT FOUNDATIONS. PILE LENGTHS TO BE DETERMINED.
2. FOR UTILITY DISPOSITION, SEE CIVIL AND GRADE SEPARATION PLANS; DRAWING CV-S1230-D.

**LEGEND:**

- INDICATES POINT OF MINIMUM VERTICAL CLEARANCE
- INDICATES DIRECTION OF TRAFFIC
- STRUCTURE APPROACH
- SLOPE PAVING (1 1/2H:1V)
- AR FENCE, SEE TRACK PLANS, DRAWING TT-B0020-D

**TEMPORARY TRAFFIC OPENINGS**

VEHICULAR TRAFFIC		FALSEWORK OPENING REQD (HORIZ x VERT)	
1. <u>X</u> TRAFFIC WILL BE DETOURED AWAY FROM THE SITE.			
2. <u>  </u> TRAFFIC WILL PASS UNDER THE STRUCTURE ON:			
ST OR ROAD NAME AND LOCATION		FALSEWORK OPENING REQD (HORIZ x VERT)	
ROAD 16/BERENDA WAY	6578+42	49'x16.5'	2-WAY
3. <u>  </u> TEMP TRAFFIC LANE REDUCTION FOR FTG EXC.			



15-AUG-2016 8:32 MF-ST-K1230-D.dgn

REV	DATE	BY	CHK	APP	DESCRIPTION

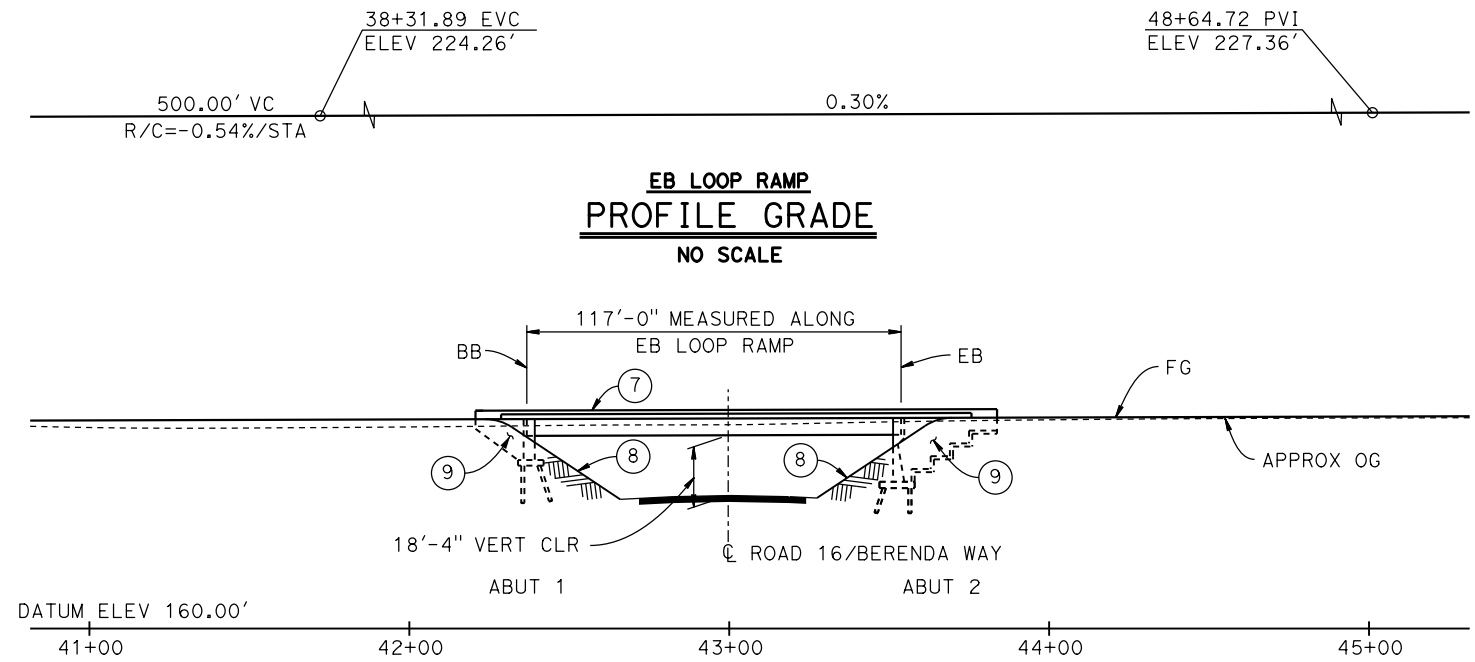
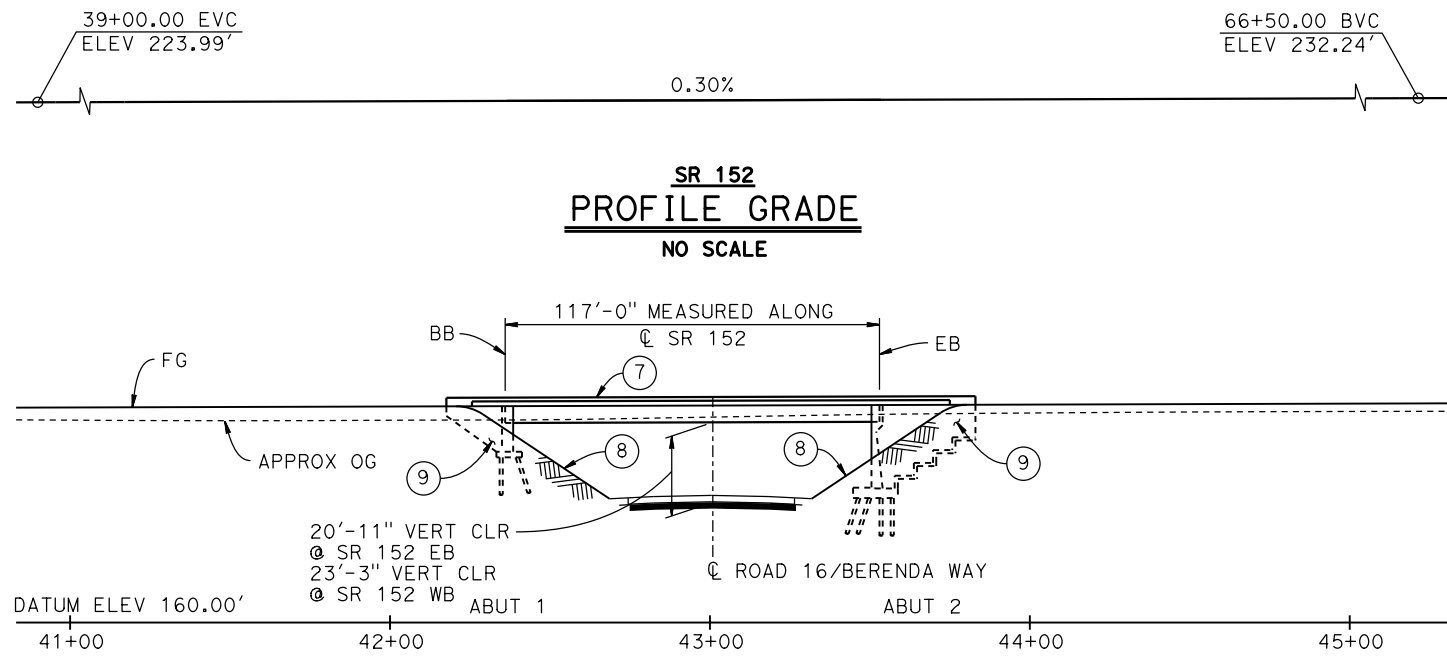
DESIGNED BY  
**M. BRATT**  
DRAWN BY  
**A. M.**  
CHECKED BY  
**K. CHARAN**  
IN CHARGE  
**C. LEMLEY**  
DATE  
**08/12/2016**

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**15% DESIGN**  
**SUBMITTAL**  
  
**NOT FOR**  
**CONSTRUCTION**



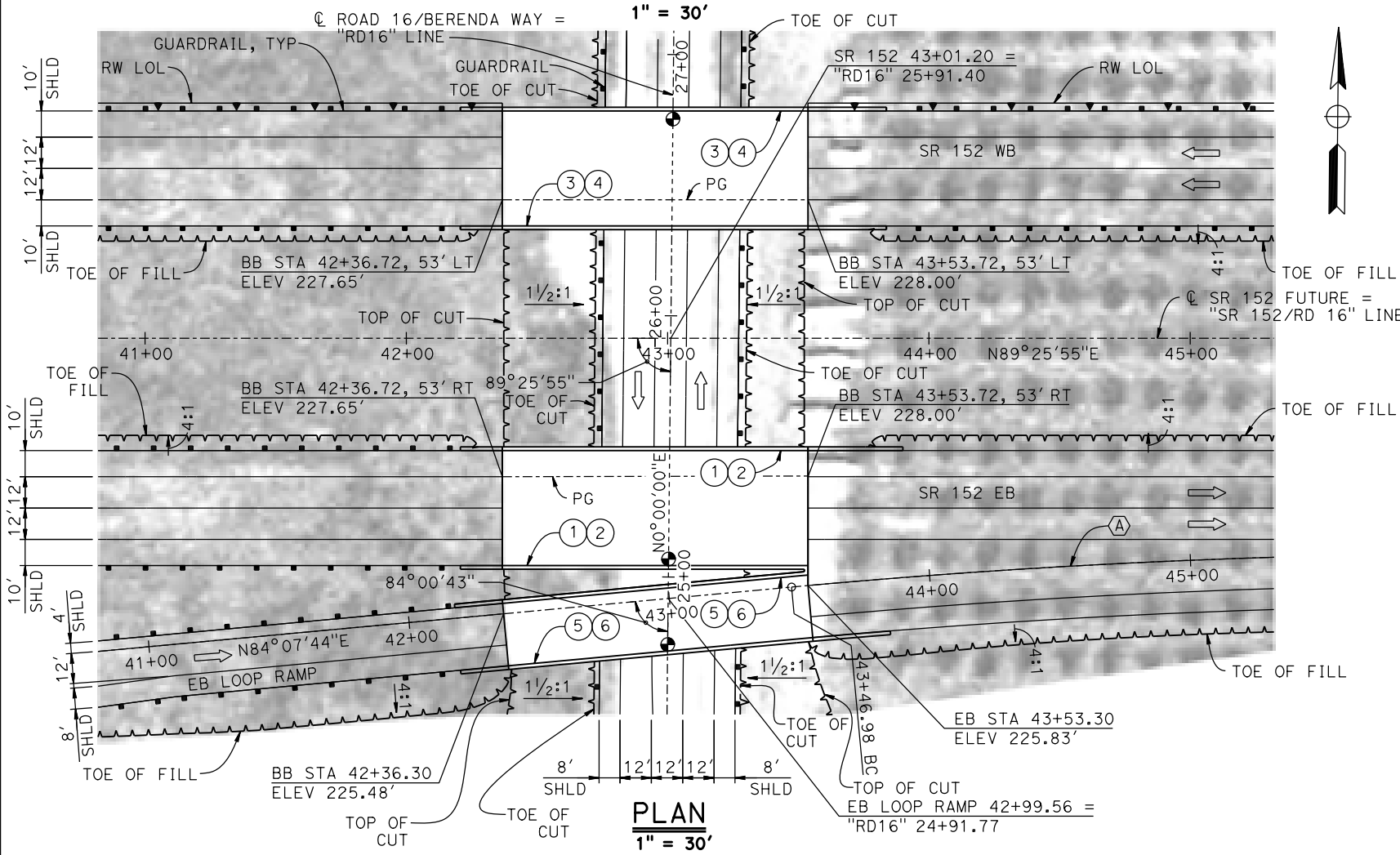
**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO SECTION**  
CENTRAL VALLEY WYE  
SR 152 (NORTH) TO ROAD 11 WYE ALTERNATIVE  
GENERAL PLAN (SJD-FRE)  
BERENDA WAY (ROAD 16) UNDERPASS

CONTRACT NO.  
HSR08-05  
DRAWING NO.  
ST-K1230-D  
SCALE  
AS SHOWN  
SHEET NO.



**SR 152 WB & EB (ROAD 16) UNDERCROSSINGS  
ELEVATION**

**EB LOOP RAMP (ROAD 16) UNDERCROSSING  
DEVELOPED ELEVATION**



**CURVE NO. 231-03 (A)**

R = 3,000.00'  
 $\Delta = 04^\circ 09' 26''$   
 L = 217.68'  
 T = 108.89'

**NOTES:**

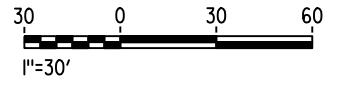
- FOR TYPICAL SECTION SEE DRAWING ST-K3235-D.
- 16"  $\phi$  PIPE PILES ASSUMED AT ABUTMENT FOUNDATIONS. PILE LENGTHS TO BE DETERMINED.
- FOR UTILITY DISPOSITIONS, SEE CIVIL AND GRADE SEPARATION PLANS; DRAWING CV-S1230-D.
- FOR GUARDRAILS, SEE CIVIL AND GRADE SEPARATION PLANS; DRAWING CV-S1230-D.
- FOR RETAINING WALLS, SEE CIVIL AND GRADE SEPARATION PLANS; DRAWING CV-S1230-D.

**LEGEND:**

- INDICATES POINT OF MINIMUM VERTICAL CLEARANCE
- INDICATES DIRECTION OF TRAFFIC
- ① PAINT "SR 152 EB (ROAD 16) UNDERCROSSING"
- ② PAINT "BRIDGE NO. XX-XXXX"
- ③ PAINT "SR 152 WB (ROAD 16) UNDERCROSSING"
- ④ PAINT "BRIDGE NO. XX-XXXX"
- ⑤ PAINT "EB LOOP RAMP (ROAD 16) UNDERCROSSING"
- ⑥ PAINT "BRIDGE NO. XX-XXXX"
- ⑦ CONCRETE BARRIER TYPE 732
- ⑧ SLOPE PAVING (1 1/2 H:1 V)
- ⑨ WINGWALL

**TEMPORARY TRAFFIC OPENINGS**

VEHICULAR TRAFFIC			
1. <u>  </u> TRAFFIC WILL BE DETOURED AWAY FROM THE SITE.			
2. <u>  </u> TRAFFIC WILL PASS UNDER THE STRUCTURE ON:			
ST OR ROAD NAME AND LOCATION		FALSEWORK OPENING REQD (HORIZ x VERT)	
ROAD 16/BERENDA WAY	43+00	52'x16.5'	2-WAY
3. <u>  </u> TEMP TRAFFIC LANE REDUCTION FOR FTG EXC.			



15-AUG-2016 8:33 MF-ST-K1235-D.dgn

REV	DATE	BY	CHK	APP	DESCRIPTION

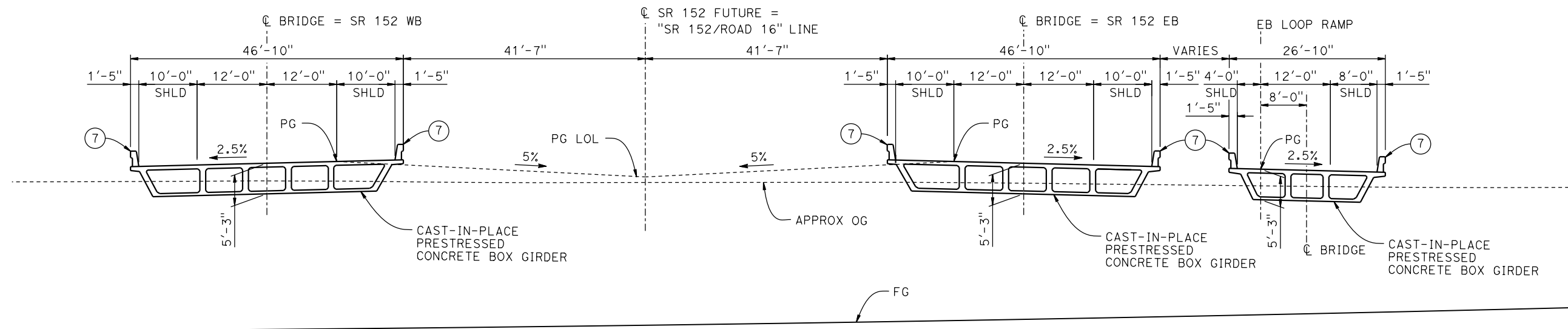
DESIGNED BY  
**M. BRATT**  
 DRAWN BY  
**A. M.**  
 CHECKED BY  
**K. CHARAN**  
 IN CHARGE  
**C. LEMLEY**  
 DATE  
**08/12/2016**

**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**  
  
**NOT FOR**  
**CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO SECTION**  
 CENTRAL VALLEY WYE  
 SR 152 (NORTH) TO ROAD 11 WYE ALTERNATIVE  
 GENERAL PLAN (SJD-FRE)  
 BERENDA WAY (ROAD 16) INTERCHANGE - 1 OF 2

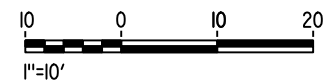
CONTRACT NO.  
HSR08-05  
 DRAWING NO.  
ST-K1235-D  
 SCALE  
AS SHOWN  
 SHEET NO.



**TYPICAL SECTION**  
1" = 10'

**NOTES:**

- FOR NOTES AND LEGEND, SEE DRAWING ST-K1235-D.



15-AUG-2016 8:48 MF-ST-K3235-D.dgn

REV	DATE	BY	CHK	APP	DESCRIPTION

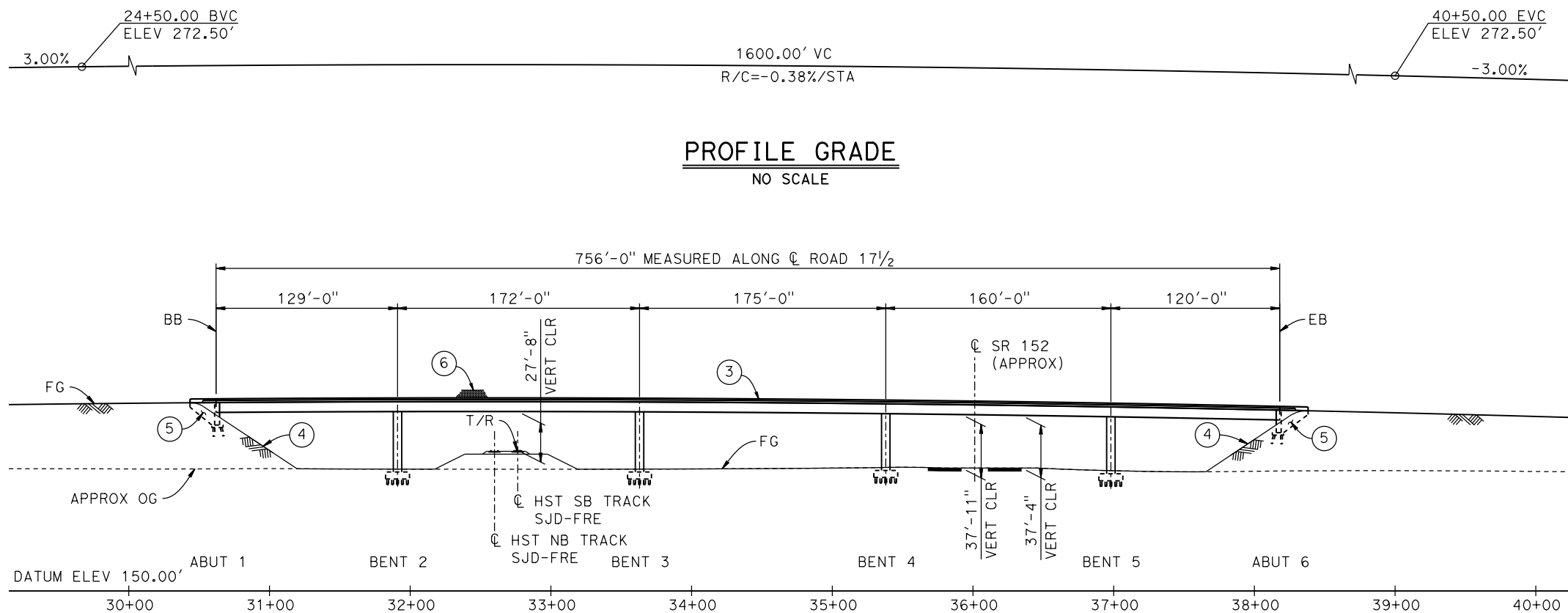
DESIGNED BY  
**M. BRATT**  
DRAWN BY  
**A. M.**  
CHECKED BY  
**K. CHARAN**  
IN CHARGE  
**C. LEMLEY**  
DATE  
**08/12/2016**

**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**  
  
**NOT FOR**  
**CONSTRUCTION**



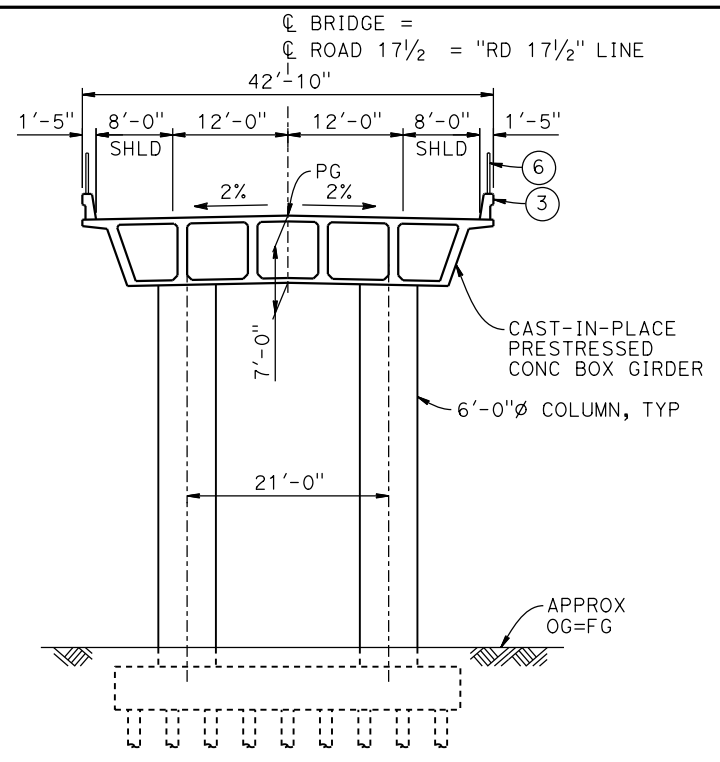
**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO SECTION**  
CENTRAL VALLEY WYE  
SR 152 (NORTH) TO ROAD 11 WYE ALTERNATIVE  
TYPICAL SECTION (SJD-FRE)  
BERENDA WAY (ROAD 16) INTERCHANGE - 2 OF 2

CONTRACT NO.  
HSR08-05  
DRAWING NO.  
ST-K3235-D  
SCALE  
AS SHOWN  
SHEET NO.



**PROFILE GRADE**  
NO SCALE

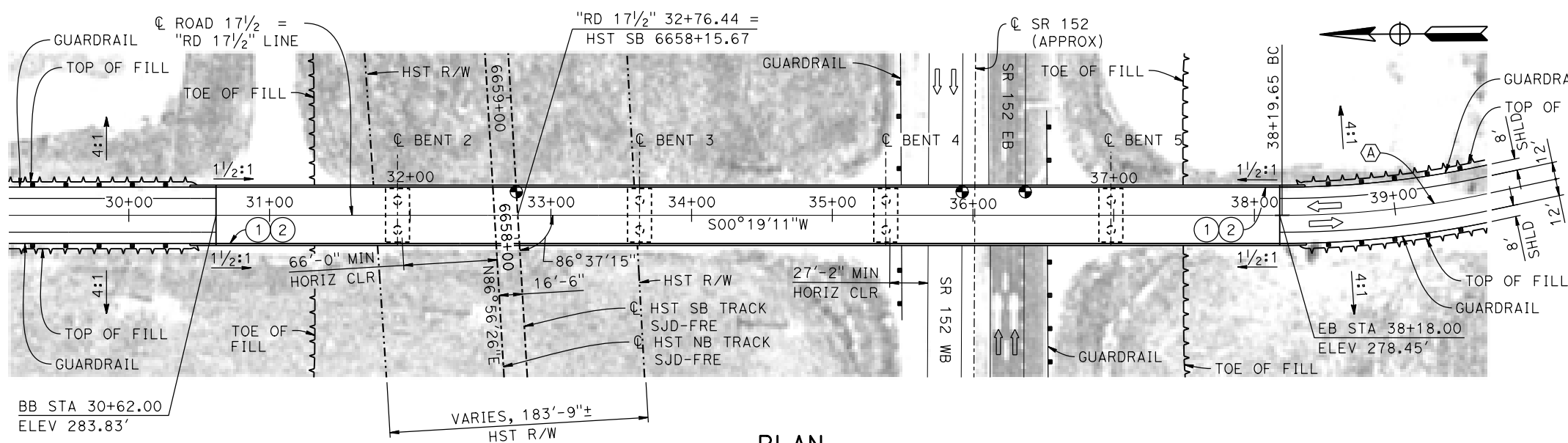
**ELEVATION**  
1"=50'



**TYPICAL SECTION**  
1" = 10'

**TEMPORARY TRAFFIC OPENINGS**

VEHICULAR TRAFFIC	
1. TRAFFIC WILL BE DETOURED AWAY FROM THE SITE.	
2. TRAFFIC WILL PASS UNDER THE STRUCTURE ON:	
ST OR ROAD NAME AND LOCATION	FALSEWORK OPENING REQD (HORIZ X VERT)
SR 152 36+23	40'x16.5' E BND
SR 152 35+80	40'x16.5' W BND
3. TEMP TRAFFIC LANE REDUCTION FOR FTG EXC.	



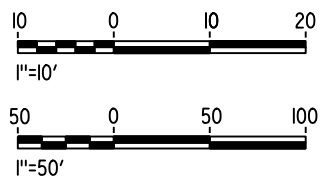
**PLAN**  
1"=50'

- LEGEND:**
- INDICATES POINT OF MINIMUM VERTICAL CLEARANCE
  - ➔ INDICATES DIRECTION OF TRAFFIC
  - ① PAINT "ROAD 17 1/2 OVERHEAD"
  - ② PAINT "BRIDGE NO. XX-XXXX"
  - ③ CONCRETE BARRIER TYPE 736 MOD
  - ④ SLOPE PAVING (1 1/2 H:1 V)
  - ⑤ WINGWALL
  - ⑥ AR FENCE WITH SOLID PLATE

**CURVE NO. 240-01 (A)**  
R = 700.00'  
Δ = 135° 19' 11"  
L = 1,653.24'  
T = 1,703.38'

**NOTES:**

1. 16" Ø PIPE PILES ASSUMED AT ABUTMENT AND BENT FOUNDATIONS. PILE LENGTHS TO BE DETERMINED.
2. FOR UTILITY DISPOSITIONS, SEE CIVIL AND GRADE SEPARATION PLANS; DRAWING CV-S1240-D.
3. FOR GUARDRAILS, SEE CIVIL AND GRADE SEPARATION PLANS; DRAWING CV-S1240-D.



15-AUG-2016 8:33 MF-ST-K1240-D.dgn

REV	DATE	BY	CHK	APP	DESCRIPTION

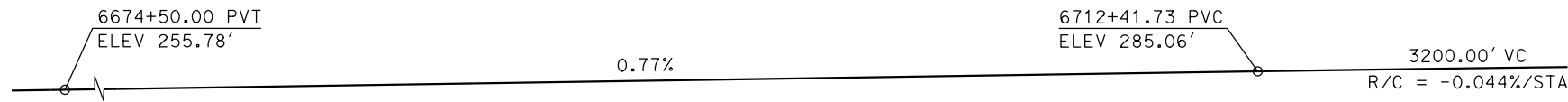
DESIGNED BY  
**M. BRATT**  
DRAWN BY  
**A. M.**  
CHECKED BY  
**K. CHARAN**  
IN CHARGE  
**C. LEMLEY**  
DATE  
**08/12/2016**

**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**  
  
**NOT FOR**  
**CONSTRUCTION**

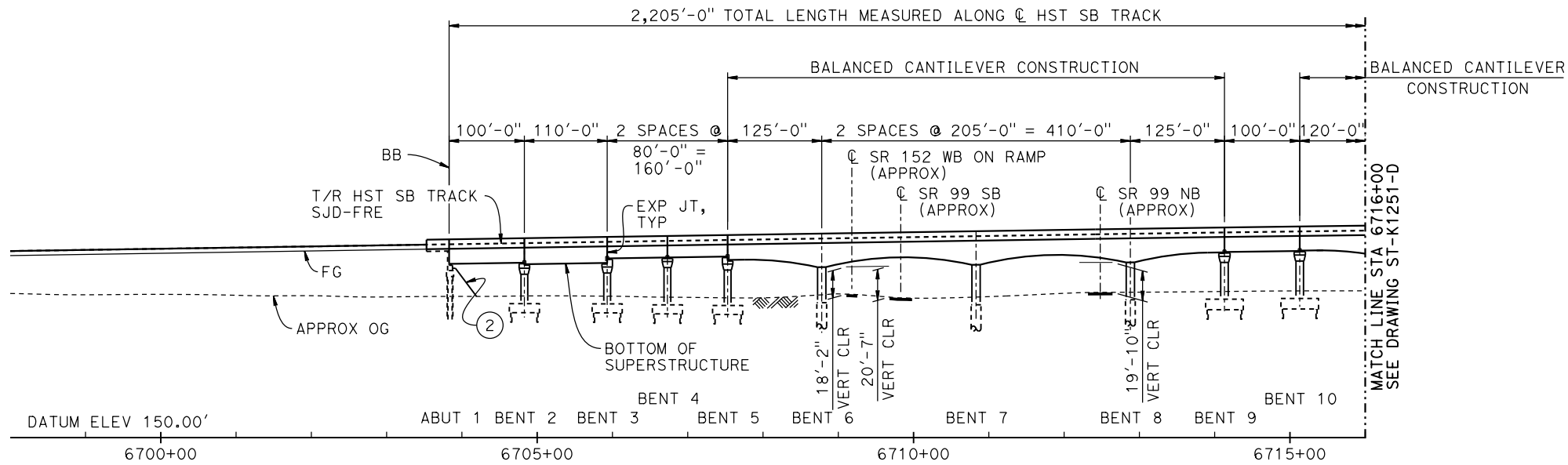


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO SECTION**  
CENTRAL VALLEY WYE  
SR 152 (NORTH) TO ROAD 11 WYE ALTERNATIVE  
GENERAL PLAN (SJD-FRE)  
ROAD 17 1/2 OVERHEAD

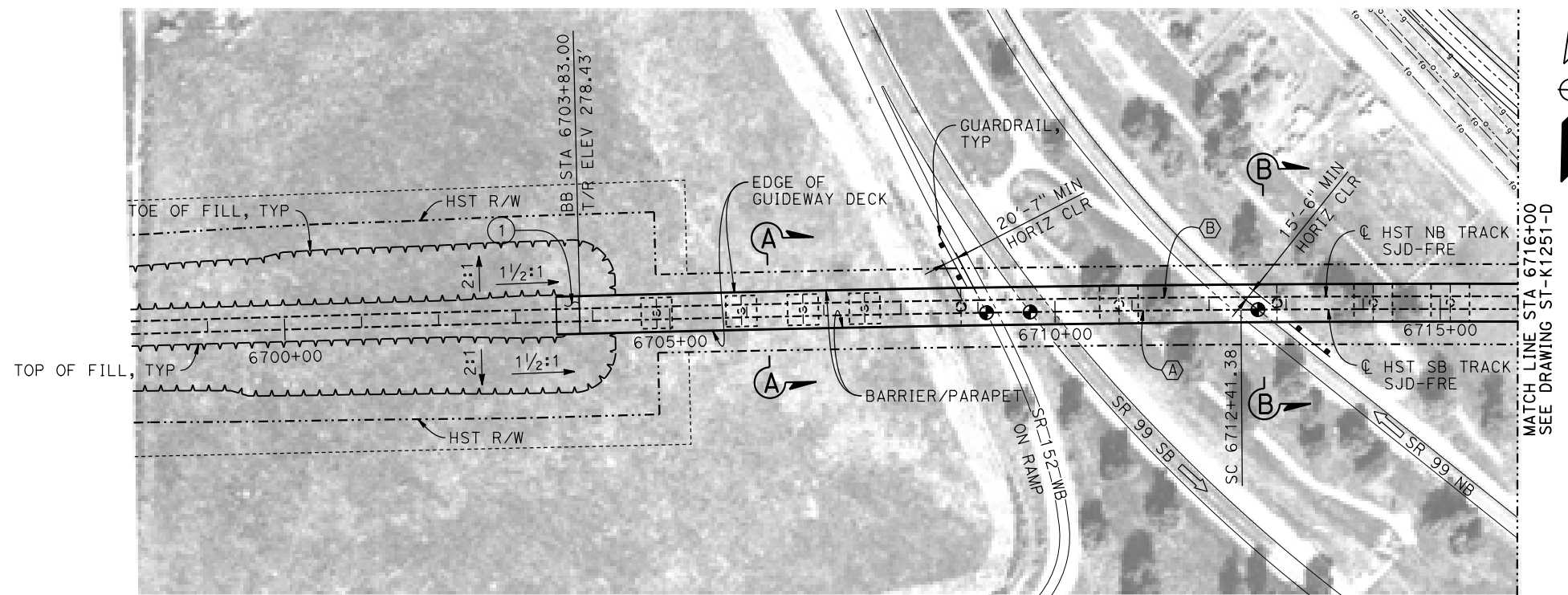
CONTRACT NO.  
HSR08-05  
DRAWING NO.  
ST-K1240-D  
SCALE  
AS SHOWN  
SHEET NO.



**TOP OF RAIL PROFILE (☉ HST SB TRACK SJD-FRE)**  
NO SCALE



**DEVELOPED ELEVATION**  
VERT: 1" = 50' HORIZ: 1" = 100'



**PLAN**  
1" = 100'

**TEMPORARY TRAFFIC OPENINGS**

VEHICULAR TRAFFIC			
1. TRAFFIC WILL BE DETOURED AWAY FROM THE SITE.			
2. X TRAFFIC WILL PASS UNDER THE STRUCTURE ON:			
ST OR ROAD NAME AND LOCATION		FALSEWORK OPENING REQD (HORIZ X VERT)	
SR 152 SB ON RAMP	6709+18	25'X16.5'	S BND
SR 99	6709+83	37'X16.5'	S BND
SR 99	6712+48	37'X16.5'	N BND
FAIRMEAD BLVD	6718+98	32'X16.5'	2-WAY
ROAD 18 3/4	6724+40	32'X16.5'	2-WAY
3. TEMP TRAFFIC LANE REDUCTION FOR FTG EXC.			

**TEMPORARY TRAFFIC OPENINGS**

RAILROAD TRAFFIC		
FALSEWORK OPENING REQUIRED ON:		
NAME OF RR AND LOCATION		FALSEWORK OPENING REQD (HORIZ X VERT)
UPRR	6717+37	24' X 21'

**LEGEND:**

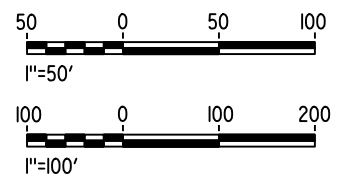
- INDICATES POINT OF MINIMUM VERTICAL CLEARANCE
- ➔ INDICATES DIRECTION OF TRAVEL
- ① STRUCTURE APPROACH
- ② SLOPE PAVING (1 1/2 H:1 V)

**NOTES:**

1. 16" Ø PIPE PILES ASSUMED FOR ABUTMENT AND BENT FOUNDATIONS, UNLESS OTHERWISE NOTED. PILE LENGTHS TO BE DETERMINED.
2. FOR SECTIONS AND BENT COLUMN SCHEDULE, SEE DRAWING ST-K3250-D.
3. ANY EXISTING DIRT ROAD THAT CONFLICTS WITH NEW CONSTRUCTION SHALL BE REALIGNED.
4. FOR UTILITY DISPOSITIONS, SEE CIVIL AND GRADE SEPARATION PLANS; DRAWING CV-S1250-D.
5. FOR GUARDRAILS, SEE CIVIL AND GRADE SEPARATION PLANS; DRAWING CV-S1250-D.

**CURVE SJD-FRE 6 SB (A)**  
R = 38,000.00'  
LS = 1,750.00'

**CURVE SJD-FRE 6 NB (B)**  
R = 38,016.50'  
LS = 1,750.00'



15-AUG-2016 8:34 MF-ST-K1250-D.dgn

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**M. BRATT**  
DRAWN BY  
**A. M.**  
CHECKED BY  
**K. CHARAN**  
IN CHARGE  
**C. LEMLEY**  
DATE  
**08/12/2016**

**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**  
  
**NOT FOR**  
**CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO SECTION**  
CENTRAL VALLEY WYE  
SR 152 (NORTH) TO ROAD 11 WYE ALTERNATIVE  
GENERAL PLAN (SJD-FRE)  
AERIAL #2 - SR 99 / UPRR - 1 OF 3

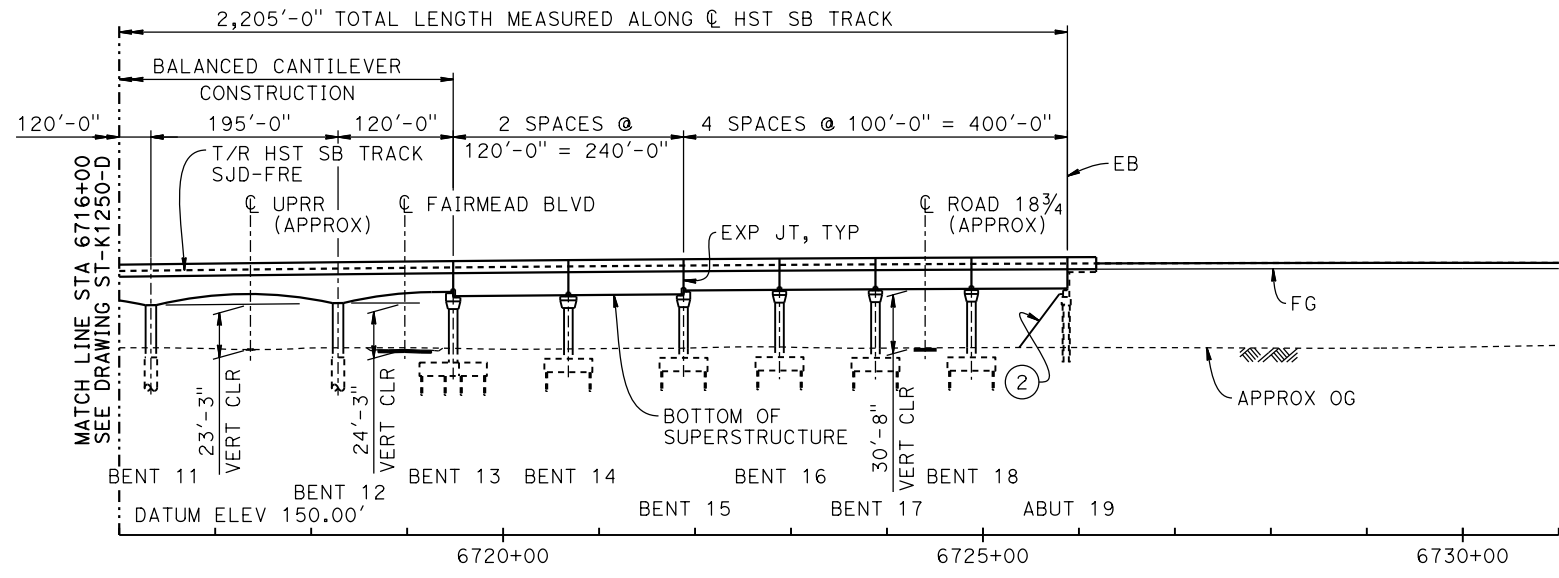
CONTRACT NO.  
HSR08-05  
DRAWING NO.  
ST-K1250-D  
SCALE  
AS SHOWN  
SHEET NO.

6744+41.73 PVT  
ELEV 287.11'  
-0.64%

3200.00' VC  
R/C = -0.044%/STA

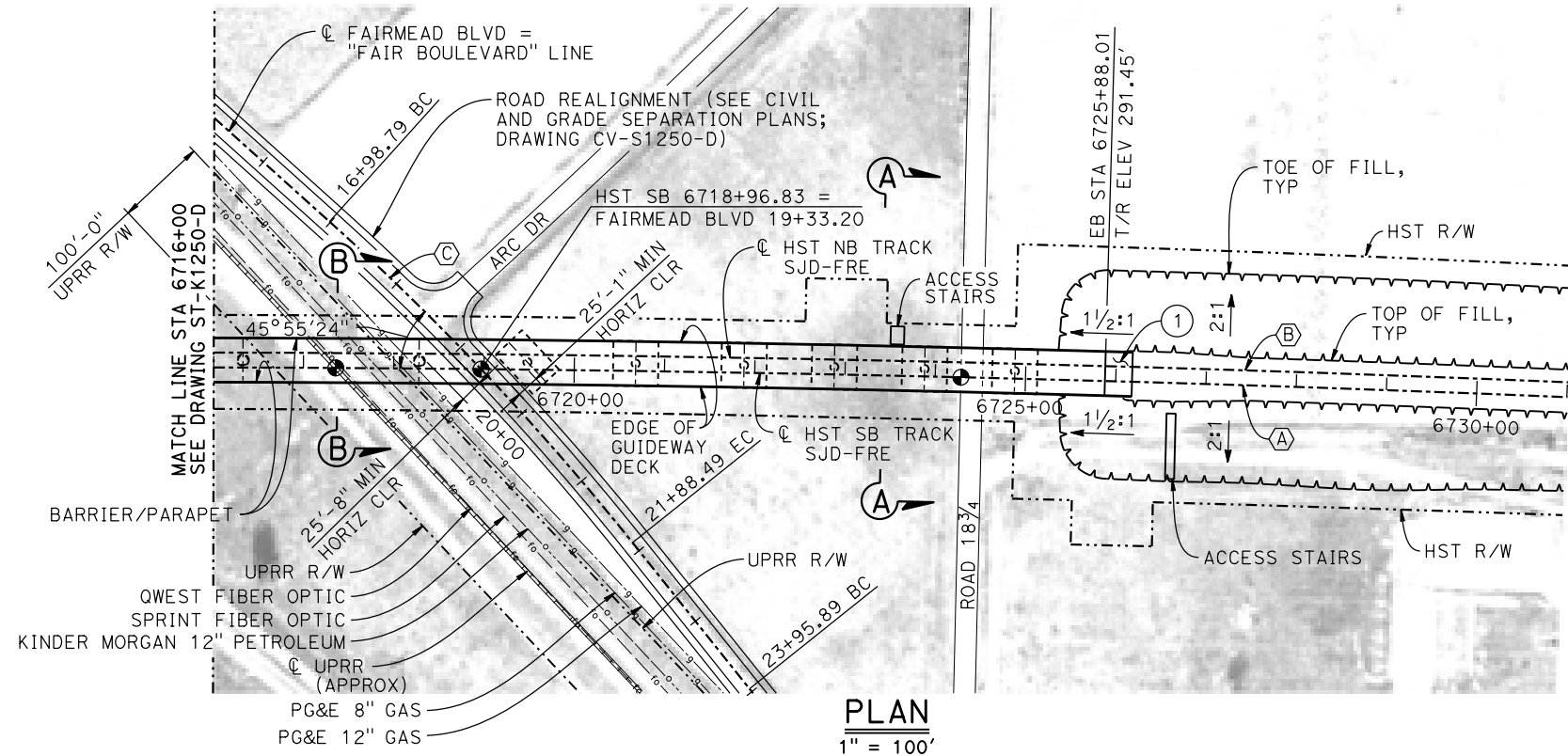
**TOP OF RAIL PROFILE (C HST SB TRACK SJD-FRE)**

NO SCALE



**DEVELOPED ELEVATION**

VERT: 1" = 50' HORIZ: 1" = 100'



**PLAN**

1" = 100'

**CURVE NO. 250-02** C

R = 3,000.00'  
Δ = 9°21'10"  
L = 489.71'  
T = 245.40'

**TEMPORARY TRAFFIC OPENINGS**

VEHICULAR TRAFFIC			
1. _ TRAFFIC WILL BE DETOURED AWAY FROM THE SITE.			
2. X TRAFFIC WILL PASS UNDER THE STRUCTURE ON:			
ST OR ROAD NAME AND LOCATION		FALSEWORK OPENING REQD (HORIZ X VERT)	
SR 152 SB ON RAMP	6709+18	25'X16.5'	S BND
SR 99	6709+83	37'X16.5'	S BND
SR 99	6712+48	37'X16.5'	N BND
FAIRMEAD BLVD	6718+98	32'X16.5'	2-WAY
ROAD 18 3/4	6724+40	32'X16.5'	2-WAY
3. _ TEMP TRAFFIC LANE REDUCTION FOR FTG EXC.			

**TEMPORARY TRAFFIC OPENINGS**

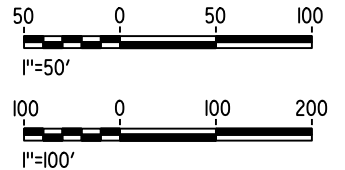
RAILROAD TRAFFIC		
FALSEWORK OPENING REQUIRED ON:		
NAME OF RR AND LOCATION		FALSEWORK OPENING REQD (HORIZ X VERT)
UPRR	6717+37	24' X 21'

**LEGEND:**

- INDICATES POINT OF MINIMUM VERTICAL CLEARANCE
- ➔ INDICATES DIRECTION OF TRAVEL
- ① STRUCTURE APPROACH
- ② SLOPE PAVING (1 1/2H:1V)

**NOTES:**

1. FOR GENERAL NOTES, SEE DRAWING ST-K1250-D.
2. FOR SECTIONS AND BENT COLUMN SCHEDULE, SEE DRAWING ST-K3250-D.



15-AUG-2016 8:34 MF-ST-K1251-D.dgn

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**M. BRATT**

DRAWN BY  
**A. M.**

CHECKED BY  
**K. CHARAN**

IN CHARGE  
**C. LEMLEY**

DATE  
**08/12/2016**

**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**

**NOT FOR**  
**CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO SECTION**

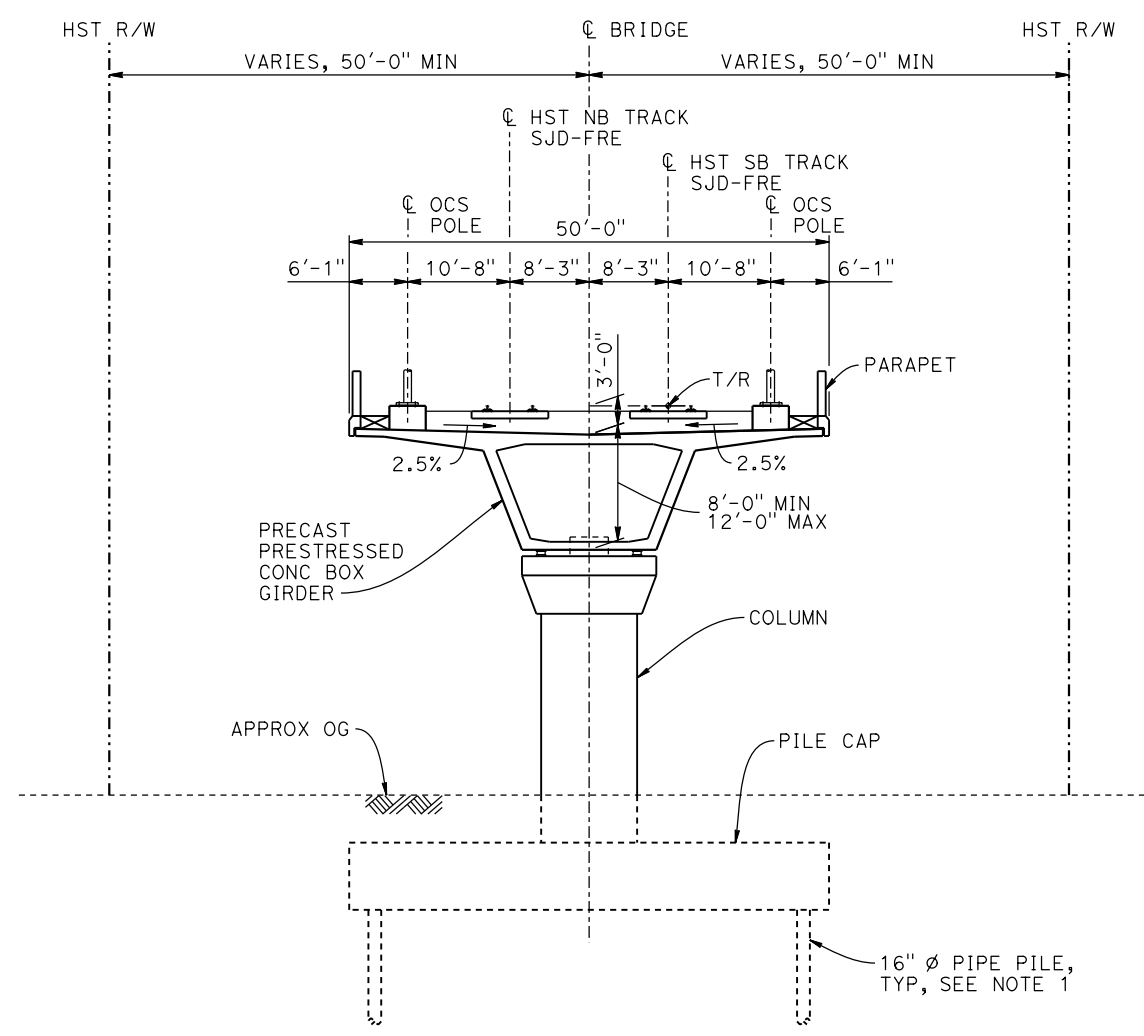
CENTRAL VALLEY WYE  
SR 152 (NORTH) TO ROAD 11 WYE ALTERNATIVE  
GENERAL PLAN (SJD-FRE)  
AERIAL #2 - SR 99 / UPRR - 2 OF 3

CONTRACT NO.  
HSR08-05

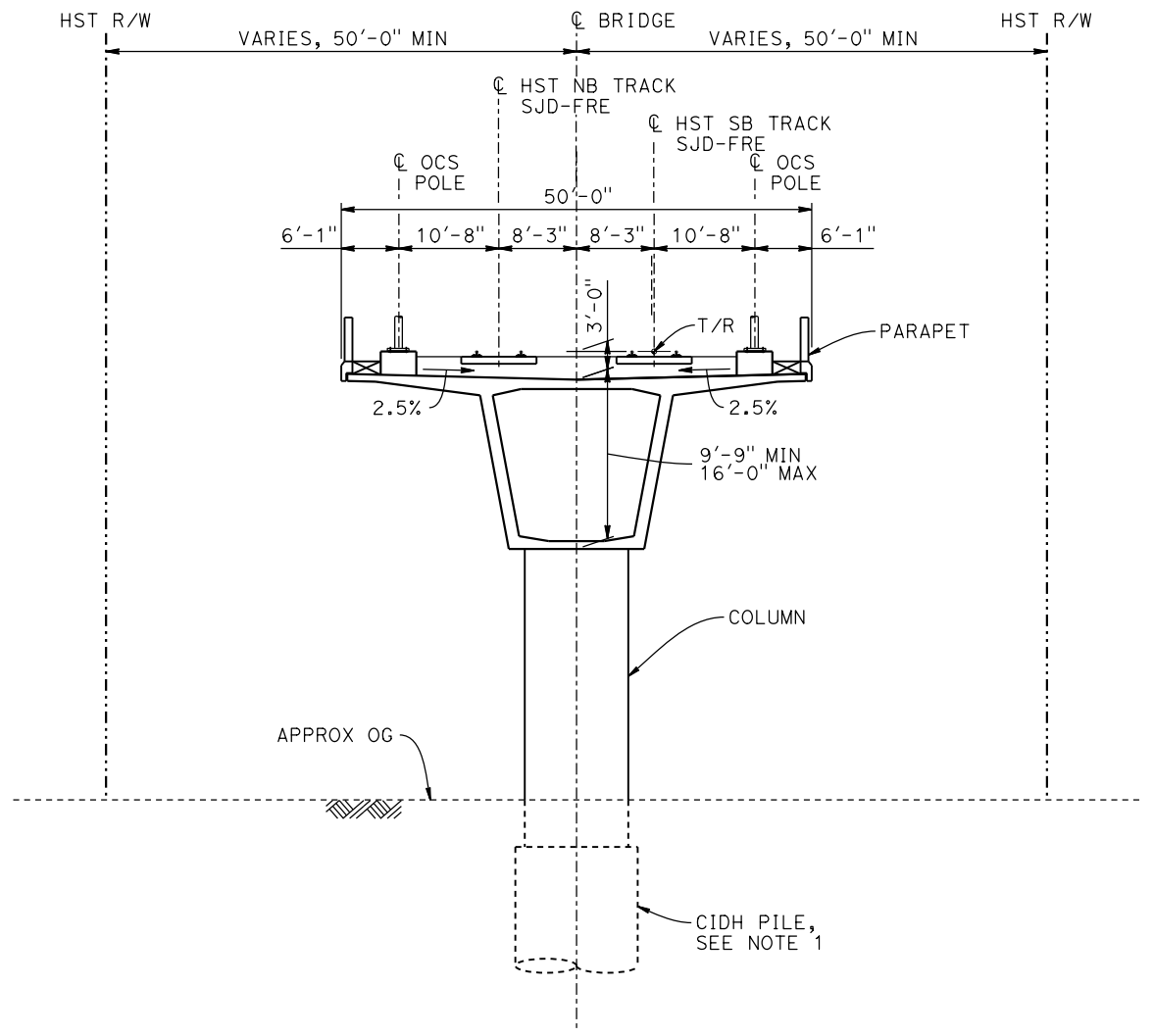
DRAWING NO.  
ST-K1251-D

SCALE  
AS SHOWN

SHEET NO.



