

# CALIFORNIA HIGH-SPEED TRAIN

Project Environmental Impact Report/Environmental Impact Statement

DRAFT

Merced to Fresno Section  
Draft EIR-EIS

## Volume III: Section G – Roadway and Grade Separation Plans

UPRR/SR 99 Alternative with Ave 24 Wye

August 2011



CALIFORNIA  
High-Speed Rail Authority



U.S. Department of Transportation  
Federal Railroad Administration





7/22/2011 11:12:05 AM p:\60022962\task\_02\_merced-fresno\cadd\civil\sheet\package 2 - Ave 24 Wye & W. Chowchilla\Volume 1B - Ave 24 Wye-W.Chowchilla Grade Separation\Index Of Drawings\B5090-B.dwg

LOCATION NO.	SHT NO.	DWG NO.	DRAWING TITLE LINE 3	DRAWING TITLE LINE 4	DRAWING TITLE LINE 5	DRAWING TITLE LINE 6
GENERAL						
		B5090-B	UPRR/SR99 - (AVE 24)	GENERAL	INDEX OF DRAWINGS	SHEET 1 OF 5
		B5091-B	UPRR/SR99 - (AVE 24)	GENERAL	INDEX OF DRAWINGS	SHEET 2 OF 5
		B5092-B	UPRR/SR99 - (AVE 24)	GENERAL	INDEX OF DRAWINGS	SHEET 3 OF 5
		B5093-B	UPRR/SR99 - (AVE 24)	GENERAL	INDEX OF DRAWINGS	SHEET 4 OF 5
		B5094-B	UPRR/SR99 - (AVE 24)	GENERAL	INDEX OF DRAWINGS	SHEET 5 OF 5
		B5095-B	UPRR/SR99 - (AVE 24/WC)	GENERAL	ABBREVIATIONS, SYMBOLS AND NOTES	SHEET 1 OF 1
		B5100-B	UPRR/SR99 - (AVE 24)		INDEX MAP	SHEET 1 OF 5
		B5101-B	UPRR/SR99 - (WC)		INDEX MAP	SHEET 2 OF 5
		B5102-B	UPRR/SR99 - (AVE 24)		INDEX MAP	SHEET 3 OF 5
		B5103-B	UPRR/SR99 - (AVE 24)		INDEX MAP	SHEET 4 OF 5
		B5104-B	UPRR/SR99 - (WC)		INDEX MAP	SHEET 5 OF 5
		CB5100-B	UPRR/SR99 MAINLINE/WYE - (AVE 24/WC)	GRADE SEPARATION - HEMLOCK RD (ROAD 9) ALT 1	KEY MAP	SHEET 1 OF 1
		CB5101-B	UPRR/SR99 MAINLINE/WYE - (AVE 24)	GRADE SEPARATION - ROAD 9 ALONG EXIST ALT 2	KEY MAP	SHEET 1 OF 1
		CB5102-B	UPRR/SR99 MAINLINE - (AVE 24)	GRADE SEPARATION - ROAD 13	KEY MAP	SHEET 1 OF 1
		CB5103-B	UPRR/SR99 MAINLINE - (AVE 24)	GRADE SEPARATION - ROAD 15	KEY MAP	SHEET 1 OF 1
		CB5104-B	UPRR/SR99 MAINLINE - (AVE 24)	GRADE SEPARATION - ROAD 16	KEY MAP	SHEET 1 OF 1
		CB5105-B	UPRR/SR99 MAINLINE - (AVE 24)	GRADE SEPARATION - AVENUE 23 1/2	KEY MAP	SHEET 1 OF 1
		CB5106-B	UPRR/SR99 WYE - (AVE 24)	GRADE SEPARATION - AVENUE 25	KEY MAP	SHEET 1 OF 1
		CB5107-B	UPRR/SR99 WYE - (AVE 24)	GRADE SEPARATION - AVENUE 26	KEY MAP	SHEET 1 OF 1
		CB5108-B	UPRR/SR99 WYE - (AVE 24)	GRADE SEPARATION - CROSS ROAD	KEY MAP	SHEET 1 OF 1
		CB5109-B	UPRR/SR99 MAINLINE/WYE - (WC)	GRADE SEPARATION - ROAD 10 ALT 1	KEY MAP	SHEET 1 OF 1
		CB5110-B	UPRR/SR99 MAINLINE/WYE - (WC)	GRADE SEPARATION-ROAD 10 ALONG EXIST ALT 2	KEY MAP	SHEET 1 OF 1
		CB5111-B	UPRR/SR99 MAINLINE/MERCED DO - (WC)	GRADE SEPARATION - ROAD 13	KEY MAP	SHEET 1 OF 1
		CB5112-B	UPRR/SR99 MAINLINE DO/MERCED DO - (WC)	GRADE SEPARATION - ROAD 15	KEY MAP	SHEET 1 OF 1
		CB5113-B	UPRR/SR99 MAINLINE DO - (WC)	GRADE SEPARATION - ROAD 16	KEY MAP	SHEET 1 OF 1
		CB5114-B	UPRR/SR99 MAINLINE DO - (WC)	GRADE SEPARATION - AVENUE 23 1/2	KEY MAP	SHEET 1 OF 1
		CB5115-B	UPRR/SR99 WYE/MERCED DO - (WC)	GRADE SEPARATION - AVENUE 25	KEY MAP	SHEET 1 OF 1
		CB5116-B	UPRR/SR99 WYE/MERCED DO - (WC)	GRADE SEPARATION - AVENUE 26 ALT 1	KEY MAP	SHEET 1 OF 1
		CB5117-B	UPRR/SR99 MERCED DO - (WC)	GRADE SEPARATION - CROSS ROAD	KEY MAP	SHEET 1 OF 1
		CB5118-B	UPRR/SR99 WYE/MERCED DO - (WC)	UNDERPASS - AVENUE 26 ALT 2	KEY MAP	SHEET 1 OF 1
		CT5090-B	UPRR/SR99 - (AVE 24)	GRADE SEPARATIONS	TYPICAL CROSS SECTIONS	SHEET 1 OF 1
		CT5091-B	UPRR/SR99 - (AVE 24/WC)		GENERAL STAGE CONSTRUCTION AND TRAFFIC PLAN	SHEET 1 OF 1
LAYOUT						
13		CT5100-B	UPRR/SR99 MAINLINE/WYE - (AVE 24/WC)	GRADE SEPARATION - HEMLOCK RD (ROAD 9) ALT 1	LAYOUT	SHEET 1 OF 4
13		CT5101-B	UPRR/SR99 MAINLINE/WYE - (AVE 24/WC)	GRADE SEPARATION - HEMLOCK RD (ROAD 9) ALT 1	LAYOUT	SHEET 2 OF 4
13		CT5102-B	UPRR/SR99 MAINLINE/WYE - (AVE 24/WC)	GRADE SEPARATION - HEMLOCK RD (ROAD 9) ALT 1	LAYOUT	SHEET 3 OF 4
13		CT5103-B	UPRR/SR99 MAINLINE/WYE - (AVE 24/WC)	GRADE SEPARATION - HEMLOCK RD (ROAD 9) ALT 1	LAYOUT	SHEET 4 OF 4
12		CT5104-B	UPRR/SR99 MAINLINE - (AVE 24)	GRADE SEPARATION - ROAD 13	LAYOUT	SHEET 1 OF 4
12		CT5105-B	UPRR/SR99 MAINLINE - (AVE 24)	GRADE SEPARATION - ROAD 13	LAYOUT	SHEET 2 OF 4
12		CT5106-B	UPRR/SR99 MAINLINE - (AVE 24)	GRADE SEPARATION - ROAD 13	LAYOUT	SHEET 3 OF 4
12		CT5107-B	UPRR/SR99 MAINLINE - (AVE 24)	GRADE SEPARATION - ROAD 13	LAYOUT	SHEET 4 OF 4
11		CT5108-B	UPRR/SR99 MAINLINE - (AVE 24)	GRADE SEPARATION - ROAD 15	LAYOUT	SHEET 1 OF 3
11		CT5109-B	UPRR/SR99 MAINLINE - (AVE 24)	GRADE SEPARATION - ROAD 15	LAYOUT	SHEET 2 OF 3
11		CT5110-B	UPRR/SR99 MAINLINE - (AVE 24)	GRADE SEPARATION - ROAD 15	LAYOUT	SHEET 3 OF 3
10		CT5111-B	UPRR/SR99 MAINLINE - (AVE 24)	GRADE SEPARATION - ROAD 16	LAYOUT	SHEET 1 OF 3
10		CT5112-B	UPRR/SR99 MAINLINE - (AVE 24)	GRADE SEPARATION - ROAD 16	LAYOUT	SHEET 2 OF 3
10		CT5113-B	UPRR/SR99 MAINLINE - (AVE 24)	GRADE SEPARATION - ROAD 16	LAYOUT	SHEET 3 OF 3
9		CT5114-B	UPRR/SR99 MAINLINE - (AVE 24)	GRADE SEPARATION - AVENUE 23 1/2	LAYOUT	SHEET 1 OF 4
9		CT5115-B	UPRR/SR99 MAINLINE - (AVE 24)	GRADE SEPARATION - AVENUE 23 1/2	LAYOUT	SHEET 2 OF 4
9		CT5116-B	UPRR/SR99 MAINLINE - (AVE 24)	GRADE SEPARATION - AVENUE 23 1/2	LAYOUT	SHEET 3 OF 4
9		CT5117-B	UPRR/SR99 MAINLINE - (AVE 24)	GRADE SEPARATION - AVENUE 23 1/2	LAYOUT	SHEET 4 OF 4
8		CT5118-B	UPRR/SR99 WYE - (AVE 24)	GRADE SEPARATION - AVENUE 25	LAYOUT	SHEET 1 OF 5
8		CT5119-B	UPRR/SR99 WYE - (AVE 24)	GRADE SEPARATION - AVENUE 25	LAYOUT	SHEET 2 OF 5
8		CT5120-B	UPRR/SR99 WYE - (AVE 24)	GRADE SEPARATION - AVENUE 25	LAYOUT	SHEET 3 OF 5
8		CT5121-B	UPRR/SR99 WYE - (AVE 24)	GRADE SEPARATION - AVENUE 25	LAYOUT	SHEET 4 OF 5
8		CT5122-B	UPRR/SR99 WYE - (AVE 24)	GRADE SEPARATION - AVENUE 25	LAYOUT	SHEET 5 OF 5
7		CT5123-B	UPRR/SR99 WYE - (AVE 24)	GRADE SEPARATION - AVENUE 26	LAYOUT	SHEET 1 OF 3
7		CT5124-B	UPRR/SR99 WYE - (AVE 24)	GRADE SEPARATION - AVENUE 26	LAYOUT	SHEET 2 OF 3
7		CT5125-B	UPRR/SR99 WYE - (AVE 24)	GRADE SEPARATION - AVENUE 26	LAYOUT	SHEET 3 OF 3
6		CT5126-B	UPRR/SR99 WYE - (AVE 24)	GRADE SEPARATION - CROSS ROAD	LAYOUT	SHEET 1 OF 3
6		CT5127-B	UPRR/SR99 WYE - (AVE 24)	GRADE SEPARATION - CROSS ROAD	LAYOUT	SHEET 2 OF 3
6		CT5128-B	UPRR/SR99 WYE - (AVE 24)	GRADE SEPARATION - CROSS ROAD	LAYOUT	SHEET 3 OF 3
32		CT5129-B	UPRR/SR99 MAINLINE/WYE - (WC)	GRADE SEPARATION - ROAD 10 ALT 1	LAYOUT	SHEET 1 OF 3
32		CT5130-B	UPRR/SR99 MAINLINE/WYE - (WC)	GRADE SEPARATION - ROAD 10 ALT 1	LAYOUT	SHEET 2 OF 3
32		CT5131-B	UPRR/SR99 MAINLINE/WYE - (WC)	GRADE SEPARATION - ROAD 10 ALT 1	LAYOUT	SHEET 3 OF 3
31		CT5132-B	UPRR/SR99 MAINLINE/MERCED DO - (WC)	GRADE SEPARATION - ROAD 13	LAYOUT	SHEET 1 OF 5
31		CT5133-B	UPRR/SR99 MAINLINE/MERCED DO - (WC)	GRADE SEPARATION - ROAD 13	LAYOUT	SHEET 2 OF 5
31		CT5134-B	UPRR/SR99 MAINLINE/MERCED DO - (WC)	GRADE SEPARATION - ROAD 13	LAYOUT	SHEET 3 OF 5
31		CT5135-B	UPRR/SR99 MAINLINE/MERCED DO - (WC)	GRADE SEPARATION - ROAD 13	LAYOUT	SHEET 4 OF 5
31		CT5136-B	UPRR/SR99 MAINLINE/MERCED DO - (WC)	GRADE SEPARATION - ROAD 13	LAYOUT	SHEET 5 OF 5

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
DRAWN BY  
C. DELOS REYES  
CHECKED BY  
A. SILVER  
IN CHARGE  
A. BOONE  
DATE  
06/30/2011

**RECORD SET**  
15% DESIGN  
SUBMITTAL

**NOT FOR  
CONSTRUCTION**



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

UPRR/SR99 - (AVE 24)  
GENERAL  
INDEX OF DRAWINGS  
SHEET 1 OF 5

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
B5090-B  
SCALE  
NONE  
SHEET NO.  
### OF ###







7/22/2011 11:12:20 AM p:\60022962\task\_02\_merced-fresno\cadd\civil\sheet\Package 2 - Ave 24 Wye & W. Chowchilla Volume 1B - Ave 24 Wye-W.Chowchilla Grade Separation\Index Of Drawings\B5092.dwg

LOCATION NO.	SHT NO.	DWG NO.	DRAWING TITLE LINE 3	DRAWING TITLE LINE 4	DRAWING TITLE LINE 5	DRAWING TITLE LINE 6
9		CT6117-B	UPRR/SR99 MAINLINE - (AVE 24)	GRADE SEPARATION - AVENUE 23 1/2	PROFILE	SHEET 4 OF 4
8		CT6118-B	UPRR/SR99 WYE - (AVE 24)	GRADE SEPARATION - AVENUE 25	PROFILE	SHEET 1 OF 5
8		CT6119-B	UPRR/SR99 WYE - (AVE 24)	GRADE SEPARATION - AVENUE 25	PROFILE	SHEET 2 OF 5
8		CT6120-B	UPRR/SR99 WYE - (AVE 24)	GRADE SEPARATION - AVENUE 25	PROFILE	SHEET 3 OF 5
8		CT6121-B	UPRR/SR99 WYE - (AVE 24)	GRADE SEPARATION - AVENUE 25	PROFILE	SHEET 4 OF 5
8		CT6122-B	UPRR/SR99 WYE - (AVE 24)	GRADE SEPARATION - AVENUE 25	PROFILE	SHEET 5 OF 5
7		CT6123-B	UPRR/SR99 WYE - (AVE 24)	GRADE SEPARATION - AVENUE 26	PROFILE	SHEET 1 OF 3
7		CT6124-B	UPRR/SR99 WYE - (AVE 24)	GRADE SEPARATION - AVENUE 26	PROFILE	SHEET 2 OF 3
7		CT6125-B	UPRR/SR99 WYE - (AVE 24)	GRADE SEPARATION - AVENUE 26	PROFILE	SHEET 3 OF 3
6		CT6126-B	UPRR/SR99 WYE - (AVE 24)	GRADE SEPARATION - CROSS RD	PROFILE	SHEET 1 OF 3
6		CT6127-B	UPRR/SR99 WYE - (AVE 24)	GRADE SEPARATION - CROSS RD	PROFILE	SHEET 2 OF 3
6		CT6128-B	UPRR/SR99 WYE - (AVE 24)	GRADE SEPARATION - CROSS RD	PROFILE	SHEET 3 OF 3
32		CT6129-B	UPRR/SR99 MAINLINE/WYE - (WC)	GRADE SEPARATION - ROAD 10 ALT 1	PROFILE	SHEET 1 OF 3
32		CT6130-B	UPRR/SR99 MAINLINE/WYE - (WC)	GRADE SEPARATION - ROAD 10 ALT 1	PROFILE	SHEET 2 OF 3
32		CT6131-B	UPRR/SR99 MAINLINE/WYE - (WC)	GRADE SEPARATION - ROAD 10 ALT 1	PROFILE	SHEET 3 OF 3
31		CT6132-B	UPRR/SR99 MAINLINE/MERCED DO - (WC)	GRADE SEPARATION - ROAD 13	PROFILE	SHEET 1 OF 5
31		CT6133-B	UPRR/SR99 MAINLINE/MERCED DO - (WC)	GRADE SEPARATION - ROAD 13	PROFILE	SHEET 2 OF 5
31		CT6134-B	UPRR/SR99 MAINLINE/MERCED DO - (WC)	GRADE SEPARATION - ROAD 13	PROFILE	SHEET 3 OF 5
31		CT6135-B	UPRR/SR99 MAINLINE/MERCED DO - (WC)	GRADE SEPARATION - ROAD 13	PROFILE	SHEET 4 OF 5
31		CT6136-B	UPRR/SR99 MAINLINE/MERCED DO - (WC)	GRADE SEPARATION - ROAD 13	PROFILE	SHEET 5 OF 5
30		CT6138-B	UPRR/SR99 MAINLINE DO/MERCED DO - (WC)	GRADE SEPARATION - ROAD 15	PROFILE	SHEET 1 OF 4
30		CT6139-B	UPRR/SR99 MAINLINE DO/MERCED DO - (WC)	GRADE SEPARATION - ROAD 15	PROFILE	SHEET 2 OF 4
30		CT6140-B	UPRR/SR99 MAINLINE DO/MERCED DO - (WC)	GRADE SEPARATION - ROAD 15	PROFILE	SHEET 3 OF 4
30		CT6141-B	UPRR/SR99 MAINLINE DO/MERCED DO - (WC)	GRADE SEPARATION - ROAD 15	PROFILE	SHEET 4 OF 4
29		CT6142-B	UPRR/SR99 MAINLINE DO - (WC)	GRADE SEPARATION - ROAD 16	PROFILE	SHEET 1 OF 4
29		CT6143-B	UPRR/SR99 MAINLINE DO - (WC)	GRADE SEPARATION - ROAD 16	PROFILE	SHEET 2 OF 4
29		CT6144-B	UPRR/SR99 MAINLINE DO - (WC)	GRADE SEPARATION - ROAD 16	PROFILE	SHEET 3 OF 4
29		CT6145-B	UPRR/SR99 MAINLINE DO - (WC)	GRADE SEPARATION - ROAD 16	PROFILE	SHEET 4 OF 4
28		CT6146-B	UPRR/SR99 MAINLINE DO - (WC)	GRADE SEPARATION - AVENUE 23 1/2	PROFILE	SHEET 1 OF 4
28		CT6147-B	UPRR/SR99 MAINLINE DO - (WC)	GRADE SEPARATION - AVENUE 23 1/2	PROFILE	SHEET 2 OF 4
28		CT6148-B	UPRR/SR99 MAINLINE DO - (WC)	GRADE SEPARATION - AVENUE 23 1/2	PROFILE	SHEET 3 OF 4
28		CT6149-B	UPRR/SR99 MAINLINE DO - (WC)	GRADE SEPARATION - AVENUE 23 1/2	PROFILE	SHEET 4 OF 4
27		CT6151-B	UPRR/SR99 WYE/MERCED DO - (WC)	GRADE SEPARATION - AVENUE 25	PROFILE	SHEET 1 OF 14
27		CT6152-B	UPRR/SR99 WYE/MERCED DO - (WC)	GRADE SEPARATION - AVENUE 25	PROFILE	SHEET 2 OF 14
27		CT6153-B	UPRR/SR99 WYE/MERCED DO - (WC)	GRADE SEPARATION - AVENUE 25	PROFILE	SHEET 3 OF 14
27		CT6154-B	UPRR/SR99 WYE/MERCED DO - (WC)	GRADE SEPARATION - AVENUE 25	PROFILE	SHEET 4 OF 14
27		CT6155-B	UPRR/SR99 WYE/MERCED DO - (WC)	GRADE SEPARATION - AVENUE 25	PROFILE	SHEET 5 OF 14
27		CT6156-B	UPRR/SR99 WYE/MERCED DO - (WC)	GRADE SEPARATION - AVENUE 25	PROFILE	SHEET 6 OF 14
27		CT6157-B	UPRR/SR99 WYE/MERCED DO - (WC)	GRADE SEPARATION - AVENUE 25	PROFILE	SHEET 7 OF 14
27		CT6158-B	UPRR/SR99 WYE/MERCED DO - (WC)	GRADE SEPARATION - AVENUE 25	PROFILE	SHEET 8 OF 14
27		CT6159-B	UPRR/SR99 WYE/MERCED DO - (WC)	GRADE SEPARATION - AVENUE 25	PROFILE	SHEET 9 OF 14
27		CT6160-B	UPRR/SR99 WYE/MERCED DO - (WC)	GRADE SEPARATION - AVENUE 25	PROFILE	SHEET 10 OF 14
27		CT6161-B	UPRR/SR99 WYE/MERCED DO - (WC)	GRADE SEPARATION - AVENUE 25	PROFILE	SHEET 11 OF 14
27		CT6162-B	UPRR/SR99 WYE/MERCED DO - (WC)	GRADE SEPARATION - AVENUE 25	PROFILE	SHEET 12 OF 14
27		CT6163-B	UPRR/SR99 WYE/MERCED DO - (WC)	GRADE SEPARATION - AVENUE 25	PROFILE	SHEET 13 OF 14
27		CT6164-B	UPRR/SR99 WYE/MERCED DO - (WC)	GRADE SEPARATION - AVENUE 25	PROFILE	SHEET 14 OF 14
26		CT6167-B	UPRR/SR99 WYE/MERCED DO - (WC)	GRADE SEPARATION - AVENUE 26 ALT 1	PROFILE	SHEET 1 OF 10
26		CT6168-B	UPRR/SR99 WYE/MERCED DO - (WC)	GRADE SEPARATION - AVENUE 26 ALT 1	PROFILE	SHEET 2 OF 10
26		CT6169-B	UPRR/SR99 WYE/MERCED DO - (WC)	GRADE SEPARATION - AVENUE 26 ALT 1	PROFILE	SHEET 3 OF 10
26		CT6170-B	UPRR/SR99 WYE/MERCED DO - (WC)	GRADE SEPARATION - AVENUE 26 ALT 1	PROFILE	SHEET 4 OF 10
26		CT6171-B	UPRR/SR99 WYE/MERCED DO - (WC)	GRADE SEPARATION - AVENUE 26 ALT 1	PROFILE	SHEET 5 OF 10
26		CT6172-B	UPRR/SR99 WYE/MERCED DO - (WC)	GRADE SEPARATION - AVENUE 26 ALT 1	PROFILE	SHEET 6 OF 10
26		CT6173-B	UPRR/SR99 WYE/MERCED DO - (WC)	GRADE SEPARATION - AVENUE 26 ALT 1	PROFILE	SHEET 7 OF 10
26		CT6174-B	UPRR/SR99 WYE/MERCED DO - (WC)	GRADE SEPARATION - AVENUE 26 ALT 1	PROFILE	SHEET 8 OF 10
26		CT6175-B	UPRR/SR99 WYE/MERCED DO - (WC)	GRADE SEPARATION - AVENUE 26 ALT 1	PROFILE	SHEET 9 OF 10
26		CT6176-B	UPRR/SR99 WYE/MERCED DO - (WC)	GRADE SEPARATION - AVENUE 26 ALT 1	PROFILE	SHEET 10 OF 10
25		CT6177-B	UPRR/SR99 MERCED DO - (WC)	GRADE SEPARATION - CROSS ROAD	PROFILE	SHEET 1 OF 3
25		CT6178-B	UPRR/SR99 MERCED DO - (WC)	GRADE SEPARATION - CROSS ROAD	PROFILE	SHEET 2 OF 3
25		CT6179-B	UPRR/SR99 MERCED DO - (WC)	GRADE SEPARATION - CROSS ROAD	PROFILE	SHEET 3 OF 3
26		CT6185-B	UPRR/SR99 WYE/MERCED DO - (WC)	UNDERPASS - AVENUE 26 ALT 2	PROFILE	SHEET 1 OF 3
26		CT6186-B	UPRR/SR99 WYE/MERCED DO - (WC)	UNDERPASS - AVENUE 26 ALT 2	PROFILE	SHEET 2 OF 3
26		CT6187-B	UPRR/SR99 WYE/MERCED DO - (WC)	UNDERPASS - AVENUE 26 ALT 2	PROFILE	SHEET 3 OF 3
13		CT6188-B	UPRR/SR99 MAINLINE/WYE - (AVE 24)	GRADE SEPARATION - ROAD 9 ALONG EXIST ALT 2	PROFILE	SHEET 1 OF 3
13		CT6189-B	UPRR/SR99 MAINLINE/WYE - (AVE 24)	GRADE SEPARATION - ROAD 9 ALONG EXIST ALT 2	PROFILE	SHEET 2 OF 3
13		CT6190-B	UPRR/SR99 MAINLINE/WYE - (AVE 24)	GRADE SEPARATION - ROAD 9 ALONG EXIST ALT 2	PROFILE	SHEET 3 OF 3
32		CT6191-B	UPRR/SR99 MAINLINE/WYE - (WC)	GRADE SEPARATION-ROAD 10 ALONG EXIST ALT 2	PROFILE	SHEET 1 OF 3
32		CT6192-B	UPRR/SR99 MAINLINE/WYE - (WC)	GRADE SEPARATION-ROAD 10 ALONG EXIST ALT 2	PROFILE	SHEET 2 OF 3
32		CT6193-B	UPRR/SR99 MAINLINE/WYE - (WC)	GRADE SEPARATION-ROAD 10 ALONG EXIST ALT 2	PROFILE	SHEET 3 OF 3
64		CT1149-A	UPRR MERCED CONNECTION - (AVE 24/WC)	GRADE SEPARATION - G STREET	PROFILE	SHEET 1 OF 1

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
DRAWN BY  
C. DELOS REYES  
CHECKED BY  
A. SILVER  
IN CHARGE  
A. BOONE  
DATE  
06/30/2011

**RECORD SET  
15% DESIGN  
SUBMITTAL**

**NOT FOR  
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**CALIFORNIA HIGH-SPEED TRAIN PROJECT  
MERCED TO FRESNO**

UPRR/SR99 - (AVE 24)

GENERAL  
INDEX OF DRAWINGS  
SHEET 3 OF 5

CONTRACT NO.  
HSR06-007

DRAWING NO.  
B5092-B

SCALE  
NONE

SHEET NO.  
### OF ###



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LOCATION NO.	SHT NO.	DWG NO.	DRAWING TITLE LINE 3	DRAWING TITLE LINE 4	DRAWING TITLE LINE 5	DRAWING TITLE LINE 6
		T-1	GOLDEN STATE BOULEVARD RE-ALIGNMENT		TITLE	
		X-1	GOLDEN STATE BOULEVARD RE-ALIGNMENT		TYPICAL SECTION	
		X-2	GOLDEN STATE BOULEVARD RE-ALIGNMENT		TYPICAL SECTION	
		X-3	GOLDEN STATE BOULEVARD RE-ALIGNMENT		TYPICAL SECTION	
		X-4	GOLDEN STATE BOULEVARD RE-ALIGNMENT		TYPICAL SECTION	
		X-5	GOLDEN STATE BOULEVARD RE-ALIGNMENT		TYPICAL SECTION	
		X-6	GOLDEN STATE BOULEVARD RE-ALIGNMENT		TYPICAL SECTION	
		X-7	GOLDEN STATE BOULEVARD RE-ALIGNMENT		TYPICAL SECTION	
		X-8	GOLDEN STATE BOULEVARD RE-ALIGNMENT		TYPICAL SECTION	
		X-9	GOLDEN STATE BOULEVARD RE-ALIGNMENT		TYPICAL SECTION	
		X-10	GOLDEN STATE BOULEVARD RE-ALIGNMENT		TYPICAL SECTION	
		X-11	GOLDEN STATE BOULEVARD RE-ALIGNMENT		TYPICAL SECTION	
		X-12	GOLDEN STATE BOULEVARD RE-ALIGNMENT		TYPICAL SECTION	
		X-13	GOLDEN STATE BOULEVARD RE-ALIGNMENT		TYPICAL SECTION	
		X-14	GOLDEN STATE BOULEVARD RE-ALIGNMENT		TYPICAL SECTION	
		X-15	GOLDEN STATE BOULEVARD RE-ALIGNMENT		TYPICAL SECTION	
		X-16	GOLDEN STATE BOULEVARD RE-ALIGNMENT		TYPICAL SECTION	
		X-17	GOLDEN STATE BOULEVARD RE-ALIGNMENT		TYPICAL SECTION	
		X-18	GOLDEN STATE BOULEVARD RE-ALIGNMENT		TYPICAL SECTION	
		K-1	GOLDEN STATE BOULEVARD RE-ALIGNMENT		KEYMAP	
		L-1	GOLDEN STATE BOULEVARD RE-ALIGNMENT		LAYOUT	"NB" 75+73 TO "NB" 100+00
		L-2	GOLDEN STATE BOULEVARD RE-ALIGNMENT		LAYOUT	"GSB" 100+00 TO "GSB" 111+50
		L-3	GOLDEN STATE BOULEVARD RE-ALIGNMENT		LAYOUT	"GSB" 111+50 TO "GSB" 138+50
		L-4	GOLDEN STATE BOULEVARD RE-ALIGNMENT		LAYOUT	"GSB" 138+50 TO "GSB" 163+50
		L-5	GOLDEN STATE BOULEVARD RE-ALIGNMENT		LAYOUT	"GSB" 163+50 TO "GSB" 191+00
		L-6	GOLDEN STATE BOULEVARD RE-ALIGNMENT		LAYOUT	"GSB" 191+00 TO "GSB" 216+00
		L-7	GOLDEN STATE BOULEVARD RE-ALIGNMENT		LAYOUT	"GSB" 216+00 TO "GSB" 241+00
		L-8	GOLDEN STATE BOULEVARD RE-ALIGNMENT		LAYOUT	"GSB" 241+00 TO "GSB" 264+00
		L-9	GOLDEN STATE BOULEVARD RE-ALIGNMENT		LAYOUT	"GSB" 264+00 TO "GSB" 289+00
		L-10	GOLDEN STATE BOULEVARD RE-ALIGNMENT		LAYOUT	"GSB" 289+00 TO "GSB" 314+00
		L-11	GOLDEN STATE BOULEVARD RE-ALIGNMENT		LAYOUT	"GSB" 314+00 TO "GSB" 338+77
		L-12	VETERANS BOULEVARD		LAYOUT	"V" 105+00 TO "V" 122+35
		L-13	BULLARD AVENUE		LAYOUT	"BU" 100+00 TO "BU" 132+72
		L-14	SHAW AVENUE RE-ALIGNMENT		LAYOUT	"S" 50+00 TO "S" 66+00
		L-15	SHAW AVENUE RE-ALIGNMENT		LAYOUT	"S" 66+00 TO "S" 80+81
		L-16	CORNELIA AVENUE RE-ALIGNMENT		LAYOUT	"C" 10+00 TO "C" 26+00
		L-17	SANTA ANA AVENUE RE-ALIGNMENT		LAYOUT	"C" 26+00 TO "C" 46+23
		SE-1	GOLDEN STATE BOULEVARD RE-ALIGNMENT		SUPERELEVATION DIAGRAM	
		SE-2	GOLDEN STATE BOULEVARD RE-ALIGNMENT		SUPERELEVATION DIAGRAM	
		BR-1	GOLDEN STATE BOULEVARD RE-ALIGNMENT		ADVANCE PLANNING STUDY	
		BR-2	GOLDEN STATE BOULEVARD RE-ALIGNMENT		ADVANCE PLANNING STUDY	
		BR-3	GOLDEN STATE BOULEVARD RE-ALIGNMENT		ADVANCE PLANNING STUDY	
		BR-4	GOLDEN STATE BOULEVARD RE-ALIGNMENT		ADVANCE PLANNING STUDY	
		BR-5	GOLDEN STATE BOULEVARD RE-ALIGNMENT		ADVANCE PLANNING STUDY	
		CT9550-A	FRESNO SUBSECTION	ALIGNMENT F1	GRADE SEPARATION LAYOUT	W MCKINLEY AVE
		CT9551-A	FRESNO SUBSECTION	ALIGNMENT F1	GRADE SEPARATION LAYOUT	N GOLDEN STATE BLVD
		CT9552-A	FRESNO SUBSECTION	ALIGNMENT F1	GRADE SEPARATION LAYOUT	W OLIVE AVE
		CT9553-A	FRESNO SUBSECTION	ALIGNMENT F1	GRADE SEPARATION LAYOUT	BELMONT AVE
		CT9554-A	FRESNO SUBSECTION	ALIGNMENT F1	GRADE SEPARATION LAYOUT	STANISLAUS ST AND TUOLUMNE ST
		CT9555-A	FRESNO SUBSECTION	ALIGNMENT F1	GRADE SEPARATION LAYOUT	FRESNO ST
		CT9556-A	FRESNO SUBSECTION	ALIGNMENT F1	GRADE SEPARATION LAYOUT	TULARE ST (OVERHEAD)
		CT9557-A	FRESNO SUBSECTION	ALIGNMENT F1	GRADE SEPARATION LAYOUT	TULARE ST (UNDERPASS)
		CT9558-A	FRESNO SUBSECTION	ALIGNMENT F1	GRADE SEPARATION LAYOUT	VENTURA ST
		CT9559-A	FRESNO SUBSECTION	ALIGNMENT F1	GRADE SEP PROFILE & SUPERELEVATION DIAGRAM	W MCKINLEY AVE
		CT9560-A	FRESNO SUBSECTION	ALIGNMENT F1	GRADE SEP PROFILE & SUPERELEVATION DIAGRAM	MCKINLEY AVE CONNECTOR
		CT9561-A	FRESNO SUBSECTION	ALIGNMENT F1	GRADE SEP PROFILE & SUPERELEVATION DIAGRAM	N WEBER AVE
		CT9562-A	FRESNO SUBSECTION	ALIGNMENT F1	GRADE SEP PROFILE & SUPERELEVATION DIAGRAM	N WEST AVE
		CT9563-A	FRESNO SUBSECTION	ALIGNMENT F1	GRADE SEP PROFILE & SUPERELEVATION DIAGRAM	N GOLDEN STATE BLVD
		CT9564-A	FRESNO SUBSECTION	ALIGNMENT F1	GRADE SEP PROFILE & SUPERELEVATION DIAGRAM	N GOLDEN STATE BLVD
		CT9565-A	FRESNO SUBSECTION	ALIGNMENT F1	GRADE SEP PROFILE & SUPERELEVATION DIAGRAM	W OLIVE AVE
		CT9566-A	FRESNO SUBSECTION	ALIGNMENT F1	GRADE SEP PROFILE & SUPERELEVATION DIAGRAM	BELMONT AVE
		CT9567-A	FRESNO SUBSECTION	ALIGNMENT F1	GRADE SEP PROFILE & SUPERELEVATION DIAGRAM	N WESLEY AVE
		CT9568-A	FRESNO SUBSECTION	ALIGNMENT F1	GRADE SEP PROFILE & SUPERELEVATION DIAGRAM	N H ST
		CT9569-A	FRESNO SUBSECTION	ALIGNMENT F1	GRADE SEP PROFILE & SUPERELEVATION DIAGRAM	STANISLAUS ST
		CT9570-A	FRESNO SUBSECTION	ALIGNMENT F1	GRADE SEP PROFILE & SUPERELEVATION DIAGRAM	TUOLUMNE ST
		CT9571-A	FRESNO SUBSECTION	ALIGNMENT F1	GRADE SEP PROFILE & SUPERELEVATION DIAGRAM	FRESNO ST
		CT9572-A	FRESNO SUBSECTION	ALIGNMENT F1	GRADE SEP PROFILE & SUPERELEVATION DIAGRAM	H ST (FRESNO ST)
		CT9573-A	FRESNO SUBSECTION	ALIGNMENT F1	GRADE SEP PROFILE & SUPERELEVATION DIAGRAM	G ST (FRESNO ST)
		CT9574-A	FRESNO SUBSECTION	ALIGNMENT F1	GRADE SEP PROFILE & SUPERELEVATION DIAGRAM	TULARE ST (OVERHEAD)
		CT9575-A	FRESNO SUBSECTION	ALIGNMENT F1	GRADE SEP PROFILE & SUPERELEVATION DIAGRAM	TULARE ST (UNDERPASS)
		CT9576-A	FRESNO SUBSECTION	ALIGNMENT F1	GRADE SEP PROFILE & SUPERELEVATION DIAGRAM	G ST (TULARE ST UNDERPASS)
		CT9577-A	FRESNO SUBSECTION	ALIGNMENT F1	GRADE SEP PROFILE & SUPERELEVATION DIAGRAM	VENTURA ST

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
DRAWN BY  
C. DELOS REYES  
CHECKED BY  
A. SILVER  
IN CHARGE  
A. BOONE  
DATE  
06/30/2011

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

UPRR/SR99 - (AVE 24)

GENERAL  
INDEX OF DRAWINGS  
SHEET 4 OF 5

CONTRACT NO.  
HSR06-007

DRAWING NO.  
B5093-B

SCALE  
NONE

SHEET NO.  
### OF ###



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LOCATION NO.	SHT NO.	DWG NO.	DRAWING TITLE LINE 3	DRAWING TITLE LINE 4	DRAWING TITLE LINE 5	DRAWING TITLE LINE 6
		CR9578-A	FRESNO SUBSECTION	ALIGNMENT F1	ROADWAY LAYOUT	N THORNE AVE
		CR9579-A	FRESNO SUBSECTION	ALIGNMENT F1	ROADWAY PROFILE & SUPERELEVATION DIAGRAM	N THORNE AVE
		CT9580-A	FRESNO SUBSECTION	ALIGNMENT F1	ROADWAY / GRADE SEPARATION	TYPICAL CROSS SECTIONS
		CT9581-A	FRESNO SUBSECTION	ALIGNMENT F1	ROADWAY / GRADE SEPARATION	TYPICAL CROSS SECTIONS
		CT9582-A	FRESNO SUBSECTION	ALIGNMENT F1	ROADWAY / GRADE SEPARATION	TYPICAL CROSS SECTIONS

REV	DATE	BY	CHK	APP	DESCRIPTION

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

UPRR/SR99 - (AVE 24)  
GENERAL  
INDEX OF DRAWINGS  
SHEET 5 OF 5

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
B5094-B  
SCALE  
NONE  
SHEET NO.  
### OF ###

## ABBREVIATIONS

### ALIGNMENT

<u>HORIZONTAL</u>	
BC	BEGINNING OF CURVE
EC	END OF CURVE
PC	POINT OF CURVE
PCC	POINT OF COMPOUNT CURVES
PI	POINT OF INTERSECTION OF TWO TANGENTS
POB	POINT OF BEGINNING
POC	POINT ON CURVE
POE	POINT OF ENDING
POT	POINT ON TANGENT
PRC	POINT OF REVERSE CURVES
PT	POINT OF TANGENCY
R	RADIUS OF CURVATURE IN FEET
V, DS	DESIGN VELOCITY IN MILES PER HOUR



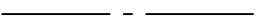

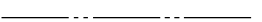
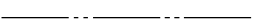
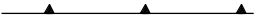

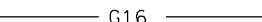

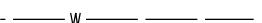













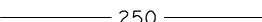
<u>VERTICAL</u>	
BVC	BEGIN OF VERTICAL CURVE
EVC	END OF VERTICAL CURVE
PVC	POINT OF VERTICAL CURVE (BEGINNING OF CURVE)
PVI	POINT OF VERTICAL INTERSECTION (OF TANGENTS)
PVT	POINT OF VERTICAL TANGENCY (ENDING OF CURVE)
VC	VERTICAL CURVE

### MISCELLANEOUS

ALT	ALTERNATIVE
AVE	AVENUE
BB	BEGIN BRIDGE
BEG	BEGIN
BLVD	BOULEVARD
CL	CENTER LINE
CLR	CLEAR
COL	COLUMN
DWG	DRAWING
EB	END BRIDGE
ELEV	ELEVATION
EQ	EQUATION
ES	EDGE OF SIDEWALK
ETW	EDGE OF TRAVELED WAY
EXIST(E)	EXISTING
FL	FLOW LINE
HORIZ	HORIZONTAL
HP	HINGE POINT
HST	HIGH SPEED TRAIN
HWY	HIGHWAY
IC	INTERCHANGE
IN	INCH
L	LENGTH
LT	LEFT
MBGR	METAL BEAM GUARD RAIL
ML	MAINLINE
MPH	MILES PER HOUR
MAX	MAXIMUM
MIN	MINIMUM
N	NORTH
NB	NORTH BOUND
No, NO	NUMBER
NTS	NOT TO SCALE
OG	ORIGINAL GROUND
O/H OH	OVERHEAD
PG&E	PACIFIC GAS & ELECTRIC
PGL, FG	PROFILE GRADE LINE
RET	RETAINING
RR	RAILROAD
RD	ROAD
R/W	RIGHT OF WAY
RT	RIGHT
SB	SOUTH BOUND
SHLD	SHOULDER
SR	STATE ROUTE
SHT	SHEET
SS	SANITARY SEWER
SSD	STOPPING SIGHT DISTANCE
ST	STREET
STA	STATION
STD	STANDARD
SD	STORM DRAIN
STRUCT, STR	STRUCTURE
T	TANGENT
TEL	TELEPHONE
	(OH) OVERHEAD LINE
	(UG) UNDERGROUND LINE

TOR	TOP OF RAIL
TK	TRACK
TYP	TYPICAL
TBD	TO BE DETERMINED
TF	TELECOMMUNICATIONS FIBER
	OPTIC
UPRR	UNION PACIFIC RAILROAD
VAR	VARIES
V VERT	VERTICAL
W	WATER, WEST

## SYMBOLS

	MATCH LINE
	HST TRACK
	PROPOSED HST RIGHT-OF-WAY
	FREIGHT/PASSENGER TRACK - EXISTING
	EXISTING RIGHT-OF-WAY
	OR EXISTING BRIDGE FEATURES
	RETAINING WALLS
	ORIGINAL GROUND
	GAS LINE (16")
	COMMUNICATION LINE
	WATER LINE
	FIBER OPTIC LINE
	ELECTRICAL LINE
	ELECTRICAL TOWER
	SEWER LINE
	STORM DRAIN LINE
	FUEL LINE
	TELEPHONE LINE
	PETROLEUM LINE (12")
	OVERHEAD
	NORTH ARROW
	PVI
	MBGR
	DIRECTION OF TRAVEL
	PROPOSED CONTOUR

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REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY R. LI
DRAWN BY A. TRINH
CHECKED BY A. SILVER
IN CHARGE A. BOONE
DATE 06/30/2011

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HIGH-SPEED RAIL AUTHORITY

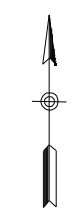
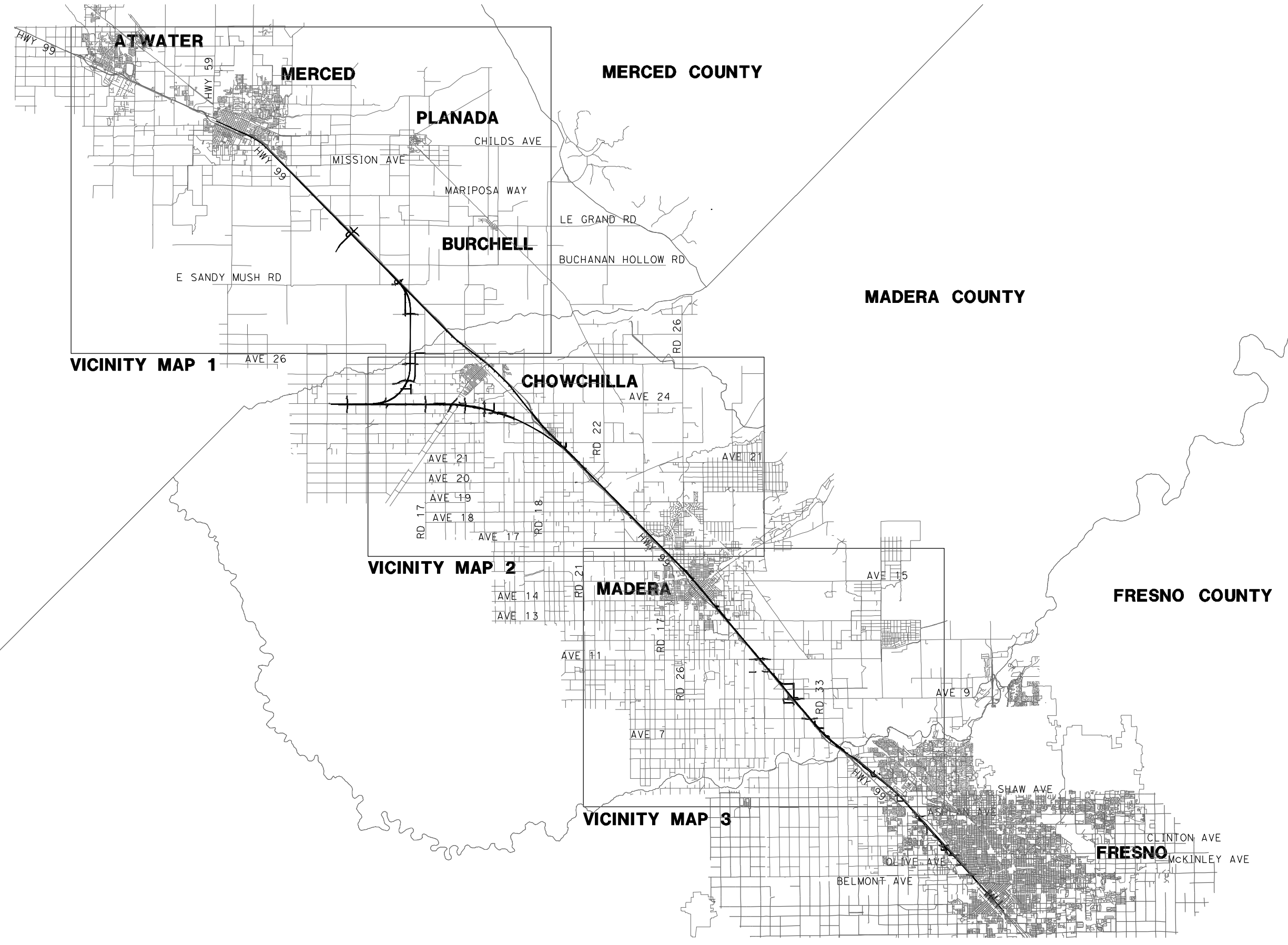
**CALIFORNIA HIGH-SPEED TRAIN PROJECT  
MERCED TO FRESNO**

UPRR/SR99 - (AVE 24/WC)

GENERAL  
ABBREVIATIONS, SYMBOLS AND NOTES  
SHEET 1 OF 1

CONTRACT NO. HSR06-007
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**D. AYELE**  
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**A. TRINH**  
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**A. SILVER**  
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**A. BOONE**  
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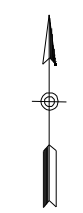
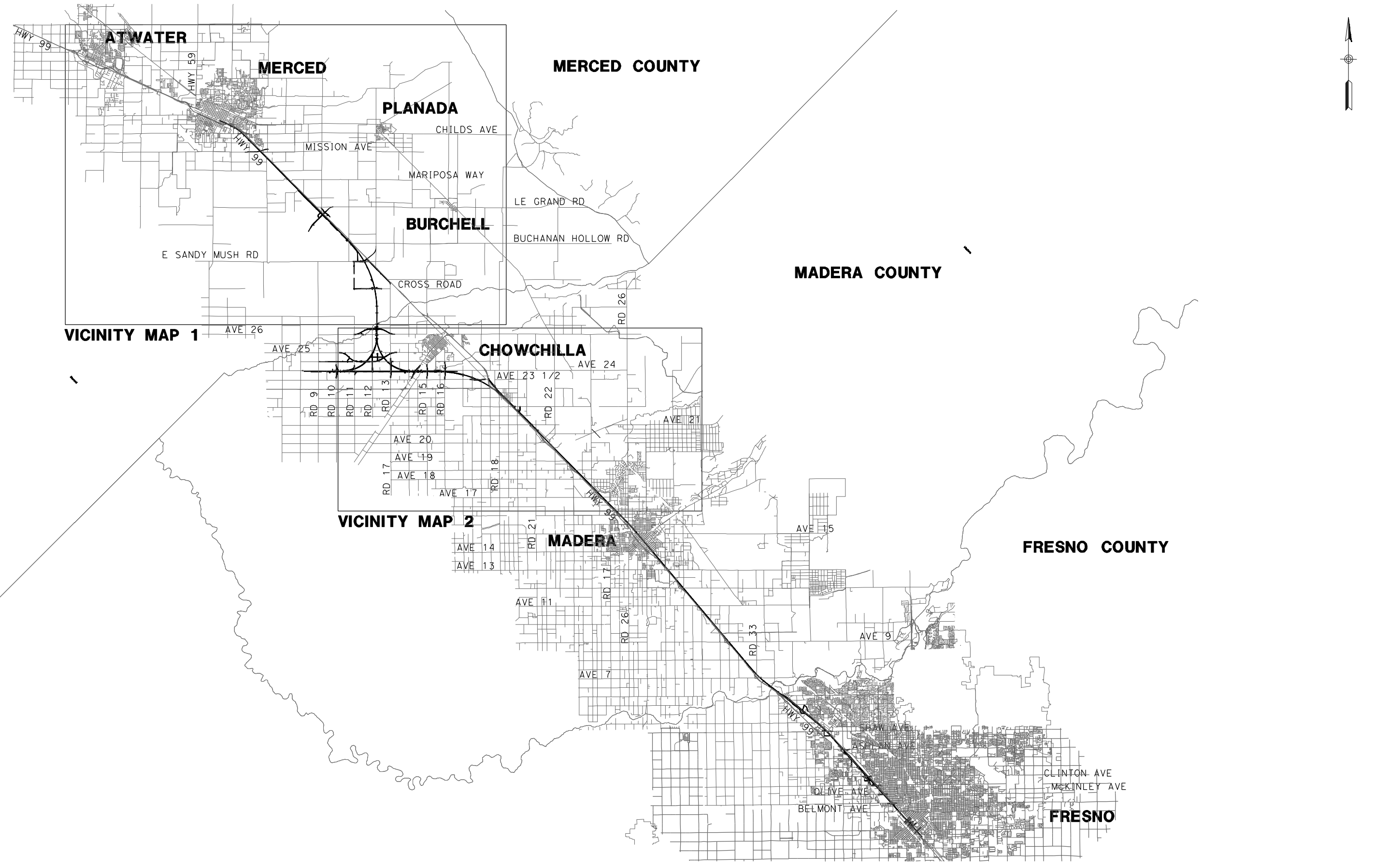
  
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**CALIFORNIA**  
 HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 - (AVE 24)  
  
 INDEX MAP  
 SHEET 1 OF 5

CONTRACT NO.  
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**D. AYELE**  
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**A. TRINH**  
 CHECKED BY  
**A. SILVER**  
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**CALIFORNIA**  
 HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 - (WC)  
  
 INDEX MAP  
 SHEET 2 OF 5

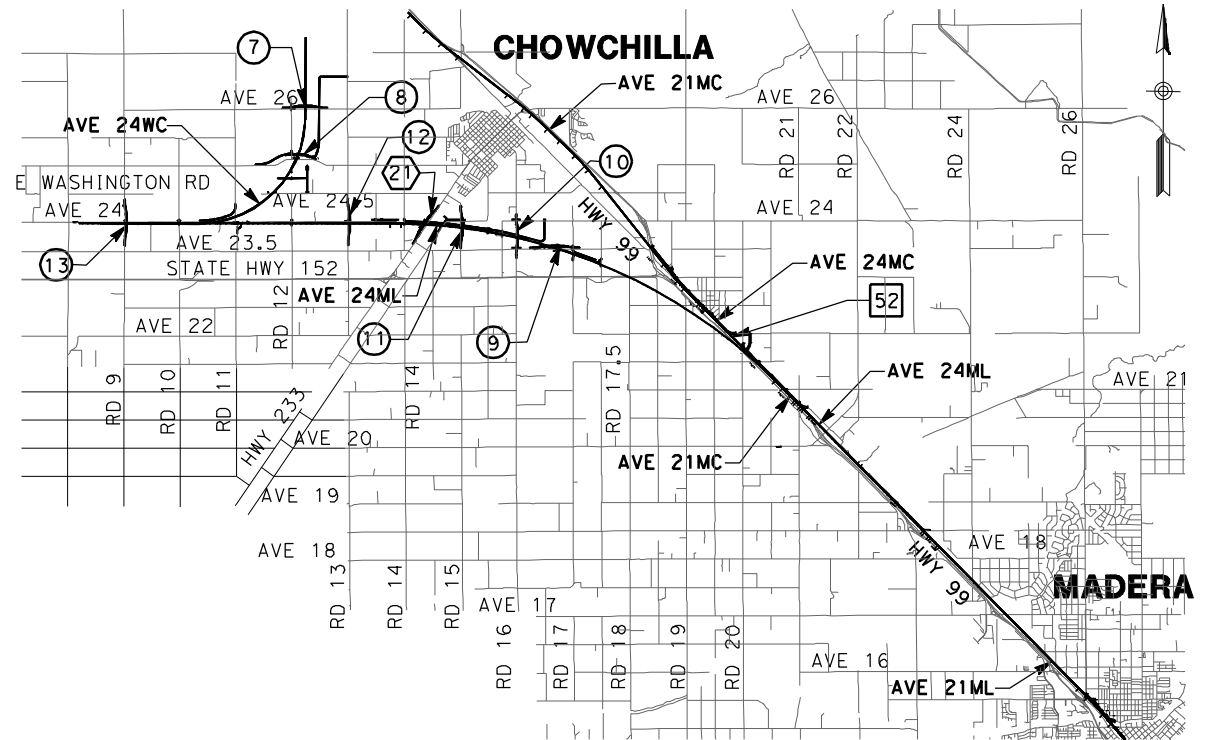
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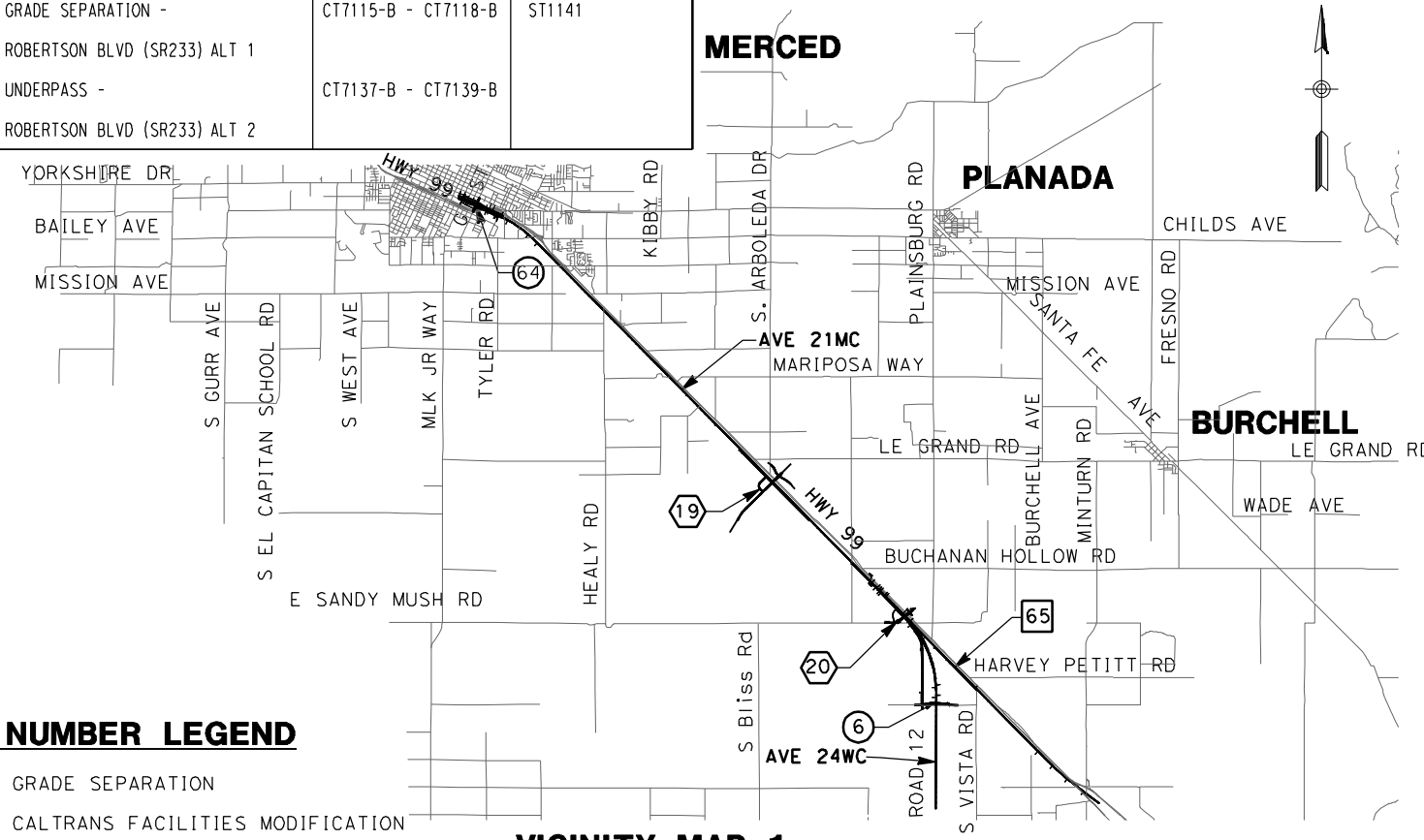
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LOCATION NO.	SHEET TITLE	ROADWAY DWG NO.	STR DWG NO.
6	GRADE SEPARATION - CROSS RD	CT5126-B - CT5128-B	ST1127
7	GRADE SEPARATION - AVENUE 26	CT5123-B - CT5125-B	ST1126
8	GRADE SEPARATION - AVENUE 25	CT5118-B - CT5122-B	ST1125
9	GRADE SEPARATION - AVENUE 23 1/2	CT5114-B - CT5117-B	ST1124
10	GRADE SEPARATION - ROAD 16	CT5111-B - CT5113-B	ST1123
11	GRADE SEPARATION - ROAD 15	CT5108-B - CT5110-B	ST1122
12	GRADE SEPARATION - ROAD 13	CT5104-B - CT5107-B	ST1138
13	GRADE SEPARATION - HEMLOCK RD (ROAD 9) ALT 1 GRADE SEPARATION - ROAD 9 ALONG EXIST ALT 2	CT5100-B - CT5103-B CT5190-B - CT5192-B	ST1120
64	GRADE SEPARATION - G STREET	CT0149-A	ST1180
14	AVENUE 8 - OVERCROSSING	CT7100-B - CT7102-B	ST1107
15	AVENUE 9 - INTERCHANGE	CT7103-B - CT7109-B	ST1108 - ST1109
16	AVENUE 11 - OVERCROSSING	CT7110-B - CT7114-B	ST1110
19	GRADE SEPARATION - LE GRAND INTERCHANGE	CT7122-B - CT7128-B	ST1114
20	GRADE SEPARATION - SANDY MUSH RD INTERCHANGE	CT7119-B - CT7121-B	ST1142
21	GRADE SEPARATION - ROBERTSON BLVD (SR233) ALT 1 UNDERPASS - ROBERTSON BLVD (SR233) ALT 2	CT7115-B - CT7118-B CT7137-B - CT7139-B	ST1141

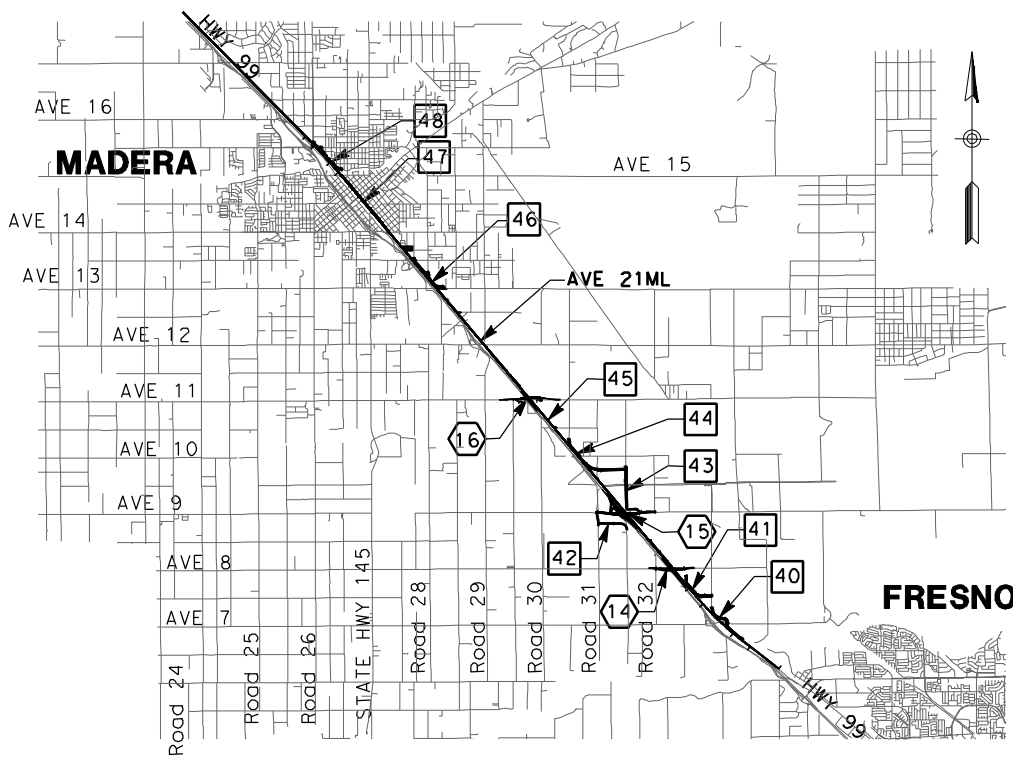
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40	ROAD 33	CR9100-B
41	PROPOSED ROAD	CR9101-B
42	ROAD 31 & GOLDEN STATE BLVD AT AVENUE 9	CR9102-B
43	ROAD 31 & GOLDEN STATE BLVD AT AVENUE 9 ROAD 31 1/2	CR9103-B CR9104-B
44	ROAD 30 1/2	CR9105-B - CR9106-B
45	FRONTAGE ROAD ROAD 30 AT AVENUE 11	CR9107-B CR9108-B - CR9109-B
46	S. KNOX ST	CR9110-B
48	SHARON BLVD & E ST	CR9111-B
47	N. E ST AND S. E ST	CR9112-B
52	FAIRMEAD BLVD	CR9113-B - CR9116-B
65	PROPOSED WEST FRONTAGE ROAD	CR9117-B - CR9118-B



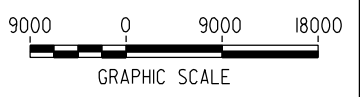
**VICINITY MAP 2**



**VICINITY MAP 1**



**VICINITY MAP 3**



**LOCATION NUMBER LEGEND**

- (X) - INDICATES GRADE SEPARATION
- (X) - INDICATES CALTRANS FACILITIES MODIFICATION
- (X) - INDICATES LOCAL ROAD RELOCATION

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**D. AYELE**  
DRAWN BY  
**A. TRINH**  
CHECKED BY  
**A. SILVER**  
IN CHARGE  
**A. BOONE**  
DATE  
**06/30/2011**

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**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
UPPR/SR99 - (AVE 24)

INDEX MAP  
SHEET 3 OF 5

CONTRACT NO.  
HSR06-007

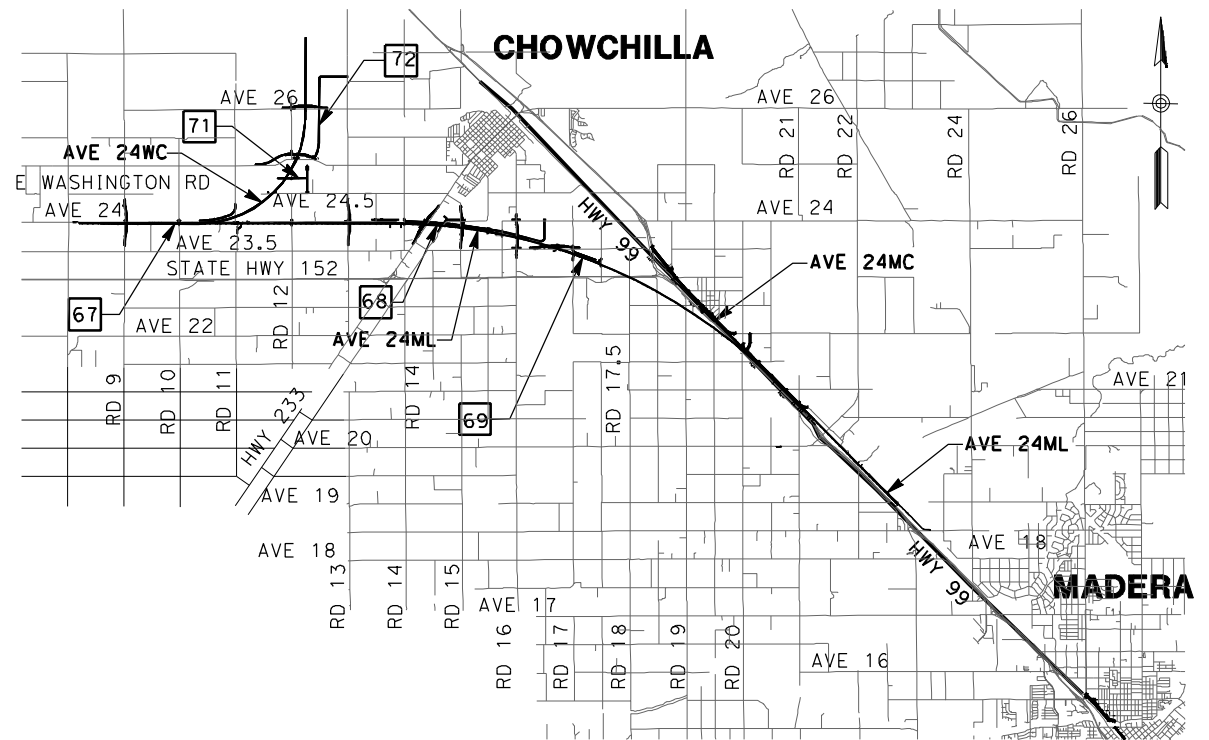
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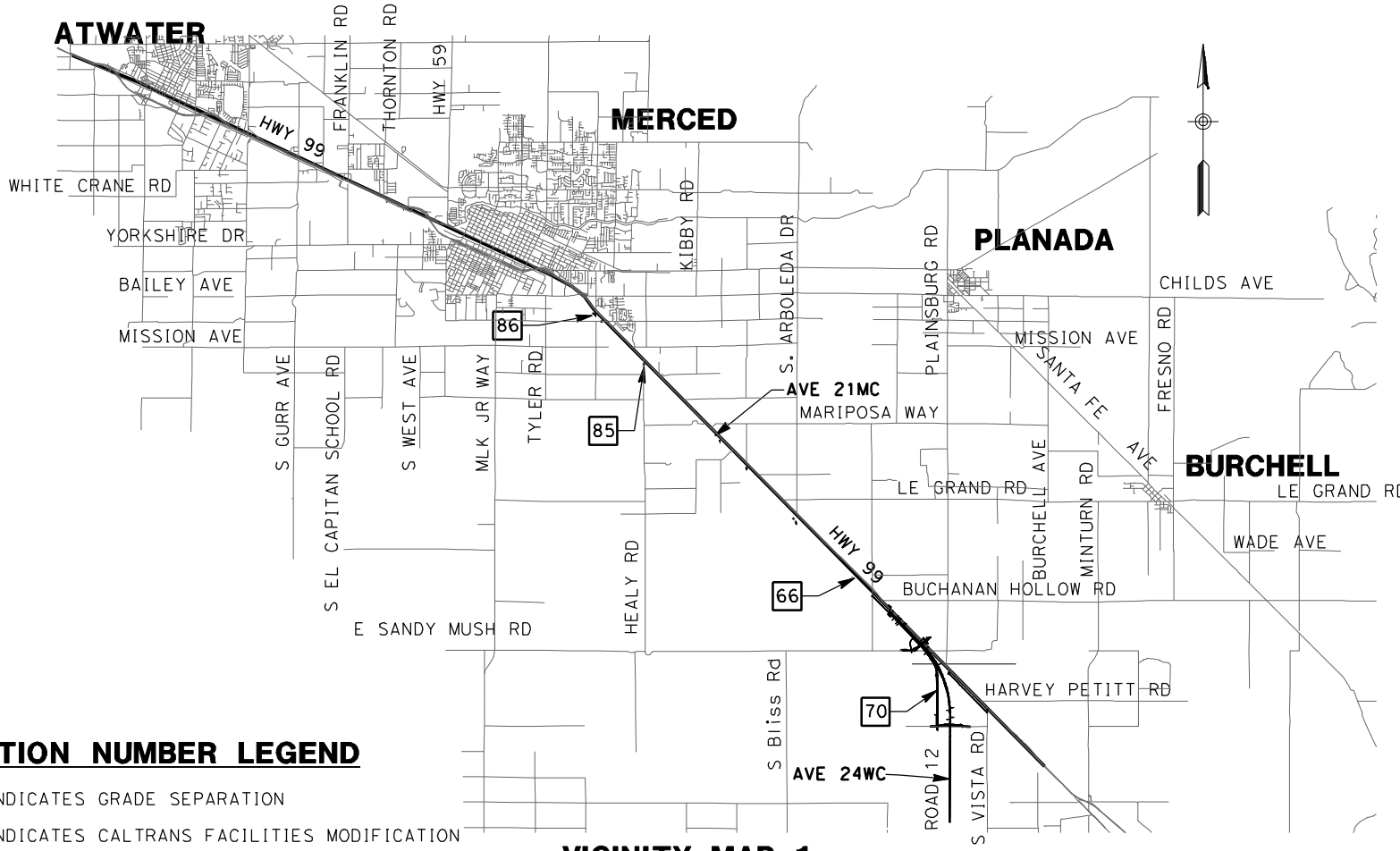
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LOCATION NO.	SHEET TITLE	ROADWAY DWG NO.
66	PROPOSED WEST FRONTAGE ROAD	CR9119-B - CR9125-B
67	SOUTH FRONTAGE ROAD PROPOSED AVENUE 24 WYE SOUTH FRONTAGE ROAD NORTH AND SOUTH FRONTAGE ROAD	CR9130-B - CR9131-B CR9132-B CR9133-B - CR9134-B CR9135-B
68	NORTH AND SOUTH FRONTAGE ROAD	CR9136-B - CR9138-B
69	NORTH FRONTAGE ROAD & ROAD 16 1/2 NORTH & SOUTH FRONTAGE ROAD AVENUE 24	CR9139-B - CR9140-B CR9141-B - CR9142-B
70	ROAD 12	CR9143-B
71	AVENUE 24 1/2 ROAD 12 1/4 & AVENUE 24 1/2 ROAD 12 1/4	CR9144-B CR9145-B CR9146-B
72	ROAD 12 1/2 ROAD 12 1/2 & AVENUE 26 1/2 AVENUE 26 1/2	CR9147-B CR9148-B CR9149-B
85	HEALY ROAD	CR9176-B
86	GERARD AVENUE/CALTRANS FRONTAGE ROAD	CR9177-B



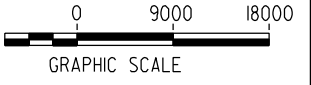
**VICINITY MAP 2**



**VICINITY MAP 1**

**LOCATION NUMBER LEGEND**

- (X) - INDICATES GRADE SEPARATION
- (X) - INDICATES CALTRANS FACILITIES MODIFICATION
- (X) - INDICATES LOCAL ROAD RELOCATION



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**D. AYELE**  
DRAWN BY  
**A. TRINH**  
CHECKED BY  
**A. SILVER**  
IN CHARGE  
**A. BOONE**  
DATE  
**06/30/2011**

**RECORD SET  
15% DESIGN  
SUBMITTAL**

**NOT FOR  
CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT  
MERCED TO FRESNO**  
UPPR/SR99 - (AVE 24)

INDEX MAP  
SHEET 4 OF 5

CONTRACT NO.  
HSR06-007

DRAWING NO.  
B5103-B

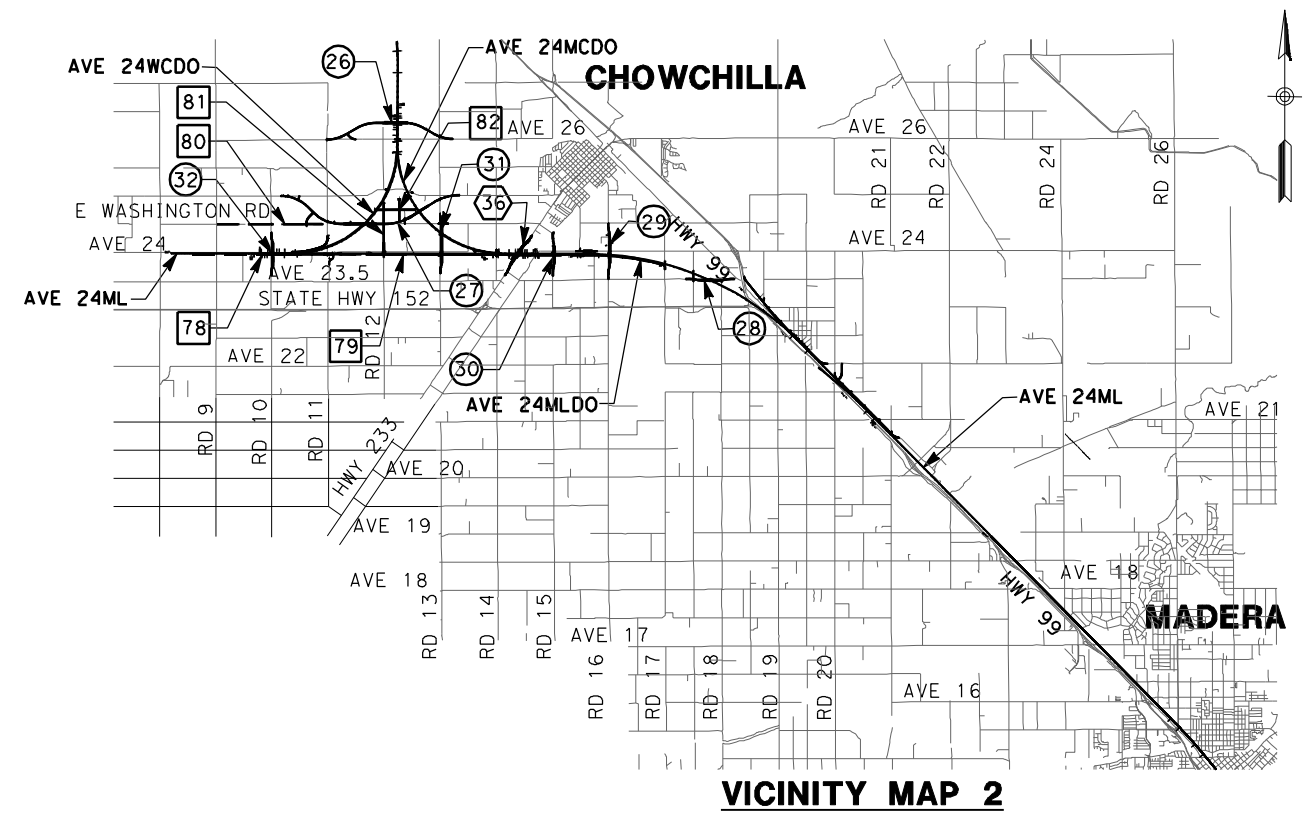
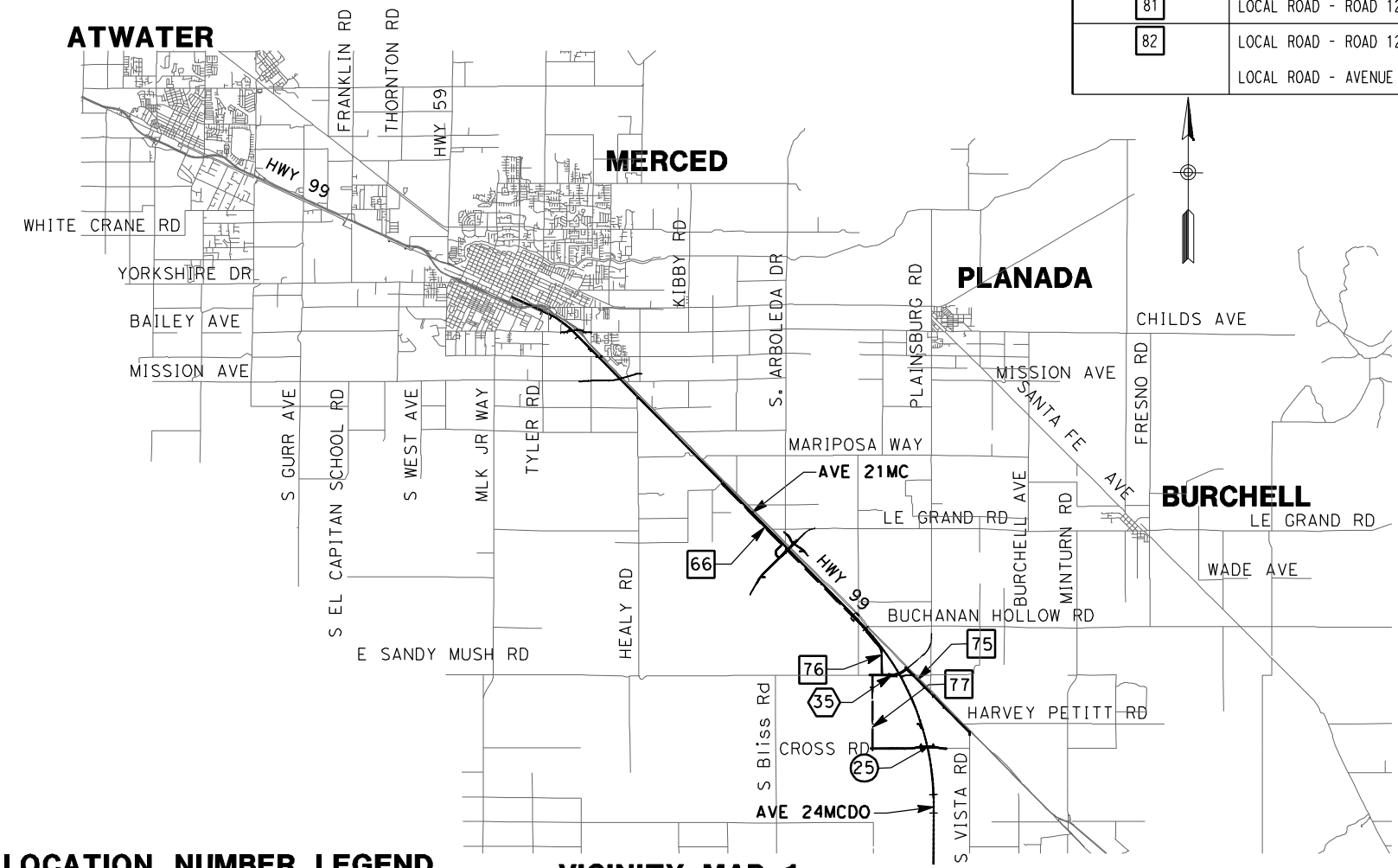
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LOCATION NO.	SHEET TITLE	ROADWAY DWG NO.	STR DWG NO.
25	GRADE SEPARATION - CROSS ROAD	CT5179-B - CT5181-B	ST1136
26	GRADE SEPARATION - AVENUE 26 ALT 1 UNDERPASS - AVENUE 26 ALT 2	CT5168-B - CT5177-B CT5187-B - CT5189-B	ST1135
27	GRADE SEPARATION - AVENUE 25	CT5150-B - CT5166-B	ST1133 & ST1134
28	GRADE SEPARATION - AVENUE 23 1/2	CT5146-B - CT5149-B	ST1132
29	GRADE SEPARATION - ROAD 16	CT5142-B - CT5145-B	ST1131
30	GRADE SEPARATION - ROAD 15	CT5138-B - CT5141-B	ST1130
31	GRADE SEPARATION - ROAD 13	CT5132-B - CT5137-B	ST1129 & ST1137
32	GRADE SEPARATION - ROAD 10 ALT 1 GRADE SEPARATION - ROAD 10 ALONG EXIST ALT 2	CT5129-B - CT5131-B CT5193-B - CT5195-B	ST1128
35	SANDY MUSH RD INTERCHANGE	CT7133-B - CT7136-B	ST1142
36	GRADE SEPARATION - ROBERTSON BLVD (SR 233) ALT 1 UNDERPASS - ROBERTSON BLVD (SR 233) ALT 2	CT7129-B - CT7132-B CT7140-B - CT7142-B	ST1143

LOCATION NO.	SHEET TITLE	ROADWAY DWG NO.
66	PROPOSED WEST FRONTAGE ROAD	CR9172-B - CR9175-B
75	LOCAL ROAD - WEST FRONTAGE ROAD	CR9126-B - CR9127-B
76	LOCAL ROAD - SANDY MUSH ROAD LOCAL ROAD - WEST FRONTAGE ROAD	CR9152-B CR9128-B - CR9129-B
77	LOCAL ROAD - ROAD 11 LOCAL ROAD - CROSS ROAD	CR9150-B - CR9151-B CR9153-B
78	SOUTH FRONTAGE ROAD AVENUE 24	CR9159-B CR9160-B
79	SOUTH FRONTAGE ROAD LOCAL ROAD - FRONTAGE ROAD LOCAL ROAD - FRONTAGE ROAD & AVE 24 LOCAL ROAD - FRONTAGE ROAD	CR9161-B - CR9163-B CR9164-B CR9165-B CR9166-B
80	LOCAL ROAD - AVENUE 24 1/2	CR9154-B - CR9155-B
81	LOCAL ROAD - ROAD 12	CR9156-B
82	LOCAL ROAD - ROAD 12 1/2 & AVE 24 3/4 LOCAL ROAD - AVENUE 24 3/4	CR9157-B CR9158-B

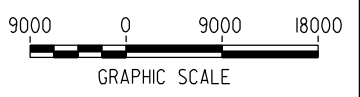


**LOCATION NUMBER LEGEND**

- (X) - INDICATES GRADE SEPARATION
- (X) - INDICATES CALTRANS FACILITIES MODIFICATION
- (X) - INDICATES LOCAL ROAD RELOCATION

**VICINITY MAP 1**

**VICINITY MAP 2**

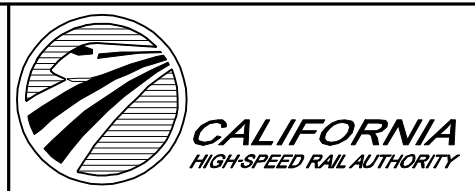


REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**D. AYELE**  
DRAWN BY  
**A. TRINH**  
CHECKED BY  
**A. SILVER**  
IN CHARGE  
**A. BOONE**  
DATE  
**06/30/2011**

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**15% DESIGN**  
**SUBMITTAL**

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**CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
UPPR/SR99 - (WC)

INDEX MAP  
SHEET 5 OF 5

CONTRACT NO.  
HSR06-007

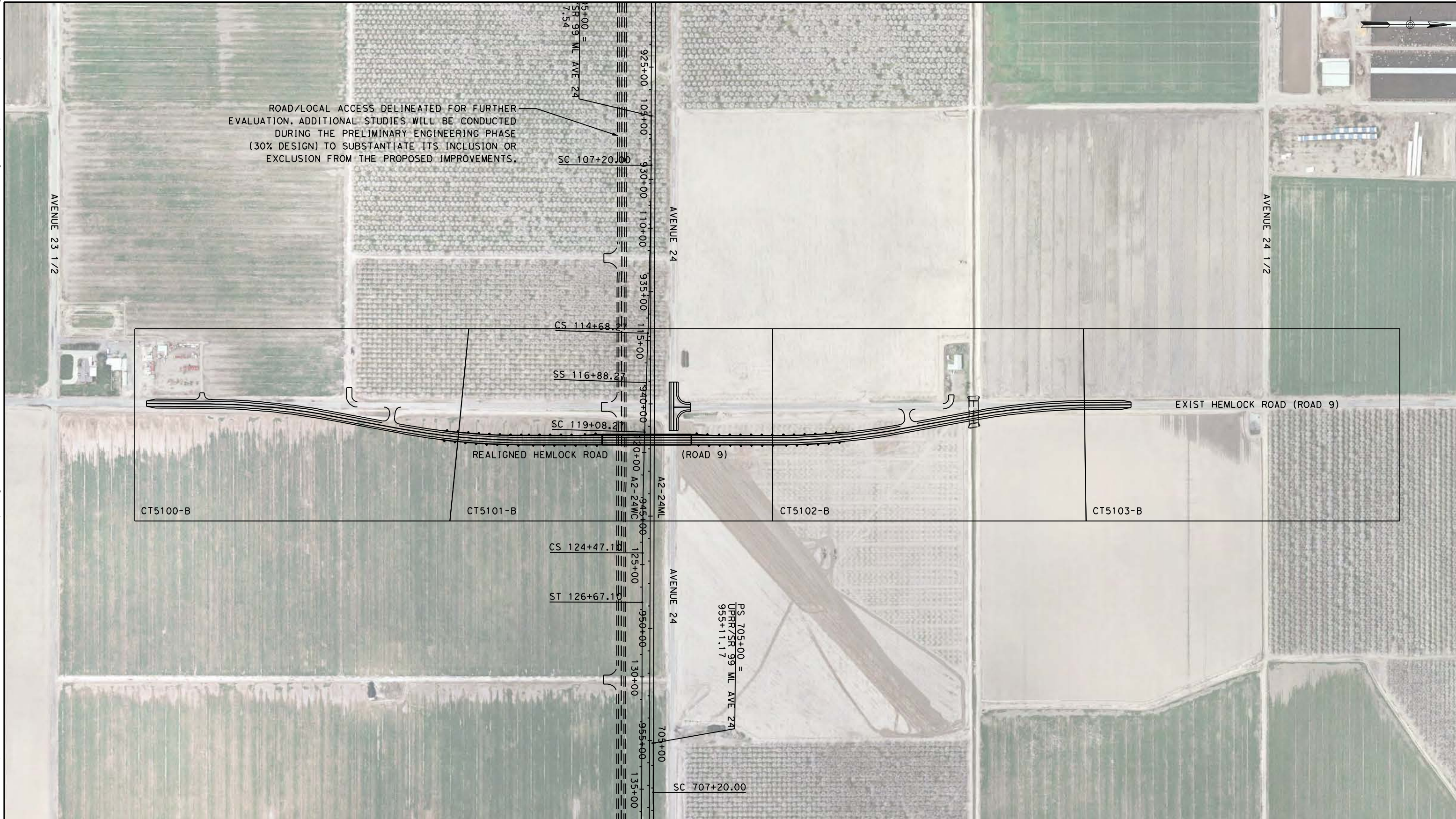
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B5104-B

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SHEET NO.  
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CT5100-B

CT5101-B

CT5102-B

CT5103-B

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
DRAWN BY  
C. DELOS REYES  
CHECKED BY  
A. SILVER  
IN CHARGE  
A. BOONE  
DATE  
04/29/2011

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

UPRR/SR99 MAINLINE/WYE - (AVE 24/WC)  
GRADE SEPARATION - HEMLOCK RD (ROAD 9) ALT 1  
KEY MAP  
SHEET 1 OF 1

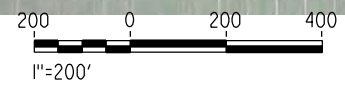
CONTRACT NO.  
HSR06-007  
DRAWING NO.  
CB5100-B  
SCALE  
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ROAD/LOCAL ACCESS DELINEATED FOR FURTHER EVALUATION. ADDITIONAL STUDIES WILL BE CONDUCTED DURING THE PRELIMINARY ENGINEERING PHASE (30% DESIGN) TO SUBSTANTIATE ITS INCLUSION OR EXCLUSION FROM THE PROPOSED IMPROVEMENTS.



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
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C. DELOS REYES  
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IN CHARGE  
A. BOONE  
DATE  
04/29/2011

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

UPRR/SR99 MAINLINE/WYE - (AVE 24)  
GRADE SEPARATION - ROAD 9 ALONG EXIST ALT 2  
KEY MAP  
SHEET 1 OF 1

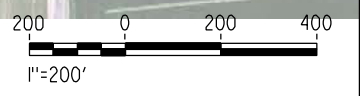
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HSR06-007  
DRAWING NO.  
CB5101-B  
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AS SHOWN  
SHEET NO.  
### OF ###



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 ReyesC1



ROAD/LOCAL ACCESS DELINEATED FOR FURTHER  
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REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**D. AYELE**  
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**C. DELOS REYES**  
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**A. BOONE**  
 DATE  
**04/29/2011**

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**SUBMITTAL**  
  
**NOT FOR**  
**CONSTRUCTION**

**AECOM**  
Technical Services, Inc.  
 2020 L Street, Suite 300  
 Sacramento, CA 95811  
**CH2MHILL**

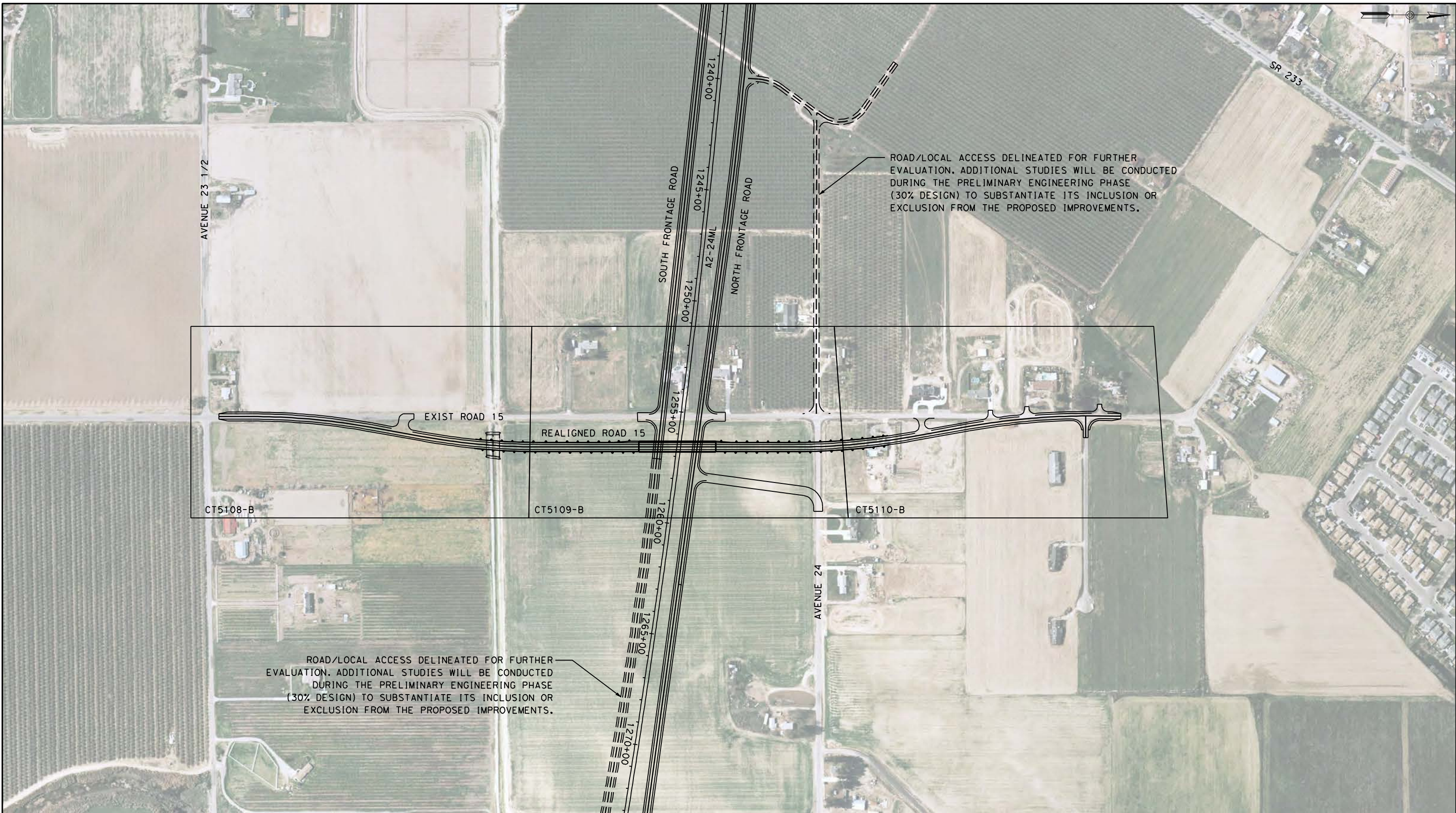


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 MAINLINE - (AVE 24)  
 GRADE SEPARATION - ROAD 13  
 KEY MAP  
 SHEET 1 OF 1

CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CB5102-B  
 SCALE  
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 SHEET NO.  
 ### OF ###

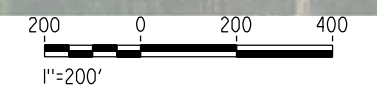


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ROAD/LOCAL ACCESS DELINEATED FOR FURTHER EVALUATION. ADDITIONAL STUDIES WILL BE CONDUCTED DURING THE PRELIMINARY ENGINEERING PHASE (30% DESIGN) TO SUBSTANTIATE ITS INCLUSION OR EXCLUSION FROM THE PROPOSED IMPROVEMENTS.

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REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**D. AYELE**  
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**C. DELOS REYES**  
CHECKED BY  
**A. SILVER**  
IN CHARGE  
**A. BOONE**  
DATE  
**04/29/2011**

**RECORD SET**  
**15% DESIGN**  
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**AECOM**  
Technical Services, Inc.  
2020 L Street, Suite 300  
Sacramento, CA 95811

**CH2MHILL**

**CALIFORNIA**  
HIGH-SPEED RAIL AUTHORITY

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

UPRR/SR99 MAINLINE - (AVE 24)  
GRADE SEPARATION - ROAD 15  
KEY MAP  
SHEET 1 OF 1

CONTRACT NO.  
HSR06-007

DRAWING NO.  
CB5103-B

SCALE  
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SHEET NO.  
### OF ###



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ROAD/LOCAL ACCESS DELINEATED FOR FURTHER EVALUATION. ADDITIONAL STUDIES WILL BE CONDUCTED DURING THE PRELIMINARY ENGINEERING PHASE (30% DESIGN) TO SUBSTANTIATE ITS INCLUSION OR EXCLUSION FROM THE PROPOSED IMPROVEMENTS.

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DESIGNED BY  
D. AYELE  
DRAWN BY  
C. DELOS REYES  
CHECKED BY  
A. SILVER  
IN CHARGE  
A. BOONE  
DATE  
04/29/2011

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15% DESIGN  
SUBMITTAL**

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CONSTRUCTION**



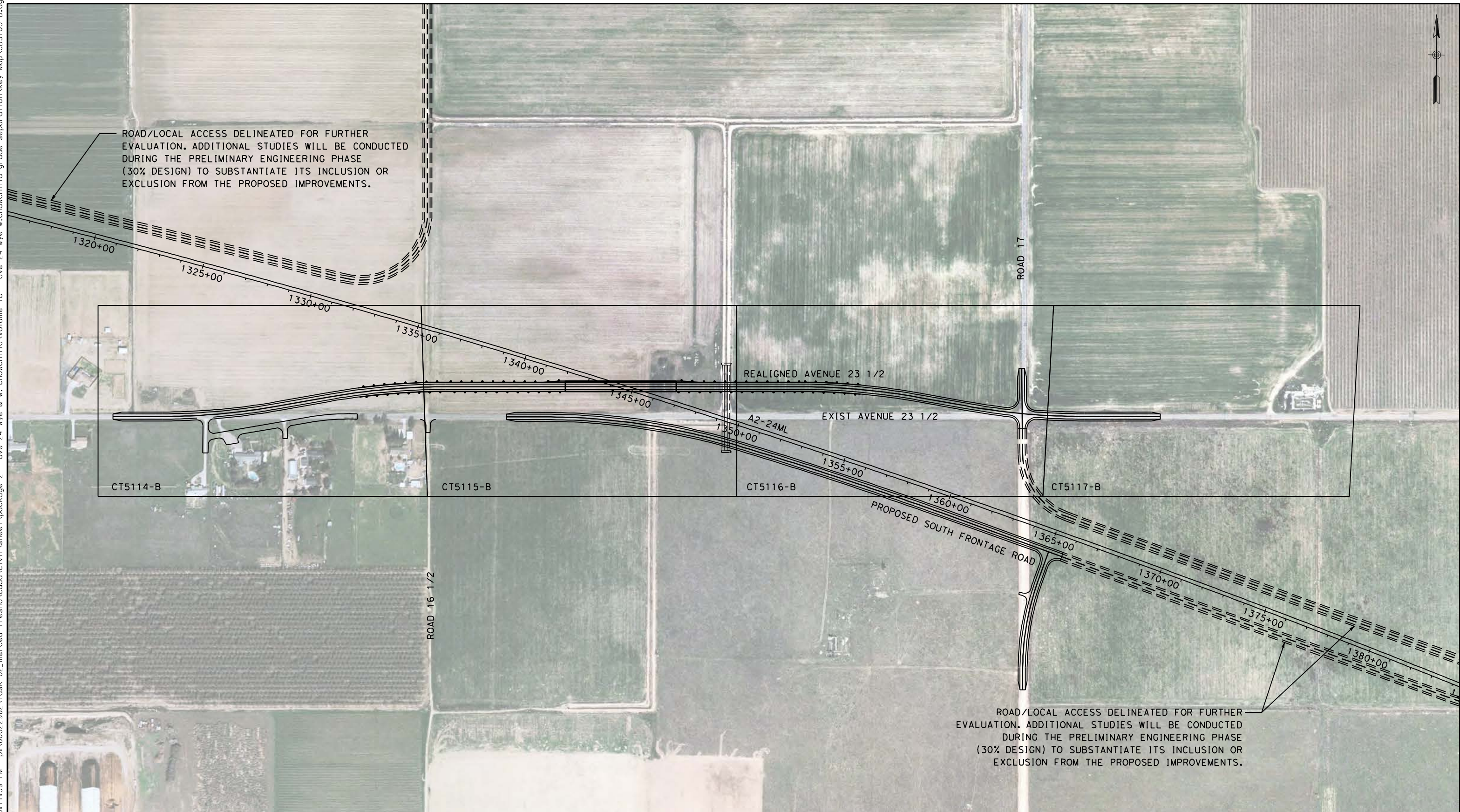
**CALIFORNIA HIGH-SPEED TRAIN PROJECT  
MERCED TO FRESNO**

UPRR/SR99 MAINLINE - (AVE 24)  
GRADE SEPARATION - ROAD 16  
KEY MAP  
SHEET 1 OF 1

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
CB5104-B  
SCALE  
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SHEET NO.  
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 ReyesC1



REV	DATE	BY	CHK	APP	DESCRIPTION

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 D. AYELE  
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 C. DELOS REYES  
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 A. SILVER  
 IN CHARGE  
 A. BOONE  
 DATE  
 04/29/2011

**RECORD SET**  
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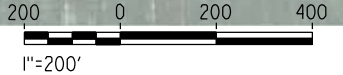


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 MAINLINE - (AVE 24)  
 GRADE SEPARATION - AVENUE 23 1/2  
 KEY MAP  
 SHEET 1 OF 1

CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CB5105-B  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###



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 ReyesC1



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**D. AYELE**  
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**A. SILVER**  
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**04/29/2011**

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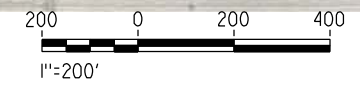


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 WYE - (AVE 24)  
 GRADE SEPARATION - AVENUE 25  
 KEY MAP  
 SHEET 1 OF 1

CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CB5106-B  
 SCALE  
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 ### OF ###



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 ReyesC1



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**D. AYELE**  
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**A. SILVER**  
 IN CHARGE  
**A. BOONE**  
 DATE  
**04/29/2011**

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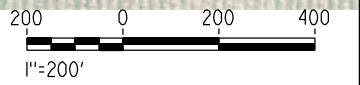
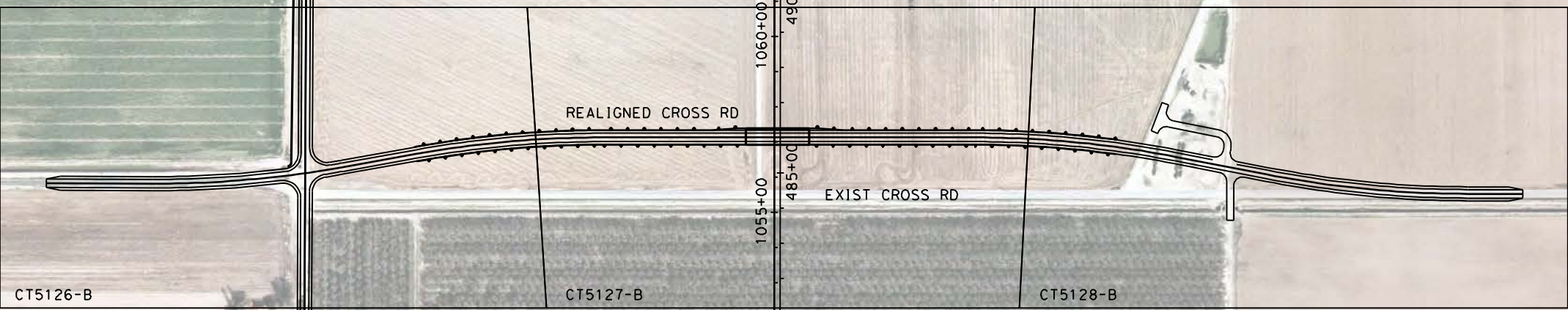


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 WYE - (AVE 24)  
 GRADE SEPARATION - AVENUE 26  
 KEY MAP  
 SHEET 1 OF 1

CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CB5107-B  
 SCALE  
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 SHEET NO.  
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DATE  
04/29/2011

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CONSTRUCTION**



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

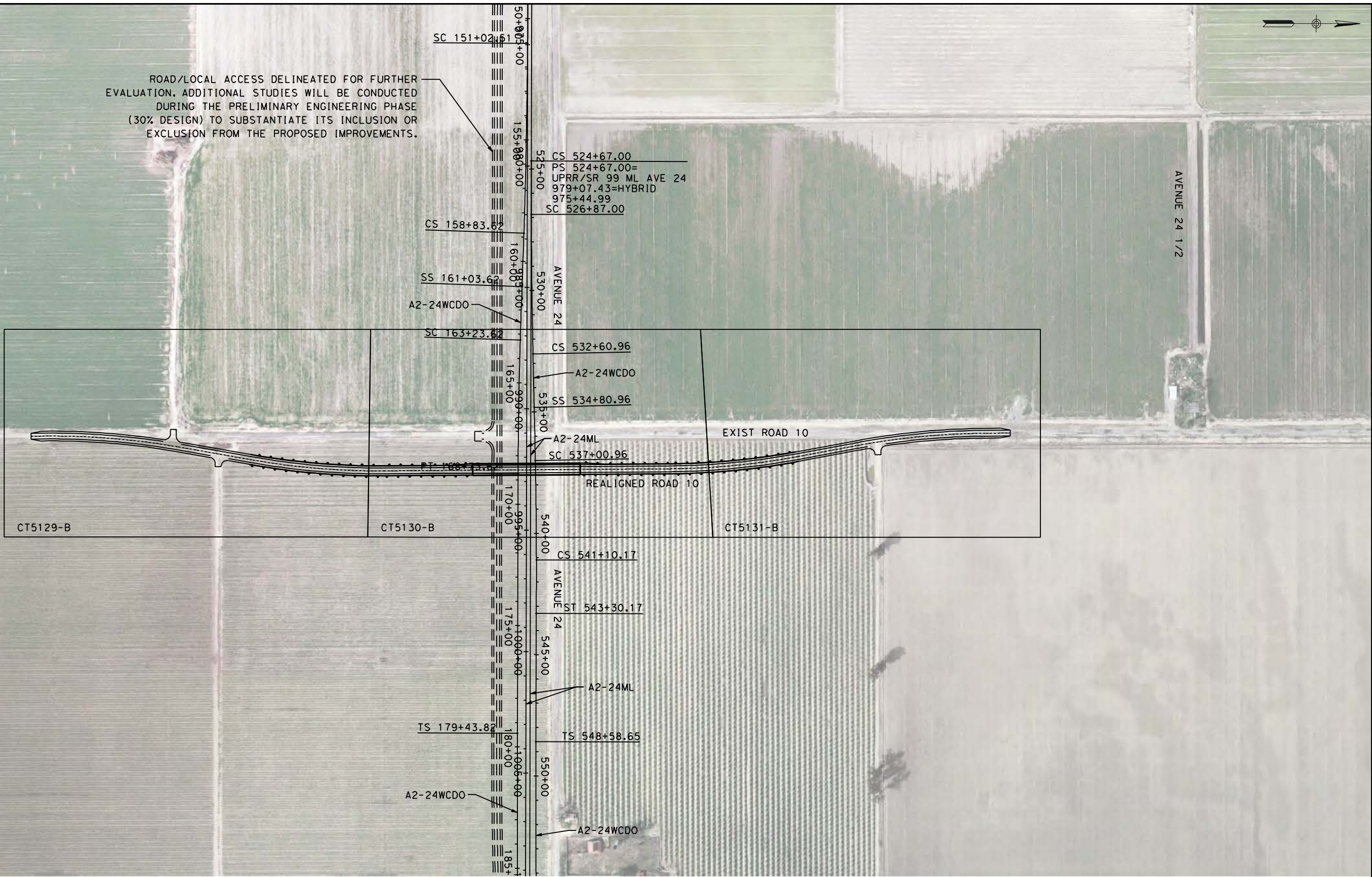
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GRADE SEPARATION - CROSS ROAD  
KEY MAP  
SHEET 1 OF 1

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
CB5108-B  
SCALE  
AS SHOWN  
SHEET NO.  
### OF ###



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ROAD/LOCAL ACCESS DELINEATED FOR FURTHER  
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REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**D. AYELE**  
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**C. DELOS REYES**  
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**A. SILVER**  
 IN CHARGE  
**A. BOONE**  
 DATE  
**04/29/2011**

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



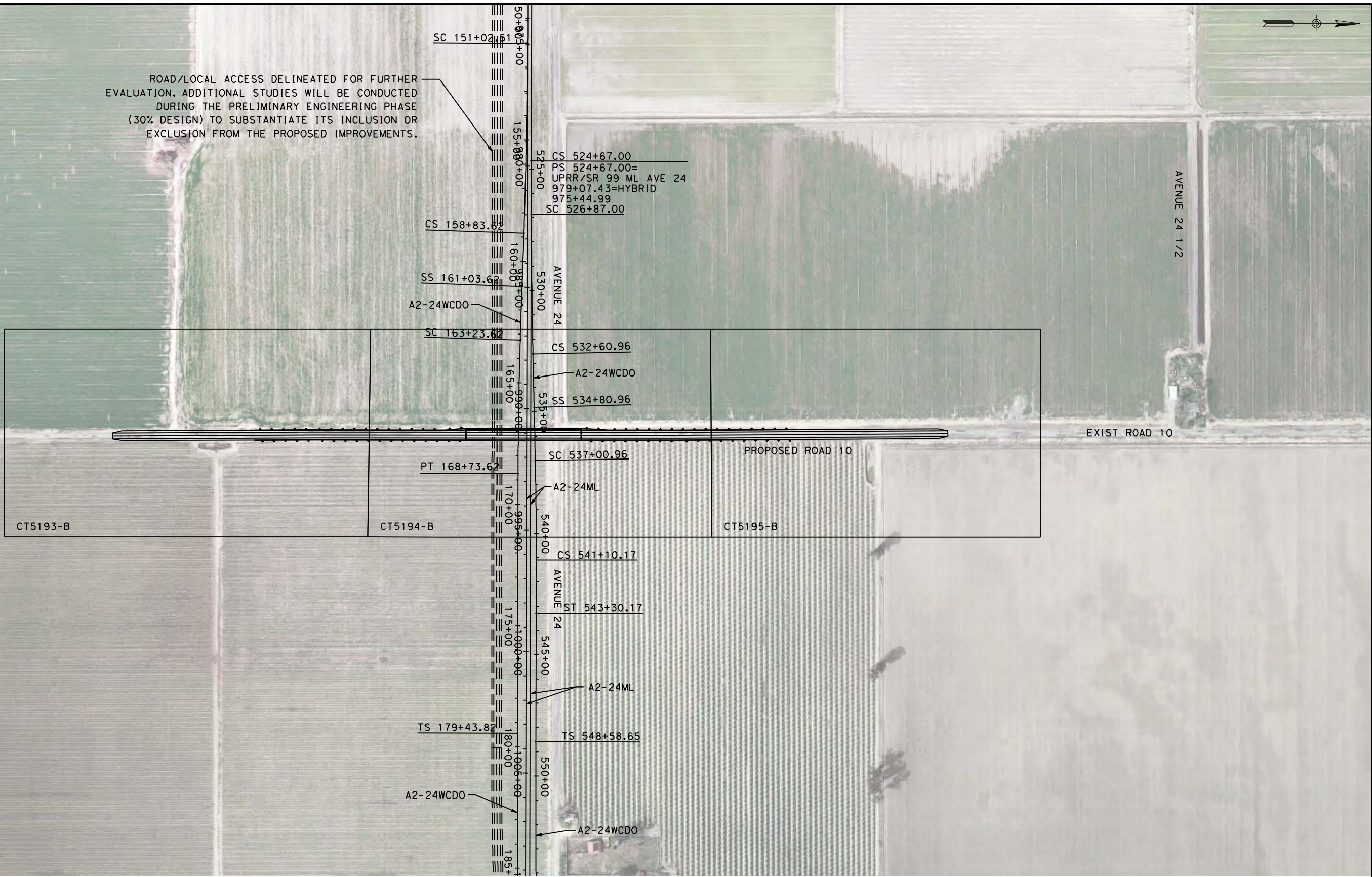
**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 MAINLINE/WYE - (WC)  
 GRADE SEPARATION - ROAD 10 ALT 1  
 KEY MAP  
 SHEET 1 OF 1

CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CB5109-B  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###



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ROAD/LOCAL ACCESS DELINEATED FOR FURTHER  
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**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 MAINLINE/WYE - (WC)  
 GRADE SEPARATION - ROAD 10 ALONG EXIST ALT 2  
 KEY MAP  
 SHEET 1 OF 1

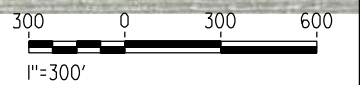
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**A. BOONE**

DATE  
**04/29/2011**

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

UPRR/SR99 MAINLINE/MERCED DO - (WC)  
GRADE SEPARATION - ROAD 13  
KEY MAP  
SHEET 1 OF 1

CONTRACT NO.  
HSR06-007

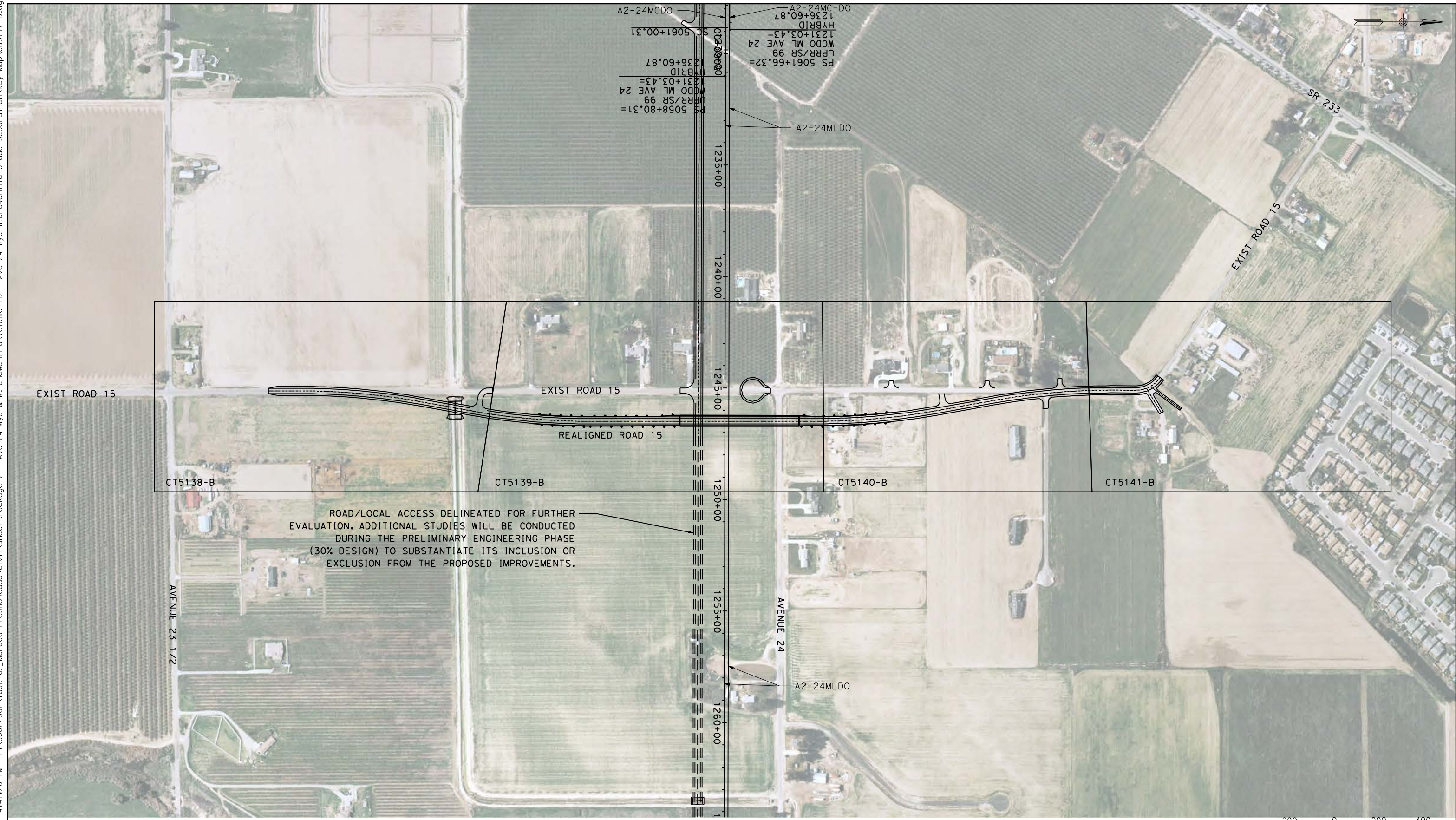
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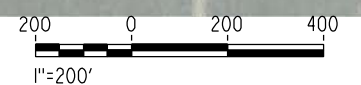
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ROAD/LOCAL ACCESS DELINEATED FOR FURTHER EVALUATION. ADDITIONAL STUDIES WILL BE CONDUCTED DURING THE PRELIMINARY ENGINEERING PHASE (30% DESIGN) TO SUBSTANTIATE ITS INCLUSION OR EXCLUSION FROM THE PROPOSED IMPROVEMENTS.



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**A. BOONE**  
 DATE  
**04/29/2011**

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



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 MAINLINE DO/MERCED DO - (WC)  
 GRADE SEPARATION - ROAD 15  
 KEY MAP  
 SHEET 1 OF 1

CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CB5112-B  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###



4/27/2011 6:17:05 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 1b - ave 24 wye-w.chowchilla grade separation\key Map\CB5113-B.dgn  
 ReyesC1



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**D. AYELE**  
 DRAWN BY  
**C. DELOS REYES**  
 CHECKED BY  
**A. SILVER**  
 IN CHARGE  
**A. BOONE**  
 DATE  
**04/29/2011**

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

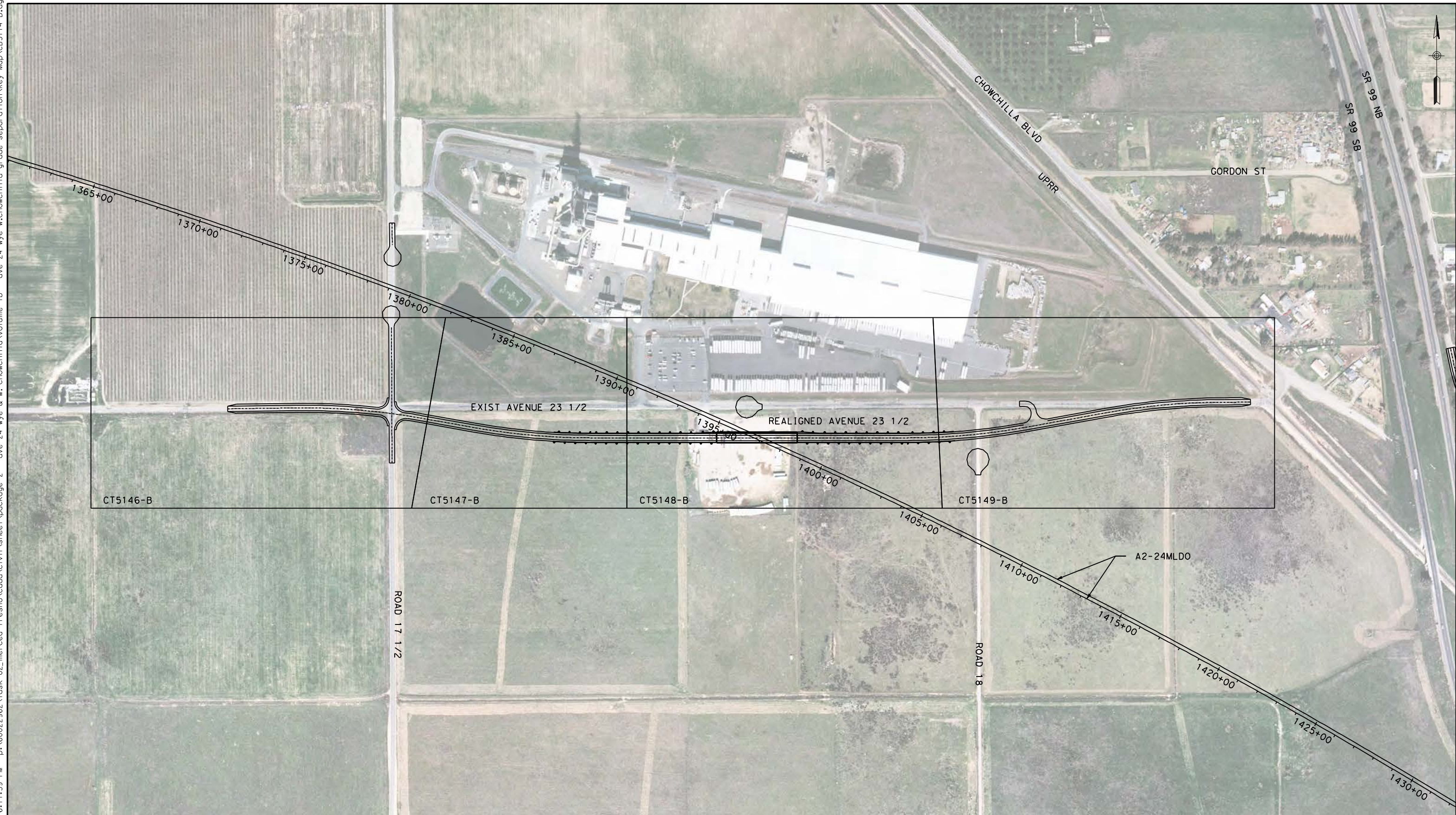


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 MAINLINE DO - (WC)  
 GRADE SEPARATION - ROAD 16  
 KEY MAP  
 SHEET 1 OF 1

CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CB5113-B  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###



ReyesCI 4/27/2011 6:17:39 PM p:\60022962\task\_02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 1b - ave 24 wye-w.chowchilla\grade separation\key Map\CB5114-B.dgn



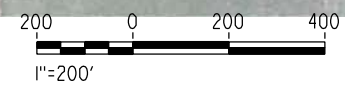
CT5146-B

CT5147-B

CT5148-B

CT5149-B

A2-24MLDO



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
 DRAWN BY  
C. DELOS REYES  
 CHECKED BY  
A. SILVER  
 IN CHARGE  
A. BOONE  
 DATE  
04/29/2011

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

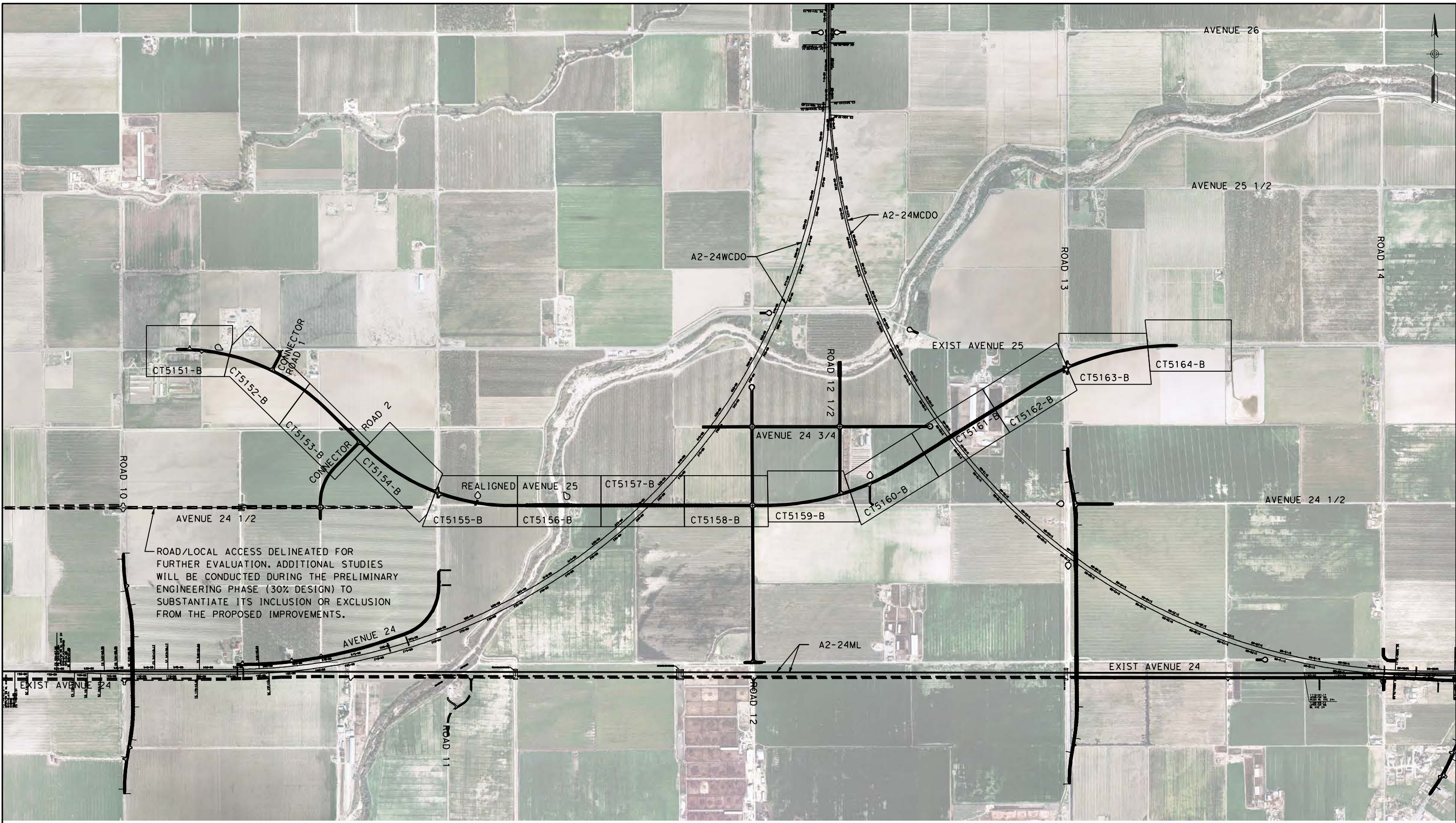


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 MAINLINE DO - (WC)  
 GRADE SEPARATION - AVENUE 23 1/2  
 KEY MAP  
 SHEET 1 OF 1

CONTRACT NO.  
HSR06-007  
 DRAWING NO.  
CB5114-B  
 SCALE  
AS SHOWN  
 SHEET NO.  
### OF ###



4/27/2011 6:18:29 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 1b - ave 24 wye-w.chowchilla grade separation\key map\CB5115-B.dgn  
 ReyesC1



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**D. AYELE**  
 DRAWN BY  
**C. DELOS REYES**  
 CHECKED BY  
**A. SILVER**  
 IN CHARGE  
**A. BOONE**  
 DATE  
**04/29/2011**

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

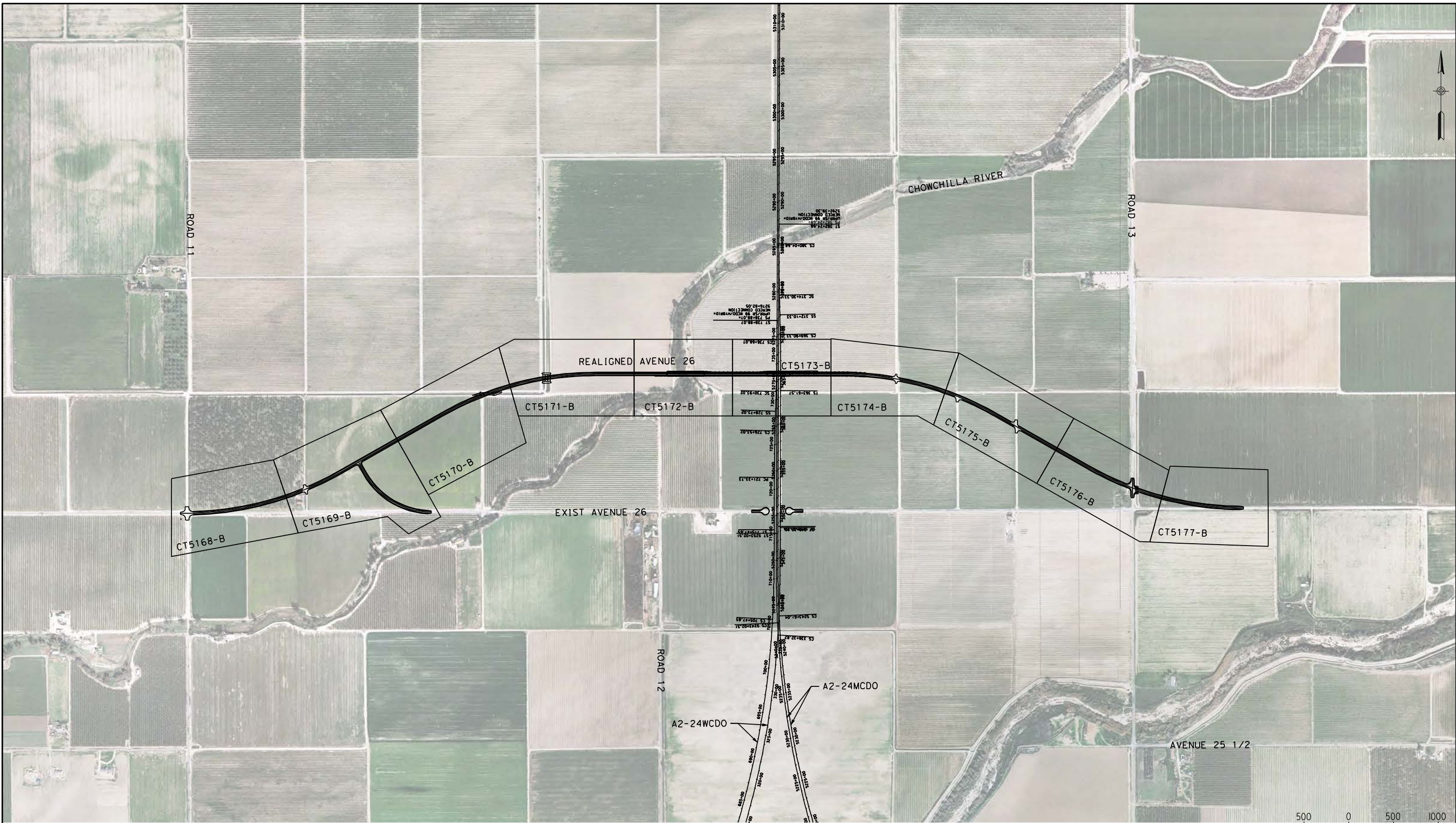


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 WYE/MERCED DO - (WC)  
 GRADE SEPARATION - AVENUE 25  
 KEY MAP  
 SHEET 1 OF 1

CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CB5115-B  
 SCALE  
 NO SCALE  
 SHEET NO.  
 ### OF ###



4/27/2011 6:19:13 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 1b - ave 24 wye-w.chowchilla grade separation\key Map\CB5116-B.dgn



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**D. AYELE**  
DRAWN BY  
**C. DELOS REYES**  
CHECKED BY  
**A. SILVER**  
IN CHARGE  
**A. BOONE**  
DATE  
**04/29/2011**

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

**NOT FOR**  
**CONSTRUCTION**



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

UPRR/SR99 WYE/MERCED DO - (WC)  
GRADE SEPARATION - AVENUE 26 ALT 1  
KEY MAP  
SHEET 1 OF 1

CONTRACT NO.  
HSR06-007

DRAWING NO.  
CB5116-B

SCALE  
AS SHOWN

SHEET NO.  
### OF ###



4/27/2011 6:19:47 PM p:\60022962\task\_02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 1b - ave 24 wye-w.chowchilla grade separation\key Map\CB5117-B.dgn  
 ReyesC1



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**D. AYELE**  
 DRAWN BY  
**C. DELOS REYES**  
 CHECKED BY  
**A. SILVER**  
 IN CHARGE  
**A. BOONE**  
 DATE  
**04/29/2011**

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

  
 Technical Services, Inc.  
 2020 L Street, Suite 300  
 Sacramento, CA 95811  



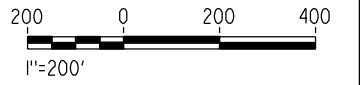
  
**CALIFORNIA**  
 HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 MERCED DO - (WC)  
 GRADE SEPARATION - CROSS ROAD  
 KEY MAP  
 SHEET 1 OF 1

CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CB5117-B  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###



4/27/2011 6:20:17 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 1b - ave 24 wye-w.chowchilla grade separation\key Map\CB5118-B.dgn  
 ReyesC1



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**D. AYELE**  
 DRAWN BY  
**C. DELOS REYES**  
 CHECKED BY  
**A. SILVER**  
 IN CHARGE  
**A. BOONE**  
 DATE  
**04/29/2011**

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



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 WYE/MERCED DO - (WC)  
 UNDERPASS - AVENUE 26 ALT 2  
 KEY MAP  
 SHEET 1 OF 1

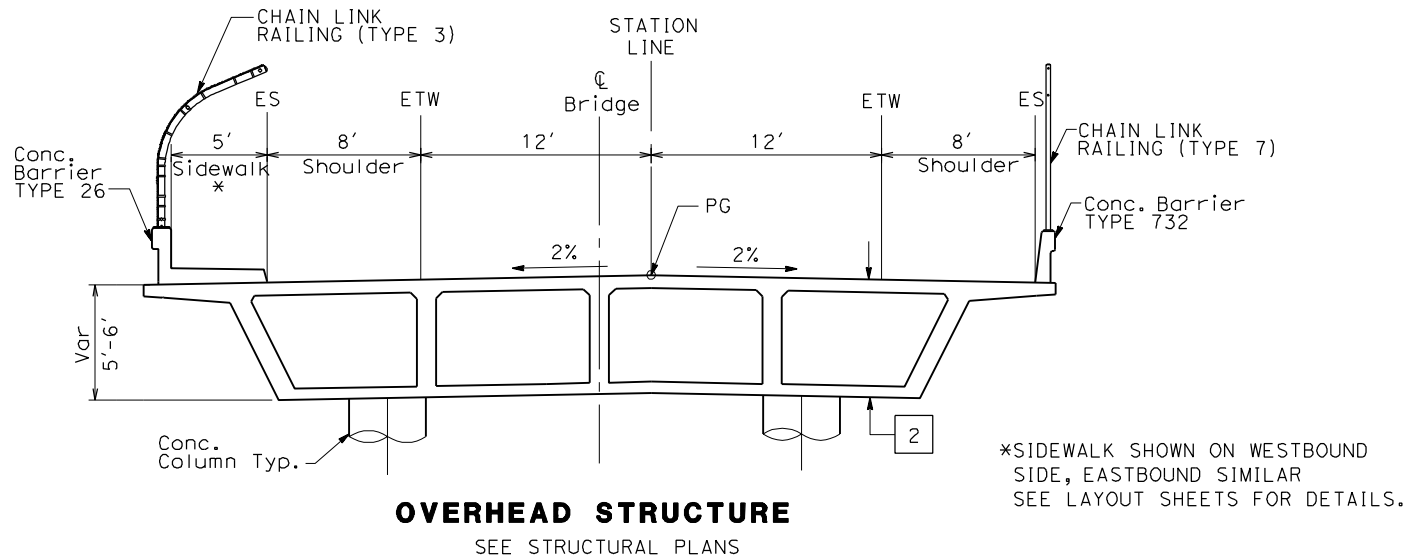
CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CB5118-B  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###



4/27/2011 6:42:46 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 1b - ave 24 wye-w.chowchilla\typical Section\CT5090

**NOTES:**

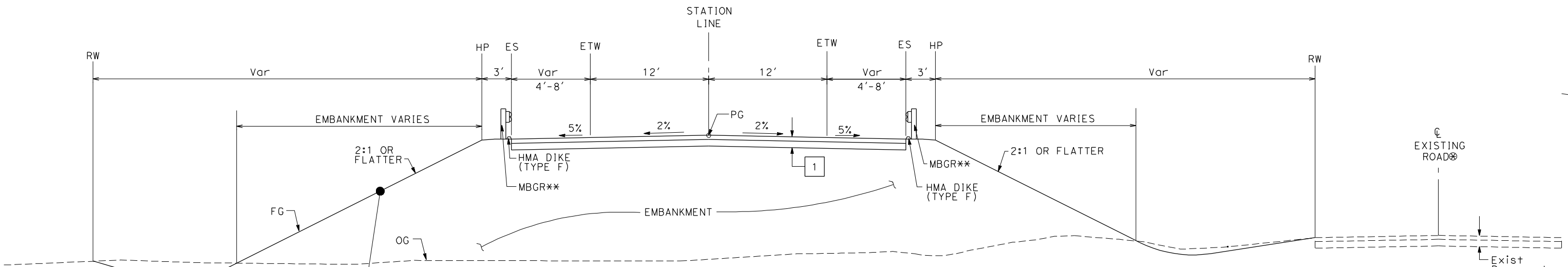
1. DIMENSIONS OF EXISTING PAVEMENT WIDTHS ARE BASED ON MEASUREMENTS MADE IN THE FIELD AND ARE APPROXIMATE.
2. PAVEMENT SECTIONS ARE TO BE DETERMINED. GEOTECHNICAL INVESTIGATIONS WILL BE CONDUCTED IN A SUBSEQUENT PHASE TO DETERMINE STRUCTURAL SECTIONS FOR EACH CROSSING.
3. SPACING OF BENCHES ON PROPOSED FILL SECTIONS ARE TO BE DETERMINED.
4. RIGHT-OF-WAY (R/W) WIDTH IS FOR INFORMATION ONLY. EXACT WIDTH TO BE DETERMINED IN COORDINATION WITH AFFECTED AGENCY.



**STRUCTURAL SECTIONS:**

- 1 HMA TYPE A  
AB CLASS 2
- 2 CAST IN PLACE / PRESTRESSED  
BOX GIRDER (6' STRUCTURE DEPTH)

\*SIDEWALK SHOWN ON WESTBOUND SIDE, EASTBOUND SIMILAR  
SEE LAYOUT SHEETS FOR DETAILS.

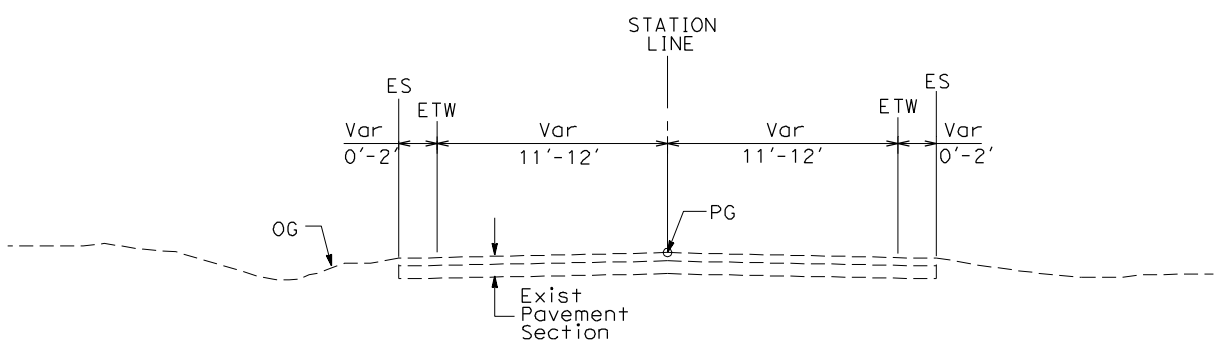
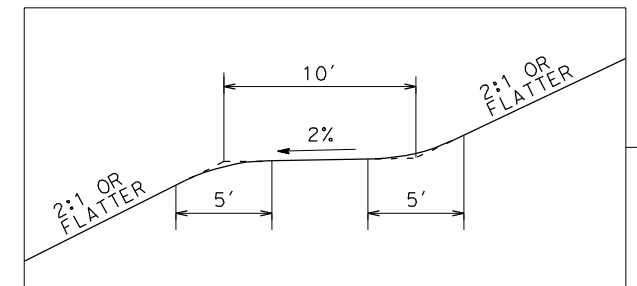


⊗ EXISTING ROAD LOCATION VARIES AND SHALL REMAIN OPEN DURING CONSTRUCTION, WHERE SHOWN ON THE PLAN CLOSE AND OBLITERATE EXISTING ROADWAY SUBSEQUENT TO CONSTRUCTION OF THE REALIGNED ROADWAY.

\*\* EXACT LIMITS OF MBGR PER AGENCY REQUIREMENTS.

TYPICAL CROSS SECTIONS ON THIS SHEET APPLY TO THE FOLLOWING ROADWAYS FOR THE ALIGNMENT A2, AVE 24 WYE OPTION & WEST CHOWCHILLA OPTION:

NO.	STREET NAME
1	ROAD 9 (HEMLOCK RD)
2	ROAD 10
3	ROAD 13
4	ROAD 15
5	ROAD 16
6	AVENUE 23-1/2
7	AVENUE 25
8	AVENUE 26
9	CROSS RD



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**K. OAKS**

DRAWN BY  
**K. OAKS**

CHECKED BY  
**A. SILVER**

IN CHARGE  
**A. BOONE**

DATE  
**04/29/2011**

**RECORD SET**  
15% DESIGN  
SUBMITTAL

**NOT FOR  
CONSTRUCTION**

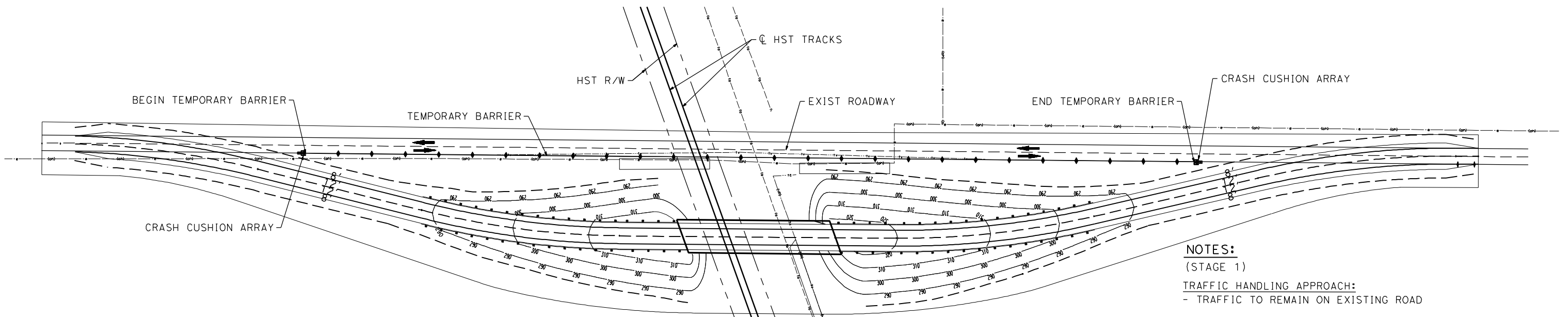


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
UPRR/SR99 - (AVE 24)  
GRADE SEPARATIONS  
TYPICAL CROSS SECTIONS  
SHEET 1 OF 1

CONTRACT NO.	HSR06-007
DRAWING NO.	CT5090-B
SCALE	NTS
SHEET NO.	### OF ###

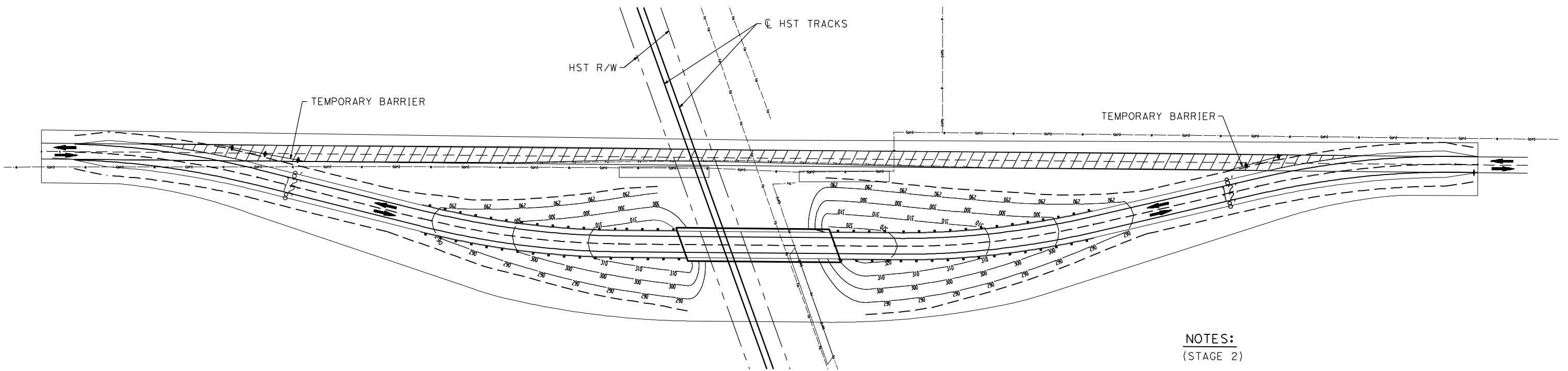


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**STAGE CONSTRUCTION (STAGE 1)**





**NOTES:**  
 (STAGE 1)  
**TRAFFIC HANDLING APPROACH:**  
 - TRAFFIC TO REMAIN ON EXISTING ROAD  
  
**STAGE CONSTRUCTION ACTIVITIES:**  
 - CONSTRUCT NEW GRADE SEPARATION EMBANKMENT  
 - CONSTRUCT NEW GRADE SEPARATION STRUCTURE  
 - CONSTRUCT DRAINAGE FACILITY



**STAGE CONSTRUCTION (STAGE 2)**

**NOTES:**  
 (STAGE 2)  
**TRAFFIC HANDLING APPROACH:**  
 - SHIFT TRAFFIC TO NEW GRADE SEPARATION FACILITY  
  
**STAGE CONSTRUCTION ACTIVITIES:**  
 - CONSTRUCT REALIGNED ROAD CONFORMS  
 - COMPLETE DRAINAGE FACILITIES  
 - REMOVE SURFACE AND BASE OF EXIST ROAD

**LEGEND:**

-  CRASH CUSHION ARRAY (TYPE U11)
-  TEMPORARY BARRIER (TYPE K)
-  DIRECTION OF TRAVEL
-  REMOVE BASE AND SURFACING (EXIST ROAD)

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
 S. WONG  
 DRAWN BY  
 F. DEMARCO  
 CHECKED BY  
 A. SILVER  
 IN CHARGE  
 A. BOONE  
 DATE  
 04/29/2011

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

**AECOM**  
 Technical Services, Inc.  
 2020 L Street, Suite 300  
 Sacramento, CA 95811  
  
**CH2MHILL**

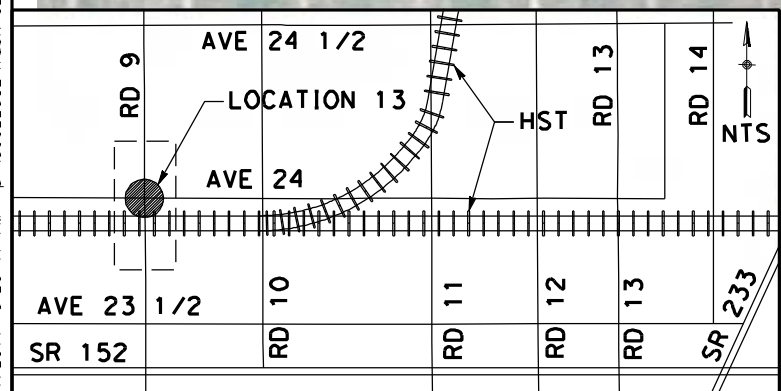


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 - (AVE 24/WC)  
  
 GENERAL STAGE CONSTRUCTION AND TRAFFIC PLAN  
 SHEET 1 OF 1

CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CT5091-B  
 SCALE  
 NO SCALE  
 SHEET NO.  
 ### OF ###

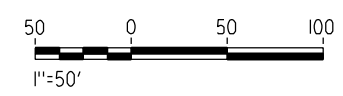


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**NOTE:**  
 1. FOR ROADWAY PROFILE, SEE DRAWINGS CT6100-B THROUGH CT6103-B

No.	R	$\Delta$	T	L	V
1	3000.00	10°00'00"	262.47	523.60	45 MPH
2	3000.00	10°26'57"	274.32	547.12	45 MPH



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
 D. AYELE  
 DRAWN BY  
 C. DELOS REYES  
 CHECKED BY  
 A. SILVER  
 IN CHARGE  
 A. BOONE  
 DATE  
 04/29/2011

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



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 MAINLINE/WYE - (AVE 24/WC)  
 GRADE SEPARATION - HEMLOCK RD (ROAD 9) ALT 1  
 LAYOUT  
 SHEET 1 OF 4

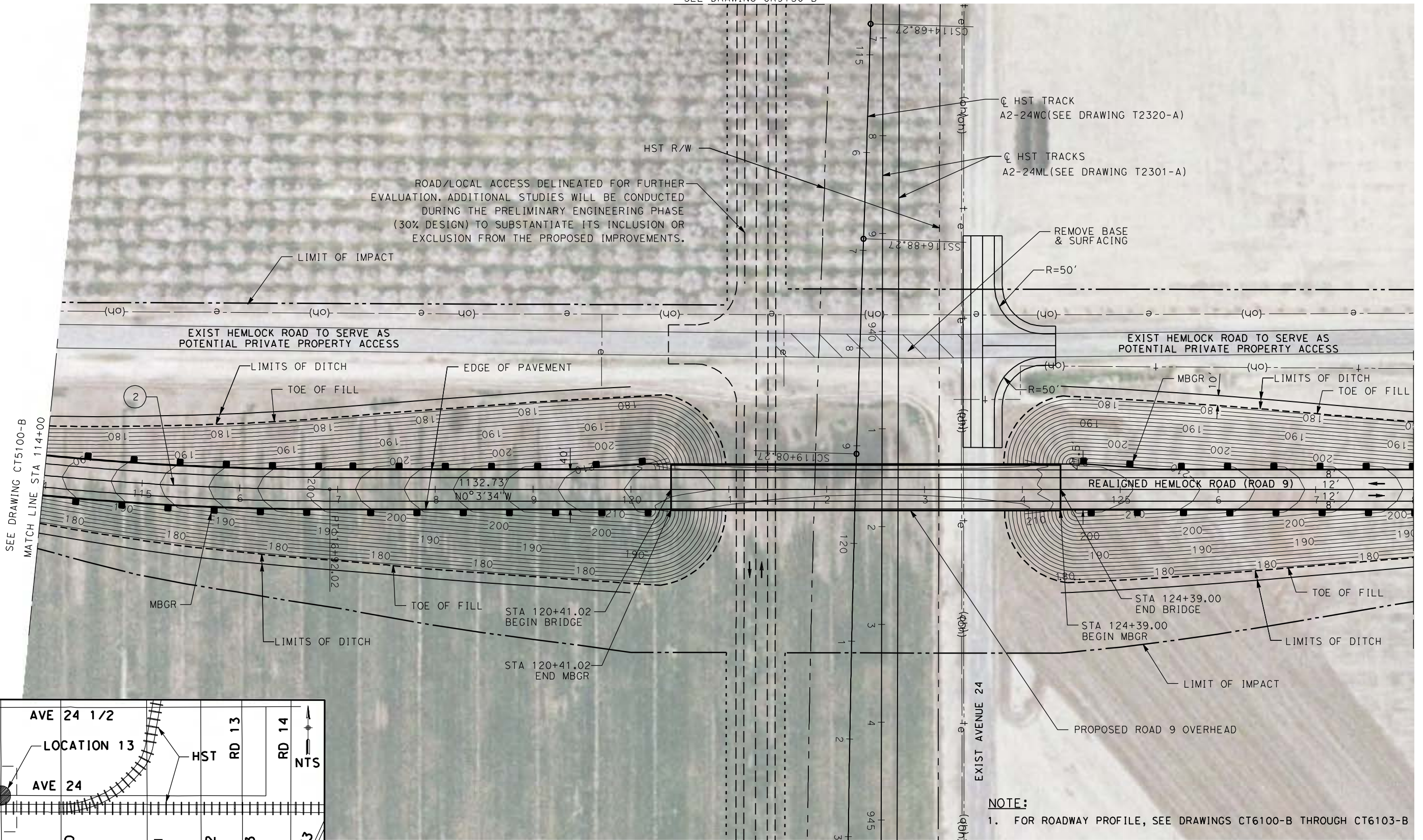
CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CT5100-B  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###



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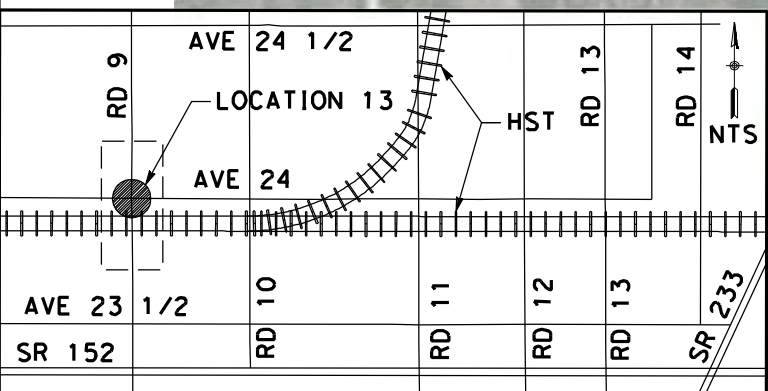


SEE DRAWING CR9130-B



SEE DRAWING CT5100-B  
MATCH LINE STA 114+00

MATCH LINE STA 128+00  
SEE DRAWING CT5102-B

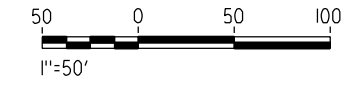


**NOTE:**  
1. FOR ROADWAY PROFILE, SEE DRAWINGS CT6100-B THROUGH CT6103-B

SEE DRAWING CR9130-B

**CURVE DATA**

No.	R	Δ	T	L	V
(2)	3000.00	10° 26' 57"	274.32	547.12	45 MPH



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**D. AYELE**  
DRAWN BY  
**C. DELOS REYES**  
CHECKED BY  
**A. SILVER**  
IN CHARGE  
**A. BOONE**  
DATE  
**04/29/2011**

**RECORD SET  
15% DESIGN  
SUBMITTAL**

**NOT FOR  
CONSTRUCTION**



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

UPRR/SR99 MAINLINE/WYE - (AVE 24/WC)  
GRADE SEPARATION - HEMLOCK RD (ROAD 9) ALT 1  
LAYOUT  
SHEET 2 OF 4

CONTRACT NO.  
HSR06-007

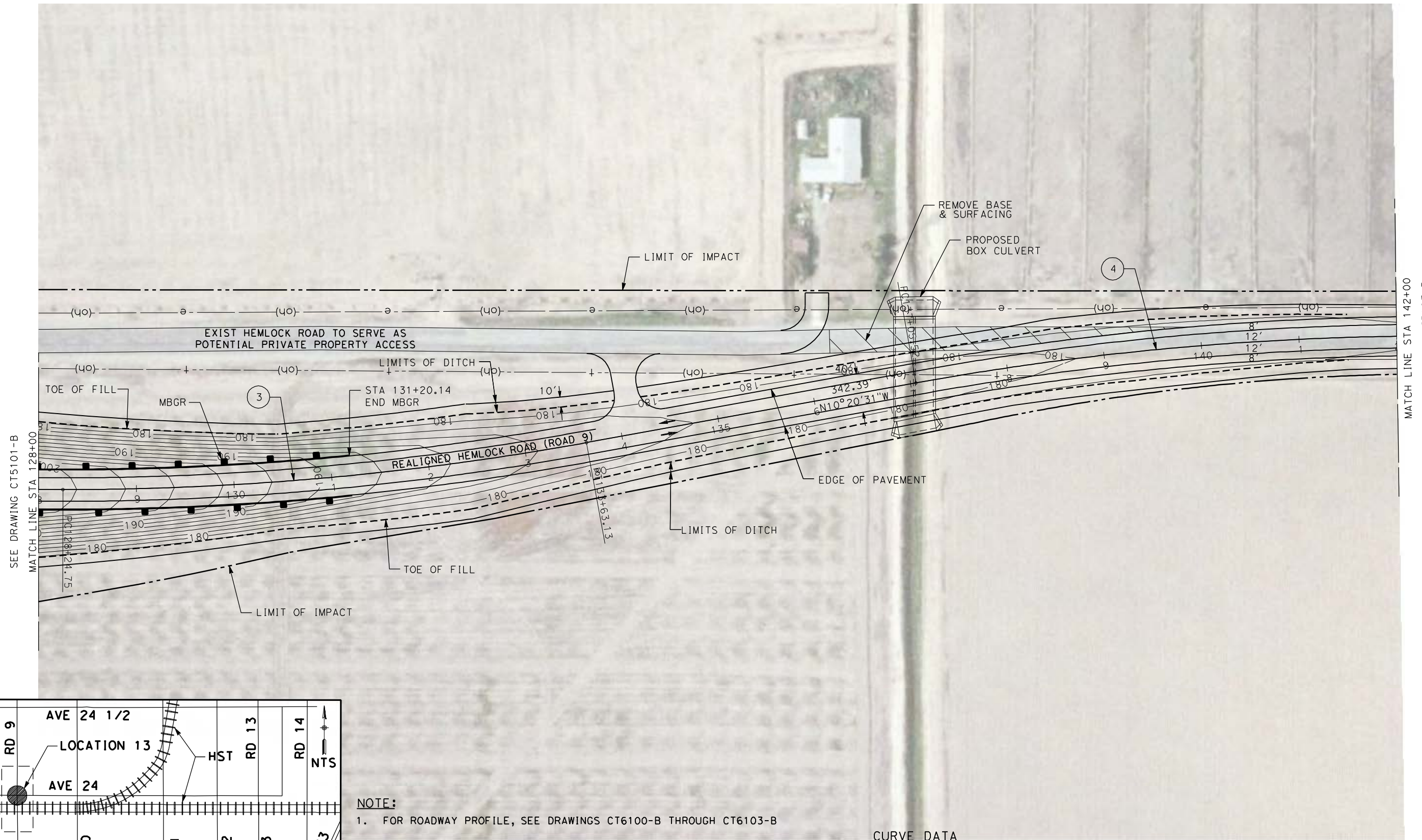
DRAWING NO.  
CT5101-B

SCALE  
AS SHOWN

SHEET NO.  
### OF ###



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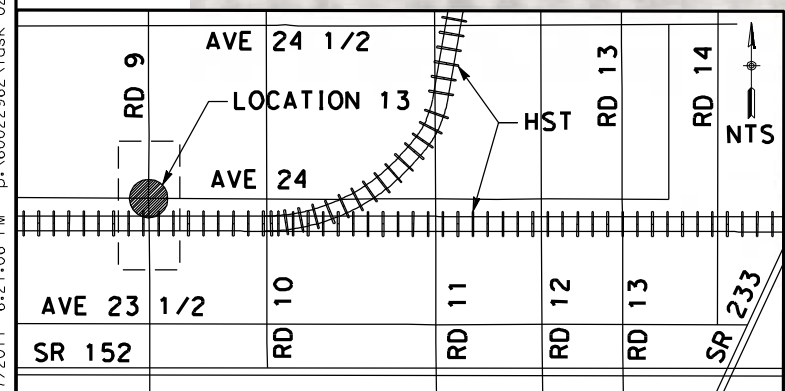
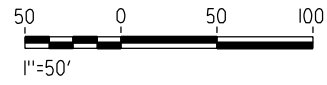
SEE DRAWING CT5101-B  
MATCH LINE STA 128+00

MATCH LINE STA 142+00  
SEE DRAWING CT5103-B

**NOTE:**  
1. FOR ROADWAY PROFILE, SEE DRAWINGS CT6100-B THROUGH CT6103-B

**CURVE DATA**

No.	R	Δ	T	L	V
③	3000.00	10°16'57"	269.92	538.38	45 MPH
④	3000.00	10°00'00"	262.47	523.60	45 MPH



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
 DRAWN BY  
C. DELOS REYES  
 CHECKED BY  
A. SILVER  
 IN CHARGE  
A. BOONE  
 DATE  
04/29/2011

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

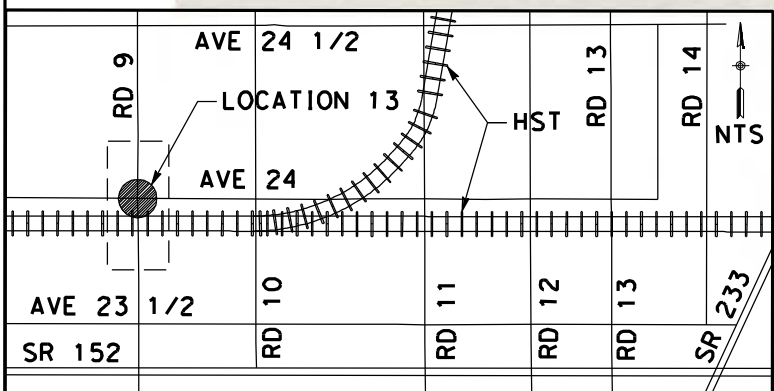


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 MAINLINE/WYE - (AVE 24/WC)  
 GRADE SEPARATION - HEMLOCK RD (ROAD 9) ALT 1  
 LAYOUT  
 SHEET 3 OF 4

CONTRACT NO.  
HSR06-007  
 DRAWING NO.  
CT5102-B  
 SCALE  
AS SHOWN  
 SHEET NO.  
### OF ###

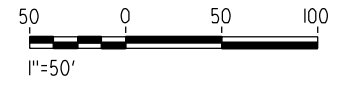


4/27/2011 6:21:15 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla volume 1b - ave 24 wye-w.chowchilla grade separation\Layout\CT5103-B.dgn



**NOTE:**  
 1. FOR ROADWAY PROFILE, SEE DRAWINGS CT6100-B THROUGH CT6103-B

CURVE DATA					
No.	R	$\Delta$	T	L	V
(4)	3000.00	10°00'00"	262.47	523.60	45 MPH



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
 D. AYELE  
 DRAWN BY  
 C. DELOS REYES  
 CHECKED BY  
 A. SILVER  
 IN CHARGE  
 A. BOONE  
 DATE  
 04/29/2011

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

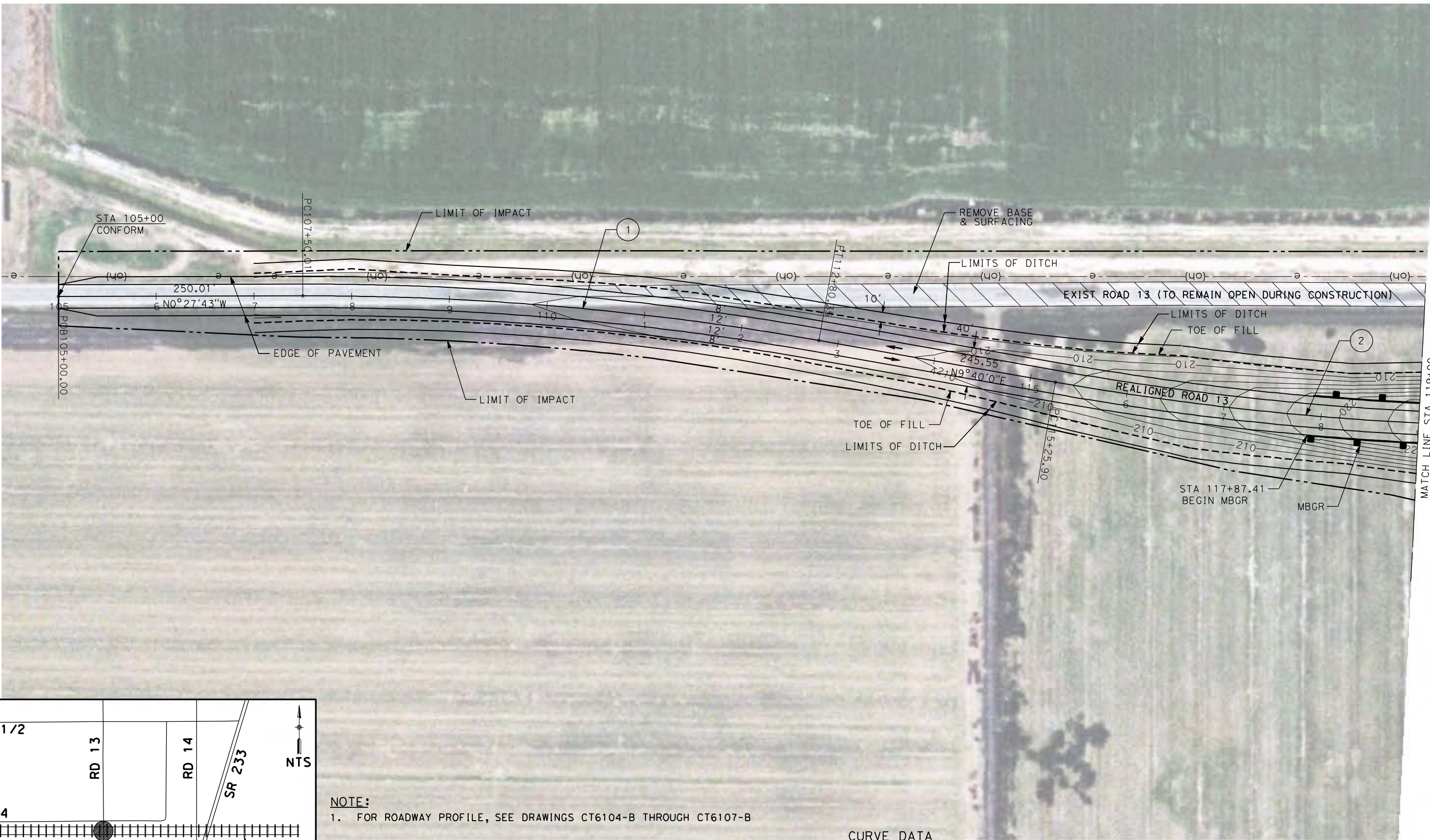


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 MAINLINE/WYE - (AVE 24/WC)  
 GRADE SEPARATION - HEMLOCK RD (ROAD 9) ALT 1  
 LAYOUT  
 SHEET 4 OF 4

CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CT5103-B  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###

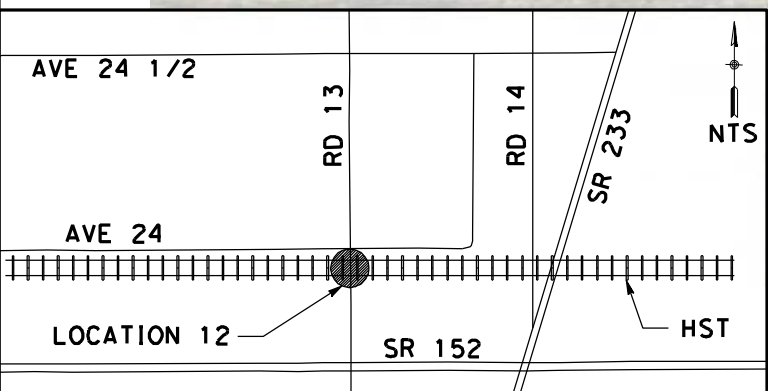


4/27/2011 6:21:23 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla grade separation\Layout\CT5104-B.dgn



MATCH LINE STA 119+00  
 SEE DRAWING CT5105-B

**NOTE:**  
 1. FOR ROADWAY PROFILE, SEE DRAWINGS CT6104-B THROUGH CT6107-B



**CURVE DATA**

No.	R	Δ	T	L	V
①	3000.00	10°07'43"	265.86	530.34	45 MPH
②	3000.00	10°00'07"	262.52	532.71	45 MPH



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
 D. AYELE  
 DRAWN BY  
 C. DELOS REYES  
 CHECKED BY  
 A. SILVER  
 IN CHARGE  
 A. BOONE  
 DATE  
 04/29/2011

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

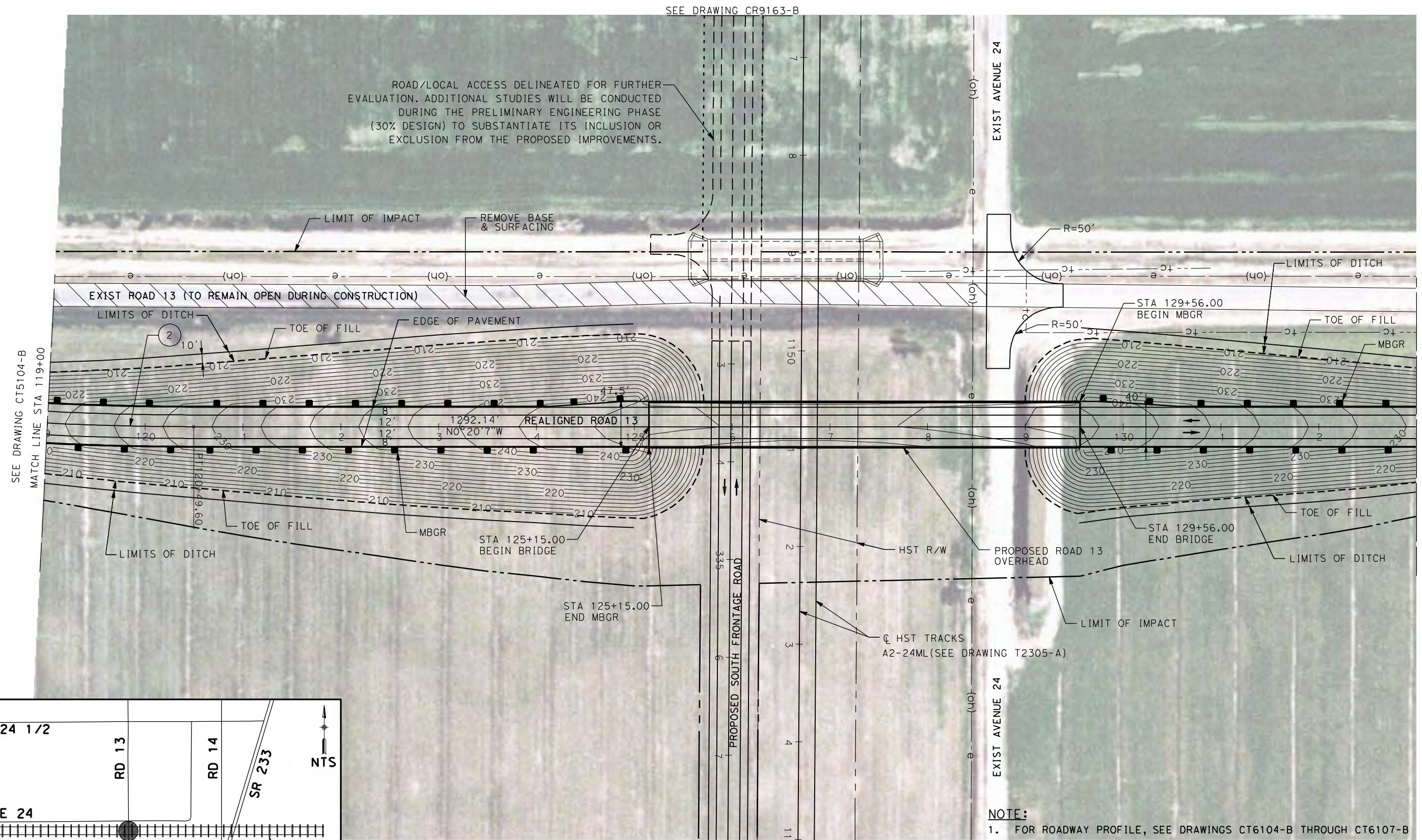


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 MAINLINE - (AVE 24)  
 GRADE SEPARATION - ROAD 13  
 LAYOUT  
 SHEET 1 OF 4

CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CT5104-B  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###

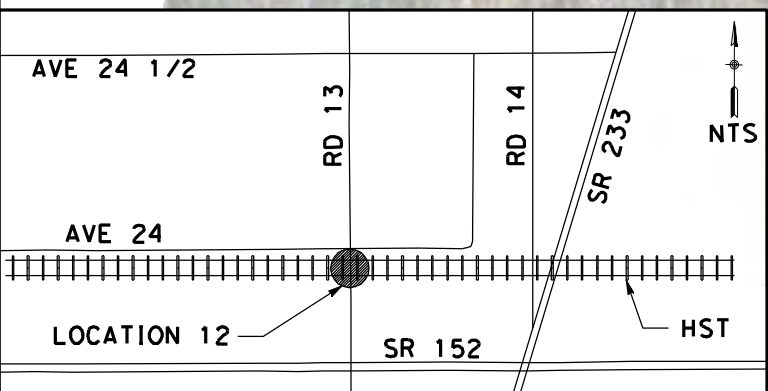


4/27/2011 6:21:37 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 1b - ave 24 wye-w.chowchilla grade separation\Layout\CT5105-B.dgn



SEE DRAWING CT5104-B  
 MATCH LINE STA 119+00

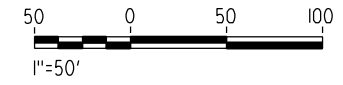
MATCH LINE STA 133+00  
 SEE DRAWING CT5106-B



SEE DRAWING CR9163-B

CURVE DATA

No.	R	$\Delta$	T	L	V
(2)	3000.00	10°00'07"	262.52	532.71	45 MPH



**NOTE:**  
 1. FOR ROADWAY PROFILE, SEE DRAWINGS CT6104-B THROUGH CT6107-B

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
 D. AYELE  
 DRAWN BY  
 C. DELOS REYES  
 CHECKED BY  
 A. SILVER  
 IN CHARGE  
 A. BOONE  
 DATE  
 04/29/2011

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

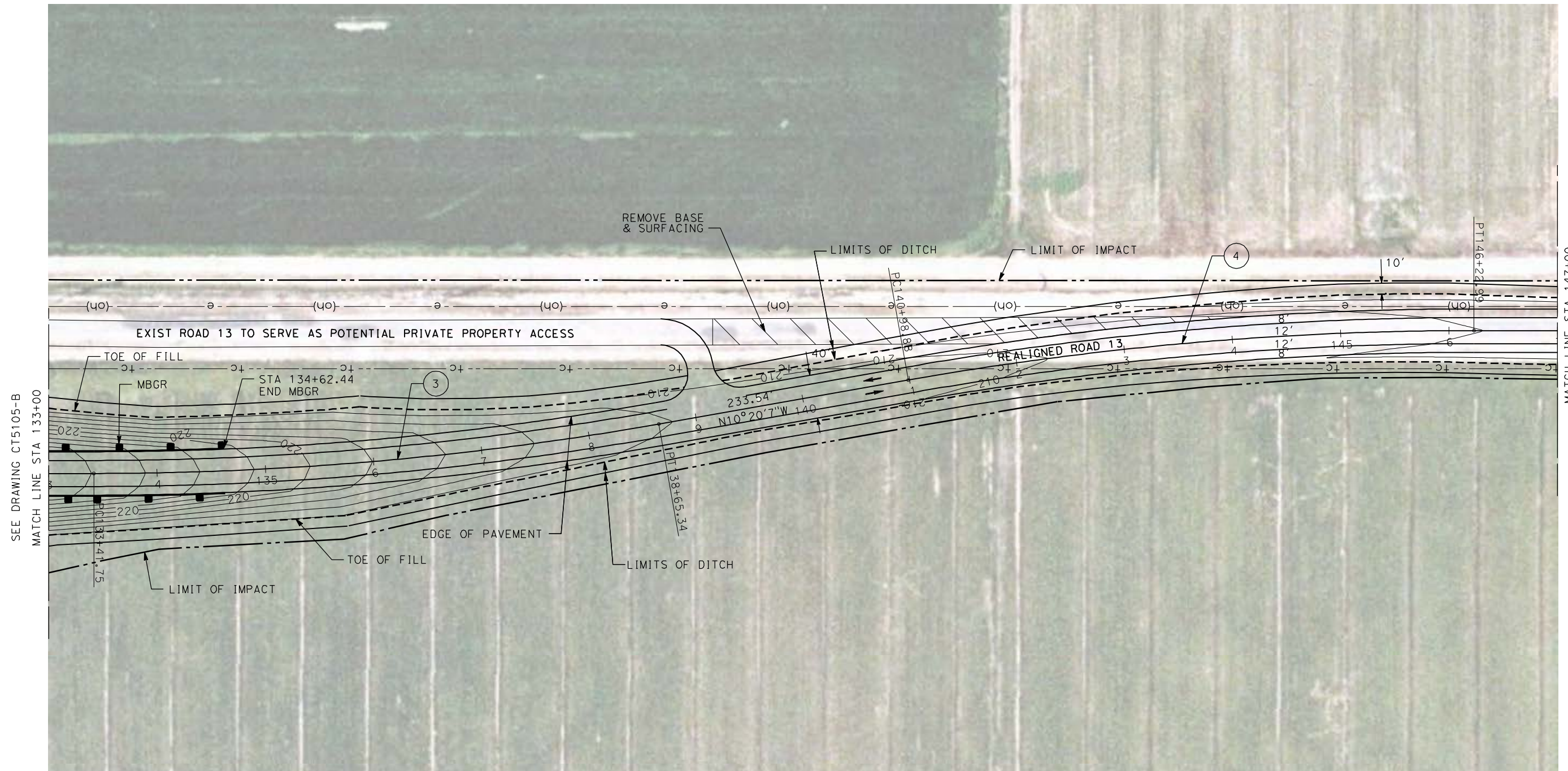


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 MAINLINE - (AVE 24)  
 GRADE SEPARATION - ROAD 13  
 LAYOUT  
 SHEET 2 OF 4

CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CT5105-B  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###



4/27/2011 6:21:48 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla volume 1b - ave 24 wye-w.chowchilla grade separation\Layout\CT5106-B.dgn



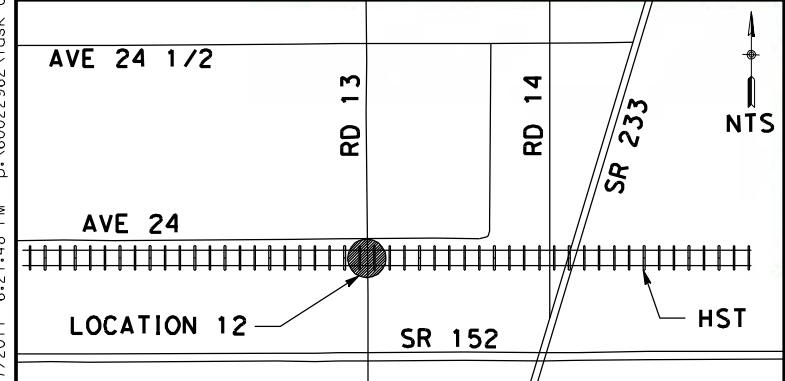
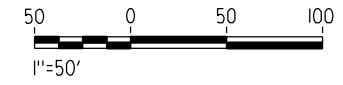
SEE DRAWING CT5105-B  
MATCH LINE STA 133+00

MATCH LINE STA 147+00  
SEE DRAWING CT5107-B

**NOTE:**  
1. FOR ROADWAY PROFILE, SEE DRAWINGS CT6104-B THROUGH CT6107-B

**CURVE DATA**

No.	R	Δ	T	L	V
③	3000.00	10°00'00"	262.46	523.59	45 MPH
④	3000.00	10°00'35"	262.72	524.11	45 MPH



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
 DRAWN BY  
C. DELOS REYES  
 CHECKED BY  
A. SILVER  
 IN CHARGE  
A. BOONE  
 DATE  
04/29/2011

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

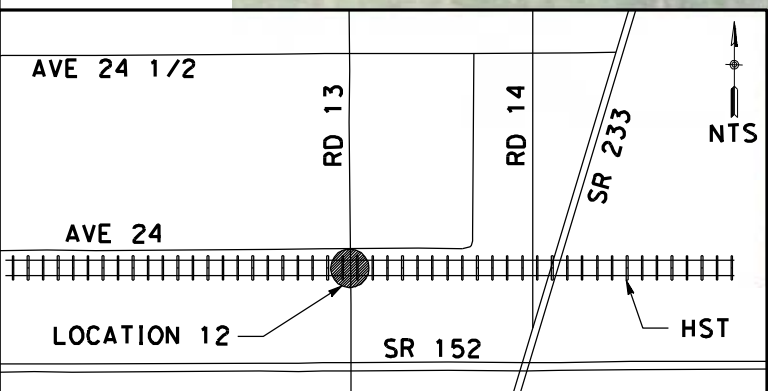
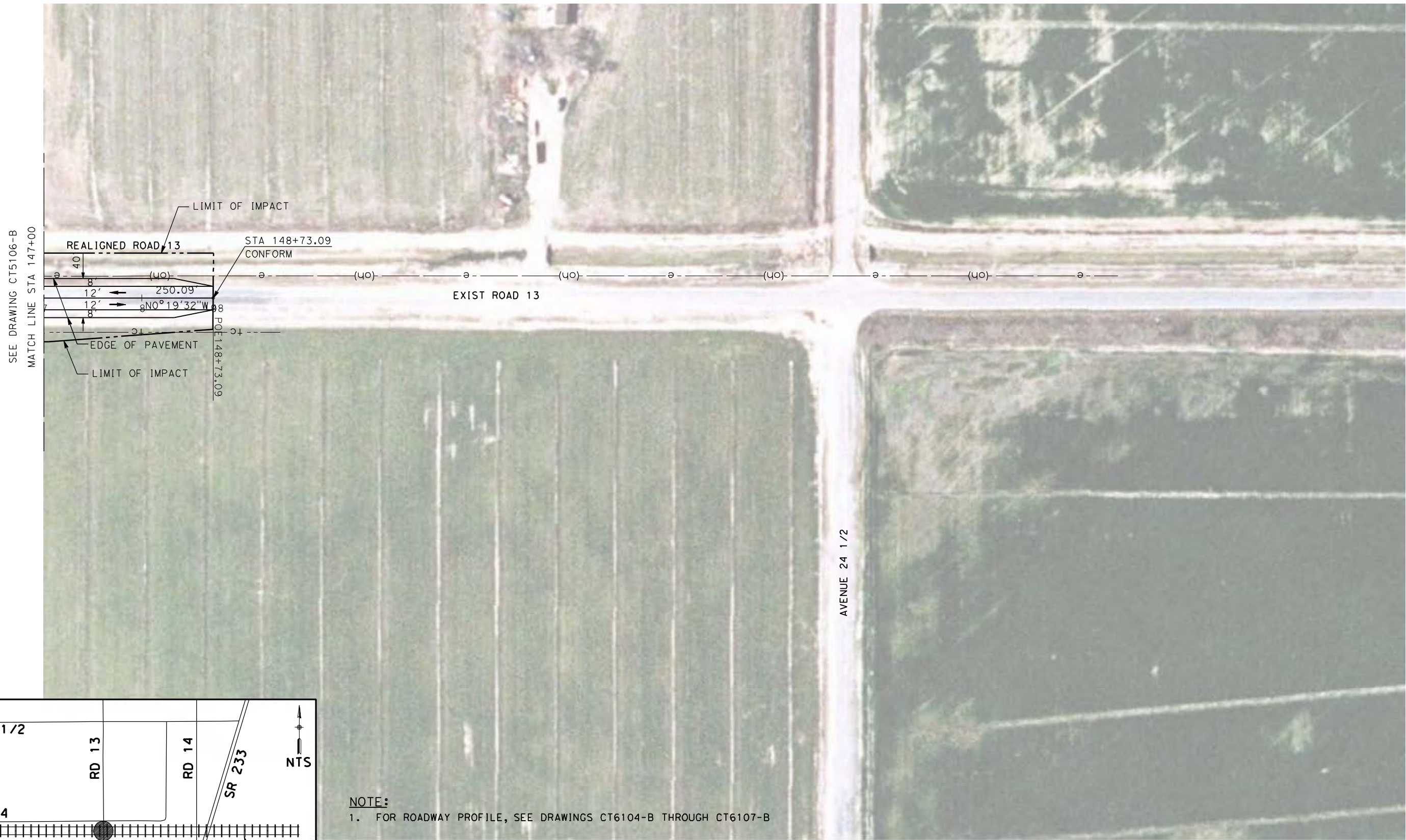


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 MAINLINE - (AVE 24)  
 GRADE SEPARATION - ROAD 13  
 LAYOUT  
 SHEET 3 OF 4

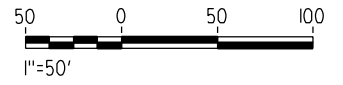
CONTRACT NO.  
HSR06-007  
 DRAWING NO.  
CT5106-B  
 SCALE  
AS SHOWN  
 SHEET NO.  
### OF ###



4/27/2011 6:21:55 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla volume 1b - ave 24 wye-w.chowchilla grade separation\Layout\CT5107-B.dgn



**NOTE:**  
 1. FOR ROADWAY PROFILE, SEE DRAWINGS CT6104-B THROUGH CT6107-B



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
 D. AYELE  
 DRAWN BY  
 C. DELOS REYES  
 CHECKED BY  
 A. SILVER  
 IN CHARGE  
 A. BOONE  
 DATE  
 04/29/2011

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

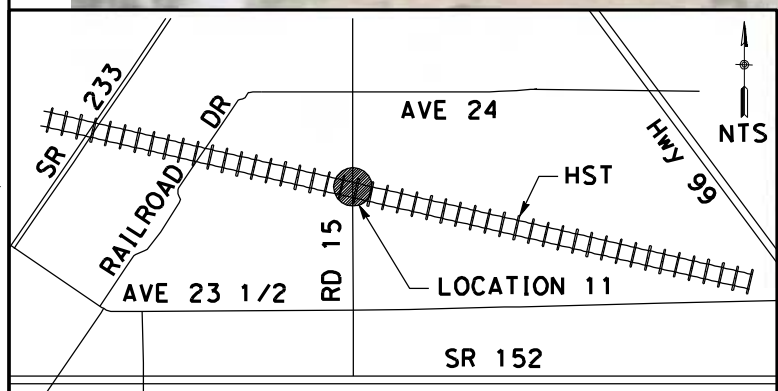
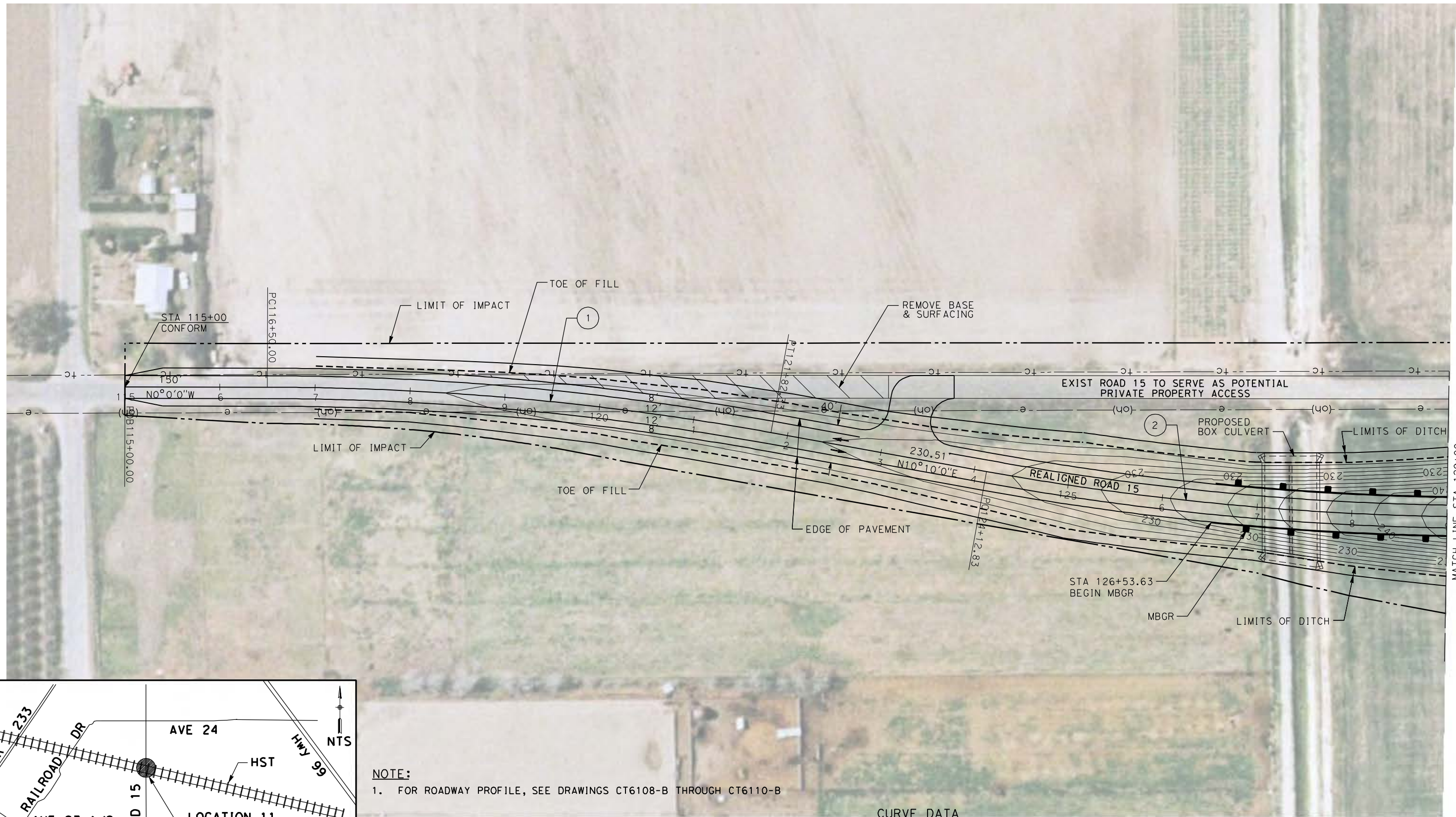


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 MAINLINE - (AVE 24)  
 GRADE SEPARATION - ROAD 13  
 LAYOUT  
 SHEET 4 OF 4

CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CT5107-B  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###



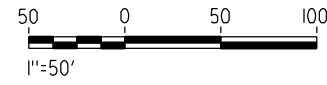
4/27/2011 6:22:03 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla volume 1b - ave 24 wye-w.chowchilla grade separation\Layout\CT5108-B.dgn



**NOTE:**  
 1. FOR ROADWAY PROFILE, SEE DRAWINGS CT6108-B THROUGH CT6110-B

CURVE DATA

No.	R	Δ	T	L	V
①	3000.00	10°10'00"	266.86	532.33	45 MPH
②	3000.00	10°13'57"	268.60	535.78	45 MPH



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
 D. AYELE  
 DRAWN BY  
 C. DELOS REYES  
 CHECKED BY  
 A. SILVER  
 IN CHARGE  
 A. BOONE  
 DATE  
 04/29/2011

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



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 MAINLINE - (AVE 24)  
 GRADE SEPARATION - ROAD 15  
 LAYOUT  
 SHEET 1 OF 3

CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CT5108-B  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###

MATCH LINE STA 129+00  
 SEE DRAWING CT5109-B

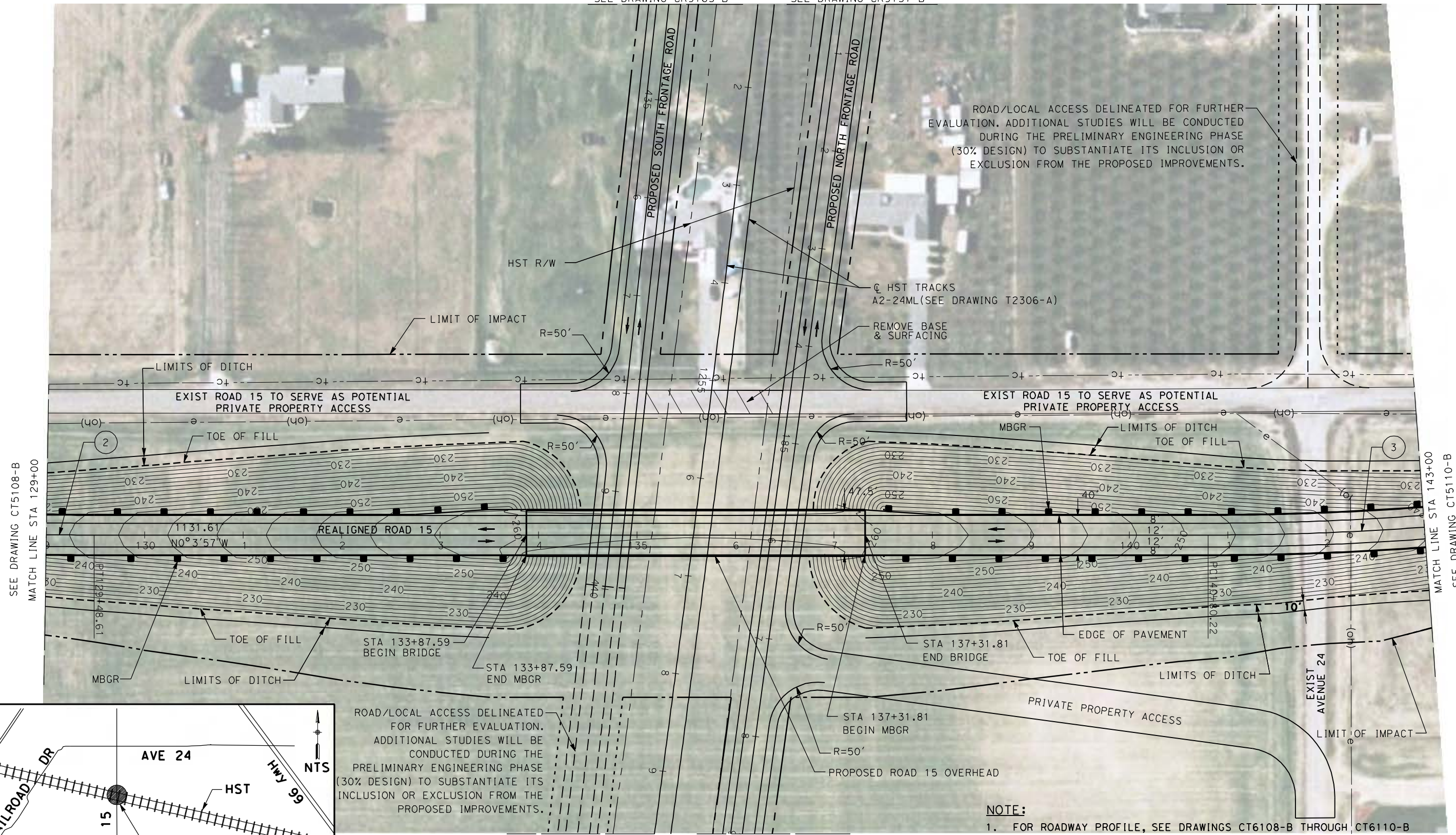


4/27/2011 6:22:15 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 1b - ave 24 wye-w.chowchilla\grade separation\Layout\CT5109-B.dgn

SEE DRAWING CR9165-B

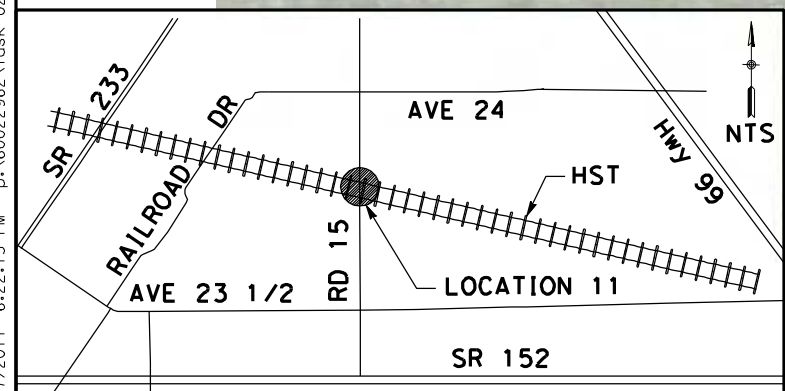
SEE DRAWING CR9137-B

SEE DRAWING CR9137-B



SEE DRAWING CT5108-B  
 MATCH LINE STA 129+00

MATCH LINE STA 143+00  
 SEE DRAWING CT5110-B



ROAD/LOCAL ACCESS DELINEATED FOR FURTHER EVALUATION. ADDITIONAL STUDIES WILL BE CONDUCTED DURING THE PRELIMINARY ENGINEERING PHASE (30% DESIGN) TO SUBSTANTIATE ITS INCLUSION OR EXCLUSION FROM THE PROPOSED IMPROVEMENTS.

**NOTE:**  
 1. FOR ROADWAY PROFILE, SEE DRAWINGS CT6108-B THROUGH CT6110-B

SEE DRAWING CR9165-B      SEE DRAWING CR9137-B      CURVE DATA

No.	R	Δ	T	L	V
②	3000.00	10°13'57"	268.60	535.78	45 MPH
③	3000.00	10°06'03"	265.12	528.88	45 MPH



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**D. AYELE**  
 DRAWN BY  
**C. DELOS REYES**  
 CHECKED BY  
**A. SILVER**  
 IN CHARGE  
**A. BOONE**  
 DATE  
**04/29/2011**

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

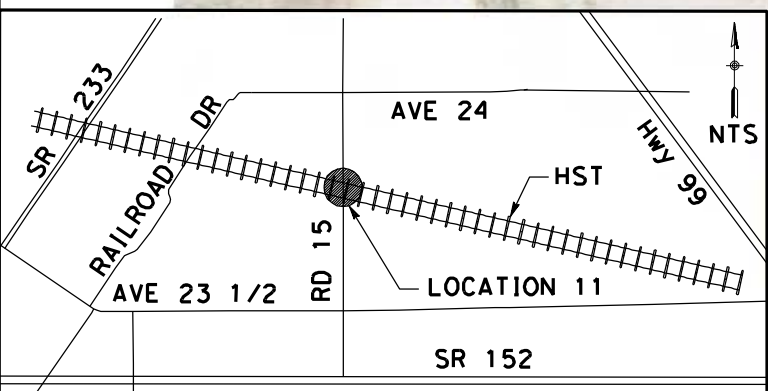
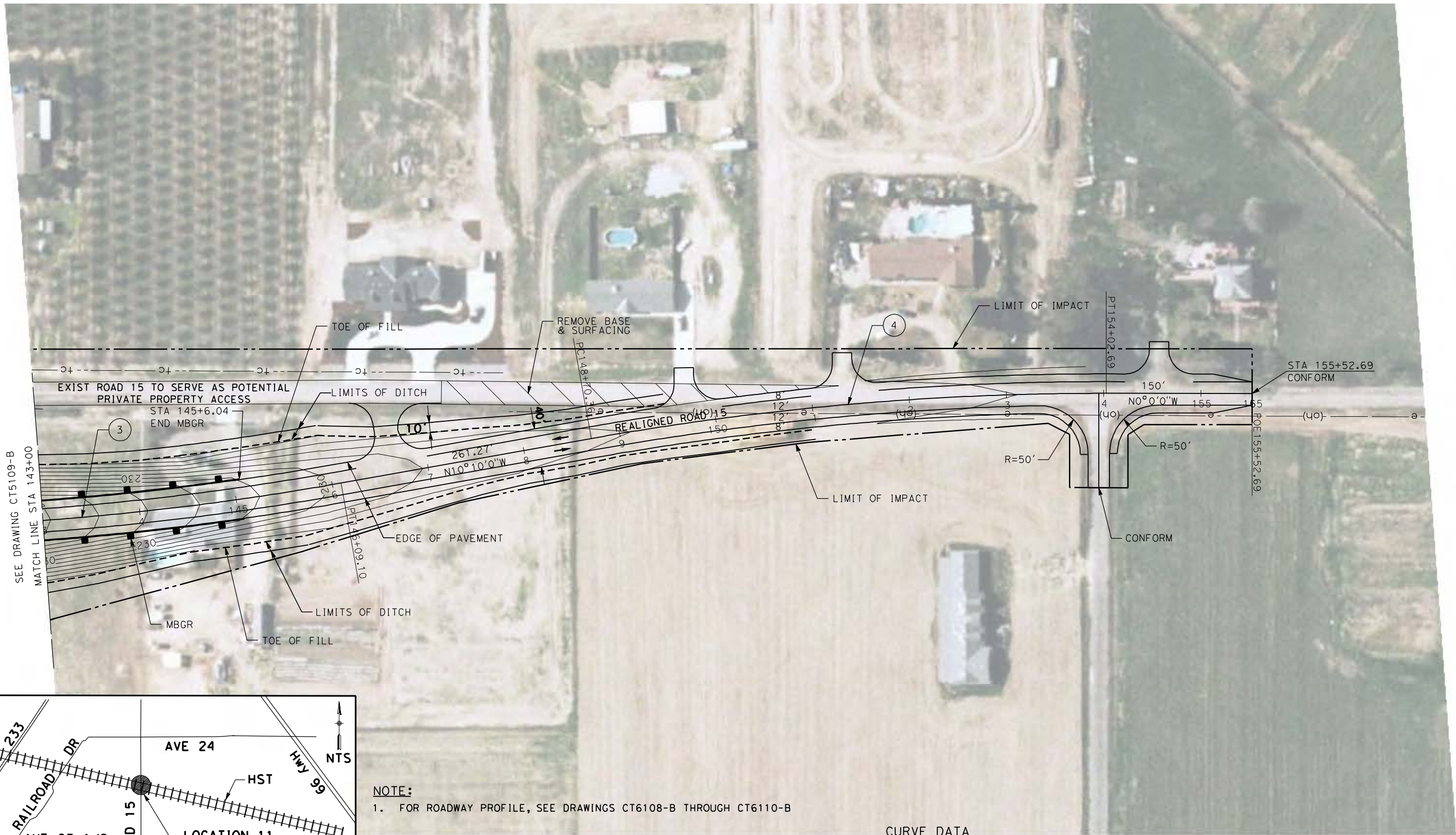


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 MAINLINE - (AVE 24)  
 GRADE SEPARATION - ROAD 15  
 LAYOUT  
 SHEET 2 OF 3

CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CT5109-B  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###

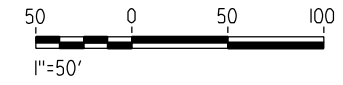


4/27/2011 6:22:24 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 1b - ave 24 wye-w.chowchilla grade separation\Layout\CT5110-B.dgn



**NOTE:**  
 1. FOR ROADWAY PROFILE, SEE DRAWINGS CT6108-B THROUGH CT6110-B

CURVE DATA					
No.	R	$\Delta$	T	L	V
3	3000.00	10°06'03"	265.12	528.88	45 MPH
4	3000.00	10°10'00"	266.86	532.33	45 MPH



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**D. AYELE**  
 DRAWN BY  
**C. DELOS REYES**  
 CHECKED BY  
**A. SILVER**  
 IN CHARGE  
**A. BOONE**  
 DATE  
**04/29/2011**

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

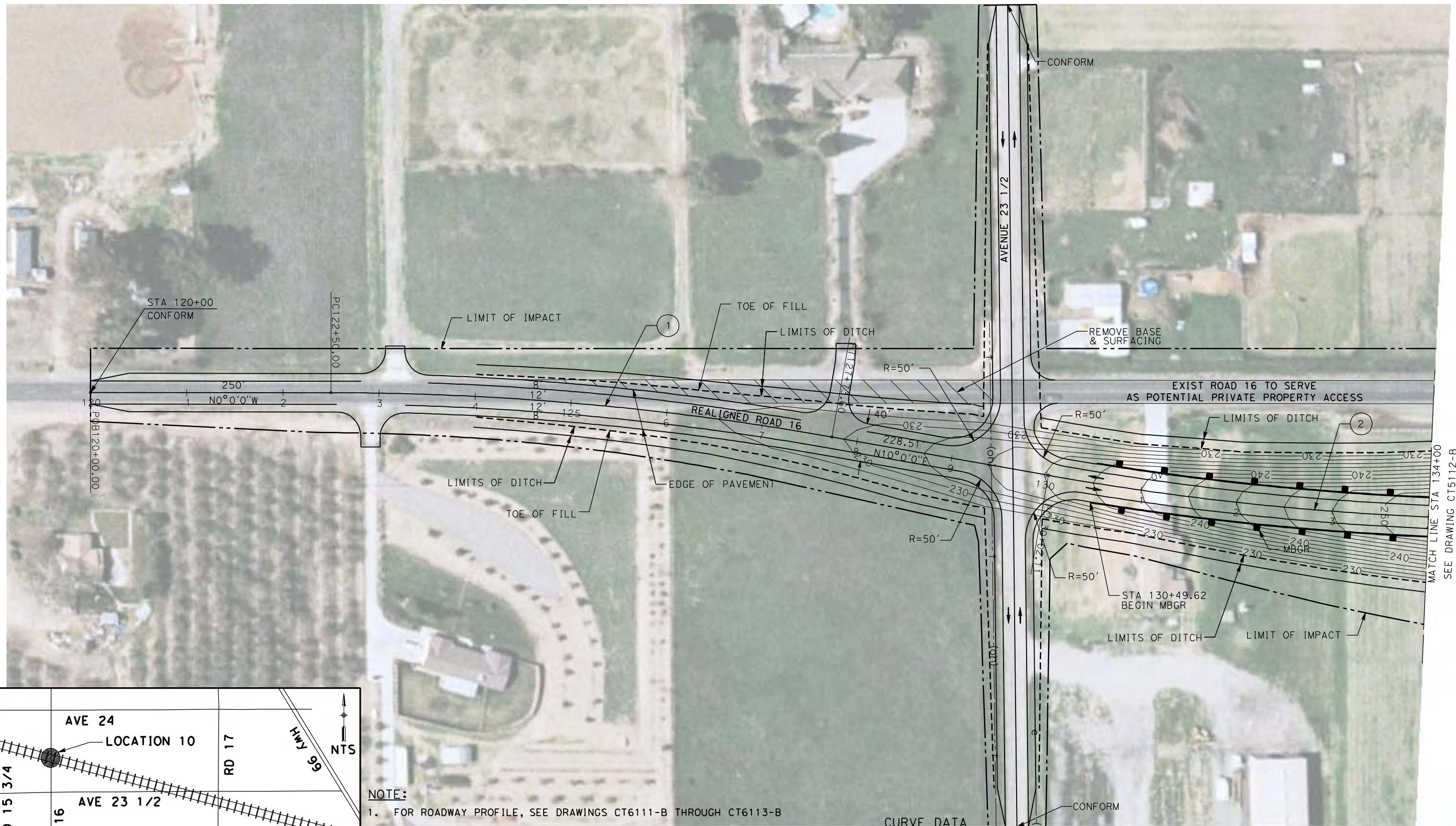
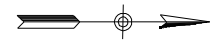


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 MAINLINE - (AVE 24)  
 GRADE SEPARATION - ROAD 15  
 LAYOUT  
 SHEET 3 OF 3

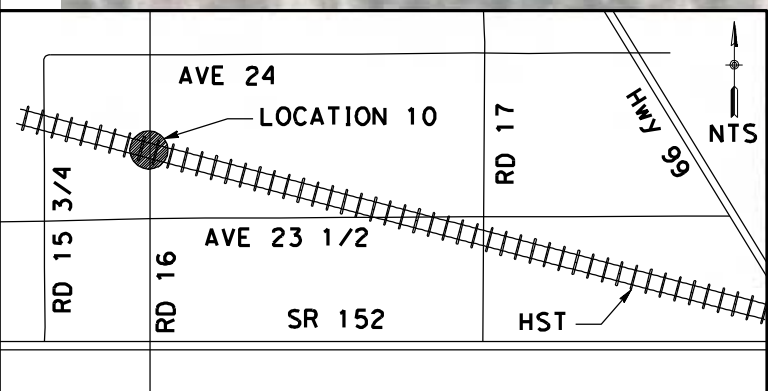
CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CT5110-B  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###



4/27/2011 6:22:33 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla volume 1b - ave 24 wye-w.chowchilla grade separation\Layout\CT5111-B.dgn



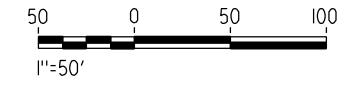
MATCH LINE STA 134+00  
SEE DRAWING CT5112-B



**NOTE:**  
1. FOR ROADWAY PROFILE, SEE DRAWINGS CT6111-B THROUGH CT6113-B

**CURVE DATA**

No.	R	Δ	T	L	V
①	3000.00	10°00'00"	262.47	523.60	45 MPH
②	3000.00	10°13'57"	263.85	526.35	45 MPH



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**D. AYELE**  
DRAWN BY  
**C. DELOS REYES**  
CHECKED BY  
**A. SILVER**  
IN CHARGE  
**A. BOONE**  
DATE  
**04/29/2011**

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



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
UPRR/SR99 MAINLINE - (AVE 24)  
GRADE SEPARATION - ROAD 16  
LAYOUT  
SHEET 1 OF 3

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
CT5111-B  
SCALE  
AS SHOWN  
SHEET NO.  
### OF ###

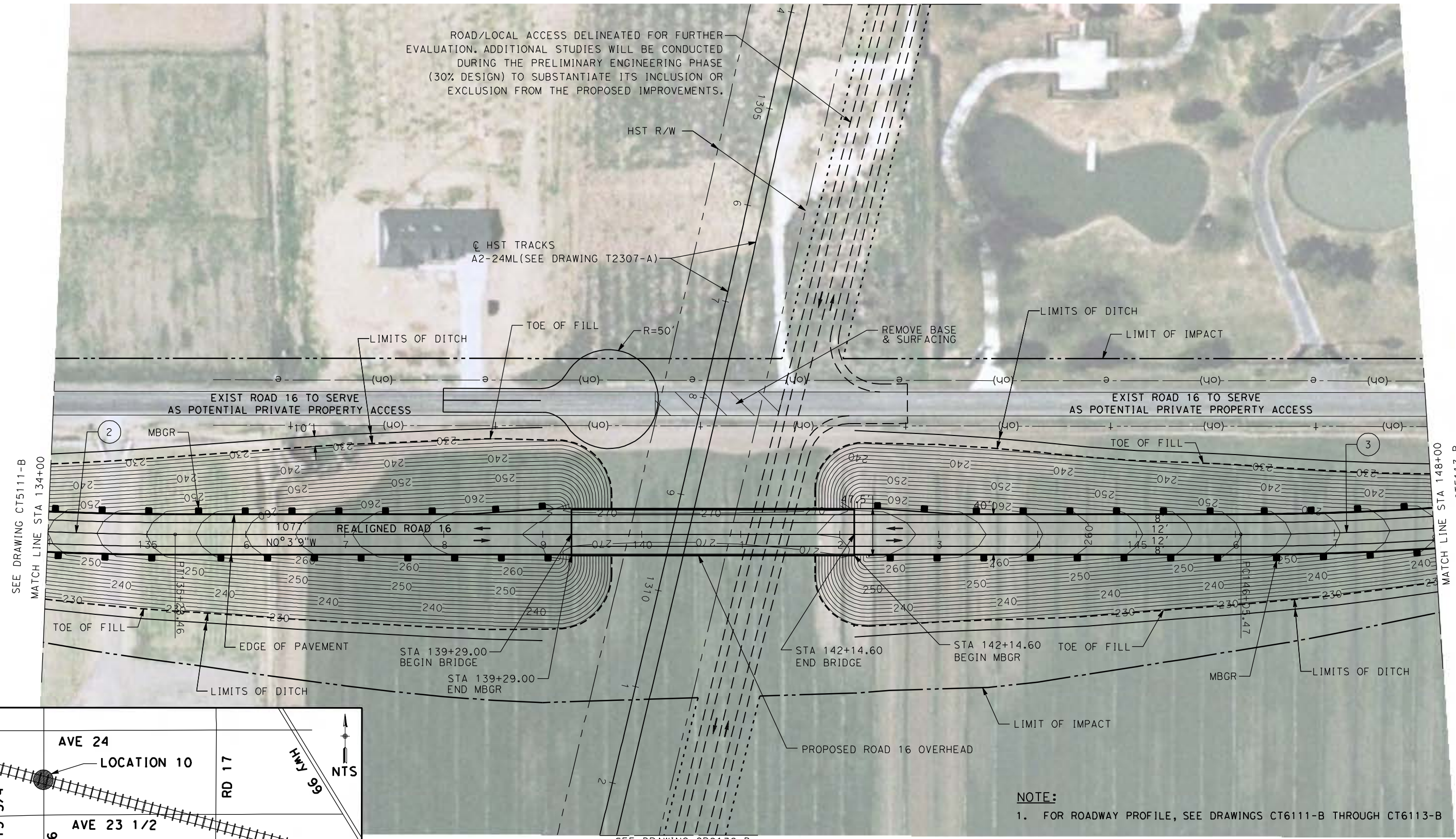


4/27/2011 6:22:46 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 1b - ave 24 wye-w.chowchilla grade separation\Layout\CT5112-B.dgn



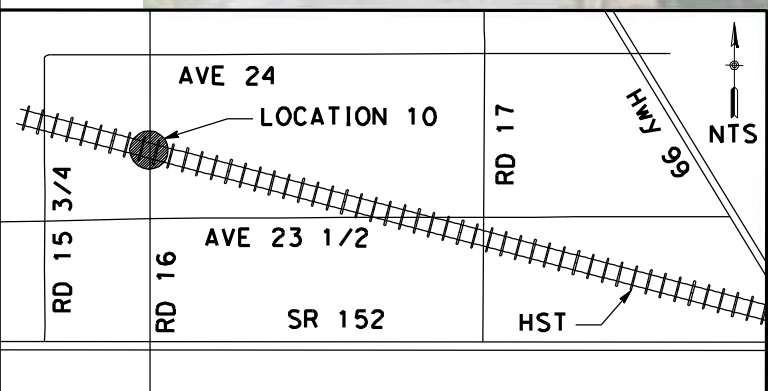
SEE DRAWING CR9138-B

ROAD/LOCAL ACCESS DELINEATED FOR FURTHER EVALUATION. ADDITIONAL STUDIES WILL BE CONDUCTED DURING THE PRELIMINARY ENGINEERING PHASE (30% DESIGN) TO SUBSTANTIATE ITS INCLUSION OR EXCLUSION FROM THE PROPOSED IMPROVEMENTS.



SEE DRAWING CT5111-B  
MATCH LINE STA 134+00

MATCH LINE STA 148+00  
SEE DRAWING CT5113-B

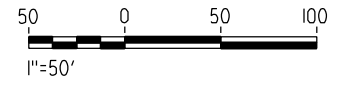


SEE DRAWING CR9138-B

**NOTE:**  
1. FOR ROADWAY PROFILE, SEE DRAWINGS CT6111-B THROUGH CT6113-B

**CURVE DATA**

No.	R	$\Delta$	T	L	V
(2)	3000.00	10°03'09"	263.85	526.35	45 MPH
(3)	3000.00	10°00'12"	262.55	523.77	45 MPH



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**D. AYELE**  
DRAWN BY  
**C. DELOS REYES**  
CHECKED BY  
**A. SILVER**  
IN CHARGE  
**A. BOONE**  
DATE  
**04/29/2011**

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

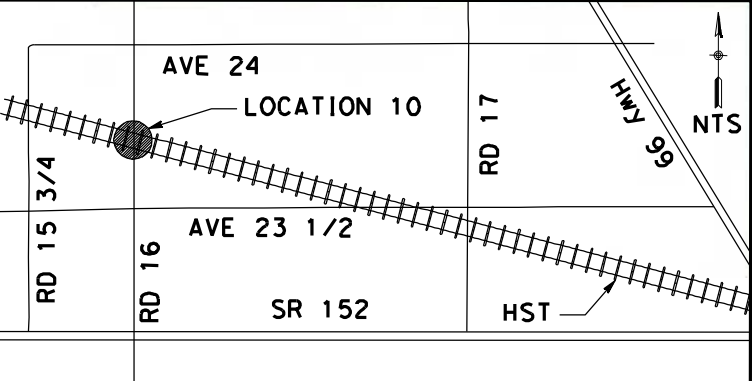
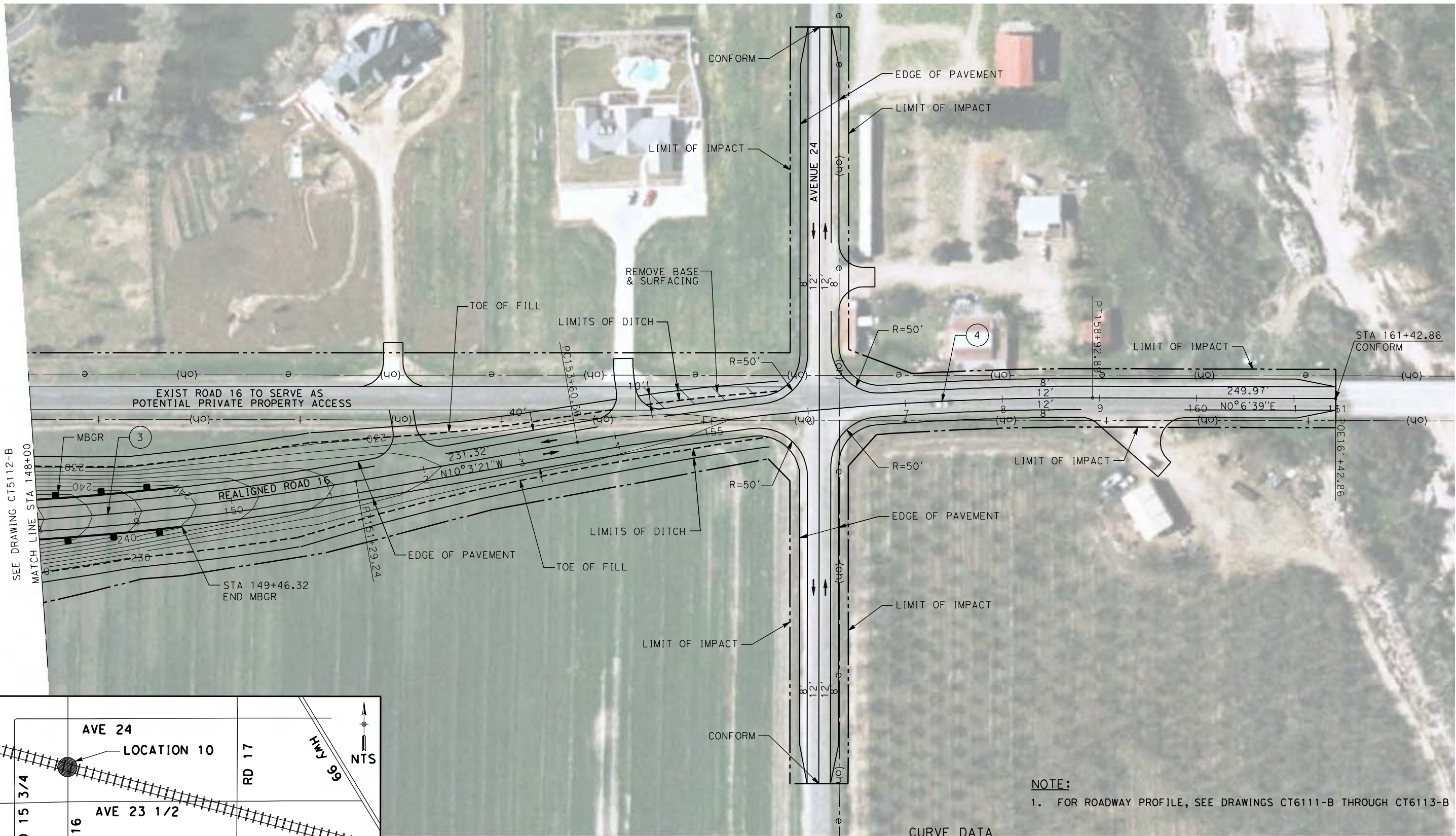


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
UPRR/SR99 MAINLINE - (AVE 24)  
GRADE SEPARATION - ROAD 16  
LAYOUT  
SHEET 2 OF 3

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
CT5112-B  
SCALE  
AS SHOWN  
SHEET NO.  
### OF ###

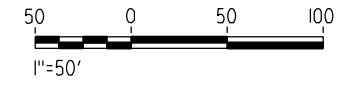


4/27/2011 6:22:54 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 1b - ave 24 wye-w.chowchilla grade separation\Layout\CT5113-B.dgn



**NOTE:**  
 1. FOR ROADWAY PROFILE, SEE DRAWINGS CT6111-B THROUGH CT6113-B

No.	R	Δ	T	L	V
(3)	3000.00	10°00'12"	262.55	523.77	45 MPH
(4)	3000.00	10°10'00"	266.86	532.33	45 MPH



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**D. AYELE**  
 DRAWN BY  
**C. DELOS REYES**  
 CHECKED BY  
**A. SILVER**  
 IN CHARGE  
**A. BOONE**  
 DATE  
**04/29/2011**

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

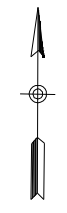
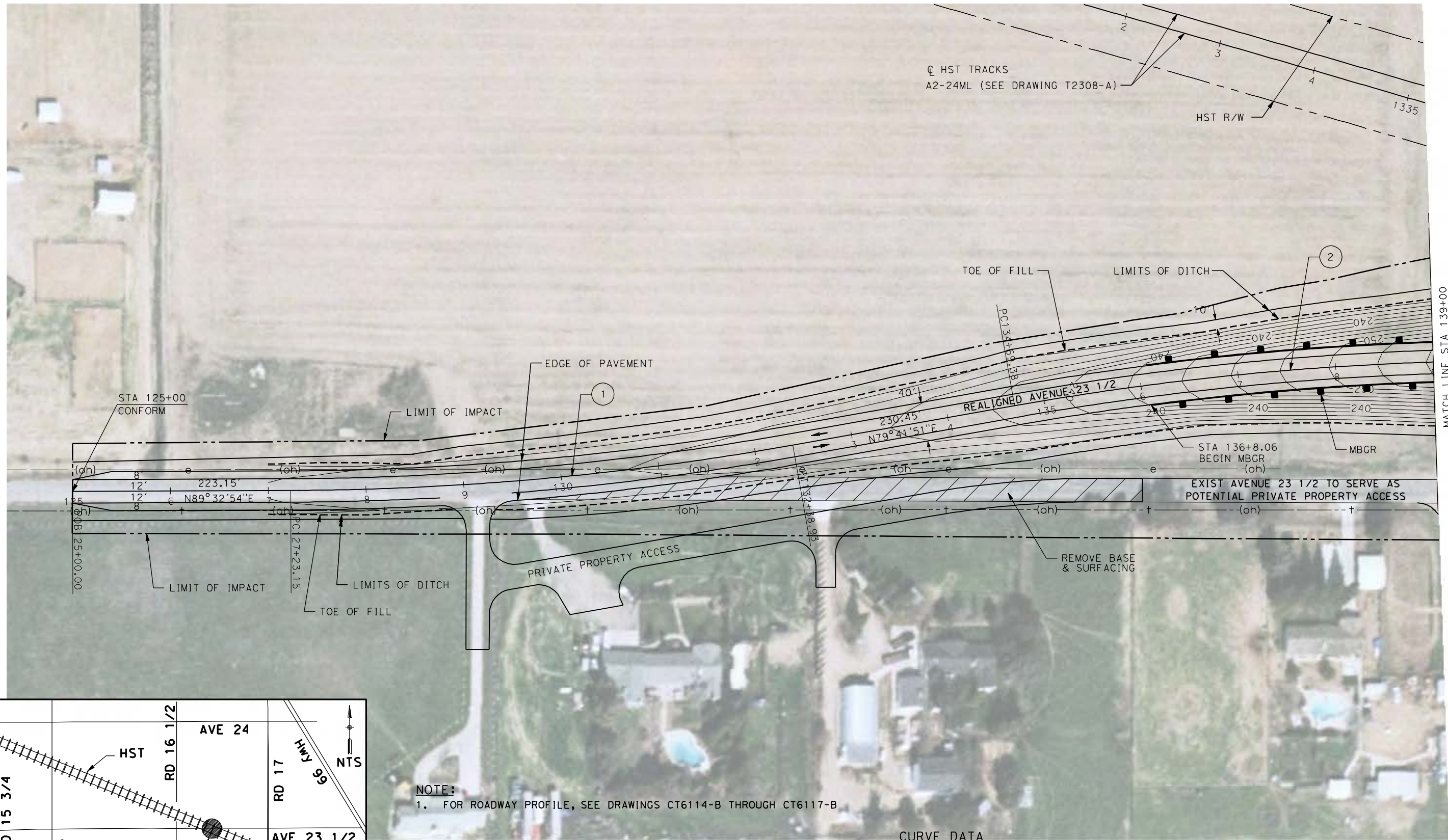


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 MAINLINE - (AVE 24)  
 GRADE SEPARATION - ROAD 16  
 LAYOUT  
 SHEET 3 OF 3

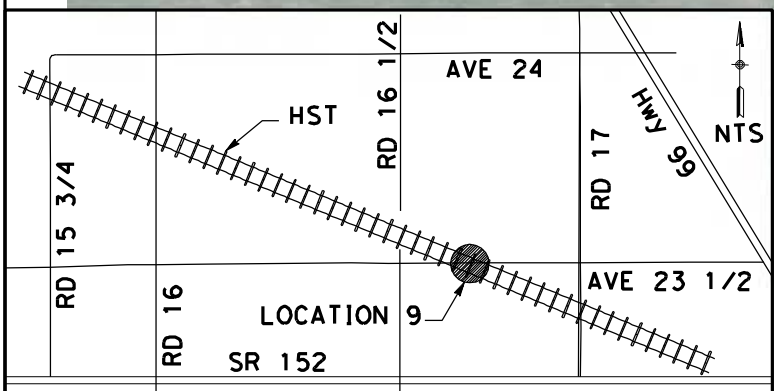
CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CT5113-B  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###



4/27/2011 6:23:05 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla volume 1b - ave 24 wye-w.chowchilla grade separation\Layout\CT5114-B.dgn



MATCH LINE STA 139+00  
 SEE DRAWING CT5115-B



**NOTE:**  
 1. FOR ROADWAY PROFILE, SEE DRAWINGS CT6114-B THROUGH CT6117-B

No.	R	Δ	T	L	V
①	3000.00	09°51'03"	258.53	515.78	45 MPH
②	3000.00	10°04'41"	264.53	527.69	45 MPH



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
 D. AYELE  
 DRAWN BY  
 C. DELOS REYES  
 CHECKED BY  
 A. SILVER  
 IN CHARGE  
 A. BOONE  
 DATE  
 04/29/2011

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



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 MAINLINE - (AVE 24)  
 GRADE SEPARATION - AVENUE 23 1/2  
 LAYOUT  
 SHEET 1 OF 4

CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CT5114-B  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###



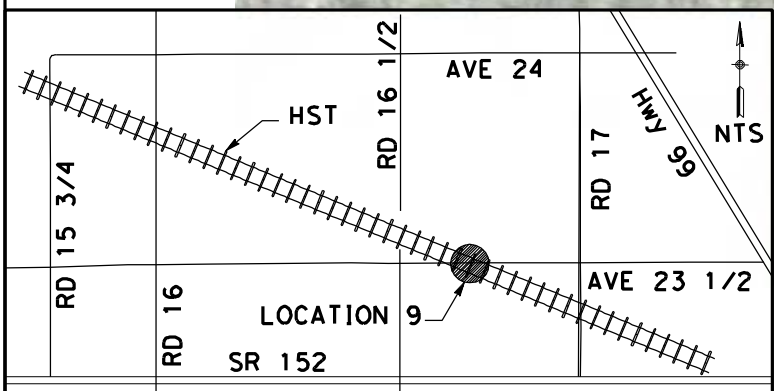






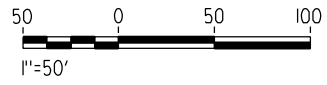


4/27/2011 6:23:37 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 1b - ave 24 wye-w.chowchilla grade separation\Layout\CT5117-B.dgn



**NOTE:**  
 1. FOR ROADWAY PROFILE, SEE DRAWINGS CT6114-B THROUGH CT6117-B

CURVE DATA					
No.	R	$\Delta$	T	L	V
(4)	3000.00	10°10'00"	266.86	532.33	45 MPH



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
 D. AYELE  
 DRAWN BY  
 C. DELOS REYES  
 CHECKED BY  
 A. SILVER  
 IN CHARGE  
 A. BOONE  
 DATE  
 04/29/2011

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

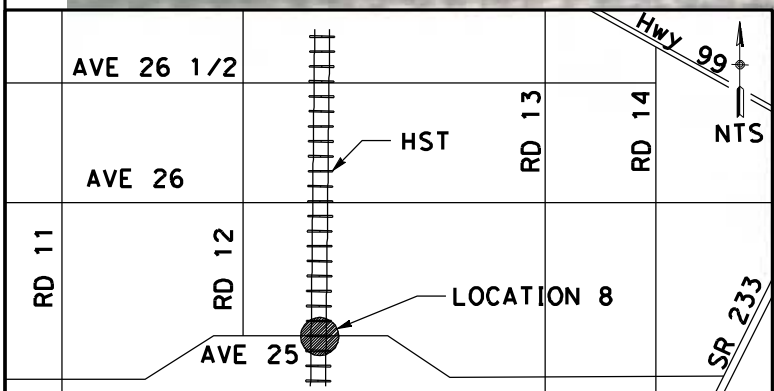
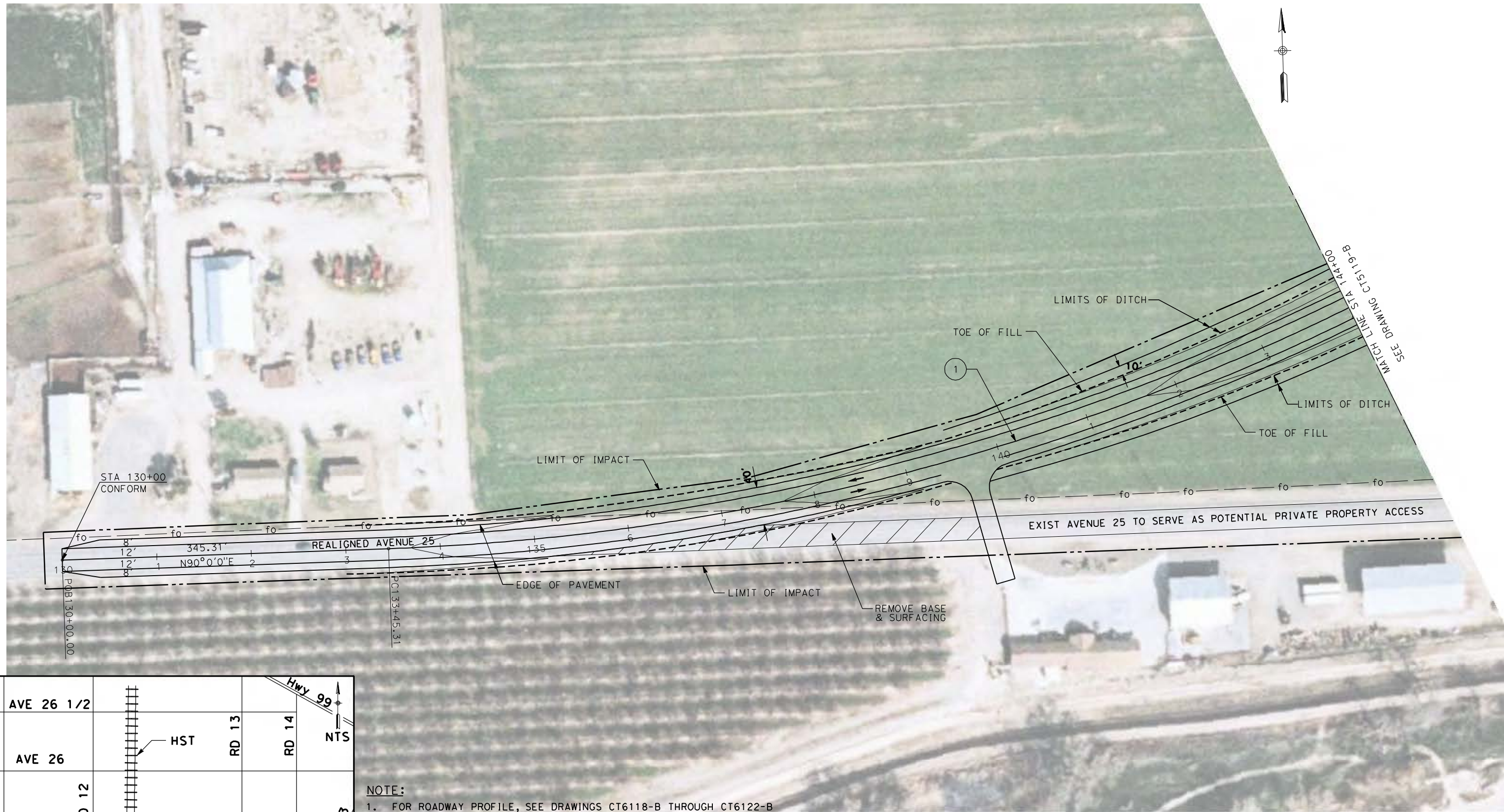


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 MAINLINE - (AVE 24)  
 GRADE SEPARATION - AVENUE 23 1/2  
 LAYOUT  
 SHEET 4 OF 4

CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CT5117-B  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###

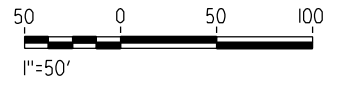


ReyesC1 4/27/2011 6:23:45 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 1b - ave 24 wye-w.chowchilla\grade separation\Layout\CT5118-B.dgn



**NOTE:**  
 1. FOR ROADWAY PROFILE, SEE DRAWINGS CT6118-B THROUGH CT6122-B

CURVE DATA					
No.	R	$\Delta$	T	L	V
(1)	2500.00	31°15'00"	699.19	1363.54	45 MPH



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
 D. AYELE  
 DRAWN BY  
 C. DELOS REYES  
 CHECKED BY  
 A. SILVER  
 IN CHARGE  
 A. BOONE  
 DATE  
 04/29/2011

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

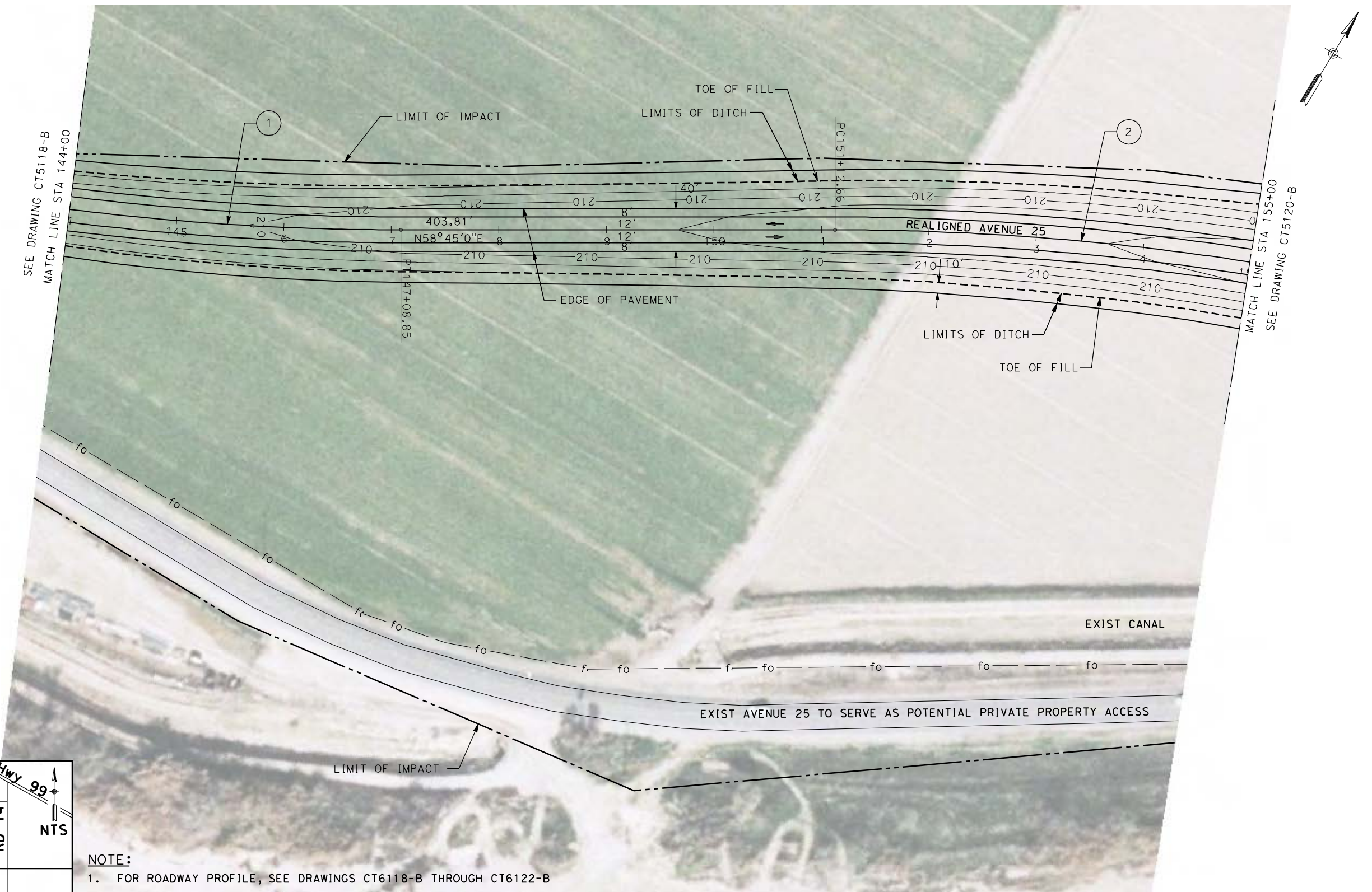


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 WYE - (AVE 24)  
 GRADE SEPARATION - AVENUE 25  
 LAYOUT  
 SHEET 1 OF 5

CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CT5118-B  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###

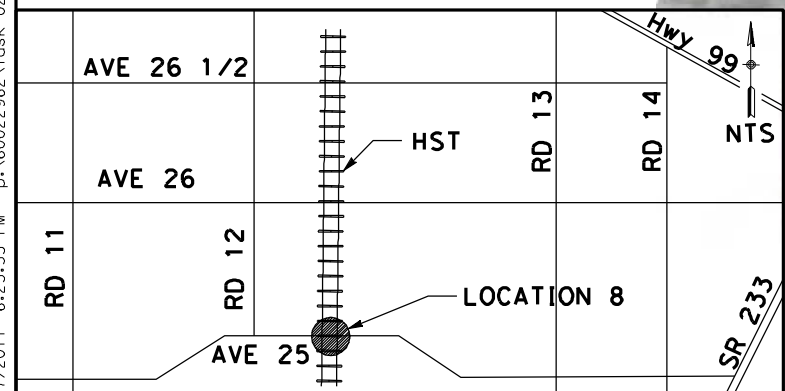


4/27/2011 6:23:53 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 1b - ave 24 wye & w. chowchilla\grade separation\Layout\CT5119-B.dgn



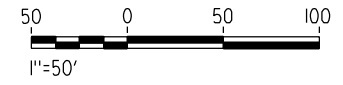
SEE DRAWING CT5118-B  
MATCH LINE STA 144+00

MATCH LINE STA 155+00  
SEE DRAWING CT5120-B



NOTE:  
1. FOR ROADWAY PROFILE, SEE DRAWINGS CT6118-B THROUGH CT6122-B

CURVE DATA					
No.	R	$\Delta$	T	L	V
①	2500.00	31° 15' 00"	699.19	1363.54	45 MPH
②	2500.00	33° 15' 00"	746.47	1450.80	45 MPH



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
 DRAWN BY  
C. DELOS REYES  
 CHECKED BY  
A. SILVER  
 IN CHARGE  
A. BOONE  
 DATE  
04/29/2011

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



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 WYE - (AVE 24)  
 GRADE SEPARATION - AVENUE 25  
 LAYOUT  
 SHEET 2 OF 5

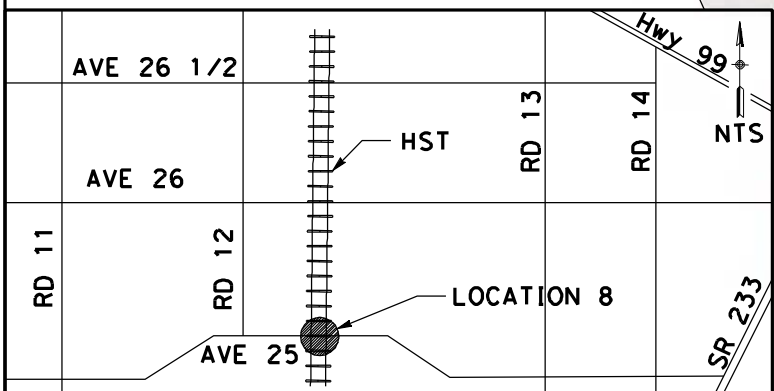
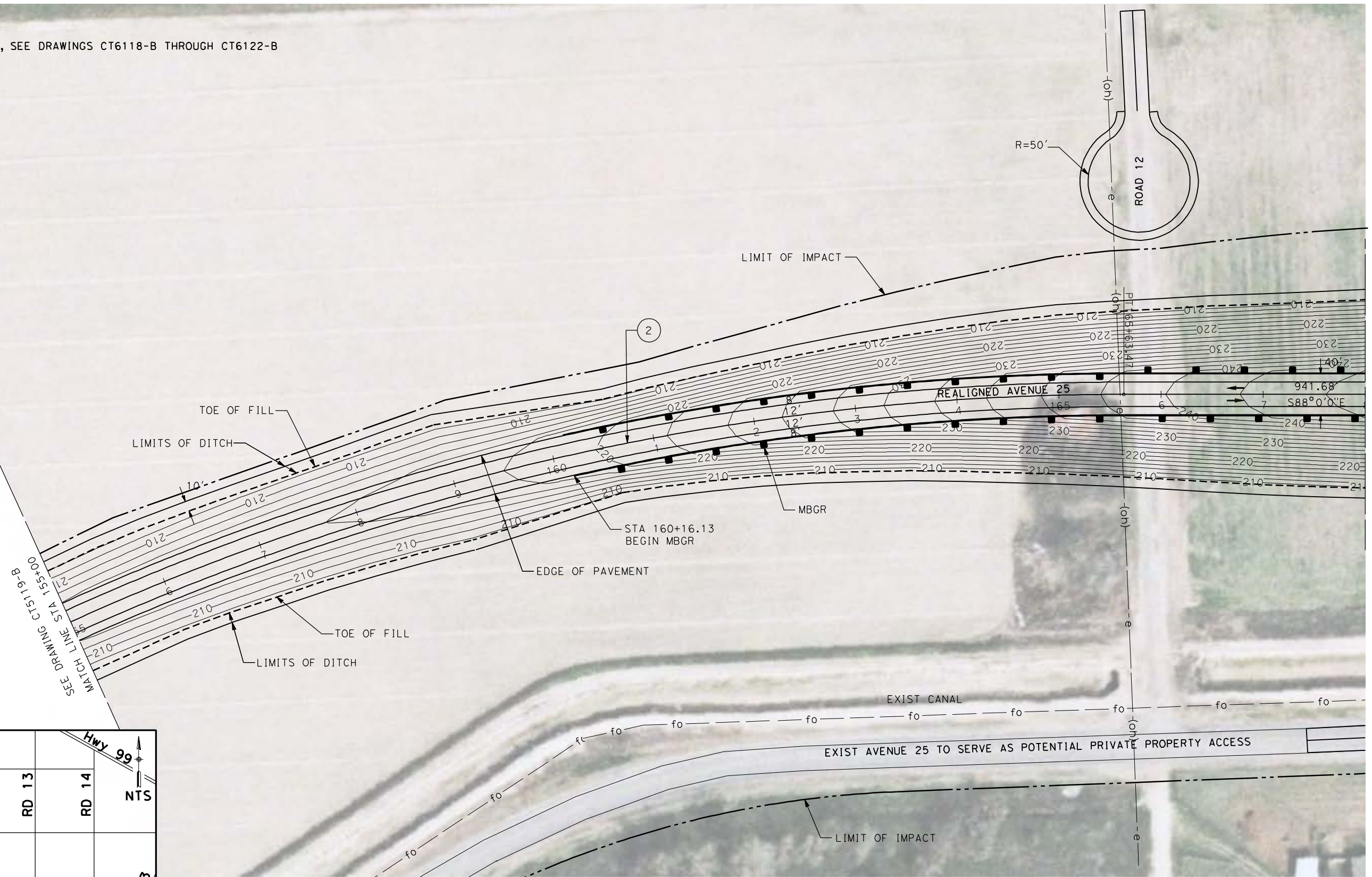
CONTRACT NO.  
HSR06-007  
 DRAWING NO.  
CT5119-B  
 SCALE  
AS SHOWN  
 SHEET NO.  
### OF ###



4/27/2011 6:24:01 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 1b - ave 24 wye-w.chowchilla grade separation\layout\CT5120-B.dgn  
 ReyesC1

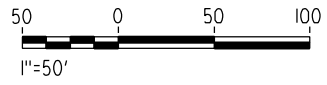
**NOTE:**

1. FOR ROADWAY PROFILE, SEE DRAWINGS CT6118-B THROUGH CT6122-B



**CURVE DATA**

No.	R	$\Delta$	T	L	V
(2)	2500.00	33° 15' 00"	746.47	1450.80	45 MPH



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
 D. AYELE  
 DRAWN BY  
 C. DELOS REYES  
 CHECKED BY  
 A. SILVER  
 IN CHARGE  
 A. BOONE  
 DATE  
 04/29/2011

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



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 WYE - (AVE 24)  
 GRADE SEPARATION - AVENUE 25  
 LAYOUT  
 SHEET 3 OF 5

CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CT5120-B  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###

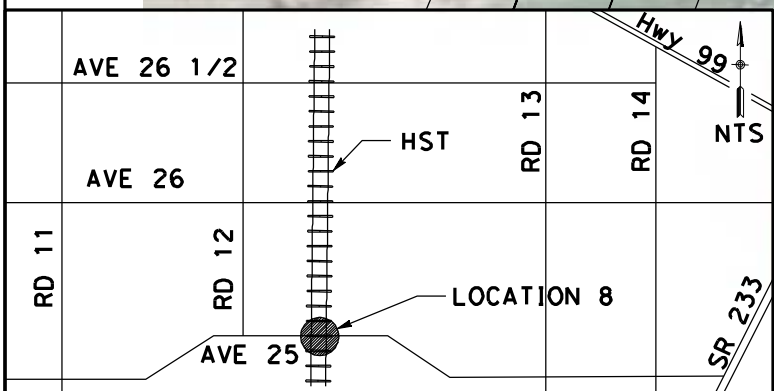
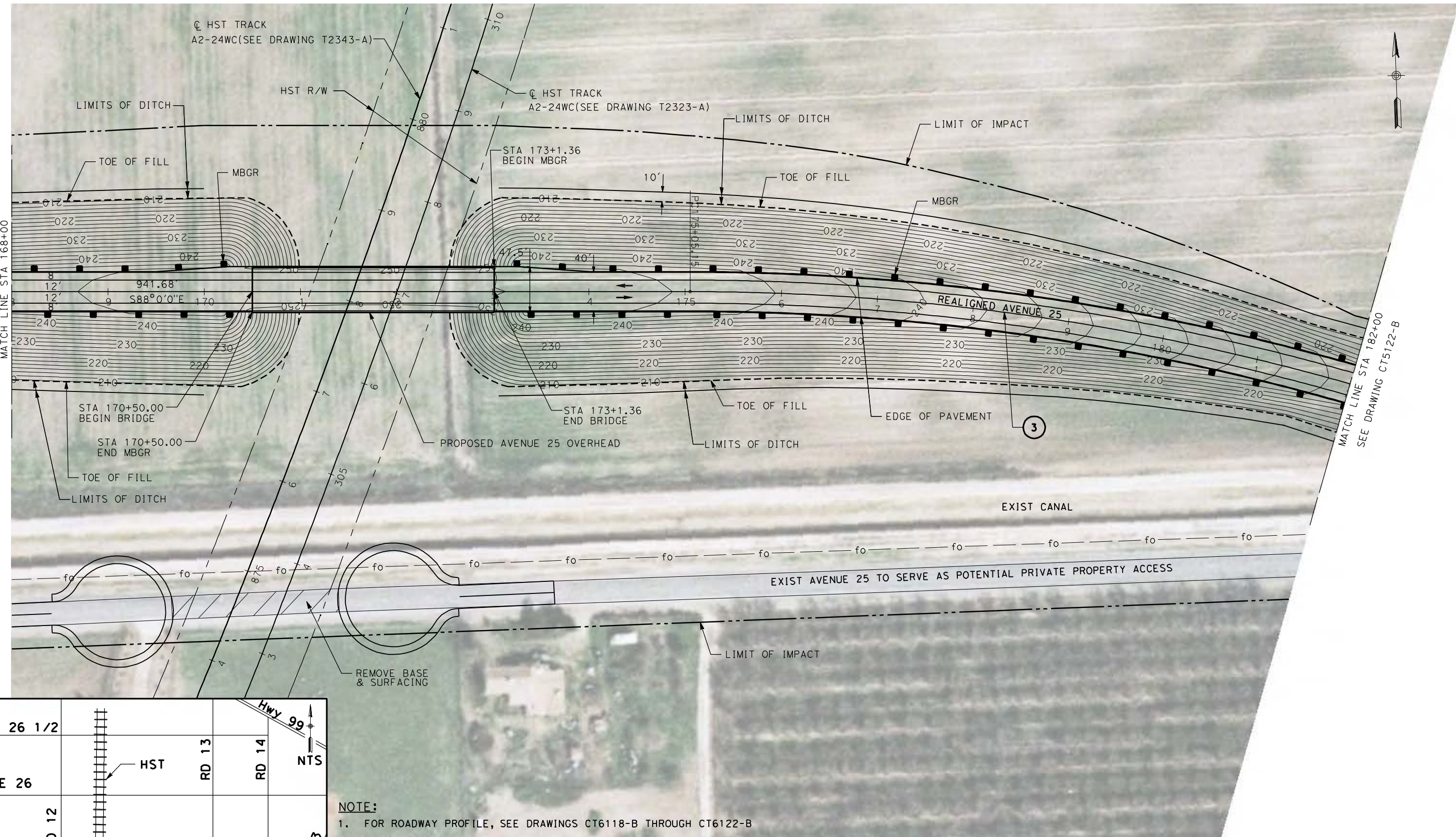
MATCH LINE STA 168+00  
 SEE DRAWING CT5121-B



ReyesCI 4/27/2011 6:24:12 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla volume 1b - ave 24 wye-w.chowchilla grade separation\Layout\CT5121-B.dgn

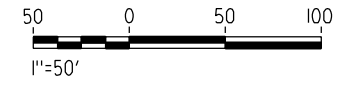
SEE DRAWING CT5120-B  
MATCH LINE STA 168+00

MATCH LINE STA 182+00  
SEE DRAWING CT5122-B



**NOTE:**  
1. FOR ROADWAY PROFILE, SEE DRAWINGS CT6118-B THROUGH CT6122-B

CURVE DATA					
No.	R	Δ	T	L	V
(3)	2500.00	24°45'07"	548.56	1080.00	45 MPH



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
 DRAWN BY  
C. DELOS REYES  
 CHECKED BY  
A. SILVER  
 IN CHARGE  
A. BOONE  
 DATE  
04/29/2011

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

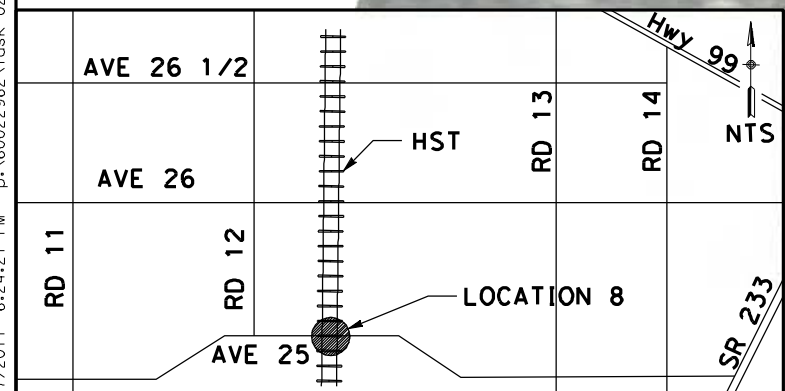
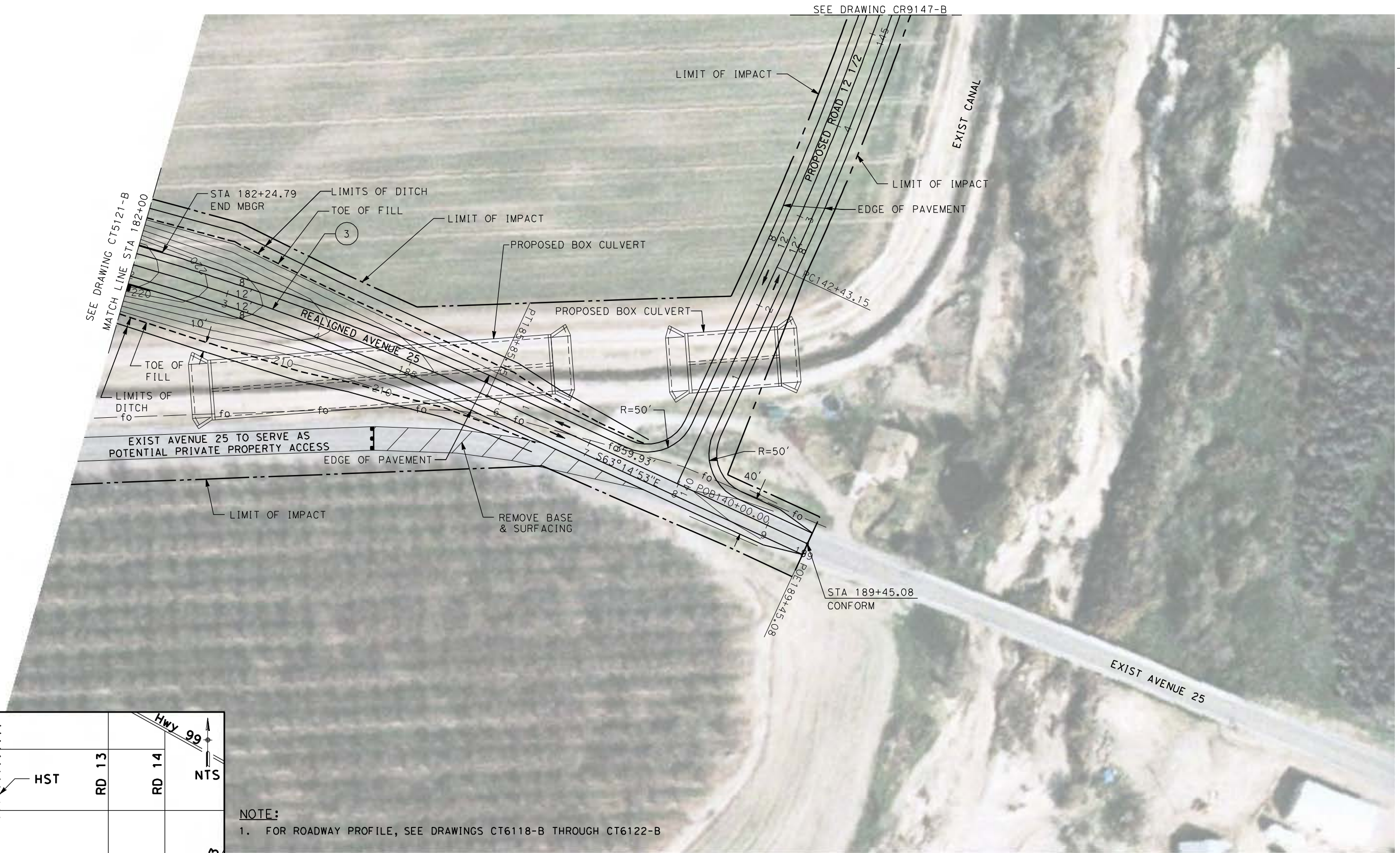


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 WYE - (AVE 24)  
 GRADE SEPARATION - AVENUE 25  
 LAYOUT  
 SHEET 4 OF 5

CONTRACT NO.  
HSR06-007  
 DRAWING NO.  
CT5121-B  
 SCALE  
AS SHOWN  
 SHEET NO.  
### OF ###

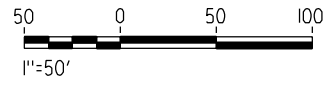


4/27/2011 6:24:21 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 1b - ave 24 wye & w. chowchilla\grade separation\Layout\CT5122-B.dgn



**NOTE:**  
 1. FOR ROADWAY PROFILE, SEE DRAWINGS CT6118-B THROUGH CT6122-B

CURVE DATA					
No.	R	$\Delta$	T	L	V
(3)	2500.00	24° 45' 07"	548.56	1080.00	45 MPH



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
 D. AYELE  
 DRAWN BY  
 C. DELOS REYES  
 CHECKED BY  
 A. SILVER  
 IN CHARGE  
 A. BOONE  
 DATE  
 04/29/2011

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

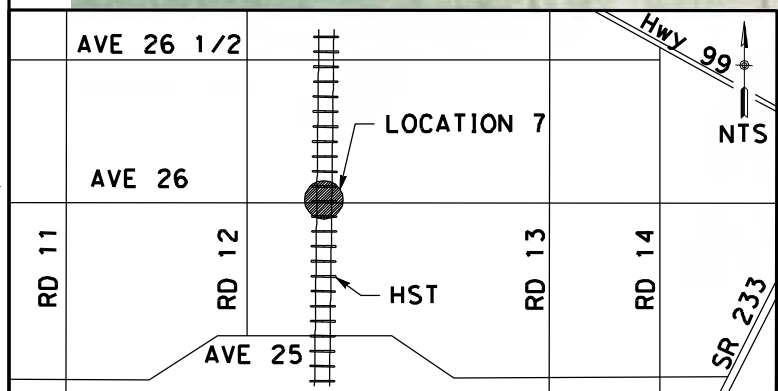
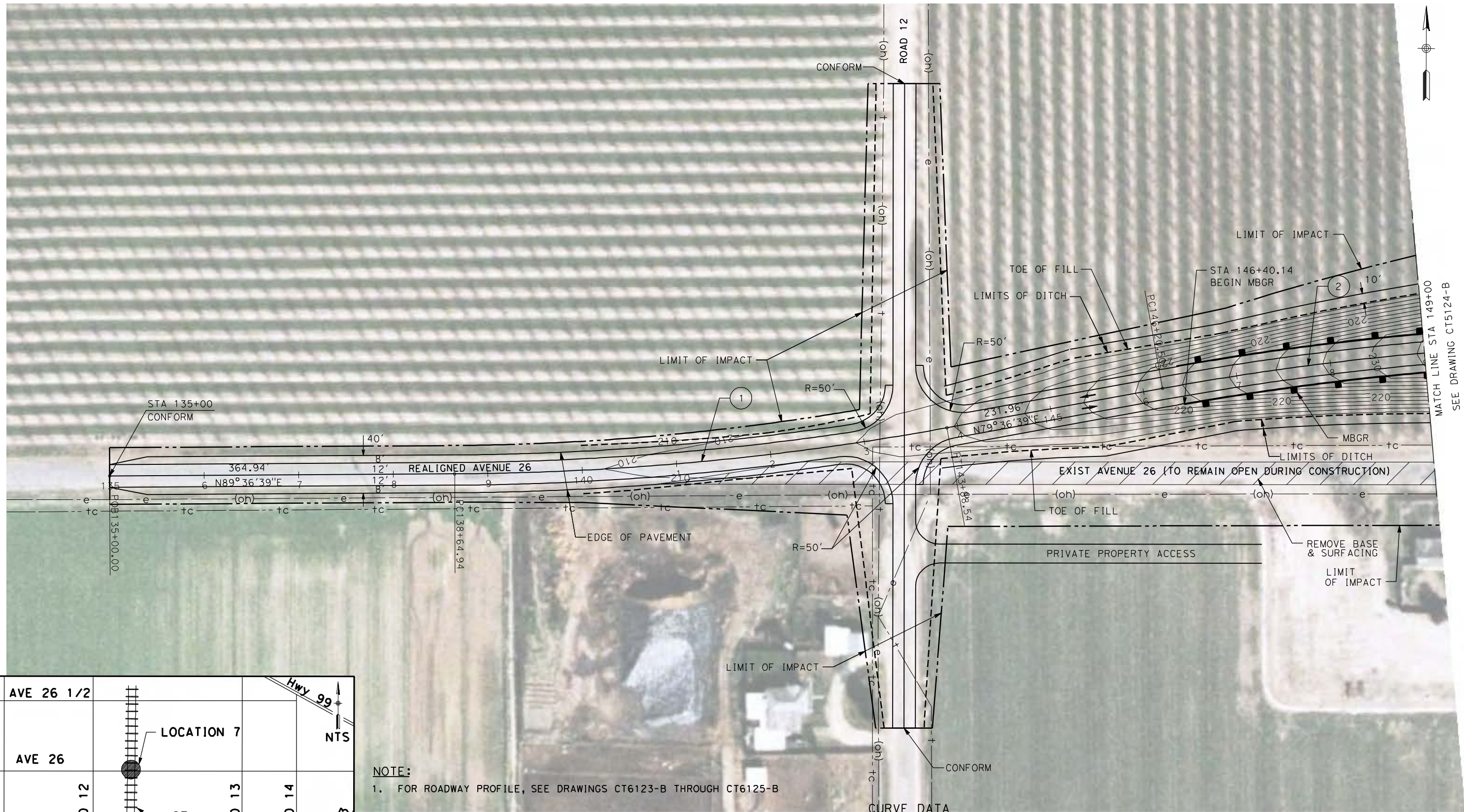


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 WYE - (AVE 24)  
 GRADE SEPARATION - AVENUE 25  
 LAYOUT  
 SHEET 5 OF 5

CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CT5122-B  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###

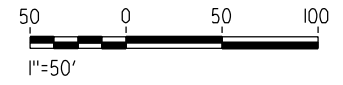


4/27/2011 6:24:29 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 1b - ave 24 wye-w.chowchilla grade separation\Layout\CT5123-B.dgn



**NOTE:**  
 1. FOR ROADWAY PROFILE, SEE DRAWINGS CT6123-B THROUGH CT6125-B

No.	R	$\Delta$	T	L	V
①	3000.00	10°00'00"	262.47	523.60	45 MPH
②	3000.00	10°21'05"	271.74	541.99	45 MPH



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
 D. AYELE  
 DRAWN BY  
 C. DELOS REYES  
 CHECKED BY  
 A. SILVER  
 IN CHARGE  
 A. BOONE  
 DATE  
 04/29/2011

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

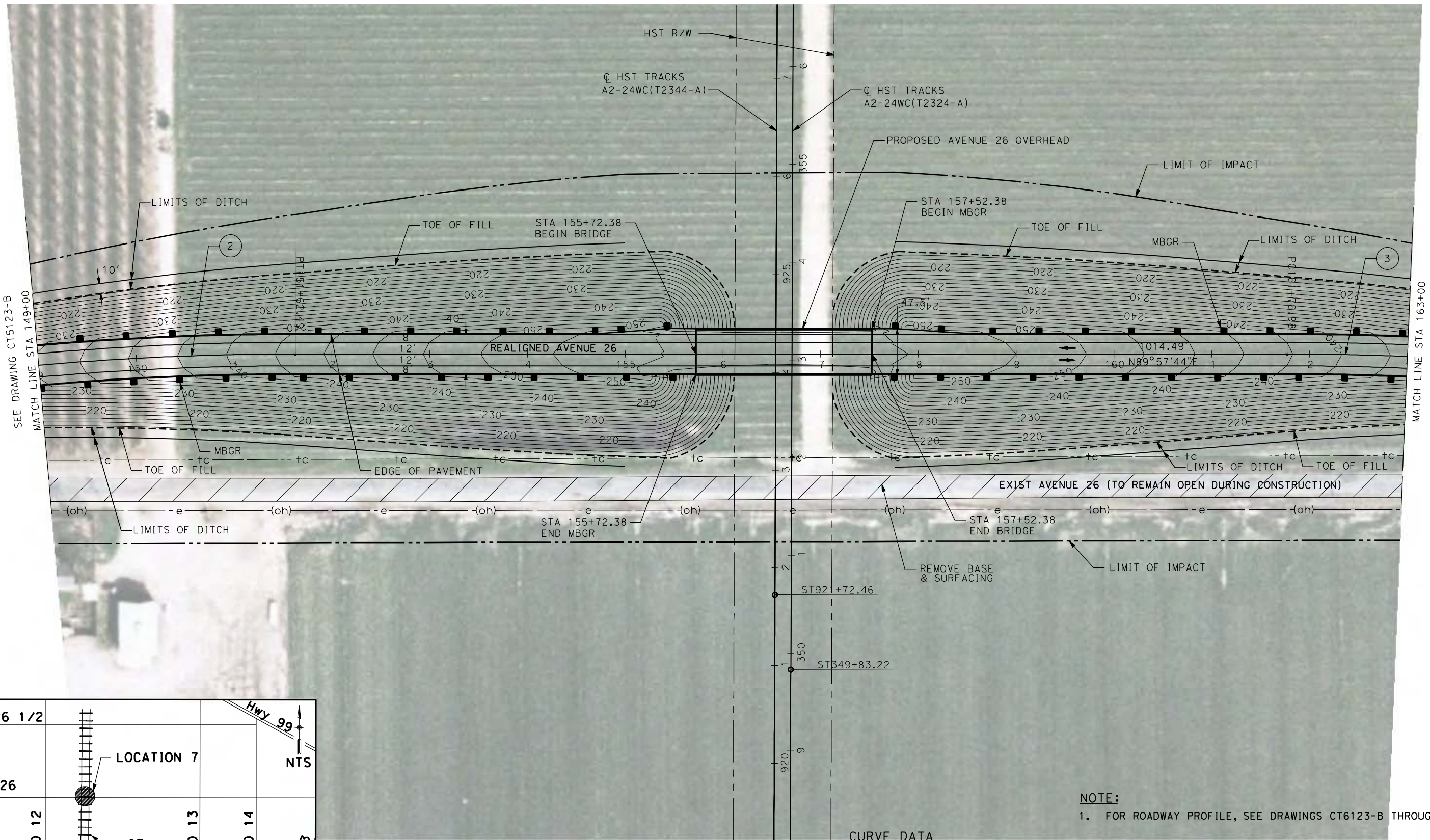


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 WYE - (AVE 24)  
 GRADE SEPARATION - AVENUE 26  
 LAYOUT  
 SHEET 1 OF 3

CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CT5123-B  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###

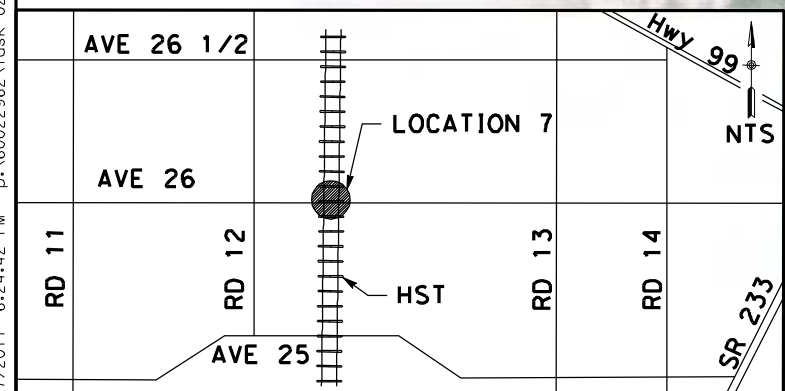


4/27/2011 6:24:42 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla volume 1b - ave 24 wye-w.chowchilla grade separation\Layout\CT5124-B.dgn



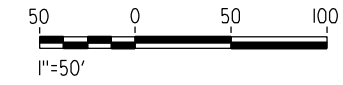
SEE DRAWING CT5123-B  
MATCH LINE STA 149+00

MATCH LINE STA 163+00  
SEE DRAWING CT5125-B



**NOTE:**  
 1. FOR ROADWAY PROFILE, SEE DRAWINGS CT6123-B THROUGH CT6125-B

No.	R	$\Delta$	T	L	V
②	3000.00	10°21'05"	271.74	541.99	45 MPH
③	3000.00	10°02'14"	263.45	525.55	45 MPH



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
 D. AYELE  
 DRAWN BY  
 C. DELOS REYES  
 CHECKED BY  
 A. SILVER  
 IN CHARGE  
 A. BOONE  
 DATE  
 04/29/2011

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

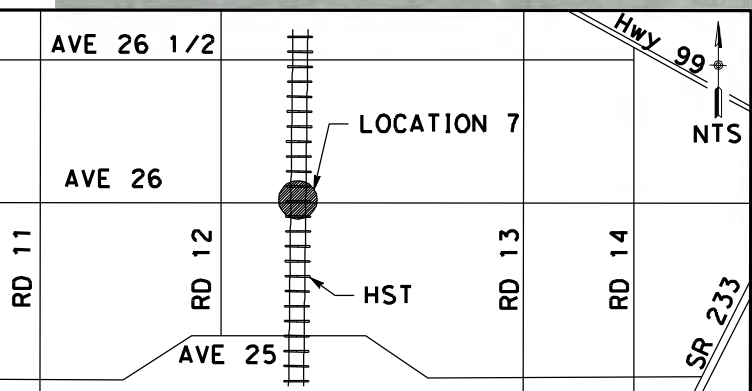
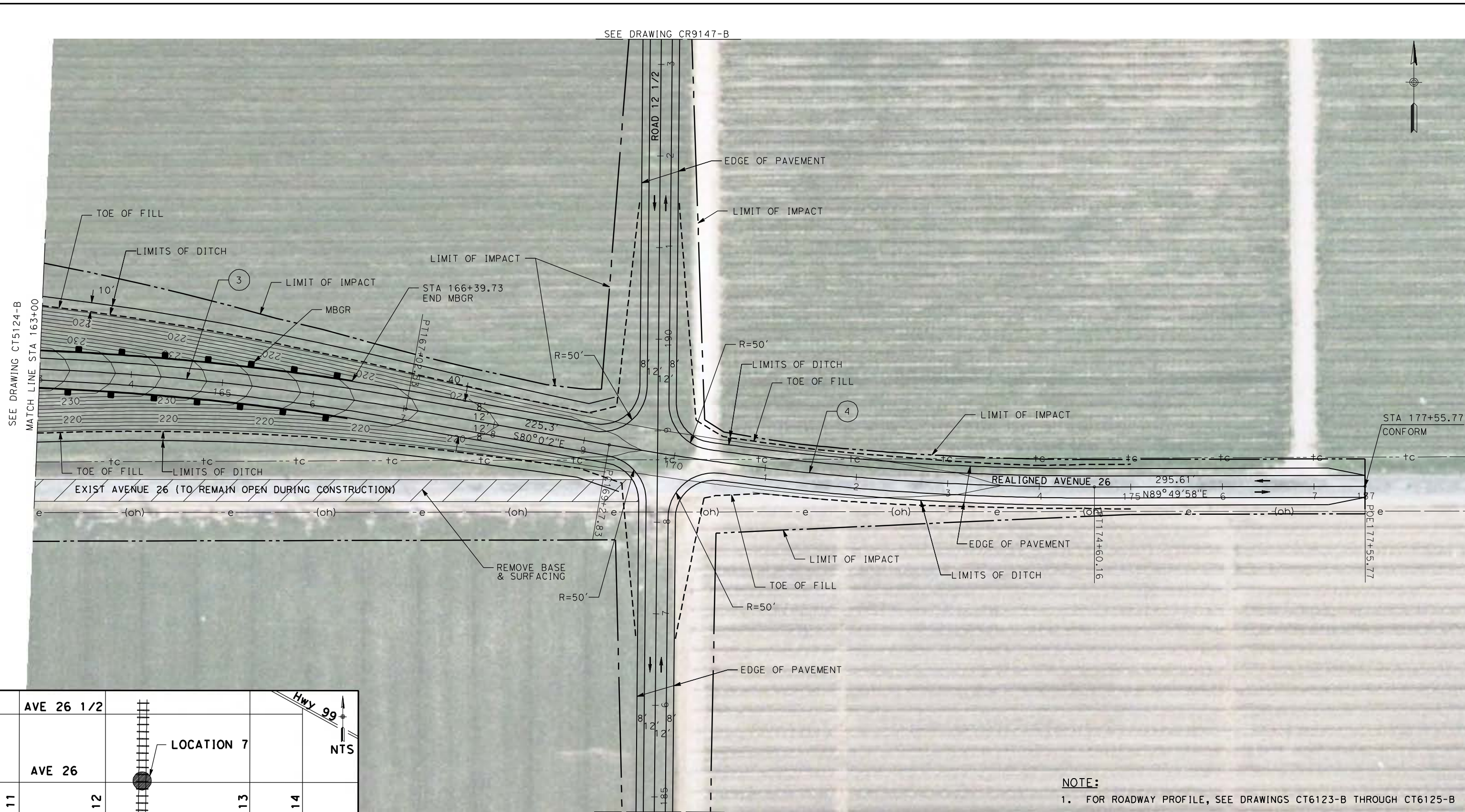


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 WYE - (AVE 24)  
 GRADE SEPARATION - AVENUE 26  
 LAYOUT  
 SHEET 2 OF 3

CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CT5124-B  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###



4/27/2011 6:24:51 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla volume 1b - ave 24 wye-w.chowchilla grade separation\Layout\CT5125-B.dgn  
 ReyesC1



**NOTE:**  
 1. FOR ROADWAY PROFILE, SEE DRAWINGS CT6123-B THROUGH CT6125-B

CURVE DATA					
No.	R	$\Delta$	T	L	V
(3)	3000.00	10° 02' 14"	263.45	525.55	45 MPH
(4)	3000.00	10° 10' 00"	266.86	532.33	45 MPH



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**D. AYELE**  
 DRAWN BY  
**C. DELOS REYES**  
 CHECKED BY  
**A. SILVER**  
 IN CHARGE  
**A. BOONE**  
 DATE  
**04/29/2011**

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

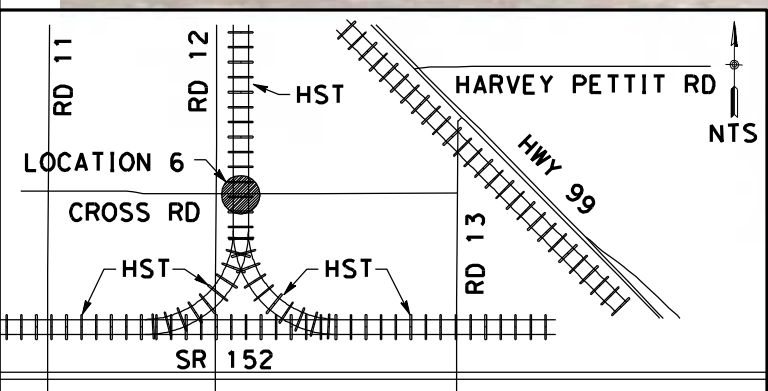
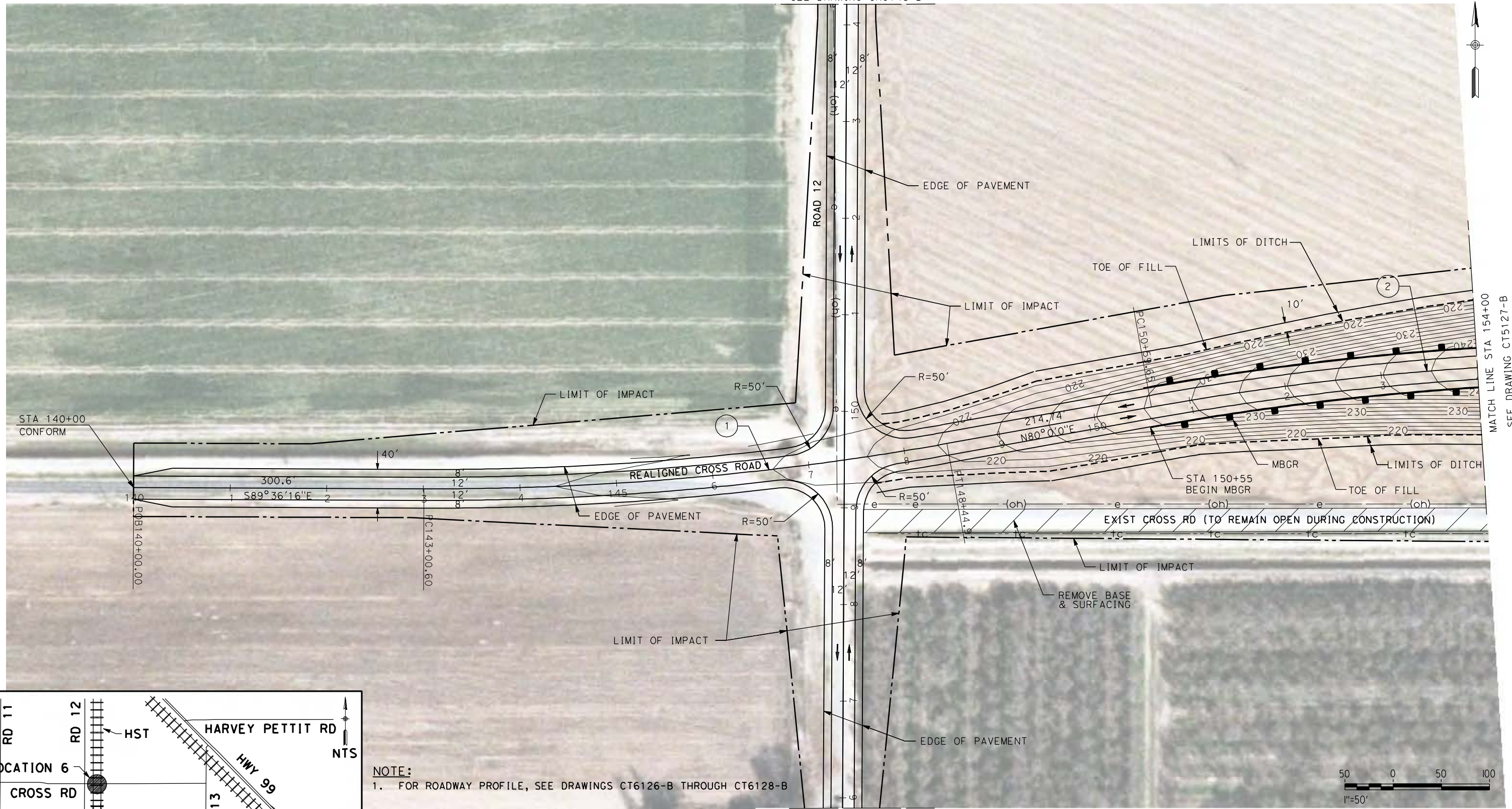


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 WYE - (AVE 24)  
 GRADE SEPARATION - AVENUE 26  
 LAYOUT  
 SHEET 3 OF 3

CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CT5125-B  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###



4/27/2011 6:25:00 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla volume 1b - ave 24 wye-w.chowchilla grade separation\Layout\CT5126-B.dgn



**NOTE:**  
 1. FOR ROADWAY PROFILE, SEE DRAWINGS CT6126-B THROUGH CT6128-B

SEE DRAWING CR9143-B  
CURVE DATA

No.	R	$\Delta$	T	L	V
①	3000.00	10°23'44"	272.90	544.31	45 MPH
②	3000.00	10°08'10"	266.06	530.73	45 MPH

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**D. AYELE**  
 DRAWN BY  
**C. DELOS REYES**  
 CHECKED BY  
**A. SILVER**  
 IN CHARGE  
**A. BOONE**  
 DATE  
**04/29/2011**

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

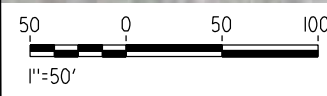
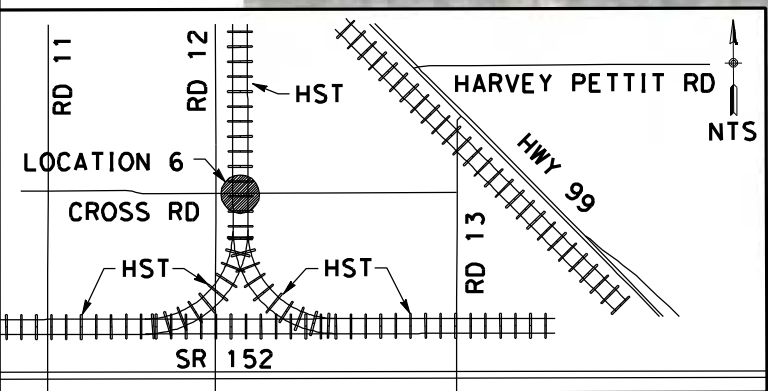
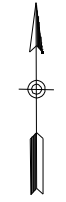
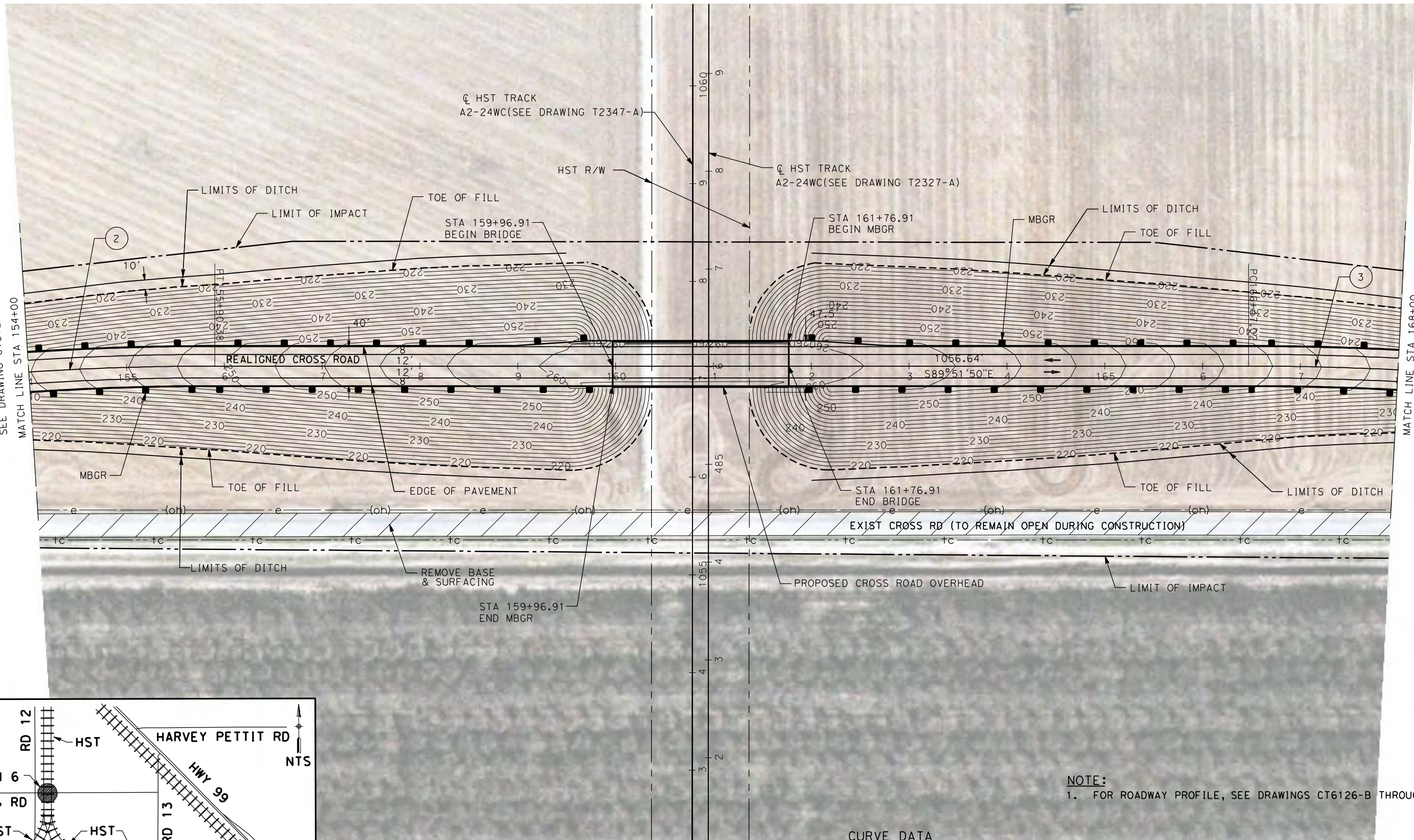


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 WYE - (AVE 24)  
 GRADE SEPARATION - CROSS ROAD  
 LAYOUT  
 SHEET 1 OF 3

CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CT5126-B  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###



4/27/2011 6:25:11 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w.chowchilla volume 1b - ave 24 wye-w.chowchilla grade separation\layout\CT5127-B.dgn



CURVE DATA

No.	R	$\Delta$	T	L	V
②	3000.00	10°08'10"	266.06	530.73	45 MPH
③	3000.00	10°59'43"	288.74	575.71	45 MPH

**NOTE:**  
 1. FOR ROADWAY PROFILE, SEE DRAWINGS CT6126-B THROUGH CT6128-B

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**D. AYELE**  
 DRAWN BY  
**C. DELOS REYES**  
 CHECKED BY  
**A. SILVER**  
 IN CHARGE  
**A. BOONE**  
 DATE  
**04/29/2011**

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

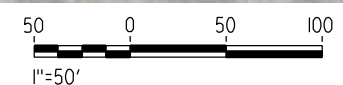
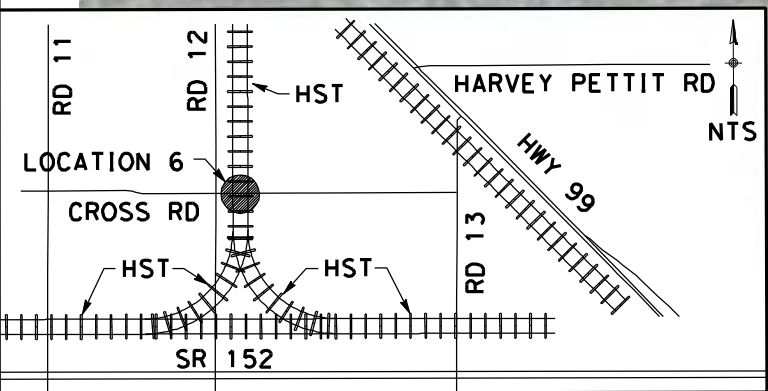
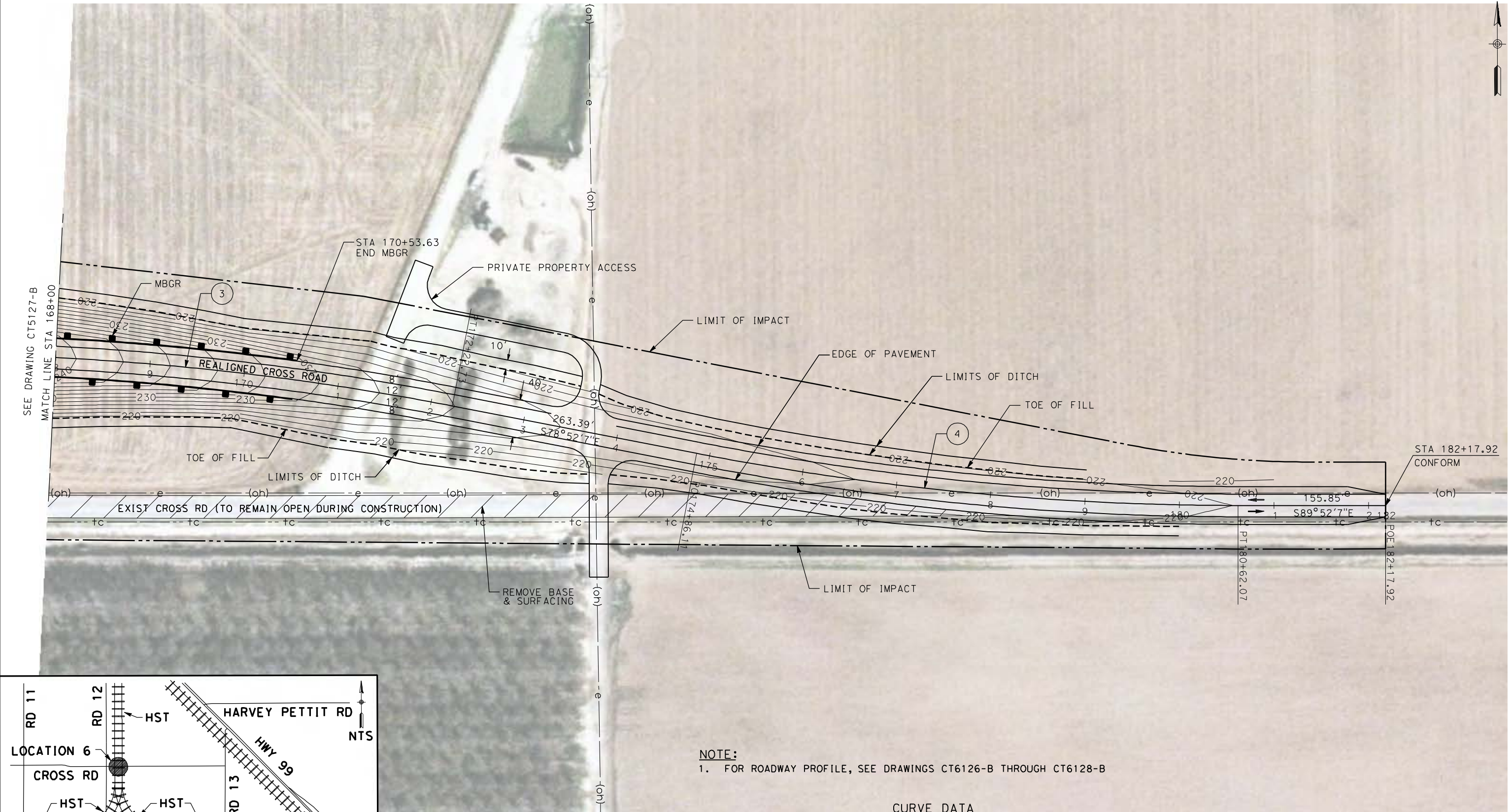


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 WYE - (AVE 24)  
 GRADE SEPARATION - CROSS ROAD  
 LAYOUT  
 SHEET 2 OF 3

CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CT5127-B  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###



4/27/2011 6:25:21 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla volume 1b - ave 24 wye-w.chowchilla grade separation\Layout\CT5128-B.dgn



**NOTE:**  
 1. FOR ROADWAY PROFILE, SEE DRAWINGS CT6126-B THROUGH CT6128-B

**CURVE DATA**

No.	R	$\Delta$	T	L	V
③	3000.00	10°59'43"	288.74	575.71	45 MPH
④	3000.00	11°00'00"	288.87	575.96	45 MPH

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**D. AYELE**  
 DRAWN BY  
**C. DELOS REYES**  
 CHECKED BY  
**A. SILVER**  
 IN CHARGE  
**A. BOONE**  
 DATE  
**04/29/2011**

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

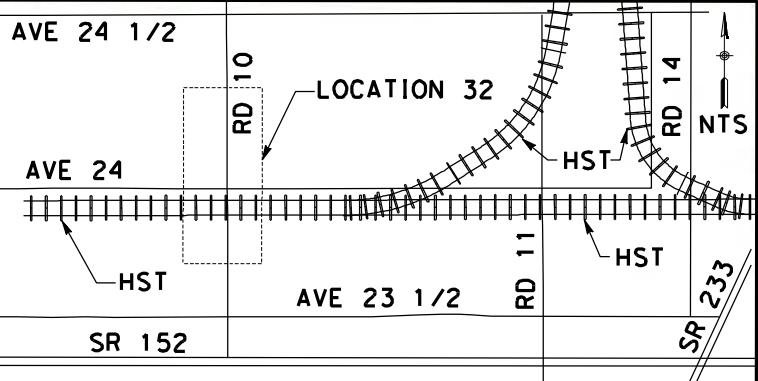
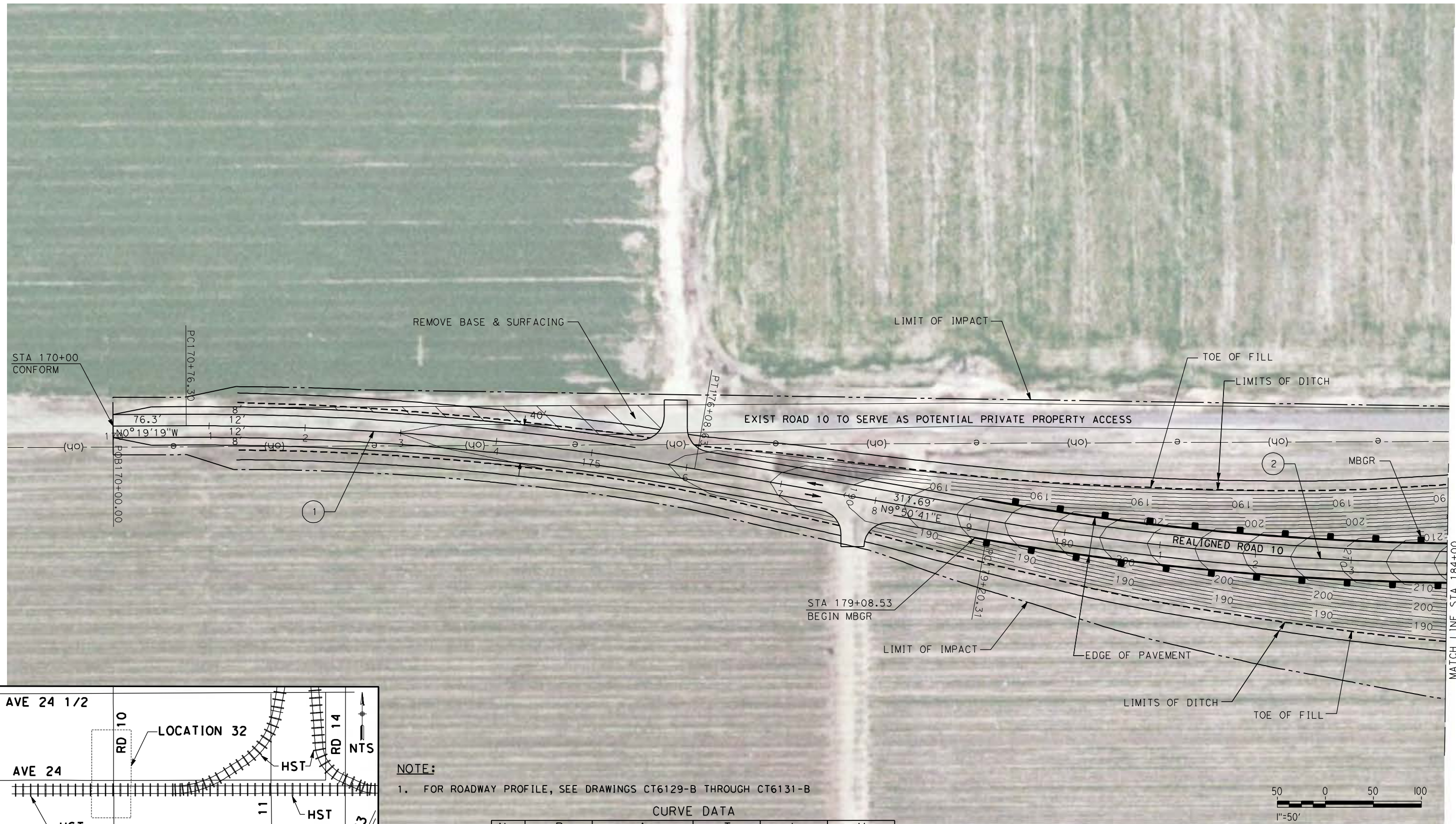


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 WYE - (AVE 24)  
 GRADE SEPARATION - CROSS ROAD  
 LAYOUT  
 SHEET 3 OF 3

CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CT5128-B  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###

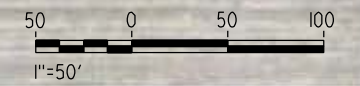


4/27/2011 6:25:37 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 1b - ave 24 wye-w.chowchilla grade separation\Layout\CT5129-B.dgn



**NOTE:**  
 1. FOR ROADWAY PROFILE, SEE DRAWINGS CT6129-B THROUGH CT6131-B

CURVE DATA					
No.	R	$\Delta$	T	L	V
(1)	3000.00	79°50'0"	266.86	532.33	45 MPH
(2)	3000.00	79°40'17"	271.14	540.81	45 MPH



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
 D. AYELE  
 DRAWN BY  
 C. DELOS REYES  
 CHECKED BY  
 A. SILVER  
 IN CHARGE  
 A. BOONE  
 DATE  
 04/29/2011

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



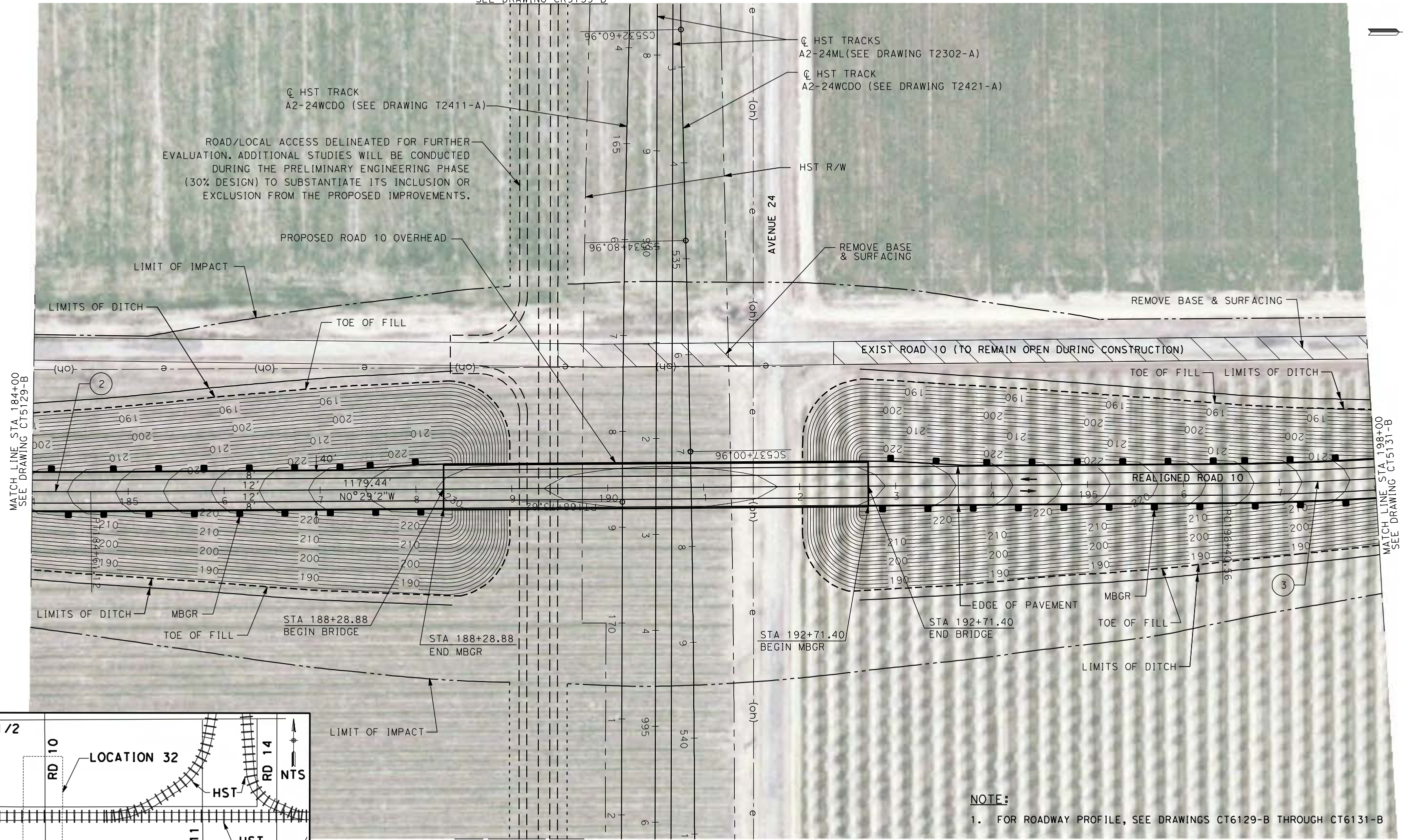
**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 MAINLINE/WYE - (WC)  
 GRADE SEPARATION - ROAD 10 ALT 1  
 LAYOUT  
 SHEET 1 OF 3

CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CT5129-B  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###



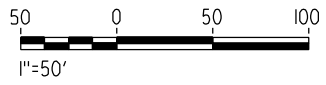
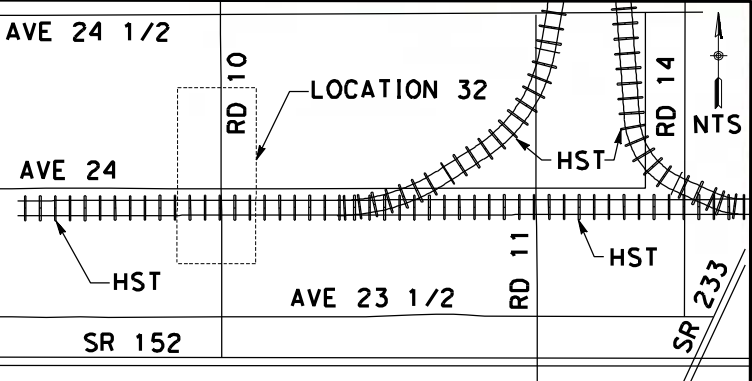
4/27/2011 6:25:54 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 1b - ave 24 wye-w.chowchilla grade separation\Layout\CT5130-B.dgn

SEE DRAWING CR9159-B



MATCH LINE STA 184+00  
 SEE DRAWING CT5129-B

MATCH LINE STA 198+00  
 SEE DRAWING CT5131-B



SEE DRAWING CR9159-B

**CURVE DATA**

No.	R	Δ	T	L	V
(2)	3000.00	79° 40' 17"	271.14	540.81	45 MPH
(3)	3000.00	79° 52' 52"	265.60	529.82	45 MPH

**NOTE:**  
 1. FOR ROADWAY PROFILE, SEE DRAWINGS CT6129-B THROUGH CT6131-B

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**D. AYELE**  
 DRAWN BY  
**C. DELOS REYES**  
 CHECKED BY  
**A. SILVER**  
 IN CHARGE  
**A. BOONE**  
 DATE  
**04/29/2011**

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



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 MAINLINE/WYE - (WC)  
 GRADE SEPARATION - ROAD 10 ALT 1  
 LAYOUT  
 SHEET 2 OF 3

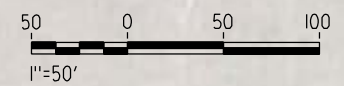
CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CT5130-B  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###



4/27/2011 6:26:10 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla volume 1b - ave 24 wye-w.chowchilla grade separation\Layout\CT5131-B.dgn

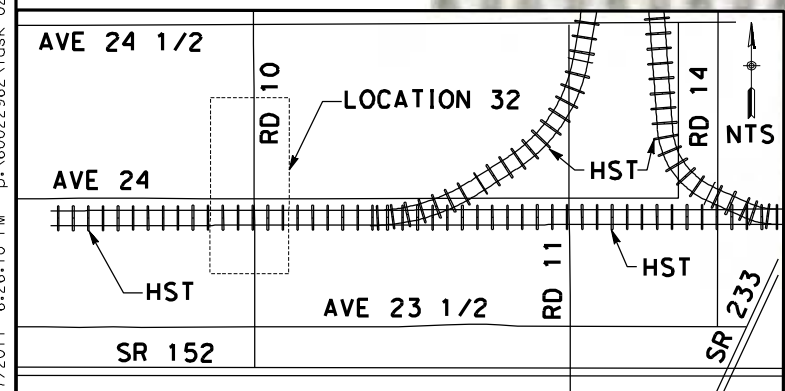


MATCH LINE STA 188+00  
 SEE DRAWING CT5130-B



**NOTE:**  
 1. FOR ROADWAY PROFILE, SEE DRAWINGS CT6129-B THROUGH CT6131-B

CURVE DATA					
No.	R	Δ	T	L	V
③	3000.00	79° 52' 52"	265.60	529.82	45 MPH
④	3000.00	79° 50' 0"	266.86	532.33	45 MPH



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
 D. AYELE  
 DRAWN BY  
 C. DELOS REYES  
 CHECKED BY  
 A. SILVER  
 IN CHARGE  
 A. BOONE  
 DATE  
 04/29/2011

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

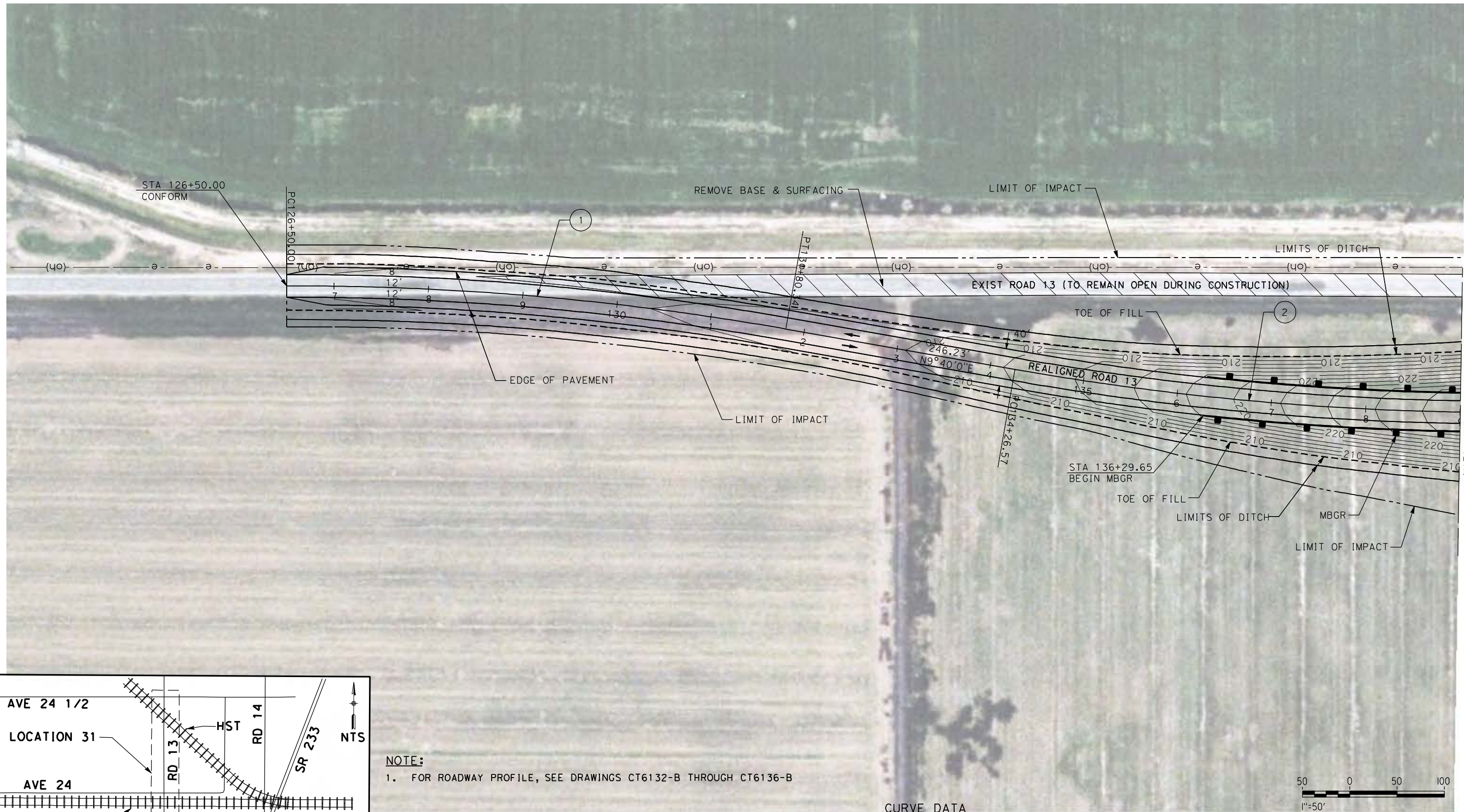


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 MAINLINE/WYE - (WC)  
 GRADE SEPARATION - ROAD 10 ALT 1  
 LAYOUT  
 SHEET 3 OF 3

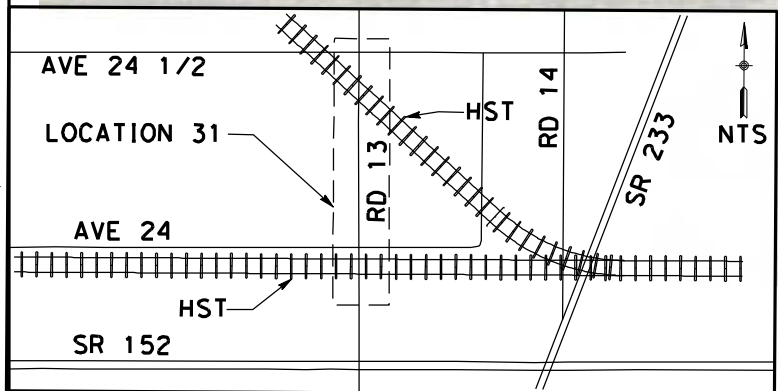
CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CT5131-B  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###



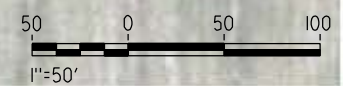
4/27/2011 6:26:24 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla volume 1b - ave 24 wye-w.chowchilla grade separation\Layout\CT5132-B.dgn



MATCH LINE STA 139+00  
 SEE DRAWING CT5133-B



**NOTE:**  
 1. FOR ROADWAY PROFILE, SEE DRAWINGS CT6132-B THROUGH CT6136-B



CURVE DATA

No.	R	Δ	T	L	V
①	3000.00	10°07'43"	265.86	530.34	45 MPH
②	3000.00	10°00'07"	262.52	532.71	45 MPH

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
 D. AYELE  
 DRAWN BY  
 C. DELOS REYES  
 CHECKED BY  
 A. SILVER  
 IN CHARGE  
 A. BOONE  
 DATE  
 04/29/2011

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



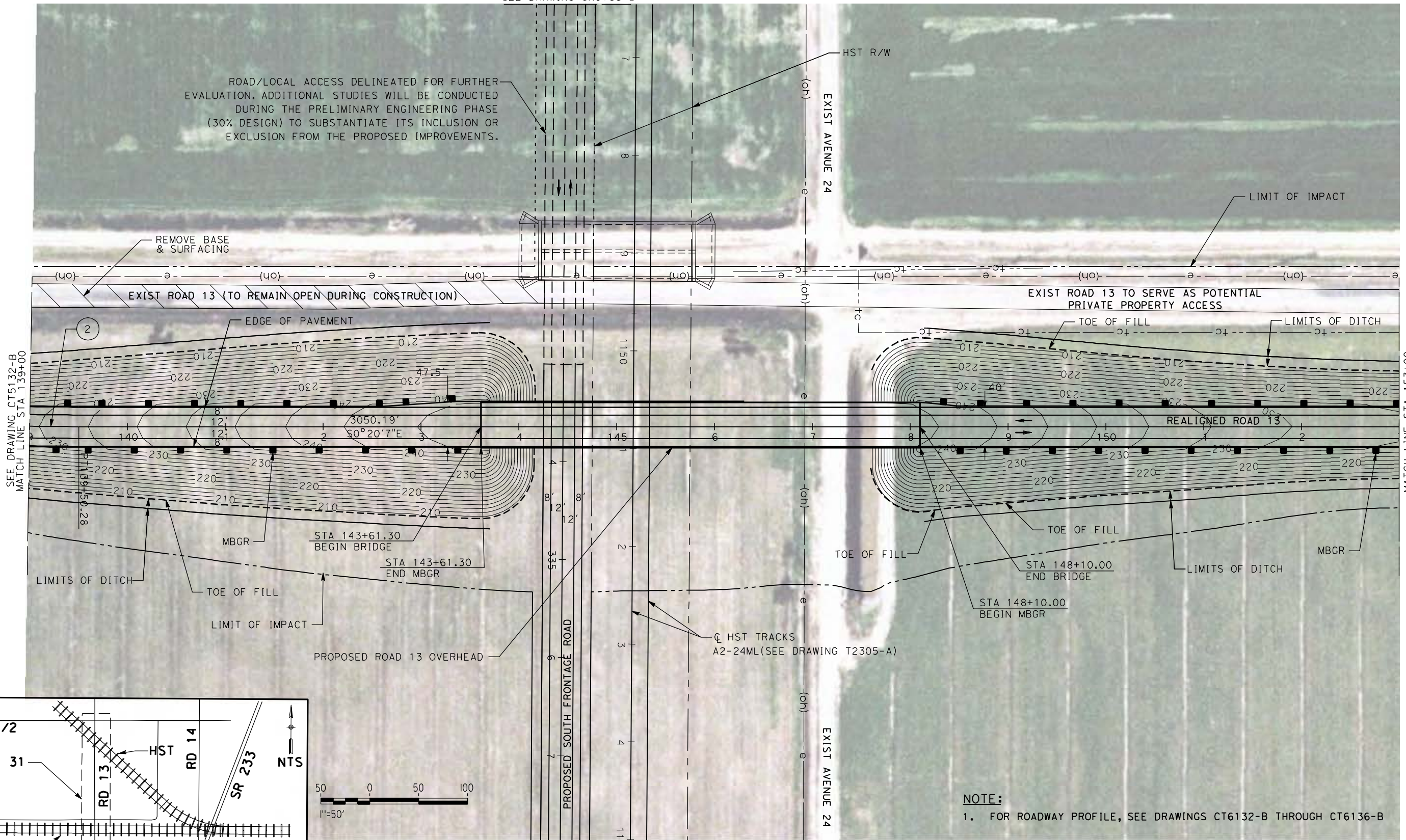
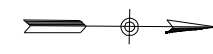
**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 MAINLINE/MERCED DO - (WC)  
 GRADE SEPARATION - ROAD 13  
 LAYOUT  
 SHEET 1 OF 5

CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CT5132-B  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###



4/27/2011 6:26:41 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 1b - ave 24 wye-w.chowchilla\grade separation\Layout\CT5133-B.dgn

SEE DRAWING CR9163-B



SEE DRAWING CT5132-B  
 MATCH LINE STA 139+00

MATCH LINE STA 153+00  
 SEE DRAWING CT5134-B

ROAD/LOCAL ACCESS DELINEATED FOR FURTHER EVALUATION. ADDITIONAL STUDIES WILL BE CONDUCTED DURING THE PRELIMINARY ENGINEERING PHASE (30% DESIGN) TO SUBSTANTIATE ITS INCLUSION OR EXCLUSION FROM THE PROPOSED IMPROVEMENTS.

REMOVE BASE & SURFACING

EXIST ROAD 13 (TO REMAIN OPEN DURING CONSTRUCTION)

EXIST ROAD 13 TO SERVE AS POTENTIAL PRIVATE PROPERTY ACCESS

LIMIT OF IMPACT

EDGE OF PAVEMENT

TOE OF FILL

LIMITS OF DITCH

STA 143+61.30  
BEGIN BRIDGE

STA 143+61.30  
END MBGR

STA 148+10.00  
END BRIDGE

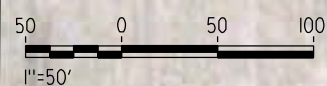
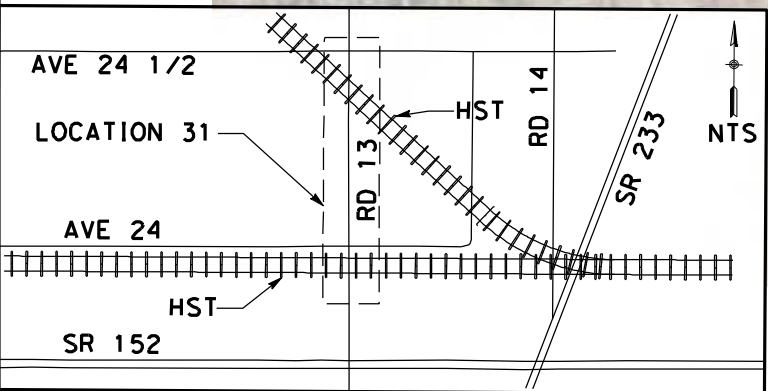
STA 148+10.00  
BEGIN MBGR

HST TRACKS  
A2-24ML(SEE DRAWING T2305-A)

PROPOSED ROAD 13 OVERHEAD

NOTE:

1. FOR ROADWAY PROFILE, SEE DRAWINGS CT6132-B THROUGH CT6136-B



SEE DRAWING CR9163-B

CURVE DATA

No.	R	Δ	T	L	V
(2)	3000.00	10°00'07"	262.52	532.71	45 MPH

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
 DRAWN BY  
C. DELOS REYES  
 CHECKED BY  
A. SILVER  
 IN CHARGE  
A. BOONE  
 DATE  
04/29/2011

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

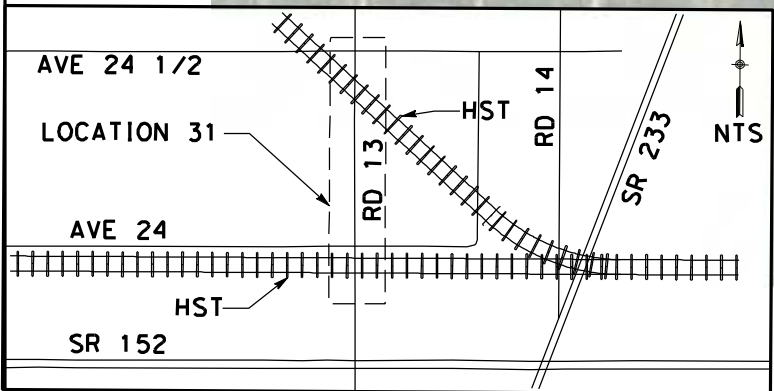
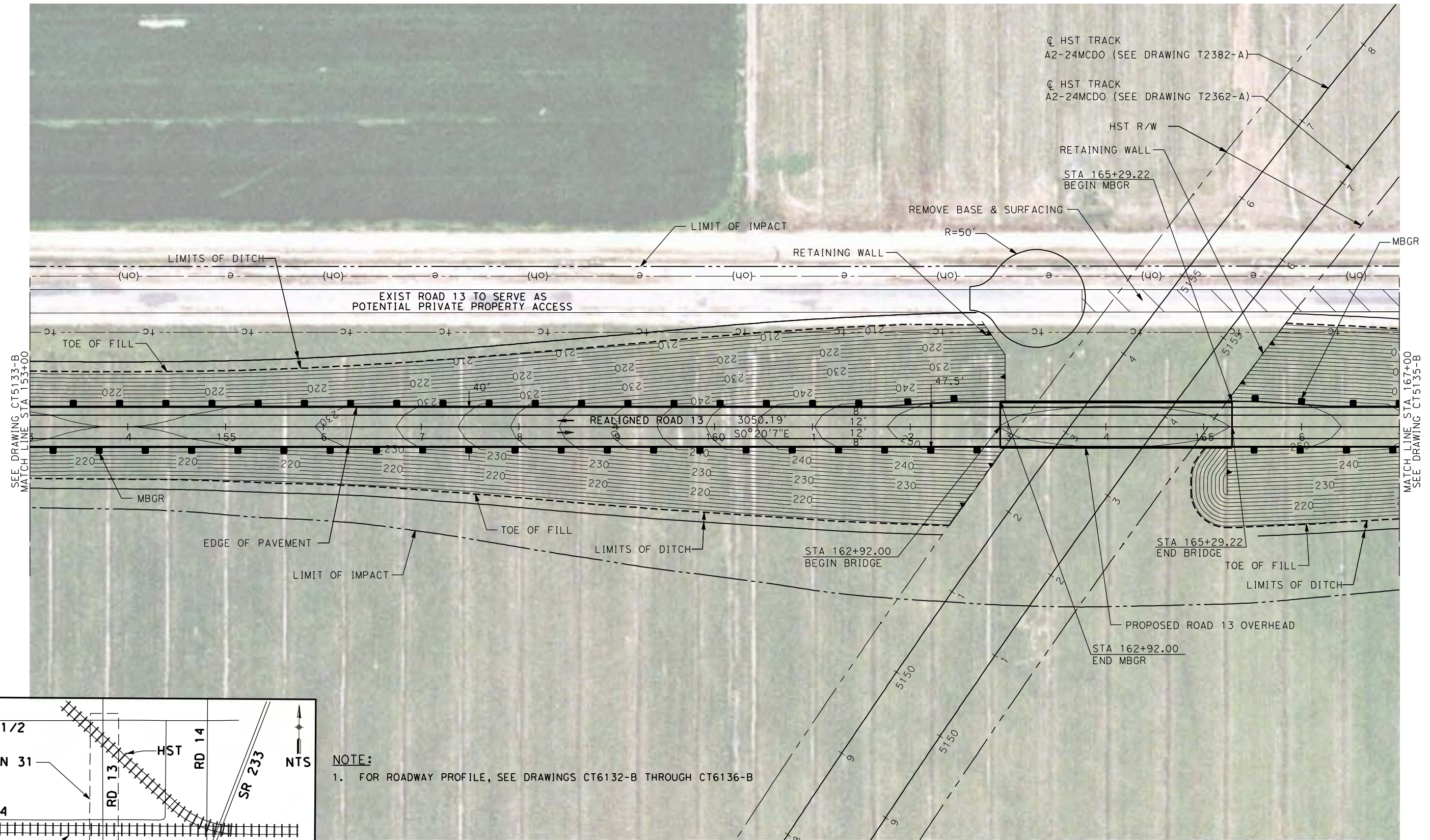
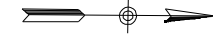


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 MAINLINE/MERCED DO - (WC)  
 GRADE SEPARATION - ROAD 13  
 LAYOUT  
 SHEET 2 OF 5

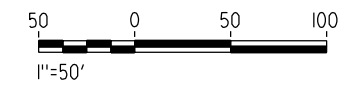
CONTRACT NO.  
HSR06-007  
 DRAWING NO.  
CT5133-B  
 SCALE  
AS SHOWN  
 SHEET NO.  
### OF ###



4/27/2011 6:26:56 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 1b - ave 24 wye-w.chowchilla grade separation\Layout\CT5134-B.dgn



**NOTE:**  
 1. FOR ROADWAY PROFILE, SEE DRAWINGS CT6132-B THROUGH CT6136-B



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
 D. AYELE  
 DRAWN BY  
 C. DELOS REYES  
 CHECKED BY  
 A. SILVER  
 IN CHARGE  
 A. BOONE  
 DATE  
 04/29/2011

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

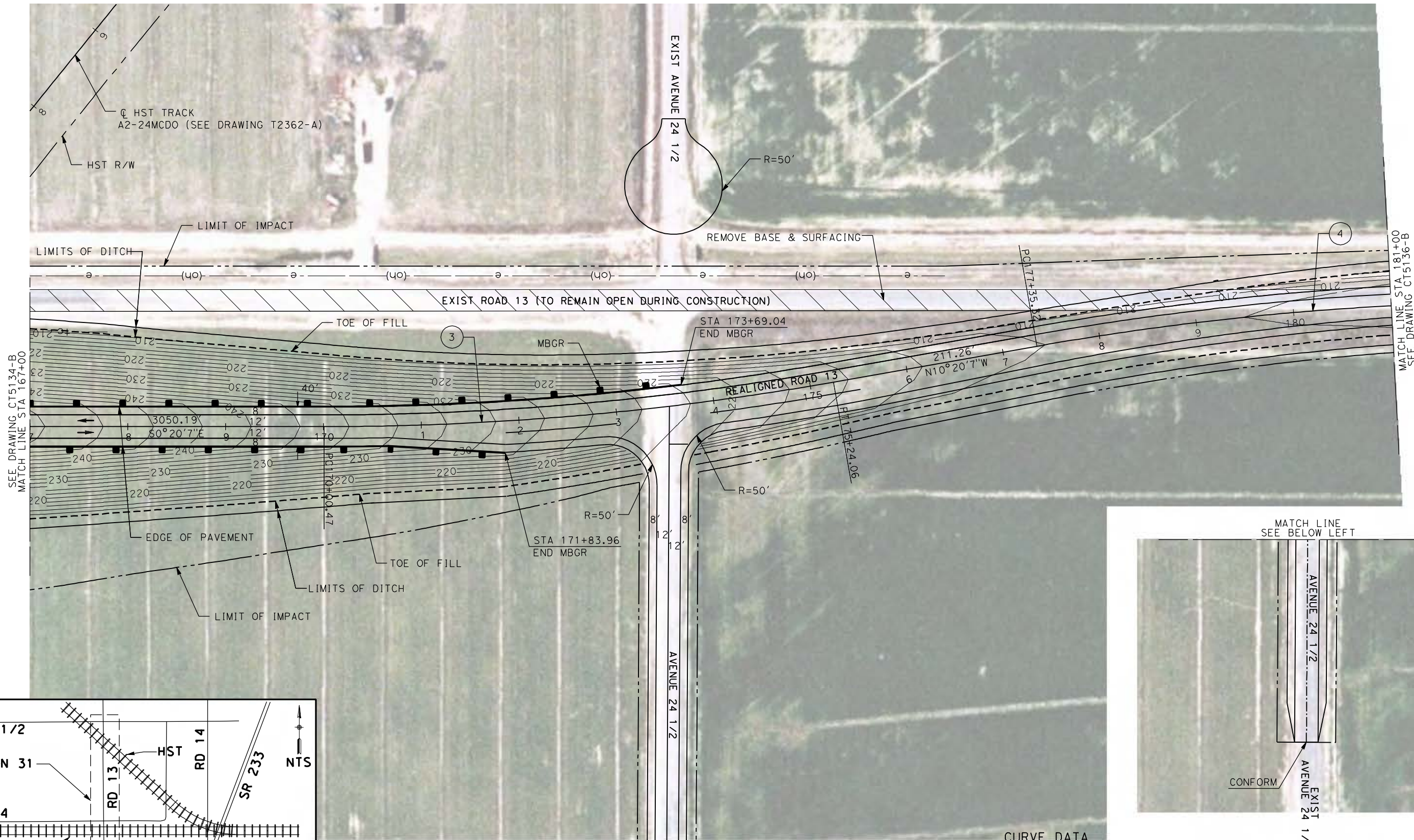


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 MAINLINE/MERCED DO - (WC)  
 GRADE SEPARATION - ROAD 13  
 LAYOUT  
 SHEET 3 OF 5

CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CT5134-B  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###

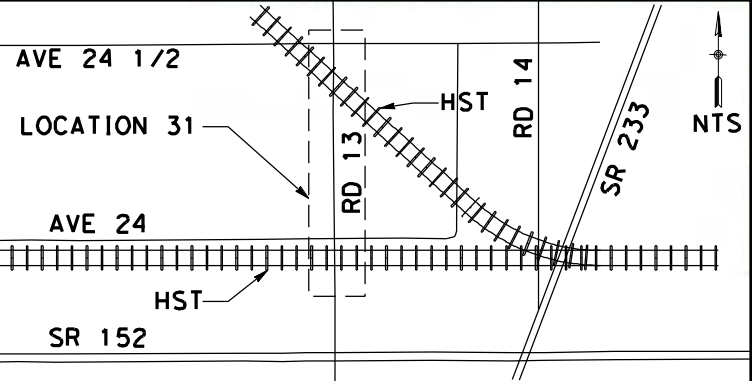


4/27/2011 6:27:18 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla volume 1b - ave 24 wye-w.chowchilla grade separation\Layout\CT5135-B.dgn



SEE DRAWING CT5134-B  
 MATCH LINE STA 167+00

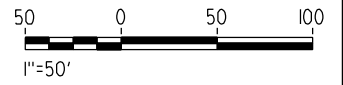
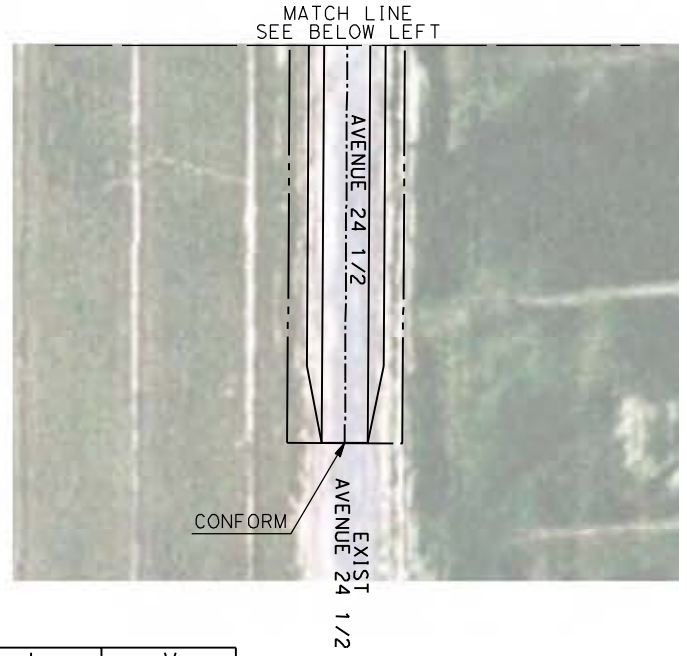
MATCH LINE STA 181+00  
 SEE DRAWING CT5136-B



**NOTE:**  
 1. FOR ROADWAY PROFILE, SEE DRAWINGS CT6132-B THROUGH CT6136-B

MATCH LINE  
SEE ABOVE RIGHT

No.	R	Δ	T	L	V
③	3000.00	10°00'00"	262.46	523.59	45 MPH
④	3000.00	10°01'26"	263.09	524.84	45 MPH



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**D. AYELE**  
 DRAWN BY  
**C. DELOS REYES**  
 CHECKED BY  
**A. SILVER**  
 IN CHARGE  
**A. BOONE**  
 DATE  
**04/29/2011**

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

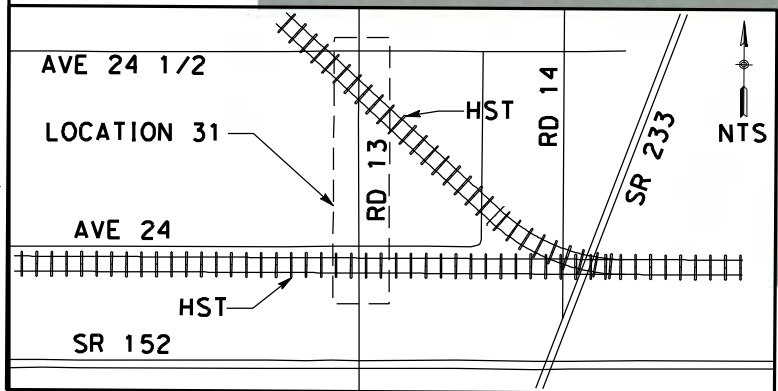
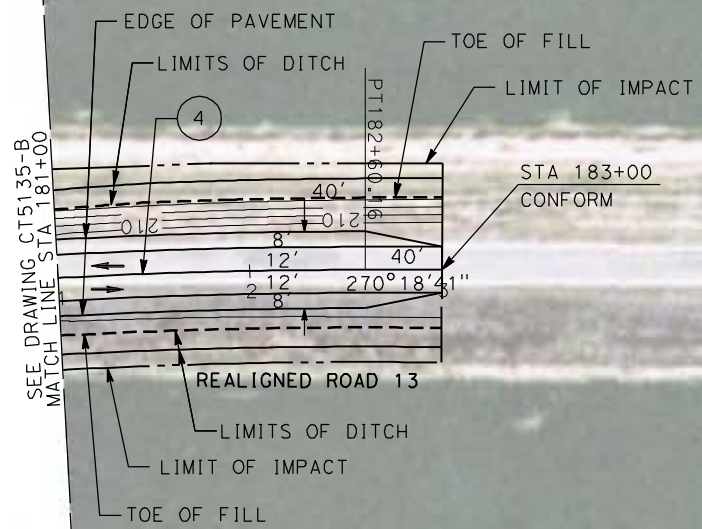
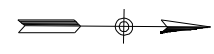


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 MAINLINE/MERCED DO - (WC)  
 GRADE SEPARATION - ROAD 13  
 LAYOUT  
 SHEET 4 OF 5

CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CT5135-B  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###



4/27/2011 6:27:33 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 1b - ave 24 wye-w.chowchilla grade separation\Layout\CT5136-B.dgn



**NOTE:**  
 1. FOR ROADWAY PROFILE, SEE DRAWINGS CT6132-B THROUGH CT6136-B



CURVE DATA					
No.	R	$\Delta$	T	L	V
(4)	3000.00	10° 01' 26"	263.09	524.84	45 MPH

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
 D. AYELE  
 DRAWN BY  
 C. DELOS REYES  
 CHECKED BY  
 A. SILVER  
 IN CHARGE  
 A. BOONE  
 DATE  
 04/29/2011

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

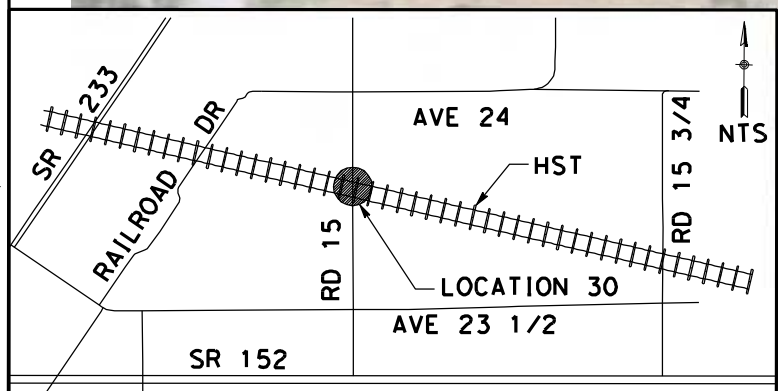
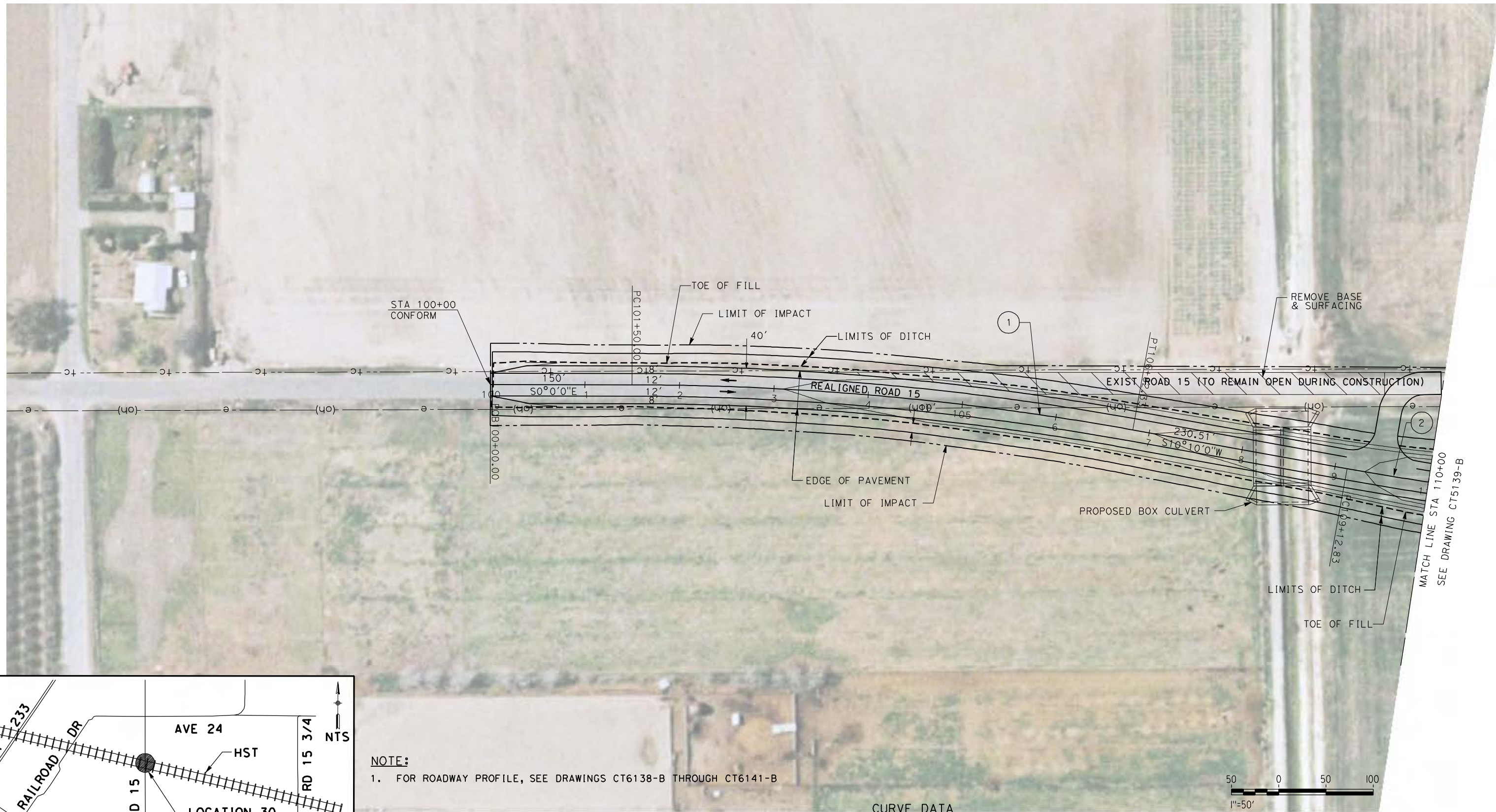
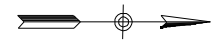


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 MAINLINE/MERCED DO - (WC)  
 GRADE SEPARATION - ROAD 13  
 LAYOUT  
 SHEET 5 OF 5

CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CT5136-B  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###



4/27/2011 6:27:51 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla volume 1b - ave 24 wye-w.chowchilla grade separation\Layout\CT5138-B.dgn



**NOTE:**  
 1. FOR ROADWAY PROFILE, SEE DRAWINGS CT6138-B THROUGH CT6141-B

CURVE DATA					
No.	R	Δ	T	L	V
①	3000.00	10°10'00"	266.86	532.33	45 MPH
②	3000.00	10°13'57"	268.60	535.78	45 MPH

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
 DRAWN BY  
C. DELOS REYES  
 CHECKED BY  
A. SILVER  
 IN CHARGE  
A. BOONE  
 DATE  
04/29/2011

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

**NOT FOR**  
**CONSTRUCTION**



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

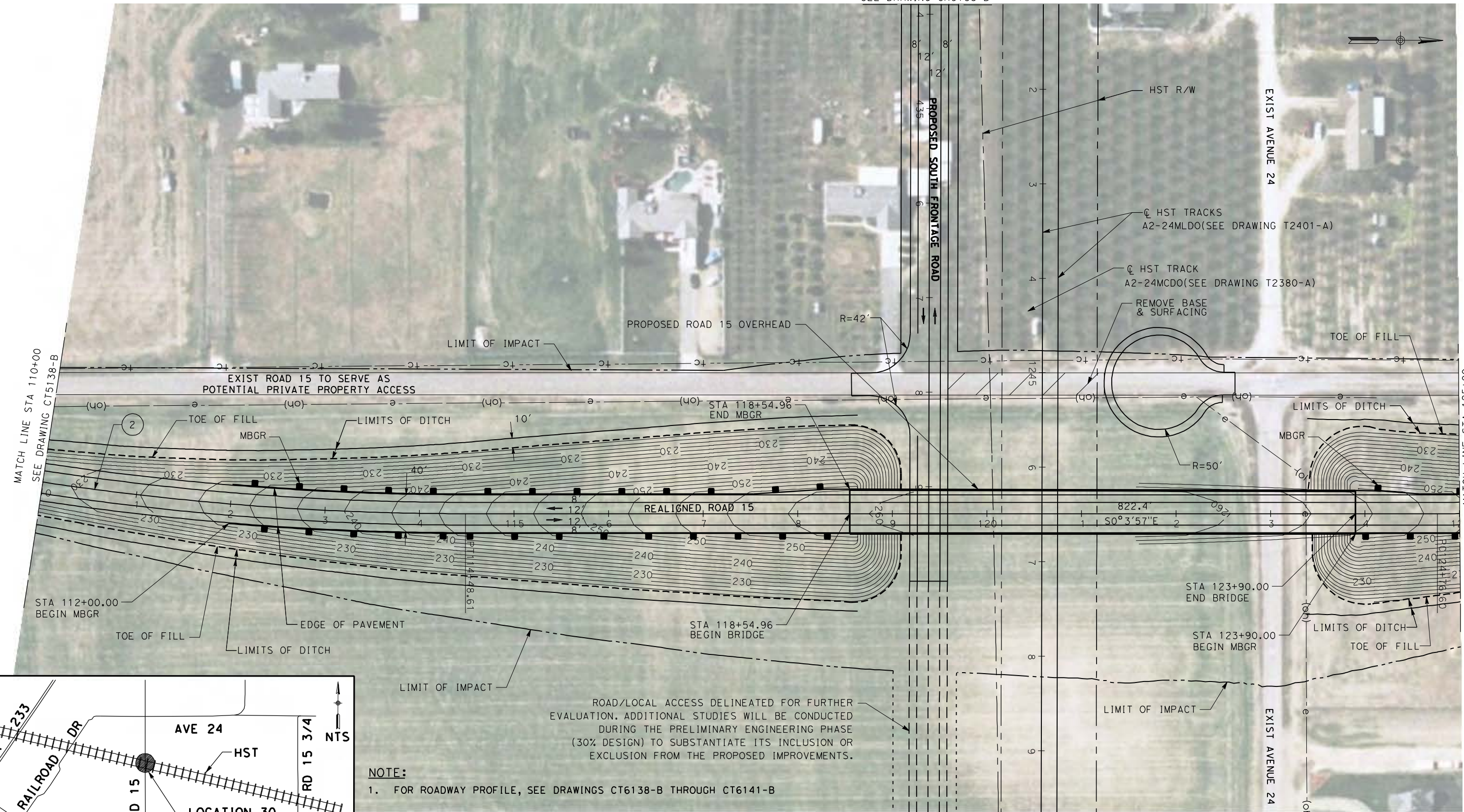
UPRR/SR99 MAINLINE DO/MERCED DO - (WC)  
 GRADE SEPARATION - ROAD 15  
 LAYOUT  
 SHEET 1 OF 4

CONTRACT NO.  
HSR06-007  
 DRAWING NO.  
CT5138-B  
 SCALE  
AS SHOWN  
 SHEET NO.  
### OF ###



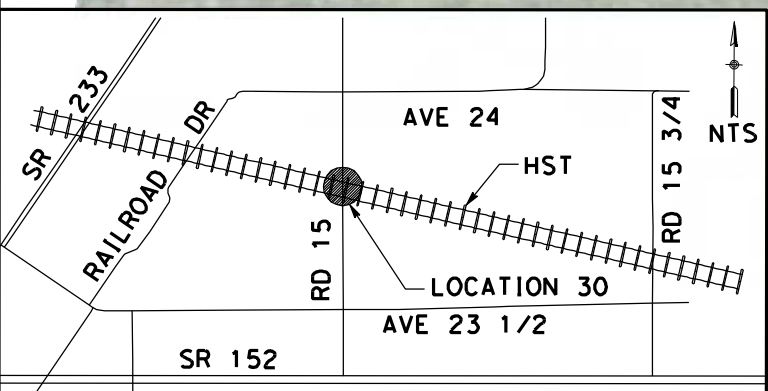
4/27/2011 6:28:07 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 1b - ave 24 wye-w.chowchilla\grade separation\Layout\CT5139-B.dgn

SEE DRAWING CR9165-B



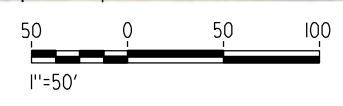
ROAD/LOCAL ACCESS DELINEATED FOR FURTHER EVALUATION. ADDITIONAL STUDIES WILL BE CONDUCTED DURING THE PRELIMINARY ENGINEERING PHASE (30% DESIGN) TO SUBSTANTIATE ITS INCLUSION OR EXCLUSION FROM THE PROPOSED IMPROVEMENTS.

**NOTE:**  
 1. FOR ROADWAY PROFILE, SEE DRAWINGS CT6138-B THROUGH CT6141-B



SEE DRAWING CR9165-B

No.	R	Δ	T	L	V
(2)	3000.00	10°13'57"	268.60	535.78	45 MPH



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
 D. AYELE  
 DRAWN BY  
 C. DELOS REYES  
 CHECKED BY  
 A. SILVER  
 IN CHARGE  
 A. BOONE  
 DATE  
 04/29/2011

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

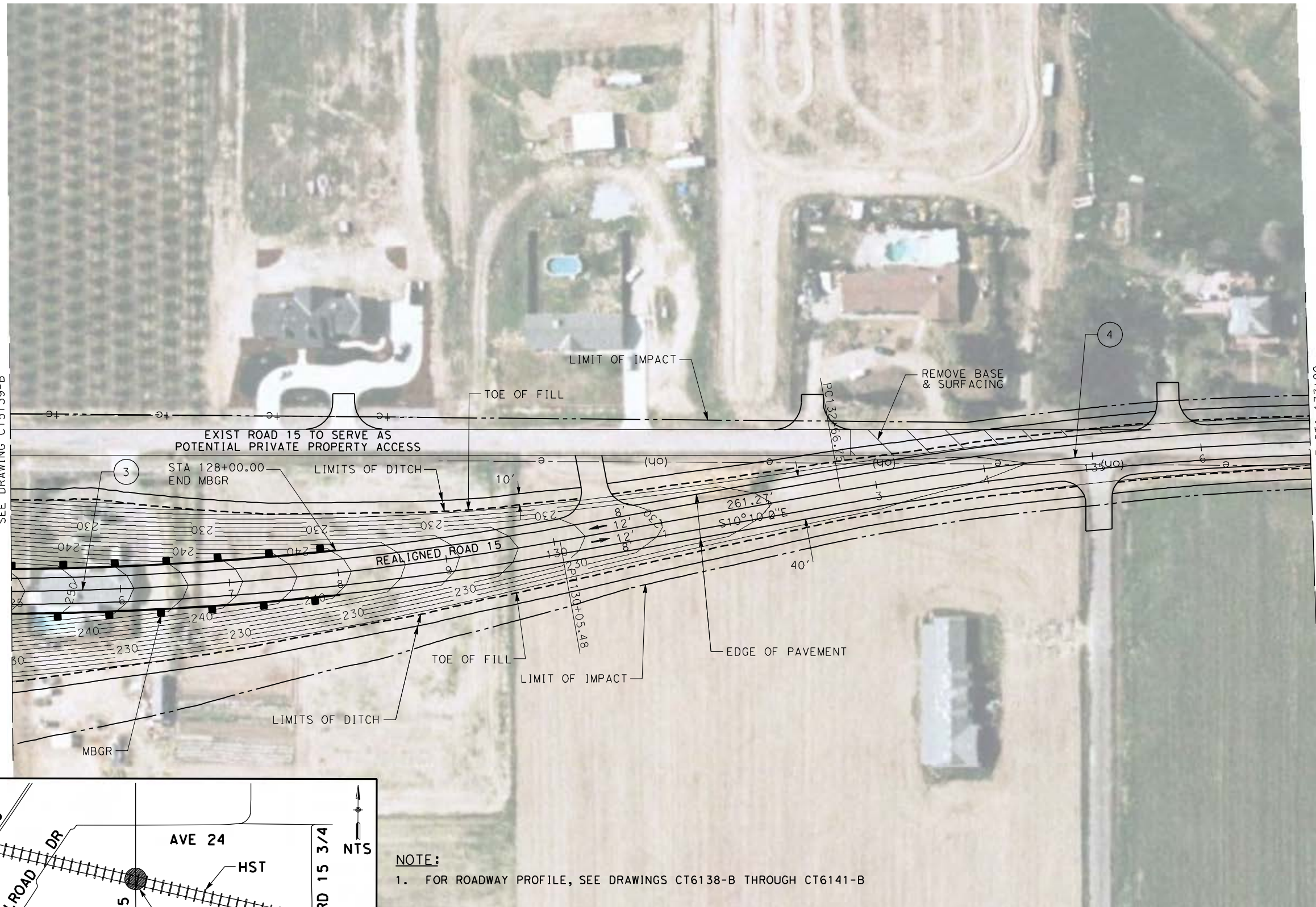


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 MAINLINE DO/MERCED DO - (WC)  
 GRADE SEPARATION - ROAD 15  
 LAYOUT  
 SHEET 2 OF 4

CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CT5139-B  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###

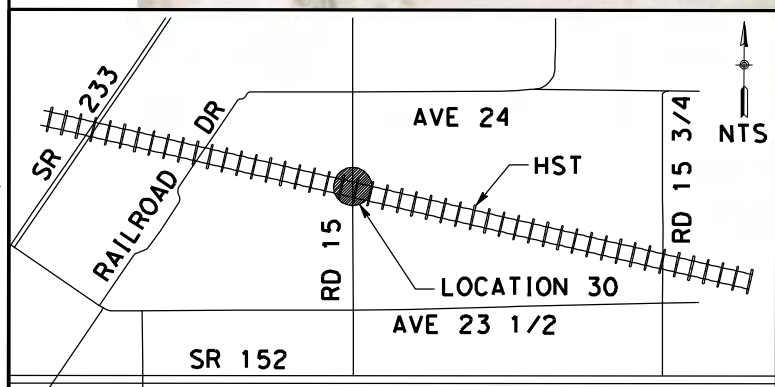


4/27/2011 6:28:25 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla volume 1b - ave 24 wye-w.chowchilla grade separation\Layout\CT5140-B.dgn  
 ReyesC1



MATCH LINE STA 125+00  
 SEE DRAWING CT5139-B

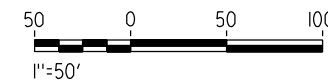
MATCH LINE STA 137+00  
 SEE DRAWING CT5141-B



**NOTE:**  
 1. FOR ROADWAY PROFILE, SEE DRAWINGS CT6138-B THROUGH CT6141-B

**CURVE DATA**

No.	R	$\Delta$	T	L	V
③	3000.00	10°6'3"	265.12	528.88	45 MPH
④	3000.00	10°10'0"	266.86	532.33	45 MPH



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
 D. AYELE  
 DRAWN BY  
 C. DELOS REYES  
 CHECKED BY  
 A. SILVER  
 IN CHARGE  
 A. BOONE  
 DATE  
 04/29/2011

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

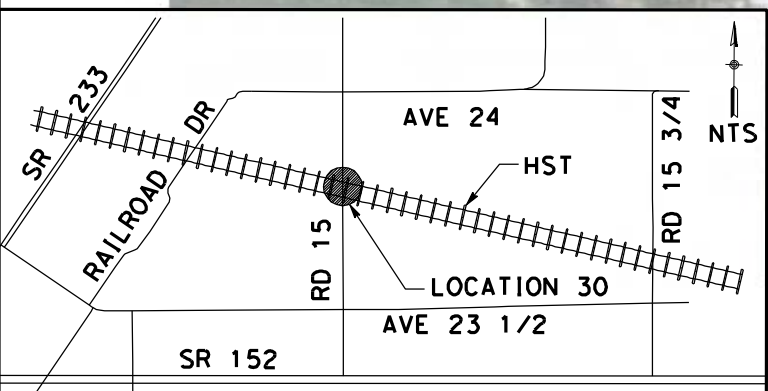
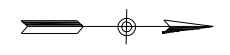


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 MAINLINE DO/MERCED DO - (WC)  
 GRADE SEPARATION - ROAD 15  
 LAYOUT  
 SHEET 3 OF 4

CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CT5140-B  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###



4/27/2011 6:28:40 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 1b - ave 24 wye-w.chowchilla grade separation\Layout\CT5141-B.dgn



**NOTE:**  
1. FOR ROADWAY PROFILE, SEE DRAWINGS CT6138-B THROUGH CT6141-B

CURVE DATA					
No.	R	$\Delta$	T	L	V
(4)	3000.00	10°10'00"	266.86	532.33	45 MPH

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
DRAWN BY  
C. DELOS REYES  
CHECKED BY  
A. SILVER  
IN CHARGE  
A. BOONE  
DATE  
04/29/2011

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

**NOT FOR**  
**CONSTRUCTION**



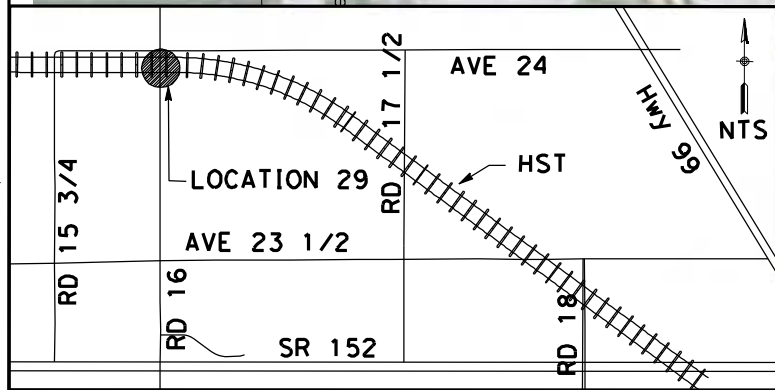
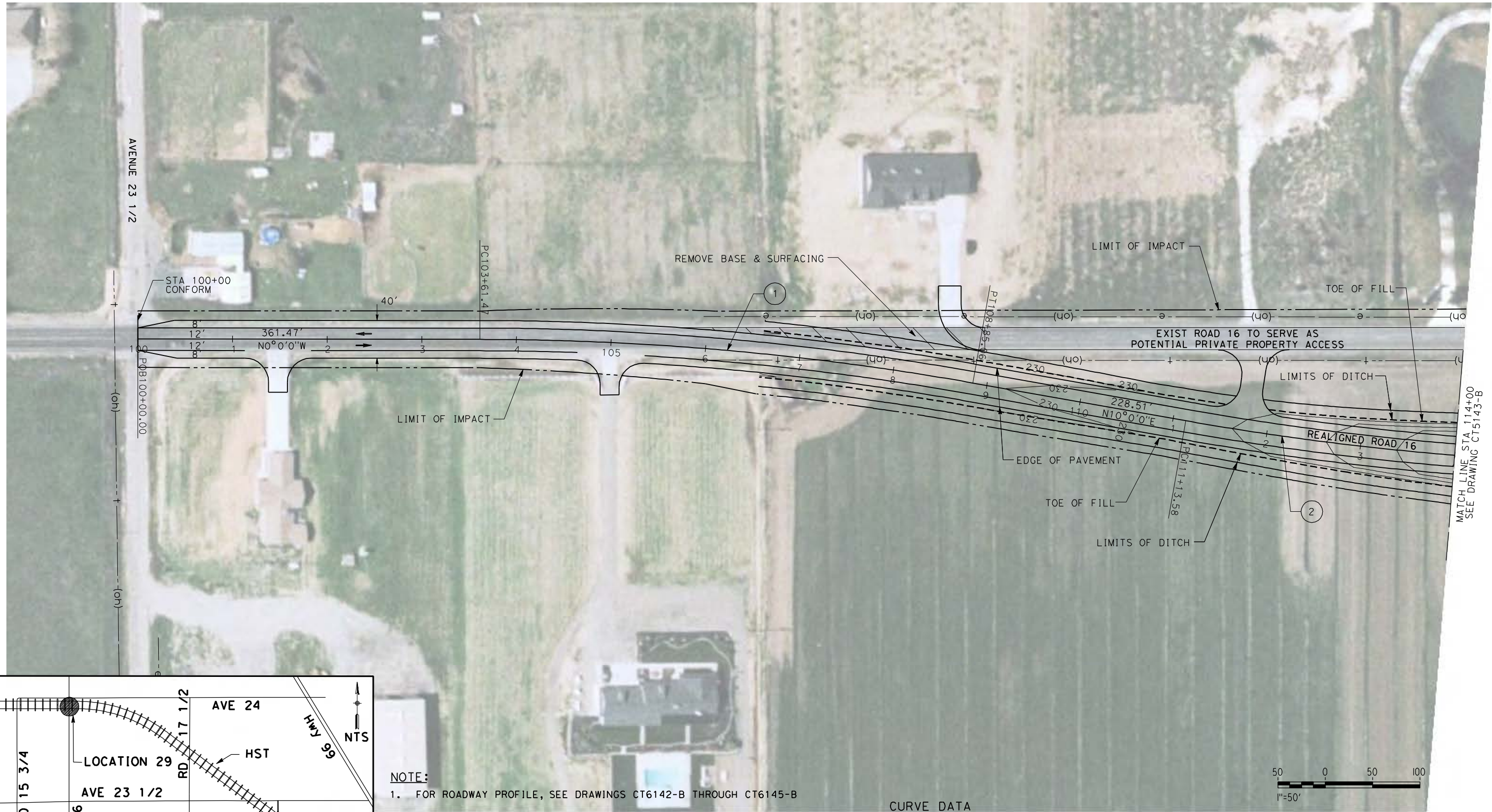
**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**

UPRR/SR99 MAINLINE DO/MERCED DO - (WC)  
GRADE SEPARATION - ROAD 15  
LAYOUT  
SHEET 4 OF 4

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
CT5141-B  
SCALE  
AS SHOWN  
SHEET NO.  
### OF ###



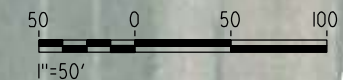
4/27/2011 6:28:54 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla volume 1b - ave 24 wye-w.chowchilla grade separation\Layout\CT5142-B.dgn



**NOTE:**  
 1. FOR ROADWAY PROFILE, SEE DRAWINGS CT6142-B THROUGH CT6145-B

CURVE DATA

No.	R	Δ	T	L	V
①	3000.00	10° 10' 00"	262.47	523.60	45 MPH
②	3000.00	10° 03' 09"	263.85	526.35	45 MPH



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**D. AYELE**  
 DRAWN BY  
**C. DELOS REYES**  
 CHECKED BY  
**A. SILVER**  
 IN CHARGE  
**A. BOONE**  
 DATE  
**04/29/2011**

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



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 MAINLINE DO - (WC)  
 GRADE SEPARATION - ROAD 16  
 LAYOUT  
 SHEET 1 OF 4

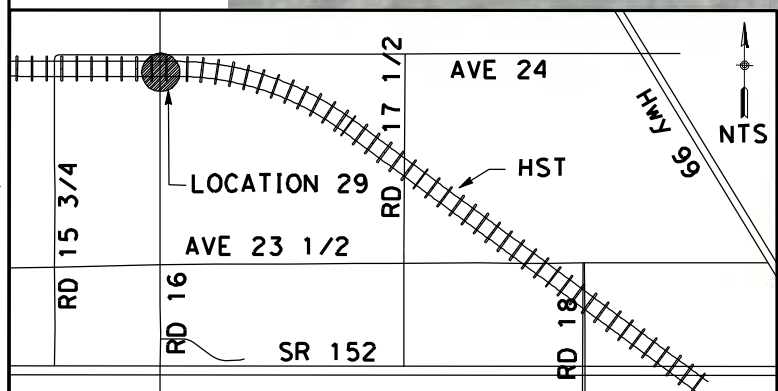
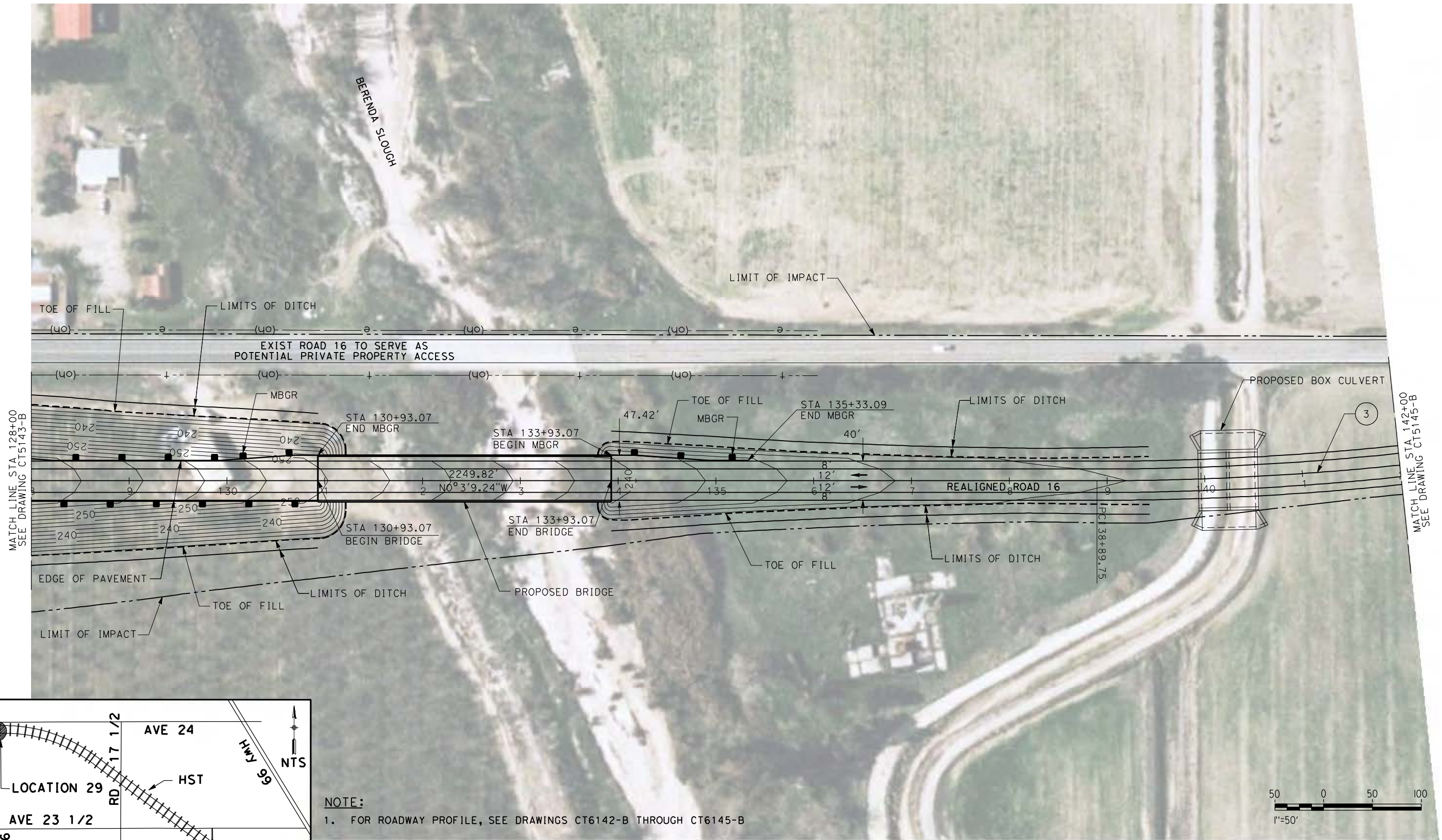
CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CT5142-B  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###



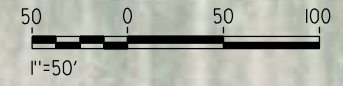




4/27/2011 6:29:23 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 1b - ave 24 wye-w.chowchilla grade separation\Layout\CT5144-B.dgn



**NOTE:**  
 1. FOR ROADWAY PROFILE, SEE DRAWINGS CT6142-B THROUGH CT6145-B



CURVE DATA				
No.	R	$\Delta$	T	V
(3)	3000.00	9° 32' 57"	250.58	45 MPH

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**D. AYELE**  
 DRAWN BY  
**C. DELOS REYES**  
 CHECKED BY  
**A. SILVER**  
 IN CHARGE  
**A. BOONE**  
 DATE  
**04/29/2011**

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

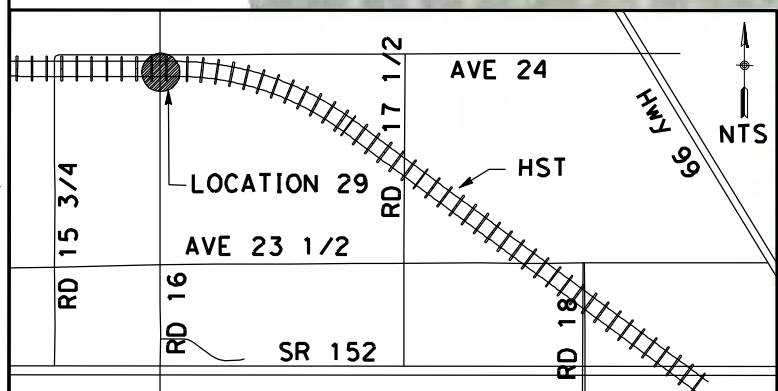
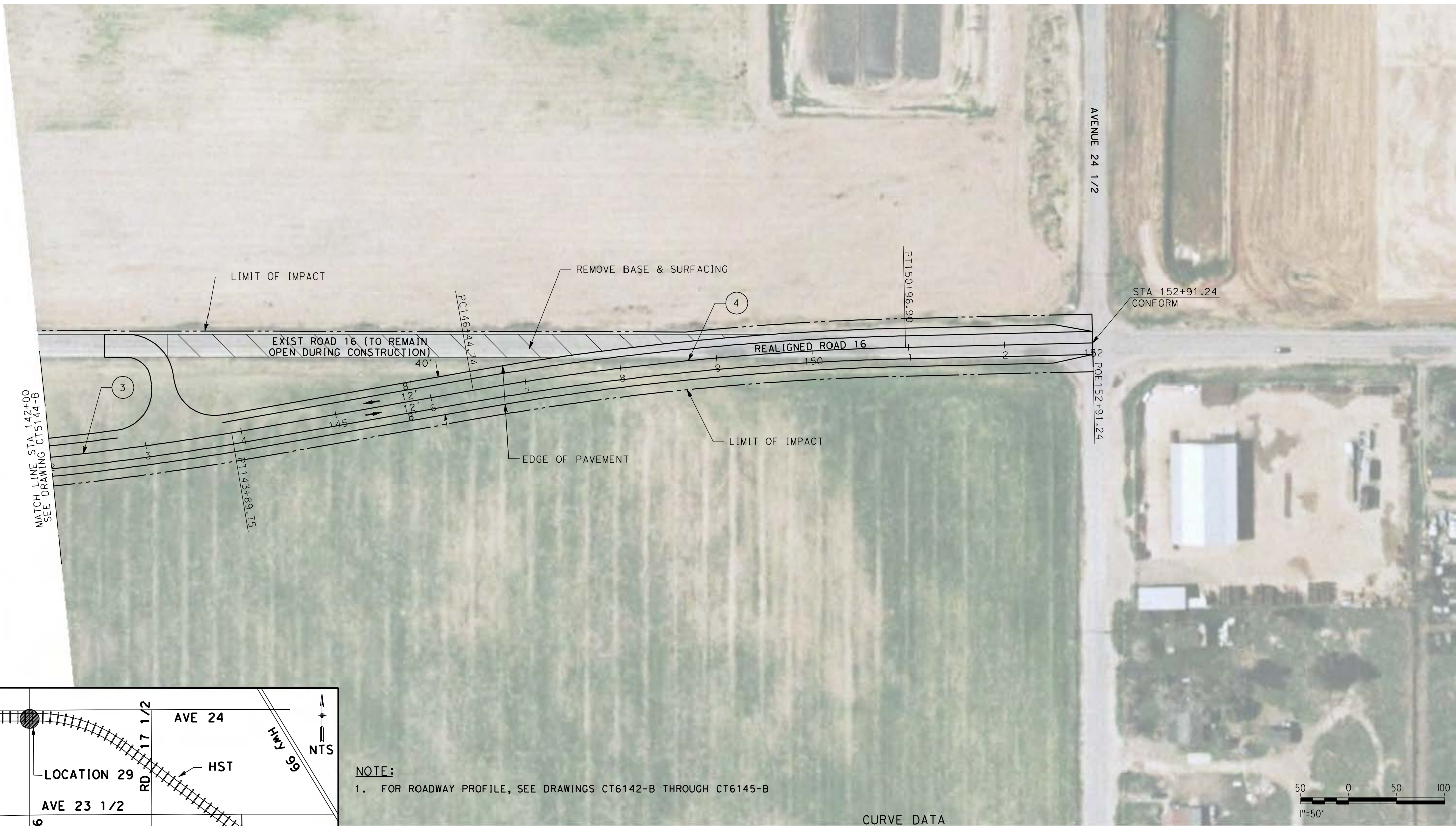


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 MAINLINE DO - (WC)  
 GRADE SEPARATION - ROAD 16  
 LAYOUT  
 SHEET 3 OF 4

CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CT5144-B  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###



4/27/2011 6:29:38 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla grade separation\Layout\CT5145-B.dgn  
 ReyesC1



**NOTE:**  
 1. FOR ROADWAY PROFILE, SEE DRAWINGS CT6142-B THROUGH CT6145-B

CURVE DATA

No.	R	Δ	T	L	V
3	3000.00	9° 32' 57"	250.58	500.00	45 MPH
4	3000.00	8° 38' 08"	226.51	452.16	45 MPH

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
 D. AYELE  
 DRAWN BY  
 C. DELOS REYES  
 CHECKED BY  
 A. SILVER  
 IN CHARGE  
 A. BOONE  
 DATE  
 04/29/2011

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

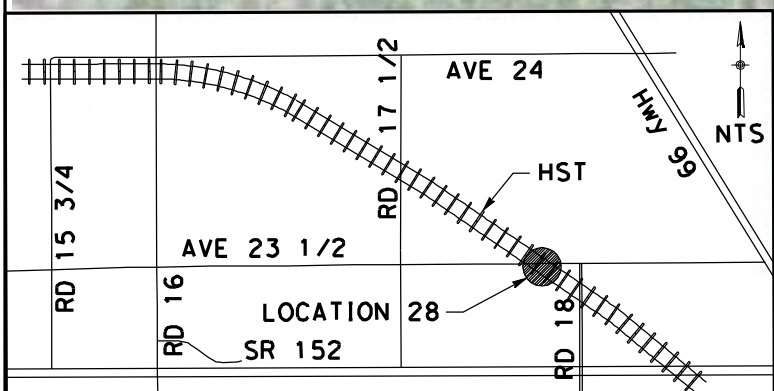


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 MAINLINE DO - (WC)  
 GRADE SEPARATION - ROAD 16  
 LAYOUT  
 SHEET 4 OF 4

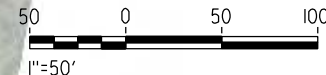
CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CT5145-B  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###



4/27/2011 6:29:52 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla volume 1b - ave 24 wye-w.chowchilla grade separation\Layout\CT5146-B.dgn  
 ReyesC1



**NOTE:**  
 1. FOR ROADWAY PROFILE, SEE DRAWINGS CT6146-B THROUGH CT6149-B



CURVE DATA					
No.	R	$\Delta$	T	L	V
①	3000.00	10°46'41"	283.00	564.34	45 MPH

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
 D. AYELE  
 DRAWN BY  
 C. DELOS REYES  
 CHECKED BY  
 A. SILVER  
 IN CHARGE  
 A. BOONE  
 DATE  
 04/29/2011

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

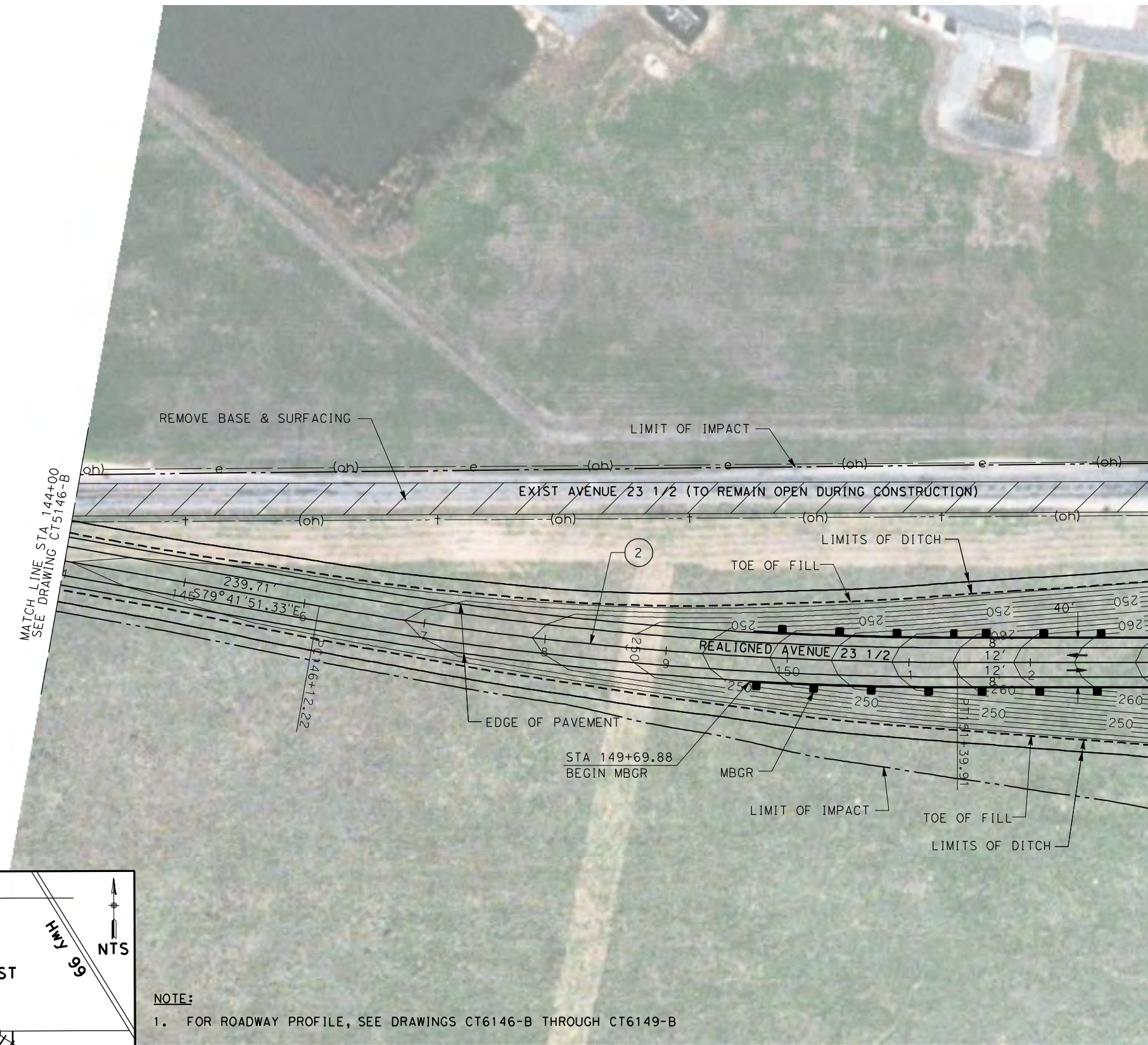


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 MAINLINE DO - (WC)  
 GRADE SEPARATION - AVENUE 23 1/2  
 LAYOUT  
 SHEET 1 OF 4

CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CT5146-B  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###



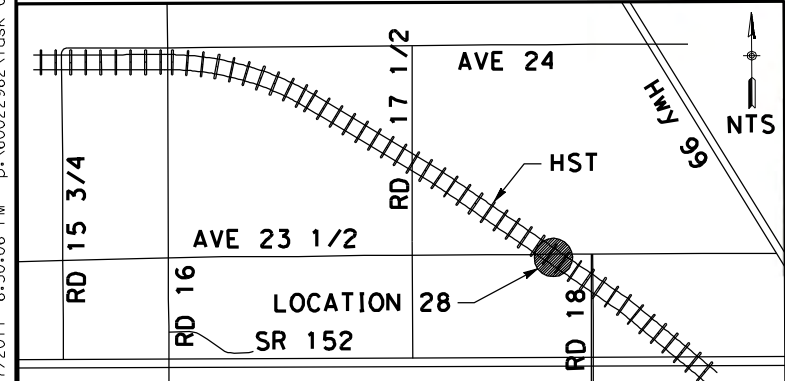
4/27/2011 6:30:06 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 1b - ave 24 wye-w.chowchilla grade separation\Layout\CT5147-B.dgn



MATCH LINE STA 144+00  
SEE DRAWING CT5146-B

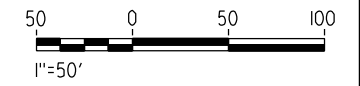
MATCH LINE STA 153+00  
SEE DRAWING CT5148-B

**NOTE:**  
1. FOR ROADWAY PROFILE, SEE DRAWINGS CT6146-B THROUGH CT6149-B



**CURVE DATA**

No.	R	Δ	T	L	V
(2)	3000.00	10°04'41"	264.53	527.69	45 MPH



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
DRAWN BY  
C. DELOS REYES  
CHECKED BY  
A. SILVER  
IN CHARGE  
A. BOONE  
DATE  
04/29/2011

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

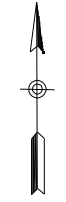
**NOT FOR**  
**CONSTRUCTION**



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

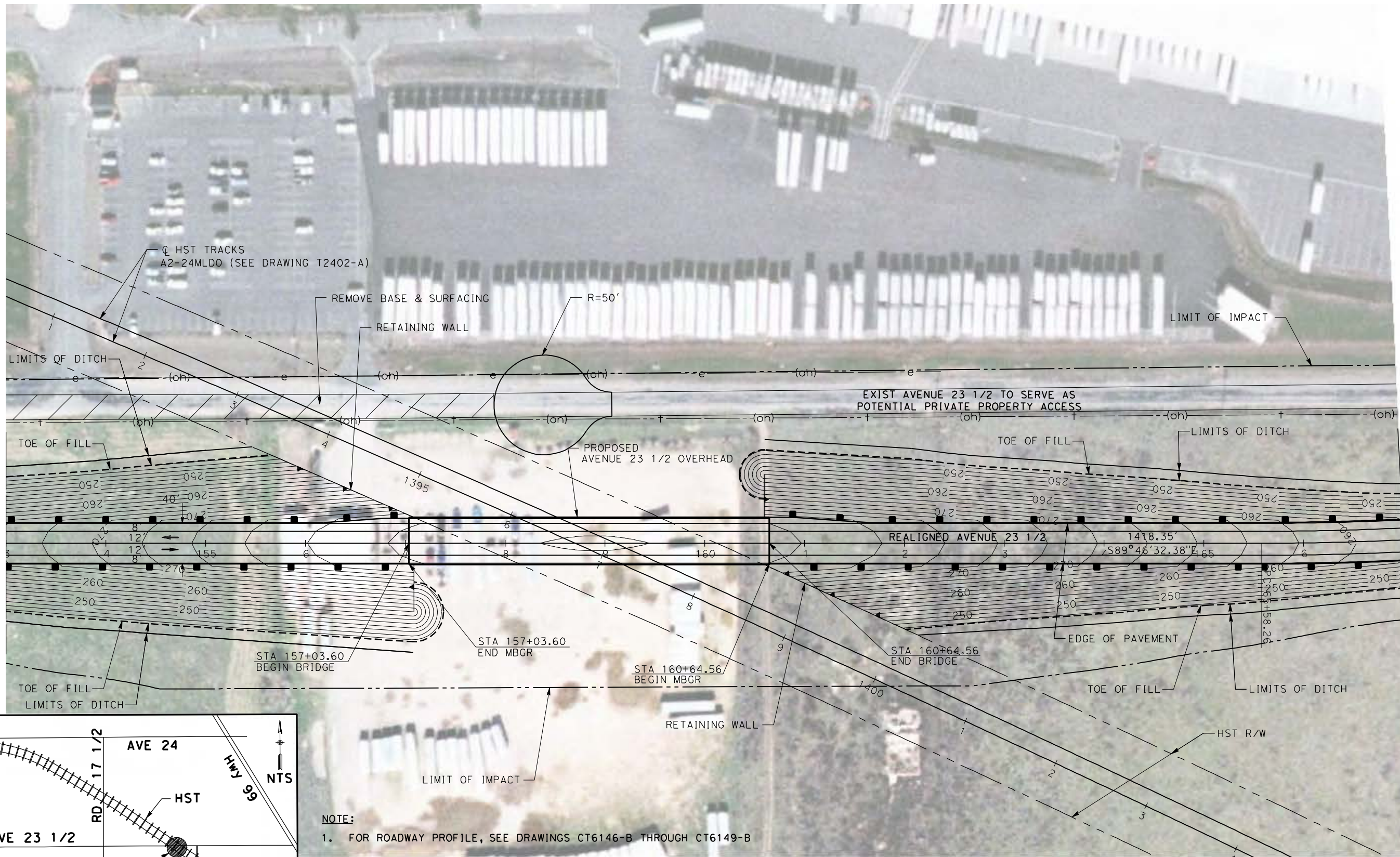
UPRR/SR99 MAINLINE DO - (WC)  
GRADE SEPARATION - AVENUE 23 1/2  
LAYOUT  
SHEET 2 OF 4

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
CT5147-B  
SCALE  
AS SHOWN  
SHEET NO.  
### OF ###

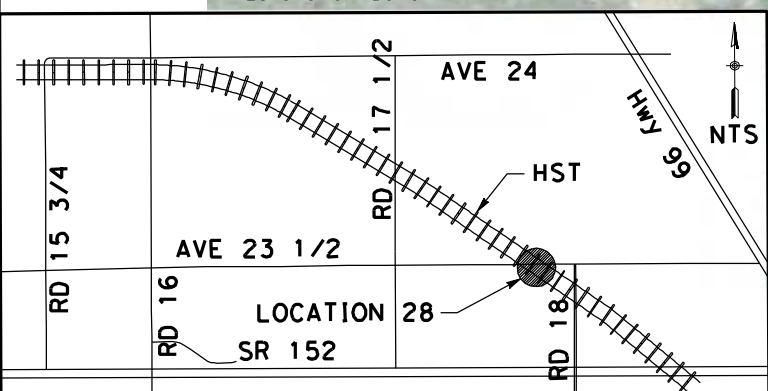
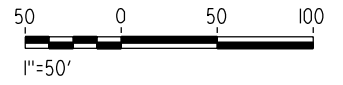




4/27/2011 6:30:21 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 1b - ave 24 wye-w.chowchilla grade separation\Layout\CT5148-B.dgn



**NOTE:**  
 1. FOR ROADWAY PROFILE, SEE DRAWINGS CT6146-B THROUGH CT6149-B



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
 D. AYELE  
 DRAWN BY  
 C. DELOS REYES  
 CHECKED BY  
 A. SILVER  
 IN CHARGE  
 A. BOONE  
 DATE  
 04/29/2011

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



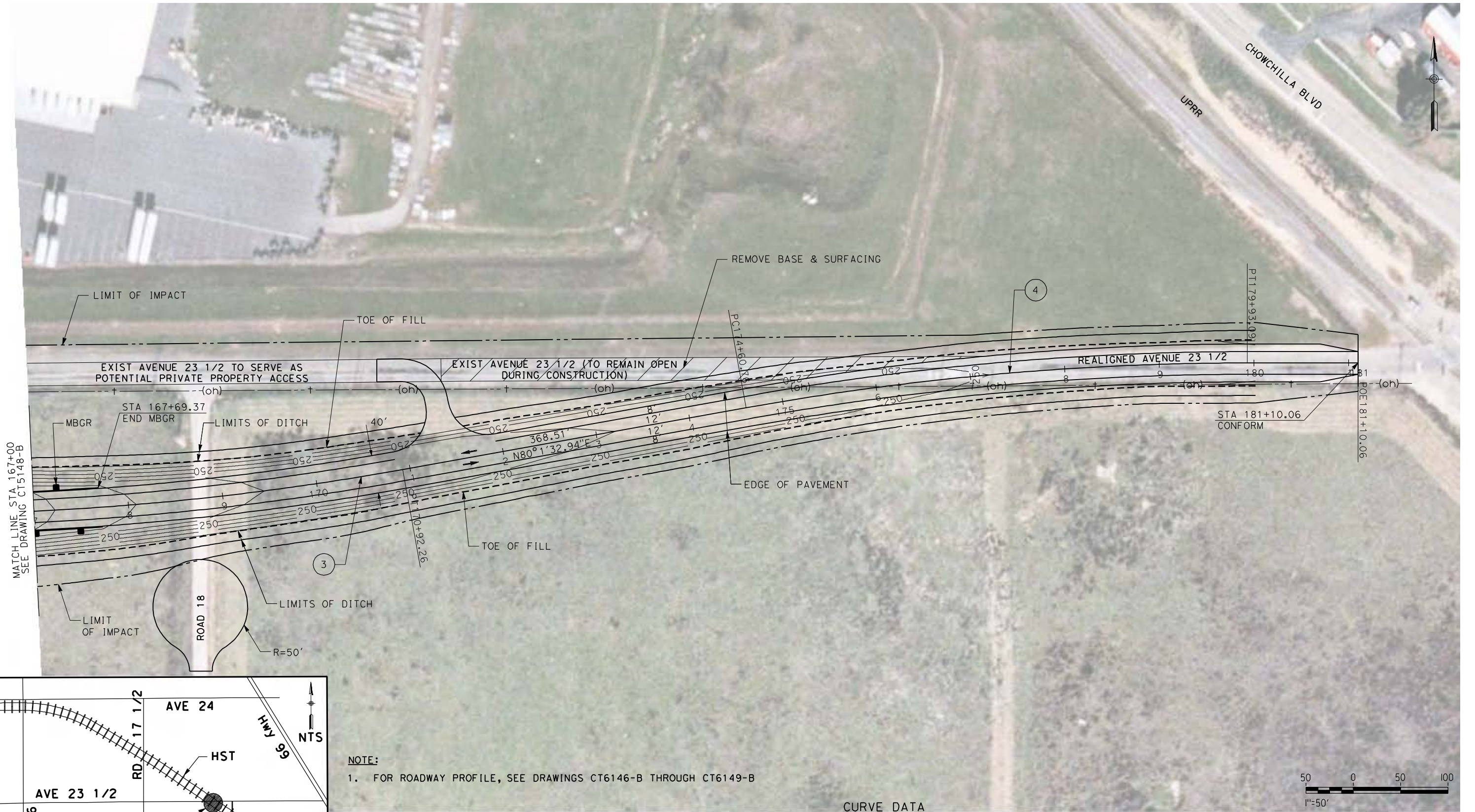
**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 MAINLINE DO - (WC)  
 GRADE SEPARATION - AVENUE 23 1/2  
 LAYOUT  
 SHEET 3 OF 4

CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CT5148-B  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###

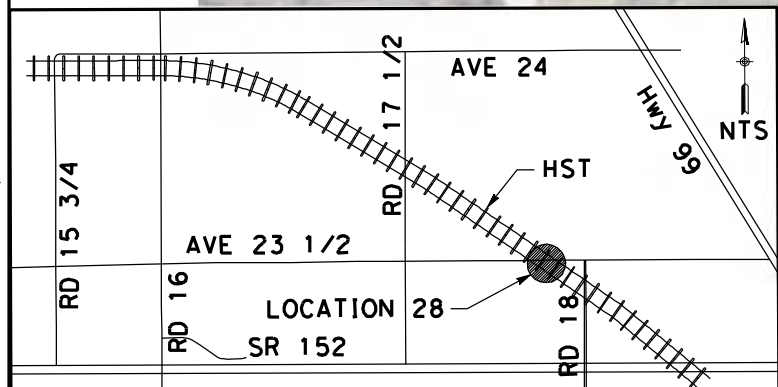




4/27/2011 6:30:35 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 1b - ave 24 wye-w.chowchilla grade separation\Layout\CT5149-B.dgn

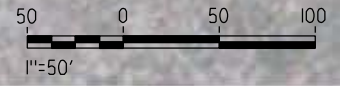


MATCH LINE STA 167+00  
 SEE DRAWING CT5148-B



**NOTE:**  
 1. FOR ROADWAY PROFILE, SEE DRAWINGS CT6146-B THROUGH CT6149-B

CURVE DATA					
No.	R	$\Delta$	T	L	V
③	3000.00	10°11'55"	267.70	533.99	45 MPH
④	3000.00	10°10'00"	266.86	532.33	45 MPH



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
 D. AYELE  
 DRAWN BY  
 C. DELOS REYES  
 CHECKED BY  
 A. SILVER  
 IN CHARGE  
 A. BOONE  
 DATE  
 04/29/2011

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

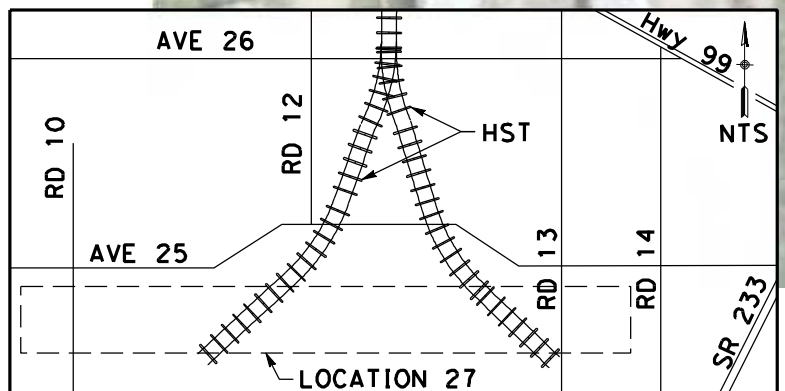
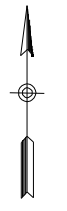
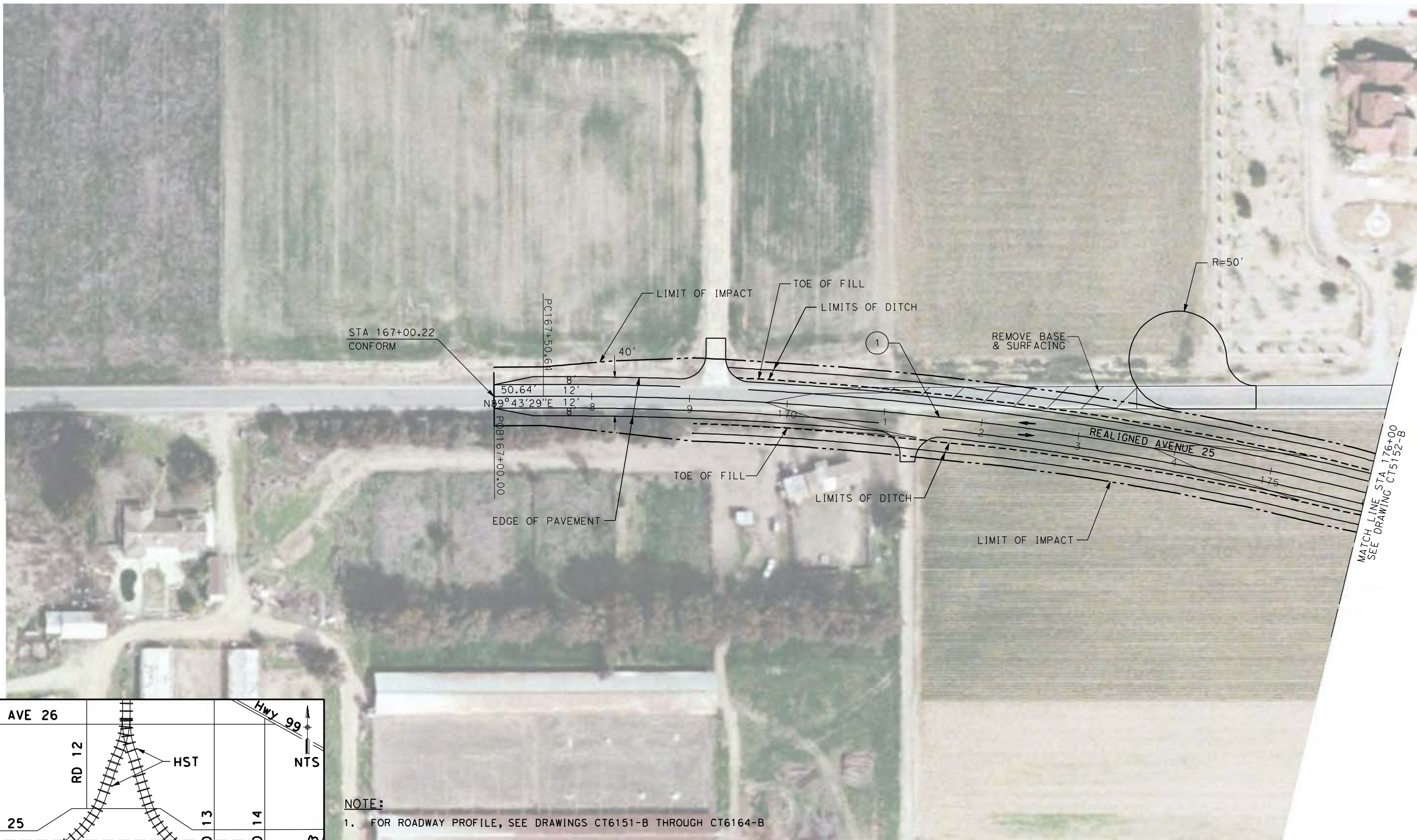


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 MAINLINE DO - (WC)  
 GRADE SEPARATION - AVENUE 23 1/2  
 LAYOUT  
 SHEET 4 OF 4

CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CT5149-B  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###

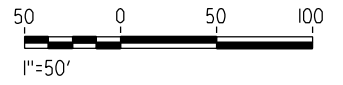


4/27/2011 6:30:44 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 1b - ave 24 wye-w.chowchilla grade separation\Layout\CT5151-B.dgn



**NOTE:**  
 1. FOR ROADWAY PROFILE, SEE DRAWINGS CT6151-B THROUGH CT6164-B

CURVE DATA					
No.	R	$\Delta$	T	L	V
(1)	3500.00	44° 36' 04"	1435.49	2724.52	55 MPH



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
 D. AYELE  
 DRAWN BY  
 C. DELOS REYES  
 CHECKED BY  
 A. SILVER  
 IN CHARGE  
 A. BOONE  
 DATE  
 04/29/2011

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

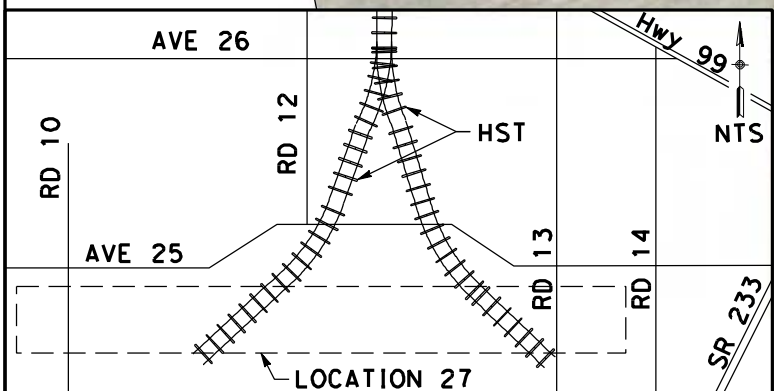
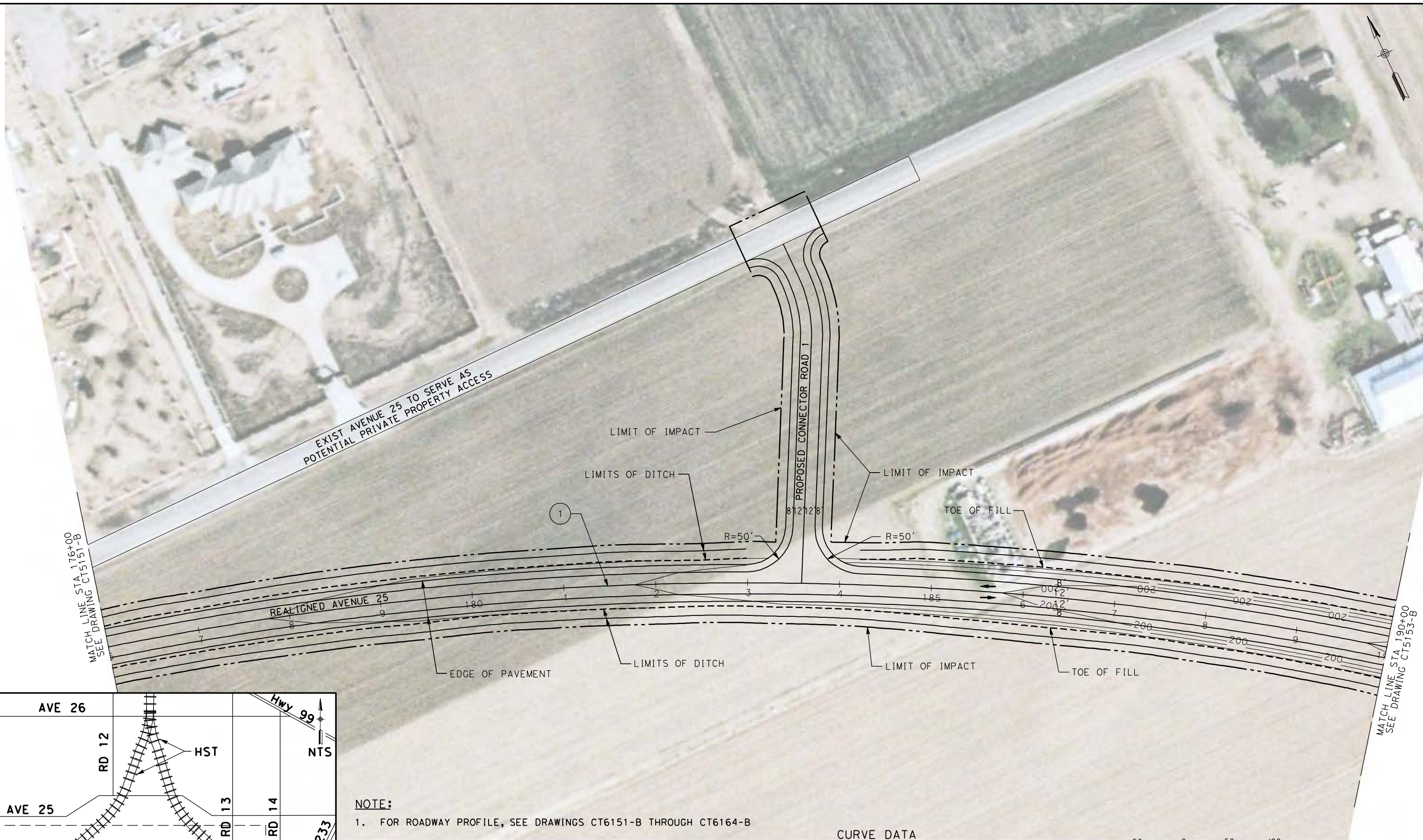


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 WYE/MERCED DO - (WC)  
 GRADE SEPARATION - AVENUE 25  
 LAYOUT  
 SHEET 1 OF 14

CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CT5151-B  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###

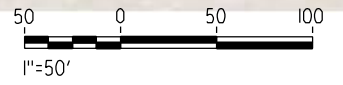


4/27/2011 6:30:53 PM p:\60022962\task\_02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 1b - ave 24 wye & w. chowchilla grade separation\Layout\CT5152-B.dgn



**NOTE:**  
 1. FOR ROADWAY PROFILE, SEE DRAWINGS CT6151-B THROUGH CT6164-B

CURVE DATA					
No.	R	Δ	T	L	V
(1)	3500.00	44°36'04"	1435.49	2724.52	55 MPH



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
 D. AYELE  
 DRAWN BY  
 C. DELOS REYES  
 CHECKED BY  
 A. SILVER  
 IN CHARGE  
 A. BOONE  
 DATE  
 04/29/2011

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

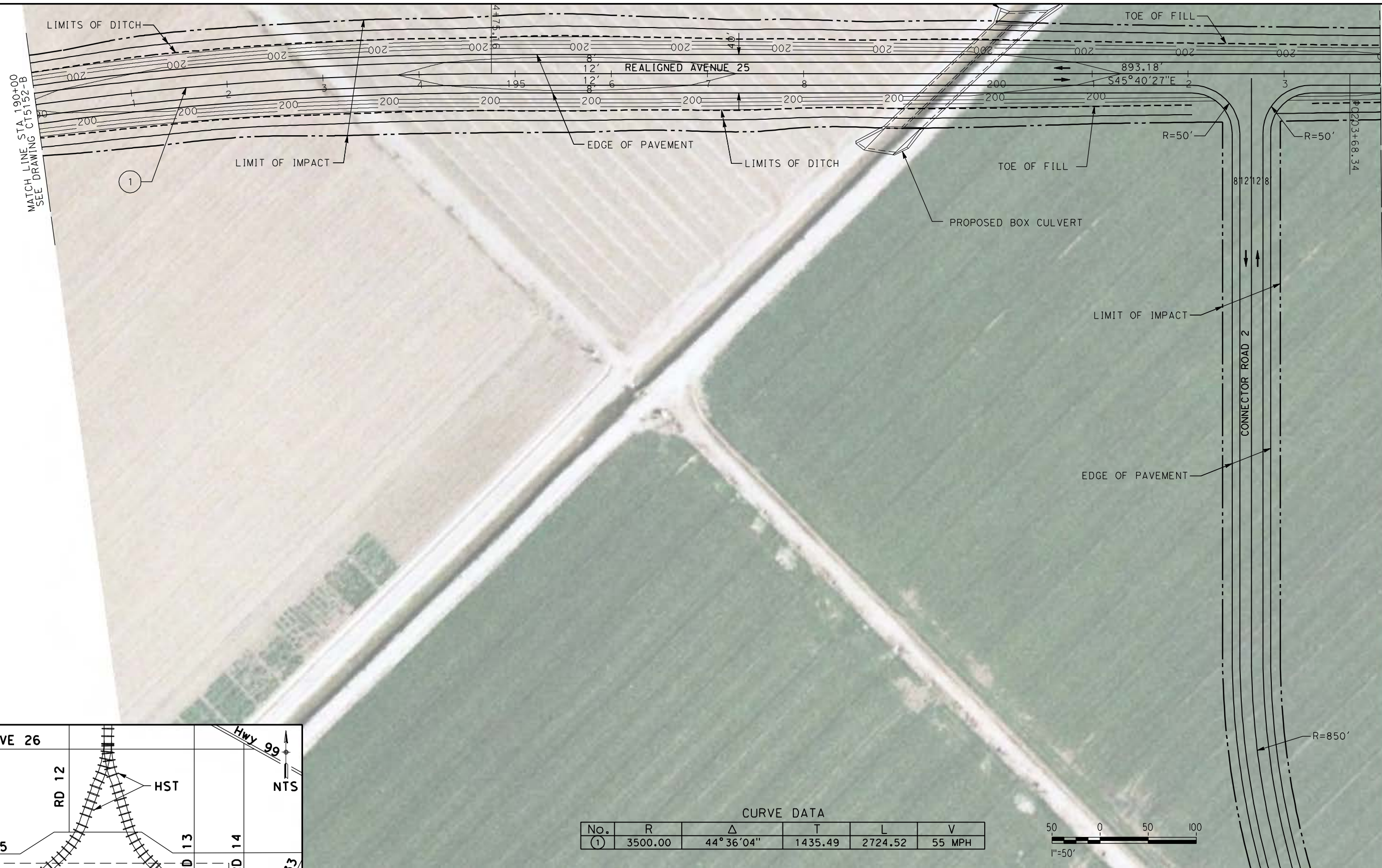


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 WYE/MERCED DO - (WC)  
 GRADE SEPARATION - AVENUE 25  
 LAYOUT  
 SHEET 2 OF 14

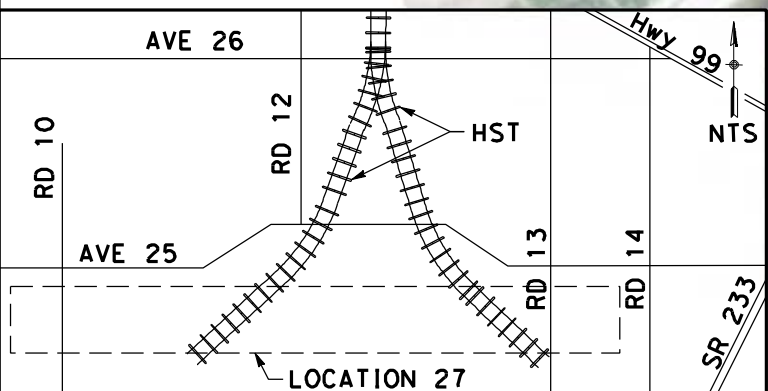
CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CT5152-B  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###



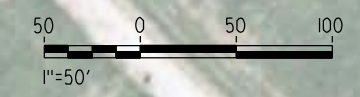
4/27/2011 6:31:03 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 1b - ave 24 wye & w. chowchilla\layout\CT5153-B.dgn  
 ReyesC1



MATCH LINE STA 204+00  
 SEE DRAWING CT5154-B



CURVE DATA					
No.	R	$\Delta$	T	L	V
(1)	3500.00	44° 36' 04"	1435.49	2724.52	55 MPH



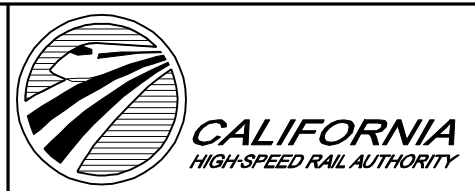
**NOTE:**  
 1. FOR ROADWAY PROFILE, SEE DRAWINGS CT6151-B THROUGH CT6164-B

SEE DRAWING CR9155-B

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
 D. AYELE  
 DRAWN BY  
 C. DELOS REYES  
 CHECKED BY  
 A. SILVER  
 IN CHARGE  
 A. BOONE  
 DATE  
 04/29/2011

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

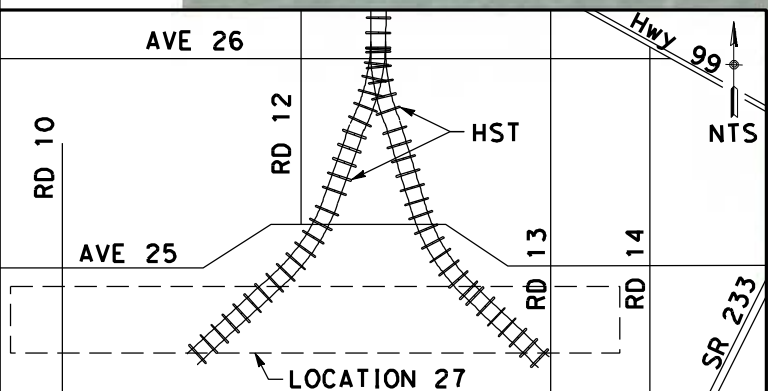
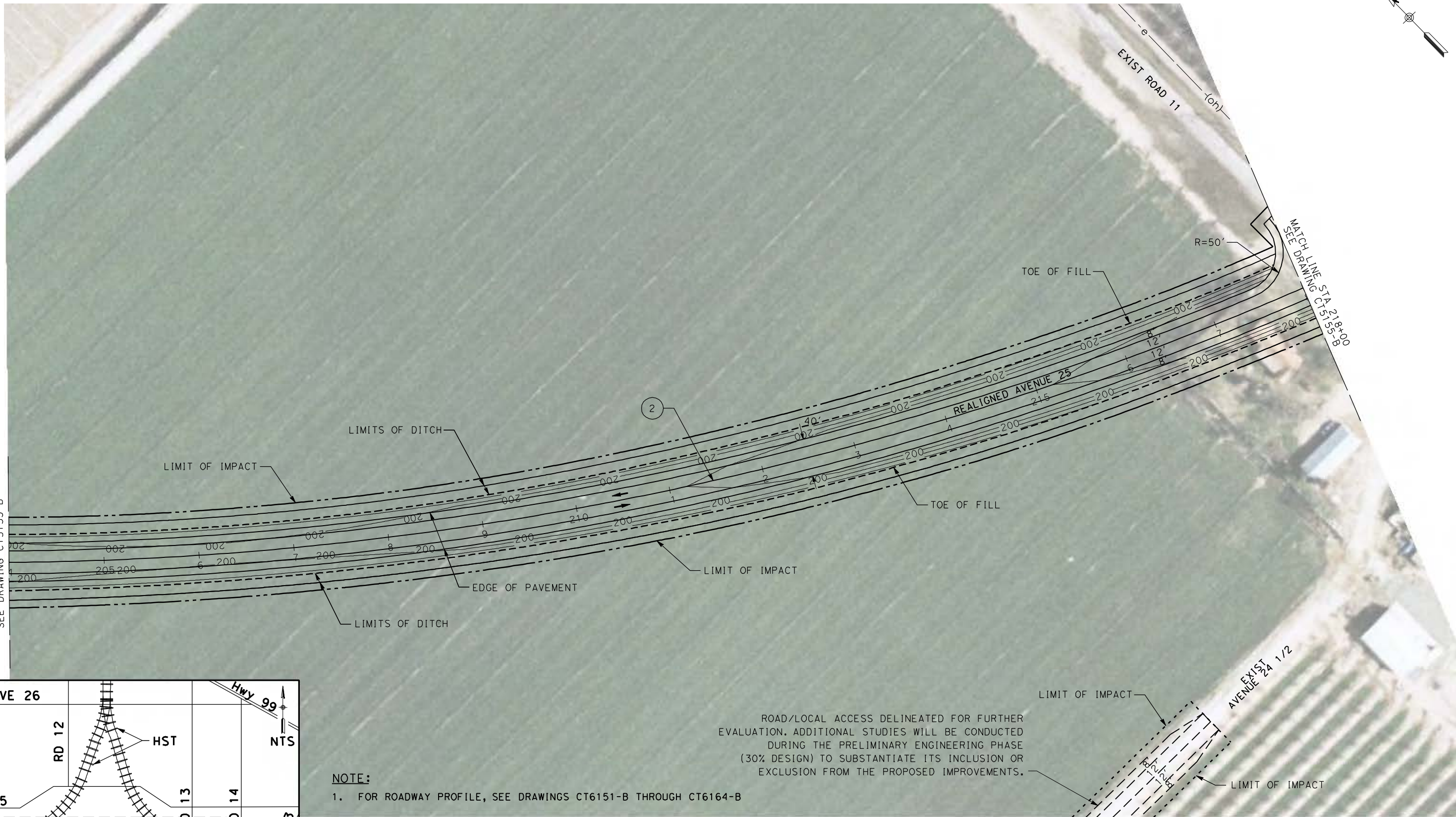


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 WYE/MERCED DO - (WC)  
 GRADE SEPARATION - AVENUE 25  
 LAYOUT  
 SHEET 3 OF 14

CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CT5153-B  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###



4/27/2011 6:31:12 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 1b - ave 24 wye-w.chowchilla grade separation\Layout\CT5154-B.dgn

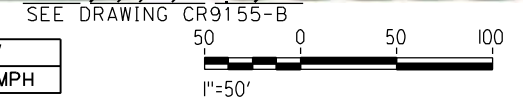


**NOTE:**  
 1. FOR ROADWAY PROFILE, SEE DRAWINGS CT6151-B THROUGH CT6164-B

ROAD/LOCAL ACCESS DELINEATED FOR FURTHER EVALUATION. ADDITIONAL STUDIES WILL BE CONDUCTED DURING THE PRELIMINARY ENGINEERING PHASE (30% DESIGN) TO SUBSTANTIATE ITS INCLUSION OR EXCLUSION FROM THE PROPOSED IMPROVEMENTS.

**CURVE DATA**

No.	R	$\Delta$	T	L	V
(2)	3500.00	44°19'33"	1425.68	2707.71	55 MPH



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
 D. AYELE  
 DRAWN BY  
 C. DELOS REYES  
 CHECKED BY  
 A. SILVER  
 IN CHARGE  
 A. BOONE  
 DATE  
 04/29/2011

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

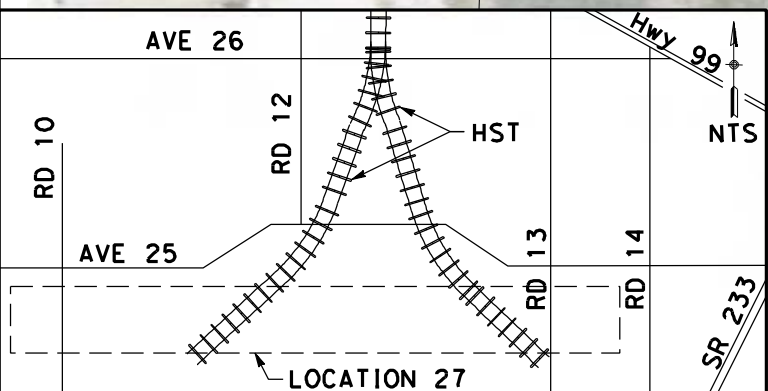
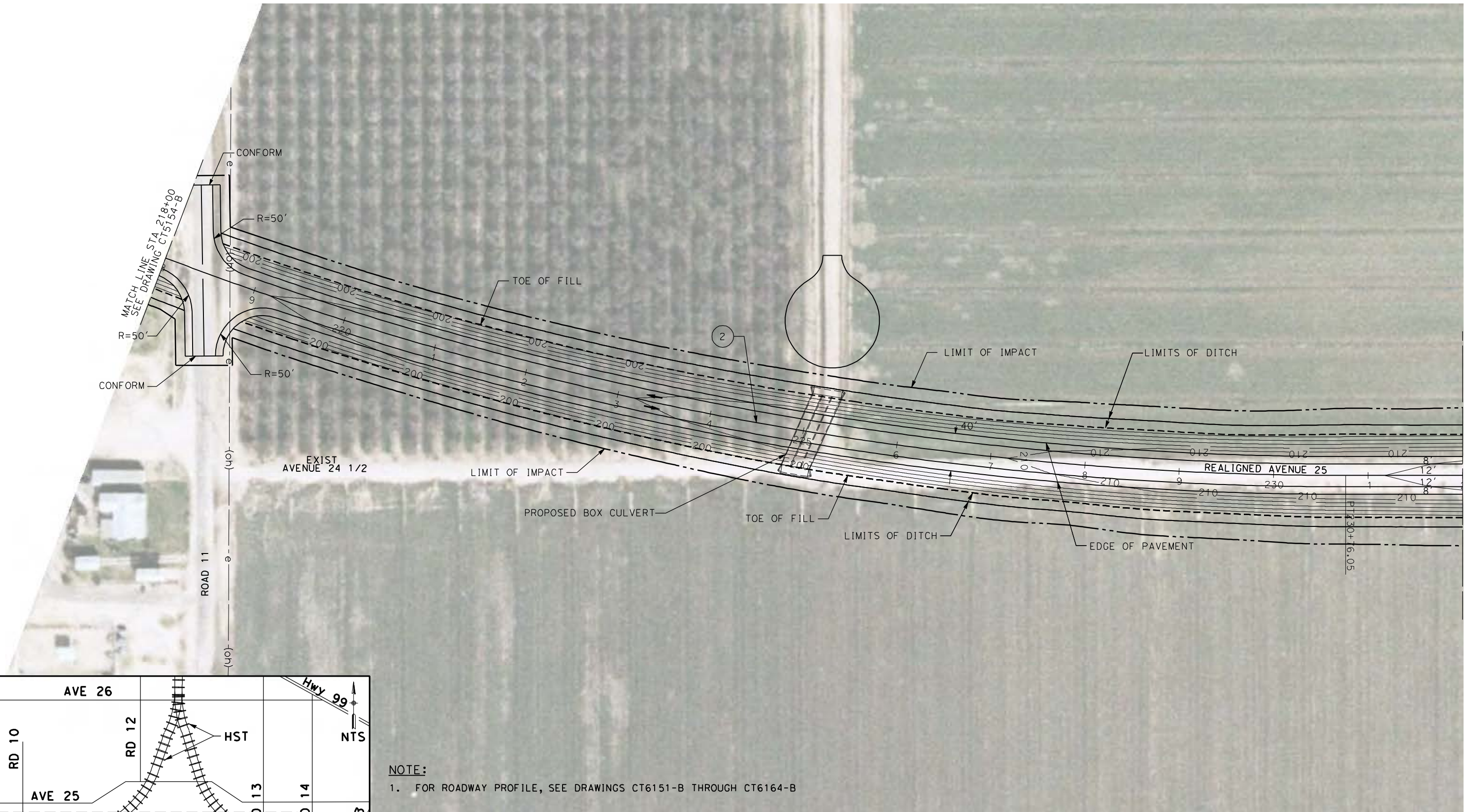


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 WYE/MERCED DO - (WC)  
 GRADE SEPARATION - AVENUE 25  
 LAYOUT  
 SHEET 4 OF 14

CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CT5154-B  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###

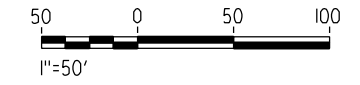


4/27/2011 6:31:20 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla volume 1b - ave 24 wye-w.chowchilla grade separation\Layout\CT5155-B.dgn  
 ReyesCT



**NOTE:**  
 1. FOR ROADWAY PROFILE, SEE DRAWINGS CT6151-B THROUGH CT6164-B

CURVE DATA					
No.	R	$\Delta$	T	L	V
(2)	3500.00	44°19'33"	1425.68	2707.71	55 MPH



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
 D. AYELE  
 DRAWN BY  
 C. DELOS REYES  
 CHECKED BY  
 A. SILVER  
 IN CHARGE  
 A. BOONE  
 DATE  
 04/29/2011

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

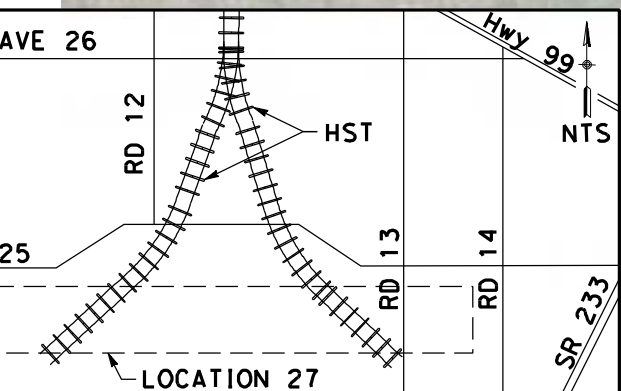
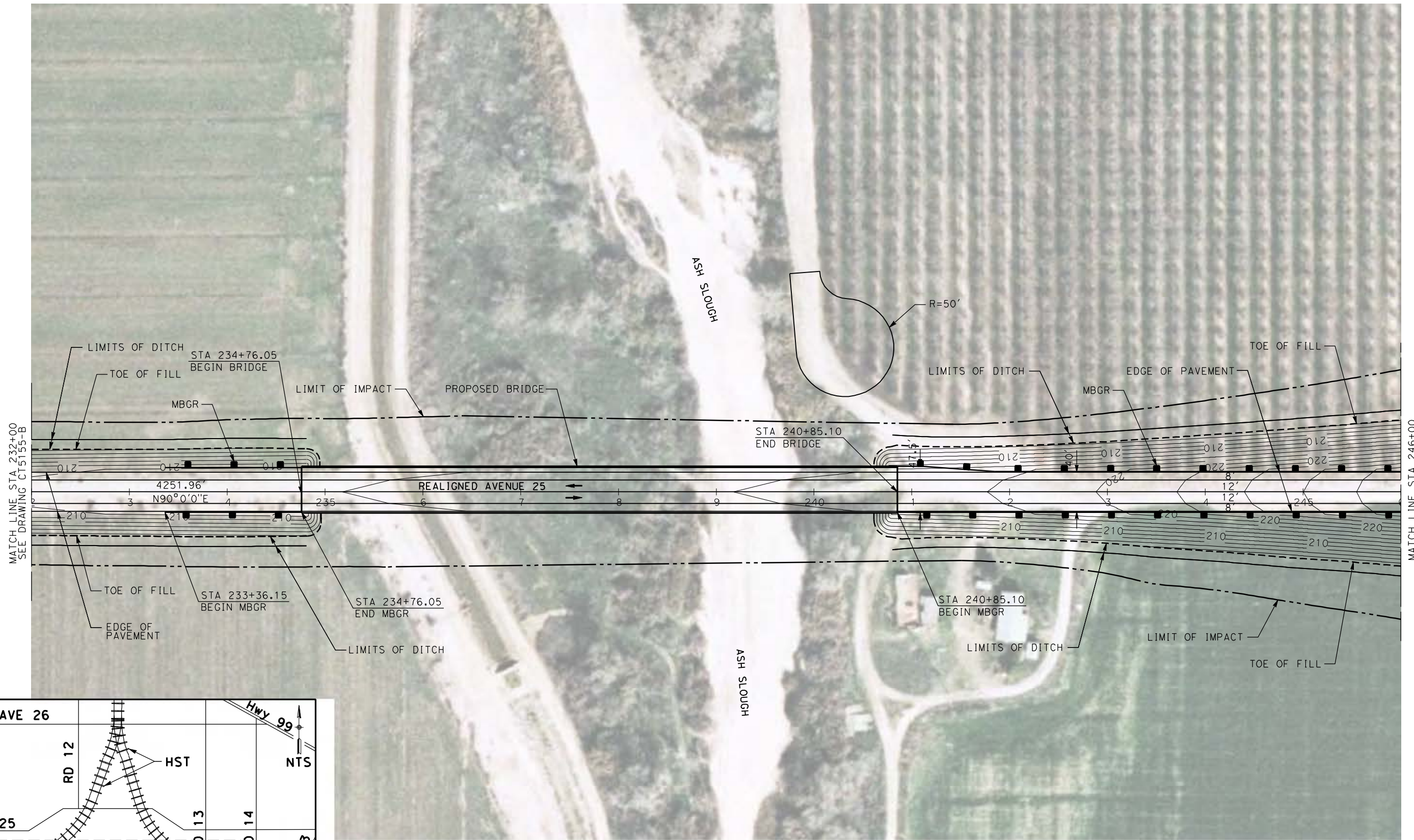
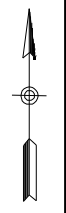


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 WYE/MERCED DO - (WC)  
 GRADE SEPARATION - AVENUE 25  
 LAYOUT  
 SHEET 5 OF 14

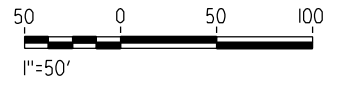
CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CT5155-B  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###



4/27/2011 6:31:29 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 1b - ave 24 wye-w.chowchilla grade separation\Layout\CT5156-B.dgn



**NOTE:**  
 1. FOR ROADWAY PROFILE, SEE DRAWINGS CT6151-B THROUGH CT6164-B



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
 D. AYELE  
 DRAWN BY  
 C. DELOS REYES  
 CHECKED BY  
 A. SILVER  
 IN CHARGE  
 A. BOONE  
 DATE  
 04/29/2011

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

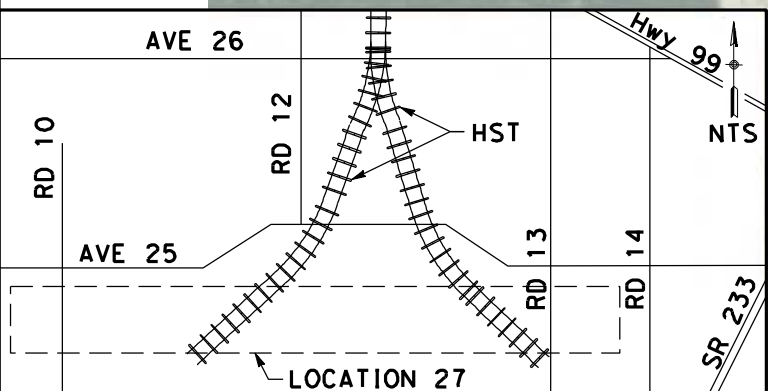
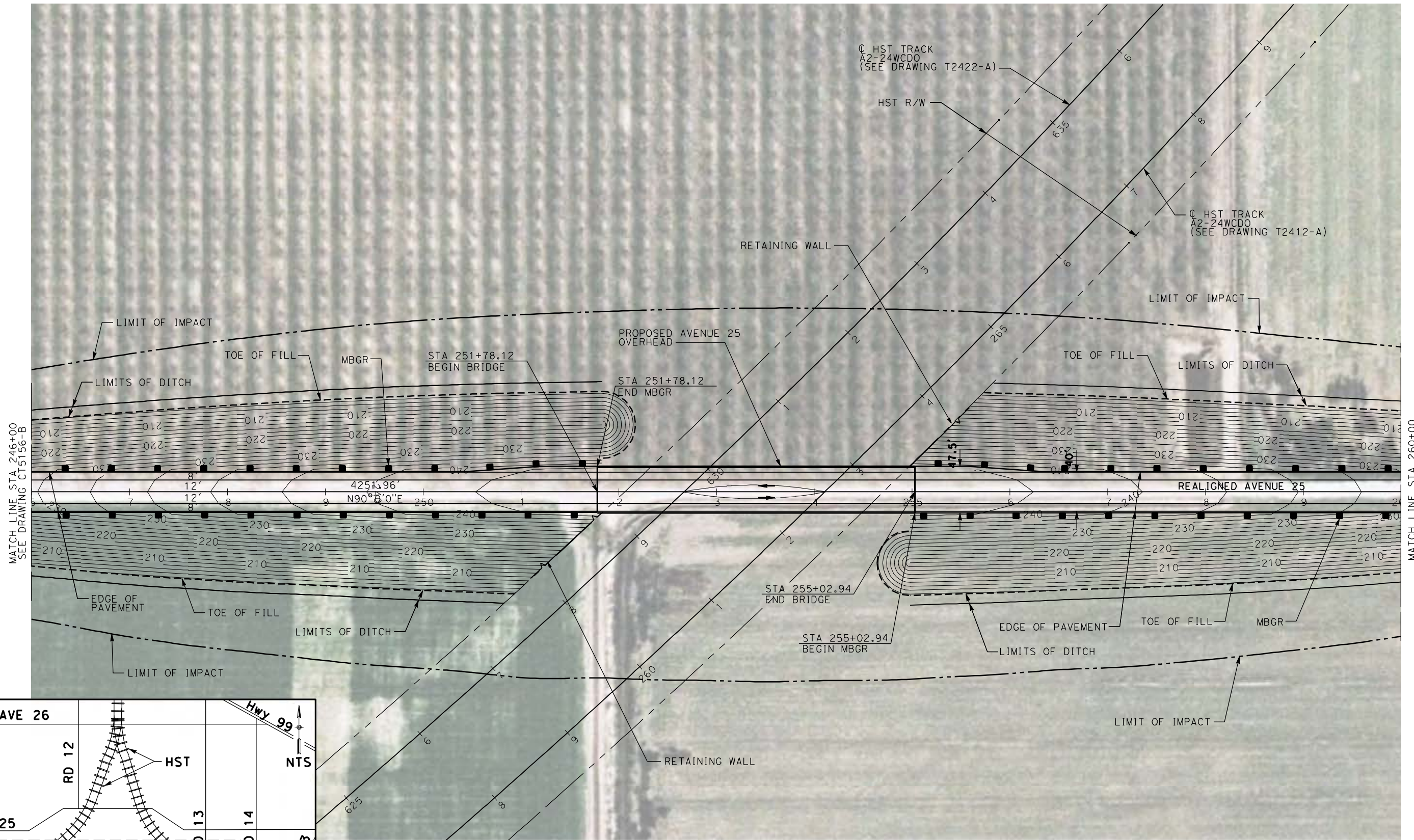
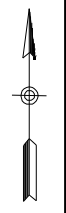


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 WYE/MERCED DO - (WC)  
 GRADE SEPARATION - AVENUE 25  
 LAYOUT  
 SHEET 6 OF 14

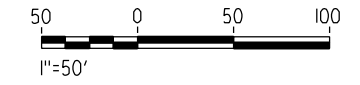
CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CT5156-B  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###



4/27/2011 6:31:38 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 1b - ave 24 wye-w.chowchilla grade separation\Layout\CT5157-B.dgn



**NOTE:**  
1. FOR ROADWAY PROFILE, SEE DRAWINGS CT6151-B THROUGH CT6164-B



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
 DRAWN BY  
C. DELOS REYES  
 CHECKED BY  
A. SILVER  
 IN CHARGE  
A. BOONE  
 DATE  
04/29/2011

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



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 WYE/MERCED DO - (WC)  
 GRADE SEPARATION - AVENUE 25  
 LAYOUT  
 SHEET 7 OF 14

CONTRACT NO.  
HSR06-007  
 DRAWING NO.  
CT5157-B  
 SCALE  
AS SHOWN  
 SHEET NO.  
### OF ###

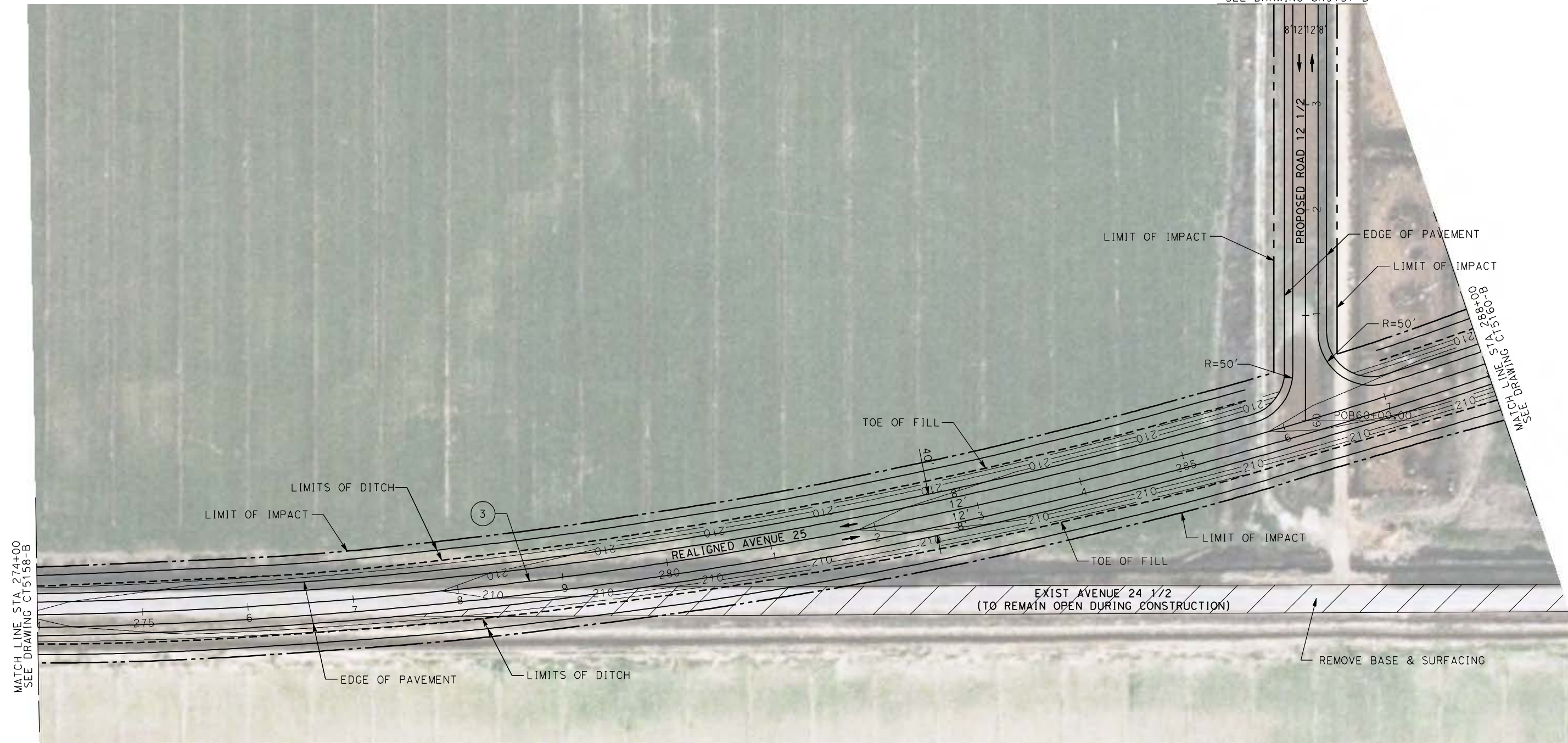






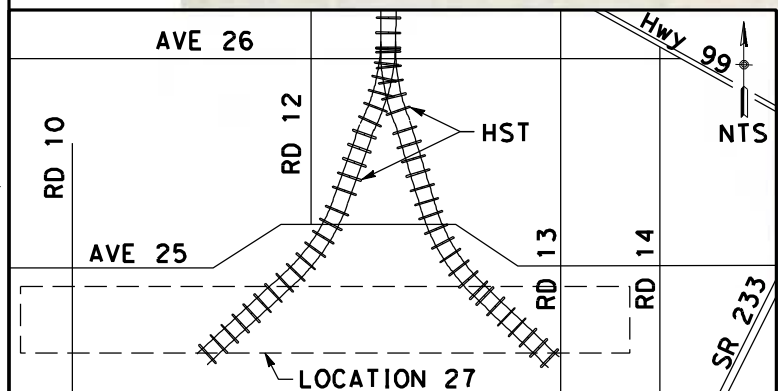
4/27/2011 6:31:56 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 1b - ave 24 wye-w.chowchilla grade separation\Layout\CT5159-B.dgn

SEE DRAWING CR9157-B



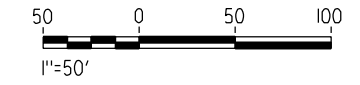
MATCH LINE STA 274+00  
SEE DRAWING CT5158-B

SEE DRAWING CT5157-B  
MATCH LINE STA 288+00



**NOTE:**  
1. FOR ROADWAY PROFILE, SEE DRAWINGS CT6151-B THROUGH CT6164-B

CURVE DATA					
No.	R	Δ	T	L	V
(3)	4500.00	31°56'45"	1288.05	2509.02	55 MPH



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
DRAWN BY  
C. DELOS REYES  
CHECKED BY  
A. SILVER  
IN CHARGE  
A. BOONE  
DATE  
04/29/2011

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

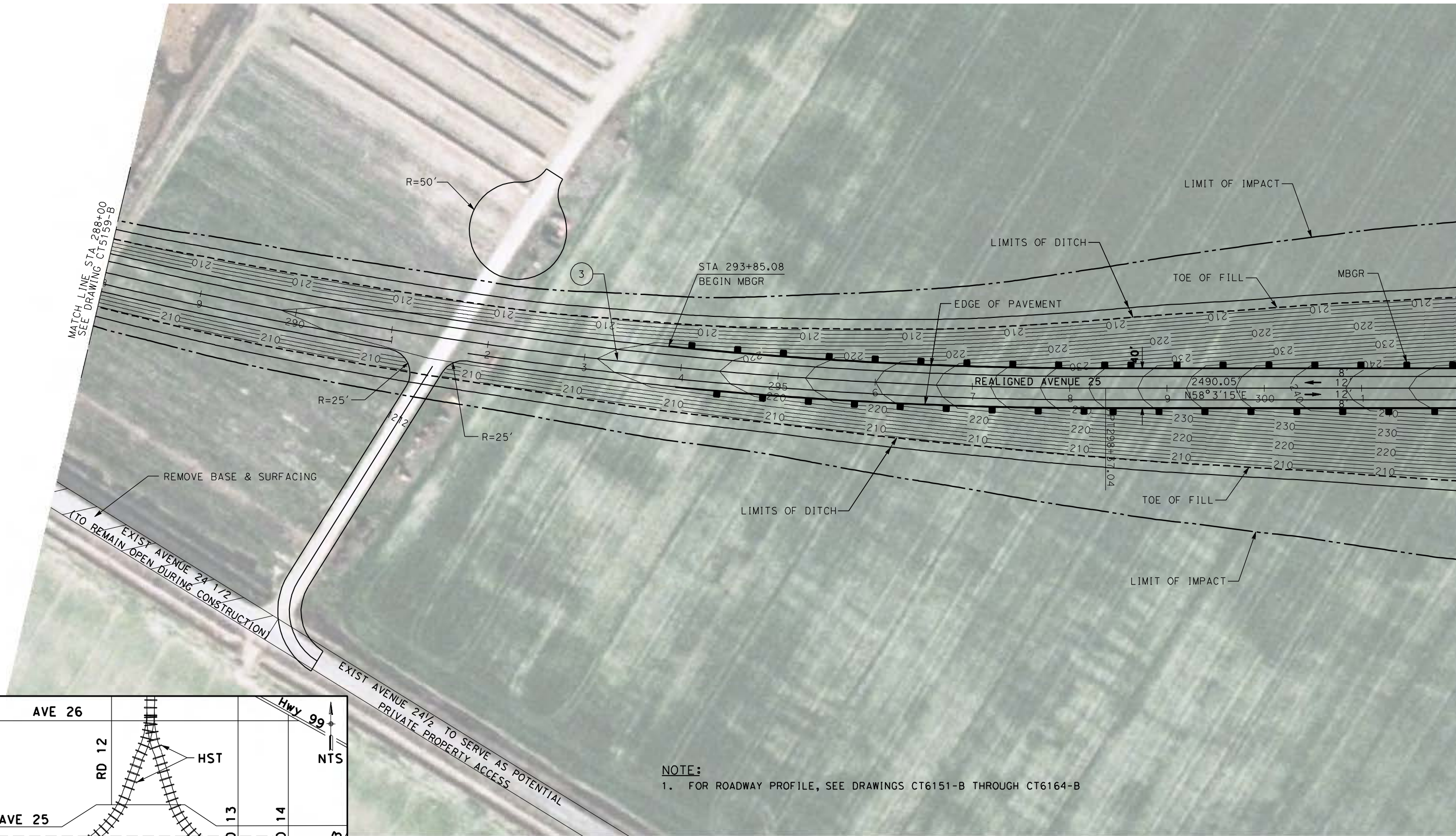
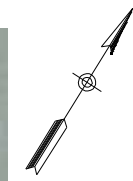


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
UPRR/SR99 WYE/MERCED DO - (WC)  
GRADE SEPARATION - AVENUE 25  
LAYOUT  
SHEET 9 OF 14

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
CT5159-B  
SCALE  
AS SHOWN  
SHEET NO.  
### OF ###

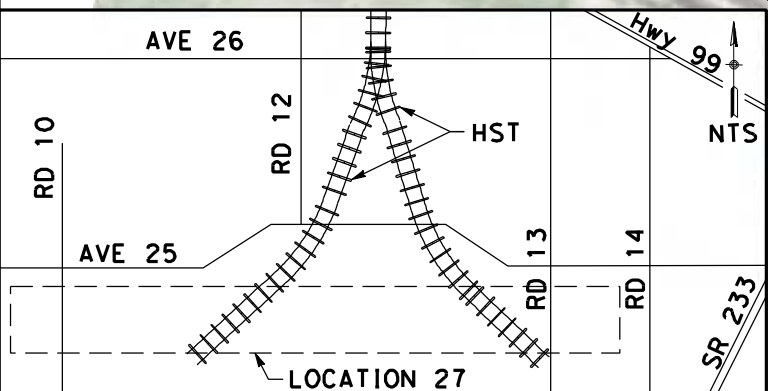


4/27/2011 6:32:05 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla volume 1b - ave 24 wye-w.chowchilla grade separation\Layout\CT5160-B.dgn  
 ReyesCT



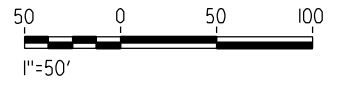
MATCH LINE STA 302+00  
 SEE DRAWING CT5161-B

MATCH LINE STA 288+00  
 SEE DRAWING CT5159-B



**NOTE:**  
 1. FOR ROADWAY PROFILE, SEE DRAWINGS CT6151-B THROUGH CT6164-B

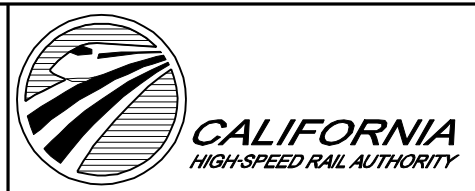
CURVE DATA					
No.	R	$\Delta$	T	L	V
③	4500.00	31°56'45"	1288.05	2509.02	55 MPH



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
 D. AYELE  
 DRAWN BY  
 C. DELOS REYES  
 CHECKED BY  
 A. SILVER  
 IN CHARGE  
 A. BOONE  
 DATE  
 04/29/2011

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

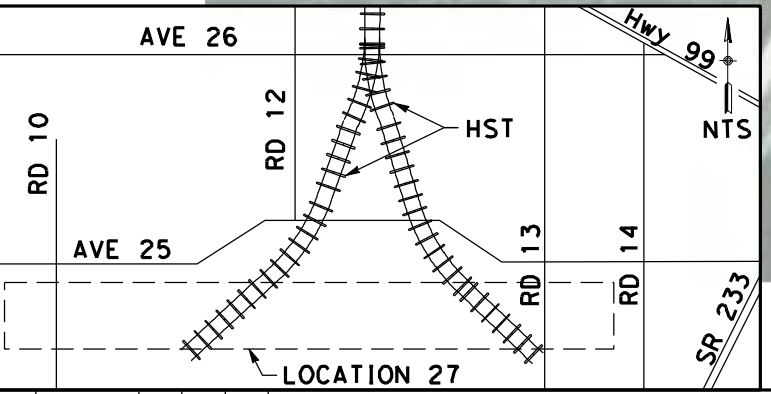
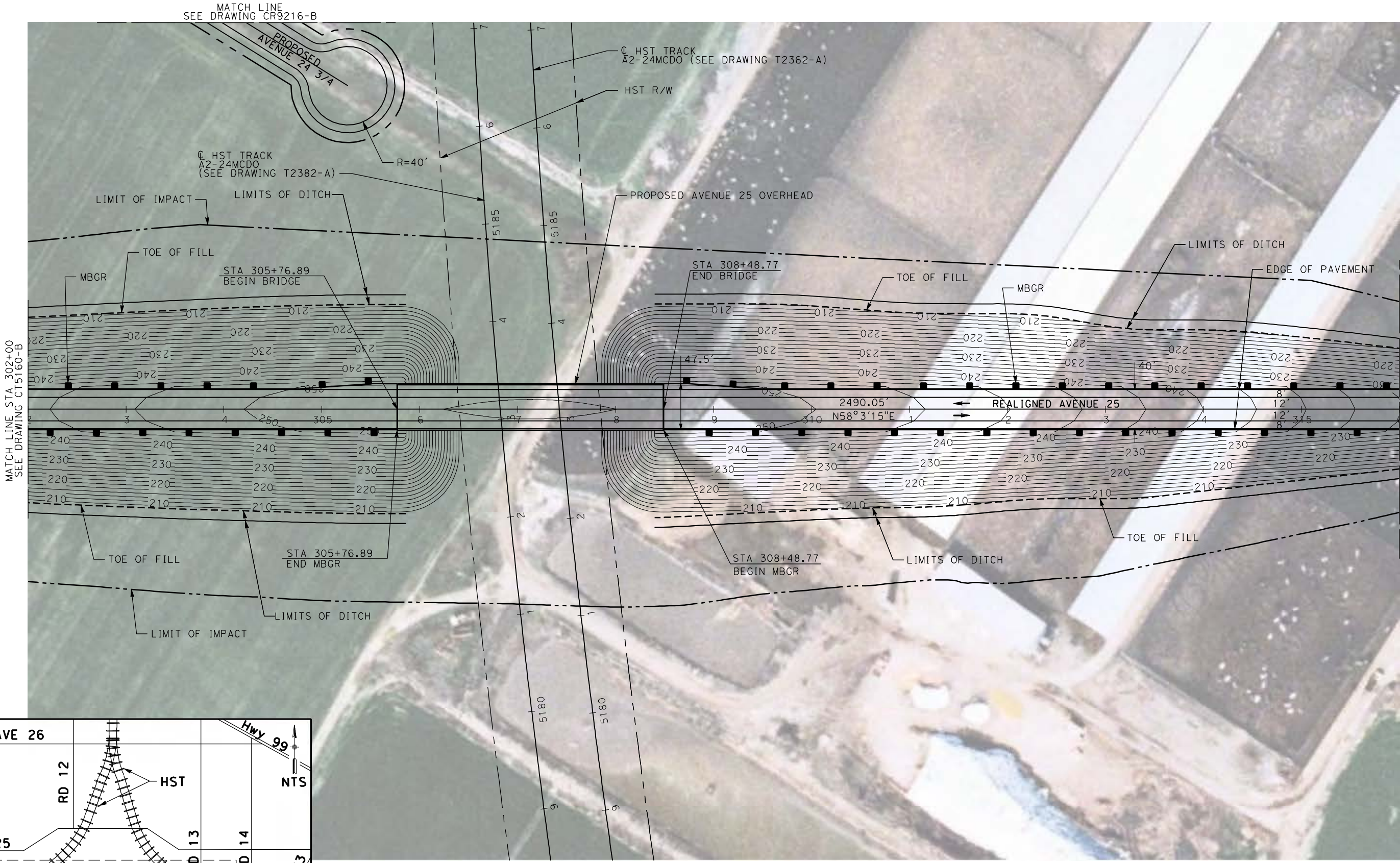
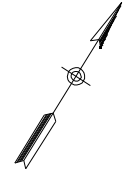


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 WYE/MERCED DO - (WC)  
 GRADE SEPARATION - AVENUE 25  
 LAYOUT  
 SHEET 10 OF 14

CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CT5160-B  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###



4/27/2011 6:32:15 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla volume 1b - ave 24 wye-w.chowchilla grade separation\Layout\CT5161-B.dgn



**NOTE:**  
 1. FOR ROADWAY PROFILE, SEE DRAWINGS CT6151-B THROUGH CT6164-B



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
 R. LI  
 DRAWN BY  
 A. TRINH  
 CHECKED BY  
 A. SILVER  
 IN CHARGE  
 A. BOONE  
 DATE  
 04/29/2011

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

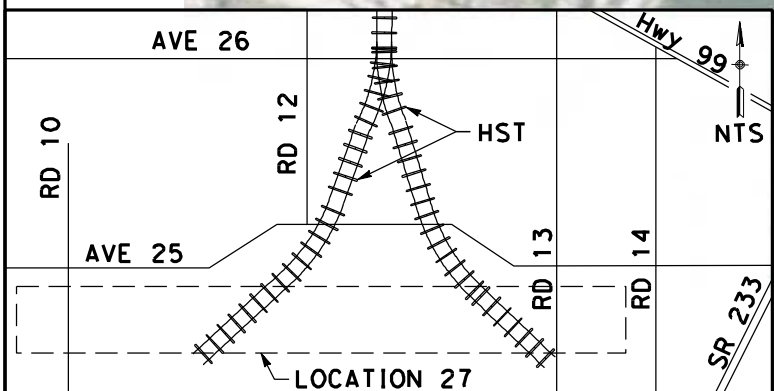
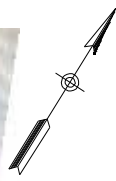
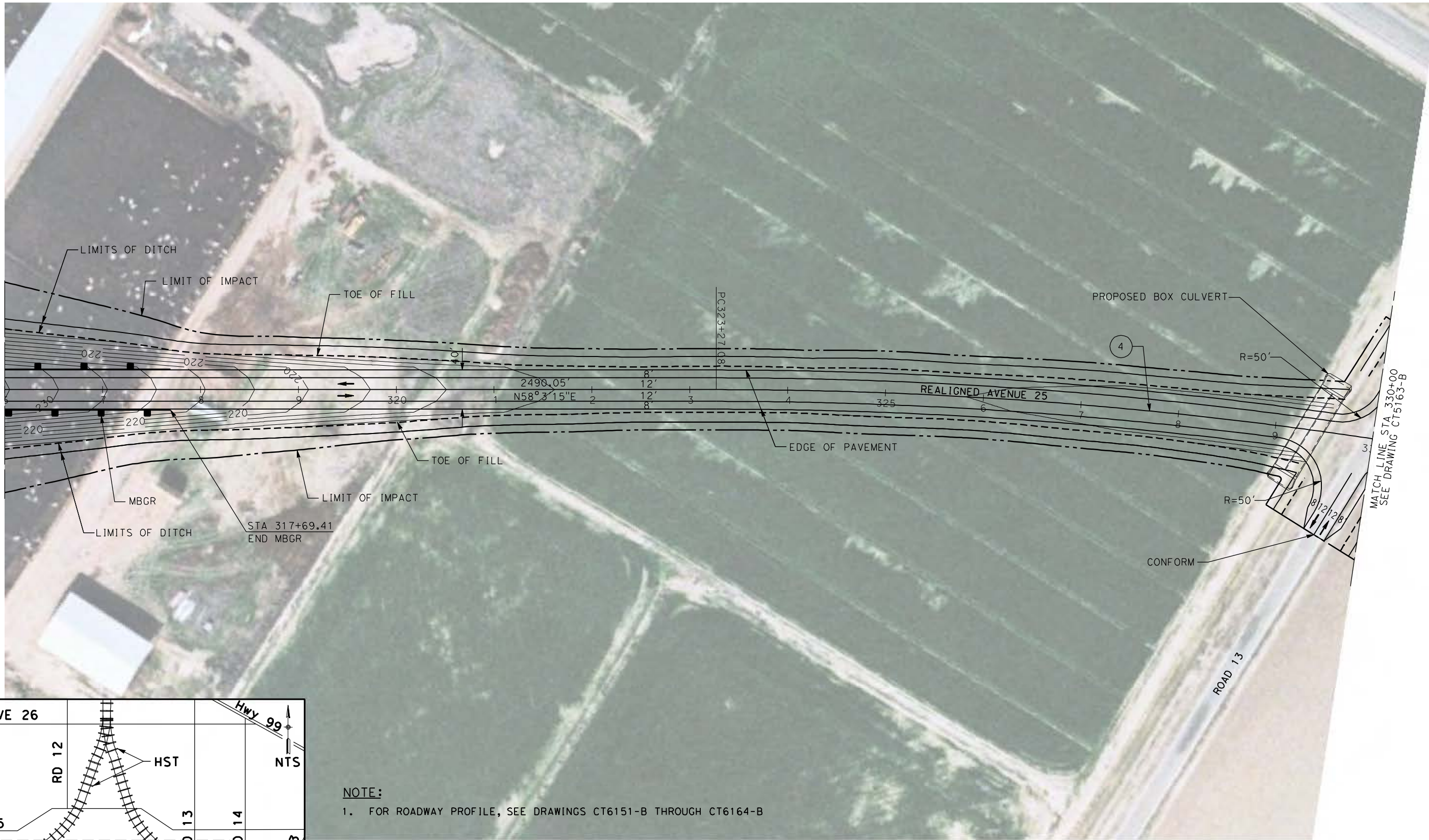


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 WYE/MERCED DO - (WC)  
 GRADE SEPARATION - AVENUE 25  
 LAYOUT  
 SHEET 11 OF 14

CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CT5161-B  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###

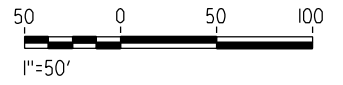


4/27/2011 6:32:24 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla volume 1b - ave 24 wye-w.chowchilla grade separation\Layout\CT5162-B.dgn



**NOTE:**  
 1. FOR ROADWAY PROFILE, SEE DRAWINGS CT6151-B THROUGH CT6164-B

CURVE DATA					
No.	R	$\Delta$	T	L	V
(4)	4500.00	31°56'45"	1288.05	2509.02	55 MPH



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
 D. AYELE  
 DRAWN BY  
 C. DELOS REYES  
 CHECKED BY  
 A. SILVER  
 IN CHARGE  
 A. BOONE  
 DATE  
 04/29/2011

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

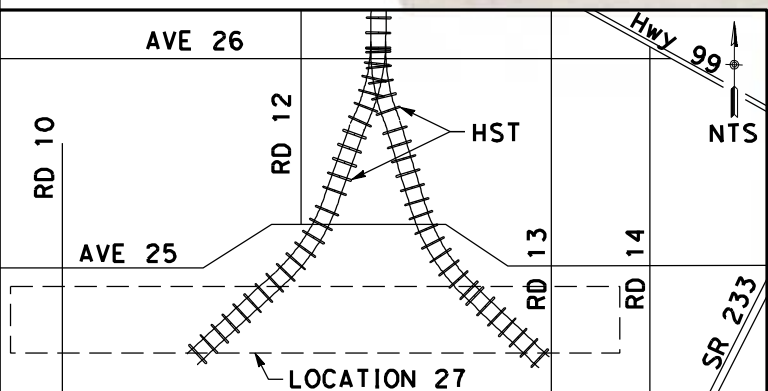
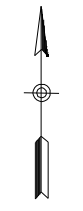
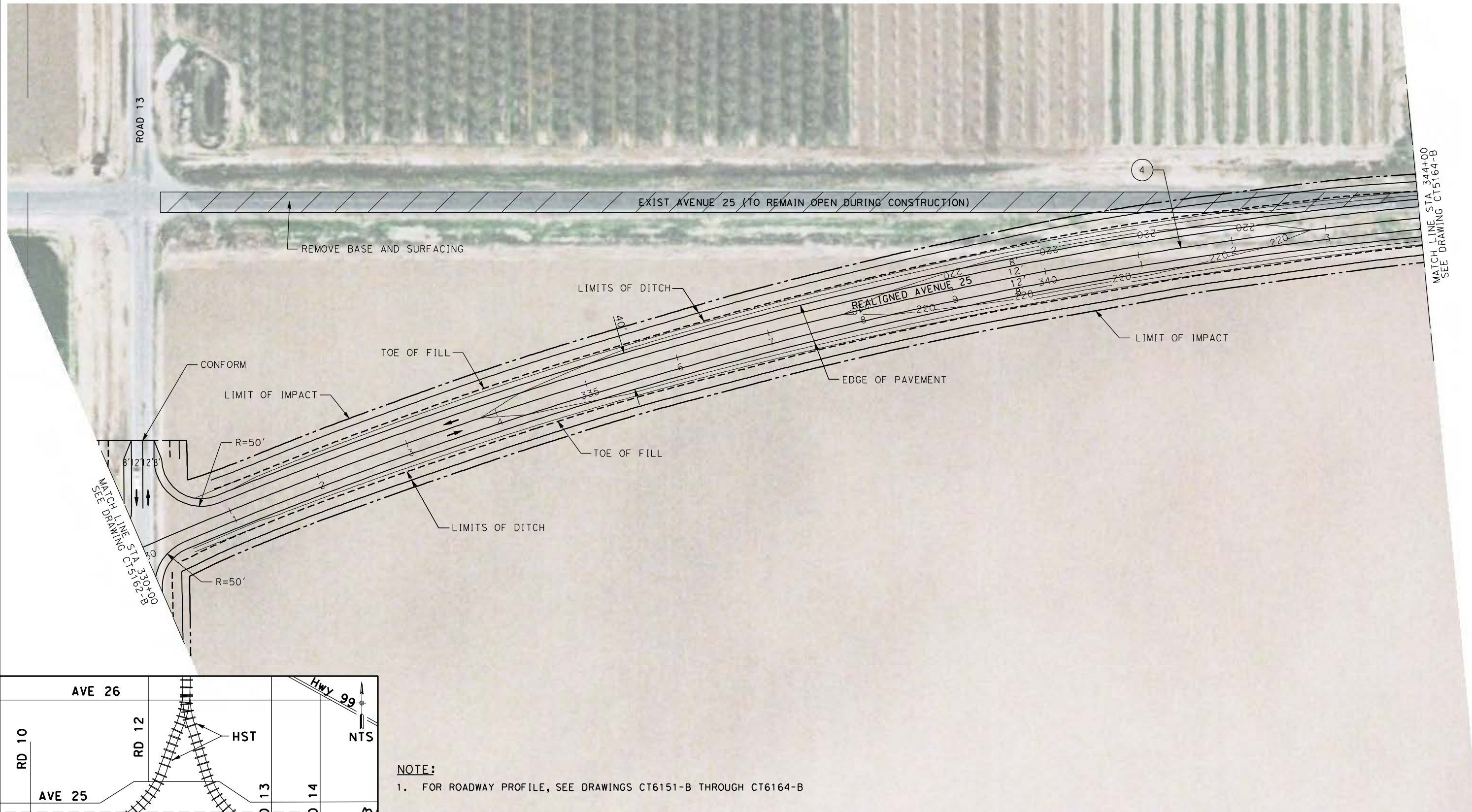


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 WYE/MERCED DO - (WC)  
 GRADE SEPARATION - AVENUE 25  
 LAYOUT  
 SHEET 12 OF 14

CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CT5162-B  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###

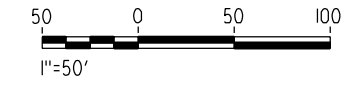


4/27/2011 6:32:32 PM p:\60022962\task\_02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 1b - ave 24 wye-w.chowchilla grade separation\layout\CT5163-B.dgn



**NOTE:**  
 1. FOR ROADWAY PROFILE, SEE DRAWINGS CT6151-B THROUGH CT6164-B

CURVE DATA					
No.	R	$\Delta$	T	L	V
(4)	4500.00	31°56'45"	1288.05	2509.02	55 MPH



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
 D. AYELE  
 DRAWN BY  
 C. DELOS REYES  
 CHECKED BY  
 A. SILVER  
 IN CHARGE  
 A. BOONE  
 DATE  
 04/29/2011

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

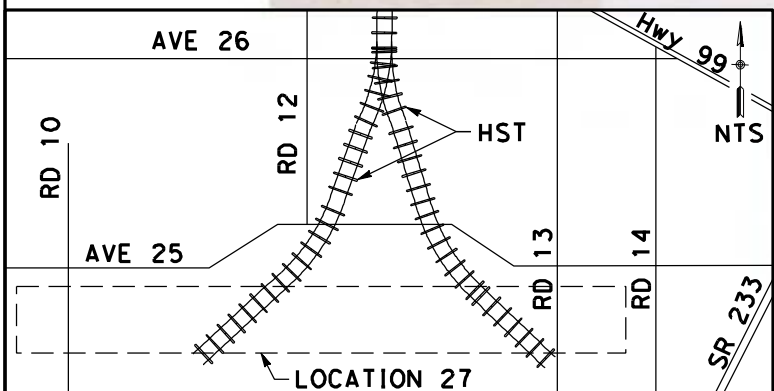
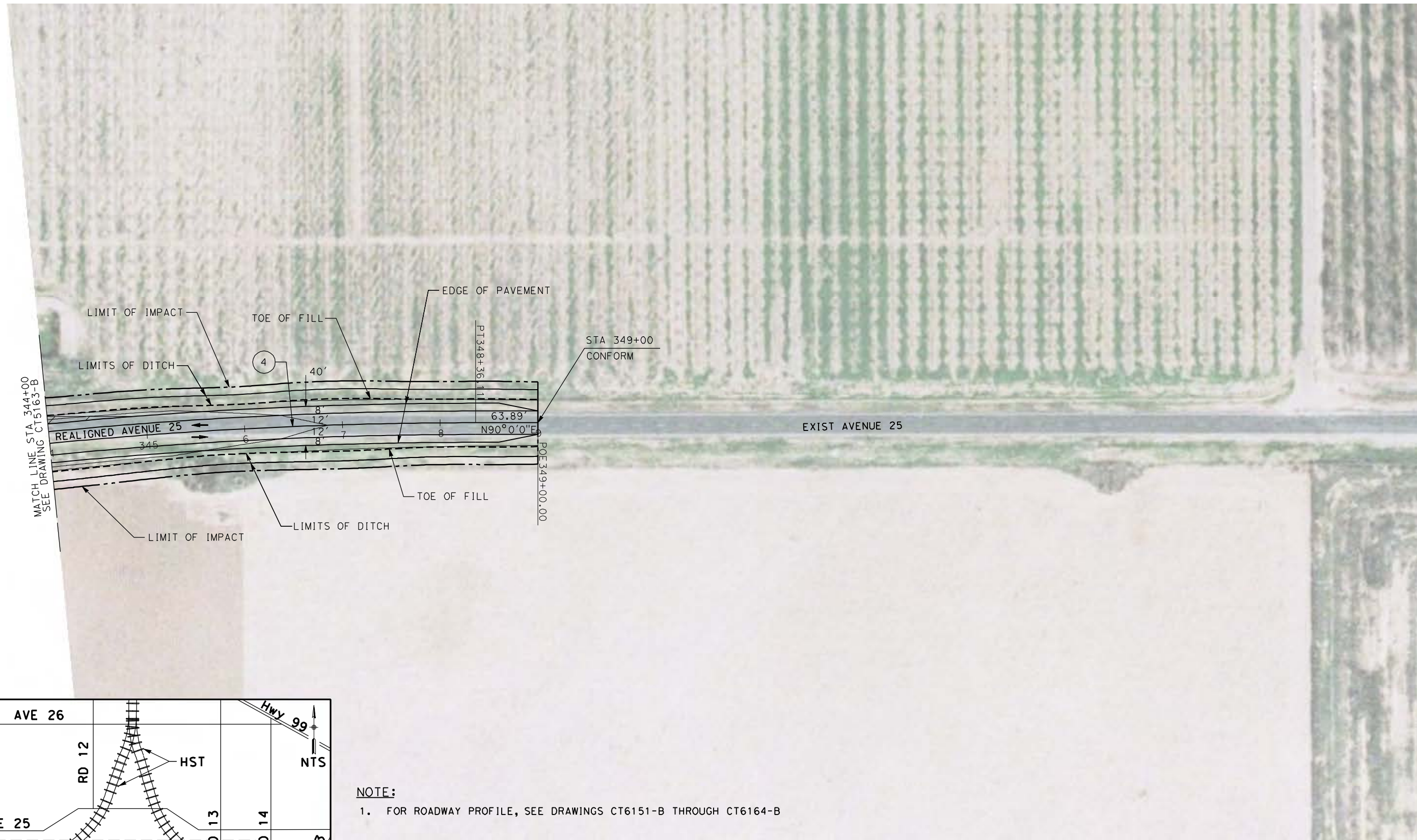


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 WYE/MERCED DO - (WC)  
 GRADE SEPARATION - AVENUE 25  
 LAYOUT  
 SHEET 13 OF 14

CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CT5163-B  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###

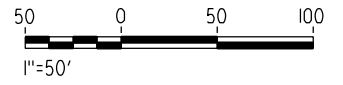


4/27/2011 6:32:41 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 1b - ave 24 wye-w.chowchilla grade separation\Layout\CT5164-B.dgn



**NOTE:**  
 1. FOR ROADWAY PROFILE, SEE DRAWINGS CT6151-B THROUGH CT6164-B

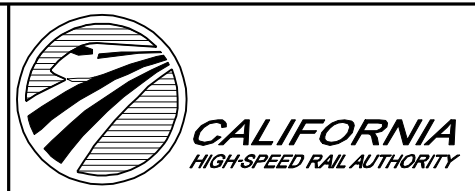
CURVE DATA					
No.	R	$\Delta$	T	L	V
(4)	4500.00	31°56'45"	1288.05	2509.02	55 MPH



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
 D. AYELE  
 DRAWN BY  
 C. DELOS REYES  
 CHECKED BY  
 A. SILVER  
 IN CHARGE  
 A. BOONE  
 DATE  
 04/29/2011

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

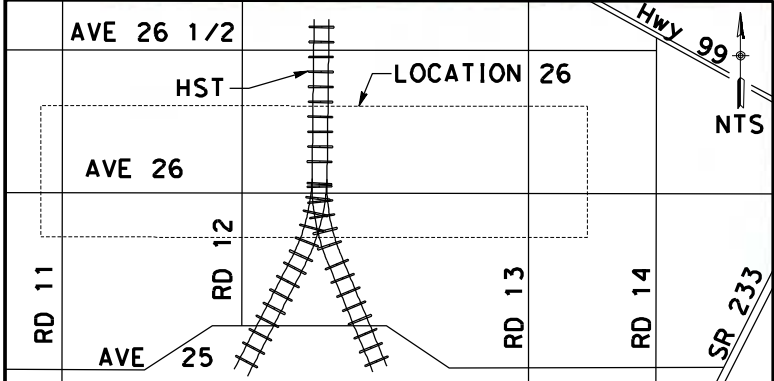


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 WYE/MERCED DO - (WC)  
 GRADE SEPARATION - AVENUE 25  
 LAYOUT  
 SHEET 14 OF 14

CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CT5164-B  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###

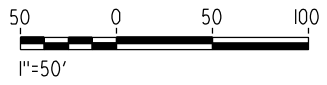


4/27/2011 6:32:49 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 1b - ave 24 wye-w.chowchilla grade separation\Layout\CT5168-B.dgn



**NOTE:**  
 1. FOR ROADWAY PROFILE, SEE DRAWINGS CT6167-B THROUGH CT6176-B

No.	R	$\Delta$	T	L	V
(1)	3500.00	60°23'27"	925.04	1808.71	45 MPH



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
 D. AYELE  
 DRAWN BY  
 C. DELOS REYES  
 CHECKED BY  
 A. SILVER  
 IN CHARGE  
 A. BOONE  
 DATE  
 04/29/2011

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

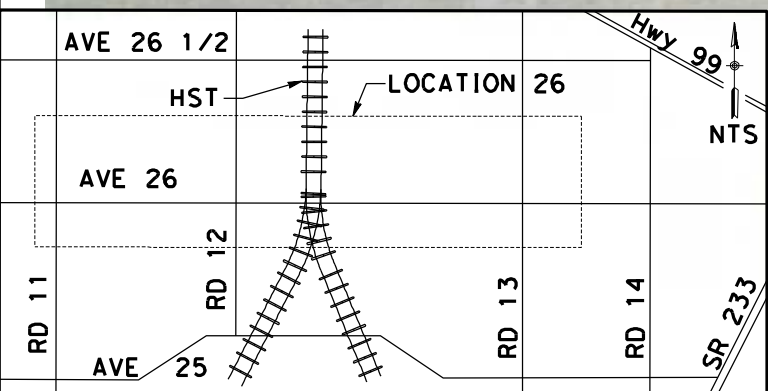
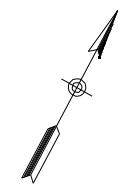
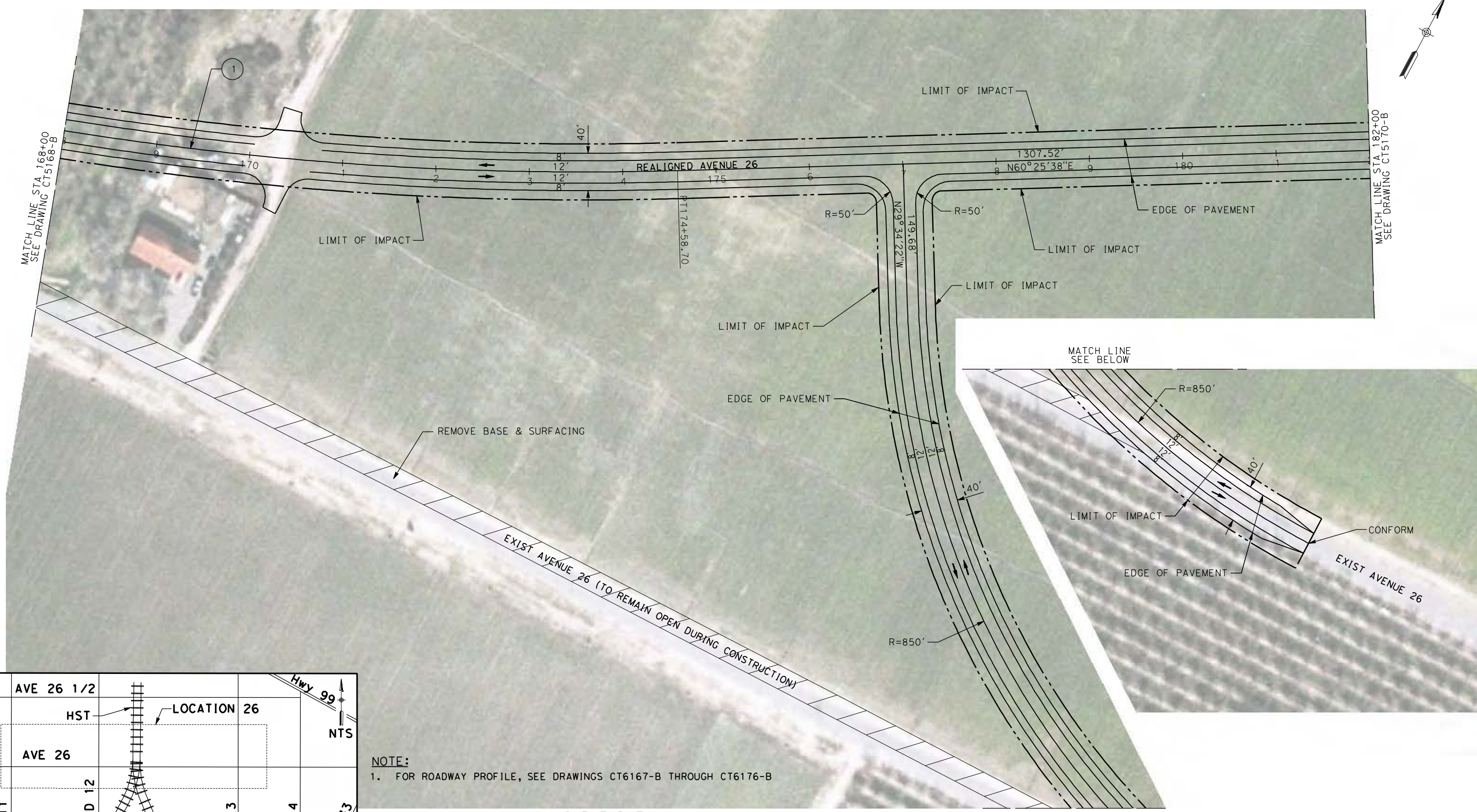


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 WYE/MERCED DO - (WC)  
 GRADE SEPARATION - AVENUE 26 ALT 1  
 LAYOUT  
 SHEET 1 OF 10

CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CT5168-B  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###

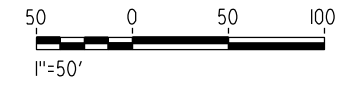


4/27/2011 6:32:59 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 1b - ave 24 wye & w. chowchilla\layout\CT5169-B.dgn  
 ReyesC1



**NOTE:**  
 1. FOR ROADWAY PROFILE, SEE DRAWINGS CT6167-B THROUGH CT6176-B

CURVE DATA					
No.	R	$\Delta$	T	L	V
(1)	3500.00	60°23'27"	925.04	1808.71	45 MPH



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
 D. AYELE  
 DRAWN BY  
 C. DELOS REYES  
 CHECKED BY  
 A. SILVER  
 IN CHARGE  
 A. BOONE  
 DATE  
 04/29/2011

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

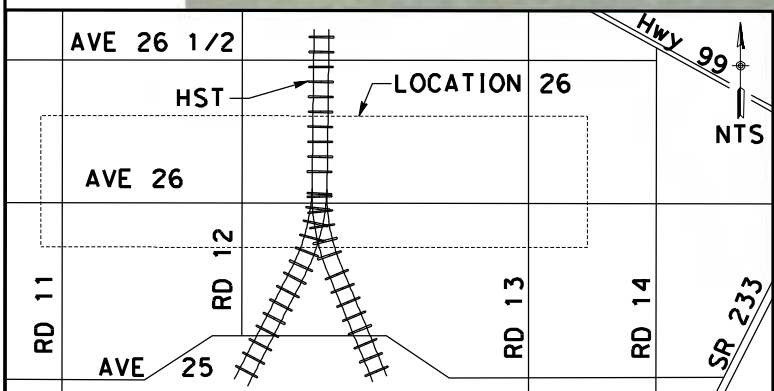
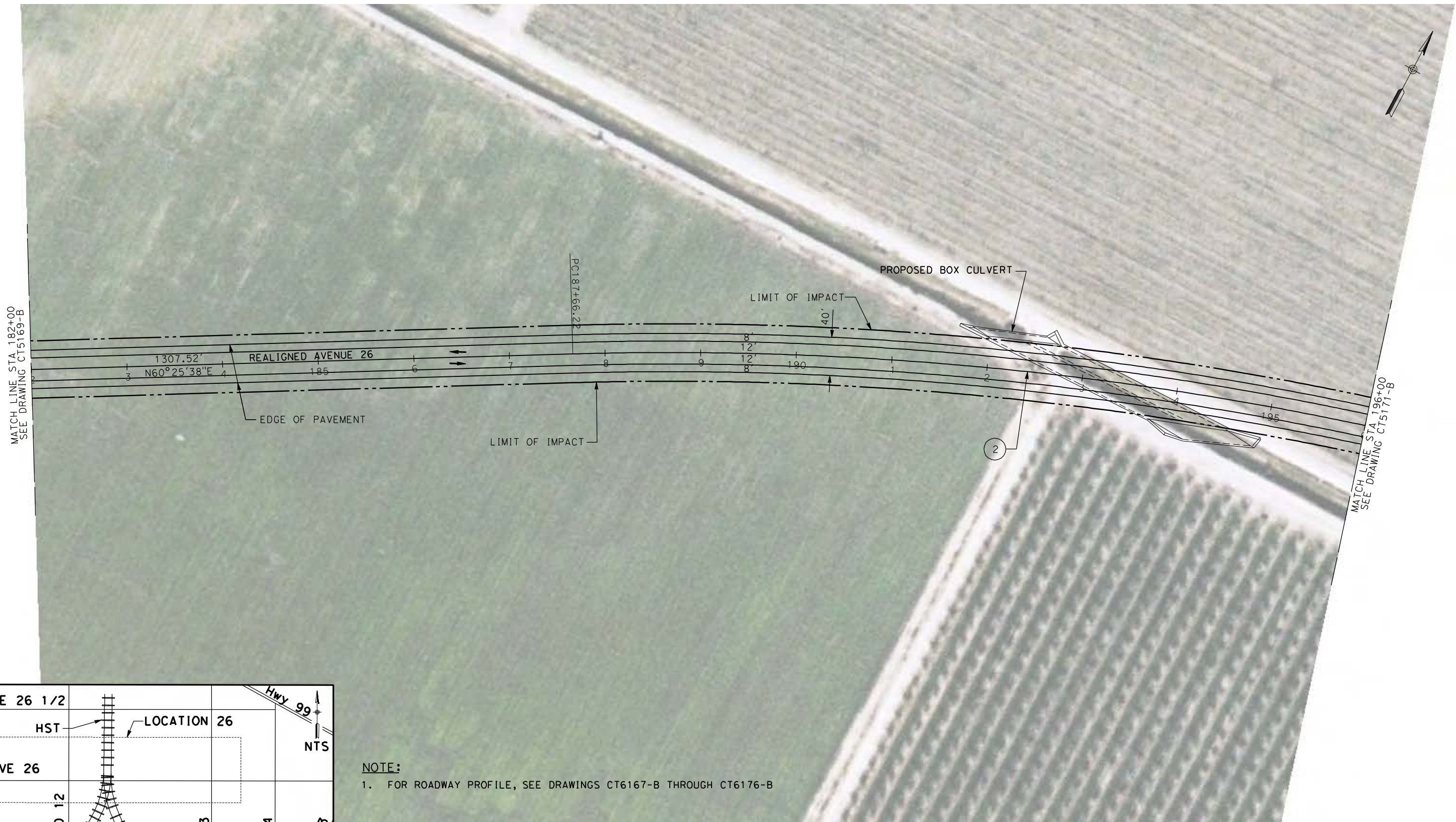


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 WYE/MERCED DO - (WC)  
 GRADE SEPARATION - AVENUE 26 ALT 1  
 LAYOUT  
 SHEET 2 OF 10

CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CT5169-B  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###

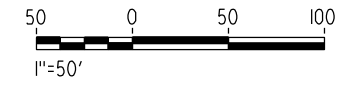


4/27/2011 6:33:08 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 1b - ave 24 wye-w.chowchilla grade separation\Layout\CT5170-B.dgn  
 ReyesCI



**NOTE:**  
 1. FOR ROADWAY PROFILE, SEE DRAWINGS CT6167-B THROUGH CT6176-B

CURVE DATA					
No.	R	$\Delta$	T	L	V
(2)	3500.00	60°25'38"	923.85	1806.50	45 MPH



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
 D. AYELE  
 DRAWN BY  
 C. DELOS REYES  
 CHECKED BY  
 A. SILVER  
 IN CHARGE  
 A. BOONE  
 DATE  
 04/29/2011

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

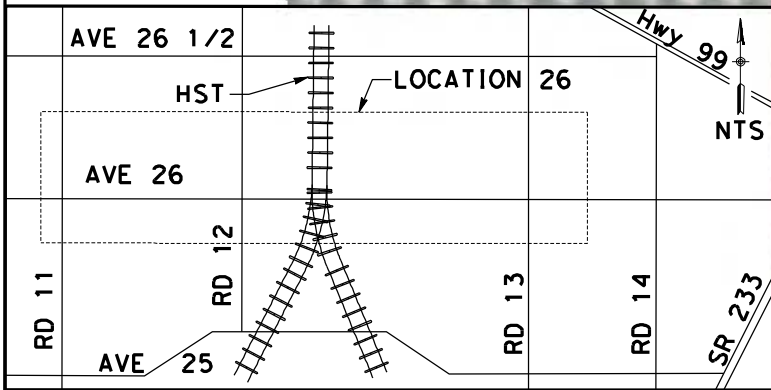
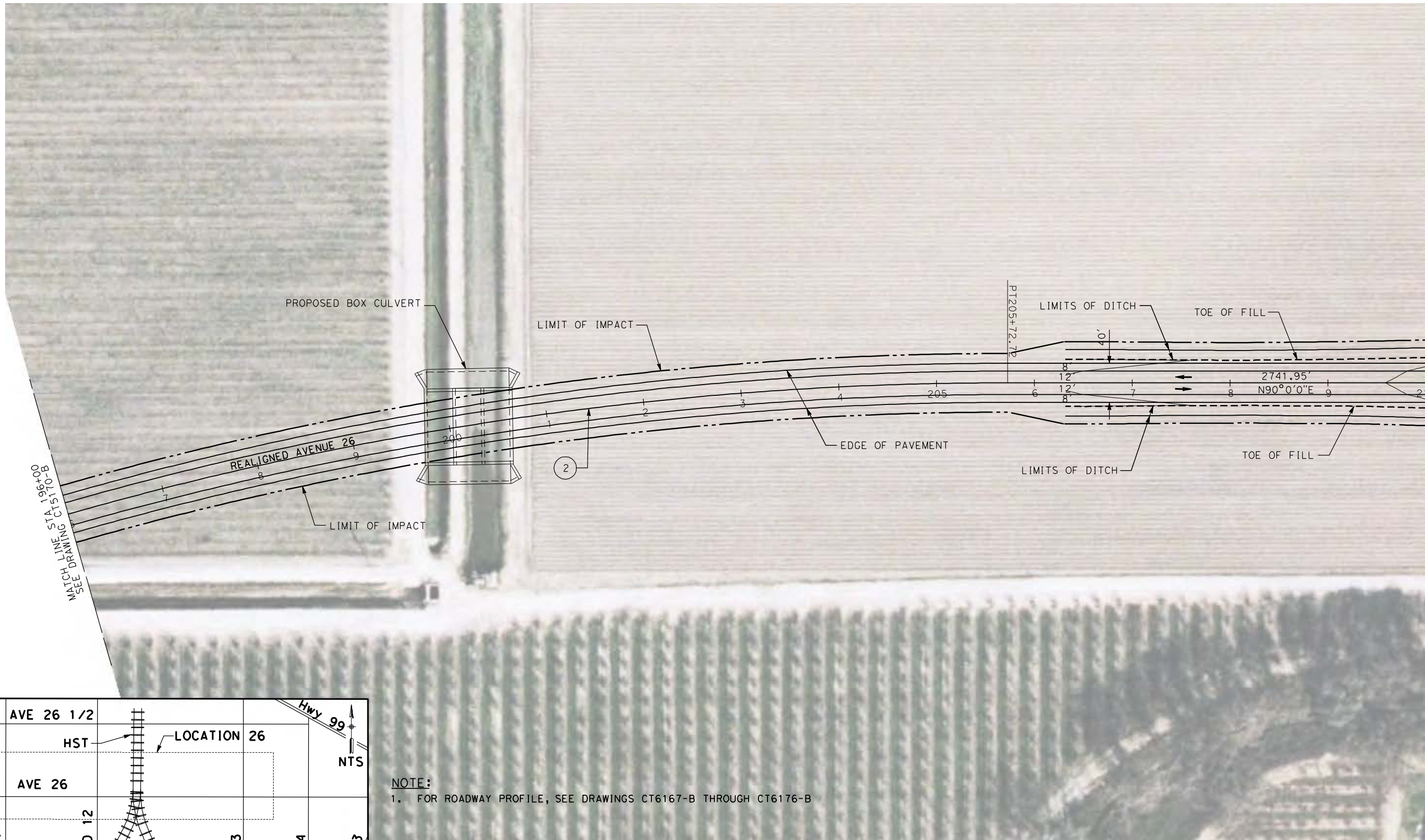


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 WYE/MERCED DO - (WC)  
 GRADE SEPARATION - AVENUE 26 ALT 1  
 LAYOUT  
 SHEET 3 OF 10

CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CT5170-B  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###



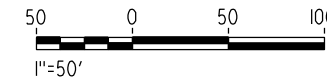
4/27/2011 6:33:17 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 1b - ave 24 wye-w.chowchilla grade separation\Layout\CT5171-B.dgn



**NOTE:**  
 1. FOR ROADWAY PROFILE, SEE DRAWINGS CT6167-B THROUGH CT6176-B

**CURVE DATA**

No.	R	$\Delta$	T	L	V
(2)	3500.00	60°25'38"	923.85	1806.50	45 MPH



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
 D. AYELE  
 DRAWN BY  
 C. DELOS REYES  
 CHECKED BY  
 A. SILVER  
 IN CHARGE  
 A. BOONE  
 DATE  
 04/29/2011

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

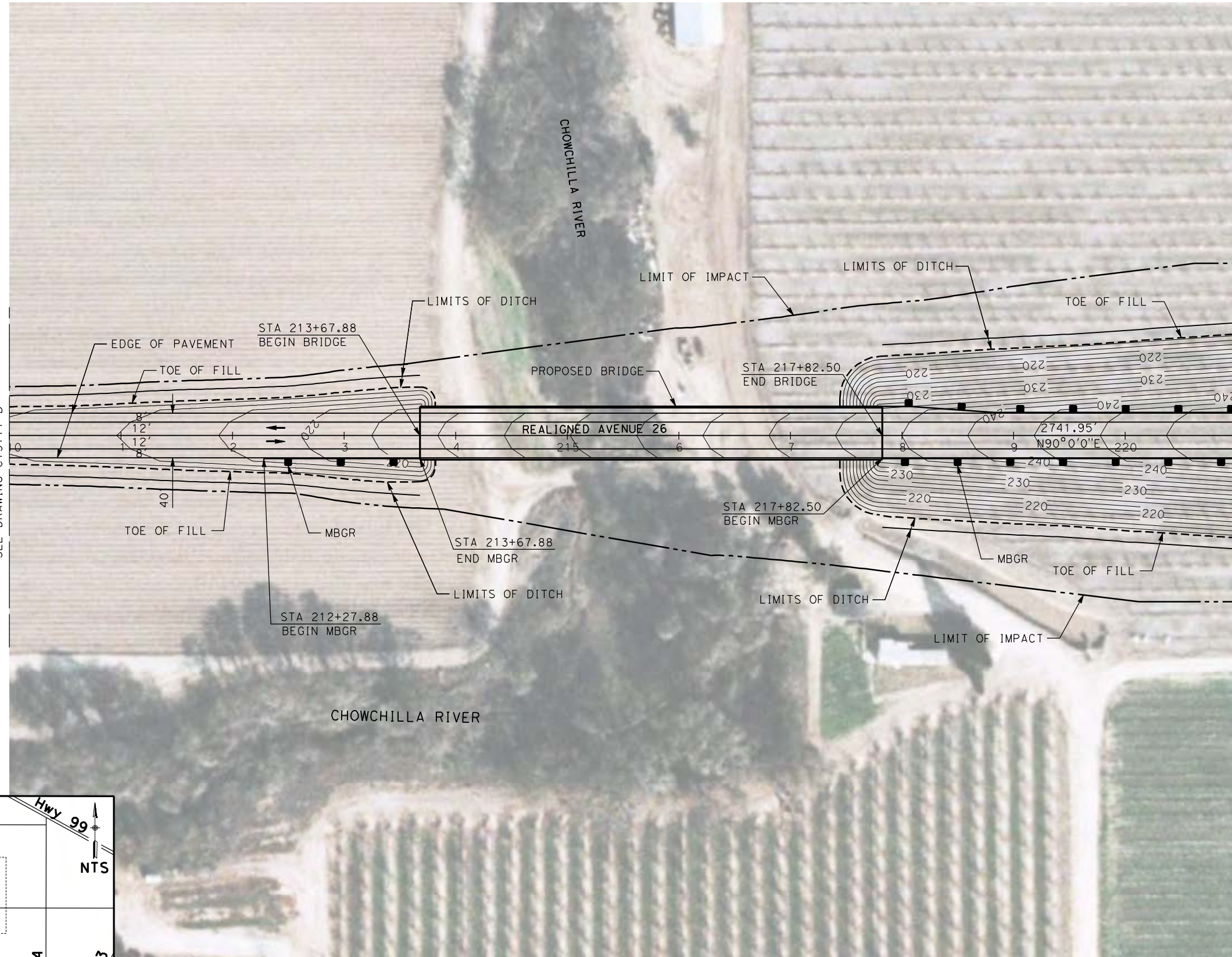


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 WYE/MERCED DO - (WC)  
 GRADE SEPARATION - AVENUE 26 ALT 1  
 LAYOUT  
 SHEET 4 OF 10

CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CT5171-B  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###

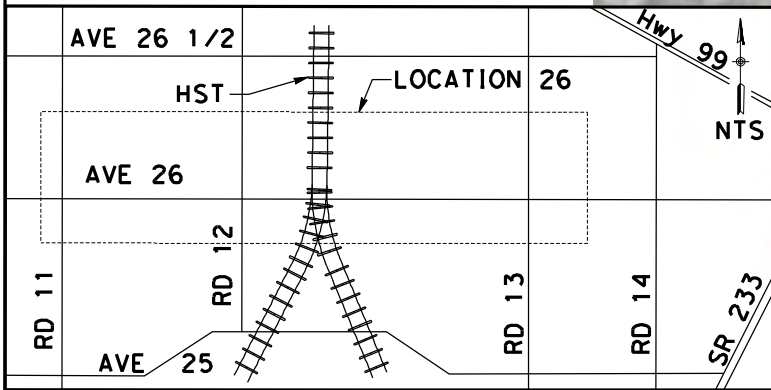


4/27/2011 6:33:25 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 1b - ave 24 wye-w.chowchilla grade separation\layout\CT5172-B.dgn



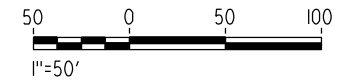
MATCH LINE STA 210+00  
SEE DRAWING CT5171-B

MATCH LINE STA 221+00  
SEE DRAWING CT5173-B



**NOTE:**

1. FOR ROADWAY PROFILE, SEE DRAWINGS CT6167-B THROUGH CT6176-B



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
 DRAWN BY  
C. DELOS REYES  
 CHECKED BY  
A. SILVER  
 IN CHARGE  
A. BOONE  
 DATE  
04/29/2011

**RECORD SET  
15% DESIGN  
SUBMITTAL**

**NOT FOR  
CONSTRUCTION**

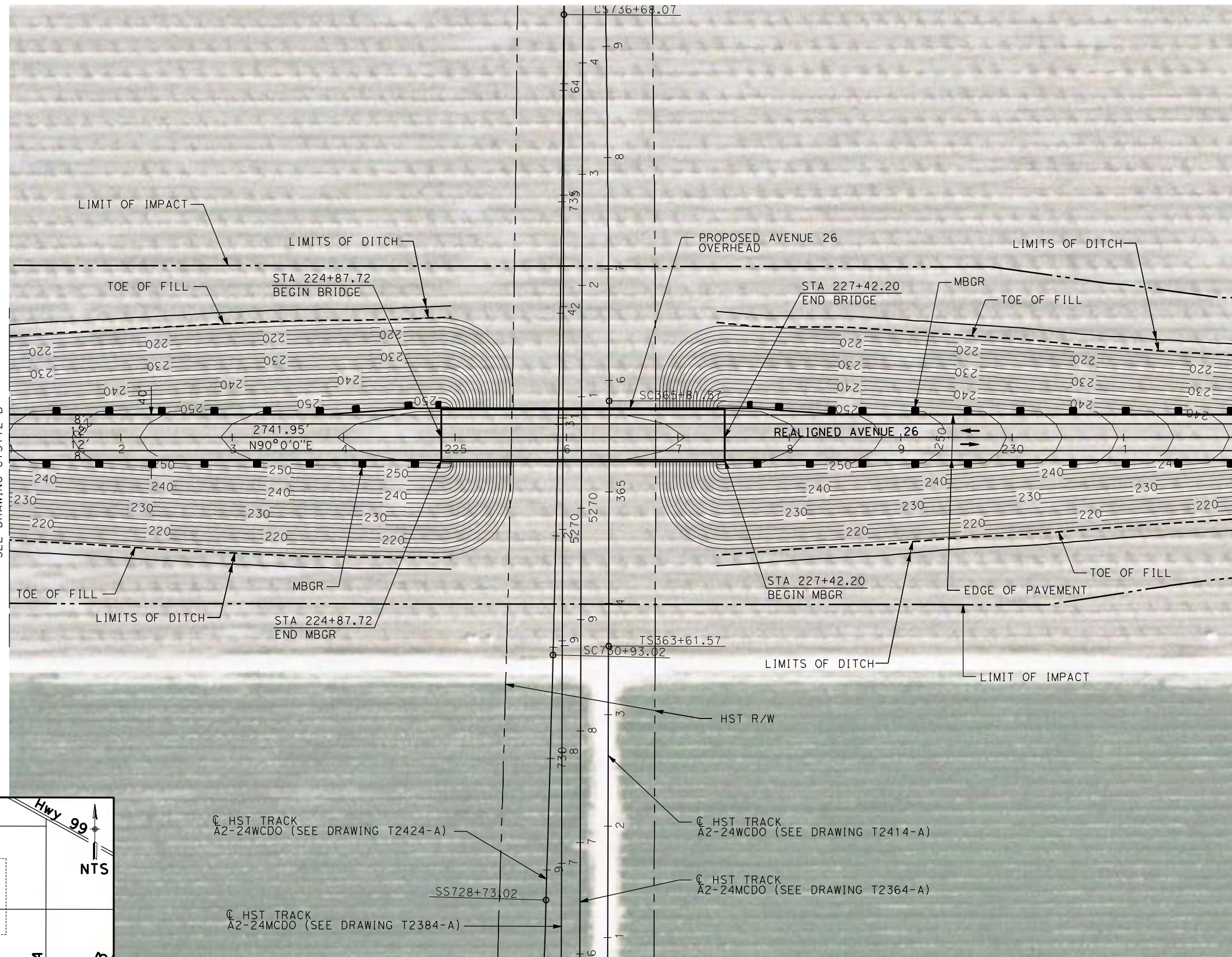


**CALIFORNIA HIGH-SPEED TRAIN PROJECT  
MERCED TO FRESNO**  
 UPRR/SR99 WYE/MERCED DO - (WC)  
 GRADE SEPARATION - AVENUE 26 ALT 1  
 LAYOUT  
 SHEET 5 OF 10

CONTRACT NO.  
HSR06-007  
 DRAWING NO.  
CT5172-B  
 SCALE  
AS SHOWN  
 SHEET NO.  
### OF ###

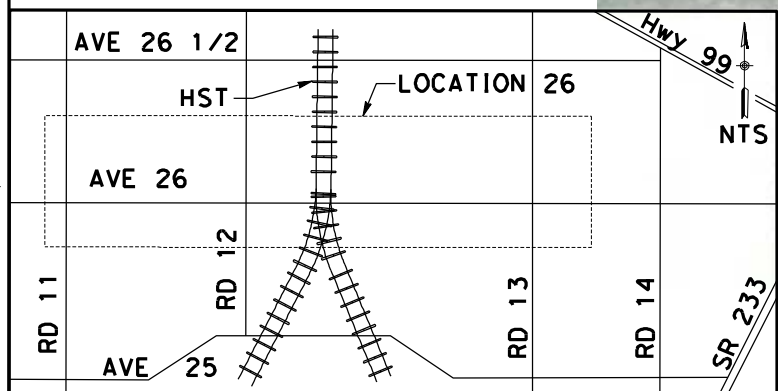


4/27/2011 6:33:33 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla volume 1b - ave 24 wye-w.chowchilla grade separation\Layout\CT5173-B.dgn

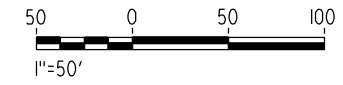


MATCH LINE STA 221+00  
 SEE DRAWING CT5172-B

MATCH LINE STA 232+00  
 SEE DRAWING CT5174-B



**NOTE:**  
 1. FOR ROADWAY PROFILE, SEE DRAWINGS CT6167-B THROUGH CT6176-B



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**D. AYELE**  
 DRAWN BY  
**C. DELOS REYES**  
 CHECKED BY  
**A. SILVER**  
 IN CHARGE  
**A. BOONE**  
 DATE  
**04/29/2011**

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

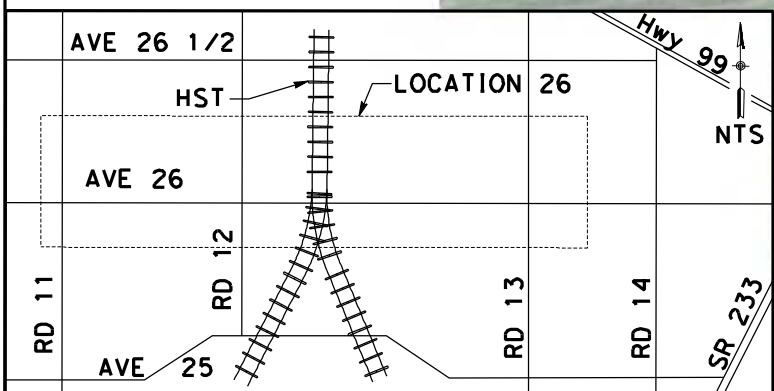
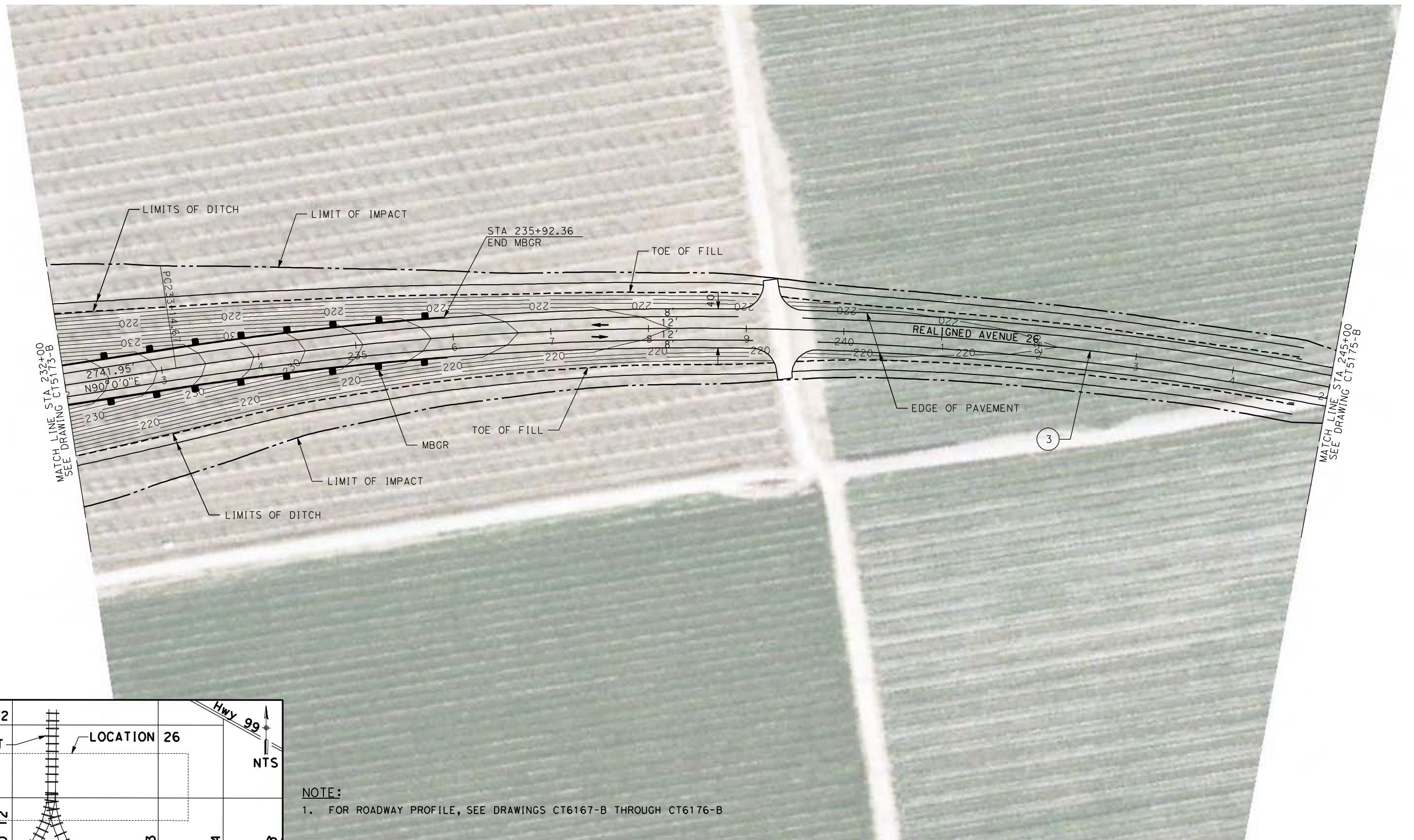


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 WYE/MERCED DO - (WC)  
 GRADE SEPARATION - AVENUE 26 ALT 1  
 LAYOUT  
 SHEET 6 OF 10

CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CT5173-B  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###

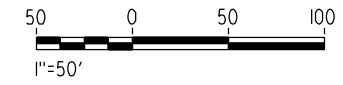


4/27/2011 6:33:41 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla volume 1b - ave 24 wye-w.chowchilla grade separation\Layout\CT5174-B.dgn  
 ReyesC1



**NOTE:**  
 1. FOR ROADWAY PROFILE, SEE DRAWINGS CT6167-B THROUGH CT6176-B

CURVE DATA					
No.	R	$\Delta$	T	L	V
(3)	3500.00	60°25'38"	923.85	1806.50	45 MPH



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
 D. AYELE  
 DRAWN BY  
 C. DELOS REYES  
 CHECKED BY  
 A. SILVER  
 IN CHARGE  
 A. BOONE  
 DATE  
 04/29/2011

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

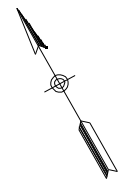


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 WYE/MERCED DO - (WC)  
 GRADE SEPARATION - AVENUE 26 ALT 1  
 LAYOUT  
 SHEET 7 OF 10

CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CT5174-B  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###



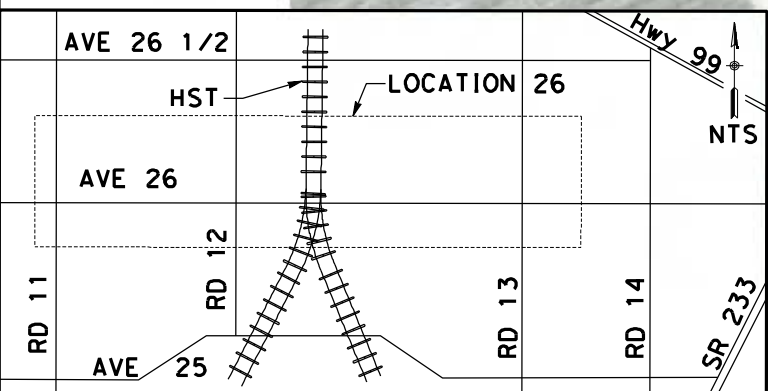
4/27/2011 6:33:51 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 1b - ave 24 wye-w.chowchilla grade separation\Layout\CT5175-B.dgn



MATCH LINE STA. 245+00  
SEE DRAWING CT5174-B

MATCH LINE STA. 259+00  
SEE DRAWING CT5176-B

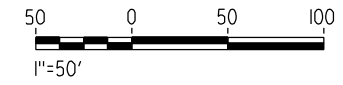
3



**NOTE:**  
1. FOR ROADWAY PROFILE, SEE DRAWINGS CT6167-B THROUGH CT6176-B

**CURVE DATA**

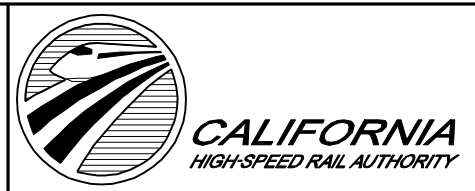
No.	R	$\Delta$	T	L	V
(3)	3500.00	60°25'38"	923.85	1806.50	45 MPH



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
DRAWN BY  
C. DELOS REYES  
CHECKED BY  
A. SILVER  
IN CHARGE  
A. BOONE  
DATE  
04/29/2011

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

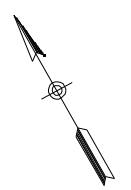
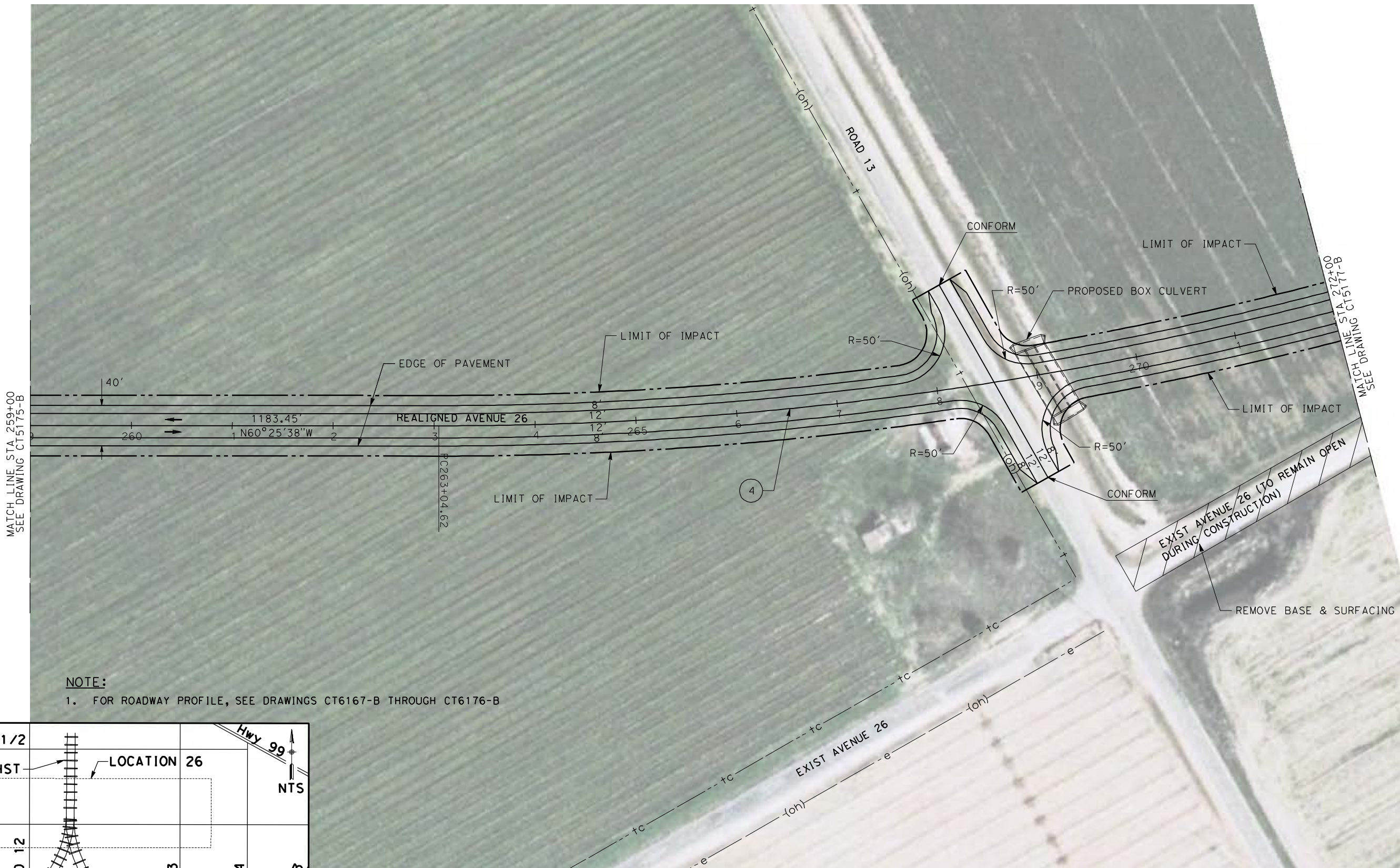


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
UPRR/SR99 WYE/MERCED DO - (WC)  
GRADE SEPARATION - AVENUE 26 ALT 1  
LAYOUT  
SHEET 8 OF 10

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
CT5175-B  
SCALE  
AS SHOWN  
SHEET NO.  
### OF ###



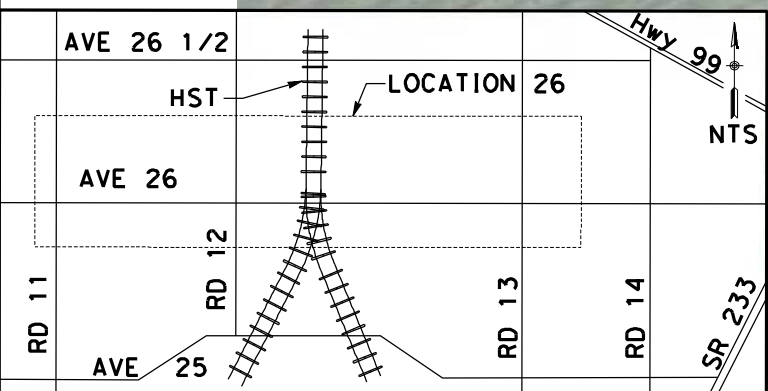
4/27/2011 6:33:59 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 1b - ave 24 wye-w.chowchilla grade separation\Layout\CT5176-B.dgn



MATCH LINE STA 259+00  
 SEE DRAWING CT5175-B

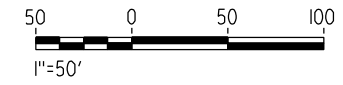
MATCH LINE STA 272+00  
 SEE DRAWING CT5177-B

**NOTE:**  
 1. FOR ROADWAY PROFILE, SEE DRAWINGS CT6167-B THROUGH CT6176-B



**CURVE DATA**

No.	R	$\Delta$	T	L	V
④	3500.00	60°15'36"	929.32	1816.72	45 MPH



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
 D. AYELE  
 DRAWN BY  
 C. DELOS REYES  
 CHECKED BY  
 A. SILVER  
 IN CHARGE  
 A. BOONE  
 DATE  
 04/29/2011

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

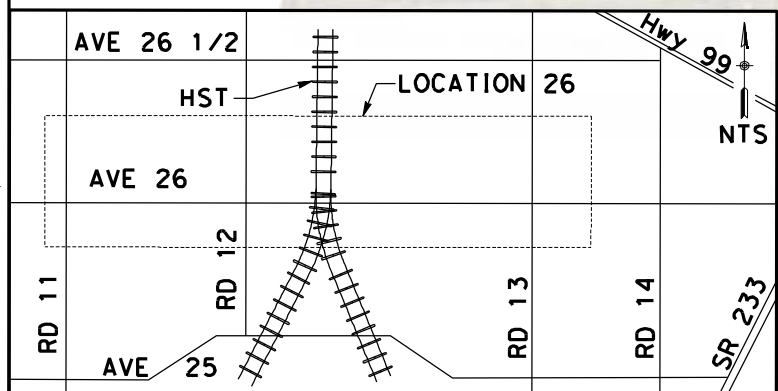
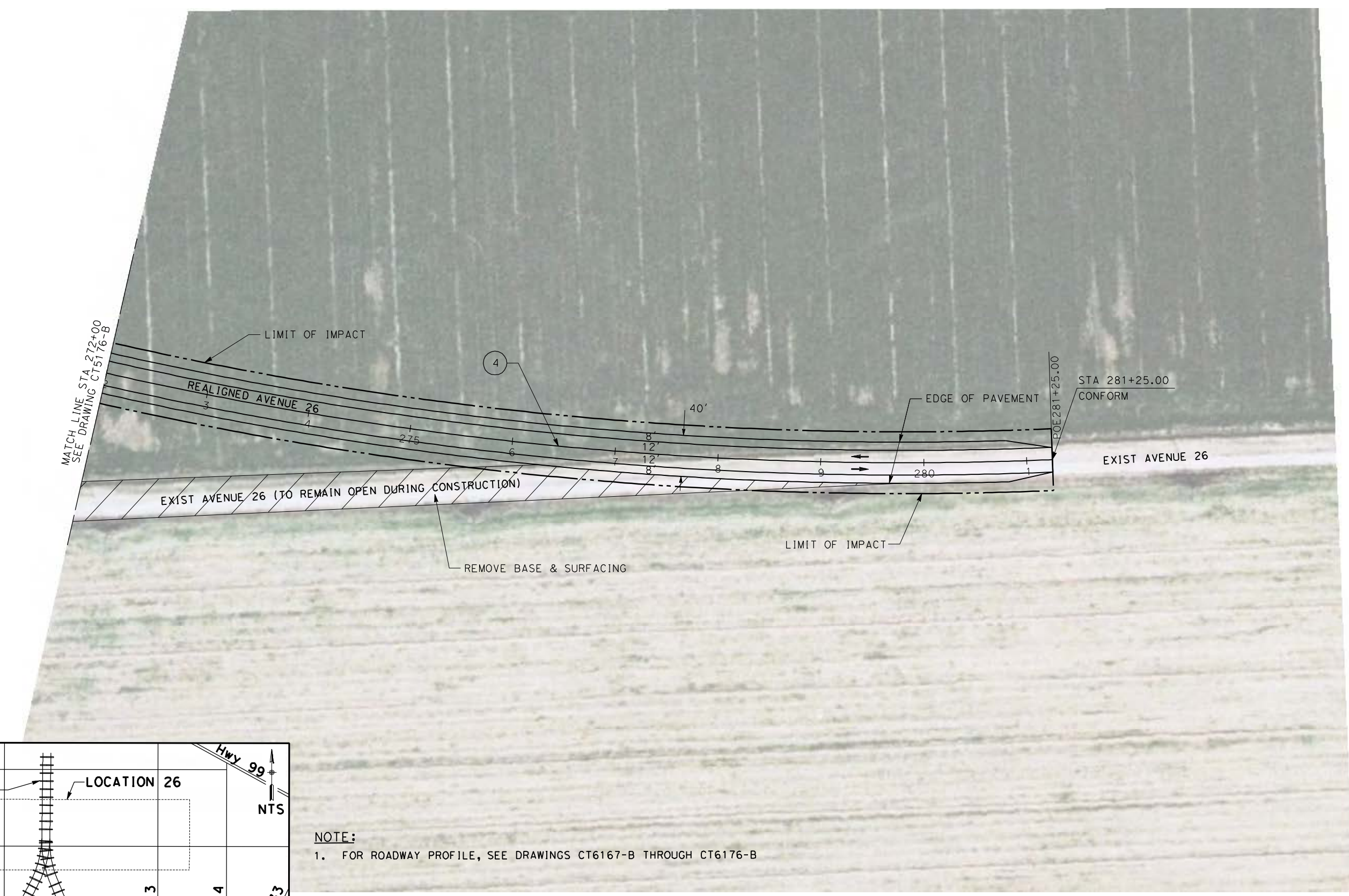


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 WYE/MERCED DO - (WC)  
 GRADE SEPARATION - AVENUE 26 ALT 1  
 LAYOUT  
 SHEET 9 OF 10

CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CT5176-B  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###

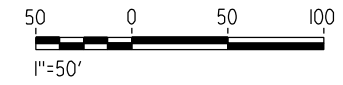


4/27/2011 6:34:08 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 1b - ave 24 wye-w.chowchilla grade separation\Layout\CT5177-B.dgn



**NOTE:**  
 1. FOR ROADWAY PROFILE, SEE DRAWINGS CT6167-B THROUGH CT6176-B

CURVE DATA					
No.	R	$\Delta$	T	L	V
(4)	3500.00	60°15'36"	929.32	1816.72	45 MPH



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**D. AYELE**  
 DRAWN BY  
**C. DELOS REYES**  
 CHECKED BY  
**A. SILVER**  
 IN CHARGE  
**A. BOONE**  
 DATE  
**04/29/2011**

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



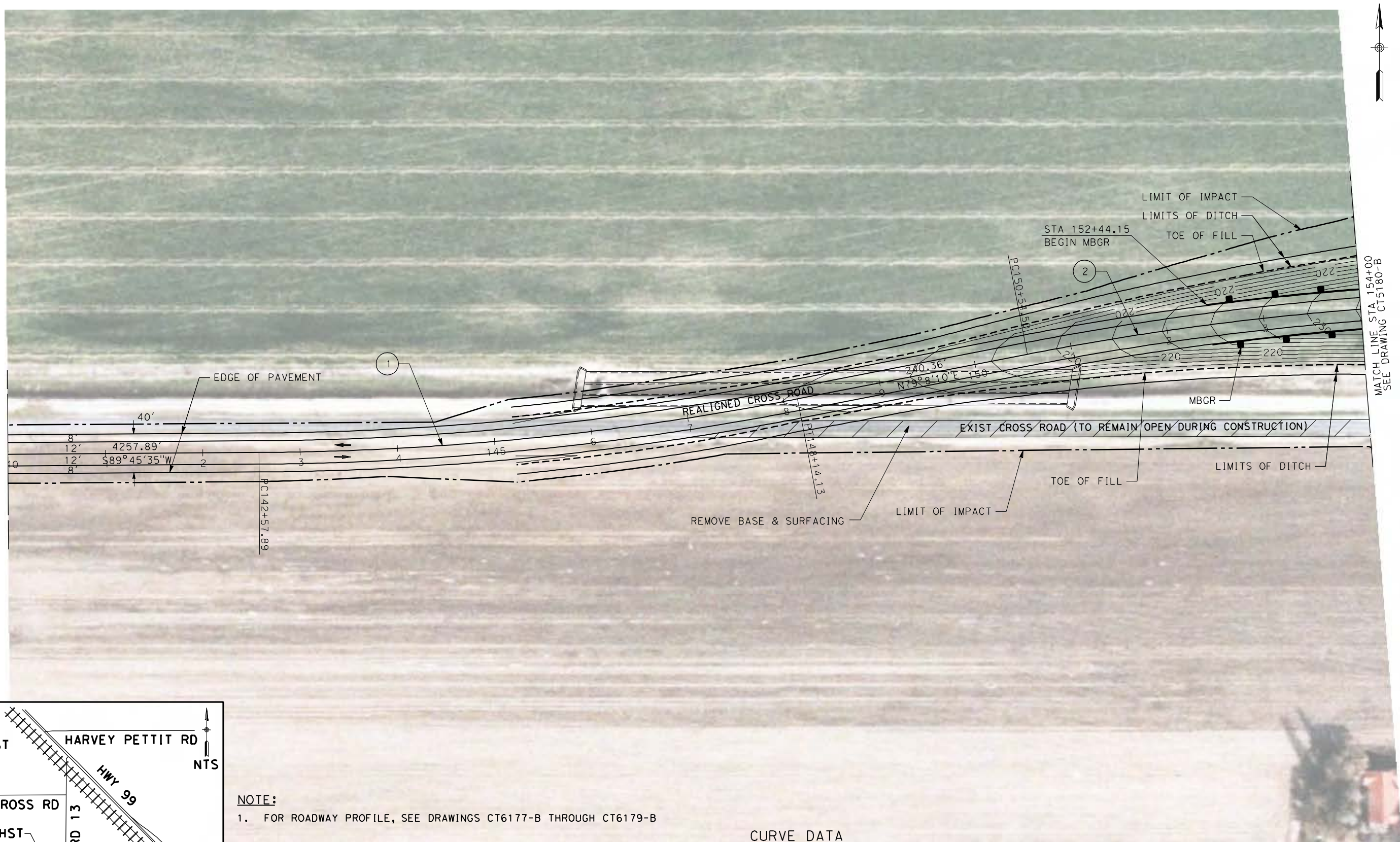
**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 WYE/MERCED DO - (WC)  
 GRADE SEPARATION - AVENUE 26 ALT 1  
 LAYOUT  
 SHEET 10 OF 10

CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CT5177-B  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###

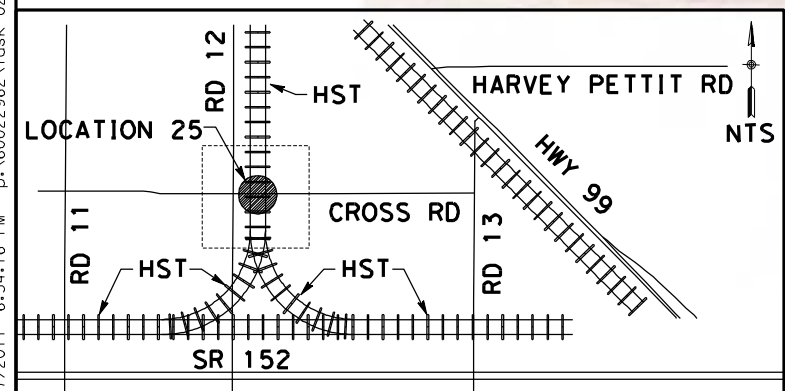


4/27/2011 6:34:16 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 1b - ave 24 wye-w.chowchilla grade separation\layout\CT5179-B.dgn

MATCH LINE STA 140+00  
 SEE DRAWING CR9153-B

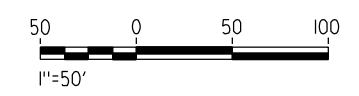


MATCH LINE STA 154+00  
 SEE DRAWING CT5180-B



**NOTE:**  
 1. FOR ROADWAY PROFILE, SEE DRAWINGS CT6177-B THROUGH CT6179-B

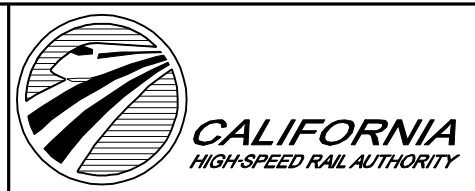
CURVE DATA					
No.	R	$\Delta$	T	L	V
①	3000.00	79° 22' 35"	278.92	556.25	45 MPH
②	3000.00	79° 0' 0"	288.87	575.96	45 MPH



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
 D. AYELE  
 DRAWN BY  
 C. DELOS REYES  
 CHECKED BY  
 A. SILVER  
 IN CHARGE  
 A. BOONE  
 DATE  
 04/29/2011

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

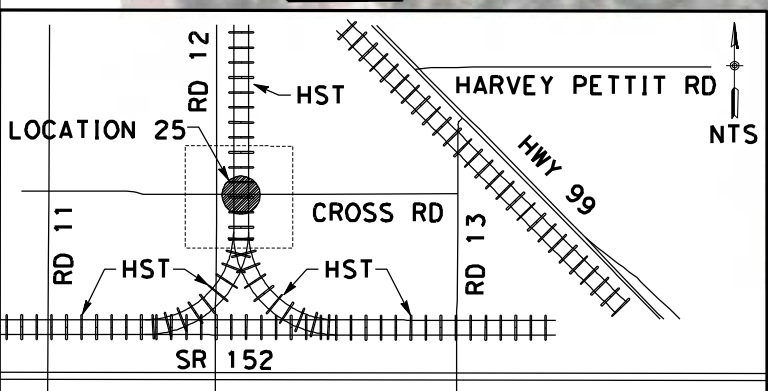
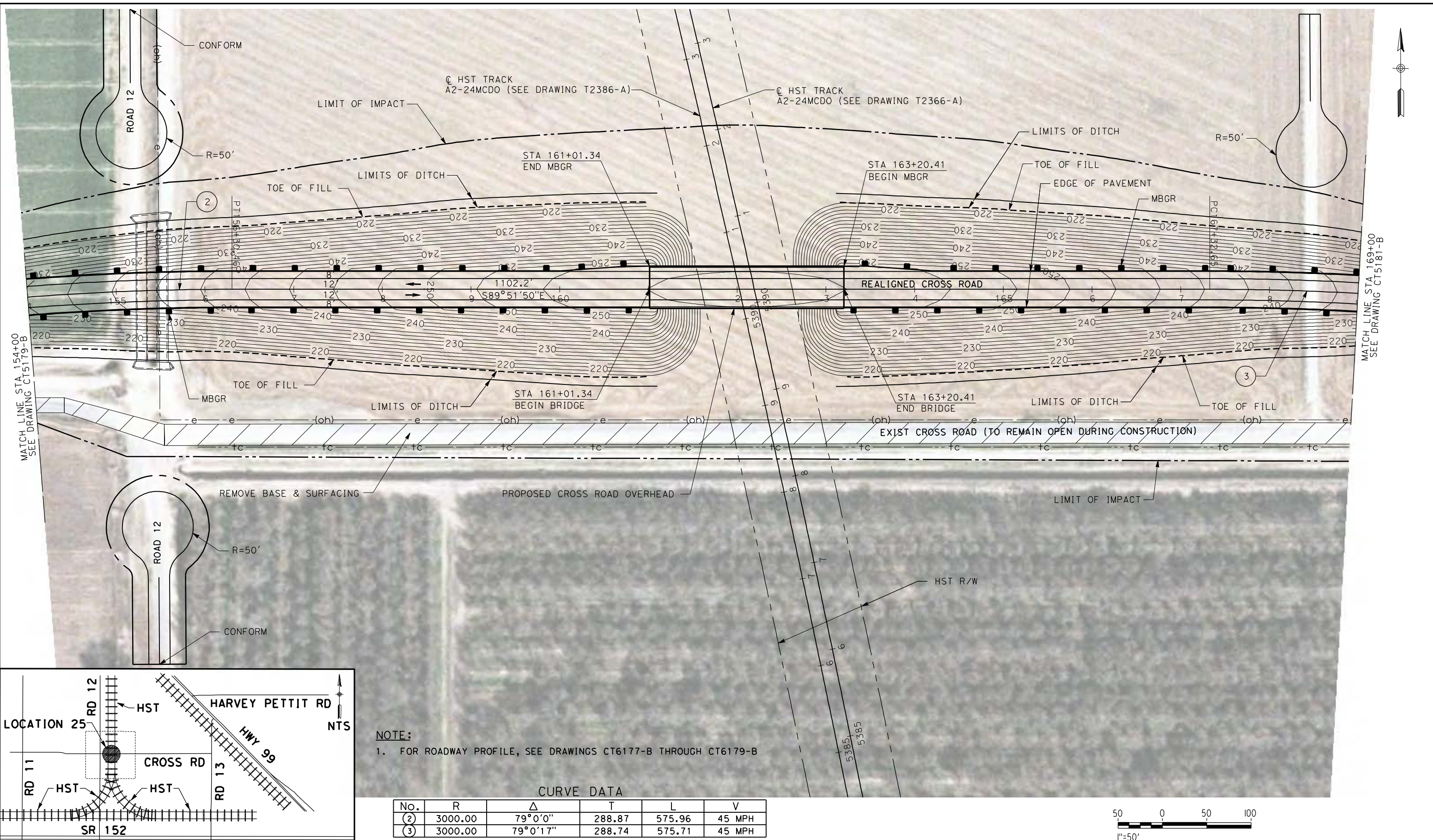


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 MERCED DO - (WC)  
 GRADE SEPARATION - CROSS ROAD  
 LAYOUT  
 SHEET 1 OF 3

CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CT5179-B  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###



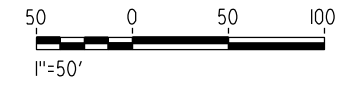
ReyesC1 4/27/2011 6:34:24 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 1b - ave 24 wye-w.chowchilla\grade separation\layout\CT5180-B.dgn



**NOTE:**  
 1. FOR ROADWAY PROFILE, SEE DRAWINGS CT6177-B THROUGH CT6179-B

**CURVE DATA**

No.	R	$\Delta$	T	L	V
(2)	3000.00	79°0'0"	288.87	575.96	45 MPH
(3)	3000.00	79°0'17"	288.74	575.71	45 MPH



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**D. AYELE**  
 DRAWN BY  
**C. DELOS REYES**  
 CHECKED BY  
**A. SILVER**  
 IN CHARGE  
**A. BOONE**  
 DATE  
**04/29/2011**

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

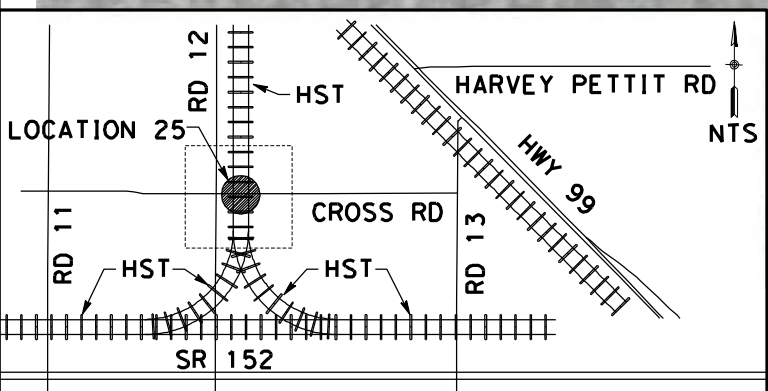
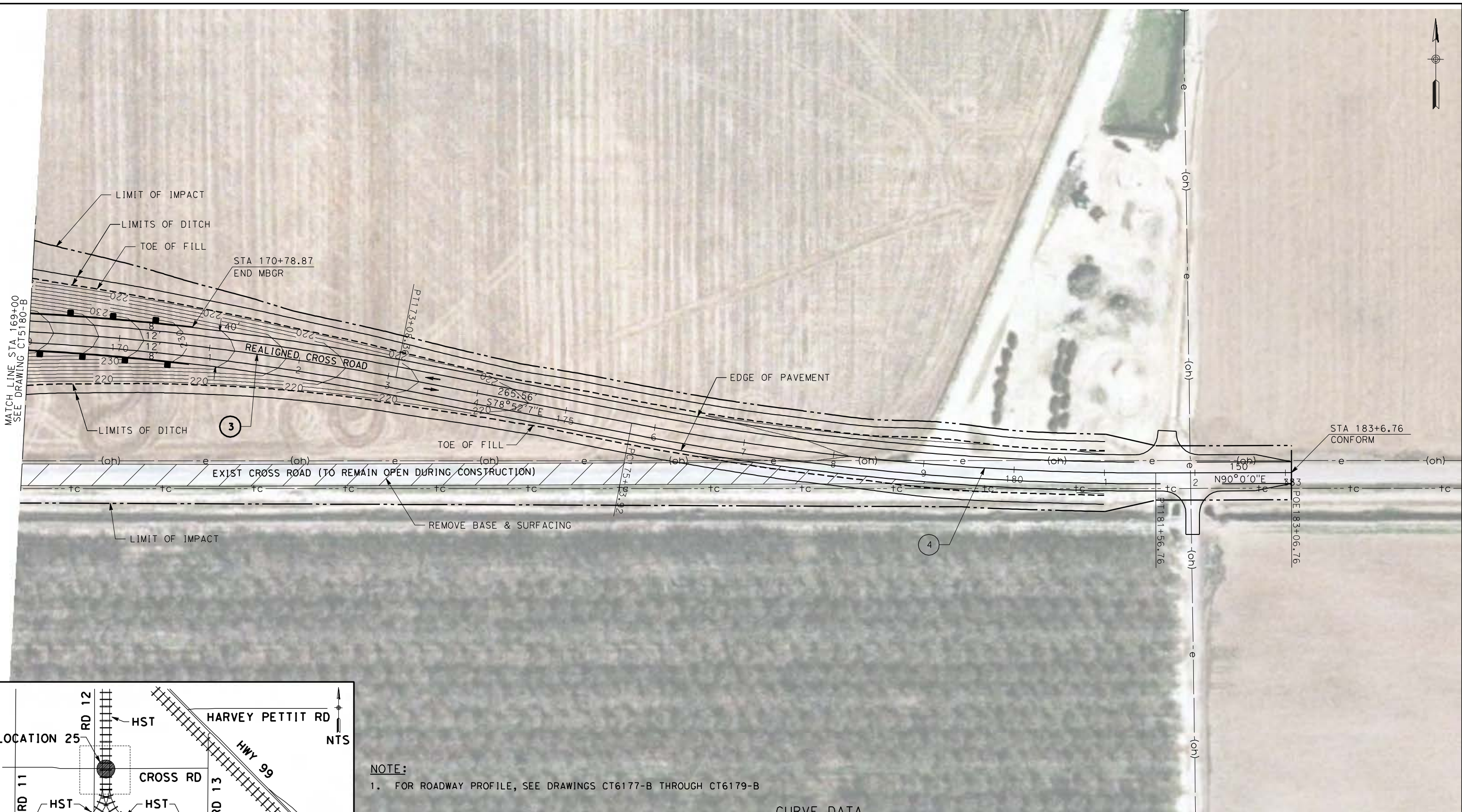


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 MERCED DO - (WC)  
 GRADE SEPARATION - CROSS ROAD  
 LAYOUT  
 SHEET 2 OF 3

CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CT5180-B  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###



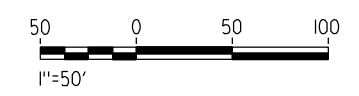
4/27/2011 6:34:33 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla volume 1b - ave 24 wye-w.chowchilla grade separation\Layout\CT5181-B.dgn  
 ReyesC1



**NOTE:**  
 1. FOR ROADWAY PROFILE, SEE DRAWINGS CT6177-B THROUGH CT6179-B

**CURVE DATA**

No.	R	Δ	T	L	V
(3)	3000.00	79°0'17"	288.74	575.71	45 MPH
(4)	3000.00	78°52'7"	292.34	582.84	45 MPH



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
 D. AYELE  
 DRAWN BY  
 C. DELOS REYES  
 CHECKED BY  
 A. SILVER  
 IN CHARGE  
 A. BOONE  
 DATE  
 04/29/2011

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



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 MERCED DO - (WC)  
 GRADE SEPARATION - CROSS ROAD  
 LAYOUT  
 SHEET 3 OF 3

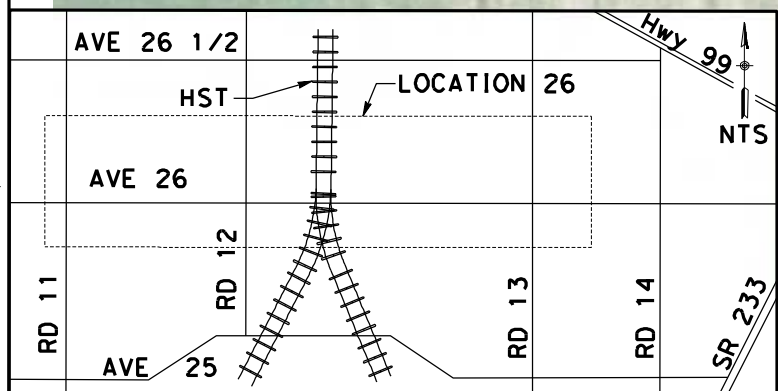
CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CT5181-B  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###



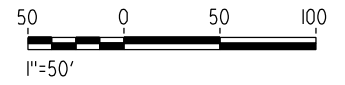
4/27/2011 6:34:42 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 1b - ave 24 wye-w.chowchilla grade separation\Layout\CT5187-B.dgn  
 ReyesC1



MATCH LINE STA 157+00  
 SEE DRAWING CT5188-B



**NOTE:**  
 1. FOR ROADWAY PROFILE, SEE DRAWINGS CT6185-B THROUGH CT6187-B



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
 D. AYELE  
 DRAWN BY  
 C. DELOS REYES  
 CHECKED BY  
 A. SILVER  
 IN CHARGE  
 A. BOONE  
 DATE  
 04/29/2011

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

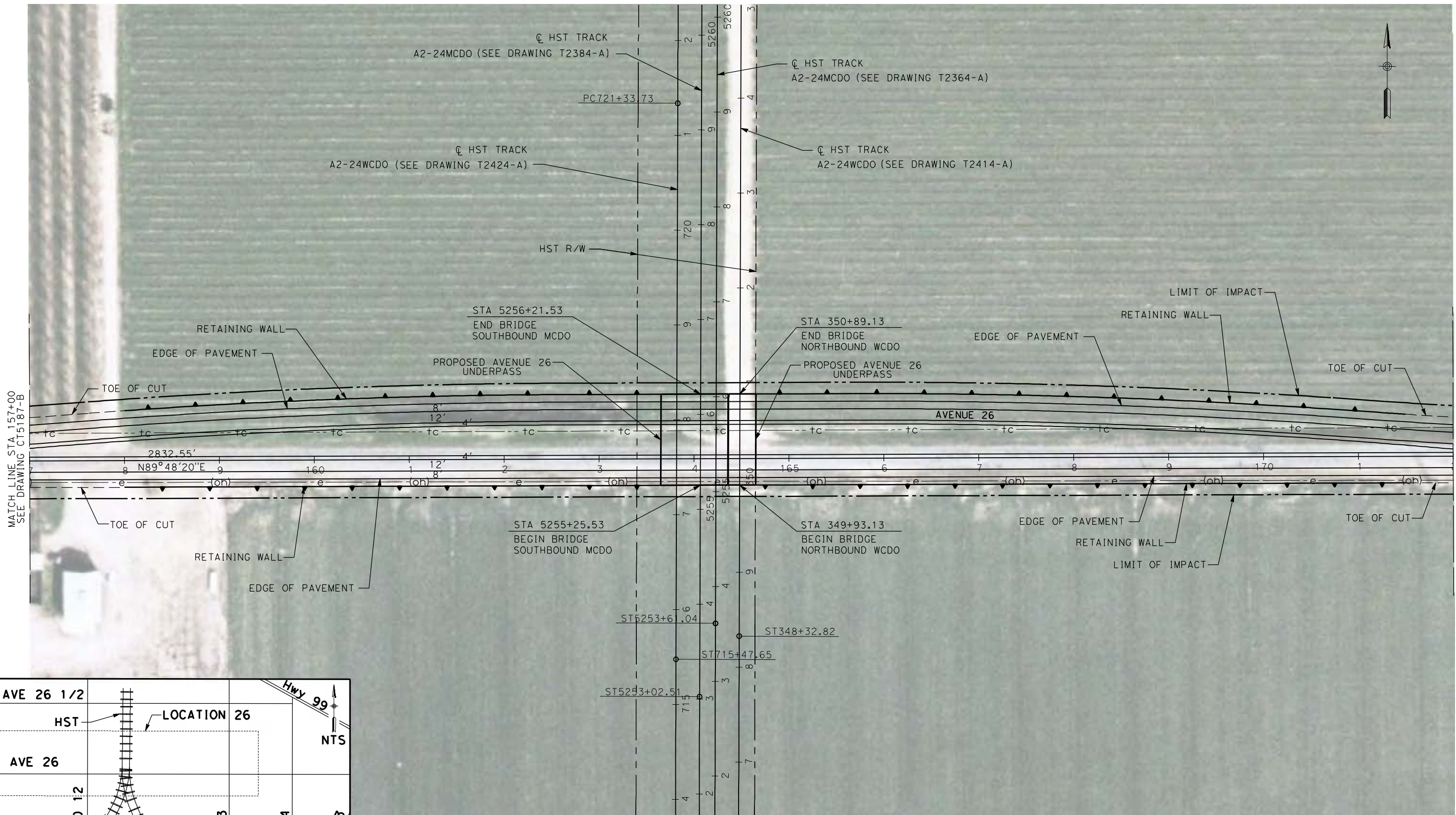


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 WYE/MERCED DO - (WC)  
 UNDERPASS - AVENUE 26 ALT 2  
 LAYOUT  
 SHEET 1 OF 3

CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CT5187-B  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###

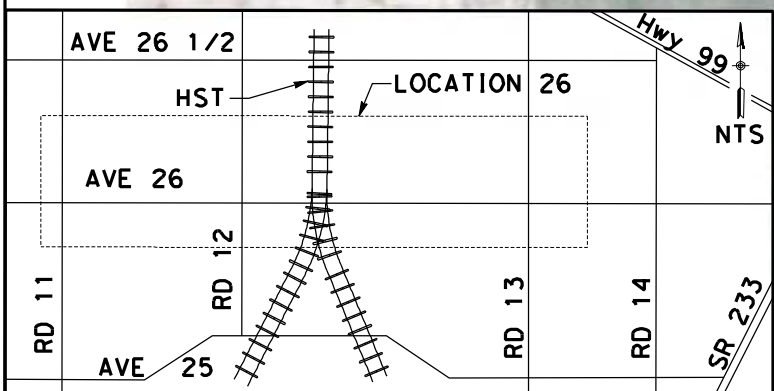


4/27/2011 6:34:50 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 1b - ave 24 wye-w.chowchilla grade separation\Layout\CT5188-B.dgn

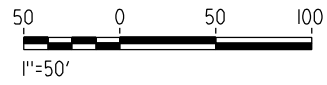


MATCH LINE STA 157+00  
 SEE DRAWING CT5187-B

MATCH LINE STA 172+00  
 SEE DRAWING CT5189-B



**NOTE:**  
 1. FOR ROADWAY PROFILE, SEE DRAWINGS CT6185-B THROUGH CT6187-B



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**D. AYELE**  
 DRAWN BY  
**C. DELOS REYES**  
 CHECKED BY  
**A. SILVER**  
 IN CHARGE  
**A. BOONE**  
 DATE  
**04/29/2011**

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

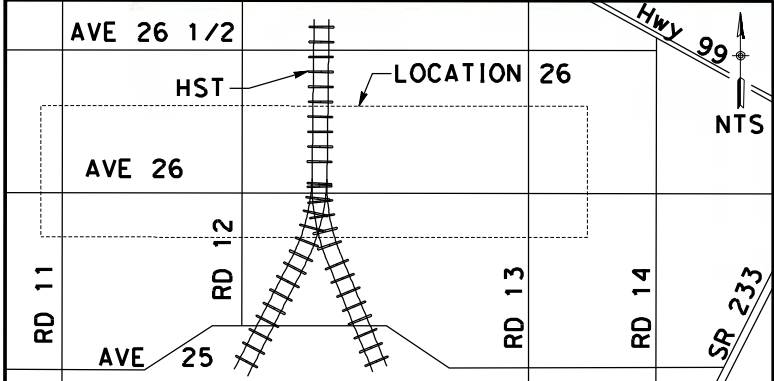


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 WYE/MERCED DO - (WC)  
 UNDERPASS - AVENUE 26 ALT 2  
 LAYOUT  
 SHEET 2 OF 3

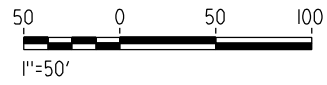
CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CT5188-B  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###



4/27/2011 6:34:57 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 1b - ave 24 wye-w.chowchilla grade separation\Layout\CT5189-B.dgn



**NOTE:**  
1. FOR ROADWAY PROFILE, SEE DRAWINGS CT6185-B THROUGH CT6187-B



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
DRAWN BY  
C. DELOS REYES  
CHECKED BY  
A. SILVER  
IN CHARGE  
A. BOONE  
DATE  
04/29/2011

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

**NOT FOR**  
**CONSTRUCTION**



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

UPRR/SR99 WYE/MERCED DO - (WC)  
UNDERPASS - AVENUE 26 ALT 2  
LAYOUT  
SHEET 3 OF 3

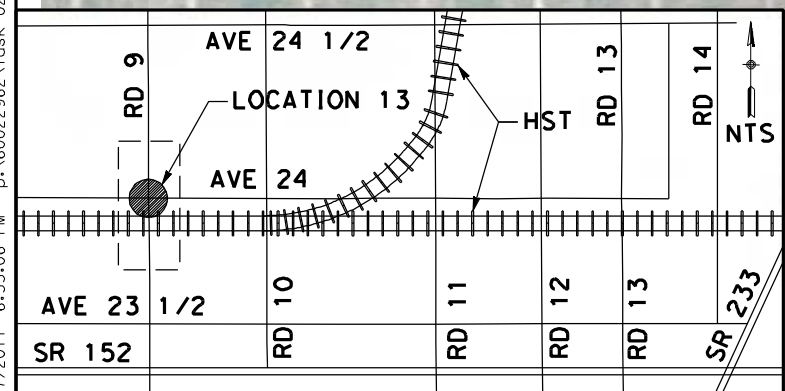
CONTRACT NO.  
HSR06-007  
DRAWING NO.  
CT5189-B  
SCALE  
AS SHOWN  
SHEET NO.  
### OF ###



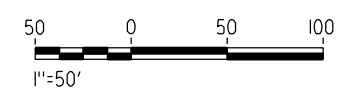
4/27/2011 6:35:06 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla volume 1b - ave 24 wye-w.chowchilla grade separation\Layout\CT5190-B.dgn



MATCH LINE STA 115+00  
 SEE DRAWING CT5191-B



**NOTE:**  
 1. FOR ROADWAY PROFILE, SEE DRAWINGS CT6188-B THROUGH CT6190-B



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
 D. AYELE  
 DRAWN BY  
 C. DELOS REYES  
 CHECKED BY  
 A. SILVER  
 IN CHARGE  
 A. BOONE  
 DATE  
 04/29/2011

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

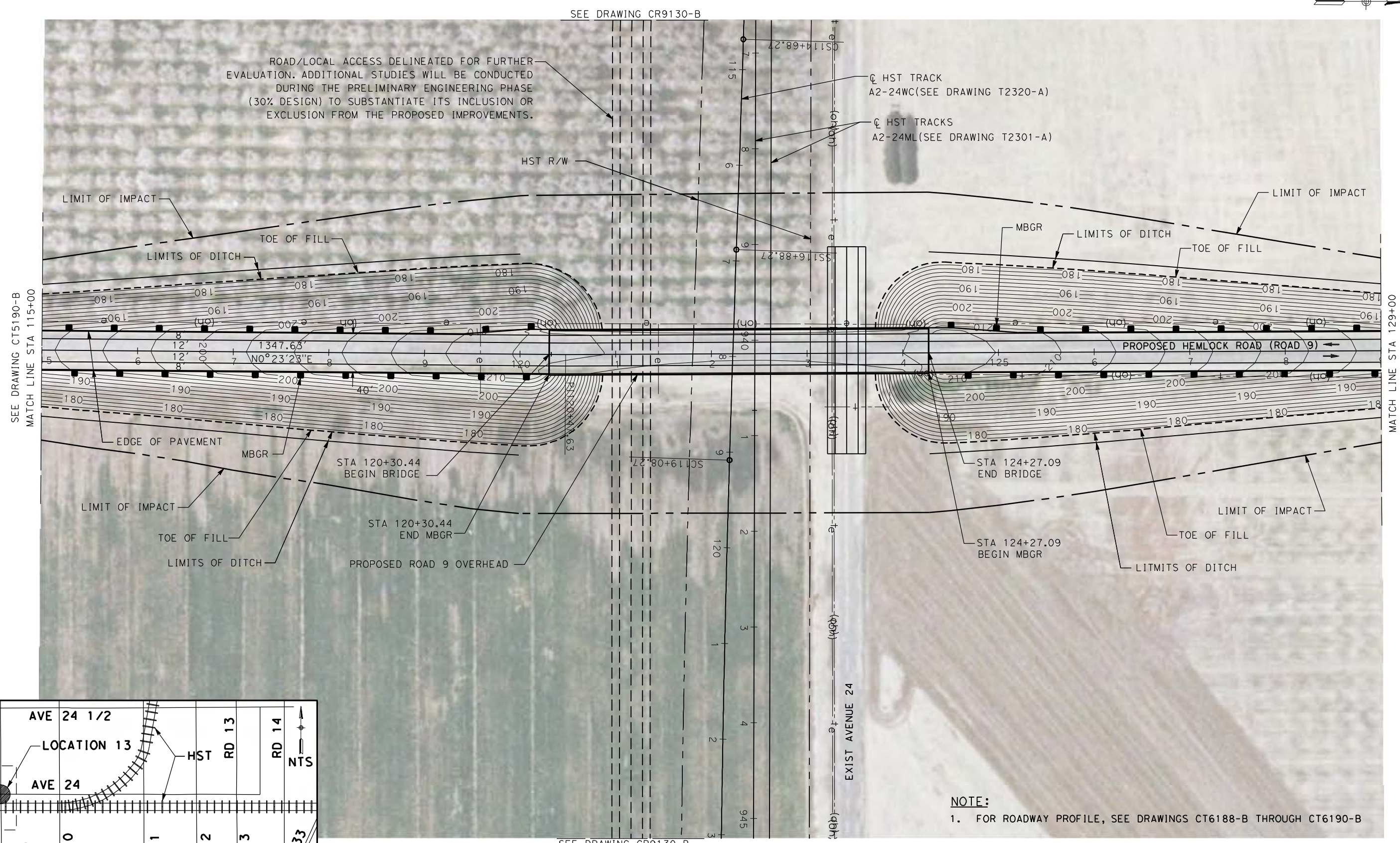


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 MAINLINE/WYE - (AVE 24)  
 GRADE SEPARATION - ROAD 9 ALONG EXIST ALT 2  
 LAYOUT  
 SHEET 1 OF 3

CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CT5190-B  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###

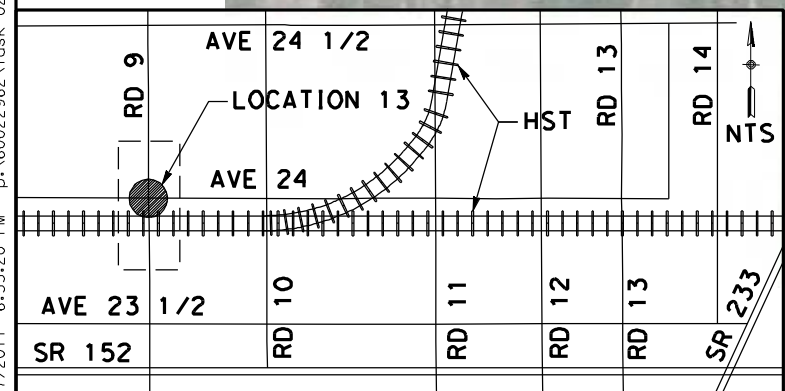


4/27/2011 6:35:20 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla volume 1b - ave 24 wye-w.chowchilla grade separation\Layout\CT5191-B.dgn  
 ReyesC1

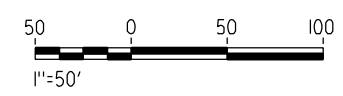


SEE DRAWING CT5190-B  
MATCH LINE STA 115+00

MATCH LINE STA 129+00  
SEE DRAWING CT5192-B



**NOTE:**  
1. FOR ROADWAY PROFILE, SEE DRAWINGS CT6188-B THROUGH CT6190-B



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
 DRAWN BY  
C. DELOS REYES  
 CHECKED BY  
A. SILVER  
 IN CHARGE  
A. BOONE  
 DATE  
04/29/2011

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

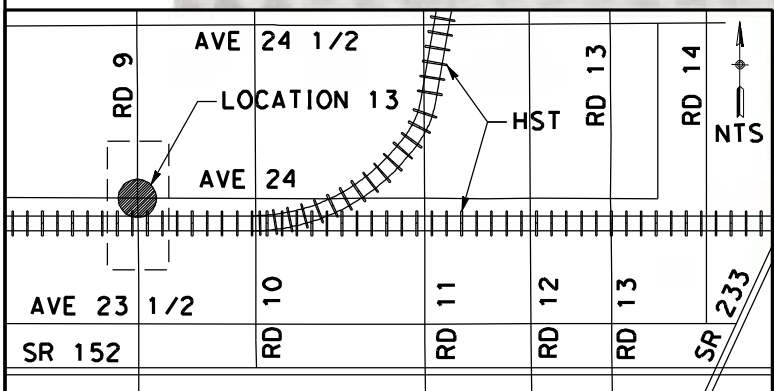
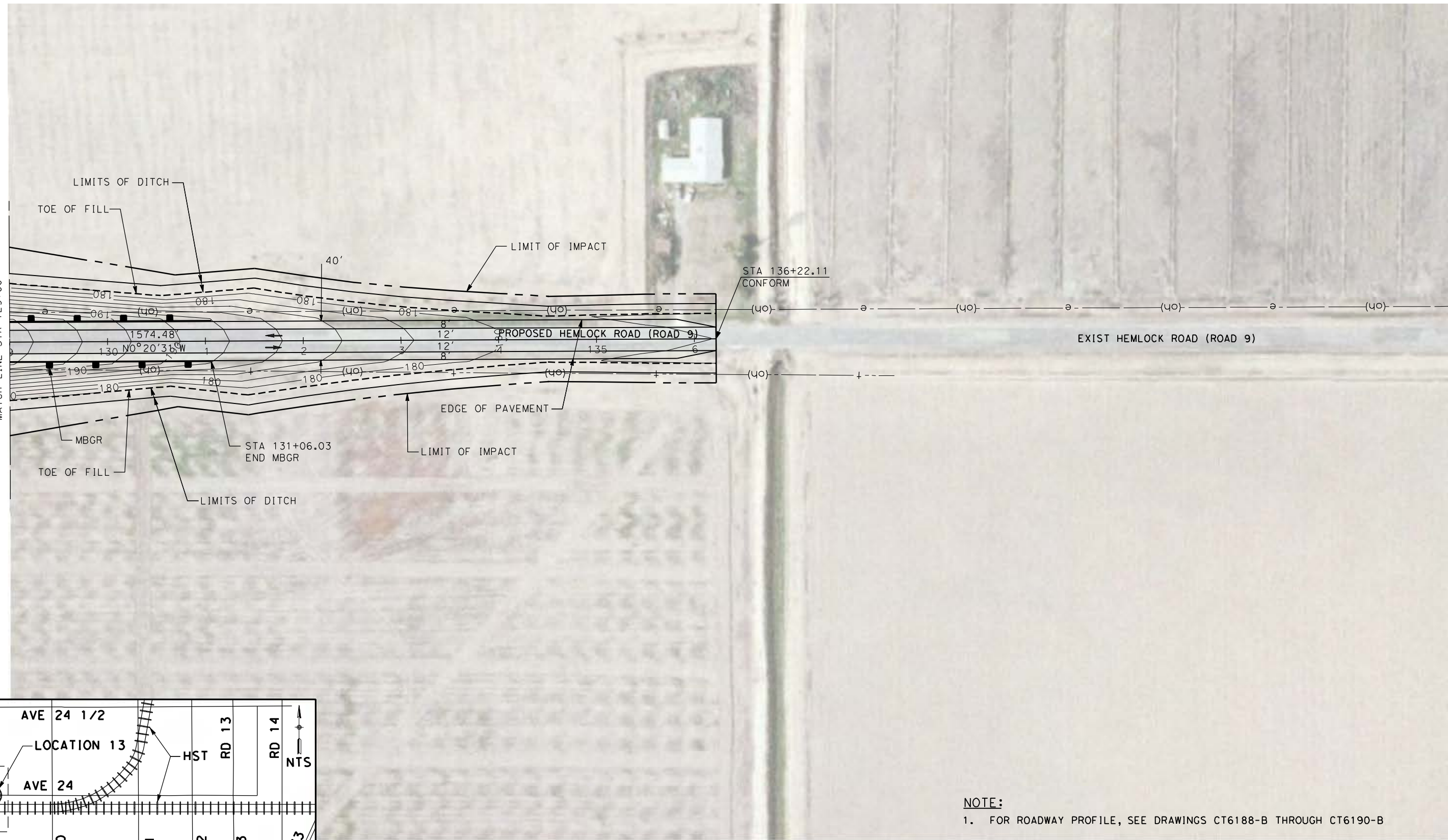


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 MAINLINE/WYE - (AVE 24)  
 GRADE SEPARATION - ROAD 9 ALONG EXIST ALT 2  
 LAYOUT  
 SHEET 2 OF 3

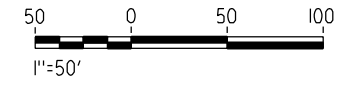
CONTRACT NO.  
HSR06-007  
 DRAWING NO.  
CT5191-B  
 SCALE  
AS SHOWN  
 SHEET NO.  
### OF ###



4/27/2011 6:35:32 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla grade separation\layout\CT5192-B.dgn



**NOTE:**  
 1. FOR ROADWAY PROFILE, SEE DRAWINGS CT6188-B THROUGH CT6190-B



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
 D. AYELE  
 DRAWN BY  
 C. DELOS REYES  
 CHECKED BY  
 A. SILVER  
 IN CHARGE  
 A. BOONE  
 DATE  
 04/29/2011

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



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 MAINLINE/WYE - (AVE 24)  
 GRADE SEPARATION - ROAD 9 ALONG EXIST ALT 2  
 LAYOUT  
 SHEET 3 OF 3

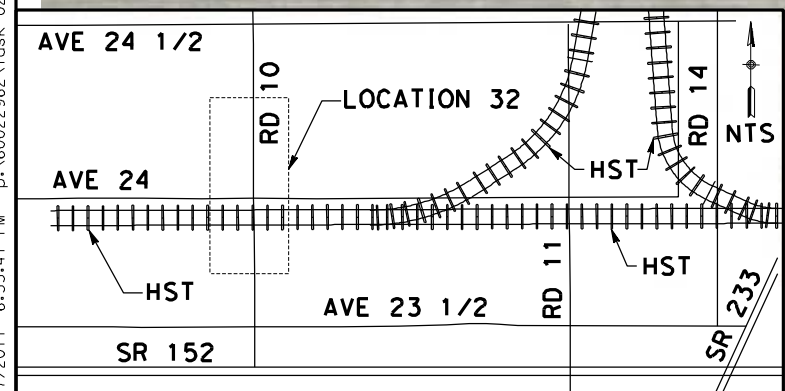
CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CT5192-B  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###



4/27/2011 6:35:41 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 1b - ave 24 wye-w.chowchilla\grade separation\Layout\CT5193-B.dgn



MATCH LINE STA 184+00  
 SEE DRAWING CT5194-B



**NOTE:**  
 1. FOR ROADWAY PROFILE, SEE DRAWINGS CT6191-B THROUGH CT6193-B



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**D. AYELE**  
 DRAWN BY  
**C. DELOS REYES**  
 CHECKED BY  
**A. SILVER**  
 IN CHARGE  
**A. BOONE**  
 DATE  
**04/29/2011**

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

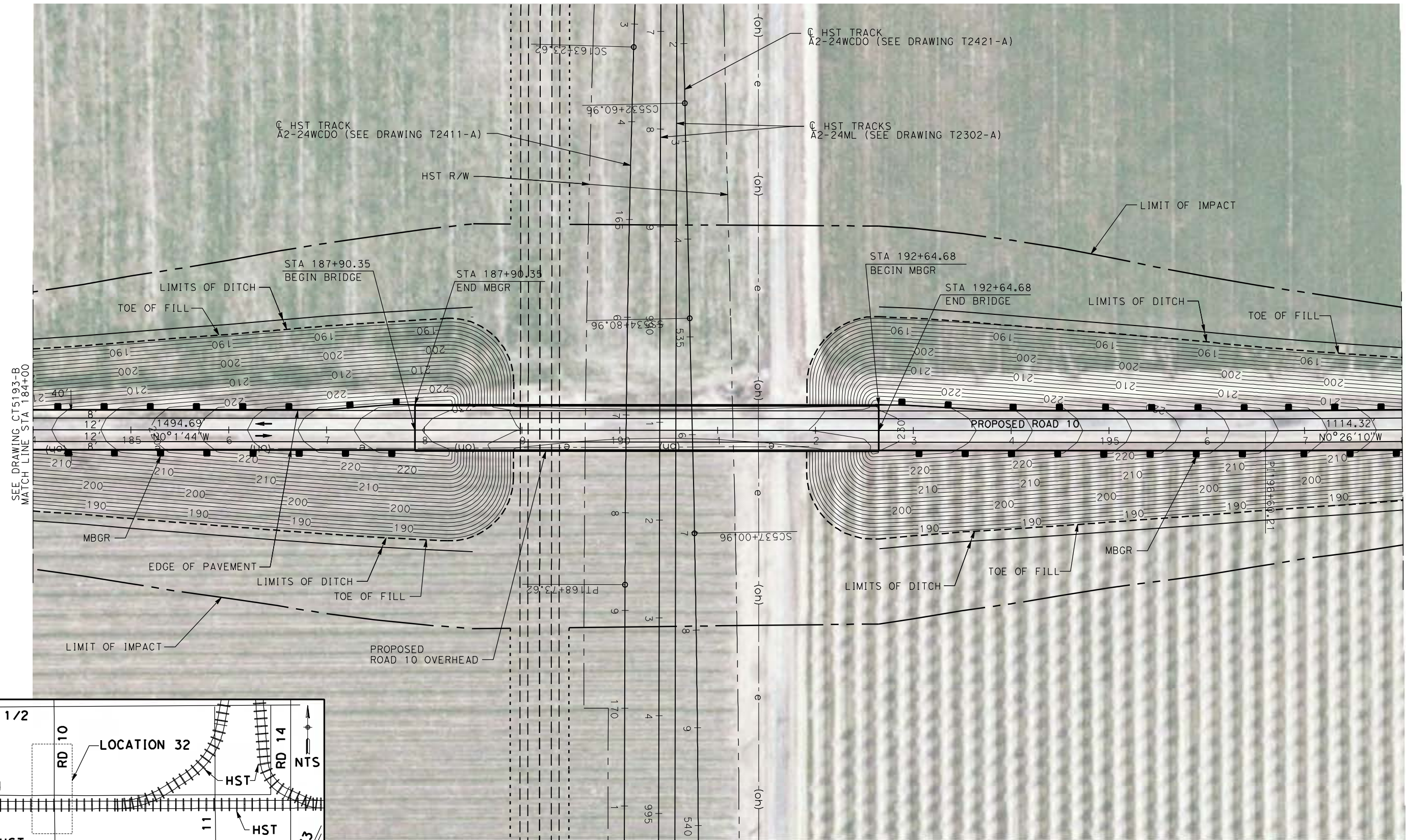


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 MAINLINE/WYE - (WC)  
 GRADE SEPARATION - ROAD 10 ALONG EXIST ALT 2  
 LAYOUT  
 SHEET 1 OF 3

CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CT5193-B  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###

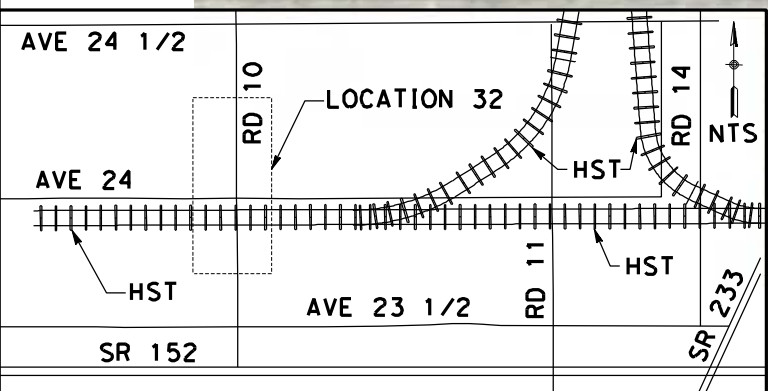


4/27/2011 6:35:51 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla volume 1b - ave 24 wye-w.chowchilla grade separation\Layout\CT5194-B.dgn

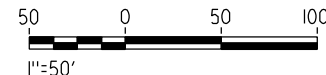


SEE DRAWING CT5193-B  
 MATCH LINE STA 184+00

MATCH LINE STA 198+00  
 SEE DRAWING CT5195-B



**NOTE:**  
 1. FOR ROADWAY PROFILE, SEE DRAWINGS CT6191-B THROUGH CT6193-B



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
 D. AYELE  
 DRAWN BY  
 C. DELOS REYES  
 CHECKED BY  
 A. SILVER  
 IN CHARGE  
 A. BOONE  
 DATE  
 04/29/2011

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



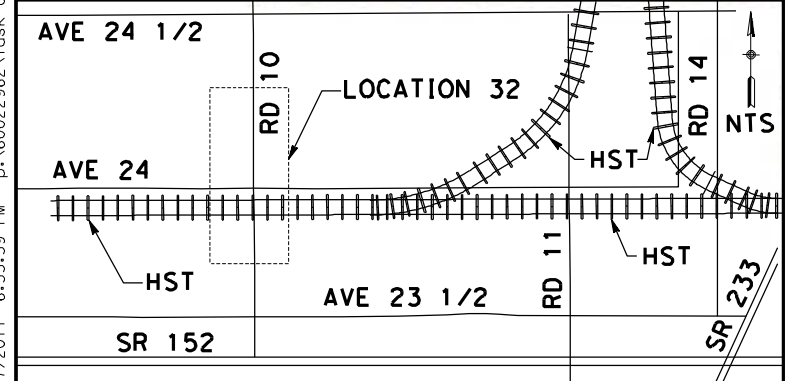
**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 MAINLINE/WYE - (WC)  
 GRADE SEPARATION - ROAD 10 ALONG EXIST ALT 2  
 LAYOUT  
 SHEET 2 OF 3

CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CT5194-B  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###





SEE DRAWING CT5194-B  
MATCH LINE STA 198+00



**NOTE:**  
1. FOR ROADWAY PROFILE, SEE DRAWINGS CT6191-B THROUGH CT6193-B



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
DRAWN BY  
C. DELOS REYES  
CHECKED BY  
A. SILVER  
IN CHARGE  
A. BOONE  
DATE  
04/29/2011

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

**NOT FOR**  
**CONSTRUCTION**



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

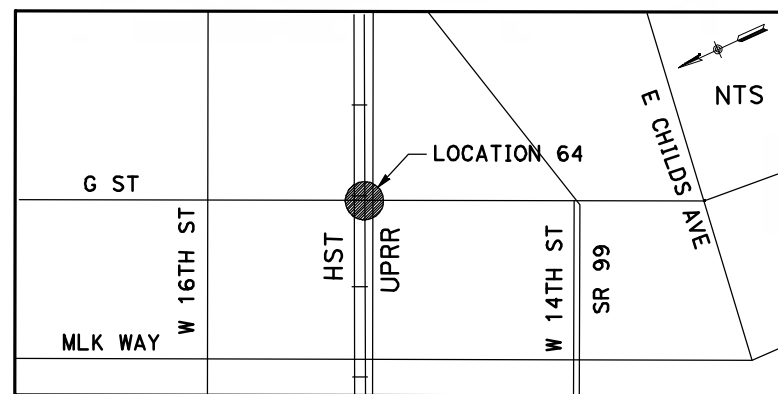
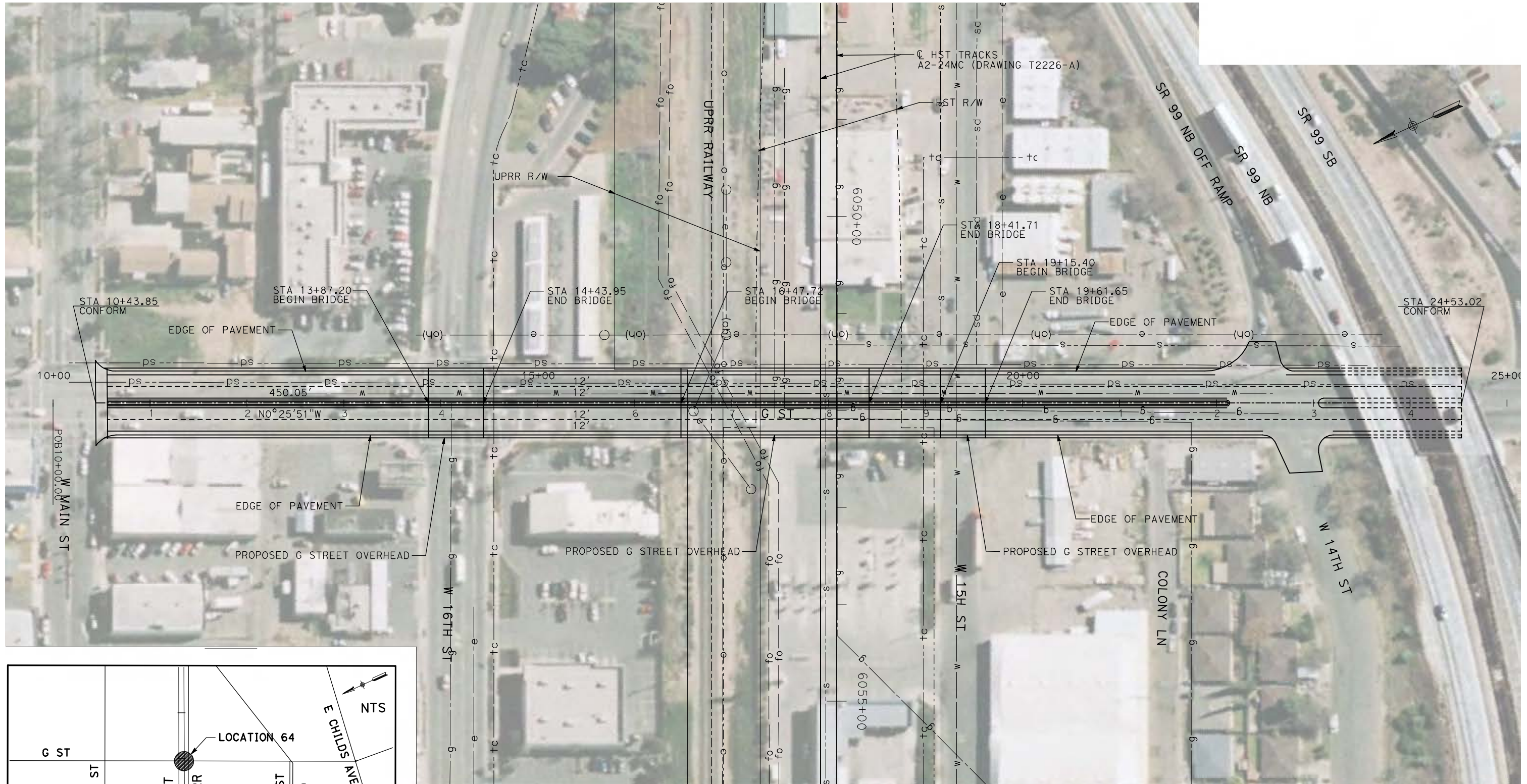
UPRR/SR99 MAINLINE/WYE - (WC)  
GRADE SEPARATION - ROAD 10 ALONG EXIST ALT 2  
LAYOUT  
SHEET 3 OF 3

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
CT5195-B  
SCALE  
AS SHOWN  
SHEET NO.  
### OF ###

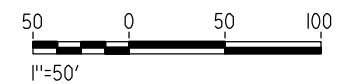
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5/2/2011 10:55:04 AM i:\chsr\60022962\Task-02\_merced-fresno\cadd\civil\sheet\roadway\cost\_reduction\Grade\_Sep\_Plan\MF-CT-0149-A.dgn



**NOTE:**  
1. FOR ROADWAY PROFILE, SEE DRAWING CT1149-A.



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
R. GIBSON  
DRAWN BY  
H. PHAN  
CHECKED BY  
A. SILVER  
IN CHARGE  
A. BOONE  
DATE  
04/29/2011

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

**NOT FOR**  
**CONSTRUCTION**



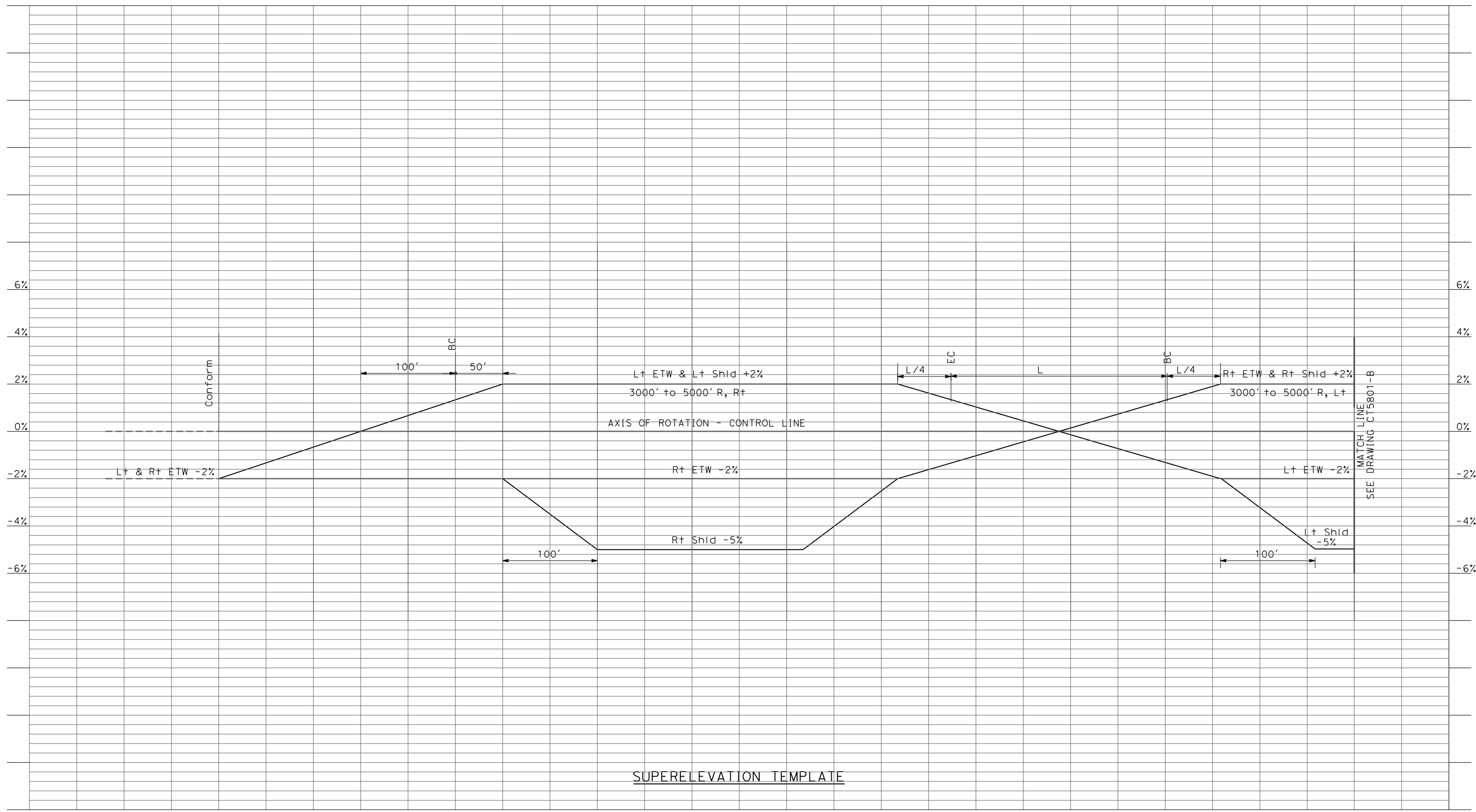
**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**

UPRR MERCED CONNECTOR - (AVE 24/WC)  
GRADE SEPARATION - G STREET  
LAYOUT  
SHEET 1 OF 1

CONTRACT NO.  
HST06-007  
DRAWING NO.  
CT0149-A  
SCALE  
AS SHOWN  
SHEET NO.  
### OF ###



4/27/2011 6:36:04 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 1b - ave 24 wye-w.chowchilla\grade separation\Profile\CT5800-B.dgn



SUPERELEVATION TEMPLATE

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
R. LI  
 DRAWN BY  
A. TRINH  
 CHECKED BY  
A. SILVER  
 IN CHARGE  
A. BOONE  
 DATE  
04/29/2011

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

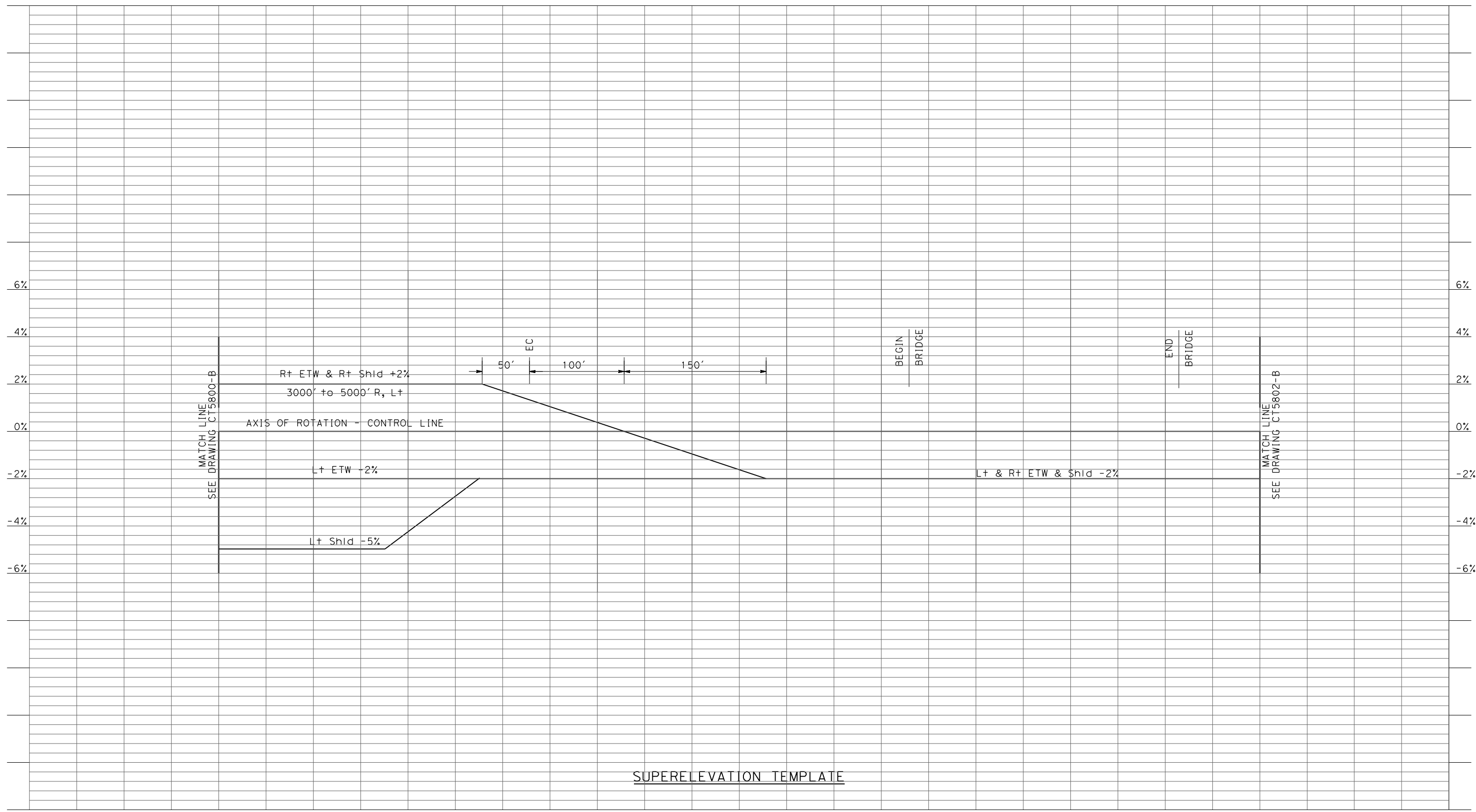


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 - (AVE 24/WC)  
 GRADE SEPARATION  
 SUPERELEVATION TEMPLATE  
 SHEET 1 OF 4

CONTRACT NO.  
HSR06-007  
 DRAWING NO.  
CT5800-B  
 SCALE  
AS SHOWN  
 SHEET NO.  
### OF ###



4/27/2011 6:36:08 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 1b - ave 24 wye-w.chowchilla grade separation\Profile\CT5801-B.dgn



SUPERELEVATION TEMPLATE

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
R. LI  
 DRAWN BY  
A. TRINH  
 CHECKED BY  
A. SILVER  
 IN CHARGE  
A. BOONE  
 DATE  
04/29/2011

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

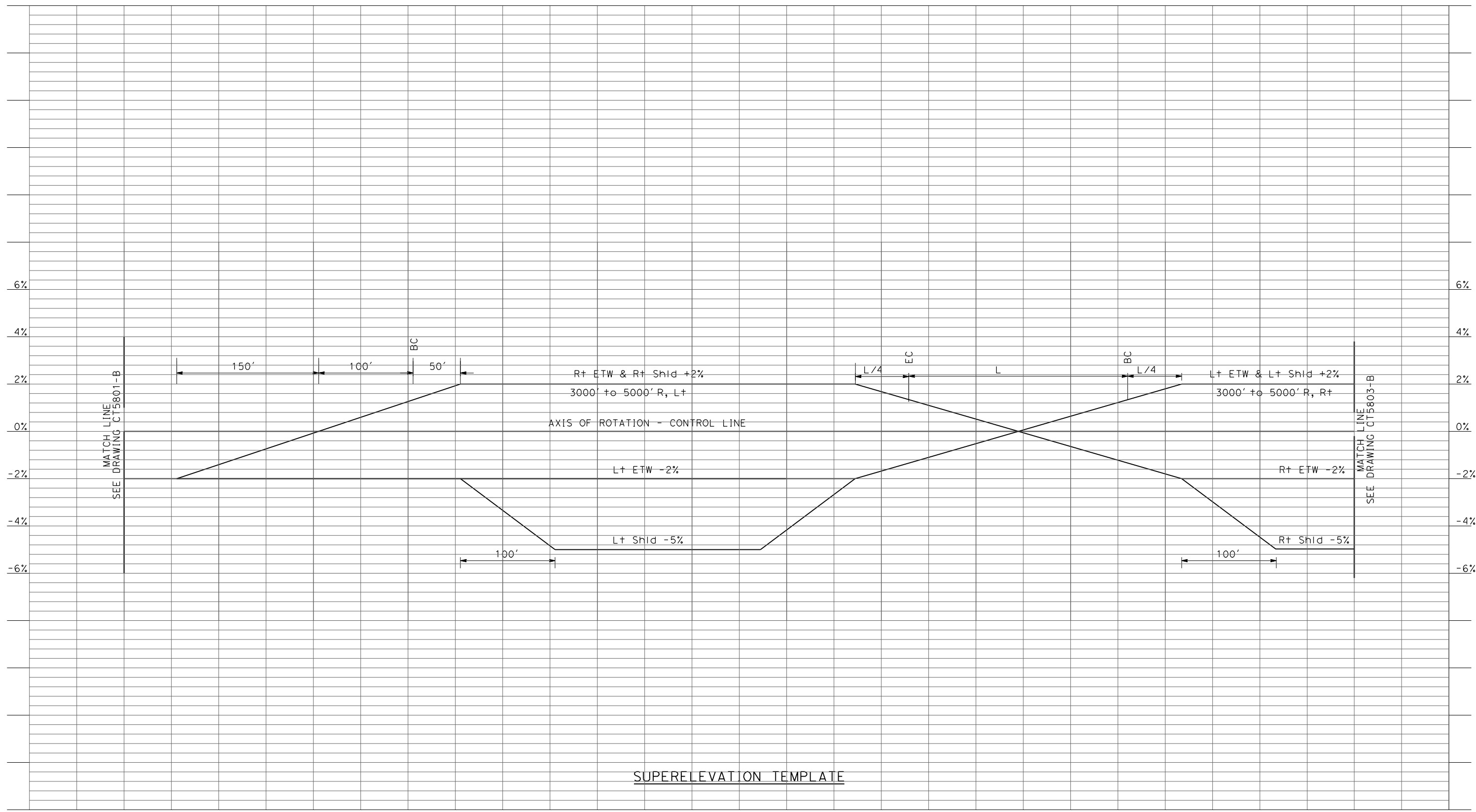


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 - (AVE 24/WC)  
 GRADE SEPARATION  
 SUPERELEVATION TEMPLATE  
 SHEET 2 OF 4

CONTRACT NO.  
HSR06-007  
 DRAWING NO.  
CT5801-B  
 SCALE  
AS SHOWN  
 SHEET NO.  
### OF ###



4/27/2011 6:36:11 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 1b - ave 24 wye-w.chowchilla\grade separation\Profile\CT5802-B.dgn



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**R. LI**  
 DRAWN BY  
**A. TRINH**  
 CHECKED BY  
**A. SILVER**  
 IN CHARGE  
**A. BOONE**  
 DATE  
**04/29/2011**

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

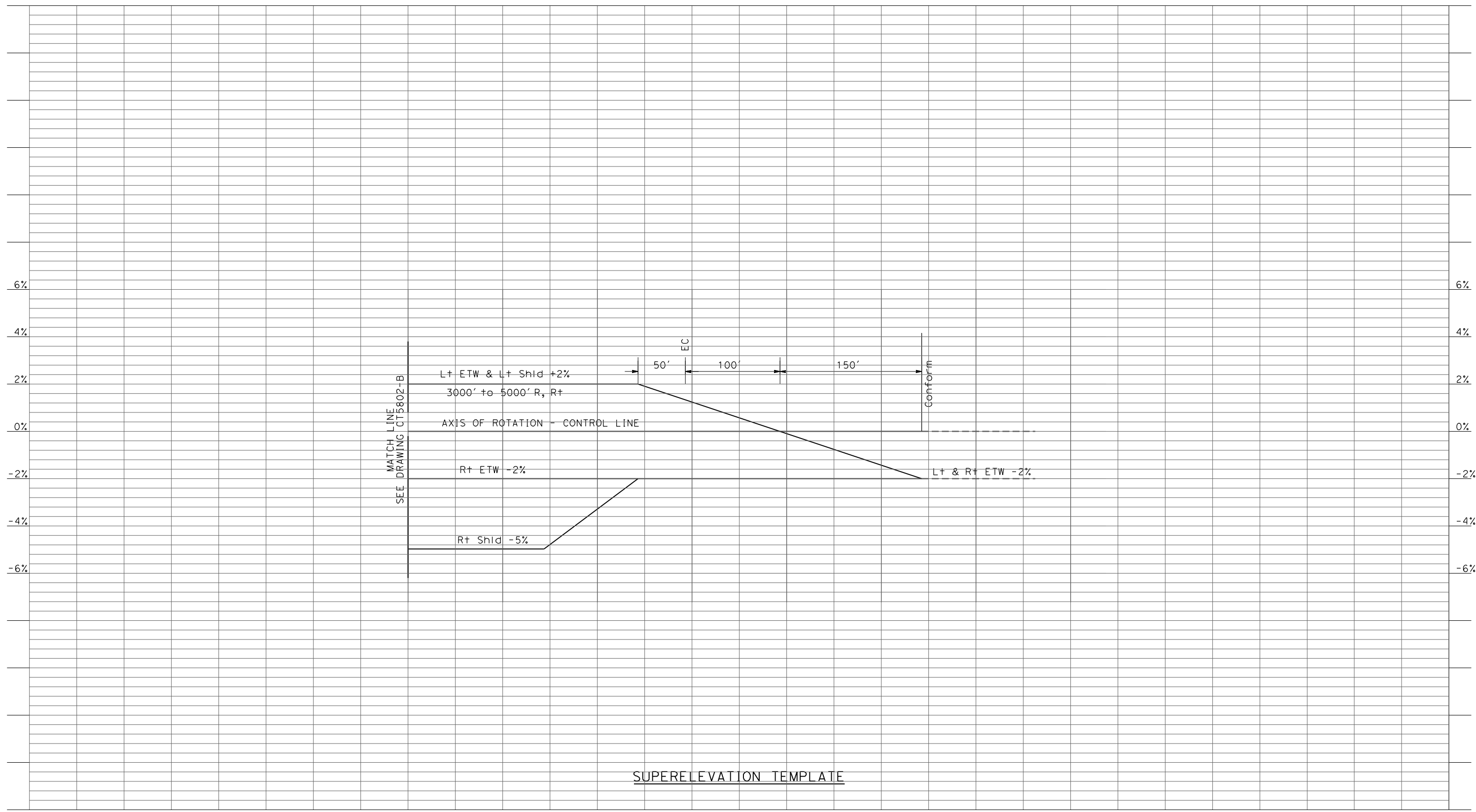


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 - (AVE 24/WC)  
 GRADE SEPARATION  
 SUPERELEVATION TEMPLATE  
 SHEET 3 OF 4

CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CT5802-B  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###



4/27/2011 6:36:14 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 1b - ave 24 wye-w.chowchilla grade separation\Profile\CT5803-B.dgn



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
R. LI  
 DRAWN BY  
A. TRINH  
 CHECKED BY  
A. SILVER  
 IN CHARGE  
A. BOONE  
 DATE  
04/29/2011

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

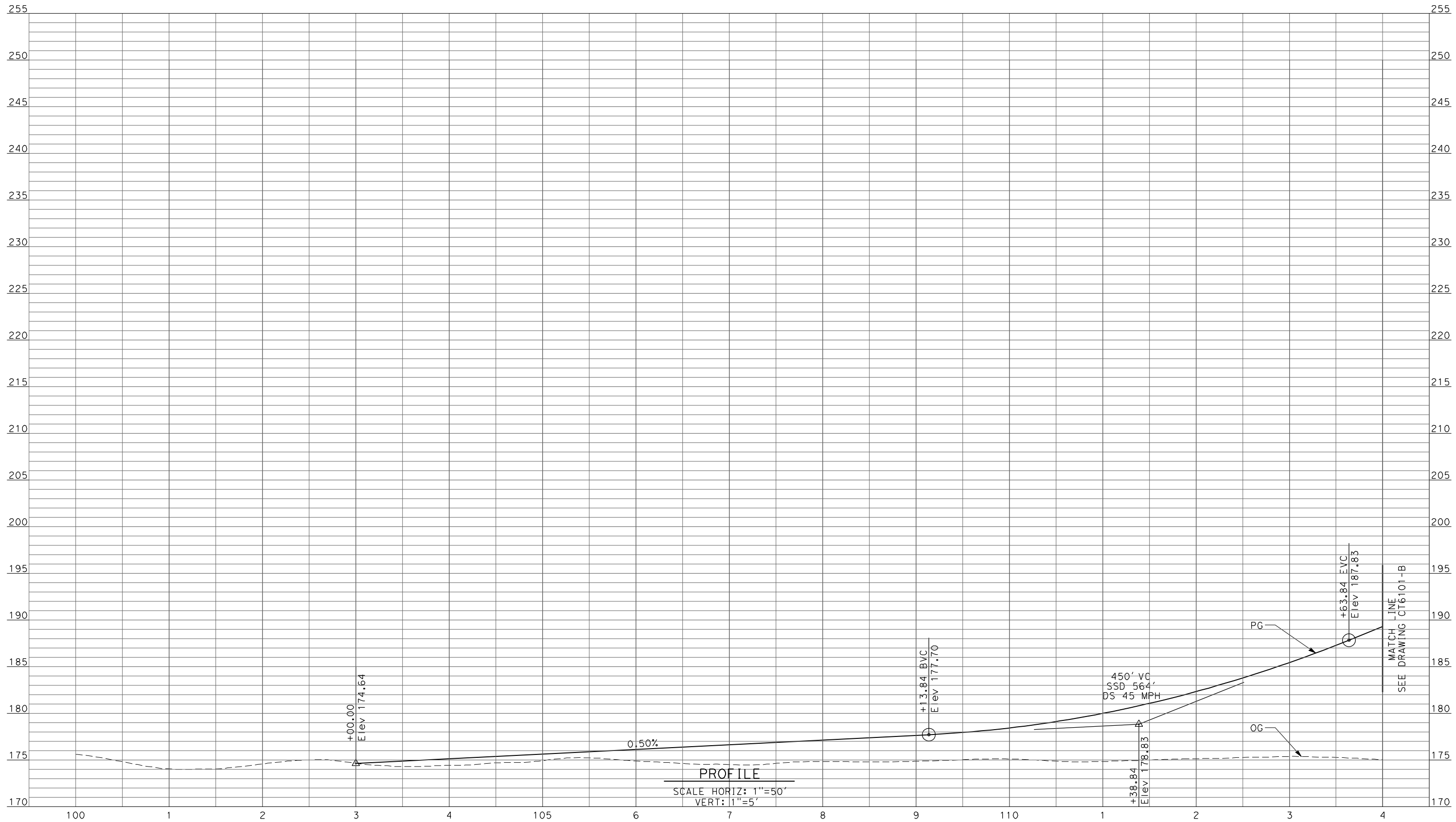


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 - (AVE 24/WC)  
 GRADE SEPARATION  
 SUPERELEVATION TEMPLATE  
 SHEET 4 OF 4

CONTRACT NO.  
HSR06-007  
 DRAWING NO.  
CT5803-B  
 SCALE  
AS SHOWN  
 SHEET NO.  
### OF ###



4/27/2011 6:36:18 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 1b - ave 24 wye-w.chowchilla grade separation\Profile\CT6100-B.dgn  
 ReyesC1



**PROFILE**  
 SCALE HORIZ: 1"=50'  
 VERT: 1"=5'

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**D. AYELE**  
 DRAWN BY  
**C. DELOS REYES**  
 CHECKED BY  
**A. SILVER**  
 IN CHARGE  
**A. BOONE**  
 DATE  
**04/29/2011**

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

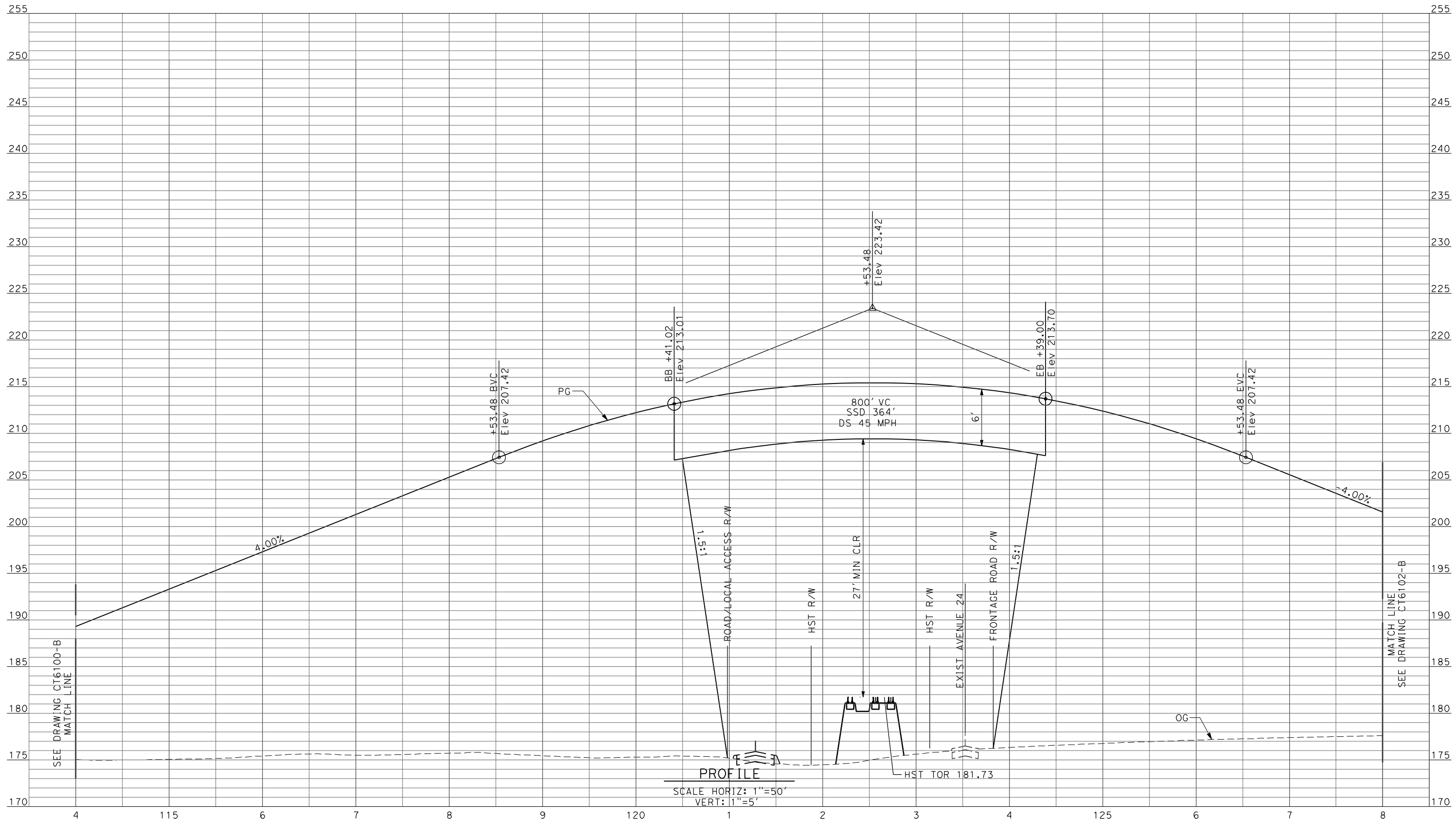


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 MAINLINE/WYE - (AVE 24/WC)  
 GRADE SEPARATION - HEMLOCK RD (ROAD 9) ALT 1  
**PROFILE**  
 SHEET 1 OF 4

CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CT6100-B  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###



4/27/2011 6:36:21 PM p:\60022962\task\_02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 1b - ave 24 wye-w.chowchilla grade separation\Profile\CT6101-B.dgn  
 ReyesC1



**PROFILE**  
 SCALE HORIZ: 1"=50'  
 VERT: 1"=5'

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**D. AYELE**  
 DRAWN BY  
**C. DELOS REYES**  
 CHECKED BY  
**A. SILVER**  
 IN CHARGE  
**A. BOONE**  
 DATE  
**04/29/2011**

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

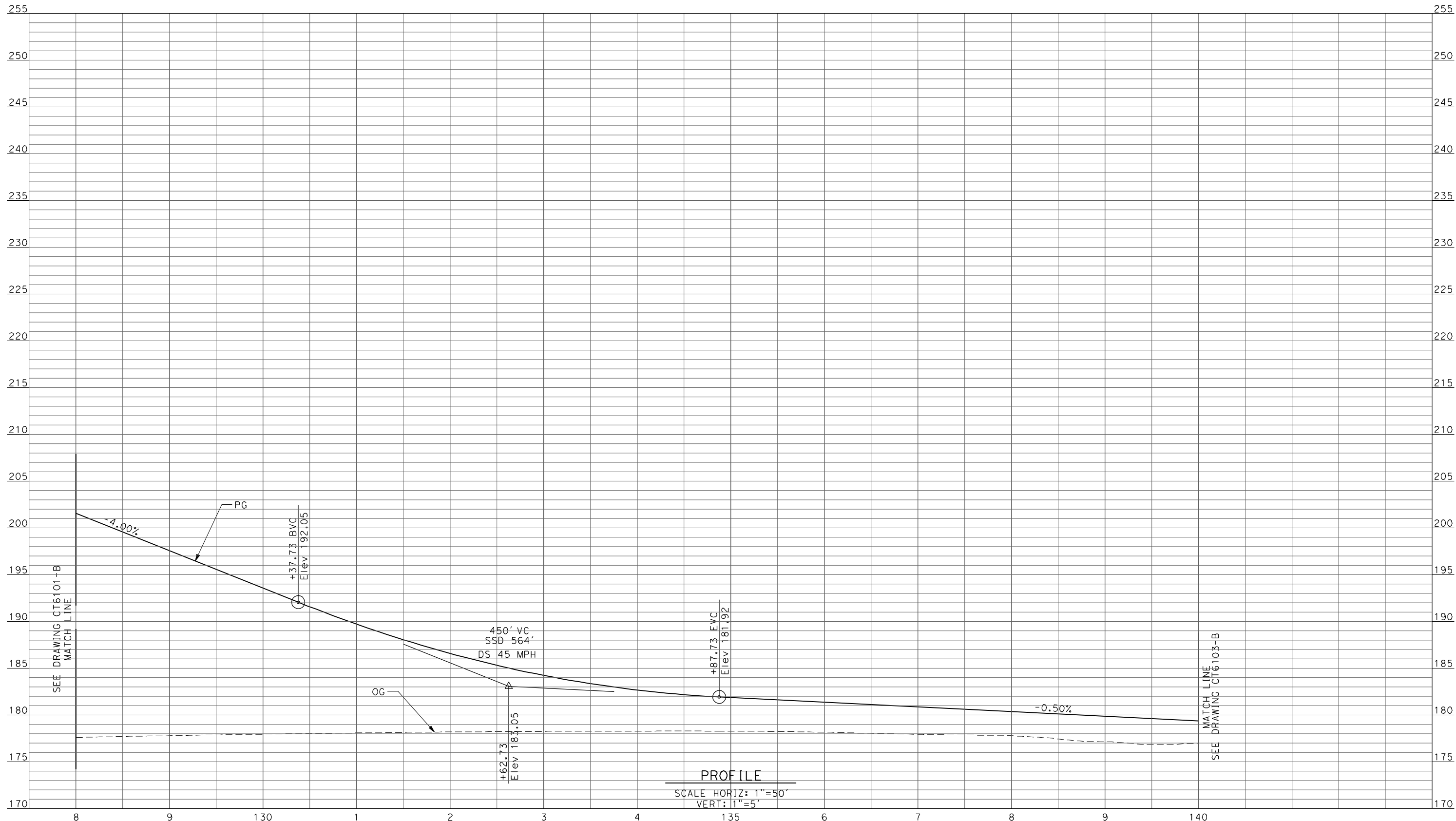


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 MAINLINE/WYE - (AVE 24/WC)  
 GRADE SEPARATION - HEMLOCK RD (ROAD 9) ALT 1  
 PROFILE  
 SHEET 2 OF 4

CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CT6101-B  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###



4/27/2011 6:36:25 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 1b - ave 24 wye-w.chowchilla grade separation\Profile\CT6102-B.dgn  
 ReyesC1



**PROFILE**  
 SCALE HORIZ: 1"=50'  
 VERT: 1"=5'

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**D. AYELE**  
 DRAWN BY  
**C. DELOS REYES**  
 CHECKED BY  
**A. SILVER**  
 IN CHARGE  
**A. BOONE**  
 DATE  
**04/29/2011**

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

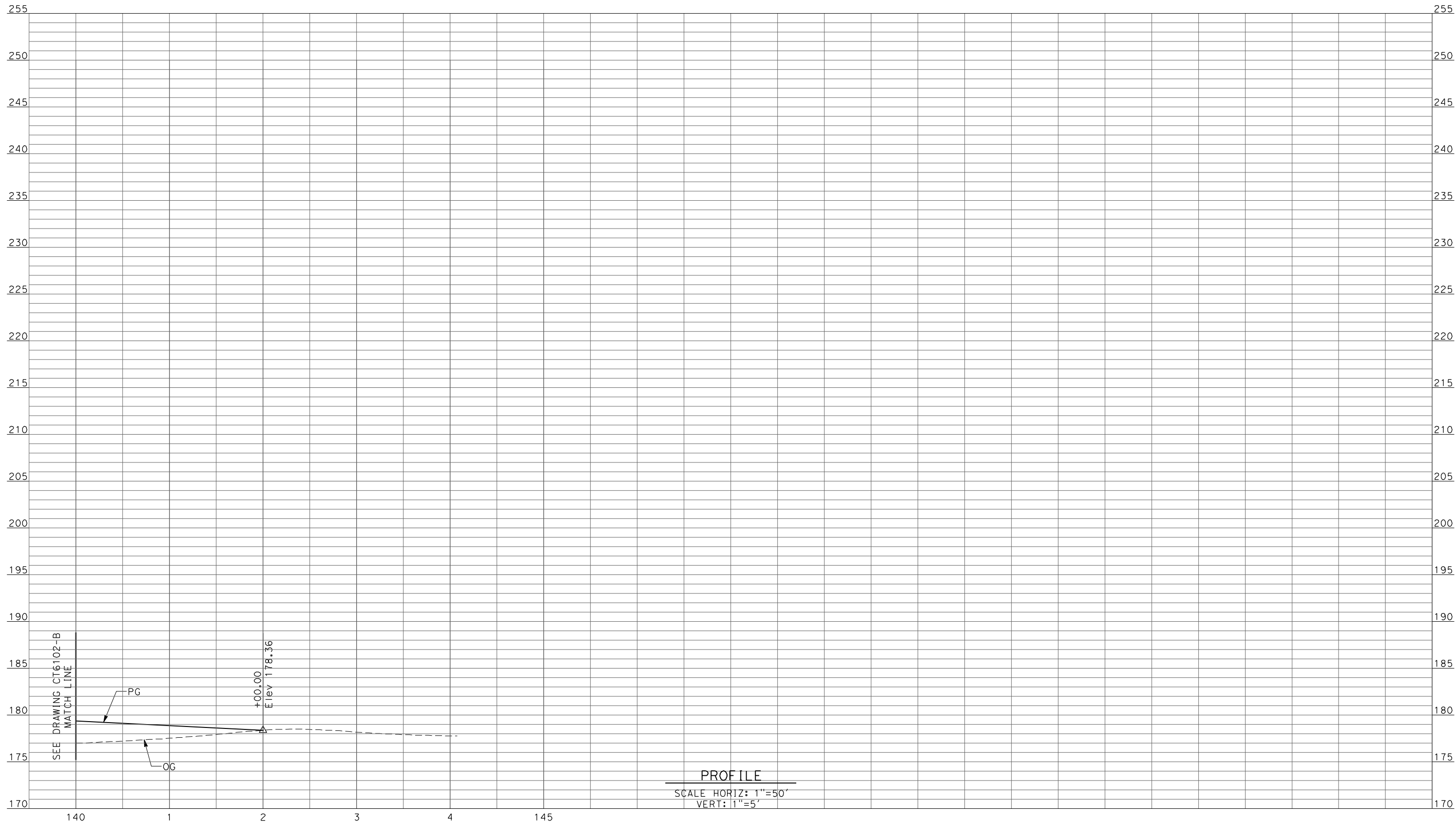


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 MAINLINE/WYE - (AVE 24/WC)  
 GRADE SEPARATION - HEMLOCK RD (ROAD 9) ALT 1  
**PROFILE**  
 SHEET 3 OF 4

CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CT6102-B  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###



4/27/2011 6:36:28 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 1b - ave 24 wye-w.chowchilla grade separation\Profile\CT6103-B.dgn



**PROFILE**  
 SCALE HORIZ: 1"=50'  
 VERT: 1"=5'

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**D. AYELE**  
 DRAWN BY  
**C. DELOS REYES**  
 CHECKED BY  
**A. SILVER**  
 IN CHARGE  
**A. BOONE**  
 DATE  
**04/29/2011**

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

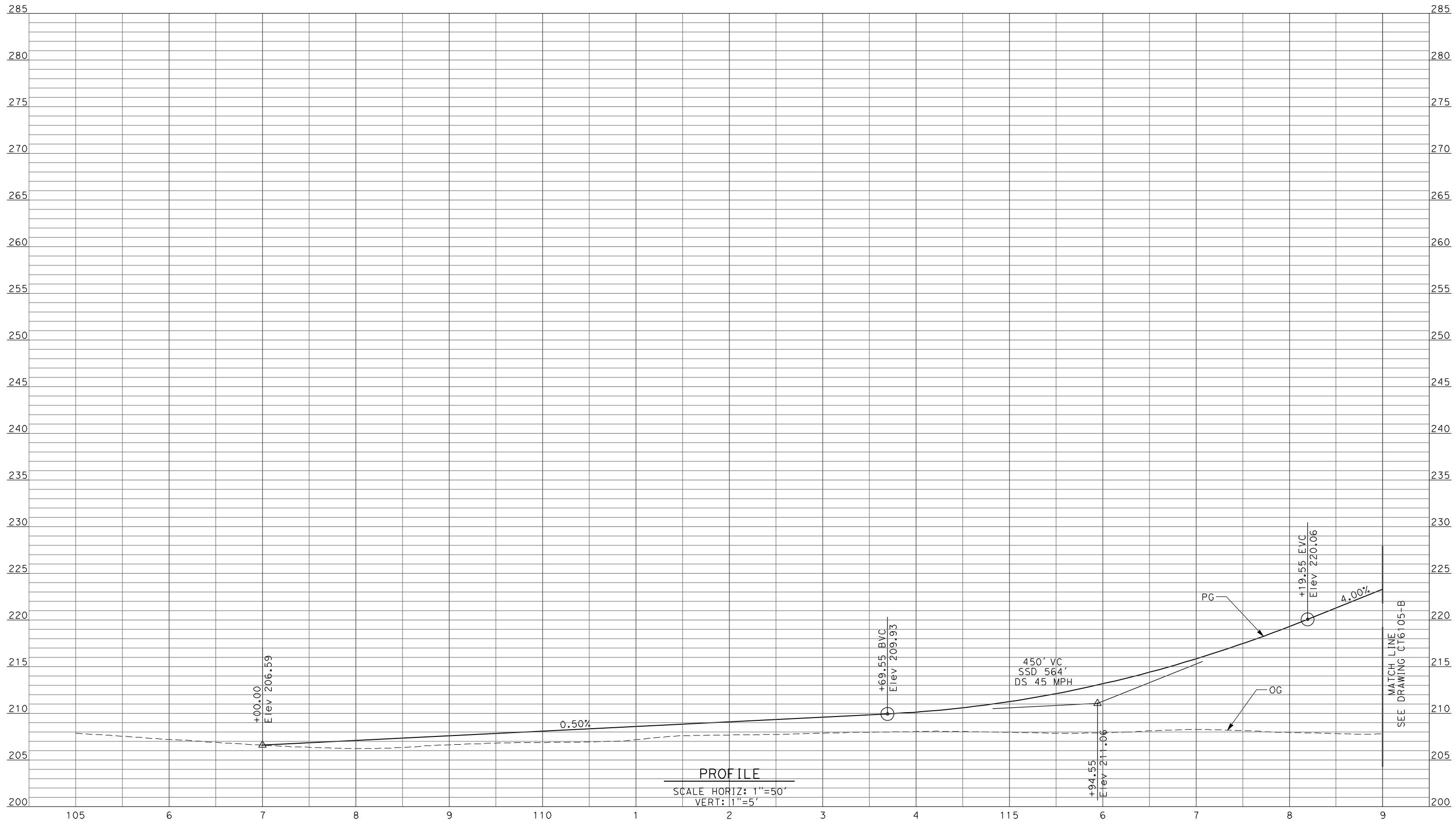


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 MAINLINE/WYE - (AVE 24/WC)  
 GRADE SEPARATION - HEMLOCK RD (ROAD 9) ALT 1  
 PROFILE  
 SHEET 4 OF 4

CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CT6103-B  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###



4/27/2011 6:36:32 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 1b - ave 24 wye-w.chowchilla\grade separation\Profile\CT6104-B.dgn  
 ReyesC1



**PROFILE**  
 SCALE HORIZ: 1"=50'  
 VERT: 1"=5'

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**D. AYELE**  
 DRAWN BY  
**C. DELOS REYES**  
 CHECKED BY  
**A. SILVER**  
 IN CHARGE  
**A. BOONE**  
 DATE  
**04/29/2011**

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

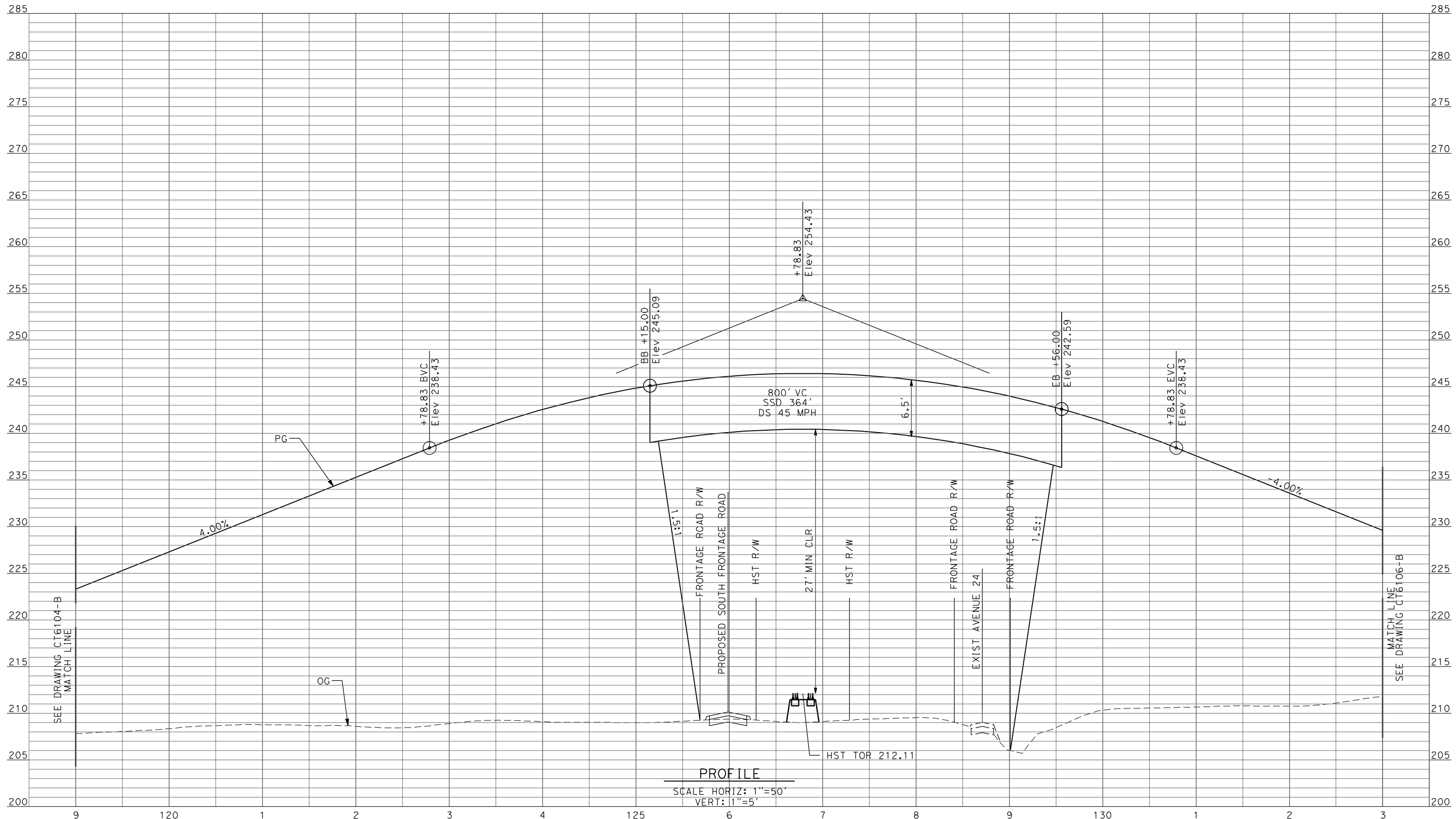


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 MAINLINE - (AVE 24)  
 GRADE SEPARATION - ROAD 13  
**PROFILE**  
 SHEET 1 OF 4

CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CT6104-B  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###



4/27/2011 6:36:36 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 1b - ave 24 wye-w.chowchilla grade separation\Profile\CT6105-B.dgn



**PROFILE**  
 SCALE HORIZ: 1"=50'  
 VERT: 1"=5'

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**D. AYELE**  
 DRAWN BY  
**C. DELOS REYES**  
 CHECKED BY  
**A. SILVER**  
 IN CHARGE  
**A. BOONE**  
 DATE  
**04/29/2011**

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



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 MAINLINE - (AVE 24)  
 GRADE SEPARATION - ROAD 13  
**PROFILE**  
**SHEET 2 OF 4**

CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CT6105-B  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###



4/27/2011 6:36:39 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 1b - ave 24 wye-w.chowchilla\grade separation\Profile\CT6106-B.dgn



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
 D. AYELE  
 DRAWN BY  
 C. DELOS REYES  
 CHECKED BY  
 A. SILVER  
 IN CHARGE  
 A. BOONE  
 DATE  
 04/29/2011

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

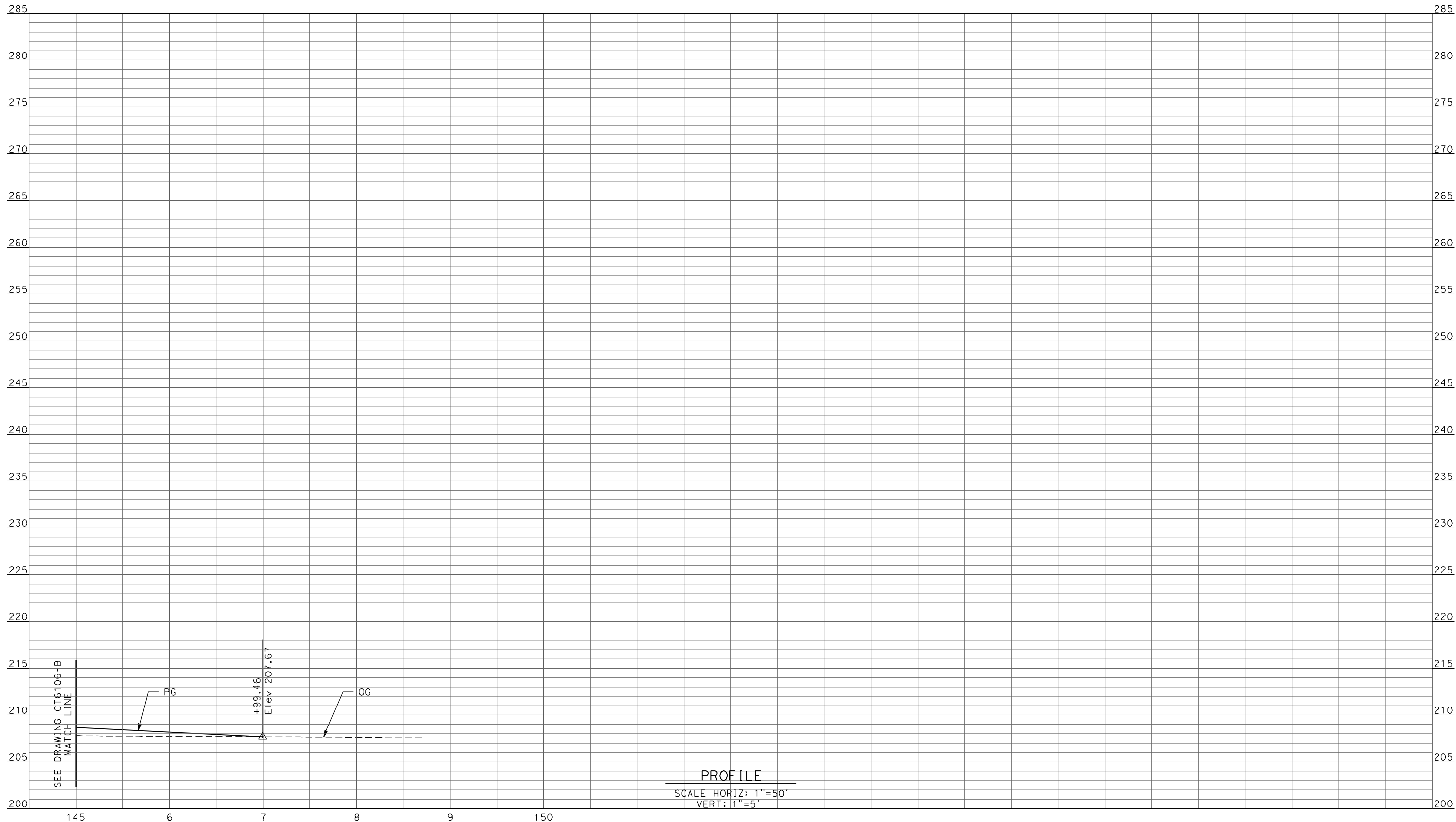


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 MAINLINE - (AVE 24)  
 GRADE SEPARATION - ROAD 13  
 PROFILE  
 SHEET 3 OF 4

CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CT6106-B  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###



4/27/2011 6:36:43 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 1b - ave 24 wye-w.chowchilla grade separation\Profile\CT6107-B.dgn



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**D. AYELE**  
 DRAWN BY  
**C. DELOS REYES**  
 CHECKED BY  
**A. SILVER**  
 IN CHARGE  
**A. BOONE**  
 DATE  
**04/29/2011**

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

  
 Technical Services, Inc.  
 2020 L Street, Suite 300  
 Sacramento, CA 95811  



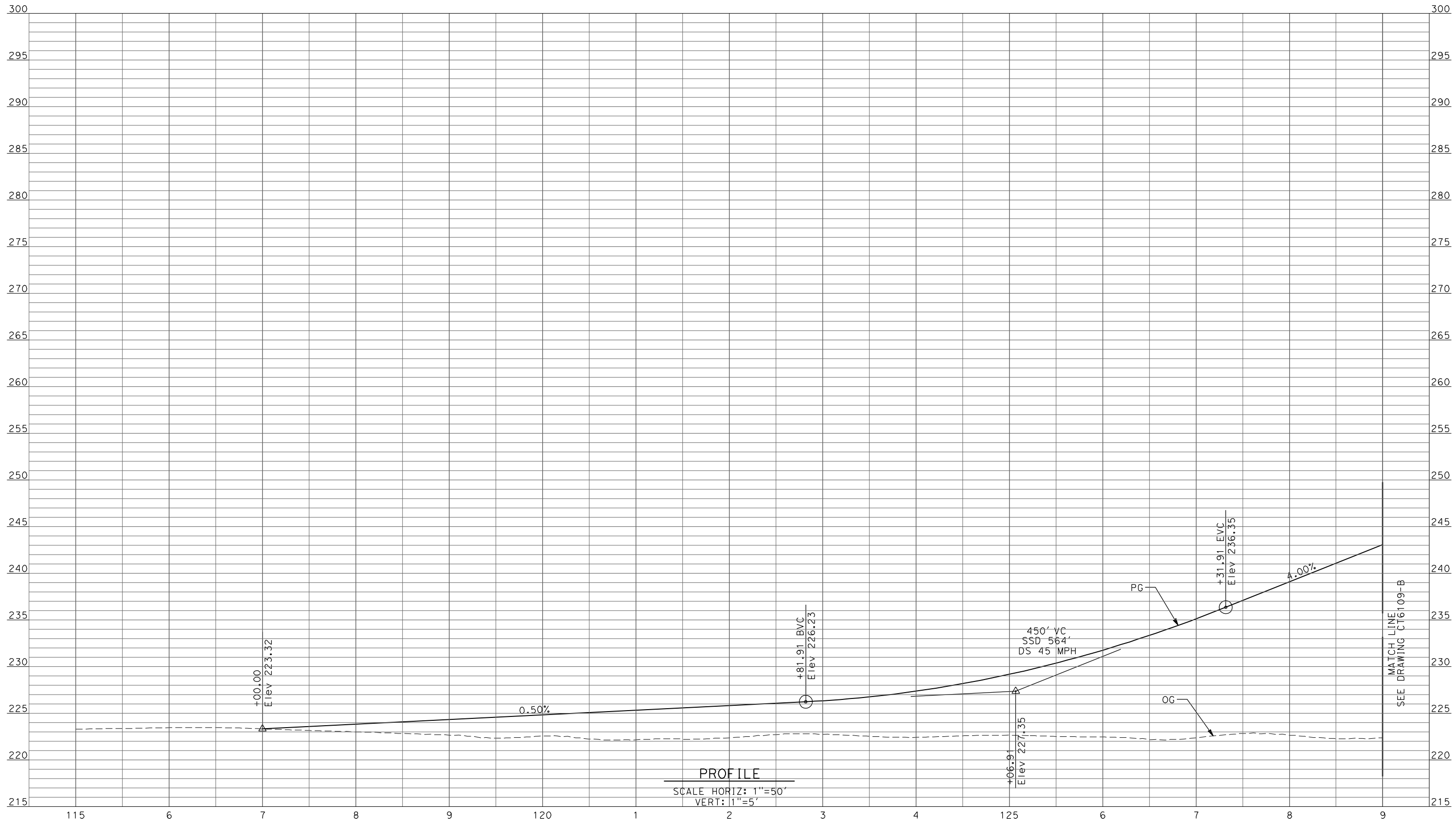
**CALIFORNIA**  
 HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 MAINLINE - (AVE 24)  
 GRADE SEPARATION - ROAD 13  
 PROFILE  
 SHEET 4 OF 4

CONTRACT NO.	HSR06-007
DRAWING NO.	CT6107-B
SCALE	AS SHOWN
SHEET NO.	### OF ###



4/27/2011 6:36:46 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 1b - ave 24 wye-w.chowchilla grade separation\Profile\CT6108-B.dgn  
 ReyesC1



**PROFILE**  
 SCALE HORIZ: 1"=50'  
 VERT: 1"=5'

MATCH LINE  
 SEE DRAWING CT6109-B

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**D. AYELE**  
 DRAWN BY  
**C. DELOS REYES**  
 CHECKED BY  
**A. SILVER**  
 IN CHARGE  
**A. BOONE**  
 DATE  
**04/29/2011**

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

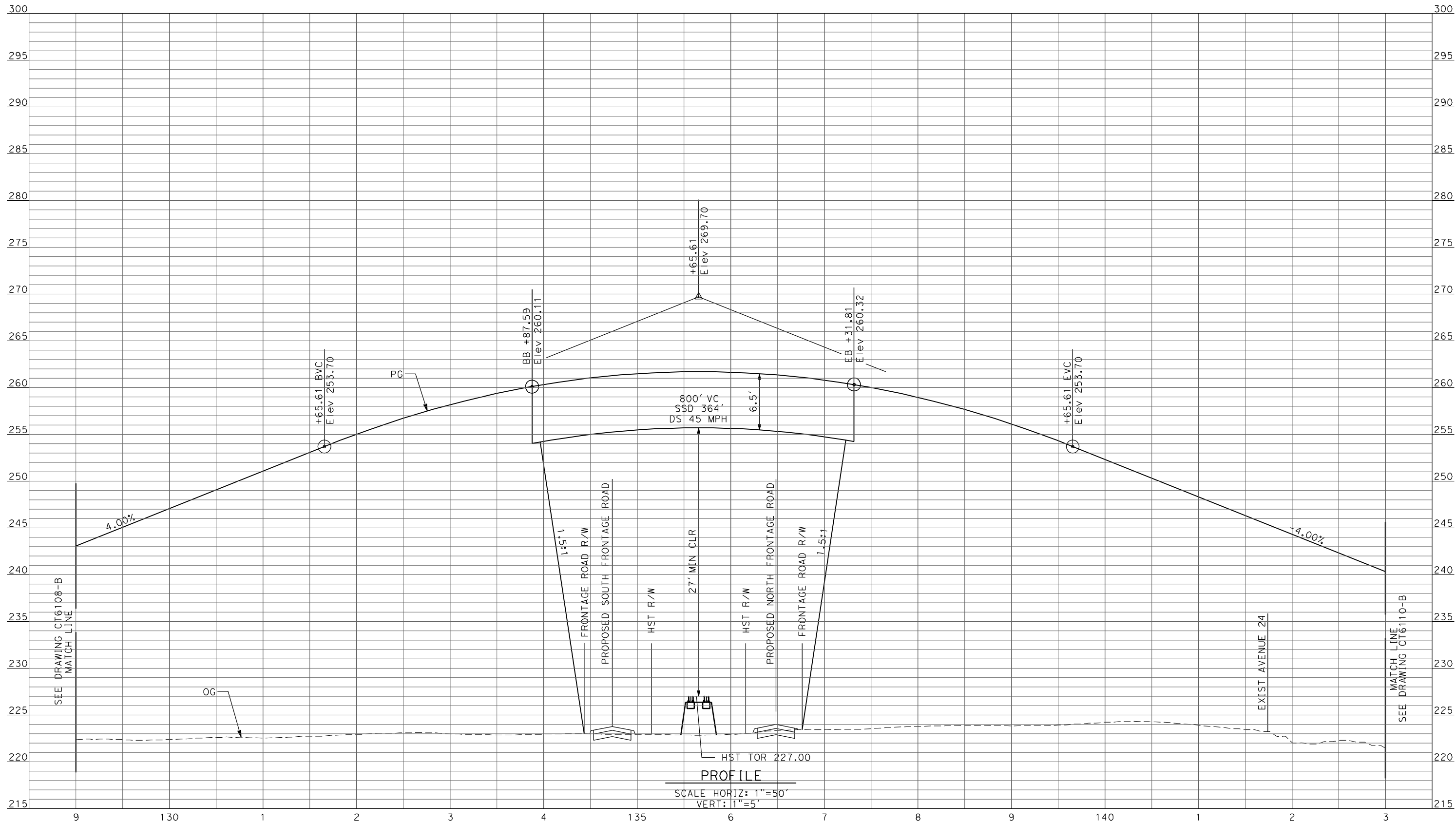


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 MAINLINE - (AVE 24)  
 GRADE SEPARATION - ROAD 15  
**PROFILE**  
 SHEET 1 OF 3

CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CT6108-B  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###



4/27/2011 6:36:50 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 1b - ave 24 wye-w.chowchilla grade separation\Profile\CT6109-B.dgn



**PROFILE**  
 SCALE HORIZ: 1"=50'  
 VERT: 1"=5'

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**D. AYELE**  
 DRAWN BY  
**C. DELOS REYES**  
 CHECKED BY  
**A. SILVER**  
 IN CHARGE  
**A. BOONE**  
 DATE  
**04/29/2011**

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

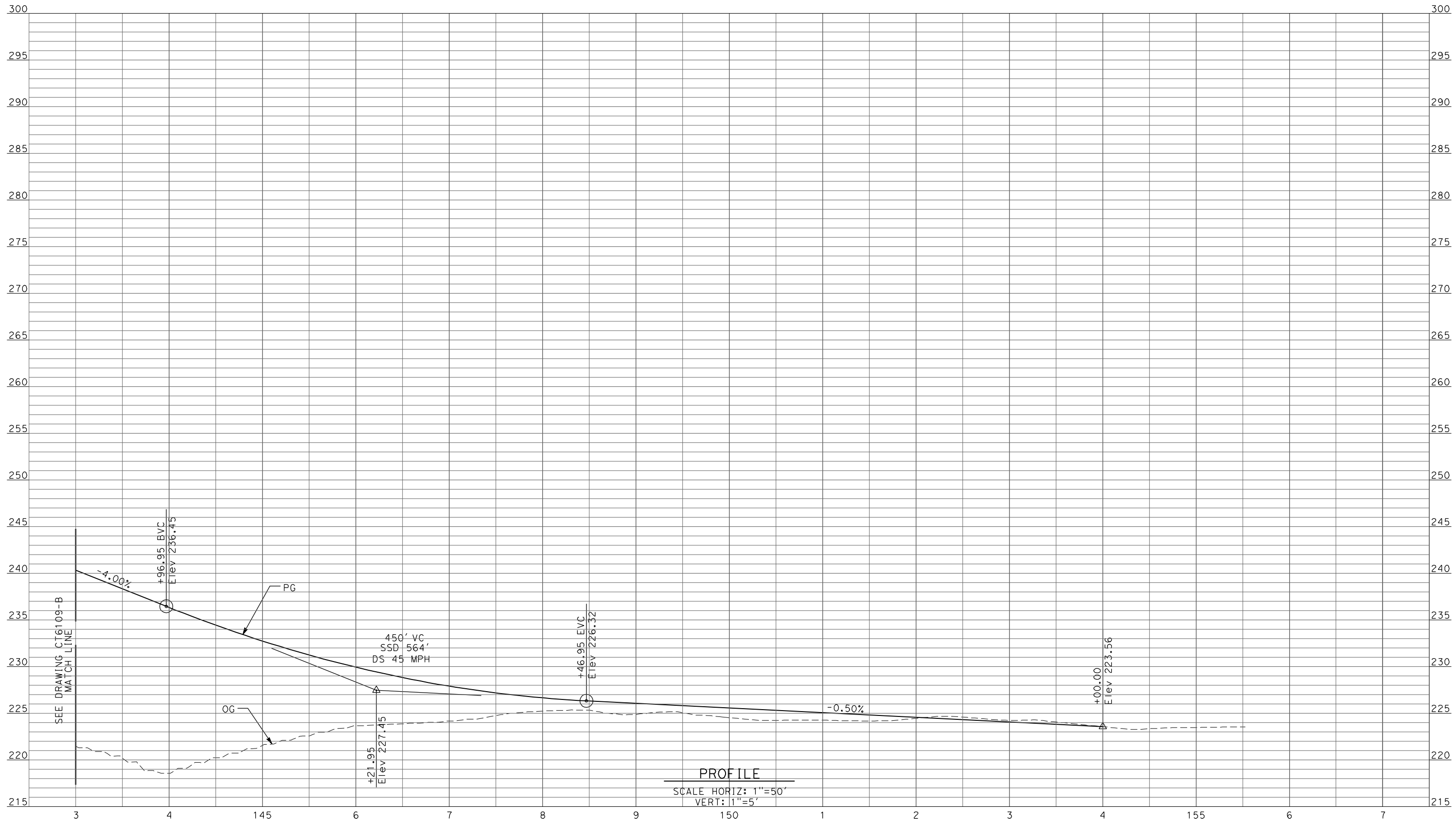


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 MAINLINE - (AVE 24)  
 GRADE SEPARATION - ROAD 15  
 PROFILE  
 SHEET 2 OF 3

CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CT6109-B  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###



4/27/2011 6:36:53 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 1b - ave 24 wye-w.chowchilla grade separation\Profile\CT6110-B.dgn  
 ReyesC1



**PROFILE**  
 SCALE HORIZ: 1"=50'  
 VERT: 1"=5'

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**D. AYELE**  
 DRAWN BY  
**C. DELOS REYES**  
 CHECKED BY  
**A. SILVER**  
 IN CHARGE  
**A. BOONE**  
 DATE  
**04/29/2011**

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

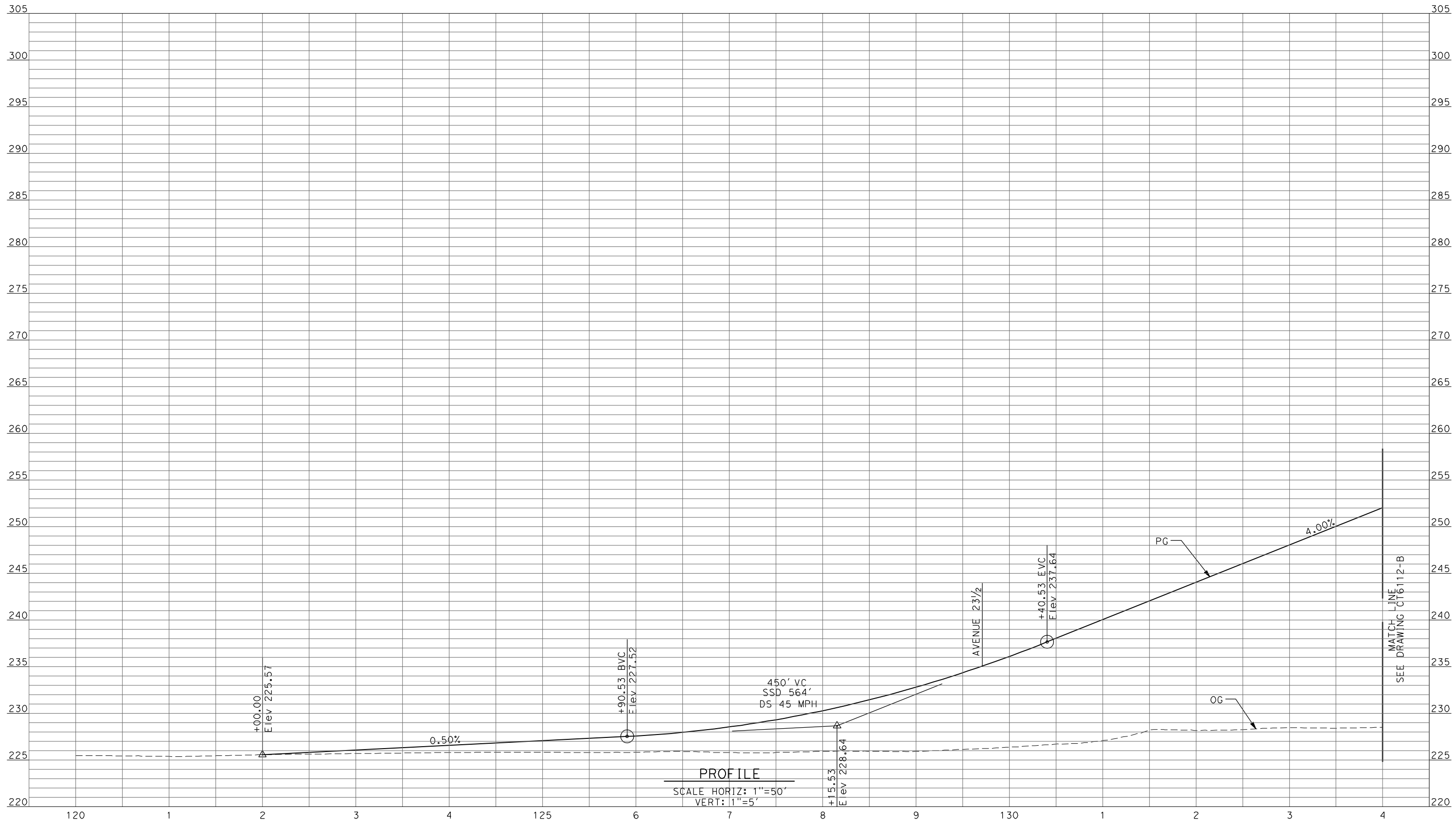


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 MAINLINE - (AVE 24)  
 GRADE SEPARATION - ROAD 15  
 PROFILE  
 SHEET 3 OF 3

CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CT6110-B  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###



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 ReyesC1



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**D. AYELE**  
 DRAWN BY  
**C. DELOS REYES**  
 CHECKED BY  
**A. SILVER**  
 IN CHARGE  
**A. BOONE**  
 DATE  
**04/29/2011**

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

**AECOM**  
 Technical Services, Inc.  
 2020 L Street, Suite 300  
 Sacramento, CA 95811  
**CH2MHILL**

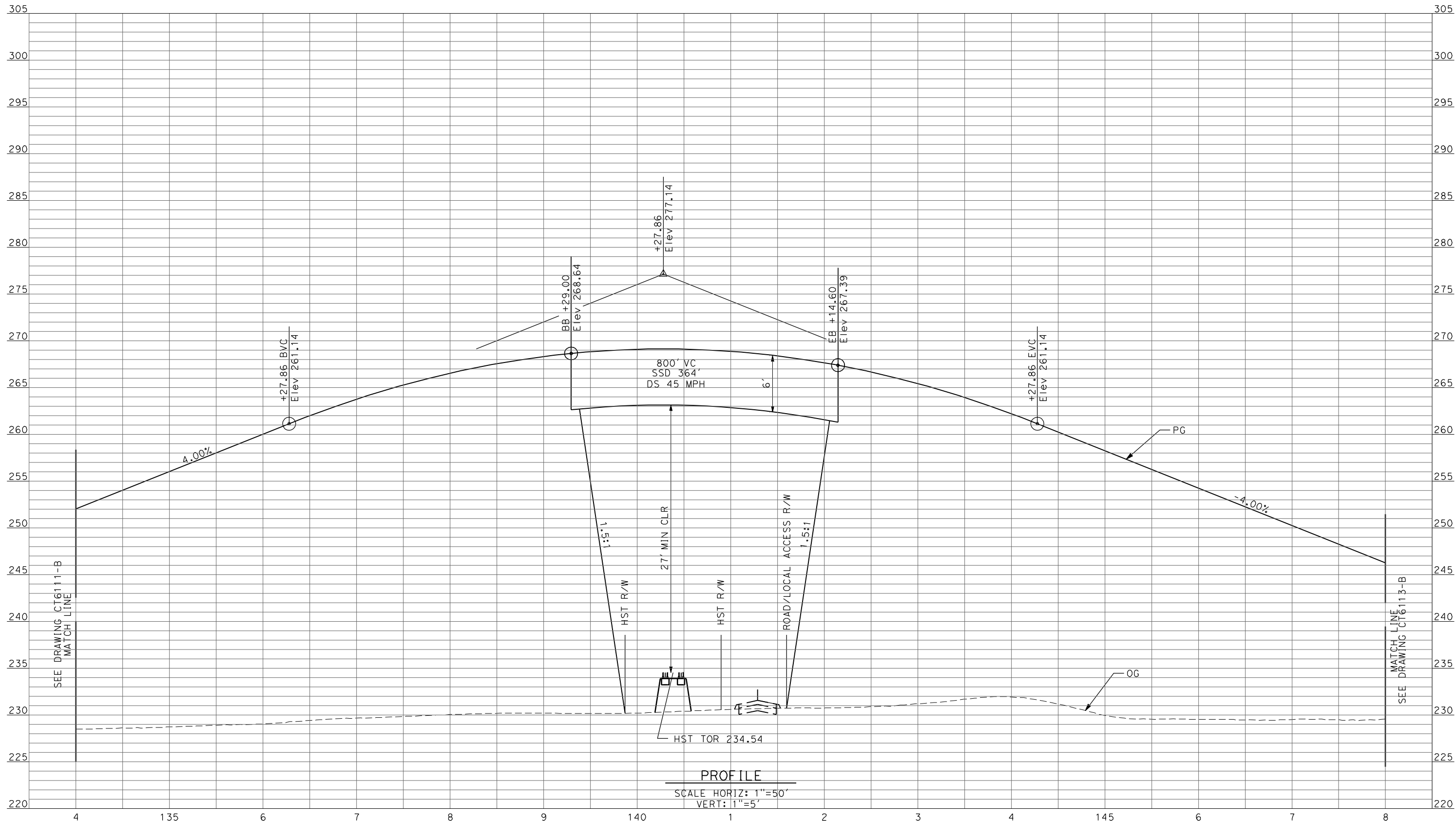


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 MAINLINE - (AVE 24)  
 GRADE SEPARATION - ROAD 16  
 PROFILE  
 SHEET 1 OF 3

CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CT6111-B  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###



4/27/2011 6:37:00 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 1b - ave 24 wye-w.chowchilla grade separation\Profile\CT6112-B.dgn



**PROFILE**  
 SCALE HORIZ: 1"=50'  
 VERT: 1"=5'

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**D. AYELE**  
 DRAWN BY  
**C. DELOS REYES**  
 CHECKED BY  
**A. SILVER**  
 IN CHARGE  
**A. BOONE**  
 DATE  
**04/29/2011**

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

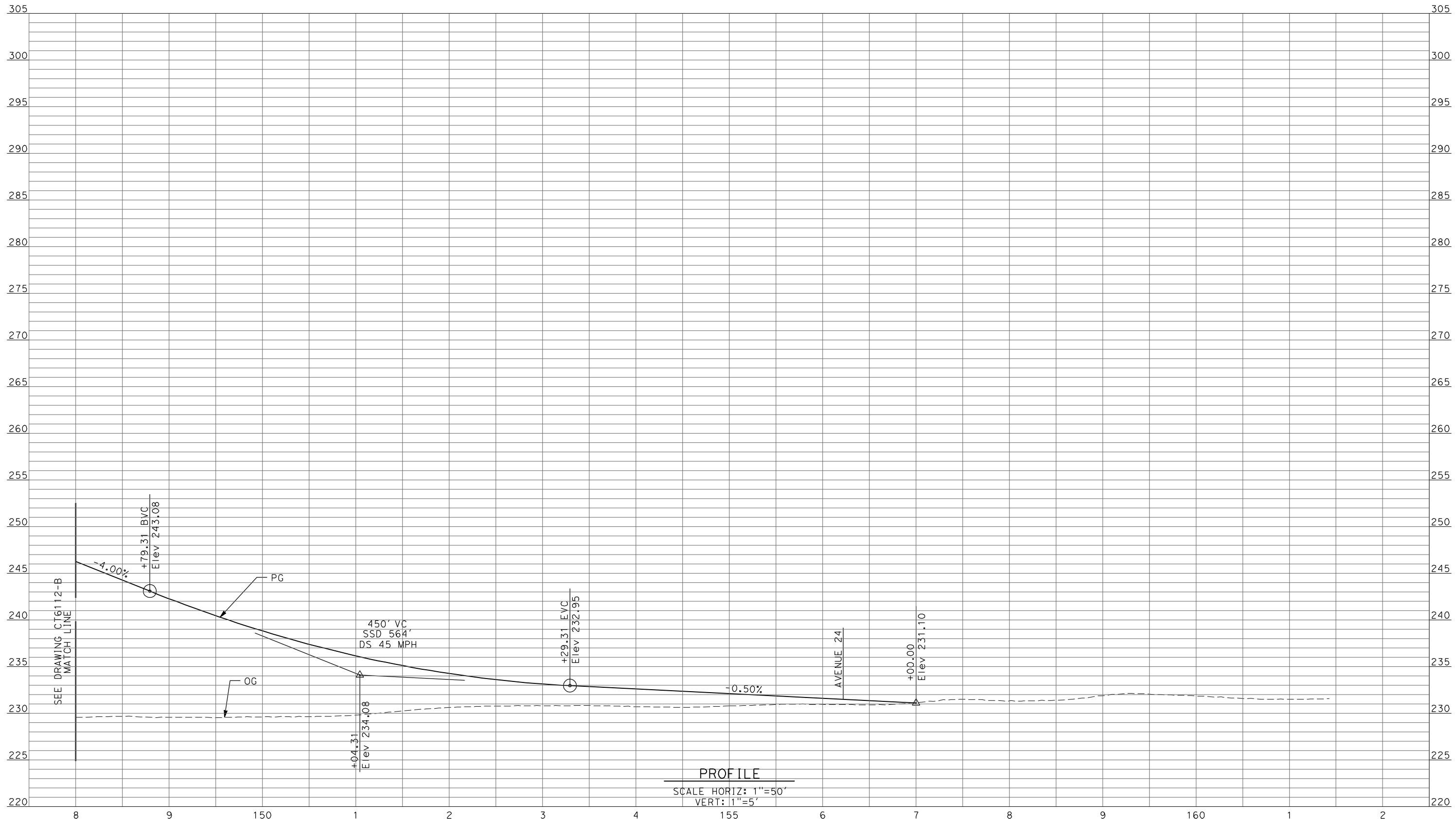


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 MAINLINE - (AVE 24)  
 GRADE SEPARATION - ROAD 16  
**PROFILE**  
 SHEET 2 OF 3

CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CT6112-B  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###



4/27/2011 6:37:04 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 1b - ave 24 wye-w.chowchilla grade separation\Profile\CT6113-B.dgn



**PROFILE**  
 SCALE HORIZ: 1"=50'  
 VERT: 1"=5'

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**D. AYELE**  
 DRAWN BY  
**C. DELOS REYES**  
 CHECKED BY  
**A. SILVER**  
 IN CHARGE  
**A. BOONE**  
 DATE  
**04/29/2011**

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

  
 Technical Services, Inc.  
 2020 L Street, Suite 300  
 Sacramento, CA 95811  

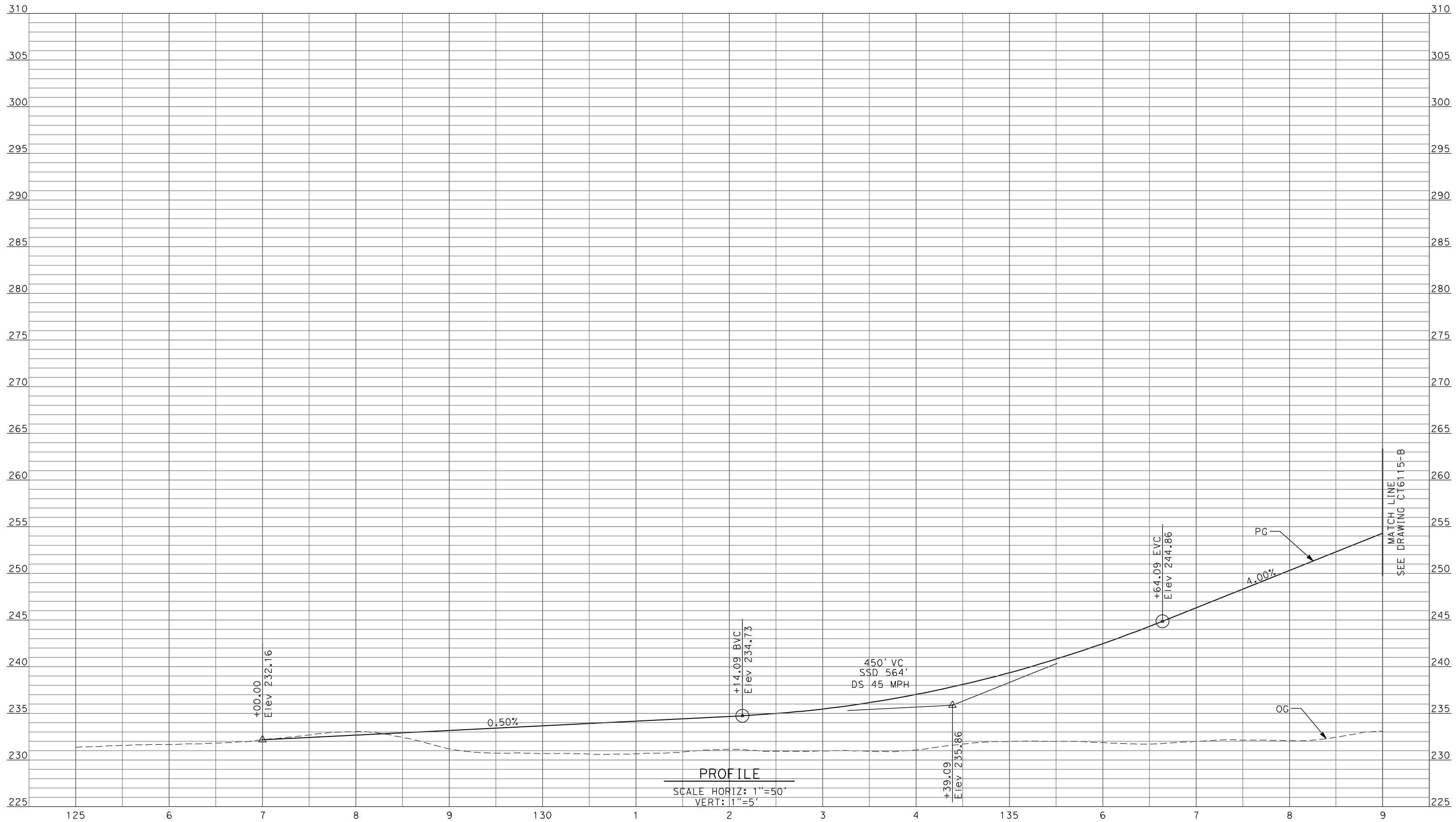

  
**CALIFORNIA**  
 HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 MAINLINE - (AVE 24)  
 GRADE SEPARATION - ROAD 16  
 PROFILE  
 SHEET 3 OF 3

CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CT6113-B  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###



4/27/2011 6:37:07 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 1b - ave 24 wye-w.chowchilla\grade separation\Profile\CT6114-B.dgn



**PROFILE**  
 SCALE HORIZ: 1"=50'  
 VERT: 1"=5'

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**D. AYELE**  
 DRAWN BY  
**C. DELOS REYES**  
 CHECKED BY  
**A. SILVER**  
 IN CHARGE  
**A. BOONE**  
 DATE  
**04/29/2011**

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

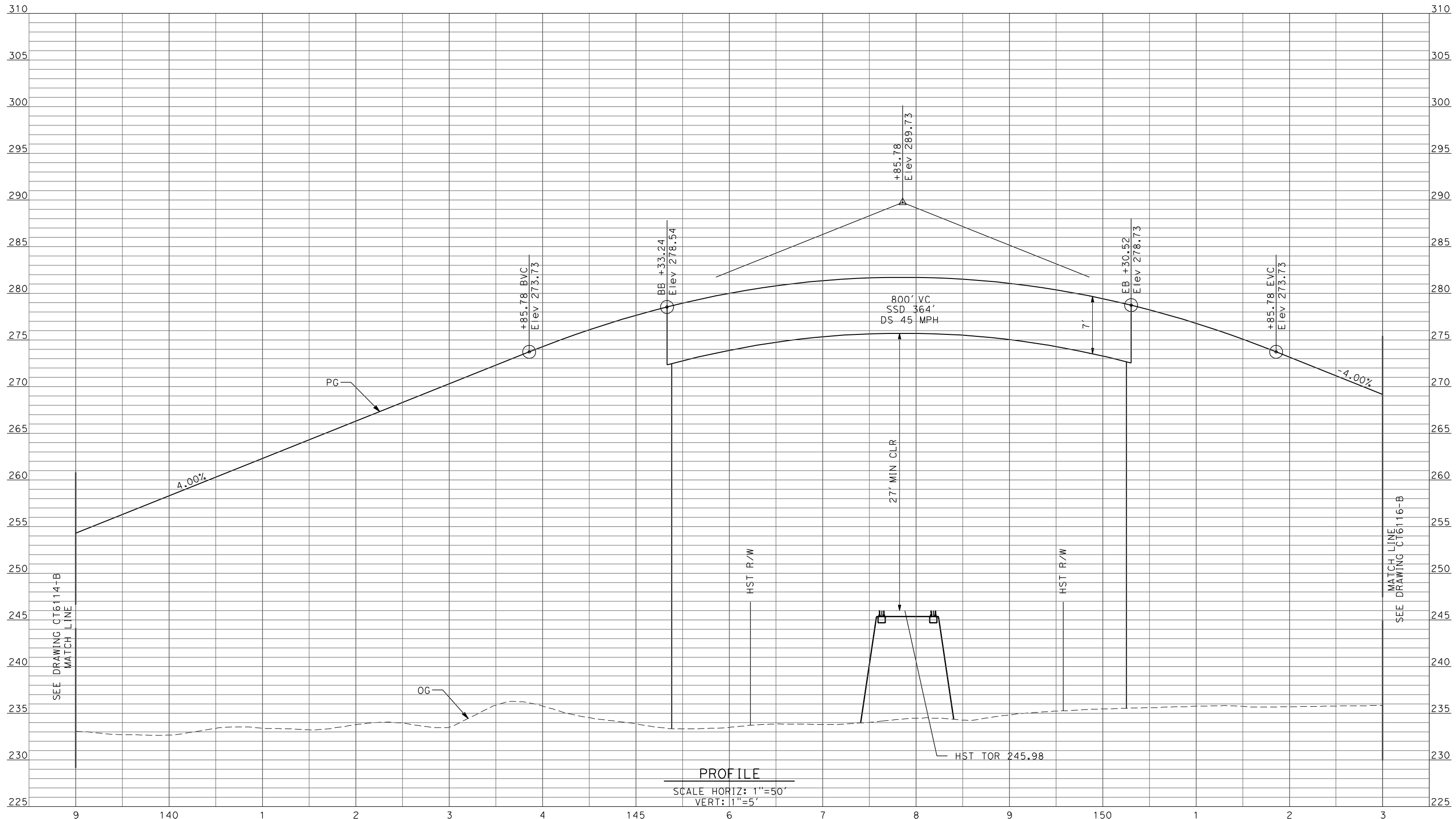


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 MAINLINE - (AVE 24)  
 GRADE SEPARATION - AVENUE 23 1/2  
**PROFILE**  
 SHEET 1 OF 4

CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CT6114-B  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###



4/27/2011 6:37:11 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 1b - ave 24 wye-w.chowchilla grade separation\Profile\CT6115-B.dgn



**PROFILE**  
 SCALE HORIZ: 1"=50'  
 VERT: 1"=5'

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**D. AYELE**  
 DRAWN BY  
**C. DELOS REYES**  
 CHECKED BY  
**A. SILVER**  
 IN CHARGE  
**A. BOONE**  
 DATE  
**04/29/2011**

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

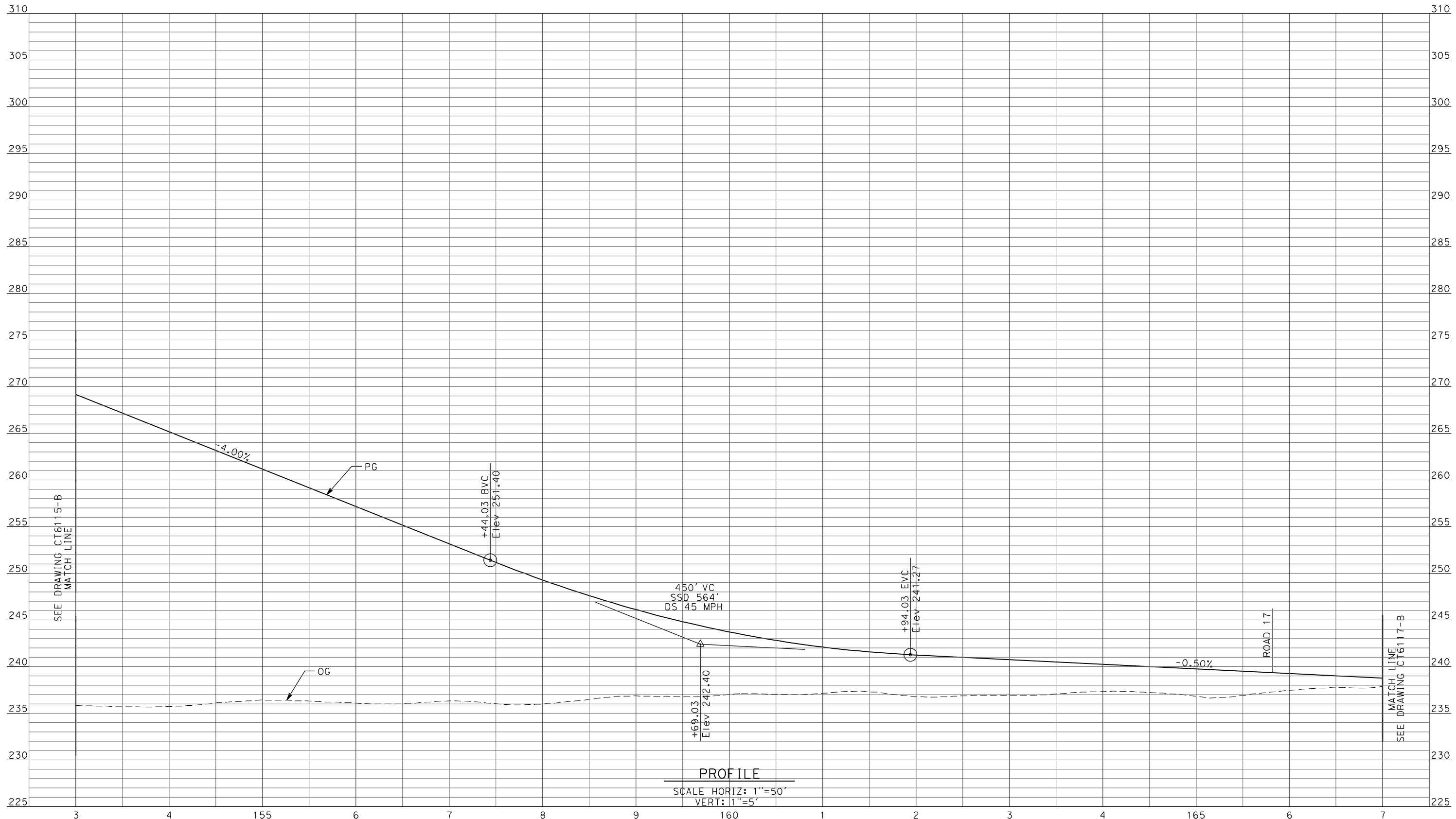


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 MAINLINE - (AVE 24)  
 GRADE SEPARATION - AVENUE 23 1/2  
**PROFILE**  
**SHEET 2 OF 4**

CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CT6115-B  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###



4/27/2011 6:37:15 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 1b - ave 24 wye-w.chowchilla grade separation\Profile\CT6116-B.dgn



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
 DRAWN BY  
C. DELOS REYES  
 CHECKED BY  
A. SILVER  
 IN CHARGE  
A. BOONE  
 DATE  
04/29/2011

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

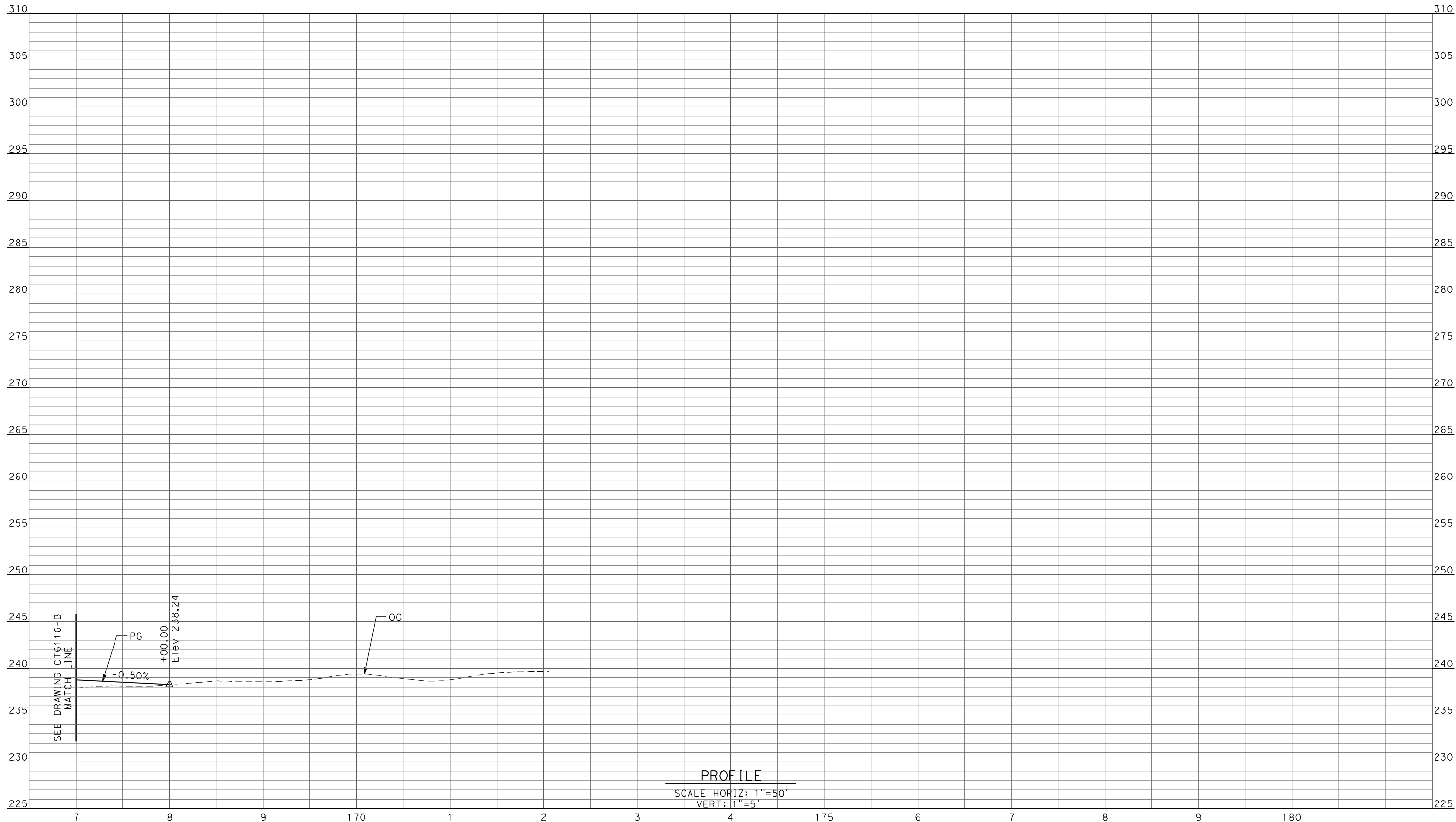


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 MAINLINE - (AVE 24)  
 GRADE SEPARATION - AVENUE 23 1/2  
 PROFILE  
 SHEET 3 OF 4

CONTRACT NO.  
HSR06-007  
 DRAWING NO.  
CT6116-B  
 SCALE  
AS SHOWN  
 SHEET NO.  
### OF ###



4/27/2011 6:37:18 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 1b - ave 24 wye-w.chowchilla grade separation\Profile\CT6117-B.dgn



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**D. AYELE**  
 DRAWN BY  
**C. DELOS REYES**  
 CHECKED BY  
**A. SILVER**  
 IN CHARGE  
**A. BOONE**  
 DATE  
**04/29/2011**

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

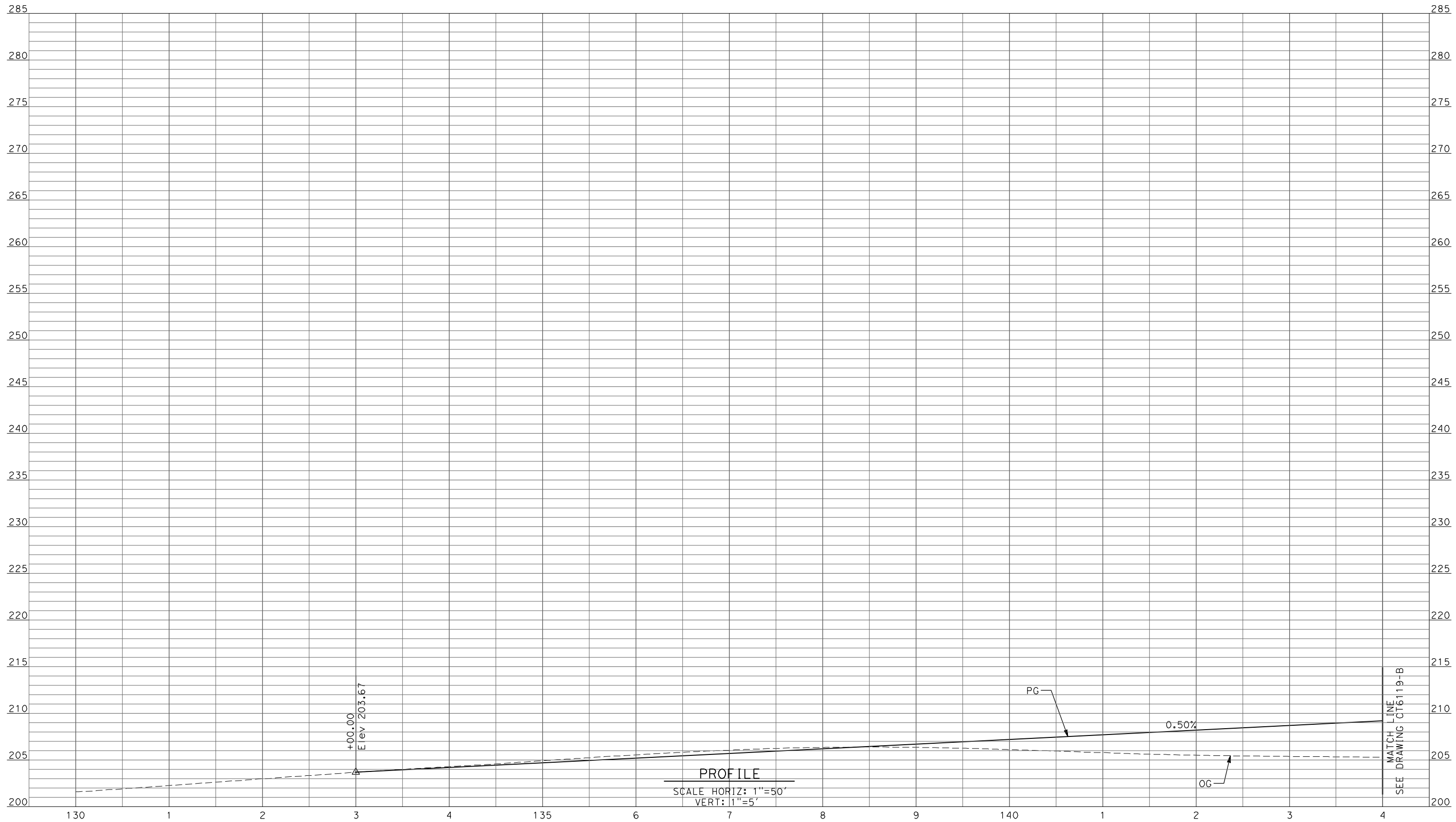


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 MAINLINE - (AVE 24)  
 GRADE SEPARATION - AVENUE 23 1/2  
 PROFILE  
 SHEET 4 OF 4

CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CT6117-B  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###



4/27/2011 6:37:22 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 1b - ave 24 wye-w.chowchilla grade separation\Profile\CT6118-B.dgn



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**D. AYELE**  
 DRAWN BY  
**C. DELOS REYES**  
 CHECKED BY  
**A. SILVER**  
 IN CHARGE  
**A. BOONE**  
 DATE  
**04/29/2011**

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

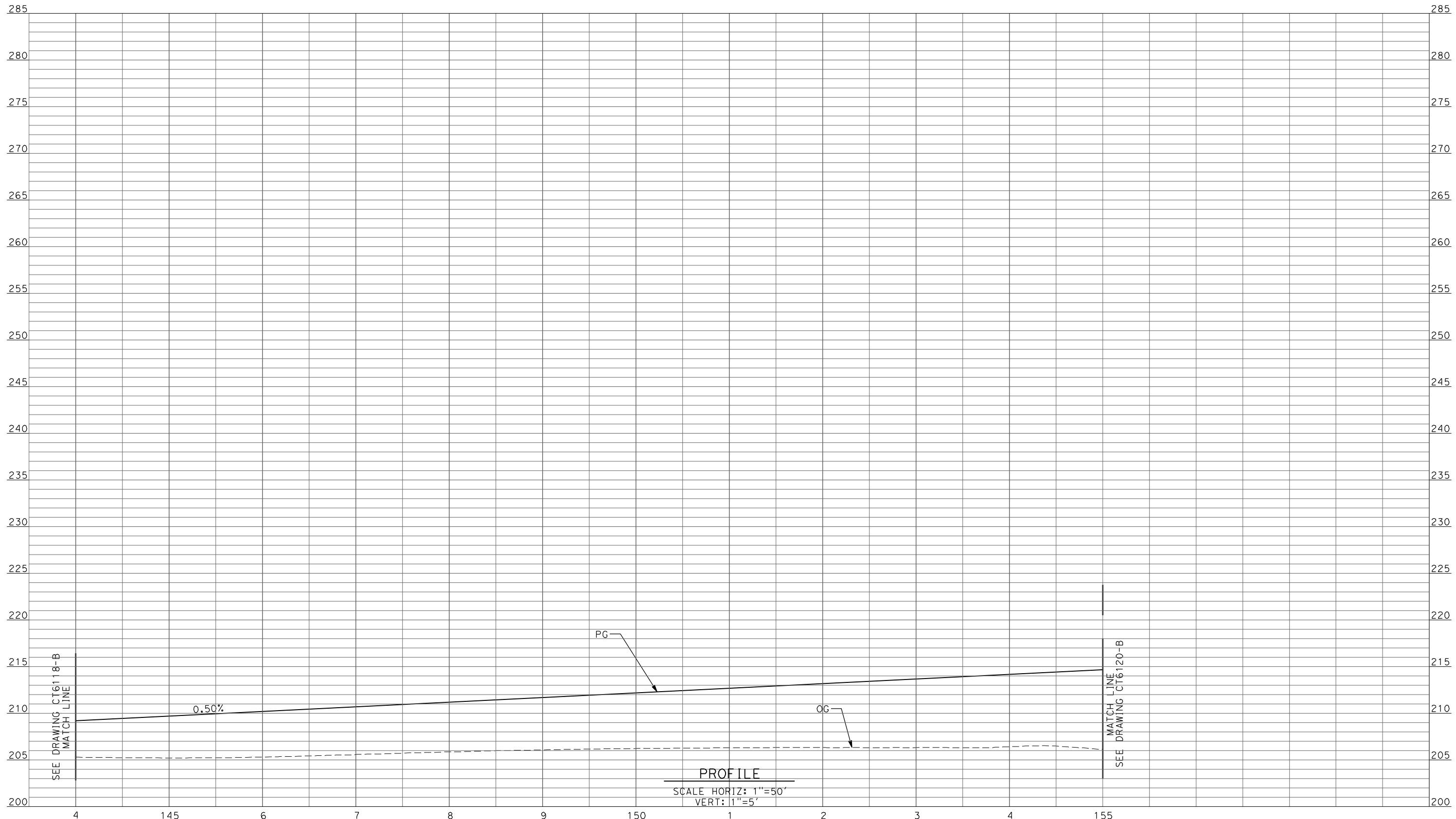


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 WYE - (AVE 24)  
 GRADE SEPARATION - AVENUE 25  
**PROFILE**  
 SHEET 1 OF 5

CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CT6118-B  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###



4/27/2011 6:37:25 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 1b - ave 24 wye-w.chowchilla grade separation\Profile\CT6119-B.dgn



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**D. AYELE**  
 DRAWN BY  
**C. DELOS REYES**  
 CHECKED BY  
**A. SILVER**  
 IN CHARGE  
**A. BOONE**  
 DATE  
**04/29/2011**

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

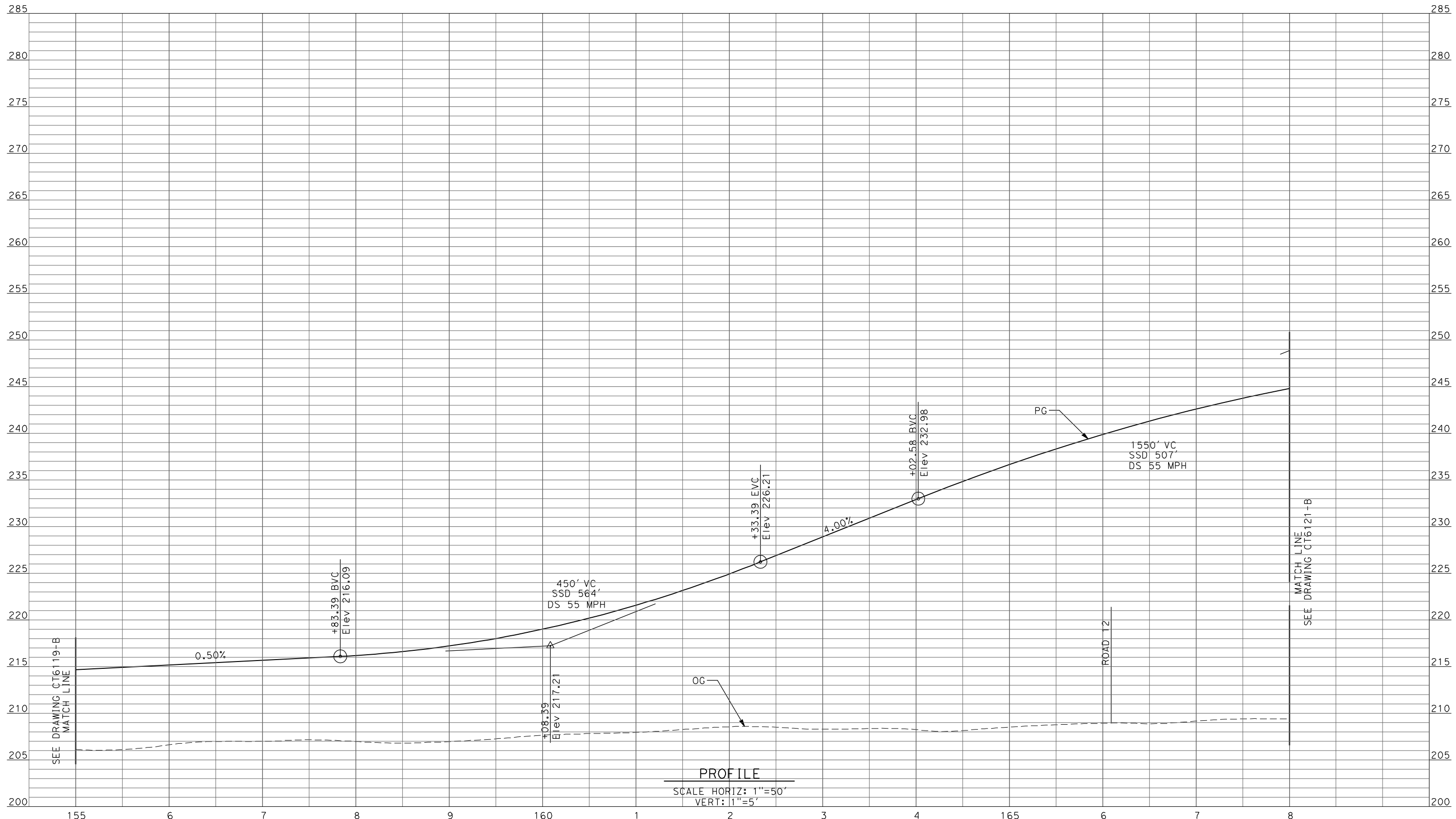


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 WYE - (AVE 24)  
 GRADE SEPARATION - AVENUE 25  
 PROFILE  
 SHEET 2 OF 5

CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CT6119-B  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###



4/27/2011 6:37:29 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 1b - ave 24 wye-w.chowchilla grade separation\Profile\CT6120-B.dgn  
 ReyesC1



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**D. AYELE**  
 DRAWN BY  
**C. DELOS REYES**  
 CHECKED BY  
**A. SILVER**  
 IN CHARGE  
**A. BOONE**  
 DATE  
**04/29/2011**

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

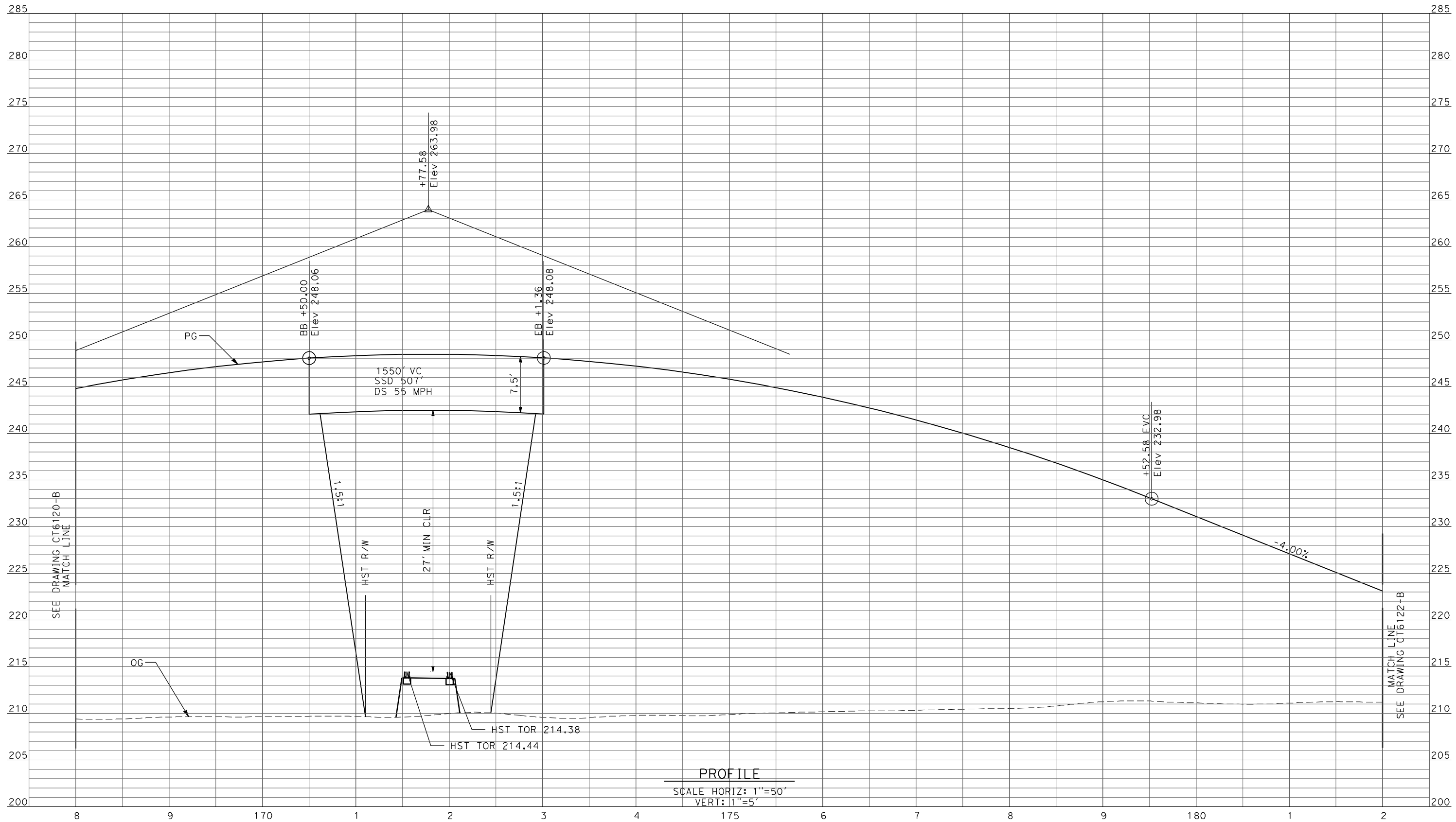


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 WYE - (AVE 24)  
 GRADE SEPARATION - AVENUE 25  
**PROFILE**  
 SHEET 3 OF 5

CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CT6120-B  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###



4/27/2011 6:37:32 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 1b - ave 24 wye-w.chowchilla\grade separation\Profile\CT6121-B.dgn



**PROFILE**  
 SCALE HORIZ: 1"=50'  
 VERT: 1"=5'

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**D. AYELE**  
 DRAWN BY  
**C. DELOS REYES**  
 CHECKED BY  
**A. SILVER**  
 IN CHARGE  
**A. BOONE**  
 DATE  
**04/29/2011**

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

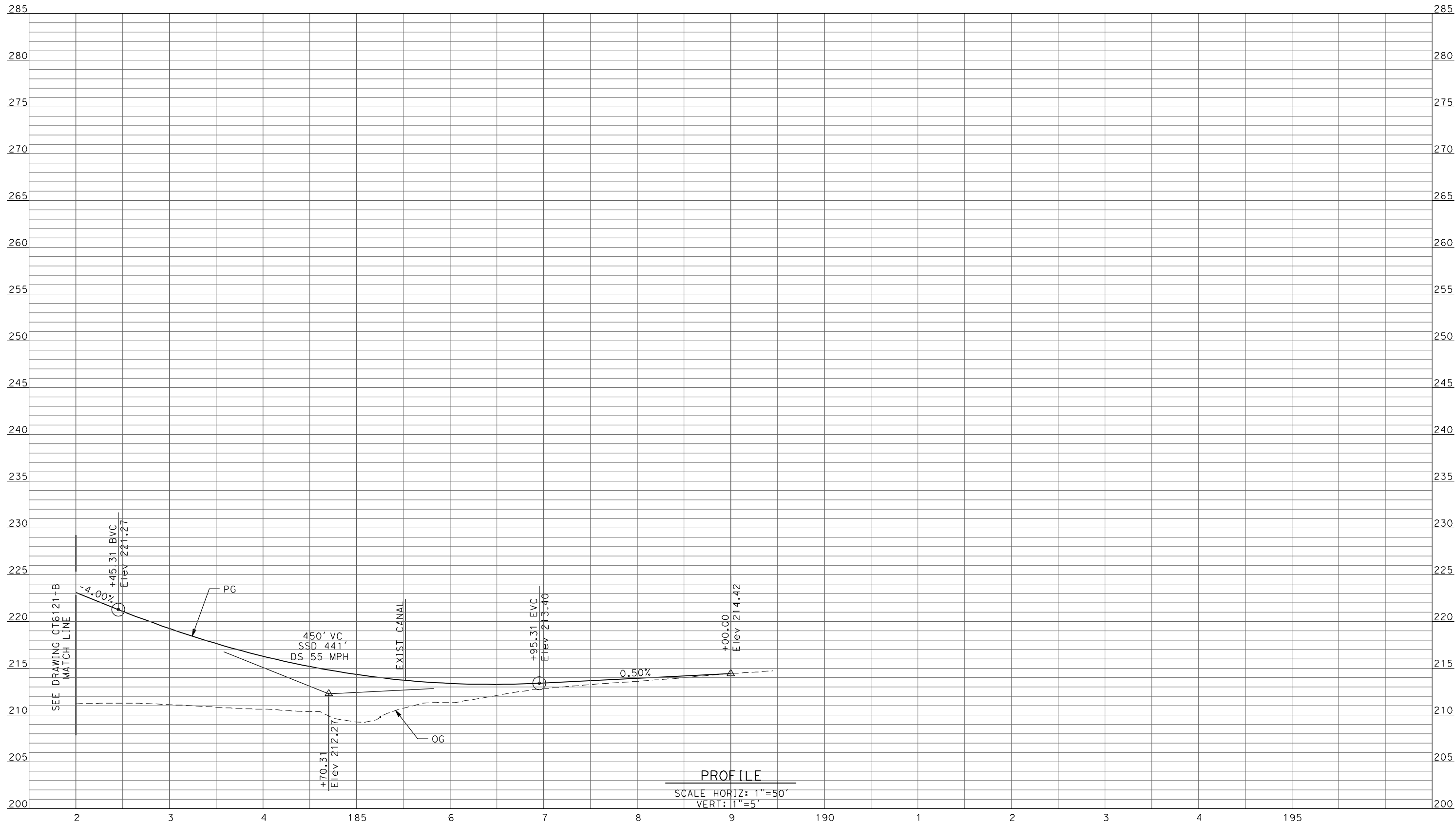


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 WYE - (AVE 24)  
 GRADE SEPARATION - AVENUE 25  
**PROFILE**  
 SHEET 4 OF 5

CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CT6121-B  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###



4/27/2011 6:37:36 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 1b - ave 24 wye-w.chowchilla grade separation\Profile\CT6122-B.dgn



**PROFILE**  
 SCALE HORIZ: 1"=50'  
 VERT: 1"=5'

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**D. AYELE**  
 DRAWN BY  
**C. DELOS REYES**  
 CHECKED BY  
**A. SILVER**  
 IN CHARGE  
**A. BOONE**  
 DATE  
**04/29/2011**

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

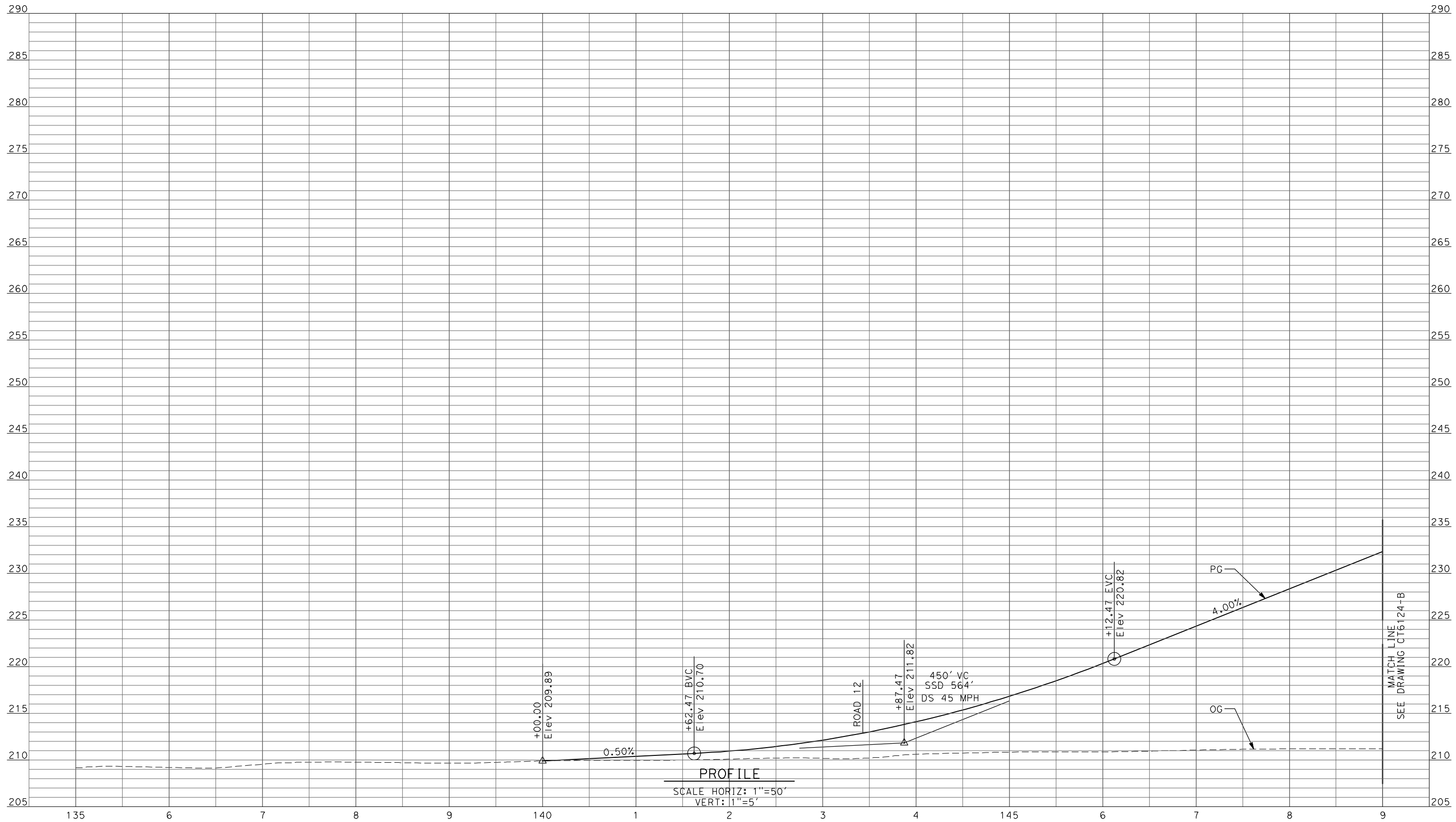


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 WYE - (AVE 24)  
 GRADE SEPARATION - AVENUE 25  
**PROFILE**  
 SHEET 5 OF 5

CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CT6122-B  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###



4/27/2011 6:37:39 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 1b - ave 24 wye-w.chowchilla\grade separation\Profile\CT6123-B.dgn  
 ReyesC1



**PROFILE**  
 SCALE HORIZ: 1"=50'  
 VERT: 1"=5'

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**D. AYELE**  
 DRAWN BY  
**C. DELOS REYES**  
 CHECKED BY  
**A. SILVER**  
 IN CHARGE  
**A. BOONE**  
 DATE  
**04/29/2011**

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

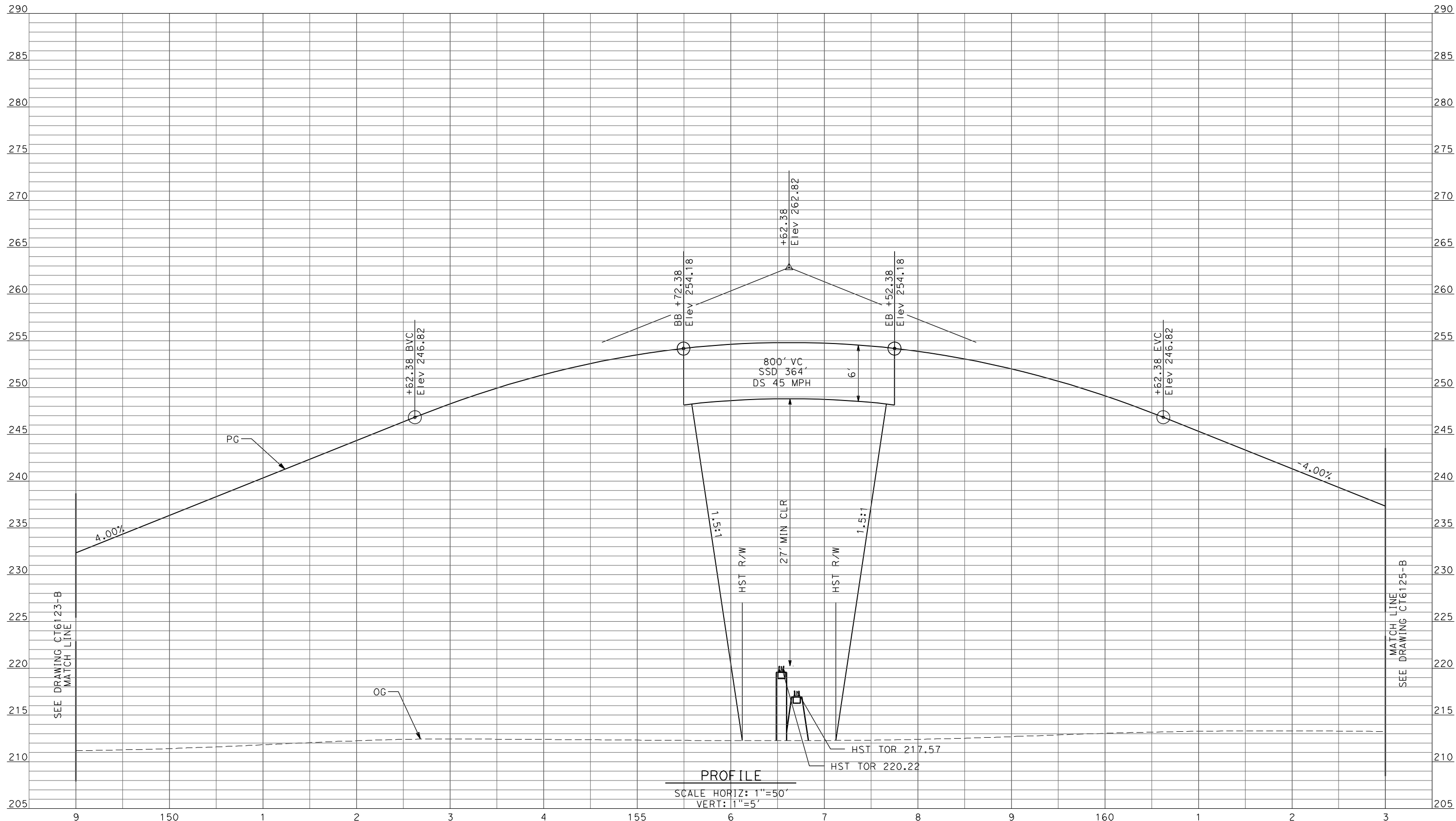


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 WYE - (AVE 24)  
 GRADE SEPARATION - AVENUE 26  
**PROFILE**  
 SHEET 1 OF 3

CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CT6123-B  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###



4/27/2011 6:37:43 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 1b - ave 24 wye-w.chowchilla\grade separation\Profile\CT6124-B.dgn  
 ReyesC1



**PROFILE**  
 SCALE HORIZ: 1"=50'  
 VERT: 1"=5'

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**D. AYELE**  
 DRAWN BY  
**C. DELOS REYES**  
 CHECKED BY  
**A. SILVER**  
 IN CHARGE  
**A. BOONE**  
 DATE  
**04/29/2011**

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

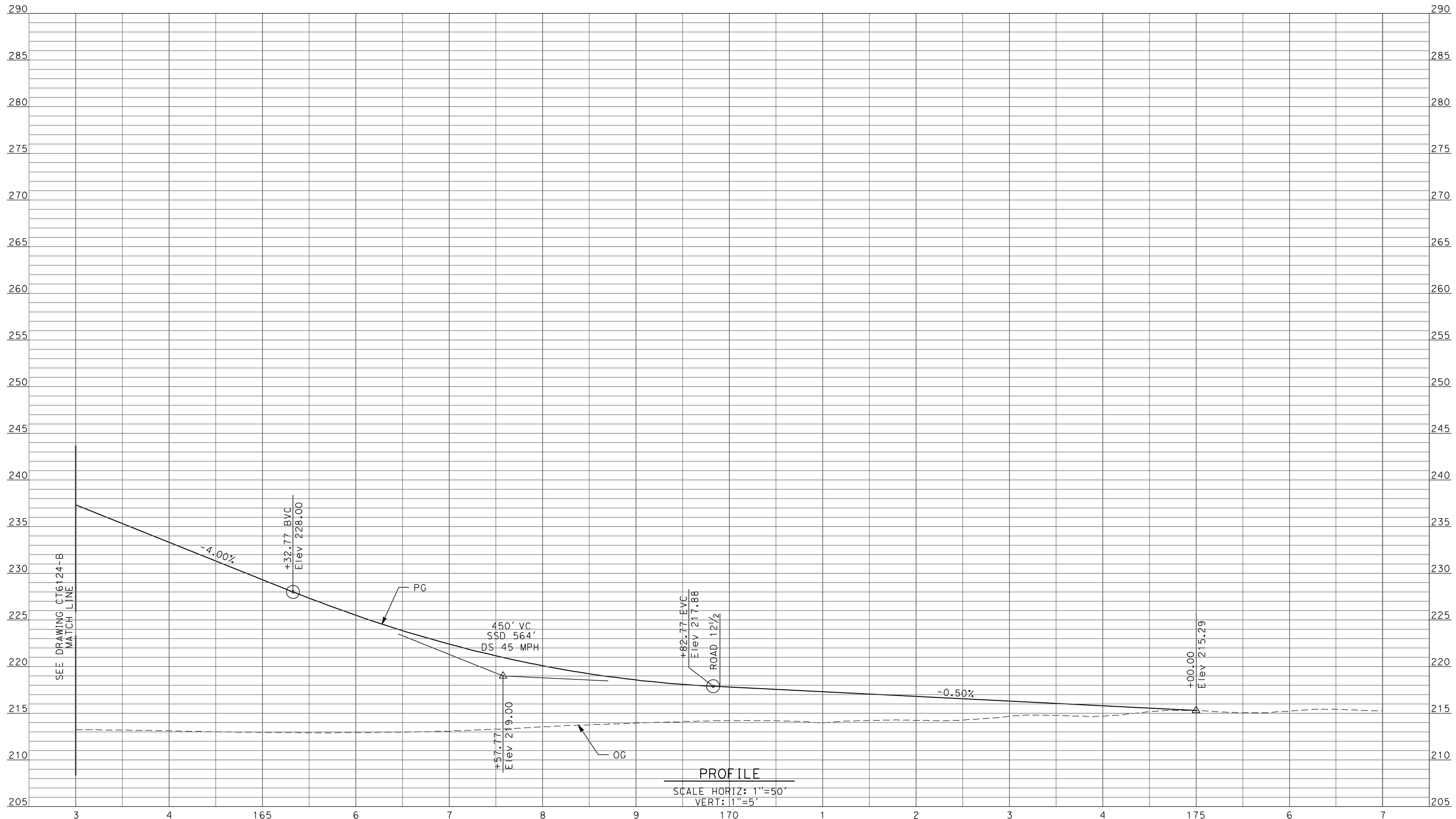


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 WYE - (AVE 24)  
 GRADE SEPARATION - AVENUE 26  
 PROFILE  
 SHEET 2 OF 3

CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CT6124-B  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###



4/27/2011 6:37:46 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 1b - ave 24 wye-w.chowchilla\grade separation\Profile\CT6125-B.dgn



**PROFILE**  
 SCALE HORIZ: 1"=50'  
 VERT: 1"=5'

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**D. AYELE**  
 DRAWN BY  
**C. DELOS REYES**  
 CHECKED BY  
**A. SILVER**  
 IN CHARGE  
**A. BOONE**  
 DATE  
**04/29/2011**

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

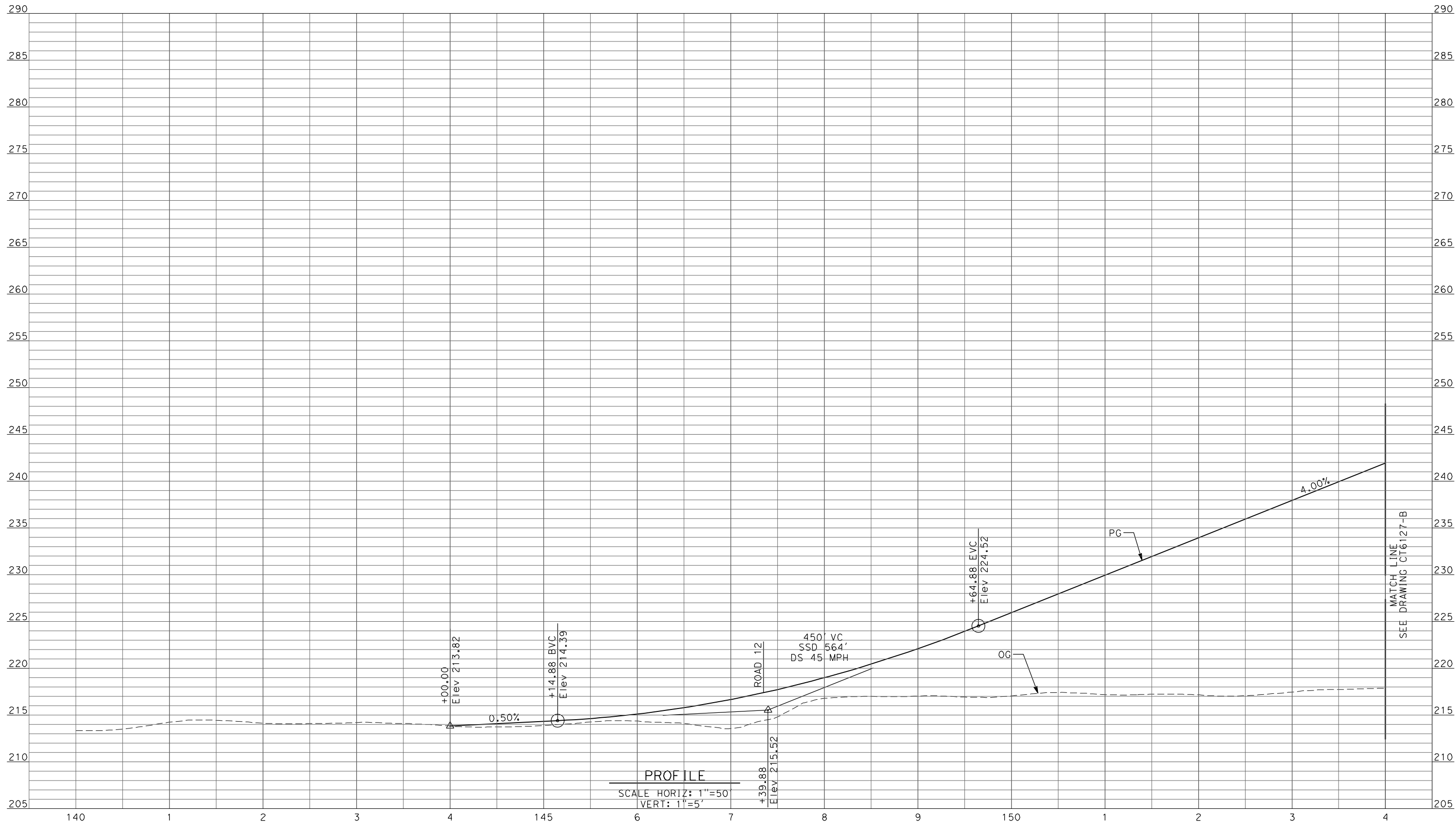


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 WYE - (AVE 24)  
 GRADE SEPARATION - AVENUE 26  
**PROFILE**  
**SHEET 3 OF 3**

CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CT6125-B  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###



4/27/2011 6:37:50 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 1b - ave 24 wye-w.chowchilla grade separation\Profile\CT6126-B.dgn



MATCH LINE  
 SEE DRAWING CT6127-B

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**D. AYELE**  
 DRAWN BY  
**C. DELOS REYES**  
 CHECKED BY  
**A. SILVER**  
 IN CHARGE  
**A. BOONE**  
 DATE  
**04/29/2011**

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

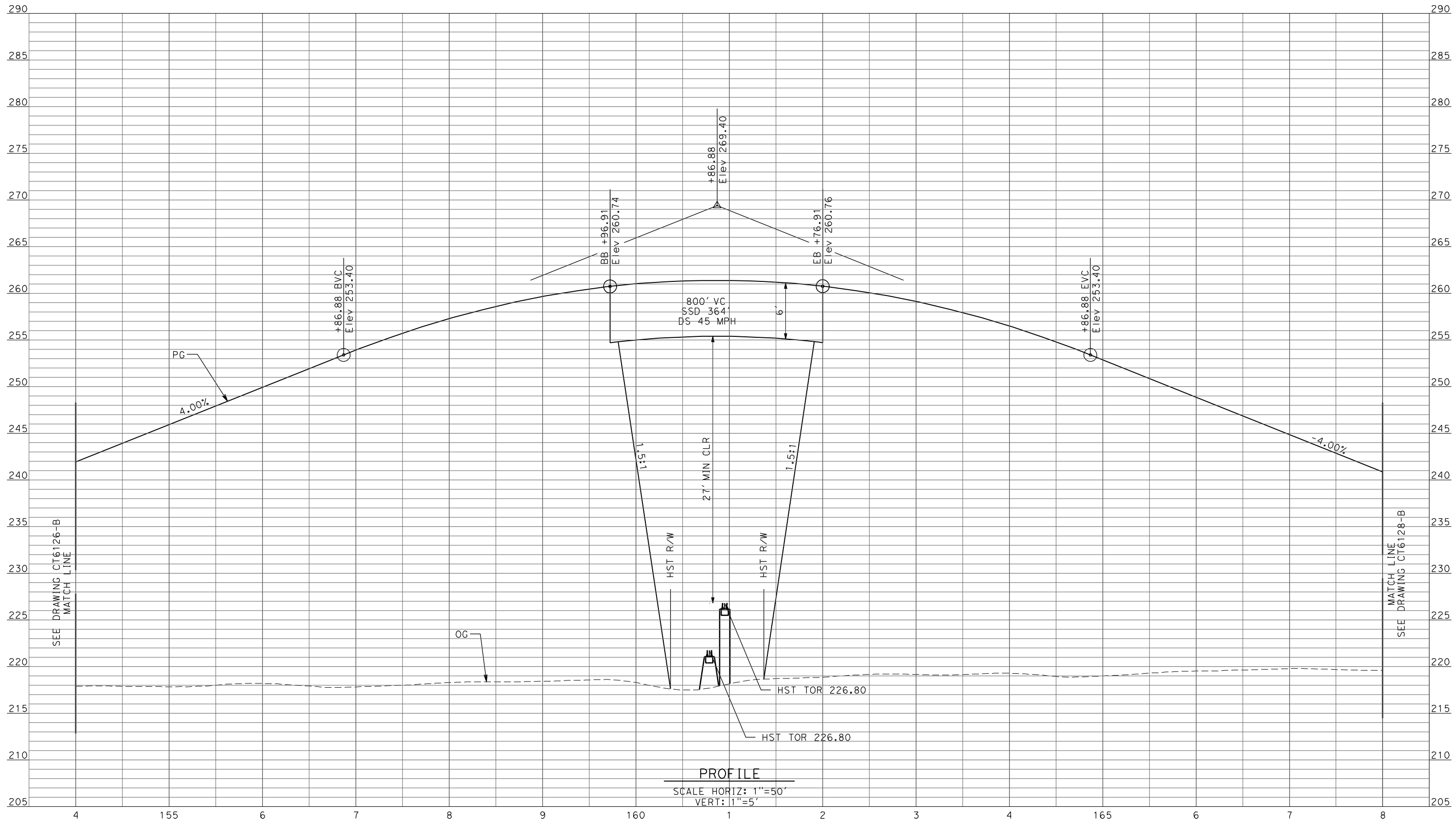


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 WYE - (AVE 24)  
 GRADE SEPARATION - CROSS ROAD  
 PROFILE  
 SHEET 1 OF 3

CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CT6126-B  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###



4/27/2011 6:37:54 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 1b - ave 24 wye-w.chowchilla grade separation\Profile\CT6127-B.dgn  
 ReyesC1



**PROFILE**  
 SCALE HORIZ: 1"=50'  
 VERT: 1"=5'

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**D. AYELE**  
 DRAWN BY  
**C. DELOS REYES**  
 CHECKED BY  
**A. SILVER**  
 IN CHARGE  
**A. BOONE**  
 DATE  
**04/29/2011**

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

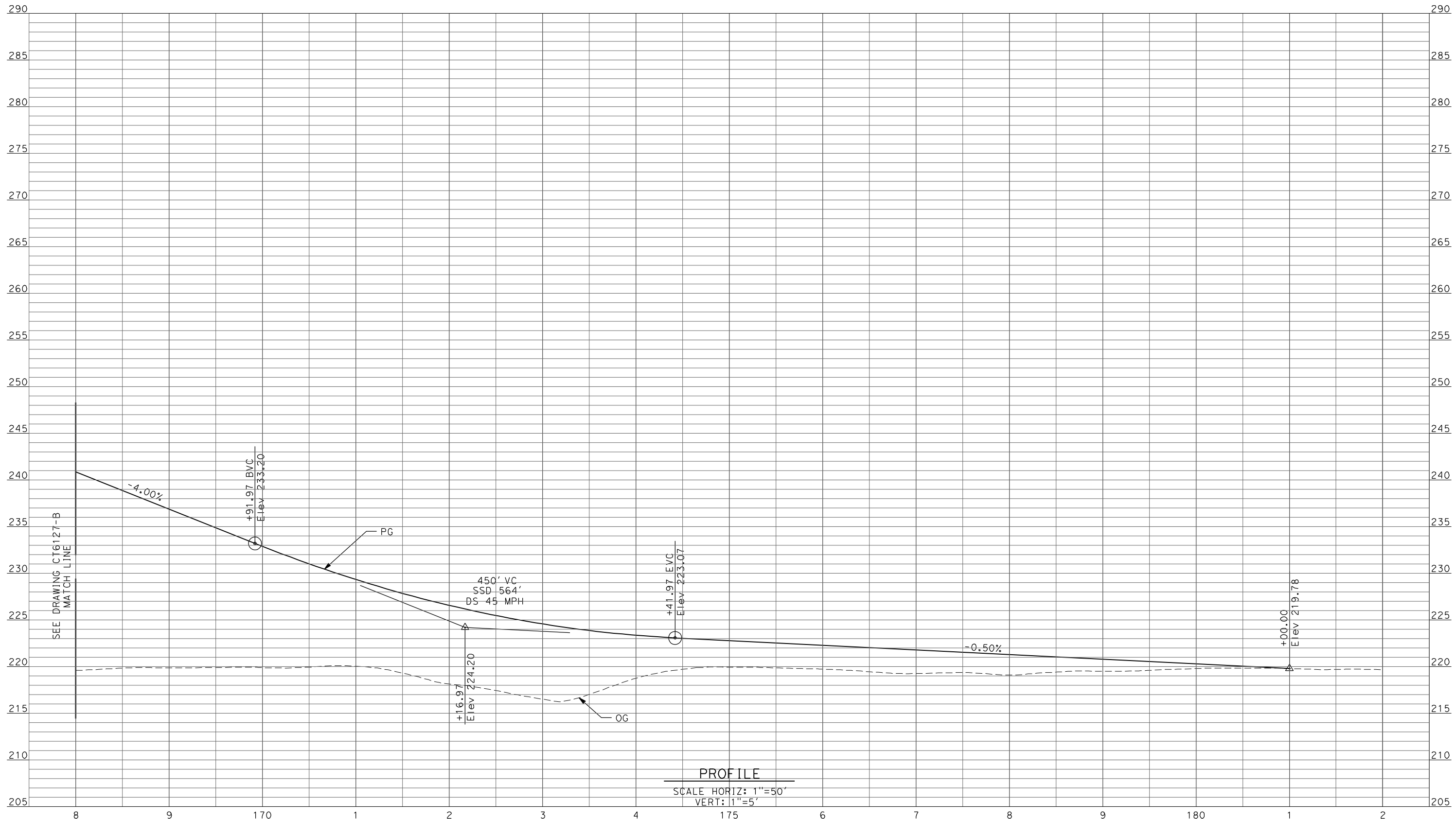


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 WYE - (AVE 24)  
 GRADE SEPARATION - CROSS ROAD  
**PROFILE**  
 SHEET 2 OF 3

CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CT6127-B  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###



4/27/2011 6:37:57 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 1b - ave 24 wye-w.chowchilla grade separation\Profile\CT6128-B.dgn  
 ReyesC1



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**D. AYELE**  
 DRAWN BY  
**C. DELOS REYES**  
 CHECKED BY  
**A. SILVER**  
 IN CHARGE  
**A. BOONE**  
 DATE  
**04/29/2011**

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

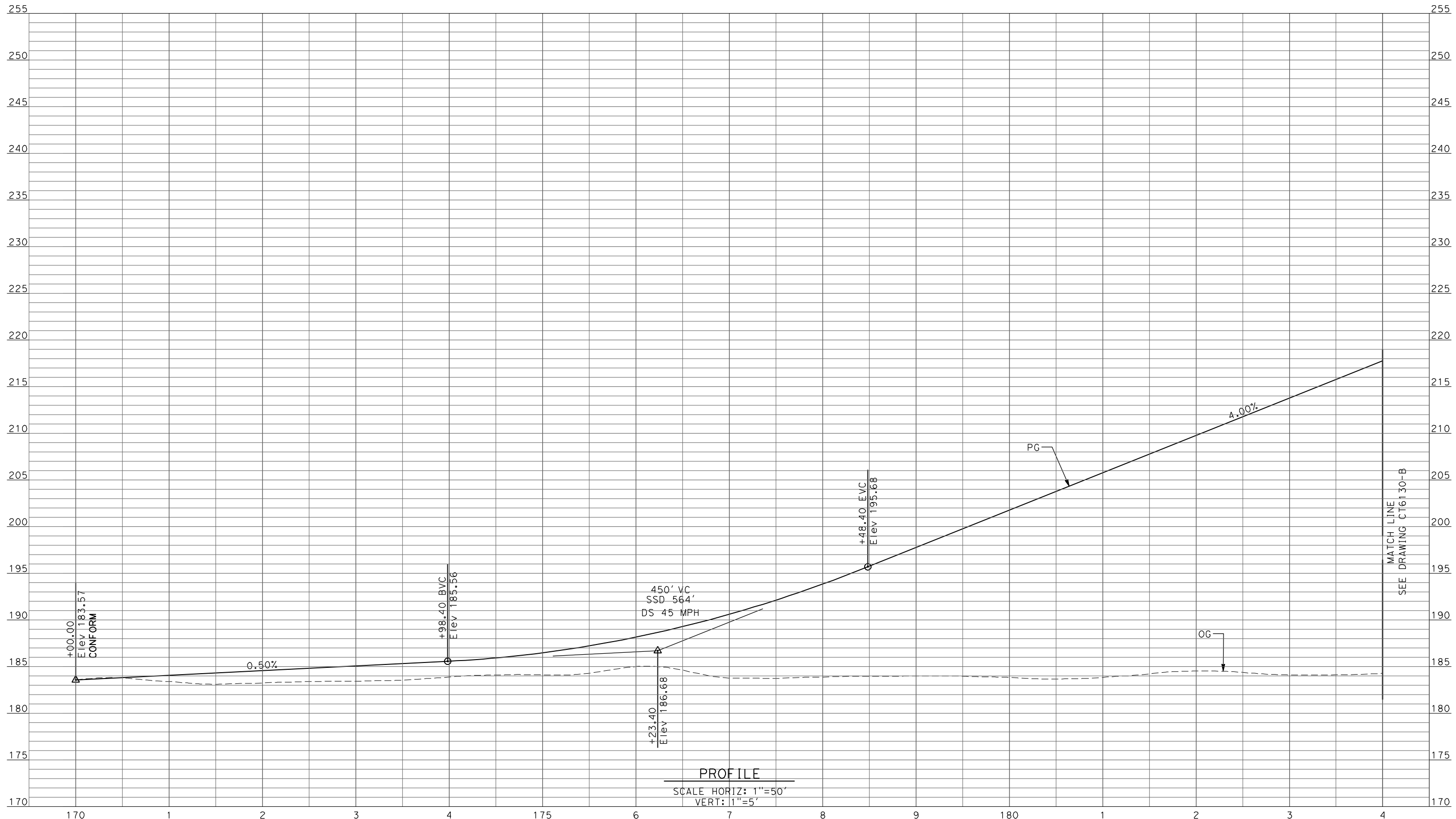


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 WYE - (AVE 24)  
 GRADE SEPARATION - CROSS ROAD  
 PROFILE  
 SHEET 3 OF 3

CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CT6128-B  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###



4/27/2011 6:38:02 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 1b - ave 24 wye-w.chowchilla grade separation\Profile\CT6129-B.dgn  
 ReyesC1



**PROFILE**  
 SCALE HORIZ: 1"=50'  
 VERT: 1"=5'

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**D. AYELE**  
 DRAWN BY  
**C. DELOS REYES**  
 CHECKED BY  
**A. SILVER**  
 IN CHARGE  
**A. BOONE**  
 DATE  
**04/29/2011**

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

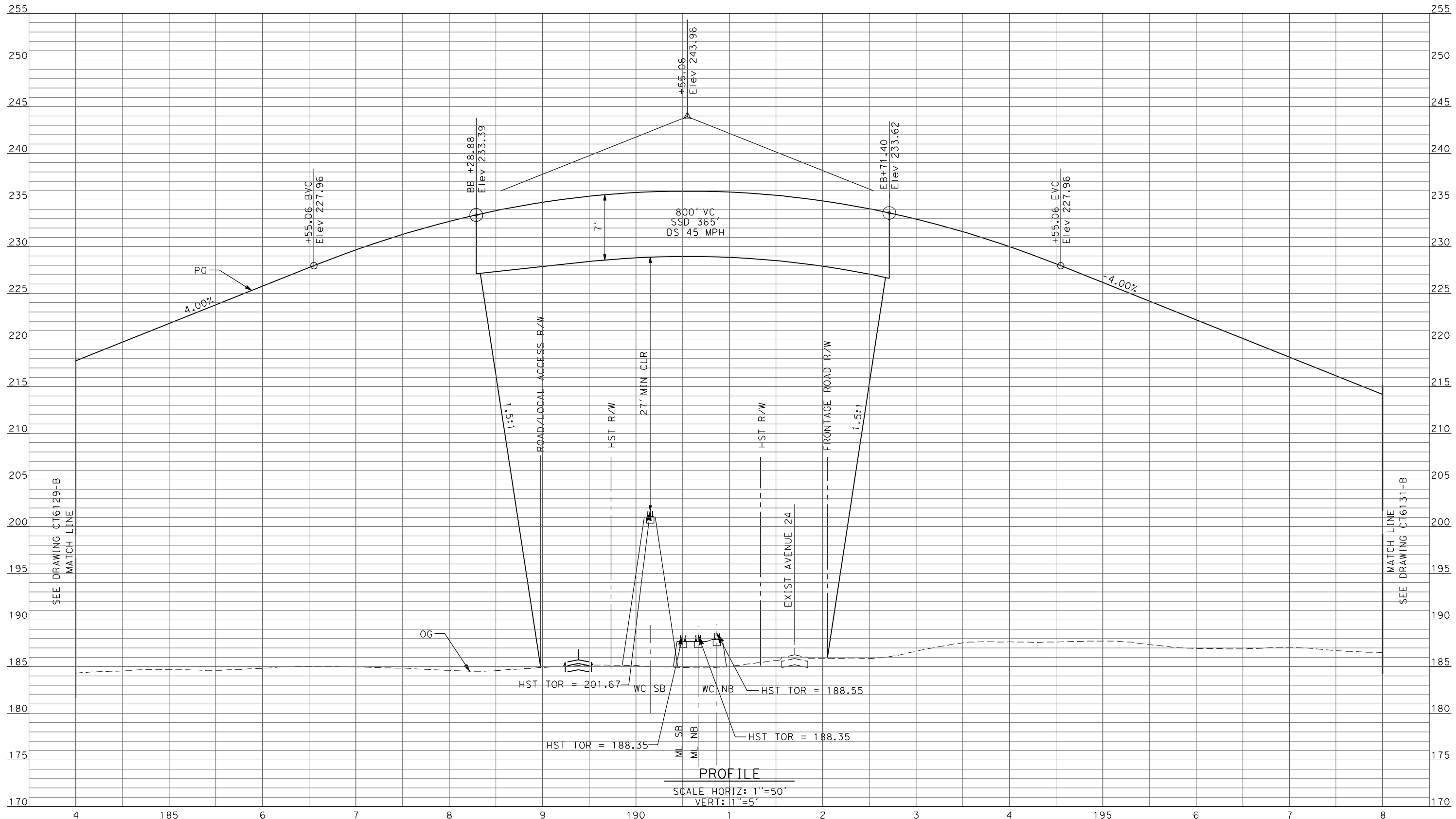


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 MAINLINE/WYE - (WC)  
 GRADE SEPARATION - ROAD 10 ALT 1  
**PROFILE**  
 SHEET 1 OF 3

CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CT6129-B  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###



4/27/2011 6:38:07 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 1b - ave 24 wye-w.chowchilla grade separation\Profile\CT6130-B.dgn  
 ReyesC1



**PROFILE**  
 SCALE HORIZ: 1"=50'  
 VERT: 1"=5'

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**D. AYELE**  
 DRAWN BY  
**C. DELOS REYES**  
 CHECKED BY  
**A. SILVER**  
 IN CHARGE  
**A. BOONE**  
 DATE  
**04/29/2011**

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

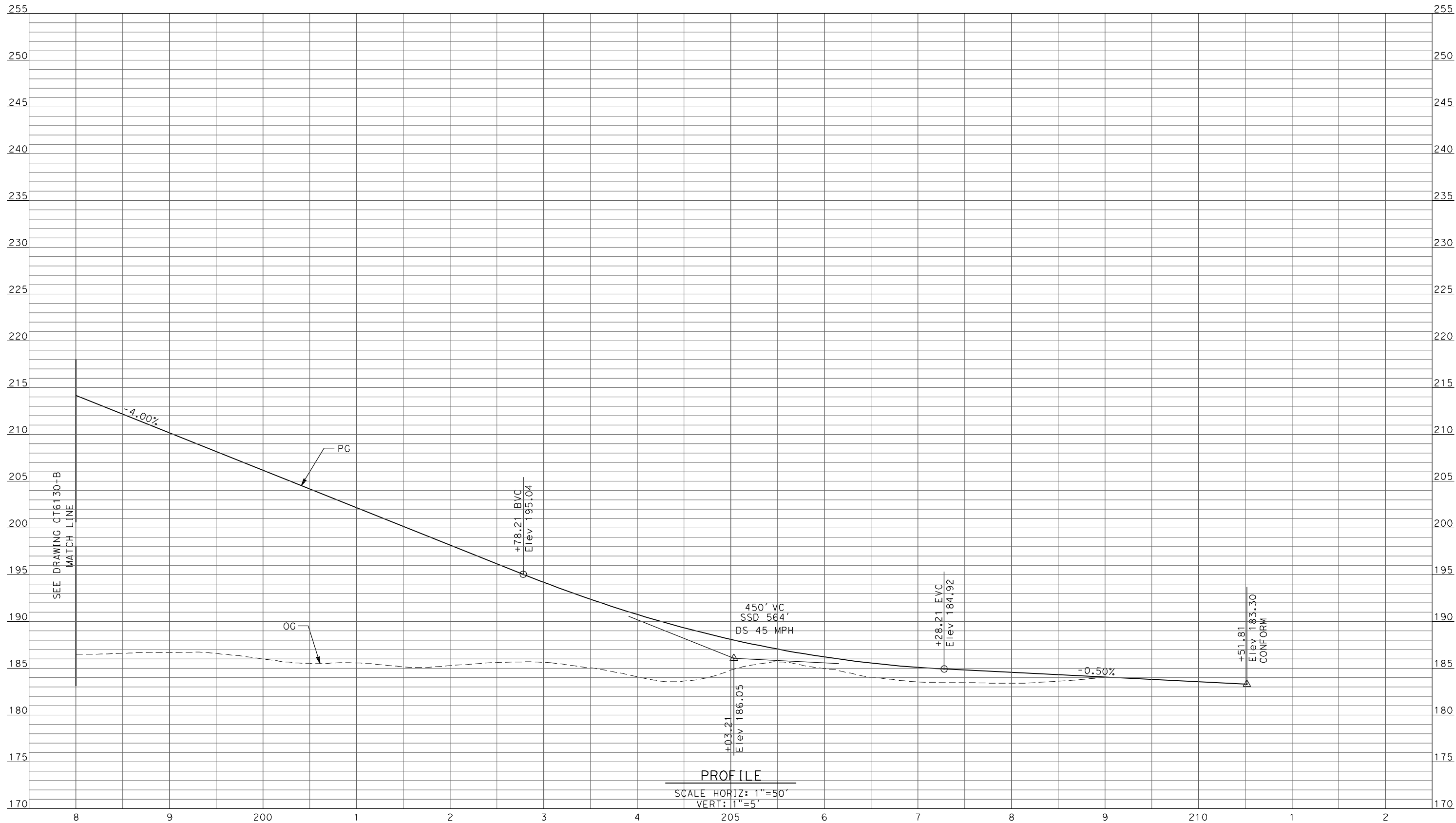


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 MAINLINE/WYE - (WC)  
 GRADE SEPARATION - ROAD 10 ALT 1  
**PROFILE**  
**SHEET 2 OF 3**

CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CT6130-B  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###



4/27/2011 6:38:12 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 1b - ave 24 wye-w.chowchilla\grade separation\Profile\CT6131-B.dgn



**PROFILE**  
 SCALE HORIZ: 1"=50'  
 VERT: 1"=5'

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**D. AYELE**  
 DRAWN BY  
**C. DELOS REYES**  
 CHECKED BY  
**A. SILVER**  
 IN CHARGE  
**A. BOONE**  
 DATE  
**04/29/2011**

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

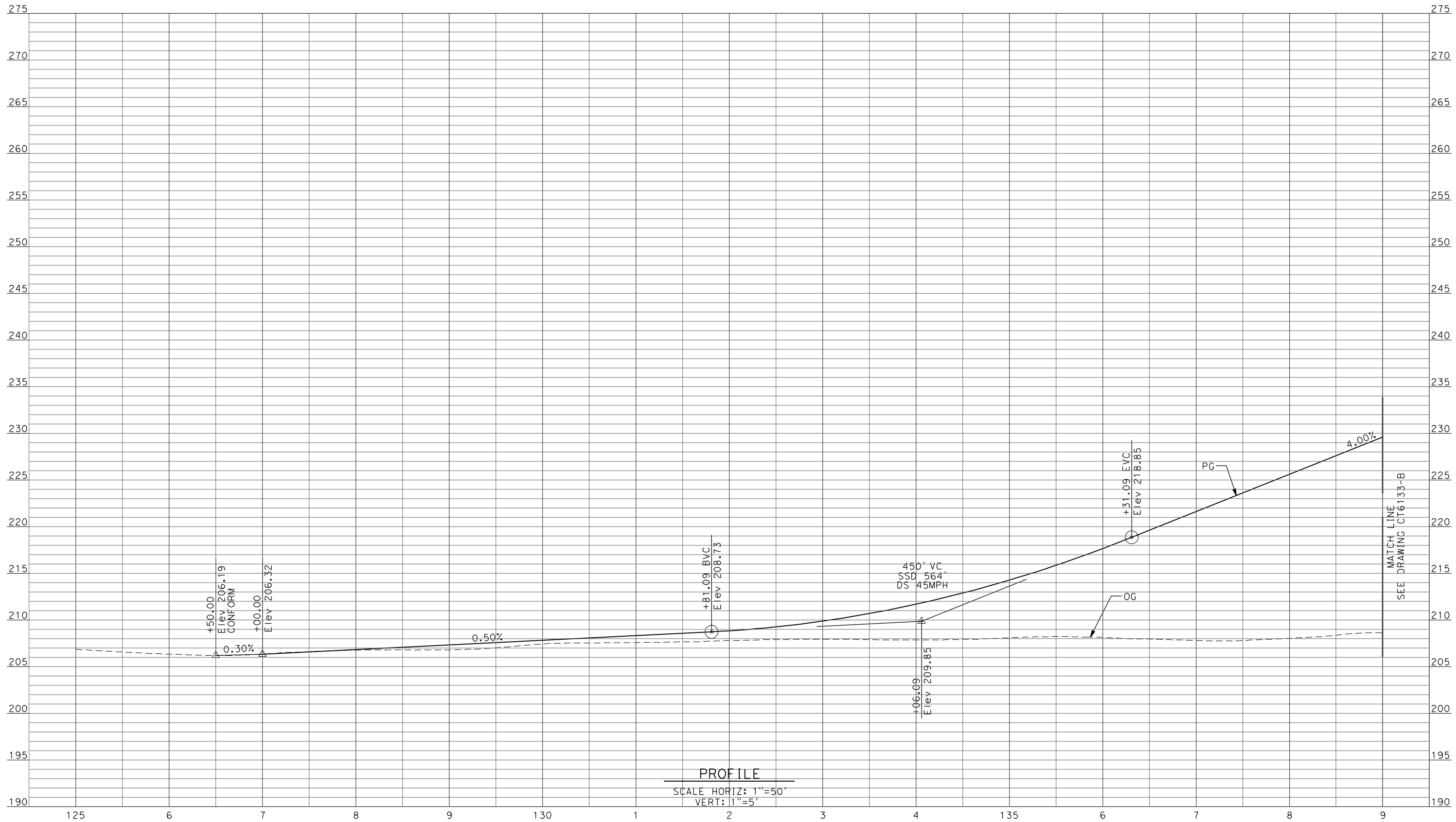


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 MAINLINE/WYE - (WC)  
 GRADE SEPARATION - ROAD 10 ALT 1  
**PROFILE**  
**SHEET 3 OF 3**

CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CT6131-B  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###



4/27/2011 6:38:17 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 1b - ave 24 wye-w.chowchilla grade separation\Profile\CT6132-B.dgn  
 ReyesCI



**PROFILE**  
 SCALE HORIZ: 1"=50'  
 VERT: 1"=5'

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**D. AYELE**  
 DRAWN BY  
**C. DELOS REYES**  
 CHECKED BY  
**A. SILVER**  
 IN CHARGE  
**A. BOONE**  
 DATE  
**04/29/2011**

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

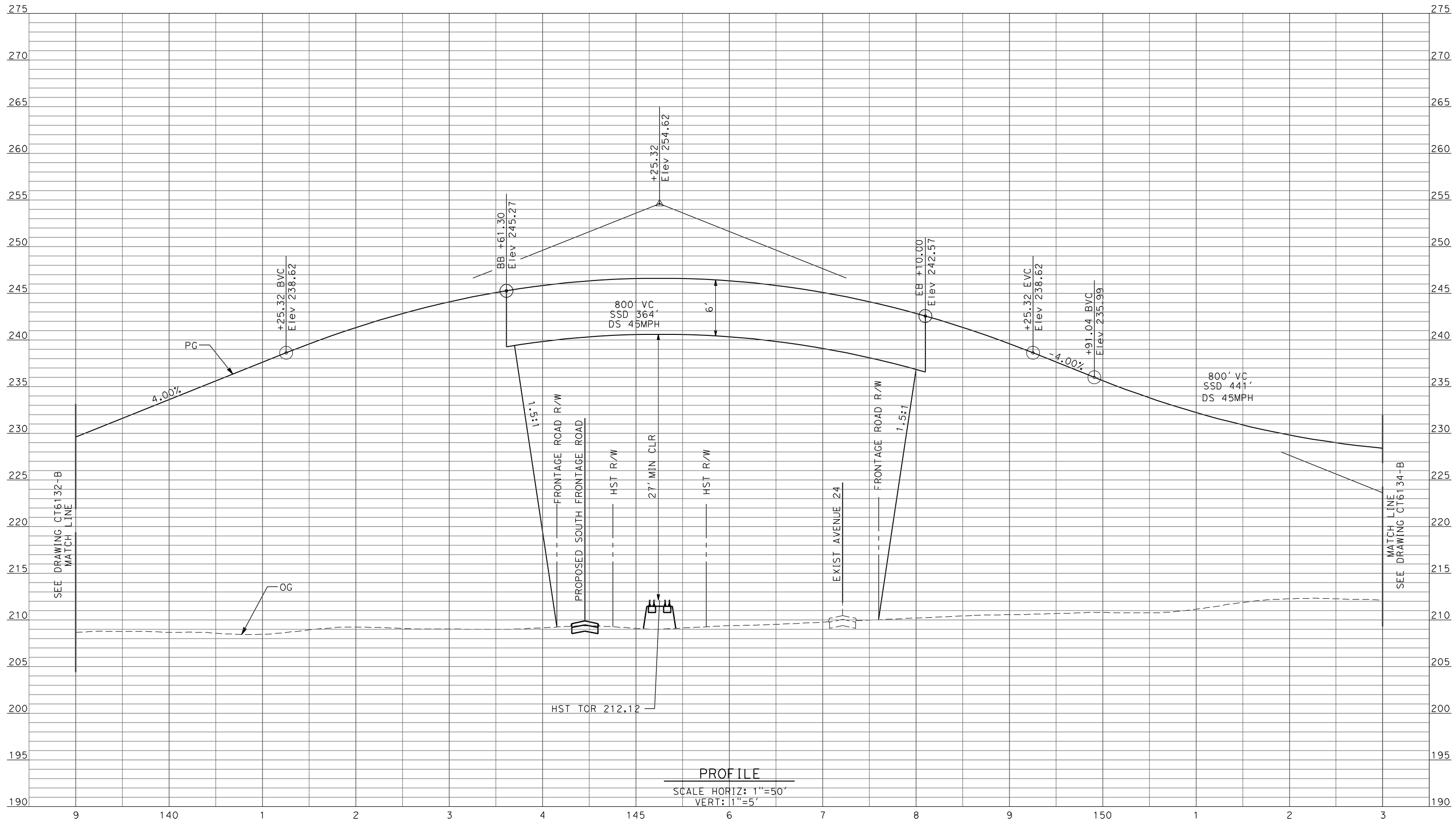


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 MAINLINE/MERCED DO - (WC)  
 GRADE SEPARATION - ROAD 13  
**PROFILE**  
 SHEET 1 OF 5

CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CT6132-B  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###



4/27/2011 6:38:22 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 1b - ave 24 wye-w.chowchilla grade separation\Profile\CT6133-B.dgn  
 ReyesC1



**PROFILE**  
 SCALE HORIZ: 1"=50'  
 VERT: 1"=5'

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**D. AYELE**  
 DRAWN BY  
**C. DELOS REYES**  
 CHECKED BY  
**A. SILVER**  
 IN CHARGE  
**A. BOONE**  
 DATE  
**04/29/2011**

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

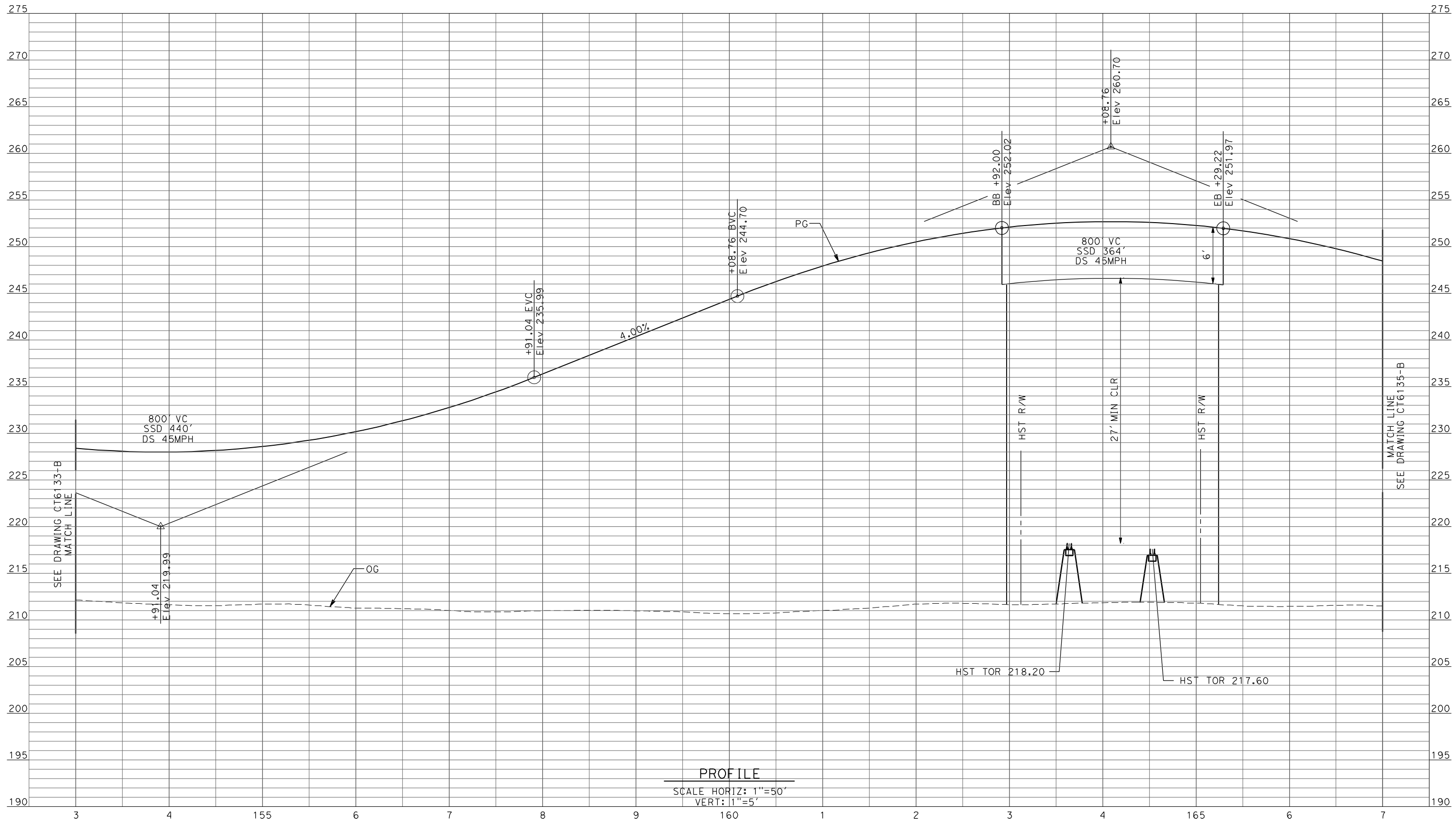


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 MAINLINE/MERCED DO - (WC)  
 GRADE SEPARATION - ROAD 13  
**PROFILE**  
 SHEET 2 OF 5

CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CT6133-B  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###



4/27/2011 6:38:27 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 1b - ave 24 wye-w.chowchilla\grade separation\Profile\CT6134-B.dgn  
 ReyesC1



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**D. AYELE**  
 DRAWN BY  
**C. DELOS REYES**  
 CHECKED BY  
**A. SILVER**  
 IN CHARGE  
**A. BOONE**  
 DATE  
**04/29/2011**

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



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 MAINLINE/MERCED DO - (WC)  
 GRADE SEPARATION - ROAD 13  
**PROFILE**  
 SHEET 3 OF 5

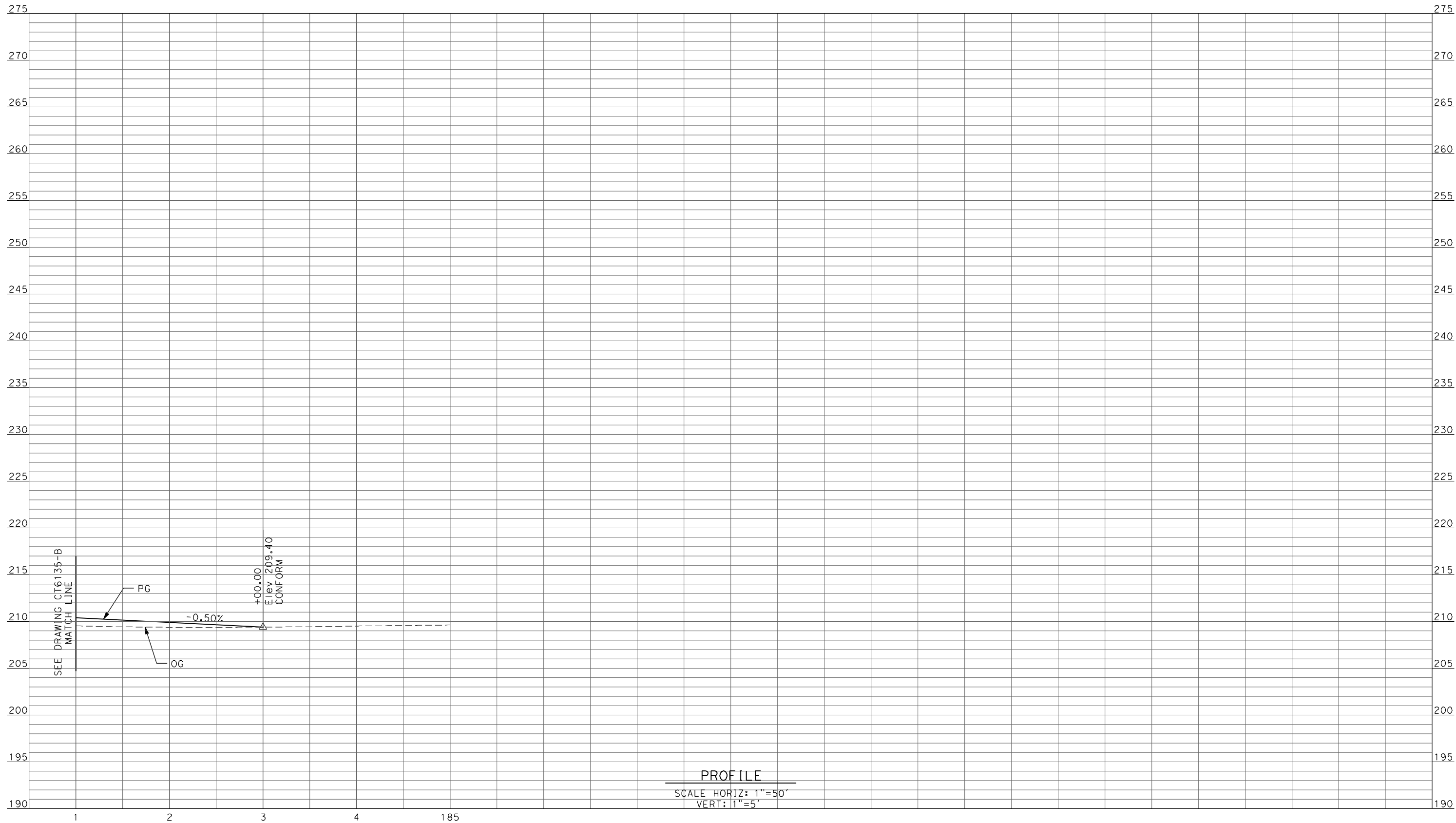
CONTRACT NO.  
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 DRAWING NO.  
 CT6134-B  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###







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**PROFILE**  
 SCALE HORIZ: 1"=50'  
 VERT: 1"=5'

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**D. AYELE**  
 DRAWN BY  
**C. DELOS REYES**  
 CHECKED BY  
**A. SILVER**  
 IN CHARGE  
**A. BOONE**  
 DATE  
**04/29/2011**

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

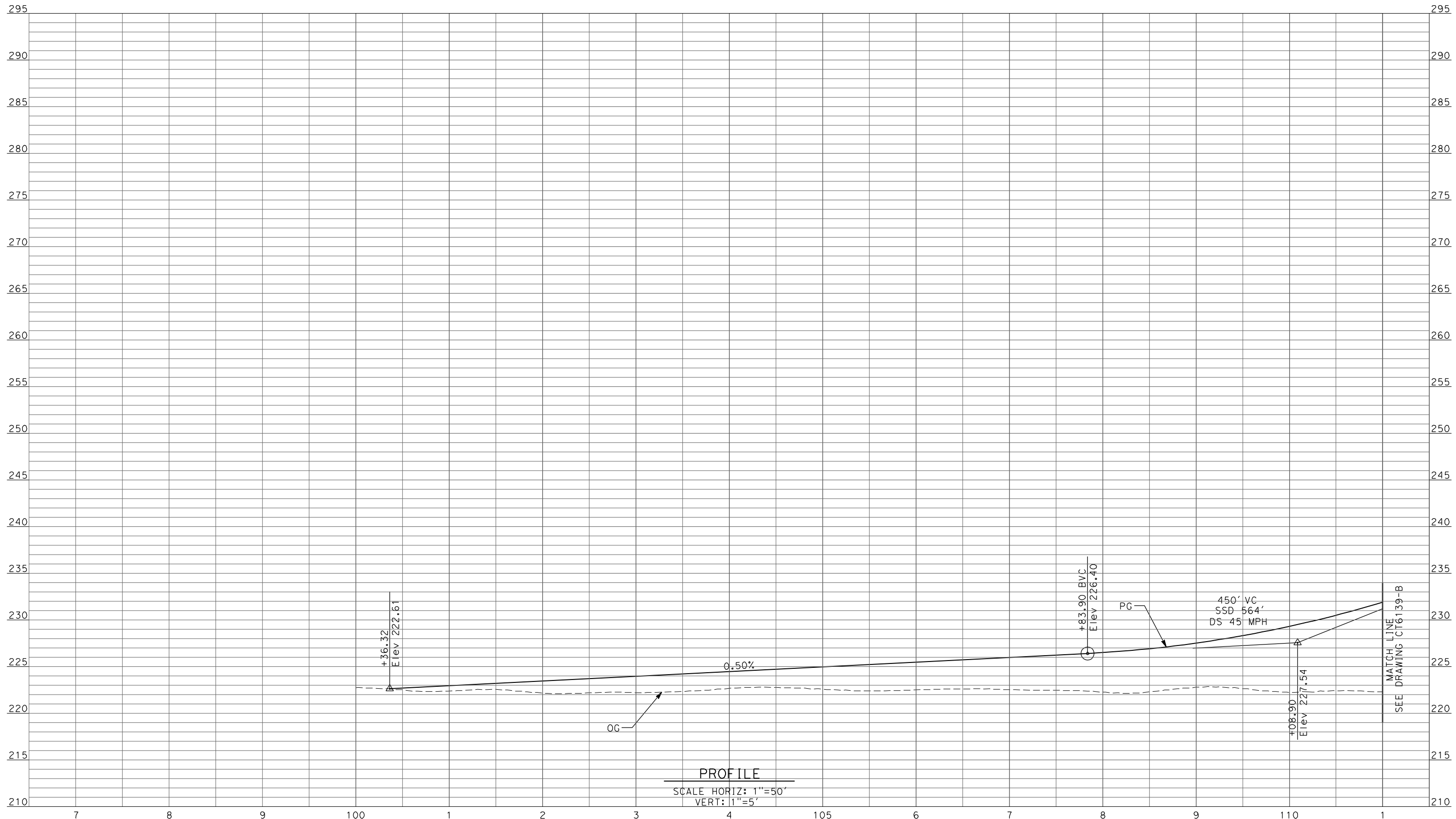


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 MAINLINE/MERCED DO - (WC)  
 GRADE SEPARATION - ROAD 13  
 PROFILE  
 SHEET 5 OF 5

CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CT6136-B  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###



4/27/2011 6:38:44 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 1b - ave 24 wye-w.chowchilla grade separation\Profile\CT6138-B.dgn  
 ReyesC1



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**D. AYELE**  
 DRAWN BY  
**C. DELOS REYES**  
 CHECKED BY  
**A. SILVER**  
 IN CHARGE  
**A. BOONE**  
 DATE  
**04/29/2011**

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

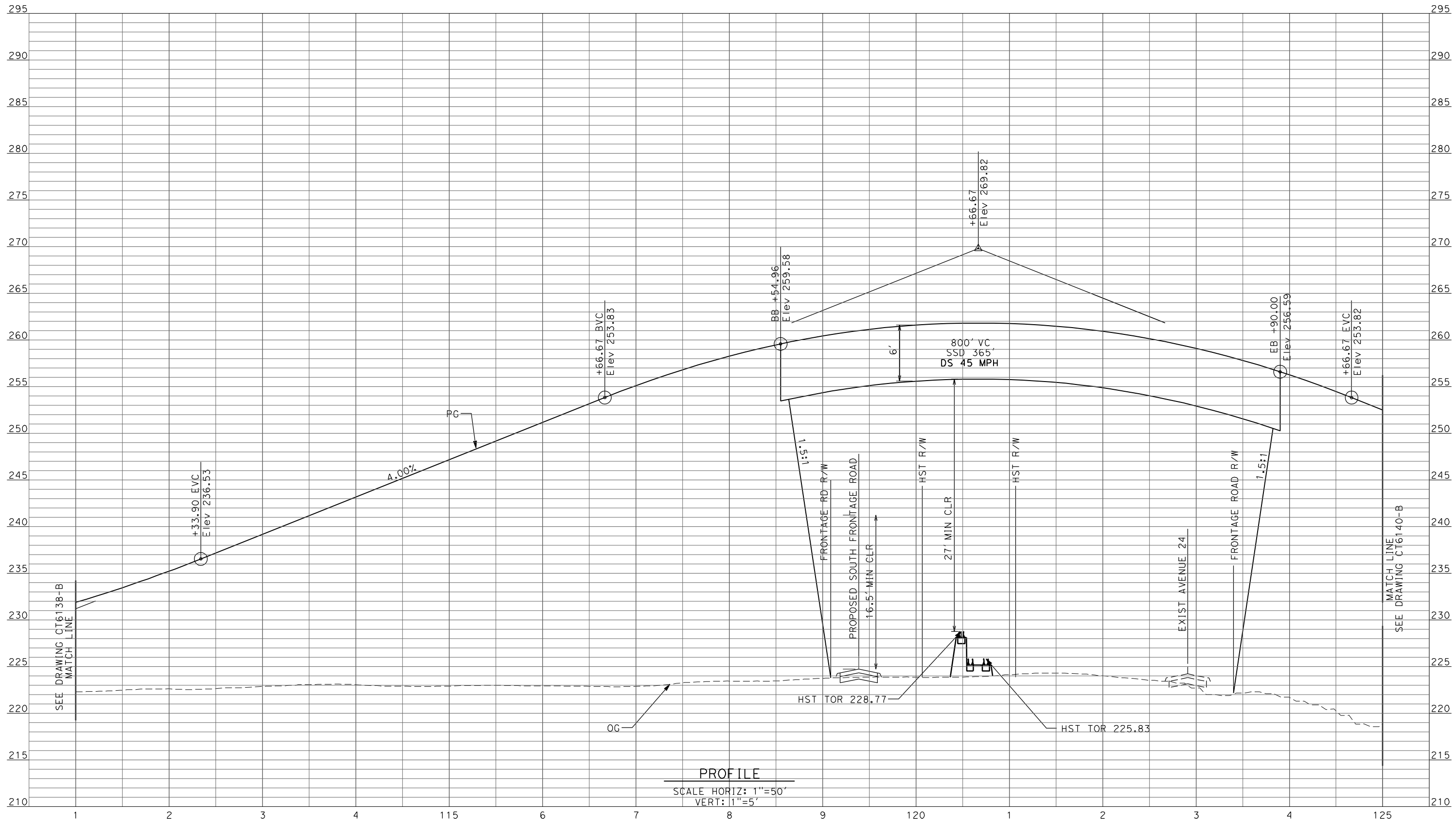


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 MAINLINE DO/MERCED DO - (WC)  
 GRADE SEPARATION - ROAD 15  
 PROFILE  
 SHEET 1 OF 4

CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CT6138-B  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###



4/27/2011 6:38:51 PM p:\60022962\task\_02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 1b - ave 24 wye-w.chowchilla grade separation\Profile\CT6139-B.dgn  
 ReyesC1



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**D. AYELE**  
 DRAWN BY  
**C. DELOS REYES**  
 CHECKED BY  
**A. SILVER**  
 IN CHARGE  
**A. BOONE**  
 DATE  
**04/29/2011**

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

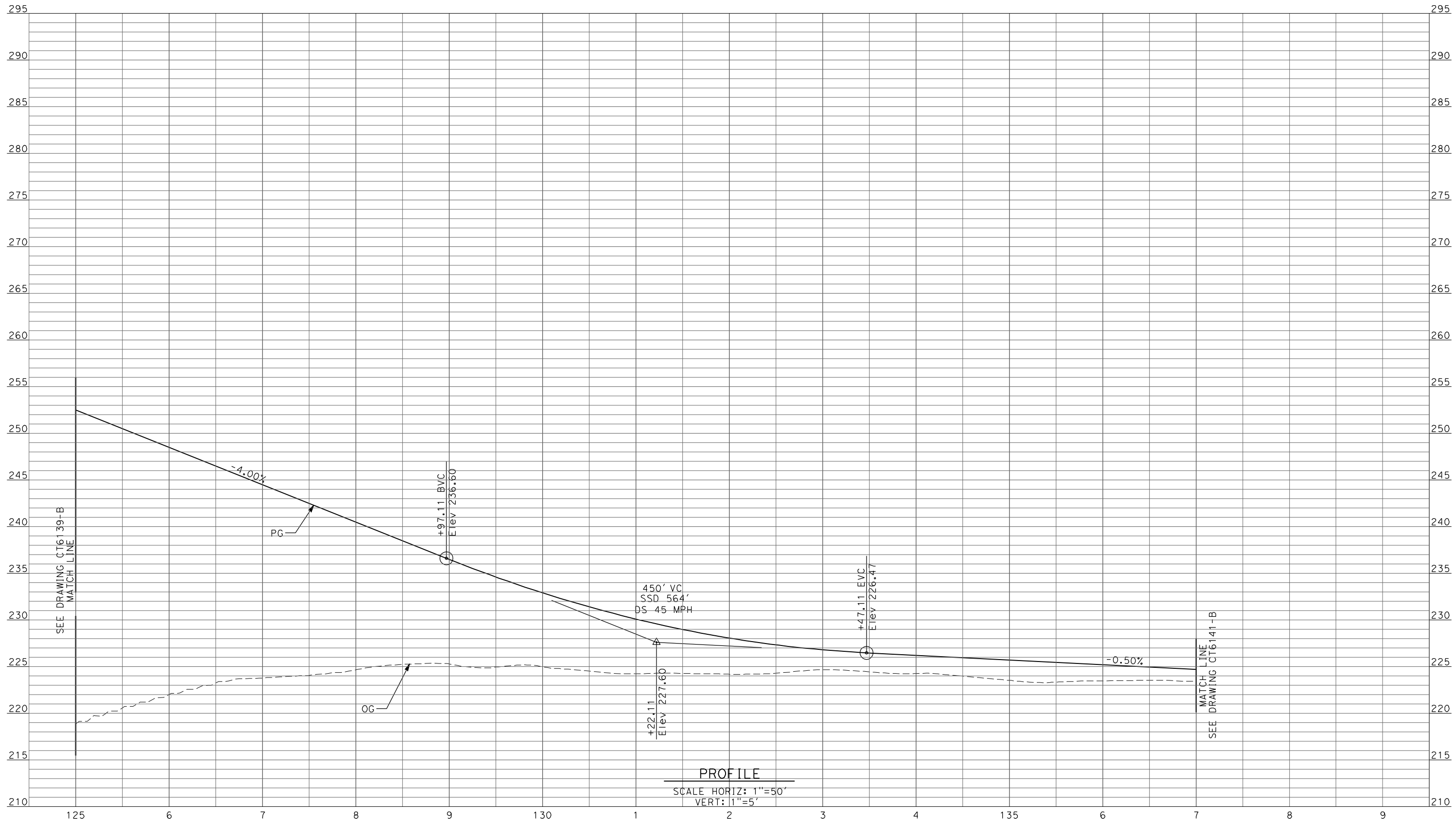


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 MAINLINE DO/MERCED DO - (WC)  
 GRADE SEPARATION - ROAD 15  
**PROFILE**  
**SHEET 2 OF 4**

CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CT6139-B  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###



4/27/2011 6:38:58 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 1b - ave 24 wye-w.chowchilla grade separation\Profile\CT6140-B.dgn  
 ReyesC1



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**D. AYELE**  
 DRAWN BY  
**C. DELOS REYES**  
 CHECKED BY  
**A. SILVER**  
 IN CHARGE  
**A. BOONE**  
 DATE  
**04/29/2011**

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

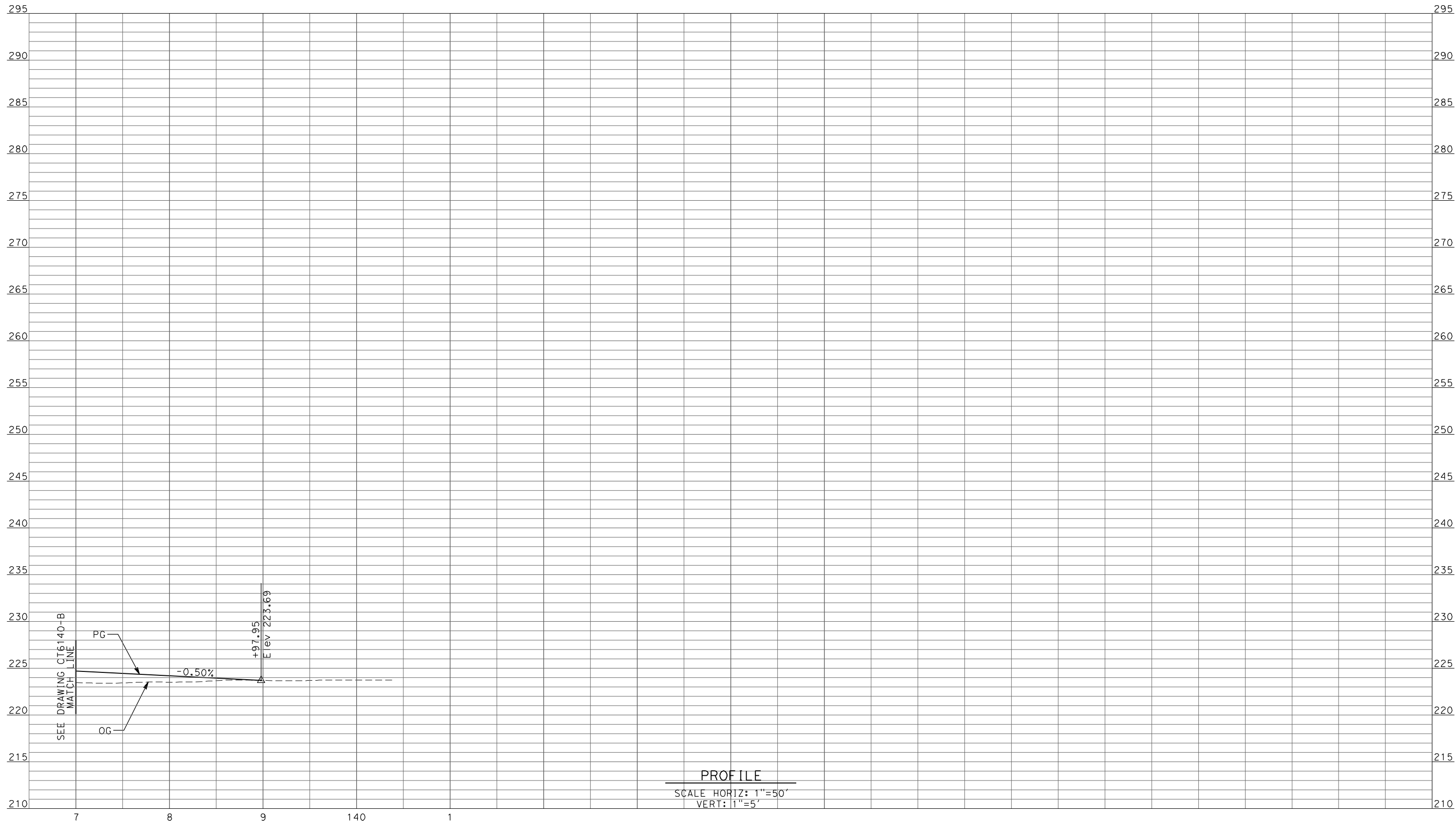


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 MAINLINE DO/MERCED DO - (WC)  
 GRADE SEPARATION - ROAD 15  
 PROFILE  
 SHEET 3 OF 4

CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CT6140-B  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###



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REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**D. AYELE**  
 DRAWN BY  
**C. DELOS REYES**  
 CHECKED BY  
**A. SILVER**  
 IN CHARGE  
**A. BOONE**  
 DATE  
**04/29/2011**

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

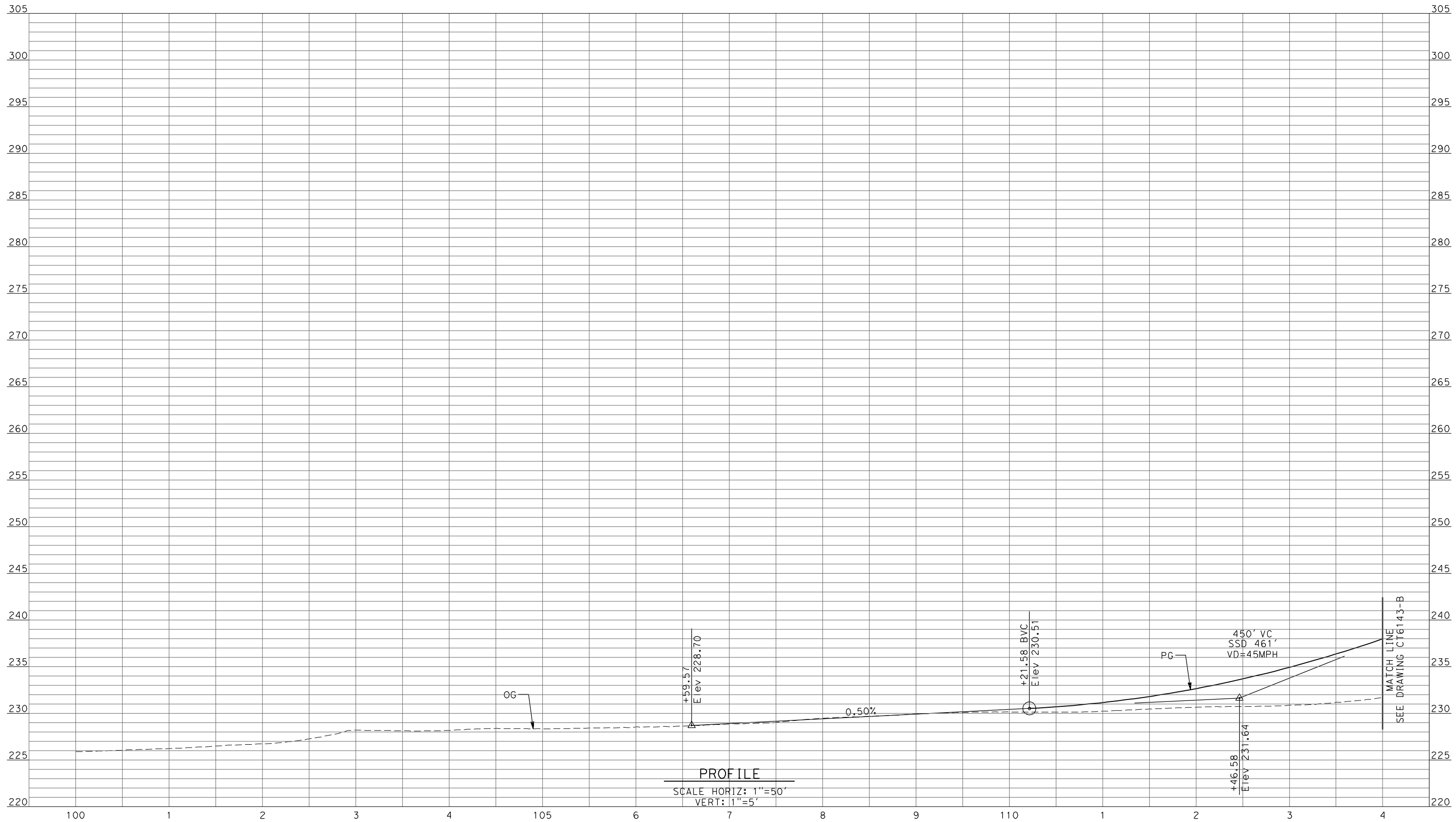


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 MAINLINE DO/MERCED DO - (WC)  
 GRADE SEPARATION - ROAD 15  
 PROFILE  
 SHEET 4 OF 4

CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CT6141-B  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###



4/27/2011 6:39:10 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 1b - ave 24 wye-w.chowchilla grade separation\Profile\CT6142-B.dgn  
 ReyesC1



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**D. AYELE**  
 DRAWN BY  
**C. DELOS REYES**  
 CHECKED BY  
**A. SILVER**  
 IN CHARGE  
**A. BOONE**  
 DATE  
**04/29/2011**

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

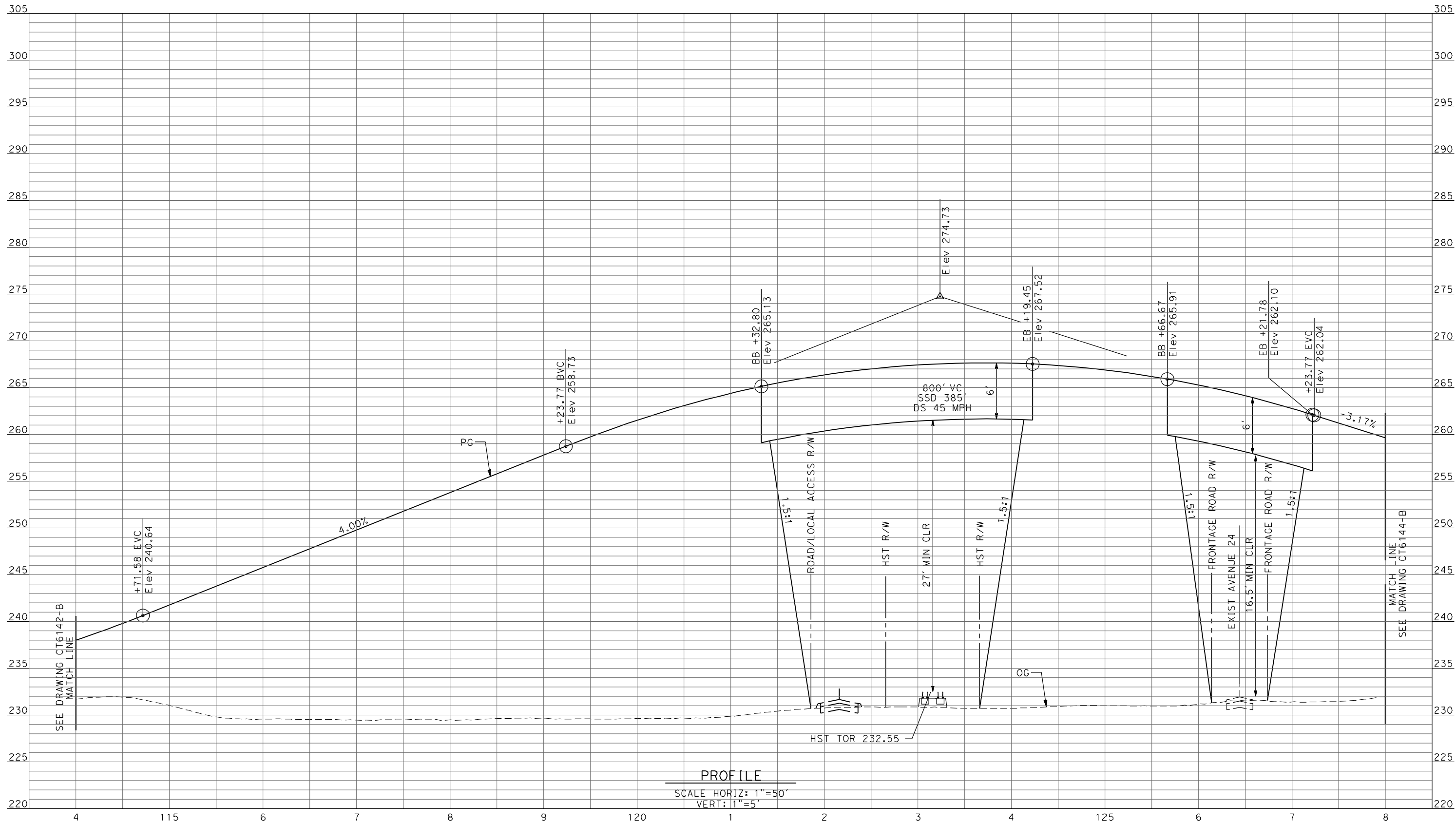


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 MAINLINE DO - (WC)  
 GRADE SEPARATION - ROAD 16  
 PROFILE  
 SHEET 1 OF 4

CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CT6142-B  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###



4/27/2011 6:39:15 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 1b - ave 24 wye-w.chowchilla grade separation\Profile\CT6143-B.dgn  
 ReyesC1



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**D. AYELE**  
 DRAWN BY  
**C. DELOS REYES**  
 CHECKED BY  
**A. SILVER**  
 IN CHARGE  
**A. BOONE**  
 DATE  
**04/29/2011**

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

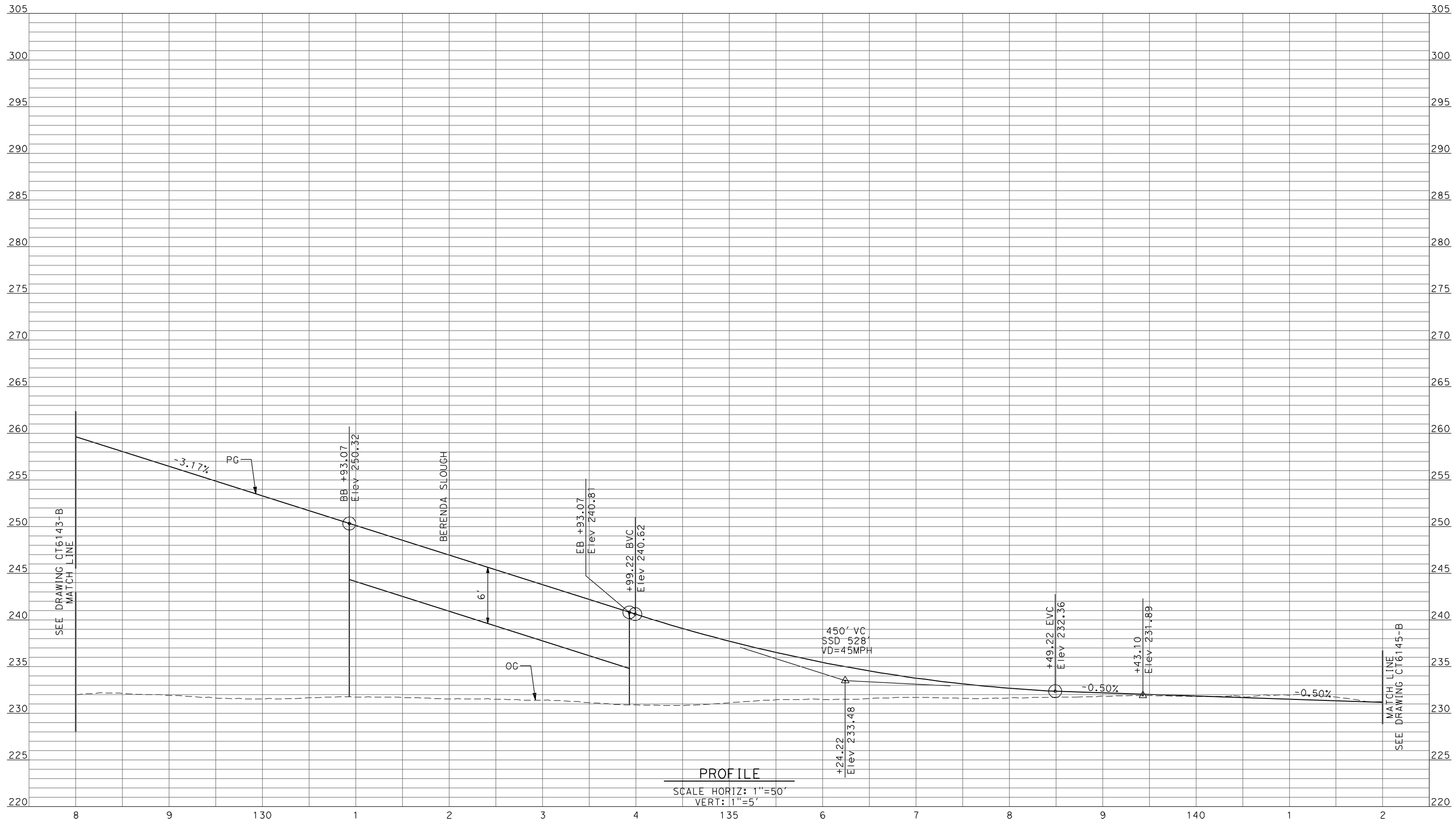


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 MAINLINE DO - (WC)  
 GRADE SEPARATION - ROAD 16  
 PROFILE  
 SHEET 2 OF 4

CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CT6143-B  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###



4/27/2011 6:39:20 PM p:\60022962\task\_02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 1b - ave 24 wye-w.chowchilla grade separation\Profile\CT6144-B.dgn  
 ReyesC1



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**D. AYELE**  
 DRAWN BY  
**C. DELOS REYES**  
 CHECKED BY  
**A. SILVER**  
 IN CHARGE  
**A. BOONE**  
 DATE  
**04/29/2011**

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

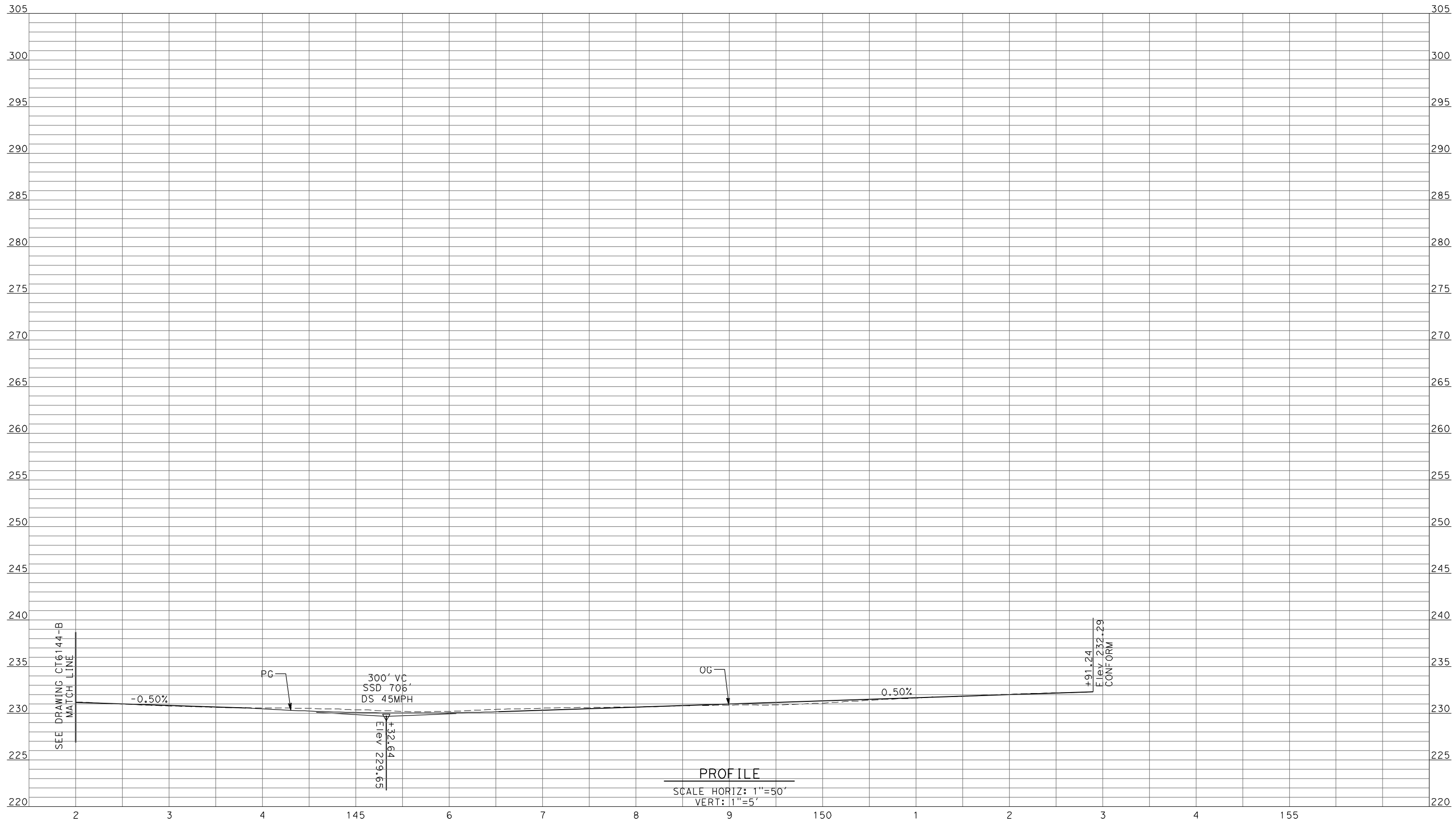


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 MAINLINE DO - (WC)  
 GRADE SEPARATION - ROAD 16  
 PROFILE  
 SHEET 3 OF 4

CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CT6144-B  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###



4/27/2011 6:39:25 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 1b - ave 24 wye-w.chowchilla grade separation\Profile\CT6145-B.dgn



**PROFILE**  
 SCALE HORIZ: 1"=50'  
 VERT: 1"=5'

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**D. AYELE**  
 DRAWN BY  
**C. DELOS REYES**  
 CHECKED BY  
**A. SILVER**  
 IN CHARGE  
**A. BOONE**  
 DATE  
**04/29/2011**

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

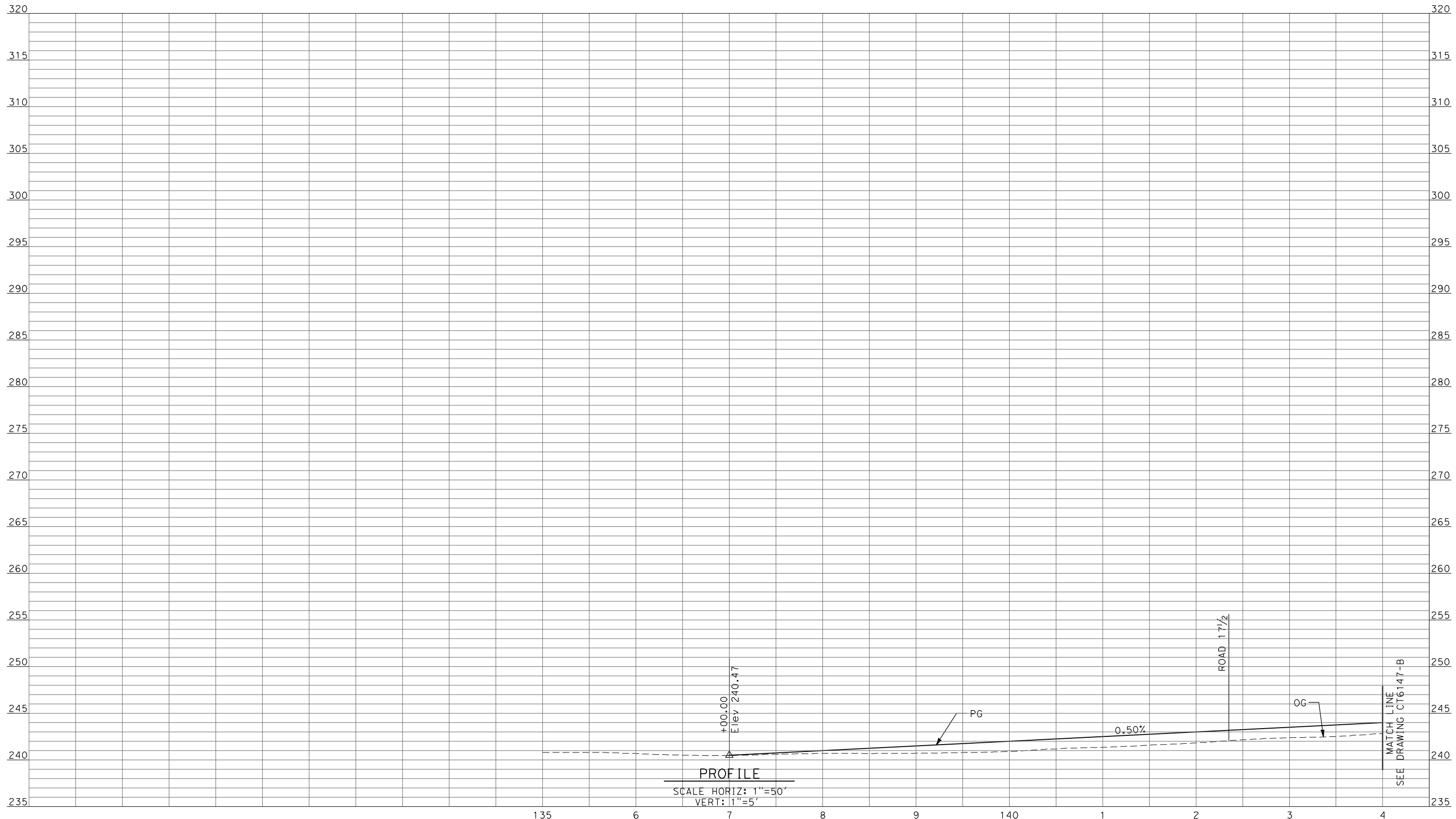


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 MAINLINE DO - (WC)  
 GRADE SEPARATION - ROAD 16  
**PROFILE**  
 SHEET 4 OF 4

CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CT6145-B  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###



4/27/2011 6:39:30 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 1b - ave 24 wye-w.chowchilla grade separation\Profile\CT6146-B.dgn  
 ReyesC1



**PROFILE**  
 SCALE HORIZ: 1"=50'  
 VERT: 1"=5'

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**D. AYELE**  
 DRAWN BY  
**C. DELOS REYES**  
 CHECKED BY  
**A. SILVER**  
 IN CHARGE  
**A. BOONE**  
 DATE  
**04/29/2011**