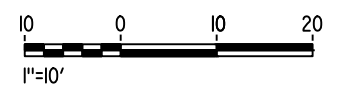
**SECTION A-A**  
1" = 10'



**SECTION B-B**  
1" = 10'

BENT COLUMN SCHEDULE		
BENT	COLUMN TYPE	CIDH TYPE
2 - 5	9'-0" $\phi$	
6	11'-0" $\phi$	13'-0" $\phi$
7	12'-0" $\phi$	
8	11'-0" $\phi$	13'-0" $\phi$
9 - 10	10'-0" $\phi$	
11 - 12	11'-0" $\phi$	13'-0" $\phi$
13 - 18	9'-0" $\phi$	

- NOTES:**
- PILE AND DRILLED SHAFT LENGTHS TO BE DETERMINED.
  - FOR TRACK SUPERELEVATION DETAILS, SEE ALIGNMENT AND TYPICAL SECTION PLANS; DRAWINGS TT-B0051-D AND TT-B0053-D.



15-AUG-2016 8:49 MF-ST-K3250-D.dgn

REV	DATE	BY	CHK	APP	DESCRIPTION

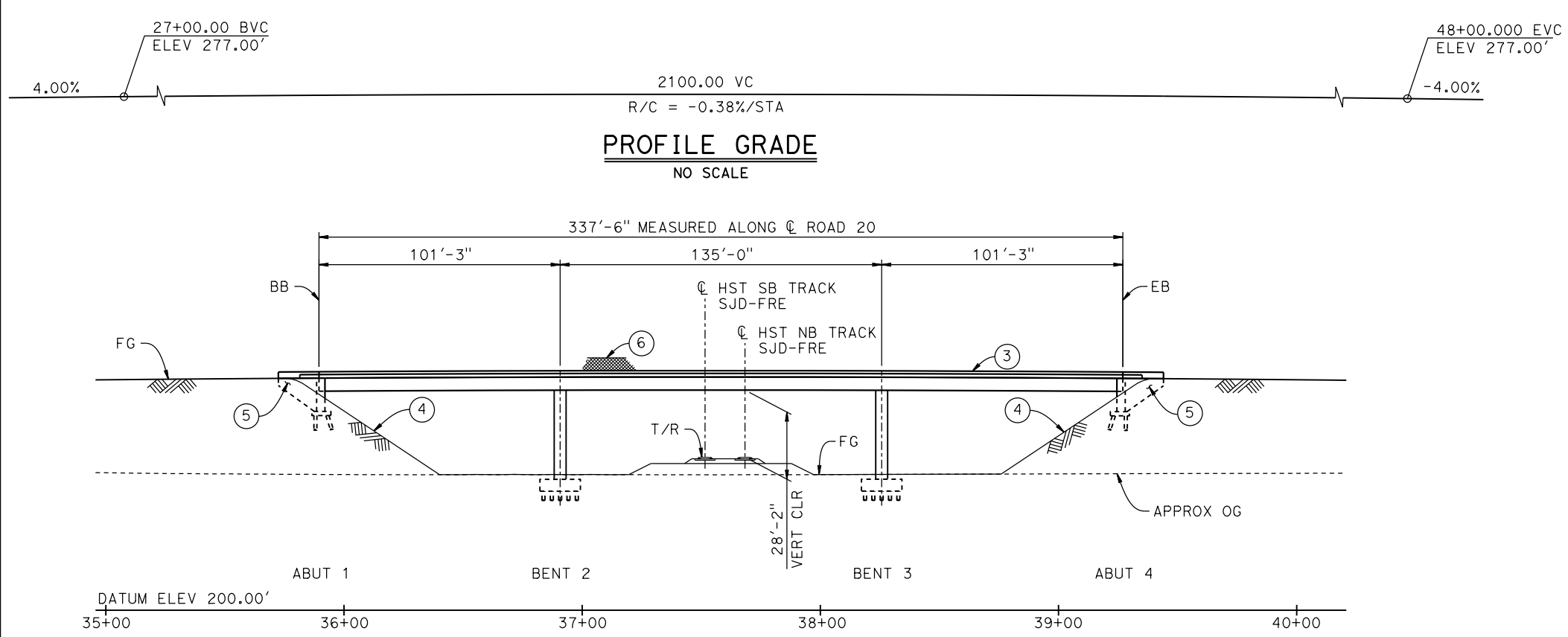
DESIGNED BY  
**M. BRATT**  
DRAWN BY  
**A. M.**  
CHECKED BY  
**K. CHARAN**  
IN CHARGE  
**C. LEMLEY**  
DATE  
**08/12/2016**

**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**  
  
**NOT FOR**  
**CONSTRUCTION**

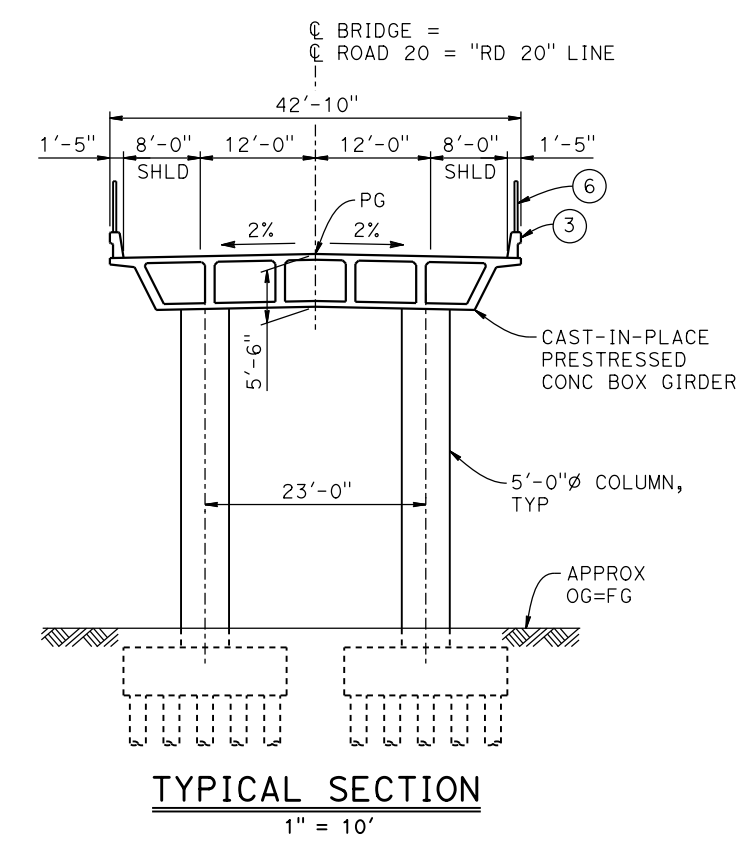


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO SECTION**  
CENTRAL VALLEY WYE  
SR 152 (NORTH) TO ROAD 11 WYE ALTERNATIVE  
TYPICAL SECTIONS (SJD-FRE)  
AERIAL #2 - SR 99 / UPRR - 3 OF 3

CONTRACT NO.  
HSR08-05  
DRAWING NO.  
ST-K3250-D  
SCALE  
AS SHOWN  
SHEET NO.



**ELEVATION**  
1" = 30'



**TYPICAL SECTION**  
1" = 10'

**LEGEND:**

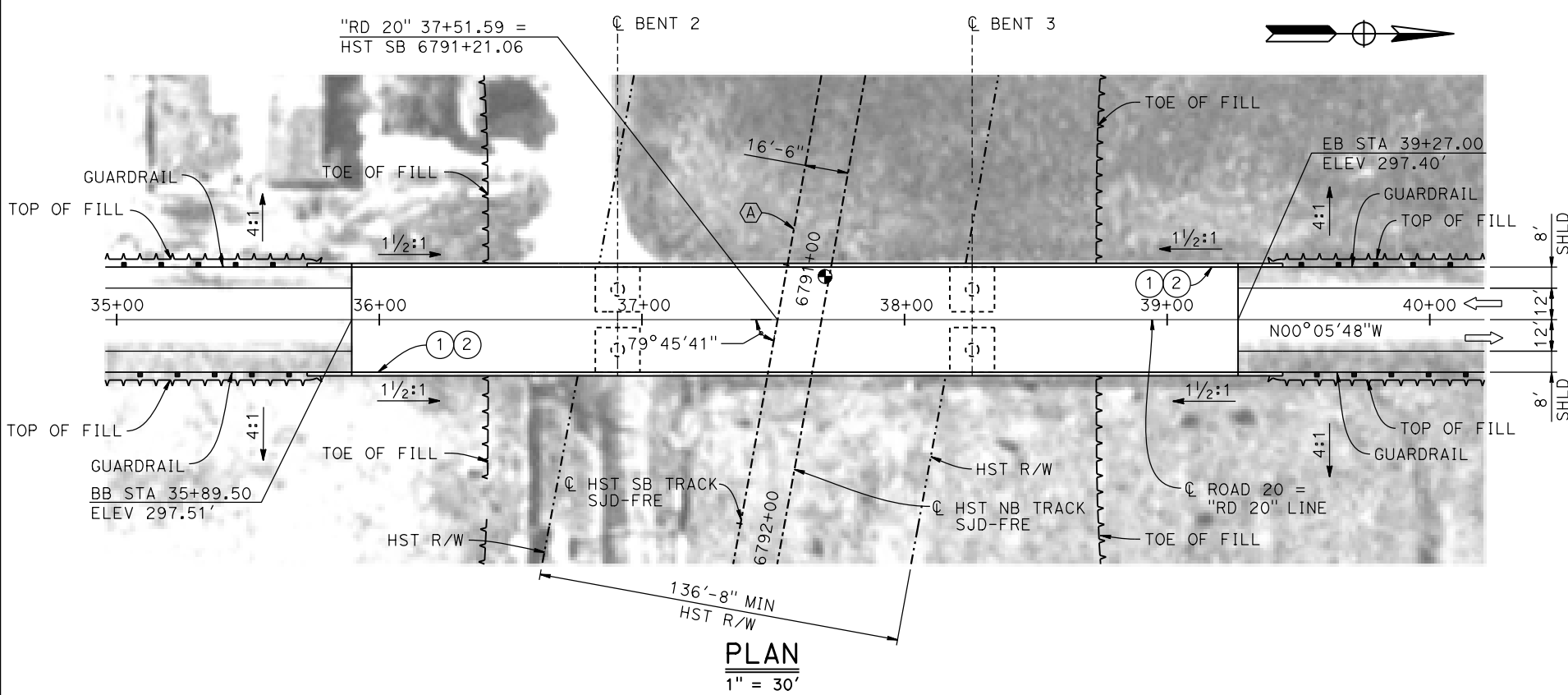
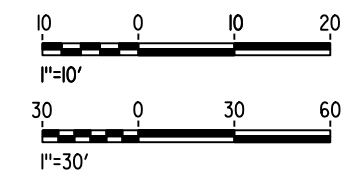
- ⊕ INDICATES POINT OF MINIMUM VERTICAL CLEARANCE
- ⇨ INDICATES DIRECTION OF TRAFFIC
- ① PAINT "ROAD 20 OVERHEAD"
- ② PAINT "BRIDGE NO. XX-XXXX"
- ③ CONCRETE BARRIER TYPE 736 MOD
- ④ SLOPE PAVING (1½H:1V)
- ⑤ WINGWALL
- ⑥ AR FENCE WITH SOLID PLATE

**NOTES:**

1. 16" Ø PIPE PILES ASSUMED AT ABUTMENT AND BENT FOUNDATIONS. PILE LENGTHS TO BE DETERMINED.
2. FOR UTILITY DISPOSITIONS, SEE CIVIL AND GRADE SEPARATION PLANS; SEE DRAWING CV-S1260-D.
3. FOR GUARDRAILS, SEE CIVIL AND GRADE SEPARATION PLANS; SEE DRAWING CV-S1260-D.

**CURVE SJD-FRE 6 SB (A)**

R = 38,000.00'  
LS = 1,750.00'



**PLAN**  
1" = 30'

15-AUG-2016 8:35 MF-ST-K1260-D.dgn

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**M. BRATT**  
DRAWN BY  
**A. M.**  
CHECKED BY  
**K. CHARAN**  
IN CHARGE  
**C. LEMLEY**  
DATE  
**08/12/2016**

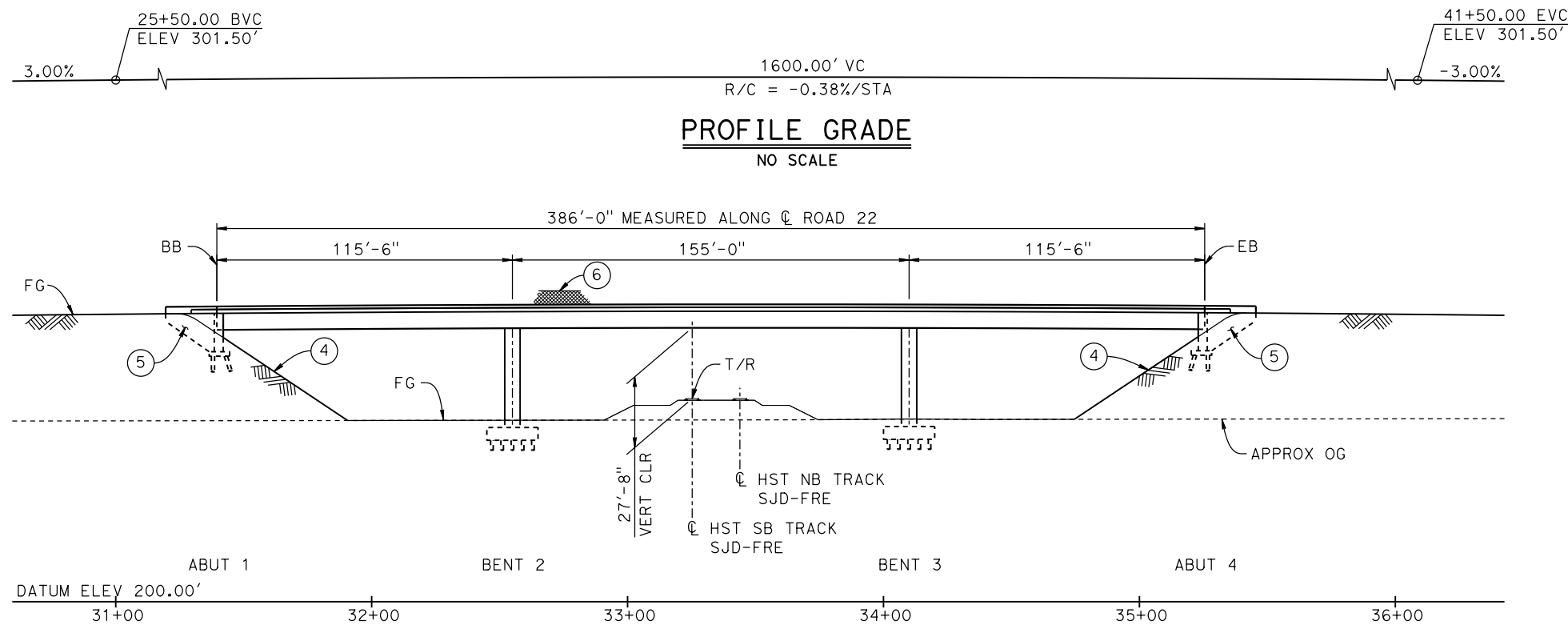
**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**  
  
**NOT FOR**  
**CONSTRUCTION**



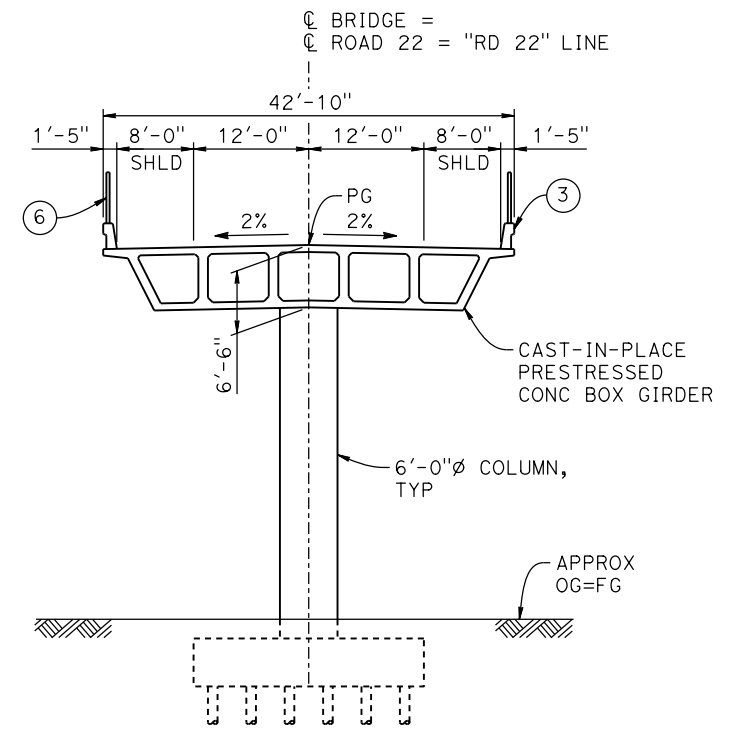
**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO SECTION**  
CENTRAL VALLEY WYE  
SR 152 (NORTH) TO ROAD 11 WYE ALTERNATIVE  
GENERAL PLAN (SJD-FRE)  
ROAD 20 OVERHEAD

CONTRACT NO.  
HSR08-05  
DRAWING NO.  
ST-K1260-D  
SCALE  
AS SHOWN  
SHEET NO.

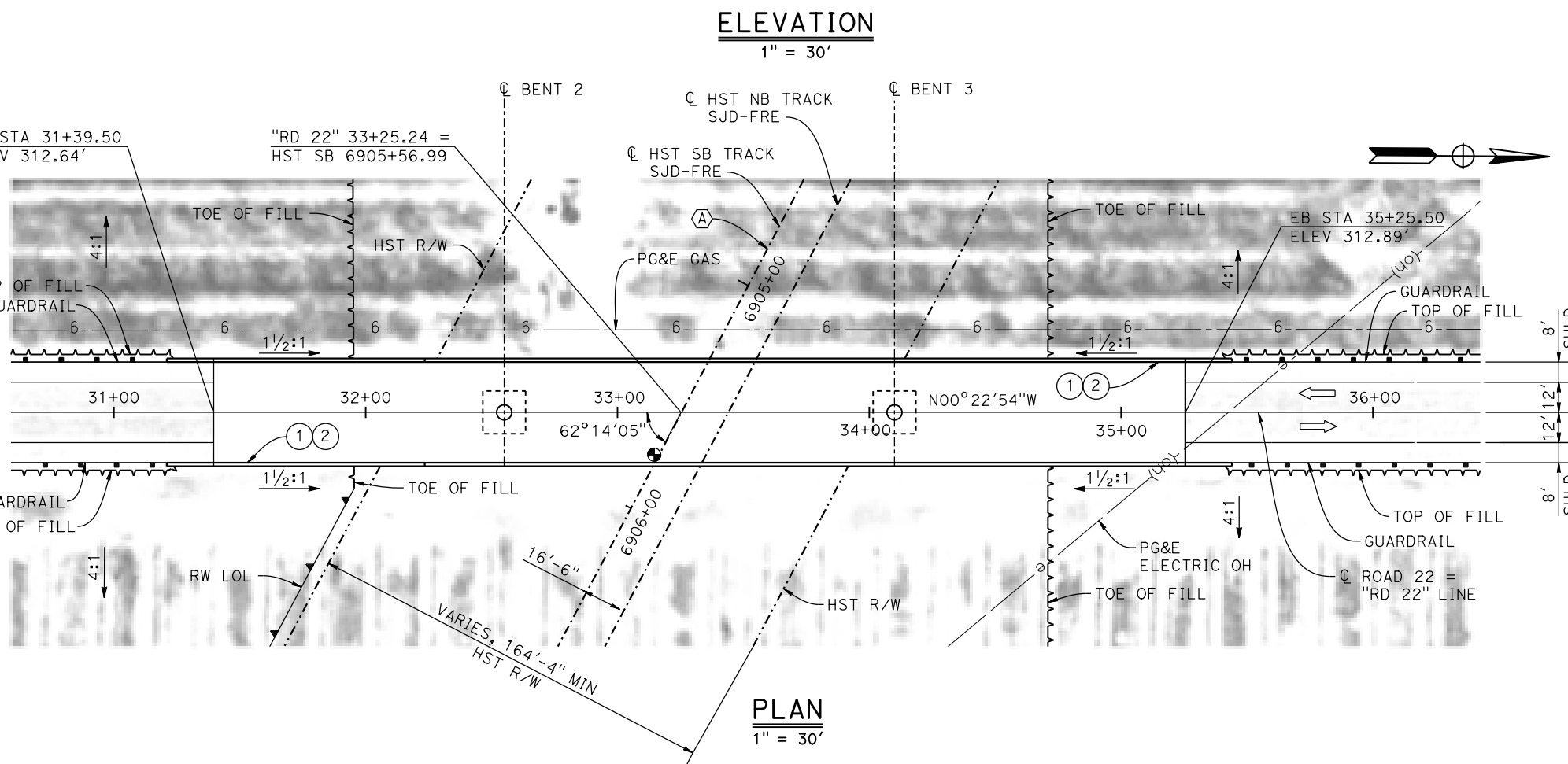




**PROFILE GRADE**  
NO SCALE



**TYPICAL SECTION**  
1" = 10'



**ELEVATION**  
1" = 30'

**PLAN**  
1" = 30'

**LEGEND:**

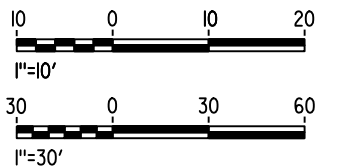
- ⊕ INDICATES POINT OF MINIMUM VERTICAL CLEARANCE
- ⇨ INDICATES DIRECTION OF TRAFFIC
- ① PAINT "ROAD 22 OVERHEAD"
- ② PAINT "BRIDGE NO. XX-XXXX"
- ③ CONCRETE BARRIER TYPE 736 MOD
- ④ SLOPE PAVING (1 1/2H:1V)
- ⑤ WINGWALL
- ⑥ AR FENCE WITH SOLID PLATE

**NOTES:**

1. 16"  $\phi$  PIPE PILES ASSUMED AT ABUTMENT AND BENT FOUNDATIONS. PILE LENGTHS TO BE DETERMINED.
2. FOR UTILITY DISPOSITIONS, SEE CIVIL AND GRADE SEPARATION PLANS; SEE DRAWING CV-S1280-D.
3. FOR GUARDRAILS, SEE CIVIL AND GRADE SEPARATION PLANS; SEE DRAWING CV-S1280-D.
4. FOR RETAINING WALLS, SEE CIVIL AND GRADE SEPARATION PLANS; DRAWING CV-R1280-D.

**CURVE SJD-FRE 6 SB (A)**

R = 38,000.00'  
LS = 1,750.00'



15-AUG-2016 8:35 MF-ST-K1280-D.dgn

REV	DATE	BY	CHK	APP	DESCRIPTION

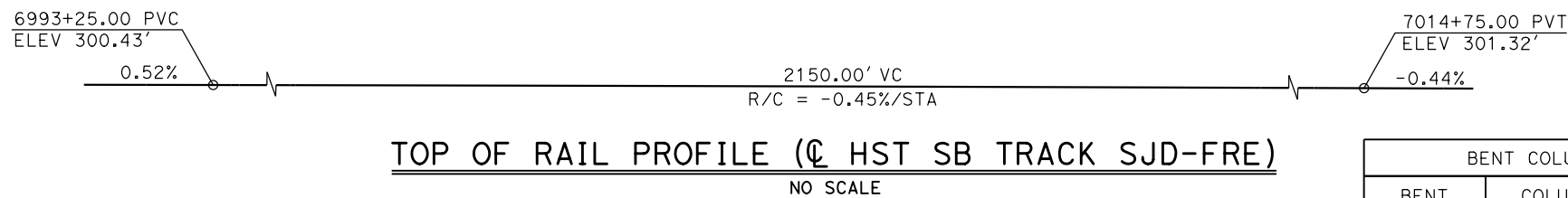
DESIGNED BY  
**M. BRATT**  
DRAWN BY  
**A. M.**  
CHECKED BY  
**K. CHARAN**  
IN CHARGE  
**C. LEMLEY**  
DATE  
**08/12/2016**

**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**  
  
**NOT FOR**  
**CONSTRUCTION**

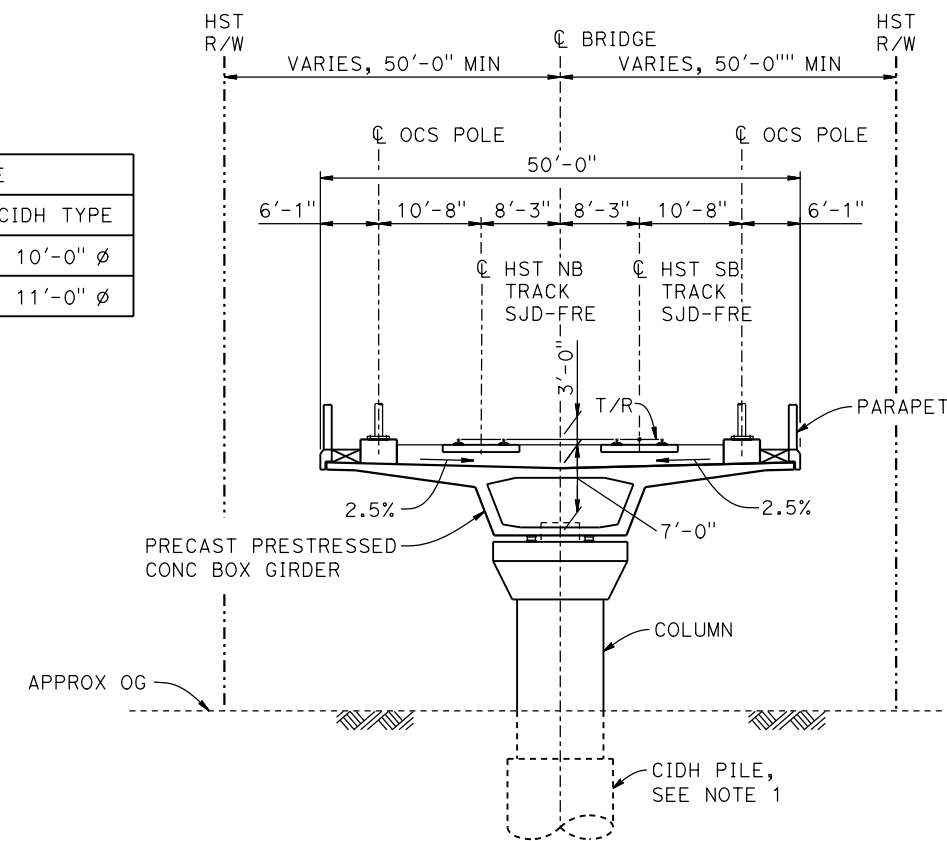
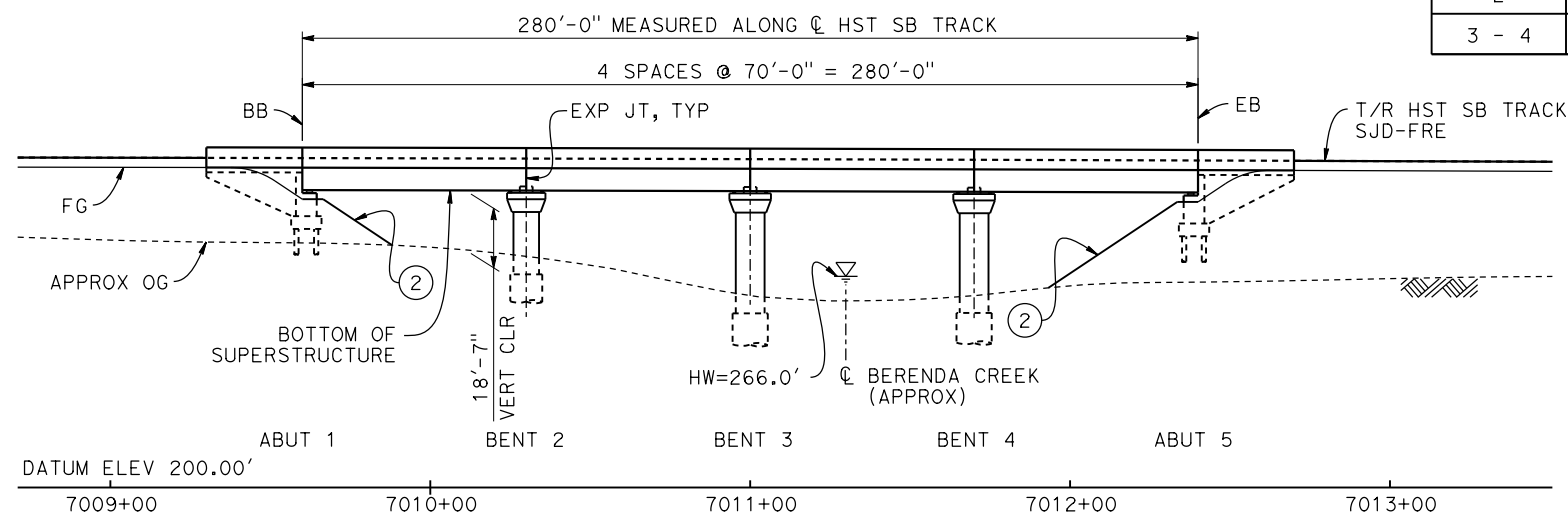


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO SECTION**  
CENTRAL VALLEY WYE  
SR 152 (NORTH) TO ROAD 11 WYE ALTERNATIVE  
GENERAL PLAN (SJD-FRE)  
ROAD 22 OVERHEAD

CONTRACT NO.  
HSR08-05  
DRAWING NO.  
ST-K1280-D  
SCALE  
AS SHOWN  
SHEET NO.



BENT COLUMN SCHEDULE		
BENT	COLUMN TYPE	CIDH TYPE
2	8'-0" $\phi$	10'-0" $\phi$
3 - 4	9'-0" $\phi$	11'-0" $\phi$



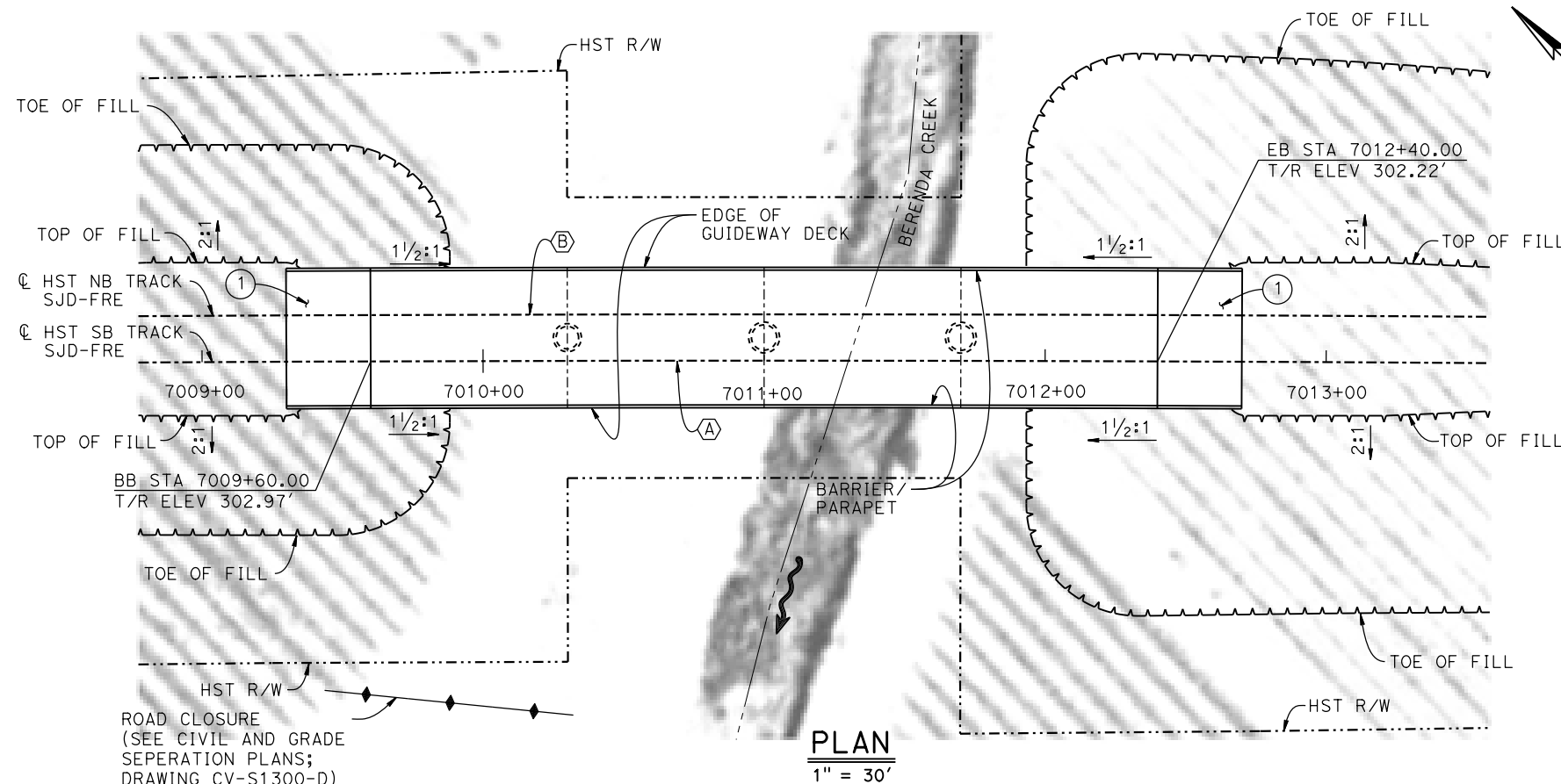
**TYPICAL SECTION**  
1" = 10'

**LEGEND:**

- INDICATES DIRECTION OF FLOW
- ① STRUCTURE APPROACH
- ② SLOPE PAVING (1 1/2 H:1 V)

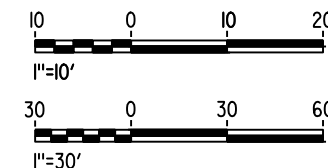
**NOTES:**

1. 16"  $\phi$  PIPE PILES ASSUMED FOR ABUTMENT FOUNDATIONS. PILE AND DRILLED SHAFT LENGTHS TO BE DETERMINED.
2. FOR UTILITY DISPOSITIONS, SEE CIVIL AND GRADE SEPARATION PLANS; DRAWINGS CV-S1300-D.
3. ANY EXISTING DIRT ROAD THAT CONFLICTS WITH NEW CONSTRUCTION SHALL BE REALIGNED.
4. FOR TRACK SUPERELEVATION, SEE ALIGNMENT AND TYPICAL SECTION PLANS; DRAWINGS TT-B0051-D AND TT-B0053-D.



**CURVE SJD-FRE 6 SB (A)**  
R = 38,000.00'  
LS = 1,750.00'

**CURVE SJD-FRE 6 NB (B)**  
R = 38,016.50'  
LS = 1,750.00'



15-AUG-2016 8:35 MF-ST-K1300-D.dgn

REV	DATE	BY	CHK	APP	DESCRIPTION

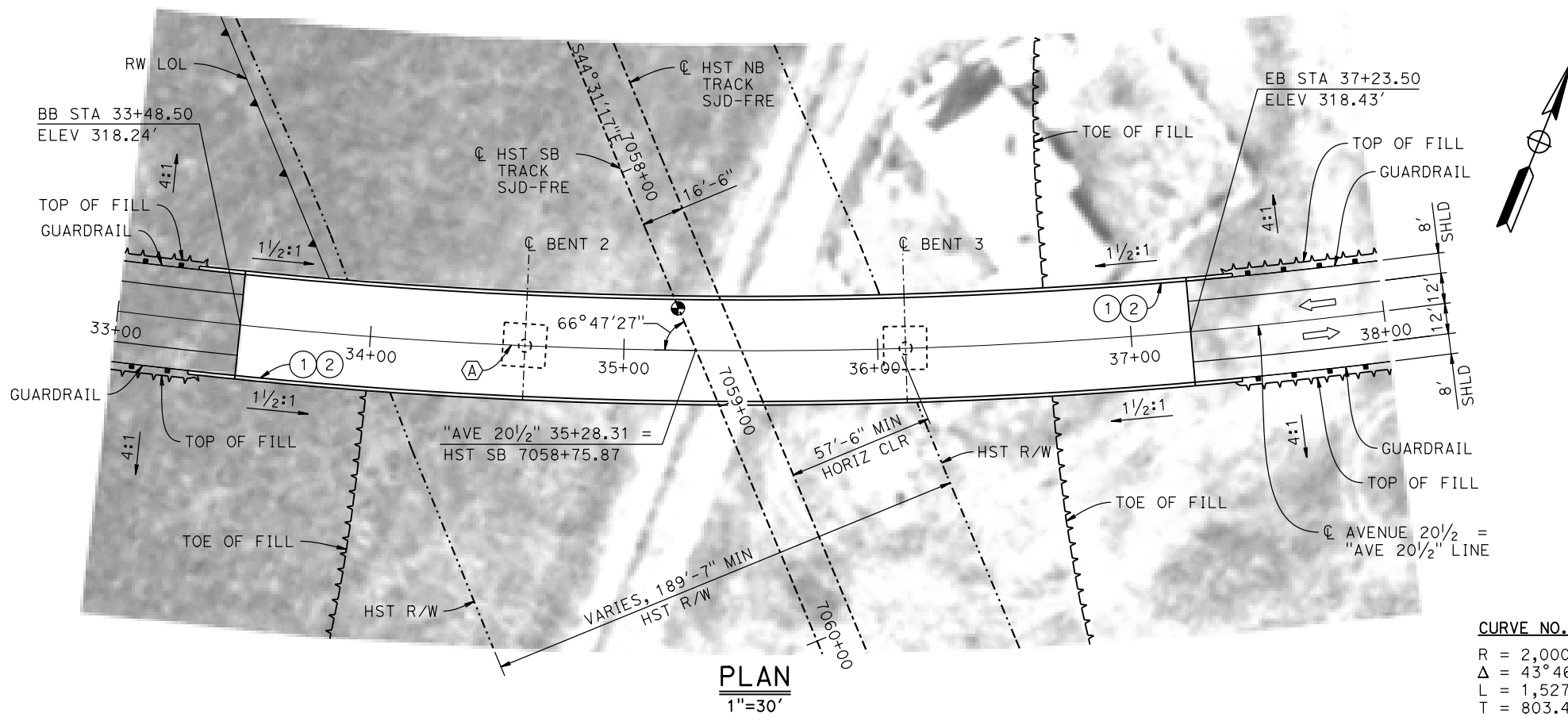
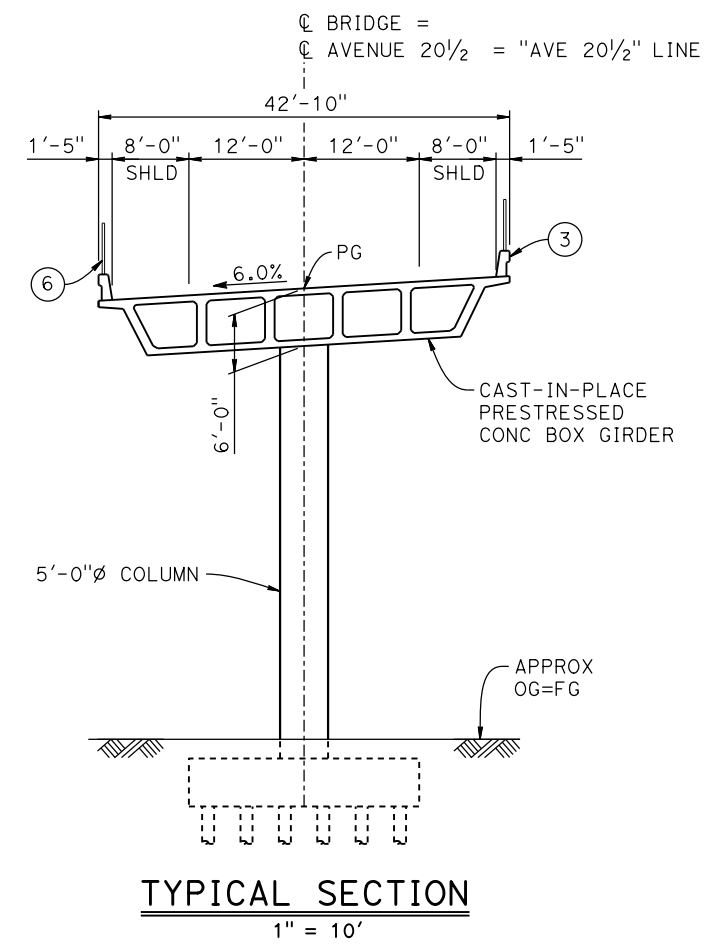
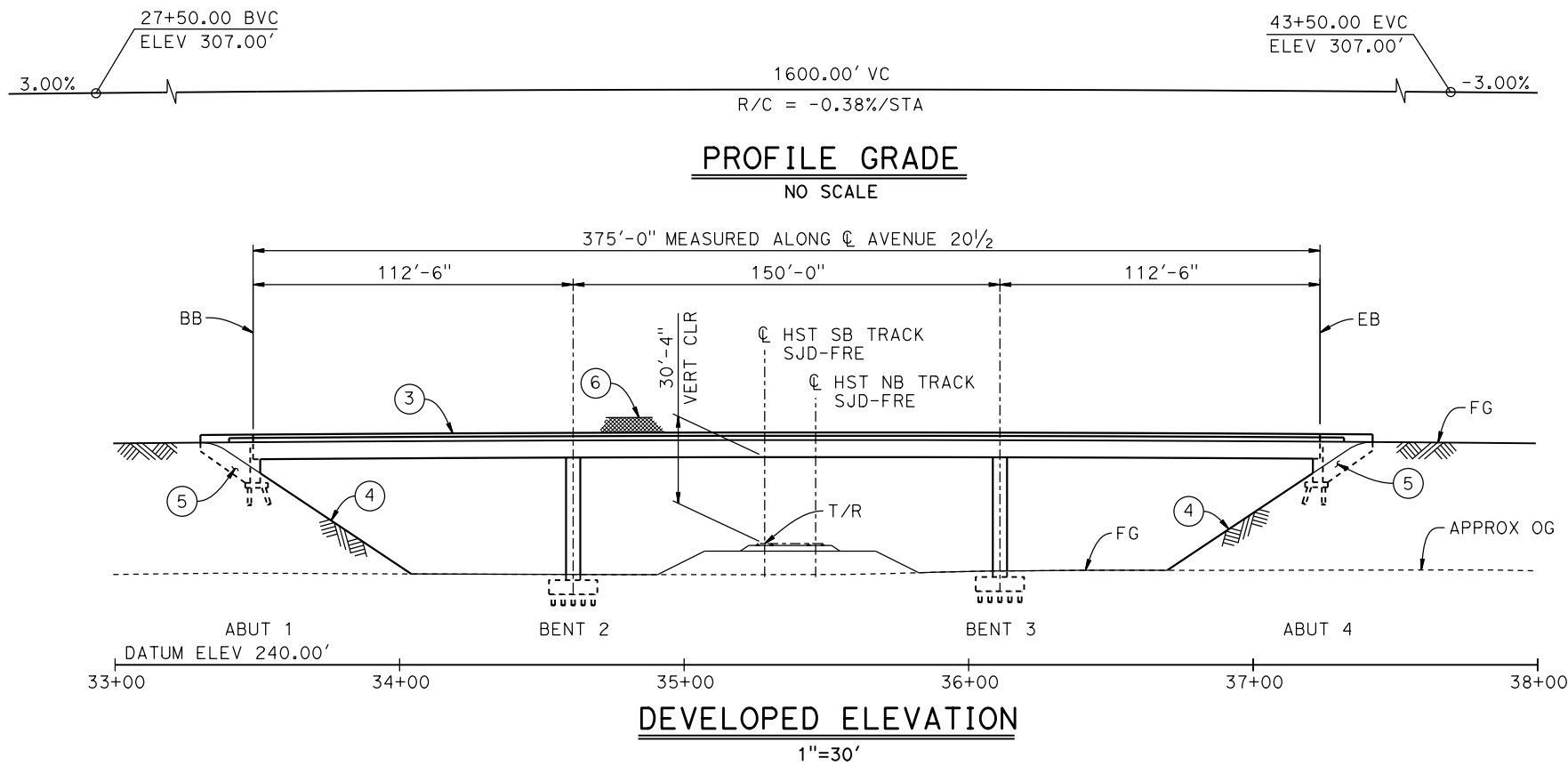
DESIGNED BY  
**M. BRATT**  
DRAWN BY  
**A. M.**  
CHECKED BY  
**K. CHARAN**  
IN CHARGE  
**C. LEMLEY**  
DATE  
**08/12/2016**

**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**  
  
**NOT FOR**  
**CONSTRUCTION**



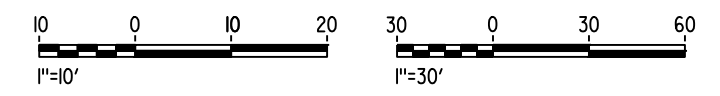
**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO SECTION**  
CENTRAL VALLEY WYE  
SR 152 (NORTH) TO ROAD 11 WYE ALTERNATIVE  
GENERAL PLAN (SJD-FRE)  
BERENDA CREEK BRIDGE

CONTRACT NO.  
HSR08-05  
DRAWING NO.  
ST-K1300-D  
SCALE  
AS SHOWN  
SHEET NO.



**CURVE NO. 310-01 (A)**  
R = 2,000.00'  
 $\Delta$  = 43°46'18"  
L = 1,527.92'  
T = 803.42'

- LEGEND:**
- ⊕ INDICATES POINT OF MINIMUM VERTICAL CLEARANCE
  - ⇨ INDICATES DIRECTION OF TRAFFIC
  - ① PAINT "AVENUE 20 $\frac{1}{2}$  OVERHEAD"
  - ② PAINT "BRIDGE NO. XX-XXXX"
  - ③ CONCRETE BARRIER TYPE 736 MOD
  - ④ SLOPE PAVING (1/2H:1V)
  - ⑤ WINGWALL
  - ⑥ AR FENCE WITH SOLID PLATE
- NOTES:**
1. 16"  $\phi$  PILES ASSUMED AT ABUTMENT AND BENT FOUNDATIONS. PILE LENGTHS TO BE DETERMINED.
  2. FOR UTILITY DISPOSITIONS, SEE CIVIL AND GRADE SEPARATION PLANS; DRAWING CV-S1310-D.
  3. FOR GUARDRAILS, SEE CIVIL AND GRADE SEPARATION PLANS; DRAWING CV-S1310-D.
  4. FOR RETAINING WALLS, SEE CIVIL AND GRADE SEPARATION PLANS; DRAWING CV-R1313-D.



15-AUG-2016 8:36 MF-ST-K1310-D.dgn

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**M. BRATT**

DRAWN BY  
**A. M.**

CHECKED BY  
**K. CHARAN**

IN CHARGE  
**C. LEMLEY**

DATE  
**08/12/2016**

**RECORD SET**  
15% DESIGN  
SUBMITTAL

**NOT FOR  
CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO SECTION**

CENTRAL VALLEY WYE  
SR 152 (NORTH) TO ROAD 11 WYE ALTERNATIVE  
GENERAL PLAN (SJD-FRE)  
AVENUE 20 $\frac{1}{2}$  OVERHEAD

CONTRACT NO.  
HSR08-05

DRAWING NO.  
ST-K1310-D

SCALE  
AS SHOWN

SHEET NO.

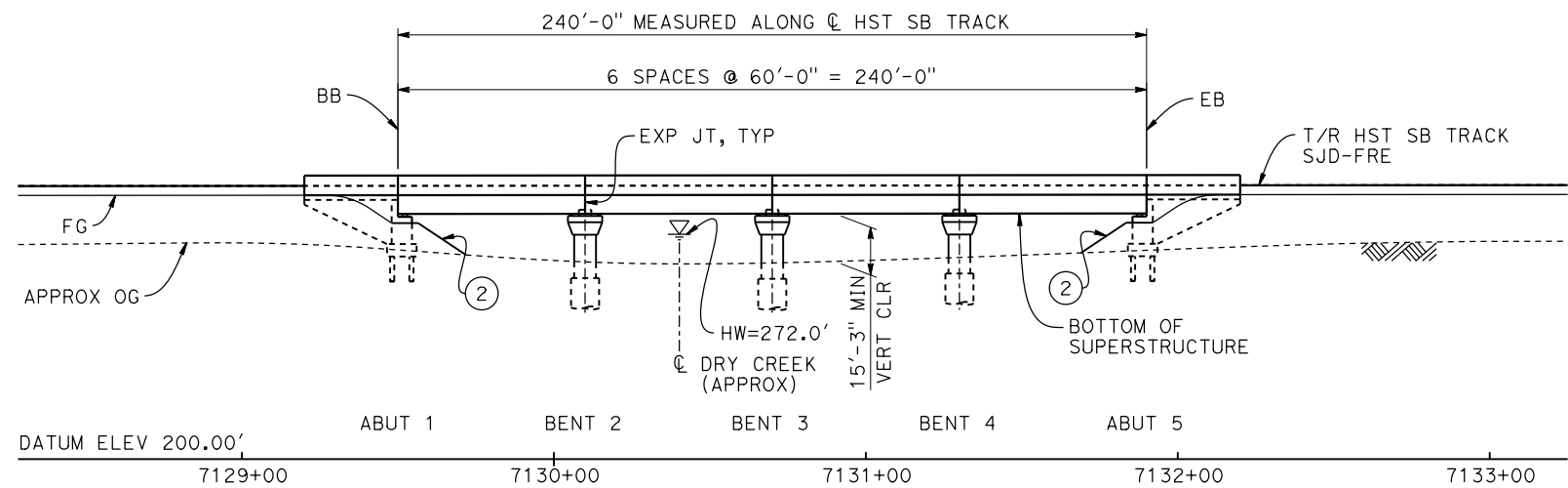
7062+80.00 PVT  
ELEV 283.37'

0.06%

7141+91.00 PVC  
ELEV 288.30'

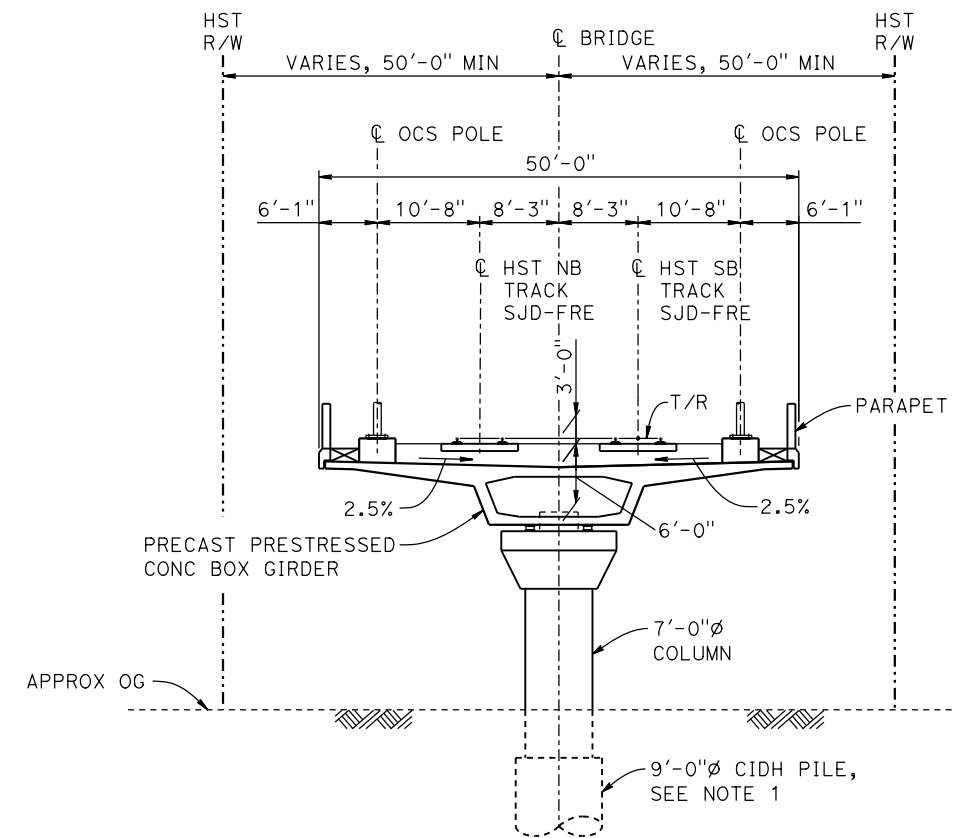
**TOP OF RAIL PROFILE (C HST SB TRACK SJD-FRE)**

NO SCALE



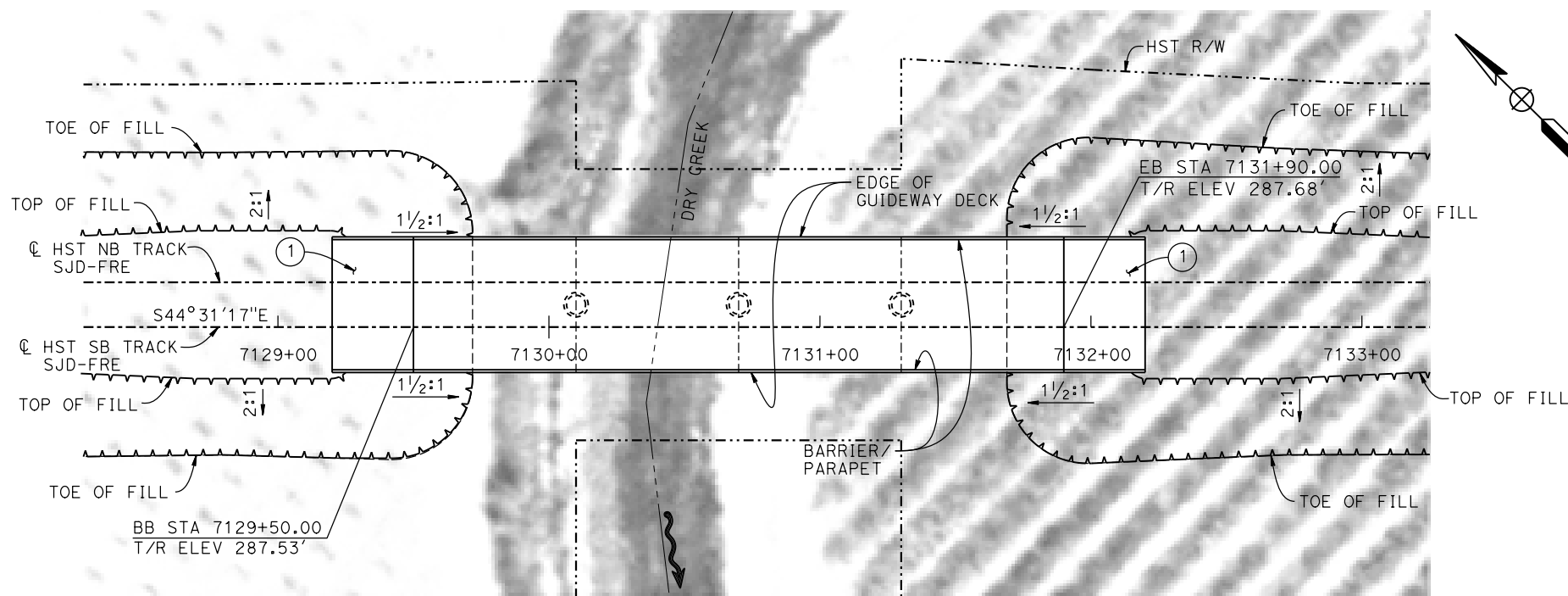
**ELEVATION**

1" = 30'



**TYPICAL SECTION**

1" = 10'



**PLAN**

1" = 30'

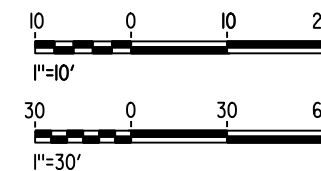
**LEGEND:**

INDICATES DIRECTION OF FLOW

- ① STRUCTURE APPROACH
- ② SLOPE PAVING (1/2H:1V)

**NOTES:**

1. 16" Ø PIPE PILES ASSUMED FOR ABUTMENT FOUNDATIONS. PILE AND DRILLED SHAFT LENGTHS TO BE DETERMINED.
2. FOR UTILITY DISPOSITIONS, SEE CIVIL AND GRADE SEPARATION PLANS; DRAWINGS CV-S1320-D AND CV-S1330-D.
3. ANY EXISTING DIRT ROAD THAT CONFLICTS WITH NEW CONSTRUCTION SHALL BE REALIGNED.



15-AUG-2016 8:36 MF-ST-K1330-D.dgn

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**M. BRATT**

DRAWN BY  
**A. M.**

CHECKED BY  
**K. CHARAN**

IN CHARGE  
**C. LEMLEY**

DATE  
**08/12/2016**

**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**

**NOT FOR**  
**CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO SECTION**

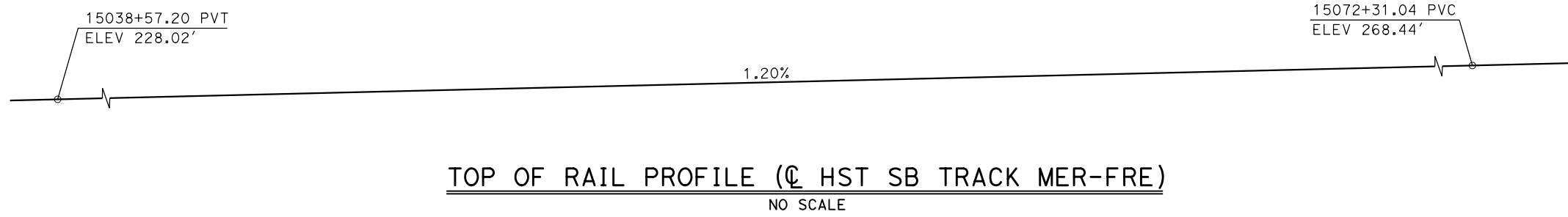
CENTRAL VALLEY WYE  
SR 152 (NORTH) TO ROAD 11 WYE ALTERNATIVE  
GENERAL PLAN (SJD-FRE)  
DRY CREEK BRIDGE

CONTRACT NO.  
HSR08-05

DRAWING NO.  
ST-K1330-D

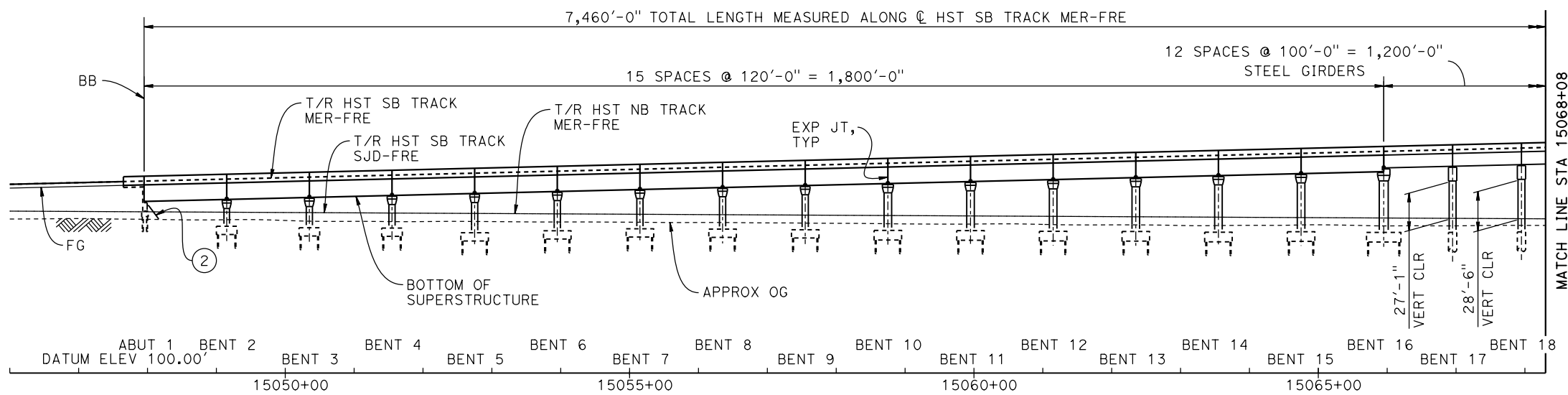
SCALE  
AS SHOWN

SHEET NO.



- LEGEND:**
- ⊕ INDICATES POINT OF MINIMUM VERTICAL CLEARANCE
  - ➡ INDICATES DIRECTION OF TRAFFIC
  - ① STRUCTURE APPROACH
  - ② SLOPE PAVING (1½H:1V)

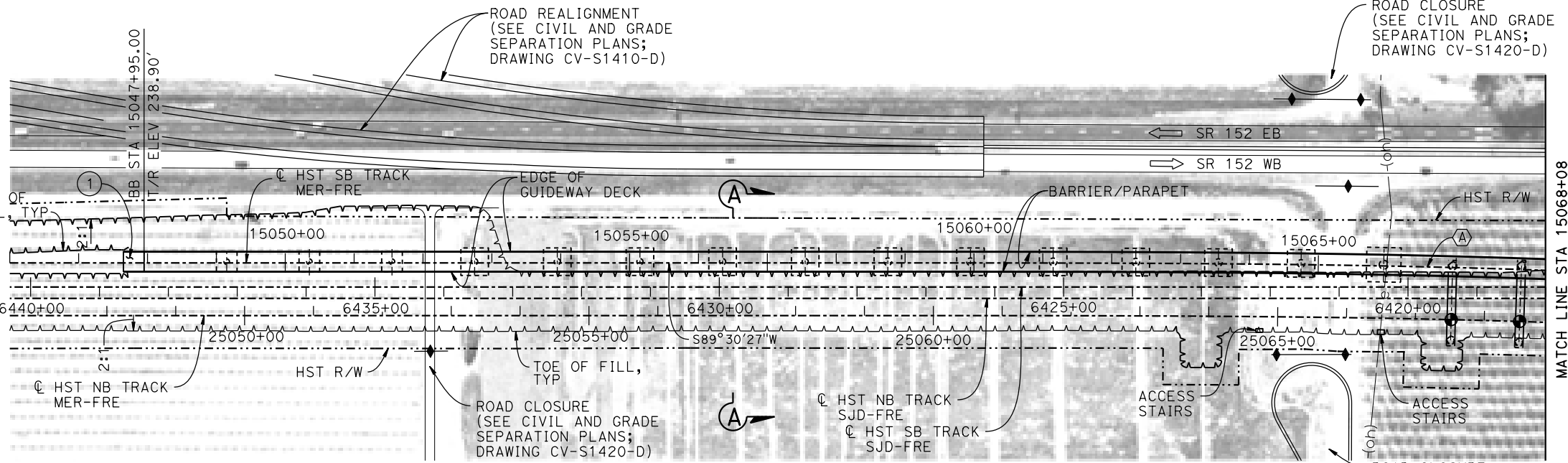
**CURVE MER-FRE 1 SB (A)**  
 R = 10,350.00'  
 LS = 1,500.00'



**TEMPORARY TRAFFIC OPENINGS**

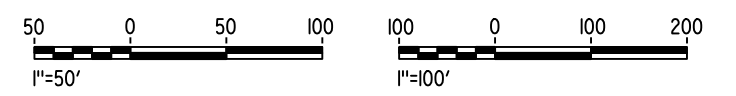
VEHICULAR TRAFFIC		FALSEWORK OPENING REQ (HORIZ X VERT)	
1. <u>  </u> TRAFFIC WILL BE DETOURED AWAY FROM THE SITE.			
2. <u>  </u> TRAFFIC WILL PASS UNDER THE STRUCTURE ON:			
ROAD 12	15120+75	20'X16.5'	2-WAY
3. <u>  </u> TEMP TRAFFIC LANE REDUCTION FOR FTG EXC.			

**DEVELOPED ELEVATION**  
 VERT: 1" = 50' HORIZ: 1" = 100'



- NOTES:**
- 16" Ø PIPE PILES ASSUMED FOR ABUTMENT AND BENT FOUNDATIONS, UNLESS OTHERWISE NOTED. PILE LENGTHS TO BE DETERMINED.
  - FOR SECTIONS AND BENT COLUMN SCHEDULE, SEE DRAWINGS ST-K3410-D TO ST-K3412-D.
  - ANY EXISTING DIRT ROAD THAT CONFLICTS WITH NEW CONSTRUCTION SHALL BE REALIGNED.
  - FOR UTILITY DISPOSITIONS, SEE CIVIL AND GRADE SEPARATION PLANS; DRAWINGS CV-S1410-D TO CV-S1430-D.
  - FOR RETAINING WALLS, SEE CIVIL AND GRADE SEPARATION PLANS; DRAWINGS CV-S1410-D TO CV-S1430-D.
  - FOR GUARDRAILS, SEE CIVIL AND GRADE SEPARATION PLANS; SEE DRAWINGS CV-S1410-D TO CV-S1430-D.
  - FOR ROAD 12 UNDERPASS GENERAL PLAN AND TYPICAL SECTION, SEE DRAWINGS ST-K1430-D.

**PLAN**  
 1" = 100'



15-AUG-2016 8:36 MF-ST-K1410-D.dgn

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**M. BRATT**

DRAWN BY  
**A. M.**

CHECKED BY  
**K. CHARAN**

IN CHARGE  
**C. LEMLEY**

DATE  
**08/12/2016**

**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**

**NOT FOR**  
**CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO SECTION**

CENTRAL VALLEY WYE  
 SR 152 (NORTH) TO ROAD 11 WYE ALTERNATIVE  
 GENERAL PLAN (MER-FRE)

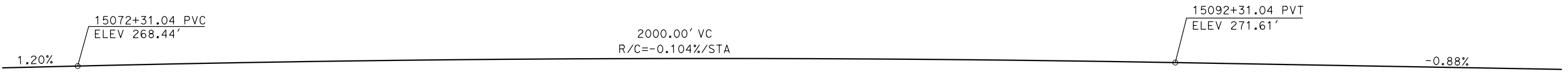
AERIAL #3 - SOUTHBOUND OVER HST MAINLINE - 1 OF 6

CONTRACT NO.  
HSR08-05

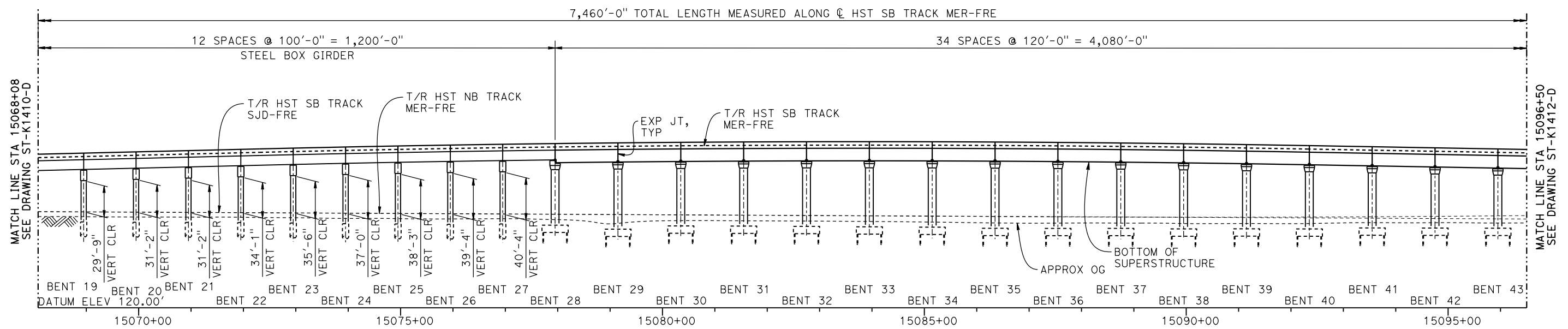
DRAWING NO.  
ST-K1410-D

SCALE  
AS SHOWN

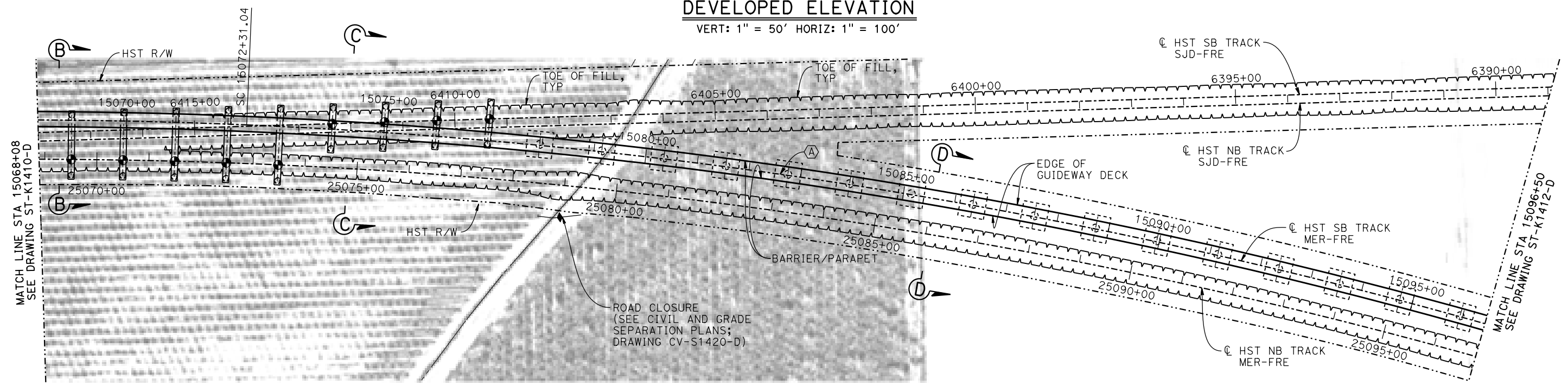
SHEET NO.



**TOP OF RAIL PROFILE (C HST SB TRACK MER-FRE)**  
NO SCALE



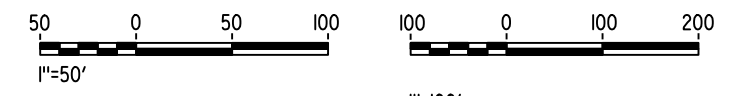
**DEVELOPED ELEVATION**  
VERT: 1" = 50' HORIZ: 1" = 100'



**PLAN**  
1" = 100'

**NOTES:**

1. FOR GENERAL NOTES AND LEGEND, SEE DRAWING ST-K1410-D.



15-AUG-2016 8:37 MF-ST-K1411-D.dgn

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**M. BRATT**  
DRAWN BY  
**A. M.**  
CHECKED BY  
**K. CHARAN**  
IN CHARGE  
**C. LEMLEY**  
DATE  
**08/12/2016**

**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**  
  
**NOT FOR**  
**CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO SECTION**  
CENTRAL VALLEY WYE  
SR 152 (NORTH) TO ROAD 11 WYE ALTERNATIVE  
GENERAL PLAN (MER-FRE)  
AERIAL #3 - SOUTHBOUND OVER HST MAINLINE - 2 OF 6

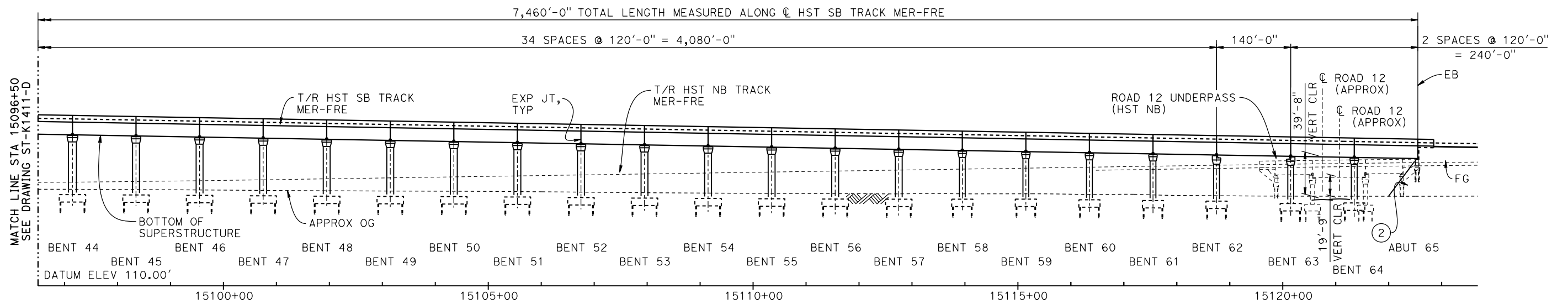
CONTRACT NO.  
HSR08-05  
DRAWING NO.  
ST-K1411-D  
SCALE  
AS SHOWN  
SHEET NO.

15136+25.00 PVC  
ELEV 232.87'

-0.88%

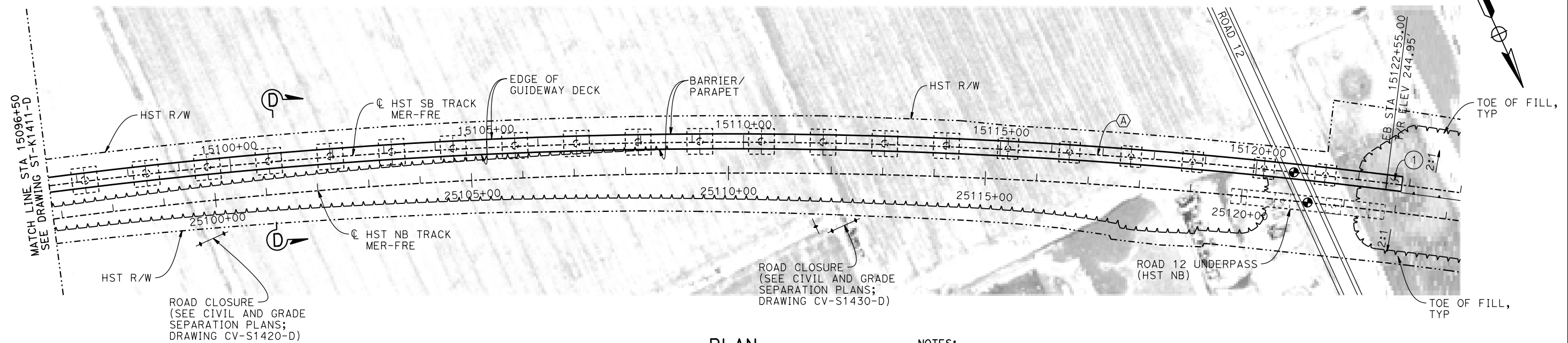
**TOP OF RAIL PROFILE (☉ HST SB TRACK MER-FRE)**

NO SCALE



**DEVELOPED ELEVATION**

VERT: 1" = 50' HORIZ: 1" = 100'

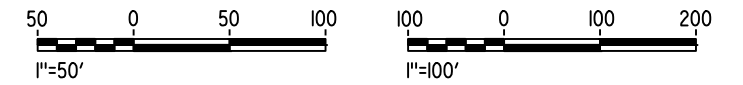


**PLAN**

1" = 100'

**NOTES:**

- FOR GENERAL NOTES AND LEGEND, SEE DRAWING ST-K1410-D.



15-AUG-2016 8:37 MF-ST-K1412-D.dgn

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**M. BRATT**

DRAWN BY  
**A. M.**

CHECKED BY  
**K. CHARAN**

IN CHARGE  
**C. LEMLEY**

DATE  
**08/12/2016**

**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**

**NOT FOR**  
**CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO SECTION**

CENTRAL VALLEY WYE  
SR 152 (NORTH) TO ROAD 11 WYE ALTERNATIVE  
GENERAL PLAN (MER-FRE)

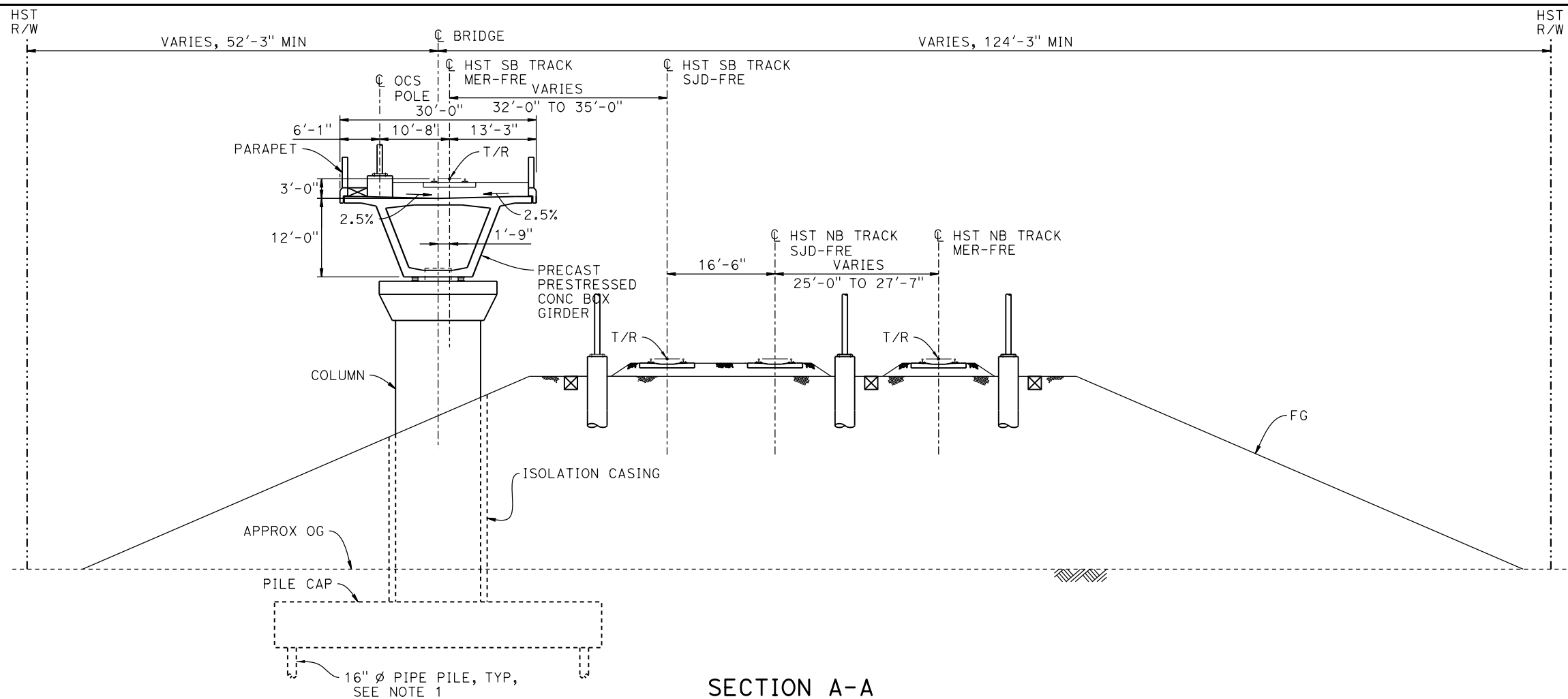
AERIAL #3 - SOUTHBOUND OVER HST MAINLINE - 3 OF 6

CONTRACT NO.  
HSR08-05

DRAWING NO.  
ST-K1412-D

SCALE  
AS SHOWN

SHEET NO.

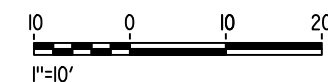


**SECTION A-A**  
1" = 10'

BENT COLUMN SCHEDULE				
BENT	COLUMN TYPE	CIDH TYPE	"A"	TYP SECTION, SHEET
2 - 4	8'-0" $\phi$			A-A, ST-K3410-D
5 - 9	9'-0" $\phi$			A-A, ST-K3410-D
10 - 15	11'-0" $\phi$			A-A, ST-K3410-D
16	13'-0" $\phi$			A-A, ST-K3410-D
17	2 - 10'-0" $\phi$	12'-0" $\phi$	108'-0"	B-B, ST-K3411-D
18	2 - 10'-0" $\phi$	12'-0" $\phi$	111'-0"	B-B, ST-K3411-D
19	2 - 10'-0" $\phi$	12'-0" $\phi$	115'-0"	B-B, ST-K3411-D
20	2 - 10'-0" $\phi$	12'-0" $\phi$	120'-0"	B-B, ST-K3411-D
21	2 - 10'-0" $\phi$	12'-0" $\phi$	124'-0"	B-B, ST-K3411-D
22	2 - 10'-0" $\phi$	12'-0" $\phi$	130'-0"	B-B, ST-K3411-D
23	2 - 10'-0" $\phi$	12'-0" $\phi$	137'-0"	B-B, ST-K3411-D
24 - 27	2 - 10'-0" $\phi$	12'-0" $\phi$	78'-0"	C-C, ST-K3412-D
28 - 45	15'-0" $\phi$			D-D, ST-K3412-D
46 - 58	13'-0" $\phi$			D-D, ST-K3412-D
59 - 64	11'-0" $\phi$			D-D, ST-K3412-D

**NOTES:**

- PILE LENGTHS TO BE DETERMINED.
- FOR TRACK SUPERELEVATION DETAILS, SEE ALIGNMENT AND TYPICAL SECTION PLANS; DRAWING TT-B0054-D.



15-AUG-2016 8:49 MF-ST-K3410-D.dgn

P005133G

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**M. BRATT**  
DRAWN BY  
**A. M.**  
CHECKED BY  
**K. CHARAN**  
IN CHARGE  
**C. LEMLEY**  
DATE  
**08/12/2016**

**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**

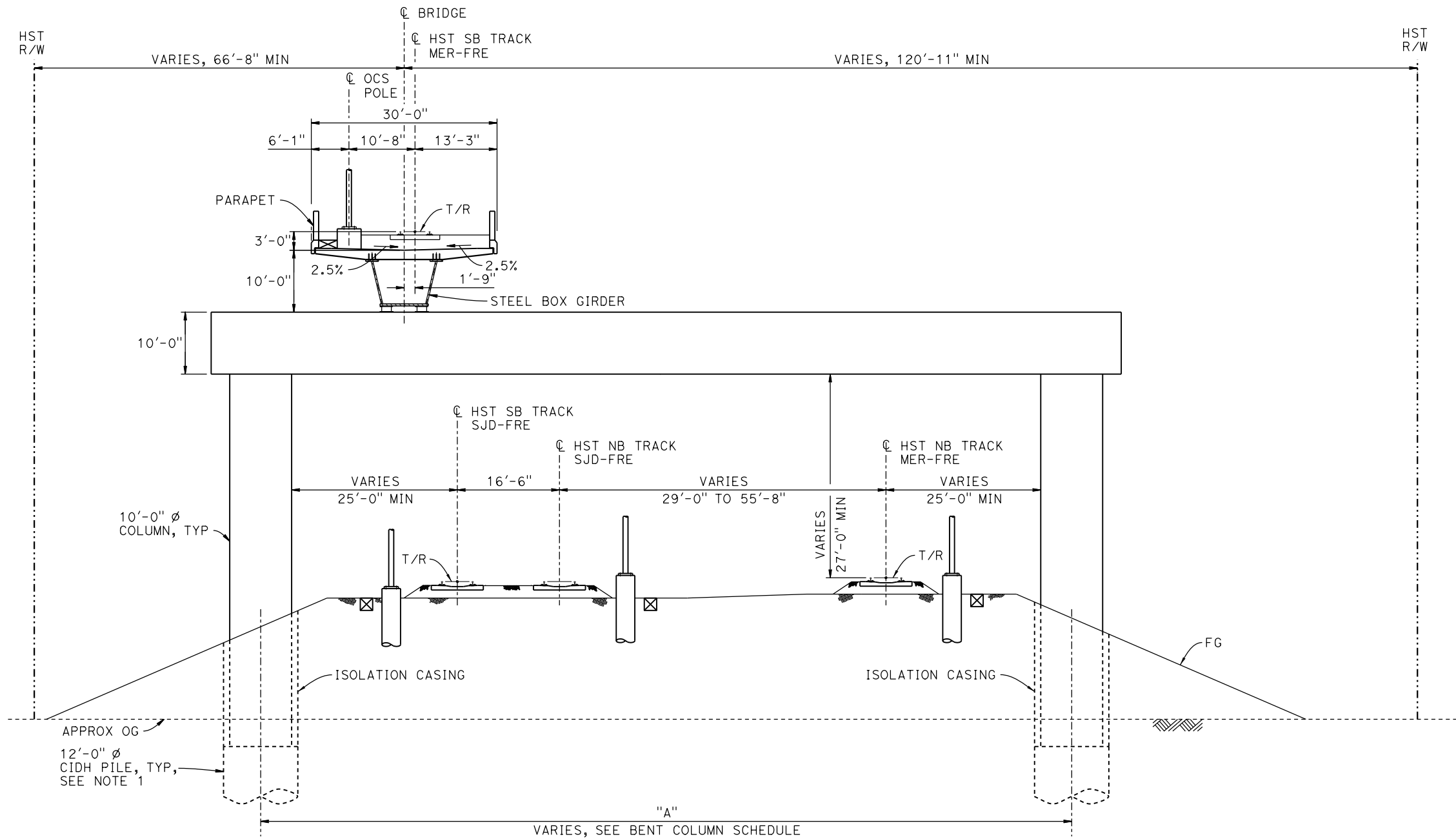
**NOT FOR**  
**CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO SECTION**  
CENTRAL VALLEY WYE  
SR 152 (NORTH) TO ROAD 11 WYE ALTERNATIVE  
TYPICAL SECTION (MER-FRE)  
AERIAL #3 - SOUTHBOUND OVER HST MAINLINE - 4 OF 6

CONTRACT NO.  
HSR08-05  
DRAWING NO.  
ST-K3410-D  
SCALE  
AS SHOWN  
SHEET NO.





**SECTION B-B**  
1" = 10'

**NOTES:**

1. DRILLED SHAFT LENGTHS TO BE DETERMINED.
2. FOR TRACK SUPERELEVATION DETAILS, SEE ALIGNMENT AND TYPICAL SECTION PLANS; DRAWING TT-B0054-D.



15-AUG-2016 8:49 MF-ST-K3411-D.dgn

REV	DATE	BY	CHK	APP	DESCRIPTION

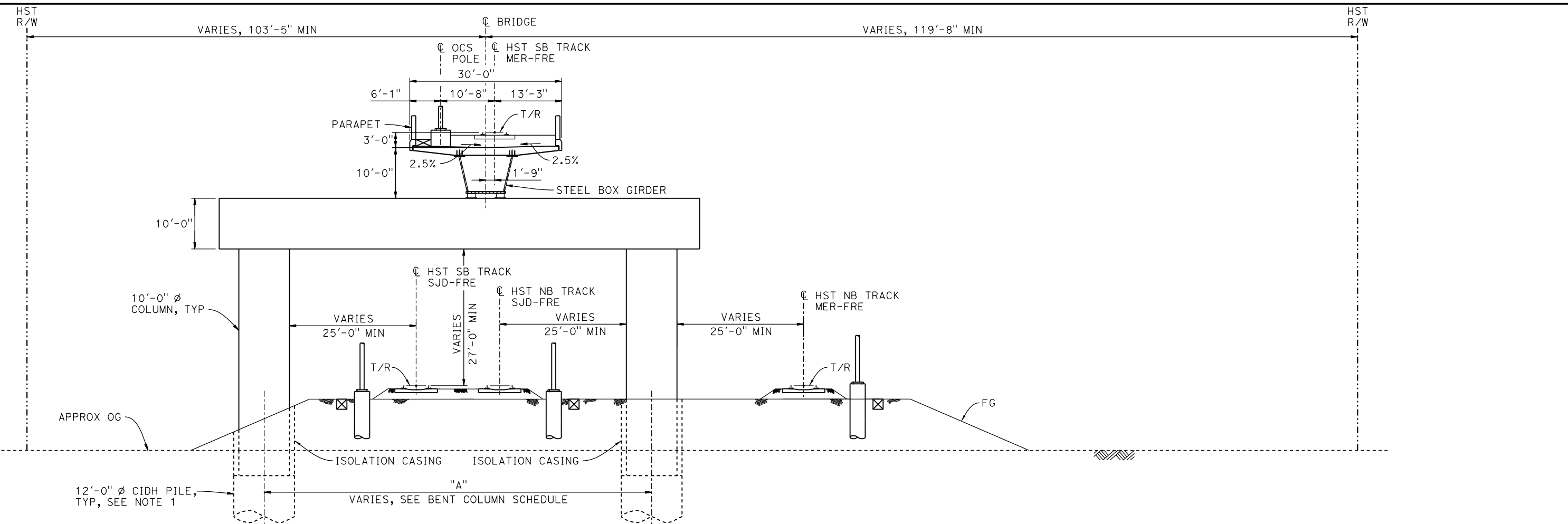
DESIGNED BY  
**M. BRATT**  
DRAWN BY  
**A. M.**  
CHECKED BY  
**K. CHARAN**  
IN CHARGE  
**C. LEMLEY**  
DATE  
**08/12/2016**

**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**  
  
**NOT FOR**  
**CONSTRUCTION**

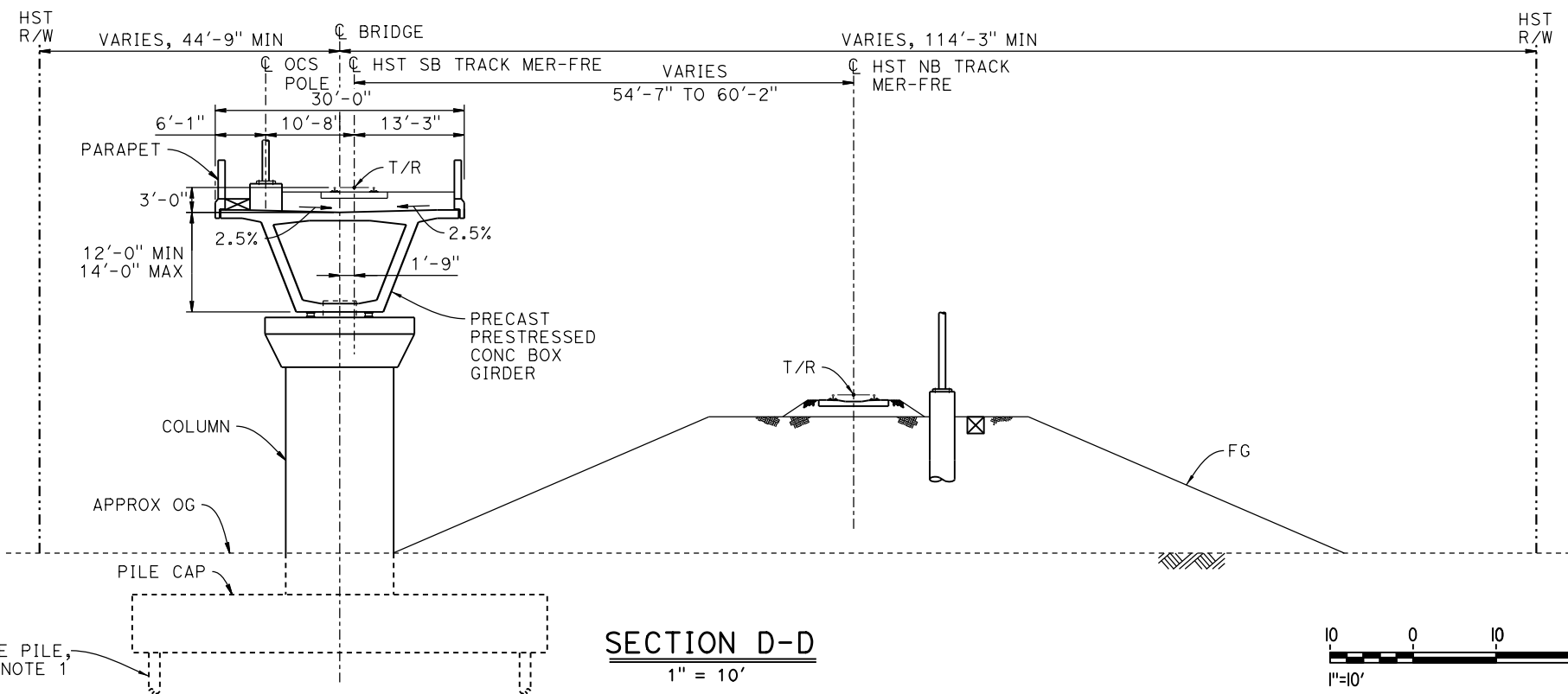


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO SECTION**  
CENTRAL VALLEY WYE  
SR 152 (NORTH) TO ROAD 11 WYE ALTERNATIVE  
TYPICAL SECTION (MER-FRE)  
AERIAL #3 - SOUTHBOUND OVER HST MAINLINE - 5 OF 6

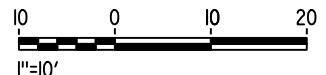
CONTRACT NO.  
HSR08-05  
DRAWING NO.  
ST-K3411-D  
SCALE  
AS SHOWN  
SHEET NO.



**SECTION C-C**  
1" = 10'



**SECTION D-D**  
1" = 10'



**NOTES:**

1. PILE AND DRILLED SHAFT LENGTHS TO BE DETERMINED.
2. FOR TRACK SUPERELEVATION DETAILS, SEE ALIGNMENT AND TYPICAL SECTION PLANS; DRAWING TT-B0054-D.

15-AUG-2016 8:49 MF-ST-K3412-D.dgn

REV	DATE	BY	CHK	APP	DESCRIPTION

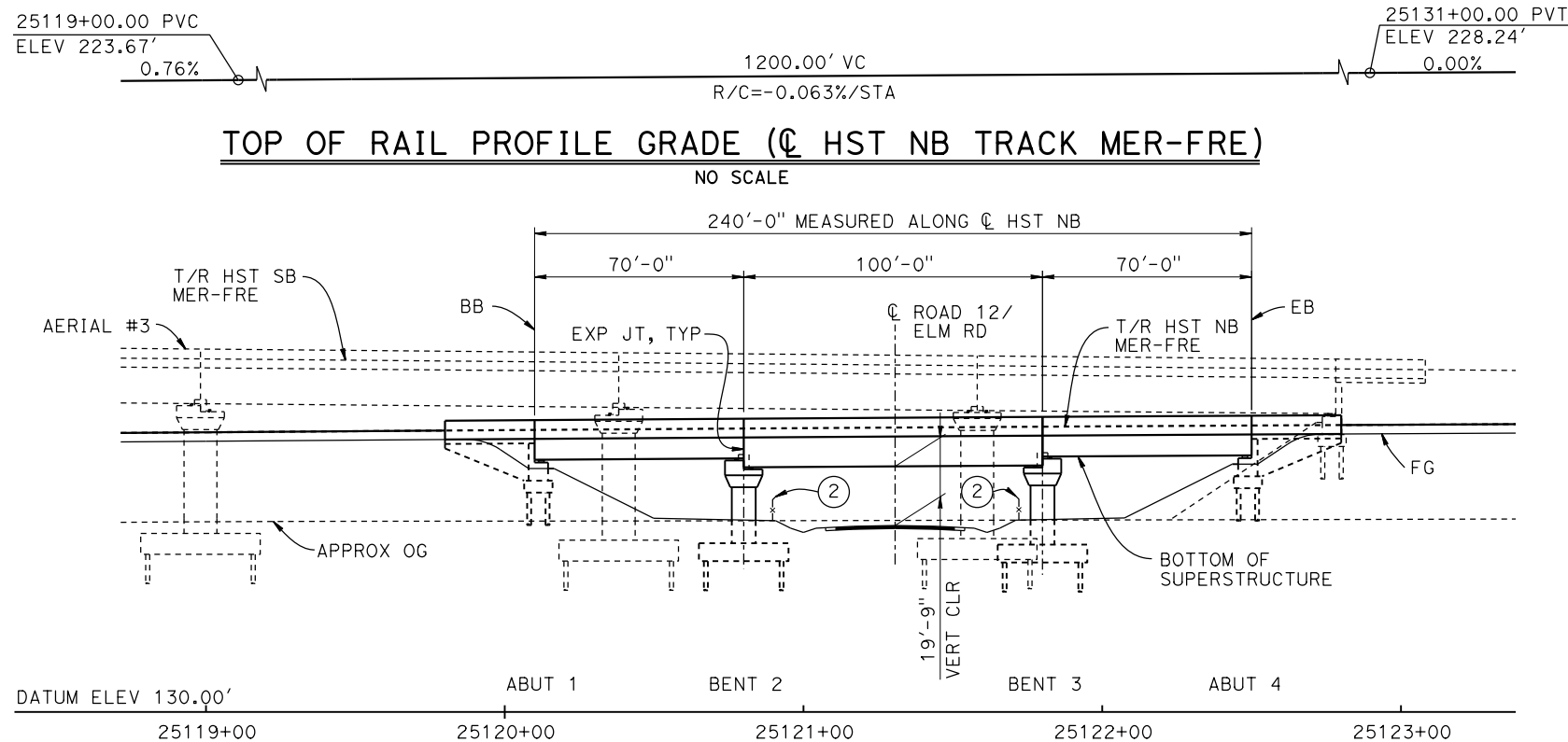
DESIGNED BY  
**M. BRATT**  
DRAWN BY  
**A. M.**  
CHECKED BY  
**K. CHARAN**  
IN CHARGE  
**C. LEMLEY**  
DATE  
**08/12/2016**

**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**  
  
**NOT FOR**  
**CONSTRUCTION**

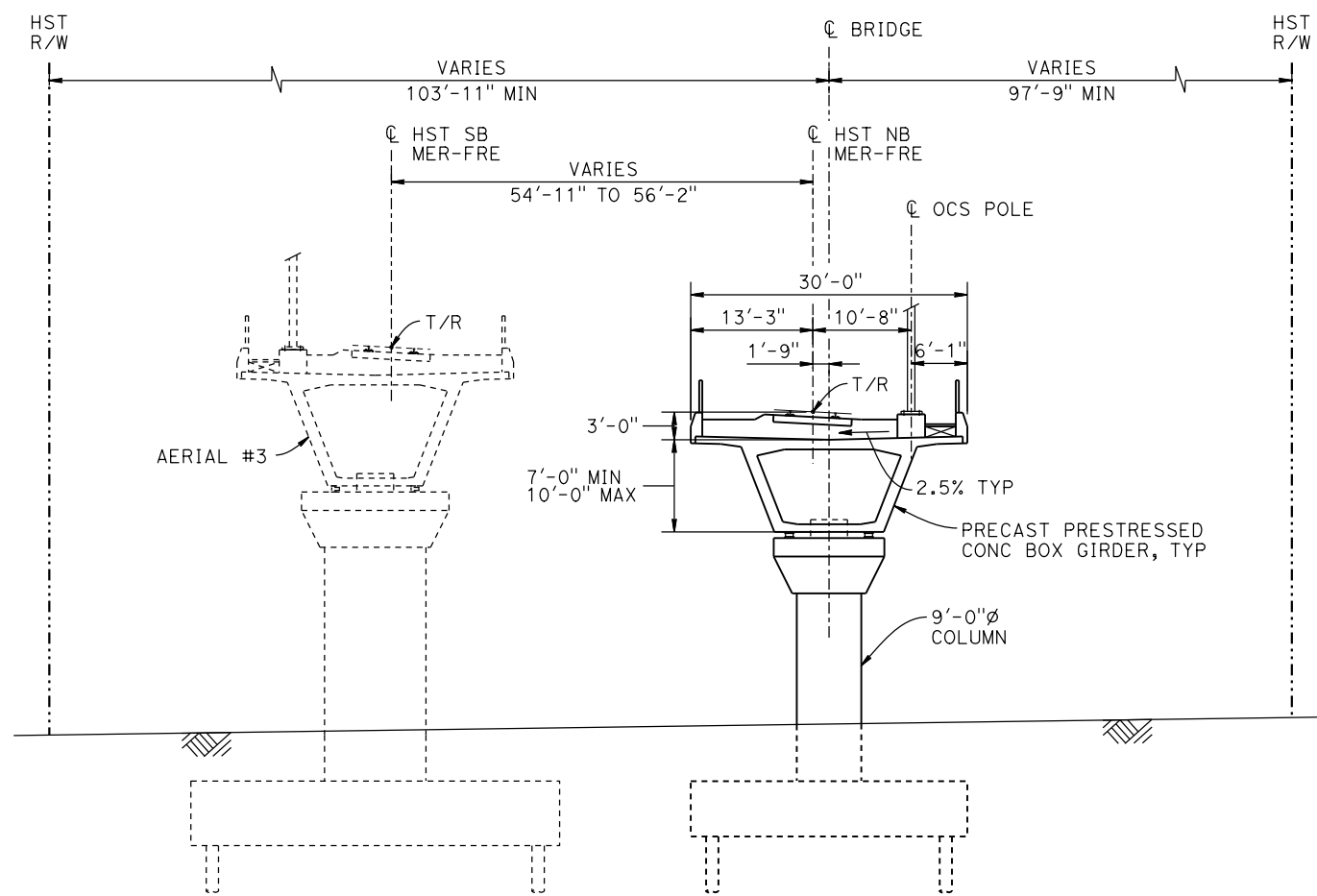


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO SECTION**  
CENTRAL VALLEY WYE  
SR 152 (NORTH) TO ROAD 11 WYE ALTERNATIVE  
TYPICAL SECTIONS (MER-FRE)  
AERIAL #3 - SOUTHBOUND OVER HST MAINLINE - 6 OF 6

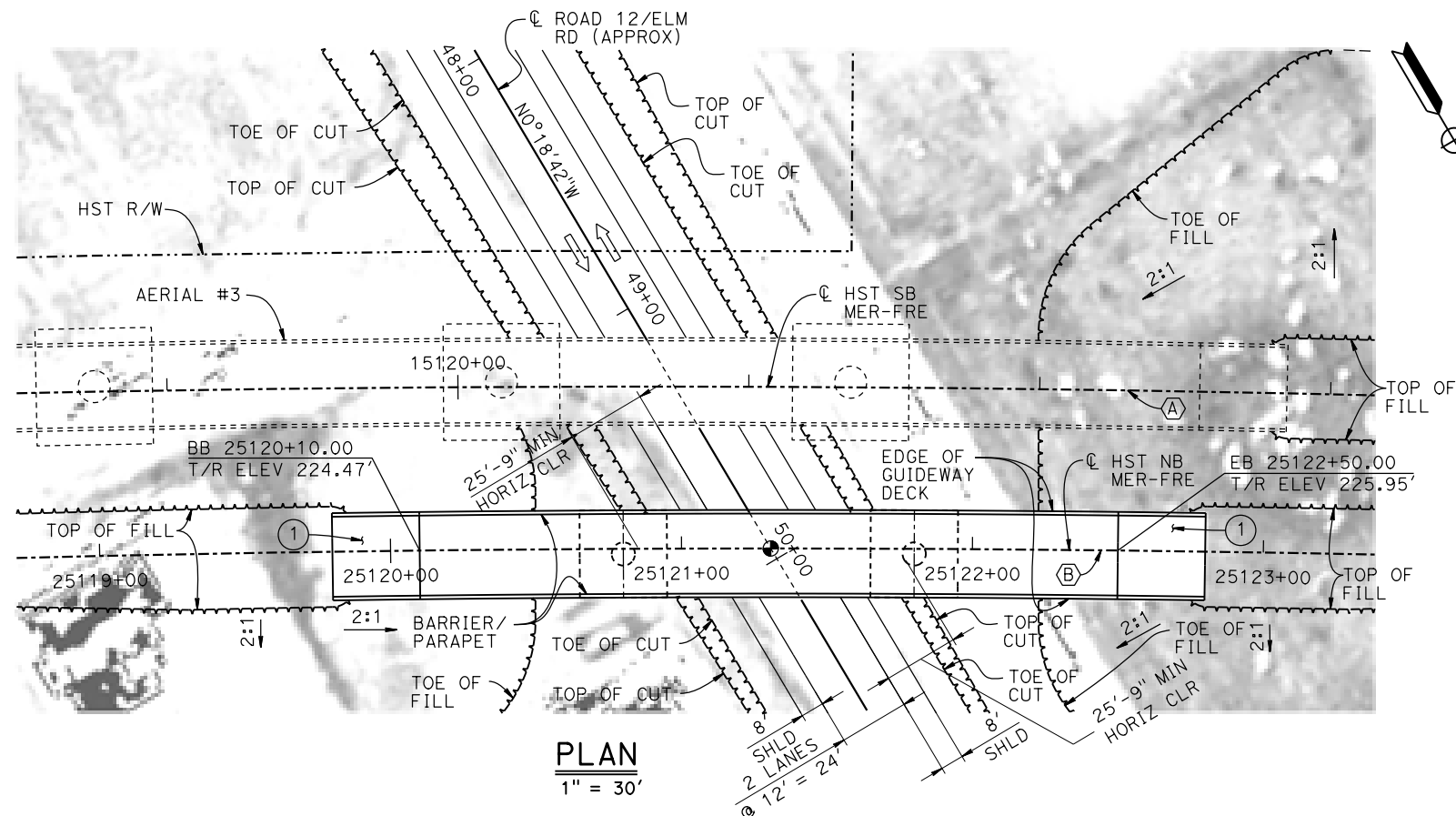
CONTRACT NO.  
HSR08-05  
DRAWING NO.  
ST-K3412-D  
SCALE  
AS SHOWN  
SHEET NO.