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

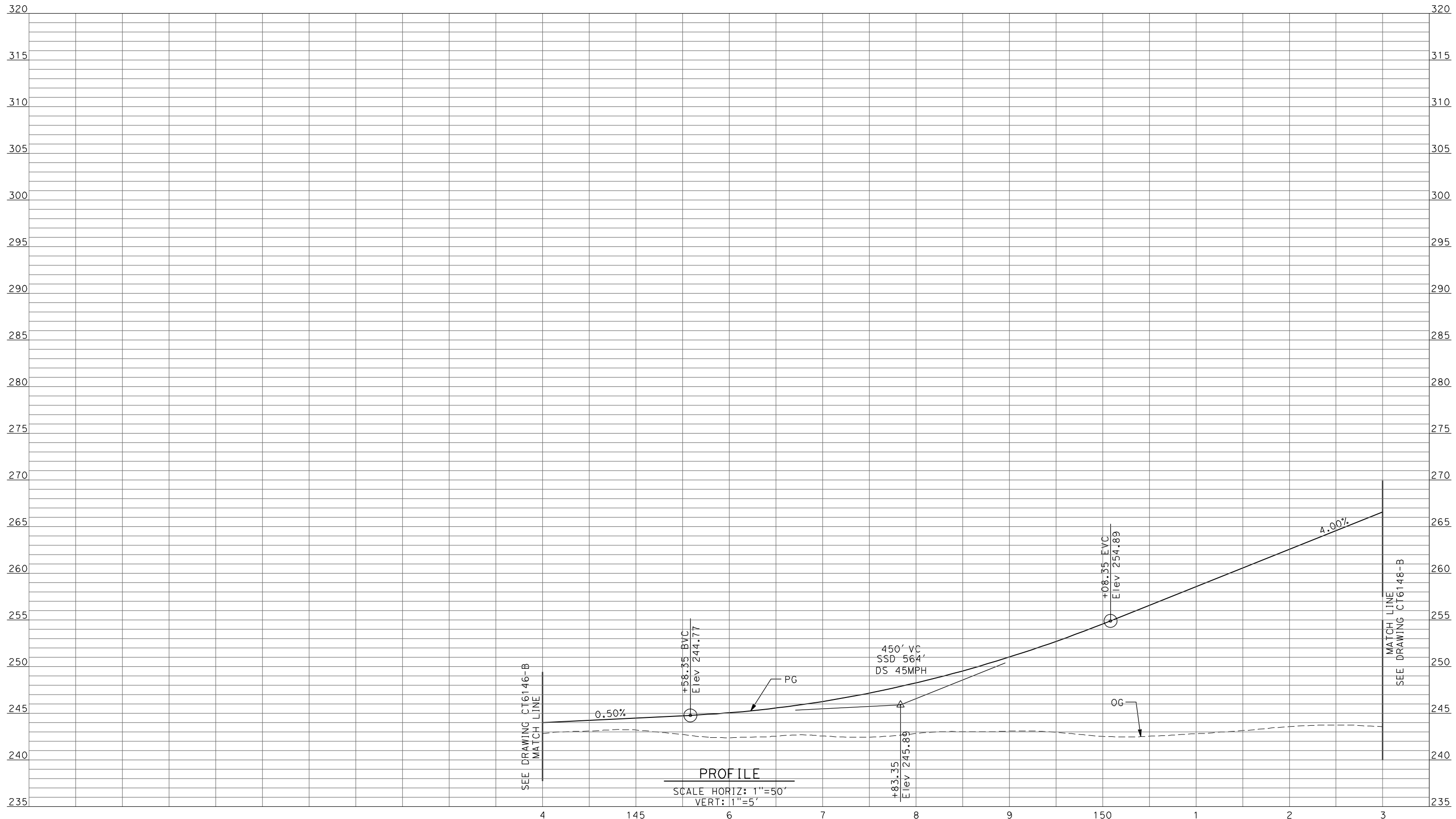


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 MAINLINE DO - (WC)  
 GRADE SEPARATION - AVENUE 23 1/2  
**PROFILE**  
 SHEET 1 OF 4

CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CT6146-B  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###



4/27/2011 6:39:35 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 1b - ave 24 wye-w.chowchilla grade separation\Profile\CT6147-B.dgn  
 ReyesC1



**PROFILE**  
 SCALE HORIZ: 1"=50'  
 VERT: 1"=5'

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**D. AYELE**  
 DRAWN BY  
**C. DELOS REYES**  
 CHECKED BY  
**A. SILVER**  
 IN CHARGE  
**A. BOONE**  
 DATE  
**04/29/2011**

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

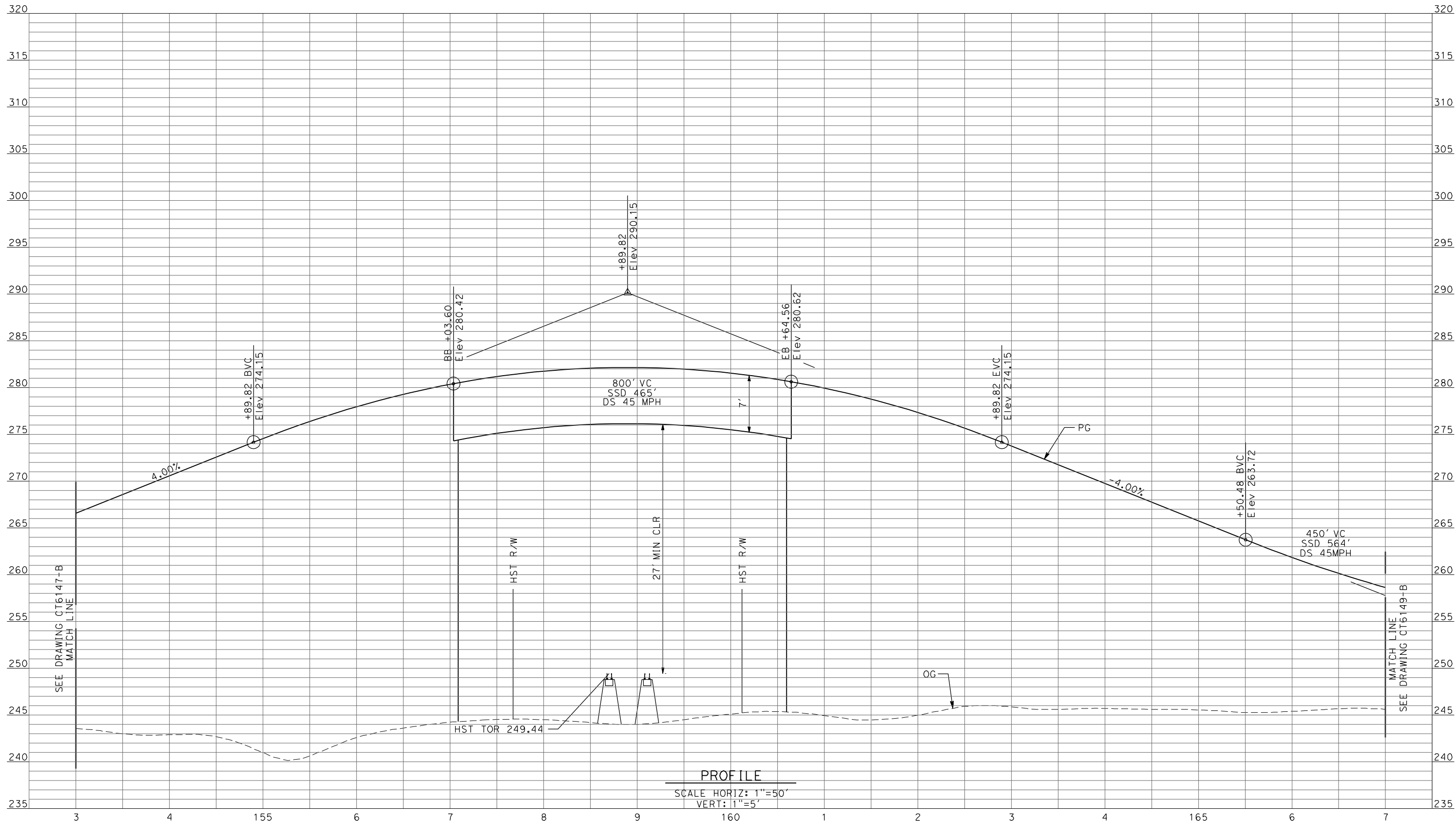


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 MAINLINE DO - (WC)  
 GRADE SEPARATION - AVENUE 23 1/2  
**PROFILE**  
 SHEET 2 OF 4

CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CT6147-B  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###



4/27/2011 6:39:40 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 1b - ave 24 wye-w.chowchilla grade separation\Profile\CT6148-B.dgn  
 ReyesC1



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**D. AYELE**  
 DRAWN BY  
**C. DELOS REYES**  
 CHECKED BY  
**A. SILVER**  
 IN CHARGE  
**A. BOONE**  
 DATE  
**04/29/2011**

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

**AECOM**  
 Technical Services, Inc.  
 2020 L Street, Suite 300  
 Sacramento, CA 95811  
**CH2MHILL**

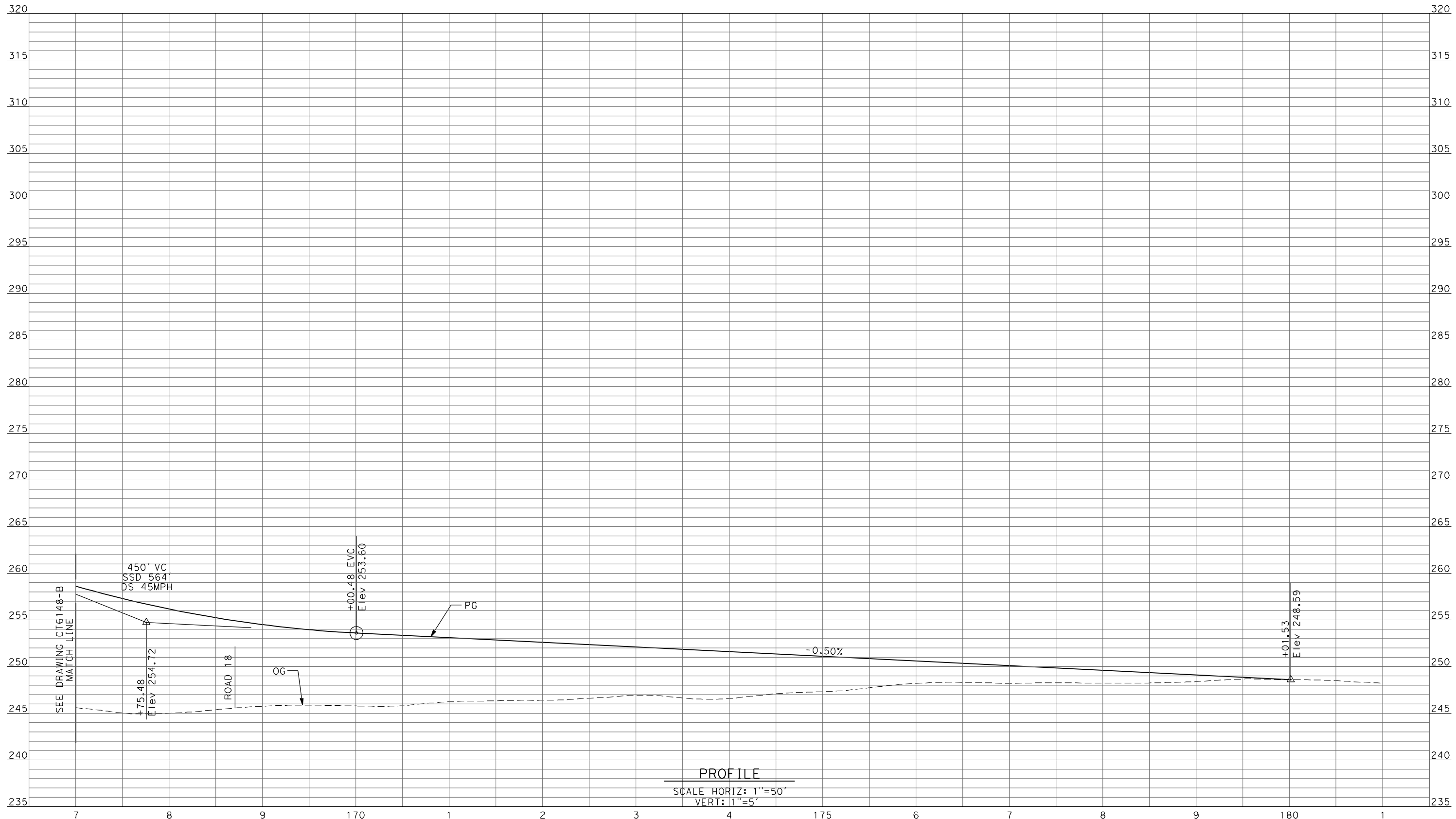


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 MAINLINE DO - (WC)  
 GRADE SEPARATION - AVENUE 23 1/2  
**PROFILE**  
 SHEET 3 OF 4

CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CT6148-B  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###



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REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**D. AYELE**  
 DRAWN BY  
**C. DELOS REYES**  
 CHECKED BY  
**A. SILVER**  
 IN CHARGE  
**A. BOONE**  
 DATE  
**04/29/2011**

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

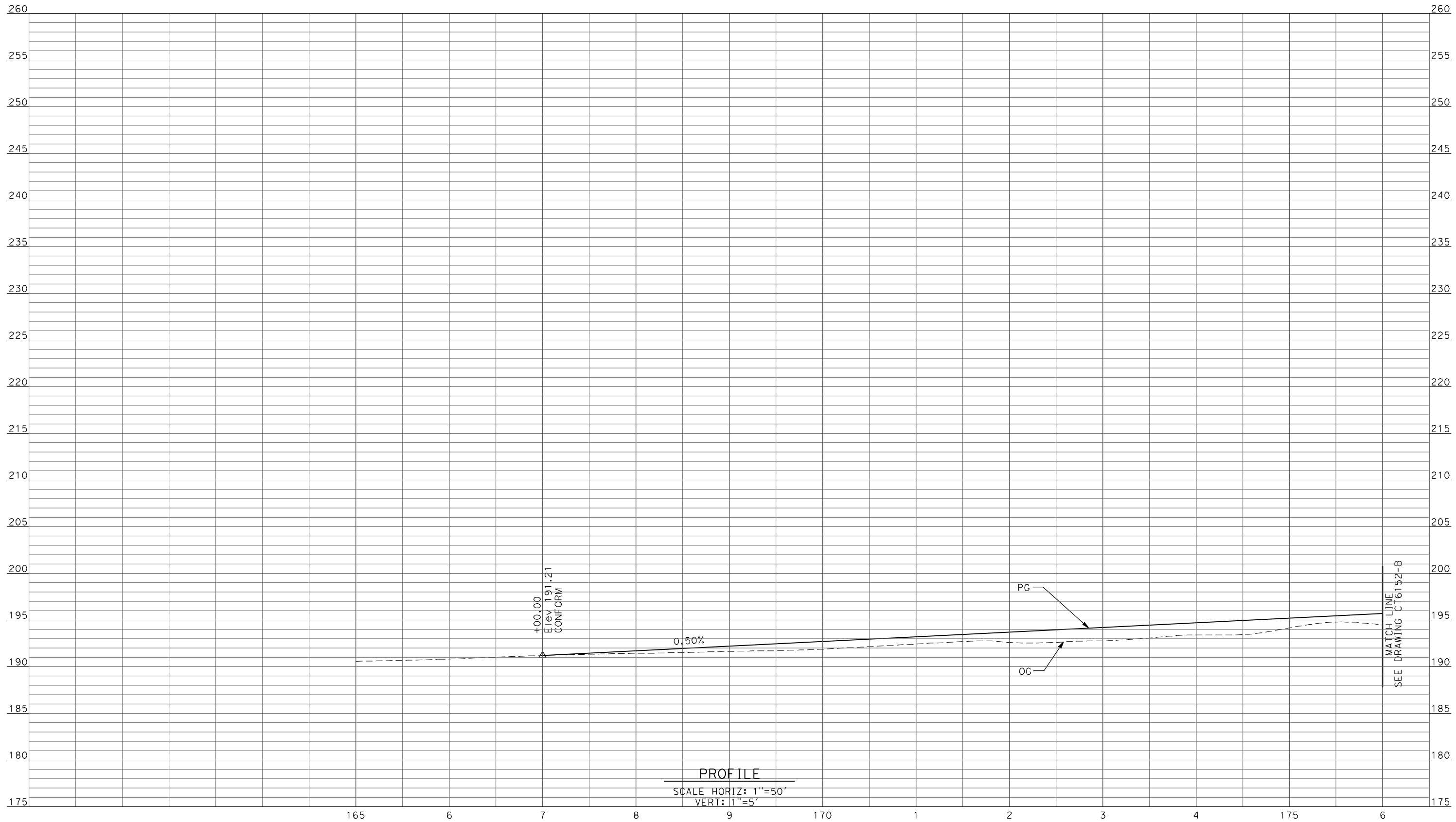


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 MAINLINE DO - (WC)  
 GRADE SEPARATION - AVENUE 23 1/2  
 PROFILE  
 SHEET 4 OF 4

CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CT6149-B  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###



4/27/2011 6:39:51 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 1b - ave 24 wye-w.chowchilla grade separation\Profile\CT6151-B.dgn



**PROFILE**  
 SCALE HORIZ: 1"=50'  
 VERT: 1"=5'

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**D. AYELE**  
 DRAWN BY  
**C. DELOS REYES**  
 CHECKED BY  
**A. SILVER**  
 IN CHARGE  
**A. BOONE**  
 DATE  
**04/29/2011**

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

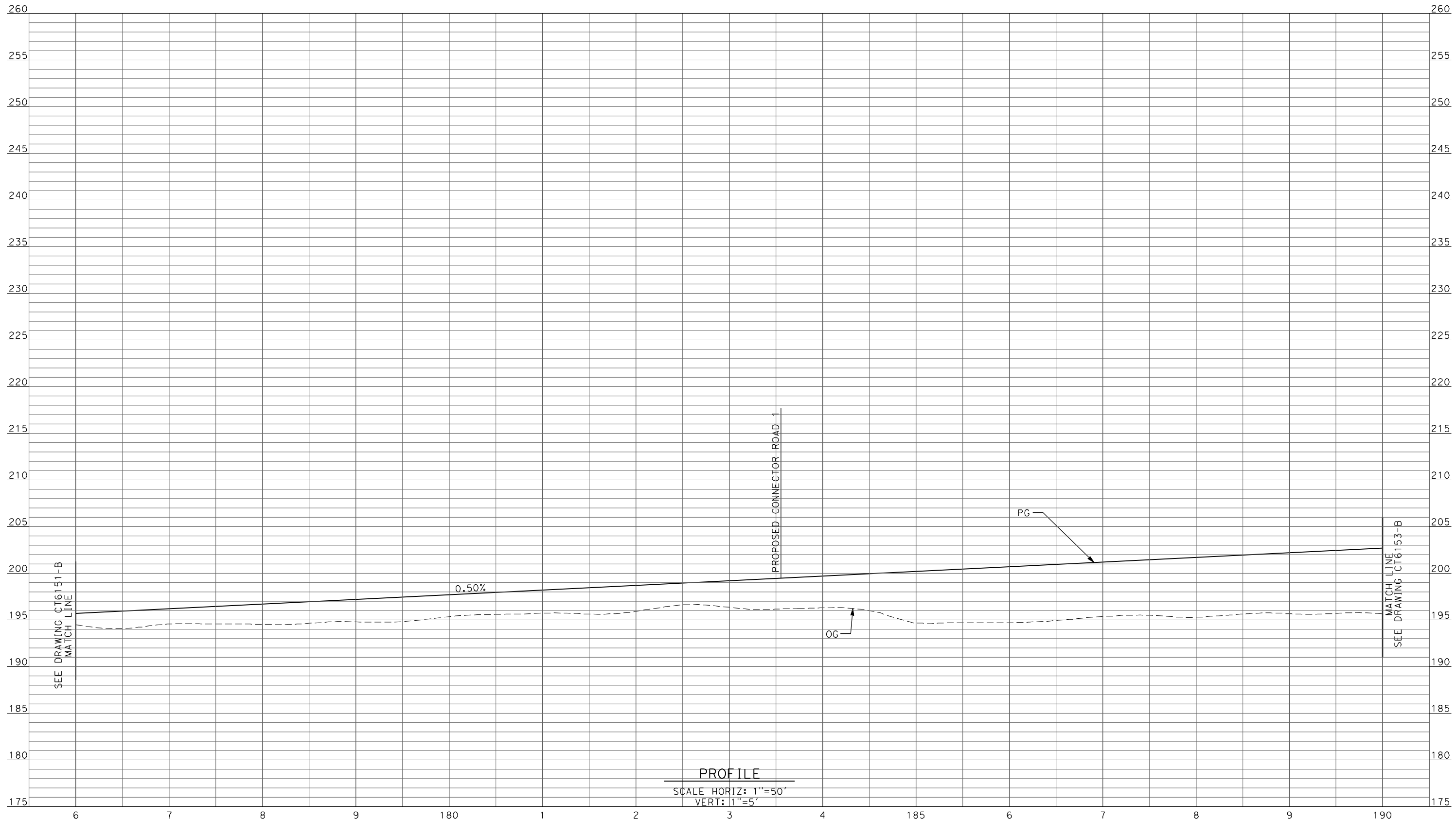


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 WYE/MERCED DO - (WC)  
 GRADE SEPARATION - AVENUE 25  
**PROFILE**  
 SHEET 1 OF 14

CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CT6151-B  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###



4/27/2011 6:39:56 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 1b - ave 24 wye-w.chowchilla grade separation\Profile\CT6152-B.dgn



PROFILE  
 SCALE HORIZ: 1"=50'  
 VERT: 1"=5'

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
 DRAWN BY  
C. DELOS REYES  
 CHECKED BY  
A. SILVER  
 IN CHARGE  
A. BOONE  
 DATE  
04/29/2011

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

**NOT FOR**  
**CONSTRUCTION**



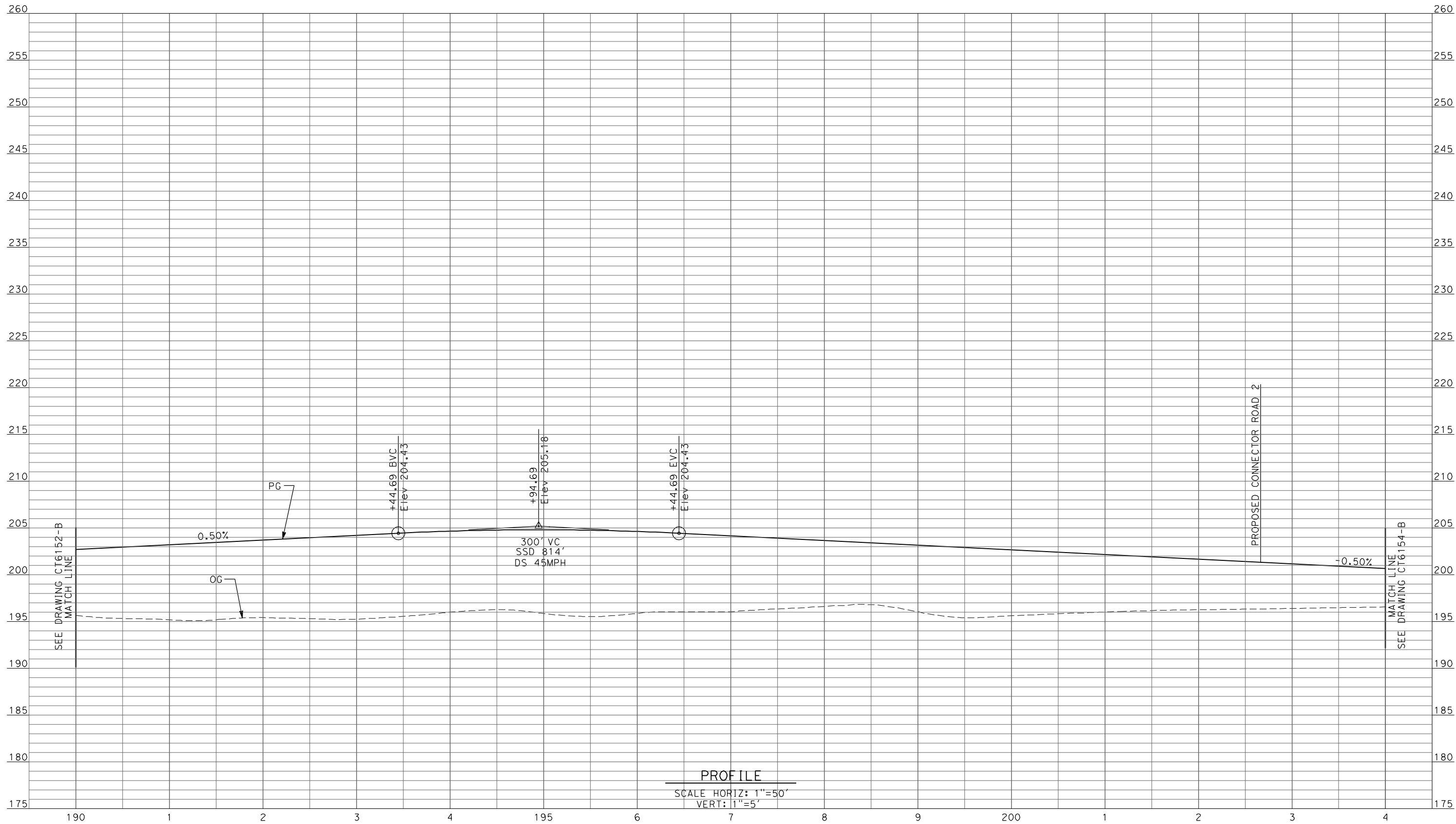
**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**

UPRR/SR99 WYE/MERCED DO - (WC)  
 GRADE SEPARATION - AVENUE 25  
 PROFILE  
 SHEET 2 OF 14

CONTRACT NO.  
HSR06-007  
 DRAWING NO.  
CT6152-B  
 SCALE  
AS SHOWN  
 SHEET NO.  
### OF ###



4/27/2011 6:40:01 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 1b - ave 24 wye-w.chowchilla\grade separation\Profile\CT6153-B.dgn



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
 D. AYELE  
 DRAWN BY  
 C. DELOS REYES  
 CHECKED BY  
 A. SILVER  
 IN CHARGE  
 A. BOONE  
 DATE  
 04/29/2011

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

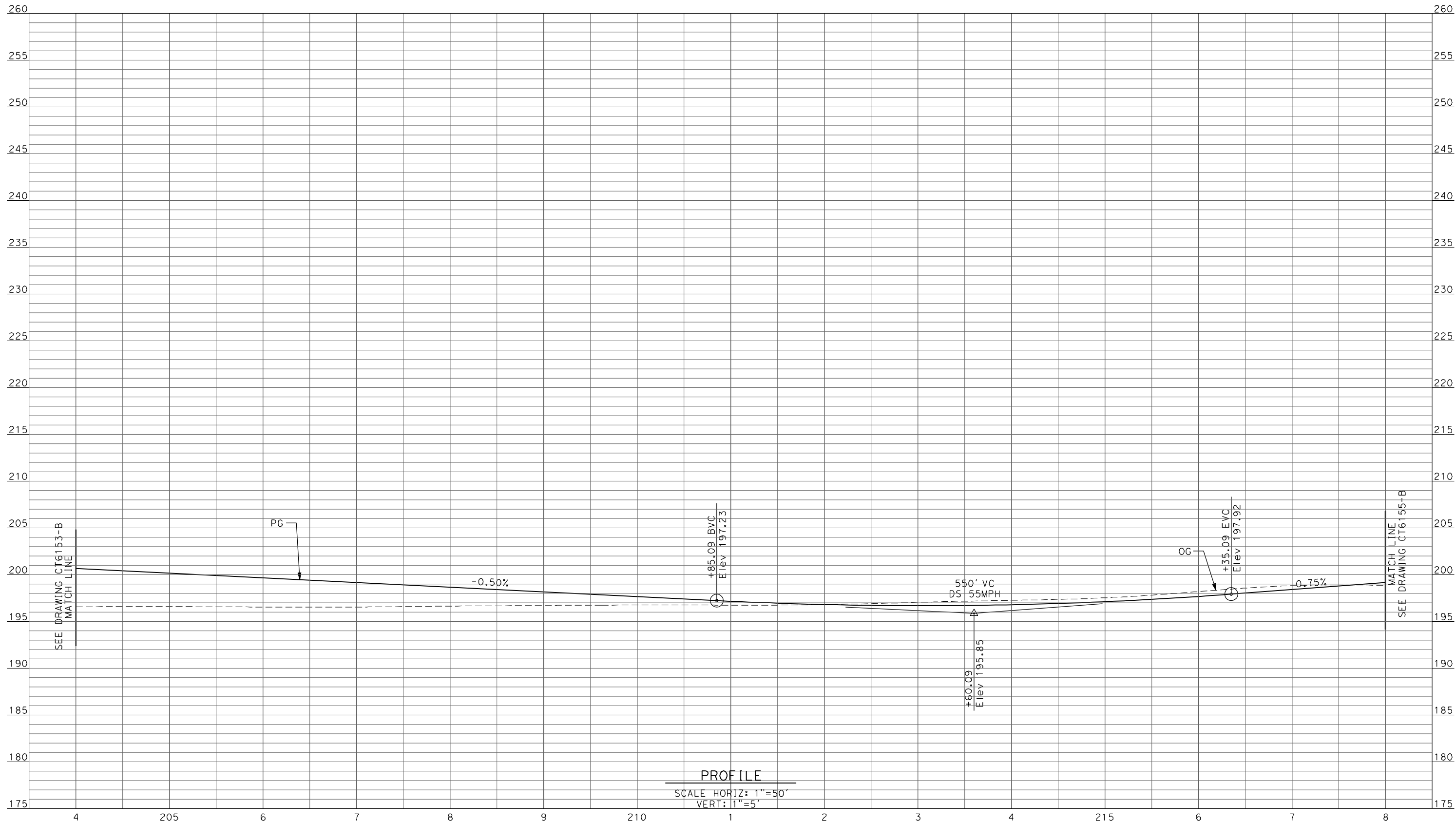


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 WYE/MERCED DO - (WC)  
 GRADE SEPARATION - AVENUE 25  
 PROFILE  
 SHEET 3 OF 14

CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CT6153-B  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###



4/27/2011 6:40:06 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 1b - ave 24 wye-w.chowchilla grade separation\Profile\CT6154-B.dgn  
 ReyesC1



**PROFILE**  
 SCALE HORIZ: 1"=50'  
 VERT: 1"=5'

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**D. AYELE**  
 DRAWN BY  
**C. DELOS REYES**  
 CHECKED BY  
**A. SILVER**  
 IN CHARGE  
**A. BOONE**  
 DATE  
**04/29/2011**

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

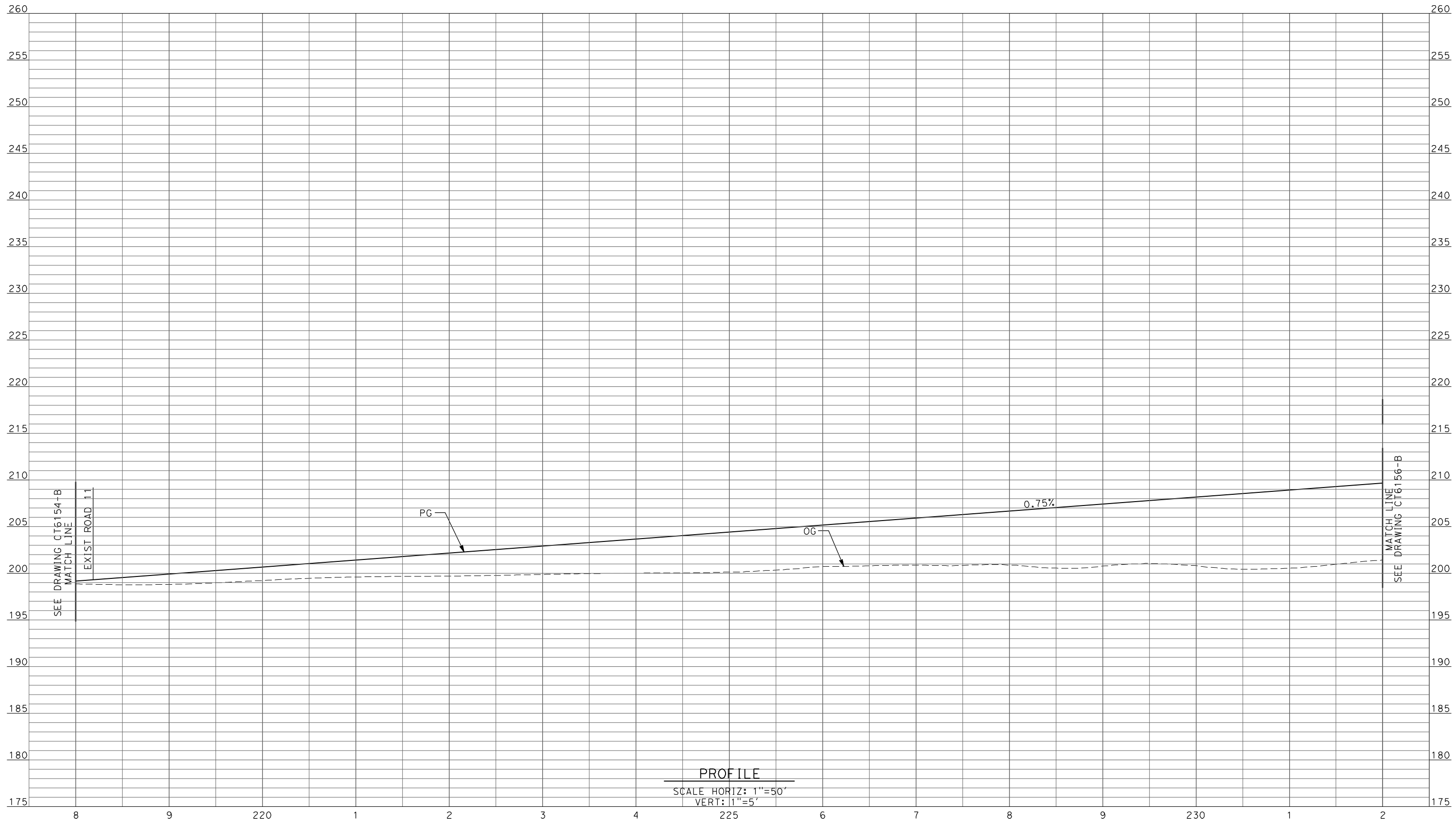


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 WYE/MERCED DO - (WC)  
 GRADE SEPARATION - AVENUE 25  
**PROFILE**  
 SHEET 4 OF 14

CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CT6154-B  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###



4/27/2011 6:40:11 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 1b - ave 24 wye-w.chowchilla\grade separation\Profile\CT6155-B.dgn



**PROFILE**  
 SCALE HORIZ: 1"=50'  
 VERT: 1"=5'

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**D. AYELE**  
 DRAWN BY  
**C. DELOS REYES**  
 CHECKED BY  
**A. SILVER**  
 IN CHARGE  
**A. BOONE**  
 DATE  
**04/29/2011**

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

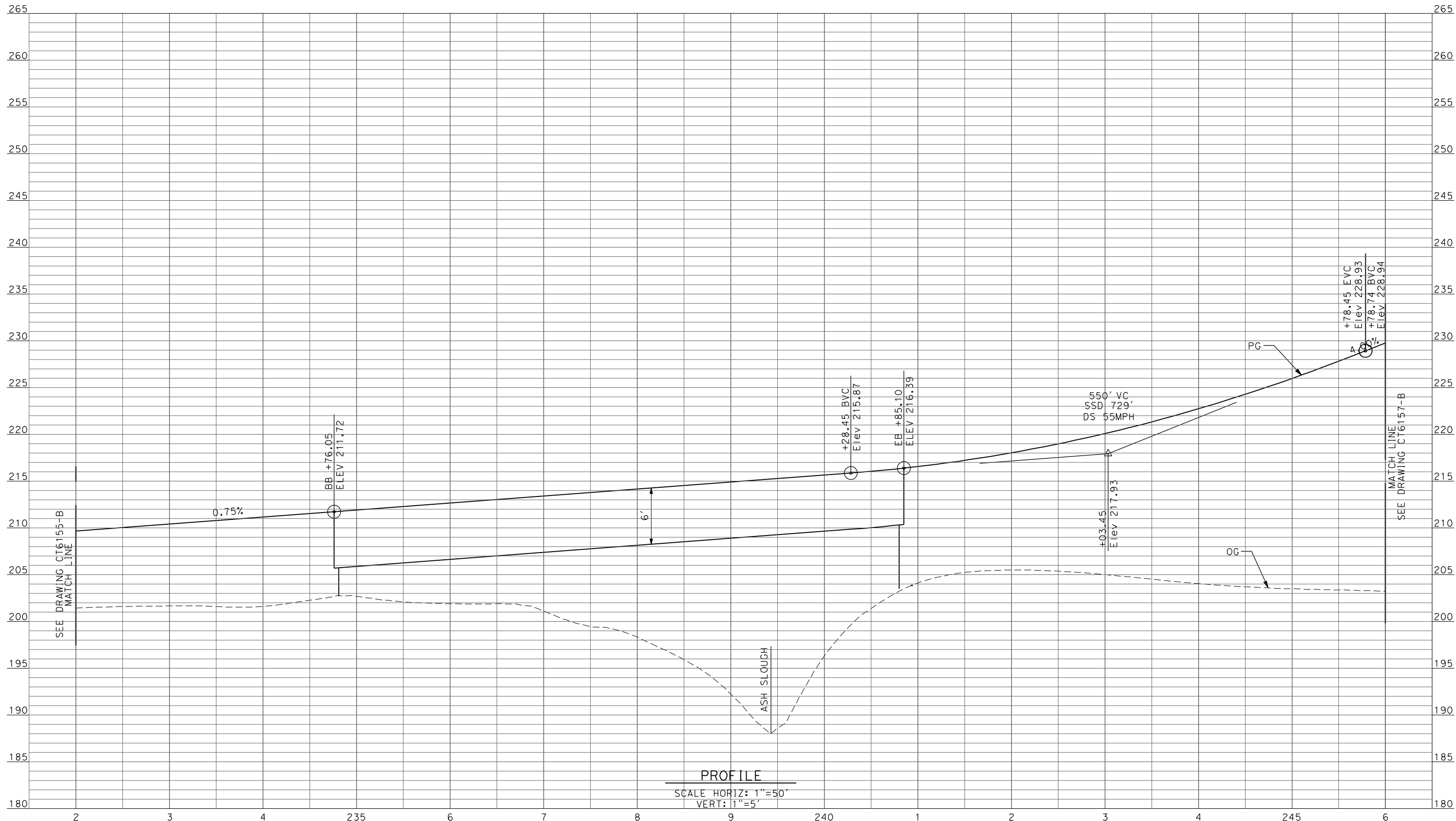


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 WYE/MERCED DO - (WC)  
 GRADE SEPARATION - AVENUE 25  
 PROFILE  
 SHEET 5 OF 14

CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CT6155-B  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###



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**PROFILE**  
 SCALE HORIZ: 1"=50'  
 VERT: 1"=5'

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**D. AYELE**  
 DRAWN BY  
**C. DELOS REYES**  
 CHECKED BY  
**A. SILVER**  
 IN CHARGE  
**A. BOONE**  
 DATE  
**04/29/2011**

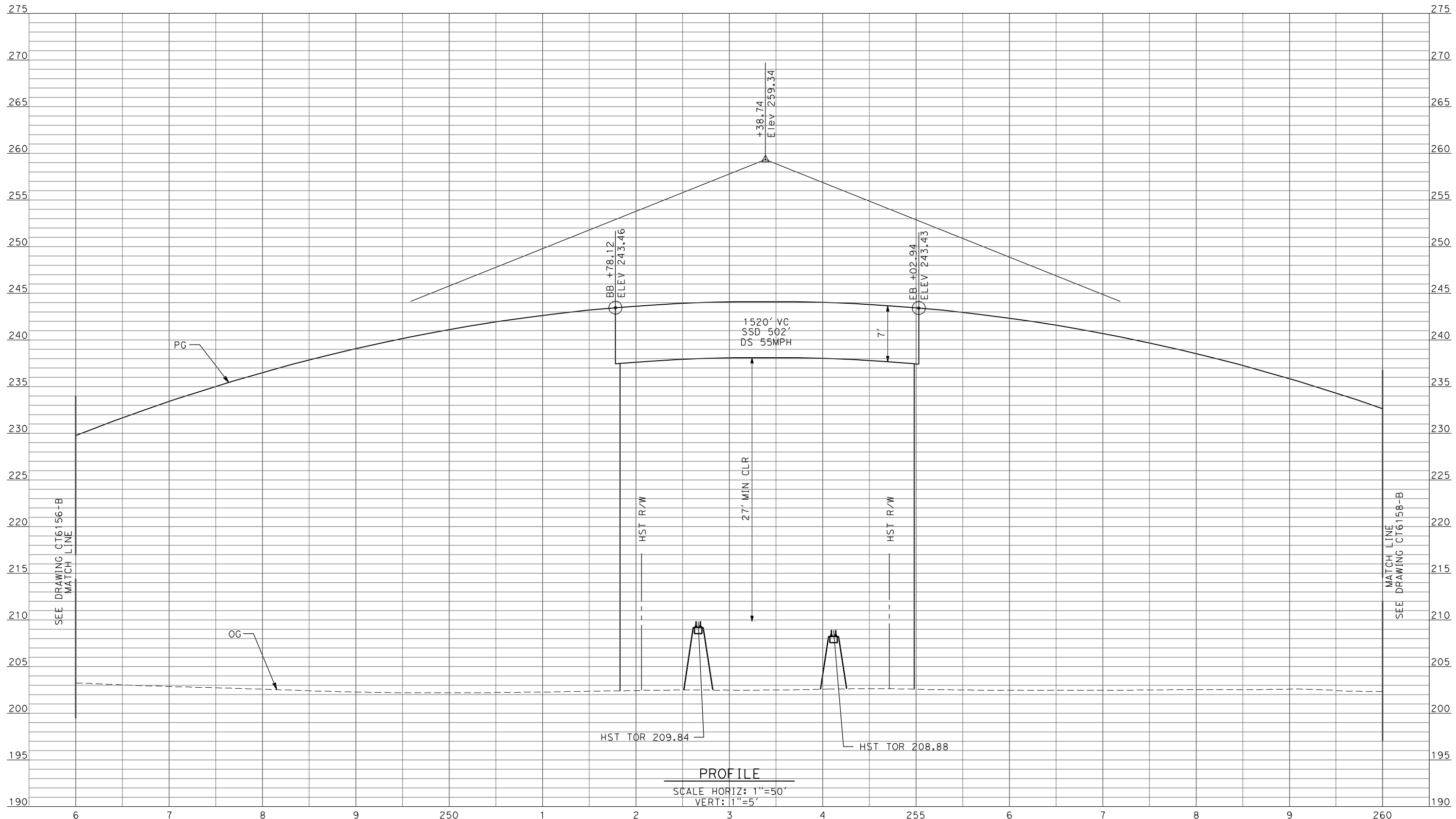
**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**  
  
**NOT FOR**  
**CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 WYE/MERCED DO - (WC)  
 GRADE SEPARATION - AVENUE 25  
**PROFILE**  
 SHEET 6 OF 14

CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CT6156-B  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###

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**PROFILE**  
 SCALE HORIZ: 1"=50'  
 VERT: 1"=5'

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**D. AYELE**  
 DRAWN BY  
**C. DELOS REYES**  
 CHECKED BY  
**A. SILVER**  
 IN CHARGE  
**A. BOONE**  
 DATE  
**04/29/2011**

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



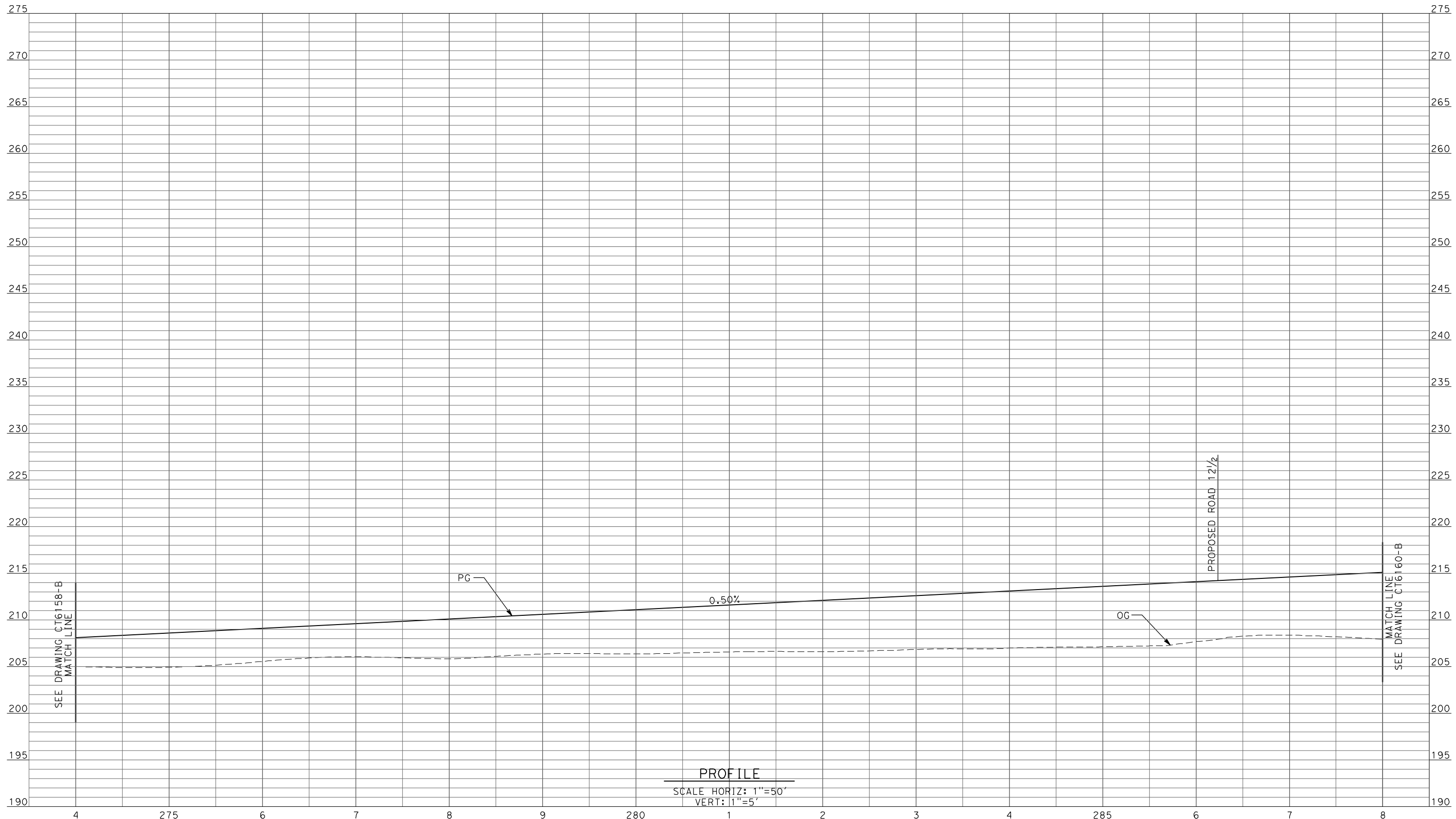
**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 WYE/MERCED DO - (WC)  
 GRADE SEPARATION - AVENUE 25  
 PROFILE  
 SHEET 7 OF 14

CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CT6157-B  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###





4/27/2011 6:40:31 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 1b - ave 24 wye-w.chowchilla grade separation\Profile\CT6159-B.dgn



**PROFILE**  
 SCALE HORIZ: 1"=50'  
 VERT: 1"=5'

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**D. AYELE**  
 DRAWN BY  
**C. DELOS REYES**  
 CHECKED BY  
**A. SILVER**  
 IN CHARGE  
**A. BOONE**  
 DATE  
**04/29/2011**

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



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 WYE/MERCED DO - (WC)  
 GRADE SEPARATION - AVENUE 25  
 PROFILE  
 SHEET 9 OF 14

CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CT6159-B  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###



4/27/2011 6:40:36 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 1b - ave 24 wye-w.chowchilla grade separation\Profile\CT6160-B.dgn  
 ReyesC1



**PROFILE**  
 SCALE HORIZ: 1"=50'  
 VERT: 1"=5'

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**D. AYELE**  
 DRAWN BY  
**C. DELOS REYES**  
 CHECKED BY  
**A. SILVER**  
 IN CHARGE  
**A. BOONE**  
 DATE  
**04/29/2011**

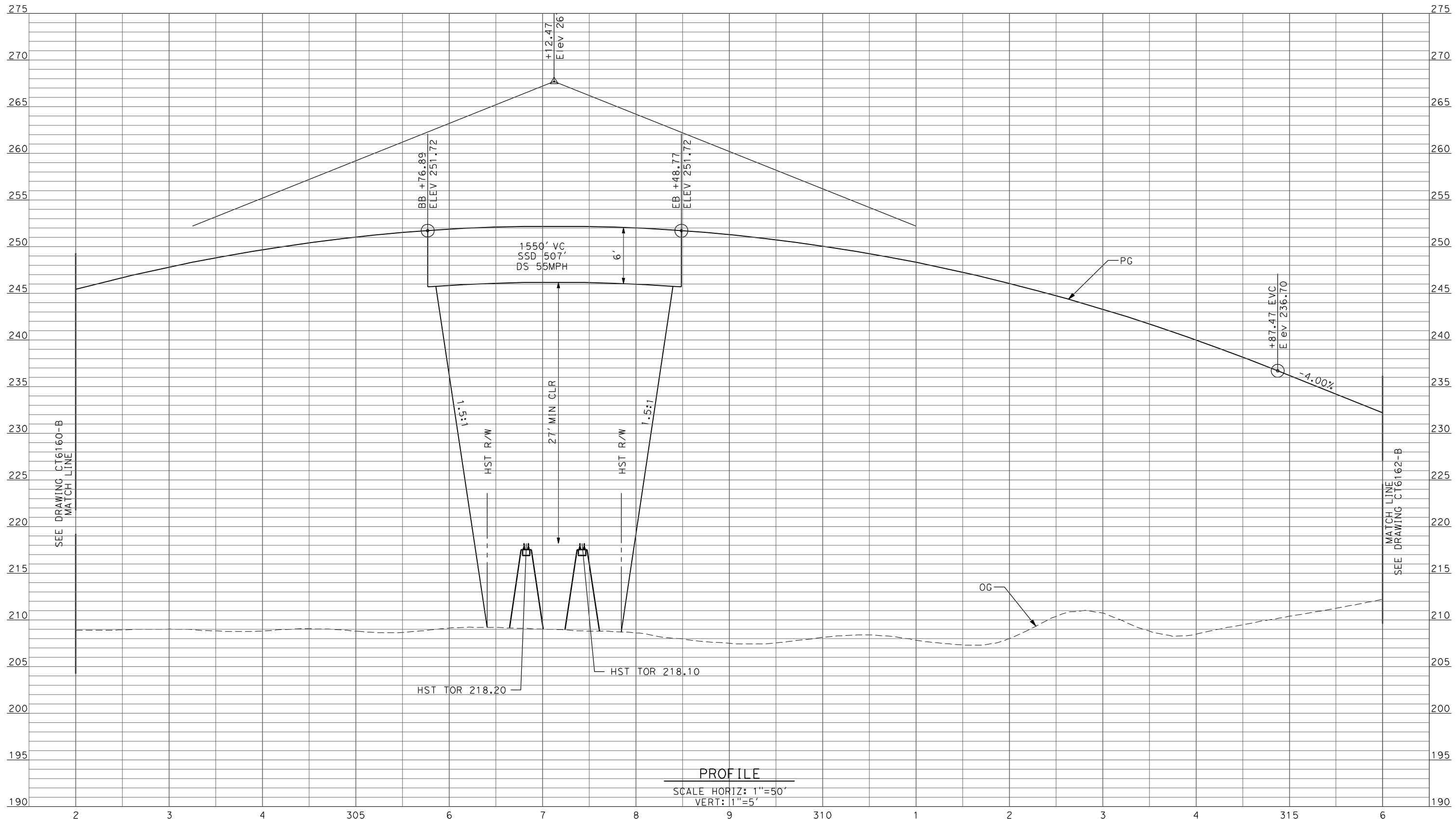
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**CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 WYE/MERCED DO - (WC)  
 GRADE SEPARATION - AVENUE 25  
**PROFILE**  
 SHEET 10 OF 14

CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CT6160-B  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###

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 ReyesC1



**PROFILE**  
 SCALE HORIZ: 1"=50'  
 VERT: 1"=5'

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**D. AYELE**  
 DRAWN BY  
**C. DELOS REYES**  
 CHECKED BY  
**A. SILVER**  
 IN CHARGE  
**A. BOONE**  
 DATE  
**04/29/2011**

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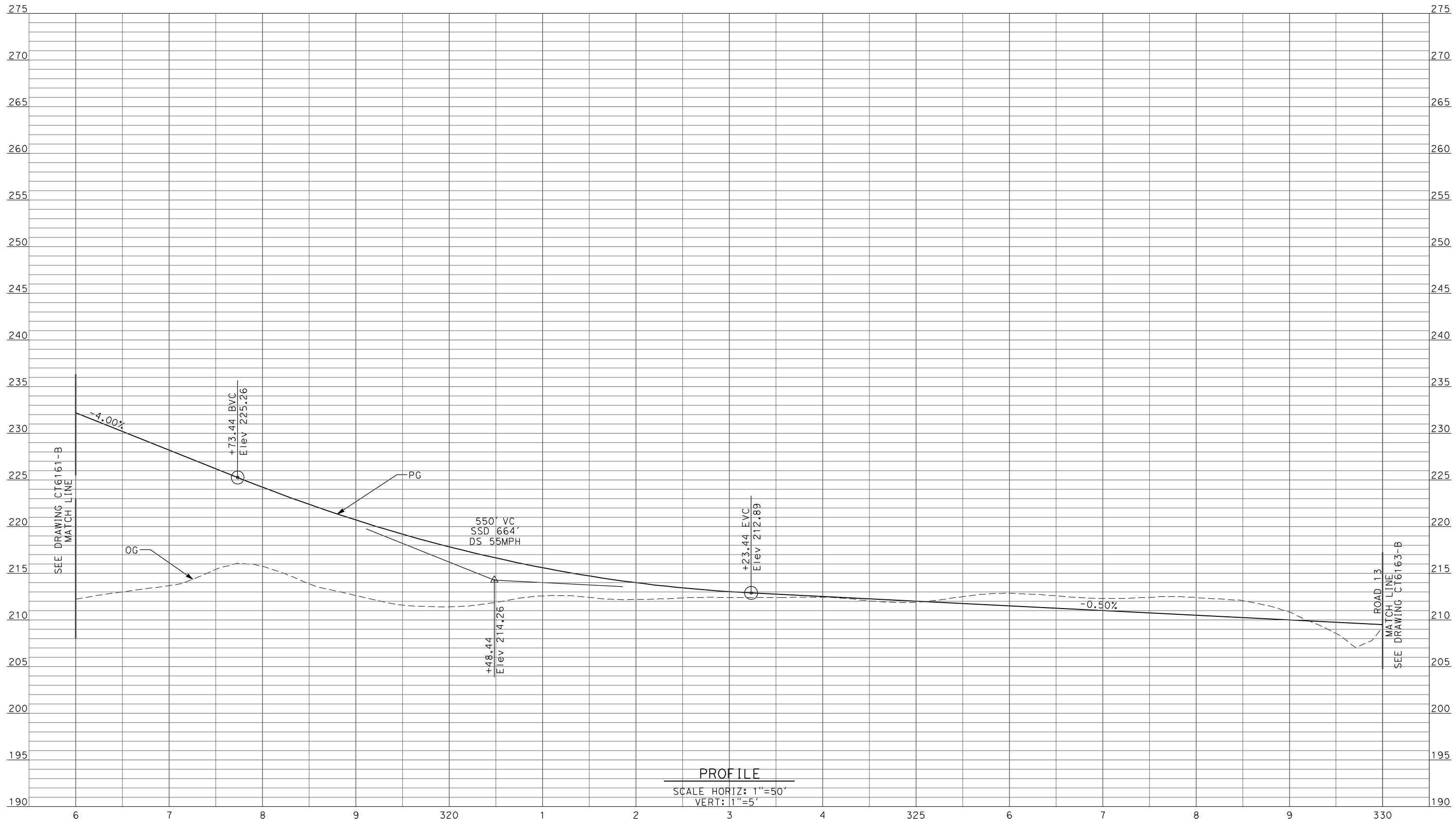


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 WYE/MERCED DO - (WC)  
 GRADE SEPARATION - AVENUE 25  
**PROFILE**  
 SHEET 11 OF 14

CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CT6161-B  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###



4/27/2011 6:40:46 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 1b - ave 24 wye-w.chowchilla\grade separation\Profile\CT6162-B.dgn



**PROFILE**  
 SCALE HORIZ: 1"=50'  
 VERT: 1"=5'

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**D. AYELE**  
 DRAWN BY  
**C. DELOS REYES**  
 CHECKED BY  
**A. SILVER**  
 IN CHARGE  
**A. BOONE**  
 DATE  
**04/29/2011**

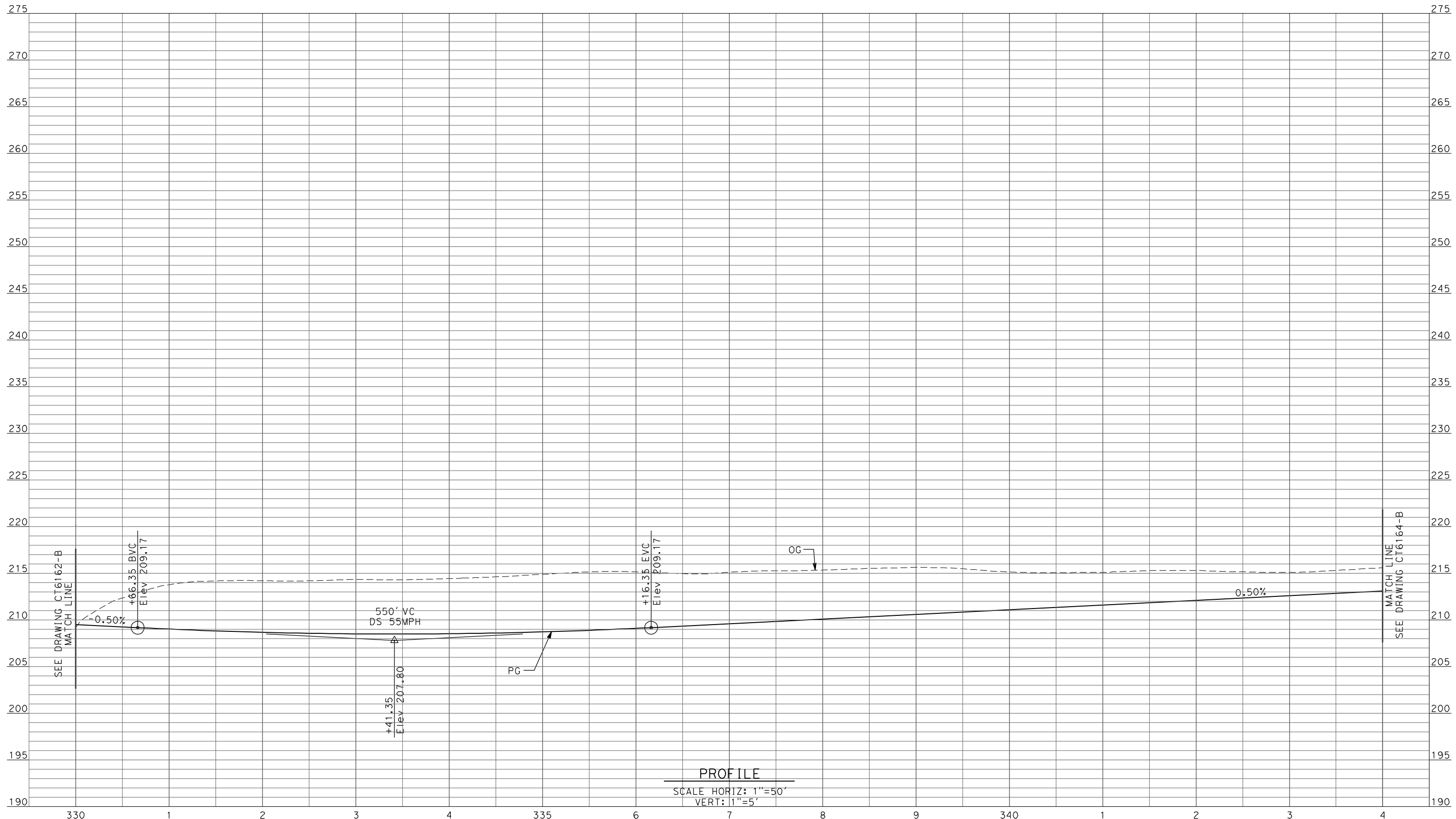
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**SUBMITTAL**  
  
**NOT FOR**  
**CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 WYE/MERCED DO - (WC)  
 GRADE SEPARATION - AVENUE 25  
**PROFILE**  
 SHEET 12 OF 14

CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CT6162-B  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###

4/27/2011 6:40:53 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 1b - ave 24 wye-w.chowchilla\grade separation\Profile\CT6163-B.dgn



**PROFILE**  
 SCALE HORIZ: 1"=50'  
 VERT: 1"=5'

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**D. AYELE**  
 DRAWN BY  
**C. DELOS REYES**  
 CHECKED BY  
**A. SILVER**  
 IN CHARGE  
**A. BOONE**  
 DATE  
**04/29/2011**

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



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 WYE/MERCED DO - (WC)  
 GRADE SEPARATION - AVENUE 25  
**PROFILE**  
 SHEET 13 OF 14

CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CT6163-B  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###



ReyesC1 4/27/2011 6:40:58 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 1b - ave 24 wye-w.chowchilla grade separation\Profile\CT6164-B.dgn



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**D. AYELE**  
 DRAWN BY  
**C. DELOS REYES**  
 CHECKED BY  
**A. SILVER**  
 IN CHARGE  
**A. BOONE**  
 DATE  
**04/29/2011**

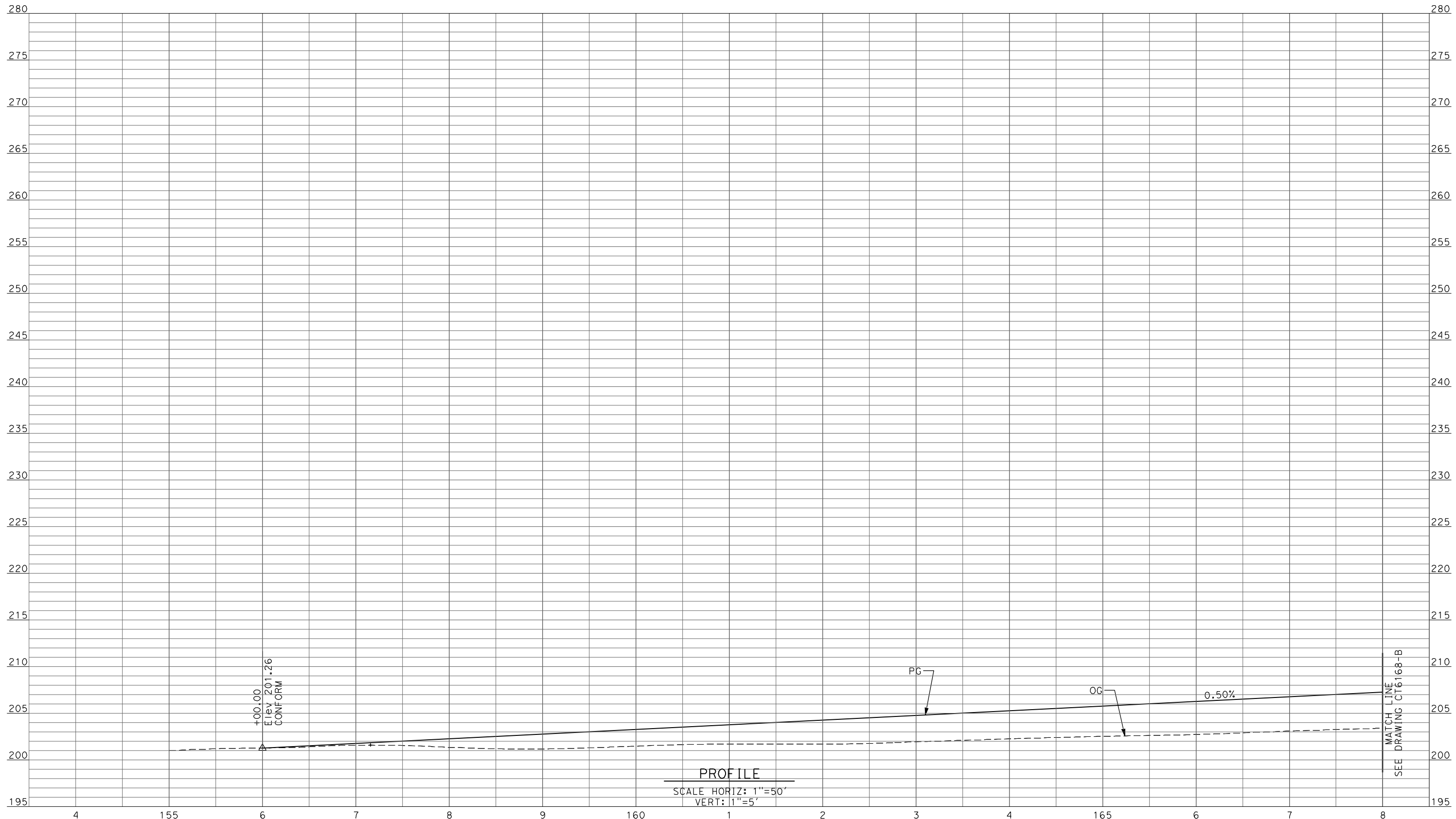
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**15% DESIGN**  
**SUBMITTAL**  
  
**NOT FOR**  
**CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 WYE/MERCED DO - (WC)  
 GRADE SEPARATION - AVENUE 25  
 PROFILE  
 SHEET 14 OF 14

CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CT6164-B  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###

4/27/2011 6:41:03 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 1b - ave 24 wye-w.chowchilla grade separation\Profile\CT61617-B.dgn



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**D. AYELE**  
 DRAWN BY  
**C. DELOS REYES**  
 CHECKED BY  
**A. SILVER**  
 IN CHARGE  
**A. BOONE**  
 DATE  
**04/29/2011**

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

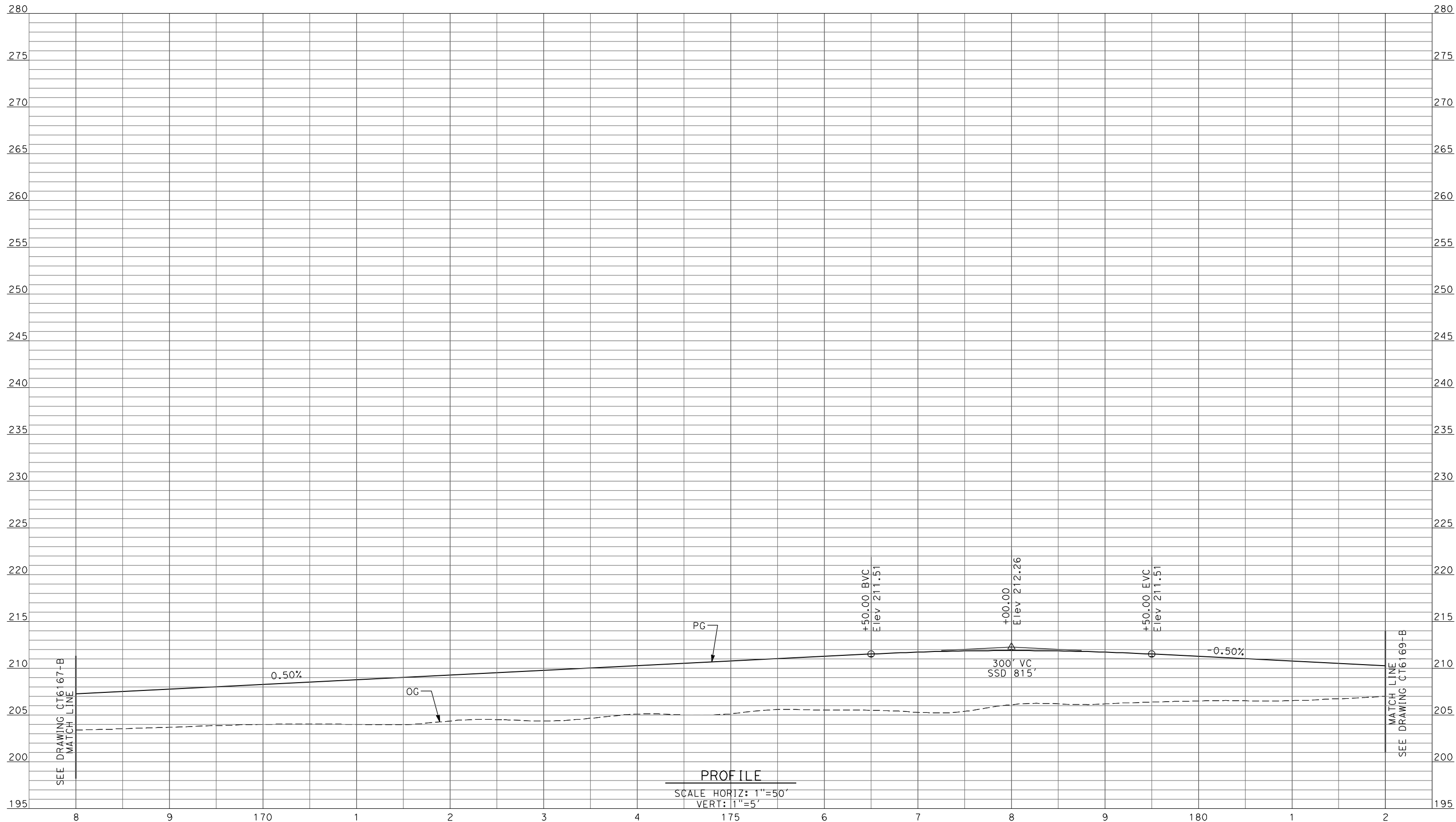


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 WYE/MERCED DO - (WC)  
 GRADE SEPARATION - AVENUE 26 ALT 1  
 PROFILE  
 SHEET 1 OF 10

CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CT61617-B  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###



4/27/2011 6:41:08 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 1b - ave 24 wye-w.chowchilla\grade separation\Profile\CT6168-B.dgn



**PROFILE**  
 SCALE HORIZ: 1"=50'  
 VERT: 1"=5'

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**D. AYELE**  
 DRAWN BY  
**C. DELOS REYES**  
 CHECKED BY  
**A. SILVER**  
 IN CHARGE  
**A. BOONE**  
 DATE  
**04/29/2011**

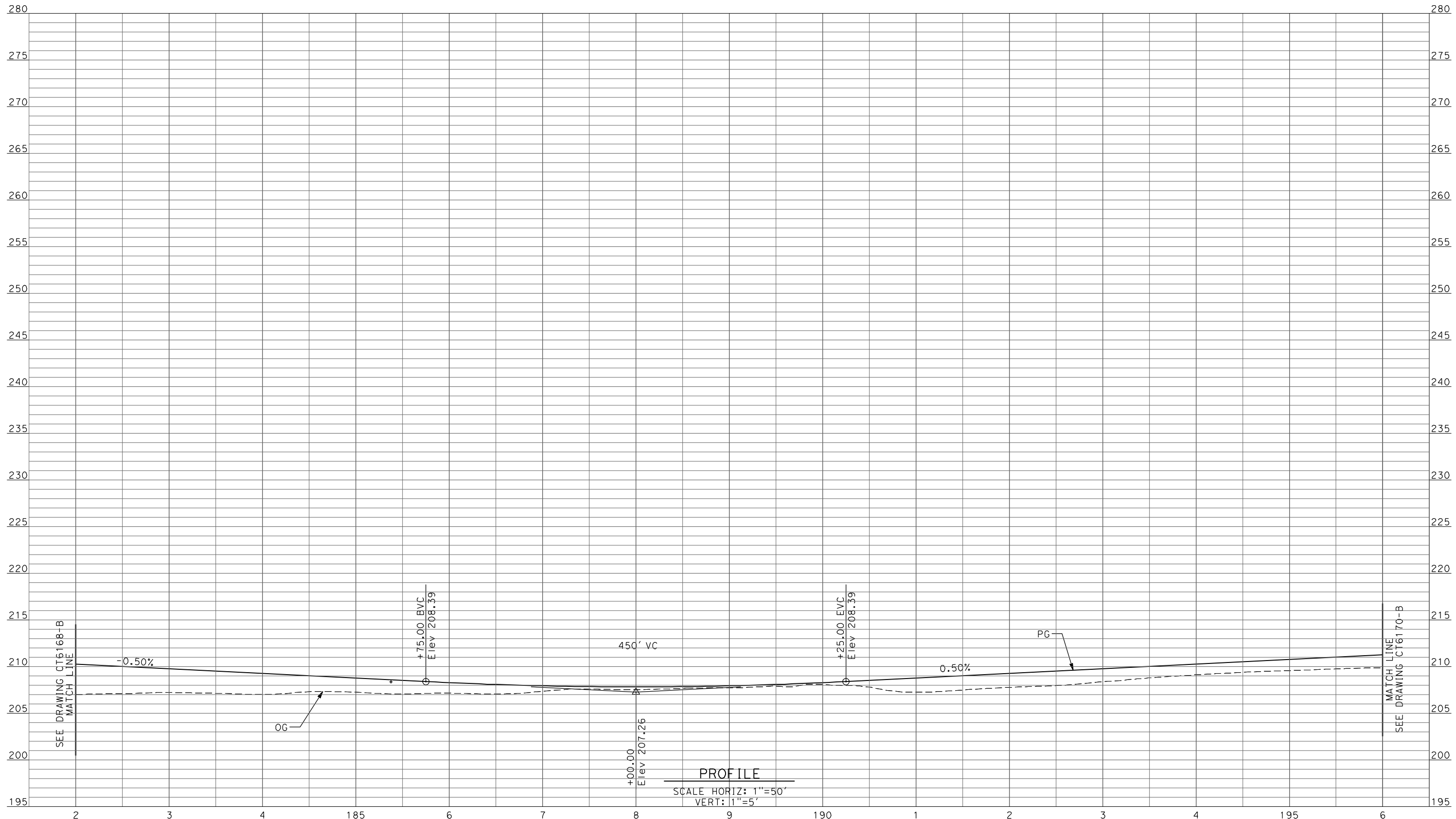
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**15% DESIGN**  
**SUBMITTAL**  
  
**NOT FOR**  
**CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 WYE/MERCED DO - (WC)  
 GRADE SEPARATION - AVENUE 26 ALT 1  
 PROFILE  
 SHEET 2 OF 10

CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CT6168-B  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###

4/27/2011 6:41:12 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 1b - ave 24 wye-w.chowchilla grade separation\Profile\CT6169-B.dgn



**PROFILE**  
 SCALE HORIZ: 1"=50'  
 VERT: 1"=5'

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**D. AYELE**  
 DRAWN BY  
**C. DELOS REYES**  
 CHECKED BY  
**A. SILVER**  
 IN CHARGE  
**A. BOONE**  
 DATE  
**04/29/2011**

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

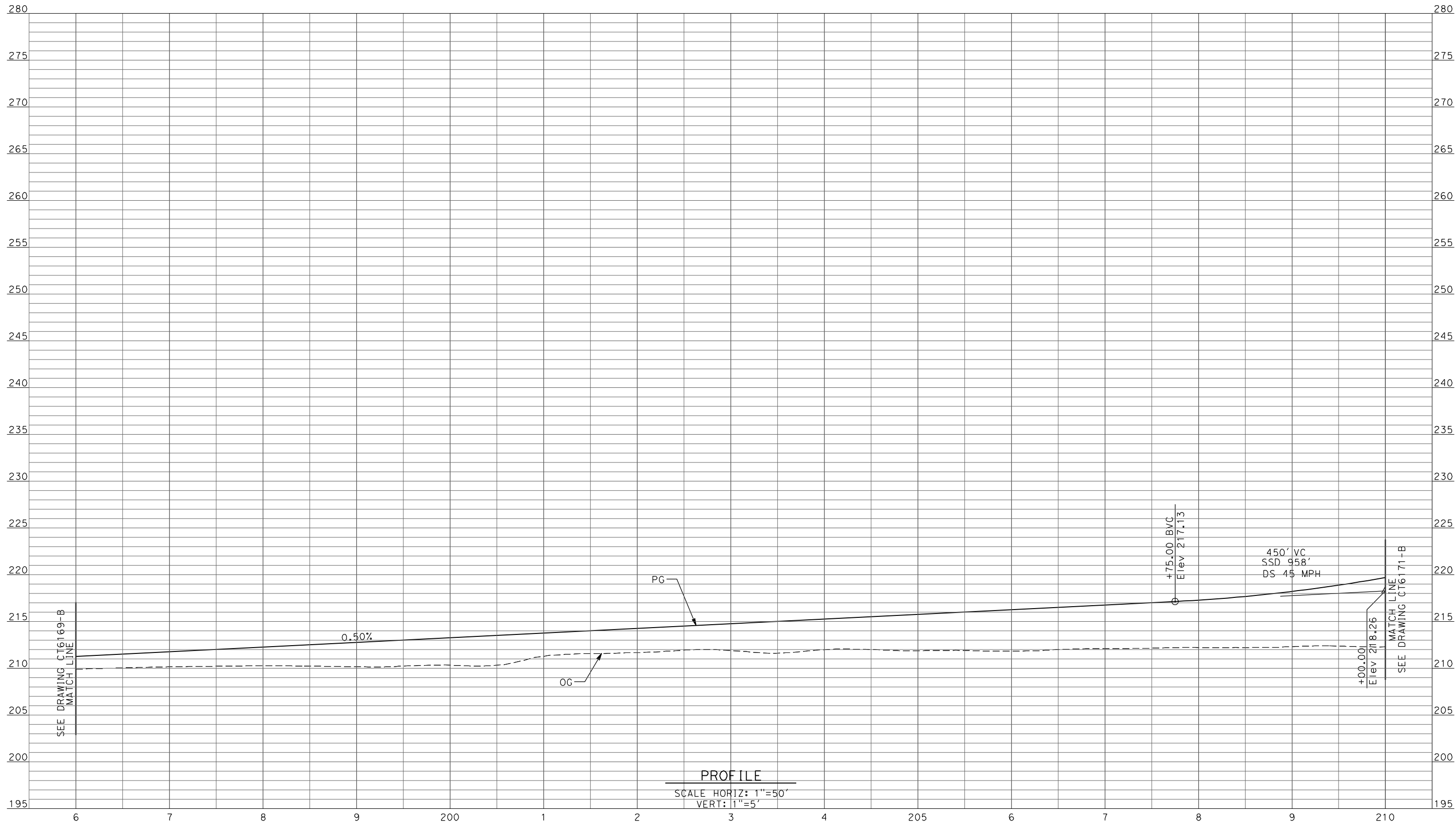


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 WYE/MERCED DO - (WC)  
 GRADE SEPARATION - AVENUE 26 ALT 1  
 PROFILE  
 SHEET 3 OF 10

CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CT6169-B  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###



4/27/2011 6:41:17 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 1b - ave 24 wye-w.chowchilla grade separation\Profile\CT6170-B.dgn



**PROFILE**  
 SCALE HORIZ: 1"=50'  
 VERT: 1"=5'

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**D. AYELE**  
 DRAWN BY  
**C. DELOS REYES**  
 CHECKED BY  
**A. SILVER**  
 IN CHARGE  
**A. BOONE**  
 DATE  
**04/29/2011**

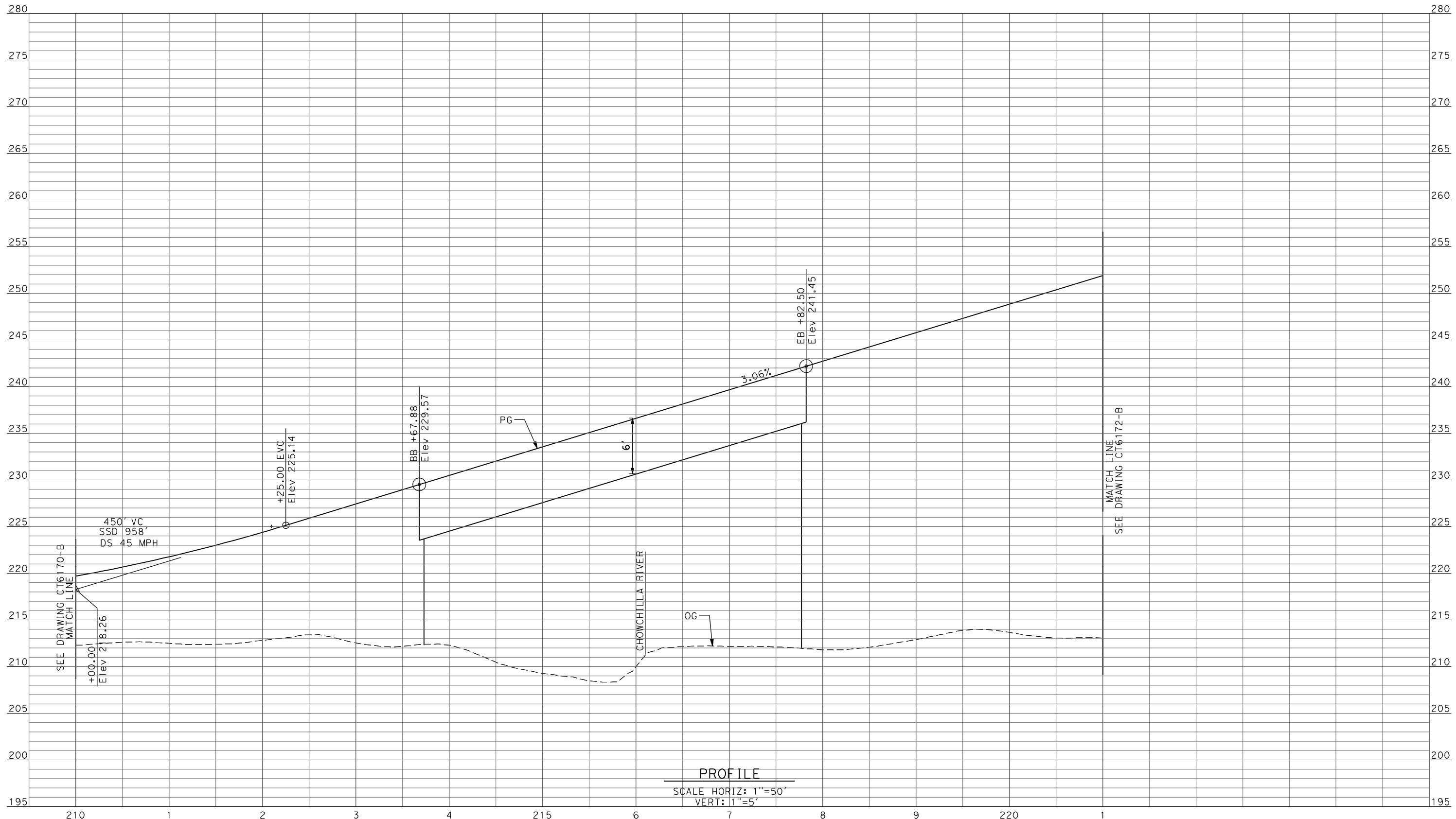
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**15% DESIGN**  
**SUBMITTAL**  
  
**NOT FOR**  
**CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 WYE/MERCED DO - (WC)  
 GRADE SEPARATION - AVENUE 26 ALT 1  
**PROFILE**  
 SHEET 4 OF 10

CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CT6170-B  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###

4/27/2011 6:41:22 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 1b - ave 24 wye-w.chowchilla\grade separation\Profile\CT6171-B.dgn  
 ReyesC1



**PROFILE**  
 SCALE HORIZ: 1"=50'  
 VERT: 1"=5'

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**D. AYELE**  
 DRAWN BY  
**C. DELOS REYES**  
 CHECKED BY  
**A. SILVER**  
 IN CHARGE  
**A. BOONE**  
 DATE  
**04/29/2011**

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

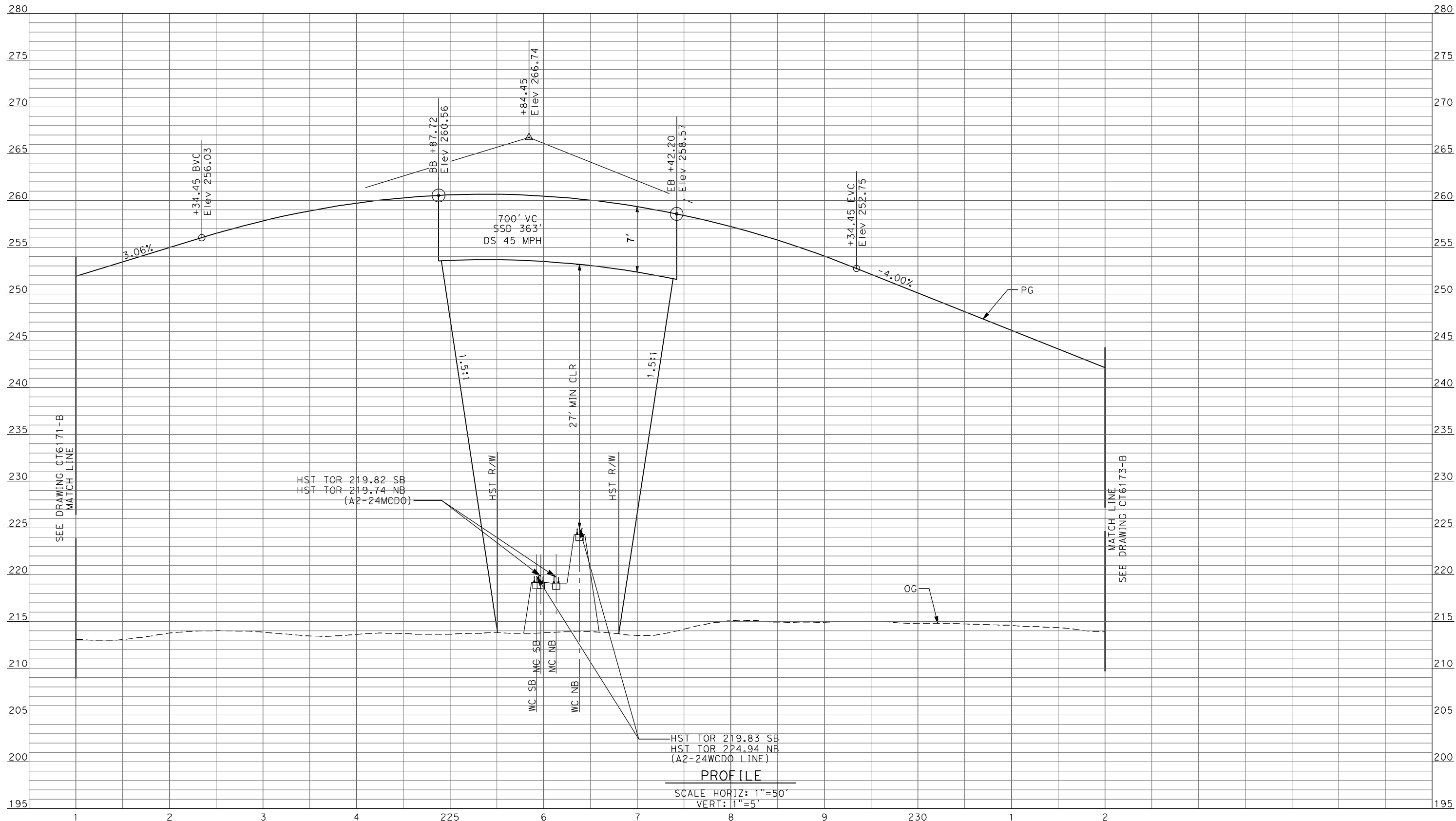


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 WYE/MERCED DO - (WC)  
 GRADE SEPARATION - AVENUE 26 ALT 1  
**PROFILE**  
 SHEET 5 OF 10

CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CT6171-B  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###



4/27/2011 6:41:27 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 1b - ave 24 wye-w.chowchilla grade separation\Profile\CT6172-B.dgn  
 ReyesC1



**PROFILE**  
 SCALE HORIZ: 1"=50'  
 VERT: 1"=5'

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**D. AYELE**  
 DRAWN BY  
**C. DELOS REYES**  
 CHECKED BY  
**A. SILVER**  
 IN CHARGE  
**A. BOONE**  
 DATE  
**04/29/2011**

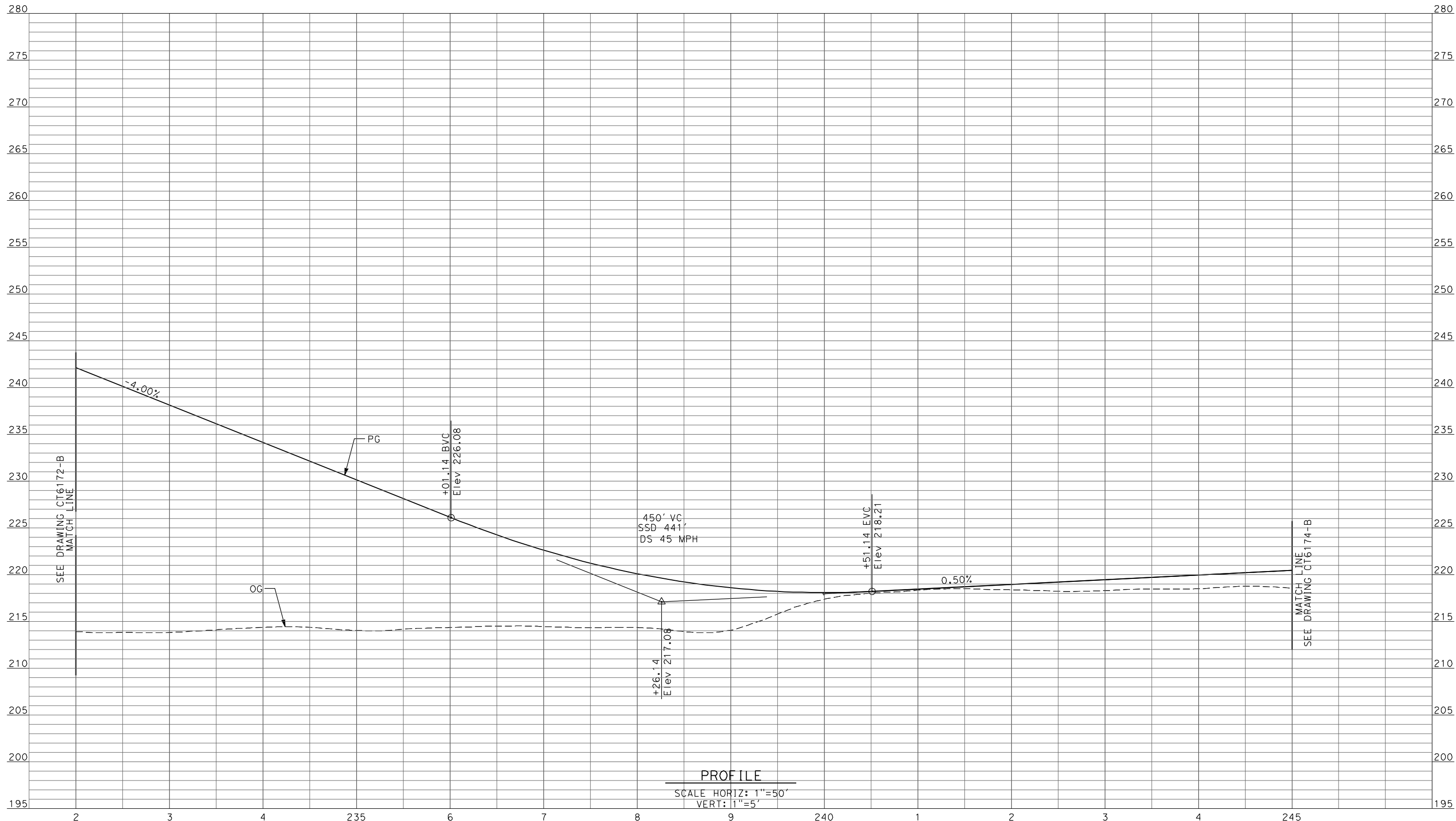
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**15% DESIGN**  
**SUBMITTAL**  
  
**NOT FOR**  
**CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 WYE/MERCED DO - (WC)  
 GRADE SEPARATION - AVENUE 26 ALT 1  
 PROFILE  
 SHEET 6 OF 10

CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CT6172-B  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###

4/27/2011 6:41:33 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 1b - ave 24 wye-w.chowchilla\grade separation\Profile\CT6173-B.dgn



**PROFILE**  
 SCALE HORIZ: 1"=50'  
 VERT: 1"=5'

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**D. AYELE**  
 DRAWN BY  
**C. DELOS REYES**  
 CHECKED BY  
**A. SILVER**  
 IN CHARGE  
**A. BOONE**  
 DATE  
**04/29/2011**

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

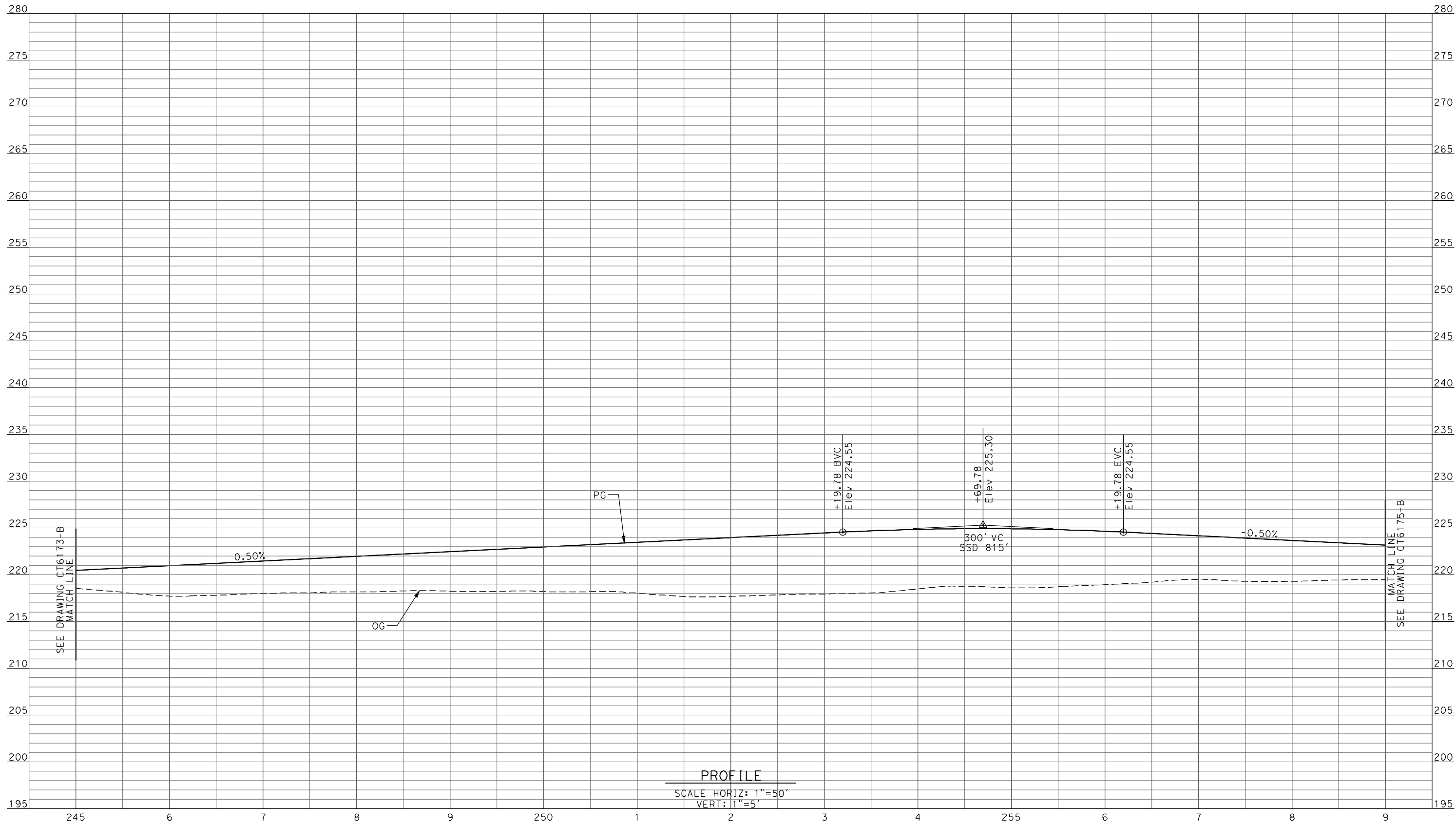


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 WYE/MERCED DO - (WC)  
 GRADE SEPARATION - AVENUE 26 ALT 1  
**PROFILE**  
 SHEET 7 OF 10

CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CT6173-B  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###



4/27/2011 6:41:38 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 1b - ave 24 wye-w.chowchilla grade separation\Profile\CT6174-B.dgn



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**D. AYELE**  
 DRAWN BY  
**C. DELOS REYES**  
 CHECKED BY  
**A. SILVER**  
 IN CHARGE  
**A. BOONE**  
 DATE  
**04/29/2011**

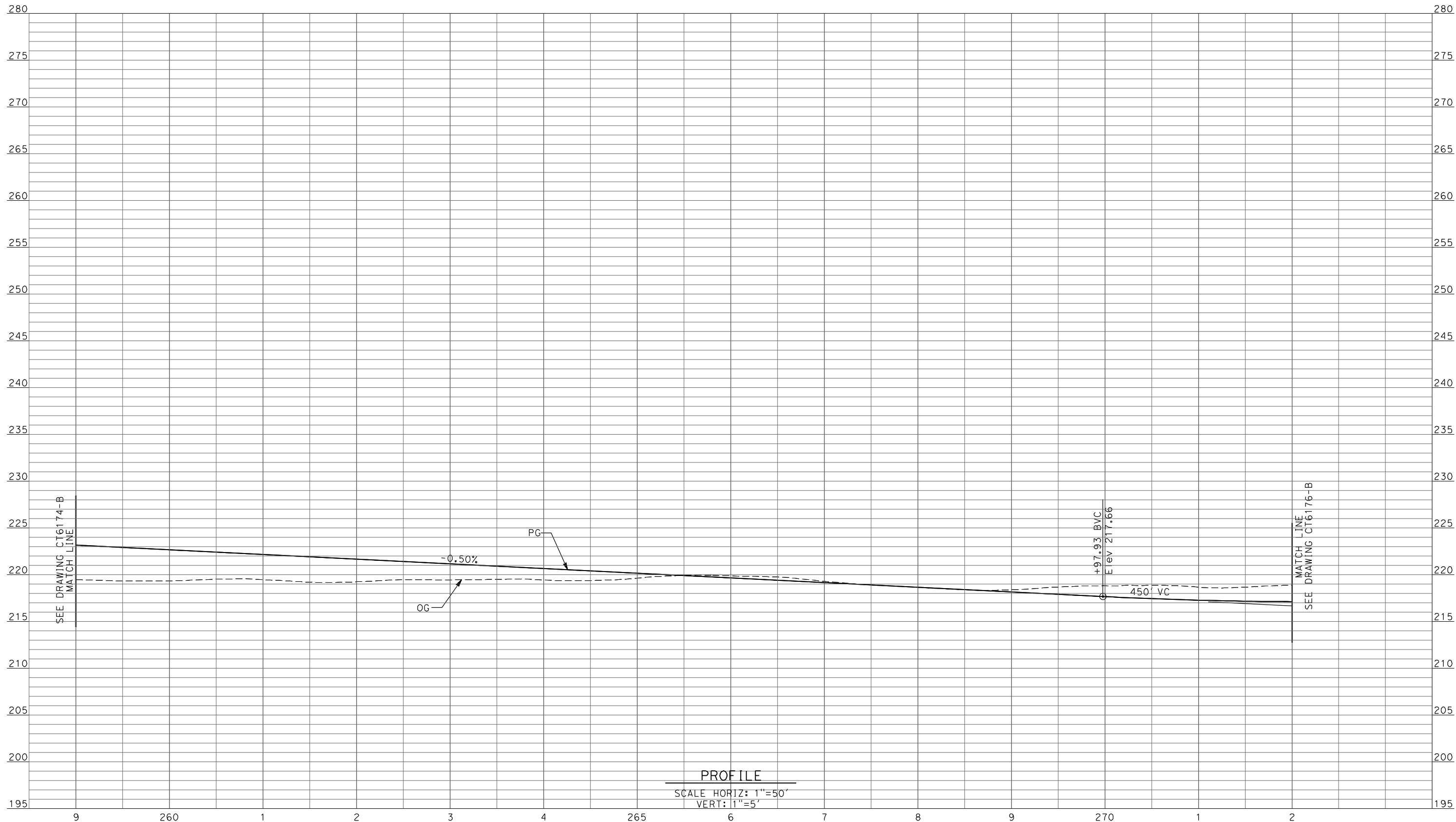
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**15% DESIGN**  
**SUBMITTAL**  
  
**NOT FOR**  
**CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 WYE/MERCED DO - (WC)  
 GRADE SEPARATION - AVENUE 26 ALT 1  
 PROFILE  
 SHEET 8 OF 10

CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CT6174-B  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###

4/27/2011 6:41:43 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 1b - ave 24 wye-w.chowchilla\grade separation\Profile\CT6175-B.dgn



PROFILE  
 SCALE HORIZ: 1"=50'  
 VERT: 1"=5'

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
 DRAWN BY  
C. DELOS REYES  
 CHECKED BY  
A. SILVER  
 IN CHARGE  
A. BOONE  
 DATE  
04/29/2011

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

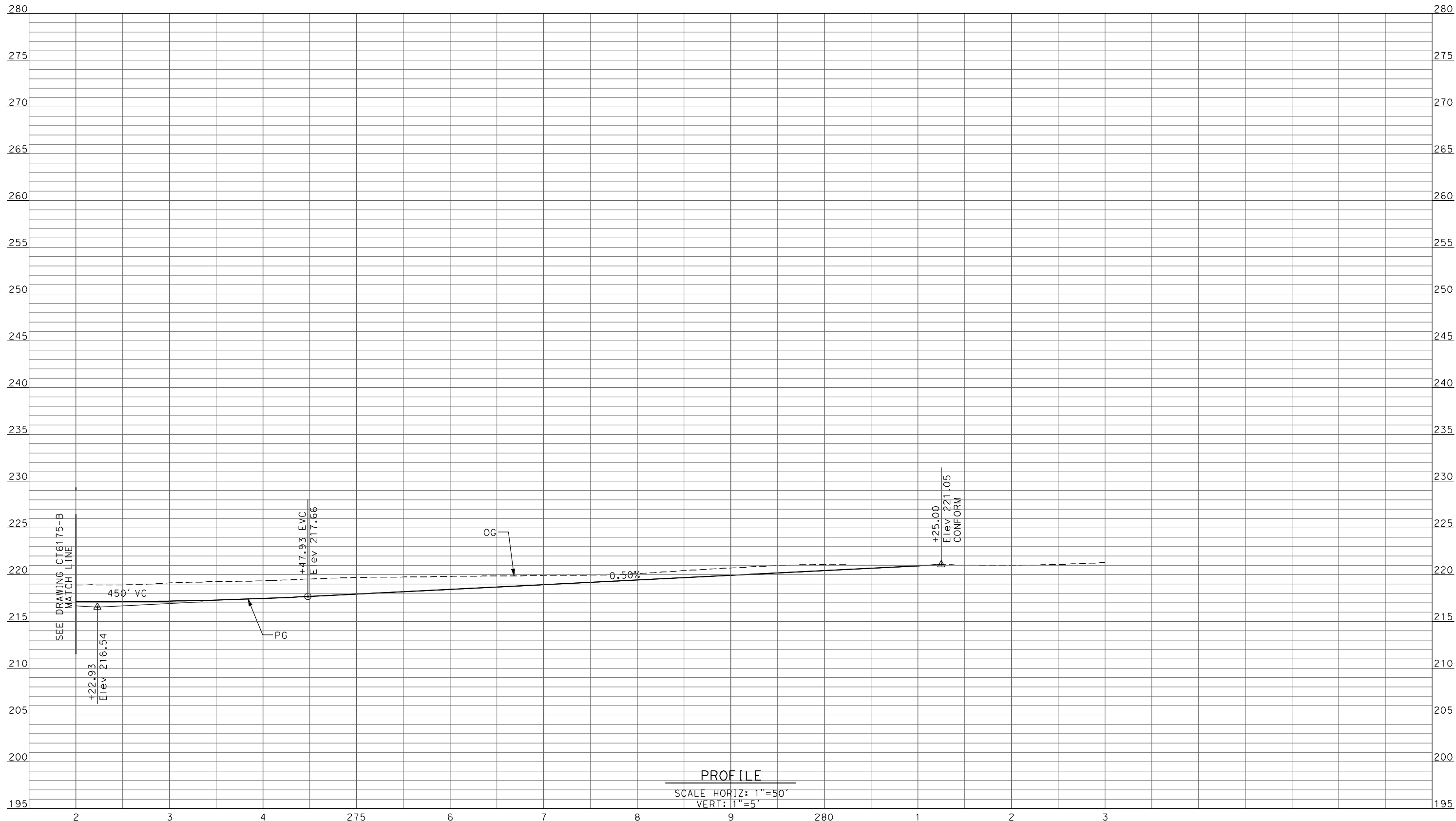


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 WYE/MERCED DO - (WC)  
 GRADE SEPARATION - AVENUE 26 ALT 1  
 PROFILE  
 SHEET 9 OF 10

CONTRACT NO.  
HSR06-007  
 DRAWING NO.  
CT6175-B  
 SCALE  
AS SHOWN  
 SHEET NO.  
### OF ###



4/27/2011 6:41:48 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 1b - ave 24 wye-w.chowchilla\grade separation\Profile\CT6176-B.dgn  
 ReyesC1



**PROFILE**  
 SCALE HORIZ: 1"=50'  
 VERT: 1"=5'

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**D. AYELE**  
 DRAWN BY  
**C. DELOS REYES**  
 CHECKED BY  
**A. SILVER**  
 IN CHARGE  
**A. BOONE**  
 DATE  
**04/29/2011**

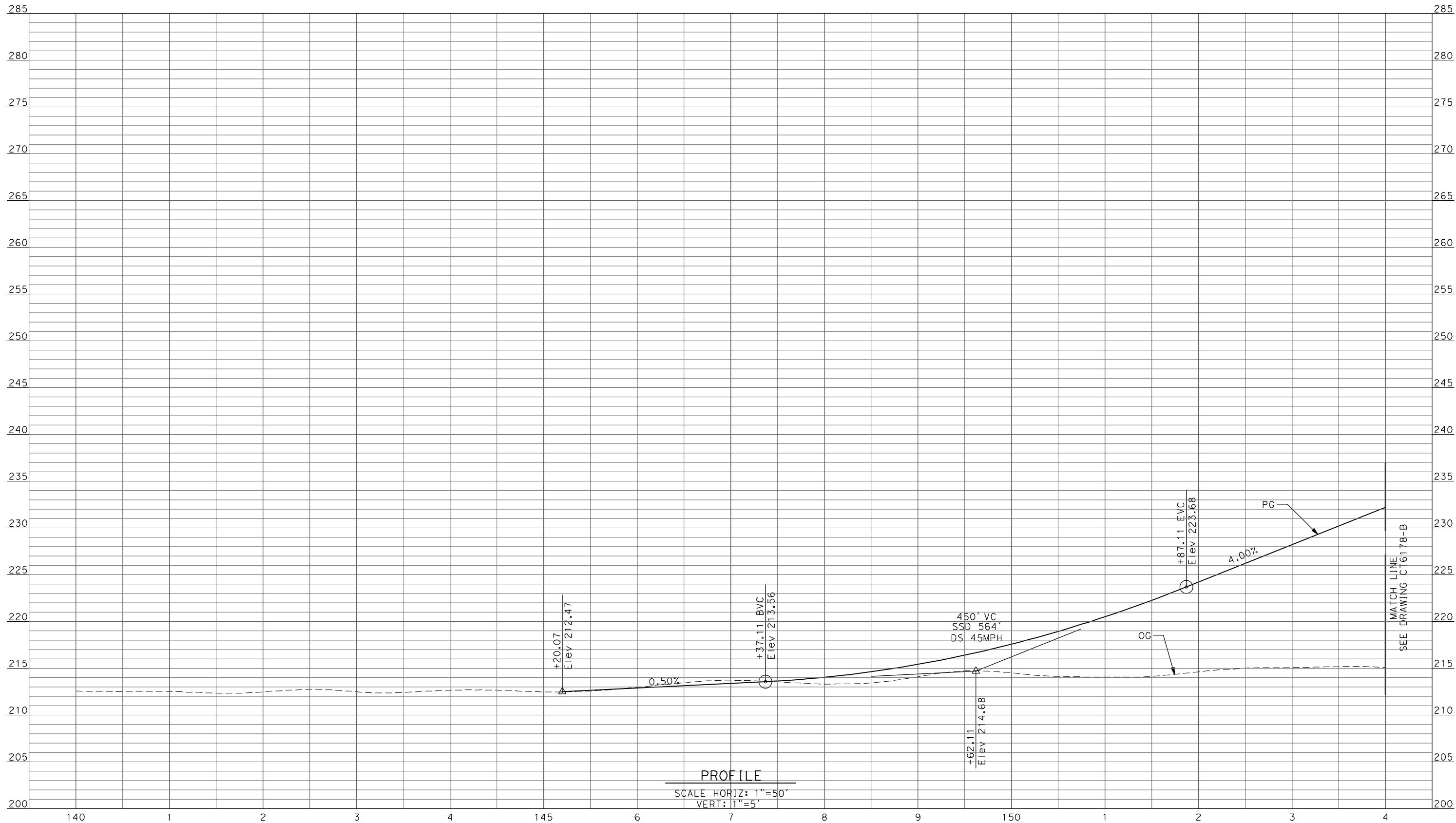
**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**  
  
**NOT FOR**  
**CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 WYE/MERCED DO - (WC)  
 GRADE SEPARATION - AVENUE 26 ALT 1  
**PROFILE**  
 SHEET 10 OF 10

CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CT6176-B  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###

4/27/2011 6:41:53 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 1b - ave 24 wye-w.chowchilla grade separation\Profile\CT6177-B.dgn



**PROFILE**  
 SCALE HORIZ: 1"=50'  
 VERT: 1"=5'

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**D. AYELE**  
 DRAWN BY  
**C. DELOS REYES**  
 CHECKED BY  
**A. SILVER**  
 IN CHARGE  
**A. BOONE**  
 DATE  
**04/29/2011**

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

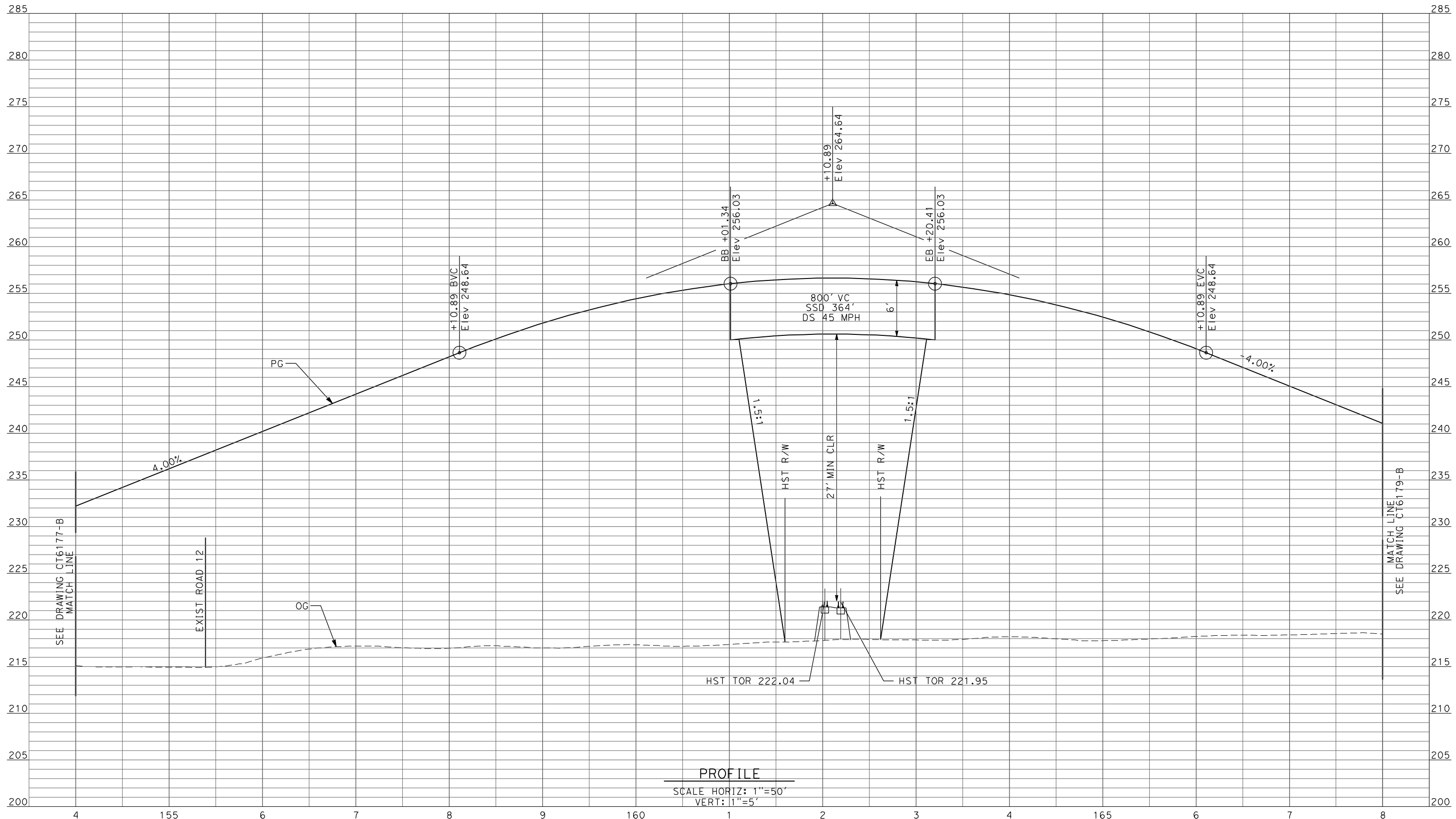


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 MERCED DO - (WC)  
 GRADE SEPARATION - CROSS ROAD  
 PROFILE  
 SHEET 1 OF 3

CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CT6177-B  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###



4/27/2011 6:41:58 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 1b - ave 24 wye-w.chowchilla grade separation\Profile\CT6178-B.dgn



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**D. AYELE**  
 DRAWN BY  
**C. DELOS REYES**  
 CHECKED BY  
**A. SILVER**  
 IN CHARGE  
**A. BOONE**  
 DATE  
**04/29/2011**

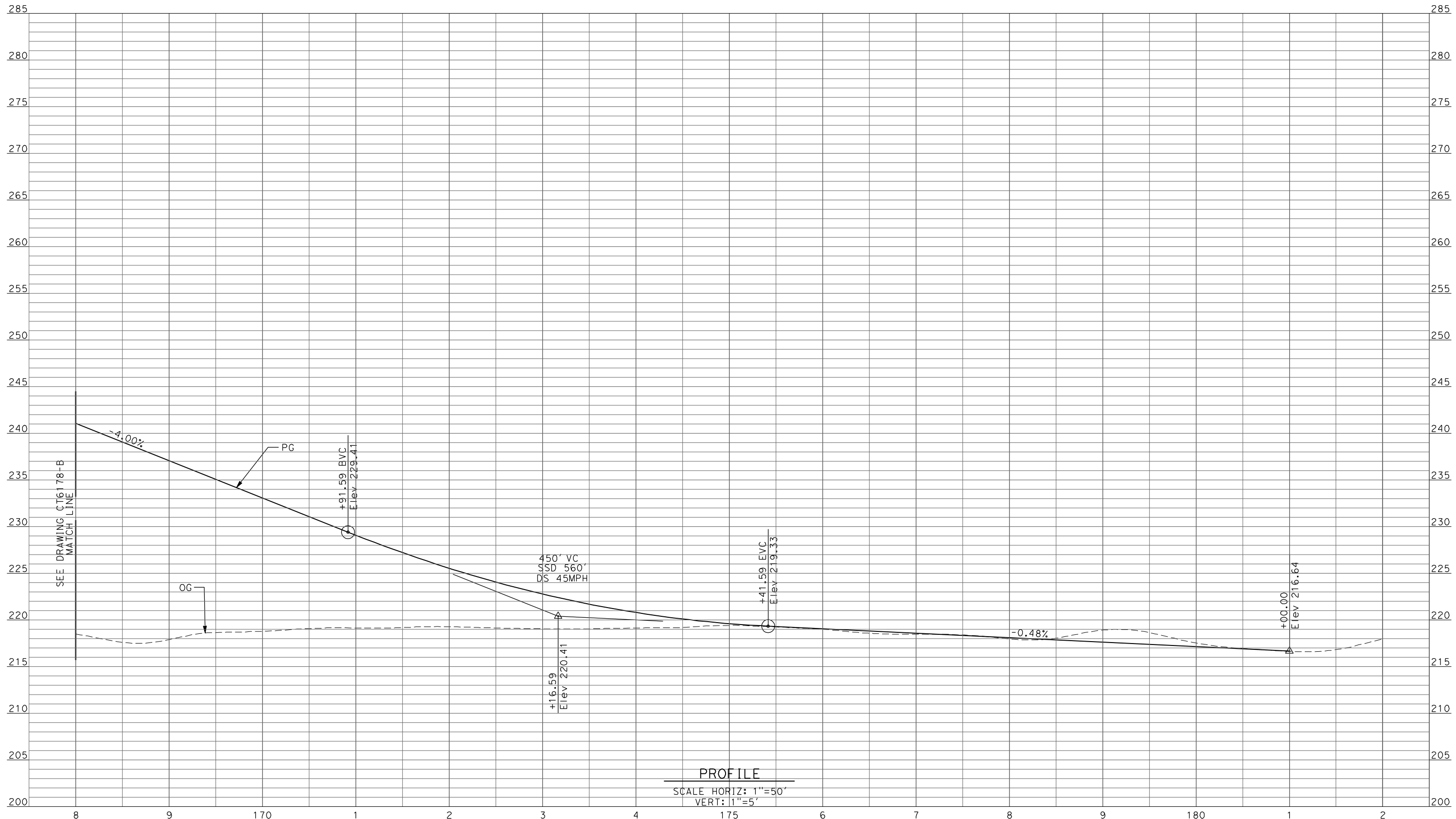
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**15% DESIGN**  
**SUBMITTAL**  
  
**NOT FOR**  
**CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 MERCED DO - (WC)  
 GRADE SEPARATION - CROSS ROAD  
 PROFILE  
 SHEET 2 OF 3

CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CT6178-B  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###

4/27/2011 6:42:03 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 1b - ave 24 wye-w.chowchilla grade separation\Profile\CT6179-B.dgn



**PROFILE**  
 SCALE HORIZ: 1"=50'  
 VERT: 1"=5'

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**D. AYELE**  
 DRAWN BY  
**C. DELOS REYES**  
 CHECKED BY  
**A. SILVER**  
 IN CHARGE  
**A. BOONE**  
 DATE  
**04/29/2011**

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

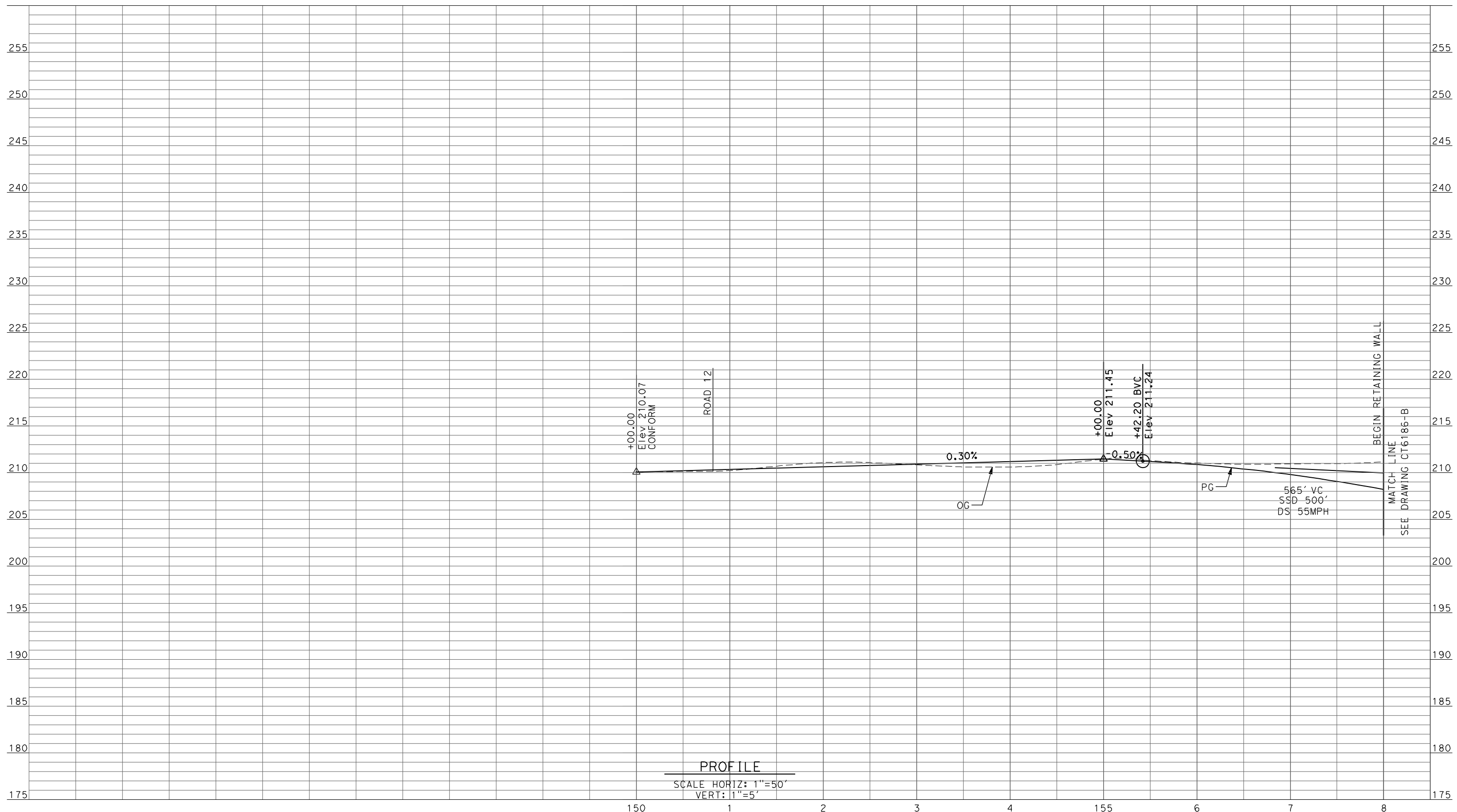


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 MERCED DO - (WC)  
 GRADE SEPARATION - CROSS ROAD  
 PROFILE  
 SHEET 3 OF 3

CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CT6179-B  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###



4/27/2011 6:42:07 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 1b - ave 24 wye-w.chowchilla grade separation\Profile\CT6185-B.dgn



**PROFILE**  
 SCALE HORIZ: 1"=50'  
 VERT: 1"=5'

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**D. AYELE**  
 DRAWN BY  
**C. DELOS REYES**  
 CHECKED BY  
**A. SILVER**  
 IN CHARGE  
**A. BOONE**  
 DATE  
**04/29/2011**

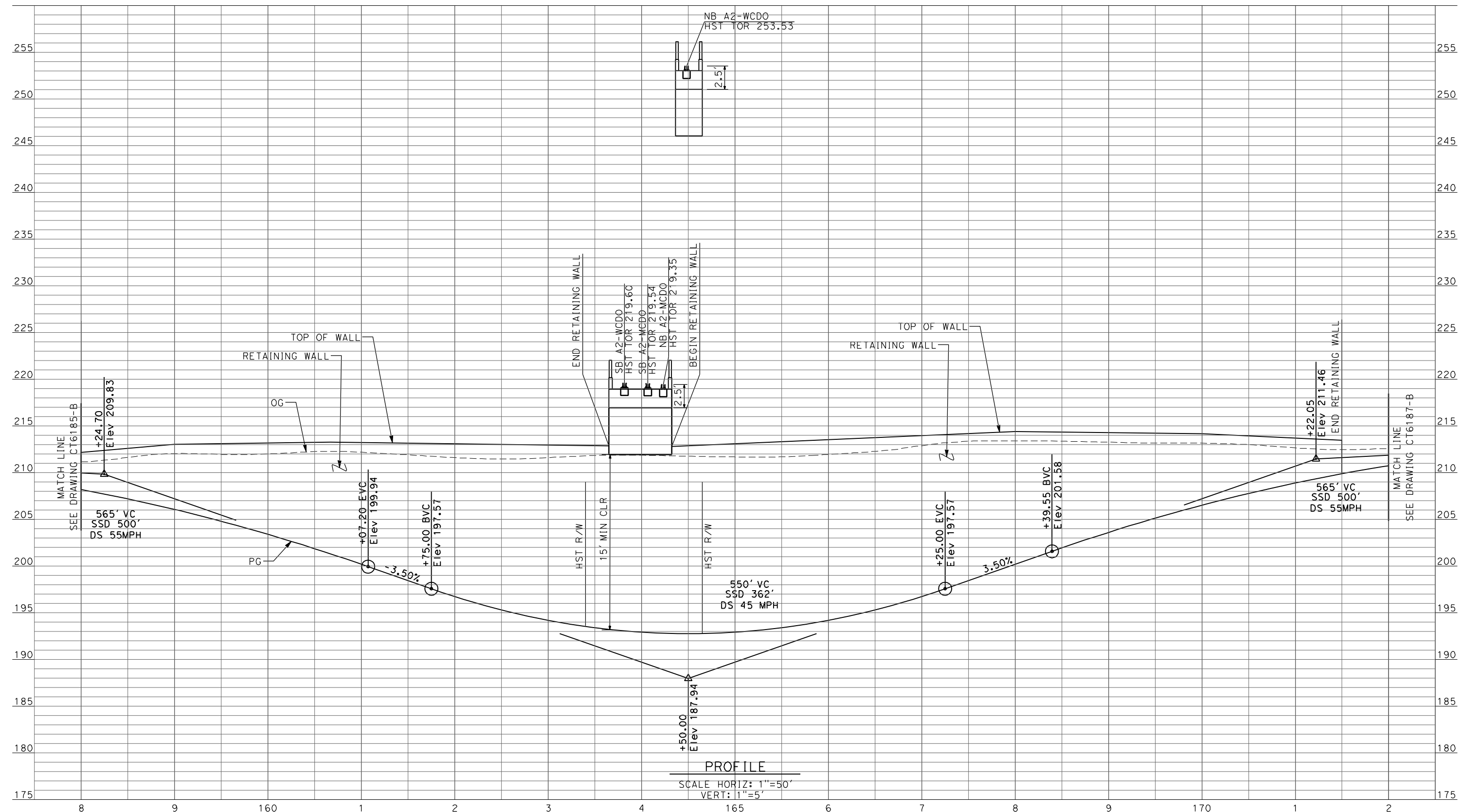
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**SUBMITTAL**  
  
**NOT FOR**  
**CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 WYE/MERCED DO - (WC)  
 UNDERPASS - AVENUE 26 ALT 2  
 PROFILE  
 SHEET 1 OF 3

CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CT6185-B  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###

4/29/2011 11:44:43 AM P:\60022962\Task 02\_Merced-Fresno\cadd\Civil\Sheet\Fresno\Volume 1B - Ave 24 Wye & W. Chowchilla\Grade Separation\Profile\CT6186-B.dgn



**PROFILE**  
 SCALE HORIZ: 1"=50'  
 VERT: 1"=5'

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
 DRAWN BY  
C. DELOS REYES  
 CHECKED BY  
A. SILVER  
 IN CHARGE  
A. BOONE  
 DATE  
04/29/2011

**RECORD SET**  
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**SUBMITTAL**

**NOT FOR**  
**CONSTRUCTION**

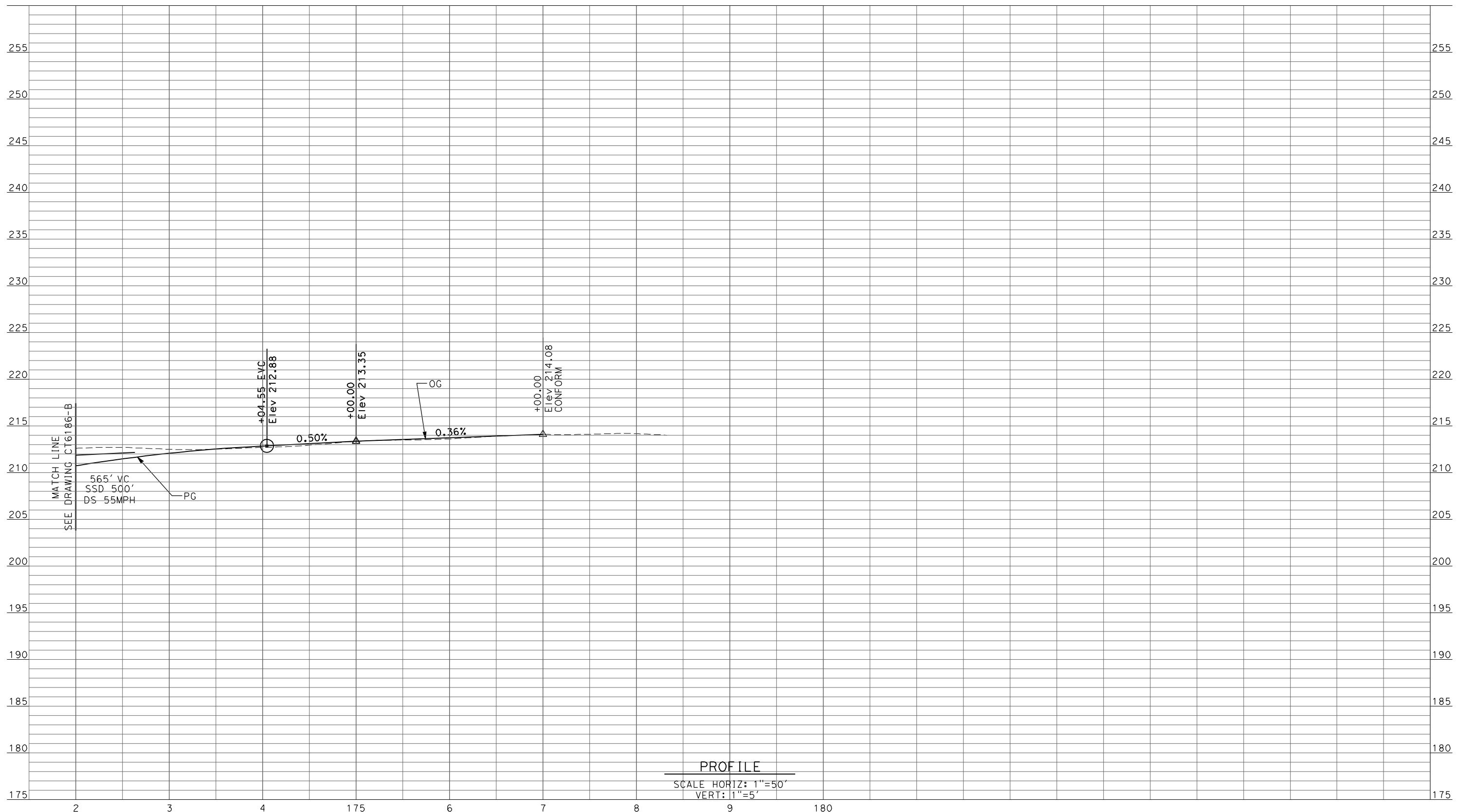


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 WYE/MERCED DO - (WC)  
 UNDERPASS - AVENUE 26 ALT 2  
 PROFILE  
 SHEET 2 OF 3

CONTRACT NO.  
HSR06-007  
 DRAWING NO.  
CT6186-B  
 SCALE  
AS SHOWN  
 SHEET NO.  
### OF ###



4/27/2011 6:42:15 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 1b - ave 24 wye-w.chowchilla grade separation\Profile\CT6187-B.dgn



**PROFILE**  
 SCALE HORIZ: 1"=50'  
 VERT: 1"=5'

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**D. AYELE**  
 DRAWN BY  
**C. DELOS REYES**  
 CHECKED BY  
**A. SILVER**  
 IN CHARGE  
**A. BOONE**  
 DATE  
**04/29/2011**

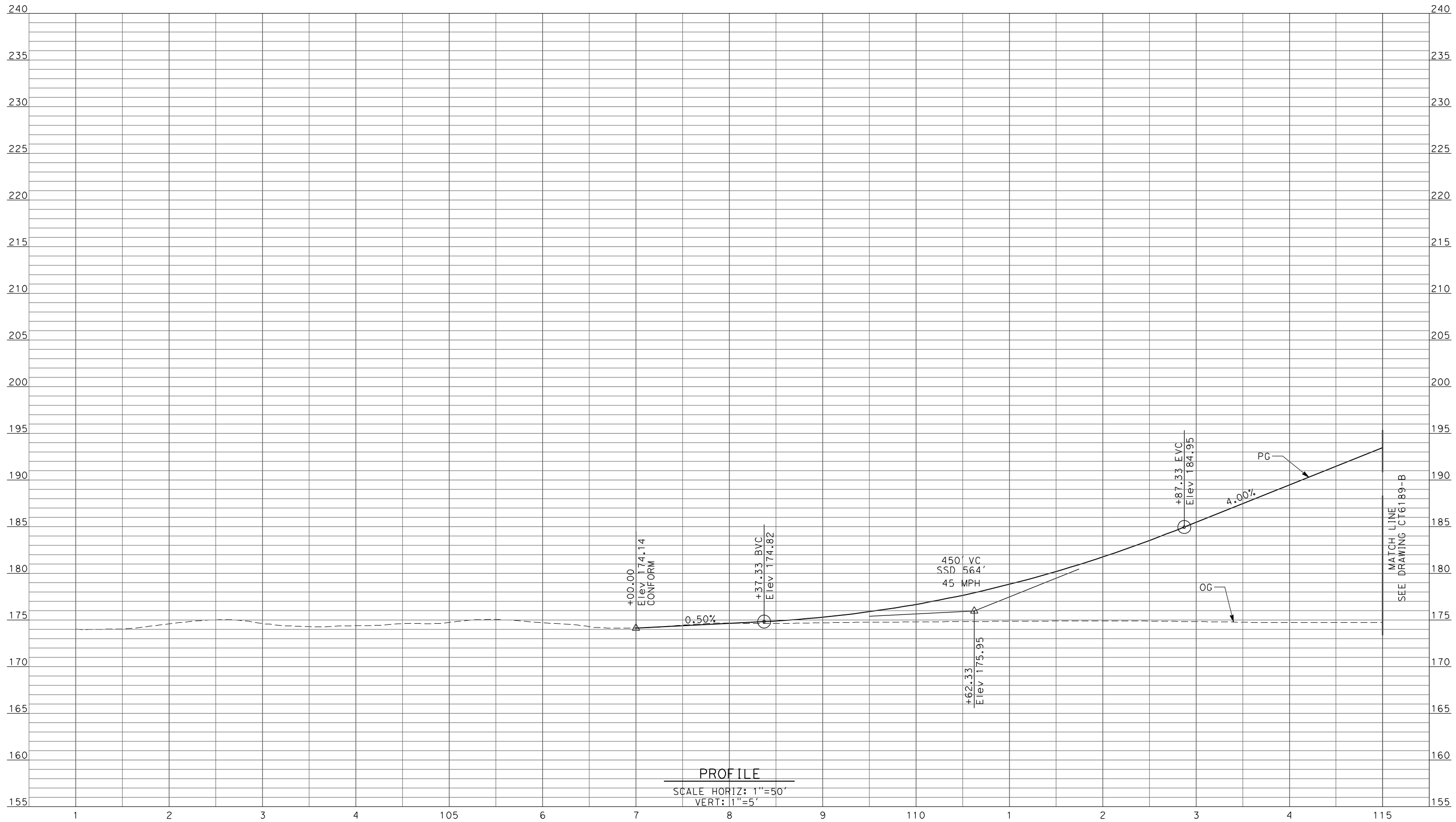
**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**  
  
**NOT FOR**  
**CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 WYE/MERCED DO - (WC)  
 UNDERPASS - AVENUE 26 ALT 2  
 PROFILE  
 SHEET 3 OF 3

CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CT6187-B  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###

4/27/2011 6:42:18 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 1b - ave 24 wye-w.chowchilla grade separation\Profile\CT6188-B.dgn



**PROFILE**  
 SCALE HORIZ: 1"=50'  
 VERT: 1"=5'

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**D. AYELE**  
 DRAWN BY  
**C. DELOS REYES**  
 CHECKED BY  
**A. SILVER**  
 IN CHARGE  
**A. BOONE**  
 DATE  
**04/29/2011**

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

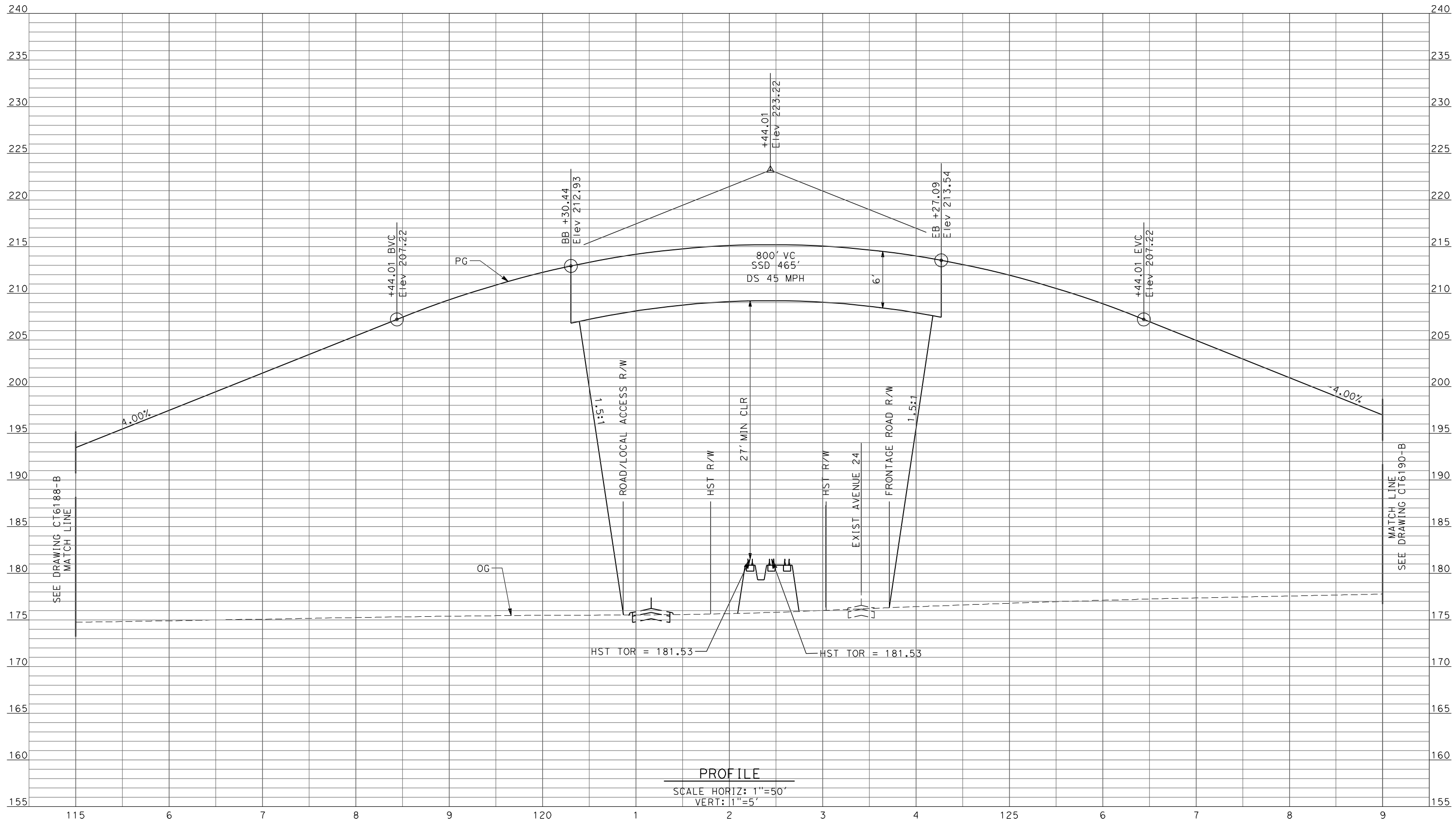


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 MAINLINE/WYE - (AVE 24)  
 GRADE SEPARATION - ROAD 9 ALONG EXIST ALT 2  
**PROFILE**  
 SHEET 1 OF 3

CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CT6188-B  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###



4/27/2011 6:42:21 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 1b - ave 24 wye-w.chowchilla grade separation\Profile\CT6189-B.dgn



**PROFILE**  
 SCALE HORIZ: 1"=50'  
 VERT: 1"=5'

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**D. AYELE**  
 DRAWN BY  
**C. DELOS REYES**  
 CHECKED BY  
**A. SILVER**  
 IN CHARGE  
**A. BOONE**  
 DATE  
**04/29/2011**

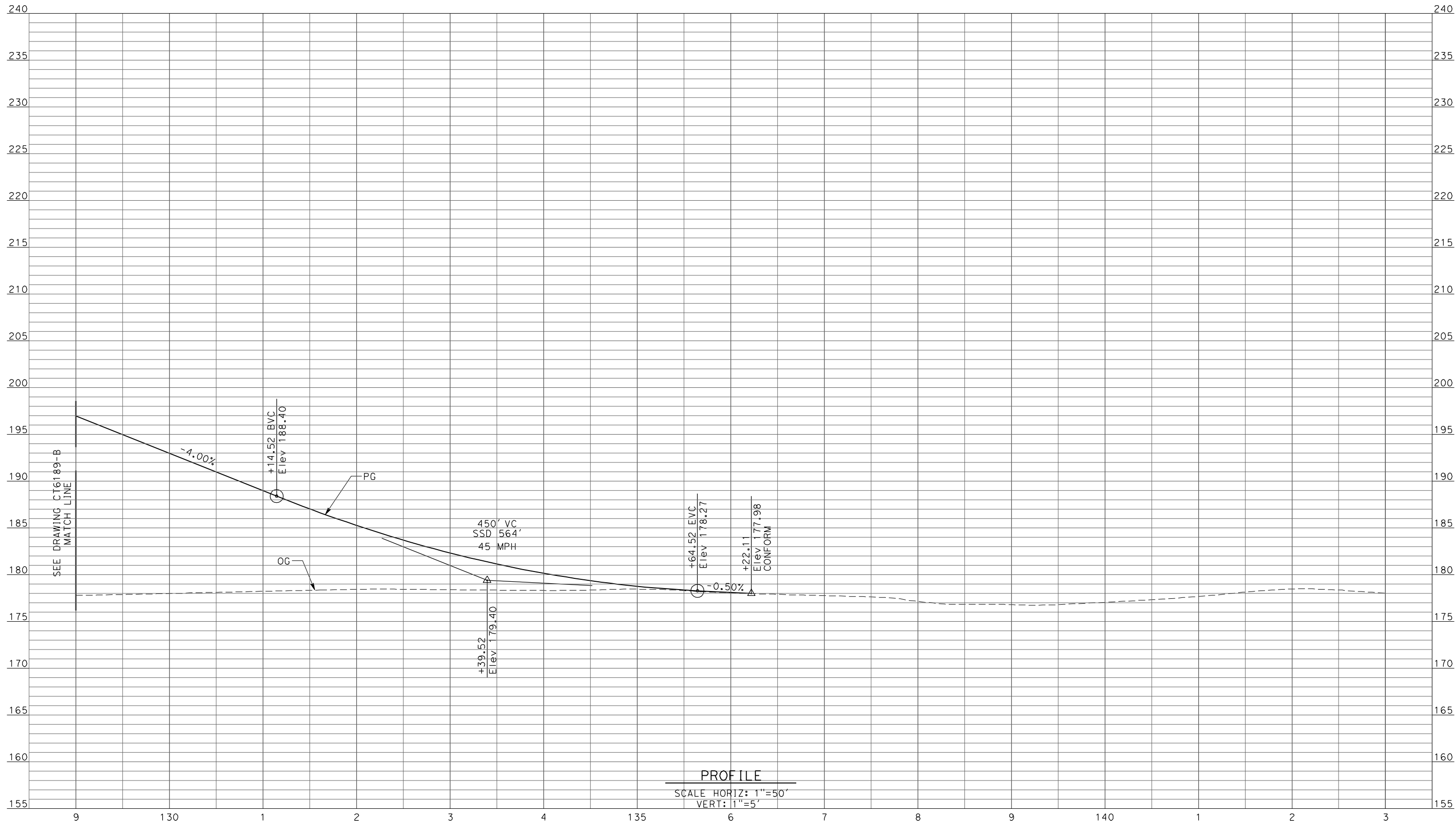
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**15% DESIGN**  
**SUBMITTAL**  
  
**NOT FOR**  
**CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 MAINLINE/WYE - (AVE 24)  
 GRADE SEPARATION - ROAD 9 ALONG EXIST ALT 2  
**PROFILE**  
 SHEET 2 OF 3

CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CT6189-B  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###

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REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**D. AYELE**  
 DRAWN BY  
**C. DELOS REYES**  
 CHECKED BY  
**A. SILVER**  
 IN CHARGE  
**A. BOONE**  
 DATE  
**04/29/2011**

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

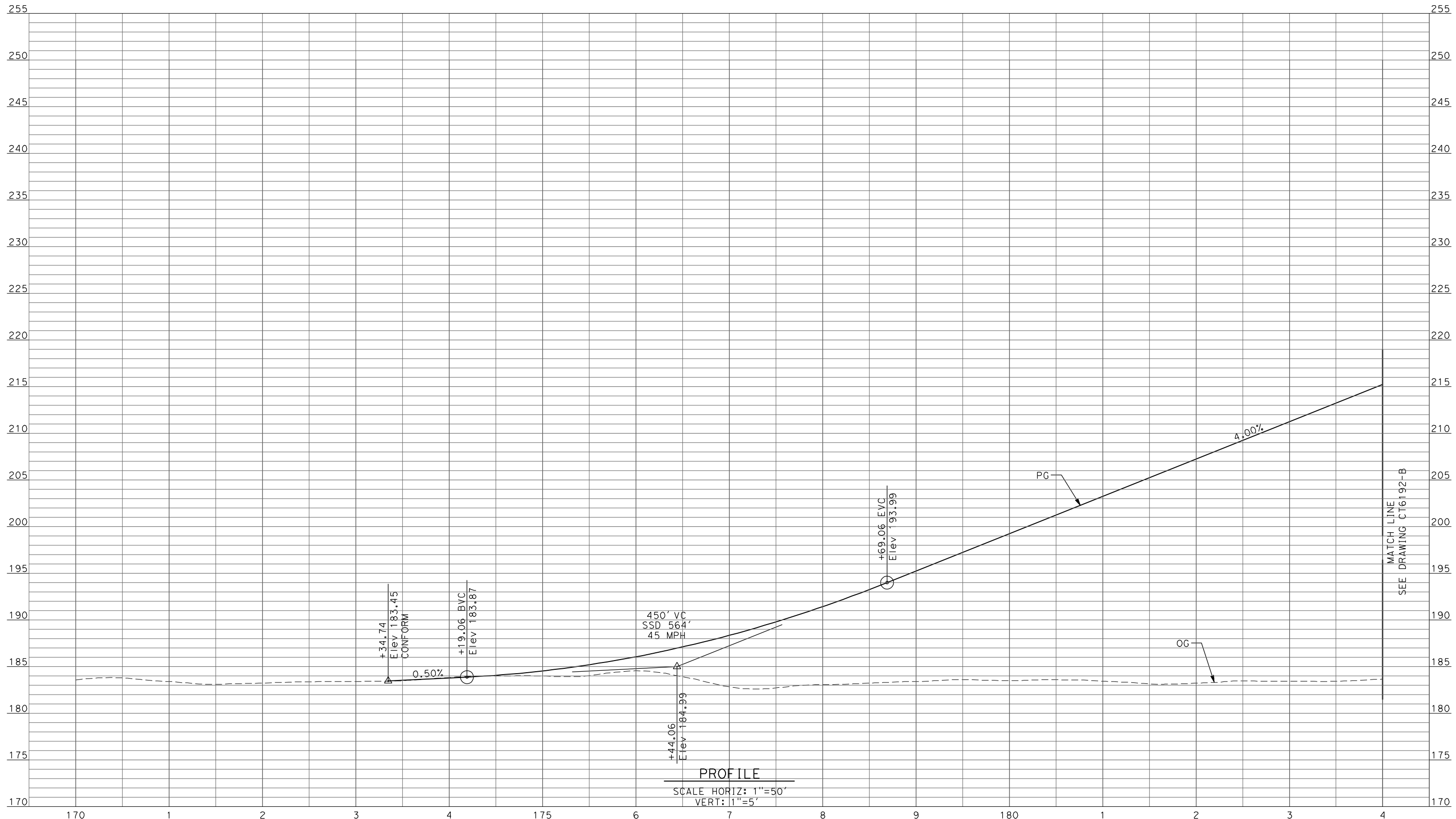


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 MAINLINE/WYE - (AVE 24)  
 GRADE SEPARATION - ROAD 9 ALONG EXIST ALT 2  
 PROFILE  
 SHEET 3 OF 3

CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CT6190-B  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###



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 ReyesC1



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**D. AYELE**  
 DRAWN BY  
**C. DELOS REYES**  
 CHECKED BY  
**A. SILVER**  
 IN CHARGE  
**A. BOONE**  
 DATE  
**04/29/2011**

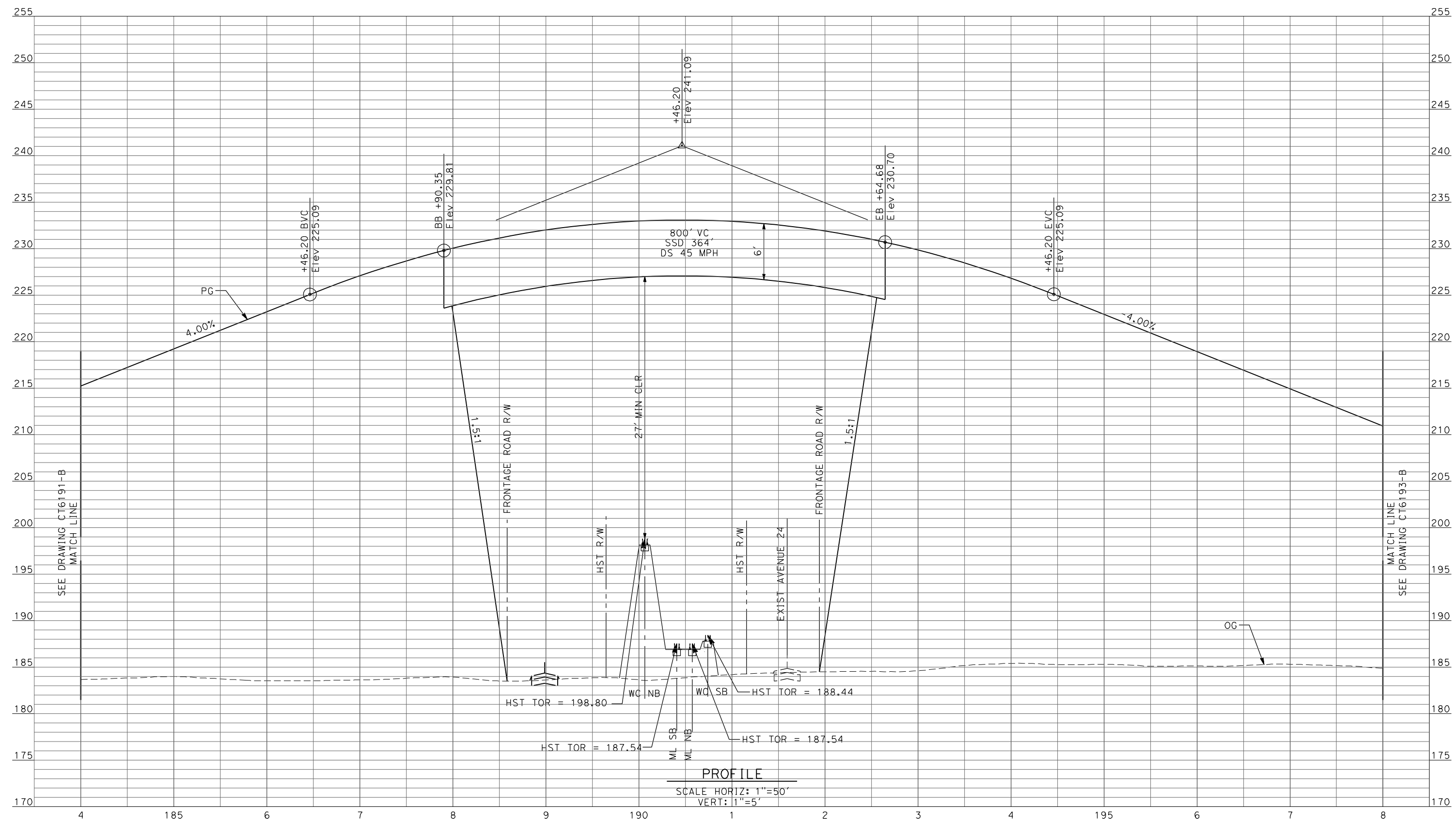
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**15% DESIGN**  
**SUBMITTAL**  
  
**NOT FOR**  
**CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 MAINLINE/WYE - (WC)  
 GRADE SEPARATION - ROAD 10 ALONG EXIST ALT 2  
 PROFILE  
 SHEET 1 OF 3

CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CT6191-B  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###

4/27/2011 6:42:32 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 1b - ave 24 wye-w.chowchilla grade separation\Profile\CT6192-B.dgn



**PROFILE**  
 SCALE HORIZ: 1"=50'  
 VERT: 1"=5'

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**D. AYELE**  
 DRAWN BY  
**C. DELOS REYES**  
 CHECKED BY  
**A. SILVER**  
 IN CHARGE  
**A. BOONE**  
 DATE  
**04/29/2011**

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

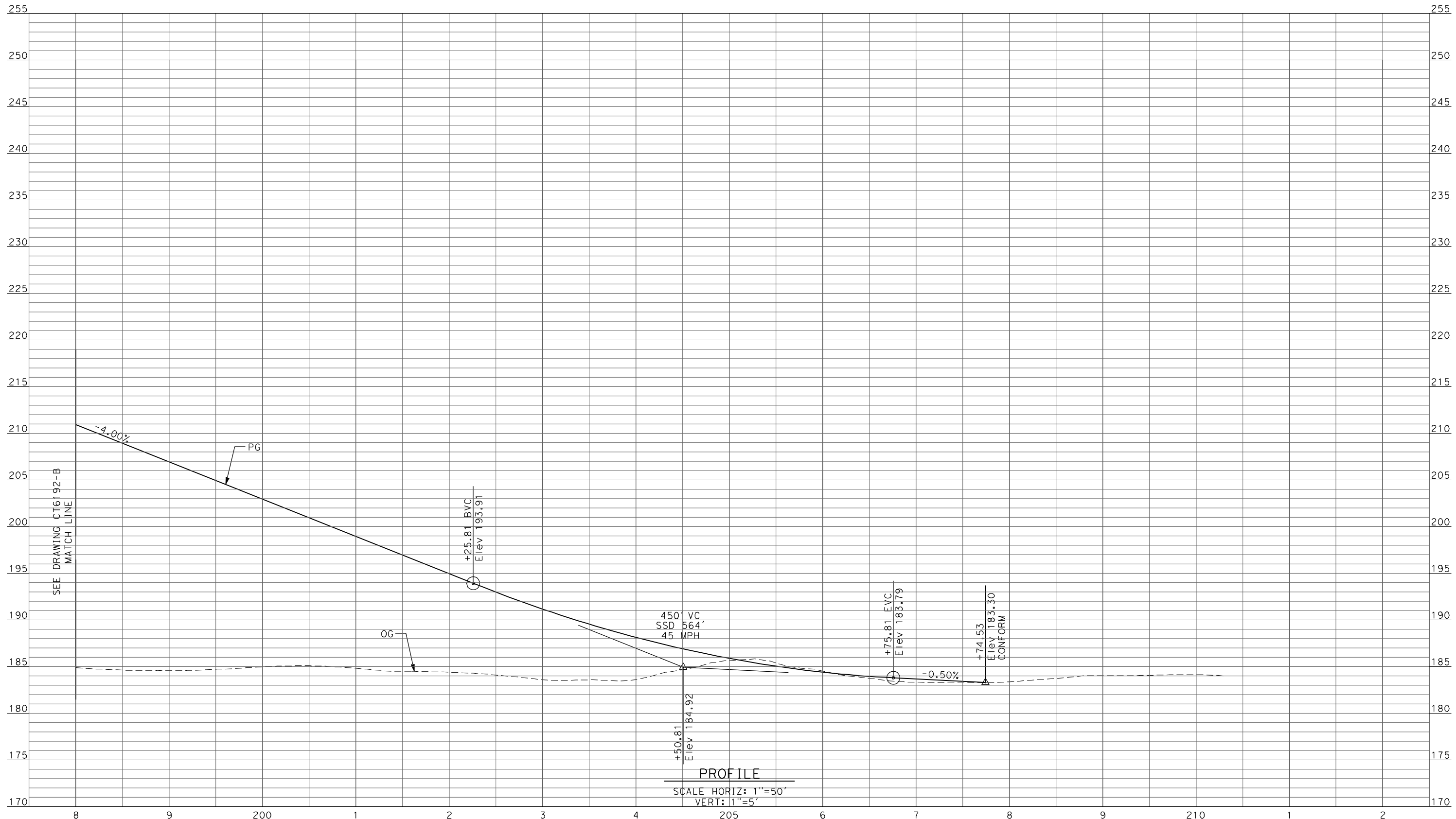


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 MAINLINE/WYE - (WC)  
 GRADE SEPARATION - ROAD 10 ALONG EXIST ALT 2  
**PROFILE**  
 SHEET 2 OF 3

CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CT6192-B  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###



4/27/2011 6:42:35 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 1b - ave 24 wye-w.chowchilla grade separation\Profile\CT6193-B.dgn



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**D. AYELE**  
 DRAWN BY  
**C. DELOS REYES**  
 CHECKED BY  
**A. SILVER**  
 IN CHARGE  
**A. BOONE**  
 DATE  
**04/29/2011**

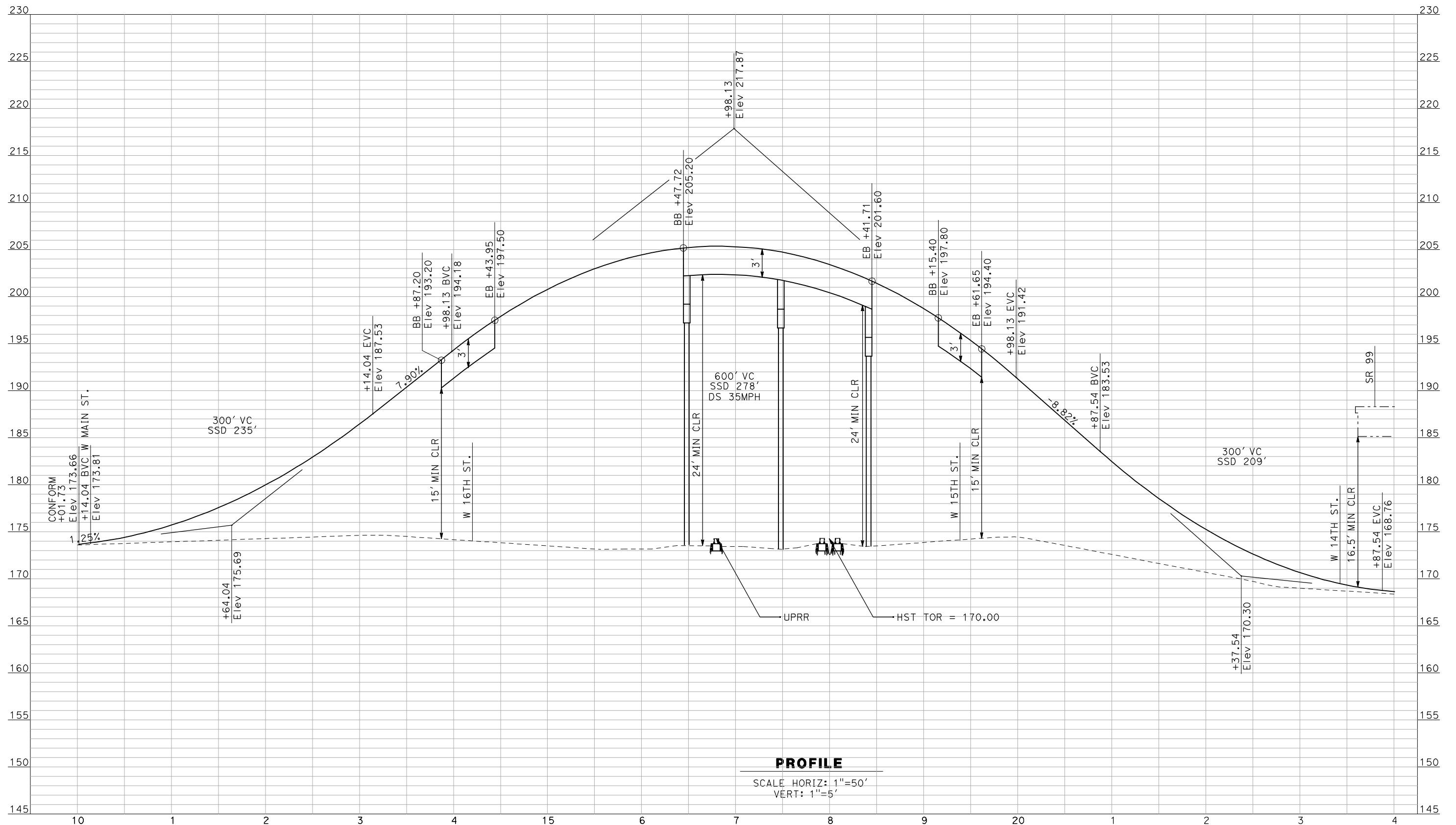
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**15% DESIGN**  
**SUBMITTAL**  
  
**NOT FOR**  
**CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 MAINLINE/WYE - (WC)  
 GRADE SEPARATION - ROAD 10 ALONG EXIST ALT 2  
 PROFILE  
 SHEET 3 OF 3

CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CT6193-B  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###

5/2/2011 10:53:32 AM I:\CHSR\60022962\Task-02\_Merced-Fresno\Cadd\Civil\Sheet\ROADWAY\Cost\_Reduction\Grade\_Sep\_Profile.WF-CT-1149-A.dgn



NOT FOR CONSTRUCTION  
FOR INTERNAL USE ONLY

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
R. GIBSON  
 DRAWN BY  
F. DEMARCO  
 CHECKED BY  
A. SILVER  
 IN CHARGE  
A. BOONE  
 DATE  
04/29/2011

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

**NOT FOR**  
**CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR MERCED CONNECTION - (AVE 24/WC)  
 GRADE SEPARATION - G Street  
 PROFILE  
 SHEET 1 OF 1

CONTRACT NO.  
HSR06-007  
 DRAWING NO.  
CT1149-A  
 SCALE  
AS SHOWN  
 SHEET NO.  
OF ###



5/1/2011 7:44:19 PM I:\CHSR\60022962\Task-02\_Merced-Fresno\CADD\Struct\Sheet\APS\A2\15%\_cost\_reduction\_submittal\Grade\_Structure\WF-SB-1201.dgn  
 cisnerose

SHT NO.	DWG NO.	DRAWING TITLE LINE 3	DRAWING TITLE LINE 4	SHEET TITLE LINE 5	SHEET TITLE LINE 6
ROADWAY BRIDGE STRUCTURE PLANS UPRR/SR 99 AVENUE 24 ALTERNATIVE					
GENERAL					
SB1201	UPRR/SR 99 ALTERNATIVE	AVENUE 24	INDEX OF DRAWINGS	SHEET 1 OF 1	
SB1202	UPRR/SR 99 ALTERNATIVE	AVENUE 24	STRUCTURE INDEX MAP	SHEET 1 OF 2	
SB1203	UPRR/SR 99 ALTERNATIVE	AVENUE 24	STRUCTURE INDEX MAP	SHEET 2 OF 2	
OVERHEAD BRIDGES					
ST1120	UPRR/SR 99 MAIN LINE/WYE CONNECTION	AVENUE 24	ROAD 9 OVERHEAD	PLANNING STUDY	
ST1138	UPRR/SR 99 MAIN LINE	AVENUE 24	ROAD 13 OVERHEAD	PLANNING STUDY	
ST1122	UPRR/SR 99 MAIN LINE	AVENUE 24	ROAD 15 OVERHEAD	PLANNING STUDY	
ST1123	UPRR/SR 99 MAIN LINE/WYE CONNECTION	AVENUE 24	ROAD 16 OVERHEAD	PLANNING STUDY	
ST1124	UPRR/SR 99 MAIN LINE	AVENUE 24	AVENUE 23 1/2 OVERHEAD	PLANNING STUDY	
ST1125	UPRR/SR 99 WYE CONNECTION	AVENUE 24	AVENUE 25 OVERHEAD	PLANNING STUDY	
ST1126	UPRR/SR 99 WYE CONNECTION	AVENUE 24	AVENUE 26 OVERHEAD	PLANNING STUDY	
ST1127	UPRR/SR 99 WYE CONNECTION	AVENUE 24	CROSS ROAD OVERHEAD	PLANNING STUDY	
ST1128	UPRR/SR 99 MAIN LINE/W CHOWCHILLA	AVENUE 24	ROAD 10 OVERHEAD	PLANNING STUDY	
ST1129	UPRR/SR 99 MAIN LINE/W CHOWCHILLA	AVENUE 24	ROAD 13 OVERHEAD	PLANNING STUDY - SHEET 1 OF 2	
ST1137	UPRR/SR 99 MERCED CONNECTION	AVENUE 24	ROAD 13 OVERHEAD	PLANNING STUDY - SHEET 2 OF 2	
ST1130	UPRR/SR 99 MAIN LINE/W CHOWCHILLA	AVENUE 24	ROAD 15 OVERHEAD	PLANNING STUDY	
ST1131	UPRR/SR 99 MAIN LINE/W CHOWCHILLA	AVENUE 24	ROAD 16 OVERHEAD	PLANNING STUDY	
ST1132	UPRR/SR 99 MAIN LINE	AVENUE 24	AVENUE 23 1/2 OVERHEAD	PLANNING STUDY	
ST1133	UPRR/SR 99 MERCED CONNECTION	AVENUE 24	AVENUE 25 OVERHEAD	PLANNING STUDY - SHEET 1 OF 2	
ST1134	UPRR/SR 99 WYE CONNECTION	AVENUE 24	AVENUE 25 OVERHEAD	PLANNING STUDY - SHEET 2 OF 2	
ST1135	UPRR/SR 99 WYE & MERCED CONNECTIONS	AVENUE 24	AVENUE 26 OVERHEAD	PLANNING STUDY	
ST1136	UPRR/SR 99 MERCED CONNECTION	AVENUE 24	CROSS ROAD OVERHEAD	PLANNING STUDY	
ST1139	UPRR/SR 99 MERCED DO - HYBRID & WYE CONNECTION	AVENUE 24	SANDY MUSH ROAD OVERHEAD	PLANNING STUDY	
ST1180	UPRR/SR 99 MERCED CONNECTION	AVENUE 21	G STREET OVERHEAD	PLANNING STUDY	

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
H. LEE  
 DRAWN BY  
J. RENTERIA  
 CHECKED BY  
B. DOLAN  
 IN CHARGE  
A. BOONE  
 DATE  
04/29/2011

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



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR 99 ALTERNATIVE  
 AVENUE 24  
 INDEX OF DRAWINGS  
 SHEET 1 OF 1

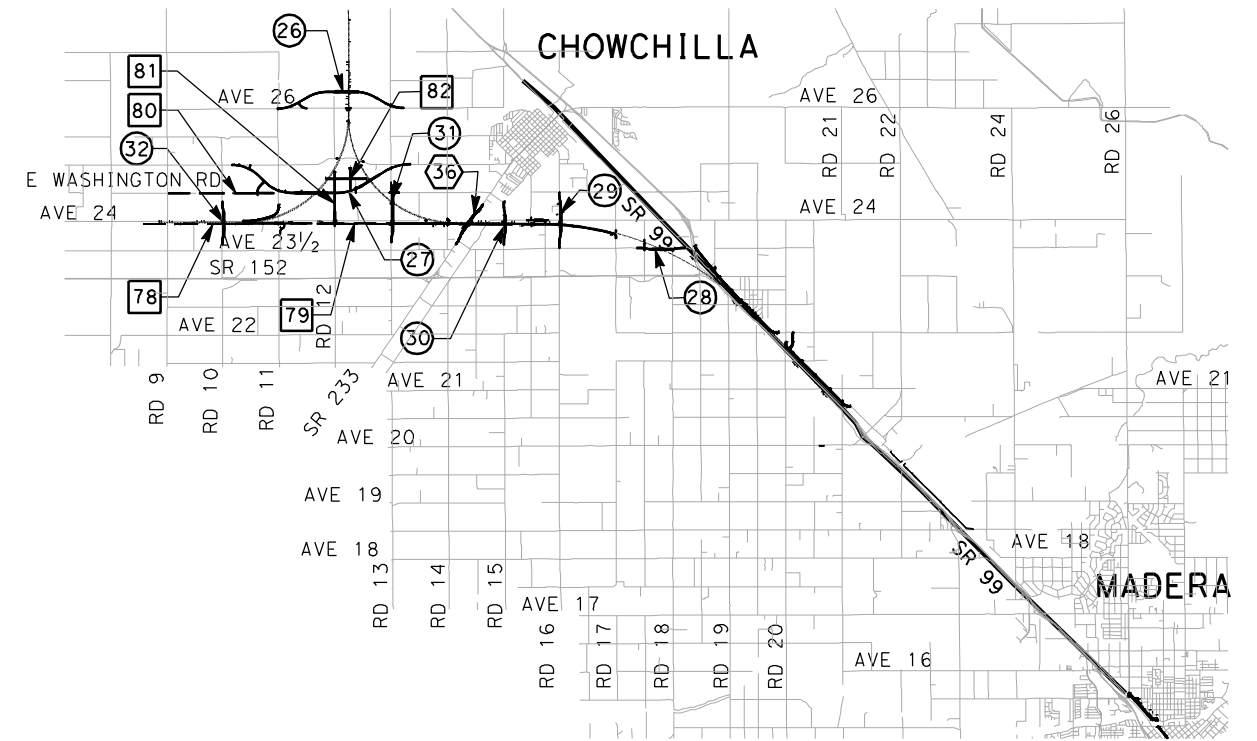
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HSR06-007  
 DRAWING NO.  
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OF





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LOCATION NO.	SHEET TITLE	STRUCTURE DRAWING NO.	ROADWAY DRAWING NO.
25	CROSS ROAD OVERHEAD	ST1136	CT5179-B - CT5181-B
26	AVENUE 26 OVERHEAD	ST1135	CT5167-B - CT5178-B
27	AVENUE 25 OVERHEAD	ST1133 & ST1134	CT5150-B - CT5166-B
28	AVENUE 23½ OVERHEAD	ST1132	CT5146-B - CT5149-B
29	ROAD 16 OVERHEAD	ST1131	CT5142-B - CT5145-B
30	ROAD 15 OVERHEAD	ST1130	CT5138-B - CT5141-B
31	ROAD 13 OVERHEAD	ST1129 & ST1137	CT5132-B - CT5137-B
32	ROAD 10 OVERHEAD	ST1128	CT5129-B - CT5131-B
35	SANDY MUSH ROAD OVERHEAD	ST1139	CT7133-B - CT7136-B
64	G STREET OVERHEAD	ST1180	CT0149-A
36	GRADE SEPARATION - ROBERTSON BLVD (SR 233)	-	-

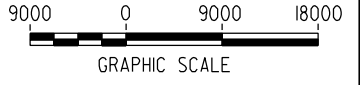


**LOCATION NUMBER LEGEND**

- (X) - INDICATES GRADE SEPARATION
- (X) - INDICATES CALTRANS FACILITIES MODIFICATION
- (X) - INDICATES LOCAL ROAD RELOCATION

VICINITY MAP 1

VICINITY MAP 2



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
H. LEE  
DRAWN BY  
B. DOLAN  
CHECKED BY  
J. ZANDIAN  
IN CHARGE  
A. BOONE  
DATE  
04/29/2011

**RECORD SET  
15% DESIGN  
SUBMITTAL**

**NOT FOR  
CONSTRUCTION**

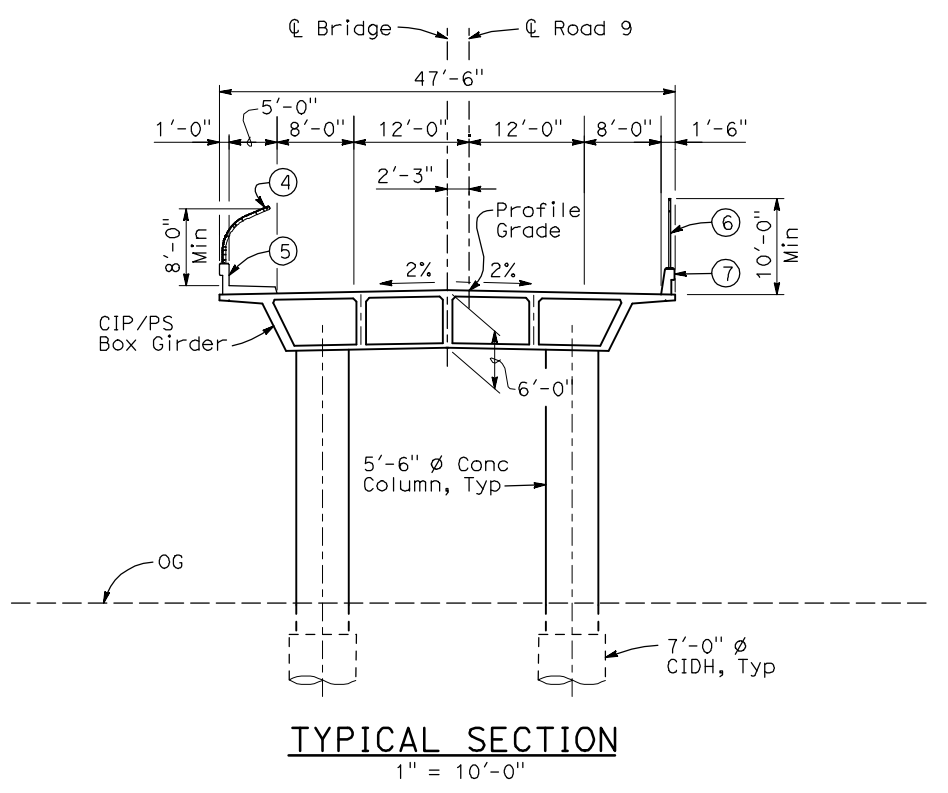
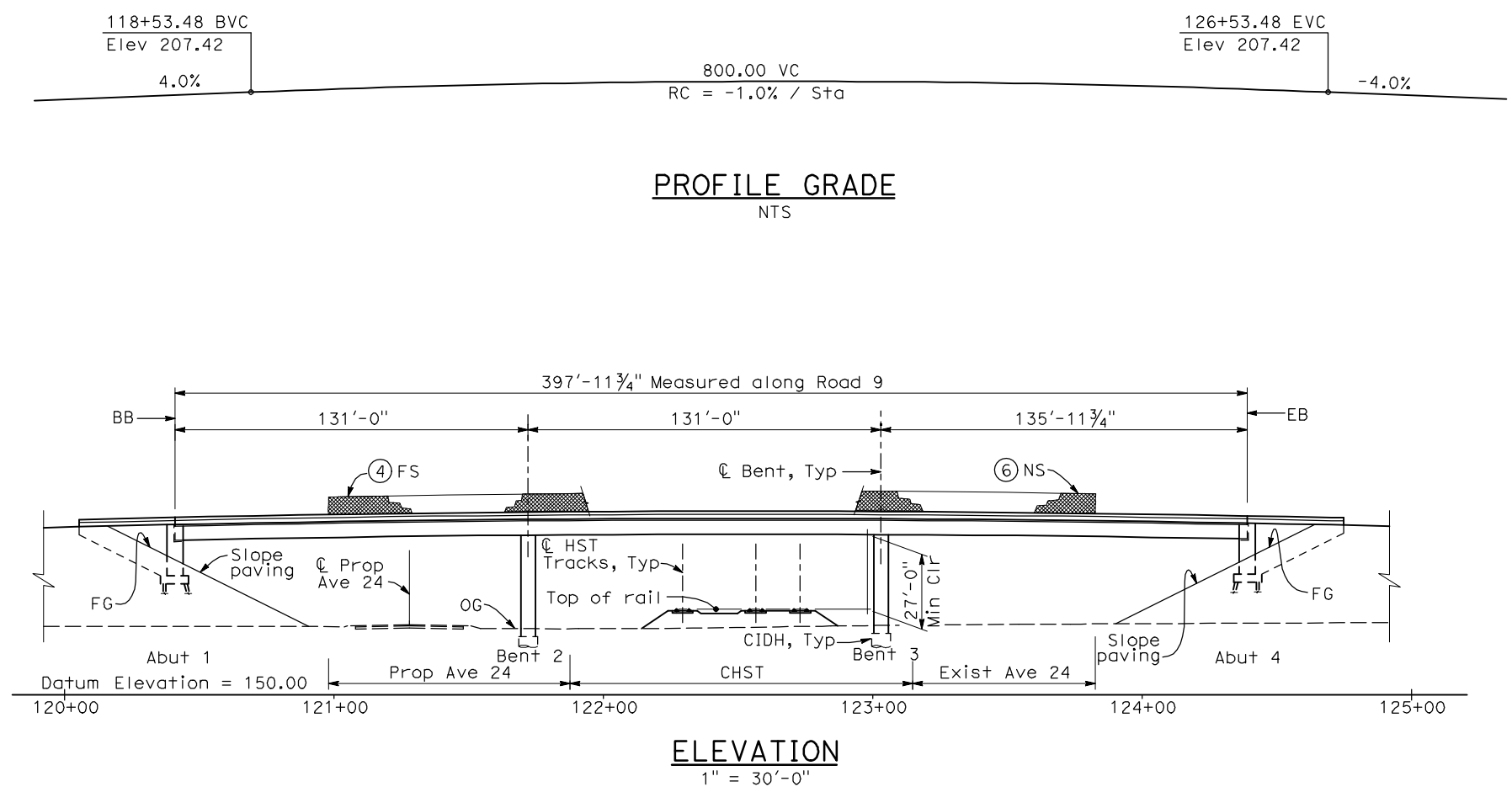


**CALIFORNIA HIGH-SPEED TRAIN PROJECT  
MERCED TO FRESNO**

UPPR/SR 99 W CHOWCHILLA ALTERNATIVE  
AVENUE 24  
STRUCTURE INDEX MAP  
SHEET 2 OF 2

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
SB1203  
SCALE  
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SHEET NO.  
OF

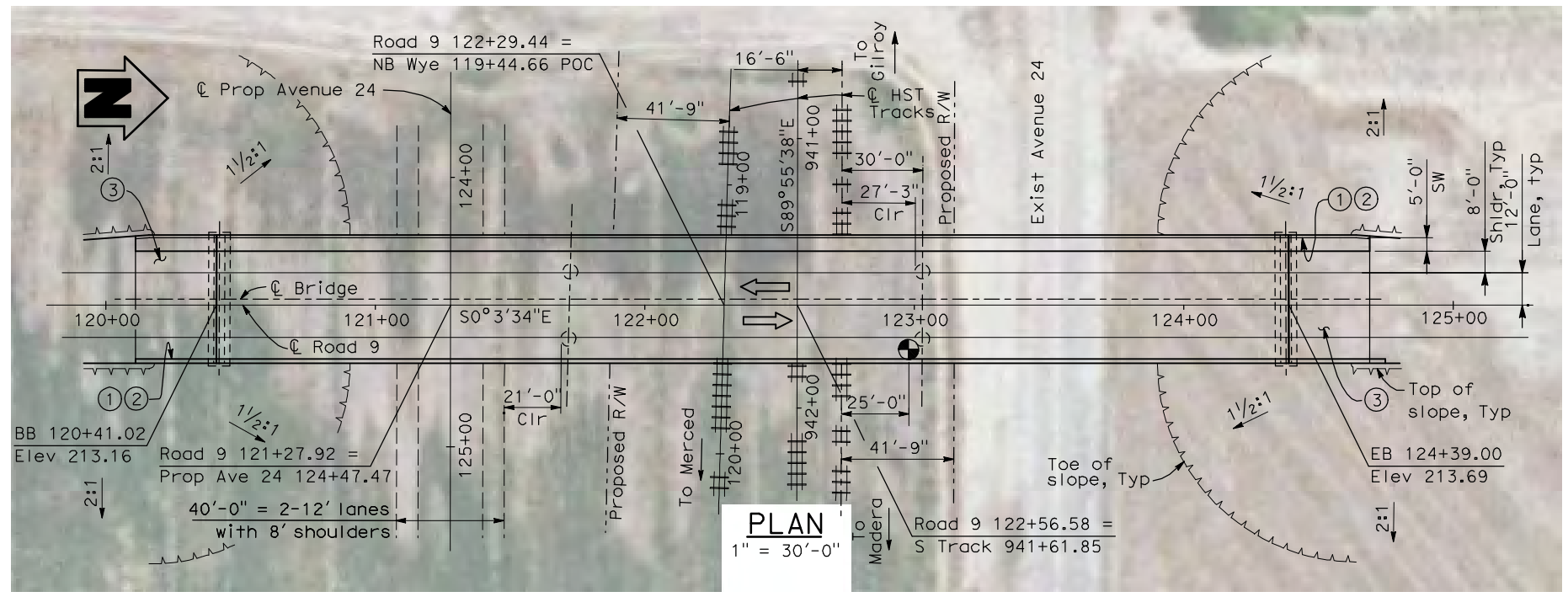
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- NOTES:**
- ① Paint "Bridge No. XX-XX"
  - ② Paint "Road 9 OH"
  - ③ Structure Approach Slab Type N (30S)
  - ④ Chain Link Railing Type 3
  - ⑤ Concrete Barrier Type 26 (Mod)
  - ⑥ Chain Link Railing Type 7 (Mod)
  - ⑦ Concrete Barrier Type 732
  8. Existing underground and overhead utilities to be determined.

- LEGEND:**
- ← Direction of traffic
  - Point of minimum vertical clearance

DATE OF ESTIMATE	
BRIDGE REMOVAL	=
STRUCTURE DEPTH	= 6'-0"
LENGTH	= 397'-11 3/4"
WIDTH	= 47'-6"
AREA	= 18,904 ft <sup>2</sup>
COST/ØFT INCLUDING 10% MOBILIZATION & 25% CONTINGENCY	=
TOTAL COST	=



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
H. LEE

DRAWN BY  
P. ARIGO

CHECKED BY  
T. BARNARD

IN CHARGE  
A. BOONE

DATE  
04/29/2011

**RECORD SET**  
15% DESIGN SUBMITTAL

**NOT FOR CONSTRUCTION**

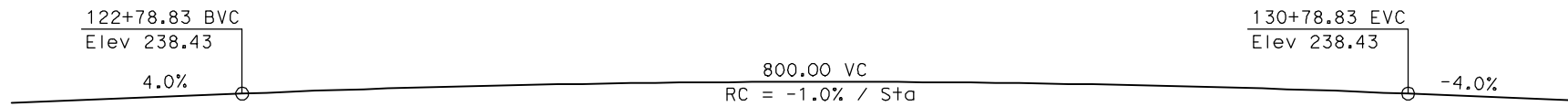


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
UPRR/SR 99 MAIN LINE/WYE CONNECTION  
AVENUE 24  
ROAD 9 OVERHEAD  
PLANNING STUDY

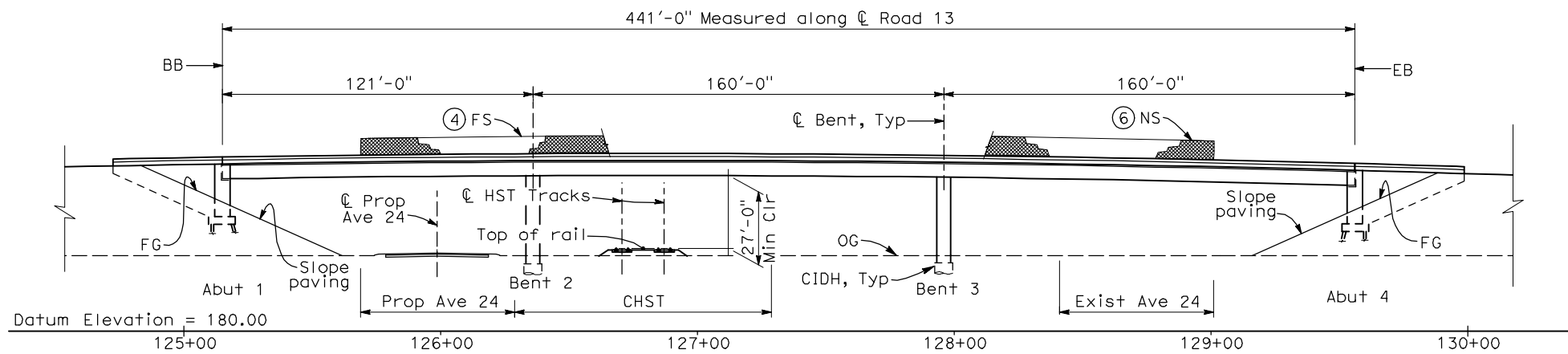
CONTRACT NO.	HSR06-007
DRAWING NO.	ST1120
SCALE	As shown
SHEET NO.	OF



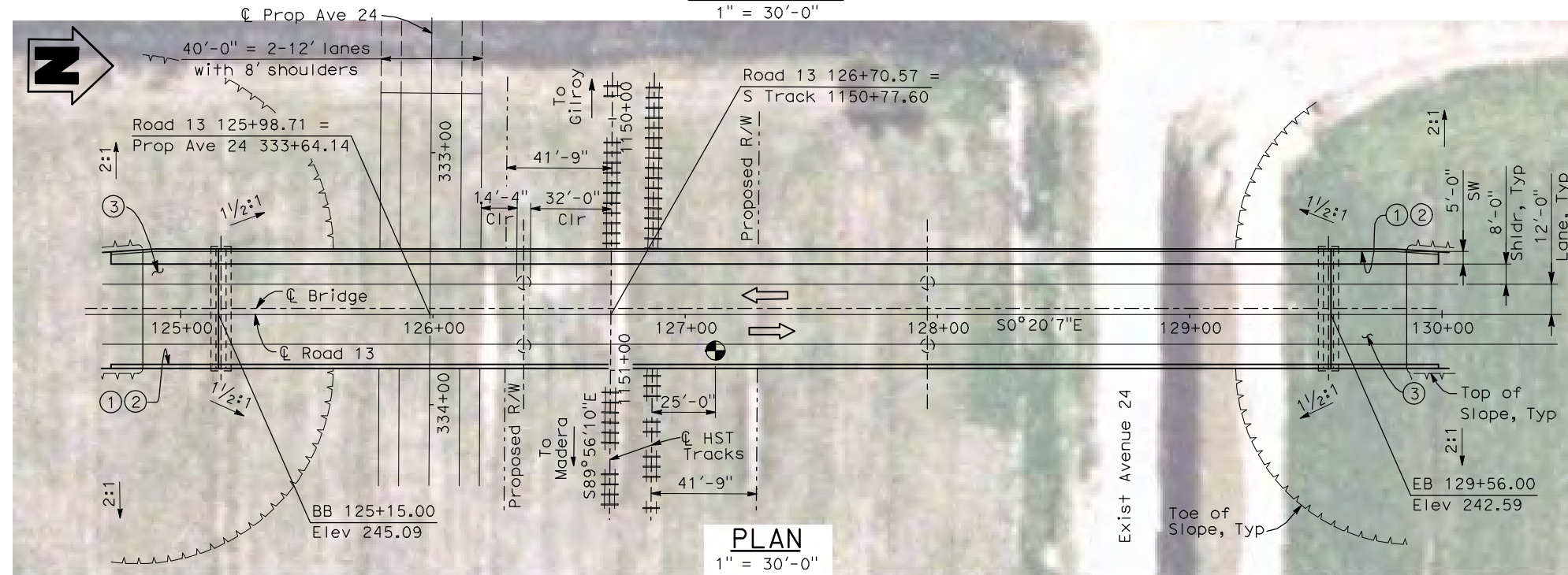
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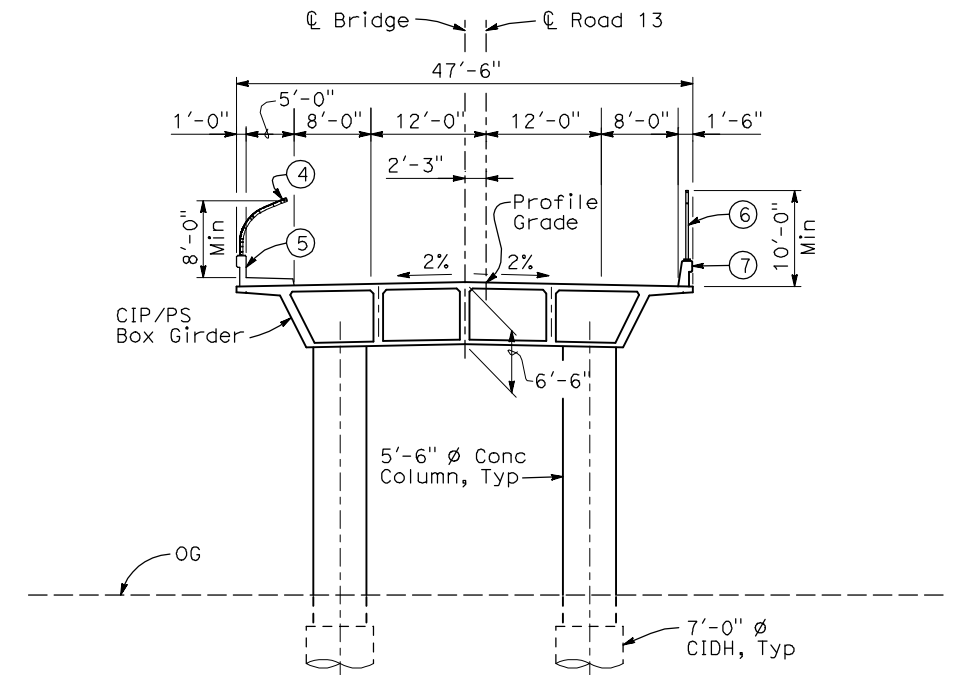
**PROFILE GRADE**  
NTS



**ELEVATION**  
1" = 30'-0"



**PLAN**  
1" = 30'-0"



**TYPICAL SECTION**  
1" = 10'-0"

**NOTES:**

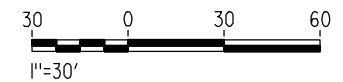
- ① Paint "Bridge No. XX-XX"
- ② Paint "Road 13 OH"
- ③ Structure Approach Slab Type N (30S)
- ④ Chain Link Railing Type 3
- ⑤ Concrete Barrier Type 26 (Mod)
- ⑥ Chain Link Railing Type 7 (Mod)
- ⑦ Concrete Barrier Type 732
8. Existing underground and overhead utilities to be determined.

**LEGEND:**

- ← Direction of traffic
- Point of minimum vertical clearance

DATE OF ESTIMATE	=	
BRIDGE REMOVAL	=	
STRUCTURE DEPTH	=	6'-6"
LENGTH	=	441'-0"
WIDTH	=	47'-6"
AREA	=	21,000 ft <sup>2</sup>
COST/ CFT INCLUDING 10% MOBILIZATION & 25% CONTINGENCY	=	
TOTAL COST	=	

**LOCATION 12**



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
H. LEE  
DRAWN BY  
P. ARIGO  
CHECKED BY  
T. BARNARD  
IN CHARGE  
A. BOONE  
DATE  
04/29/2011

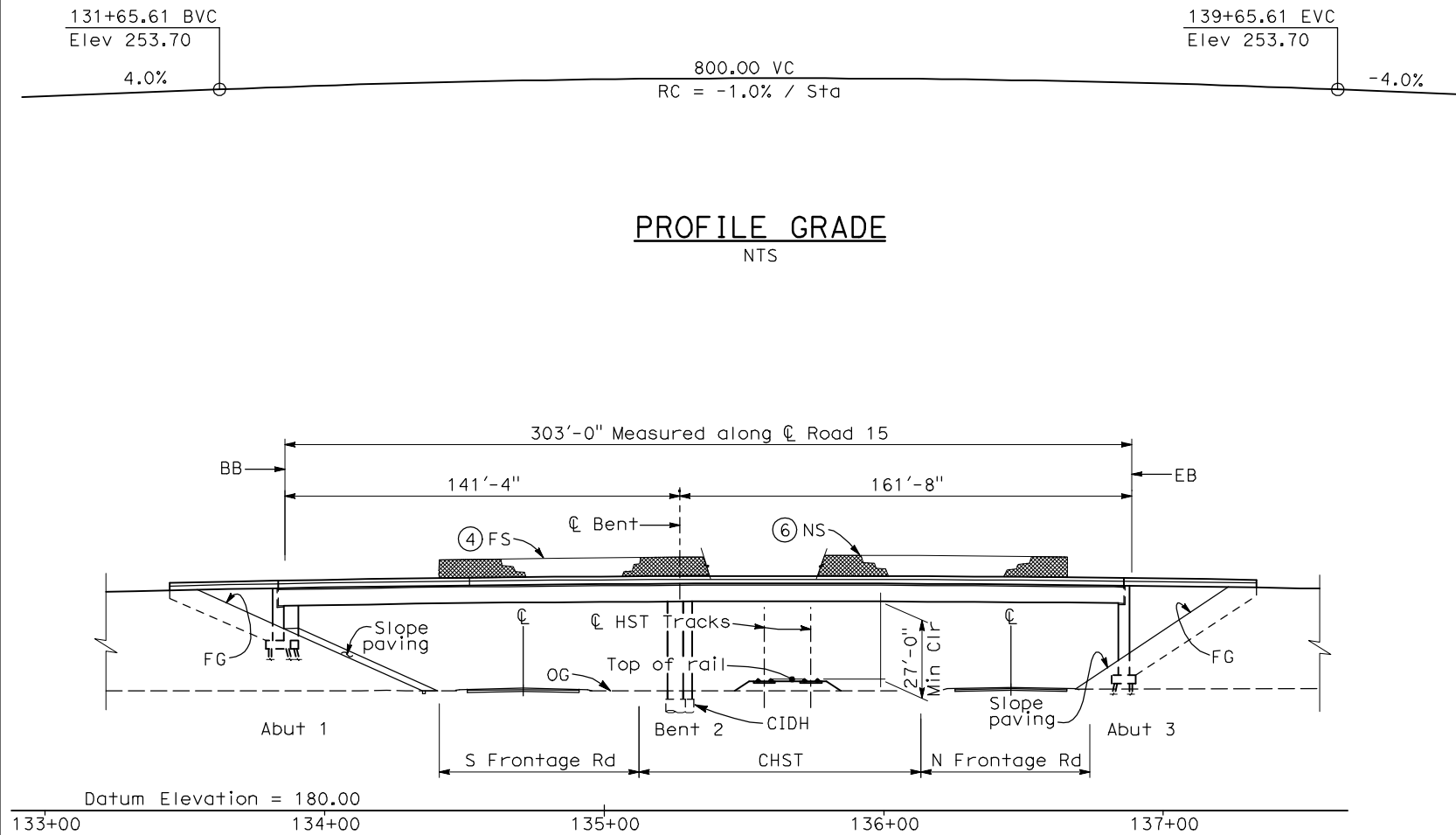
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15% DESIGN SUBMITTAL  
  
**NOT FOR CONSTRUCTION**



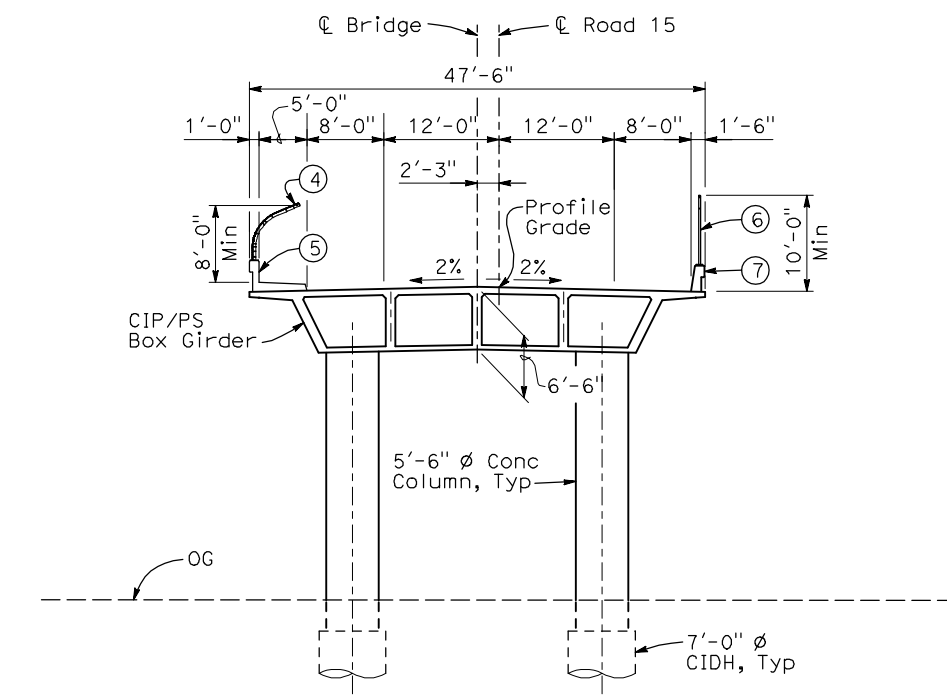
**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
UPRR/SR99 MAIN LINE  
AVENUE 24  
ROAD 13 OVERHEAD  
PLANNING STUDY

CONTRACT NO.	HSR06-007
DRAWING NO.	ST1138
SCALE	As shown
SHEET NO.	OF

4/30/2011 5:53:18 PM I:\CHSR\60022962\Task-02\_Merced-Fresno\cadd\Struct\Sheet\XPS\A2\15%\_cost\_reduction\_submittal\Grade Structure\W-MF-ST-OH\_Road 15-Loc 11.dgn



**PROFILE GRADE**  
NTS

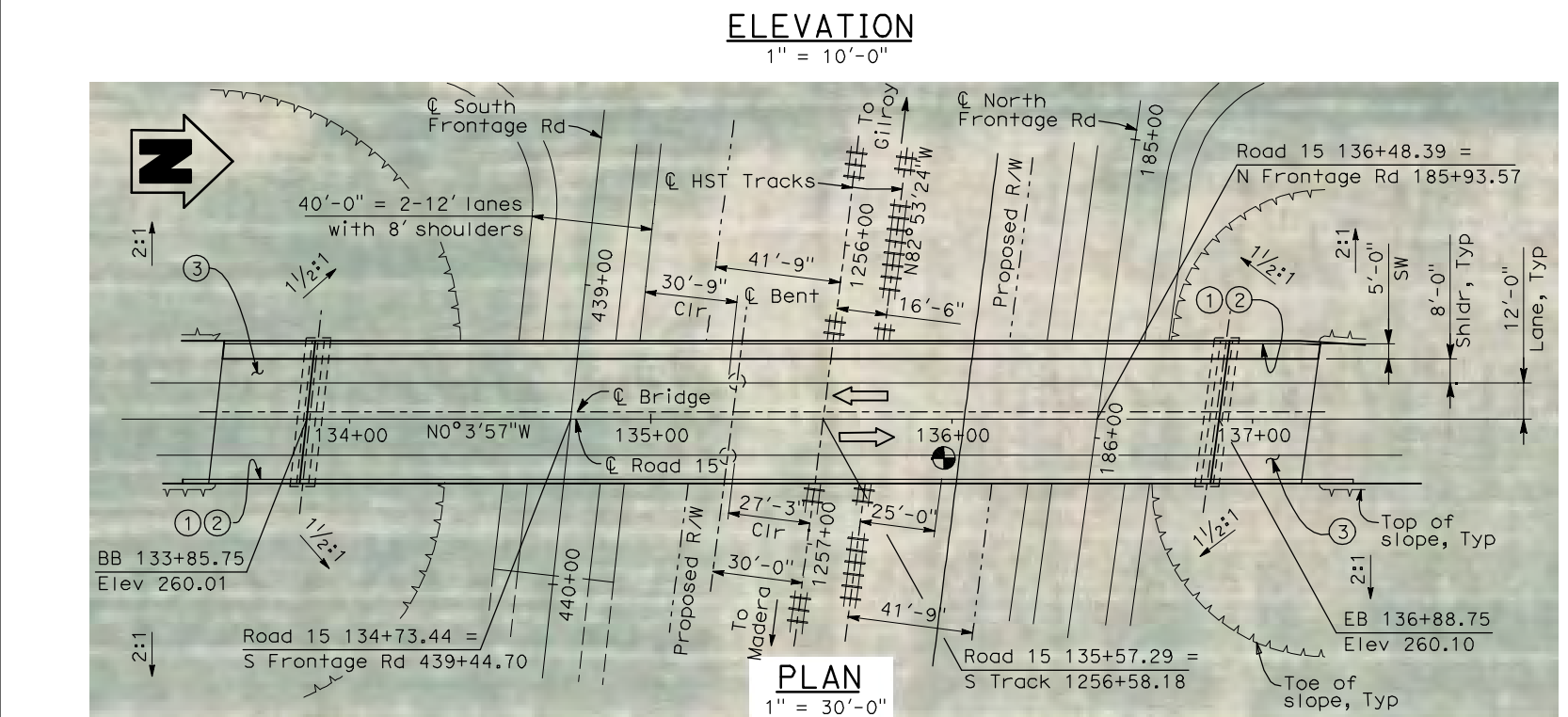


**TYPICAL SECTION**  
1" = 10'-0"

- NOTES:**
- ① Paint "Bridge No. XX-XX"
  - ② Paint "Road 15 OH"
  - ③ Structure Approach Slab Type N (30S)
  - ④ Chain Link Railing Type 3
  - ⑤ Concrete Barrier Type 26 (Mod)
  - ⑥ Chain Link Railing Type 7 (Mod)
  - ⑦ Concrete Barrier Type 732
  8. Existing underground and overhead utilities to be determined.

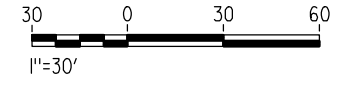
- LEGEND:**
- ← Direction of traffic
  - Point of minimum vertical clearance

DATE OF ESTIMATE	=	
BRIDGE REMOVAL	=	
STRUCTURE DEPTH	=	6'-6"
LENGTH	=	303'-0"
WIDTH	=	47'-6"
AREA	=	14,390 ft <sup>2</sup>
COST/ □FT INCLUDING 10% MOBILIZATION & 25% CONTINGENCY	=	
TOTAL COST	=	



**PLAN**  
1" = 30'-0"

**LOCATION 11**



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
H. LEE  
DRAWN BY  
P. ARIGO  
CHECKED BY  
T. BARNARD  
IN CHARGE  
A. BOONE  
DATE  
04/29/2011

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

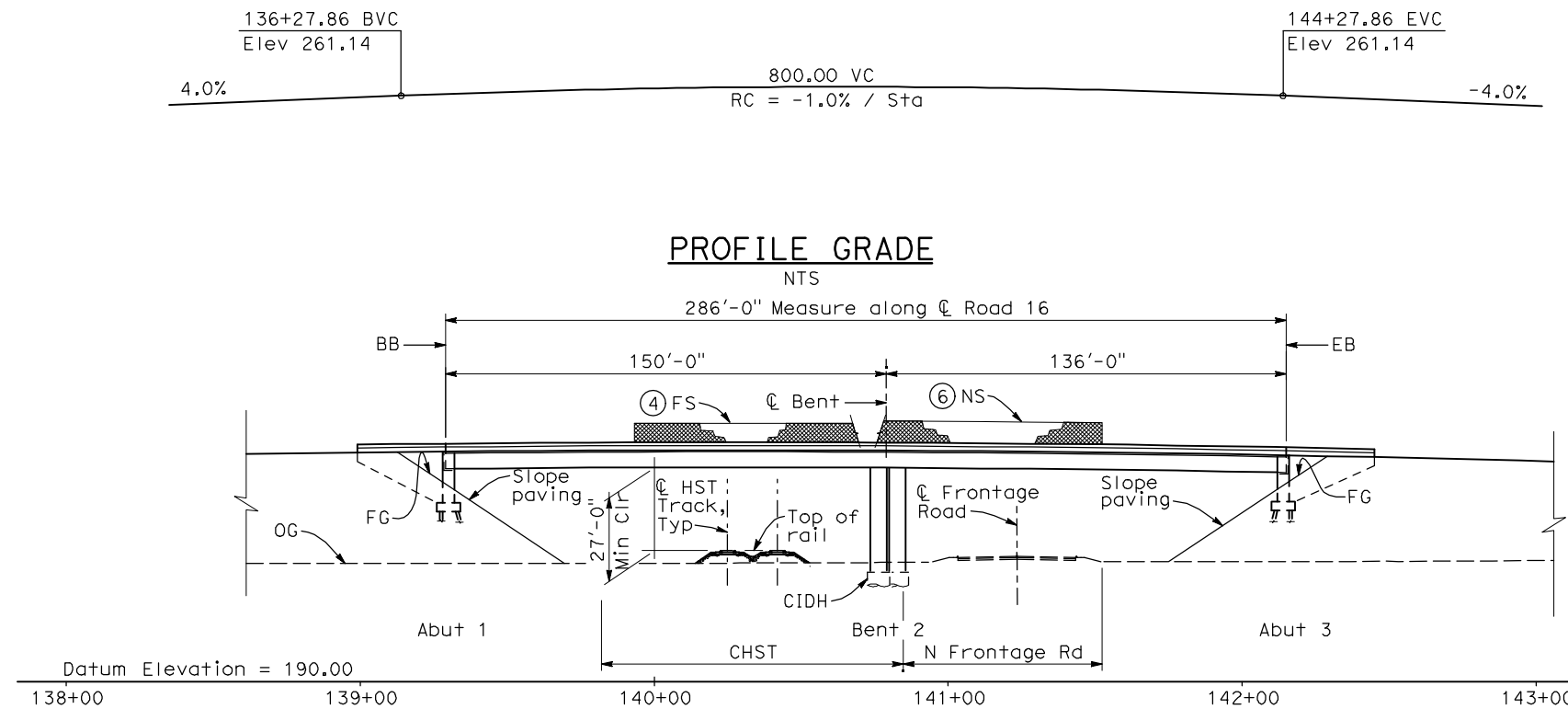
**NOT FOR**  
**CONSTRUCTION**



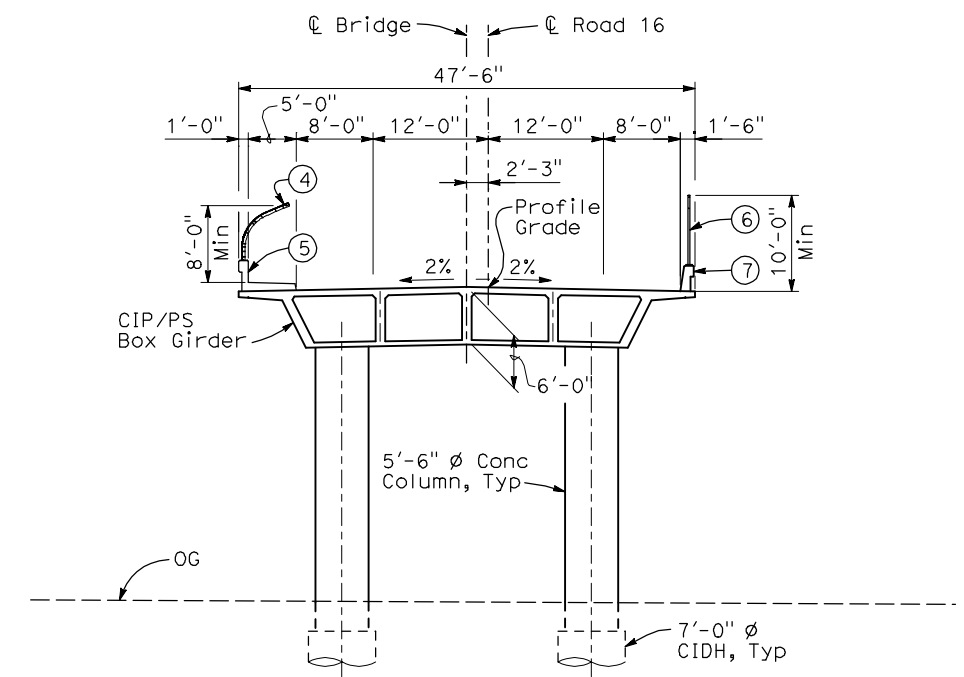
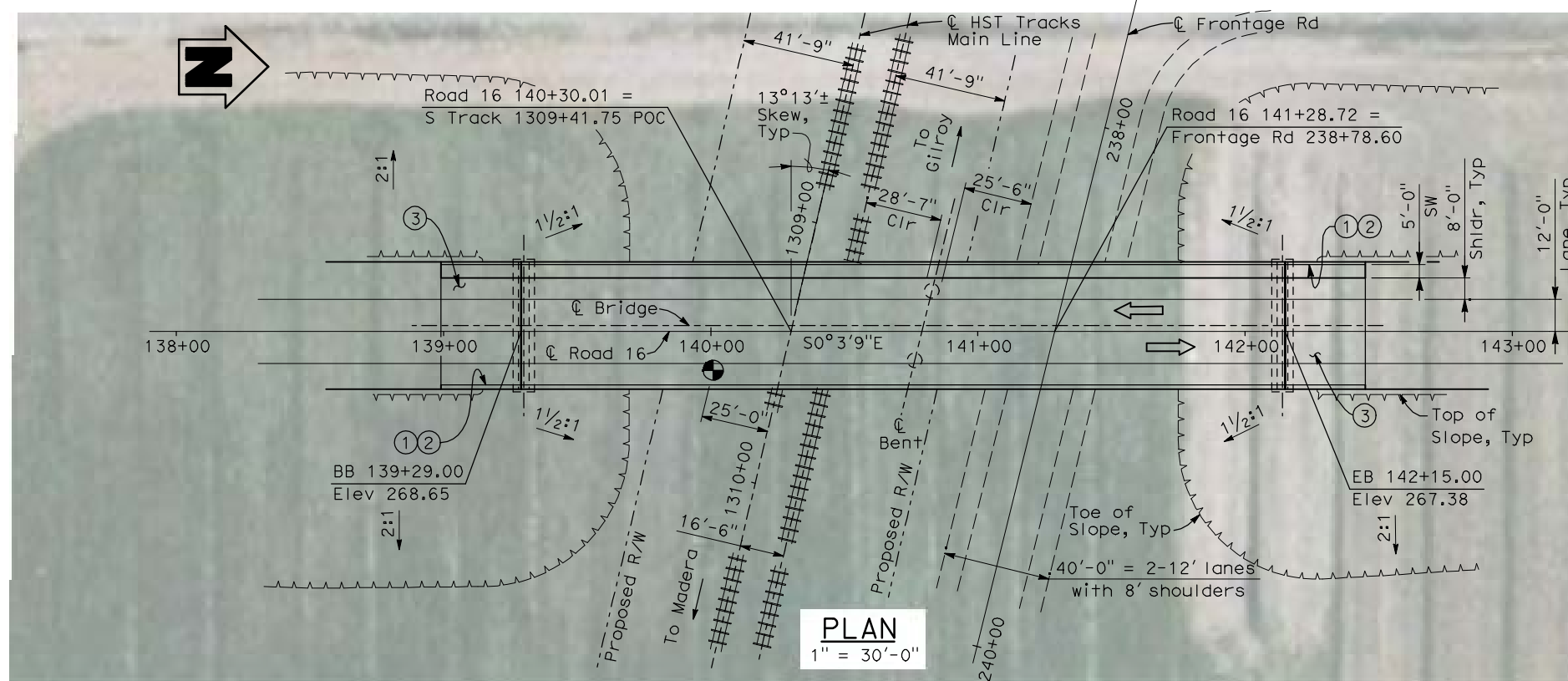
**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
UPRR/SR 99 MAIN LINE  
AVENUE 24  
ROAD 15 OVERHEAD  
PLANNING STUDY

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
ST1122  
SCALE  
As shown  
SHEET NO.  
OF





**ELEVATION**  
1" = 30'-0"



**NOTES:**

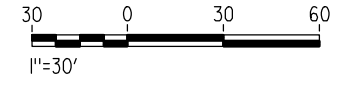
- ① Paint "Bridge No. XX-XX"
- ② Paint "Road 16 OH"
- ③ Structure Approach Slab Type N (30S)
- ④ Chain Link Railing Type 3
- ⑤ Concrete Barrier Type 26 (Mod)
- ⑥ Chain Link Railing Type 7 (Mod)
- ⑦ Concrete Barrier Type 732
8. Existing underground and overhead utilities to be determined.

**LEGEND:**

- Direction of traffic
- Point of minimum vertical clearance

DATE OF ESTIMATE	=	_____
BRIDGE REMOVAL	=	_____
STRUCTURE DEPTH	=	6'-0"
LENGTH	=	286'-0"
WIDTH	=	47'-6"
AREA	=	13,600 ft <sup>2</sup>
COST/CFRT INCLUDING 10% MOBILIZATION & 25% CONTINGENCY	=	_____
TOTAL COST	=	_____

**LOCATION 10**



4/30/2011 5:53:43 PM I:\CHSR\60022962\Task-02\_Merced-Fresno\cadd\Struct\Sheet\APS\A2\15%\_cost\_reduction\_submittal\Grade Structure\WF-ST-OH\_Road 16-Loc 10.dgn

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
H. LEE  
DRAWN BY  
B. DOLAN  
CHECKED BY  
T. BARNARD  
IN CHARGE  
A. BOONE  
DATE  
04/29/2011

**RECORD SET**  
15% DESIGN  
SUBMITTAL

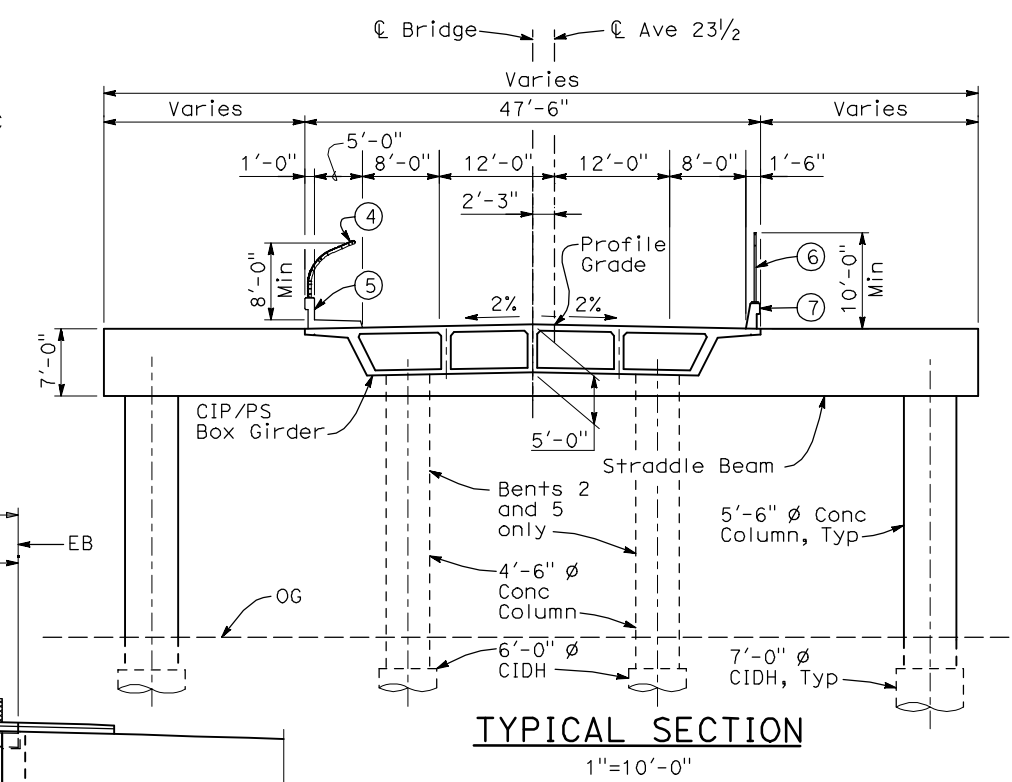
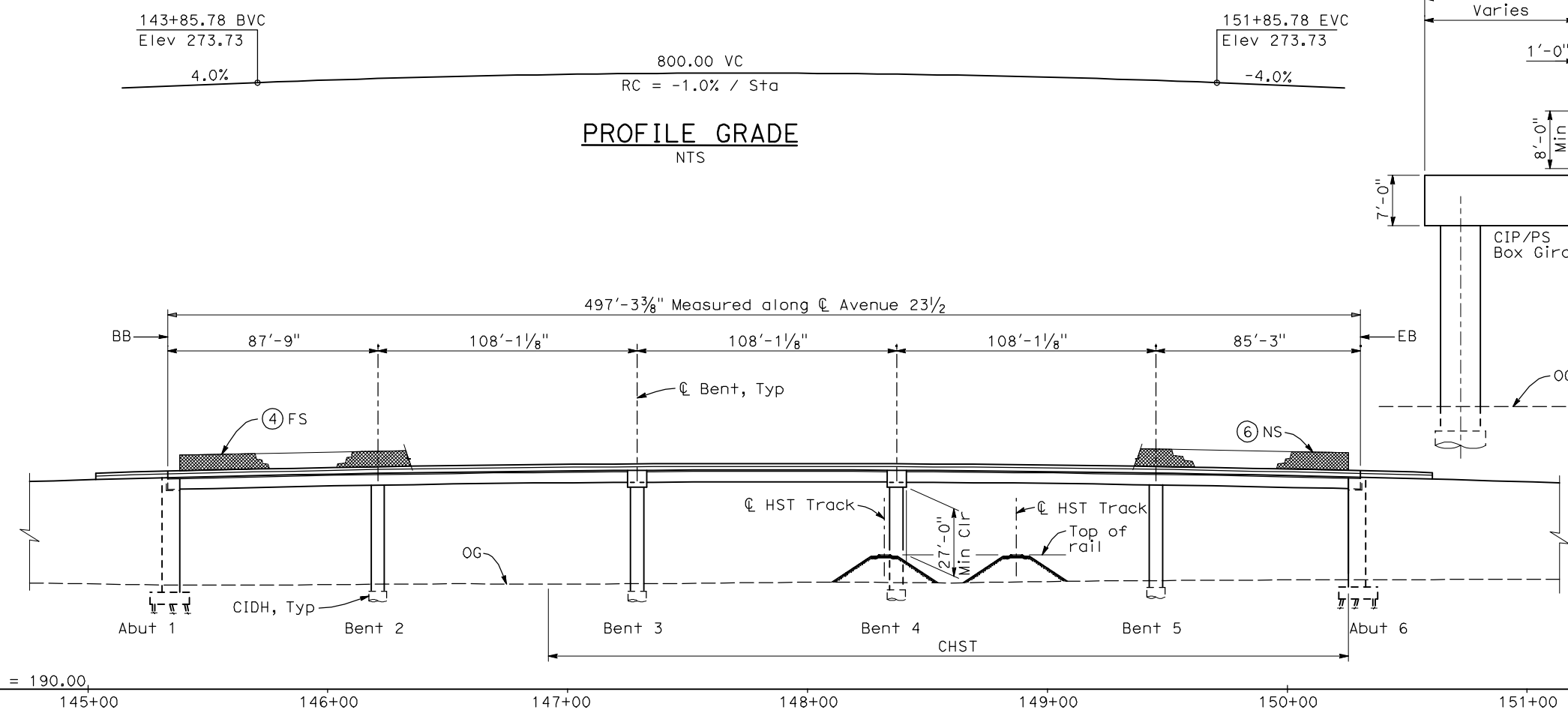
**NOT FOR  
CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
UPRR/SR99 MAIN LINE/WYE CONNECTION  
AVENUE 24  
ROAD 16 OVERHEAD  
PLANNING STUDY

CONTRACT NO.	HSR06-007
DRAWING NO.	ST1123
SCALE	As shown
SHEET NO.	OF

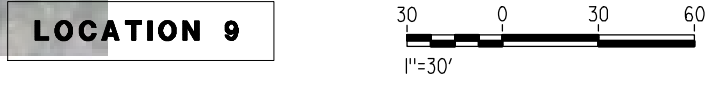
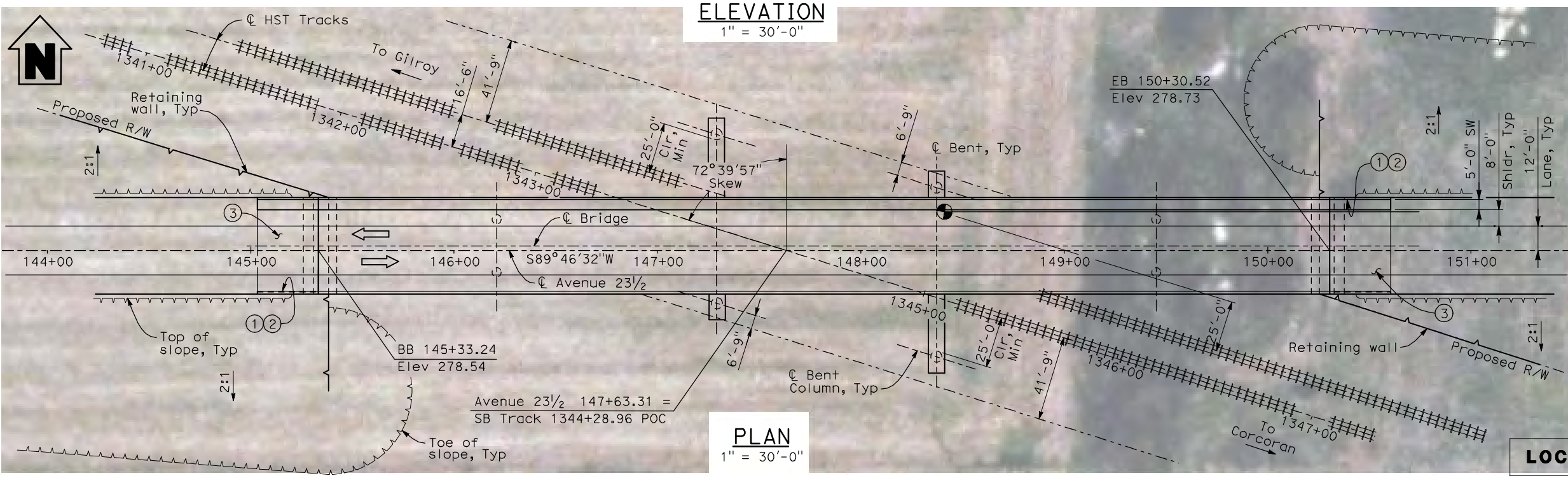
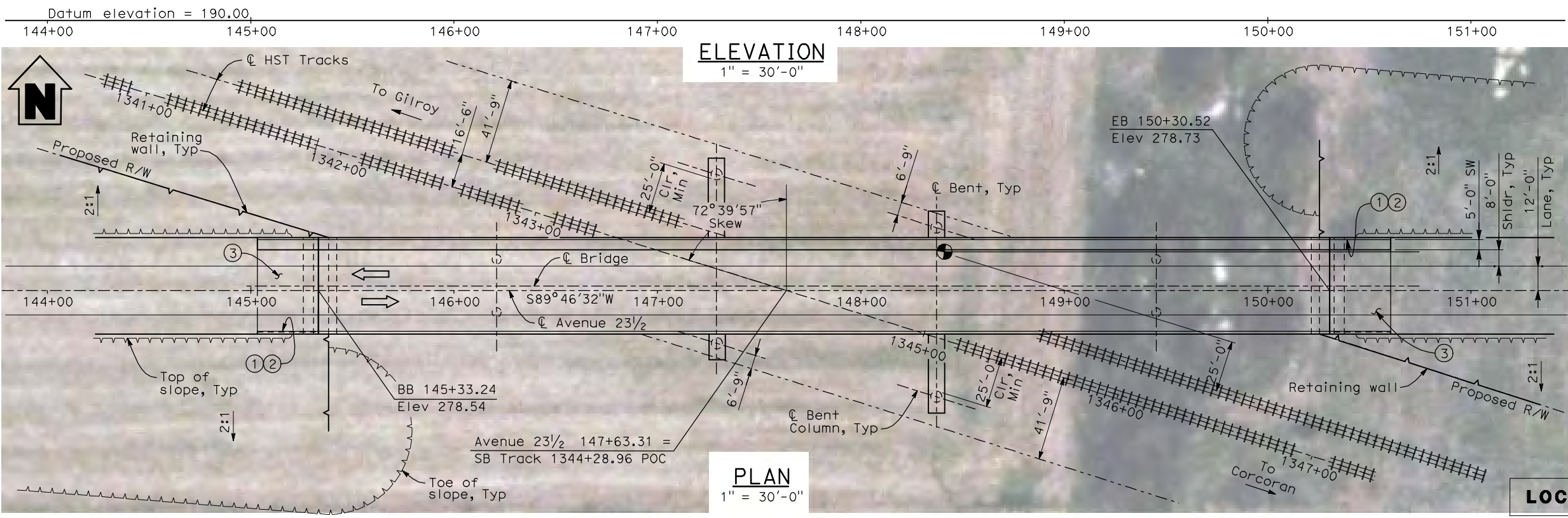
4/30/2011 6:05:31 PM I:\CHSR\60022962\Task-02\_Merced-Fresno\cadd\Struct\Sheet\MPS\M2\15%\_cost\_reduction\_submittal\Grade Structure\W-MF-ST-OH\_Ave 23.5-Loc 9.dgn



- NOTES:**
- ① Paint "Bridge No. XX-XX"
  - ② Paint "Avenue 23 1/2 OH"
  - ③ Structure Approach Slab Type N (30S)
  - ④ Chain Link Railing Type 3
  - ⑤ Concrete Barrier Type 26 (Mod)
  - ⑥ Chain Link Railing Type 7 (Mod)
  - ⑦ Concrete Barrier Type 732
  8. Existing underground and overhead utilities to be determined.

- LEGEND:**
- ← Direction of traffic
  - ⊙ Point of minimum vertical clearance

Date of Estimate	
Bridge Removal	=
Structure Depth	= 5'-0"
Length	= 497'-3 3/8"
Width	= 47'-6"
Area	= 23,620 ft <sup>2</sup>
Cost/ Dft including 10% Mobilization & 25% Contingency	=
Total Cost	=



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
H. LEE  
DRAWN BY  
B. DOLAN  
CHECKED BY  
H. WANG  
IN CHARGE  
A. BOONE  
DATE  
04/29/2011

**RECORD SET  
15% DESIGN  
SUBMITTAL**

**NOT FOR  
CONSTRUCTION**

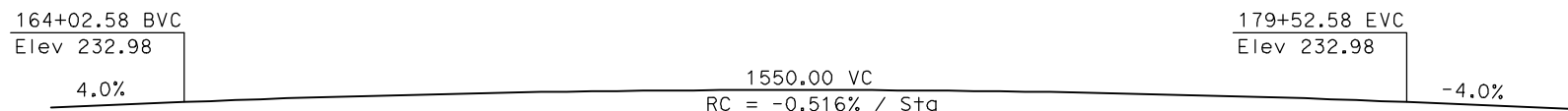


**CALIFORNIA HIGH-SPEED TRAIN PROJECT  
MERCED TO FRESNO**  
UPRR/SR 99 MAIN LINE  
AVENUE 24  
AVENUE 23 1/2 OVERHEAD  
PLANNING STUDY

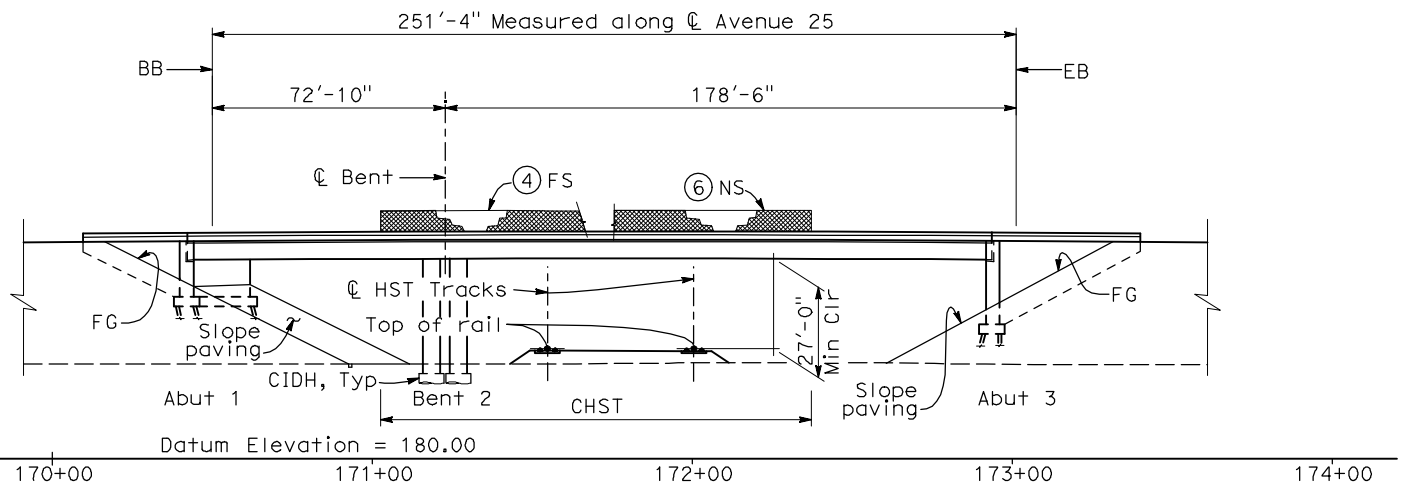
CONTRACT NO.	HSR06-007
DRAWING NO.	ST1124
SCALE	As shown
SHEET NO.	OF



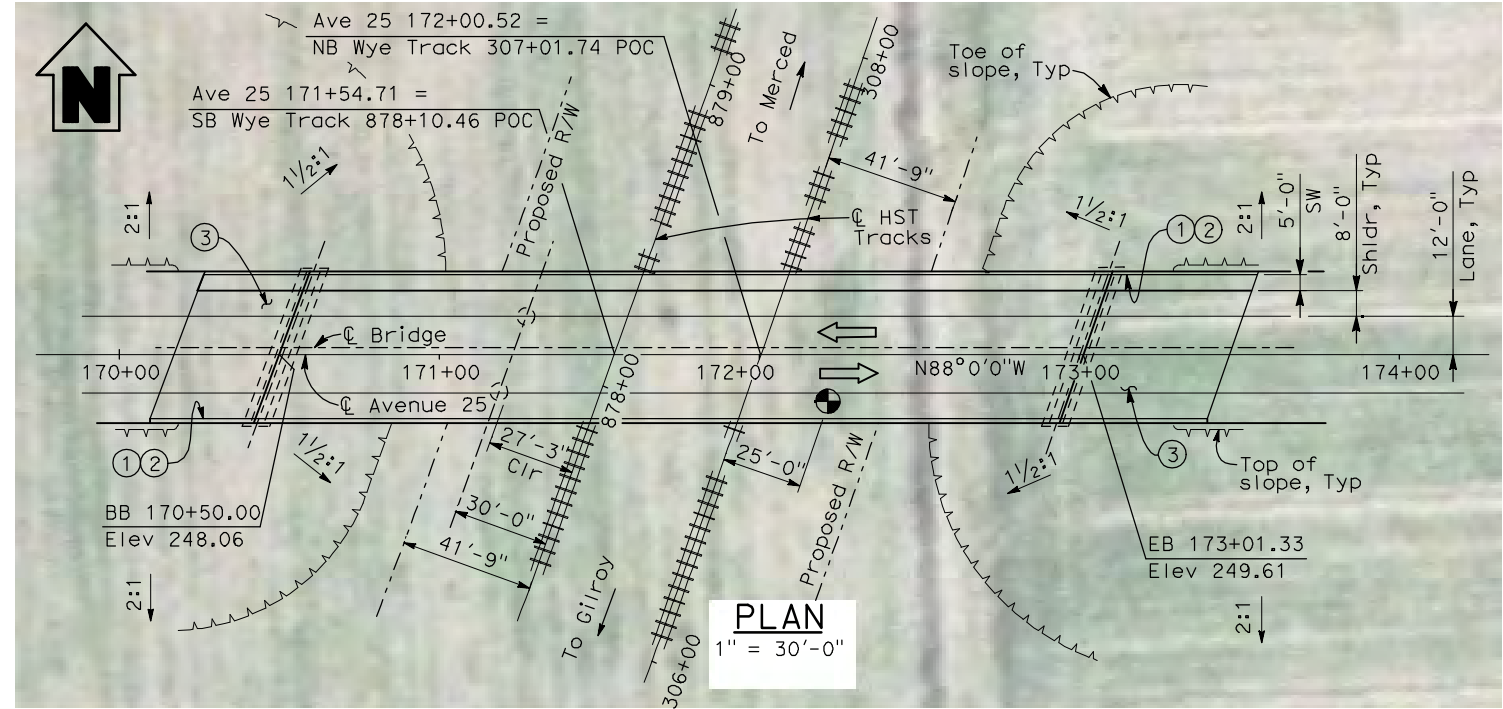
4/30/2011 5:54:32 PM I:\CHSR\60022962\Task-02\_Merced-Fresno\cadd\Struct\Sheet\APS\A2\15%\_cost\_reduction\_submittal\Grade Structure\W-MF-ST-OH\_Ave 25-Loc 8.dgn



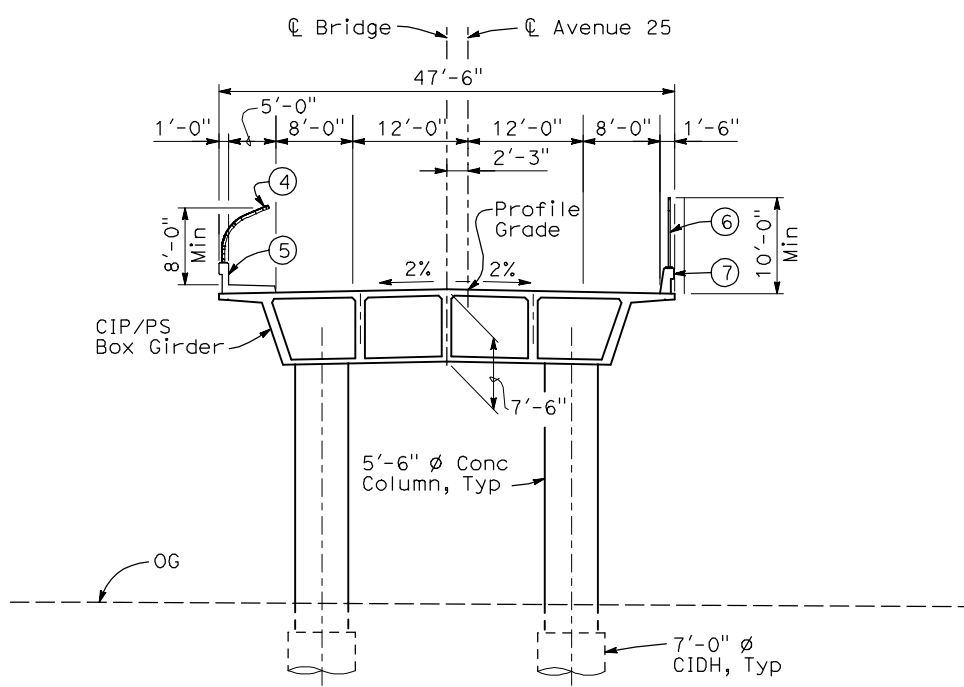
**PROFILE GRADE**  
NTS



**ELEVATION**  
1" = 30'-0"



**PLAN**  
1" = 30'-0"



**TYPICAL SECTION**  
1" = 10'-0"

**NOTES:**

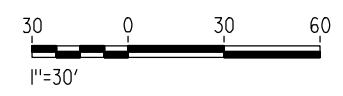
- ① Paint "Bridge No. XX-XX"
- ② Paint "Avenue 25 OH"
- ③ Structure Approach Slab Type N (30S)
- ④ Chain Link Railing Type 3
- ⑤ Concrete Barrier Type 26 (Mod)
- ⑥ Chain Link Railing Type 7 (Mod)
- ⑦ Concrete Barrier Type 732
8. Existing underground and overhead utilities to be determined.

**LEGEND:**

- ← Direction of traffic
- Point of minimum vertical clearance

DATE OF ESTIMATE	=	_____
BRIDGE REMOVAL	=	_____
STRUCTURE DEPTH	=	7'-6"
LENGTH	=	251'-4"
WIDTH	=	47'-6"
AREA	=	11,950 ft <sup>2</sup>
COST/□FT INCLUDING 10% MOBILIZATION & 25% CONTINGENCY	=	_____
TOTAL COST	=	_____

**LOCATION 8**



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
H. LEE  
DRAWN BY  
P. ARIGO  
CHECKED BY  
T. BARNARD  
IN CHARGE  
A. BOONE  
DATE  
04/29/2011

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

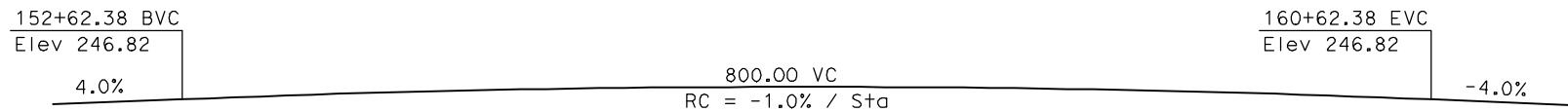
**NOT FOR**  
**CONSTRUCTION**



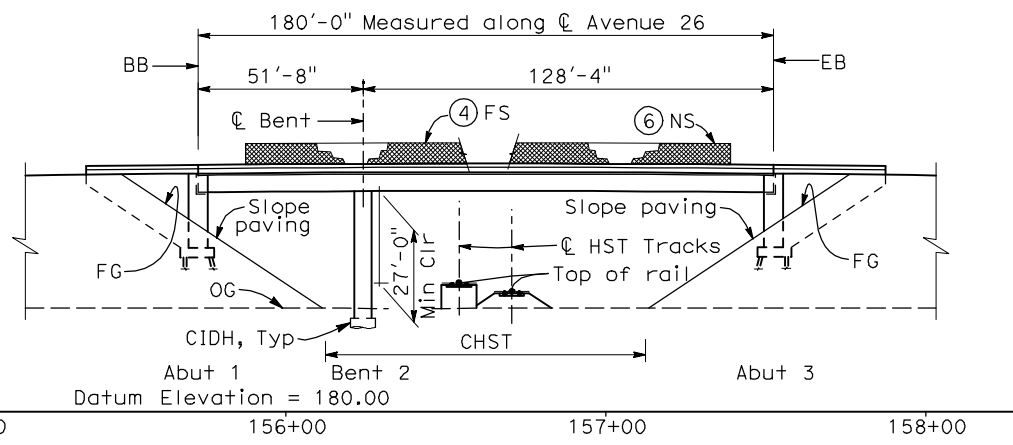
**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
UPRR/SR 99 WYE CONNECTION  
AVENUE 24  
AVENUE 25 OVERHEAD  
PLANNING STUDY

CONTRACT NO.	HSR06-007
DRAWING NO.	ST1125
SCALE	As shown
SHEET NO.	OF

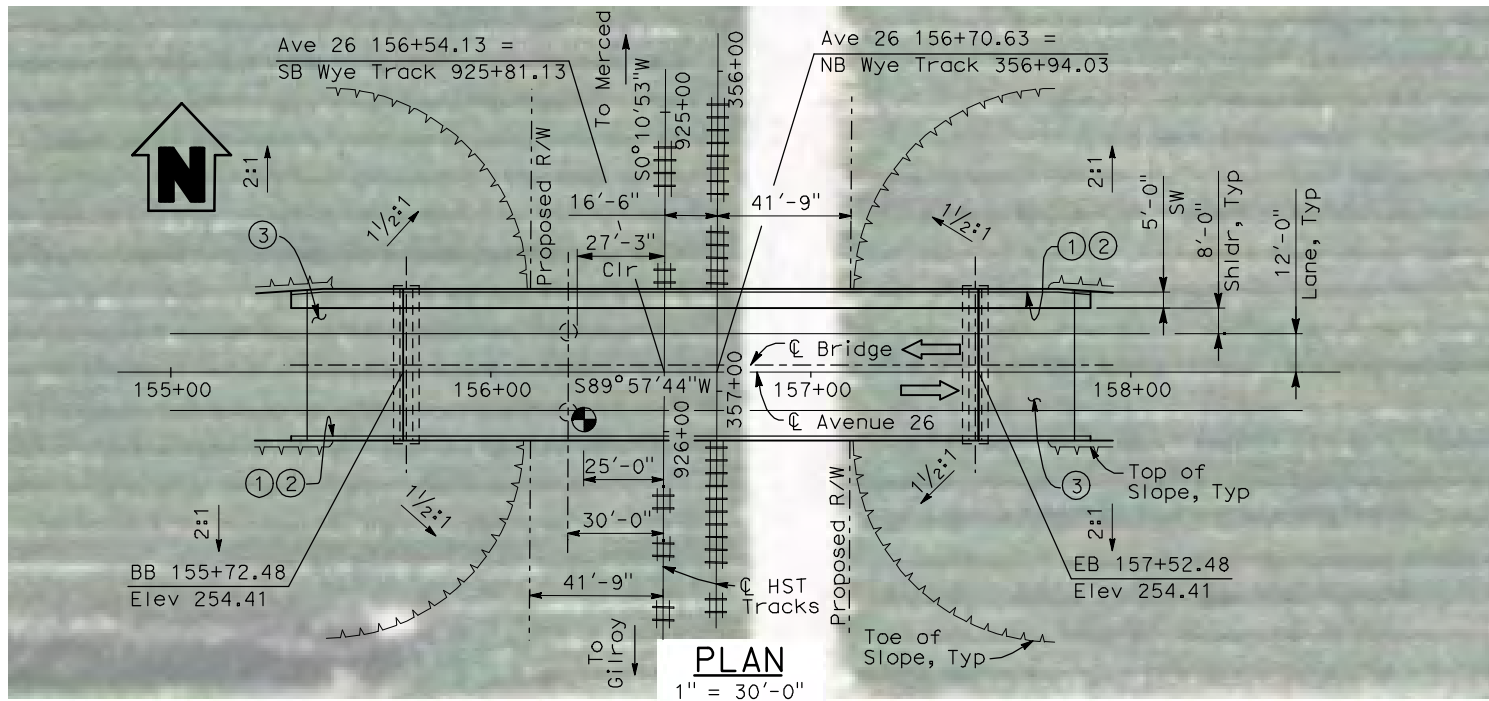
4/30/2011 5:54:56 PM I:\CHSR\60022962\Task-02\_Merced-Fresno\cadd\Struct\Sheet\APS\A2\15%\_cost\_reduction\_submittal\Grade\_Structure\W-MF-ST-OH\_Ave\_26-Loc\_7.dgn



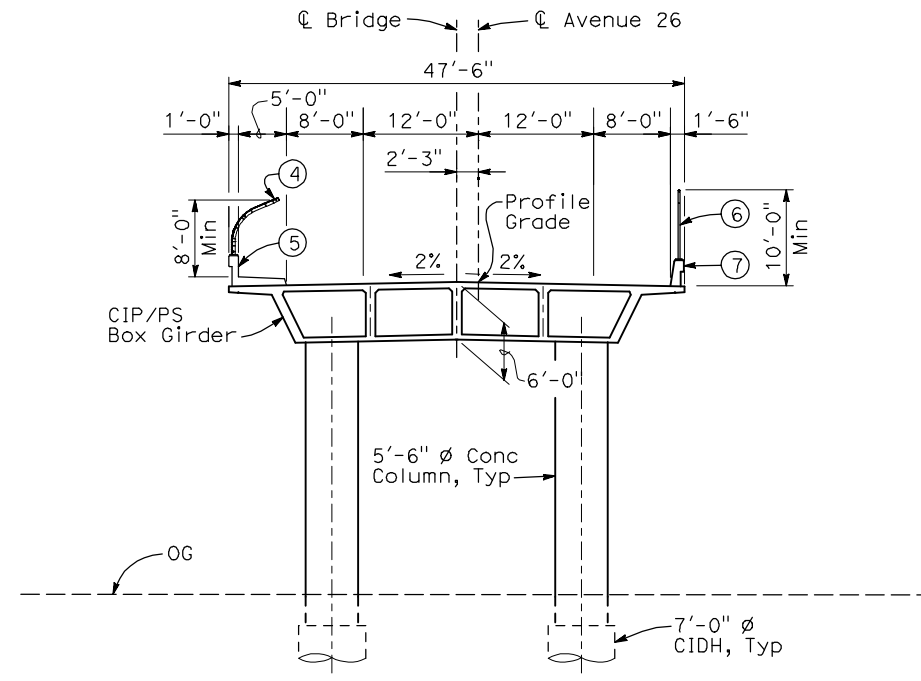
**PROFILE GRADE**  
NTS



**ELEVATION**  
1" = 30'-0"



**PLAN**  
1" = 30'-0"



**TYPICAL SECTION**  
1" = 10'-0"

**NOTES:**

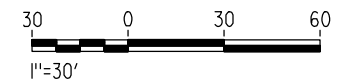
- ① Paint "Bridge No. XX-XX"
- ② Paint "Avenue 26 OH"
- ③ Structure Approach Slab Type N (30S)
- ④ Chain Link Railing Type 3
- ⑤ Concrete Barrier Type 26 (Mod)
- ⑥ Chain Link Railing Type 7 (Mod)
- ⑦ Concrete Barrier Type 732
8. Existing underground and overhead utilities to be determined.

**LEGEND:**

- ← Direction of traffic
- Point of minimum vertical clearance

DATE OF ESTIMATE	=	_____
BRIDGE REMOVAL	=	_____
STRUCTURE DEPTH	=	6'-0"
LENGTH	=	180'-0"
WIDTH	=	47'-6"
AREA	=	8,550 ft <sup>2</sup>
COST/CFE INCLUDING 10% MOBILIZATION & 25% CONTINGENCY	=	_____
TOTAL COST	=	_____

**LOCATION 7**



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
H. LEE  
DRAWN BY  
P. ARIGO  
CHECKED BY  
T. BARNARD  
IN CHARGE  
A. BOONE  
DATE  
04/29/2011

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

**NOT FOR**  
**CONSTRUCTION**

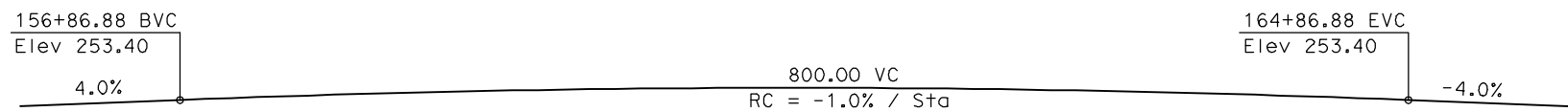


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
UPRR/SR 99 WYE CONNECTION  
AVENUE 24  
AVENUE 26 OVERHEAD  
PLANNING STUDY

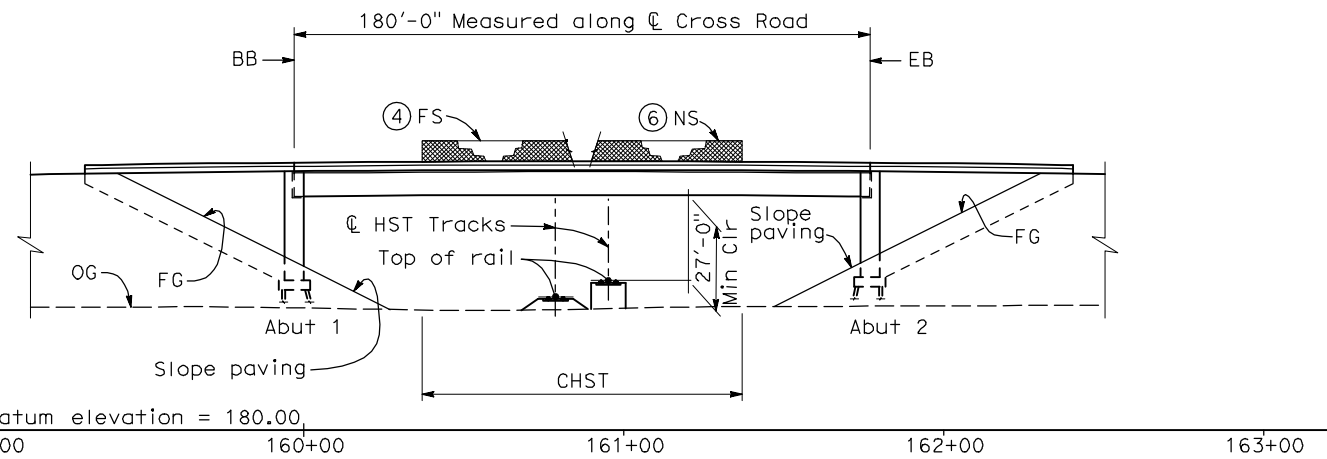
CONTRACT NO.  
HSR06-007  
DRAWING NO.  
ST1126  
SCALE  
As shown  
SHEET NO.  
OF



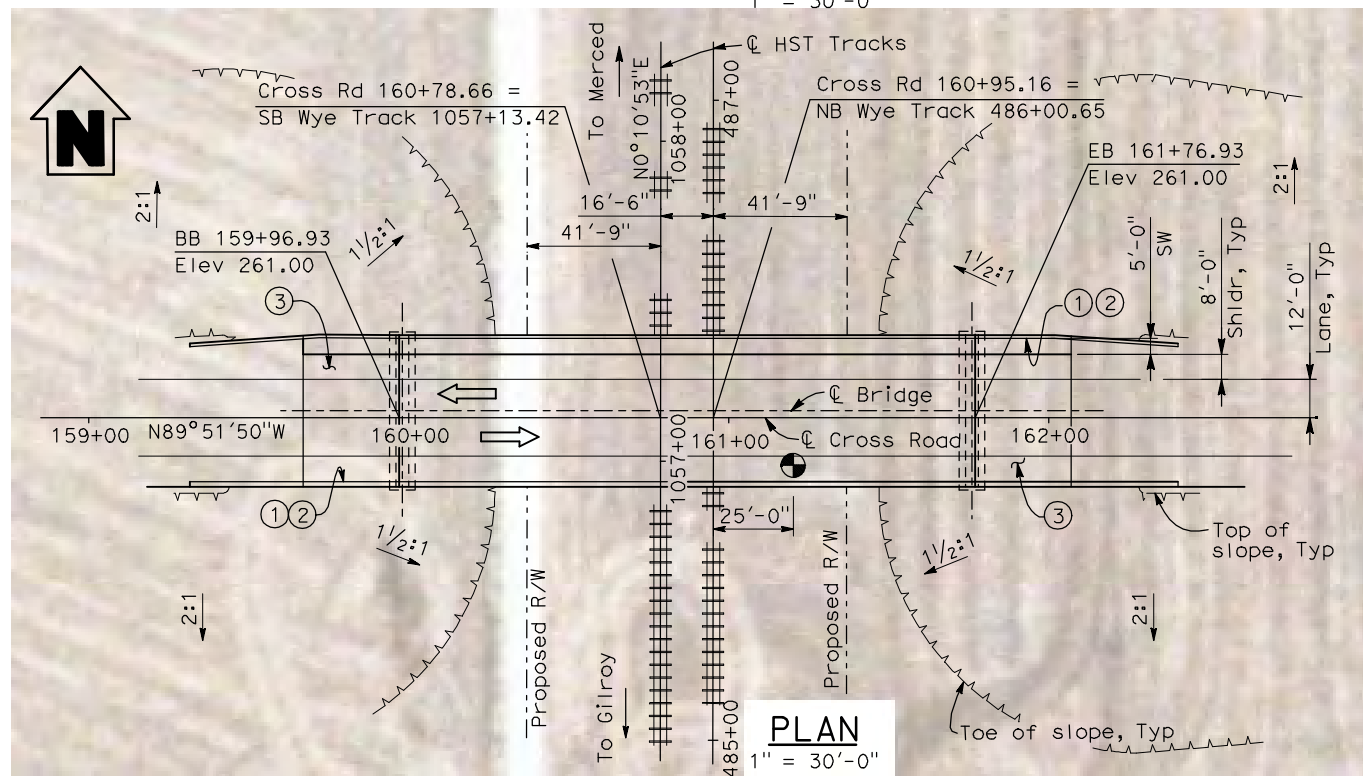
4/30/2011 5:55:23 PM I:\CHSR\60022962\Task-02\_Merced-Fresno\cadd\Struct\Sheet\SPS\A2\15%\_cost\_reduction\_submittal\Grade Structure\W-MF-ST-OH\_Cross Road-Loc 6.dgn



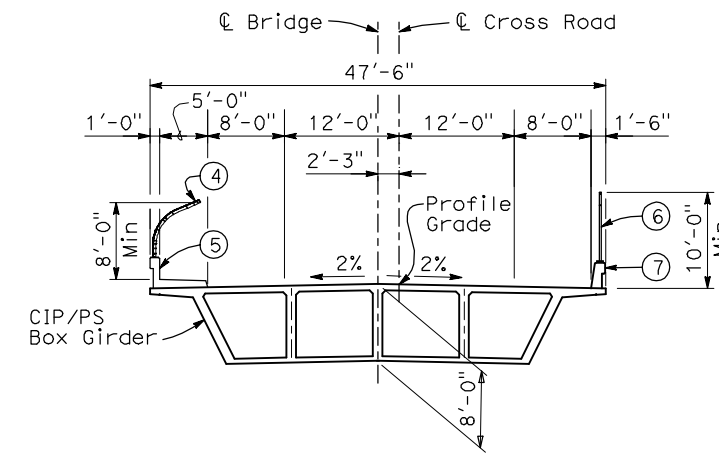
**PROFILE GRADE**  
NTS



**ELEVATION**  
1" = 30'-0"



**PLAN**  
1" = 30'-0"



**TYPICAL SECTION**  
1" = 10'-0"

**NOTES:**

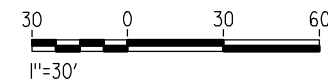
- ① Paint "Bridge No. XX-XX"
- ② Paint "Cross Road OH"
- ③ Structure Approach Slab Type N (30S)
- ④ Chain Link Railing Type 3
- ⑤ Concrete Barrier Type 26 (Mod)
- ⑥ Chain Link Railing Type 7 (Mod)
- ⑦ Concrete Barrier Type 732
8. Existing underground and overhead utilities to be determined.

**LEGEND:**

- ← Direction of traffic
- Point of minimum vertical clearance

DATE OF ESTIMATE	=	_____
BRIDGE REMOVAL	=	_____
STRUCTURE DEPTH	=	8'-0"
LENGTH	=	180'-0"
WIDTH	=	47'-6"
AREA	=	8,550 ft <sup>2</sup>
COST/ LFT INCLUDING 10% MOBILIZATION & 25% CONTINGENCY	=	_____
TOTAL COST	=	_____

**LOCATION 6**



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
H. LEE  
DRAWN BY  
P. ARIGO  
CHECKED BY  
T. BARNARD  
IN CHARGE  
A. BOONE  
DATE  
04/29/2011

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

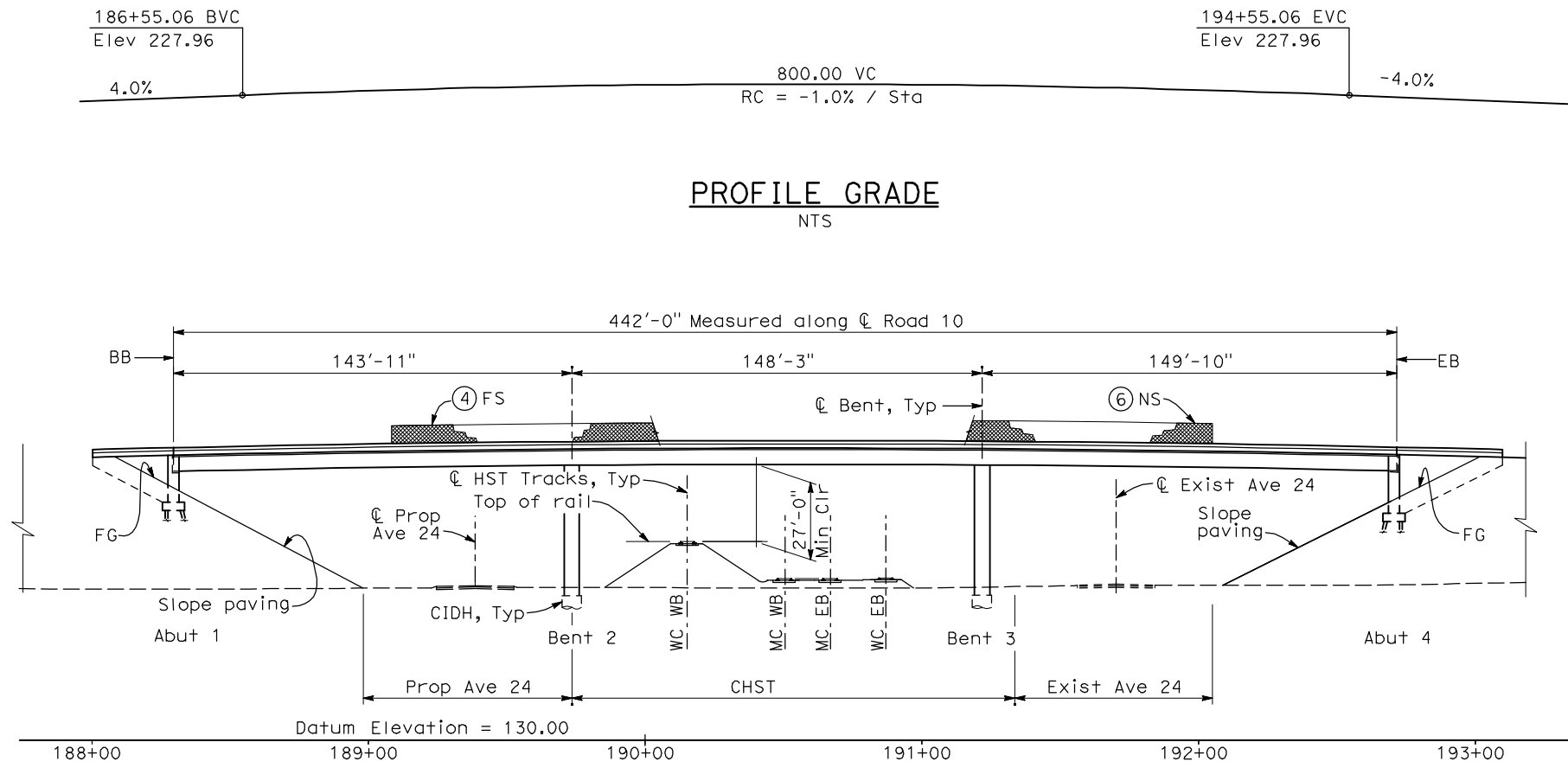
**NOT FOR**  
**CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
UPRR/SR 99 WYE CONNECTION  
AVENUE 24  
CROSS ROAD OVERHEAD  
PLANNING STUDY

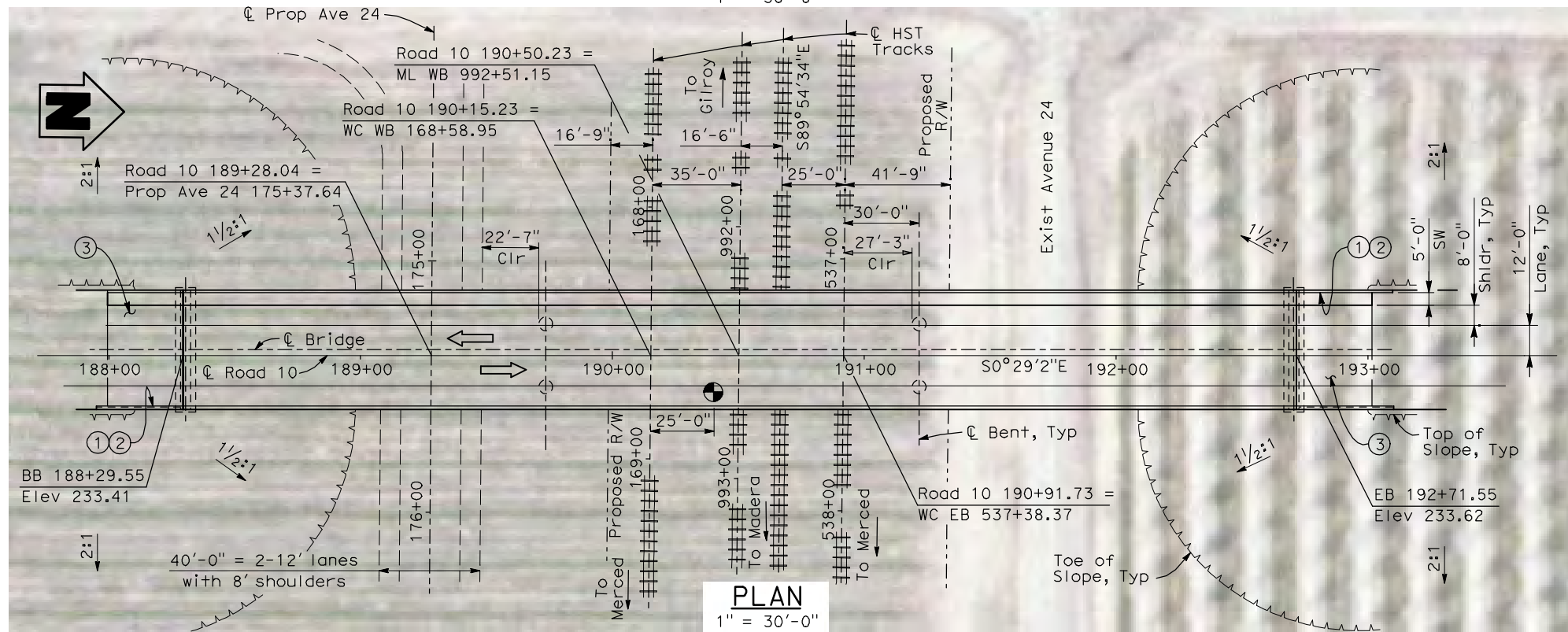
CONTRACT NO.	HSR06-007
DRAWING NO.	ST1127
SCALE	As shown
SHEET NO.	OF

4/30/2011 5:55:57 PM I:\CHSR\60022962\Task-02\_Merced-Fresno\Drawings\Sheet\A2\15%\_cost\_reduction\submit\Grade Structure\W-MF-ST-OH\_Road 10\_W Chow-Loc 32.dgn

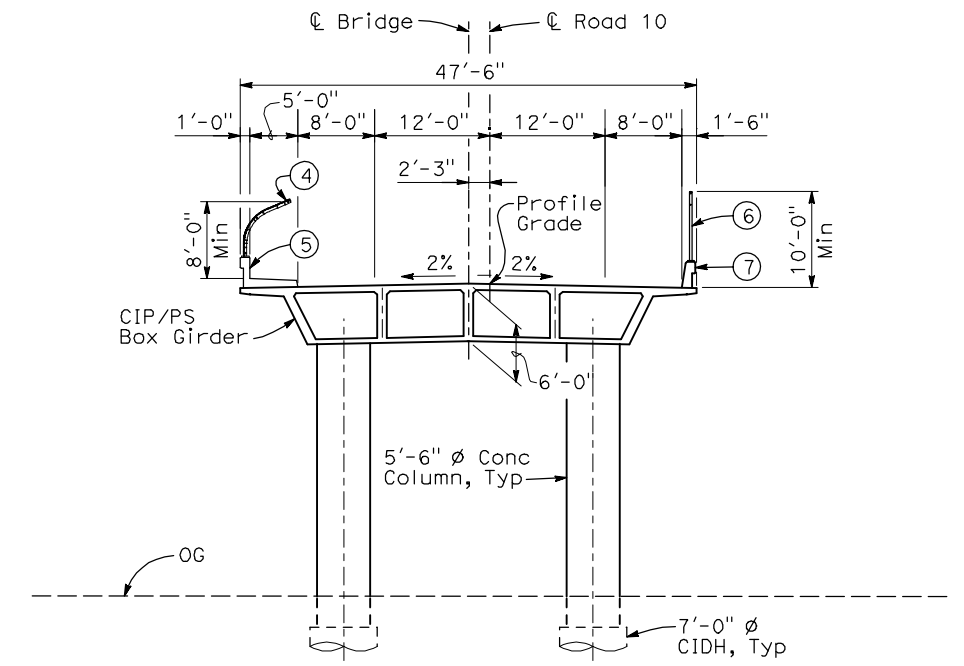


**PROFILE GRADE**  
NTS

**ELEVATION**  
1" = 30'-0"



**PLAN**  
1" = 30'-0"



**TYPICAL SECTION**  
1" = 10'-0"

**NOTES:**

- ① Paint "Bridge No. XX-XX"
- ② Paint "Road 10 OH"
- ③ Structure Approach Slab Type N (30S)
- ④ Chain Link Railing Type 3
- ⑤ Concrete Barrier Type 26 (Mod)
- ⑥ Chain Link Railing Type 7 (Mod)
- ⑦ Concrete Barrier Type 732
8. Existing underground and overhead utilities to be determined.

**LEGEND/ABBREVIATIONS:**

- ← Direction of traffic
- Point of minimum vertical clearance
- ML = Main Line
- WC = Wye Connection

DATE OF ESTIMATE	=	
BRIDGE REMOVAL	=	
STRUCTURE DEPTH	=	6'-0"
LENGTH	=	442'-0"
WIDTH	=	47'-6"
AREA	=	21,000 ft <sup>2</sup>
COST / CFT INCLUDING 10% MOBILIZATION & 25% CONTINGENCY	=	
TOTAL COST	=	



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
H. LEE  
DRAWN BY  
P. ARIGO  
CHECKED BY  
T. BARNARD  
IN CHARGE  
A. BOONE  
DATE  
04/29/2011

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

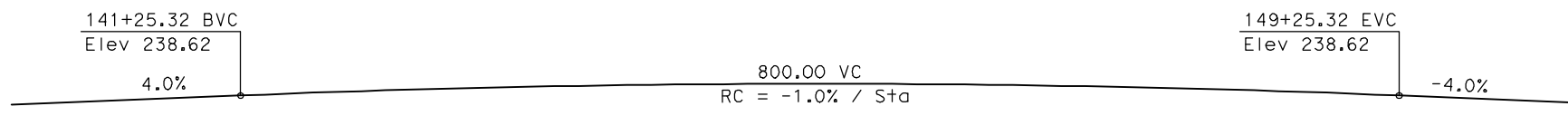


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
UPRR/SR99 MAIN LINE/W CHOWCHILLA AVENUE 24  
ROAD 10 OVERHEAD PLANNING STUDY

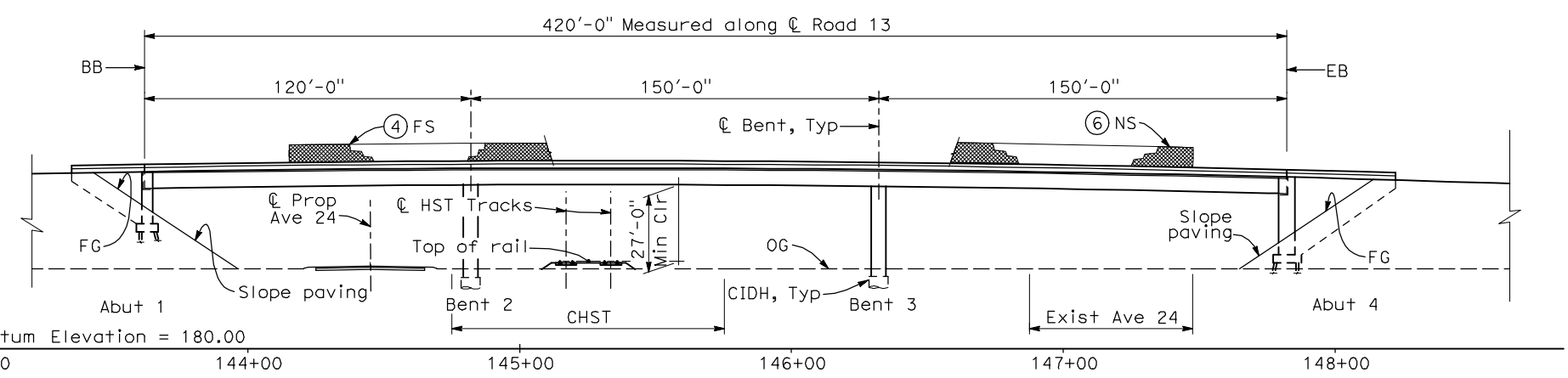
CONTRACT NO.	HSR06-007
DRAWING NO.	ST1128
SCALE	As shown
SHEET NO.	OF



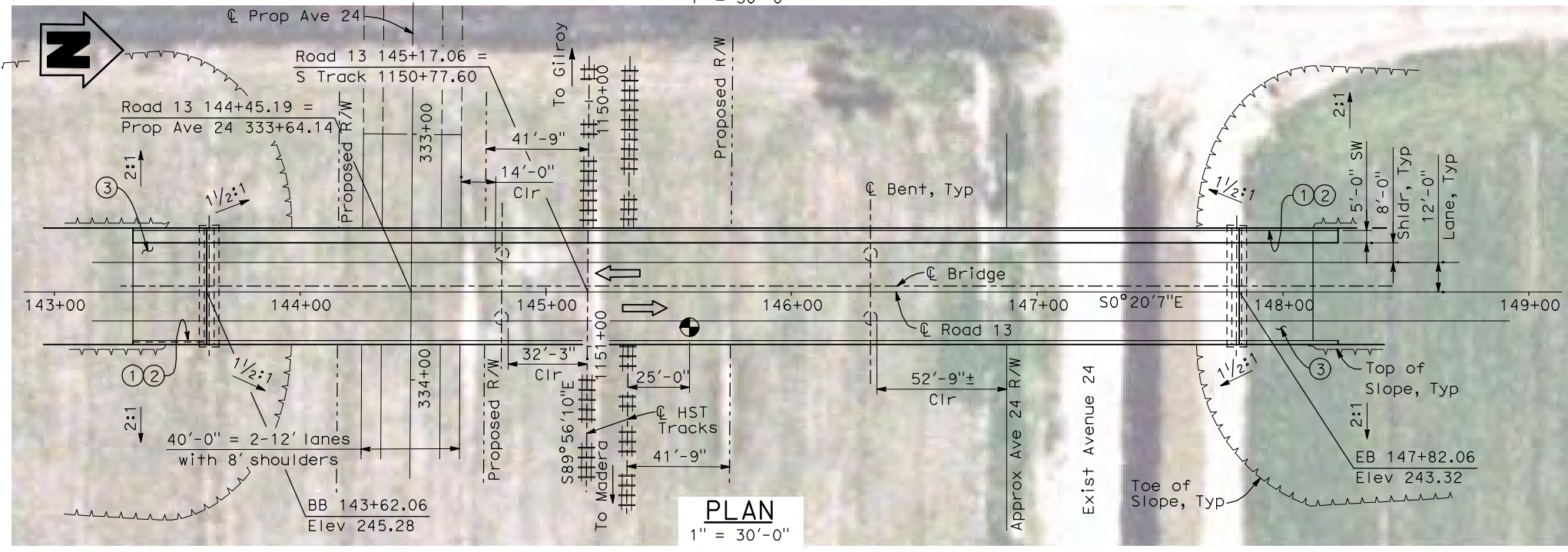
4/30/2011 5:57:27 PM I:\CHSR\60022962\Task-02\_Merced-Fresno\cadd\Struct\Sheet\A2\15%\_cost\_reduction\submit\Grade Structure\W-MF-ST-OH\_Road 13\Chow-Loc 31.dgn



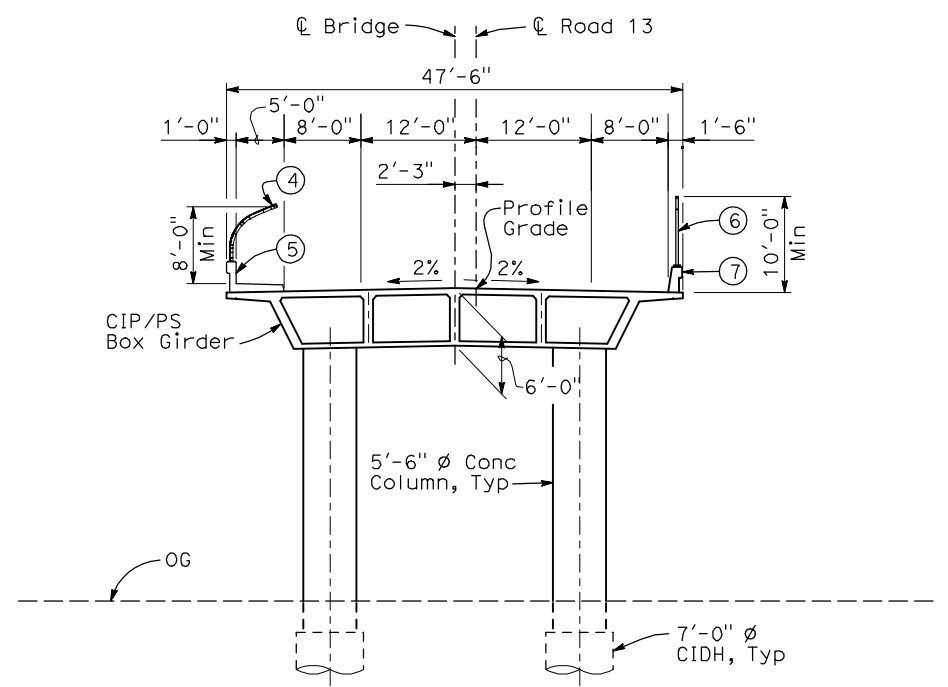
**PROFILE GRADE**  
NTS



**ELEVATION**  
1" = 30'-0"



**PLAN**  
1" = 30'-0"



**TYPICAL SECTION**  
1" = 10'-0"

**NOTES:**

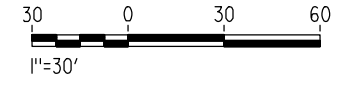
- ① Paint "Bridge No. XX-XX"
- ② Paint "Road 13 OH"
- ③ Structure Approach Slab Type N (30S)
- ④ Chain Link Railing Type 3
- ⑤ Concrete Barrier Type 26 (Mod)
- ⑥ Chain Link Railing Type 7 (Mod)
- ⑦ Concrete Barrier Type 732
8. Existing underground and overhead utilities to be determined.

**LEGEND:**

- ← Direction of traffic
- Point of minimum vertical clearance

DATE OF ESTIMATE	=	_____
BRIDGE REMOVAL	=	_____
STRUCTURE DEPTH	=	6'-0"
LENGTH	=	420'-0"
WIDTH	=	47'-6"
AREA	=	19,950 ft <sup>2</sup>
COST/ CFT INCLUDING 10% MOBILIZATION & 25% CONTINGENCY	=	_____
TOTAL COST	=	_____

**LOCATION 31**



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
H. LEE  
DRAWN BY  
P. ARIGO  
CHECKED BY  
T. BARNARD  
IN CHARGE  
A. BOONE  
DATE  
04/29/2011

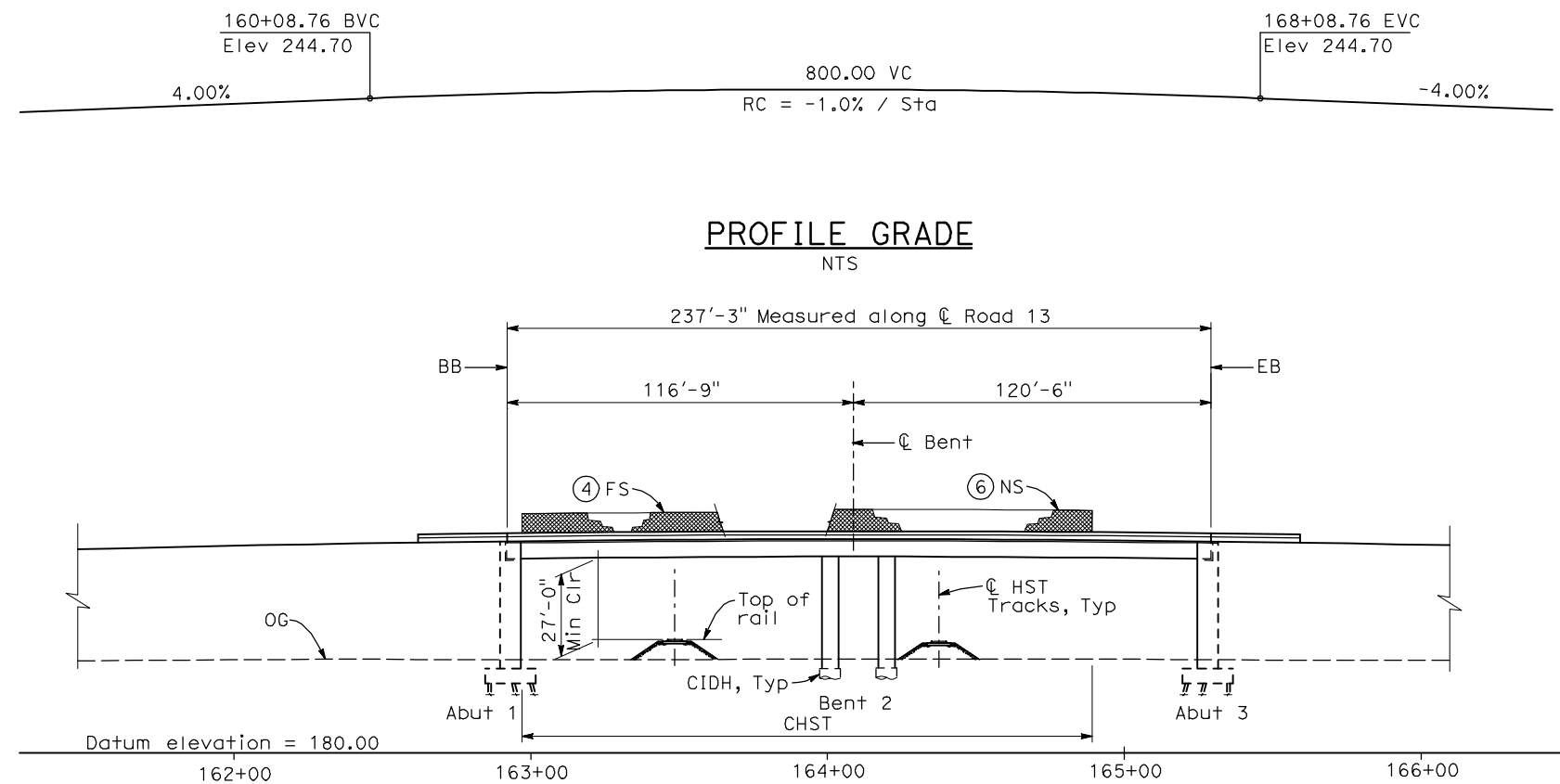
**RECORD SET**  
15% DESIGN  
SUBMITTAL  
  
**NOT FOR  
CONSTRUCTION**



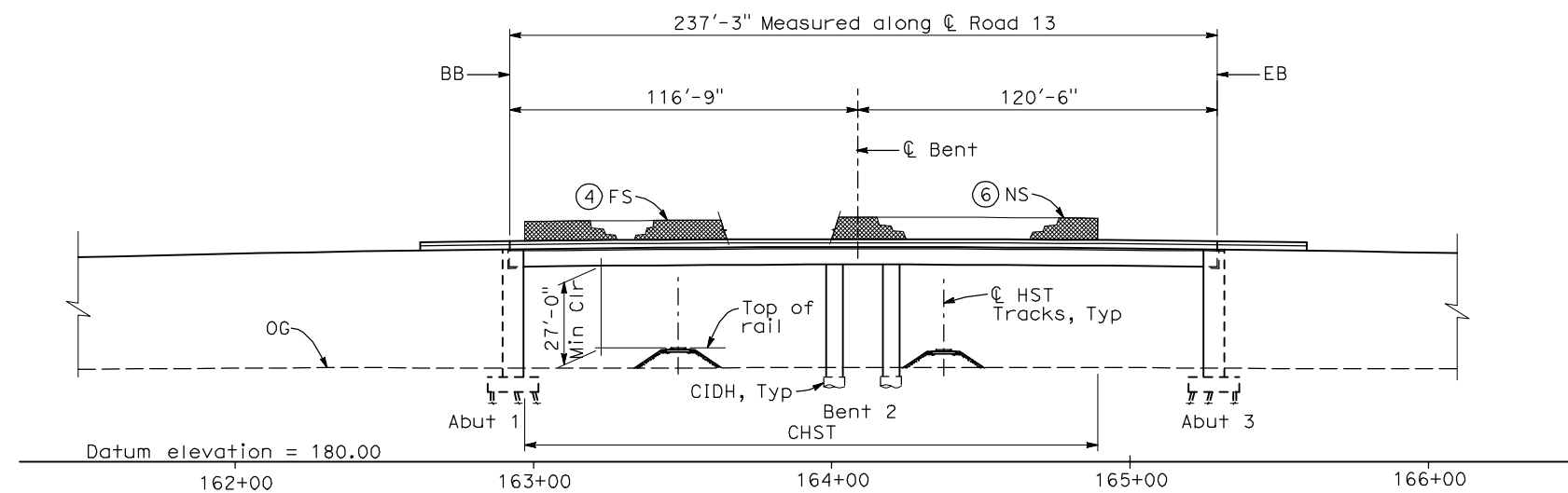
**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
UPRR/SR99 MAIN LINE/W CHOWCHILLA  
AVENUE 24  
ROAD 13 OVERHEAD  
PLANNING STUDY - SHEET 1 OF 2

CONTRACT NO.	HSR06-007
DRAWING NO.	ST1129
SCALE	As shown
SHEET NO.	OF

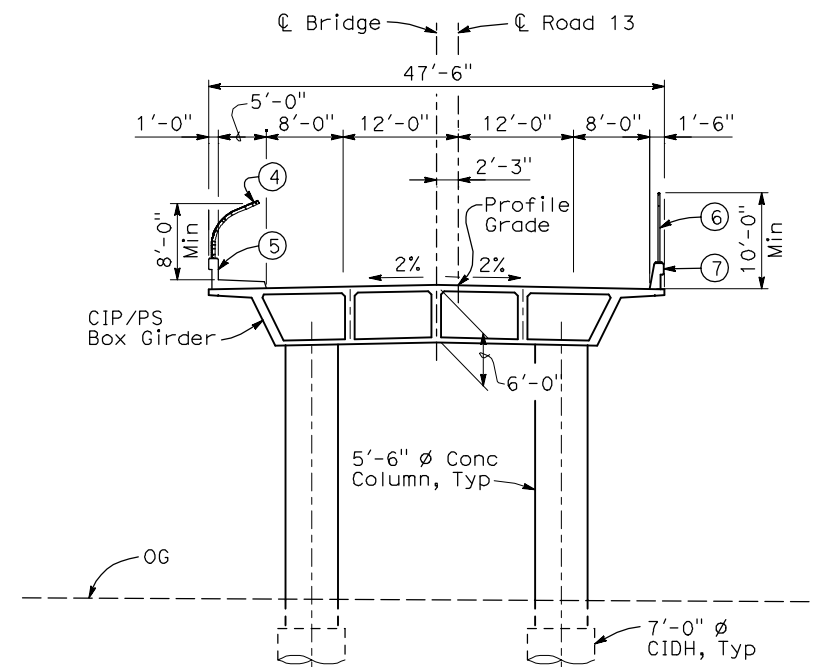
4/30/2011 5:56:51 PM I:\CHSR\60022962\Task-02\_Merced-Fresno\cadd\Struct\Sheet\MPS\M2\15%\_cost\_reduction\_submittal\Grade Structure\W-MF-ST-OH\_Road 13\W-MCDO-Loc 31.dgn



**PROFILE GRADE**  
NTS



**ELEVATION**  
1" = 30'-0"

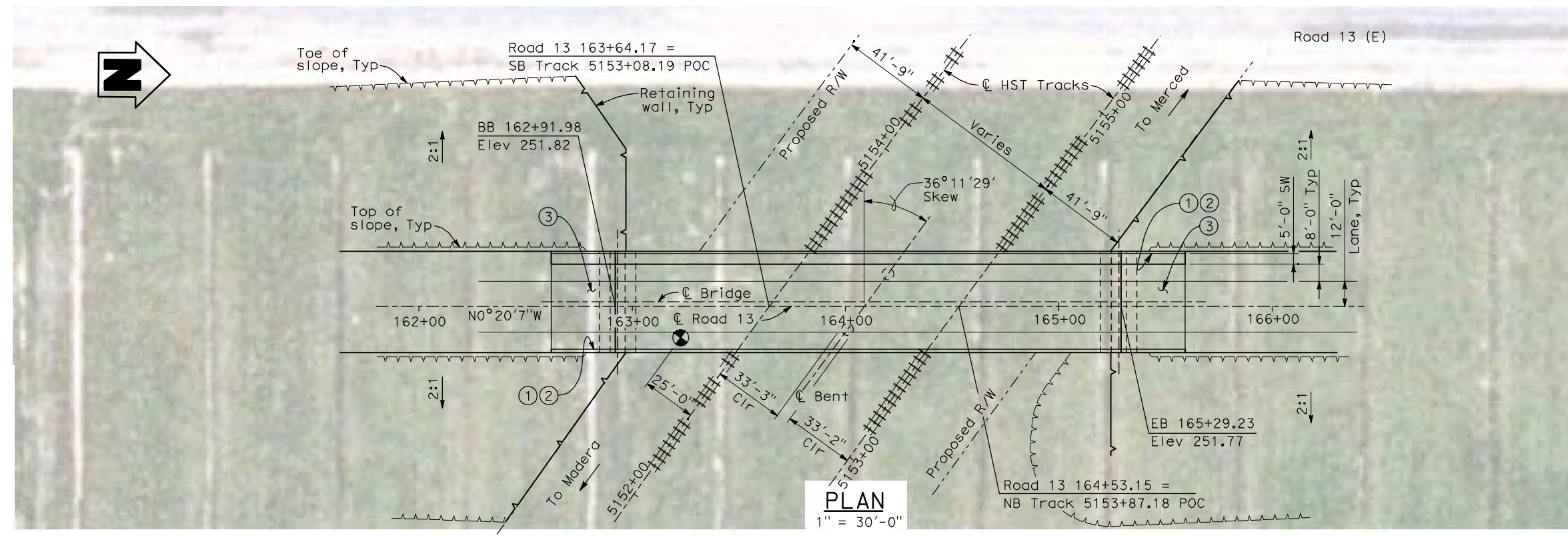


**TYPICAL SECTION**  
1" = 10'-0"

- NOTES:**
- ① Paint "Bridge No. WW-XX"
  - ② Paint "Road 13 OH"
  - ③ Structure Approach Slab Type N (30S)
  - ④ Chain Link Railing Type 3
  - ⑤ Concrete Barrier Type 26 (Mod)
  - ⑥ Chain Link Railing Type 7 (Mod)
  - ⑦ Concrete Barrier Type 732
  8. Existing underground and overhead utilities to be determined.

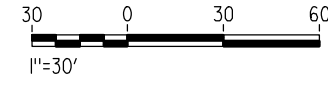
- LEGEND:**
- ← Direction of traffic
  - Point of minimum vertical clearance

DATE OF ESTIMATE	=	
BRIDGE REMOVAL	=	
STRUCTURE DEPTH	=	6'-0"
LENGTH	=	237'-3"
WIDTH	=	47'-6"
AREA	=	11,300 ft <sup>2</sup>
COST/ØFT INCLUDING 10% MOBILIZATION & 25% CONTINGENCY	=	
TOTAL COST	=	



**PLAN**  
1" = 30'-0"

**LOCATION 31**



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
H. LEE  
DRAWN BY  
B. DOLAN  
CHECKED BY  
T. BARNARD  
IN CHARGE  
A. BOONE  
DATE  
04/29/2011

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

**NOT FOR**  
**CONSTRUCTION**

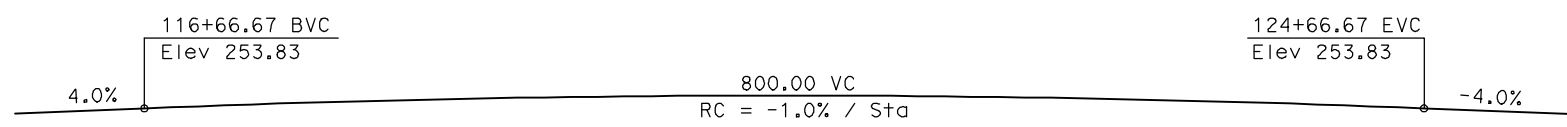


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
UPRR/SR 99 MERCED CONNECTION - W CHOWCHILLA AVENUE 24  
ROAD 13 OVERHEAD  
PLANNING STUDY - SHEET 2 OF 2

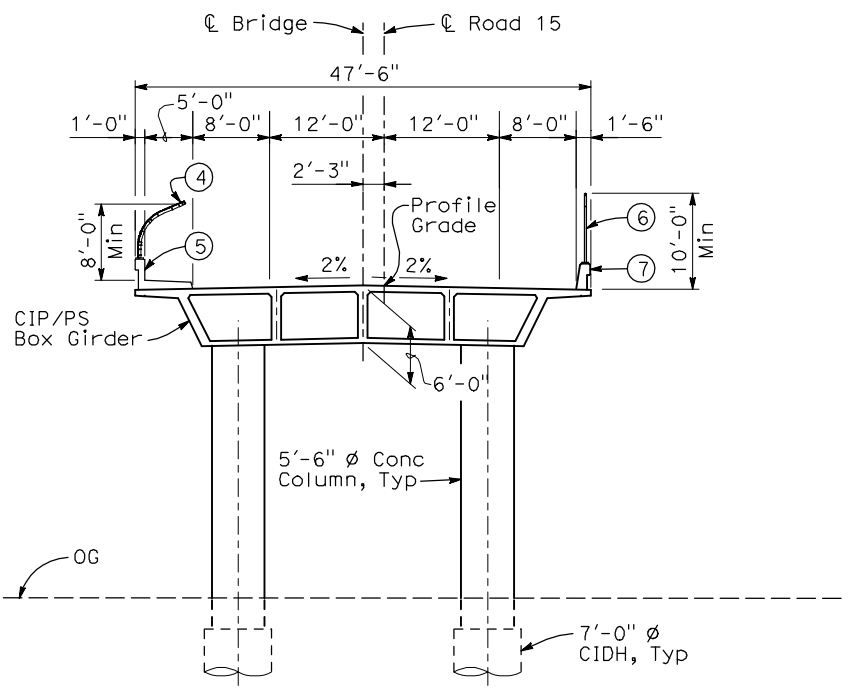
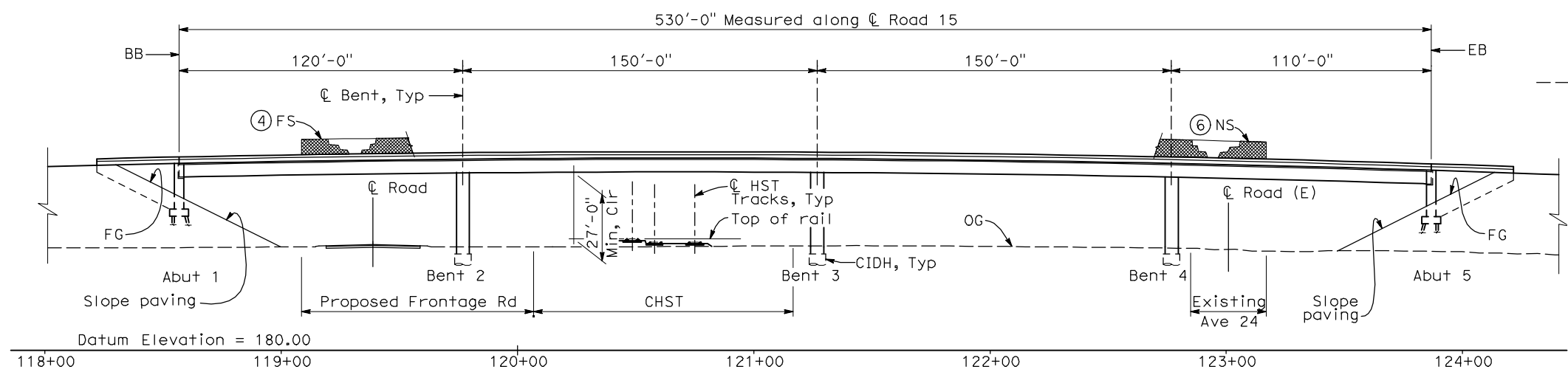
CONTRACT NO.	HSR06-007
DRAWING NO.	ST1137
SCALE	As shown
SHEET NO.	OF



4/30/2011 5:57:55 PM I:\CHSR\60022962\Task-02\_Merced-Fresno\Drawings\Sheet\A2\15%\_cost\_reduction\_submittal\Grade Structure\W-MF-ST-OH\_Road 15\Chow-Loc 30.dgn



**PROFILE GRADE**  
NTS



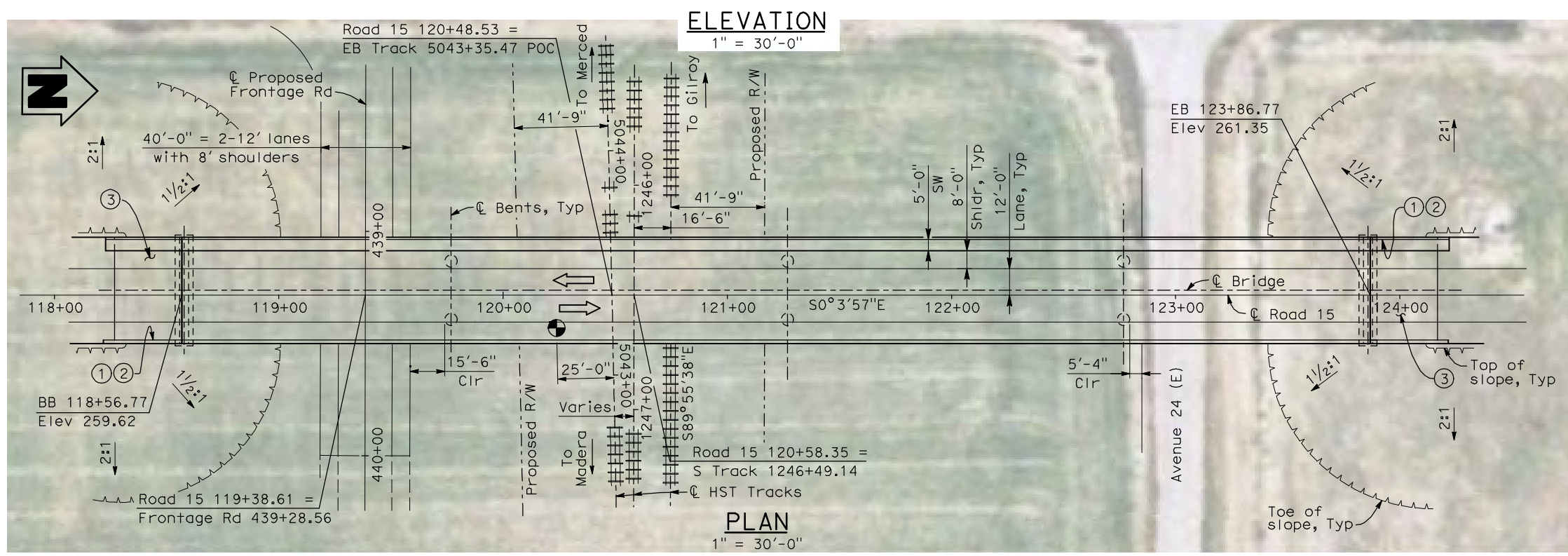
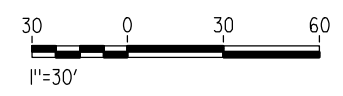
**TYPICAL SECTION**  
1" = 10'-0"

- NOTES:**
- ① Paint "Bridge No. XX-XX"
  - ② Paint "Road 15 OH"
  - ③ Structure Approach Slab Type N (30S)
  - ④ Chain Link Railing Type 3
  - ⑤ Concrete Barrier Type 26 (Mod)
  - ⑥ Chain Link Railing Type 7 (Mod)
  - ⑦ Concrete Barrier Type 732
  8. Existing underground and overhead utilities to be determined.

- LEGEND:**
- ← Direction of traffic
  - Point of minimum vertical clearance

DATE OF ESTIMATE	
BRIDGE REMOVAL	=
STRUCTURE DEPTH	= 6'-0"
LENGTH	= 530'-0"
WIDTH	= 47'-6"
AREA	= 25,200 ft <sup>2</sup>
COST/CFE INCLUDING 10% MOBILIZATION & 25% CONTINGENCY	=
TOTAL COST	=

**LOCATION 30**



**ELEVATION**  
1" = 30'-0"

**PLAN**  
1" = 30'-0"

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
H. LEE  
DRAWN BY  
P. ARIGO  
CHECKED BY  
T. BARNARD  
IN CHARGE  
A. BOONE  
DATE  
04/29/2011

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

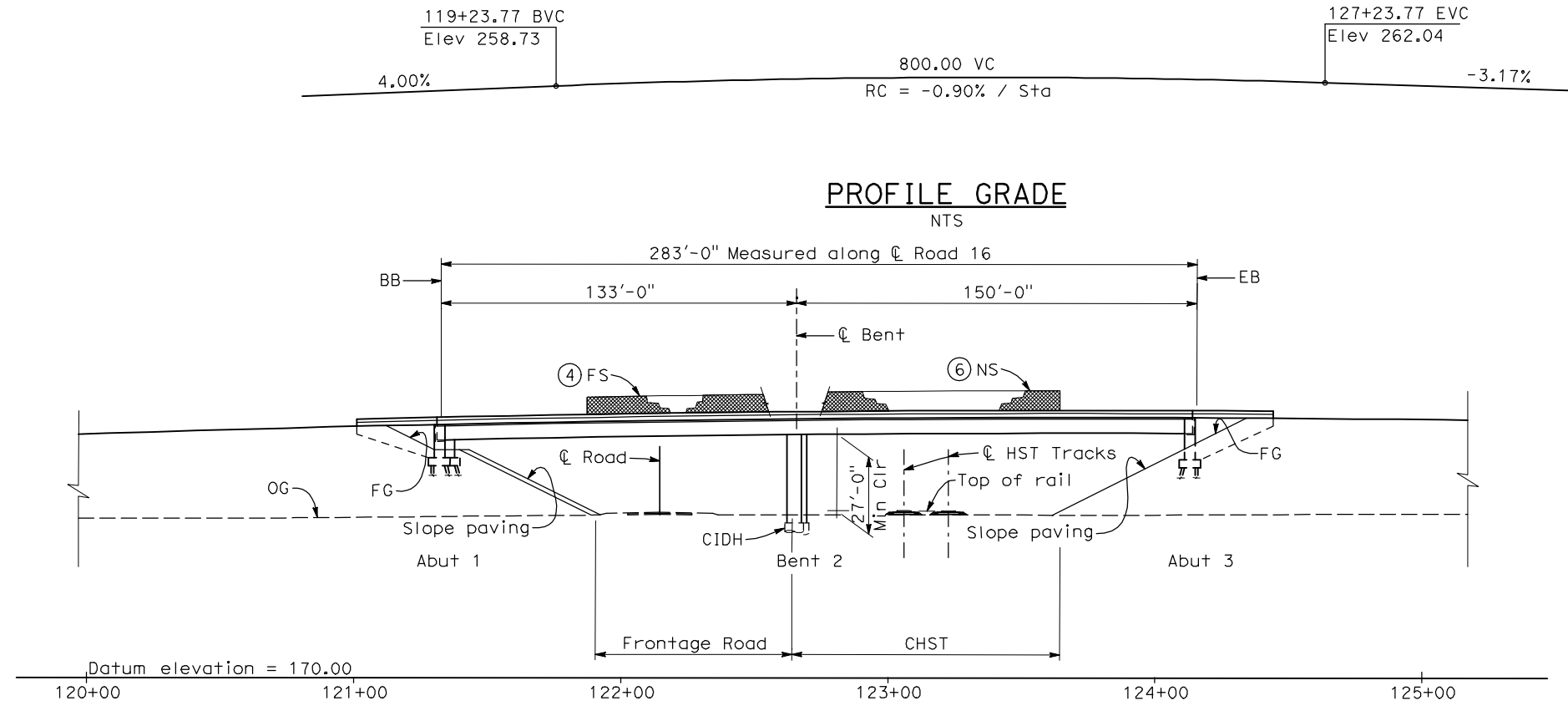
**NOT FOR**  
**CONSTRUCTION**



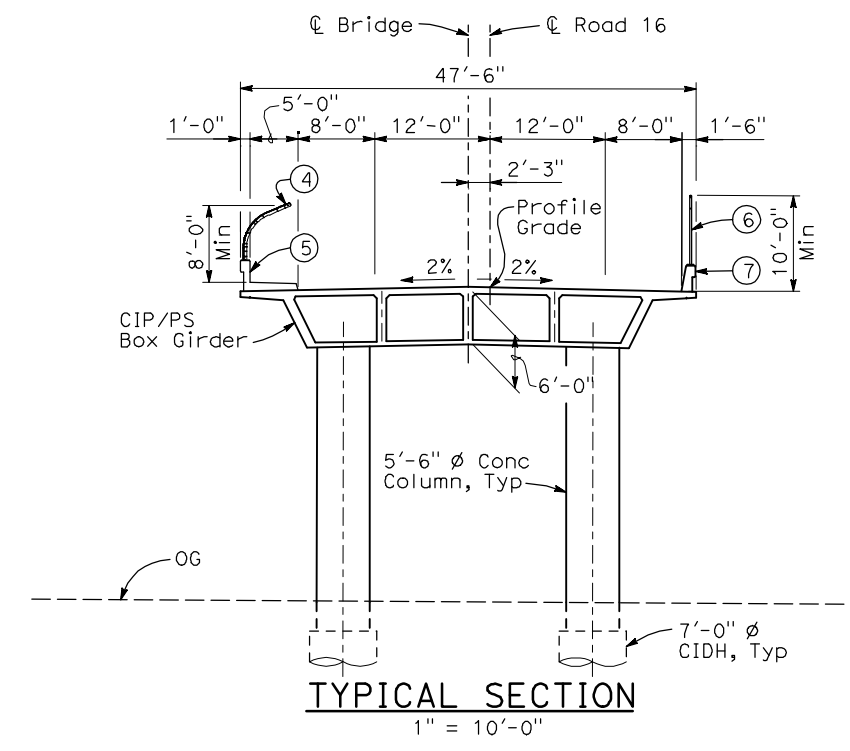
**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
UPRR/SR 99 MAIN LINE/W CHOWCHILLA  
AVENUE 24  
ROAD 15 OVERHEAD  
PLANNING STUDY

CONTRACT NO.	HSR06-007
DRAWING NO.	ST1130
SCALE	As shown
SHEET NO.	OF

4/30/2011 5:58:32 PM I:\CHSR\60022962\Task-02\_Merced-Fresno\cadd\Struct\Sheet\APS\A2\15%\_cost\_reduction\_submittal\Grade Structure\W-MF-ST-OH\_Road\_16\W-Chow-Loc\_29.dgn



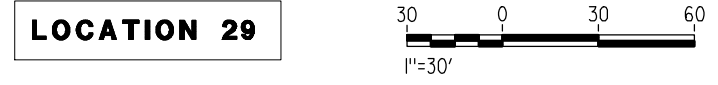
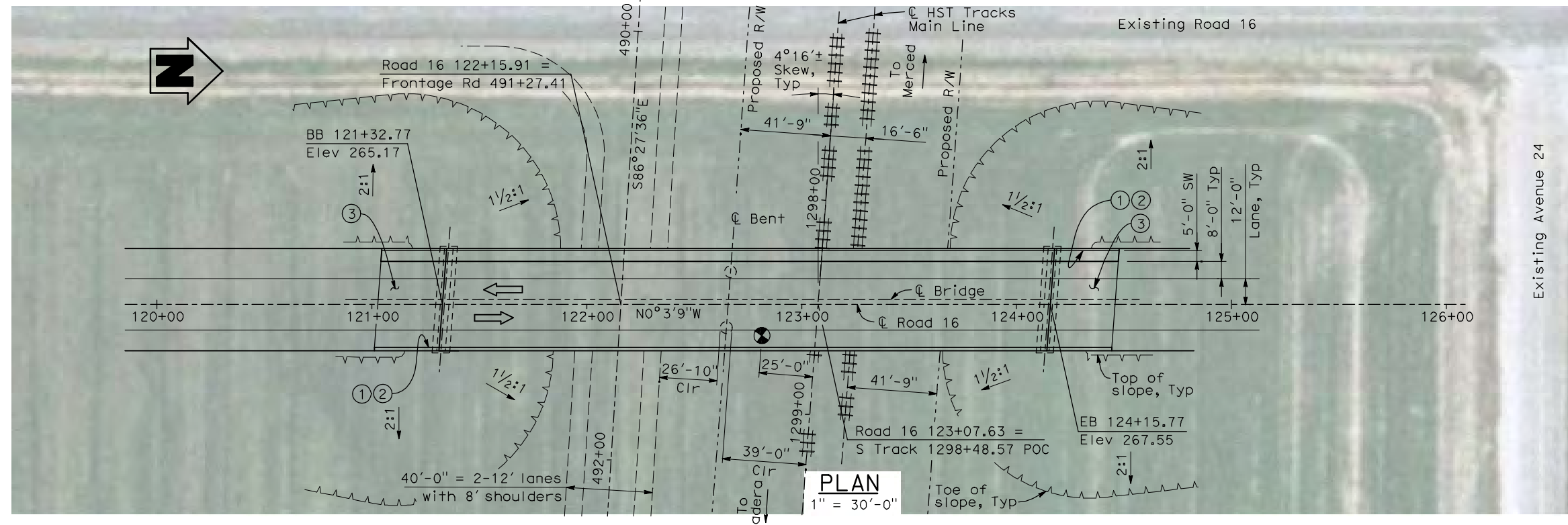
**ELEVATION**  
1" = 30'-0"



- NOTES:**
- ① Paint "Bridge No. WW-WW"
  - ② Paint "Road 16 OH"
  - ③ Structure Approach Slab Type N (30S)
  - ④ Chain Link Railing Type 3
  - ⑤ Concrete Barrier Type 26 (Mod)
  - ⑥ Chain Link Railing Type 7 (Mod)
  - ⑦ Concrete Barrier Type 732
  8. Existing underground and overhead utilities to be determined.

- LEGEND:**
- Direction of traffic
  - Point of minimum vertical clearance

DATE OF ESTIMATE	_____
BRIDGE REMOVAL	= _____
STRUCTURE DEPTH	= 6'-0"
LENGTH	= 283'-0"
WIDTH	= 47'-6"
AREA	= 13,450 ft <sup>2</sup>
COST/ $\square$ FT INCLUDING 10% MOBILIZATION & 25% CONTINGENCY	= _____
TOTAL COST	= _____



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
H. LEE

DRAWN BY  
B. DOLAN

CHECKED BY  
T. BARNARD

IN CHARGE  
A. BOONE

DATE  
04/29/2011

**RECORD SET**  
15% DESIGN SUBMITTAL

**NOT FOR CONSTRUCTION**

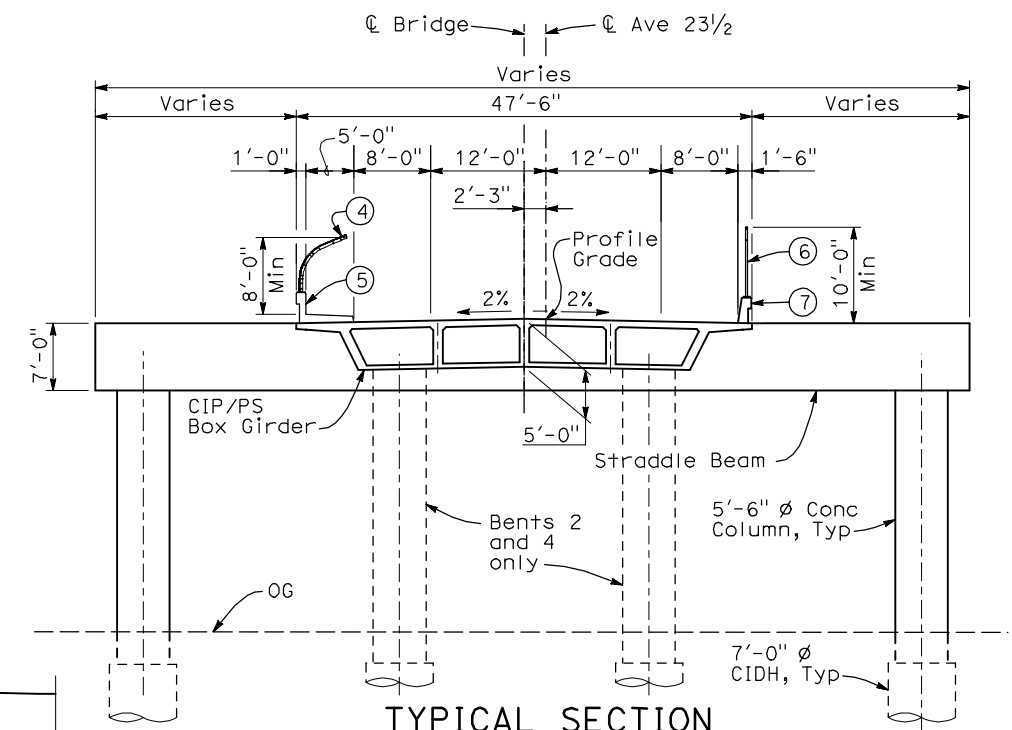
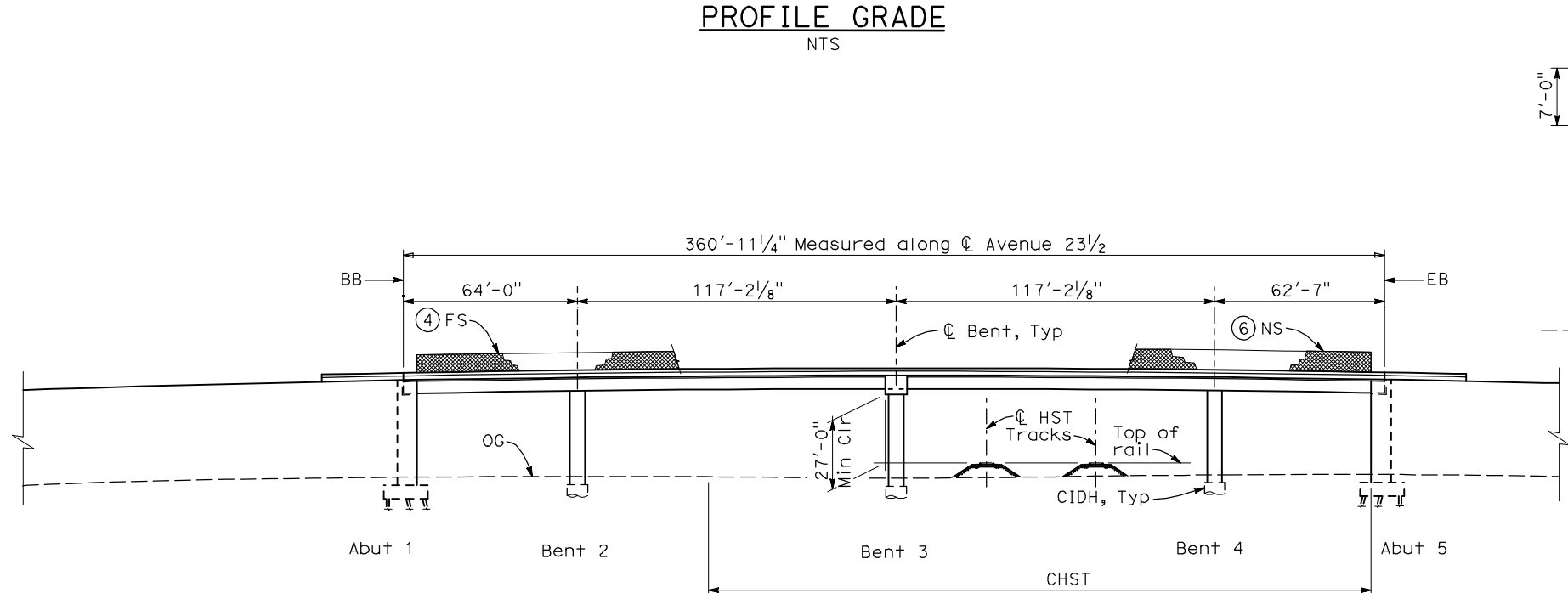
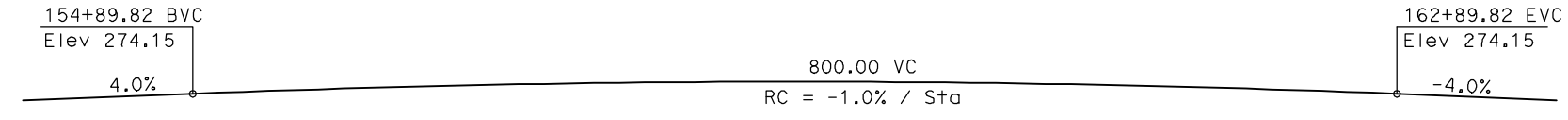


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
UPRR/SR 99 MAIN LINE/W CHOWCHILLA  
AVENUE 24  
ROAD 16 OVERHEAD  
PLANNING STUDY

CONTRACT NO.	HSR06-007
DRAWING NO.	ST1131
SCALE	As shown
SHEET NO.	OF



4/30/2011 5:59:07 PM I:\CHSR\60022962\Task-02\_Merced-Fresno\cadd\Struct\Sheet\SPS\A2\15%\_cost\_reduction\_submittal\Grade Structure\W-MF-ST-OH\_Ave 23.5\Chow-Loc 28.dgn



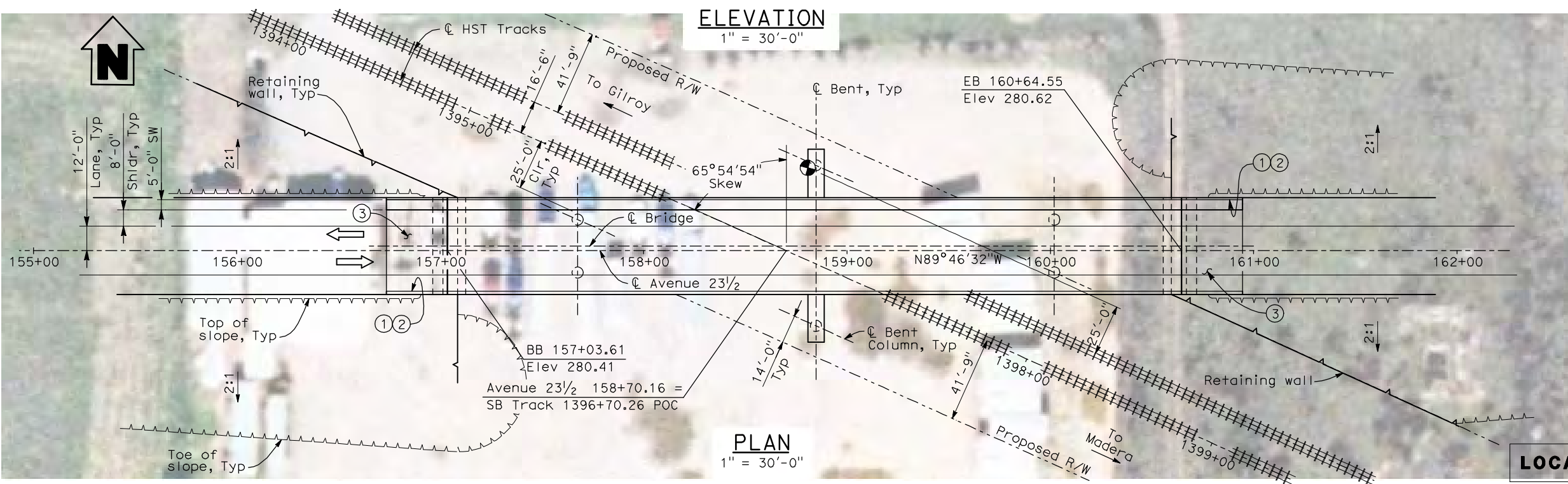
**TYPICAL SECTION**  
1"=10'-0"

- NOTES:**
- ① Paint "Bridge No. XX-XX"
  - ② Paint "Avenue 23 1/2 OH"
  - ③ Structure Approach Slab Type N (30S)
  - ④ Chain Link Railing Type 3
  - ⑤ Concrete Barrier Type 26 (Mod)
  - ⑥ Chain Link Railing Type 7 (Mod)
  - ⑦ Concrete Barrier Type 732
  8. Existing underground and overhead utilities to be determined.

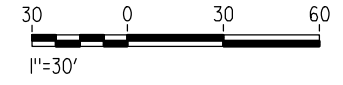
- LEGEND:**
- ← Direction of traffic
  - ⊙ Point of minimum vertical clearance

Date of Estimate	
Bridge Removal	=
Structure Depth	= 5'-0"
Length	= 360'-11 1/4"
Width	= 47'-6"
Area	= 17,150 ft <sup>2</sup>
Cost/□ft including 10% Mobilization & 25% Contingency	=
Total Cost	=

Datum elevation = 190.00  
155+00 156+00 157+00 158+00 159+00 160+00 161+00 162+00



**LOCATION 28**



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
H. LEE  
DRAWN BY  
B. DOLAN  
CHECKED BY  
H. WANG  
IN CHARGE  
A. BOONE  
DATE  
04/29/2011

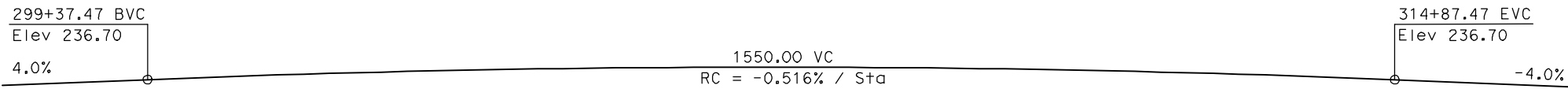
**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**

**NOT FOR**  
**CONSTRUCTION**



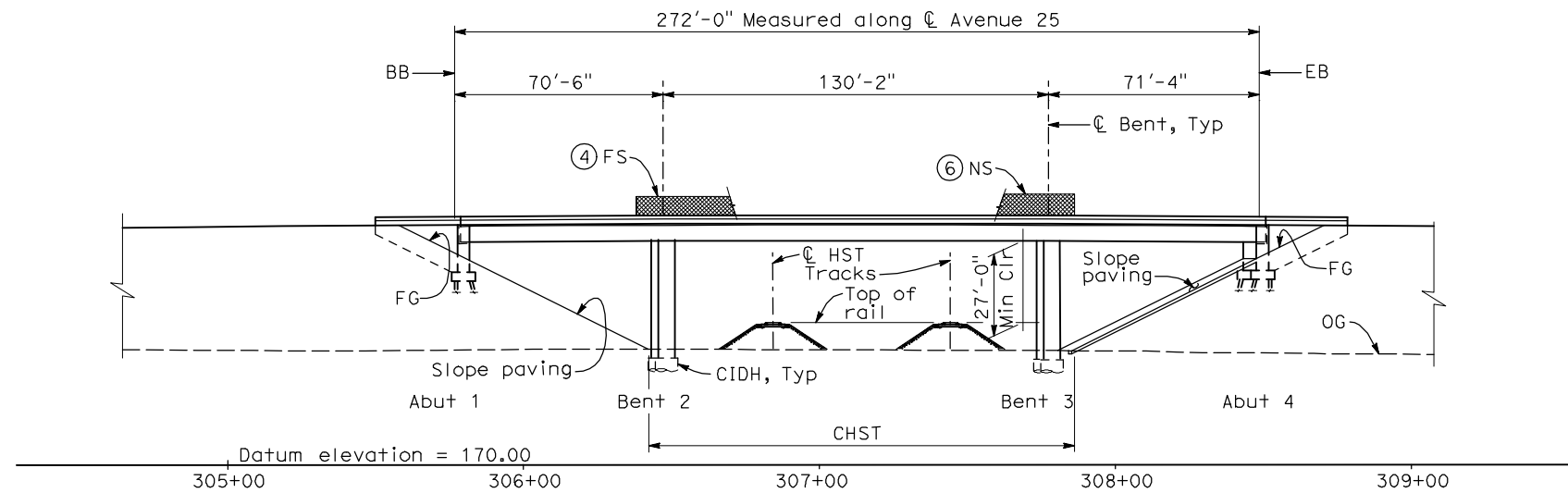
**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
UPRR/SR 99 MAIN LINE/W CHOWCHILLA  
AVENUE 24  
AVENUE 23 1/2 OVERHEAD  
PLANNING STUDY

CONTRACT NO.	HSR06-007
DRAWING NO.	ST1132
SCALE	As shown
SHEET NO.	OF



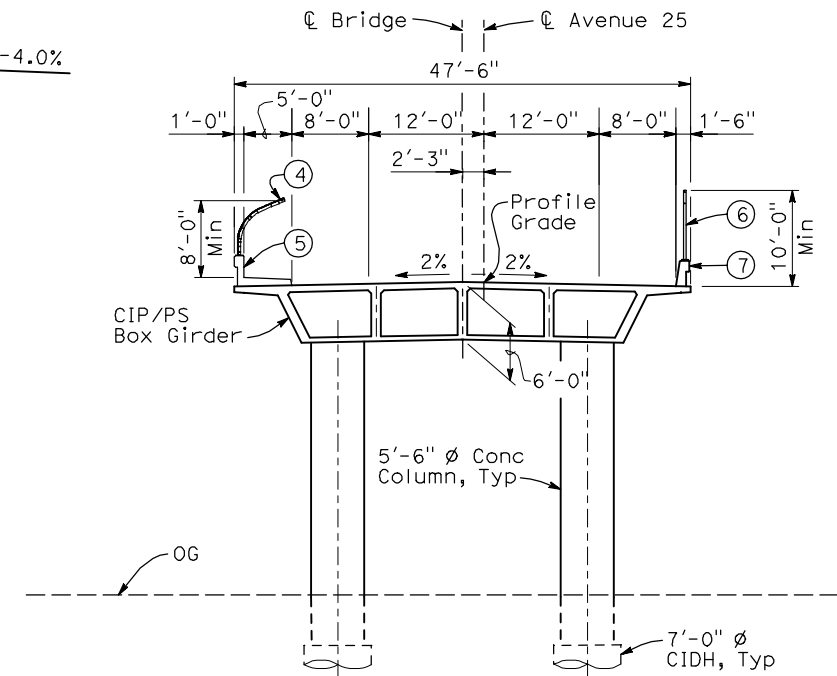
**PROFILE GRADE**

NTS



**ELEVATION**

1" = 30'-0"



**TYPICAL SECTION**

1" = 10'-0"

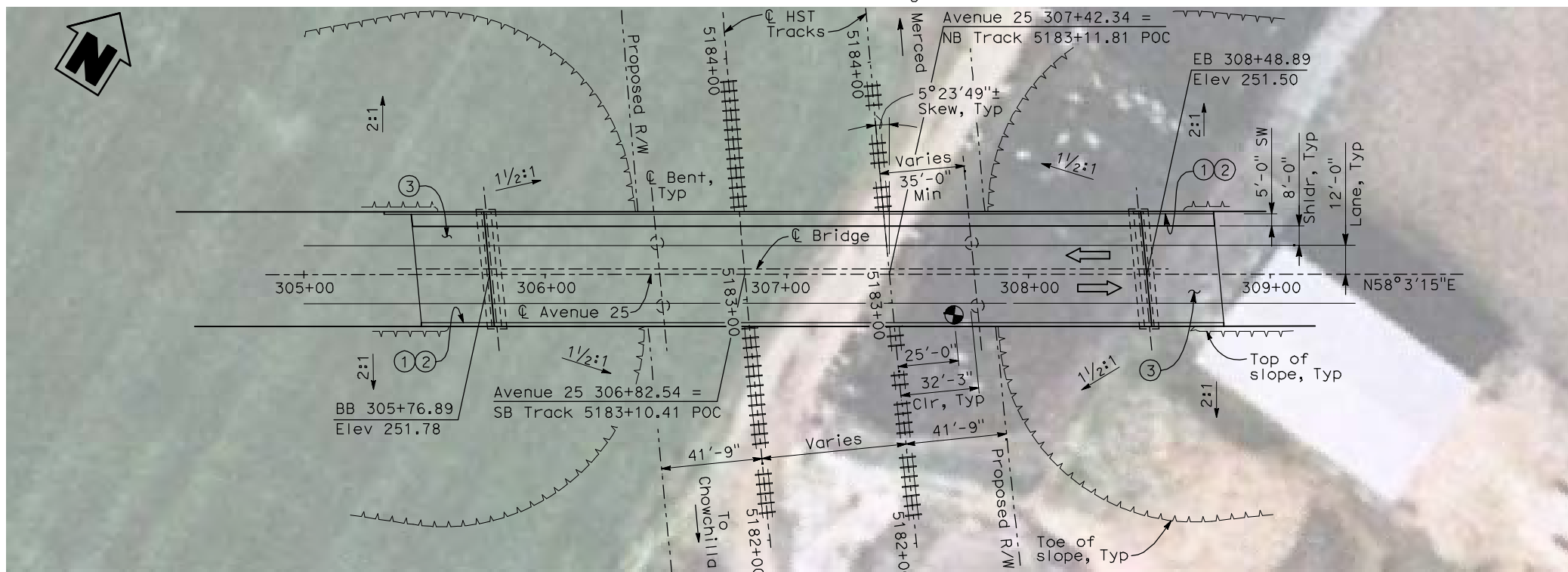
**NOTES:**

- ① Paint "Bridge No. XX-XX"
- ② Paint "Avenue 25 OH"
- ③ Structure Approach Slab Type N (30S)
- ④ Chain Link Railing Type 3
- ⑤ Concrete Barrier Type 26 (Mod)
- ⑥ Chain Link Railing Type 7 (Mod)
- ⑦ Concrete Barrier Type 732
- 8. Existing underground and overhead utilities to be determined.

**LEGEND:**

- ← Direction of traffic
- ⊙ Point of minimum vertical clearance

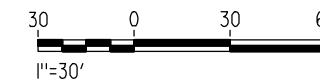
DATE OF ESTIMATE	=	_____
BRIDGE REMOVAL	=	_____
STRUCTURE DEPTH	=	6'-0"
LENGTH	=	272'-0"
WIDTH	=	47'-6"
AREA	=	12,900 ft <sup>2</sup>
COST/ CFT INCLUDING 10% MOBILIZATION & 25% CONTINGENCY	=	_____
TOTAL COST	=	_____



**PLAN**

1" = 30'-0"

**LOCATION 27**



4/30/2011 6:00:09 PM I:\CHSR\60022962\Task-02\_Merced-Fresno\cadd\Struct\Sheet\APS\A2\15%\_cost\_reduction\_submittal\Grade Structure\W-MF-ST-OH\_Ave 25MC-Loc 27.dgn

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
H. LEE  
DRAWN BY  
B. DOLAN  
CHECKED BY  
T. BARNARD  
IN CHARGE  
A. BOONE  
DATE  
04/29/2011

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

**NOT FOR**  
**CONSTRUCTION**

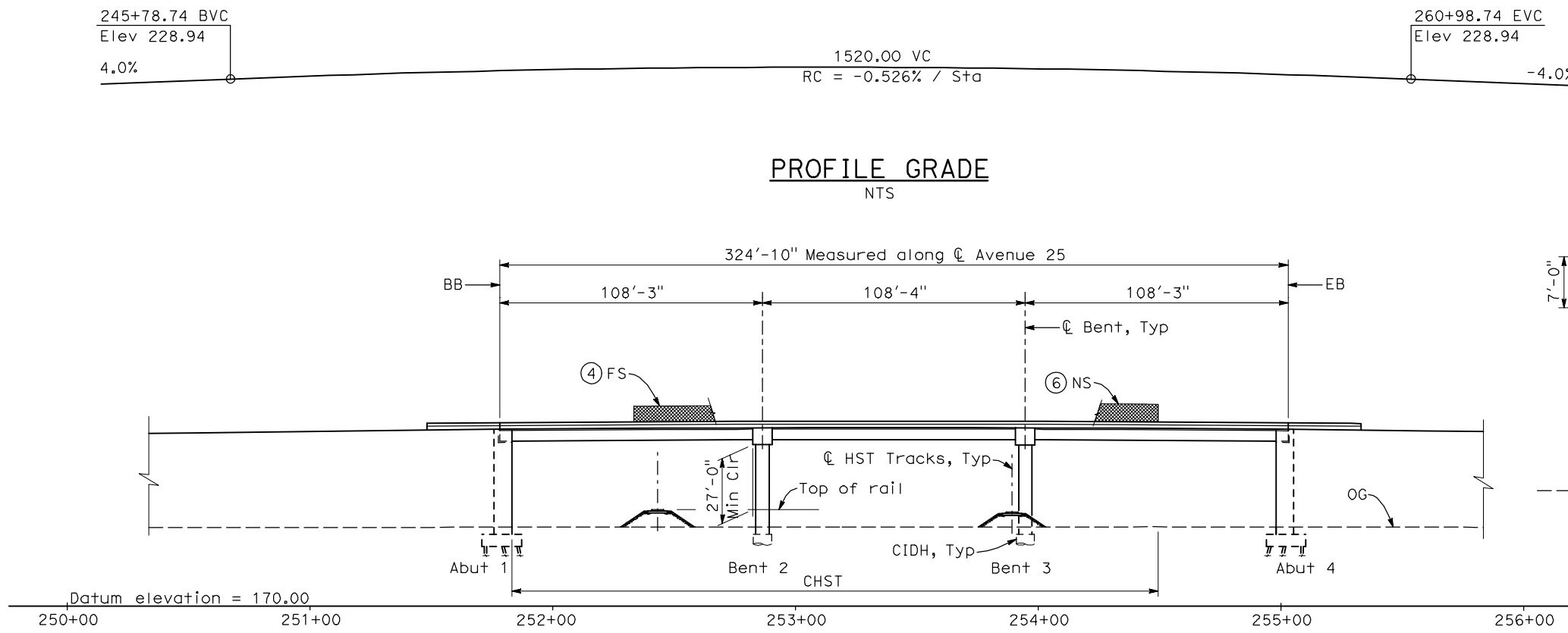


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
UPRR/SR 99 MERCED CONNECTION  
AVENUE 24  
AVENUE 25 OVERHEAD  
PLANNING STUDY - SHEET 1 OF 2

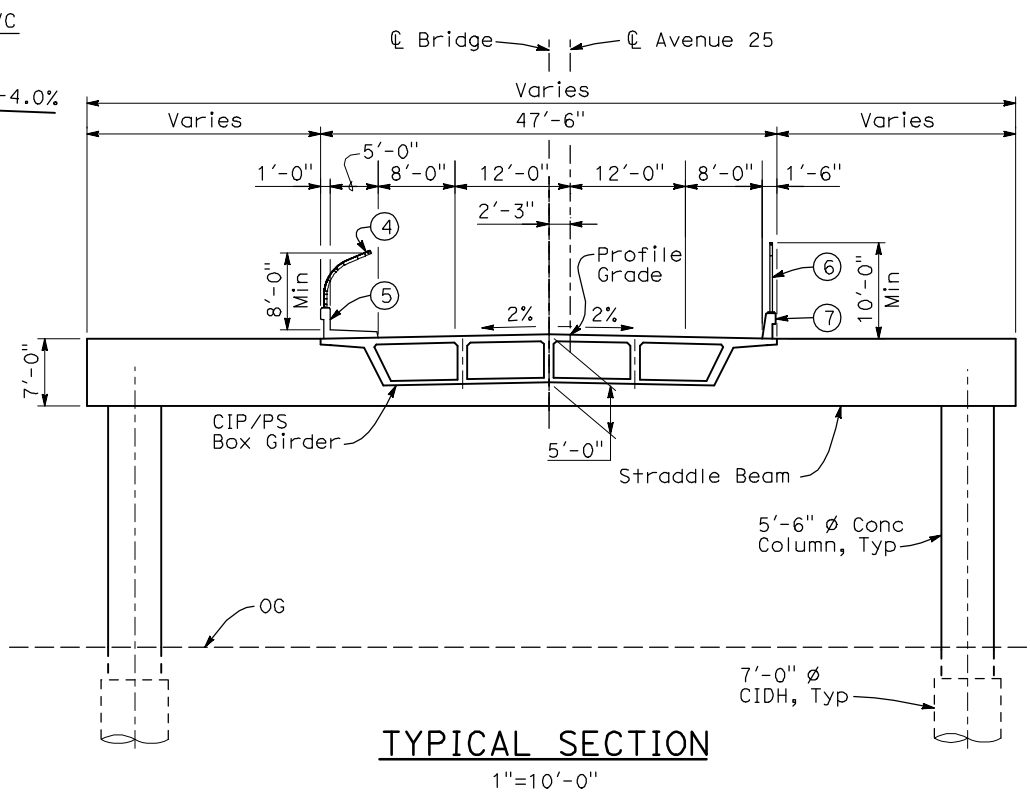
CONTRACT NO.	HSR06-007
DRAWING NO.	ST1133
SCALE	As shown
SHEET NO.	OF



4/30/2011 5:59:41 PM I:\CHSR\60022962\Task-02\_Merced-Fresno\cadd\Struct\Sheet\APS\A2\15%\_cost\_reduction\_submittal\Grade Structure\W-MF-ST-OH\_Ave\_25Wye-Loc\_27.dgn



**ELEVATION**  
1" = 30'-0"



**TYPICAL SECTION**  
1"=10'-0"

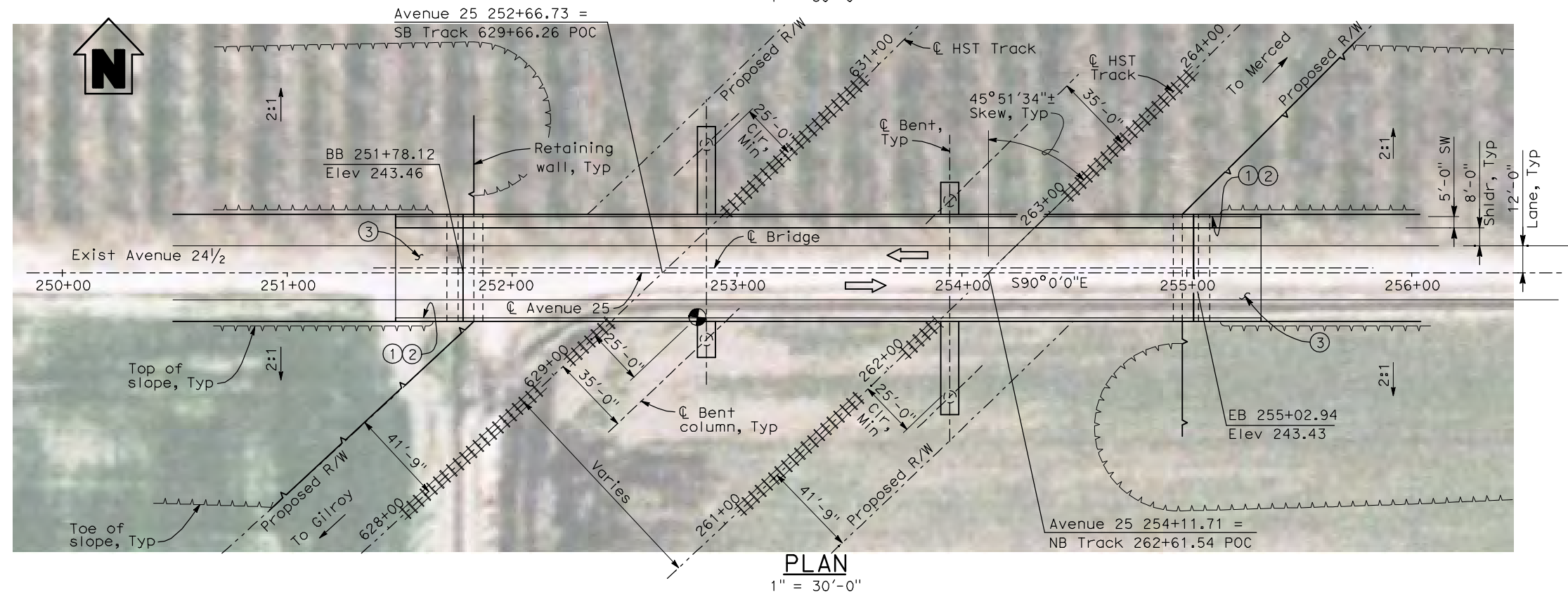
**NOTES:**

- ① Paint "Bridge No. XX-XX"
- ② Paint "Avenue 25 OH"
- ③ Structure Approach Slab Type N (30S)
- ④ Chain Link Railing Type 3
- ⑤ Concrete Barrier Type 26 (Mod)
- ⑥ Chain Link Railing Type 7 (Mod)
- ⑦ Concrete Barrier Type 732
8. Existing underground and overhead utilities to be determined.

**LEGEND:**

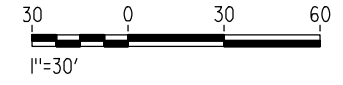
- ← Direction of traffic
- ⊙ Point of minimum vertical clearance

DATE OF ESTIMATE	=	_____
BRIDGE REMOVAL	=	_____
STRUCTURE DEPTH	=	5'-0"
LENGTH	=	324'-10"
WIDTH	=	47'-6"
AREA	=	15,450 ft <sup>2</sup>
COST/ CFT INCLUDING 10% MOBILIZATION & 25% CONTINGENCY	=	_____
TOTAL COST	=	_____



**PLAN**  
1" = 30'-0"

**LOCATION 27**



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
H. LEE  
DRAWN BY  
B. DOLAN  
CHECKED BY  
H. WANG  
IN CHARGE  
A. BOONE  
DATE  
04/29/2011

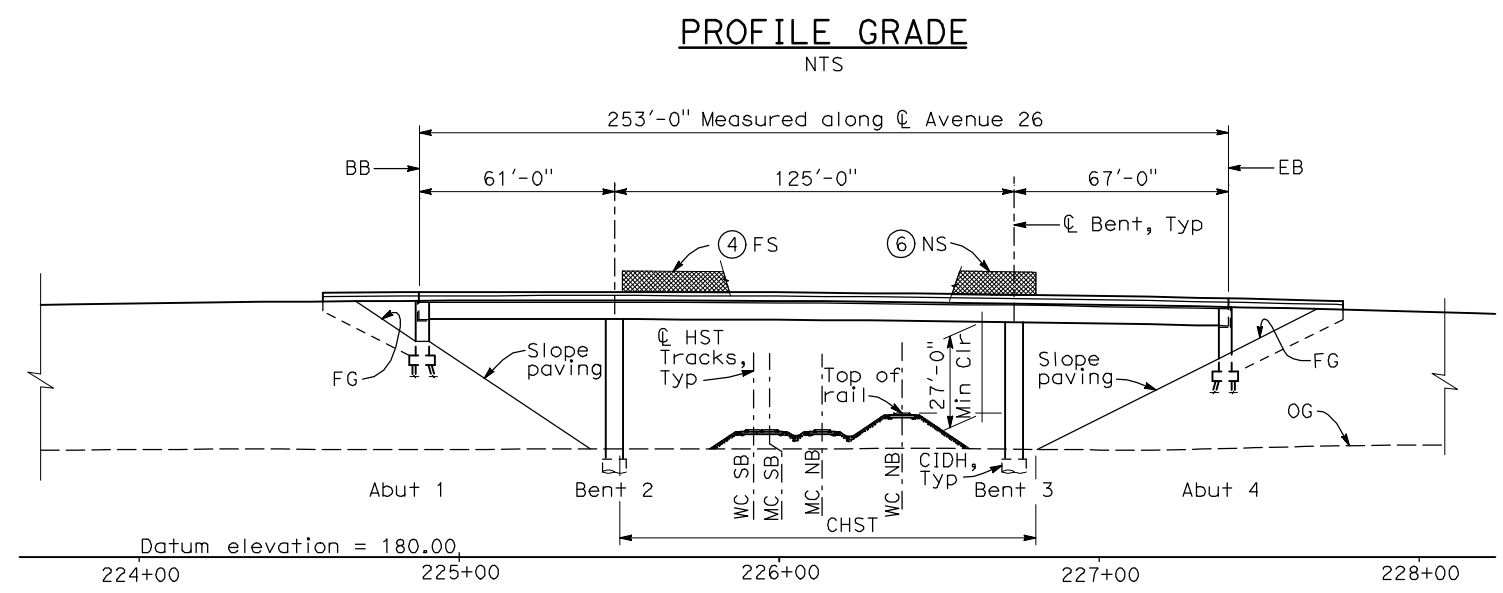
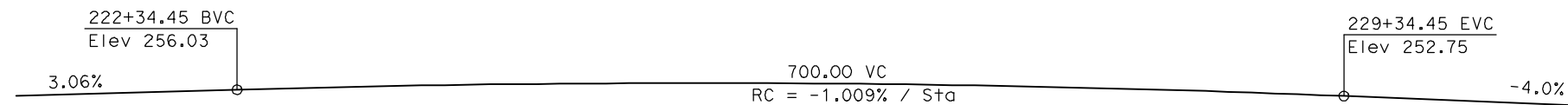
**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**

**NOT FOR**  
**CONSTRUCTION**

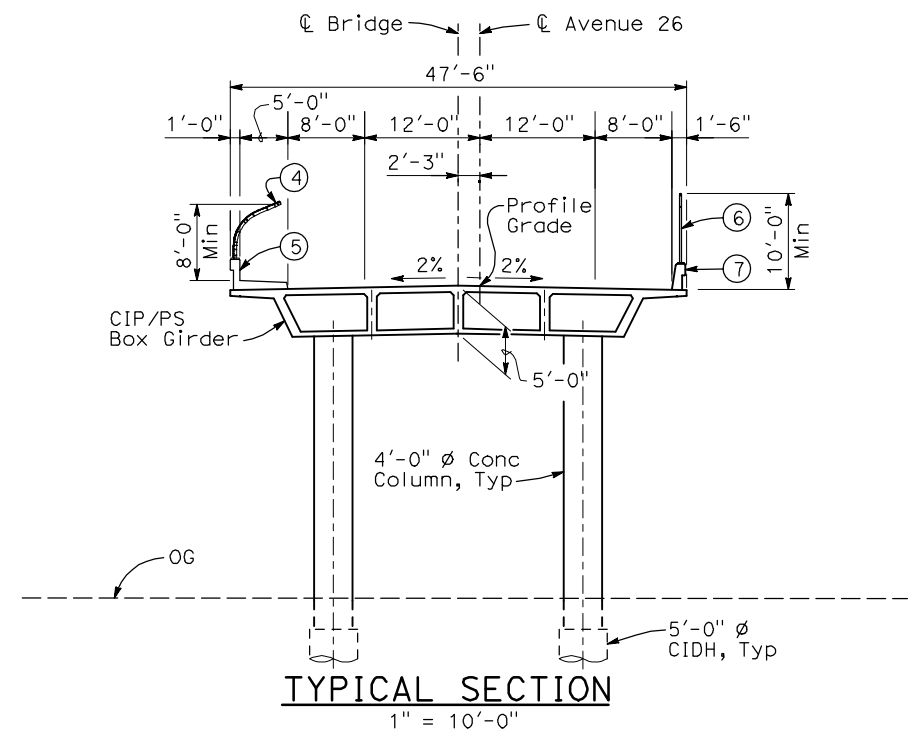


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
UPRR/SR 99 WYE CONNECTION  
AVENUE 24  
AVENUE 25 OVERHEAD  
PLANNING STUDY - SHEET 2 OF 2

CONTRACT NO.	HSR06-007
DRAWING NO.	ST1134
SCALE	As shown
SHEET NO.	OF



**ELEVATION**  
1" = 30'-0"

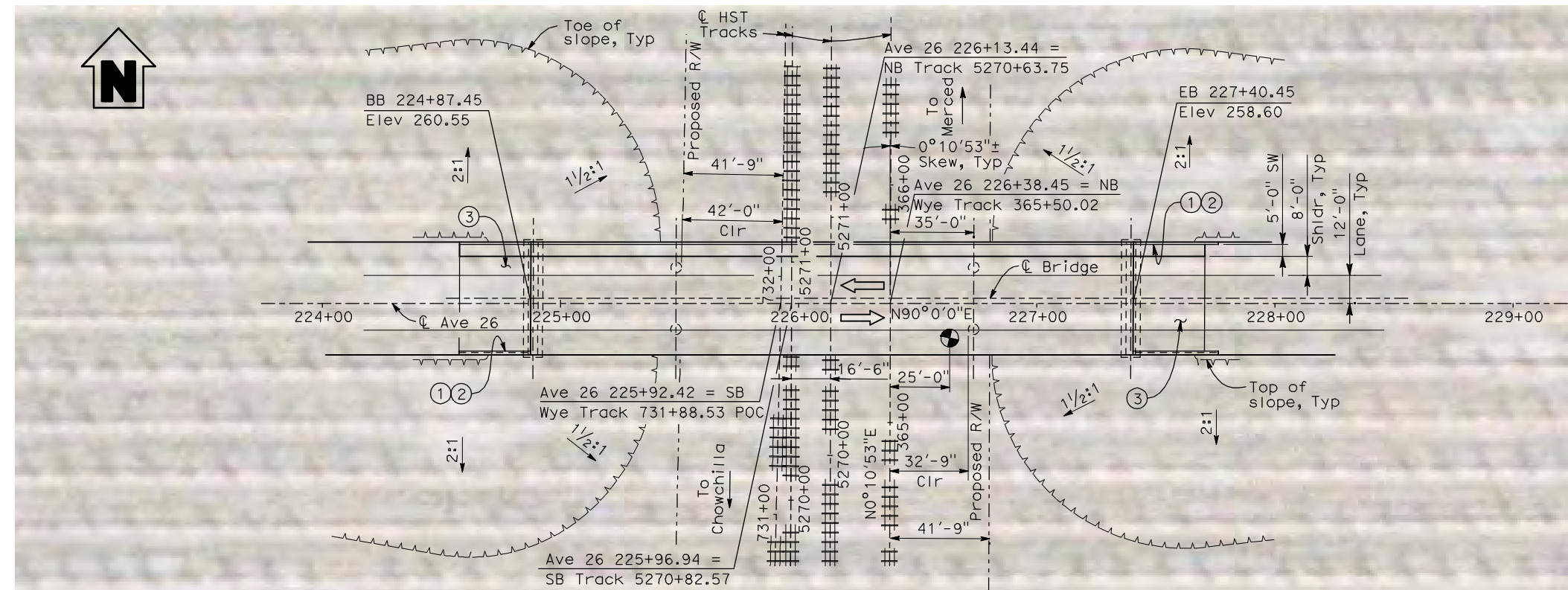


**TYPICAL SECTION**  
1" = 10'-0"

- NOTES:**
- ① Paint "Bridge No. XX-XX"
  - ② Paint "Avenue 26 OH"
  - ③ Structure Approach Slab Type N (30S)
  - ④ Chain Link Railing Type 3
  - ⑤ Concrete Barrier Type 26 (Mod)
  - ⑥ Chain Link Railing Type 7 (Mod)
  - ⑦ Concrete Barrier Type 732
  8. Existing underground and overhead utilities to be determined.

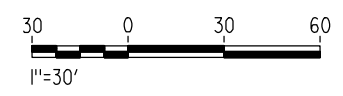
- LEGEND/ABBREVIATIONS:**
- ← Direction of traffic
  - ⊕ Point of minimum vertical clearance
  - MC = Merced Connection
  - WC = Wye Connection

DATE OF ESTIMATE	=	
BRIDGE REMOVAL	=	
STRUCTURE DEPTH	=	5'-0"
LENGTH	=	253'-0"
WIDTH	=	47'-6"
AREA	=	12,000 ft <sup>2</sup>
COST/ CFT INCLUDING 10% MOBILIZATION & 25% CONTINGENCY	=	
TOTAL COST	=	



**PLAN**  
1" = 30'-0"

**LOCATION 26**



4/30/2011 6:00:41 PM I:\CHSR\60022962\Task-02\_Merced-Fresno\cadd\Struct\Sheet\APS\A2\15%\_cost\_reduction\_submittal\Grade Structure\W-MF-ST-OH\_Ave 26W&MC-Loc 26.dgn

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
H. LEE  
DRAWN BY  
B. DOLAN  
CHECKED BY  
T. BARNARD  
IN CHARGE  
A. BOONE  
DATE  
04/29/2011

**RECORD SET**  
15% DESIGN  
SUBMITTAL

**NOT FOR  
CONSTRUCTION**

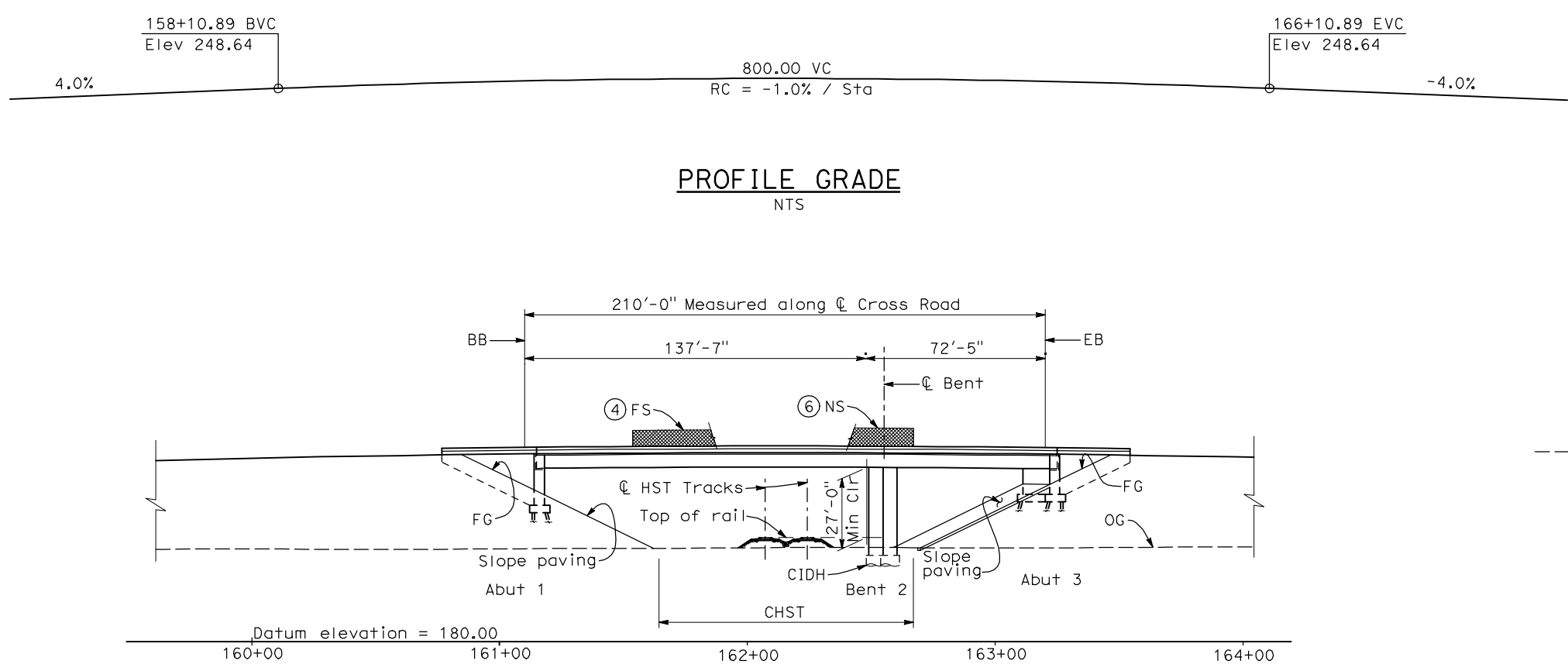


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
UPRR/SR 99 WYE & MERCED CONNECTIONS  
AVENUE 24  
AVENUE 26 OVERHEAD  
PLANNING STUDY

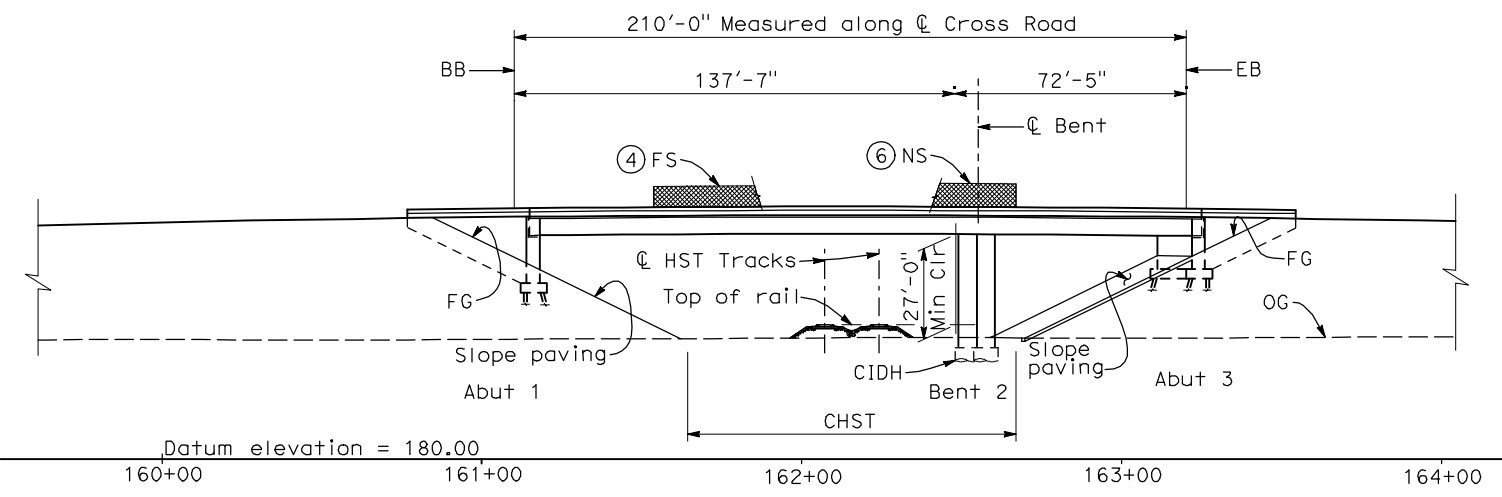
CONTRACT NO.  
HSR06-007  
DRAWING NO.  
ST1135  
SCALE  
As shown  
SHEET NO.  
OF



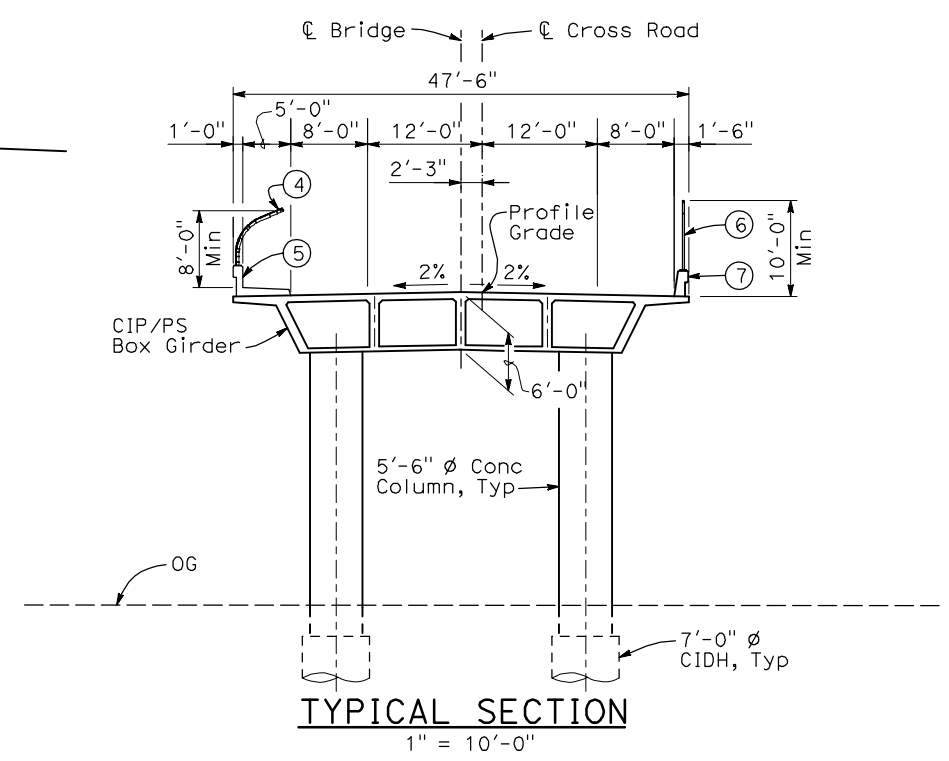
4/30/2011 6:01:04 PM I:\CHSR\60022962\Task-02\_Merced-Fresno\cadd\Struct\Sheet\A2\15%\_cost\_reduction\_submittal\Grade Structure\W-MF-5T-OH\_Cross Road\MC-Loc 25.dgn



**PROFILE GRADE**  
NTS



**ELEVATION**  
1" = 30'-0"



**TYPICAL SECTION**  
1" = 10'-0"

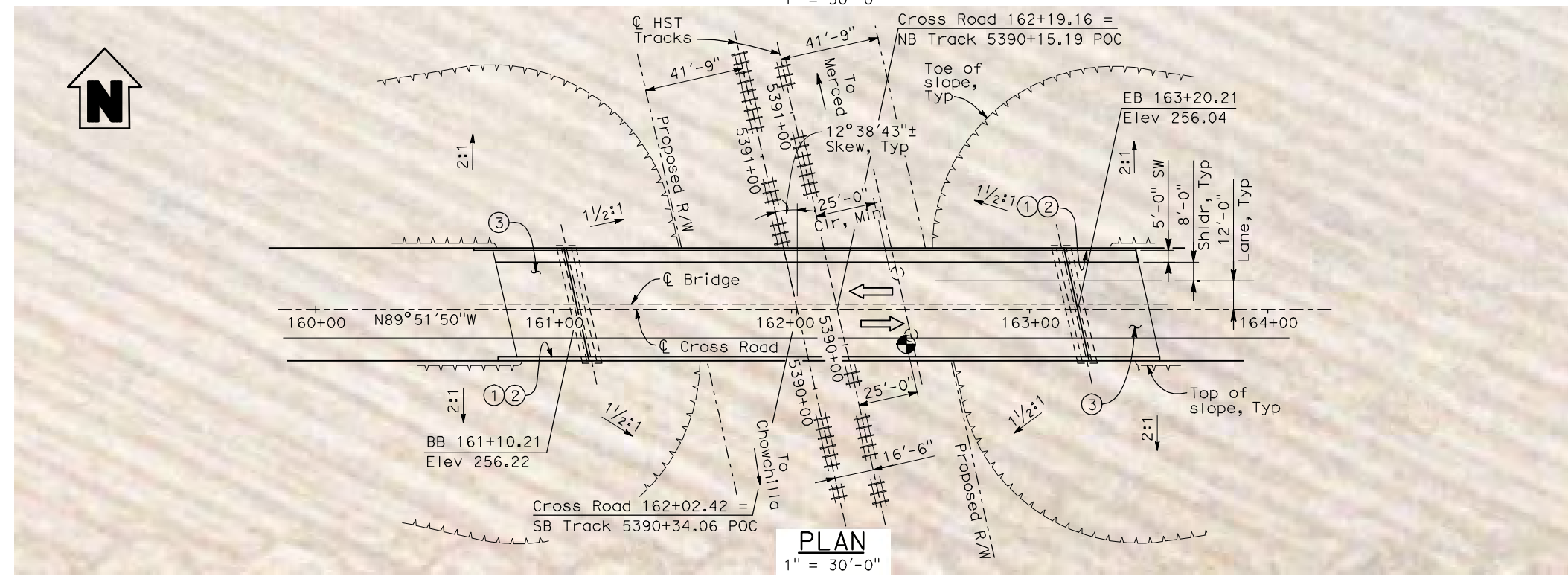
**NOTES:**

- ① Paint "Bridge No. XX-XX"
- ② Paint "Cross Road OH"
- ③ Structure Approach Slab Type N (30S)
- ④ Chain Link Railing Type 3
- ⑤ Concrete Barrier Type 26 (Mod)
- ⑥ Chain Link Railing Type 7 (Mod)
- ⑦ Concrete Barrier Type 732
8. Existing underground and overhead utilities to be determined.

**LEGEND:**

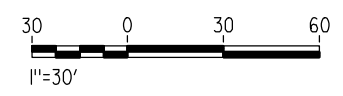
- ← Direction of traffic
- ⊙ Point of minimum vertical clearance

DATE OF ESTIMATE	_____
BRIDGE REMOVAL	= _____
STRUCTURE DEPTH	= 6'-0"
LENGTH	= 210'-0"
WIDTH	= 47'-6"
AREA	= 9,975 ft <sup>2</sup>
COST/CFRT INCLUDING 10% MOBILIZATION & 25% CONTINGENCY	= _____
TOTAL COST	= _____



**PLAN**  
1" = 30'-0"

**LOCATION 25**



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
H. LEE  
DRAWN BY  
B. DOLAN  
CHECKED BY  
T. BARNARD  
IN CHARGE  
A. BOONE  
DATE  
04/29/2011

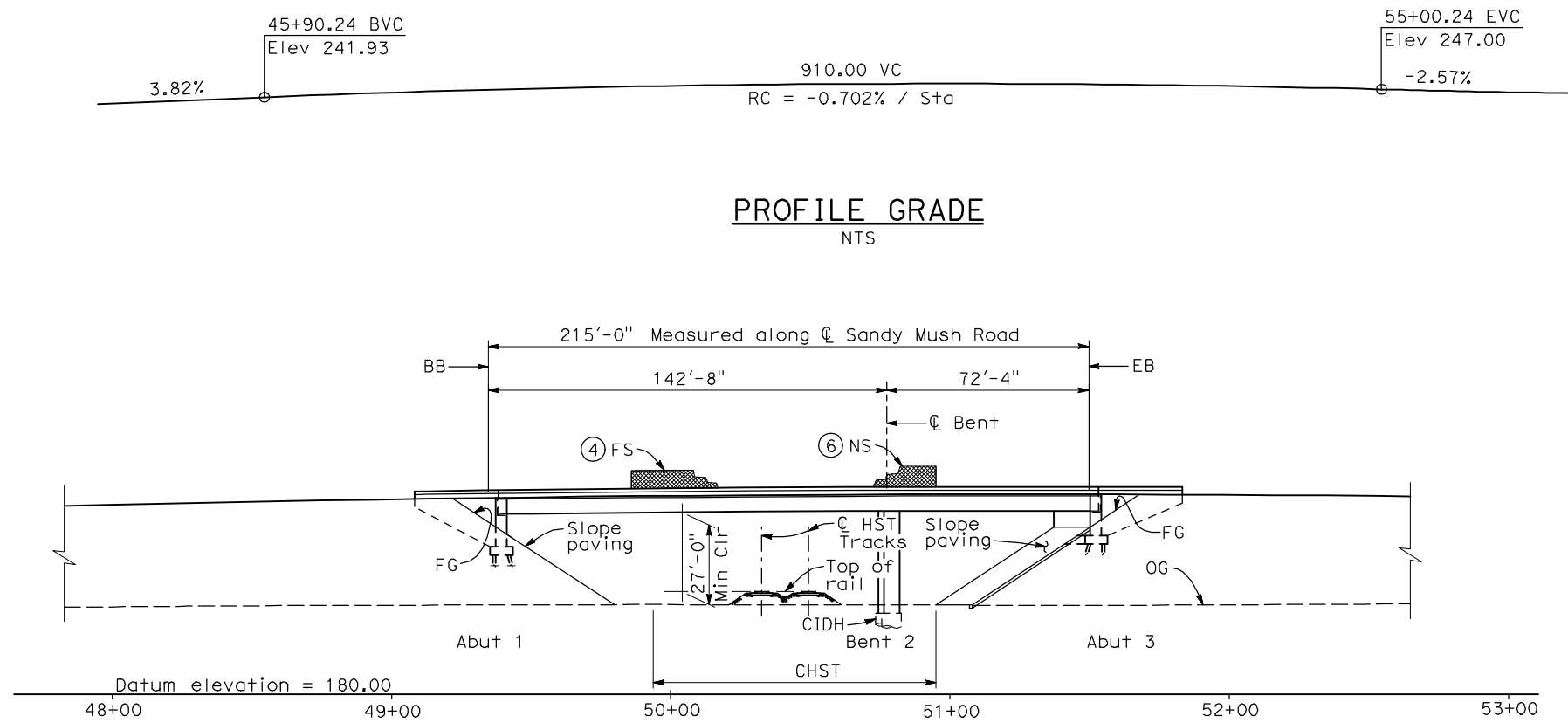
**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**

**NOT FOR**  
**CONSTRUCTION**

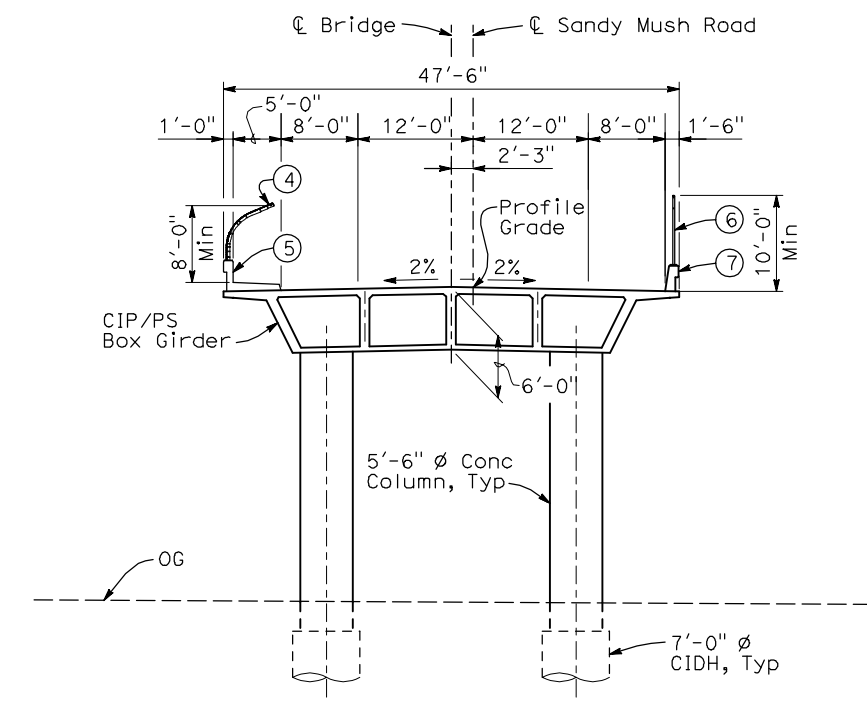


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
UPRR/SR 99 MERCED CONNECTION  
AVENUE 24  
CROSS ROAD OVERHEAD  
PLANNING STUDY

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
ST1136  
SCALE  
As shown  
SHEET NO.  
OF



**DEVELOPED ELEVATION**  
1" = 30'-0"



**TYPICAL SECTION**  
1" = 10'-0"

**NOTES:**

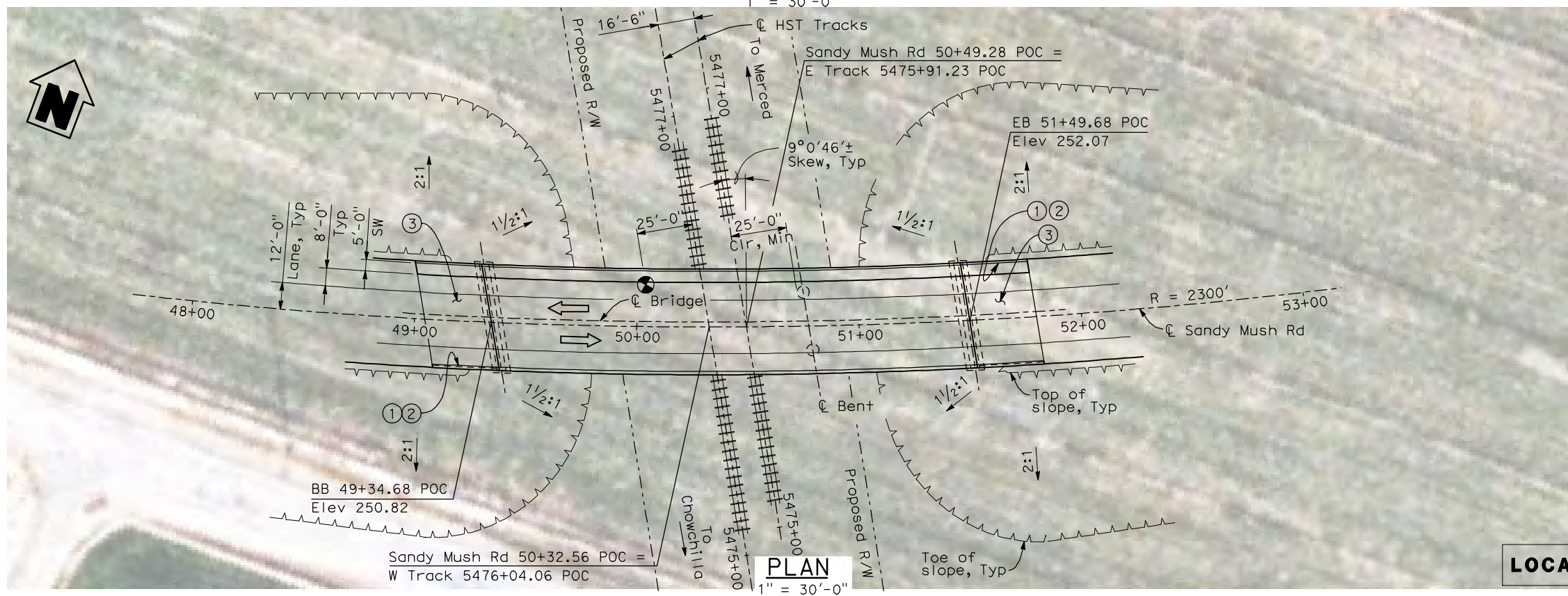
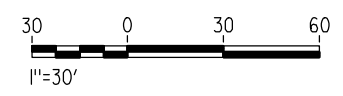
- ① Paint "Bridge No. WX-ZZ"
- ② Paint "Sandy Mush Road OH"
- ③ Structure Approach Slab Type N (30S)
- ④ Chain Link Railing Type 3
- ⑤ Concrete Barrier Type 26 (Mod)
- ⑥ Chain Link Railing Type 7 (Mod)
- ⑦ Concrete Barrier Type 732
8. Existing underground and overhead utilities to be determined.

**LEGEND:**

- ← Direction of traffic
- ⊙ Point of minimum vertical clearance

DATE OF ESTIMATE	_____
BRIDGE REMOVAL	= _____
STRUCTURE DEPTH	= 6'-0"
LENGTH	= 215'-0"
WIDTH	= 47'-6"
AREA	= 10,200 ft <sup>2</sup>
COST/ □FT INCLUDING 10% MOBILIZATION & 25% CONTINGENCY	= _____
TOTAL COST	= _____

**LOCATIONS 35 & 35.1**



**PLAN**  
1" = 30'-0"

4/30/2011 6:01:44 PM I:\CHSR\60022962\Task-02\_Merced-Fresno\cadd\Struct\Sheet\SPS\A2\15%\_cost\_reduction\_submittal\Grade Structure\W-MF-ST-OH\_Sandy\_Mush24MC\_HY-Loc35&35.1.dgn

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
H. LEE  
DRAWN BY  
B. DOLAN  
CHECKED BY  
T. BARNARD  
IN CHARGE  
A. BOONE  
DATE  
04/29/2011

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

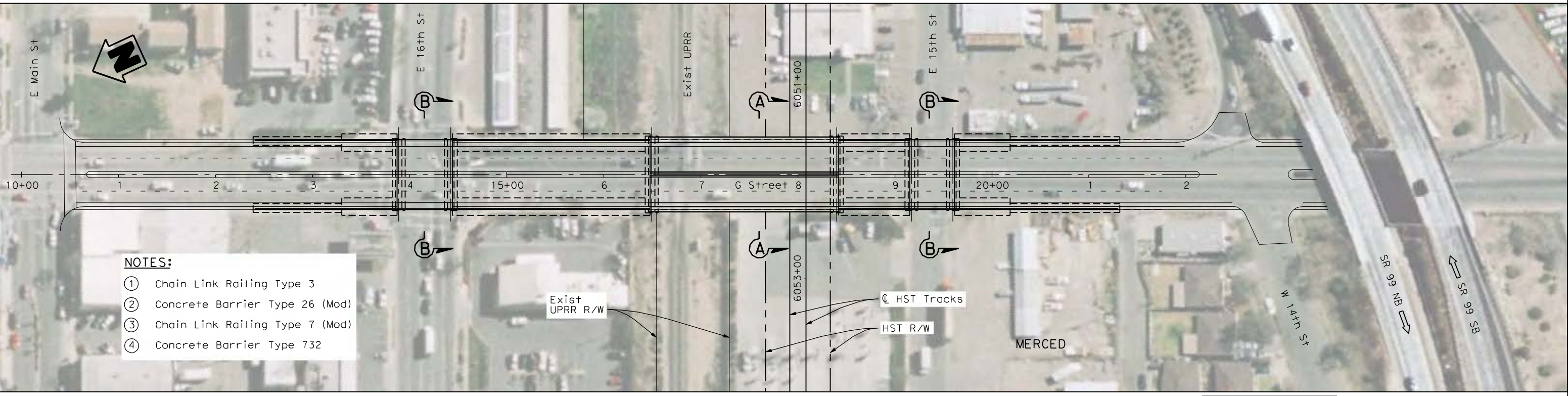
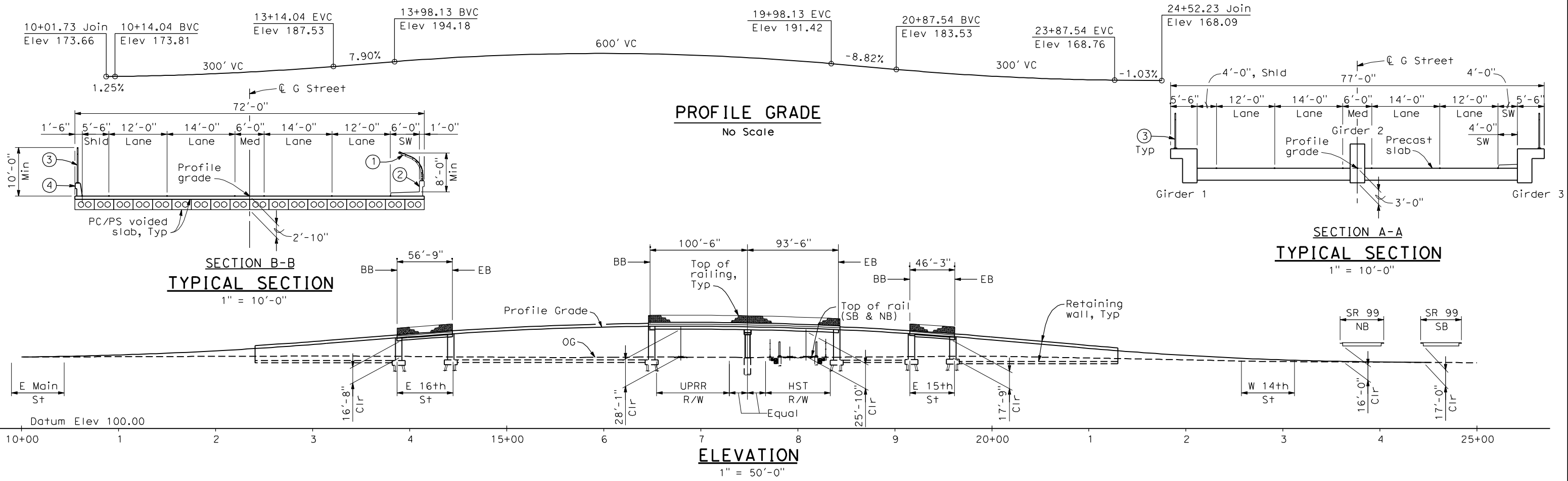


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
UPRR/SR 99 MERCED DO - HYBRID & WYE CONNECTION  
AVENUE 24  
SANDY MUSH ROAD OVERHEAD  
PLANNING STUDY

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
ST1139  
SCALE  
As shown  
SHEET NO.  
OF



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- NOTES:**
- ① Chain Link Railing Type 3
  - ② Concrete Barrier Type 26 (Mod)
  - ③ Chain Link Railing Type 7 (Mod)
  - ④ Concrete Barrier Type 732

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
H. LEE  
DRAWN BY  
B. DOLAN  
CHECKED BY  
L. LEUNG  
IN CHARGE  
A. BOONE  
DATE  
04/29/2011

**RECORD SET**  
15% DESIGN  
SUBMITTAL

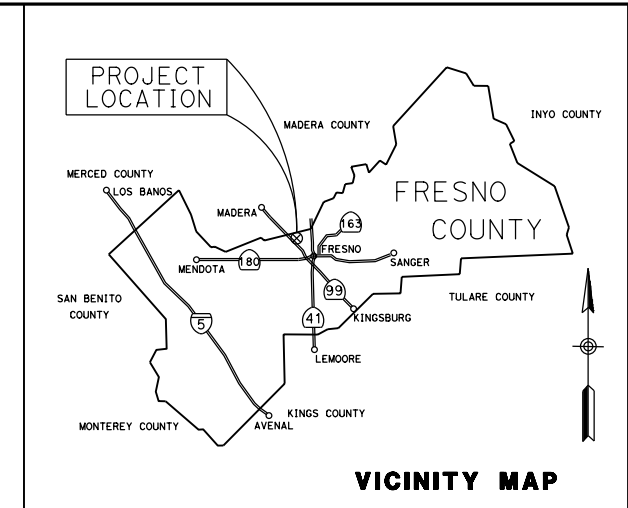
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CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
UPRR/SR 99 MERCED CONNECTION  
AVENUE 21  
G STREET OVERHEAD  
PLANNING STUDY

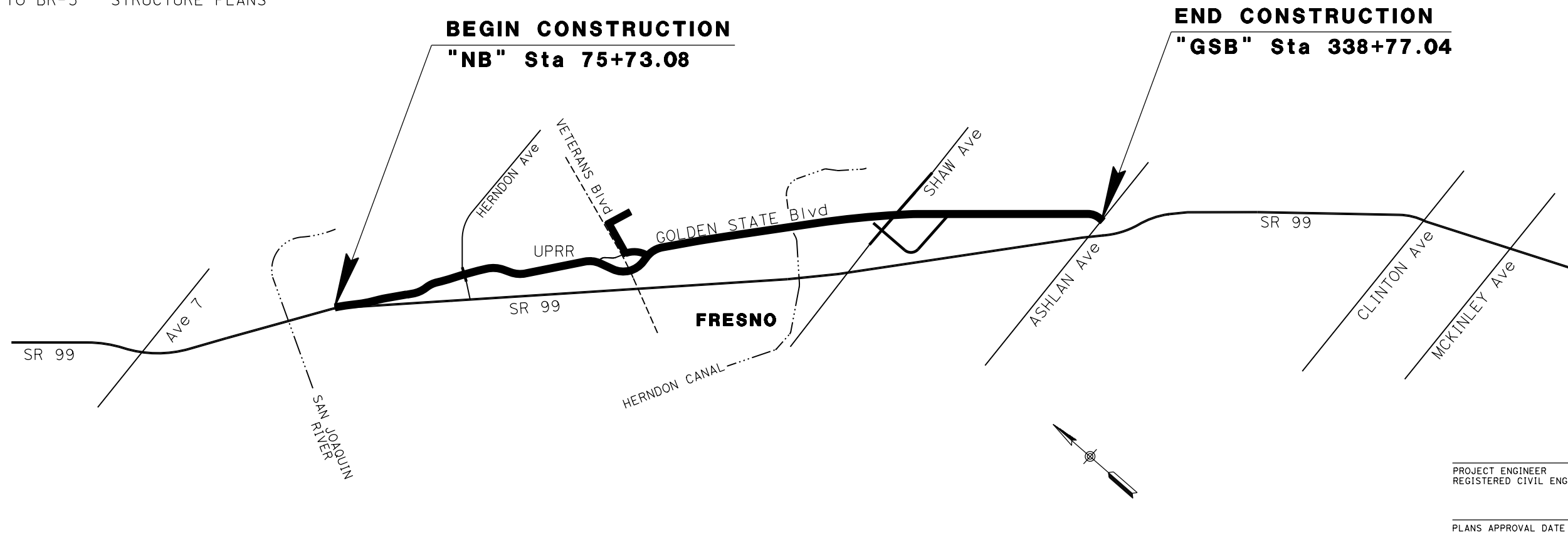
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SHEET NO.  
OF

**CALIFORNIA HIGH SPEED RAIL AUTHORITY**  
**CITY OF FRESNO**  
**DEPARTMENT OF PUBLIC WORKS**  
**CONSTRUCTION PLANS FOR**  
**GOLDEN STATE BOULEVARD**



INDEX OF PLANS

T-1	TITLE SHEET
X-1 TO X-18	TYPICAL CROSS SECTIONS
K-1	KEYMAP
L-1 TO L-17	LAYOUT AND PROFILE
SE-1 TO SE-2	SUPERELEVATION
BR-1 to BR-5	STRUCTURE PLANS



PROJECT ENGINEER  
REGISTERED CIVIL ENGINEER

DATE

PLANS APPROVAL DATE



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
G. MANOREK  
DRAWN BY  
B. CHAN  
CHECKED BY  
L. HEUSTON  
IN CHARGE  
J. MATSUI-DRURY  
DATE  
04/29/11

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

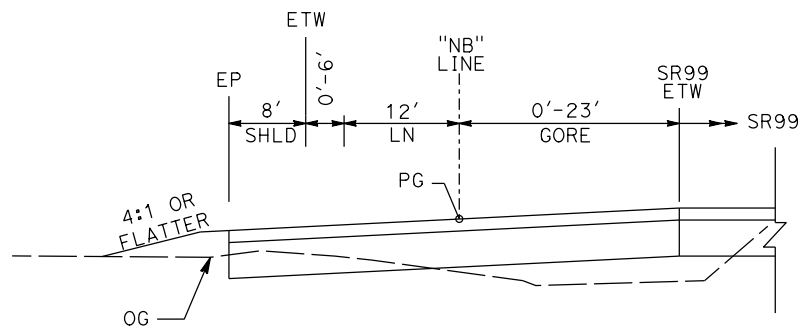
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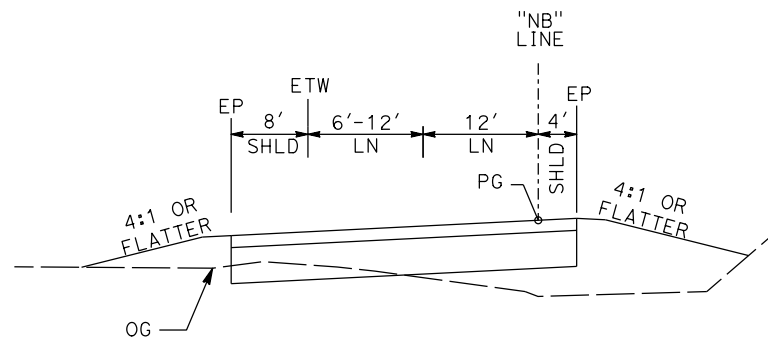
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**MERCED TO FRESNO**  
**GOLDEN STATE BOULEVARD RE-ALIGNMENT**  
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SHEET NO.