**DEVELOPED ELEVATION**  
1" = 30'



**TYPICAL SECTION**  
1" = 10'



**PLAN**  
1" = 30'

**NOTES:**

- 16"  $\phi$  PIPE PILES ASSUMED FOR ABUTMENT AND BENT FOUNDATIONS. PILE LENGTHS TO BE DETERMINED.
- FOR UTILITY DISPOSITIONS, SEE CIVIL AND GRADE SEPARATION PLANS; DRAWING CV-S1430-D.
- FOR TRACK SUPERELEVATION DETAILS, SEE ALIGNMENT AND TYPICAL SECTION PLANS; DRAWINGS TT-B0054-D AND TT-B0055-D.
- FOR AERIAL #3 GENERAL PLANS AND TYPICAL SECTIONS, SEE DRAWINGS ST-K1410-D THROUGH ST-K1412-D AND ST-K3410-D THROUGH ST-K3412-D.

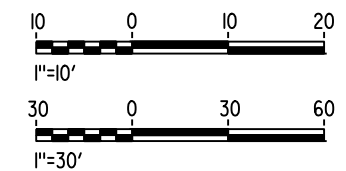
**LEGEND:**

- INDICATES POINT OF MINIMUM VERTICAL CLEARANCE
- INDICATES DIRECTION OF TRAFFIC
- STRUCTURE APPROACH
- AR FENCE, SEE TRACK PLANS; DRAWING TT-B0020-D

**CURVE MER-FRE 1 SB (A)**      **CURVE MER-FRE 1 NB (B)**  
 R = 10,350.00'      R = 10,300.00'  
 LS = 1,500.00'      LS = 1,500.00'

**TEMPORARY TRAFFIC OPENINGS**

VEHICULAR TRAFFIC			
1. — TRAFFIC WILL BE DETOURED AWAY FROM THE SITE.			
2. <input checked="" type="checkbox"/> TRAFFIC WILL PASS UNDER THE STRUCTURE ON:			
STREET OR ROAD NAME AND LOCATION	FALSEWORK OPENING REQD (HORIZ X VERT)		
ROAD 12/ELM RD	25121+31 32'X16.5'	2-WAY	
3. — TEMP TRAFFIC LANE REDUCTION FOR FTG EXC.			



15-AUG-2016 8:38 MF-ST-K1430-D.dgn

REV	DATE	BY	CHK	APP	DESCRIPTION

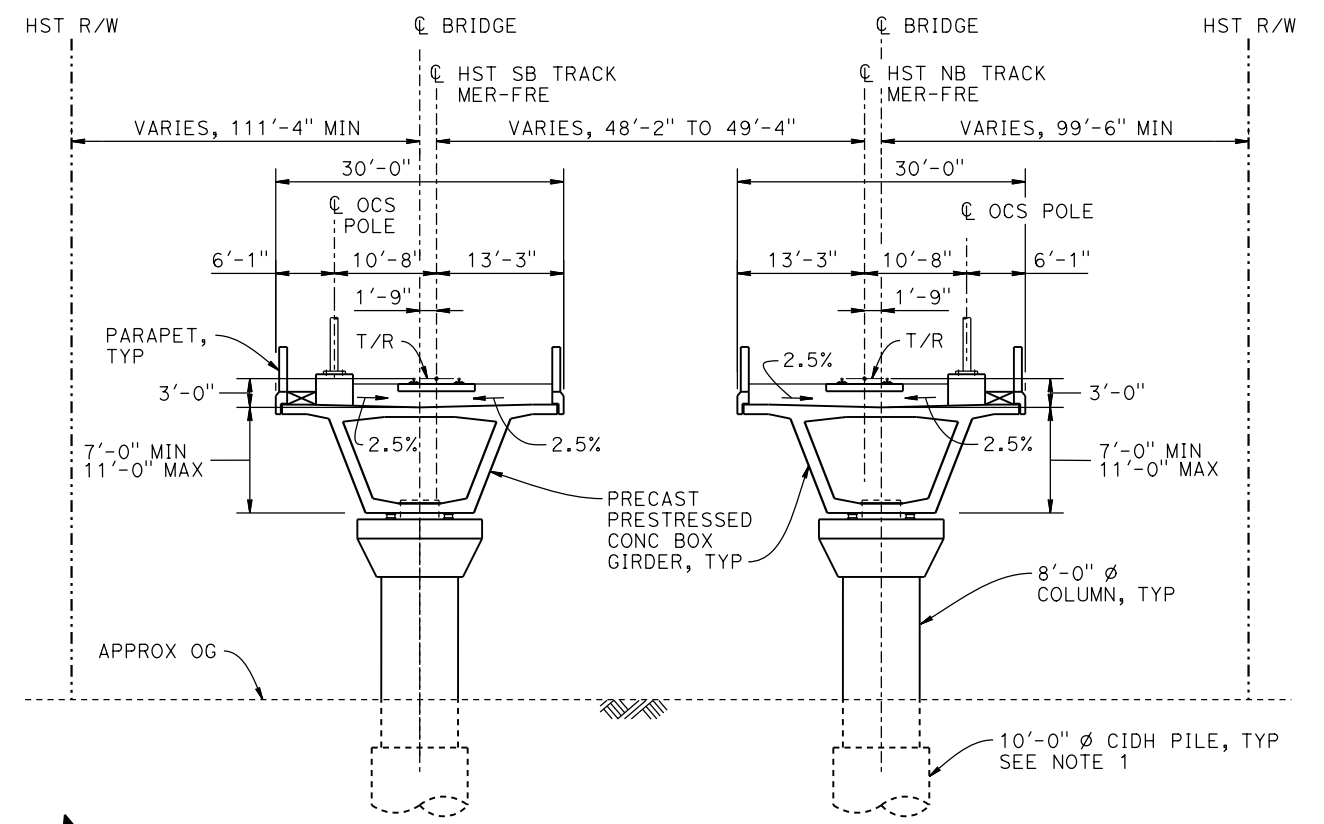
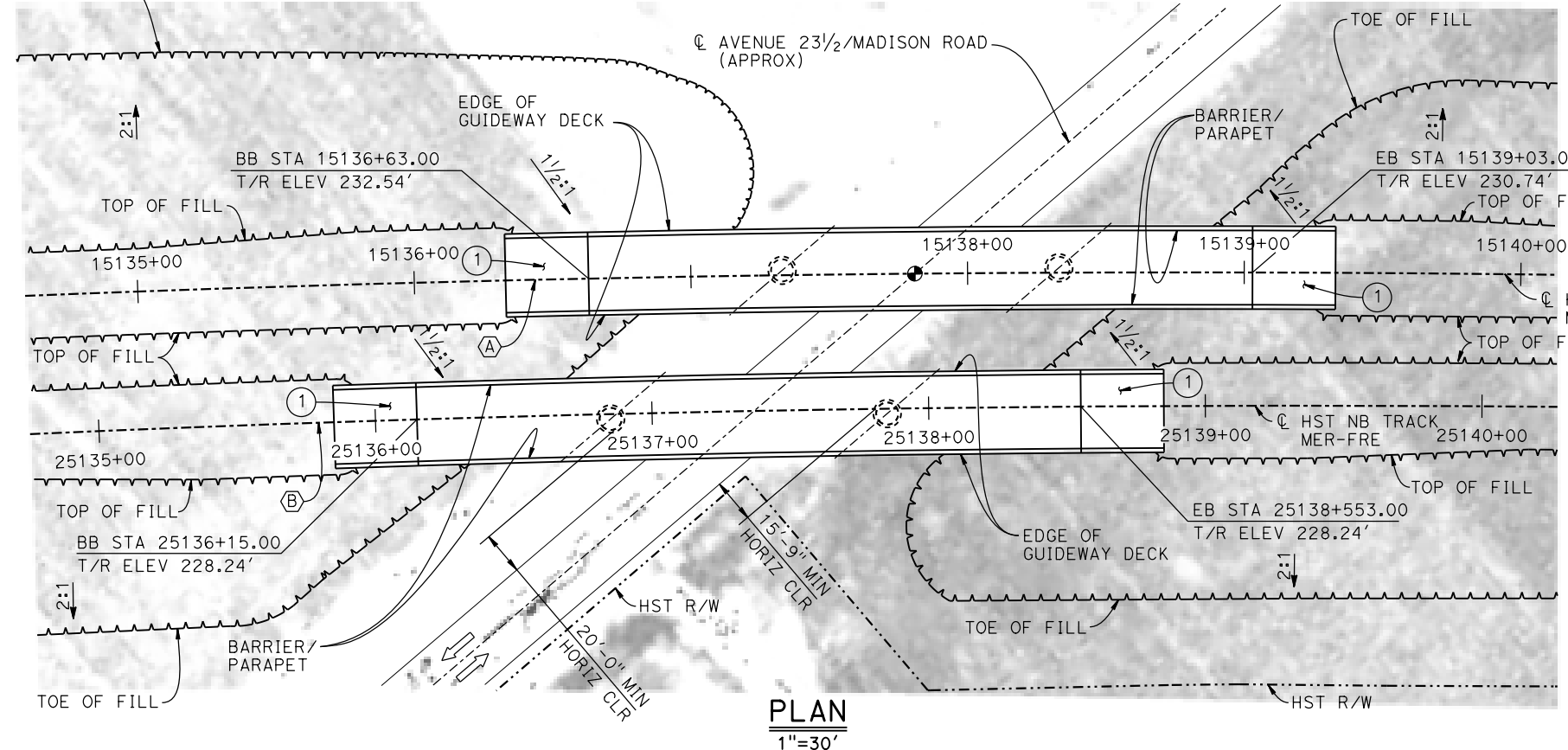
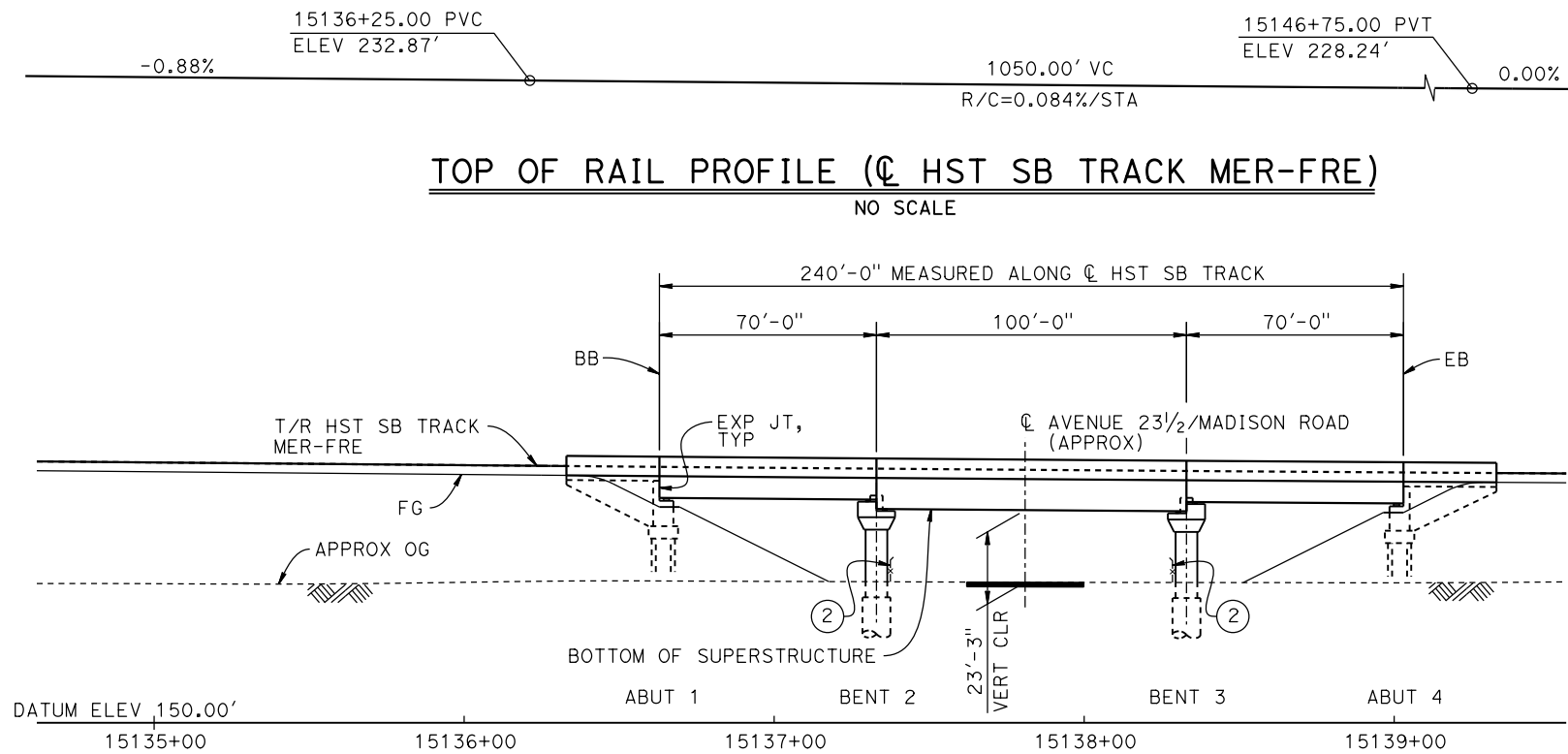
DESIGNED BY  
**M. BRATT**  
 DRAWN BY  
**A. M.**  
 CHECKED BY  
**K. CHARAN**  
 IN CHARGE  
**C. LEMLEY**  
 DATE  
**08/12/2016**

**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**  
  
**NOT FOR**  
**CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO SECTION**  
 CENTRAL VALLEY WYE  
 SR 152 (NORTH) TO ROAD 11 WYE ALTERNATIVE  
 GENERAL PLAN (MER-FRE)  
 ROAD 12 UNDERPASS

CONTRACT NO.  
**HSR08-05**  
 DRAWING NO.  
**ST-K1430-D**  
 SCALE  
**AS SHOWN**  
 SHEET NO.



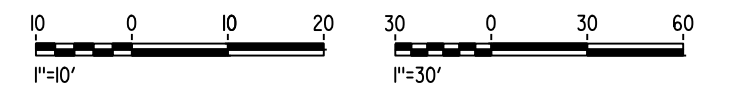
**CURVE MER-FRE 1 SB (A)**  
 R = 10,350.00'  
 LS = 1,500.00'

**CURVE MER-FRE 1 NB (B)**  
 R = 10,300.00'  
 LS = 1,500.00'

TEMPORARY TRAFFIC OPENINGS			
VEHICULAR TRAFFIC			
1. <u>  </u> TRAFFIC WILL BE DETOURED AWAY FROM THE SITE.			
2. <u>  </u> TRAFFIC WILL PASS UNDER THE STRUCTURE ON:			
ST OR ROAD NAME AND LOCATION	DATE	FALSEWORK OPENING REQD (HORIZ X VERT)	
AVENUE 23 1/2 / MADISON ROAD	15137+81	32'X16.5'	2-WAY
3. <u>  </u> TEMP TRAFFIC LANE REDUCTION FOR FTG EXC.			

- LEGEND:**
- ⊗ INDICATES POINT OF MINIMUM VERTICAL CLEARANCE
  - ➔ INDICATES DIRECTION OF TRAFFIC
  - ① STRUCTURE APPROACH
  - ② AR FENCE, SEE TRACK PLANS; DRAWING TT-B0020-D

- NOTES:**
1. 16" Ø PIPE PILES ASSUMED FOR ABUTMENT FOUNDATIONS. PILE AND DRILLED SHAFT LENGTHS TO BE DETERMINED.
  2. FOR UTILITY DISPOSITIONS, SEE CIVIL AND GRADE SEPARATION PLANS; DRAWING CV-S1430-D.
  3. FOR TRACK SUPERELEVATION, SEE ALIGNMENT AND TYPICAL SECTION PLANS; DRAWINGS TT-B0054-D AND TT-B0055-D.



MF-ST-K1435-D.dgn  
 29-AUG-2016 3:12  
 P005133G

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**M. BRATT**

DRAWN BY  
**A. M.**

CHECKED BY  
**K. CHARAN**

IN CHARGE  
**C. LEMLEY**

DATE  
**09/02/2016**

**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**

**NOT FOR**  
**CONSTRUCTION**



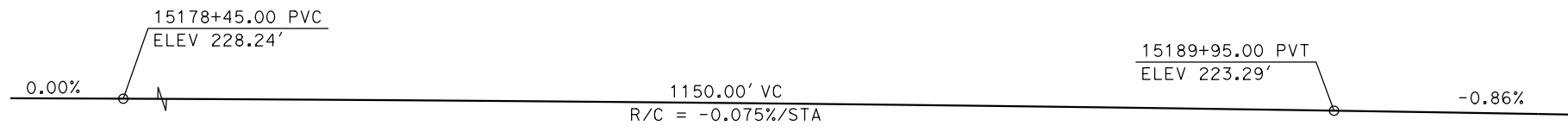
**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO SECTION**  
 CENTRAL VALLEY WYE  
 SR 152 (NORTH) TO ROAD 11 WYE ALTERNATIVE  
 GENERAL PLAN (MER-FRE)  
 MADISON ROAD (AVENUE 23 1/2) UNDERPASS

CONTRACT NO.  
HSR08-05

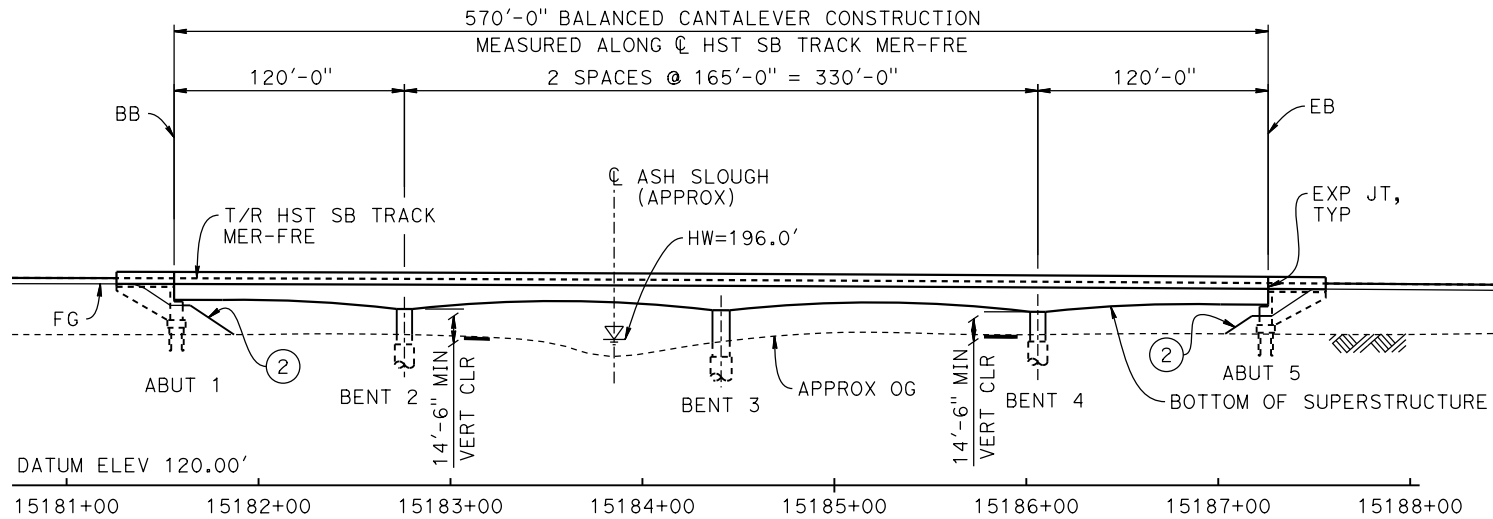
DRAWING NO.  
ST-K1435-D

SCALE  
AS SHOWN

SHEET NO.



**TOP OF RAIL PROFILE (☉ HST SB TRACK MER-FRE)**  
NO SCALE



**DEVELOPED ELEVATION**  
1" = 50'

**CURVE MER-FRE 1 SB (A)**  
R = 10350.00'  
LS = 1500.00'

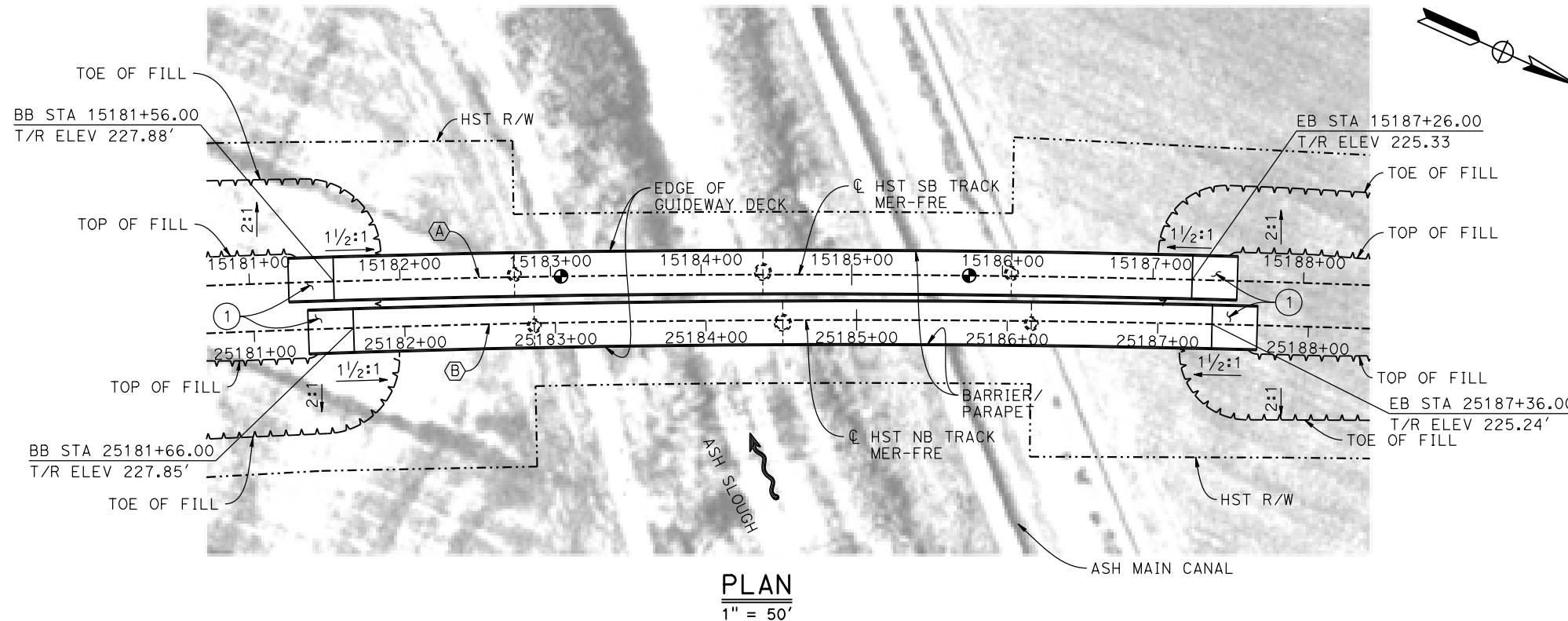
**CURVE MER-FRE 1 NB (B)**  
R = 10300.00'  
LS = 1500.00'

**LEGEND:**

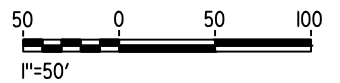
- ⊕ INDICATES POINT OF MINIMUM VERTICAL CLEARANCE
- ~ INDICATES DIRECTION OF FLOW
- ① STRUCTURE APPROACH
- ② SLOPE PAVING (1½H:1V)

**NOTES:**

1. 16" ø PIPE PILES ASSUMED FOR ABUTMENT FOUNDATIONS UNLESS OTHERWISE NOTED. PILE LENGTHS TO BE DETERMINED.
2. FOR SECTION AND BENT COLUMN SCHEDULE, SEE DRAWING ST-K3440-D.
3. FOR UTILITY DISPOSITIONS, SEE CIVIL AND GRADE SEPARATION PLANS; DRAWING CV-S1440-D.
4. ANY EXISTING DIRT ROAD THAT CONFLICTS WITH NEW CONSTRUCTION SHALL BE REALIGNED.



**PLAN**  
1" = 50'



15-AUG-2016 8:39 MF-ST-K1440-D.dgn

REV	DATE	BY	CHK	APP	DESCRIPTION

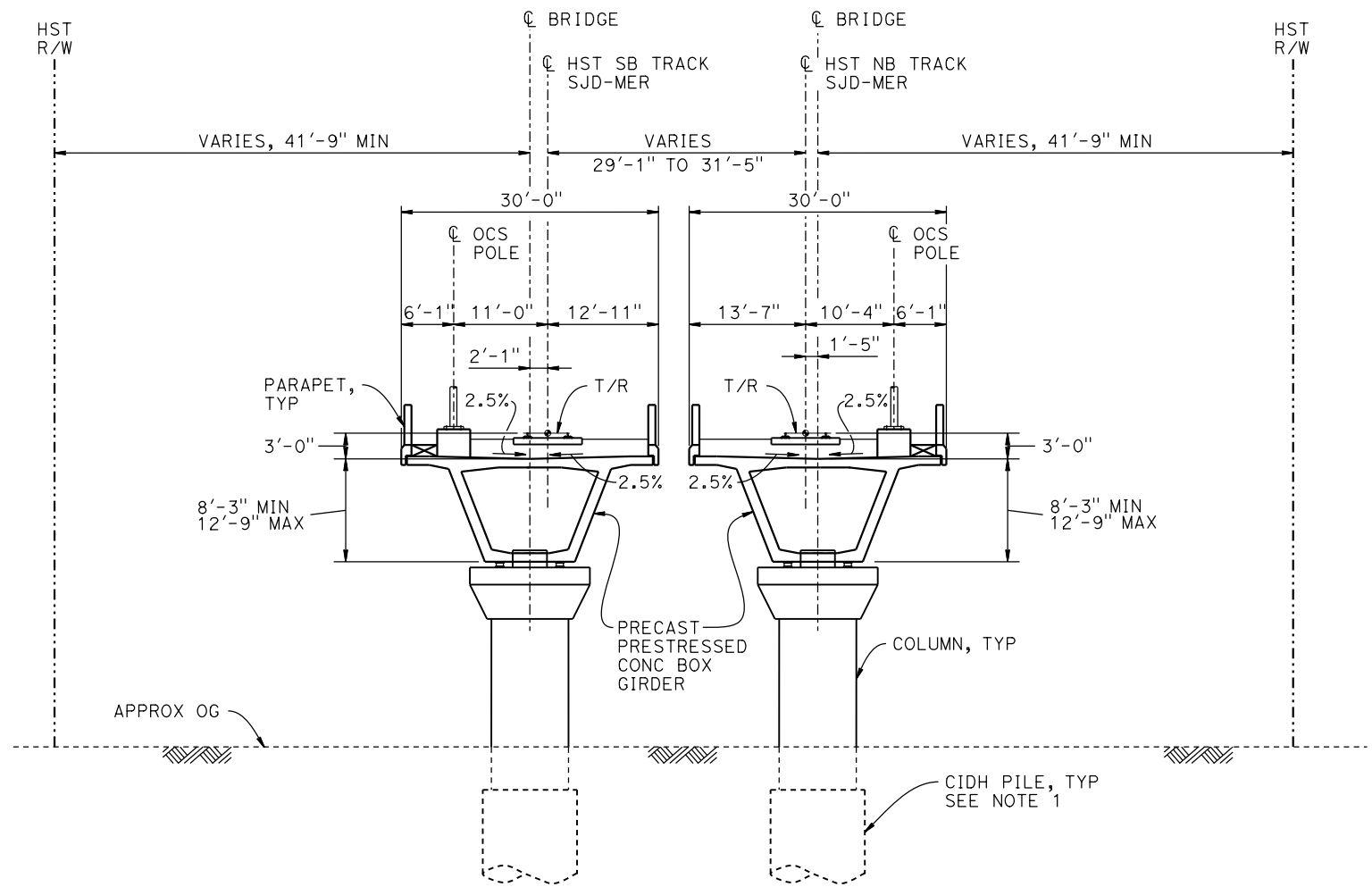
DESIGNED BY  
**M. BRATT**  
DRAWN BY  
**A. M.**  
CHECKED BY  
**K. CHARAN**  
IN CHARGE  
**C. LEMLEY**  
DATE  
**08/12/2016**

**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**  
  
**NOT FOR**  
**CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO SECTION**  
CENTRAL VALLEY WYE  
SR 152 (NORTH) TO ROAD 11 WYE ALTERNATIVE  
GENERAL PLAN (MER-FRE)  
ASH SLOUGH BRIDGE - 1 OF 2

CONTRACT NO.  
HSR08-05  
DRAWING NO.  
ST-K1440-D  
SCALE  
AS SHOWN  
SHEET NO.



BENT COLUMN SCHEDULE		
BENT	COLUMN TYPE	CIDH TYPE
2	7'-0" $\phi$	9'-0" $\phi$
3	9'-0" $\phi$	11'-0" $\phi$
4	7'-0" $\phi$	9'-0" $\phi$

**TYPICAL SECTION**  
1" = 10'

- NOTE:**
- 16"  $\phi$  PIPE PILES ASSUMED FOR ABUTMENT FOUNDATIONS. PILE AND DRILLED SHAFT LENGTHS TO BE DETERMINED.
  - FOR TRACK SUPERELEVATION DETAILS, SEE ALIGNMENT AND TYPICAL SECTION PLANS; DRAWING TT-B0054-D AND TT-B0055-D.



15-AUG-2016 8:49 MF-ST-K3440-D.dgn

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**M. BRATT**

DRAWN BY  
**A. M.**

CHECKED BY  
**K. CHARAN**

IN CHARGE  
**C. LEMLEY**

DATE  
**08/12/2016**

**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**

**NOT FOR**  
**CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO SECTION**

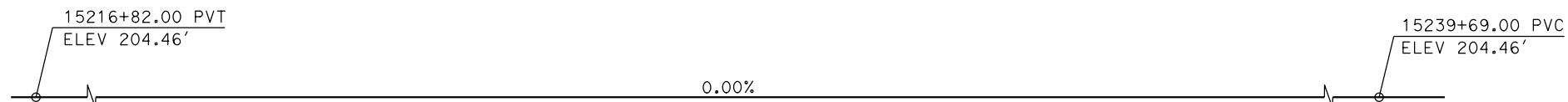
CENTRAL VALLEY WYE  
SR 152 (NORTH) TO ROAD 11 WYE ALTERNATIVE  
TYPICAL SECTION (MER-FRE)  
ASH SLOUGH BRIDGE - 2 OF 2

CONTRACT NO.  
HSR08-05

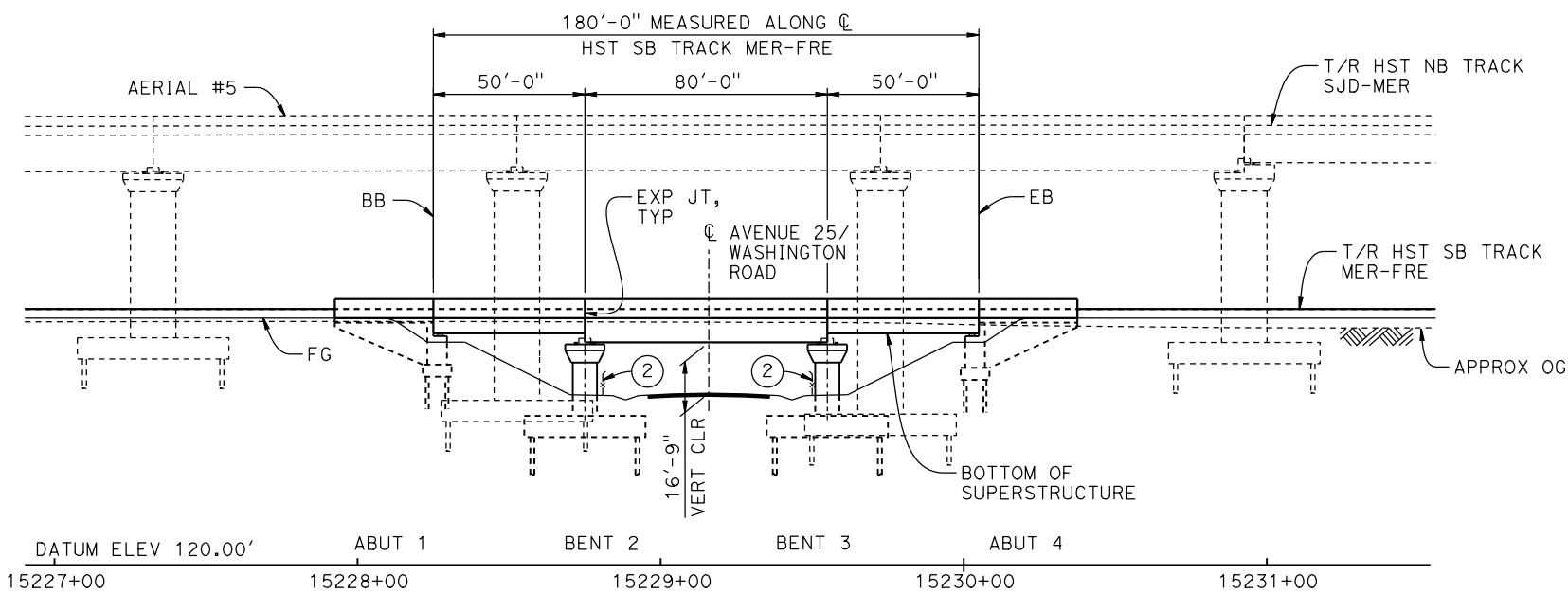
DRAWING NO.  
ST-K3440-D

SCALE  
AS SHOWN

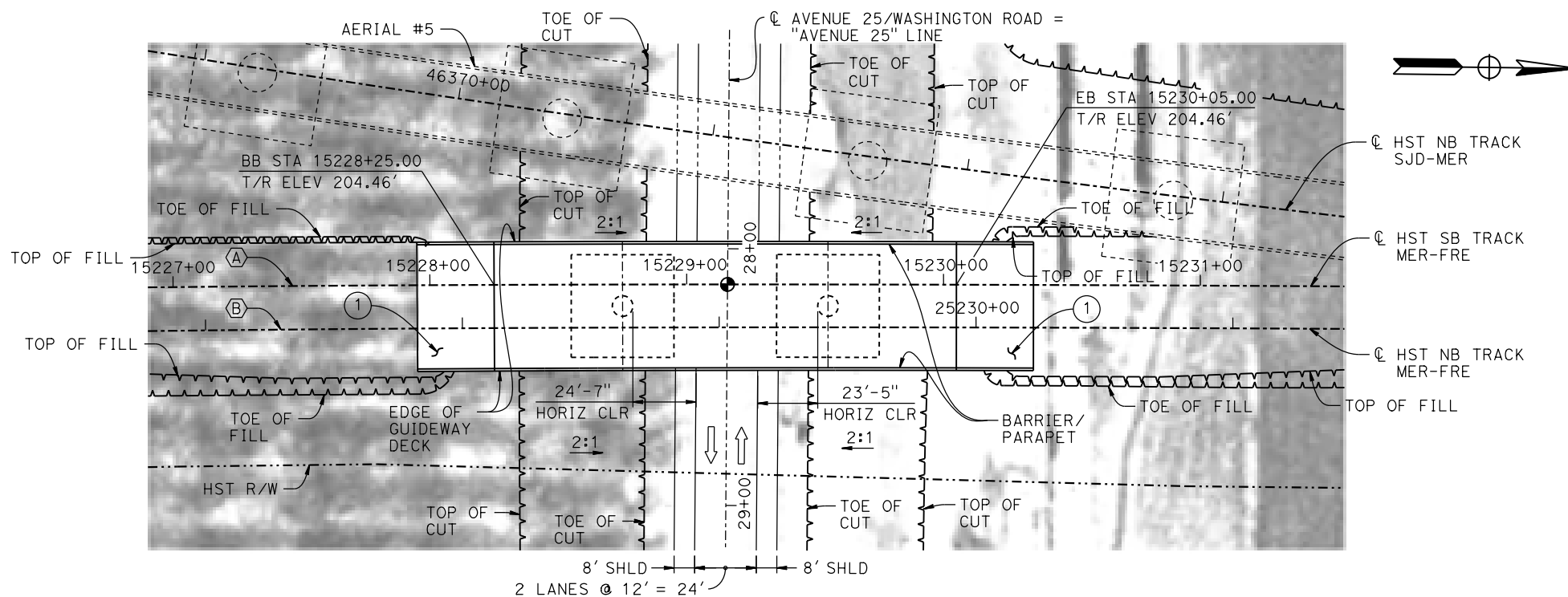
SHEET NO.



**TOP OF RAIL PROFILE (CL HST SB TRACK MER-FRE)**  
NO SCALE



**DEVELOPED ELEVATION**  
1" = 30'



**PLAN**  
1" = 30'

**TEMPORARY TRAFFIC OPENINGS**

VEHICULAR TRAFFIC			
1. X TRAFFIC WILL BE DETOURED AWAY FROM THE SITE.			
2. _ TRAFFIC WILL PASS UNDER THE STRUCTURE ON:			
STREET OR ROAD NAME AND LOCATION	FALSEWORK OPENING REQD (HORIZ x VERT)		
AVENUE 25/WASHINGTON ROAD	15229+16	32'x15'	2-WAY
3. _ TEMP TRAFFIC LANE REDUCTION FOR FTG EXC.			

**LEGEND:**

- INDICATES POINT OF MINIMUM VERTICAL CLEARANCE
- ➔ INDICATES DIRECTION OF TRAFFIC
- ① STRUCTURE APPROACH
- ② AR FENCE, SEE TRACK PLANS; DRAWING TT-B0020-D

**NOTES:**

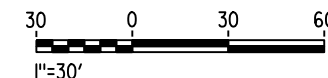
1. FOR TYPICAL SECTION, SEE DRAWING ST-K3450-D.
2. FOR UTILITY DISPOSITIONS, SEE CIVIL AND GRADE SEPARATION PLANS; DRAWING CV-S1450-D.
3. FOR AERIAL #5 - NORTHBOUND OVER HST MERCED TO FRESNO GENERAL PLAN AND TYPICAL SECTIONS, SEE DRAWINGS ST-K1640-D TO ST-K1643-D, ST-K3640-D AND ST-K3641-D.

**CURVE MER-FRE 1 SB (A)**

R = 10,350.00'  
LS = 1,500.00'

**CURVE MER-FRE 1 NB (B)**

R = 10,300.00'  
LS = 1,500.00'



15-AUG-2016 8:39 MF-ST-K1450-D.dgn

REV	DATE	BY	CHK	APP	DESCRIPTION

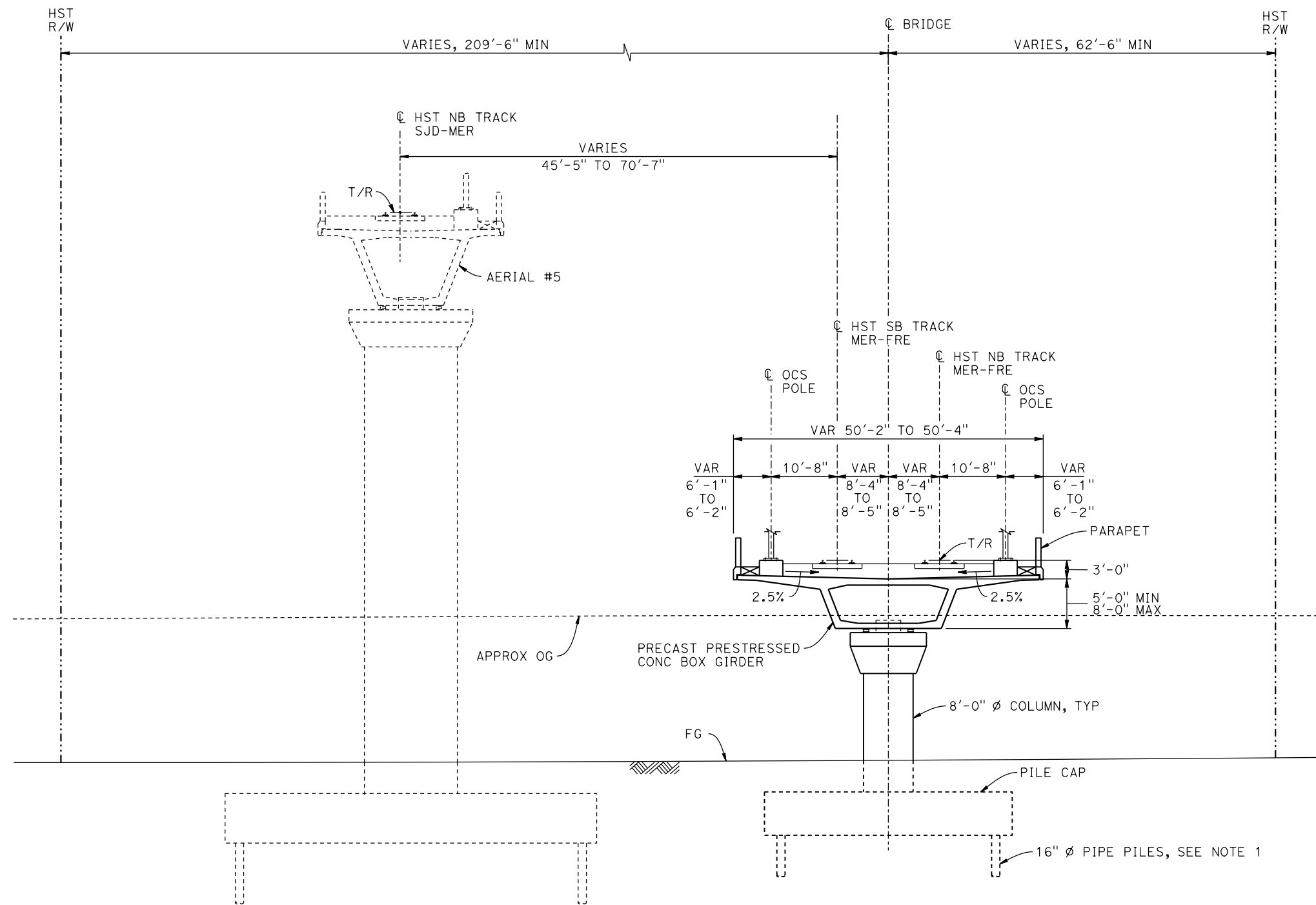
DESIGNED BY  
**M. BRATT**  
DRAWN BY  
**A. M.**  
CHECKED BY  
**K. CHARAN**  
IN CHARGE  
**C. LEMLEY**  
DATE  
**08/12/2016**

**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**  
  
**NOT FOR**  
**CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO SECTION**  
CENTRAL VALLEY WYE  
SR 152 (NORTH) TO ROAD 11 WYE ALTERNATIVE  
GENERAL PLAN (MER-FRE)  
WASHINGTON ROAD (AVENUE 25) UNDERPASS - 1 OF 2

CONTRACT NO.  
HSR08-05  
DRAWING NO.  
ST-K1450-D  
SCALE  
AS SHOWN  
SHEET NO.



**TYPICAL SECTION**  
1"=10'

- NOTES:**
1. 16"  $\phi$  PIPE PILES ASSUMED FOR ABUTMENT AND BENT FOUNDATIONS. PILE LENGTHS TO BE DETERMINED.
  2. FOR TRACK SUPERELEVATION DETAILS, SEE ALIGNMENT AND TYPICAL SECTION PLANS; DRAWINGS TT-B0054-D AND TT-B0055-D.