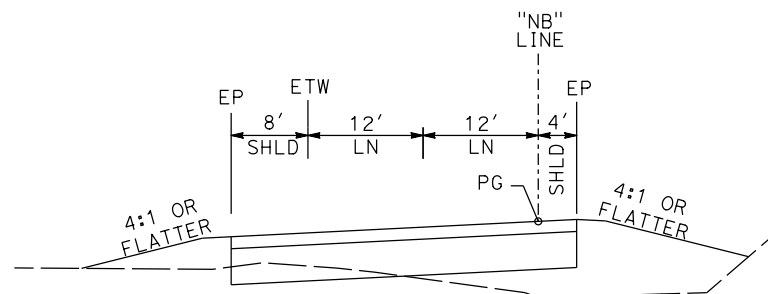




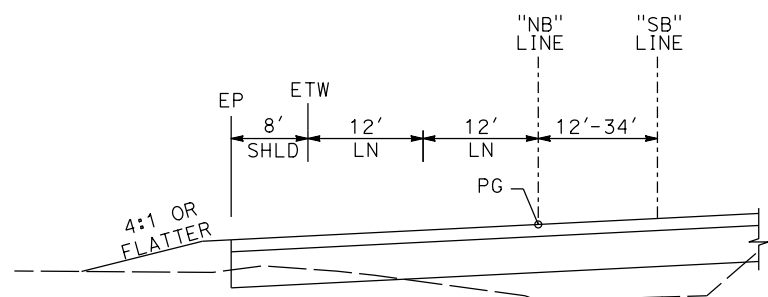
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**"NB" 82+17 TO "NB" 84+72**

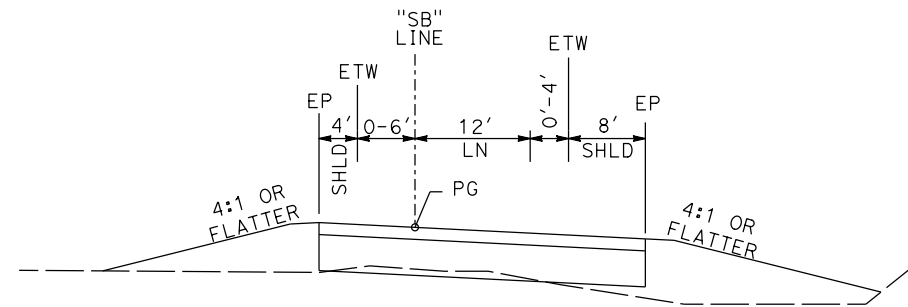


**"NB" 84+72 TO "NB" 97+56**

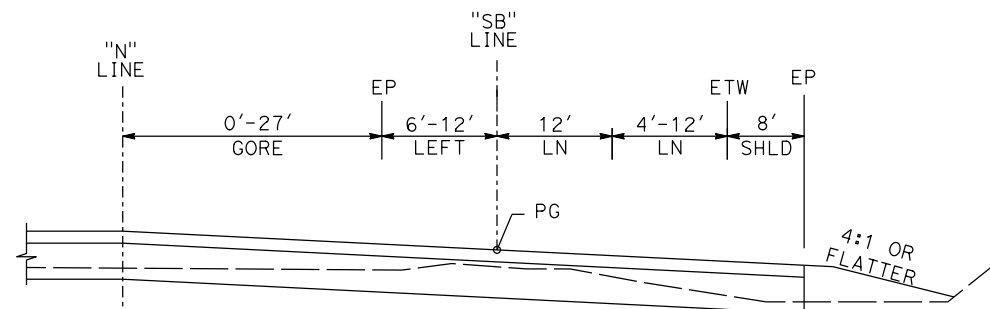


**"NB" 97+56 TO "NB" 100+00**

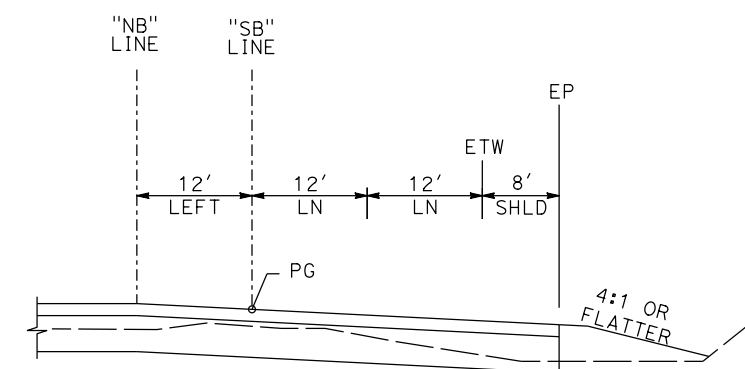
**NORTHBOUND ONRAMP**



**"SB" 95+47 TO "SB" 97+61**



**"SB" 97+61 TO "SB" 99+51**



**"SB" 99+51 TO "SB" 100+00**

**SOUTHBOUND OFFRAMP**

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
G. MANOREK  
DRAWN BY  
B. CHAN  
CHECKED BY  
L. HEUSTON  
IN CHARGE  
J. MATSUI-DRURY  
DATE  
04/29/11

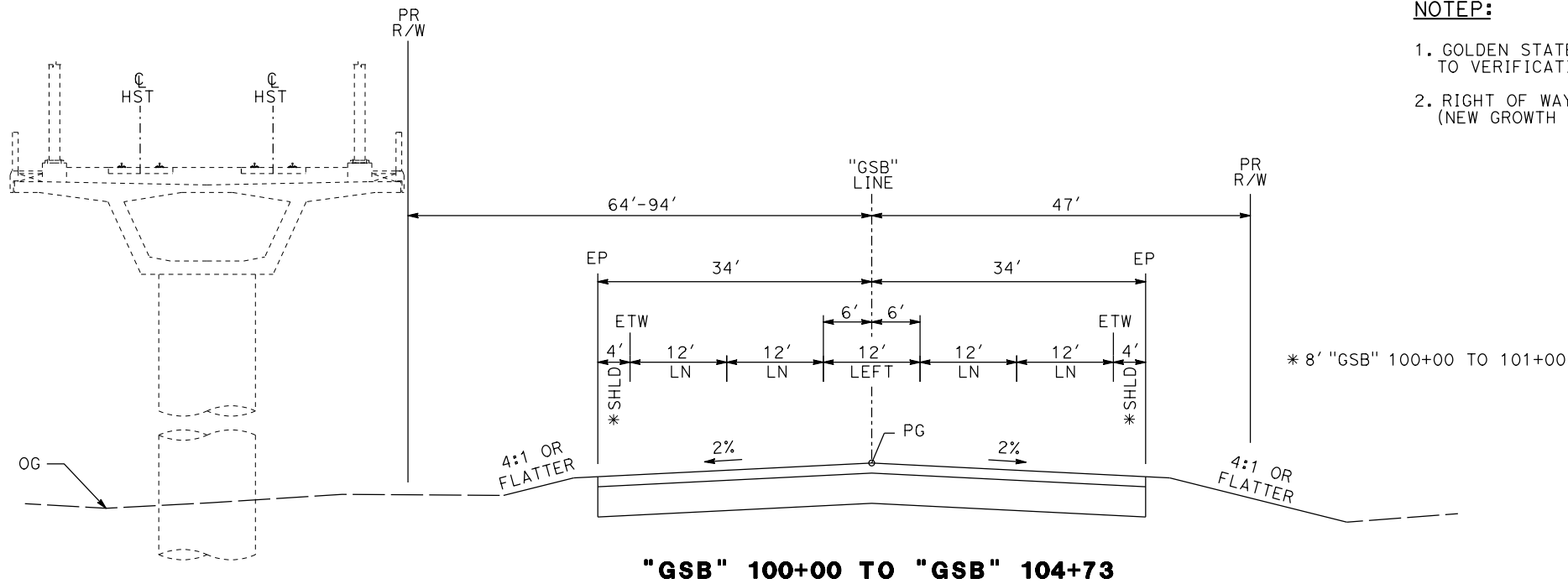
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SUBMITTAL**

**NOT FOR  
CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT  
MERCED TO FRESNO  
GOLDEN STATE BOULEVARD RE-ALIGNMENT  
TYPICAL SECTION**

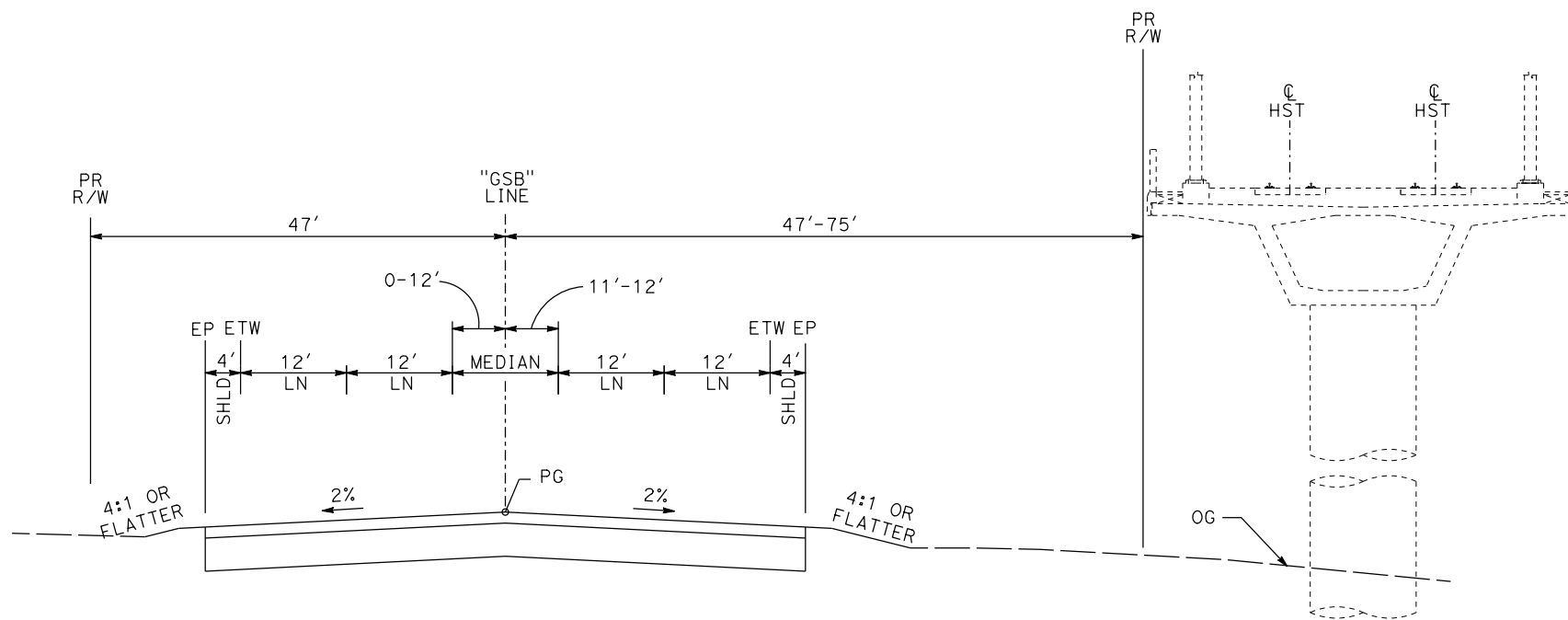
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DRAWING NO.  
**X-1**  
SCALE  
SHEET NO.



"GSB" 100+00 TO "GSB" 104+73

**NOTE:**

1. GOLDEN STATE BLVD ULTIMATE STREET WIDTH/CLASSIFICATION SUBJECT TO VERIFICATION.
2. RIGHT OF WAY WIDTH BASED ON CITY OF FRESNO UNDIVIDED COLLECTORS (NEW GROWTH AREA) TYPICAL STREET CROSS-SECTION.



"GSB" 104+73 TO "GSB" 110+65

**GOLDEN STATE BOULEVARD**

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
G. MANOREK  
DRAWN BY  
B. CHAN  
CHECKED BY  
L. HEUSTON  
IN CHARGE  
J. MATSUI-DRURY  
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04/29/11

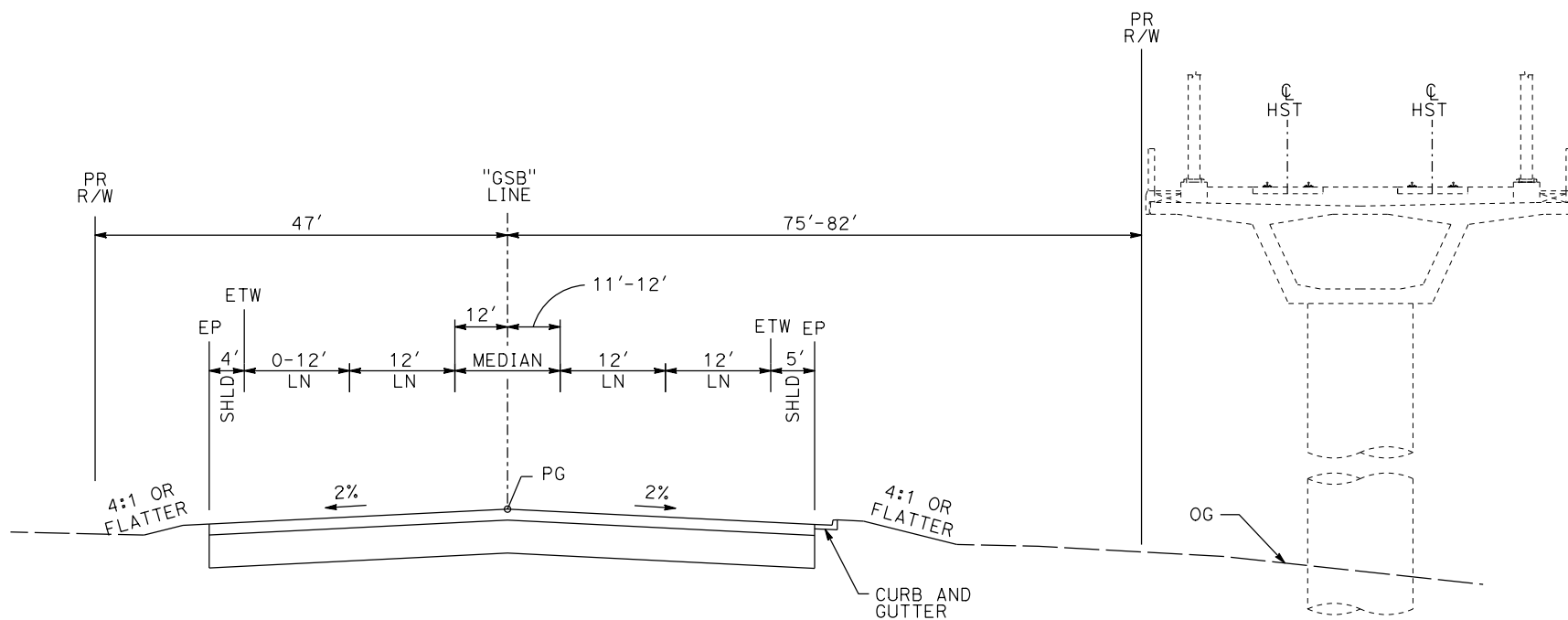
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**SUBMITTAL**  
  
**NOT FOR**  
**CONSTRUCTION**



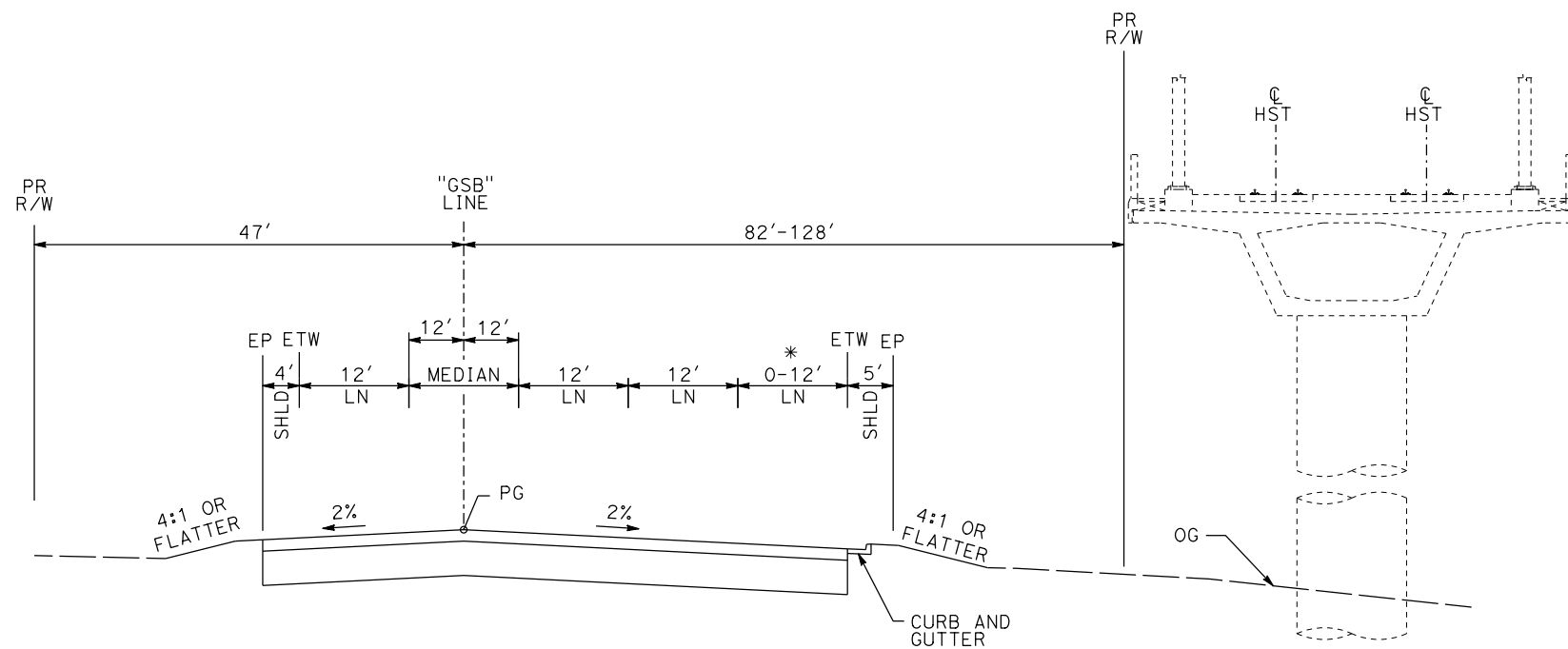
**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
**GOLDEN STATE BOULEVARD RE-ALIGNMENT**  
**TYPICAL SECTION**

CONTRACT NO.	HSR06-007
DRAWING NO.	<b>X-2</b>
SCALE	
SHEET NO.	





"GSB" 110+65 TO "GSB" 111+96



"GSB" 111+96 TO "GSB" 116+57

\* 114+59 TO 116+57

**GOLDEN STATE BOULEVARD**

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
G. MANOREK  
DRAWN BY  
B. CHAN  
CHECKED BY  
L. HEUSTON  
IN CHARGE  
J. MATSUI-DRURY  
DATE  
04/29/11

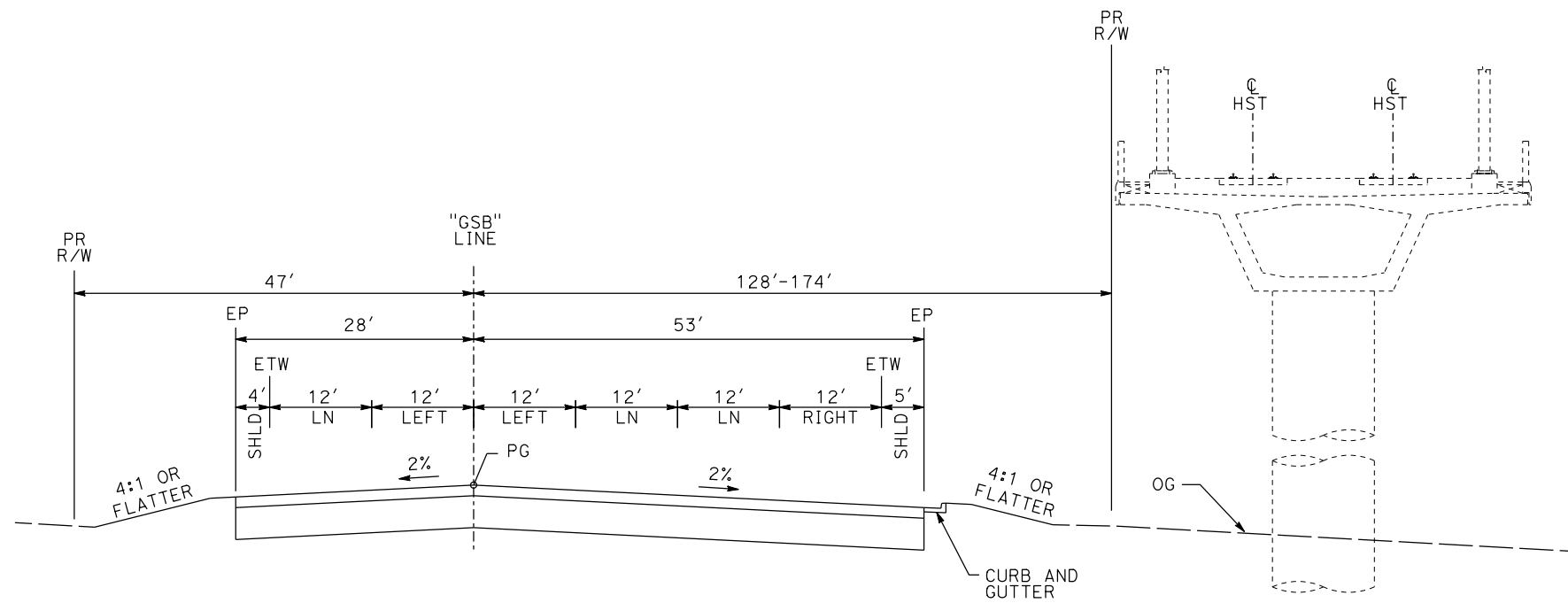
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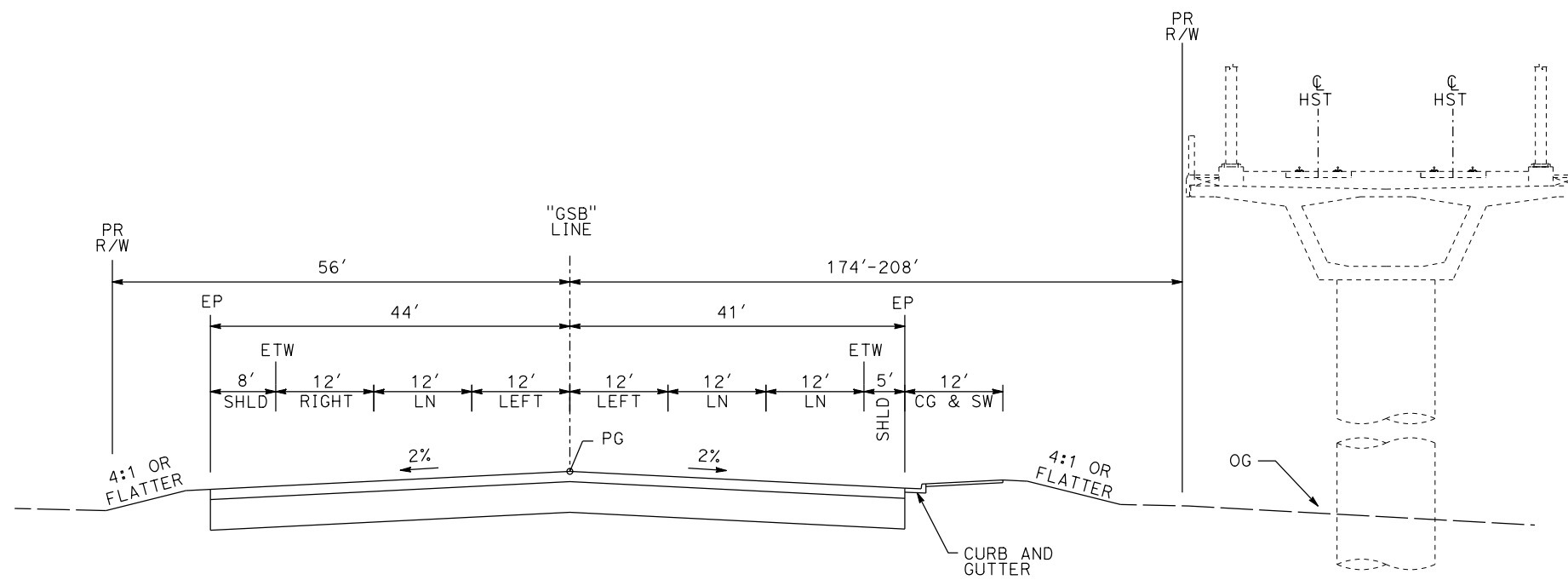


**CALIFORNIA HIGH-SPEED TRAIN PROJECT  
MERCED TO FRESNO  
GOLDEN STATE BOULEVARD RE-ALIGNMENT  
TYPICAL SECTION**

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
**X-3**  
SCALE  
SHEET NO.



**"GSB" 116+57 TO "GSB" 120+50**



**"GSB" 120+50 TO "GSB" 124+47**

**GOLDEN STATE BOULEVARD**

REV	DATE	BY	CHK	APP	DESCRIPTION

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G. MANOREK  
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B. CHAN  
CHECKED BY  
L. HEUSTON  
IN CHARGE  
J. MATSUI-DRURY  
DATE  
04/29/11

**RECORD SET  
15% DESIGN  
SUBMITTAL**

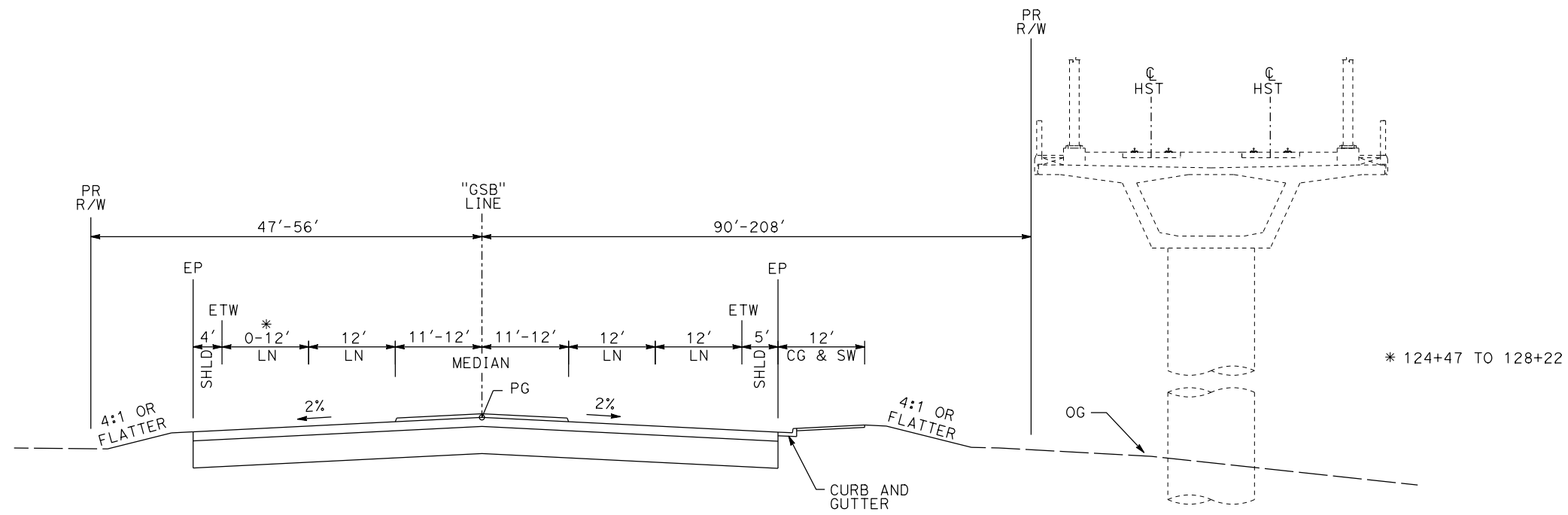
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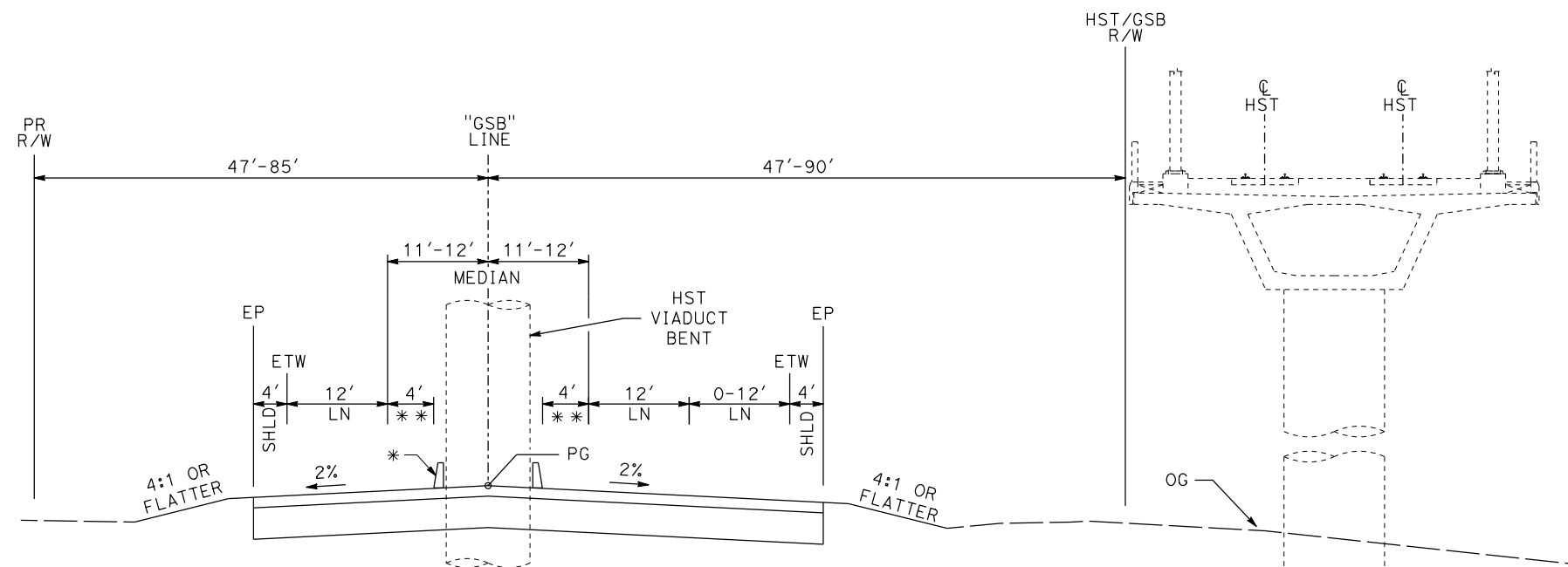
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GOLDEN STATE BOULEVARD RE-ALIGNMENT  
TYPICAL SECTION**

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
**X-4**  
SCALE  
SHEET NO.





**"GSB" 124+47 TO "GSB" 134+16**



**"GSB" 134+16 TO "GSB" 141+36**

**GOLDEN STATE BOULEVARD**

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
G. MANOREK  
DRAWN BY  
B. CHAN  
CHECKED BY  
L. HEUSTON  
IN CHARGE  
J. MATSUI-DRURY  
DATE  
04/29/11

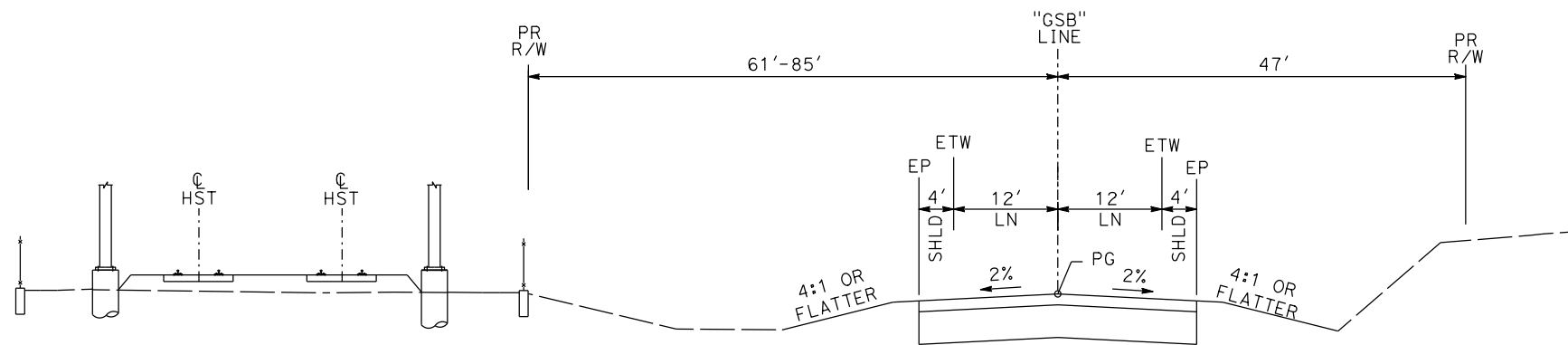
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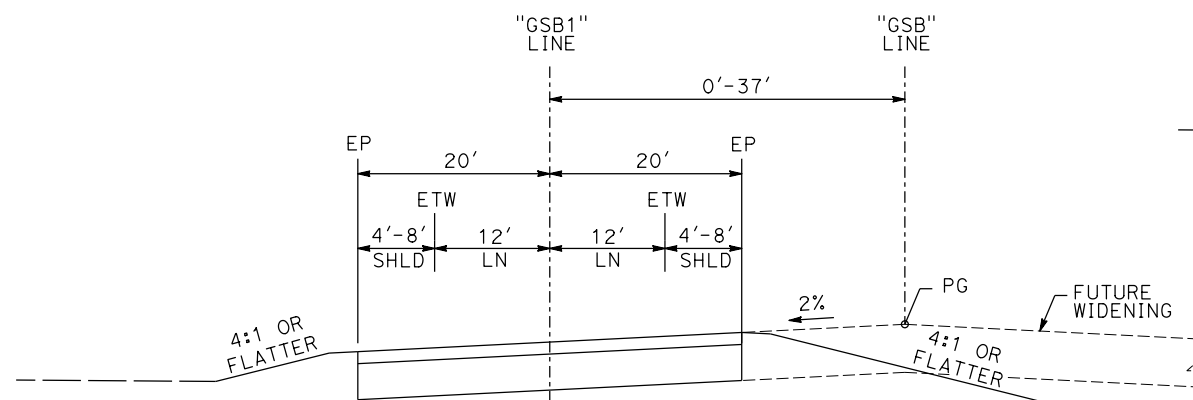


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
**GOLDEN STATE BOULEVARD RE-ALIGNMENT**  
**TYPICAL SECTION**

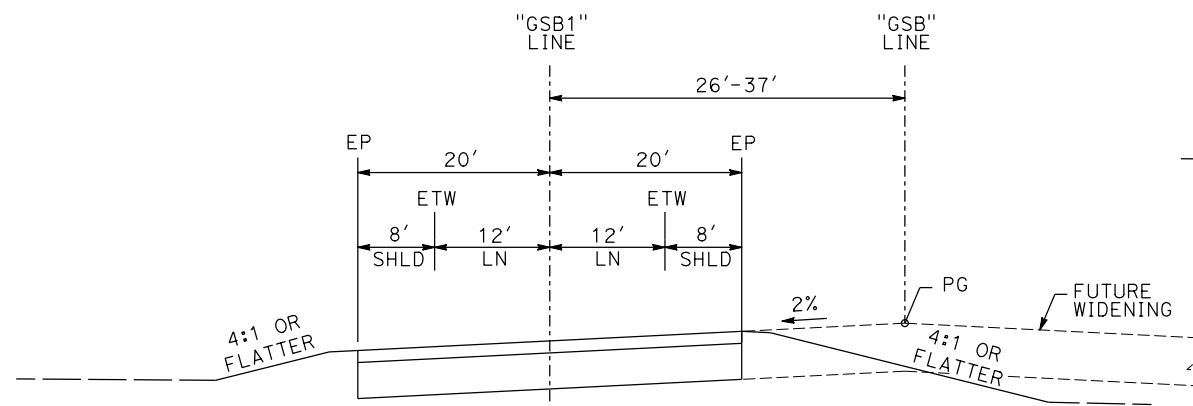
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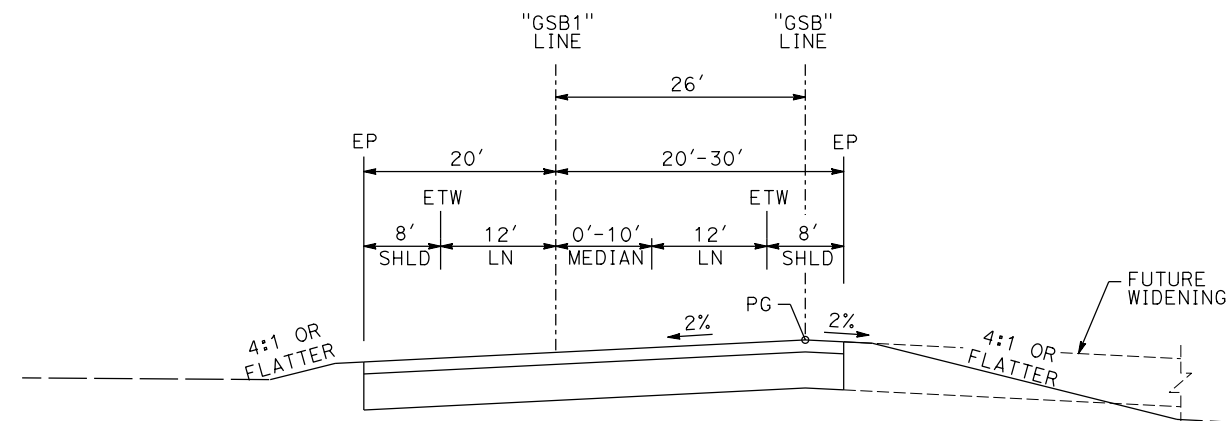
**"GSB" 141+36 TO "GSB" 161+45**



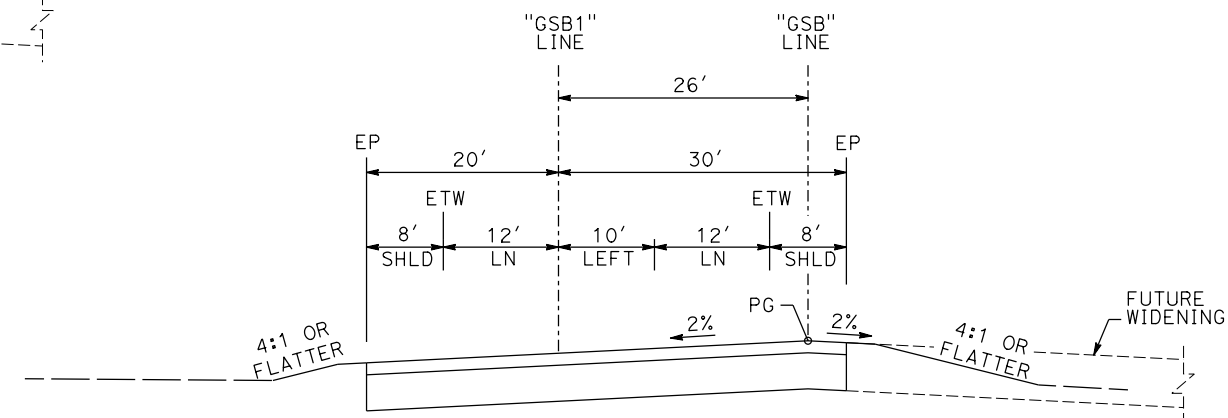
**"GSB" 161+45 TO "GSB" 167+38**



**"GSB" 167+38 TO "GSB" 176+62**



**"GSB" 176+62 TO "GSB" 182+26**



**"GSB" 182+26 TO "GSB" 184+25**

**GOLDEN STATE BOULEVARD**

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
G. MANOREK  
DRAWN BY  
B. CHAN  
CHECKED BY  
L. HEUSTON  
IN CHARGE  
J. MATSUI-DRURY  
DATE  
04/29/11

**RECORD SET  
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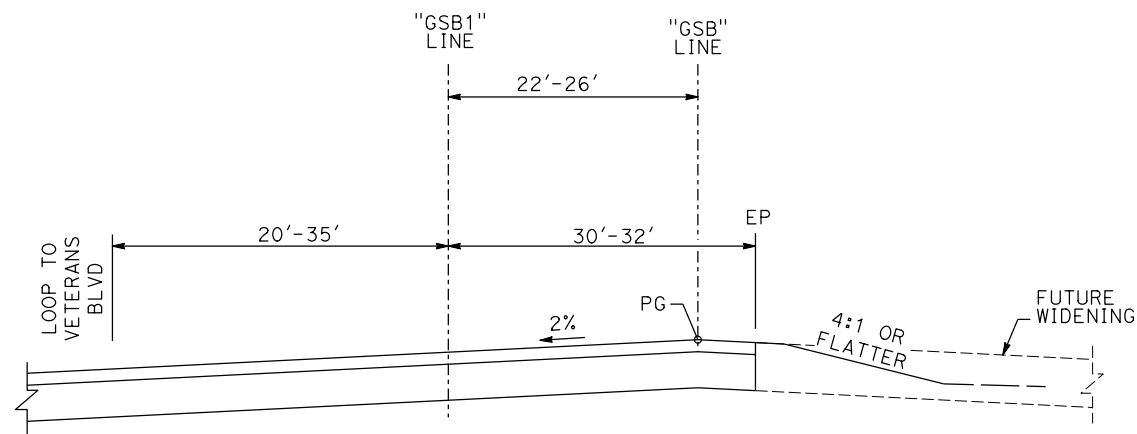
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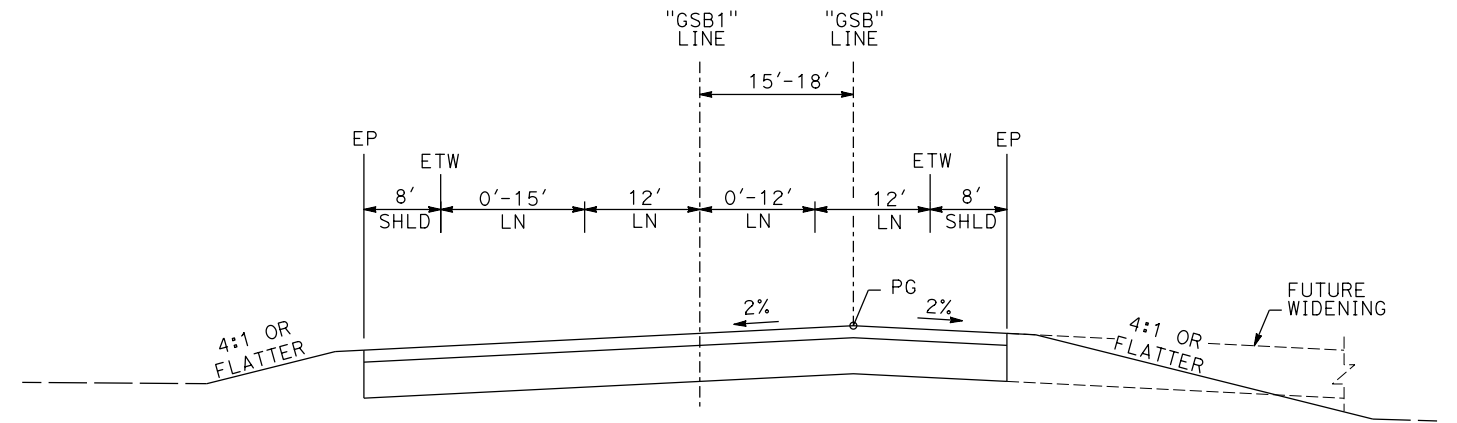
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MERCED TO FRESNO  
GOLDEN STATE BOULEVARD RE-ALIGNMENT  
TYPICAL SECTION**

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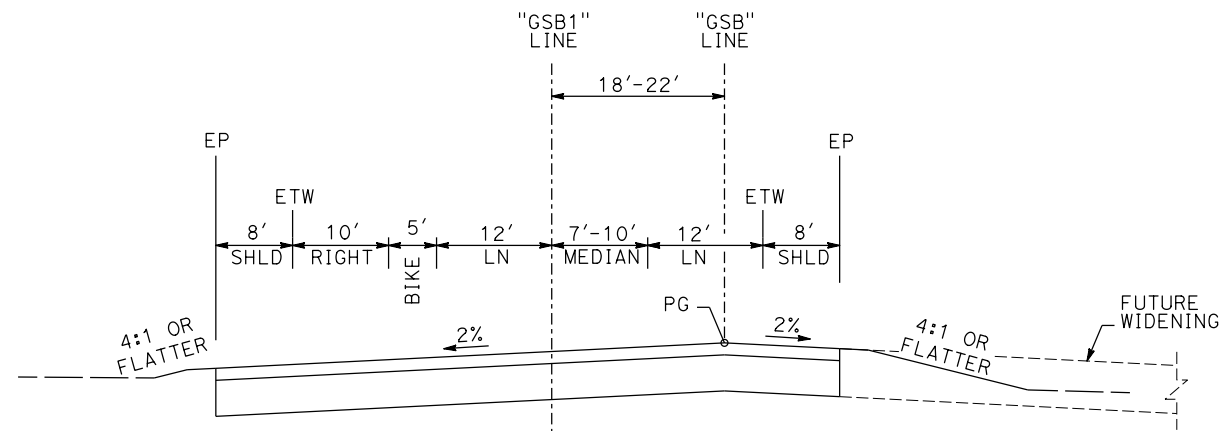




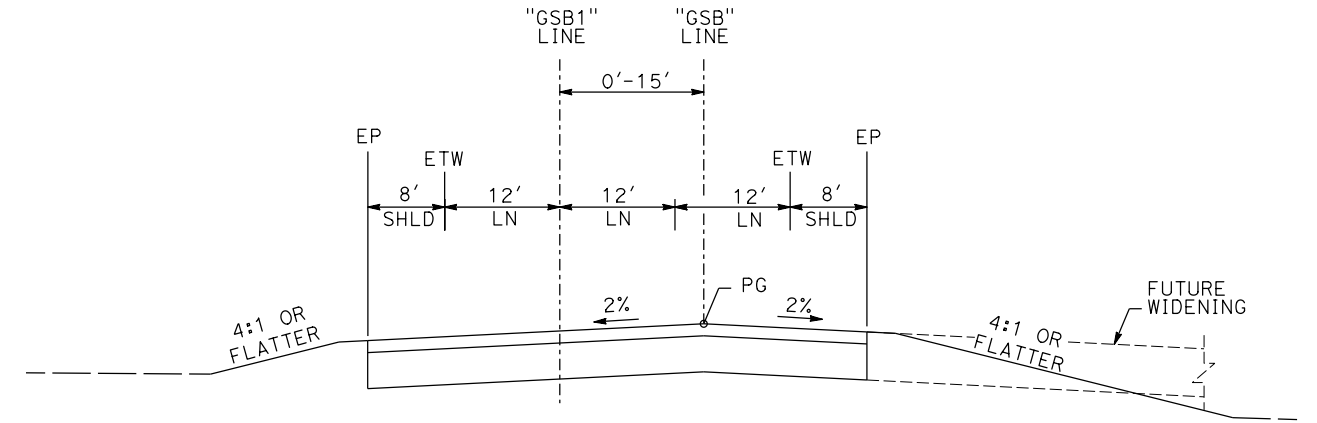
"GSB" 184+25 TO "GSB" 185+41



"GSB" 186+42 TO "GSB" 187+23



"GSB" 185+41 TO "GSB" 186+42



"GSB" 187+23 TO "GSB" 190+86

**GOLDEN STATE BOULEVARD**

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
G. MANOREK  
DRAWN BY  
B. CHAN  
CHECKED BY  
L. HEUSTON  
IN CHARGE  
J. MATSUI-DRURY  
DATE  
04/29/11

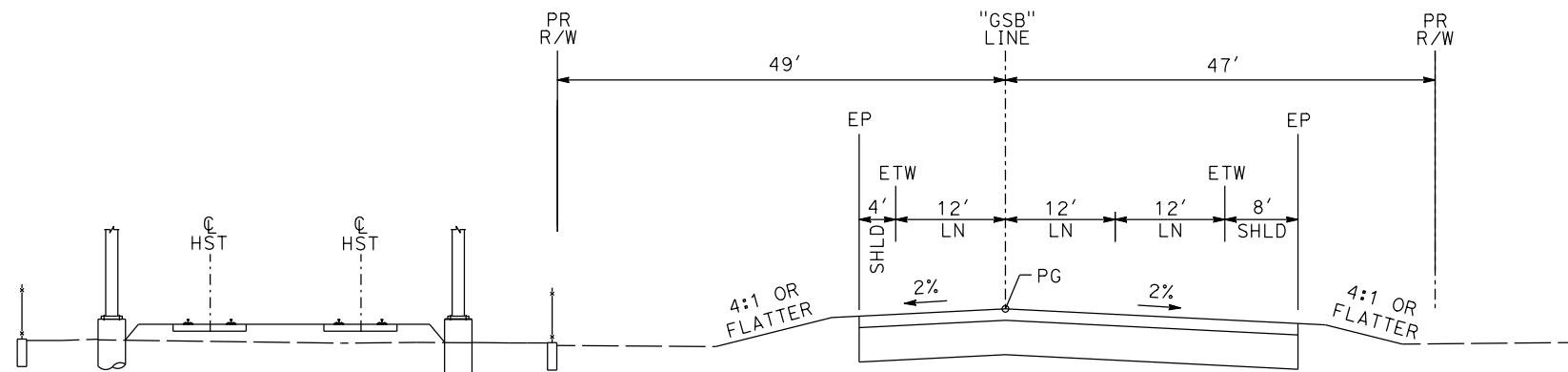
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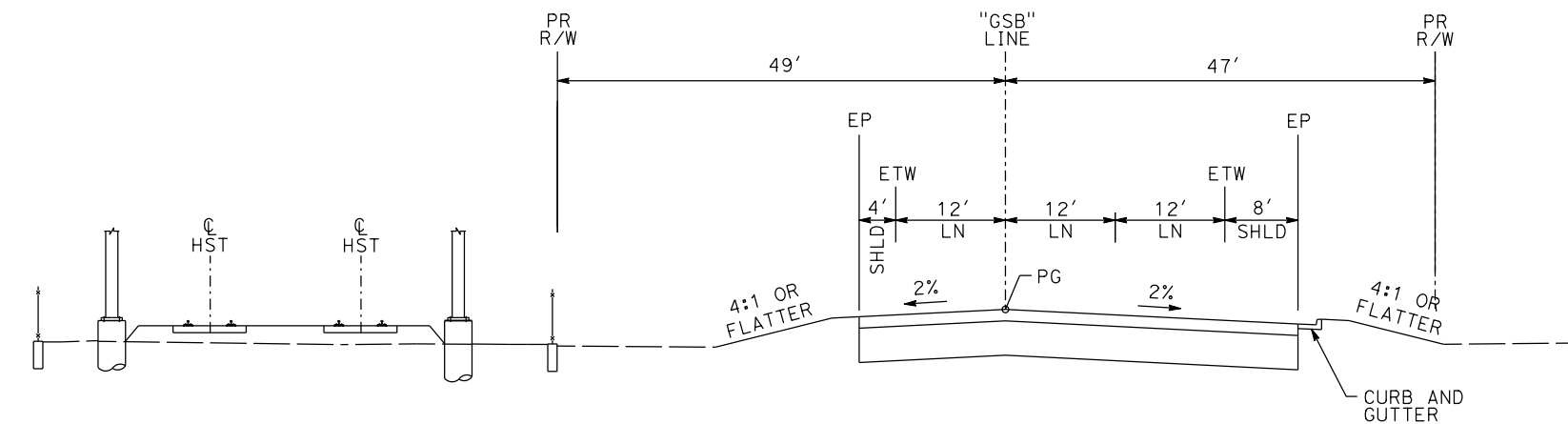


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
**GOLDEN STATE BOULEVARD RE-ALIGNMENT**  
**TYPICAL SECTION**

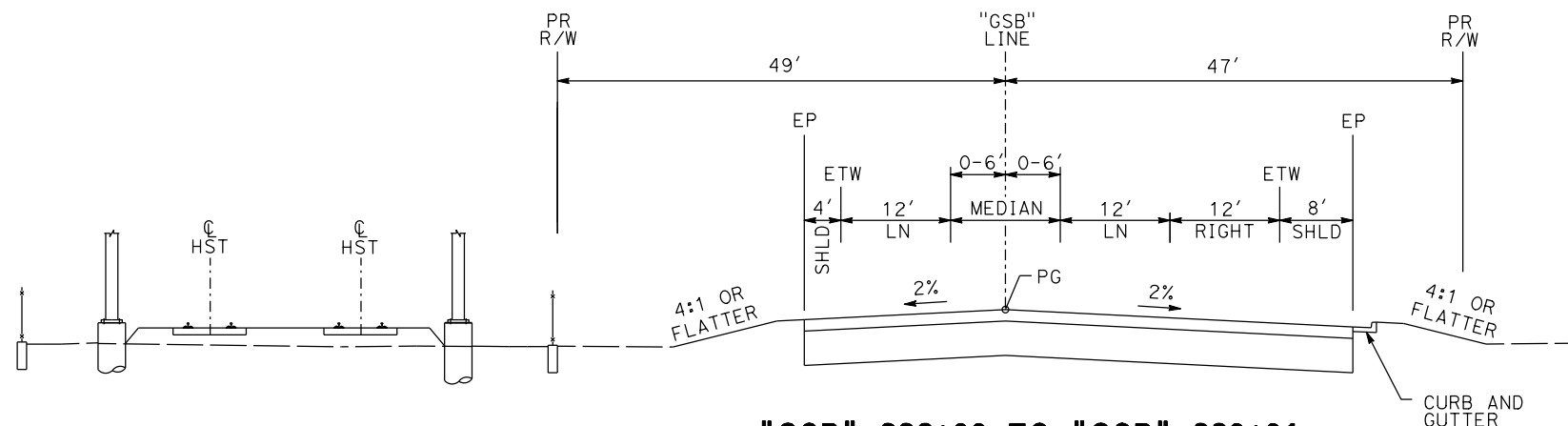
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SCALE  
SHEET NO.



"GSB" 190+86 TO "GSB" 197+48



"GSB" 197+48 TO "GSB" 223+68



"GSB" 223+68 TO "GSB" 228+91

**GOLDEN STATE BOULEVARD**

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
G. MANOREK  
DRAWN BY  
B. CHAN  
CHECKED BY  
L. HEUSTON  
IN CHARGE  
J. MATSUI-DRURY  
DATE  
04/29/11

**RECORD SET  
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SUBMITTAL**

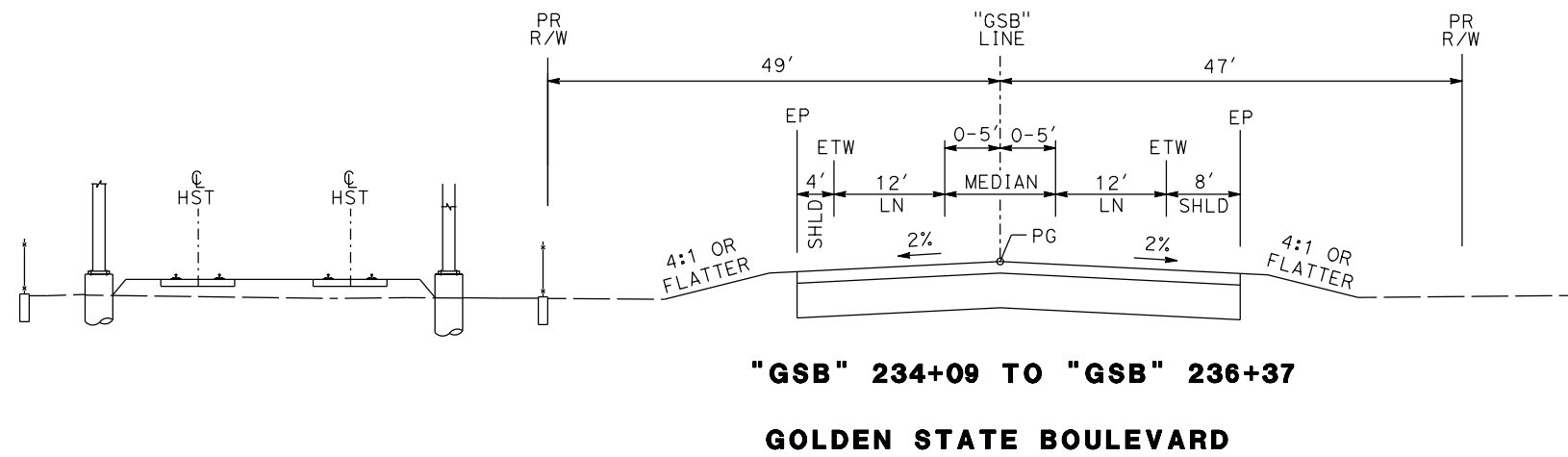
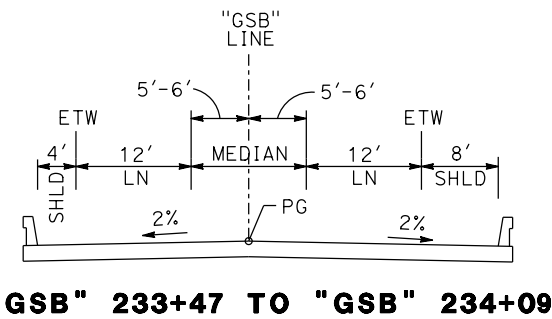
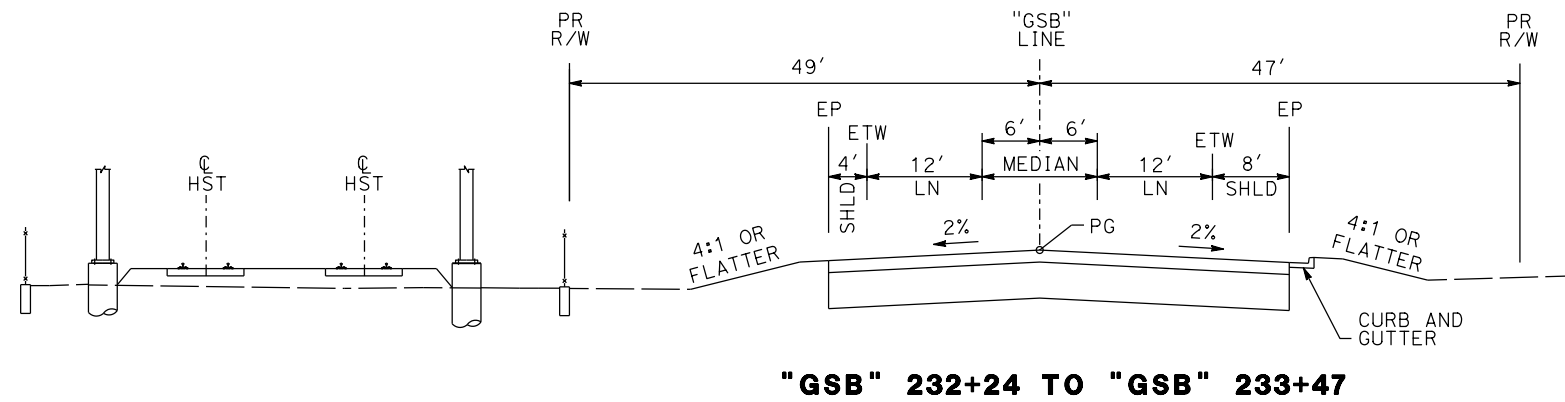
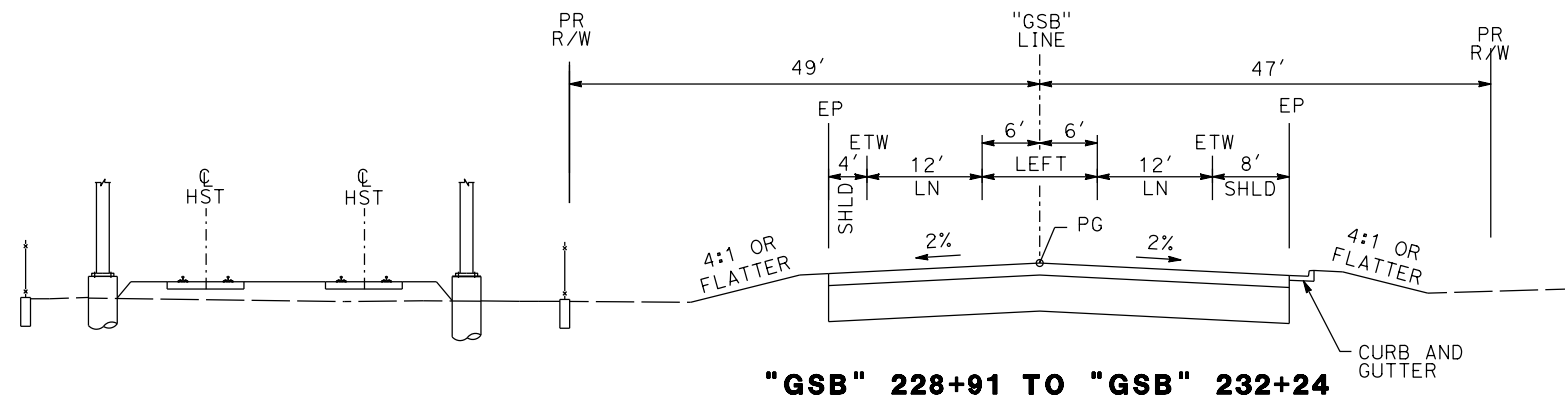
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**CALIFORNIA HIGH-SPEED TRAIN PROJECT  
MERCED TO FRESNO  
GOLDEN STATE BOULEVARD RE-ALIGNMENT  
TYPICAL SECTION**

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
**X-8**  
SCALE  
SHEET NO.





REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
G. MANOREK  
DRAWN BY  
B. CHAN  
CHECKED BY  
L. HEUSTON  
IN CHARGE  
J. MATSUI-DRURY  
DATE  
04/29/11

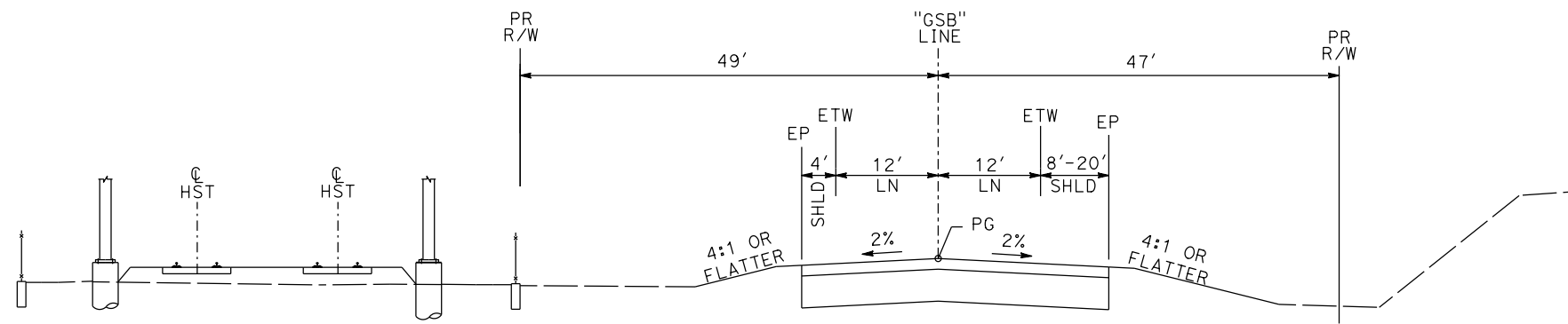
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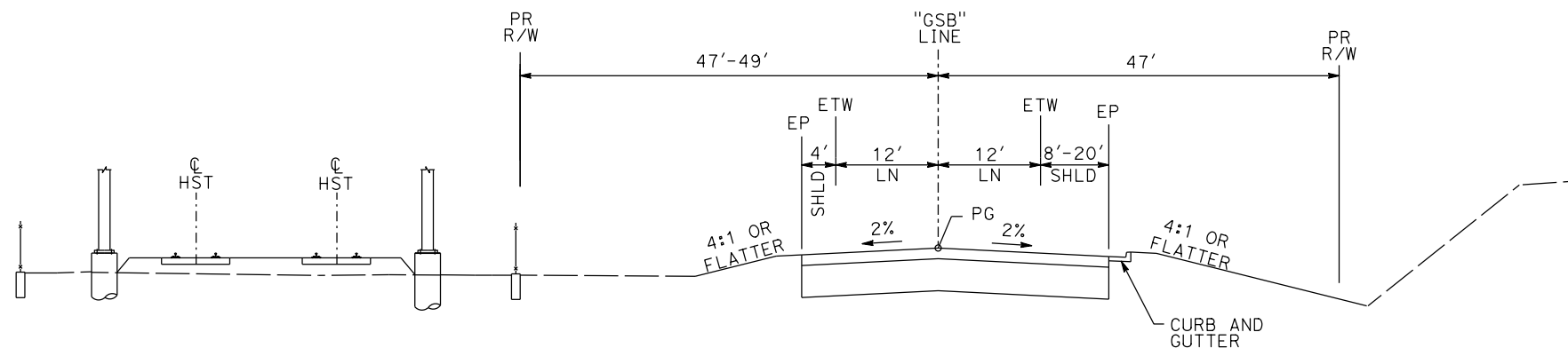


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
**GOLDEN STATE BOULEVARD RE-ALIGNMENT**  
**TYPICAL SECTION**

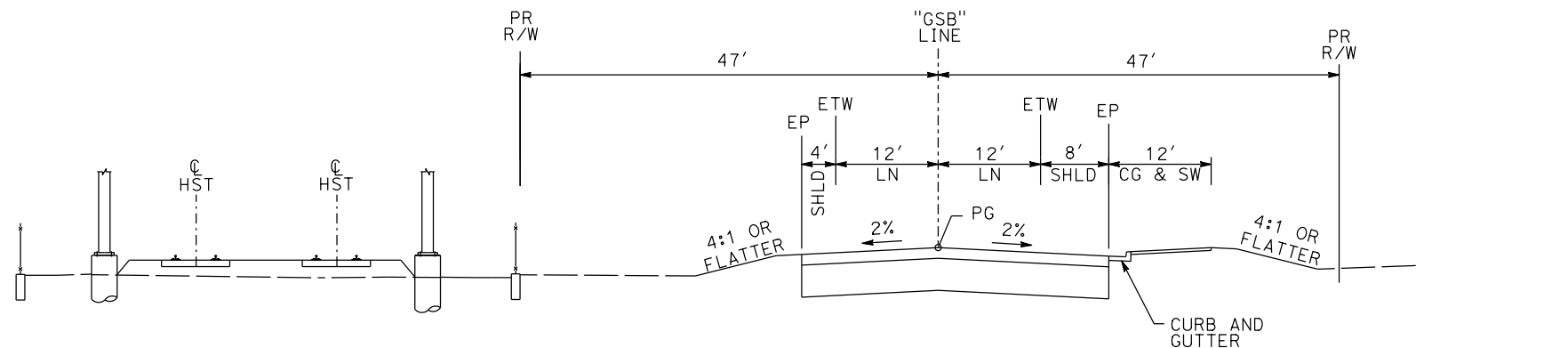
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**X-9**  
SCALE  
SHEET NO.



**"GSB" 236+37 TO "GSB" 239+13**



**"GSB" 239+13 TO "GSB" 249+22**



**"GSB" 249+22 TO "GSB" 254+26**

**GOLDEN STATE BOULEVARD**

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
G. MANOREK  
DRAWN BY  
B. CHAN  
CHECKED BY  
L. HEUSTON  
IN CHARGE  
J. MATSUI-DRURY  
DATE  
04/29/11

**RECORD SET  
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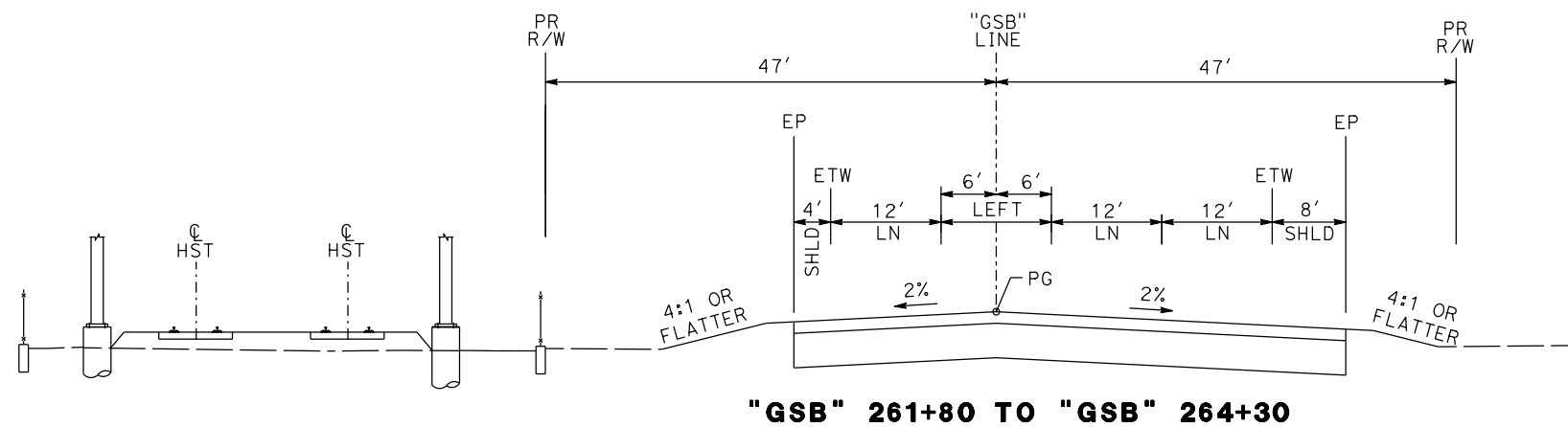
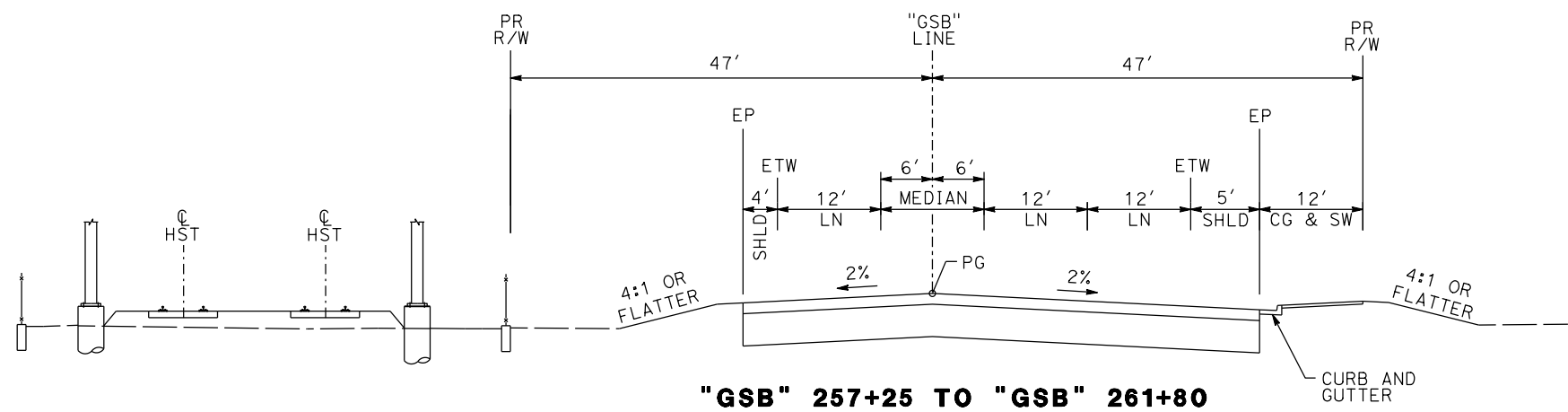
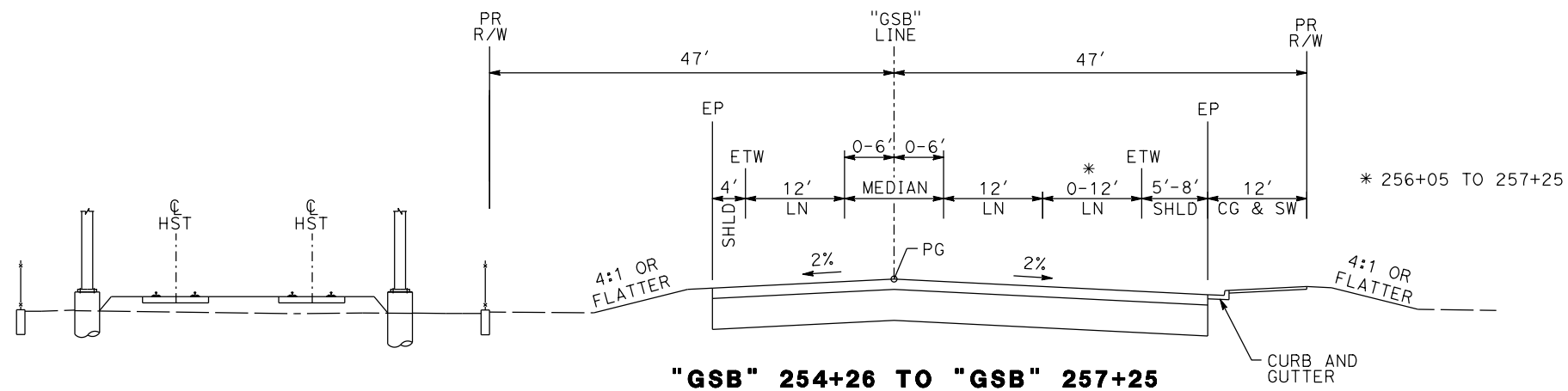
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CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT  
MERCED TO FRESNO  
GOLDEN STATE BOULEVARD RE-ALIGNMENT  
TYPICAL SECTION**

CONTRACT NO. HSR06-007
DRAWING NO. <b>X-10</b>
SCALE
SHEET NO.





**GOLDEN STATE BOULEVARD**

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
G. MANOREK  
DRAWN BY  
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L. HEUSTON  
IN CHARGE  
J. MATSUI-DRURY  
DATE  
04/29/11

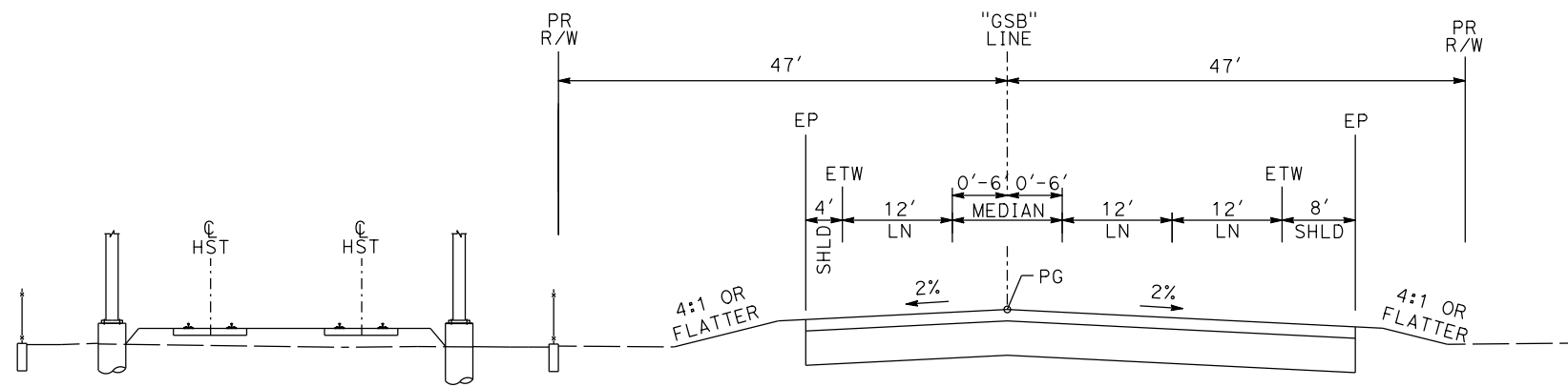
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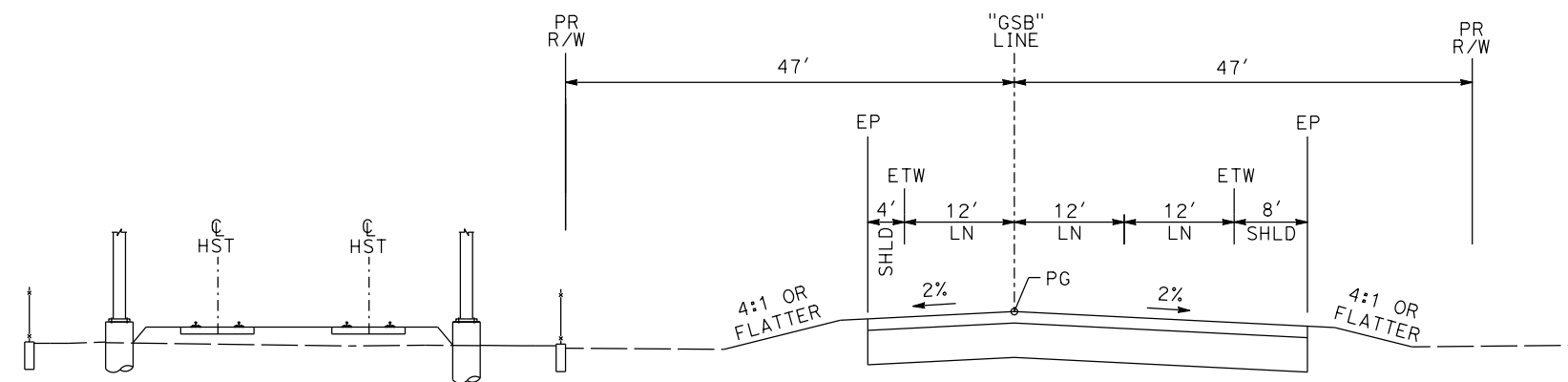


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
**GOLDEN STATE BOULEVARD RE-ALIGNMENT**  
**TYPICAL SECTION**

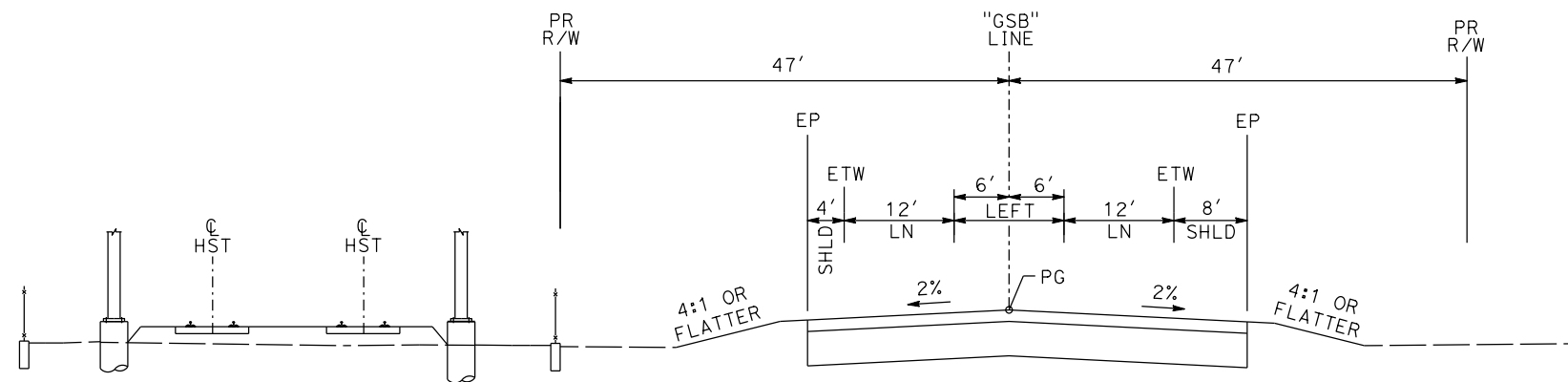
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DRAWING NO.	<b>X-11</b>
SCALE	
SHEET NO.	



**"GSB" 264+30 TO "GSB" 268+49**  
**"GSB" 280+18 TO "GSB" 286+76**



**"GSB" 268+49 TO "GSB" 280+18**



**"GSB" 286+76 TO "GSB" 289+26**

**GOLDEN STATE BOULEVARD**

REV	DATE	BY	CHK	APP	DESCRIPTION

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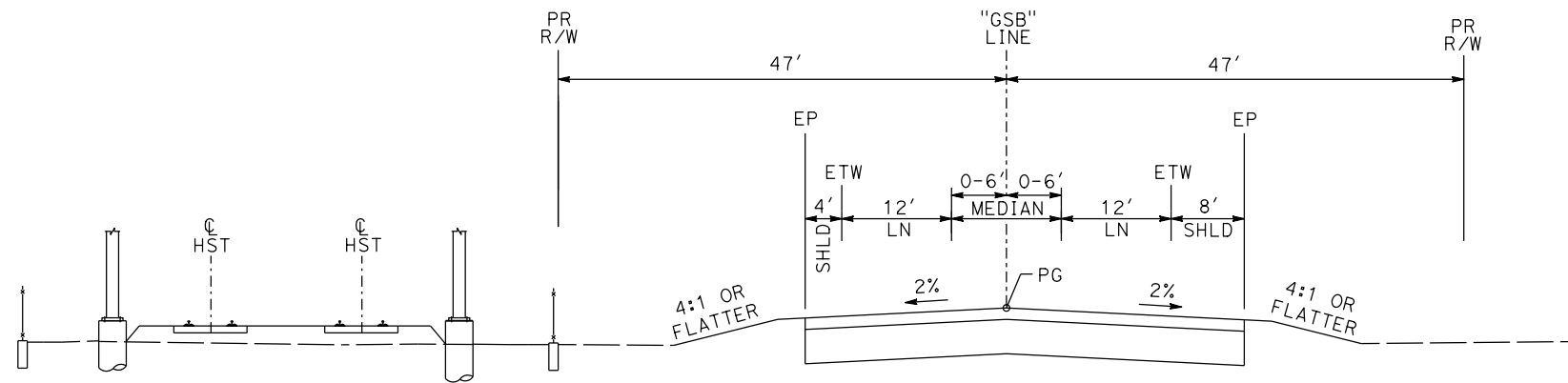
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**CONSTRUCTION**



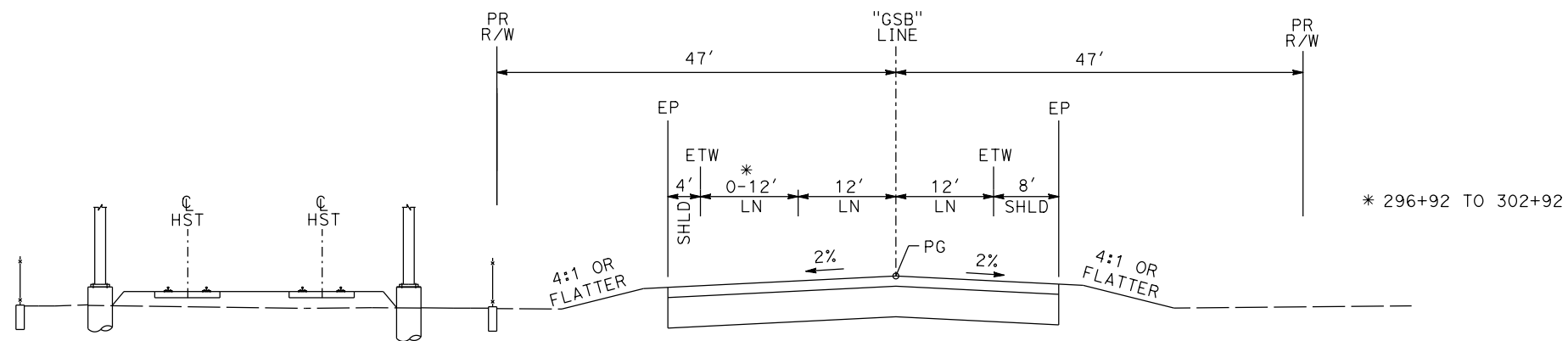
**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
**GOLDEN STATE BOULEVARD RE-ALIGNMENT**  
**TYPICAL SECTION**

CONTRACT NO.  
HSR06-007  
 DRAWING NO.  
**X-12**  
 SCALE  
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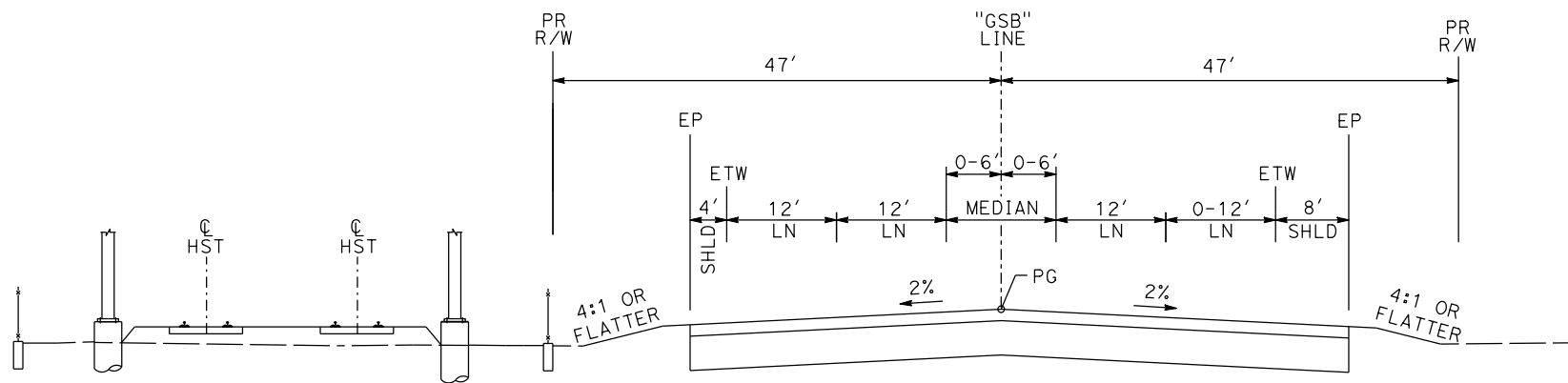




"GSB" 289+26 TO "GSB" 293+46



"GSB" 293+46 TO "GSB" 302+92



"GSB" 302+92 TO "GSB" 305+92

**GOLDEN STATE BOULEVARD**

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L. HEUSTON  
IN CHARGE  
J. MATSUI-DRURY  
DATE  
04/29/11

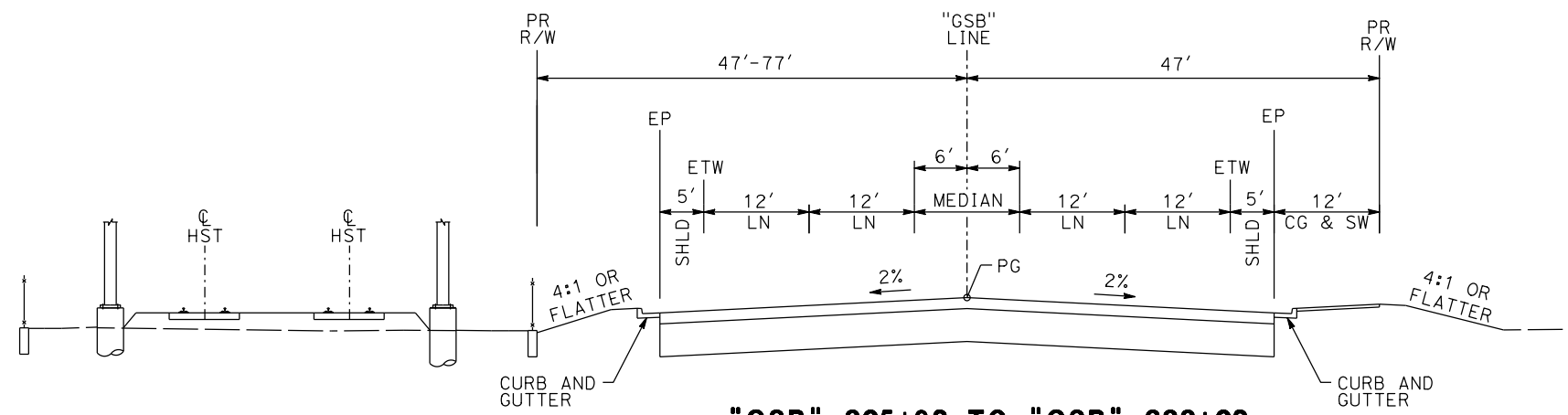
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**SUBMITTAL**

**NOT FOR**  
**CONSTRUCTION**

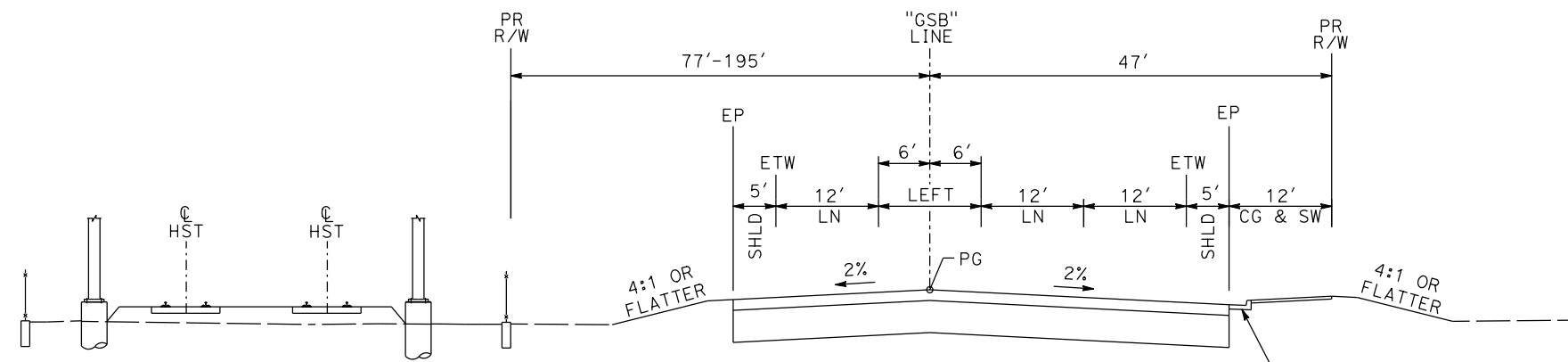


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
**GOLDEN STATE BOULEVARD RE-ALIGNMENT**  
**TYPICAL SECTION**

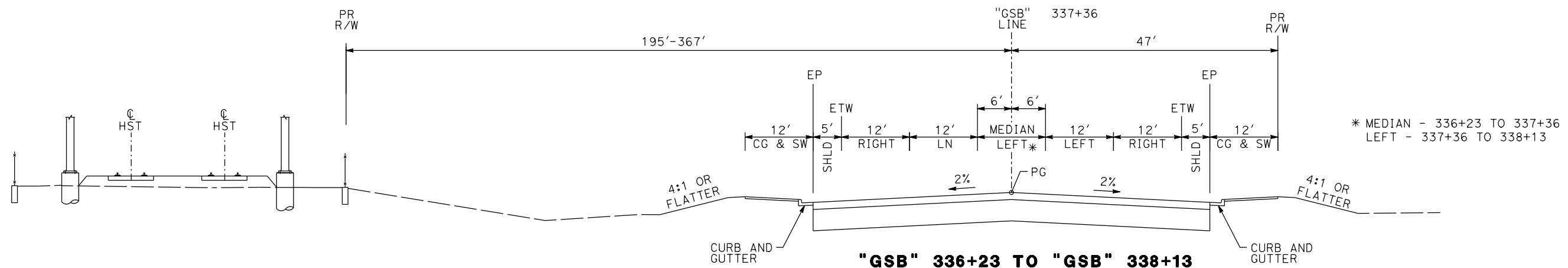
CONTRACT NO.  
HSR06-007  
DRAWING NO.  
**X-13**  
SCALE  
SHEET NO.



"GSB" 305+92 TO "GSB" 333+02



"GSB" 333+02 TO "GSB" 336+23



"GSB" 336+23 TO "GSB" 338+13

**GOLDEN STATE BOULEVARD**

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
G. MANOREK  
DRAWN BY  
B. CHAN  
CHECKED BY  
L. HEUSTON  
IN CHARGE  
J. MATSUI-DRURY  
DATE  
04/29/11

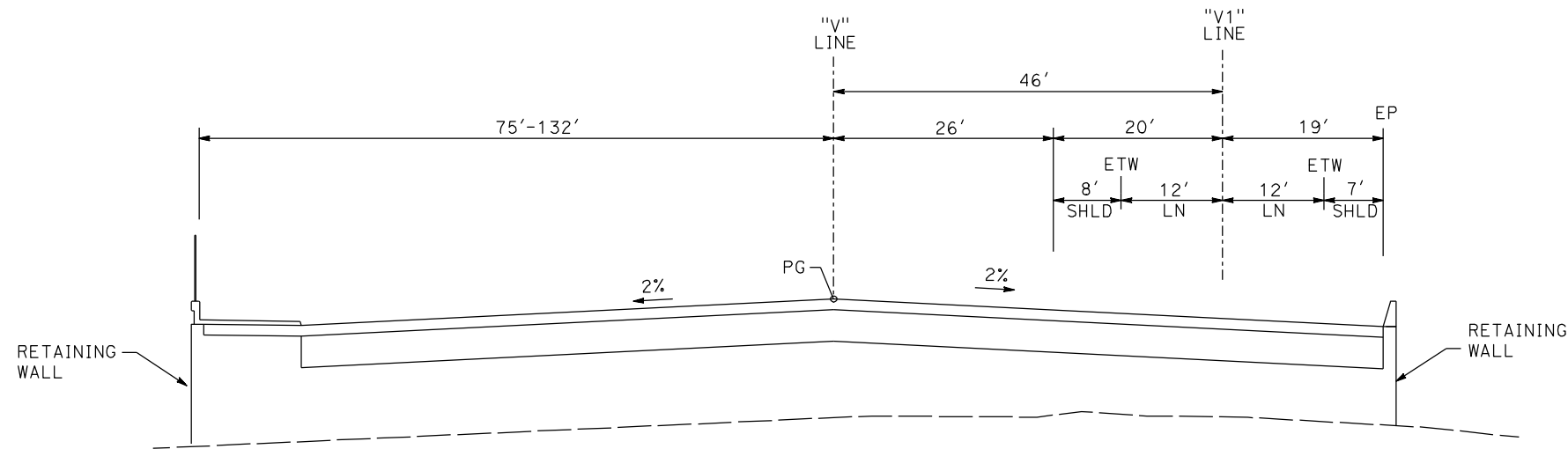
**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**  
  
**NOT FOR**  
**CONSTRUCTION**



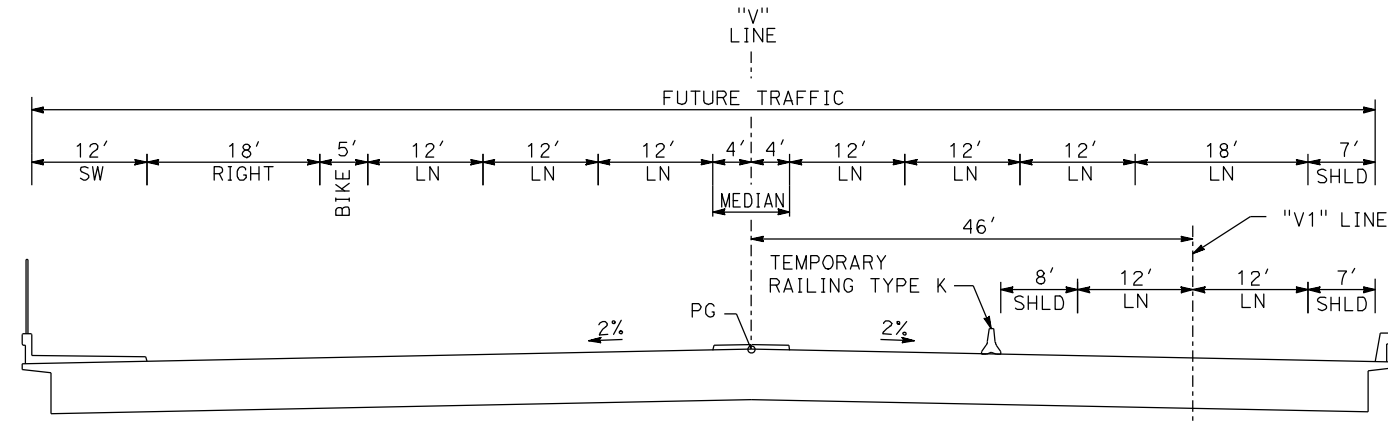
**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
**GOLDEN STATE BOULEVARD RE-ALIGNMENT**  
**TYPICAL SECTION**

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
**X-14**  
SCALE  
SHEET NO.

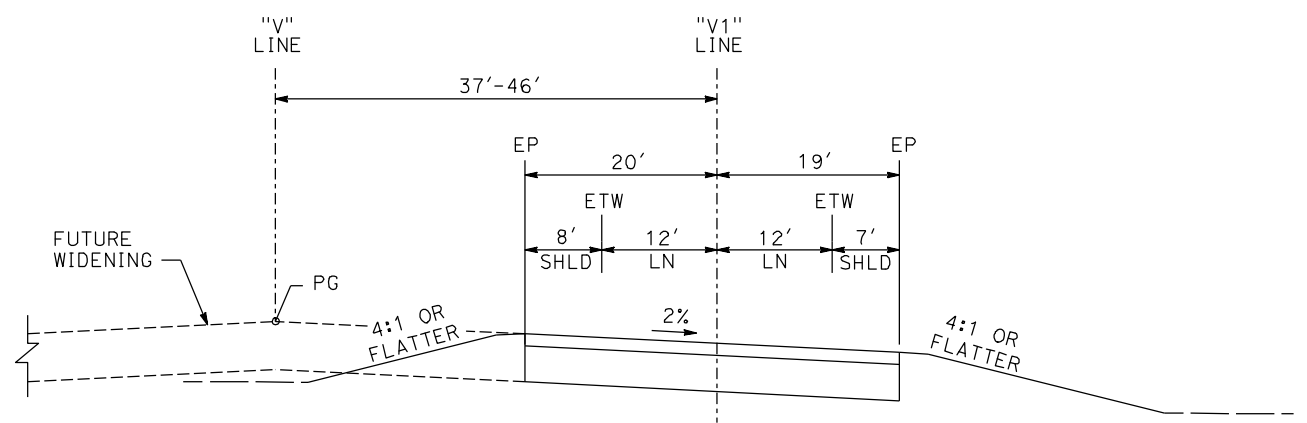




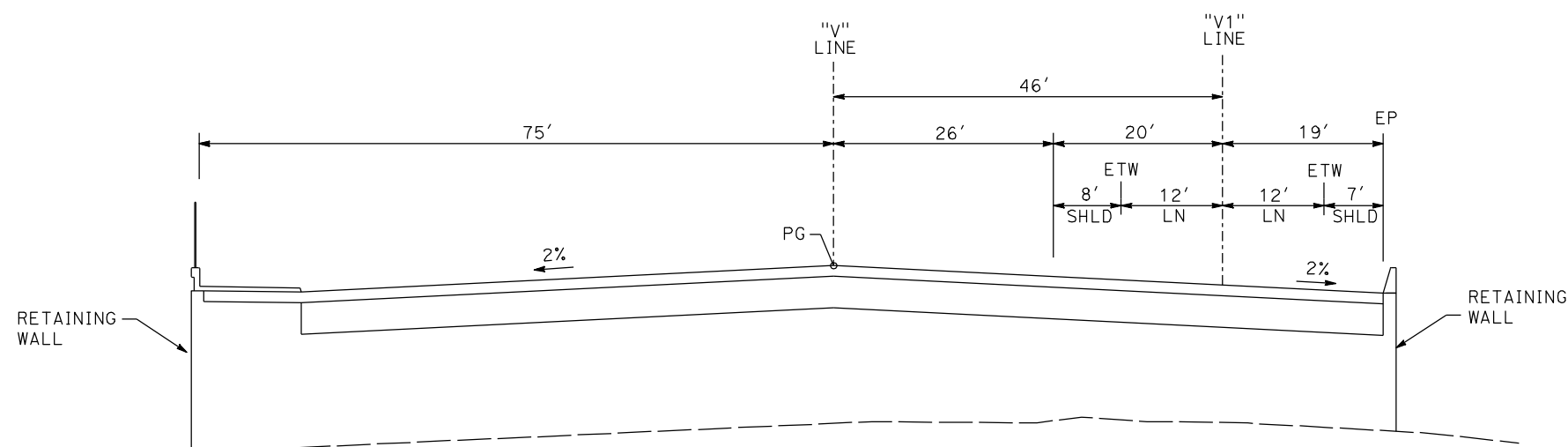
"V" 105+00 TO "V" 105+63



"V" 105+63 TO "V" 109+79



"V" 110+32 TO "V" 122+35



"V" 109+79 TO "V" 110+32

**VETERANS BLVD**

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
G. MANOREK  
DRAWN BY  
B. CHAN  
CHECKED BY  
L. HEUSTON  
IN CHARGE  
J. MATSUI-DRURY  
DATE  
04/29/11

**RECORD SET  
15% DESIGN  
SUBMITTAL**

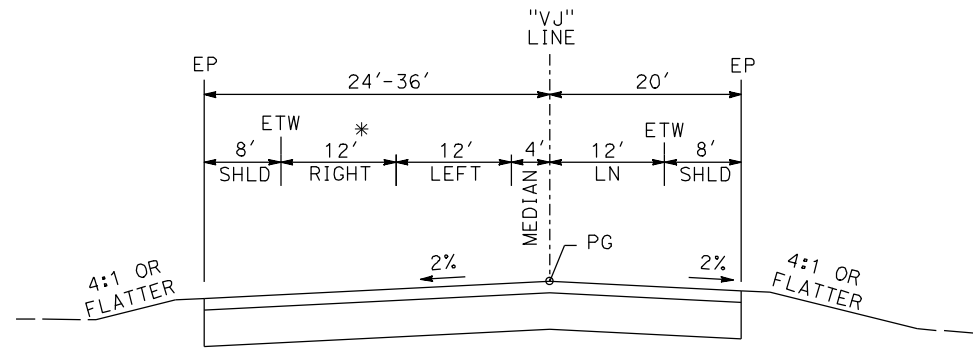
**NOT FOR  
CONSTRUCTION**



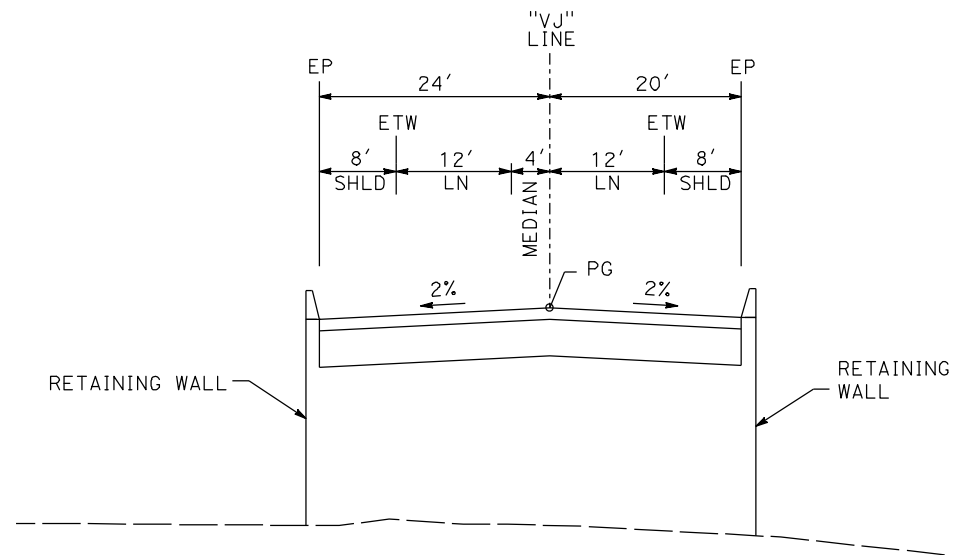
**CALIFORNIA HIGH-SPEED TRAIN PROJECT  
MERCED TO FRESNO  
GOLDEN STATE BOULEVARD RE-ALIGNMENT  
TYPICAL SECTION**

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
**X-15**  
SCALE  
SHEET NO.

\* 0'-12' - FROM 12+61 TO 13+21

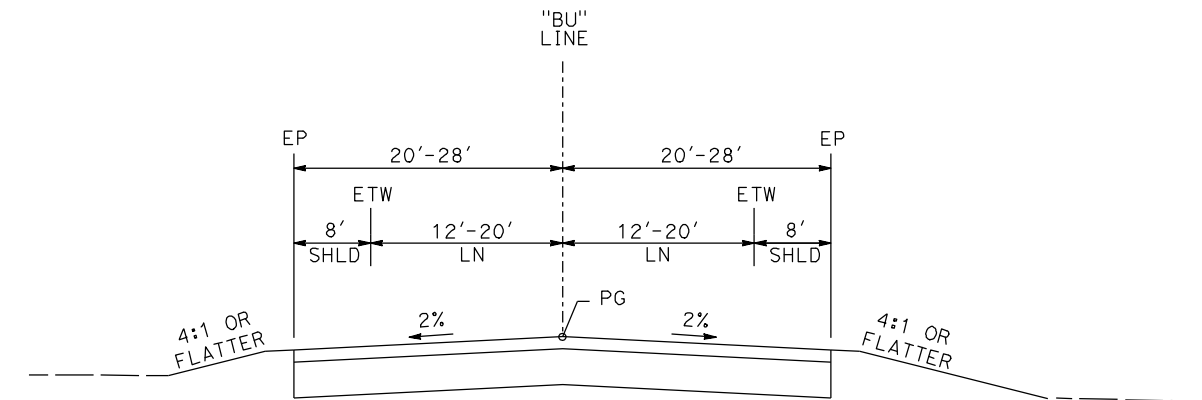


**"VJ" 10+44 TO "VJ" 13+21**

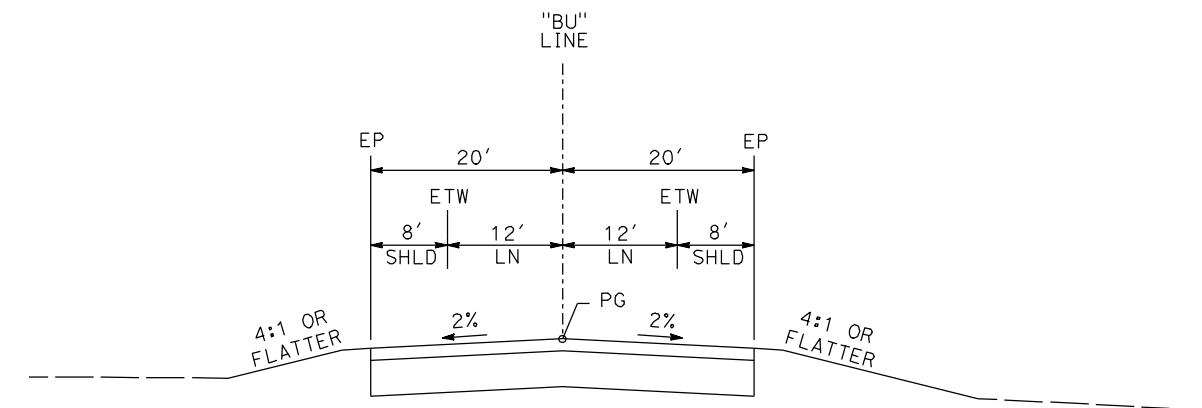


**"VJ" 13+21 TO "VJ" 18+37**

**LOOP - VETERANS BLVD**



**"BU" 110+00 TO "BU" 113+67**



**"BU" 113+67 TO "BU" 132+26**

**BULLARD AVE**

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
G. MANOREK  
DRAWN BY  
B. CHAN  
CHECKED BY  
L. HEUSTON  
IN CHARGE  
J. MATSUI-DRURY  
DATE  
04/29/11

**RECORD SET  
15% DESIGN  
SUBMITTAL**

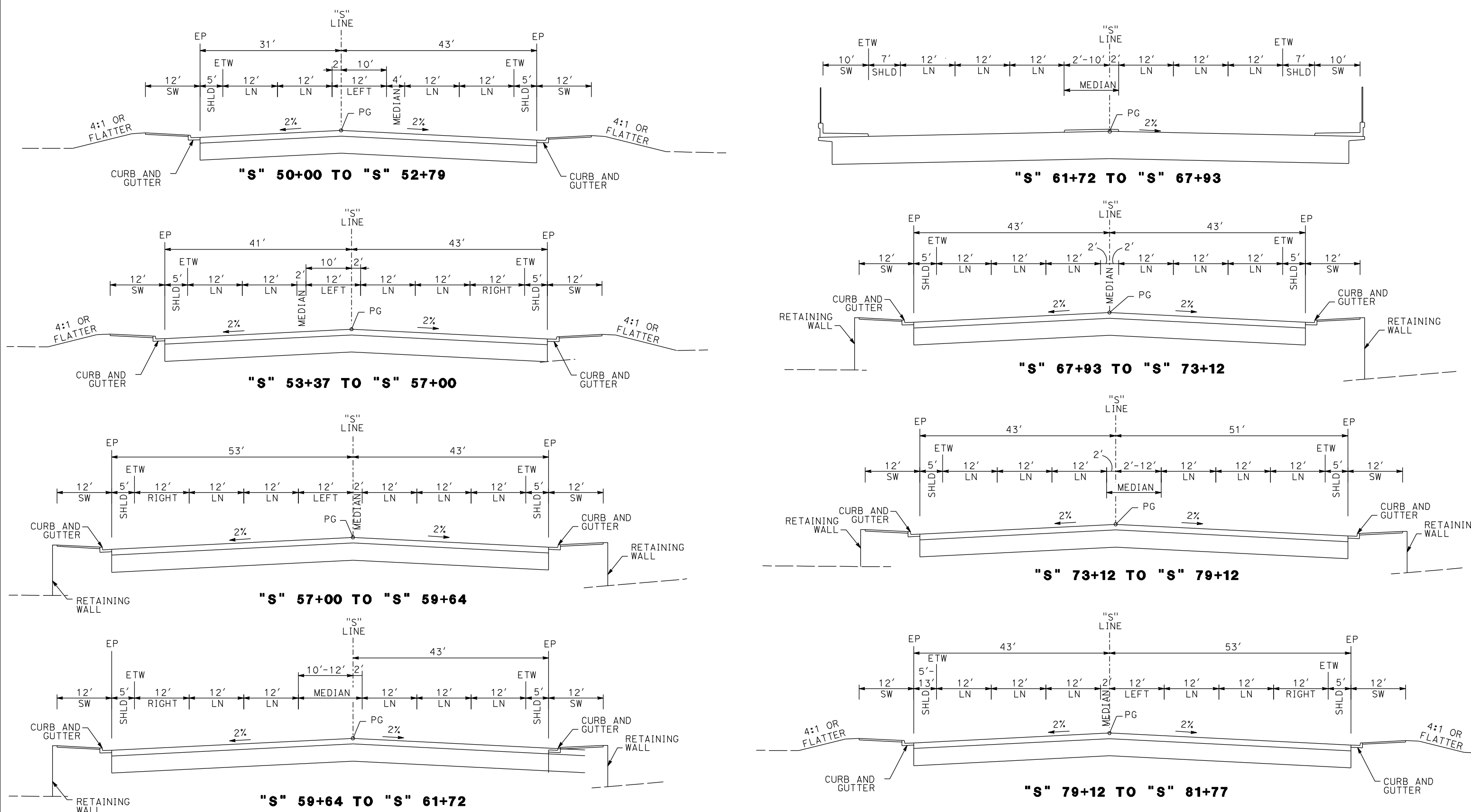
**NOT FOR  
CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT  
MERCED TO FRESNO  
GOLDEN STATE BOULEVARD RE-ALIGNMENT  
TYPICAL SECTION**

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
**X-16**  
SCALE  
SHEET NO.





**SHAW AVE**

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
G. MANOREK  
DRAWN BY  
B. CHAN  
CHECKED BY  
L. HEUSTON  
IN CHARGE  
J. MATSUI-DRURY  
DATE  
04/29/11

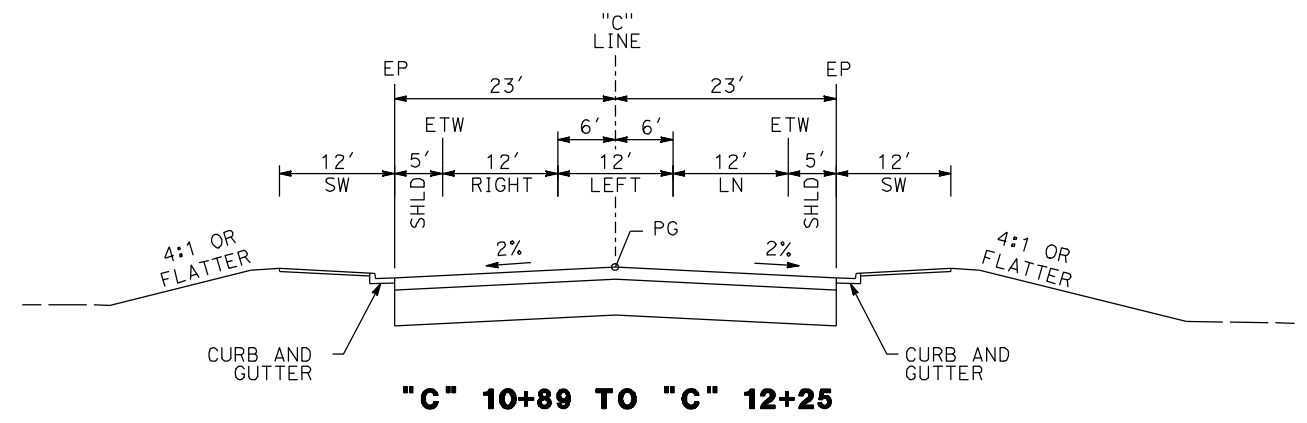
**RECORD SET  
15% DESIGN  
SUBMITTAL**

**NOT FOR  
CONSTRUCTION**

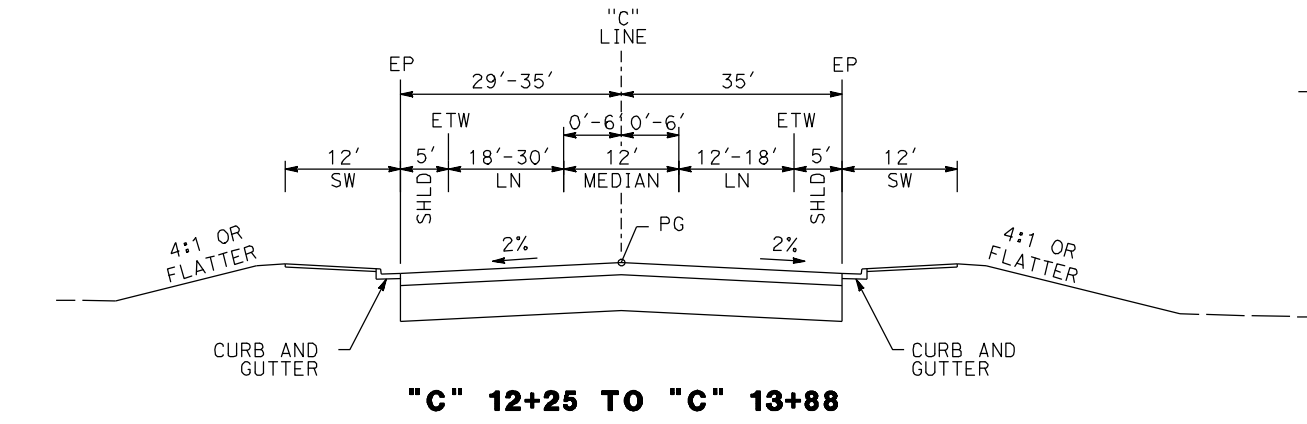


**CALIFORNIA HIGH-SPEED TRAIN PROJECT  
MERCED TO FRESNO  
GOLDEN STATE BOULEVARD RE-ALIGNMENT  
TYPICAL SECTION**

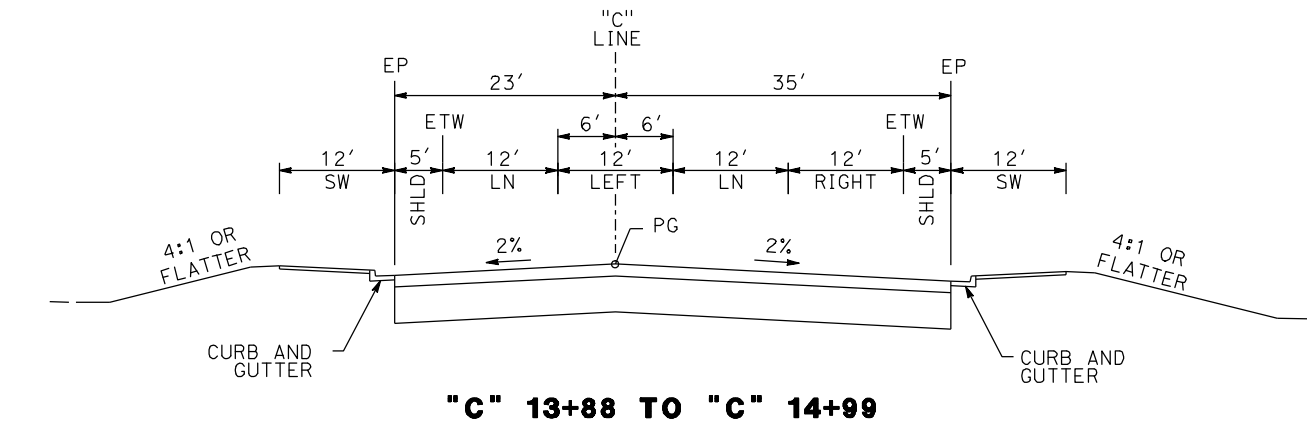
CONTRACT NO.  
HSR06-007  
DRAWING NO.  
**X-17**  
SCALE  
SHEET NO.



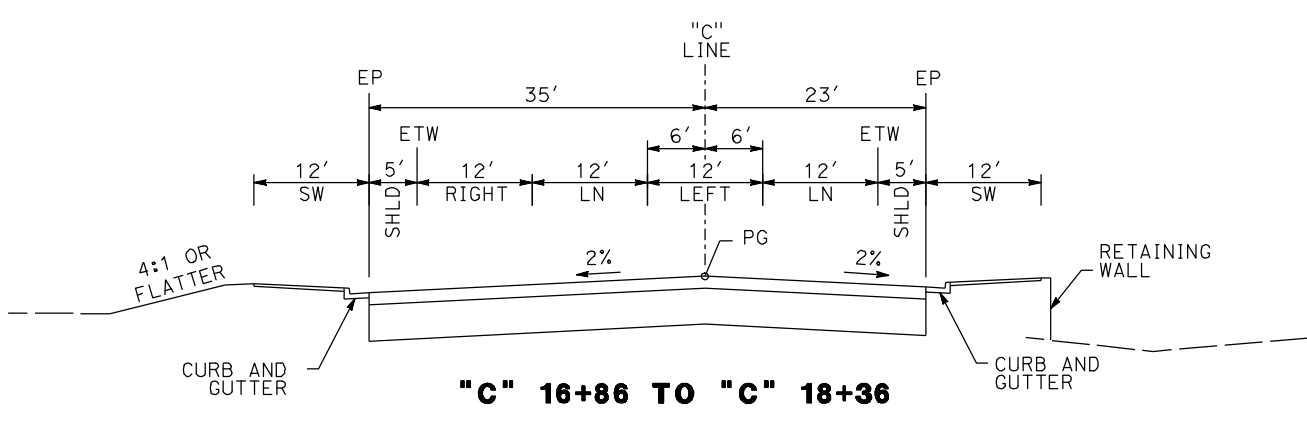
**"C" 10+89 TO "C" 12+25**



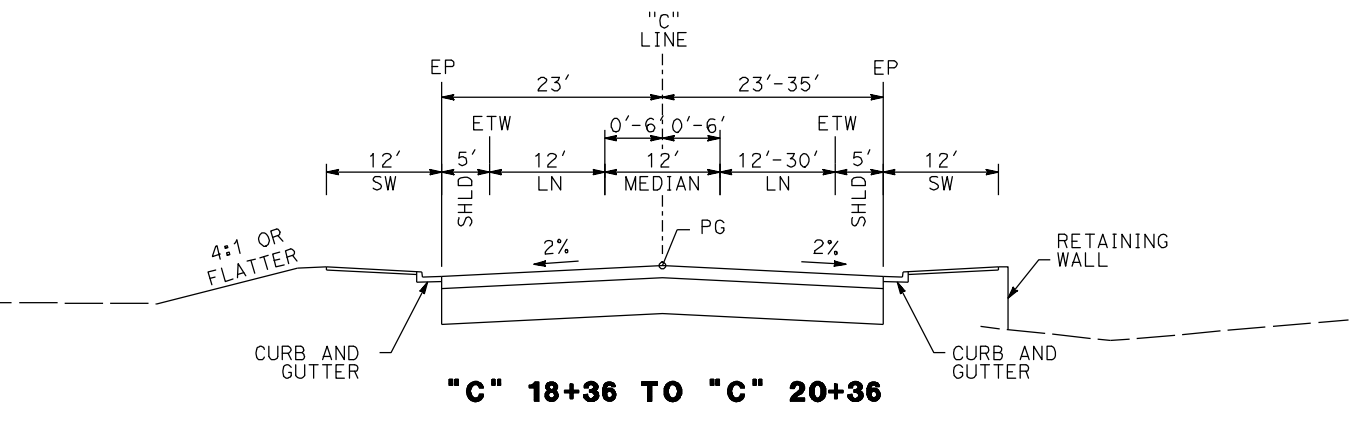
**"C" 12+25 TO "C" 13+88**



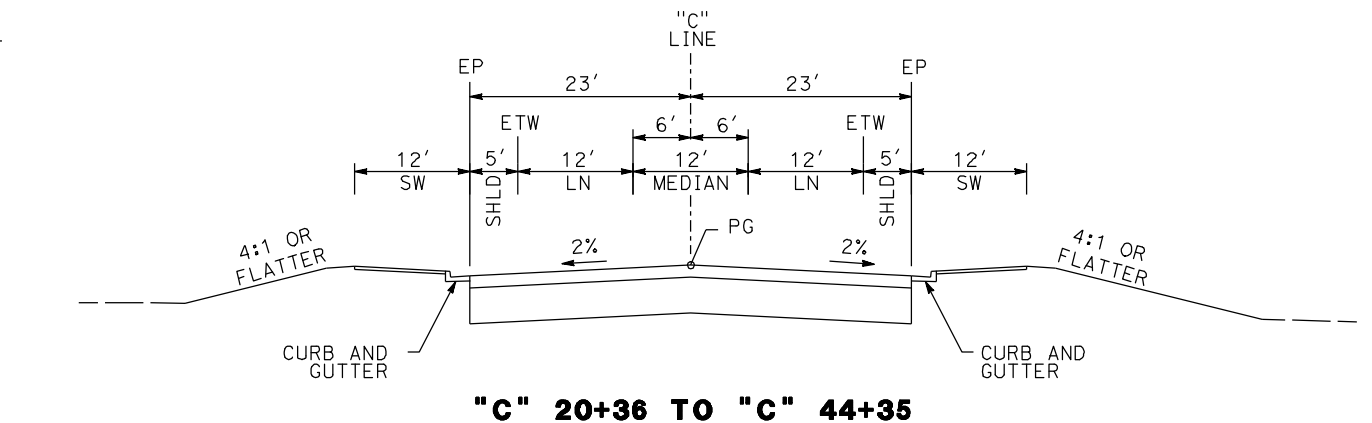
**"C" 13+88 TO "C" 14+99**



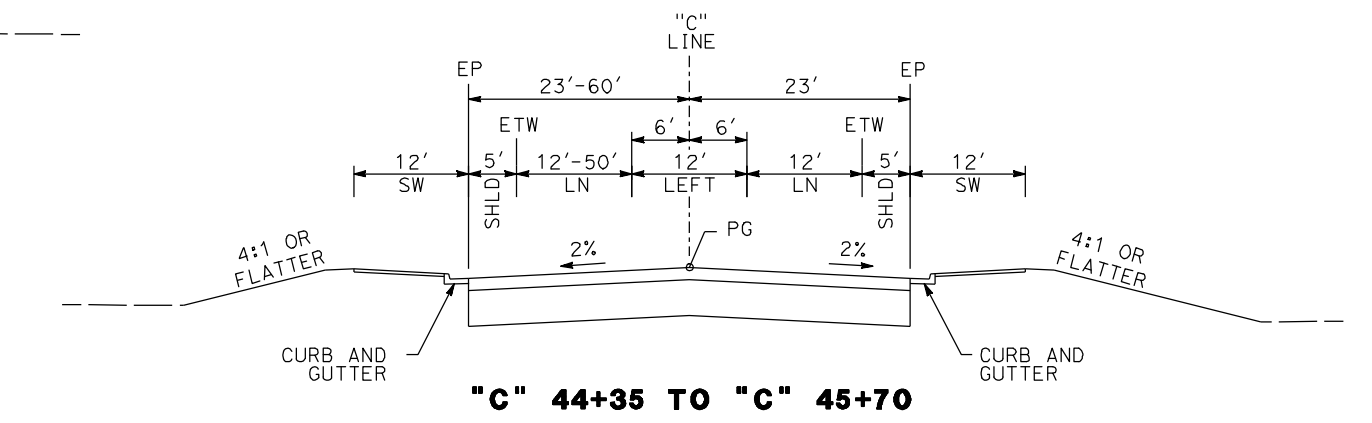
**"C" 16+86 TO "C" 18+36**



**"C" 18+36 TO "C" 20+36**



**"C" 20+36 TO "C" 44+35**



**"C" 44+35 TO "C" 45+70**

**CORNELIA AVE & SANTA ANA AVE**

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
G. MANOREK  
DRAWN BY  
B. CHAN  
CHECKED BY  
L. HEUSTON  
IN CHARGE  
J. MATSUI-DRURY  
DATE  
04/29/11

**RECORD SET  
15% DESIGN  
SUBMITTAL**

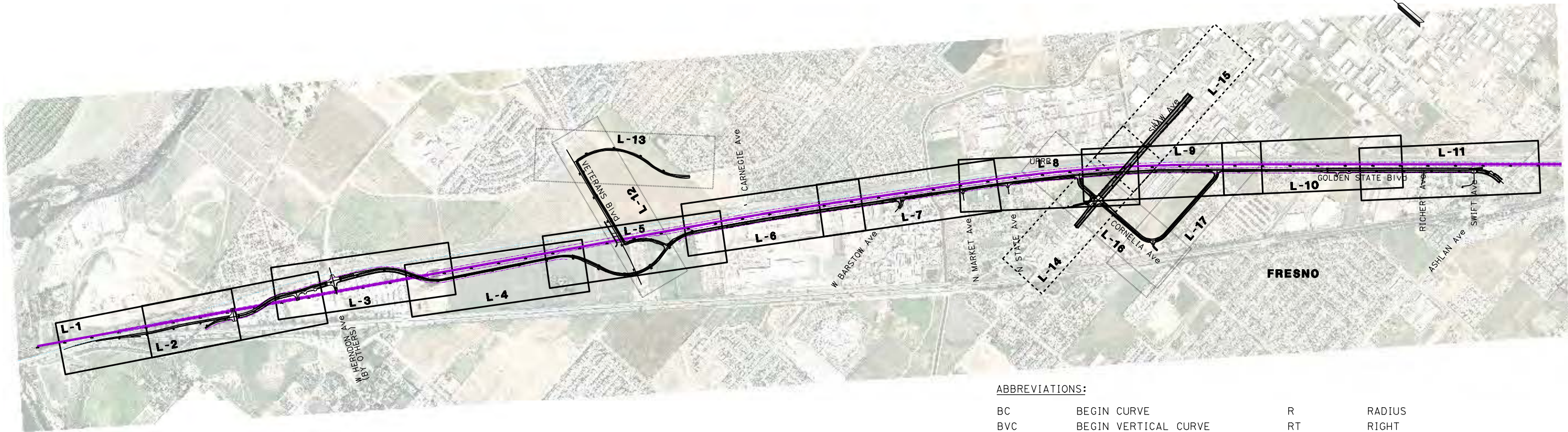
**NOT FOR  
CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT  
MERCED TO FRESNO  
GOLDEN STATE BOULEVARD RE-ALIGNMENT  
TYPICAL SECTION**

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
**X-18**  
SCALE  
SHEET NO.





**ABBREVIATIONS:**

BC	BEGIN CURVE	R	RADIUS
BVC	BEGIN VERTICAL CURVE	RT	RIGHT
CG	CURB AND GUTTER	R/W	RIGHT OF WAY
CL	CENTERLINE	SB	SOUTHBOUND
EC	END CURVE	SHLD	SHOULDER
ELEV	ELEVATION	SW	SIDEWALK
EP	EDGE OF PAVEMENT	T	TANGENT
ES	EDGE OF SHOULDER	UPRR	UNION PACIFIC RAILROAD
ETW	EDGE OF TRAVELLED WAY	VAR	VARIES
EVC	END VERTICAL CURVE		
GSB	GOLDEN STATE BLVD		
HST	HIGH SPEED TRAIN		
L	LENGTH		
LN	LANE		
LT	LEFT		
NB	NORTHBOUND		
OG	ORIGINAL GROUND		
PCC	POINT OF COMPOUND CURVE		
PI	POINT OF INTERSECTION		
POB	POINT OF BEGINNING		
POC	POINT ON CURVE		
POE	POINT OF END		
POT	POINT ON TANGENT		
PG	PROFILE GRADE		
PR	PROPOSED		
PRC	POINT OF REVERSE CURVE		
PVI	POINT OF VERTICAL INTERSECTION		
PRVC	POINT OF REVERSE VERTICAL CURVE		

**LEGEND:**

- EXIST / PROPOSED RIGHT OF WAY
- HIGH SPEED TRAIN TRACK CENTERLINES
- P12 PETROLEUM GAS LINE
- RETAINING WALL

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
G. MANOREK  
DRAWN BY  
B. CHAN  
CHECKED BY  
L. HEUSTON  
IN CHARGE  
J. MATSUI-DRURY  
DATE  
04/29/11

**RECORD SET  
15% DESIGN  
SUBMITTAL**

**NOT FOR  
CONSTRUCTION**

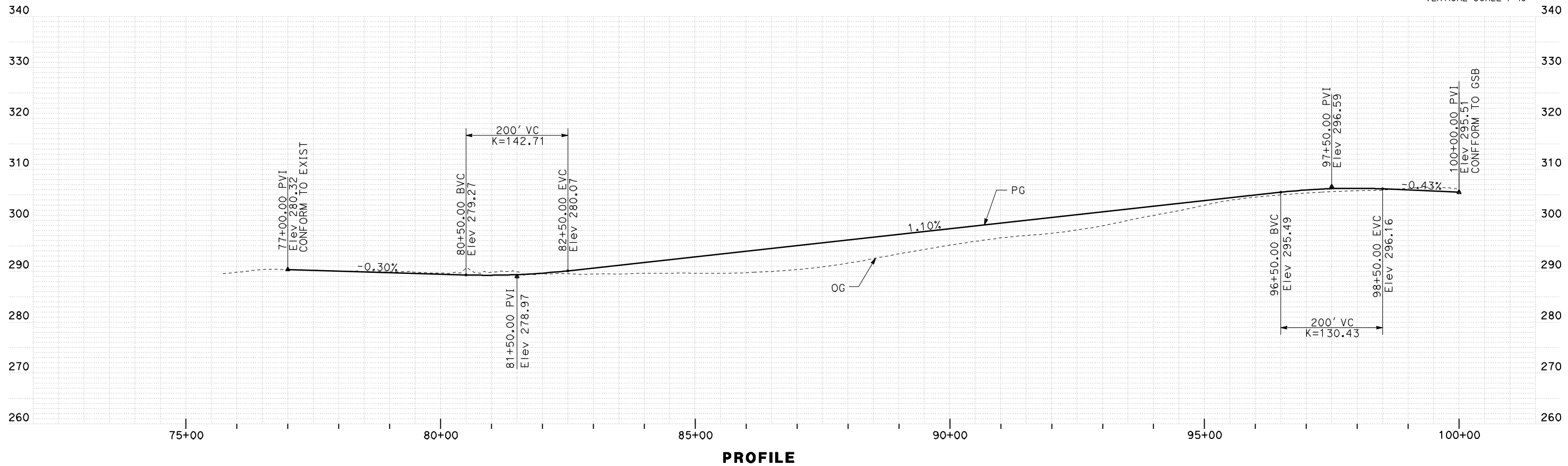
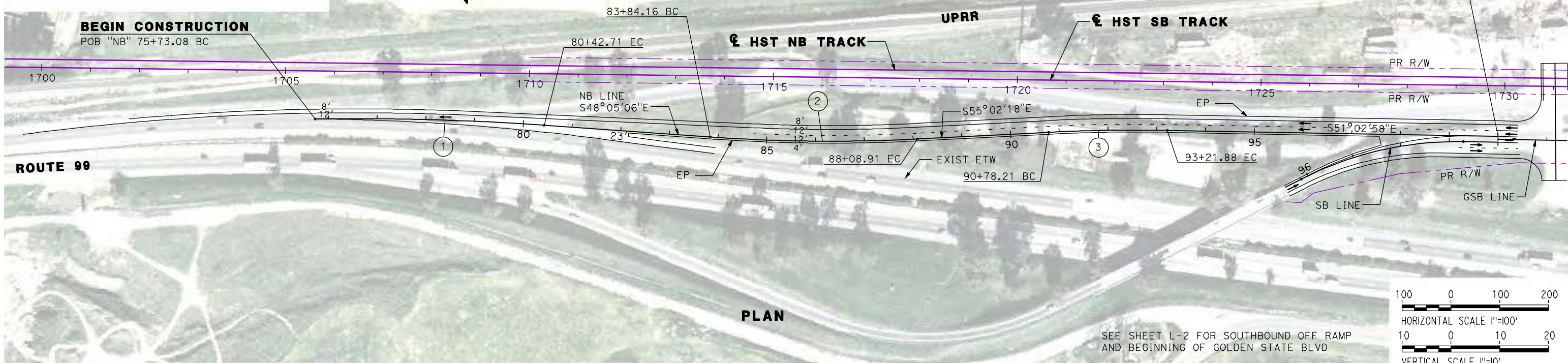


**CALIFORNIA HIGH-SPEED TRAIN PROJECT  
MERCED TO FRESNO  
GOLDEN STATE BOULEVARD RE-ALIGNMENT  
KEYMAP**

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
**K-1**  
SCALE  
NTS  
SHEET NO.



CURVE DATA					
No.	LINE	R	$\Delta$	L	T
①	NB	5500.00'	04°53'32"	469.63'	234.69'
②	NB	3500.00'	06°57'12"	424.76'	212.64'
③	NB	3500.00'	03°59'20"	243.67'	121.88'



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
G. MANOREK  
DRAWN BY  
B. CHAN  
CHECKED BY  
L. HEUSTON  
IN CHARGE  
J. MATSUI-DRURY  
DATE  
04/29/11

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

**NOT FOR**  
**CONSTRUCTION**

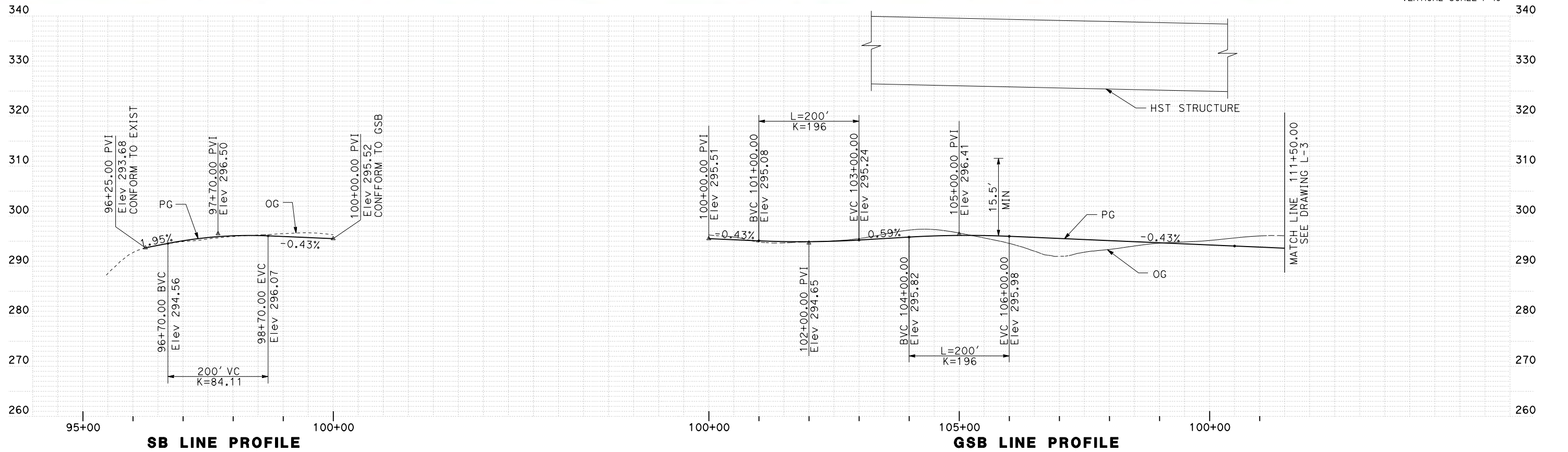
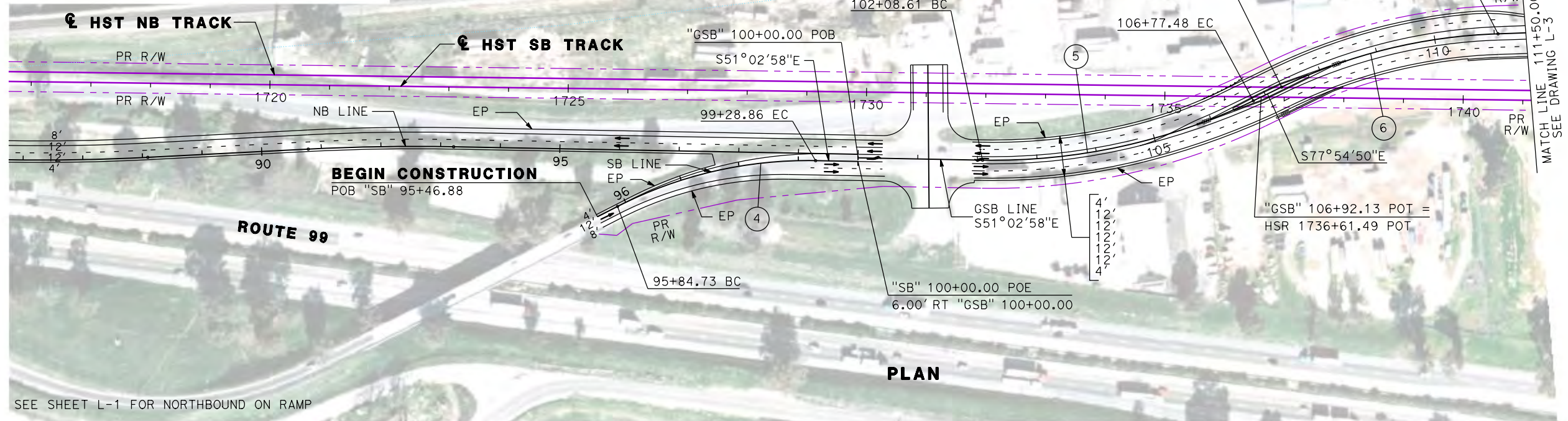


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
**GOLDEN STATE BOULEVARD RE-ALIGNMENT**  
**LAYOUT**  
**"NB" 75+73 TO "NB" 100+00**

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
**L-1**  
SCALE  
AS SHOWN  
SHEET NO.



CURVE DATA					
No.	LINE	R	Δ	L	T
④	SB	700.00'	28°10'05"	344.14'	175.62'
⑤	GSB	1000.00'	26°51'52"	468.87'	238.83'
⑥	GSB	900.00'	23°57'18"	376.29'	190.93'



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
G. MANOREK  
DRAWN BY  
B. CHAN  
CHECKED BY  
L. HEUSTON  
IN CHARGE  
J. MATSUI-DRURY  
DATE  
04/29/11

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

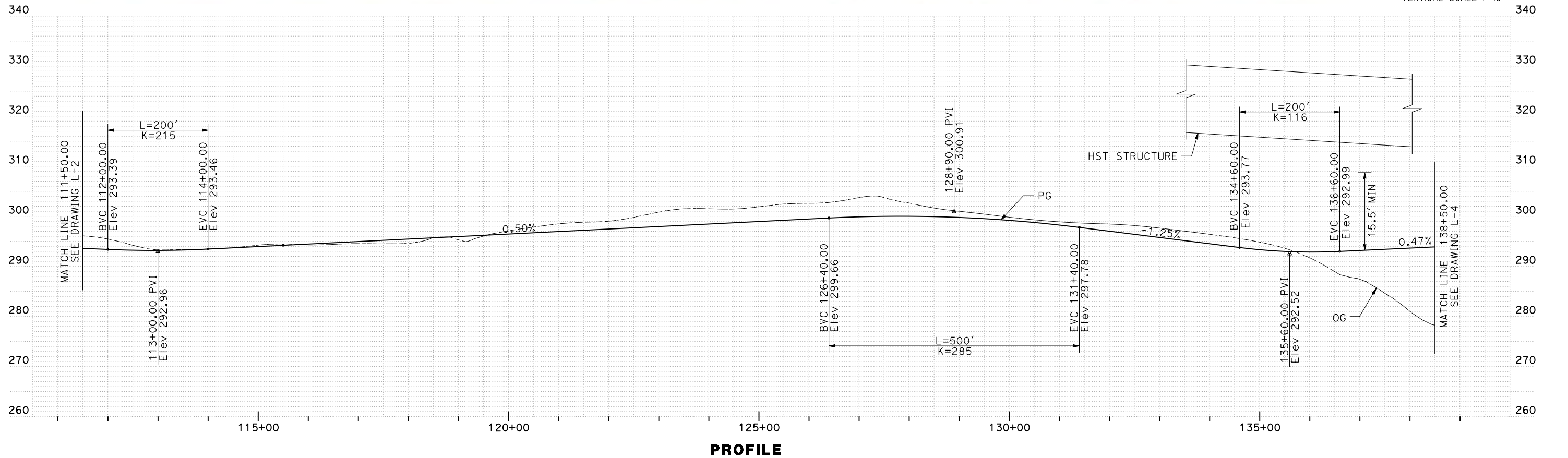
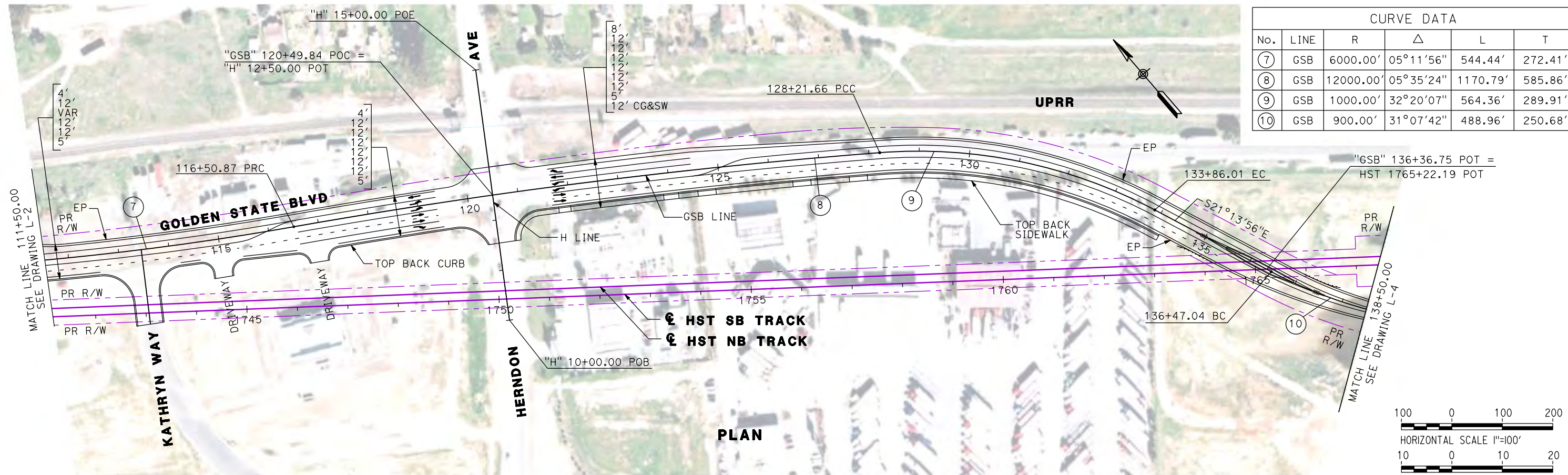
**NOT FOR**  
**CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
**GOLDEN STATE BOULEVARD RE-ALIGNMENT**  
**LAYOUT**  
**"GSB" 100+00 TO "GSB" 111+50**

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
**L-2**  
SCALE  
AS SHOWN  
SHEET NO.





REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
G. MANOREK  
DRAWN BY  
B. CHAN  
CHECKED BY  
L. HEUSTON  
IN CHARGE  
J. MATSUI-DRURY  
DATE  
04/29/11

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

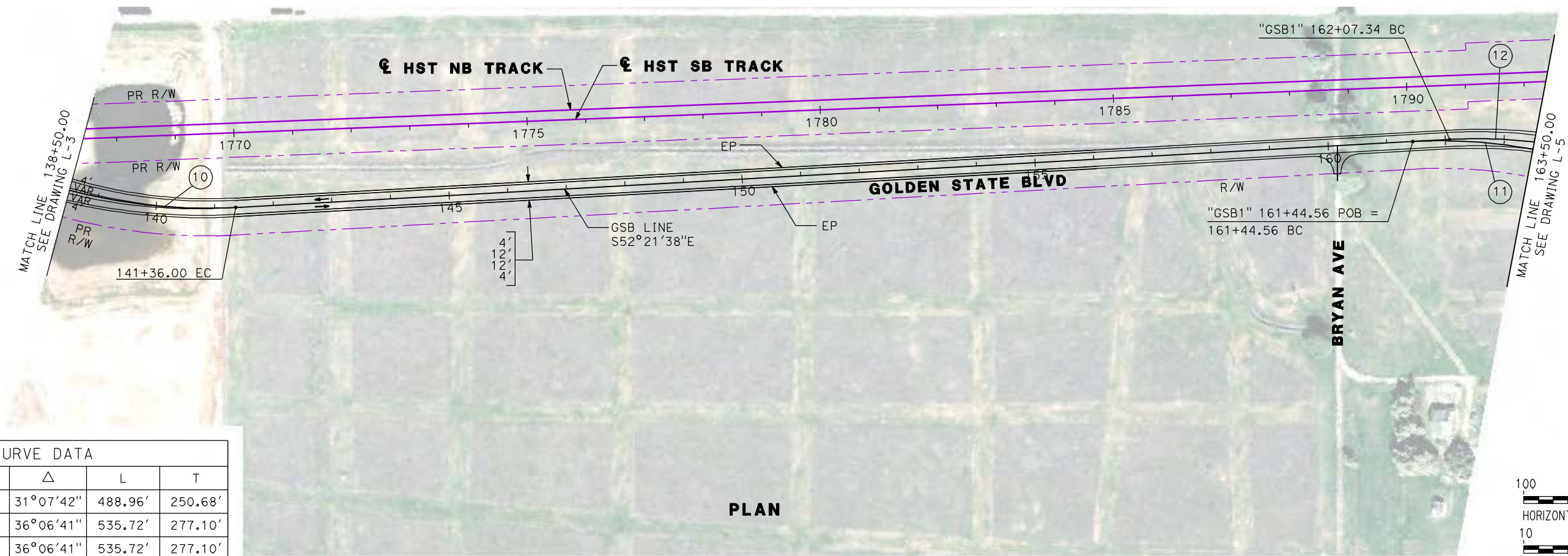
**NOT FOR**  
**CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
**GOLDEN STATE BOULEVARD RE-ALIGNMENT**  
**LAYOUT**  
**"GSB" 111+50 TO "GSB" 138+50**

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
**L-3**  
SCALE  
AS SHOWN  
SHEET NO.

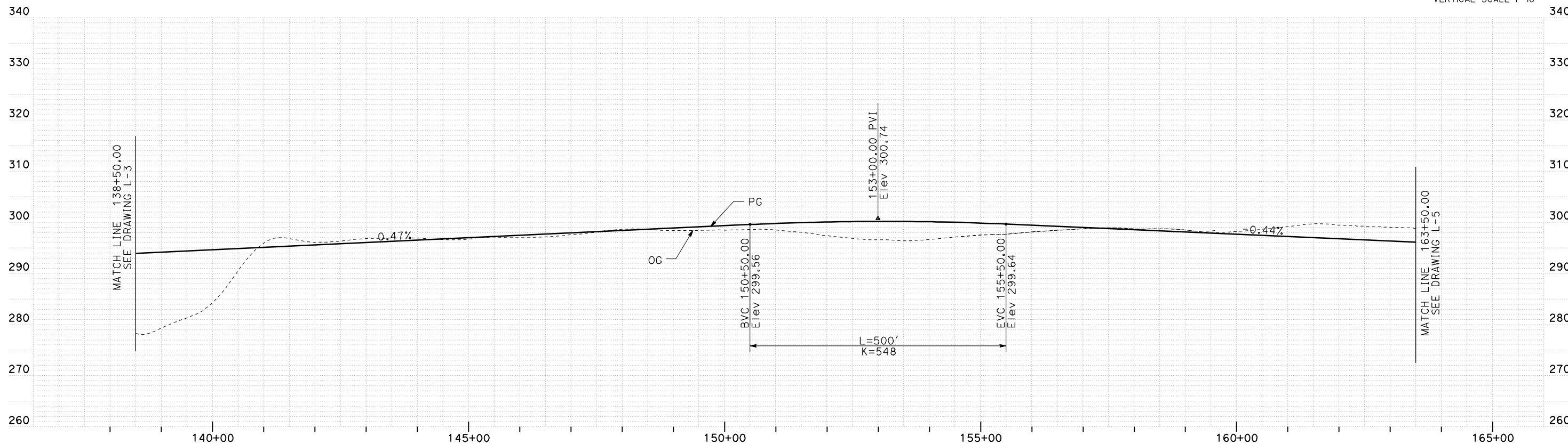
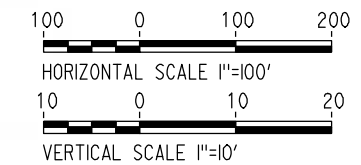




PLAN

CURVE DATA

No.	LINE	R	Δ	L	T
10	GSB	900.00'	31°07'42"	488.96'	250.68'
11	GSB	850.00'	36°06'41"	535.72'	277.10'
12	GSB1	850.00'	36°06'41"	535.72'	277.10'



PROFILE

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
G. MANOREK  
DRAWN BY  
B. CHAN  
CHECKED BY  
L. HEUSTON  
IN CHARGE  
J. MATSUI-DRURY  
DATE  
04/29/11

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

**NOT FOR**  
**CONSTRUCTION**



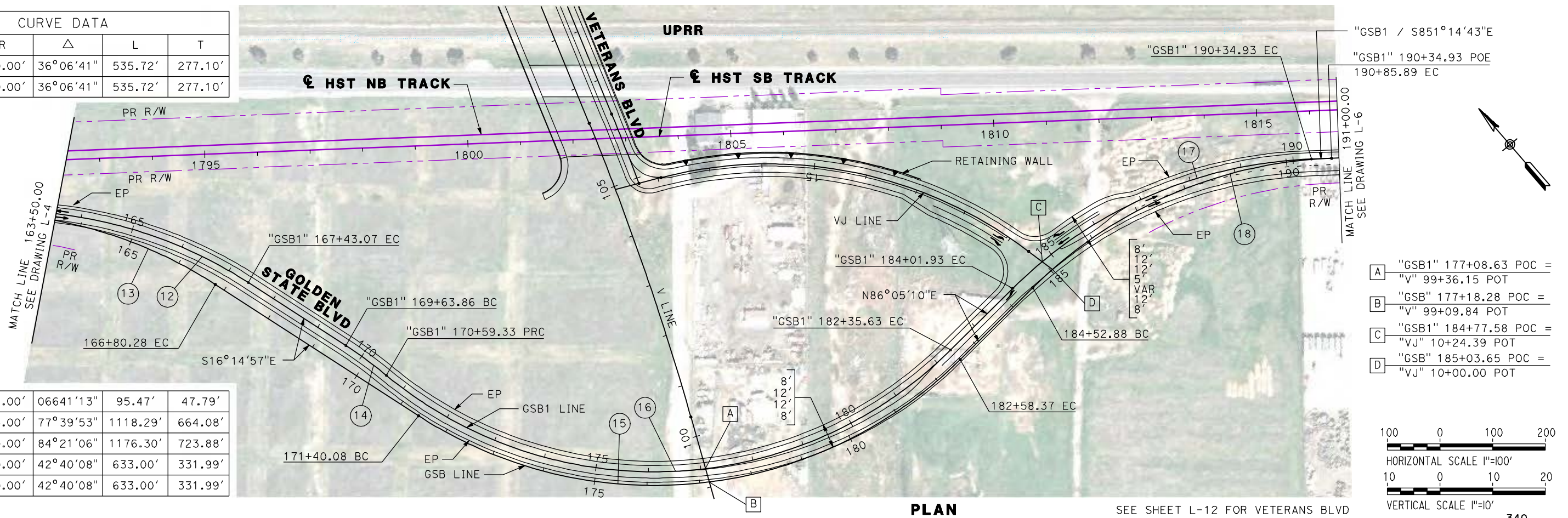
**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
**GOLDEN STATE BOULEVARD RE-ALIGNMENT**  
**LAYOUT**  
**"GSB" 138+50 TO "GSB" 163+50**

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
**L-4**  
SCALE  
AS SHOWN  
SHEET NO.

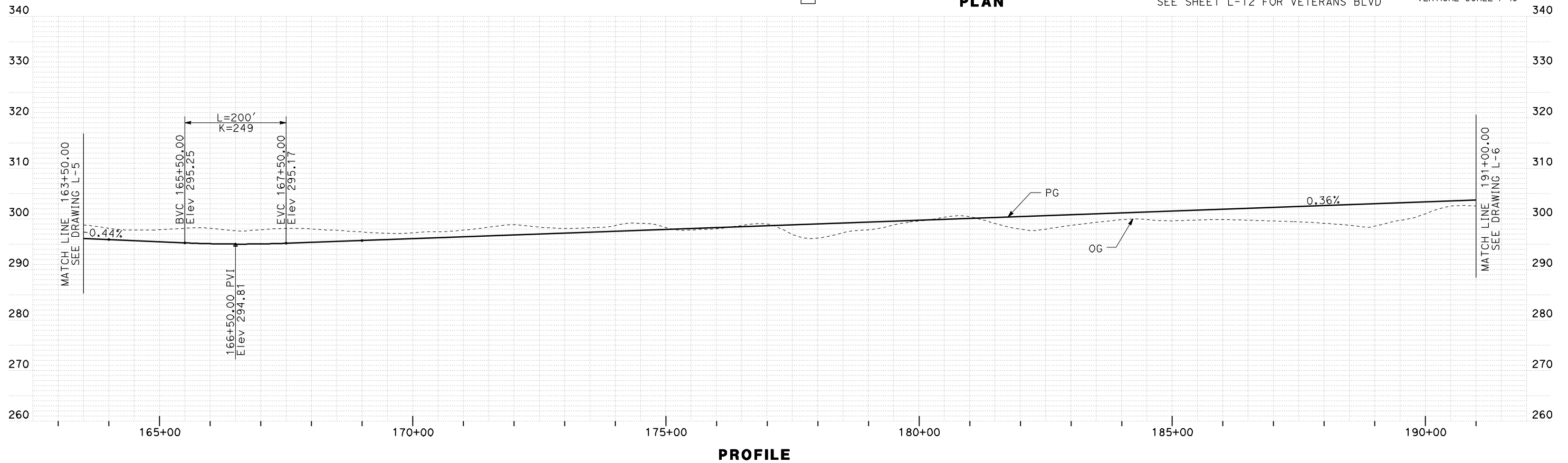
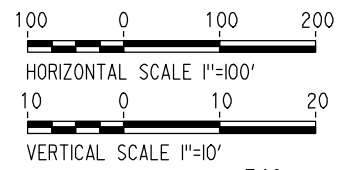


CURVE DATA					
No.	LINE	R	$\Delta$	L	T
12	GSB1	850.00'	36°06'41"	535.72'	277.10'
13	GSB	850.00'	36°06'41"	535.72'	277.10'

14	GSB1	818.00'	06641'13"	95.47'	47.79'
15	GSB	825.00'	77°39'53"	1118.29'	664.08'
16	GSB1	799.00'	84°21'06"	1176.30'	723.88'
17	GSB1	850.00'	42°40'08"	633.00'	331.99'
18	GSB	850.00'	42°40'08"	633.00'	331.99'



- A "GSB1" 177+08.63 POC = "V" 99+36.15 POT
- B "GSB" 177+18.28 POC = "V" 99+09.84 POT
- C "GSB1" 184+77.58 POC = "VJ" 10+24.39 POT
- D "GSB" 185+03.65 POC = "VJ" 10+00.00 POT



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
G. MANOREK  
DRAWN BY  
B. CHAN  
CHECKED BY  
L. HEUSTON  
IN CHARGE  
J. MATSUI-DRURY  
DATE  
04/29/11

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

**NOT FOR**  
**CONSTRUCTION**

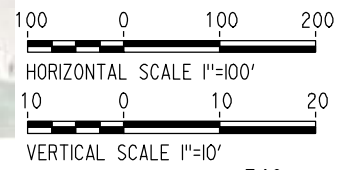
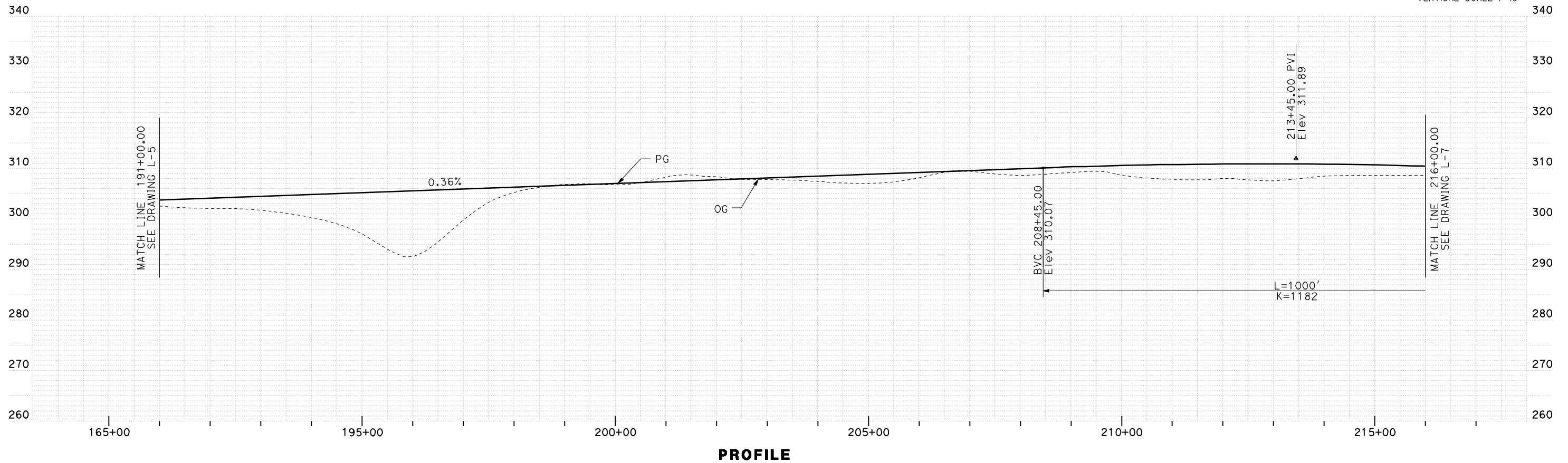
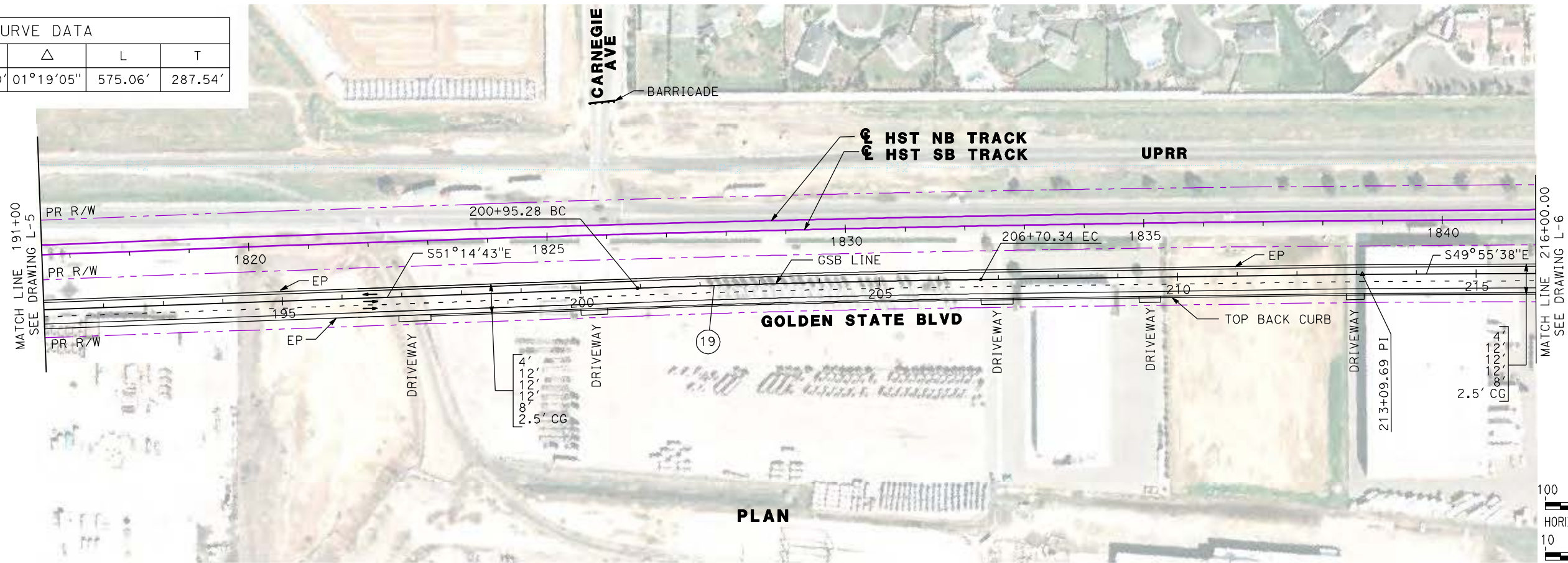


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
**GOLDEN STATE BOULEVARD RE-ALIGNMENT**  
**LAYOUT**  
**"GSB" 163+50 TO "GSB" 191+00**

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
**L-5**  
SCALE  
AS SHOWN  
SHEET NO.



CURVE DATA					
No.	LINE	R	$\Delta$	L	T
19	GSB	25000.00'	01°19'05"	575.06'	287.54'



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
G. MANOREK  
DRAWN BY  
B. CHAN  
CHECKED BY  
L. HEUSTON  
IN CHARGE  
J. MATSUI-DRURY  
DATE  
04/29/11

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

**NOT FOR**  
**CONSTRUCTION**

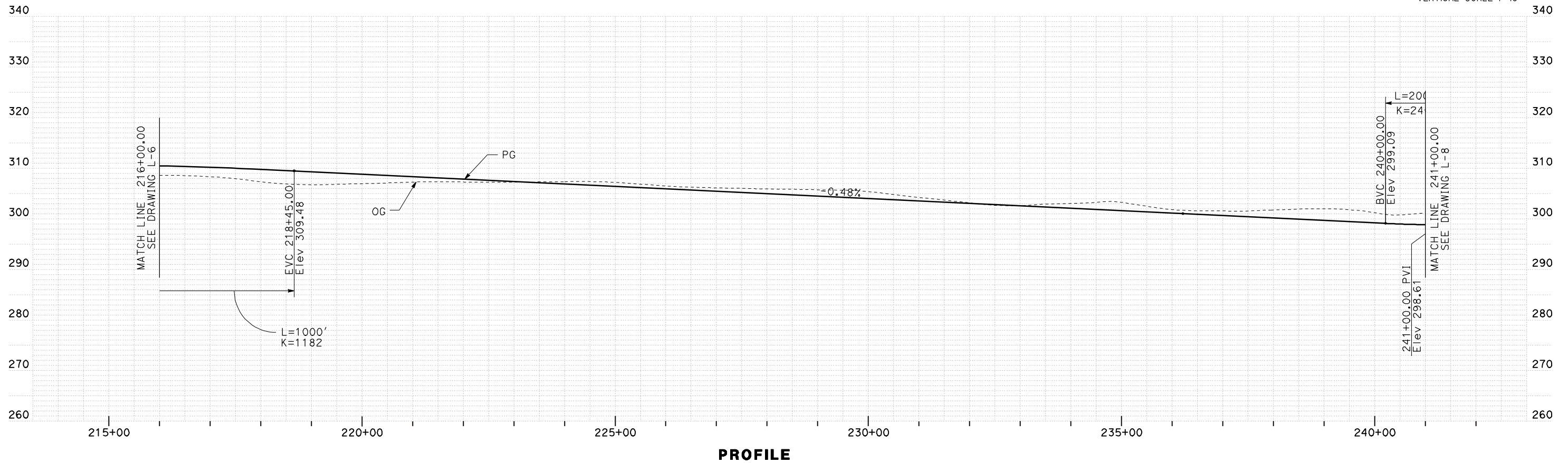
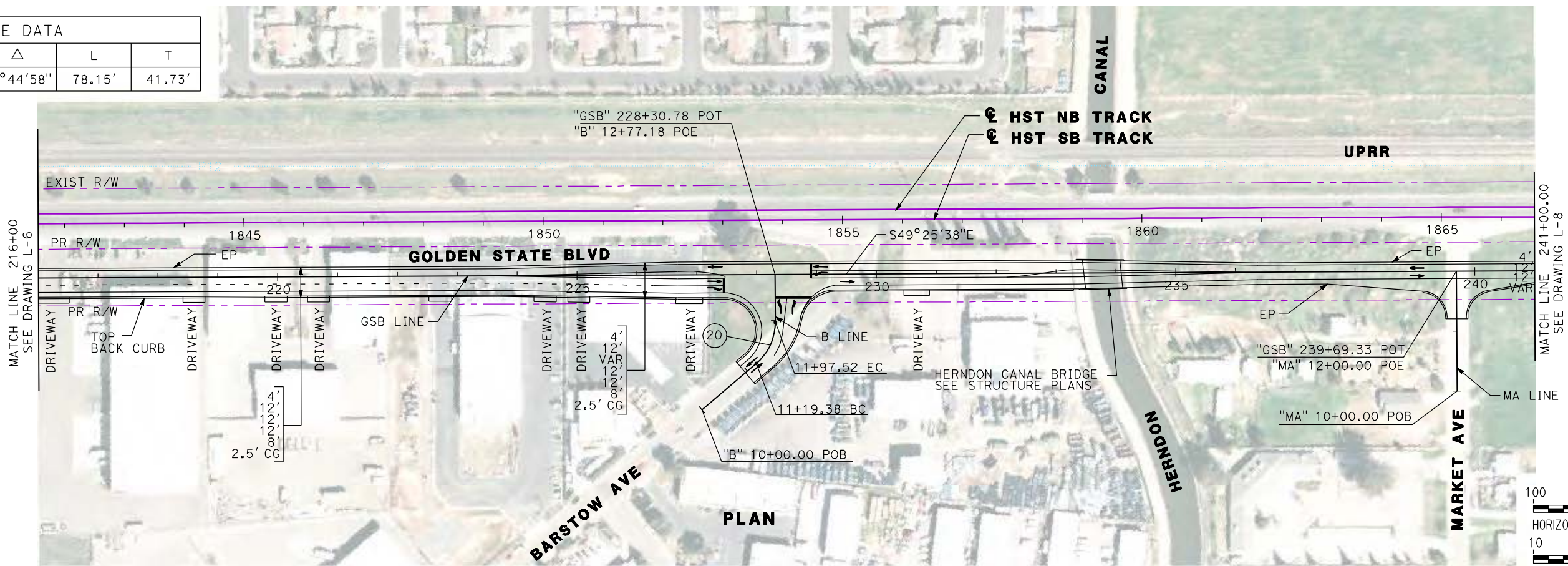


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
**GOLDEN STATE BOULEVARD RE-ALIGNMENT**  
**LAYOUT**  
**"GSB" 191+00 TO "GSB" 216+00**

CONTRACT NO.	HSR06-007
DRAWING NO.	<b>L-6</b>
SCALE	AS SHOWN
SHEET NO.	



CURVE DATA					
No.	LINE	R	$\Delta$	L	T
20	B	90.00'	49°44'58"	78.15'	41.73'



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
G. MANOREK  
DRAWN BY  
B. CHAN  
CHECKED BY  
L. HEUSTON  
IN CHARGE  
J. MATSUI-DRURY  
DATE  
04/29/11

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

**NOT FOR**  
**CONSTRUCTION**

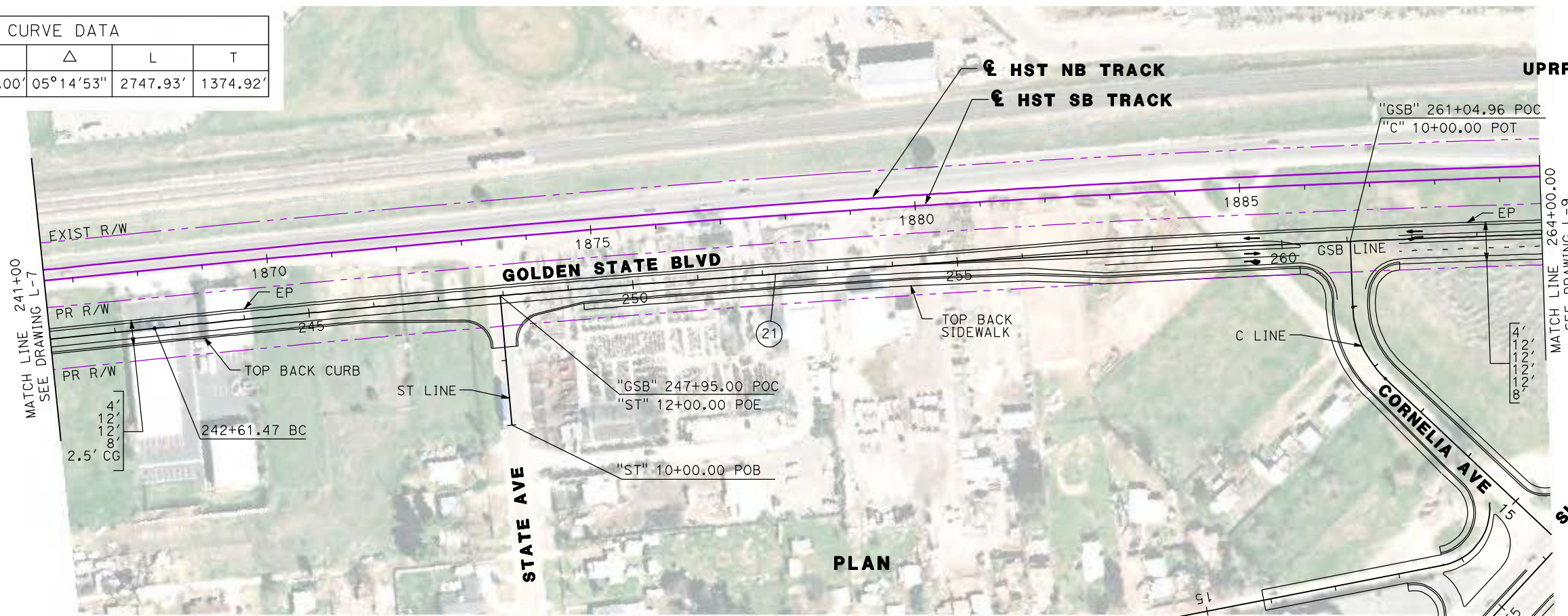


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
**GOLDEN STATE BOULEVARD RE-ALIGNMENT**  
**LAYOUT**  
**"GSB" 216+00 TO "GSB" 241+00**

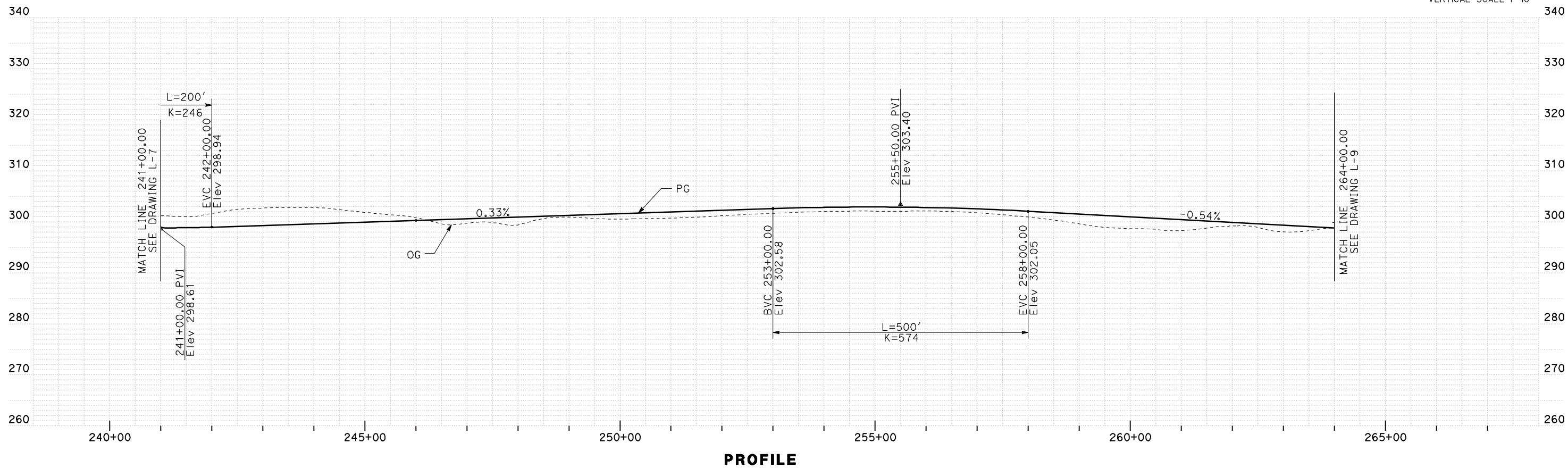
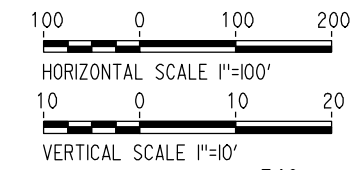
CONTRACT NO.  
HSR06-007  
DRAWING NO.  
**L-7**  
SCALE  
AS SHOWN  
SHEET NO.



CURVE DATA					
No.	LINE	R	$\Delta$	L	T
(21)	GSB	30000.00'	05°14'53"	2747.93'	1374.92'



SEE SHEETS L-14 AND L-15 FOR SHAW AVE  
SEE SHEETS L-16 AND L-17 FOR CORNELIA AND SANTA ANA AVE



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
G. MANOREK  
DRAWN BY  
B. CHAN  
CHECKED BY  
L. HEUSTON  
IN CHARGE  
J. MATSUI-DRURY  
DATE  
04/29/11

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

**NOT FOR**  
**CONSTRUCTION**

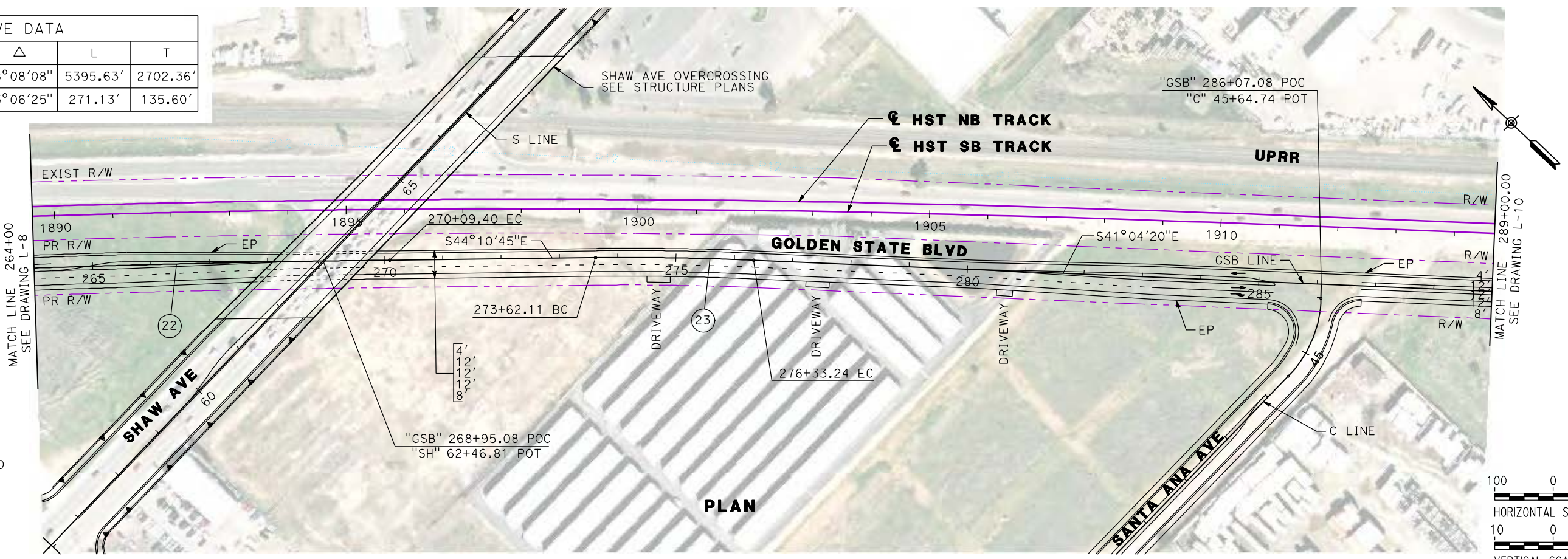


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
**GOLDEN STATE BOULEVARD RE-ALIGNMENT**  
**LAYOUT**  
**"GSB" 241+00 TO "GSB" 264+00**

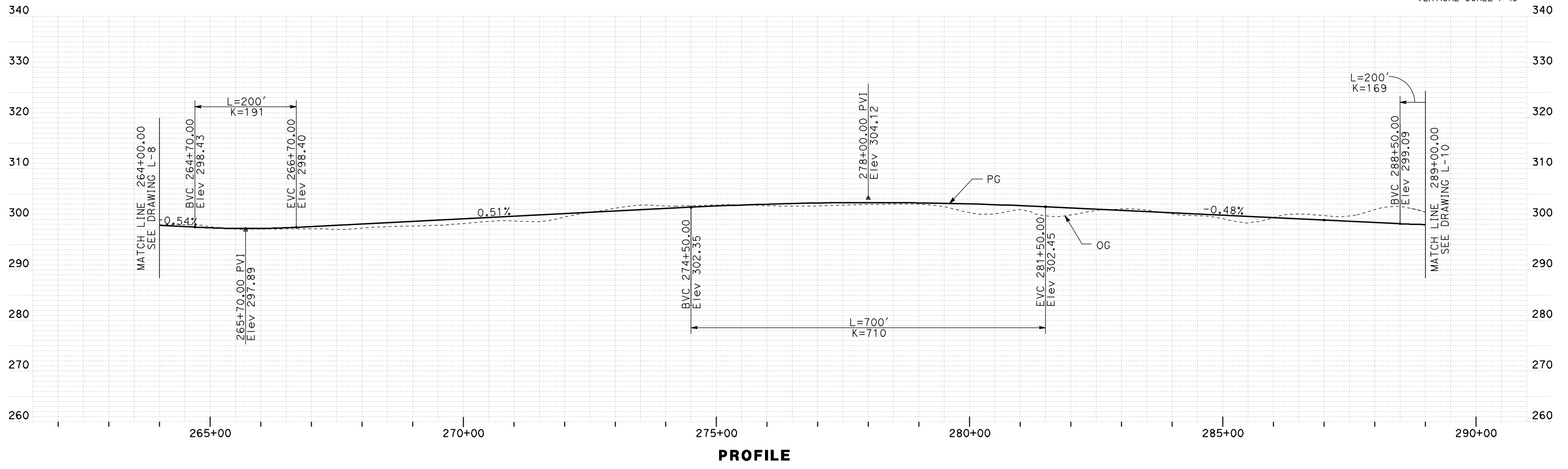
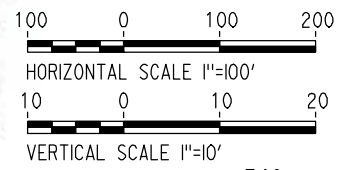
CONTRACT NO.  
HSR06-007  
DRAWING NO.  
**L-8**  
SCALE  
AS SHOWN  
SHEET NO.



CURVE DATA					
No.	LINE	R	Δ	L	T
22	GSB	38000.00'	08°08'08"	5395.63'	2702.36'
23	GSB	5000.00'	03°06'25"	271.13'	135.60'



SEE SHEETS L-14 AND L-15 FOR SHAW AVE  
SEE SHEETS L-16 AND L-17 FOR CORNELIA AND SANTA ANA AVE



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
G. MANOREK  
DRAWN BY  
B. CHAN  
CHECKED BY  
L. HEUSTON  
IN CHARGE  
J. MATSUI-DRURY  
DATE  
04/29/11

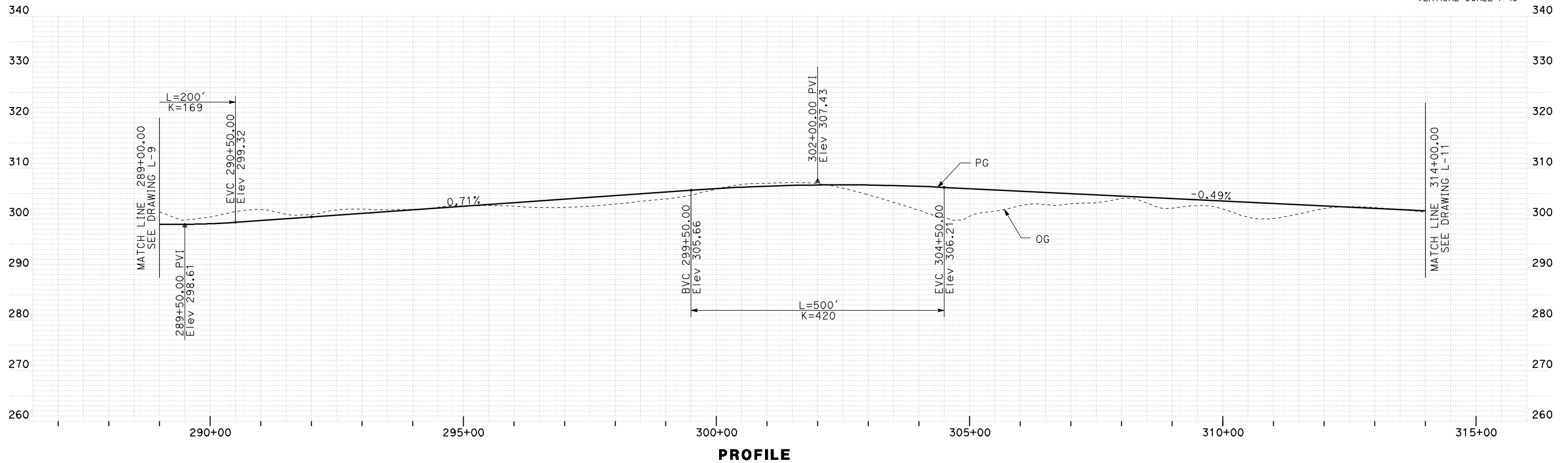
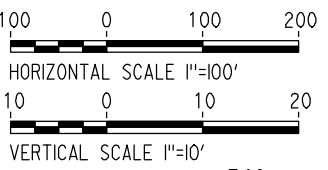
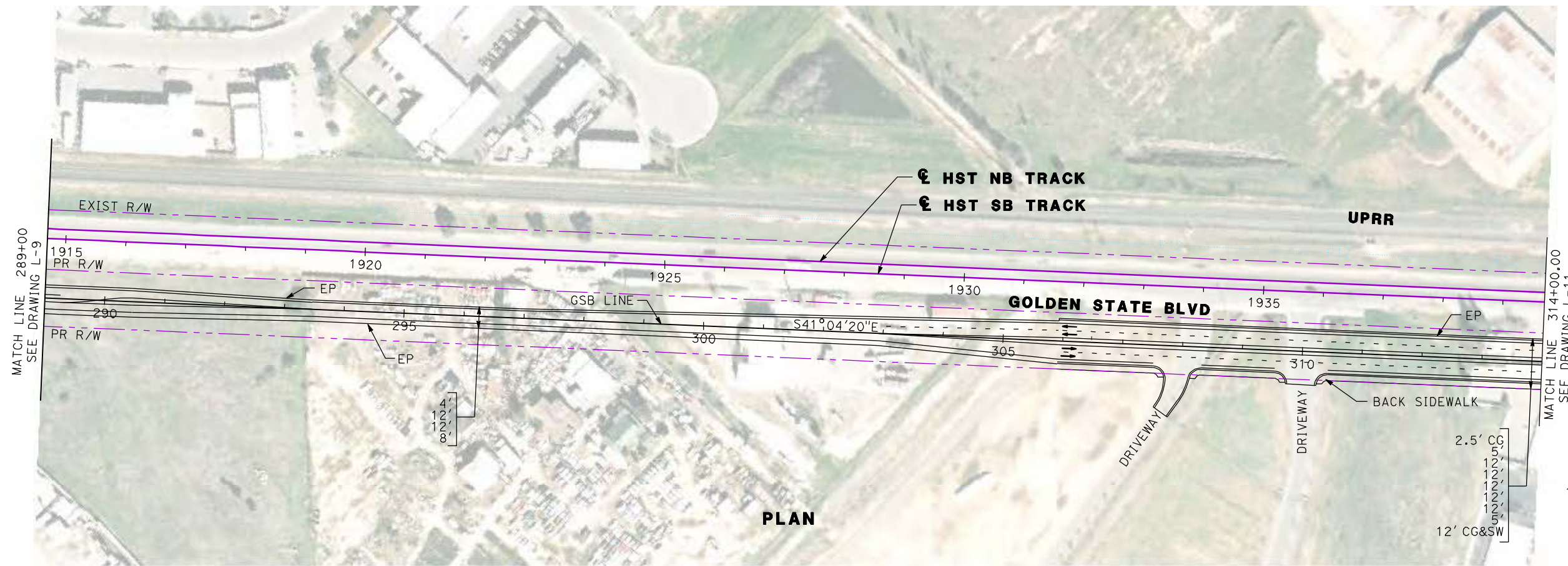
**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**  
  
**NOT FOR**  
**CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
**GOLDEN STATE BOULEVARD RE-ALIGNMENT**  
**LAYOUT**  
**"GSB" 264+00 TO "GSB" 289+00**

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
**L-9**  
SCALE  
AS SHOWN  
SHEET NO.





REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
G. MANOREK  
DRAWN BY  
B. CHAN  
CHECKED BY  
L. HEUSTON  
IN CHARGE  
J. MATSUI-DRURY  
DATE  
04/29/11

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

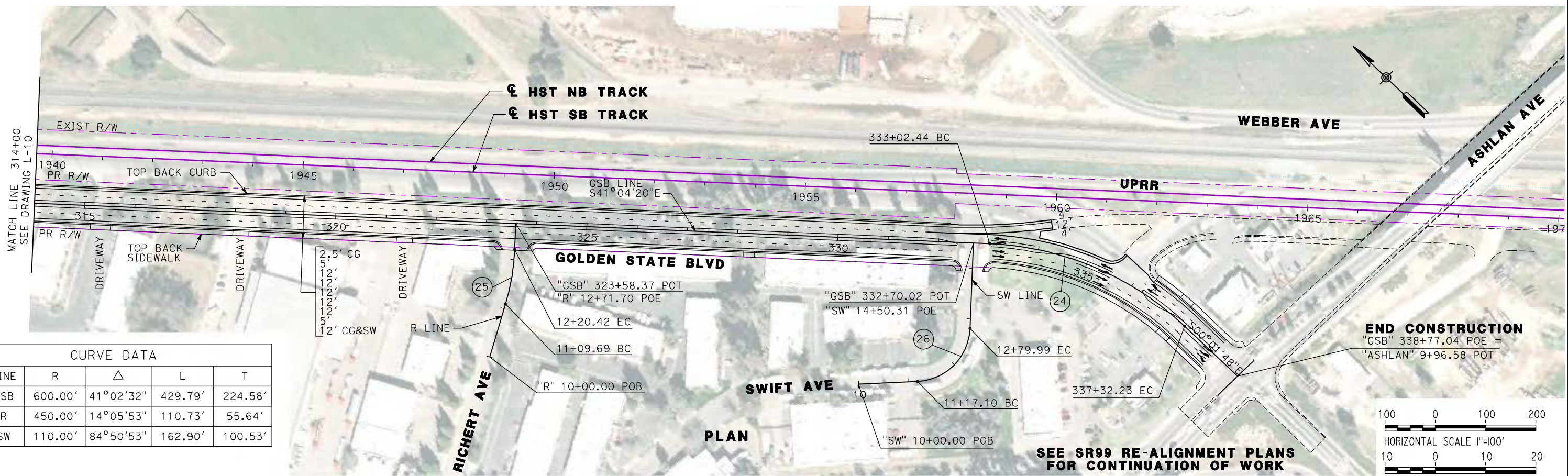
**NOT FOR**  
**CONSTRUCTION**



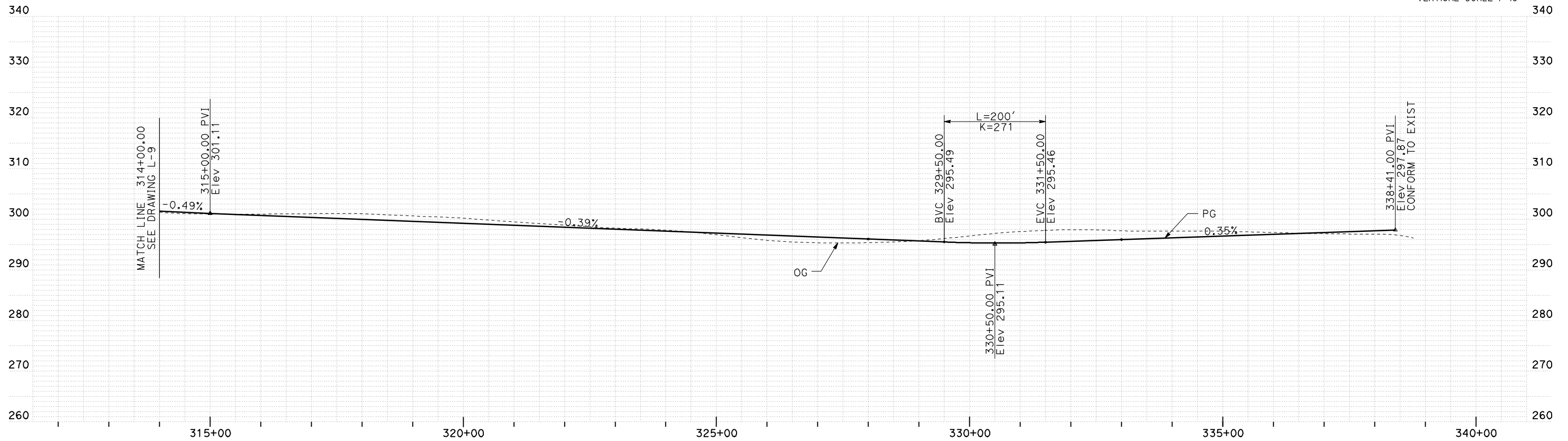
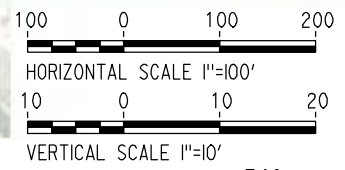
**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
**GOLDEN STATE BOULEVARD RE-ALIGNMENT**  
**LAYOUT**  
**"GSB" 289+00 TO "GSB" 314+00**

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
**L-10**  
SCALE  
AS SHOWN  
SHEET NO.





CURVE DATA					
No.	LINE	R	Δ	L	T
24	GSB	600.00'	41°02'32"	429.79'	224.58'
25	R	450.00'	14°05'53"	110.73'	55.64'
26	SW	110.00'	84°50'53"	162.90'	100.53'



PROFILE

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
G. MANOREK  
DRAWN BY  
B. CHAN  
CHECKED BY  
L. HEUSTON  
IN CHARGE  
J. MATSUI-DRURY  
DATE  
04/29/11

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

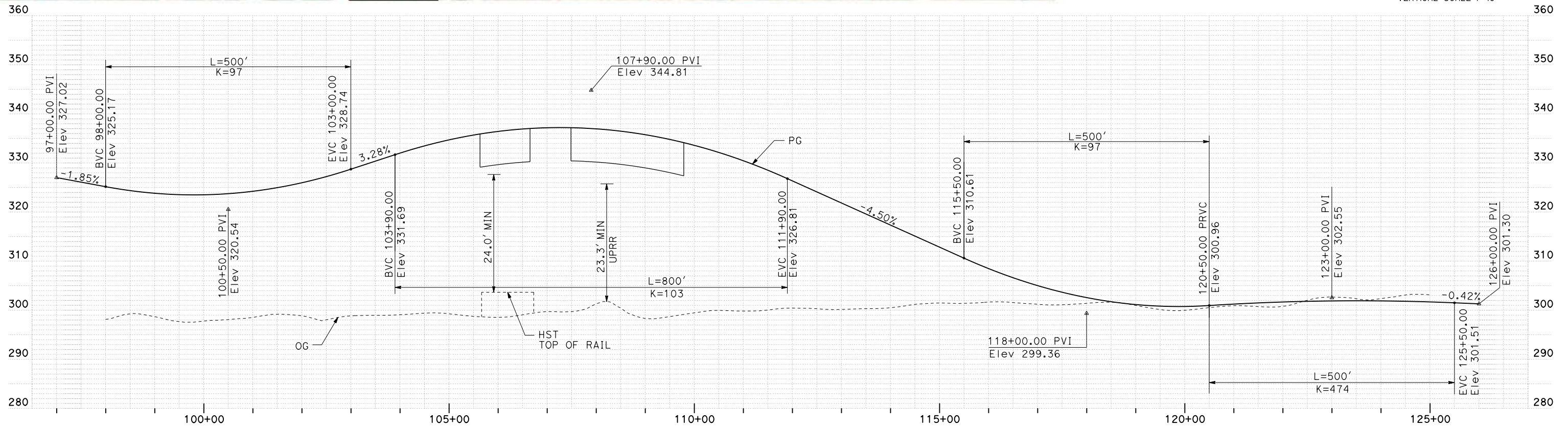
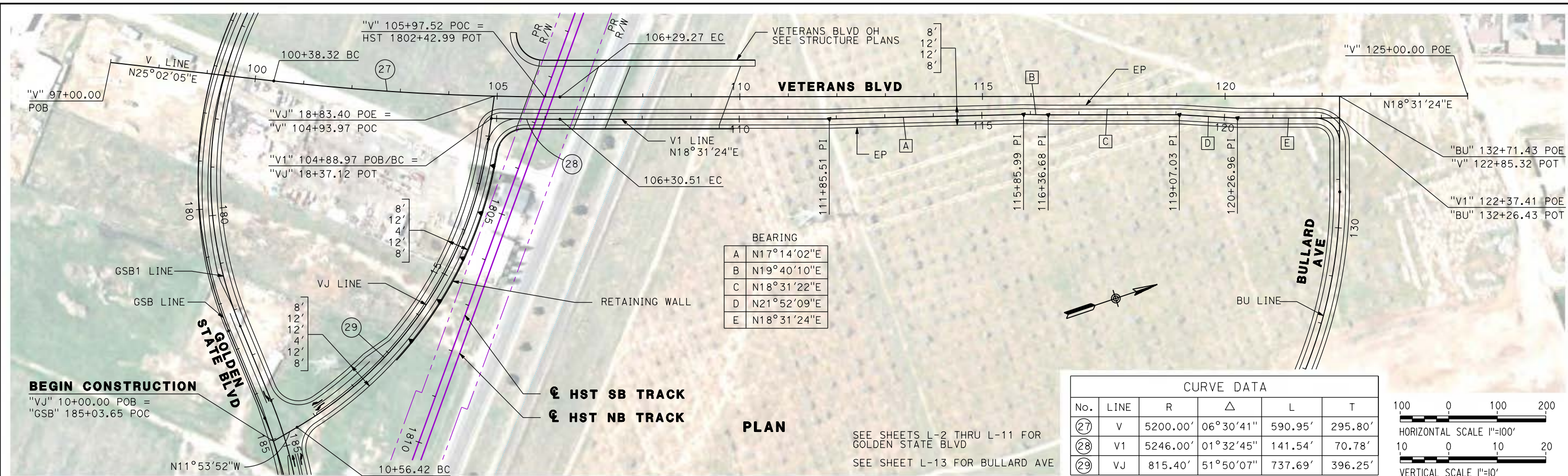
**NOT FOR**  
**CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
**GOLDEN STATE BOULEVARD RE-ALIGNMENT**  
**LAYOUT**  
**"GSB" 314+00 TO "GSB" 338+77**

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
**L-11**  
SCALE  
AS SHOWN  
SHEET NO.





SEE SHEET L-13 FOR VJ PROFILE

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
G. MANOREK  
DRAWN BY  
B. CHAN  
CHECKED BY  
L. HEUSTON  
IN CHARGE  
J. MATSUI-DRURY  
DATE  
04/29/11

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

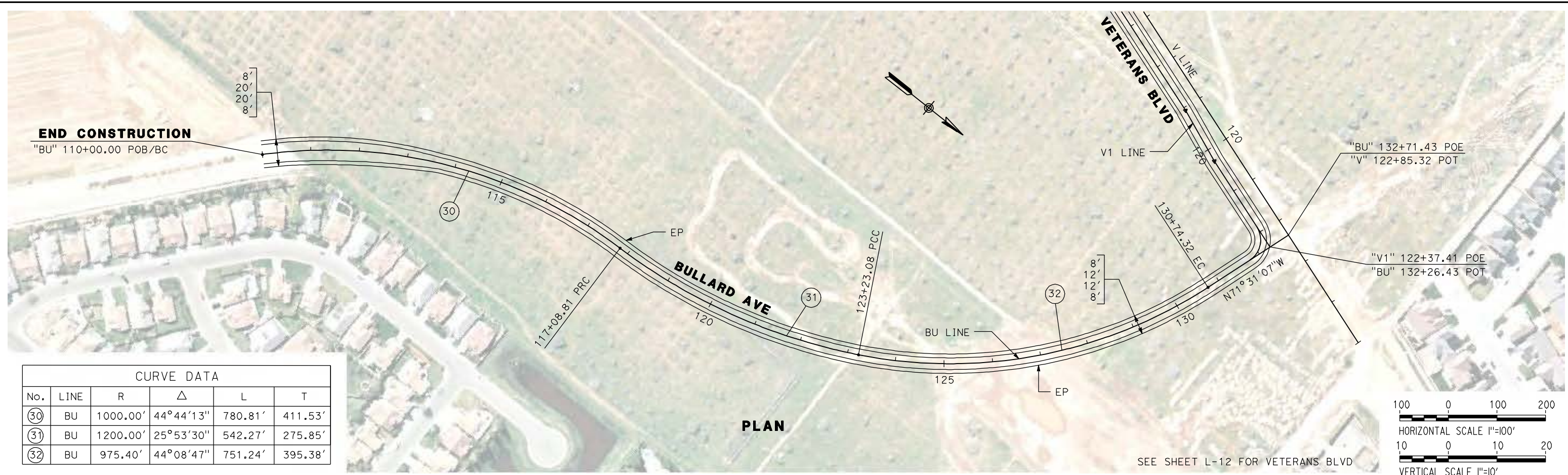
**NOT FOR**  
**CONSTRUCTION**



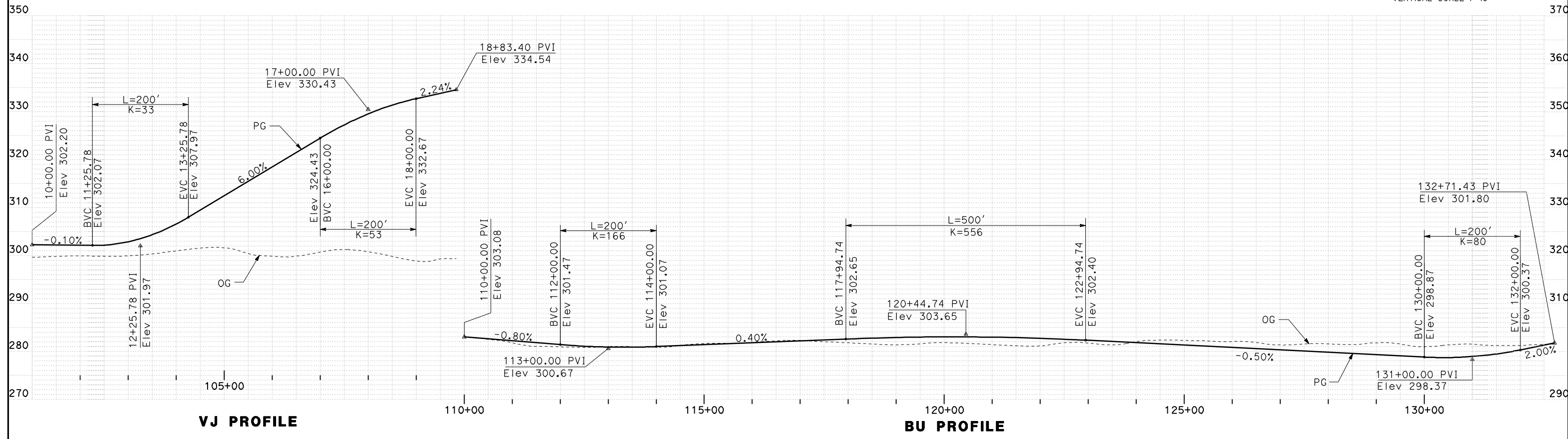
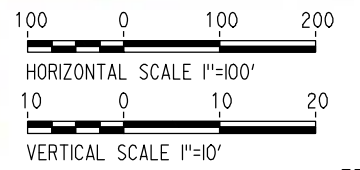
**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
**VETERANS BOULEVARD**  
**LAYOUT**  
**"V" 105+00 TO "V" 122+35**

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
**L-12**  
SCALE  
AS SHOWN  
SHEET NO.





CURVE DATA					
No.	LINE	R	Δ	L	T
30	BU	1000.00'	44°44'13"	780.81'	411.53'
31	BU	1200.00'	25°53'30"	542.27'	275.85'
32	BU	975.40'	44°08'47"	751.24'	395.38'



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
G. MANOREK  
DRAWN BY  
B. CHAN  
CHECKED BY  
L. HEUSTON  
IN CHARGE  
J. MATSUI-DRURY  
DATE  
04/29/11

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

**NOT FOR**  
**CONSTRUCTION**

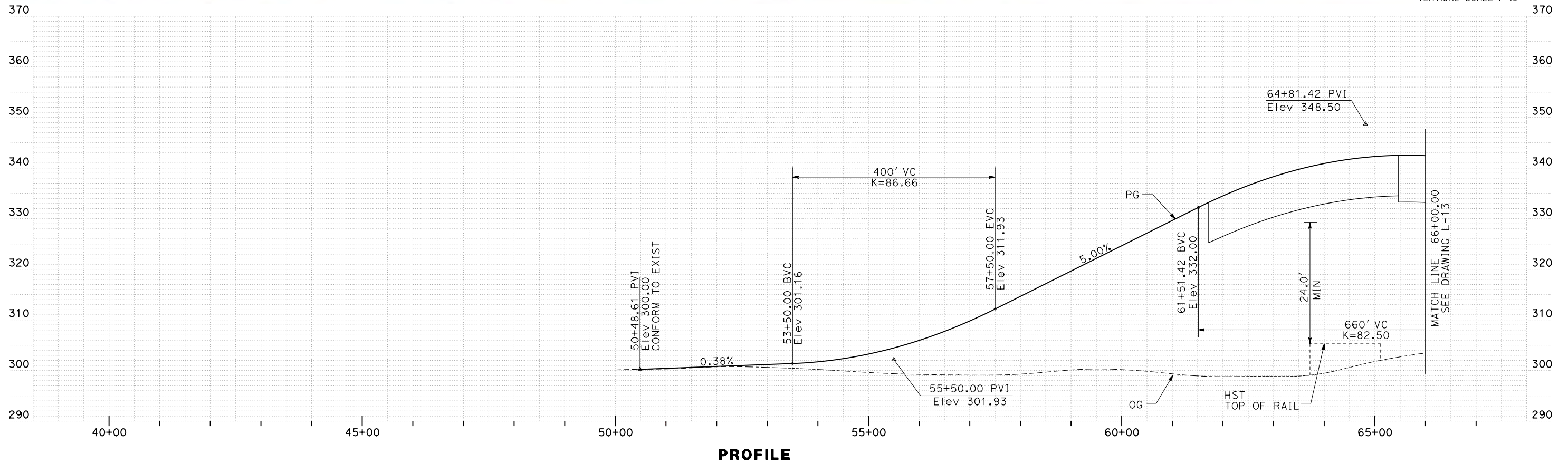
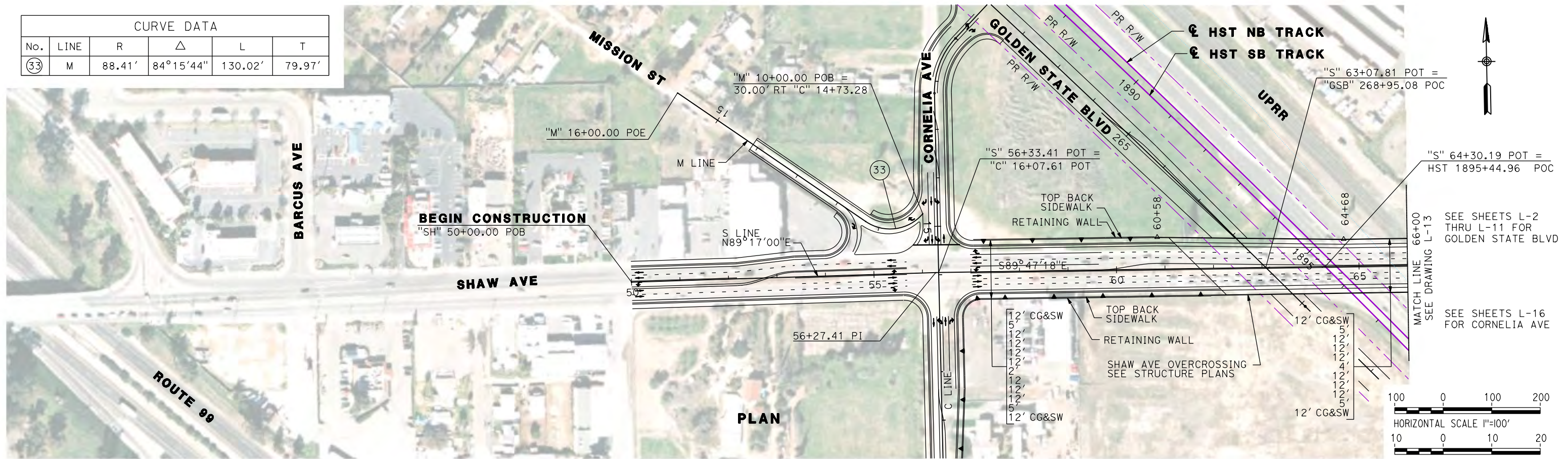


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
**BULLARD AVENUE**  
**LAYOUT**  
**"BU" 100+00 TO "BU" 132+72**

CONTRACT NO. HSR06-007
DRAWING NO. <b>L-13</b>
SCALE AS SHOWN
SHEET NO.



CURVE DATA					
No.	LINE	R	$\Delta$	L	T
33	M	88.41'	84°15'44"	130.02'	79.97'



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
G. MANOREK  
DRAWN BY  
B. CHAN  
CHECKED BY  
L. HEUSTON  
IN CHARGE  
J. MATSUI-DRURY  
DATE  
04/29/11

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

**NOT FOR**  
**CONSTRUCTION**

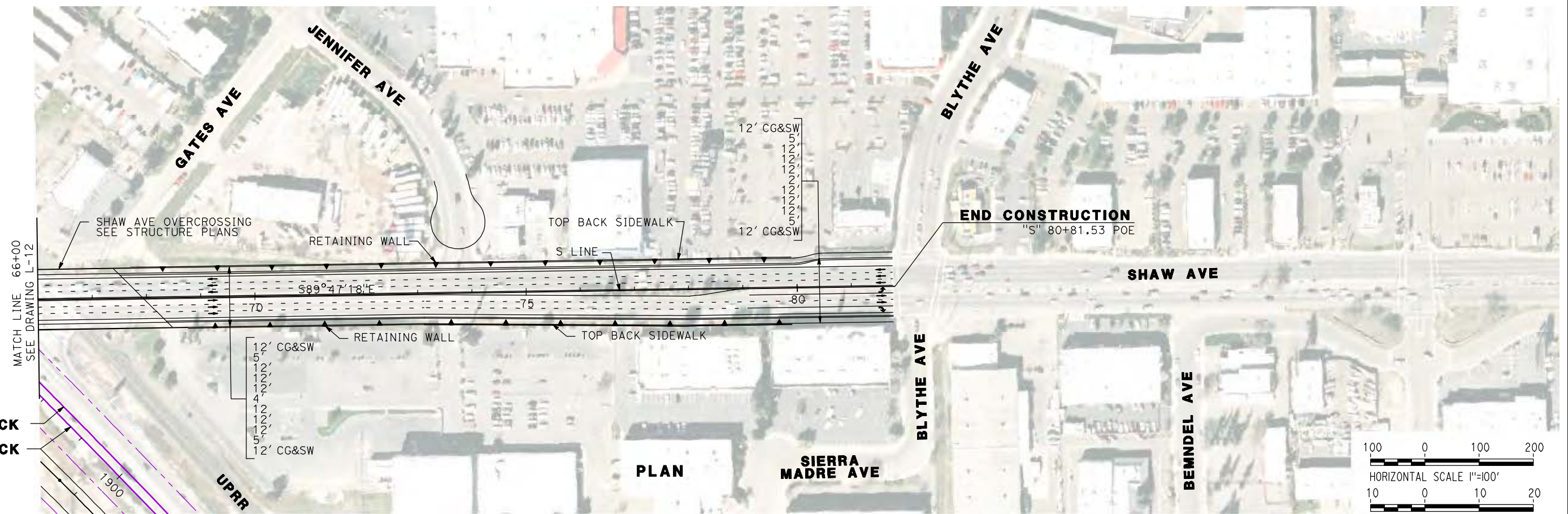


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
**SHAW AVENUE RE-ALIGNMENT**  
**LAYOUT**  
**"S" 50+00 TO "S" 66+00**

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
**L-14**  
SCALE  
AS SHOWN  
SHEET NO.

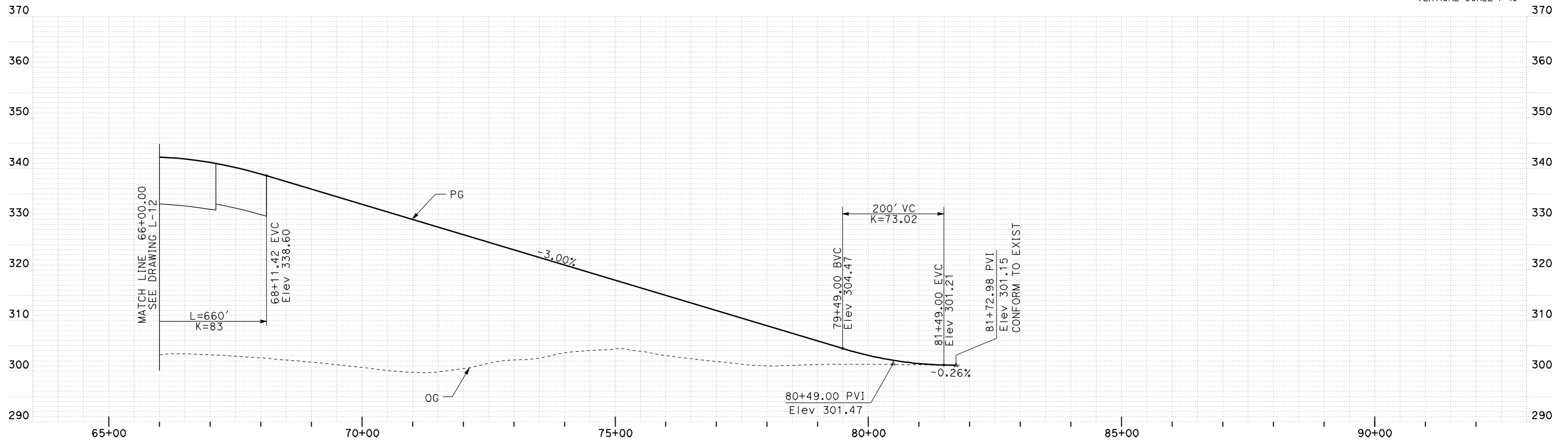


SEE SHEETS L-2 THRU  
L-11 FOR GOLDEN  
STATE BLVD



☉ HST NB TRACK  
☉ HST SB TRACK

PLAN



PROFILE

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
G. MANOREK  
DRAWN BY  
B. CHAN  
CHECKED BY  
L. HEUSTON  
IN CHARGE  
J. MATSUI-DRURY  
DATE  
04/29/11

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



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
**SHAW AVENUE RE-ALIGNMENT**  
**LAYOUT**  
**"S" 66+00 TO "S" 80+81**

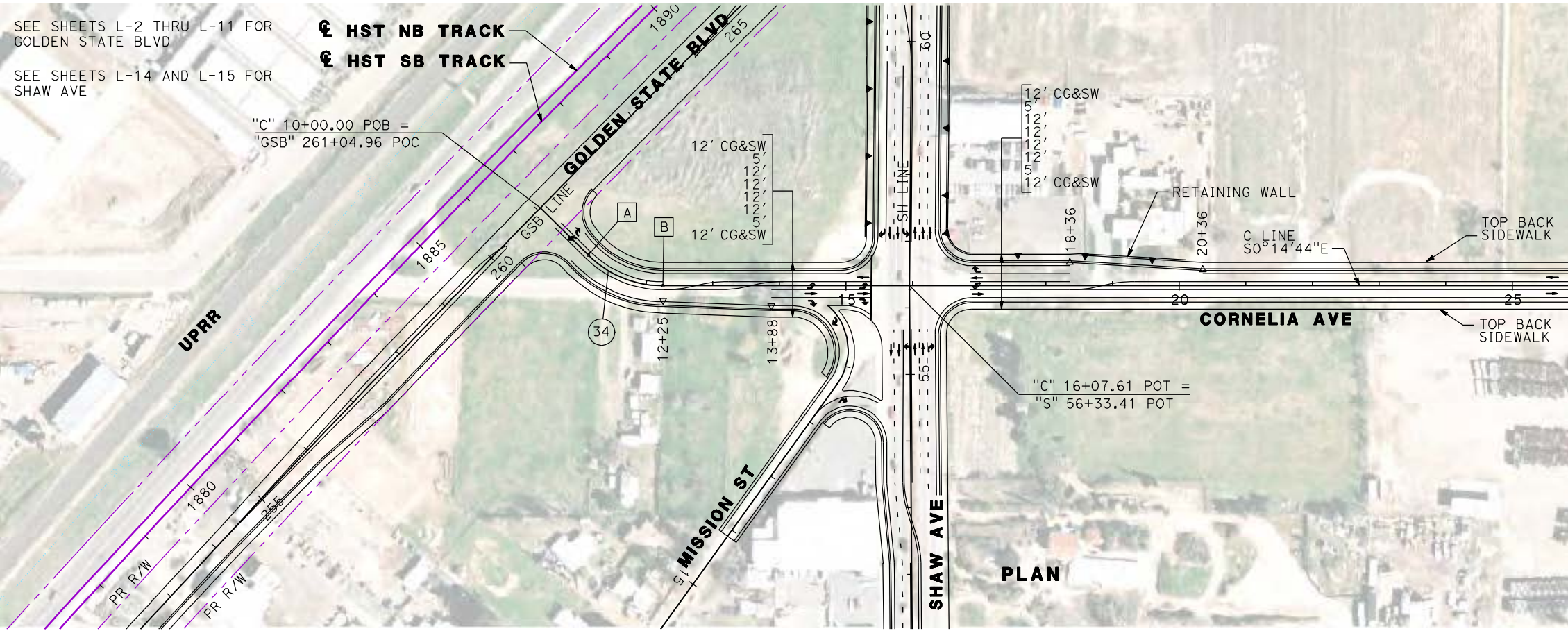
CONTRACT NO.  
HSR06-007  
DRAWING NO.  
**L-15**  
SCALE  
AS SHOWN  
SHEET NO.



SEE SHEETS L-2 THRU L-11 FOR GOLDEN STATE BLVD

SEE SHEETS L-14 AND L-15 FOR SHAW AVE

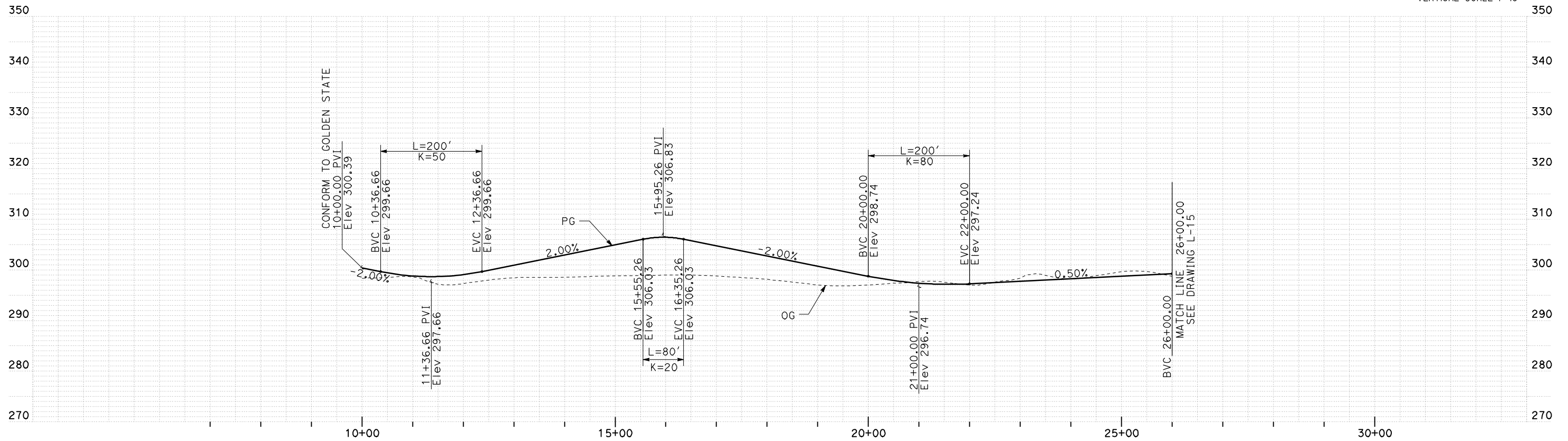
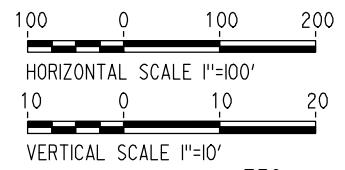
☑ HST NB TRACK  
☑ HST SB TRACK



CURVE DATA					
No.	LINE	R	Δ	L	T
34	C	160.00'	44°29'15"	124.23'	65.44'



- A 11+00.95 BC
- B 12+25.19 EC



PROFILE

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
G. MANOREK  
DRAWN BY  
B. CHAN  
CHECKED BY  
L. HEUSTON  
IN CHARGE  
J. MATSUI-DRURY  
DATE  
04/29/11

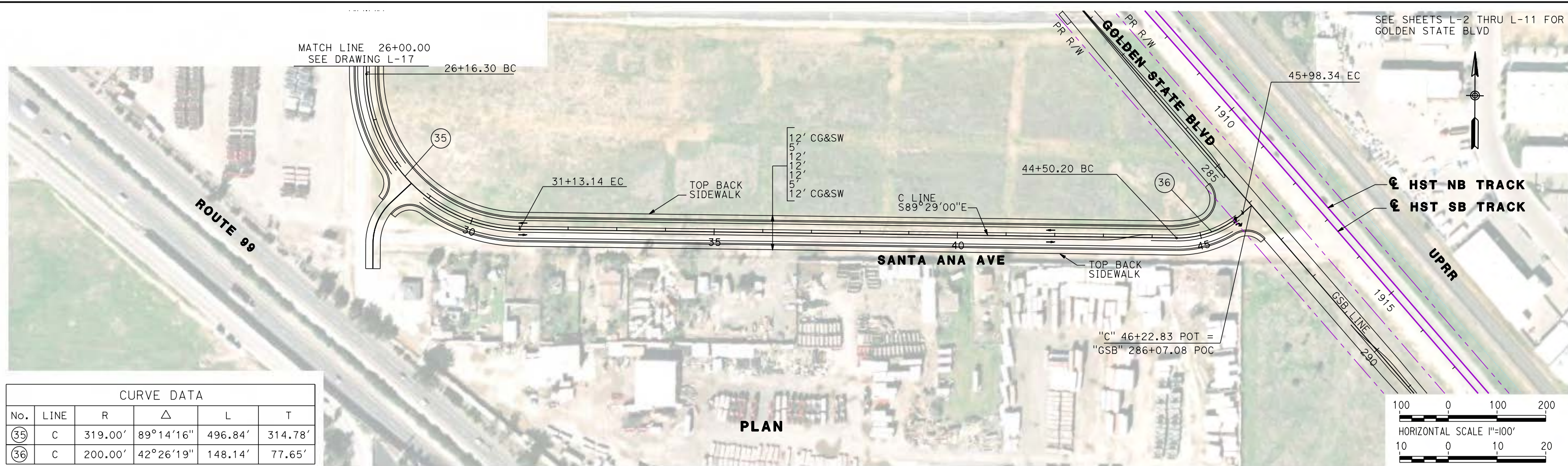
**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**  
  
**NOT FOR**  
**CONSTRUCTION**



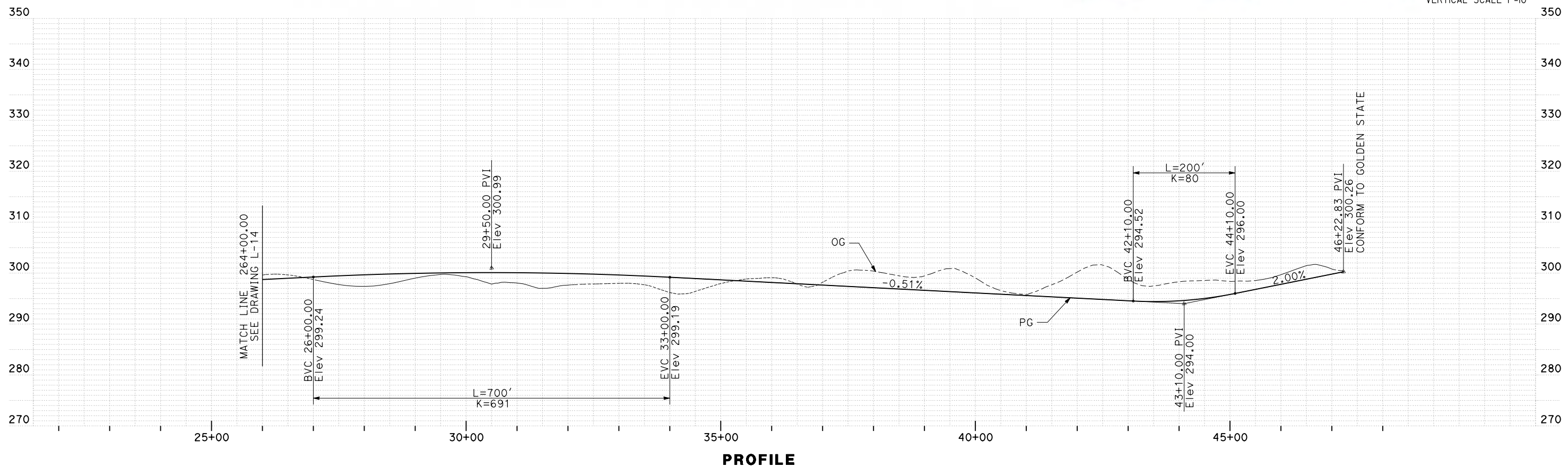
**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
**CORNELIA AVENUE RE-ALIGNMENT**  
**LAYOUT**  
**"C" 10+00 TO "C" 26+00**

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
**L-16**  
SCALE  
AS SHOWN  
SHEET NO.





CURVE DATA					
No.	LINE	R	Δ	L	T
35	C	319.00'	89°14'16"	496.84'	314.78'
36	C	200.00'	42°26'19"	148.14'	77.65'



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
G. MANOREK

DRAWN BY  
B. CHAN

CHECKED BY  
L. HEUSTON

IN CHARGE  
J. MATSUI-DRURY

DATE  
04/29/11

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

**NOT FOR**  
**CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
**SANTA ANA AVENUE RE-ALIGNMENT**  
**LAYOUT**  
**"C" 26+00 TO "C" 46+23**

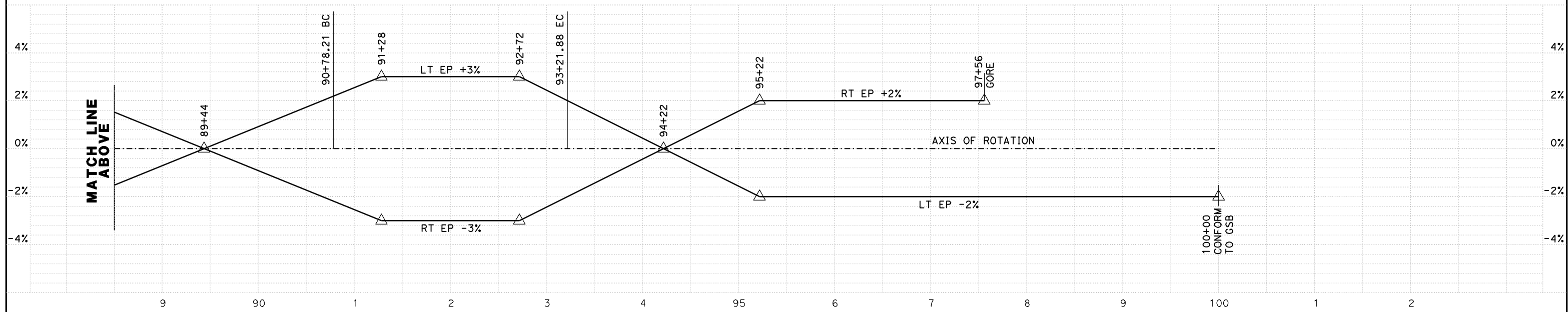
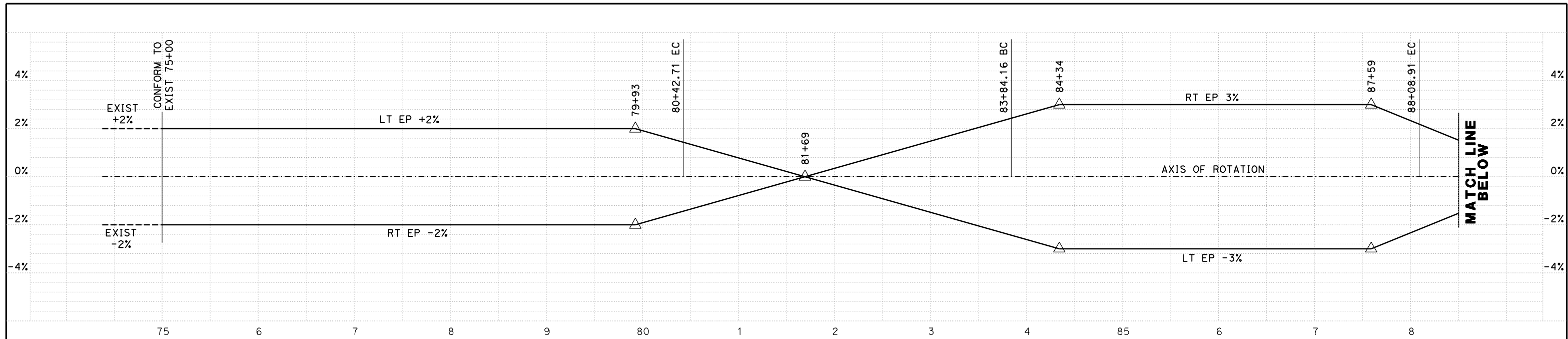
CONTRACT NO.  
HSR06-007

DRAWING NO.  
**L-17**

SCALE  
AS SHOWN

SHEET NO.





**NB LINE**  
**SUPERELEVATION DIAGRAM**  
 NO SCALE

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
G. MANOREK  
 DRAWN BY  
B. CHAN  
 CHECKED BY  
L. HEUSTON  
 IN CHARGE  
J. MATSUI-DRURY  
 DATE  
04/29/11

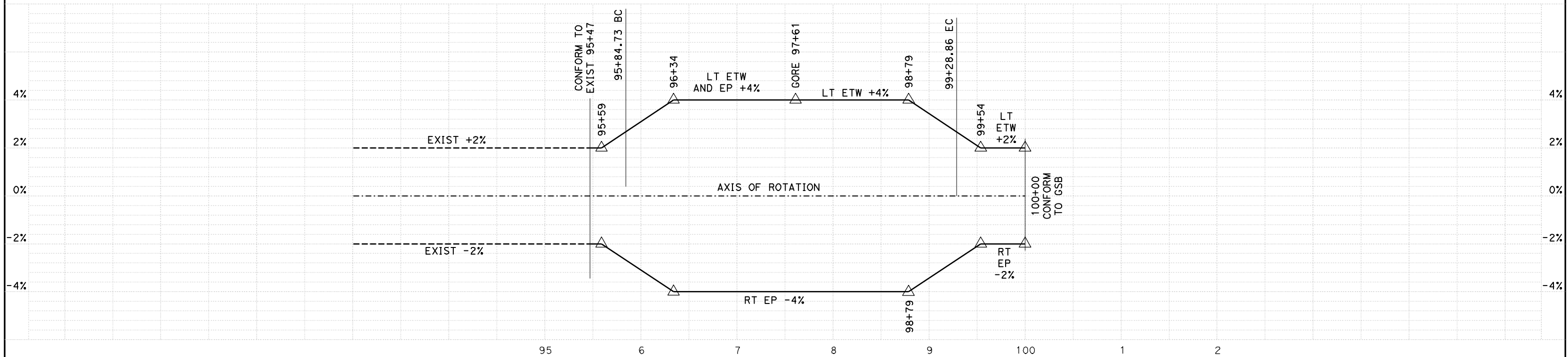
**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**

**NOT FOR**  
**CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
**GOLDEN STATE BOULEVARD RE-ALIGNMENT**  
**SUPERELEVATION DIAGRAM**

CONTRACT NO.  
HSR06-007  
 DRAWING NO.  
**SE-1**  
 SCALE  
 SHEET NO.



**SB LINE**  
**SUPERELEVATION DIAGRAM**  
 NO SCALE

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
G. MANOREK  
 DRAWN BY  
B. CHAN  
 CHECKED BY  
L. HEUSTON  
 IN CHARGE  
J. MATSUI-DRURY  
 DATE  
04/29/11

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

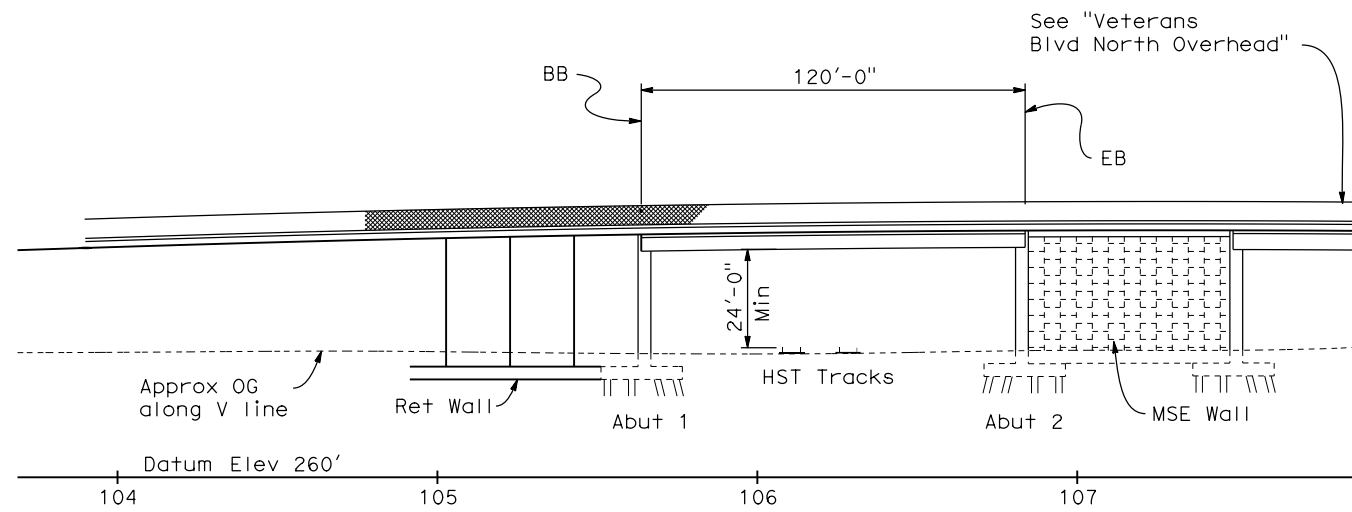
**NOT FOR**  
**CONSTRUCTION**



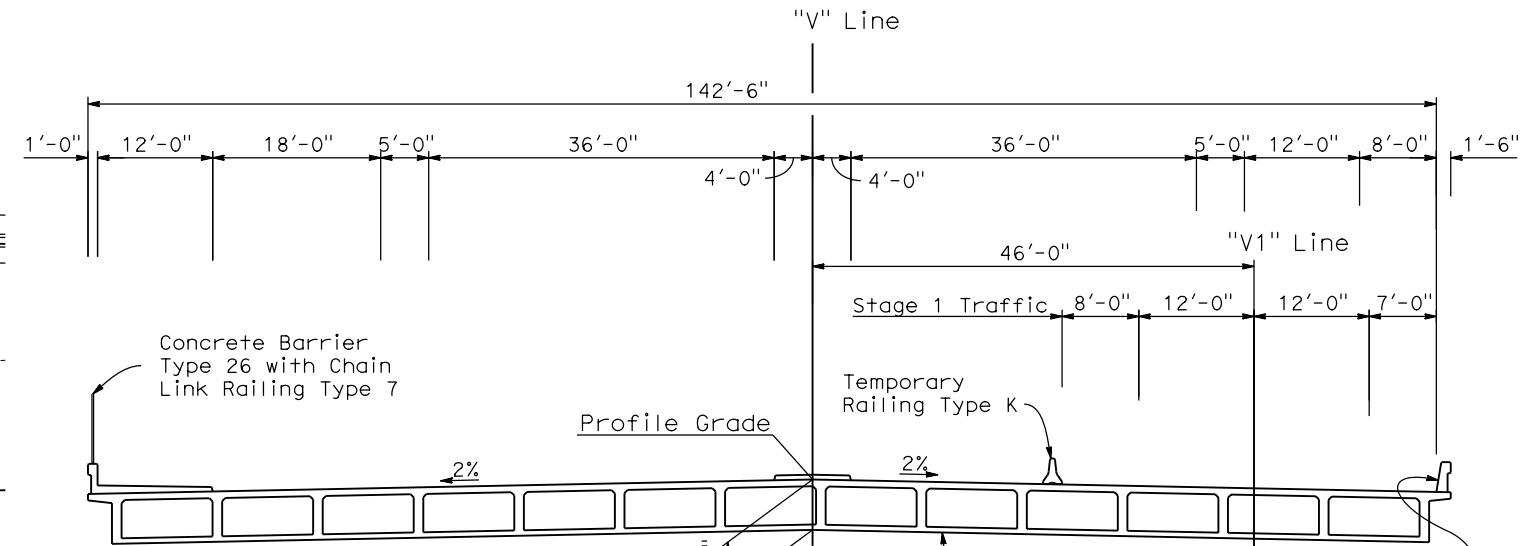
**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
**GOLDEN STATE BOULEVARD RE-ALIGNMENT**  
**SUPERELEVATION DIAGRAM**

CONTRACT NO.  
HSR06-007  
 DRAWING NO.  
**SE-2**  
 SCALE  
 SHEET NO.

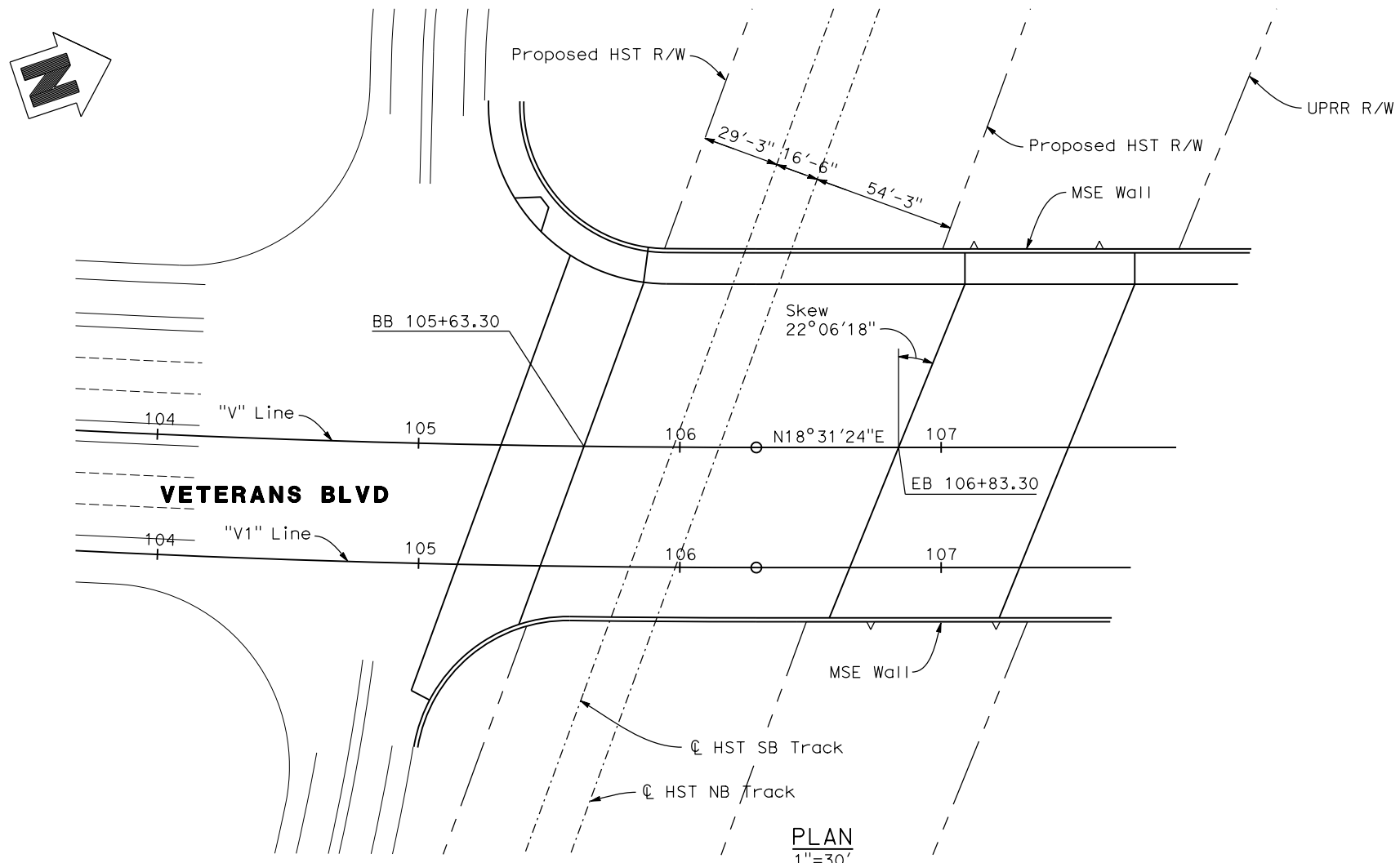




**ELEVATION**  
1"=30'



**TYPICAL SECTION**  
1"=10'



**PLAN**  
1"=30'

DATE OF ESTIMATE	=	04-13-2011
BRIDGE REMOVAL	=	-
STRUCTURE DEPTH	=	5'-3"
LENGTH	=	120'-0"
WIDTH	=	142'-6"
AREA	=	17,100 ft <sup>2</sup>
COST/ft <sup>2</sup> INCLUDING 10% MOBILIZATION & 25% CONTINGENCY	=	\$ 175/ft <sup>2</sup>
TOTAL COST	=	\$ 2,993,000

**VETERANS BLVD. SOUTH OVERHEAD**

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**D. FREDERICKS**

DRAWN BY  
**P. WALKER**

CHECKED BY  
**J. SHOWERS**

IN CHARGE  
**J. MATSUI-DRURY**

DATE  
**04/29/11**

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

**NOT FOR**  
**CONSTRUCTION**

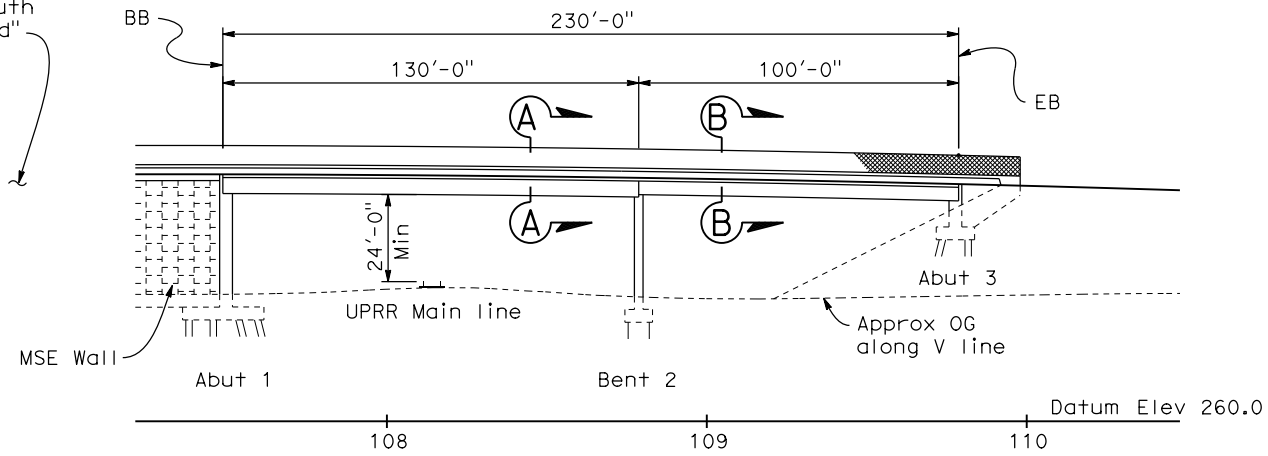


**CALIFORNIA HIGH SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
**GOLDEN STATE BOULEVARD RE-ALIGNMENT**  
**ADVANCE PLANNING STUDY**

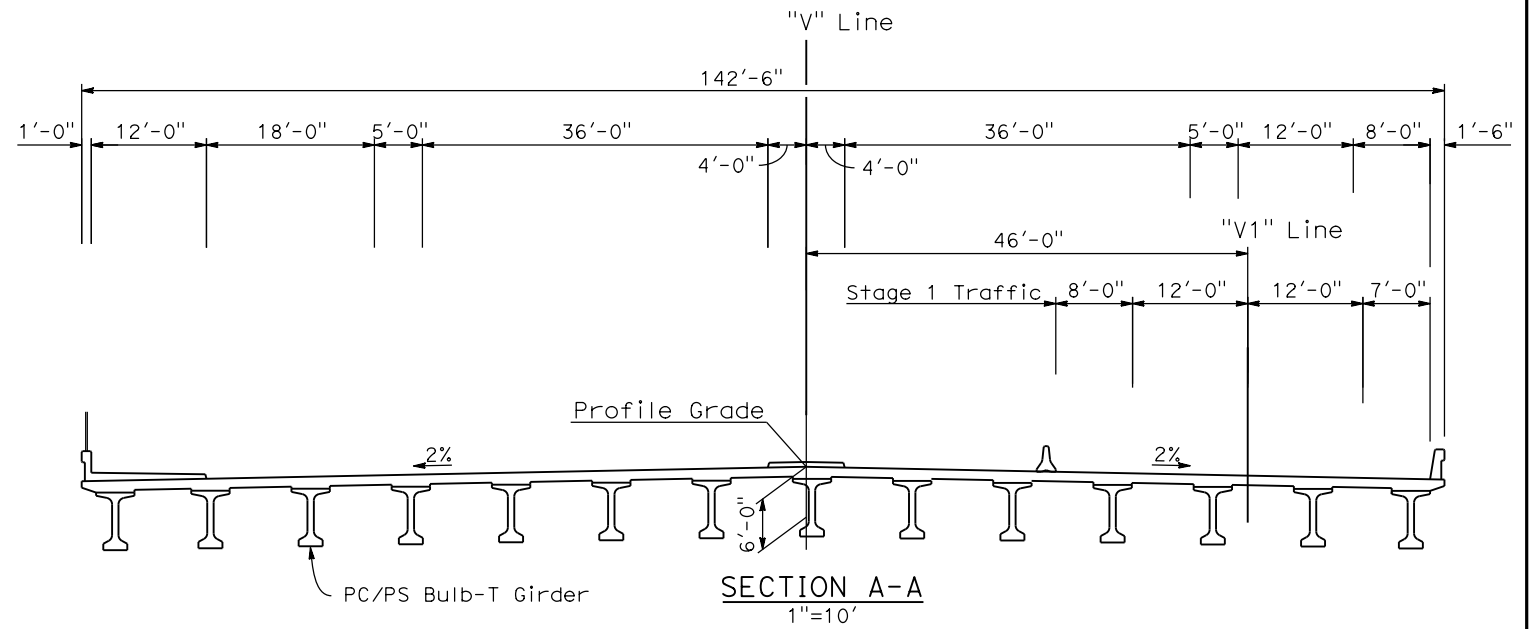
CONTRACT NO.	HSR006-007
DRAWING NO.	<b>BR-1</b>
SCALE	AS SHOWN
SHEET NO.	

DATE PLOTTED: 03-28-APR-2011

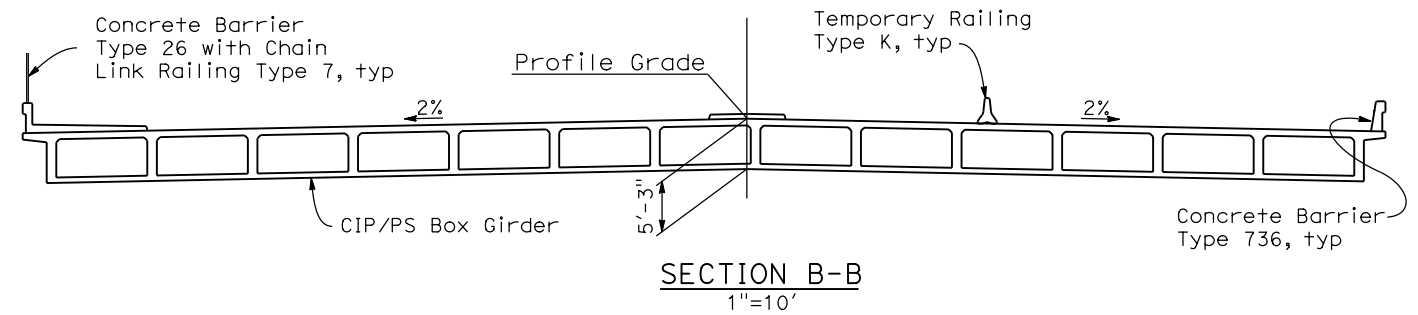
See "Veterans Blvd South Overhead"



**ELEVATION**  
1"=30'

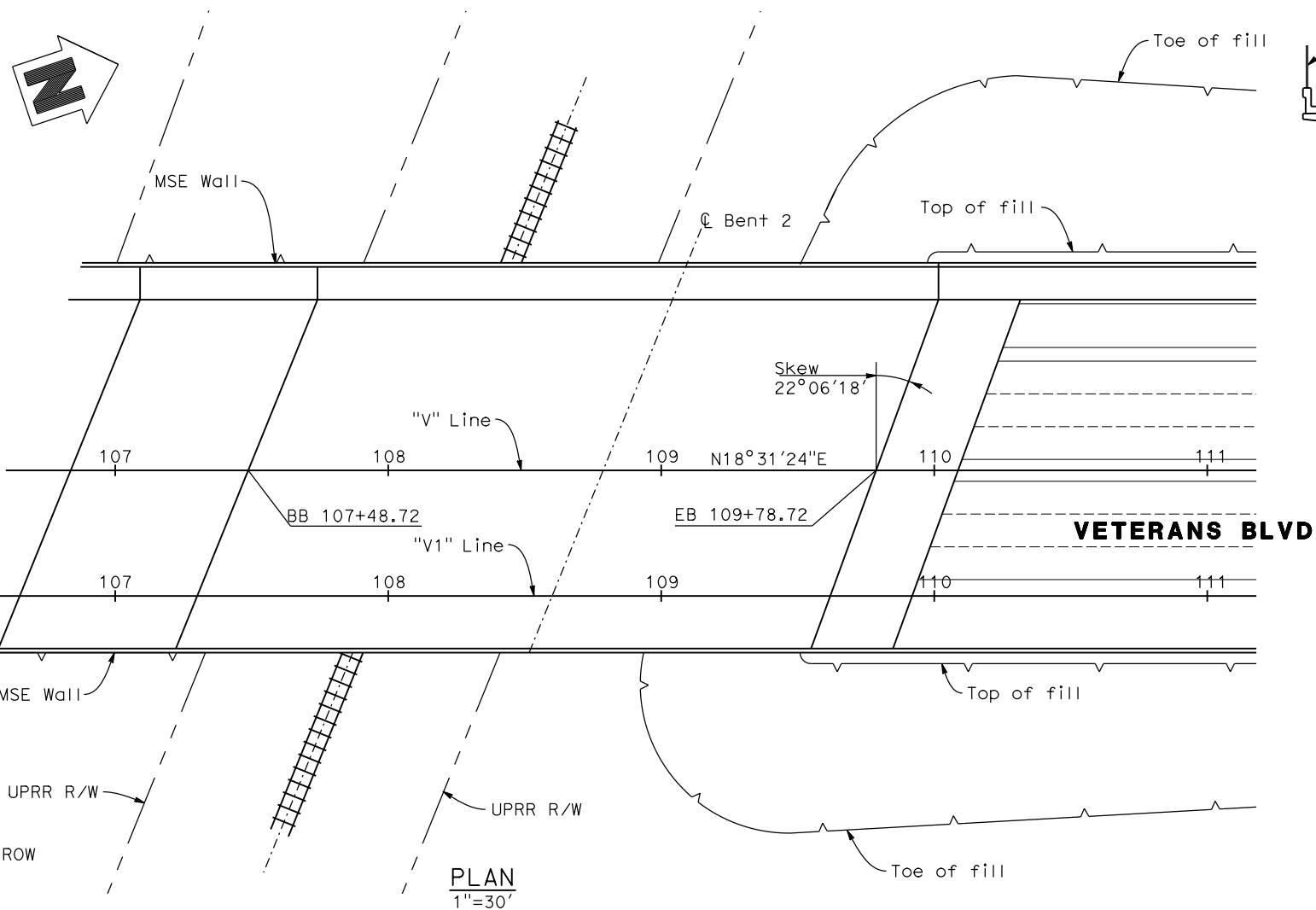


**SECTION A-A**  
1"=10'



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

DATE OF ESTIMATE	=	04-13-2011
BRIDGE REMOVAL	=	-
STRUCTURE DEPTH	=	5'-3" TO 6'-0"
LENGTH	=	230'-0"
WIDTH	=	142'-6"
AREA	=	32,775 ft <sup>2</sup>
COST/ft <sup>2</sup> INCLUDING 10% MOBILIZATION & 25% CONTINGENCY	=	\$ 175/ft <sup>2</sup>
TOTAL COST	=	\$ 5,736,000



**PLAN**  
1"=30'

**VETERANS BLVD. NORTH OVERHEAD**

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**D. FREDERICKS**  
DRAWN BY  
**P. WALKER**  
CHECKED BY  
**J. SHOWERS**  
IN CHARGE  
**J. MATSUI-DRURY**  
DATE  
**04/29/11**

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

**NOT FOR**  
**CONSTRUCTION**

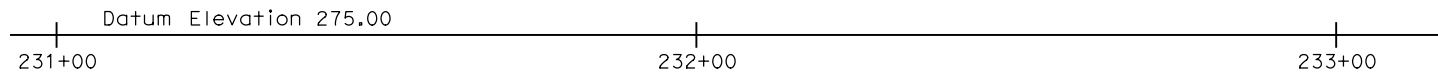
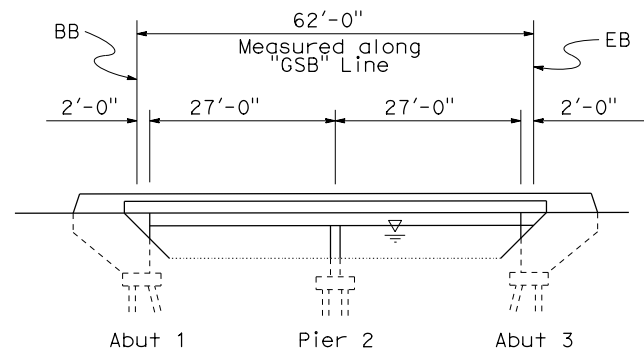


**CALIFORNIA HIGH SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
**GOLDEN STATE BOULEVARD RE-ALIGNMENT**  
**ADVANCE PLANNING STUDY**

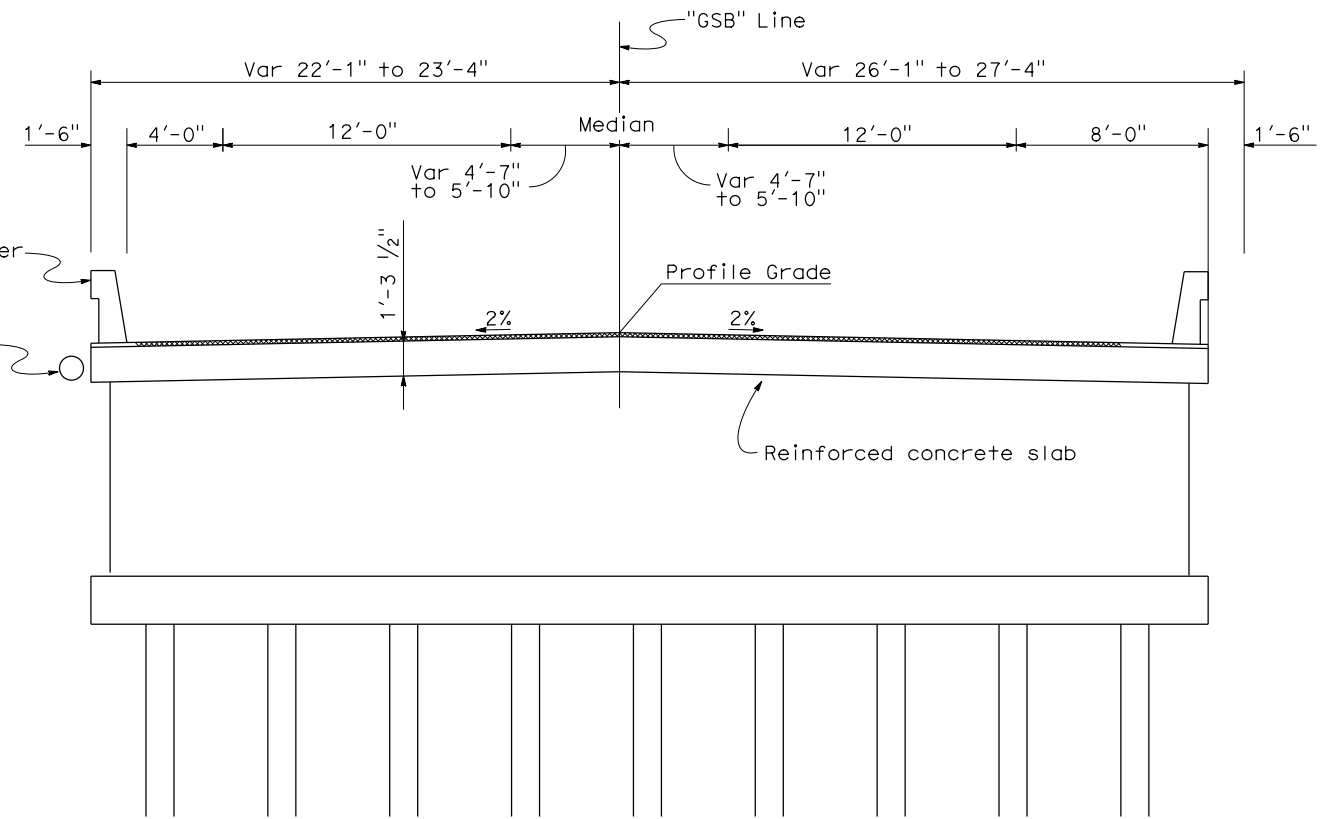
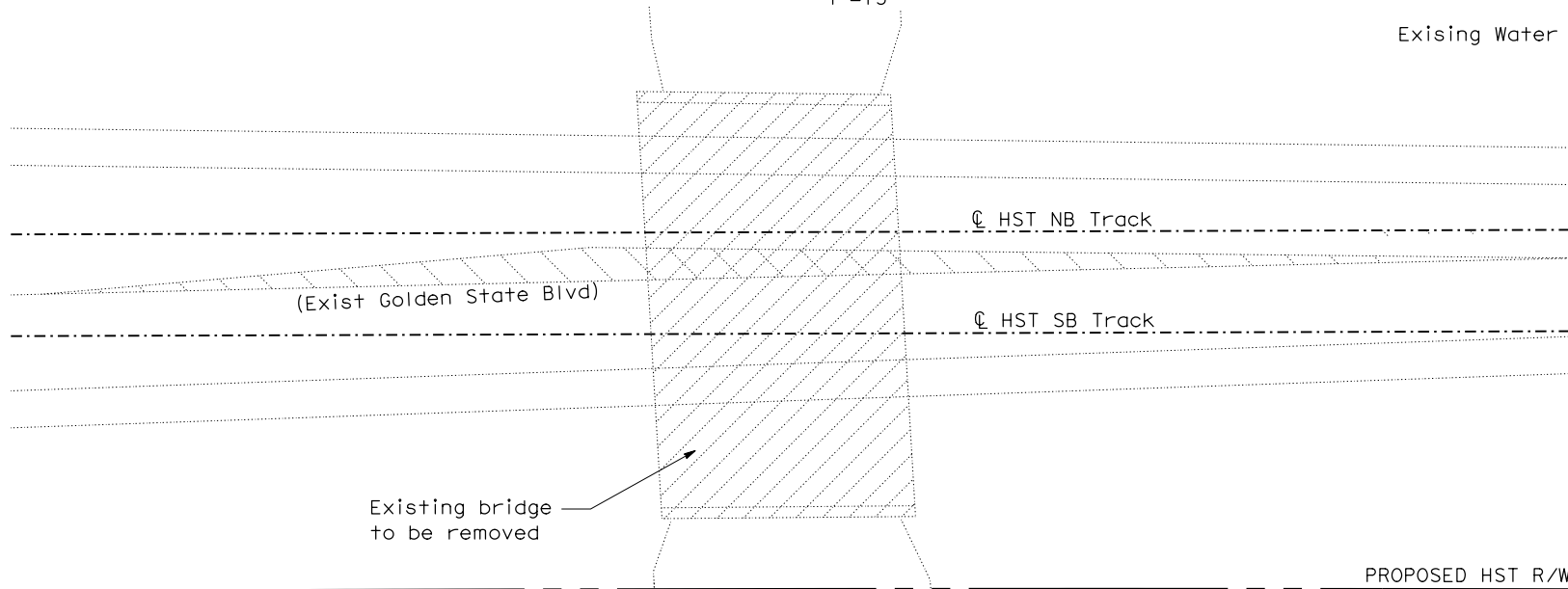
CONTRACT NO.  
HSR006-007  
DRAWING NO.  
**BR-2**  
SCALE  
AS SHOWN  
SHEET NO.

DATE PLOTTED: 23-APR-2011

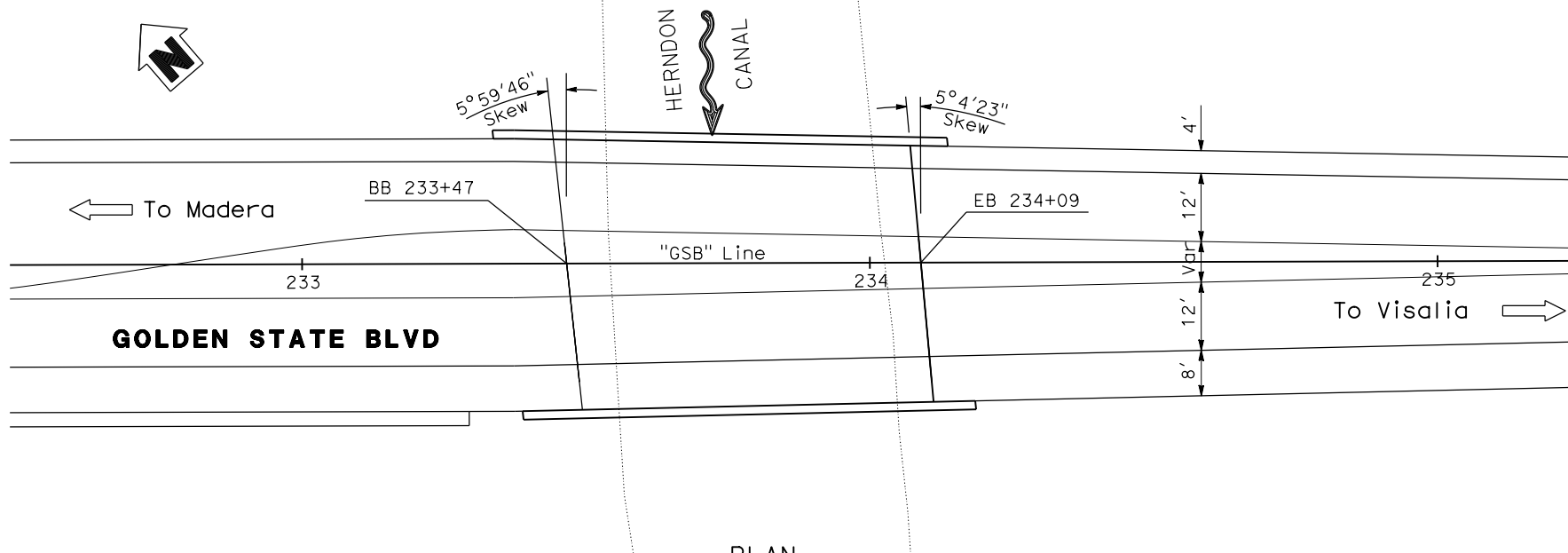




**ELEVATION**  
1"=15'



**TYPICAL SECTION**  
1/4"=1'-0"



**PLAN**  
1"=15'

DATE OF ESTIMATE	03-09-2011
BRIDGE REMOVAL	= \$ 50,000
STRUCTURE DEPTH	= 1'-3 1/2"
LENGTH	= 62'-0"
WIDTH	= 49'-5"
AREA	= 3064 Sq. Ft.
COST/□ INCLUDING 10% MOBILIZATION & 25% CONTINGENCY	= \$ 150
TOTAL COST	= \$ 510,000

**HERNDON CANAL BRIDGE**

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**D. FREDERICKS**  
DRAWN BY  
**P. WALKER**  
CHECKED BY  
**J. SHOWERS**  
IN CHARGE  
**J. MATSUI-DRURY**  
DATE  
**04/29/11**

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

**AECOM**  
Technical Services, Inc.  
2020 L Street, Suite 300  
Sacramento, CA 95811

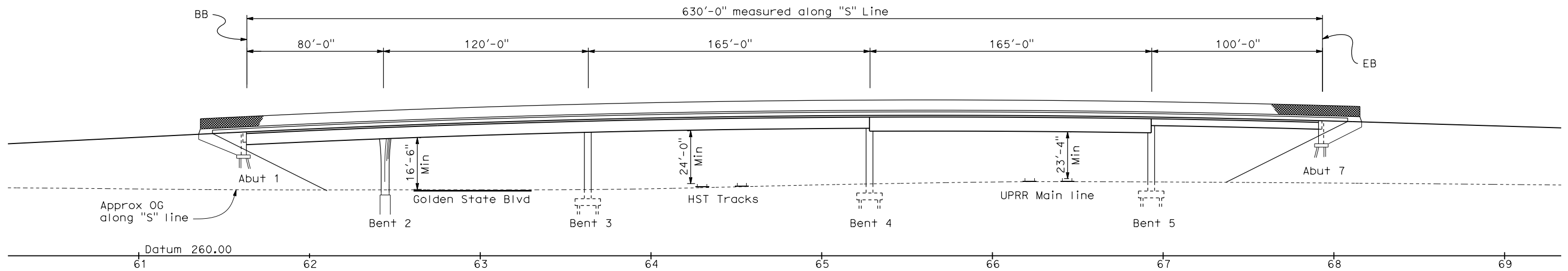
**CH2MHILL**



**CALIFORNIA HIGH SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
**GOLDEN STATE BOULEVARD RE-ALIGNMENT**  
**ADVANCE PLANNING STUDY**

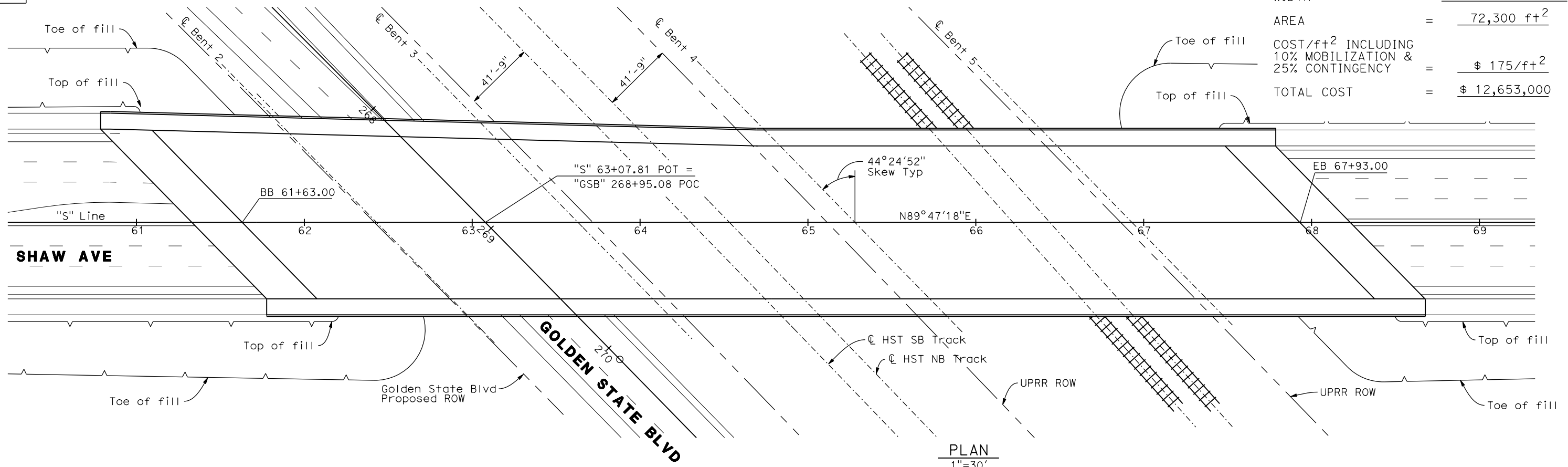
CONTRACT NO.	HSR006-007
DRAWING NO.	<b>BR-3</b>
SCALE	AS SHOWN
SHEET NO.	

DATE PLOTTED: 03-28-2011 10:58:00 AM



ELEVATION  
1"=30'

DATE OF ESTIMATE	=	04-13-2011
BRIDGE REMOVAL	=	-
STRUCTURE DEPTH	=	6'-0" TO 7'-3"
LENGTH	=	630'-0"
WIDTH	=	112'-0" to 120'-0"
AREA	=	72,300 ft <sup>2</sup>
COST/ft <sup>2</sup> INCLUDING 10% MOBILIZATION & 25% CONTINGENCY	=	\$ 175/ft <sup>2</sup>
TOTAL COST	=	\$ 12,653,000



PLAN  
1"=30'

**SHAW AVE OVERCROSSING**

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**D. FREDERICKS**  
DRAWN BY  
**P. WALKER**  
CHECKED BY  
**J. SHOWERS**  
IN CHARGE  
**J. MATSUI-DRURY**  
DATE  
**04/29/11**

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

**AECOM**  
Technical Services, Inc.  
2020 L Street, Suite 300  
Sacramento, CA 95811

**CH2MHILL**

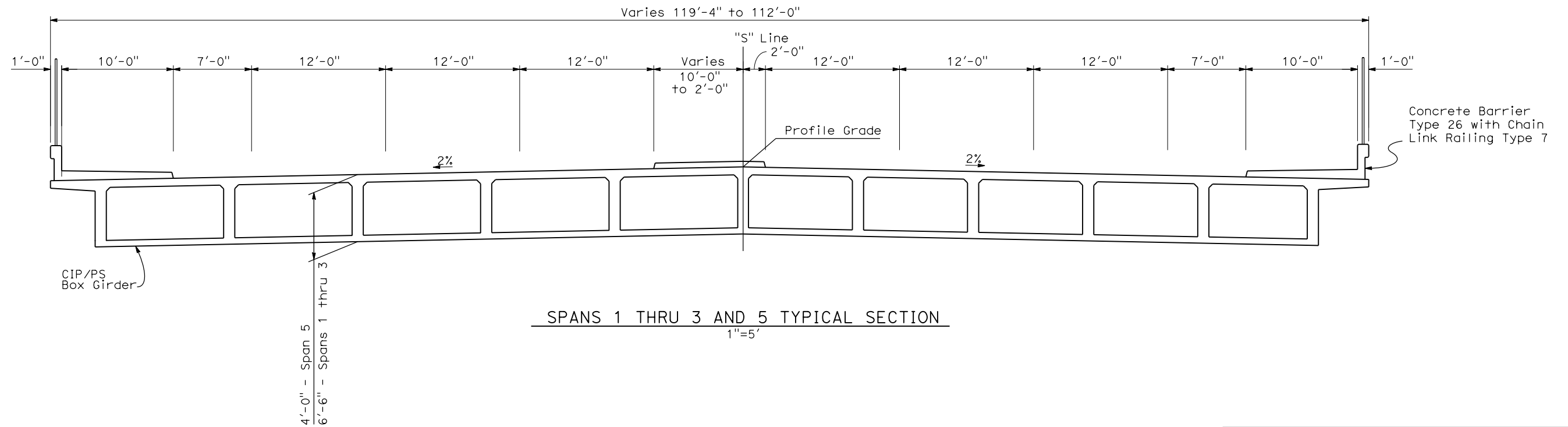
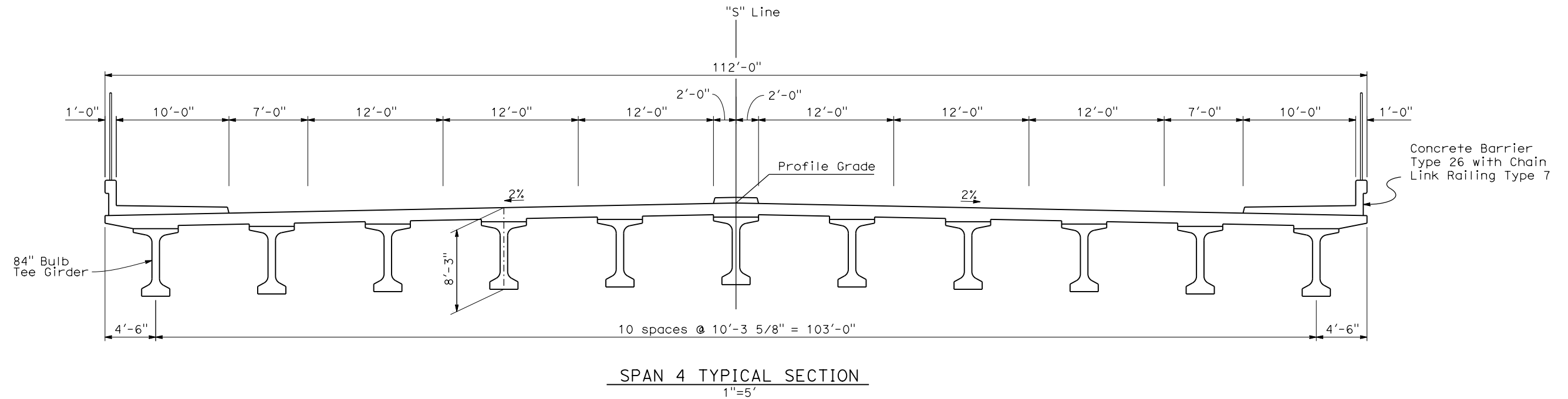
**CALIFORNIA**  
HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
**GOLDEN STATE BOULEVARD RE-ALIGNMENT**  
**ADVANCE PLANNING STUDY**

CONTRACT NO.	HSR006-007
DRAWING NO.	<b>BR-4</b>
SCALE	AS SHOWN
SHEET NO.	

DATE PLOTTED: 23-APR-2011





**SHAW AVE OVERCROSSING**

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**D. FREDERICKS**  
DRAWN BY  
**P. WALKER**  
CHECKED BY  
**J. SHOWERS**  
IN CHARGE  
**J. MATSUI-DRURY**  
DATE  
**04/29/11**

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

**NOT FOR**  
**CONSTRUCTION**



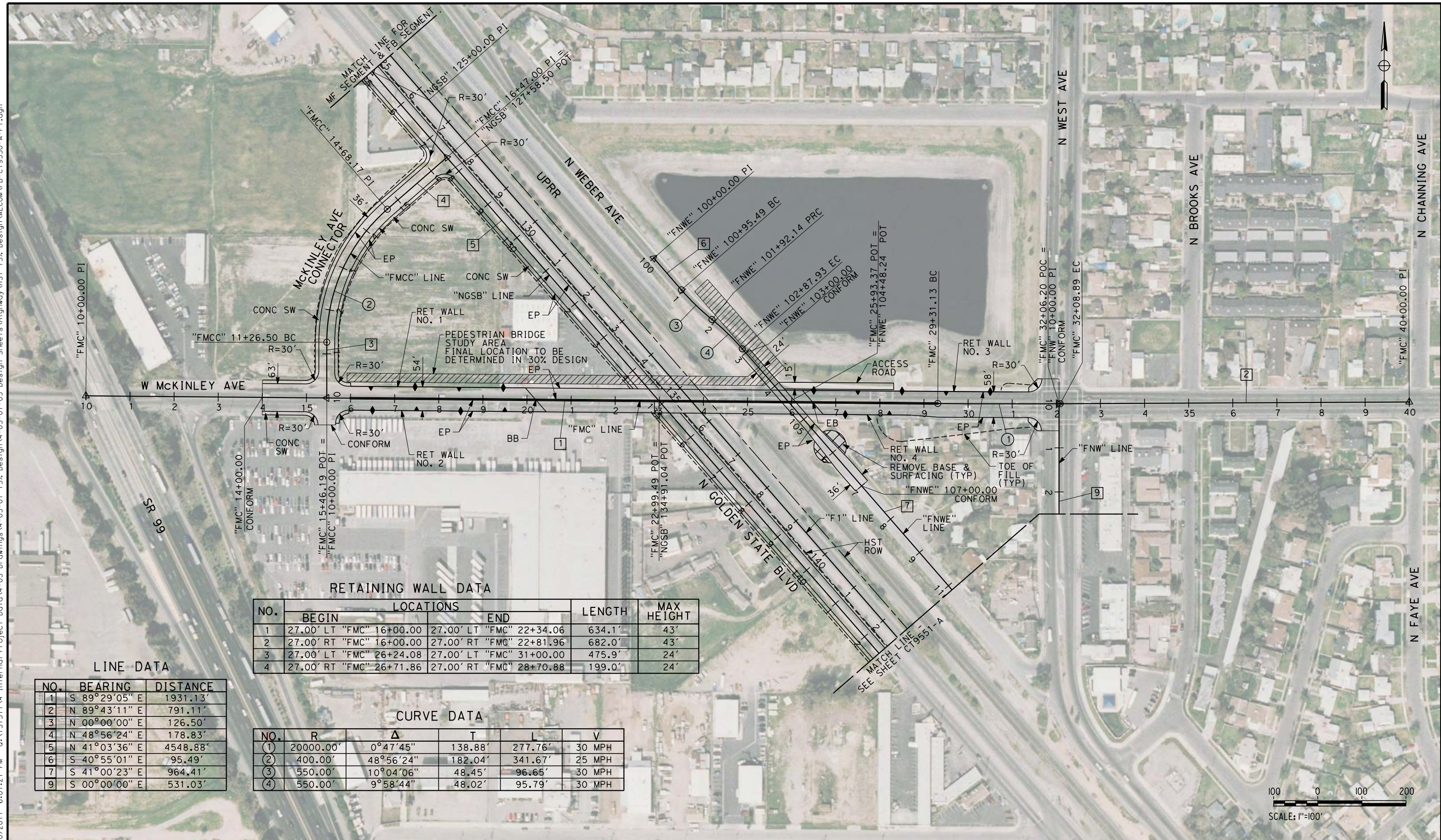
**CALIFORNIA HIGH SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
**GOLDEN STATE BOULEVARD RE-ALIGNMENT**  
**ADVANCE PLANNING STUDY**

CONTRACT NO.	HSR006-007
DRAWING NO.	<b>BR-5</b>
SCALE	AS SHOWN
SHEET NO.	

DATE PLOTTED: 23 APR 2011 10:55:00 AM



eron\_sudhausen 7/20/2011 6:07:21 PM 0:\1315177\4 Internal Project Data\4-03 Drawings\4-03-01 15% Design\AECOM\FB-CT9550-A-F1.dgn



RETAINING WALL DATA

NO.	LOCATIONS		LENGTH	MAX HEIGHT
	BEGIN	END		
1	27.00' LT "FMC" 16+00.00	27.00' LT "FMC" 22+34.06	634.1'	43'
2	27.00' RT "FMC" 16+00.00	27.00' RT "FMC" 22+81.96	682.0'	43'
3	27.00' LT "FMC" 26+24.08	27.00' LT "FMC" 31+00.00	475.9'	24'
4	27.00' RT "FMC" 26+71.86	27.00' RT "FMC" 28+70.88	199.0'	24'

LINE DATA

NO.	BEARING	DISTANCE
1	S 89°29'05" E	1931.13'
2	N 89°43'11" E	791.11'
3	N 00°00'00" E	126.50'
4	N 48°56'24" E	178.83'
5	N 41°03'36" E	4548.88'
6	S 40°55'01" E	95.49'
7	S 41°00'23" E	964.41'
9	S 00°00'00" E	531.03'

CURVE DATA

NO.	R	Δ	T	L	V
(1)	20000.00'	0°47'45"	138.88'	277.76'	30 MPH
(2)	400.00'	48°56'24"	182.04'	341.67'	25 MPH
(3)	550.00'	10°04'06"	48.45'	96.65'	30 MPH
(4)	550.00'	9°58'44"	48.02'	95.79'	30 MPH



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
K. MING  
 DRAWN BY  
E. SUDHAUSEN  
 CHECKED BY  
J. MONG  
 IN CHARGE  
A. LUFT  
 DATE  
05/13/11

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



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 FRESNO SUBSECTION  
 ALIGNMENT F1  
 GRADE SEPARATION LAYOUT  
 W MCKINLEY AVE

CONTRACT NO.  
HSR 06-0003  
 DRAWING NO.  
CT9550-A  
 SCALE  
AS SHOWN  
 SHEET NO.  
### OF ###



eron\_sudhausen 7/20/2011 6:07:26 PM 0:\1315177\4 Internal Project Data\4-03 Drawings\4-03-01 15% Design\4-03-01-05 Design Sheets\Highway\HST 15% Design\AECOM\FB-CT9551-A-F1.dgn

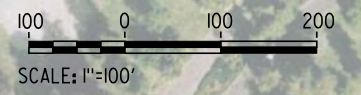


**LINE DATA**

NO.	BEARING	DISTANCE
5	N 41°03'36" E	4548.88'
7	N 41°00'23" E	964.41'
8	N 77°44'10" E	23.31'
9	N 00°00'00" E	529.15'
10	N 41°18'09" E	157.28'

**CURVE DATA**

NO.	R	Δ	T	L	V
5	75.00'	61°15'27"	44.41'	80.19'	15 MPH
6	435.00'	41°18'09"	163.95'	313.58'	30 MPH



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
K. MING  
 DRAWN BY  
E. SUDHAUSEN  
 CHECKED BY  
J. MONG  
 IN CHARGE  
A. LUFT  
 DATE  
05/13/11

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

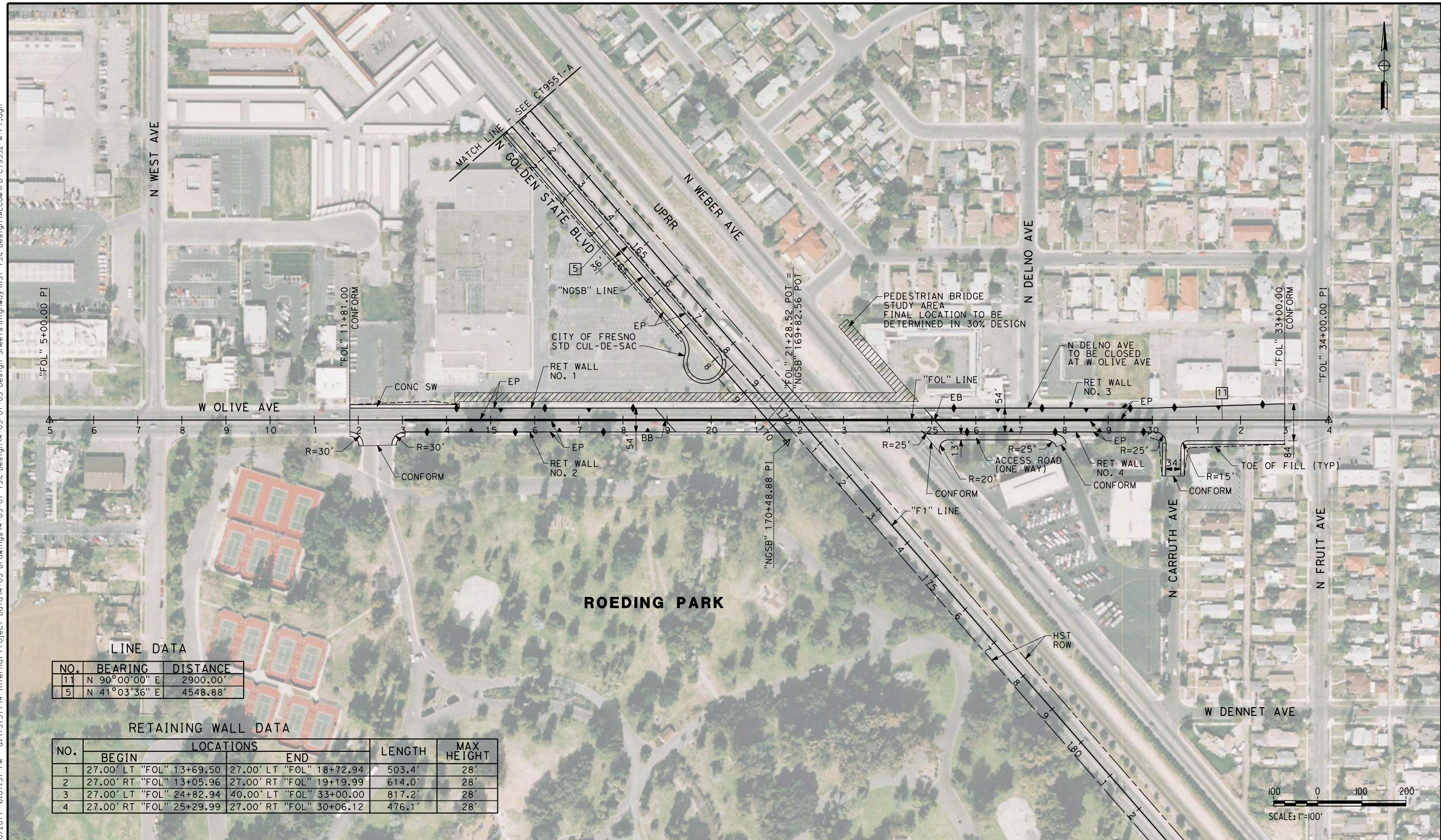


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 FRESNO SUBSECTION  
 ALIGNMENT F1  
 GRADE SEPARATION LAYOUT  
 N GOLDEN STATE BLVD

CONTRACT NO.  
HSR 06-0003  
 DRAWING NO.  
CT9551-A  
 SCALE  
AS SHOWN  
 SHEET NO.  
### OF ###



eron\_sudhausen 7/20/2011 6:07:31 PM 0:\1315177\4 Internal Project Data\4-03 Drawings\4-03-01 15% Design\4-03-01-05 Design Sheets\Highway\HST 15% Design\AECOM\FB-CT9552-A-F1.dgn



**LINE DATA**

NO.	BEARING	DISTANCE
11	N 90°00'00" E	2900.00'
5	N 41°03'36" E	4548.88'

**RETAINING WALL DATA**

NO.	LOCATIONS		LENGTH	MAX HEIGHT
	BEGIN	END		
1	27.00' LT "FOL" 13+69.50	27.00' LT "FOL" 18+72.94	503.4'	28'
2	27.00' RT "FOL" 13+05.96	27.00' RT "FOL" 19+19.99	614.0'	28'
3	27.00' LT "FOL" 24+82.94	40.00' LT "FOL" 33+00.00	817.2'	28'
4	27.00' RT "FOL" 25+29.99	27.00' RT "FOL" 30+06.12	476.1'	28'



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
K. MING  
 DRAWN BY  
E. SUDHAUSEN  
 CHECKED BY  
J. MONG  
 IN CHARGE  
A. LUFT  
 DATE  
05/13/11

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

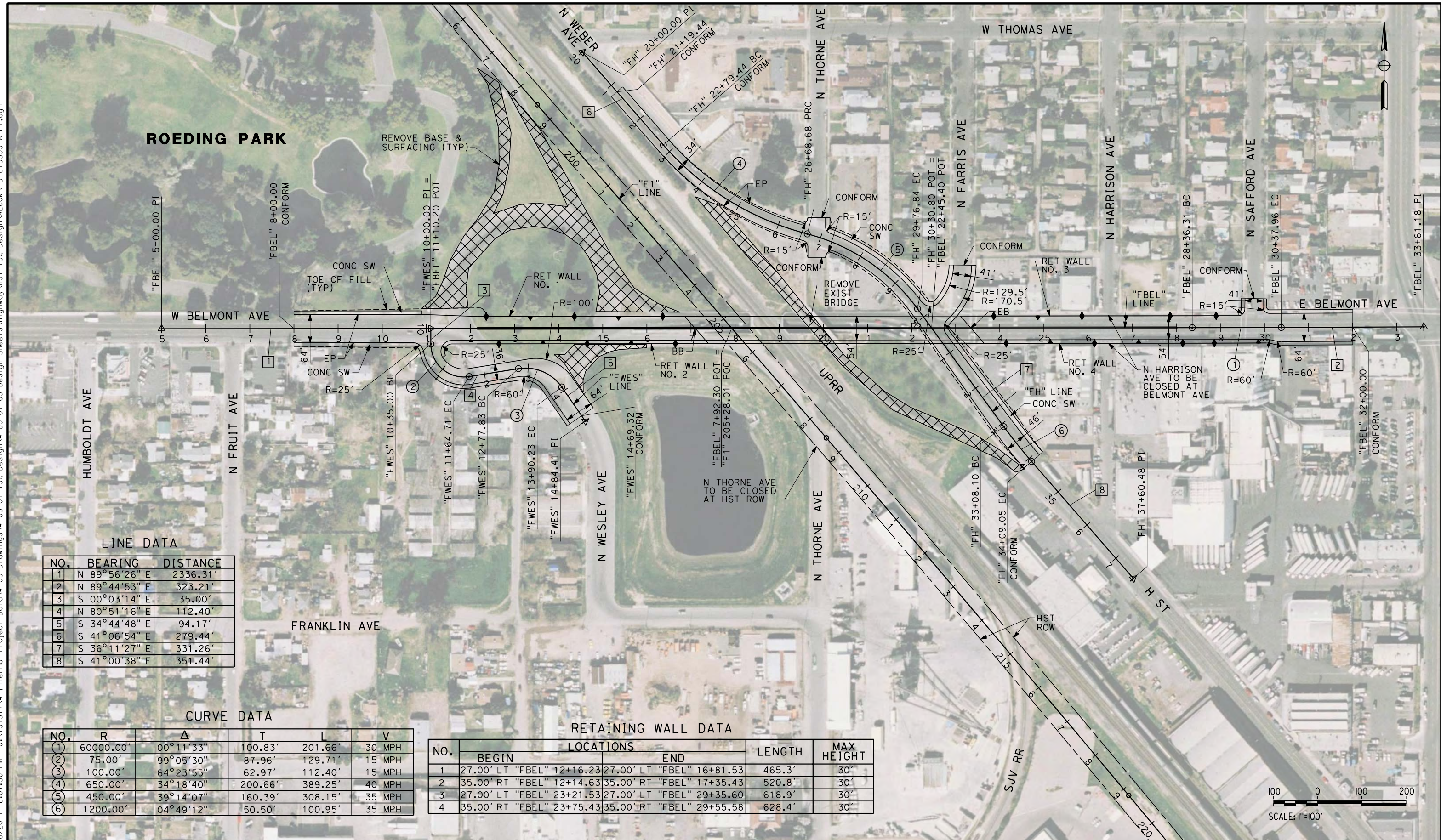


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 FRESNO SUBSECTION  
 ALIGNMENT F1  
 GRADE SEPARATION LAYOUT  
 W OLIVE AVE

CONTRACT NO.  
HSR 06-0003  
 DRAWING NO.  
CT9552-A  
 SCALE  
AS SHOWN  
 SHEET NO.  
### OF ###



eron\_sudhausen 7/20/2011 6:07:36 PM 0:\1315177\4 Internal Project Data\4-03 Drawings\4-03-01 15% Design\4-03-01-05 Design Sheets\Highway\HST 15% Design\AECOM\FB-CT9553-A-F1.dgn



**LINE DATA**

NO.	BEARING	DISTANCE
1	N 89°56'26" E	2336.31'
2	N 89°44'53" E	323.21'
3	S 00°03'14" E	35.00'
4	N 80°51'16" E	112.40'
5	S 34°44'48" E	94.17'
6	S 41°06'54" E	279.44'
7	S 36°11'27" E	331.26'
8	S 41°00'38" E	351.44'

**CURVE DATA**

NO.	R	Δ	T	L	V
①	60000.00'	00°11'33"	100.83'	201.66'	30 MPH
②	75.00'	99°05'30"	87.96'	129.71'	15 MPH
③	100.00'	64°23'55"	62.97'	112.40'	15 MPH
④	650.00'	34°18'40"	200.66'	389.25'	40 MPH
⑤	450.00'	39°14'07"	160.39'	308.15'	35 MPH
⑥	1200.00'	04°49'12"	50.50'	100.95'	35 MPH

**RETAINING WALL DATA**

NO.	LOCATIONS		LENGTH	MAX HEIGHT
	BEGIN	END		
1	27.00' LT "FBEL" 12+16.23	27.00' LT "FBEL" 16+81.53	465.3'	30'
2	35.00' RT "FBEL" 12+14.63	35.00' RT "FBEL" 17+35.43	520.8'	30'
3	27.00' LT "FBEL" 23+21.53	27.00' LT "FBEL" 29+35.60	618.9'	30'
4	35.00' RT "FBEL" 23+75.43	35.00' RT "FBEL" 29+55.58	628.4'	30'



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
K. MING  
 DRAWN BY  
E. SUDHAUSEN  
 CHECKED BY  
J. MONG  
 IN CHARGE  
A. LUFT  
 DATE  
05/13/11

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



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 FRESNO SUBSECTION  
 ALIGNMENT F1  
 GRADE SEPARATION LAYOUT  
 BELMONT AVE

CONTRACT NO.  
HSR 06-0003  
 DRAWING NO.  
CT9553-A  
 SCALE  
AS SHOWN  
 SHEET NO.  
### OF ###



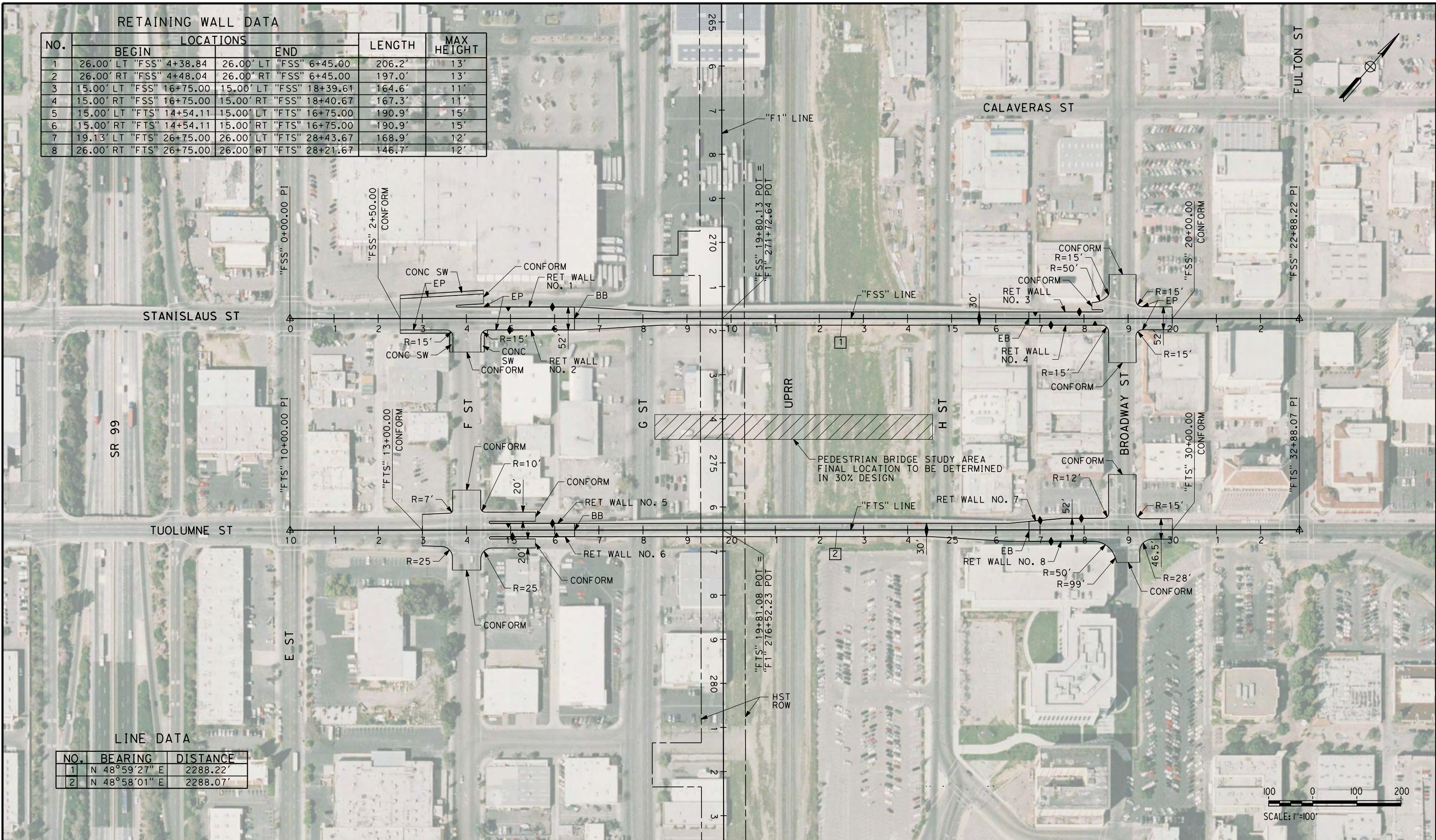
RETAINING WALL DATA

NO.	LOCATIONS		LENGTH	MAX HEIGHT
	BEGIN	END		
1	26.00' LT "FSS" 4+38.84	26.00' LT "FSS" 6+45.00	206.2'	13'
2	26.00' RT "FSS" 4+48.04	26.00' RT "FSS" 6+45.00	197.0'	13'
3	15.00' LT "FSS" 16+75.00	15.00' LT "FSS" 18+39.61	164.6'	11'
4	15.00' RT "FSS" 16+75.00	15.00' RT "FSS" 18+40.67	167.3'	11'
5	15.00' LT "FTS" 14+54.11	15.00' LT "FTS" 16+75.00	190.9'	15'
6	15.00' RT "FTS" 14+54.11	15.00' RT "FTS" 16+75.00	190.9'	15'
7	19.13' LT "FTS" 26+75.00	26.00' LT "FTS" 28+43.67	168.9'	12'
8	26.00' RT "FTS" 26+75.00	26.00' RT "FTS" 28+21.67	146.7'	12'

LINE DATA

NO.	BEARING	DISTANCE
1	N 48°59'27" E	2288.22'
2	N 48°58'01" E	2288.07'

7/21/2011 9:06:00 AM 0:\131577\4 Internal Project Data\4-03 Drawings\4-03-01 15% Design\AECOM\FB-CT9554-A-F1.dgn eron\_sudhausen



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
K. MING  
 DRAWN BY  
E. SUDHAUSEN  
 CHECKED BY  
J. MONG  
 IN CHARGE  
A. LUFT  
 DATE  
05/13/11

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



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 FRESNO SUBSECTION  
 ALIGNMENT F1  
 GRADE SEPARATION LAYOUT  
 STANISLAUS ST AND TUOLUMNE ST

CONTRACT NO.  
HSR 06-0003  
 DRAWING NO.  
CT9554-A  
 SCALE  
AS SHOWN  
 SHEET NO.  
### OF ###



CURVE DATA

NO.	R	Δ	T	L	V
①	5000.00'	02°34'01"	112.01'	224.01'	30 MPH
②	2000.00'	05°55'10"	103.41'	206.63'	30 MPH
③	3000.00'	03°23'12"	88.69'	177.33'	30 MPH

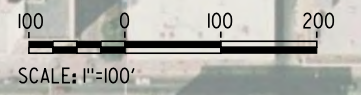
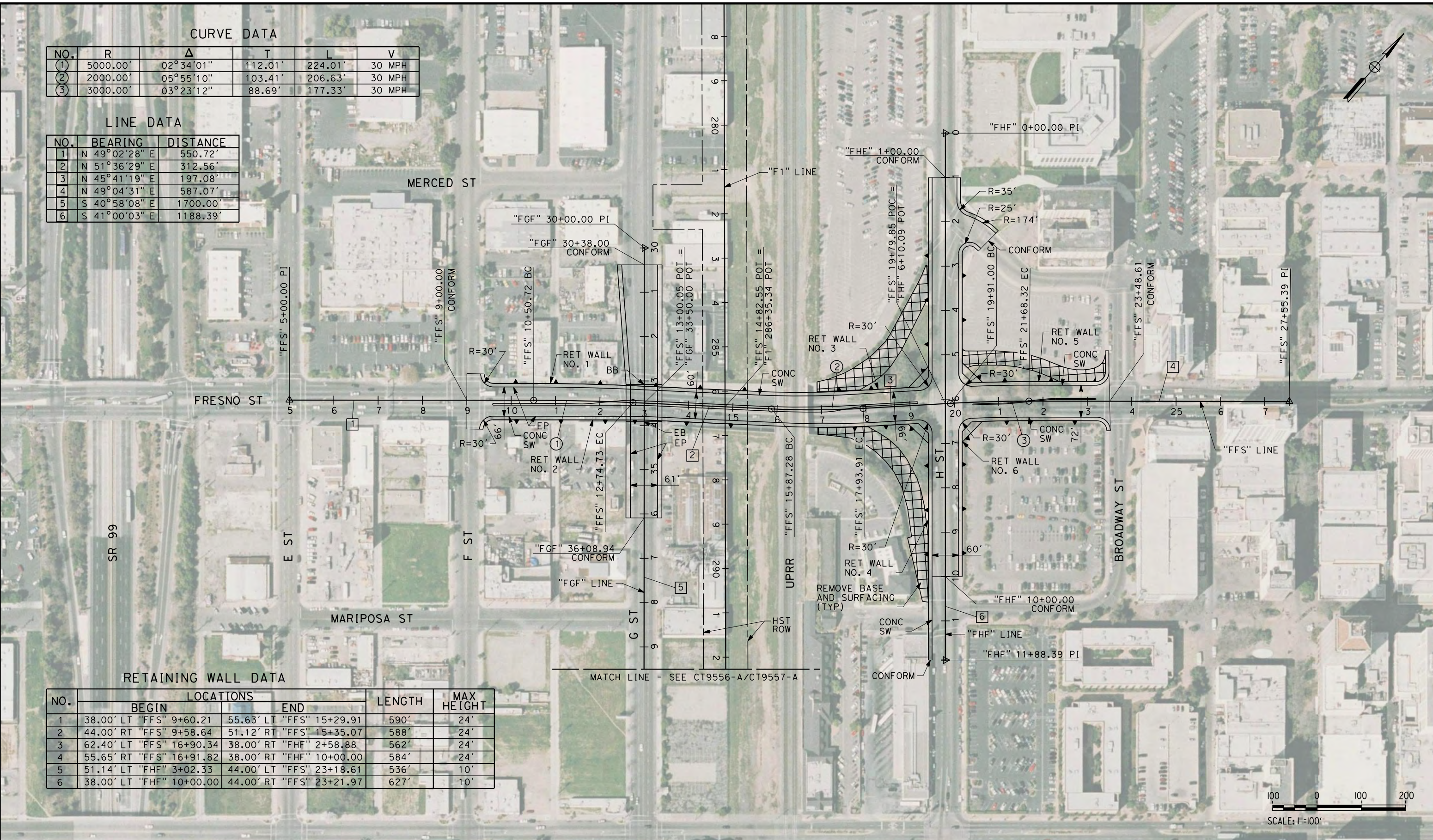
LINE DATA

NO.	BEARING	DISTANCE
1	N 49°02'28" E	550.72'
2	N 51°36'29" E	312.56'
3	N 45°41'19" E	197.08'
4	N 49°04'31" E	587.07'
5	S 40°58'08" E	1700.00'
6	S 41°00'03" E	1188.39'

RETAINING WALL DATA

NO.	LOCATIONS		LENGTH	MAX HEIGHT
	BEGIN	END		
1	38.00' LT "FFS" 9+60.21	55.63' LT "FFS" 15+29.91	590'	24'
2	44.00' RT "FFS" 9+58.64	51.12' RT "FFS" 15+35.07	588'	24'
3	62.40' LT "FFS" 16+90.34	38.00' RT "FHF" 2+58.88	562'	24'
4	55.65' RT "FFS" 16+91.82	38.00' RT "FHF" 10+00.00	584'	24'
5	51.14' LT "FHF" 3+02.33	44.00' LT "FFS" 23+18.61	536'	10'
6	38.00' LT "FHF" 10+00.00	44.00' RT "FFS" 23+21.97	627'	10'

eron\_sudhausen 7/20/2011 6:07:48 PM 0:\131577\4 Internal Project Data\4-03 Drawings\4-03-01 15% Design Sheets\Highway\HST 15% Design\AECOM\FB-CT9555-A-F1.dgn



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
K. MING  
 DRAWN BY  
E. SUDHAUSEN  
 CHECKED BY  
J. MONG  
 IN CHARGE  
A. LUFT  
 DATE  
06/30/11

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



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 FRESNO SUBSECTION  
 ALIGNMENT F1  
 GRADE SEPARATION LAYOUT  
 FRESNO ST

CONTRACT NO.  
HSR 06-0003  
 DRAWING NO.  
CT9555-A  
 SCALE  
AS SHOWN  
 SHEET NO.  
### OF ###



LINE DATA

NO.	BEARING	DISTANCE
6	N 48°54'51" E	2564.41'

7/20/2011 6:07:53 PM 0:\1315177\4 Internal Project Data\4-03 Drawings\4-03-01 15% Design\AECOM\FB-CT9556-A-F1.dgn



RETAINING WALL DATA

NO.	LOCATIONS		LENGTH	MAX HEIGHT
	BEGIN	END		
1	23.00' LT "FTU" 6+00.00	23.00' LT "FTU" 12+55.00	655.0'	27'
2	13.00' RT "FTU" 6+00.00	13.00' RT "FTU" 12+55.00	655.0'	27'
3	23.00' LT "FTU" 20+35.00	31.97' LT "FTU" 26+00.00	565.3'	26'
4	13.00' RT "FTU" 20+35.00	13.00' RT "FTU" 26+00.00	565.0'	26'

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
K. MING  
DRAWN BY  
E. SUDHAUSEN  
CHECKED BY  
J. MONG  
IN CHARGE  
A. LUFT  
DATE  
05/13/11

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



**CALIFORNIA HIGH-SPEED TRAIN PROJECT  
MERCED TO FRESNO**  
FRESNO SUBSECTION  
ALIGNMENT F1  
GRADE SEPARATION LAYOUT  
TULARE ST (OVERHEAD)

CONTRACT NO.  
HSR 06-0003  
DRAWING NO.  
CT9556-A  
SCALE  
AS SHOWN  
SHEET NO.  
### OF ###



7/20/2011 6:07:57 PM 0:\1315177\4 Internal Project Data\4-03 Drawings\4-03-01 15% Design\Sheets\Highway\HST 15% Design\AECOM\FB-CT9557-A-F1.dgn



**LINE DATA**

NO.	BEARING	DISTANCE
5	S 40°58'08" E	1700.00
6	N 48°54'51" E	2564.41'

**RETAINING WALL DATA**

NO.	LOCATIONS		LENGTH	MAX HEIGHT
	BEGIN	END		
1	15.00' LT "FTU" 9+41.00	15.00' LT "FTU" 19+25.00	984.0'	30'
2	28.00' RT "FTU" 9+41.00	28.00' RT "FTU" 19+25.00	984.0'	30'
3	15.00' RT "FTU" 9+41.00	15.00' RT "FTU" 19+25.00	984.0'	10'

REV	DATE	BY	CHK	APP	DESCRIPTION

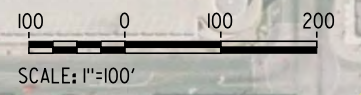
DESIGNED BY  
K. MING  
DRAWN BY  
E. SUDHAUSEN  
CHECKED BY  
J. MONG  
IN CHARGE  
A. LUFT  
DATE  
05/13/11

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



**CALIFORNIA HIGH-SPEED TRAIN PROJECT  
MERCED TO FRESNO**  
FRESNO SUBSECTION  
ALIGNMENT F1  
GRADE SEPARATION LAYOUT  
TULARE ST (UNDERPASS)

CONTRACT NO.  
HSR 06-0003  
DRAWING NO.  
CT9557-A  
SCALE  
AS SHOWN  
SHEET NO.  
### OF ###





**CURVE DATA**

NO.	R	Δ	T	L	V
①	10000.00'	01°15'13"	109.39'	218.77'	30 MPH
②	10000.00'	01°07'47"	98.59'	197.17'	30 MPH

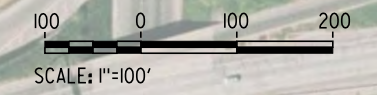
**LINE DATA**

NO.	BEARING	DISTANCE
1	N 49°02'50" E	1368.36'
2	N 50°18'02" E	184.02'
3	N 49°10'15" E	687.13'

**RETAINING WALL DATA**

NO.	LOCATIONS		LENGTH	MAX HEIGHT
	BEGIN	END		
1	26.00' LT "FVE" 9+55.00	26.00' LT "FVE" 12+55.00	300.0'	24'
2	26.00' RT "FVE" 9+55.00	26.00' RT "FVE" 12+55.00	300.0'	24'
3	26.00' LT "FVE" 20+55.00	26.00' LT "FVE" 22+71.15	216.2'	22'
4	26.00' RT "FVE" 20+55.00	38.00' RT "FVE" 22+71.15	216.9'	22'

eron\_sudhausen 7/20/2011 6:08:02 PM 0:\131577\4 Internal Project Data\4-03 Drawings\4-03-01 15% Design\AECOM\FB-CT9558-A-F1.dgn



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
K. MING  
 DRAWN BY  
E. SUDHAUSEN  
 CHECKED BY  
J. MONG  
 IN CHARGE  
A. LUFT  
 DATE  
05/13/11

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



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 FRESNO SUBSECTION  
 ALIGNMENT F1  
 GRADE SEPARATION LAYOUT  
 VENTURA ST

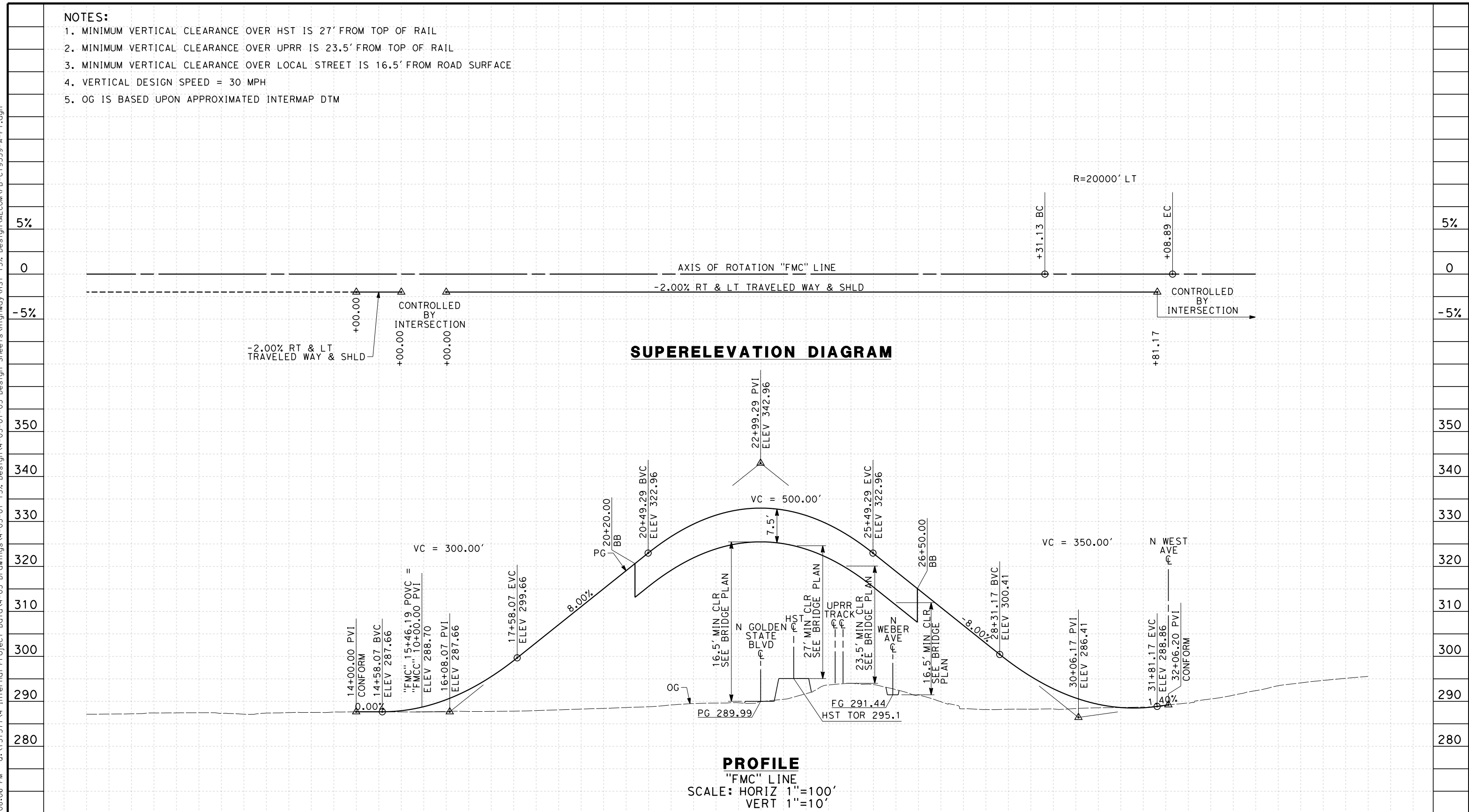
CONTRACT NO.  
HSR 06-0003  
 DRAWING NO.  
CT9558-A  
 SCALE  
AS SHOWN  
 SHEET NO.  
### OF ###



**NOTES:**

1. MINIMUM VERTICAL CLEARANCE OVER HST IS 27' FROM TOP OF RAIL
2. MINIMUM VERTICAL CLEARANCE OVER UPRR IS 23.5' FROM TOP OF RAIL
3. MINIMUM VERTICAL CLEARANCE OVER LOCAL STREET IS 16.5' FROM ROAD SURFACE
4. VERTICAL DESIGN SPEED = 30 MPH
5. OG IS BASED UPON APPROXIMATED INTERMAP DTM

7/20/2011 6:08:06 PM 0:\1315177\4 Internal Project Data\4-03 Drawings\4-03-01 15% Design\AECOM\FB-CT9559-A-F1.dgn



STATION	8	9	10	1	2	3	4	15	6	7	8	9	20	1	2	3	4	25	6	7	8	9	30	1	2	3	4	35	6	TOTAL
Exc																														
Emb																														

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
 K. MING  
 DRAWN BY  
 E. SUDHAUSEN  
 CHECKED BY  
 J. MONG  
 IN CHARGE  
 A. LUFT  
 DATE  
 05/13/11

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



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 FRESNO SUBSECTION  
 ALIGNMENT F1  
 GRADE SEP PROFILE & SUPERELEVATION DIAGRAM  
 W MCKINLEY AVE

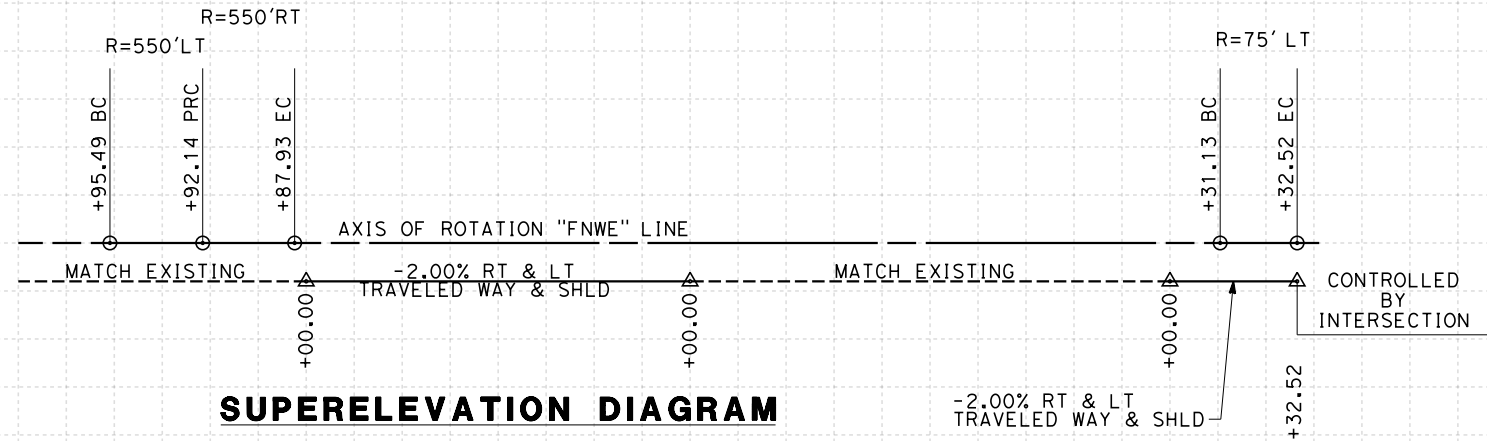
CONTRACT NO.  
 HSR 06-0003  
 DRAWING NO.  
 CT9559-A  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###



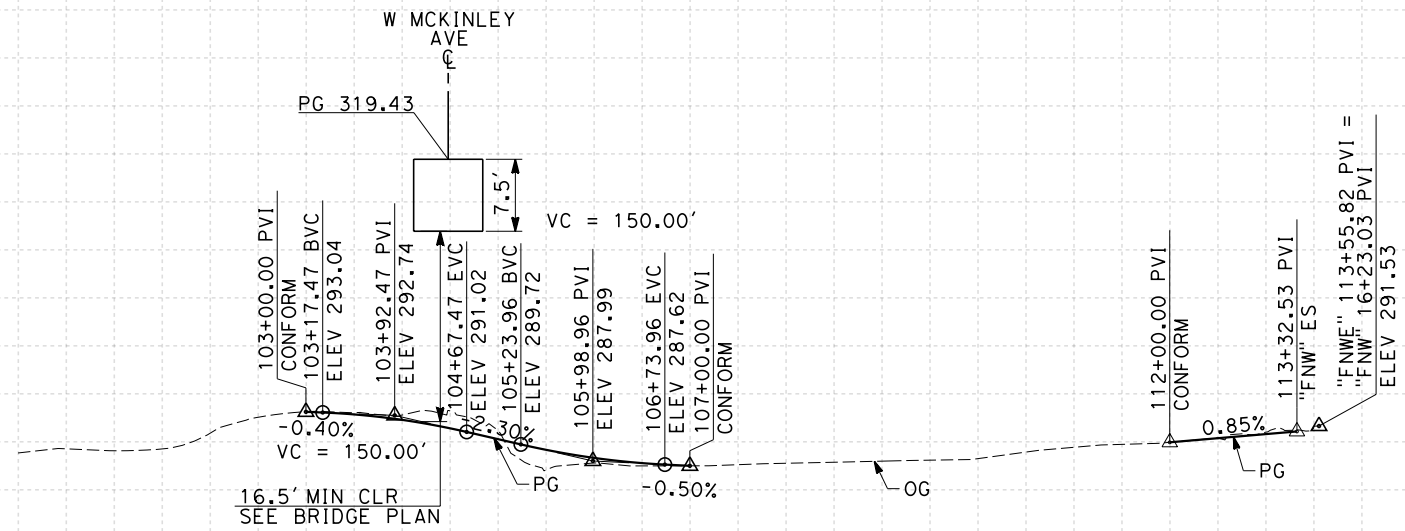


**NOTES:**

1. MINIMUM VERTICAL CLEARANCE UNDER STRUCTURE IS 16.5' FROM ROAD SURFACE
2. VERTICAL DESIGN SPEED = 25 MPH
3. OG IS BASED UPON APPROXIMATED INTERMAP DTM
4. REFER TO SHEET CT1001 FOR LAYOUT



**SUPERELEVATION DIAGRAM**



**PROFILE**

"FNWE" LINE  
SCALE: HORIZ 1"=100'  
VERT 1"=10'

STATION	100	1	2	3	4	105	6	7	8	9	110	1	2	3	4	TOTAL
Exc																
Emb																

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
K. MING  
DRAWN BY  
E. SUDHAUSEN  
CHECKED BY  
J. MONG  
IN CHARGE  
A. LUFT  
DATE  
05/13/11

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

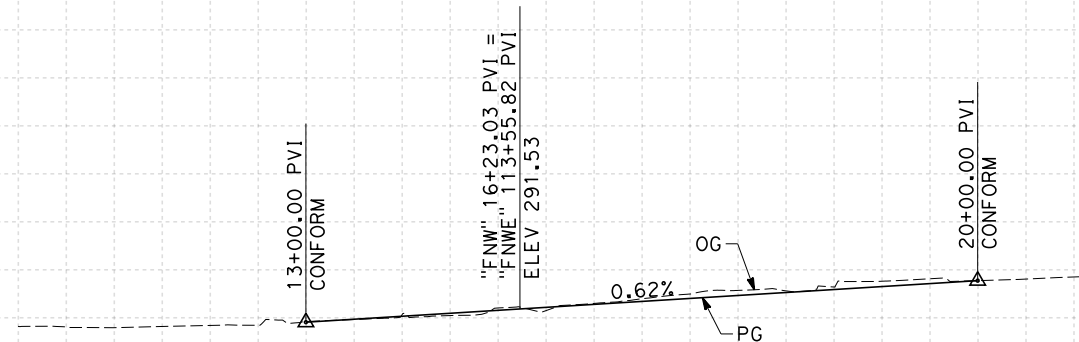
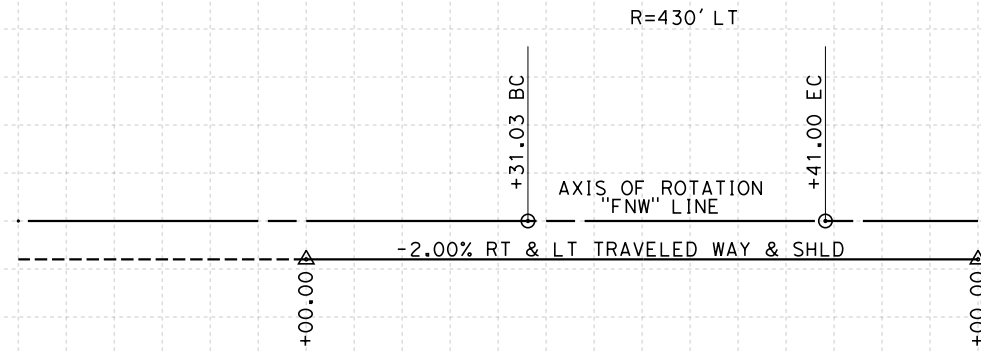


**CALIFORNIA HIGH-SPEED TRAIN PROJECT  
MERCED TO FRESNO**  
FRESNO SUBSECTION  
ALIGNMENT F1  
GRADE SEP PROFILE & SUPERELEVATION DIAGRAM  
N WEBER AVE

CONTRACT NO.  
HSR 06-0003  
DRAWING NO.  
CT9561-A  
SCALE  
AS SHOWN  
SHEET NO.  
### OF ###

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- NOTES:**
1. VERTICAL DESIGN SPEED = 25 MPH AT TRAFFIC CIRCLE
  2. OG IS BASED UPON APPROXIMATED INTERMAP DTM
  3. REFER TO SHEET CT1001 FOR LAYOUT



STATION	10	1	2	3	4	15	6	7	8	9	20	TOTAL
Exc												
Emb												

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
K. MING  
DRAWN BY  
E. SUDHAUSEN  
CHECKED BY  
J. MONG  
IN CHARGE  
A. LUFT  
DATE  
05/13/11

**RECORD SET 15%  
DESIGN SUBMISSION**

**NOT FOR  
CONSTRUCTION**



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

FRESNO SUBSECTION  
ALIGNMENT F1  
GRADE SEP PROFILE & SUPERELEVATION DIAGRAM  
N WEST AVE

CONTRACT NO.  
HSR 06-0003  
DRAWING NO.  
CT9562-A  
SCALE  
AS SHOWN  
SHEET NO.  
### OF ###

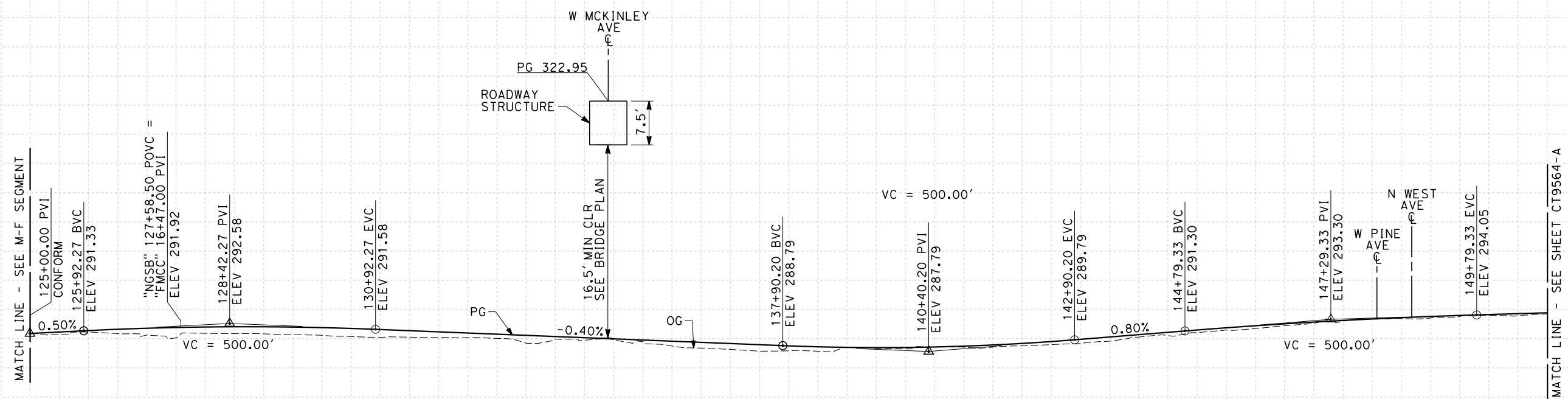
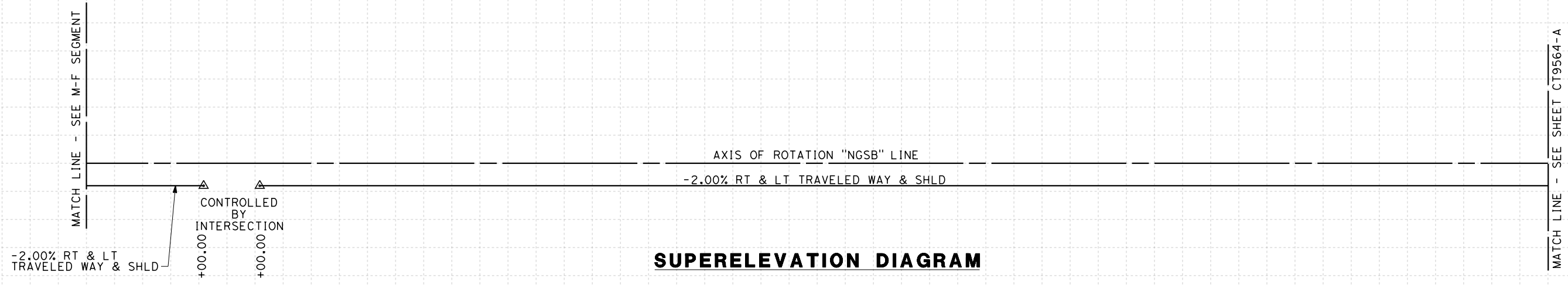
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**NOTES:**

1. MINIMUM VERTICAL CLEARANCE UNDER STRUCTURE IS 16.5' FROM ROAD SURFACE.
2. VERTICAL DESIGN SPEED = 50 MPH
3. OG IS BASED UPON APPROXIMATED INTERMAP DTM
4. REFER TO SHEET CT1001, CT1005, AND CT1007 FOR LAYOUT

7/20/2011 6:08:13 PM 0:\1315177\4 Internal Project Data\4-03 Drawings\4-03-01 15% Design\4-03-01-05 Design Sheets\Highway\HST 15% Design\AECOM\FB-CT9563-A-F1.dgn



STATION	125	6	7	8	9	130	1	2	3	4	135	6	7	8	9	140	1	2	3	4	145	6	7	8	9	150	1	TOTAL
Exc																												
Emb																												

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
K. MING  
 DRAWN BY  
E. SUDHAUSEN  
 CHECKED BY  
J. MONG  
 IN CHARGE  
A. LUFT  
 DATE  
05/13/11

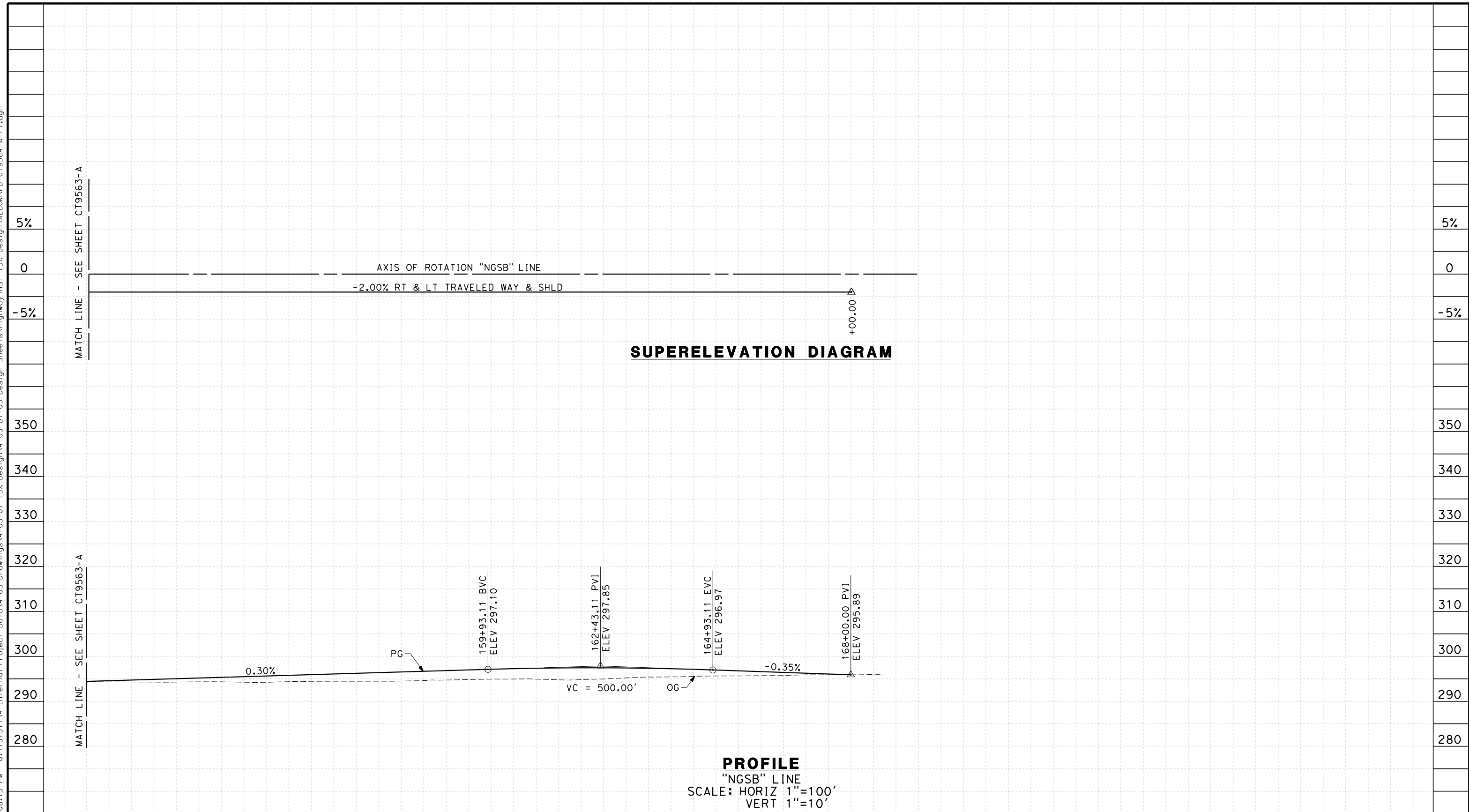
**RECORD SET 15%  
DESIGN SUBMISSION**  
  
**NOT FOR  
CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 FRESNO SUBSECTION  
 ALIGNMENT F1  
 GRADE SEP PROFILE & SUPERELEVATION DIAGRAM  
 N GOLDEN STATE BLVD

CONTRACT NO.  
HSR 06-0003  
 DRAWING NO.  
CT9563-A  
 SCALE  
AS SHOWN  
 SHEET NO.  
### OF ###

7/20/2011 6:08:15 PM 0:\131577\4 Internal Project Data\4-03 Drawings\4-03-01 15% Design\4-03-01-05 Design Sheets\Highway\HST 15% Design\AECOM\FB-CT9564-A-F1.dgn



STATION	1	2	3	4	155	6	7	8	9	160	1	2	3	4	165	6	7	8	9	170	1	TOTAL	
CY Exc																							
CY Emb																							

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
K. MING  
 DRAWN BY  
E. SUDHAUSEN  
 CHECKED BY  
J. MONG  
 IN CHARGE  
A. LUFT  
 DATE  
05/13/11

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



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 FRESNO SUBSECTION  
 ALIGNMENT F1  
 GRADE SEP PROFILE & SUPERELEVATION DIAGRAM  
 N GOLDEN STATE BLVD

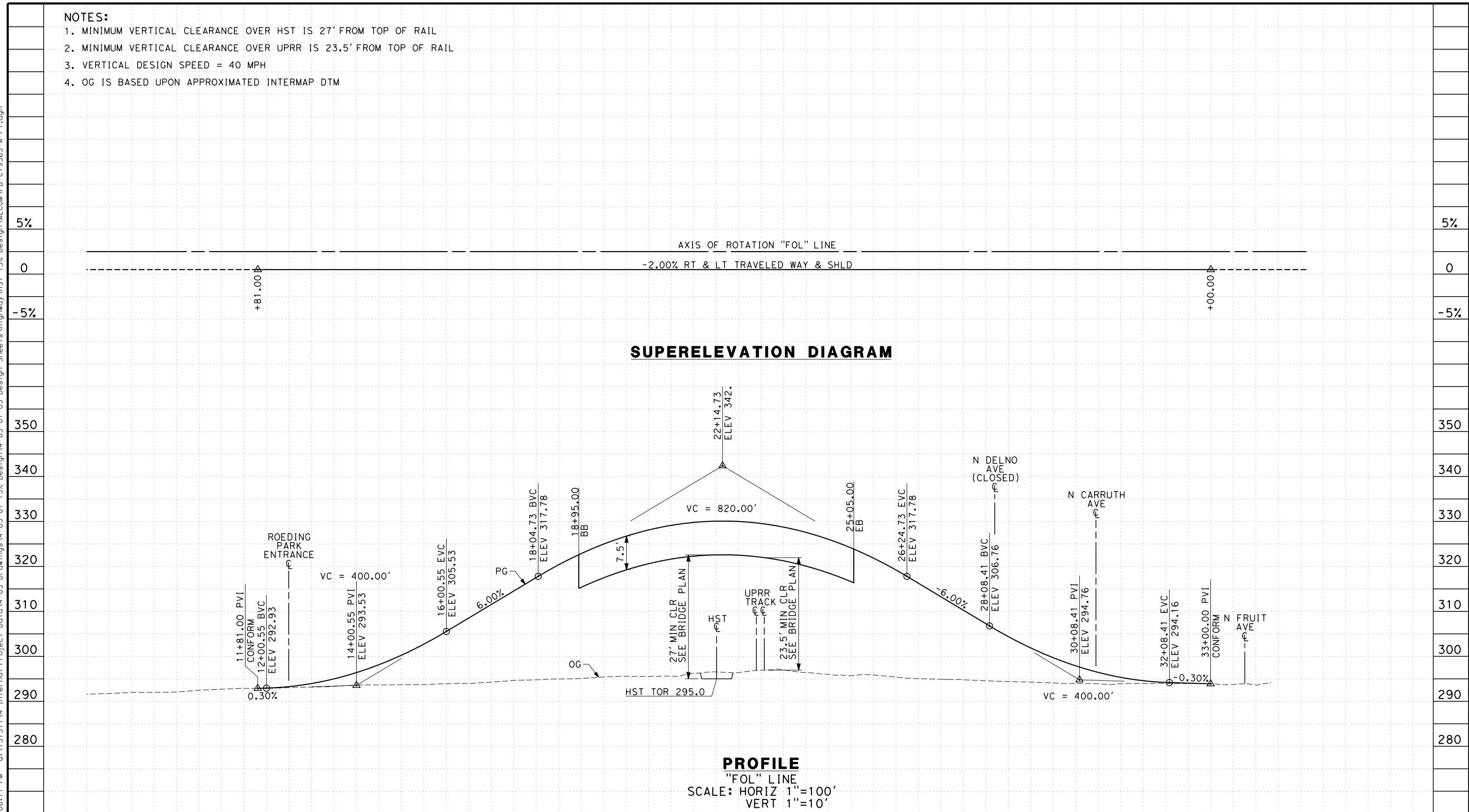
CONTRACT NO.  
HSR 06-0003  
 DRAWING NO.  
CT9564-A  
 SCALE  
AS SHOWN  
 SHEET NO.  
### OF ###



**NOTES:**

1. MINIMUM VERTICAL CLEARANCE OVER HST IS 27' FROM TOP OF RAIL
2. MINIMUM VERTICAL CLEARANCE OVER UPRR IS 23.5' FROM TOP OF RAIL
3. VERTICAL DESIGN SPEED = 40 MPH
4. OG IS BASED UPON APPROXIMATED INTERMAP DTM

7/20/2011 6:08:17 PM 0:\1315177\4 Internal Project Data\4-03 Drawings\4-03-01 15% Design Sheets\Highway\HST 15% Design\AECOM\FB-CT9565-A-F1.dgn



STATION	8	9	10	1	2	3	4	15	6	7	8	9	20	1	2	3	4	25	6	7	8	9	30	1	2	3	4	35	6	TOTAL	
Exc																															
Emb																															

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
 K. MING  
 DRAWN BY  
 E. SUDHAUSEN  
 CHECKED BY  
 J. MONG  
 IN CHARGE  
 A. LUFT  
 DATE  
 05/13/11

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



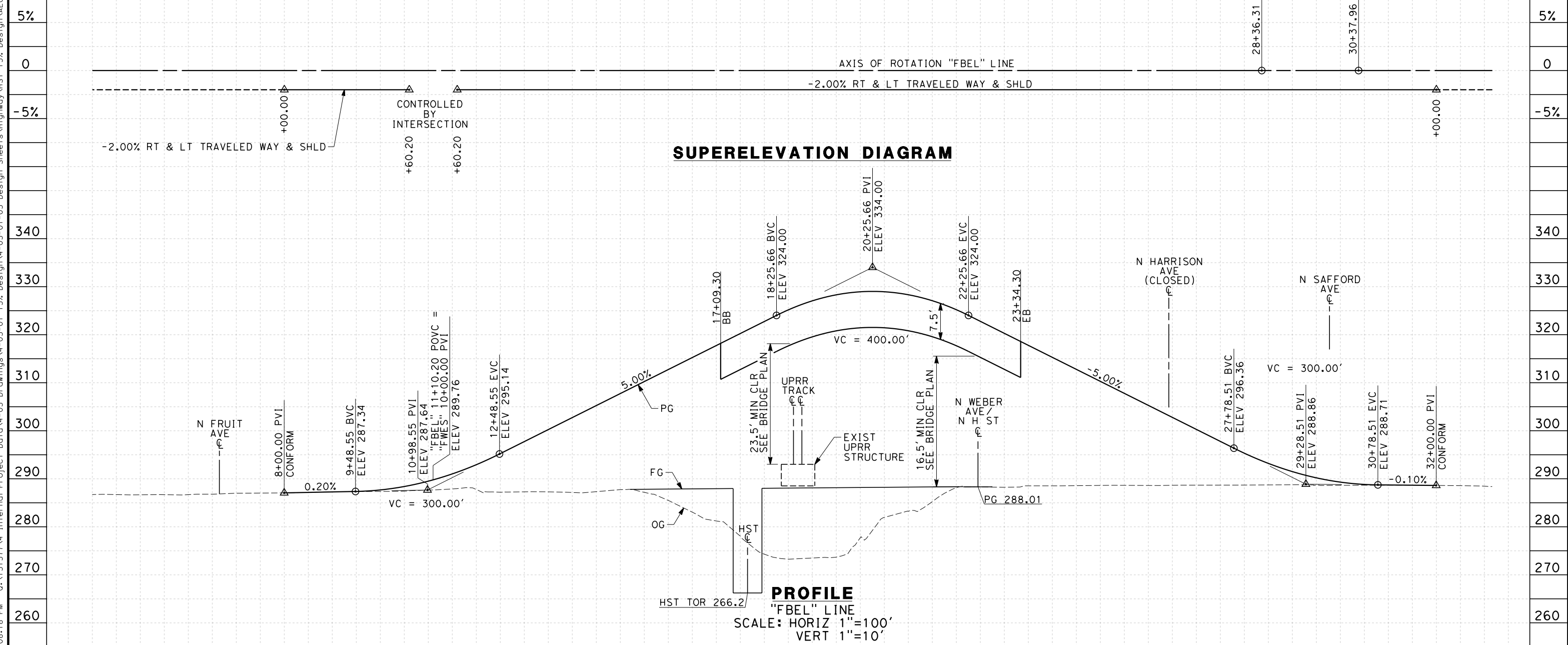
**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 FRESNO SUBSECTION  
 ALIGNMENT F1  
 GRADE SEP PROFILE & SUPERELEVATION DIAGRAM  
 W OLIVE AVE

CONTRACT NO.  
 HSR 06-0003  
 DRAWING NO.  
 CT9565-A  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###

7/20/2011 6:08:18 PM 0:\1315177\4 Internal Project Data\4-03 Drawings\4-03-01 15% Design\4-03-01-05 Design Sheets\Highway\HST 15% Design\AECOM\FB-CT9566-A-F1.dgn

**NOTES:**

1. MINIMUM VERTICAL CLEARANCE OVER HST IS 27' FROM TOP OF RAIL
2. MINIMUM VERTICAL CLEARANCE OVER UPRR IS 23.5' FROM TOP OF RAIL
3. MINIMUM VERTICAL CLEARANCE OVER LOCAL STREET IS 16.5' FROM ROAD SURFACE
4. VERTICAL DESIGN SPEED = 30 MPH
5. OG IS BASED UPON APPROXIMATED INTERMAP DTM



STATION	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	TOTAL
Exc																													
Emb																													

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
K. MING  
 DRAWN BY  
E. SUDHAUSEN  
 CHECKED BY  
J. MONG  
 IN CHARGE  
A. LUFT  
 DATE  
05/13/11

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

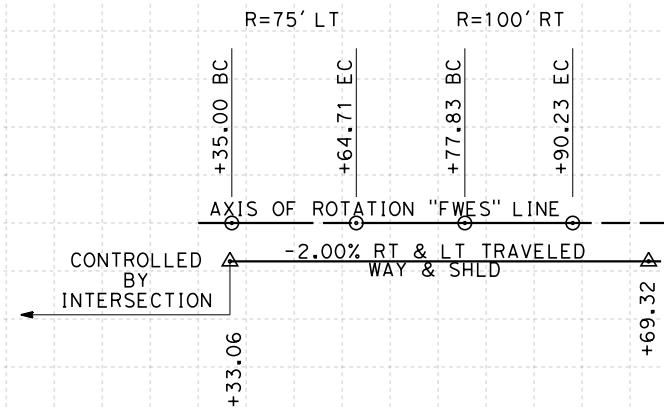


**CALIFORNIA HIGH-SPEED TRAIN PROJECT  
MERCED TO FRESNO**  
 FRESNO SUBSECTION  
 ALIGNMENT F1  
 GRADE SEP PROFILE & SUPERELEVATION DIAGRAM  
 BELMONT AVE

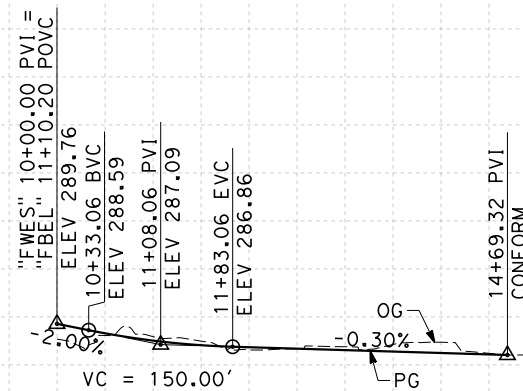
CONTRACT NO.  
HSR 06-0003  
 DRAWING NO.  
CT9566-A  
 SCALE  
AS SHOWN  
 SHEET NO.  
### OF ###



- NOTES:**
1. VERTICAL DESIGN SPEED = 25 MPH
  2. OG IS BASED UPON APPROXIMATED INTERMAP DTM
  3. REFER TO SHEET CT1008 FOR LAYOUT



**SUPERELEVATION DIAGRAM**



**PROFILE**

"FWES" LINE  
 SCALE: HORIZ 1"=100'  
 VERT 1"=10'

STATION	10	1	2	3	4	15	TOTAL
Exc							
Emb							

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
K. MING  
 DRAWN BY  
E. SUDHAUSEN  
 CHECKED BY  
J. MONG  
 IN CHARGE  
A. LUFT  
 DATE  
05/13/11

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



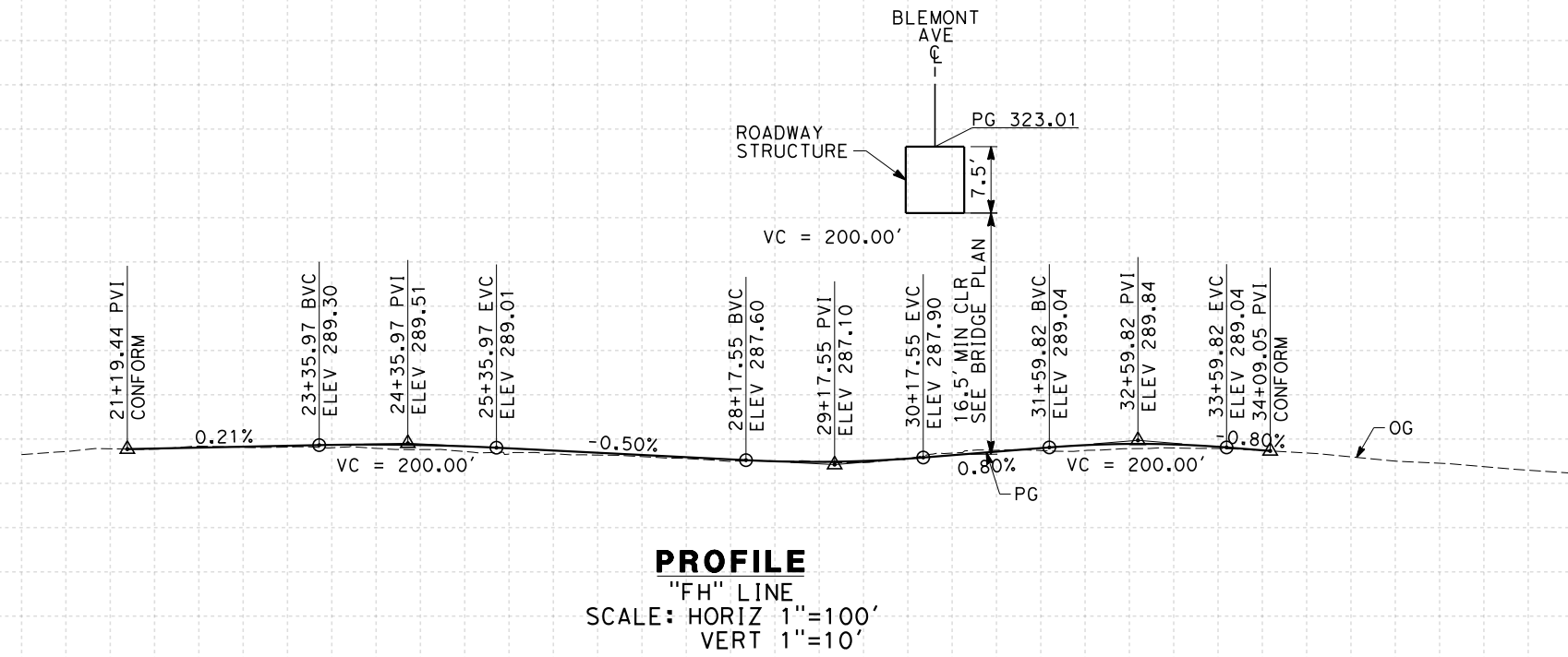
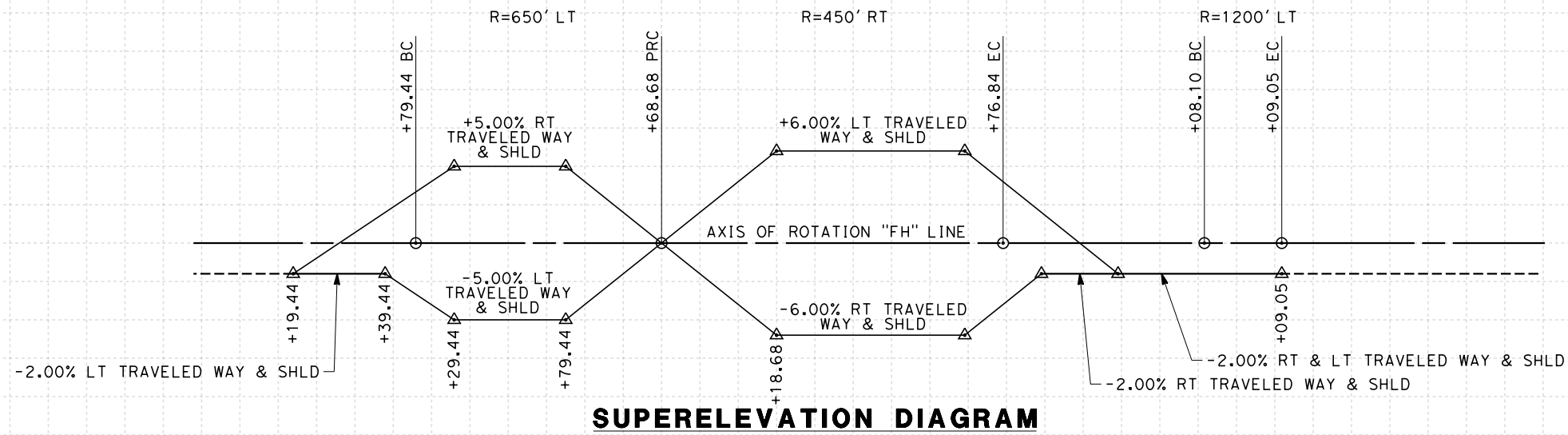
**CALIFORNIA HIGH-SPEED TRAIN PROJECT  
 MERCED TO FRESNO**  
 FRESNO SUBSECTION  
 ALIGNMENT F1  
 GRADE SEP PROFILE & SUPERELEVATION DIAGRAM  
 N WESLEY AVE

CONTRACT NO.  
HSR 06-0003  
 DRAWING NO.  
CT9567-A  
 SCALE  
AS SHOWN  
 SHEET NO.  
### OF ###

er-on-sudhausen 7/20/2011 6:08:20 PM 0:\1315177\4 Internal Project Data\4-03 Drawings\4-03-01 15% Design Sheets\Highway\HST 15% Design\AECOM\FB-CT9567-A-F1.dgn

**NOTES:**

1. MINIMUM VERTICAL CLEARANCE UNDER STRUCTURE IS 16.5' FROM ROAD SURFACE
2. VERTICAL DESIGN SPEED = 35 MPH
3. OG IS BASED UPON APPROXIMATED INTERMAP DTM
4. REFER TO SHEET CT1008 FOR LAYOUT



STATION	20	1	2	3	4	25	6	7	8	9	30	1	2	3	4	35	6	7	8	TOTAL	
Exc																					
Emb																					

DESIGNED BY	K. MING
DRAWN BY	E. SUDHAUSEN
CHECKED BY	J. MONG
IN CHARGE	A. LUFT
DATE	05/13/11

**RECORD SET 15%  
DESIGN SUBMISSION**

**NOT FOR  
CONSTRUCTION**



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

FRESNO SUBSECTION  
ALIGNMENT F1  
GRADE SEP PROFILE & SUPERELEVATION DIAGRAM  
N H ST

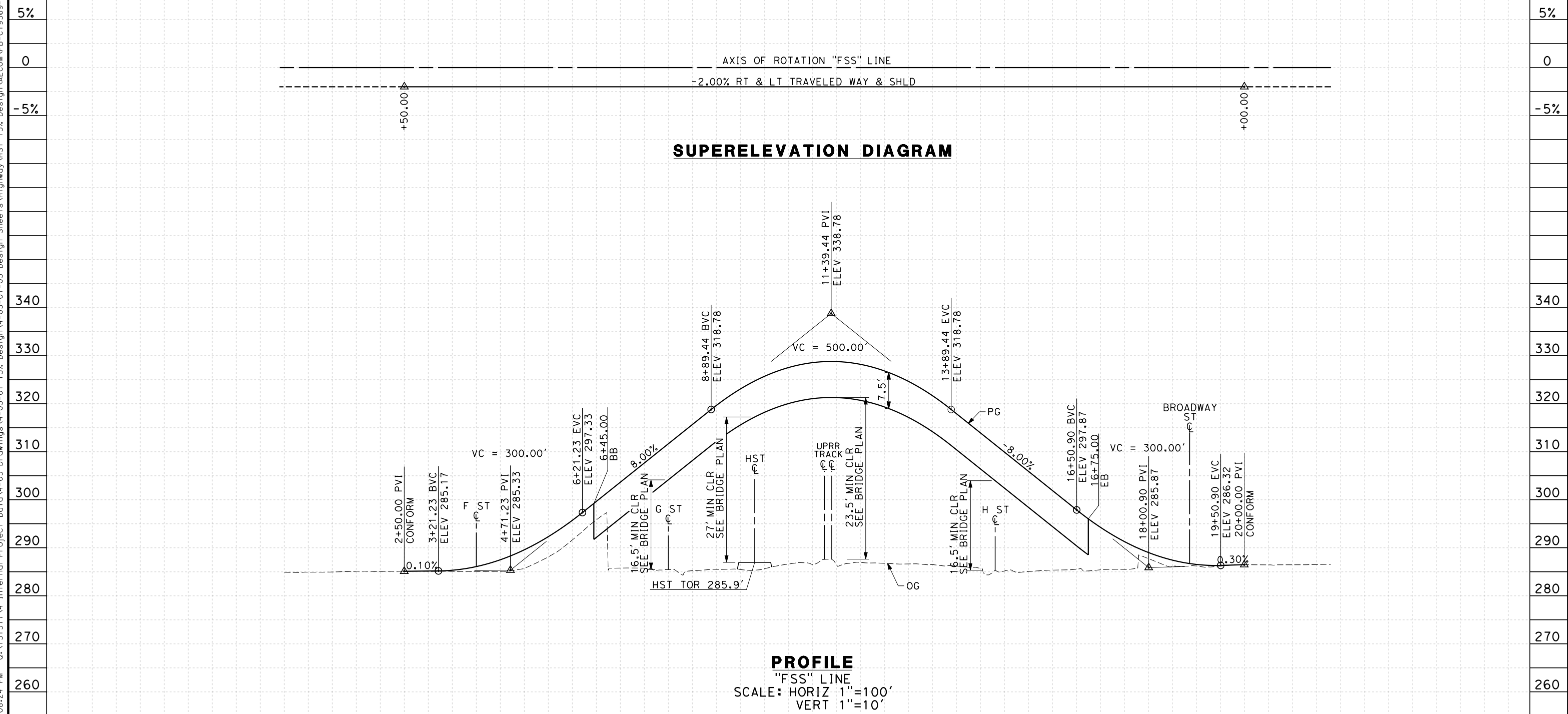
CONTRACT NO.	HSR 06-0003
DRAWING NO.	CT9568-A
SCALE	AS SHOWN
SHEET NO.	### OF ###



**NOTES:**

1. MINIMUM VERTICAL CLEARANCE OVER HST IS 27' FROM TOP OF RAIL
2. MINIMUM VERTICAL CLEARANCE OVER UPRR IS 23.5' FROM TOP OF RAIL
3. MINIMUM VERTICAL CLEARANCE OVER LOCAL STREET IS 16.5' FROM ROAD SURFACE
4. VERTICAL DESIGN SPEED = 30 MPH
5. OG IS BASED UPON APPROXIMATED INTERMAP DTM

7/20/2011 6:08:24 PM 0:\1315177\4 Internal Project Data\4-03 Drawings\4-03-01 15% Design\Sheets\Highway\HST 15% Design\AECOM\FB-CT9569-A-F1.dgn



STATION	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	TOTAL
Exc																								
Emb																								

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
K. MING  
 DRAWN BY  
E. SUDHAUSEN  
 CHECKED BY  
J. MONG  
 IN CHARGE  
A. LUFT  
 DATE  
05/13/11

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



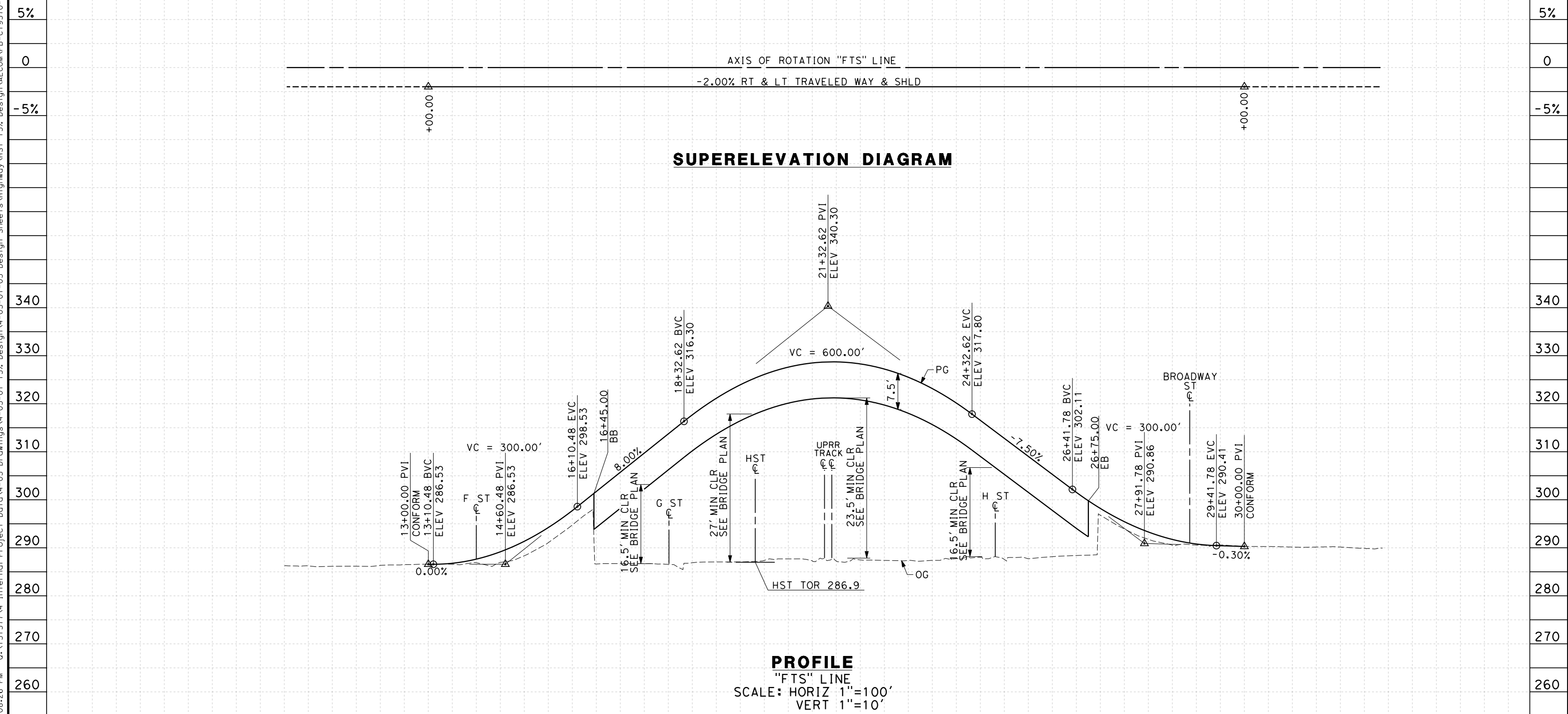
**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 FRESNO SUBSECTION  
 ALIGNMENT F1  
 GRADE SEP PROFILE & SUPERELEVATION DIAGRAM  
 STANISLAUS ST

CONTRACT NO.  
HSR 06-0003  
 DRAWING NO.  
CT9569-A  
 SCALE  
AS SHOWN  
 SHEET NO.  
### OF ###

**NOTES:**

1. MINIMUM VERTICAL CLEARANCE FOR HST IS 27' FROM TOP OF RAIL
2. MINIMUM VERTICAL CLEARANCE FOR BNSF IS 23.5' FROM TOP OF RAIL
3. MINIMUM VERTICAL CLEARANCE OVER LOCAL STREET IS 16.5' FROM ROAD SURFACE
4. VERTICAL DESIGN SPEED = 30 MPH
5. OG IS BASED UPON APPROXIMATED INTERMAP DTM

eron-sudhausen 7/20/2011 6:08:26 PM 0:\1315177\4 Internal Project Data\4-03 Drawings\4-03-01 15% Design\4-03-01-05 Design Sheets\Highway\HST 15% Design\AECOM\FB-CT9570-A-F1.dgn



STATION	10	1	2	3	4	15	6	7	8	9	20	1	2	3	4	25	6	7	8	9	30	1	2	3	TOTAL
Exc																									
Emb																									

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
K. MING  
 DRAWN BY  
E. SUDHAUSEN  
 CHECKED BY  
J. MONG  
 IN CHARGE  
A. LUFT  
 DATE  
05/13/11

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



**CALIFORNIA HIGH-SPEED TRAIN PROJECT  
MERCED TO FRESNO**  
 FRESNO SUBSECTION  
 ALIGNMENT F1  
 GRADE SEP PROFILE & SUPERELEVATION DIAGRAM  
 TUOLUMNE ST

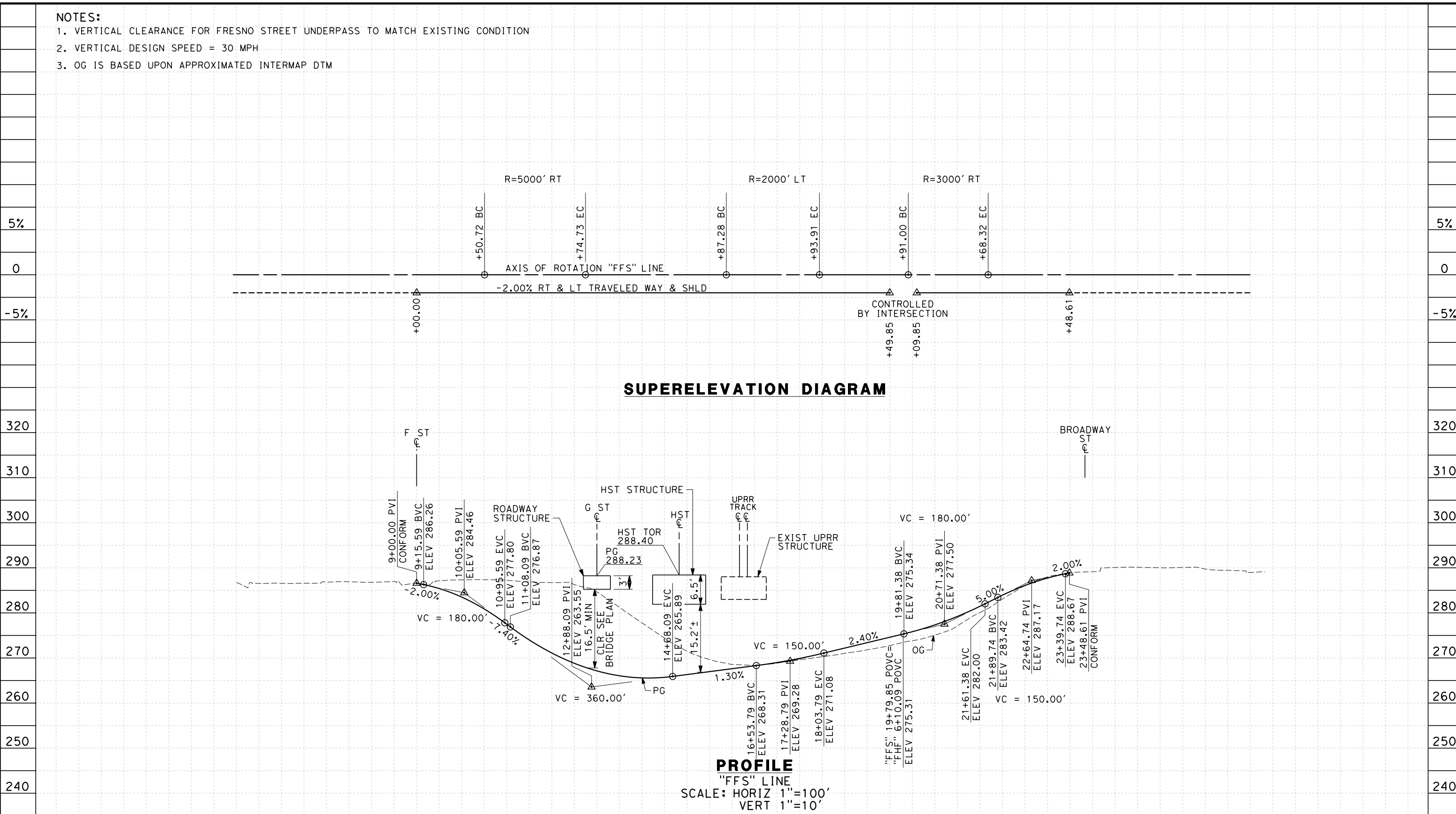
CONTRACT NO.  
HSR 06-0003  
 DRAWING NO.  
CT9570-A  
 SCALE  
AS SHOWN  
 SHEET NO.  
### OF ###



**NOTES:**

1. VERTICAL CLEARANCE FOR FRESNO STREET UNDERPASS TO MATCH EXISTING CONDITION
2. VERTICAL DESIGN SPEED = 30 MPH
3. OG IS BASED UPON APPROXIMATED INTERMAP DTM

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**SUPERELEVATION DIAGRAM**

**PROFILE**  
 "FFS" LINE  
 SCALE: HORIZ 1"=100'  
 VERT 1"=10'

STATION	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	TOTAL
Exc																													
Emb																													

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
 K. MING  
 DRAWN BY  
 E. SUDHAUSEN  
 CHECKED BY  
 J. MONG  
 IN CHARGE  
 A. LUFT  
 DATE  
 06/30/11

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



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 FRESNO SUBSECTION  
 ALIGNMENT F1  
 GRADE SEP PROFILE & SUPERELEVATION DIAGRAM  
 FRESNO ST

CONTRACT NO.  
 HSR 06-0003  
 DRAWING NO.  
 CT9571-A  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###

- NOTES:**
1. VERTICAL DESIGN SPEED = 40 MPH
  2. OG IS BASED UPON APPROXIMATED INTERMAP DTM
  3. REFER TO SHEET CT1013 FOR LAYOUT

5%

0

-5%

300

290

280

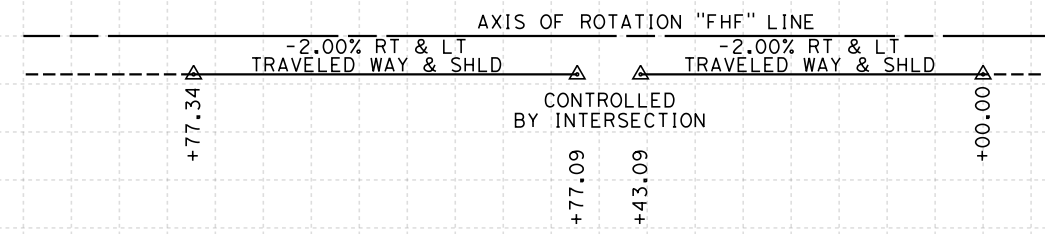
270

260

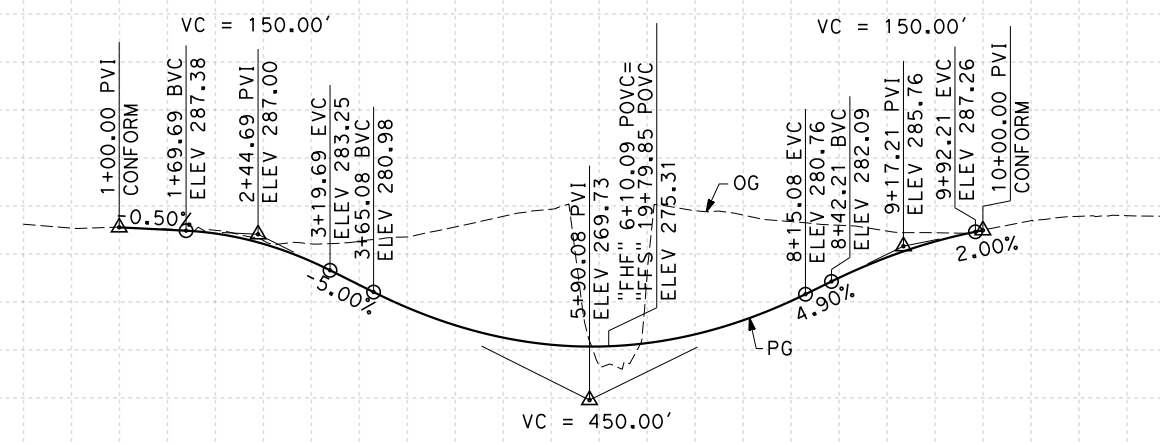
STATION

Exc  
Emb

REV	DATE	BY	CHK	APP	DESCRIPTION



**SUPERELEVATION DIAGRAM**



**PROFILE**

"FHF" LINE  
SCALE: HORIZ 1"=100'  
VERT 1"=10'

DESIGNED BY  
K. MING

DRAWN BY  
E. SUDHAUSEN

CHECKED BY  
J. MONG

IN CHARGE  
A. LUFT

DATE  
06/30/11

**RECORD SET 15%  
DESIGN SUBMISSION**

**NOT FOR  
CONSTRUCTION**



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

FRESNO SUBSECTION  
ALIGNMENT F1  
GRADE SEP PROFILE & SUPERELEVATION DIAGRAM  
H ST (FRESNO ST)

CONTRACT NO.  
HSR 06-0003

DRAWING NO.  
CT9572-A

SCALE  
AS SHOWN

SHEET NO.  
### OF ###

5%

0

-5%

300

290

280

270

260

TOTAL

7/20/2011 6:08:29 PM 0:\1315177\4 Internal Project Data\4-03 Drawings\4-03-01 15% Design\4-03-01-05 Design Sheets\Highway\HST 15% Design\AECOM\FB-CT9572-A-F1.dgn

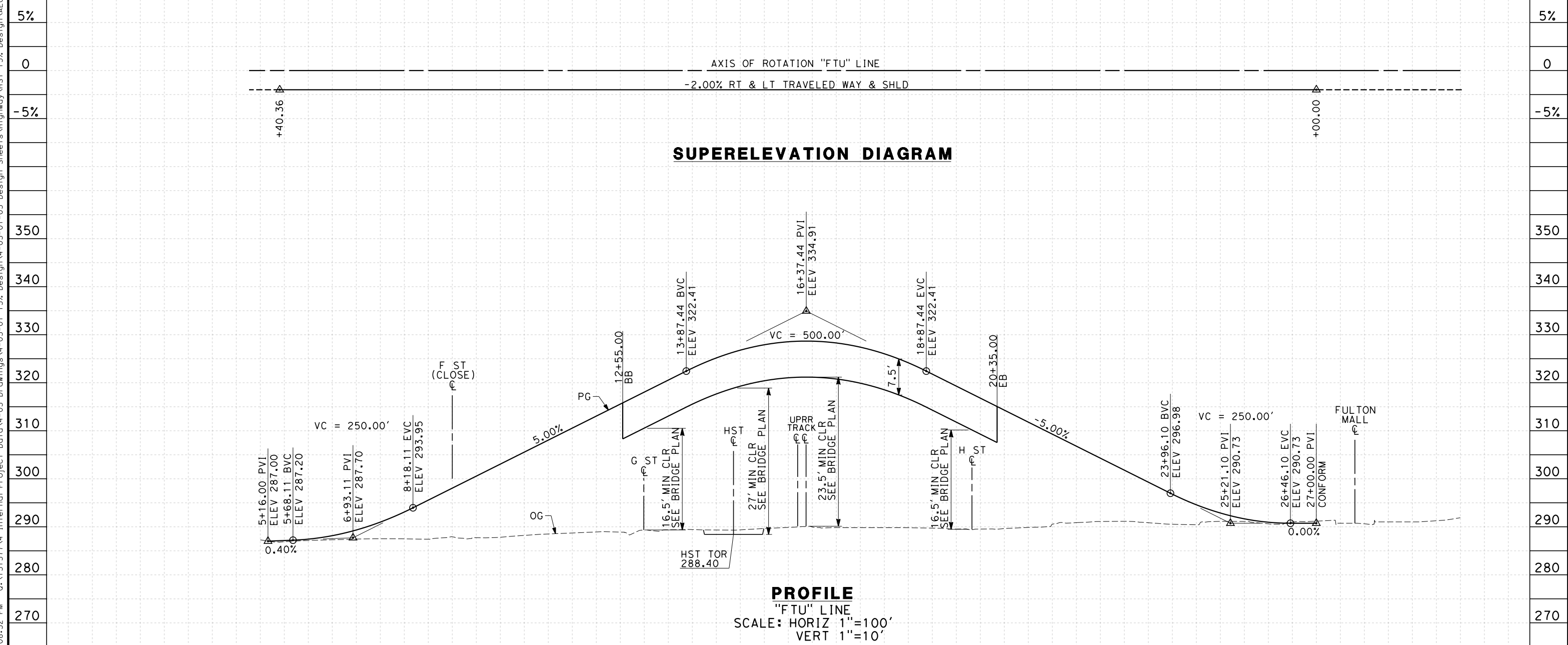




**NOTES:**

1. MINIMUM VERTICAL CLEARANCE OVER HST IS 27' FROM TOP OF RAIL
2. MINIMUM VERTICAL CLEARANCE OVER UPRR IS 23.5' FROM TOP OF RAIL
3. MINIMUM VERTICAL CLEARANCE OVER LOCAL STREET IS 16.5' FROM ROAD SURFACE
4. VERTICAL DESIGN SPEED = 30 MPH
5. OG IS BASED UPON APPROXIMATED INTERMAP DTM

7/20/2011 6:08:32 PM 0:\1315177\4 Internal Project Data\4-03 Drawings\4-03-01 15% Design\4-03-01-05 Design Sheets\Highway\HST 15% Design\AECOM\FB-CT9574-A-F1.dgn



STATION	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	TOTAL	
Exc																										
Emb																										

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
 K. MING  
 DRAWN BY  
 E. SUDHAUSEN  
 CHECKED BY  
 J. MONG  
 IN CHARGE  
 A. LUFT  
 DATE  
 05/13/11

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



**CALIFORNIA HIGH-SPEED TRAIN PROJECT  
 MERCED TO FRESNO**  
 FRESNO SUBSECTION  
 ALIGNMENT F1  
 GRADE SEP PROFILE & SUPERELEVATION DIAGRAM  
 TULARE ST (OVERHEAD)

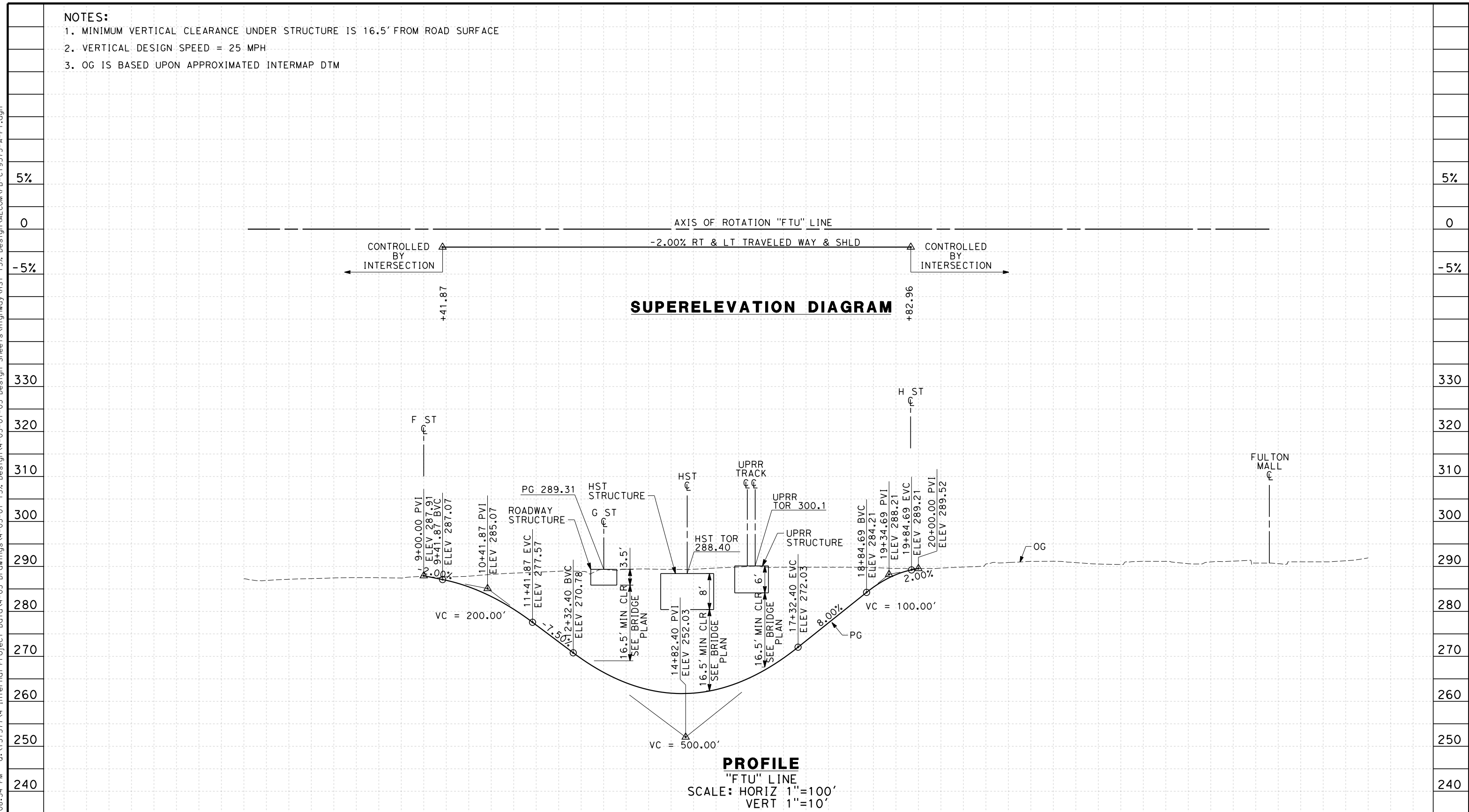
CONTRACT NO.  
 HSR 06-0003  
 DRAWING NO.  
 CT9574-A  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###



**NOTES:**

1. MINIMUM VERTICAL CLEARANCE UNDER STRUCTURE IS 16.5' FROM ROAD SURFACE
2. VERTICAL DESIGN SPEED = 25 MPH
3. OG IS BASED UPON APPROXIMATED INTERMAP DTM

7/20/2011 6:08:34 PM 0:\1315177\4 Internal Project Data\4-03 Drawings\4-03-01 15% Design\AECOM\FB-CT9575-A-F1.dgn



STATION	5	6	7	8	9	10	1	2	3	4	15	6	7	8	9	20	1	2	3	4	25	6	7	8	TOTAL	
Exc																										
Emb																										

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
K. MING  
 DRAWN BY  
E. SUDHAUSEN  
 CHECKED BY  
J. MONG  
 IN CHARGE  
A. LUFT  
 DATE  
05/13/11

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



**CALIFORNIA HIGH-SPEED TRAIN PROJECT  
MERCED TO FRESNO**  
 FRESNO SUBSECTION  
 ALIGNMENT F1  
 GRADE SEP PROFILE & SUPERELEVATION DIAGRAM  
 TULARE ST (UNDERPASS)

CONTRACT NO.  
HSR 06-0003  
 DRAWING NO.  
CT9575-A  
 SCALE  
AS SHOWN  
 SHEET NO.  
### OF ###

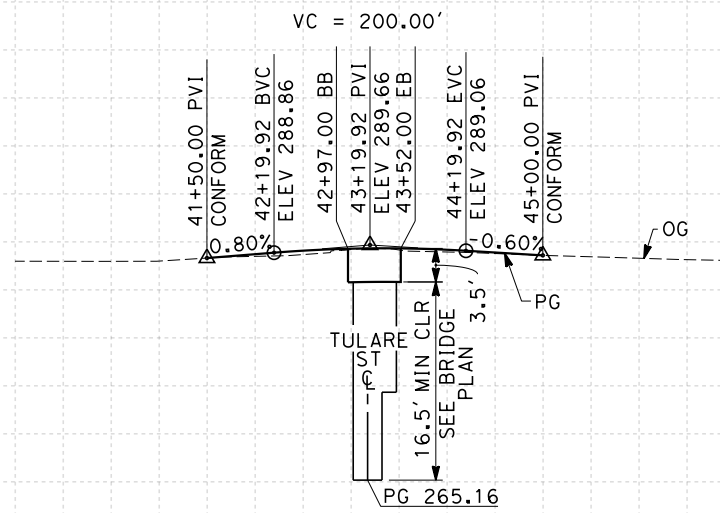
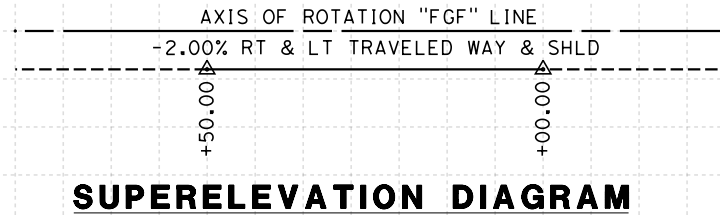
**NOTES:**

1. MINIMUM VERTICAL CLEARANCE OVER LOCAL STREET IS 16.5' FROM ROAD SURFACE
2. VERTICAL DESIGN SPEED = 40 MPH
3. OG IS BASED UPON APPROXIMATED INTERMAP DTM
4. REFER TO SHEET CT1017 FOR LAYOUT

7/20/2011 6:08:35 PM 0:\1315177\4 Internal Project Data\4-03 Drawings\4-03-01 15% Design\Sheets\Highway\HST 15% Design\AECOM\FB-CT9576-A-F1.dgn

5%  
0  
-5%  
  
320  
310  
300  
290  
280  
270  
260

5%  
0  
-5%  
  
320  
310  
300  
290  
280  
270  
260



**PROFILE**  
 "FGF" LINE  
 SCALE: HORIZ 1"=100'  
 VERT 1"=10'

STATION	40    1    2    3    4    45    6    7		TOTAL
CY	Exc		
	Emb		

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
 K. MING  
 DRAWN BY  
 E. SUDHAUSEN  
 CHECKED BY  
 J. MONG  
 IN CHARGE  
 A. LUFT  
 DATE  
 05/13/11

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



**CALIFORNIA HIGH-SPEED TRAIN PROJECT  
 MERCED TO FRESNO**  
 FRESNO SUBSECTION  
 ALIGNMENT F1  
 GRADE SEP PROFILE & SUPERELEVATION DIAGRAM  
 G ST (TULARE ST UNDERPASS)

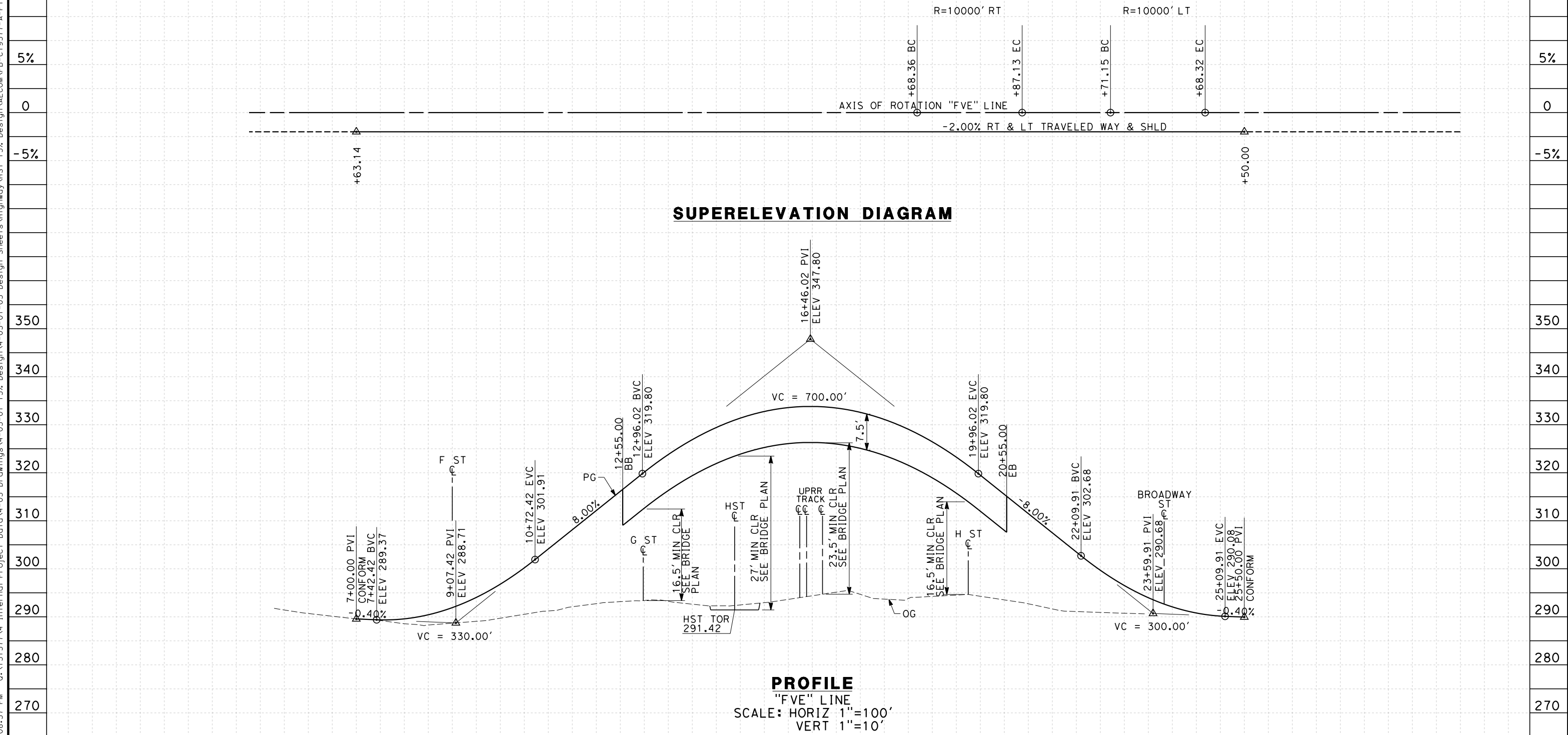
CONTRACT NO.  
 HSR 06-0003  
 DRAWING NO.  
 CT9576-A  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###



**NOTES:**

1. MINIMUM VERTICAL CLEARANCE OVER HST IS 27' FROM TOP OF RAIL
2. MINIMUM VERTICAL CLEARANCE OVER UPRR IS 23.5' FROM TOP OF RAIL
3. MINIMUM VERTICAL CLEARANCE OVER LOCAL STREET IS 16.5' FROM ROAD SURFACE
4. VERTICAL DESIGN SPEED = 30 MPH
5. OG IS BASED UPON APPROXIMATED INTERMAP DTM

7/20/2011 6:08:37 PM 0:\1315177\4 Internal Project Data\4-03 Drawings\4-03-01 15% Design\Sheets\Highway\HST 15% Design\AECOM\FB-CT9577-A-F1.dgn



STATION	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	TOTAL	
Exc																												
Emb																												

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**K. MING**  
 DRAWN BY  
**E. SUDHAUSEN**  
 CHECKED BY  
**J. MONG**  
 IN CHARGE  
**A. LUFT**  
 DATE  
**05/13/11**

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



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 FRESNO SUBSECTION  
 ALIGNMENT F1  
 GRADE SEP PROFILE & SUPERELEVATION DIAGRAM  
 VENTURA ST

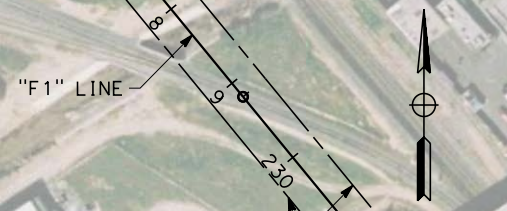
CONTRACT NO.  
 HSR 06-0003  
 DRAWING NO.  
 CT9577-A  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###



7/20/2011 6:08:44 PM 0:\1315177\4 Internal Project Data\4-03 Drawings\4-03-01 15% Design\4-03-01-05 Design Sheets\Highway\HST 15% Design\AECOM\FB-CR9578-A-F1.dgn

LINE DATA

NO.	BEARING	DISTANCE
3	N 00°00'00" E	207.32'



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
K. MING  
DRAWN BY  
E. SUDHAUSEN  
CHECKED BY  
J. MONG  
IN CHARGE  
A. LUFT  
DATE  
05/13/11

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



**CALIFORNIA HIGH-SPEED TRAIN PROJECT  
MERCED TO FRESNO**  
FRESNO SUBSECTION  
ALIGNMENT F1  
ROADWAY LAYOUT  
N THORNE AVE

CONTRACT NO.  
HSR 06-0003  
DRAWING NO.  
CR9578-A  
SCALE  
AS SHOWN  
SHEET NO.  
### OF ###



NOTES:  
 1. VERTICAL DESIGN SPEED = 15 MPH  
 2. OG IS BASED UPON APPROXIMATED INTERMAP DTM

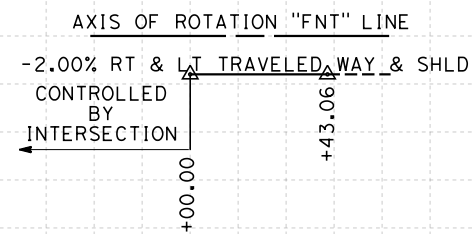
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5%  
0  
-5%

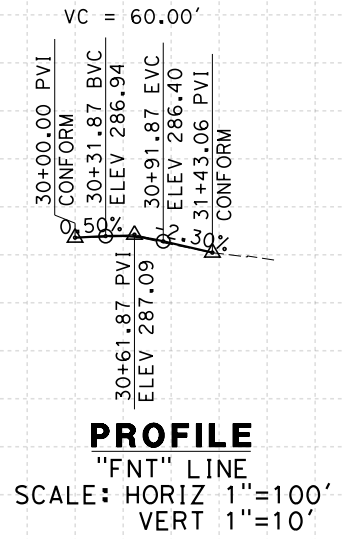
310  
300  
290  
280  
270

5%  
0  
-5%

310  
300  
290  
280  
270



**SUPERELEVATION DIAGRAM**



**PROFILE**

"FNT" LINE  
 SCALE: HORIZ 1"=100'  
 VERT 1"=10'

STATION	30	1	2	3	6	7	8	9	TOTAL
Exc									
Emb									

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
K. MING  
 DRAWN BY  
E. SUDHAUSEN  
 CHECKED BY  
J. MONG  
 IN CHARGE  
A. LUFT  
 DATE  
05/13/11

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



**CALIFORNIA HIGH-SPEED TRAIN PROJECT  
 MERCED TO FRESNO**  
 FRESNO SUBSECTION  
 ALIGNMENT F1  
 ROADWAY PROFILE & SUPERELEVATION DIAGRAM  
 N THORNE AVE

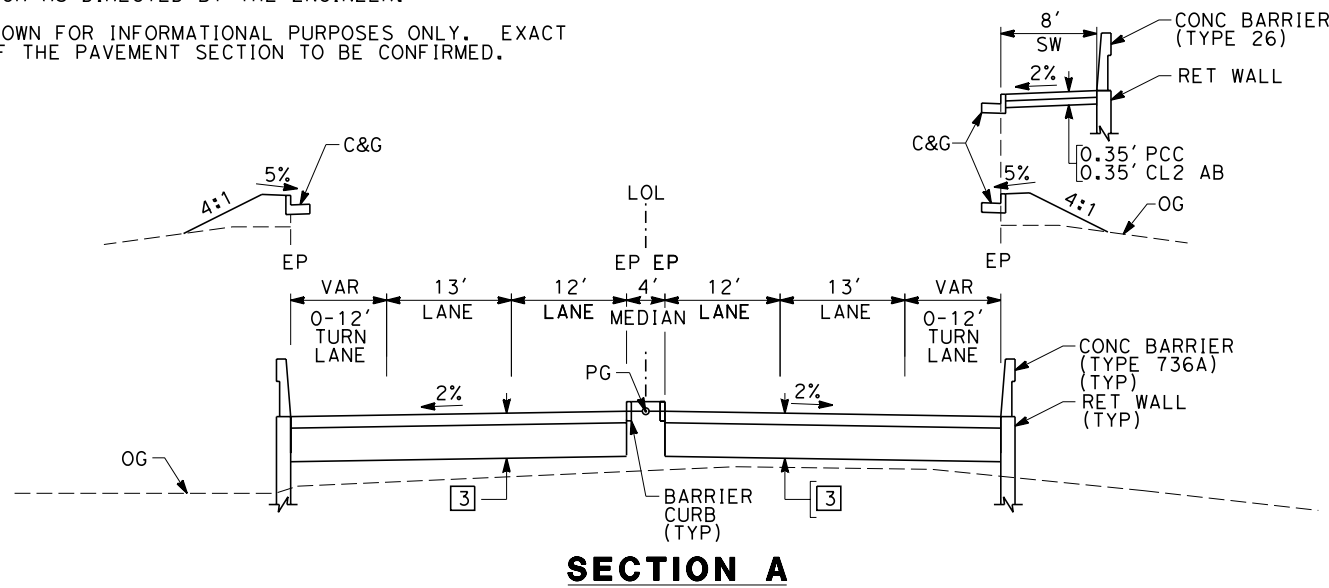
CONTRACT NO.  
HSR 06-0003  
 DRAWING NO.  
CR9579-A  
 SCALE  
AS SHOWN  
 SHEET NO.  
### OF ###

**NOTES:**

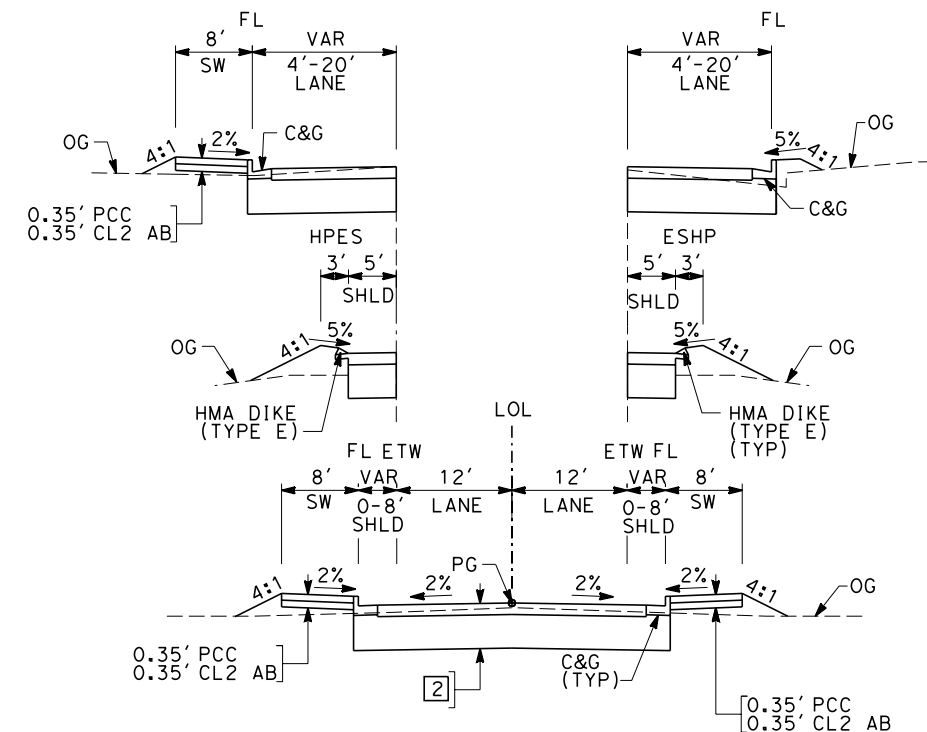
1. SUPERELEVATION AS SHOWN OR AS DIRECTED BY THE ENGINEER.
2. PAVEMENT SECTIONS ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY. EXACT DIMENSION AND MATERIAL OF THE PAVEMENT SECTION TO BE CONFIRMED.

**STRUCTURAL SECTIONS  
TYPICAL ROADWAY**

- 1 [0.65' HMA (TYPE A)  
1.75' CL2 AB
- 2 [0.35' HMA (TYPE A)  
1.00' CL2 AB
- 3 [0.40' HMA (TYPE A)  
1.50' CL2 AB
- 4 [0.55' HMA (TYPE A)  
1.50' CL2 AB

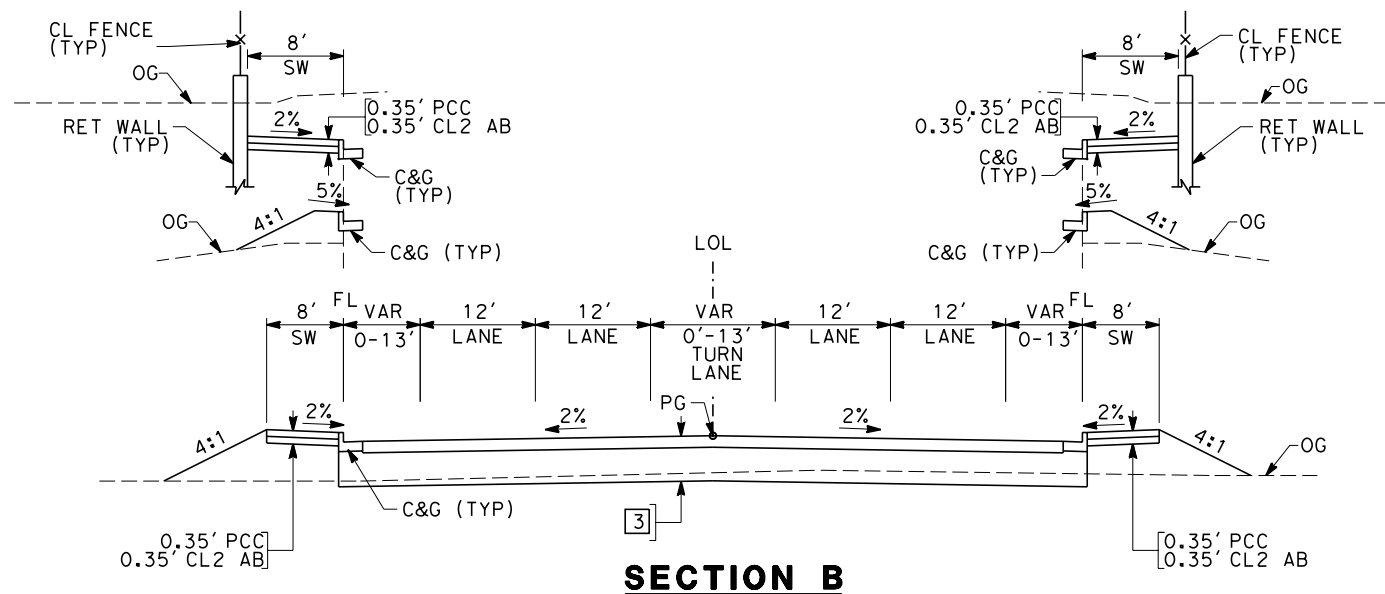


"FMC"	16+00.00 TO 22+60.00	"FBEL"	23+34.30 TO 29+55.58
"FMC"	26+50.00 TO 29+31.13	"FVE"	9+55.00 TO 12+55.00
"FOL"	13+05.96 TO 19+19.99	"FVE"	20+55.00 TO 22+71.15
"FOL"	24+82.94 TO 30+06.12	"FCH"	16+85.51 TO 21+20.00
"FBEL"	12+14.63 TO 17+09.30	"FCH"	29+45.00 TO 35+45.11



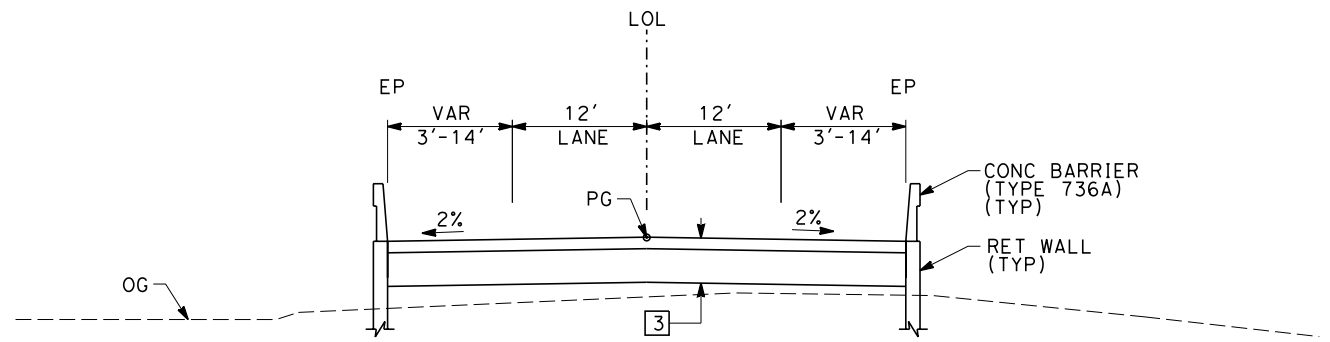
**SECTION C**

"FMCC"	10+00.00 TO 16+47.00	"FSL"	11+36.79 TO 17+27.26
"FNWE"	103+00.00 TO 107+00.00	"FSE"	1+00.00 TO 14+12.10
"FNWE"	112+00.00 TO 113+55.54	"FNT"	30+00.00 TO 31+46.01
"NGSB"	125+00.00 TO 167+12.45	"FGC"	0+50.00 TO 4+49.83
"FWES"	10+00.00 TO 14+69.32		



**SECTION B**

"FMC"	14+00.00 TO 16+00.00	"FTS"	13+00.00 TO 14+54.11
"FMC"	29+31.13 TO 32+08.89	"FTS"	28+43.67 TO 30+00.00
"FOL"	11+81.00 TO 13+05.96	"FVE"	7+00.00 TO 9+55.00
"FOL"	30+06.12 TO 33+00.00	"FVE"	22+71.15 TO 25+50.00
"FBEL"	8+00.00 TO 12+14.63	"FCH"	14+00.00 TO 16+85.51
"FBEL"	29+55.58 TO 32+00.00	"FCH"	35+45.11 TO 37+00.00
"FSS"	2+50.00 TO 4+38.84	"FGF"	30+38.00 TO 33+08.00
"FSS"	18+40.67 TO 20+00.00	"FGF"	33+92.00 TO 36+08.94
"FHF"	1+77.34 TO 10+00.00	"FGF"	41+50.00 TO 45+00.00



**SECTION D**

"FSS"	4+38.84 TO 6+45.00
"FSS"	16+75.00 TO 18+40.67
"FTS"	14+54.11 TO 16+75.00
"FTS"	26+75.00 TO 28+43.67

eron\_sudhausen 7/20/2011 6:08:51 PM 0:\1315177\4 Internal Project Data\4-03 Drawings\4-03-01 15% Design\AECOM\FB-CT9580-A-F1.dgn

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY K. MING
DRAWN BY E. SUDHAUSEN
CHECKED BY J. MONG
IN CHARGE A. LUF T
DATE 06/30/11

**RECORD SET 15%  
DESIGN SUBMISSION**

**NOT FOR  
CONSTRUCTION**



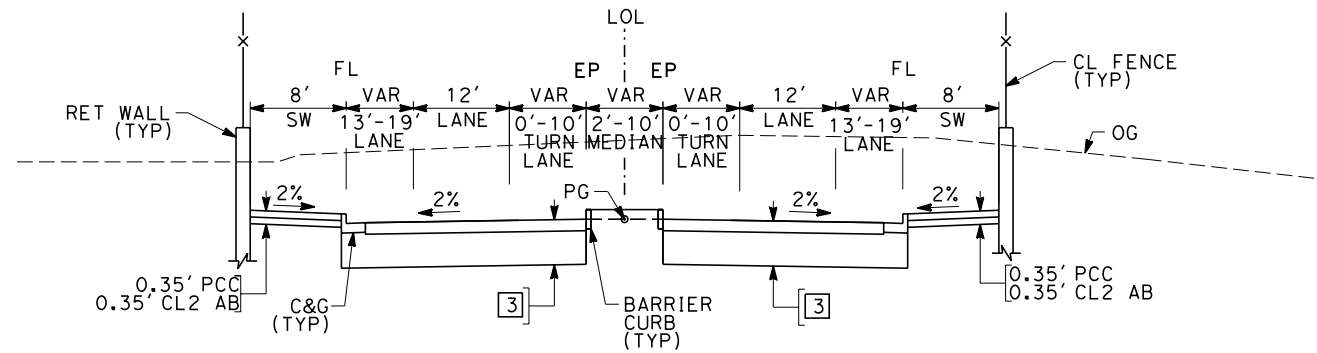
**CALIFORNIA HIGH-SPEED TRAIN PROJECT  
MERCED TO FRESNO**

FRESNO SUBSECTION  
ALIGNMENT F1  
ROADWAY / GRADE SEPARATION  
TYPICAL CROSS SECTIONS

CONTRACT NO. HSR 06-0003
DRAWING NO. CT9580-A
SCALE NO SCALE
SHEET NO. ### OF ###

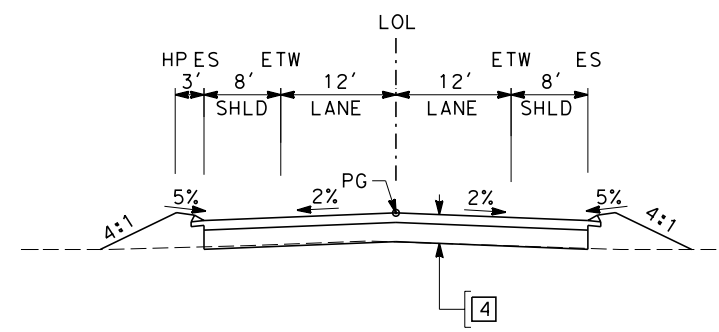


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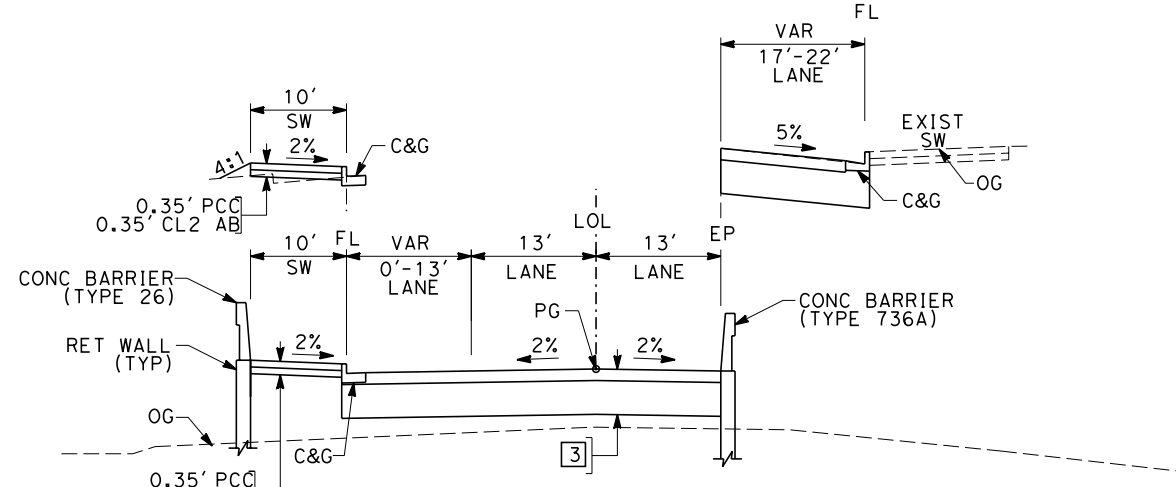
**SECTION E**

"FFS" 9+00.00 TO 23+48.61



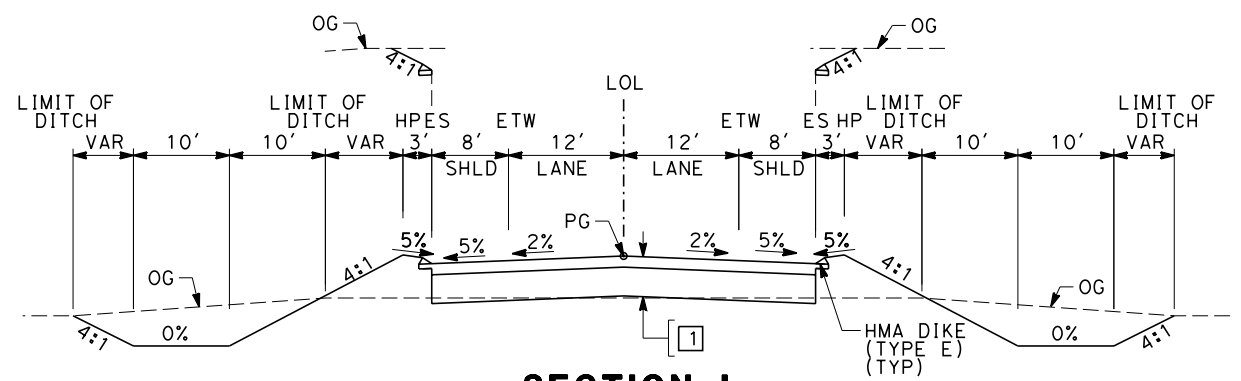
**SECTION H**

"FCE" 21+00.00 TO 24+00.00



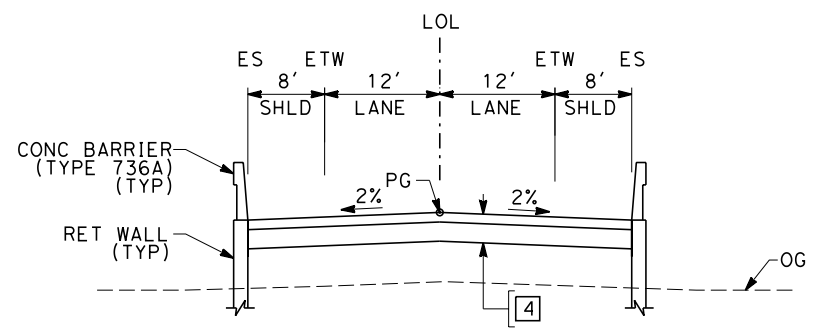
**SECTION F**

"FTU" 5+16.00 TO 12+55.43 (OVERHEAD OPTION)  
 "FTU" 20+34.30 TO 27+00.00 (OVERHEAD OPTION)



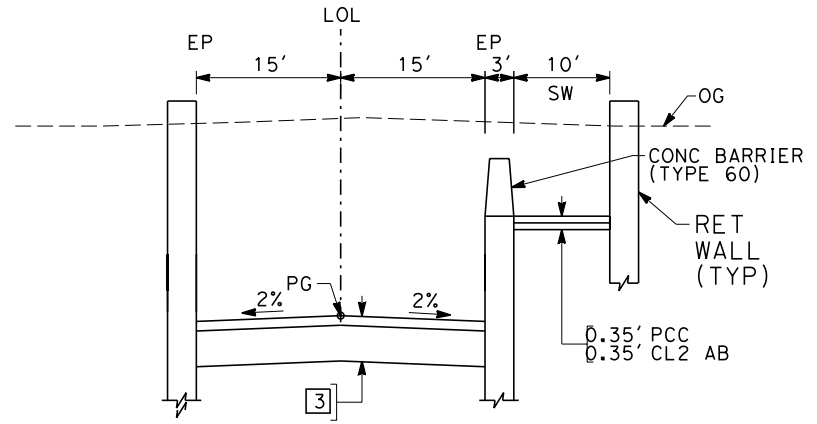
**SECTION I**

"FAM" 12+50.00 TO 24+63.00  
 "FAM" 28+13.00 TO 39+91.28



**SECTION G**

"FCE" 24+00.00 TO 32+60.00  
 "FCE" 37+80.00 TO 46+00.00



**SECTION J**

"FTU" 9+00.00 TO 20+00.00 (UNDERPASS OPTION)

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
 K. MING  
 DRAWN BY  
 E. SUDHAUSEN  
 CHECKED BY  
 J. MONG  
 IN CHARGE  
 A. LUFT  
 DATE  
 06/30/11

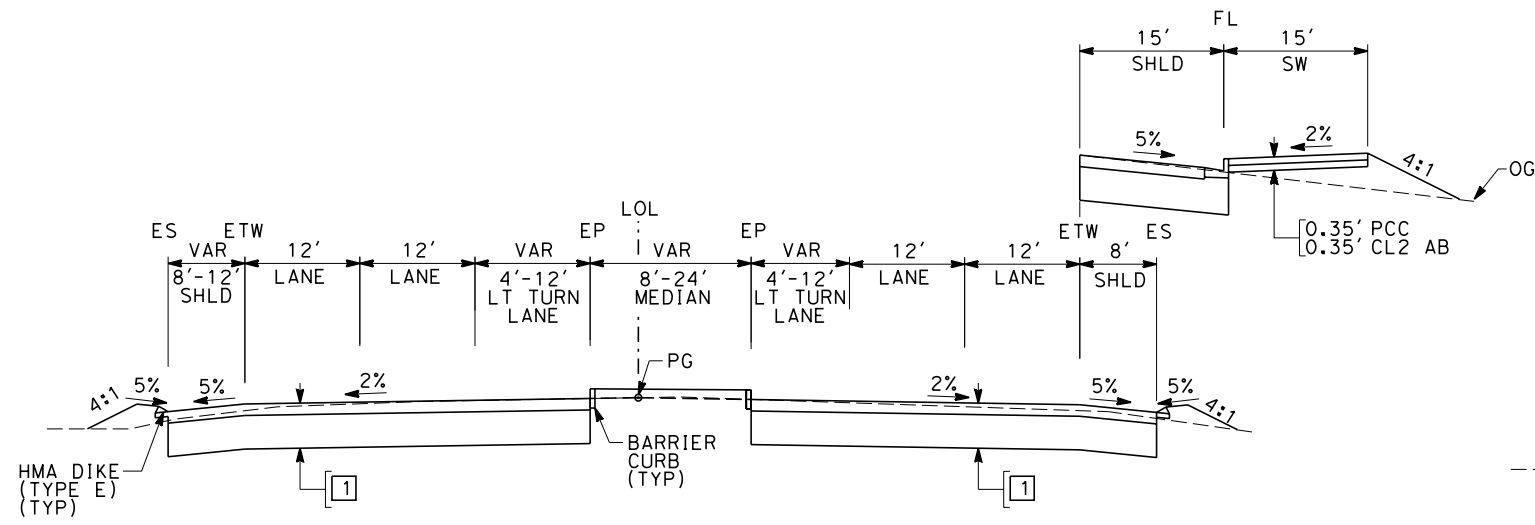
**RECORD SET 15%  
 DESIGN SUBMISSION**  
  
**NOT FOR  
 CONSTRUCTION**



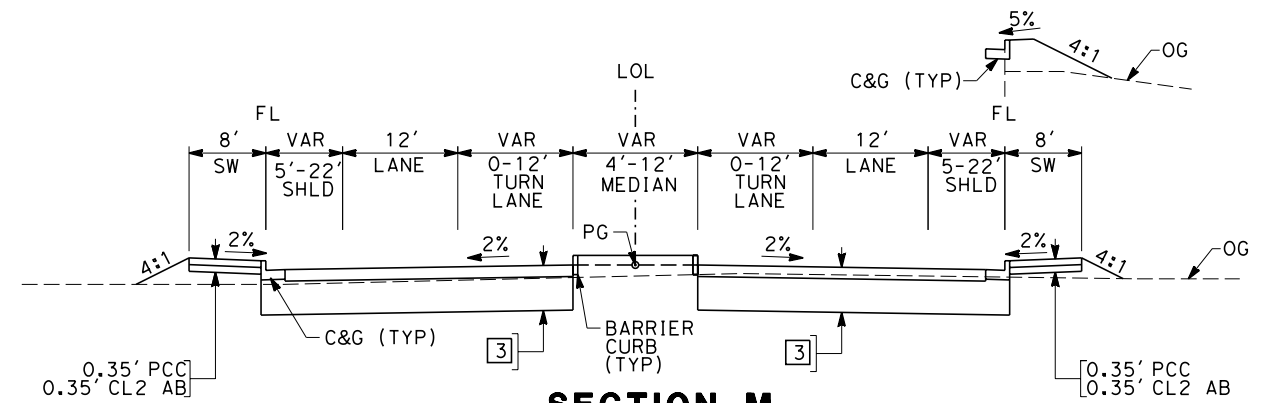
**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 FRESNO SUBSECTION  
 ALIGNMENT F1  
 ROADWAY / GRADE SEPARATION  
 TYPICAL CROSS SECTIONS

CONTRACT NO.  
 HSR 06-0003  
 DRAWING NO.  
 CT9581-A  
 SCALE  
 NO SCALE  
 SHEET NO.  
 ### OF ###

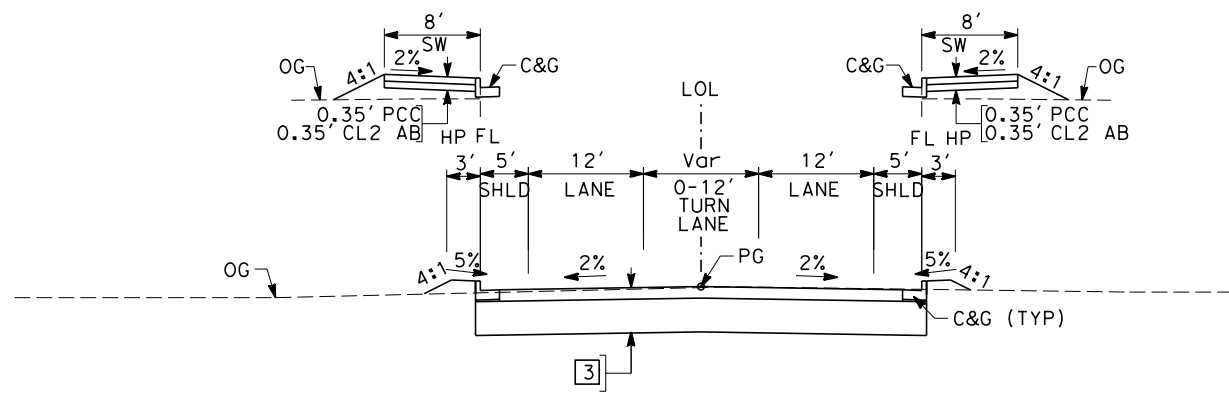
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**SECTION K**  
"SGSB" 2+00.00 TO 6+00.00



**SECTION M**  
"FNW" 13+00.00 TO 18+25.72



**SECTION L**  
"FH" 21+19.44 TO 34+09.05  
"FNW" 18+25.72 TO 20+00.00

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
K. MING  
 DRAWN BY  
E. SUDHAUSEN  
 CHECKED BY  
J. MONG  
 IN CHARGE  
A. LUFT  
 DATE  
05/13/11

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



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 FRESNO SUBSECTION  
 ALIGNMENT F1  
 ROADWAY / GRADE SEPARATION  
 TYPICAL CROSS SECTIONS

CONTRACT NO.  
HSR 06-0003  
 DRAWING NO.  
CT9582-A  
 SCALE  
NO SCALE  
 SHEET NO.  
### OF ###



7/22/2011 11:14:08 AM p:\60022962\task\_02\_merced-fresno\cadd\civil\sheet\package 2 - Ave 24 Wye & W. Chowchilla\Volume 2B - Ave 24 Wye-W.chowchilla Caltrans Facilities\Index Of Drawings\B7090-B

LOCATION NO.	SHT NO.	DWG NO.	DRAWING TITLE LINE 3	DRAWING TITLE LINE 4	DRAWING TITLE LINE 5	DRAWING TITLE LINE 6
GENERAL						
		B7090-B	UPRR/SR99 - (AVE 24)	GENERAL	INDEX OF DRAWINGS	SHEET 1 OF 3
		B7091-B	UPRR/SR99 - (AVE 24)	GENERAL	INDEX OF DRAWINGS	SHEET 2 OF 3
		B7092-B	UPRR/SR99 - (AVE 24)	GENERAL	INDEX OF DRAWINGS	SHEET 3 OF 3
		B7093-B	UPRR/SR99 - (AVE 24/WC)	GENERAL	ABBREVIATIONS, SYMBOLS AND NOTES	SHEET 1 OF 1
		B7100-B	UPRR/SR99 - (AVE 24)		INDEX MAP	SHEET 1 OF 5
		B7101-B	UPRR/SR99 - (WC)		INDEX MAP	SHEET 2 OF 5
		B7102-B	UPRR/SR99 - (AVE 24)		INDEX MAP	SHEET 3 OF 5
		B7103-B	UPRR/SR99 - (AVE 24)		INDEX MAP	SHEET 4 OF 5
		B7104-B	UPRR/SR99 - (WC)		INDEX MAP	SHEET 5 OF 5
		CB7100-B	UPRR/SR99 MAINLINE - (AVE 24/WC)	AVENUE 8 - OVERHEAD	KEY MAP	SHEET 1 OF 1
		CB7101-B	UPRR/SR99 MAINLINE - (AVE 24/WC)	AVENUE 9 - INTERCHANGE	KEY MAP	SHEET 1 OF 1
		CB7102-B	UPRR/SR99 MAINLINE - (AVE 24/WC)	AVENUE 11 - OVERHEAD	KEY MAP	SHEET 1 OF 1
		CB7103-B	UPRR/SR99 MAINLINE - (AVE 24)	GRADE SEPARATION - ROBERTSON BLVD (SR 233) ALT 1	KEY MAP	SHEET 1 OF 1
		CB7104-B	UPRR/SR99 WYE/MERCED - (AVE 24)	SANDY MUSH RD - INTERCHANGE	KEY MAP	SHEET 1 OF 1
		CB7105-B	UPRR/SR99 MERCED - (AVE 24/WC)	LE GRAND RD - INTERCHANGE	KEY MAP	SHEET 1 OF 1
		CB7106-B	UPRR/SR99 MAINLINE DO/MERCED DO - (WC)	GRADE SEPARATION - ROBERTSON BLVD (SR 233) ALT 1	KEY MAP	SHEET 1 OF 1
		CB7107-B	UPRR/SR99 MERCED DO - (WC)	SANDY MUSH RD - INTERCHANGE	KEY MAP	SHEET 1 OF 1
		CB7108-B	UPRR/SR99 MAINLINE - (AVE 24)	UNDERPASS - ROBERTSON BLVD (SR 233) ALT 2	KEY MAP	SHEET 1 OF 1
		CB7109-B	UPRR/SR99 MAINLINE DO/MERCED DO - (WC)	UNDERPASS - ROBERTSON BLVD (SR 233) ALT 2	KEY MAP	SHEET 1 OF 1
		CT7090-B	UPRR/SR99 - (AVE 24)	HIGHWAY	TYPICAL CROSS SECTIONS	SHEET 1 OF 2
		CT7091-B	UPRR/SR99 - (AVE 24)	HIGHWAY	TYPICAL CROSS SECTIONS	SHEET 2 OF 2
		CT7092-B	UPRR/SR99 - (AVE 24/WC)		GENERAL STAGE CONSTRUCTION AND TRAFFIC PLAN	SHEET 1 OF 1
LAYOUT						
14		CT7100-B	UPRR/SR99 MAINLINE - (AVE 24/WC)	AVENUE 8 - OVERHEAD	LAYOUT	SHEET 1 OF 3
14		CT7101-B	UPRR/SR99 MAINLINE - (AVE 24/WC)	AVENUE 8 - OVERHEAD	LAYOUT	SHEET 2 OF 3
14		CT7102-B	UPRR/SR99 MAINLINE - (AVE 24/WC)	AVENUE 8 - OVERHEAD	LAYOUT	SHEET 3 OF 3
15		CT7103-B	UPRR/SR99 MAINLINE - (AVE 24/WC)	AVENUE 9 - INTERCHANGE	LAYOUT	SHEET 1 OF 7
15		CT7104-B	UPRR/SR99 MAINLINE - (AVE 24/WC)	AVENUE 9 - INTERCHANGE	LAYOUT	SHEET 2 OF 7
15		CT7105-B	UPRR/SR99 MAINLINE - (AVE 24/WC)	AVENUE 9 - INTERCHANGE	LAYOUT	SHEET 3 OF 7
15		CT7106-B	UPRR/SR99 MAINLINE - (AVE 24/WC)	AVENUE 9 - INTERCHANGE	LAYOUT	SHEET 4 OF 7
15		CT7107-B	UPRR/SR99 MAINLINE - (AVE 24/WC)	AVENUE 9 - INTERCHANGE	LAYOUT	SHEET 5 OF 7
15		CT7108-B	UPRR/SR99 MAINLINE - (AVE 24/WC)	AVE 9 - INTERCHANGE SR 99 NB OFF/SB ON RAMP	LAYOUT	SHEET 6 OF 7
15		CT7109-B	UPRR/SR99 MAINLINE - (AVE 24/WC)	AVE 9 - INTERCHANGE SR 99 NB ON/SB OFF RAMP	LAYOUT	SHEET 7 OF 7
16		CT7110-B	UPRR/SR99 MAINLINE - (AVE 24/WC)	AVENUE 11 - OVERHEAD	LAYOUT	SHEET 1 OF 5
16		CT7111-B	UPRR/SR99 MAINLINE - (AVE 24/WC)	AVENUE 11 - OVERHEAD	LAYOUT	SHEET 2 OF 5
16		CT7112-B	UPRR/SR99 MAINLINE - (AVE 24/WC)	AVENUE 11 - OVERHEAD	LAYOUT	SHEET 3 OF 5
16		CT7113-B	UPRR/SR99 MAINLINE - (AVE 24/WC)	AVENUE 11 - OVERHEAD	LAYOUT	SHEET 4 OF 5
16		CT7114-B	UPRR/SR99 MAINLINE - (AVE 24/WC)	AVENUE 11 - OVERHEAD	LAYOUT	SHEET 5 OF 5
21		CT7115-B	UPRR/SR99 MAINLINE - (AVE 24)	GRADE SEPARATION - ROBERTSON BLVD (SR 233) ALT 1	LAYOUT	SHEET 1 OF 4
21		CT7116-B	UPRR/SR99 MAINLINE - (AVE 24)	GRADE SEPARATION - ROBERTSON BLVD (SR 233) ALT 1	LAYOUT	SHEET 2 OF 4
21		CT7117-B	UPRR/SR99 MAINLINE - (AVE 24)	GRADE SEPARATION - ROBERTSON BLVD (SR 233) ALT 1	LAYOUT	SHEET 3 OF 4
21		CT7118-B	UPRR/SR99 MAINLINE - (AVE 24)	GRADE SEPARATION - ROBERTSON BLVD (SR 233) ALT 1	LAYOUT	SHEET 4 OF 4
20		CT7119-B	UPRR/SR99 WYE/MERCED - (AVE 24)	GRADE SEPARATION - SANDY MUSH RD INTERCHANGE	LAYOUT	SHEET 1 OF 3
20		CT7120-B	UPRR/SR99 WYE/MERCED - (AVE 24)	GRADE SEPARATION - SANDY MUSH RD INTERCHANGE	LAYOUT	SHEET 2 OF 3
20		CT7121-B	UPRR/SR99 WYE/MERCED - (AVE 24)	GRADE SEPARATION - SANDY MUSH RD INTERCHANGE	LAYOUT	SHEET 3 OF 3
19		CT7122-B	UPRR/SR99 MERCED - (AVE 24/WC)	GRADE SEPARATION - LE GRAND RD INTERCHANGE	LAYOUT	SHEET 1 OF 5
19		CT7123-B	UPRR/SR99 MERCED - (AVE 24/WC)	GRADE SEPARATION - LE GRAND RD INTERCHANGE	LAYOUT	SHEET 2 OF 5
19		CT7124-B	UPRR/SR99 MERCED - (AVE 24/WC)	GRADE SEPARATION - LE GRAND RD INTERCHANGE	LAYOUT	SHEET 3 OF 5
19		CT7125-B	UPRR/SR99 MERCED - (AVE 24/WC)	GRADE SEPARATION - LE GRAND RD INTERCHANGE	LAYOUT	SHEET 4 OF 5
19		CT7126-B	UPRR/SR99 MERCED - (AVE 24/WC)	GRADE SEPARATION - LE GRAND RD INTERCHANGE	LAYOUT	SHEET 5 OF 5
19		CT7127-B	UPRR/SR99 MERCED - (AVE 24/WC)	GRADE SEPARATION - LE GRAND RD IC SR99 SB ON-RAMP	LAYOUT	SHEET 1 OF 2
19		CT7128-B	UPRR/SR99 MERCED - (AVE 24/WC)	GRADE SEPARATION - LE GRAND RD IC SR99 SB OFF-RAMP	LAYOUT	SHEET 2 OF 2
36		CT7129-B	UPRR/SR99 MAINLINE DO/MERCED DO - (WC)	GRADE SEPARATION - ROBERTSON BLVD (SR 233) ALT 1	LAYOUT	SHEET 1 OF 4
36		CT7130-B	UPRR/SR99 MAINLINE DO/MERCED DO - (WC)	GRADE SEPARATION - ROBERTSON BLVD (SR 233) ALT 1	LAYOUT	SHEET 2 OF 4
36		CT7131-B	UPRR/SR99 MAINLINE DO/MERCED DO - (WC)	GRADE SEPARATION - ROBERTSON BLVD (SR 233) ALT 1	LAYOUT	SHEET 3 OF 4
36		CT7132-B	UPRR/SR99 MAINLINE DO/MERCED DO - (WC)	GRADE SEPARATION - ROBERTSON BLVD (SR 233) ALT 1	LAYOUT	SHEET 4 OF 4
35		CT7133-B	UPRR/SR99 MERCED DO - (WC)	SANDY MUSH RD INTERCHANGE	LAYOUT	SHEET 1 OF 4
35		CT7134-B	UPRR/SR99 MERCED DO - (WC)	SANDY MUSH RD INTERCHANGE	LAYOUT	SHEET 2 OF 4
35		CT7135-B	UPRR/SR99 MERCED DO - (WC)	SANDY MUSH RD INTERCHANGE	LAYOUT	SHEET 3 OF 4
35		CT7136-B	UPRR/SR99 MERCED DO - (WC)	SANDY MUSH RD INTERCHANGE	LAYOUT	SHEET 4 OF 4
21		CT7137-B	UPRR/SR99 MAINLINE - (AVE 24)	UNDERPASS - ROBERTSON BOULEVARD (SR 233) ALT 2	LAYOUT	SHEET 1 OF 3
21		CT7138-B	UPRR/SR99 MAINLINE - (AVE 24)	UNDERPASS - ROBERTSON BOULEVARD (SR 233) ALT 2	LAYOUT	SHEET 2 OF 3
21		CT7139-B	UPRR/SR99 MAINLINE - (AVE 24)	UNDERPASS - ROBERTSON BOULEVARD (SR 233) ALT 2	LAYOUT	SHEET 3 OF 3
36		CT7140-B	UPRR/SR99 MAINLINE DO/MERCED DO - (WC)	UNDERPASS - ROBERTSON BOULEVARD (SR 233) ALT 2	LAYOUT	SHEET 1 OF 3
36		CT7141-B	UPRR/SR99 MAINLINE DO/MERCED DO - (WC)	UNDERPASS - ROBERTSON BOULEVARD (SR 233) ALT 2	LAYOUT	SHEET 2 OF 3
36		CT7142-B	UPRR/SR99 MAINLINE DO/MERCED DO - (WC)	UNDERPASS - ROBERTSON BOULEVARD (SR 233) ALT 2	LAYOUT	SHEET 3 OF 3
PROFILE						
14		CT8100-B	UPRR/SR99 MAINLINE - (AVE 24/WC)	AVENUE 8 - OVERHEAD	PROFILE	SHEET 1 OF 4
14		CT8101-B	UPRR/SR99 MAINLINE - (AVE 24/WC)	AVENUE 8 - OVERHEAD	PROFILE	SHEET 2 OF 4
14		CT8102-B	UPRR/SR99 MAINLINE - (AVE 24/WC)	AVENUE 8 - OVERHEAD	PROFILE	SHEET 3 OF 4
14		CT8103-B	UPRR/SR99 MAINLINE - (AVE 24/WC)	AVENUE 8 - OVERHEAD	PROFILE	SHEET 4 OF 4
15		CT8104-B	UPRR/SR99 MAINLINE - (AVE 24/WC)	AVENUE 9 - INTERCHANGE	PROFILE	SHEET 1 OF 11

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
DRAWN BY  
C. DELOS REYES  
CHECKED BY  
A. SILVER  
IN CHARGE  
A. BOONE  
DATE  
06/30/2011

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

UPRR/SR99 - (AVE 24)  
GENERAL  
INDEX OF DRAWINGS  
SHEET 1 OF 3

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
B7090-B  
SCALE  
NONE  
SHEET NO.  
### OF ###







**ABBREVIATIONS**

**ALIGNMENT**

HORIZONTAL  
 BC BEGINNING OF CURVE  
 EC END OF CURVE  
 PC POINT OF CURVE  
 PCC POINT OF COMPOUNT CURVES  
 PI POINT OF INTERSECTION OF TWO TANGENTS  
 POB POINT OF BEGINNING  
 POC POINT ON CURVE  
 POE POINT OF ENDING  
 POT POINT ON TANGENT  
 PRC POINT OF REVERSE CURVES  
 PT POINT OF TANGENCY  
 R RADIUS OF CURVATURE IN FEET  
 V, DS DESIGN VELOCITY IN MILES PER HOUR





VERTICAL  
 BVC BEGIN OF VERTICAL CURVE  
 EVC END OF VERTICAL CURVE  
 PVC POINT OF VERTICAL CURVE (BEGINNING OF CURVE)  
 PVI POINT OF VERTICAL INTERSECTION (OF TANGENTS)  
 PVT POINT OF VERTICAL TANGENCY (ENDING OF CURVE)  
 VC VERTICAL CURVE

**MISCELLANEOUS**

ALT ALTERNATIVE  
 AVE AVENUE  
 BB BEGIN BRIDGE  
 BEG BEGIN  
 BLVD BOULEVARD  
 CL CENTER LINE  
 CLR CLEAR  
 COL COLUMN  
 DWG DRAWING  
 EB END BRIDGE  
 ELEV ELEVATION  
 EQ EQUATION  
 ES EDGE OF SIDEWALK  
 ETW EDGE OF TRAVELED WAY  
 EXIST(E) EXISTING  
 FL FLOW LINE  
 HORIZ HORIZONTAL  
 HP HINGE POINT  
 HST HIGH SPEED TRAIN  
 HWY HIGHWAY  
 IC INTERCHANGE  
 IN INCH  
 L LENGTH  
 LT LEFT  
 MBGR METAL BEAM GUARD RAIL  
 ML MAINLINE  
 MPH MILES PER HOUR  
 MAX MAXIMUM  
 MIN MINIMUM  
 N NORTH  
 NB NORTH BOUND  
 No, NO NUMBER  
 NTS NOT TO SCALE  
 OG ORIGINAL GROUND  
 O/H OH OVERHEAD  
 PG&E PACIFIC GAS & ELECTRIC  
 PGL, FG PROFILE GRADE LINE  
 RET RETAINING  
 RR RAILROAD  
 RD ROAD  
 R/W RIGHT OF WAY  
 RT RIGHT  
 SB SOUTH BOUND  
 SHLD SHOULDER  
 SR STATE ROUTE  
 SHT SHEET  
 SS SANITARY SEWER  
 SSD STOPPING SIGHT DISTANCE  
 ST STREET  
 STA STATION  
 STD STANDARD  
 SD STORM DRAIN  
 STRUCT, STR STRUCTURE  
 T TANGENT  
 TEL TELEPHONE  
 (OH) OVERHEAD LINE  
 (UG) UNDERGROUND LINE

TOR TOP OF RAIL  
 TK TRACK  
 TYP TYPICAL  
 TBD TO BE DETERMINED  
 TF TELECOMMUNICATIONS FIBER OPTIC  
 UPRR UNION PACIFIC RAILROAD  
 VAR VARIES  
 V VERT VERTICAL  
 W WATER, WEST

**SYMBOLS**

— — — — — MATCH LINE  
 ————— HST TRACK  
 - - - - - PROPOSED HST RIGHT-OF-WAY  
 — + — + — FREIGHT/PASSENGER TRACK - EXISTING  
 — · · · · · EXISTING RIGHT-OF-WAY OR EXISTING BRIDGE FEATURES  
 —▲—▲—▲— RETAINING WALLS  
 - - - - - ORIGINAL GROUND  
 ——— G16 ——— GAS LINE (16")  
 - - - TC ——— COMMUNICATION LINE  
 - — W ——— WATER LINE  
 — FO ——— FIBER OPTIC LINE  
 — — E ——— ELECTRICAL LINE  
 × ELECTRICAL TOWER  
 ——— S ——— SEWER LINE  
 - - - SD ——— STORM DRAIN LINE  
 ——— 0 ——— FUEL LINE  
 - - - TC ——— TELEPHONE LINE  
 ——— P12 ——— PETROLEUM LINE (12")  
 ——— (OH) ——— OVERHEAD  
 NORTH ARROW  
 PVI  
 MBGR  
 DIRECTION OF TRAVEL  
 ——— 250 ——— PROPOSED CONTOUR

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REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
R. LI  
 DRAWN BY  
A. TRINH  
 CHECKED BY  
A. SILVER  
 IN CHARGE  
A. BOONE  
 DATE  
06/30/2011

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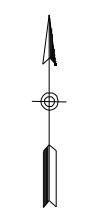
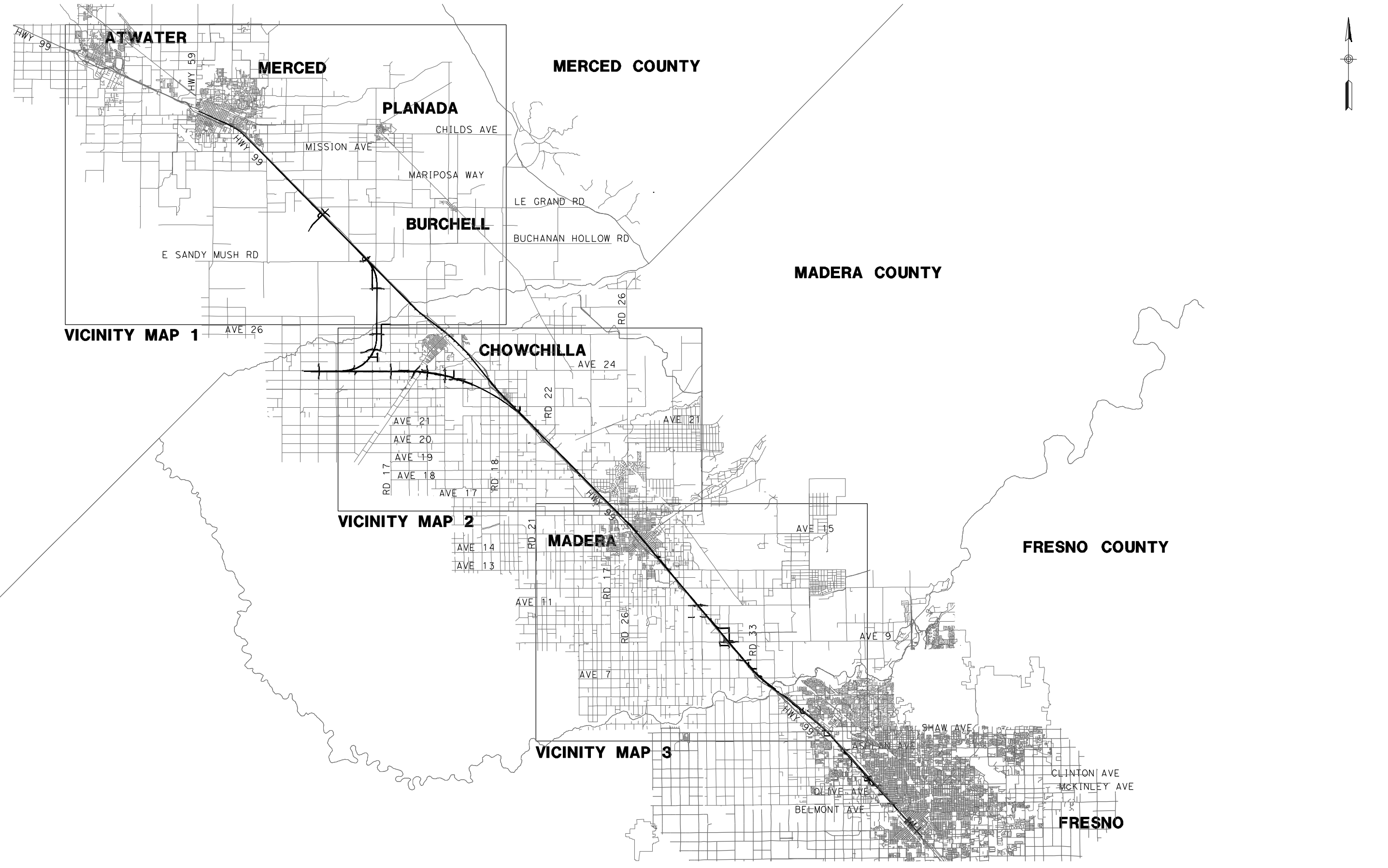


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 - (AVE 24/WC)  
 GENERAL  
 ABBREVIATIONS, SYMBOLS AND NOTES  
 SHEET 1 OF 1

CONTRACT NO.  
HSR06-007  
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B7093-B  
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**D. AYELE**  
DRAWN BY  
**A. TRINH**  
CHECKED BY  
**A. SILVER**  
IN CHARGE  
**A. BOONE**  
DATE  
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**AECOM**  
Technical Services, Inc.  
2020 L Street, Suite 300  
Sacramento, CA 95811

**CH2MHILL**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
UPRR/SR99 - (AVE 24)

INDEX MAP  
SHEET 1 OF 5

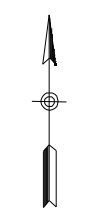
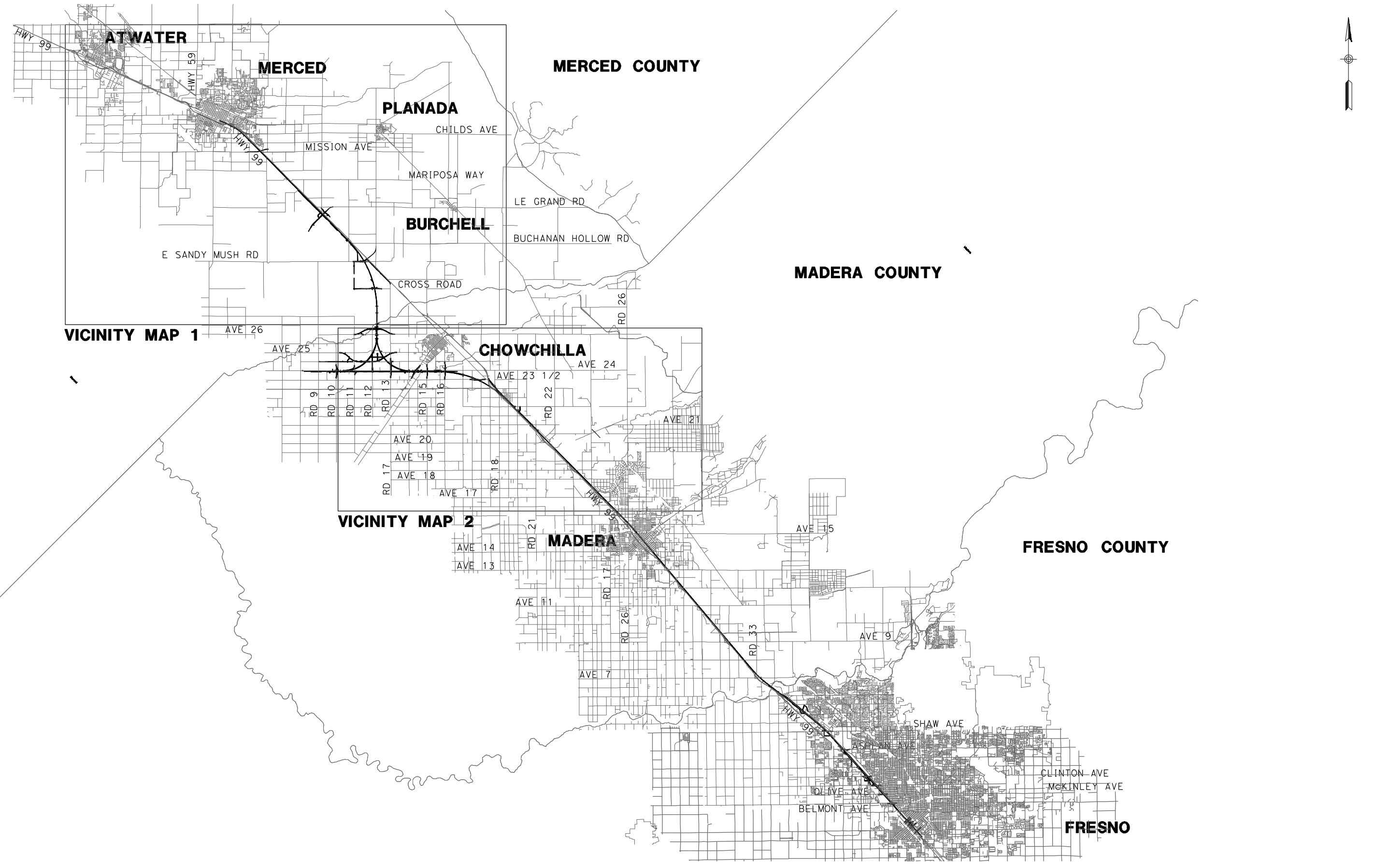
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**D. AYELE**  
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**A. TRINH**  
CHECKED BY  
**A. SILVER**  
IN CHARGE  
**A. BOONE**  
DATE  
**06/30/2011**

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Technical Services, Inc.  
2020 L Street, Suite 300  
Sacramento, CA 95811

**CH2MHILL**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
UPRR/SR99 - (WC)

INDEX MAP  
SHEET 2 OF 5

CONTRACT NO.  
HSR06-007

DRAWING NO.  
B7101-B

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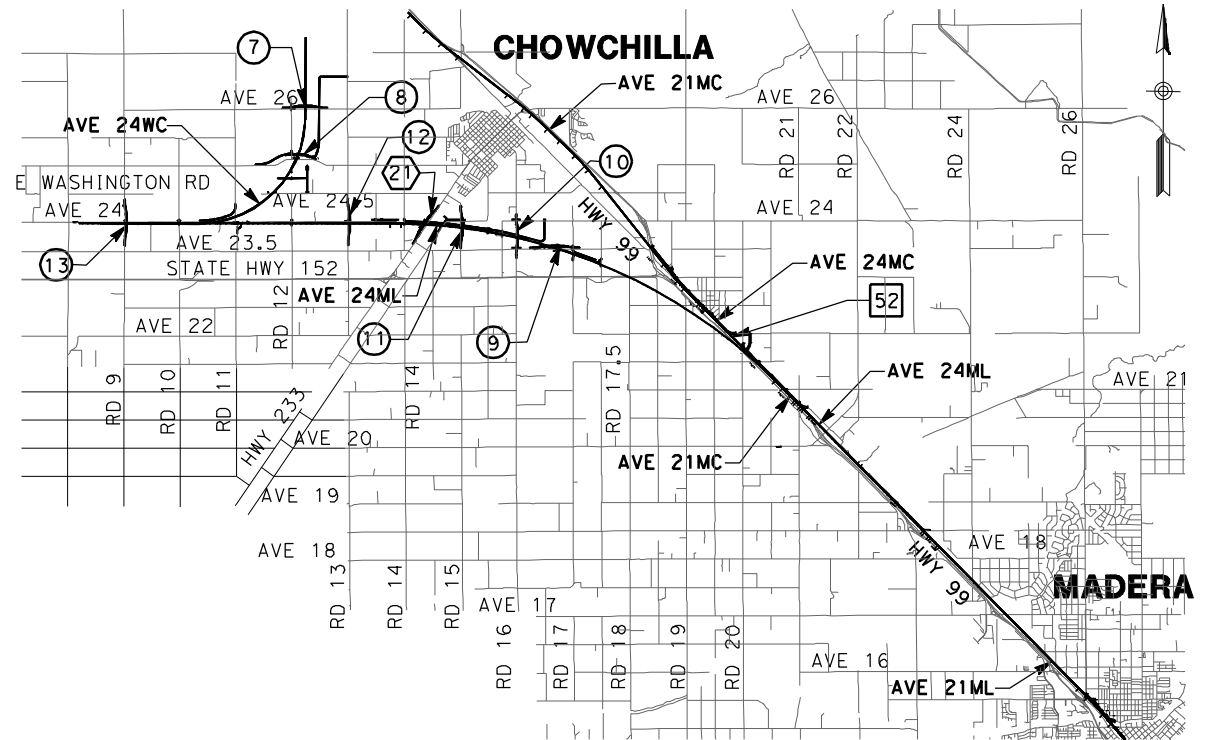
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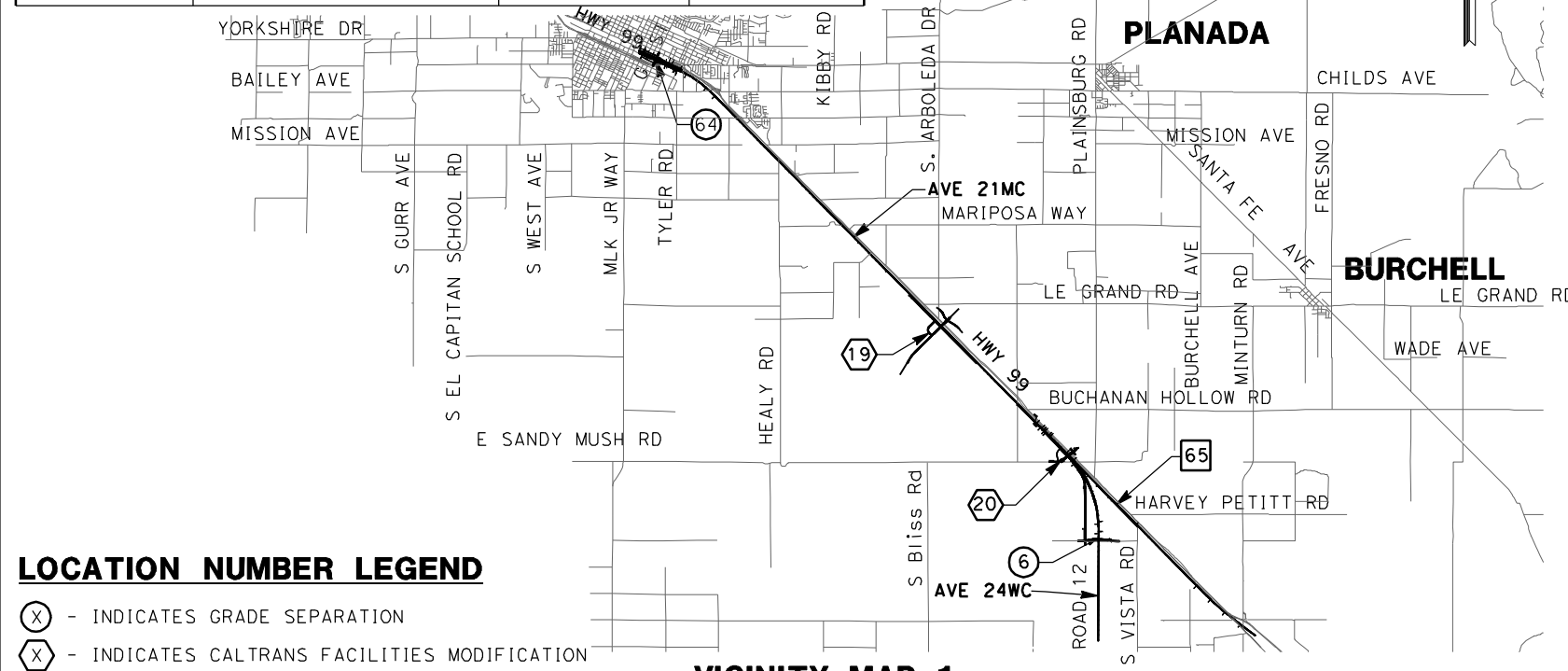
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LOCATION NO.	SHEET TITLE	ROADWAY DWG NO.	STR DWG NO.
6	GRADE SEPARATION - CROSS RD	CT5126-B - CT5128-B	ST1127
7	GRADE SEPARATION - AVENUE 26	CT5123-B - CT5125-B	ST1126
8	GRADE SEPARATION - AVENUE 25	CT5118-B - CT5122-B	ST1125
9	GRADE SEPARATION - AVENUE 23 1/2	CT5114-B - CT5117-B	ST1124
10	GRADE SEPARATION - ROAD 16	CT5111-B - CT5113-B	ST1123
11	GRADE SEPARATION - ROAD 15	CT5108-B - CT5110-B	ST1122
12	GRADE SEPARATION - ROAD 13	CT5104-B - CT5107-B	ST1138
13	GRADE SEPARATION - HEMLOCK RD (ROAD 9) ALT 1 GRADE SEPARATION - ROAD 9 ALONG EXIST ALT 2	CT5100-B - CT5103-B CT5190-B - CT5192-B	ST1120
64	GRADE SEPARATION - G STREET	CT0149-A	ST1180
14	AVENUE 8 - OVERCROSSING	CT7100-B - CT7102-B	ST1107
15	AVENUE 9 - INTERCHANGE	CT7103-B - CT7109-B	ST1108 - ST1109
16	AVENUE 11 - OVERCROSSING	CT7110-B - CT7114-B	ST1110
19	GRADE SEPARATION - LE GRAND INTERCHANGE	CT7122-B - CT7128-B	ST1114
20	GRADE SEPARATION - SANDY MUSH RD INTERCHANGE	CT7119-B - CT7121-B	ST1142
21	GRADE SEPARATION - ROBERTSON BLVD (SR233) ALT 1 UNDERPASS - ROBERTSON BLVD (SR233) ALT 2	CT7115-B - CT7118-B CT7137-B - CT7139-B	ST1141

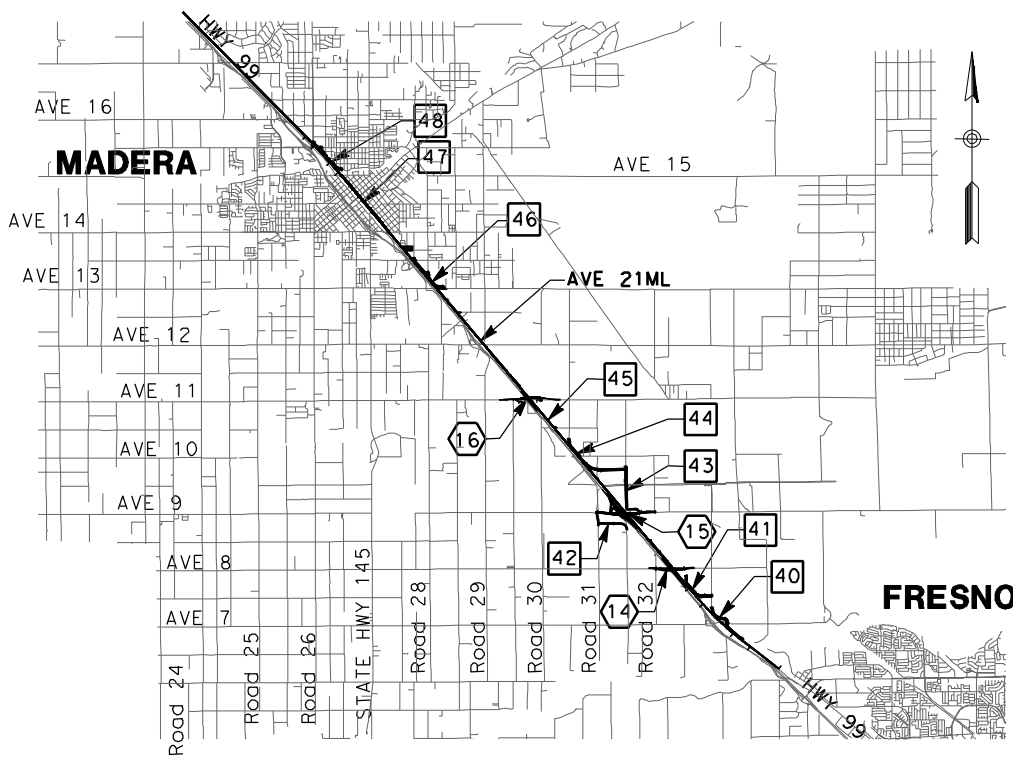
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40	ROAD 33	CR9100-B
41	PROPOSED ROAD	CR9101-B
42	ROAD 31 & GOLDEN STATE BLVD AT AVENUE 9	CR9102-B
43	ROAD 31 & GOLDEN STATE BLVD AT AVENUE 9 ROAD 31 1/2	CR9103-B CR9104-B
44	ROAD 30 1/2	CR9105-B - CR9106-B
45	FRONTAGE ROAD ROAD 30 AT AVENUE 11	CR9107-B CR9108-B - CR9109-B
46	S. KNOX ST	CR9110-B
48	SHARON BLVD & E ST	CR9111-B
47	N. E ST AND S. E ST	CR9112-B
52	FAIRMEAD BLVD	CR9113-B - CR9116-B
65	PROPOSED WEST FRONTAGE ROAD	CR9117-B - CR9118-B



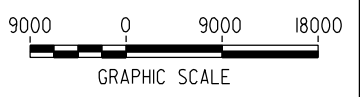
**VICINITY MAP 2**



**VICINITY MAP 1**



**VICINITY MAP 3**



**LOCATION NUMBER LEGEND**

- (X) - INDICATES GRADE SEPARATION
- (X) - INDICATES CALTRANS FACILITIES MODIFICATION
- (X) - INDICATES LOCAL ROAD RELOCATION

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**D. AYELE**  
DRAWN BY  
**A. TRINH**  
CHECKED BY  
**A. SILVER**  
IN CHARGE  
**A. BOONE**  
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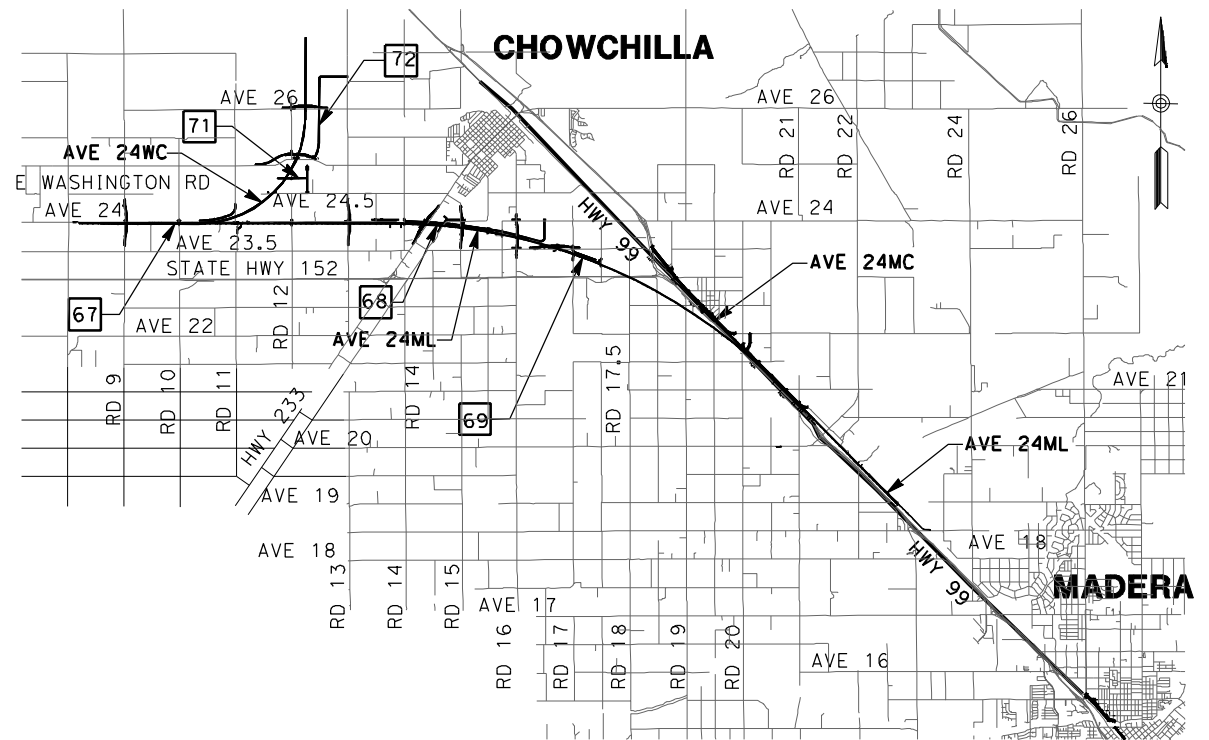
**CALIFORNIA HIGH-SPEED TRAIN PROJECT  
MERCED TO FRESNO**  
UPPR/SR99 - (AVE 24)

INDEX MAP  
SHEET 3 OF 5

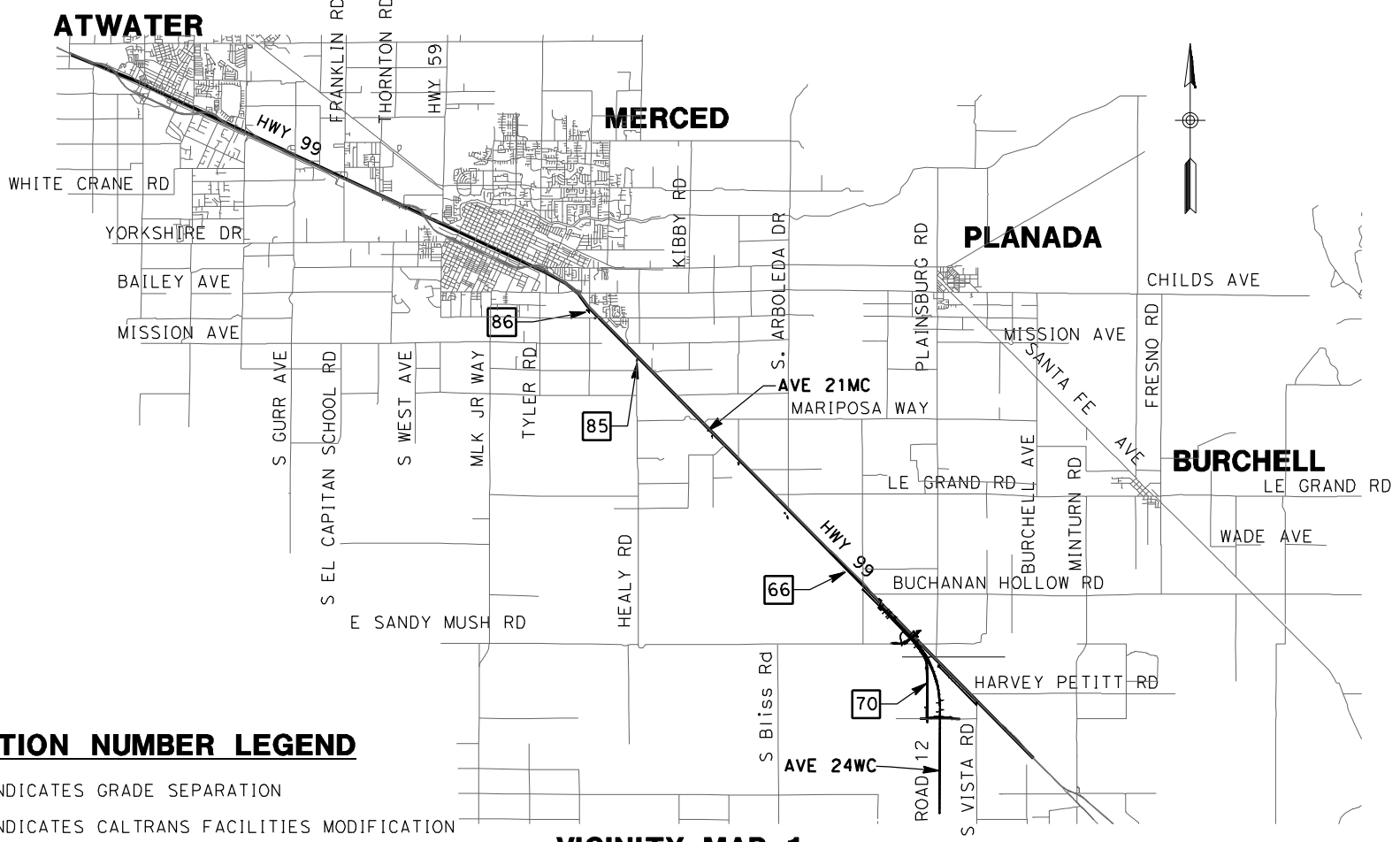
CONTRACT NO.  
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B7102-B  
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LOCATION NO.	SHEET TITLE	ROADWAY DWG NO.
66	PROPOSED WEST FRONTAGE ROAD	CR9119-B - CR9125-B
67	SOUTH FRONTAGE ROAD PROPOSED AVENUE 24 WYE SOUTH FRONTAGE ROAD NORTH AND SOUTH FRONTAGE ROAD	CR9130-B - CR9131-B CR9132-B CR9133-B - CR9134-B CR9135-B
68	NORTH AND SOUTH FRONTAGE ROAD	CR9136-B - CR9138-B
69	NORTH FRONTAGE ROAD & ROAD 16 1/2 NORTH & SOUTH FRONTAGE ROAD AVENUE 24	CR9139-B - CR9140-B CR9141-B - CR9142-B
70	ROAD 12	CR9143-B
71	AVENUE 24 1/2 ROAD 12 1/4 & AVENUE 24 1/2 ROAD 12 1/4	CR9144-B CR9145-B CR9146-B
72	ROAD 12 1/2 ROAD 12 1/2 & AVENUE 26 1/2 AVENUE 26 1/2	CR9147-B CR9148-B CR9149-B
85	HEALY ROAD	CR9176-B
86	GERARD AVENUE/CALTRANS FRONTAGE ROAD	CR9177-B



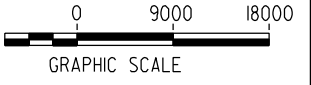
**VICINITY MAP 2**



**VICINITY MAP 1**

**LOCATION NUMBER LEGEND**

- (X) - INDICATES GRADE SEPARATION
- (X) - INDICATES CALTRANS FACILITIES MODIFICATION
- (X) - INDICATES LOCAL ROAD RELOCATION



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DESIGNED BY  
**D. AYELE**  
DRAWN BY  
**A. TRINH**  
CHECKED BY  
**A. SILVER**  
IN CHARGE  
**A. BOONE**  
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**CALIFORNIA HIGH-SPEED TRAIN PROJECT  
MERCED TO FRESNO**  
UPPR/SR99 - (AVE 24)

INDEX MAP  
SHEET 4 OF 5

CONTRACT NO.  
HSR06-007

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B7103-B

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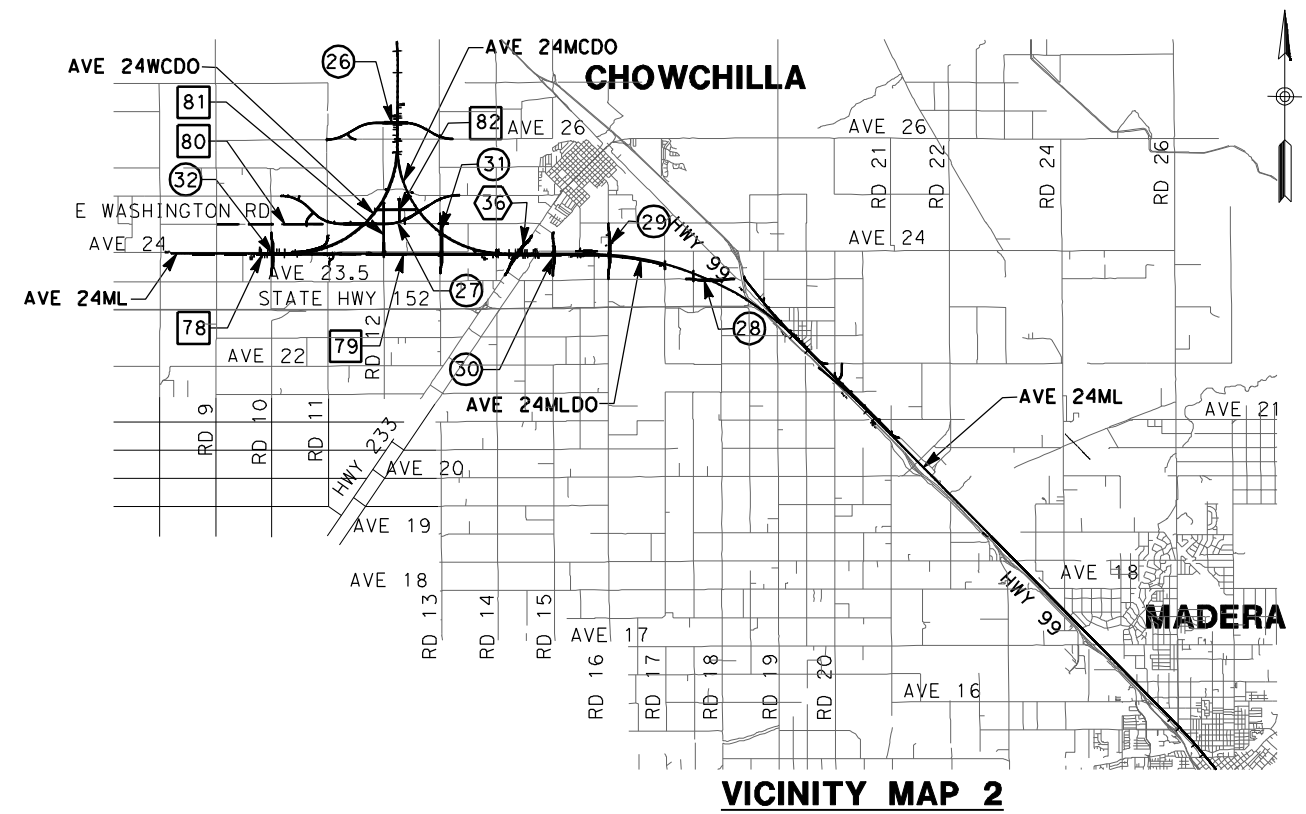
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LOCATION NO.	SHEET TITLE	ROADWAY DWG NO.	STR DWG NO.
25	GRADE SEPARATION - CROSS ROAD	CT5179-B - CT5181-B	ST1136
26	GRADE SEPARATION - AVENUE 26 ALT 1 UNDERPASS - AVENUE 26 ALT 2	CT5168-B - CT5177-B CT5187-B - CT5189-B	ST1135
27	GRADE SEPARATION - AVENUE 25	CT5150-B - CT5166-B	ST1133 & ST1134
28	GRADE SEPARATION - AVENUE 23 1/2	CT5146-B - CT5149-B	ST1132
29	GRADE SEPARATION - ROAD 16	CT5142-B - CT5145-B	ST1131
30	GRADE SEPARATION - ROAD 15	CT5138-B - CT5141-B	ST1130
31	GRADE SEPARATION - ROAD 13	CT5132-B - CT5137-B	ST1129 & ST1137
32	GRADE SEPARATION - ROAD 10 ALT 1 GRADE SEPARATION - ROAD 10 ALONG EXIST ALT 2	CT5129-B - CT5131-B CT5193-B - CT5195-B	ST1128
35	SANDY MUSH RD INTERCHANGE	CT7133-B - CT7136-B	ST1142
36	GRADE SEPARATION - ROBERTSON BLVD (SR 233) ALT 1 UNDERPASS - ROBERTSON BLVD (SR 233) ALT 2	CT7129-B - CT7132-B CT7140-B - CT7142-B	ST1143

LOCATION NO.	SHEET TITLE	ROADWAY DWG NO.
66	PROPOSED WEST FRONTAGE ROAD	CR9172-B - CR9175-B
75	LOCAL ROAD - WEST FRONTAGE ROAD	CR9126-B - CR9127-B
76	LOCAL ROAD - SANDY MUSH ROAD LOCAL ROAD - WEST FRONTAGE ROAD	CR9152-B CR9128-B - CR9129-B
77	LOCAL ROAD - ROAD 11 LOCAL ROAD - CROSS ROAD	CR9150-B - CR9151-B CR9153-B
78	SOUTH FRONTAGE ROAD AVENUE 24	CR9159-B CR9160-B
79	SOUTH FRONTAGE ROAD LOCAL ROAD - FRONTAGE ROAD LOCAL ROAD - FRONTAGE ROAD & AVE 24 LOCAL ROAD - FRONTAGE ROAD	CR9161-B - CR9163-B CR9164-B CR9165-B CR9166-B
80	LOCAL ROAD - AVENUE 24 1/2	CR9154-B - CR9155-B
81	LOCAL ROAD - ROAD 12	CR9156-B
82	LOCAL ROAD - ROAD 12 1/2 & AVE 24 3/4 LOCAL ROAD - AVENUE 24 3/4	CR9157-B CR9158-B

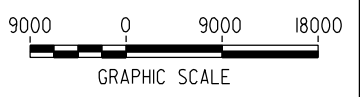


**LOCATION NUMBER LEGEND**

- (X) - INDICATES GRADE SEPARATION
- (X) - INDICATES CALTRANS FACILITIES MODIFICATION
- (X) - INDICATES LOCAL ROAD RELOCATION

**VICINITY MAP 1**

**VICINITY MAP 2**



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**D. AYELE**  
DRAWN BY  
**A. TRINH**  
CHECKED BY  
**A. SILVER**  
IN CHARGE  
**A. BOONE**  
DATE  
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**CALIFORNIA HIGH-SPEED TRAIN PROJECT  
MERCED TO FRESNO**  
UPPR/SR99 - (WC)

INDEX MAP  
SHEET 5 OF 5

CONTRACT NO.  
HSR06-007

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DESIGNED BY  
**D. AYELE**  
DRAWN BY  
**C. DELOS REYES**  
CHECKED BY  
**A. SILVER**  
IN CHARGE  
**A. BOONE**  
DATE  
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**AECOM**  
Technical Services, Inc.  
2020 L Street, Suite 300  
Sacramento, CA 95811

**CH2MHILL**



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

UPRR/SR99 MAINLINE - (AVE 24/WC)  
AVENUE 8 - OVERHEAD  
KEY MAP  
SHEET 1 OF 1

CONTRACT NO.  
HSR06-007

DRAWING NO.  
CB7100-B

SCALE  
AS SHOWN

SHEET NO.  
### OF ###



4/28/2011 5:08:46 PM P:\60022962\Task 02\_Merced-Fresno\Cadd\Civil\Sheet\Package 2 - Ave 24 Wye & W. Chowchilla\Volume 2B - Ave 24 Wye-W.Chowchilla Caltrans Facilities\Key Map\CB7101-B.dgn



DESIGNED BY  
D. AYELE  
DRAWN BY  
C. DELOS REYES  
CHECKED BY  
A. SILVER  
IN CHARGE  
A. BOONE  
DATE  
04/29/2011

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

**NOT FOR**  
**CONSTRUCTION**

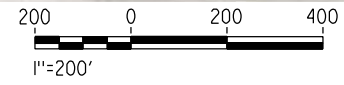


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
UPRR/SR99 MAINLINE - (AVE 24/WC)  
AVENUE 9 - INTERCHANGE  
KEY MAP  
SHEET 1 OF 1

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
CB7101-B  
SCALE  
AS SHOWN  
SHEET NO.  
### OF ###



4/27/2011 6:20:44 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 2b - ave 24 wye-w.chowchilla\caltrans facilities\key Map\CB7102-B.dwg  
 oyeled



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**D. AYELE**  
 DRAWN BY  
**C. DELOS REYES**  
 CHECKED BY  
**A. SILVER**  
 IN CHARGE  
**A. BOONE**  
 DATE  
**04/29/2011**

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

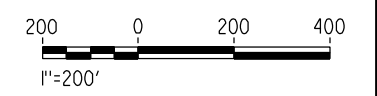
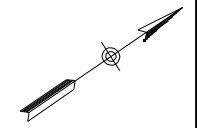


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 MAINLINE - (AVE 24/WC)  
 AVENUE 11 - OVERHEAD  
 KEY MAP  
 SHEET 1 OF 1

CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CB7102-B  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###



4/27/2011 6:21:49 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 2b - ave 24 wye-w.chowchilla\caltrans facilities\key Map\CB7103-B.dwg



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
DRAWN BY  
C. DELOS REYES  
CHECKED BY  
A. SILVER  
IN CHARGE  
A. BOONE  
DATE  
04/29/2011

**RECORD SET  
15% DESIGN  
SUBMITTAL**

**NOT FOR  
CONSTRUCTION**



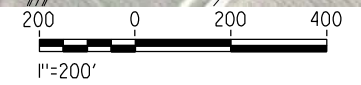
**CALIFORNIA HIGH-SPEED TRAIN PROJECT  
MERCED TO FRESNO**

UPRR/SR99 MAINLINE - (AVE 24)  
GRADE SEPARATION - ROBERTSON BLVD (SR 233) ALT 1  
KEY MAP  
SHEET 1 OF 1

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
CB7103-B  
SCALE  
AS SHOWN  
SHEET NO.  
### OF ###



4/27/2011 6:22:22 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 2b - ave 24 wye-w.chowchilla\caltrans facilities\key Map\CB7104-B.dwg



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
DRAWN BY  
C. DELOS REYES  
CHECKED BY  
A. SILVER  
IN CHARGE  
A. BOONE  
DATE  
04/29/2011

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

**NOT FOR**  
**CONSTRUCTION**



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

UPRR/SR99 WYE/MERCED - (AVE 24)  
SANDY MUSH ROAD - INTERCHANGE  
KEY MAP  
SHEET 1 OF 1

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
CB7104-B  
SCALE  
AS SHOWN  
SHEET NO.  
### OF ###



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REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
DRAWN BY  
C. DELOS REYES  
CHECKED BY  
A. SILVER  
IN CHARGE  
A. BOONE  
DATE  
04/29/2011

**RECORD SET  
15% DESIGN  
SUBMITTAL**

**NOT FOR  
CONSTRUCTION**

**AECOM**  
Technical Services, Inc.  
2020 L Street, Suite 300  
Sacramento, CA 95811

**CH2MHILL**



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

UPRR/SR99 MERCED - (AVE 24/WC)  
LE GRAND ROAD - INTERCHANGE  
KEY MAP  
SHEET 1 OF 1

CONTRACT NO.  
HSR06-007

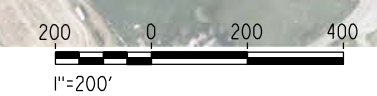
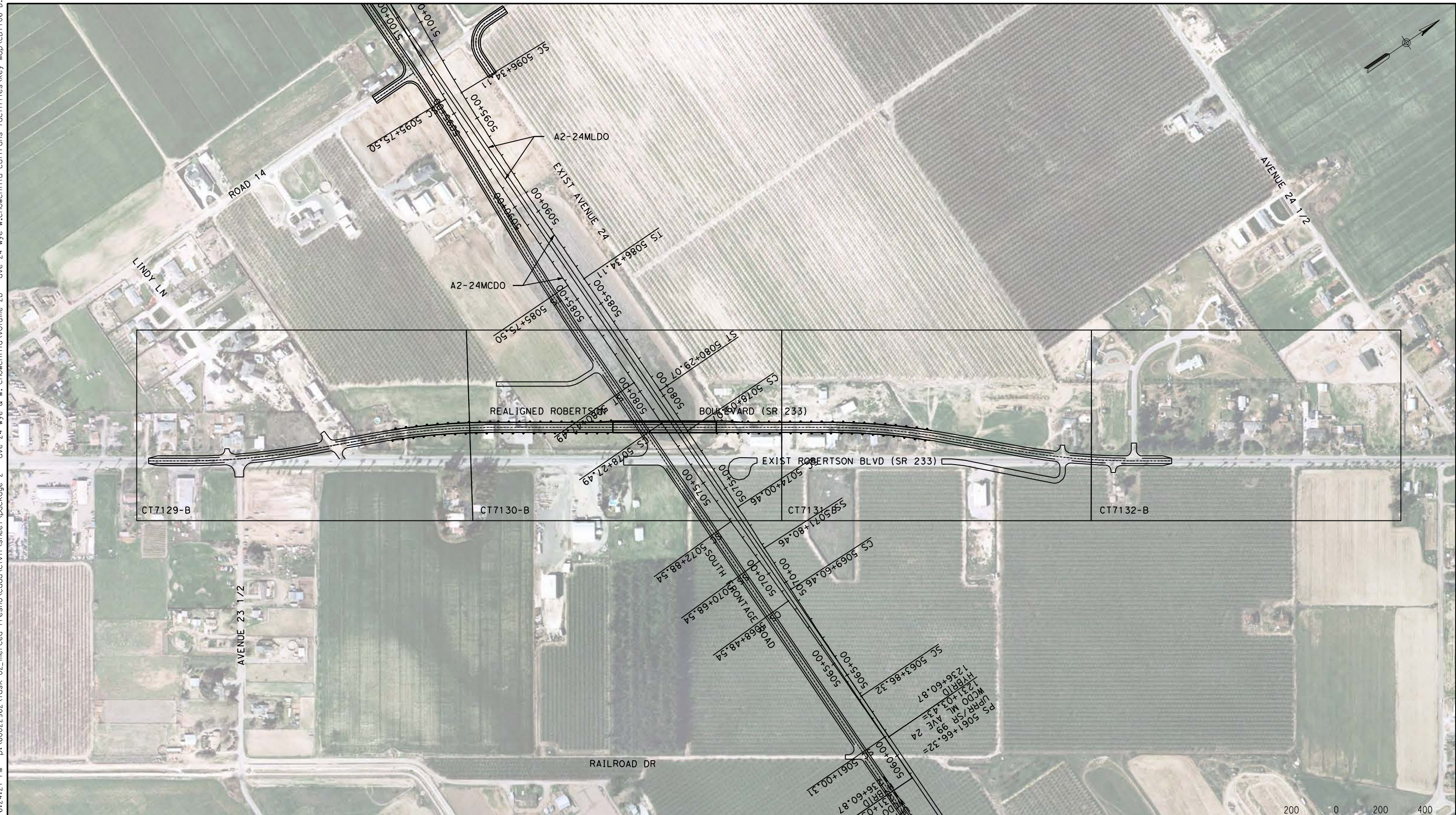
DRAWING NO.  
CB7105-B

SCALE  
AS SHOWN

SHEET NO.  
### OF ###



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REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
DRAWN BY  
C. DELOS REYES  
CHECKED BY  
A. SILVER  
IN CHARGE  
A. BOONE  
DATE  
04/29/2011

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

**NOT FOR**  
**CONSTRUCTION**



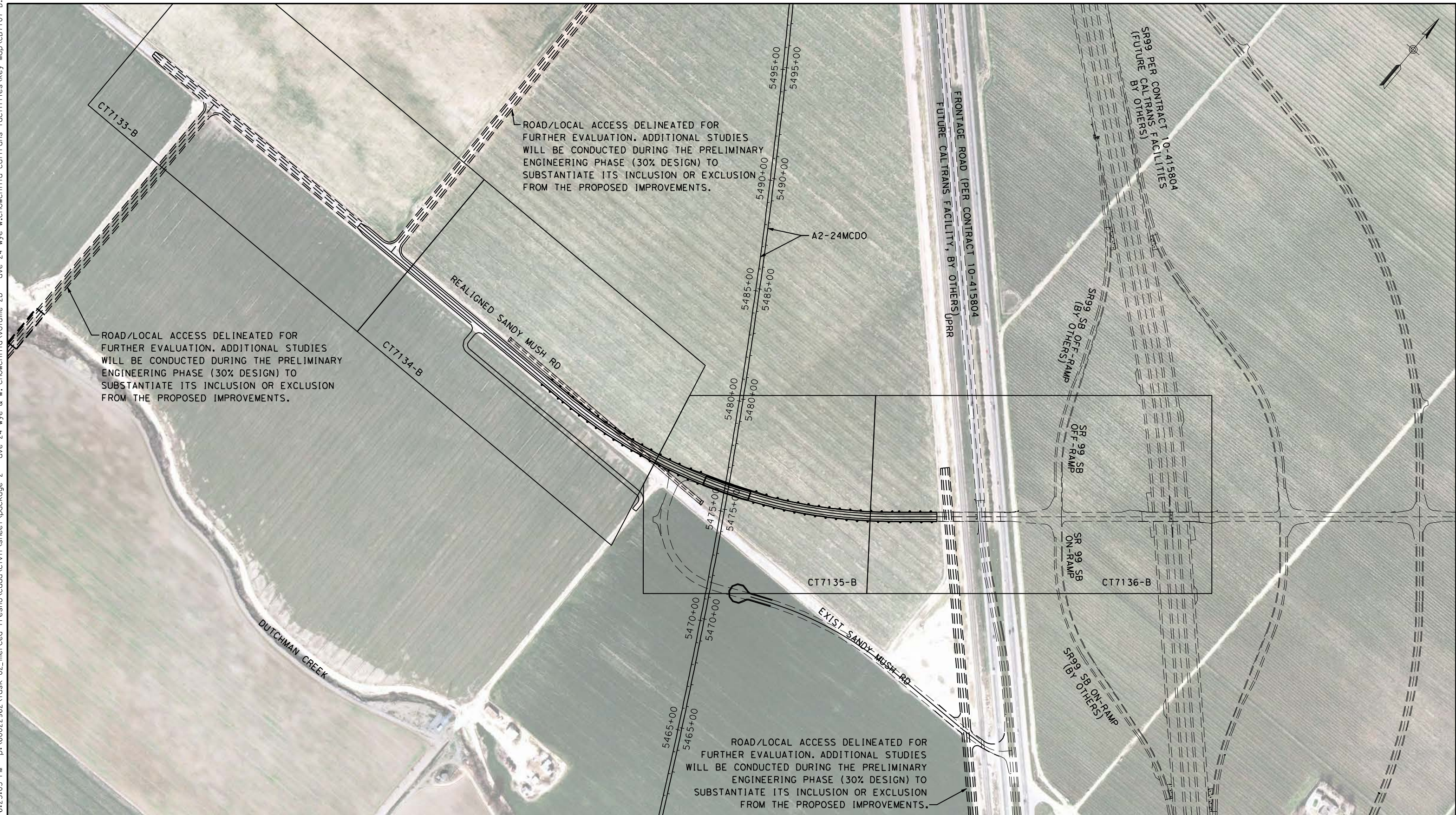
**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**

UPRR/SR99 MAINLINE DO/MERCED DO - (WC)  
GRADE SEPARATION - ROBERTSON BLVD (SR 233) ALT 1  
KEY MAP  
SHEET 1 OF 1

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
CB7106-B  
SCALE  
AS SHOWN  
SHEET NO.  
### OF ###



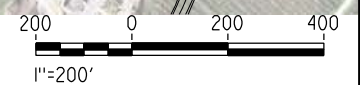
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 oyeled



ROAD/LOCAL ACCESS DELINEATED FOR FURTHER EVALUATION. ADDITIONAL STUDIES WILL BE CONDUCTED DURING THE PRELIMINARY ENGINEERING PHASE (30% DESIGN) TO SUBSTANTIATE ITS INCLUSION OR EXCLUSION FROM THE PROPOSED IMPROVEMENTS.

ROAD/LOCAL ACCESS DELINEATED FOR FURTHER EVALUATION. ADDITIONAL STUDIES WILL BE CONDUCTED DURING THE PRELIMINARY ENGINEERING PHASE (30% DESIGN) TO SUBSTANTIATE ITS INCLUSION OR EXCLUSION FROM THE PROPOSED IMPROVEMENTS.

ROAD/LOCAL ACCESS DELINEATED FOR FURTHER EVALUATION. ADDITIONAL STUDIES WILL BE CONDUCTED DURING THE PRELIMINARY ENGINEERING PHASE (30% DESIGN) TO SUBSTANTIATE ITS INCLUSION OR EXCLUSION FROM THE PROPOSED IMPROVEMENTS.



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
 DRAWN BY  
C. DELOS REYES  
 CHECKED BY  
A. SILVER  
 IN CHARGE  
A. BOONE  
 DATE  
04/29/2011

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

**NOT FOR**  
**CONSTRUCTION**

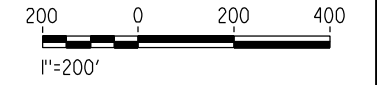
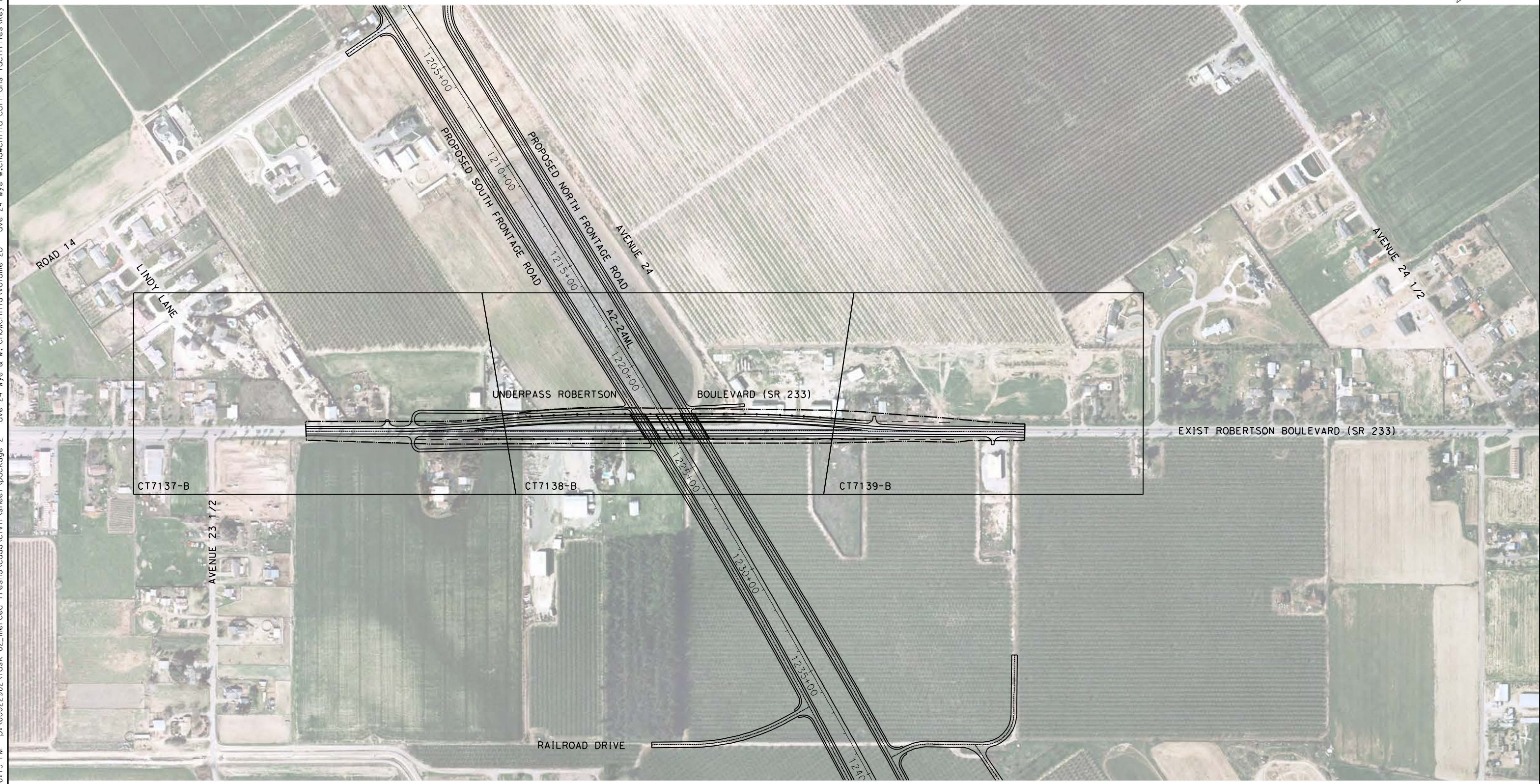
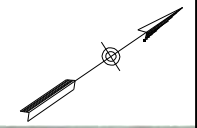


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 MERCED DO - (WC)  
 SANDY MUSH RD - INTERCHANGE  
 KEY MAP  
 SHEET 1 OF 1

CONTRACT NO.  
HSR06-007  
 DRAWING NO.  
CB7107-B  
 SCALE  
AS SHOWN  
 SHEET NO.  
### OF ###



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REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
DRAWN BY  
C. DELOS REYES  
CHECKED BY  
A. SILVER  
IN CHARGE  
A. BOONE  
DATE  
04/29/2011

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

**NOT FOR**  
**CONSTRUCTION**



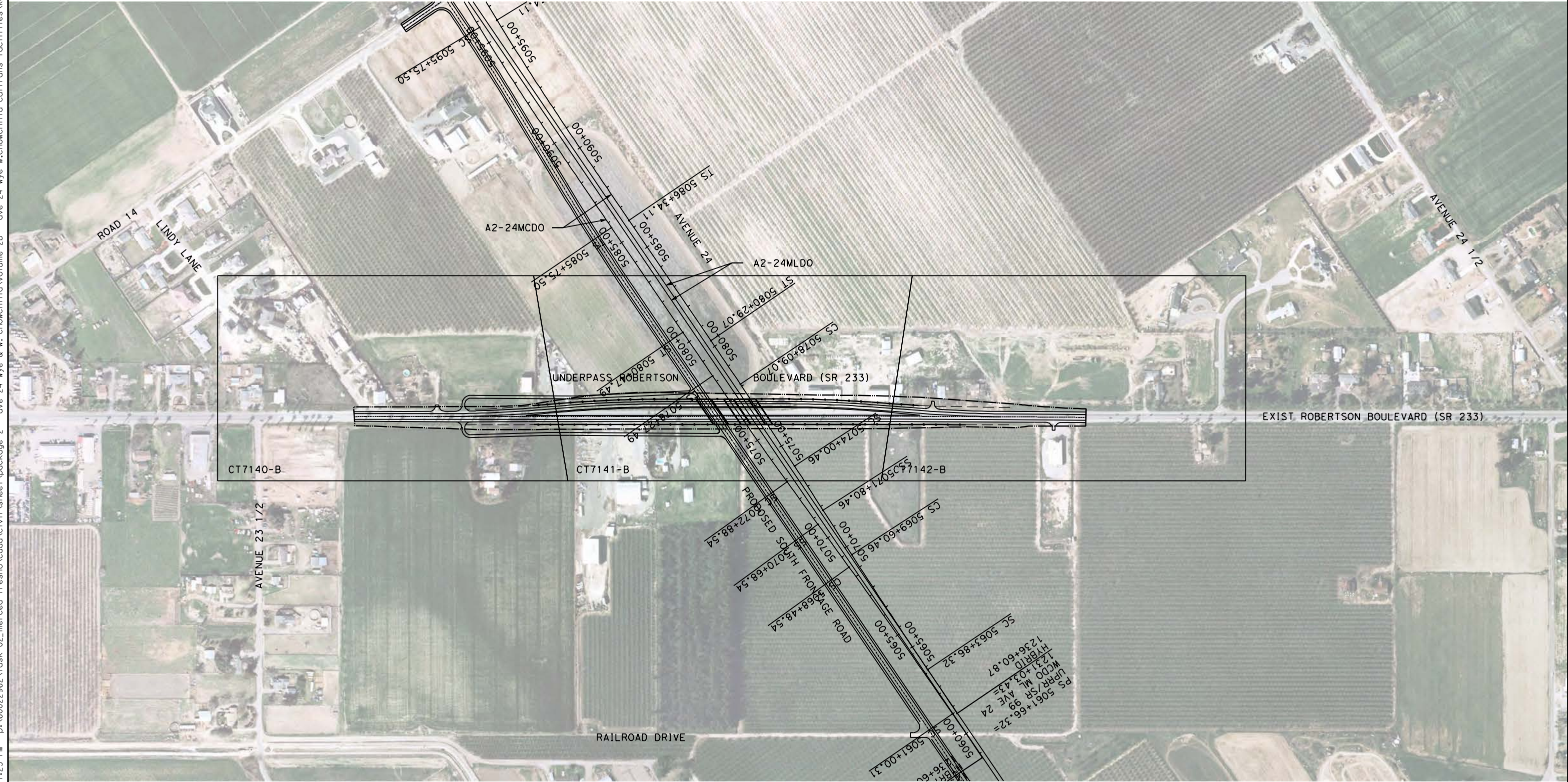
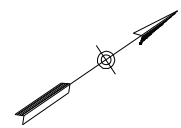
**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**

UPRR/SR99 MAINLINE - (AVE 24)  
UNDERPASS - ROBERTSON BOULEVARD (SR 233) ALT 2  
KEY MAP  
SHEET 1 OF 1

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
CB7108-B  
SCALE  
AS SHOWN  
SHEET NO.  
### OF ###



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REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
DRAWN BY  
C. DELOS REYES  
CHECKED BY  
A. SILVER  
IN CHARGE  
A. BOONE  
DATE  
04/29/2011

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

**NOT FOR**  
**CONSTRUCTION**



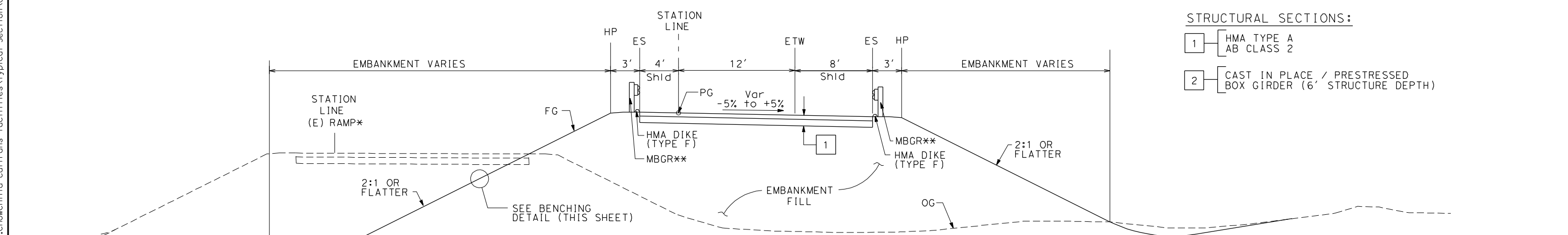
**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**

UPRR/SR99 MAINLINE DO/MERCED DO - (WC)  
UNDERPASS - ROBERTSON BOULEVARD (SR 233) ALT 2  
KEY MAP  
SHEET 1 OF 1

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
CB7109-B  
SCALE  
AS SHOWN  
SHEET NO.  
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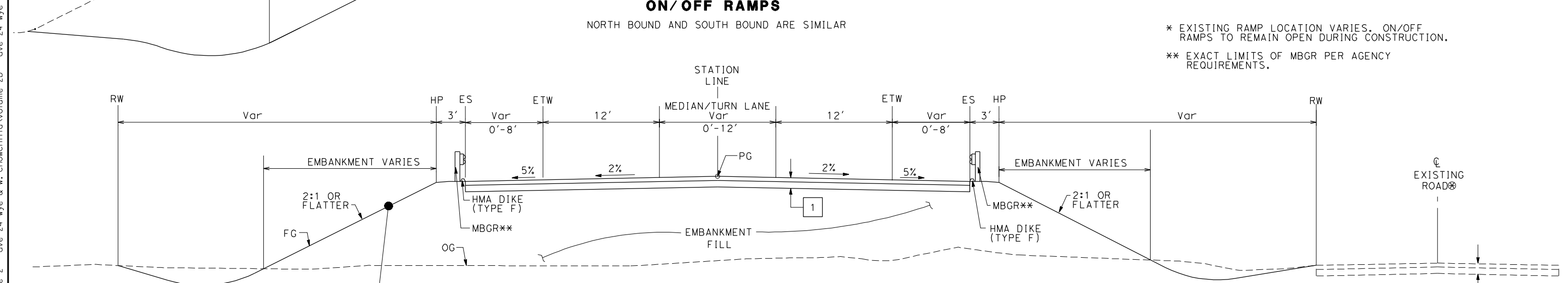


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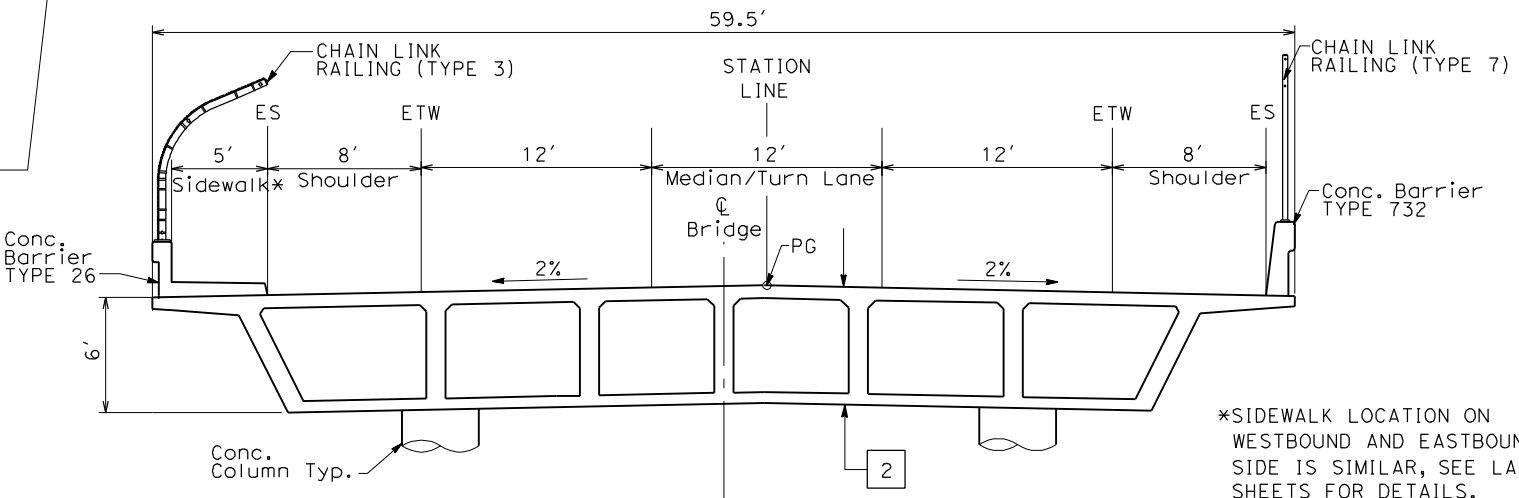
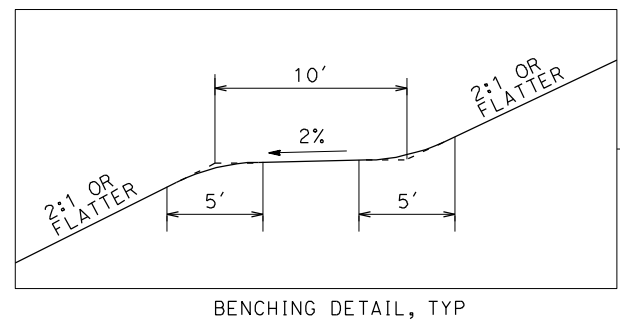


- STRUCTURAL SECTIONS:**
- 1 HMA TYPE A  
AB CLASS 2
  - 2 CAST IN PLACE / PRESTRESSED  
BOX GIRDER (6' STRUCTURE DEPTH)

\* EXISTING RAMP LOCATION VARIES. ON/OFF RAMPS TO REMAIN OPEN DURING CONSTRUCTION.  
 \*\* EXACT LIMITS OF MBGR PER AGENCY REQUIREMENTS.



\* EXISTING ROAD LOCATION VARIES AND SHALL REMAIN OPEN DURING CONSTRUCTION. WHERE SHOWN ON THE PLAN CLOSE AND OBLITERATE EXISTING ROADWAY SUBSEQUENT TO CONSTRUCTION OF THE REALIGNED ROADWAY.  
 \*\* EXACT LIMITS OF MBGR PER AGENCY REQUIREMENTS.



\*SIDEWALK LOCATION ON WESTBOUND AND EASTBOUND SIDE IS SIMILAR, SEE LAYOUT SHEETS FOR DETAILS.

TYPICAL CROSS SECTIONS ON THIS SHEET APPLY TO THE FOLLOWING ROADWAYS FOR ALIGNMENT A2, AVE 24 WYE:

NO.	STREET NAME
1	Avenue 9 INTERCHANGE

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**K. OAKS**  
 DRAWN BY  
**K. OAKS**  
 CHECKED BY  
**A. SILVER**  
 IN CHARGE  
**A. BOONE**  
 DATE  
**04/29/2011**

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



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 - (AVE 24)  
 HIGHWAY  
 TYPICAL CROSS SECTIONS  
 SHEET 1 OF 2

CONTRACT NO.	HSR06-007
DRAWING NO.	CT7090-B
SCALE	N.T.S.
SHEET NO.	### OF ###

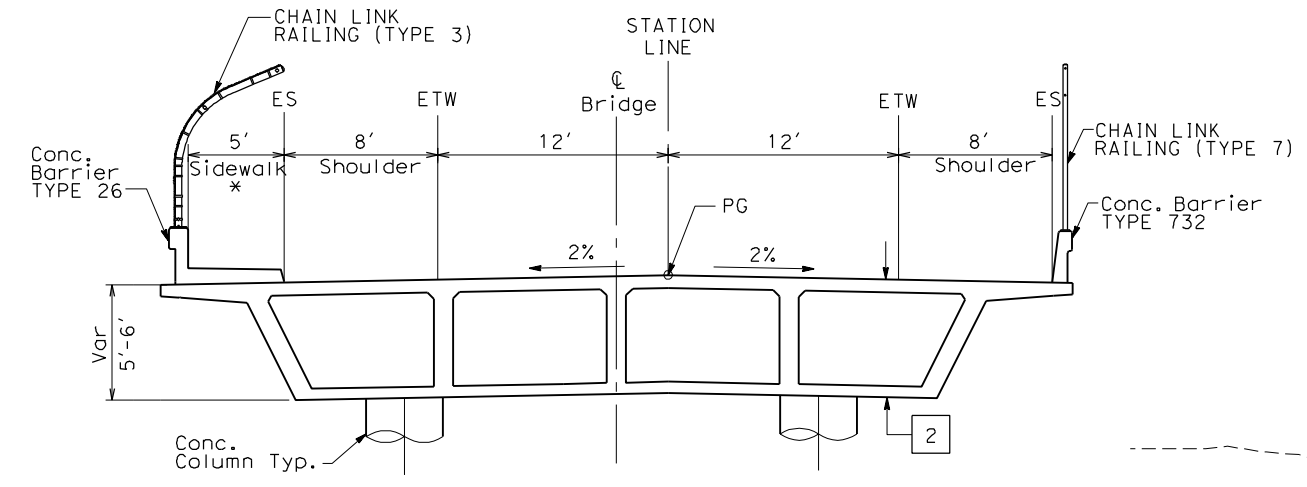


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**NOTES:**

1. DIMENSIONS OF EXISTING PAVEMENT WIDTHS ARE BASED ON MEASUREMENTS MADE IN THE FIELD AND ARE APPROXIMATE.
2. PAVEMENT SECTIONS ARE TO BE DETERMINED. GEOTECHNICAL INVESTIGATIONS WILL BE CONDUCTED IN A SUBSEQUENT PHASE TO DETERMINE STRUCTURAL SECTIONS FOR EACH CROSSING.
3. SPACING OF BENCHES ON PROPOSED FILL SECTIONS ARE TO BE DETERMINED.
4. RIGHT-OF-WAY (R/W) WIDTH IS FOR INFORMATION ONLY. EXACT WIDTH TO BE DETERMINED IN COORDINATION WITH AFFECTED AGENCY.

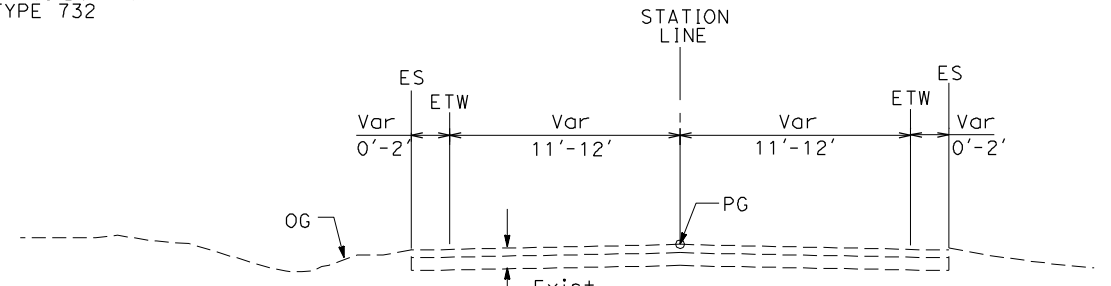
\*SIDEWALK SHOWN ON WESTBOUND SIDE, EASTBOUND SIMILAR SEE LAYOUT SHEETS FOR DETAILS.



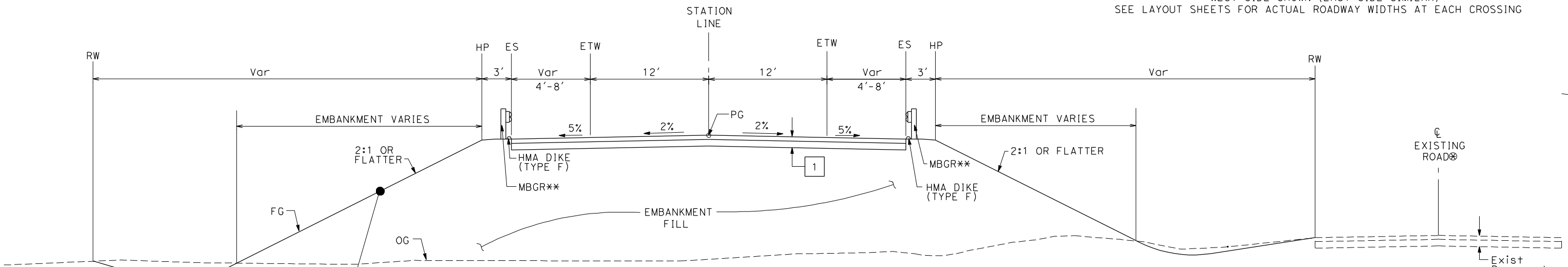
**OVERHEAD STRUCTURE**  
SEE STRUCTURAL PLANS

**STRUCTURAL SECTIONS:**

- 1 HMA TYPE A AB CLASS 2
- 2 CAST IN PLACE / PRESTRESSED BOX GIRDER (6' STRUCTURE DEPTH)

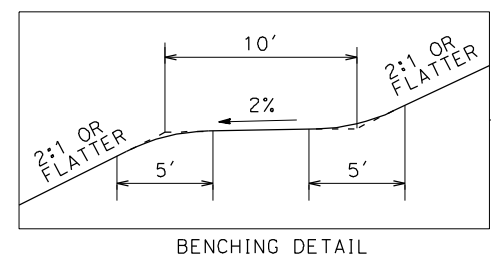


**EXISTING LOCAL ROAD**  
WEST SIDE SHOWN (EAST SIDE SIMILAR)  
SEE LAYOUT SHEETS FOR ACTUAL ROADWAY WIDTHS AT EACH CROSSING



**FILL SECTIONS TO OVERHEAD STRUCTURE**  
WEST SIDE SHOWN (EAST SIDE SIMILAR)

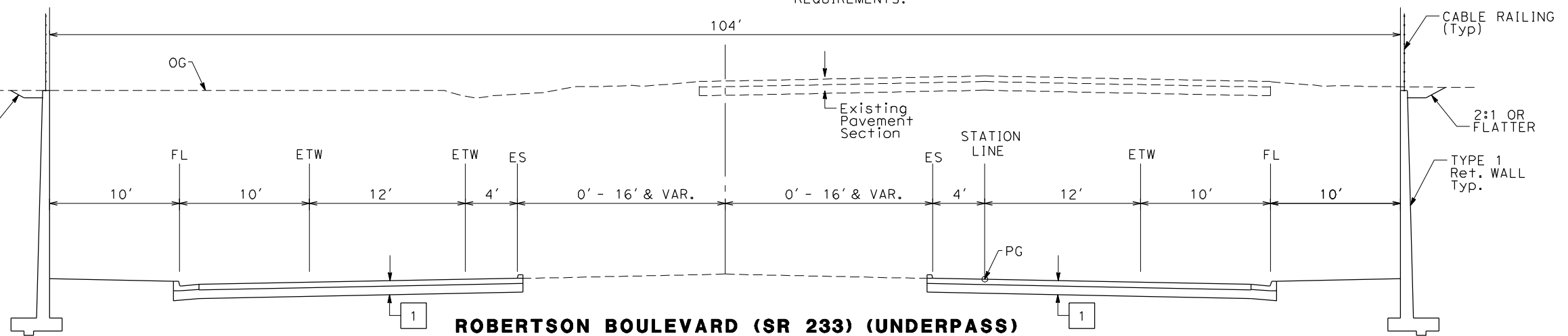
⊗ EXISTING ROAD LOCATION VARIES AND SHALL REMAIN OPEN DURING CONSTRUCTION. WHERE SHOWN ON THE PLAN CLOSE AND OBLITERATE EXISTING ROADWAY SUBSEQUENT TO CONSTRUCTION OF THE REALIGNED ROADWAY.  
\*\* EXACT LIMITS OF MBGR PER AGENCY REQUIREMENTS.



BENCHING DETAIL

TYPICAL CROSS SECTIONS ON THIS SHEET APPLY TO THE FOLLOWING ROADWAYS FOR ALIGNMENT A2, AVE 24 WYE OPTION & WEST CHOWCHILLA OPTION:

NO.	STREET NAME
1	SR233 (ROBERTSON BOULEVARD)
2	LE GRAND
3	E. SANDY MUSH ROAD
4	AVENUE 11
5	AVENUE 8
6	SR 233 (ROBERTSON BOULEVARD UNDERPASS)



**ROBERTSON BOULEVARD (SR 233) (UNDERPASS)**

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
K. OAKS  
DRAWN BY  
K. OAKS  
CHECKED BY  
A. SILVER  
IN CHARGE  
A. BOONE  
DATE  
04/29/2011

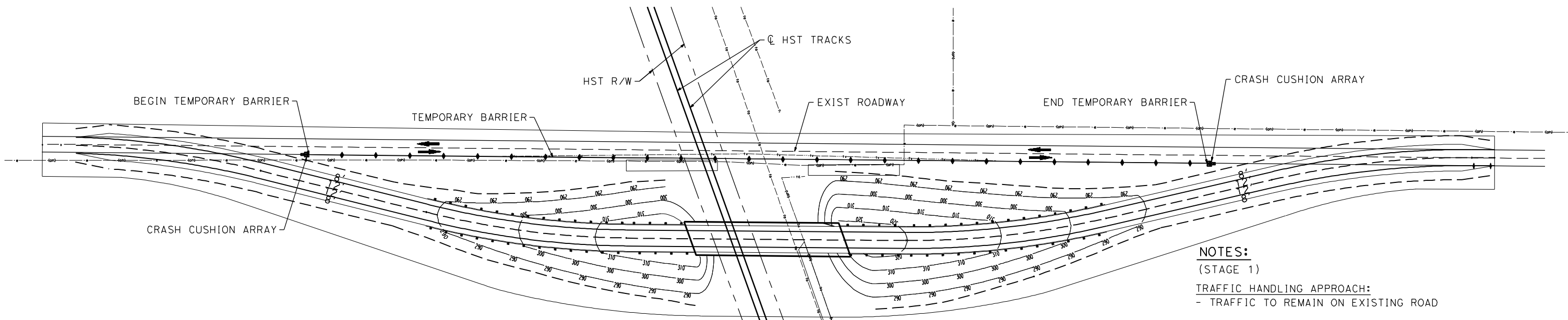
**RECORD SET**  
15% DESIGN SUBMITTAL  
  
**NOT FOR CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
UPRR/SR99 - (AVE 24)  
HIGHWAY  
TYPICAL CROSS SECTIONS  
SHEET 2 OF 2

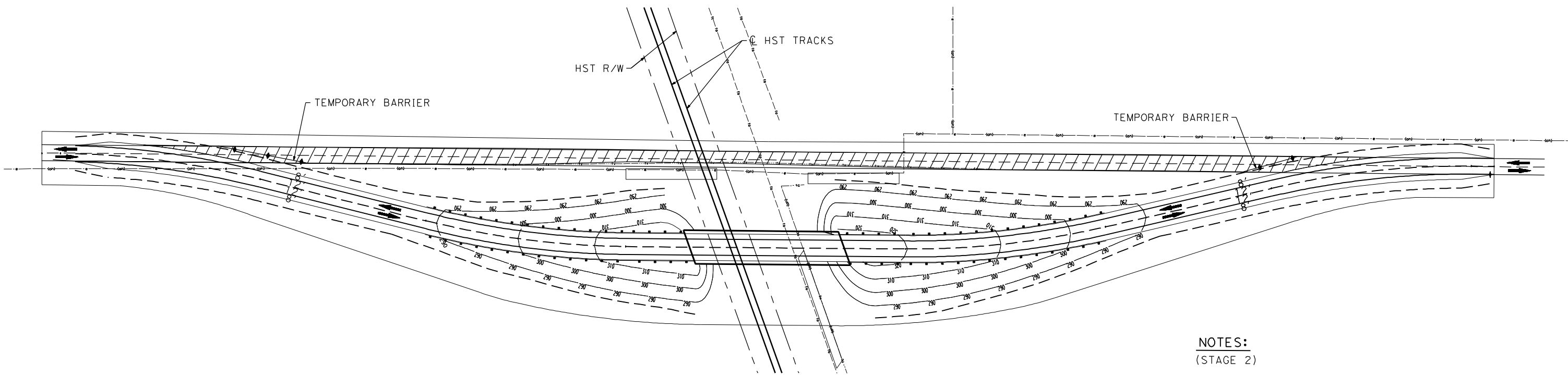
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DRAWING NO.	CT7091-B
SCALE	NTS
SHEET NO.	### OF ###

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 oyeled



**NOTES:**  
 (STAGE 1)  
**TRAFFIC HANDLING APPROACH:**  
 - TRAFFIC TO REMAIN ON EXISTING ROAD

**STAGE CONSTRUCTION ACTIVITIES:**  
 - CONSTRUCT NEW GRADE SEPARATION EMBANKMENT  
 - CONSTRUCT NEW GRADE SEPARATION STRUCTURE  
 - CONSTRUCT DRAINAGE FACILITY



**NOTES:**  
 (STAGE 2)  
**TRAFFIC HANDLING APPROACH:**  
 - SHIFT TRAFFIC TO NEW GRADE SEPARATION FACILITY

**STAGE CONSTRUCTION ACTIVITIES:**  
 - CONSTRUCT REALIGNED ROAD CONFORMS  
 - COMPLETE DRAINAGE FACILITIES  
 - REMOVE SURFACE AND BASE OF EXIST ROAD

- LEGEND:**
- CRASH CUSHION ARRAY (TYPE U11)
  - TEMPORARY BARRIER (TYPE K)
  - DIRECTION OF TRAVEL
  - REMOVE BASE AND SURFACING (EXIST ROAD)

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**S. WONG**  
 DRAWN BY  
**F. DEMARCO**  
 CHECKED BY  
**A. SILVER**  
 IN CHARGE  
**A. BOONE**  
 DATE  
**04/29/2011**

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

**AECOM**  
 Technical Services, Inc.  
 2020 L Street, Suite 300  
 Sacramento, CA 95811

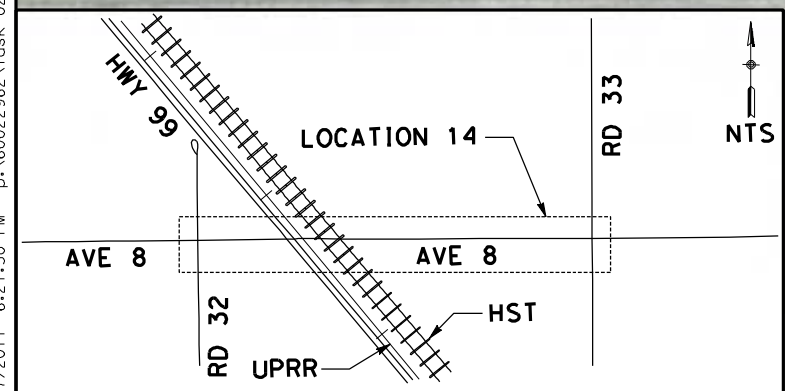
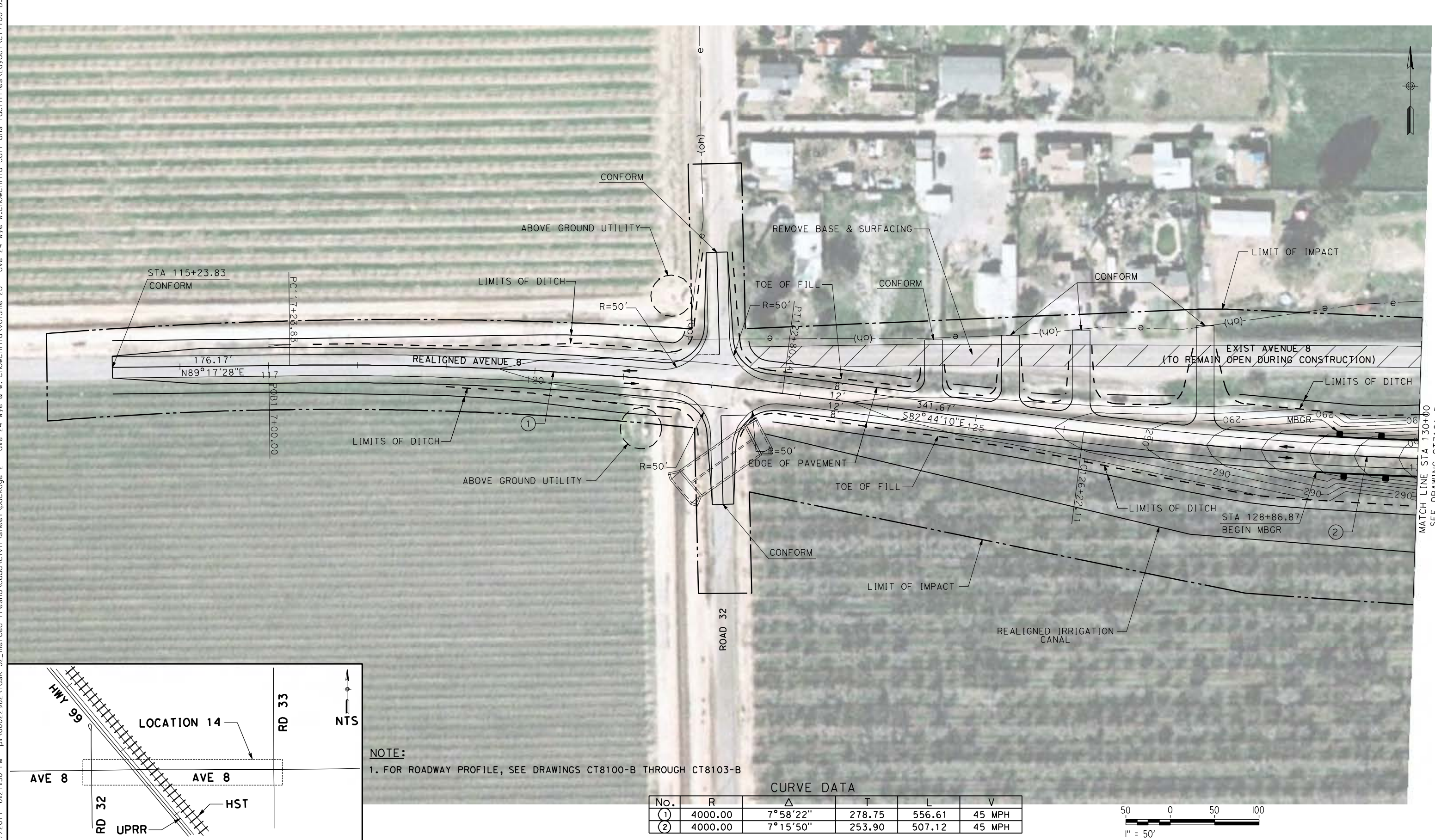
**CALIFORNIA**  
 HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 - (AVE 24/WC)  
 GENERAL STAGE CONSTRUCTION AND TRAFFIC PLAN  
 SHEET 1 OF 1

CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CT7092-B  
 SCALE  
 NO SCALE  
 SHEET NO.  
 ### OF ###

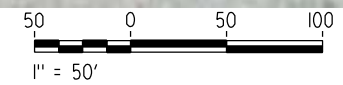


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NOTE:  
1. FOR ROADWAY PROFILE, SEE DRAWINGS CT8100-B THROUGH CT8103-B

CURVE DATA					
No.	R	Δ	T	L	V
①	4000.00	7°58'22"	278.75	556.61	45 MPH
②	4000.00	7°15'50"	253.90	507.12	45 MPH



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
DRAWN BY  
C. DELOS REYES  
CHECKED BY  
A. SILVER  
IN CHARGE  
A. BOONE  
DATE  
04/29/2011

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

**NOT FOR**  
**CONSTRUCTION**

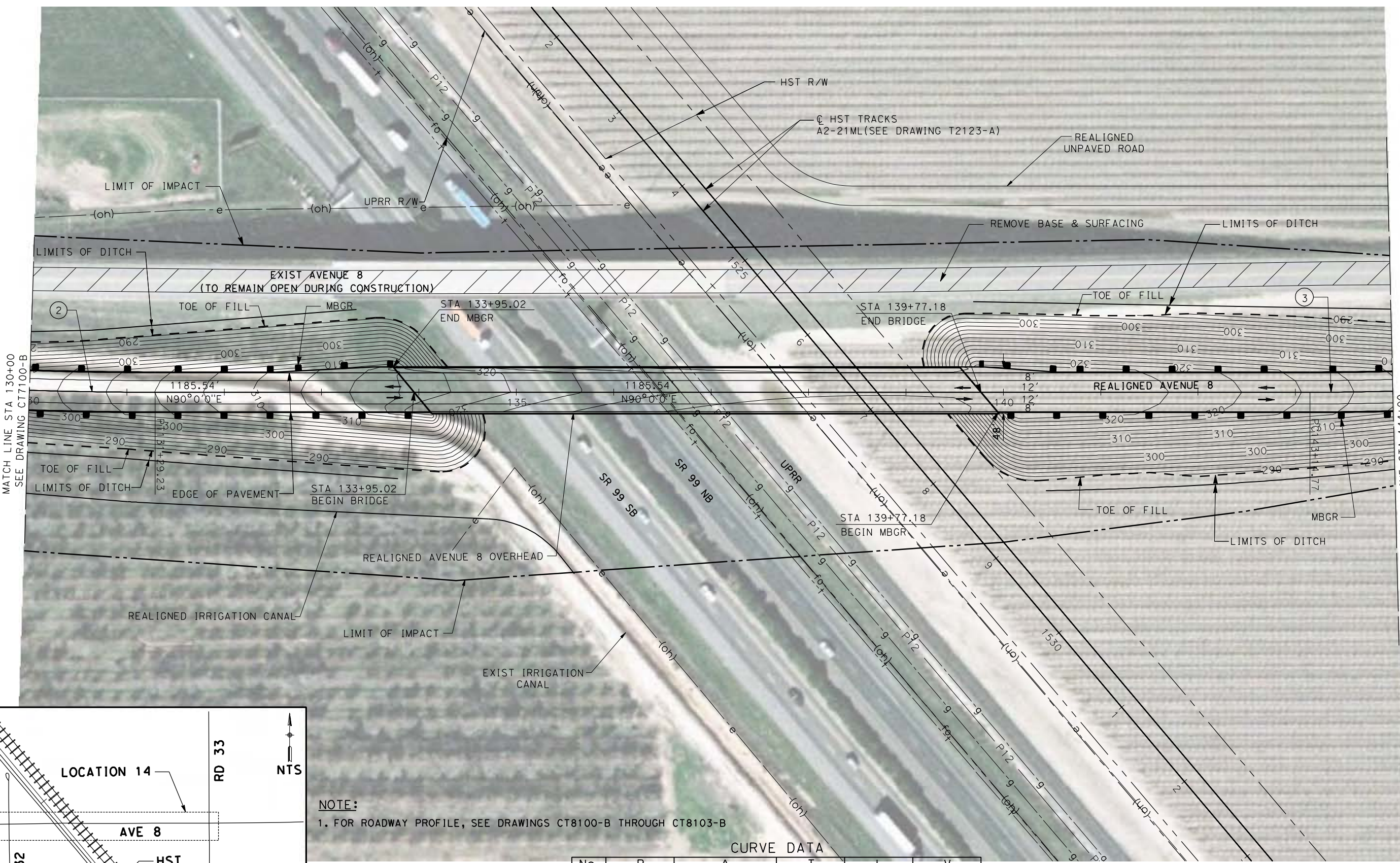


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
UPRR/SR99 MAINLINE - (AVE 24/WC)  
AVENUE 8 - OVERHEAD  
LAYOUT  
SHEET 1 OF 3

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
CT7100-B  
SCALE  
AS SHOWN  
SHEET NO.  
### OF ###



4/27/2011 6:28:16 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 2b - ave 24 wye-w.chowchilla\caltrans facilities\Layout\CT7101-B.dwg

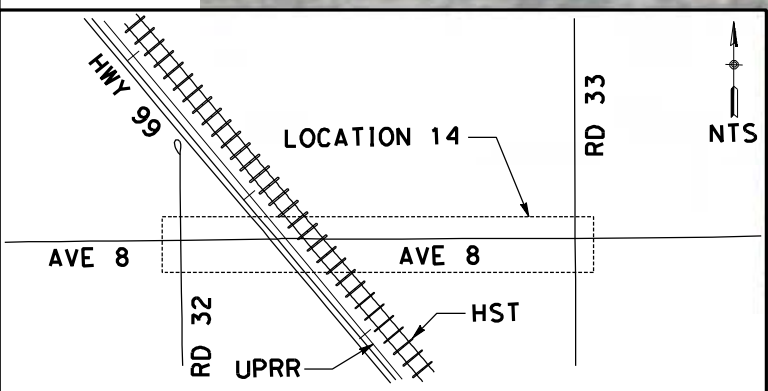
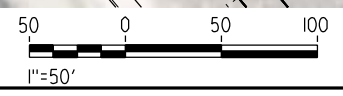


MATCH LINE STA 130+00  
SEE DRAWING CT7100-B

MATCH LINE STA 144+00  
SEE DRAWING CT7102-B

**NOTE:**  
1. FOR ROADWAY PROFILE, SEE DRAWINGS CT8100-B THROUGH CT8103-B

No.	R	Δ	T	L	V
(2)	4000.00	7°15'50"	253.90	507.12	45 MPH
(3)	3500.00	8°36'07"	263.22	525.46	45 MPH



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**D. AYELE**  
DRAWN BY  
**C. DELOS REYES**  
CHECKED BY  
**A. SILVER**  
IN CHARGE  
**A. BOONE**  
DATE  
**04/29/2011**

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

**AECOM**  
Technical Services, Inc.  
2020 L Street, Suite 300  
Sacramento, CA 95811

**CH2MHILL**

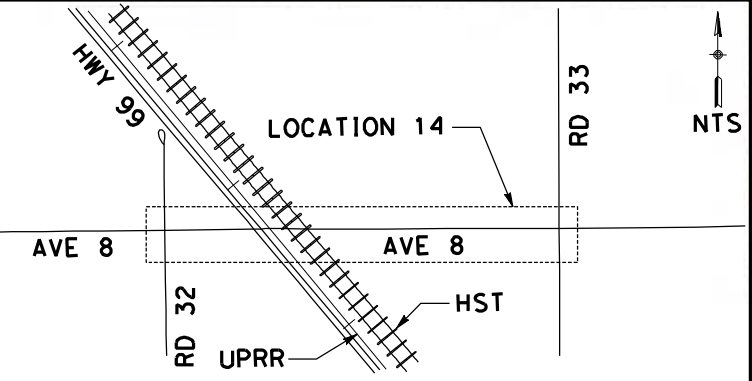
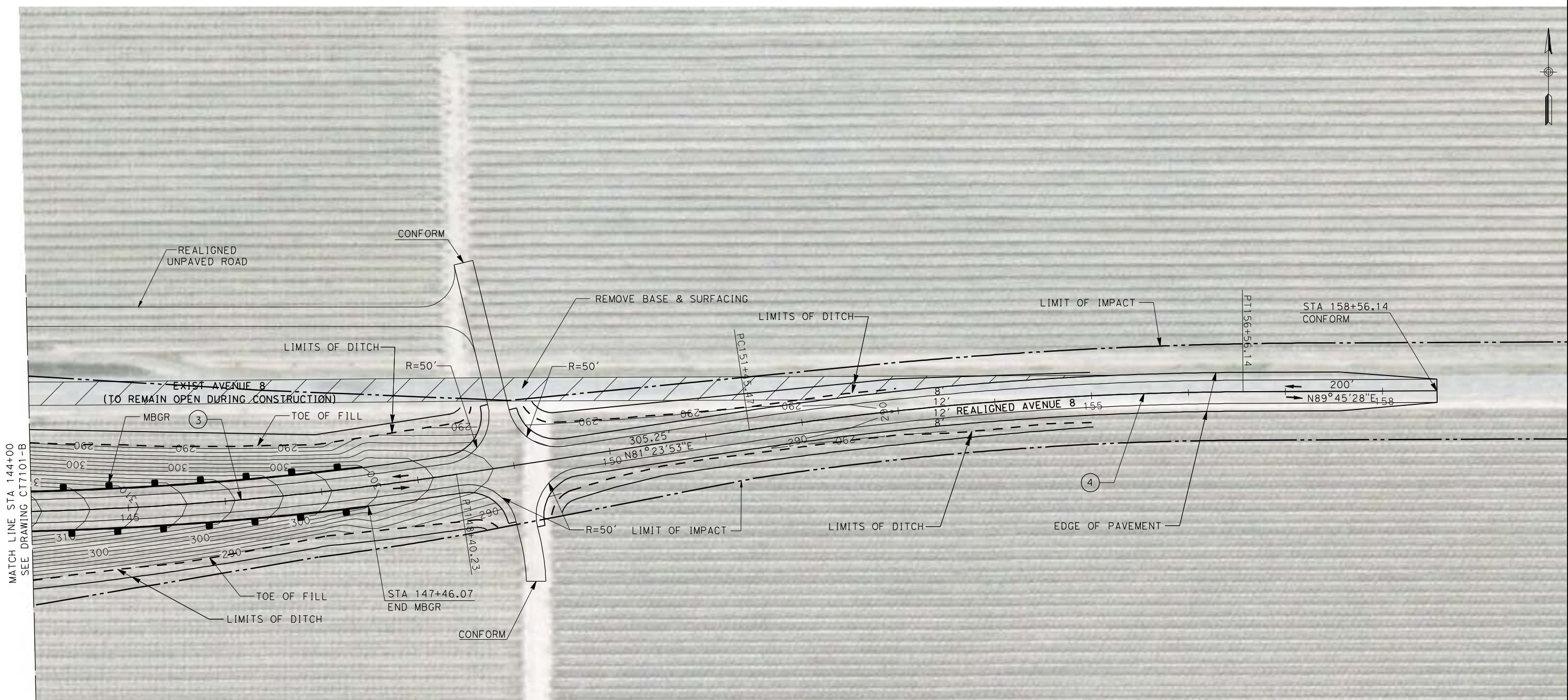
**CALIFORNIA**  
HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
UPRR/SR99 MAINLINE - (AVE 24/WC)  
AVENUE 8 - OVERHEAD  
LAYOUT  
SHEET 2 OF 3

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
CT7101-B  
SCALE  
AS SHOWN  
SHEET NO.  
### OF ###

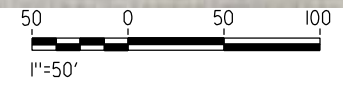


4/27/2011 6:28:30 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 2b - ave 24 wye-w.chowchilla caltrans facilities\Layout\CT7102-B.dgn



**NOTE:**  
1. FOR ROADWAY PROFILE, SEE DRAWINGS CT8100-B THROUGH CT8103-B

CURVE DATA					
No.	R	Δ	T	L	V
(3)	3500.00	8° 36' 07"	263.22	525.46	45 MPH
(4)	3500.00	8° 21' 35"	255.79	510.66	45 MPH



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
DRAWN BY  
C. DELOS REYES  
CHECKED BY  
A. SILVER  
IN CHARGE  
A. BOONE  
DATE  
04/29/2011

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

**NOT FOR**  
**CONSTRUCTION**

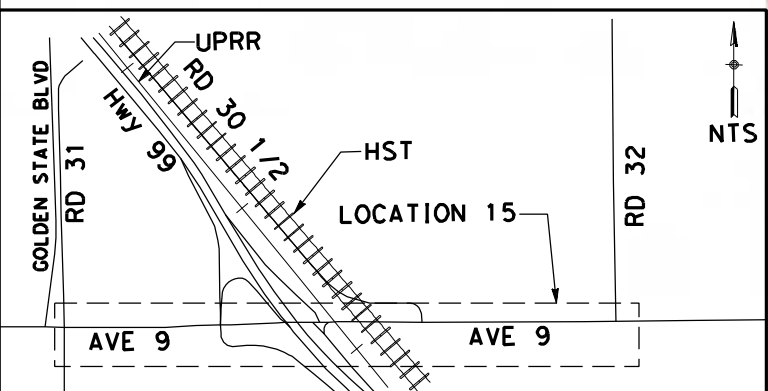
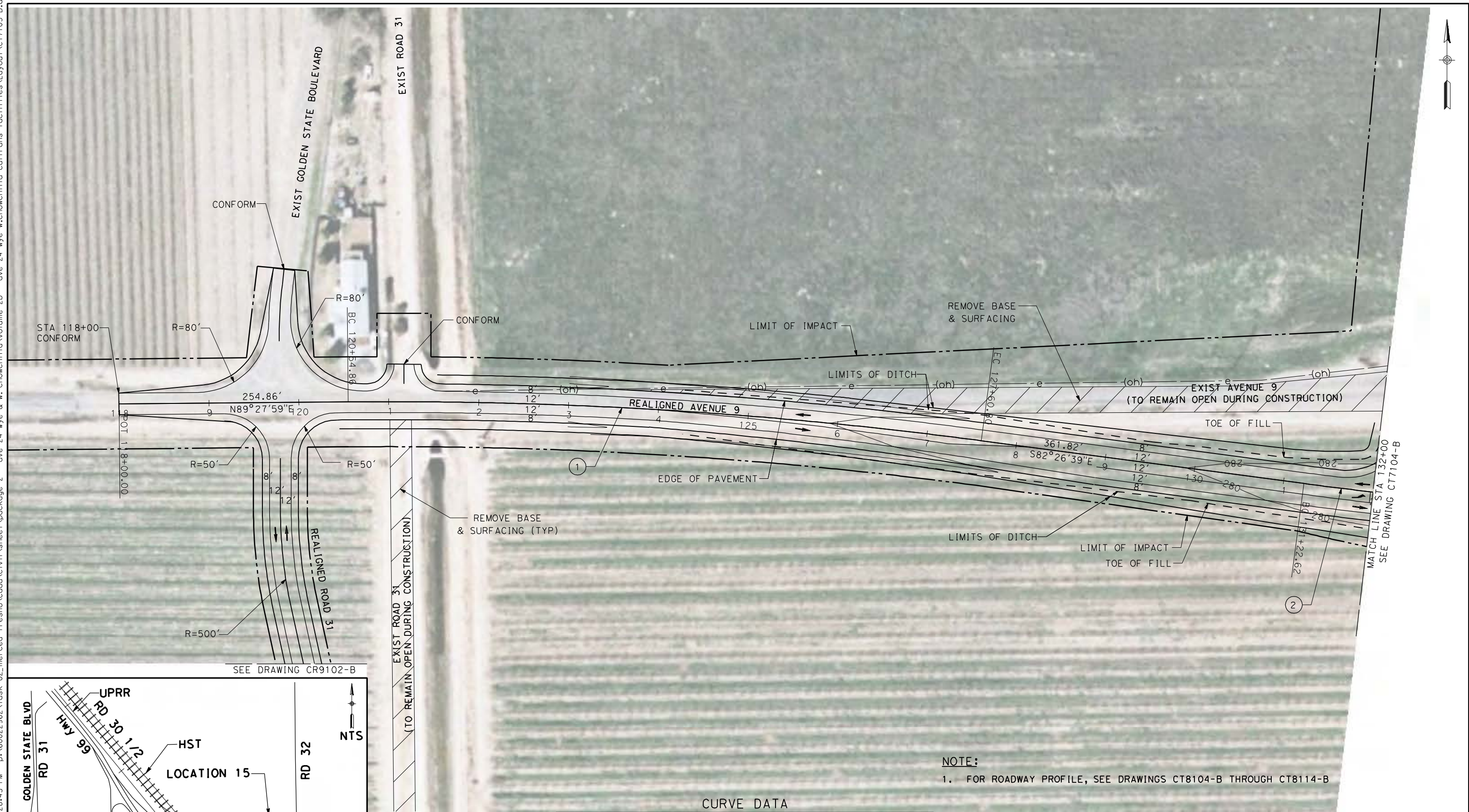


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
UPRR/SR99 MAINLINE - (AVE 24/WC)  
AVENUE 8 - OVERHEAD  
LAYOUT  
SHEET 3 OF 3

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
CT7102-B  
SCALE  
AS SHOWN  
SHEET NO.  
### OF ###



4/27/2011 6:28:43 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 2b - ave 24 wye-w.chowchilla caltrans facilities\Layout\CT7103-B.dwg



**NOTE:**  
1. FOR ROADWAY PROFILE, SEE DRAWINGS CT8104-B THROUGH CT8114-B

**CURVE DATA**

No.	R	Δ	T	L	V
①	5000.00	8° 5' 22"	353.56	705.94	45 MPH
②	5000.00	7° 33' 21"	330.16	659.37	45 MPH



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
DRAWN BY  
C. DELOS REYES  
CHECKED BY  
A. SILVER  
IN CHARGE  
A. BOONE  
DATE  
04/29/2011

**RECORD SET  
15% DESIGN  
SUBMITTAL**

**NOT FOR  
CONSTRUCTION**

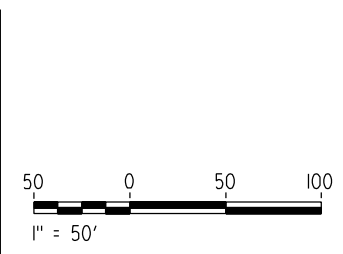
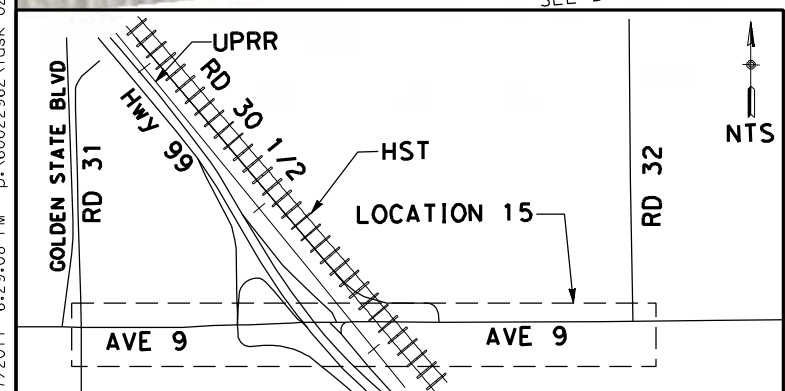
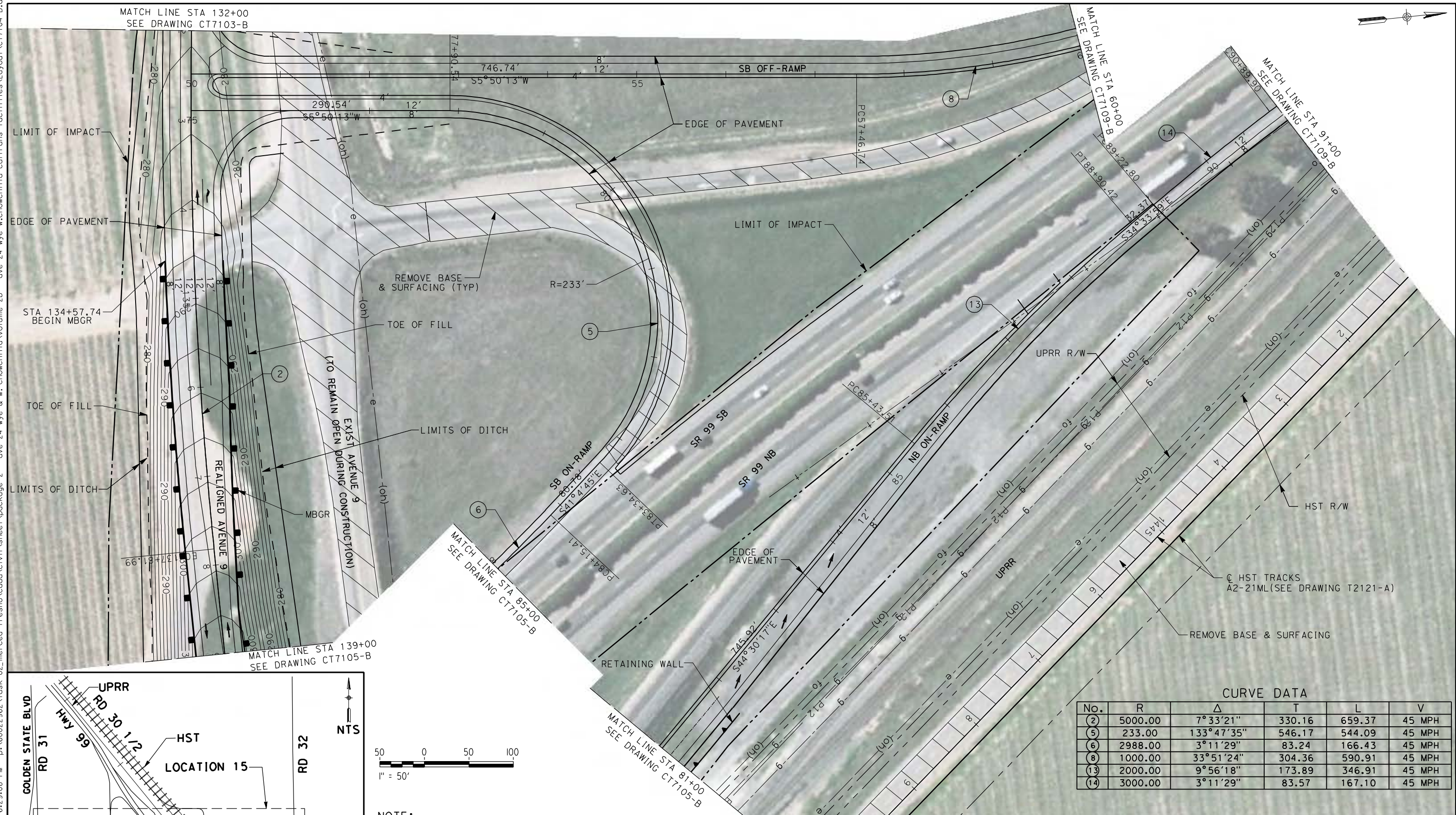
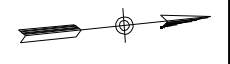


**CALIFORNIA HIGH-SPEED TRAIN PROJECT  
MERCED TO FRESNO**  
UPRR/SR99 MAINLINE - (AVE 24/WC)  
AVENUE 9 - INTERCHANGE  
LAYOUT  
SHEET 1 OF 7

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
CT7103-B  
SCALE  
AS SHOWN  
SHEET NO.  
### OF ###



MATCH LINE STA 132+00  
SEE DRAWING CT7103-B



**NOTE:**  
1. FOR ROADWAY PROFILE, SEE DRAWINGS CT8104-B THROUGH CT8114-B

CURVE DATA					
No.	R	$\Delta$	T	L	V
(2)	5000.00	7° 33' 21"	330.16	659.37	45 MPH
(5)	233.00	133° 47' 35"	546.17	544.09	45 MPH
(6)	2988.00	3° 11' 29"	83.24	166.43	45 MPH
(8)	1000.00	33° 51' 24"	304.36	590.91	45 MPH
(13)	2000.00	9° 56' 18"	173.89	346.91	45 MPH
(14)	3000.00	3° 11' 29"	83.57	167.10	45 MPH

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
DRAWN BY  
C. DELOS REYES  
CHECKED BY  
A. SILVER  
IN CHARGE  
A. BOONE  
DATE  
04/29/2011

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

**NOT FOR**  
**CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
UPRR/SR99 MAINLINE - (AVE 24/WC)  
AVENUE 9 - INTERCHANGE  
LAYOUT  
SHEET 2 OF 7

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
CT7104-B  
SCALE  
AS SHOWN  
SHEET NO.  
### OF ###

4/27/2011 6:29:08 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 2b - ave 24 wye-w.chowchilla\layout\CT7104-B.dgn



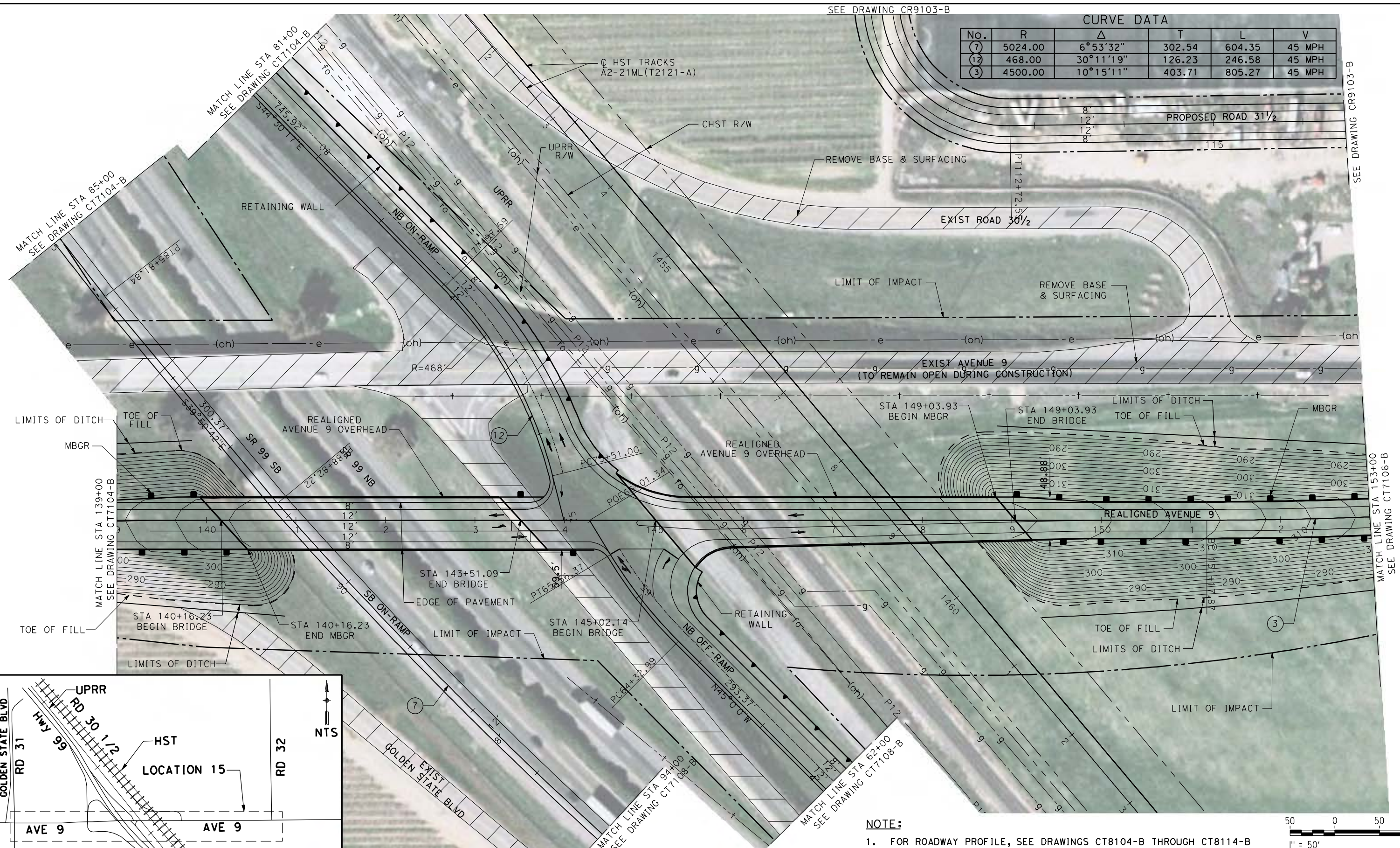
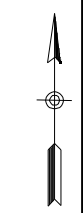
4/27/2011 6:29:35 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 2b - ave 24 wye & w. chowchilla\caltrans facilities\layout\CT7105-B.dgn

SEE DRAWING CR9103-B

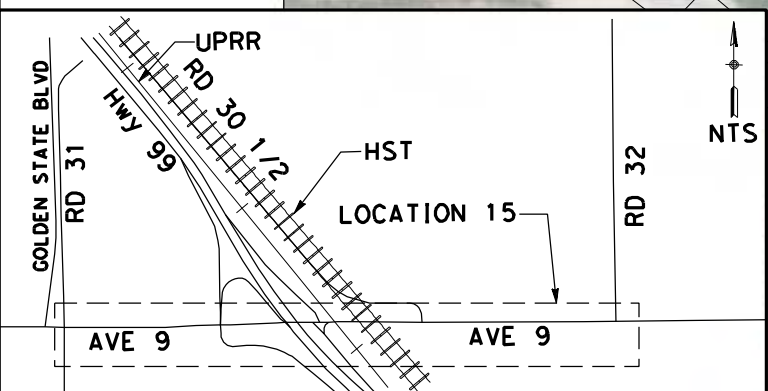
CURVE DATA

No.	R	Δ	T	L	V
7	5024.00	6°53'32"	302.54	604.35	45 MPH
12	468.00	30°11'19"	126.23	246.58	45 MPH
3	4500.00	10°15'11"	403.71	805.27	45 MPH

SEE DRAWING CR9103-B



MATCH LINE STA 153+00  
SEE DRAWING CT7106-B



NOTE:

1. FOR ROADWAY PROFILE, SEE DRAWINGS CT8104-B THROUGH CT8114-B



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
DRAWN BY  
C. DELOS REYES  
CHECKED BY  
A. SILVER  
IN CHARGE  
A. BOONE  
DATE  
04/29/2011

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

**NOT FOR**  
**CONSTRUCTION**

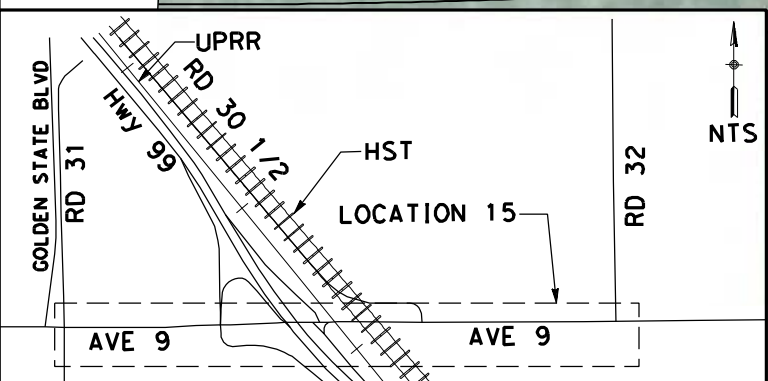
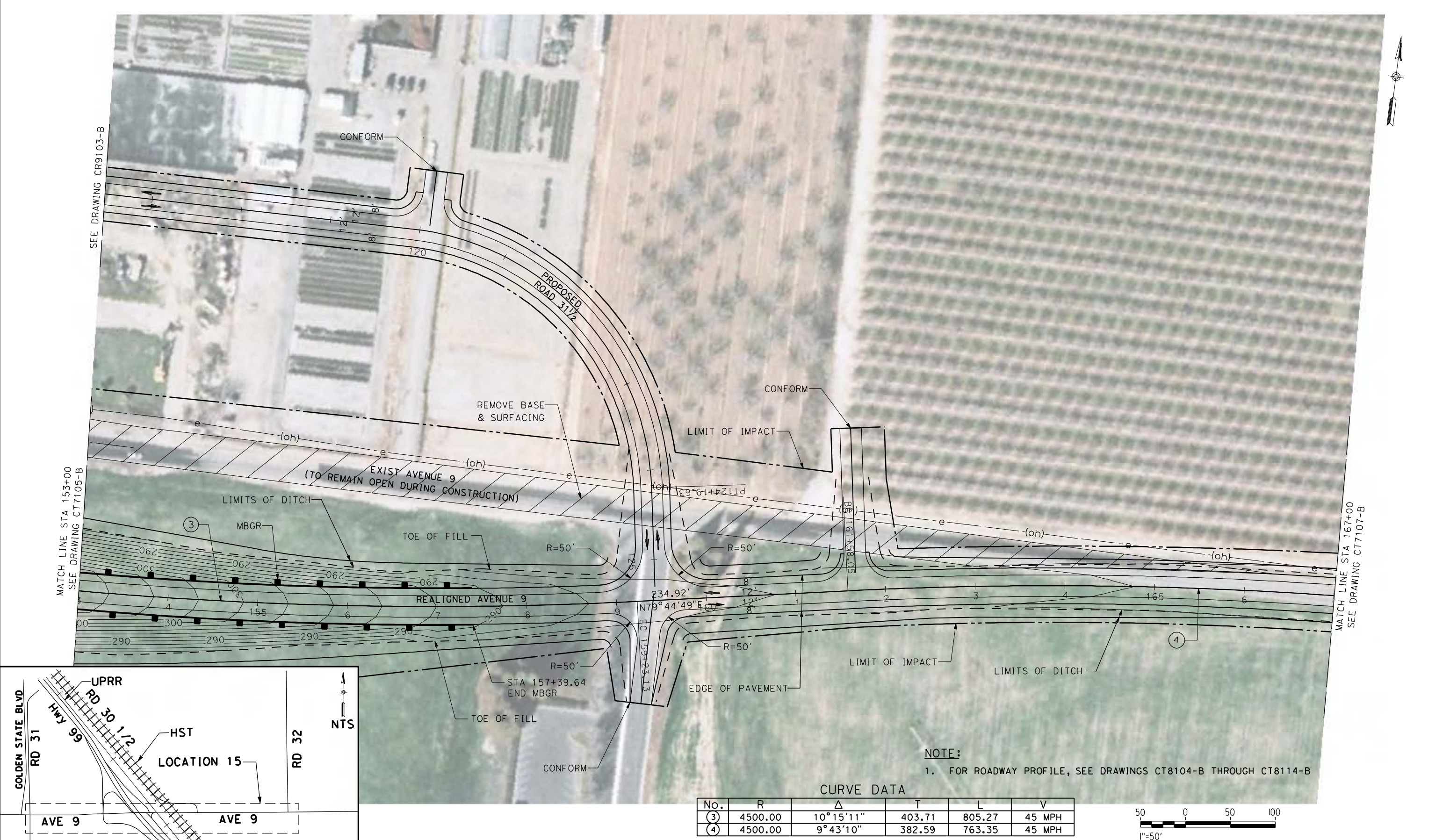


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
UPRR/SR99 MAINLINE - (AVE 24/WC)  
AVENUE 9 - INTERCHANGE  
LAYOUT  
SHEET 3 OF 7

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
CT7105-B  
SCALE  
AS SHOWN  
SHEET NO.  
### OF ###



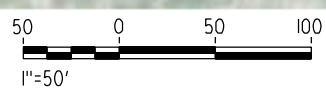
4/27/2011 6:29:49 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 2b - ave 24 wye-w.chowchilla\caltrans facilities\Layout\CT7106-B.dwg



**NOTE:**  
1. FOR ROADWAY PROFILE, SEE DRAWINGS CT8104-B THROUGH CT8114-B

**CURVE DATA**

No.	R	Δ	T	L	V
(3)	4500.00	10°15'11"	403.71	805.27	45 MPH
(4)	4500.00	9°43'10"	382.59	763.35	45 MPH



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**D. AYELE**  
DRAWN BY  
**C. DELOS REYES**  
CHECKED BY  
**A. SILVER**  
IN CHARGE  
**A. BOONE**  
DATE  
**04/29/2011**

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

**NOT FOR**  
**CONSTRUCTION**

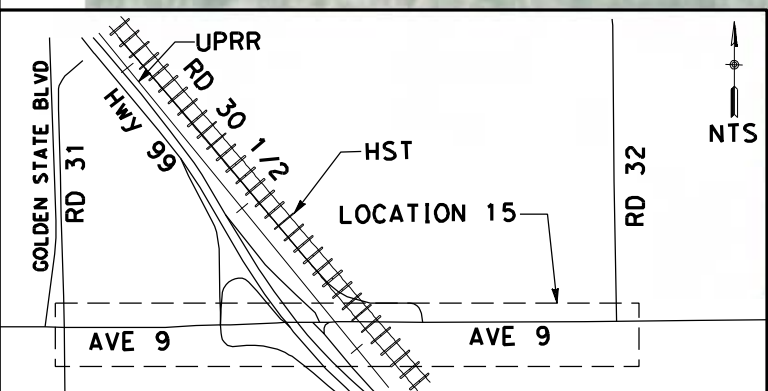


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
UPRR/SR99 MAINLINE - (AVE 24/WC)  
AVENUE 9 - INTERCHANGE  
LAYOUT  
SHEET 4 OF 7

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
CT7106-B  
SCALE  
AS SHOWN  
SHEET NO.  
### OF ###

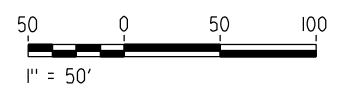


4/27/2011 6:30:00 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 2b - ave 24 wye-w.chowchilla caltrans facilities\Layout\CT7107-B.dwg  
 oyeled



**NOTE:**  
 1. FOR ROADWAY PROFILE, SEE DRAWINGS CT8104-B THROUGH CT8114-B

No.	R	$\Delta$	T	L	V
(4)	4500.00	9°43'10"	382.59	763.35	45 MPH



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**D. AYELE**  
 DRAWN BY  
**C. DELOS REYES**  
 CHECKED BY  
**A. SILVER**  
 IN CHARGE  
**A. BOONE**  
 DATE  
**04/29/2011**

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

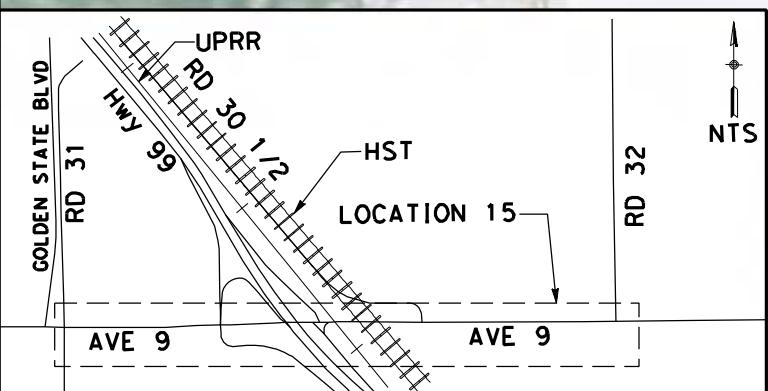


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 MAINLINE - (AVE 24/WC)  
 AVENUE 9 - INTERCHANGE  
 LAYOUT  
 SHEET 5 OF 7

CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CT7107-B  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###

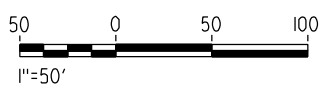


4/27/2011 6:30:25 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 2b - ave 24 wye-w.chowchilla\Layout\CT7108-B.dgn



**NOTE:**  
1. FOR ROADWAY PROFILE, SEE DRAWINGS CT8104-B THROUGH CT8114-B

CURVE DATA					
No.	R	Δ	T	L	V
(7)	5024.00	6°53'32"	302.54	604.35	45 MPH
(10)	5012.00	1°36'00"	69.99	139.96	45 MPH
(11)	10000.00	3°01'58"	264.72	529.31	45 MPH



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
DRAWN BY  
C. DELOS REYES  
CHECKED BY  
A. SILVER  
IN CHARGE  
A. BOONE  
DATE  
04/29/2011

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

**NOT FOR**  
**CONSTRUCTION**

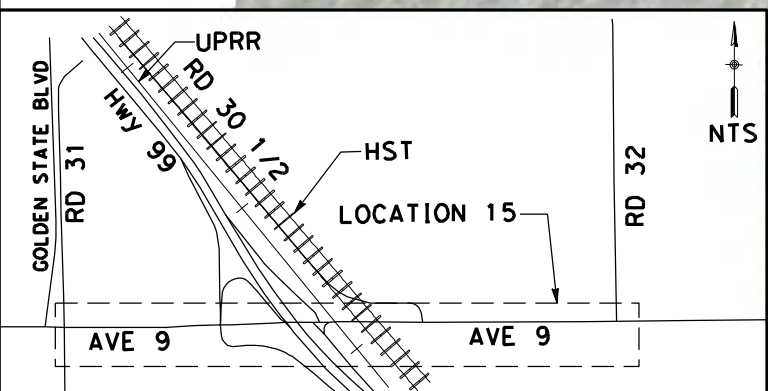


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
UPRR/SR99 MAINLINE - (AVE 24/WC)  
AVE 9 - INTERCHANGE SR 99 NB OFF/SB ON RAMP  
LAYOUT  
SHEET 6 OF 7

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
CT7108-B  
SCALE  
AS SHOWN  
SHEET NO.  
### OF ###

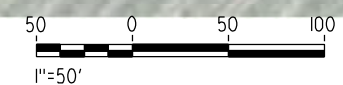


4/27/2011 6:30:48 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 2b - ave 24 wye-w.chowchilla caltrans facilities\Layout\CT7109-B.dgn



**NOTE:**  
1. FOR ROADWAY PROFILE, SEE DRAWINGS CT8104-B THROUGH CT8114-B

CURVE DATA					
No.	R	Δ	T	L	V
8	1000.00	33°51'24"	304.36	590.91	45 MPH
9	5488.00	1°00'46"	48.51	97.02	45 MPH
15	5012.00	3°25'55"	150.15	300.22	45 MPH
16	5012.00	5°29'39"	240.48	480.60	45 MPH



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**D. AYELE**  
DRAWN BY  
**C. DELOS REYES**  
CHECKED BY  
**A. SILVER**  
IN CHARGE  
**A. BOONE**  
DATE  
**04/29/2011**

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



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
UPRR/SR99 MAINLINE - (AVE 24/WC)  
AVE 9 - INTERCHANGE SR 99 NB ON/SB OFF RAMP  
LAYOUT  
SHEET 7 OF 7

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
CT7109-B  
SCALE  
AS SHOWN  
SHEET NO.  
### OF ###



4/27/2011 6:31:01 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 2b - ave 24 wye-w.chowchilla\caltrans facilities\Layout\CT7110-B.dgn



EXIST AVENUE 11

STA 124+35.59  
CONFORM

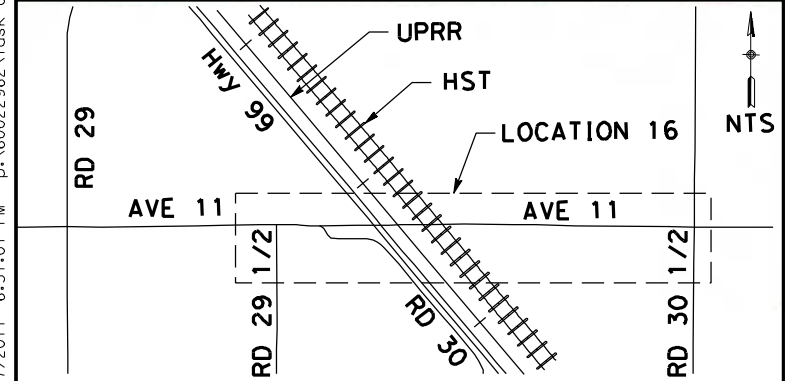
LIMIT OF IMPACT

REALIGNED AVENUE 11

EDGE OF PAVEMENT

LIMIT OF IMPACT

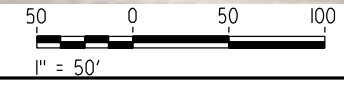
MATCH LINE STA 130+00  
SEE DRAWING CT7111-B



**NOTE:**  
1. FOR ROADWAY PROFILE, SEE DRAWINGS CT8115-B THROUGH CT8119-B

CURVE DATA

No.	R	$\Delta$	T	L	V
(1)	10000.00	3° 3' 13"	266.54	532.96	45 MPH



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
DRAWN BY  
C. DELOS REYES  
CHECKED BY  
A. SILVER  
IN CHARGE  
A. BOONE  
DATE  
04/29/2011

**RECORD SET  
15% DESIGN  
SUBMITTAL**

**NOT FOR  
CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT  
MERCED TO FRESNO**  
UPRR/SR99 MAINLINE - (AVE 24/WC)  
AVENUE 11 - OVERHEAD  
LAYOUT  
SHEET 1 OF 5

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
CT7110-B  
SCALE  
AS SHOWN  
SHEET NO.  
### OF ###



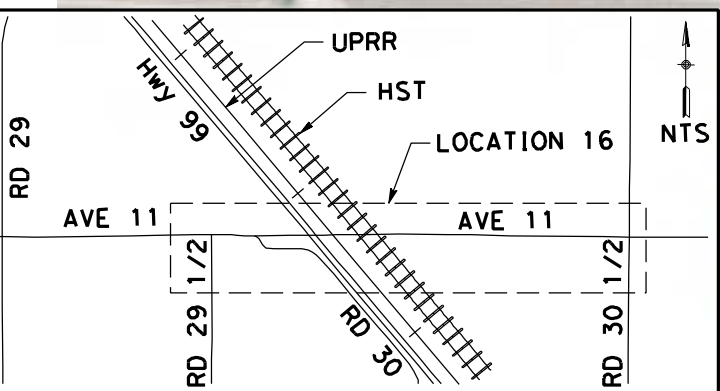
4/27/2011 6:31:13 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 2b - ave 24 wye-w.chowchilla caltrans facilities\Layout\CT7111-B.dgn



MATCH LINE STA 130+00  
SEE DRAWING CT7110-B

MATCH LINE STA 145+00  
SEE DRAWING CT7112-B

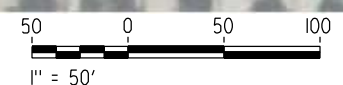
SEE DRAWING CR9107-B



CURVE DATA

No.	R	$\Delta$	T	L	V
(1)	10000.00	3° 3' 13"	266.54	532.96	45 MPH

NOTE:  
1. FOR ROADWAY PROFILE, SEE DRAWINGS CT8115-B THROUGH CT8119-B



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
DRAWN BY  
C. DELOS REYES  
CHECKED BY  
A. SILVER  
IN CHARGE  
A. BOONE  
DATE  
04/29/2011

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

**NOT FOR**  
**CONSTRUCTION**

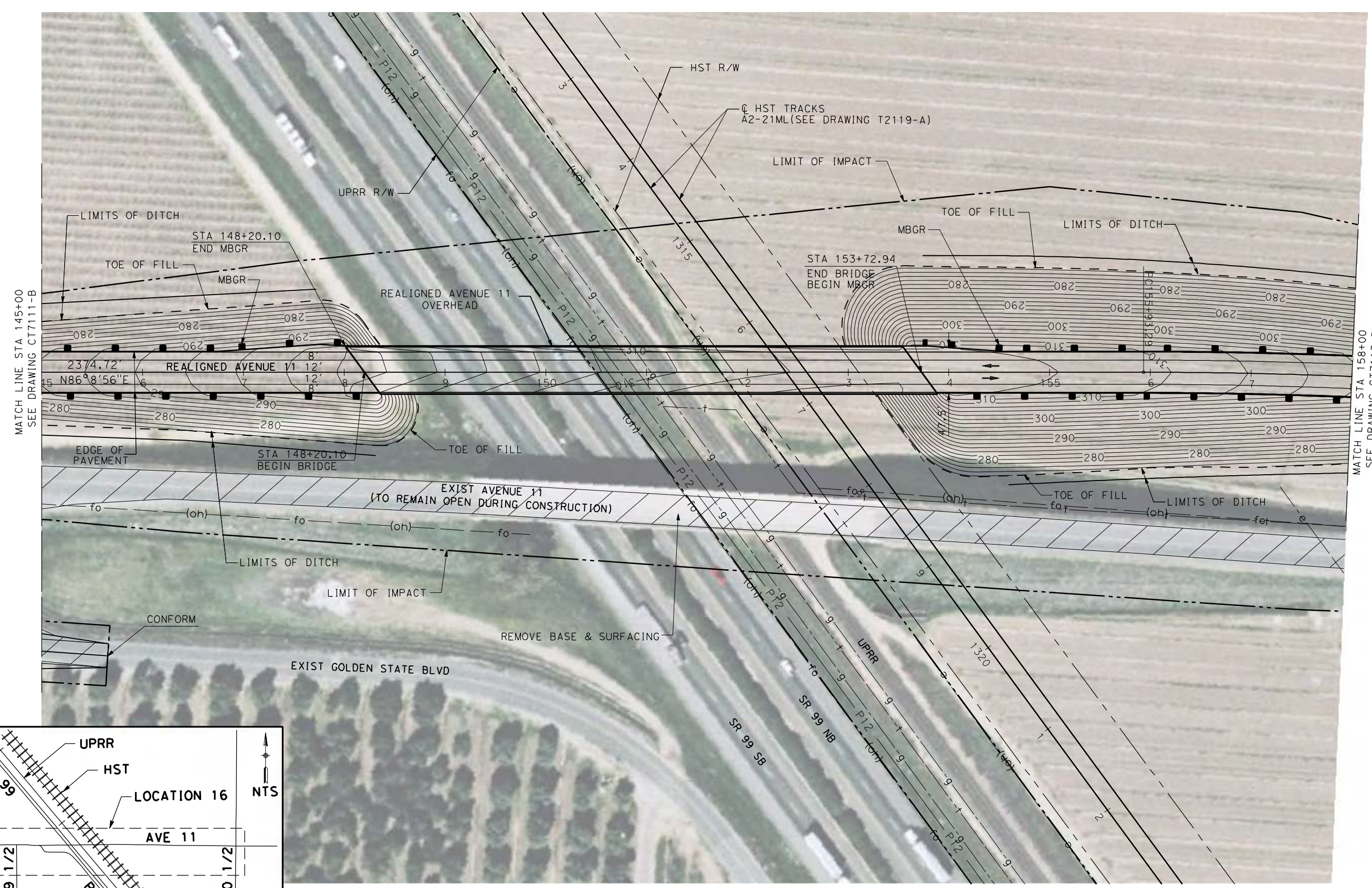


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
UPRR/SR99 MAINLINE - (AVE 24/WC)  
AVENUE 11 - OVERHEAD  
LAYOUT  
SHEET 2 OF 5

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
CT7111-B  
SCALE  
AS SHOWN  
SHEET NO.  
### OF ###

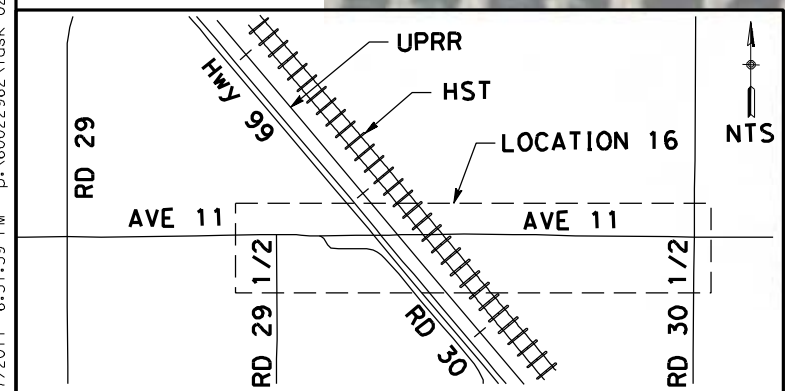


4/27/2011 6:31:39 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 2b - ave 24 wye-w.chowchilla\caltrans facilities\Layout\CT7112-B.dwg

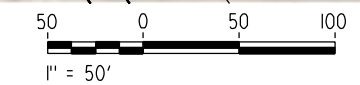


MATCH LINE STA 145+00  
SEE DRAWING CT7111-B

MATCH LINE STA 158+00  
SEE DRAWING CT7113-B



**NOTE:**  
1. FOR ROADWAY PROFILE, SEE DRAWINGS CT8115-B THROUGH CT8119-B



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
DRAWN BY  
C. DELOS REYES  
CHECKED BY  
A. SILVER  
IN CHARGE  
A. BOONE  
DATE  
04/29/2011

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

**NOT FOR**  
**CONSTRUCTION**

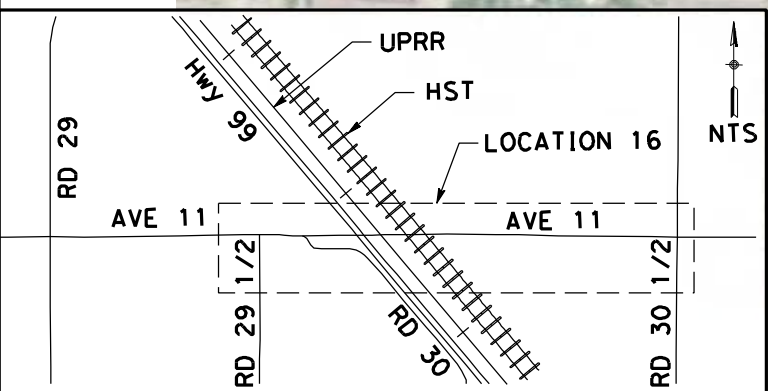
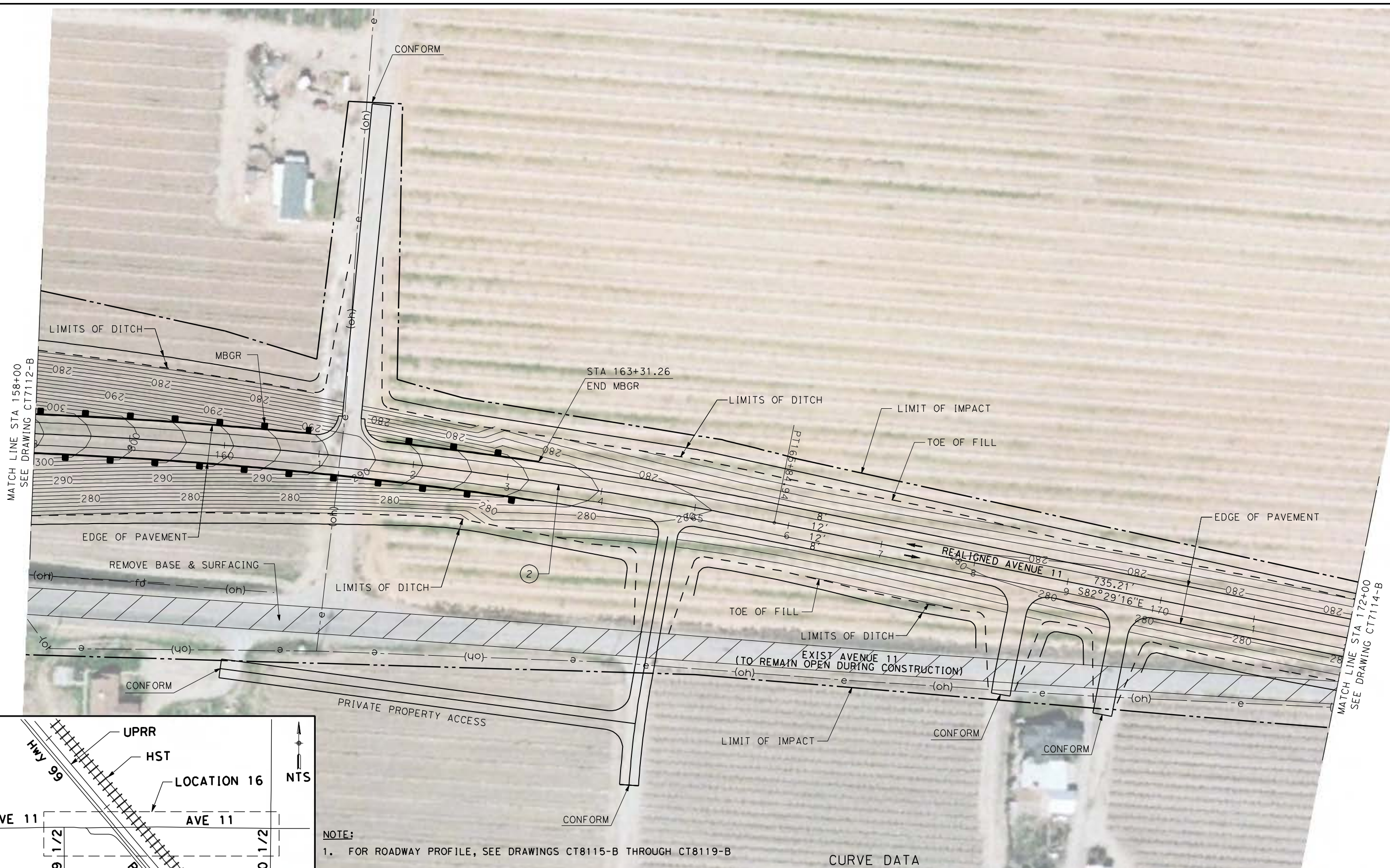


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
UPRR/SR99 MAINLINE - (AVE 24/WC)  
AVENUE 11 - OVERHEAD  
LAYOUT  
SHEET 3 OF 5

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
CT7112-B  
SCALE  
AS SHOWN  
SHEET NO.  
### OF ###



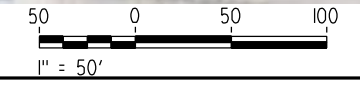
4/27/2011 6:31:52 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 2b - ave 24 wye-w.chowchilla caltrans facilities\Layout\CT7113-B.dwg



**NOTE:**  
1. FOR ROADWAY PROFILE, SEE DRAWINGS CT8115-B THROUGH CT8119-B

**CURVE DATA**

No.	R	Δ	T	L	V
(2)	5000.00	11°21'48"	497.45	991.64	45 MPH



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**D. AYELE**  
DRAWN BY  
**C. DELOS REYES**  
CHECKED BY  
**A. SILVER**  
IN CHARGE  
**A. BOONE**  
DATE  
**04/29/2011**

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

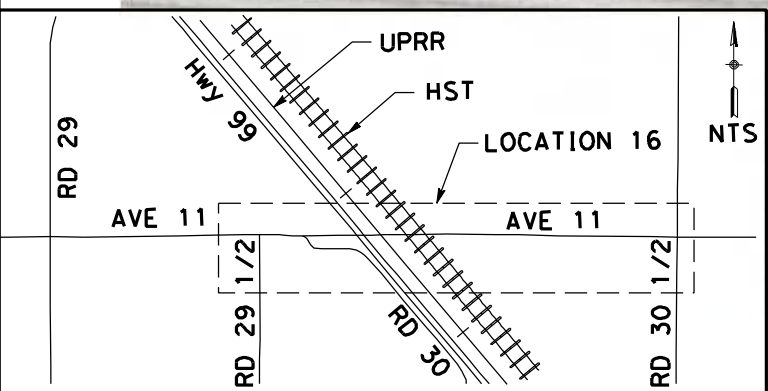
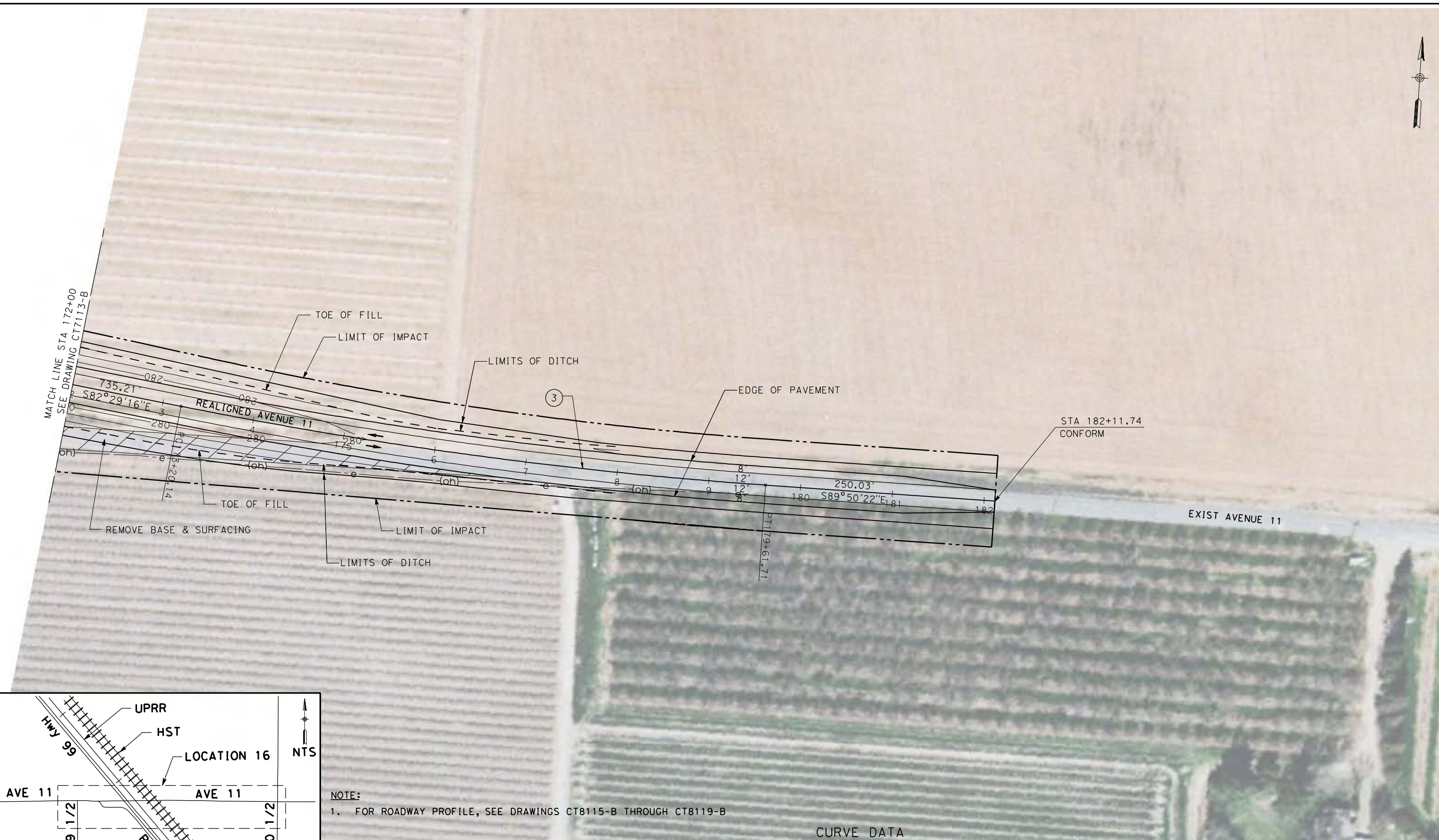


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
UPRR/SR99 MAINLINE - (AVE 24/WC)  
AVENUE 11 - OVERHEAD  
LAYOUT  
SHEET 4 OF 5

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
CT7113-B  
SCALE  
AS SHOWN  
SHEET NO.  
### OF ###

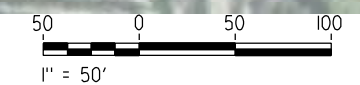


4/27/2011 6:32:04 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 2b - ave 24 wye-w.chowchilla caltrans facilities\Layout\CT7114-B.dgn  
 oyeled



NOTE:  
 1. FOR ROADWAY PROFILE, SEE DRAWINGS CT8115-B THROUGH CT8119-B

No.	R	$\Delta$	T	L	V
(3)	5000.00	7°21'6"	321.22	641.56	45 MPH



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
 D. AYELE  
 DRAWN BY  
 C. DELOS REYES  
 CHECKED BY  
 A. SILVER  
 IN CHARGE  
 A. BOONE  
 DATE  
 04/29/2011

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

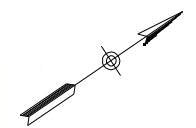


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 MAINLINE - (AVE 24/WC)  
 AVENUE 11 - OVERHEAD  
 LAYOUT  
 SHEET 5 OF 5

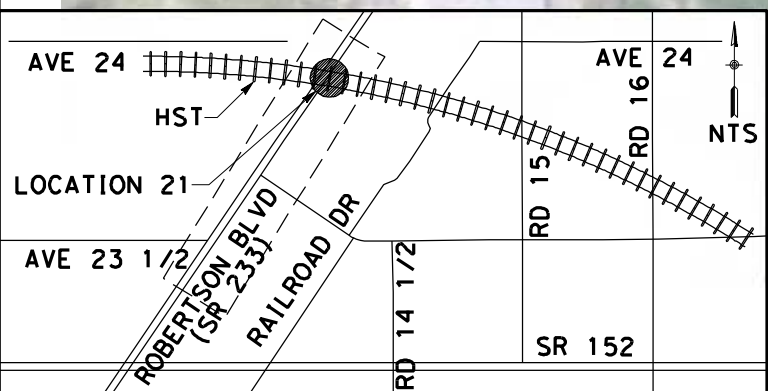
CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CT7114-B  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###



4/27/2011 6:32:16 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 2b - ave 24 wye-w.chowchilla\caltrans facilities\Layout\CT7115-B.dwg

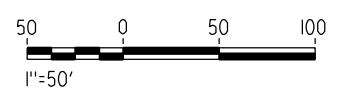


MATCH LINE STA 144+00  
SEE DRAWING CT7116-B



**NOTE:**  
1. FOR ROADWAY PROFILE, SEE DRAWINGS CT8120-B THROUGH CT8123-B

CURVE DATA					
No.	R	Δ	T	L	V
①	3000.00	10° 10' 00"	266.86	532.33	45 MPH
②	3000.00	10° 10' 00"	266.86	532.33	45 MPH



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
DRAWN BY  
C. DELOS REYES  
CHECKED BY  
A. SILVER  
IN CHARGE  
A. BOONE  
DATE  
04/29/2011

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

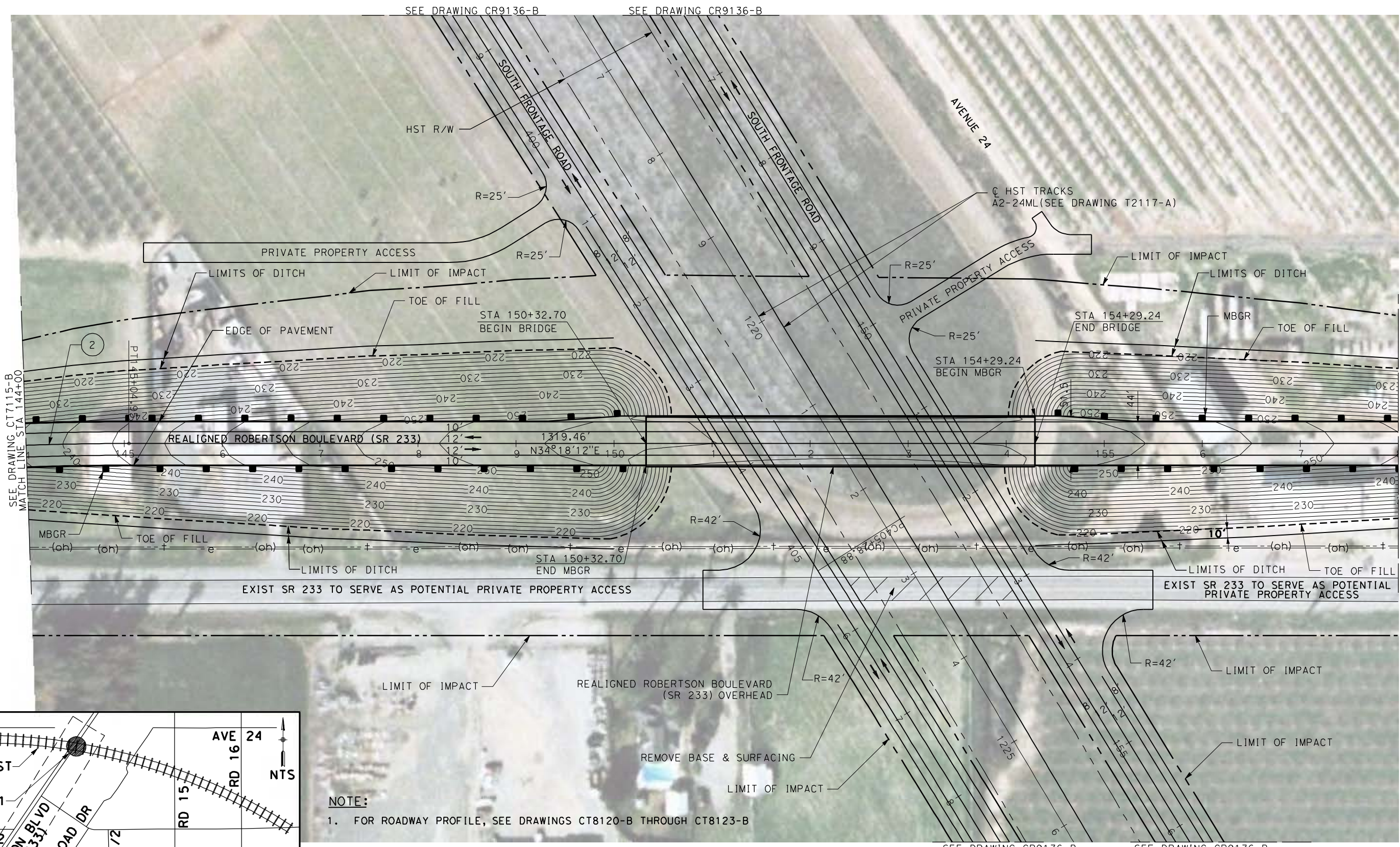
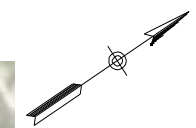


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
UPRR/SR99 MAINLINE - (AVE 24)  
GRADE SEPARATION - ROBERTSON BLVD (SR 233) ALT 1  
LAYOUT  
SHEET 1 OF 4

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
CT7115-B  
SCALE  
AS SHOWN  
SHEET NO.  
### OF ###

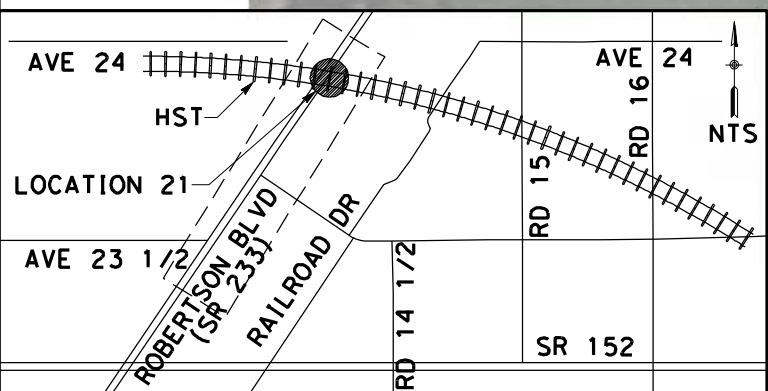


4/27/2011 6:32:29 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 2b - ave 24 wye-w.chowchilla\layout\CT7116-B.dwg



SEE DRAWING CT7115-B  
MATCH LINE STA 144+00

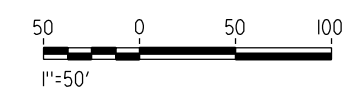
MATCH LINE STA 158+00  
SEE DRAWING CT7117-B



**NOTE:**  
1. FOR ROADWAY PROFILE, SEE DRAWINGS CT8120-B THROUGH CT8123-B

**CURVE DATA**

No.	R	Δ	T	L	V
(2)	3000.00	10° 10' 00"	266.86	532.33	45 MPH



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**D. AYELE**  
DRAWN BY  
**C. DELOS REYES**  
CHECKED BY  
**A. SILVER**  
IN CHARGE  
**A. BOONE**  
DATE  
**04/29/2011**

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

**NOT FOR**  
**CONSTRUCTION**



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

UPRR/SR99 MAINLINE - (AVE 24)  
GRADE SEPARATION - ROBERTSON BLVD (SR 233) ALT 1  
LAYOUT  
SHEET 2 OF 4

CONTRACT NO.  
HSR06-007

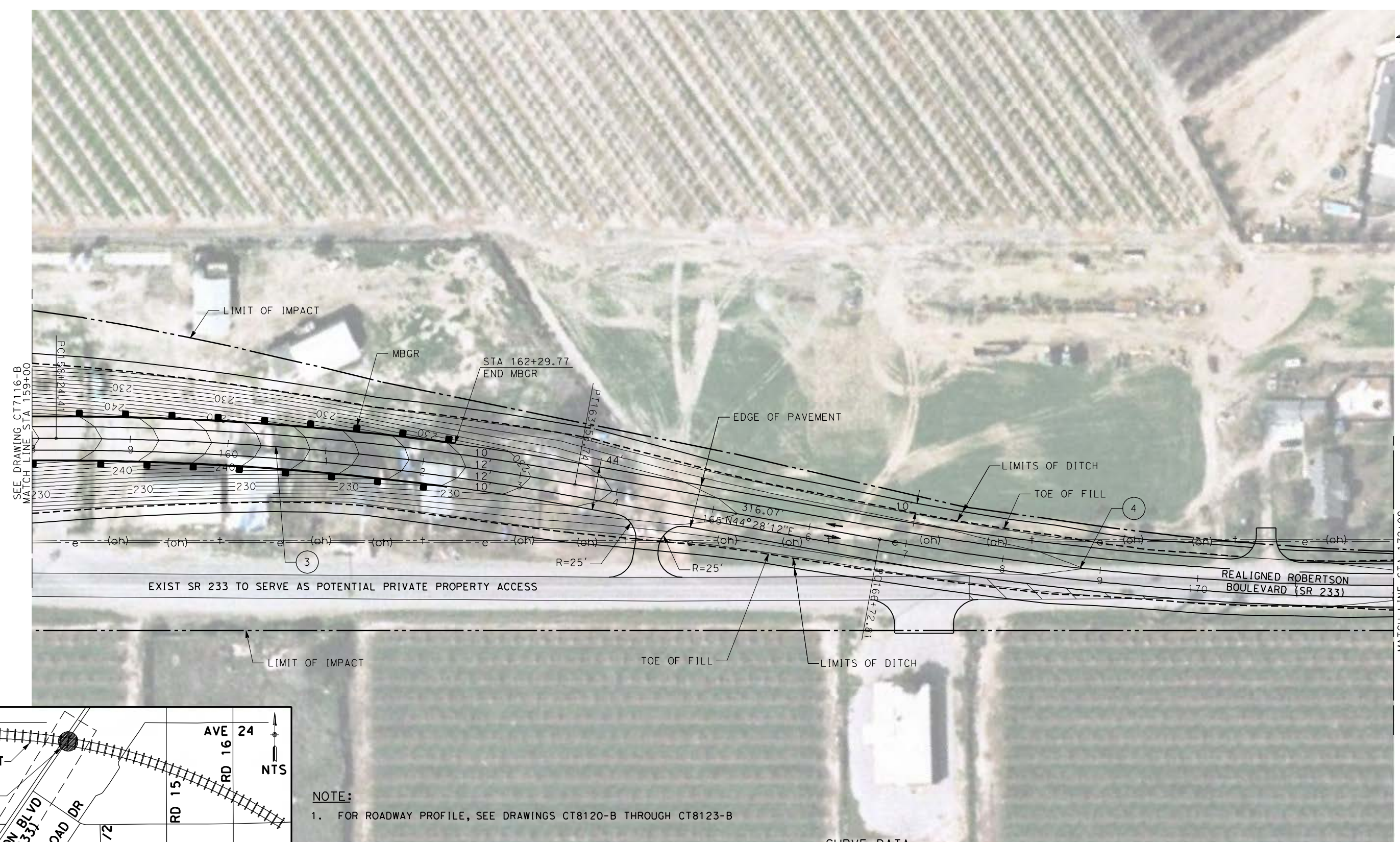
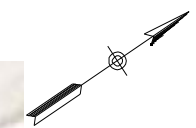
DRAWING NO.  
CT7116-B

SCALE  
AS SHOWN

SHEET NO.  
### OF ###

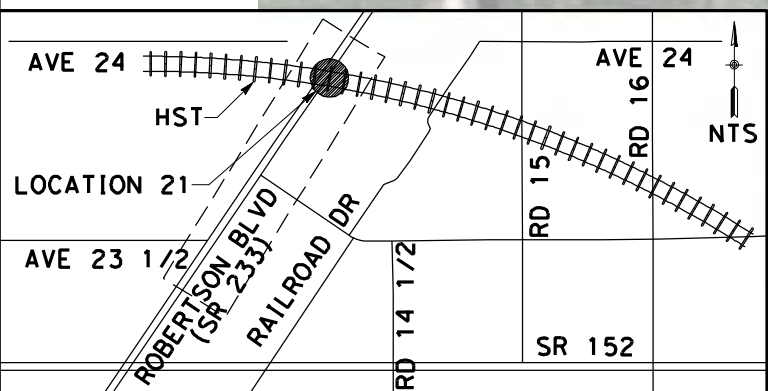


4/27/2011 6:32:39 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 2b - ave 24 wye-w.chowchilla\caltrans facilities\Layout\CT7117-B.dwg  
 oyeled



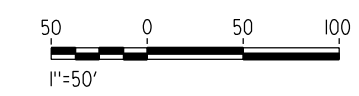
SEE DRAWING CT7116-B  
MATCH LINE STA 159+00

MATCH LINE STA 172+00  
SEE DRAWING CT7118-B



**NOTE:**  
1. FOR ROADWAY PROFILE, SEE DRAWINGS CT8120-B THROUGH CT8123-B

CURVE DATA					
No.	R	$\Delta$	T	L	V
③	3000.00	10° 10' 00"	266.86	532.33	45 MPH
④	3000.00	10° 10' 00"	266.86	532.33	45 MPH



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
 DRAWN BY  
C. DELOS REYES  
 CHECKED BY  
A. SILVER  
 IN CHARGE  
A. BOONE  
 DATE  
04/29/2011



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 MAINLINE - (AVE 24)  
 GRADE SEPARATION - ROBERTSON BLVD (SR 233) ALT 1  
 LAYOUT  
 SHEET 3 OF 4

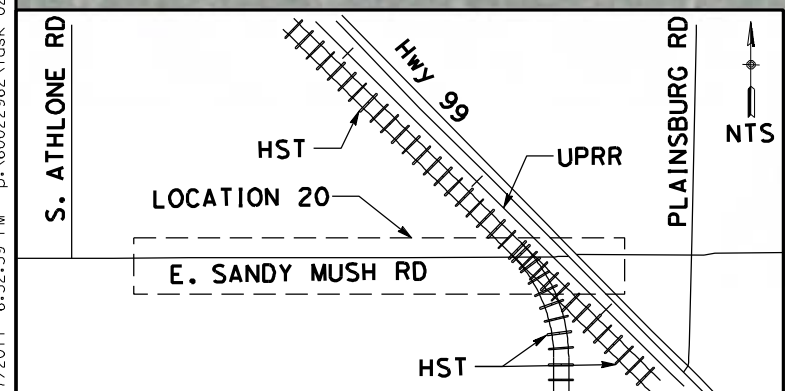
CONTRACT NO.  
HSR06-007  
 DRAWING NO.  
CT7117-B  
 SCALE  
AS SHOWN  
 SHEET NO.  
### OF ###







4/27/2011 6:32:59 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w.chowchilla caltrans facilities\Layout\CT7119-B.dgn



**NOTE:**  
1. FOR ROADWAY PROFILE, SEE DRAWINGS CT8124-B THROUGH CT8126-B

CURVE DATA

No.	R	Δ	T	L	V
(1)	2300.00	39° 51' 34"	833.94	1600.06	50 MPH



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
DRAWN BY  
C. DELOS REYES  
CHECKED BY  
A. SILVER  
IN CHARGE  
A. BOONE  
DATE  
04/29/2011

**RECORD SET  
15% DESIGN  
SUBMITTAL**

**NOT FOR  
CONSTRUCTION**



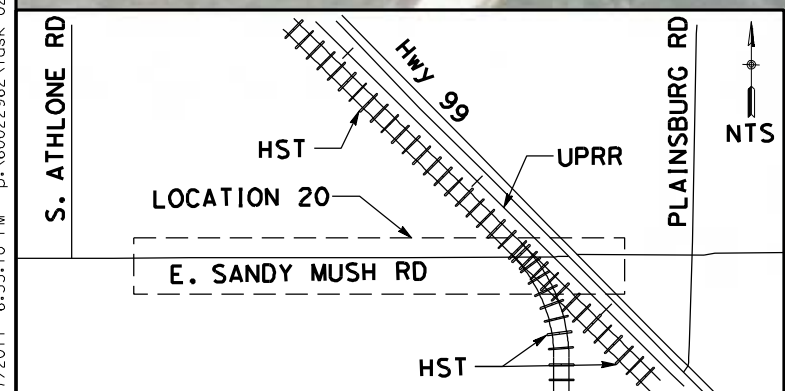
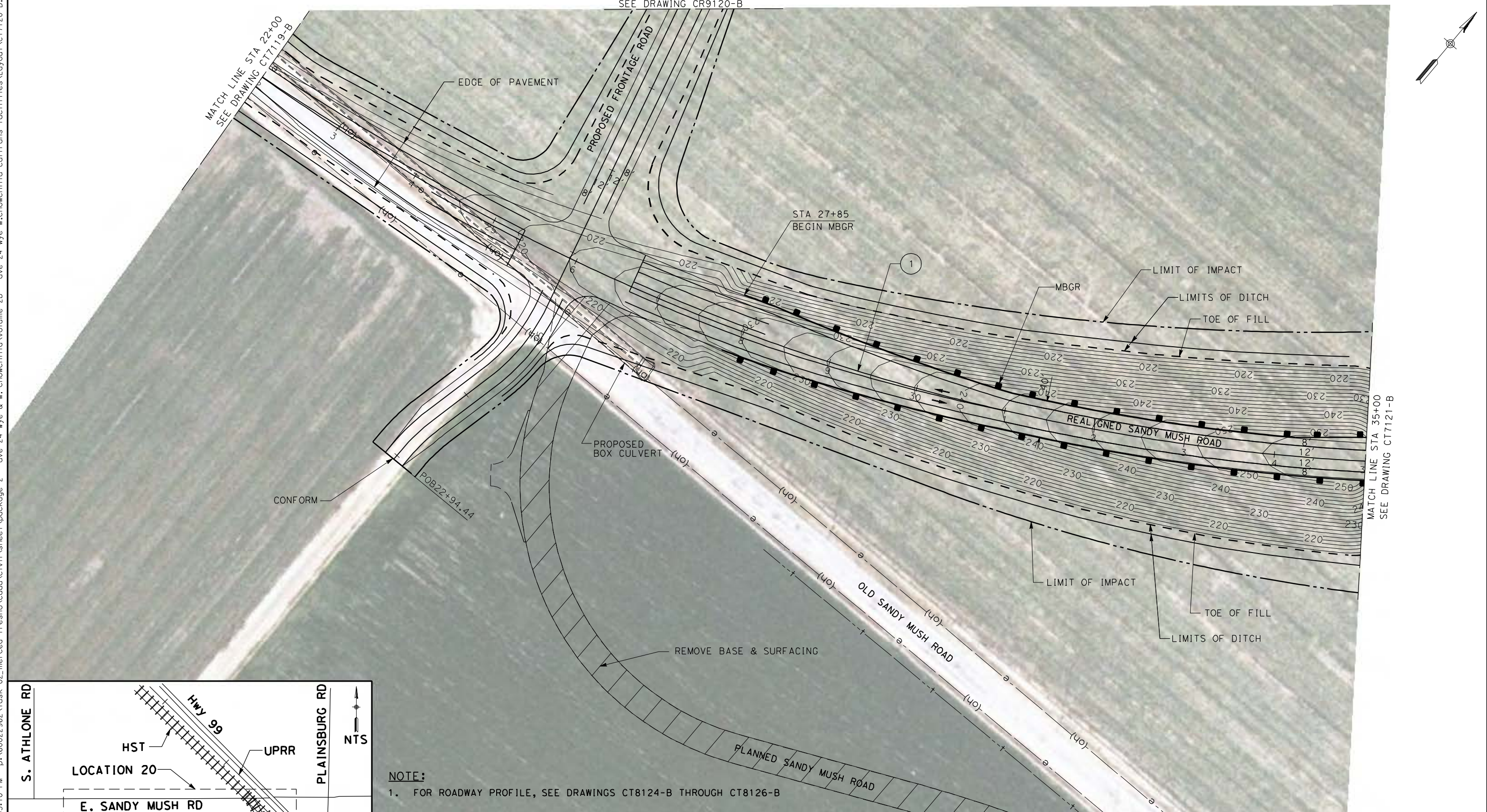
**CALIFORNIA HIGH-SPEED TRAIN PROJECT  
MERCED TO FRESNO**

UPRR/SR99 WYE/MERCED - (AVE 24)  
GRADE SEPARATION - SANDY MUSH RD INTERCHANGE  
LAYOUT  
SHEET 1 OF 3

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
CT7119-B  
SCALE  
AS SHOWN  
SHEET NO.  
### OF ###



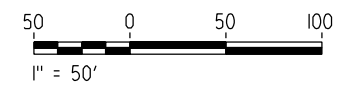
4/27/2011 6:33:10 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 2b - ave 24 wye-w.chowchilla\Layout\CT7120-B.dgn



**NOTE:**  
 1. FOR ROADWAY PROFILE, SEE DRAWINGS CT8124-B THROUGH CT8126-B

CURVE DATA

No.	R	Δ	T	L	V
(1)	2300.00	39°51'34"	833.94	1600.06	50 MPH



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
 DRAWN BY  
C. DELOS REYES  
 CHECKED BY  
A. SILVER  
 IN CHARGE  
A. BOONE  
 DATE  
04/29/2011

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

**NOT FOR**  
**CONSTRUCTION**



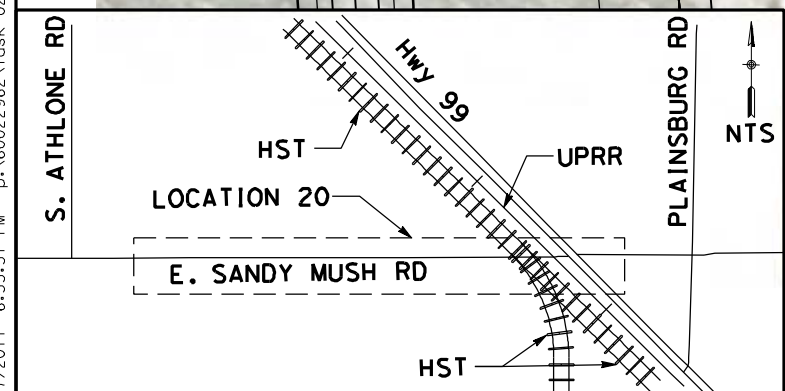
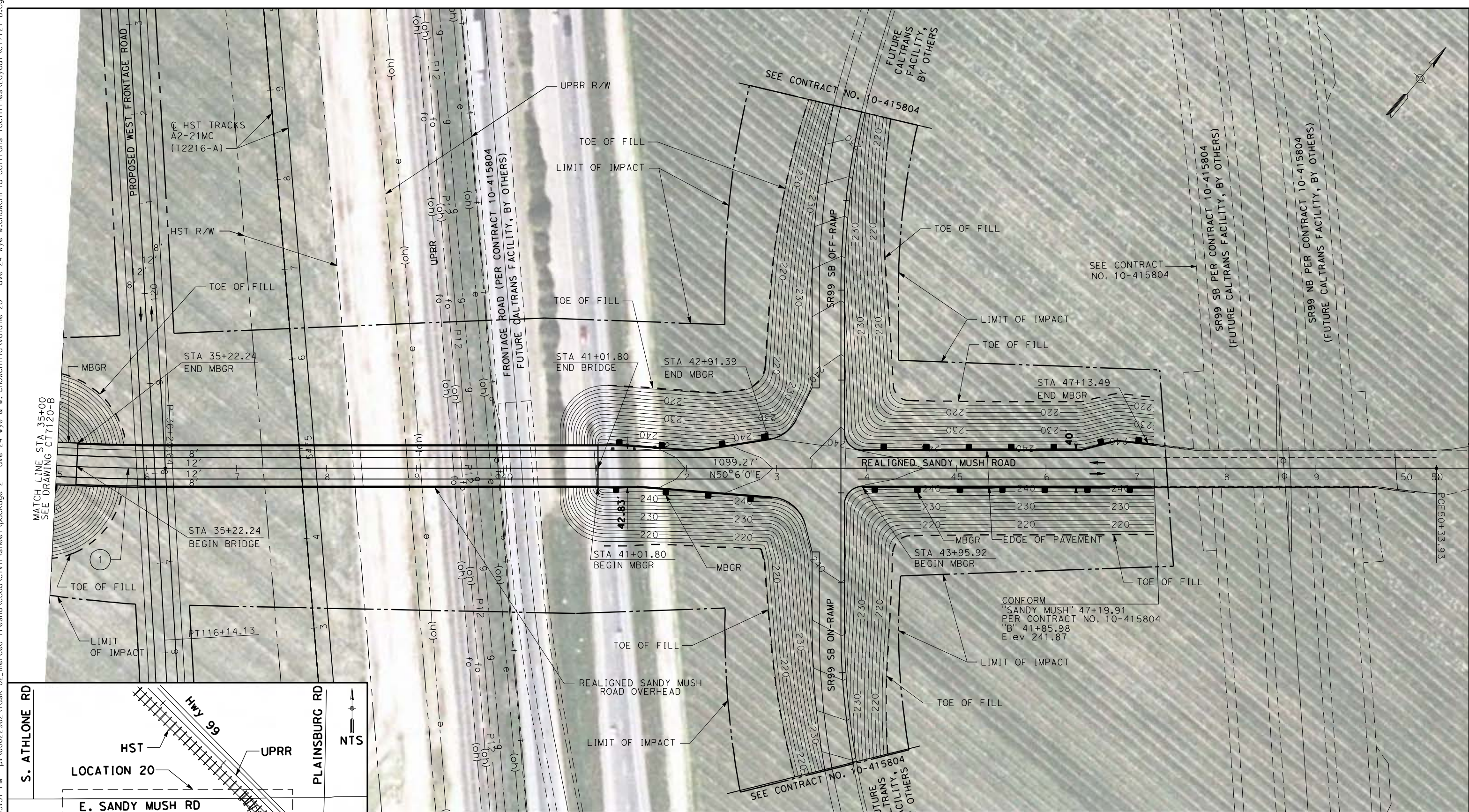
**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**

UPRR/SR99 WYE/MERCED - (AVE 24)  
 GRADE SEPARATION - SANDY MUSH RD INTERCHANGE  
 LAYOUT  
 SHEET 2 OF 3

CONTRACT NO.  
HSR06-007  
 DRAWING NO.  
CT7120-B  
 SCALE  
AS SHOWN  
 SHEET NO.  
### OF ###

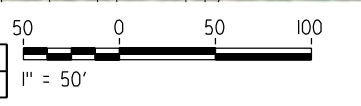


4/27/2011 6:33:31 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 2b - ave 24 wye-w.chowchilla\Layout\CT7121-B.dwg



**NOTE:**  
 1. FOR ROADWAY PROFILE, SEE DRAWINGS CT8124-B THROUGH CT8126-B

CURVE DATA					
No.	R	$\Delta$	T	L	V
(1)	2300.00	39°51'34"	833.94	1600.06	50 MPH



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
 DRAWN BY  
C. DELOS REYES  
 CHECKED BY  
A. SILVER  
 IN CHARGE  
A. BOONE  
 DATE  
04/29/2011

**RECORD SET  
 15% DESIGN  
 SUBMITTAL**

**NOT FOR  
 CONSTRUCTION**



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

UPRR/SR99 WYE/MERCED - (AVE 24)  
 GRADE SEPARATION - SANDY MUSH RD INTERCHANGE  
 LAYOUT  
 SHEET 3 OF 3

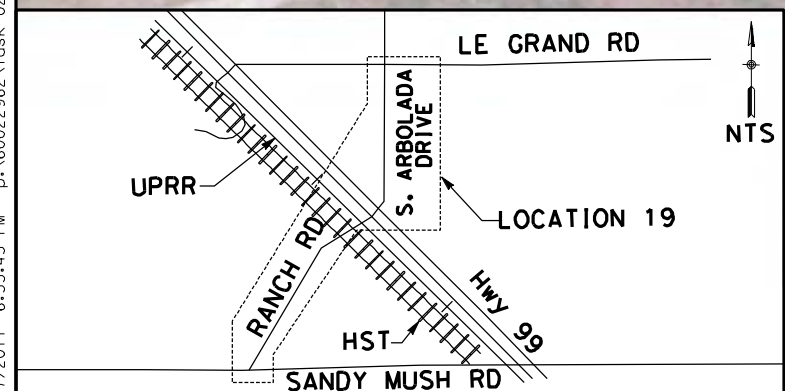
CONTRACT NO.  
HSR06-007  
 DRAWING NO.  
CT7121-B  
 SCALE  
AS SHOWN  
 SHEET NO.  
### OF ###



4/27/2011 6:33:45 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 2b - ave 24 wye-w.chowchilla\caltrans facilities\Layout\CT7122-B.dgn  
 oyeled

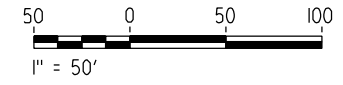


MATCH LINE STA 61+00  
 SEE DRAWING CT7123-B



**NOTE:**  
 1. FOR ROADWAY PROFILE, SEE DRAWINGS CT8127-B THROUGH CT8131-B

CURVE DATA				
No.	R	$\Delta$	T	L
(1)	3000.00	14°17'14"	375.99	748.07



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
 D. AYELE  
 DRAWN BY  
 C. DELOS REYES  
 CHECKED BY  
 A. SILVER  
 IN CHARGE  
 A. BOONE  
 DATE  
 04/29/2011

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



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 MERCED - (AVE 24/WC)  
 GRADE SEPARATION - LE GRAND RD INTERCHANGE  
 LAYOUT  
 SHEET 1 OF 5

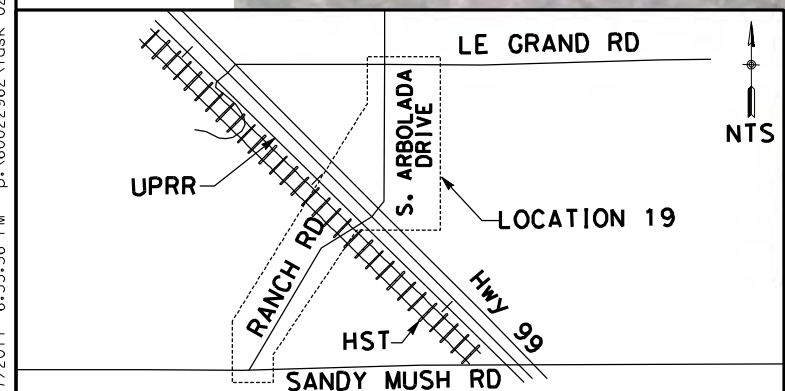
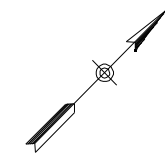
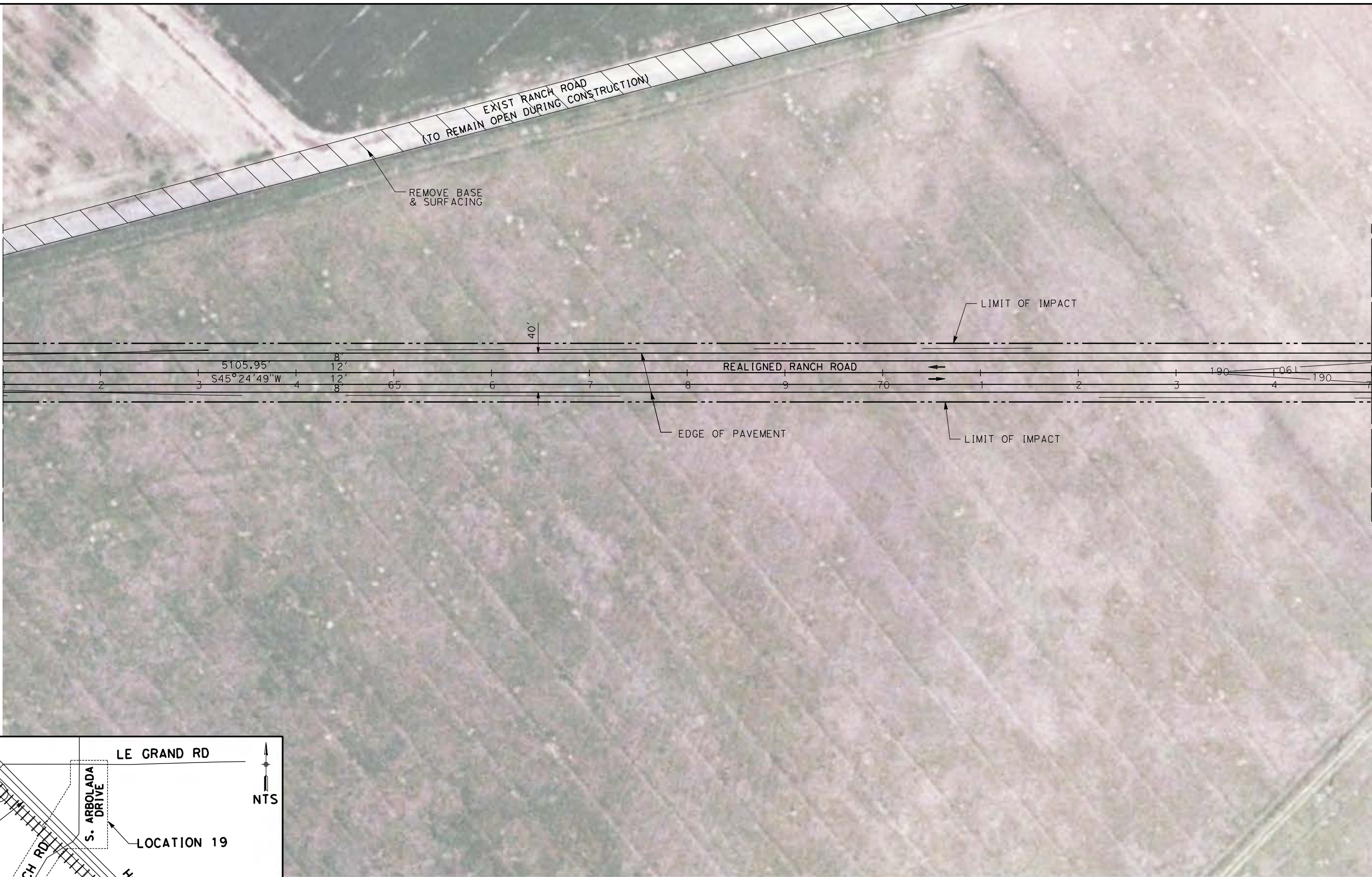
CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CT7122-B  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###



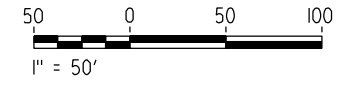
4/27/2011 6:33:56 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 2b - ave 24 wye-w.chowchilla caltrans facilities\Layout\CT7123-B.dgn

MATCH LINE STA 61+00  
SEE DRAWING CT7122-B

MATCH LINE STA 75+00  
SEE DRAWING CT7124-B



**NOTE:**  
1. FOR ROADWAY PROFILE, SEE DRAWINGS CT8127-B THROUGH CT8131-B



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
DRAWN BY  
C. DELOS REYES  
CHECKED BY  
A. SILVER  
IN CHARGE  
A. BOONE  
DATE  
04/29/2011

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

**NOT FOR**  
**CONSTRUCTION**

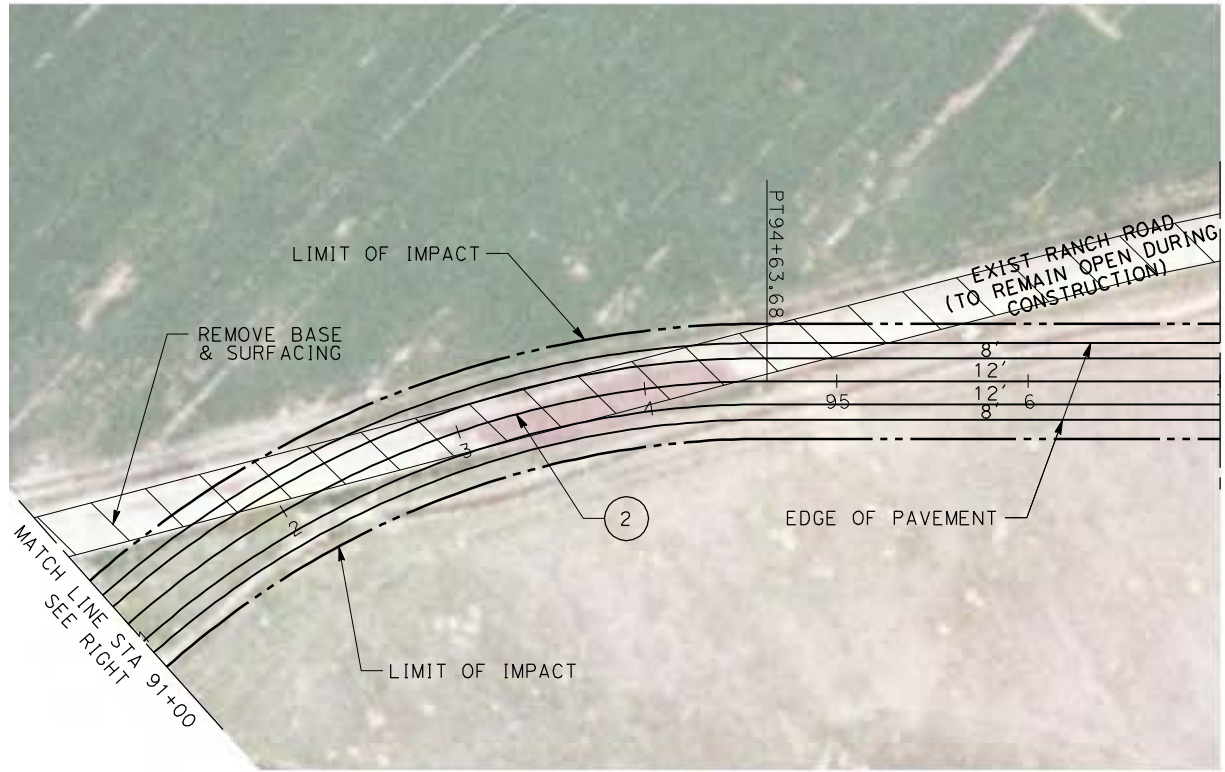


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
UPRR/SR99 MERCED - (AVE 24/WC)  
GRADE SEPARATION - LE GRAND RD INTERCHANGE  
LAYOUT  
SHEET 2 OF 5

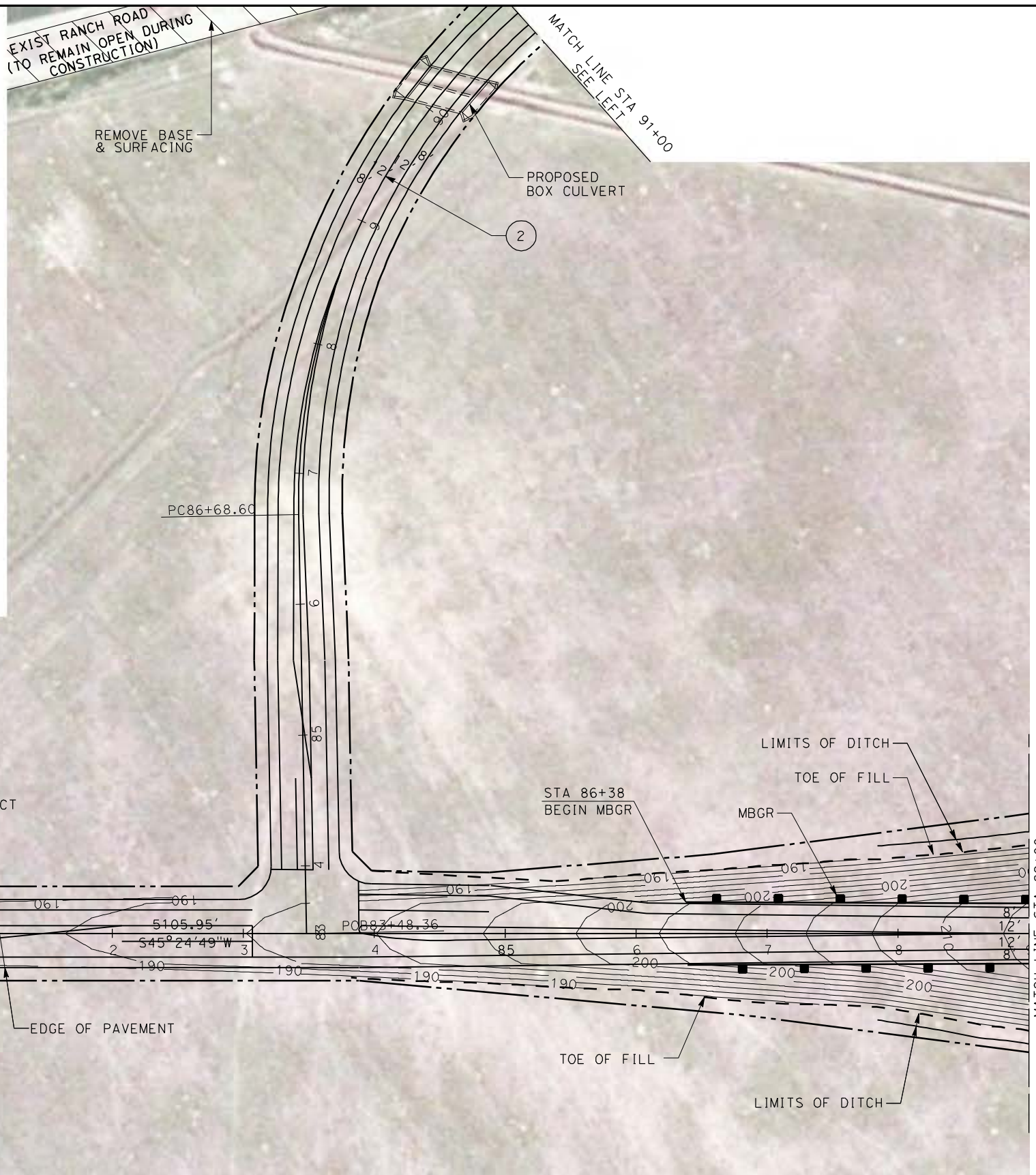
CONTRACT NO.  
HSR06-007  
DRAWING NO.  
CT7123-B  
SCALE  
AS SHOWN  
SHEET NO.  
### OF ###



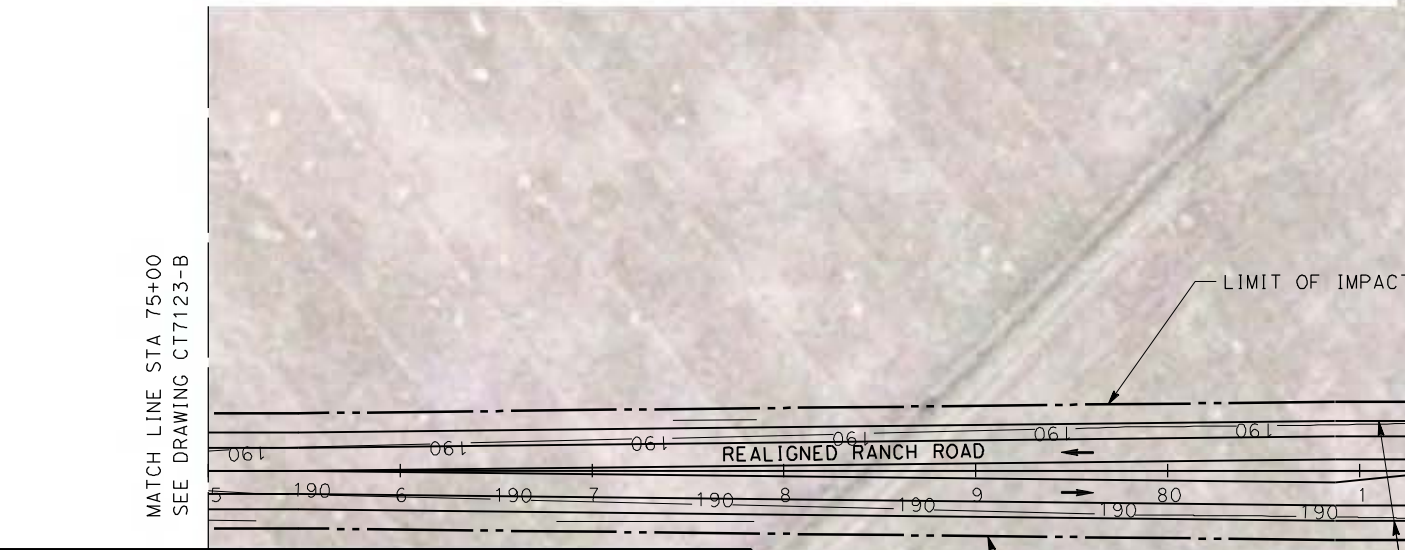
4/27/2011 6:34:09 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 2b - ave 24 wye-w.chowchilla\layout\CT7124-B.dwg



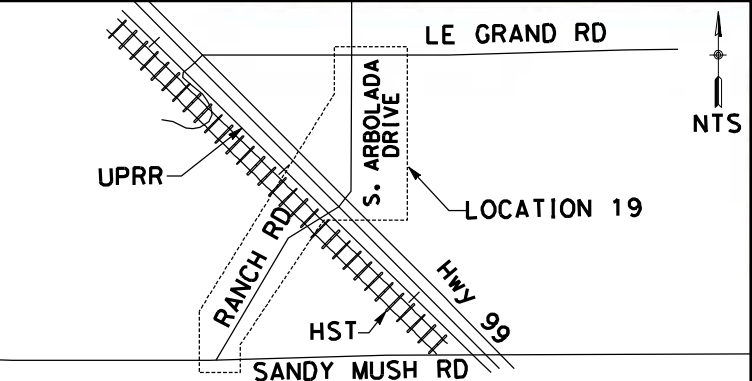
SEE DRAWING CF9123-B



SEE DRAWING CTT125-B

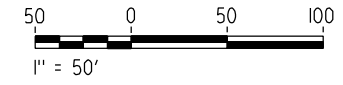


SEE DRAWING CT7123-B



**NOTE:**  
1. FOR ROADWAY PROFILE, SEE DRAWINGS CT8127-B THROUGH CT8131-B

CURVE DATA				
No.	R	Δ	T	L
(2)	500.00	91°06'35"	509.78	795.08



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
DRAWN BY  
C. DELOS REYES  
CHECKED BY  
A. SILVER  
IN CHARGE  
A. BOONE  
DATE  
04/29/2011

**RECORD SET  
15% DESIGN  
SUBMITTAL**

**NOT FOR  
CONSTRUCTION**



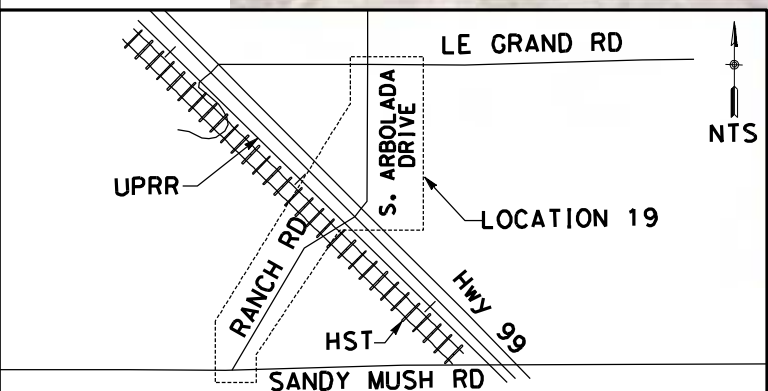
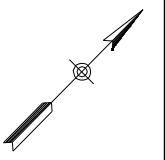
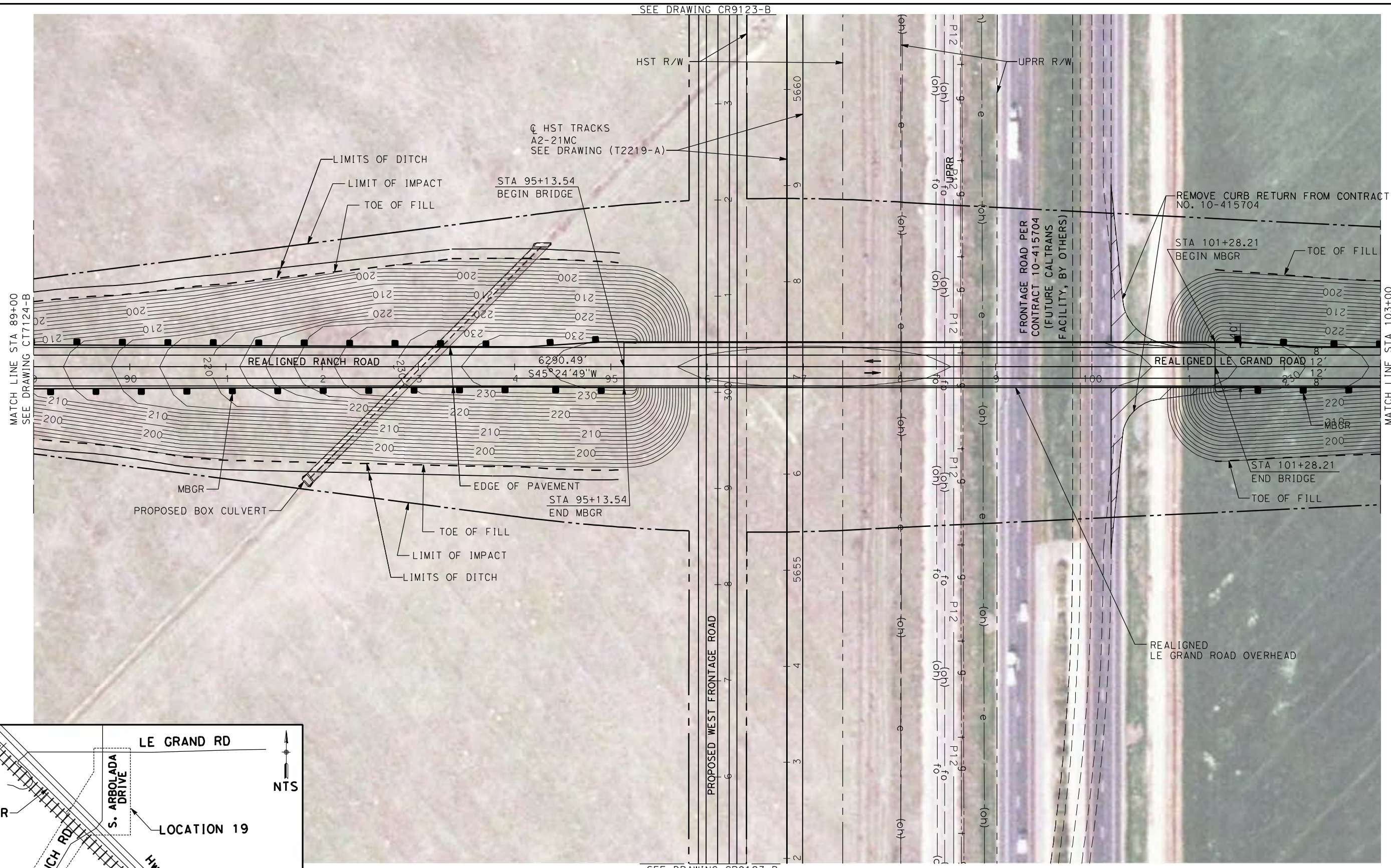
**CALIFORNIA HIGH-SPEED TRAIN PROJECT  
MERCED TO FRESNO**

UPRR/SR99 MERCED - (AVE 24/WC)  
GRADE SEPARATION - LE GRAND RD INTERCHANGE  
LAYOUT  
SHEET 3 OF 5

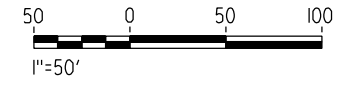
CONTRACT NO.  
HSR06-007  
DRAWING NO.  
CT7124-B  
SCALE  
AS SHOWN  
SHEET NO.  
### OF ###



4/27/2011 6:34:29 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 2b - ave 24 wye-w.chowchilla\caltrans facilities\Layout\CT7125-B.dgn



**NOTE:**  
1. FOR ROADWAY PROFILE, SEE DRAWINGS CT8127-B THROUGH CT8131-B



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE

DRAWN BY  
C. DELOS REYES

CHECKED BY  
A. SILVER

IN CHARGE  
A. BOONE

DATE  
04/29/2011

**RECORD SET**  
15% DESIGN  
SUBMITTAL

**NOT FOR  
CONSTRUCTION**



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

UPRR/SR99 MERCED - (AVE 24/WC)  
GRADE SEPARATION - LE GRAND RD INTERCHANGE  
LAYOUT  
SHEET 4 OF 5

CONTRACT NO.  
HSR06-007

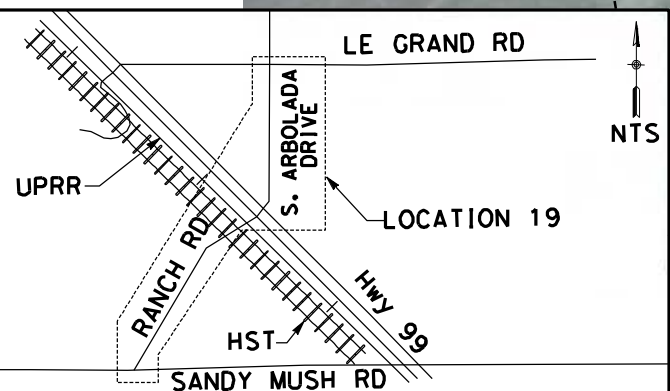
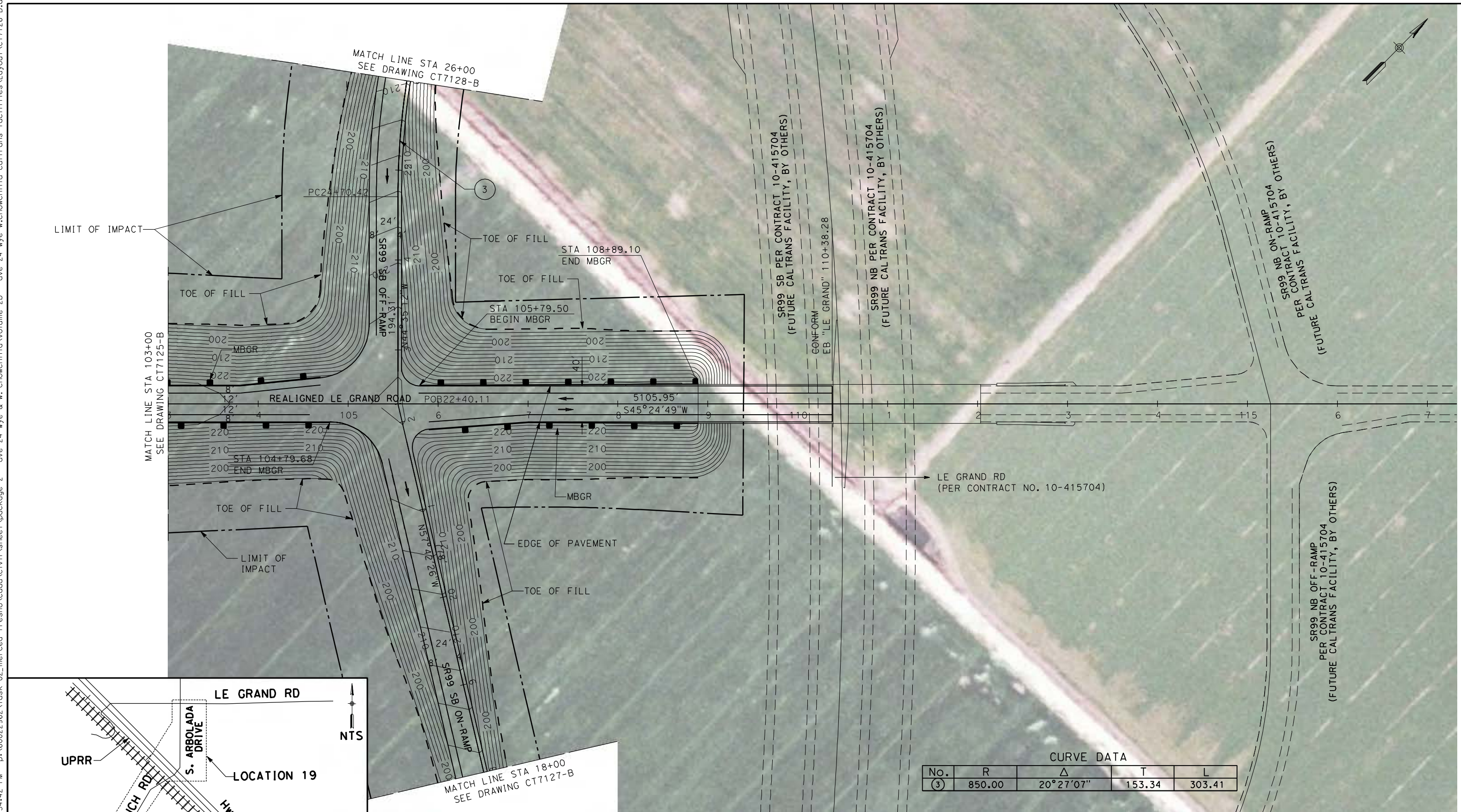
DRAWING NO.  
CT7125-B

SCALE  
AS SHOWN

SHEET NO.  
### OF ###

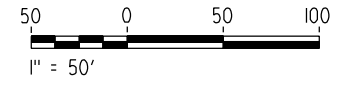


4/27/2011 6:34:42 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 2b - ave 24 wye-w.chowchilla\caltrans facilities\Layout\CT7126-B.dgn



CURVE DATA

No.	R	Δ	T	L
(3)	850.00	20°27'07"	153.34	303.41



NOTE:  
1. FOR ROADWAY PROFILE, SEE DRAWINGS CT8127-B THROUGH CT8131-B

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
DRAWN BY  
C. DELOS REYES  
CHECKED BY  
A. SILVER  
IN CHARGE  
A. BOONE  
DATE  
04/29/2011

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

**NOT FOR**  
**CONSTRUCTION**



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

UPRR/SR99 MERCED - (AVE 24/WC)  
GRADE SEPARATION - LE GRAND RD INTERCHANGE  
LAYOUT  
SHEET 5 OF 5

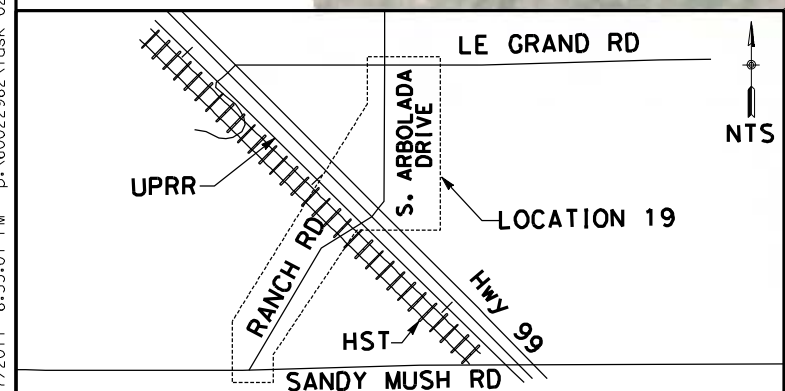
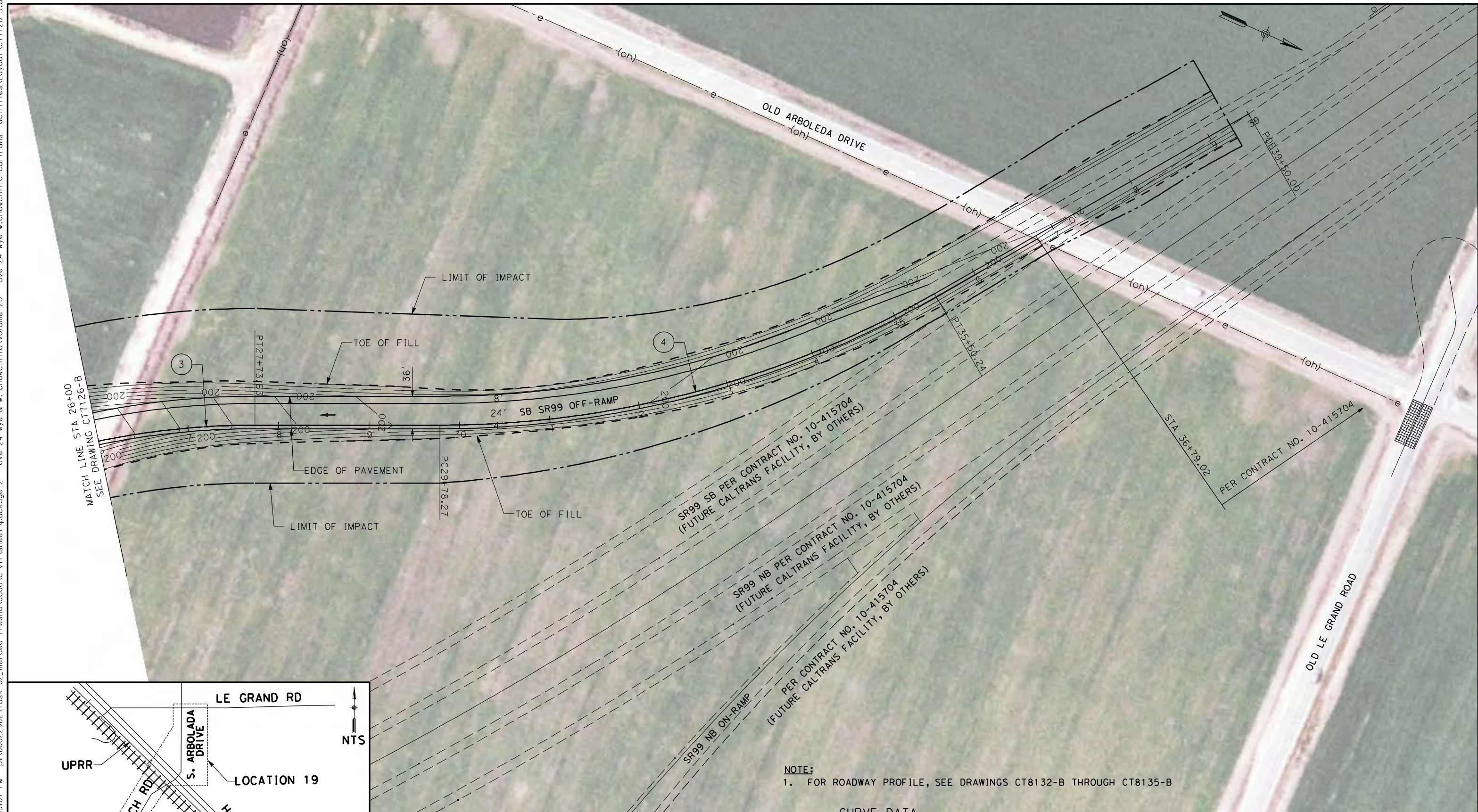
CONTRACT NO.  
HSR06-007  
DRAWING NO.  
CT7126-B  
SCALE  
AS SHOWN  
SHEET NO.  
### OF ###







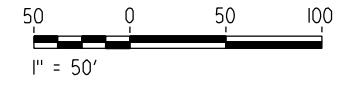
4/27/2011 6:35:07 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 2b - ave 24 wye-w.chowchilla\layout\CT7128-B.dwg



**NOTE:**  
1. FOR ROADWAY PROFILE, SEE DRAWINGS CT8132-B THROUGH CT8135-B

**CURVE DATA**

No.	R	Δ	T	L
③	850.00	20°27'07"	153.34	303.41
④	1100.00	29°47'31"	292.61	571.97



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
DRAWN BY  
C. DELOS REYES  
CHECKED BY  
A. SILVER  
IN CHARGE  
A. BOONE  
DATE  
04/29/2011

**RECORD SET  
15% DESIGN  
SUBMITTAL**

**NOT FOR  
CONSTRUCTION**



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

UPRR/SR99 MERCED - (AVE 24/WC)  
GRADE SEPARATION-LE GRAND RD IC SR99 SB OFF-RAMP  
LAYOUT  
SHEET 2 OF 2

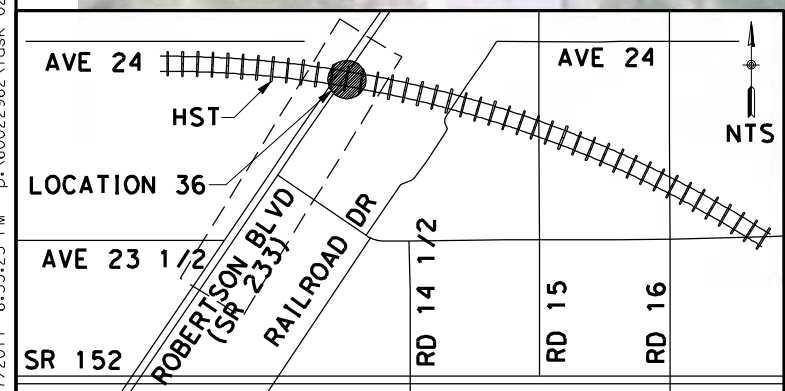
CONTRACT NO.  
HSR06-007  
DRAWING NO.  
CT7128-B  
SCALE  
AS SHOWN  
SHEET NO.  
### OF ###



4/27/2011 6:35:25 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 2b - ave 24 wye-w.chowchilla\Layout\CT7129-B.dwg



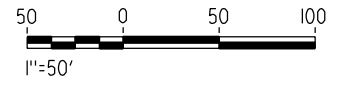
MATCH LINE STA 164+00  
SEE DRAWING CT7130-B



**NOTE:**  
1. FOR ROADWAY PROFILE, SEE DRAWINGS CT8136-B THROUGH CT8139-B

CURVE DATA

No.	R	Δ	T	L	V
①	3000.00	10° 10' 00"	266.86	532.33	55 MPH
②	3000.00	10° 10' 00"	266.86	532.33	55 MPH



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
DRAWN BY  
C. DELOS REYES  
CHECKED BY  
A. SILVER  
IN CHARGE  
A. BOONE  
DATE  
04/29/2011

**RECORD SET  
15% DESIGN  
SUBMITTAL**

**NOT FOR  
CONSTRUCTION**



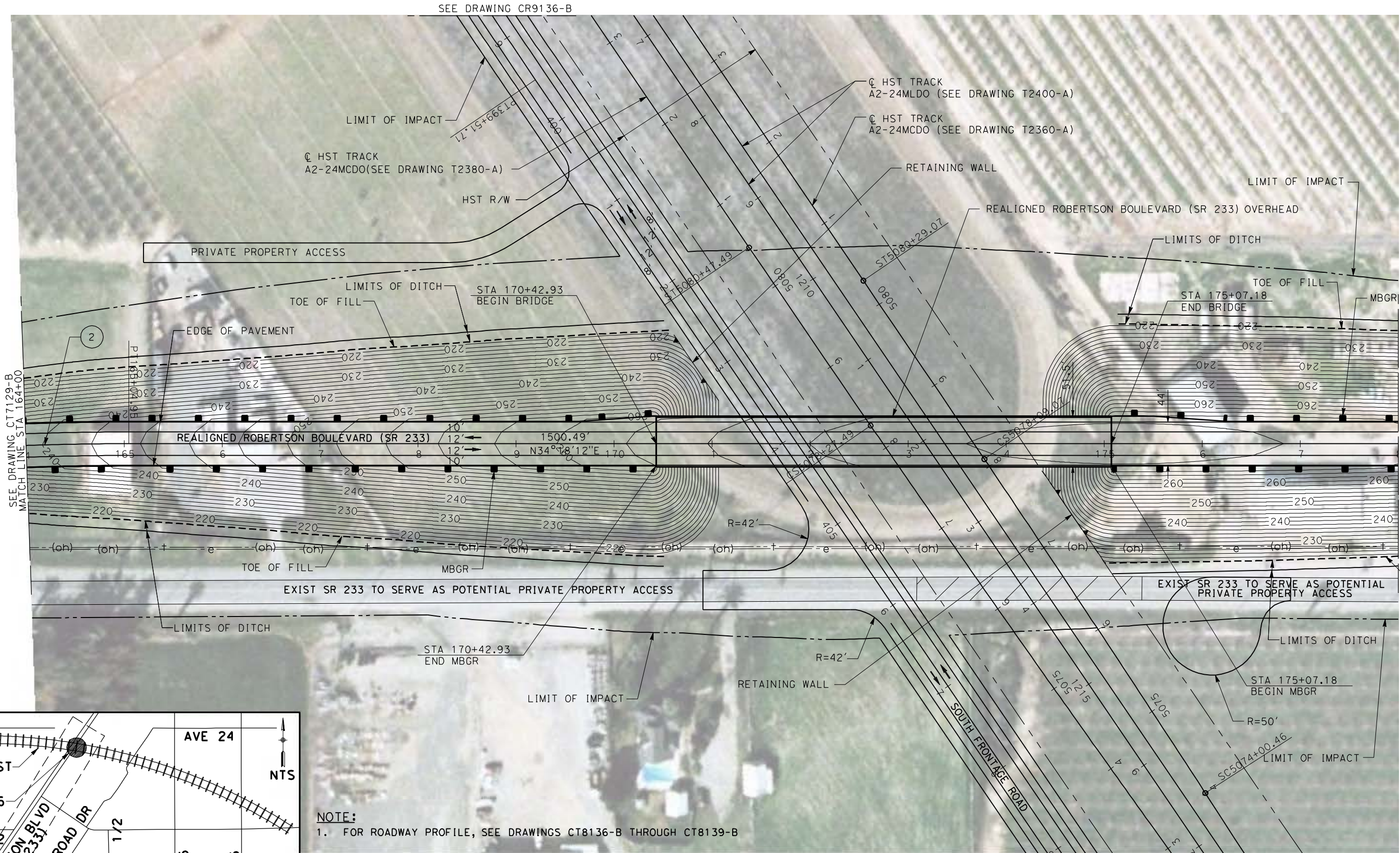
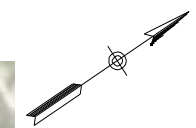
**CALIFORNIA HIGH-SPEED TRAIN PROJECT  
MERCED TO FRESNO**

UPRR/SR99 MAINLINE DO/MERCED DO - (WC)  
GRADE SEPARATION - ROBERTSON BLVD (SR 233) ALT 1  
LAYOUT  
SHEET 1 OF 4

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
CT7129-B  
SCALE  
AS SHOWN  
SHEET NO.  
### OF ###

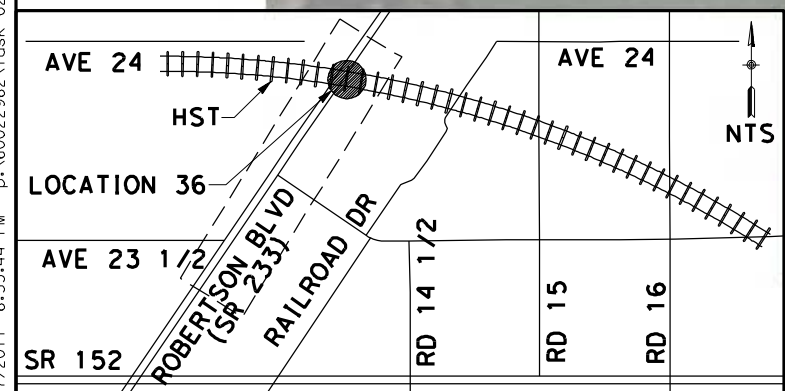


4/27/2011 6:35:44 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 2b - ave 24 wye-w.chowchilla\caltrans facilities\Layout\CT7130-B.dwg



SEE DRAWING CT7129-B  
MATCH LINE STA 164+00

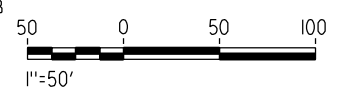
MATCH LINE STA 178+00  
SEE DRAWING CT7131-B



**NOTE:**  
1. FOR ROADWAY PROFILE, SEE DRAWINGS CT8136-B THROUGH CT8139-B

CURVE DATA SEE DRAWING CR9136-B

No.	R	Δ	T	L	V
(2)	3000.00	10° 10' 00"	266.86	532.33	55 MPH



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**D. AYELE**  
DRAWN BY  
**C. DELOS REYES**  
CHECKED BY  
**A. SILVER**  
IN CHARGE  
**A. BOONE**  
DATE  
**04/29/2011**

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

**NOT FOR**  
**CONSTRUCTION**



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

UPRR/SR99 MAINLINE DO/MERCED DO - (WC)  
GRADE SEPARATION - ROBERTSON BLVD (SR 233) ALT 1  
LAYOUT  
SHEET 2 OF 4

CONTRACT NO.  
HSR06-007

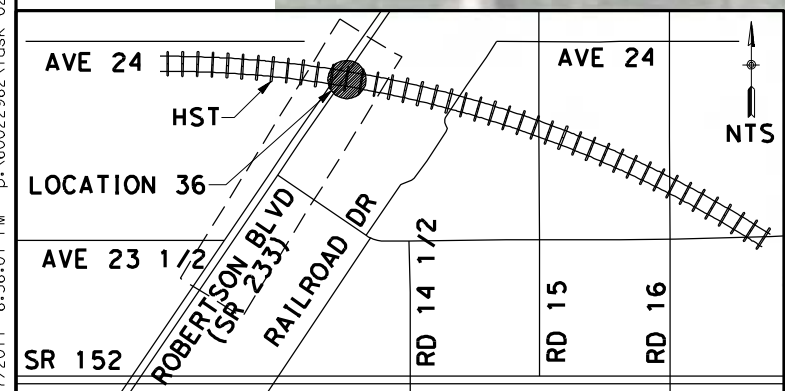
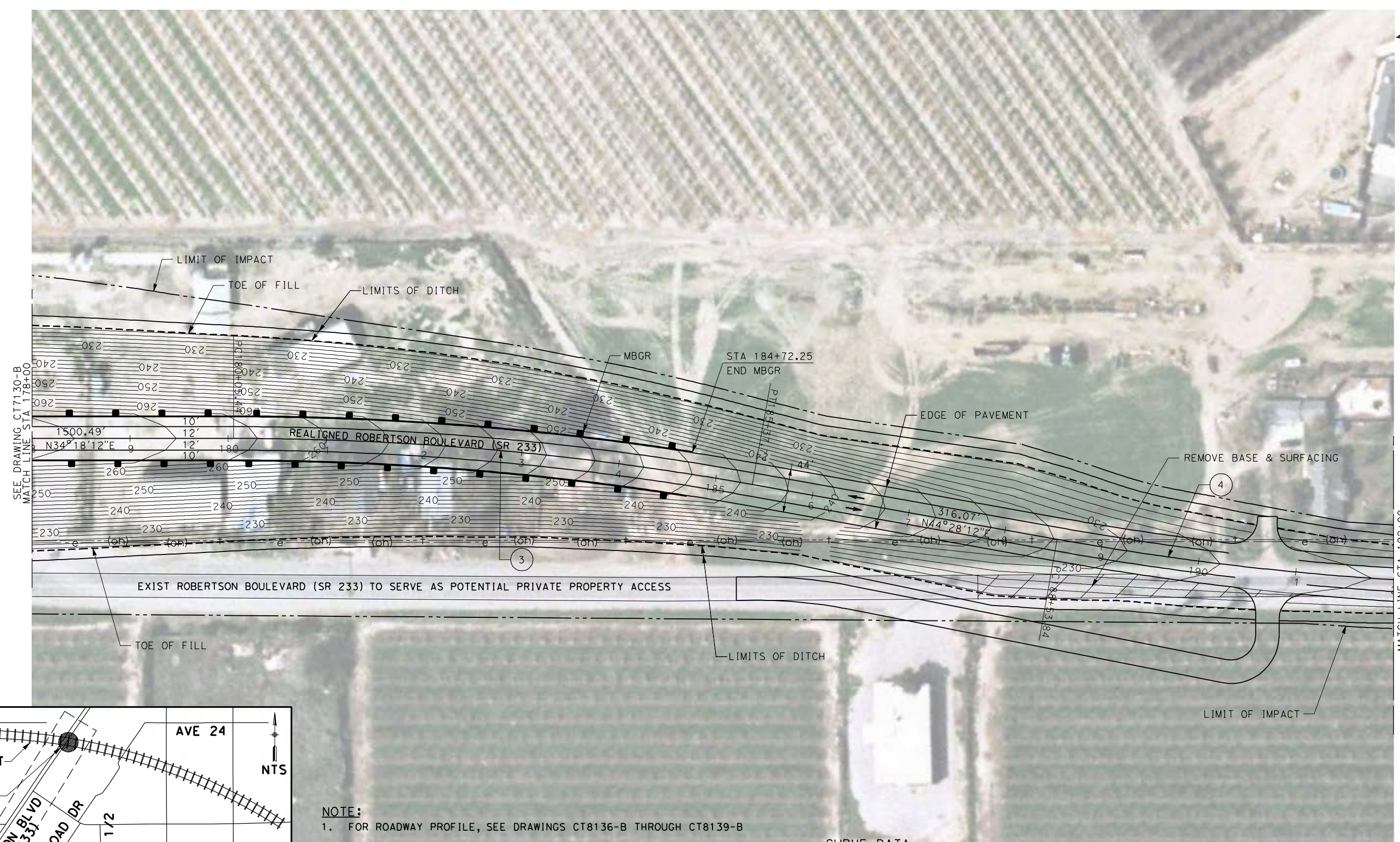
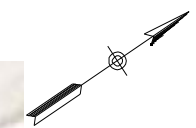
DRAWING NO.  
CT7130-B

SCALE  
AS SHOWN

SHEET NO.  
### OF ###

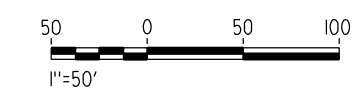


4/27/2011 6:36:01 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 2b - ave 24 wye-w.chowchilla\Layout\CT7131-B.dwg  
 oyeled



**NOTE:**  
 1. FOR ROADWAY PROFILE, SEE DRAWINGS CT8136-B THROUGH CT8139-B

CURVE DATA					
No.	R	Δ	T	L	V
③	3000.00	10° 10' 00"	266.86	532.33	55 MPH
④	3000.00	10° 10' 00"	266.86	532.33	55 MPH



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**D. AYELE**  
 DRAWN BY  
**C. DELOS REYES**  
 CHECKED BY  
**A. SILVER**  
 IN CHARGE  
**A. BOONE**  
 DATE  
**04/29/2011**

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

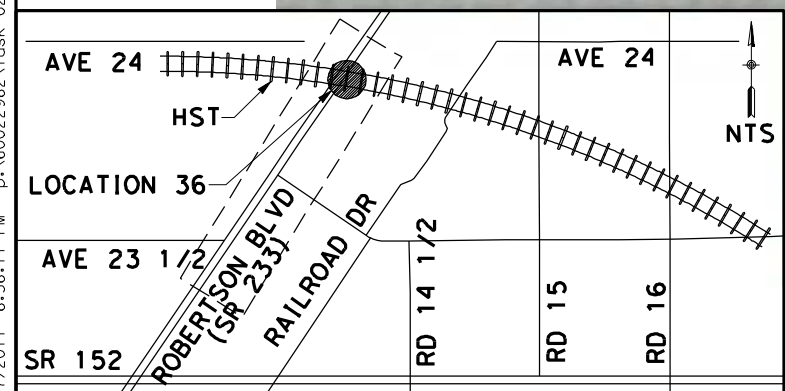
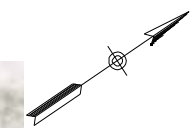


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 MAINLINE DO/MERCED DO - (WC)  
 GRADE SEPARATION - ROBERTSON BLVD (SR 233) ALT 1  
 LAYOUT  
 SHEET 3 OF 4

CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CT7131-B  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###

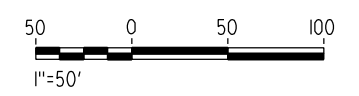


4/27/2011 6:36:17 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 2b - ave 24 wye-w.chowchilla caltrans facilities\Layout\CT7132-B.dwg  
 oyeled



**NOTE:**  
 1. FOR ROADWAY PROFILE, SEE DRAWINGS CT8136-B THROUGH CT8139-B

CURVE DATA					
No.	R	$\Delta$	T	L	V
(4)	3000.00	10° 10' 00"	266.86	532.33	55 MPH



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
 D. AYELE  
 DRAWN BY  
 C. DELOS REYES  
 CHECKED BY  
 A. SILVER  
 IN CHARGE  
 A. BOONE  
 DATE  
 04/29/2011

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

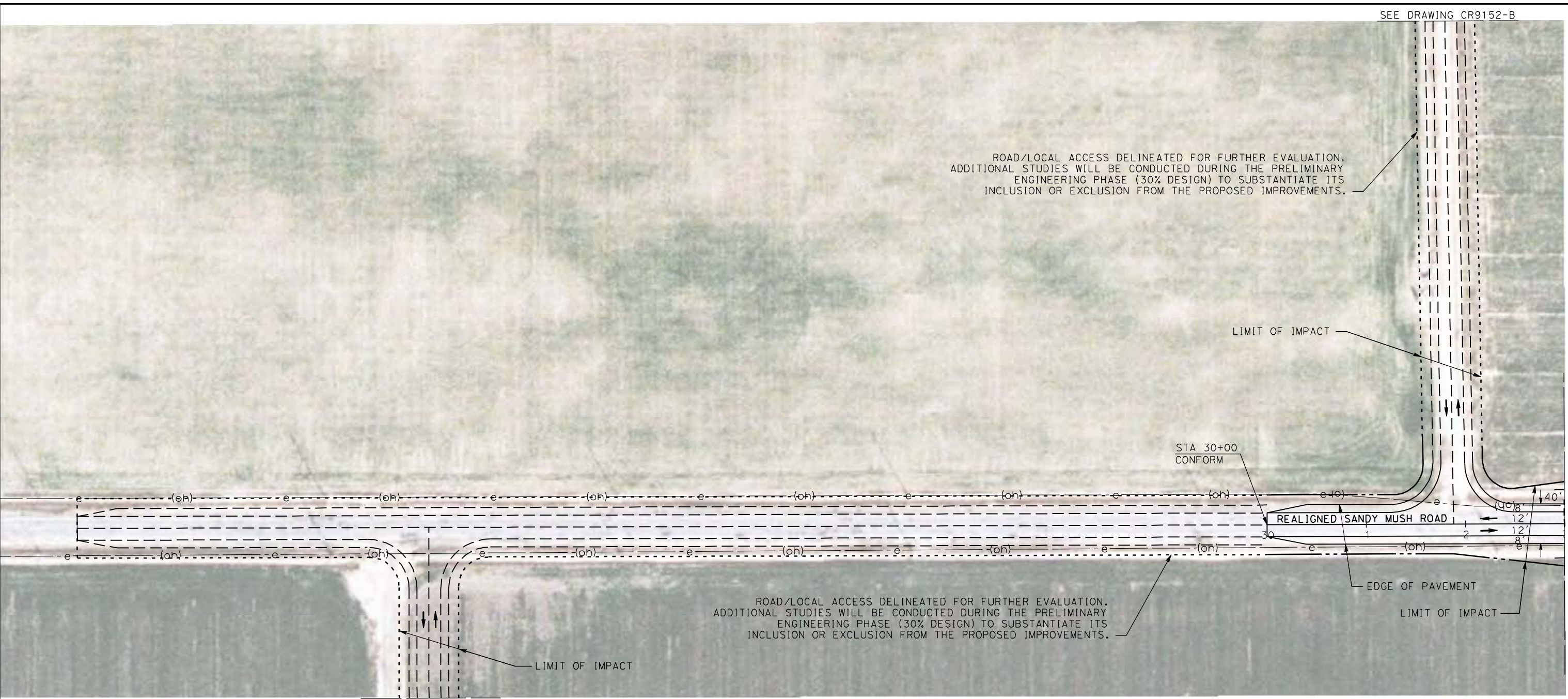


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 MAINLINE DO/MERCED DO - (WC)  
 GRADE SEPARATION - ROBERTSON BLVD (SR 233) ALT 1  
 LAYOUT  
 SHEET 4 OF 4

CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CT7132-B  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###

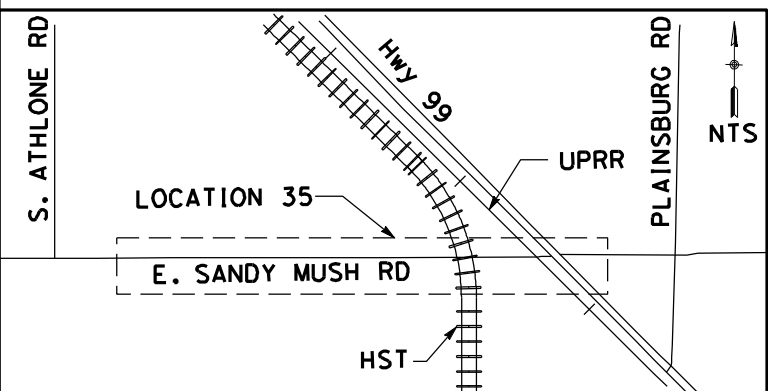


4/27/2011 6:36:29 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 2b - ave 24 wye-w.chowchilla\caltrans facilities\Layout\CT7133-B.dgn

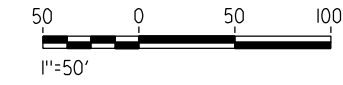


MATCH LINE STA 33+00  
SEE DRAWING CT7134-B

SEE DRAWING CR9151-B



**NOTE:**  
1. FOR ROADWAY PROFILE, SEE DRAWINGS CT8140-B THROUGH CT8143-B



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
DRAWN BY  
C. DELOS REYES  
CHECKED BY  
A. SILVER  
IN CHARGE  
A. BOONE  
DATE  
04/29/2011

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

**NOT FOR**  
**CONSTRUCTION**

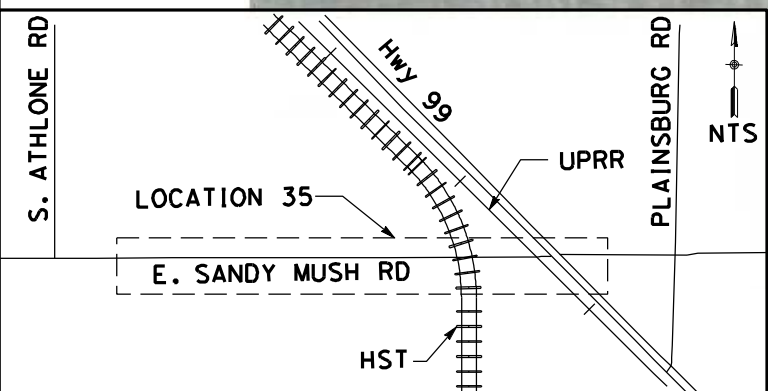
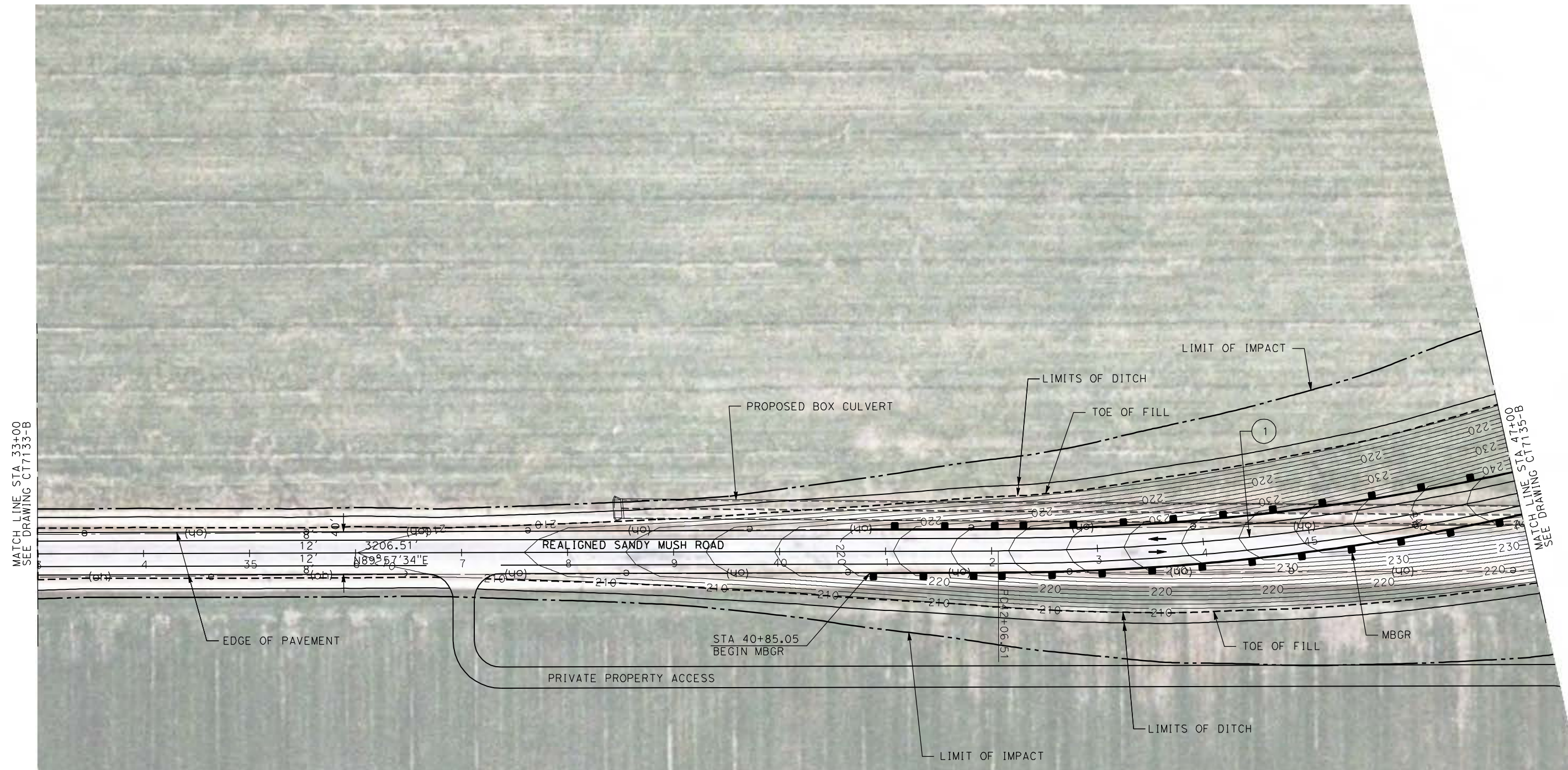
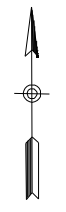


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
UPRR/SR99 MERCED DO - (WC)  
SANDY MUSH RD INTERCHANGE  
LAYOUT  
SHEET 1 OF 4

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
CT7133-B  
SCALE  
AS SHOWN  
SHEET NO.  
### OF ###

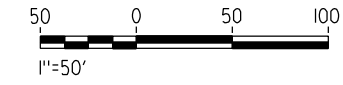


4/27/2011 6:36:41 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 2b - ave 24 wye-w.chowchilla caltrans facilities\Layout\CT7134-B.dgn



**NOTE:**  
1. FOR ROADWAY PROFILE, SEE DRAWINGS CT8140-B THROUGH CT8143-B

CURVE DATA					
No.	R	$\Delta$	T	L	V
(1)	2300.00	50° 8' 26"	833.94	1600.06	50 MPH



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE

DRAWN BY  
C. DELOS REYES

CHECKED BY  
A. SILVER

IN CHARGE  
A. BOONE

DATE  
04/29/2011

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

**NOT FOR**  
**CONSTRUCTION**



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

UPRR/SR99 MERCED DO - (WC)  
SANDY MUSH RD INTERCHANGE  
LAYOUT  
SHEET 2 OF 4

CONTRACT NO.  
HSR06-007

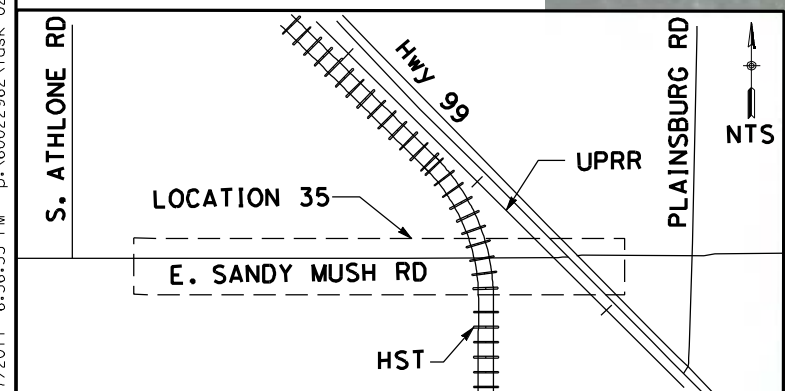
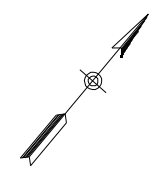
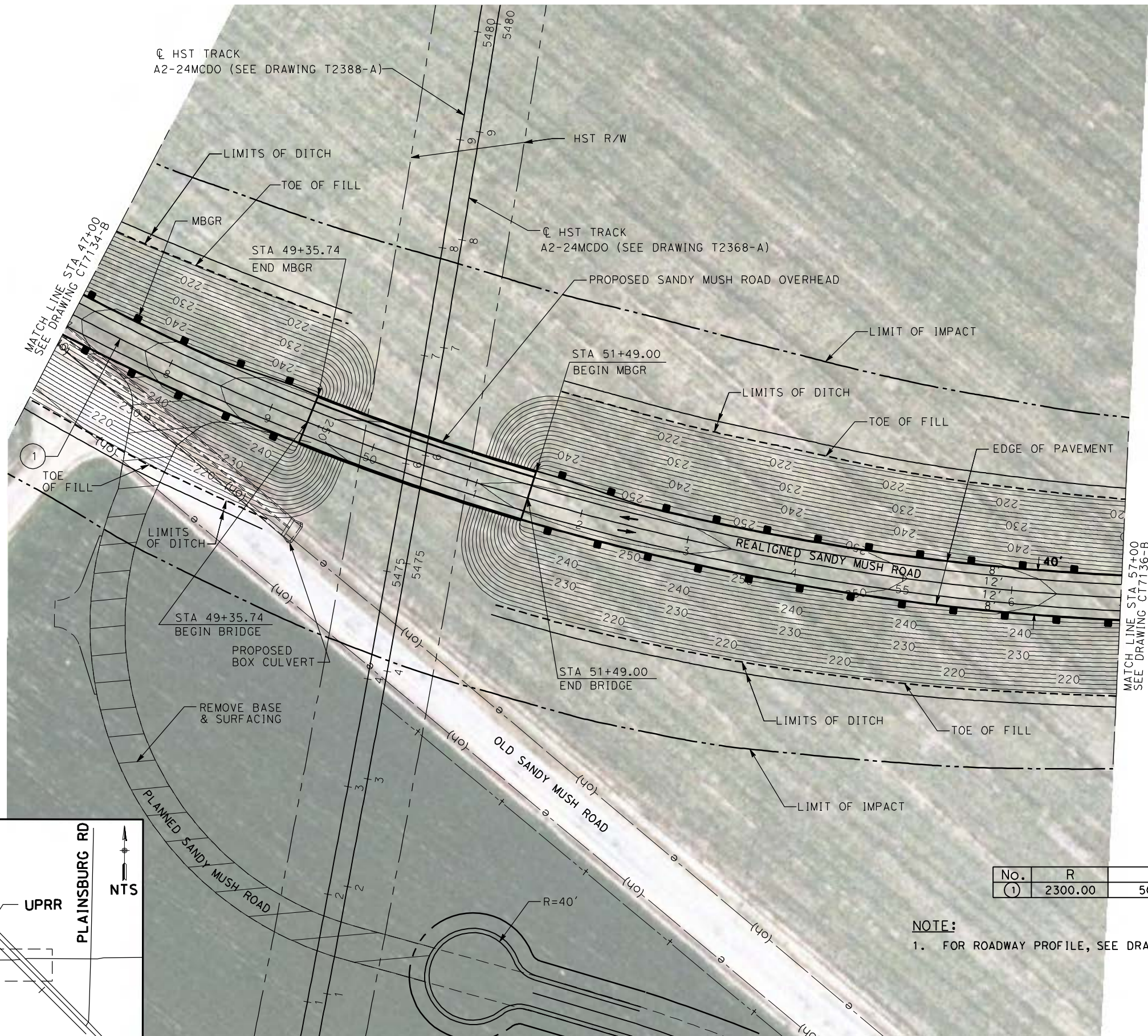
DRAWING NO.  
CT7134-B

SCALE  
AS SHOWN

SHEET NO.  
### OF ###



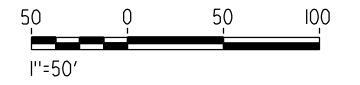
4/27/2011 6:36:53 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 2b - ave 24 wye-w.chowchilla\caltrans facilities\Layout\CT7135-B.dgn



**CURVE DATA**

No.	R	$\Delta$	T	L	V
(1)	2300.00	50°8'26"	833.94	1600.06	50 MPH

**NOTE:**  
1. FOR ROADWAY PROFILE, SEE DRAWINGS CT8140-B THROUGH CT8143-B



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**D. AYELE**  
DRAWN BY  
**C. DELOS REYES**  
CHECKED BY  
**A. SILVER**  
IN CHARGE  
**A. BOONE**  
DATE  
**04/29/2011**

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

**NOT FOR**  
**CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
UPRR/SR99 MERCED DO - (WC)  
SANDY MUSH RD INTERCHANGE  
LAYOUT  
SHEET 3 OF 4

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
CT7135-B  
SCALE  
AS SHOWN  
SHEET NO.  
### OF ###



4/27/2011 6:37:06 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 2b - ave 24 wye-w.chowchilla caltrans facilities\Layout\CT7136-B.dgn

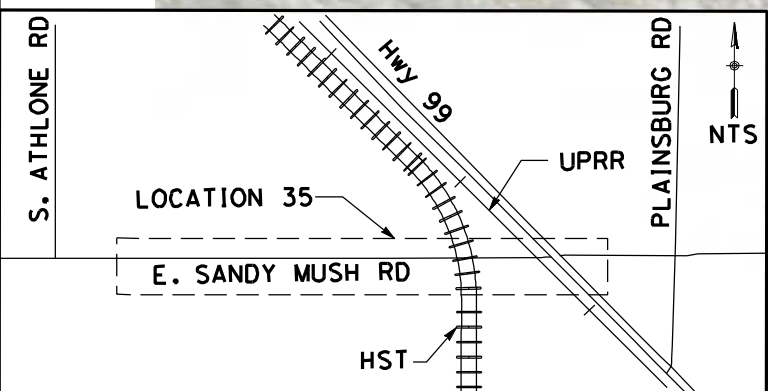
ROAD/LOCAL ACCESS DELINEATED FOR FURTHER EVALUATION. ADDITIONAL STUDIES WILL BE CONDUCTED DURING THE PRELIMINARY ENGINEERING PHASE (30% DESIGN) TO SUBSTANTIATE ITS INCLUSION OR EXCLUSION FROM THE PROPOSED IMPROVEMENTS.



MATCH LINE STA 57+00  
SEE DRAWING CT7135-B

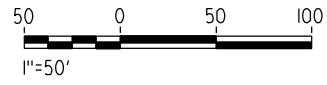
SEE CONTRACT NO. 10-415804

SEE DRAWING CR9127-B



**NOTE:**  
1. FOR ROADWAY PROFILE, SEE DRAWINGS CT8140-B THROUGH CT8143-B

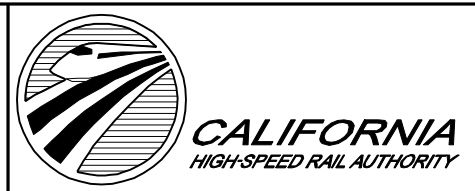
No.	R	Δ	T	L	V
1	2300.00	50° 8' 26"	833.94	1600.06	50 MPH



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
DRAWN BY  
C. DELOS REYES  
CHECKED BY  
A. SILVER  
IN CHARGE  
A. BOONE  
DATE  
04/29/2011

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

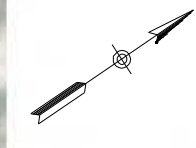


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
UPRR/SR99 MERCED DO - (WC)  
SANDY MUSH RD INTERCHANGE  
LAYOUT  
SHEET 4 OF 4

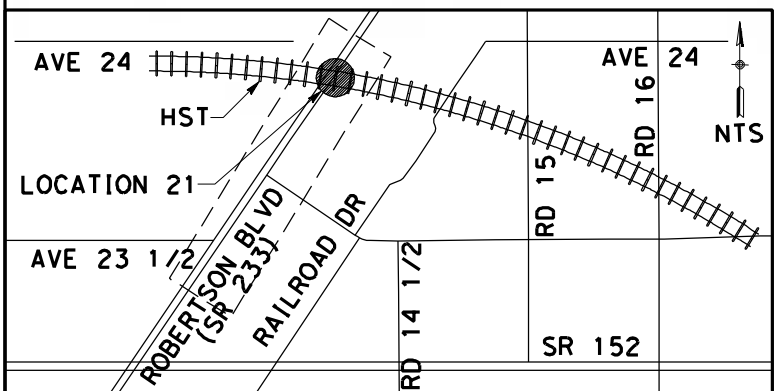
CONTRACT NO.  
HSR06-007  
DRAWING NO.  
CT7136-B  
SCALE  
AS SHOWN  
SHEET NO.  
### OF ###



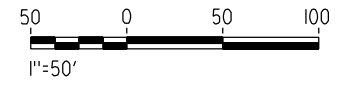
4/27/2011 6:37:16 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 2b - ave 24 wye-w.chowchilla\caltrans facilities\Layout\CT7137-B.dwg



MATCH LINE STA 68+96.28  
SEE DRAWING CT7138-B



**NOTE:**  
1. FOR ROADWAY PROFILE, SEE DRAWINGS CT8144-B THROUGH CT8146-B



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
DRAWN BY  
C. DELOS REYES  
CHECKED BY  
A. SILVER  
IN CHARGE  
A. BOONE  
DATE  
04/29/2011

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



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
UPRR/SR99 MAINLINE (AVE 24)  
UNDERPASS - ROBERTSON BOULEVARD (SR 233) ALT 2  
LAYOUT  
SHEET 1 OF 3

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
CT7137-B  
SCALE  
AS SHOWN  
SHEET NO.  
### OF ###



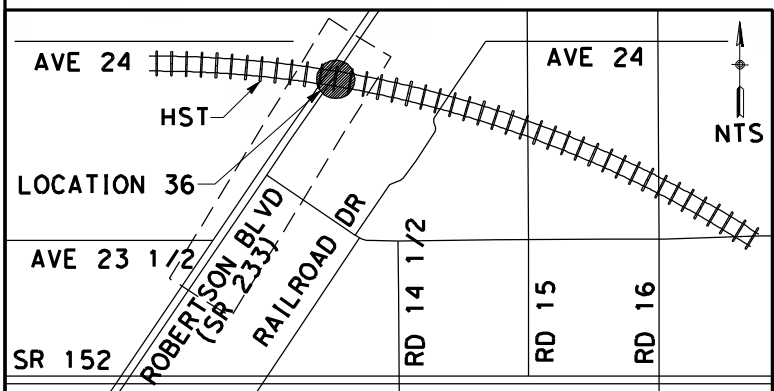




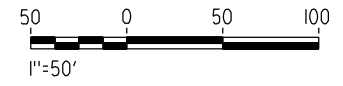




4/27/2011 6:37:44 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 2b - ave 24 wye-w.chowchilla\caltrans facilities\Layout\CT7140-B.dgn



**NOTE:**  
 1. FOR ROADWAY PROFILE, SEE DRAWINGS CT8147-B THROUGH CT8149-B



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
 DRAWN BY  
C. DELOS REYES  
 CHECKED BY  
A. SILVER  
 IN CHARGE  
A. BOONE  
 DATE  
04/29/2011

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



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR233 MAINLINE DO/MERCED DO - (WC)  
 UNDERPASS - ROBERTSON BOULEVARD (SR 233) ALT 2  
 LAYOUT  
 SHEET 1 OF 3

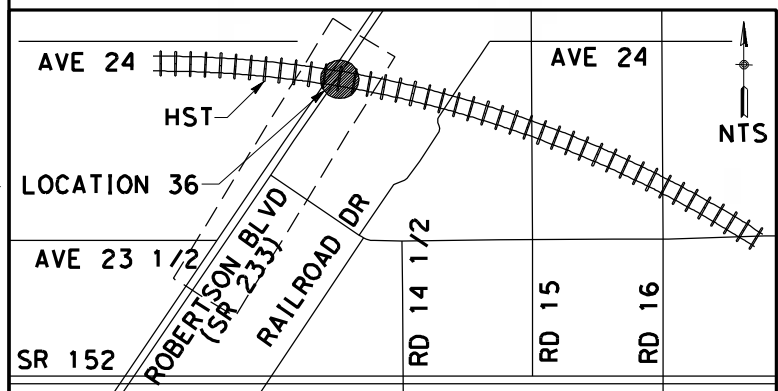
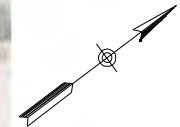
CONTRACT NO.  
HSR06-007  
 DRAWING NO.  
CT7140-B  
 SCALE  
AS SHOWN  
 SHEET NO.  
### OF ###



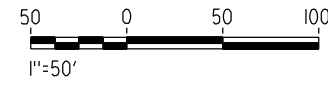




4/27/2011 6:38:04 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 2b - ave 24 wye-w.chowchilla caltrans facilities\Layout\CT7142-B.dgn



**NOTE:**  
1. FOR ROADWAY PROFILE, SEE DRAWINGS CT8144-B THROUGH CT8146-B



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
DRAWN BY  
C. DELOS REYES  
CHECKED BY  
A. SILVER  
IN CHARGE  
A. BOONE  
DATE  
04/29/2011

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

**NOT FOR**  
**CONSTRUCTION**

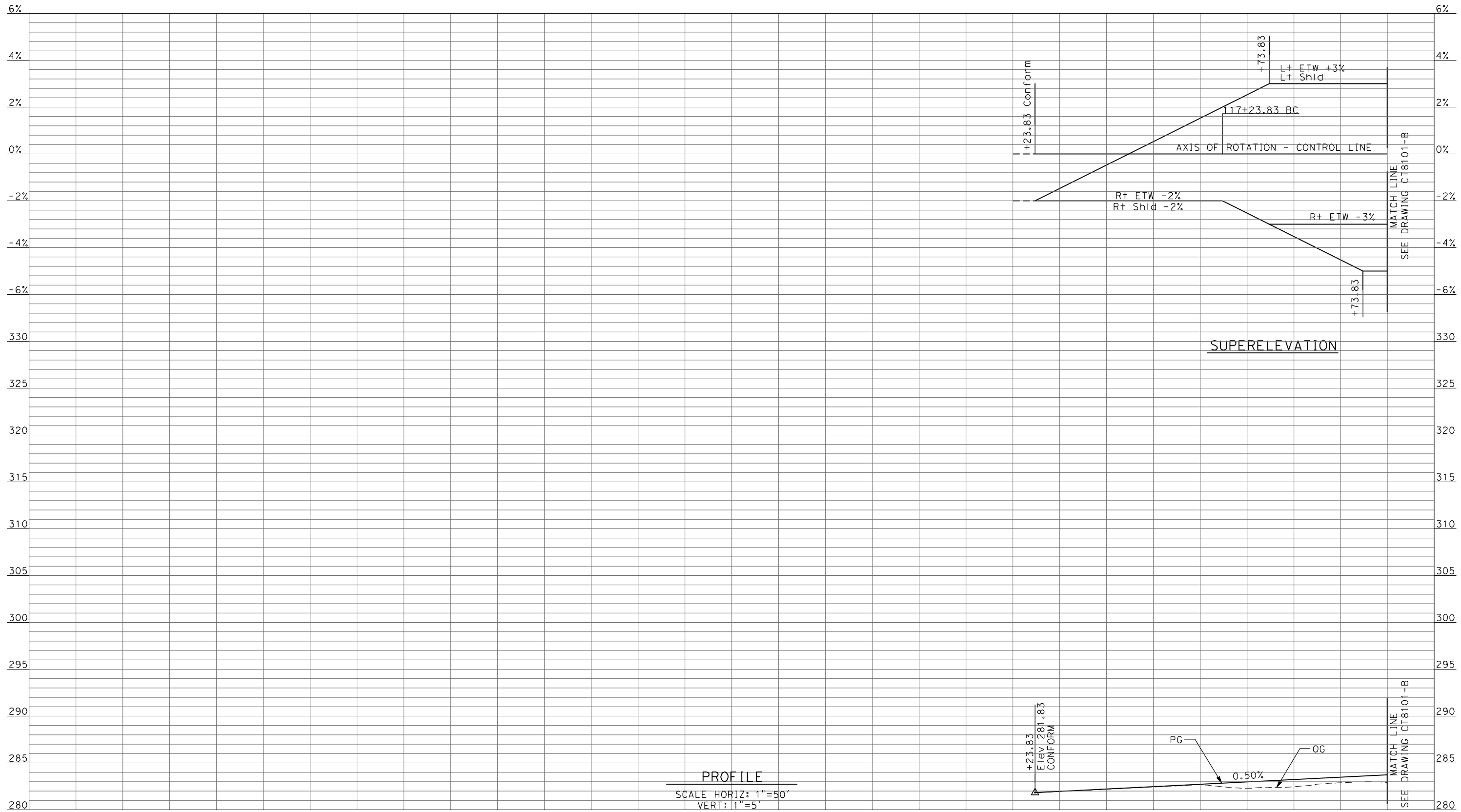


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**

UPRR/SR99 MAINLINE DO/MERCED DO - (WC)  
UNDERPASS - ROBERTSON BOULEVARD (SR 233) ALT 2  
LAYOUT  
SHEET 3 OF 3

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
CT7142-B  
SCALE  
AS SHOWN  
SHEET NO.  
### OF ###

4/27/2011 6:38:10 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 2b - ave 24 wye.ctb



**PROFILE**  
 SCALE HORIZ: 1"=50'  
 VERT: 1"=5'

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
 DRAWN BY  
C. DELOS REYES  
 CHECKED BY  
A. SILVER  
 IN CHARGE  
A. BOONE  
 DATE  
04/29/2011

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

**NOT FOR**  
**CONSTRUCTION**

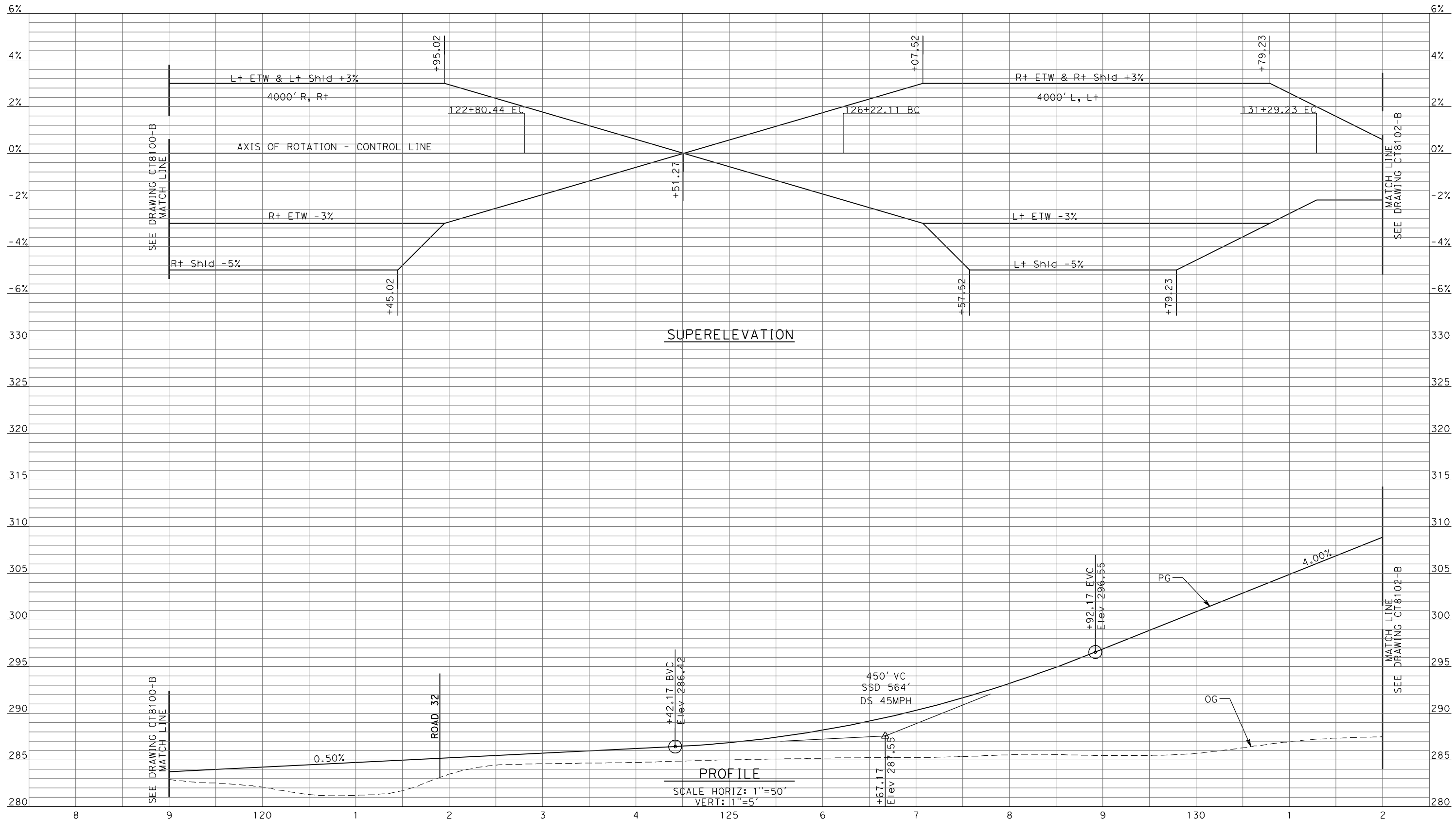


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 MAINLINE - (AVE 24/WC)  
 AVENUE 8 - OVERHEAD  
 PROFILE  
 SHEET 1 OF 4

CONTRACT NO.  
HSR06-007  
 DRAWING NO.  
CT8100-B  
 SCALE  
AS SHOWN  
 SHEET NO.  
### OF ###



4/27/2011 6:38:14 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 2b - ave 24 wye-w.chowchilla\caltrans facilities\Profile\CT8101-B.dgn



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE

DRAWN BY  
C. DELOS REYES

CHECKED BY  
A. SILVER

IN CHARGE  
A. BOONE

DATE  
04/29/2011

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

**NOT FOR**  
**CONSTRUCTION**



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

UPRR/SR99 MAINLINE - (AVE 24/WC)  
AVENUE 8 - OVERHEAD  
PROFILE  
SHEET 2 OF 4

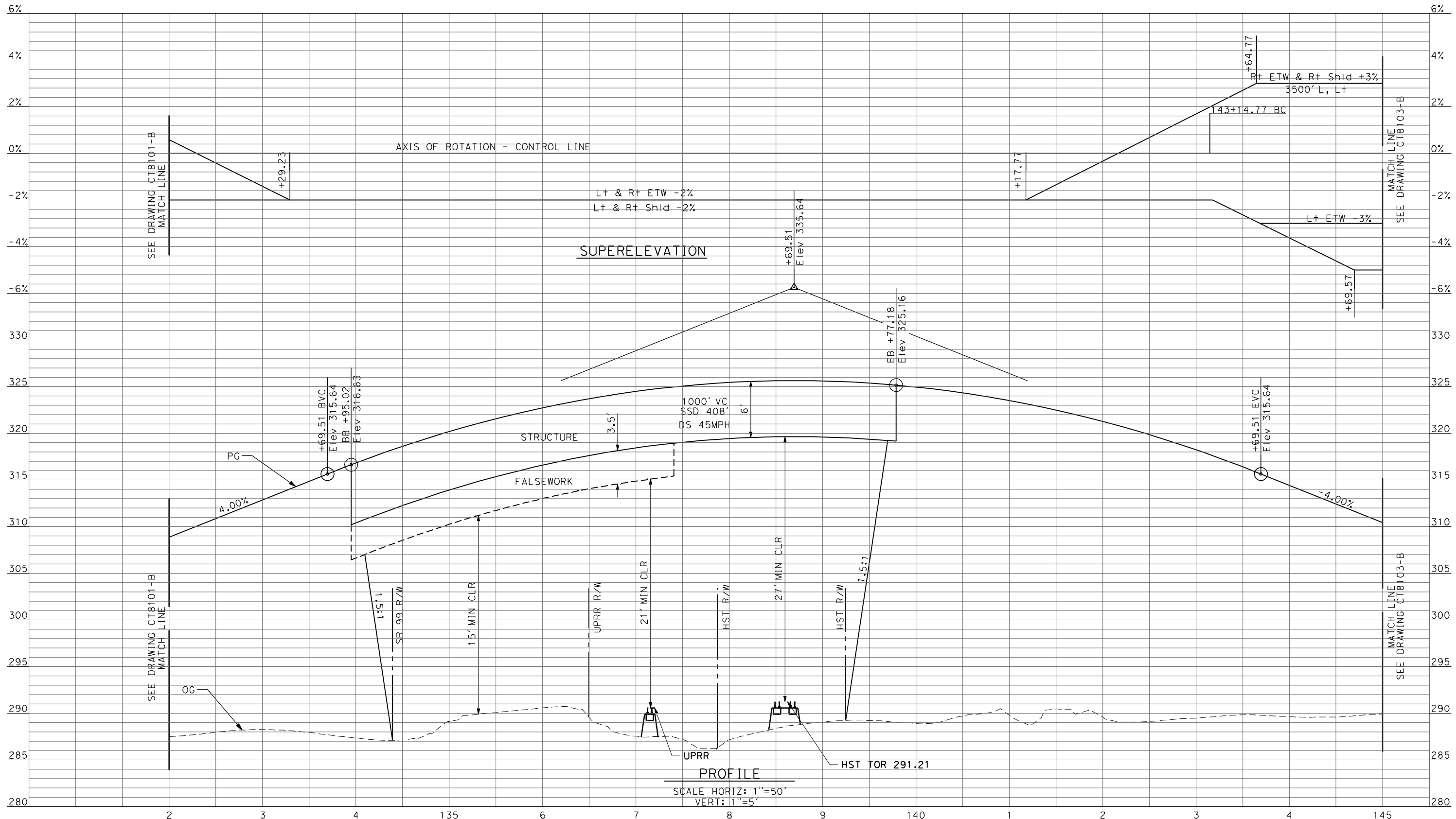
CONTRACT NO.  
HSR06-007

DRAWING NO.  
CT8101-B

SCALE  
AS SHOWN

SHEET NO.  
### OF ###

4/27/2011 6:38:18 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 2b - ave 24 wye-w.chowchilla\caltrans facilities\Profile\CT8102-B.dgn



PROFILE  
SCALE HORIZ: 1"=50'  
VERT: 1"=5'

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
DRAWN BY  
C. DELOS REYES  
CHECKED BY  
A. SILVER  
IN CHARGE  
A. BOONE  
DATE  
04/29/2011

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

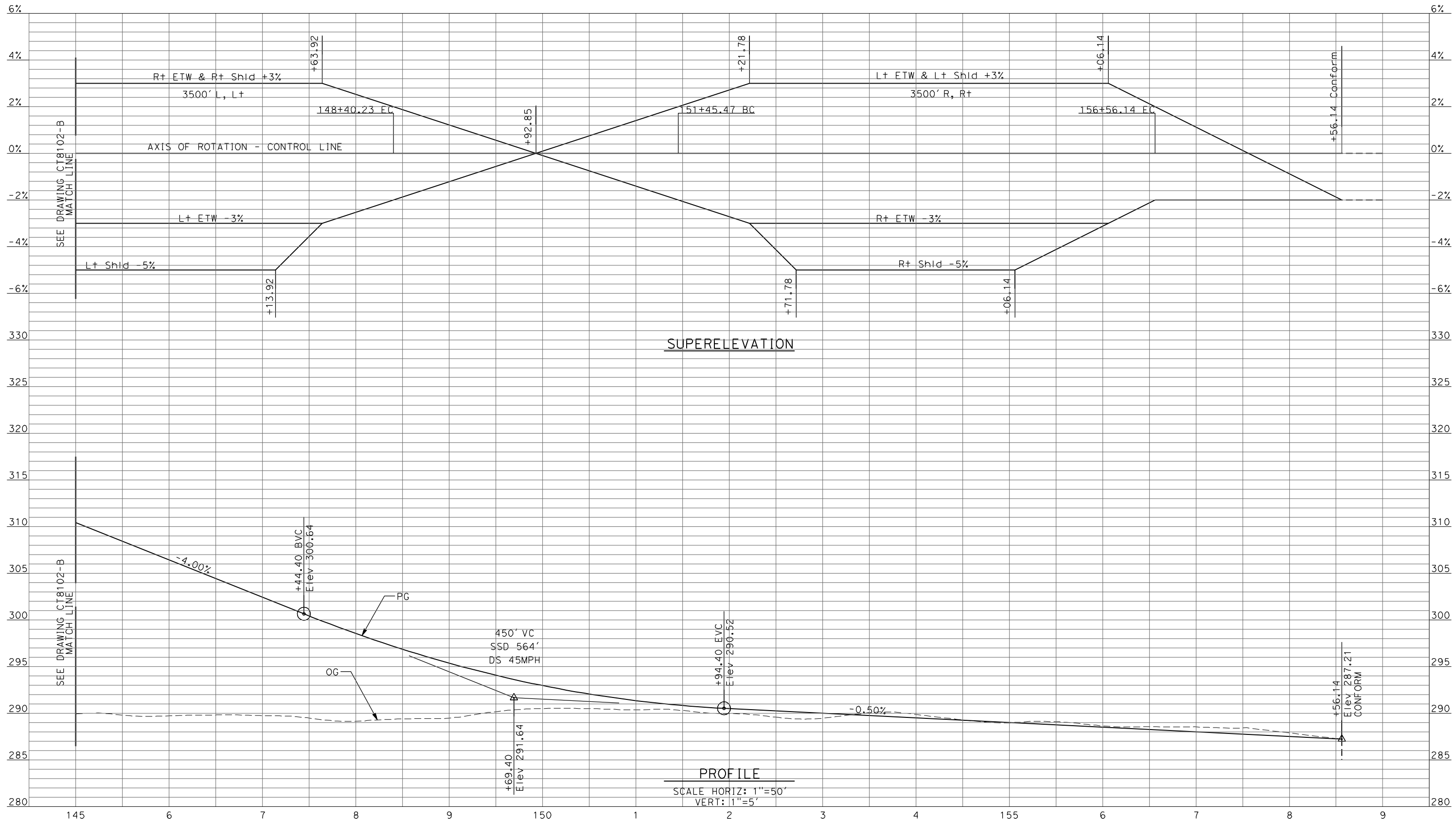


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
UPRR/SR99 MAINLINE - (AVE 24/WC)  
AVENUE 8 - OVERHEAD  
PROFILE  
SHEET 3 OF 4

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
CT8102-B  
SCALE  
AS SHOWN  
SHEET NO.  
### OF ###



4/27/2011 6:38:22 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 2b - ave 24 wye & w. chowchilla\caltrans facilities\Profile\CT8103-B.dgn



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
DRAWN BY  
C. DELOS REYES  
CHECKED BY  
A. SILVER  
IN CHARGE  
A. BOONE  
DATE  
04/29/2011

**RECORD SET  
15% DESIGN  
SUBMITTAL**

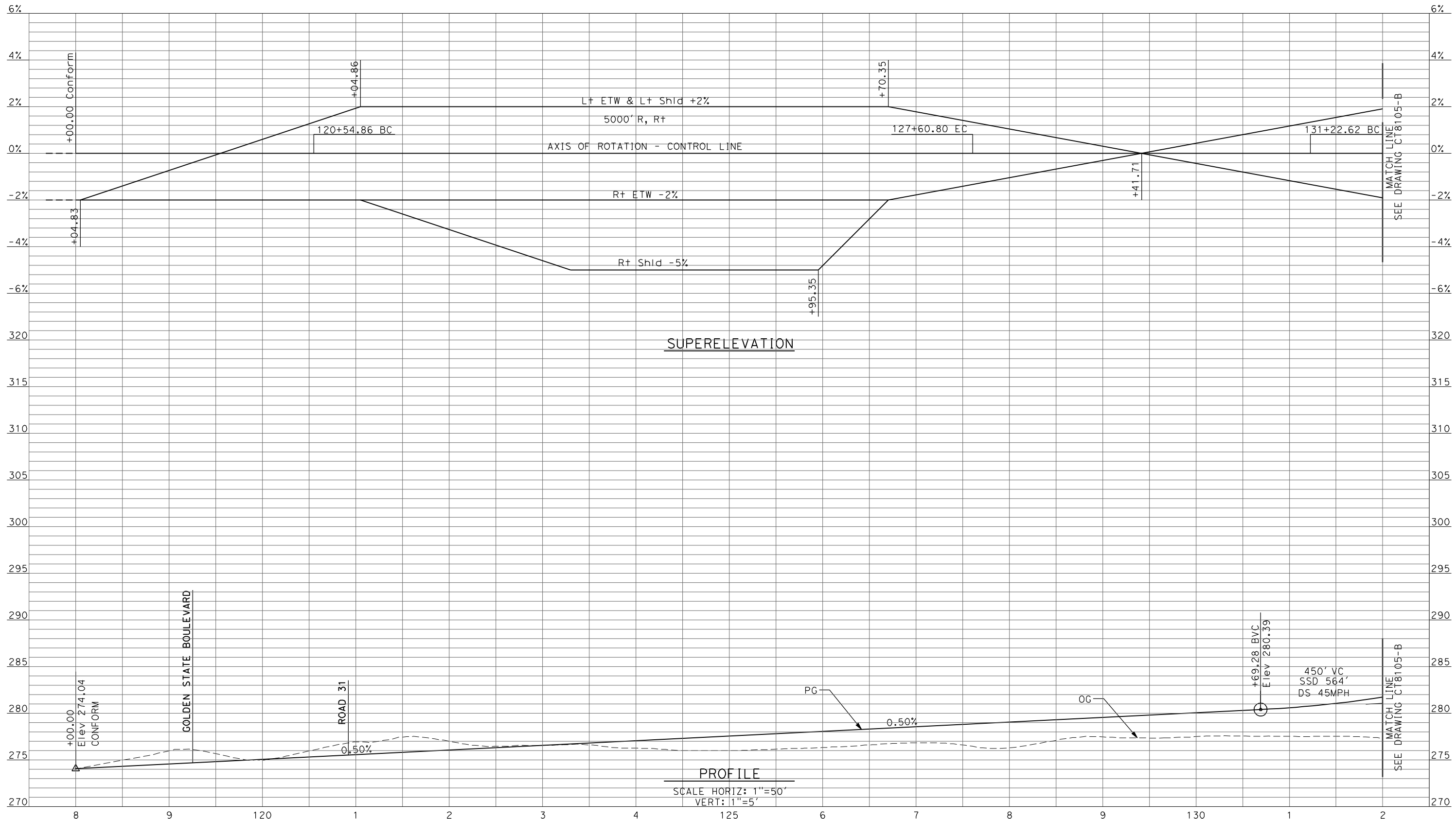
**NOT FOR  
CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT  
MERCED TO FRESNO**  
UPRR/SR99 MAINLINE - (AVE 24/WC)  
AVENUE 8 - OVERHEAD  
PROFILE  
SHEET 4 OF 4

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
CT8103-B  
SCALE  
AS SHOWN  
SHEET NO.  
### OF ###

4/27/2011 6:38:26 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 2b - ave 24 wye & w. chowchilla\Profile\CT8104-B.dgn  
 oyeled



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**D. AYELE**  
 DRAWN BY  
**C. DELOS REYES**  
 CHECKED BY  
**A. SILVER**  
 IN CHARGE  
**A. BOONE**  
 DATE  
**04/29/2011**

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

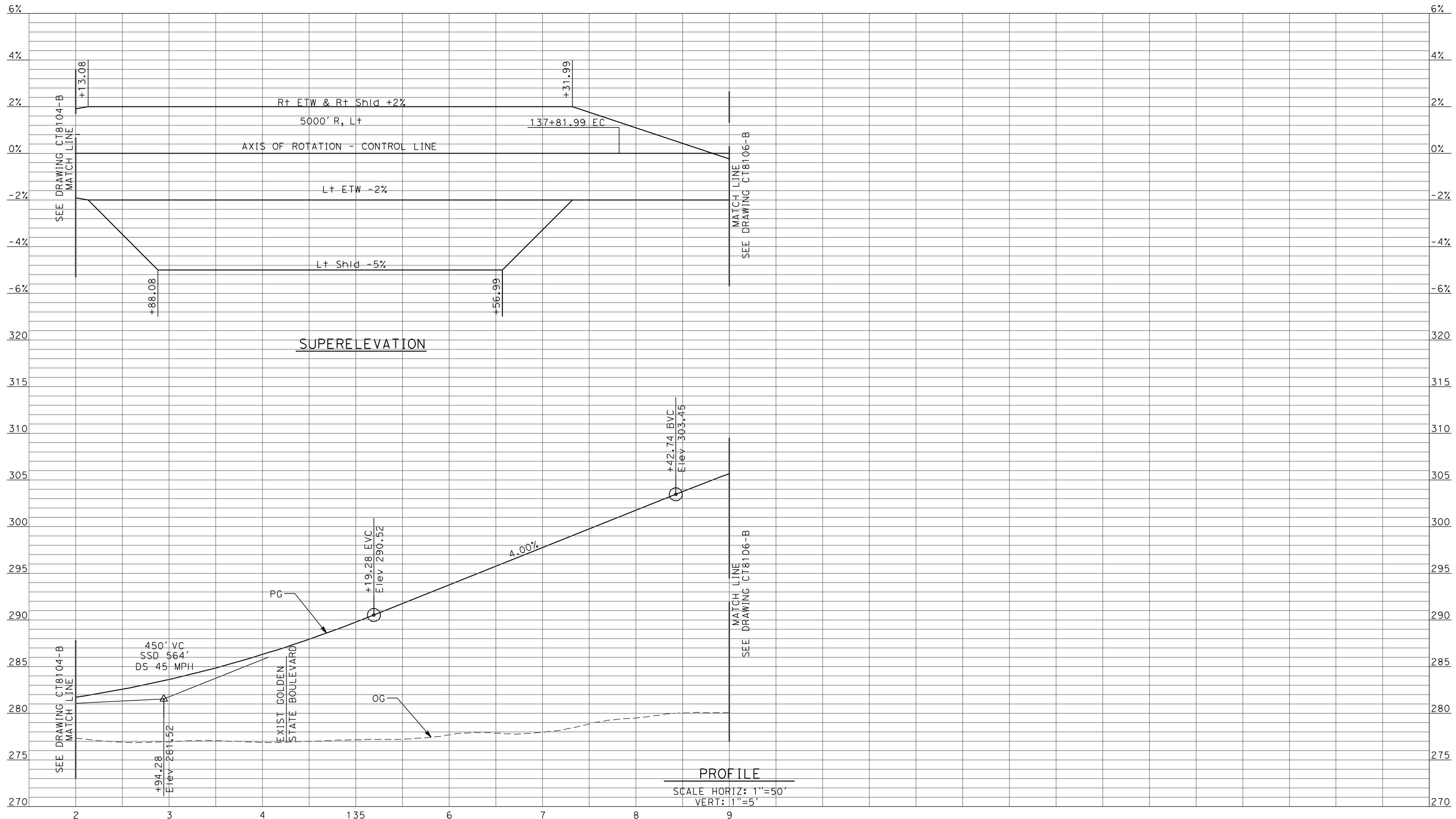


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 MAINLINE - (AVE 24/WC)  
 AVENUE 9 - INTERCHANGE  
 PROFILE  
 SHEET 1 OF 11

CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CT8104-B  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###



4/27/2011 6:38:31 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 2b - ave 24 wye & w. chowchilla\caltrans facilities\Profile\CT8105-B.dgn



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**D. AYELE**

DRAWN BY  
**C. DELOS REYES**

CHECKED BY  
**A. SILVER**

IN CHARGE  
**A. BOONE**

DATE  
**04/29/2011**

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

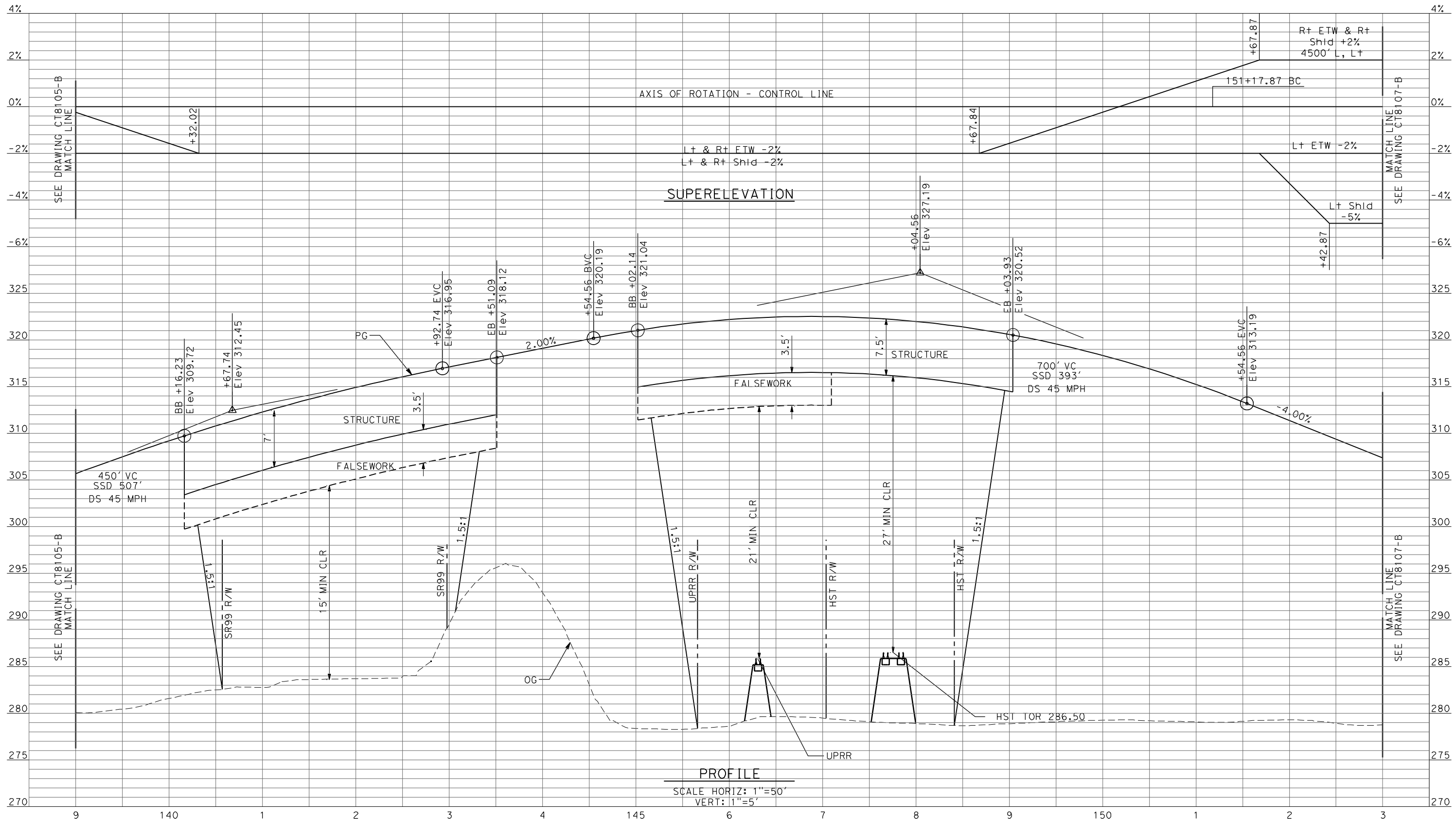
**NOT FOR**  
**CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
UPRR/SR99 MAINLINE - (AVE 24/WC)  
AVENUE 9 - INTERCHANGE  
PROFILE  
SHEET 2 OF 11

CONTRACT NO.	HSR06-007
DRAWING NO.	CT8105-B
SCALE	AS SHOWN
SHEET NO.	### OF ###

4/27/2011 6:38:35 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 2b - ave 24 wye-w.chowchilla\caltrans facilities\Profile\CT8106-B.dgn



**PROFILE**  
 SCALE HORIZ: 1"=50'  
 VERT: 1"=5'

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
 DRAWN BY  
C. DELOS REYES  
 CHECKED BY  
A. SILVER  
 IN CHARGE  
A. BOONE  
 DATE  
04/29/2011

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

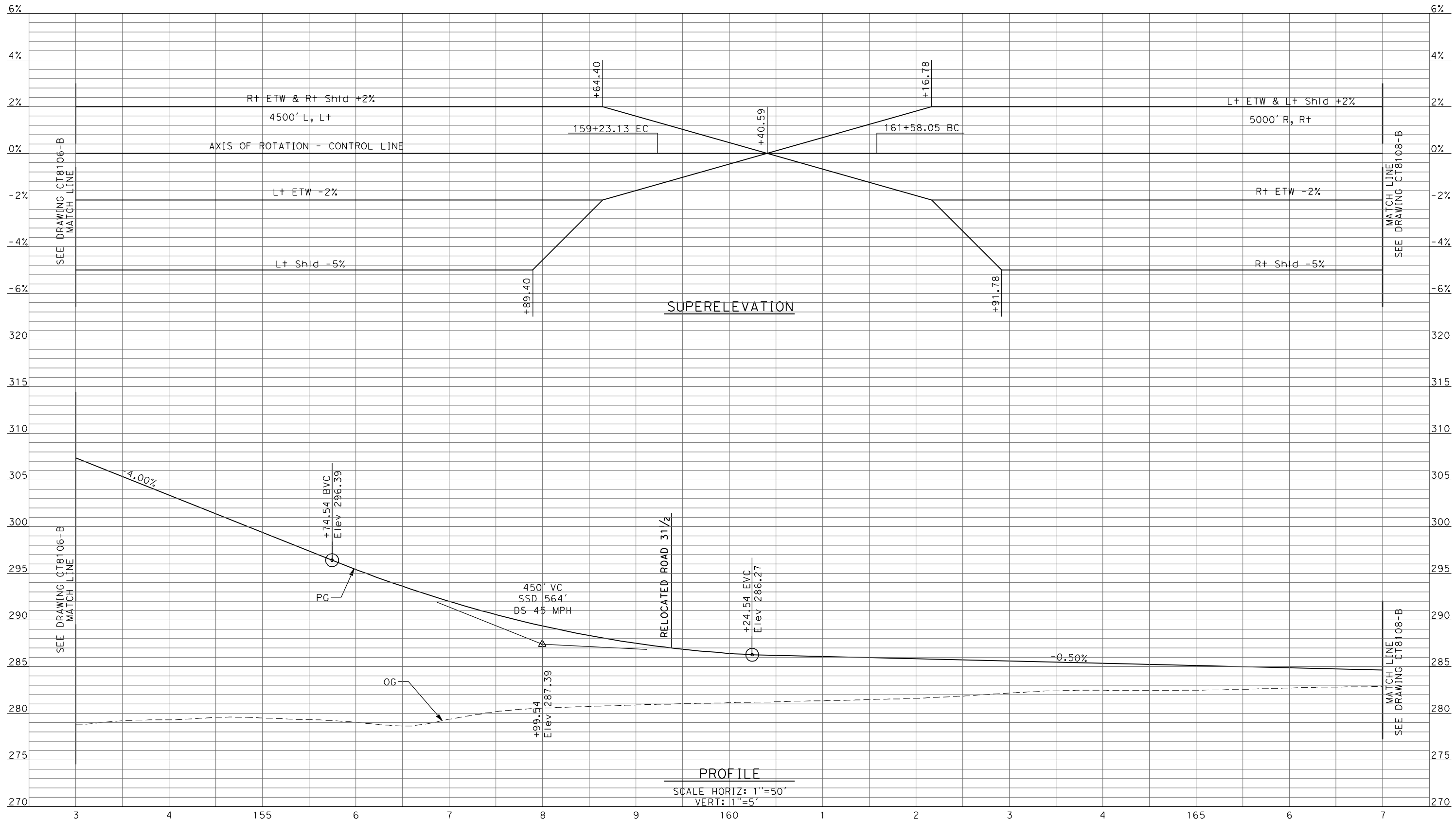


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 MAINLINE - (AVE 24/WC)  
 AVENUE 9 - INTERCHANGE  
 PROFILE  
 SHEET 3 OF 11

CONTRACT NO.  
HSR06-007  
 DRAWING NO.  
CT8106-B  
 SCALE  
AS SHOWN  
 SHEET NO.  
### OF ###



4/27/2011 6:38:39 PM p:\60022962\task\_02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 2b - ave 24 wye-w.chowchilla\caltrans facilities\Profile\CT8107-B.dgn



**PROFILE**  
 SCALE HORIZ: 1"=50'  
 VERT: 1"=5'

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
 DRAWN BY  
C. DELOS REYES  
 CHECKED BY  
A. SILVER  
 IN CHARGE  
A. BOONE  
 DATE  
04/29/2011

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

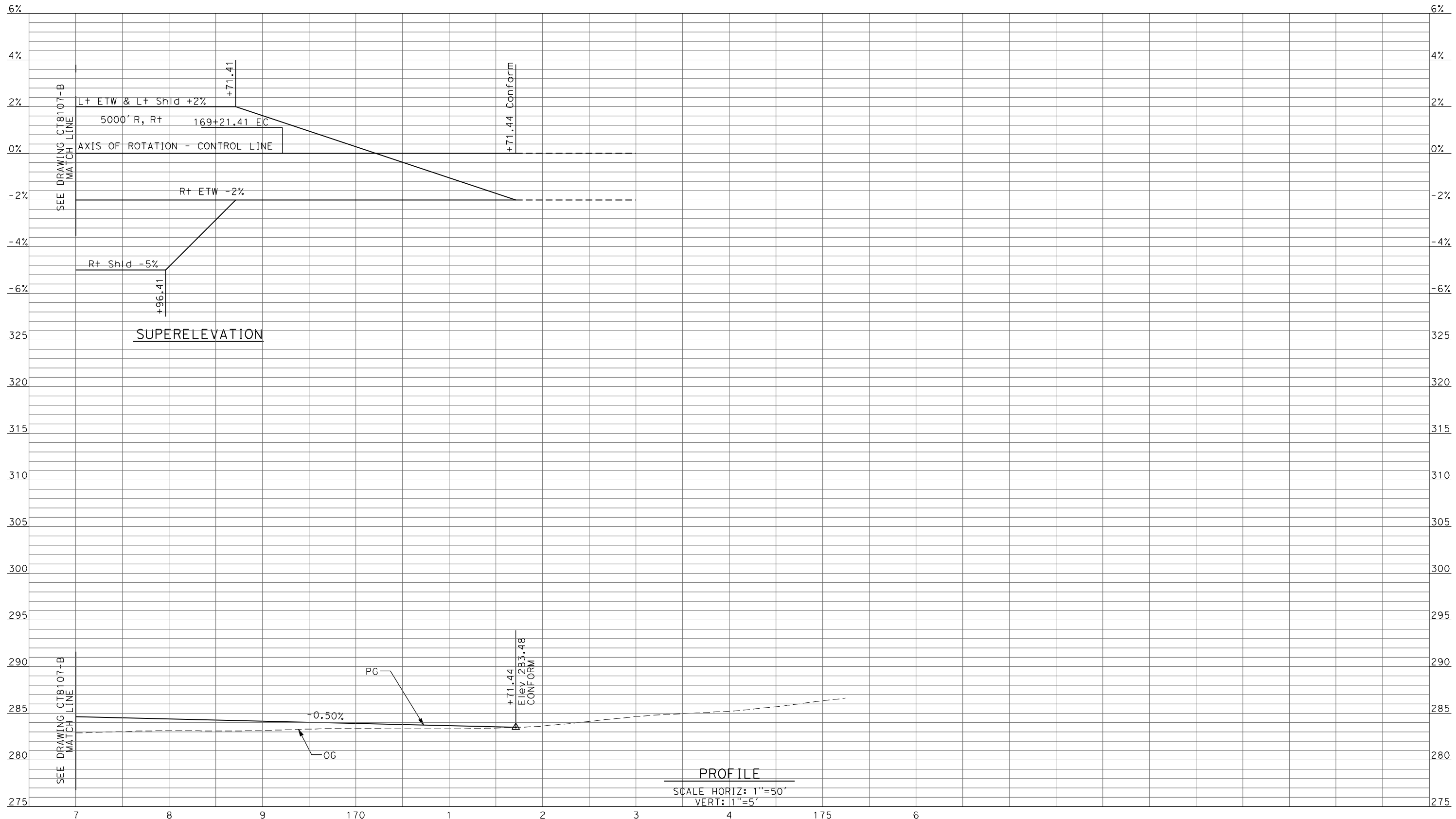
**NOT FOR**  
**CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 MAINLINE - (AVE 24/WC)  
 AVENUE 9 - INTERCHANGE  
 PROFILE  
 SHEET 4 OF 11

CONTRACT NO.  
HSR06-007  
 DRAWING NO.  
CT8107-B  
 SCALE  
AS SHOWN  
 SHEET NO.  
### OF ###

4/27/2011 6:38:43 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 2b - ave 24 wye & w. chowchilla\caltrans facilities\Profile\CT8108-B.dgn  
 oyeled



**PROFILE**  
 SCALE HORIZ: 1"=50'  
 VERT: 1"=5'

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**D. AYELE**  
 DRAWN BY  
**C. DELOS REYES**  
 CHECKED BY  
**A. SILVER**  
 IN CHARGE  
**A. BOONE**  
 DATE  
**04/29/2011**

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

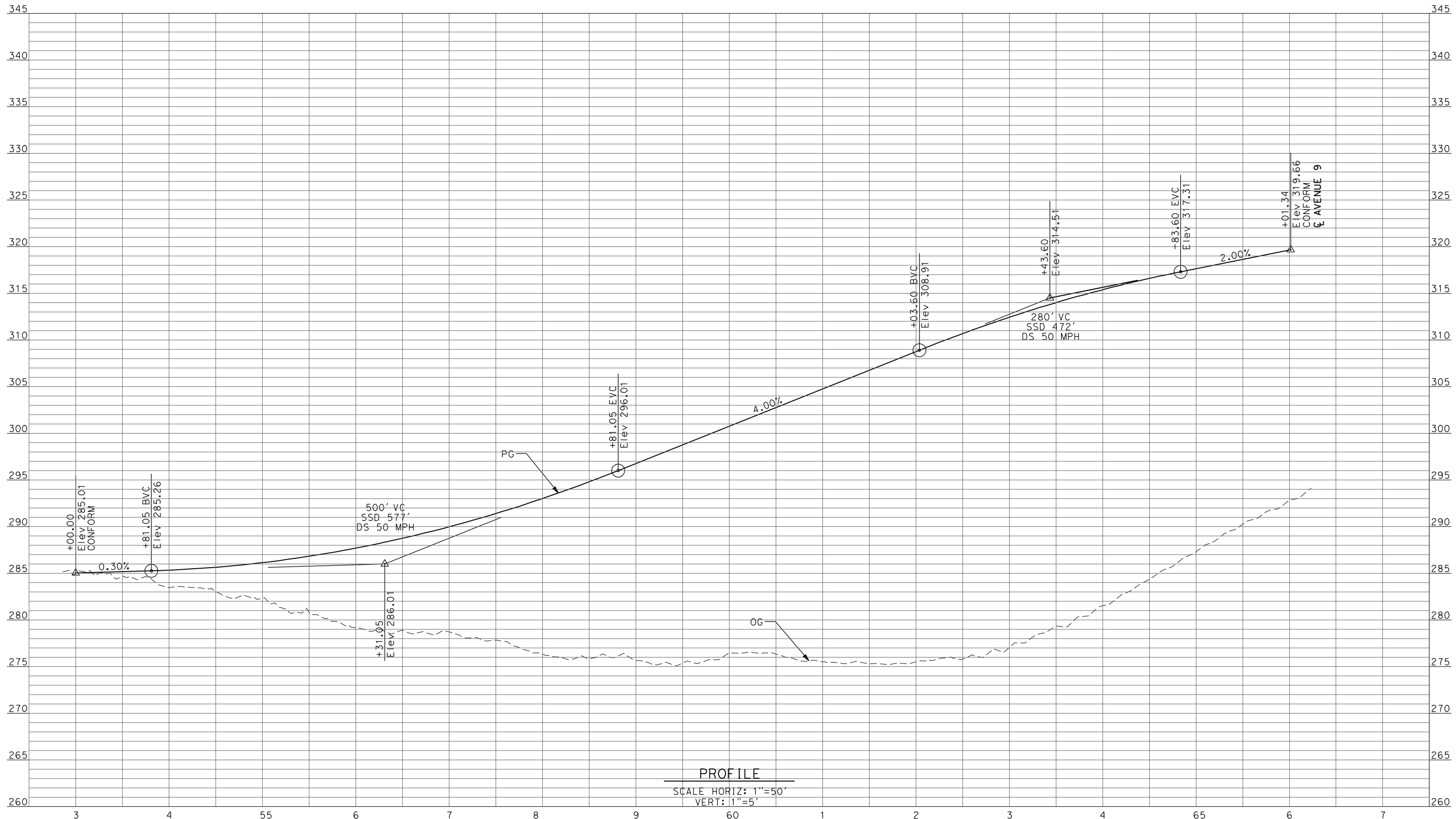


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 MAINLINE - (AVE 24/WC)  
 AVENUE 9 - INTERCHANGE  
 PROFILE  
 SHEET 5 OF 11

CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CT8108-B  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###



4/27/2011 6:38:47 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 2b - ave 24 wye-w.chowchilla\caltrans facilities\Profile\CT8109-B.dgn



PROFILE  
 SCALE HORIZ: 1"=50'  
 VERT: 1"=5'

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
 DRAWN BY  
C. DELOS REYES  
 CHECKED BY  
A. SILVER  
 IN CHARGE  
A. BOONE  
 DATE  
04/29/2011

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

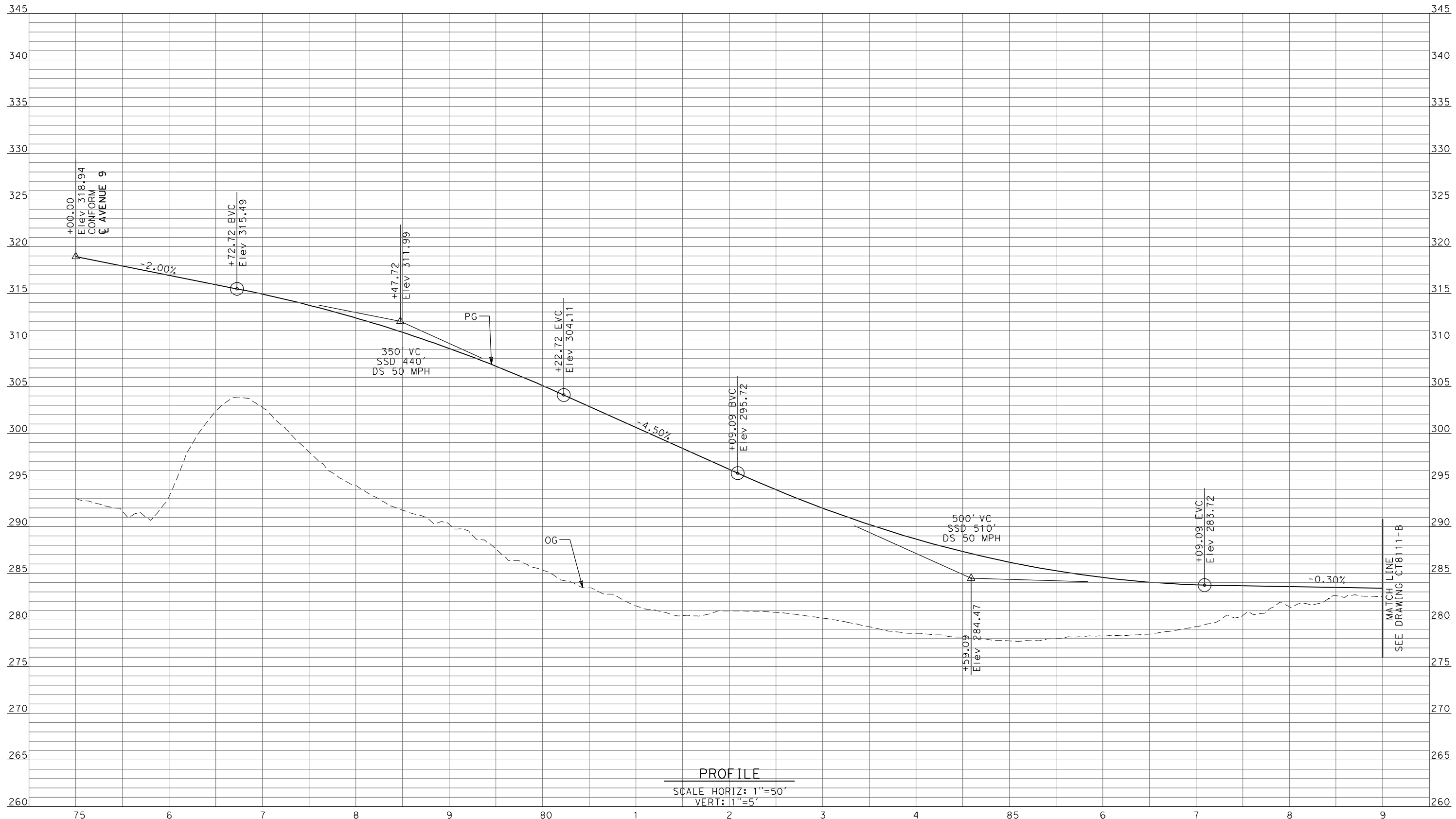
**NOT FOR**  
**CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 MAINLINE - (AVE 24/WC)  
 AVENUE 9 - INTERCHANGE SR NB 99 OFF-RAMP  
 PROFILE  
 SHEET 6 OF 11

CONTRACT NO.  
HSR06-007  
 DRAWING NO.  
CT8109-B  
 SCALE  
AS SHOWN  
 SHEET NO.  
### OF ###

4/27/2011 6:38:51 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 2b - ave 24 wye-w.chowchilla caltrans facilities\Profile\CT8110-B.dgn



**PROFILE**  
 SCALE HORIZ: 1"=50'  
 VERT: 1"=5'

MATCH LINE  
 SEE DRAWING CT8111-B

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
 DRAWN BY  
C. DELOS REYES  
 CHECKED BY  
A. SILVER  
 IN CHARGE  
A. BOONE  
 DATE  
04/29/2011

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

**NOT FOR**  
**CONSTRUCTION**

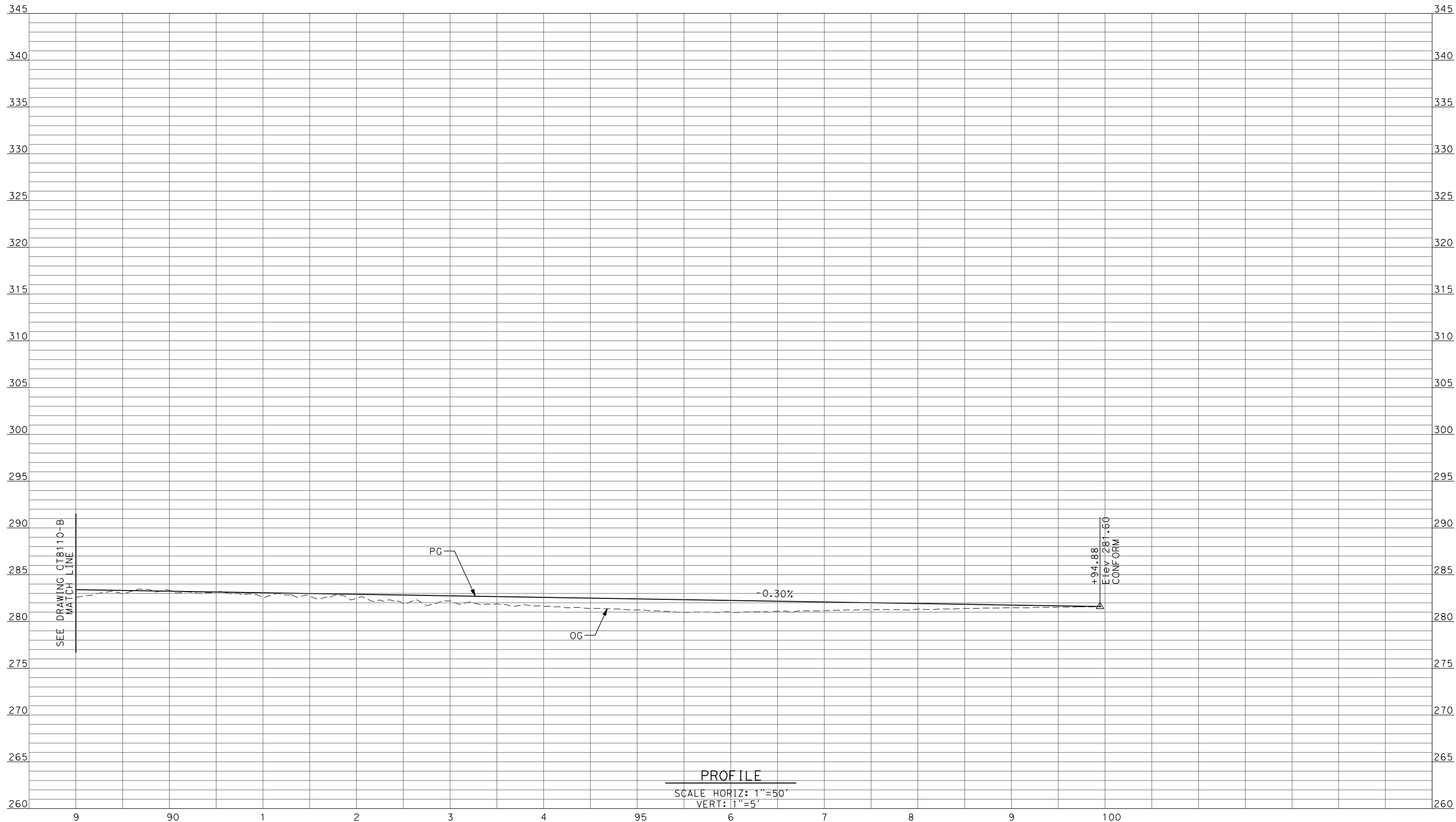


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 MAINLINE - (AVE 24/WC)  
 AVENUE 9 - INTERCHANGE SR 99 NB ON-RAMP  
 PROFILE  
 SHEET 7 OF 11

CONTRACT NO.  
HSR06-007  
 DRAWING NO.  
CT8110-B  
 SCALE  
AS SHOWN  
 SHEET NO.  
### OF ###



4/27/2011 6:38:55 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 2b - ave 24 wye-w.chowchilla\caltrans facilities\Profile\CT8111-B.dgn  
 oyeled



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
 D. AYELE  
 DRAWN BY  
 C. DELOS REYES  
 CHECKED BY  
 A. SILVER  
 IN CHARGE  
 A. BOONE  
 DATE  
 04/29/2011

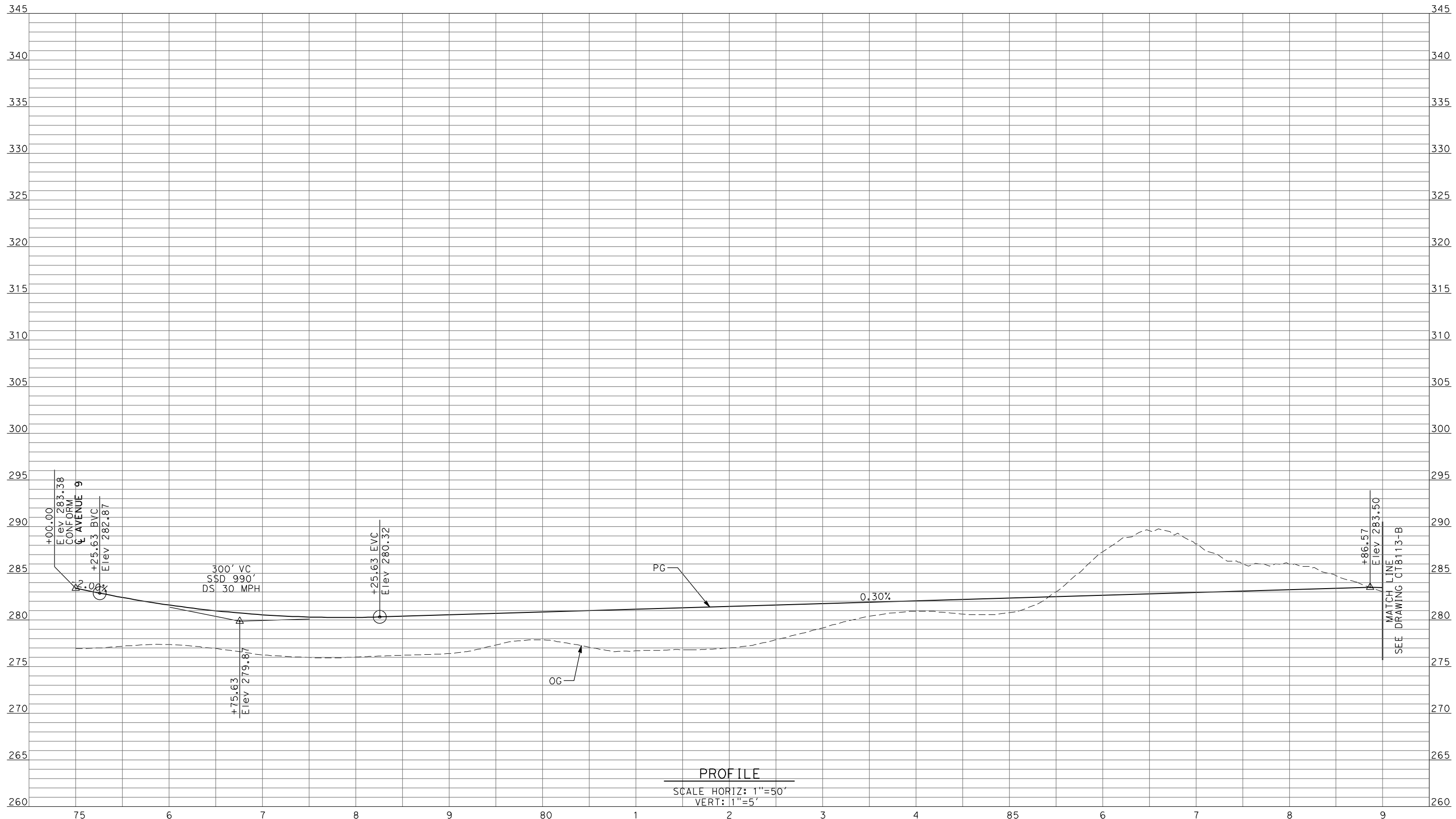
**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**  
  
**NOT FOR**  
**CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 MAINLINE - (AVE 24/WC)  
 AVENUE 9 - INTERCHANGE SR 99 NB ON-RAMP  
 PROFILE  
 SHEET 8 OF 11

CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CT8111-B  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###

4/27/2011 6:38:59 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 2b - ave 24 wye-w.chowchilla\caltrans\_facilities\Profile\CT8112-B.dgn  
 oyeled



**PROFILE**  
 SCALE HORIZ: 1"=50'  
 VERT: 1"=5'

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**D. AYELE**  
 DRAWN BY  
**C. DELOS REYES**  
 CHECKED BY  
**A. SILVER**  
 IN CHARGE  
**A. BOONE**  
 DATE  
**04/29/2011**

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

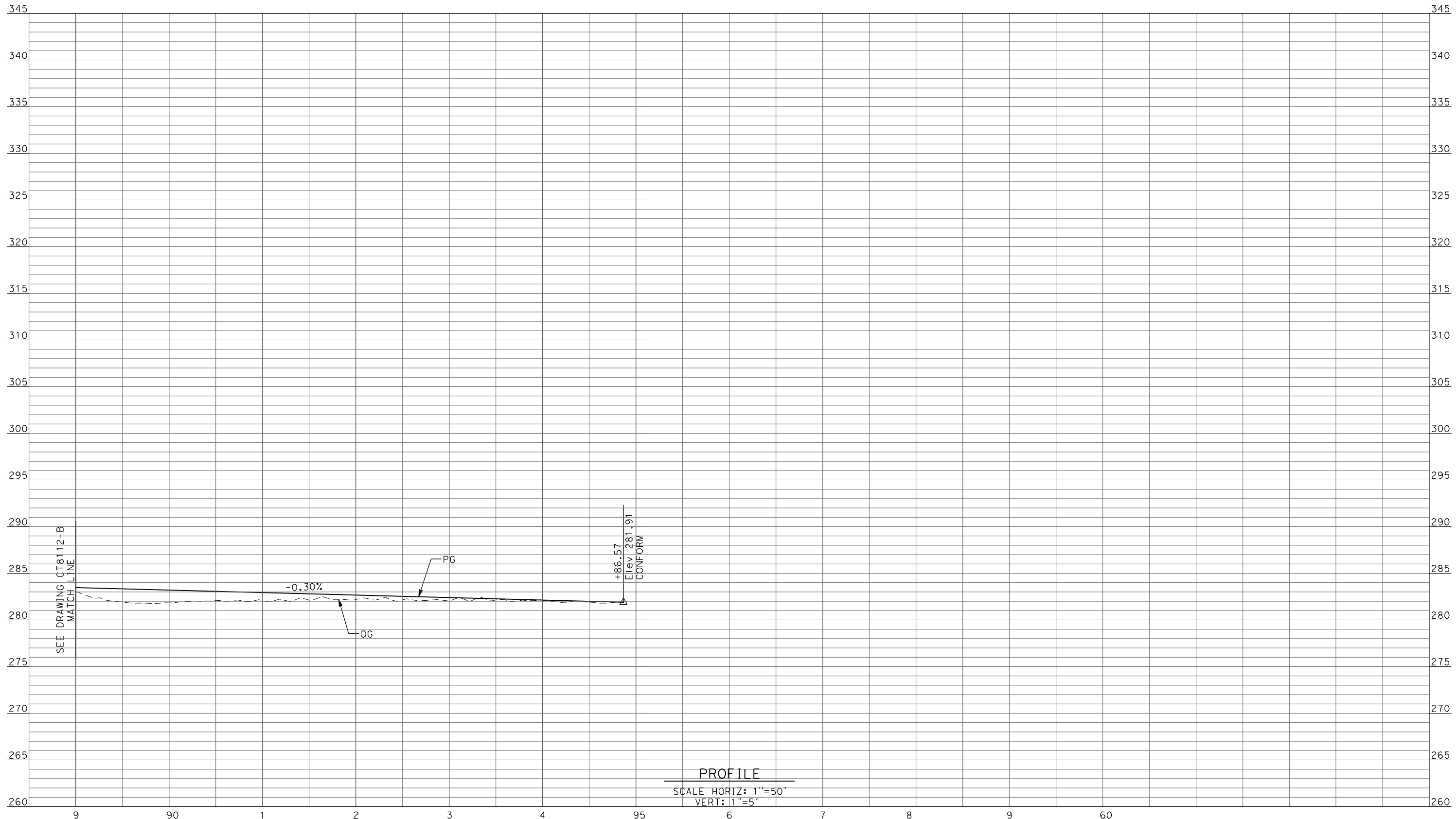


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 MAINLINE - (AVE 24/WC)  
 AVENUE 9 - INTERCHANGE SR 99 SB ON-RAMP  
**PROFILE**  
 SHEET 9 OF 11

CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CT8112-B  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###



4/27/2011 6:39:03 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 2b - ave 24 wye-w.chowchilla\caltrans facilities\Profile\CT8113-B.dgn



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
DRAWN BY  
C. DELOS REYES  
CHECKED BY  
A. SILVER  
IN CHARGE  
A. BOONE  
DATE  
04/29/2011

**RECORD SET  
15% DESIGN  
SUBMITTAL**

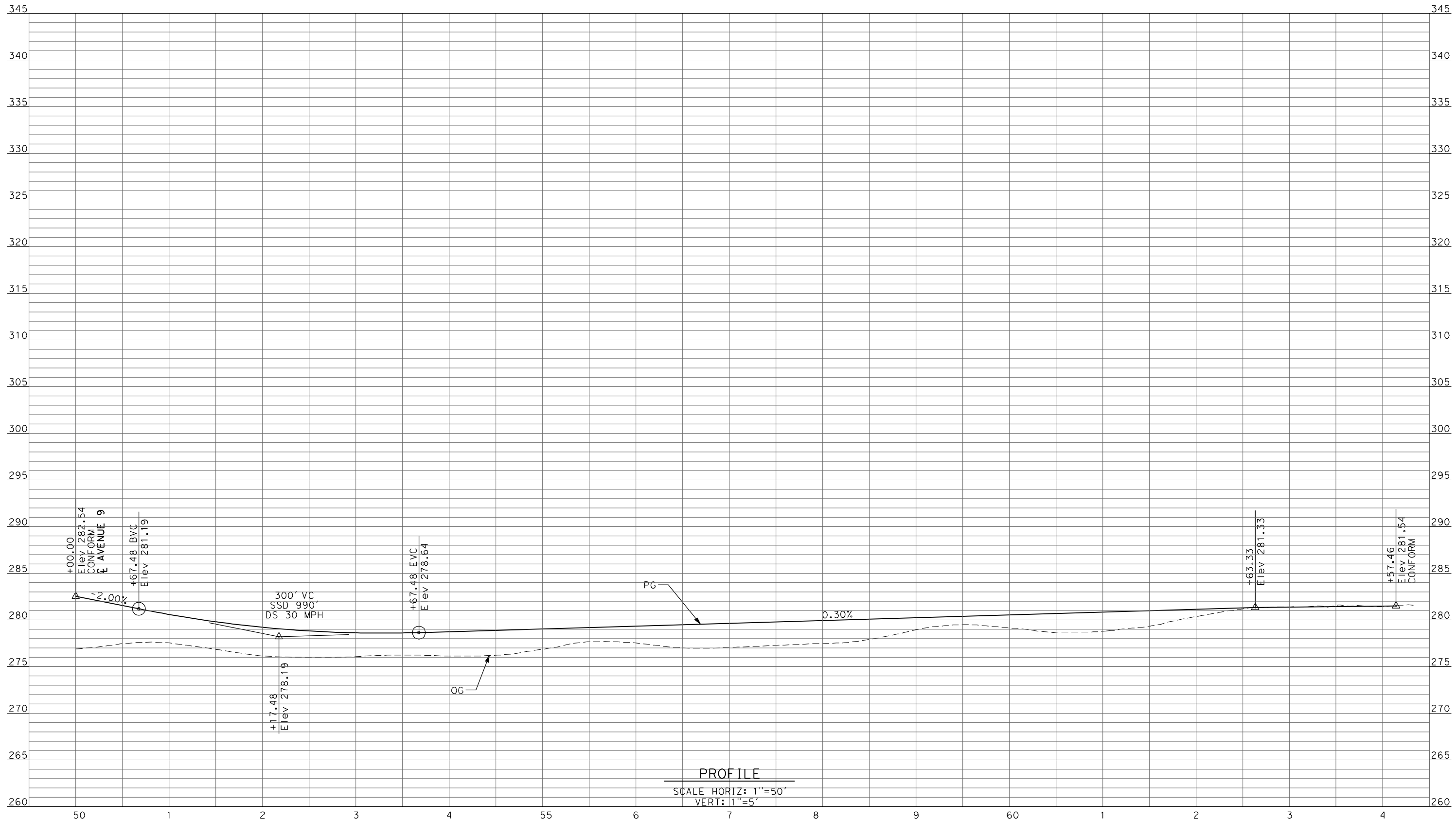
**NOT FOR  
CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT  
MERCED TO FRESNO**  
UPRR/SR99 MAINLINE - (AVE 24/WC)  
AVENUE 9 - INTERCHANGE SR 99 SB ON-RAMP  
PROFILE  
SHEET 10 OF 11

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
CT8113-B  
SCALE  
AS SHOWN  
SHEET NO.  
### OF ###

4/27/2011 6:39:07 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 2b - ave 24 wye-w.chowchilla\caltrans facilities\Profile\CT8114-B.dgn  
 oyeled



**PROFILE**  
 SCALE HORIZ: 1"=50'  
 VERT: 1"=5'

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
 D. AYELE  
 DRAWN BY  
 C. DELOS REYES  
 CHECKED BY  
 A. SILVER  
 IN CHARGE  
 A. BOONE  
 DATE  
 04/29/2011

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



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 MAINLINE - (AVE 24/WC)  
 AVENUE 9 - INTERCHANGE SR 99 SB OFF-RAMP  
 PROFILE  
 SHEET 11 OF 11

CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CT8114-B  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###



4/27/2011 6:39:11 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 2b - ave 24 wye & w. chowchilla\caltrans facilities\Profile\CT8115-B.dgn



PROFILE  
 SCALE HORIZ: 1"=50'  
 VERT: 1"=5'

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
 DRAWN BY  
C. DELOS REYES  
 CHECKED BY  
A. SILVER  
 IN CHARGE  
A. BOONE  
 DATE  
04/29/2011

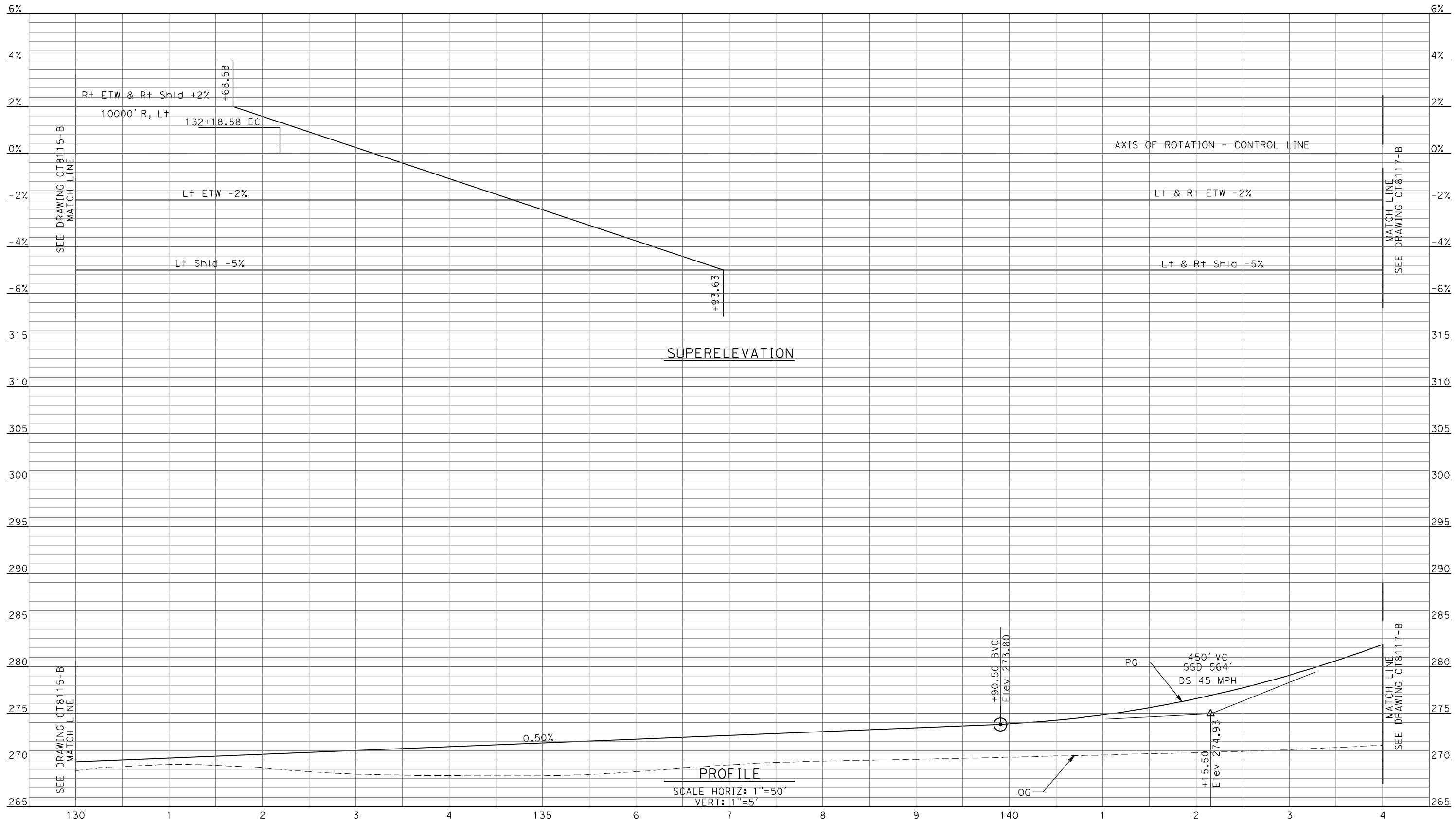
**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**  
  
**NOT FOR**  
**CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 MAINLINE - (AVE 24/WC)  
 AVENUE 11 - OVERHEAD  
 PROFILE  
 SHEET 1 OF 5

CONTRACT NO.  
HSR06-007  
 DRAWING NO.  
CT8115-B  
 SCALE  
AS SHOWN  
 SHEET NO.  
### OF ###

4/27/2011 6:39:15 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 2b - ave 24 wye & w. chowchilla\caltrans facilities\Profile\CT8116-B.dgn



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
DRAWN BY  
C. DELOS REYES  
CHECKED BY  
A. SILVER  
IN CHARGE  
A. BOONE  
DATE  
04/29/2011

**RECORD SET  
15% DESIGN  
SUBMITTAL**

**NOT FOR  
CONSTRUCTION**

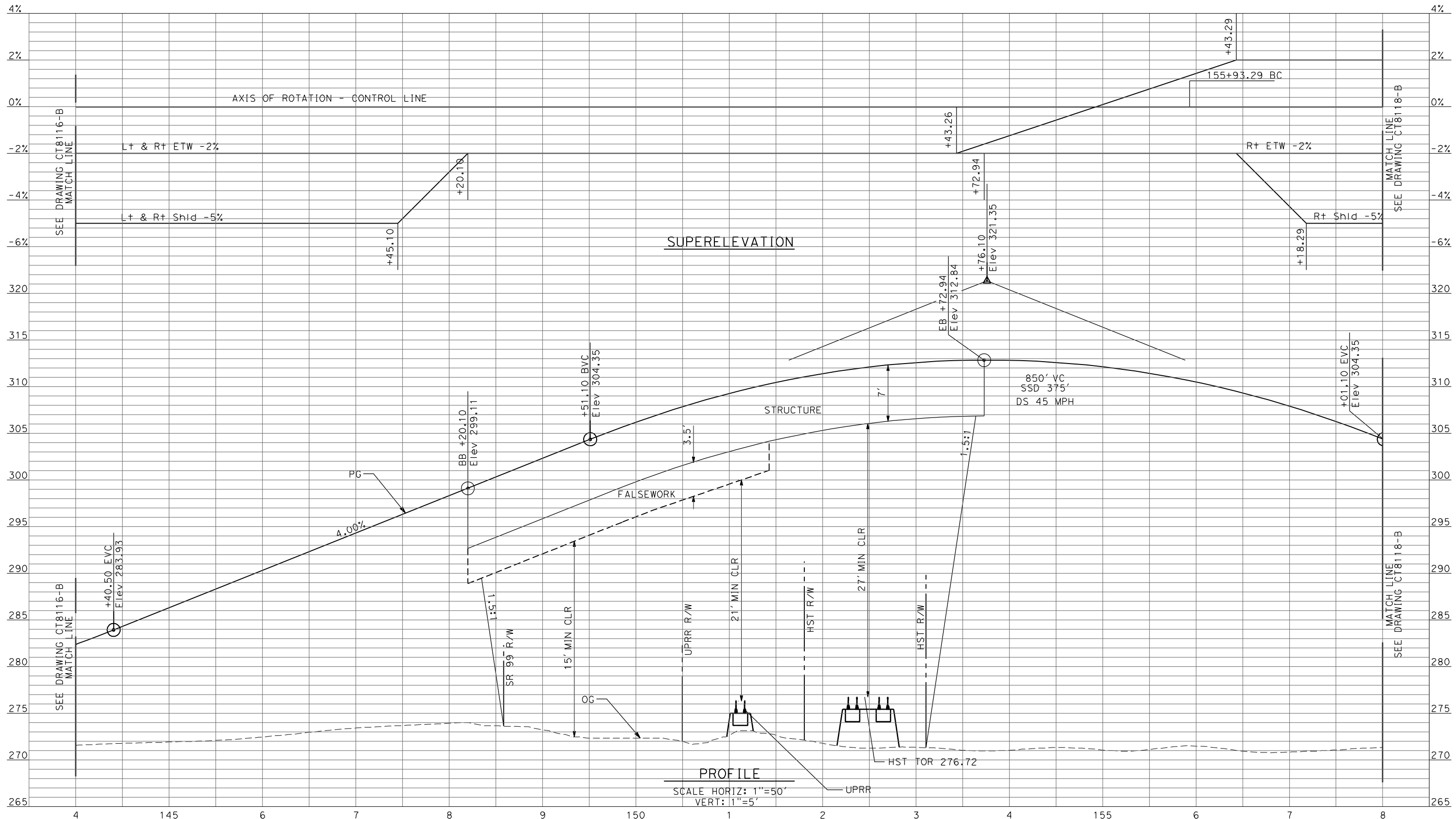


**CALIFORNIA HIGH-SPEED TRAIN PROJECT  
MERCED TO FRESNO**  
UPRR/SR99 MAINLINE - (AVE 24/WC)  
AVENUE 11 - OVERHEAD  
PROFILE  
SHEET 2 OF 5

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
CT8116-B  
SCALE  
AS SHOWN  
SHEET NO.  
### OF ###



4/27/2011 6:39:19 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 2b - ave 24 wye-w.chowchilla\caltrans facilities\Profile\CT8117-B.dgn



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
DRAWN BY  
C. DELOS REYES  
CHECKED BY  
A. SILVER  
IN CHARGE  
A. BOONE  
DATE  
04/29/2011

**RECORD SET  
15% DESIGN  
SUBMITTAL**

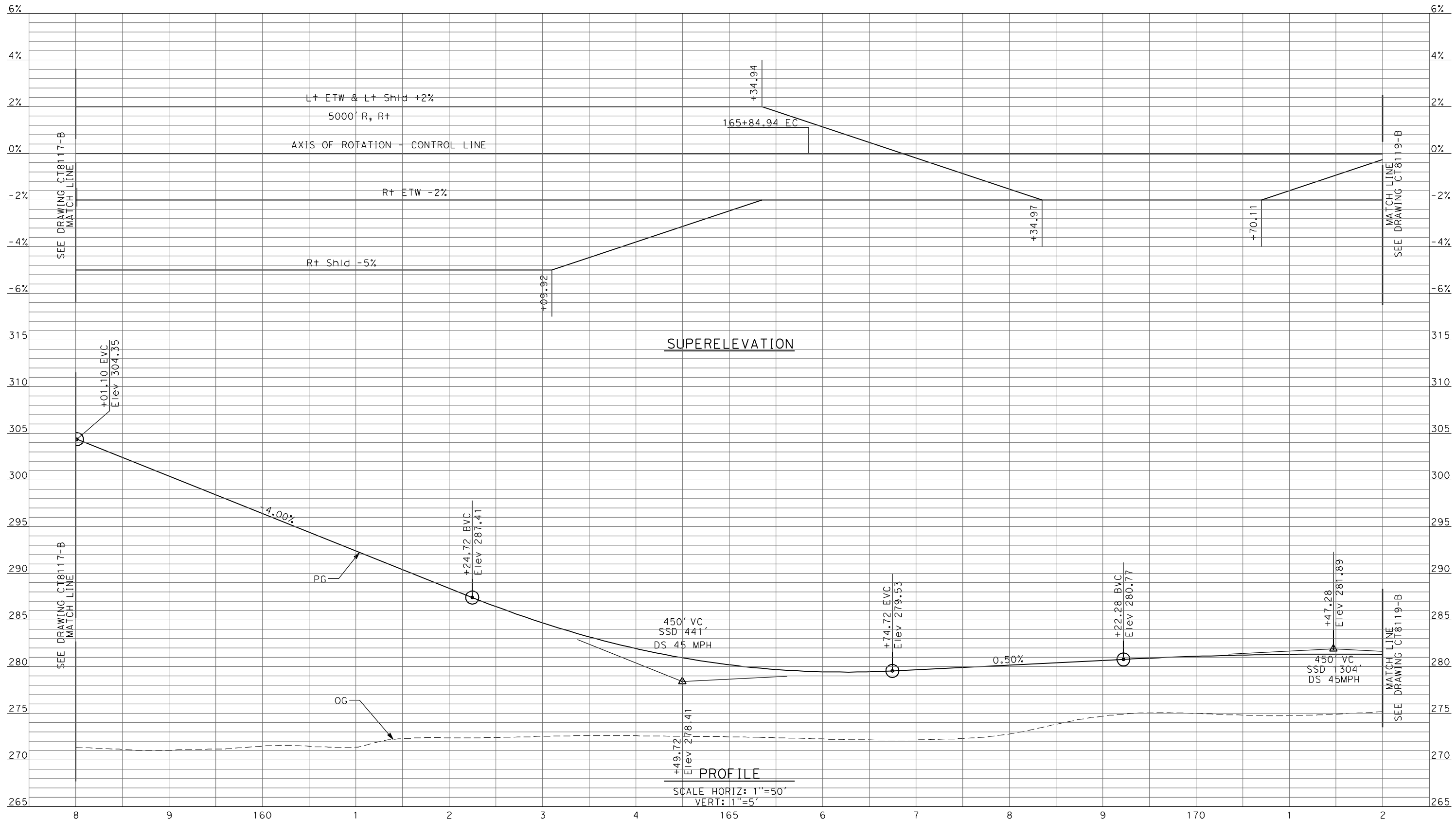
**NOT FOR  
CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT  
MERCED TO FRESNO**  
UPRR/SR99 MAINLINE - (AVE 24/WC)  
AVENUE 11 - OVERHEAD  
PROFILE  
SHEET 3 OF 5

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
CT8117-B  
SCALE  
AS SHOWN  
SHEET NO.  
### OF ###

4/27/2011 6:39:24 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 2b - ave 24 wye & w. chowchilla\caltrans facilities\Profile\CT8118-B.dgn