16-AUG-2016 11:28 MF-ST-K3450-D.dgn

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**M. BRATT**

DRAWN BY  
**A. M.**

CHECKED BY  
**K. CHARAN**

IN CHARGE  
**C. LEMLEY**

DATE  
**08/12/2016**

**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**

**NOT FOR**  
**CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO SECTION**

CENTRAL VALLEY WYE  
SR 152 (NORTH) TO ROAD 11 WYE ALTERNATIVE  
TYPICAL SECTION (MER-FRE)  
WASHINGTON ROAD (AVENUE 25) UNDERPASS - 2 OF 2

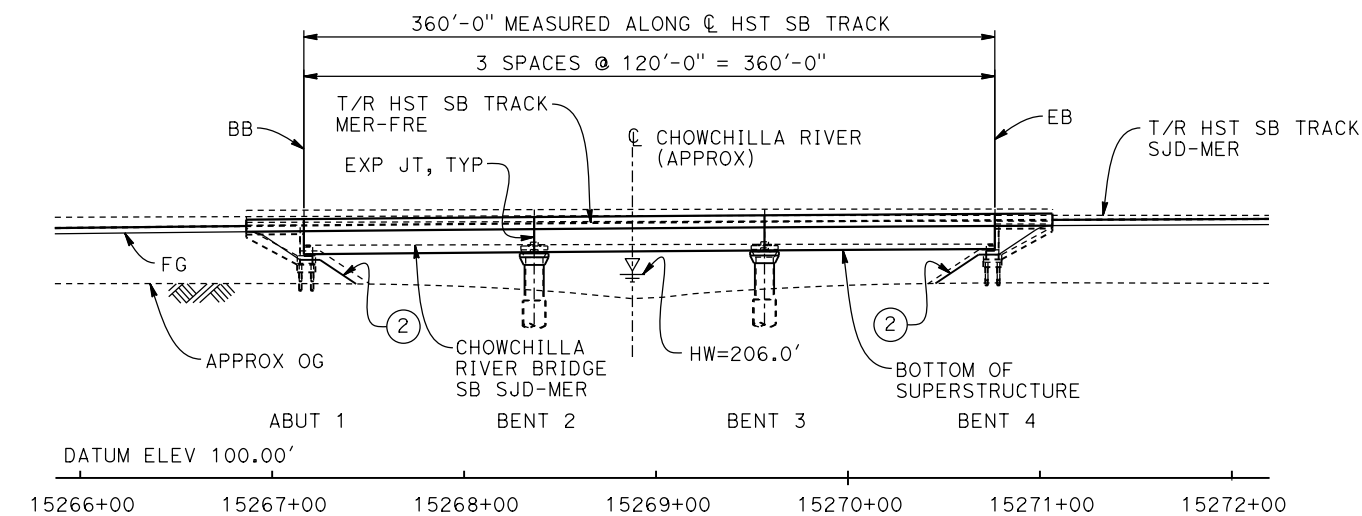
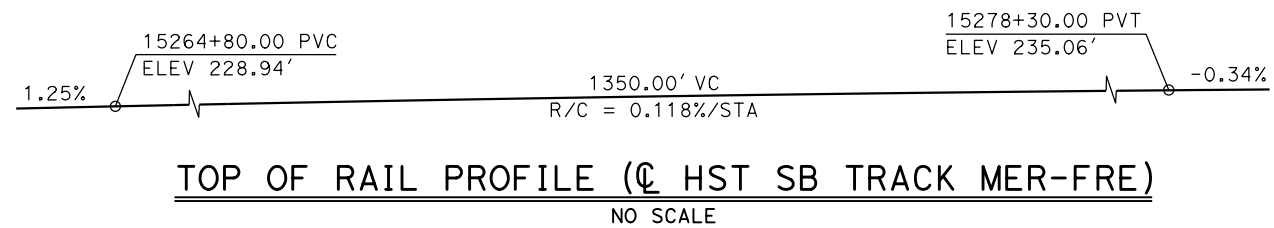
CONTRACT NO.  
HSR08-05

DRAWING NO.  
ST-K3450-D

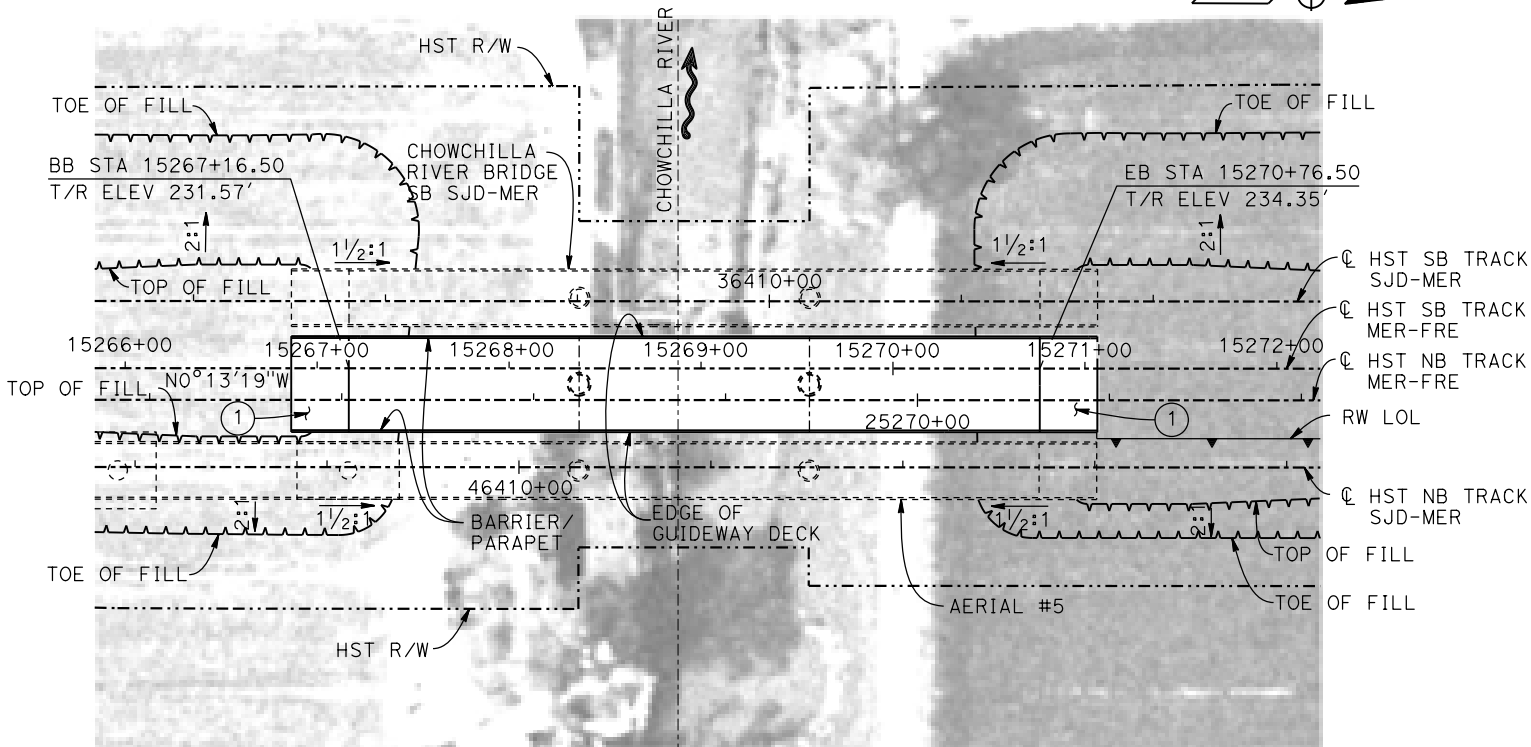
SCALE  
AS SHOWN

SHEET NO.

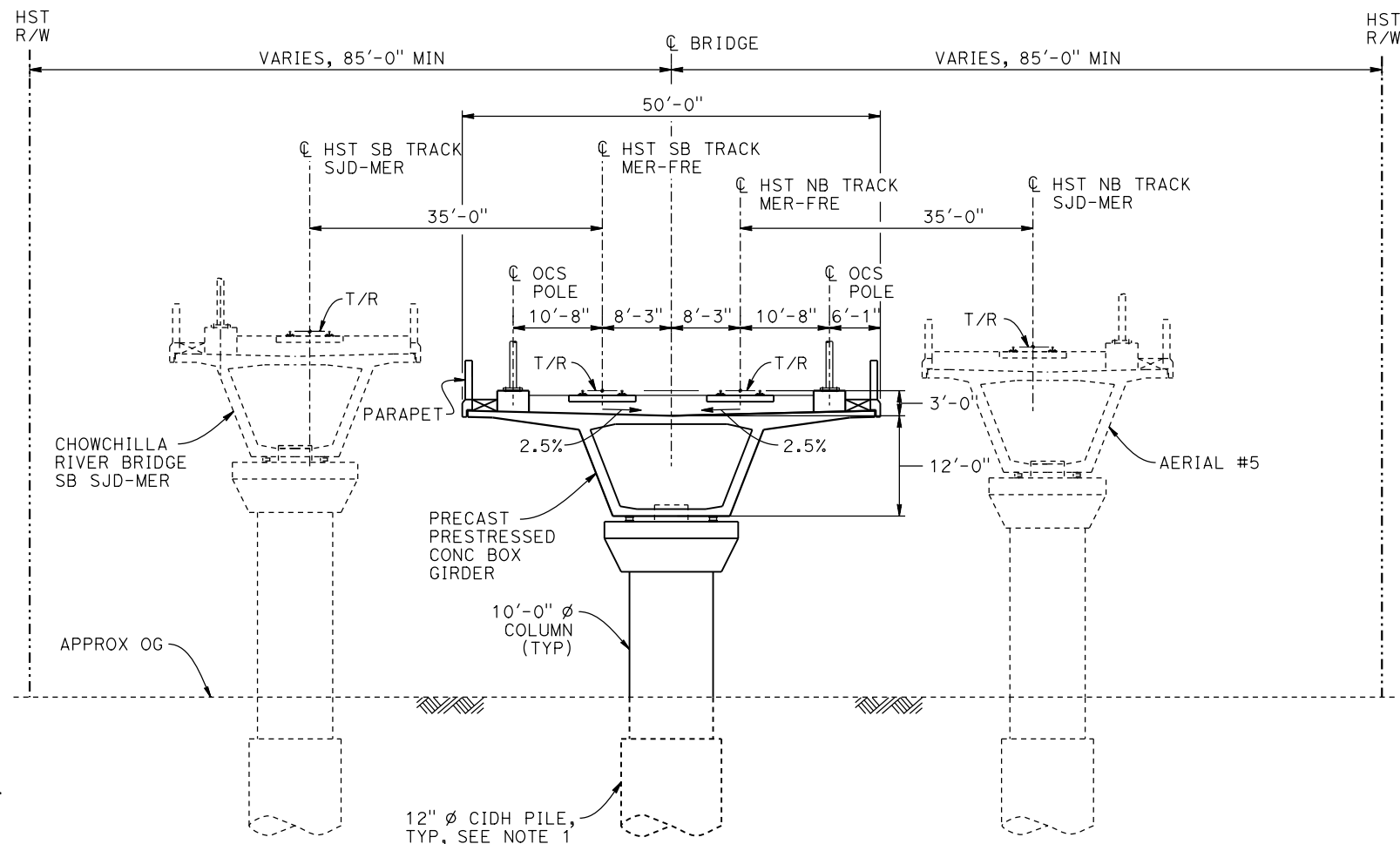




**ELEVATION**  
1" = 50'  
(AERIAL #5 NOT SHOWN FOR CLARITY)



**PLAN**  
1" = 50'



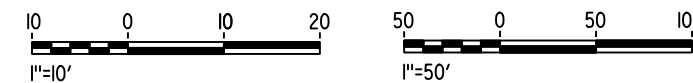
**TYPICAL SECTION**  
1" = 10'

**LEGEND:**

- INDICATES DIRECTION OF TRAFFIC
- ~ INDICATES DIRECTION OF FLOW
- ① STRUCTURE APPROACH
- ② SLOPE PAVING (1/2H:1V)

**NOTES:**

1. 16" Ø PIPE PILES ASSUMED FOR ABUTMENT FOUNDATIONS. PILE AND DRILLED SHAFT LENGTHS TO BE DETERMINED.
2. ANY EXISTING DIRT ROAD THAT CONFLICTS WITH NEW CONSTRUCTION SHALL BE REALIGNED.
3. FOR UTILITY DISPOSITIONS, SEE CIVIL AND GRADE SEPARATION PLANS; DRAWING CV-S1450-D.
4. FOR RETAINING WALLS, SEE CIVIL AND GRADE SEPARATION PLANS; DRAWING CV-S1450-D.
5. FOR CHOWCHILLA RIVER BRIDGE SB SJD-MER GENERAL PLAN AND TYPICAL SECTION, SEE DRAWING ST-K1659-D.
6. FOR AERIAL #5 GENERAL PLAN AND TYPICAL SECTIONS, SEE DRAWINGS ST-K1640-D TO ST-K1643-D AND ST-K3640-D TO ST-K3641-D.



16-AUG-2016 7:05 MF-ST-K1455-D.dgn

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**M. BRATT**  
DRAWN BY  
**A. M.**  
CHECKED BY  
**K. CHARAN**  
IN CHARGE  
**C. LEMLEY**  
DATE  
**08/12/2016**

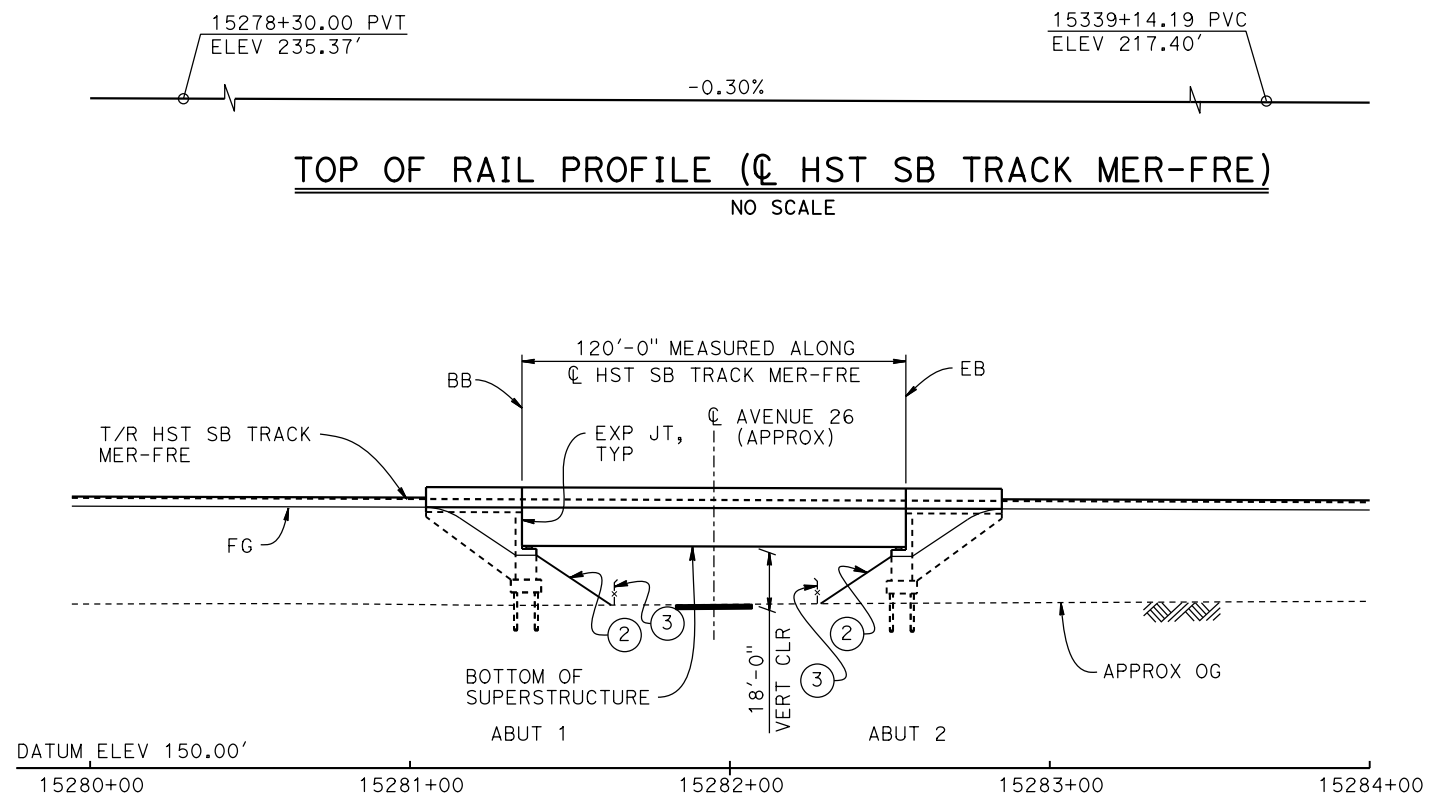
**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**  
  
**NOT FOR**  
**CONSTRUCTION**



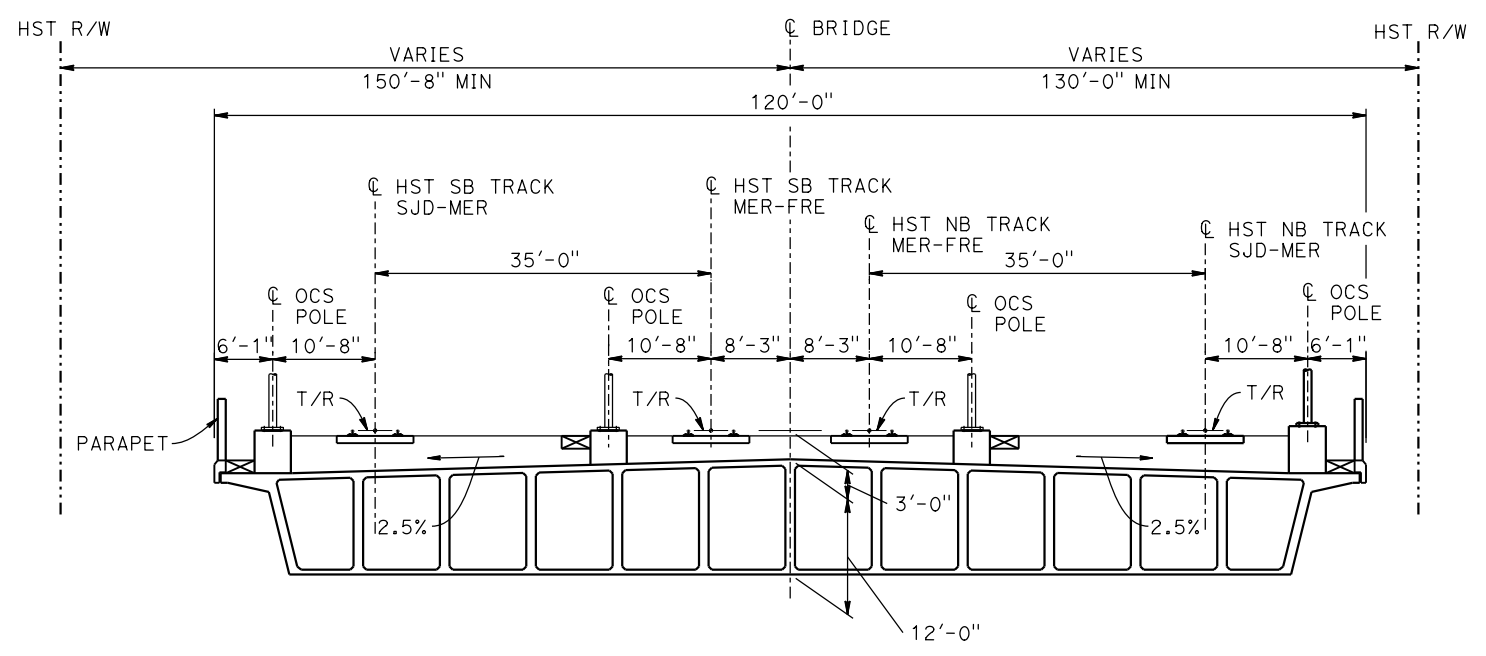
**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO SECTION**

CENTRAL VALLEY WYE  
SR 152 (NORTH) TO ROAD 11 WYE ALTERNATIVE  
GENERAL PLAN (MER-FRE)  
CHOWCHILLA RIVER BRIDGE

CONTRACT NO.  
HSR08-05  
DRAWING NO.  
ST-K1455-D  
SCALE  
AS SHOWN  
SHEET NO.



**ELEVATION**  
1" = 30'



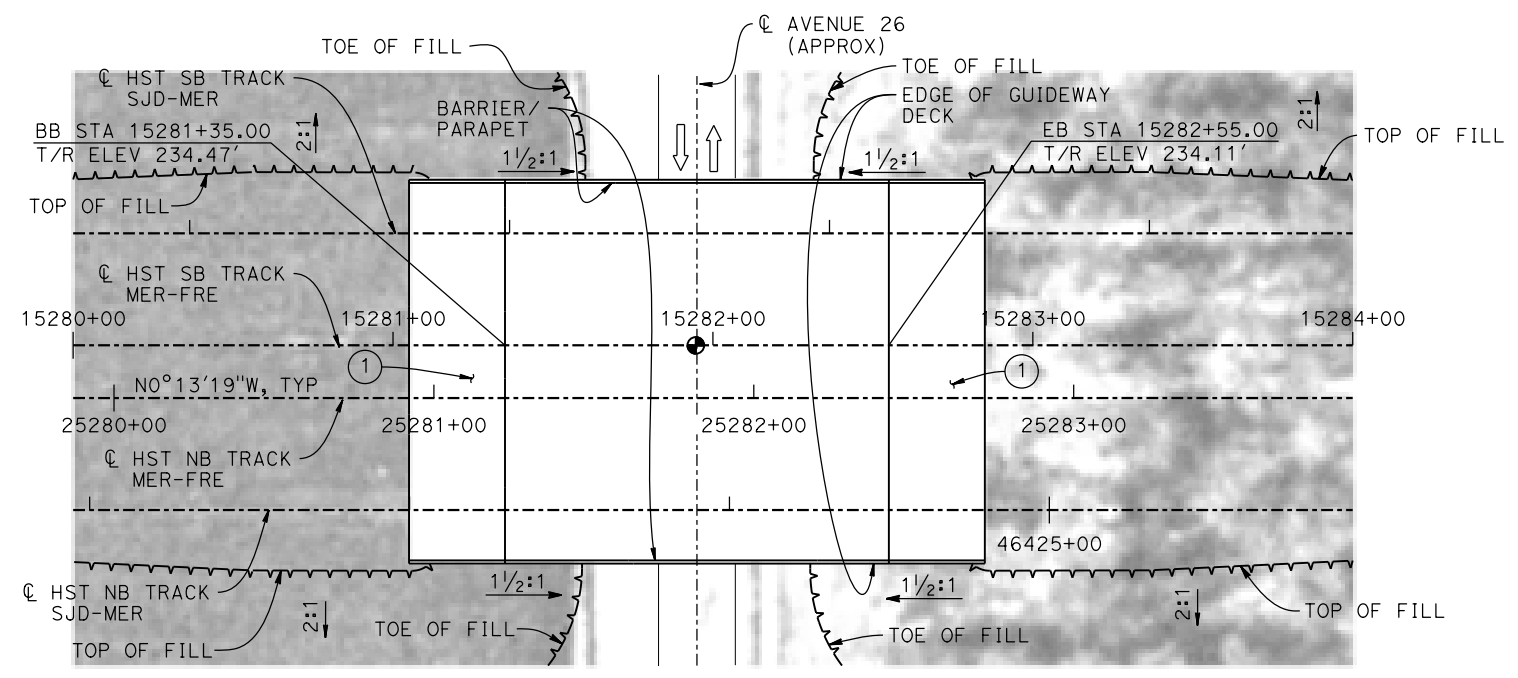
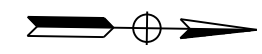
**TYPICAL SECTION**  
1" = 10'

**LEGEND:**

- ⊕ INDICATES POINT OF MINIMUM VERTICAL CLEARANCE
- ➔ INDICATES DIRECTION OF TRAFFIC
- ① STRUCTURE APPROACH
- ② SLOPE PAVING (1/2H:1V)
- ③ AR FENCE, SEE TRACK PLANS DRAWING TT-B0020-D

**NOTES:**

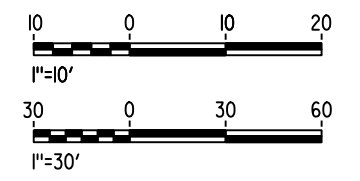
1. 16" Ø PIPE PILES ASSUMED FOR ABUTMENT FOUNDATIONS. PILE LENGTHS TO BE DETERMINED.
2. FOR UTILITY DISPOSITIONS, SEE CIVIL AND GRADE SEPARATION PLANS; DRAWING CV-S1460-D.
3. ANY EXISTING DIRT ROAD THAT CONFLICTS WITH NEW CONSTRUCTION SHALL BE REALIGNED.



**PLAN**  
1" = 30'

**TEMPORARY TRAFFIC OPENINGS**

VEHICULAR TRAFFIC			
1. TRAFFIC WILL BE DETOURED AWAY FROM THE SITE.			
2. X TRAFFIC WILL PASS UNDER THE STRUCTURE ON:			
ST OR ROAD NAME AND LOCATION	FALSEWORK OPENING REQD (HORIZ X VERT)		
AVENUE 26	15281+95	32'X16.5'	2-WAY
3. TEMP TRAFFIC LANE REDUCTION FOR FTG EXC.			



15-AUG-2016 8:40 MF-ST-K1460-D.dgn

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**M. BRATT**  
DRAWN BY  
**A. M.**  
CHECKED BY  
**K. CHARAN**  
IN CHARGE  
**C. LEMLEY**  
DATE  
**08/12/2016**

**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**  
  
**NOT FOR**  
**CONSTRUCTION**

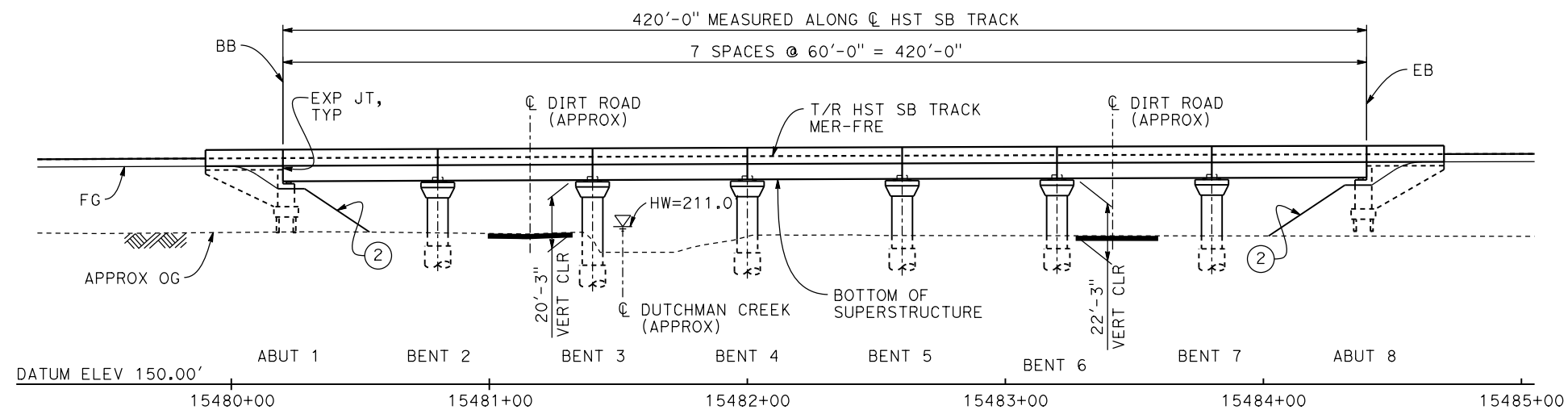


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO SECTION**  
CENTRAL VALLEY WYE  
SR 152 (NORTH) TO ROAD 11 WYE ALTERNATIVE  
GENERAL PLAN (MER-FRE)  
AVENUE 26 UNDERPASS

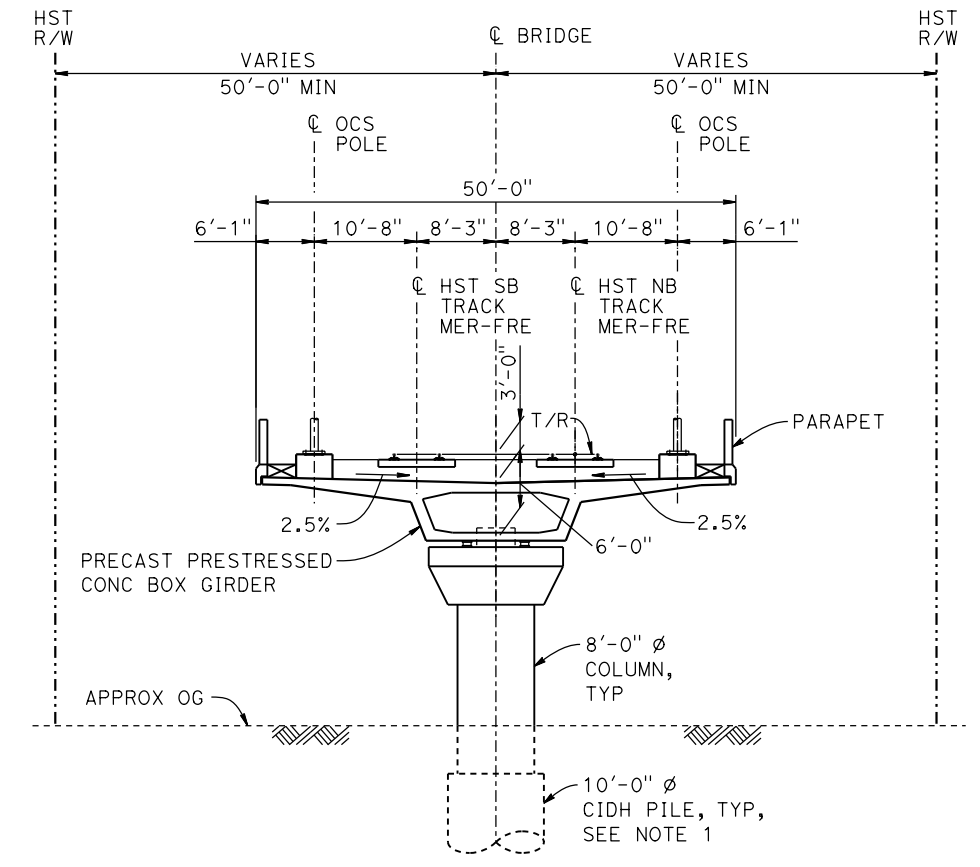
CONTRACT NO.  
HSR08-05  
DRAWING NO.  
ST-K1460-D  
SCALE  
AS SHOWN  
SHEET NO.



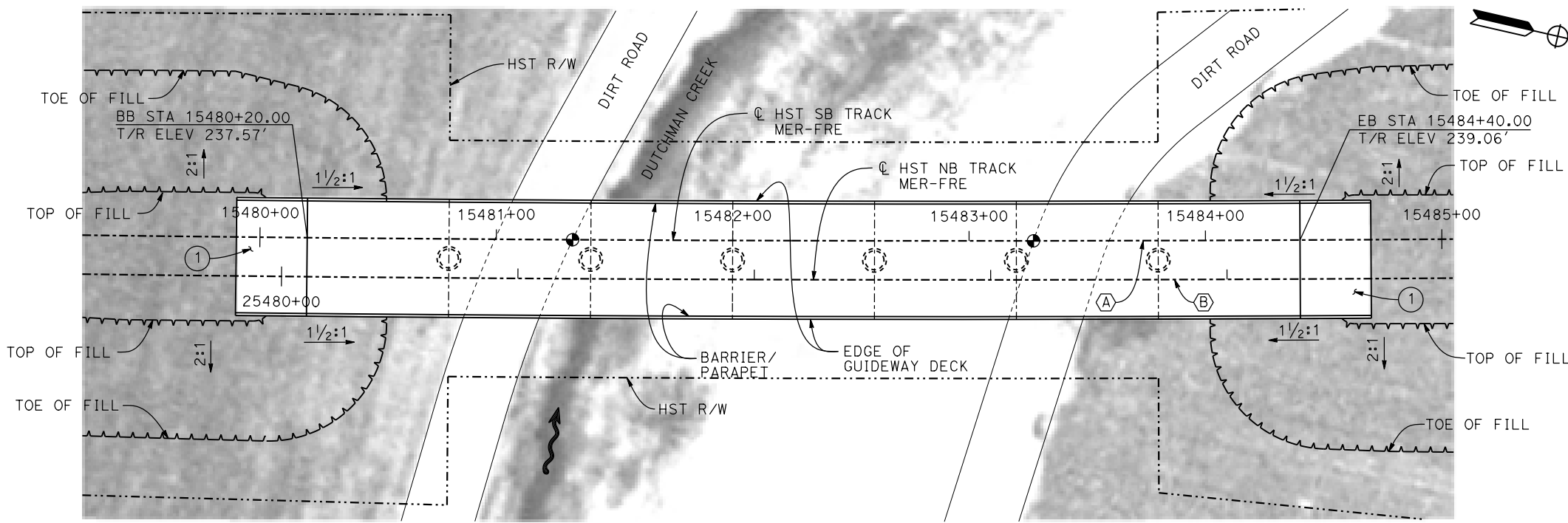
**TOP OF RAIL PROFILE (C HST SB TRACK MER-FRE)**  
NO SCALE



**DEVELOPED ELEVATION**  
1" = 30'



**TYPICAL SECTION**  
1" = 10'



**PLAN**  
1" = 30'

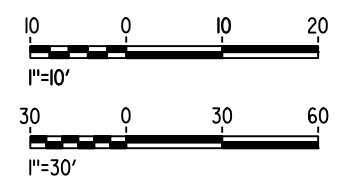
**CURVE MER-FRE 2 SB (A)**      **CURVE MER-FRE 2 NB (B)**  
R = 28,600.00'      R = 28,616.50'  
LS = 2,500.00'      LS = 2,500.00'

**LEGEND:**

- INDICATES DIRECTION OF FLOW
- (1) STRUCTURE APPROACH
- (2) SLOPE PAVING (1 1/2 H:1 V)

**NOTES:**

1. 16" Ø PIPE PILES ASSUMED FOR ABUTMENT FOUNDATIONS. PILE AND DRILLED SHAFT LENGTHS TO BE DETERMINED.
2. FOR UTILITY DISPOSITION, SEE CIVIL AND GRADE SEPARATION PLANS; DRAWING CV-S1490-D.
3. ANY EXISTING DIRT ROAD THAT CONFLICTS WITH NEW CONSTRUCTION SHALL BE REALIGNED.
4. FOR TRACK SUPERELEVATION DETAILS, SEE ALIGNMENT AND TYPICAL SECTION PLANS; DRAWINGS TT-B0054-D AND TT-B0055-D.



16-AUG-2016 7:06 MF-ST-K1490-D.dgn

REV	DATE	BY	CHK	APP	DESCRIPTION

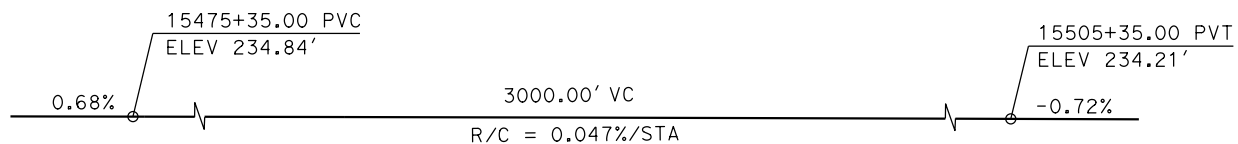
DESIGNED BY  
**M. BRATT**  
DRAWN BY  
**A. M.**  
CHECKED BY  
**K. CHARAN**  
IN CHARGE  
**C. LEMLEY**  
DATE  
**08/12/2016**

**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**  
  
**NOT FOR**  
**CONSTRUCTION**

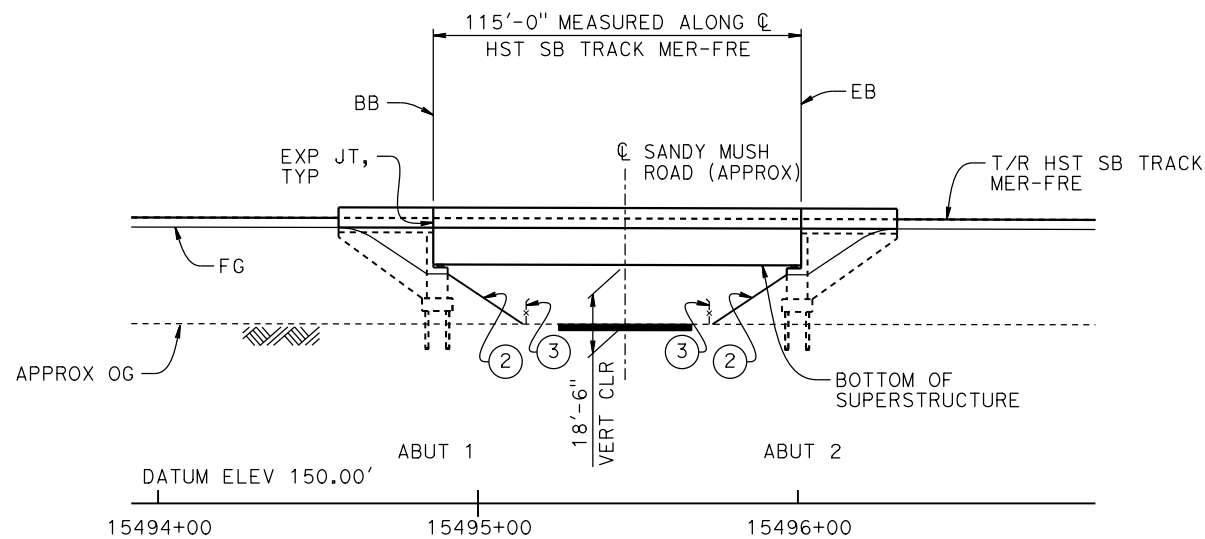


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO SECTION**  
CENTRAL VALLEY WYE  
SR 152 (NORTH) TO ROAD 11 WYE ALTERNATIVE  
GENERAL PLAN (MER-FRE)  
DUTCHMAN CREEK BRIDGE

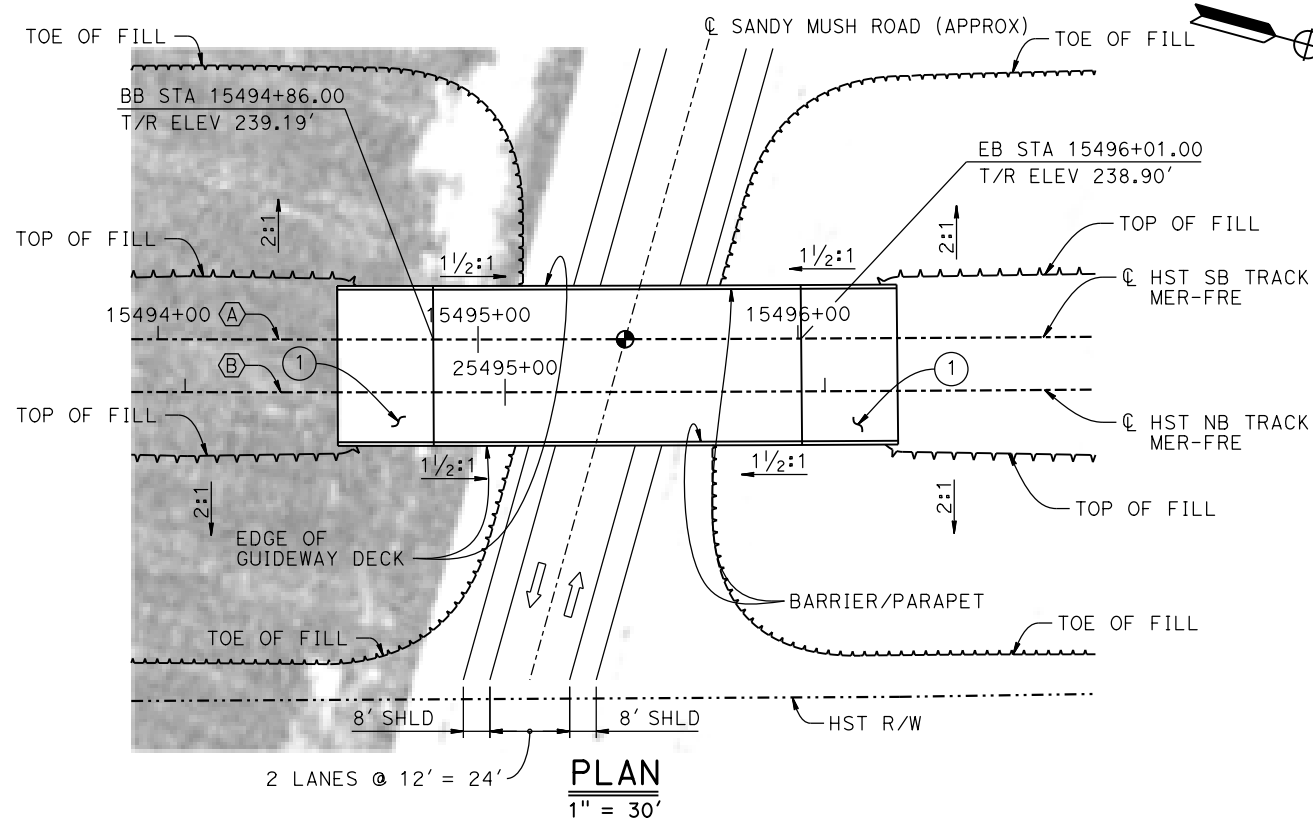
CONTRACT NO.  
HSR08-05  
DRAWING NO.  
ST-K1490-D  
SCALE  
AS SHOWN  
SHEET NO.



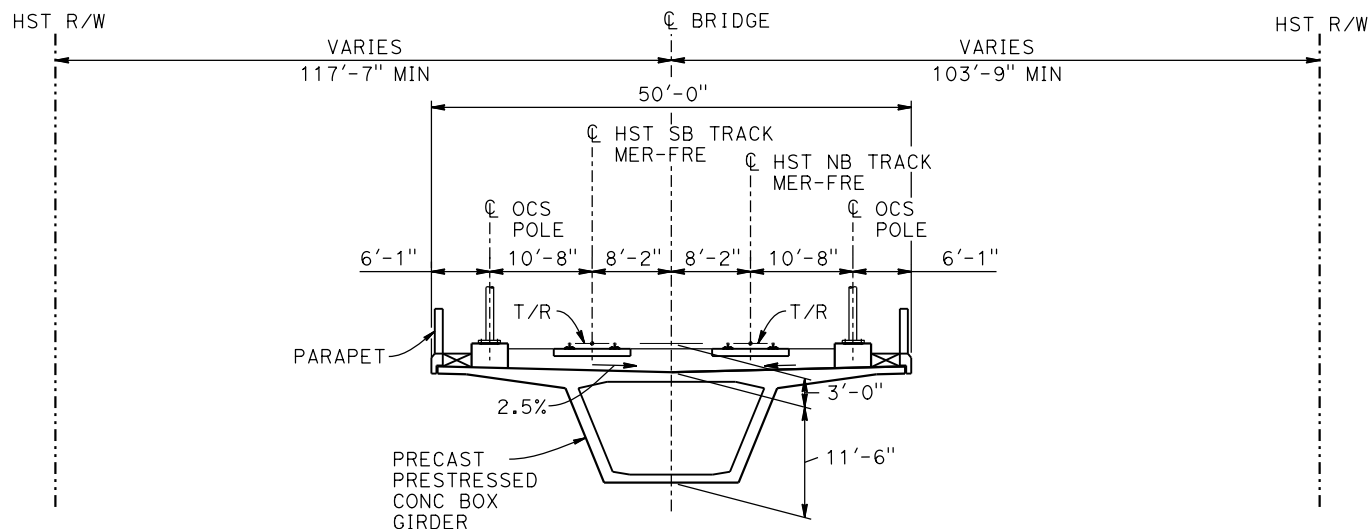
**TOP OF RAIL PROFILE (C HST SB TRACK MER-FRE)**  
NO SCALE



**DEVELOPED ELEVATION**  
1" = 30'



**PLAN**  
1" = 30'



**TYPICAL SECTION**  
1" = 10'

**CURVE MER-FRE 2 SB (A)**  
R = 28,600.00'  
LS = 2,500.00'

**CURVE MER-FRE 2 NB (B)**  
R = 28,616.50'  
LS = 2,500.00'

**LEGEND:**

- ⊙ INDICATES POINT OF MINIMUM VERTICAL CLEARANCE
- INDICATES DIRECTION OF TRAFFIC
- ① STRUCTURE APPROACH
- ② SLOPE PAVING (1½H:1V)
- ③ AR FENCE, SEE TRACK PLANS; DRAWING TT-B0020-D

**NOTES:**

1. 16"Ø PIPE PILES ASSUMED FOR ABUTMENT FOUNDATIONS. PILE LENGTHS TO BE DETERMINED.
2. FOR UTILITY DISPOSITIONS, SEE CIVIL AND GRADE SEPARATION PLANS; DRAWING CV-S1490-D.
3. FOR TRACK SUPERELEVATION DETAILS, SEE ALIGNMENT AND TYPICAL SECTION PLANS; DRAWINGS TT-B0054-D AND TT-B0055-D.

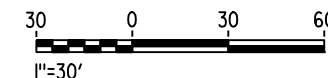
**TEMPORARY TRAFFIC OPENINGS**

**VEHICULAR TRAFFIC**

1.    TRAFFIC WILL BE DETOURED AWAY FROM THE SITE.
2.    TRAFFIC WILL PASS UNDER THE STRUCTURE ON:

STREET OR ROAD NAME AND LOCATION	FALSEWORK OPENING REQD (HORIZ x VERT)
SANDY MUSH ROAD 15495+46	32'x15' 2-WAY

3.    TEMP TRAFFIC LANE REDUCTION FOR FTG EXC.



16-AUG-2016 7:06 MF-ST-K1495-D.dgn

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**M. BRATT**  
DRAWN BY  
**A. M.**  
CHECKED BY  
**K. CHARAN**  
IN CHARGE  
**C. LEMLEY**  
DATE  
**08/12/2016**

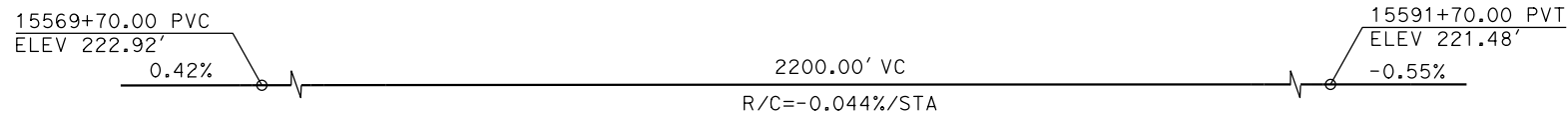
**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**  
  
**NOT FOR**  
**CONSTRUCTION**



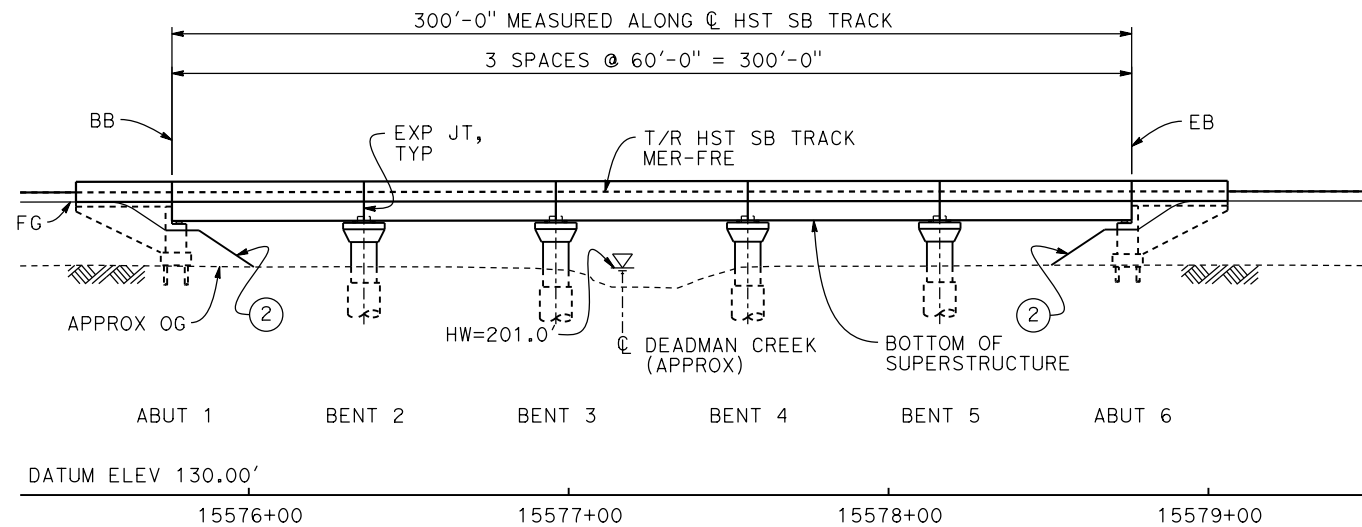
**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO SECTION**

CENTRAL VALLEY WYE  
SR 152 (NORTH) TO ROAD 11 WYE ALTERNATIVE  
GENERAL PLAN (MER-FRE)  
SANDY MUSH ROAD UNDERPASS

CONTRACT NO.  
HSR08-05  
DRAWING NO.  
ST-K1495-D  
SCALE  
AS SHOWN  
SHEET NO.



**TOP OF RAIL PROFILE (CL HST SB TRACK MER-FRE)**  
NO SCALE



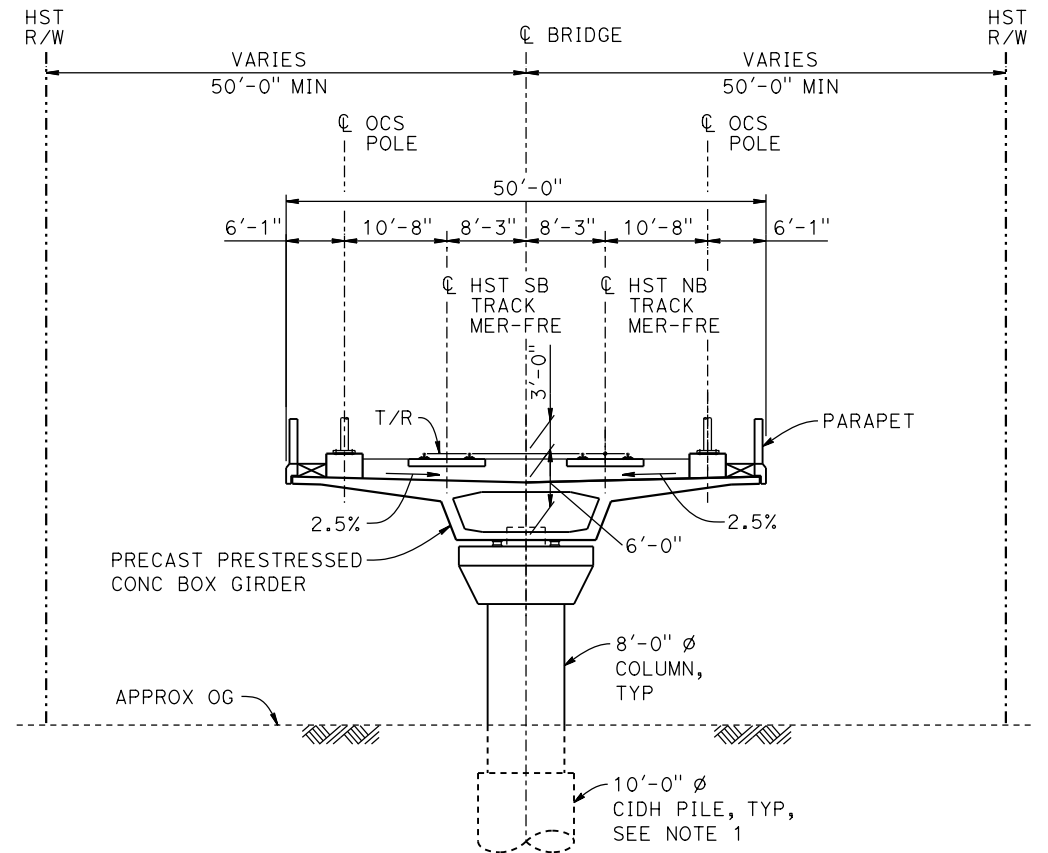
**DEVELOPED ELEVATION**  
1" = 30'

**CURVE MER-FRE 2 SB (A)**

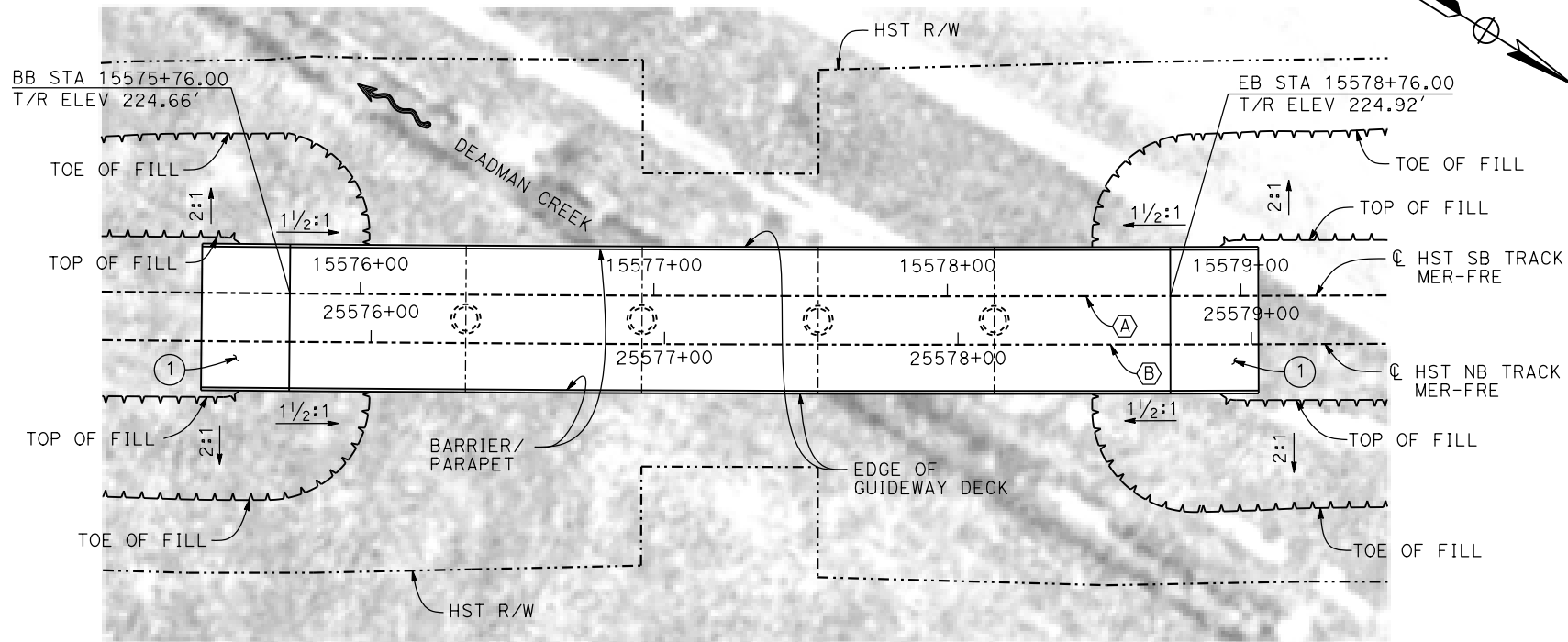
R = 28,600.00'  
LS = 2,500.00'

**CURVE MER-FRE 2 NB (B)**

R = 28,616.50'  
LS = 2,500.00'



**TYPICAL SECTION**  
1" = 10'



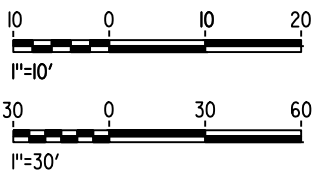
**PLAN**  
1" = 30'

**LEGEND:**

- INDICATES DIRECTION OF FLOW
- ① STRUCTURE APPROACH
- ② SLOPE PAVING (1 1/2H:1V)

**NOTES:**

1. 16" Ø PIPE PILES ASSUMED FOR ABUTMENT FOUNDATIONS. PILE AND DRILLED SHAFT LENGTHS TO BE DETERMINED.
2. FOR UTILITY DISPOSITION, SEE CIVIL AND GRADE SEPARATION PLANS; DRAWING CV-S1510-D.
3. ANY EXISTING DIRT ROAD THAT CONFLICTS WITH NEW CONSTRUCTION SHALL BE REALIGNED.
4. FOR TRACK SUPERELEVATION DETAILS, SEE ALIGNMENT AND TYPICAL SECTION PLANS; DRAWINGS TT-B0054-D AND TT-B0055-D.



15-AUG-2016 8:41 MF-ST-K1510-D.dgn

REV	DATE	BY	CHK	APP	DESCRIPTION

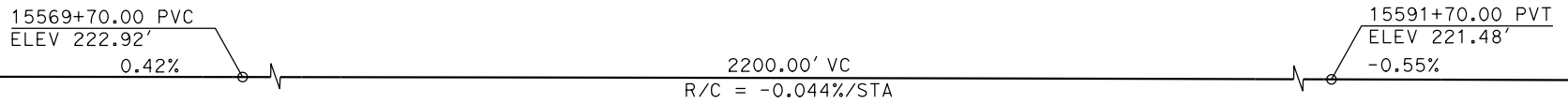
DESIGNED BY  
**M. BRATT**  
DRAWN BY  
**A. M.**  
CHECKED BY  
**K. CHARAN**  
IN CHARGE  
**C. LEMLEY**  
DATE  
**08/12/2016**

**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**  
  
**NOT FOR**  
**CONSTRUCTION**

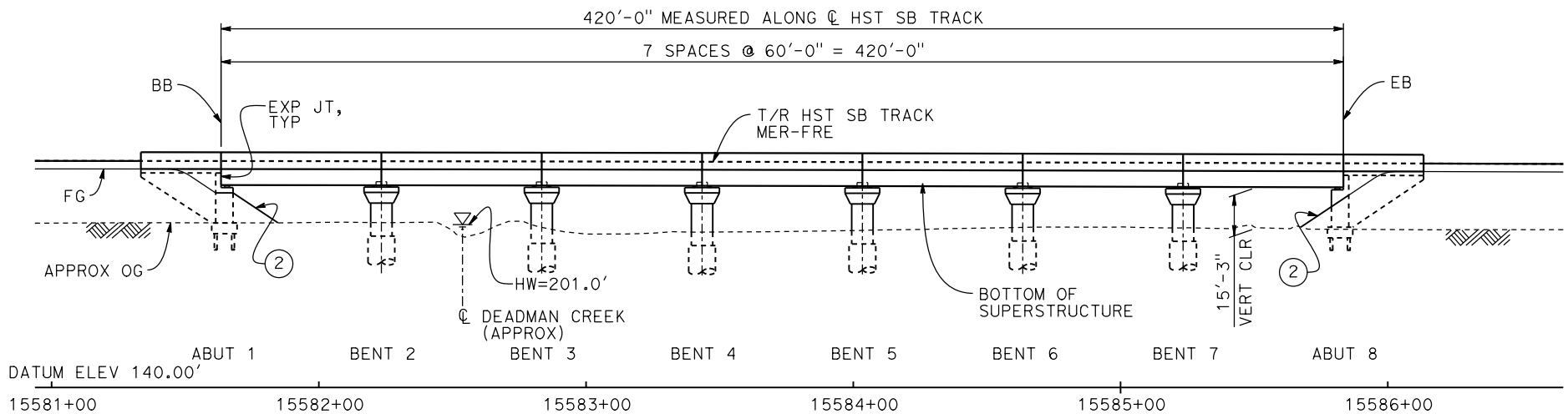


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO SECTION**  
CENTRAL VALLEY WYE  
SR 152 (NORTH) TO ROAD 11 WYE ALTERNATIVE  
GENERAL PLAN (MER-FRE)  
DEADMEN CREEK BRIDGE No. 1

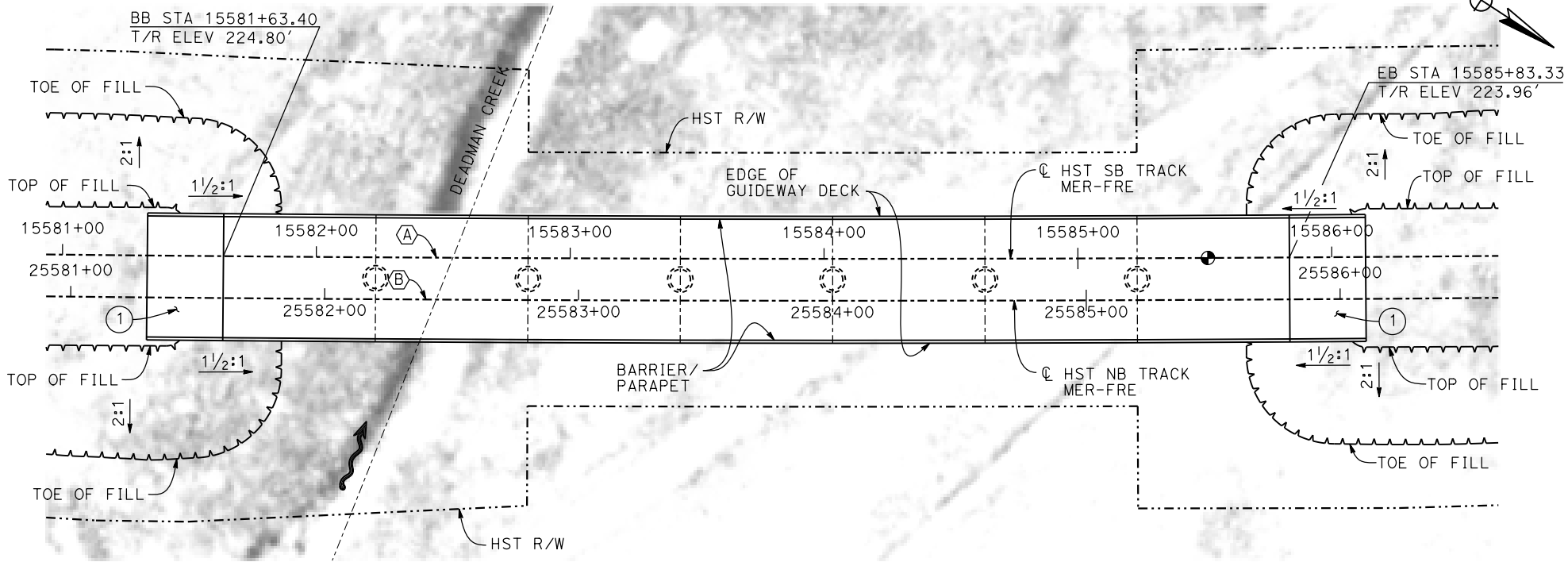
CONTRACT NO.  
HSR08-05  
DRAWING NO.  
ST-K1510-D  
SCALE  
AS SHOWN  
SHEET NO.



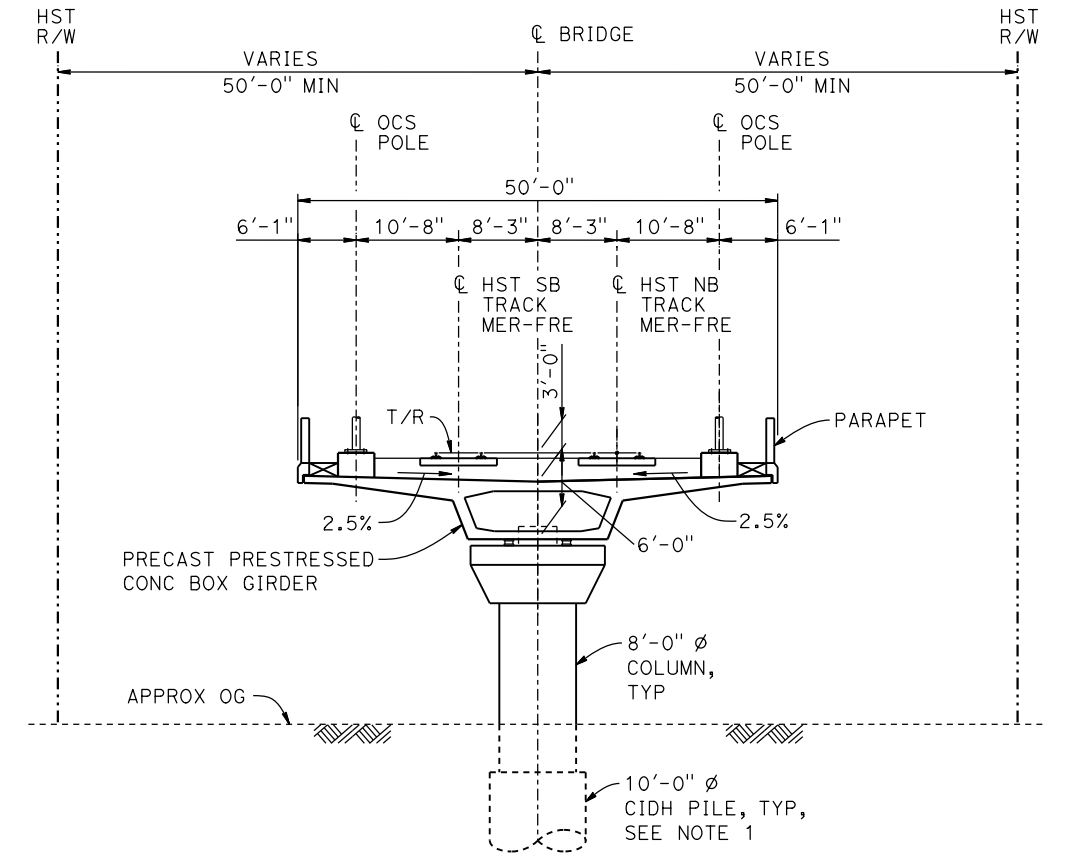
**TOP OF RAIL PROFILE (☉ HST SB TRACK MER-FRE)**  
NO SCALE



**DEVELOPED ELEVATION**  
1" = 30'



**PLAN**  
1" = 30'



**TYPICAL SECTION**  
1" = 10'

**LEGEND:**

- INDICATES DIRECTION OF FLOW
- ① STRUCTURE APPROACH
- ② SLOPE PAVING (1 1/2 H:1 V)

**NOTES:**

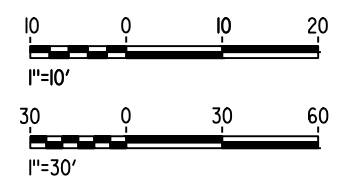
1. 16"  $\phi$  PIPE PILES ASSUMED FOR ABUTMENT FOUNDATIONS. PILE AND DRILLED SHAFT LENGTHS TO BE DETERMINED.
2. FOR UTILITY DISPOSITION, SEE CIVIL AND GRADE SEPARATION PLANS; DRAWING CV-S1515-D.
3. ANY EXISTING DIRT ROAD THAT CONFLICTS WITH NEW CONSTRUCTION SHALL BE REALIGNED.
4. FOR TRACK SUPERELEVATION DETAILS, SEE ALIGNMENT AND TYPICAL SECTION PLANS; DRAWINGS TT-B0054-D AND TT-B0055-D.

**CURVE MER-FRE 2 SB (A)**

R = 28,600.00'  
LS = 2,500.00'

**CURVE MER-FRE 2 NB (B)**

R = 28,616.50'  
LS = 2,500.00'



16-AUG-2016 7:06 MF-ST-K1515-D.dgn

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**M. BRATT**  
DRAWN BY  
**A. M.**  
CHECKED BY  
**K. CHARAN**  
IN CHARGE  
**C. LEMLEY**  
DATE  
**08/12/2016**

**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**  
  
**NOT FOR**  
**CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO SECTION**  
CENTRAL VALLEY WYE  
SR 152 (NORTH) TO ROAD 11 WYE ALTERNATIVE  
GENERAL PLAN (MER-FRE)  
DEADMAN CREEK BRIDGE No. 2

CONTRACT NO.  
HSR08-05  
DRAWING NO.  
ST-K1515-D  
SCALE  
AS SHOWN  
SHEET NO.

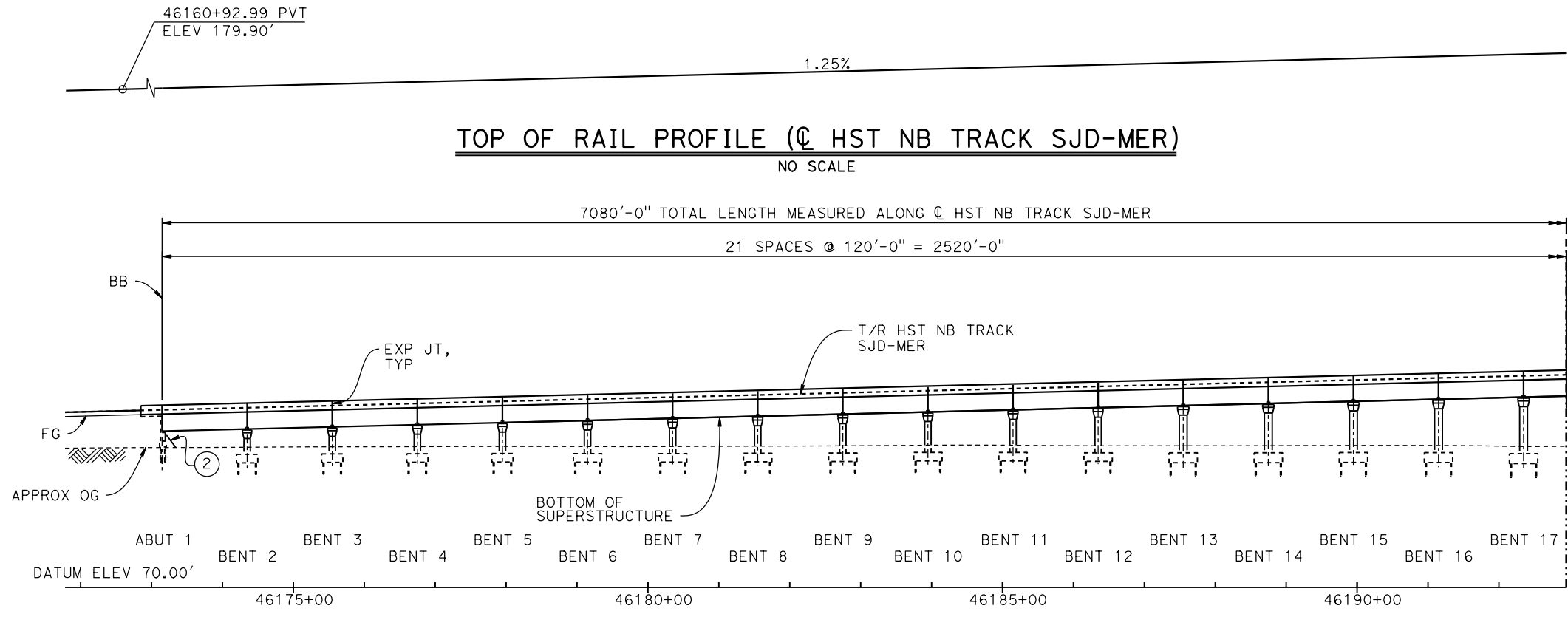
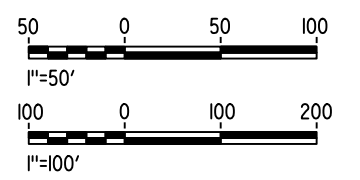
- LEGEND:**
- ⊕ INDICATES POINT OF MINIMUM VERTICAL CLEARANCE
  - ~ INDICATES DIRECTION OF FLOW
  - ⇨ INDICATES DIRECTION OF TRAFFIC
  - ① STRUCTURE APPROACH
  - ② SLOPE PAVING (1½H:1V)

**TEMPORARY TRAFFIC OPENINGS**

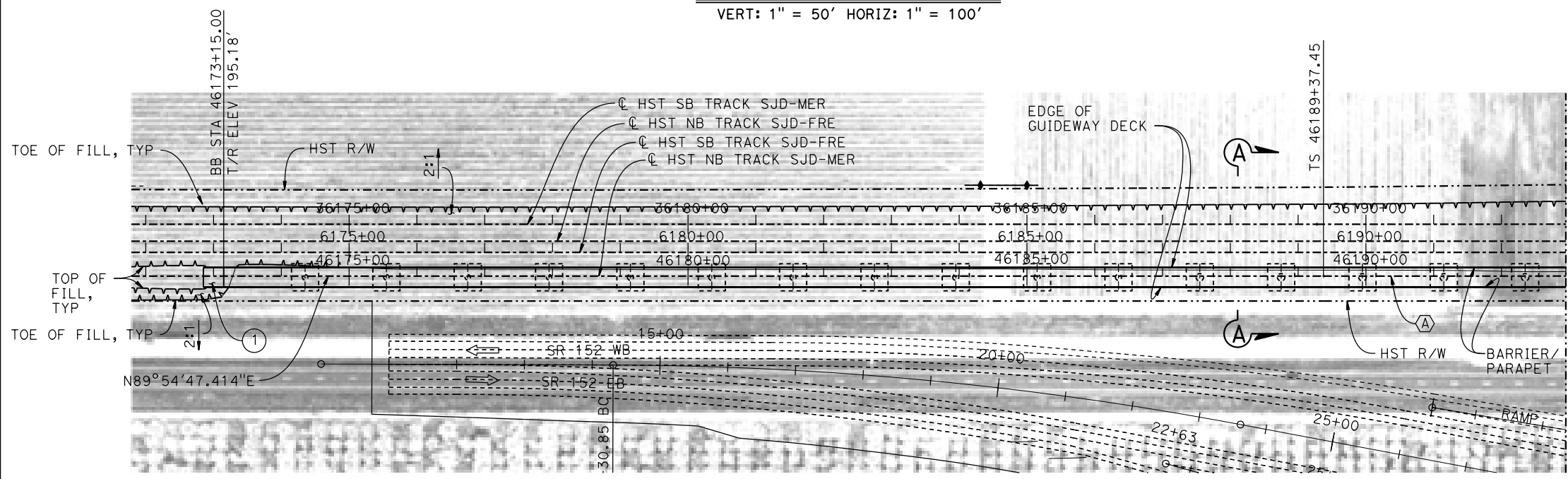
VEHICULAR TRAFFIC			
1. <u>X</u> TRAFFIC WILL BE DETOURED AWAY FROM THE SITE.			
2. <u>-</u> TRAFFIC WILL PASS UNDER THE STRUCTURE ON:			
ST OR ROAD NAME AND LOCATION	FALSEWORK OPENING REQD (HORIZ X VERT)		
HEMLOCK RD 46211+10	32'X16.5'	-	
3. <u>-</u> TEMP TRAFFIC LANE REDUCTION FOR FTG EXC.			

- NOTES:**
- 16" Ø PIPE PILES ASSUMED FOR ABUTMENT AND BENT FOUNDATIONS, UNLESS OTHERWISE NOTED. PILE LENGTHS TO BE DETERMINED.
  - FOR SECTIONS AND BENT COLUMN SCHEDULE, SEE DRAWINGS ST-K3610-D AND ST-K3611-D.
  - ANY EXISTING DIRT ROAD THAT CONFLICTS WITH NEW CONSTRUCTION SHALL BE REALIGNED.
  - FOR RETAINING WALLS, SEE CIVIL AND GRADE SEPARATION PLANS; DRAWINGS CV-S1610-D AND CV-S1630-D.
  - FOR UTILITY DISPOSITIONS, SEE CIVIL AND GRADE SEPARATION PLANS; DRAWINGS CV-S1610-D AND CV-S1630-D.
  - FOR HEMLOCK RD (ROAD 9) INTERCHANGE GENERAL PLAN AND TYPICAL SECTION, SEE DRAWING ST-K1160-D.
  - FOR HEMLOCK RD (ROAD 9) OVERHEAD GENERAL PLAN AND TYPICAL SECTION, SEE DRAWING ST-K1620-D.

**CURVE SJD-MER 1 NB (A)**  
 R = 12,000.00'  
 LS = 1,500.00'



**DEVELOPED ELEVATION**  
 VERT: 1" = 50' HORIZ: 1" = 100'



**PLAN**  
 1" = 100'

16-AUG-2016 08:06 MF-ST-K1610-D.dgn

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**M. BRATT**

DRAWN BY  
**A. M.**

CHECKED BY  
**K. CHARAN**

IN CHARGE  
**C. LEMLEY**

DATE  
**08/12/2016**

**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**

**NOT FOR**  
**CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO SECTION**

CENTRAL VALLEY WYE  
 SR 152 (NORTH) TO ROAD 11 WYE ALTERNATIVE  
 GENERAL PLAN (SJD-MER)

AERIAL #4 - NORTHBOUND OVER HST MAINLINE - 1 OF 5

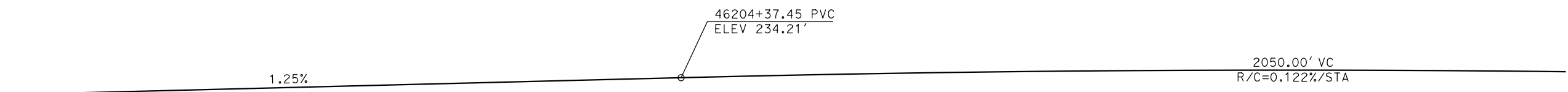
CONTRACT NO.  
HSR08-05

DRAWING NO.  
ST-K1610-D

SCALE  
AS SHOWN

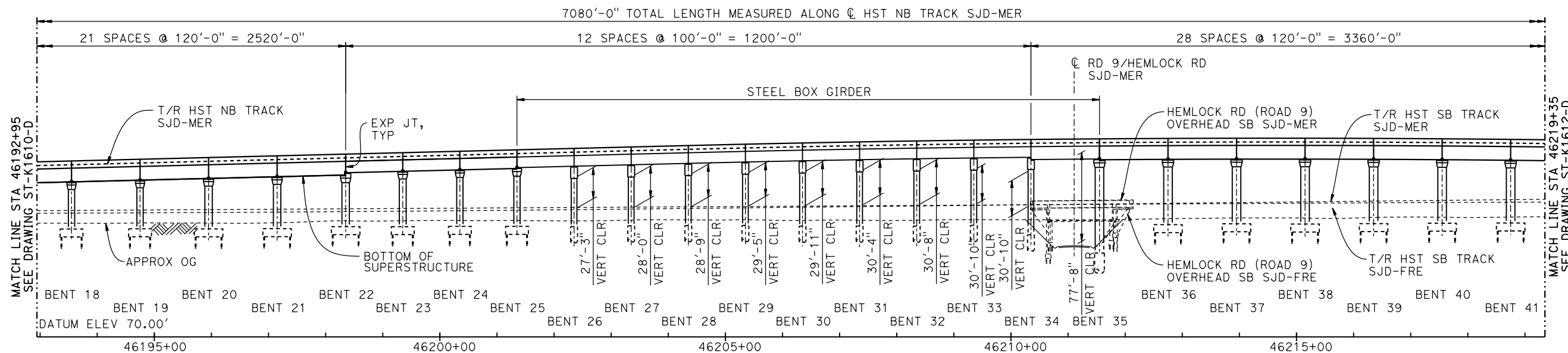
SHEET NO.

15-AUG-2016 8:42 MF-ST-K1611-D.dgn



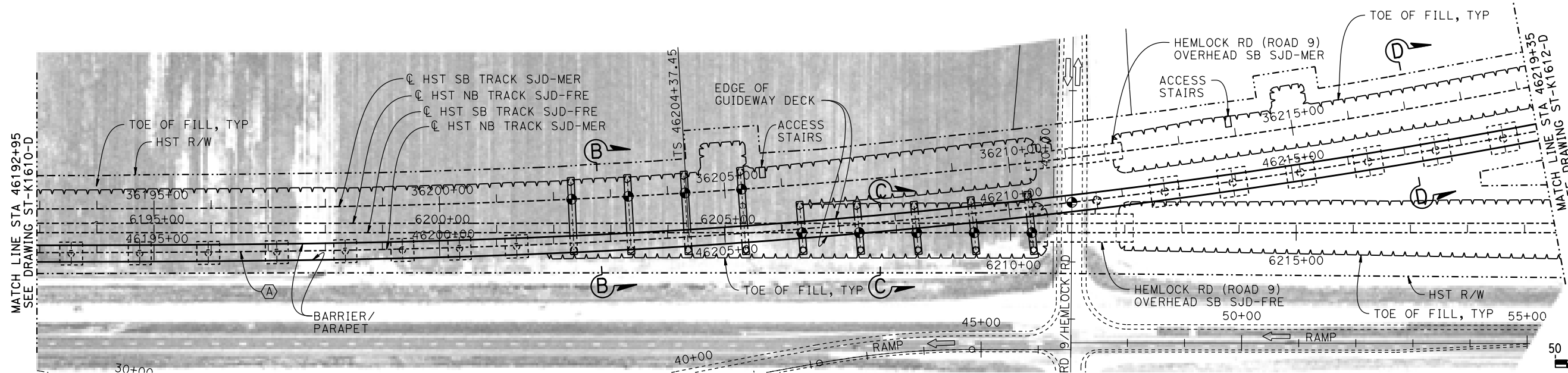
**TOP OF RAIL PROFILE (C HST NB TRACK SJD-MER)**

NO SCALE



**DEVELOPED ELEVATION**

VERT: 1" = 50' HORIZ: 1" = 100'

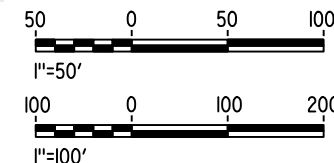


**PLAN**

1" = 100'

**NOTES:**

1. FOR GENERAL NOTES AND LEGEND, SEE DRAWING ST-K1610-D.



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**M. BRATT**  
DRAWN BY  
**A. M.**  
CHECKED BY  
**K. CHARAN**  
IN CHARGE  
**C. LEMLEY**  
DATE  
**08/12/2016**

**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**  
  
**NOT FOR**  
**CONSTRUCTION**

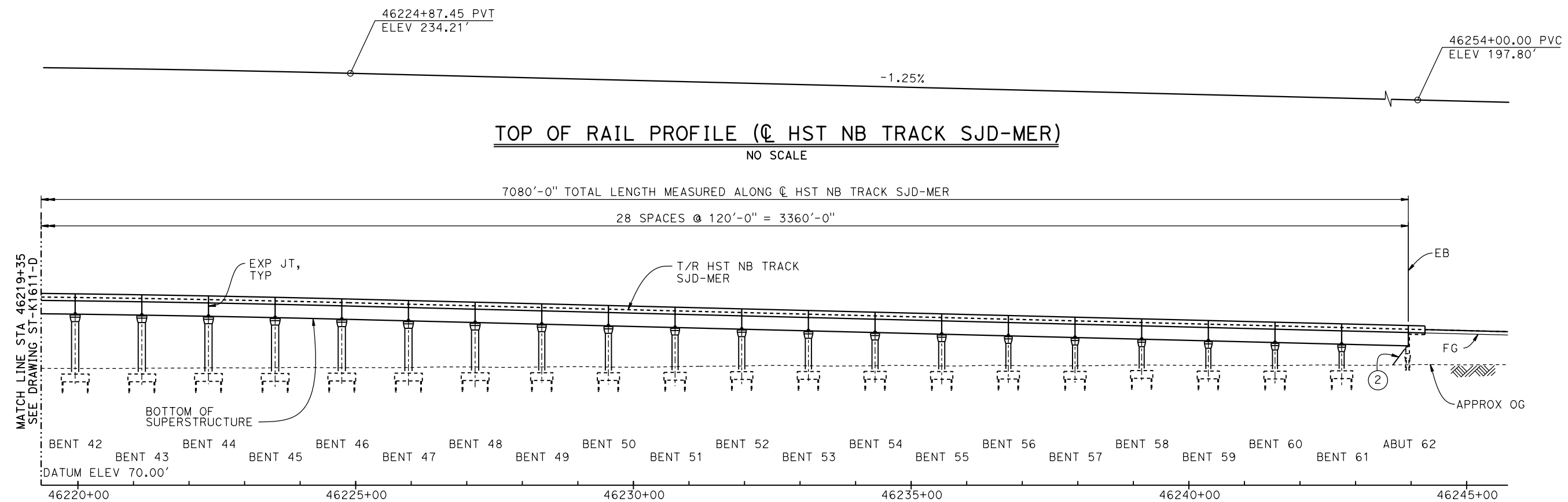


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO SECTION**  
CENTRAL VALLEY WYE  
SR 152 (NORTH) TO ROAD 11 WYE ALTERNATIVE  
GENERAL PLAN (SJD-MER)  
AERIAL #4 - NORTHBOUND OVER HST MAINLINE - 2 OF 5

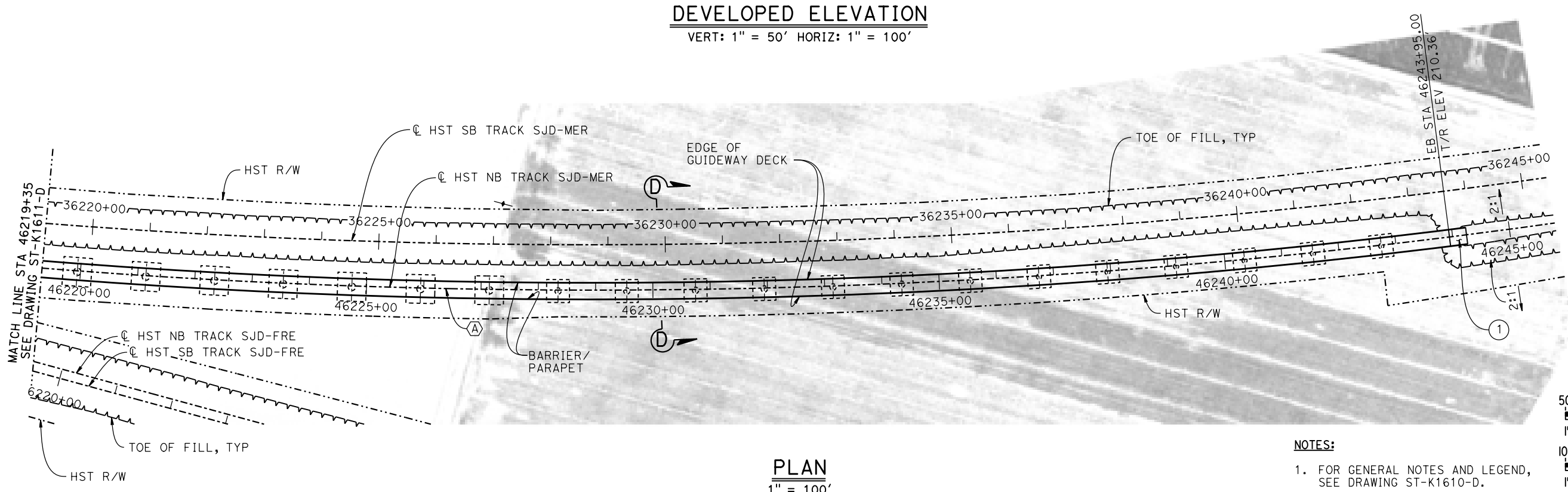
CONTRACT NO.  
HSR08-05  
DRAWING NO.  
ST-K1611-D  
SCALE  
AS SHOWN  
SHEET NO.



16-AUG-2016 7:07 MF-ST-K1612-D.dgn

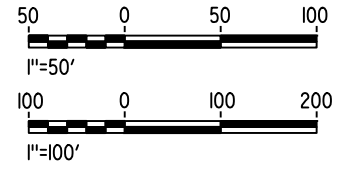


**DEVELOPED ELEVATION**  
VERT: 1" = 50' HORIZ: 1" = 100'



**PLAN**  
1" = 100'

**NOTES:**  
1. FOR GENERAL NOTES AND LEGEND, SEE DRAWING ST-K1610-D.



REV	DATE	BY	CHK	APP	DESCRIPTION

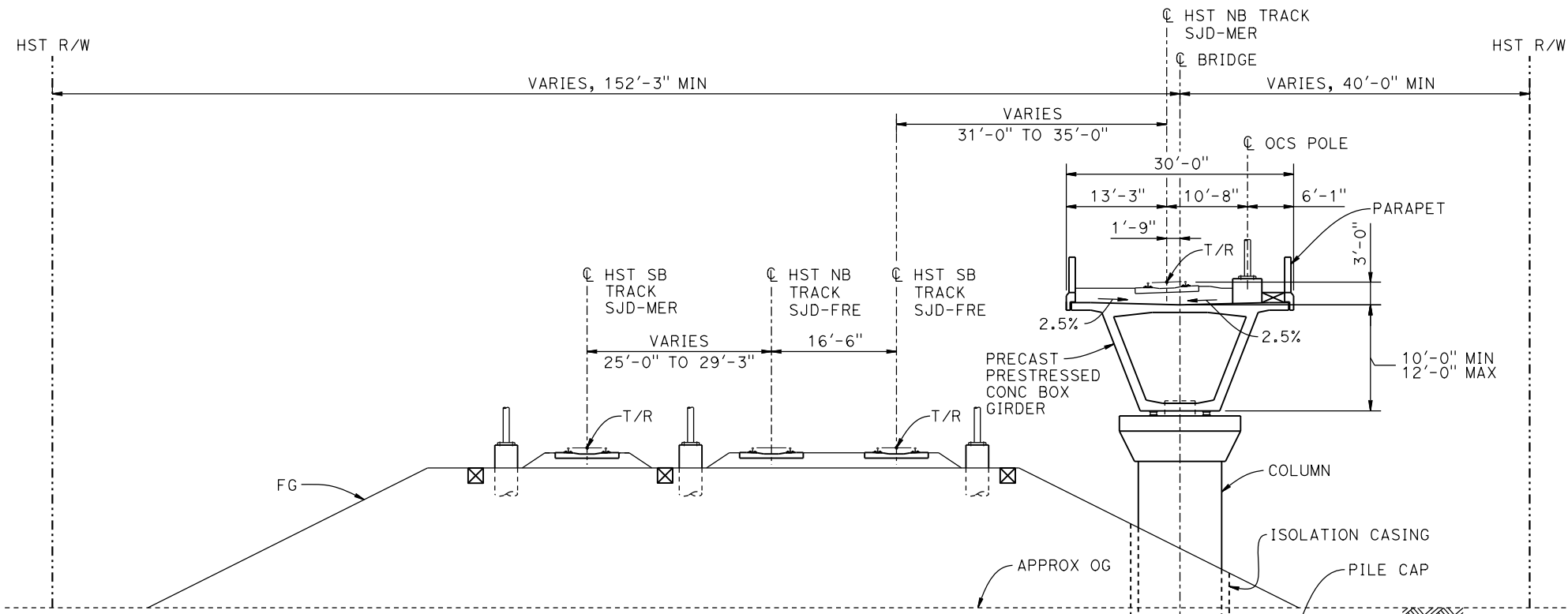
DESIGNED BY  
**M. BRATT**  
DRAWN BY  
**A. M.**  
CHECKED BY  
**K. CHARAN**  
IN CHARGE  
**C. LEMLEY**  
DATE  
**08/12/2016**

**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**  
  
**NOT FOR**  
**CONSTRUCTION**



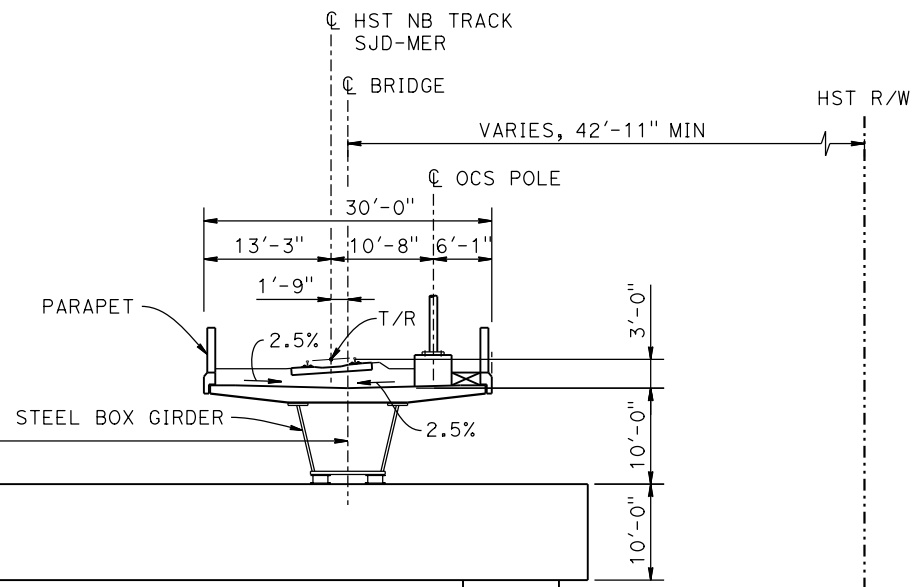
**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO SECTION**  
CENTRAL VALLEY WYE  
SR 152 (NORTH) TO ROAD 11 WYE ALTERNATIVE  
GENERAL PLAN (SJD-MER)  
AERIAL #4 - NORTHBOUND OVER HST MAINLINE - 3 OF 5

CONTRACT NO.  
HSR08-05  
DRAWING NO.  
ST-K1612-D  
SCALE  
AS SHOWN  
SHEET NO.



**SECTION A-A**  
1" = 10'

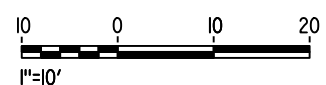
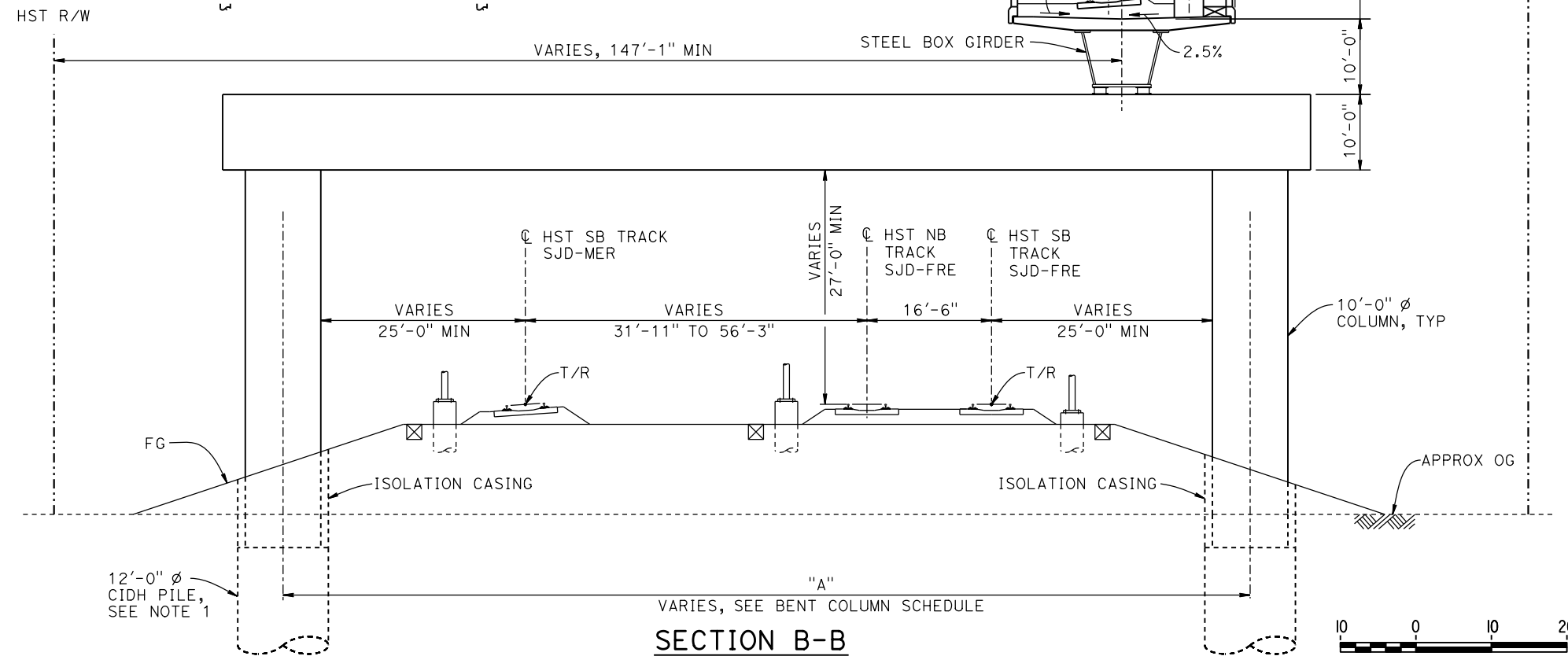
16" Ø PIPE PILE  
TYP, SEE NOTE 1



**SECTION B-B**  
1" = 10'

- NOTES:**
1. PILE AND DRILLED SHAFT LENGTHS TO BE DETERMINED.
  2. FOR TRACK SUPERELEVATION DETAILS, SEE ALIGNMENT AND TYPICAL SECTION PLANS; DRAWING TT-B0056-D.

BENT COLUMN SCHEDULE				
BENT	COLUMN TYPE	CIDH TYPE	"A"	TYP SECTION, SHEET
2 - 5	8'-0" Ø			A-A, ST-K3610-D
6 - 12	9'-0" Ø			A-A, ST-K3610-D
13 - 19	11'-0" Ø			A-A, ST-K3610-D
20 - 22	13'-0" Ø			A-A, ST-K3610-D
23 - 25	12'-0" Ø			A-A, ST-K3610-D
26	2 - 10'-0" Ø	12'-0" Ø	119'-0"	B-B, ST-K3610-D
27	2 - 10'-0" Ø	12'-0" Ø	124'-0"	B-B, ST-K3610-D
28	2 - 10'-0" Ø	12'-0" Ø	130'-0"	B-B, ST-K3610-D
29	2 - 10'-0" Ø	12'-0" Ø	137'-0"	B-B, ST-K3610-D
30 - 32	2 - 10'-0" Ø	12'-0" Ø	77'-0"	C-C, ST-K3611-D
33	2 - 10'-0" Ø	12'-0" Ø	85'-0"	C-C, ST-K3611-D
34	2 - 10'-0" Ø	12'-0" Ø	95'-0"	C-C, ST-K3611-D
35	15'-0" Ø	17'-0" Ø		C-C, ST-K3611-D
36 - 42	15'-0" Ø			D-D, ST-K3611-D
43 - 49	13'-0" Ø			D-D, ST-K3611-D
50 - 55	11'-0" Ø			D-D, ST-K3611-D
56 - 61	9'-0" Ø			D-D, ST-K3611-D



15-AUG-2016 8:50 MF-ST-K3610-D.dgn

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**M. BRATT**

DRAWN BY  
**A. M.**

CHECKED BY  
**K. CHARAN**

IN CHARGE  
**C. LEMLEY**

DATE  
**08/12/2016**

**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**

**NOT FOR**  
**CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO SECTION**

CENTRAL VALLEY WYE  
SR 152 (NORTH) TO ROAD 11 WYE ALTERNATIVE  
TYPICAL SECTIONS (SJD-MER)

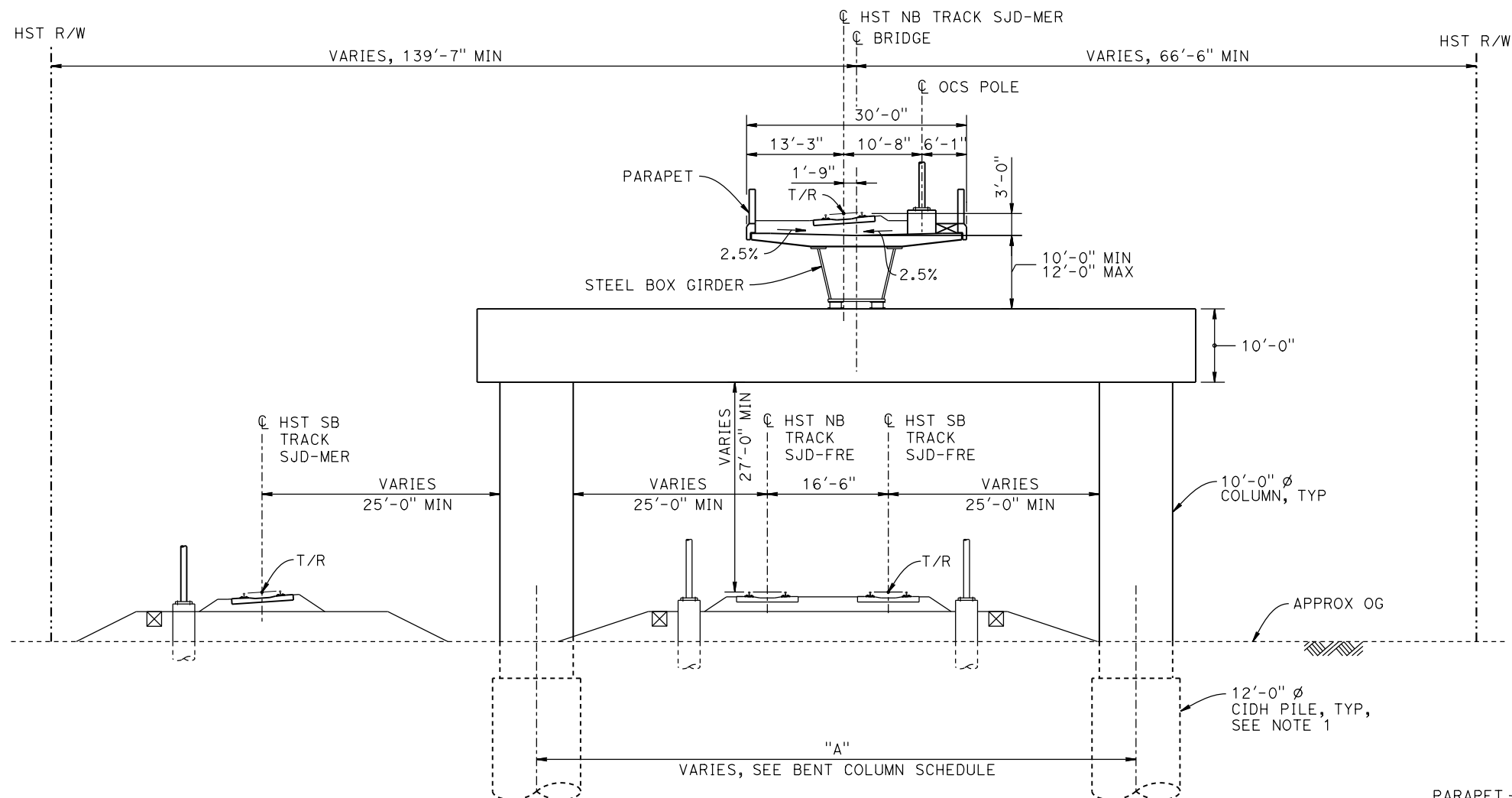
AERIAL #4 - NORTHBOUND OVER HST MAINLINE - 4 OF 5

CONTRACT NO.  
HSR08-05

DRAWING NO.  
ST-K3610-D

SCALE  
AS SHOWN

SHEET NO.



**SECTION C-C**  
1" = 10'



**SECTION D-D**  
1" = 10'

**NOTES:**

1. PILE AND DRILLED SHAFT LENGTHS TO BE DETERMINED.
2. FOR TRACK SUPERELEVATION DETAILS, SEE ALIGNMENT AND TYPICAL SECTION PLANS; DRAWING TT-B0056-A.