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
DRAWN BY  
C. DELOS REYES  
CHECKED BY  
A. SILVER  
IN CHARGE  
A. BOONE  
DATE  
04/29/2011

**RECORD SET  
15% DESIGN  
SUBMITTAL**

**NOT FOR  
CONSTRUCTION**

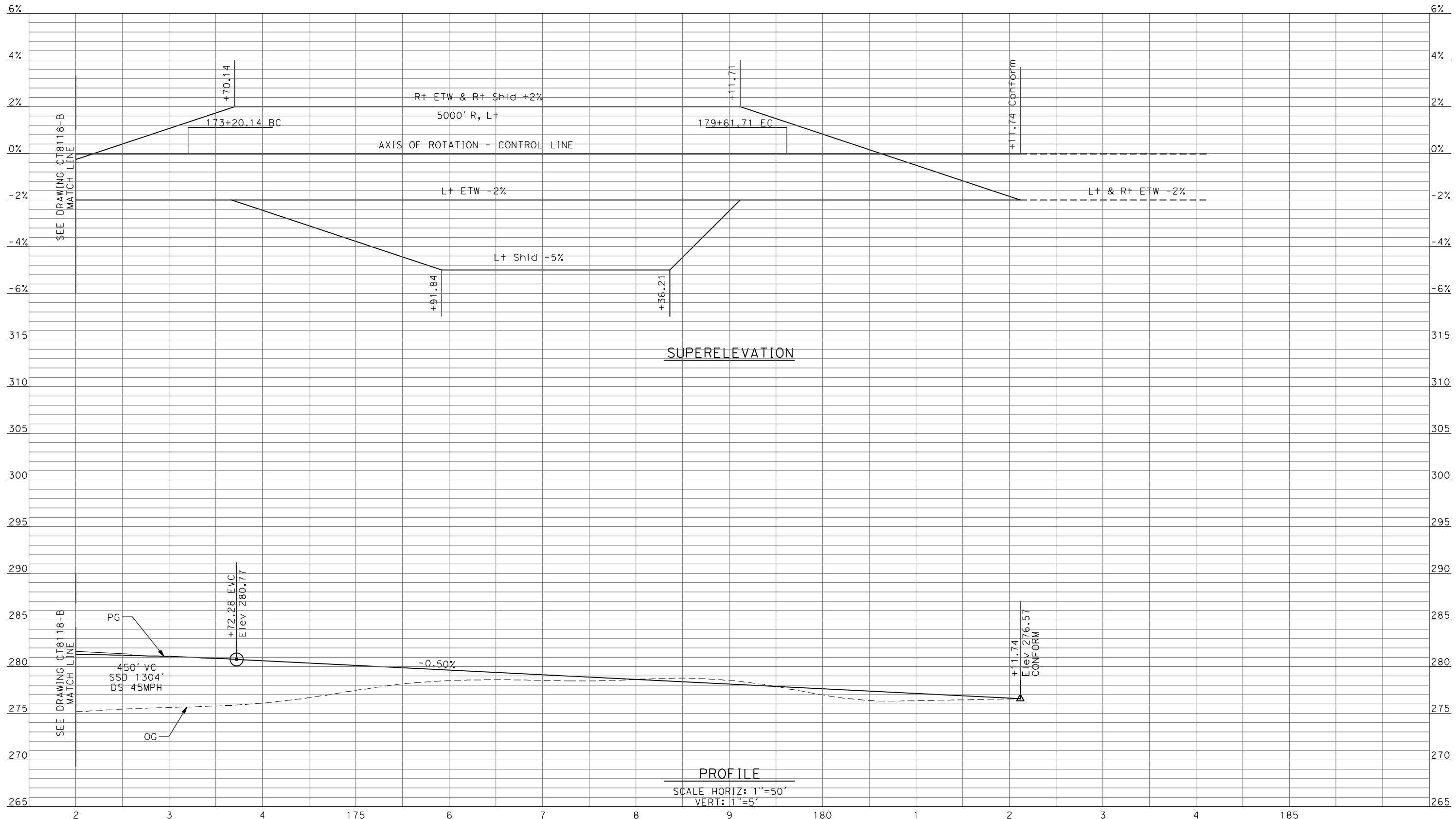


**CALIFORNIA HIGH-SPEED TRAIN PROJECT  
MERCED TO FRESNO**  
UPRR/SR99 MAINLINE - (AVE 24/WC)  
AVENUE 11 - OVERHEAD  
PROFILE  
SHEET 4 OF 5

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
CT8118-B  
SCALE  
AS SHOWN  
SHEET NO.  
### OF ###



4/27/2011 6:39:28 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 2b - ave 24 wye-w.chowchilla\caltrans facilities\Profile\CT8119-B.dgn



**SUPERELEVATION**

**PROFILE**  
SCALE HORIZ: 1"=50'  
VERT: 1"=5'

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**D. AYELE**  
DRAWN BY  
**C. DELOS REYES**  
CHECKED BY  
**A. SILVER**  
IN CHARGE  
**A. BOONE**  
DATE  
**04/29/2011**

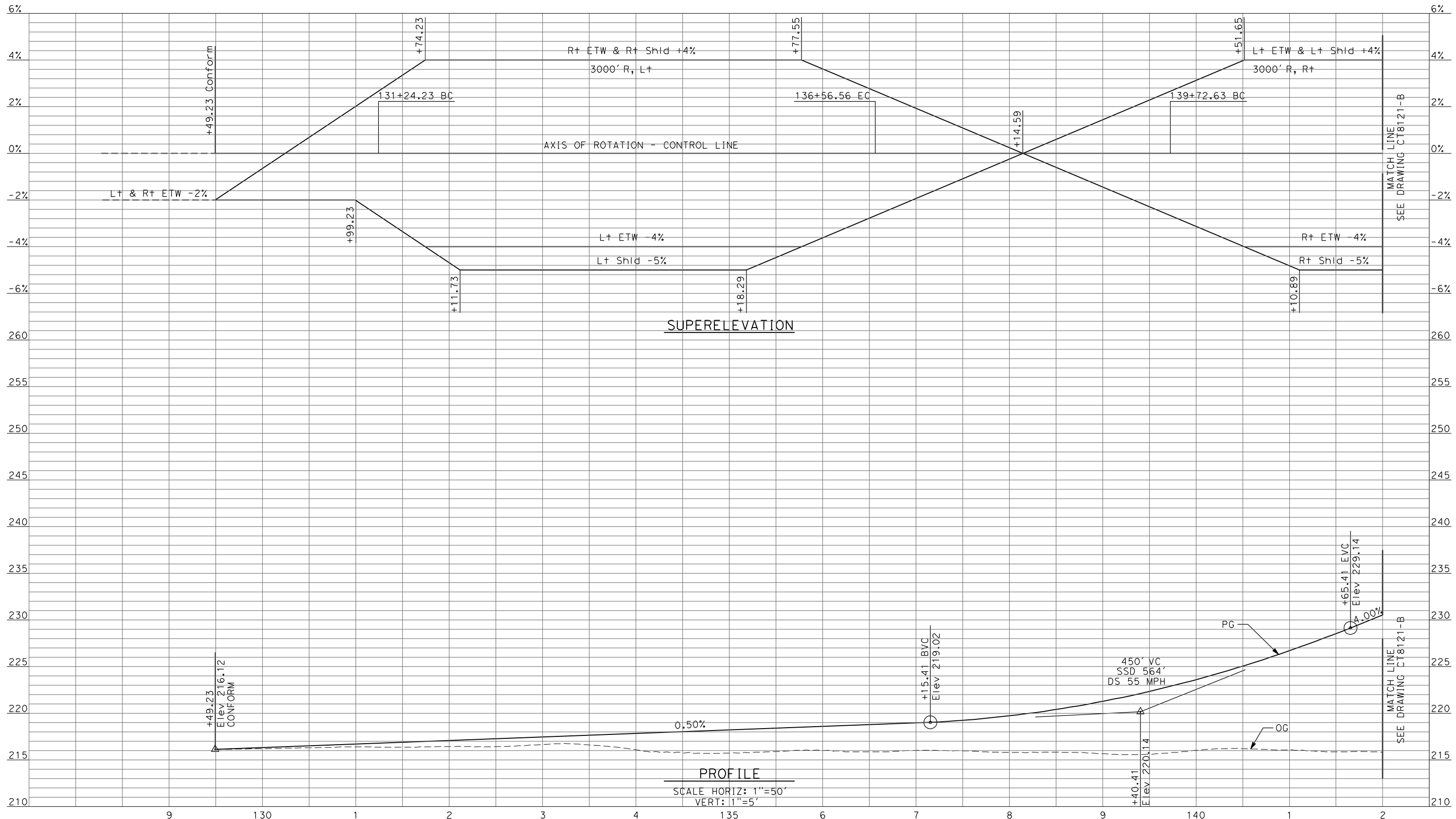
**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**  
  
**NOT FOR**  
**CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
UPRR/SR99 MAINLINE - (AVE 24/WC)  
AVENUE 11 - OVERHEAD  
PROFILE  
SHEET 5 OF 5

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
CT8119-B  
SCALE  
AS SHOWN  
SHEET NO.  
### OF ###

4/27/2011 6:39:32 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 2b - ave 24 wye-w.chowchilla\caltrans facilities\Profile\CT8120-B.dgn  
 oyeled



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**D. AYELE**  
 DRAWN BY  
**C. DELOS REYES**  
 CHECKED BY  
**A. SILVER**  
 IN CHARGE  
**A. BOONE**  
 DATE  
**04/29/2011**

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

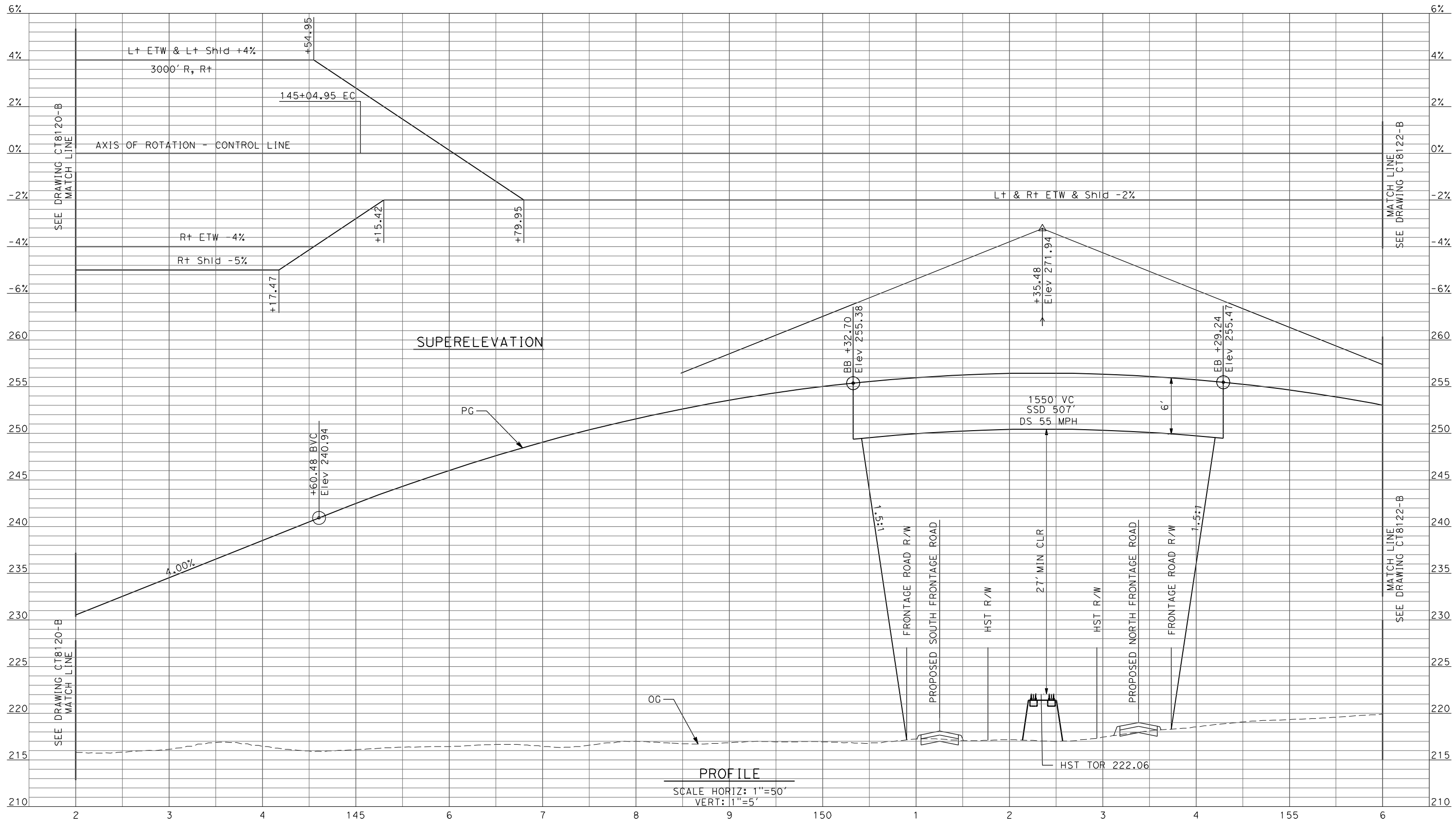


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 MAINLINE - (AVE 24)  
 GRADE SEPARATION - ROBERTSON BLVD (SR 233) ALT 1  
**PROFILE**  
 SHEET 1 OF 4

CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CT8120-B  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###



4/27/2011 6:39:36 PM p:\60022962\task\_02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 2b - ave 24 wye & w. chowchilla\caltrans facilities\Profile\CT8121-B.dgn



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
 DRAWN BY  
C. DELOS REYES  
 CHECKED BY  
A. SILVER  
 IN CHARGE  
A. BOONE  
 DATE  
04/29/2011

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

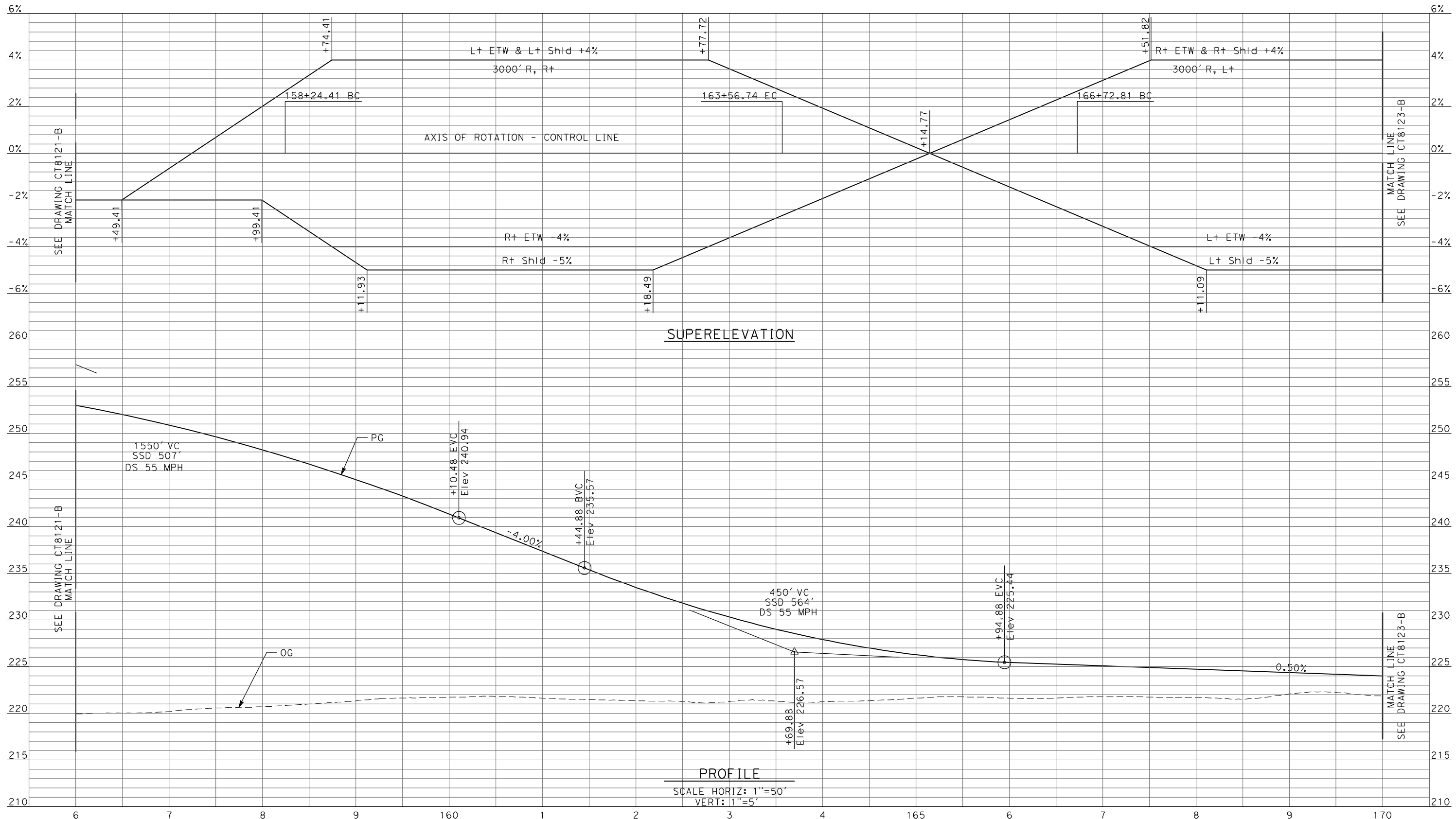
**NOT FOR**  
**CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 MAINLINE - (AVE 24)  
 GRADE SEPARATION - ROBERTSON BLVD (SR 233) ALT 1  
 PROFILE  
 SHEET 2 OF 4

CONTRACT NO.  
HSR06-007  
 DRAWING NO.  
CT8121-B  
 SCALE  
AS SHOWN  
 SHEET NO.  
### OF ###

4/27/2011 6:39:40 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 2b - ave 24 wye & w. chowchilla\Profile\CT8122-B.dgn



**PROFILE**  
 SCALE HORIZ: 1"=50'  
 VERT: 1"=5'

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
 DRAWN BY  
C. DELOS REYES  
 CHECKED BY  
A. SILVER  
 IN CHARGE  
A. BOONE  
 DATE  
04/29/2011

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

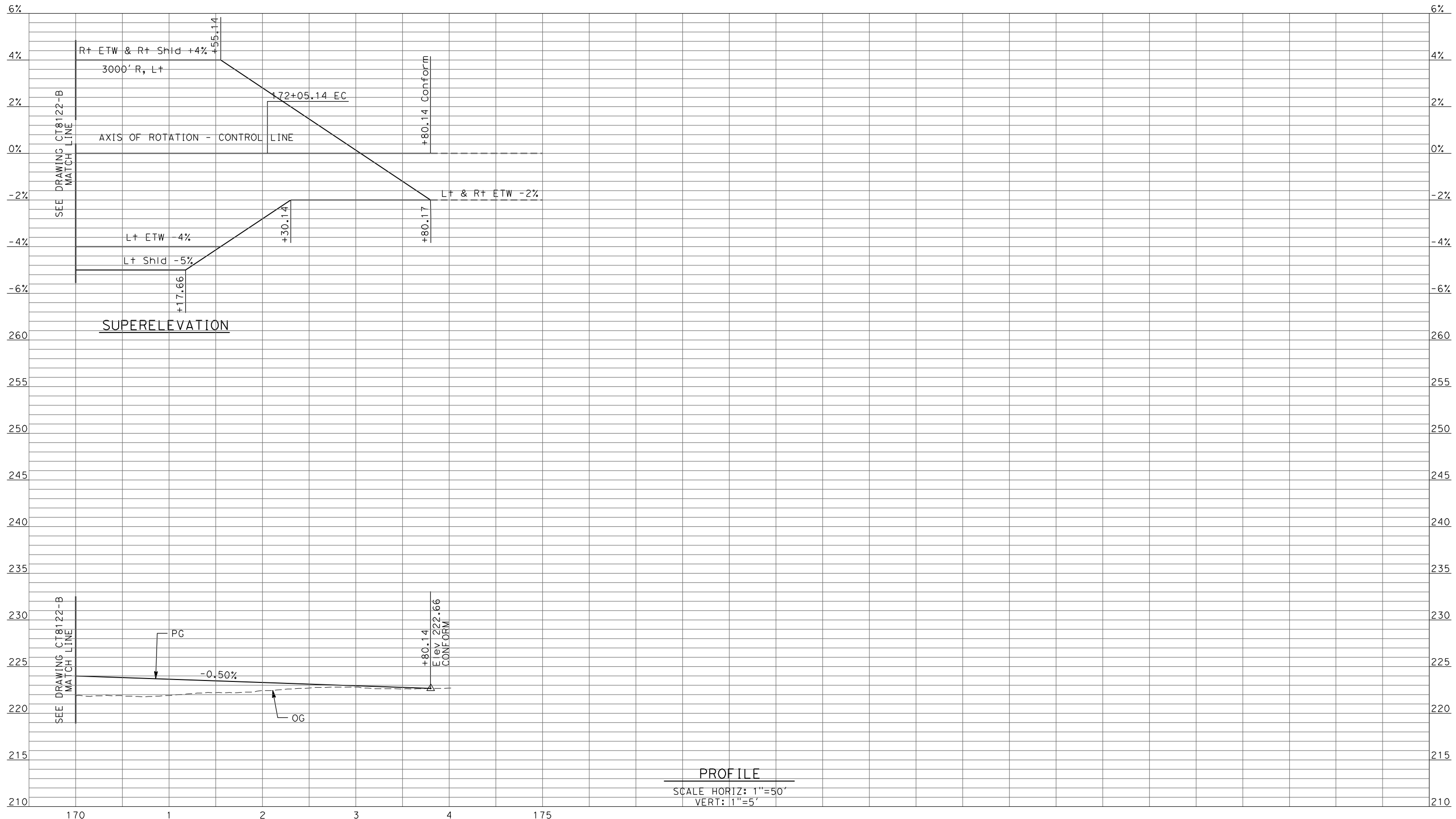


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 MAINLINE - (AVE 24)  
 GRADE SEPARATION - ROBERTSON BLVD (SR 233) ALT 1  
**PROFILE**  
 SHEET 3 OF 4

CONTRACT NO.  
HSR06-007  
 DRAWING NO.  
CT8122-B  
 SCALE  
AS SHOWN  
 SHEET NO.  
### OF ###



4/27/2011 6:39:44 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 2b - ave 24 wye & w. chowchilla\caltrans facilities\Profile\CT8123-B.dgn  
 oyeled



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**D. AYELE**  
 DRAWN BY  
**C. DELOS REYES**  
 CHECKED BY  
**A. SILVER**  
 IN CHARGE  
**A. BOONE**  
 DATE  
**04/29/2011**

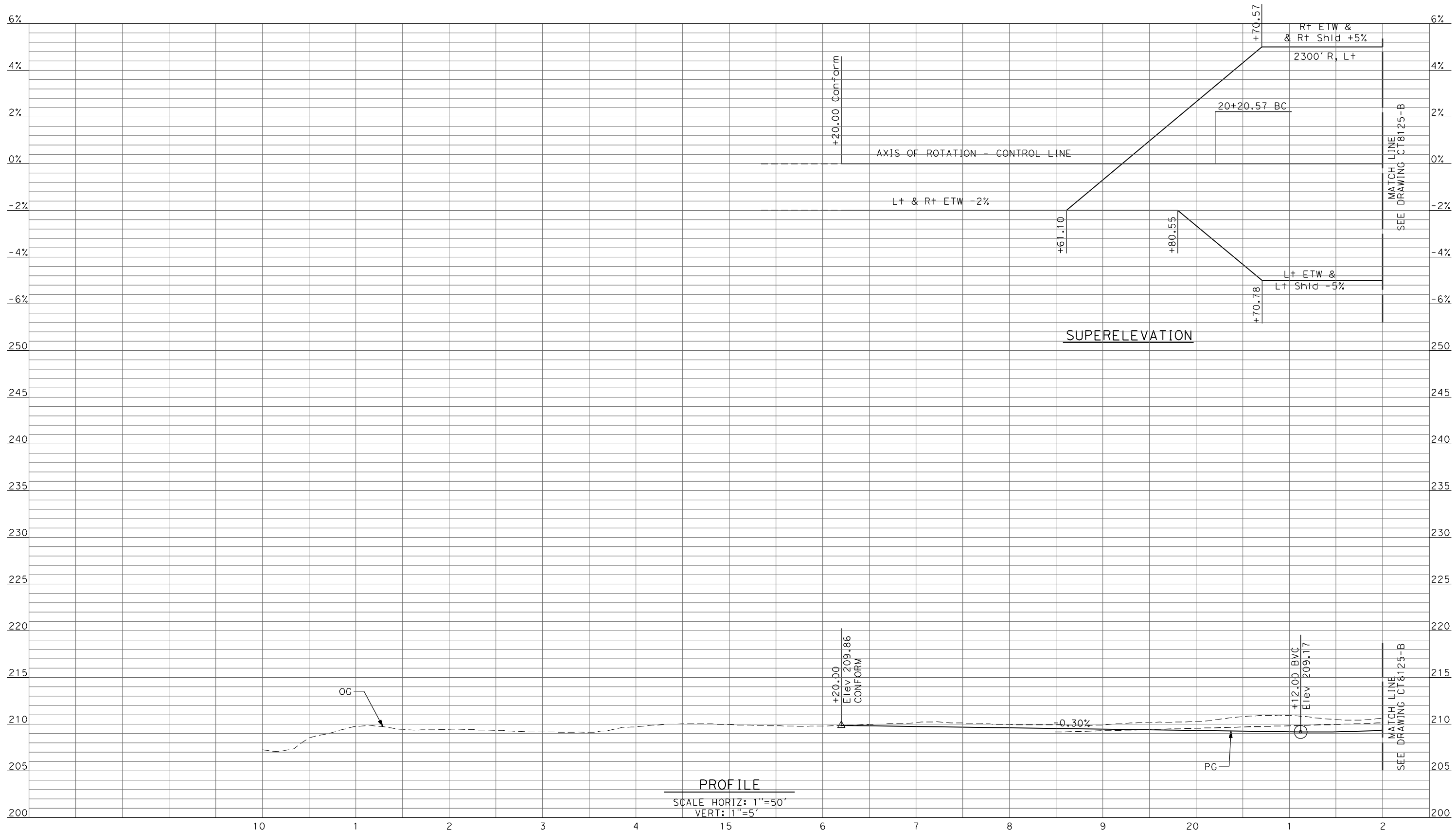
**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**  
  
**NOT FOR**  
**CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 MAINLINE - (AVE 24)  
 GRADE SEPARATION - ROBERTSON BLVD (SR 233) ALT 1  
**PROFILE**  
 SHEET 4 OF 4

CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CT8123-B  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###

4/27/2011 6:39:48 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 2b - ave 24 wye-w.chowchilla\caltrans facilities\Profile\CT8124-B.dgn



PROFILE  
SCALE HORIZ: 1"=50'  
VERT: 1"=5'

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**D. AYELE**  
DRAWN BY  
**C. DELOS REYES**  
CHECKED BY  
**A. SILVER**  
IN CHARGE  
**A. BOONE**  
DATE  
**04/29/2011**

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

**NOT FOR**  
**CONSTRUCTION**



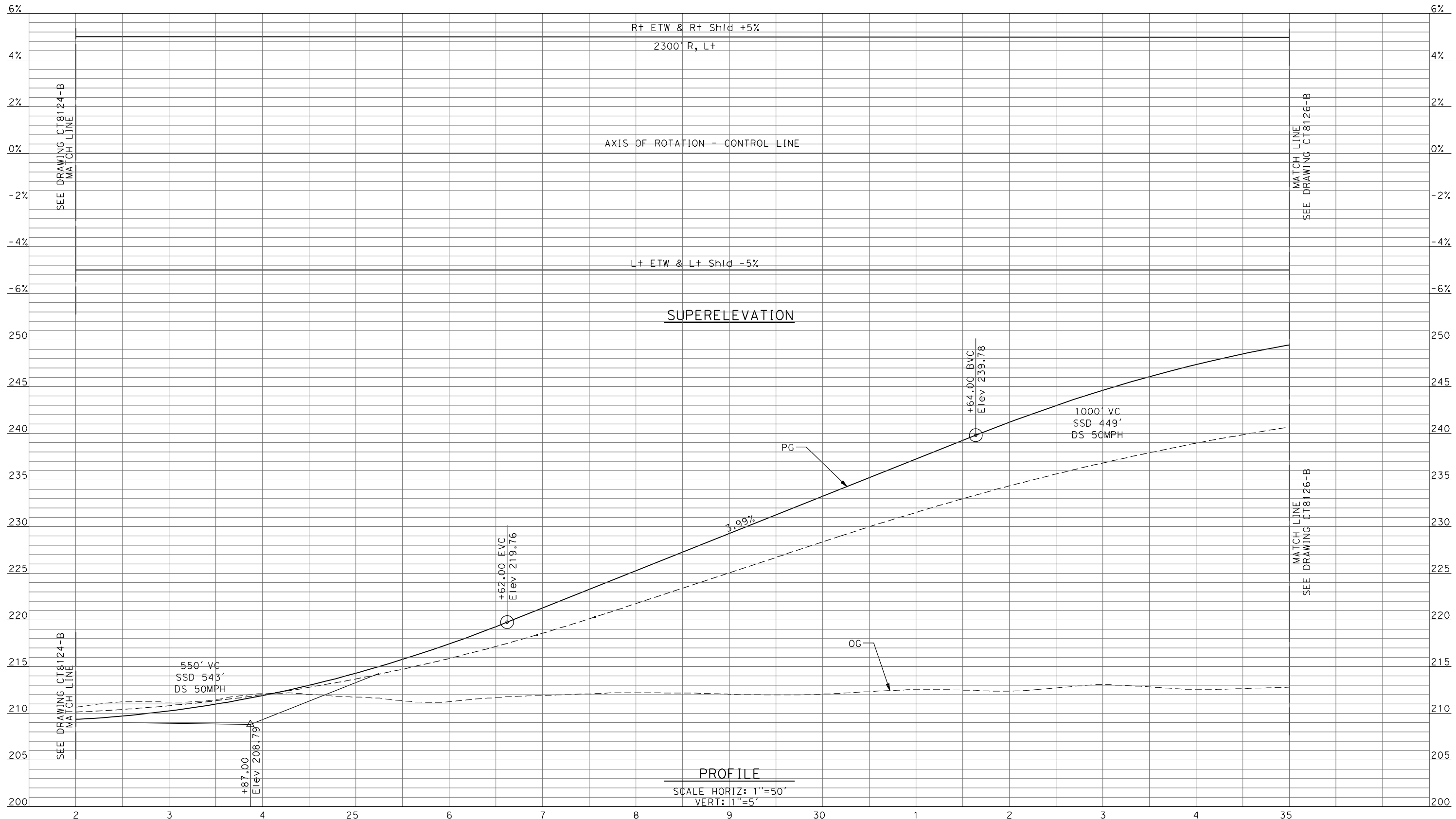
**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**

UPRR/SR99 WYE/MERCED - (AVE 24)  
GRADE SEPARATION - SANDY MUSH RD INTERCHANGE  
PROFILE  
SHEET 1 OF 3

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
CT8124-B  
SCALE  
AS SHOWN  
SHEET NO.  
### OF ###



4/27/2011 6:39:52 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 2b - ave 24 wye-w.chowchilla\caltrans facilities\Profile\CT8125-B.dgn



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE

DRAWN BY  
C. DELOS REYES

CHECKED BY  
A. SILVER

IN CHARGE  
A. BOONE

DATE  
04/29/2011

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

**NOT FOR**  
**CONSTRUCTION**



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

UPRR/SR99 WYE/MERCED - (AVE 24)  
 GRADE SEPARATION - SANDY MUSH RD INTERCHANGE  
 PROFILE  
 SHEET 2 OF 3

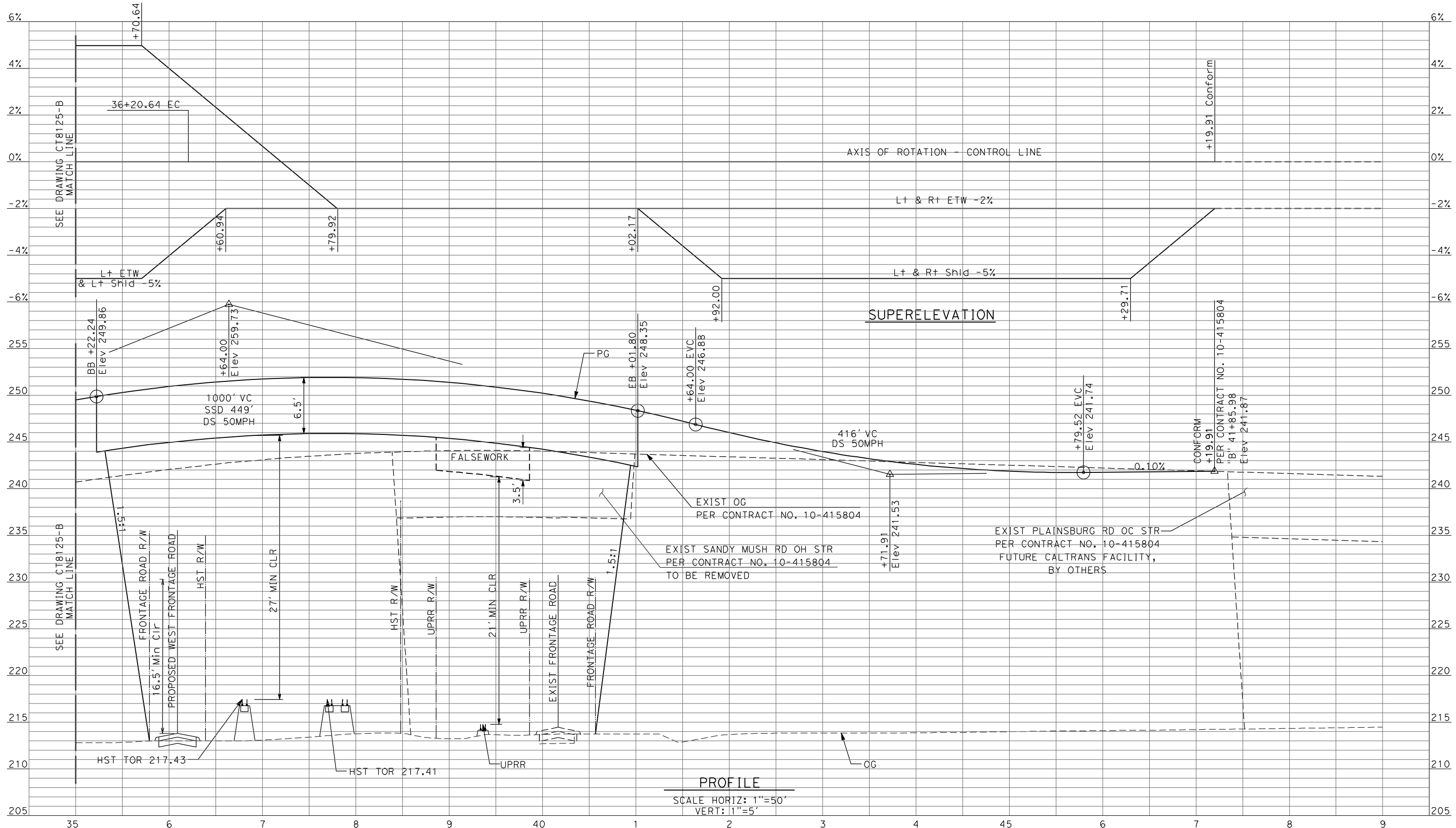
CONTRACT NO.  
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DRAWING NO.  
CT8125-B

SCALE  
AS SHOWN

SHEET NO.  
### OF ###

4/27/2011 6:39:56 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 2b - ave 24 wye-w.chowchilla\caltrans facilities\Profile\CT8126-B.dgn



PROFILE  
SCALE HORIZ: 1"=50'  
VERT: 1"=5'

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
DRAWN BY  
C. DELOS REYES  
CHECKED BY  
A. SILVER  
IN CHARGE  
A. BOONE  
DATE  
04/29/2011

**RECORD SET  
15% DESIGN  
SUBMITTAL**

**NOT FOR  
CONSTRUCTION**



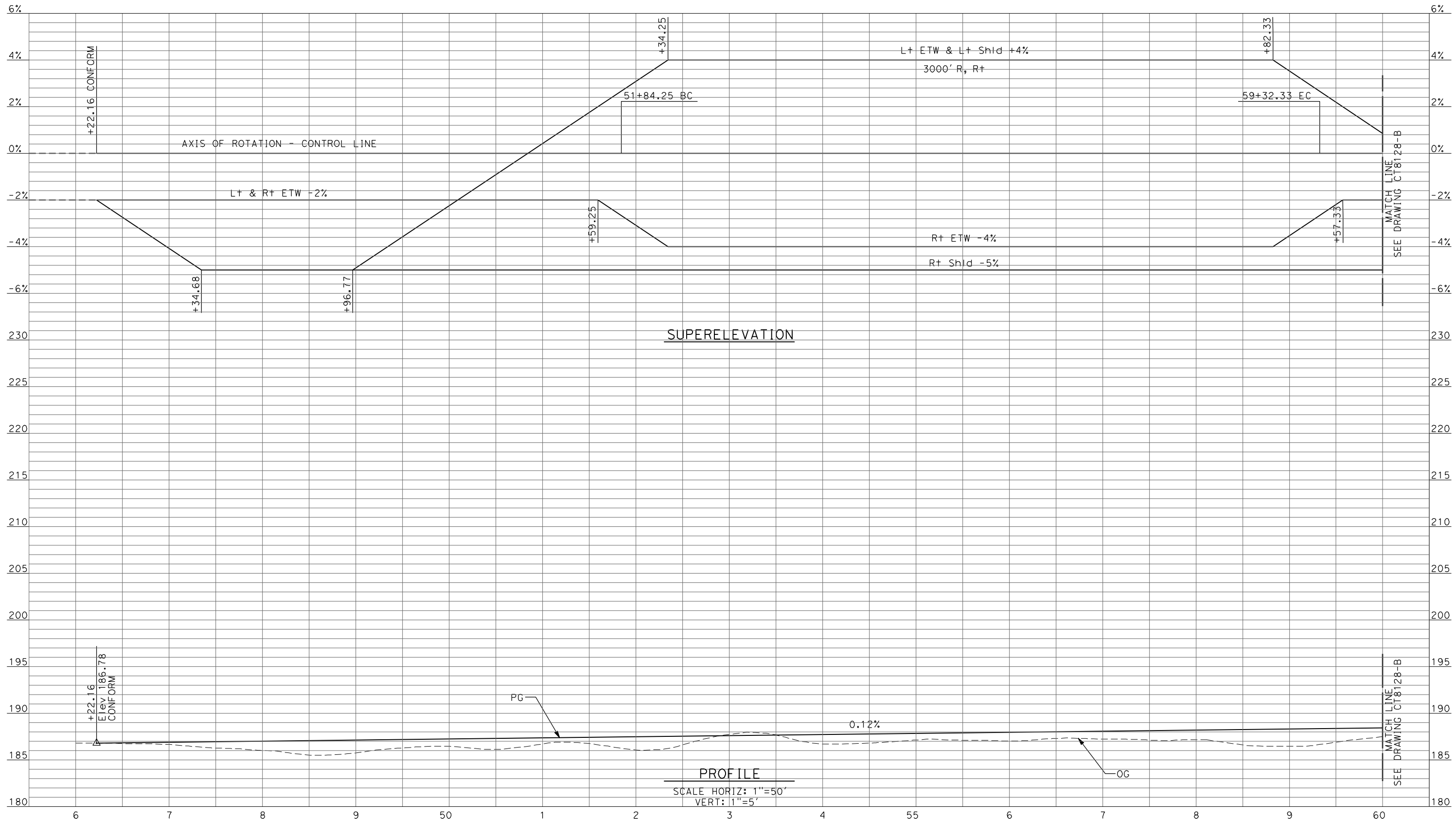
**CALIFORNIA HIGH-SPEED TRAIN PROJECT  
MERCED TO FRESNO**

UPRR/SR99 WYE/MERCED - (AVE 24)  
GRADE SEPARATION - SANDY MUSH RD INTERCHANGE  
PROFILE  
SHEET 3 OF 3

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
CT8126-B  
SCALE  
AS SHOWN  
SHEET NO.  
### OF ###



4/27/2011 6:40:01 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 2b - ave 24 wye-w.chowchilla\caltrans facilities\Profile\CT8127-B.dgn



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE

DRAWN BY  
C. DELOS REYES

CHECKED BY  
A. SILVER

IN CHARGE  
A. BOONE

DATE  
04/29/2011

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

**NOT FOR**  
**CONSTRUCTION**



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

UPRR/SR99 MERCED - (AVE 24/WC)  
 GRADE SEPARATION - LE GRAND RD INTERCHANGE  
 PROFILE  
 SHEET 1 OF 5

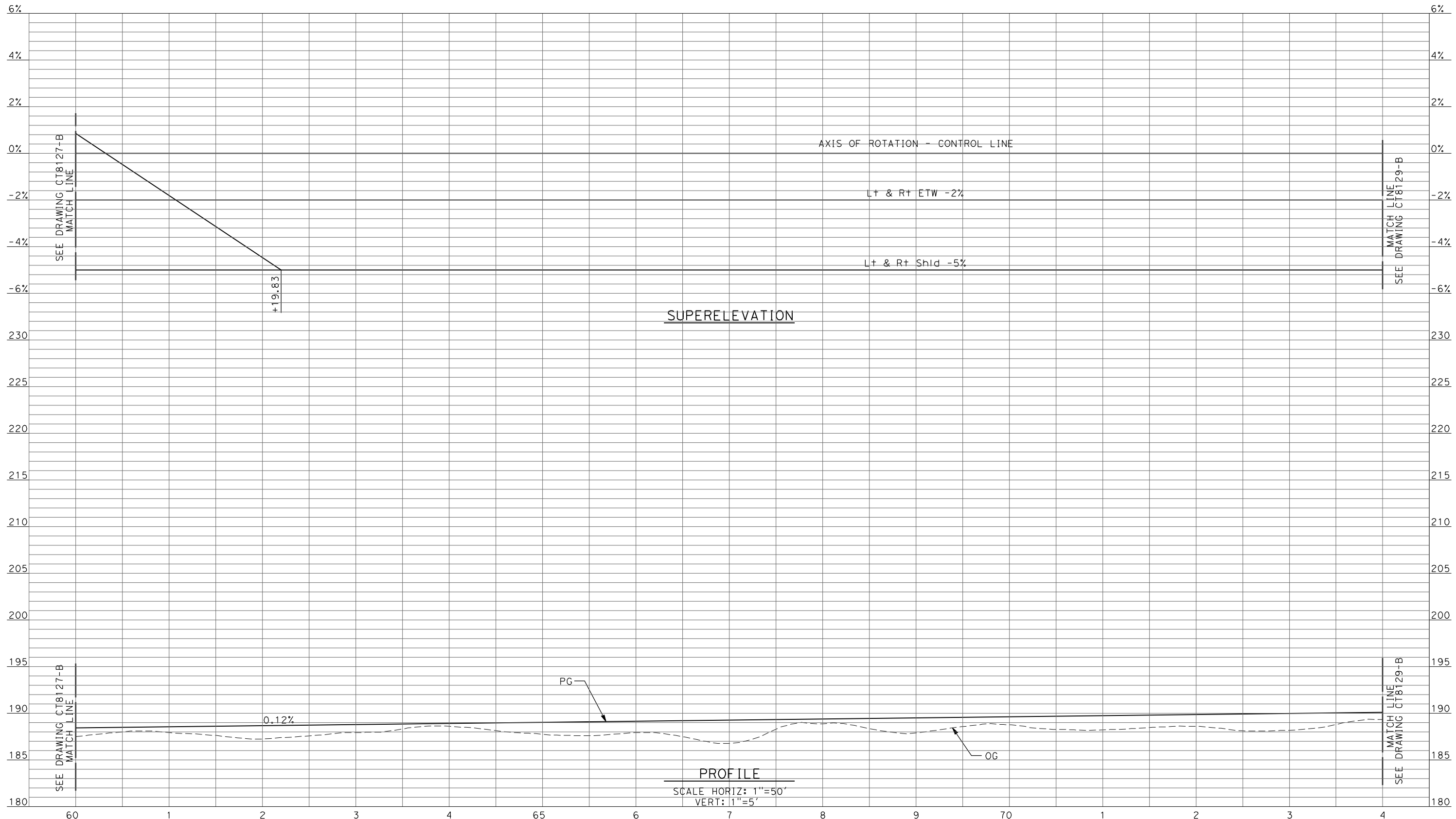
CONTRACT NO.  
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DRAWING NO.  
CT8127-B

SCALE  
AS SHOWN

SHEET NO.  
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SUPERELEVATION

PROFILE  
SCALE HORIZ: 1"=50'  
VERT: 1"=5'

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
DRAWN BY  
C. DELOS REYES  
CHECKED BY  
A. SILVER  
IN CHARGE  
A. BOONE  
DATE  
04/29/2011

**RECORD SET  
15% DESIGN  
SUBMITTAL**

**NOT FOR  
CONSTRUCTION**



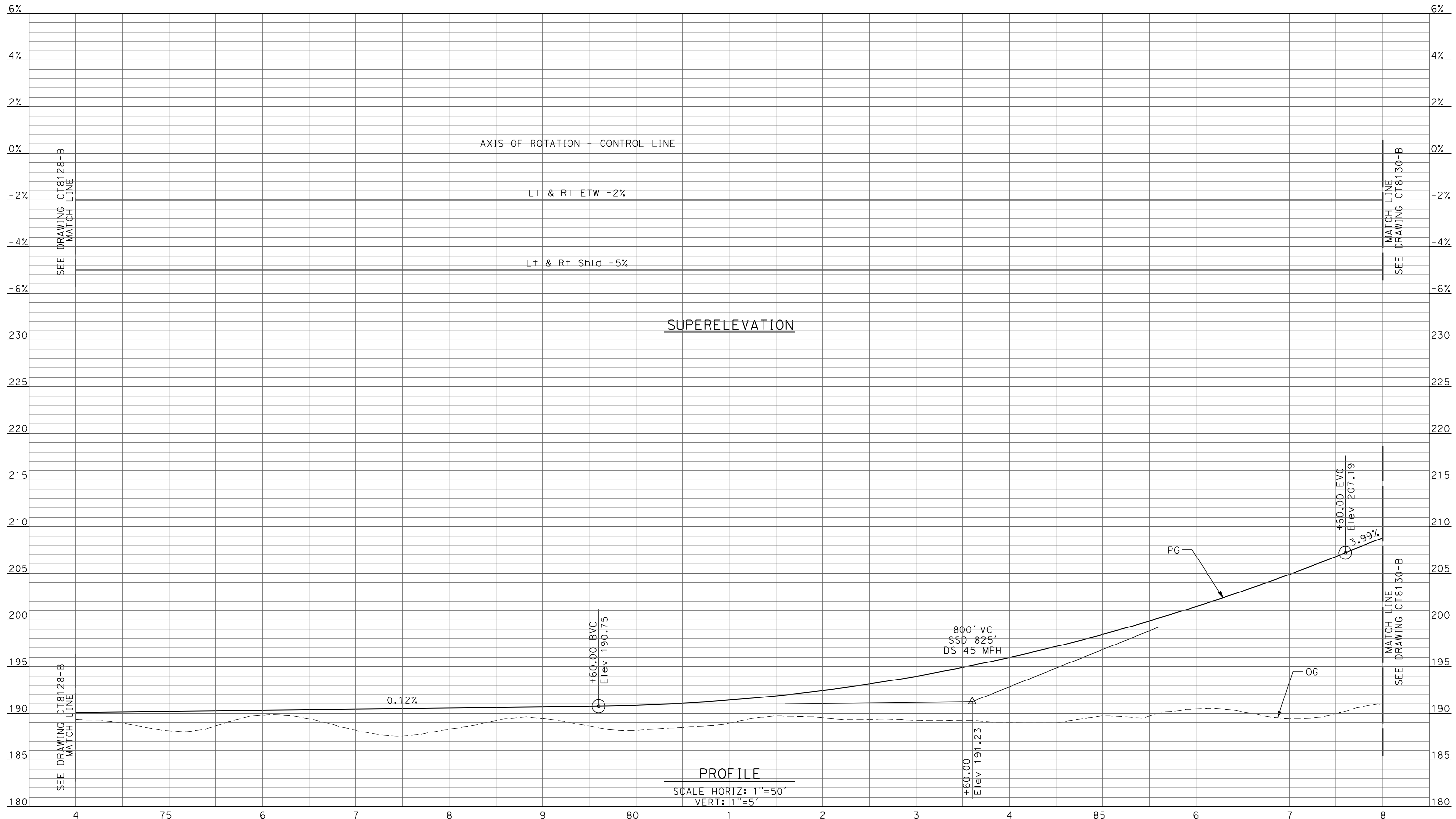
**CALIFORNIA HIGH-SPEED TRAIN PROJECT  
MERCED TO FRESNO**

UPRR/SR99 MERCED - (AVE 24/WC)  
GRADE SEPARATION - LE GRAND RD INTERCHANGE  
PROFILE  
SHEET 2 OF 5

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
CT8128-B  
SCALE  
AS SHOWN  
SHEET NO.  
### OF ###



4/27/2011 6:40:08 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 2b - ave 24 wye & w. chowchilla\caltrans facilities\Profile\CT8129-B.dgn



**PROFILE**  
 SCALE HORIZ: 1"=50'  
 VERT: 1"=5'

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
 DRAWN BY  
C. DELOS REYES  
 CHECKED BY  
A. SILVER  
 IN CHARGE  
A. BOONE  
 DATE  
04/29/2011

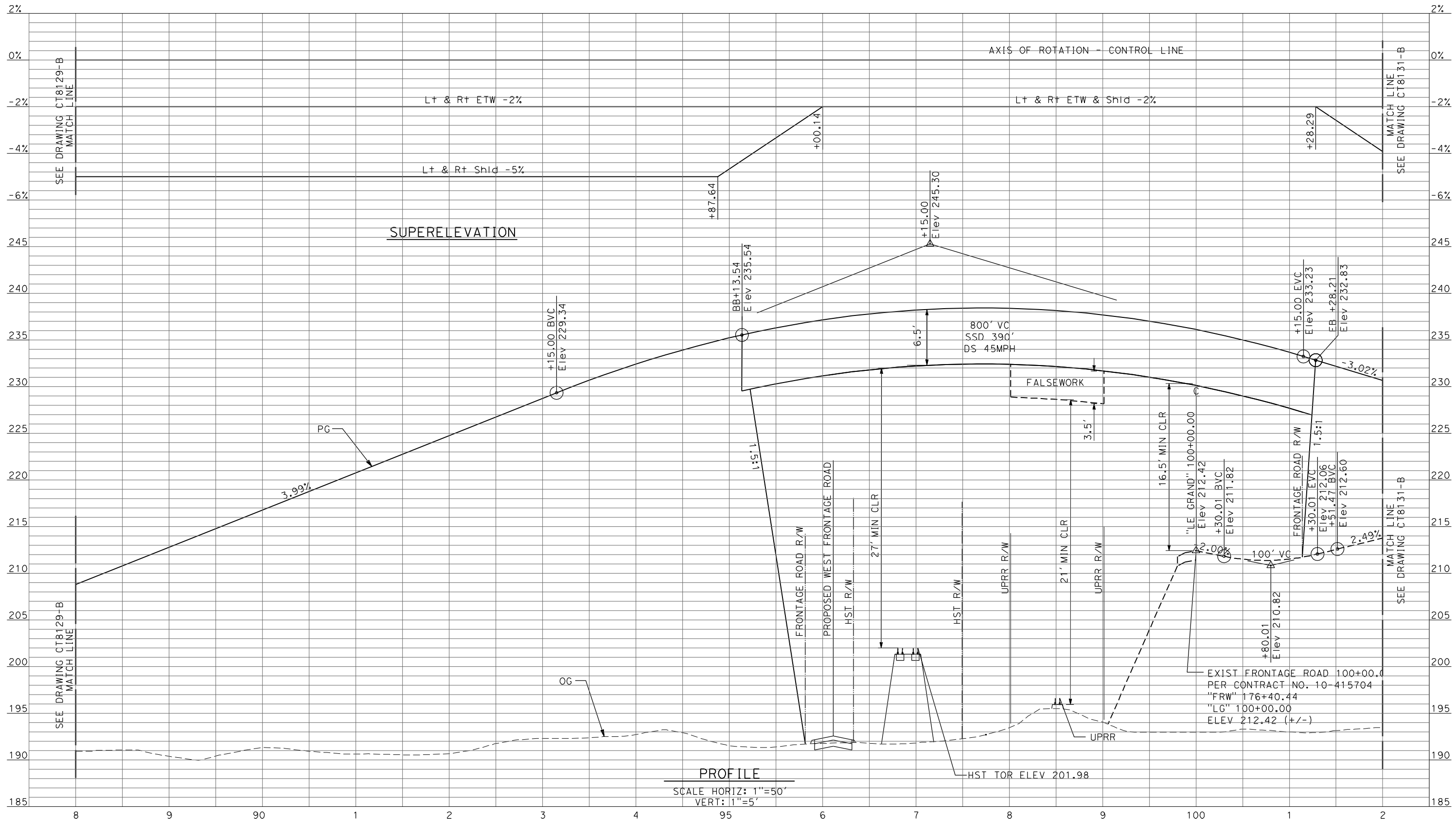
**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**  
  
**NOT FOR**  
**CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 MERCED - (AVE 24/WC)  
 GRADE SEPARATION - LE GRAND RD INTERCHANGE  
 PROFILE  
 SHEET 3 OF 5

CONTRACT NO.  
HSR06-007  
 DRAWING NO.  
CT8129-B  
 SCALE  
AS SHOWN  
 SHEET NO.  
### OF ###

4/27/2011 6:40:12 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 2b - ave 24 wye-w.chowchilla\caltrans facilities\Profile\CT8130-B.dgn



PROFILE  
SCALE HORIZ: 1"=50'  
VERT: 1"=5'

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
DRAWN BY  
C. DELOS REYES  
CHECKED BY  
A. SILVER  
IN CHARGE  
A. BOONE  
DATE  
04/29/2011

**RECORD SET  
15% DESIGN  
SUBMITTAL**

**NOT FOR  
CONSTRUCTION**



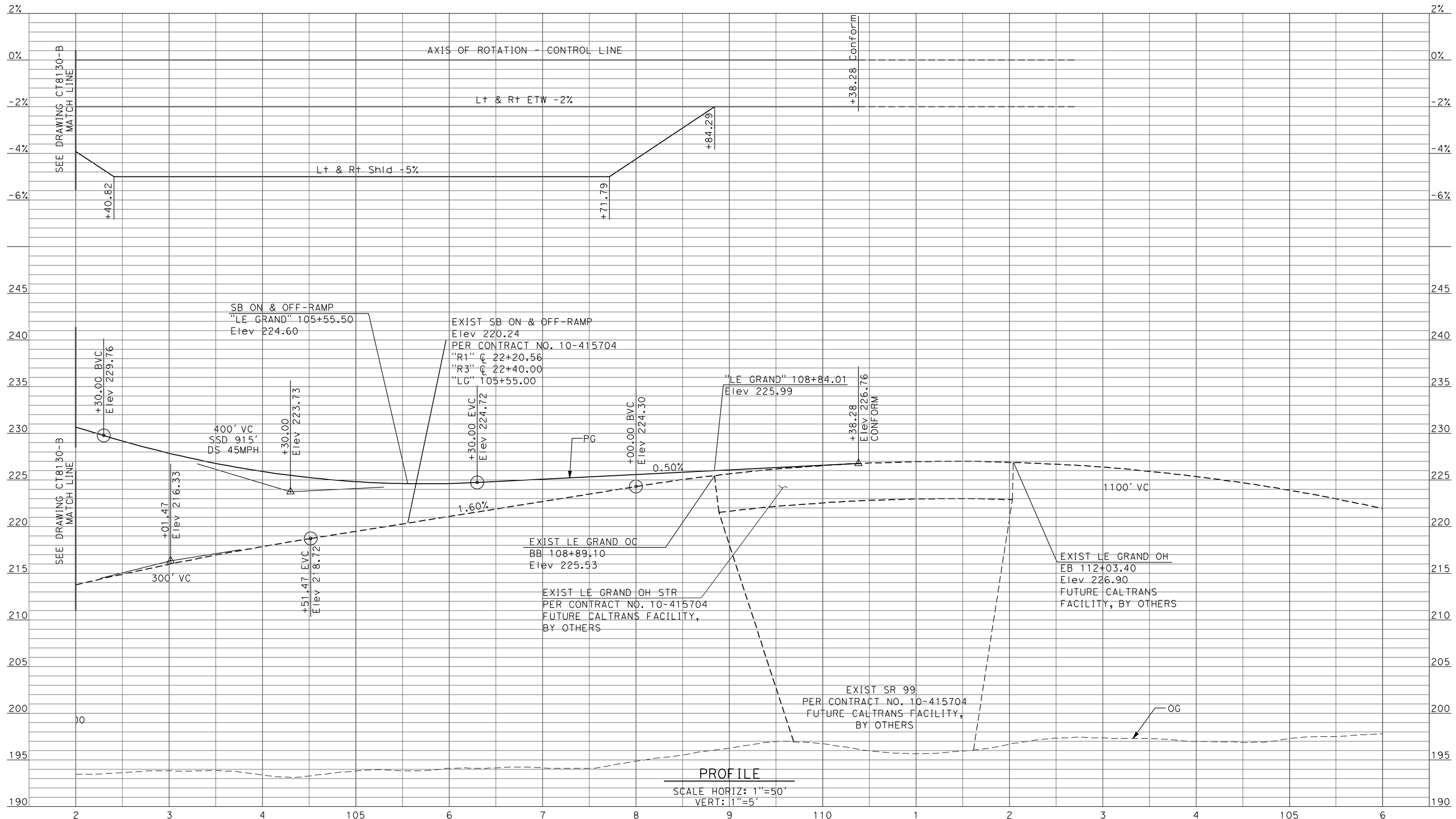
**CALIFORNIA HIGH-SPEED TRAIN PROJECT  
MERCED TO FRESNO**

UPRR/SR99 MERCED - (AVE 24/WC)  
GRADE SEPARATION - LE GRAND RD INTERCHANGE  
PROFILE  
SHEET 4 OF 5

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
CT8130-B  
SCALE  
AS SHOWN  
SHEET NO.  
### OF ###



4/27/2011 6:40:16 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 2b - ave 24 wye-w.chowchilla\caltrans facilities\Profile\CT8131-B.dgn



PROFILE  
SCALE HORIZ: 1"=50'  
VERT: 1"=5'

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**D. AYELE**  
DRAWN BY  
**C. DELOS REYES**  
CHECKED BY  
**A. SILVER**  
IN CHARGE  
**A. BOONE**  
DATE  
**04/29/2011**

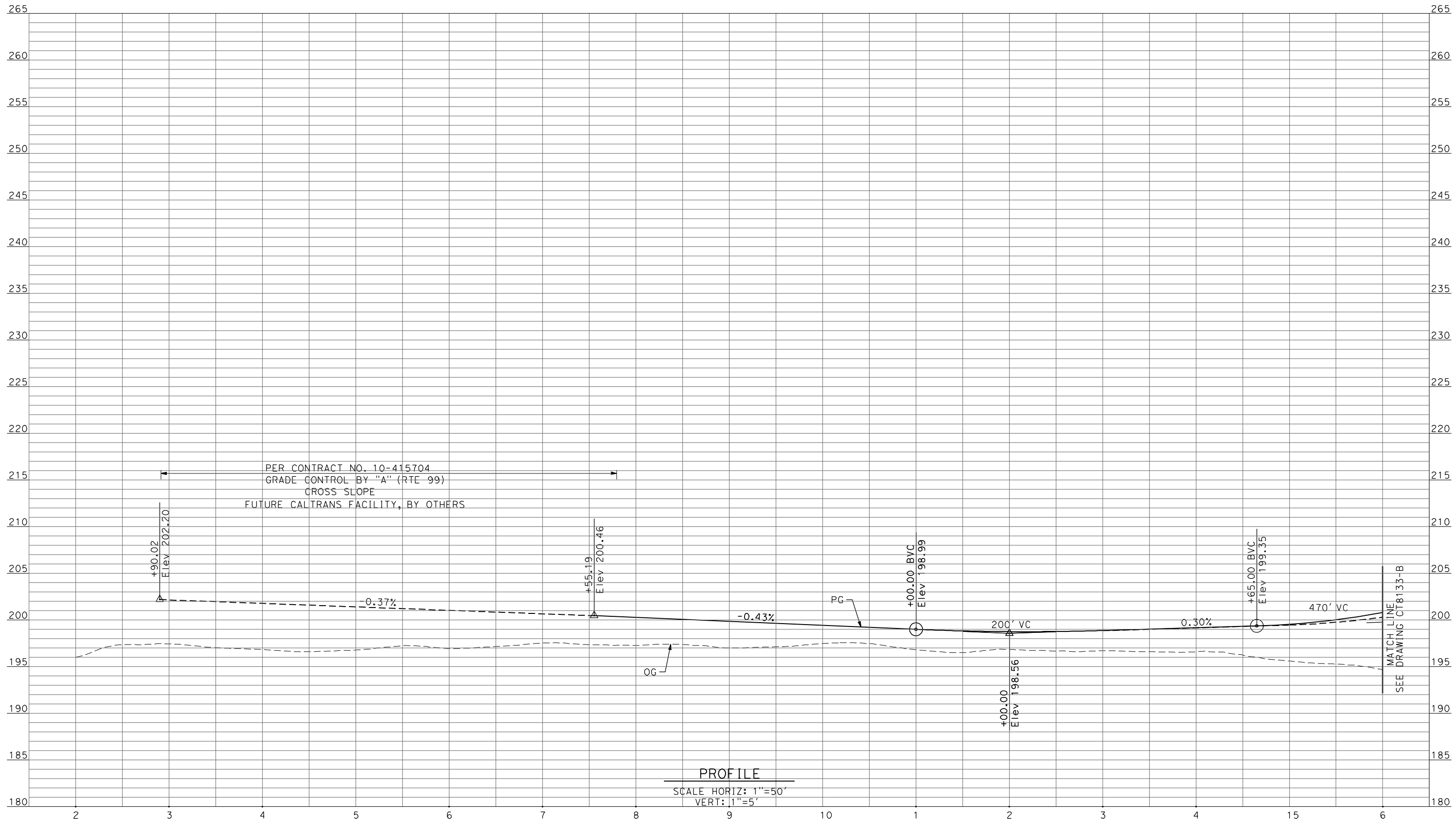
**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**  
  
**NOT FOR**  
**CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
UPRR/SR99 MERCED - (AVE 24/WC)  
GRADE SEPARATION - LE GRAND RD INTERCHANGE  
PROFILE  
SHEET 5 OF 5

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
CT8131-B  
SCALE  
AS SHOWN  
SHEET NO.  
### OF ###

4/27/2011 6:40:20 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 2b - ave 24 wye-w.chowchilla\caltrans facilities\Profile\CT8132-B.dgn



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
DRAWN BY  
C. DELOS REYES  
CHECKED BY  
A. SILVER  
IN CHARGE  
A. BOONE  
DATE  
04/29/2011

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

**NOT FOR**  
**CONSTRUCTION**



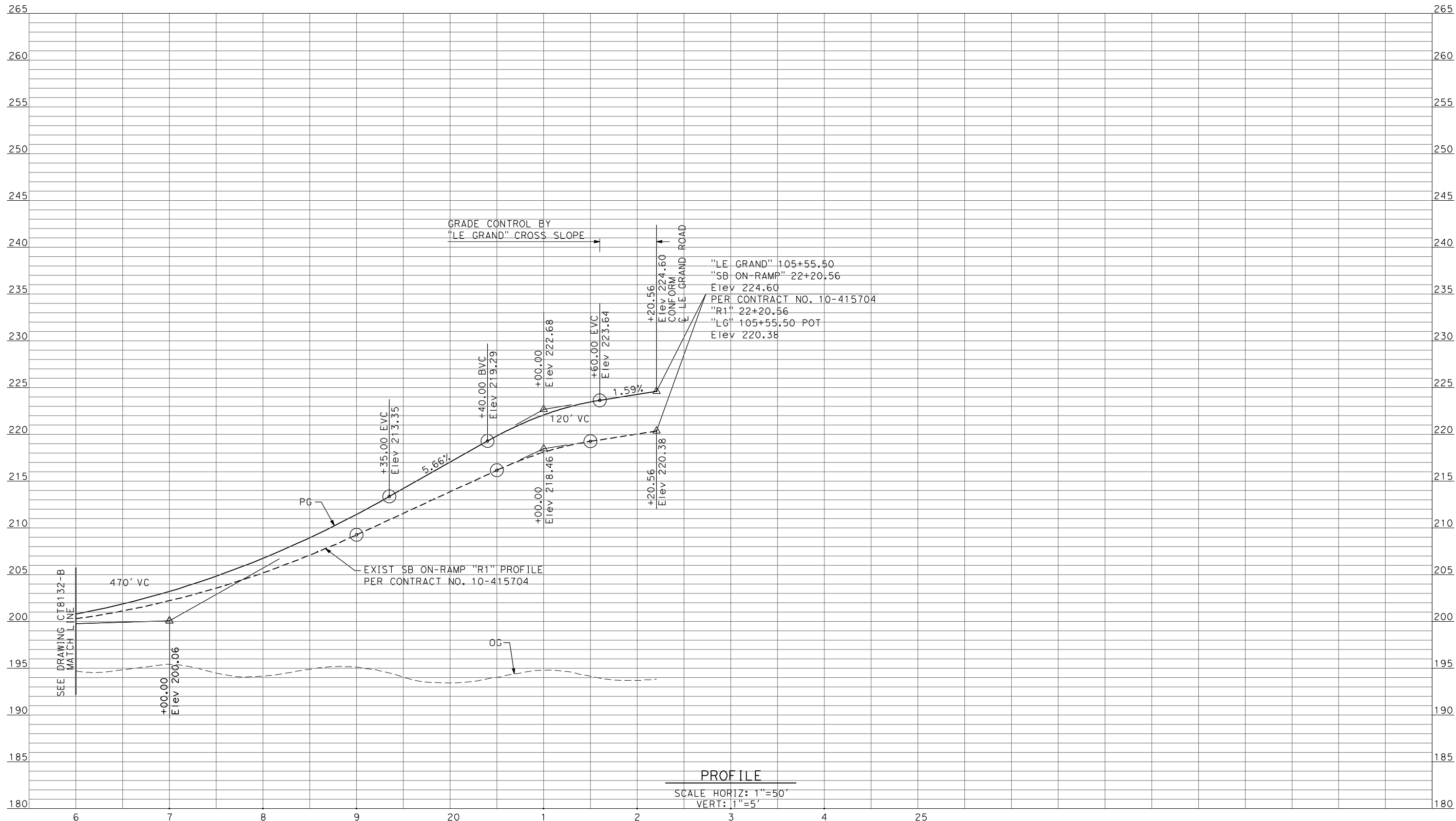
**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**

UPRR/SR99 MERCED - (AVE 24/WC)  
GRADE SEPARATION-LE GRAND RD IC SR99 SB ON-RAMP  
PROFILE  
SHEET 1 OF 4

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
CT8132-B  
SCALE  
AS SHOWN  
SHEET NO.  
### OF ###



4/27/2011 6:40:24 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 2b - ave 24 wye-w.chowchilla caltrans facilities\Profile\CT8133-B.dgn



PROFILE  
 SCALE HORIZ: 1"=50'  
 VERT: 1"=5'

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
 DRAWN BY  
C. DELOS REYES  
 CHECKED BY  
A. SILVER  
 IN CHARGE  
A. BOONE  
 DATE  
04/29/2011

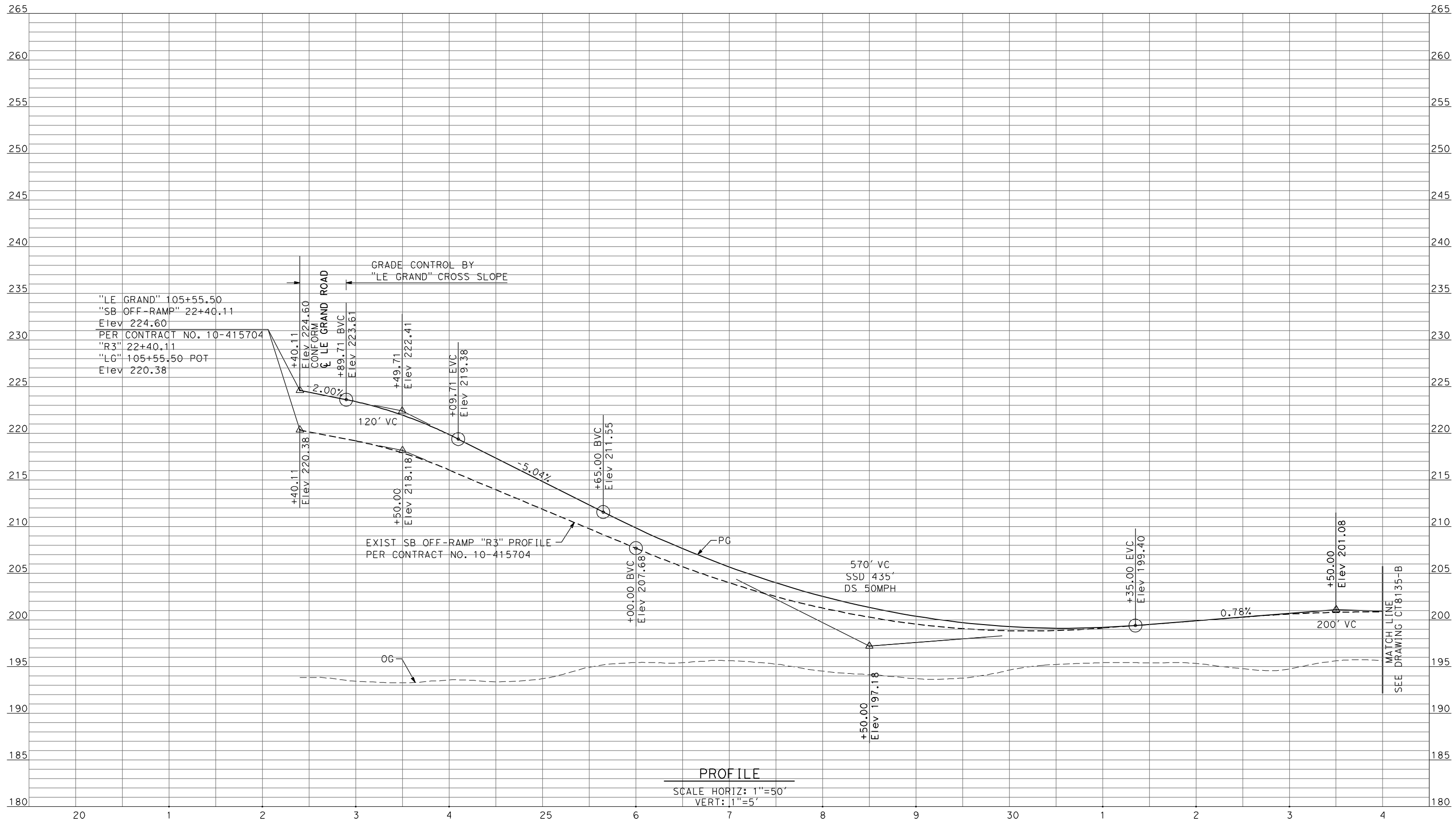
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**SUBMITTAL**  
  
**NOT FOR**  
**CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 MERCED - (AVE 24/WC)  
 GRADE SEPARATION-LE GRAND RD IC SR99 SB ON-RAMP  
 PROFILE  
 SHEET 2 OF 4

CONTRACT NO.  
HSR06-007  
 DRAWING NO.  
CT8133-B  
 SCALE  
AS SHOWN  
 SHEET NO.  
### OF ###

4/27/2011 6:40:28 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 2b - ave 24 wye-w.chowchilla caltrans facilities\Profile\CT8134-B.dgn



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
 DRAWN BY  
C. DELOS REYES  
 CHECKED BY  
A. SILVER  
 IN CHARGE  
A. BOONE  
 DATE  
04/29/2011

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

**NOT FOR**  
**CONSTRUCTION**



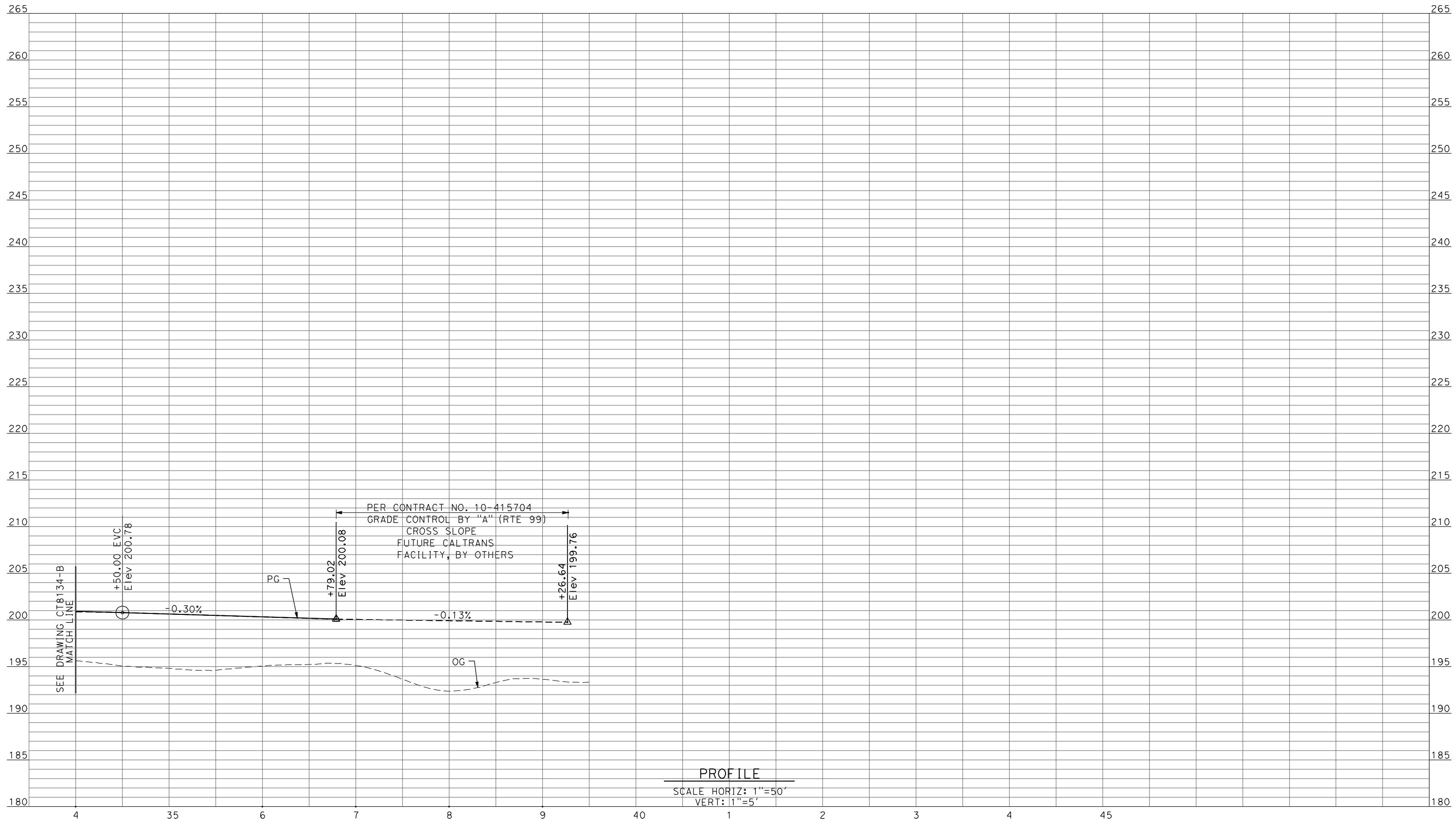
**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**

UPRR/SR99 MERCED - (AVE 24/WC)  
 GRADE SEPARATION-LE GRAND RD IC SR99 SB OFF-RAMP  
 PROFILE  
 SHEET 3 OF 4

CONTRACT NO.  
HSR06-007  
 DRAWING NO.  
CT8134-B  
 SCALE  
AS SHOWN  
 SHEET NO.  
### OF ###



4/27/2011 6:40:32 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 2b - ave 24 wye-w.chowchilla\caltrans facilities\Profile\CT8135-B.dgn



PROFILE  
 SCALE HORIZ: 1"=50'  
 VERT: 1"=5'

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
 DRAWN BY  
C. DELOS REYES  
 CHECKED BY  
A. SILVER  
 IN CHARGE  
A. BOONE  
 DATE  
04/29/2011

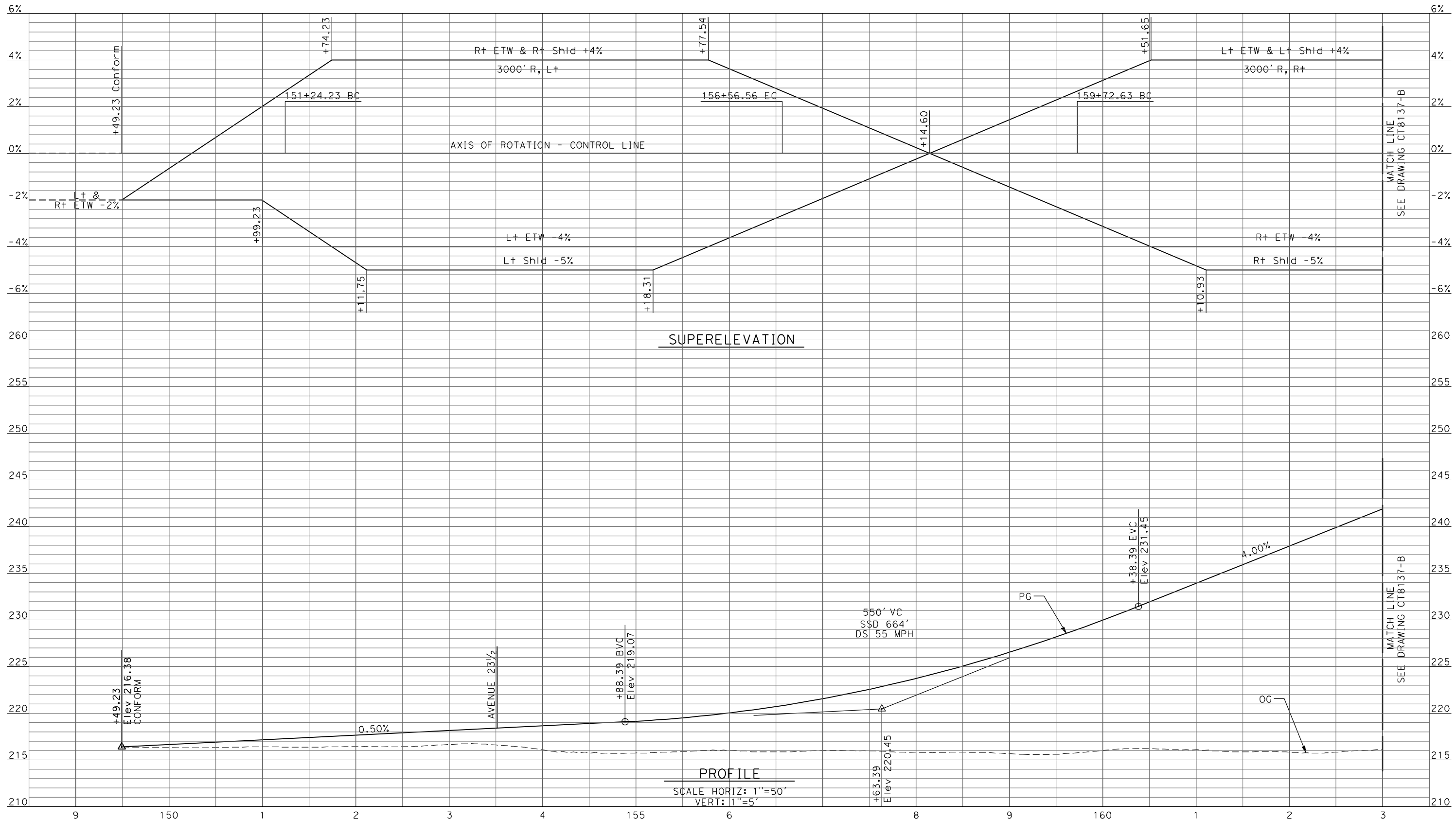
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**15% DESIGN**  
**SUBMITTAL**  
  
**NOT FOR**  
**CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 MERCED - (AVE 24/WC)  
 GRADE SEPARATION-LE GRAND RD IC SR99 SB OFF-RAMP  
 PROFILE  
 SHEET 4 OF 4

CONTRACT NO.  
HSR06-007  
 DRAWING NO.  
CT8135-B  
 SCALE  
AS SHOWN  
 SHEET NO.  
### OF ###

4/27/2011 6:40:39 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 2b - ave 24 wye-w.chowchilla\profile\CT8136-B.dgn



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE

DRAWN BY  
C. DELOS REYES

CHECKED BY  
A. SILVER

IN CHARGE  
A. BOONE

DATE  
04/29/2011

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

**NOT FOR**  
**CONSTRUCTION**



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

UPRR/SR99 MAINLINE DO/MERCED DO - (WC)  
GRADE SEPARATION - ROBERTSON BLVD (SR 233) ALT 1  
PROFILE  
SHEET 1 OF 4

CONTRACT NO.  
HSR06-007

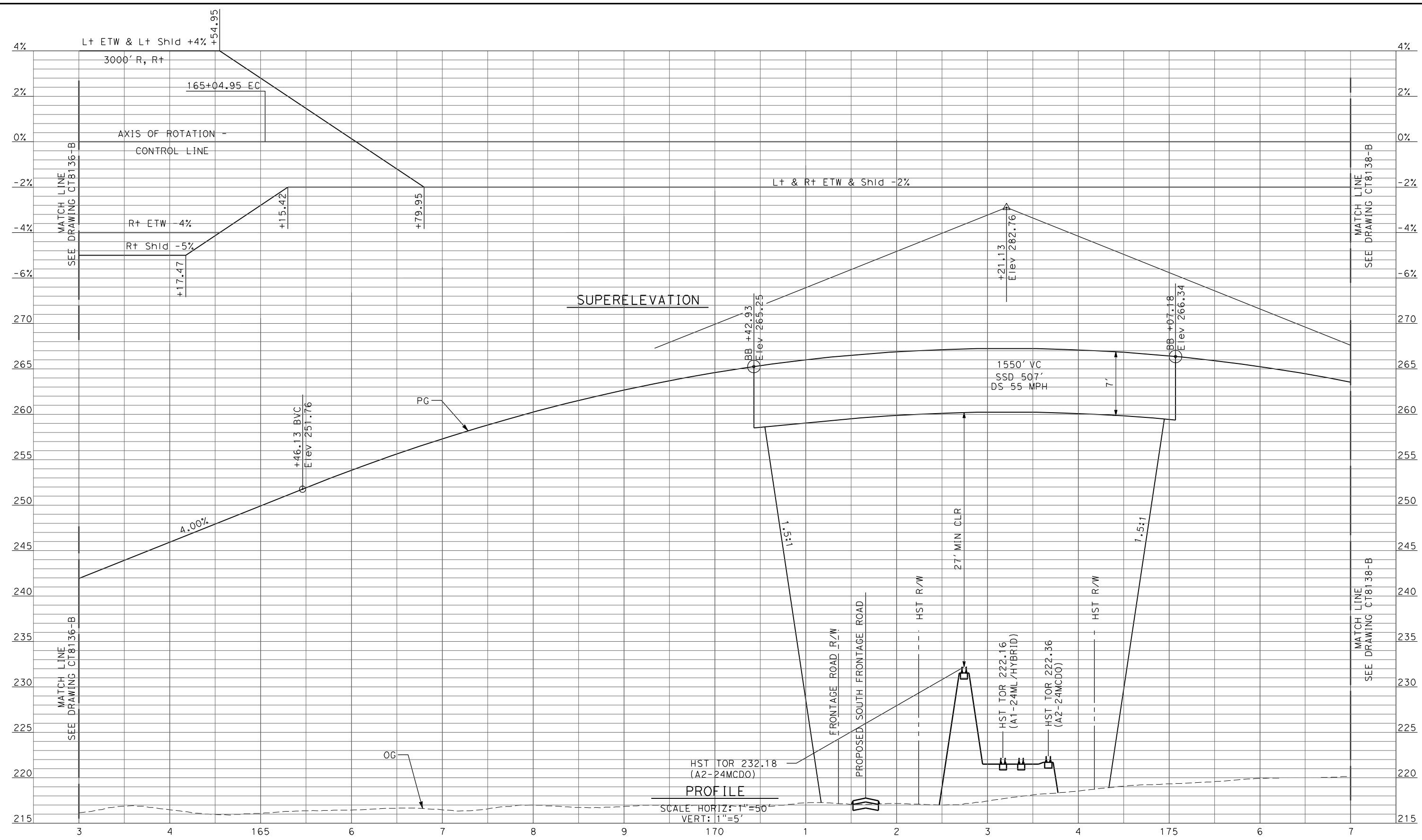
DRAWING NO.  
CT8136-B

SCALE  
AS SHOWN

SHEET NO.  
### OF ###



4/27/2011 6:40:46 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 2b - ave 24 wye & w. chowchilla\caltrans facilities\Profile\CT8137-B.dgn



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
DRAWN BY  
C. DELOS REYES  
CHECKED BY  
A. SILVER  
IN CHARGE  
A. BOONE  
DATE  
04/29/2011

**RECORD SET  
15% DESIGN  
SUBMITTAL**

**NOT FOR  
CONSTRUCTION**

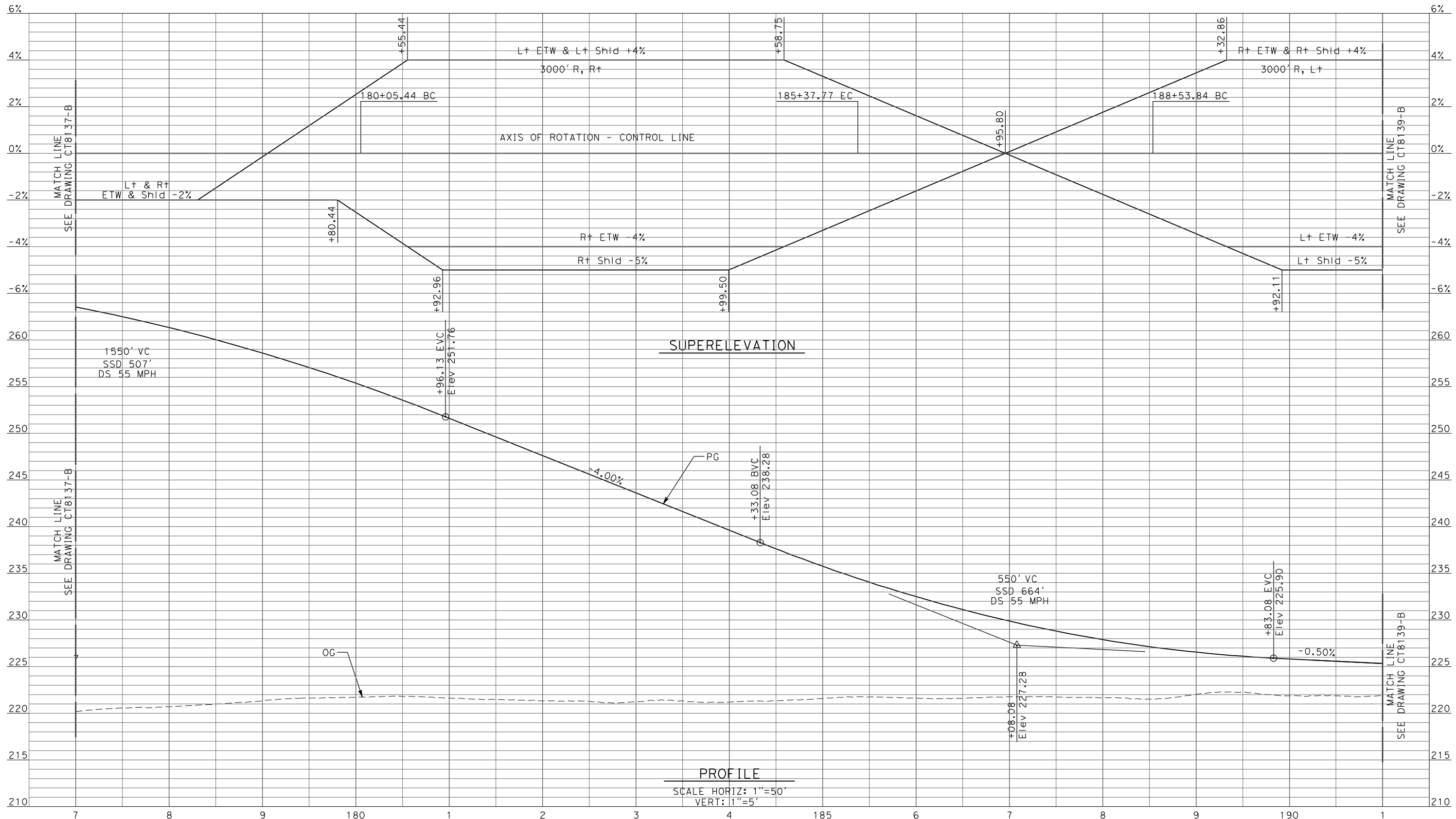


**CALIFORNIA HIGH-SPEED TRAIN PROJECT  
MERCED TO FRESNO**

UPRR/SR99 MAINLINE DO/MERCED DO - (WC)  
GRADE SEPARATION - ROBERTSON BLVD (SR 233) ALT 1  
PROFILE  
SHEET 2 OF 4

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
CT8137-B  
SCALE  
AS SHOWN  
SHEET NO.  
### OF ###

4/27/2011 6:40:54 PM p:\60022962\task\_02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 2b - ave 24 wye & w. chowchilla\caltrans facilities\Profile\CT8138-B.dgn



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
 D. AYELE

DRAWN BY  
 C. DELOS REYES

CHECKED BY  
 A. SILVER

IN CHARGE  
 A. BOONE

DATE  
 04/29/2011

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

**NOT FOR**  
**CONSTRUCTION**



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

UPRR/SR99 MAINLINE DO/MERCED DO - (WC)  
 GRADE SEPARATION - ROBERTSON BLVD (SR 233) ALT 1  
 PROFILE  
 SHEET 3 OF 4

CONTRACT NO.  
 HSR06-007

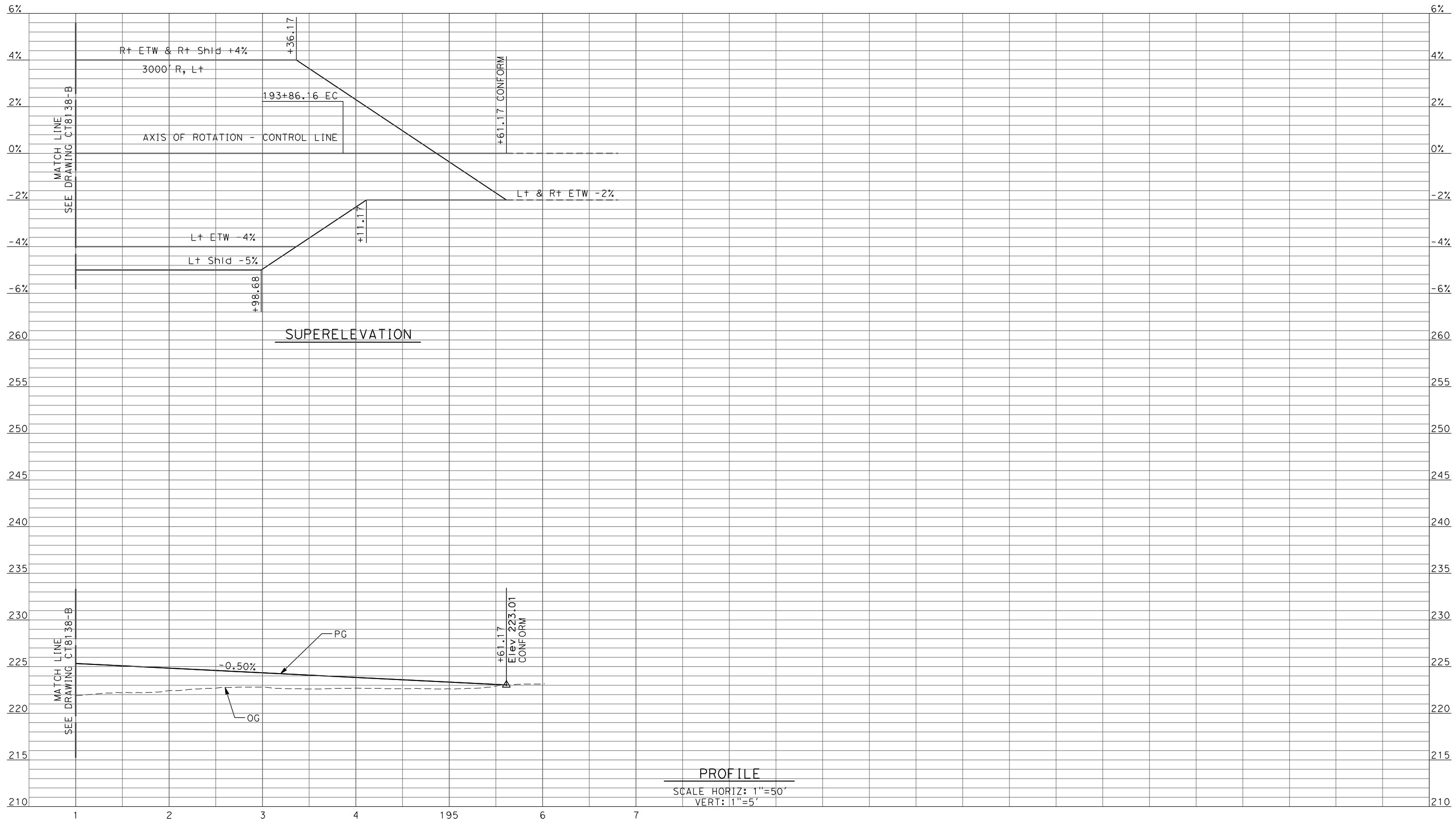
DRAWING NO.  
 CT8138-B

SCALE  
 AS SHOWN

SHEET NO.  
 ### OF ###



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PROFILE  
 SCALE HORIZ: 1"=50'  
 VERT: 1"=5'

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
 DRAWN BY  
C. DELOS REYES  
 CHECKED BY  
A. SILVER  
 IN CHARGE  
A. BOONE  
 DATE  
04/29/2011

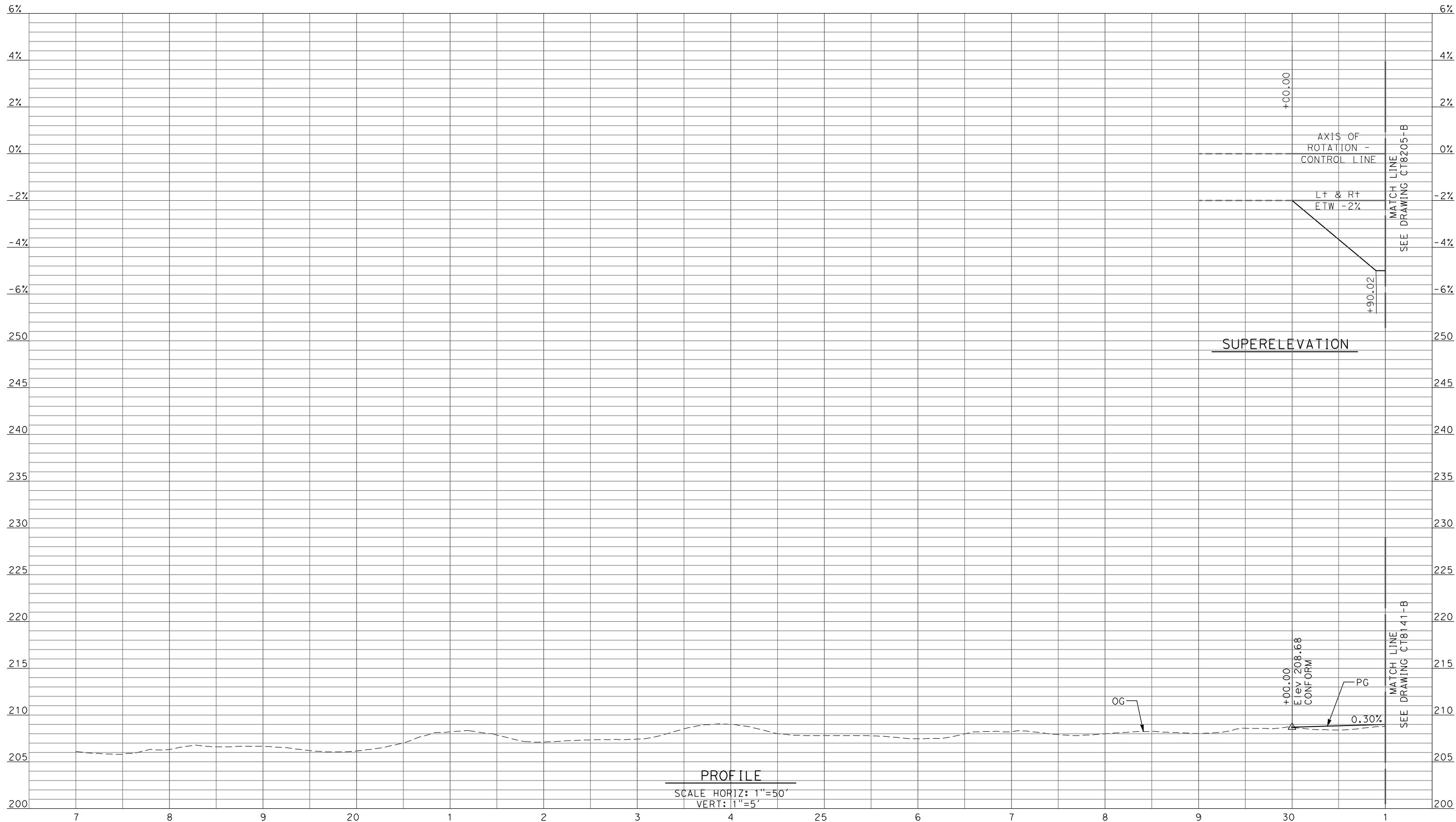
**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**  
  
**NOT FOR**  
**CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 MAINLINE DO/MERCED DO - (WC)  
 GRADE SEPARATION - ROBERTSON BLVD (SR 233) ALT 1  
 PROFILE  
 SHEET 4 OF 4

CONTRACT NO.  
HSR06-007  
 DRAWING NO.  
CT8139-B  
 SCALE  
AS SHOWN  
 SHEET NO.  
### OF ###

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REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
 DRAWN BY  
C. DELOS REYES  
 CHECKED BY  
A. SILVER  
 IN CHARGE  
A. BOONE  
 DATE  
04/29/2011

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

**NOT FOR**  
**CONSTRUCTION**

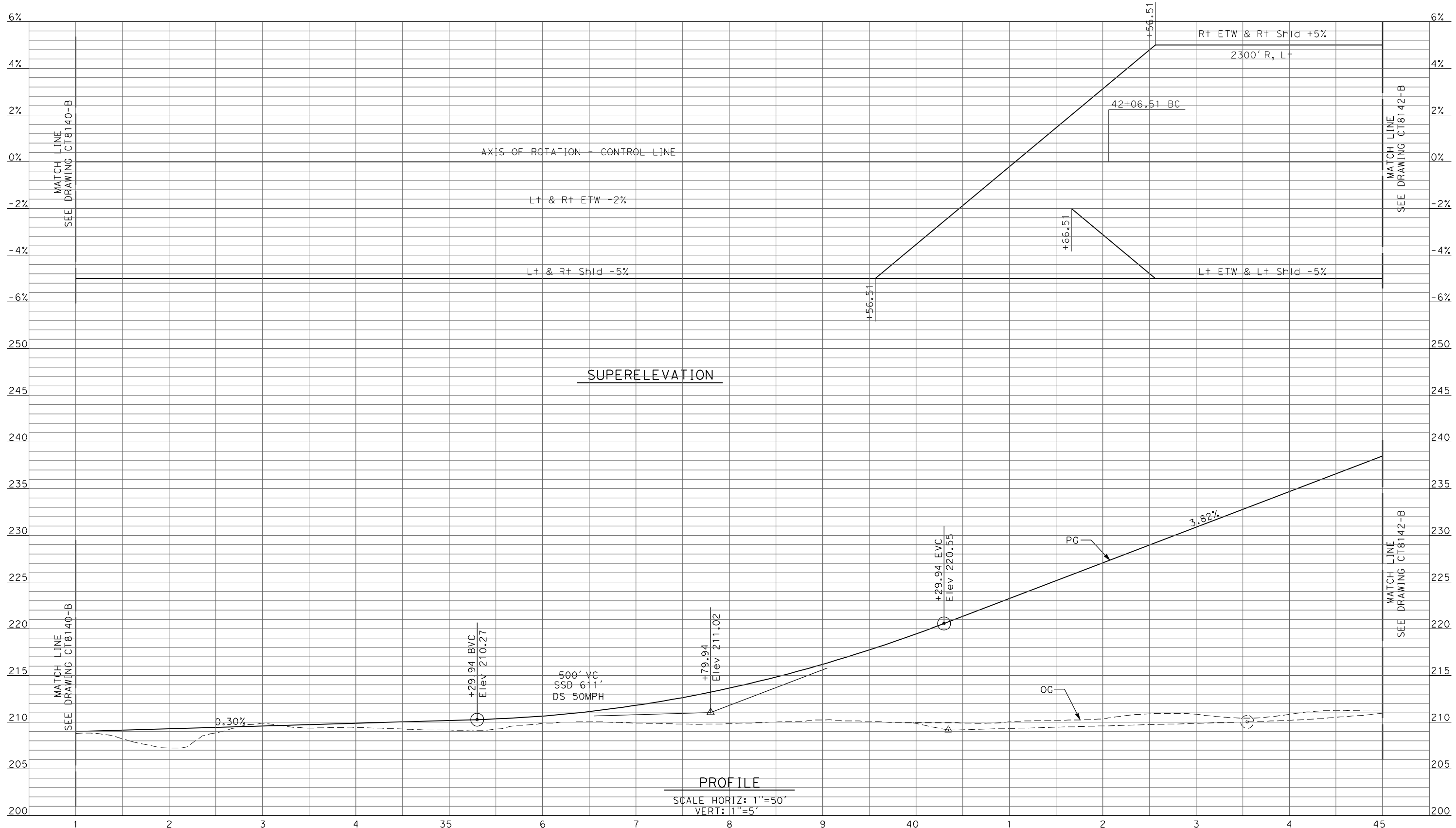


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 MERCED DO - (WC)  
 SANDY MUSH RD INTERCHANGE  
 PROFILE  
 SHEET 1 OF 4

CONTRACT NO.  
HSR06-007  
 DRAWING NO.  
CT8140-B  
 SCALE  
AS SHOWN  
 SHEET NO.  
### OF ###



4/27/2011 6:41:09 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 2b - ave 24 wye-w.chowchilla\caltrans facilities\Profile\CT8141-B.dwg



PROFILE  
SCALE HORIZ: 1"=50'  
VERT: 1"=5'

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
DRAWN BY  
C. DELOS REYES  
CHECKED BY  
A. SILVER  
IN CHARGE  
A. BOONE  
DATE  
04/29/2011

**RECORD SET  
15% DESIGN  
SUBMITTAL**

**NOT FOR  
CONSTRUCTION**

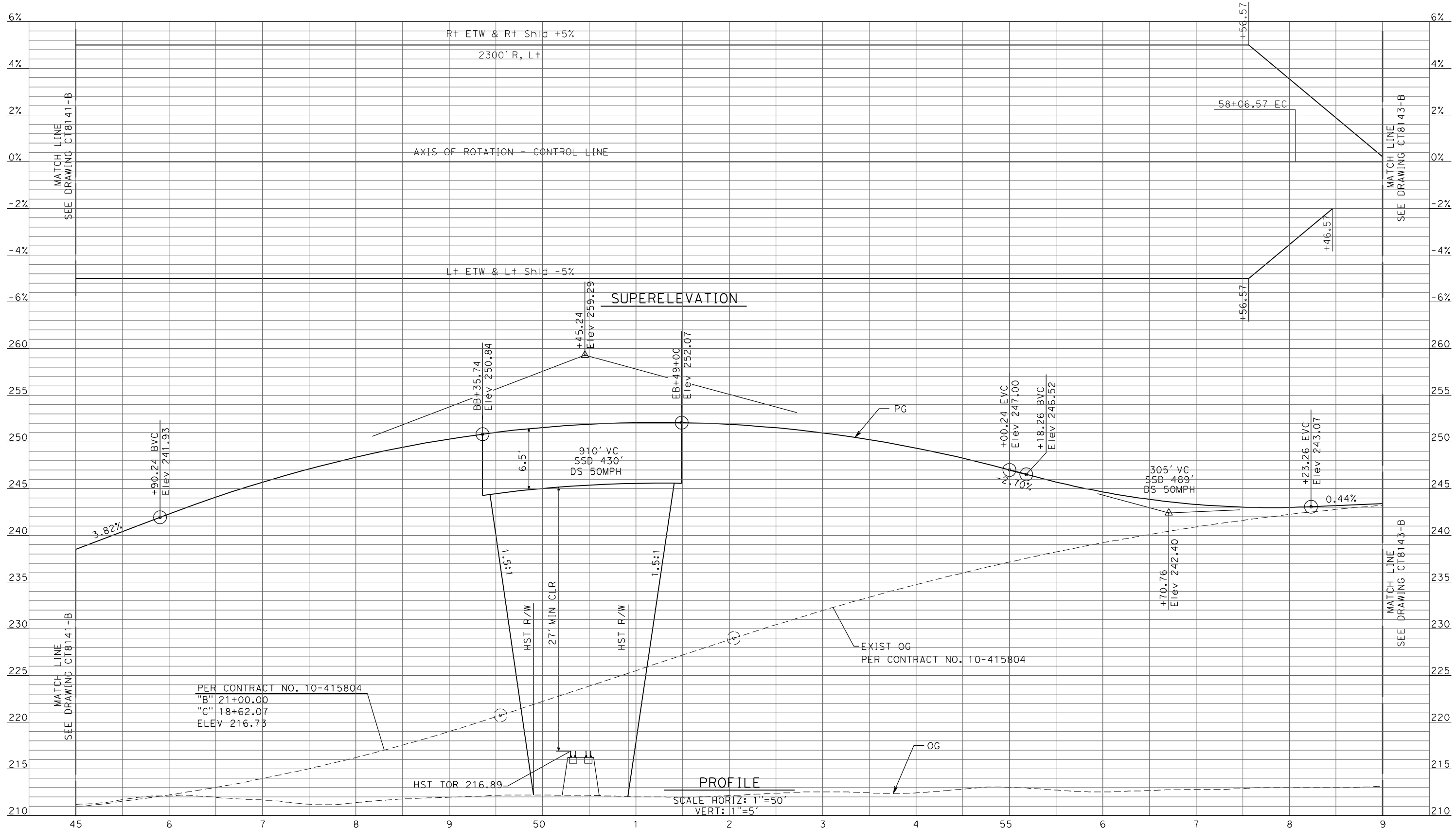


**CALIFORNIA HIGH-SPEED TRAIN PROJECT  
MERCED TO FRESNO**

UPRR/SR99 MERCED DO - (WC)  
SANDY MUSH RD INTERCHANGE  
PROFILE  
SHEET 2 OF 4

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
CT8141-B  
SCALE  
AS SHOWN  
SHEET NO.  
### OF ###

4/27/2011 6:41:13 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 2b - ave 24 wye-w.chowchilla\caltrans facilities\Profile\CT8142-B.dgn



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**D. AYELE**

DRAWN BY  
**C. DELOS REYES**

CHECKED BY  
**A. SILVER**

IN CHARGE  
**A. BOONE**

DATE  
**04/29/2011**

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

**NOT FOR**  
**CONSTRUCTION**



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

UPRR/SR99 MERCED DO - (WC)  
 SANDY MUSH RD INTERCHANGE  
 PROFILE  
 SHEET 3 OF 4

CONTRACT NO.  
HSR06-007

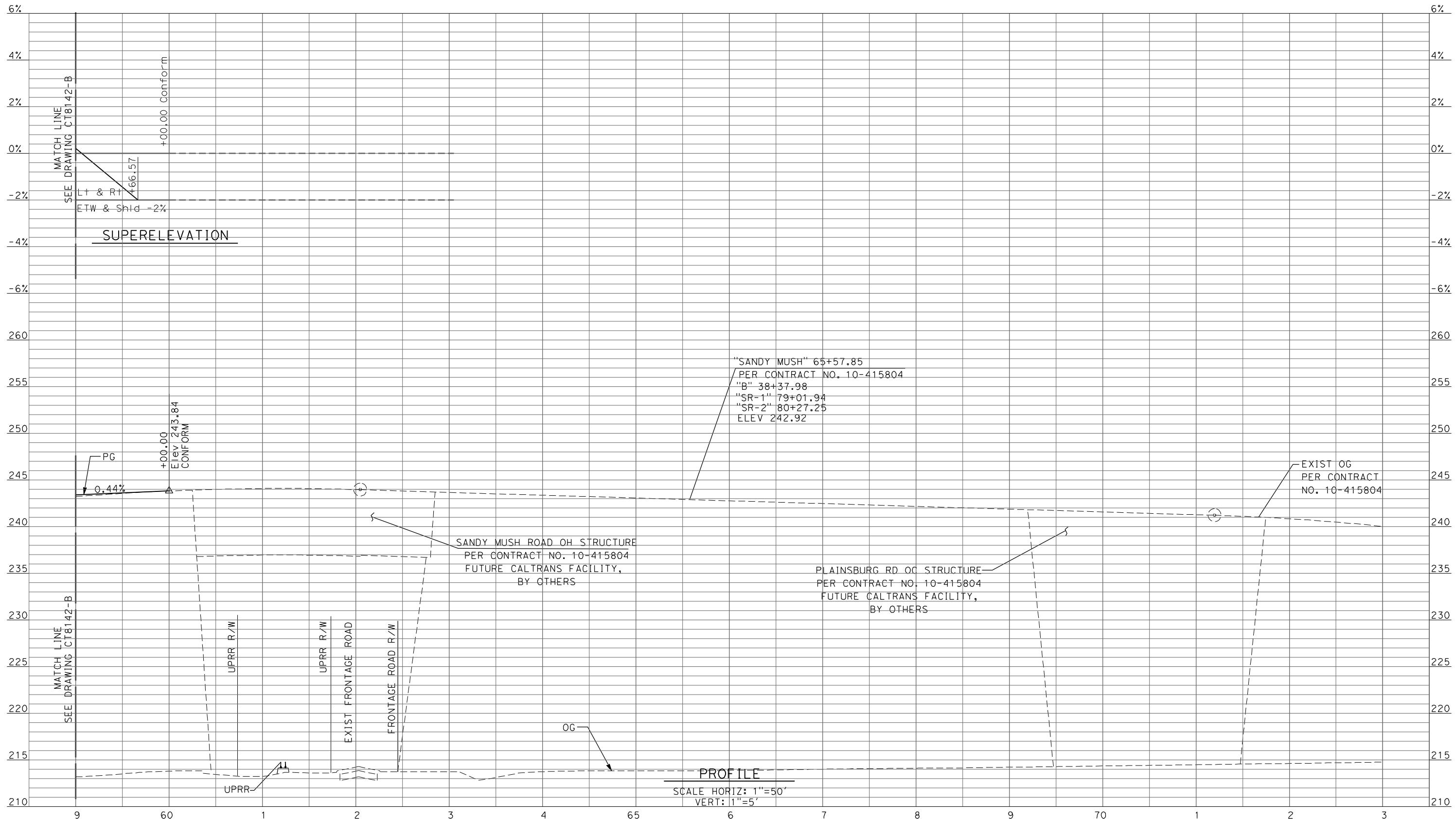
DRAWING NO.  
CT8142-B

SCALE  
AS SHOWN

SHEET NO.  
### OF ###



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 oyeled



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**D. AYELE**  
 DRAWN BY  
**C. DELOS REYES**  
 CHECKED BY  
**A. SILVER**  
 IN CHARGE  
**A. BOONE**  
 DATE  
**04/29/2011**

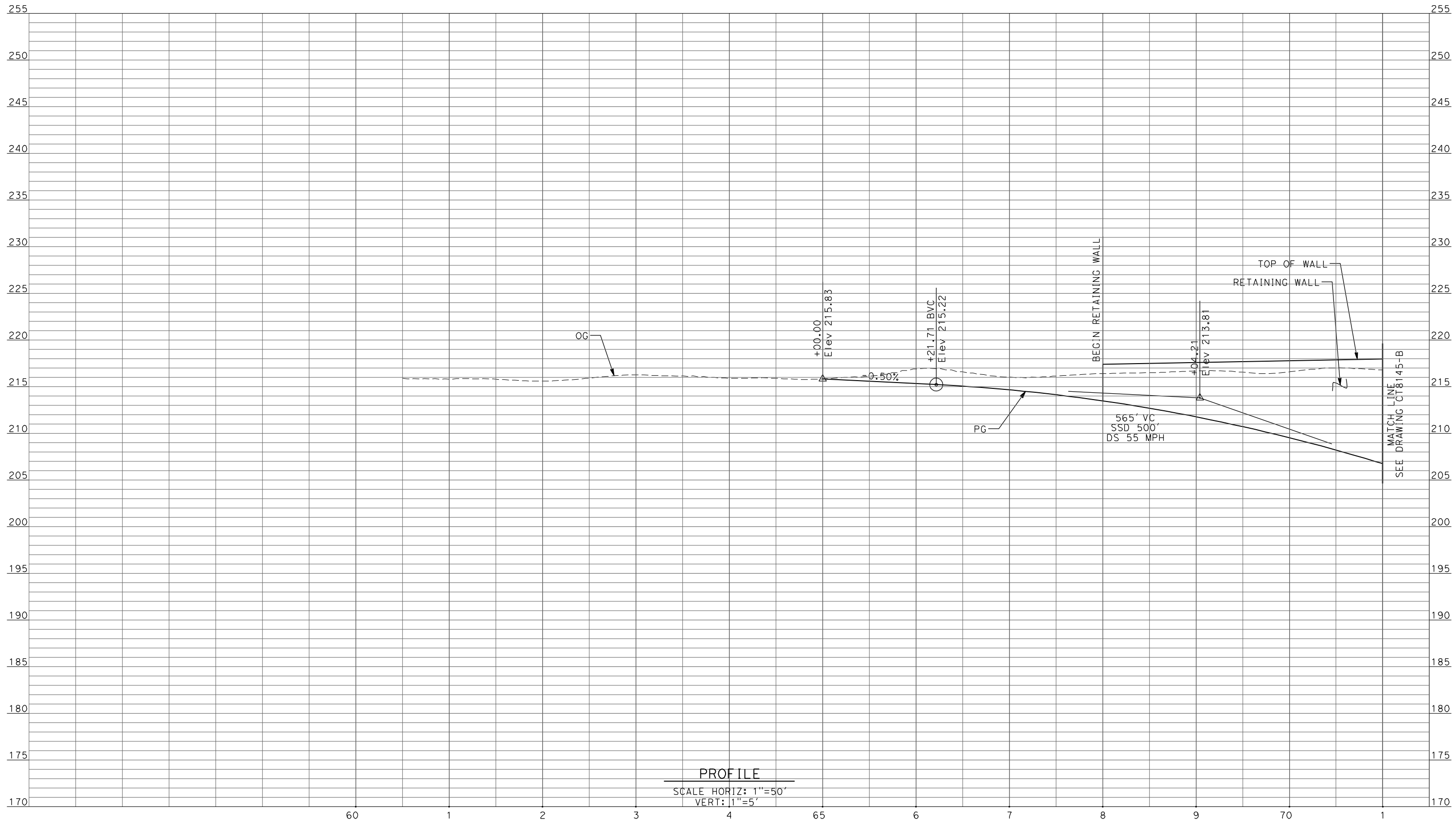
**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**  
  
**NOT FOR**  
**CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 MERCED DO - (WC)  
 SANDY MUSH RD INTERCHANGE  
 PROFILE  
 SHEET 4 OF 4

CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CT8143-B  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###

4/27/2011 6:41:21 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 2b - ave 24 wye-w.chowchilla caltrans facilities\Profile\CT8144-B.dgn



PROFILE  
 SCALE HORIZ: 1"=50'  
 VERT: 1"=5'

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
 DRAWN BY  
C. DELOS REYES  
 CHECKED BY  
A. SILVER  
 IN CHARGE  
A. BOONE  
 DATE  
04/29/2011

**RECORD SET  
 15% DESIGN  
 SUBMITTAL**

**NOT FOR  
 CONSTRUCTION**



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

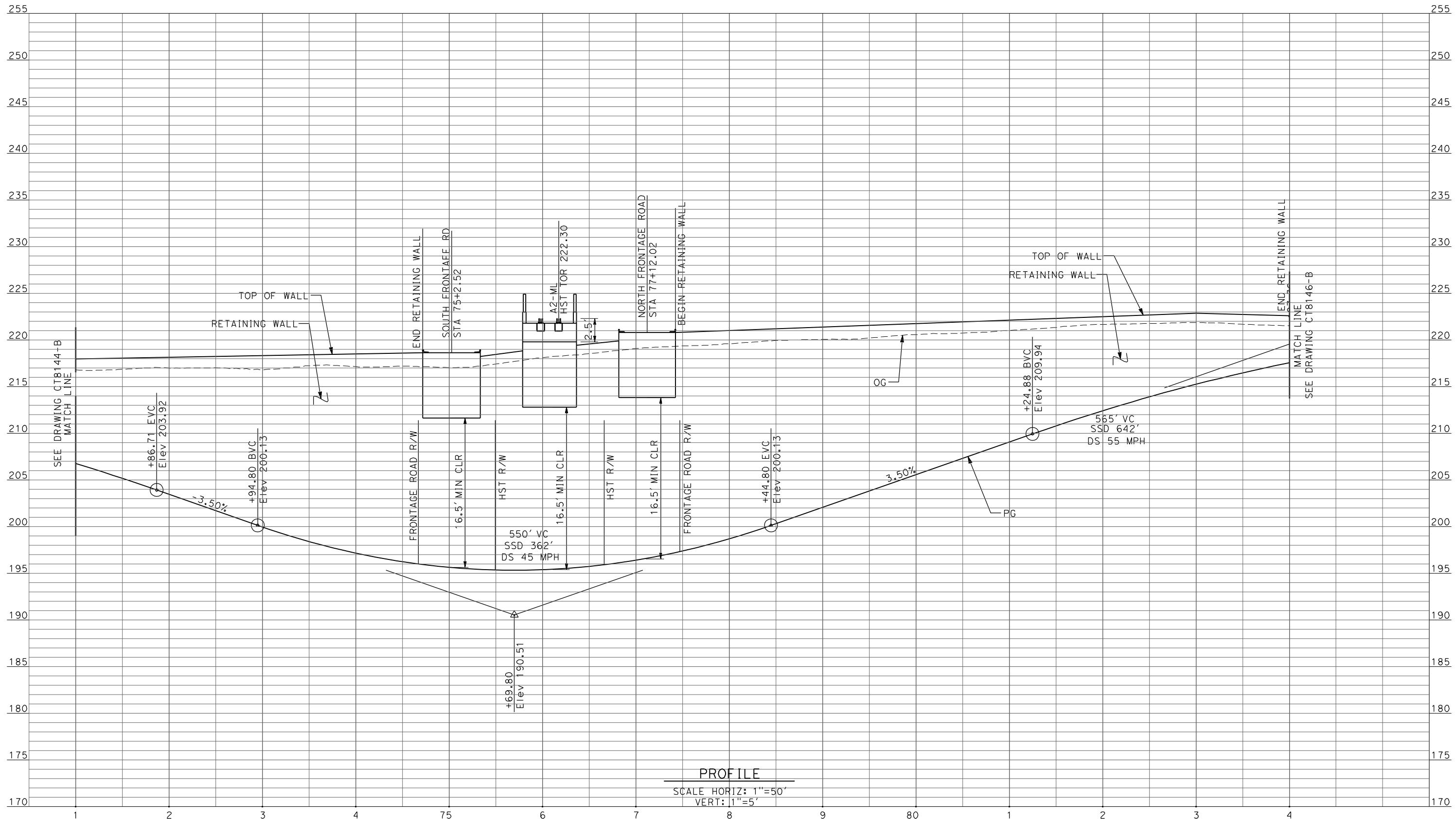
UPRR/SR99 MAINLINE - (AVE 24)  
 UNDERPASS - ROBERTSON BOULEVARD (SR 233) ALT 2

PROFILE  
 SHEET 1 OF 3

CONTRACT NO.  
HSR06-007  
 DRAWING NO.  
CT8144-B  
 SCALE  
AS SHOWN  
 SHEET NO.  
### OF ###



4/27/2011 6:41:25 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 2b - ave 24 wye-w.chowchilla caltrans facilities\Profile\CT8145-B.dgn



**PROFILE**  
 SCALE HORIZ: 1"=50'  
 VERT: 1"=5'

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
 DRAWN BY  
C. DELOS REYES  
 CHECKED BY  
A. SILVER  
 IN CHARGE  
A. BOONE  
 DATE  
04/29/2011

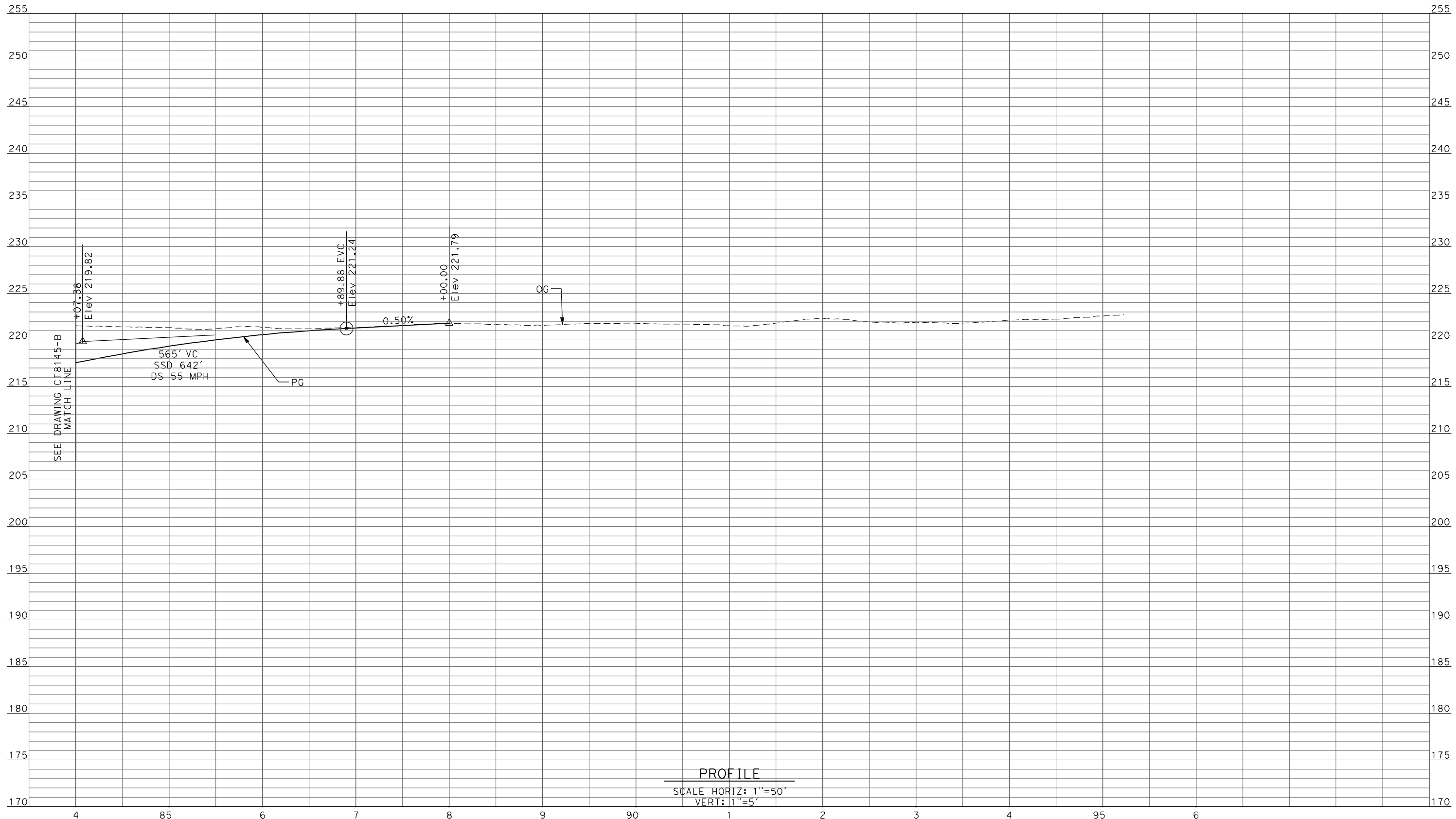
**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**  
  
**NOT FOR**  
**CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 MAINLINE - (AVE 24)  
 UNDERPASS - ROBERTSON BOULEVARD (SR 233) ALT 2  
 PROFILE  
 SHEET 2 OF 3

CONTRACT NO.  
HSR06-007  
 DRAWING NO.  
CT8145-B  
 SCALE  
AS SHOWN  
 SHEET NO.  
### OF ###

4/27/2011 6:41:29 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 2b - ave 24 wye-w.chowchilla caltrans facilities\Profile\CT8146-B.dgn



PROFILE  
 SCALE HORIZ: 1"=50'  
 VERT: 1"=5'

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
 DRAWN BY  
C. DELOS REYES  
 CHECKED BY  
A. SILVER  
 IN CHARGE  
A. BOONE  
 DATE  
04/29/2011

**RECORD SET  
 15% DESIGN  
 SUBMITTAL**

**NOT FOR  
 CONSTRUCTION**



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

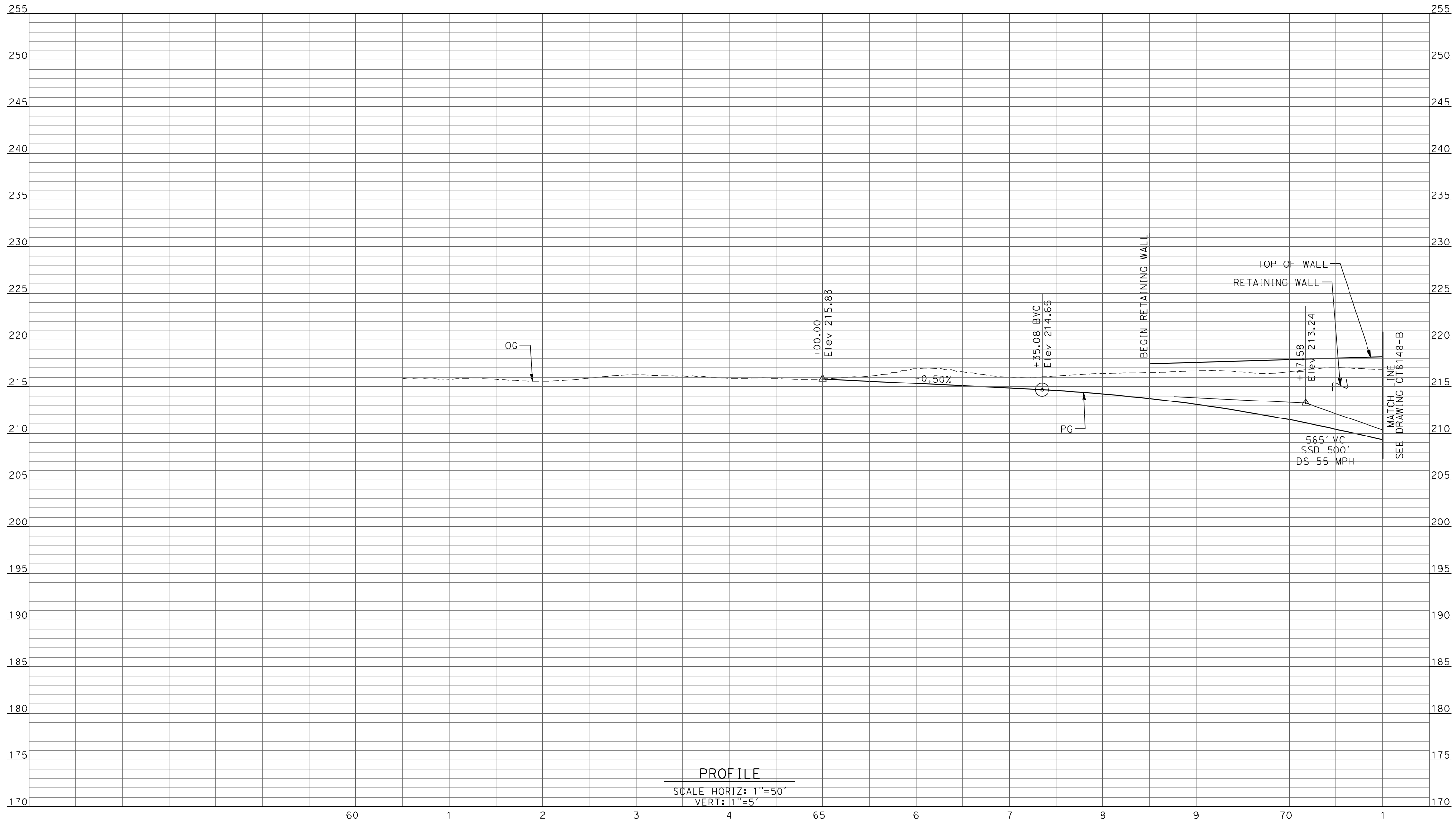
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 UNDERPASS - ROBERTSON BOULEVARD (SR 233) ALT 2

PROFILE  
 SHEET 3 OF 3

CONTRACT NO.  
HSR06-007  
 DRAWING NO.  
CT8146-B  
 SCALE  
AS SHOWN  
 SHEET NO.  
### OF ###



4/27/2011 6:41:32 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 2b - ave 24 wye-w.chowchilla caltrans facilities\Profile\CT8147-B.dgn



PROFILE  
 SCALE HORIZ: 1"=50'  
 VERT: 1"=5'

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
 DRAWN BY  
C. DELOS REYES  
 CHECKED BY  
A. SILVER  
 IN CHARGE  
A. BOONE  
 DATE  
04/29/2011

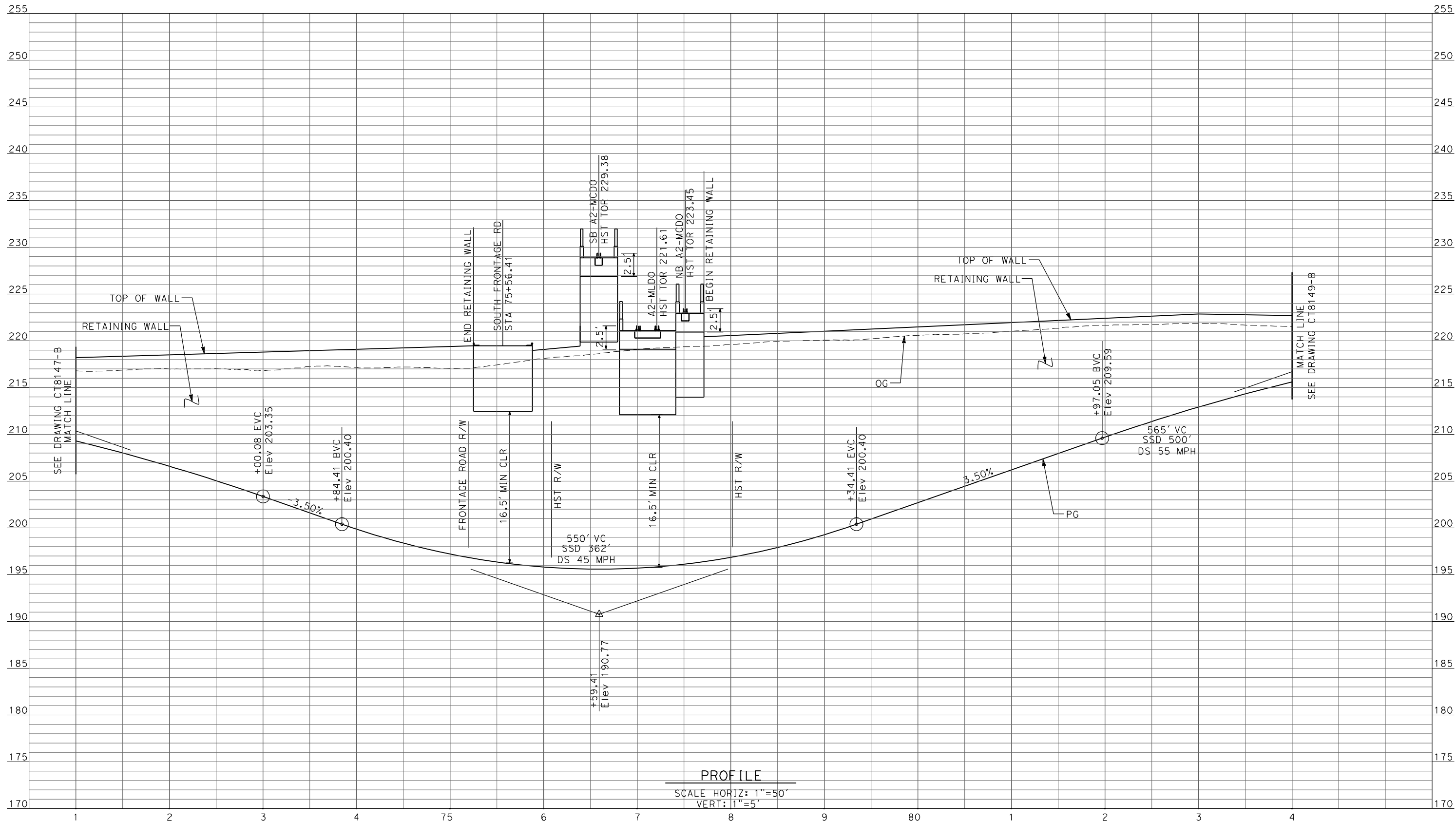
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**15% DESIGN**  
**SUBMITTAL**  
  
**NOT FOR**  
**CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 MAINLINE DO/MERCED DO - (WC)  
 UNDERPASS - ROBERTSON BOULEVARD (SR 233) ALT 2  
 PROFILE  
 SHEET 1 OF 3

CONTRACT NO.  
HSR06-007  
 DRAWING NO.  
CT8147-B  
 SCALE  
AS SHOWN  
 SHEET NO.  
### OF ###

4/29/2011 11:50:54 AM P:\60022962\Task 02\_Merced-Fresno\Cadd\Civil\Sheet\Fresno\Volume 2B - Ave 24 Wye & W. Chowchilla Caltrans Facilities\Profile\CT8148-B.dgn



PROFILE  
 SCALE HORIZ: 1"=50'  
 VERT: 1"=5'

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
 DRAWN BY  
C. DELOS REYES  
 CHECKED BY  
A. SILVER  
 IN CHARGE  
A. BOONE  
 DATE  
04/29/2011

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

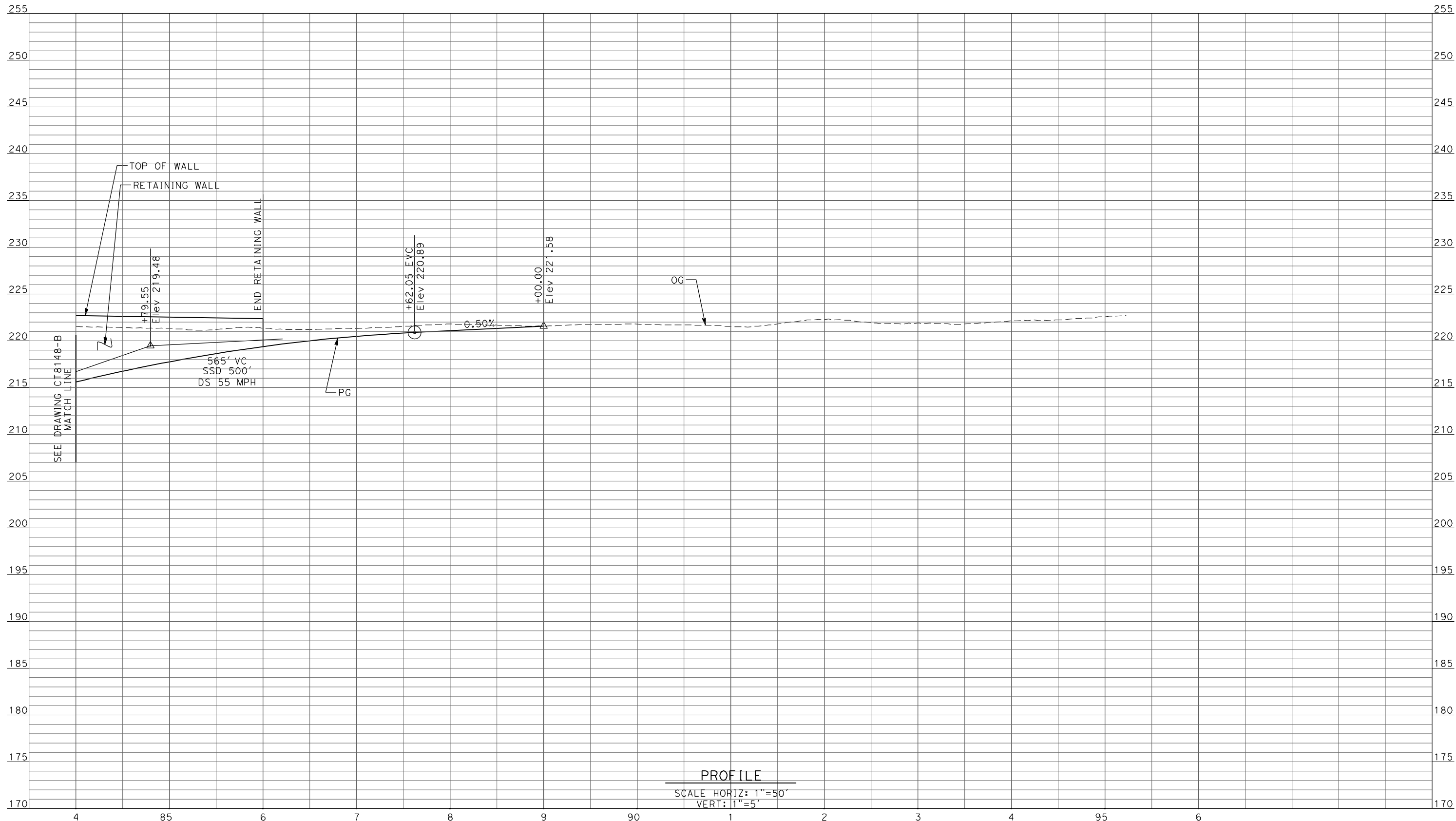


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 MAINLINE DO/MERCED DO - (WC)  
 UNDERPASS - ROBERTSON BOULEVARD (SR 233) ALT 2  
 PROFILE  
 SHEET 2 OF 3

CONTRACT NO.  
HSR06-007  
 DRAWING NO.  
CT8148-B  
 SCALE  
AS SHOWN  
 SHEET NO.  
### OF ###



4/27/2011 6:41:40 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 2b - ave 24 wye-w.chowchilla caltrans facilities\Profile\CT8149-B.dgn



PROFILE  
 SCALE HORIZ: 1"=50'  
 VERT: 1"=5'

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
 DRAWN BY  
C. DELOS REYES  
 CHECKED BY  
A. SILVER  
 IN CHARGE  
A. BOONE  
 DATE  
04/29/2011

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



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 MAINLINE DO/MERCED DO - (WC)  
 UNDERPASS - ROBERTSON BOULEVARD (SR 233) ALT 2  
 PROFILE  
 SHEET 3 OF 3

CONTRACT NO.  
HSR06-007  
 DRAWING NO.  
CT8149-B  
 SCALE  
AS SHOWN  
 SHEET NO.  
### OF ###

5/1/2011 9:41:00 AM I:\CHSR\60022962\Task-02\_Merced-Fresno\cadd\Struct\Sheet\A2\15%\_cost\_reduction\_submittal\Grade\_Structure\WF-SB-1221.dgn  
 DolanR

SHT NO.	DWG NO.	DRAWING TITLE LINE 3	DRAWING TITLE LINE 4	SHEET TITLE LINE 5	SHEET TITLE LINE 6
<b>ROADWAY BRIDGE STRUCTURE PLANS UPRR/SR 99 AVENUE 24 ALTERNATIVE</b>					
GENERAL					
SB1221		UPRR/SR 99 ALTERNATIVE	AVENUE 24	INDEX OF DRAWINGS	SHEET 1 OF 1
SB1222		UPRR/SR 99 ALTERNATIVE	AVENUE 24	STRUCTURE INDEX MAP	SHEET 1 OF 1
OVERHEAD BRIDGES					
ST1107		UPRR/SR 99 MAIN LINE	AVENUE 21	AVENUE 8 OVERHEAD - REPLACEMENT	PLANNING STUDY
ST1108		UPRR/SR 99 MAIN LINE	AVENUE 21	AVENUE 9 OVERHEAD - REPLACEMENT	PLANNING STUDY - BRIDGE AT UPRR
ST1109		UPRR/SR 99 MAIN LINE	AVENUE 21	AVENUE 9 OVERCROSSING - REPLACEMENT	PLANNING STUDY - BRIDGE AT SR 99
ST1110		UPRR/SR 99 MAIN LINE	AVENUE 21	AVENUE 11 OVERHEAD - REPLACEMENT	PLANNING STUDY
ST1141		UPRR/SR 99 MAIN LINE	AVENUE 24	SR 233 OVERHEAD	PLANNING STUDY
ST1142		UPRR/SR 99 MERCED & WYE CONNECTIONS	AVENUE 24	SANDY MUSH ROAD OVERHEAD	PLANNING STUDY
ST1114		UPRR/SR 99 MERCED CONNECTION	AVENUE 21	LE GRAND ROAD OVERHEAD	PLANNING STUDY
ST1143		UPRR/SR 99 MAIN LINE/W CHOWCHILLA	AVENUE 24	SR 233 OVERHEAD	PLANNING STUDY
ST1181		UPRR/SR 99 MERCED CONNECTION	AVENUE 21	SR 99 SOUTHBOUND OVERHEAD	PLANNING STUDY

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
H. LEE  
 DRAWN BY  
J. RENTERIA  
 CHECKED BY  
B. DOLAN  
 IN CHARGE  
A. BOONE  
 DATE  
04/29/2011

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



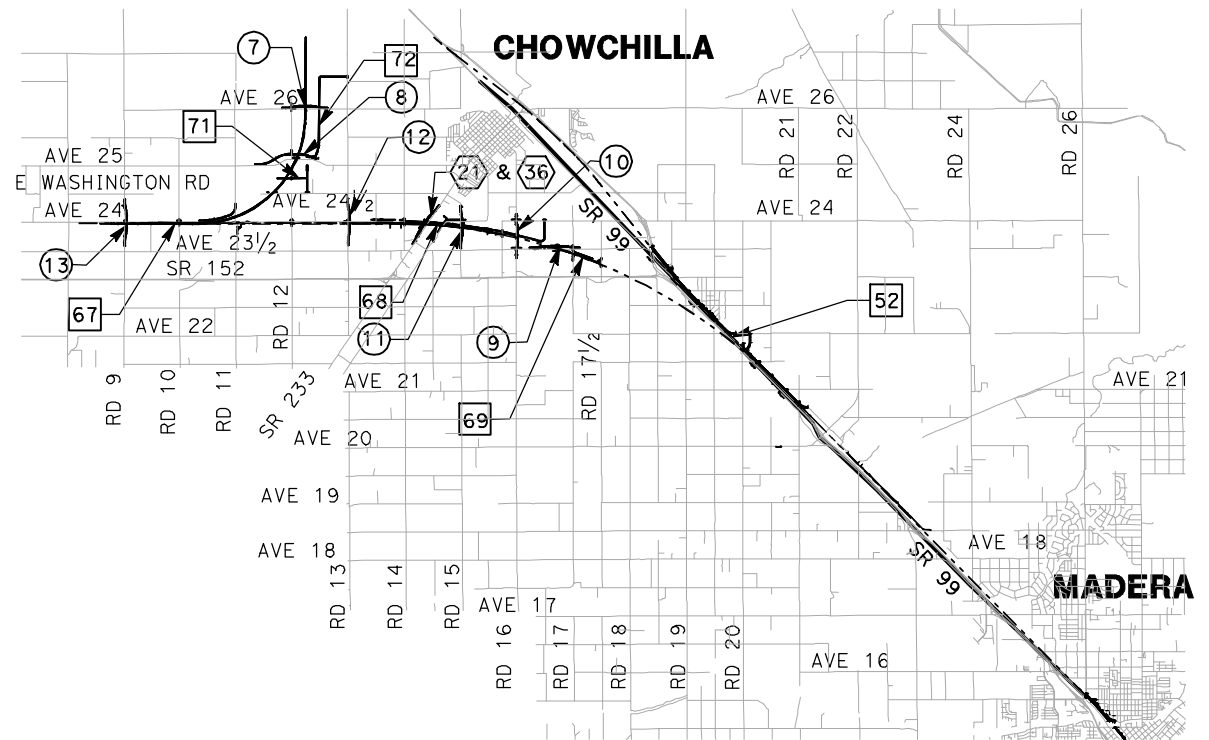
**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR 99 ALTERNATIVE  
 AVENUE 24  
 INDEX OF DRAWINGS  
 SHEET 1 OF 1

CONTRACT NO.  
HSR06-007  
 DRAWING NO.  
SB1221  
 SCALE  
No scale  
 SHEET NO.  
OF

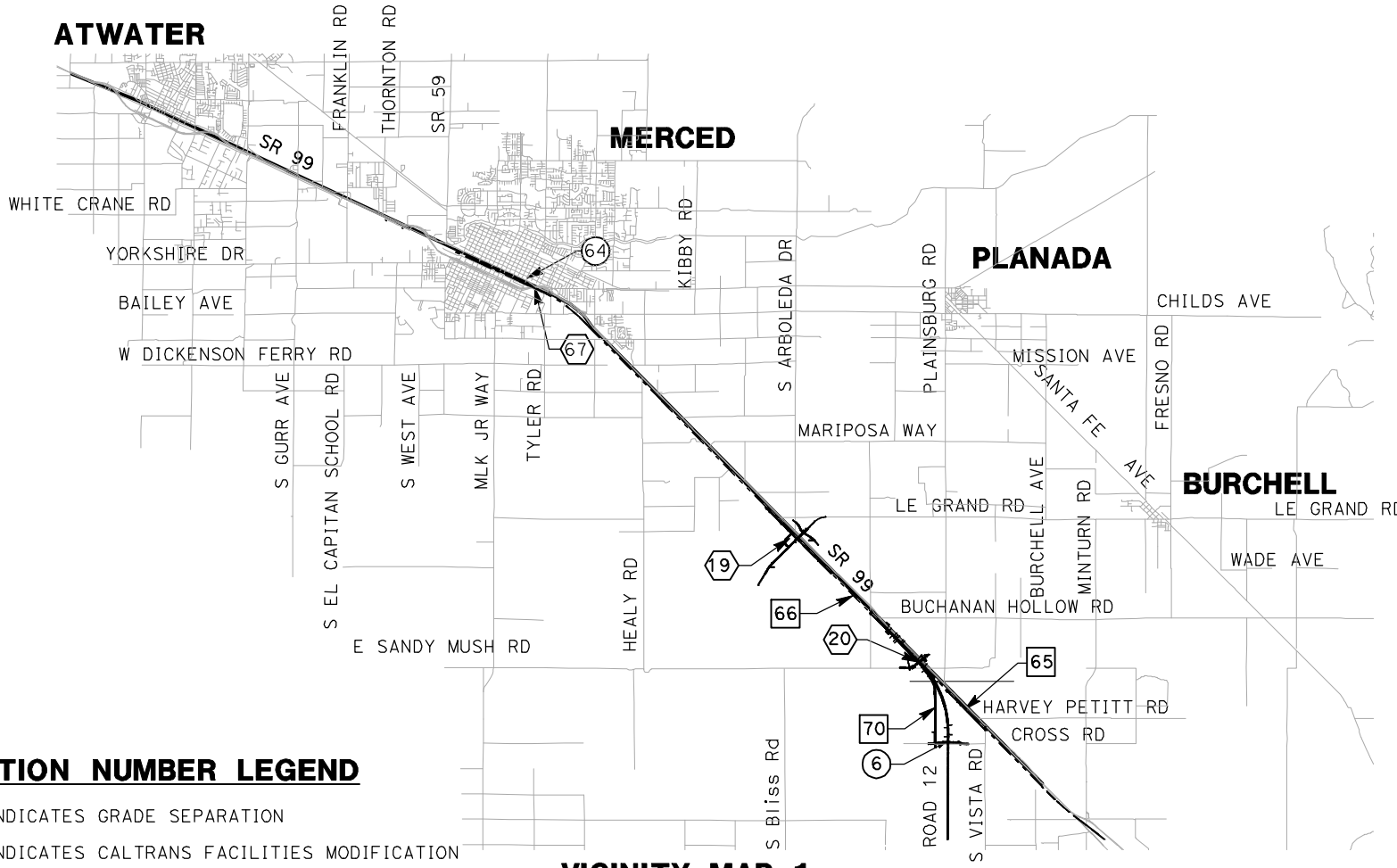


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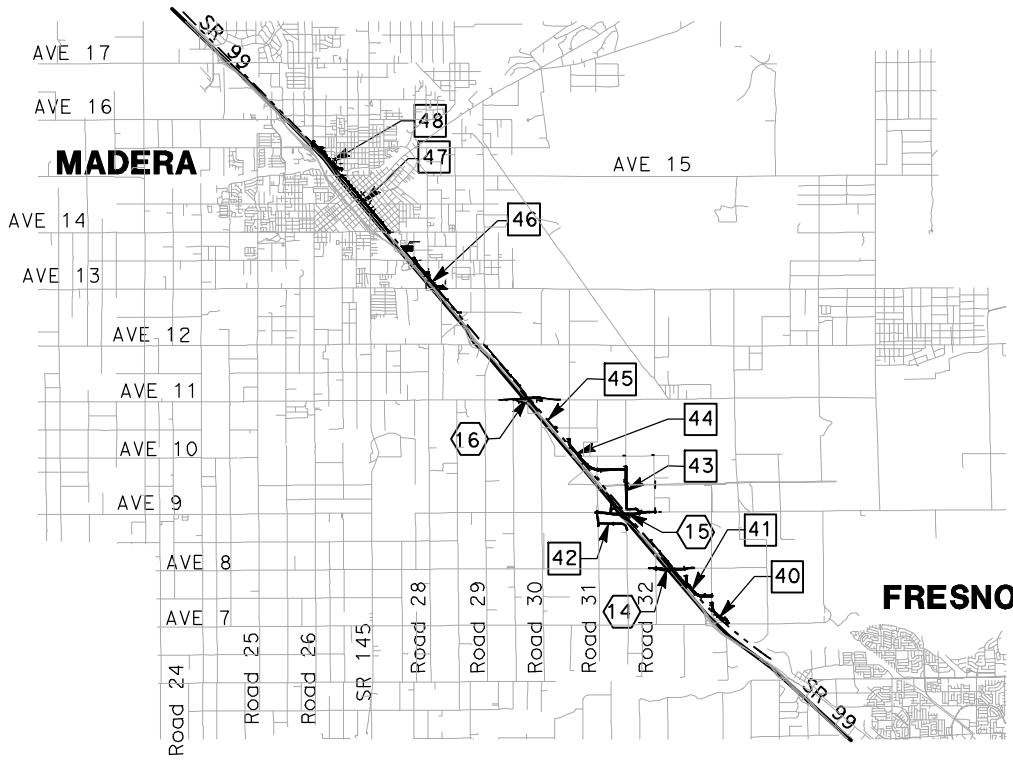
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6	GRADE SEPARATION - CROSS RD	-	-
7	GRADE SEPARATION - AVENUE 26	-	-
8	GRADE SEPARATION - AVENUE 25	-	-
9	GRADE SEPARATION - AVENUE 23 1/2	-	-
10	GRADE SEPARATION - ROAD 16	-	-
11	GRADE SEPARATION - ROAD 15	-	-
12	GRADE SEPARATION - ROAD 13	-	-
13	GRADE SEPARATION - HEMLOCK RD (ROAD 9)	-	-
64	GRADE SEPARATION - G STREET	-	-
14	AVENUE 8 OVERHEAD - REPLACEMENT	ST1107	CT7100-B - CT7102-B
15	AVENUE 9 OVERHEAD - REPLACEMENT	ST1108 & ST1109	CT7103-B - CT7109-B
16	AVENUE 11 OVERHEAD	ST1110	CT7110-B - CT7114-B
19	LE GRAND ROAD OVERHEAD	ST1114	CT7122-B - CT7128-B
20	SANDY MUSH RD OVERHEAD	ST1142	CT7119-B - CT7121-B
21	GRADE SEPARATION - SR 233	ST1141	CT7115-B - CT7118-B
36	GRADE SEPARATION - SR 233	ST1143	CT7129-B - CT7132-B
67	SR 99 SOUTHBOUND OVERHEAD	ST1181	-



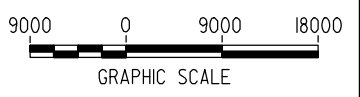
**VICINITY MAP 2**



**VICINITY MAP 1**



**VICINITY MAP 3**



**LOCATION NUMBER LEGEND**

- (X) - INDICATES GRADE SEPARATION
- (X) - INDICATES CALTRANS FACILITIES MODIFICATION
- (X) - INDICATES LOCAL ROAD RELOCATION

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
H. LEE  
 DRAWN BY  
B. DOLAN  
 CHECKED BY  
J. ZANDIAN  
 IN CHARGE  
A. BOONE  
 DATE  
04/29/2011

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



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPPR/SR 99 ALTERNATIVE  
 AVENUE 24  
 STRUCTURE INDEX MAP  
 SHEET 1 OF 1

CONTRACT NO.  
HSR06-007  
 DRAWING NO.  
SB1222  
 SCALE  
No scale  
 SHEET NO.  
OF

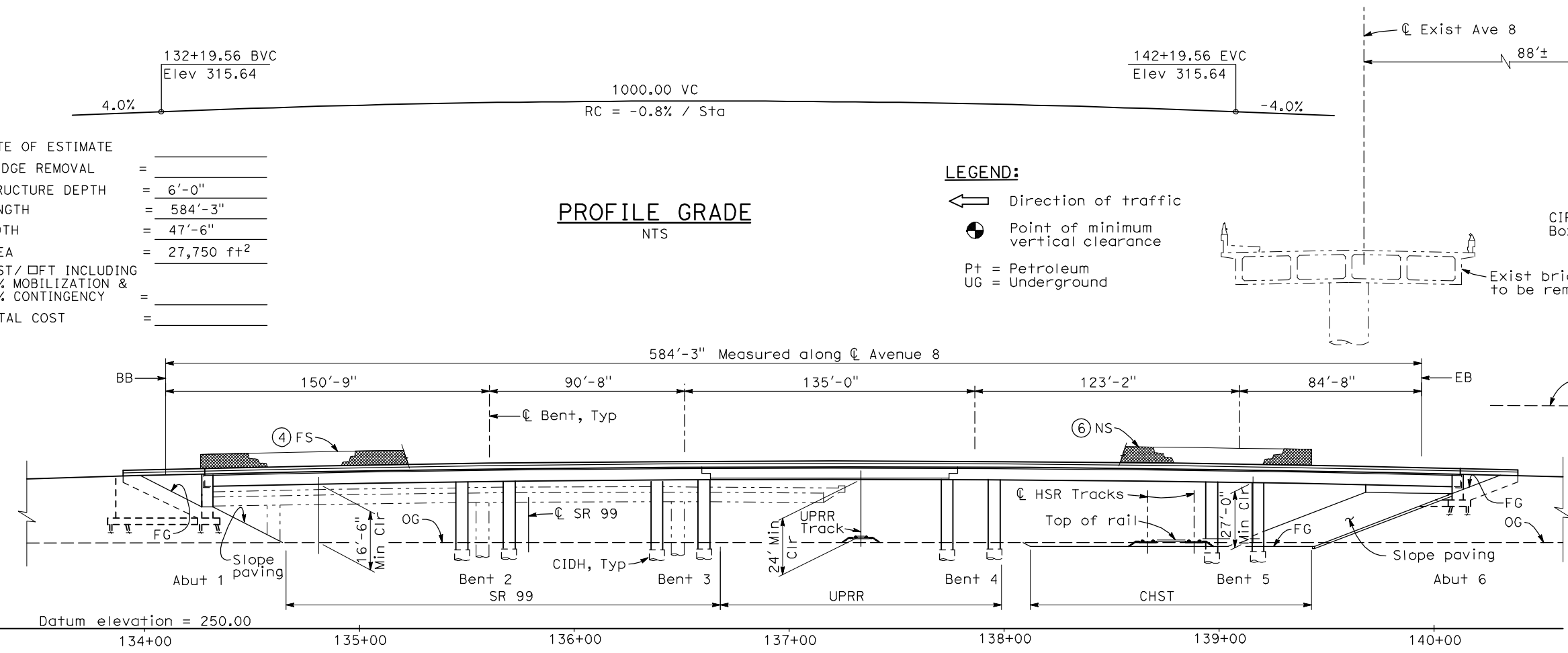
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DATE OF ESTIMATE	=	
BRIDGE REMOVAL	=	
STRUCTURE DEPTH	=	6'-0"
LENGTH	=	584'-3"
WIDTH	=	47'-6"
AREA	=	27,750 ft <sup>2</sup>
COST/ □ FT INCLUDING 10% MOBILIZATION & 25% CONTINGENCY	=	
TOTAL COST	=	

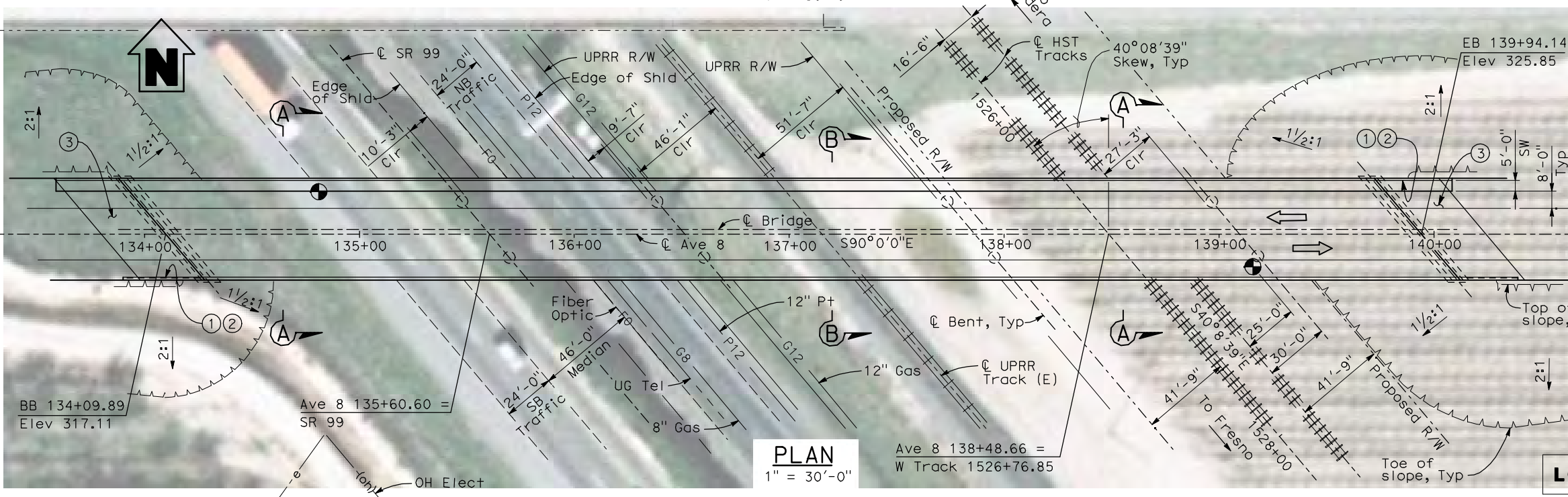
**PROFILE GRADE**  
NTS

**LEGEND:**

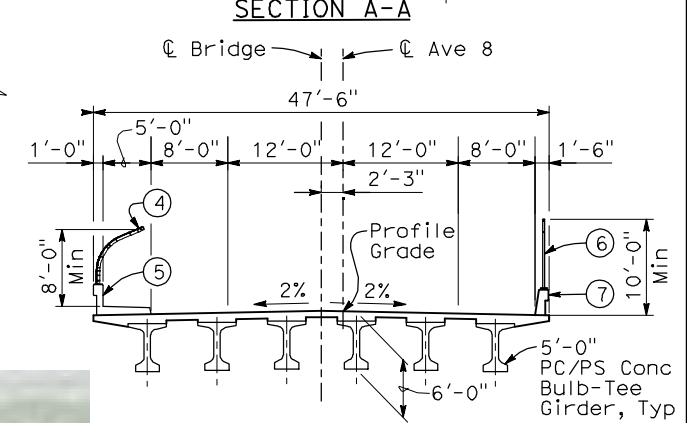
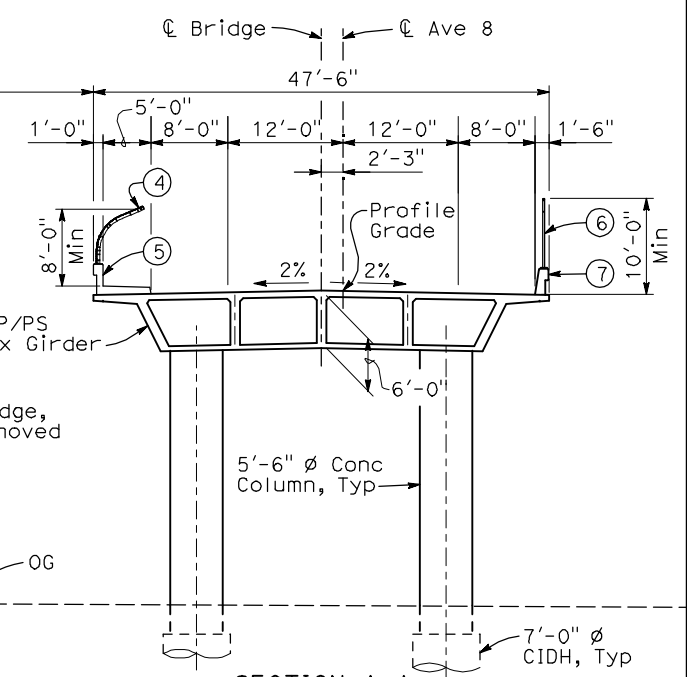
- ← Direction of traffic
- Point of minimum vertical clearance
- P+ = Petroleum
- UG = Underground



**ELEVATION**  
1" = 30'-0"



**PLAN**  
1" = 30'-0"

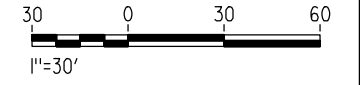


**SECTION B-B**  
**TYPICAL SECTIONS**  
1" = 10'-0"

**NOTES:**

- ① Paint "Bridge No. 41-60"
- ② Paint "Avenue 8 OH"
- ③ Structure Approach Slab Type N (30S)
- ④ Chain Link Railing Type 3
- ⑤ Concrete Barrier Type 26 (Mod)
- ⑥ Chain Link Railing Type 7 (Mod)
- ⑦ Concrete Barrier Type 732
8. Bearing of Avenue 8, SR 99 and UPRR track to be verified.
9. Existing underground and overhead utilities to be determined.
10. Location and elevation of existing UPRR track to be determined.

**LOCATION 14**



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
H. LEE  
DRAWN BY  
B. DOLAN  
CHECKED BY  
T. BARNARD  
IN CHARGE  
A. BOONE  
DATE  
04/29/2011

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

**NOT FOR**  
**CONSTRUCTION**

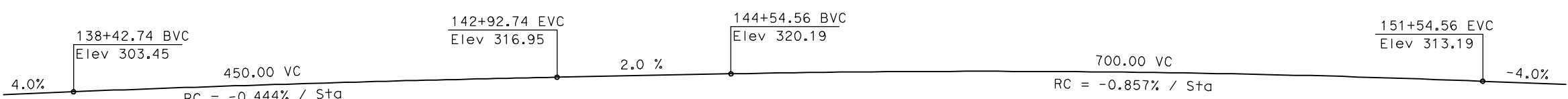


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
UPRR/SR 99 MAIN LINE  
AVENUE 21  
AVENUE 8 OVERHEAD - REPLACEMENT  
PLANNING STUDY

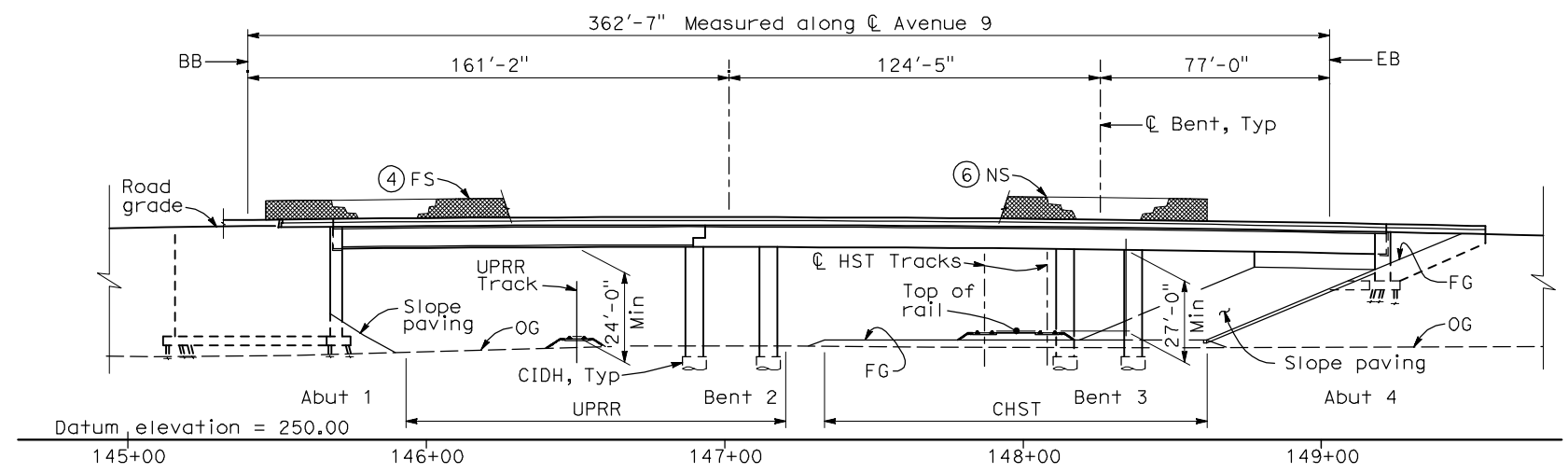
CONTRACT NO.	HSR06-007
DRAWING NO.	ST1107
SCALE	As shown
SHEET NO.	OF



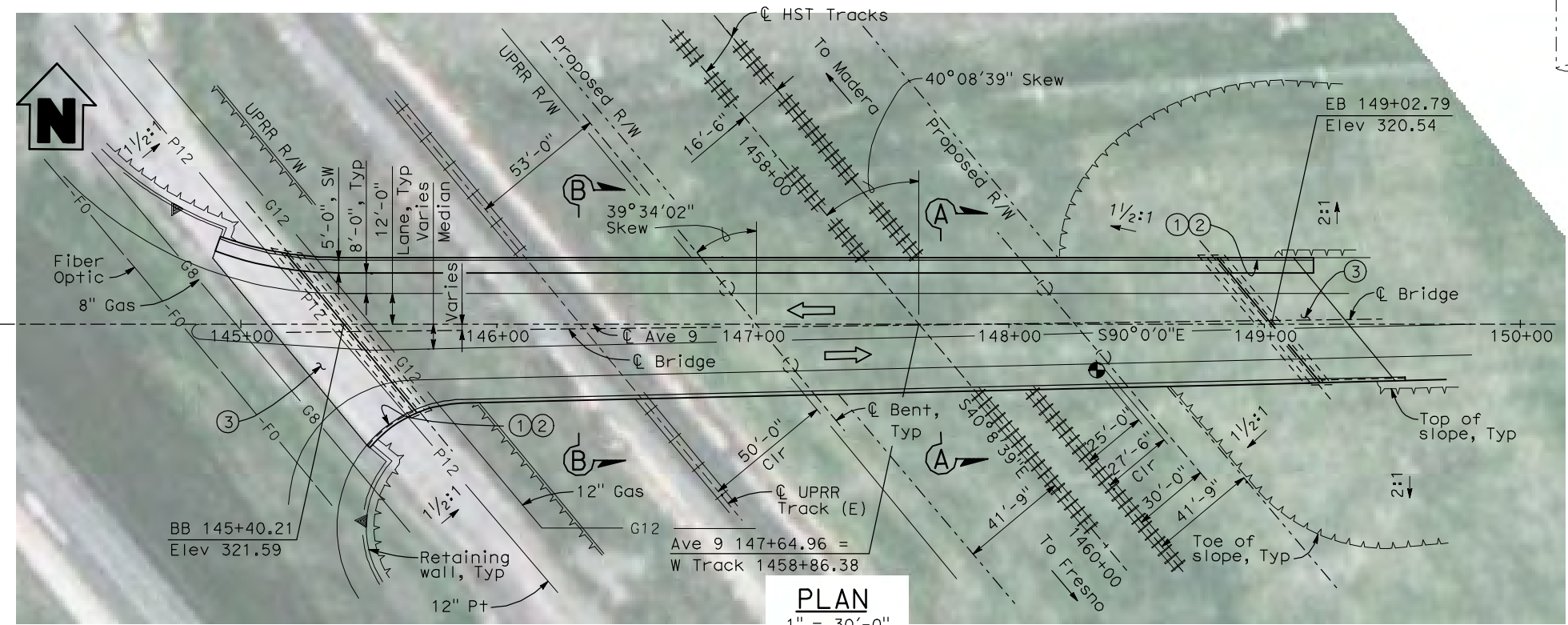
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**PROFILE GRADE**  
NTS



**ELEVATION**  
1" = 30'-0"



**PLAN**  
1" = 30'-0"

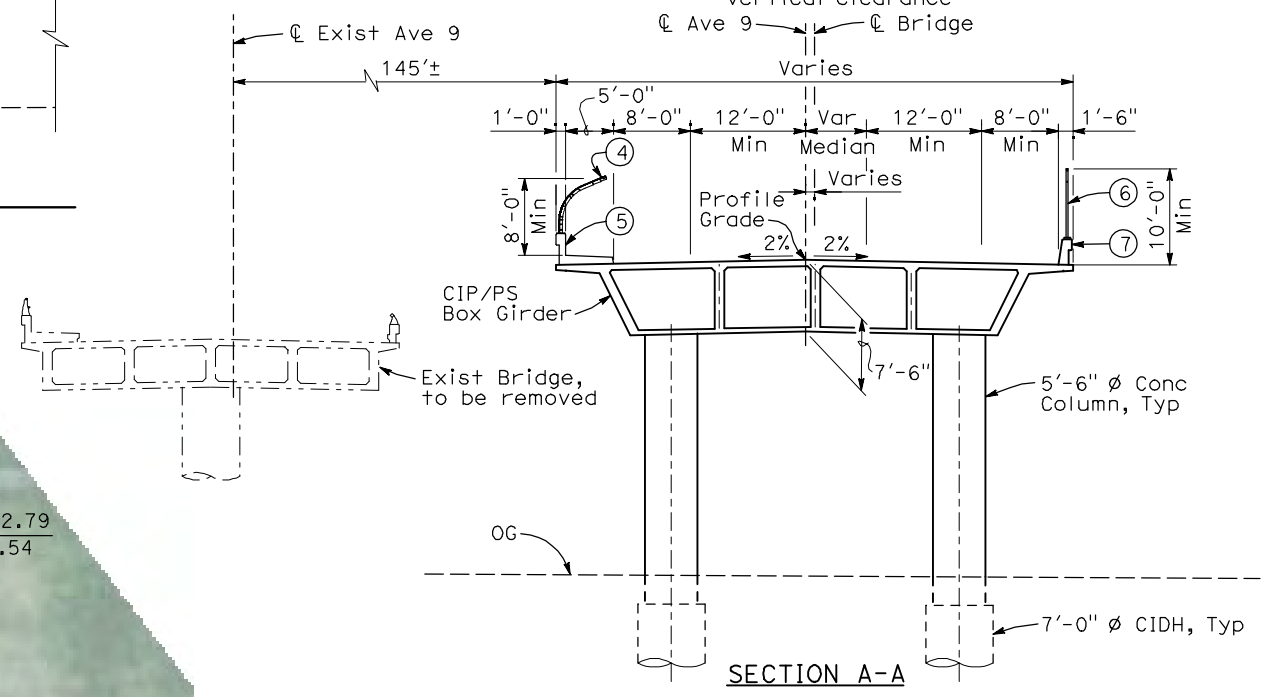
DATE OF ESTIMATE \_\_\_\_\_  
 BRIDGE REMOVAL = \_\_\_\_\_  
 STRUCTURE DEPTH = 7'-6"  
 LENGTH = 362'-7"  
 WIDTH = 53'-3 5/8" Avg  
 AREA = 19,400 ft<sup>2</sup>  
 COST/ □ FT INCLUDING 10% MOBILIZATION & 25% CONTINGENCY = \_\_\_\_\_  
 TOTAL COST = \_\_\_\_\_

**NOTES:**

- ① Paint "Bridge No. \_\_\_\_\_"
- ② Paint "Avenue 9 OH"
- ③ Structure Approach Slab Type N (30S)
- ④ Chain Link Railing Type 3
- ⑤ Concrete Barrier Type 26 (Mod)
- ⑥ Chain Link Railing Type 7 (Mod)
- ⑦ Concrete Barrier Type 732
8. Bearing of UPRR track to be verified.
9. Existing underground and overhead utilities to be determined.
10. Location and elevation of existing UPRR track to be determined.

**LEGEND/ABBREVIATIONS:**

- ← Direction of traffic Pt = Petroleum  
 ● Point of minimum vertical clearance UG = Underground  
 ⊕ Ave 9 ⊕ Bridge

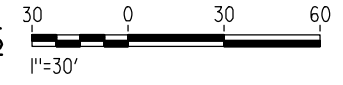


**SECTION A-A**

**SECTION B-B**

**TYPICAL SECTIONS**  
1" = 10'-0"

**LOCATION 15**



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
H. LEE  
 DRAWN BY  
B. DOLAN  
 CHECKED BY  
T. BARNARD  
 IN CHARGE  
A. BOONE  
 DATE  
04/29/2011

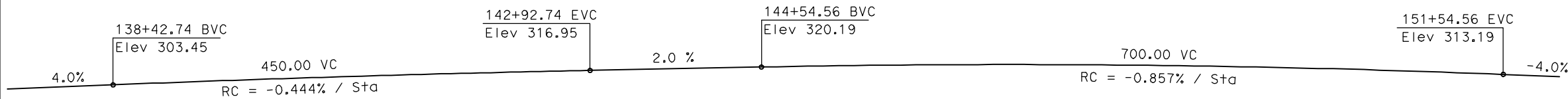
**RECORD SET**  
15% DESIGN SUBMITTAL  
  
**NOT FOR CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR 99 MAIN LINE  
 AVENUE 21  
 AVENUE 9 OVERHEAD - REPLACEMENT  
 PLANNING STUDY - BRIDGE AT UPRR

CONTRACT NO. HSR06-007
DRAWING NO. ST1108
SCALE As shown
SHEET NO. OF

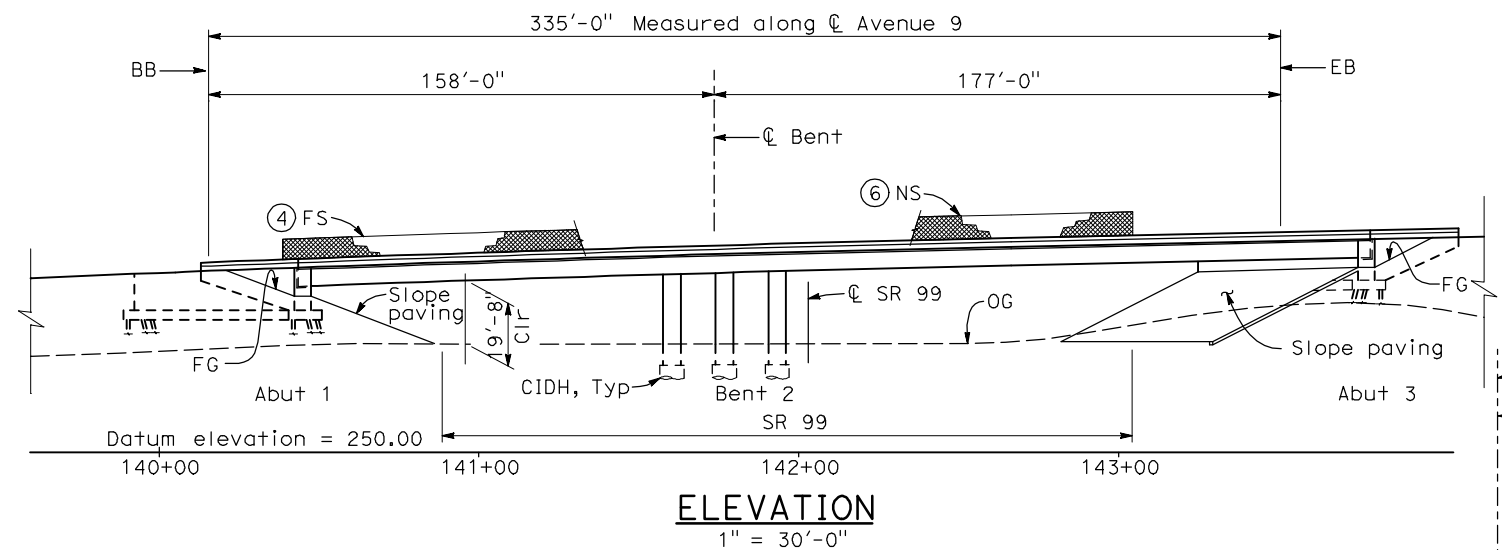
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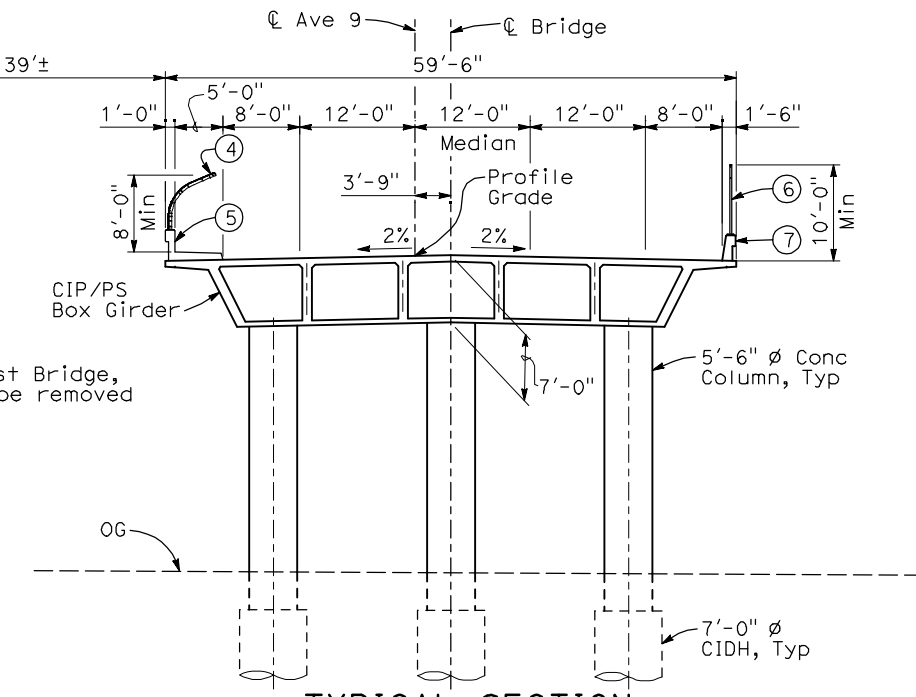
**PROFILE GRADE**  
NTS

- NOTES:**
- ① Paint "Bridge No. \_\_\_\_\_"
  - ② Paint "Avenue 9 OH"
  - ③ Structure Approach Slab Type N (30S)
  - ④ Chain Link Railing Type 3
  - ⑤ Concrete Barrier Type 26 (Mod)
  - ⑥ Chain Link Railing Type 7 (Mod)
  - ⑦ Concrete Barrier Type 732
  8. Location of SR 99 to be verified.
  9. Existing underground and overhead utilities to be determined.

- LEGEND:**
- ← Direction of traffic
  - Point of minimum vertical clearance
  - UG = Underground



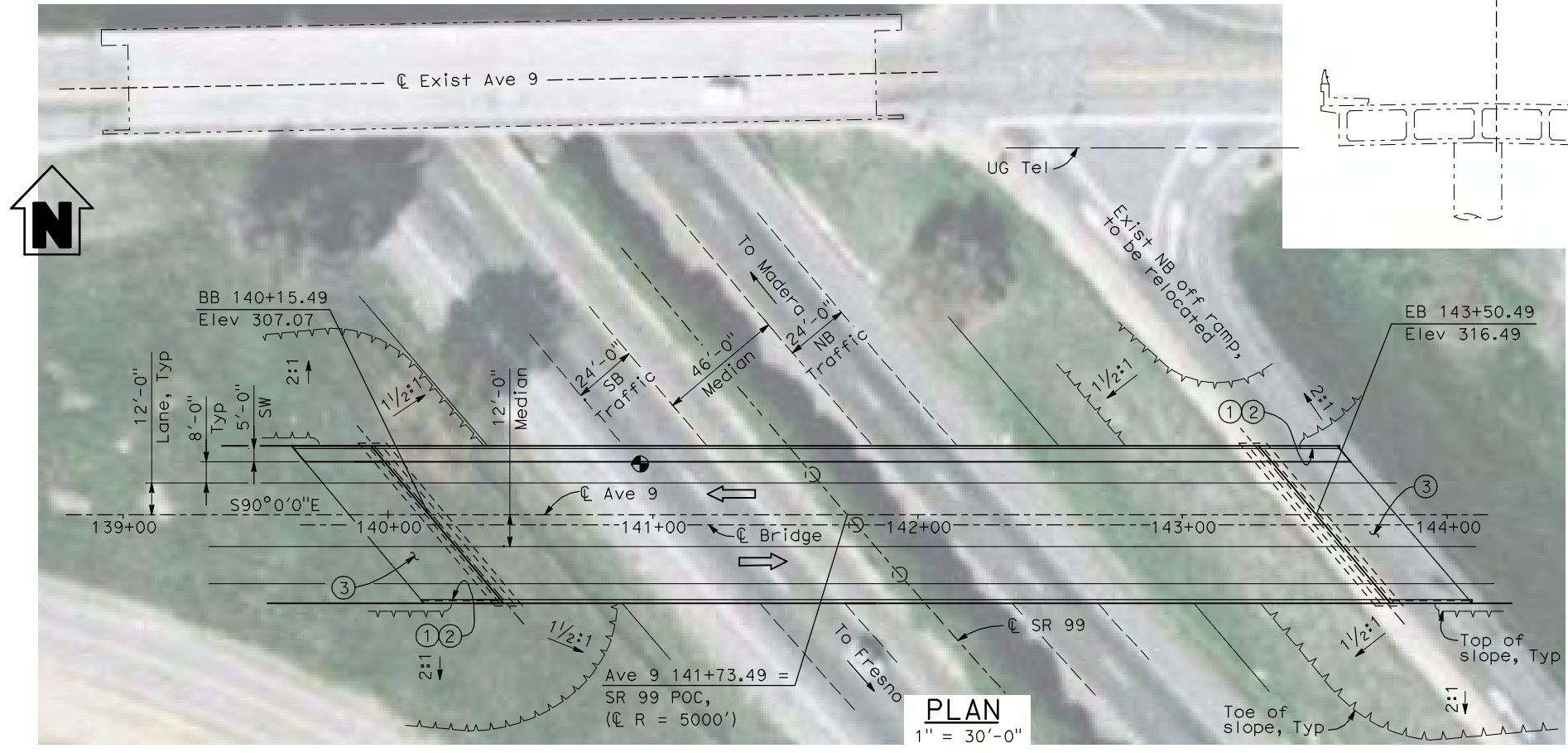
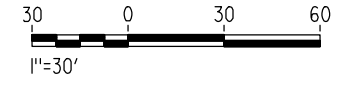
**ELEVATION**  
1" = 30'-0"



**TYPICAL SECTION**  
1" = 10'-0"

DATE OF ESTIMATE	=	
BRIDGE REMOVAL	=	
STRUCTURE DEPTH	=	7'-0"
LENGTH	=	335'-0"
WIDTH	=	59'-6"
AREA	=	19,950 ft <sup>2</sup>
COST/ □ FT INCLUDING 10% MOBILIZATION & 25% CONTINGENCY	=	
TOTAL COST	=	

**LOCATION 15**



**PLAN**  
1" = 30'-0"

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
H. LEE  
 DRAWN BY  
B. DOLAN  
 CHECKED BY  
T. BARNARD  
 IN CHARGE  
A. BOONE  
 DATE  
04/29/2011

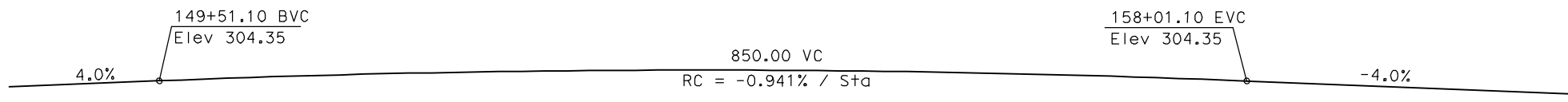
**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**  
  
**NOT FOR**  
**CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR 99 MAIN LINE  
 AVENUE 21  
 AVENUE 9 OVERCROSSING - REPLACEMENT  
 PLANNING STUDY - BRIDGE AT SR 99

CONTRACT NO.	HSR06-007
DRAWING NO.	ST1109
SCALE	As shown
SHEET NO.	OF



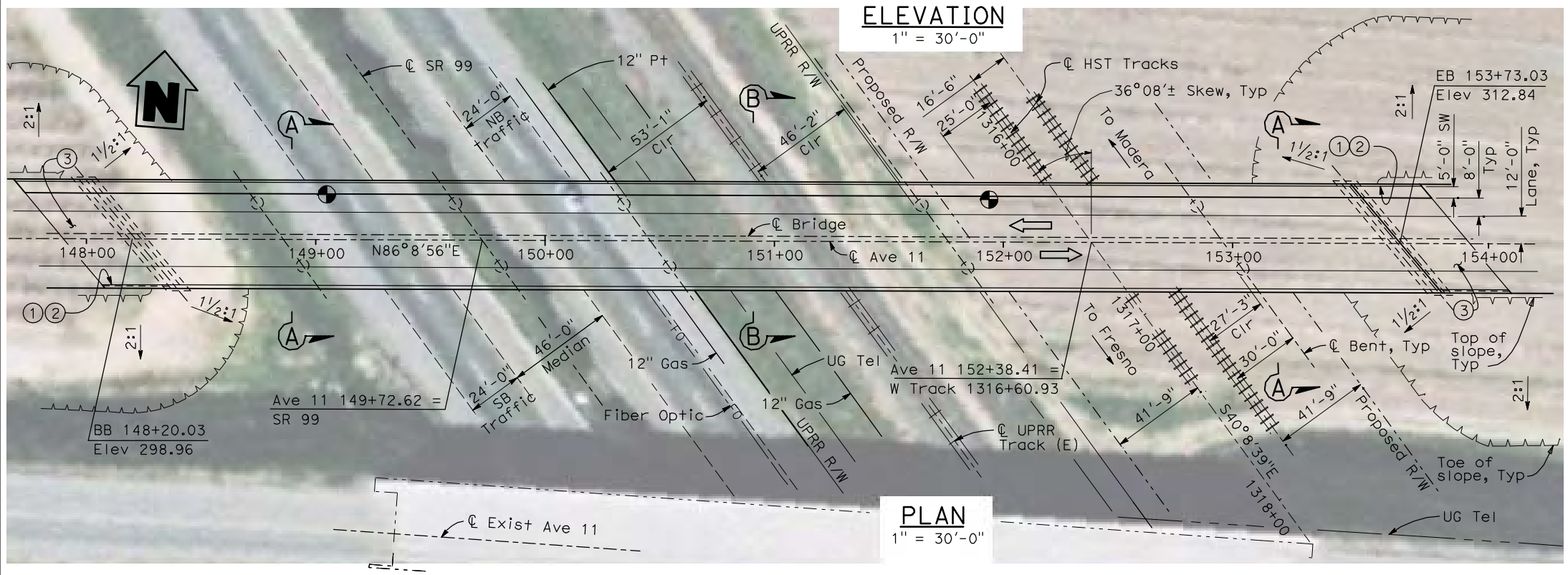
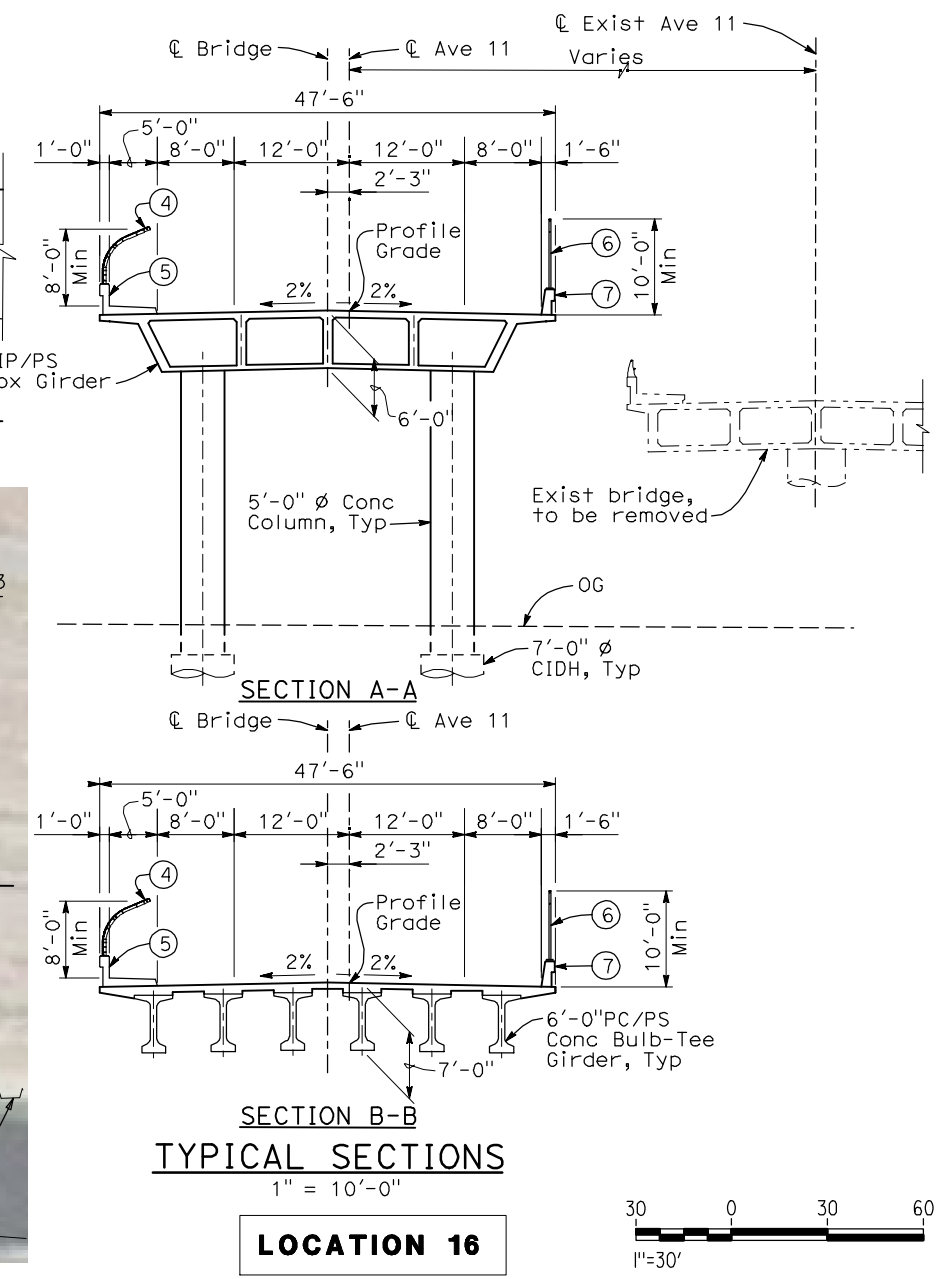
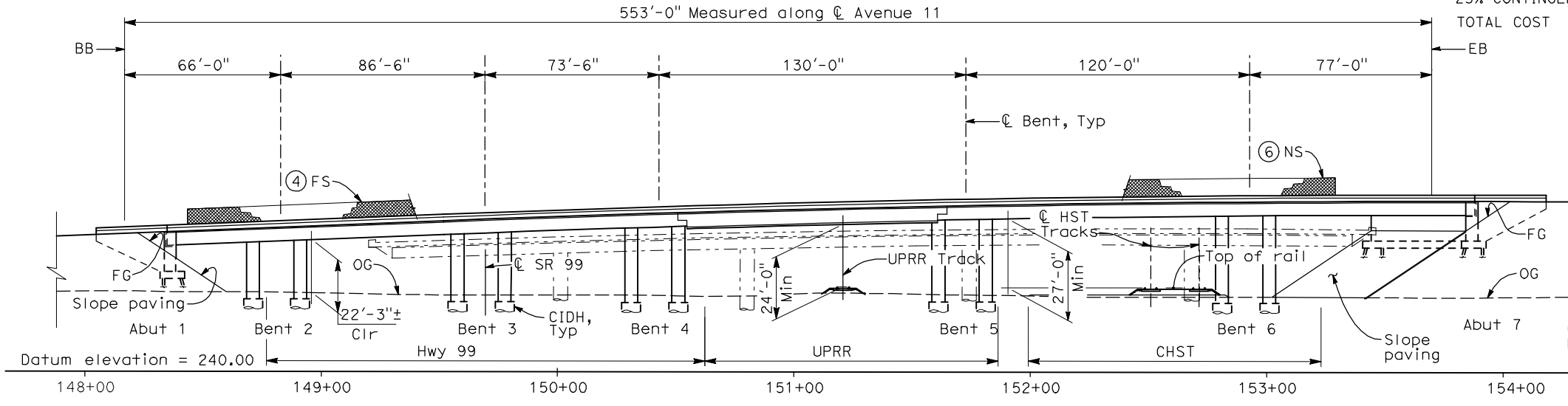


**PROFILE GRADE**  
NTS

DATE OF ESTIMATE = \_\_\_\_\_  
 BRIDGE REMOVAL = \_\_\_\_\_  
 STRUCTURE DEPTH = 6'-0" and 7'-0"  
 LENGTH = 553'-0"  
 WIDTH = 47'-6"  
 AREA = 26,300 ft<sup>2</sup>  
 COST/FOOT INCLUDING 10% MOBILIZATION & 25% CONTINGENCY = \_\_\_\_\_  
 TOTAL COST = \_\_\_\_\_

- NOTES:**
- ① Paint "Bridge No. 41-61"
  - ② Paint "Avenue 11 OH"
  - ③ Structure Approach Slab Type N (30S)
  - ④ Chain Link Railing Type 3
  - ⑤ Concrete Barrier Type 26 (Mod)
  - ⑥ Chain Link Railing Type 7 (Mod)
  - ⑦ Concrete Barrier Type 732
  8. Existing underground and overhead utilities to be determined.
  9. Location, bearing and elevation of existing UPRR track(s) to be determined.
  10. Location of existing bridge to be verified.

- LEGEND:**
- ← Direction of traffic
  - ⊙ Point of minimum vertical clearance
  - Pt = Petroleum
  - UG = Underground

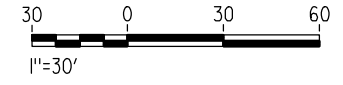


**ELEVATION**  
1" = 30'-0"

**PLAN**  
1" = 30'-0"

**TYPICAL SECTIONS**  
1" = 10'-0"

**LOCATION 16**



5/1/2011 9:57:25 AM I:\CHSR\60022962\Task-02\_Merced-Fresno\cadd\Struct\_Sheet\MPS\M2\15%\_cost\_reduction\_submittal\Grade\_Structure\MF-ST-OH\_Ave 11-Loc 16.dgn

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
H. LEE  
 DRAWN BY  
B. DOLAN  
 CHECKED BY  
T. BARNARD  
 IN CHARGE  
A. BOONE  
 DATE  
04/29/2011

**RECORD SET**  
15% DESIGN SUBMITTAL

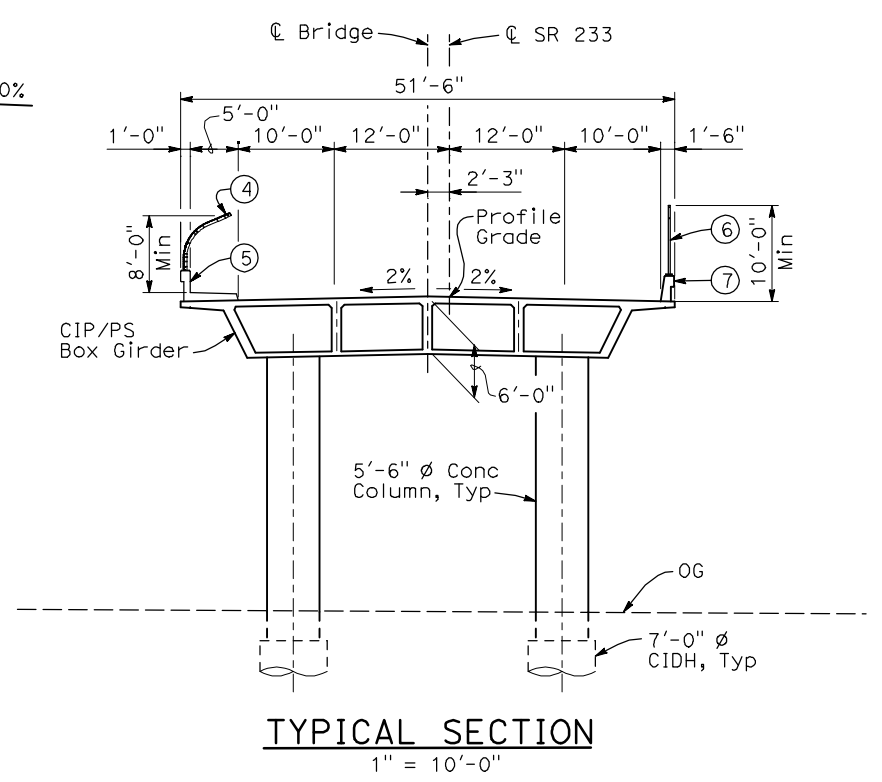
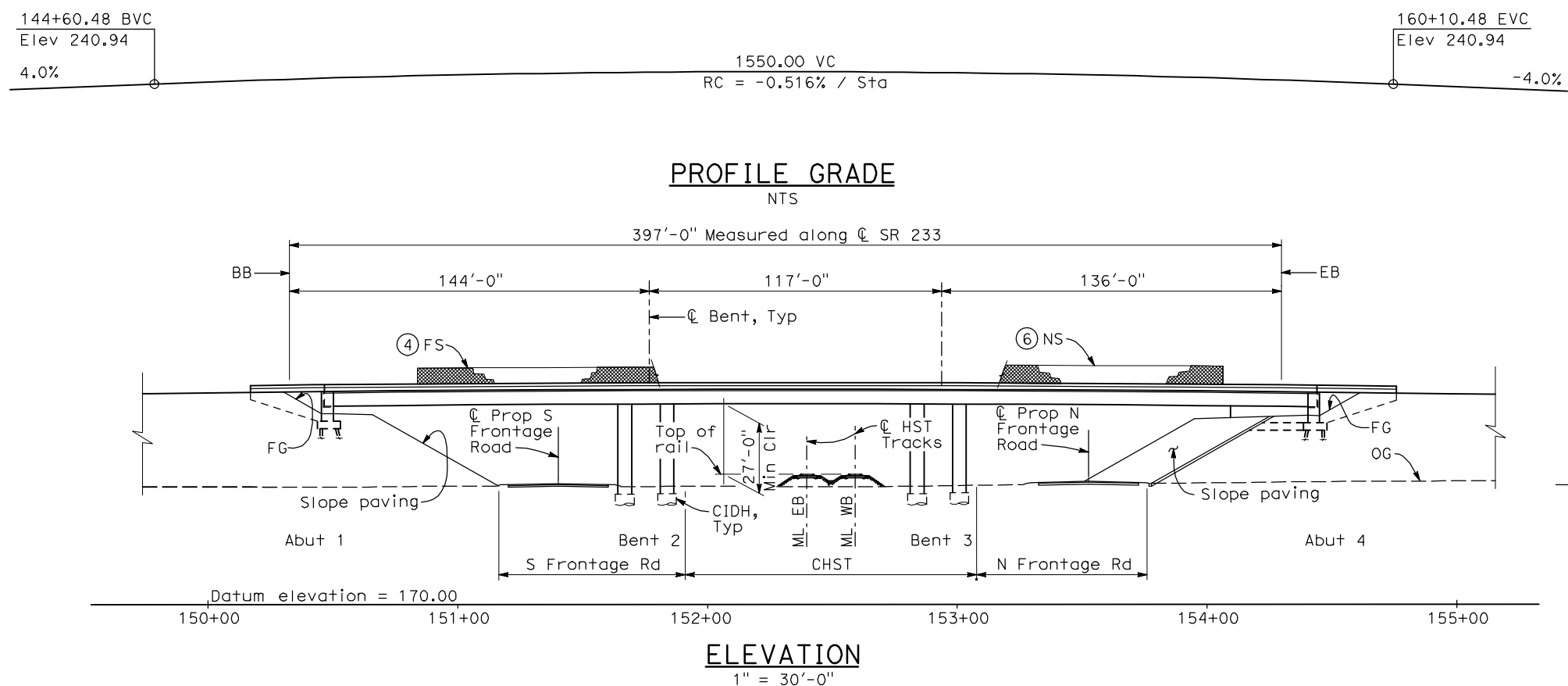
**NOT FOR CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR 99 MAIN LINE  
 AVENUE 21  
 AVENUE 11 OVERHEAD - REPLACEMENT  
 PLANNING STUDY

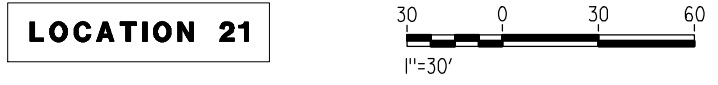
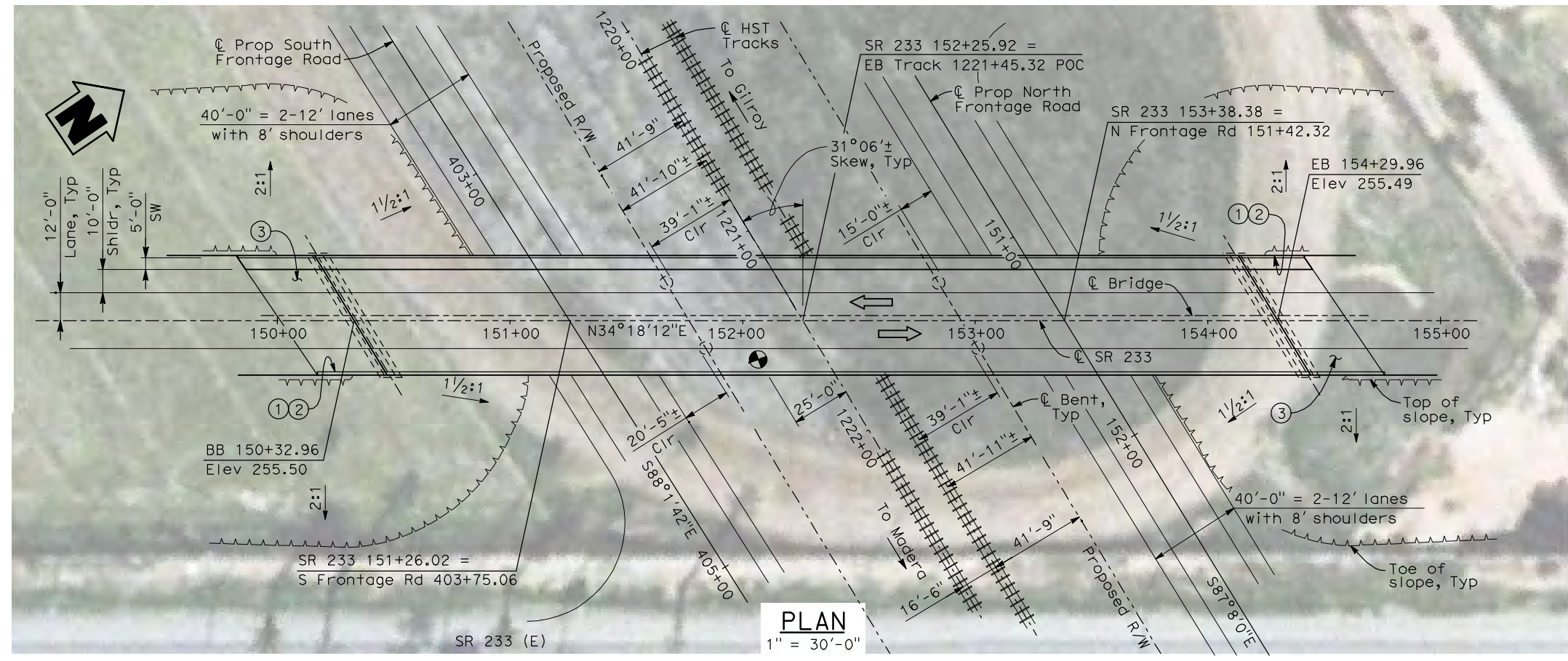
CONTRACT NO.	HSR06-007
DRAWING NO.	ST1110
SCALE	As shown
SHEET NO.	OF

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- NOTES:**
- ① Paint "Bridge No. XX-XX"
  - ② Paint "SR 233 OH"
  - ③ Structure Approach Slab Type N (30S)
  - ④ Chain Link Railing Type 3
  - ⑤ Concrete Barrier Type 26 (Mod)
  - ⑥ Chain Link Railing Type 7 (Mod)
  - ⑦ Concrete Barrier Type 732
  8. Existing underground and overhead utilities to be determined.

- LEGEND/ABBREVIATIONS:**
- Direction of traffic
  - Point of minimum vertical clearance
  - ML = Main Line
- DATE OF ESTIMATE \_\_\_\_\_
- BRIDGE REMOVAL = \_\_\_\_\_
- STRUCTURE DEPTH = 6'-0"
- LENGTH = 397'-0"
- WIDTH = 51'-6"
- AREA = 20,500 ft<sup>2</sup>
- COST/ CFT INCLUDING 10% MOBILIZATION & 25% CONTINGENCY = \_\_\_\_\_
- TOTAL COST = \_\_\_\_\_



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
H. LEE

DRAWN BY  
B. DOLAN

CHECKED BY  
T. BARNARD

IN CHARGE  
A. BOONE

DATE  
04/29/2011

**15%  
SUBMITTAL  
FOR INTERNAL  
USE ONLY**

**NOT FOR  
CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**

**MERCED TO FRESNO**

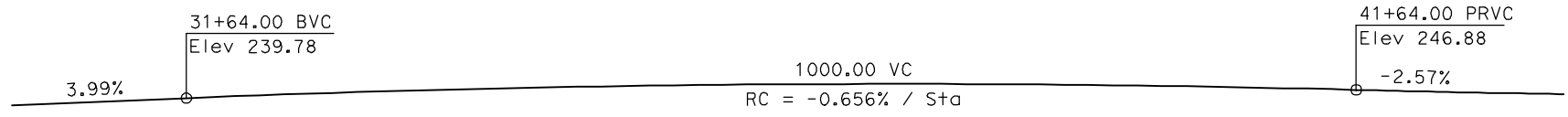
UPRR/SR 99 MAIN LINE  
AVENUE 24  
SR 233 OVERHEAD  
PLANNING STUDY

CONTRACT NO. HSR06-007
DRAWING NO. ST1141
SCALE As shown
SHEET NO. OF



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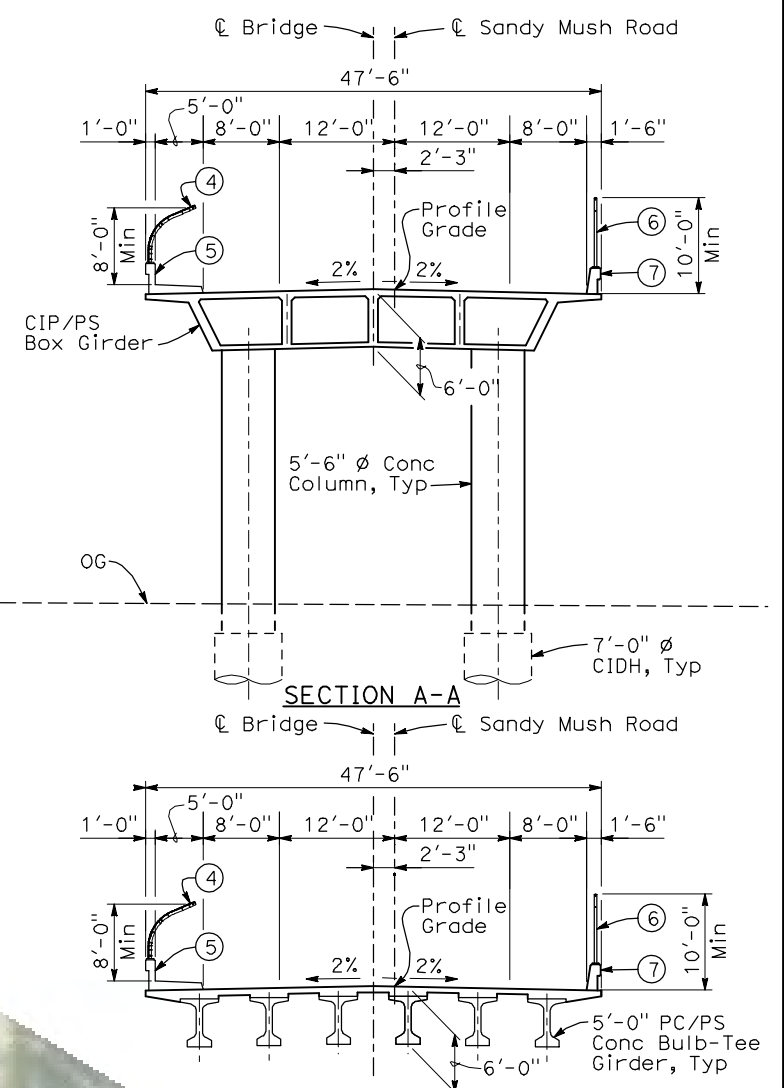
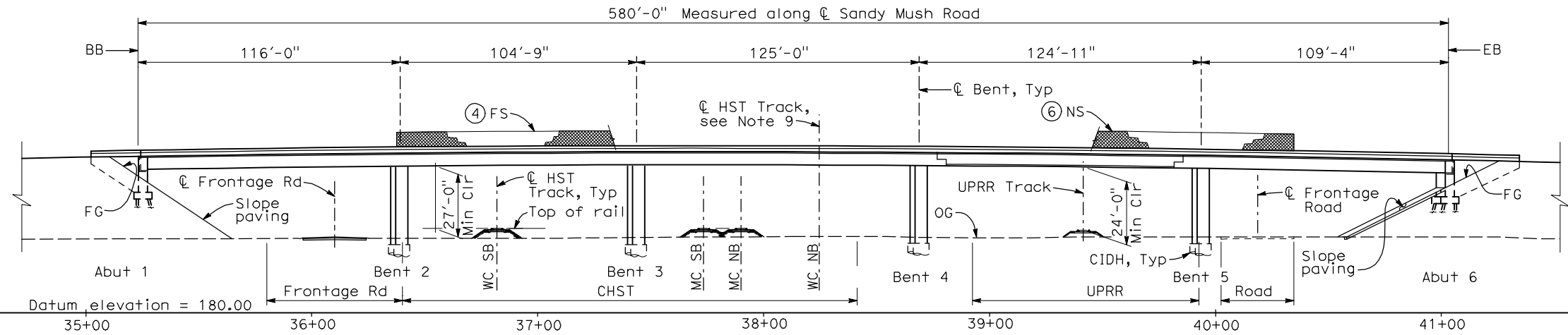
DATE OF ESTIMATE	=	
BRIDGE REMOVAL	=	
STRUCTURE DEPTH	=	6'-0"
LENGTH	=	580'-0"
WIDTH	=	47'-6"
AREA	=	27,600 ft <sup>2</sup>
COST/ CFT INCLUDING 10% MOBILIZATION & 25% CONTINGENCY	=	
TOTAL COST	=	



### PROFILE GRADE NTS

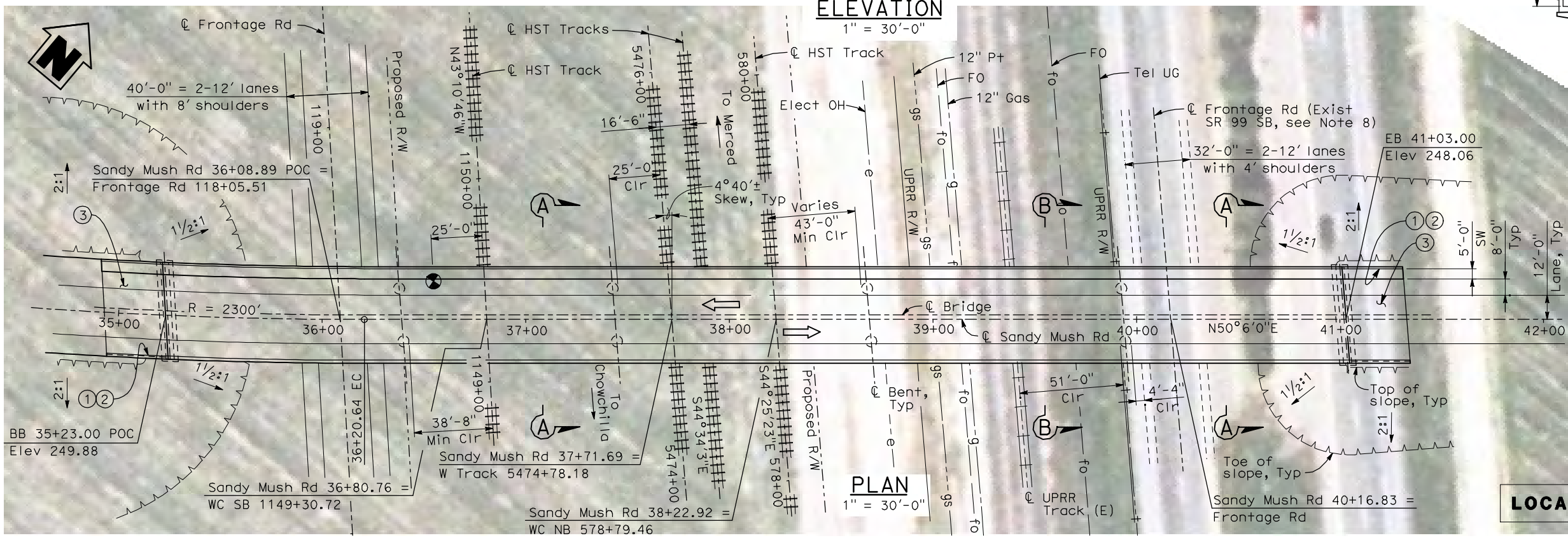
#### LEGEND/ABBREVIATIONS:

- ← Direction of traffic
- Point of minimum vertical clearance
- Pt = Petroleum
- UG = Underground
- FO = Fiber Optic
- MC = Merced Connection
- WC = Wye Connection

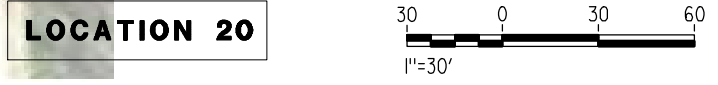


### SECTION B-B TYPICAL SECTIONS

- 1" = 10'-0"
- NOTES:**
- ① Paint "Bridge No. WX-ZZ"
  - ② Paint "Sandy Mush Road OH"
  - ③ Structure Approach Slab Type N (30S)
  - ④ Chain Link Railing Type 3
  - ⑤ Concrete Barrier Type 26 (Mod)
  - ⑥ Chain Link Railing Type 7 (Mod)
  - ⑦ Concrete Barrier Type 732
  8. SR 99 will be relocated prior to or concurrent with this construction.
  9. Top of rail for NB Wye Connection to be determined.
  10. Existing underground and overhead utilities to be determined.
  11. Bearing, location and elevation of existing UPRR track to be determined.



### PLAN 1" = 30'-0"



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
H. LEE  
DRAWN BY  
B. DOLAN  
CHECKED BY  
T. BARNARD  
IN CHARGE  
A. BOONE  
DATE  
04/29/2011

**RECORD SET  
15% DESIGN  
SUBMITTAL**

**NOT FOR  
CONSTRUCTION**

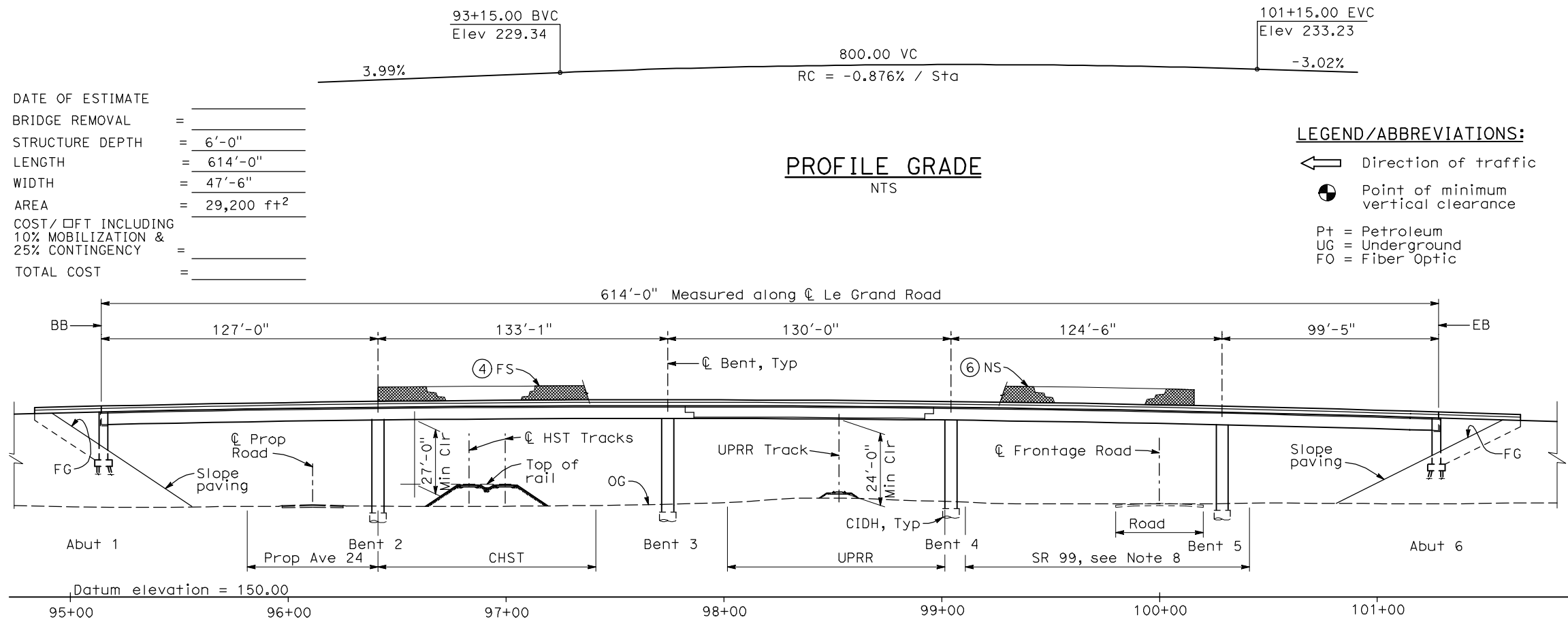


**CALIFORNIA HIGH-SPEED TRAIN PROJECT  
MERCED TO FRESNO**

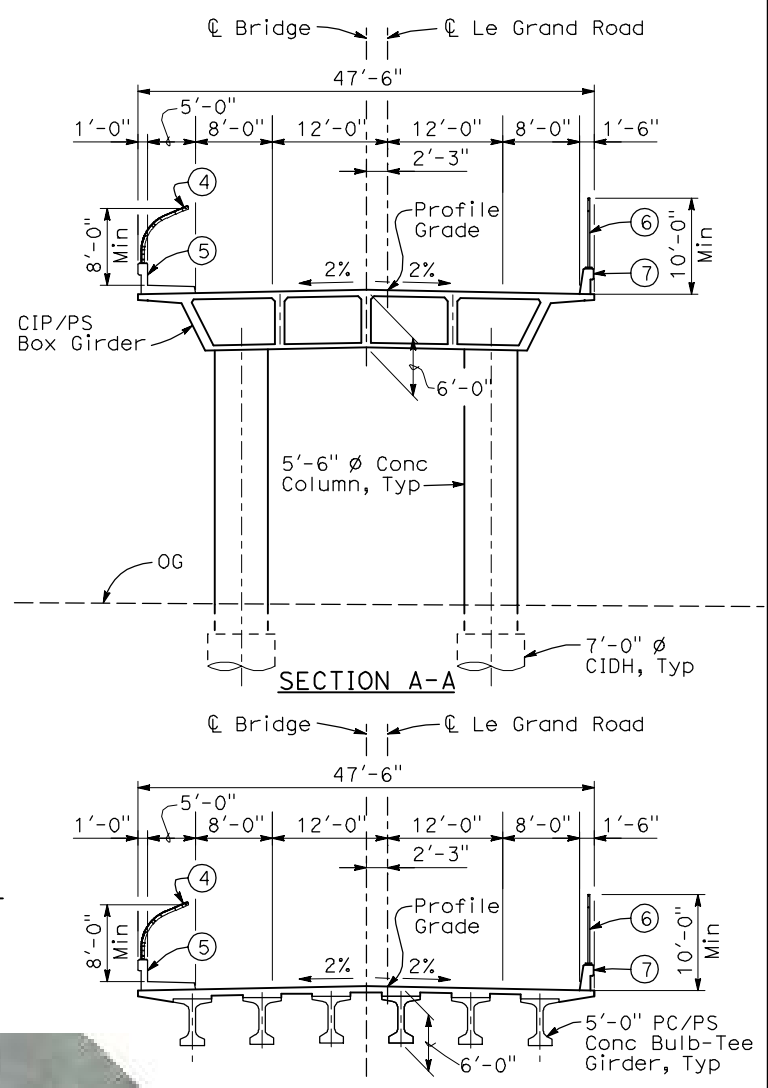
UPRR/SR 99 MERCED & WYE CONNECTIONS  
AVENUE 24  
SANDY MUSH ROAD OVERHEAD  
PLANNING STUDY

CONTRACT NO.	HSR06-007
DRAWING NO.	ST1142
SCALE	As shown
SHEET NO.	OF

5/1/2011 9:59:27 AM I:\CHSR\60022962\Task-02\_Merced-Fresno\cadd\Struct\Sheet\APS\A2\15%\_cost\_reduction\_submittal\Grade Structure\W-MF-ST-OH\_Le Grand Road-Loc 19.dgn

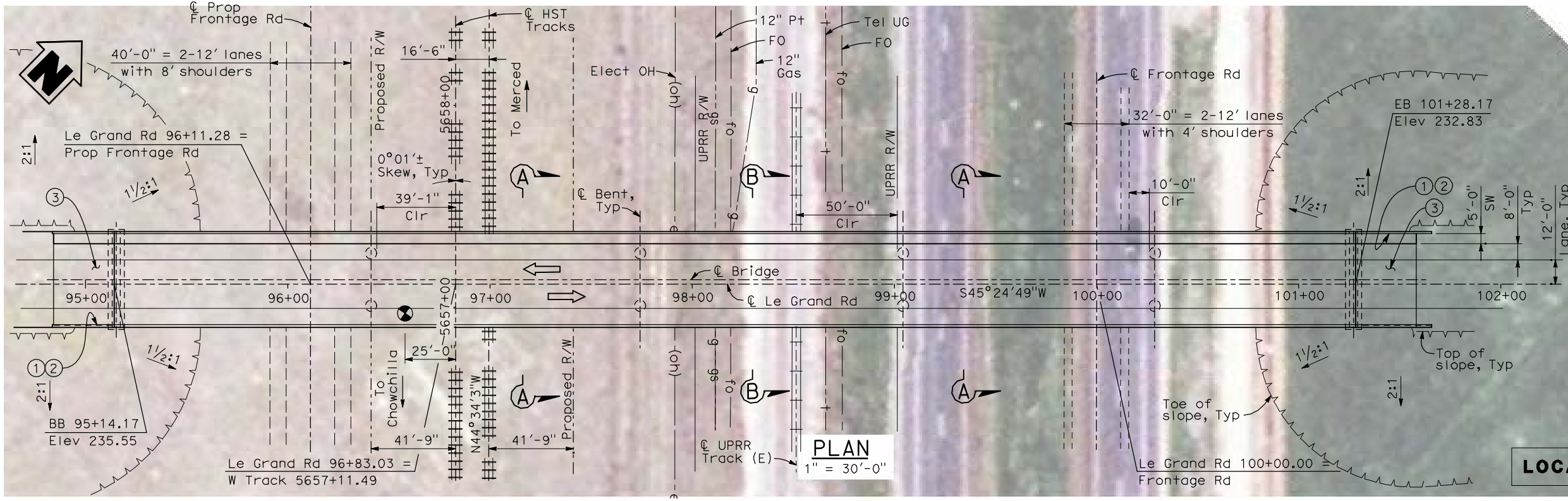


**ELEVATION**  
1" = 30'-0"



**TYPICAL SECTIONS**  
1" = 10'-0"

- NOTES:**
- Paint "Bridge No. WX-YY"
  - Paint "Le Grand Road OH"
  - Structure Approach Slab Type N (30S)
  - Chain Link Railing Type 3
  - Concrete Barrier Type 26 (Mod)
  - Chain Link Railing Type 7 (Mod)
  - Concrete Barrier Type 732
  - SR 99 will be relocated prior to or concurrent with this construction.
  - Bearing of Le Grand Road and UPRR track to be verified.
  - Existing underground and overhead utilities to be determined.
  - Location and elevation of existing UPRR track to be determined.



**LOCATION 19**  
1" = 30'

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
H. LEE

DRAWN BY  
B. DOLAN

CHECKED BY  
T. BARNARD

IN CHARGE  
A. BOONE

DATE  
04/29/2011

**RECORD SET**  
15% DESIGN SUBMITTAL

**NOT FOR CONSTRUCTION**

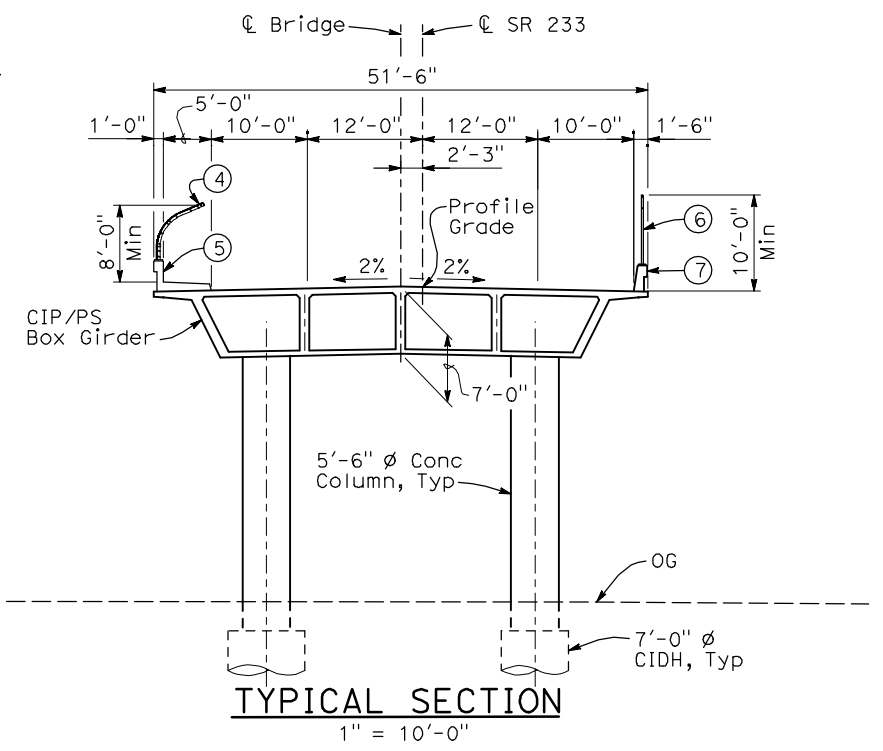
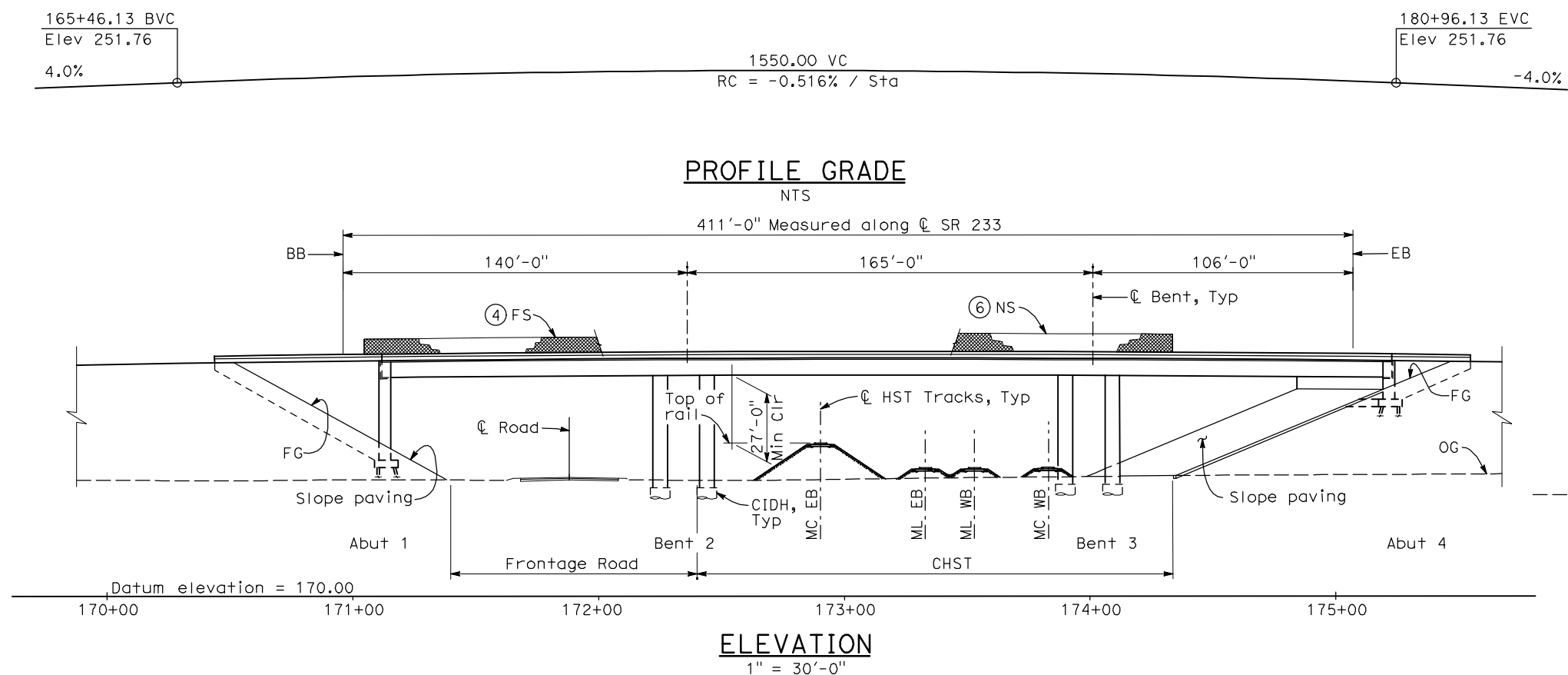


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
UPRR/SR 99 MERCED CONNECTION  
AVENUE 21  
LE GRAND ROAD OVERHEAD  
PLANNING STUDY

CONTRACT NO. HSR06-007
DRAWING NO. ST1114
SCALE As shown
SHEET NO. OF



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- NOTES:**
- ① Paint "Bridge No. XX-XX"
  - ② Paint "SR 233 OH"
  - ③ Structure Approach Slab Type N (30S)
  - ④ Chain Link Railing Type 3
  - ⑤ Concrete Barrier Type 26 (Mod)
  - ⑥ Chain Link Railing Type 7 (Mod)
  - ⑦ Concrete Barrier Type 732
  8. Existing underground and overhead utilities to be determined.

- LEGEND/ABBREVIATIONS:**
- $\leftarrow$  Direction of traffic
  - $\odot$  Point of minimum vertical clearance
  - MC = Merced Connection
  - ML = Main Line

**DATE OF ESTIMATE** \_\_\_\_\_

**BRIDGE REMOVAL** = \_\_\_\_\_

**STRUCTURE DEPTH** = 7'-0"

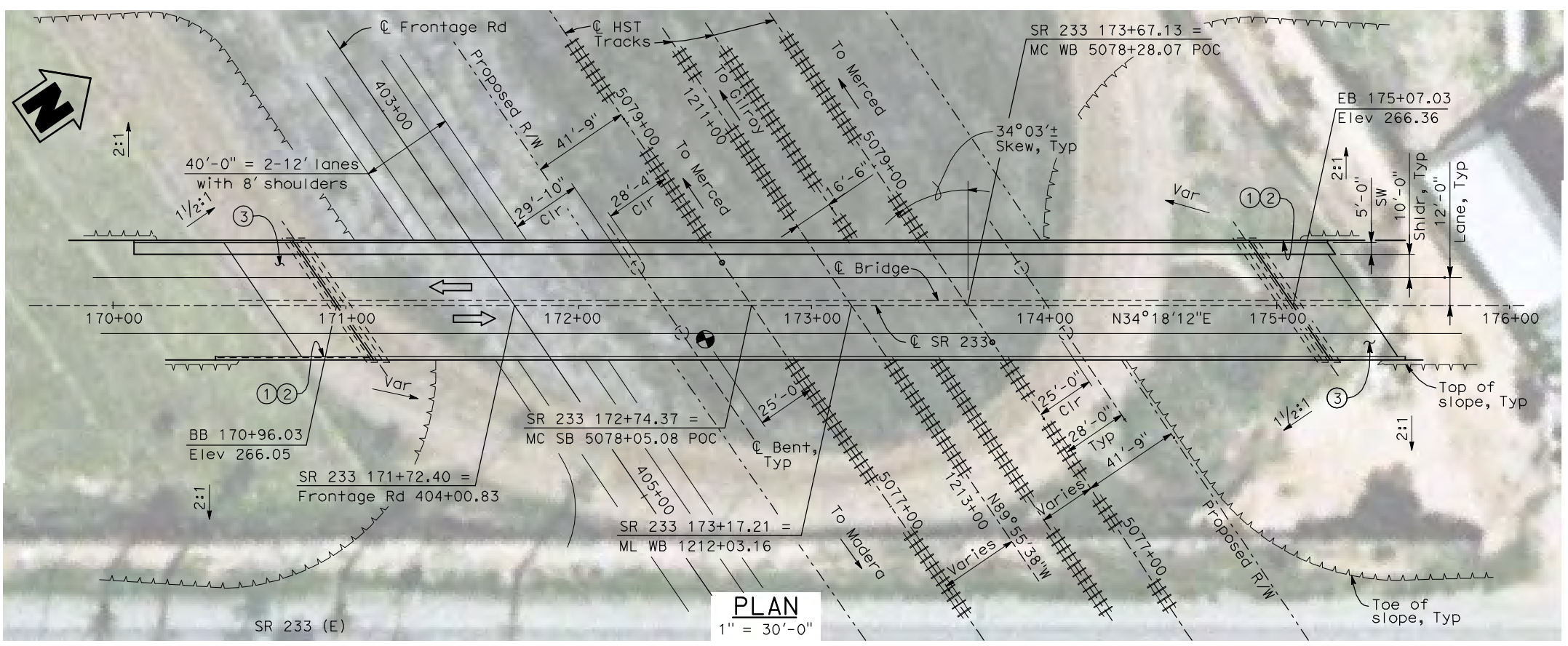
**LENGTH** = 411'-0"

**WIDTH** = 51'-6"

**AREA** = 21,200 ft<sup>2</sup>

**COST/ DFT INCLUDING 10% MOBILIZATION & 25% CONTINGENCY** = \_\_\_\_\_

**TOTAL COST** = \_\_\_\_\_



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
H. LEE

DRAWN BY  
B. DOLAN

CHECKED BY  
T. BARNARD

IN CHARGE  
A. BOONE

DATE  
04/29/2011

**RECORD SET**  
15% DESIGN SUBMITTAL

**NOT FOR CONSTRUCTION**



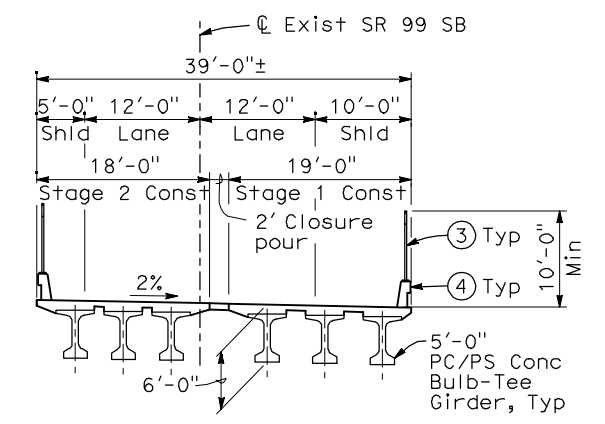
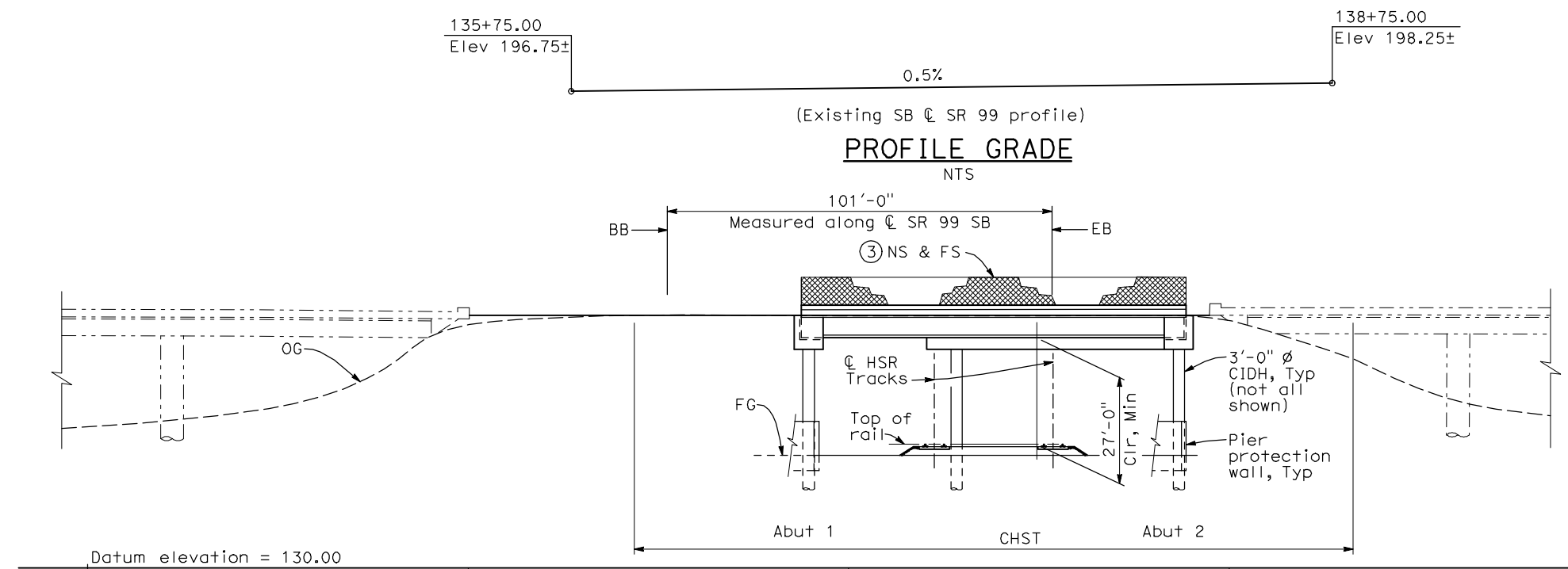
**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
UPRR/SR 99 MAIN LINE/W CHOWCHILLA AVENUE 24  
SR 233 OVERHEAD PLANNING STUDY

CONTRACT NO.  
HSR06-007

DRAWING NO.  
ST1143

SCALE  
As shown

SHEET NO.  
OF

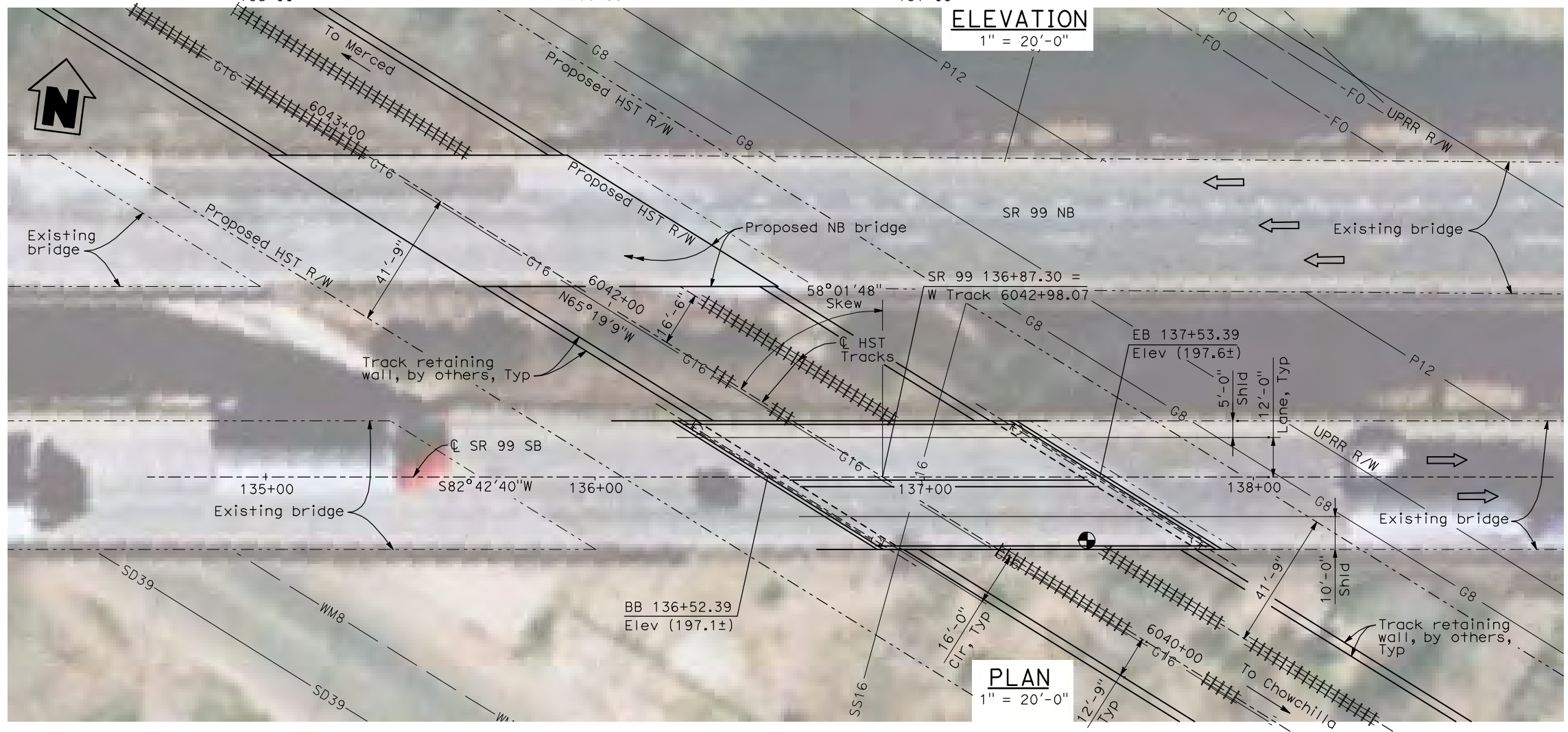


**TYPICAL SECTION**  
1" = 10'-0"

- NOTES:**
- ① Paint "Bridge No. WX-YY"
  - ② Paint "SR 99 OH"
  - ③ Chain Link Railing Type 7 (Mod)
  - ④ Concrete Barrier Type 732
  5. Southbound bridge shown, northbound bridge similar.
  6. Bearing, stationing and elevation of SR 99 SB to be verified.
  7. Existing underground and overhead utilities to be determined.

- LEGEND:**
- $\leftarrow$  Direction of traffic
  - $\bullet$  Point of minimum vertical clearance
  - G = Gas
  - FO = Fiber Optic
  - P = Petroleum
  - SD = Storm Drain
  - SS = Sanitary Sewer
  - WM = Water

DATE OF ESTIMATE	_____
BRIDGE REMOVAL	= _____
STRUCTURE DEPTH	= 6'-0"
LENGTH	= 101'-0"
WIDTH	= 39'-0"
AREA	= 3,950 ft <sup>2</sup>
COST/ $\square$ FT INCLUDING 10% MOBILIZATION & 25% CONTINGENCY	= _____
TOTAL COST	= _____



**LOCATION 67**



5/1/2011 10:07:51 AM I:\CHSR\60022962\Task-02\_Merced-Fresno\cadd\Struct\Sheet\SPS\A2\15%\_cost\_reduction\_submittal\Grade Structure\WF-ST-OH\_SR\_99-Loc67.dgn

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
H. LEE

DRAWN BY  
B. DOLAN

CHECKED BY  
L. LEUNG

IN CHARGE  
A. BOONE

DATE  
04/29/2011

**RECORD SET**  
15% DESIGN SUBMITTAL

**NOT FOR CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
UPRR/SR 99 MERCED CONNECTION  
AVENUE 21  
SR 99 SOUTHBOUND OVERHEAD  
PLANNING STUDY

CONTRACT NO.  
HSR06-007

DRAWING NO.  
ST1181

SCALE  
As shown

SHEET NO.  
OF

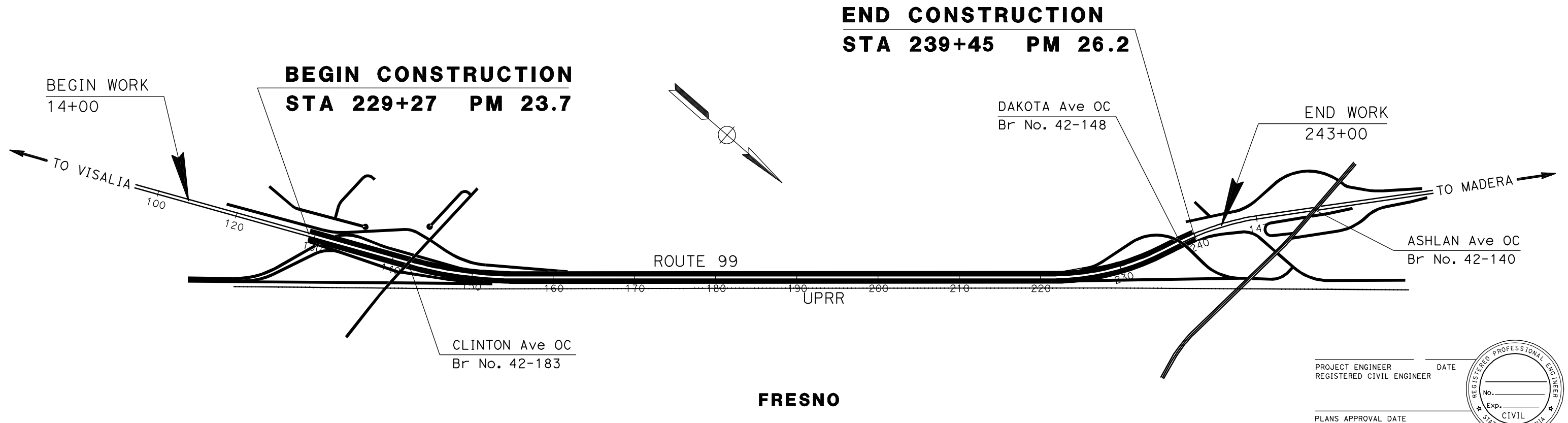


**INDEX OF PLANS**

T-1	TITLE SHEET
X-1 TO X-15	TYPICAL CROSS SECTIONS
K-1	KEYMAP
L-1 TO L-17	LAYOUT
P-1 TO P-27	PROFILE AND SUPERELEVATION
SC-1 TO SC-18	STAGE CONSTRUCTION
BR-1 TO BR-6	STRUCTURE PLANS

**CALIFORNIA HIGH SPEED RAIL AUTHORITY**  
**PROJECT PLANS FOR CONSTRUCTION ON**  
**STATE HIGHWAY**  
**IN THE CITY OF FRESNO**  
**0.5 MI SOUTH OF CLINTON AVENUE**  
**TO 0.2 MI SOUTH OF ASHLAN AVENUE**

TO BE SUPPLEMENTED BY STANDARD PLANS DATED MAY 2006



PROJECT ENGINEER \_\_\_\_\_ DATE \_\_\_\_\_  
 REGISTERED CIVIL ENGINEER  
 \_\_\_\_\_  
 PLANS APPROVAL DATE \_\_\_\_\_



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
 G. MANOREK  
 DRAWN BY  
 L. ROS  
 CHECKED BY  
 L. HEUSTON  
 IN CHARGE  
 J. MATSUI-DRURY  
 DATE  
 04/29/11

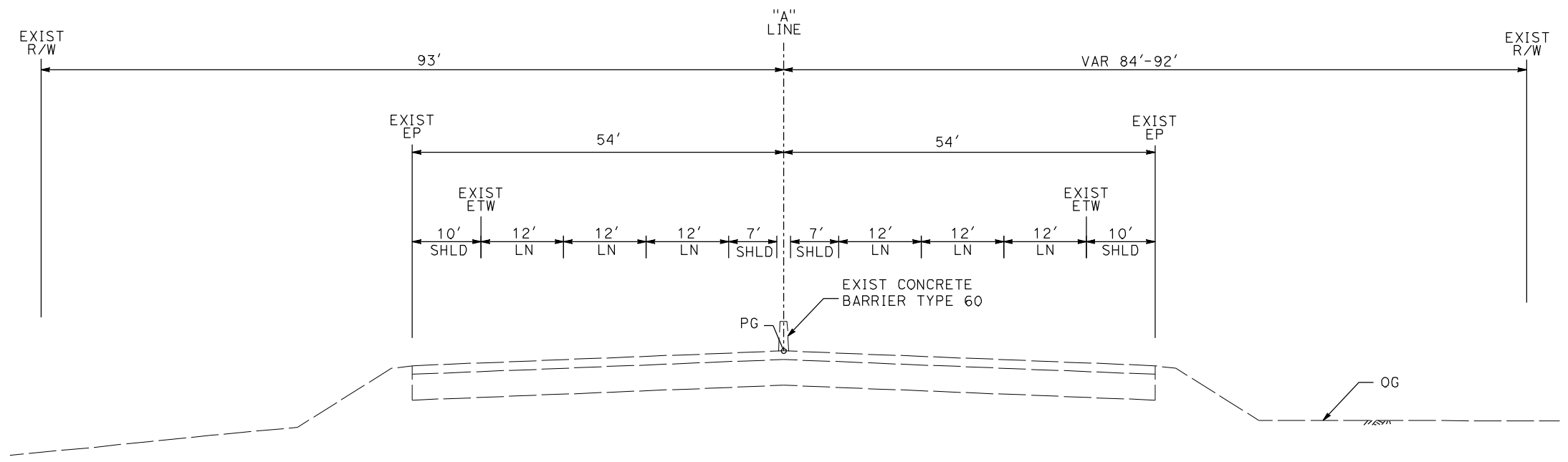
**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**  
  
**NOT FOR**  
**CONSTRUCTION**



**CALIFORNIA HIGH SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
**ROUTE 99 RE-ALIGNMENT**  
**TITLE**

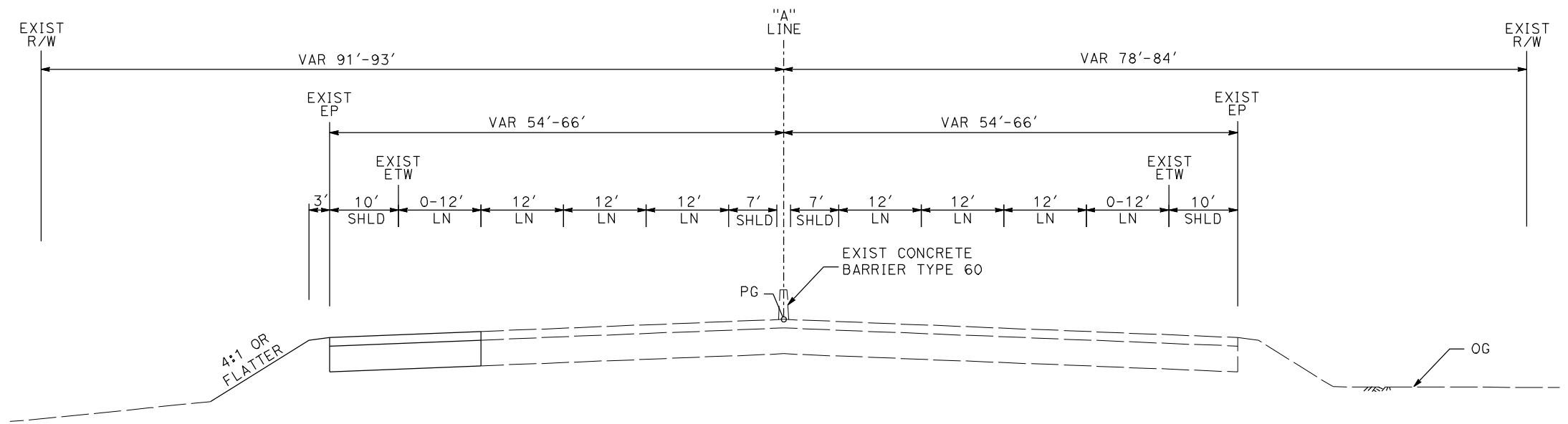
CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
**T-1**  
 SCALE  
 NO SCALE  
 SHEET NO.

DATE PLOTTED: 23-APR-2011



**SB 117+00 TO 117+40**

**NB 117+00 TO 119+55**



**SB 117+40 TO 123+40**

**NB 119+55 TO 123+15**

**ROUTE 99**

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
G. MANOREK  
DRAWN BY  
L. ROS  
CHECKED BY  
L. HEUSTON  
IN CHARGE  
J. MATSUI-DRURY  
DATE  
04/29/11

**RECORD SET  
15% DESIGN  
SUBMITTAL**

**NOT FOR  
CONSTRUCTION**

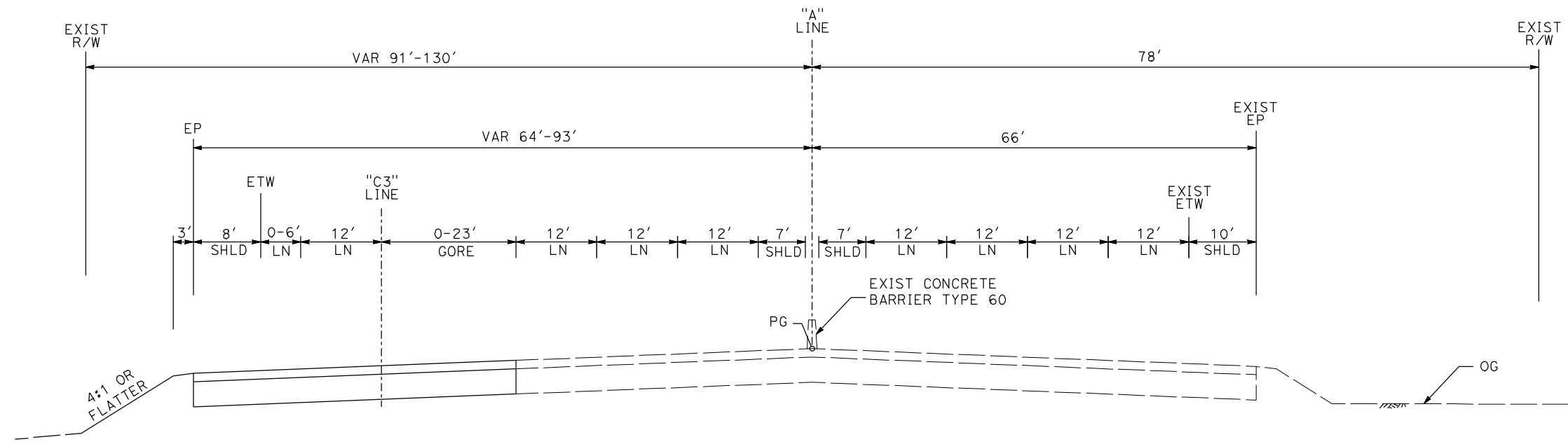


**CALIFORNIA HIGH SPEED TRAIN PROJECT  
MERCED TO FRESNO  
ROUTE 99 RE-ALIGNMENT  
TYPICAL CROSS SECTIONS**

CONTRACT NO.	HSR06-007
DRAWING NO.	<b>X-1</b>
SCALE	NO SCALE
SHEET NO.	

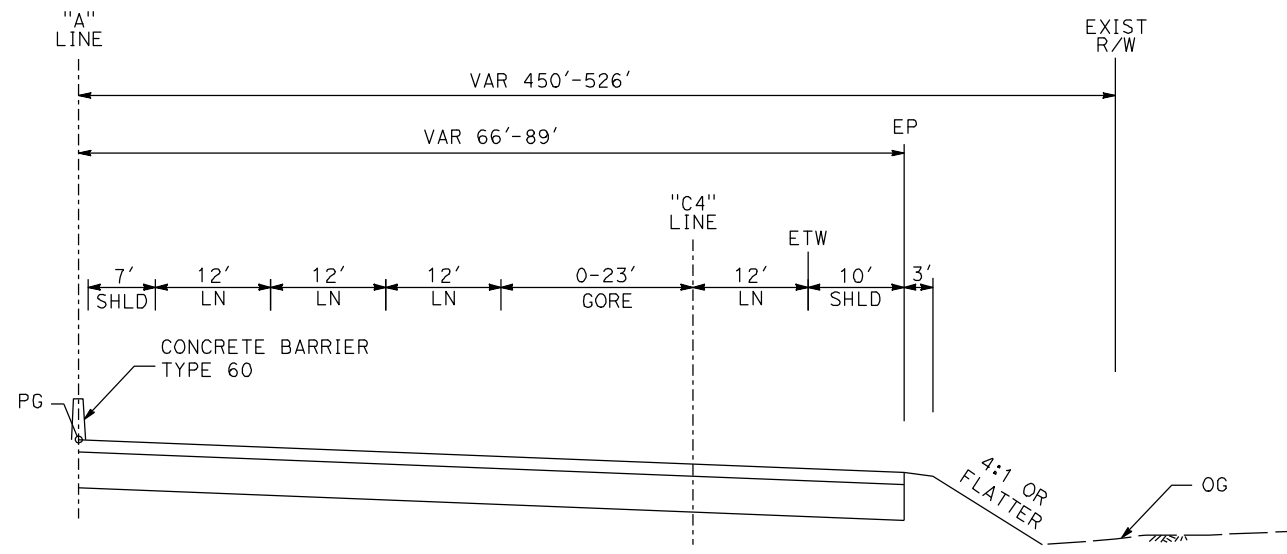
DATE PLOTTED => 26-APR-2011





**SB 123+40 TO 129+27**

**NB 123+15 TO 130+18**



**NB 130+18 TO 132+89**

**ROUTE 99**

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
G. MANOREK  
DRAWN BY  
L. ROS  
CHECKED BY  
L. HEUSTON  
IN CHARGE  
J. MATSUI-DRURY  
DATE  
04/29/11

**RECORD SET  
15% DESIGN  
SUBMITTAL**

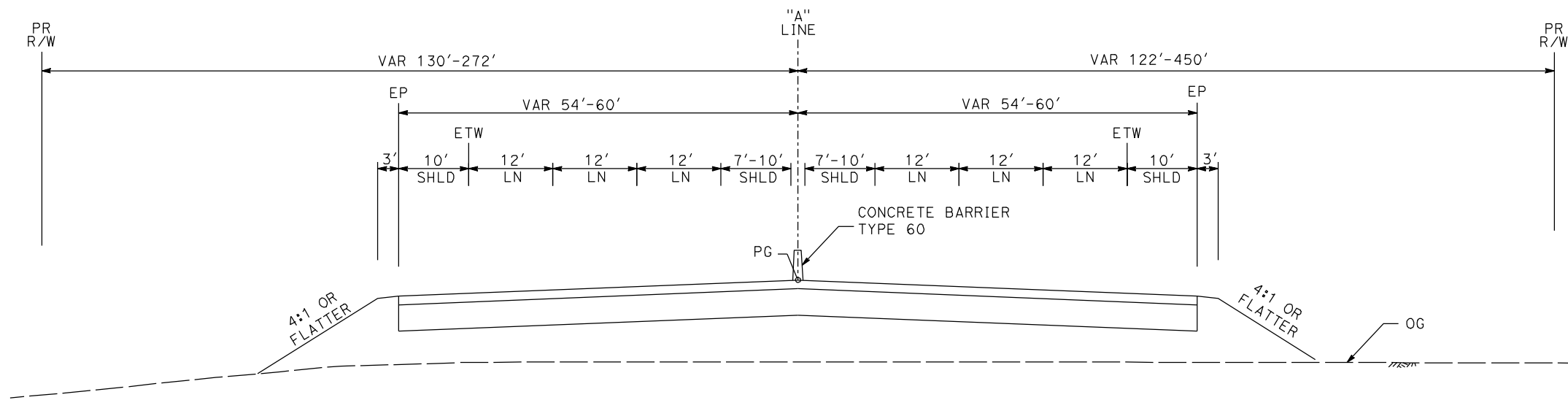
**NOT FOR  
CONSTRUCTION**



**CALIFORNIA HIGH SPEED TRAIN PROJECT  
MERCED TO FRESNO  
ROUTE 99 RE-ALIGNMENT  
TYPICAL CROSS SECTIONS**

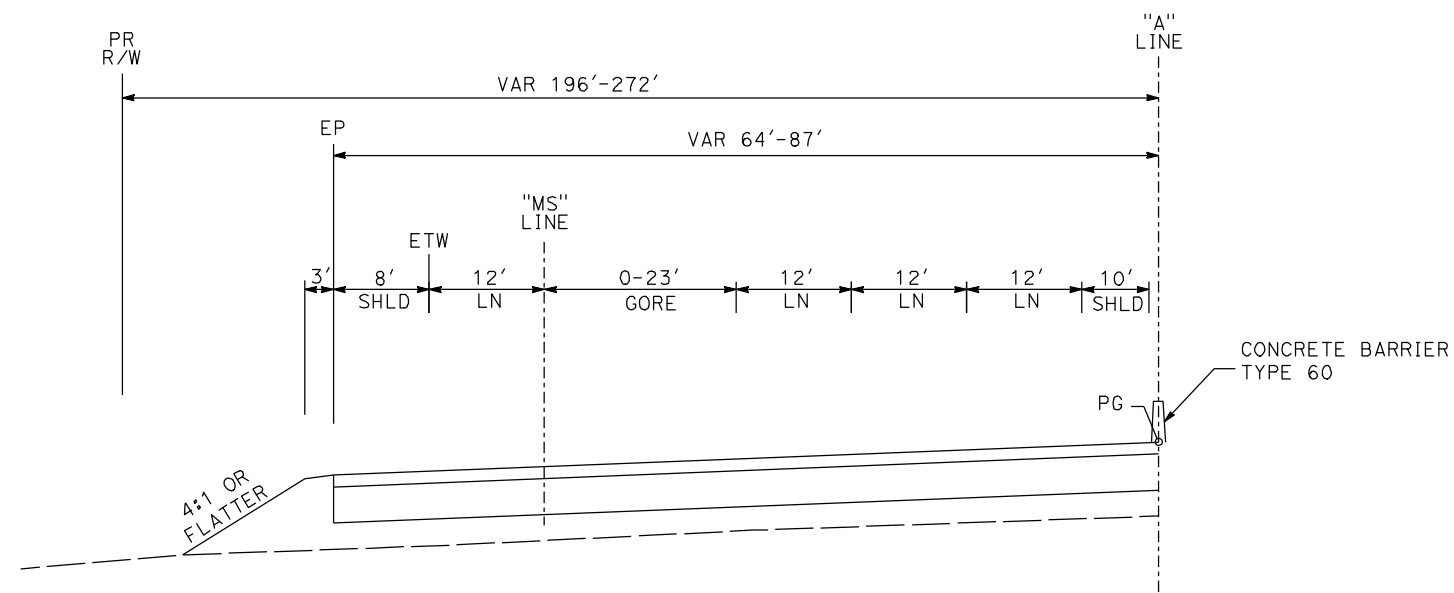
CONTRACT NO.  
HSR06-007  
DRAWING NO.  
**X-2**  
SCALE  
NO SCALE  
SHEET NO.

DATE PLOTTED => 26-APR-2011



SB 129+27 TO 146+07

NB 132+89 TO 152+18



SB 146+07 TO 148+79

ROUTE 99

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
G. MANOREK  
DRAWN BY  
L. ROS  
CHECKED BY  
L. HEUSTON  
IN CHARGE  
J. MATSUI-DRURY  
DATE  
04/29/11

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

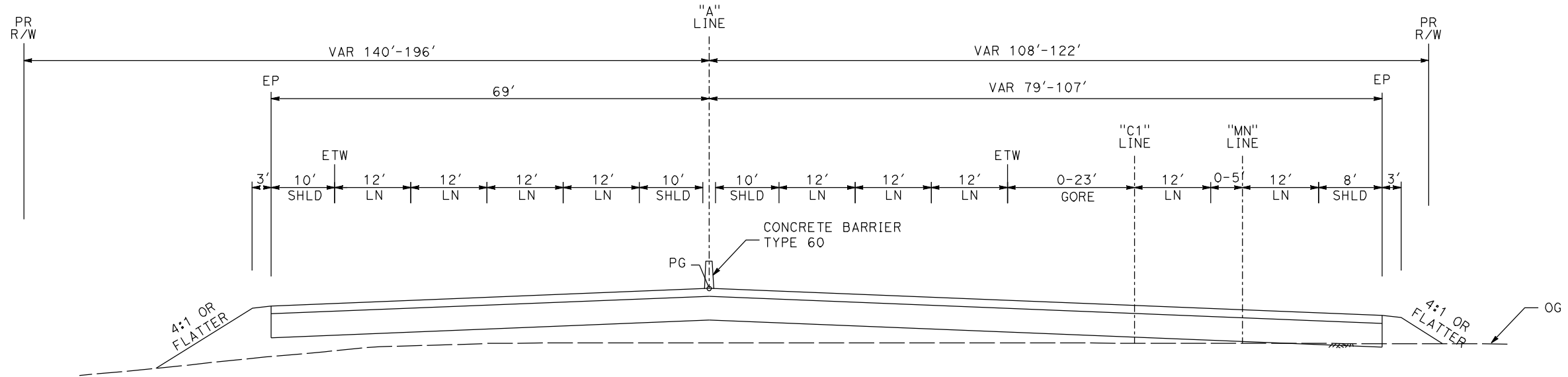


**CALIFORNIA HIGH SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
**ROUTE 99 RE-ALIGNMENT**  
**TYPICAL CROSS SECTIONS**

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
**X-3**  
SCALE  
NO SCALE  
SHEET NO.

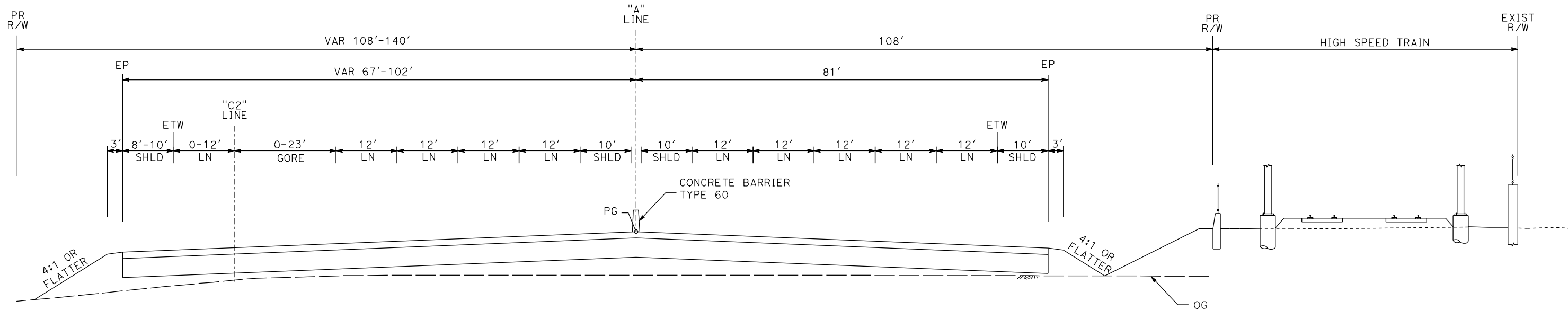
DATE PLOTTED => 26-APR-2011





**SB 148+79 TO 157+19**

**NB 152+18 TO 158+14**



**SB 157+19 TO 161+30**

**NB 152+18 TO 158+14**

**ROUTE 99**

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
G. MANOREK  
DRAWN BY  
L. ROS  
CHECKED BY  
L. HEUSTON  
IN CHARGE  
J. MATSUI-DRURY  
DATE  
04/29/11

**RECORD SET  
15% DESIGN  
SUBMITTAL**

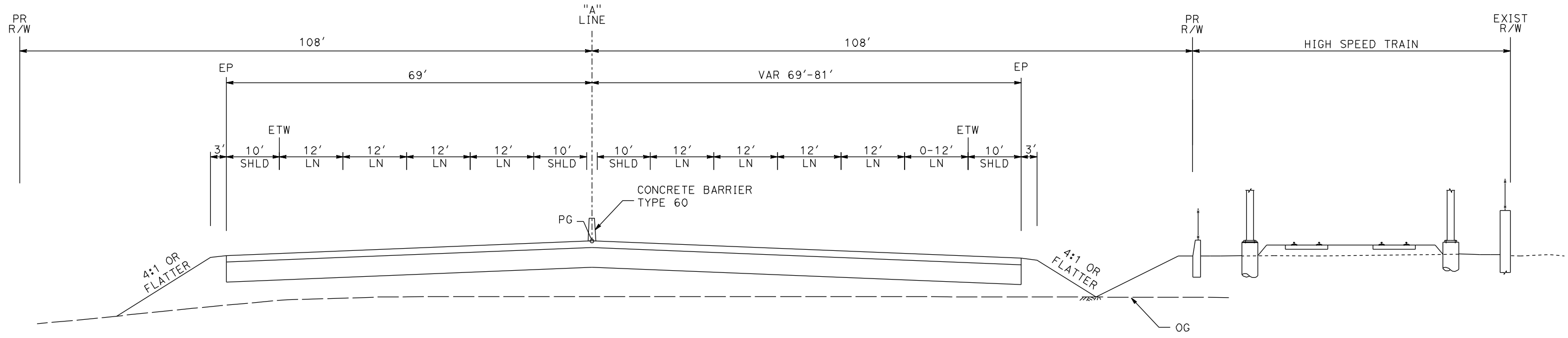
**NOT FOR  
CONSTRUCTION**



**CALIFORNIA HIGH SPEED TRAIN PROJECT  
MERCED TO FRESNO  
ROUTE 99 RE-ALIGNMENT  
TYPICAL CROSS SECTIONS**

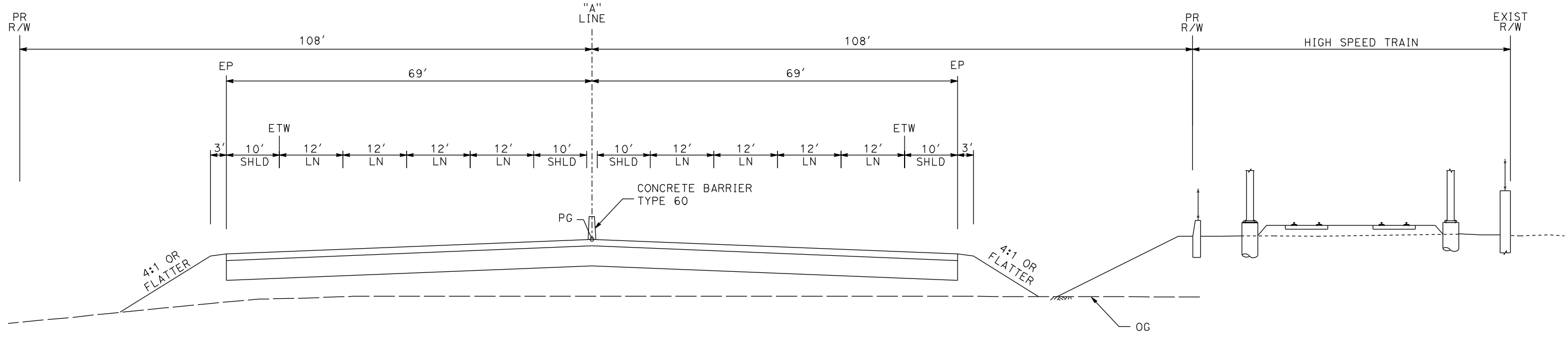
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HSR06-007  
DRAWING NO.  
**X-4**  
SCALE  
NO SCALE  
SHEET NO.

DATE PLOTTED => 26-APR-2011



SB 161+30 TO 164+14

NB 158+14 TO 164+14



SB 164+14 TO 220+00

NB 164+14 TO 220+80

ROUTE 99

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
G. MANOREK  
DRAWN BY  
L. ROS  
CHECKED BY  
L. HEUSTON  
IN CHARGE  
J. MATSUI-DRURY  
DATE  
04/29/11

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

**NOT FOR**  
**CONSTRUCTION**

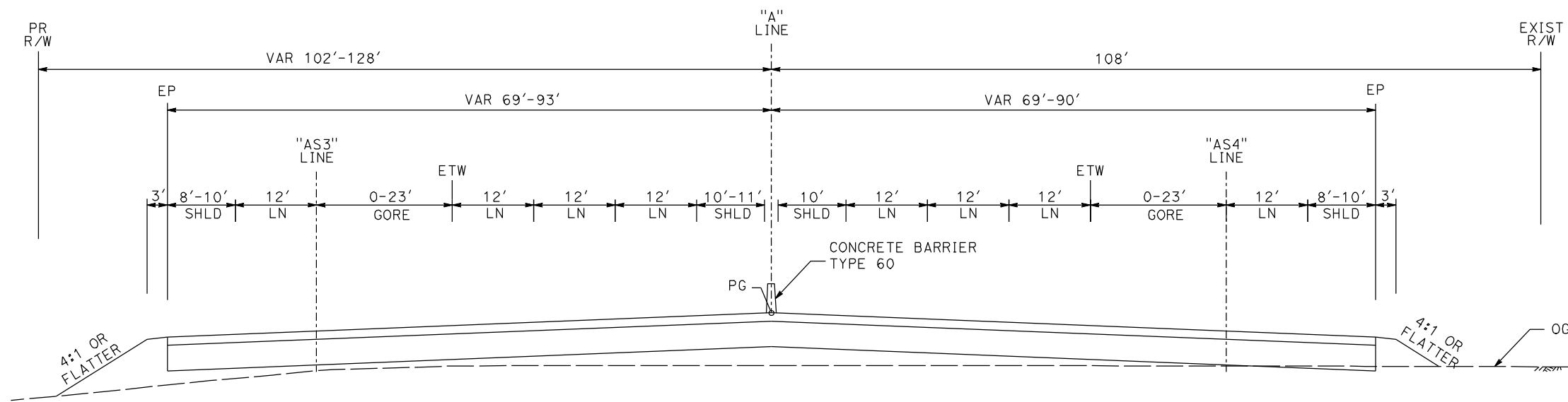


**CALIFORNIA HIGH SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
**ROUTE 99 RE-ALIGNMENT**  
**TYPICAL CROSS SECTIONS**

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
**X-5**  
SCALE  
NO SCALE  
SHEET NO.

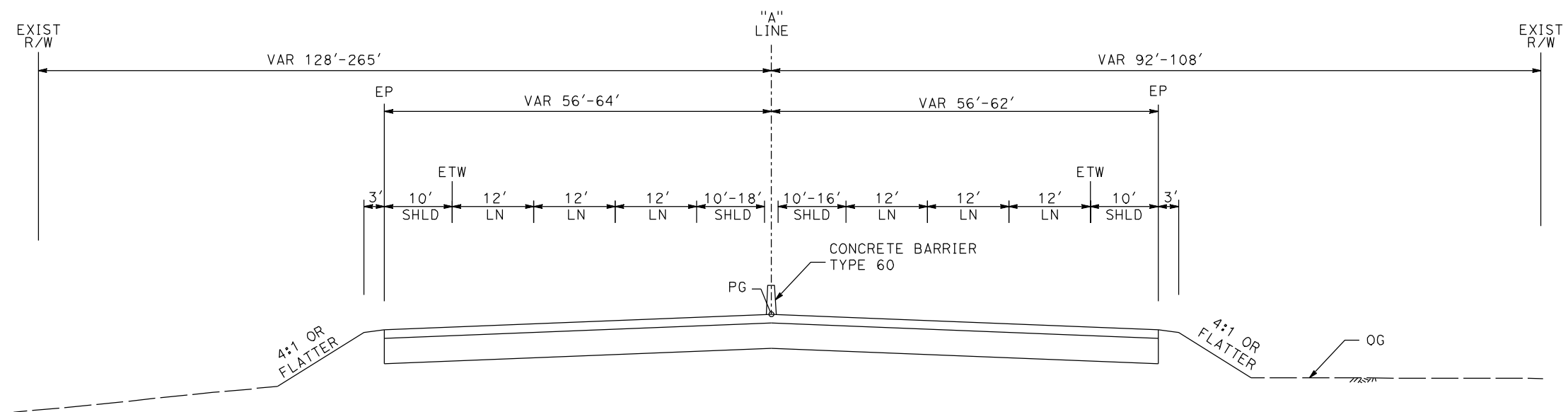
DATE PLOTTED: 23-APR-2011





**SB 220+00 TO 226+80**

**NB 220+80 TO 223+50**



**SB 226+80 TO 239+45**

**NB 223+50 TO 239+45**

**ROUTE 99**

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
G. MANOREK  
DRAWN BY  
L. ROS  
CHECKED BY  
L. HEUSTON  
IN CHARGE  
J. MATSUI-DRURY  
DATE  
04/29/11

**RECORD SET  
15% DESIGN  
SUBMITTAL**

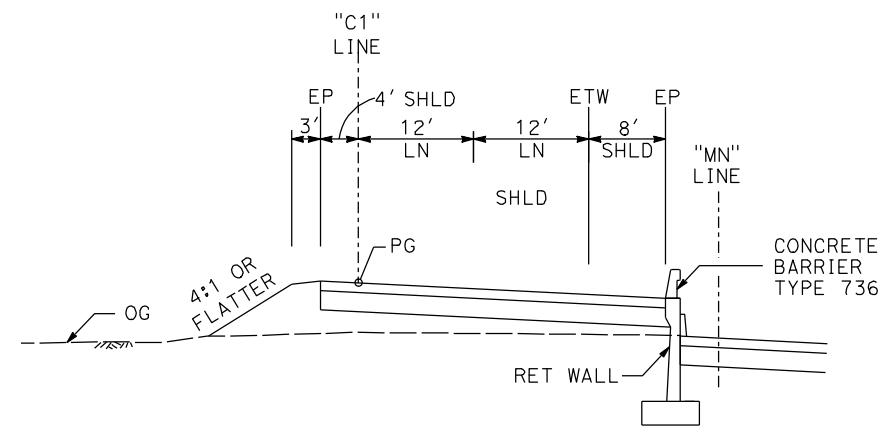
**NOT FOR  
CONSTRUCTION**



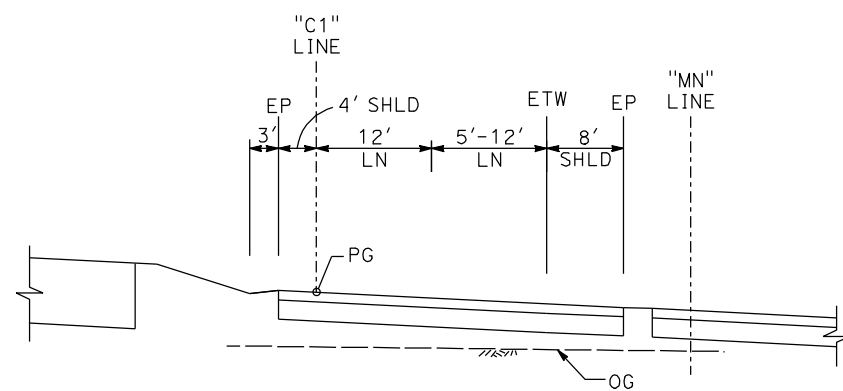
**CALIFORNIA HIGH SPEED TRAIN PROJECT  
MERCED TO FRESNO  
ROUTE 99 RE-ALIGNMENT  
TYPICAL CROSS SECTIONS**

CONTRACT NO.	HSR06-007
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SCALE	NO SCALE
SHEET NO.	

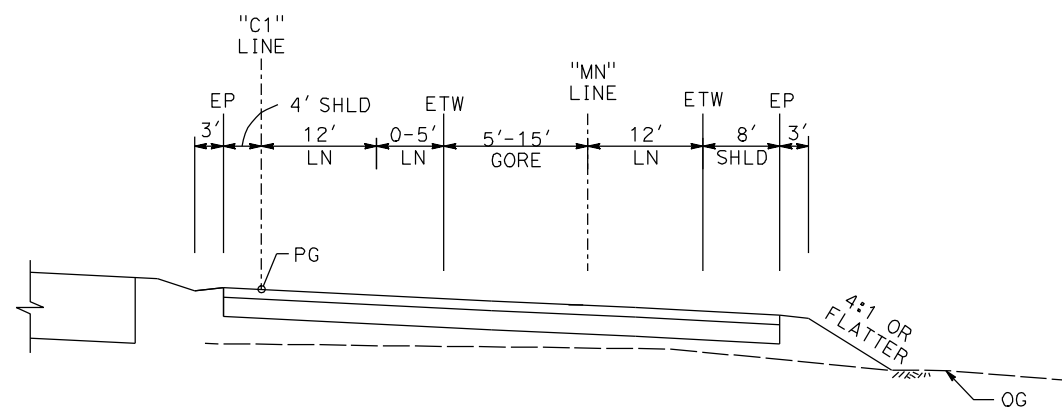
DATE PLOTTED => 26-APR-2011



**142+10 TO 1147+31**

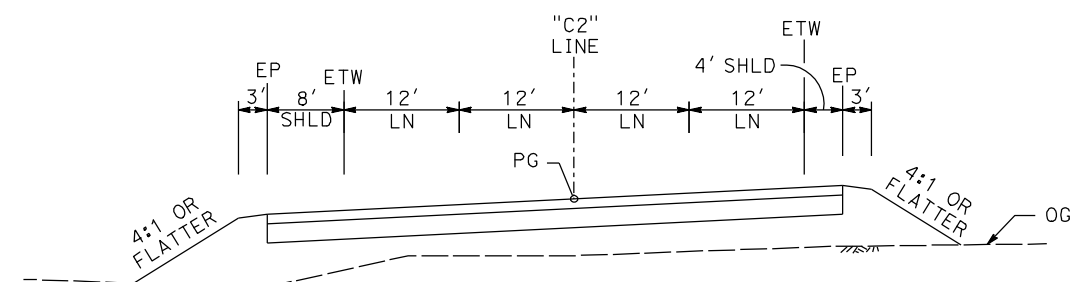


**147+31 TO 149+07**

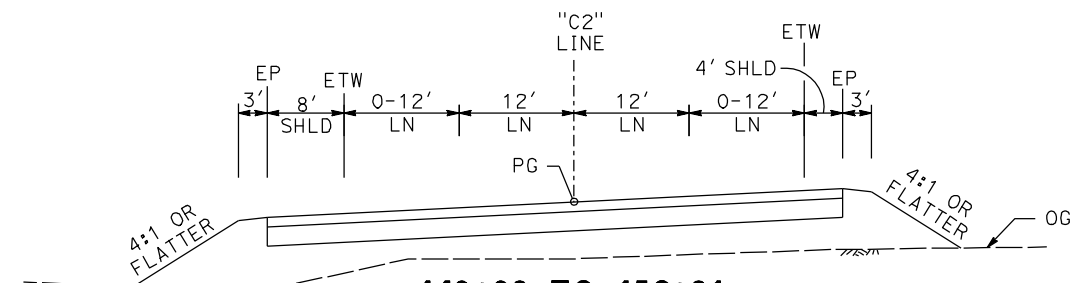


**149+07 TO 152+15**

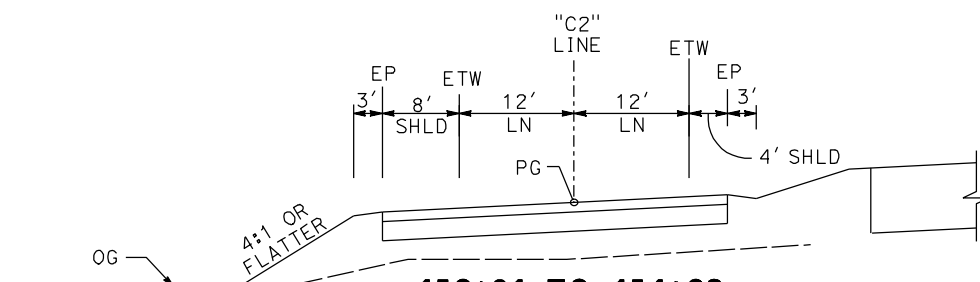
**C1 LINE  
(NB ON RAMP AT CLINTON AVE)**



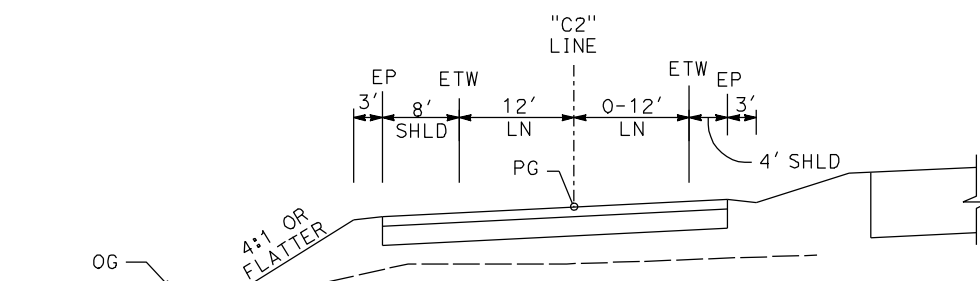
**144+66 TO 149+68**



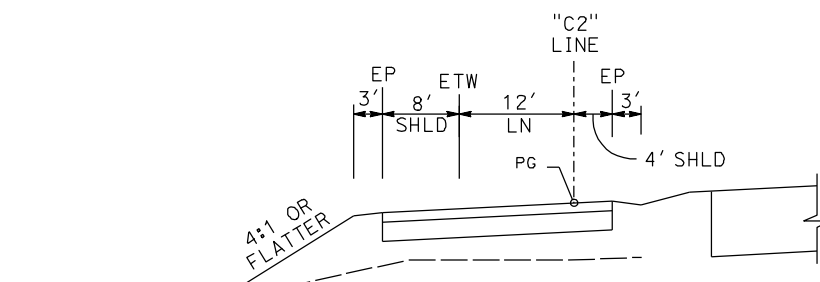
**149+68 TO 150+81**



**150+81 TO 154+32**



**154+32 TO 155+52**



**154+32 TO 155+52**

**C2 LINE  
(SB OFF RAMP AT CLINTON AVE)**

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
G. MANOREK  
DRAWN BY  
L. ROS  
CHECKED BY  
L. HEUSTON  
IN CHARGE  
J. MATSUI-DRURY  
DATE  
04/29/11

**RECORD SET  
15% DESIGN  
SUBMITTAL**

**NOT FOR  
CONSTRUCTION**

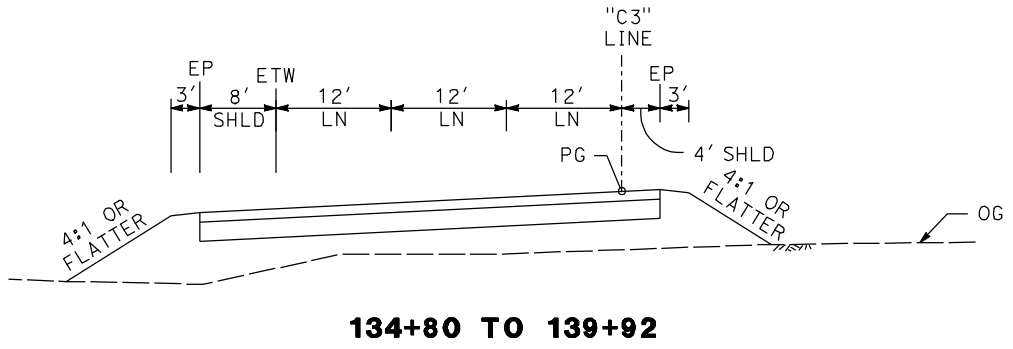
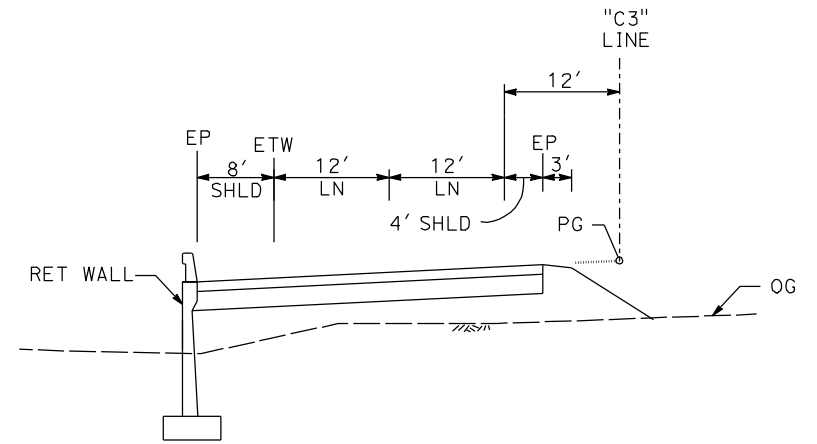
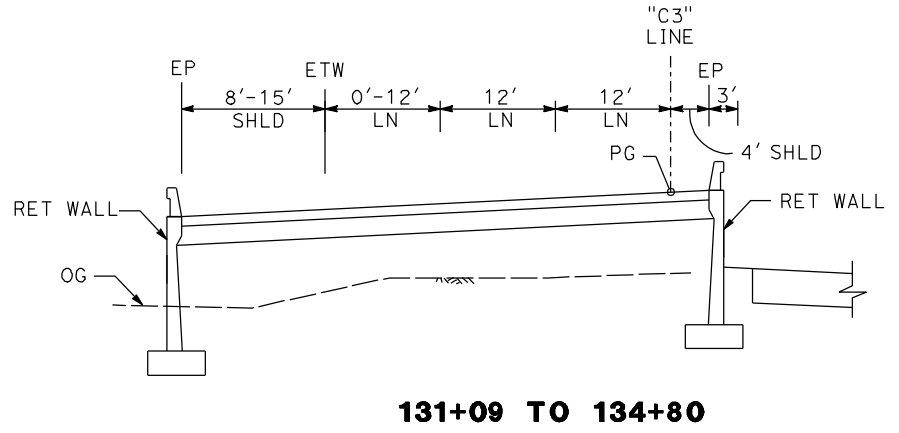
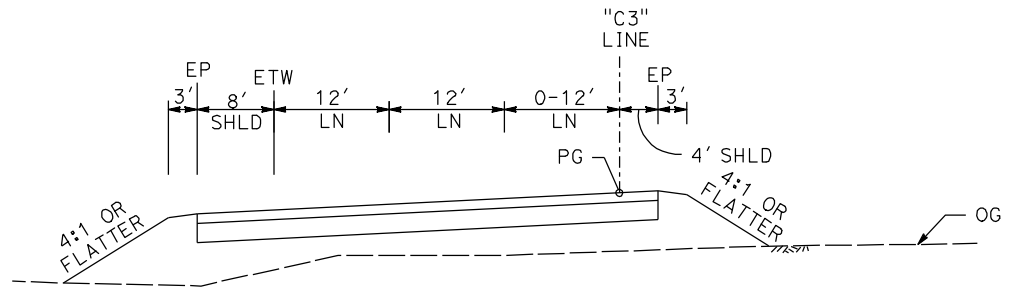
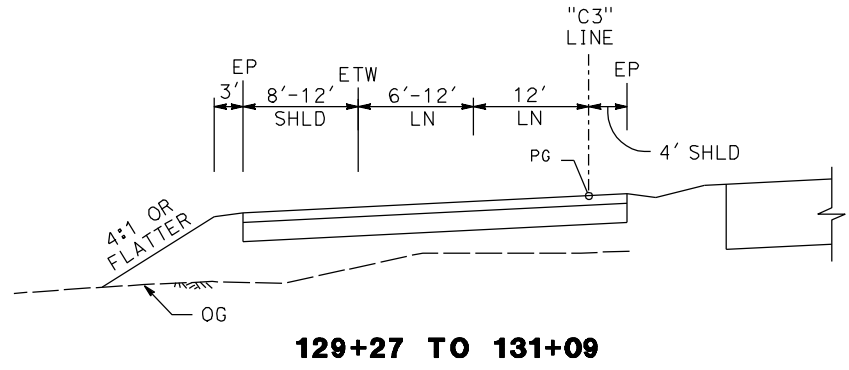


**CALIFORNIA HIGH SPEED TRAIN PROJECT  
MERCED TO FRESNO  
ROUTE 99 RE-ALIGNMENT  
TYPICAL CROSS SECTIONS**

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
**X-7**  
SCALE  
NO SCALE  
SHEET NO.

DATE PLOTTED: 23-APR-2011





**C3 LINE**  
(SB ON RAMP AT CLINTON AVE)

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
G. MANOREK  
DRAWN BY  
L. ROS  
CHECKED BY  
L. HEUSTON  
IN CHARGE  
J. MATSUI-DRURY  
DATE  
04/29/11

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

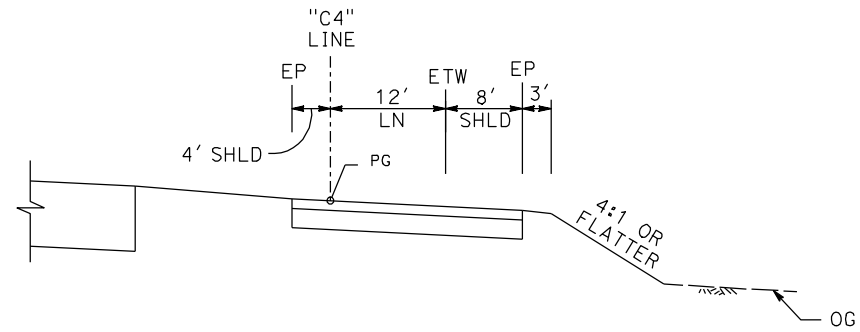
**NOT FOR**  
**CONSTRUCTION**



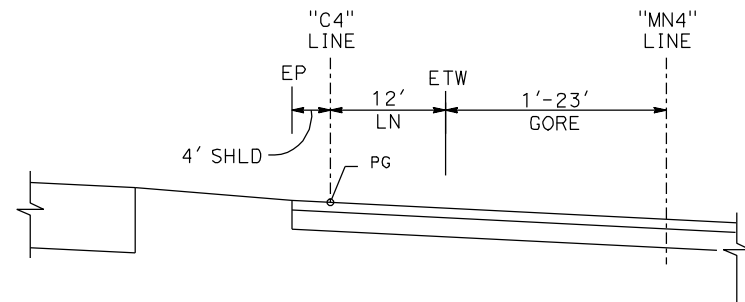
**CALIFORNIA HIGH SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
**ROUTE 99 RE-ALIGNMENT**  
**TYPICAL CROSS SECTIONS**

CONTRACT NO.	HSR06-007
DRAWING NO.	<b>X-8</b>
SCALE	NO SCALE
SHEET NO.	

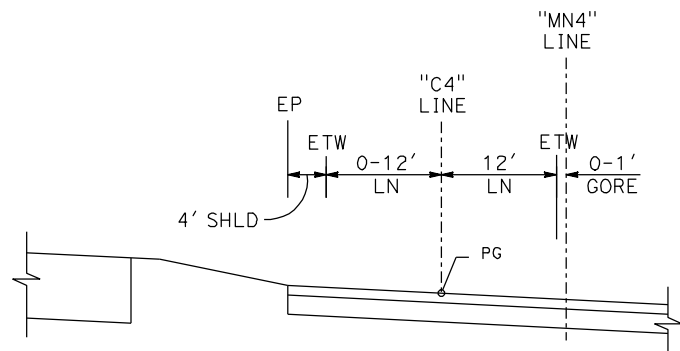
DATE PLOTTED => 26-APR-2011



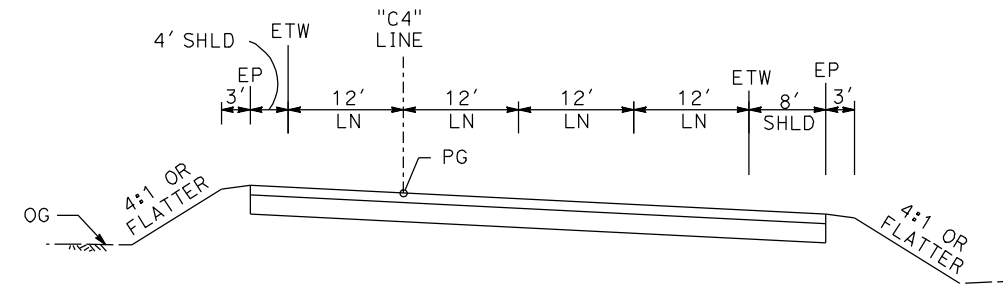
**132+89 TO 133+20**



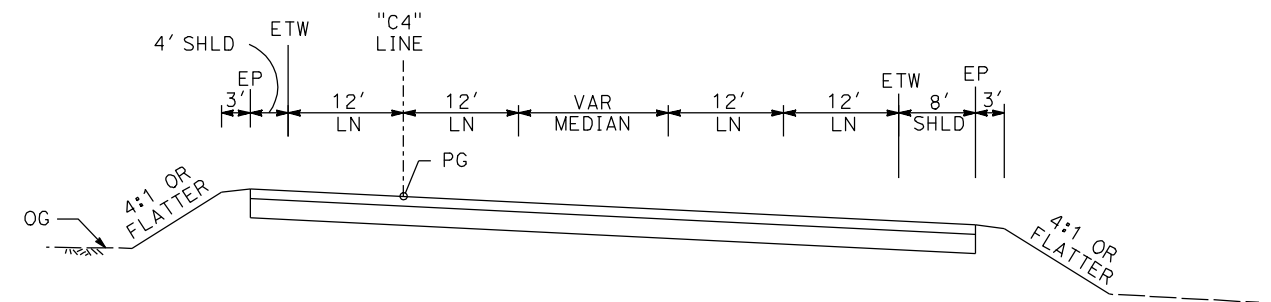
**133+20 TO 134+72**



**134+72 TO 135+92**



**135+92 TO 139+95**



**139+95 TO 141+12**

**C4 LINE  
(NB OFF RAMP AT CLINTON AVE)**

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
G. MANOREK  
DRAWN BY  
L. ROS  
CHECKED BY  
L. HEUSTON  
IN CHARGE  
J. MATSUI-DRURY  
DATE  
04/29/11

**RECORD SET  
15% DESIGN  
SUBMITTAL**

**NOT FOR  
CONSTRUCTION**

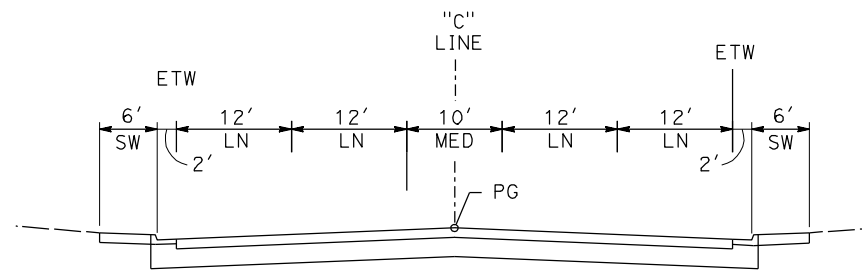


**CALIFORNIA HIGH SPEED TRAIN PROJECT  
MERCED TO FRESNO  
ROUTE 99 RE-ALIGNMENT  
TYPICAL CROSS SECTIONS**

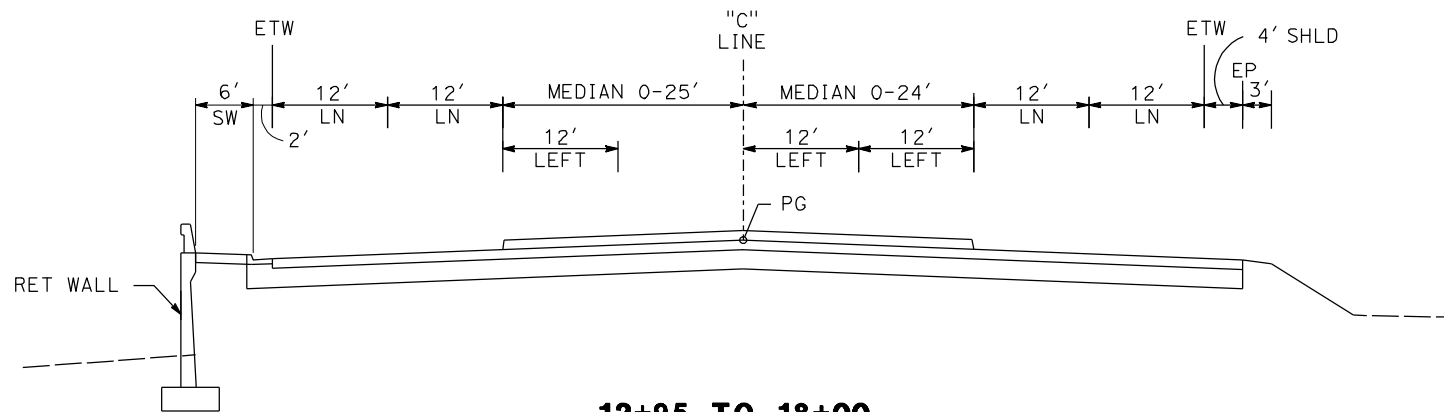
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HSR06-007  
DRAWING NO.  
**X-9**  
SCALE  
NO SCALE  
SHEET NO.

DATE PLOTTED: 23-APR-2011

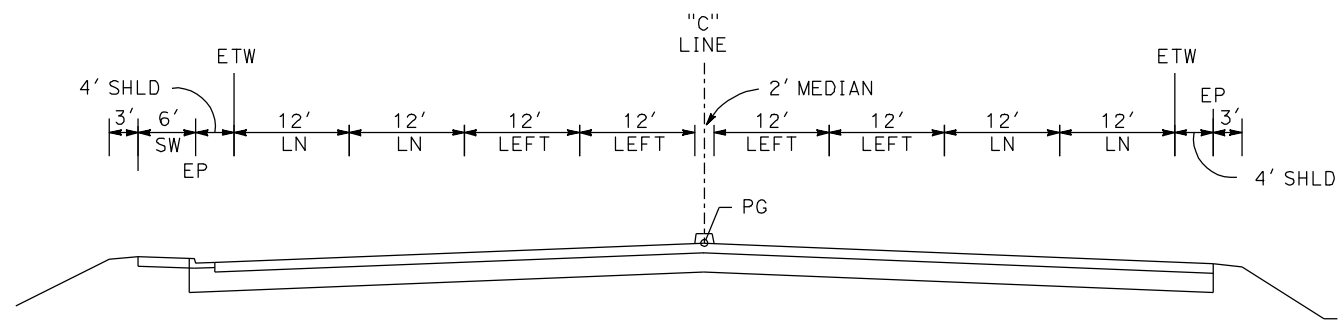




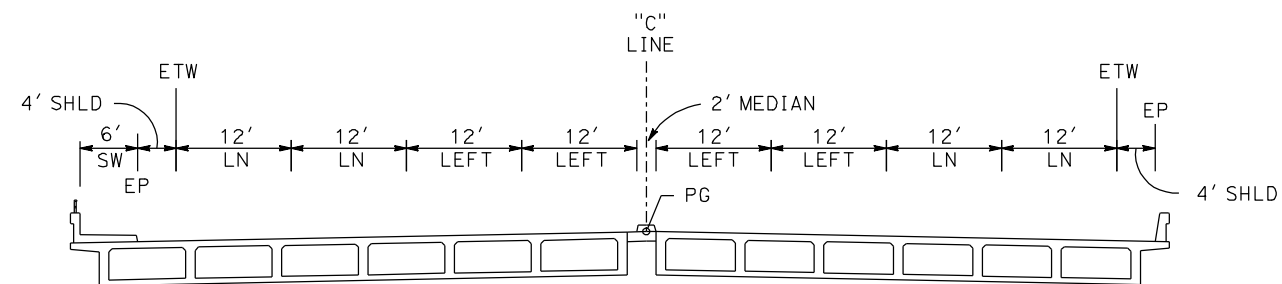
**10+00 TO 12+95**



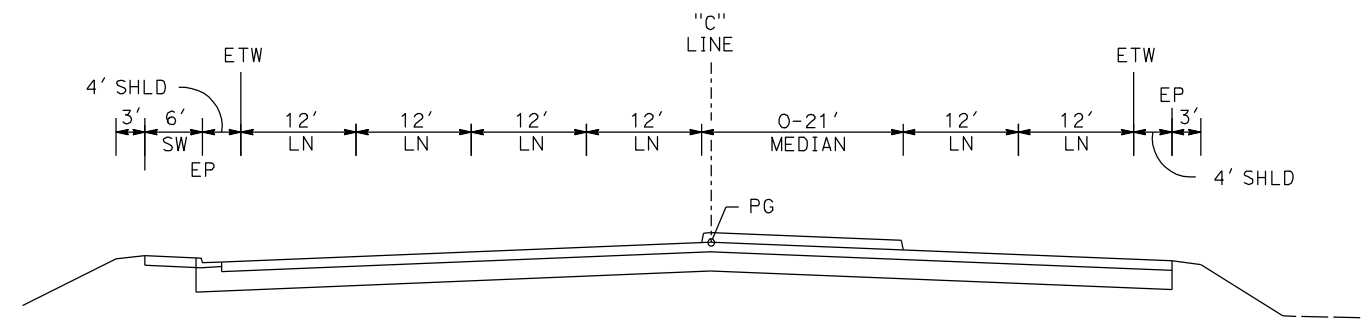
**12+95 TO 18+00**



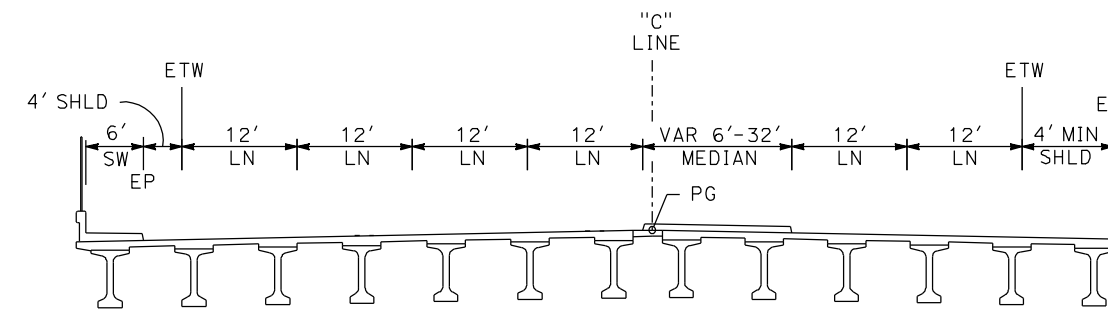
**18+00 TO 19+66**



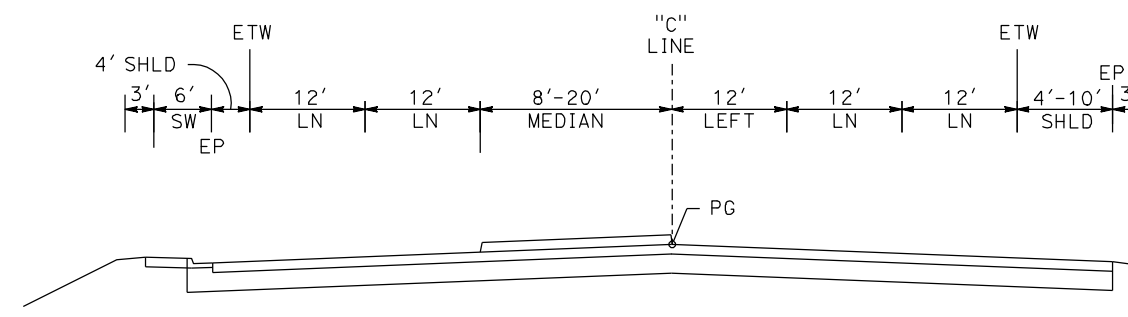
**19+66 TO 22+49  
CLINTON AVE OC**



**22+49 TO 24+08**



**24+08 TO 27+98  
FREPNO YARD OH**



**27+98 TO 34+18**

**CLINTON AVE**

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
G. MANOREK  
DRAWN BY  
L. ROS  
CHECKED BY  
L. HEUSTON  
IN CHARGE  
J. MATSUI-DRURY  
DATE  
04/29/11

**RECORD SET  
15% DESIGN  
SUBMITTAL**

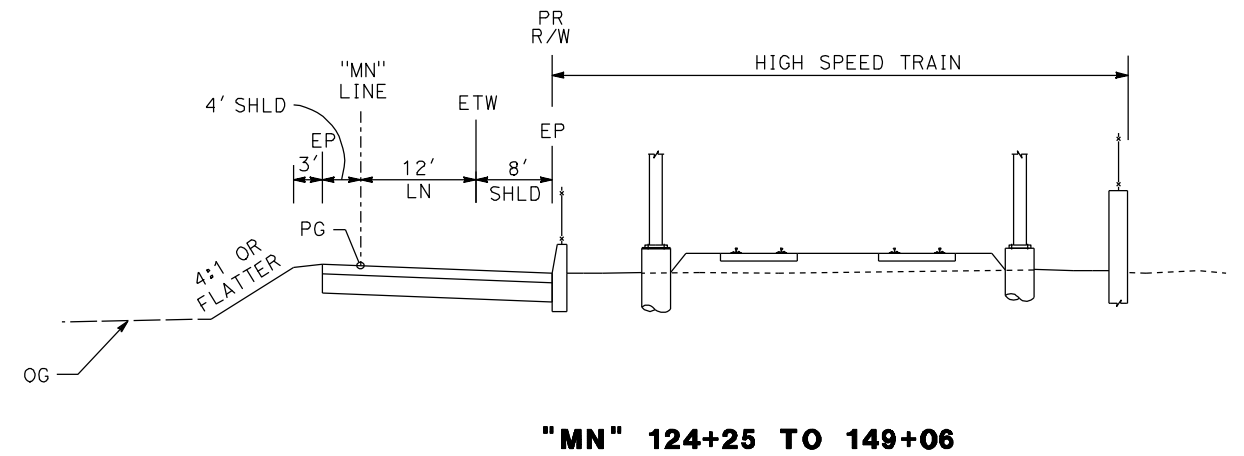
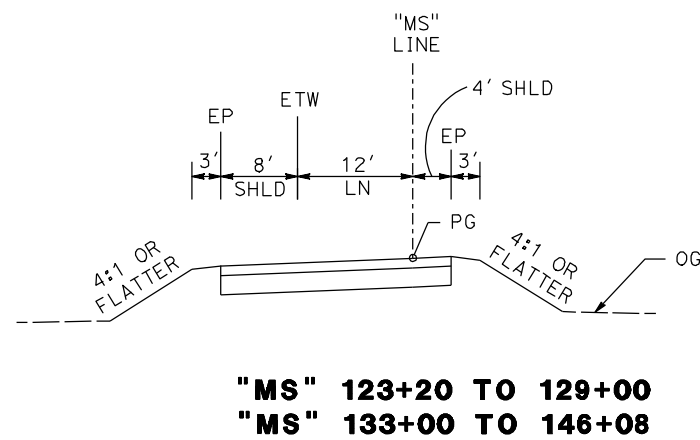
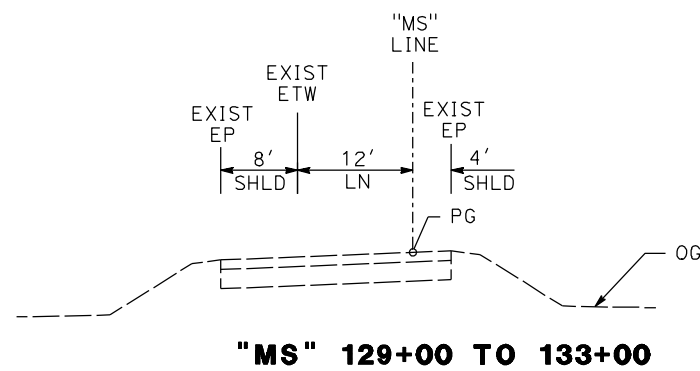
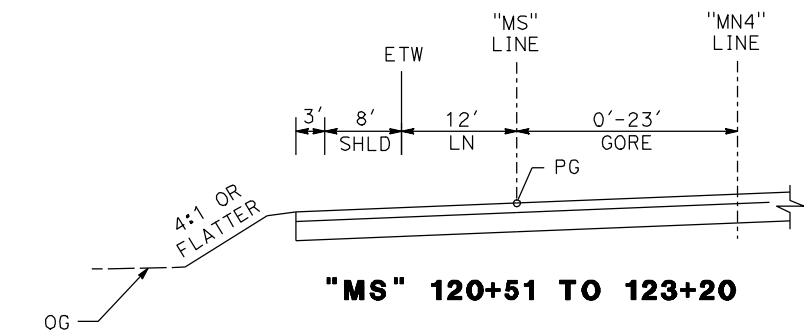
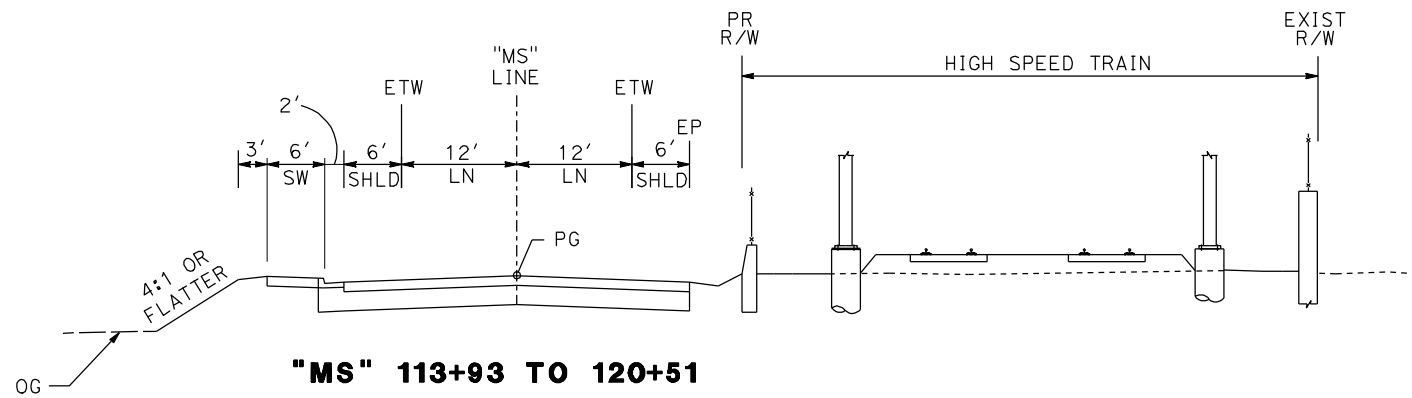
**NOT FOR  
CONSTRUCTION**



**CALIFORNIA HIGH SPEED TRAIN PROJECT  
MERCED TO FRESNO  
ROUTE 99 RE-ALIGNMENT  
TYPICAL CROSS SECTIONS**

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
**X-10**  
SCALE  
NO SCALE  
SHEET NO.

DATE PLOTTED: 23-APR-2011



**GOLDEN STATE BLVD**

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
G. MANOREK  
 DRAWN BY  
L. ROS  
 CHECKED BY  
L. HEUSTON  
 IN CHARGE  
J. MATSUI-DRURY  
 DATE  
04/29/11

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

**NOT FOR**  
**CONSTRUCTION**

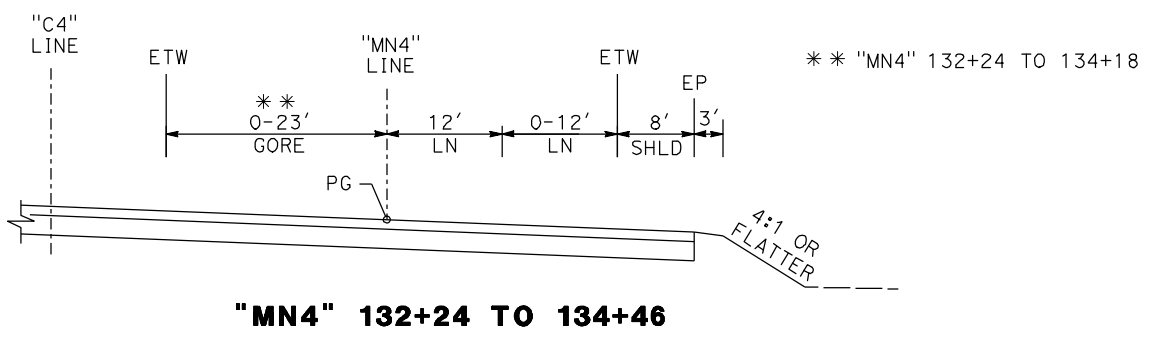
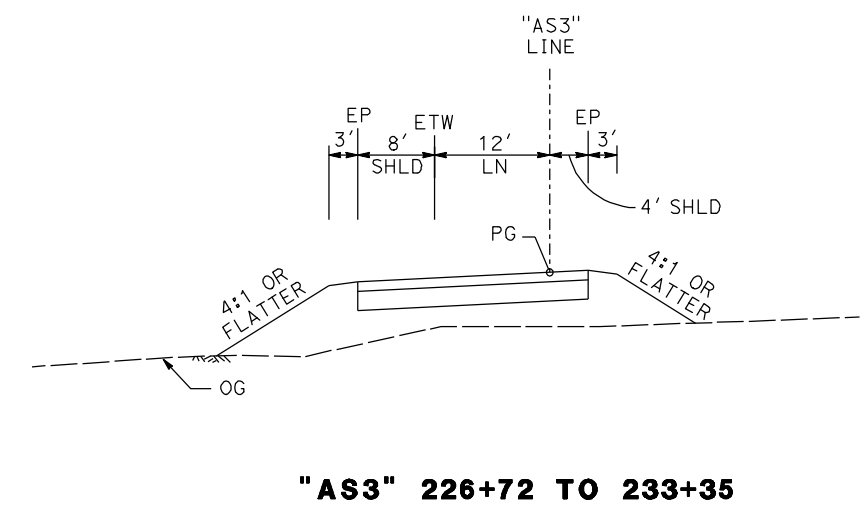
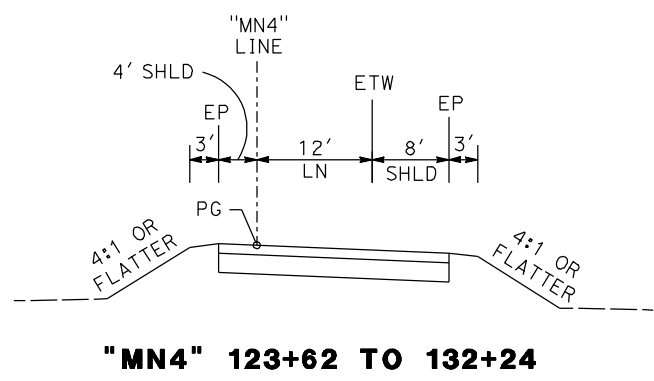
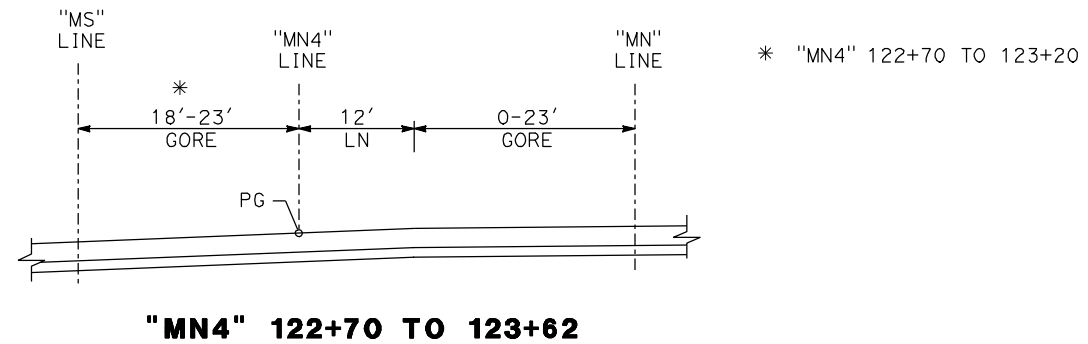
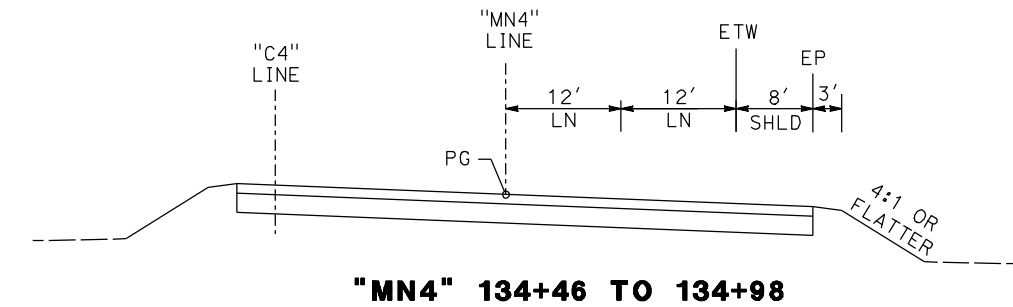
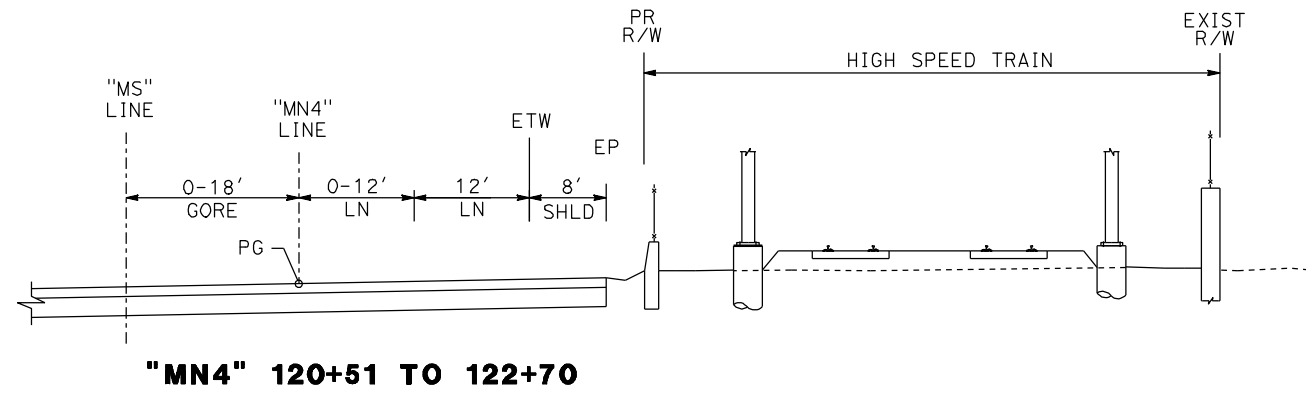


**CALIFORNIA HIGH SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
**ROUTE 99 RE-ALIGNMENT**  
**TYPICAL CROSS SECTIONS**

CONTRACT NO.  
HSR06-007  
 DRAWING NO.  
**X-11**  
 SCALE  
NO SCALE  
 SHEET NO.

DATE PLOTTED => 26-APR-2011





**MN4 LINE  
(GOLDEN STATE BLVD NB OFF RAMP AT)**

**AS3 LINE  
(SB ON RAMP AT ASHLAN AVE)**

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
G. MANOREK  
DRAWN BY  
L. ROS  
CHECKED BY  
L. HEUSTON  
IN CHARGE  
J. MATSUI-DRURY  
DATE  
04/29/11

**RECORD SET  
15% DESIGN  
SUBMITTAL**

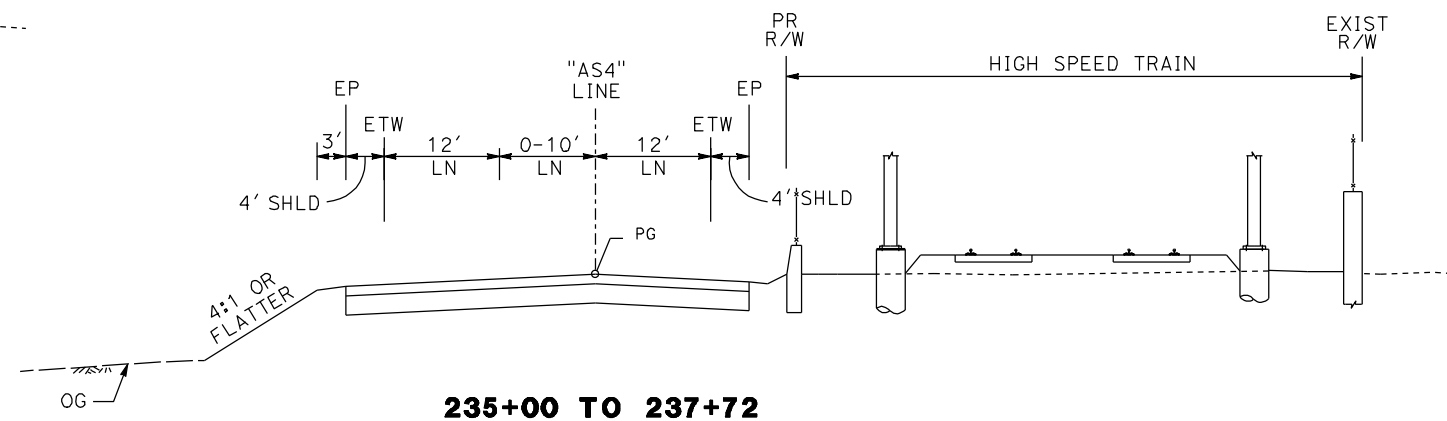
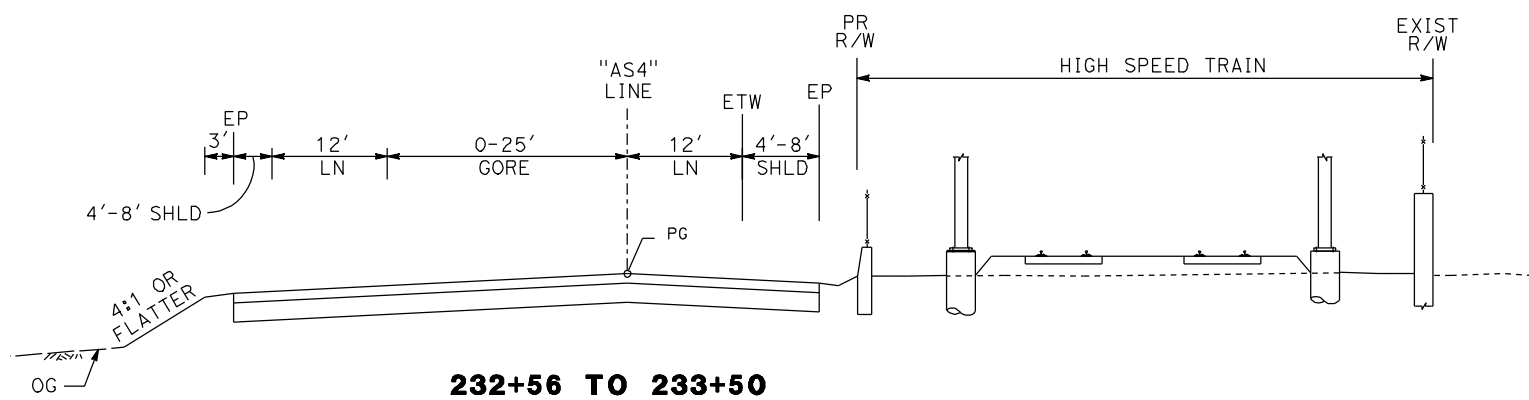
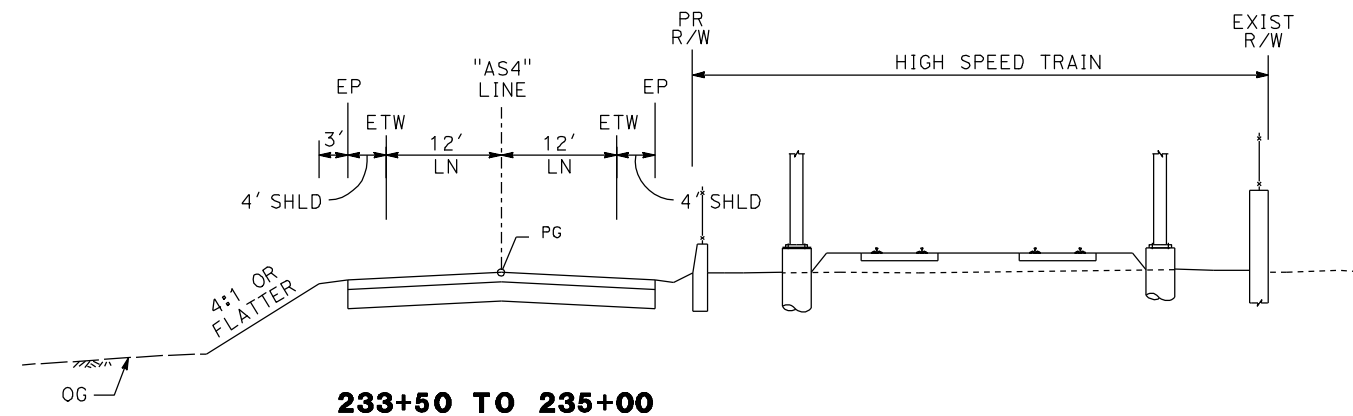
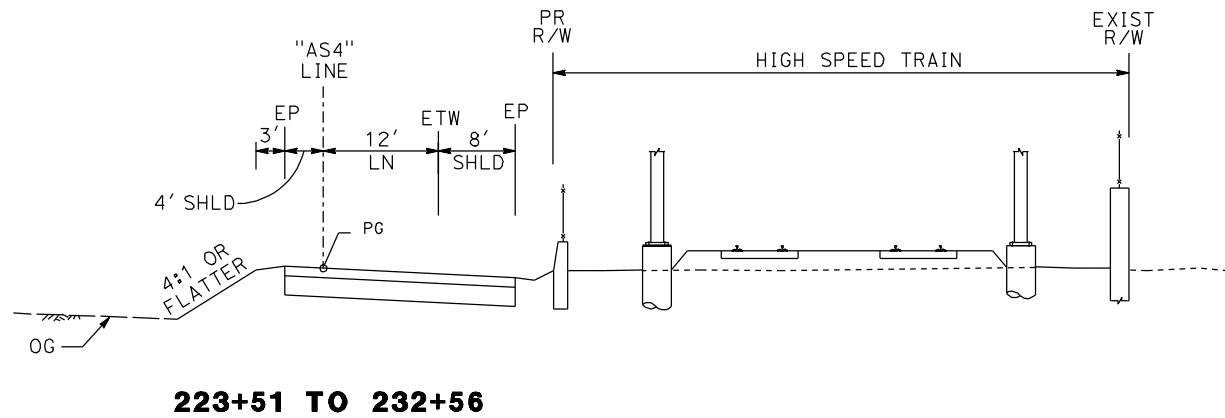
**NOT FOR  
CONSTRUCTION**



**CALIFORNIA HIGH SPEED TRAIN PROJECT  
MERCED TO FRESNO  
ROUTE 99 RE-ALIGNMENT  
TYPICAL CROSS SECTIONS**

CONTRACT NO.	HSR06-007
DRAWING NO.	<b>X-12</b>
SCALE	NO SCALE
SHEET NO.	

DATE PLOTTED: 23 APR 2011



**AS4 LINE  
(NB OFF RAMP AT ASHLAN AVE)**

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
G. MANOREK  
DRAWN BY  
L. ROS  
CHECKED BY  
L. HEUSTON  
IN CHARGE  
J. MATSUI-DRURY  
DATE  
04/29/11

**RECORD SET  
15% DESIGN  
SUBMITTAL**

**NOT FOR  
CONSTRUCTION**

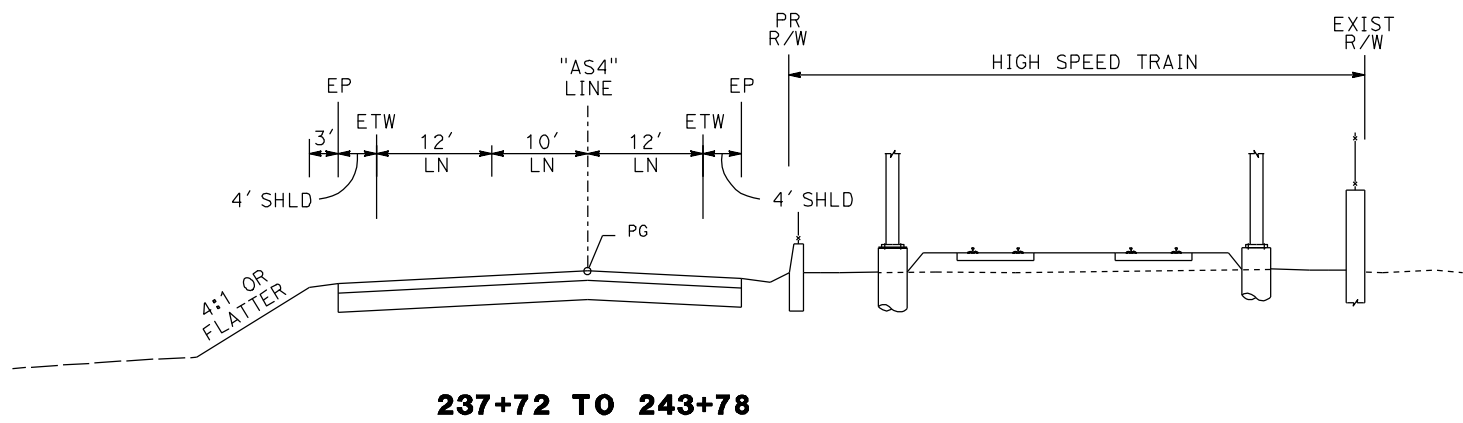


**CALIFORNIA HIGH SPEED TRAIN PROJECT  
MERCED TO FRESNO  
ROUTE 99 RE-ALIGNMENT  
TYPICAL CROSS SECTIONS**

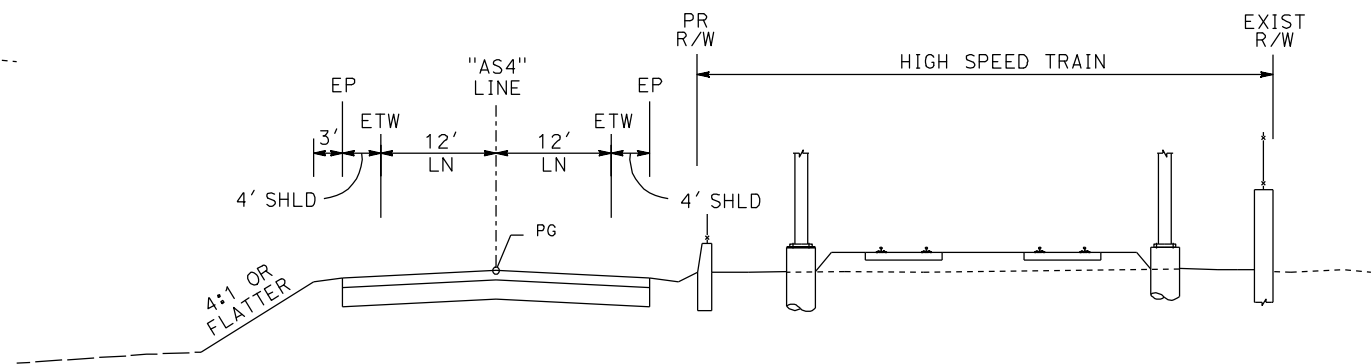
CONTRACT NO.  
HSR06-007  
DRAWING NO.  
**X-13**  
SCALE  
NO SCALE  
SHEET NO.

DATE PLOTTED => 26-APR-2011

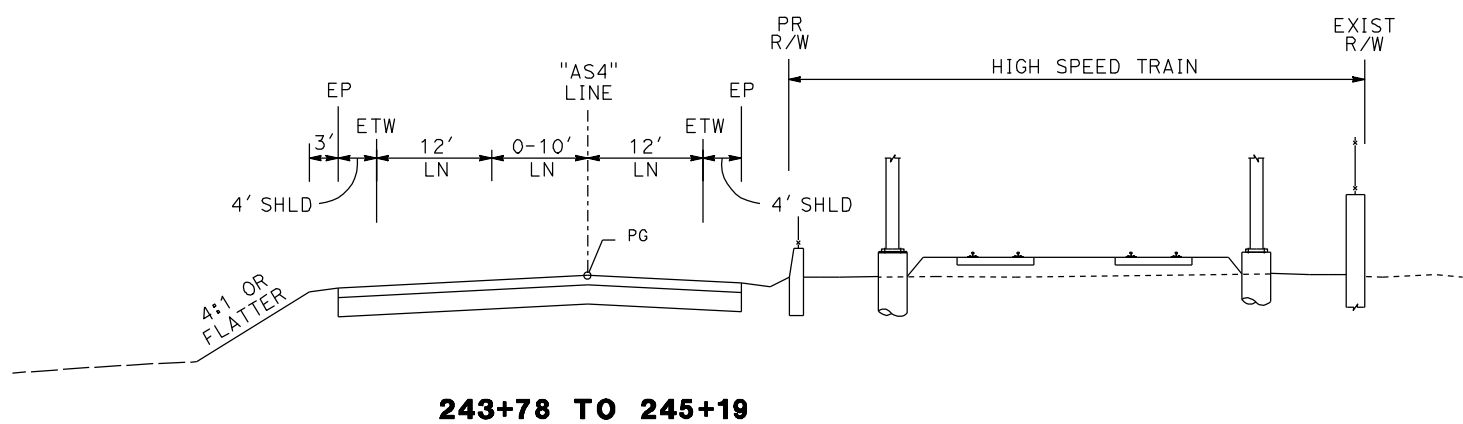




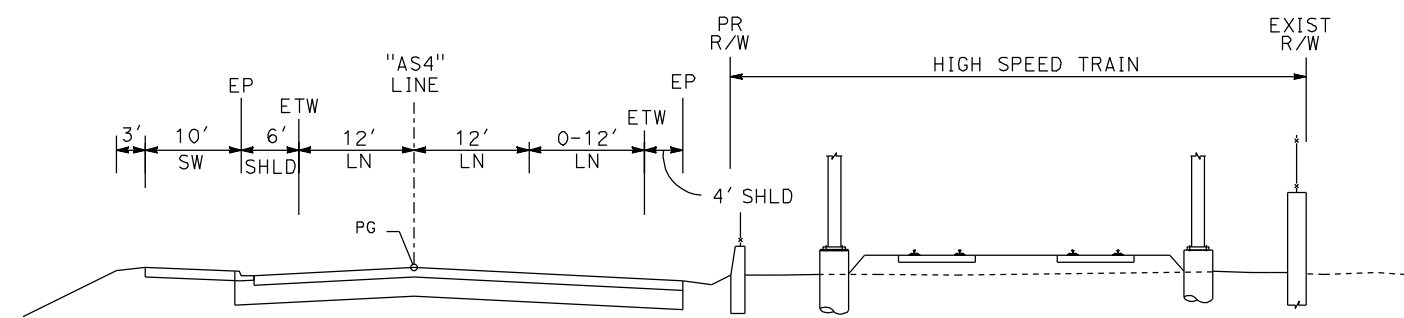
**237+72 TO 243+78**



**245+19 TO 249+52**



**243+78 TO 245+19**



**245+19 TO 249+52**

**AS4 LINE  
(NB OFF RAMP AT ASHLAN AVE)**

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
G. MANOREK  
DRAWN BY  
L. ROS  
CHECKED BY  
L. HEUSTON  
IN CHARGE  
J. MATSUI-DRURY  
DATE  
04/29/11

**RECORD SET  
15% DESIGN  
SUBMITTAL**

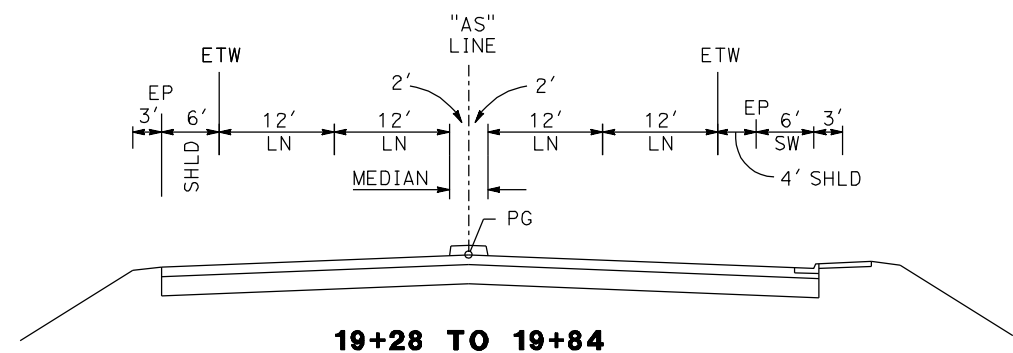
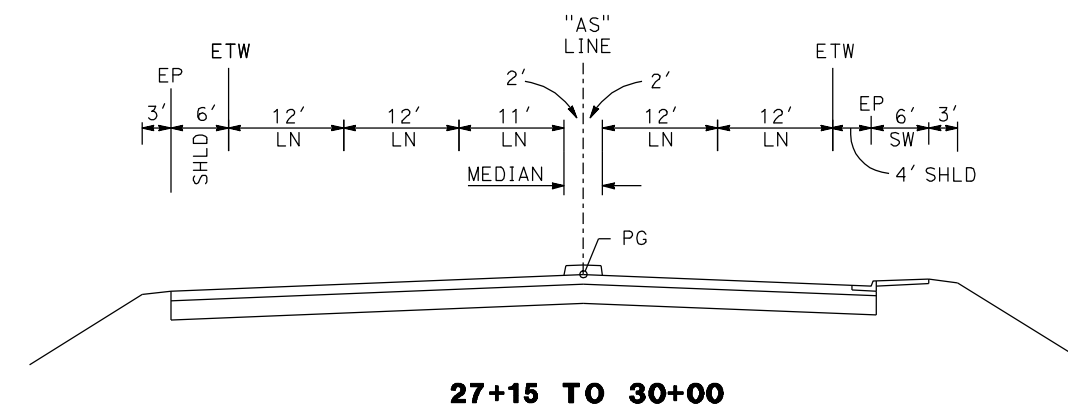
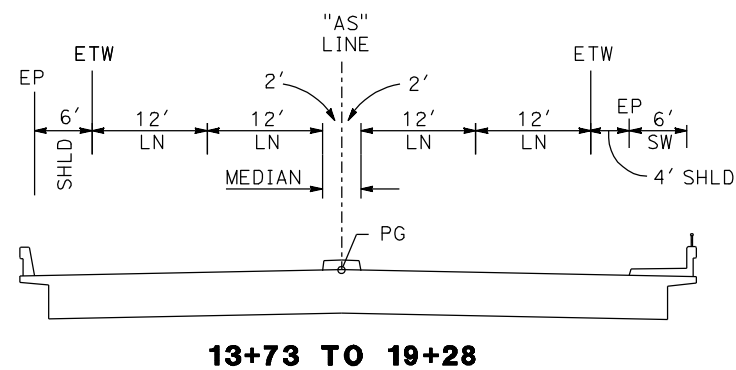
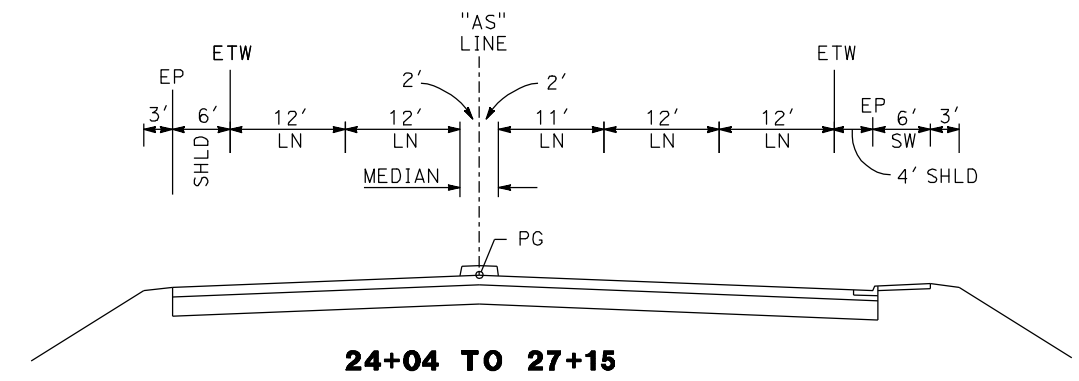
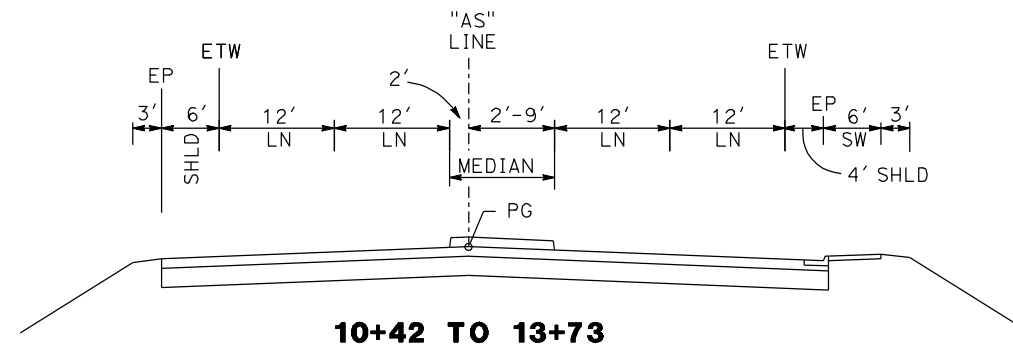
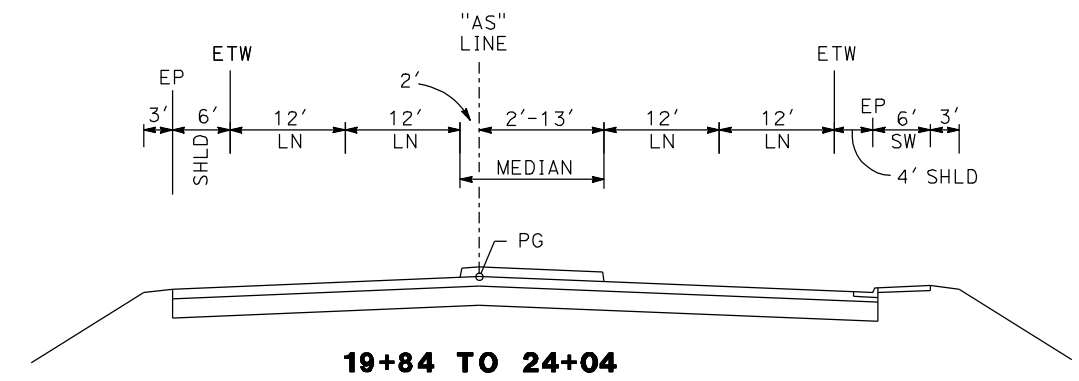
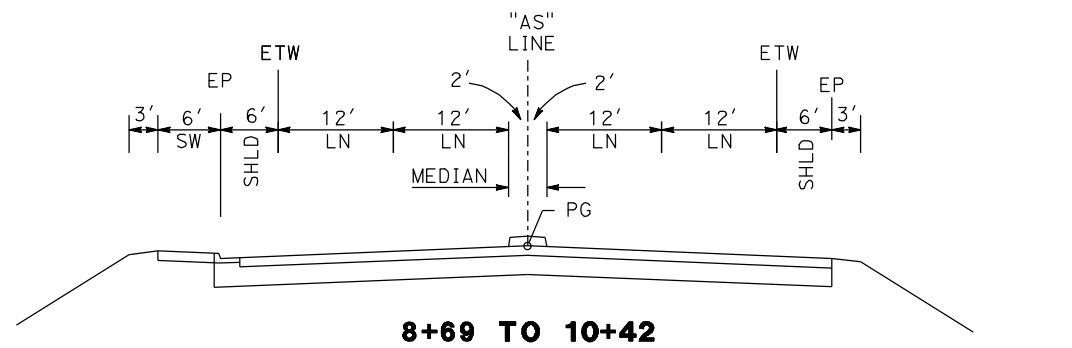
**NOT FOR  
CONSTRUCTION**



**CALIFORNIA HIGH SPEED TRAIN PROJECT  
MERCED TO FRESNO  
ROUTE 99 RE-ALIGNMENT  
TYPICAL CROSS SECTIONS**

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
**X-14**  
SCALE  
NO SCALE  
SHEET NO.

DATE PLOTTED => 26-APR-2011



**ASHLAN AVE**

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
G. MANOREK  
DRAWN BY  
L. ROS  
CHECKED BY  
L. HEUSTON  
IN CHARGE  
J. MATSUI-DRURY  
DATE  
04/29/11

**RECORD SET  
15% DESIGN  
SUBMITTAL**

**NOT FOR  
CONSTRUCTION**

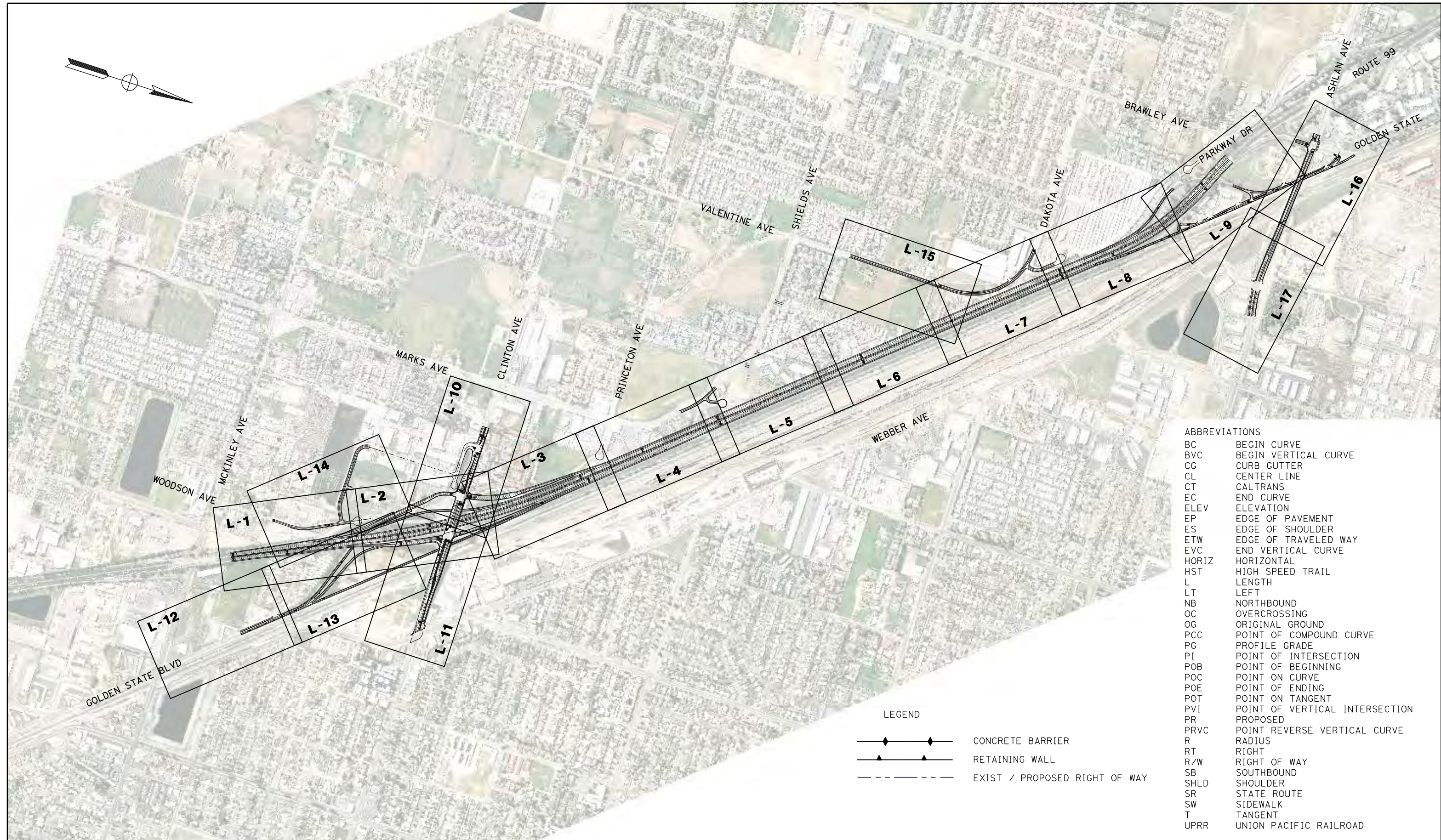
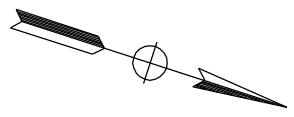


**CALIFORNIA HIGH SPEED TRAIN PROJECT  
MERCED TO FRESNO  
ROUTE 99 RE-ALIGNMENT  
TYPICAL CROSS SECTIONS**

CONTRACT NO.	HSR06-007
DRAWING NO.	<b>X-15</b>
SCALE	NO SCALE
SHEET NO.	

DATE PLOTTED: 03/26/11





**ABBREVIATIONS**

BC	BEGIN CURVE
BVC	BEGIN VERTICAL CURVE
CG	CURB GUTTER
CL	CENTER LINE
CT	CALTRANS
EC	END CURVE
ELEV	ELEVATION
EP	EDGE OF PAVEMENT
ES	EDGE OF SHOULDER
ETW	EDGE OF TRAVELED WAY
EVC	END VERTICAL CURVE
HORIZ	HORIZONTAL
HST	HIGH SPEED TRAIN
L	LENGTH
LT	LEFT
NB	NORTHBOUND
OC	OVERCROSSING
OG	ORIGINAL GROUND
PCC	POINT OF COMPOUND CURVE
PG	PROFILE GRADE
PI	POINT OF INTERSECTION
POB	POINT OF BEGINNING
POC	POINT ON CURVE
POE	POINT OF ENDING
POT	POINT ON TANGENT
PVI	POINT OF VERTICAL INTERSECTION
PR	PROPOSED
PRVC	POINT REVERSE VERTICAL CURVE
R	RADIUS
RT	RIGHT
R/W	RIGHT OF WAY
SB	SOUTHBOUND
SHLD	SHOULDER
SR	STATE ROUTE
SW	SIDEWALK
T	TANGENT
UPRR	UNION PACIFIC RAILROAD

**LEGEND**

	CONCRETE BARRIER
	RETAINING WALL
	EXIST / PROPOSED RIGHT OF WAY

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
G. MANOREK  
DRAWN BY  
L. ROS  
CHECKED BY  
L. HEUSTON  
IN CHARGE  
J. MATSUI-DRURY  
DATE  
04/29/11

**RECORD SET  
15% DESIGN  
SUBMITTAL**

**NOT FOR  
CONSTRUCTION**

**AECOM**  
Technical Services, Inc.  
2020 L Street, Suite 300  
Sacramento, CA 95811

**CH2MHILL**

**CALIFORNIA**  
HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH SPEED TRAIN PROJECT**

**MERCED TO FRESNO**

**ROUTE 99 RE-ALIGNMENT**

**KEY MAP**

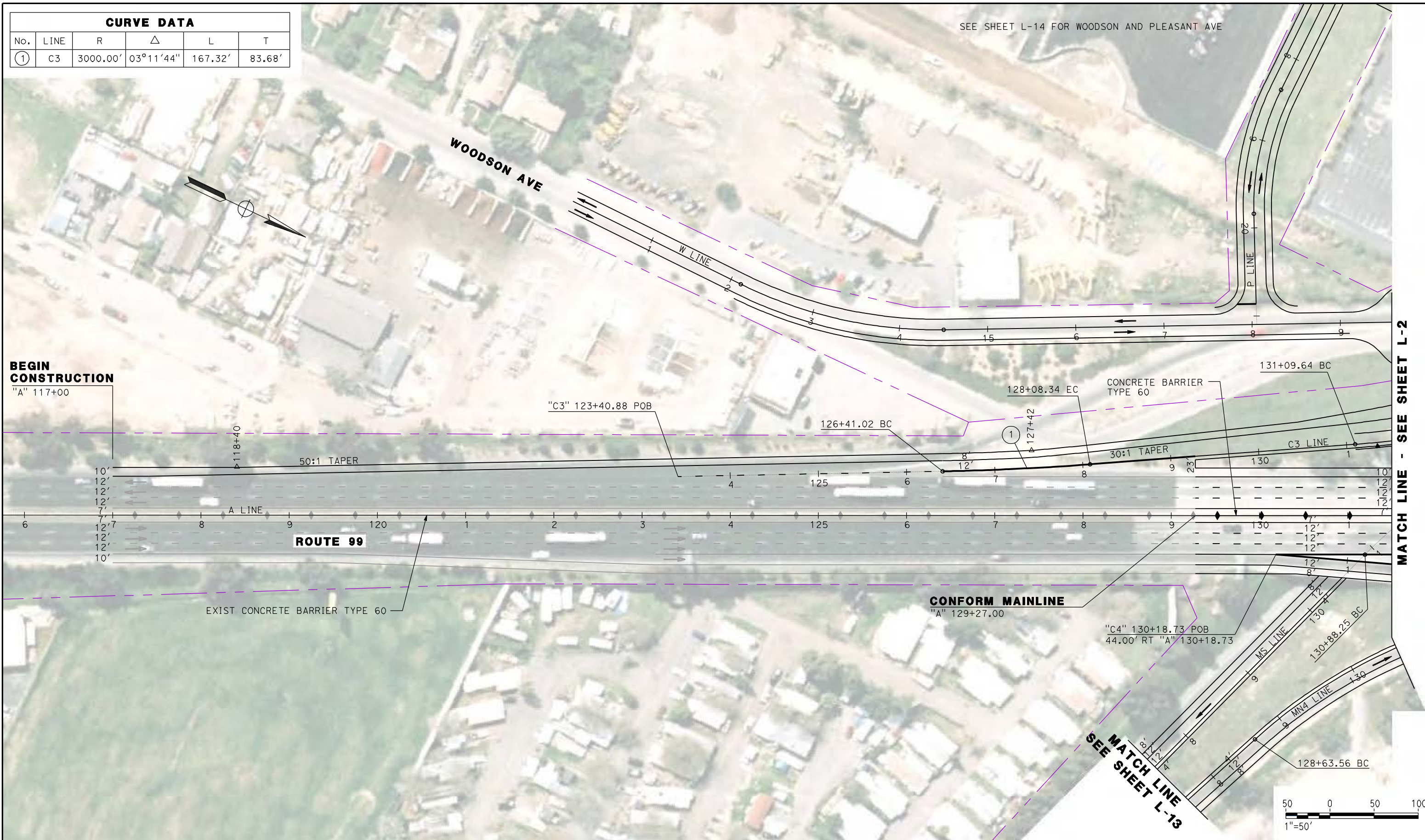
CONTRACT NO.	HSR06-007
DRAWING NO.	<b>K-1</b>
SCALE	NO SCALE
SHEET NO.	

DATE PLOTTED: 23-APR-2011



CURVE DATA					
No.	LINE	R	$\Delta$	L	T
①	C3	3000.00'	03°11'44"	167.32'	83.68'

SEE SHEET L-14 FOR WOODSON AND PLEASANT AVE



**BEGIN CONSTRUCTION**

"A" 117+00

50:1 TAPER

**ROUTE 99**

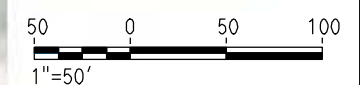
EXIST CONCRETE BARRIER TYPE 60

**CONFORM MAINLINE**  
"A" 129+27.00

"C4" 130+18.73 POB  
44.00' RT "A" 130+18.73

**MATCH LINE**  
SEE SHEET L-13

**MATCH LINE - SEE SHEET L-2**



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
G. MANOREK  
DRAWN BY  
L. ROS  
CHECKED BY  
L. HEUSTON  
IN CHARGE  
J. MATSUI-DRURY  
DATE  
04/29/11

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

**NOT FOR**  
**CONSTRUCTION**



**CALIFORNIA HIGH SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
**ROUTE 99 RE-ALIGNMENT**  
**LAYOUT**

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
**L-1**  
SCALE  
AS SHOWN  
SHEET NO.

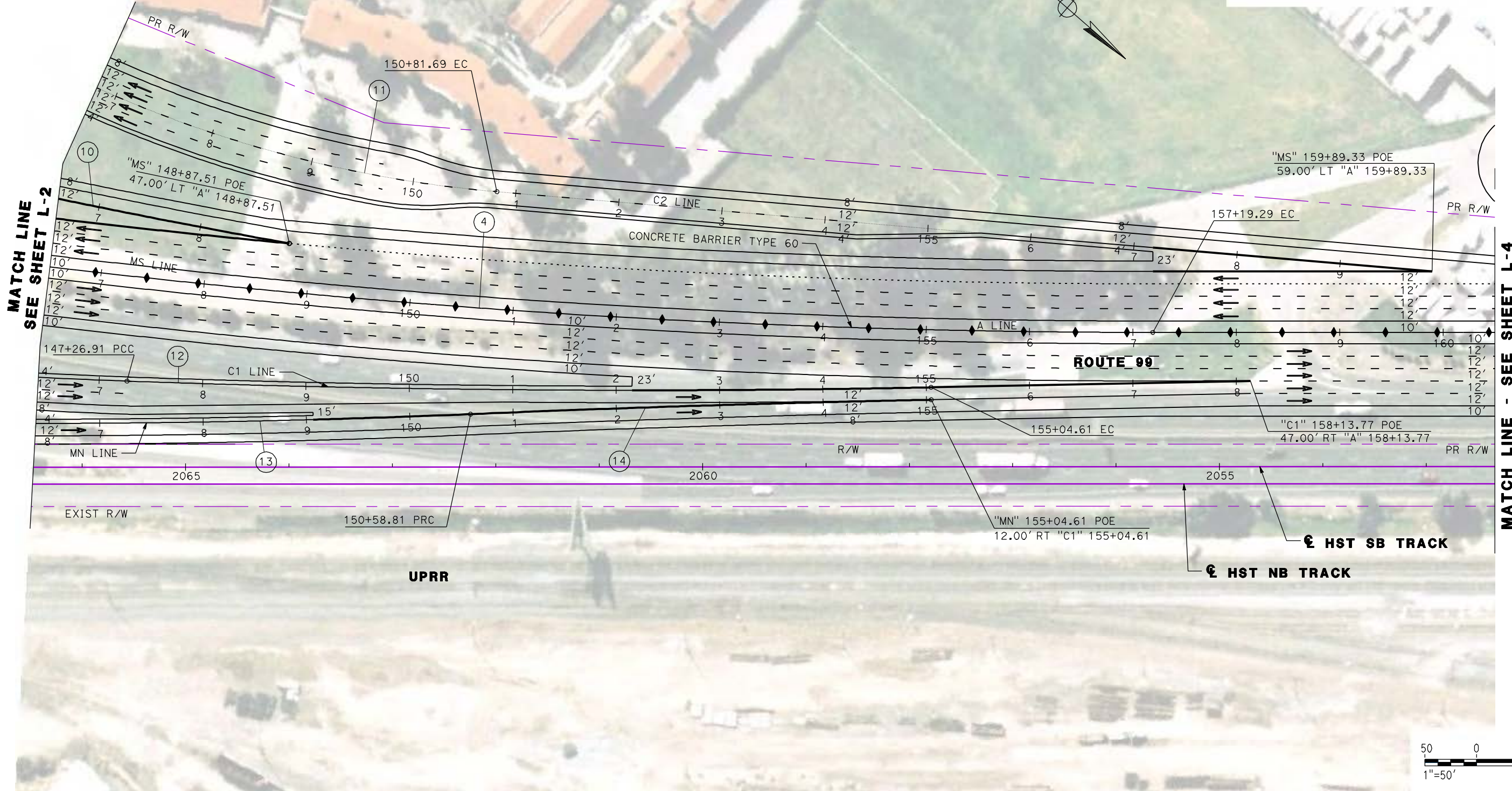
DATE PLOTTED: 23 APR 2011







CURVE DATA					
No.	LINE	R	Δ	L	T
④	A	9000.00'	15°38'27"	2456.85'	1236.11'
⑩	MS	8000.00'	01°56'18"	270.64'	135.34'
⑪	C2	1188.00'	27°12'55"	564.30'	287.58'
⑫	C1	14000.00'	03°10'58"	777.70'	388.95'
⑬	MN	10000.00'	02°25'22"	422.87'	697.58'
⑭	MN	20000.00'	01°16'38"	445.80'	222.91'



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
G. MANOREK  
DRAWN BY  
L. ROS  
CHECKED BY  
L. HEUSTON  
IN CHARGE  
J. MATSUI-DRURY  
DATE  
04/29/11

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

**NOT FOR**  
**CONSTRUCTION**

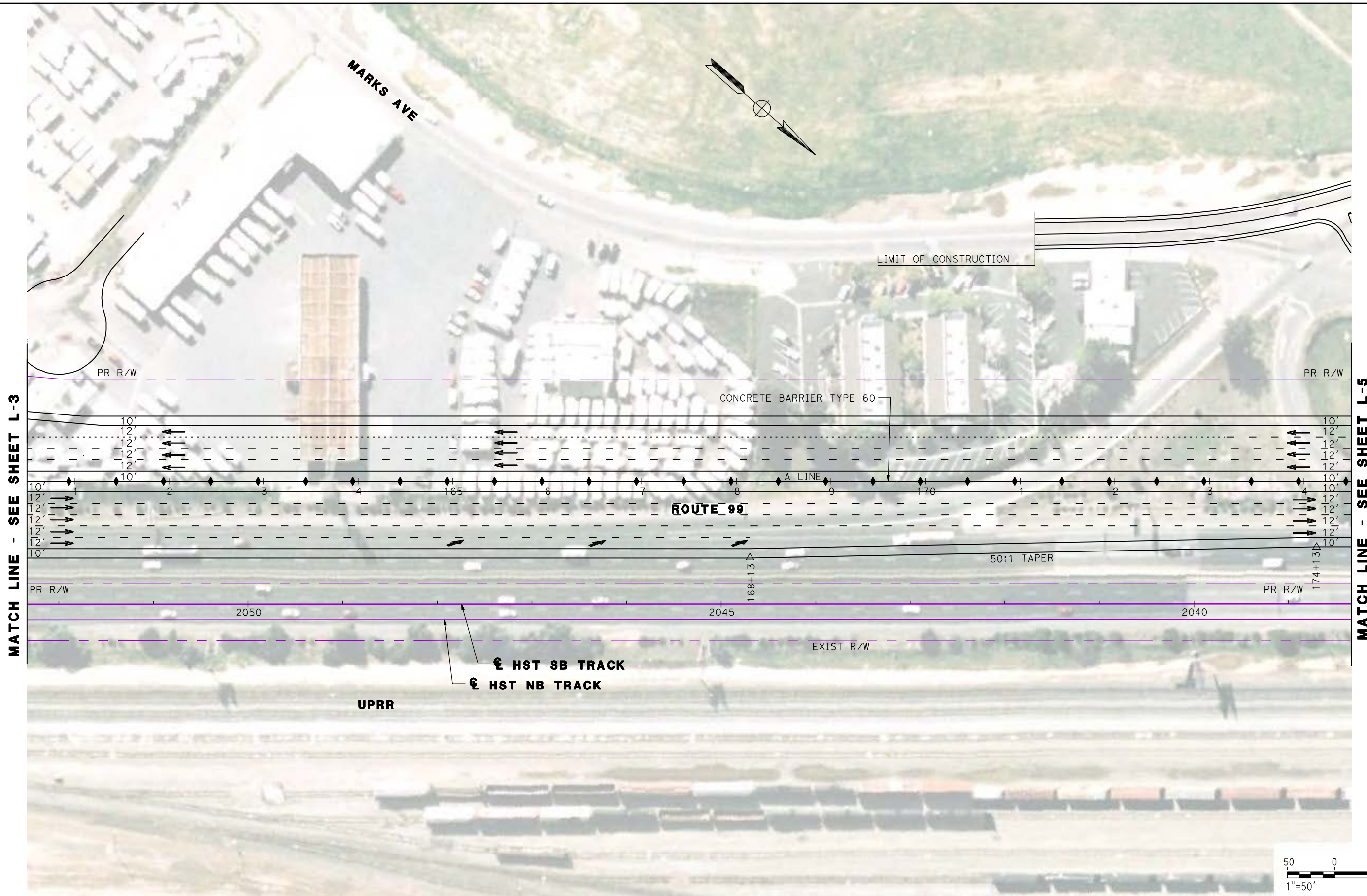


**CALIFORNIA HIGH SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
**ROUTE 99 RE-ALIGNMENT**  
**LAYOUT**

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
**L-3**  
SCALE  
AS SHOWN  
SHEET NO.

DATE PLOTTED: 03/26/11





REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
G. MANOREK  
DRAWN BY  
L. ROS  
CHECKED BY  
L. HEUSTON  
IN CHARGE  
J. MATSUI-DRURY  
DATE  
04/29/11

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

**NOT FOR**  
**CONSTRUCTION**

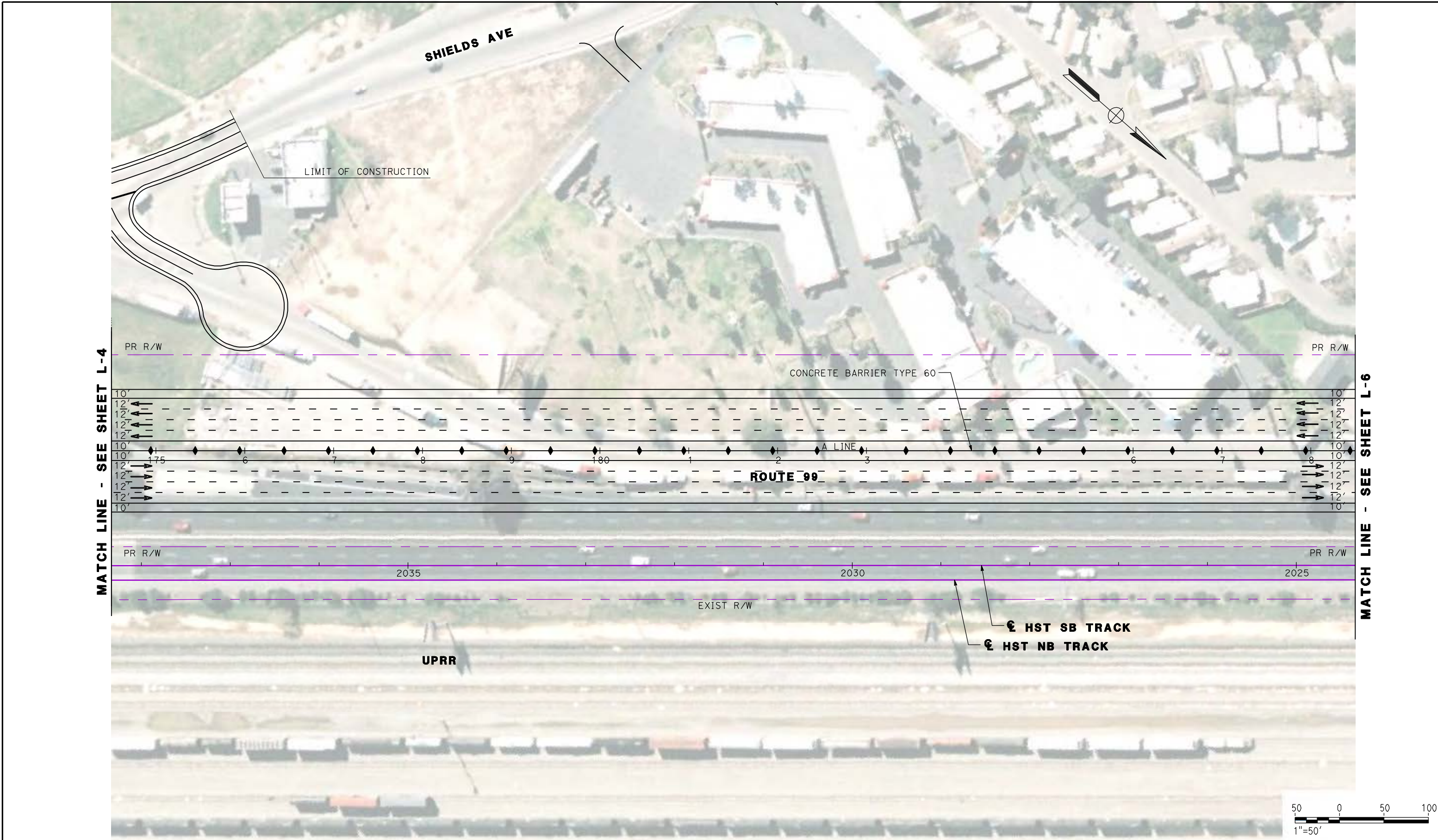


**CALIFORNIA HIGH SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
**ROUTE 99 RE-ALIGNMENT**  
**LAYOUT**

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
**L-4**  
SCALE  
AS SHOWN  
SHEET NO.

DATE PLOTTED: 03/26/11





MATCH LINE - SEE SHEET L-4

MATCH LINE - SEE SHEET L-6

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
G. MANOREK  
DRAWN BY  
L. ROS  
CHECKED BY  
L. HEUSTON  
IN CHARGE  
J. MATSUI-DRURY  
DATE  
04/29/11

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

**NOT FOR**  
**CONSTRUCTION**

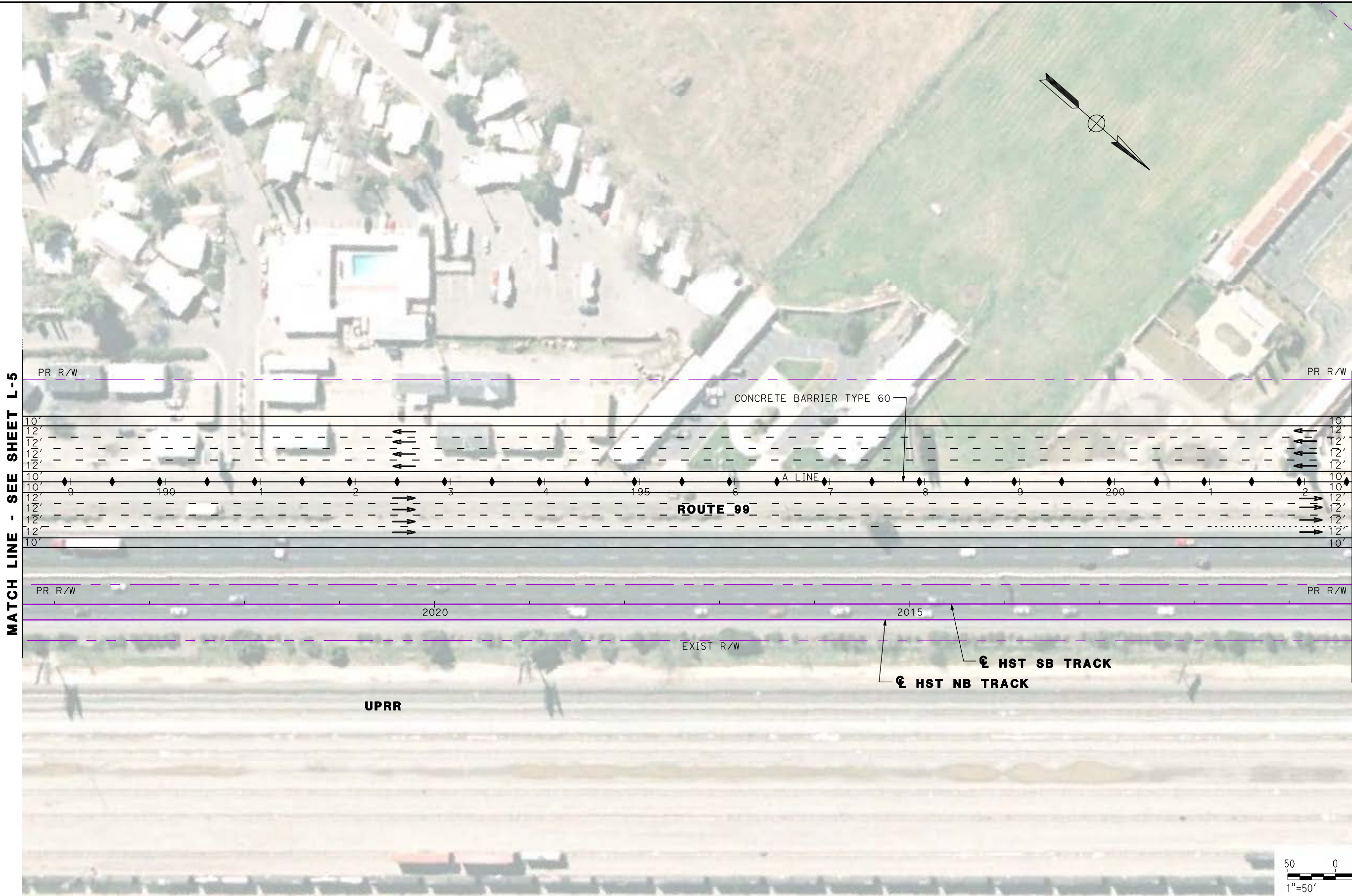


**CALIFORNIA HIGH SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
**ROUTE 99 RE-ALIGNMENT**  
**LAYOUT**

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
**L-5**  
SCALE  
AS SHOWN  
SHEET NO.

DATE PLOTTED: 03/26/11





REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
 G. MANOREK  
 DRAWN BY  
 L. ROS  
 CHECKED BY  
 L. HEUSTON  
 IN CHARGE  
 J. MATSUI-DRURY  
 DATE  
 04/29/11

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



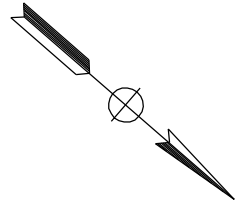
**CALIFORNIA HIGH SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
**ROUTE 99 RE-ALIGNMENT**  
**LAYOUT**

CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
**L-6**  
 SCALE  
 AS SHOWN  
 SHEET NO.

DATE PLOTTED => 26-APR-2011



CURVE DATA					
No.	LINE	R	Δ	L	T
15	V	730.00'	90°37'32"	1154.65'	738.01'



"V" 34+70.52 POE

**END CONSTRUCTION**  
33+80.63 EC

**DAKOTA AVE**

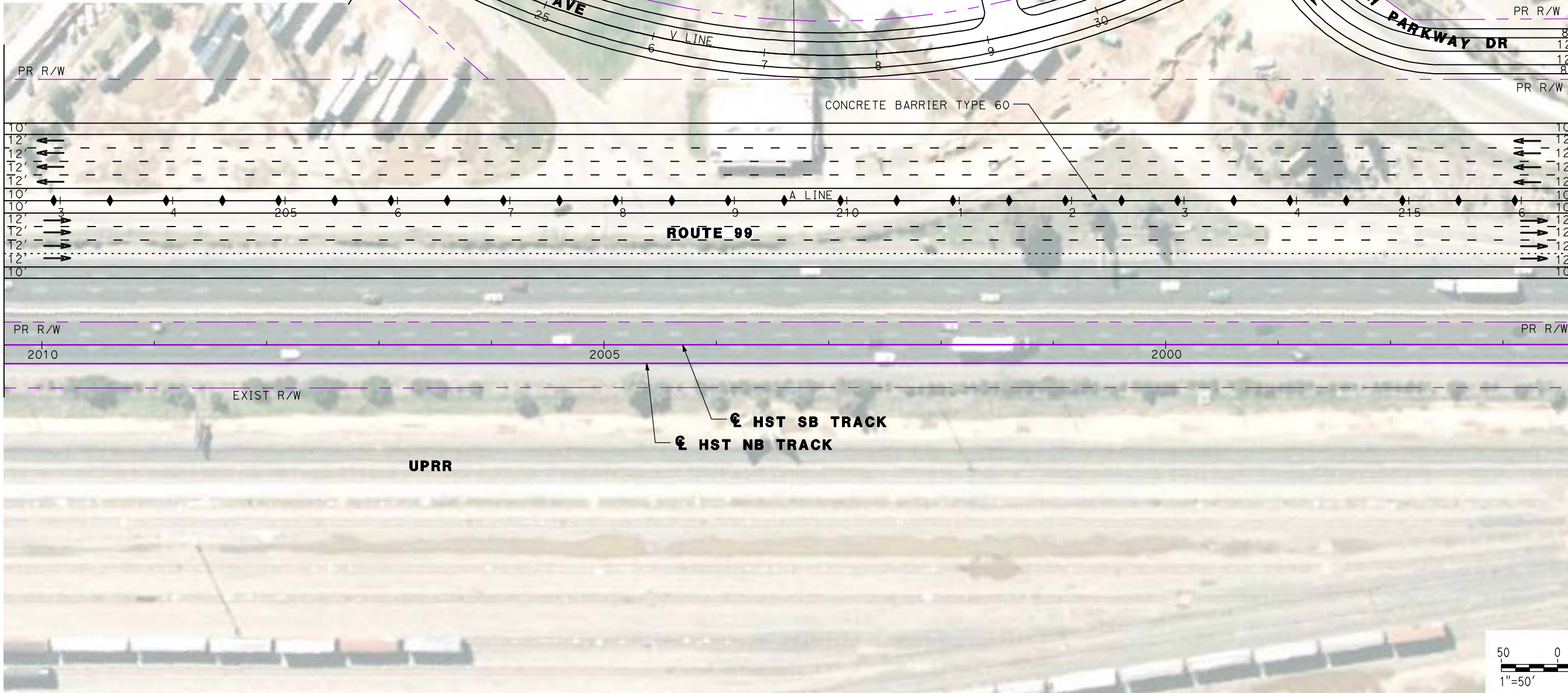
**MATCH LINE**  
**SEE SHEET L-15**

**VALENTINE AVE**

**NORTH PARKWAY DR**

**MATCH LINE - SEE SHEET L-6**

**MATCH LINE - SEE SHEET L-8**



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
G. MANOREK

DRAWN BY  
L. ROS

CHECKED BY  
L. HEUSTON

IN CHARGE  
J. MATSUI-DRURY

DATE  
04/29/11

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

**NOT FOR**  
**CONSTRUCTION**

**AECOM**  
Technical Services, Inc.  
2020 L Street, Suite 300  
Sacramento, CA 95811

**CH2MHILL**



**CALIFORNIA HIGH SPEED TRAIN PROJECT**

**MERCED TO FRESNO**

**ROUTE 99 RE-ALIGNMENT**

**LAYOUT**

CONTRACT NO.  
HSR06-007

DRAWING NO.  
**L-7**

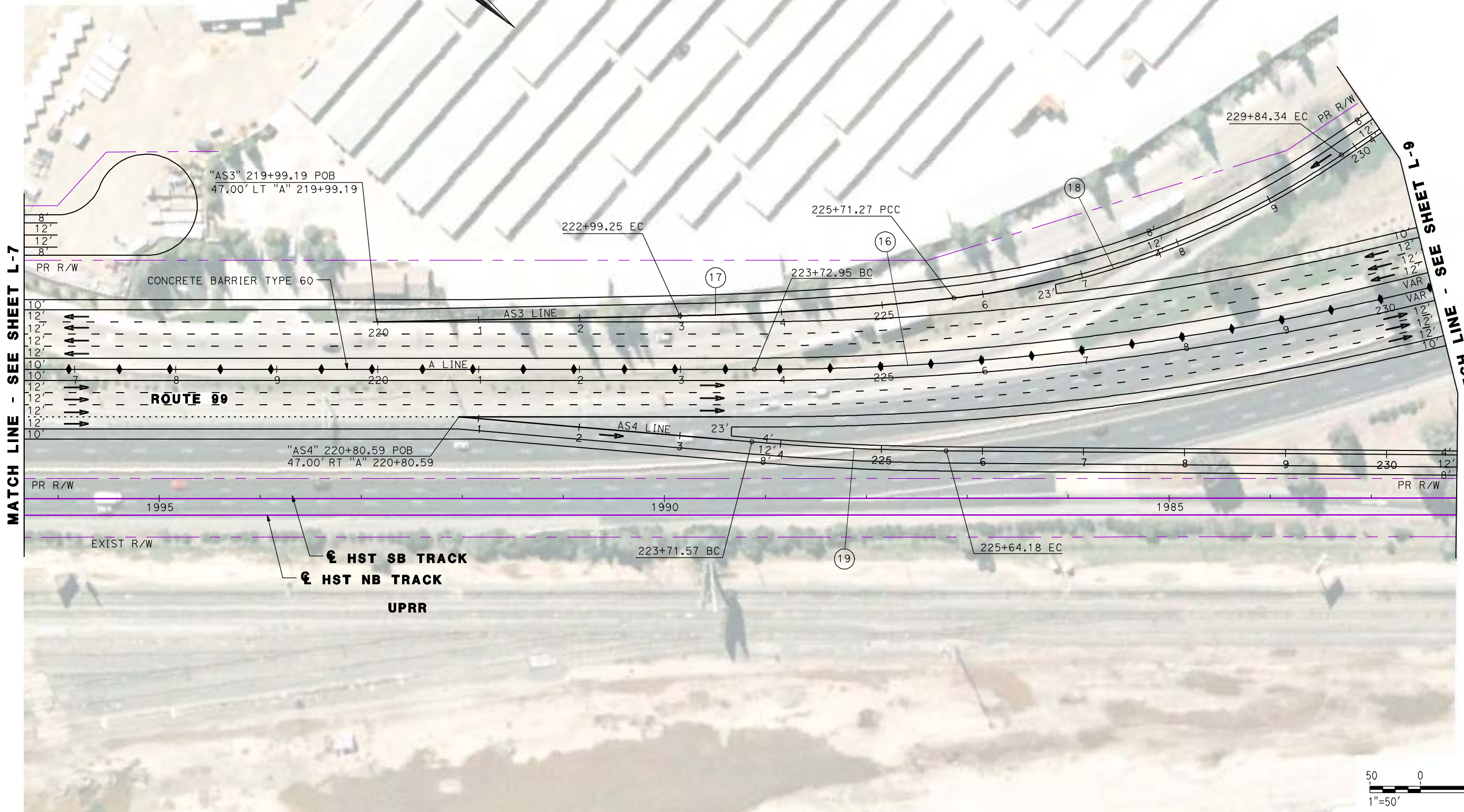
SCALE  
AS SHOWN

SHEET NO.

DATE PLOTTED: 03/26/11



CURVE DATA					
No.	LINE	R	Δ	L	T
16	A	2800.00'	25°05'16"	1226.02'	623.00'
17	AS3	3000.00'	05°11'43"	272.02'	136.10'
18	AS3	850.00'	27°50'37"	413.07'	210.70'
19	AS4	2500.00'	04°24'52"	192.62'	96.36'



MATCH LINE - SEE SHEET L-7

MATCH LINE - SEE SHEET L-9



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
G. MANOREK  
DRAWN BY  
L. ROS  
CHECKED BY  
L. HEUSTON  
IN CHARGE  
J. MATSUI-DRURY  
DATE  
04/29/11

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

**NOT FOR**  
**CONSTRUCTION**

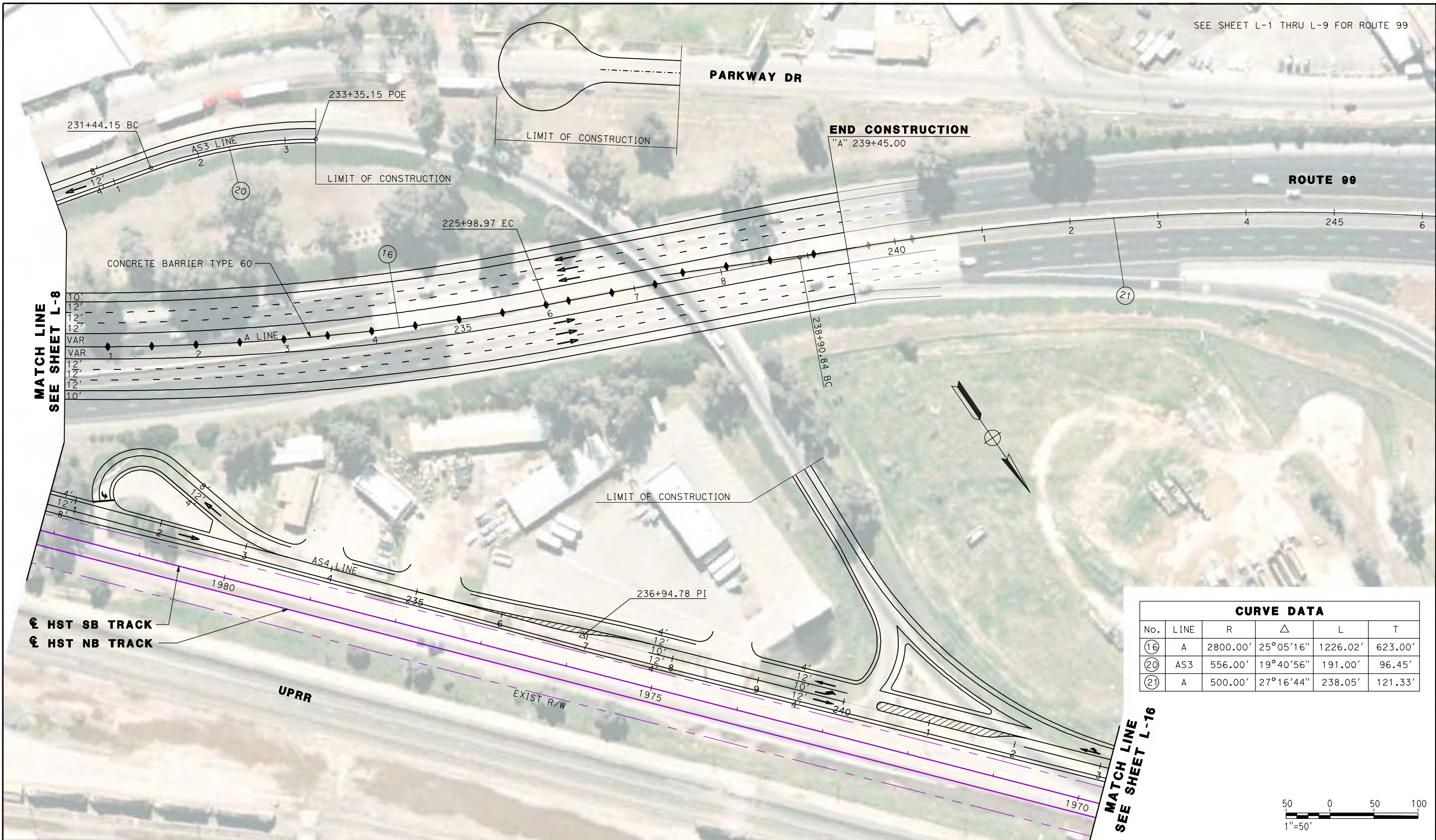


**CALIFORNIA HIGH SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
**ROUTE 99 RE-ALIGNMENT**  
**LAYOUT**

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
**L-8**  
SCALE  
AS SHOWN  
SHEET NO.

DATE PLOTTED: 03/26/11





CURVE DATA					
No.	LINE	R	Δ	L	T
16	A	2800.00'	25°05'16"	1226.02'	623.00'
20	AS3	556.00'	19°40'56"	191.00'	96.45'
21	A	500.00'	27°16'44"	238.05'	121.33'

MATCH LINE  
SEE SHEET L-8

MATCH LINE  
SEE SHEET L-16

⊕ HST SB TRACK  
⊕ HST NB TRACK

UPRR

EXIST R/W

END CONSTRUCTION  
"A" 239+45.00

ROUTE 99

PARKWAY DR

LIMIT OF CONSTRUCTION

LIMIT OF CONSTRUCTION

LIMIT OF CONSTRUCTION

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
G. MANOREK  
DRAWN BY  
L. ROS  
CHECKED BY  
L. HEUSTON  
IN CHARGE  
J. MATSUI-DRURY  
DATE  
04/29/11

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

**NOT FOR**  
**CONSTRUCTION**



**CALIFORNIA HIGH SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
**ROUTE 99 RE-ALIGNMENT**  
**LAYOUT**

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
**L-9**  
SCALE  
AS SHOWN  
SHEET NO.



SEE SHEET L-1 THRU L-9 FOR ROUTE 99

**CURVE DATA**

No.	LINE	R	Δ	L	T
22	C	2031.50'	05°47'54"	205.59'	102.88'
23	C	2000.00'	06°02'32"	210.91'	105.55'



**BEGIN CONSTRUCTION**  
"C" 10+00.00 POB

**CLINTON AVE**

12+95.47 BC

15+01.06 PRC

23 RETAINING WALL

"C3" 144+21.46 POE =  
"C" 18+36.94 POT

**VASSAR AVE**

17+11.97 EC

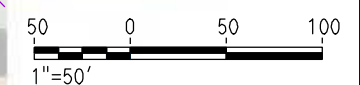
"C" 20+07.05 POT =  
"MS" 143+26.56 POT

"A" 142+42.66 POC =  
"C" 21+49.47 POT

LIMIT OF CONSTRUCTION

**PLEASANT AVE**

**MATCH LINE - SEE SHEET L-11**



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**G. MANOREK**  
DRAWN BY  
**L. ROS**  
CHECKED BY  
**L. HEUSTON**  
IN CHARGE  
**J. MATSUI-DRURY**  
DATE  
**04/29/11**

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

**NOT FOR**  
**CONSTRUCTION**



**CALIFORNIA HIGH SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
**ROUTE 99 RE-ALIGNMENT**  
**LAYOUT**

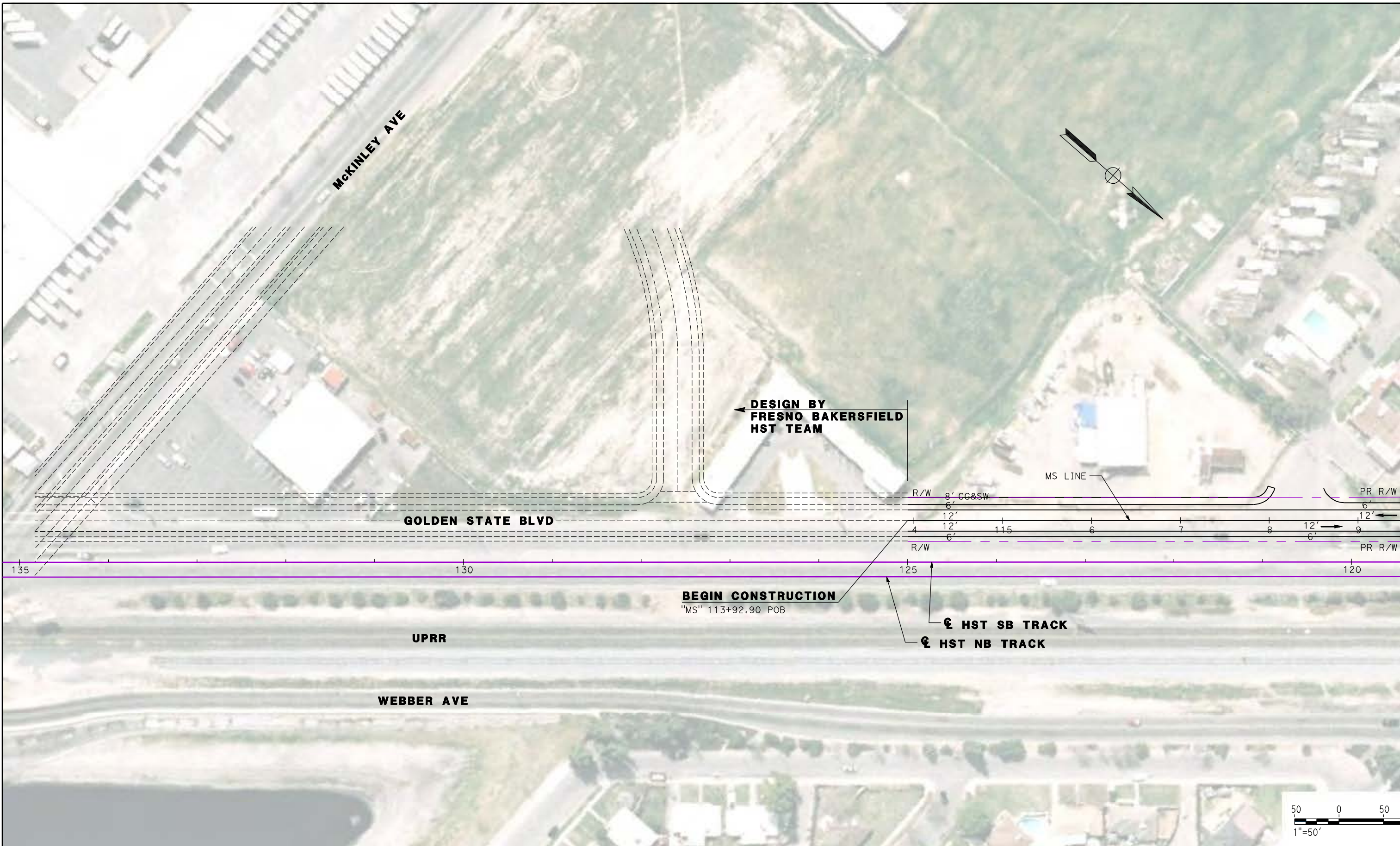
CONTRACT NO.  
**HSR06-007**  
DRAWING NO.  
**L-10**  
SCALE  
**AS SHOWN**  
SHEET NO.

DATE PLOTTED: 03/26/11









DESIGN BY  
FRESNO BAKERSFIELD  
HST TEAM

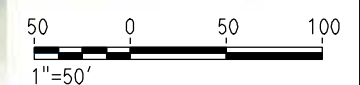
GOLDEN STATE BLVD

BEGIN CONSTRUCTION  
"MS" 113+92.90 POB

UPRR

WEBBER AVE

MS LINE  
HST SB TRACK  
HST NB TRACK



MATCH LINE - SEE SHEET L-13

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
G. MANOREK  
DRAWN BY  
L. ROS  
CHECKED BY  
L. HEUSTON  
IN CHARGE  
J. MATSUI-DRURY  
DATE  
04/29/11

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

**AECOM**  
Technical Services, Inc.  
2020 L Street, Suite 300  
Sacramento, CA 95811

**CH2MHILL**

**CALIFORNIA**  
HIGH-SPEED RAIL AUTHORITY

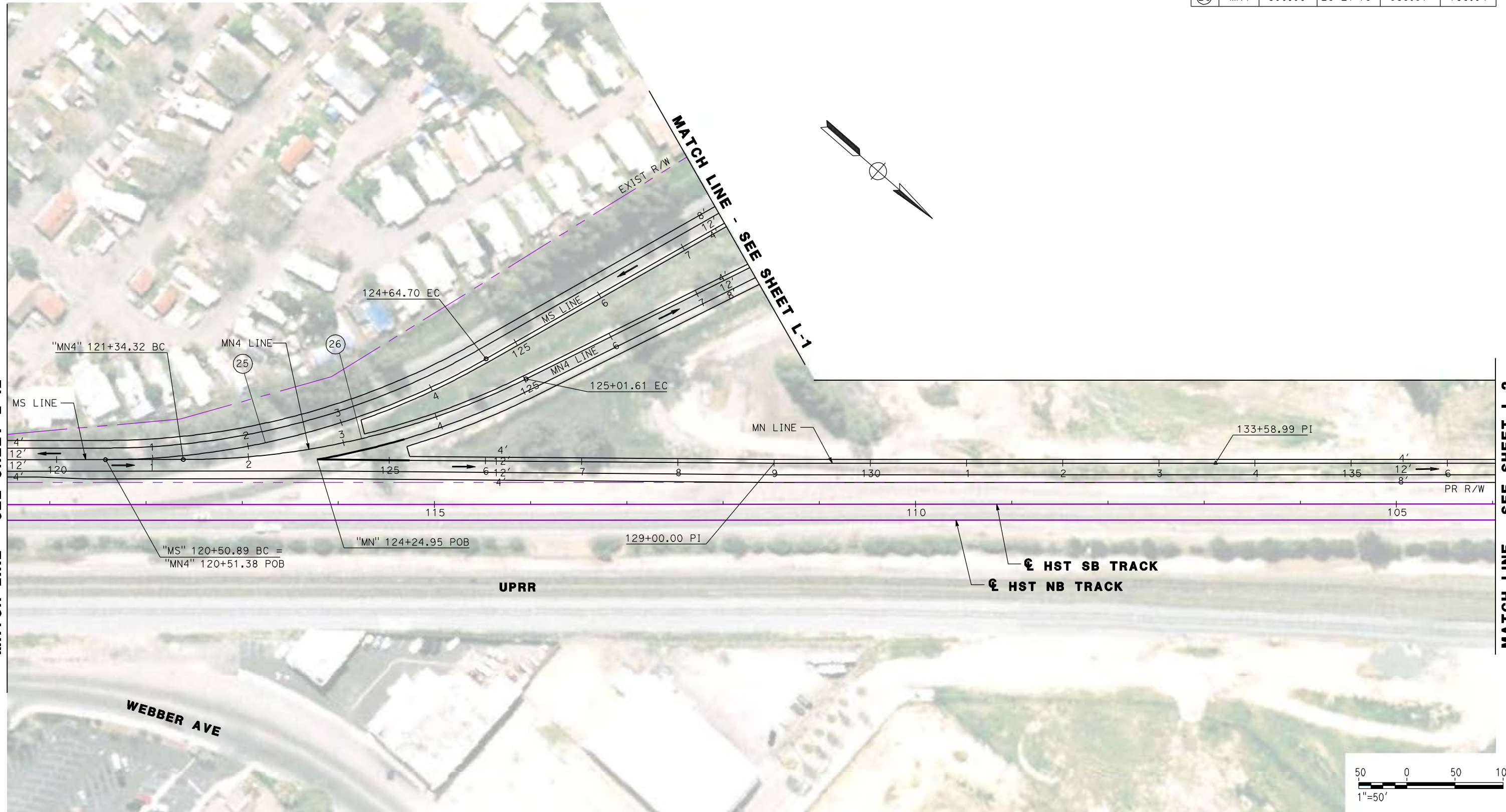
**CALIFORNIA HIGH SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
**ROUTE 99 RE-ALIGNMENT**  
**LAYOUT**

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
**L-12**  
SCALE  
AS SHOWN  
SHEET NO.

DATE PLOTTED: 03/26/11



CURVE DATA					
No.	LINE	R	$\Delta$	L	T
25	MS	800.00'	29°28'13"	413.81'	211.65'
26	MN4	800.00'	26°27'15"	369.37'	188.04'



MATCH LINE - SEE SHEET L-12

MATCH LINE - SEE SHEET L-2

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
G. MANOREK  
DRAWN BY  
L. ROS  
CHECKED BY  
L. HEUSTON  
IN CHARGE  
J. MATSUI-DRURY  
DATE  
04/29/11

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

**NOT FOR**  
**CONSTRUCTION**



**CALIFORNIA HIGH SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
**ROUTE 99 RE-ALIGNMENT**  
**LAYOUT**

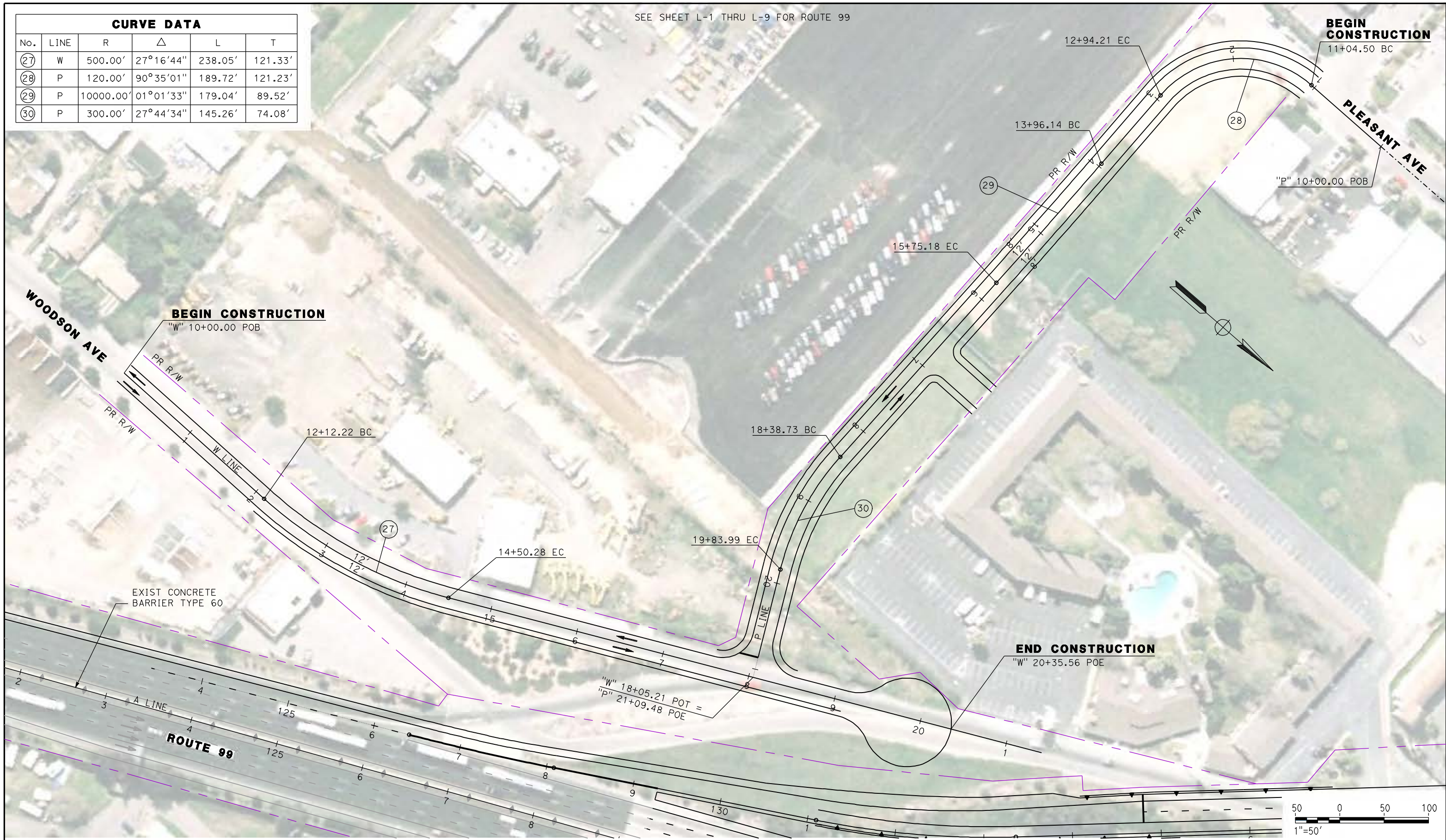
CONTRACT NO.  
HSR06-007  
DRAWING NO.  
**L-13**  
SCALE  
AS SHOWN  
SHEET NO.

DATE PLOTTED: 03/26/11



SEE SHEET L-1 THRU L-9 FOR ROUTE 99

CURVE DATA					
No.	LINE	R	Δ	L	T
27	W	500.00'	27°16'44"	238.05'	121.33'
28	P	120.00'	90°35'01"	189.72'	121.23'
29	P	10000.00'	01°01'33"	179.04'	89.52'
30	P	300.00'	27°44'34"	145.26'	74.08'



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
G. MANOREK  
DRAWN BY  
L. ROS  
CHECKED BY  
L. HEUSTON  
IN CHARGE  
J. MATSUI-DRURY  
DATE  
04/29/11

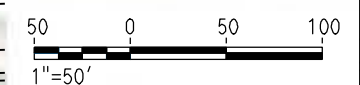
**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**

**NOT FOR**  
**CONSTRUCTION**



**CALIFORNIA HIGH SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
**ROUTE 99 RE-ALIGNMENT**  
**LAYOUT**

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
**L-14**  
SCALE  
AS SHOWN  
SHEET NO.



DATE PLOTTED: 03/26/11



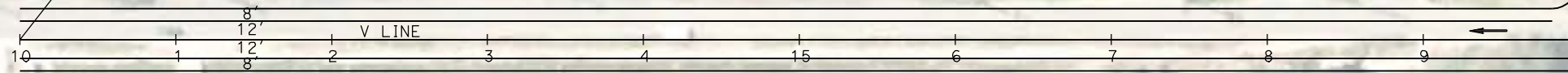
SEE SHEET L-1 THRU L-9 FOR ROUTE 99



**BEGIN CONSTRUCTION**

"V" 10+00.00 POB

**VALENTINE AVE**



22+25.97 BC

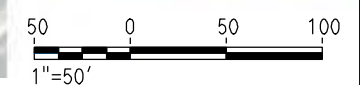
**MATCH LINE**  
SEE SHEET L-7

R/W

A LINE

**ROUTE 99**

R/W 2010



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
G. MANOREK  
DRAWN BY  
L. ROS  
CHECKED BY  
L. HEUSTON  
IN CHARGE  
J. MATSUI-DRURY  
DATE  
04/29/11

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

**NOT FOR**  
**CONSTRUCTION**



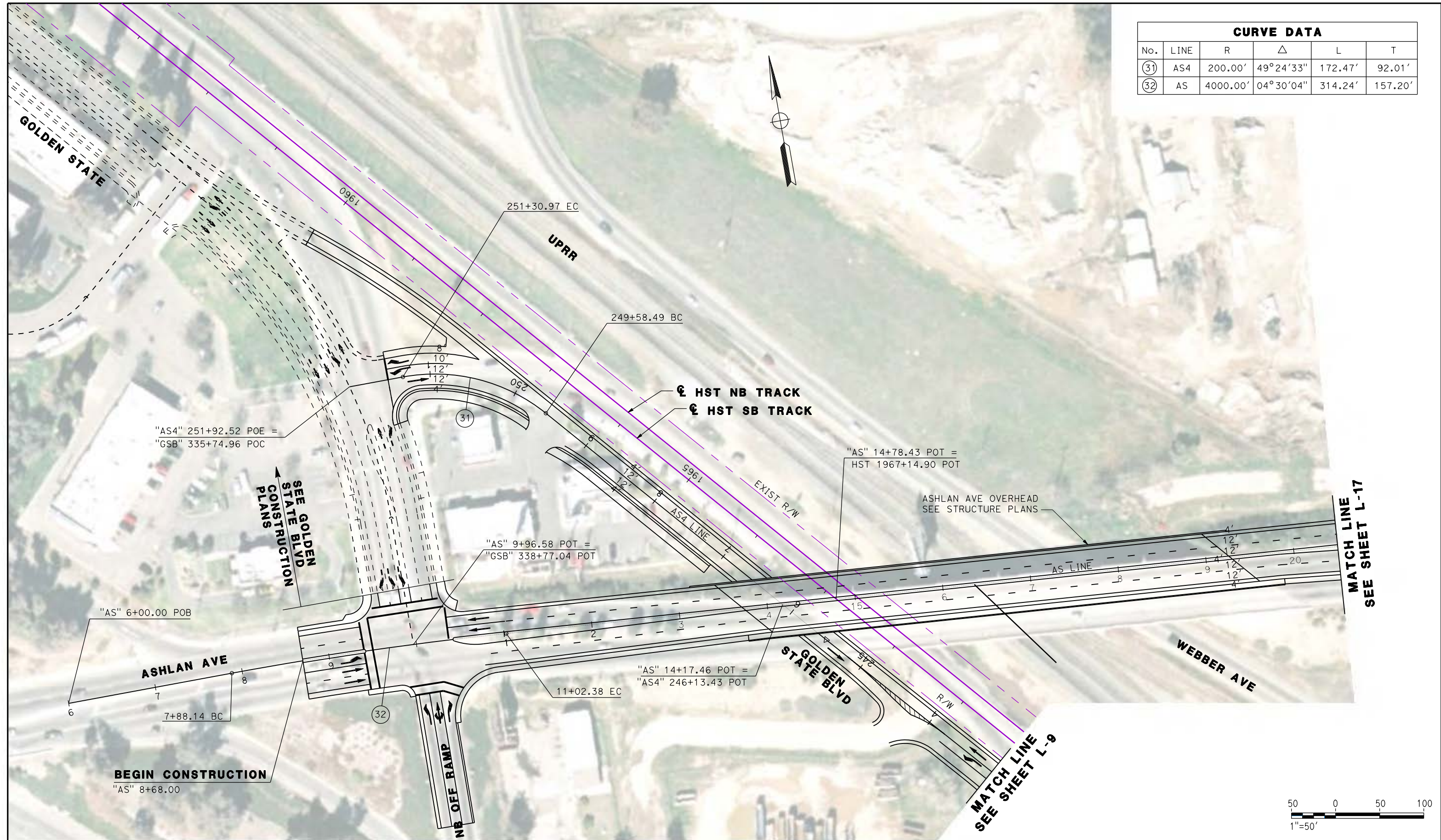
**CALIFORNIA HIGH SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
**ROUTE 99 RE-ALIGNMENT**  
**LAYOUT**

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
**L-15**  
SCALE  
AS SHOWN  
SHEET NO.

DATE PLOTTED: 03/26/11



CURVE DATA					
No.	LINE	R	$\Delta$	L	T
31	AS4	200.00'	49°24'33"	172.47'	92.01'
32	AS	4000.00'	04°30'04"	314.24'	157.20'



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
G. MANOREK  
DRAWN BY  
L. ROS  
CHECKED BY  
L. HEUSTON  
IN CHARGE  
J. MATSUI-DRURY  
DATE  
04/29/11

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

**NOT FOR**  
**CONSTRUCTION**

**AECOM**  
Technical Services, Inc.  
2020 L Street, Suite 300  
Sacramento, CA 95811

**CH2MHILL**



**CALIFORNIA HIGH SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
**ROUTE 99 RE-ALIGNMENT**  
**LAYOUT**

CONTRACT NO.  
HSR06-007

DRAWING NO.  
**L-16**

SCALE  
AS SHOWN

SHEET NO.

DATE PLOTTED: 23-APR-2011



CURVE DATA					
No.	LINE	R	$\Delta$	L	T
33	AS	1802.00'	17°05'39"	537.62'	270.82'
34	AS	2098.00'	11°01'06"	403.45'	202.35'



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
G. MANOREK  
DRAWN BY  
L. ROS  
CHECKED BY  
L. HEUSTON  
IN CHARGE  
J. MATSUI-DRURY  
DATE  
04/29/11

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

**NOT FOR**  
**CONSTRUCTION**

**AECOM**  
Technical Services, Inc.  
2020 L Street, Suite 300  
Sacramento, CA 95811

**CH2MHILL**

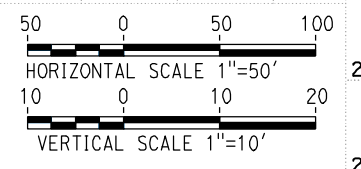
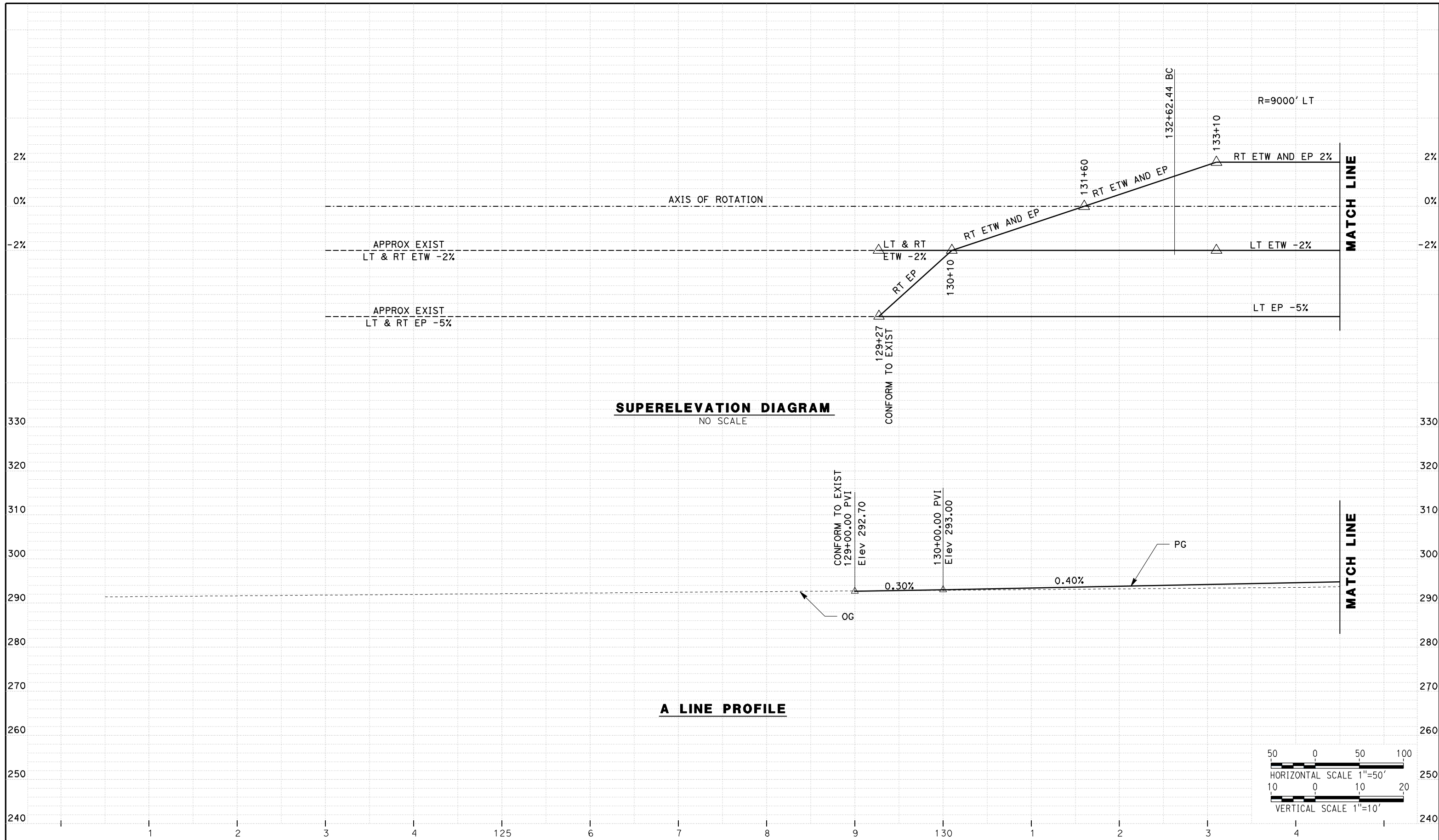


**CALIFORNIA HIGH SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
**ROUTE 99 RE-ALIGNMENT**  
**LAYOUT**

CONTRACT NO.	HSR06-007
DRAWING NO.	<b>L-17</b>
SCALE	AS SHOWN
SHEET NO.	

DATE PLOTTED: 23-APR-2011





REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
G. MANOREK  
 DRAWN BY  
L. ROS  
 CHECKED BY  
L. HEUSTON  
 IN CHARGE  
J. MATSUI-DRURY  
 DATE  
04/29/11

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

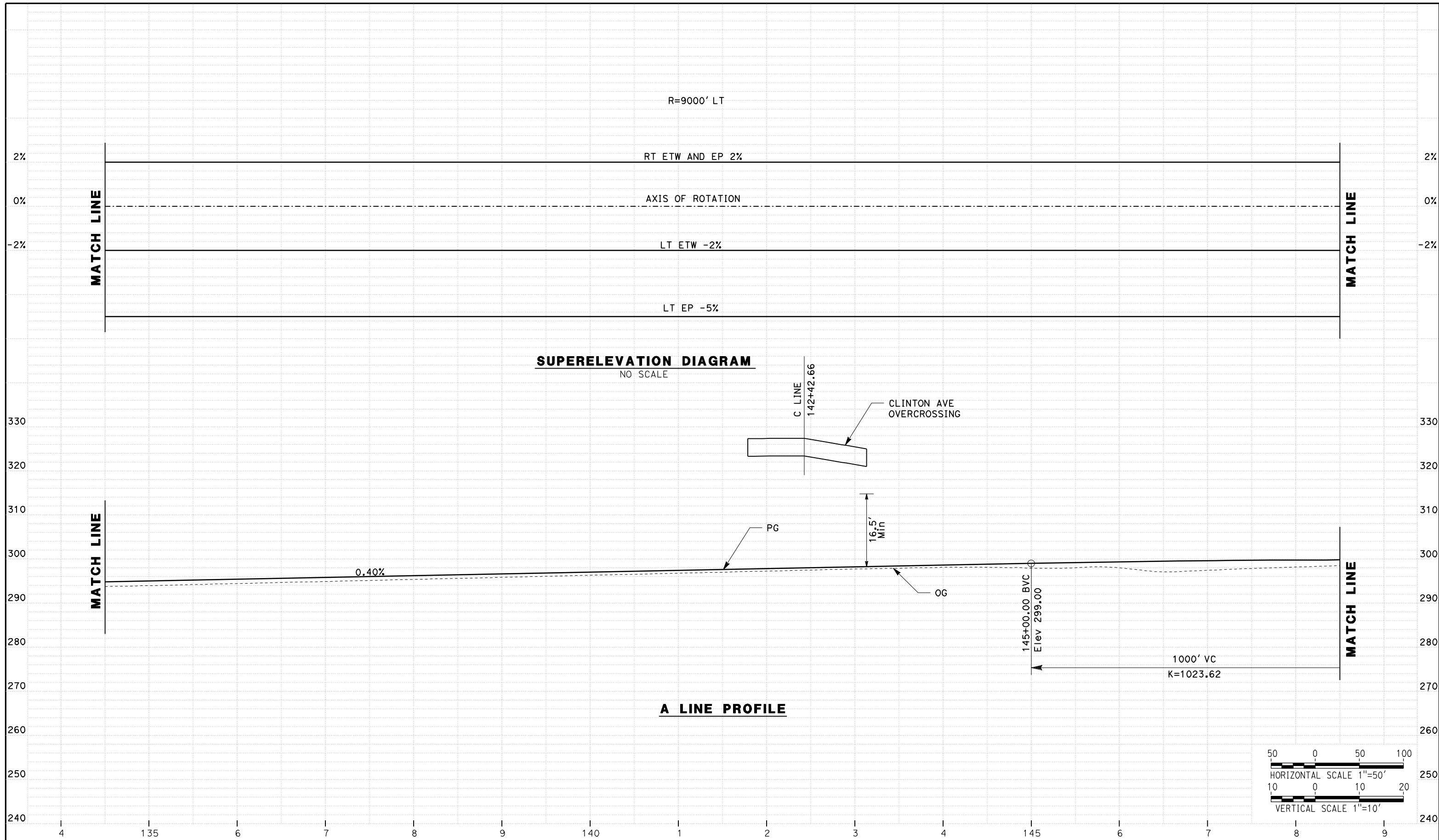
**NOT FOR**  
**CONSTRUCTION**



**CALIFORNIA HIGH SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
**ROUTE 99 RE-ALIGNMENT**  
**PROFILE AND SUPERELEVATION**

CONTRACT NO.  
HSR06-007  
 DRAWING NO.  
**P-1**  
 SCALE  
AS SHOWN  
 SHEET NO.

DATE PLOTTED => 26-APR-2011



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
G. MANOREK  
 DRAWN BY  
L. ROS  
 CHECKED BY  
L. HEUSTON  
 IN CHARGE  
J. MATSUI-DRURY  
 DATE  
04/29/11

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

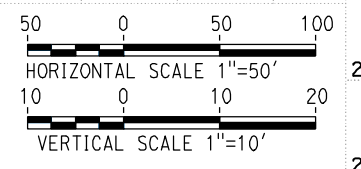
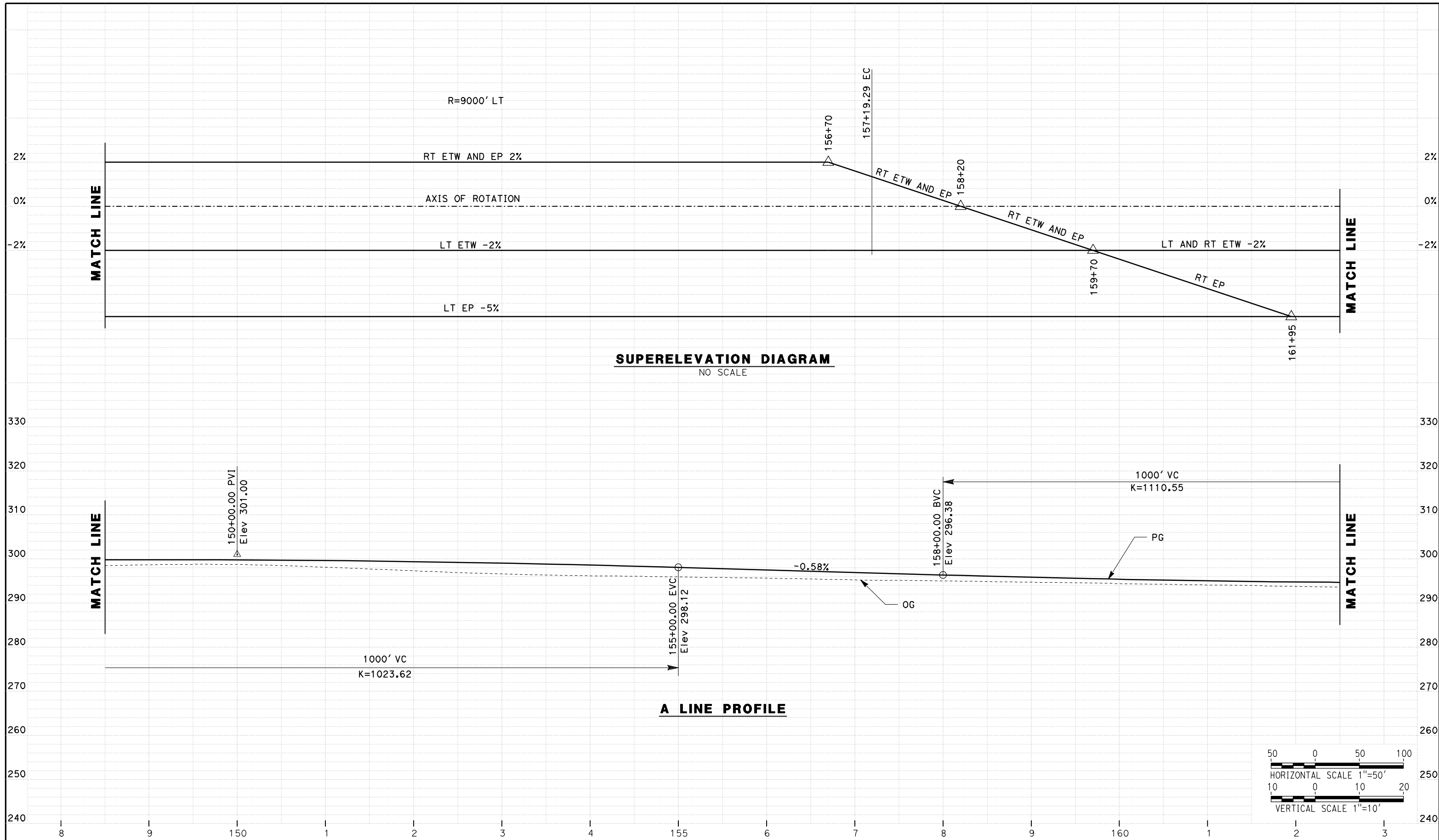


**CALIFORNIA HIGH SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
**ROUTE 99 RE-ALIGNMENT**  
**PROFILE AND SUPERELEVATION**

CONTRACT NO.  
HSR06-007  
 DRAWING NO.  
**P-2**  
 SCALE  
AS SHOWN  
 SHEET NO.

DATE PLOTTED => 26-APR-2011





REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
G. MANOREK  
DRAWN BY  
L. ROS  
CHECKED BY  
L. HEUSTON  
IN CHARGE  
J. MATSUI-DRURY  
DATE  
04/29/11

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

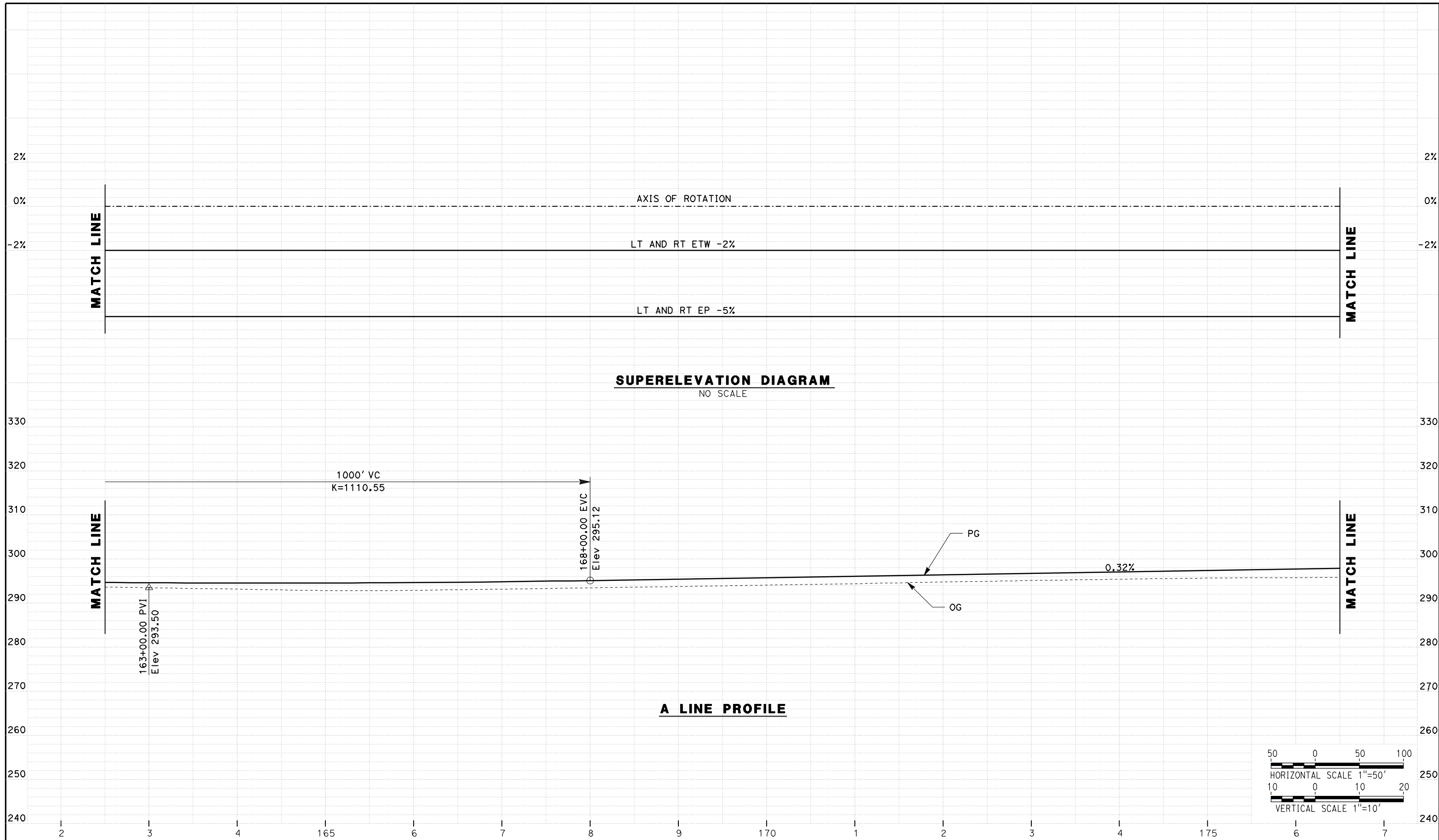
**NOT FOR**  
**CONSTRUCTION**



**CALIFORNIA HIGH SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
**ROUTE 99 RE-ALIGNMENT**  
**PROFILE AND SUPERELEVATION**

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
**P-3**  
SCALE  
AS SHOWN  
SHEET NO.

DATE PLOTTED => 26-APR-2011



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
G. MANOREK  
DRAWN BY  
L. ROS  
CHECKED BY  
L. HEUSTON  
IN CHARGE  
J. MATSUI-DRURY  
DATE  
04/29/11

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

**NOT FOR**  
**CONSTRUCTION**

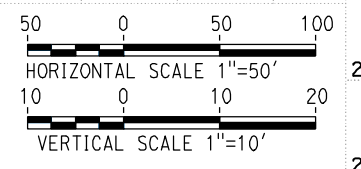
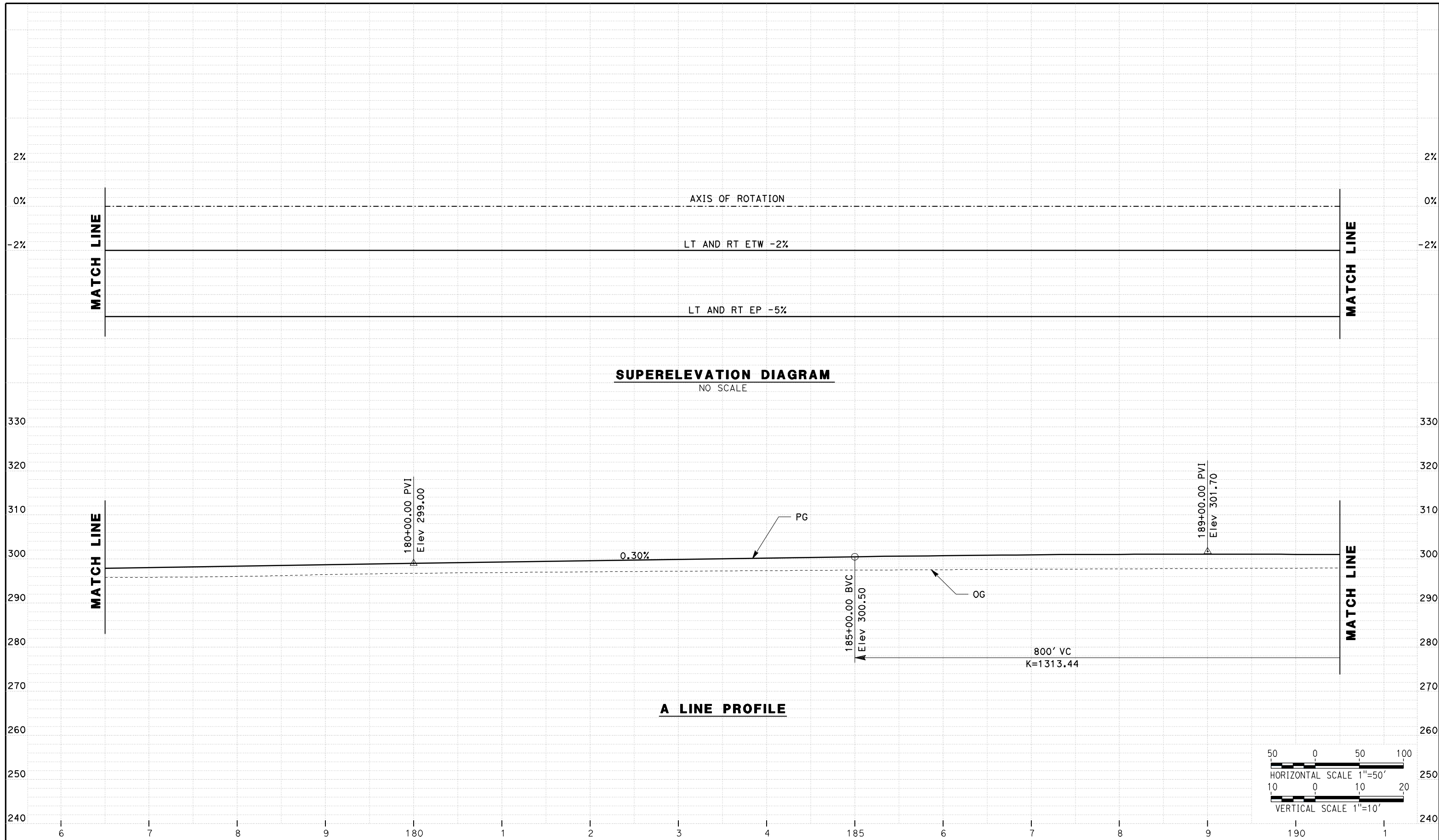


**CALIFORNIA HIGH SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
**ROUTE 99 RE-ALIGNMENT**  
**PROFILE AND SUPERELEVATION**

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
**P-4**  
SCALE  
AS SHOWN  
SHEET NO.

DATE PLOTTED => 26-APR-2011





REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
G. MANOREK  
DRAWN BY  
L. ROS  
CHECKED BY  
L. HEUSTON  
IN CHARGE  
J. MATSUI-DRURY  
DATE  
04/29/11

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

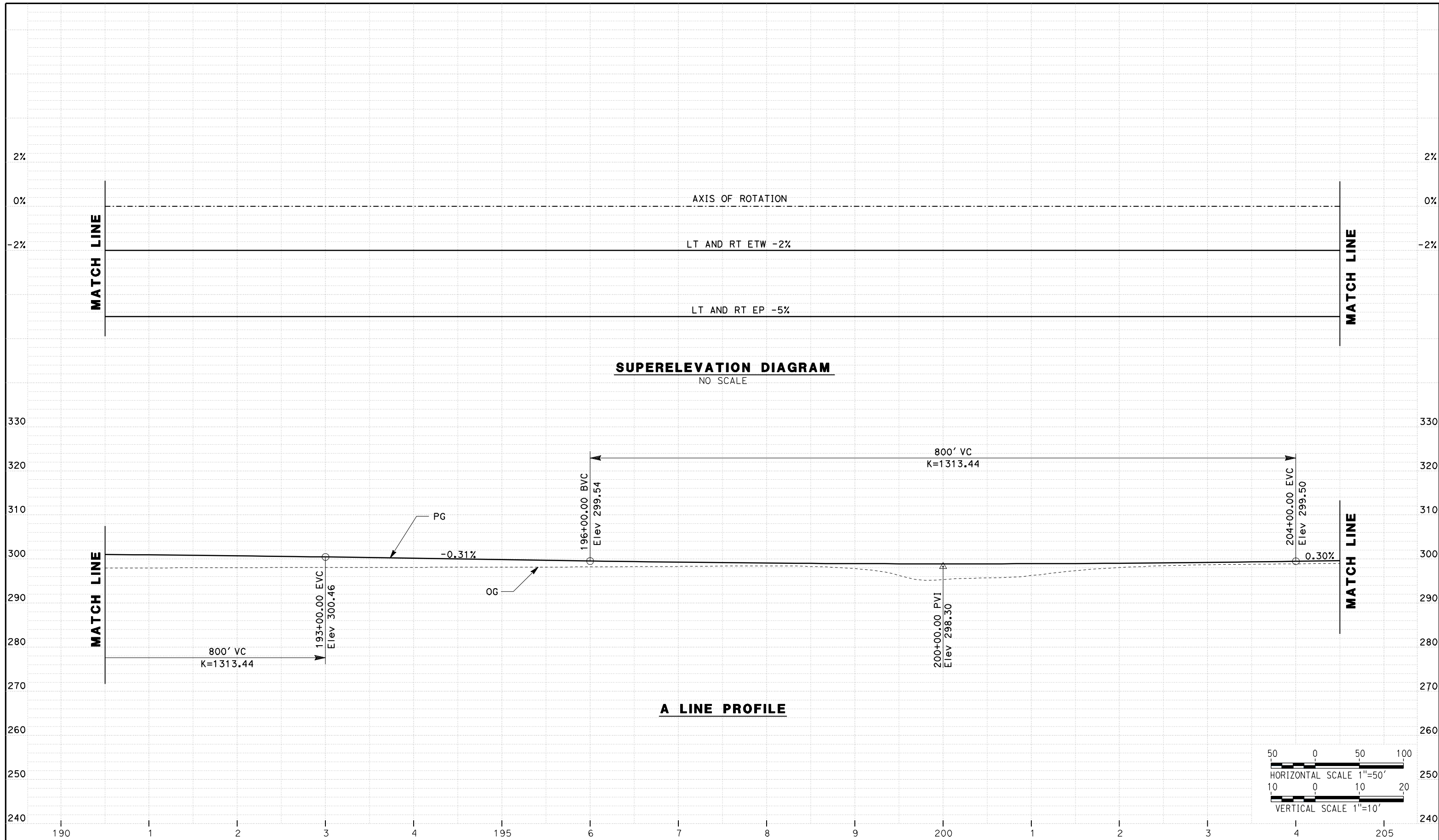
**NOT FOR**  
**CONSTRUCTION**



**CALIFORNIA HIGH SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
**ROUTE 99 RE-ALIGNMENT**  
**PROFILE AND SUPERELEVATION**

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
**P-5**  
SCALE  
AS SHOWN  
SHEET NO.

DATE PLOTTED => 26-APR-2011



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
G. MANOREK

DRAWN BY  
L. ROS

CHECKED BY  
L. HEUSTON

IN CHARGE  
J. MATSUI-DRURY

DATE  
04/29/11

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

**NOT FOR**  
**CONSTRUCTION**



**CALIFORNIA HIGH SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
**ROUTE 99 RE-ALIGNMENT**  
**PROFILE AND SUPERELEVATION**

CONTRACT NO.  
HSR06-007

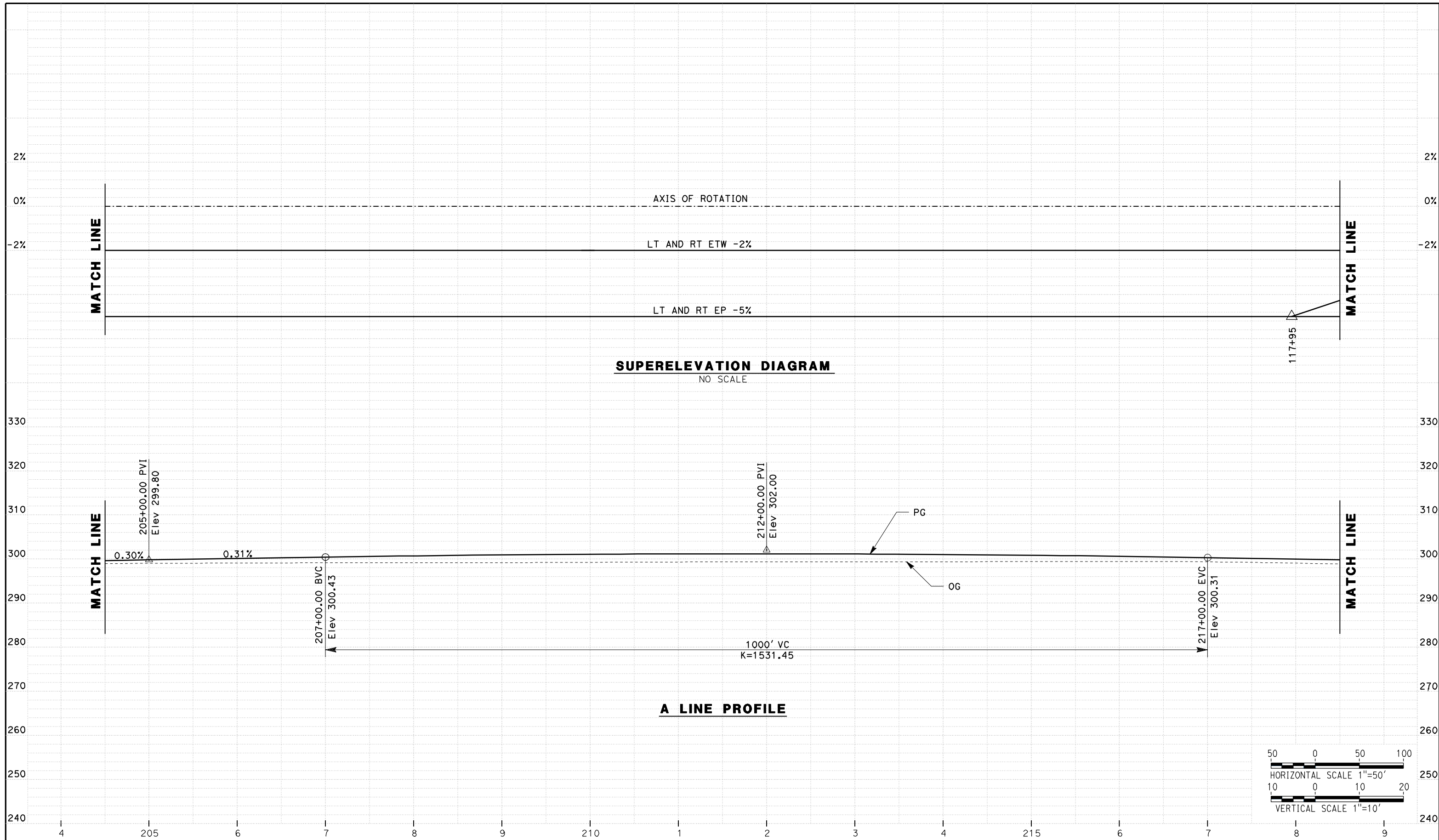
DRAWING NO.  
**P-6**

SCALE  
AS SHOWN

SHEET NO.

DATE PLOTTED => 26-APR-2011





REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
G. MANOREK  
DRAWN BY  
L. ROS  
CHECKED BY  
L. HEUSTON  
IN CHARGE  
J. MATSUI-DRURY  
DATE  
04/29/11

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

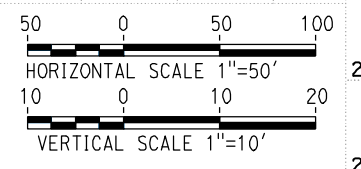
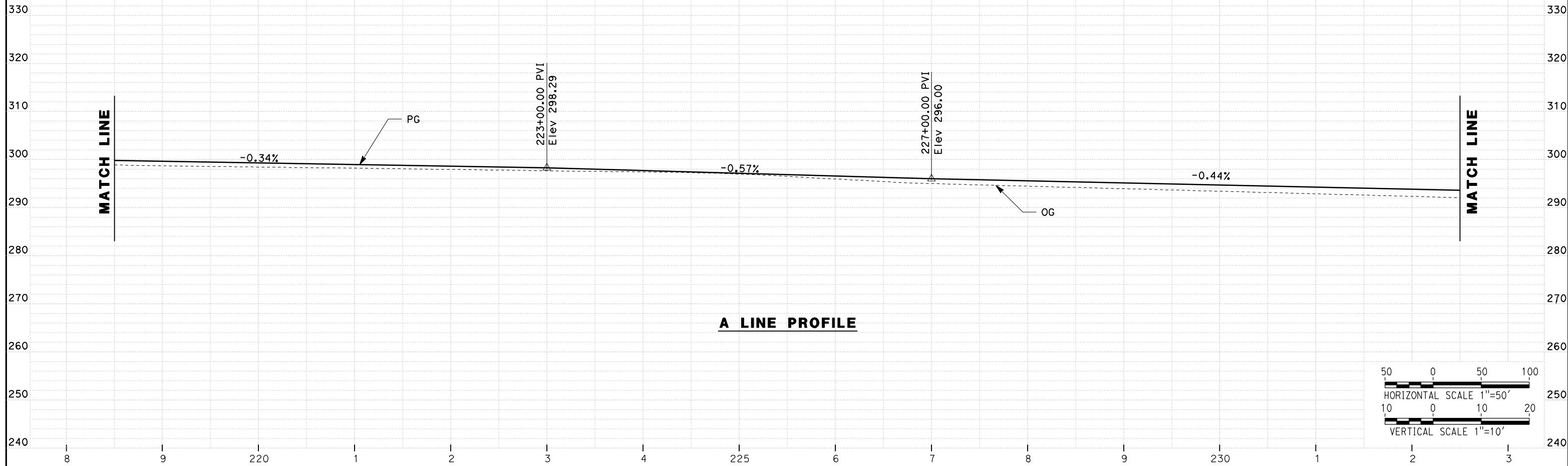
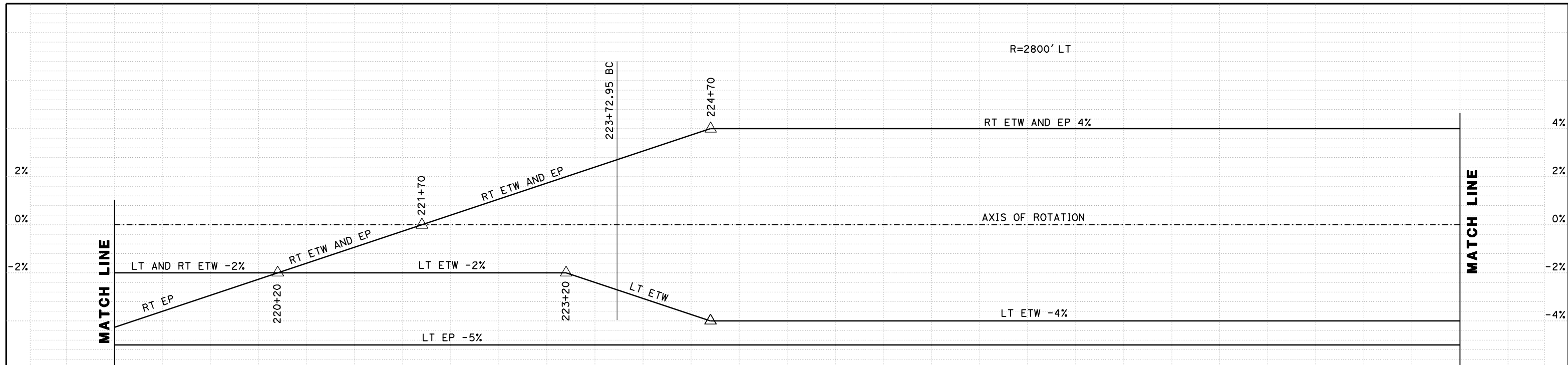
**NOT FOR**  
**CONSTRUCTION**



**CALIFORNIA HIGH SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
**ROUTE 99 RE-ALIGNMENT**  
**PROFILE AND SUPERELEVATION**

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
**P-7**  
SCALE  
AS SHOWN  
SHEET NO.

DATE PLOTTED => 26-APR-2011



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**G. MANOREK**  
DRAWN BY  
**L. ROS**  
CHECKED BY  
**L. HEUSTON**  
IN CHARGE  
**J. MATSUI-DRURY**  
DATE  
**04/29/11**

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

**NOT FOR**  
**CONSTRUCTION**



**CALIFORNIA HIGH SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
**ROUTE 99 RE-ALIGNMENT**  
**PROFILE AND SUPERELEVATION**

CONTRACT NO.  
**HSR06-007**

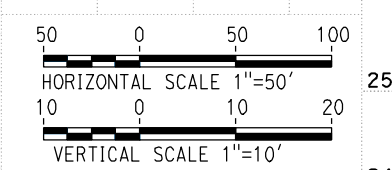
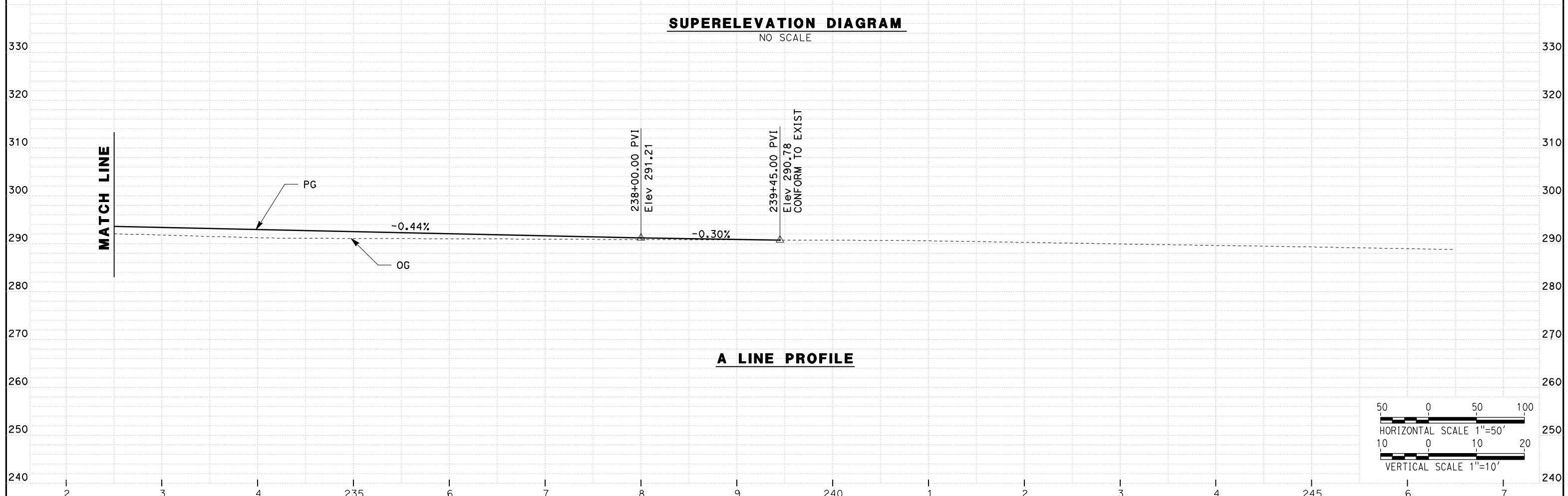
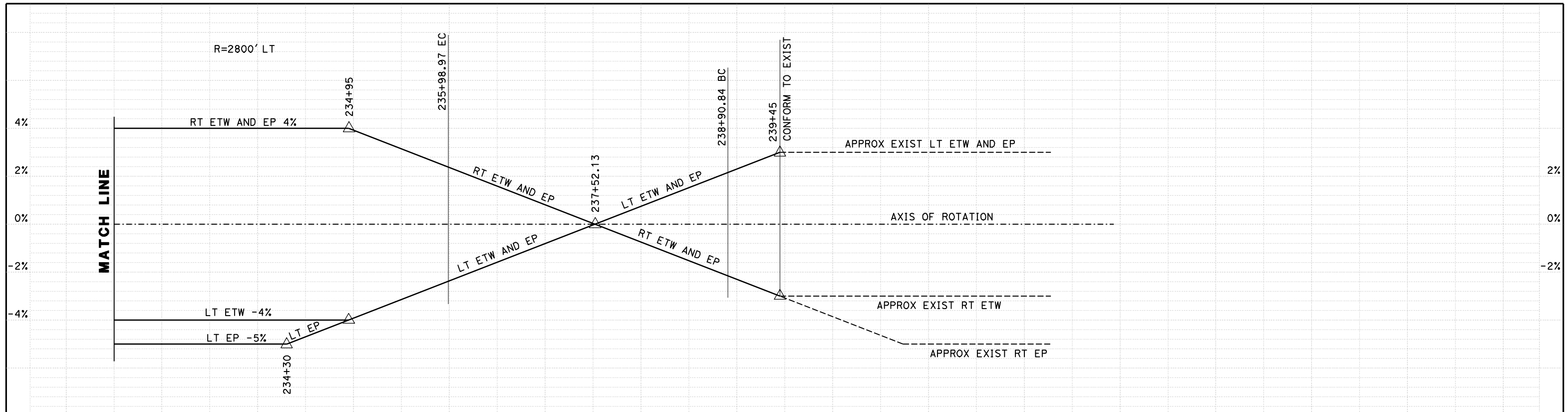
DRAWING NO.  
**P-8**

SCALE  
**AS SHOWN**

SHEET NO.

DATE PLOTTED => 26-APR-2011





REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
G. MANOREK  
DRAWN BY  
L. ROS  
CHECKED BY  
L. HEUSTON  
IN CHARGE  
J. MATSUI-DRURY  
DATE  
04/29/11

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

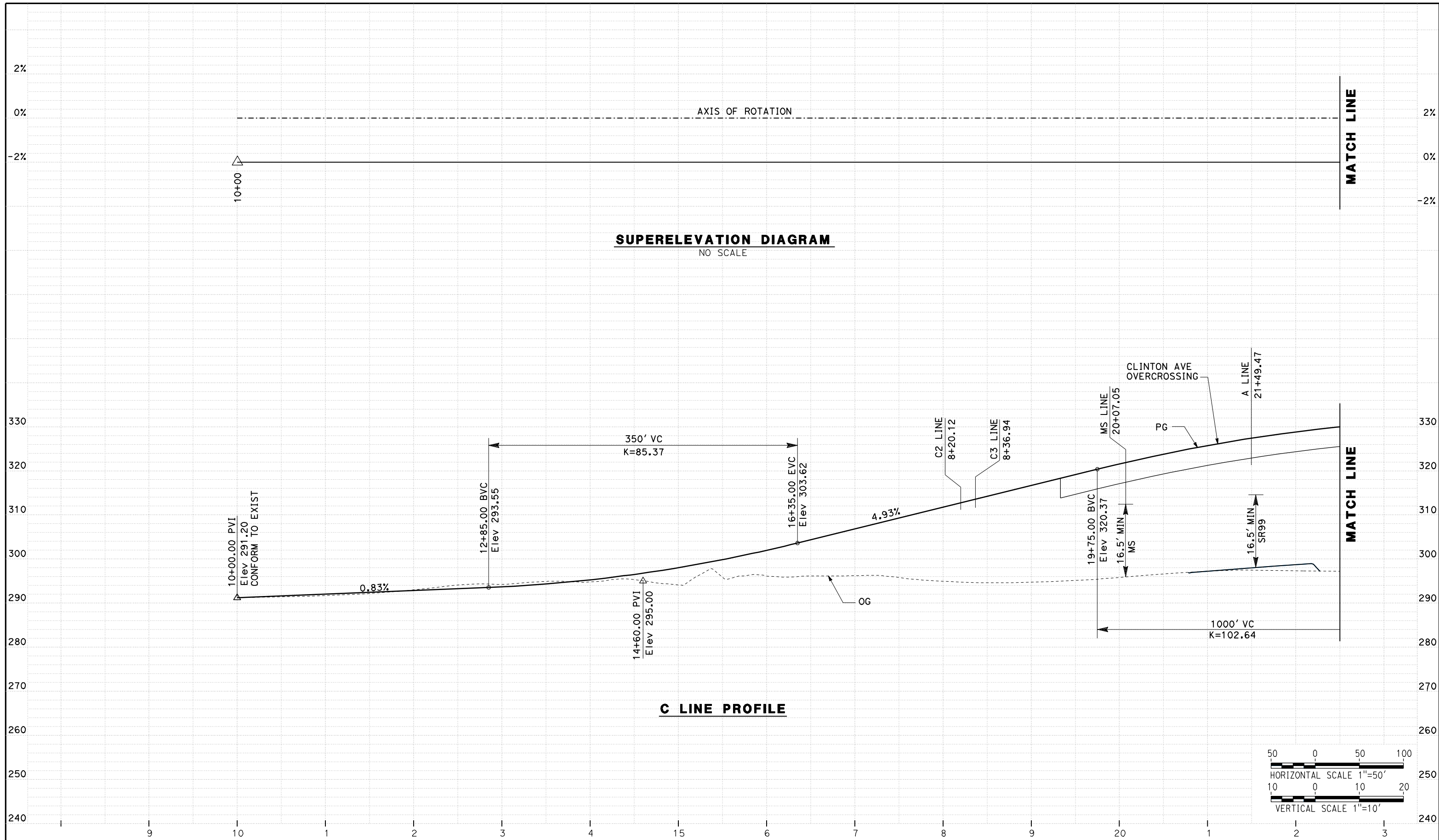
**NOT FOR**  
**CONSTRUCTION**



**CALIFORNIA HIGH SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
**ROUTE 99 RE-ALIGNMENT**  
**PROFILE AND SUPERELEVATION**

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
**P-9**  
SCALE  
AS SHOWN  
SHEET NO.

DATE PLOTTED => 26-APR-2011



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
G. MANOREK

DRAWN BY  
L. ROS

CHECKED BY  
L. HEUSTON

IN CHARGE  
J. MATSUI-DRURY

DATE  
04/29/11

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

**NOT FOR**  
**CONSTRUCTION**



**CALIFORNIA HIGH SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
**ROUTE 99 RE-ALIGNMENT**  
**PROFILE AND SUPERELEVATION**

CONTRACT NO.  
HSR06-007

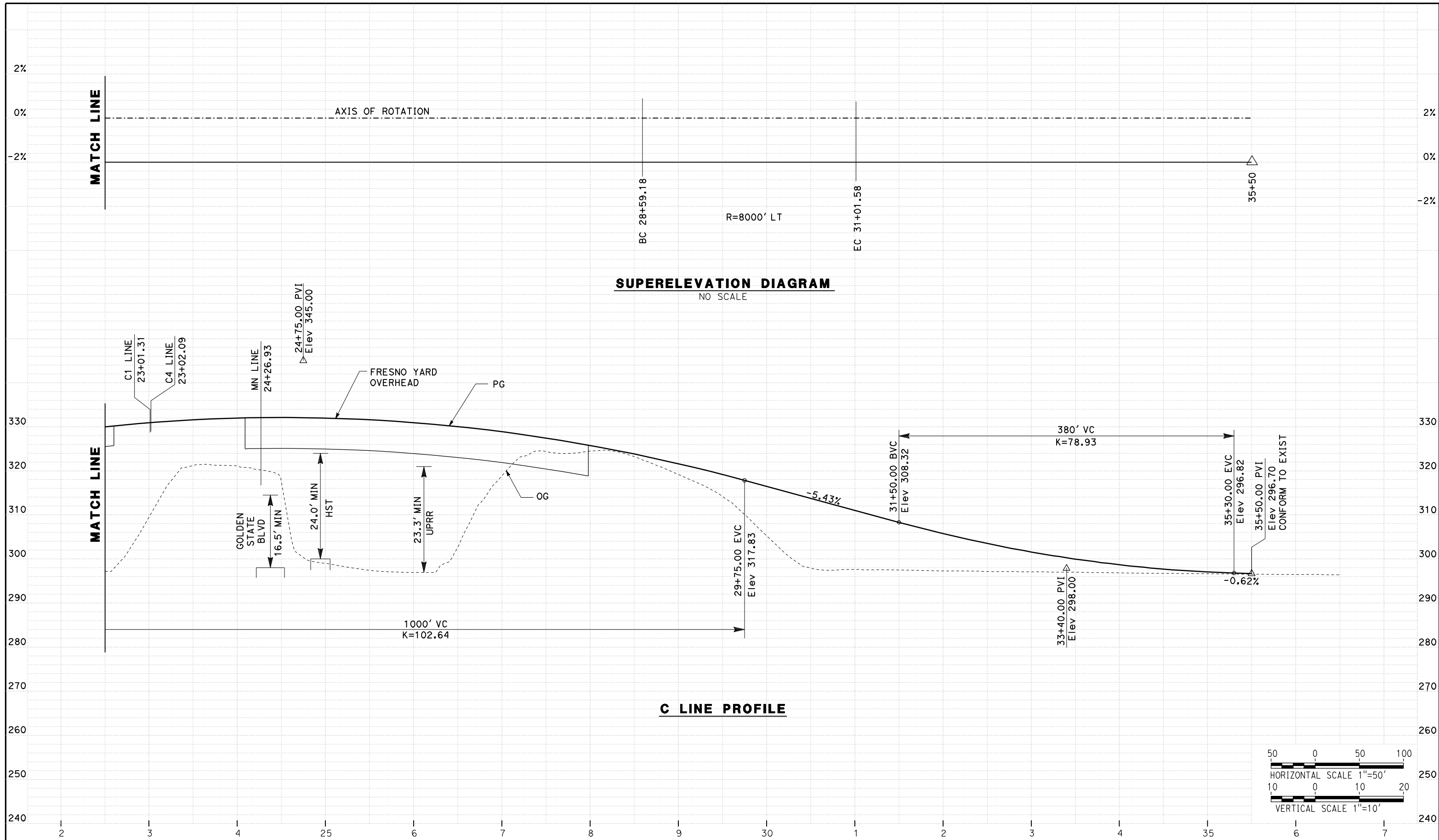
DRAWING NO.  
**P-10**

SCALE  
AS SHOWN

SHEET NO.

DATE PLOTTED => 26-APR-2011





REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
G. MANOREK  
 DRAWN BY  
L. ROS  
 CHECKED BY  
L. HEUSTON  
 IN CHARGE  
J. MATSUI-DRURY  
 DATE  
04/29/11

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

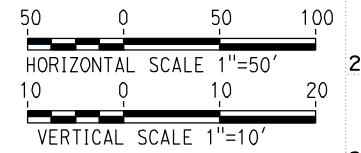
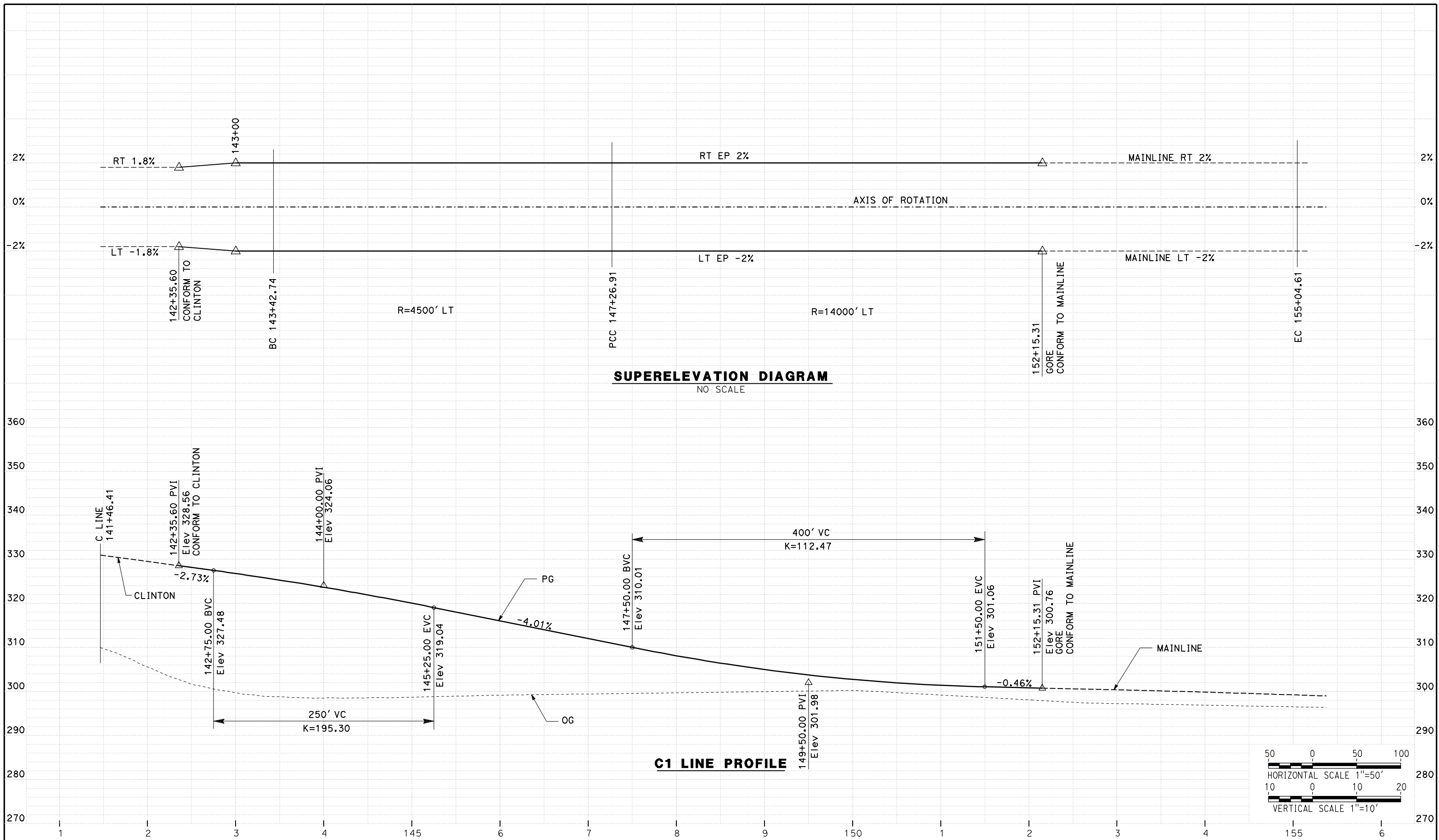
**NOT FOR**  
**CONSTRUCTION**



**CALIFORNIA HIGH SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
**ROUTE 99 RE-ALIGNMENT**  
**PROFILE AND SUPERELEVATION**

CONTRACT NO.  
HSR06-007  
 DRAWING NO.  
**P-11**  
 SCALE  
AS SHOWN  
 SHEET NO.

DATE PLOTTED => 26-APR-2011



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
G. MANOREK  
DRAWN BY  
L. ROS  
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L. HEUSTON  
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J. MATSUI-DRURY  
DATE  
04/29/11

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

**NOT FOR**  
**CONSTRUCTION**

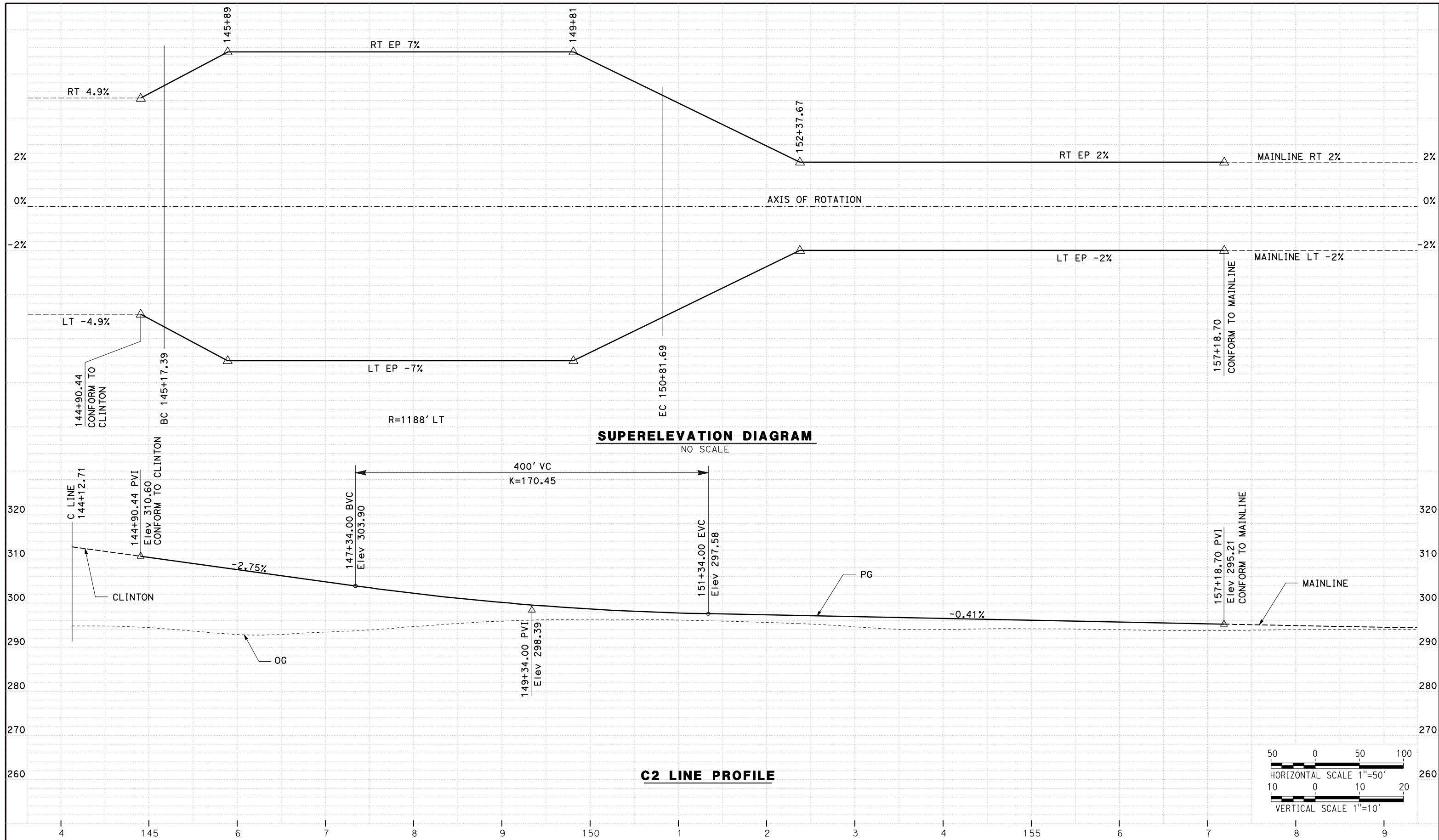


**CALIFORNIA HIGH SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
**ROUTE 99 RE-ALIGNMENT**  
**PROFILE AND SUPERELEVATION**

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
**P-12**  
SCALE  
AS SHOWN  
SHEET NO.

DATE PLOTTED => 26-APR-2011

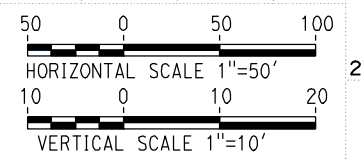




**SUPERELEVATION DIAGRAM**

NO SCALE

**C2 LINE PROFILE**



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
G. MANOREK  
DRAWN BY  
L. ROS  
CHECKED BY  
L. HEUSTON  
IN CHARGE  
J. MATSUI-DRURY  
DATE  
04/29/11

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

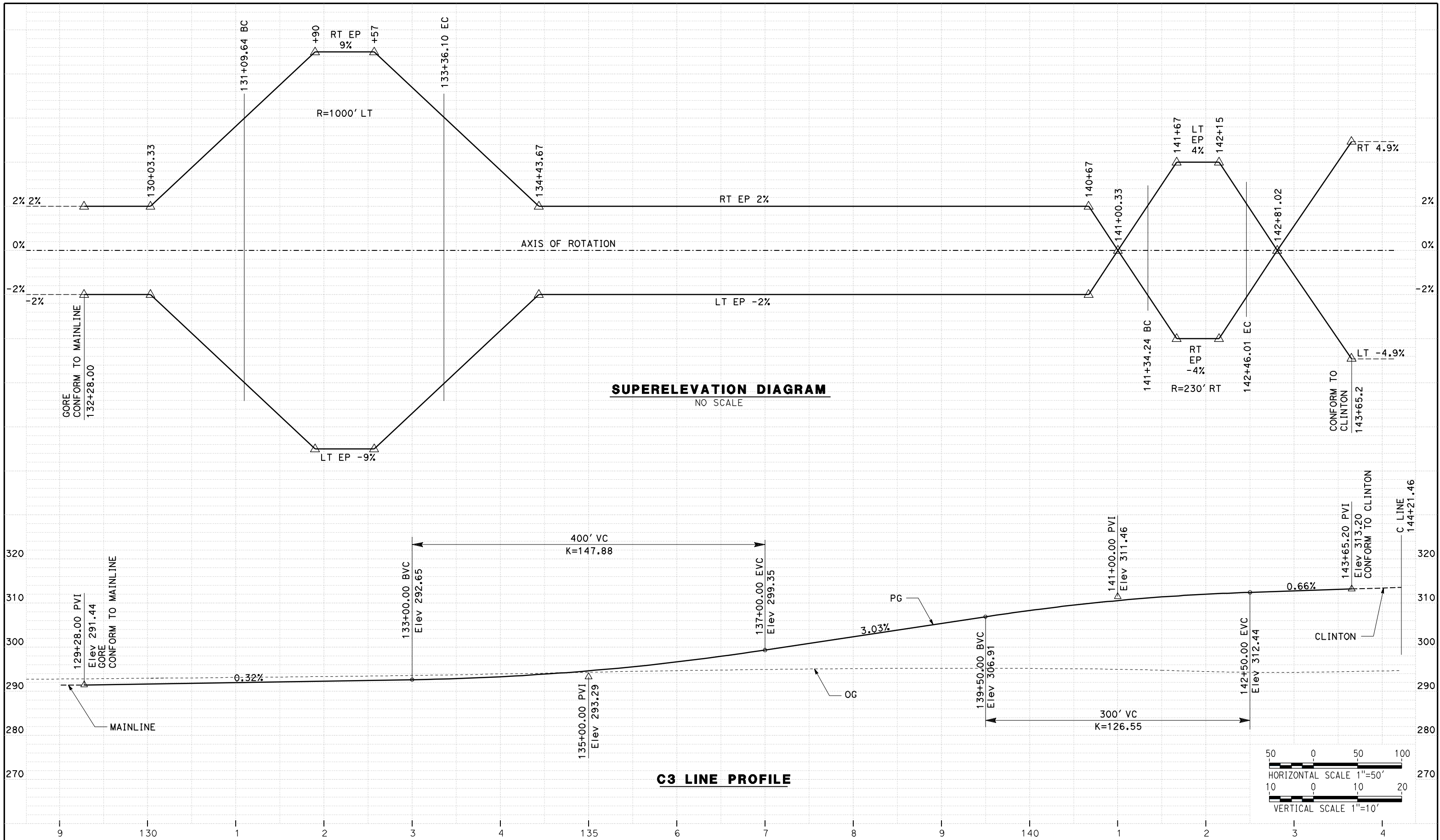
**NOT FOR**  
**CONSTRUCTION**



**CALIFORNIA HIGH SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
**ROUTE 99 RE-ALIGNMENT**  
**PROFILE AND SUPERELEVATION**

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
**P-13**  
SCALE  
AS SHOWN  
SHEET NO.

DATE PLOTTED => 26-APR-2011



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
G. MANOREK  
DRAWN BY  
L. ROS  
CHECKED BY  
L. HEUSTON  
IN CHARGE  
J. MATSUI-DRURY  
DATE  
04/29/11

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

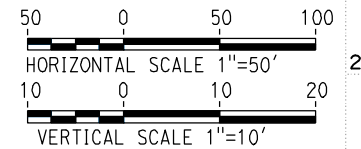
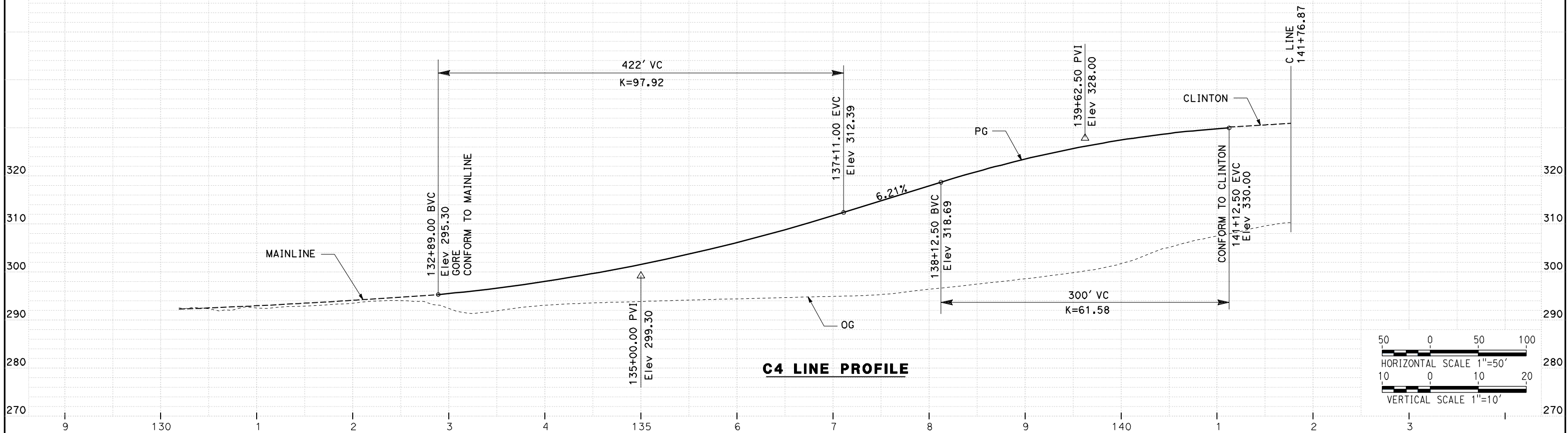
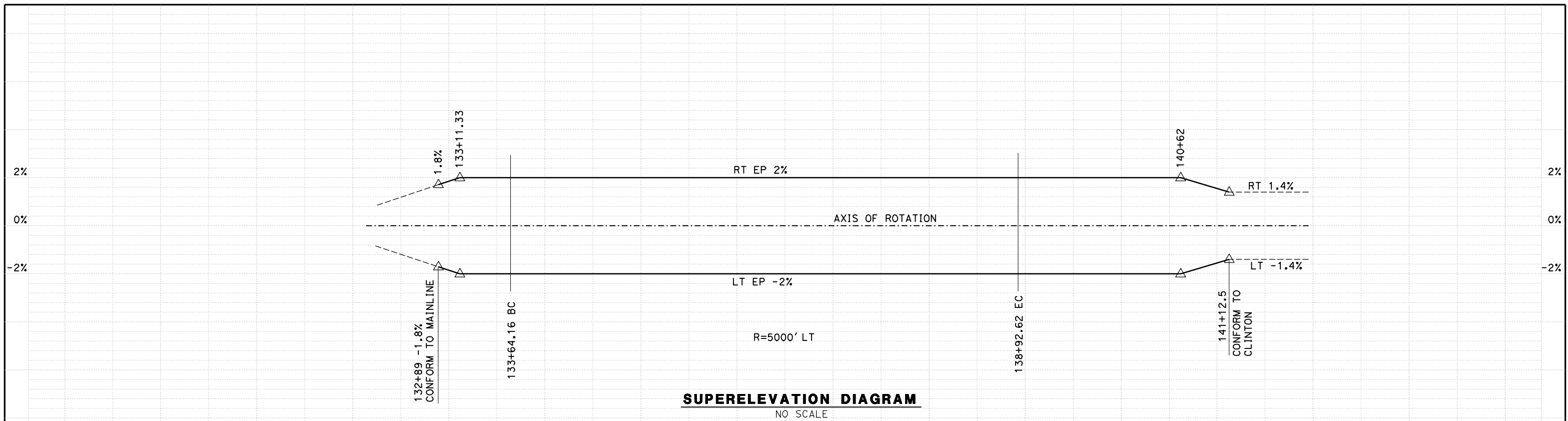
**NOT FOR**  
**CONSTRUCTION**



**CALIFORNIA HIGH SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
**ROUTE 99 RE-ALIGNMENT**  
**PROFILE AND SUPERELEVATION**

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
**P-14**  
SCALE  
AS SHOWN  
SHEET NO.





REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
G. MANOREK  
DRAWN BY  
L. ROS  
CHECKED BY  
L. HEUSTON  
IN CHARGE  
J. MATSUI-DRURY  
DATE  
04/29/11

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

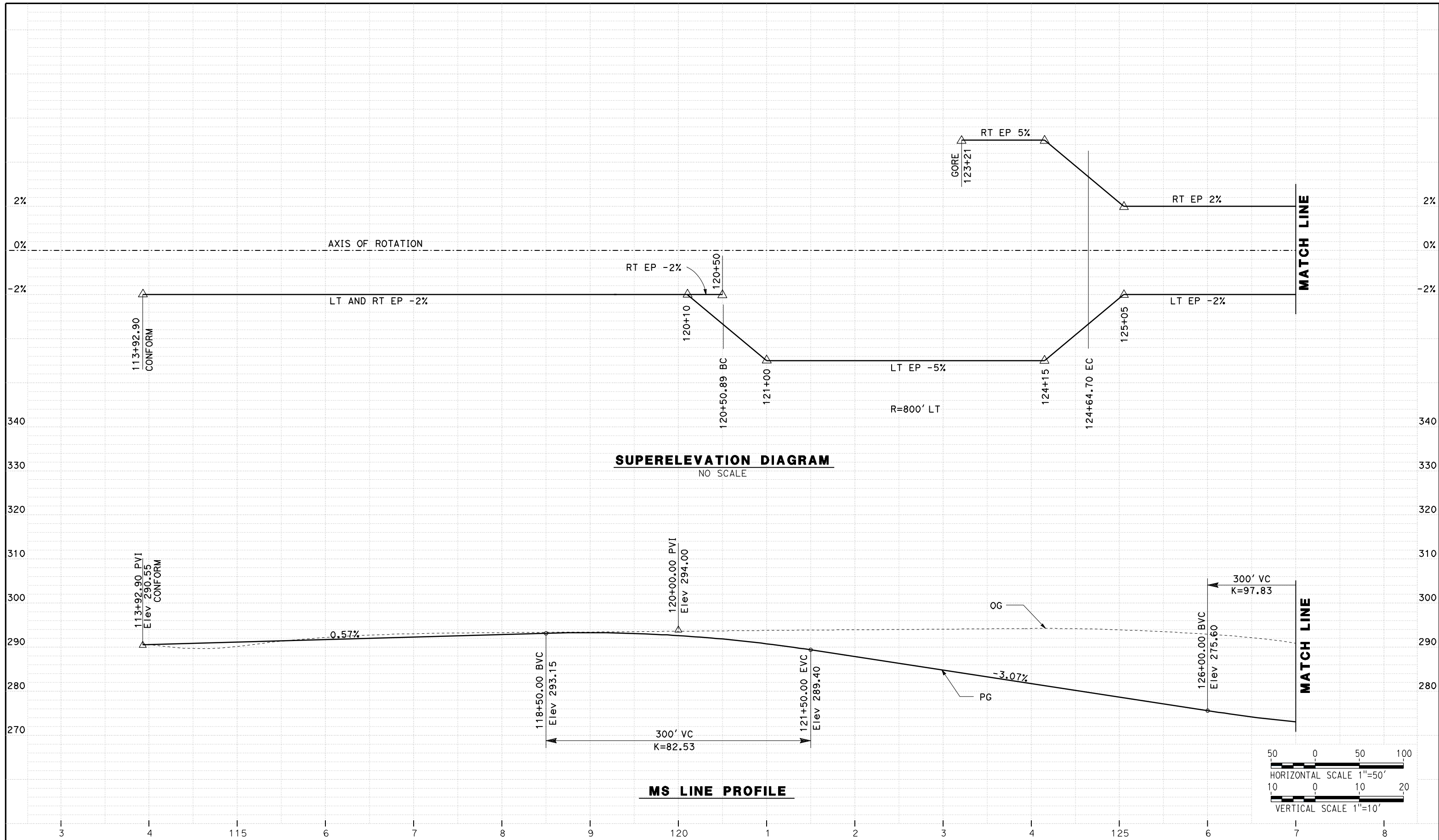
**NOT FOR**  
**CONSTRUCTION**



**CALIFORNIA HIGH SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
**ROUTE 99 RE-ALIGNMENT**  
**PROFILE AND SUPERELEVATION**

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
**P-15**  
SCALE  
AS SHOWN  
SHEET NO.

DATE PLOTTED => 26-APR-2011



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
G. MANOREK  
DRAWN BY  
L. ROS  
CHECKED BY  
L. HEUSTON  
IN CHARGE  
J. MATSUI-DRURY  
DATE  
04/29/11

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

**NOT FOR**  
**CONSTRUCTION**

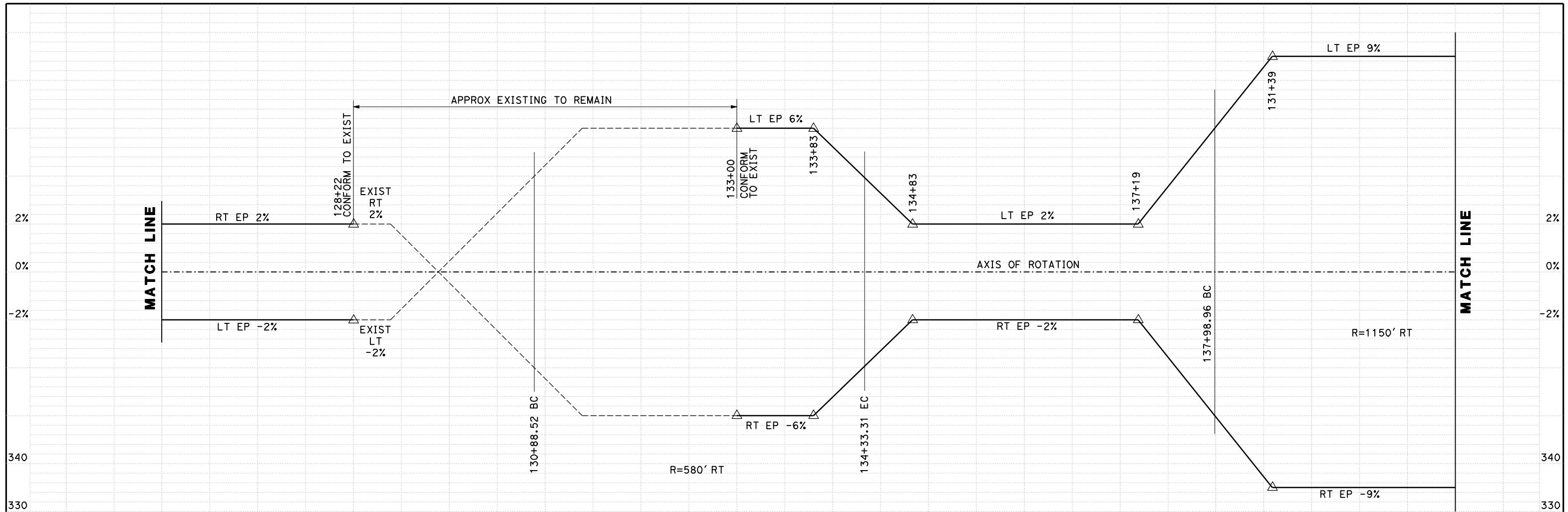


**CALIFORNIA HIGH SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
**ROUTE 99 RE-ALIGNMENT**  
**PROFILE AND SUPERELEVATION**

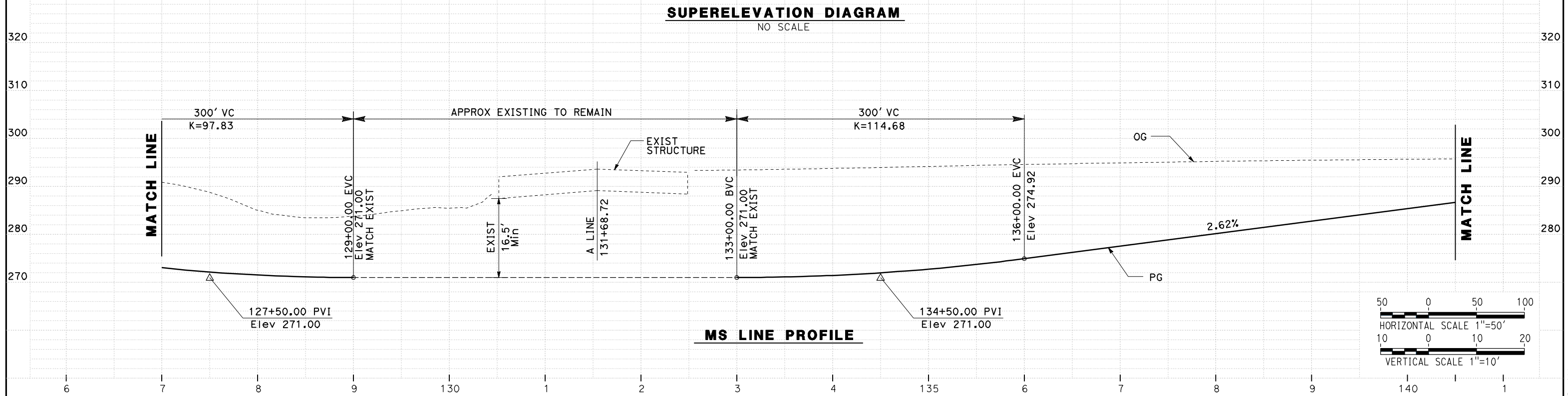
CONTRACT NO.  
HSR06-007  
DRAWING NO.  
**P-16**  
SCALE  
AS SHOWN  
SHEET NO.

DATE PLOTTED => 26-APR-2011

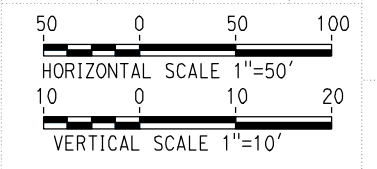




**SUPERELEVATION DIAGRAM**  
NO SCALE



**MS LINE PROFILE**



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
G. MANOREK  
DRAWN BY  
L. ROS  
CHECKED BY  
L. HEUSTON  
IN CHARGE  
J. MATSUI-DRURY  
DATE  
04/29/11

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

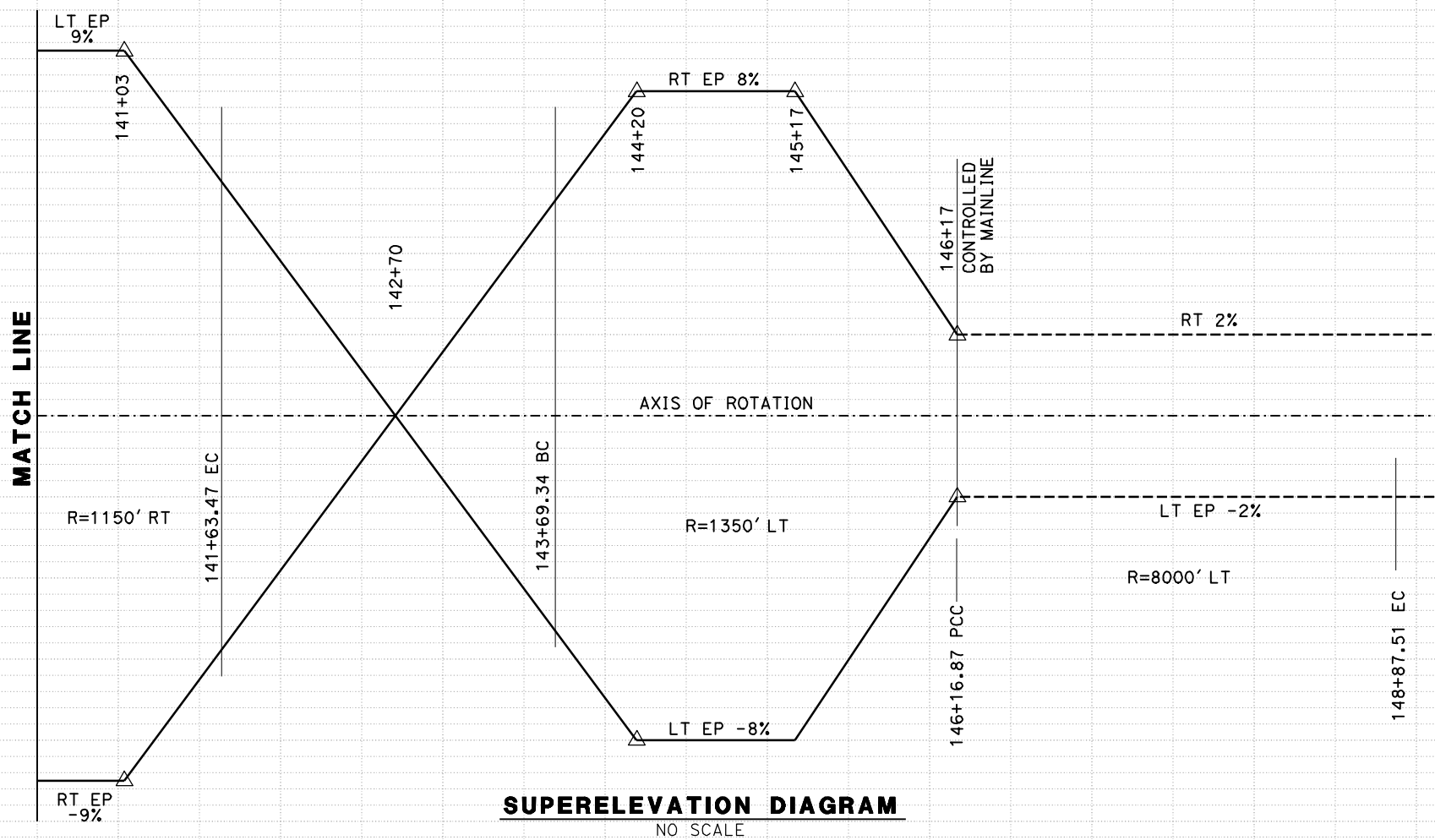
**NOT FOR**  
**CONSTRUCTION**



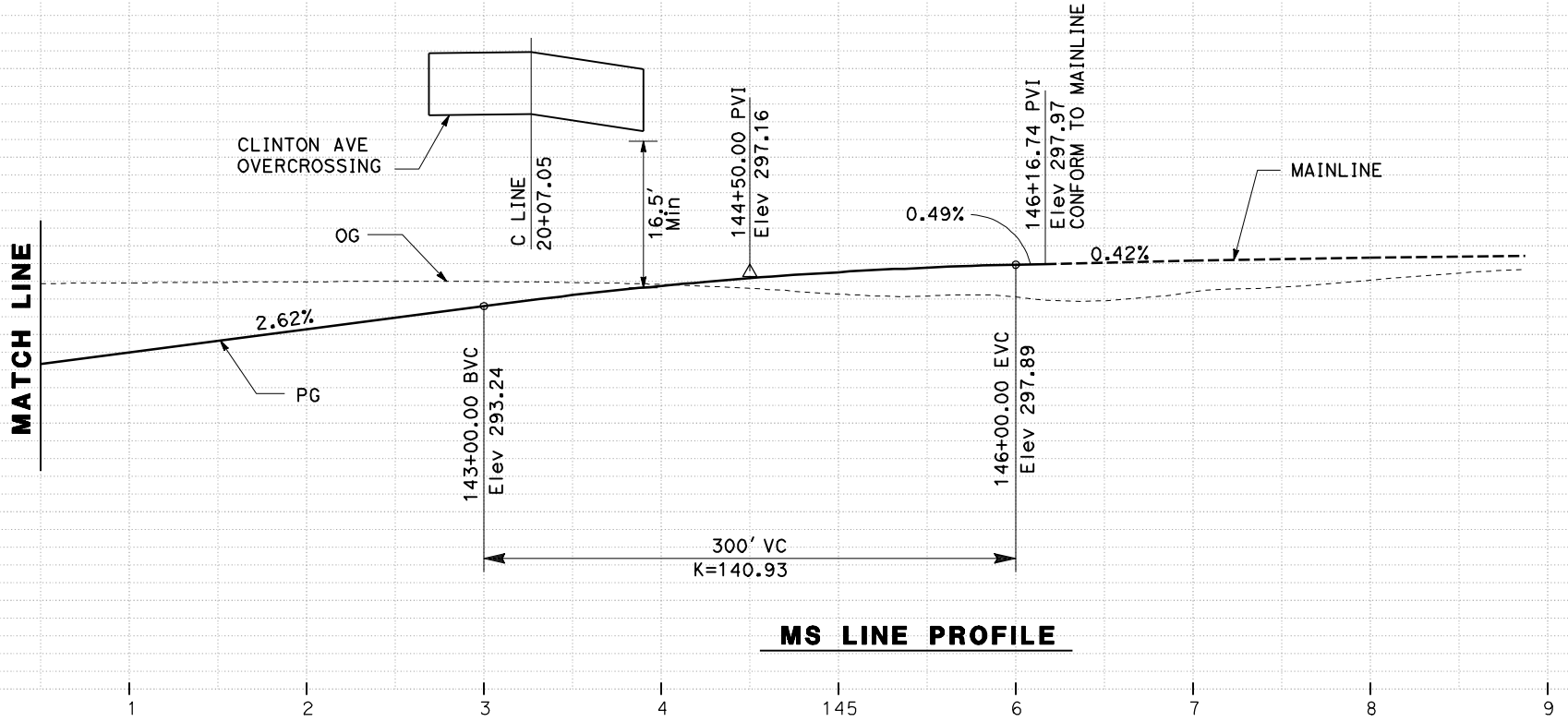
**CALIFORNIA HIGH SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
**ROUTE 99 RE-ALIGNMENT**  
**PROFILE AND SUPERELEVATION**

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
**P-17**  
SCALE  
AS SHOWN  
SHEET NO.

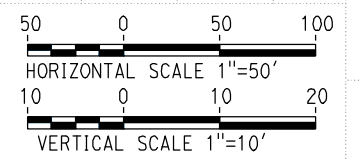
DATE PLOTTED => 26-APR-2011



**SUPERELEVATION DIAGRAM**  
NO SCALE



**MS LINE PROFILE**



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**G. MANOREK**  
DRAWN BY  
**L. ROS**  
CHECKED BY  
**L. HEUSTON**  
IN CHARGE  
**J. MATSUI-DRURY**  
DATE  
**04/29/11**

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

**NOT FOR**  
**CONSTRUCTION**



**CALIFORNIA HIGH SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
**ROUTE 99 RE-ALIGNMENT**  
**PROFILE AND SUPERELEVATION**

CONTRACT NO.  
**HSR06-007**

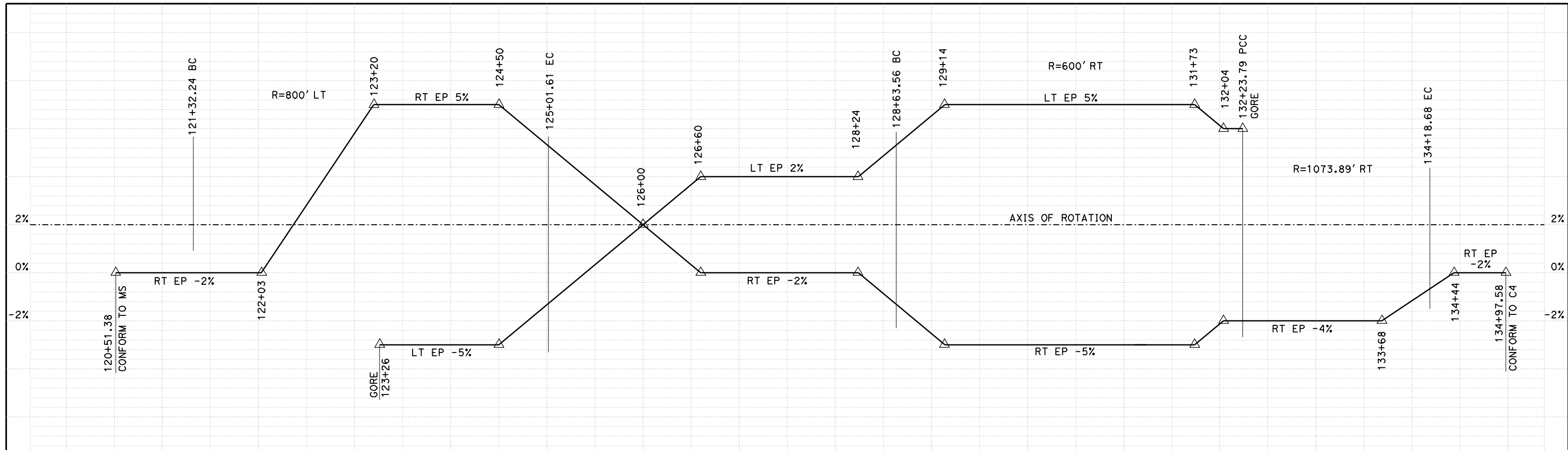
DRAWING NO.  
**P-18**

SCALE  
**AS SHOWN**

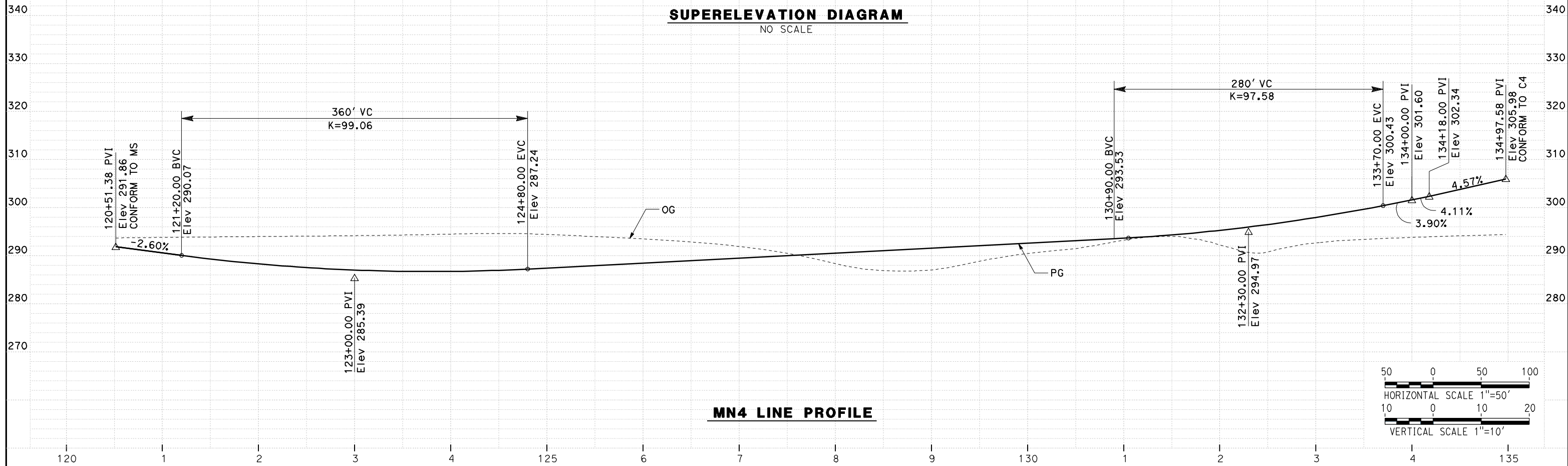
SHEET NO.

DATE PLOTTED => 26-APR-2011

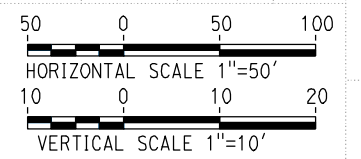




**SUPERELEVATION DIAGRAM**  
NO SCALE



**MN4 LINE PROFILE**



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
G. MANOREK  
DRAWN BY  
L. ROS  
CHECKED BY  
L. HEUSTON  
IN CHARGE  
J. MATSUI-DRURY  
DATE  
04/29/11

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

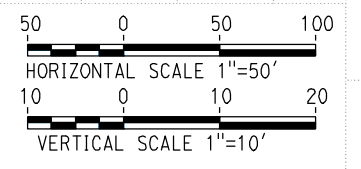
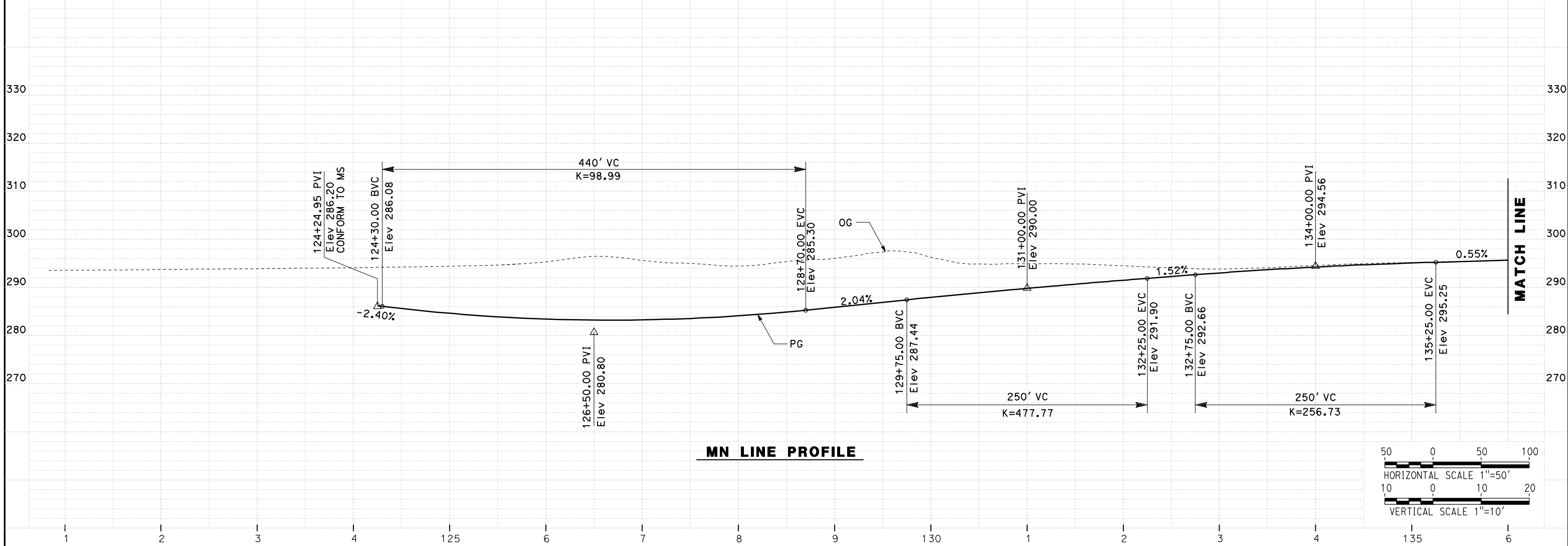
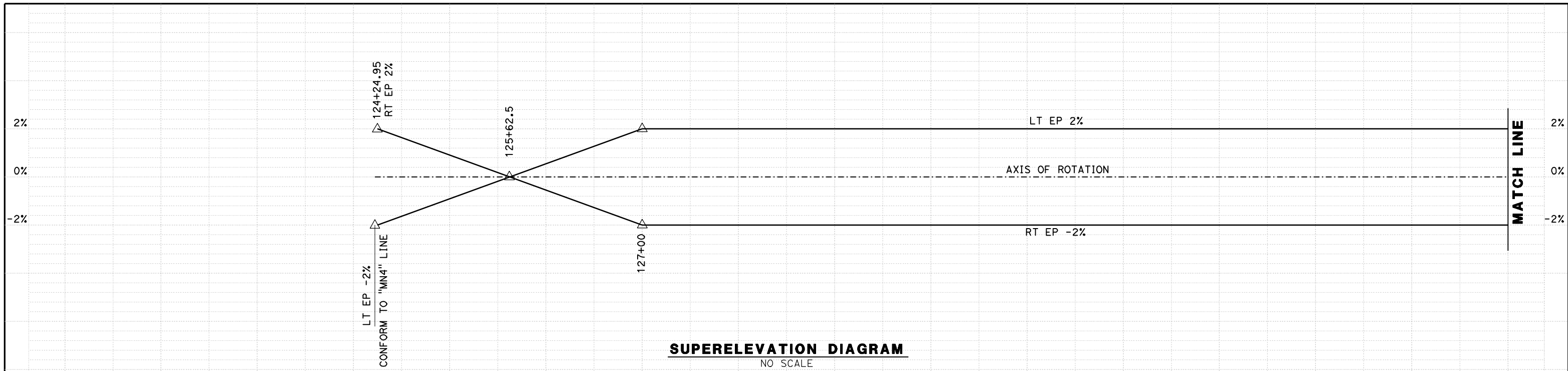
**NOT FOR**  
**CONSTRUCTION**



**CALIFORNIA HIGH SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
**ROUTE 99 RE-ALIGNMENT**  
**PROFILE AND SUPERELEVATION**

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
**P-19**  
SCALE  
AS SHOWN  
SHEET NO.

DATE PLOTTED => 26-APR-2011



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
G. MANOREK  
DRAWN BY  
L. ROS  
CHECKED BY  
L. HEUSTON  
IN CHARGE  
J. MATSUI-DRURY  
DATE  
04/29/11

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

**NOT FOR**  
**CONSTRUCTION**

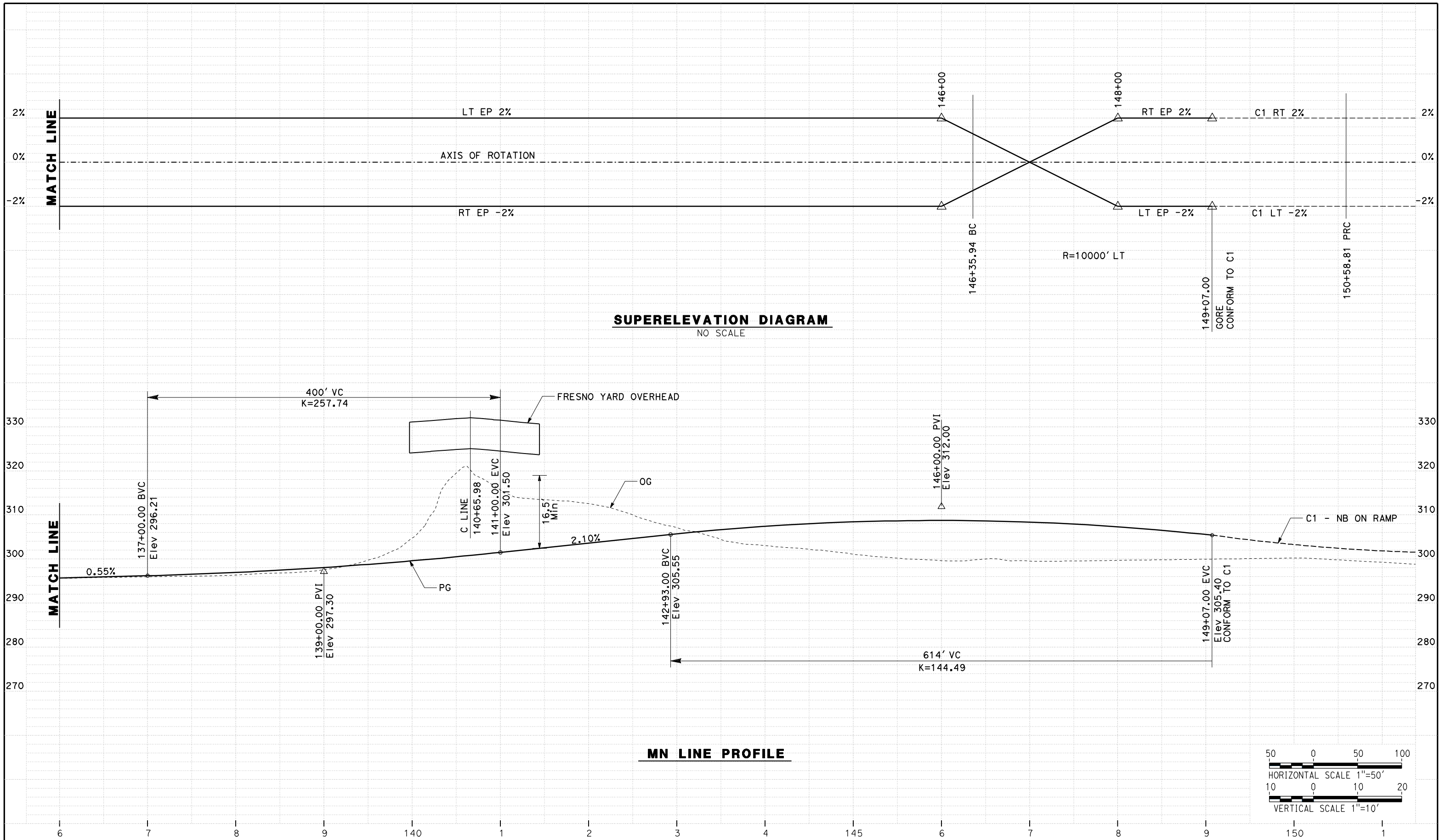


**CALIFORNIA HIGH SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
**ROUTE 99 RE-ALIGNMENT**  
**PROFILE AND SUPERELEVATION**

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
**P-20**  
SCALE  
AS SHOWN  
SHEET NO.

DATE PLOTTED => 26-APR-2011





REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
G. MANOREK

DRAWN BY  
L. ROS

CHECKED BY  
L. HEUSTON

IN CHARGE  
J. MATSUI-DRURY

DATE  
04/29/11

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

**NOT FOR**  
**CONSTRUCTION**



**CALIFORNIA HIGH SPEED TRAIN PROJECT**

**MERCED TO FRESNO**

**ROUTE 99 RE-ALIGNMENT**

**PROFILE AND SUPERELEVATION**

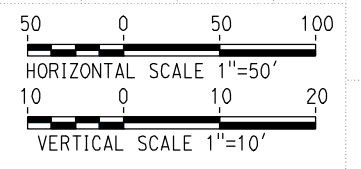
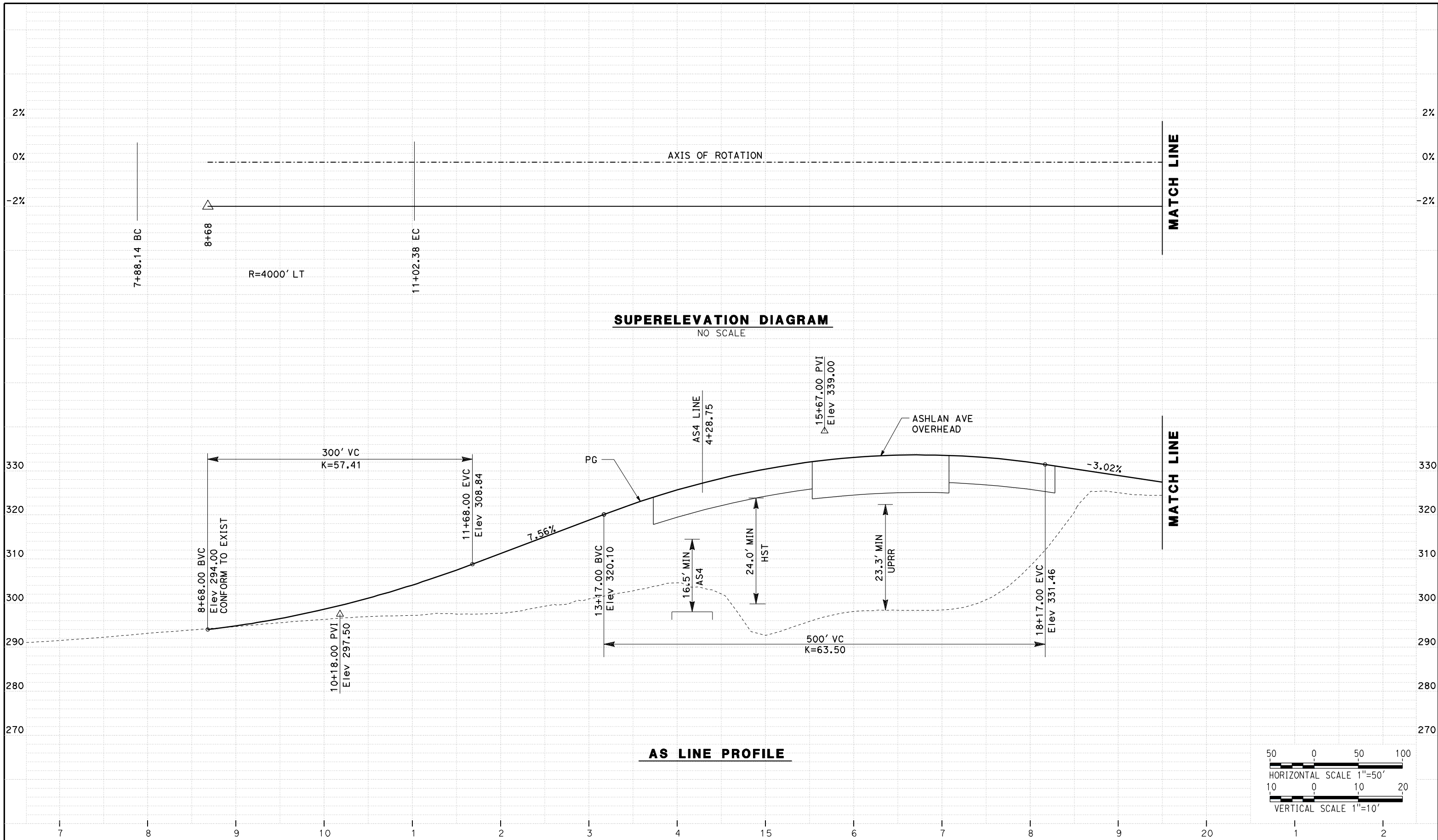
CONTRACT NO.  
HSR06-007

DRAWING NO.  
**P-21**

SCALE  
AS SHOWN

SHEET NO.

DATE PLOTTED => 26-APR-2011



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
G. MANOREK  
DRAWN BY  
L. ROS  
CHECKED BY  
L. HEUSTON  
IN CHARGE  
J. MATSUI-DRURY  
DATE  
04/29/11

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

**NOT FOR**  
**CONSTRUCTION**

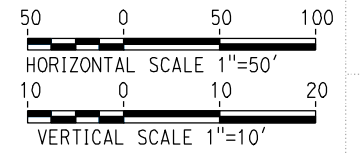
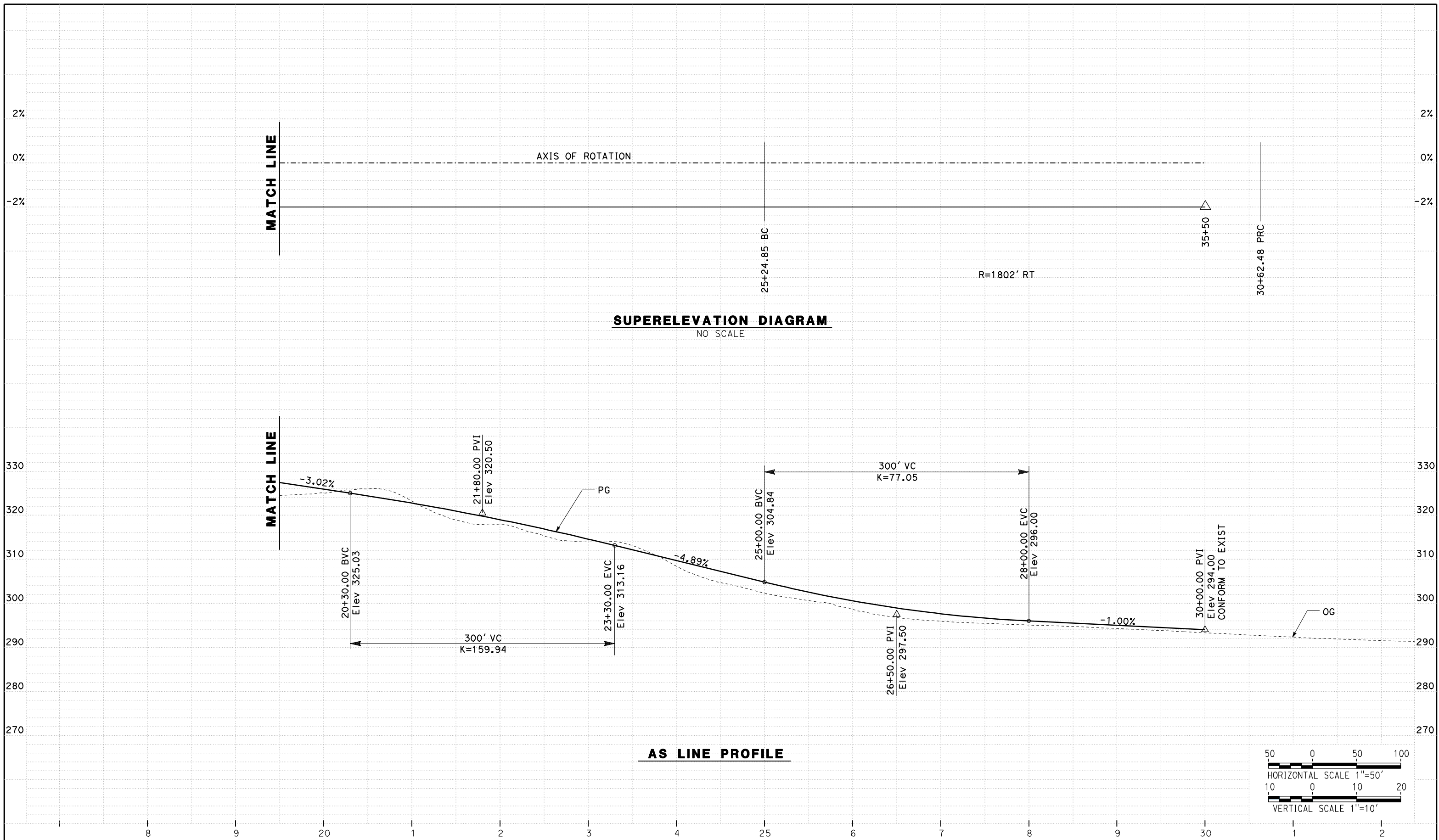


**CALIFORNIA HIGH SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
**ROUTE 99 RE-ALIGNMENT**  
**PROFILE AND SUPERELEVATION**

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
**P-22**  
SCALE  
AS SHOWN  
SHEET NO.

DATE PLOTTED => 26-APR-2011





REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
G. MANOREK

DRAWN BY  
L. ROS

CHECKED BY  
L. HEUSTON

IN CHARGE  
J. MATSUI-DRURY

DATE  
04/29/11

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

**NOT FOR**  
**CONSTRUCTION**

**AECOM**  
Technical Services, Inc.  
2020 L Street, Suite 300  
Sacramento, CA 95811

**CH2MHILL**



**CALIFORNIA HIGH SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
**ROUTE 99 RE-ALIGNMENT**  
**PROFILE AND SUPERELEVATION**

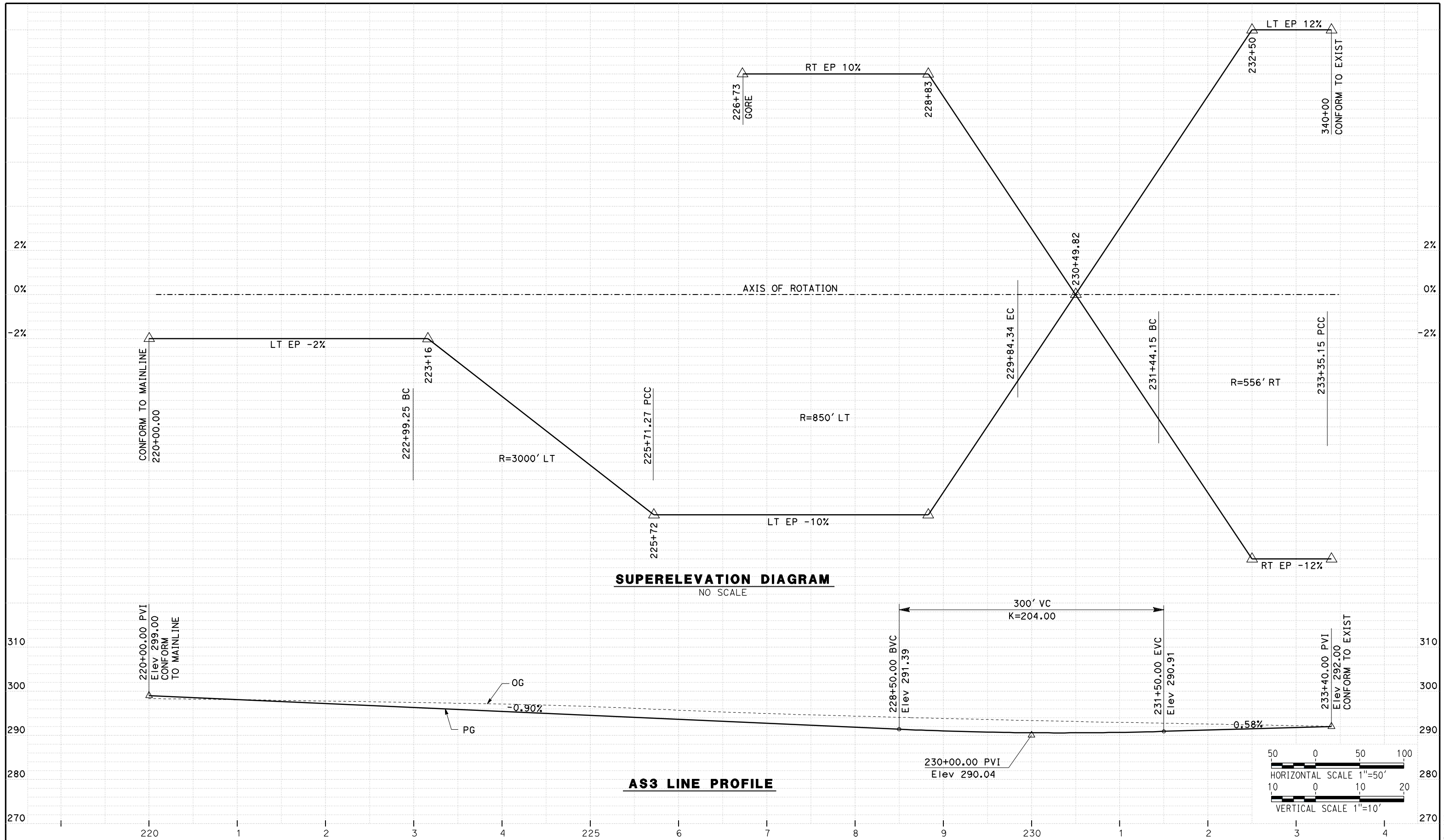
CONTRACT NO.  
HSR06-007

DRAWING NO.  
**P-23**

SCALE  
AS SHOWN

SHEET NO.

DATE PLOTTED => 26-APR-2011



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
G. MANOREK  
DRAWN BY  
L. ROS  
CHECKED BY  
L. HEUSTON  
IN CHARGE  
J. MATSUI-DRURY  
DATE  
04/29/11

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

**NOT FOR**  
**CONSTRUCTION**

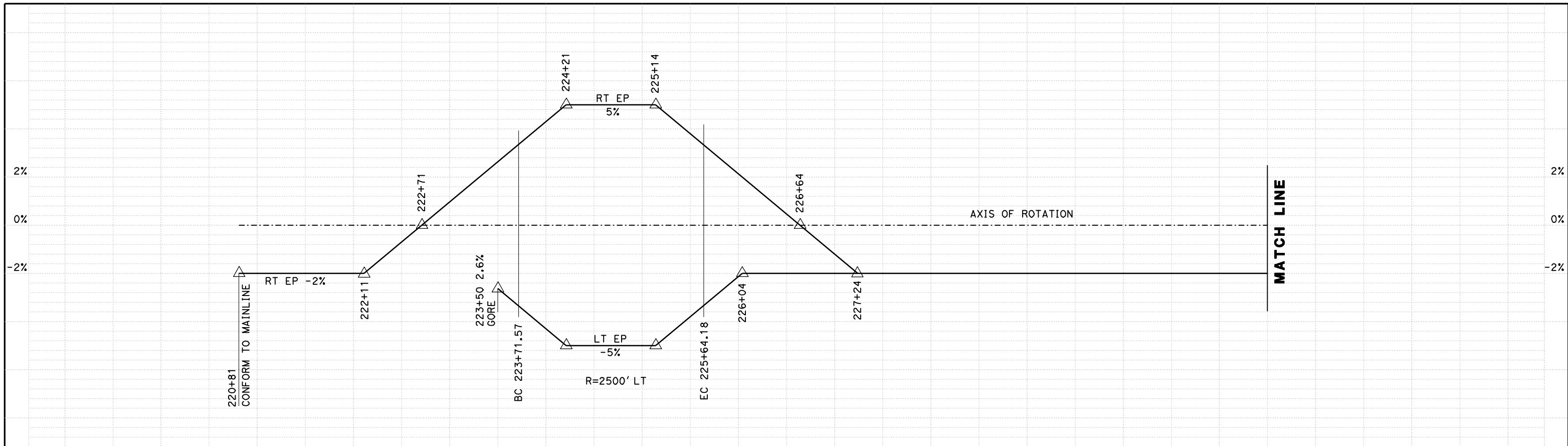


**CALIFORNIA HIGH SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
**ROUTE 99 RE-ALIGNMENT**  
**PROFILE AND SUPERELEVATION**

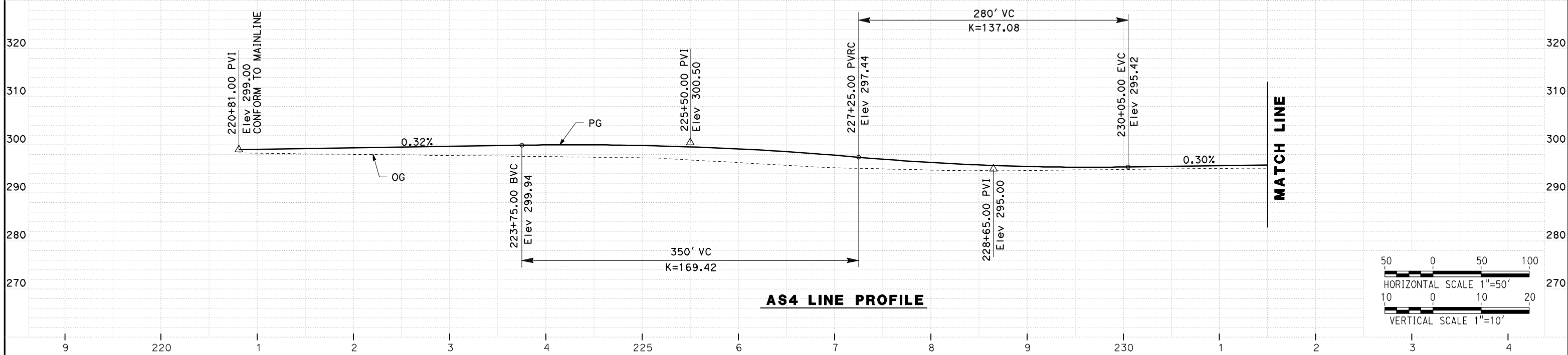
CONTRACT NO.  
HSR06-007  
DRAWING NO.  
**P-24**  
SCALE  
AS SHOWN  
SHEET NO.

DATE PLOTTED => 26-APR-2011

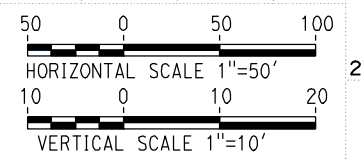




**SUPERELEVATION DIAGRAM**  
NO SCALE



**AS4 LINE PROFILE**



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
G. MANOREK  
DRAWN BY  
L. ROS  
CHECKED BY  
L. HEUSTON  
IN CHARGE  
J. MATSUI-DRURY  
DATE  
04/29/11

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

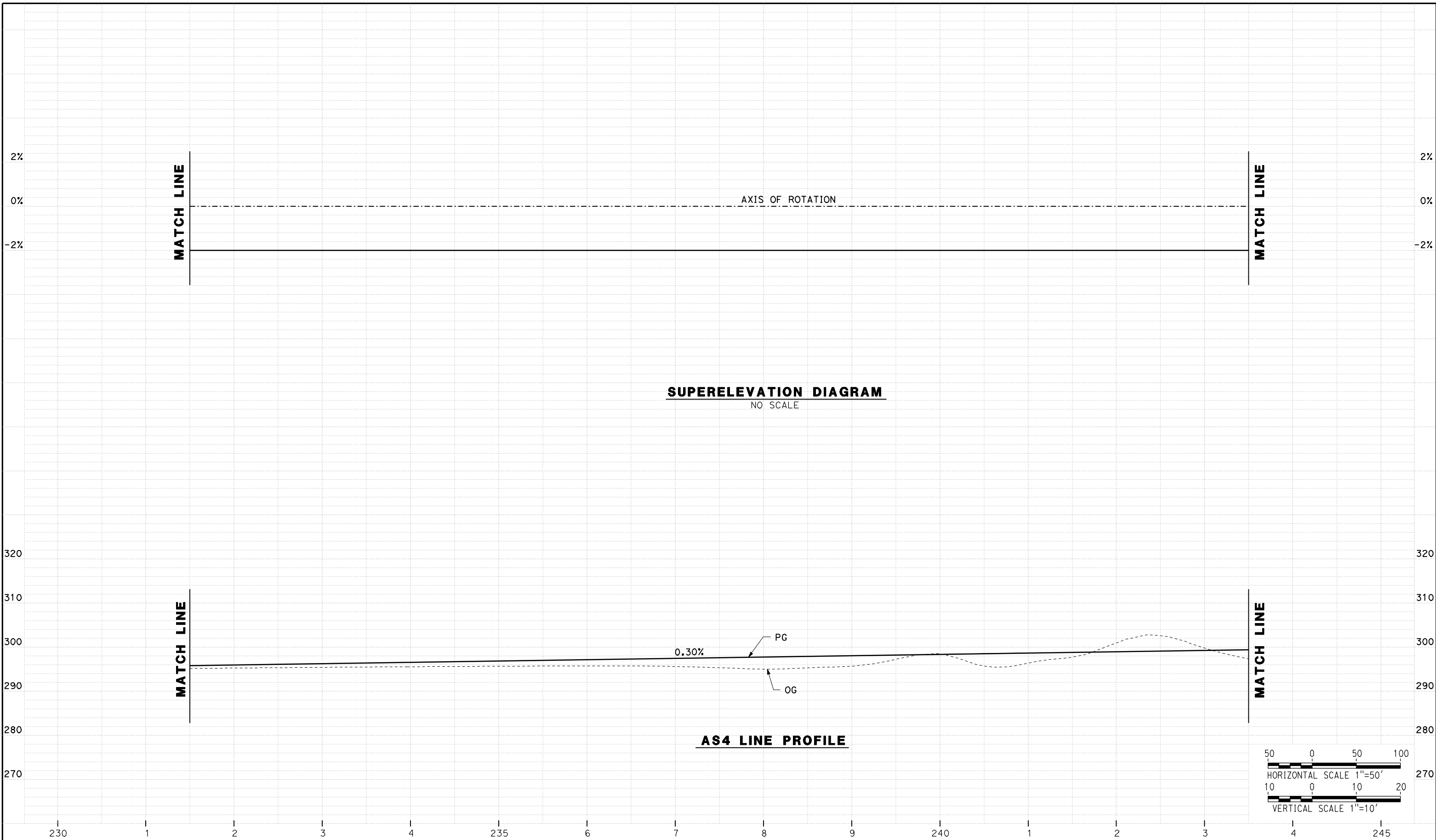
**NOT FOR**  
**CONSTRUCTION**



**CALIFORNIA HIGH SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
**ROUTE 99 RE-ALIGNMENT**  
**PROFILE AND SUPERELEVATION**

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
**P-25**  
SCALE  
AS SHOWN  
SHEET NO.

DATE PLOTTED => 26-APR-2011



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
G. MANOREK  
DRAWN BY  
L. ROS  
CHECKED BY  
L. HEUSTON  
IN CHARGE  
J. MATSUI-DRURY  
DATE  
04/29/11

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

**NOT FOR**  
**CONSTRUCTION**

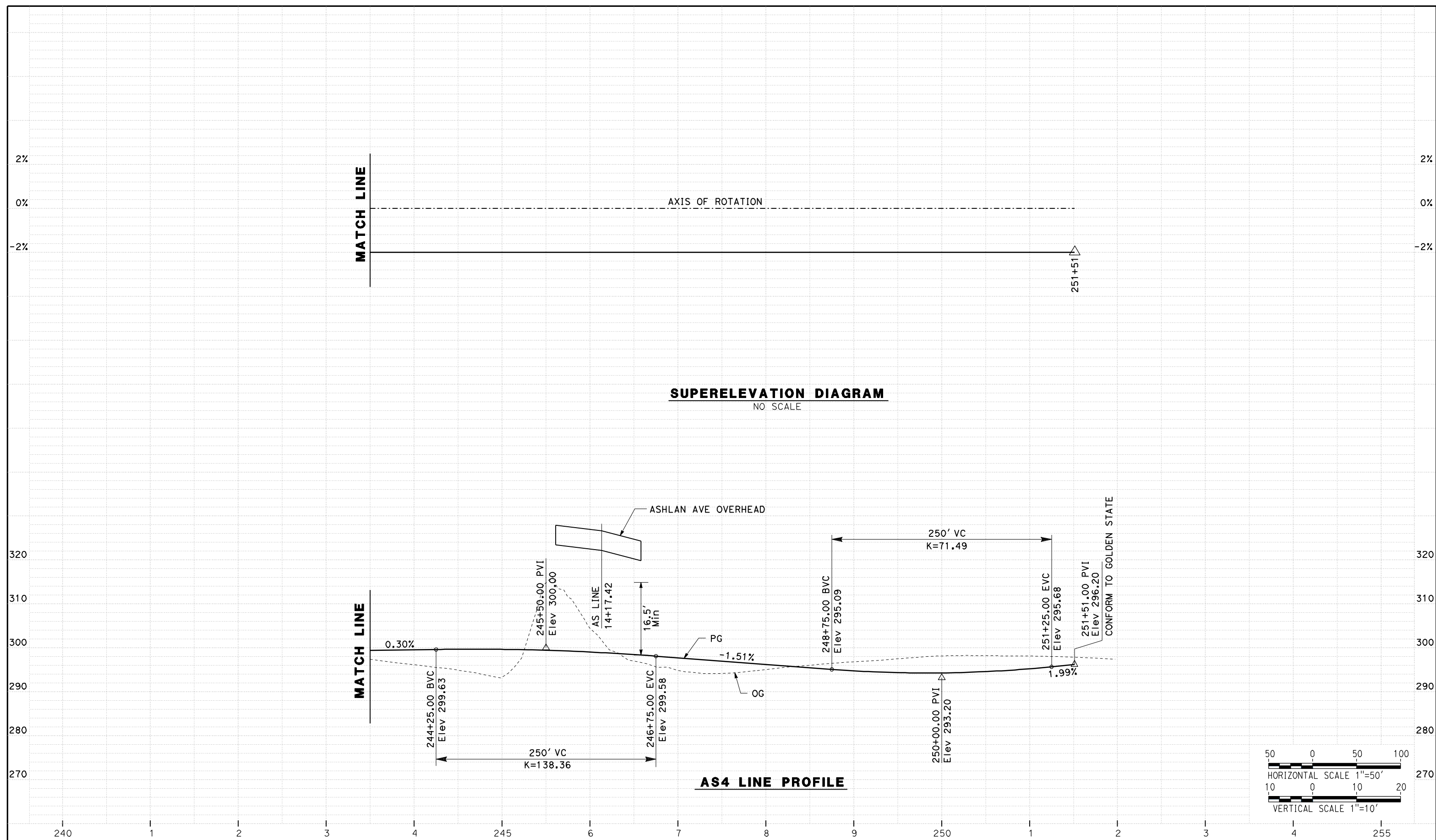


**CALIFORNIA HIGH SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
**ROUTE 99 RE-ALIGNMENT**  
**PROFILE AND SUPERELEVATION**

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
**P-26**  
SCALE  
AS SHOWN  
SHEET NO.

DATE PLOTTED => 26-APR-2011





REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
G. MANOREK  
DRAWN BY  
L. ROS  
CHECKED BY  
L. HEUSTON  
IN CHARGE  
J. MATSUI-DRURY  
DATE  
04/29/11

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

**NOT FOR**  
**CONSTRUCTION**



**CALIFORNIA HIGH SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
**ROUTE 99 RE-ALIGNMENT**  
**PROFILE AND SUPERELEVATION**

CONTRACT NO.  
HSR06-007

DRAWING NO.  
**P-27**

SCALE  
AS SHOWN


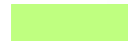
SHEET NO.

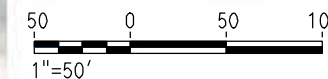
DATE PLOTTED => 26-APR-2011

**STAGING NOTES:**

1. -CLOSE ON/OFF RAMP AT DAKOTA, PRINCETON AND SHIELD AVE.  
-CLOSE SOUTHBOUND ON/OFF RAMP AT CLINTON AVE.
2. -ROUTE 99 NORTHBOUND/SOUTHBOUND TRAFFIC REMAIN AS IS.  
SEE TYPICAL SECTION SHEETS SC-2 AND SC-4.
3. -CONSTRUCT ROUTE 99.  
-CONSTRUCT SOUTHBOUND ON/OFF RAMP AT CLINTON AVE.  
-CONSTRUCT SOUTHBOUND ON RAMP ASHLAN AVE.  
-CONSTRUCT SOUTHBOUND OFF RAMP MOTEL DR.
4. -MULTIPLE PHASES AND NIGHT CLOSURE ARE ANTICIPATED FOR  
CONFORM TO ROUTE 99.
5. -ASHLAN AVE SOUTHBOUND ON RAMP TO REMAIN OPEN AT ALL TIMES.
6. -HIGH SPEED RAIL TO BE CONSTRUCTED AFTER COMPLETION OF ROUTE 99.

**LEGEND:**

-  CONSTRUCT THIS STAGE
-  CONSTRUCT PREVIOUS STAGE



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
G. MANOREK  
DRAWN BY  
L. ROS  
CHECKED BY  
L. HEUSTON  
IN CHARGE  
J. MATSUI-DRURY  
DATE  
04/29/11

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

**NOT FOR**  
**CONSTRUCTION**



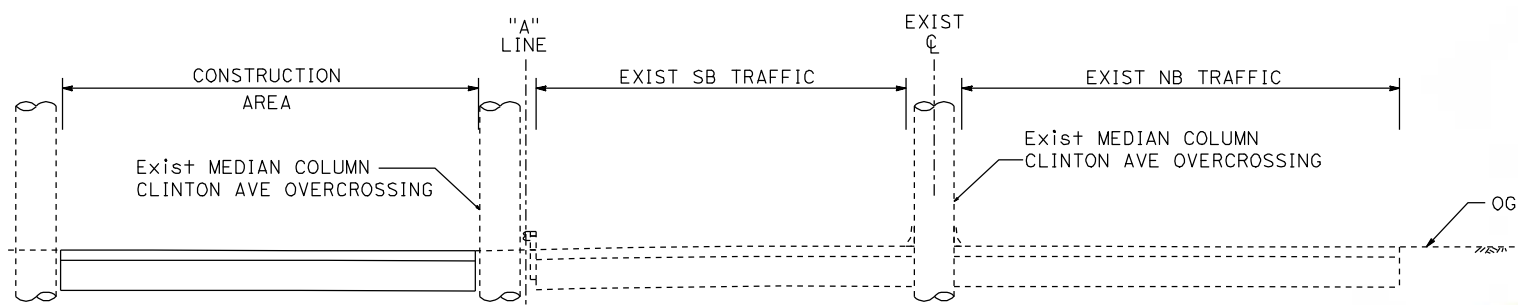
**CALIFORNIA HIGH SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
**ROUTE 99 RE-ALIGNMENT**  
**STAGE 1 CONSTRUCTION**

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
**SC-1**  
SCALE  
AS SHOWN  
SHEET NO.

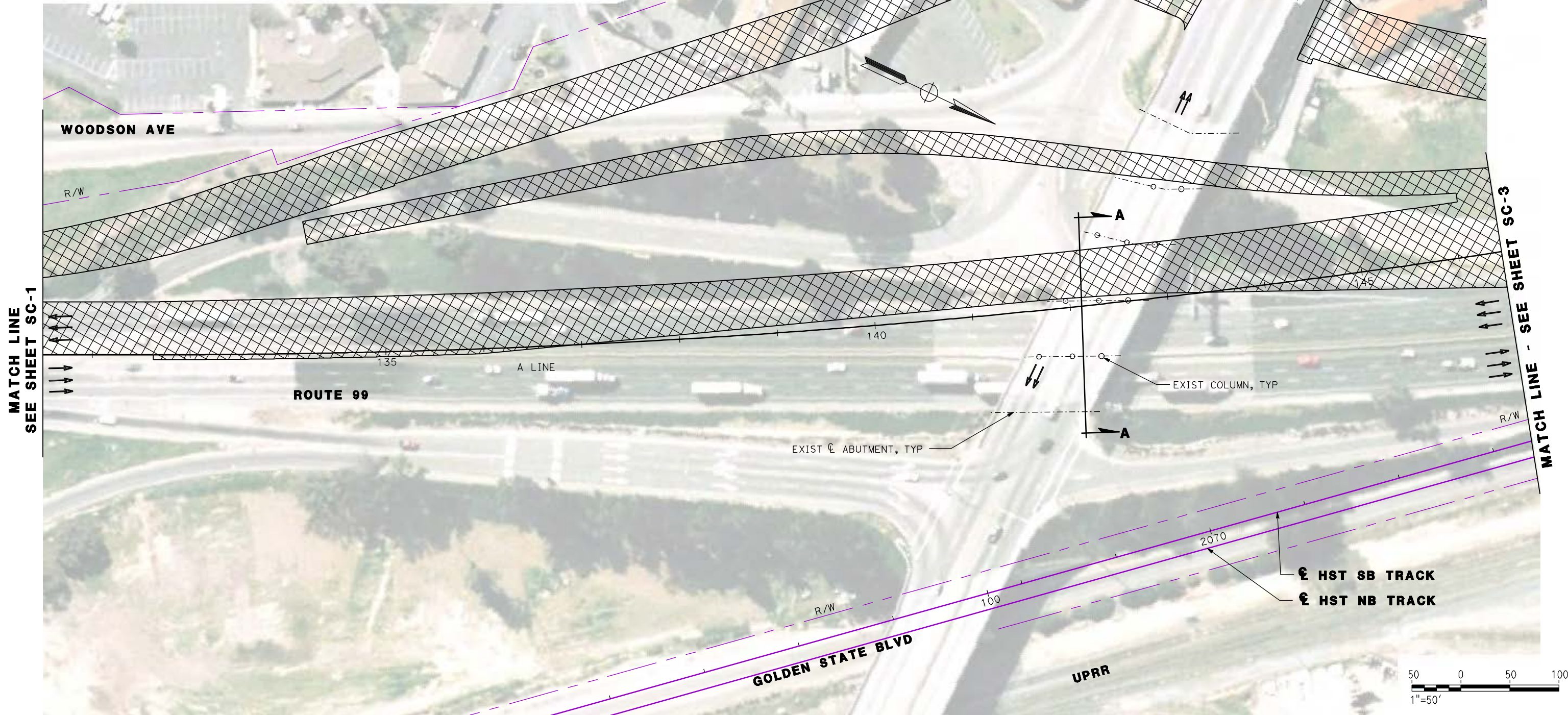
MATCH LINE - SEE SHEET SC-2

DATE PLOTTED: 03/26/11





**SECTION A-A  
ROUTE 99 AT CLINTON AVE**



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
G. MANOREK  
DRAWN BY  
L. ROS  
CHECKED BY  
L. HEUSTON  
IN CHARGE  
J. MATSUI-DRURY  
DATE  
04/29/11

**RECORD SET  
15% DESIGN  
SUBMITTAL**

**NOT FOR  
CONSTRUCTION**

**AECOM**  
Technical Services, Inc.  
2020 L Street, Suite 300  
Sacramento, CA 95811

**CH2MHILL**

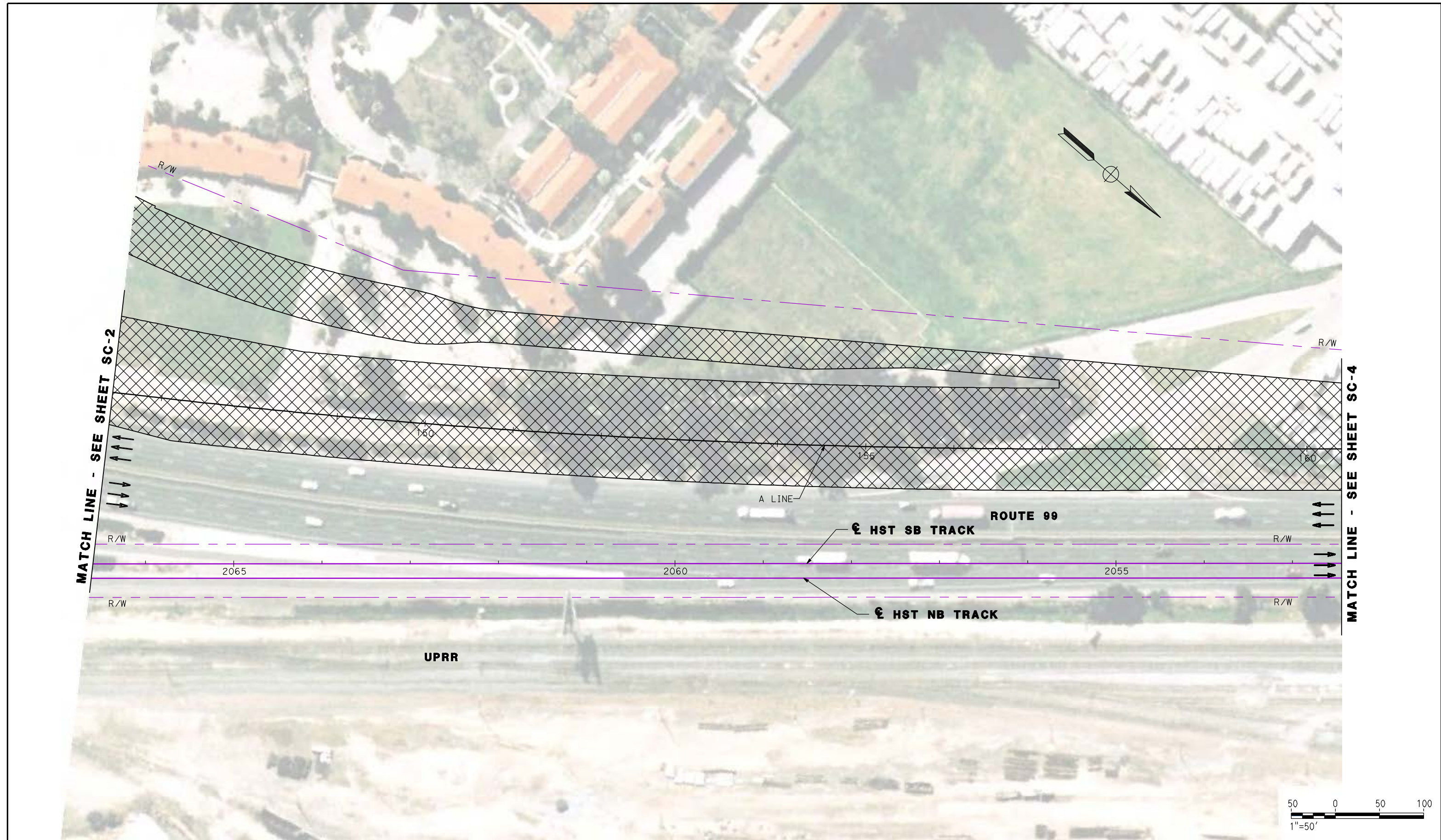


**CALIFORNIA HIGH SPEED TRAIN PROJECT  
MERCED TO FRESNO  
ROUTE 99 RE-ALIGNMENT  
STAGE 1 CONSTRUCTION**

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
**SC-2**  
SCALE  
AS SHOWN  
SHEET NO.

DATE PLOTTED: 23-APR-2011





REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
 G. MANOREK  
 DRAWN BY  
 L. ROS  
 CHECKED BY  
 L. HEUSTON  
 IN CHARGE  
 J. MATSUI-DRURY  
 DATE  
 04/29/11

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

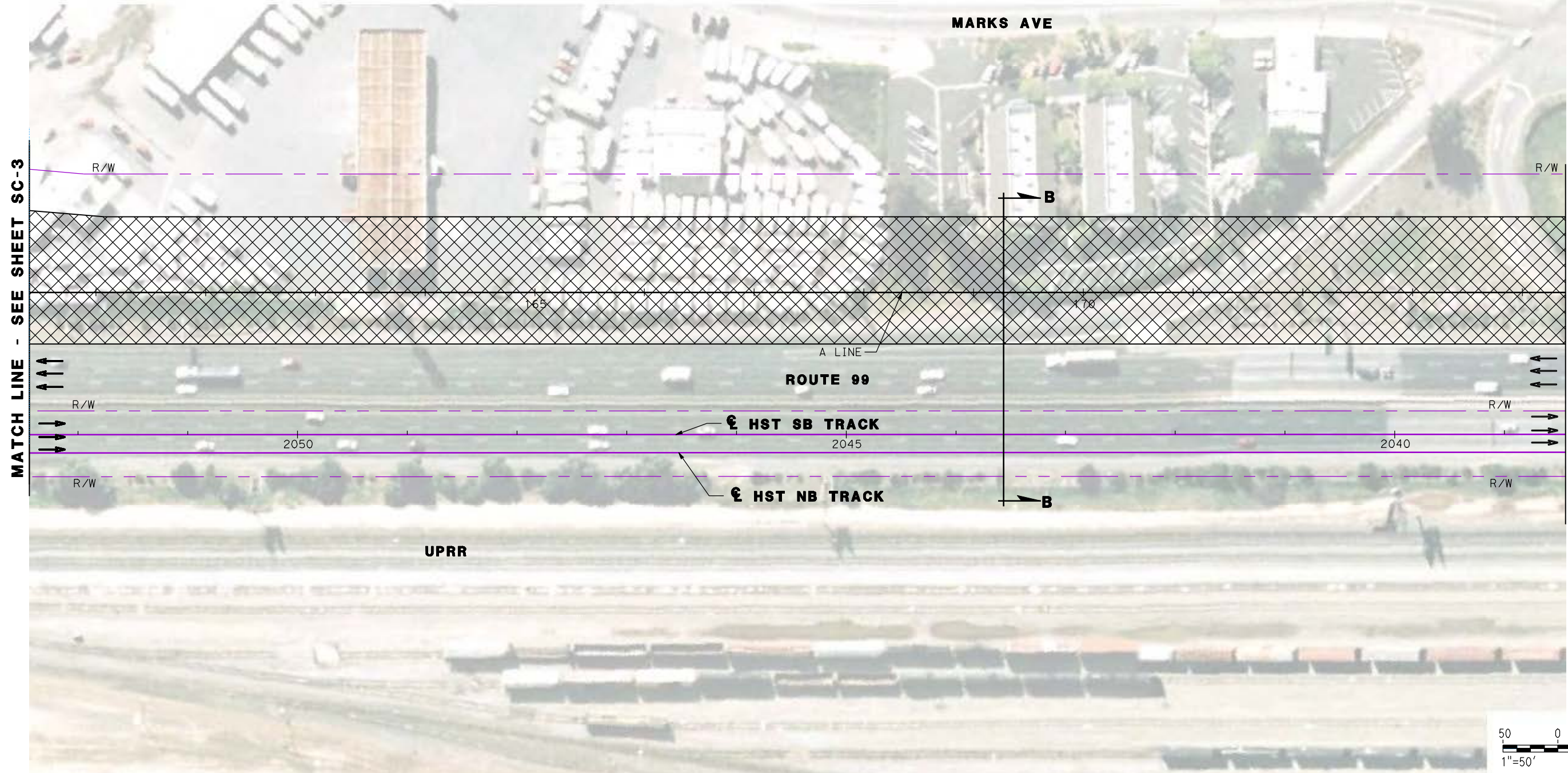
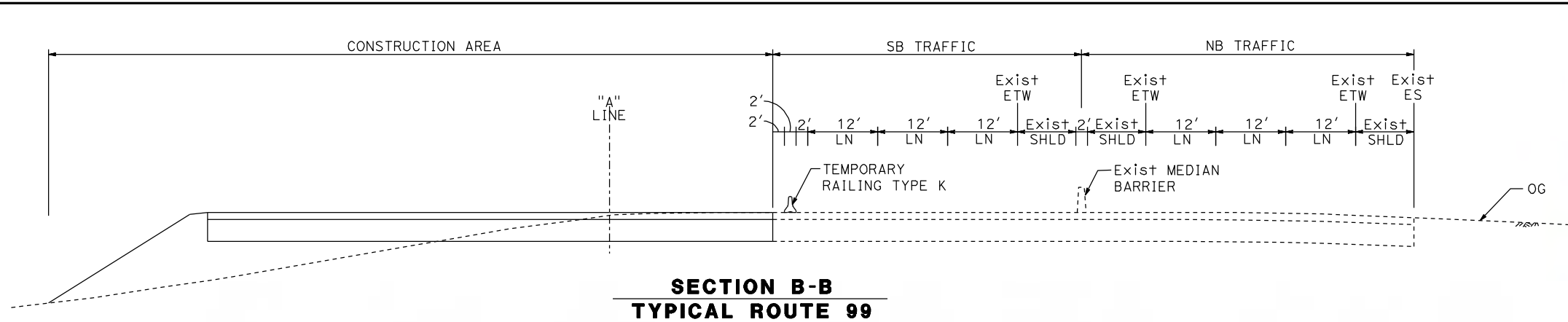


**CALIFORNIA HIGH SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
**ROUTE 99 RE-ALIGNMENT**  
**STAGE 1 CONSTRUCTION**

CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
**SC-3**  
 SCALE  
 AS SHOWN  
 SHEET NO.

DATE PLOTTED: 03/26/11





REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
G. MANOREK  
DRAWN BY  
L. ROS  
CHECKED BY  
L. HEUSTON  
IN CHARGE  
J. MATSUI-DRURY  
DATE  
04/29/11

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

**NOT FOR**  
**CONSTRUCTION**

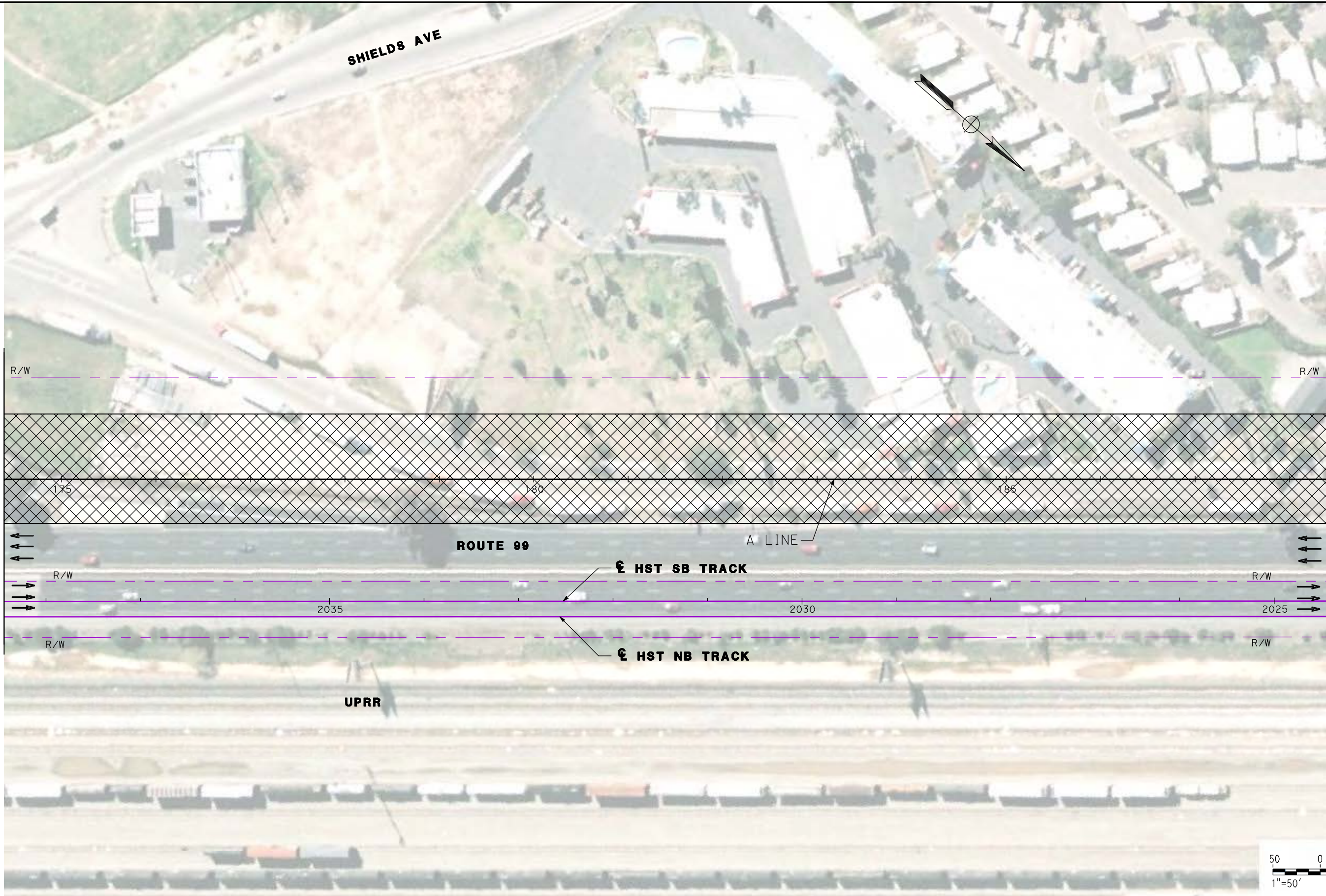


**CALIFORNIA HIGH SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
**ROUTE 99 RE-ALIGNMENT**  
**STAGE 1 CONSTRUCTION**

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
**SC-4**  
SCALE  
AS SHOWN  
SHEET NO.

DATE PLOTTED: 03/26/11





MATCH LINE - SEE SHEET SC-4

MATCH LINE - SEE SHEET SC-6

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
G. MANOREK  
DRAWN BY  
L. ROS  
CHECKED BY  
L. HEUSTON  
IN CHARGE  
J. MATSUI-DRURY  
DATE  
04/29/11

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

**NOT FOR**  
**CONSTRUCTION**

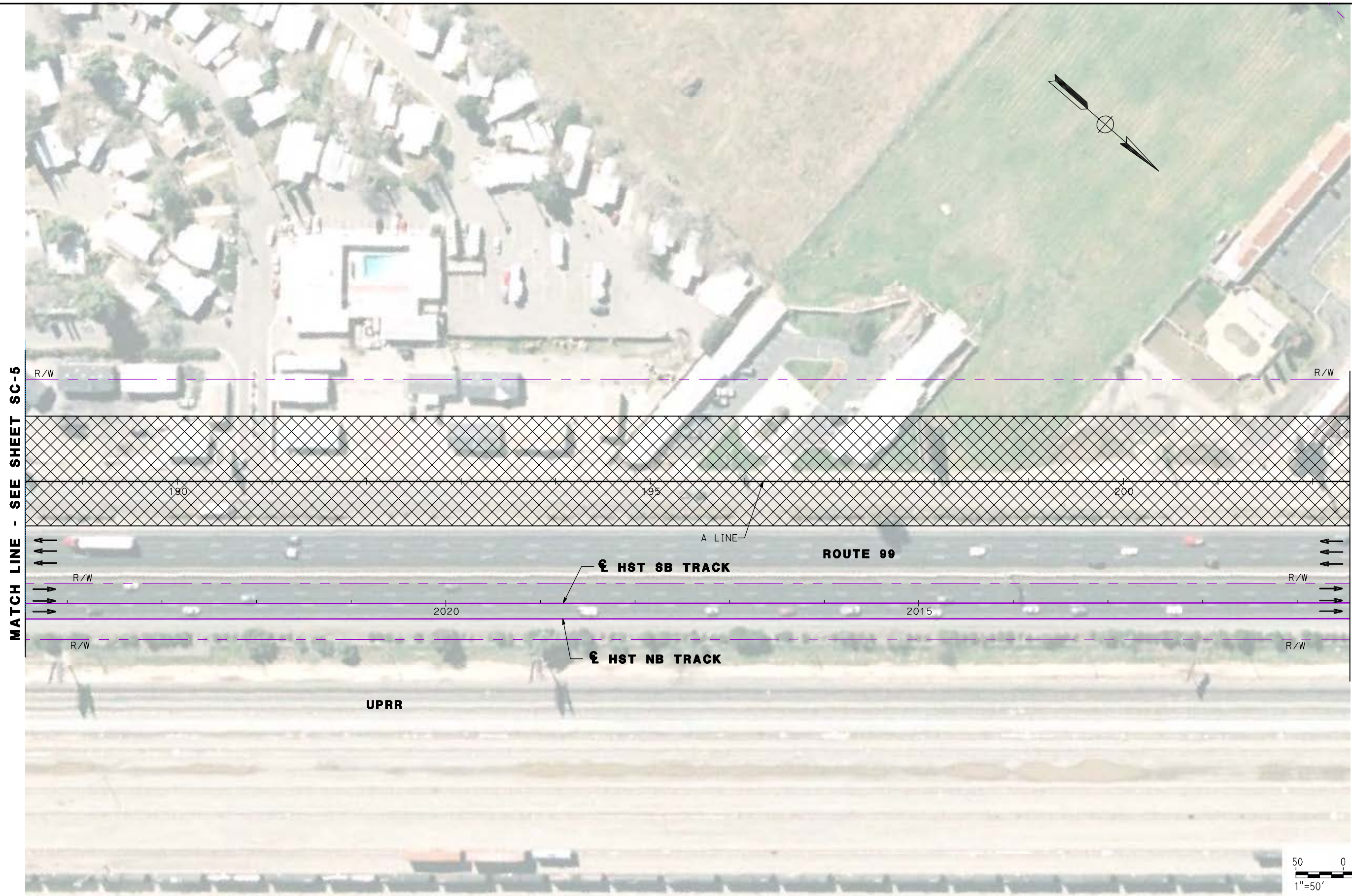


**CALIFORNIA HIGH SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
**ROUTE 99 RE-ALIGNMENT**  
**STAGE 1 CONSTRUCTION**

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
**SC-5**  
SCALE  
AS SHOWN  
SHEET NO.

DATE PLOTTED => 26-APR-2011





MATCH LINE - SEE SHEET SC-5

MATCH LINE - SEE SHEET SC-7



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
G. MANOREK  
DRAWN BY  
L. ROS  
CHECKED BY  
L. HEUSTON  
IN CHARGE  
J. MATSUI-DRURY  
DATE  
04/29/11

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

**NOT FOR**  
**CONSTRUCTION**

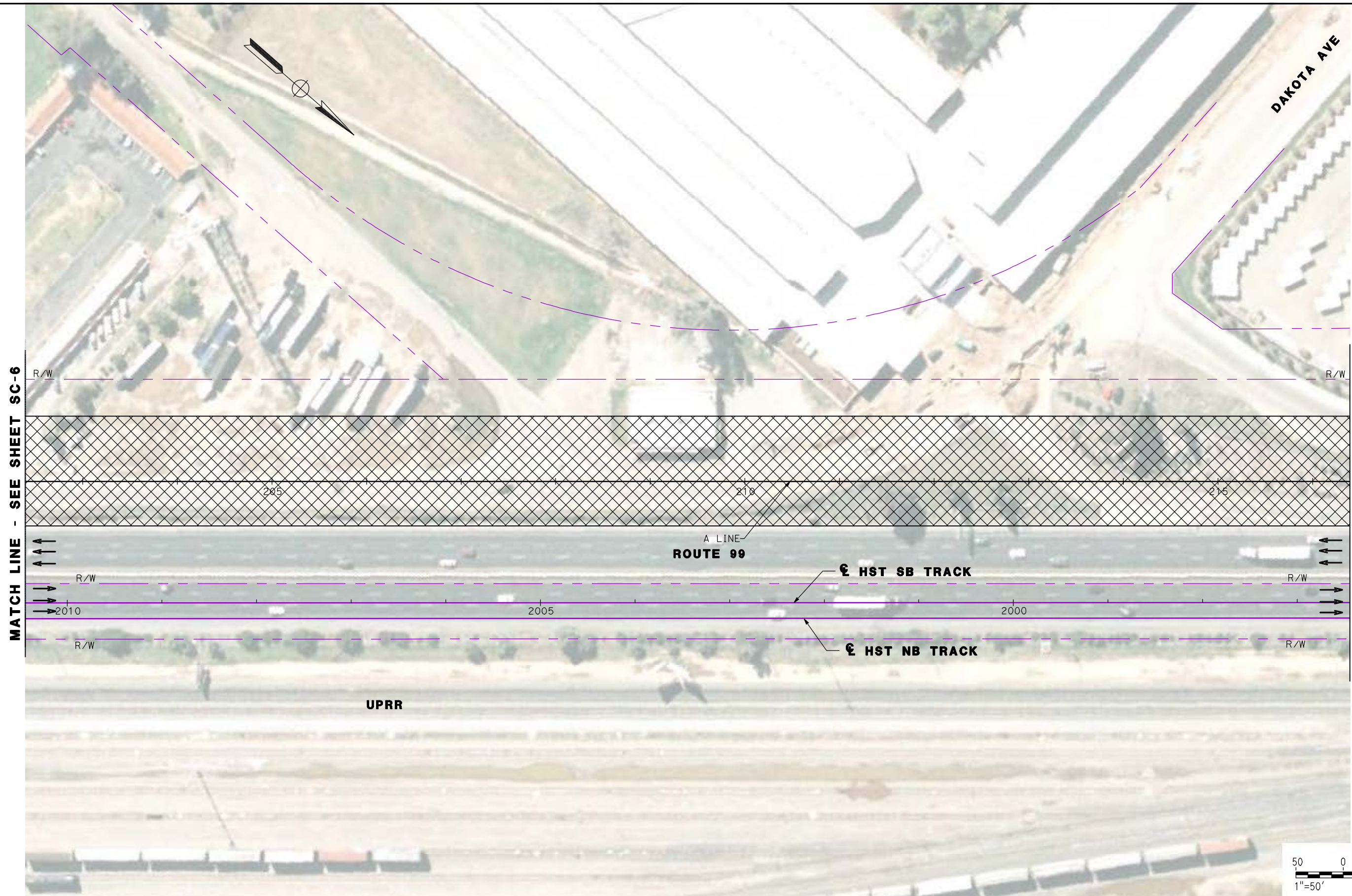


**CALIFORNIA HIGH SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
**ROUTE 99 RE-ALIGNMENT**  
**STAGE 1 CONSTRUCTION**

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
**SC-6**  
SCALE  
AS SHOWN  
SHEET NO.

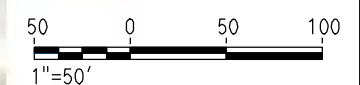
DATE PLOTTED => 26-APR-2011





MATCH LINE - SEE SHEET SC-6

MATCH LINE - SEE SHEET SC-8



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
G. MANOREK  
DRAWN BY  
L. ROS  
CHECKED BY  
L. HEUSTON  
IN CHARGE  
J. MATSUI-DRURY  
DATE  
04/29/11

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

**NOT FOR**  
**CONSTRUCTION**

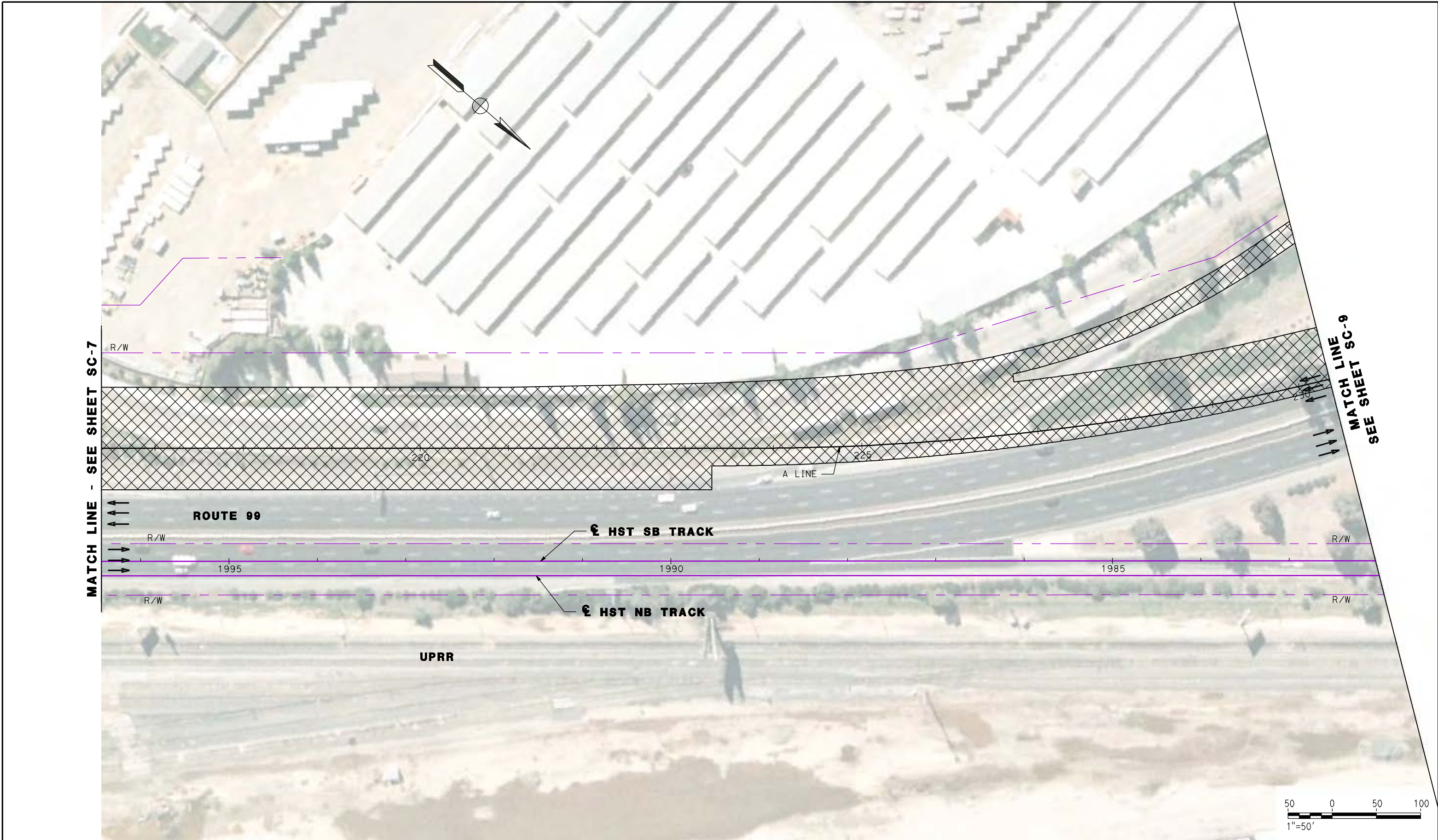


**CALIFORNIA HIGH SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
**ROUTE 99 RE-ALIGNMENT**  
**STAGE 1 CONSTRUCTION**

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
**SC-7**  
SCALE  
AS SHOWN  
SHEET NO.

DATE PLOTTED => 26-APR-2011





REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
G. MANOREK  
DRAWN BY  
L. ROS  
CHECKED BY  
L. HEUSTON  
IN CHARGE  
J. MATSUI-DRURY  
DATE  
04/29/11

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

**NOT FOR**  
**CONSTRUCTION**

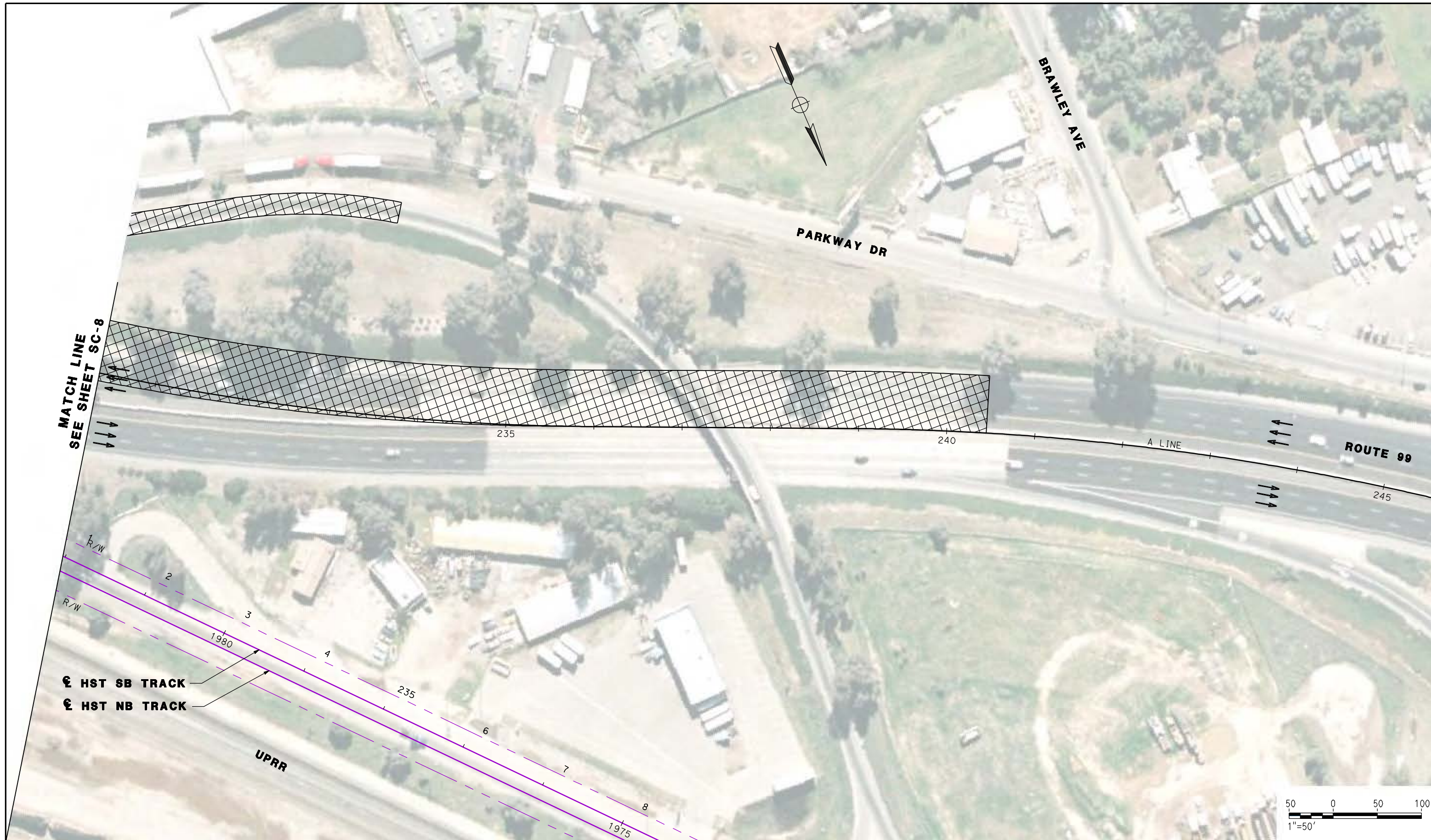


**CALIFORNIA HIGH SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
**ROUTE 99 RE-ALIGNMENT**  
**STAGE 1 CONSTRUCTION**

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
**SC-8**  
SCALE  
AS SHOWN  
SHEET NO.

DATE PLOTTED => 26-APR-2011





MATCH LINE  
SEE SHEET SC-8

€ HST SB TRACK  
€ HST NB TRACK



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
G. MANOREK  
DRAWN BY  
L. ROS  
CHECKED BY  
L. HEUSTON  
IN CHARGE  
J. MATSUI-DRURY  
DATE  
04/29/11

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

**NOT FOR**  
**CONSTRUCTION**

**AECOM**  
Technical Services, Inc.  
2020 L Street, Suite 300  
Sacramento, CA 95811

**CH2MHILL**



**CALIFORNIA HIGH SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
**ROUTE 99 RE-ALIGNMENT**  
**STAGE 1 CONSTRUCTION**

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
**SC-9**  
SCALE  
AS SHOWN  
SHEET NO.



DATE PLOTTED: 03/26/11 09:44:00 AM



**STAGING NOTES:**

1. -CLOSE ON/OFF RAMP AT DAKOTA, PRINCETON AND SHIELD AVE.  
-CLOSE SOUTHBOUND ON/OFF RAMP AT CLINTON AVE.  
-CLOSE NORTHBOUND ON/OFF RAMP AT CLINTON AVE.
2. -SHIFT ROUTE 99 NORTHBOUND/SOUTHBOUND TO STAGE 1 PAVEMENT.  
SEE TYPICAL SECTION SHEETS SC-11 AND SC-13.
3. -CONSTRUCT REMAINDER OF ROUTE 99.  
-CONSTRUCT NORTHBOUND ON/OFF RAMP AT CLINTON AVE.  
-CONSTRUCT NORTHBOUND OFF RAMP ASHLAN AVE.  
-CONSTRUCT NORTHBOUND ON RAMP MOTEL DR.
4. -SHIFT EASTBOUND AND WESTBOUND CLINTON AVE TRAFFIC TO SOUTHERLY PORTION OF CLINTON AVENUE.  
-REMOVE NORTHERLY PORTION OF CLINTON AVENUE OC.  
-CONSTRUCT NEW NORTHERLY PORTION OF CLINTON AVE.  
-SHIFT EASTBOUND AND WESTBOUND CLINTON AVE TRAFFIC TO NORTHERLY PORTION OF CLINTON AVENUE.  
-CONSTRUCT NEW SOUTHERLY PORTION OF CLINTON AVE.  
-SEE TYPICAL SECTION SHEET SC-11.
5. -MULTIPLE PHASES AND NIGHT CLOSURES ARE ANTICIPATED FOR REMOVAL OF EXISTING BRIDGE, BRIDGE CONSTRUCTION AND CONFORM TO ROUTE 99.
6. -ASHLAN AVE NORTHBOUND OFF RAMP TO REMAIN OPEN AT ALL TIMES.
7. -HIGH SPEED RAIL TO BE CONSTRUCTED AFTER COMPLETION OF ROUTE 99.

**LEGEND:**

-  CONSTRUCT THIS STAGE
-  CONSTRUCT PREVIOUS STAGE



MATCH LINE - SEE SHEET SC-11

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
G. MANOREK  
DRAWN BY  
L. ROS  
CHECKED BY  
L. HEUSTON  
IN CHARGE  
J. MATSUI-DRURY  
DATE  
04/29/11

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

**NOT FOR**  
**CONSTRUCTION**

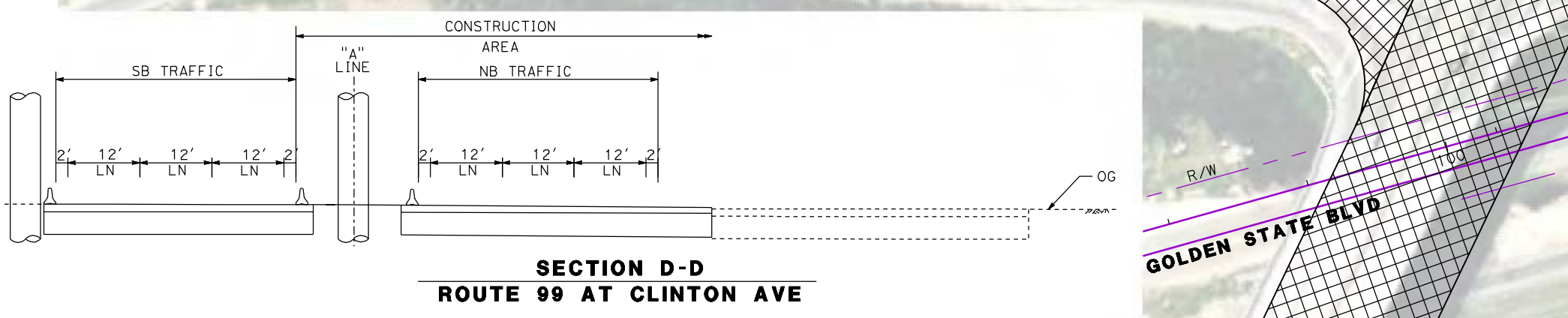
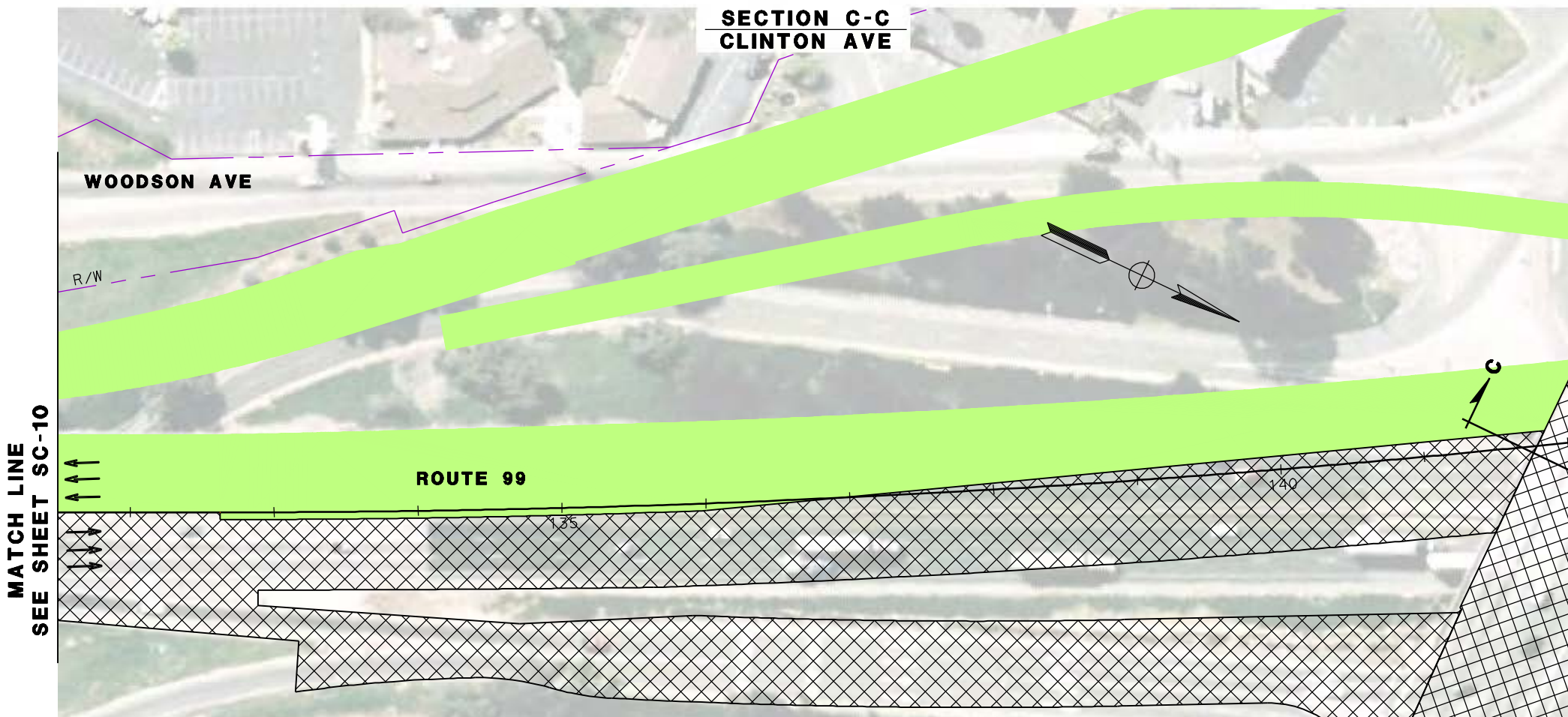
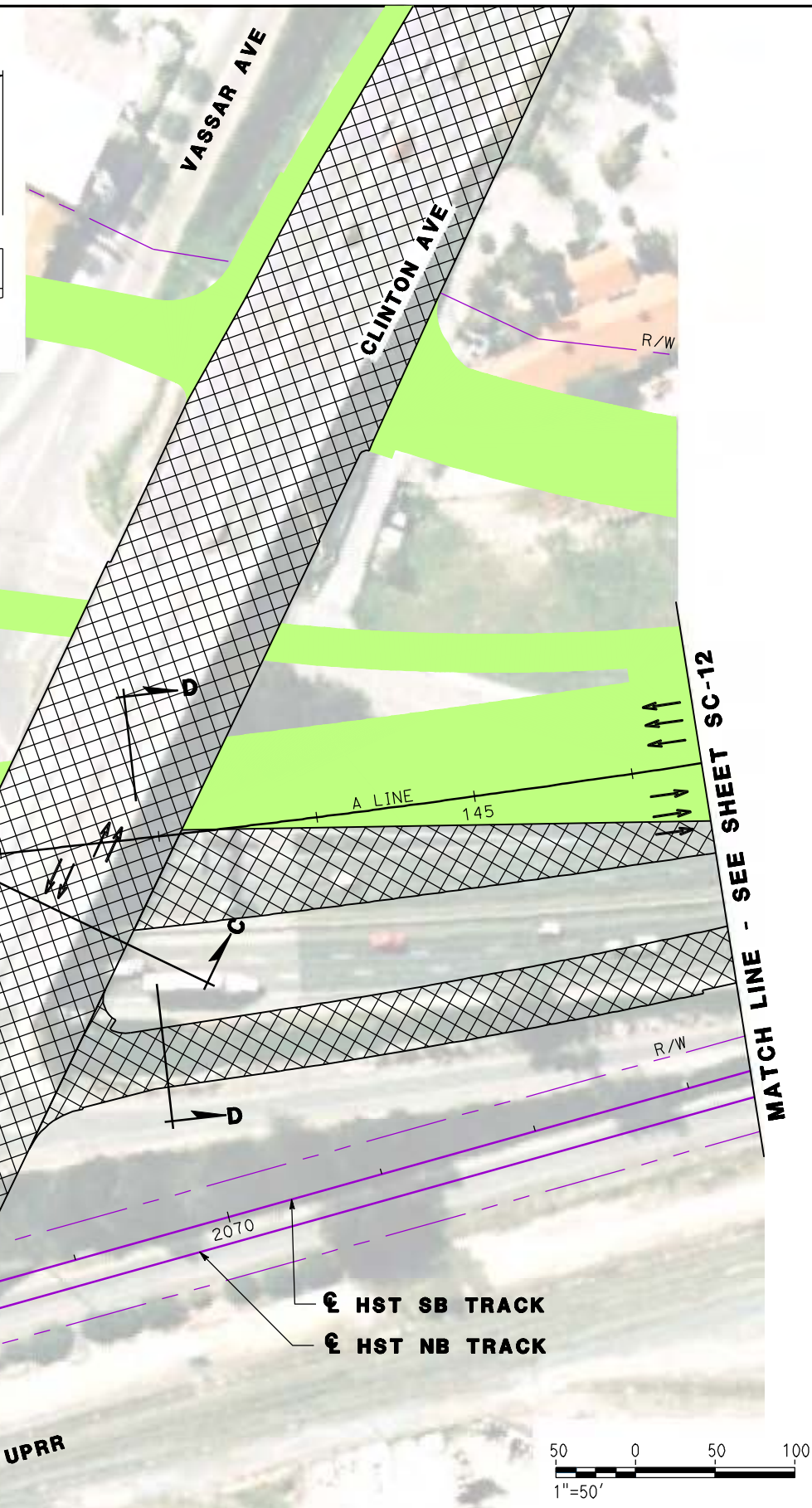
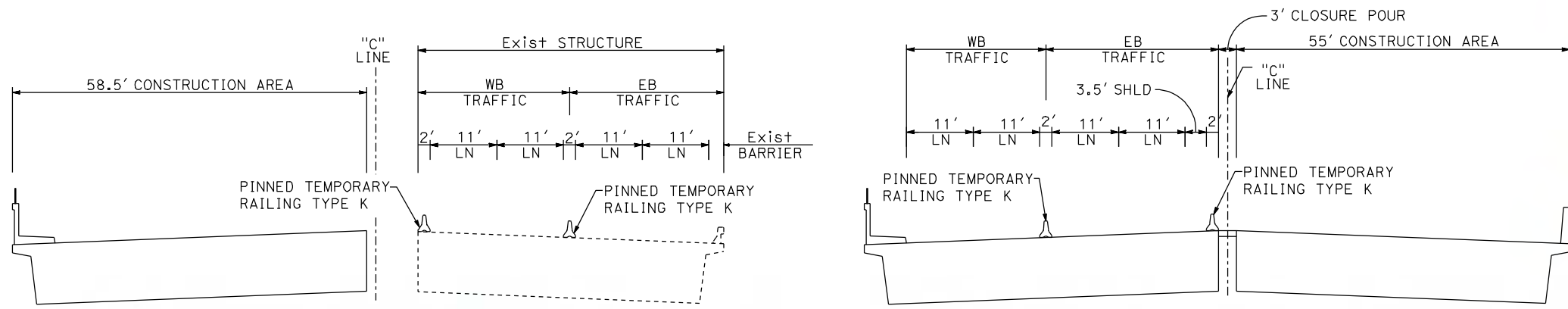


**CALIFORNIA HIGH SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
**ROUTE 99 RE-ALIGNMENT**  
**STAGE 2 CONSTRUCTION**

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
**SC-10**  
SCALE  
AS SHOWN  
SHEET NO.

DATE PLOTTED: 23-APR-2011





REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**G. MANOREK**  
DRAWN BY  
**L. ROS**  
CHECKED BY  
**L. HEUSTON**  
IN CHARGE  
**J. MATSUI-DRURY**  
DATE  
**04/29/11**

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

**NOT FOR**  
**CONSTRUCTION**

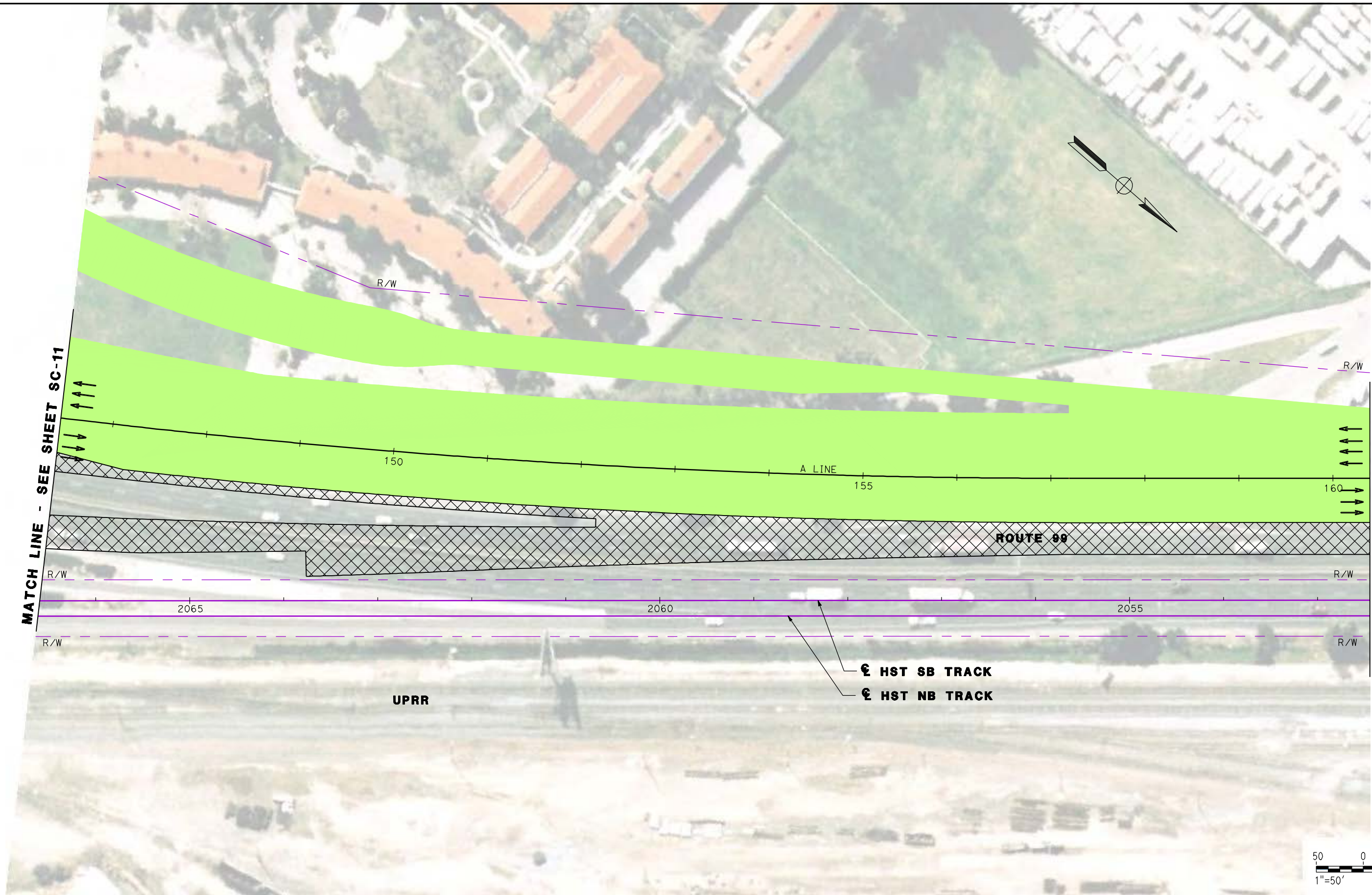


**CALIFORNIA HIGH SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
**ROUTE 99 RE-ALIGNMENT**  
**STAGE 2 CONSTRUCTION**

CONTRACT NO.  
**HSR06-007**  
DRAWING NO.  
**SC-11**  
SCALE  
**AS SHOWN**  
SHEET NO.

DATE PLOTTED: 03/26/11





MATCH LINE - SEE SHEET SC-11

MATCH LINE - SEE SHEET SC-13

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
G. MANOREK  
DRAWN BY  
L. ROS  
CHECKED BY  
L. HEUSTON  
IN CHARGE  
J. MATSUI-DRURY  
DATE  
04/29/11

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

**NOT FOR**  
**CONSTRUCTION**

**AECOM**  
Technical Services, Inc.  
2020 L Street, Suite 300  
Sacramento, CA 95811

**CH2MHILL**

**CALIFORNIA**  
HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
**ROUTE 99 RE-ALIGNMENT**  
**STAGE 2 CONSTRUCTION**

CONTRACT NO.  
HSR06-007

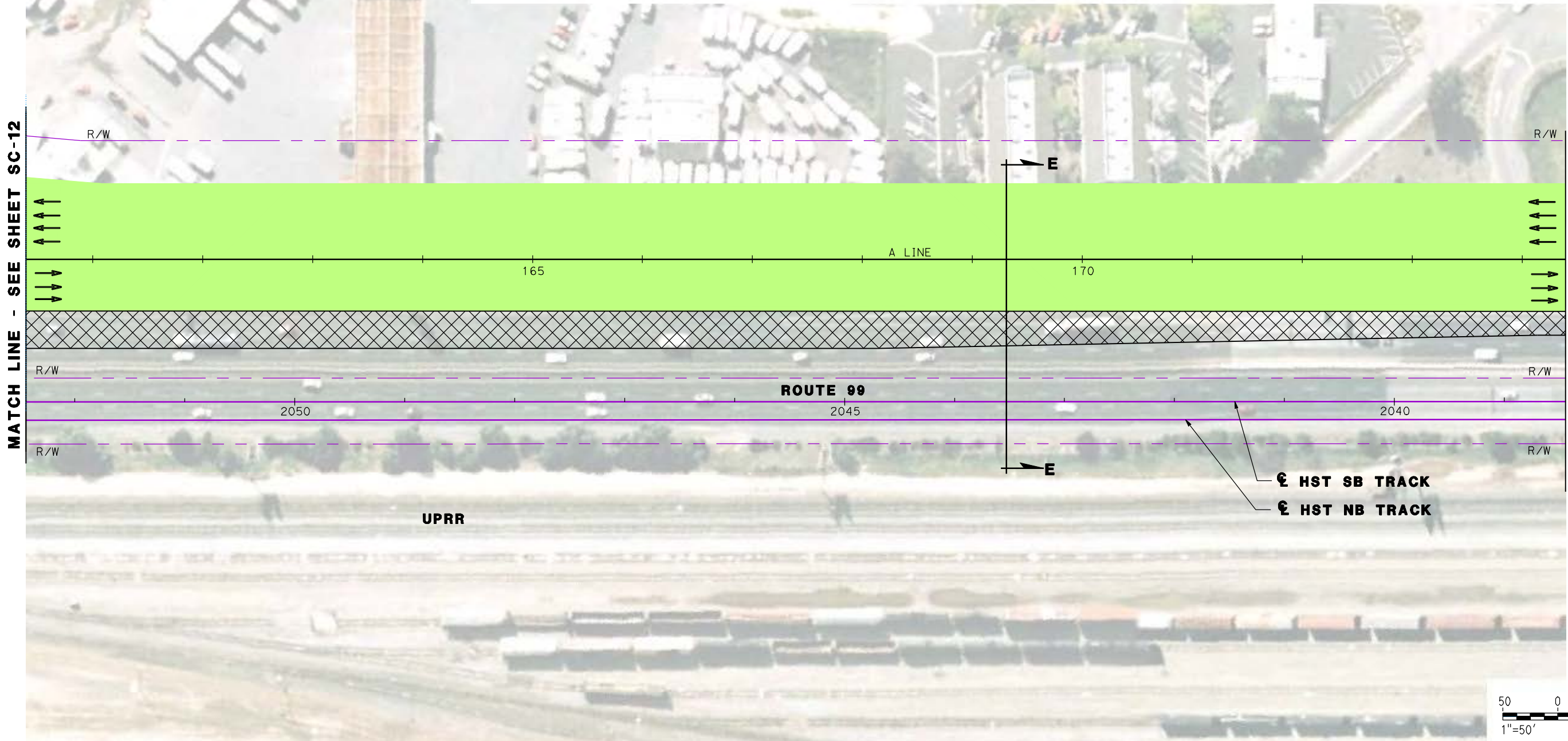
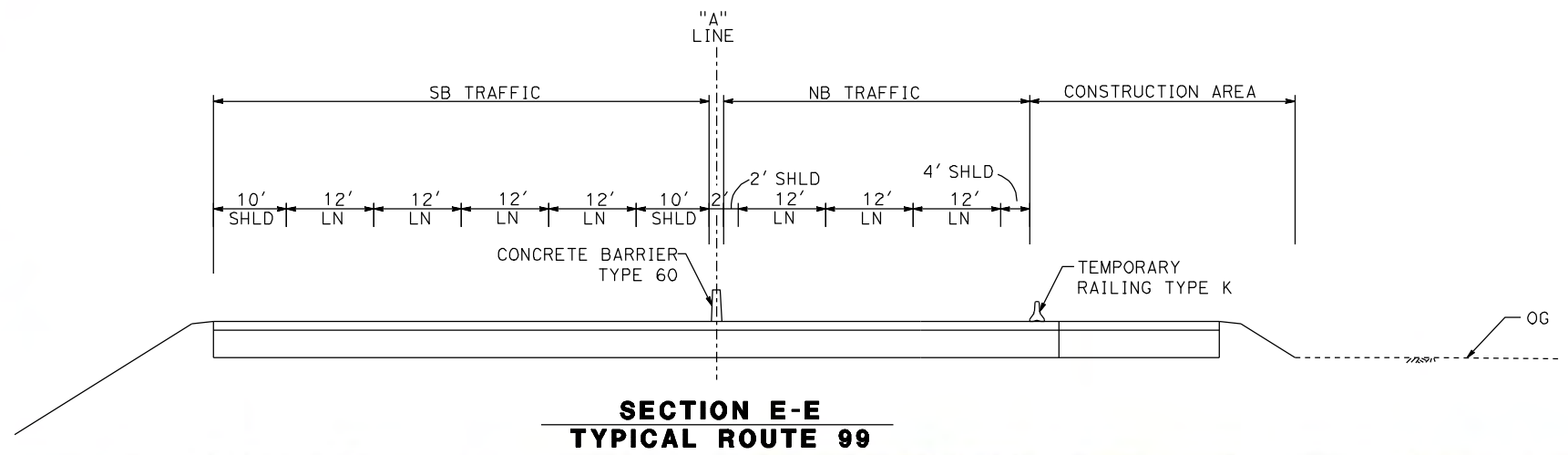
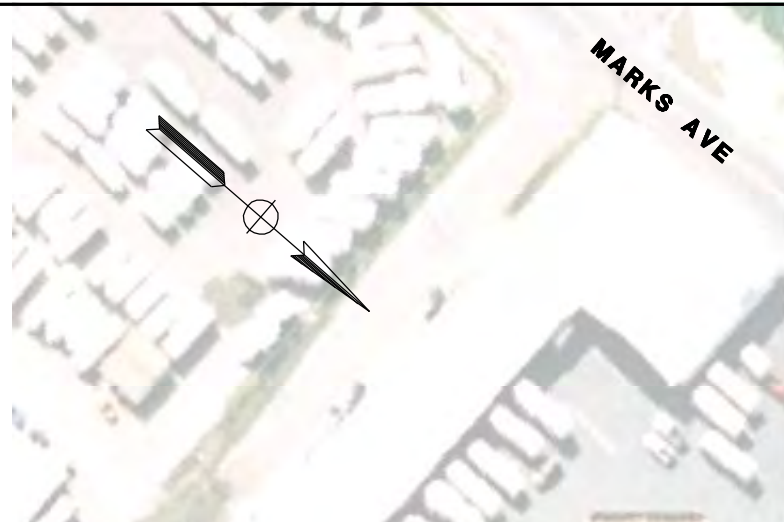
DRAWING NO.  
**SC-12**

SCALE  
AS SHOWN

SHEET NO.

DATE PLOTTED: 03/26/11





REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
G. MANOREK  
 DRAWN BY  
L. ROS  
 CHECKED BY  
L. HEUSTON  
 IN CHARGE  
J. MATSUI-DRURY  
 DATE  
04/29/11

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



**CALIFORNIA HIGH SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
**ROUTE 99 RE-ALIGNMENT**  
**STAGE 2 CONSTRUCTION**

CONTRACT NO.  
HSR06-007  
 DRAWING NO.  
**SC-13**  
 SCALE  
AS SHOWN  
 SHEET NO.

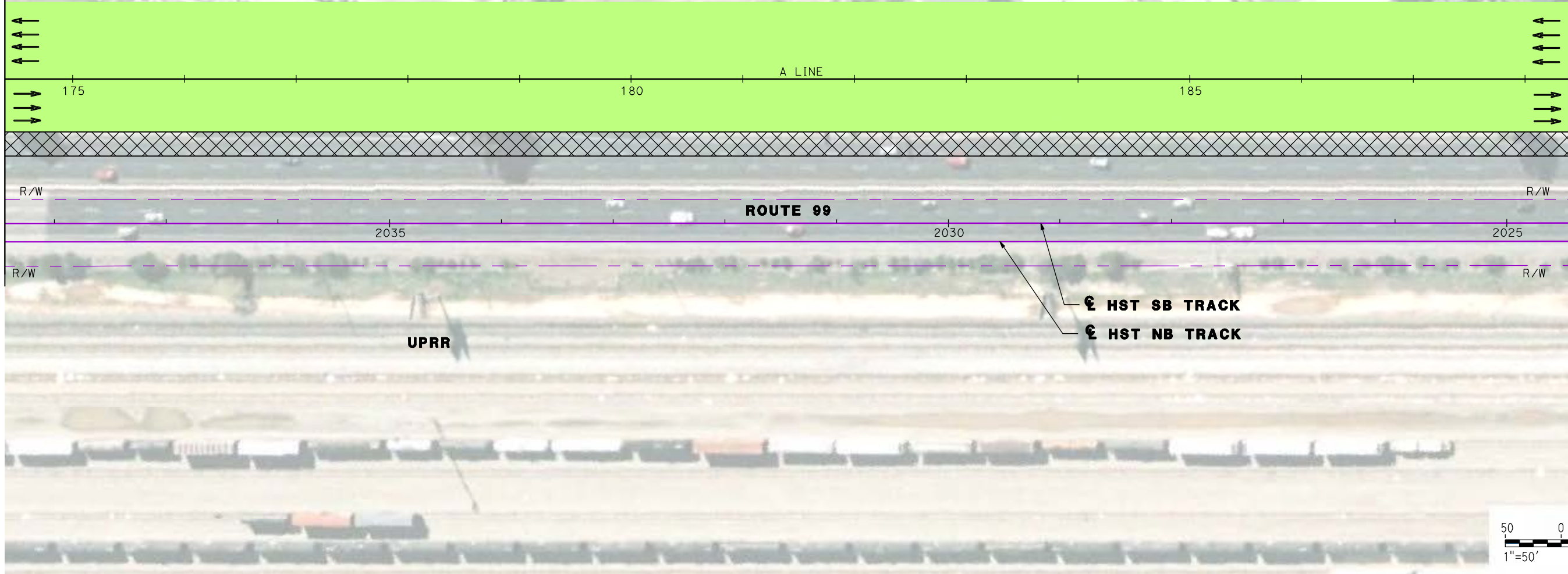
DATE PLOTTED => 26-APR-2011





MATCH LINE - SEE SHEET SC-13

MATCH LINE - SEE SHEET SC-15



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
G. MANOREK  
DRAWN BY  
L. ROS  
CHECKED BY  
L. HEUSTON  
IN CHARGE  
J. MATSUI-DRURY  
DATE  
04/29/11

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

**NOT FOR**  
**CONSTRUCTION**

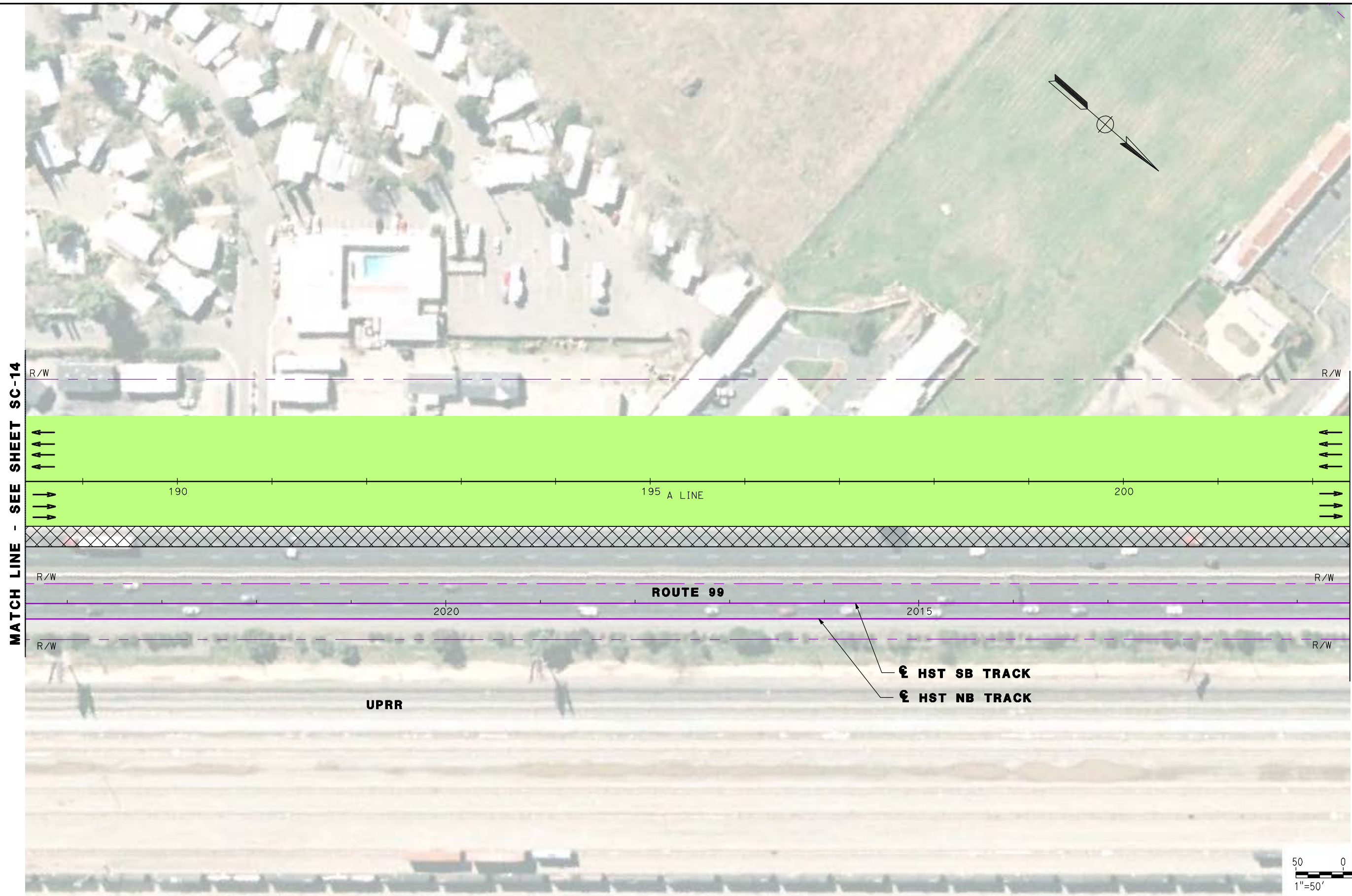


**CALIFORNIA HIGH SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
**ROUTE 99 RE-ALIGNMENT**  
**STAGE 2 CONSTRUCTION**

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
**SC-14**  
SCALE  
AS SHOWN  
SHEET NO.

DATE PLOTTED: 23 26-APR-2011





MATCH LINE - SEE SHEET SC-14

MATCH LINE - SEE SHEET SC-16



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
G. MANOREK  
DRAWN BY  
L. ROS  
CHECKED BY  
L. HEUSTON  
IN CHARGE  
J. MATSUI-DRURY  
DATE  
04/29/11

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

**NOT FOR**  
**CONSTRUCTION**

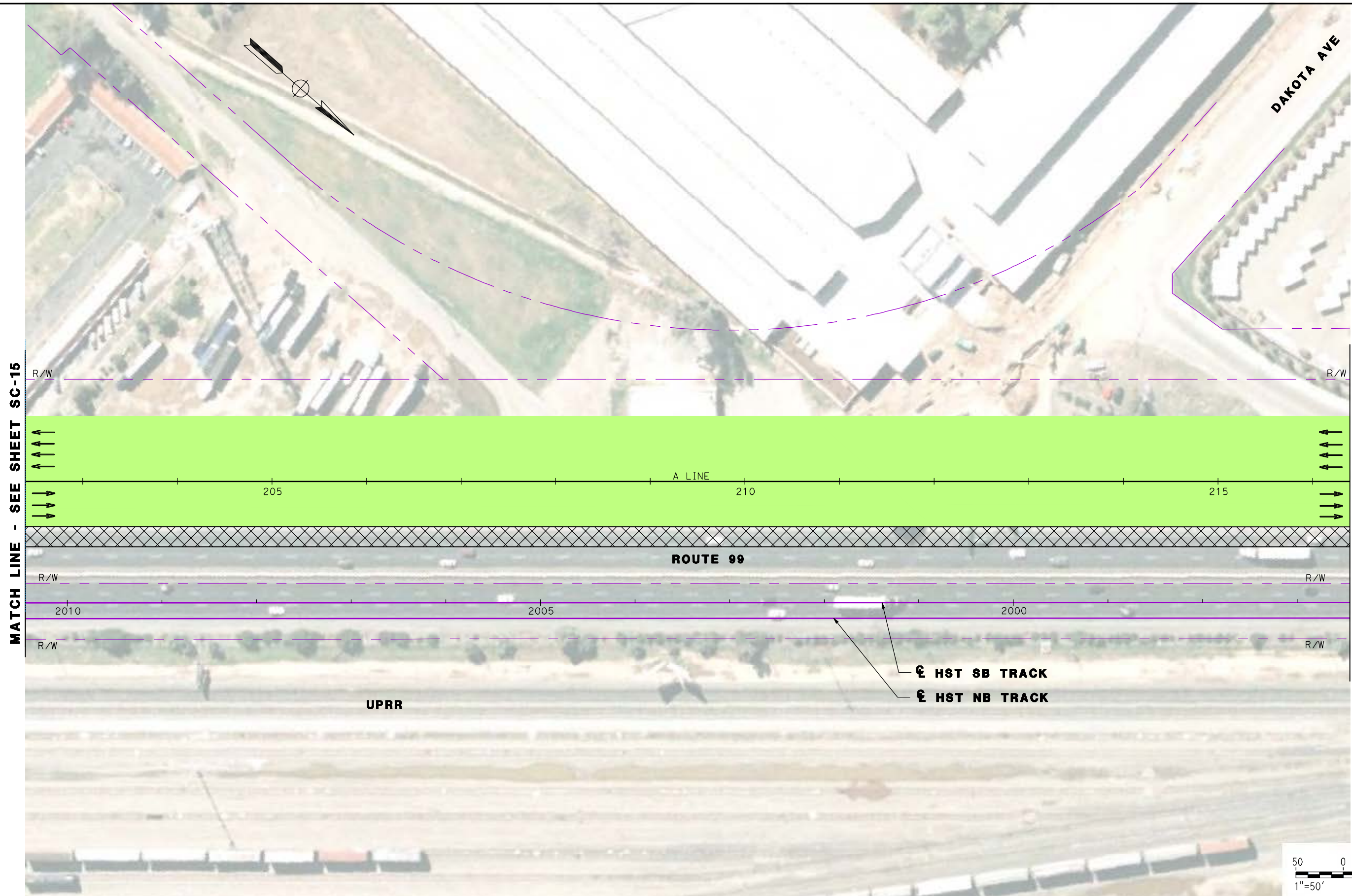


**CALIFORNIA HIGH SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
**ROUTE 99 RE-ALIGNMENT**  
**STAGE 2 CONSTRUCTION**

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
**SC-15**  
SCALE  
AS SHOWN  
SHEET NO.

DATE PLOTTED => 26-APR-2011





MATCH LINE - SEE SHEET SC-15

MATCH LINE - SEE SHEET SC-17

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
G. MANOREK  
DRAWN BY  
L. ROS  
CHECKED BY  
L. HEUSTON  
IN CHARGE  
J. MATSUI-DRURY  
DATE  
04/29/11

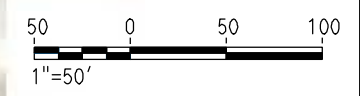
**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**

**NOT FOR**  
**CONSTRUCTION**



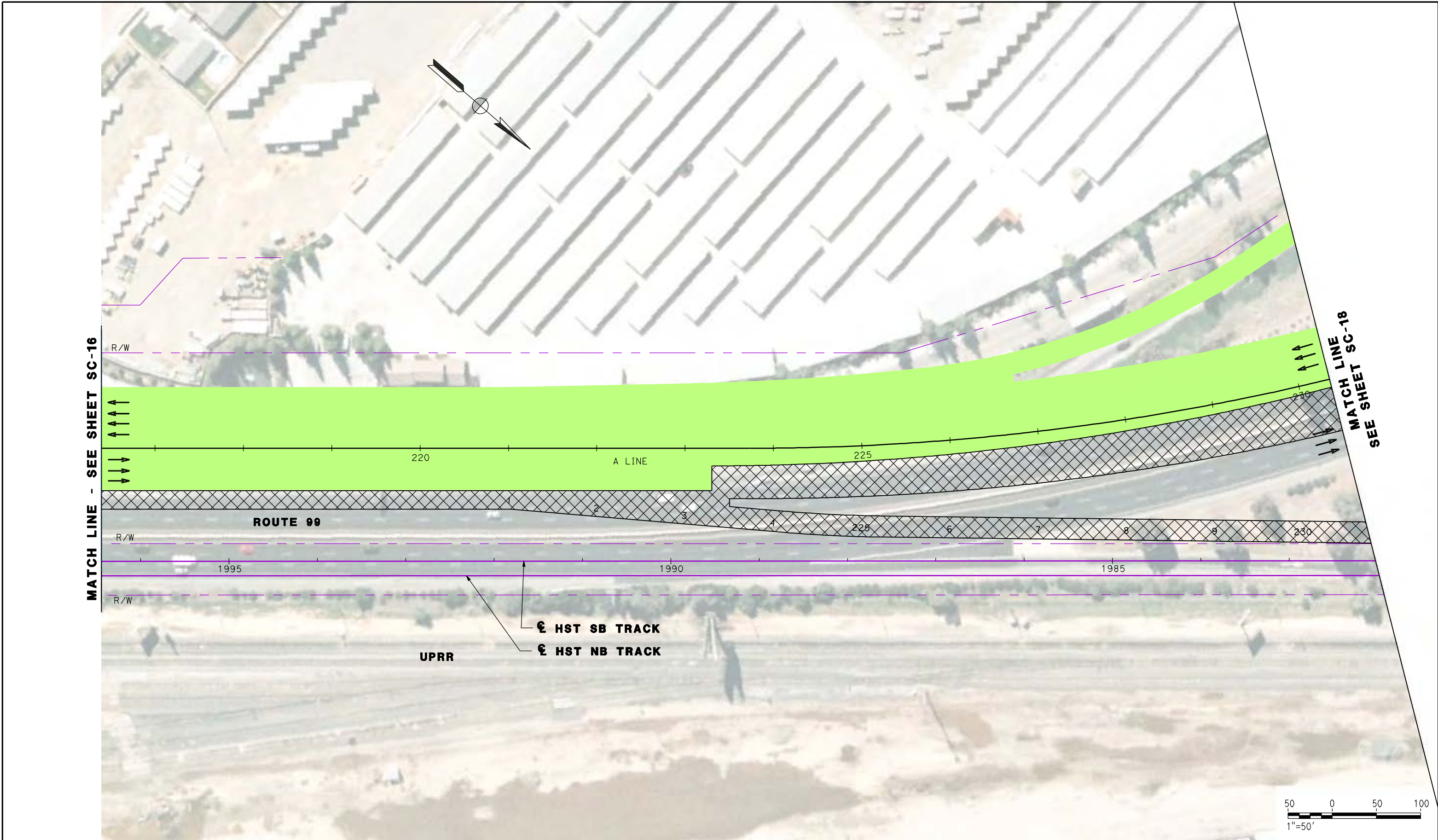
**CALIFORNIA HIGH SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
**ROUTE 99 RE-ALIGNMENT**  
**STAGE 2 CONSTRUCTION**

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
**SC-16**  
SCALE  
AS SHOWN  
SHEET NO.



DATE PLOTTED: 23-APR-2011





MATCH LINE - SEE SHEET SC-16

MATCH LINE SC-18  
SEE SHEET SC-18



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
G. MANOREK  
DRAWN BY  
L. ROS  
CHECKED BY  
L. HEUSTON  
IN CHARGE  
J. MATSUI-DRURY  
DATE  
04/29/11

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

**NOT FOR**  
**CONSTRUCTION**

**AECOM**  
Technical Services, Inc.  
2020 L Street, Suite 300  
Sacramento, CA 95811

**CH2MHILL**

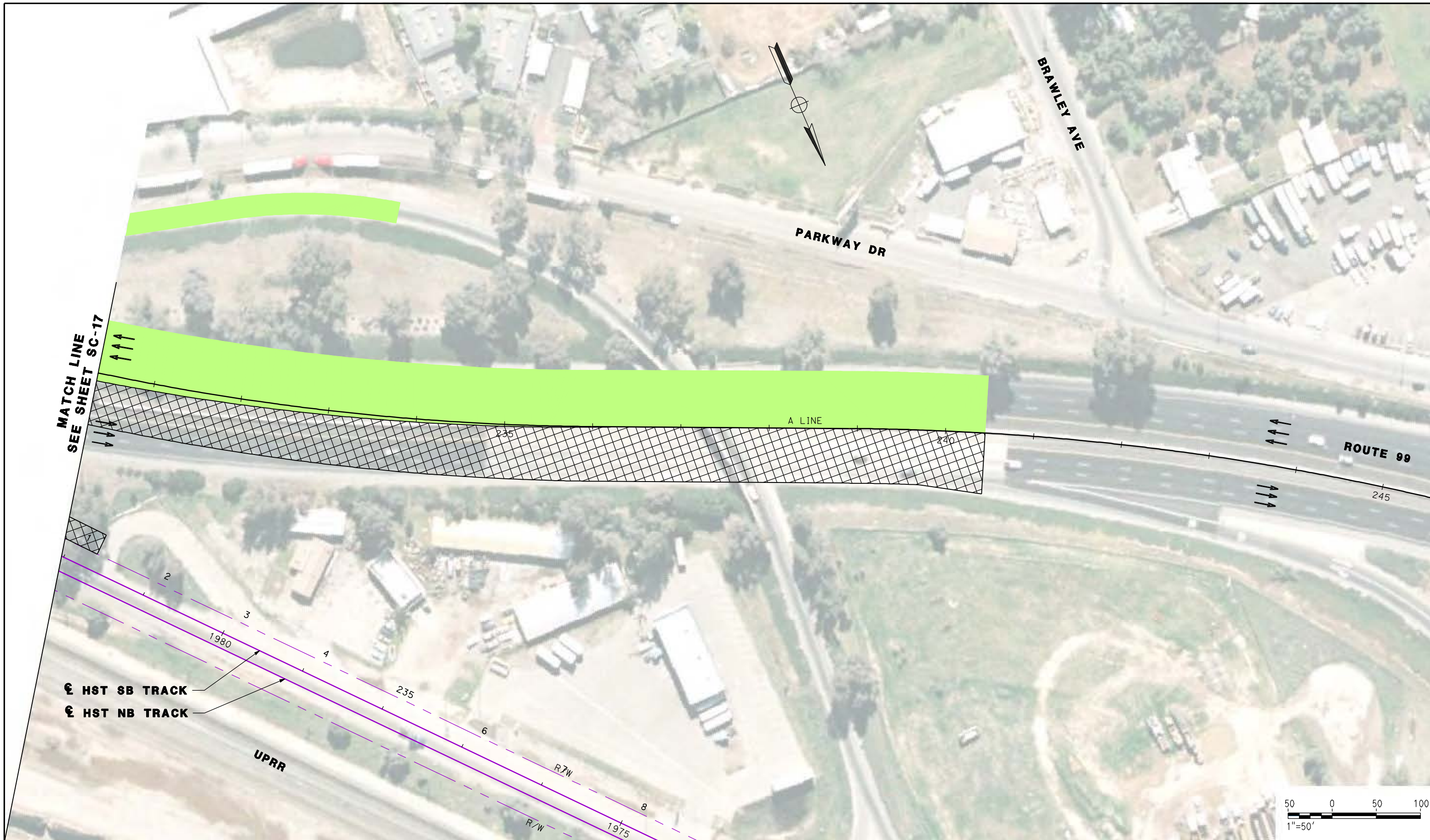


**CALIFORNIA HIGH SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
**ROUTE 99 RE-ALIGNMENT**  
**STAGE 2 CONSTRUCTION**

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
**SC-17**  
SCALE  
AS SHOWN  
SHEET NO.

DATE PLOTTED => 26-APR-2011





MATCH LINE  
SEE SHEET SC-17

A LINE

ROUTE 99

⊕ HST SB TRACK  
⊕ HST NB TRACK

UPRR



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
G. MANOREK  
DRAWN BY  
L. ROS  
CHECKED BY  
L. HEUSTON  
IN CHARGE  
J. MATSUI-DRURY  
DATE  
04/29/11

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

**NOT FOR**  
**CONSTRUCTION**

**AECOM**  
Technical Services, Inc.  
2020 L Street, Suite 300  
Sacramento, CA 95811

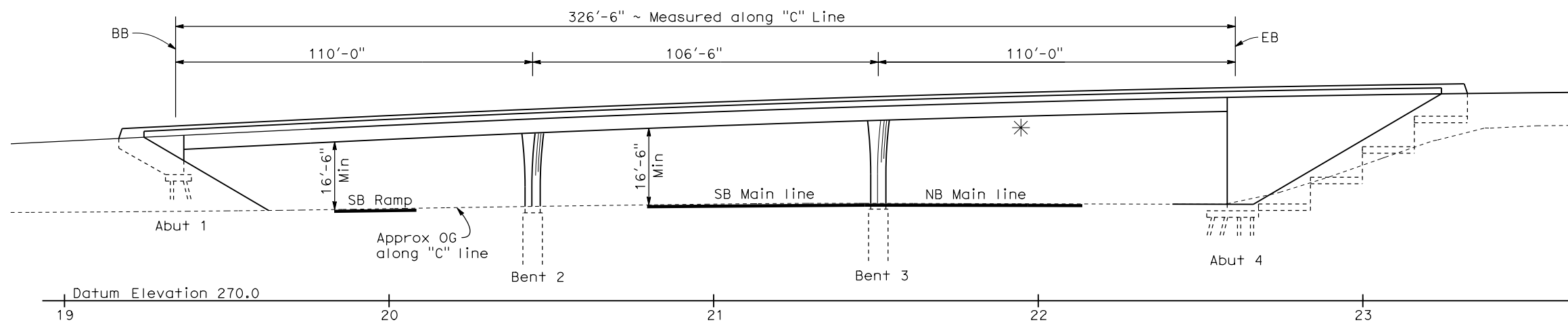
**CH2MHILL**



**CALIFORNIA HIGH SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
**ROUTE 99 RE-ALIGNMENT**  
**STAGE 2 CONSTRUCTION**

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
**SC-18**  
SCALE  
AS SHOWN  
SHEET NO.

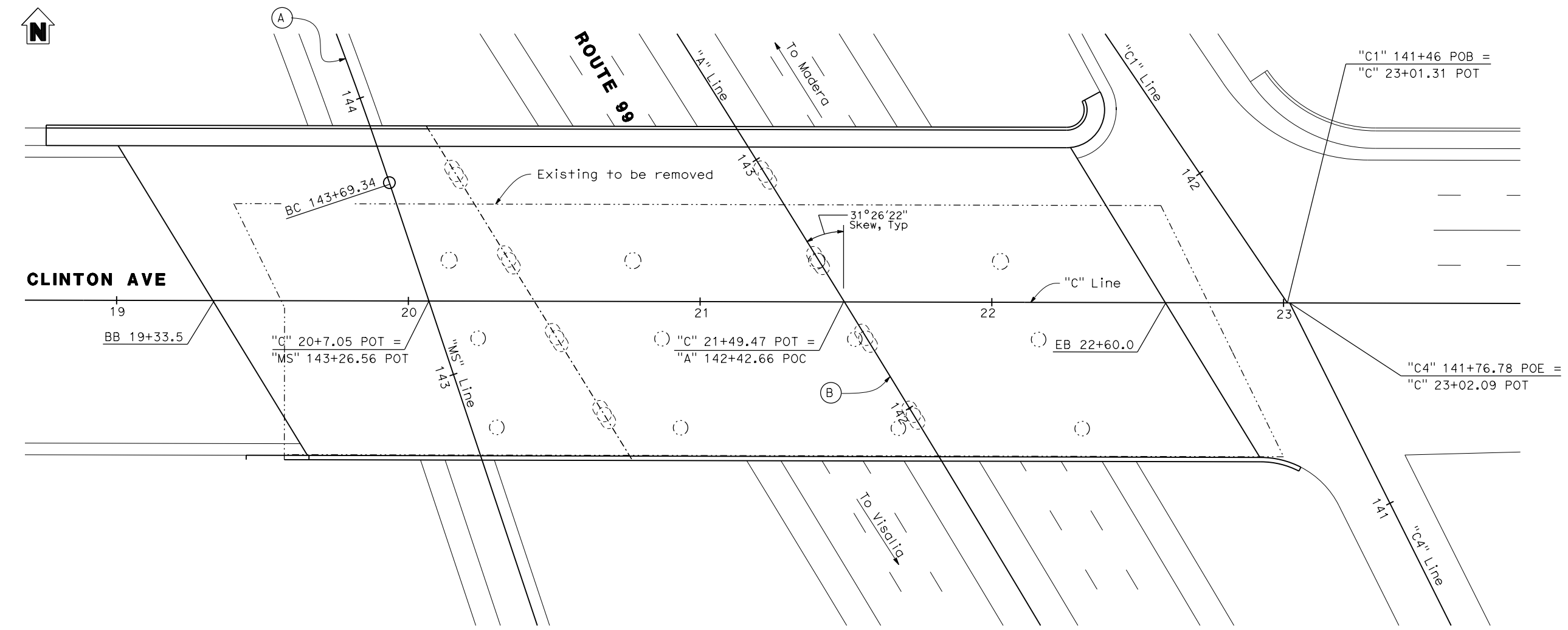
DATE PLOTTED: 23-APR-2011



DATE OF ESTIMATE	=	10-21-2010
BRIDGE REMOVAL	=	\$ 600,000
STRUCTURE DEPTH	=	4'-6"
LENGTH	=	326'-6"
WIDTH	=	114'-6"
AREA	=	37,385 ft <sup>2</sup>
COST/ft <sup>2</sup> INCLUDING 10% MOBILIZATION & 25% CONTINGENCY	=	\$ 175/ft <sup>2</sup>
TOTAL COST	=	\$ 6,543,000

ELEVATION  
1"=20'

\* Temporary Falsework Clearance = 15'-0"  
Falsework Depth = 3'-3 1/2"



<b>CURVE DATA (A)</b>	
R = 1350'	
Δ = 10°30'20"	
L = 247.53'	
T = 124.11'	
<b>CURVE DATA (B)</b>	
R = 9000.00'	
Δ = 15°38'27"	
L = 2456.85'	
T = 1236.11'	

PLAN  
1"=20'

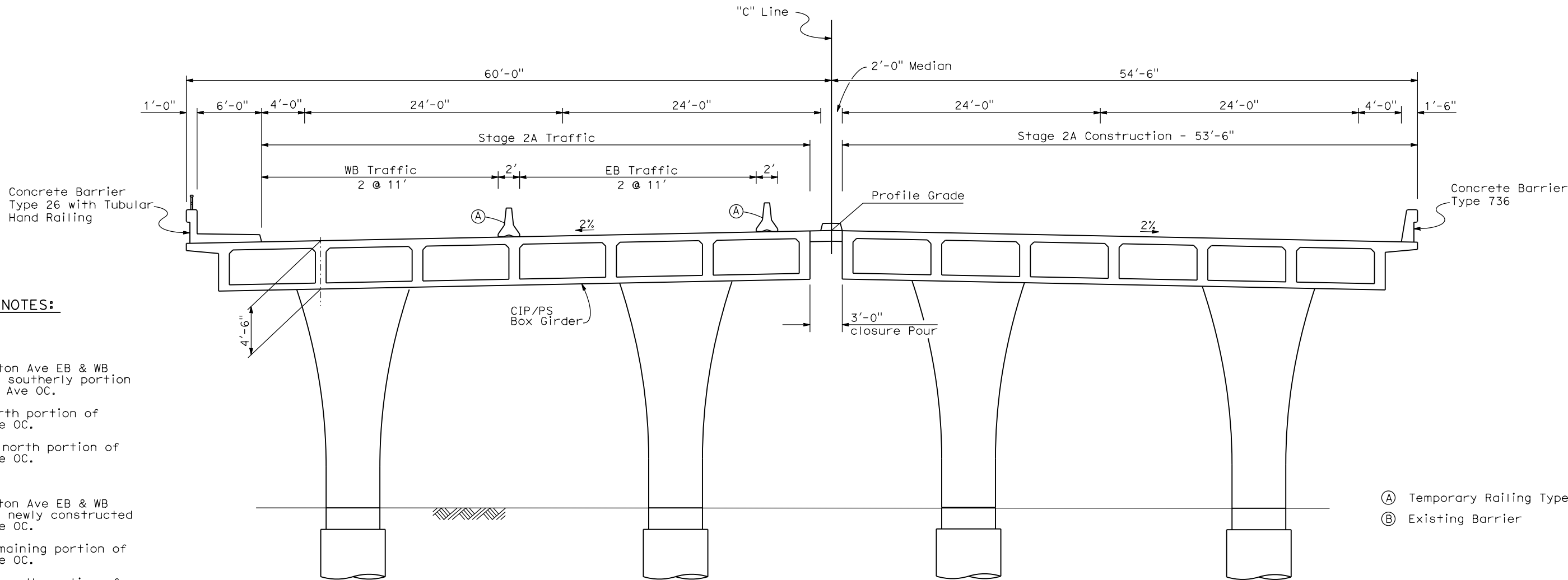
**CLINTON AVE OVERCROSSING (REPLACE)**

DESIGNED BY D. FREDERICKS	<b>RECORD SET</b> <b>15% DESIGN</b> <b>SUBMITTAL</b>  <b>NOT FOR</b> <b>CONSTRUCTION</b>	 <small>Technical Services, Inc. 2020 L Street, Suite 300 Sacramento, CA 95811</small> 	 <b>CALIFORNIA</b> <small>HIGH-SPEED RAIL AUTHORITY</small>	<b>CALIFORNIA HIGH SPEED TRAIN PROJECT</b> <b>MERCED TO FRESNO</b> <b>ROUTE 99 RE-ALIGNMENT</b> <b>ADVANCE PLANNING STUDY</b>	CONTRACT NO. HSR006-007
DRAWN BY P. WALKER					DRAWING NO. <b>BR-1</b>
CHECKED BY J. SHOWERS					SCALE AS SHOWN
IN CHARGE J. MATSUI-DRURY					SHEET NO.
DATE 04/29/11					

REV	DATE	BY	CHK	APP	DESCRIPTION

DATE PLOTTED: 23-APR-2011





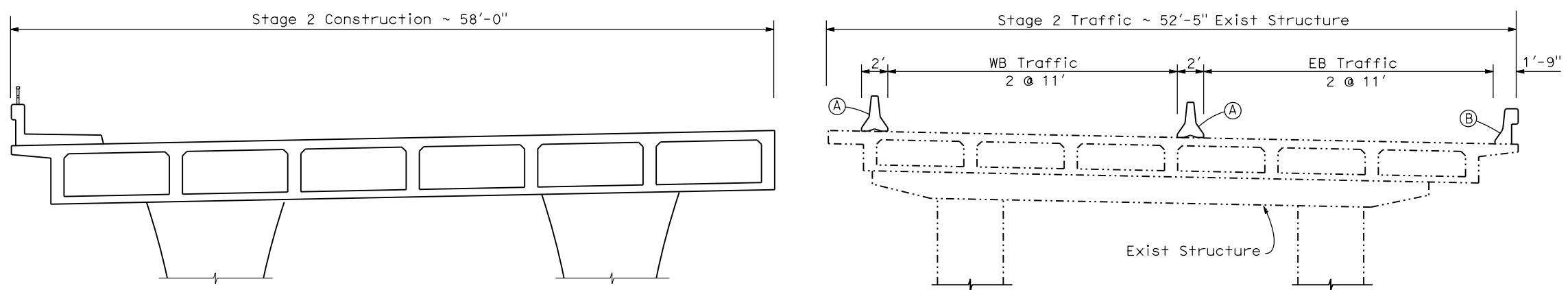
**STAGING NOTES:**

**STAGE 1:**  
 Shift Clinton Ave EB & WB traffic to southerly portion of Clinton Ave OC.  
 Remove north portion of Clinton Ave OC.  
 Construct north portion of Clinton Ave OC.

**STAGE 2:**  
 Shift Clinton Ave EB & WB traffic to newly constructed Clinton Ave OC.  
 Remove remaining portion of Clinton Ave OC.  
 Construct south portion of Clinton Ave OC.  
 Closure pour.

- (A) Temporary Railing Type K
- (B) Existing Barrier

**TYPICAL SECTION**  
1"=5'



**STAGE CONSTRUCTION**  
1"=5'

**CLINTON AVE OVERCROSSING (REPLACE)**

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. FREDERICKS  
 DRAWN BY  
P. WALKER  
 CHECKED BY  
J. SHOWERS  
 IN CHARGE  
J. MATSUI-DRURY  
 DATE  
04/29/11

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

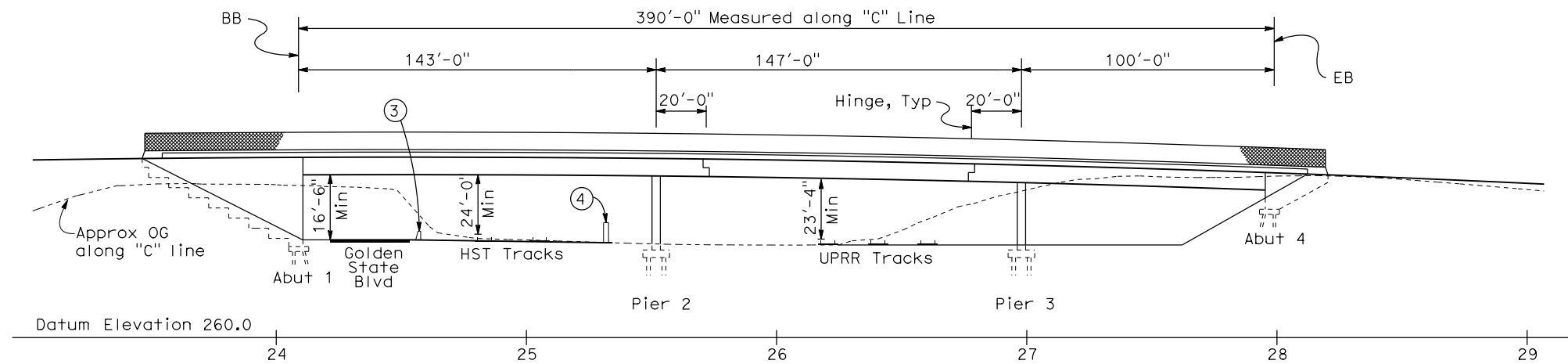
**NOT FOR**  
**CONSTRUCTION**



**CALIFORNIA HIGH SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
**ROUTE 99 RE-ALIGNMENT**  
**ADVANCE PLANNING STUDY**

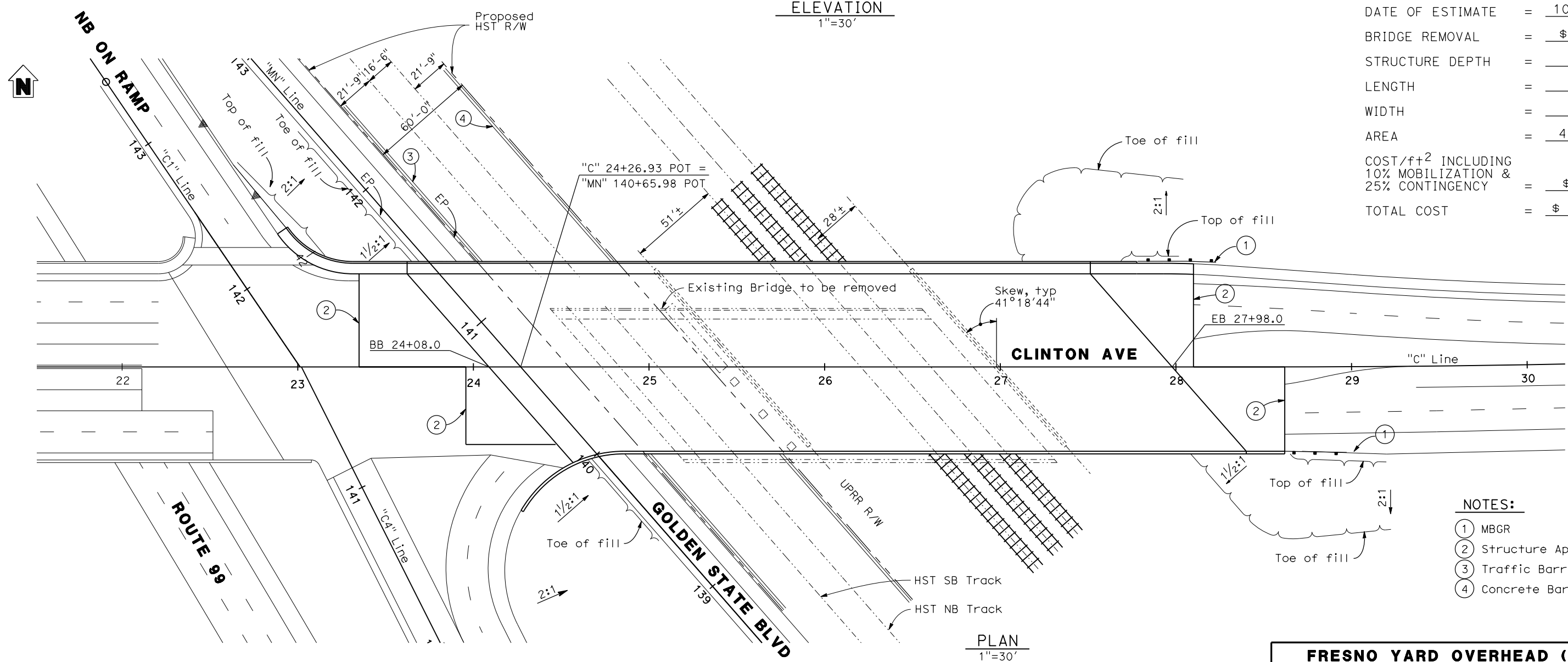
CONTRACT NO.	HSR006-007
DRAWING NO.	<b>BR-2</b>
SCALE	AS SHOWN
SHEET NO.	

DATE PLOTTED: 23 APR 2011 10:58:53 AM



ELEVATION  
1"=30'

DATE OF ESTIMATE	=	10-21-2010
BRIDGE REMOVAL	=	\$ 400,000
STRUCTURE DEPTH	=	7'-6"
LENGTH	=	390'-0"
WIDTH	=	109'-6"
AREA	=	42,705 ft <sup>2</sup>
COST/ft <sup>2</sup> INCLUDING 10% MOBILIZATION & 25% CONTINGENCY	=	\$ 150/ft <sup>2</sup>
TOTAL COST	=	\$ 6,810,000



PLAN  
1"=30'

- NOTES:
- ① MBGR
  - ② Structure Approach
  - ③ Traffic Barrier
  - ④ Concrete Barrier Wall

**FRESNO YARD OVERHEAD (REPLACE)**

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**D. FREDERICKS**  
DRAWN BY  
**P. WALKER**  
CHECKED BY  
**J. SHOWERS**  
IN CHARGE  
**J. MATSUI-DRURY**  
DATE  
**04/29/11**

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

**NOT FOR**  
**CONSTRUCTION**

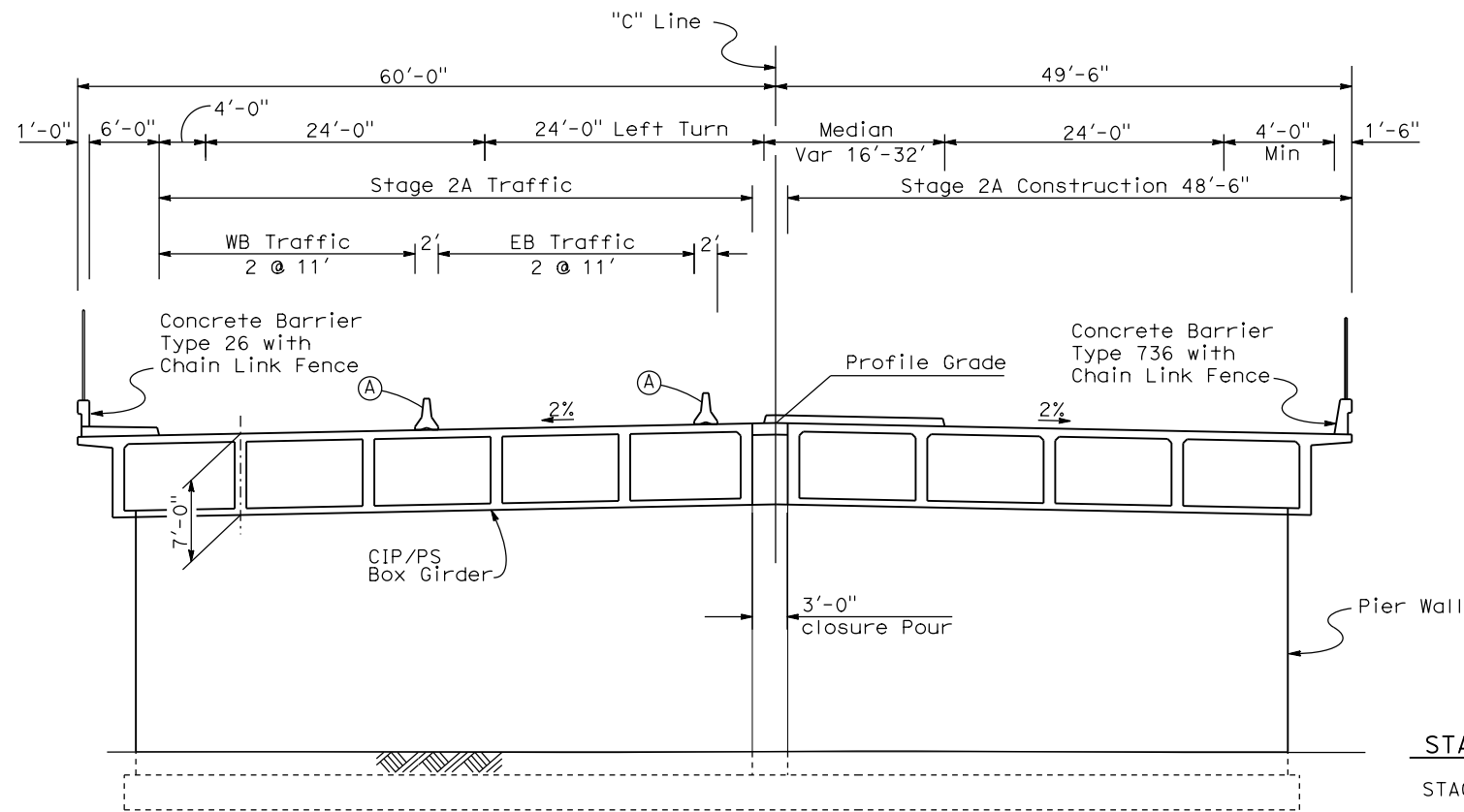


**CALIFORNIA HIGH SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
**ROUTE 99 RE-ALIGNMENT**  
**ADVANCE PLANNING STUDY**

CONTRACT NO.	HSR006-007
DRAWING NO.	<b>BR-3</b>
SCALE	AS SHOWN
SHEET NO.	

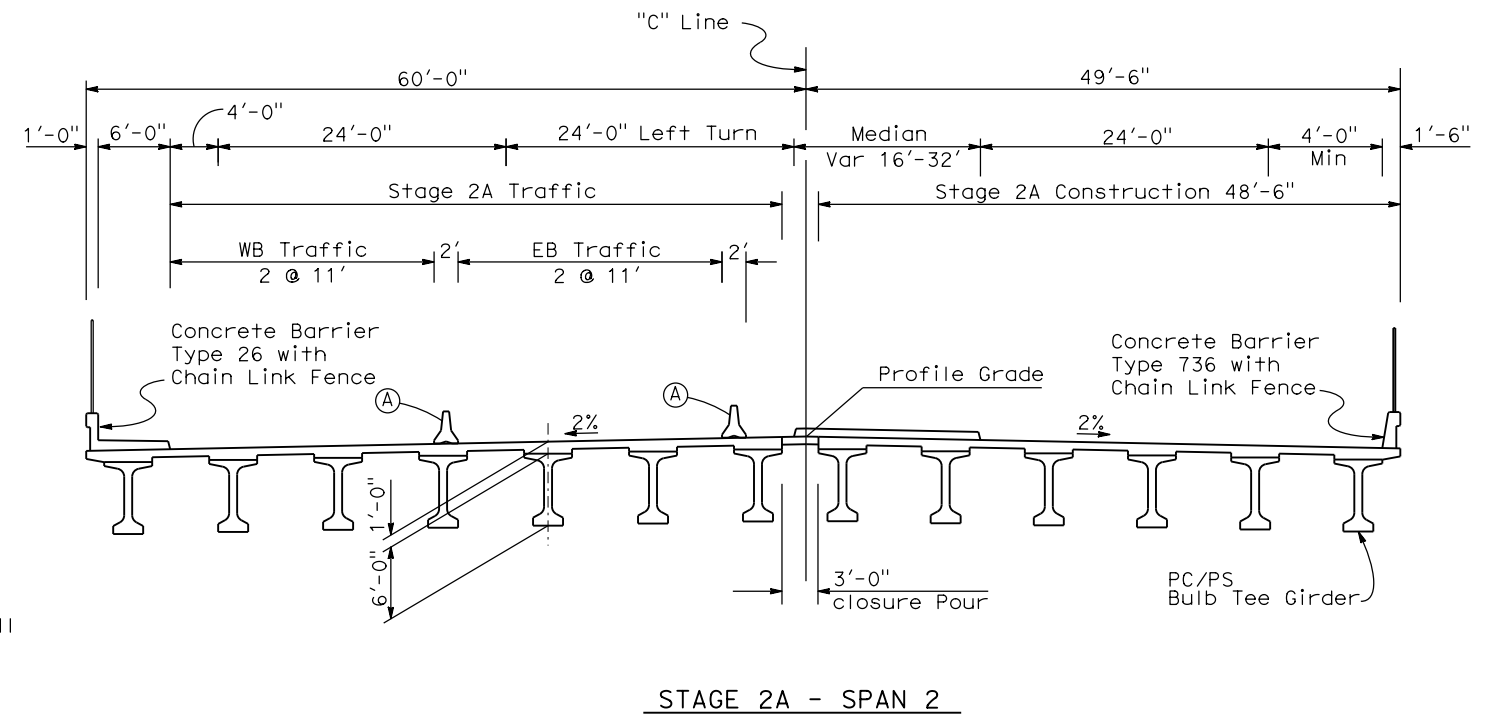
DATE PLOTTED: 23-28-APR-2011





STAGE 2A - SPANS 1 & 3

- (A) Temporary Railing Type K
- (B) Existing Barrier



STAGE 2A - SPAN 2

**STAGING NOTES:**

**STAGE 2:**

Shift Clinton Ave EB & WB traffic to southerly portion of Fresno Yard OH.

Remove north portion of Fresno Yard OH.

Construct north portion of Fresno Yard OH.

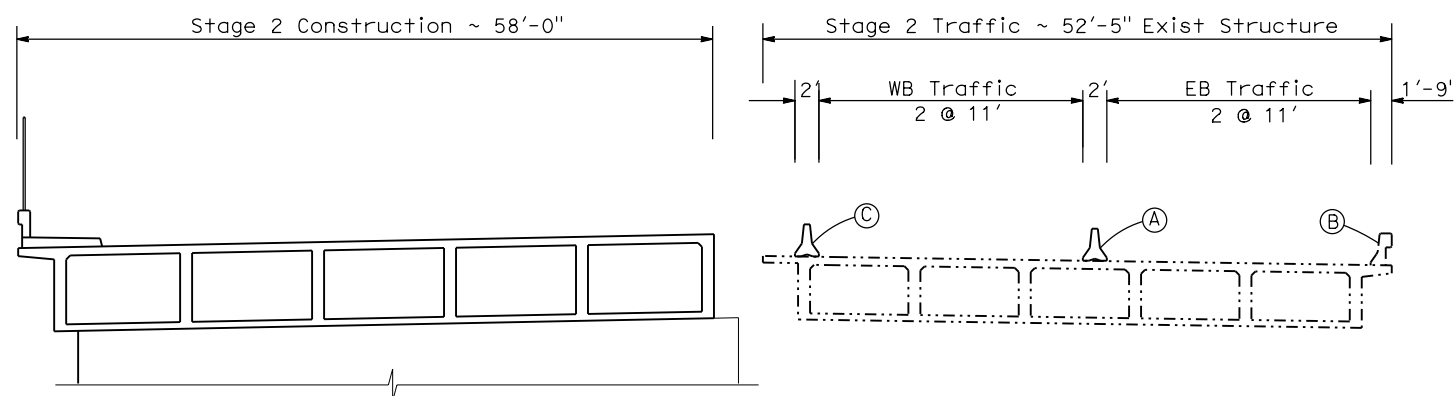
**STAGE 2A:**

Shift Clinton Ave EB & WB traffic to newly constructed Fresno Yard OH.

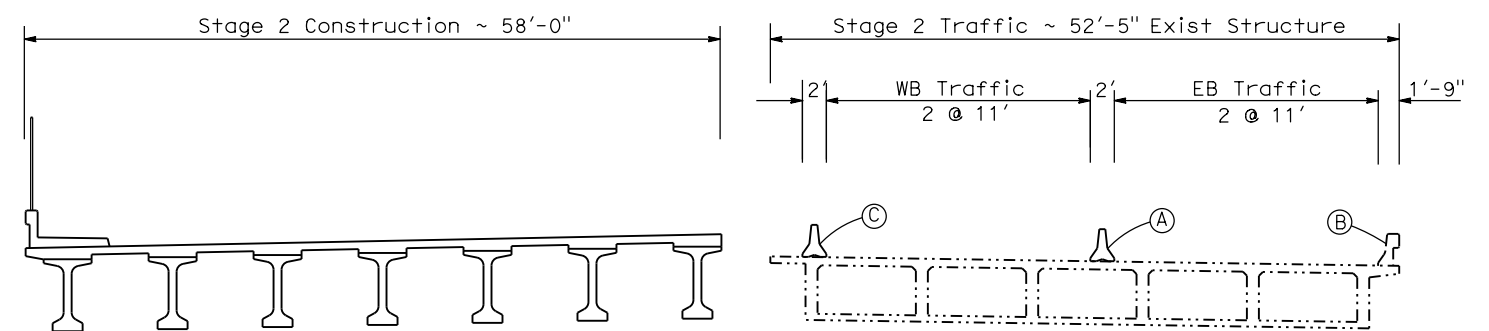
Remove remaining portion of Fresno Yard OH.

Construct south portion of Fresno Yard OH.

Closure pour.



STAGE 1 - SPANS 1 & 3



STAGE 1 - SPAN 2

**TYPICAL SECTION**

1/8"=1'-0"

**FRESNO YARD OVERHEAD (REPLACE)**

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. FREDERICKS  
DRAWN BY  
P. WALKER  
CHECKED BY  
J. SHOWERS  
IN CHARGE  
J. MATSUI-DRURY  
DATE  
04/29/11

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

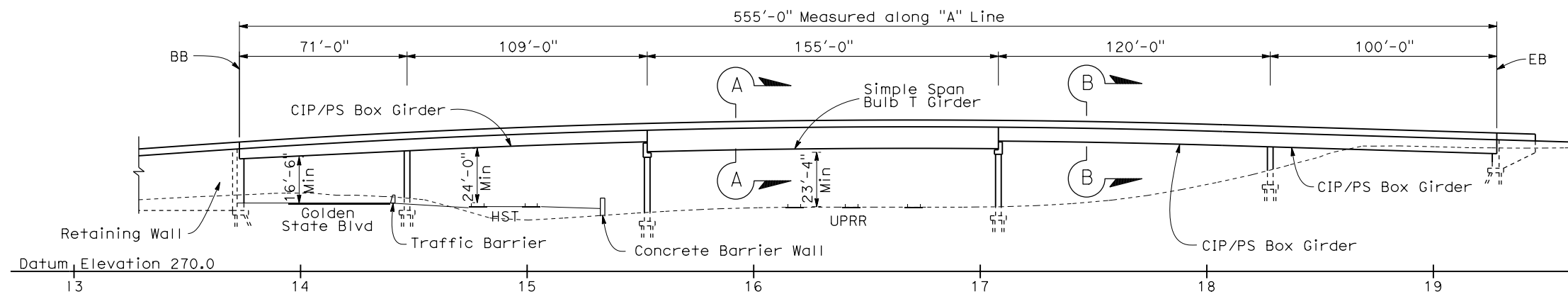
**NOT FOR**  
**CONSTRUCTION**



**CALIFORNIA HIGH SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
**ROUTE 99 RE-ALIGNMENT**  
**ADVANCE PLANNING STUDY**

CONTRACT NO.  
HSR006-007  
DRAWING NO.  
**BR-4**  
SCALE  
AS SHOWN  
SHEET NO.

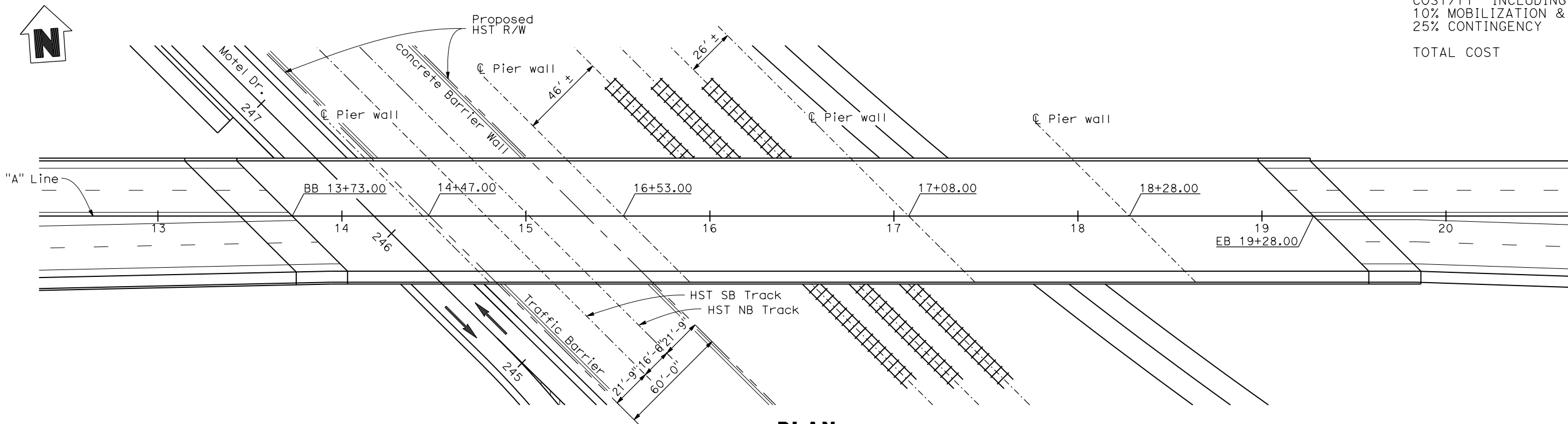
DATE PLOTTED: 23-APR-2011



**ELEVATION**

1" = 30'

DATE OF ESTIMATE	=	3-14-2011
BRIDGE REMOVAL	=	\$ 600,000
STRUCTURE DEPTH	=	9'-6"
LENGTH	=	555'-0"
WIDTH	=	68'-6"
AREA	=	38,020 ft <sup>2</sup>
COST/ft <sup>2</sup> INCLUDING 10% MOBILIZATION & 25% CONTINGENCY	=	\$ 175/ft <sup>2</sup>
TOTAL COST	=	\$ 6,700,000



**PLAN**

1" = 30'

**ASHLAN AVE OVERHEAD (REPLACE)**

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**D. FREDERICKS**

DRAWN BY  
**P. WALKER**

CHECKED BY  
**J. SHOWERS**

IN CHARGE  
**J. MATSUI-DRURY**

DATE  
**04/29/11**

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

**NOT FOR**  
**CONSTRUCTION**

**AECOM**  
Technical Services, Inc.  
2020 L Street, Suite 300  
Sacramento, CA 95811

**CH2MHILL**

**CALIFORNIA**  
HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH SPEED TRAIN PROJECT**

**MERCED TO FRESNO**

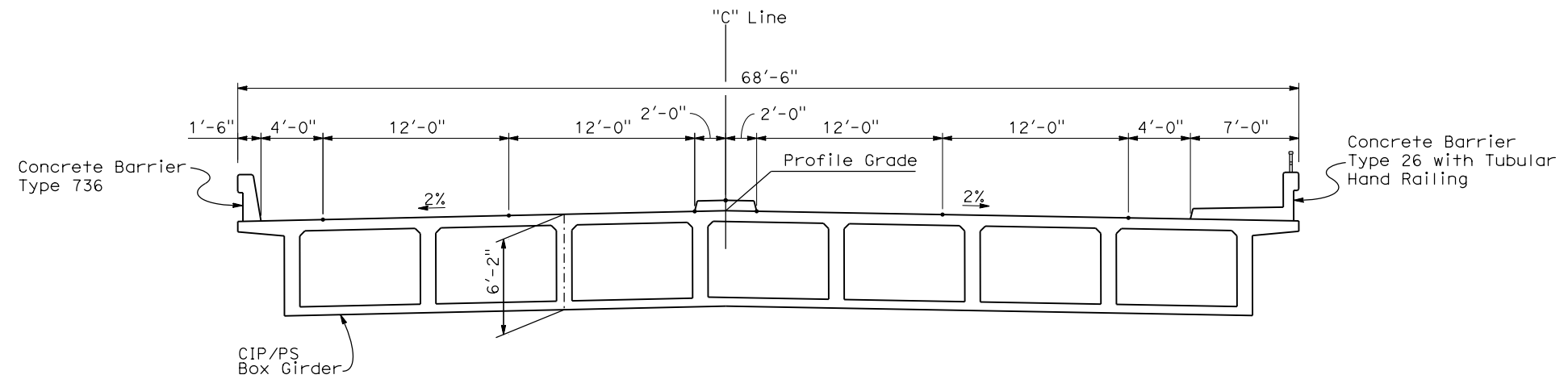
**ROUTE 99 RE-ALIGNMENT**

**ADVANCE PLANNING STUDY**

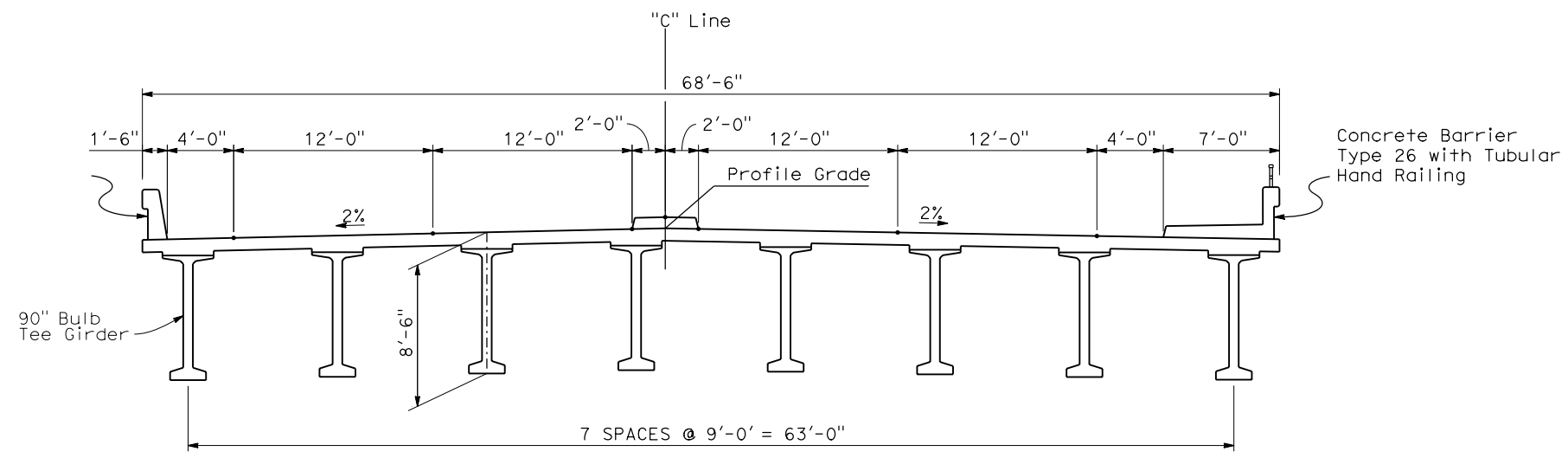
CONTRACT NO.	HSR006-007
DRAWING NO.	<b>BR-5</b>
SCALE	AS SHOWN
SHEET NO.	

DATE PLOTTED: 03-28-2011 10:00 AM





SECTION A-A  
1"=5'



SECTION B-B  
1"=5'

**ASHLAN AVE OVERHEAD (REPLACE)**

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**D. FREDERICKS**  
DRAWN BY  
**P. WALKER**  
CHECKED BY  
**J. SHOWERS**  
IN CHARGE  
**J. MATSUI-DRURY**  
DATE  
**04/29/11**

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



**CALIFORNIA HIGH SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
**ROUTE 99 RE-ALIGNMENT**  
**ADVANCE PLANNING STUDY**

CONTRACT NO.  
HSR006-007  
DRAWING NO.  
**BR-6**  
SCALE  
AS SHOWN  
SHEET NO.

DATE PLOTTED: 23 APR 2011 10:00 AM

7/22/2011 11:16:01 AM p:\60022962\task\_02\_merced-fresno\cadd\civil\sheet\package 2 - Ave 24 Wye & W. Chowchilla\Volume 3B - Ave 24 Wye-W.Chowchilla Local Roads\Index Of Drawings\B9090-B.dwg

LOCATION NO.	SHT NO.	DWG NO.	DRAWING TITLE LINE 3	DRAWING TITLE LINE 4	DRAWING TITLE LINE 5	DRAWING TITLE LINE 6
GENERAL						
		B9090-B	UPRR/SR99 - (AVE 24)	GENERAL	INDEX OF DRAWINGS	SHEET 1 OF 2
		B9091-B	UPRR/SR99 - (AVE 24)	GENERAL	INDEX OF DRAWINGS	SHEET 2 OF 2
		B9092-B	UPRR/SR99 - (AVE 24/WC)	GENERAL	ABBREVIATIONS, SYMBOLS AND NOTES	SHEET 1 OF 1
		B9100-B	UPRR/SR99 - (AVE 24)		INDEX MAP	SHEET 1 OF 5
		B9101-B	UPRR/SR99 - (WC)		INDEX MAP	SHEET 2 OF 5
		B9102-B	UPRR/SR99 - (AVE 24)		INDEX MAP	SHEET 3 OF 5
		B9103-B	UPRR/SR99 - (AVE 24)		INDEX MAP	SHEET 4 OF 5
		B9104-B	UPRR/SR99 - (WC)		INDEX MAP	SHEET 5 OF 5
		CB9100-B	UPRR/SR99 MAINLINE - (AVE 24/WC)	LOCAL & FRONTAGE ROAD	KEY MAP	SHEET 1 OF 7
		CB9101-B	UPRR/SR99 MAINLINE - (AVE 24/WC)	LOCAL & FRONTAGE ROAD	KEY MAP	SHEET 2 OF 7
		CB9102-B	UPRR/SR99 MAINLINE/WYE/MERCED - (AVE 24)	LOCAL & FRONTAGE ROAD	KEY MAP	SHEET 3 OF 7
		CB9103-B	UPRR/SR99 WYE/MERCED - (AVE 24)	LOCAL & FRONTAGE ROAD	KEY MAP	SHEET 4 OF 7
		CB9104-B	UPRR/SR99 MERCED - (AVE 24/WC)	LOCAL & FRONTAGE ROAD	KEY MAP	SHEET 5 OF 7
		CB9105-B	UPRR/SR99 MAINLINE/WYE/MERCED DO - (WC)	LOCAL & FRONTAGE ROAD	KEY MAP	SHEET 6 OF 7
		CB9106-B	UPRR/SR99 MAINLINE/WYE/MERCED DO - (WC)	LOCAL & FRONTAGE ROAD	KEY MAP	SHEET 7 OF 7
		CR9090-B	UPRR/SR99 - (AVE 24/WC)	LOCAL ROADS	TYPICAL CROSS SECTIONS	SHEET 1 OF 2
		CR9091-B	UPRR/SR99 - (AVE 24/WC)	LOCAL ROADS	TYPICAL CROSS SECTIONS	SHEET 2 OF 2
		CR9092-B	UPRR/SR99 - (AVE 24/WC)		GENERAL STAGE CONSTRUCTION AND TRAFFIC PLAN	SHEET 1 OF 1
LAYOUT						
40		CR9100-B	UPRR/SR99 MAINLINE - (AVE 24/WC)	ROAD 33	LAYOUT	STA 13+21 TO STA 58+86
41		CR9101-B	UPRR/SR99 MAINLINE - (AVE 24/WC)	REALIGNED ROAD	LAYOUT	STA 10+00 TO STA 45+94
42		CR9102-B	UPRR/SR99 MAINLINE - (AVE 24/WC)	ROAD 31 & GOLDEN STATE BLVD AT AVENUE 9	LAYOUT	STA 100+00 TO STA 130+35.68
43		CR9103-B	UPRR/SR99 MAINLINE - (AVE 24/WC)	ROAD 31 1/2	LAYOUT	SHEET 1 OF 4
43		CR9104-B	UPRR/SR99 MAINLINE - (AVE 24/WC)	ROAD 31 1/2	LAYOUT	SHEET 2 OF 4
44		CR9105-B	UPRR/SR99 MAINLINE - (AVE 24/WC)	ROAD 30 1/2 & ROAD 31 1/2	LAYOUT	SHEET 3 OF 4
44		CR9106-B	UPRR/SR99 MAINLINE - (AVE 24/WC)	ROAD 30 1/2	LAYOUT	SHEET 4 OF 4
45		CR9107-B	UPRR/SR99 MAINLINE - (AVE 24/WC)	ROAD 30 AT AVENUE 11	LAYOUT	SHEET 1 OF 2
45		CR9108-B	UPRR/SR99 MAINLINE - (AVE 24/WC)	ACCESS ROAD AT AVENUE 11	LAYOUT	SHEET 2 OF 2
46		CR9109-B	UPRR/SR99 MAINLINE - (AVE 24/WC)	S KNOX ST	LAYOUT	STA 10+00 TO STA 34+67
47		CR9110-B	UPRR/SR99 MAINLINE - (AVE 24/WC)	N E ST AND S E ST	LAYOUT	SHEET 1 OF 2
48		CR9111-B	UPRR/SR99 MAINLINE - (AVE 24/WC)	SHARON BLVD & E ST	LAYOUT	SHEET 2 OF 2
52		CR9112-B	UPRR/SR99 MERCED - (AVE 24)	FAIRMEAD BLVD	LAYOUT	SHEET 1 OF 5
52		CR9113-B	UPRR/SR99 MERCED - (AVE 24)	FAIRMEAD BLVD	LAYOUT	SHEET 2 OF 5
52		CR9114-B	UPRR/SR99 MERCED - (AVE 24)	FAIRMEAD BLVD	LAYOUT	SHEET 3 OF 5
52		CR9115-B	UPRR/SR99 MERCED - (AVE 24)	FAIRMEAD BLVD	LAYOUT	SHEET 4 OF 5
52		CR9116-B	UPRR/SR99 MERCED - (AVE 24)	FAIRMEAD BLVD	LAYOUT	SHEET 5 OF 5
65		CR9117-B	UPRR/SR99 MERCED - (AVE 24)	PROPOSED WEST FRONTAGE ROAD	LAYOUT	STA 18+22 TO STA 54+00
65		CR9118-B	UPRR/SR99 WYE/MERCED - (AVE 24)	PROPOSED WEST FRONTAGE ROAD	LAYOUT	STA 54+00 TO STA 77+51.01
66		CR9119-B	UPRR/SR99 WYE/MERCED - (AVE 24)	PROPOSED WEST FRONTAGE ROAD	LAYOUT	STA 205+00 TO STA 115+00
66		CR9120-B	UPRR/SR99 WYE/MERCED - (AVE 24)	PROPOSED FRONTAGE ROAD	LAYOUT	STA 115+00 TO STA 145+00
66		CR9121-B	UPRR/SR99 MERCED - (AVE 24)	PROPOSED WEST FRONTAGE ROAD	LAYOUT	STA 145+00 TO STA 191+27.40
66		CR9122-B	UPRR/SR99 MERCED - (AVE 24/WC)	PROPOSED WEST FRONTAGE ROAD	LAYOUT	STA 191+27.40 TO STA 251+00
66		CR9123-B	UPRR/SR99 MERCED - (AVE 21/AVE 24/WC)	PROPOSED WEST FRONTAGE ROAD	LAYOUT	STA 251+00 TO STA 311+00
66		CR9124-B	UPRR/SR99 MERCED - (AVE 24/WC)	PROPOSED WEST FRONTAGE ROAD	LAYOUT	STA 311+00 TO STA 369+00
66		CR9125-B	UPRR/SR99 MERCED - (AVE 24/WC)	PROPOSED WEST FRONTAGE ROAD	LAYOUT	STA 369+00 TO STA 404+20.27
75		CR9126-B	UPRR/SR99 MERCED DO - (WC)	LOCAL ROAD - WEST FRONTAGE ROAD	LAYOUT	
75		CR9127-B	UPRR/SR99 MERCED DO - (WC)	LOCAL ROAD - WEST FRONTAGE ROAD	LAYOUT	
76		CR9128-B	UPRR/SR99 MERCED DO - (WC)	LOCAL ROAD - WEST FRONTAGE ROAD	LAYOUT	
76		CR9129-B	UPRR/SR99 MERCED DO - (WC)	LOCAL ROAD - WEST FRONTAGE ROAD	LAYOUT	
67		CR9130-B	UPRR/SR99 MAINLINE/WYE - (AVE 24/WC)	SOUTH FRONTAGE ROAD	LAYOUT	
67		CR9131-B	UPRR/SR99 MAINLINE/WYE - (AVE 24)	SOUTH FRONTAGE ROAD	LAYOUT	STA 120+00 TO 135+00
67		CR9132-B	UPRR/SR99 WYE - (AVE 24)	SOUTH FRONTAGE ROAD AVENUE 24	LAYOUT	STA 135+00 TO STA 161+86.44
67		CR9133-B	UPRR/SR99 MAINLINE - (AVE 24)	SOUTH FRONTAGE ROAD	LAYOUT	
67		CR9134-B	UPRR/SR99 MAINLINE - (AVE 24)	SOUTH FRONTAGE ROAD AVENUE 24	LAYOUT	
67		CR9135-B	UPRR/SR99 MAINLINE - (AVE 24)	NORTH & SOUTH FRONTAGE ROAD	LAYOUT	STA 332+76.37 TO STA 369+00
68		CR9136-B	UPRR/SR99 MAINLINE - (AVE 24)	NORTH & SOUTH FRONTAGE ROAD	LAYOUT	STA 369+00 TO 416+00 & 130+00 TO 162+63.49
68		CR9137-B	UPRR/SR99 MAINLINE - (AVE 24)	NORTH & SOUTH FRONTAGE ROAD	LAYOUT	STA 162+63.49 TO 192+72.18 & STA 416 TO 440
68		CR9138-B	UPRR/SR99 MAINLINE - (AVE 24)	NORTH & SOUTH FRONTAGE ROAD	LAYOUT	STA 192+72.18 TO 224+34.28
69		CR9139-B	UPRR/SR99 MAINLINE - (AVE 24)	NORTH FRONTAGE ROAD & ROAD 16 1/2	LAYOUT	
69		CR9140-B	UPRR/SR99 MAINLINE - (AVE 24)	SOUTH FRONTAGE ROAD & ROAD 16 1/2	LAYOUT	STA 112+99.41 TO STA 132+00
69		CR9141-B	UPRR/SR99 MAINLINE - (AVE 24)	NORTH & SOUTH FRONTAGE ROAD AVENUE 24	LAYOUT	STA 132+00 TO 138+79.29
69		CR9142-B	UPRR/SR99 MAINLINE - (AVE 24)	NORTH & SOUTH FRONTAGE ROAD AVENUE 24	LAYOUT	
70		CR9143-B	UPRR/SR99 WYE - (AVE 24)	ROAD 12	LAYOUT	STA 145+00 TO STA 205+00
71		CR9144-B	UPRR/SR99 WYE - (AVE 24)	AVENUE 24 1/2	LAYOUT	
71		CR9145-B	UPRR/SR99 WYE - (AVE 24)	ROAD 12 1/4 & AVENUE 24 1/2	LAYOUT	STA 110+00 TO STA 126+00
71		CR9146-B	UPRR/SR99 WYE - (AVE 24)	ROAD 12 1/4	LAYOUT	STA 126+00 TO STA 135+00
72		CR9147-B	UPRR/SR99 WYE - (AVE 24)	ROAD 12 1/2	LAYOUT	STA 140+00 TO STA 200+00
72		CR9148-B	UPRR/SR99 WYE - (AVE 24)	ROAD 12 1/2 & AVENUE 26 1/2	LAYOUT	STA 200+00 TO STA 133+00
72		CR9149-B	UPRR/SR99 WYE - (AVE 24)	AVENUE 26 1/2	LAYOUT	STA 133+00 TO STA 147+05.87
77		CR9150-B	UPRR/SR99 MERCED DO - (WC)	LOCAL ROAD - ROAD 11	LAYOUT	
77		CR9151-B	UPRR/SR99 MERCED DO - (WC)	LOCAL ROAD - ROAD 11	LAYOUT	

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
DRAWN BY  
C. DELOS REYES  
CHECKED BY  
A. SILVER  
IN CHARGE  
A. BOONE  
DATE  
06/30/2011

**RECORD SET  
15% DESIGN  
SUBMITTAL**

**NOT FOR  
CONSTRUCTION**



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

UPRR/SR99 - (AVE 24)  
GENERAL  
INDEX OF DRAWINGS  
SHEET 1 OF 2

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
B9090-B  
SCALE  
NONE  
SHEET NO.  
### OF ###



7/22/2011 11:16:09 AM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - Ave 24 Wye & W. Chowchilla\Volume 3B - Ave 24 Wye-W.Chowchilla Local Roads\Index Of Drawings\B9091-B.dwg

LOCATION NO.	SHT NO.	DWG NO.	DRAWING TITLE LINE 3	DRAWING TITLE LINE 4	DRAWING TITLE LINE 5	DRAWING TITLE LINE 6
76		CR9152-B	UPRR/SR99 MERCED DO - (WC)	LOCAL ROAD - SANDY MUSH ROAD	LAYOUT	STA 30+00 TO STA 33+00
77		CR9153-B	UPRR/SR99 MERCED DO - (WC)	LOCAL ROAD - CROSS ROAD	LAYOUT	STA 120+00 TO STA 140+00
80		CR9154-B	UPRR/SR99 MAINLINE/WYE DO - (WC)	LOCAL ROAD - AVENUE 24 1/2	LAYOUT	
80		CR9155-B	UPRR/SR99 WYE DO - (WC)	LOCAL ROAD - AVENUE 24 1/2	LAYOUT	
81		CR9156-B	UPRR/SR99 MAINLINE/WYE DO - (WC)	LOCAL ROAD - ROAD 12	LAYOUT	STA 50+00 TO 95+58.26 & STA 71+00 TO 81+00
82		CR9157-B	UPRR/SR99 MERCED DO - (WC)	LOCAL ROAD - ROAD 12 1/2 & AVENUE 24 3/4	LAYOUT	STA 81+00 TO STA 96+00
82		CR9158-B	UPRR/SR99 MERCED/WYE DO - (WC)	LOCAL ROAD - AVENUE 24 3/4	LAYOUT	STA 96+00 TO STA 109+18.38
78		CR9159-B	UPRR/SR99 MAINLINE/WYE DO - (WC)	SOUTH FRONTAGE ROAD	LAYOUT	STA 120+00 TO 135+00
78		CR9160-B	UPRR/SR99 MAINLINE/WYE DO - (WC)	AVENUE 24	LAYOUT	STA 135+00 TO STA 161+86.44
79		CR9161-B	UPRR/SR99 MAINLINE - (WC)	SOUTH FRONTAGE ROAD	LAYOUT	
79		CR9162-B	UPRR/SR99 MAINLINE - (WC)	SOUTH FRONTAGE ROAD	LAYOUT	
79		CR9163-B	UPRR/SR99 MAINLINE - (WC)	SOUTH FRONTAGE ROAD	LAYOUT	STA 333+00 TO STA 374+00
79		CR9164-B	UPRR/SR99 MAINLINE DO/MERCED DO - (WC)	LOCAL ROAD - FRONTAGE ROAD	LAYOUT	STA 374+00 TO STA 434+00
79		CR9165-B	UPRR/SR99 MAINLINE DO - (WC)	LOCAL ROAD - FRONTAGE ROAD & AVENUE 24	LAYOUT	STA 434+00 TO STA 440+00
79		CR9166-B	UPRR/SR99 MAINLINE DO - (WC)	LOCAL ROAD - FRONTAGE ROAD	LAYOUT	
52		CR9167-B	UPRR/SR99 MERCED - (WC)	FAIRMEAD BLVD	LAYOUT	SHEET 1 OF 5
52		CR9168-B	UPRR/SR99 MERCED - (WC)	FAIRMEAD BLVD	LAYOUT	SHEET 2 OF 5
52		CR9169-B	UPRR/SR99 MERCED - (WC)	FAIRMEAD BLVD	LAYOUT	SHEET 3 OF 5
52		CR9170-B	UPRR/SR99 MERCED - (WC)	FAIRMEAD BLVD	LAYOUT	SHEET 4 OF 5
52		CR9171-B	UPRR/SR99 MERCED - (WC)	FAIRMEAD BLVD	LAYOUT	SHEET 5 OF 5
66		CR9172-B	UPRR/SR99 MERCED - (WC)	PROPOSED WEST FRONTAGE ROAD	LAYOUT	
66		CR9173-B	UPRR/SR99 MERCED - (WC)	PROPOSED WEST FRONTAGE ROAD	LAYOUT	
66		CR9174-B	UPRR/SR99 MERCED - (WC)	PROPOSED WEST FRONTAGE ROAD	LAYOUT	
66		CR9175-B	UPRR/SR99 MERCED - (WC)	PROPOSED WEST FRONTAGE ROAD	LAYOUT	
85		CR9176-B	UPRR/SR99 MERCED - (AVE 24/WC)	HEALY ROAD	LAYOUT	
86		CR9177-B	UPRR/SR99 MERCED - (AVE 24/WC)	GERARD AVENUE/CALTRANS FRONTAGE ROAD	LAYOUT	

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
DRAWN BY  
C. DELOS REYES  
CHECKED BY  
A. SILVER  
IN CHARGE  
A. BOONE  
DATE  
06/30/2011

**RECORD SET  
15% DESIGN  
SUBMITTAL**

**NOT FOR  
CONSTRUCTION**



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

UPRR/SR99 - (AVE 24)  
GENERAL  
INDEX OF DRAWINGS  
SHEET 2 OF 2

CONTRACT NO.  
HSR06-007

DRAWING NO.  
B9091-B

SCALE  
NONE

SHEET NO.  
### OF ###

## ABBREVIATIONS

### ALIGNMENT

#### HORIZONTAL

BC BEGINNING OF CURVE  
 EC END OF CURVE  
 PC POINT OF CURVE  
 PCC POINT OF COMPOUNT CURVES  
 PI POINT OF INTERSECTION OF TWO TANGENTS  
 POB POINT OF BEGINNING  
 POC POINT ON CURVE  
 POE POINT OF ENDING  
 POT POINT ON TANGENT  
 PRC POINT OF REVERSE CURVES  
 PT POINT OF TANGENCY  
 R RADIUS OF CURVATURE IN FEET  
 V, DS DESIGN VELOCITY IN MILES PER HOUR

#### VERTICAL



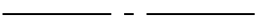

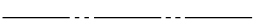
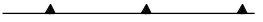

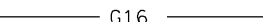

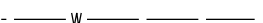











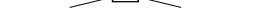


BVC BEGIN OF VERTICAL CURVE  
 EVC END OF VERTICAL CURVE  
 PVC POINT OF VERTICAL CURVE (BEGINNING OF CURVE)  
 PVI POINT OF VERTICAL INTERSECTION (OF TANGENTS)  
 PVT POINT OF VERTICAL TANGENCY (ENDING OF CURVE)  
 VC VERTICAL CURVE

### MISCELLANEOUS

ALT ALTERNATIVE  
 AVE AVENUE  
 BB BEGIN BRIDGE  
 BEG BEGIN  
 BLVD BOULEVARD  
 CL CENTER LINE  
 CLR CLEAR  
 COL COLUMN  
 DWG DRAWING  
 EB END BRIDGE  
 ELEV ELEVATION  
 EQ EQUATION  
 ES EDGE OF SIDEWALK  
 ETW EDGE OF TRAVELED WAY  
 EXIST(E) EXISTING  
 FL FLOW LINE  
 HORIZ HORIZONTAL  
 HP HINGE POINT  
 HST HIGH SPEED TRAIN  
 HWY HIGHWAY  
 IC INTERCHANGE  
 IN INCH  
 L LENGTH  
 LT LEFT  
 MBGR METAL BEAM GUARD RAIL  
 ML MAINLINE  
 MPH MILES PER HOUR  
 MAX MAXIMUM  
 MIN MINIMUM  
 N NORTH  
 NB NORTH BOUND  
 No, NO NUMBER  
 NTS NOT TO SCALE  
 OG ORIGINAL GROUND  
 O/H OH OVERHEAD  
 PG&E PACIFIC GAS & ELECTRIC  
 PGL, FG PROFILE GRADE LINE  
 RET RETAINING  
 RR RAILROAD  
 RD ROAD  
 R/W RIGHT OF WAY  
 RT RIGHT  
 SB SOUTH BOUND  
 SHLD SHOULDER  
 SR STATE ROUTE  
 SHT SHEET  
 SS SANITARY SEWER  
 SSD STOPPING SIGHT DISTANCE  
 ST STREET  
 STA STATION  
 STD STANDARD  
 SD STORM DRAIN  
 STRUCT, STR STRUCTURE  
 T TANGENT  
 TEL TELEPHONE  
 (OH) OVERHEAD LINE  
 (UG) UNDERGROUND LINE

TOR TOP OF RAIL  
 TK TRACK  
 TYP TYPICAL  
 TBD TO BE DETERMINED  
 TF TELECOMMUNICATIONS FIBER OPTIC  
 UPRR UNION PACIFIC RAILROAD  
 VAR VARIES  
 V VERT VERTICAL  
 W WATER, WEST

## SYMBOLS

 MATCH LINE  
 HST TRACK  
 PROPOSED HST RIGHT-OF-WAY  
 FREIGHT/PASSENGER TRACK - EXISTING  
 EXISTING RIGHT-OF-WAY OR EXISTING BRIDGE FEATURES  
 RETAINING WALLS  
 ORIGINAL GROUND  
 GAS LINE (16")  
 COMMUNICATION LINE  
 WATER LINE  
 FIBER OPTIC LINE  
 ELECTRICAL LINE  
 ELECTRICAL TOWER  
 SEWER LINE  
 STORM DRAIN LINE  
 FUEL LINE  
 TELEPHONE LINE  
 PETROLEUM LINE (12")  
 OVERHEAD  
 NORTH ARROW  
 PVI  
 MBGR  
 DIRECTION OF TRAVEL  
 PROPOSED CONTOUR

7/22/2011 1:48:40 PM p:\60022962\task\_02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\Volume 3B - Ave 24 Wye-W.chowchilla Local Roads\Abbreviation\B9092-B.dgn

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
R. LI  
 DRAWN BY  
A. TRINH  
 CHECKED BY  
A. SILVER  
 IN CHARGE  
A. BOONE  
 DATE  
06/30/2011

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

**NOT FOR**  
**CONSTRUCTION**

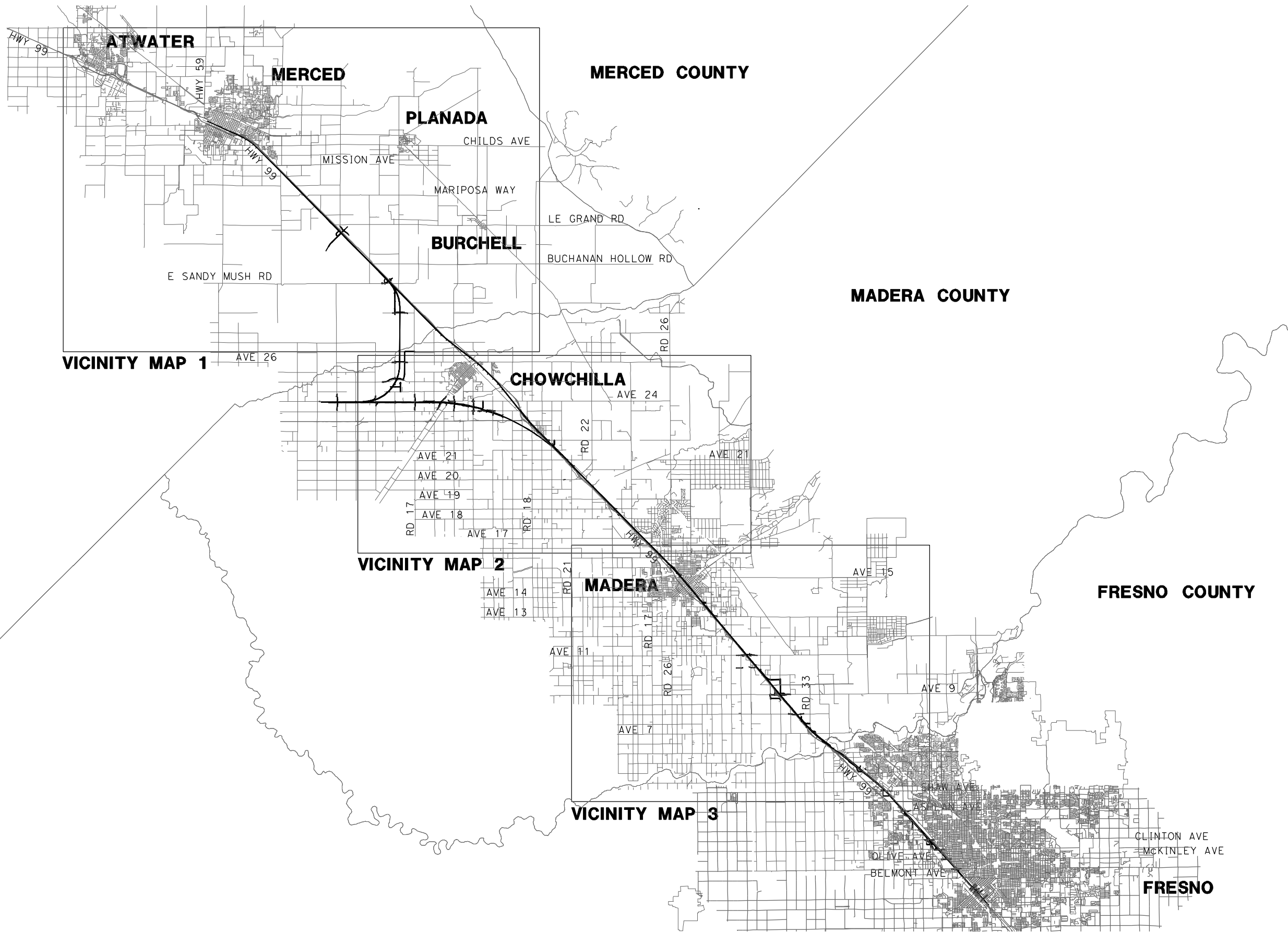


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 - (AVE 24/WC)  
 GENERAL  
 ABBREVIATIONS, SYMBOLS AND NOTES  
 SHEET 1 OF 1

CONTRACT NO.  
HSR06-007  
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**D. AYELE**  
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**A. TRINH**  
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**A. SILVER**  
IN CHARGE  
**A. BOONE**  
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Sacramento, CA 95811

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**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
UPRR/SR99 - (AVE 24)

INDEX MAP  
SHEET 1 OF 5

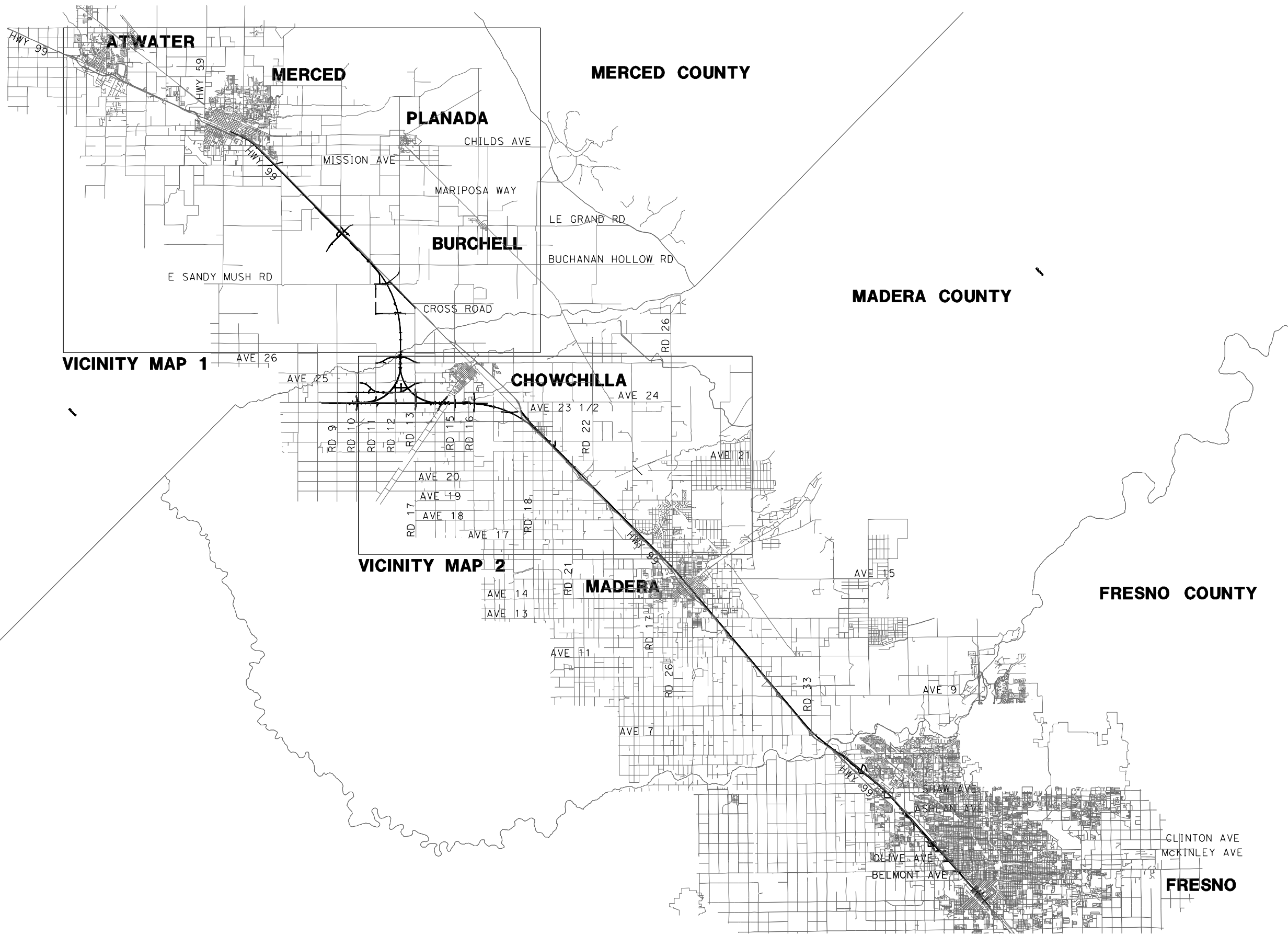
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**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
UPRR/SR99 - (WC)

INDEX MAP  
SHEET 2 OF 5

CONTRACT NO.  
HSR06-007

DRAWING NO.  
B9101-B

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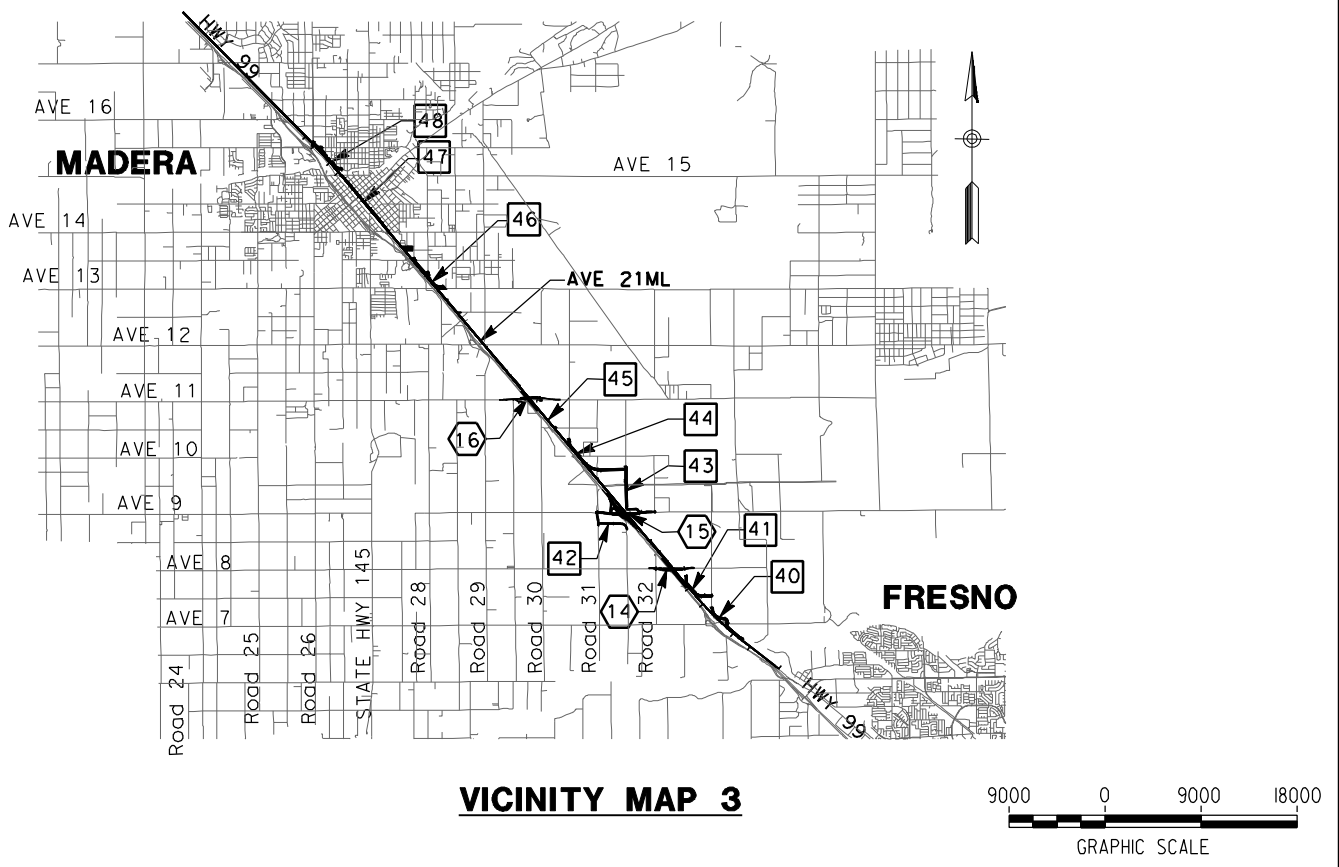
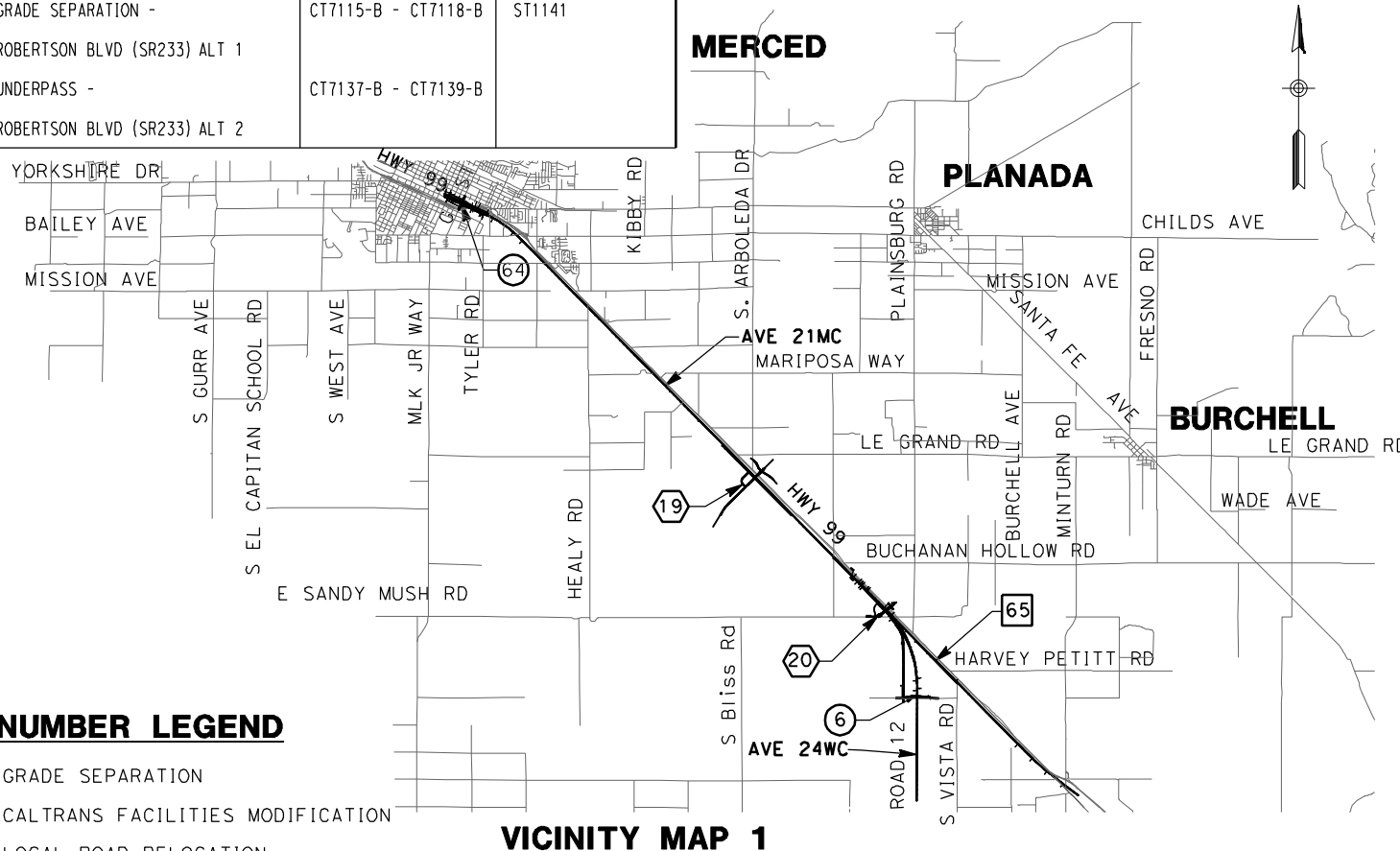
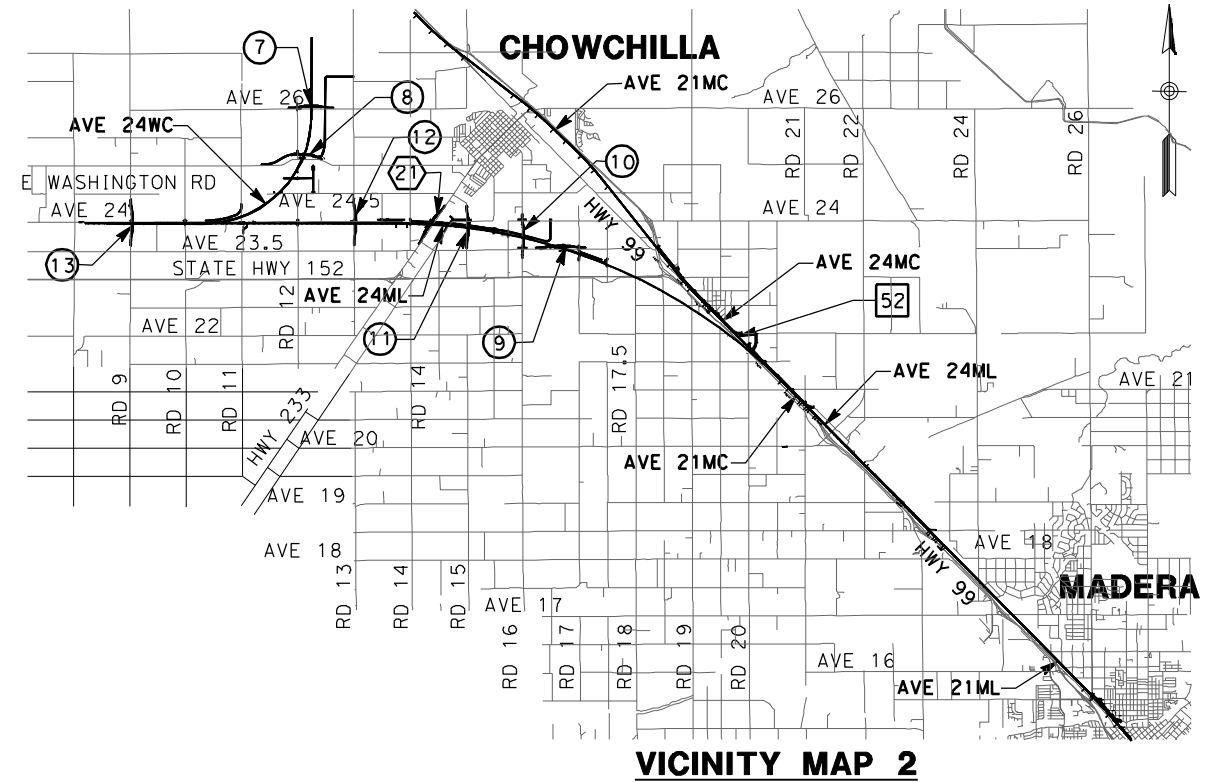
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LOCATION NO.	SHEET TITLE	ROADWAY DWG NO.	STR DWG NO.
6	GRADE SEPARATION - CROSS RD	CT5126-B - CT5128-B	ST1127
7	GRADE SEPARATION - AVENUE 26	CT5123-B - CT5125-B	ST1126
8	GRADE SEPARATION - AVENUE 25	CT5118-B - CT5122-B	ST1125
9	GRADE SEPARATION - AVENUE 23 1/2	CT5114-B - CT5117-B	ST1124
10	GRADE SEPARATION - ROAD 16	CT5111-B - CT5113-B	ST1123
11	GRADE SEPARATION - ROAD 15	CT5108-B - CT5110-B	ST1122
12	GRADE SEPARATION - ROAD 13	CT5104-B - CT5107-B	ST1138
13	GRADE SEPARATION - HEMLOCK RD (ROAD 9) ALT 1 GRADE SEPARATION - ROAD 9 ALONG EXIST ALT 2	CT5100-B - CT5103-B CT5190-B - CT5192-B	ST1120
64	GRADE SEPARATION - G STREET	CT0149-A	ST1180
14	AVENUE 8 - OVERCROSSING	CT7100-B - CT7102-B	ST1107
15	AVENUE 9 - INTERCHANGE	CT7103-B - CT7109-B	ST1108 - ST1109
16	AVENUE 11 - OVERCROSSING	CT7110-B - CT7114-B	ST1110
19	GRADE SEPARATION - LE GRAND INTERCHANGE	CT7122-B - CT7128-B	ST1114
20	GRADE SEPARATION - SANDY MUSH RD INTERCHANGE	CT7119-B - CT7121-B	ST1142
21	GRADE SEPARATION - ROBERTSON BLVD (SR233) ALT 1 UNDERPASS - ROBERTSON BLVD (SR233) ALT 2	CT7115-B - CT7118-B CT7137-B - CT7139-B	ST1141

LOCATION NO.	SHEET TITLE	ROADWAY DWG NO.
40	ROAD 33	CR9100-B
41	PROPOSED ROAD	CR9101-B
42	ROAD 31 & GOLDEN STATE BLVD AT AVENUE 9	CR9102-B
43	ROAD 31 & GOLDEN STATE BLVD AT AVENUE 9 ROAD 31 1/2	CR9103-B CR9104-B
44	ROAD 30 1/2	CR9105-B - CR9106-B
45	FRONTAGE ROAD ROAD 30 AT AVENUE 11	CR9107-B CR9108-B - CR9109-B
46	S. KNOX ST	CR9110-B
48	SHARON BLVD & E ST	CR9111-B
47	N. E ST AND S. E ST	CR9112-B
52	FAIRMEAD BLVD	CR9113-B - CR9116-B
65	PROPOSED WEST FRONTAGE ROAD	CR9117-B - CR9118-B

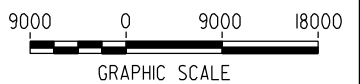


**LOCATION NUMBER LEGEND**

- (X) - INDICATES GRADE SEPARATION
- (X) - INDICATES CALTRANS FACILITIES MODIFICATION
- (X) - INDICATES LOCAL ROAD RELOCATION

**VICINITY MAP 1**

**VICINITY MAP 3**



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**D. AYELE**  
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**A. TRINH**  
CHECKED BY  
**A. SILVER**  
IN CHARGE  
**A. BOONE**  
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**CALIFORNIA HIGH-SPEED TRAIN PROJECT  
MERCED TO FRESNO**  
UPPR/SR99 - (AVE 24)

INDEX MAP  
SHEET 3 OF 5

CONTRACT NO.  
HSR06-007

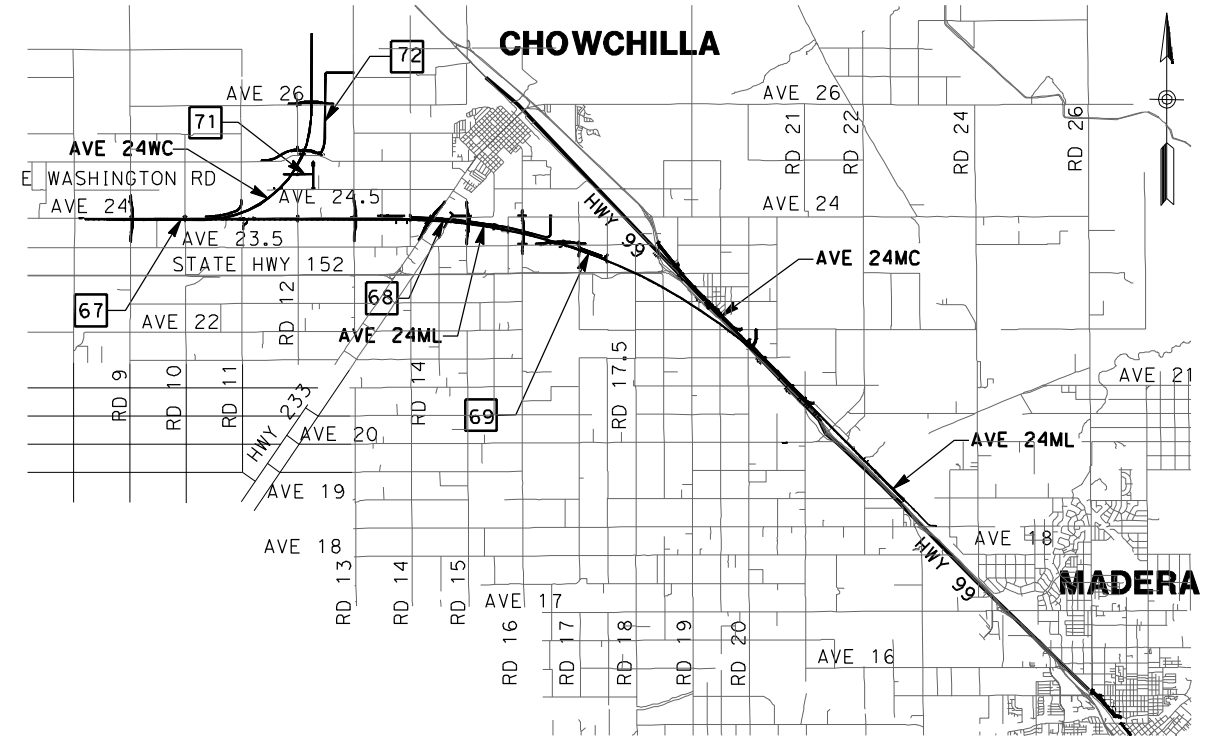
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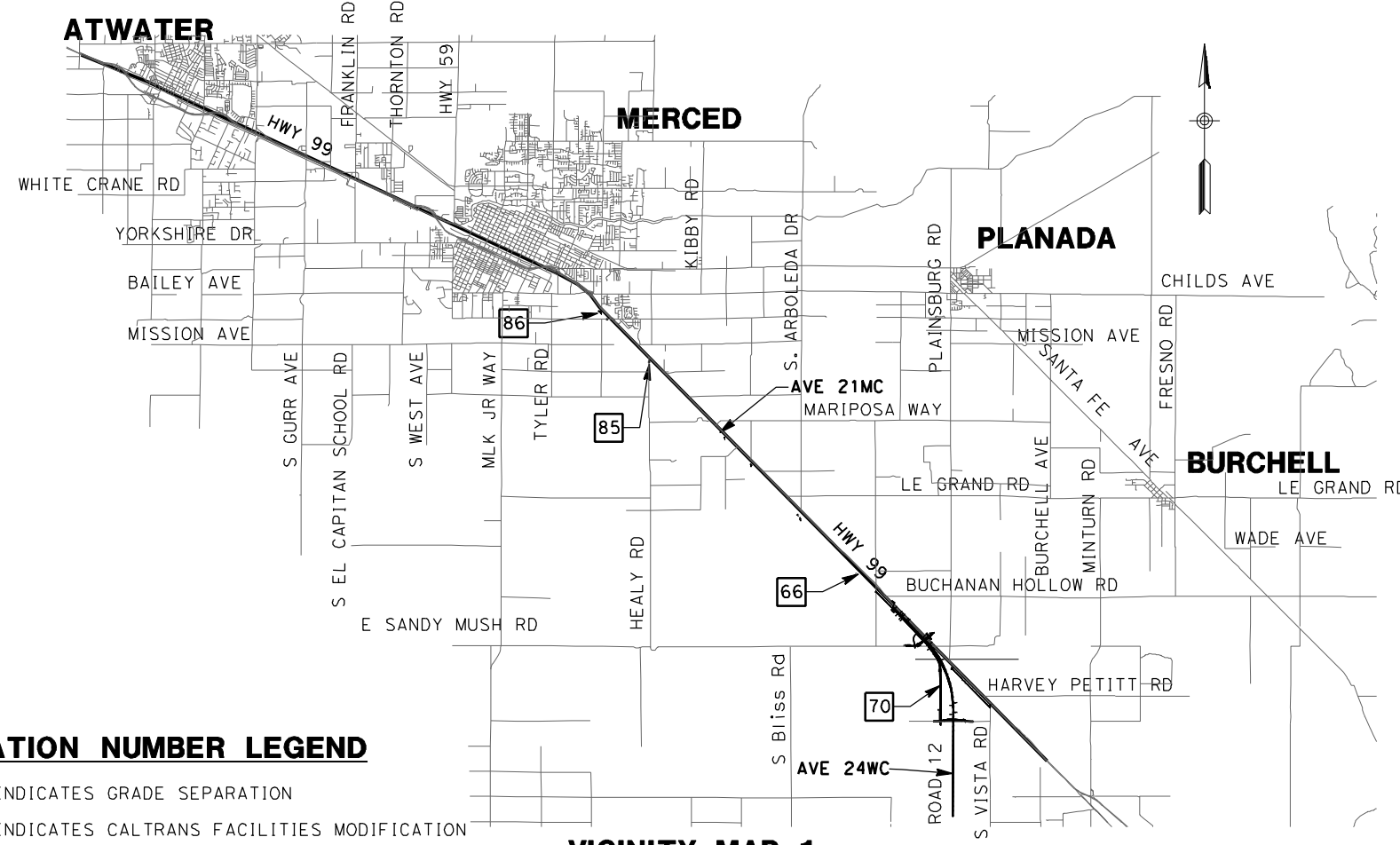
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LOCATION NO.	SHEET TITLE	ROADWAY DWG NO.
66	PROPOSED WEST FRONTAGE ROAD	CR9119-B - CR9125-B
67	SOUTH FRONTAGE ROAD PROPOSED AVENUE 24 WYE SOUTH FRONTAGE ROAD NORTH AND SOUTH FRONTAGE ROAD	CR9130-B - CR9131-B CR9132-B CR9133-B - CR9134-B CR9135-B
68	NORTH AND SOUTH FRONTAGE ROAD	CR9136-B - CR9138-B
69	NORTH FRONTAGE ROAD & ROAD 16 1/2 NORTH & SOUTH FRONTAGE ROAD AVENUE 24	CR9139-B - CR9140-B CR9141-B - CR9142-B
70	ROAD 12	CR9143-B
71	AVENUE 24 1/2 ROAD 12 1/4 & AVENUE 24 1/2 ROAD 12 1/4	CR9144-B CR9145-B CR9146-B
72	ROAD 12 1/2 ROAD 12 1/2 & AVENUE 26 1/2 AVENUE 26 1/2	CR9147-B CR9148-B CR9149-B
85	HEALY ROAD	CR9176-B
86	GERARD AVENUE/CALTRANS FRONTAGE ROAD	CR9177-B



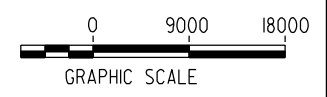
**VICINITY MAP 2**



**VICINITY MAP 1**

**LOCATION NUMBER LEGEND**

- (X) - INDICATES GRADE SEPARATION
- (X) - INDICATES CALTRANS FACILITIES MODIFICATION
- (X) - INDICATES LOCAL ROAD RELOCATION



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**D. AYELE**  
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**CALIFORNIA HIGH-SPEED TRAIN PROJECT  
MERCED TO FRESNO**  
UPPR/SR99 - (AVE 24)

INDEX MAP  
SHEET 4 OF 5

CONTRACT NO.  
HSR06-007

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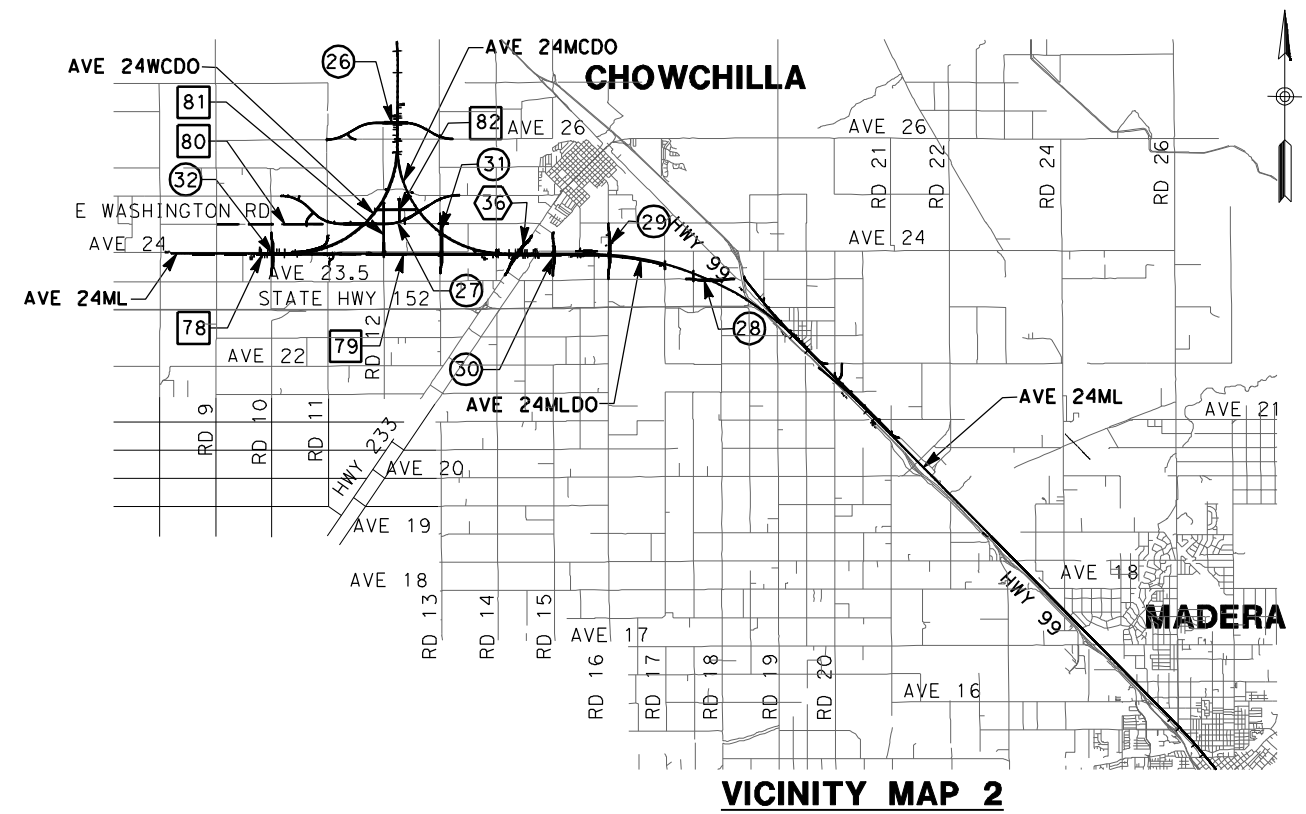
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LOCATION NO.	SHEET TITLE	ROADWAY DWG NO.	STR DWG NO.
25	GRADE SEPARATION - CROSS ROAD	CT5179-B - CT5181-B	ST1136
26	GRADE SEPARATION - AVENUE 26 ALT 1 UNDERPASS - AVENUE 26 ALT 2	CT5168-B - CT5177-B CT5187-B - CT5189-B	ST1135
27	GRADE SEPARATION - AVENUE 25	CT5150-B - CT5166-B	ST1133 & ST1134
28	GRADE SEPARATION - AVENUE 23 1/2	CT5146-B - CT5149-B	ST1132
29	GRADE SEPARATION - ROAD 16	CT5142-B - CT5145-B	ST1131
30	GRADE SEPARATION - ROAD 15	CT5138-B - CT5141-B	ST1130
31	GRADE SEPARATION - ROAD 13	CT5132-B - CT5137-B	ST1129 & ST1137
32	GRADE SEPARATION - ROAD 10 ALT 1 GRADE SEPARATION - ROAD 10 ALONG EXIST ALT 2	CT5129-B - CT5131-B CT5193-B - CT5195-B	ST1128
35	SANDY MUSH RD INTERCHANGE	CT7133-B - CT7136-B	ST1142
36	GRADE SEPARATION - ROBERTSON BLVD (SR 233) ALT 1 UNDERPASS - ROBERTSON BLVD (SR 233) ALT 2	CT7129-B - CT7132-B CT7140-B - CT7142-B	ST1143

LOCATION NO.	SHEET TITLE	ROADWAY DWG NO.
66	PROPOSED WEST FRONTAGE ROAD	CR9172-B - CR9175-B
75	LOCAL ROAD - WEST FRONTAGE ROAD	CR9126-B - CR9127-B
76	LOCAL ROAD - SANDY MUSH ROAD LOCAL ROAD - WEST FRONTAGE ROAD	CR9152-B CR9128-B - CR9129-B
77	LOCAL ROAD - ROAD 11 LOCAL ROAD - CROSS ROAD	CR9150-B - CR9151-B CR9153-B
78	SOUTH FRONTAGE ROAD AVENUE 24	CR9159-B CR9160-B
79	SOUTH FRONTAGE ROAD LOCAL ROAD - FRONTAGE ROAD LOCAL ROAD - FRONTAGE ROAD & AVE 24 LOCAL ROAD - FRONTAGE ROAD	CR9161-B - CR9163-B CR9164-B CR9165-B CR9166-B
80	LOCAL ROAD - AVENUE 24 1/2	CR9154-B - CR9155-B
81	LOCAL ROAD - ROAD 12	CR9156-B
82	LOCAL ROAD - ROAD 12 1/2 & AVE 24 3/4 LOCAL ROAD - AVENUE 24 3/4	CR9157-B CR9158-B

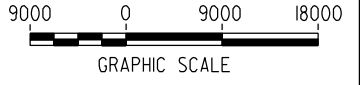


**LOCATION NUMBER LEGEND**

- (X) - INDICATES GRADE SEPARATION
- (X) - INDICATES CALTRANS FACILITIES MODIFICATION
- (X) - INDICATES LOCAL ROAD RELOCATION

**VICINITY MAP 1**

**VICINITY MAP 2**



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**CALIFORNIA HIGH-SPEED TRAIN PROJECT  
MERCED TO FRESNO**  
UPPR/SR99 - (WC)

INDEX MAP  
SHEET 5 OF 5

CONTRACT NO.  
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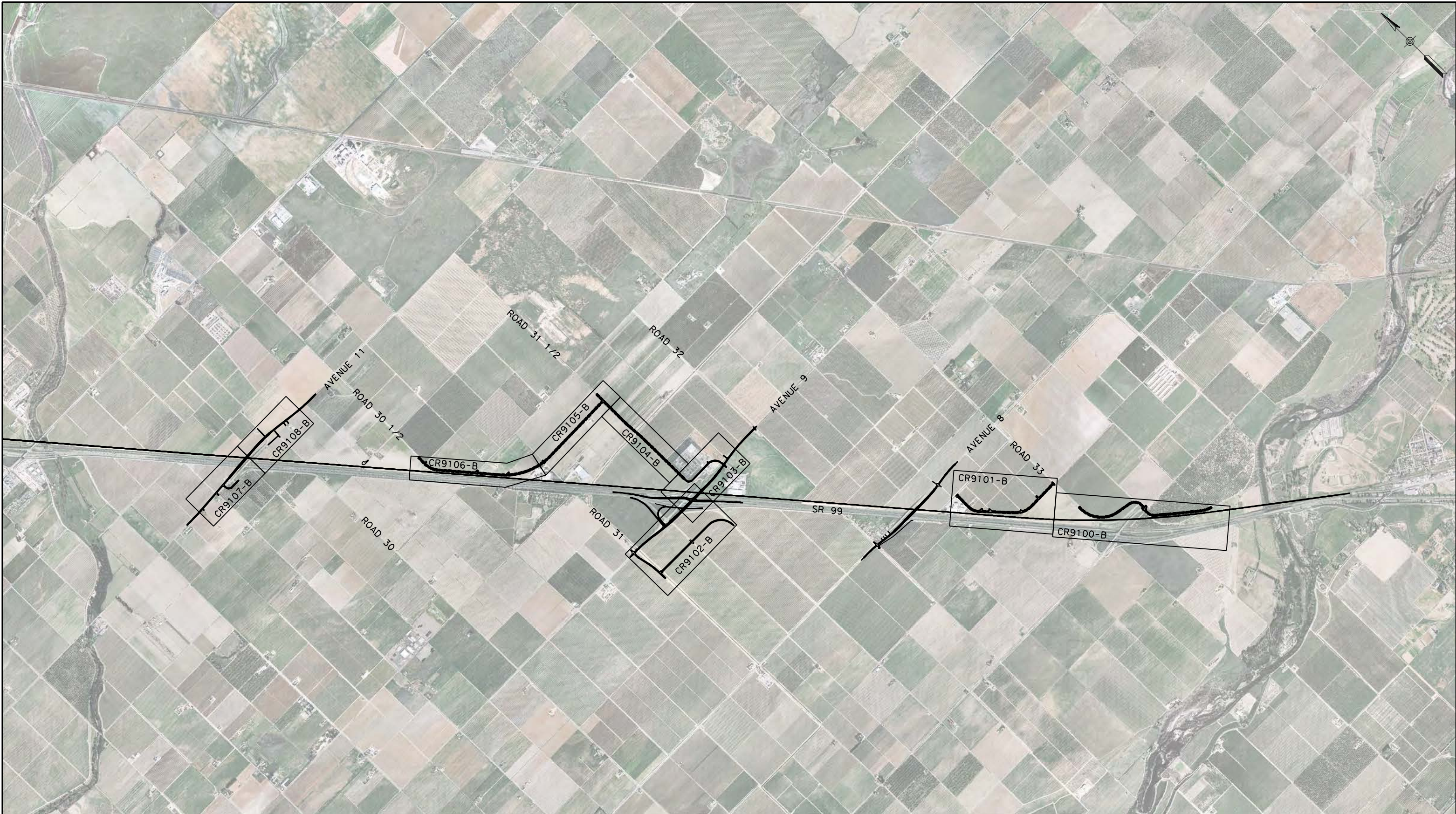
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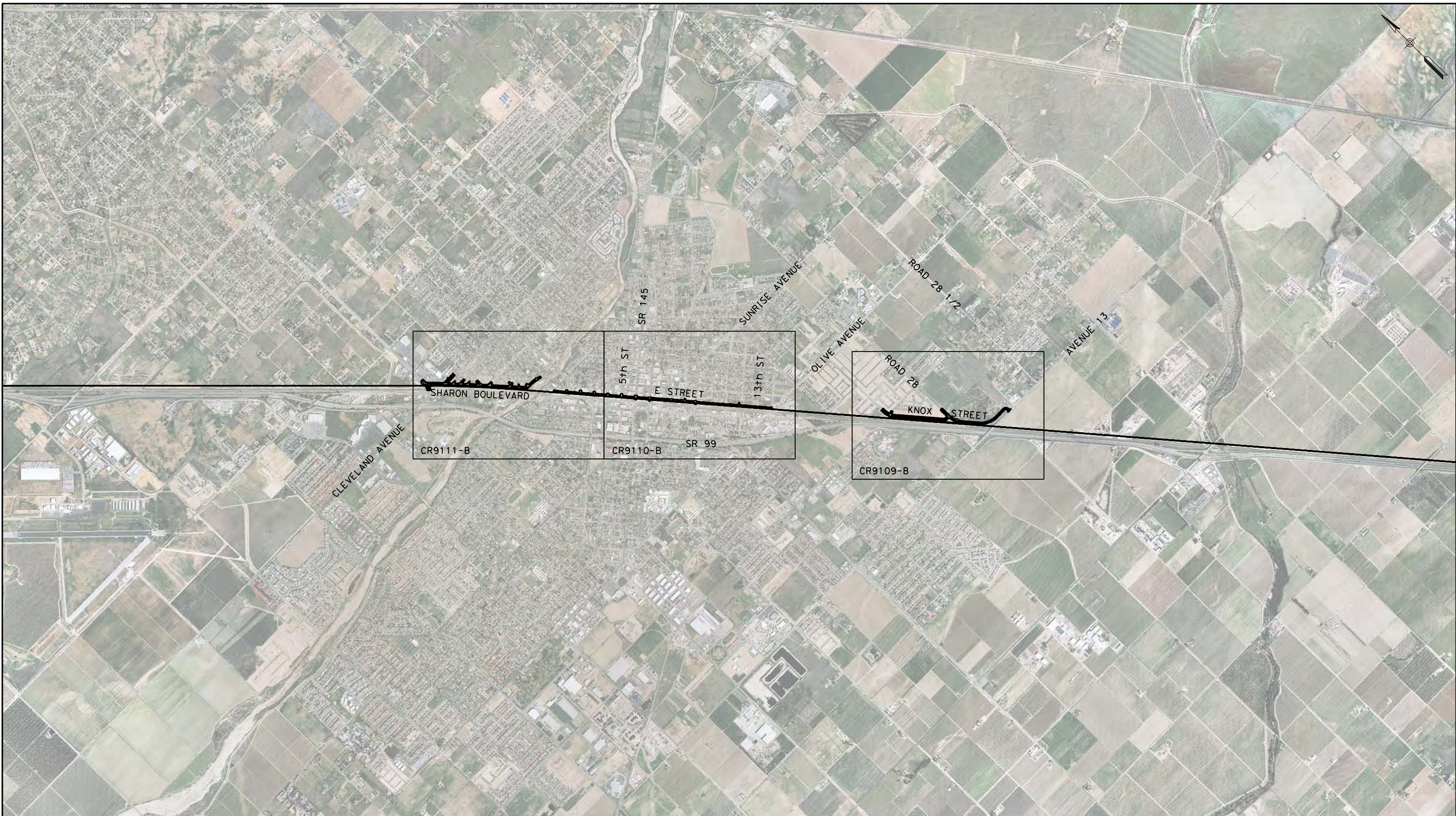


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 MAINLINE - (AVE 24/WC)  
 LOCAL & FRONTAGE ROAD  
 KEY MAP  
 SHEET 1 OF 7

CONTRACT NO.  
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**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 MAINLINE - (AVE 24/WC)  
 LOCAL & FRONTAGE ROAD  
 KEY MAP  
 SHEET 2 OF 7

CONTRACT NO.  
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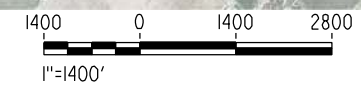
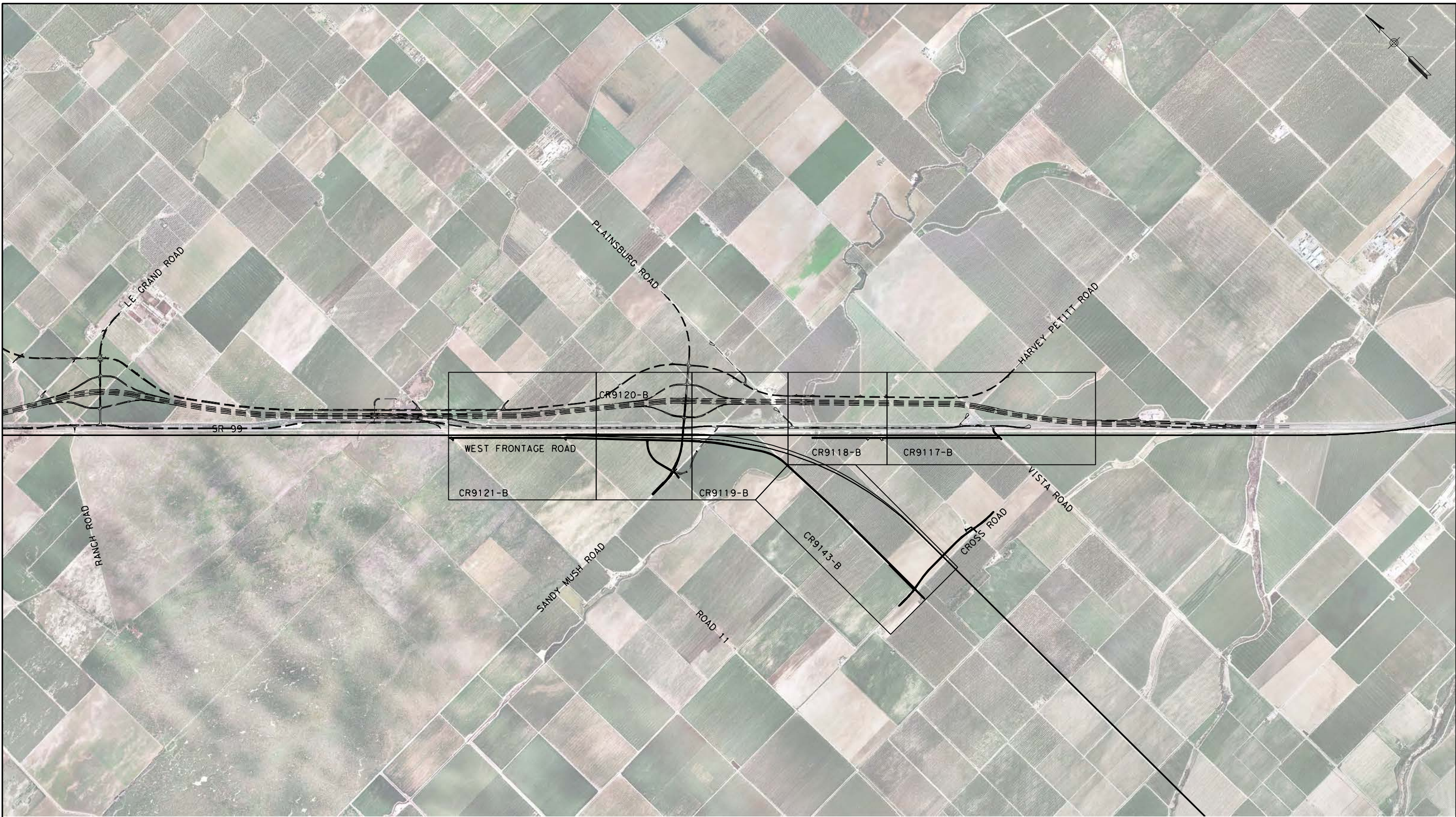
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**CALIFORNIA**  
 HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 MAINLINE/WYE/MERCED - (AVE 24)  
 LOCAL & FRONTAGE ROAD  
 KEY MAP  
 SHEET 3 OF 7

CONTRACT NO.	HSR06-007
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**A. BOONE**  
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**04/29/2011**

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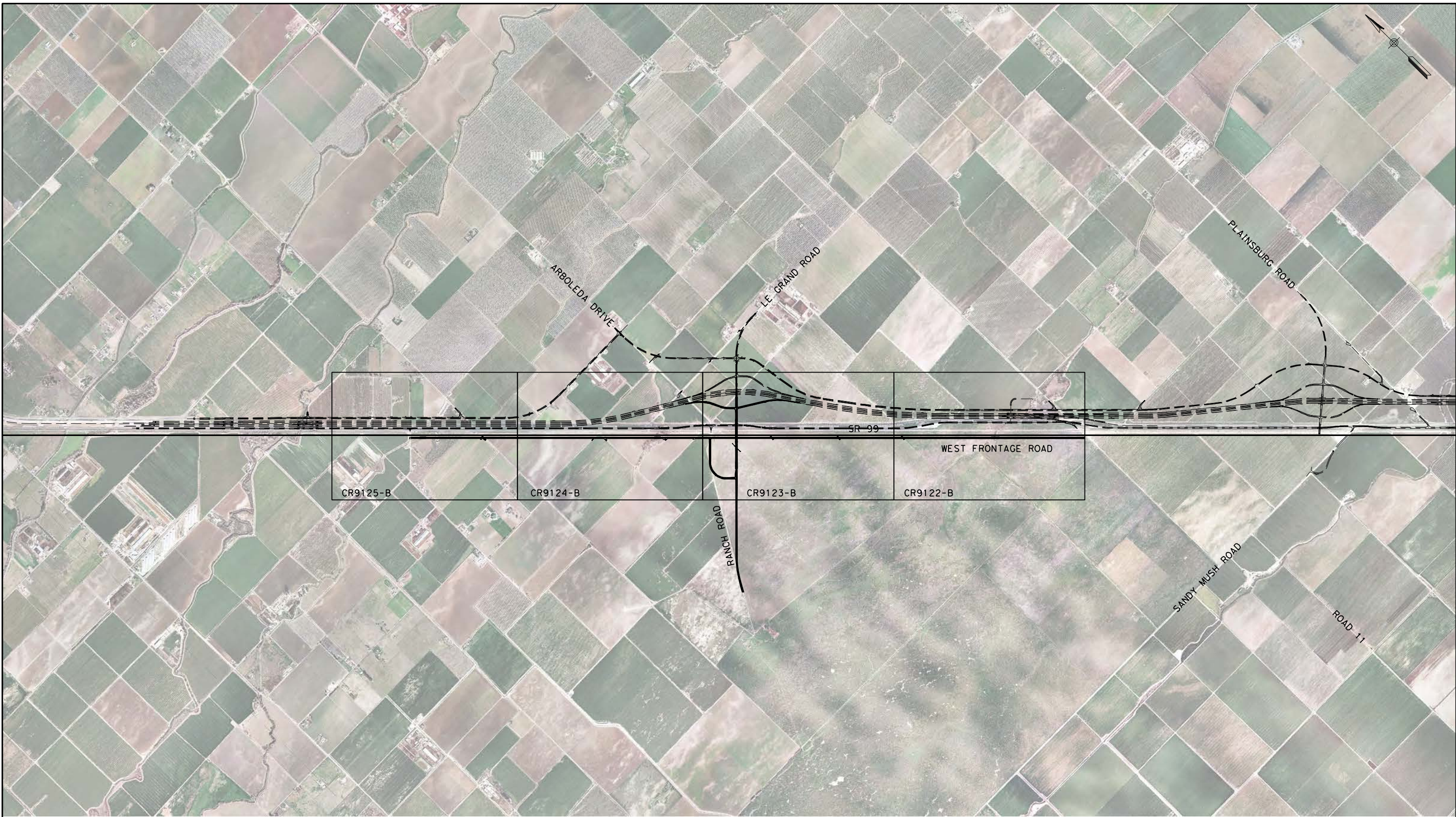


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 WYE/MERCED - (AVE 24)  
 LOCAL & FRONTAGE ROAD  
 KEY MAP  
 SHEET 4 OF 7

CONTRACT NO.  
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**C. DELOS REYES**  
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**A. SILVER**  
 IN CHARGE  
**A. BOONE**  
 DATE  
**04/29/2011**

**RECORD SET**  
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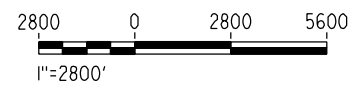
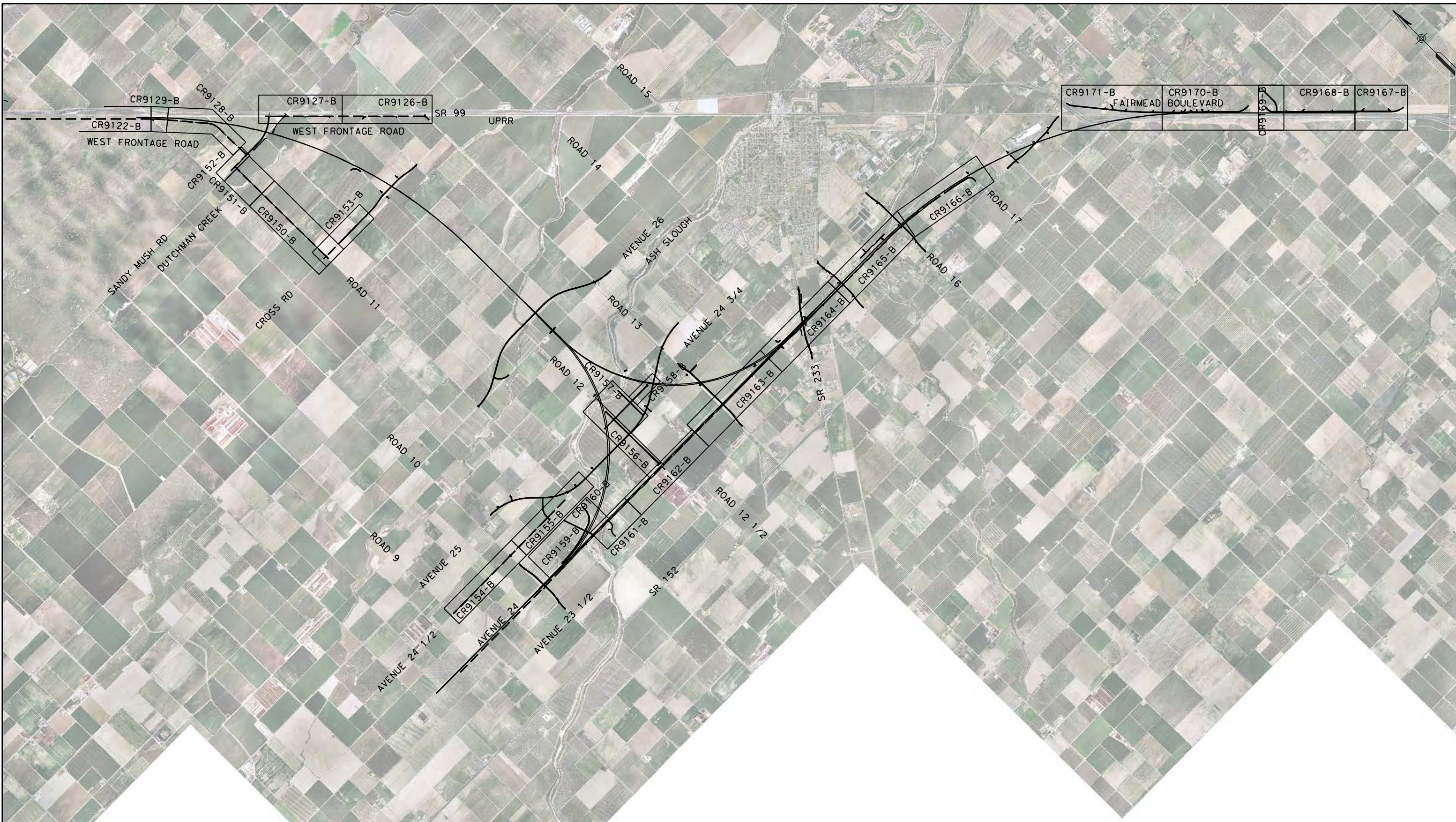


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 MERCED - (AVE 24/WC)  
 LOCAL & FRONTAGE ROAD  
 KEY MAP  
 SHEET 5 OF 7

CONTRACT NO.  
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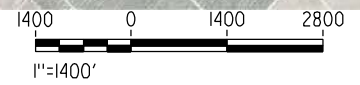
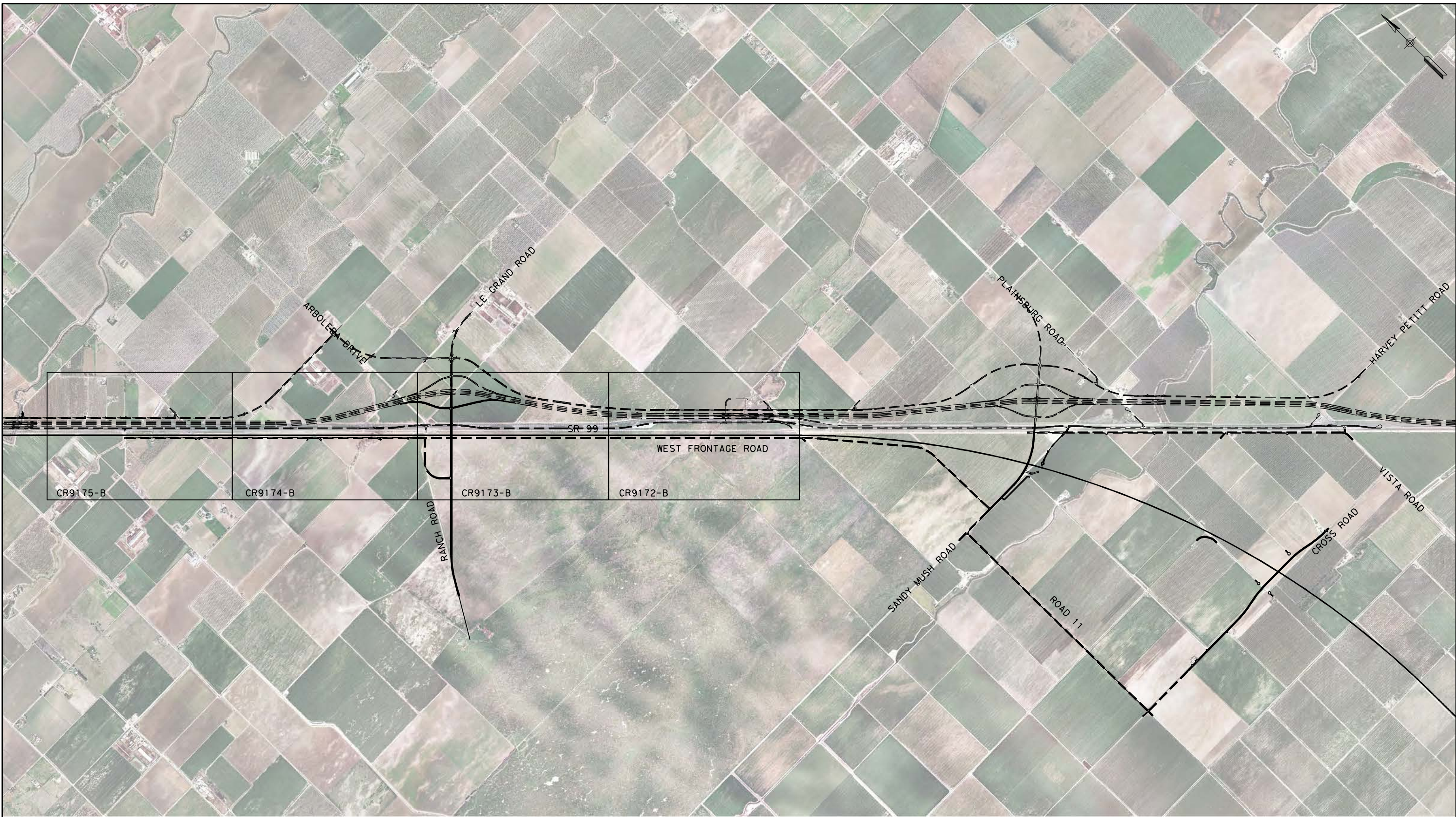


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 MAINLINE/WYE/MERCED DO - (WC)  
 LOCAL & FRONTAGE ROAD  
 KEY MAP  
 SHEET 6 OF 7

CONTRACT NO.  
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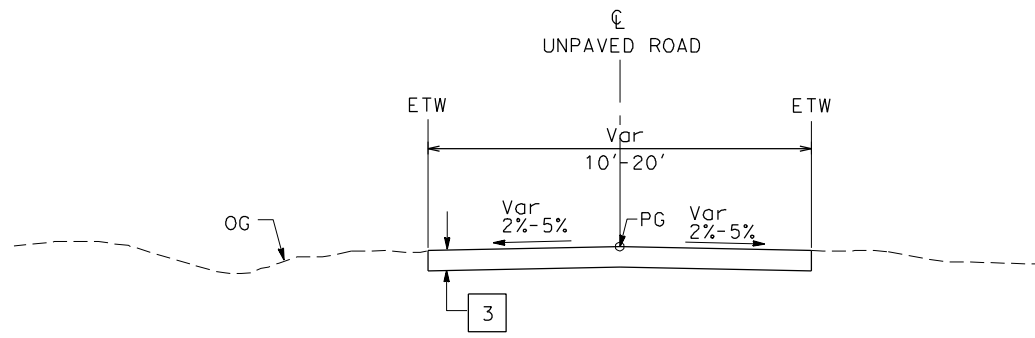


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 WYE/MERCED DO - (WC)  
 LOCAL & FRONTAGE RD  
 KEY MAP  
 SHEET 7 OF 7

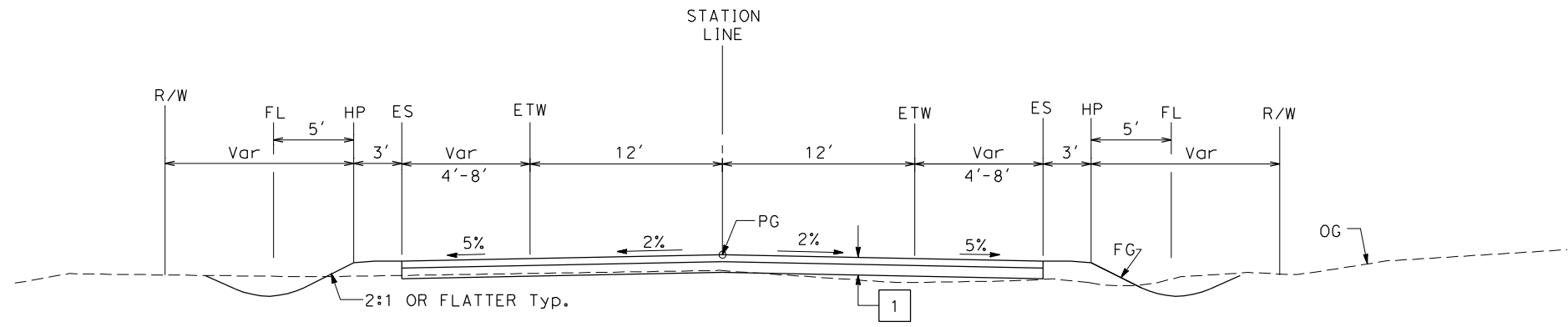
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 HSR06-007  
 DRAWING NO.  
 CB9106-B  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###



4/27/2011 7:19:00 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 3b - ave 24 wye-w.chowchilla local roads\Typical\_Section\CR9090-B.dgn



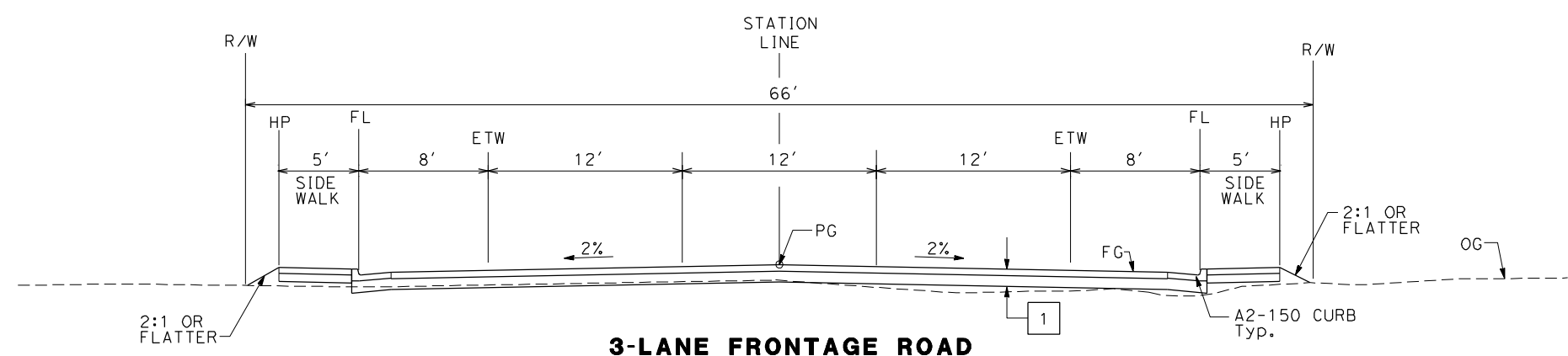
**UNPAVED ROAD (TYP)**  
SEE LAYOUT SHEETS  
FOR ACTUAL ROADWAY WIDTHS



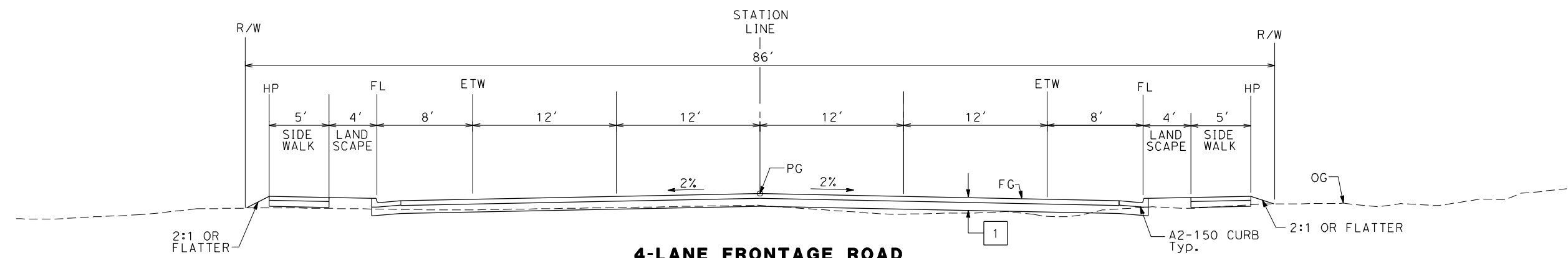
**2-LANE FRONTAGE ROAD**  
SEE LAYOUT SHEETS  
FOR ACTUAL SHOULDER WIDTHS

STRUCTURAL SECTIONS:

- 1 HMA TYPE A  
AB CLASS 2
- 3 AB CLASS 2



**3-LANE FRONTAGE ROAD**  
SEE LAYOUT SHEETS  
FOR ACTUAL SHOULDER WIDTHS



**4-LANE FRONTAGE ROAD**  
SEE LAYOUT SHEETS  
FOR ACTUAL SHOULDER WIDTHS

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
K. OAKS  
 DRAWN BY  
K. OAKS  
 CHECKED BY  
A. SILVER  
 IN CHARGE  
A. BOONE  
 DATE  
04/29/2011

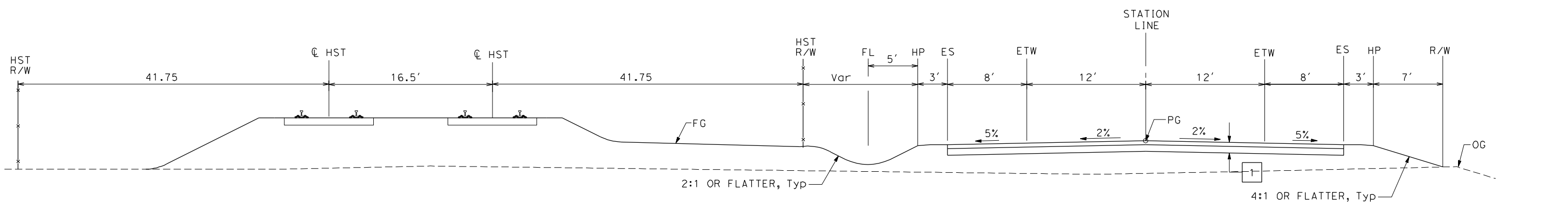
**RECORD SET**  
**15% DESIGN**  
**SUBMITTAL**  
  
**NOT FOR**  
**CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 - (AVE 24/WC)  
 LOCAL ROADS  
 TYPICAL CROSS SECTIONS  
 SHEET 1 OF 2

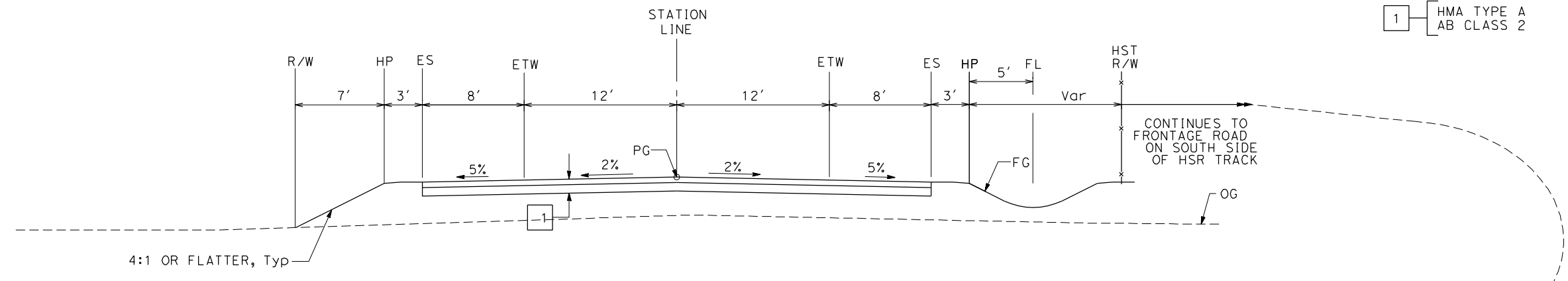
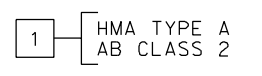
CONTRACT NO.	HSR06-007
DRAWING NO.	CR9090-B
SCALE	NTS
SHEET NO.	### OF ###

4/27/2011 7:19:04 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 3b - ave 24 wye-w.chowchilla local roads\Typical Section\CR9091-B.dgn

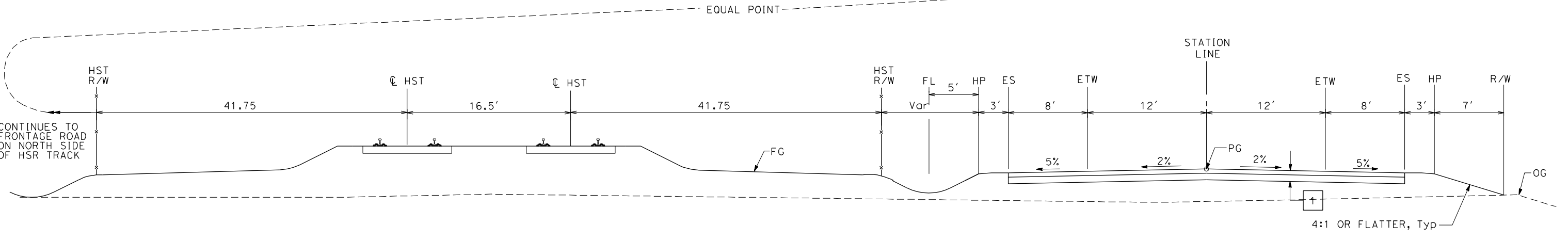


**2-LANE FRONTAGE ROAD**  
FRONTAGE ROAD ALONG TRACK ALIGNMENT

STRUCTURAL SECTIONS:



**2-LANE FRONTAGE ROAD\***  
NORTH SIDE OF TRACK



**2-LANE FRONTAGE ROAD\***  
SOUTH SIDE OF TRACK

\*APPLYS TO DUAL FRONTAGE ROADS SEPERATED BY THE HIGH SPEED TRACK ALIGNMENT.