15-AUG-2016 8:50 MF-ST-K3611-D.dgn

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**M. BRATT**  
DRAWN BY  
**A. M.**  
CHECKED BY  
**K. CHARAN**  
IN CHARGE  
**C. LEMLEY**  
DATE  
**08/12/2016**

**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**  
  
**NOT FOR**  
**CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO SECTION**  
CENTRAL VALLEY WYE  
SR 152 (NORTH) TO ROAD 11 WYE ALTERNATIVE  
TYPICAL SECTIONS (SJD-MER)  
AERIAL #4 - NORTHBOUND OVER HST MAINLINE - 5 OF 5

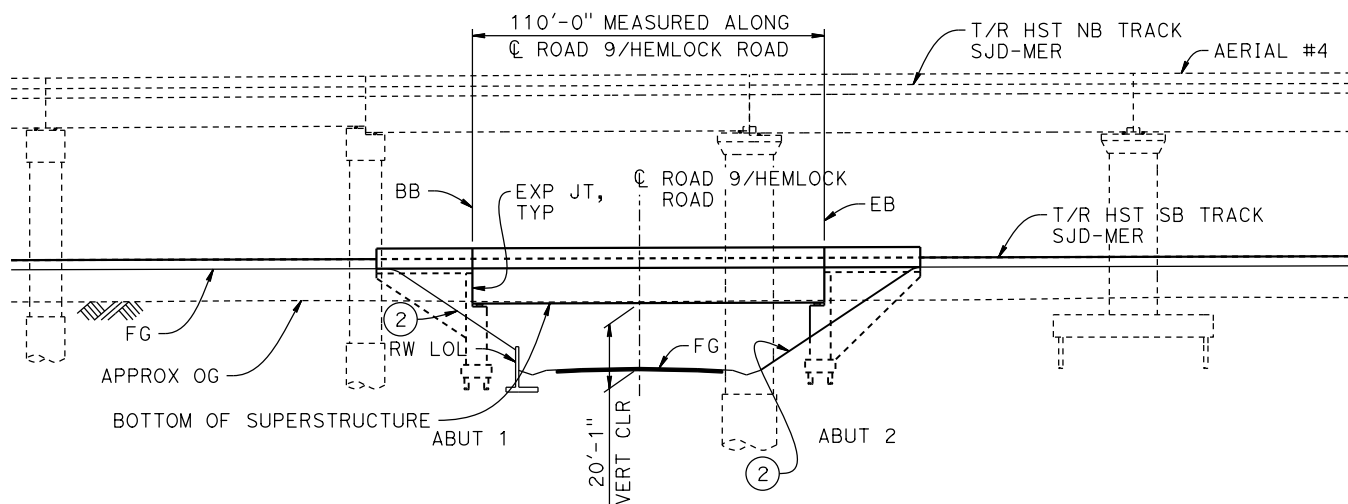
CONTRACT NO.  
HSR08-05  
DRAWING NO.  
ST-K3611-D  
SCALE  
AS SHOWN  
SHEET NO.

36184+99.78 PVT  
ELEV 178.18'

36214+00.00 PVC  
ELEV 186.73'

**TOP OF RAIL PROFILE (C HST SB TRACK SJD-MER)**

NO SCALE

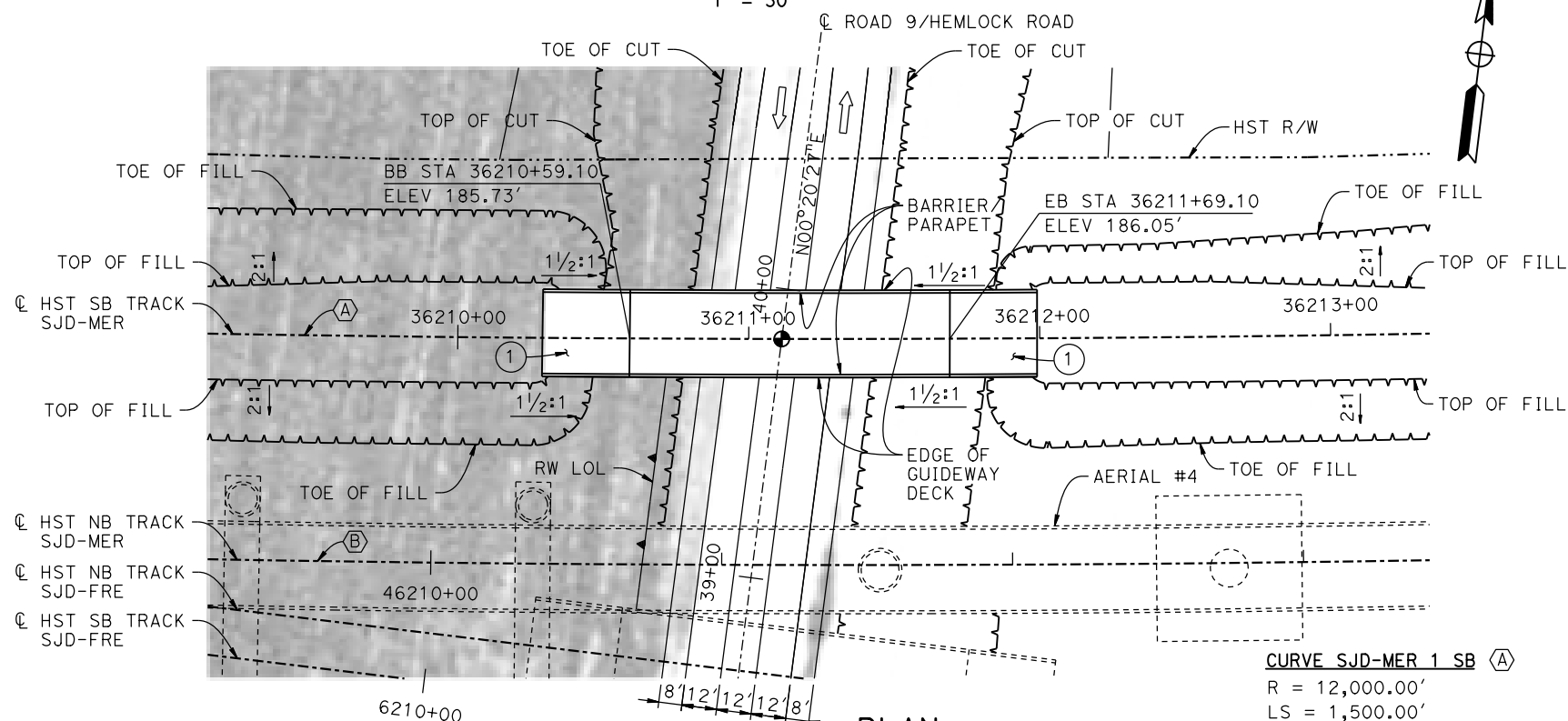


DATUM ELEV 100.00'

36210+00 36211+00 36212+00 36213+00

**DEVELOPED ELEVATION**

1" = 30'



**PLAN**

1" = 30'

CURVE SJD-MER 1 SB (A)

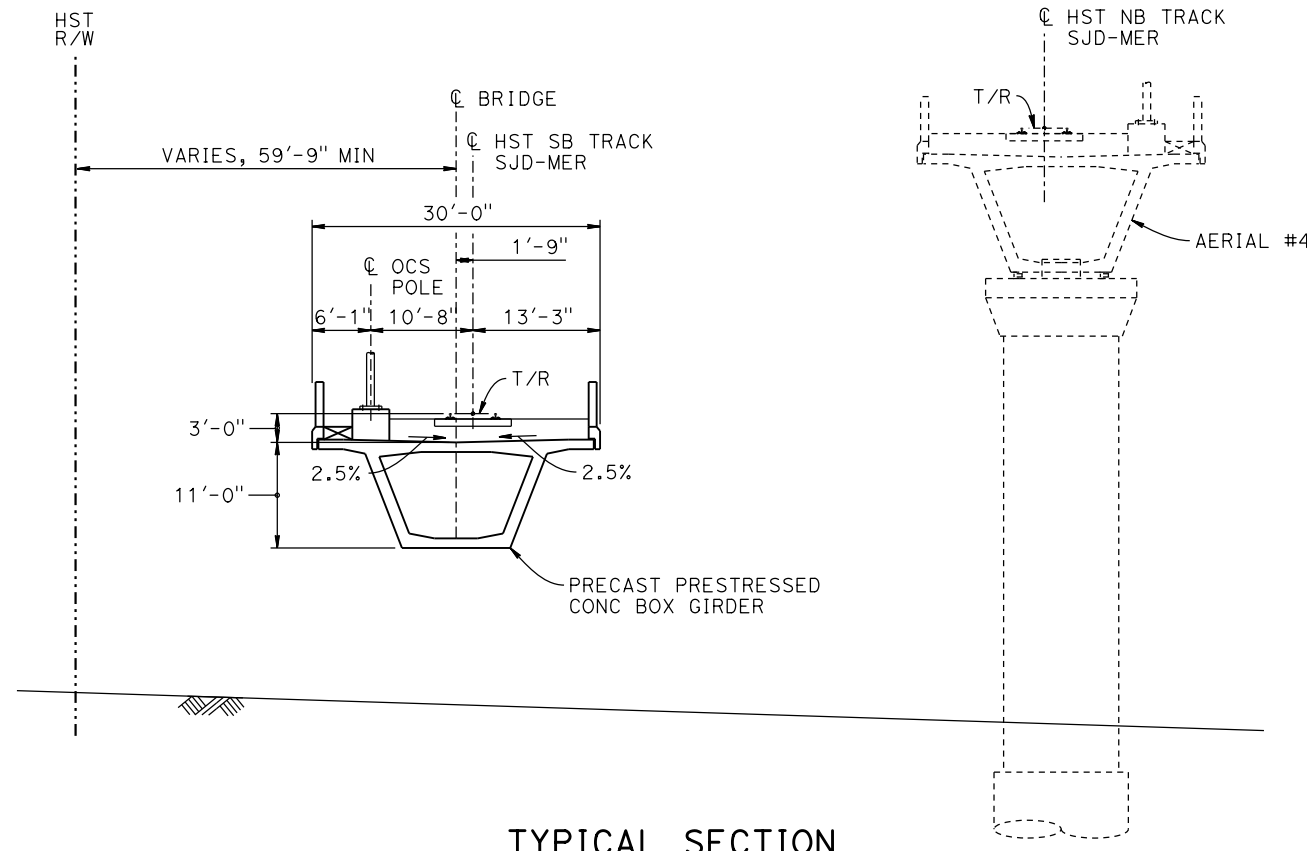
R = 12,000.00'

LS = 1,500.00'

CURVE SJD-MER 1 NB (B)

R = 12,076.50'

LS = 1,500.00'



**TYPICAL SECTION**

1" = 10'

**LEGEND:**

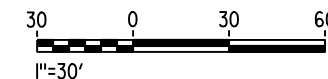
- INDICATES POINT OF MINIMUM VERTICAL CLEARANCE
- ⇒ INDICATES DIRECTION OF TRAFFIC
- ① STRUCTURE APPROACH
- ② SLOPE PAVING (1/2H:1V)

**NOTES:**

1. 16" Ø PIPE PILES ASSUMED FOR ABUTMENT FOUNDATIONS.
2. FOR UTILITY DISPOSITIONS, SEE CIVIL AND GRADE SEPARATION PLANS; DRAWING CV-S1160-D.
3. FOR TRACK SUPERELEVATION DETAILS, SEE ALIGNMENT AND TYPICAL SECTION PLANS; DRAWING TT-B0056-D.
4. FOR AERIAL #4 GENERAL PLAN AND TYPICAL SECTIONS, SEE DRAWINGS ST-K1610-D TO ST-K1612-D AND ST-K3610-D TO ST-K3611-D.
5. FOR MAINLINE BRIDGE GENERAL PLAN AND TYPICAL SECTION, SEE DRAWING ST-K1160-D.

**TEMPORARY TRAFFIC OPENINGS**

VEHICULAR TRAFFIC		FALSEWORK OPENING REQD (HORIZ X VERT)	
1. X	TRAFFIC WILL BE DETOURED AWAY FROM THE SITE.		
2. _	TRAFFIC WILL PASS UNDER THE STRUCTURE ON:		
	ST OR ROAD NAME AND LOCATION		
	HEMLOCK RD	36211+11	32'x16.5' 2-WAY
3. _	TEMP TRAFFIC LANE REDUCTION FOR FTG EXC.		



15-AUG-2016 8:43 MF-ST-K1620-D.dgn

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**M. BRATT**

DRAWN BY  
**A. M**

CHECKED BY  
**K. CHARAN**

IN CHARGE  
**C. LEMLEY**

DATE  
**08/12/2016**

**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**

**NOT FOR**  
**CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO SECTION**

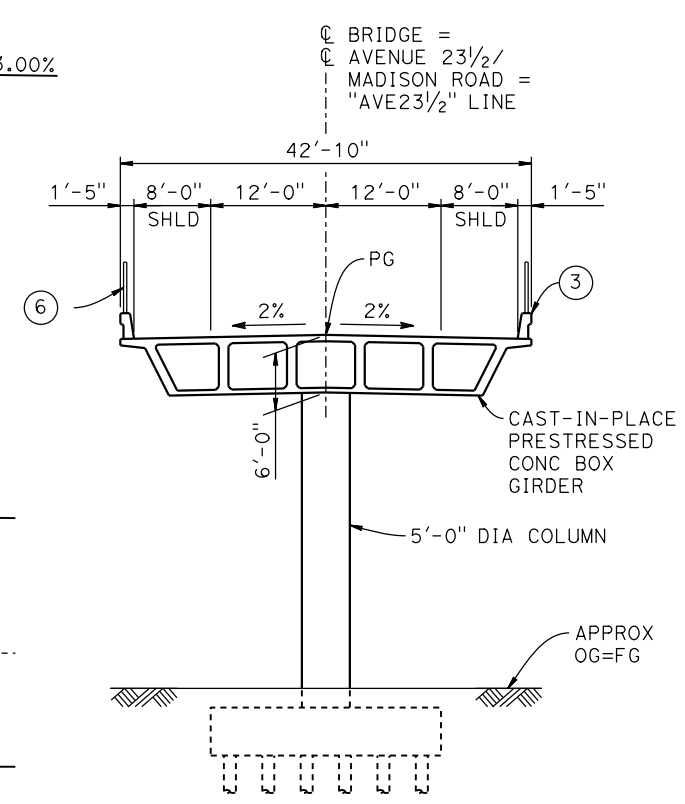
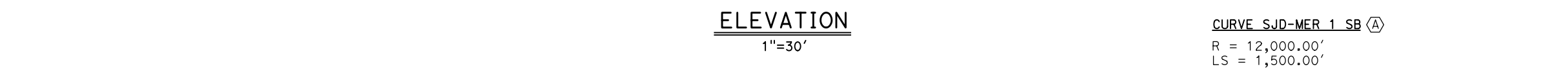
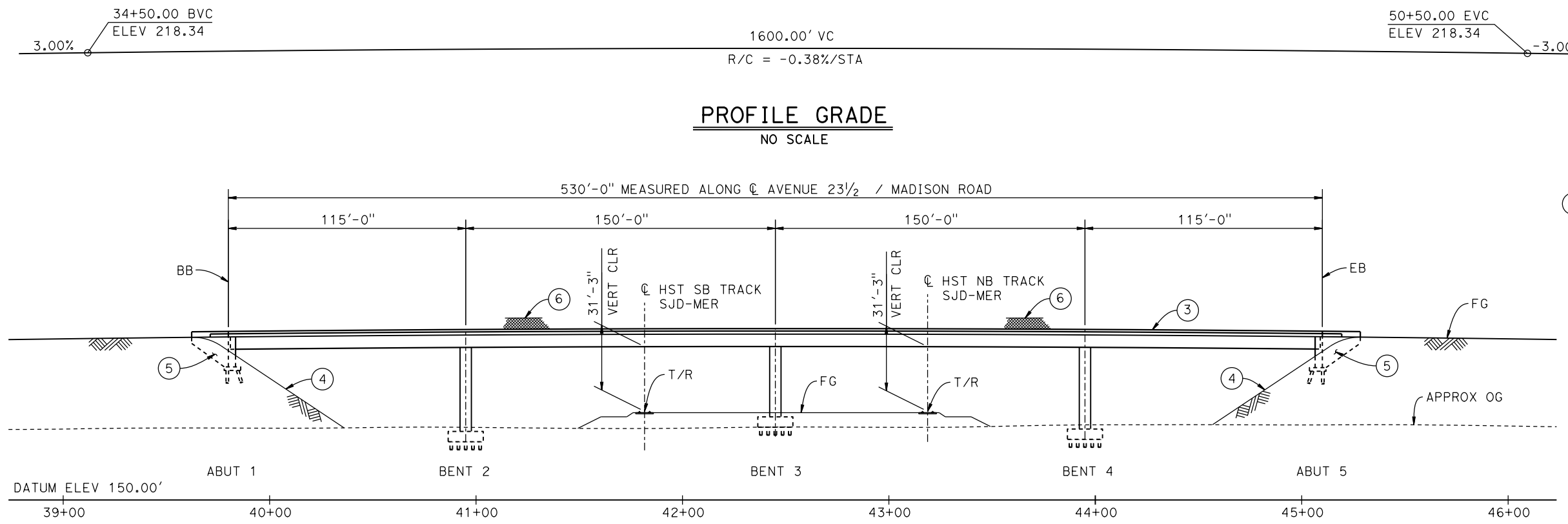
CENTRAL VALLEY WYE  
SR 152 (NORTH) TO ROAD 11 WYE ALTERNATIVE  
GENERAL PLAN (SJD-MER)  
HEMLOCK ROAD (ROAD 9) UNDERPASS

CONTRACT NO.  
HSR08-05

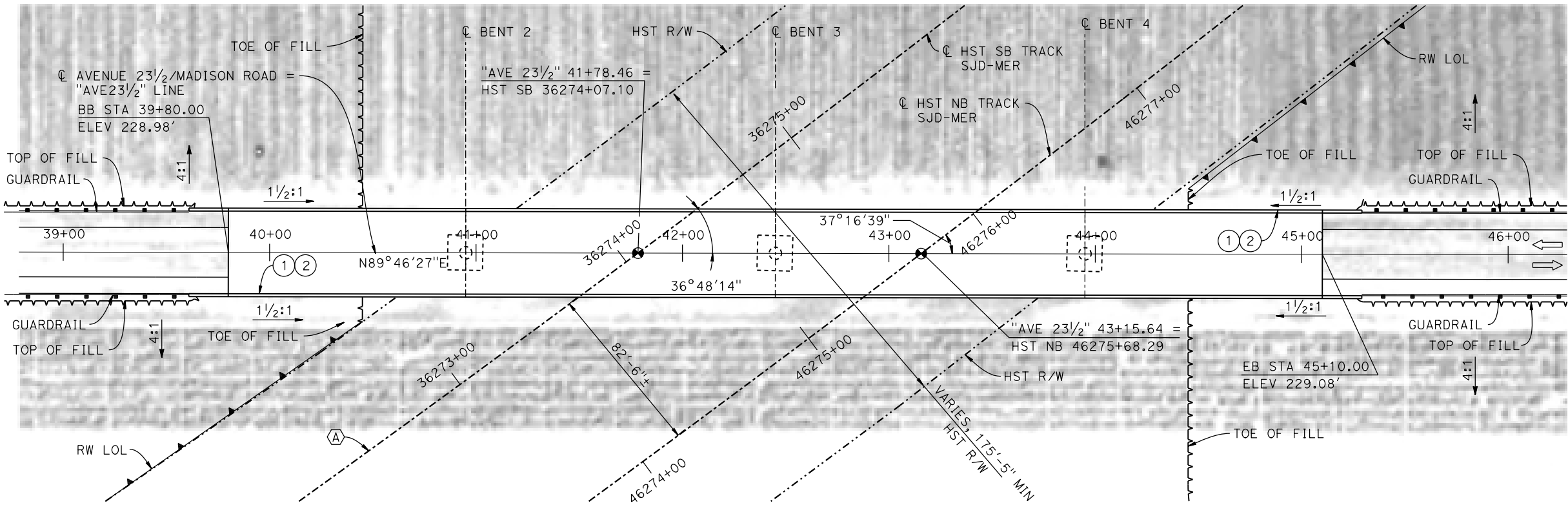
DRAWING NO.  
ST-K1620-D

SCALE  
AS SHOWN

SHEET NO.

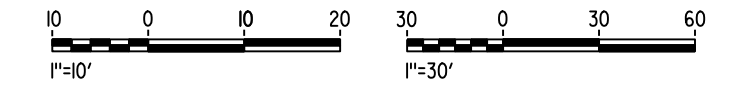


**TYPICAL SECTION**  
1" = 10'



**PLAN**  
1" = 30'

- LEGEND:**
- INDICATES POINT OF MINIMUM VERTICAL CLEARANCE
  - ➔ INDICATES DIRECTION OF TRAFFIC
  - ① PAINT "MADISON ROAD OVERHEAD"
  - ② PAINT "BRIDGE NO. XX-XXXX"
  - ③ CONCRETE BARRIER TYPE 736 MOD
  - ④ SLOPE PAVING (1/2H:1V)
  - ⑤ WINGWALL
  - ⑥ AR FENCE WITH SOLID PLATE
- NOTES:**
1. 16" Ø PIPE PILES ASSUMED AT ABUTMENT AND BENT FOUNDATIONS. PILE LENGTHS TO BE DETERMINED.
  2. FOR UTILITY DISPOSITION, SEE CIVIL AND GRADE SEPARATION PLANS; DRAWING CV-S1630-D.
  3. FOR GUARDRAILS, SEE CIVIL AND GRADE SEPARATION PLANS; DRAWING CV-S1630-D.
  4. FOR RETAINING WALLS, SEE CIVIL AND GRADE SEPARATION PLANS; DRAWING CV-S1630-D.



15-AUG-2016 8:43 MF-ST-K1630-D.dgn

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**M. BRATT**  
DRAWN BY  
**A. M.**  
CHECKED BY  
**K. CHARAN**  
IN CHARGE  
**C. LEMLEY**  
DATE  
**08/12/2016**

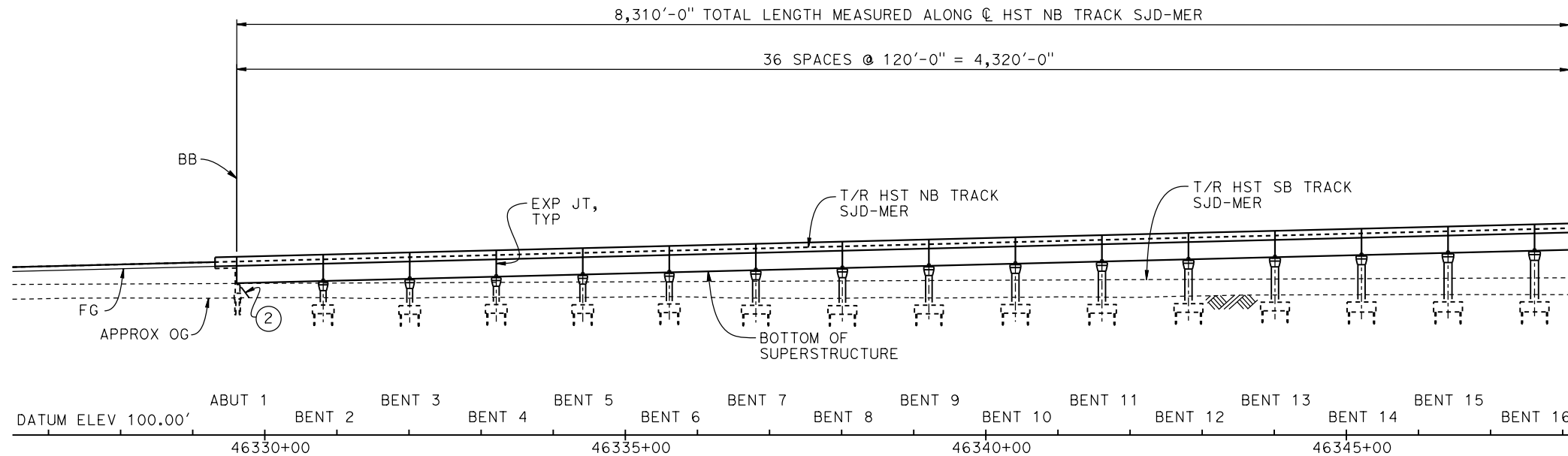
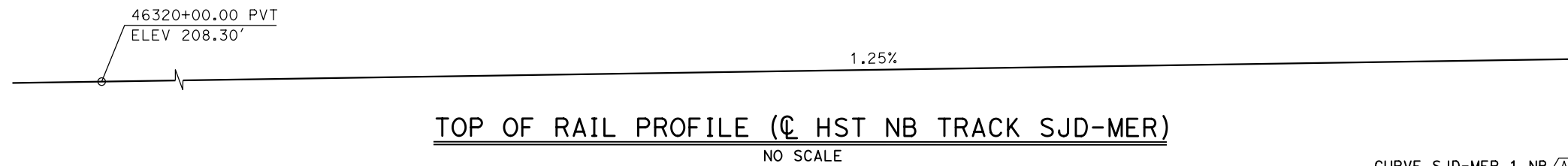
**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**

**NOT FOR**  
**CONSTRUCTION**



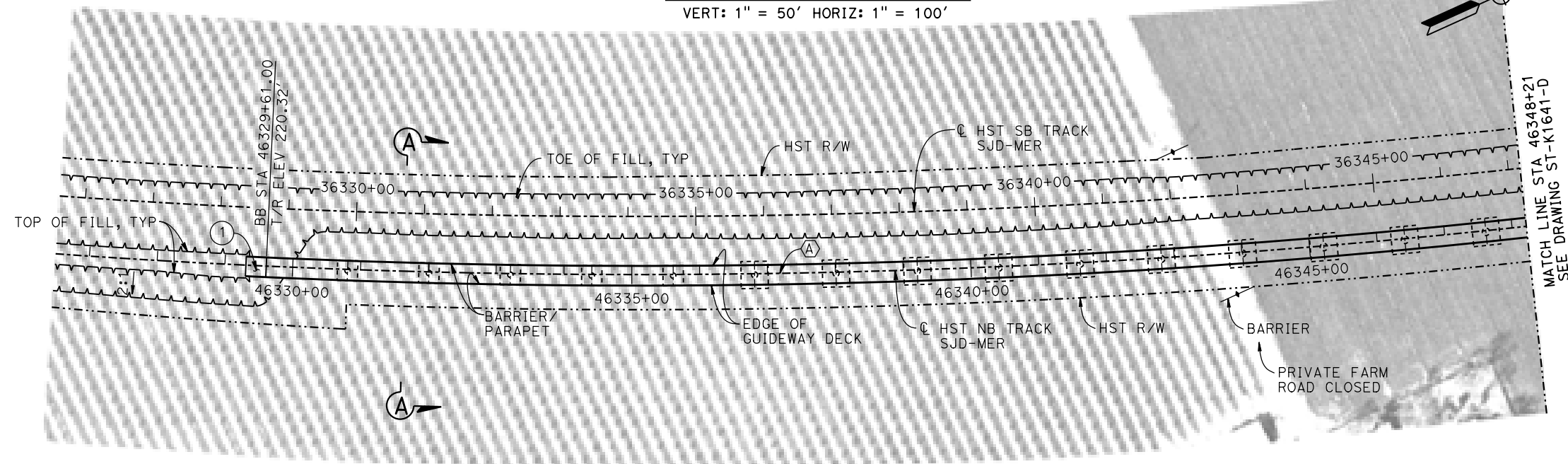
**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO SECTION**  
CENTRAL VALLEY WYE  
SR 152 (NORTH) TO ROAD 11 WYE ALTERNATIVE  
GENERAL PLAN (SJD-MER)  
MADISON ROAD (AVENUE 23 1/2) OVERHEAD

CONTRACT NO.  
HSR08-05  
DRAWING NO.  
ST-K1630-D  
SCALE  
AS SHOWN  
SHEET NO.



**DEVELOPED ELEVATION**

VERT: 1" = 50' HORIZ: 1" = 100'



**PLAN**

1" = 100'

**LEGEND:**

- INDICATES POINT OF MINIMUM VERTICAL CLEARANCE
- INDICATES DIRECTION OF TRAFFIC
- INDICATES DIRECTION OF FLOW
- ① STRUCTURE APPROACH
- ② SLOPE PAVING (1 1/2 H:1 V)

**TEMPORARY TRAFFIC OPENINGS**

**VEHICULAR TRAFFIC**

1. X TRAFFIC WILL BE DETOURED AWAY FROM THE SITE.
2.    TRAFFIC WILL PASS UNDER THE STRUCTURE ON:

ST OR ROAD NAME AND LOCATION		FALSEWORK OPENING REQD (HORIZ X VERT)	
ROAD 11 REALIGNMENT	46359+08	32'X16.5'	2-WAY
AVENUE 25/WASHINGTON RD	46371+05	32'X16.5'	2-WAY

3.    TEMP TRAFFIC LANE REDUCTION FOR FTG EXC.

**NOTES:**

1. 16"  $\phi$  PIPE PILES ASSUMED FOR ABUTMENT AND BENT FOUNDATIONS, UNLESS OTHERWISE NOTED. PILE LENGTHS TO BE DETERMINED.
2. FOR SECTIONS AND BENT COLUMN SCHEDULE, SEE DRAWINGS ST-K3640-D AND ST-K3641-D.
3. ANY EXISTING DIRT ROAD THAT CONFLICTS WITH NEW CONSTRUCTION SHALL BE REALIGNED.
4. FOR UTILITY DISPOSITIONS, SEE CIVIL AND GRADE SEPARATION PLANS; DRAWINGS CV-S1640-D TO CV-S1660-D.
5. FOR GUARDRAILS, SEE CIVIL AND GRADE SEPARATION PLANS; DRAWINGS CV-S1640-D TO CV-S1660-D.
6. FOR RETAINING WALLS, SEE CIVIL AND GRADE SEPARATION PLANS; DRAWINGS CV-S1640-D TO CV-S1660-D.
7. FOR ROAD 11 OVERHEAD GENERAL PLAN AND TYPICAL SECTION, SEE DRAWING ST-K1650-D.
8. FOR WASHINGTON ROAD (AVENUE 25) UNDERPASS MER-FRE GENERAL PLAN AND TYPICAL SECTION, SEE DRAWINGS ST-K1450-D AND ST-K3450-D.
9. FOR WASHINGTON ROAD (AVENUE 25) UNDERPASS SJD-MER GENERAL PLAN AND TYPICAL SECTION, SEE DRAWING ST-K1655-D.
10. FOR CHOWCHILLA RIVER BRIDGE SB MER-FRE GENERAL PLAN AND TYPICAL SECTION, SEE DRAWING ST-K1455-D.
11. FOR CHOWCHILLA RIVER BRIDGE SB SJD-MER GENERAL PLAN AND TYPICAL SECTION, SEE DRAWING ST-K1659-D.



15-AUG-2016 8:44 MF-ST-K1640-D.dgn

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**M. BRATT**

DRAWN BY  
**A. M.**

CHECKED BY  
**K. CHARAN**

IN CHARGE  
**C. LEMLEY**

DATE  
**08/12/2016**

**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**

**NOT FOR**  
**CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO SECTION**

CENTRAL VALLEY WYE  
SR 152 (NORTH) TO ROAD 11 WYE ALTERNATIVE  
GENERAL PLAN (SJD-MER)

AERIAL #5 - NORTHBOUND OVER HST MERCED TO FRESNO - 1 OF 6

CONTRACT NO.  
**HSR08-05**

DRAWING NO.  
**ST-K1640-D**

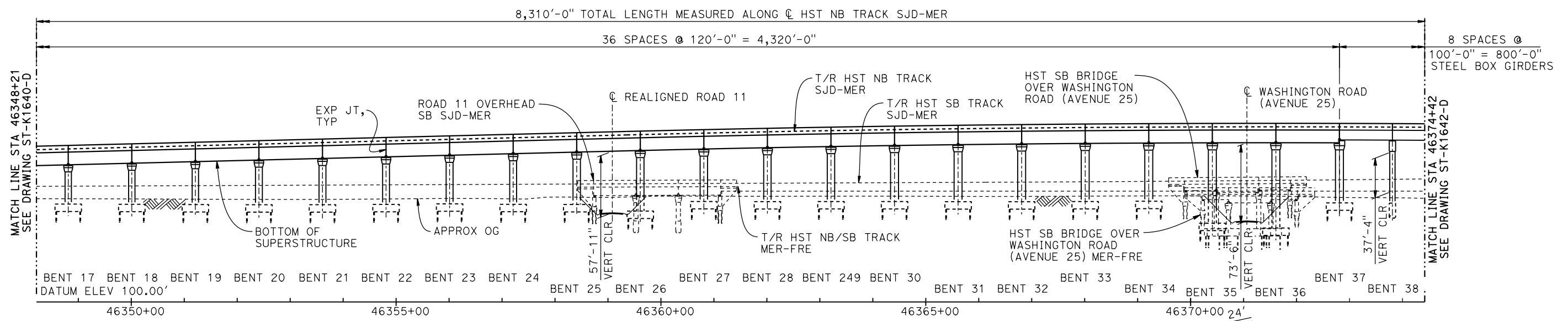
SCALE  
**AS SHOWN**

SHEET NO.

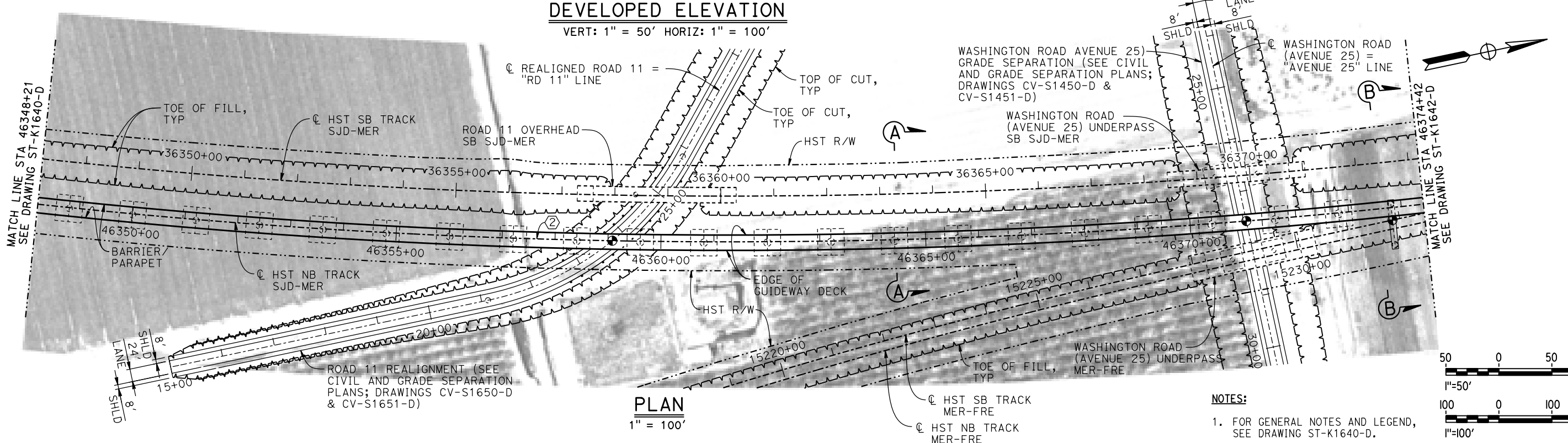
15-AUG-2016 8:44 MF-ST-K1641-D.dgn



**TOP OF RAIL PROFILE (CL HST NB TRACK SJD-MER)**  
NO SCALE



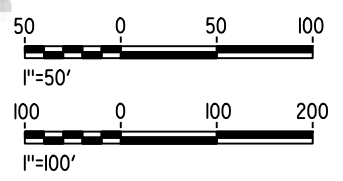
**DEVELOPED ELEVATION**  
VERT: 1" = 50' HORIZ: 1" = 100'



**PLAN**  
1" = 100'

**NOTES:**

1. FOR GENERAL NOTES AND LEGEND, SEE DRAWING ST-K1640-D.



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**M. BRATT**  
DRAWN BY  
**A. M.**  
CHECKED BY  
**K. CHARAN**  
IN CHARGE  
**C. LEMLEY**  
DATE  
**08/12/2016**

**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**  
  
**NOT FOR**  
**CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO SECTION**  
CENTRAL VALLEY WYE  
SR 152 (NORTH) TO ROAD 11 WYE ALTERNATIVE  
GENERAL PLAN (SJD-MER)  
AERIAL #5 - NORTHBOUND OVER HST MERCED TO FRESNO - 2 OF 6

CONTRACT NO.  
HSR08-05  
DRAWING NO.  
ST-K1641-D  
SCALE  
AS SHOWN  
SHEET NO.

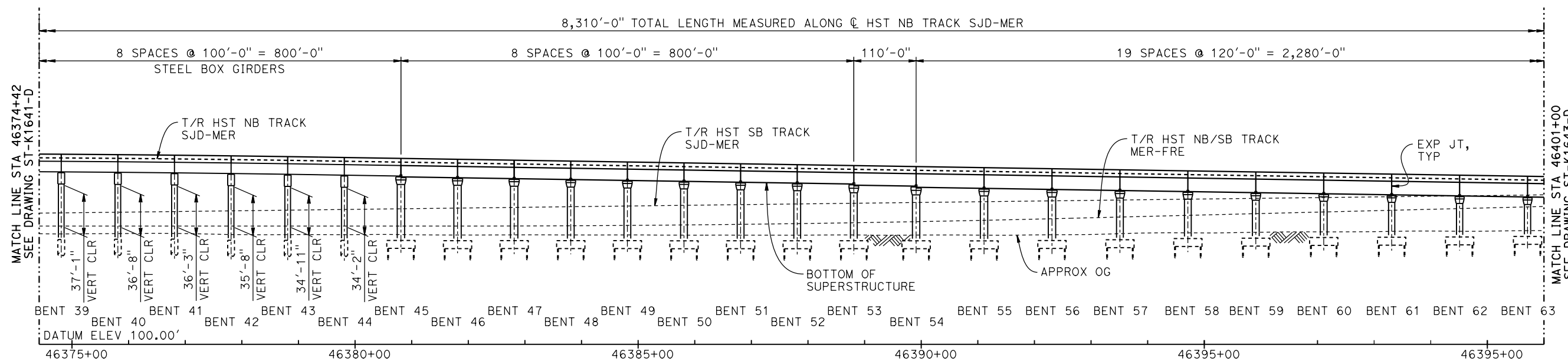
2000.00' VC  
R/C = 0.102%/STA

46379+35.67 PVT  
ELEV 262.08'

-0.79%

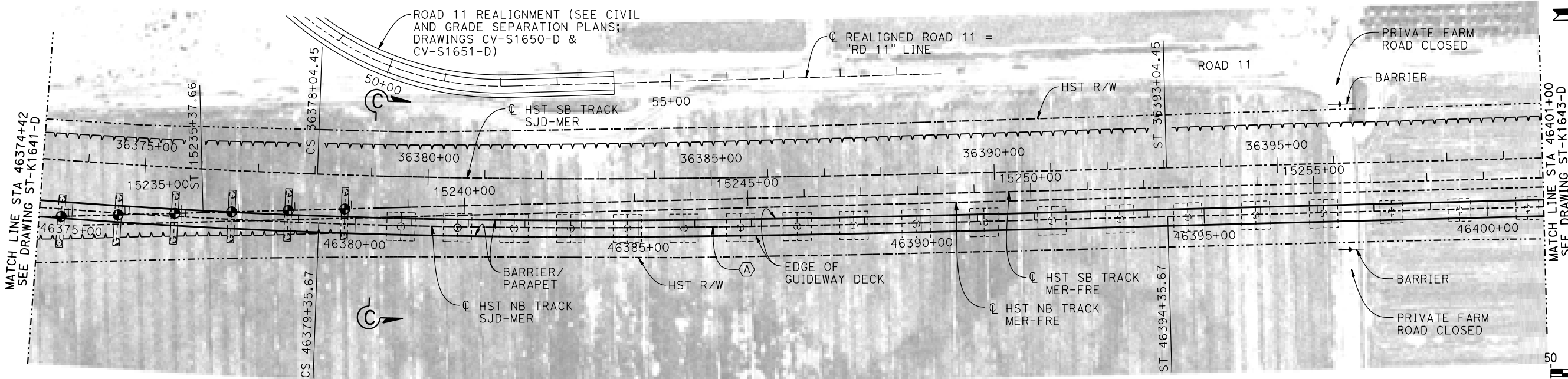
**TOP OF RAIL PROFILE (C HST NB TRACK SJD-MER)**

NO SCALE



**DEVELOPED ELEVATION**

VERT: 1" = 50' HORIZ: 1" = 100'

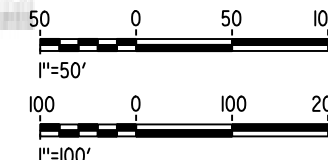


**PLAN**

1" = 100'

**NOTES:**

1. FOR GENERAL NOTES AND LEGEND, SEE DRAWING ST-K1640-D.



16-AUG-2016 7:07 MF-ST-K1642-D.dgn

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**M. BRATT**

DRAWN BY  
**A. M.**

CHECKED BY  
**K. CHARAN**

IN CHARGE  
**C. LEMLEY**

DATE  
**08/12/2016**

**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**

**NOT FOR**  
**CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO SECTION**

CENTRAL VALLEY WYE  
SR 152 (NORTH) TO ROAD 11 WYE ALTERNATIVE  
GENERAL PLAN (SJD-MER)

AERIAL #5 - NORTHBOUND OVER HST MERCED TO FRESNO - 3 OF 6

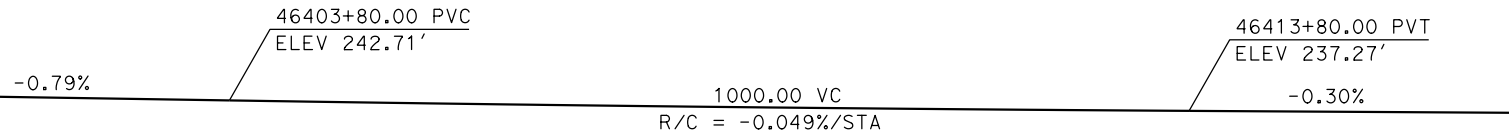
CONTRACT NO.  
HSR08-05

DRAWING NO.  
ST-K1642-D

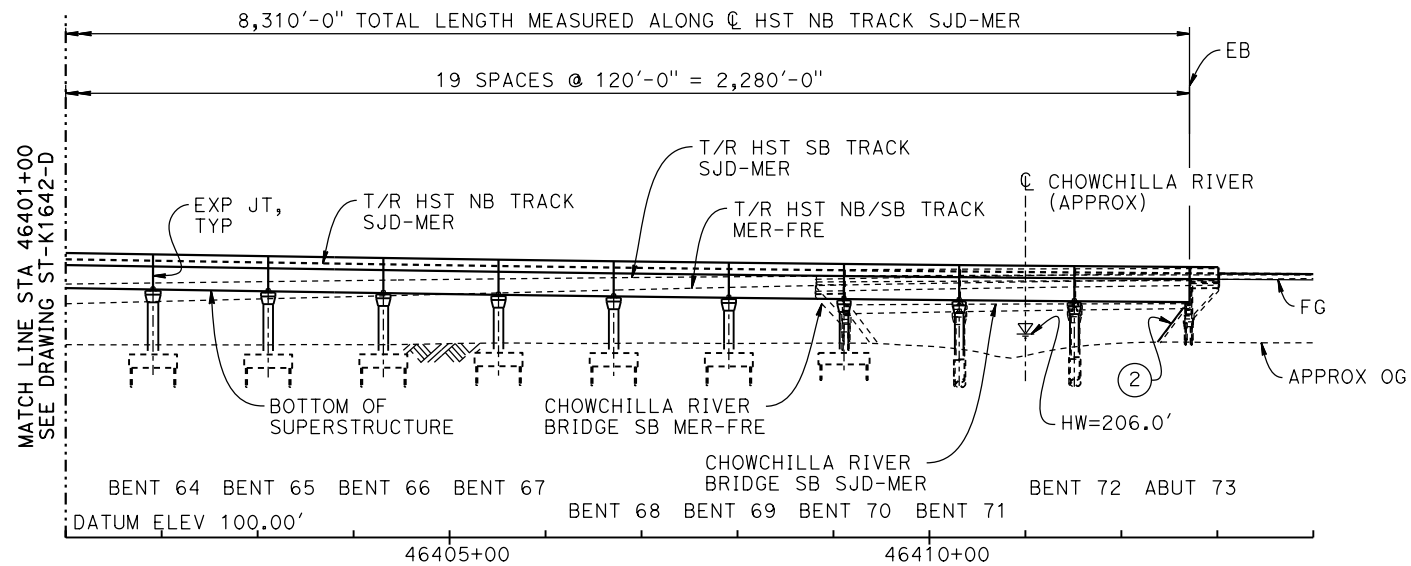
SCALE  
AS SHOWN

SHEET NO.

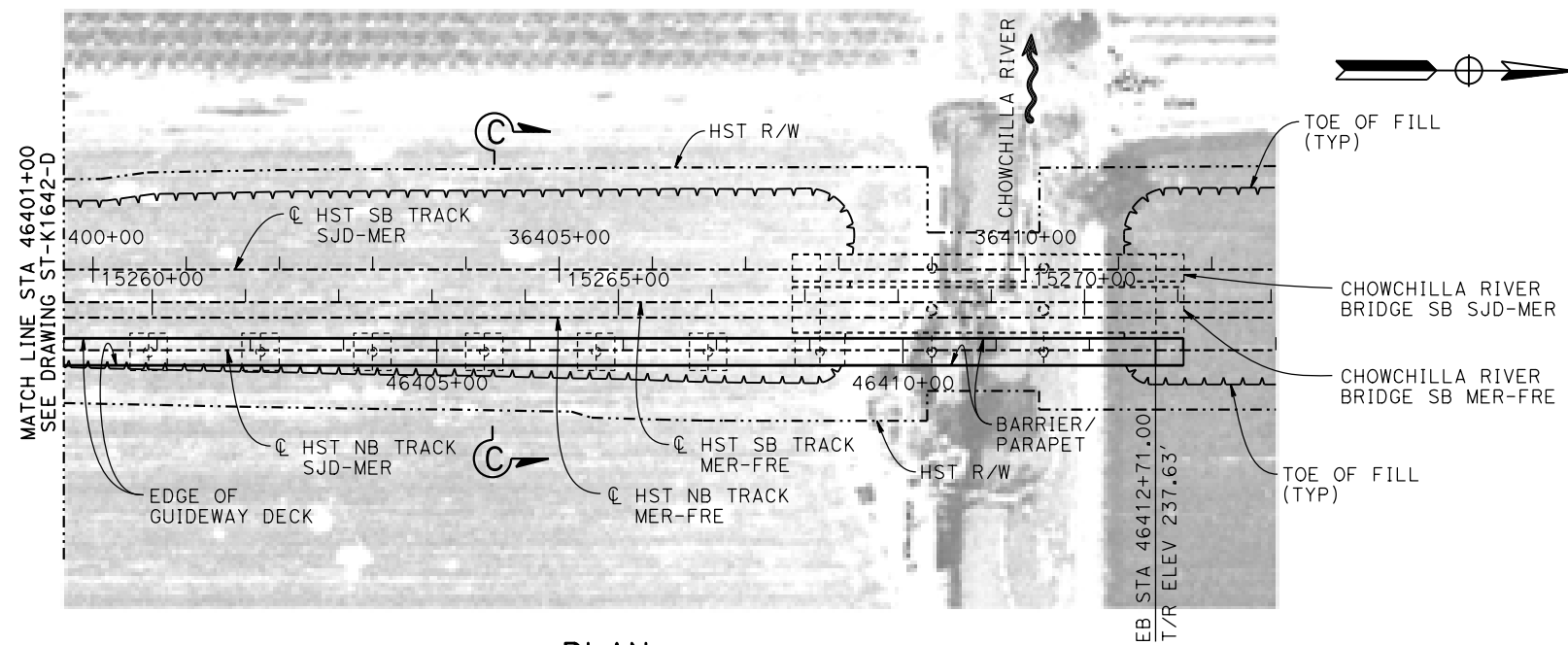




**TOP OF RAIL PROFILE (C HST NB TRACK SJD-MER)**  
NO SCALE

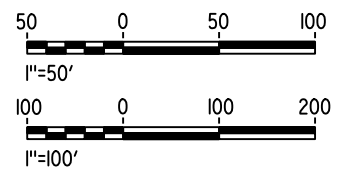


**DEVELOPED ELEVATION**  
VERT: 1" = 50' HORIZ: 1" = 100'



**PLAN**

- NOTES:**
- FOR GENERAL NOTES AND LEGEND, SEE DRAWING ST-K1640-D.



16-AUG-2016 7:08 MF-ST-K1643-D.dgn

REV	DATE	BY	CHK	APP	DESCRIPTION

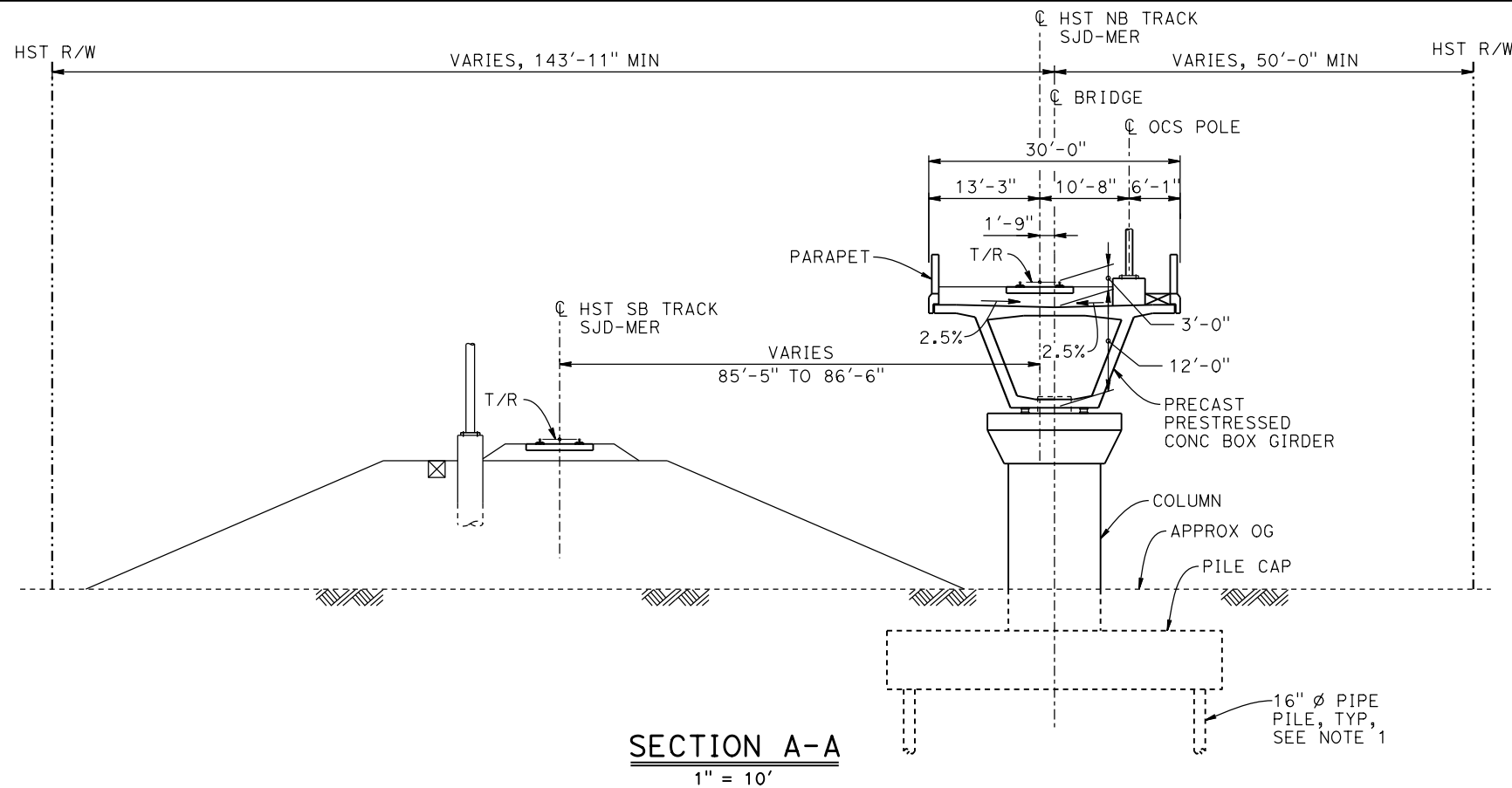
DESIGNED BY  
**M. BRATT**  
DRAWN BY  
**A. M.**  
CHECKED BY  
**K. CHARAN**  
IN CHARGE  
**C. LEMLEY**  
DATE  
**08/12/2016**

**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**  
  
**NOT FOR**  
**CONSTRUCTION**

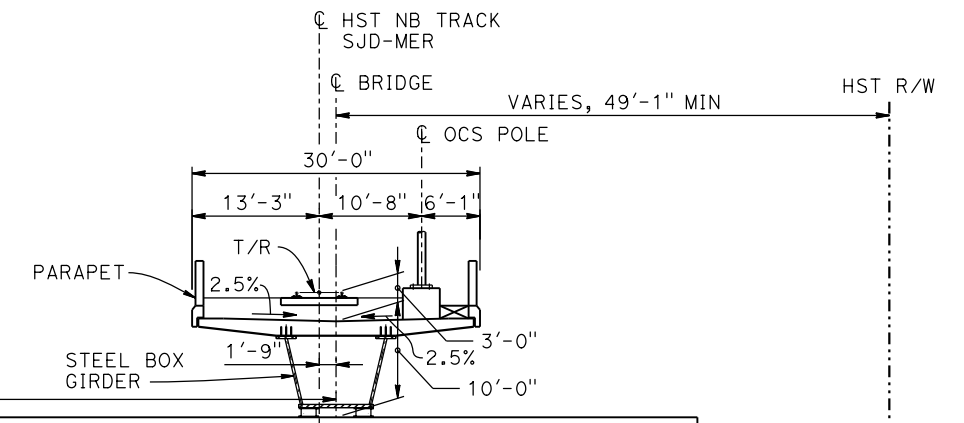


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO SECTION**  
CENTRAL VALLEY WYE  
SR 152 (NORTH) TO ROAD 11 WYE ALTERNATIVE  
GENERAL PLAN (SJD-MER)  
AERIAL #5 - NORTHBOUND OVER HST MERCED TO FRESNO - 4 OF 6

CONTRACT NO.  
HSR08-05  
DRAWING NO.  
ST-K1643-D  
SCALE  
AS SHOWN  
SHEET NO.



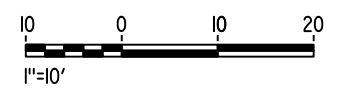
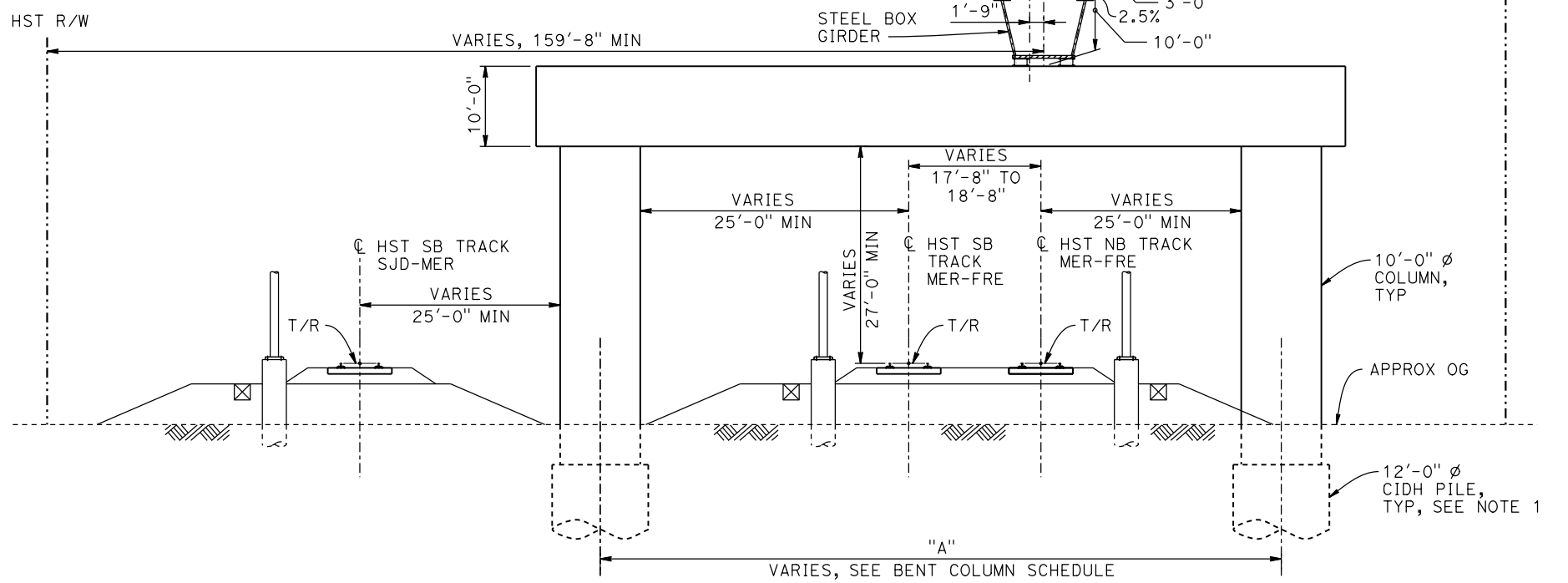
**SECTION A-A**  
1" = 10'



**SECTION B-B**  
1" = 10'

- NOTES:**
1. PILE AND DRILLED SHAFT LENGTHS TO BE DETERMINED.
  2. FOR TRACK SUPERELEVATION DETAILS, SEE ALIGNMENT AND TYPICAL SECTION PLANS; DRAWING TT-B0056-D.

BENT COLUMN SCHEDULE				
BENT	COLUMN TYPE	CIDH TYPE	"A"	TYP SECTION, SHEET
2 - 6	8'-0"∅			A-A, ST-K3640-D
7 - 14	9'-0"∅			A-A, ST-K3640-D
15 - 20	11'-0"∅			A-A, ST-K3640-D
21 - 30	13'-0"∅			A-A, ST-K3640-D
31 - 37	15'-0"∅			A-A, ST-K3640-D
38 - 44	2 - 10'-0"∅	12'-0"∅	77'-0"	B-B, ST-K3640-D
45 - 46	15'-0"∅			C-C, ST-K3641-D
47 - 57	13'-0"∅			C-C, ST-K3641-D
58 - 64	11'-0"∅			C-C, ST-K3641-D
65 - 70	9'-0"∅			C-C, ST-K3641-D
71 - 72	9'-0"∅	11'-0"∅		C-C, ST-K3641-D



15-AUG-2016 8:50 MF-ST-K3640-D.dgn

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**M. BRATT**

DRAWN BY  
**A. M.**

CHECKED BY  
**K. CHARAN**

IN CHARGE  
**C. LEMLEY**

DATE  
**08/12/2016**

**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**

**NOT FOR**  
**CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO SECTION**

CENTRAL VALLEY WYE  
SR 152 (NORTH) TO ROAD 11 WYE ALTERNATIVE  
TYPICAL SECTIONS (SJD-MER)

AERIAL #5 - NORTHBOUND OVER HST MERCED TO FRESNO - 5 OF 6

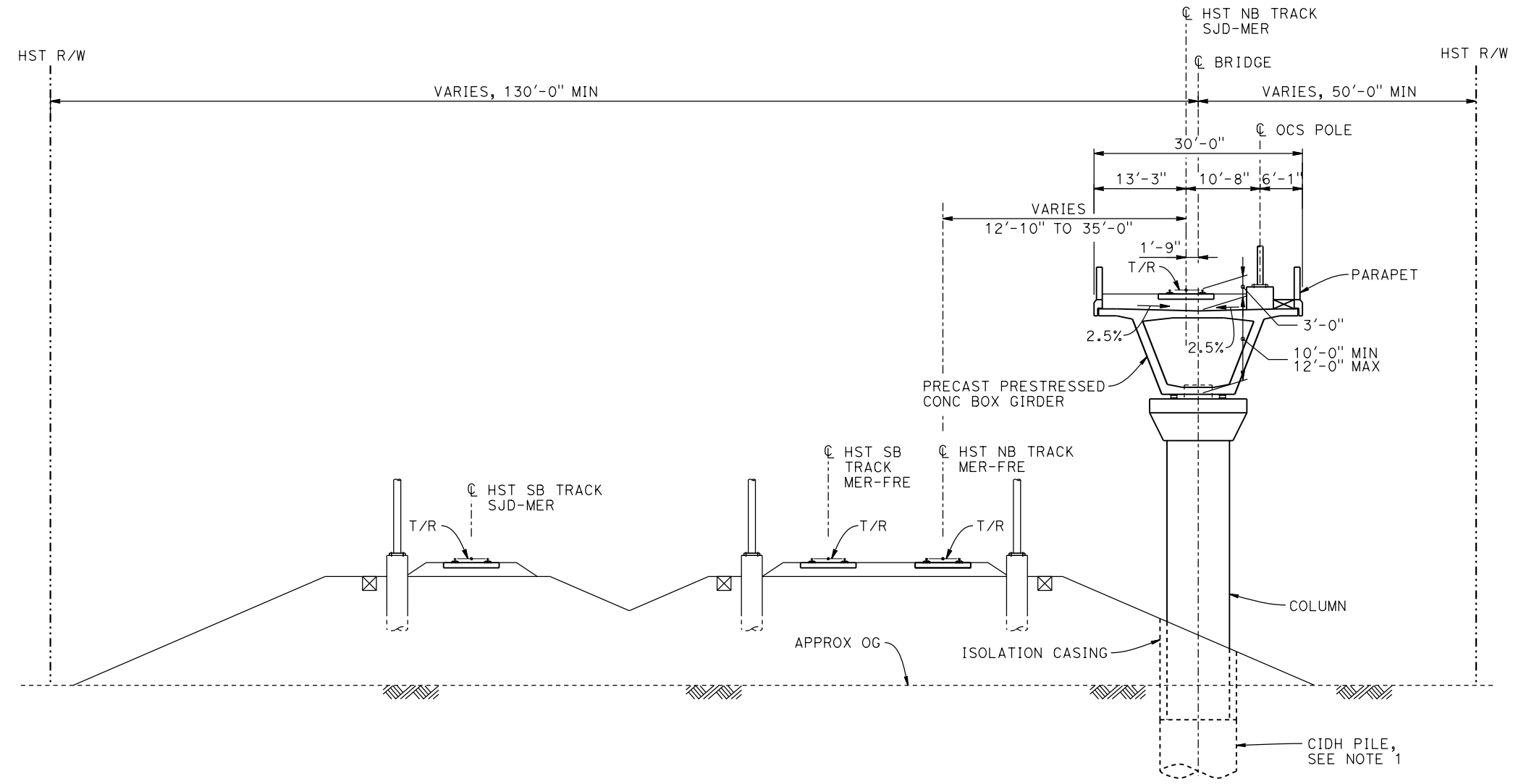
CONTRACT NO.  
HSR08-05

DRAWING NO.  
ST-K3640-D

SCALE  
AS SHOWN

SHEET NO.

- NOTES:**
1. DRILLED SHAFT LENGTHS TO BE DETERMINED.
  2. FOR TRACK SUPERELEVATION DETAILS, SEE ALIGNMENT AND TYPICAL SECTION PLANS; DRAWING TT-B0056-D.



**SECTION C-C**  
1" = 10'



15-AUG-2016 8:50 MF-ST-K3641-D.dgn

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**M. BRATT**

DRAWN BY  
**A. M.**

CHECKED BY  
**K. CHARAN**

IN CHARGE  
**C. LEMLEY**

DATE  
**08/12/2016**

**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**

**NOT FOR**  
**CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO SECTION**

CENTRAL VALLEY WYE  
SR 152 (NORTH) TO ROAD 11 WYE ALTERNATIVE  
TYPICAL SECTIONS (SJD-MER)

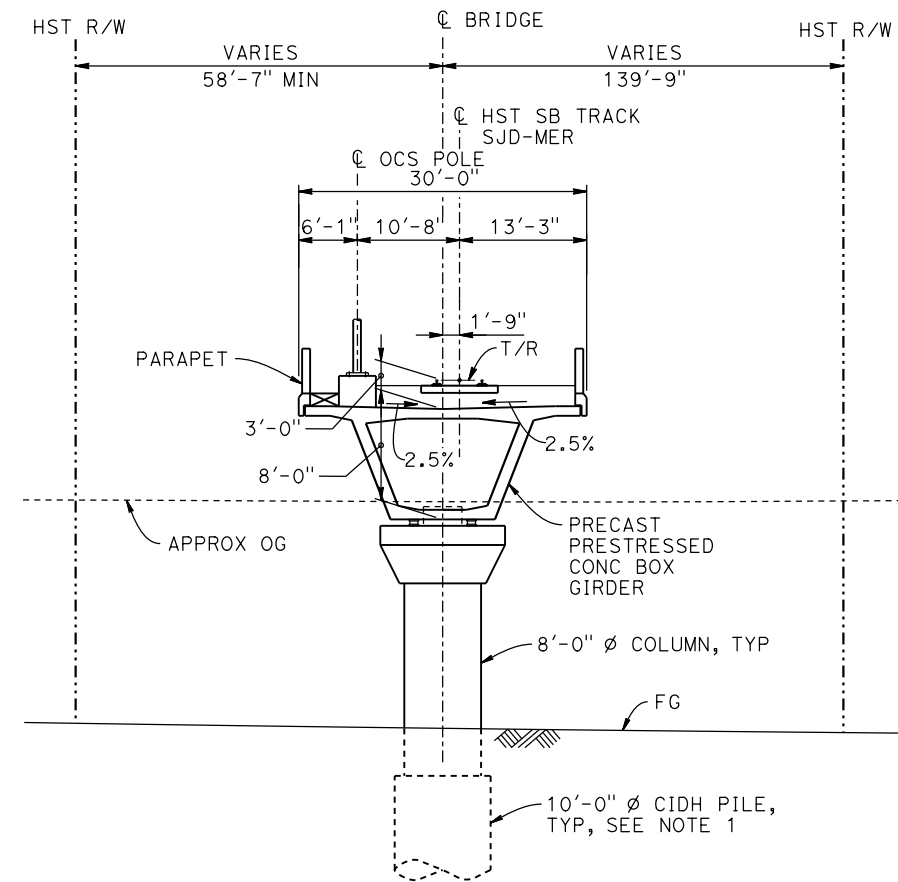
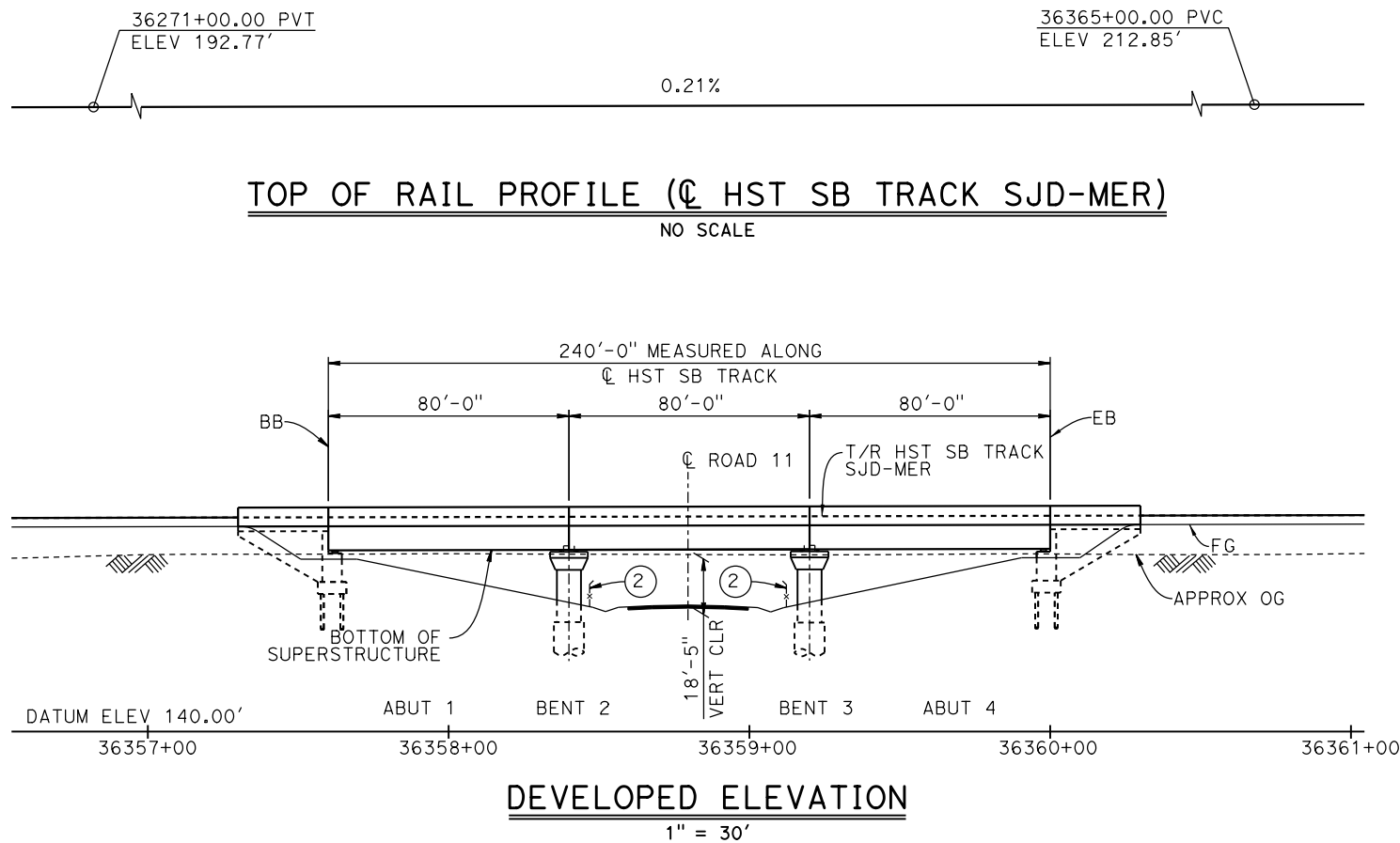
AERIAL #5 - NORTHBOUND OVER HST MERCED TO FRESNO - 6 OF 6

CONTRACT NO.  
HSR08-05

DRAWING NO.  
ST-K3641-D

SCALE  
AS SHOWN

SHEET NO.



**CURVE SJD-MER 1 SB (A)**  
 R = 12,000.00'  
 LS = 1,500.00'

**TEMPORARY TRAFFIC OPENINGS**

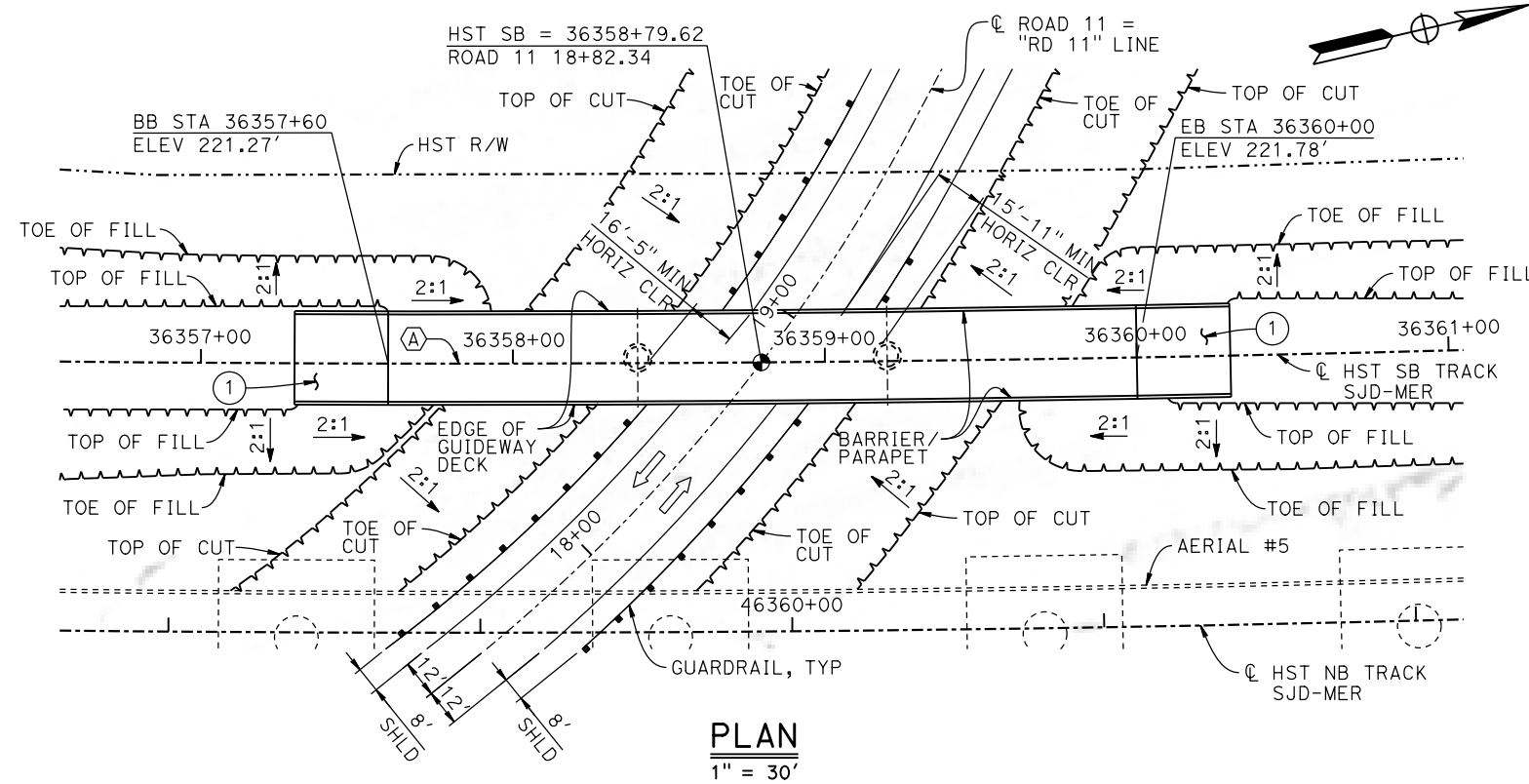
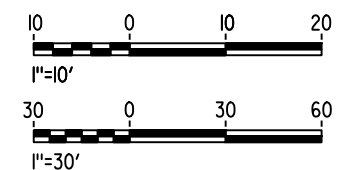
VEHICULAR TRAFFIC			
1. — TRAFFIC WILL BE DETOURED AWAY FROM THE SITE.			
2. X TRAFFIC WILL PASS UNDER THE STRUCTURE ON:			
ST OR ROAD NAME AND LOCATION		FALSEWORK OPENING REQD (HORIZ X VERT)	
ROAD 11	36358+80	32'X15'	2-WAY
3. X TEMP TRAFFIC LANE REDUCTION FOR FTG EXC.			

**NOTES:**

- 16"  $\phi$  PIPE PILE ASSUMED AT ABUTMENT FOUNDATIONS. PILE AND DRILLED SHAFT LENGTHS TO BE DETERMINED.
- FOR UTILITY DISPOSITIONS, SEE CIVIL AND GRADE SEPARATION PLANS; DRAWING CV-R1650-D.
- FOR GUARDRAILS, SEE CIVIL AND GRADE SEPARATION PLANS; DRAWING CV-R1650-D.
- FOR TRACK SUPERELEVATION DETAILS, SEE ALIGNMENT AND TYPICAL SECTION PLANS; DRAWING TT-B0056-D.
- FOR ROAD 11 REALIGNMENT, SEE CIVIL AND GRADE SEPARATION PLANS; DRAWING CV-R1650-D.
- FOR AERIAL # 5 GENERAL PLAN AND TYPICAL SECTIONS, SEE DRAWINGS ST-K1640-D TO ST-K1643-D AND ST-K3640-D TO ST-K3641-D.

**LEGEND:**

- INDICATES POINT OF MINIMUM VERTICAL CLEARANCE
- INDICATES DIRECTION OF TRAFFIC
- STRUCTURE APPROACH
- AR FENCE, SEE TRACK PLANS; DRAWING TT-B0050-D



16-AUG-2016 7:29 MF-ST-K1650-D.dgn

REV	DATE	BY	CHK	APP	DESCRIPTION

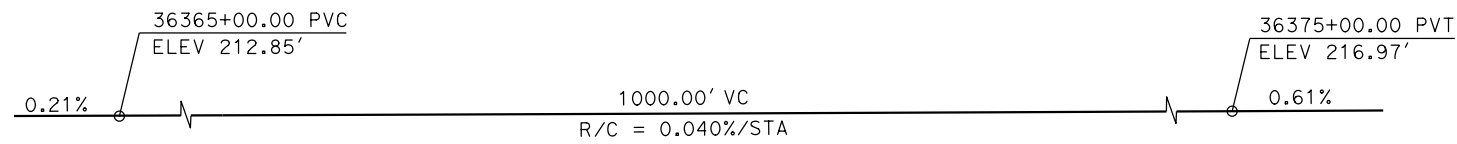
DESIGNED BY  
**M. BRATT**  
 DRAWN BY  
**A. M.**  
 CHECKED BY  
**K. CHARAN**  
 IN CHARGE  
**C. LEMLEY**  
 DATE  
**08/12/2016**

**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**  
  
**NOT FOR**  
**CONSTRUCTION**

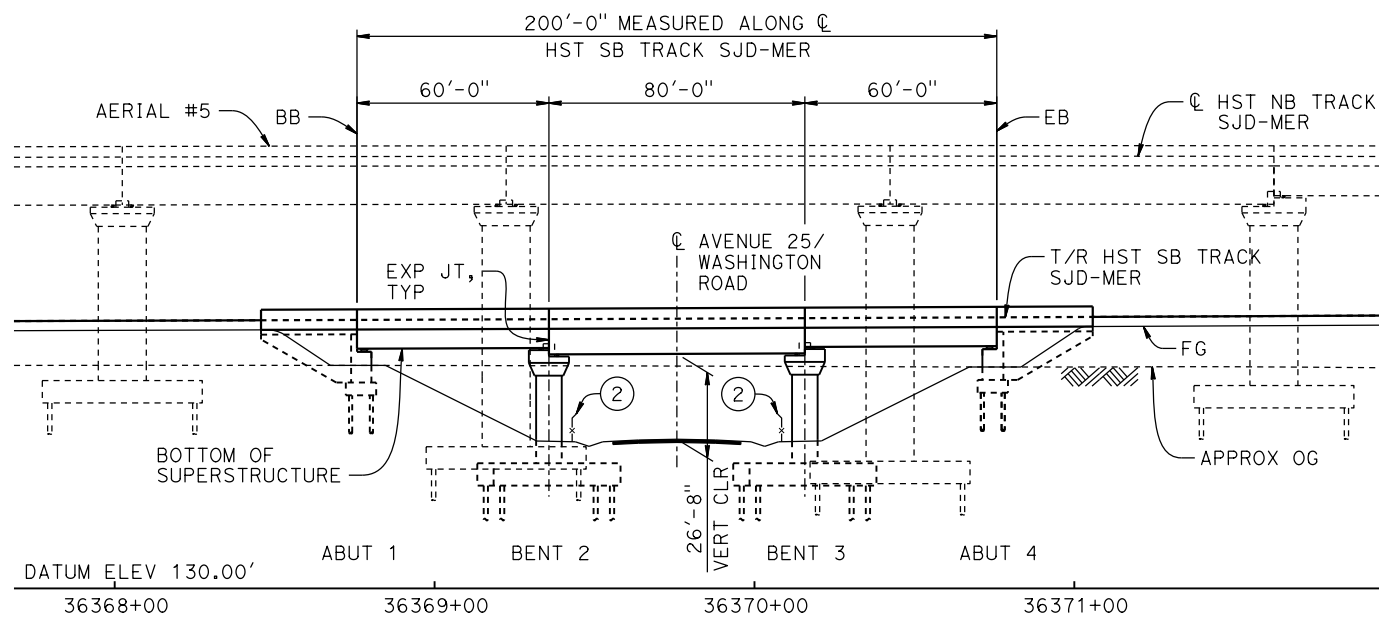


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO SECTION**  
 CENTRAL VALLEY WYE  
 SR 152 (NORTH) TO ROAD 11 WYE ALTERNATIVE  
 GENERAL PLAN (SJD-MER)  
 ROAD 11 UNDERPASS

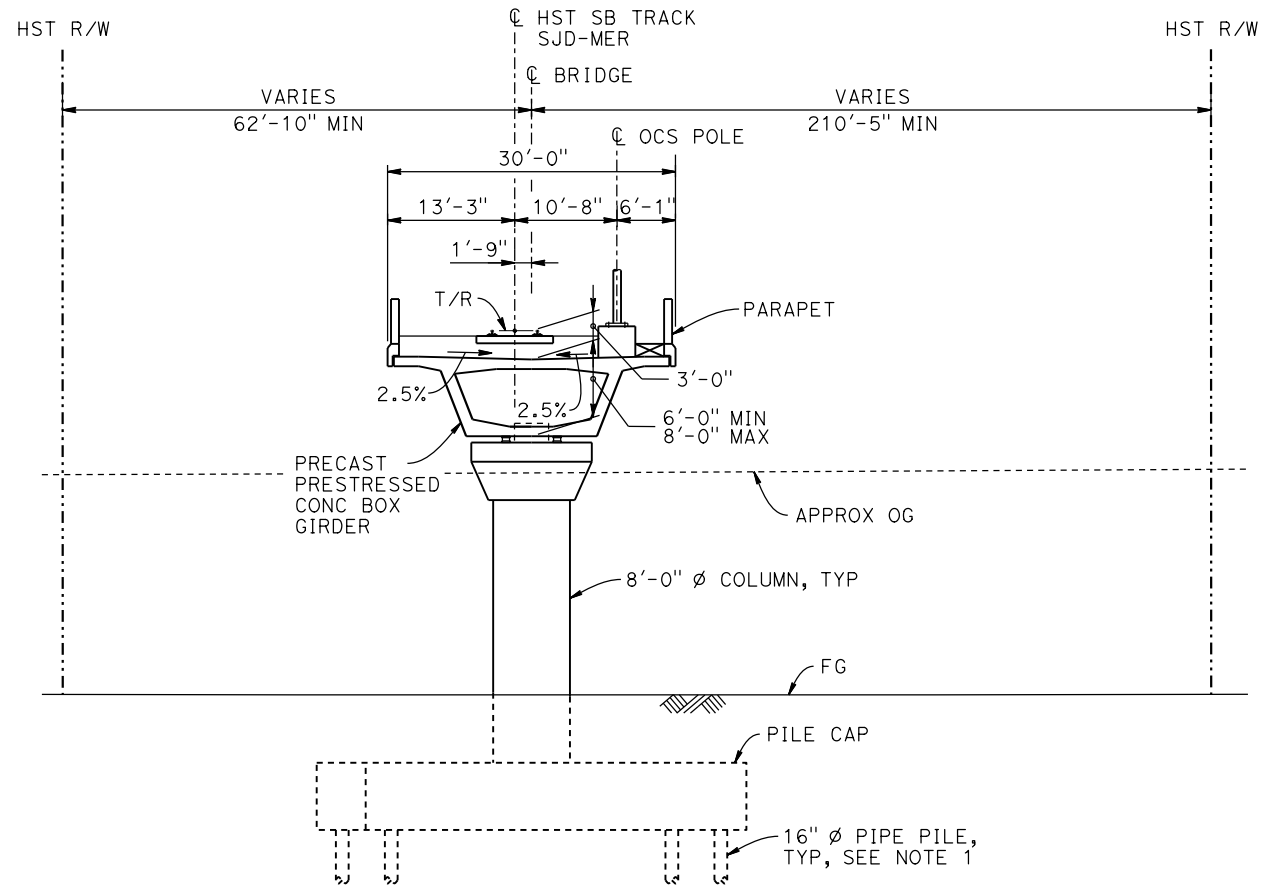
CONTRACT NO.  
HSR08-05  
 DRAWING NO.  
ST-K1650-D  
 SCALE  
AS SHOWN  
 SHEET NO.



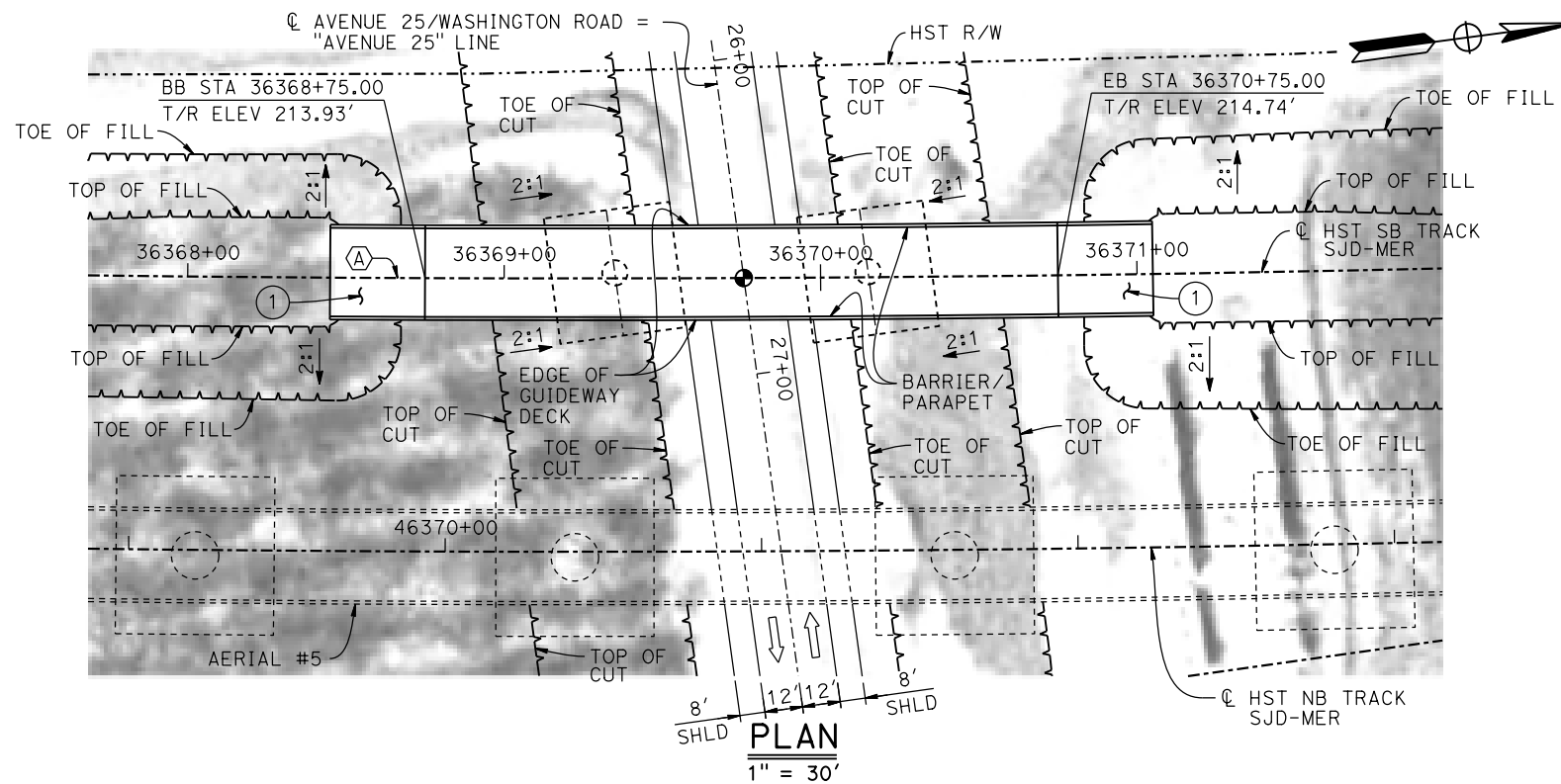
**TOP OF RAIL PROFILE (C HST SB TRACK SJD-MER)**  
NO SCALE



**DEVELOPED ELEVATION**  
1" = 30'



**TYPICAL SECTION**  
1" = 10'



**PLAN**  
1" = 30'

**TEMPORARY TRAFFIC OPENINGS**

**VEHICULAR TRAFFIC**

1. X TRAFFIC WILL BE DETOURED AWAY FROM THE SITE.
2. \_ TRAFFIC WILL PASS UNDER THE STRUCTURE ON:

STREET OR ROAD NAME AND LOCATION	FALSEWORK OPENING REQD (HORIZ X VERT)
AVENUE 25/WASHINGTON ROAD 36369+76	32'x15' 2-WAY

3. \_ TEMP TRAFFIC LANE REDUCTION FOR FTG EXC.

**LEGEND:**

- INDICATES POINT OF MINIMUM VERTICAL CLEARANCE
- ➔ INDICATES DIRECTION OF TRAFFIC
- ① STRUCTURE APPROACH
- ② AR FENCE, SEE TRACK PLANS; DRAWING TT-B0020-D

**CURVE SJD-MER 1 SB (A)**

R = 12,000.00'  
LS = 1,500.00'



**NOTES:**

1. 16"Ø PIPE PILES ASSUMED FOR ABUTMENT FOUNDATIONS. PILE LENGTHS TO BE DETERMINED.
2. FOR UTILITY DISPOSITIONS, SEE CIVIL AND GRADE SEPARATION PLANS; DRAWING CV-S1650-D.
3. FOR AERIAL #5 - NORTHBOUND OVER HST MERCED TO FRESNO GENERAL PLAN AND TYPICAL SECTIONS, SEE DRAWINGS ST-K1640-D TO ST-K1643-D, ST-K3640-D AND ST-K3641-D.
4. FOR TRACK SUPERELEVATION DETAILS, SEE ALIGNMENT AND TYPICAL SECTION PLANS; DRAWING TT-B0056-D.

16-AUG-2016 7:30 MF-ST-K1655-D.dgn

REV	DATE	BY	CHK	APP	DESCRIPTION

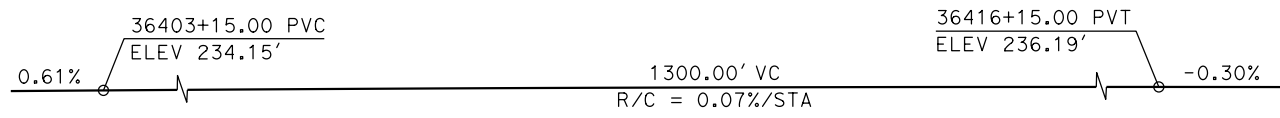
DESIGNED BY  
**M. BRATT**  
DRAWN BY  
**A. M.**  
CHECKED BY  
**K. CHARAN**  
IN CHARGE  
**C. LEMLEY**  
DATE  
**08/12/2016**

**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**  
  
**NOT FOR**  
**CONSTRUCTION**



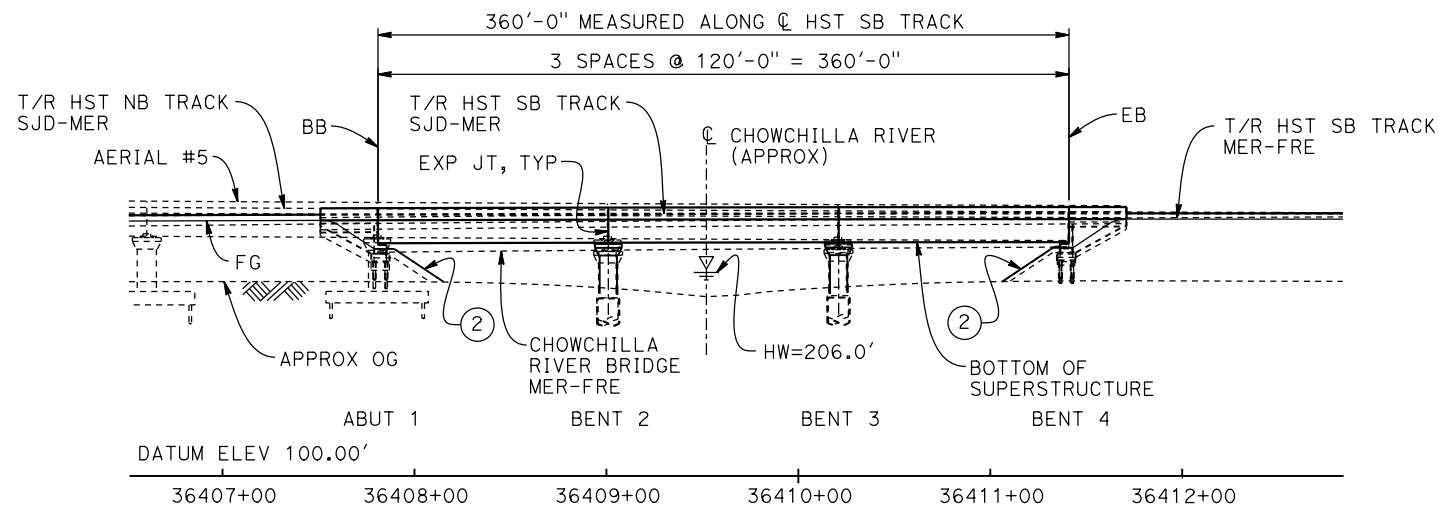
**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO SECTION**  
CENTRAL VALLEY WYE  
SR 152 (NORTH) TO ROAD 11 WYE ALTERNATIVE  
GENERAL PLAN (SJD-MER)  
WASHINGTON ROAD (AVENUE 25) UNDERPASS

CONTRACT NO.  
HSR08-05  
DRAWING NO.  
ST-K1655-D  
SCALE  
AS SHOWN  
SHEET NO.



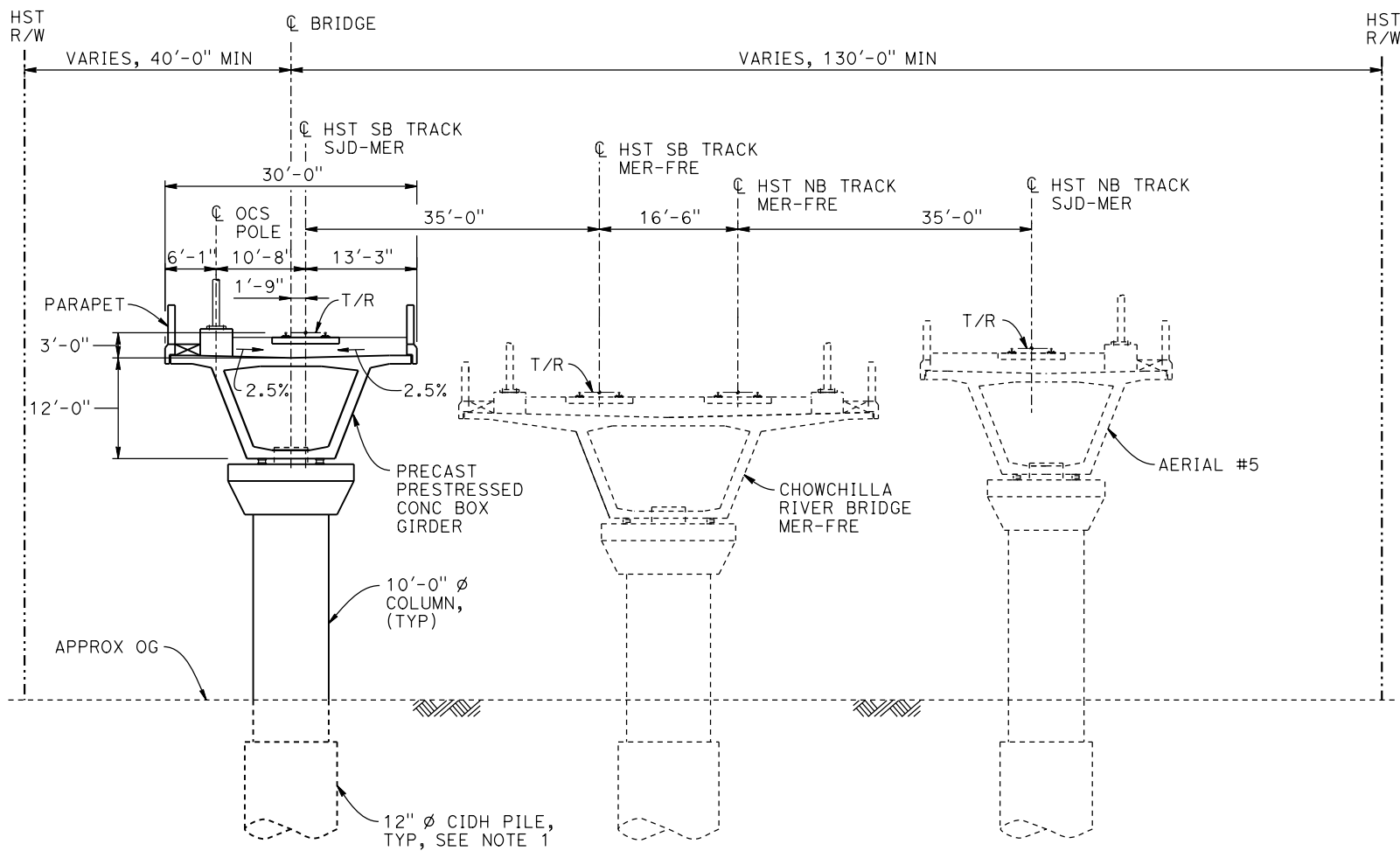
**TOP OF RAIL PROFILE (CL HST SB TRACK SJD-MER)**

NO SCALE



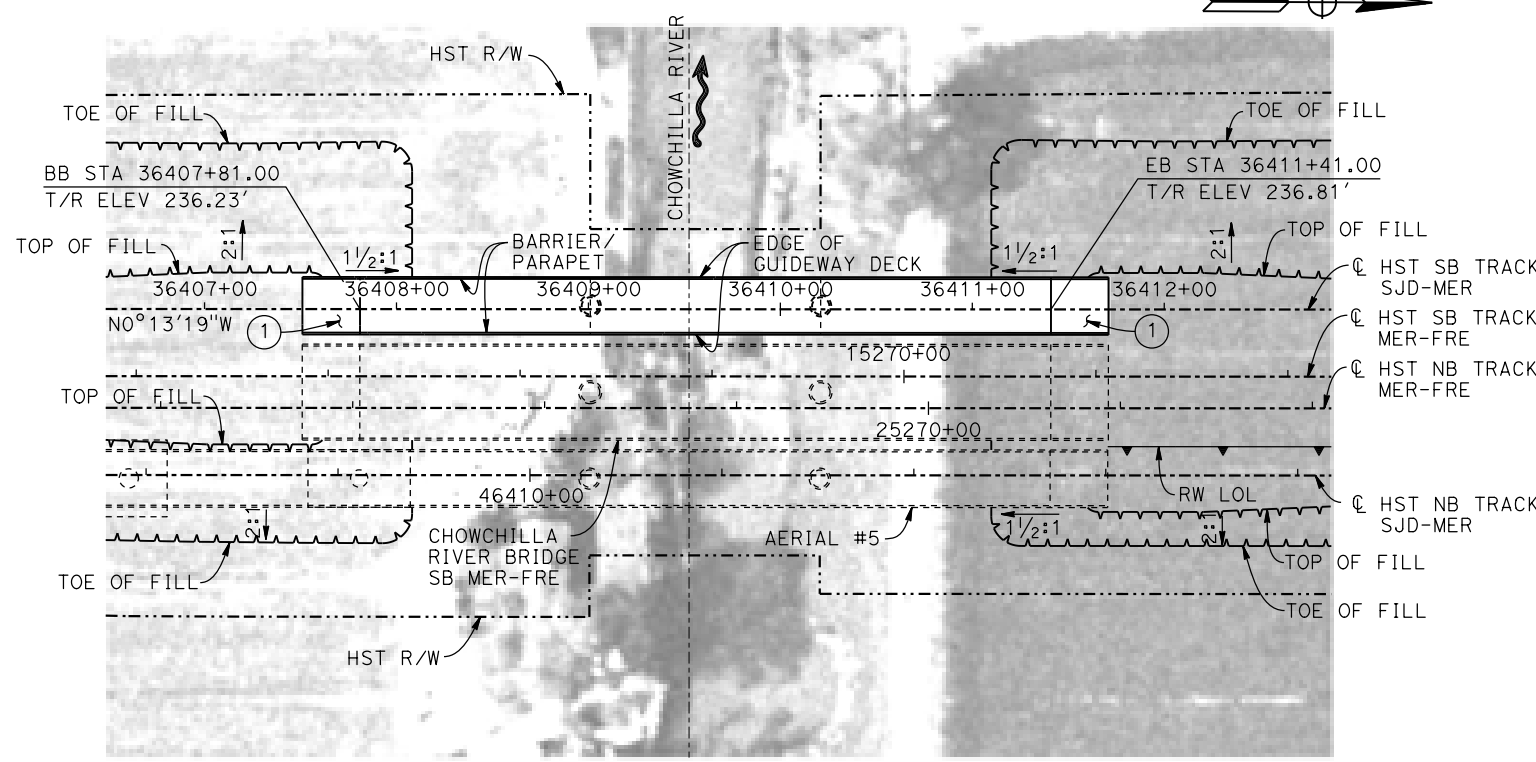
**ELEVATION**

1" = 50'



**TYPICAL SECTION**

1" = 10'



**PLAN**

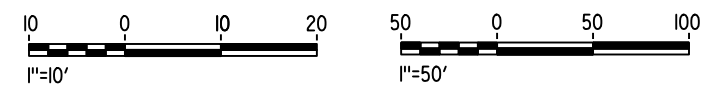
1" = 50'

**LEGEND:**

- INDICATES DIRECTION OF TRAFFIC
- ~ INDICATES DIRECTION OF FLOW
- ① STRUCTURE APPROACH
- ② SLOPE PAVING (1/2H:1V)

**NOTES:**

1. 16"  $\phi$  PIPE PILES ASSUMED FOR ABUTMENT FOUNDATIONS. PILE LENGTHS TO BE DETERMINED.
2. ANY EXISTING DIRT ROAD THAT CONFLICTS WITH NEW CONSTRUCTION SHALL BE REALIGNED.
3. FOR UTILITY DISPOSITIONS, SEE CIVIL AND GRADE SEPARATION PLANS; DRAWING CV-S1450-D.
4. FOR RETAINING WALLS, SEE CIVIL AND GRADE SEPARATION PLANS; DRAWING CV-S1450-D.
5. FOR CHOWCHILLA RIVER BRIDGE MER-FRE GENERAL PLAN AND TYPICAL SECTION, SEE DRAWING ST-K1455-D.
6. FOR AERIAL #5 GENERAL PLAN AND TYPICAL SECTIONS, SEE DRAWINGS ST-K1640-D TO ST-K1643-D AND ST-K3640-D TO ST-K3641-D.



16-AUG-2016 7:30 MF-ST-K1659-D.dgn

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**M. BRATT**  
DRAWN BY  
**A. M.**  
CHECKED BY  
**K. CHARAN**  
IN CHARGE  
**C. LEMLEY**  
DATE  
**08/12/2016**

**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**

**NOT FOR**  
**CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO SECTION**

CENTRAL VALLEY WYE  
SR 152 (NORTH) TO ROAD 11 WYE ALTERNATIVE  
GENERAL PLAN (SJD-MER)  
CHOWCHILLA RIVER BRIDGE

CONTRACT NO.  
HSR08-05

DRAWING NO.  
ST-K1659-D

SCALE  
AS SHOWN

SHEET NO.