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
K. OAKS  
 DRAWN BY  
K. OAKS  
 CHECKED BY  
A. SILVER  
 IN CHARGE  
A. BOONE  
 DATE  
04/29/2011

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

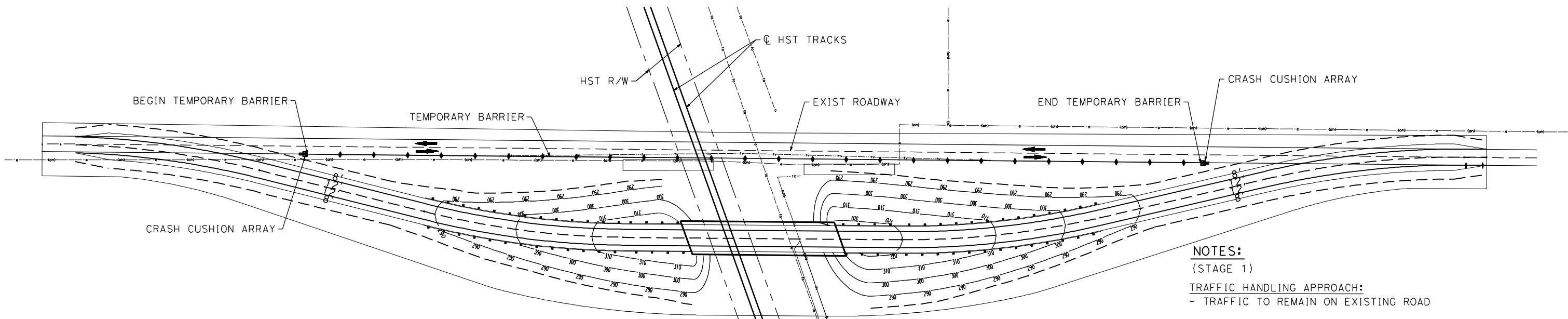


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 - (AVE 24/WC)  
 LOCAL ROADS  
 TYPICAL CROSS SECTIONS  
 SHEET 2 OF 2

CONTRACT NO.  
HSR06-007  
 DRAWING NO.  
CR9091-B  
 SCALE  
NTS  
 SHEET NO.  
### OF ###



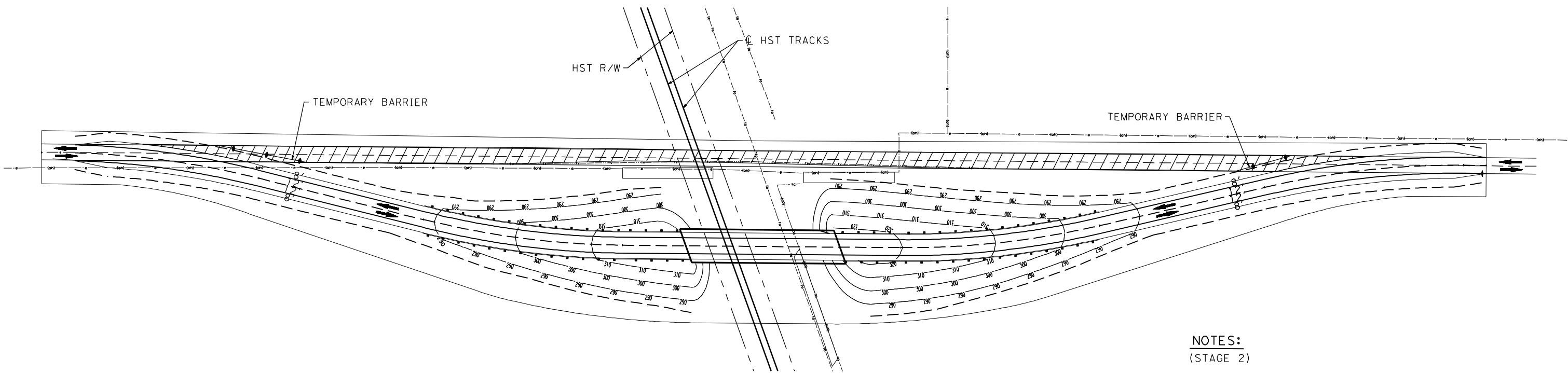
4/27/2011 7:18:53 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 3b - ave 24 wye-w.chowchilla local roads\Staging\CR9092-B.dgn



**STAGE CONSTRUCTION (STAGE 1)**

**NOTES:**  
 (STAGE 1)  
**TRAFFIC HANDLING APPROACH:**  
 - TRAFFIC TO REMAIN ON EXISTING ROAD

**STAGE CONSTRUCTION ACTIVITIES:**  
 - CONSTRUCT NEW GRADE SEPARATION EMBANKMENT  
 - CONSTRUCT NEW GRADE SEPARATION STRUCTURE  
 - CONSTRUCT DRAINAGE FACILITY



**STAGE CONSTRUCTION (STAGE 2)**

**NOTES:**  
 (STAGE 2)  
**TRAFFIC HANDLING APPROACH:**  
 - SHIFT TRAFFIC TO NEW GRADE SEPARATION FACILITY

**STAGE CONSTRUCTION ACTIVITIES:**  
 - CONSTRUCT REALIGNED ROAD CONFORMS  
 - COMPLETE DRAINAGE FACILITIES  
 - REMOVE SURFACE AND BASE OF EXIST ROAD

**LEGEND**

- CRASH CUSHION ARRAY (TYPE U11)
- TEMPORARY BARRIER (TYPE K)
- DIRECTION OF TRAVEL
- REMOVE BASE AND SURFACING (EXIST ROAD)

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
 S. WONG  
 DRAWN BY  
 F. DEMARCO  
 CHECKED BY  
 A. SILVER  
 IN CHARGE  
 A. BOONE  
 DATE  
 04/29/2011

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

Technical Services, Inc.  
 2020 L Street, Suite 300  
 Sacramento, CA 95811

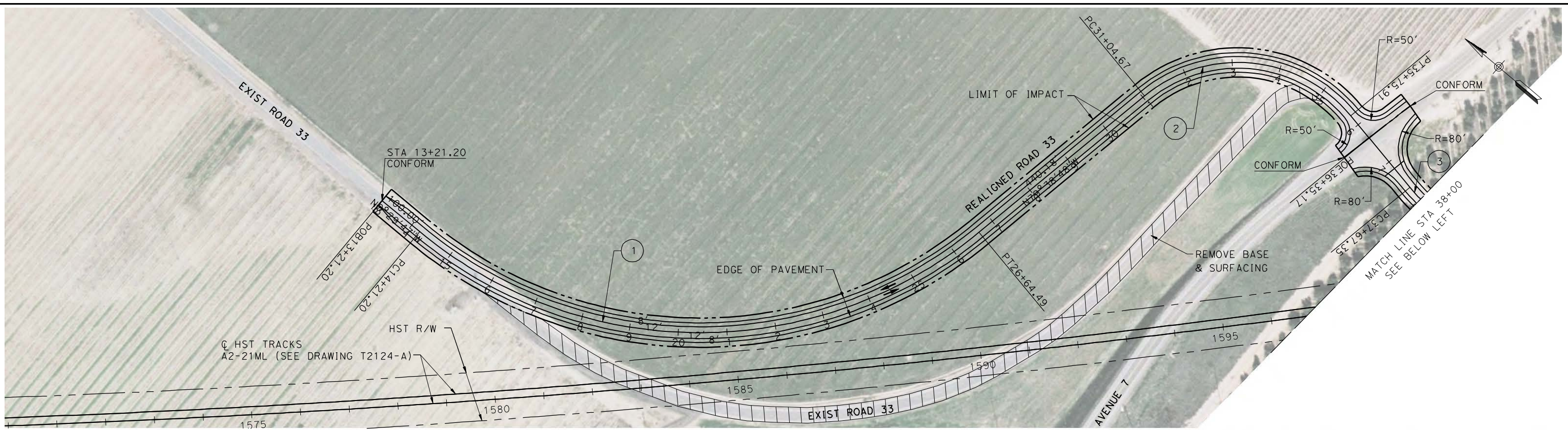
**CALIFORNIA**  
 HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 - (AVE 24/WC)  
 GENERAL STAGE CONSTRUCTION AND TRAFFIC PLAN  
 SHEET 1 OF 1

CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CR9092-B  
 SCALE  
 NO SCALE  
 SHEET NO.  
 ### OF ###

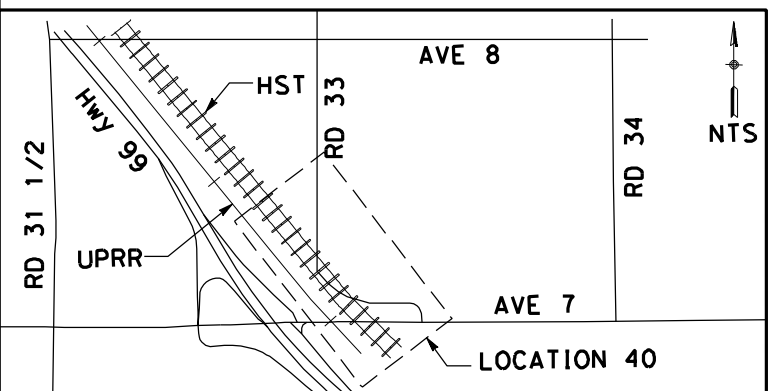
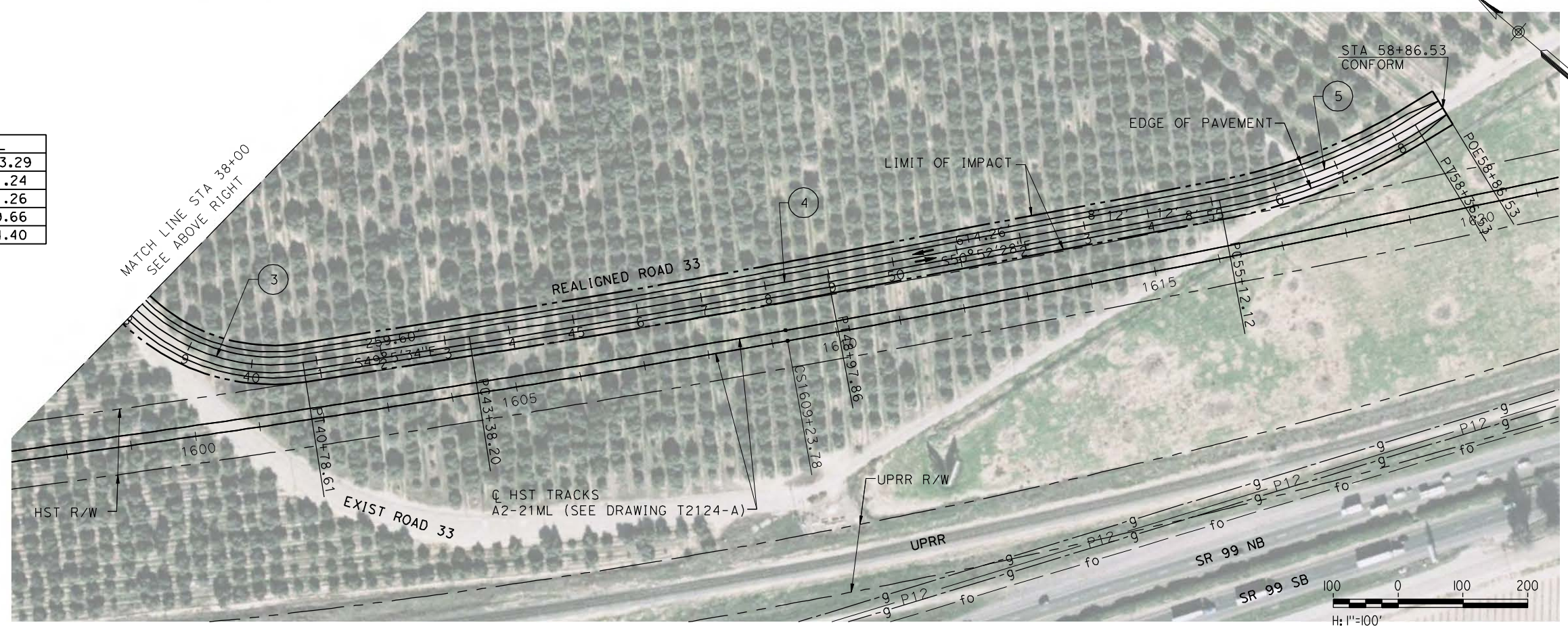


4/27/2011 6:55:01 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 3b - ave 24 wye-w.chowchilla local roads\Layout\CR9100-B.dgn  
 ReyesC1



**CURVE DATA**

No.	R	$\Delta$	T	L
①	900.00	79° 9' 1"	743.89	1243.29
②	300.00	90° 0' 0"	300.00	471.24
③	300.00	59° 26' 46"	171.28	311.26
④	18000.00	1° 46' 53"	279.85	559.66
⑤	900.00	20° 39' 8"	163.98	324.40



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
R. LI  
 DRAWN BY  
A. TRINH  
 CHECKED BY  
A. SILVER  
 IN CHARGE  
A. BOONE  
 DATE  
04/29/2011

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



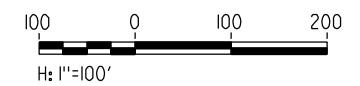
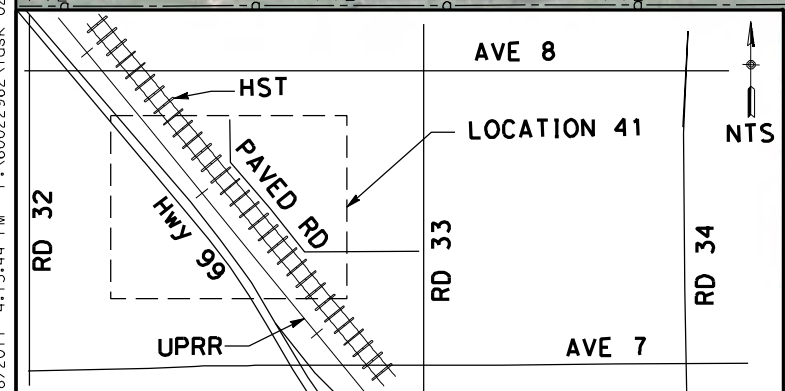
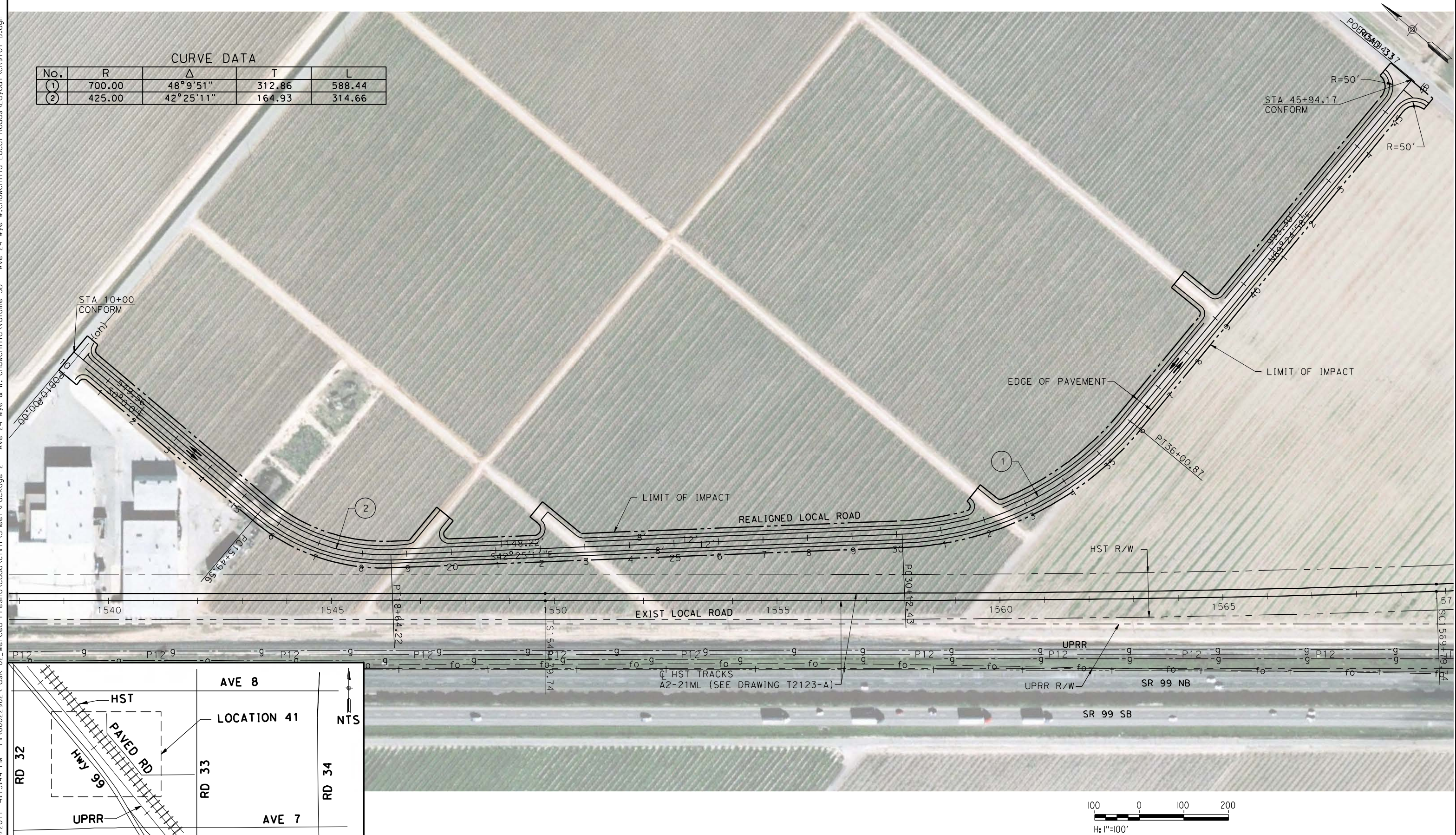
**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 MAINLINE - (AVE 24/WC)  
 ROAD 33  
 LAYOUT  
 STA 13+21 TO STA 58+86

CONTRACT NO.  
HSR06-007  
 DRAWING NO.  
CR9100-B  
 SCALE  
AS SHOWN  
 SHEET NO.  
### OF ###



4/28/2011 4:15:44 PM P:\60022962\Task 02\_Merced-Fresno\Cadd\Civil\Sheet\Package 2 - Ave 24 Wye & W. Chowchilla\Volume 3B - Ave 24 Wye-W.Chowchilla Local Roads\Layout\CR9101-B.dgn

CURVE DATA				
No.	R	Δ	T	L
①	700.00	48°9'51"	312.86	588.44
②	425.00	42°25'11"	164.93	314.66



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
DRAWN BY  
C. DELOS REYES  
CHECKED BY  
A. SILVER  
IN CHARGE  
A. BOONE  
DATE  
04/29/2011

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

**NOT FOR**  
**CONSTRUCTION**



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

UPRR/SR99 MAINLINE - (AVE 24/WC)  
REALIGNED ROAD  
LAYOUT  
STA 10+00 TO STA 45+94

CONTRACT NO.  
HSR06-007

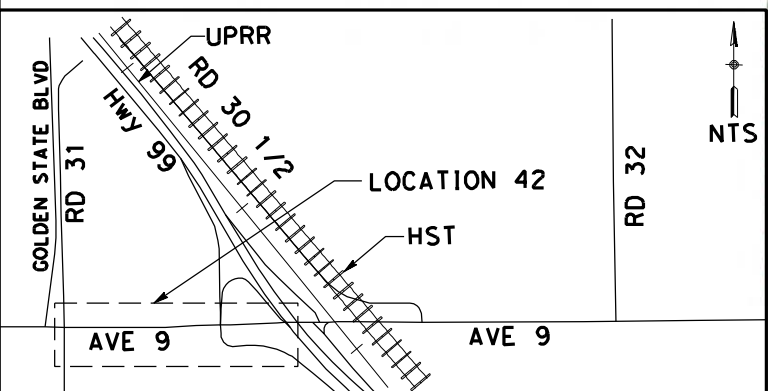
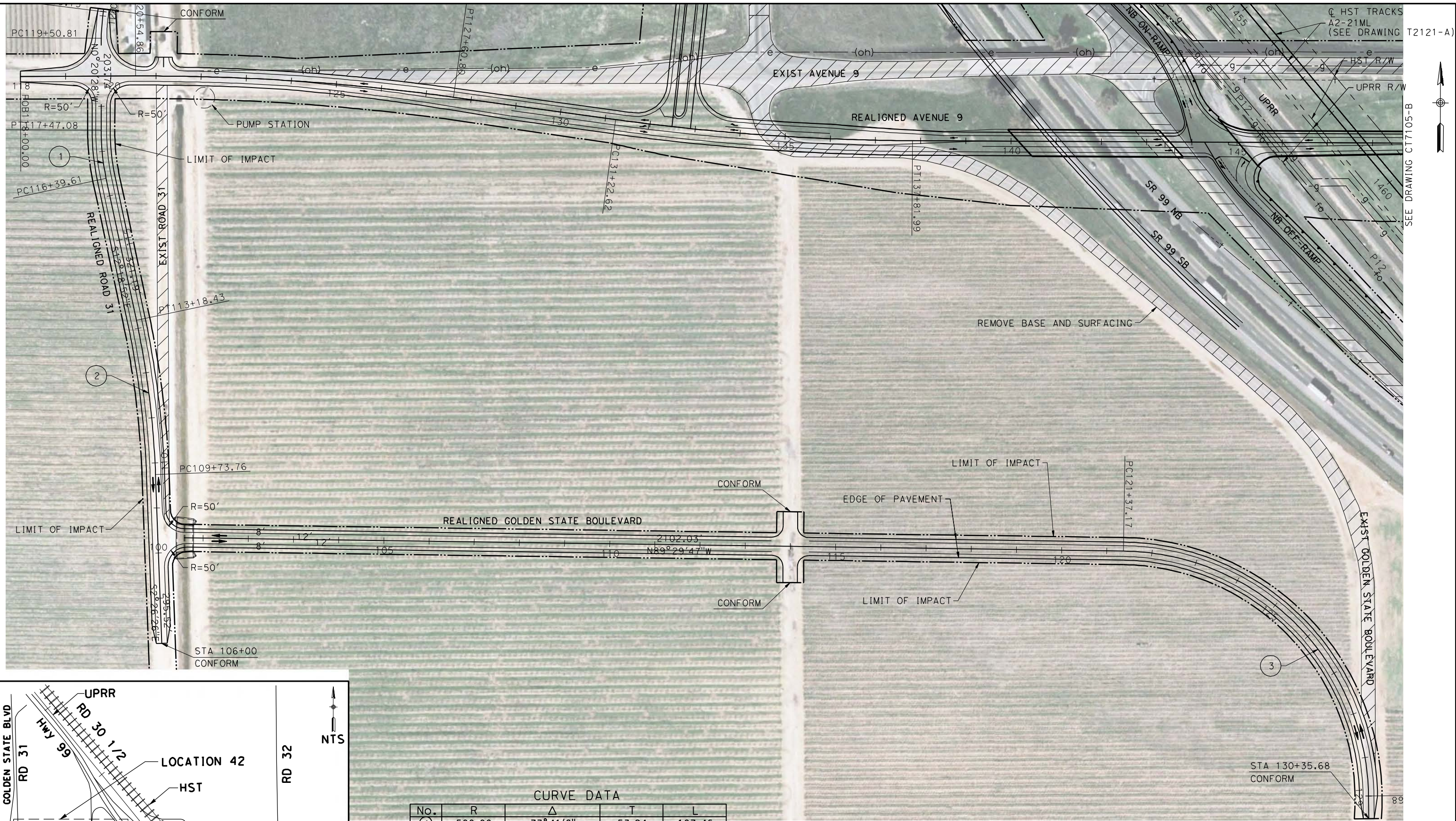
DRAWING NO.  
CR9101-B

SCALE  
AS SHOWN

SHEET NO.  
### OF ###



4/27/2011 6:55:41 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 3b - ave 24 wye-w.chowchilla local roads\layout\CR9102-B.dgn  
 ReyesC1



**CURVE DATA**

No.	R	Δ	T	L
①	500.00	77° 41' 8"	53.94	107.46
②	2000.00	80° 7' 34"	172.76	344.67
③	550.00	1° 36' 28"	534.78	848.50



DESIGNED BY  
**D. AYELE**  
 DRAWN BY  
**C. DELOS REYES**  
 CHECKED BY  
**A. SILVER**  
 IN CHARGE  
**A. BOONE**  
 DATE  
**04/29/2011**

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



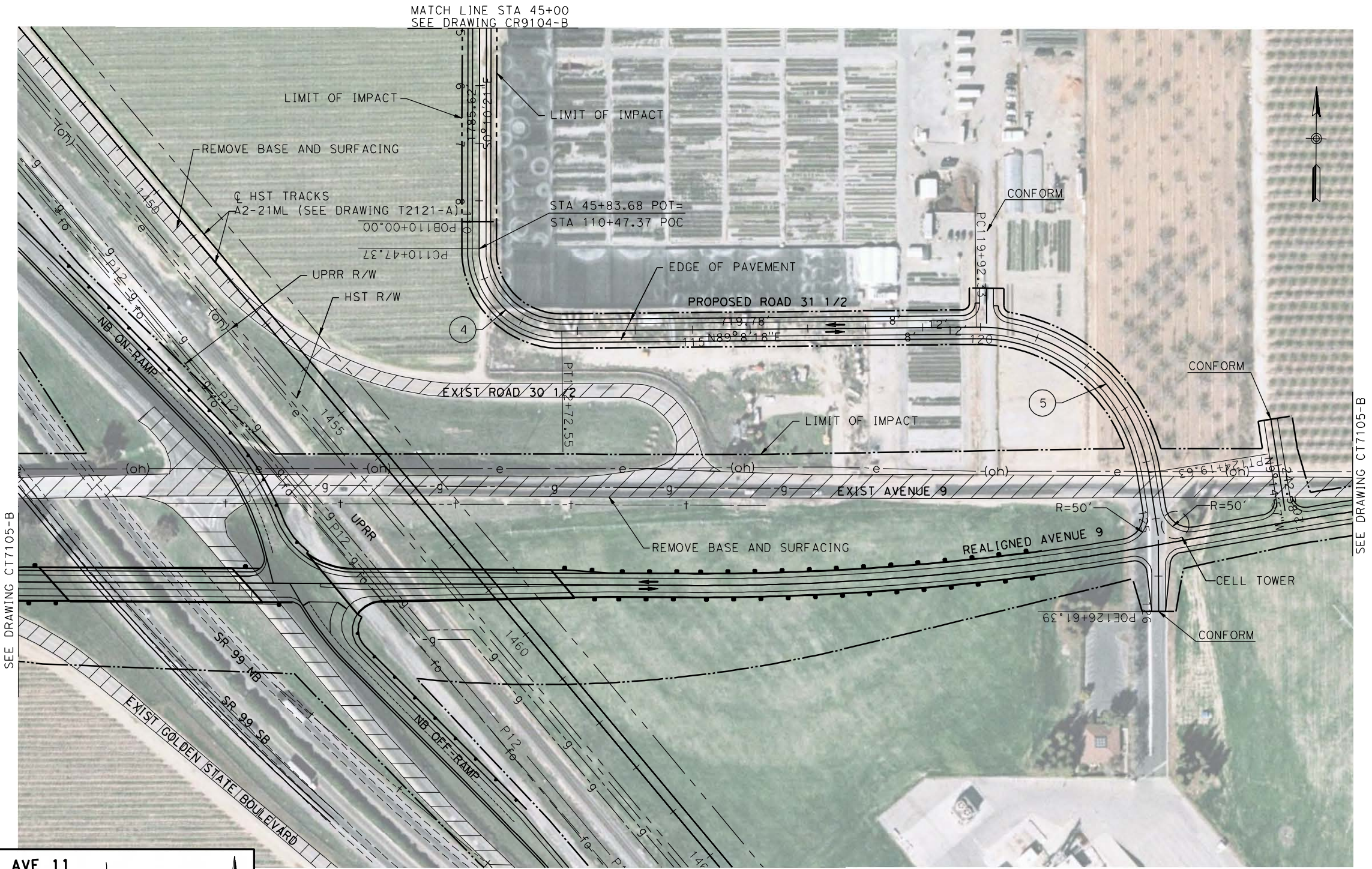
**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 MAINLINE - (AVE 24/WC)  
 ROAD 31 & GOLDEN STATE BLVD AT AVENUE 9  
 LAYOUT  
 STA 100+00 TO STA 130+35.68

CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CR9102-B  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###

REV	DATE	BY	CHK	APP	DESCRIPTION

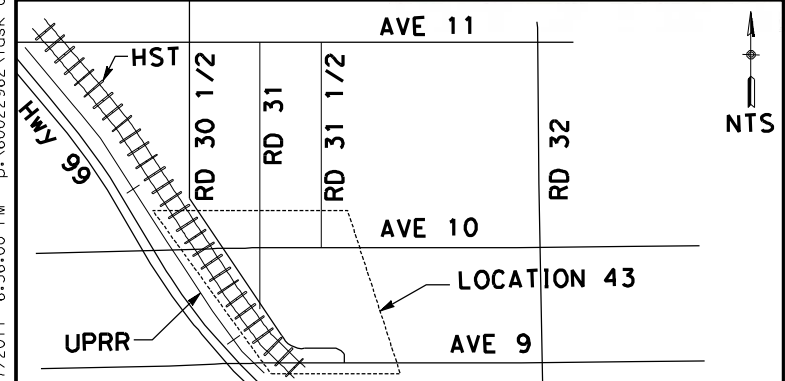


4/27/2011 6:56:00 PM p:\60022962\task\_02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 3b - ave 24 wye-w.chowchilla local roads\layout\CR9103-B.dgn  
 ReyesCT



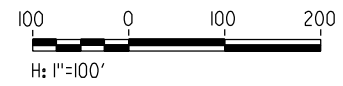
SEE DRAWING CT7105-B

SEE DRAWING CT7105-B



**CURVE DATA**

No.	R	$\Delta$	T	L
④	142.00	359° 8' 18"	144.15	225.19
⑤	300.00	8° 23' 29"	258.99	427.30



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**D. AYELE**  
 DRAWN BY  
**C. DELOS REYES**  
 CHECKED BY  
**A. SILVER**  
 IN CHARGE  
**A. BOONE**  
 DATE  
**04/29/2011**

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

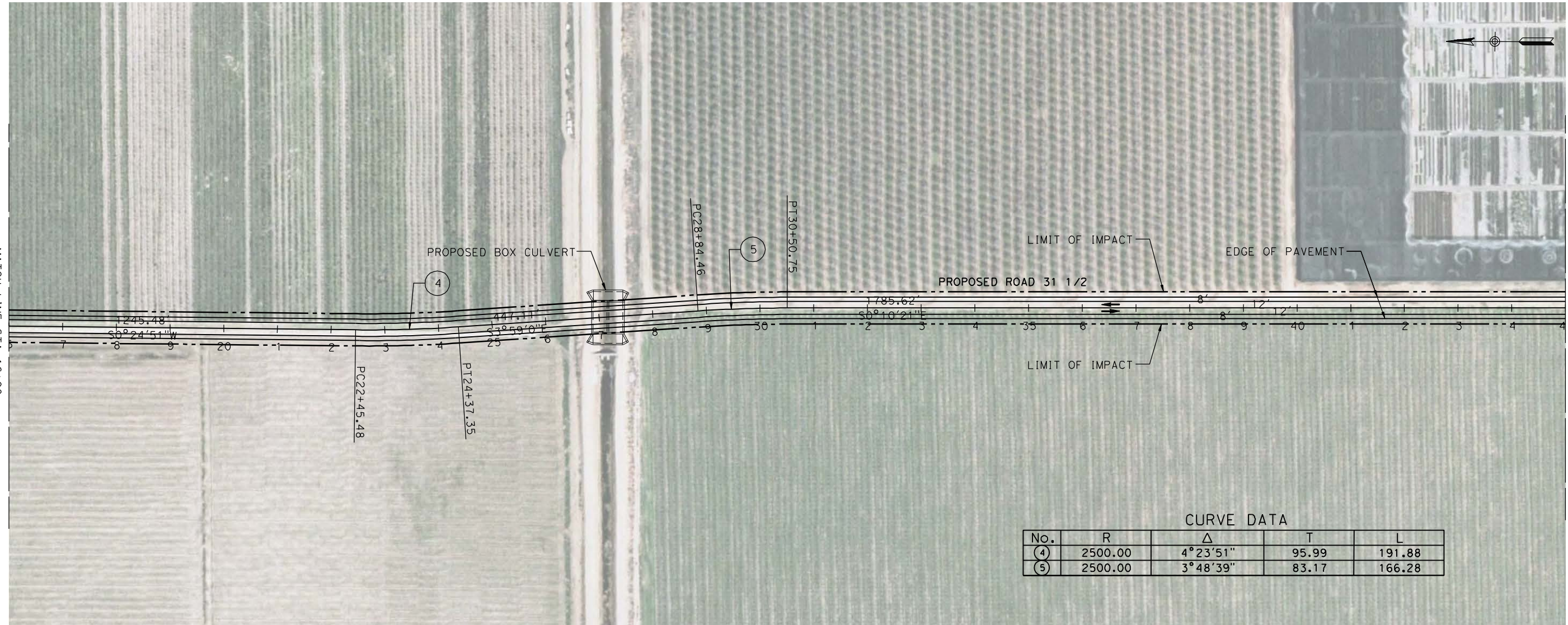


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 MAINLINE - (AVE 24/WC)  
 ROAD 31 1/2  
 LAYOUT  
 SHEET 1 OF 4

CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CR9103-B  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###



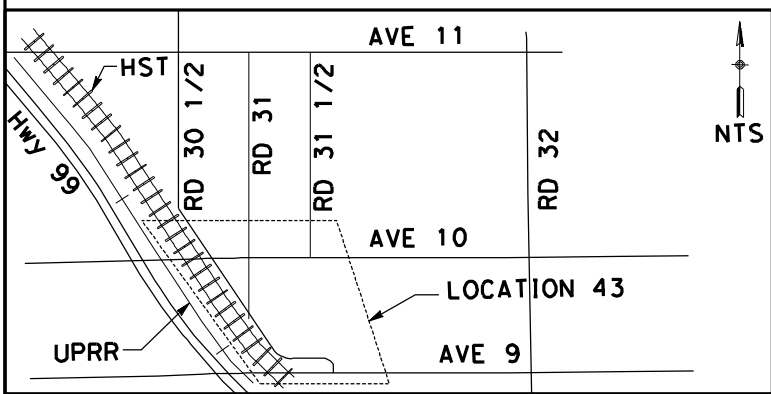
4/27/2011 6:56:15 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla local roads\volume 3b - ave 24 wye-w.chowchilla local roads\Layout\CR9104-B.dgn  
 ReyesC1



CURVE DATA				
No.	R	Δ	T	L
(4)	2500.00	4°23'51"	95.99	191.88
(5)	2500.00	3°48'39"	83.17	166.28

MATCH LINE STA 16+00  
 SEE DRAWING CR9105-B

MATCH LINE STA 45+00  
 SEE DRAWING CR9103-B



NTS



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
 D. AYELE  
 DRAWN BY  
 C. DELOS REYES  
 CHECKED BY  
 A. SILVER  
 IN CHARGE  
 A. BOONE  
 DATE  
 04/29/2011

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

**NOT FOR**  
**CONSTRUCTION**

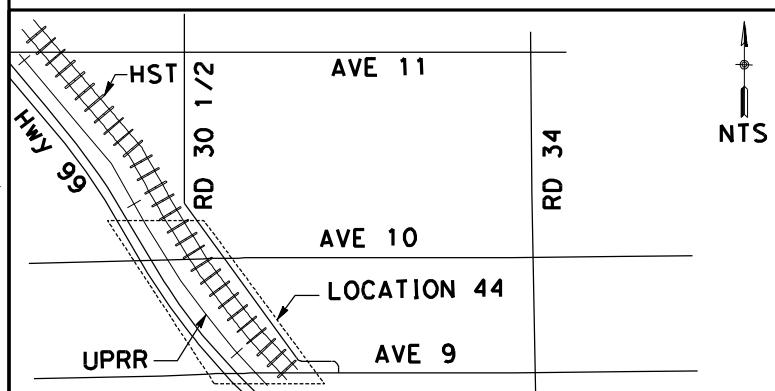
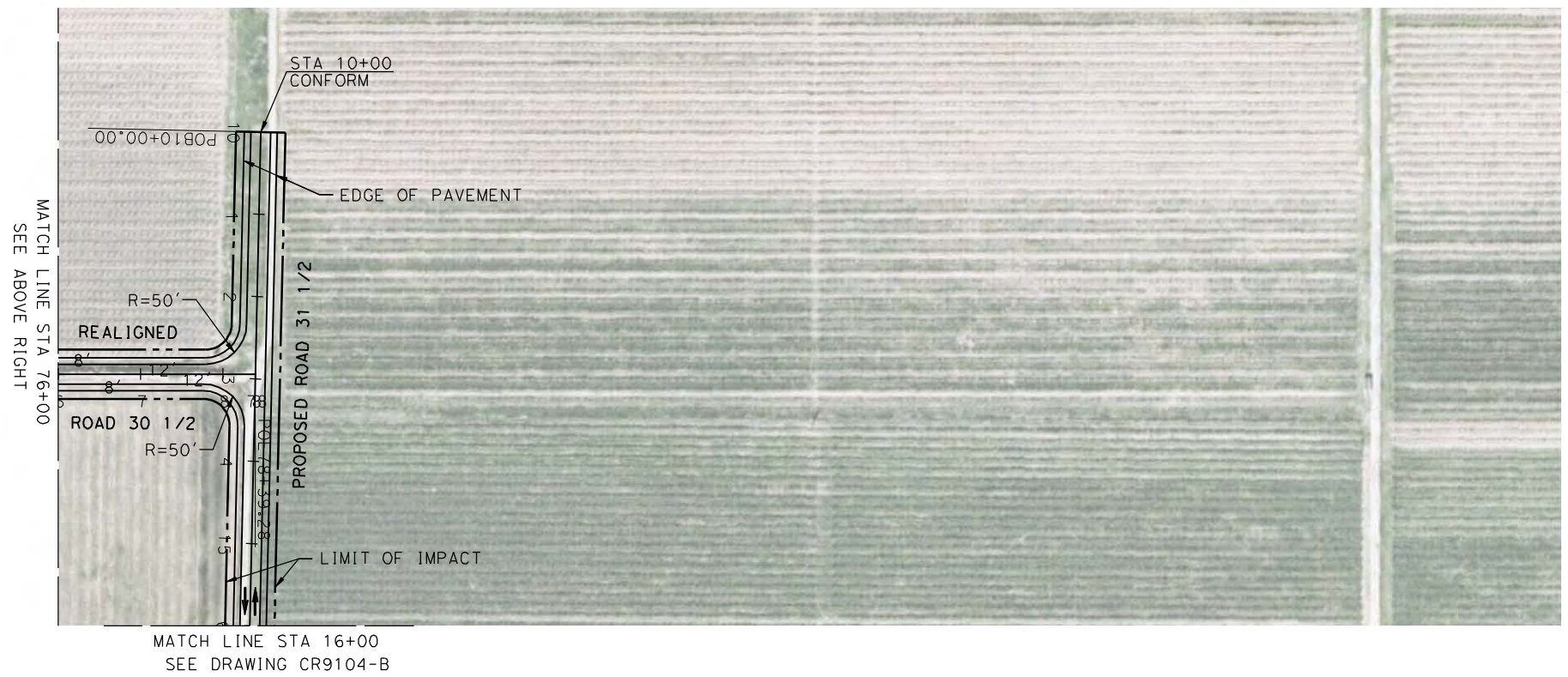
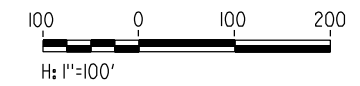
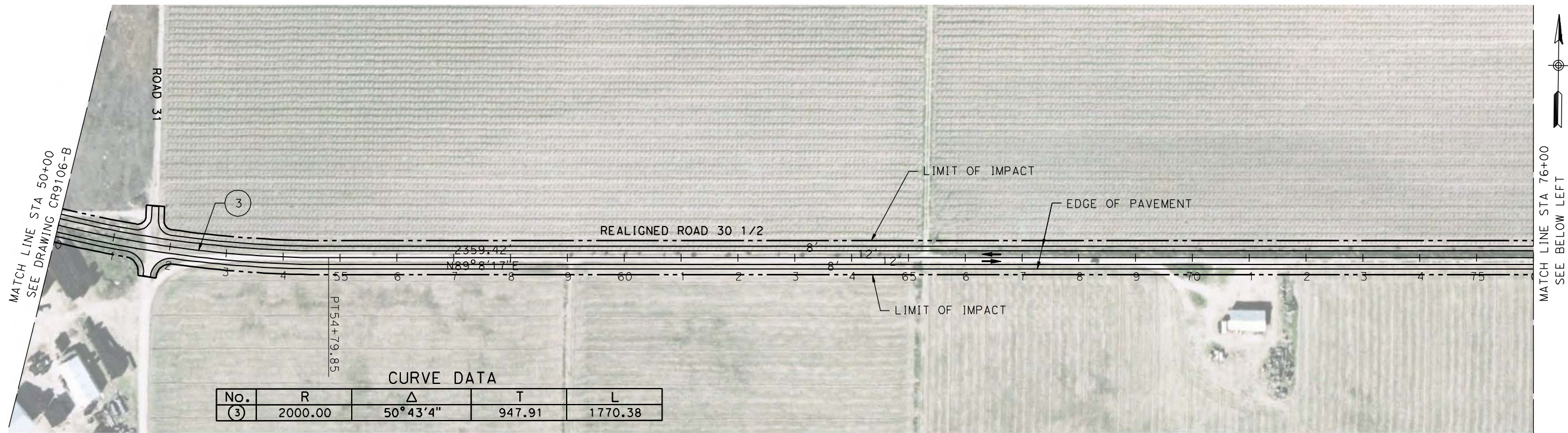


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 MAINLINE - (AVE 24/WC)  
 ROAD 31 1/2  
 LAYOUT  
 SHEET 2 OF 4

CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CR9104-B  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###



4/27/2011 6:56:28 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla local roads\volume 3b - ave 24 wye & w. chowchilla local roads\Layout\CR9105-B.dgn



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
 DRAWN BY  
C. DELOS REYES  
 CHECKED BY  
A. SILVER  
 IN CHARGE  
A. BOONE  
 DATE  
04/29/2011

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

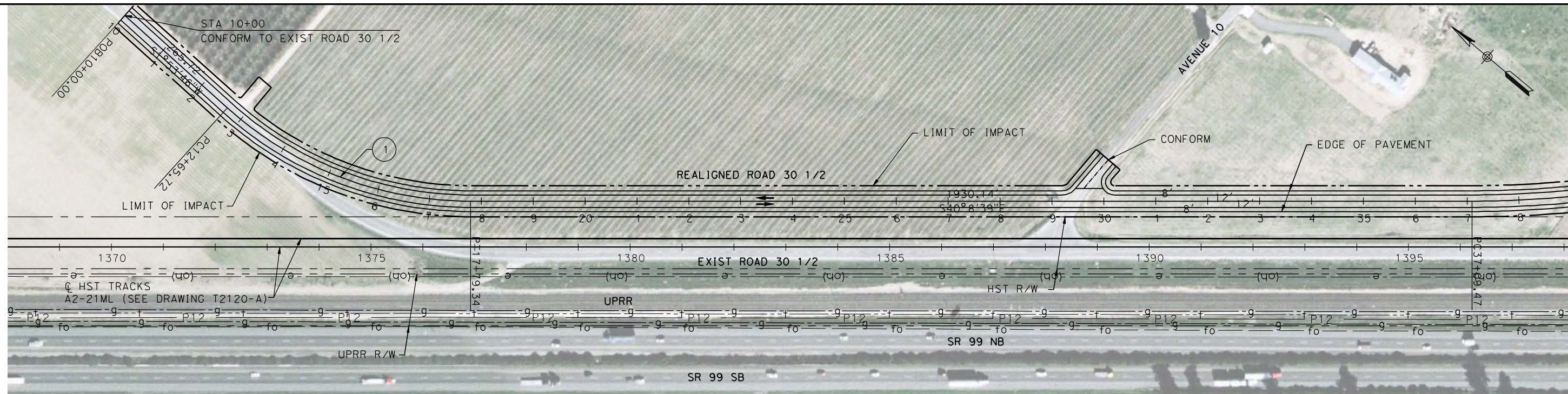


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 MAINLINE - (AVE 24/WC)  
 ROAD 30 1/2 & ROAD 31 1/2  
 LAYOUT  
 SHEET 3 OF 4

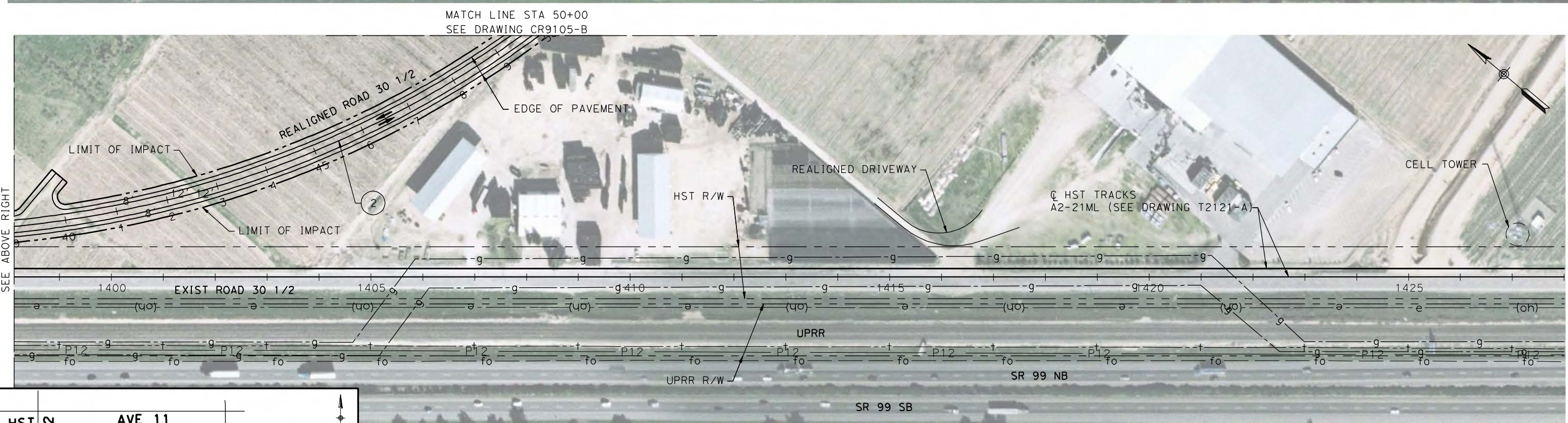
CONTRACT NO.  
HSR06-007  
 DRAWING NO.  
CR9105-B  
 SCALE  
AS SHOWN  
 SHEET NO.  
### OF ###



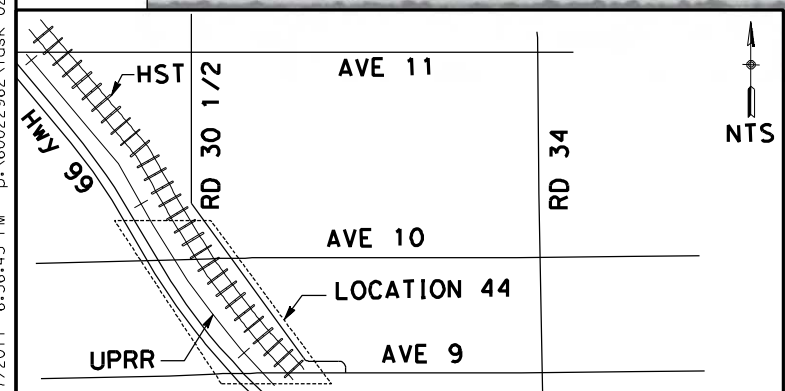
ReyesC1 4/27/2011 6:56:45 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 3b - ave 24 wye-w.chowchilla local roads\Layout\CR9106-B.dgn



MATCH LINE STA 39+00  
 SEE BELOW LEFT



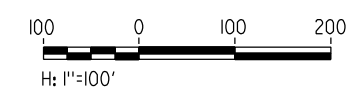
MATCH LINE STA 39+00  
 SEE ABOVE RIGHT



NTS  
 ↑

**CURVE DATA**

No.	R	Δ	T	L
(1)	700.00	42°2'25"	268.99	513.62
(2)	2000.00	50°43'04"	947.91	1770.38



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
 D. AYELE  
 DRAWN BY  
 C. DELOS REYES  
 CHECKED BY  
 A. SILVER  
 IN CHARGE  
 A. BOONE  
 DATE  
 04/29/2011

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

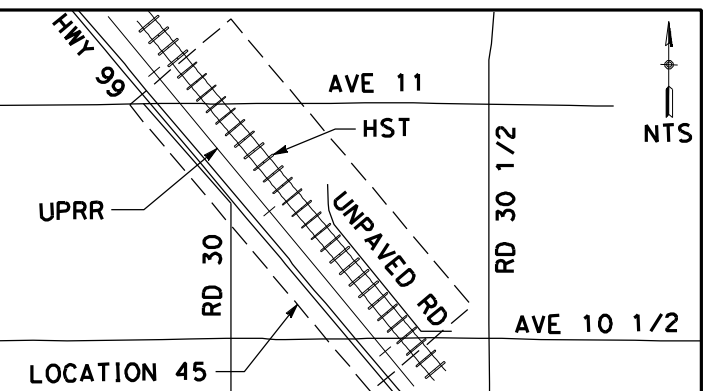
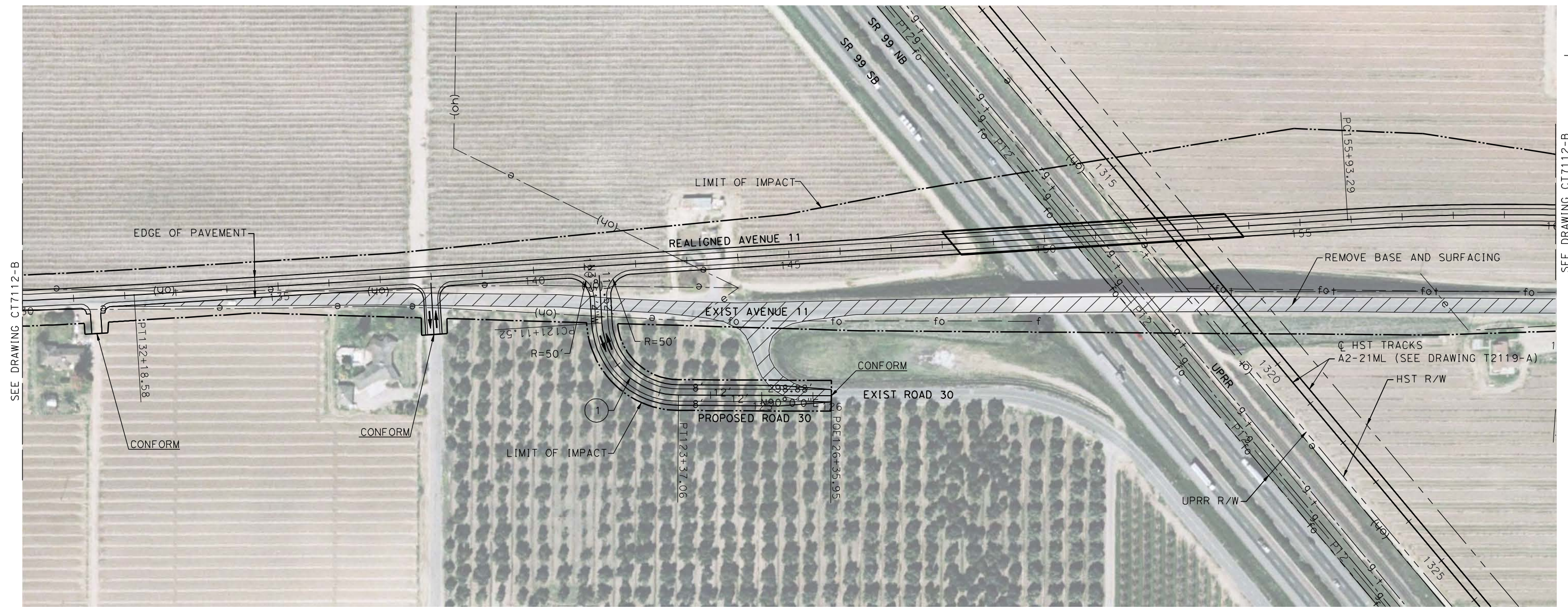


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 MAINLINE - (AVE 24/WC)  
 ROAD 30 1/2  
 LAYOUT  
 SHEET 4 OF 4

CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CR9106-B  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###



4/27/2011 6:57:01 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 3b - ave 24 wye-w.chowchilla local roads\Layout\CR9107-B.dgn



CURVE DATA

No.	R	Δ	T	L
①	150.00	3°51'4"	140.24	225.54



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
DRAWN BY  
C. DELOS REYES  
CHECKED BY  
A. SILVER  
IN CHARGE  
A. BOONE  
DATE  
04/29/2011

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

**NOT FOR**  
**CONSTRUCTION**



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

UPRR/SR99 MAINLINE - (AVE 24/WC)  
ROAD 30 AT AVENUE 11  
LAYOUT  
SHEET 1 OF 2

CONTRACT NO.  
HSR06-007

DRAWING NO.  
CR9107-B

SCALE  
AS SHOWN

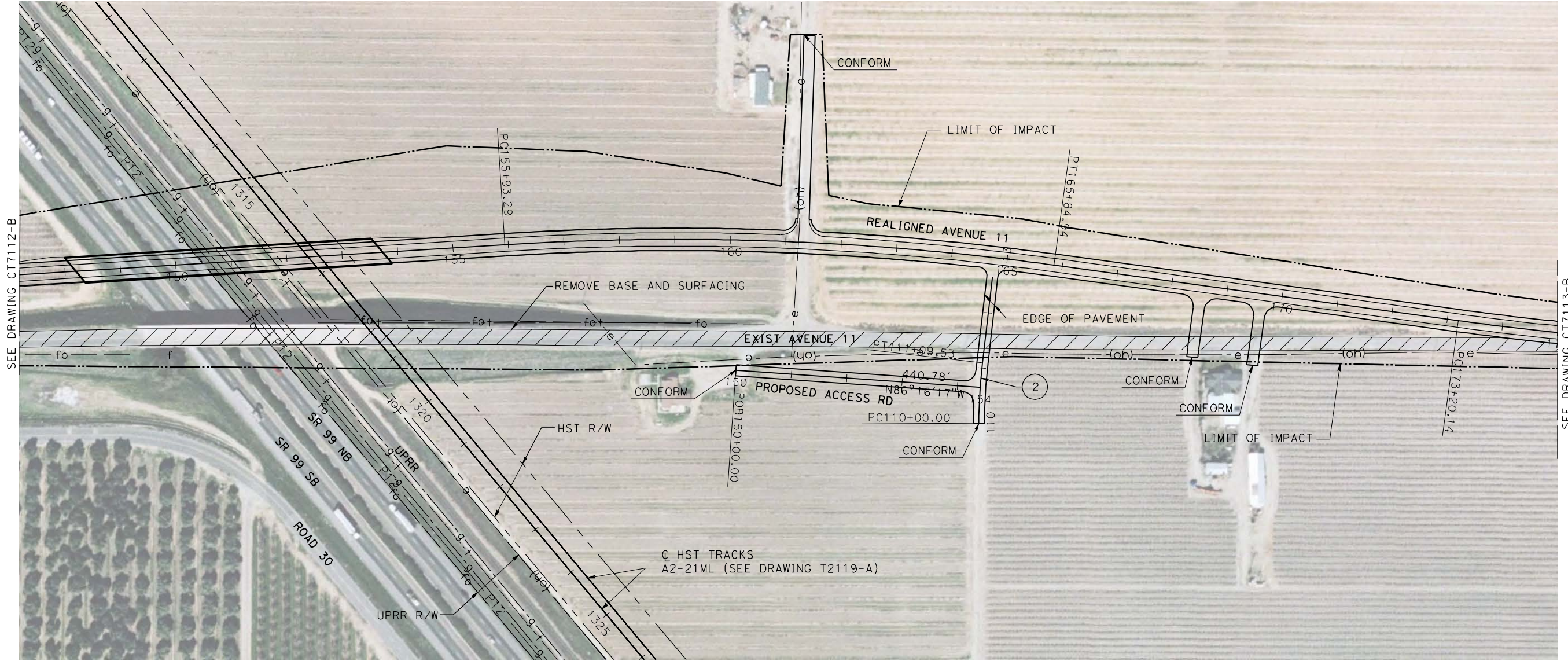
SHEET NO.  
### OF ###

SEE DRAWING CT7112-B

SEE DRAWING CT7112-B

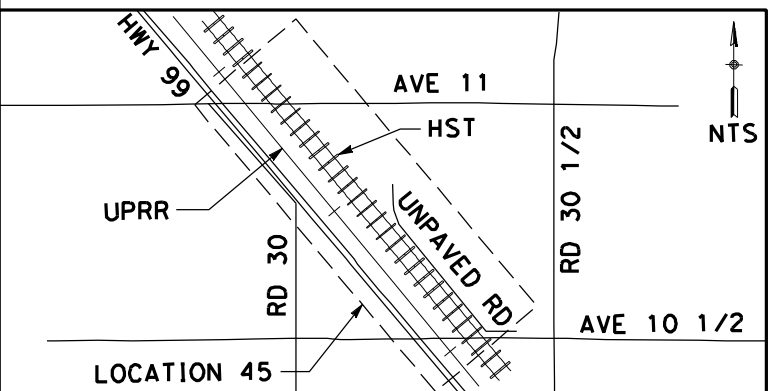
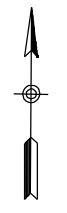


4/27/2011 6:57:15 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla local roads\volume 3b - ave 24 wye-w.chowchilla local roads\Layout\CR9108-B.dgn



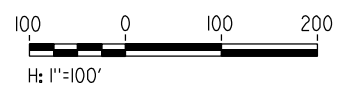
SEE DRAWING CT7112-B

SEE DRAWING CT7113-B



CURVE DATA

No.	R	Δ	T	L
(2)	1000.00	83°43'28"	54.82	109.53



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
 DRAWN BY  
C. DELOS REYES  
 CHECKED BY  
A. SILVER  
 IN CHARGE  
A. BOONE  
 DATE  
04/29/2011

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

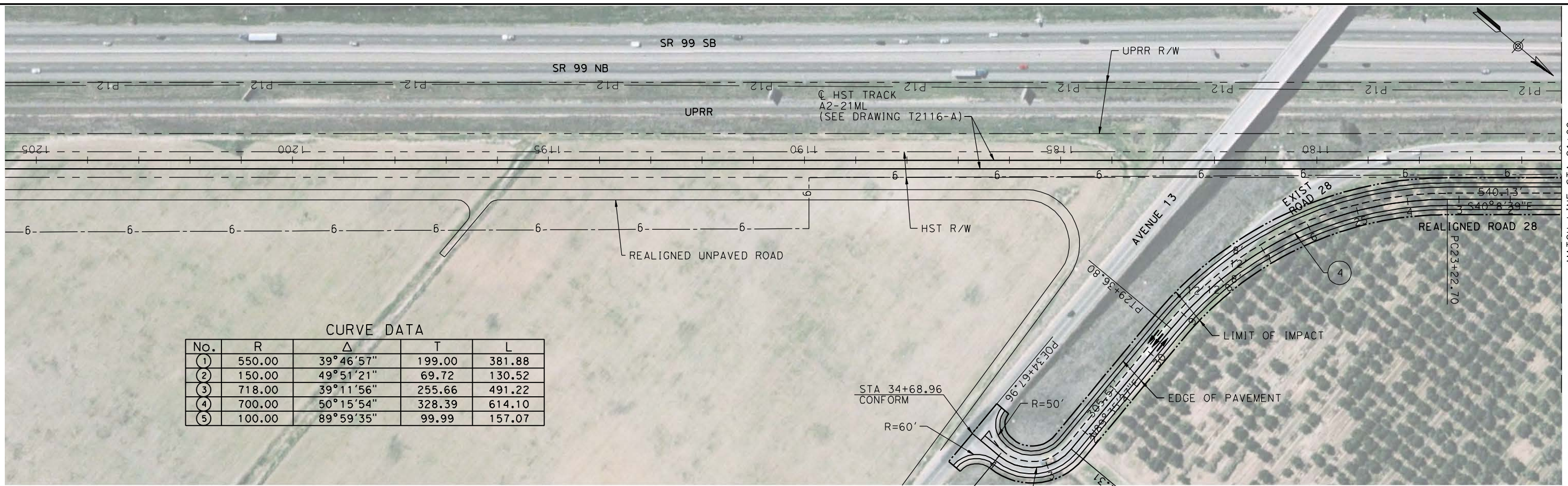


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 MAINLINE - (AVE 24/WC)  
 ACCESS ROAD AT AVENUE 11  
 LAYOUT  
 SHEET 2 OF 2

CONTRACT NO.  
HSR06-007  
 DRAWING NO.  
CR9108-B  
 SCALE  
AS SHOWN  
 SHEET NO.  
### OF ###

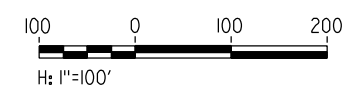
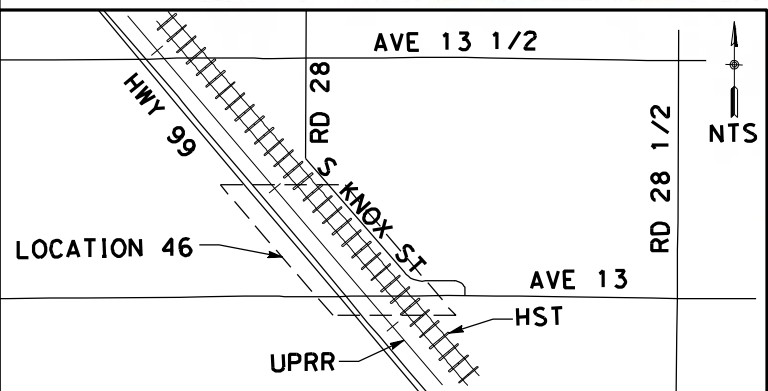
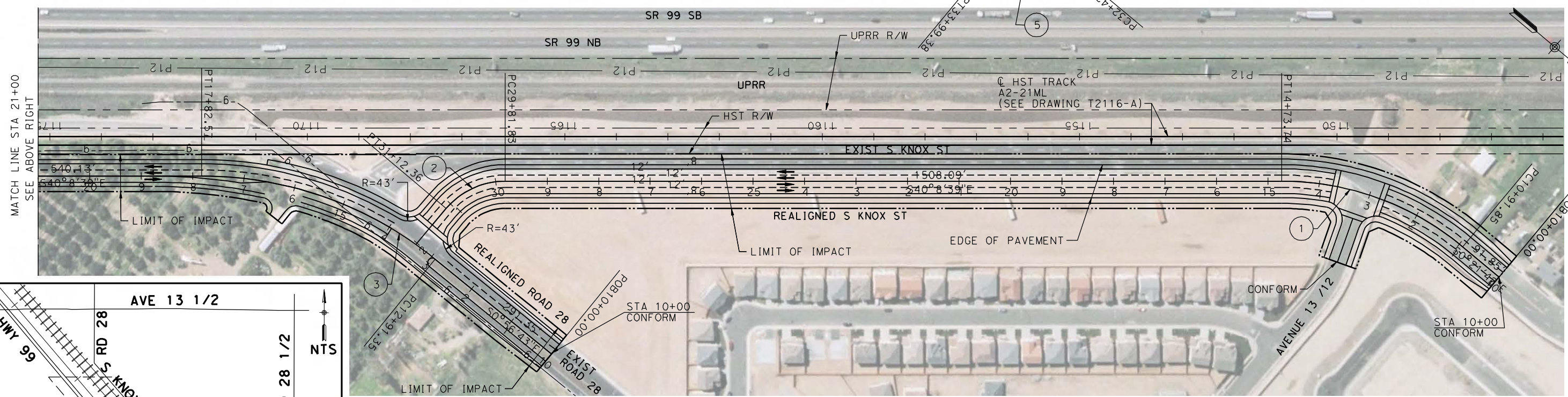


4/27/2011 6:57:32 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 3b - ave 24 wye-w.chowchilla local roads\Layout\CR9109-B.dgn



**CURVE DATA**

No.	R	Δ	T	L
①	550.00	39°46'57"	199.00	381.88
②	150.00	49°51'21"	69.72	130.52
③	718.00	39°11'56"	255.66	491.22
④	700.00	50°15'54"	328.39	614.10
⑤	100.00	89°59'35"	99.99	157.07



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
 DRAWN BY  
C. DELOS REYES  
 CHECKED BY  
A. SILVER  
 IN CHARGE  
A. BOONE  
 DATE  
04/29/2011

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

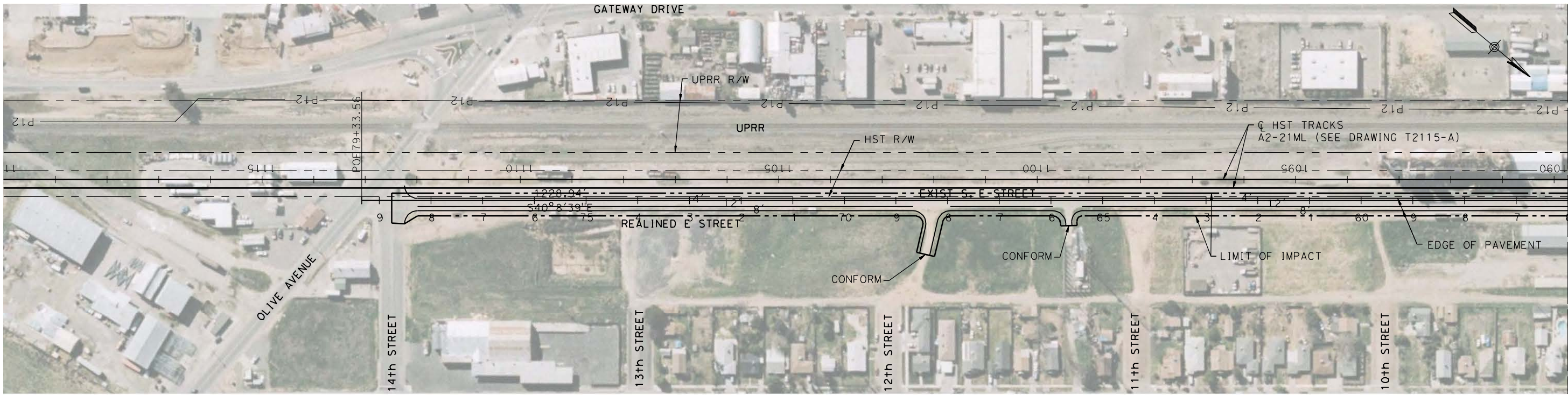


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 MAINLINE - (AVE 24/WC)  
 S KNOX ST  
 LAYOUT  
 STA 10+00 TO STA 34+67

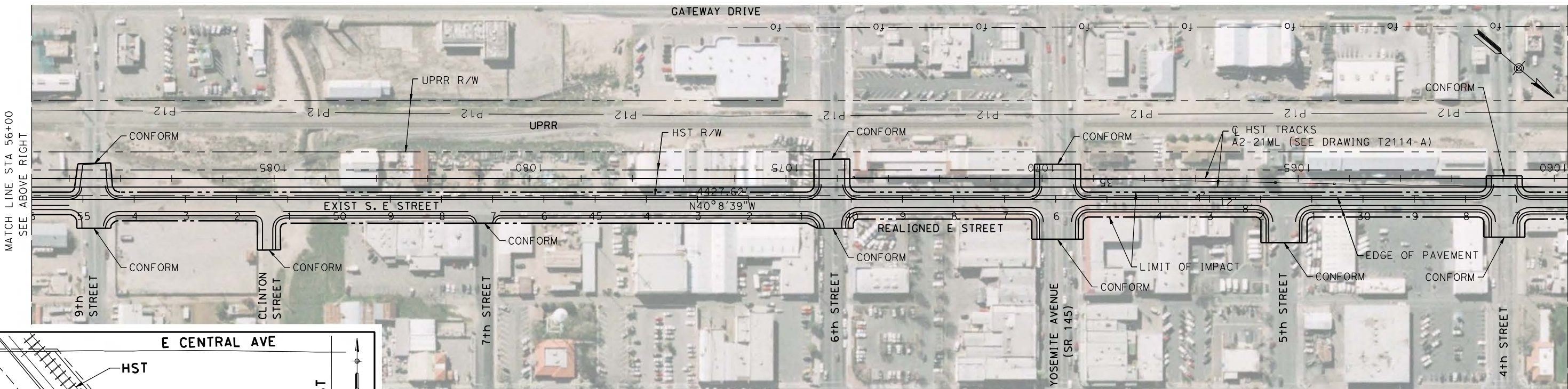
CONTRACT NO.  
HSR06-007  
 DRAWING NO.  
CR9109-B  
 SCALE  
AS SHOWN  
 SHEET NO.  
### OF ###



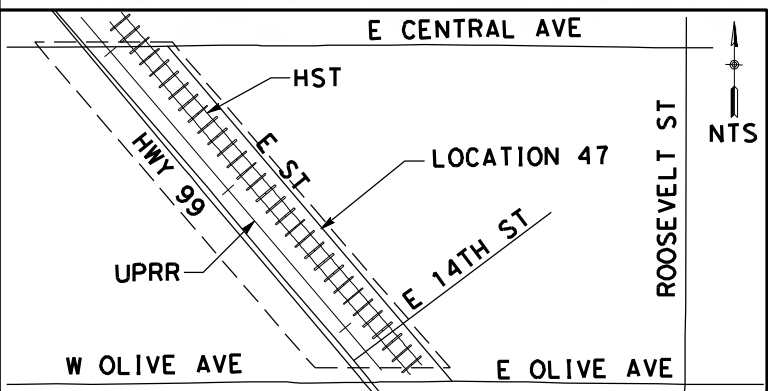
4/27/2011 6:57:52 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 3b - ave 24 wye-w.chowchilla\layout\CR9110-B.dgn



MATCH LINE STA 56+00  
 SEE BELOW LEFT



MATCH LINE STA 26+00  
 SEE DRAWING CR9111-B



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
 D. AYELE  
 DRAWN BY  
 C. DELOS REYES  
 CHECKED BY  
 A. SILVER  
 IN CHARGE  
 A. BOONE  
 DATE  
 04/29/2011

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

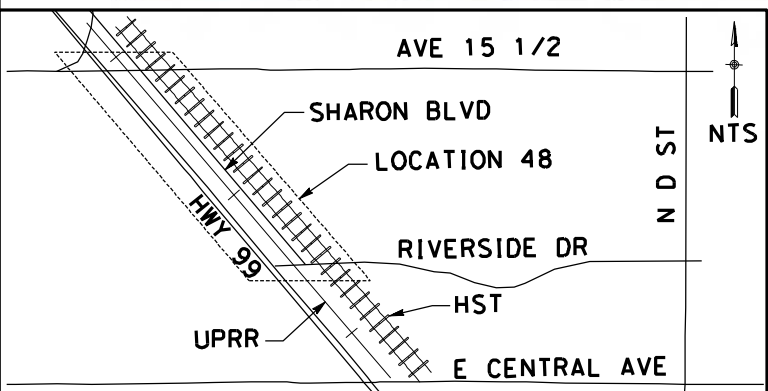
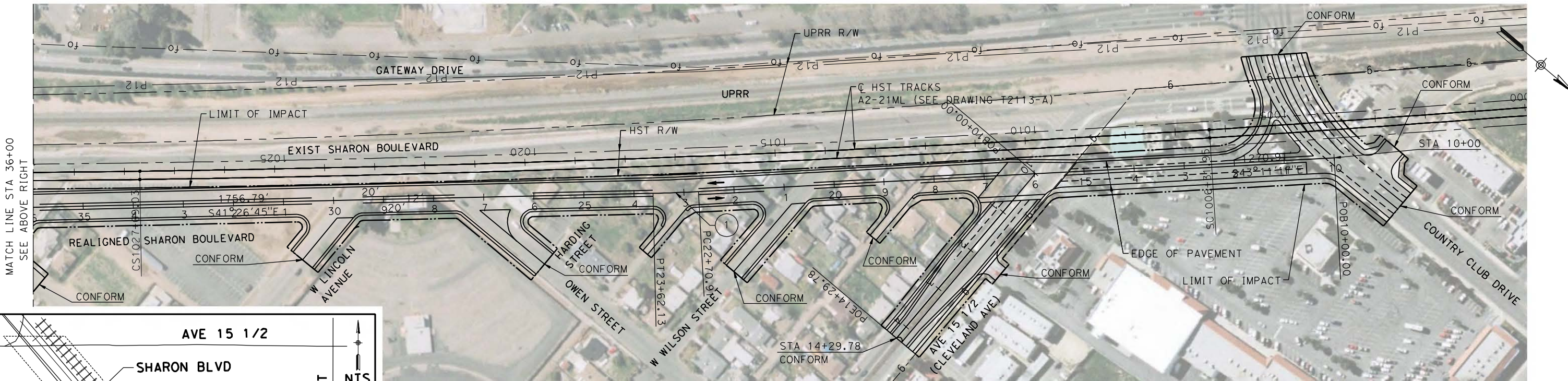
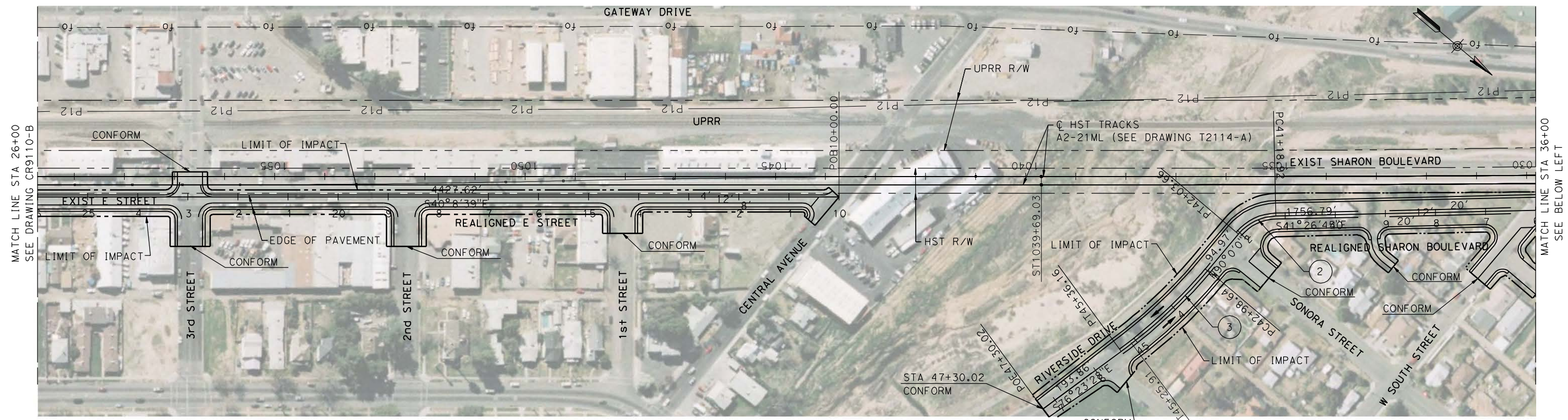


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 MAINLINE - (AVE 24/WC)  
 N E ST AND S E ST  
 LAYOUT  
 SHEET 1 OF 2

CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CR9110-B  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###

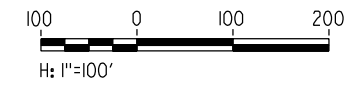


4/27/2011 6:58:12 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 3b - ave 24 wye & w. chowchilla\layout\CR9111-B.dgn



**CURVE DATA**

No.	R	Δ	T	L
①	3000.00	01°44'32"	45.61	91.22
②	100.00	48°33'15"	45.10	84.74
③	1000.00	13°36'32"	119.32	237.52



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
DRAWN BY  
C. DELOS REYES  
CHECKED BY  
A. SILVER  
IN CHARGE  
A. BOONE  
DATE  
04/29/2011

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

**NOT FOR**  
**CONSTRUCTION**



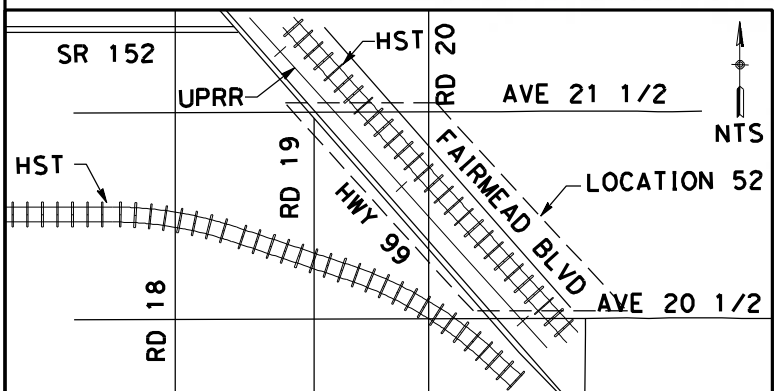
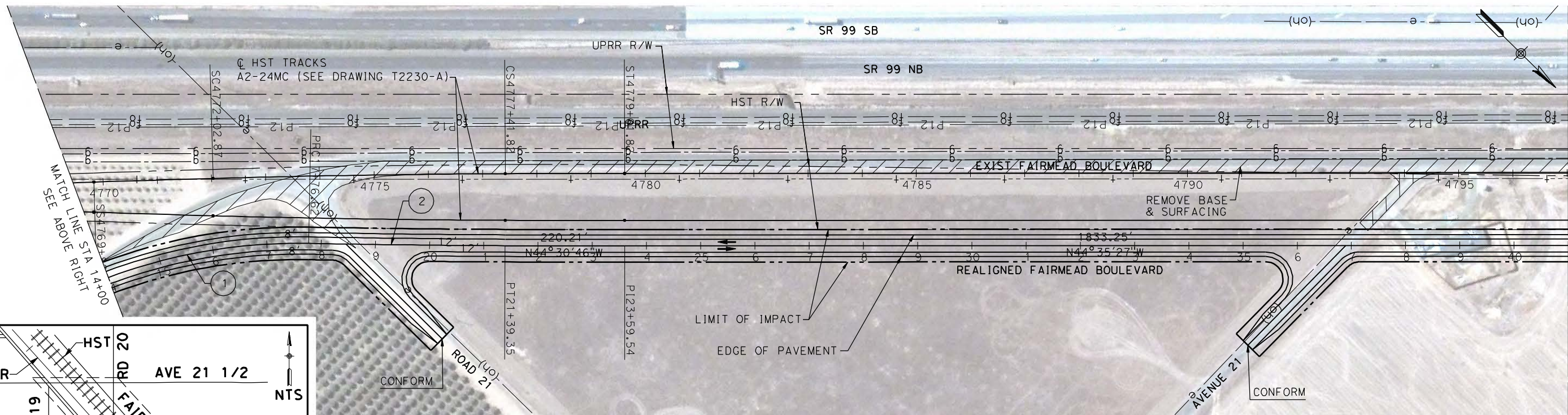
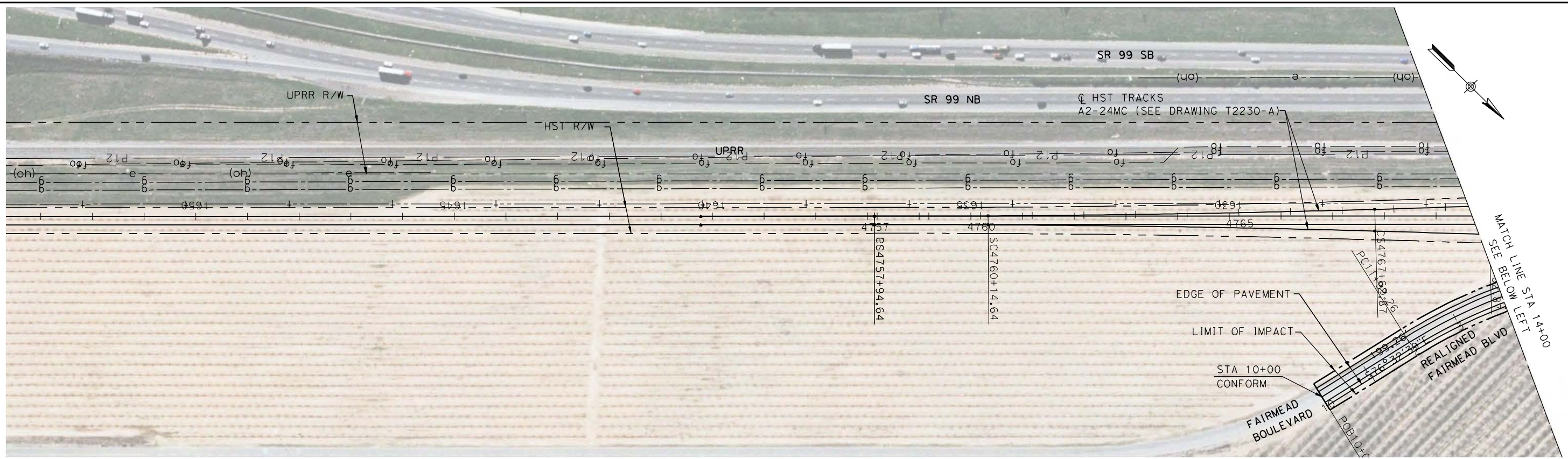
**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**

UPRR/SR99 MAINLINE - (AVE 24/WC)  
SHARON BLVD & E ST  
LAYOUT  
SHEET 2 OF 2

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
CR9111-B  
SCALE  
AS SHOWN  
SHEET NO.  
### OF ###

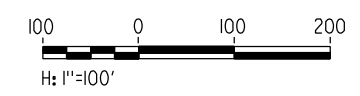


ReyesC1 4/27/2011 6:58:39 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 3b - ave 24 wye-w.chowchilla local roads\Layout\CR9112-B.dgn



**CURVE DATA**

No.	R	Δ	T	L
①	1000.00	33°04'50"	296.98	557.36
②	24039.61	0°51'52"	181.37	362.73



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
 DRAWN BY  
C. DELOS REYES  
 CHECKED BY  
A. SILVER  
 IN CHARGE  
A. BOONE  
 DATE  
04/29/2011

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

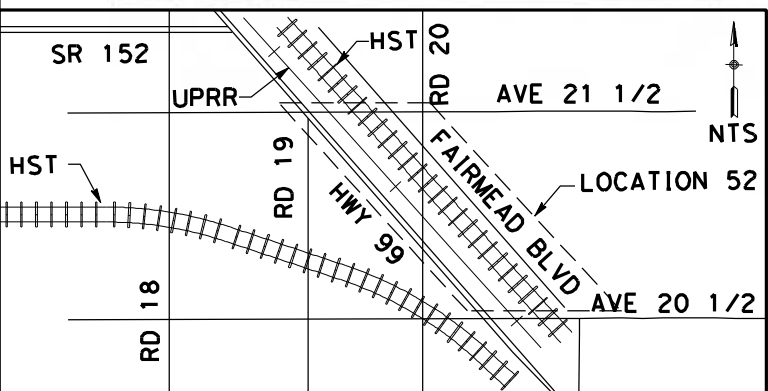
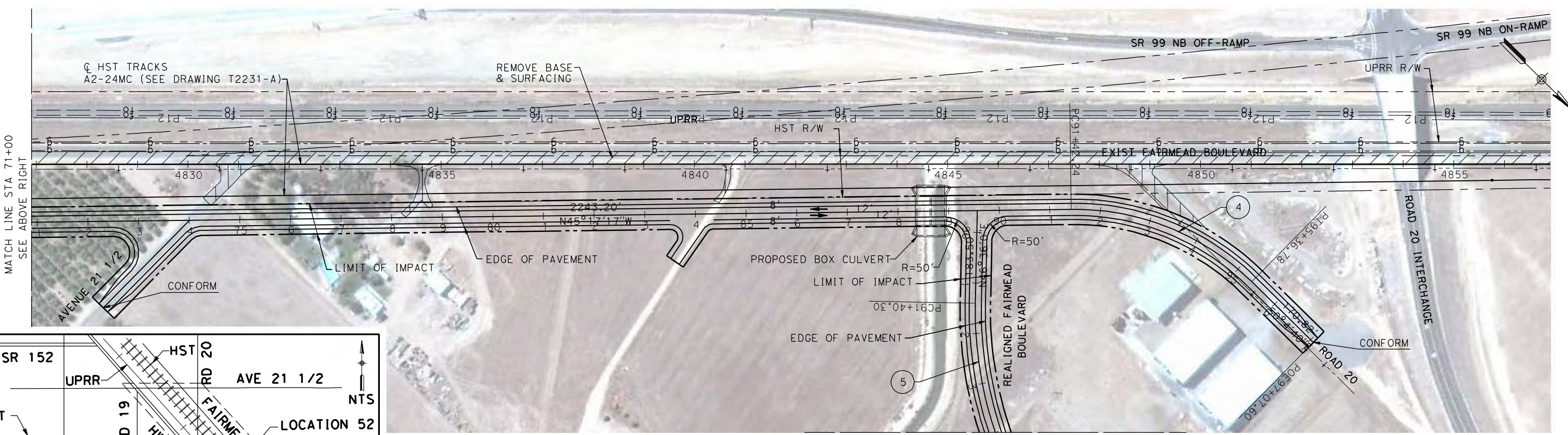
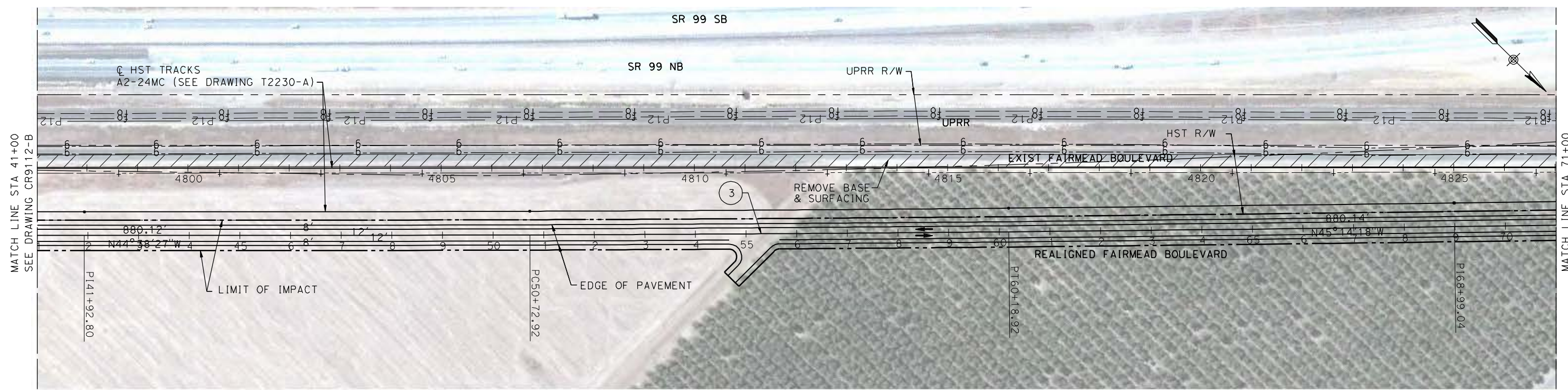


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 MERCED - (AVE 24)  
 FAIRMEAD BLVD  
 LAYOUT  
 SHEET 1 OF 5

CONTRACT NO.  
HSR06-007  
 DRAWING NO.  
CR9112-B  
 SCALE  
AS SHOWN  
 SHEET NO.  
### OF ###

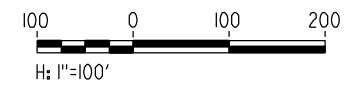


4/27/2011 6:58:57 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 3b - ave 24 wye-w.chowchilla\local roads\layout\CR9113-B.dgn



**CURVE DATA**

No.	R	Δ	T	L
③	150046.75	0°21'40"	473.00	945.99
④	500.00	45°12'37"	208.18	394.53
⑤	750.00	46°36'00"	323.00	609.99



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
 DRAWN BY  
C. DELOS REYES  
 CHECKED BY  
A. SILVER  
 IN CHARGE  
A. BOONE  
 DATE  
04/29/2011

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



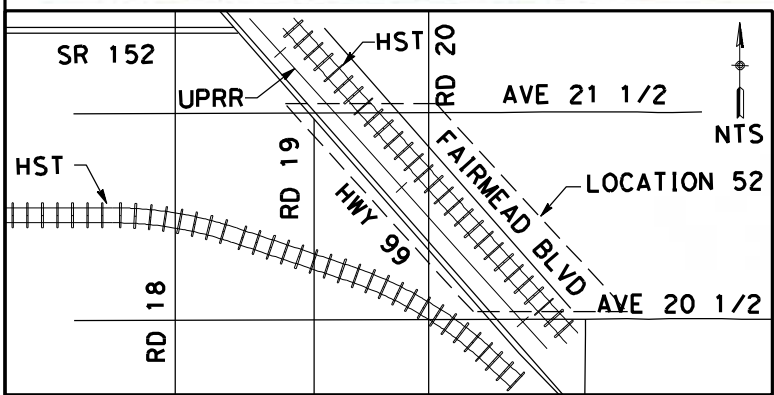
**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 MERCED - (AVE 24)  
 FAIRMEAD BLVD  
 LAYOUT  
 SHEET 2 OF 5

CONTRACT NO.  
HSR06-007  
 DRAWING NO.  
CR9113-B  
 SCALE  
AS SHOWN  
 SHEET NO.  
### OF ###

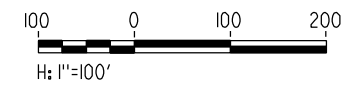


ReyesC1 4/27/2011 6:59:06 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 3b - ave 24 wye-w.chowchilla local roads\layout\CR9114-B.dgn

MATCH LINE STA 94+00  
SEE DRAWING CR9113-B



CURVE DATA				
No.	R	$\Delta$	T	L
(5)	750.00	46° 36' 00"	323.00	609.99



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
 DRAWN BY  
C. DELOS REYES  
 CHECKED BY  
A. SILVER  
 IN CHARGE  
A. BOONE  
 DATE  
04/29/2011

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

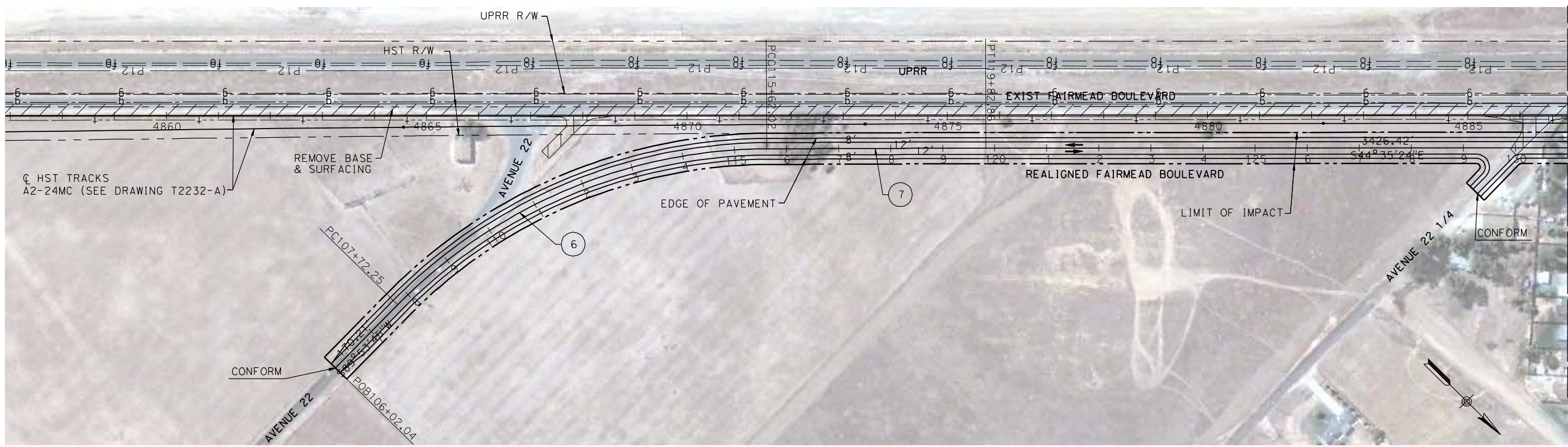


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 MERCED - (AVE 24)  
 FAIRMEAD BLVD  
 LAYOUT  
 SHEET 3 OF 5

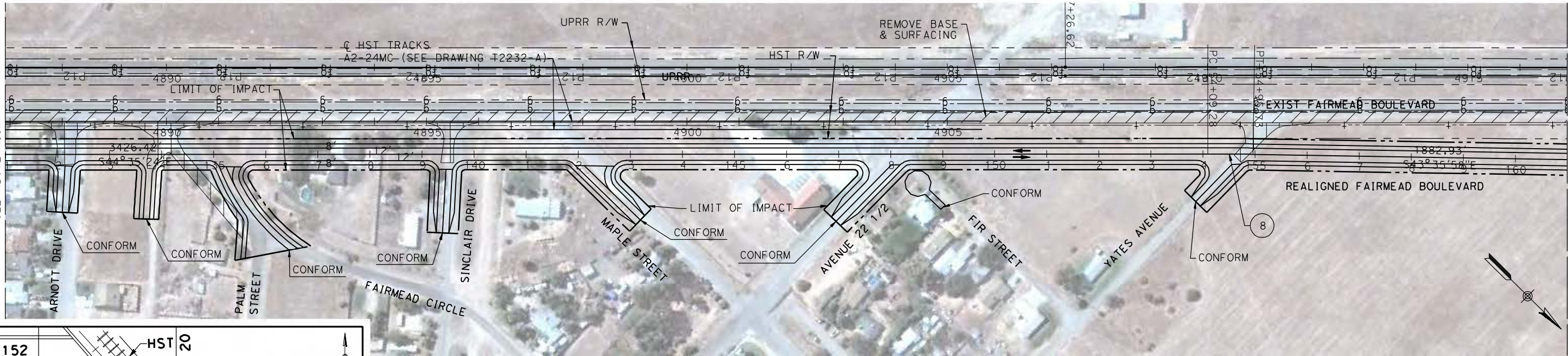
CONTRACT NO.  
HSR06-007  
 DRAWING NO.  
CR9114-B  
 SCALE  
AS SHOWN  
 SHEET NO.  
### OF ###



4/27/2011 6:59:22 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 3b - ave 24 wye-w.chowchilla local roads\Layout\CR9115-B.dgn  
 ReyesCI

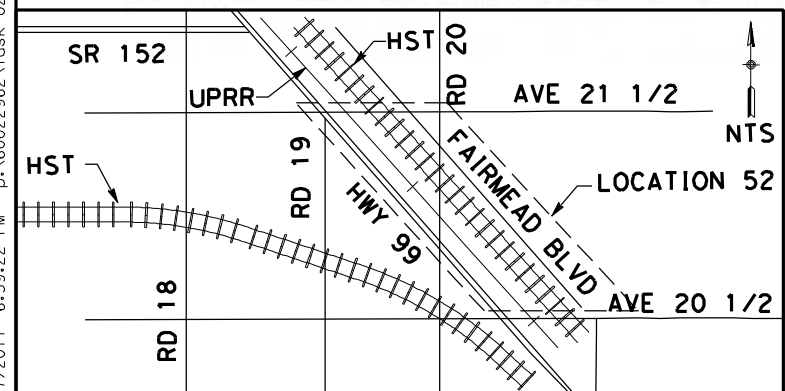


MATCH LINE STA 131+00  
SEE BELOW LEFT



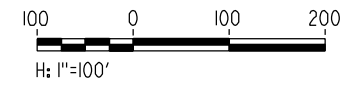
MATCH LINE STA 131+00  
SEE ABOVE RIGHT

MATCH LINE STA 161+00  
SEE DRAWING CR9116-B



**CURVE DATA**

No.	R	Δ	T	L
⑥	1000.00	45°15'01"	416.78	789.77
⑦	5000.00	0°09'39"	210.42	420.84
⑧	5000.00	0°59'26"	43.23	86.45



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
 DRAWN BY  
C. DELOS REYES  
 CHECKED BY  
A. SILVER  
 IN CHARGE  
A. BOONE  
 DATE  
04/29/2011

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

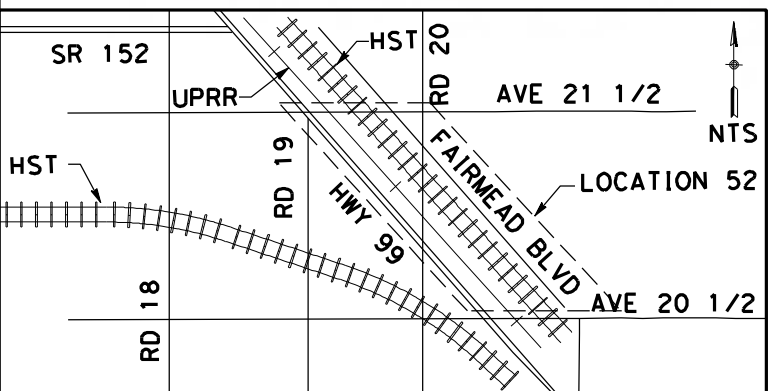
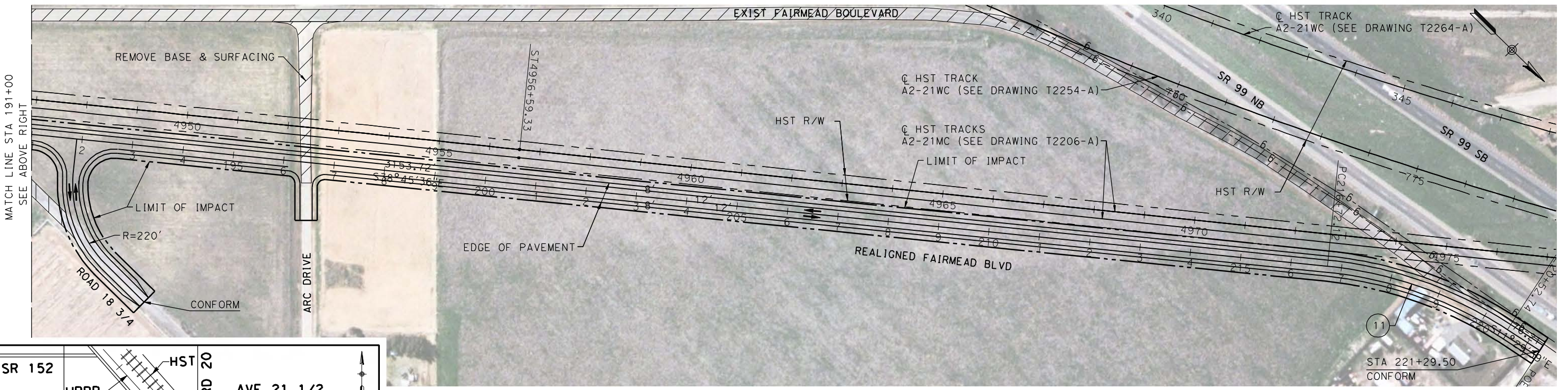
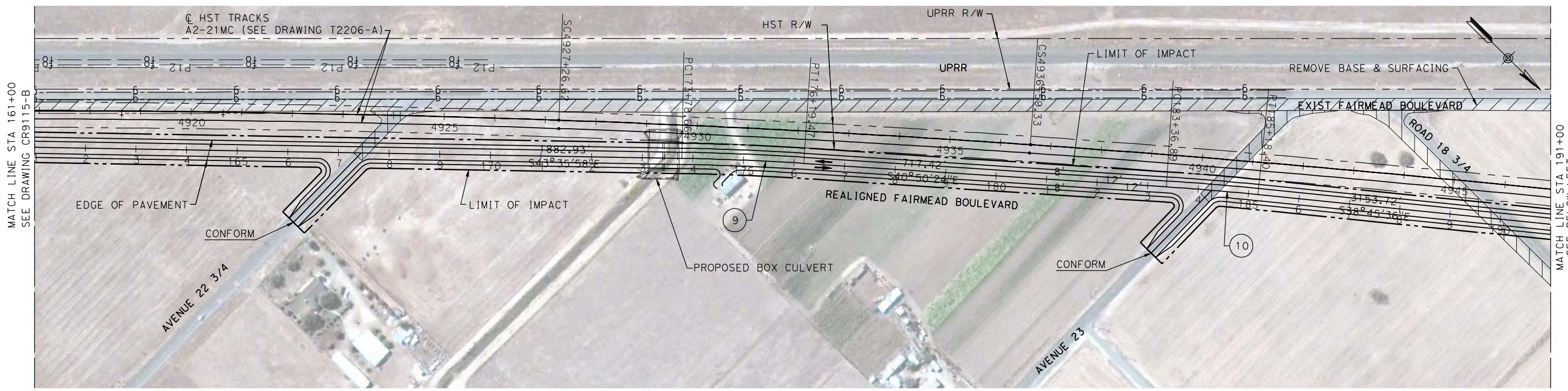


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 MERCED - (AVE 24)  
 FAIRMEAD BLVD  
 LAYOUT  
 SHEET 4 OF 5

CONTRACT NO.  
HSR06-007  
 DRAWING NO.  
CR9115-B  
 SCALE  
AS SHOWN  
 SHEET NO.  
### OF ###



4/27/2011 6:59:36 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 3b - ave 24 wye-w.chowchilla\layout\CR9116-B.dgn  
 ReyesC1



**CURVE DATA**

No.	R	Δ	T	L
(9)	5000.00	87°14'26"	120.43	240.81
(10)	5000.00	87°55'12"	90.76	181.51
(11)	800.00	62°44'23"	193.99	380.63



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**D. AYELE**  
 DRAWN BY  
**C. DELOS REYES**  
 CHECKED BY  
**A. SILVER**  
 IN CHARGE  
**A. BOONE**  
 DATE  
**04/29/2011**

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

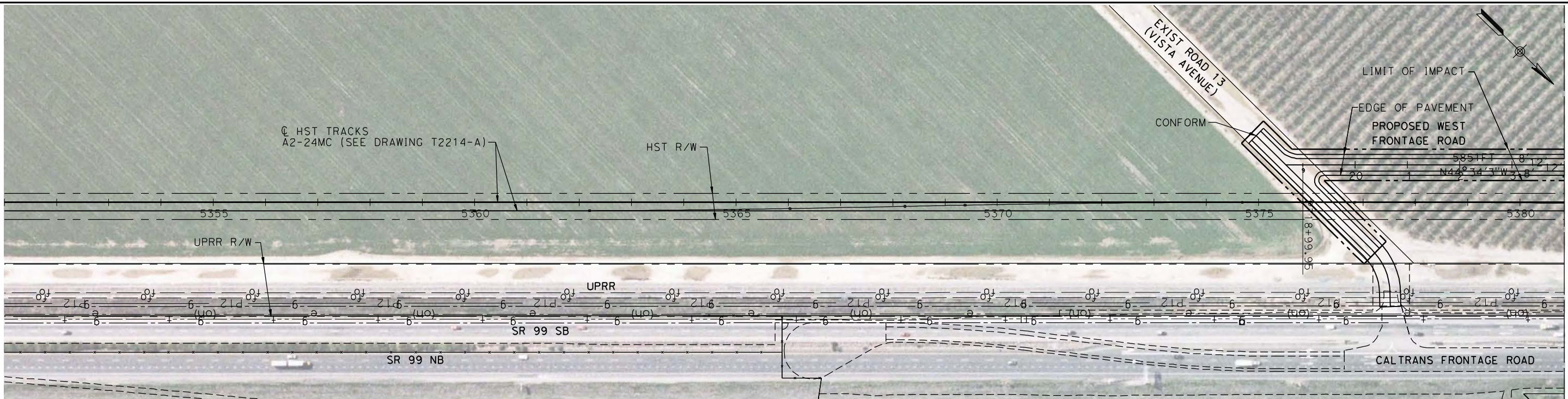


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 MERCED - (AVE 24)  
 FAIRMEAD BLVD  
 LAYOUT  
 SHEET 5 OF 5

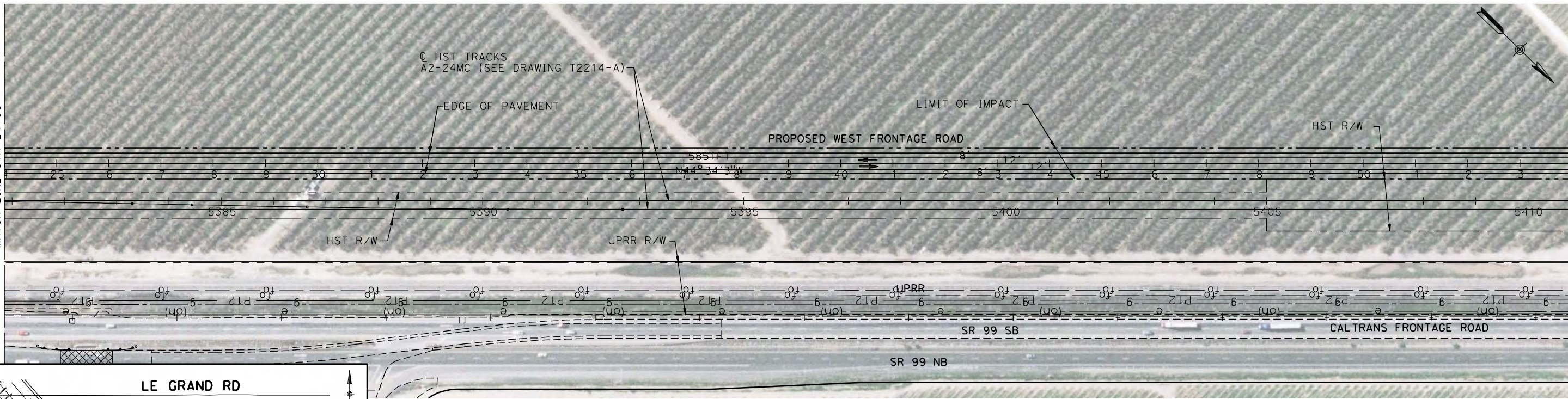
CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CR9116-B  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###



4/27/2011 6:59:55 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 3b - ave 24 wye-w.chowchilla local roads\Layout\CR9117-B.dgn

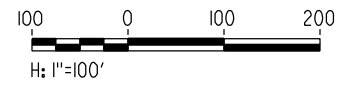
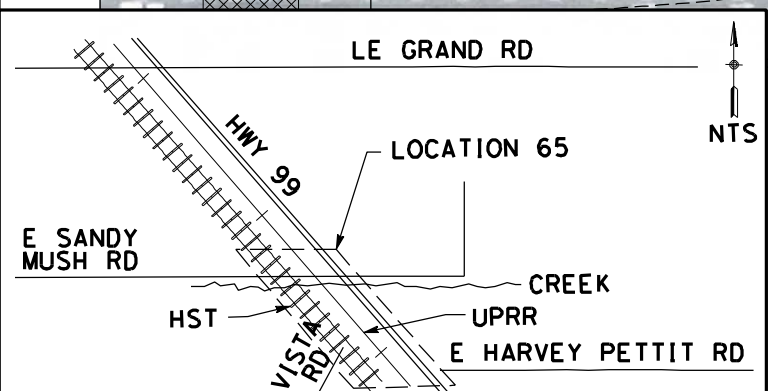


MATCH LINE STA 24+00  
 SEE BELOW LEFT



SEE ABOVE RIGHT  
 MATCH LINE STA 24+00

MATCH LINE STA 54+00  
 SEE DRAWING CR9118-B



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**D. AYELE**  
 DRAWN BY  
**C. DELOS REYES**  
 CHECKED BY  
**A. SILVER**  
 IN CHARGE  
**A. BOONE**  
 DATE  
**04/29/2011**

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

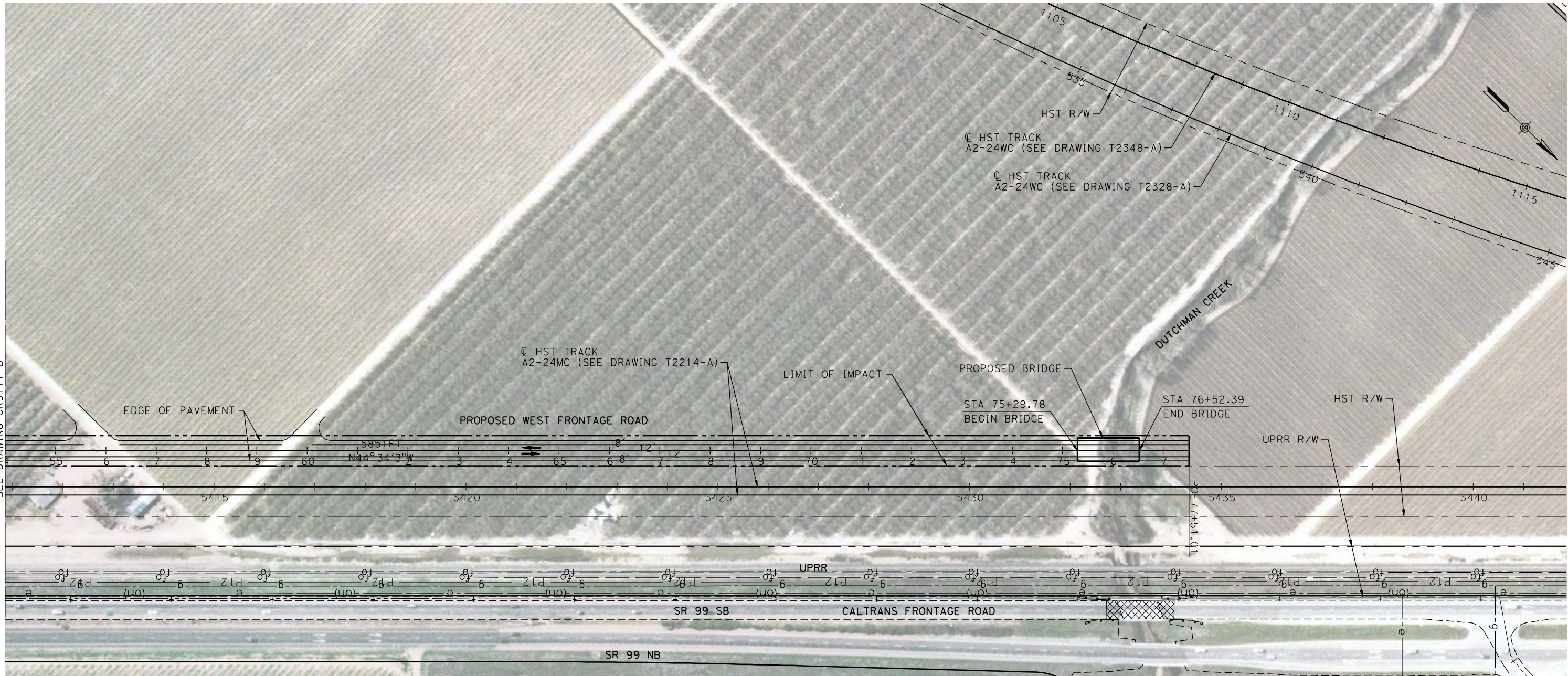


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 MERCED - (AVE 24)  
 PROPOSED WEST FRONTAGE ROAD  
 LAYOUT  
 STA 18+22 TO STA 54+00

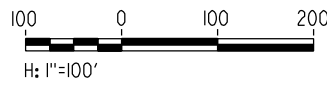
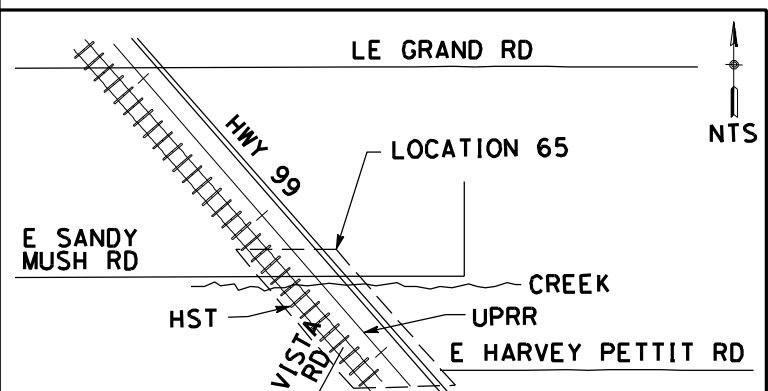
CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CR9117-B  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###



4/27/2011 7:00:12 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 3b - ave 24 wye-w.chowchilla local roads\Layout\CR9118-B.dgn



MATCH LINE STA 54+00  
 SEE DRAWING CR9117-B



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**D. AYELE**  
 DRAWN BY  
**C. DELOS REYES**  
 CHECKED BY  
**A. SILVER**  
 IN CHARGE  
**A. BOONE**  
 DATE  
**04/29/2011**

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



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 WYE/MERCED - (AVE 24)  
 PROPOSED WEST FRONTAGE ROAD  
 LAYOUT  
 STA 54+00 TO STA 77+51.01

CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CR9118-B  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###

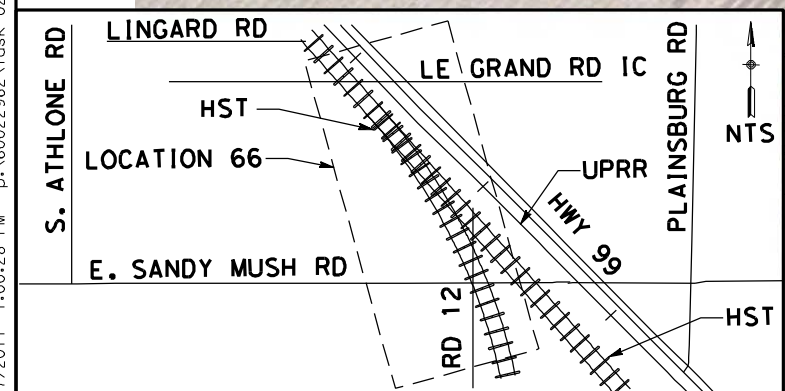
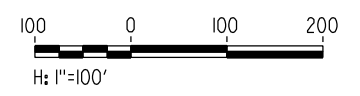


4/27/2011 7:00:28 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 3b - ave 24 wye-w.chowchilla local roads\Layout\CR9119-B.dgn



CURVE DATA

No.	R	Δ	T	L
①	8000.00	9° 9' 17"	640.49	1278.26
②	1500.00	32° 6' 4"	431.55	840.41



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
 D. AYELE  
 DRAWN BY  
 C. DELOS REYES  
 CHECKED BY  
 A. SILVER  
 IN CHARGE  
 A. BOONE  
 DATE  
 04/29/2011

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



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 WYE/MERCED - (AVE 24)  
 PROPOSED WEST FRONTAGE ROAD  
 LAYOUT  
 STA 205+00 TO STA 115+00

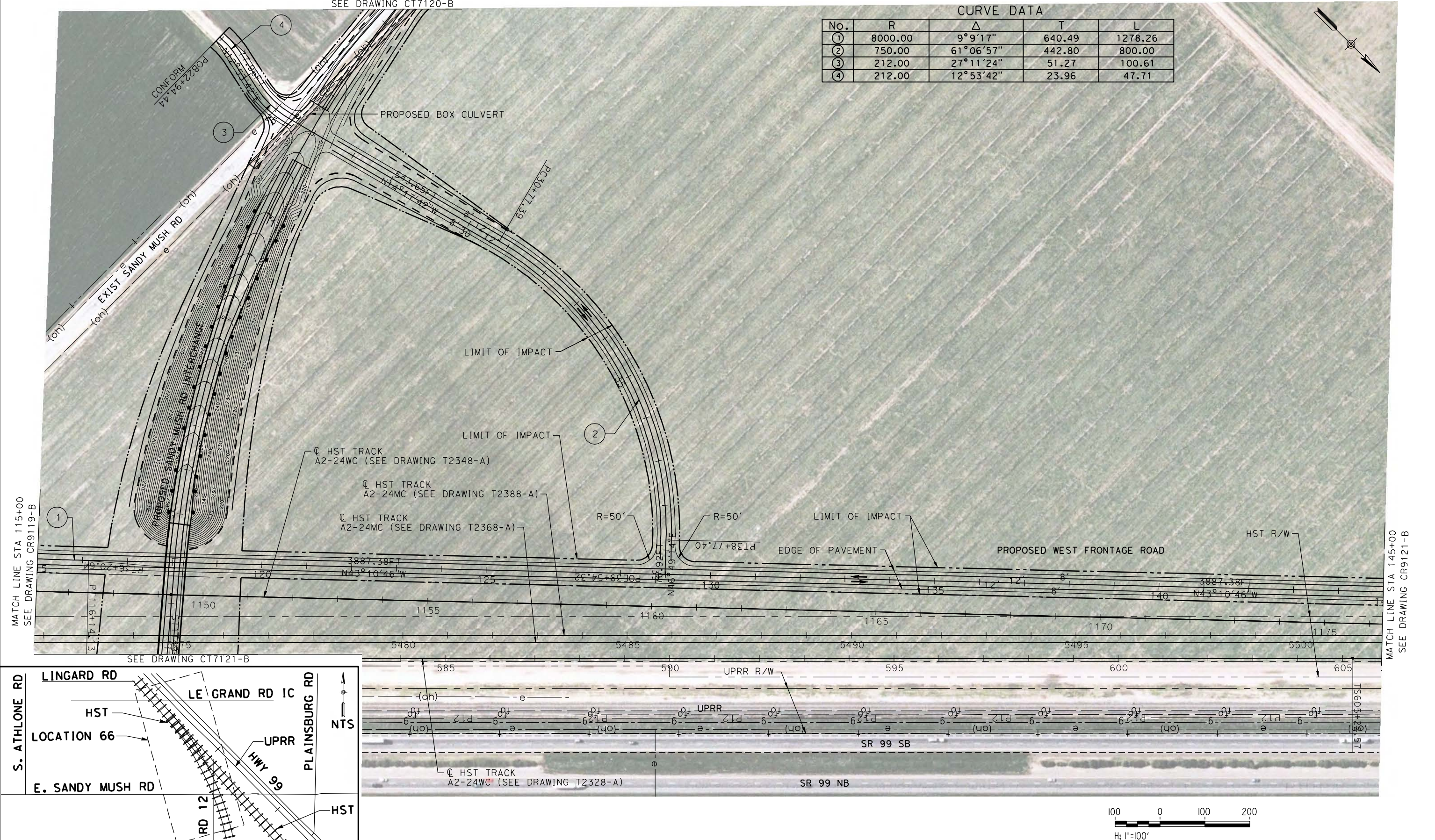
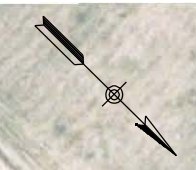
CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CR9119-B  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###



4/27/2011 7:00:46 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 3b - ave 24 wye-w.chowchilla local roads\layout\CR9120-B.dgn

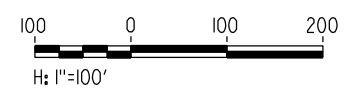
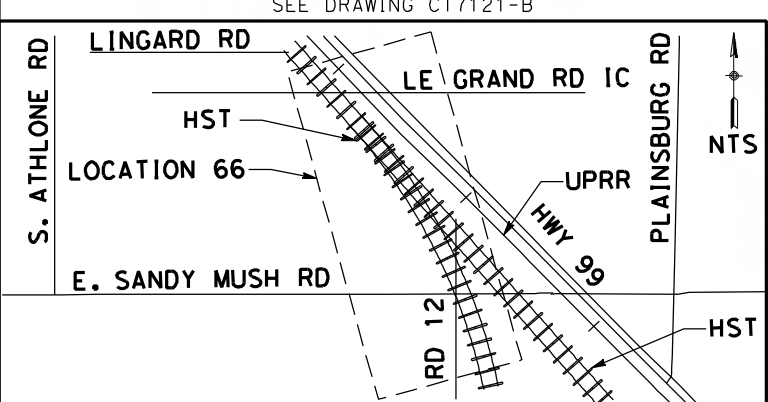
SEE DRAWING CT7120-B

CURVE DATA				
No.	R	Δ	T	L
①	8000.00	9°9'17"	640.49	1278.26
②	750.00	61°06'57"	442.80	800.00
③	212.00	27°11'24"	51.27	100.61
④	212.00	12°53'42"	23.96	47.71



MATCH LINE STA 115+00  
SEE DRAWING CR9119-B

MATCH LINE STA 145+00  
SEE DRAWING CR9121-B



DESIGNED BY  
D. AYELE  
DRAWN BY  
C. DELOS REYES  
CHECKED BY  
A. SILVER  
IN CHARGE  
A. BOONE  
DATE  
04/29/2011

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

**NOT FOR**  
**CONSTRUCTION**



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

UPRR/SR99 WYE/MERCED - (AVE 24)  
PROPOSED FRONTAGE ROAD  
LAYOUT  
STA 115+00 TO STA 145+00

CONTRACT NO.  
HSR06-007

DRAWING NO.  
CR9120-B

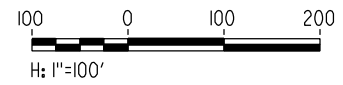
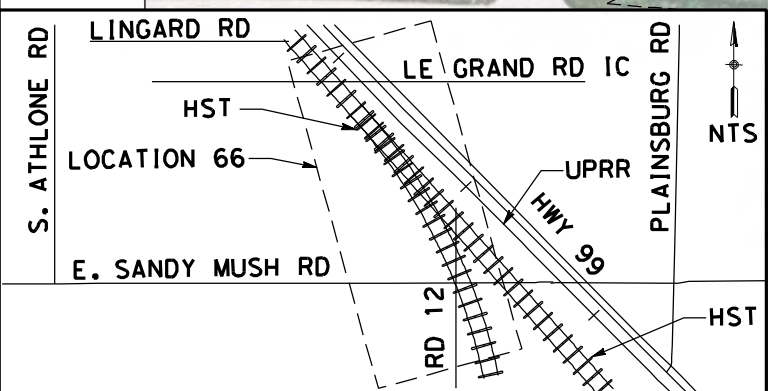
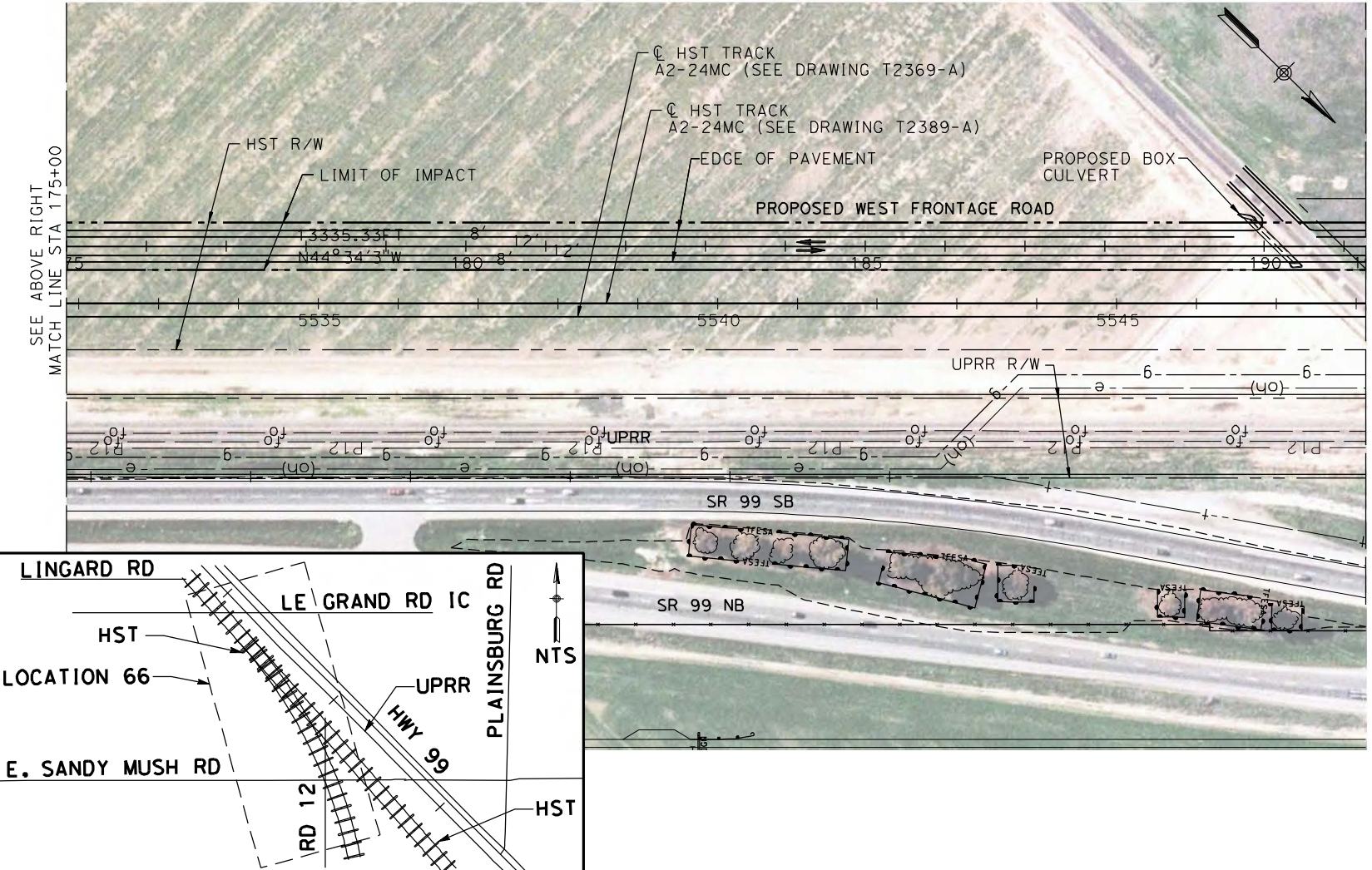
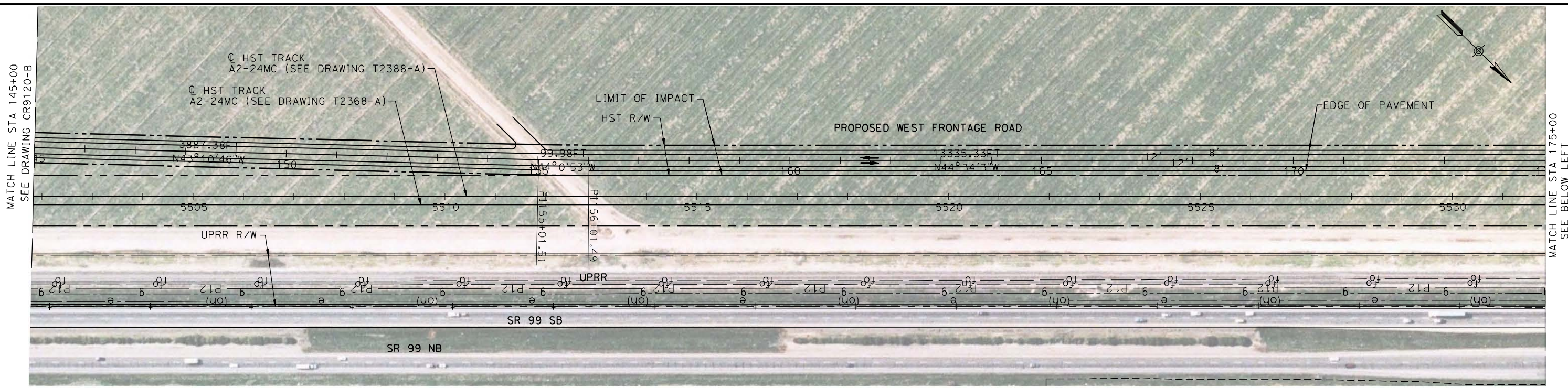
SCALE  
AS SHOWN

SHEET NO.  
### OF ###

REV	DATE	BY	CHK	APP	DESCRIPTION



ReyesCI 4/27/2011 7:01:05 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 3b - ave 24 wye-w.chowchilla local roads\Layout\CR9121-B.dgn



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
 DRAWN BY  
C. DELOS REYES  
 CHECKED BY  
A. SILVER  
 IN CHARGE  
A. BOONE  
 DATE  
04/29/2011

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



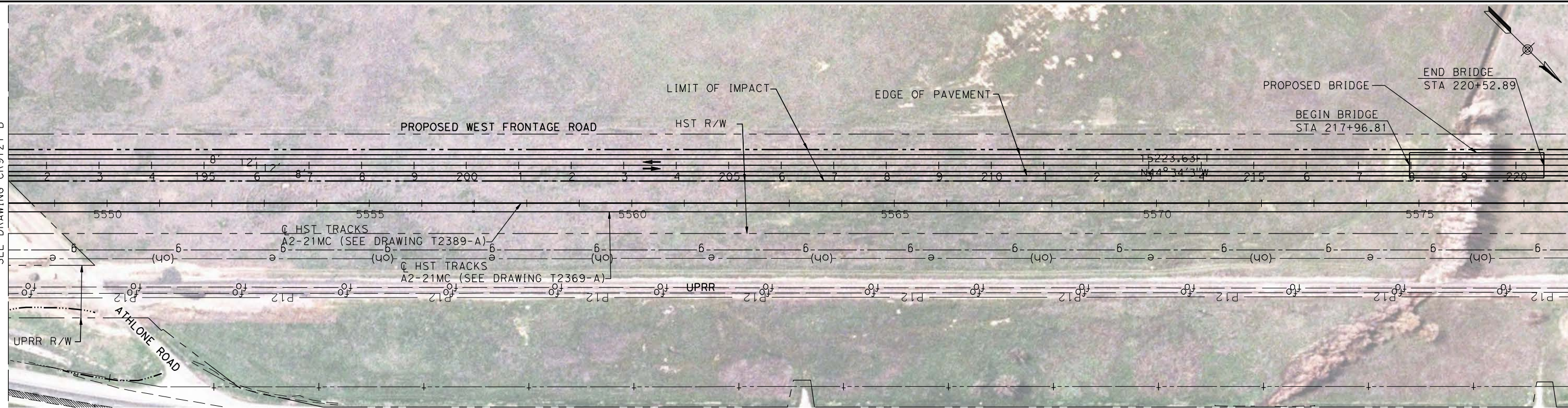
**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 MERCED - (AVE 24)  
 PROPOSED WEST FRONTAGE ROAD  
 LAYOUT  
 STA 145+00 TO STA 191+27.40

CONTRACT NO.  
HSR06-007  
 DRAWING NO.  
CR9121-B  
 SCALE  
AS SHOWN  
 SHEET NO.  
### OF ###



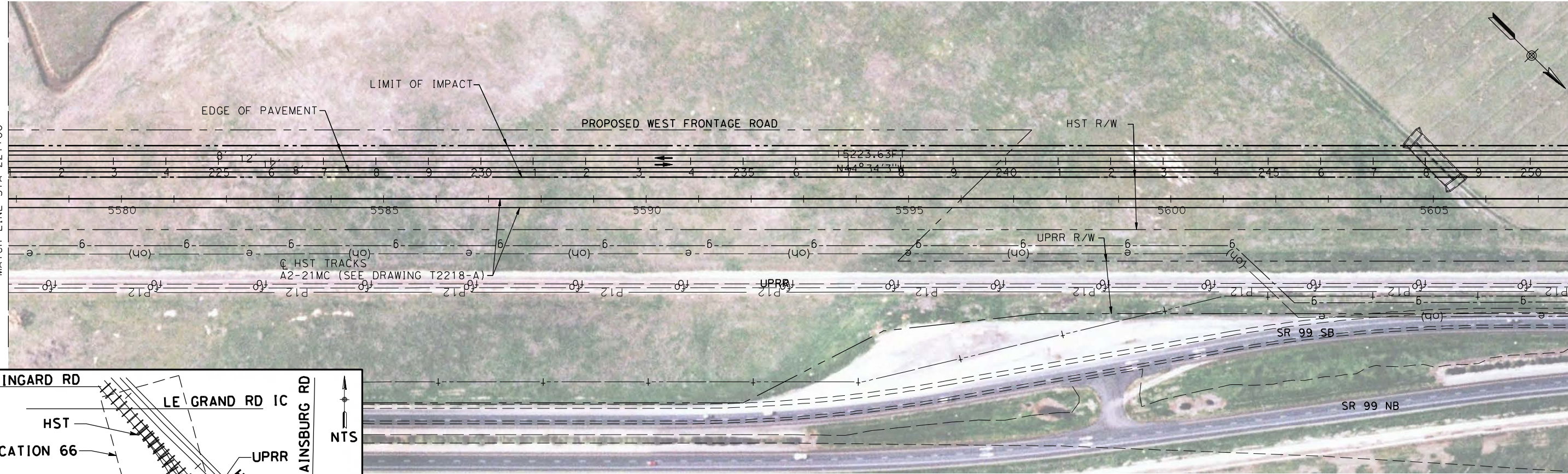
4/27/2011 7:01:24 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 3b - ave 24 wye-w.chowchilla local roads\Layout\CR9122-B.dgn

MATCH LINE STA 191+27.40  
SEE DRAWING CR9121-B

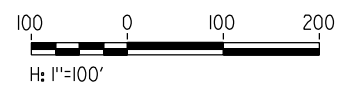
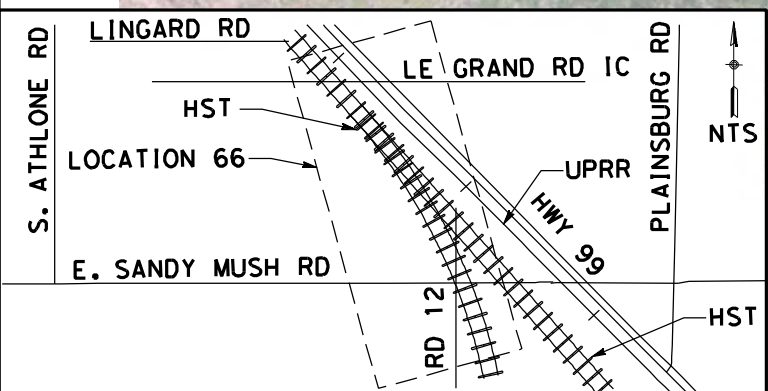


MATCH LINE STA 221+00  
SEE BELOW LEFT

SEE ABOVE RIGHT  
MATCH LINE STA 221+00



MATCH LINE STA 251+00  
SEE DRAWING CR9123-B



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
 DRAWN BY  
C. DELOS REYES  
 CHECKED BY  
A. SILVER  
 IN CHARGE  
A. BOONE  
 DATE  
04/29/2011

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



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 MERCED - (AVE 24)  
 PROPOSED WEST FRONTAGE ROAD  
 LAYOUT  
 STA 191+27.40 TO STA 251+00

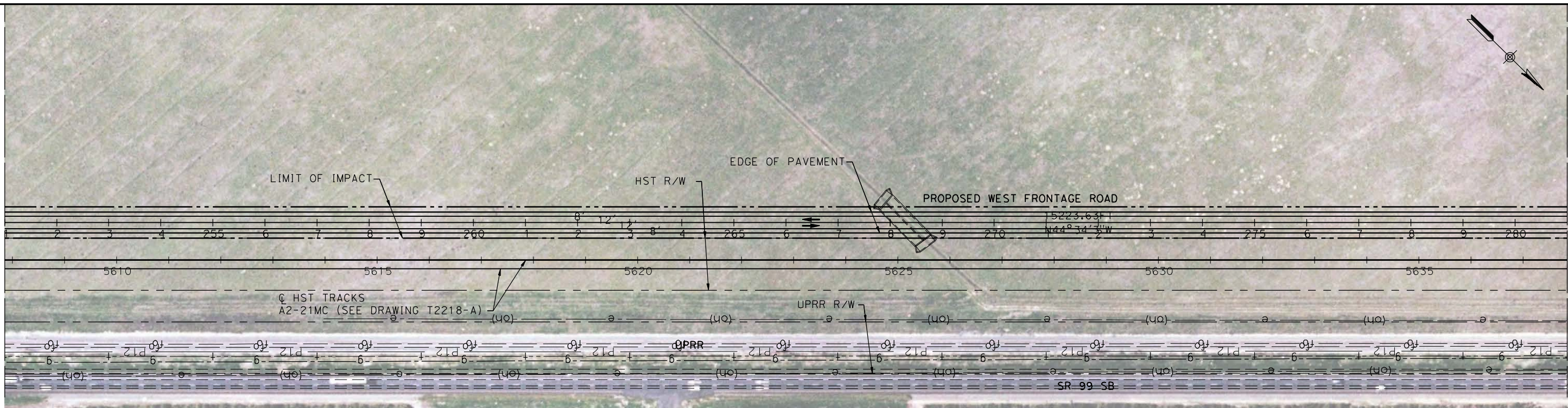
CONTRACT NO.  
HSR06-007  
 DRAWING NO.  
CR9122-B  
 SCALE  
AS SHOWN  
 SHEET NO.  
### OF ###



4/27/2011 7:01:47 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 3b - ave 24 wye-w.chowchilla local roads\Layout\CR9123-B.dgn

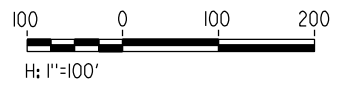
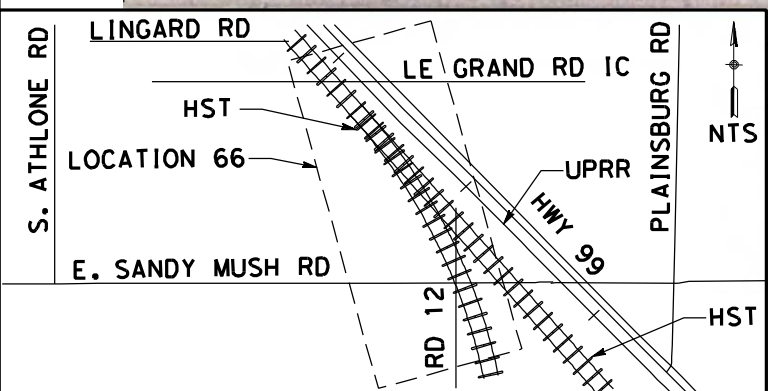
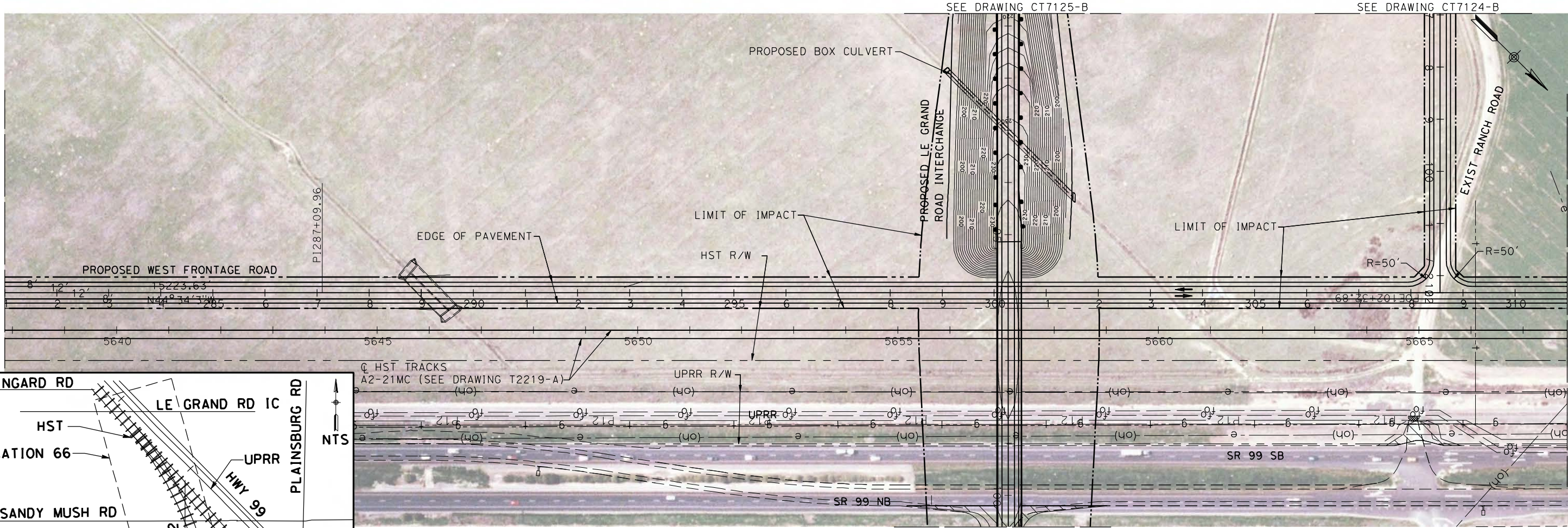
MATCH LINE STA 251+00  
SEE DRAWING CR9122-B

MATCH LINE STA 281+00  
SEE BELOW LEFT



SEE ABOVE RIGHT  
MATCH LINE STA 281+00

MATCH LINE STA 311+00  
SEE DRAWING CR9124-B



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
DRAWN BY  
C. DELOS REYES  
CHECKED BY  
J. ZANDIAN  
IN CHARGE  
A. BOONE  
DATE  
04/29/2011

**RECORD SET  
15% DESIGN  
SUBMITTAL**

**NOT FOR  
CONSTRUCTION**



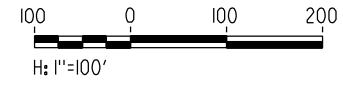
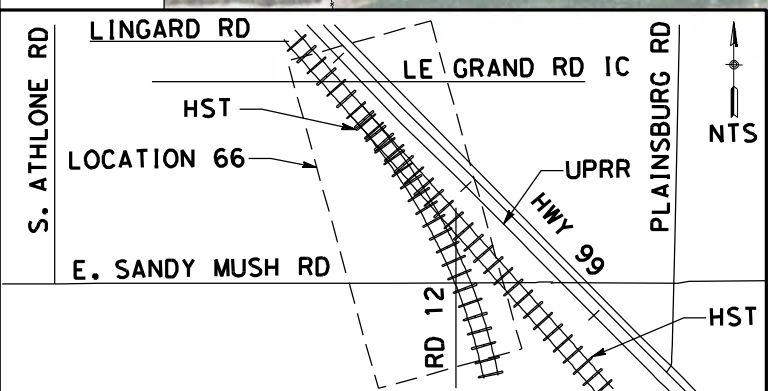
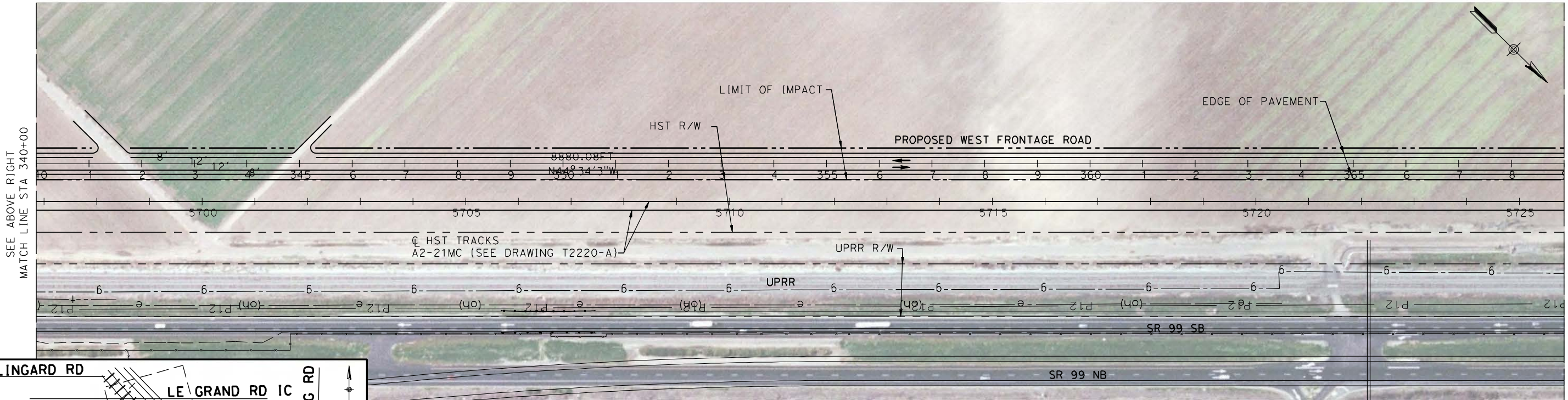
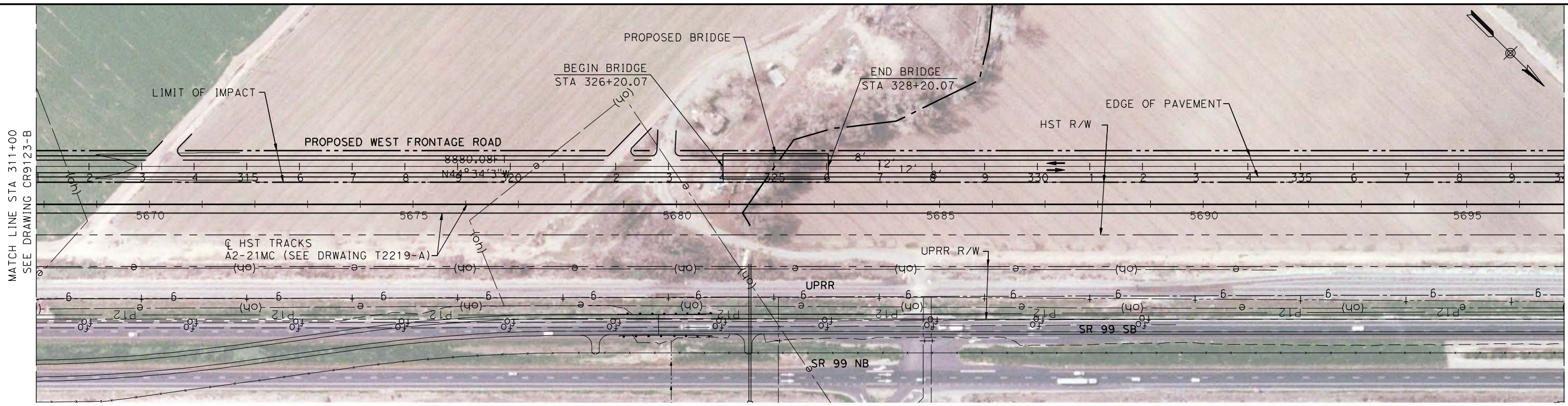
**CALIFORNIA HIGH-SPEED TRAIN PROJECT  
MERCED TO FRESNO**

UPRR/SR99 MERCED - (AVE 24)  
PROPOSED WEST FRONTAGE ROAD  
LAYOUT  
STA 251+00 TO STA 311+00

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
CR9123-B  
SCALE  
AS SHOWN  
SHEET NO.  
### OF ###



4/27/2011 7:02:08 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 3b - ave 24 wye-w.chowchilla local roads\Layout\CR9124-B.dgn



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
DRAWN BY  
C. DELOS REYES  
CHECKED BY  
A. SILVER  
IN CHARGE  
A. BOONE  
DATE  
04/29/2011

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

**NOT FOR**  
**CONSTRUCTION**

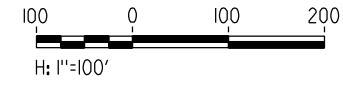
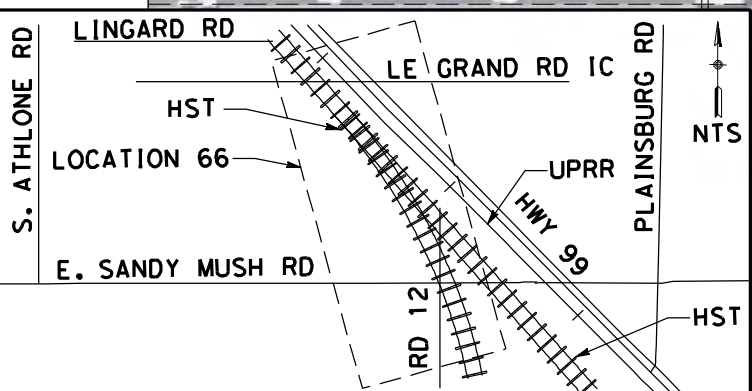
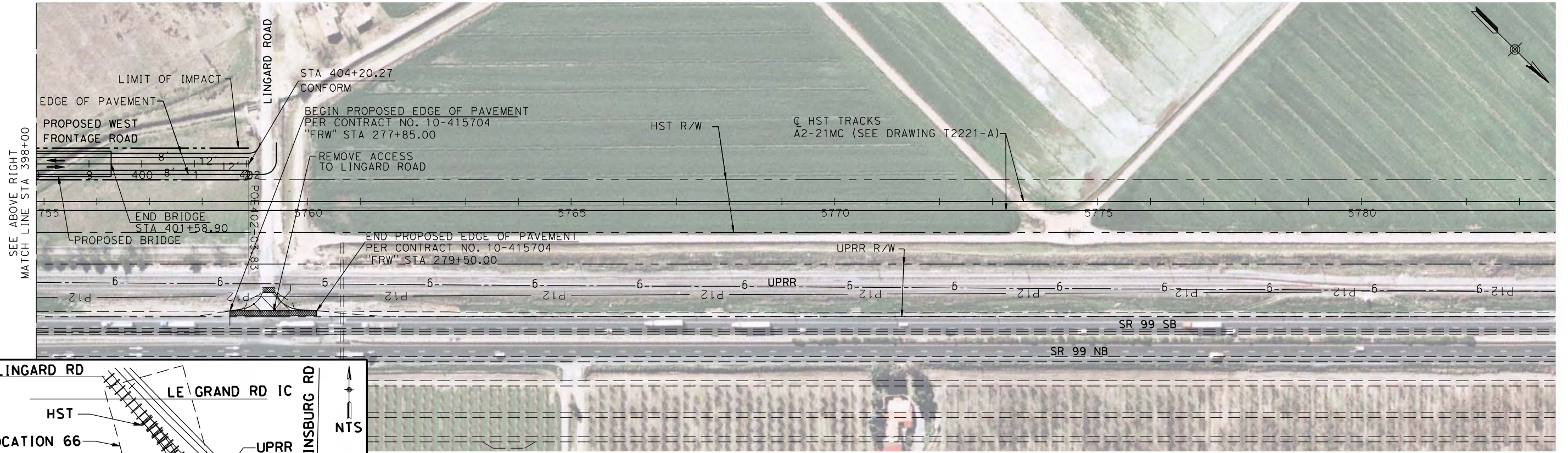
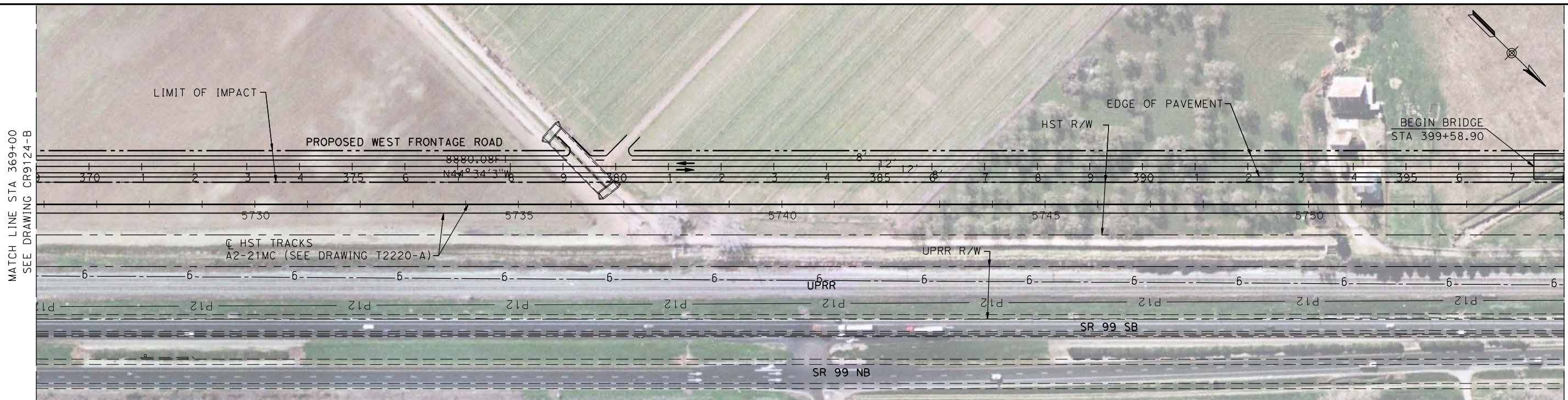


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
UPRR/SR99 MERCED - (AVE 24)  
PROPOSED WEST FRONTAGE ROAD  
LAYOUT  
STA 311+00 TO STA 369+00

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
CR9124-B  
SCALE  
AS SHOWN  
SHEET NO.  
### OF ###



4/27/2011 7:02:26 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 3b - ave 24 wye-w.chowchilla local roads\Layout\CR9125-B.dgn



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
 DRAWN BY  
C. DELOS REYES  
 CHECKED BY  
A. SILVER  
 IN CHARGE  
A. BOONE  
 DATE  
04/29/2011

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

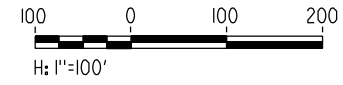
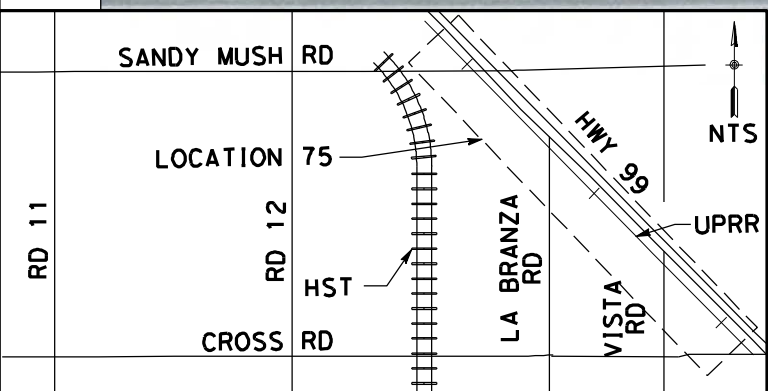


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 MERCED - (AVE 24)  
 PROPOSED WEST FRONTAGE ROAD  
 LAYOUT  
 STA 369+00 TO STA 404+20.27

CONTRACT NO.  
HSR06-007  
 DRAWING NO.  
CR9125-B  
 SCALE  
AS SHOWN  
 SHEET NO.  
### OF ###



4/27/2011 7:02:45 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 3b - ave 24 wye-w.chowchilla local roads\Layout\CR9126-B.dgn  
 ReyesC1



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
 D. AYELE  
 DRAWN BY  
 C. DELOS REYES  
 CHECKED BY  
 A. SILVER  
 IN CHARGE  
 A. BOONE  
 DATE  
 04/29/2011

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

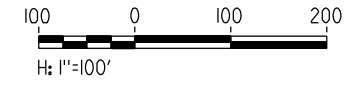
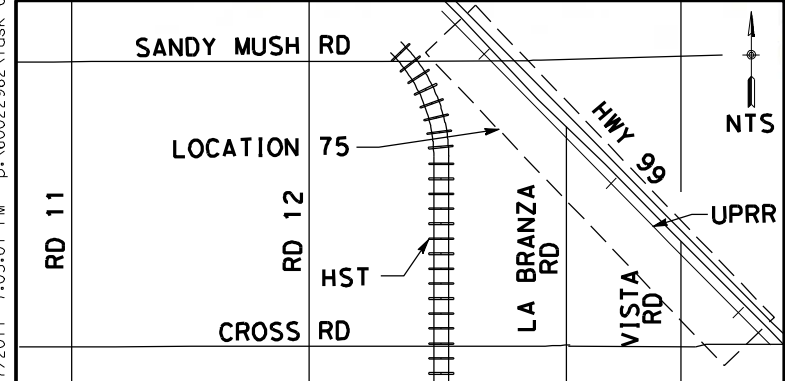
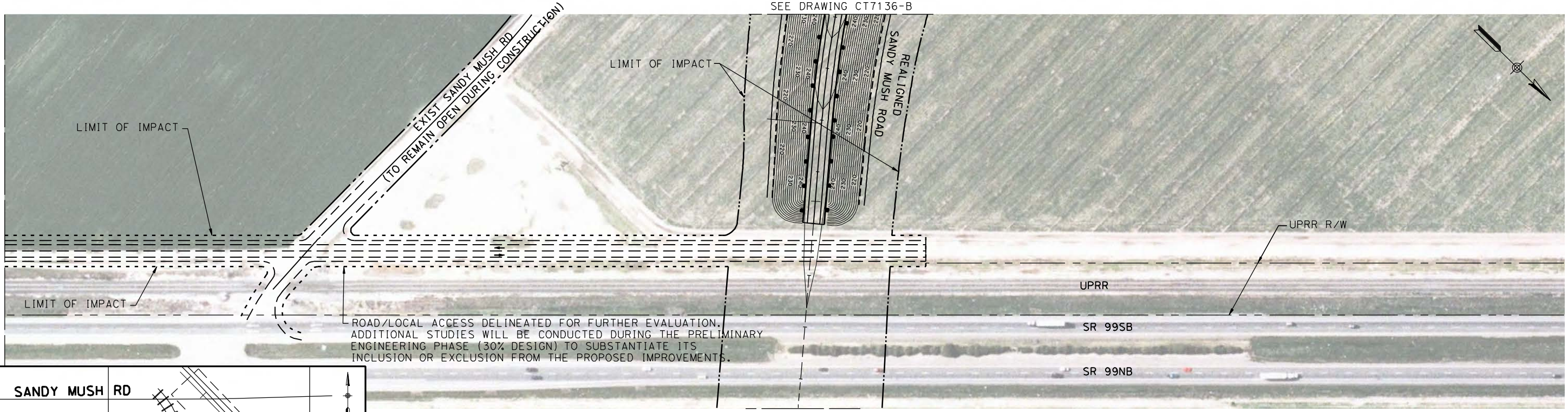
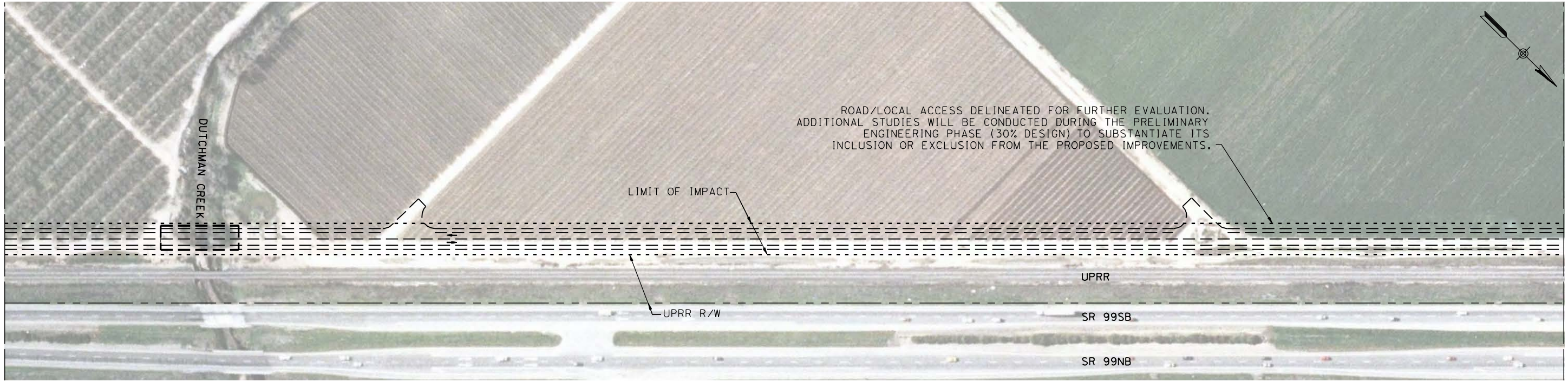


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 MERCED DO - (WC)  
 LOCAL ROAD - WEST FRONTAGE ROAD  
 LAYOUT

CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CR9126-B  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###



4/27/2011 7:03:01 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 3b - ave 24 wye-w.chowchilla local roads\Layout\CR9127-B.dgn



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
 DRAWN BY  
C. DELOS REYES  
 CHECKED BY  
A. SILVER  
 IN CHARGE  
A. BOONE  
 DATE  
04/29/2011

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

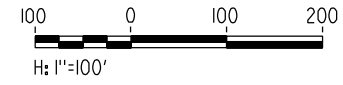
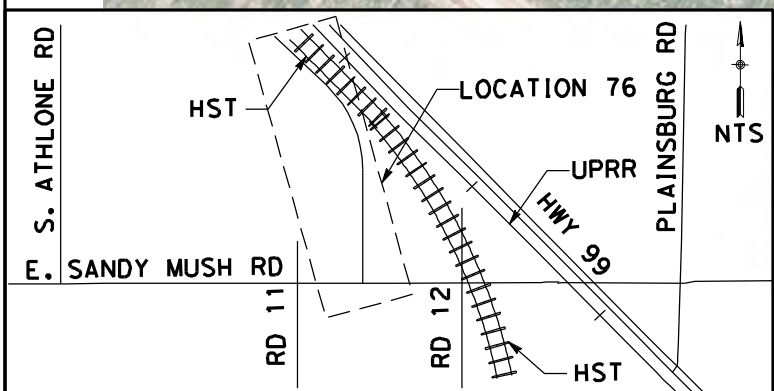
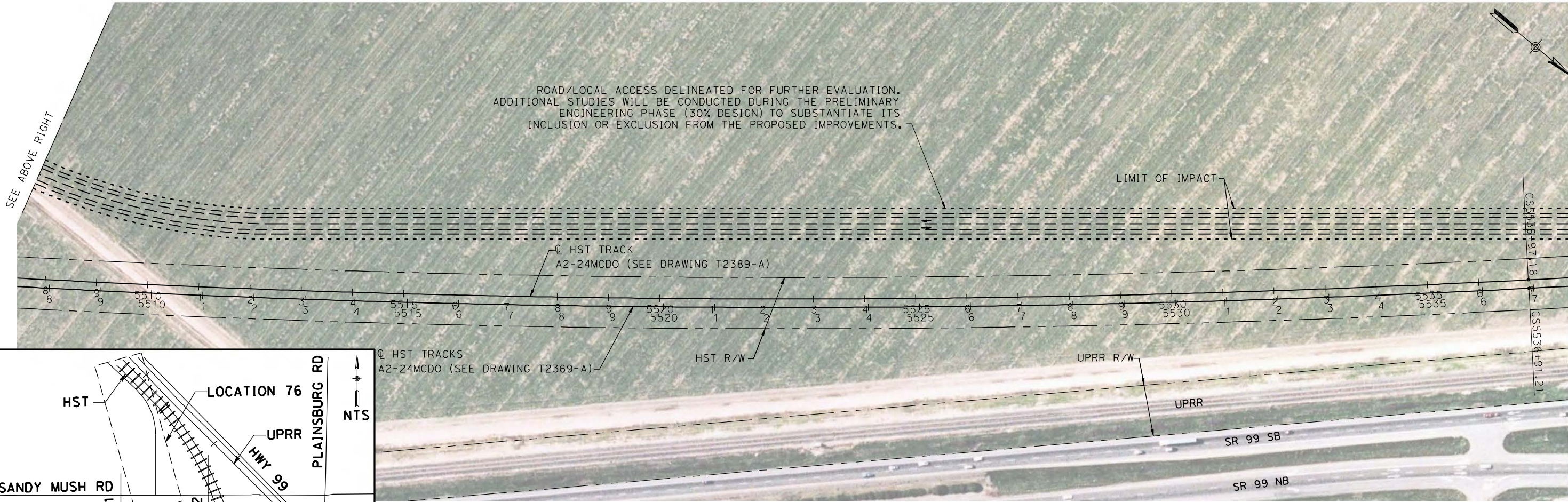
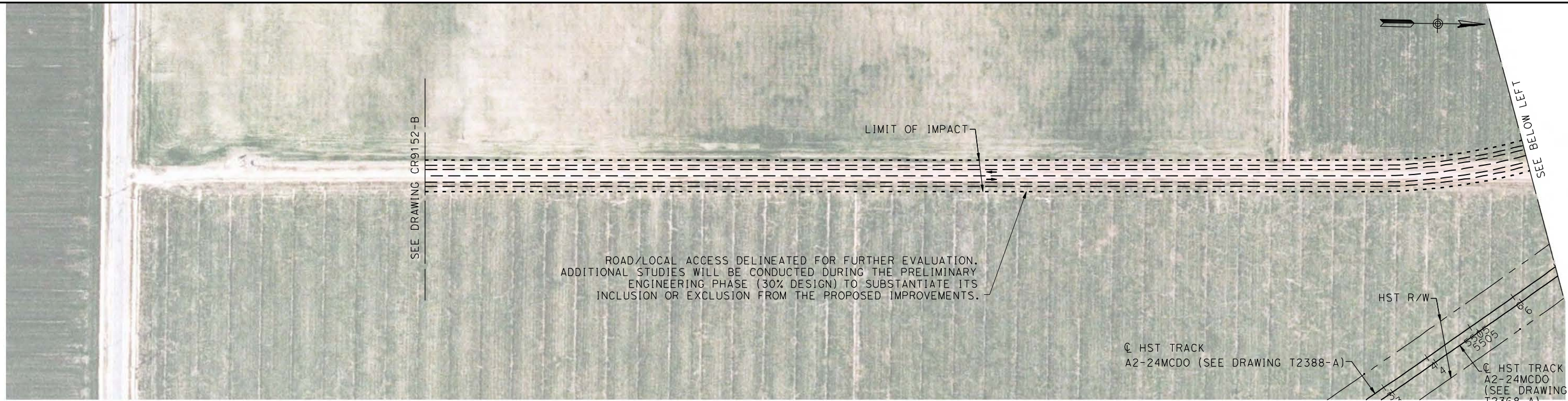


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 MERCED DO - (WC)  
 LOCAL ROAD - WEST FRONTAGE ROAD  
 LAYOUT

CONTRACT NO.  
HSR06-007  
 DRAWING NO.  
CR9127-B  
 SCALE  
AS SHOWN  
 SHEET NO.  
### OF ###



ReyesC1 4/27/2011 7:03:18 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 3b - ave 24 wye-w.chowchilla local roads\Layout\CR9128-B.dgn



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
 DRAWN BY  
C. DELOS REYES  
 CHECKED BY  
A. SILVER  
 IN CHARGE  
A. BOONE  
 DATE  
04/29/2011

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

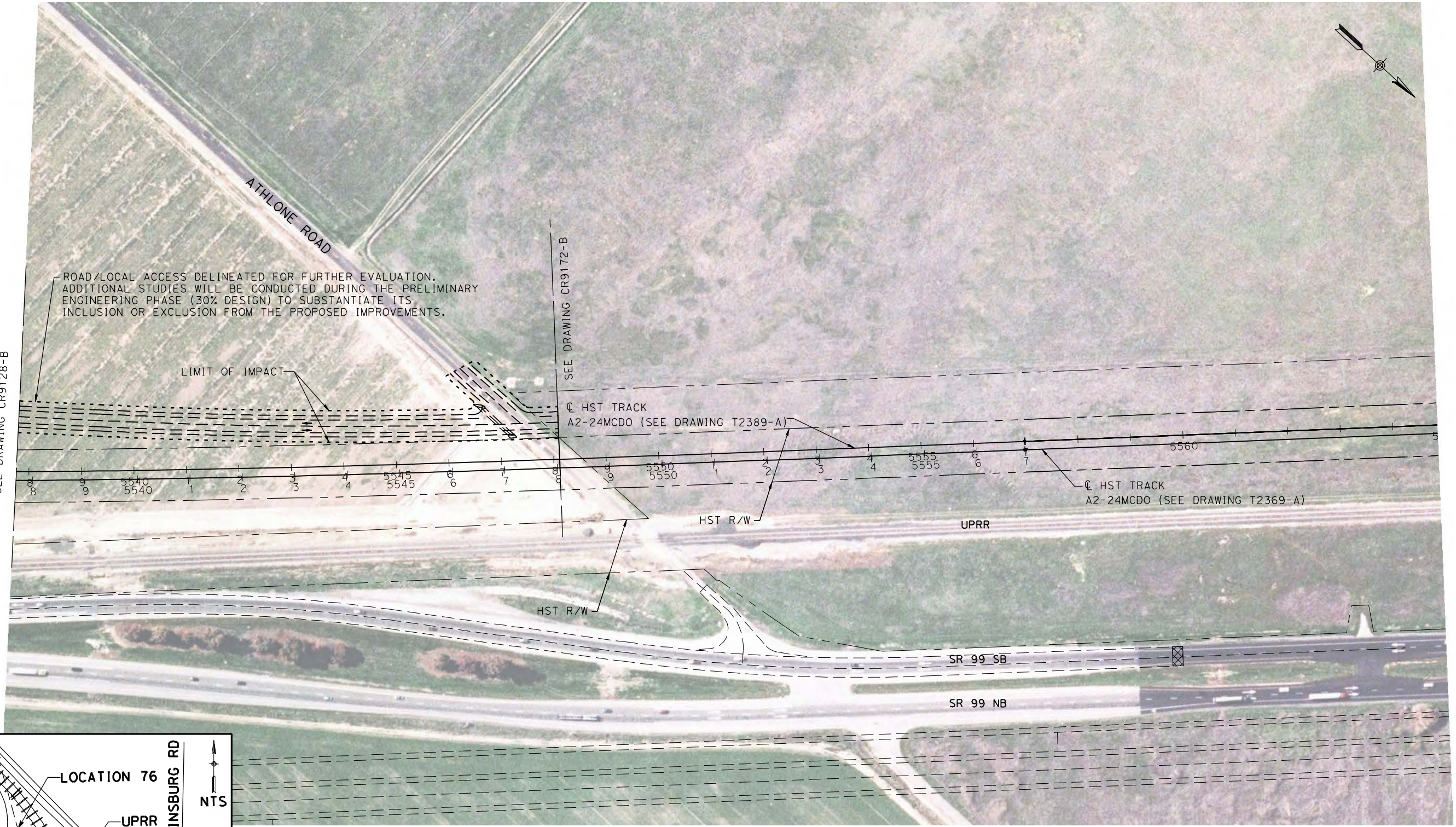


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 MERCED DO - (WC)  
 LOCAL ROAD - WEST FRONTAGE ROAD  
 LAYOUT

CONTRACT NO.  
HSR06-007  
 DRAWING NO.  
CR9128-B  
 SCALE  
AS SHOWN  
 SHEET NO.  
### OF ###



4/27/2011 7:03:33 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 3b - ave 24 wye-w.chowchilla local roads\Layout\CR9129-B.dgn



ROAD/LOCAL ACCESS DELINEATED FOR FURTHER EVALUATION. ADDITIONAL STUDIES WILL BE CONDUCTED DURING THE PRELIMINARY ENGINEERING PHASE (30% DESIGN) TO SUBSTANTIATE ITS INCLUSION OR EXCLUSION FROM THE PROPOSED IMPROVEMENTS.

SEE DRAWING CR9128-B

SEE DRAWING CR9172-B

LIMIT OF IMPACT

☉ HST TRACK  
A2-24MCDO (SEE DRAWING T2389-A)

☉ HST TRACK  
A2-24MCDO (SEE DRAWING T2369-A)

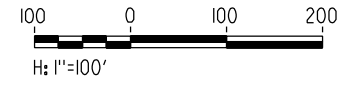
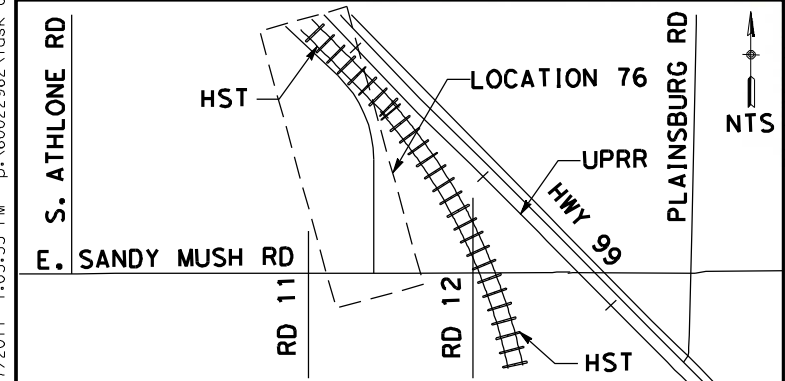
HST R/W

UPRR

HST R/W

SR 99 SB

SR 99 NB



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
DRAWN BY  
C. DELOS REYES  
CHECKED BY  
A. SILVER  
IN CHARGE  
A. BOONE  
DATE  
04/29/2011

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

**NOT FOR**  
**CONSTRUCTION**



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

UPRR/SR99 MERCED DO - (WC)  
LOCAL ROAD - WEST FRONTAGE ROAD  
LAYOUT

CONTRACT NO.  
HSR06-007

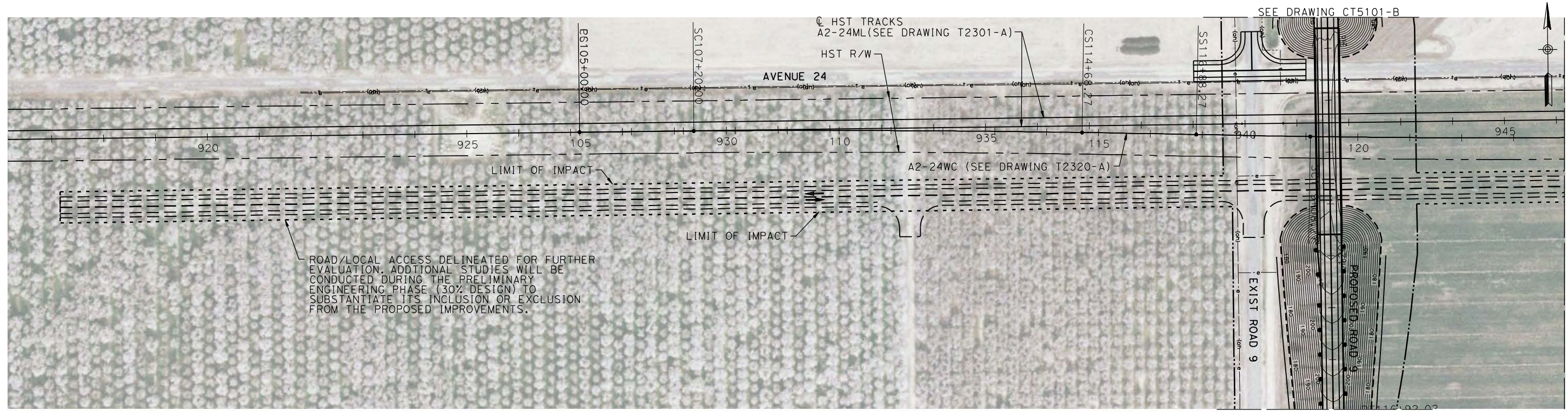
DRAWING NO.  
CR9129-B

SCALE  
AS SHOWN

SHEET NO.  
### OF ###

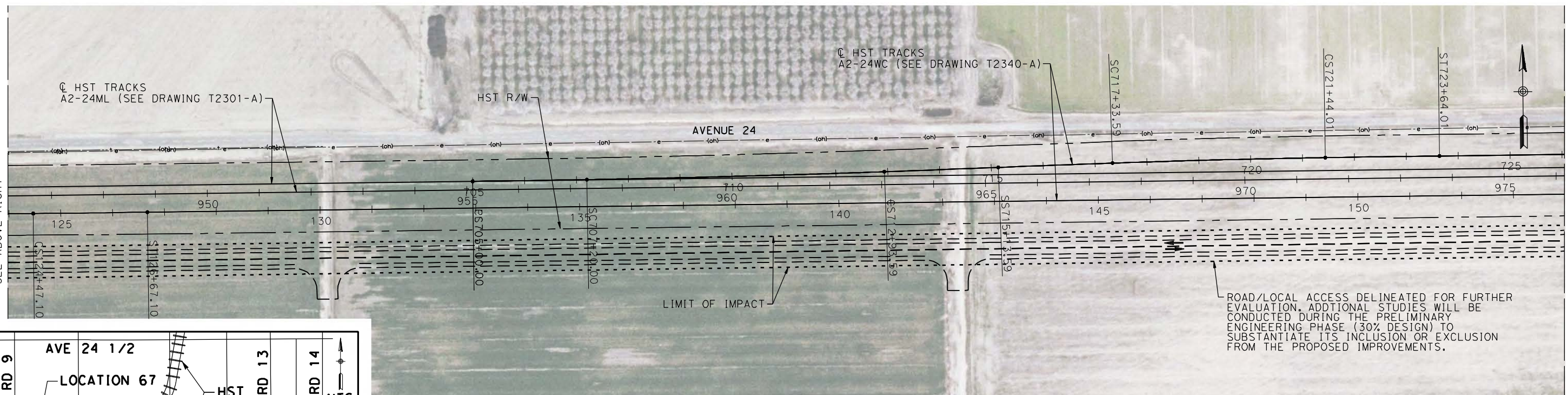


ReyesC1 4/27/2011 7:03:48 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 3b - ave 24 wye-w.chowchilla local roads\Layout\CR9130-B.dgn



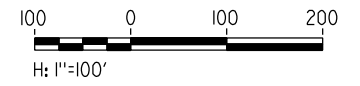
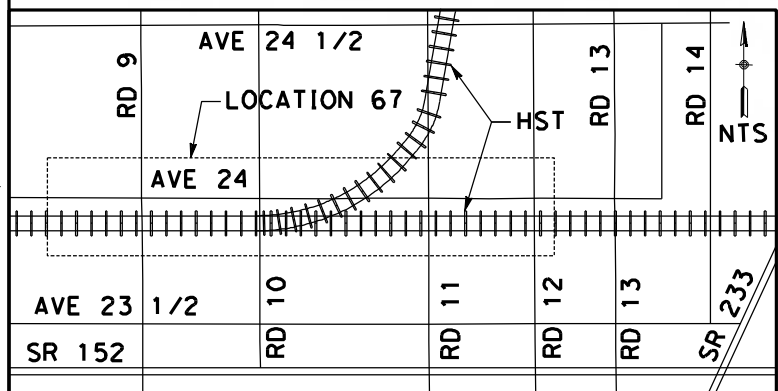
ROAD/LOCAL ACCESS DELINEATED FOR FURTHER EVALUATION. ADDITIONAL STUDIES WILL BE CONDUCTED DURING THE PRELIMINARY ENGINEERING PHASE (30% DESIGN) TO SUBSTANTIATE ITS INCLUSION OR EXCLUSION FROM THE PROPOSED IMPROVEMENTS.

SEE BELOW LEFT



ROAD/LOCAL ACCESS DELINEATED FOR FURTHER EVALUATION. ADDITIONAL STUDIES WILL BE CONDUCTED DURING THE PRELIMINARY ENGINEERING PHASE (30% DESIGN) TO SUBSTANTIATE ITS INCLUSION OR EXCLUSION FROM THE PROPOSED IMPROVEMENTS.

SEE DRAWING CR9131-B (AVE 24WYE)  
 SEE DRAWING CR9159-B (W. CHOWCHILLA)



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
 D. AYELE  
 DRAWN BY  
 C. DELOS REYES  
 CHECKED BY  
 A. SILVER  
 IN CHARGE  
 A. BOONE  
 DATE  
 04/29/2011

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

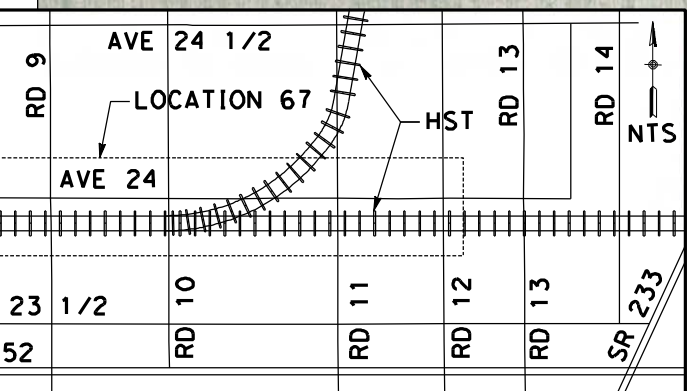
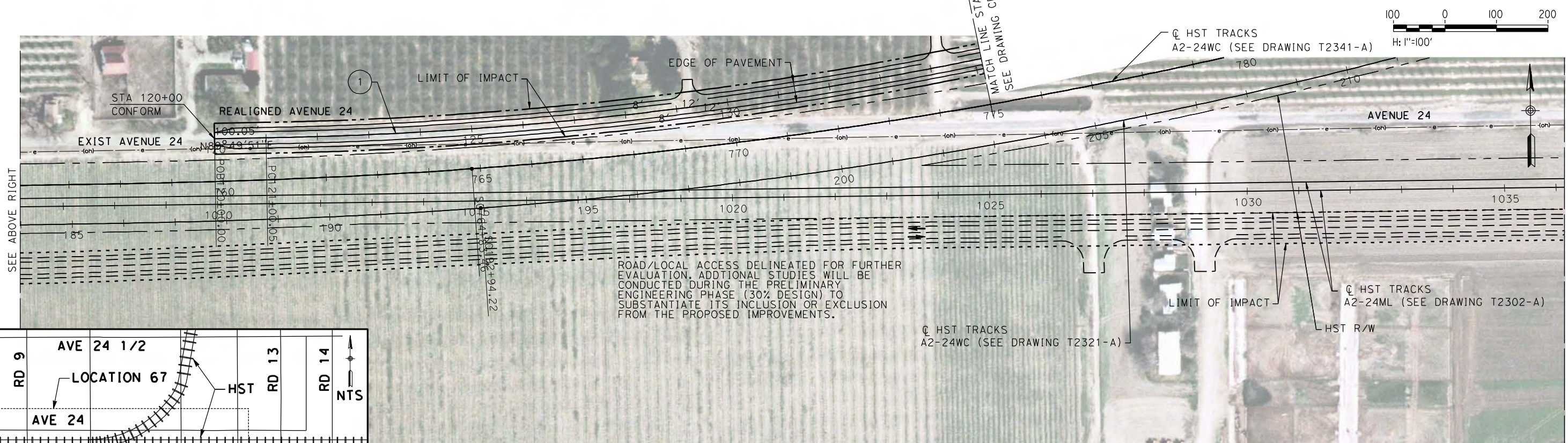
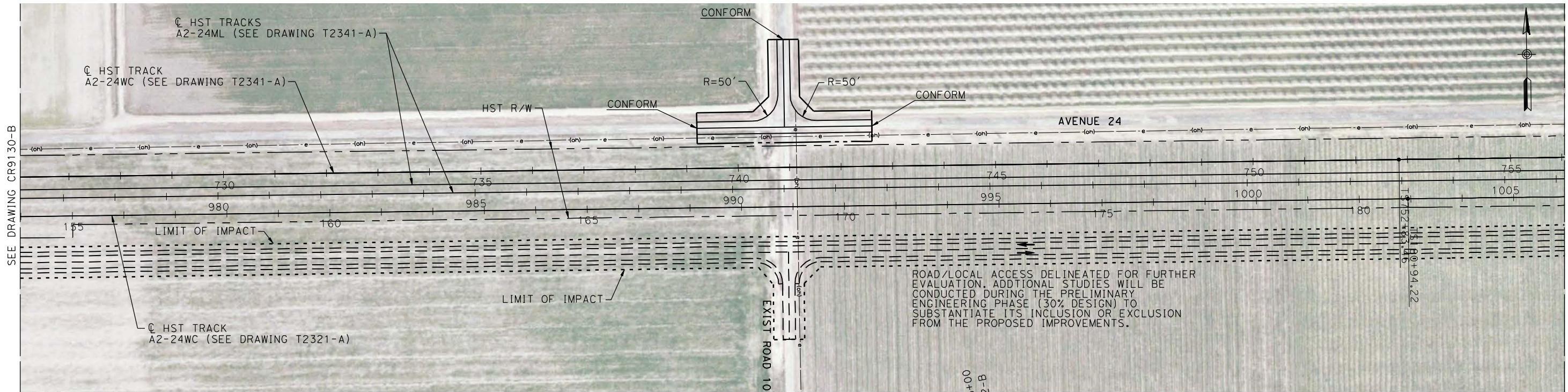


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 MAINLINE/WYE - (AVE 24/WC)  
 SOUTH FRONTAGE ROAD  
 LAYOUT

CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CR9130-B  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###



ReyesC1 4/27/2011 7:04:03 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 3b - ave 24 wye-w.chowchilla\layout\CR9131-B.dgn



**CURVE DATA**

No.	R	$\Delta$	T	L
(1)	7500.00	18°41'5"	1233.88	2445.84

ROAD/LOCAL ACCESS DELINEATED FOR FURTHER EVALUATION. ADDITIONAL STUDIES WILL BE CONDUCTED DURING THE PRELIMINARY ENGINEERING PHASE (30% DESIGN) TO SUBSTANTIATE ITS INCLUSION OR EXCLUSION FROM THE PROPOSED IMPROVEMENTS.

ROAD/LOCAL ACCESS DELINEATED FOR FURTHER EVALUATION. ADDITIONAL STUDIES WILL BE CONDUCTED DURING THE PRELIMINARY ENGINEERING PHASE (30% DESIGN) TO SUBSTANTIATE ITS INCLUSION OR EXCLUSION FROM THE PROPOSED IMPROVEMENTS.

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
 DRAWN BY  
C. DELOS REYES  
 CHECKED BY  
A. SILVER  
 IN CHARGE  
A. BOONE  
 DATE  
04/29/2011

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

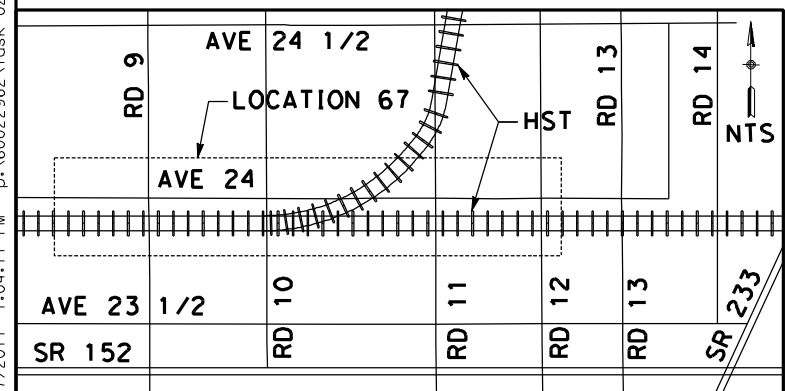
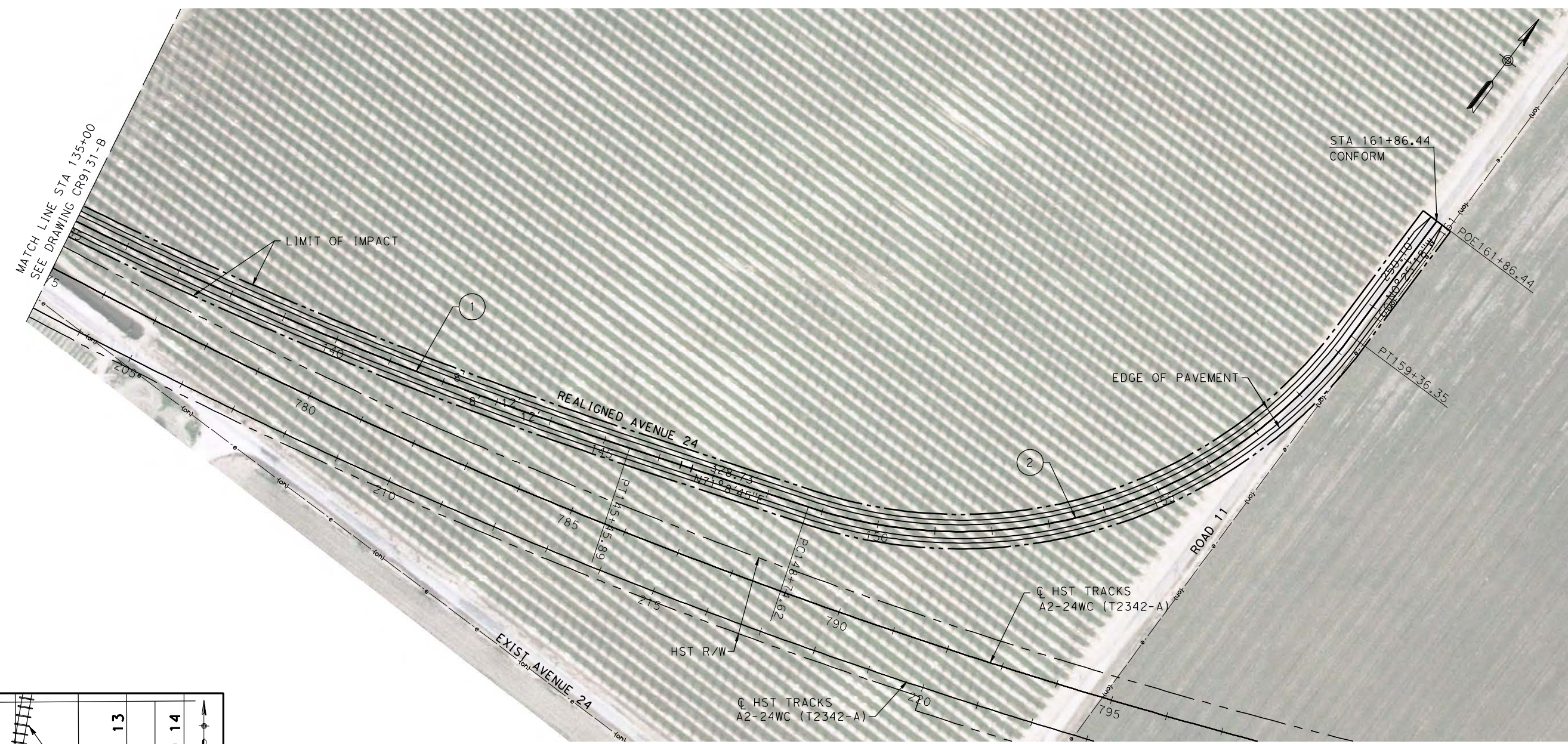


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 MAINLINE/WYE - (AVE 24)  
 SOUTH FRONTAGE ROAD  
 LAYOUT  
 STA 120+00 TO 135+00

CONTRACT NO.  
HSR06-007  
 DRAWING NO.  
CR9131-B  
 SCALE  
AS SHOWN  
 SHEET NO.  
### OF ###

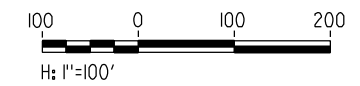


4/27/2011 7:04:17 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla volume 3b - ave 24 wye-w.chowchilla local roads\Layout\CR9132-B.dgn



CURVE DATA

No.	R	Δ	T	L
①	7500.02	18°41'5"	1233.88	2445.84
②	850.00	71°34'4"	612.68	1061.73



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
 D. AYELE  
 DRAWN BY  
 C. DELOS REYES  
 CHECKED BY  
 A. SILVER  
 IN CHARGE  
 A. BOONE  
 DATE  
 04/29/2011

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



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 WYE - (AVE 24)  
 SOUTH FRONTAGE ROAD AVENUE 24  
 LAYOUT  
 STA 135+00 TO STA 161+86.44

CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CR9132-B  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###

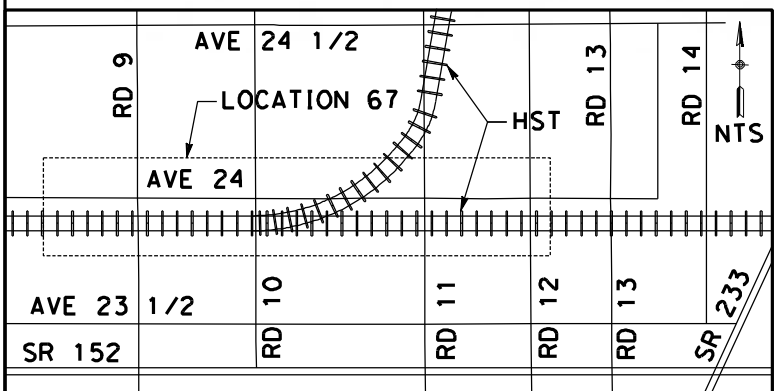


4/27/2011 7:04:30 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 3b - ave 24 wye-w.chowchilla local roads\Layout\CR9133-B.dgn  
 ReyesCI



SEE DRAWING CR9131-B

SEE DRAWING CR9134-B



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**D. AYELE**  
 DRAWN BY  
**C. DELOS REYES**  
 CHECKED BY  
**A. SILVER**  
 IN CHARGE  
**A. BOONE**  
 DATE  
**04/29/2011**

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

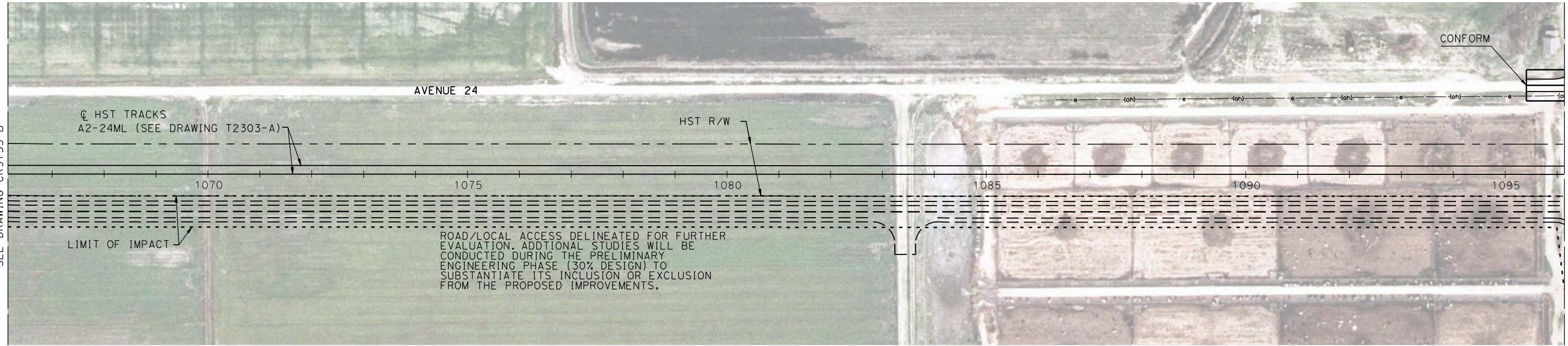


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 MAINLINE - (AVE 24)  
 SOUTH FRONTAGE ROAD  
 LAYOUT

CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CR9133-B  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###

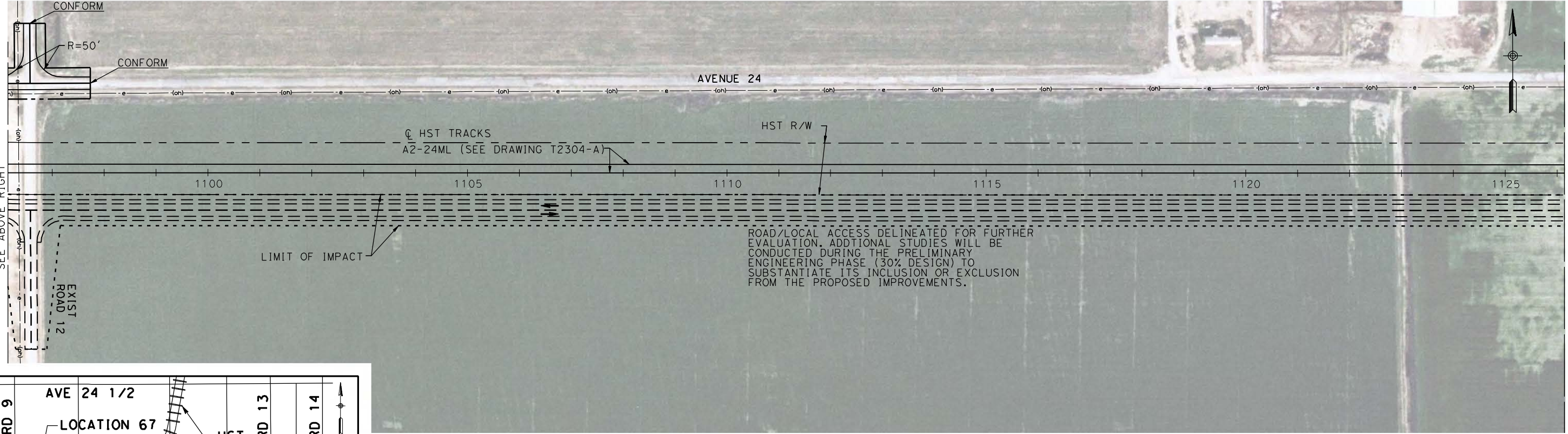


ReyesC1 4/27/2011 7:04:44 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 3b - ave 24 wye-w.chowchilla\local roads\Layout\CR9134-B.dgn



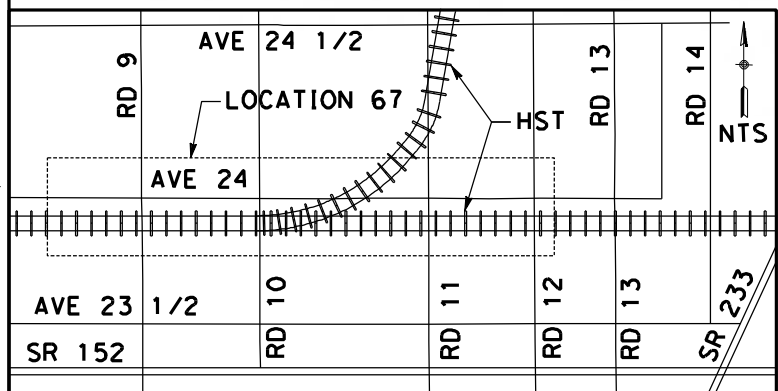
SEE DRAWING CR9133-B

SEE BELOW LEFT



SEE ABOVE RIGHT

SEE DRAWING CR9135-B



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
 DRAWN BY  
C. DELOS REYES  
 CHECKED BY  
A. SILVER  
 IN CHARGE  
A. BOONE  
 DATE  
04/29/2011

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

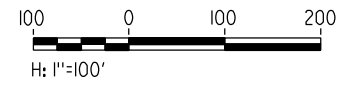
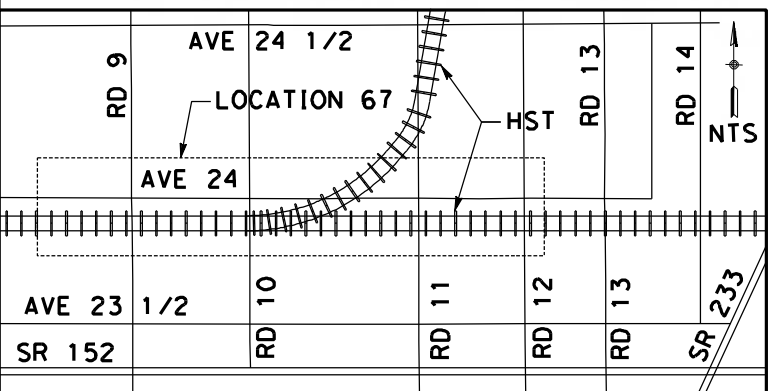
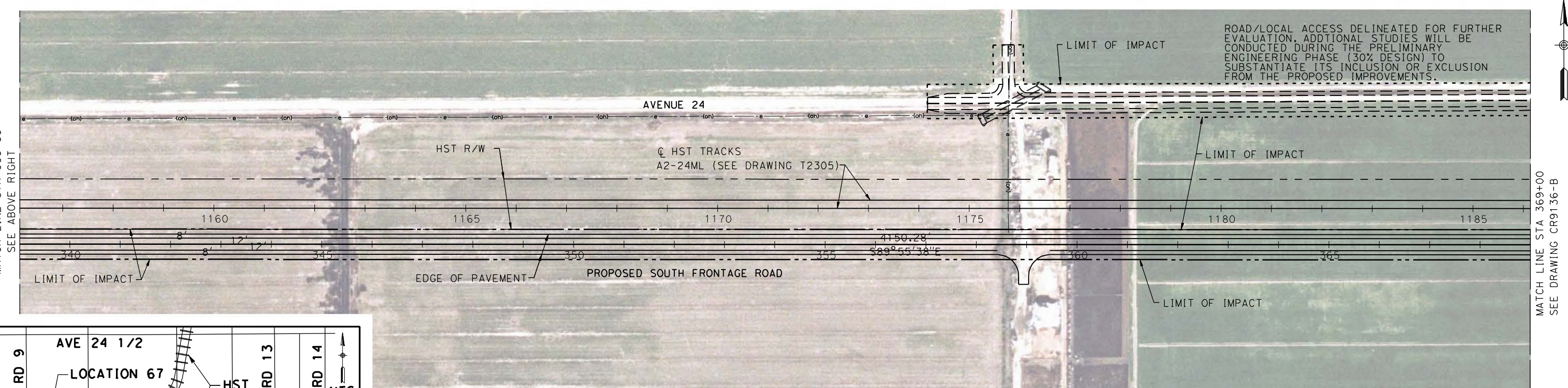
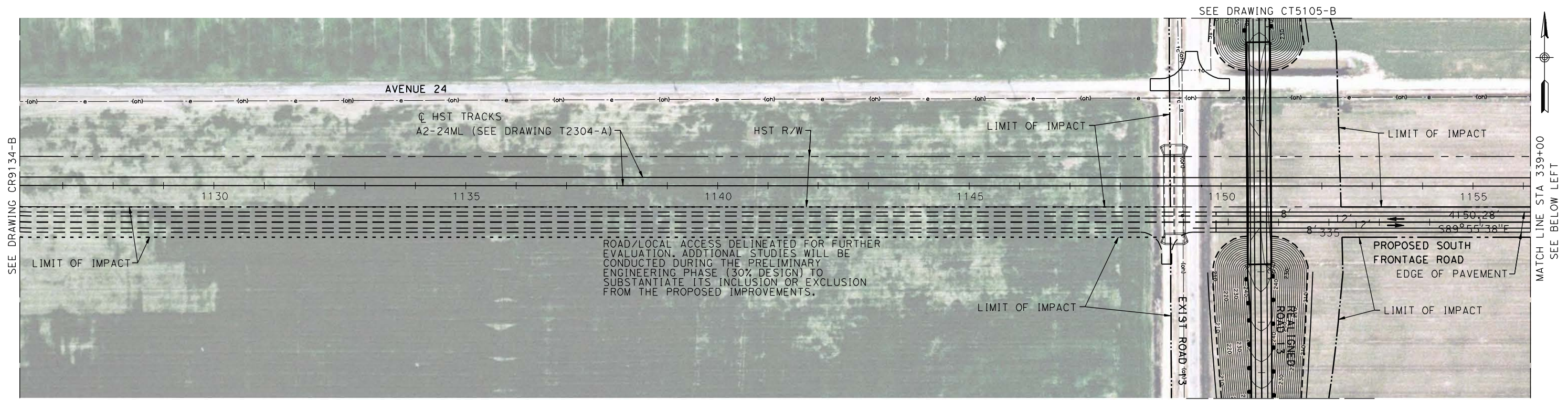


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 MAINLINE - (AVE 24)  
 SOUTH FRONTAGE ROAD AVENUE 24  
 LAYOUT

CONTRACT NO.  
HSR06-007  
 DRAWING NO.  
CR9134-B  
 SCALE  
AS SHOWN  
 SHEET NO.  
### OF ###



4/27/2011 7:04:57 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 3b - ave 24 wye-w.chowchilla local roads\Layout\CR9135-B.dgn



DESIGNED BY  
D. AYELE  
DRAWN BY  
C. DELOS REYES  
CHECKED BY  
A. SILVER  
IN CHARGE  
A. BOONE  
DATE  
04/29/2011

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

**NOT FOR**  
**CONSTRUCTION**



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

UPRR/SR99 MAINLINE - (AVE 24)  
NORTH & SOUTH FRONTAGE ROAD  
LAYOUT  
STA 332+76.37 TO STA 369+00

CONTRACT NO.  
HSR06-007

DRAWING NO.  
CR9135-B

SCALE  
AS SHOWN

SHEET NO.  
### OF ###

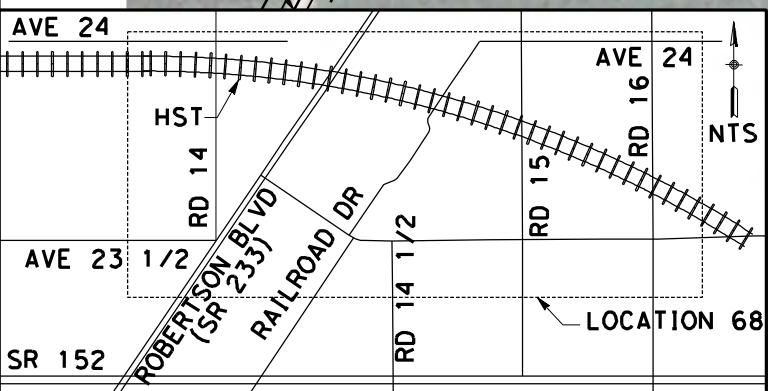
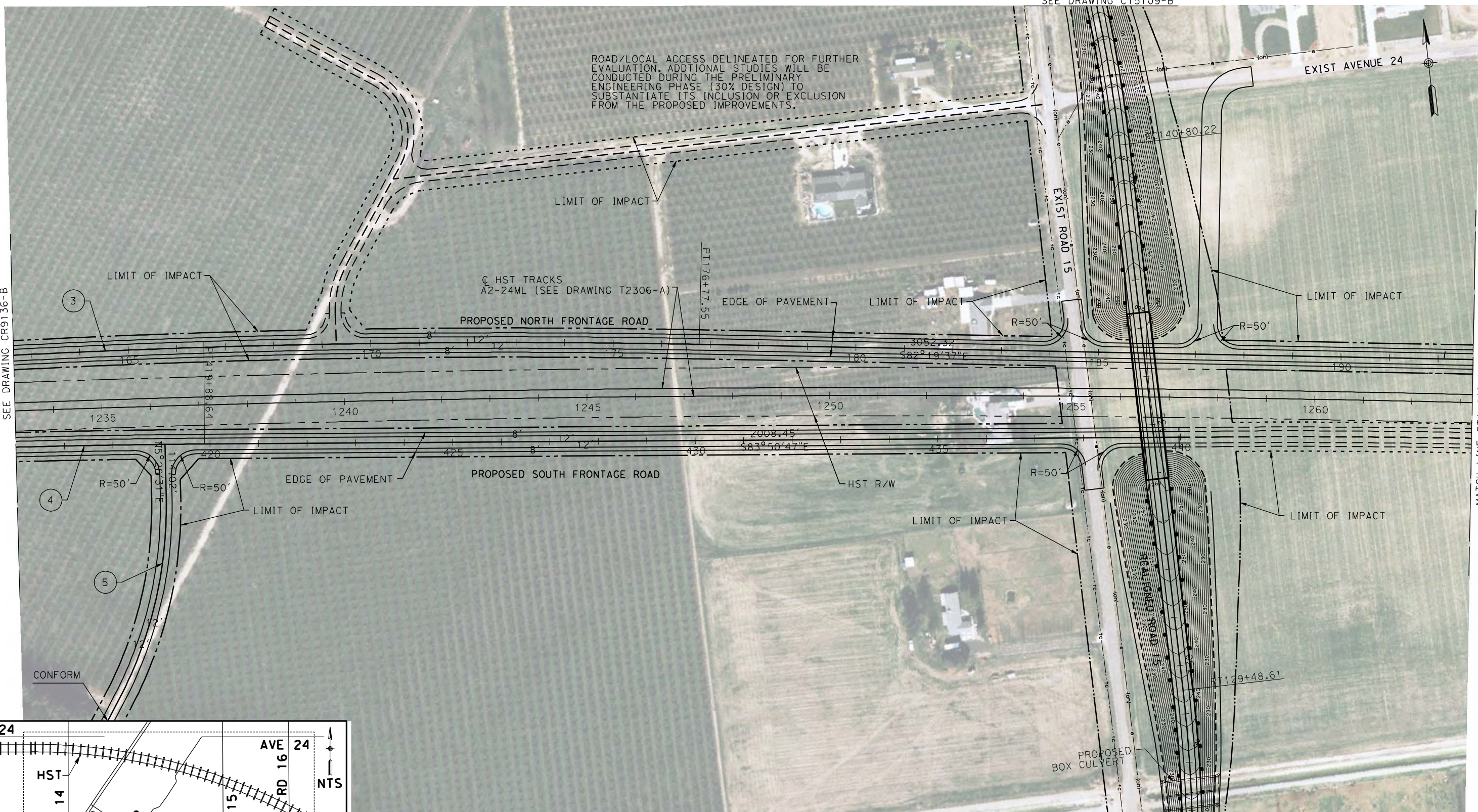
REV	DATE	BY	CHK	APP	DESCRIPTION





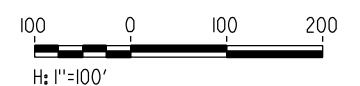


4/27/2011 7:05:22 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla local roads\volume 3b - ave 24 wye-w.chowchilla local roads\layout\CR9137-B.dgn



CURVE DATA

No.	R	Δ	T	L
③	20000.04	4° 48' 23"	839.37	1677.76
④	20000.04	4° 10' 55"	730.20	1459.76
⑤	850.00	28° 34' 7"	216.41	423.82



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE

DRAWN BY  
C. DELOS REYES

CHECKED BY  
A. SILVER

IN CHARGE  
A. BOONE

DATE  
04/29/2011

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

**NOT FOR**  
**CONSTRUCTION**



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

UPRR/SR99 MAINLINE - (AVE 24)  
NORTH & SOUTH FRONTAGE ROAD  
LAYOUT

STA 162+63.49 TO 192+72.18 & STA 416 TO 440

CONTRACT NO.  
HSR06-007

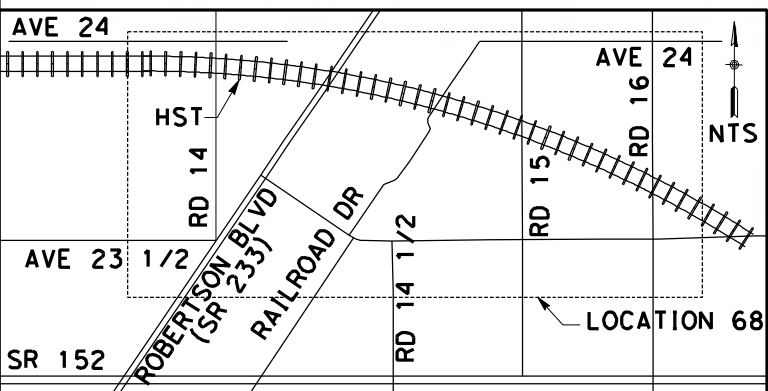
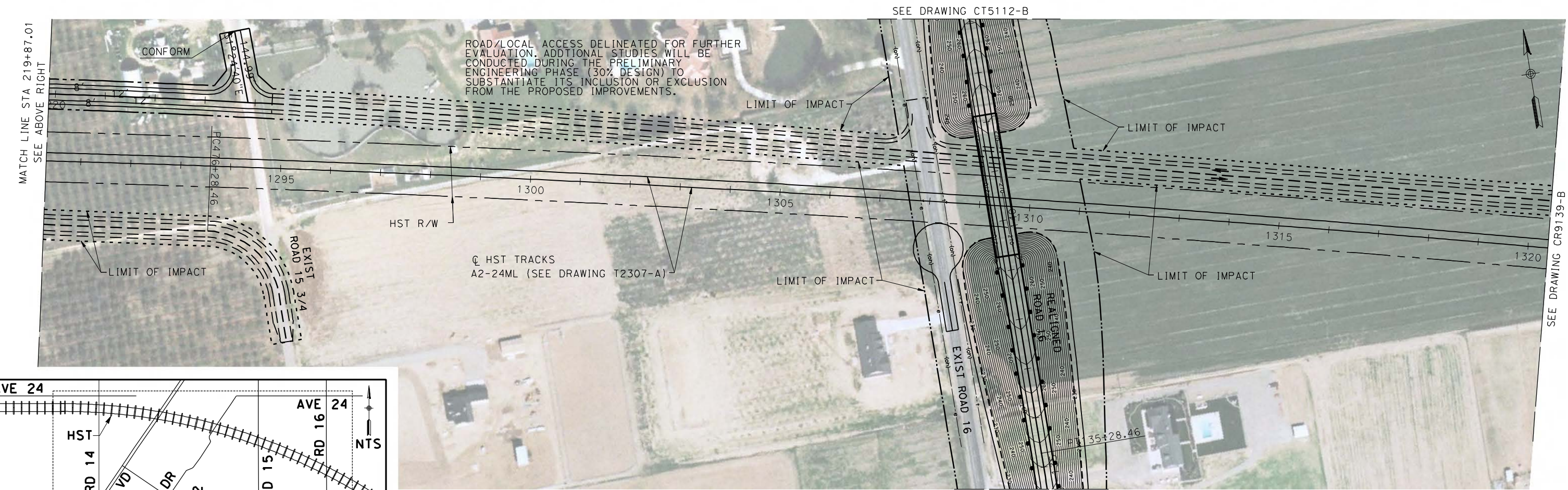
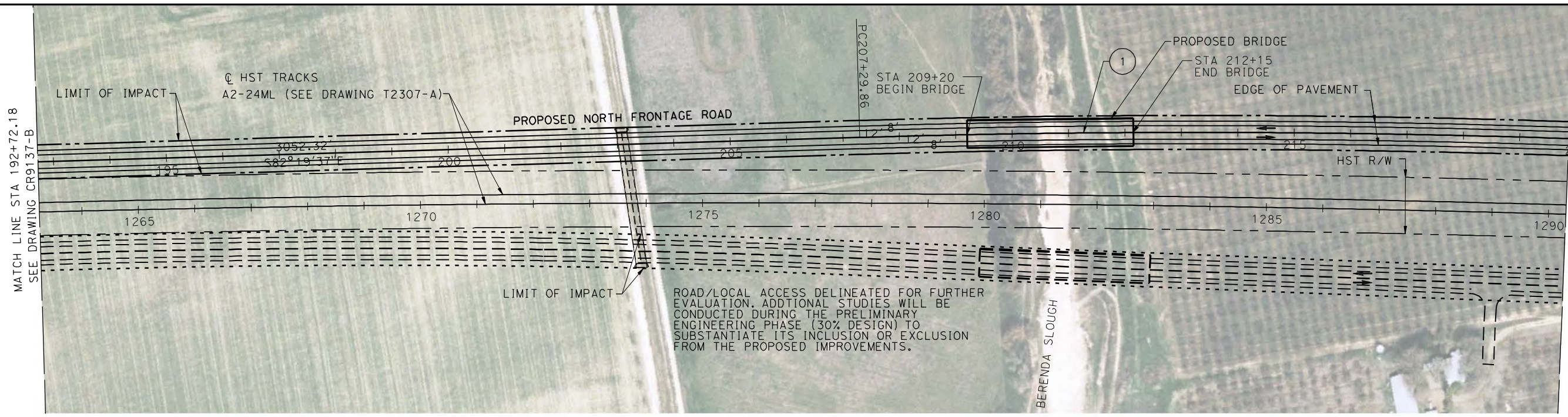
DRAWING NO.  
CR9137-B

SCALE  
AS SHOWN

SHEET NO.  
### OF ###

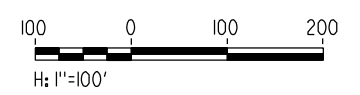


4/27/2011 7:05:38 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 3b - ave 24 wye-w.chowchilla local roads\layout\CR9138-B.dgn  
 ReyesC1



**CURVE DATA**

No.	R	Δ	T	L
①	20000.00	6° 8' 17"	1072.32	2142.59



DESIGNED BY  
**D. AYELE**  
 DRAWN BY  
**C. DELOS REYES**  
 CHECKED BY  
**A. SILVER**  
 IN CHARGE  
**A. BOONE**  
 DATE  
**04/29/2011**

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



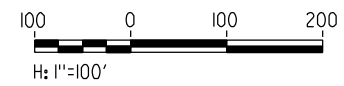
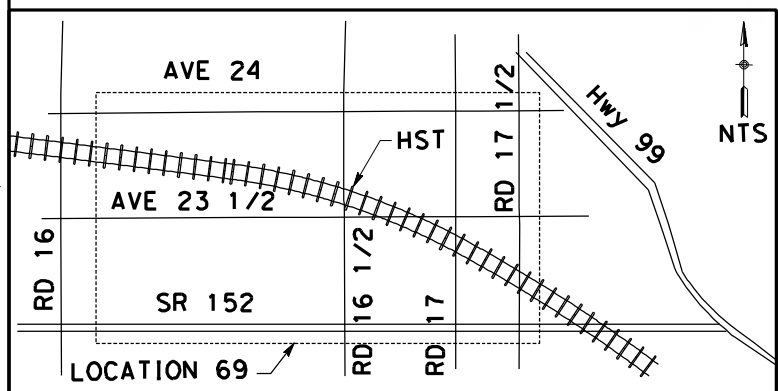
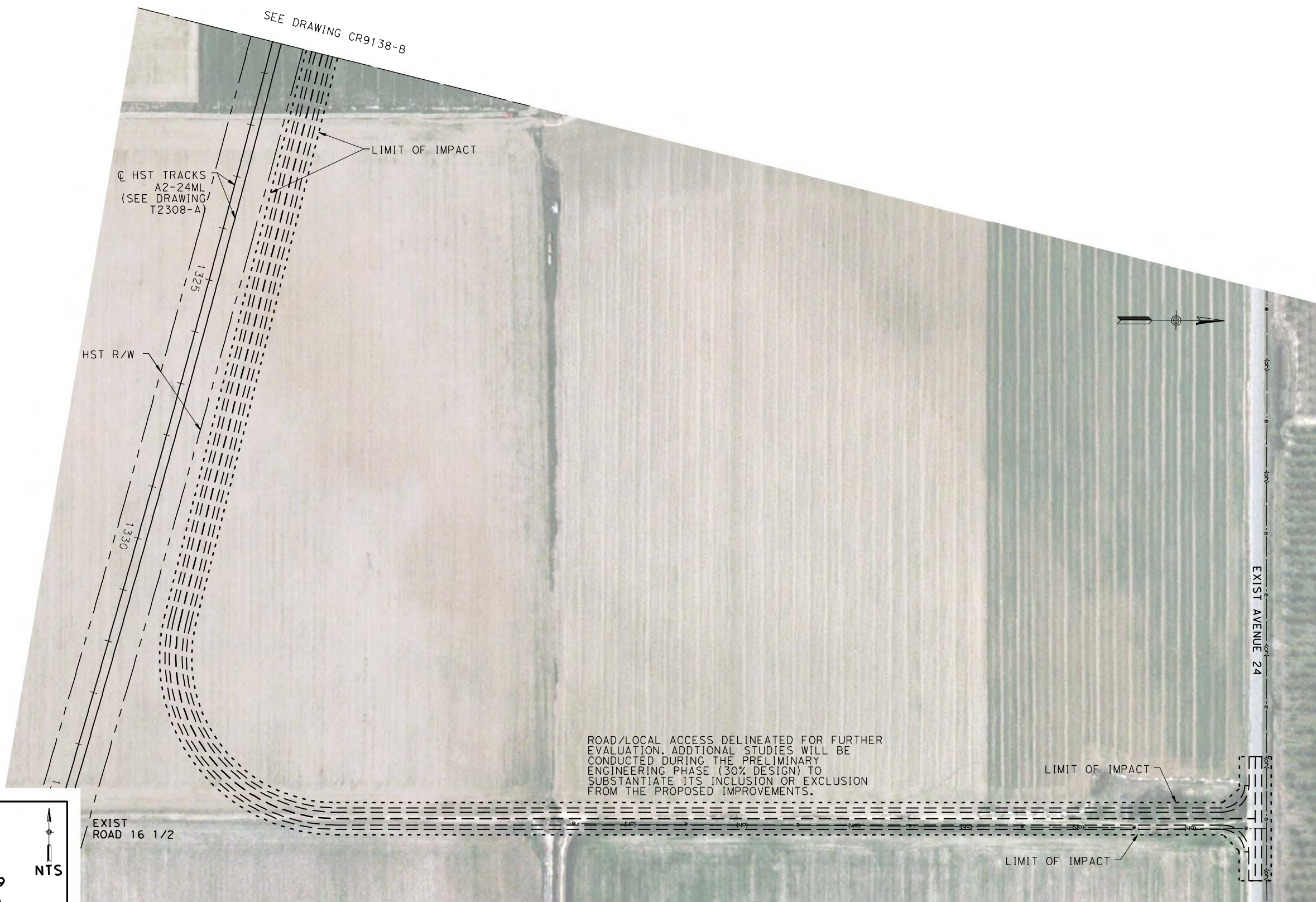
**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 MAINLINE - (AVE 24)  
 NORTH & SOUTH FRONTAGE ROAD  
 LAYOUT  
 192+72.18 TO 224+34.28

CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CR9138-B  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###

REV	DATE	BY	CHK	APP	DESCRIPTION



4/27/2011 7:05:52 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 3b - ave 24 wye-w.chowchilla local roads\Layout\CR9139-B.dgn  
 ReyesC1



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**D. AYELE**  
 DRAWN BY  
**C. DELOS REYES**  
 CHECKED BY  
**A. SILVER**  
 IN CHARGE  
**A. BOONE**  
 DATE  
**04/29/2011**

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

**AECOM**  
 Technical Services, Inc.  
 2020 L Street, Suite 300  
 Sacramento, CA 95811  
**CH2MHILL**

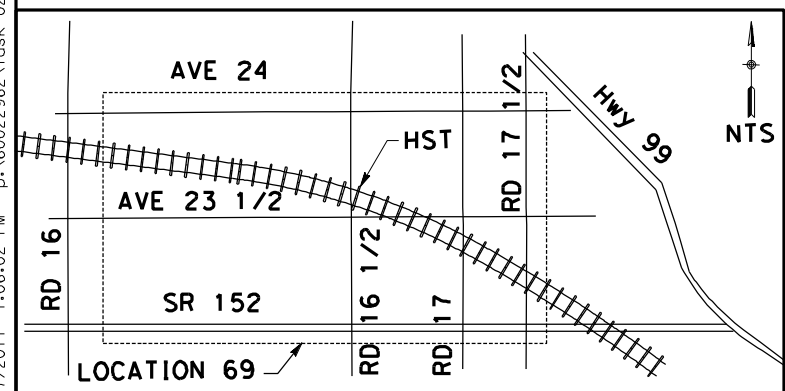


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 MAINLINE - (AVE 24)  
 NORTH FRONTAGE ROAD & ROAD 16 1/2  
 LAYOUT

CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CR9139-B  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###

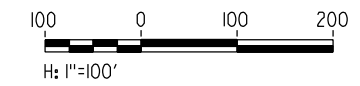


4/27/2011 7:06:02 PM p:\60022962\task\_02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla local roads\layout\CR9140-B.dgn  
 ReyesC1



CURVE DATA

No.	R	Δ	T	L
①	2000.00	16°55'26"	297.54	590.75
②	20000.00	3°0'28"	525.07	1049.90



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
 D. AYELE  
 DRAWN BY  
 C. DELOS REYES  
 CHECKED BY  
 A. SILVER  
 IN CHARGE  
 A. BOONE  
 DATE  
 04/29/2011

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

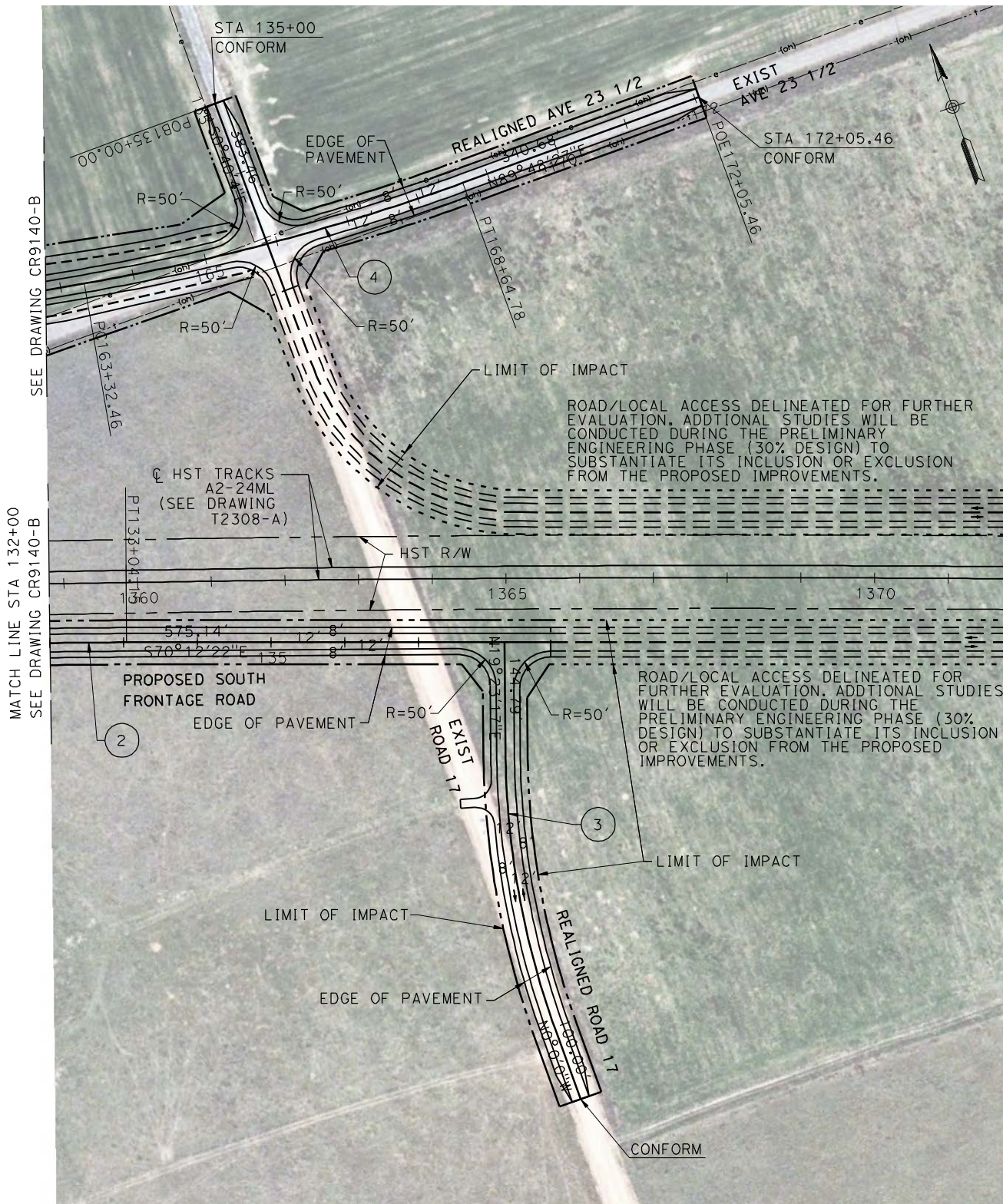


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 MAINLINE - (AVE 24)  
 SOUTH FRONTAGE ROAD & ROAD 16 1/2  
 LAYOUT  
 STA 112+99.41 TO STA 132+00

CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CR9140-B  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###



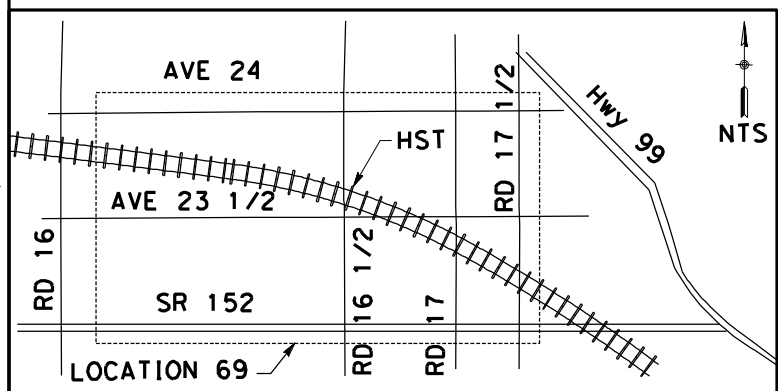
4/27/2011 7:06:12 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 3b - ave 24 wye-w.chowchilla local roads\layout\CR9141-B.dgn



SEE DRAWING CR9140-B

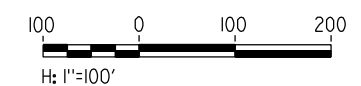
MATCH LINE STA 132+00  
SEE DRAWING CR9140-B

SEE DRAWING CR9142-B



CURVE DATA

No.	R	Δ	T	L
②	20000.00	3°0'28"	525.07	1049.90
③	1150.00	19°23'17"	196.45	389.14
④	3000.00	10°10'0"	266.86	532.33



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
 DRAWN BY  
C. DELOS REYES  
 CHECKED BY  
A. SILVER  
 IN CHARGE  
A. BOONE  
 DATE  
04/29/2011

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



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 MAINLINE - (AVE 24)  
 NORTH & SOUTH FRONTAGE ROAD AVENUE 24  
 LAYOUT  
 STA 132+00 TO STA 138+79.29

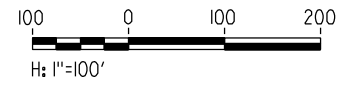
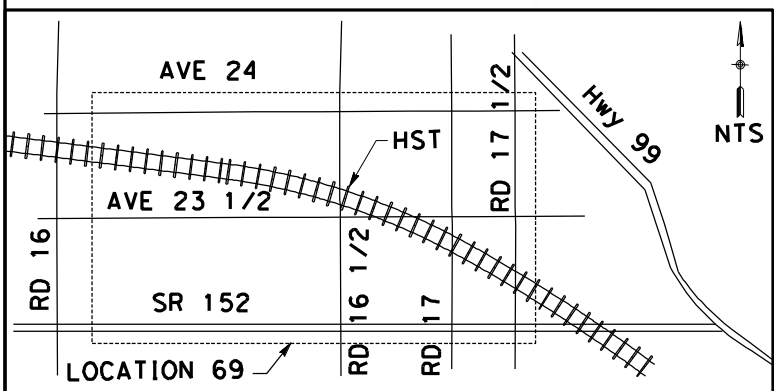
CONTRACT NO.  
HSR06-007  
 DRAWING NO.  
CR9141-B  
 SCALE  
AS SHOWN  
 SHEET NO.  
### OF ###



4/27/2011 7:06:23 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla local roads\volume 3b - ave 24 wye-w.chowchilla local roads\Layout\CR9142-B.dgn  
 ReyesC1



SEE DRAWING CR9141-B



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**D. AYELE**  
 DRAWN BY  
**C. DELOS REYES**  
 CHECKED BY  
**A. SILVER**  
 IN CHARGE  
**A. BOONE**  
 DATE  
**04/29/2011**

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

**AECOM**  
 Technical Services, Inc.  
 2020 L Street, Suite 300  
 Sacramento, CA 95811  
**CH2MHILL**

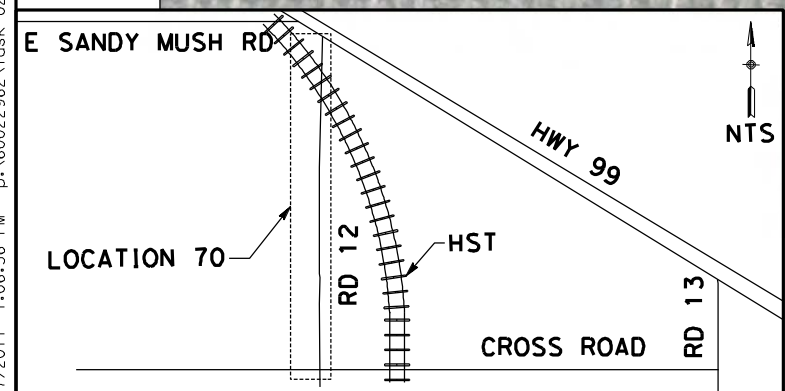
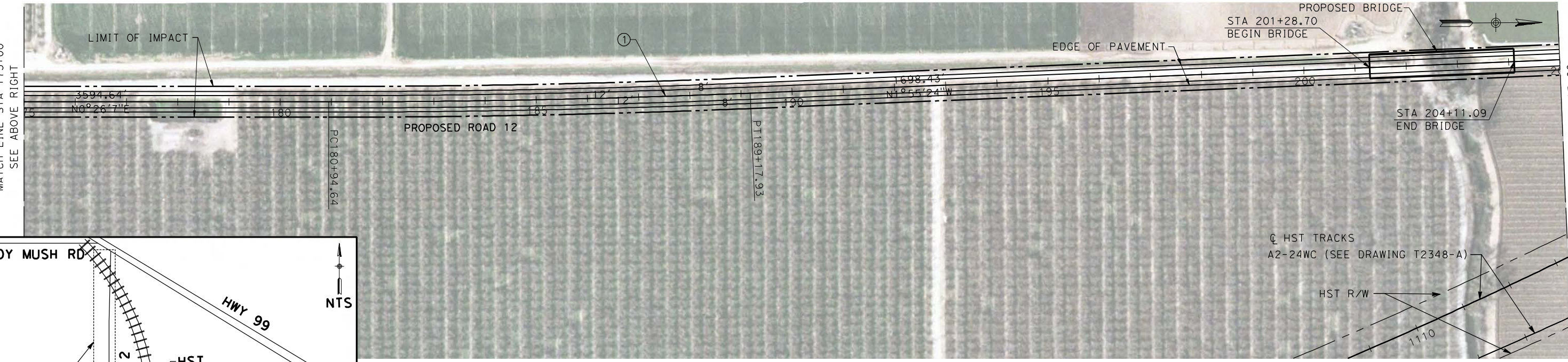
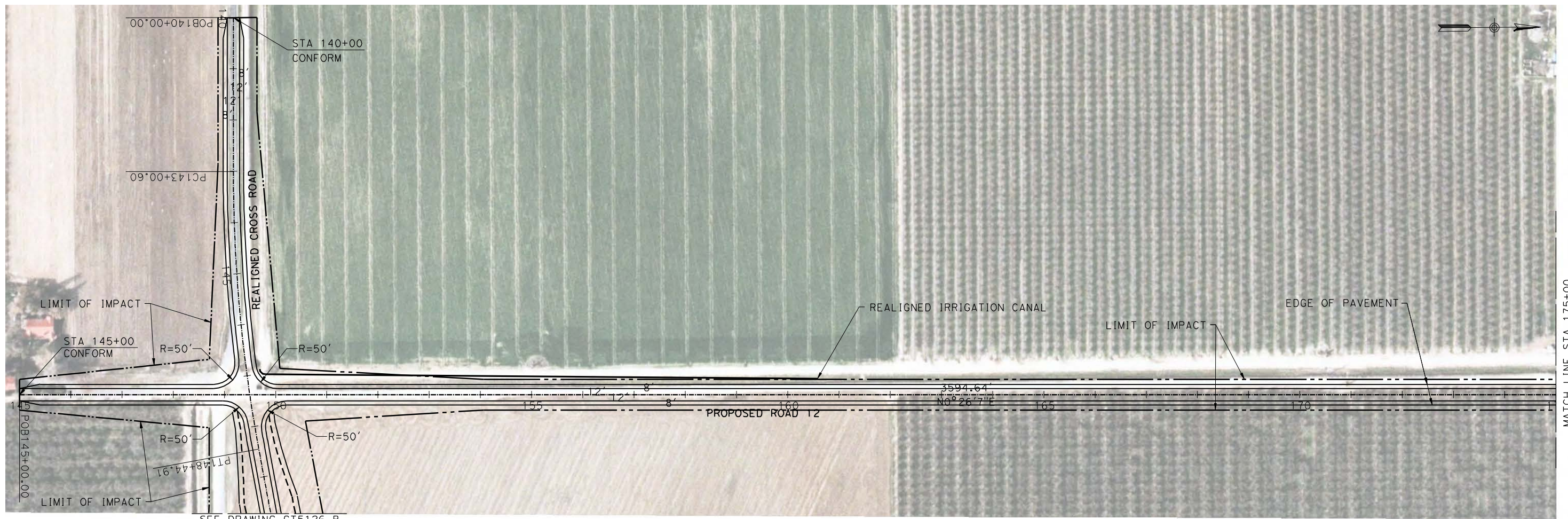
**CALIFORNIA**  
 HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 MAINLINE - (AVE 24)  
 NORTH & SOUTH FRONTAGE ROAD AVENUE 24  
 LAYOUT

CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CR9142-B  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###

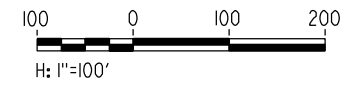


4/27/2011 7:06:36 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla local roads\volume 3b - ave 24 wye-w.chowchilla local roads\Layout\CR9143-B.dgn  
 ReyesC1



**CURVE DATA**

No.	R	Δ	T	L
①	20000.00	87° 38' 29"	411.70	823.29



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
 DRAWN BY  
C. DELOS REYES  
 CHECKED BY  
A. SILVER  
 IN CHARGE  
A. BOONE  
 DATE  
04/29/2011

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



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 WYE - (AVE 24)  
 ROAD 12  
 LAYOUT  
 STA 145+00 TO STA 205+00

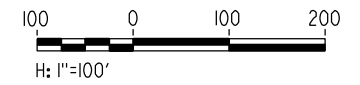
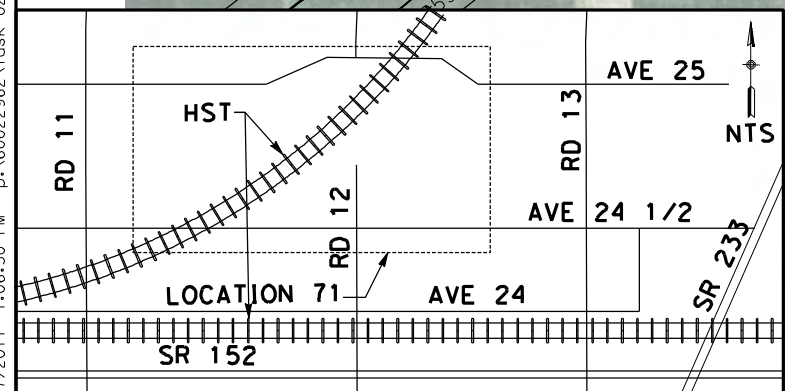
CONTRACT NO.  
HSR06-007  
 DRAWING NO.  
CR9143-B  
 SCALE  
AS SHOWN  
 SHEET NO.  
### OF ###

MATCH LINE STA 175+00  
SEE BELOW LEFT

MATCH LINE STA 205+00  
SEE DRAWING CR9119-B



4/27/2011 7:06:50 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 3b - ave 24 wye-w.chowchilla local roads\layout\CR9144-B.dgn



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
 DRAWN BY  
C. DELOS REYES  
 CHECKED BY  
A. SILVER  
 IN CHARGE  
A. BOONE  
 DATE  
04/29/2011

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



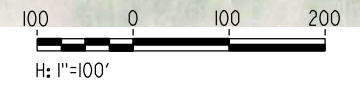
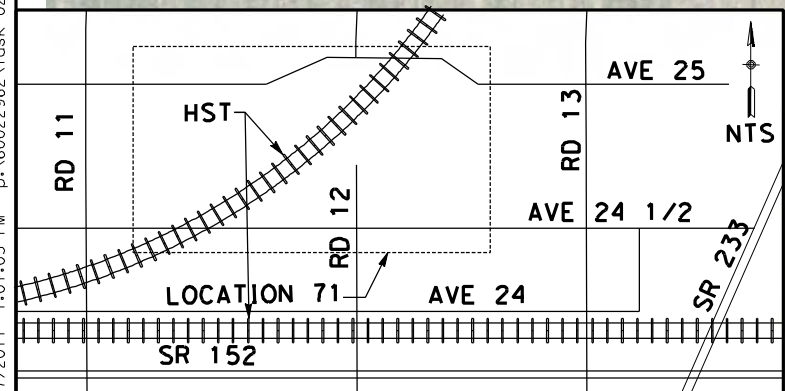
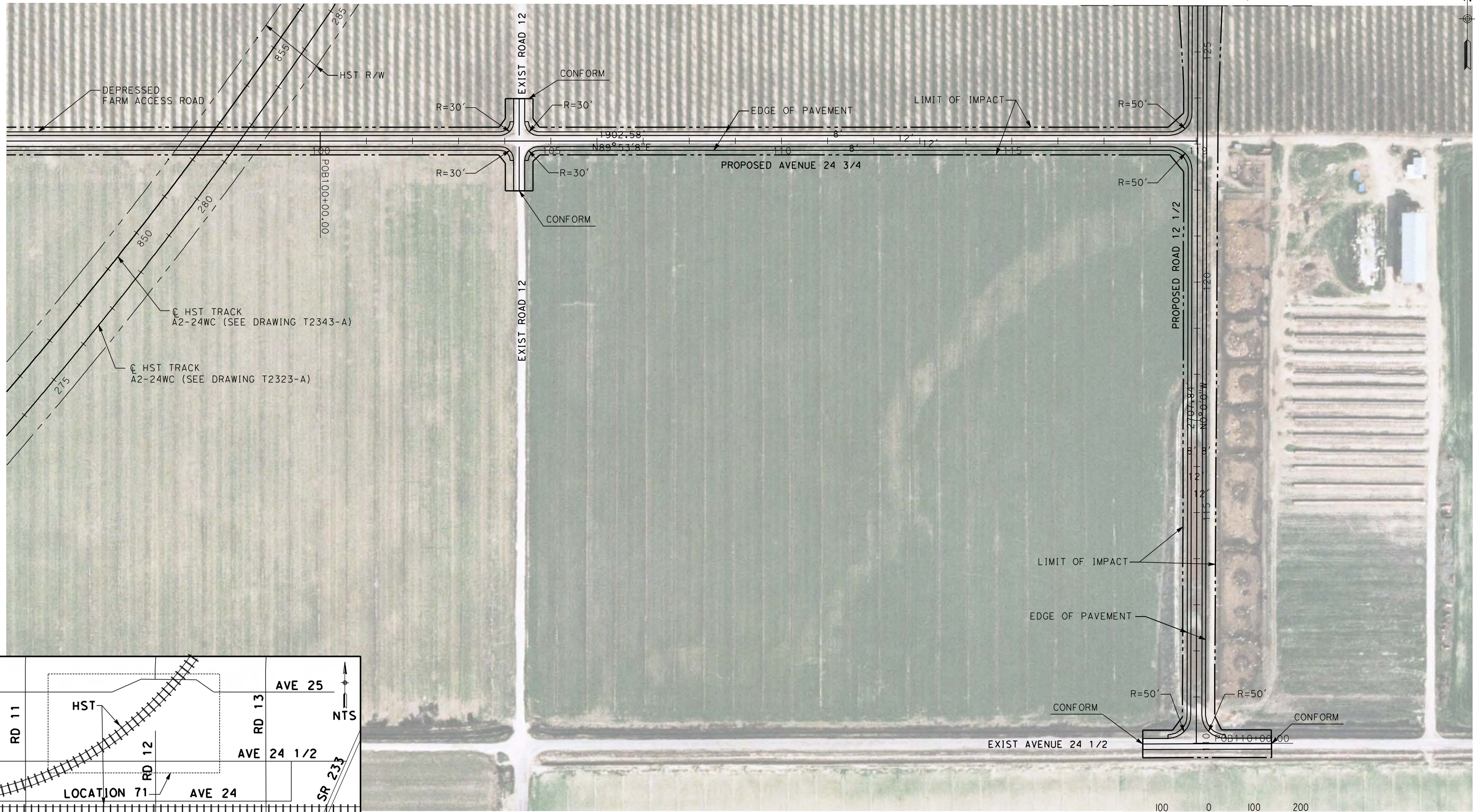
**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 WYE - (AVE 24)  
 AVENUE 24 1/2  
 LAYOUT

CONTRACT NO.  
HSR06-007  
 DRAWING NO.  
CR9144-B  
 SCALE  
AS SHOWN  
 SHEET NO.  
### OF ###



4/27/2011 7:07:05 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 3b - ave 24 wye-w.chowchilla local roads\Layout\CR9145-B.dgn

MATCH LINE STA 126+00  
SEE DRAWING CR9146-B



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
DRAWN BY  
C. DELOS REYES  
CHECKED BY  
A. SILVER  
IN CHARGE  
A. BOONE  
DATE  
04/29/2011

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

**NOT FOR**  
**CONSTRUCTION**

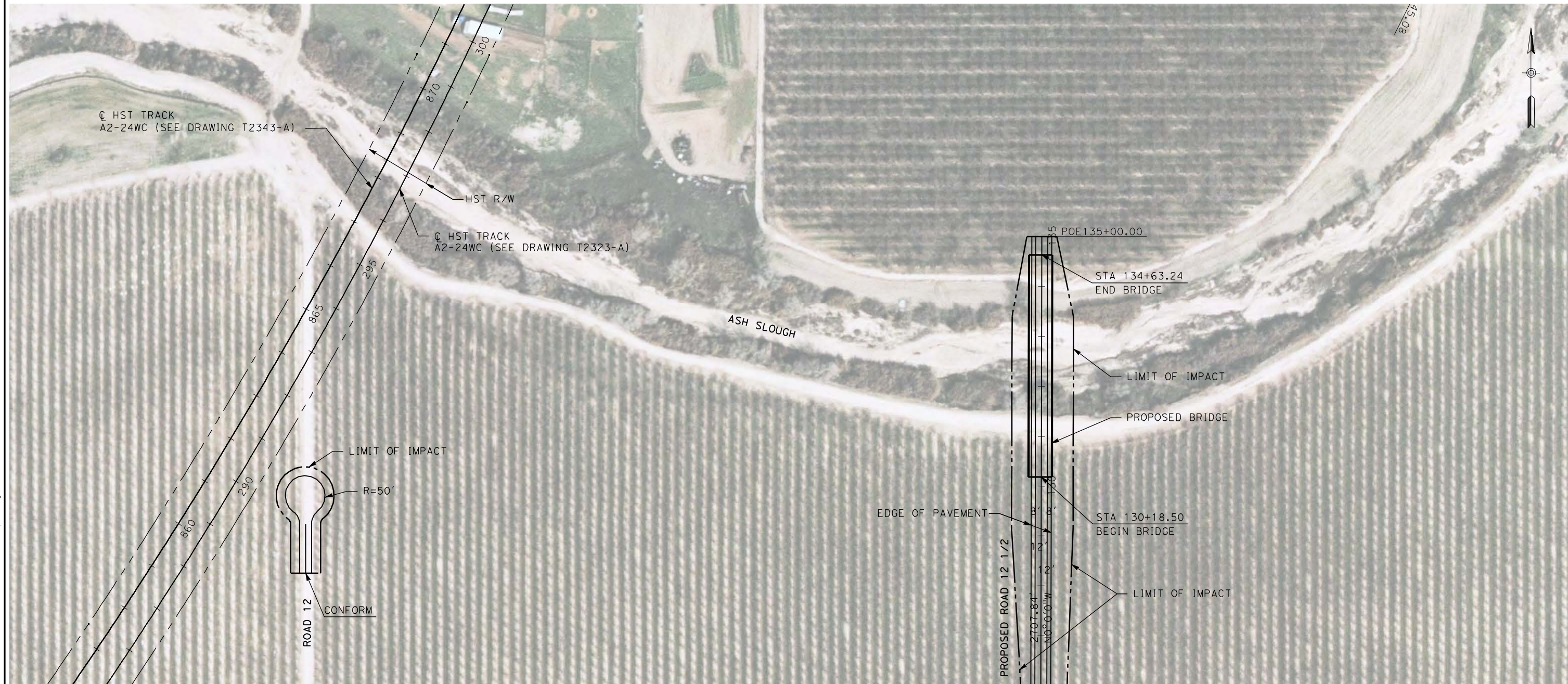


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
UPRR/SR99 WYE - (AVE 24)  
ROAD 12 1/4 & AVENUE 24 1/2  
LAYOUT  
STA 110+00 TO STA 126+00

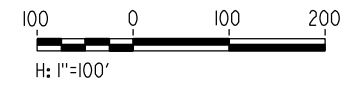
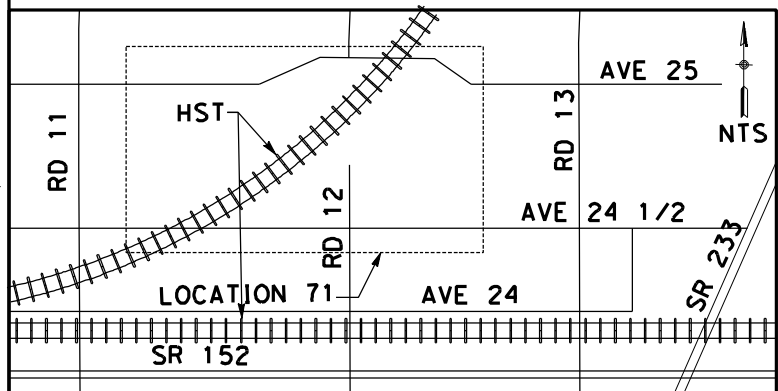
CONTRACT NO.  
HSR06-007  
DRAWING NO.  
CR9145-B  
SCALE  
AS SHOWN  
SHEET NO.  
### OF ###



4/27/2011 7:07:18 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 3b - ave 24 wye-w.chowchilla local roads\Layout\CR9146-B.dgn  
 ReyesC1



MATCH LINE STA 126+00  
SEE DRAWING CR9145-B



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
 DRAWN BY  
C. DELOS REYES  
 CHECKED BY  
A. SILVER  
 IN CHARGE  
A. BOONE  
 DATE  
04/29/2011

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

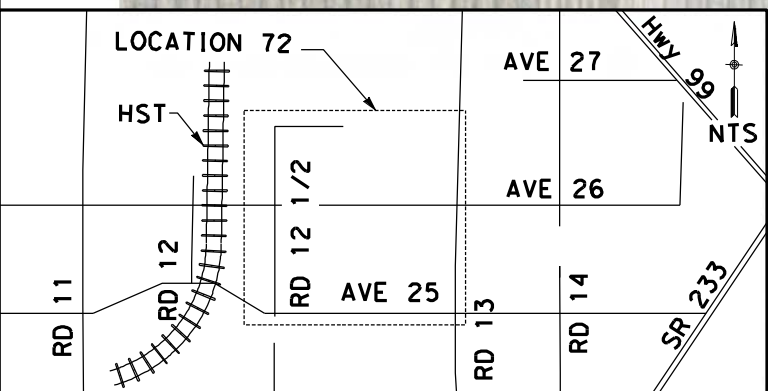
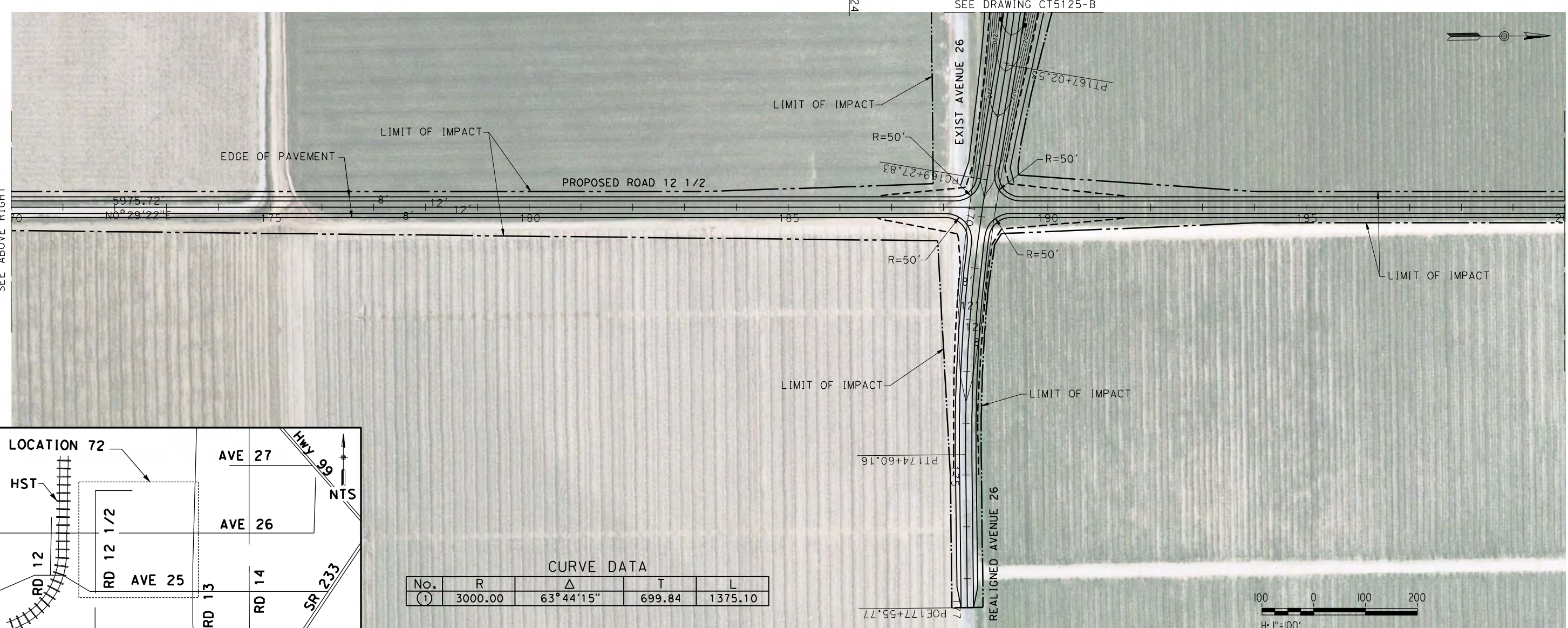
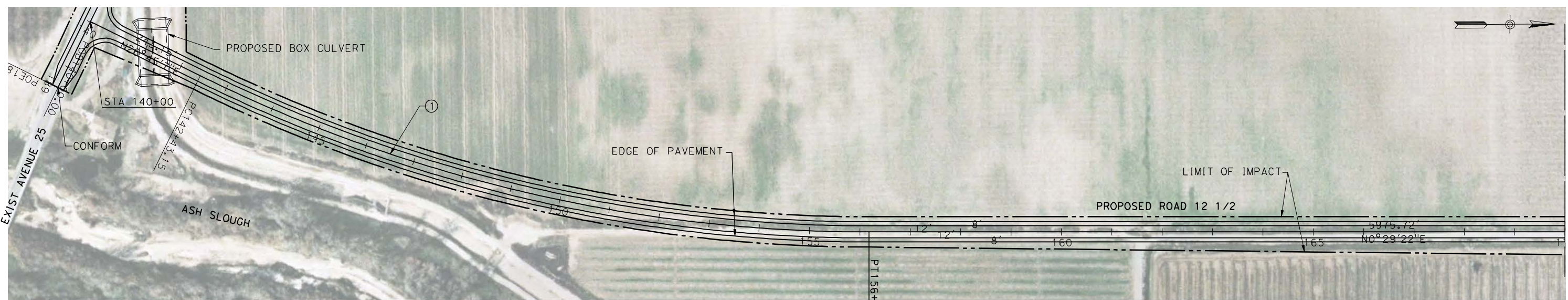


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 WYE - (AVE 24)  
 ROAD 12 1/4  
 LAYOUT  
 STA 126+00 TO STA 135+00

CONTRACT NO.  
HSR06-007  
 DRAWING NO.  
CR9146-B  
 SCALE  
AS SHOWN  
 SHEET NO.  
### OF ###

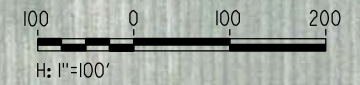


4/27/2011 7:07:30 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 3b - ave 24 wye - w.chowchilla local roads\layout\CR9147-B.dgn  
 ReyesC1



CURVE DATA

No.	R	$\Delta$	T	L
(1)	3000.00	63°44'15"	699.84	1375.10



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**D. AYELE**  
 DRAWN BY  
**C. DELOS REYES**  
 CHECKED BY  
**A. SILVER**  
 IN CHARGE  
**A. BOONE**  
 DATE  
**04/29/2011**

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



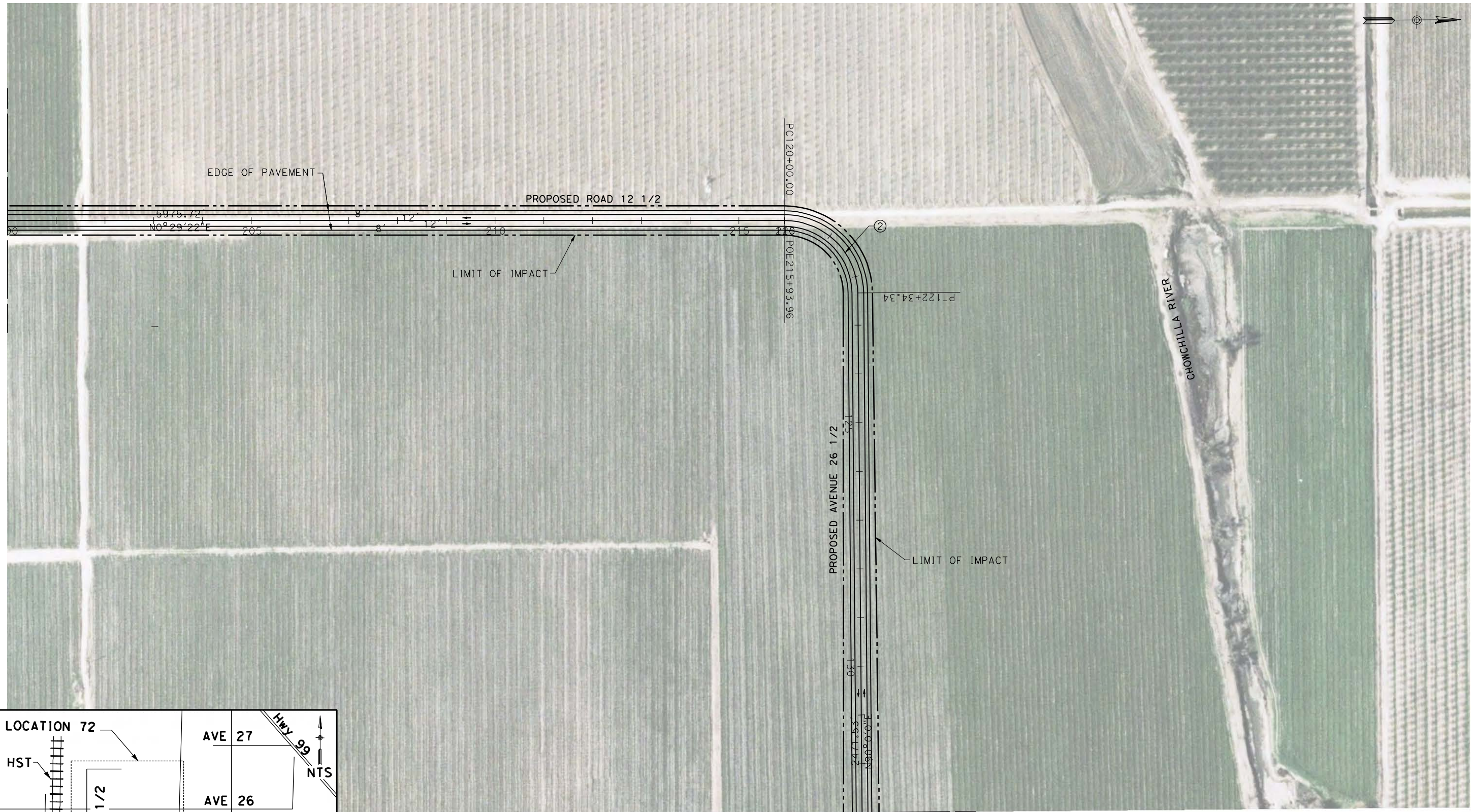
**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 WYE - (AVE 24)  
 ROAD 12 1/2  
 LAYOUT  
 STA 140+00 TO STA 200+00

CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CR9147-B  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###

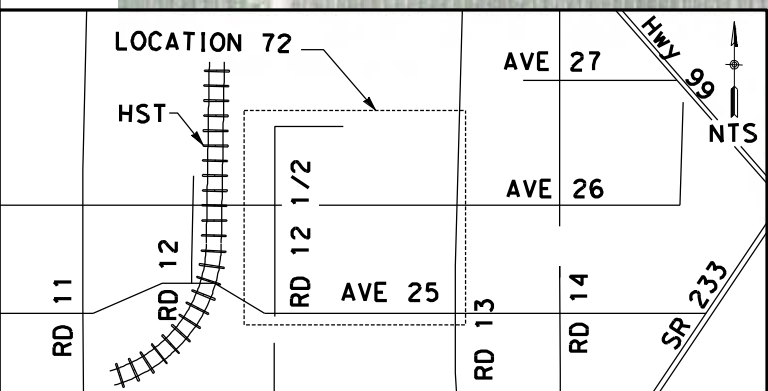


4/27/2011 7:07:44 PM p:\60022962\task\_02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 3b - ave 24 wye & w. chowchilla local roads\layout\CR9148-B.dgn

MATCH LINE STA 200+00  
SEE DRAWING CR9147-B

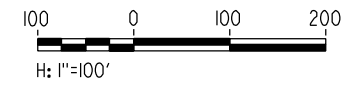


MATCH LINE STA 133+00  
SEE DRAWING CR9149-B



CURVE DATA

No.	R	Δ	T	L
(2)	150.00	0° 29' 22"	148.72	234.34

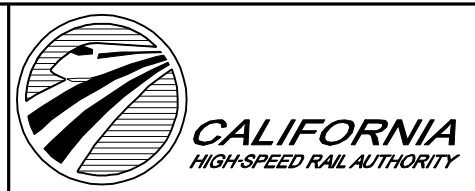


REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
DRAWN BY  
C. DELOS REYES  
CHECKED BY  
A. SILVER  
IN CHARGE  
A. BOONE  
DATE  
04/29/2011

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

**NOT FOR**  
**CONSTRUCTION**



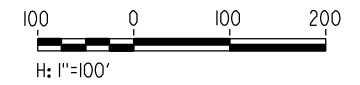
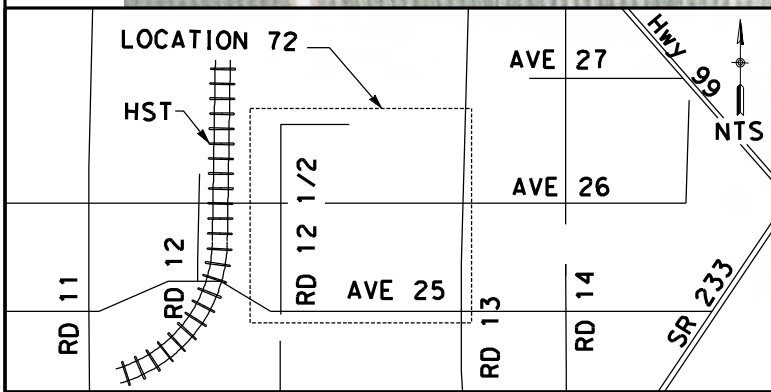
**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
UPRR/SR99 WYE - (AVE 24)  
ROAD 12 1/2 & AVENUE 26 1/2  
LAYOUT  
STA 200+00 TO STA 133+00

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
CR9148-B  
SCALE  
AS SHOWN  
SHEET NO.  
### OF ###



4/27/2011 7:07:57 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 3b - ave 24 wye - w.chowchilla local roads\Layout\CR9149-B.dgn

MATCH LINE STA 133+00  
SEE DRAWING CR9148-B



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
DRAWN BY  
C. DELOS REYES  
CHECKED BY  
A. SILVER  
IN CHARGE  
A. BOONE  
DATE  
04/29/2011

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

**NOT FOR**  
**CONSTRUCTION**



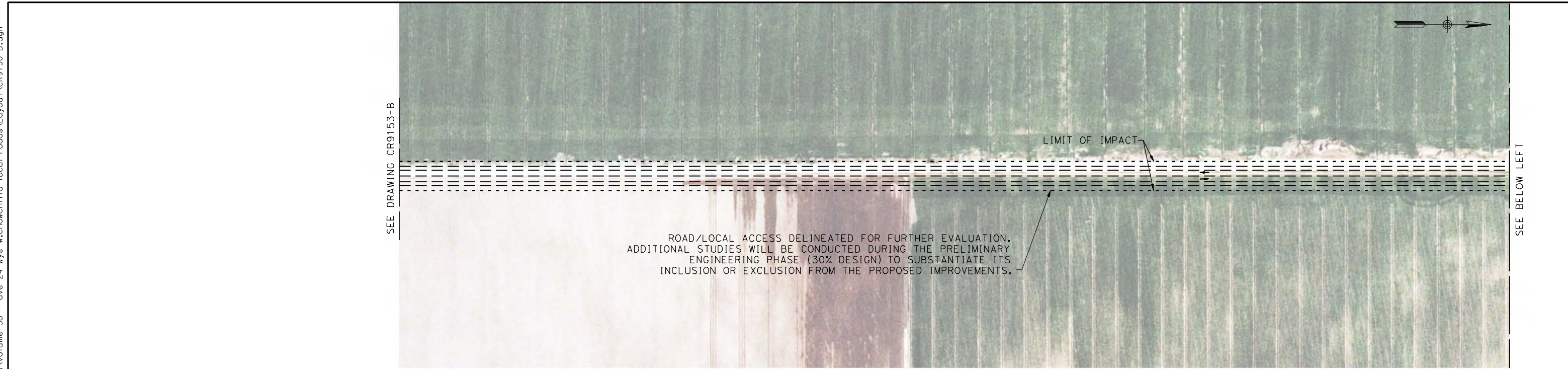
**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**

UPRR/SR99 WYE - (AVE 24)  
AVENUE 26 1/2  
LAYOUT  
STA 133+00 TO STA 147+05.87

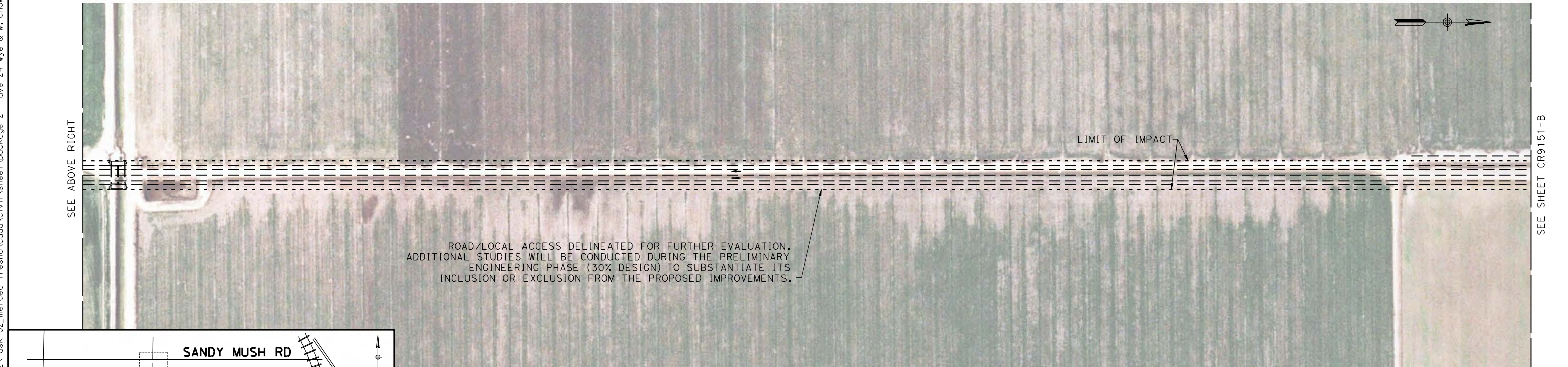
CONTRACT NO.  
HSR06-007  
DRAWING NO.  
CR9149-B  
SCALE  
AS SHOWN  
SHEET NO.  
### OF ###



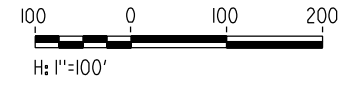
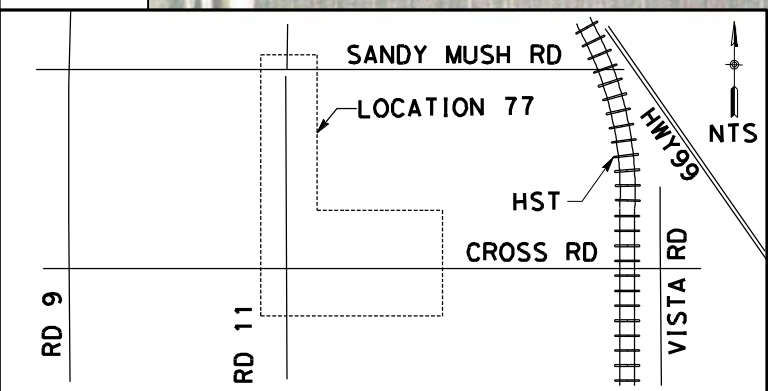
4/27/2011 7:08:14 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 3b - ave 24 wye-w.chowchilla local roads\Layout\CR9150-B.dgn



ROAD/LOCAL ACCESS DELINEATED FOR FURTHER EVALUATION. ADDITIONAL STUDIES WILL BE CONDUCTED DURING THE PRELIMINARY ENGINEERING PHASE (30% DESIGN) TO SUBSTANTIATE ITS INCLUSION OR EXCLUSION FROM THE PROPOSED IMPROVEMENTS.



ROAD/LOCAL ACCESS DELINEATED FOR FURTHER EVALUATION. ADDITIONAL STUDIES WILL BE CONDUCTED DURING THE PRELIMINARY ENGINEERING PHASE (30% DESIGN) TO SUBSTANTIATE ITS INCLUSION OR EXCLUSION FROM THE PROPOSED IMPROVEMENTS.



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
DRAWN BY  
C. DELOS REYES  
CHECKED BY  
A. SILVER  
IN CHARGE  
A. BOONE  
DATE  
04/29/2011

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

**NOT FOR**  
**CONSTRUCTION**

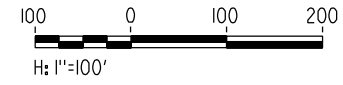
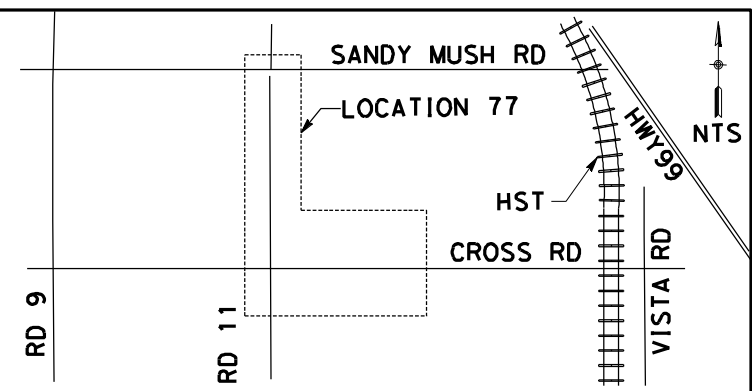
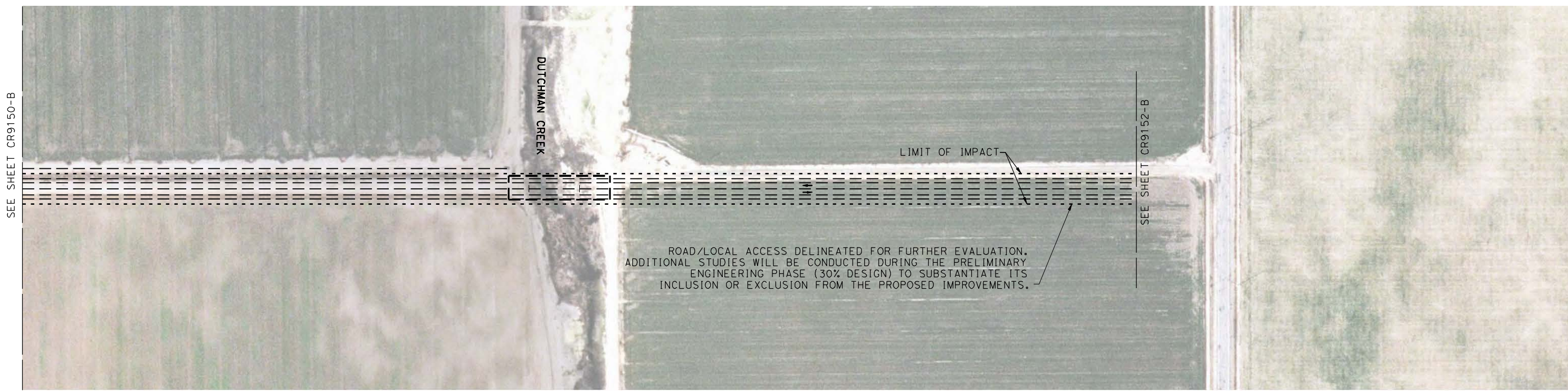
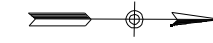


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
UPRR/SR99 MERCED DO - (WC)  
LOCAL ROAD - ROAD 11  
LAYOUT

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
CR9150-B  
SCALE  
AS SHOWN  
SHEET NO.  
### OF ###



4/27/2011 7:08:25 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 3b - ave 24 wye-w.chowchilla local roads\Layout\CR9151-B.dgn  
 ReyesC1



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**D. AYELE**  
 DRAWN BY  
**C. DELOS REYES**  
 CHECKED BY  
**A. SILVER**  
 IN CHARGE  
**A. BOONE**  
 DATE  
**04/29/2011**

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

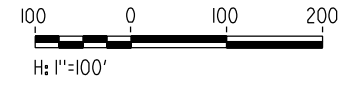
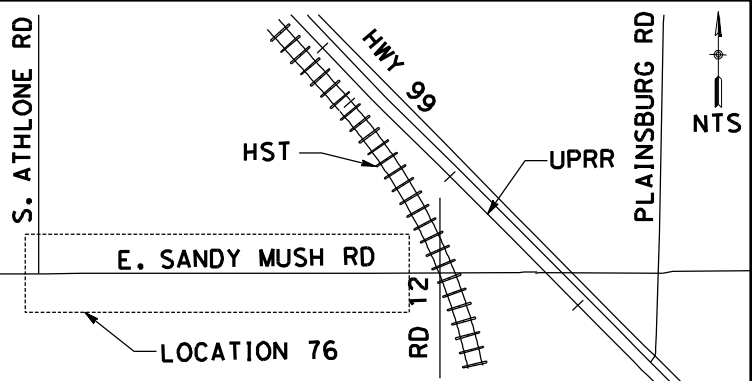


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 MERCED DO - (WC)  
 LOCAL ROAD - ROAD 11  
 LAYOUT

CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CR9151-B  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###



4/27/2011 7:08:37 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 3b - ave 24 wye-w.chowchilla local roads\Layout\CR9152-B.dgn



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**D. AYELE**  
 DRAWN BY  
**C. DELOS REYES**  
 CHECKED BY  
**A. SILVER**  
 IN CHARGE  
**A. BOONE**  
 DATE  
**04/29/2011**

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

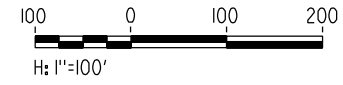
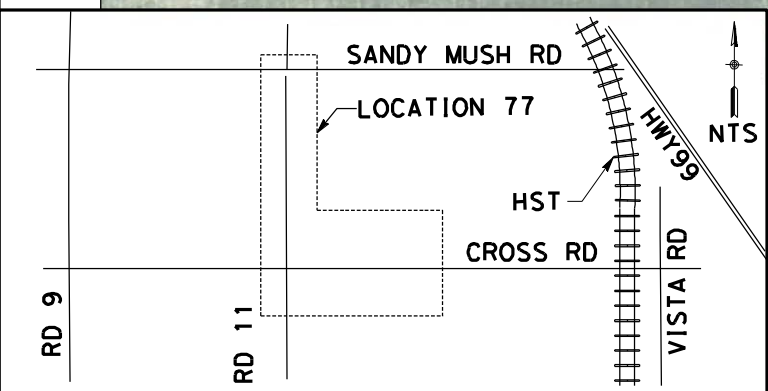
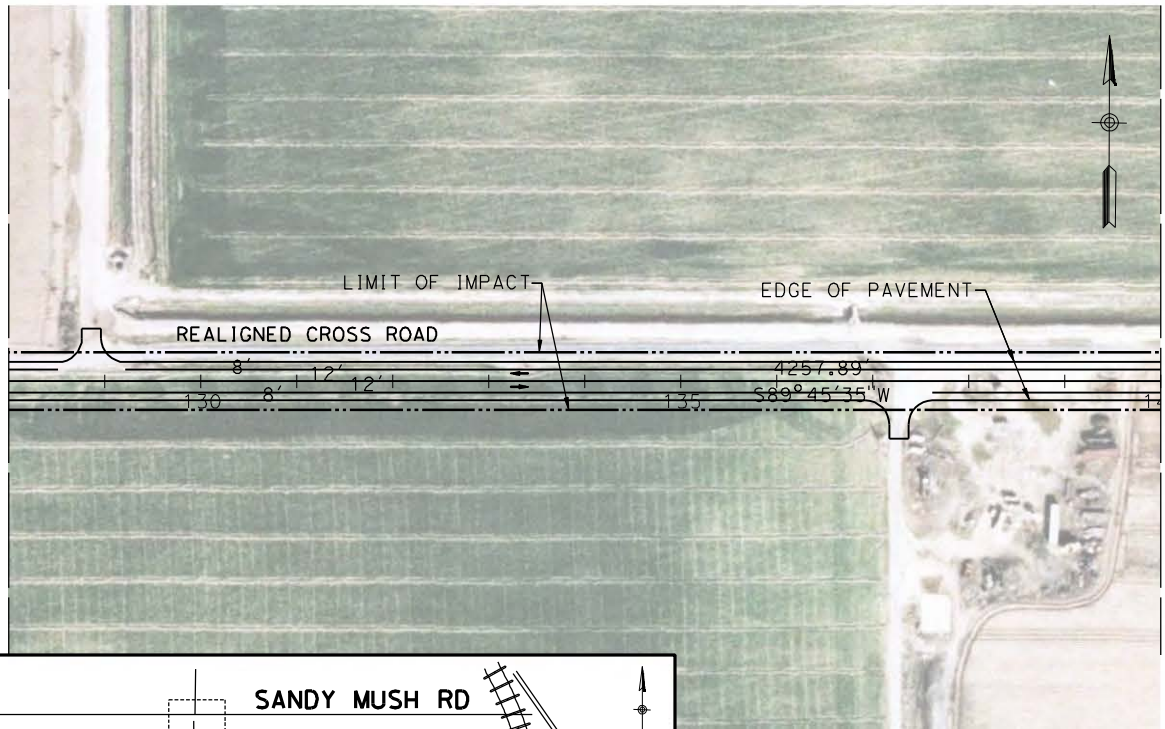
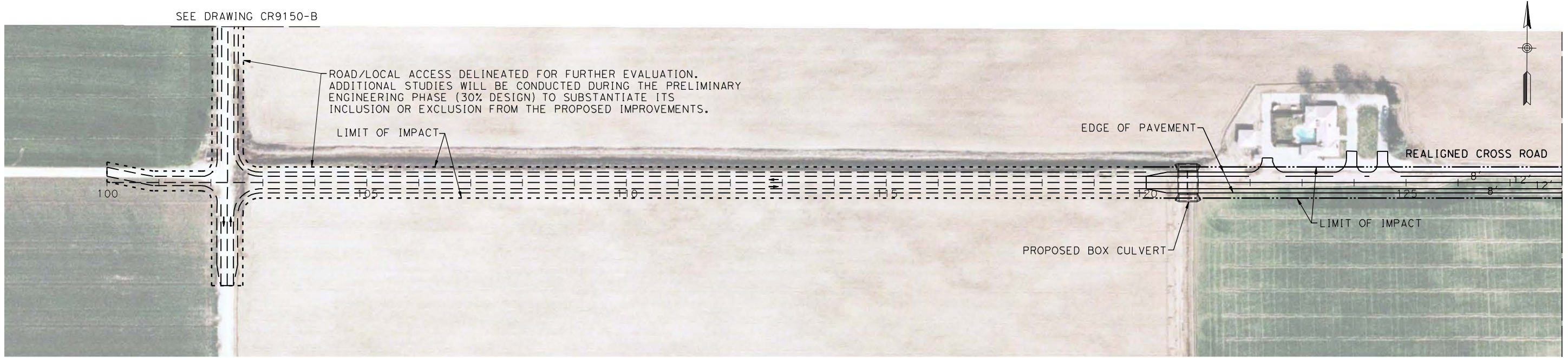


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 MERCED DO - (WC)  
 LOCAL ROAD - SANDY MUSH ROAD  
 LAYOUT  
 STA 30+00 TO STA 33+00

CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CR9152-B  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###



ReyesC1 4/27/2011 7:08:48 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 3b - ave 24 wye-w.chowchilla local roads\Layout\CR9153-B.dgn



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**D. AYELE**  
 DRAWN BY  
**C. DELOS REYES**  
 CHECKED BY  
**A. SILVER**  
 IN CHARGE  
**A. BOONE**  
 DATE  
**04/29/2011**

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

**AECOM**  
Technical Services, Inc.  
 2020 L Street, Suite 300  
 Sacramento, CA 95811  
**CH2MHILL**

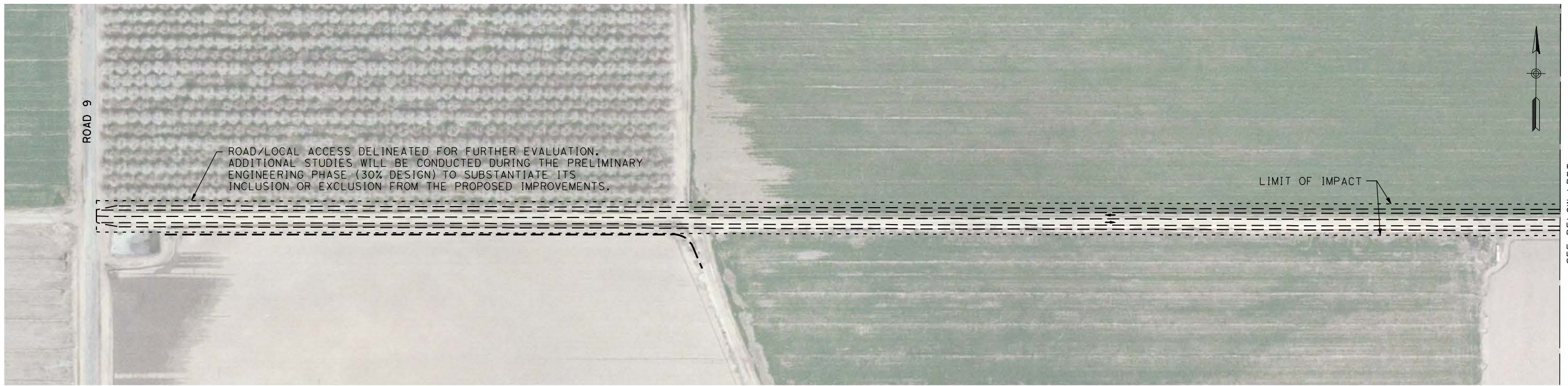


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 MERCED DO - (WC)  
 LOCAL ROAD - CROSS ROAD  
 LAYOUT  
 STA 120+00 TO STA 140+00

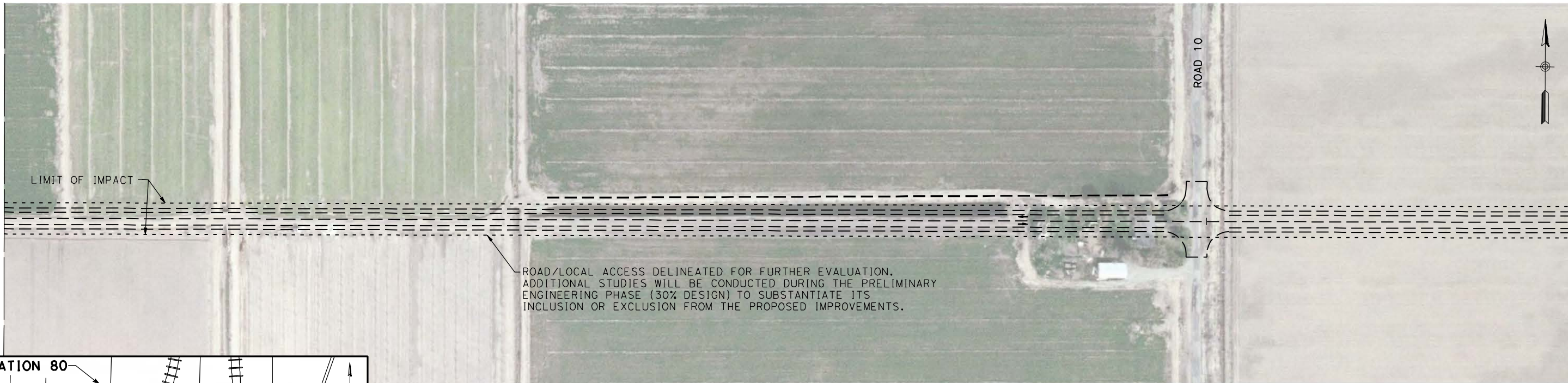
CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CR9153-B  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###



4/27/2011 7:09:01 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 3b - ave 24 wye-w.chowchilla local roads\Layout\CR9154-B.dgn  
 ReyesCI

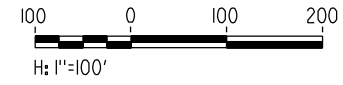
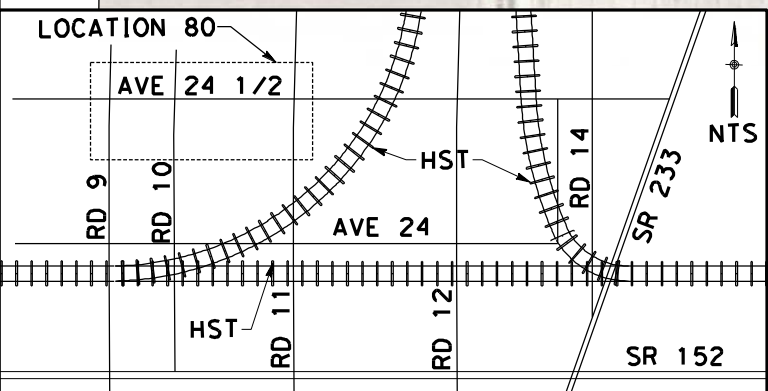


SEE BELOW LEFT



SEE ABOVE RIGHT

SEE SHEET CR9155-B



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**D. AYELE**  
 DRAWN BY  
**C. DELOS REYES**  
 CHECKED BY  
**A. SILVER**  
 IN CHARGE  
**A. BOONE**  
 DATE  
**04/29/2011**

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

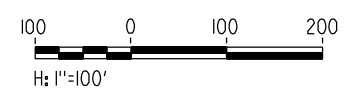
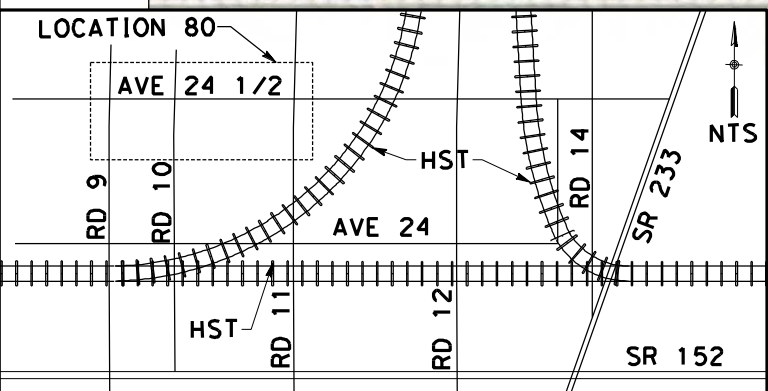
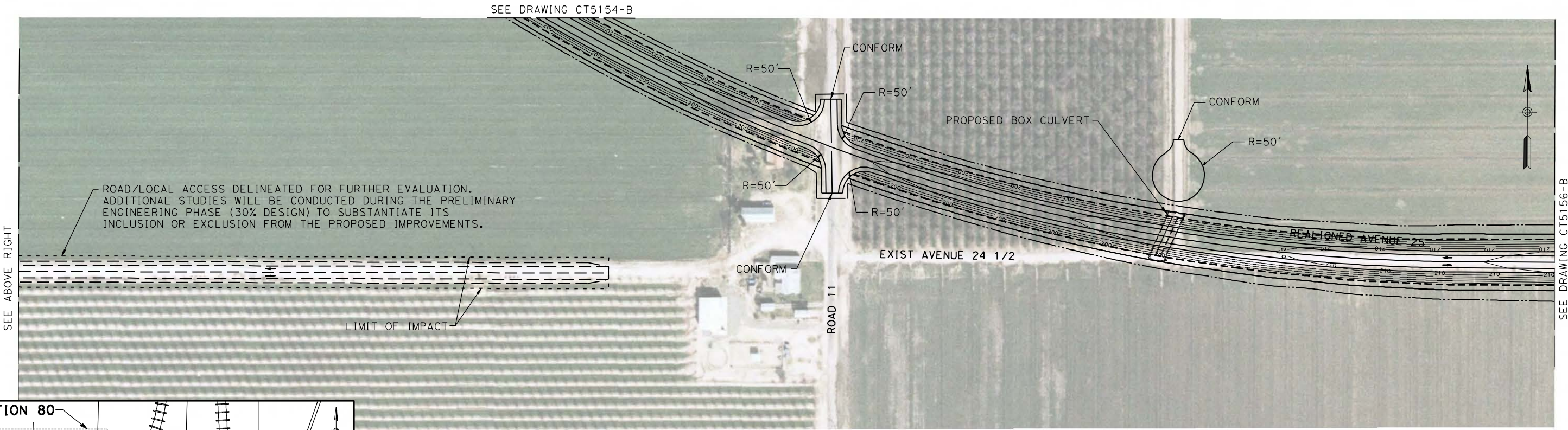


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 MAINLINE/WYE DO - (WC)  
 LOCAL ROAD - AVENUE 24 1/2  
 LAYOUT

CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CR9154-B  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###



4/27/2011 7:09:15 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 3b - ave 24 wye-w.chowchilla local roads\Layout\CR9155-B.dgn



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE

DRAWN BY  
C. DELOS REYES

CHECKED BY  
A. SILVER

IN CHARGE  
A. BOONE

DATE  
04/29/2011

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

**NOT FOR**  
**CONSTRUCTION**



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

UPRR/SR99 WYE DO - (WC)  
LOCAL ROAD - AVENUE 24 1/2  
LAYOUT

CONTRACT NO.  
HSR06-007

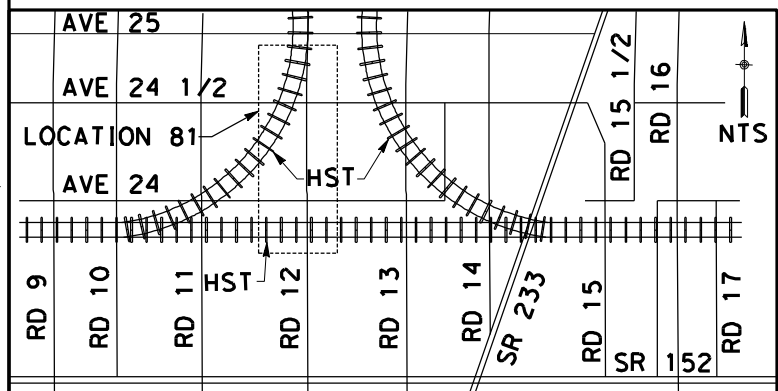
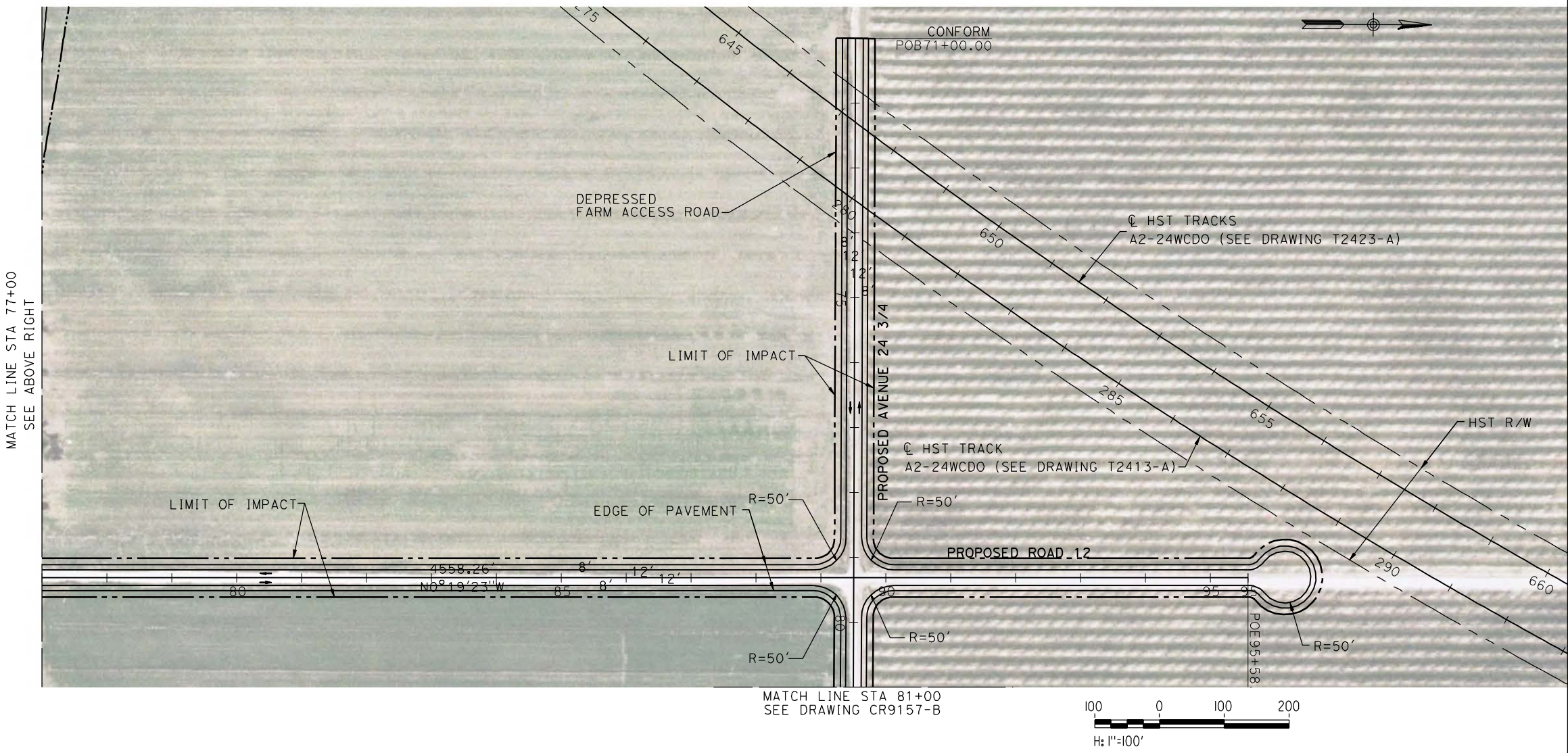
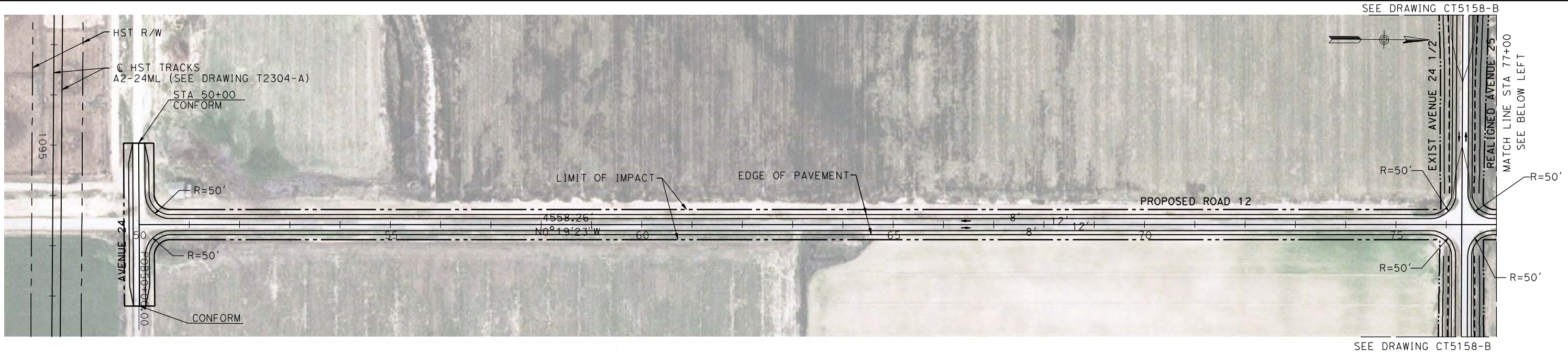
DRAWING NO.  
CR9155-B

SCALE  
AS SHOWN

SHEET NO.  
### OF ###



4/27/2011 7:09:29 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 3b - ave 24 wye & w. chowchilla\layout\CR9156-B.dgn  
 ReyesC1



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**D. AYELE**  
 DRAWN BY  
**C. DELOS REYES**  
 CHECKED BY  
**A. SILVER**  
 IN CHARGE  
**A. BOONE**  
 DATE  
**04/29/2011**

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



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 MAINLINE/WYE DO - (WC)  
 LOCAL ROAD - ROAD 12  
 LAYOUT  
 STA 50+00 TO 95+58.26 & STA 71+00 TO 81+00

CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CR9156-B  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###



4/27/2011 7:09:42 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 3b - ave 24 wye-w.chowchilla local roads\layout\CR9157-B.dgn

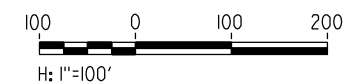
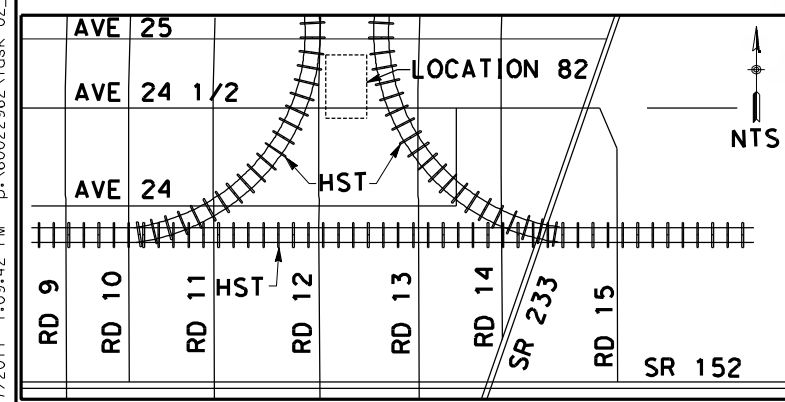
SEE DRAWING CT5159-B

MATCH LINE STA 81+00  
SEE DRAWING CR9156-B



SEE DRAWING CT5159-B

MATCH LINE STA 96+00  
SEE DRAWING CR9158-B



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
DRAWN BY  
C. DELOS REYES  
CHECKED BY  
A. SILVER  
IN CHARGE  
A. BOONE  
DATE  
04/29/2011

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

**NOT FOR**  
**CONSTRUCTION**

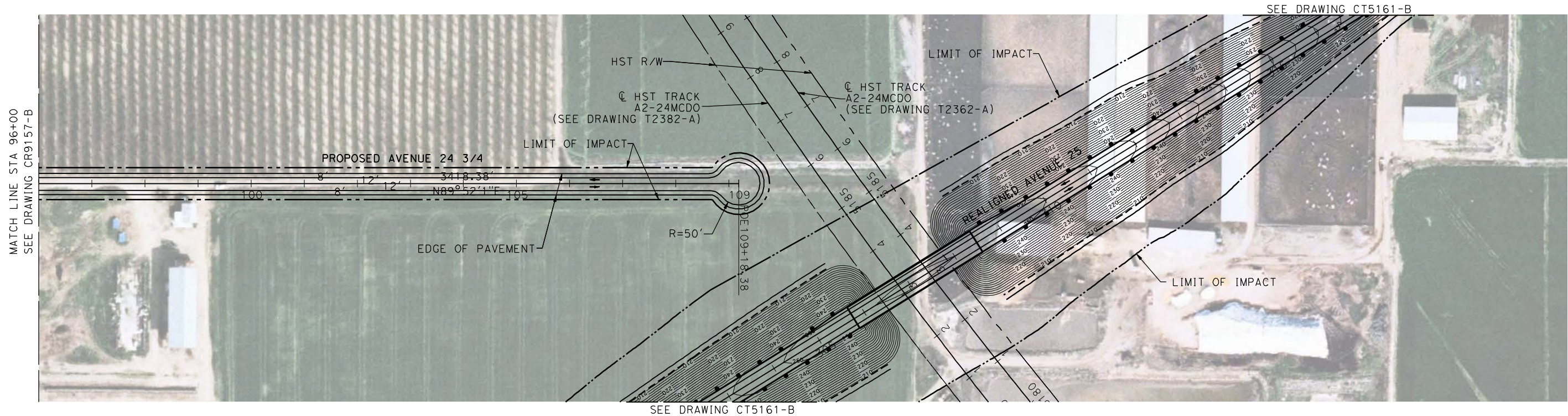
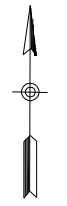


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
UPRR/SR99 MERCED DO - (WC)  
LOCAL ROAD - ROAD 12 1/2 & AVENUE 24 3/4  
LAYOUT  
STA 81+00 TO STA 96+00

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
CR9157-B  
SCALE  
AS SHOWN  
SHEET NO.  
### OF ###

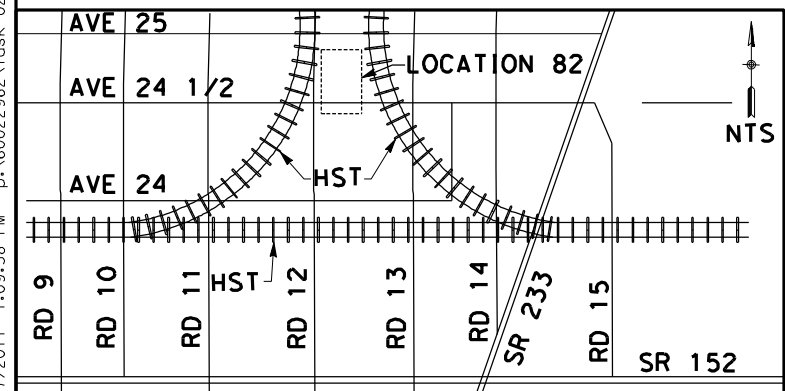


4/27/2011 7:09:58 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 3b - ave 24 wye-w.chowchilla local roads\layout\CR9158-B.dgn



SEE DRAWING CT5161-B

SEE DRAWING CT5161-B



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**D. AYELE**  
 DRAWN BY  
**C. DELOS REYES**  
 CHECKED BY  
**A. SILVER**  
 IN CHARGE  
**A. BOONE**  
 DATE  
**04/29/2011**

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

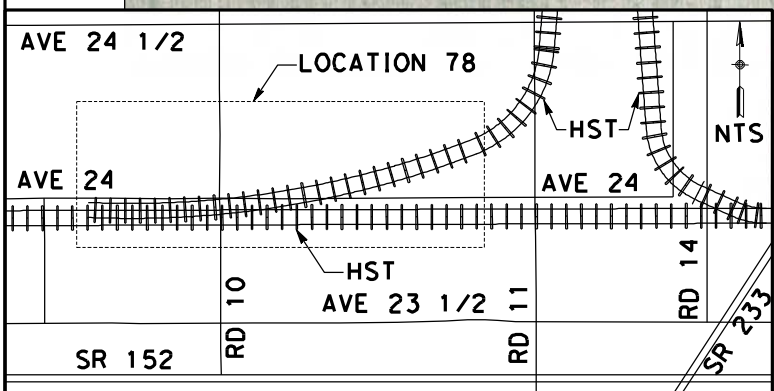
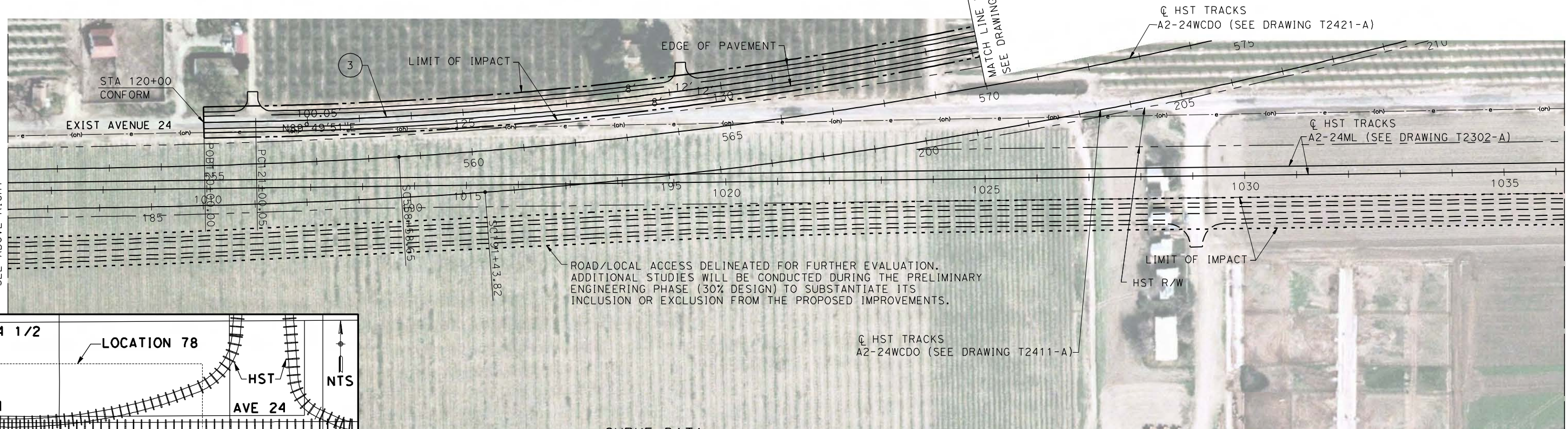
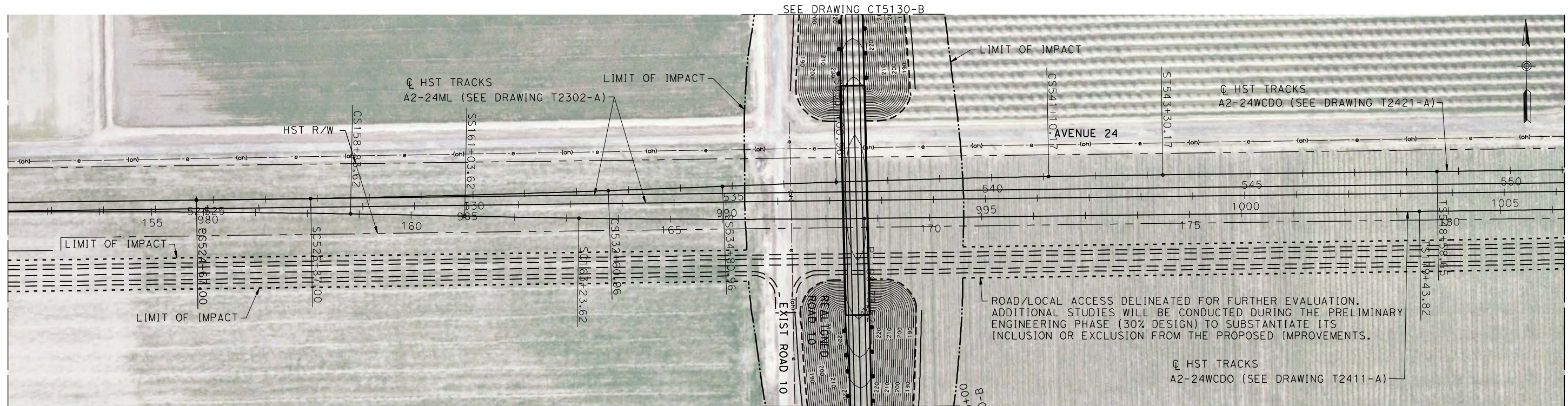


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 MERCED/WYE DO - (WC)  
 LOCAL ROAD - AVENUE 24 3/4  
 LAYOUT  
 STA 96+00 TO STA 109+18.38

CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CR9158-B  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###

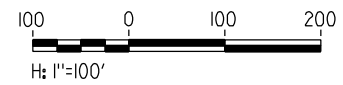


4/27/2011 7:10:25 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 3b - ave 24 wye-w.chowchilla local roads\Layout\CR9159-B.dgn  
 ReyesCI



CURVE DATA

NO.	R	Δ	T	L
③	7500.00	18°41'5"	1233.88	2445.84



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
 D. AYELE  
 DRAWN BY  
 C. DELOS REYES  
 CHECKED BY  
 A. SILVER  
 IN CHARGE  
 A. BOONE  
 DATE  
 04/29/2011

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

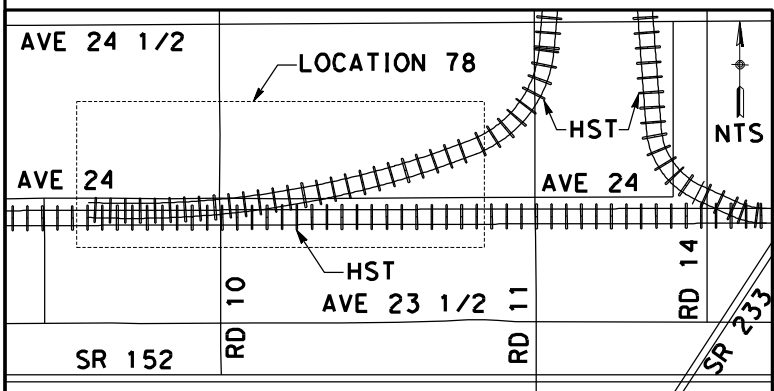
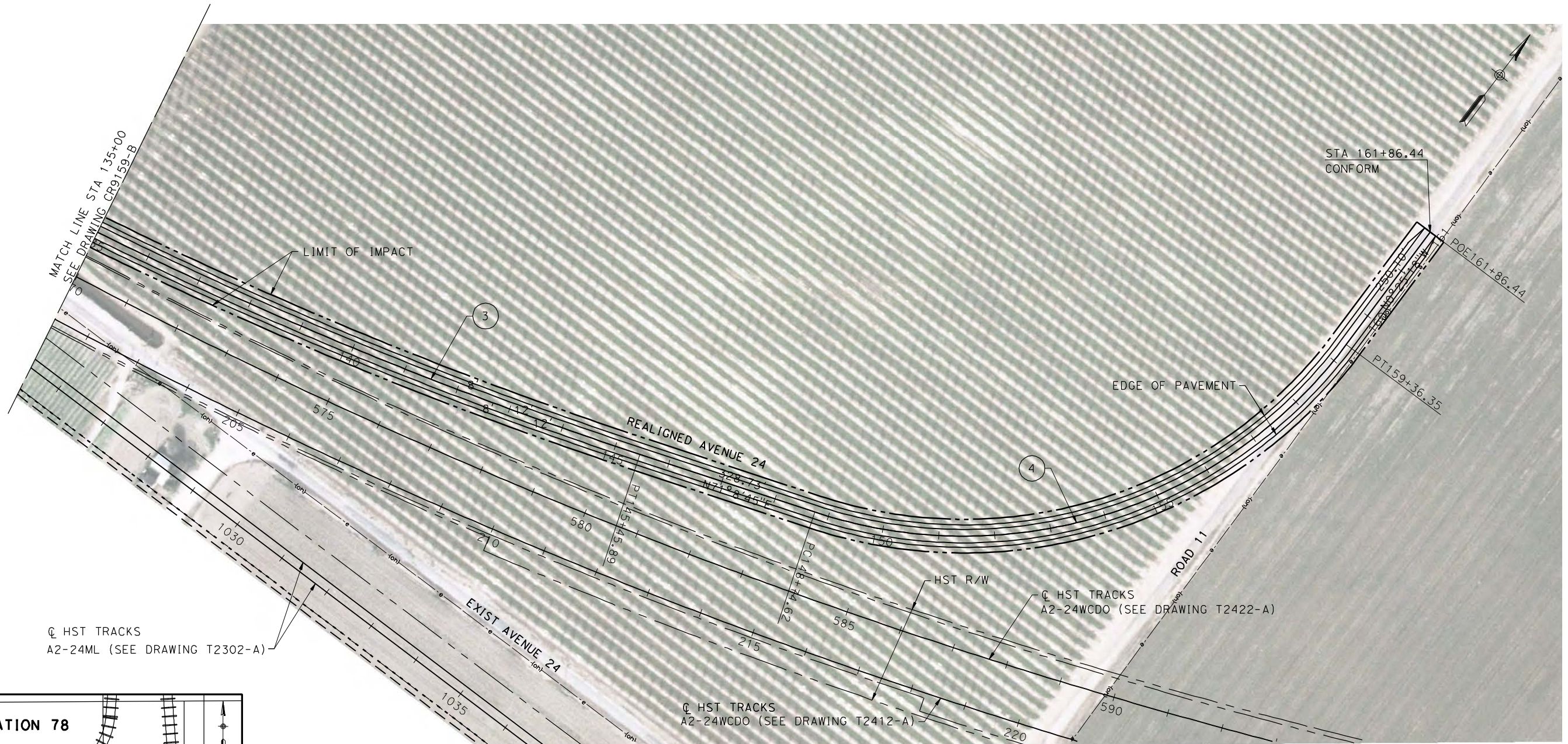


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 MAINLINE/WYE DO - (WC)  
 SOUTH FRONTAGE ROAD  
 LAYOUT  
 STA 120+00 TO 135+00

CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CR9159-B  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###

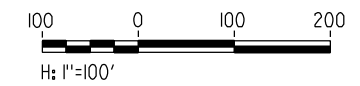


4/27/2011 7:10:45 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla local roads\volume 3b - ave 24 wye-w.chowchilla local roads\Layout\CR9160-B.dgn  
 ReyesC1



**CURVE DATA**

No.	R	Δ	T	L
③	7500.02	18°41'5"	1233.88	2445.84
④	850.00	71°34'4"	612.68	1061.73



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**D. AYELE**  
 DRAWN BY  
**C. DELOS REYES**  
 CHECKED BY  
**A. SILVER**  
 IN CHARGE  
**A. BOONE**  
 DATE  
**04/29/2011**

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

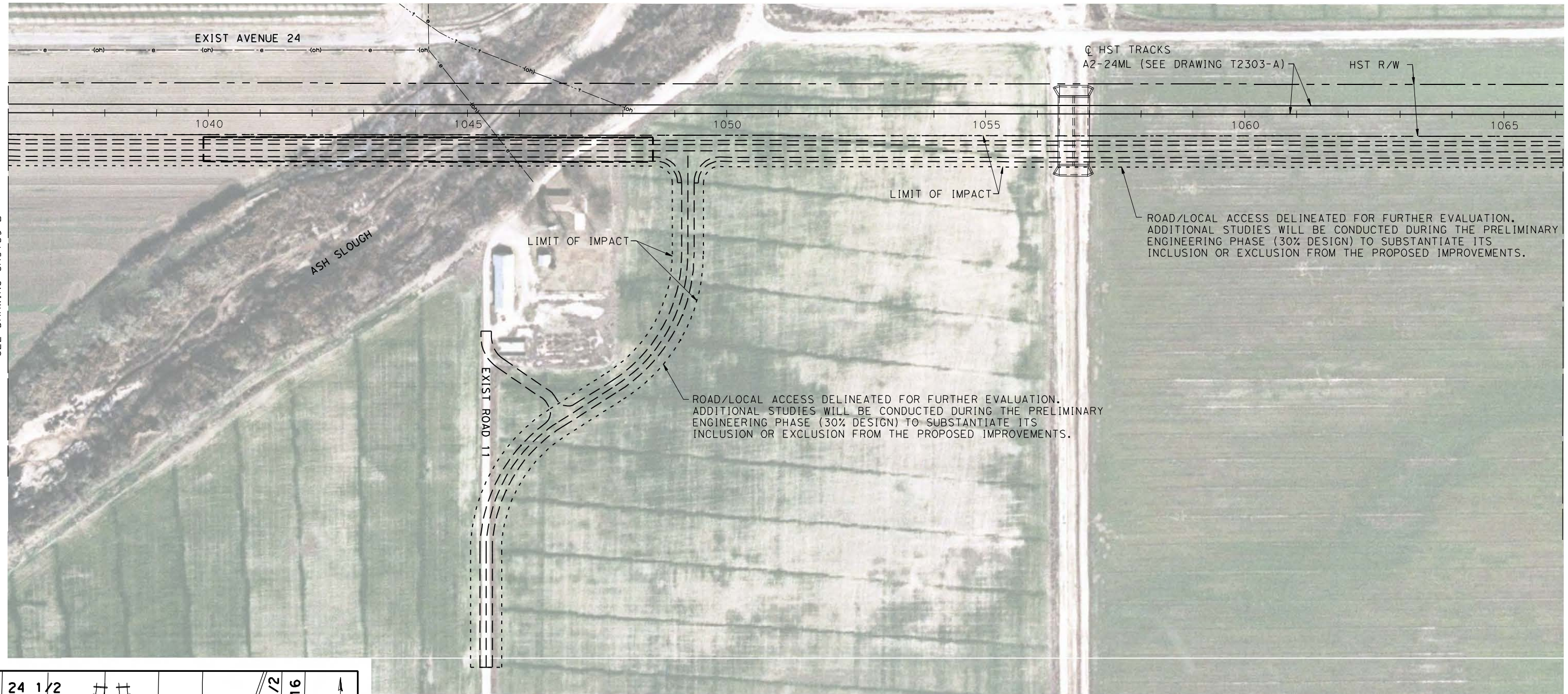


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 MAINLINE/WYE DO - (WC)  
 AVENUE 24  
 LAYOUT  
 STA 135+00 TO STA 161+86.44

CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CR9160-B  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###

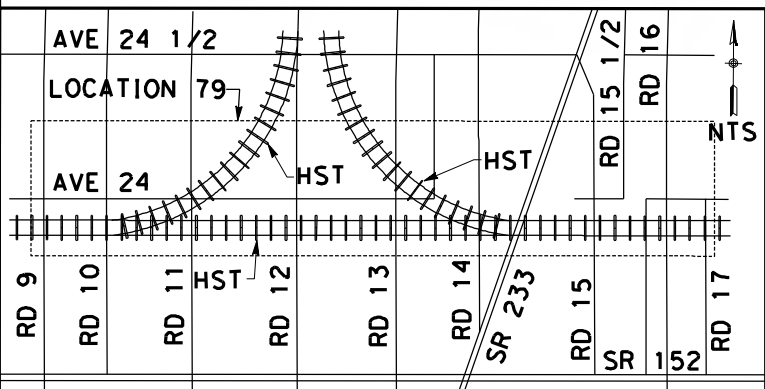


4/27/2011 7:11:03 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 3b - ave 24 wye-w.chowchilla local roads\Layout\CR9161-B.dgn  
 ReyesC1



SEE DRAWING CR9159-B

SEE DRAWING CR9162-B



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
 D. AYELE  
 DRAWN BY  
 C. DELOS REYES  
 CHECKED BY  
 A. SILVER  
 IN CHARGE  
 A. BOONE  
 DATE  
 04/29/2011

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

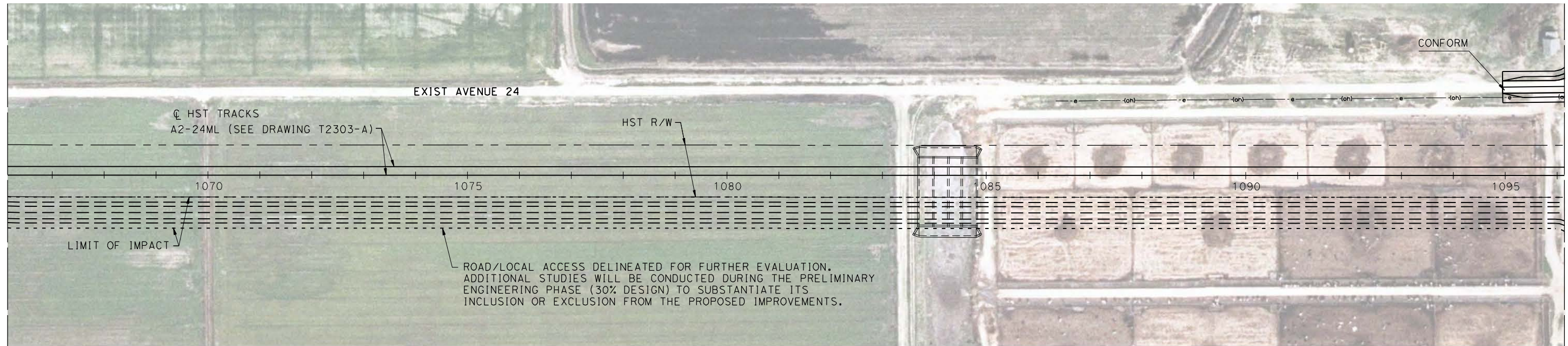


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 MAINLINE - (WC)  
 SOUTH FRONTAGE ROAD  
 LAYOUT

CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CR9161-B  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###

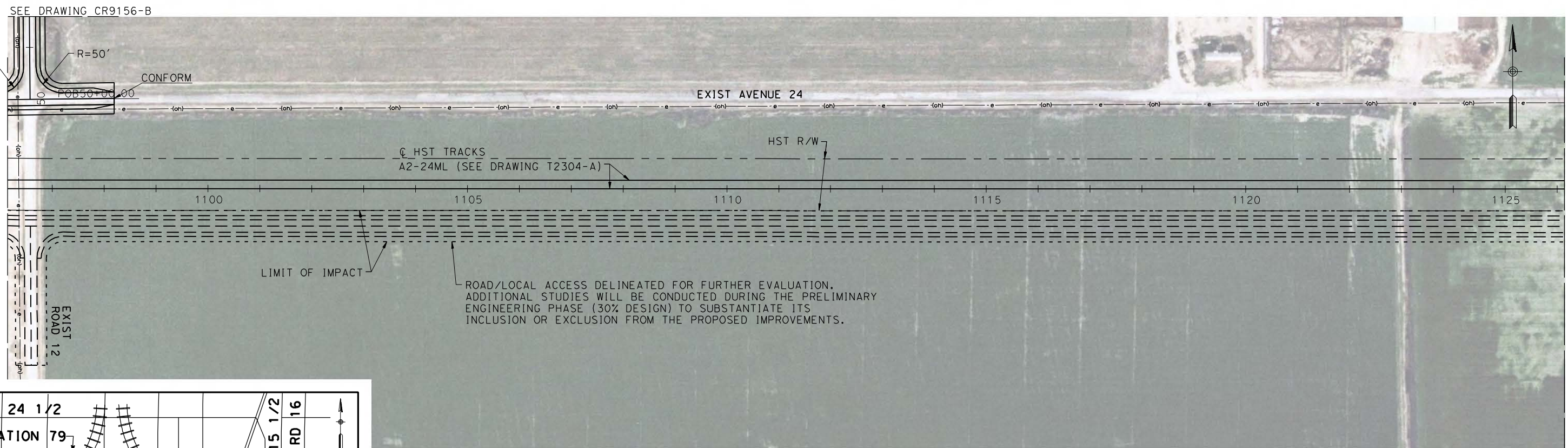


ReyesCI 4/27/2011 7:11:29 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 3b - ave 24 wye-w.chowchilla local roads\Layout\CR9162-B.dgn



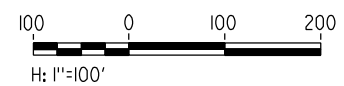
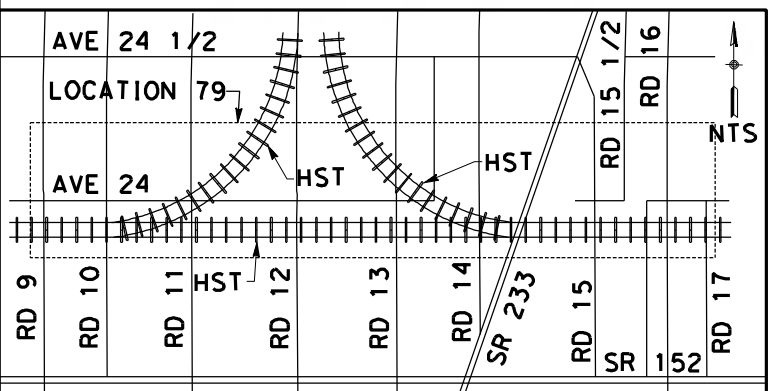
SEE DRAWING CR9161-B

SEE BELOW LEFT



SEE ABOVE RIGHT

SEE DRAWING CR9163-B



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
 DRAWN BY  
C. DELOS REYES  
 CHECKED BY  
A. SILVER  
 IN CHARGE  
A. BOONE  
 DATE  
04/29/2011

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

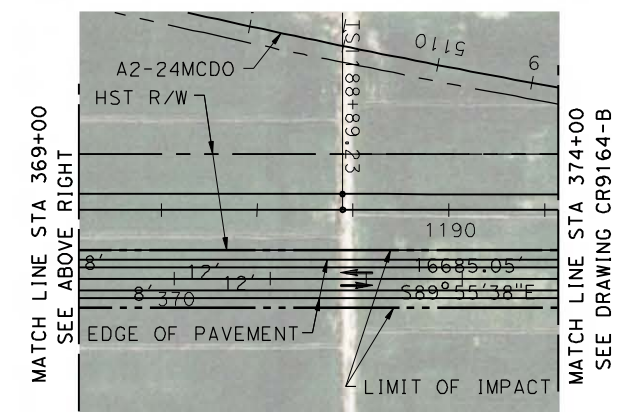
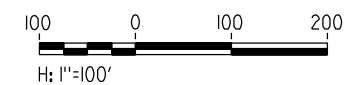
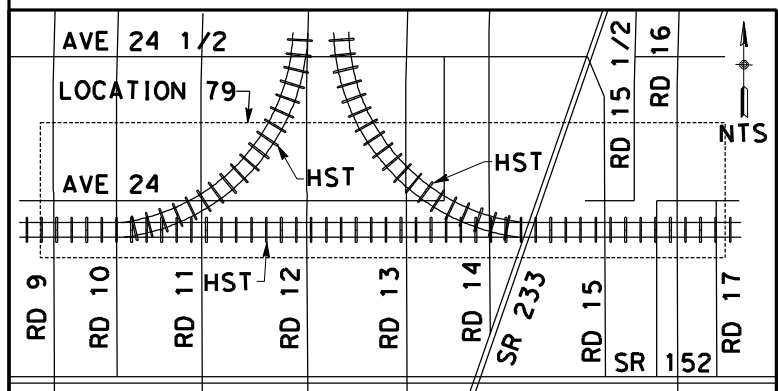
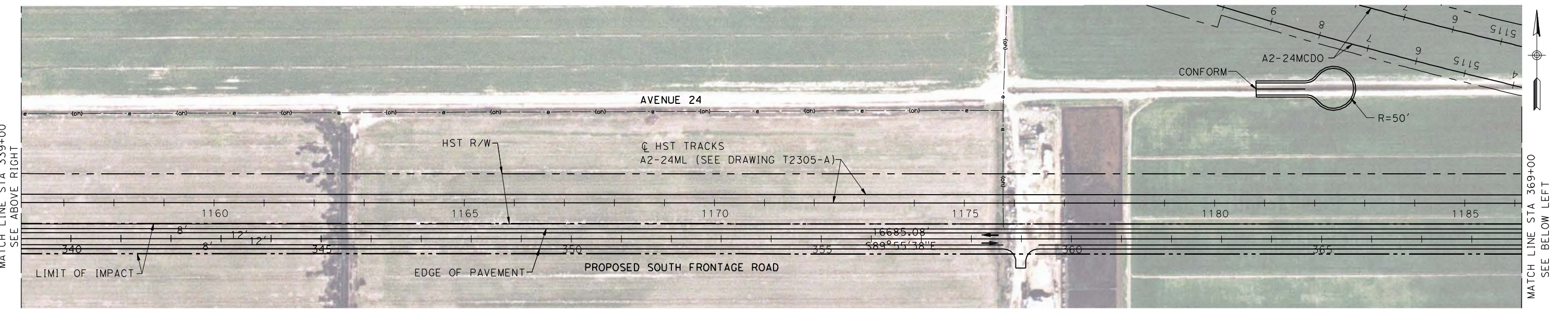
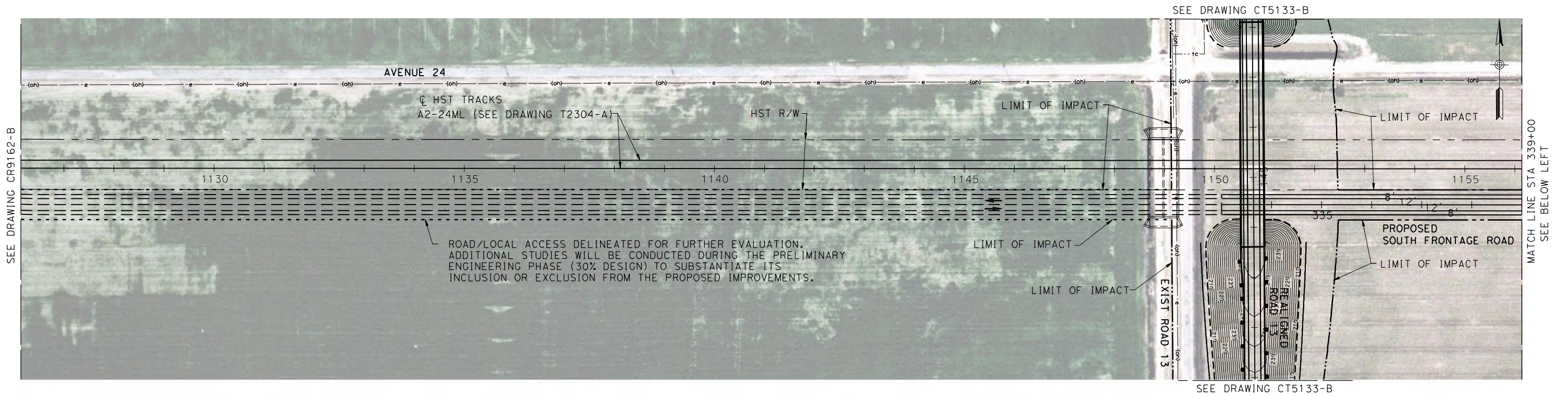


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 MAINLINE - (WC)  
 SOUTH FRONTAGE ROAD  
 LAYOUT

CONTRACT NO.  
HSR06-007  
 DRAWING NO.  
CR9162-B  
 SCALE  
AS SHOWN  
 SHEET NO.  
### OF ###



4/28/2011 6:10:00 PM P:\60022962\Task 02\_Merced-Fresno\Cadd\Civil\Sheet\Package 2 - Ave 24 Wye & W. Chowchilla\Volume 3B - Ave 24 Wye-W.Chowchilla Local Roads\Layout\CR9163-B.dgn



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
DRAWN BY  
C. DELOS REYES  
CHECKED BY  
A. SILVER  
IN CHARGE  
A. BOONE  
DATE  
04/29/2011

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

**NOT FOR**  
**CONSTRUCTION**

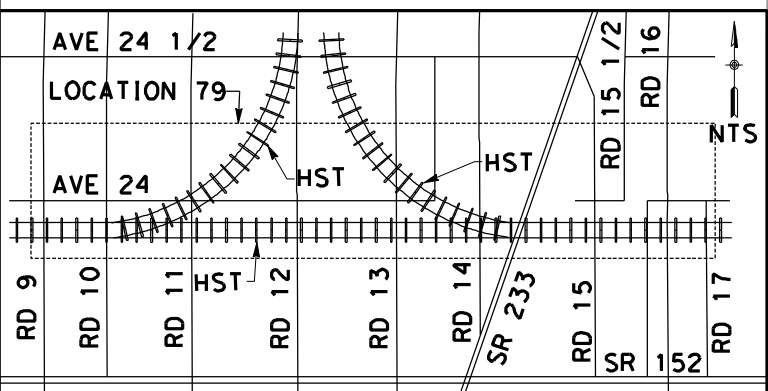
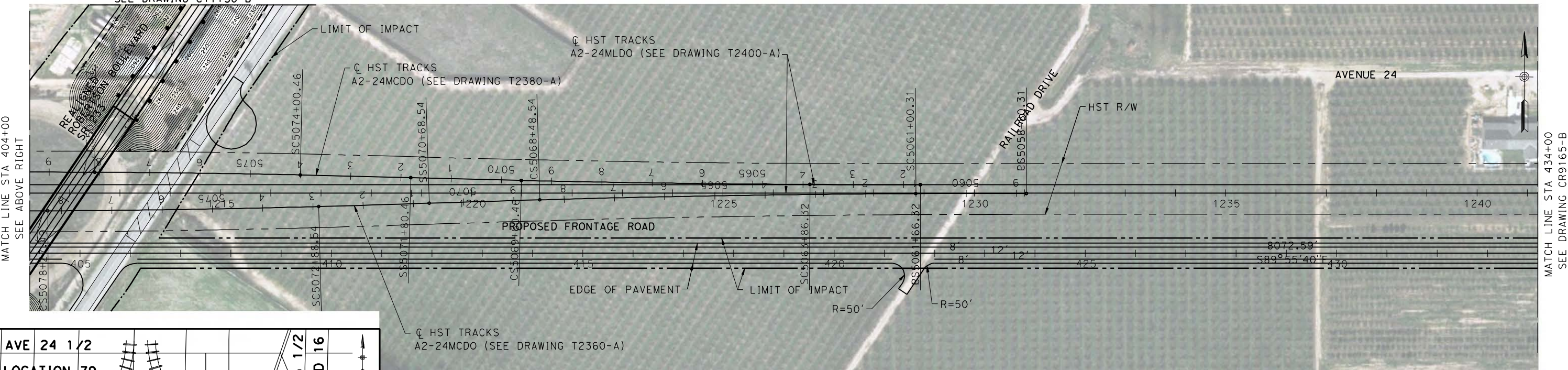
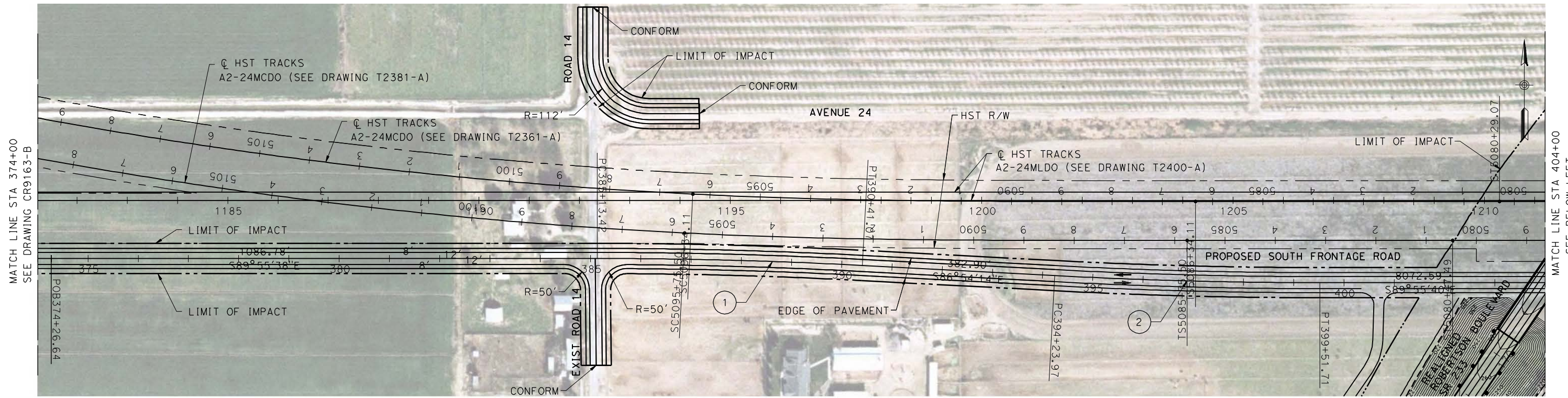


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
UPRR/SR99 MAINLINE - (WC)  
SOUTH FRONTAGE ROAD  
LAYOUT  
STA 333+00 TO STA 374+00

CONTRACT NO.  
HSR06-007  
DRAWING NO.  
CR9163-B  
SCALE  
AS SHOWN  
SHEET NO.  
### OF ###

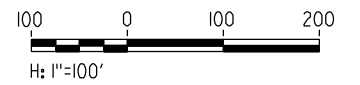


ReyesC1 4/27/2011 7:12:34 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 3b - ave 24 wye-w.chowchilla local roads\Layout\CR9164-B.dgn



**CURVE DATA**

No.	R	Δ	T	L
(1)	10000.00	3°01'24"	263.88	527.65
(2)	10000.00	3°01'25"	263.93	527.74



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
 DRAWN BY  
C. DELOS REYES  
 CHECKED BY  
A. SILVER  
 IN CHARGE  
A. BOONE  
 DATE  
04/29/2011

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



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 MAINLINE DO/MERCED DO - (WC)  
 LOCAL ROAD - FRONTAGE ROAD  
 LAYOUT  
 STA 374+00 TO STA 434+00

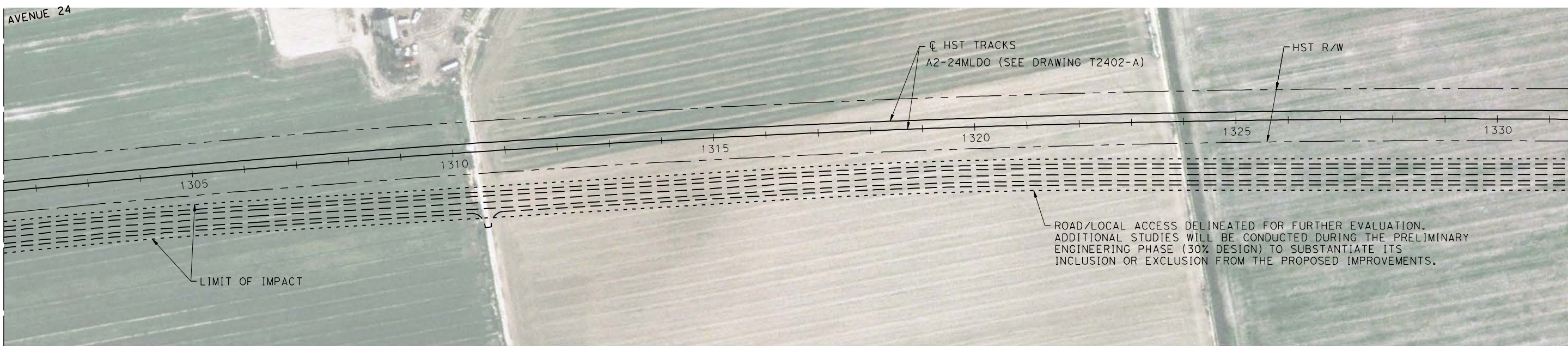
CONTRACT NO.  
HSR06-007  
 DRAWING NO.  
CR9164-B  
 SCALE  
AS SHOWN  
 SHEET NO.  
### OF ###







ReyesC1 4/27/2011 7:13:45 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 3b - ave 24 wye-w.chowchilla local roads\layout\CR9166-B.dgn



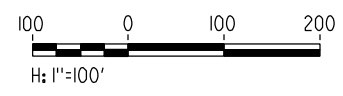
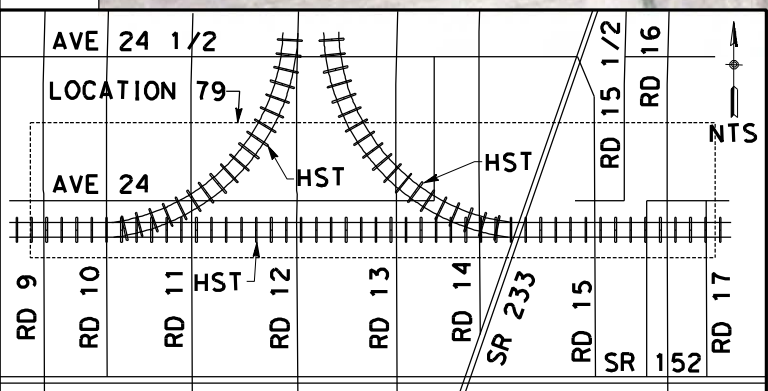
SEE DRAWING CR9165-B

SEE BELOW LEFT



SEE ABOVE RIGHT

SEE BELOW LEFT



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
 DRAWN BY  
C. DELOS REYES  
 CHECKED BY  
A. SILVER  
 IN CHARGE  
A. BOONE  
 DATE  
04/29/2011

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

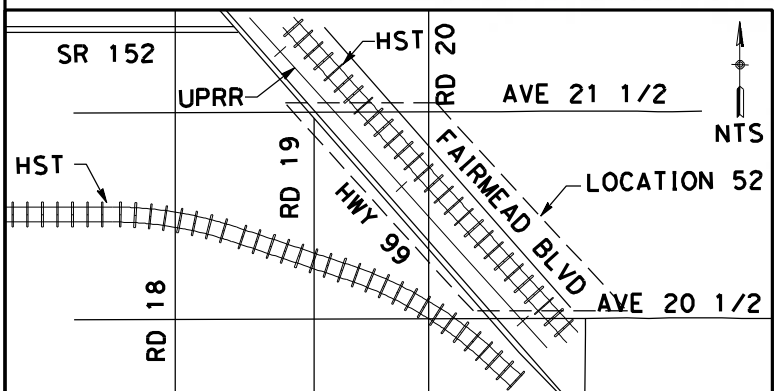
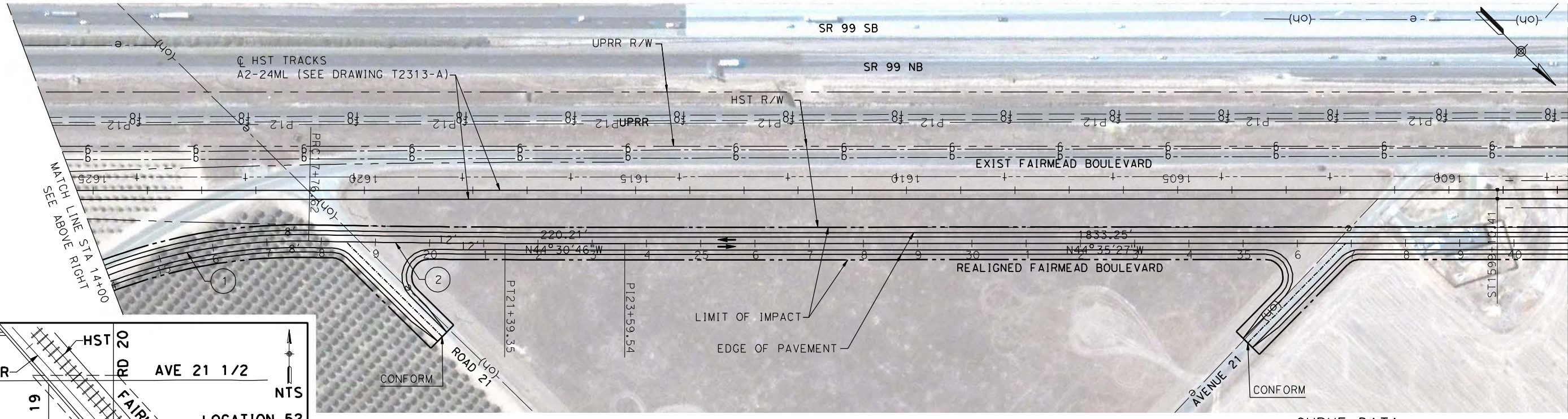
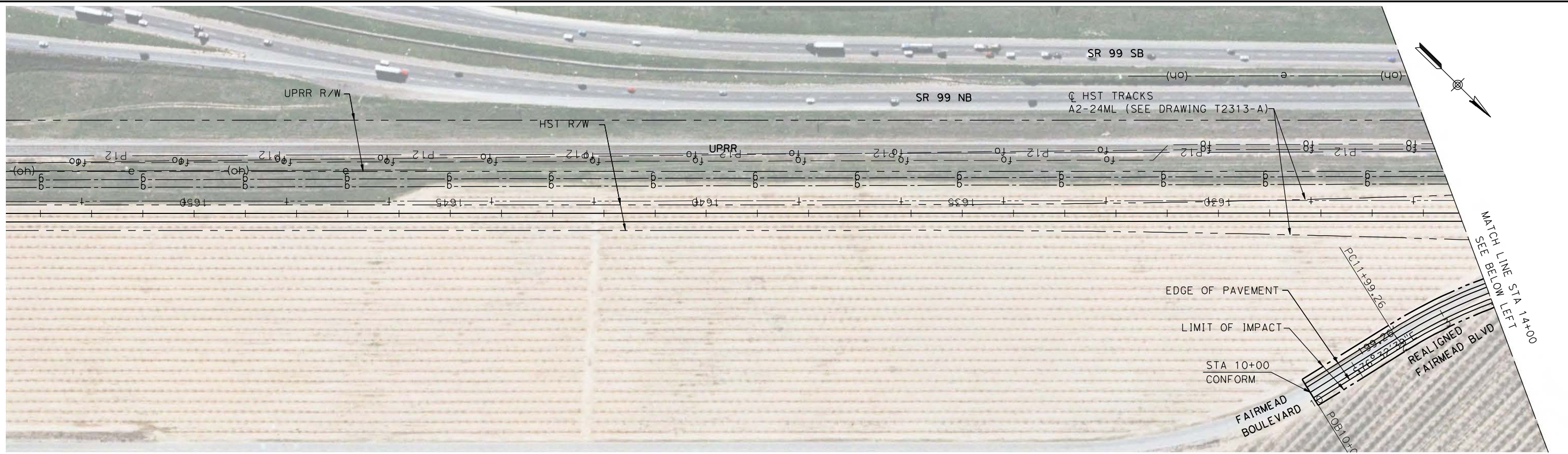


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 MAINLINE DO - (WC)  
 LOCAL ROAD - FRONTAGE ROAD  
 LAYOUT

CONTRACT NO.  
HSR06-007  
 DRAWING NO.  
CR9166-B  
 SCALE  
AS SHOWN  
 SHEET NO.  
### OF ###

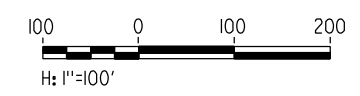


ReyesC1 4/27/2011 7:14:27 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 3b - ave 24 wye-w.chowchilla local roads\Layout\CR9167-B.dgn



**CURVE DATA**

No.	R	Δ	T	L
①	1000.00	33°04'50"	296.98	557.36
②	24039.61	0°51'52"	181.37	362.73



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
 DRAWN BY  
C. DELOS REYES  
 CHECKED BY  
A. SILVER  
 IN CHARGE  
A. BOONE  
 DATE  
04/29/2011

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

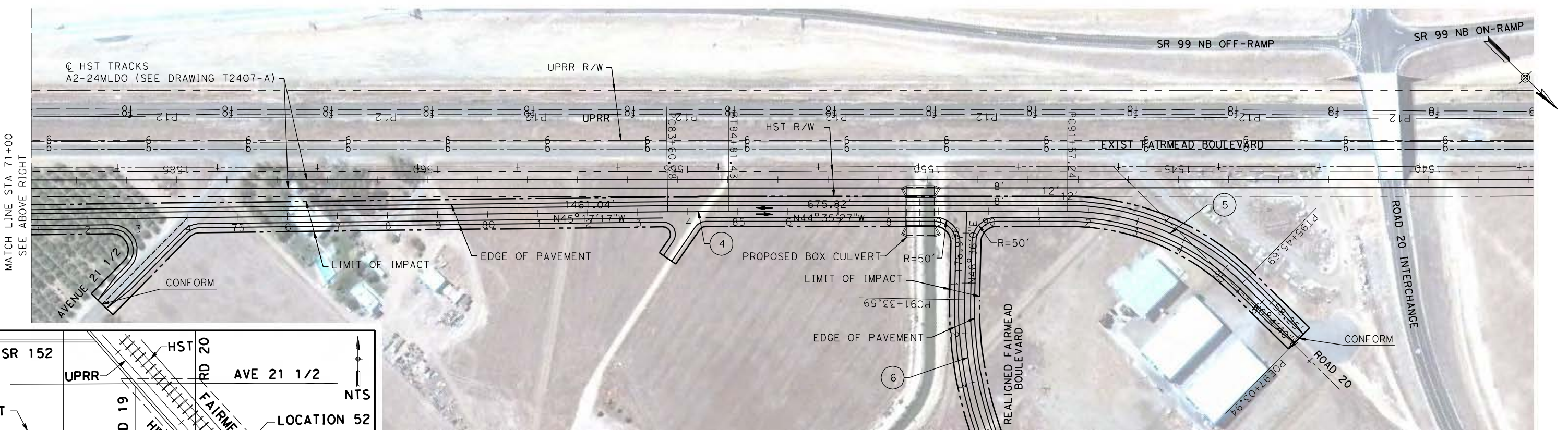
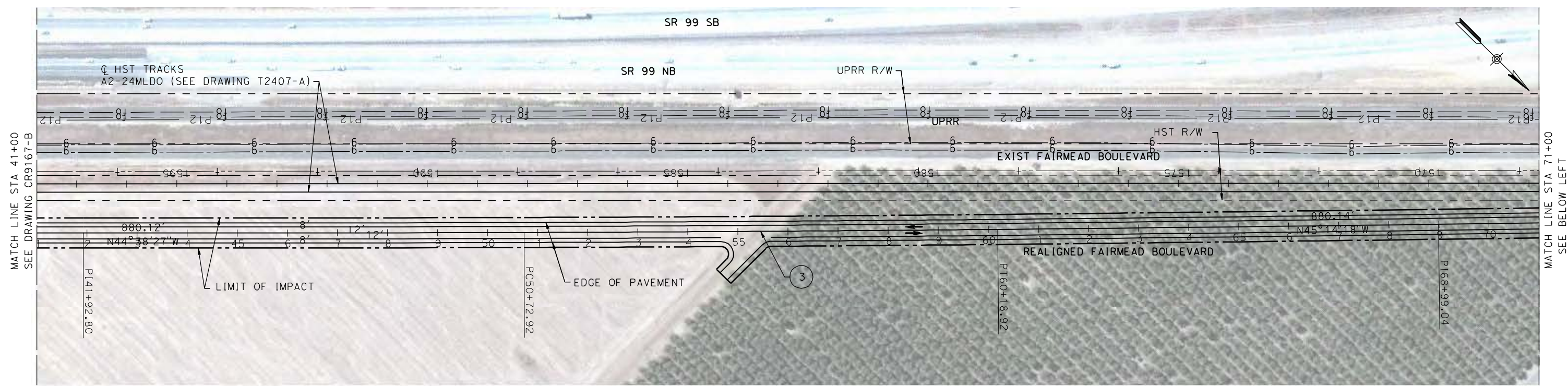


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 MERCED - (WC)  
 FAIRMEAD BLVD  
 LAYOUT  
 SHEET 1 OF 5

CONTRACT NO.  
HSR06-007  
 DRAWING NO.  
CR9167-B  
 SCALE  
AS SHOWN  
 SHEET NO.  
### OF ###

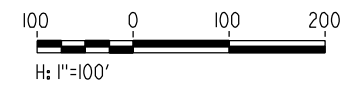


4/27/2011 7:15:02 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 3b - ave 24 wye-w.chowchilla local roads\layout\CR9168-B.dgn  
 ReyesC1



**CURVE DATA**

No.	R	Δ	T	L
③	150046.75	0° 21' 40"	473.00	945.99
④	9970.00	0° 41' 51"	60.67	121.35
⑤	500.00	44° 30' 47"	204.62	388.45
⑥	750.00	46° 36' 00"	323.00	609.99



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
**D. AYELE**  
 DRAWN BY  
**C. DELOS REYES**  
 CHECKED BY  
**A. SILVER**  
 IN CHARGE  
**A. BOONE**  
 DATE  
**04/29/2011**

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



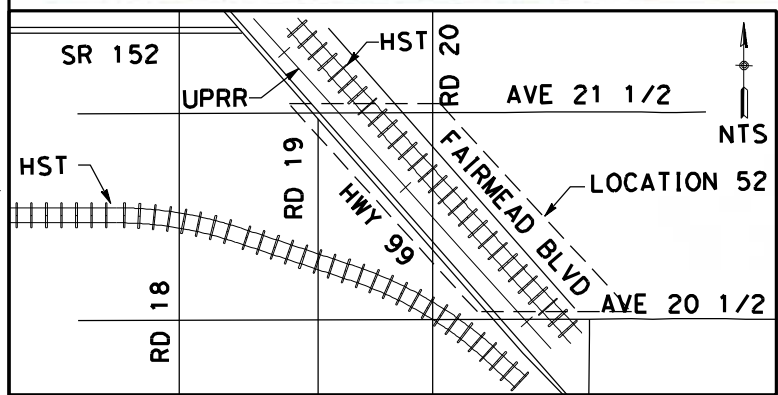
**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 MERCED - (WC)  
 FAIRMEAD BLVD  
 LAYOUT  
 SHEET 2 OF 5

CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CR9168-B  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###

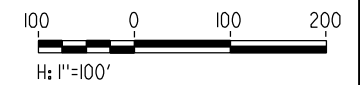


ReyesC1 4/27/2011 7:15:30 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 3b - ave 24 wye-w.chowchilla local roads\Layout\CR9169-B.dgn

MATCH LINE STA 94+00  
 SEE DRAWING CR9168-B



CURVE DATA				
No.	R	$\Delta$	T	L
(6)	750.00	46° 36' 00"	323.00	609.99



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
 D. AYELE  
 DRAWN BY  
 C. DELOS REYES  
 CHECKED BY  
 A. SILVER  
 IN CHARGE  
 A. BOONE  
 DATE  
 04/29/2011

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

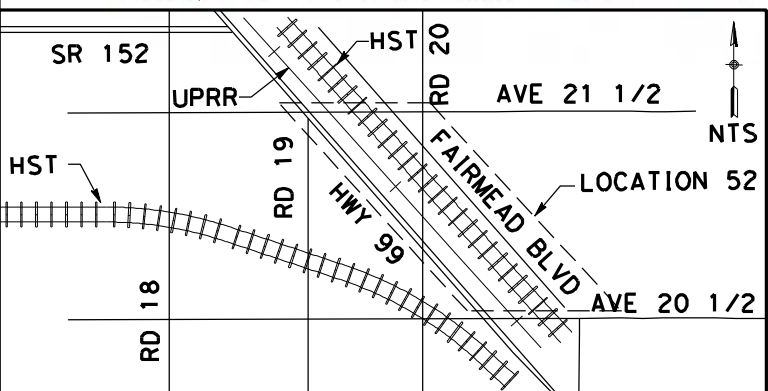
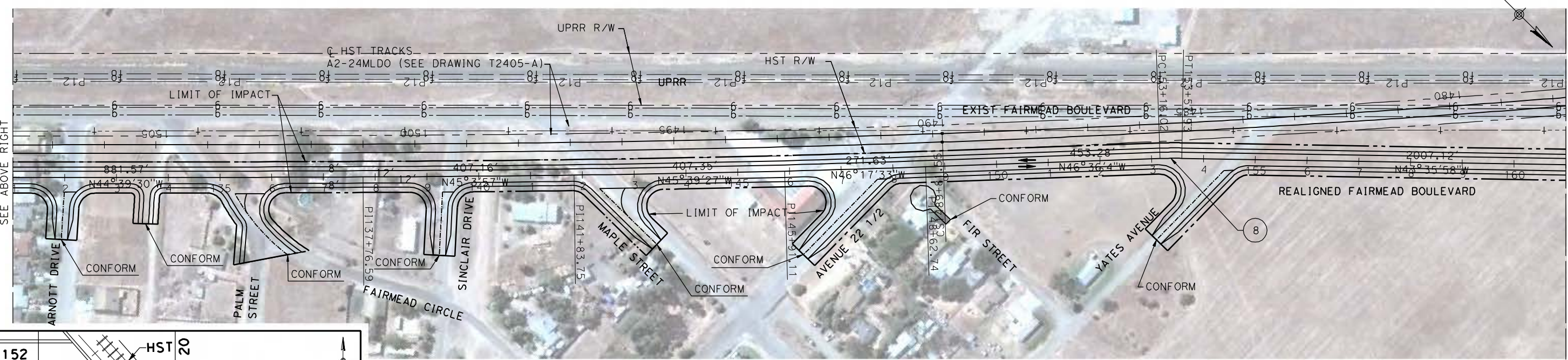
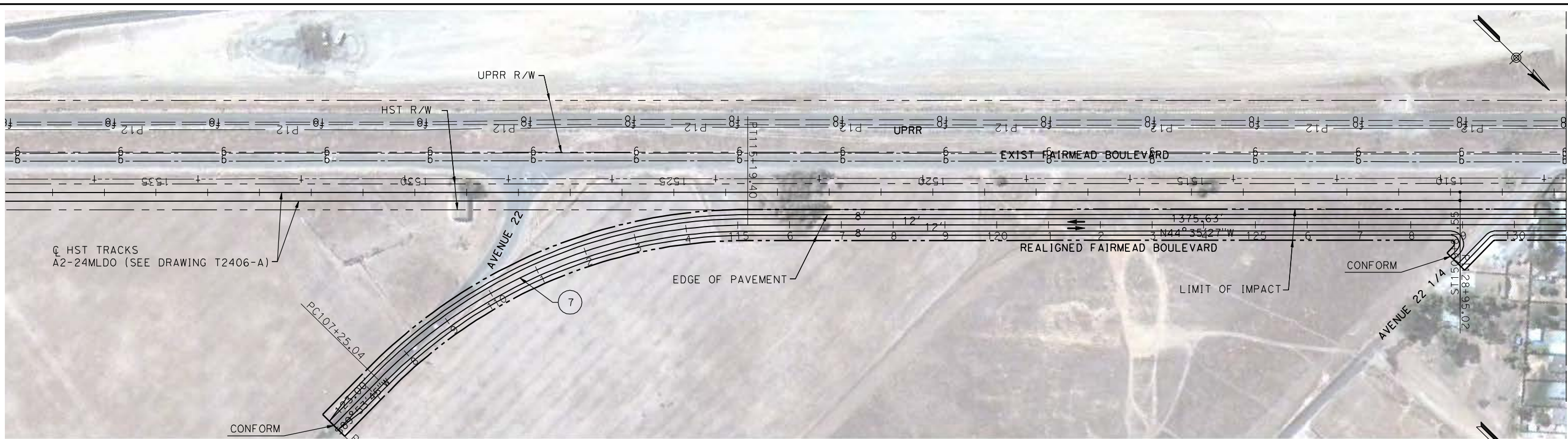


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 MERCED - (WC)  
 FAIRMEAD BLVD  
 LAYOUT  
 SHEET 3 OF 5

CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CR9169-B  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###

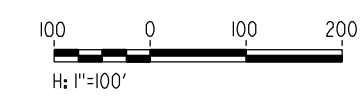


4/27/2011 7:16:18 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 3b - ave 24 wye-w.chowchilla local roads\layout\CR9170-B.dgn



**CURVE DATA**

No.	R	Δ	T	L
⑦	1000.00	45° 30' 48"	419.47	794.36
⑧	800.00	3° 00' 06"	20.96	41.91



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
 DRAWN BY  
C. DELOS REYES  
 CHECKED BY  
A. SILVER  
 IN CHARGE  
A. BOONE  
 DATE  
04/29/2011

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

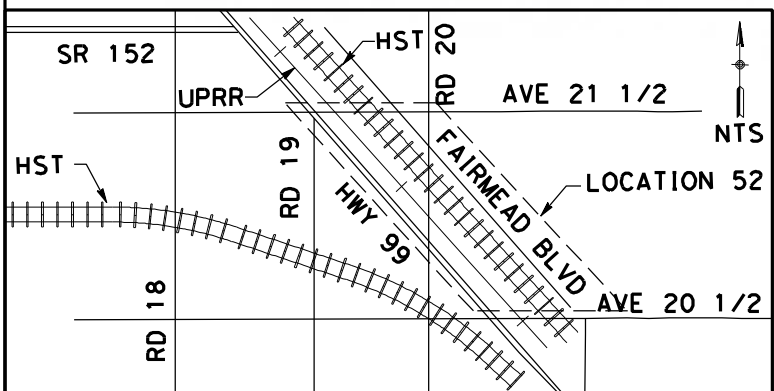
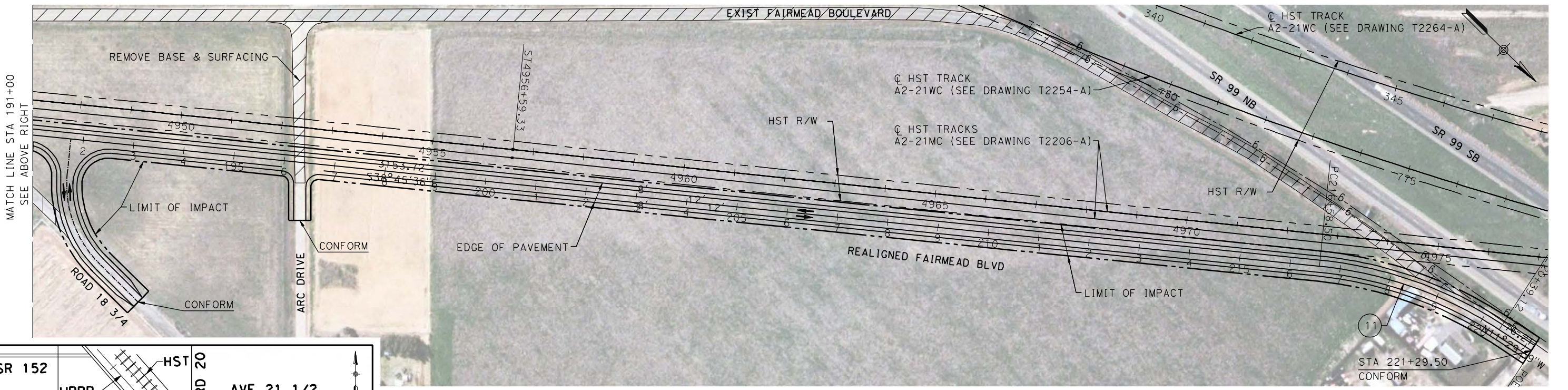
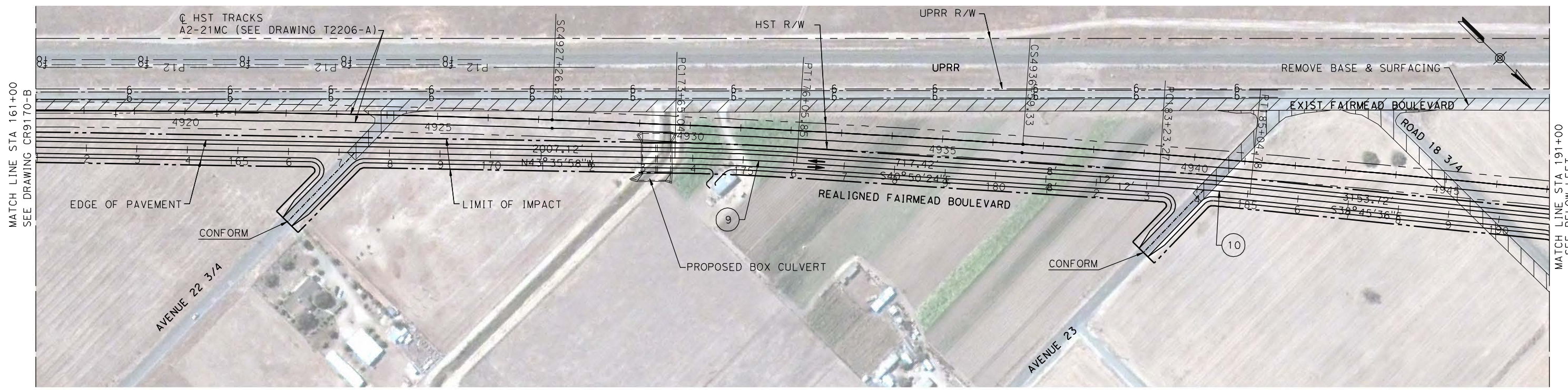


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 MERCED - (WC)  
 FAIRMEAD BLVD  
 LAYOUT  
 SHEET 4 OF 5

CONTRACT NO.  
HSR06-007  
 DRAWING NO.  
CR9170-B  
 SCALE  
AS SHOWN  
 SHEET NO.  
### OF ###



ReyesC1 4/27/2011 7:16:53 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 3b - ave 24 wye-w.chowchilla\layout CR9171-B.dgn



**CURVE DATA**

No.	R	Δ	T	L
(9)	5000.00	02°45'34"	120.43	240.81
(10)	5000.00	2°04'48"	90.76	181.51
(11)	800.00	27°15'37"	193.99	380.63



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
 DRAWN BY  
C. DELOS REYES  
 CHECKED BY  
A. SILVER  
 IN CHARGE  
A. BOONE  
 DATE  
04/29/2011

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

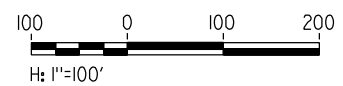
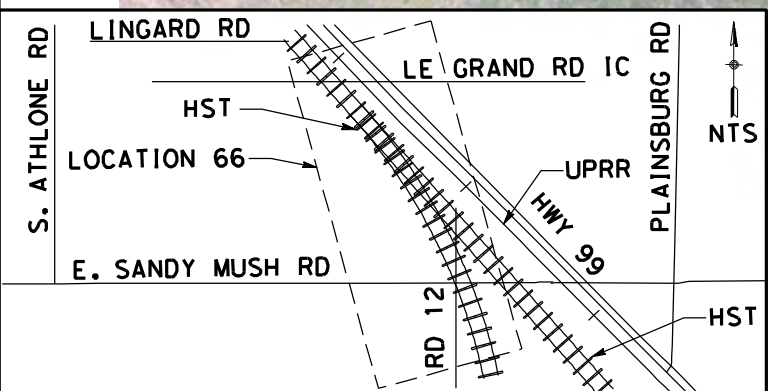
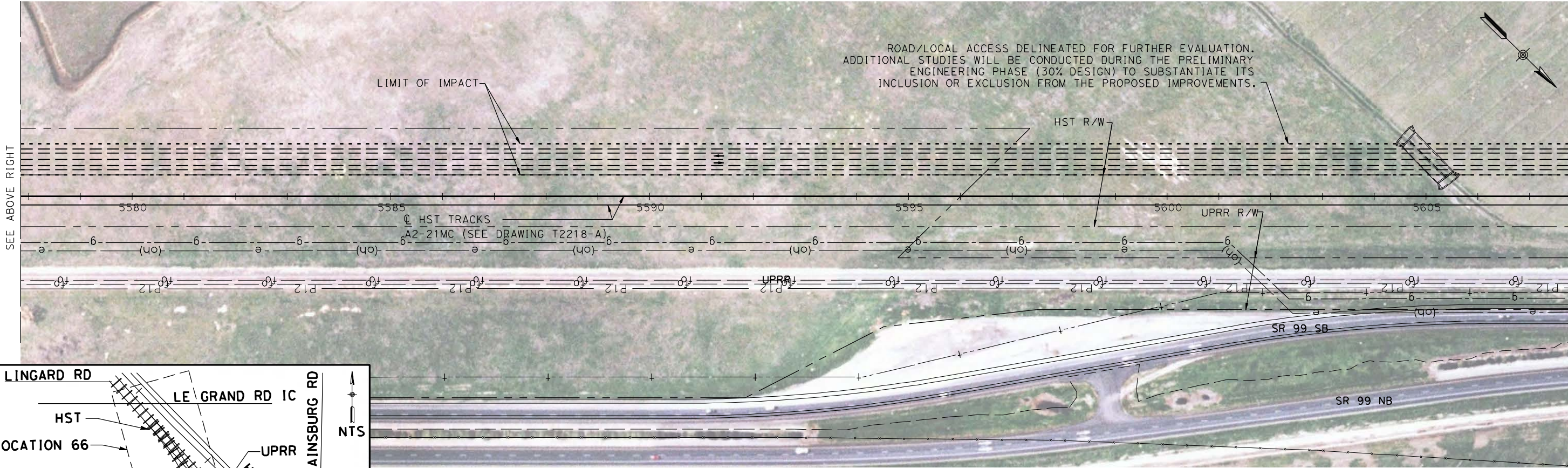
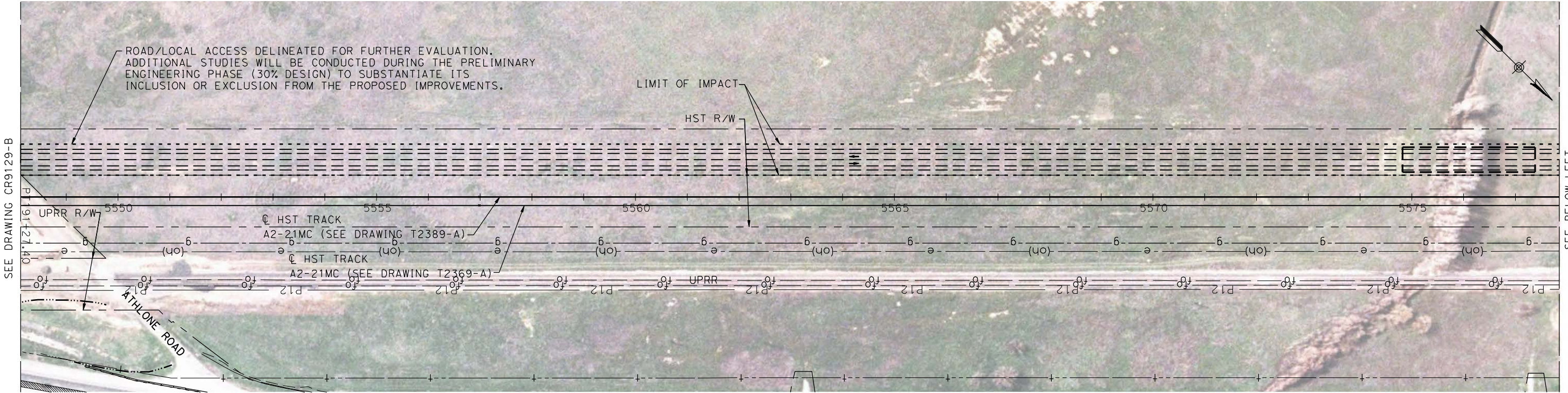


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 MERCED - (WC)  
 FAIRMEAD BLVD  
 LAYOUT  
 SHEET 5 OF 5

CONTRACT NO.  
HSR06-007  
 DRAWING NO.  
CR9171-B  
 SCALE  
AS SHOWN  
 SHEET NO.  
### OF ###



ReyesC1 4/27/2011 7:17:13 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 3b - ave 24 wye-w.chowchilla local roads\Layout\CR9172-B.dgn



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
 DRAWN BY  
C. DELOS REYES  
 CHECKED BY  
A. SILVER  
 IN CHARGE  
A. BOONE  
 DATE  
04/29/2011

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

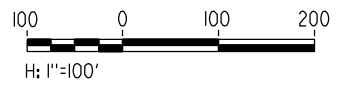
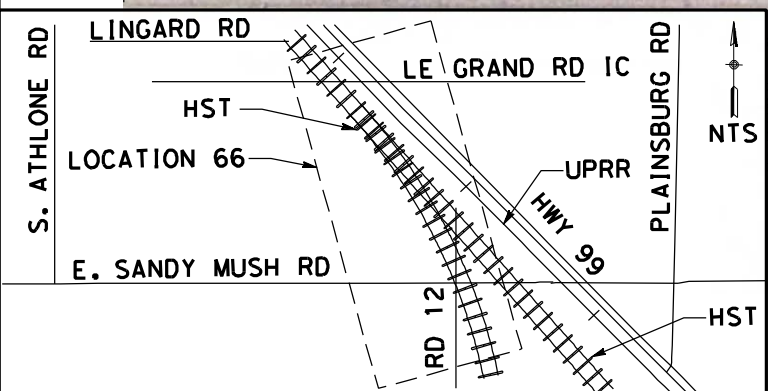
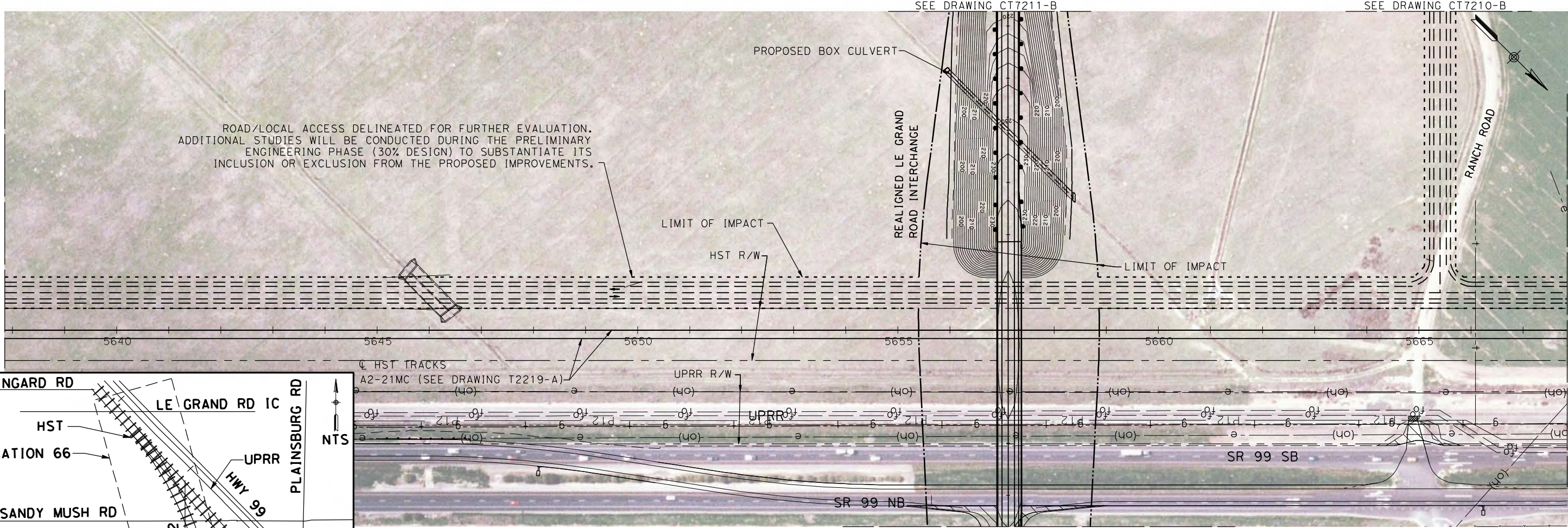
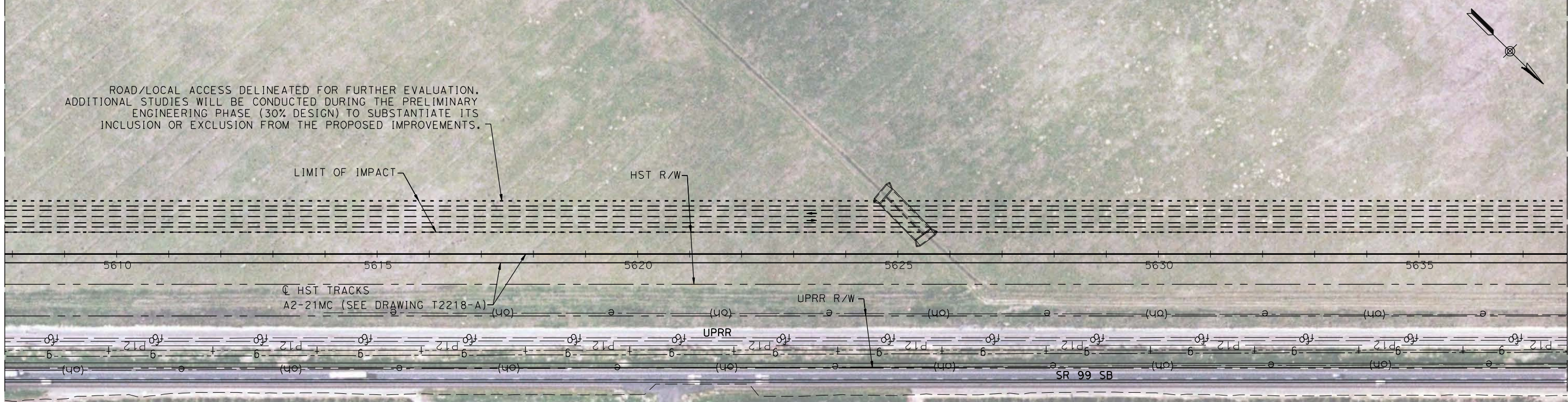


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 MERCED - (WC)  
 PROPOSED WEST FRONTAGE ROAD  
 LAYOUT

CONTRACT NO.  
HSR06-007  
 DRAWING NO.  
CR9172-B  
 SCALE  
AS SHOWN  
 SHEET NO.  
### OF ###



ReyesCI 4/27/2011 7:17:35 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 3b - ave 24 wye-w.chowchilla local roads\Layout\CR9173-B.dgn



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
 DRAWN BY  
C. DELOS REYES  
 CHECKED BY  
A. SILVER  
 IN CHARGE  
A. BOONE  
 DATE  
04/29/2011

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

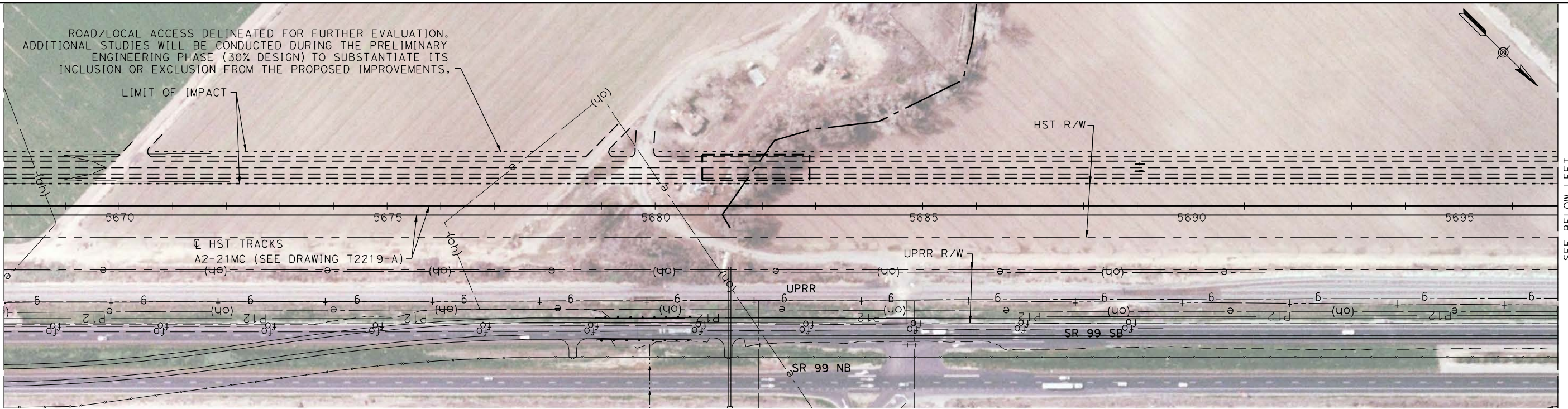


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 MERCED - (WC)  
 PROPOSED WEST FRONTAGE ROAD  
 LAYOUT

CONTRACT NO.  
HSR06-007  
 DRAWING NO.  
CR9173-B  
 SCALE  
AS SHOWN  
 SHEET NO.  
### OF ###

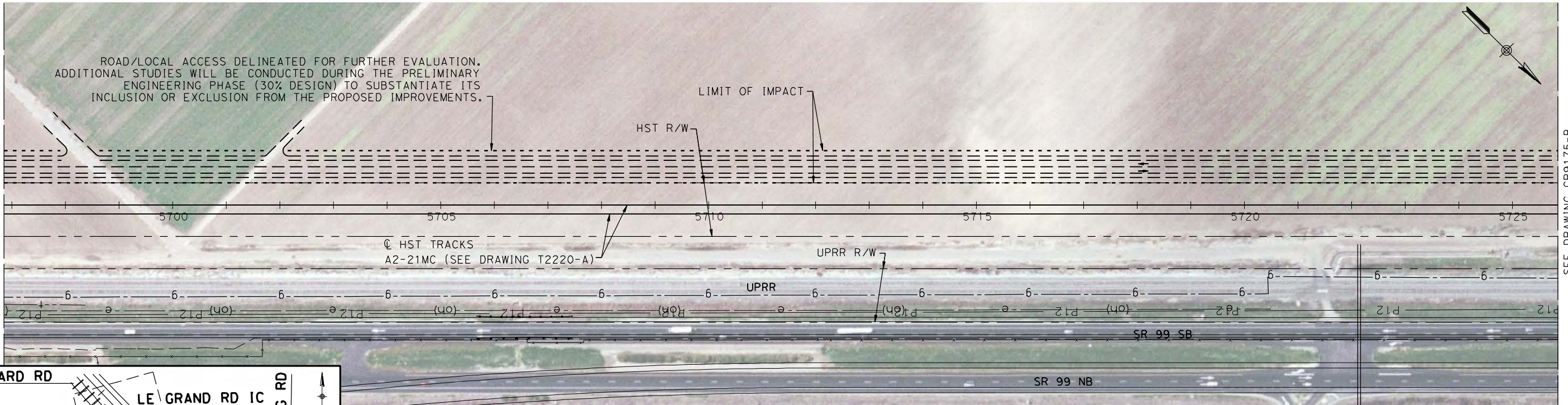


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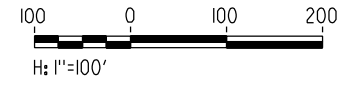
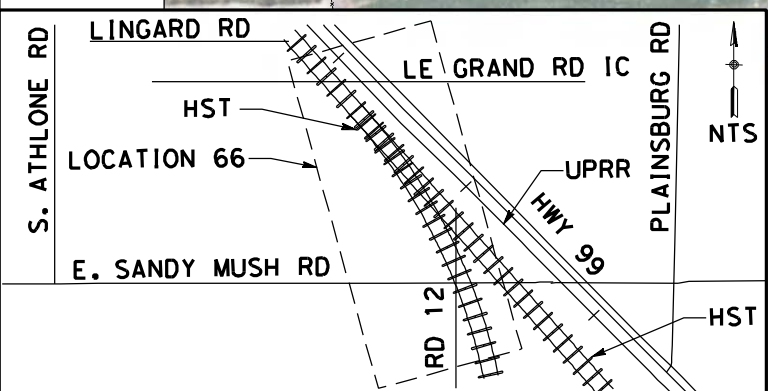
SEE DRAWING CR9173-B

SEE BELOW LEFT



SEE ABOVE RIGHT

SEE DRAWING CR9175-B



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
 DRAWN BY  
C. DELOS REYES  
 CHECKED BY  
A. SILVER  
 IN CHARGE  
A. BOONE  
 DATE  
04/29/2011

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



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 MERCED - (WC)  
 PROPOSED WEST FRONTAGE ROAD  
 LAYOUT

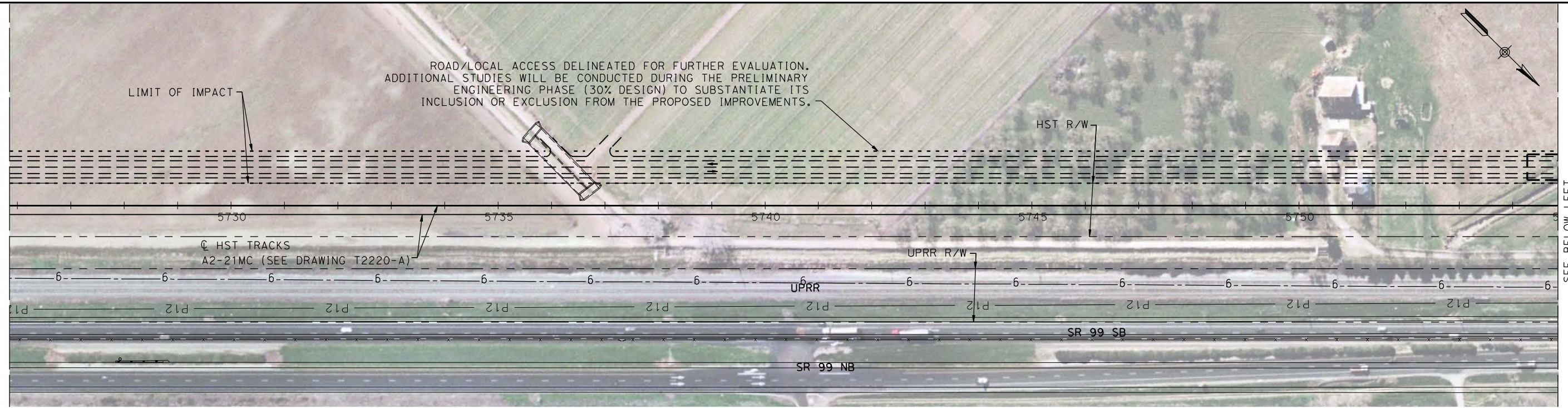
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 DRAWING NO.  
CR9174-B  
 SCALE  
AS SHOWN  
 SHEET NO.  
### OF ###



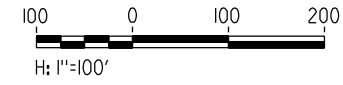
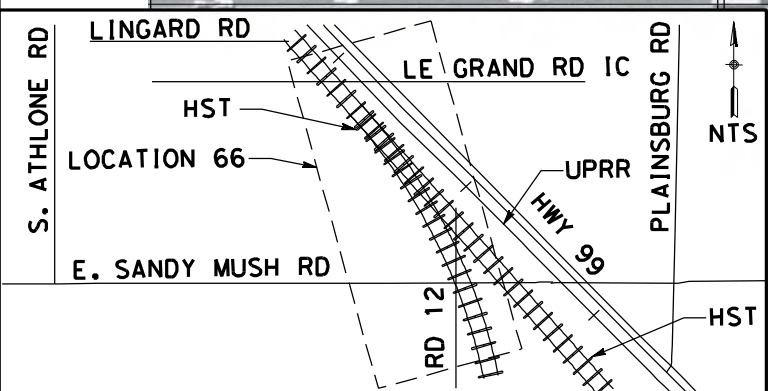
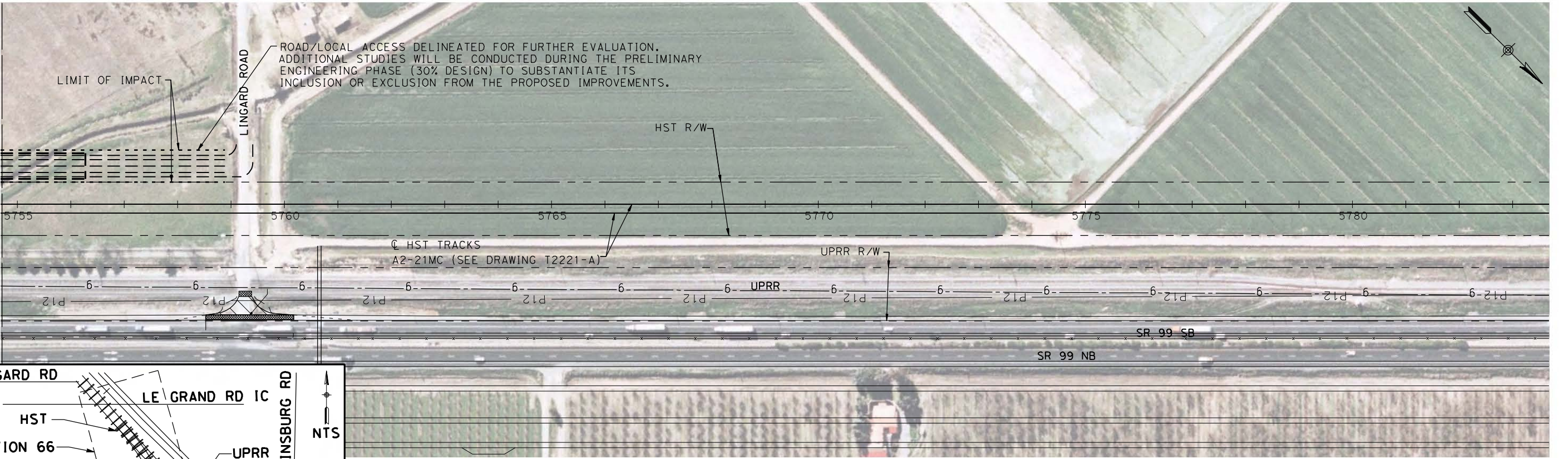
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SEE DRAWING CR9174-B

SEE BELOW LEFT



SEE ABOVE RIGHT



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
 DRAWN BY  
C. DELOS REYES  
 CHECKED BY  
A. SILVER  
 IN CHARGE  
A. BOONE  
 DATE  
04/29/2011

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

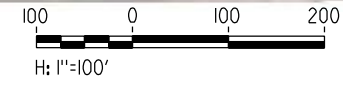
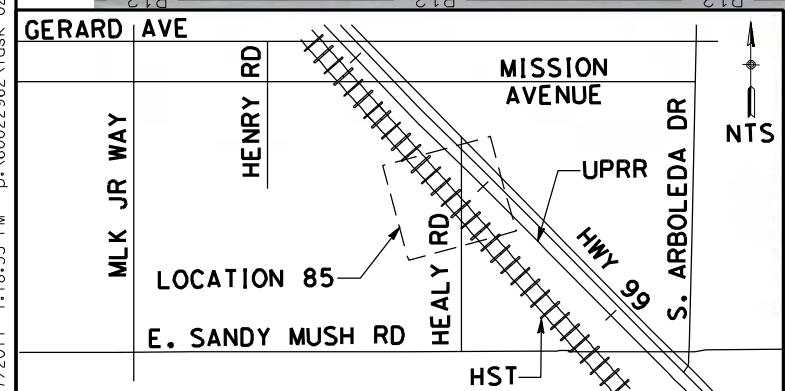


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 MERCED - (WC)  
 PROPOSED WEST FRONTAGE ROAD  
 LAYOUT

CONTRACT NO.  
HSR06-007  
 DRAWING NO.  
CR9175-B  
 SCALE  
AS SHOWN  
 SHEET NO.  
### OF ###



4/27/2011 7:18:33 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla\volume 3b - ave 24 wye-w.chowchilla local roads\layout\CR9176-B.dgn  
 ReyesC1



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
 D. AYELE  
 DRAWN BY  
 C. DELOS REYES  
 CHECKED BY  
 A. SILVER  
 IN CHARGE  
 A. BOONE  
 DATE  
 04/29/2011

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

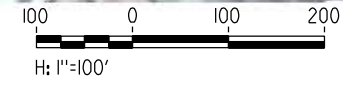
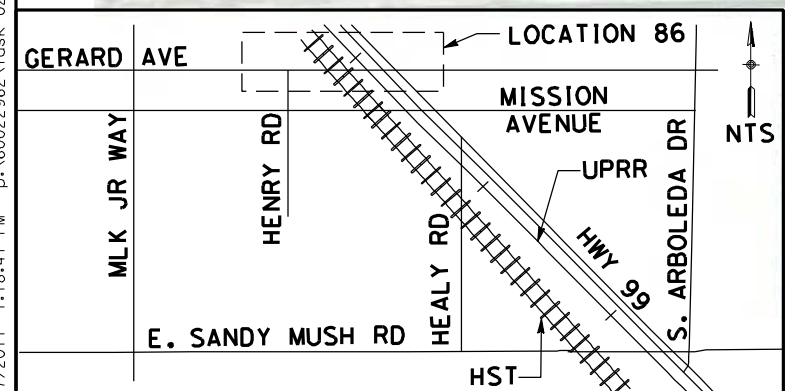


**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 MERCED - (AVE 24/WC)  
 HEALY ROAD  
 LAYOUT

CONTRACT NO.  
 HSR06-007  
 DRAWING NO.  
 CR9176-B  
 SCALE  
 AS SHOWN  
 SHEET NO.  
 ### OF ###



ReyesC1 4/27/2011 7:18:47 PM p:\60022962\task 02\_merced-fresno\cadd\civil\sheet\package 2 - ave 24 wye & w. chowchilla local roads\volume 3b - ave 24 wye-w.chowchilla local roads\Layout\CR9177-B.dgn



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY  
D. AYELE  
 DRAWN BY  
C. DELOS REYES  
 CHECKED BY  
A. SILVER  
 IN CHARGE  
A. BOONE  
 DATE  
04/29/2011

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



**CALIFORNIA HIGH-SPEED TRAIN PROJECT**  
**MERCED TO FRESNO**  
 UPRR/SR99 MERCED - (AVE 24/WC)  
 GERARD AVENUE/CALTRANS FRONTAGE ROAD  
 LAYOUT

CONTRACT NO.  
HSR06-007  
 DRAWING NO.  
CR9177-B  
 SCALE  
AS SHOWN  
 SHEET NO.  
### OF ###