CALIFORNIA HIGH-SPEED TRAIN

Project Environmental Impact Report/Environmental Impact Statement

FINAL

Merced to Fresno Section Project EIR/EIS

Volume III:

Section F1 – Alignment Plans

Hybrid Alternative with Ave 21 Wye

April 2012

CALIFORNIA High-Speed Rail Authority

U.S. Department of Transportation
Federal Railroad Administration

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	T2087-A	HYBRID	AVENUE 24/SR152/AVENUE 21	TRACK PLAN AND PROFILE	STA 6208+00 TO STA 6264+00
	T2088-A	HYBRID	AVENUE 24/SR152/AVENUE 21	TRACK PLAN AND PROFILE	STA 6264+00 TO STA 6320+00
	T2089-A	HYBRID	AVENUE 24/SR152/AVENUE 21	TRACK PLAN AND PROFILE	STA 6320+00 TO STA 6376+00
	T2090-A	HYBRID	AVENUE 24/SR152/AVENUE 21	TRACK PLAN AND PROFILE	STA 6376+00 TO STA 6432+00
	T2091-A	HYBRID	AVENUE 24/SR152/AVENUE 21	TRACK PLAN AND PROFILE	STA 6342+00 TO STA 6488+00
	T2092-A	HYBRID	AVENUE 24/SR152/AVENUE 21	TRACK PLAN AND PROFILE	STA 6488+00 TO STA 6542+00
	T2093-A	HYBRID	AVENUE 21	TRACK PLAN AND PROFILE	STA 6146+00 TO STA 6202+00
	T2094-A	HYBRID	AVENUE 21	TRACK PLAN AND PROFILE	STA 6202+00 TO STA 6258+00
	T2095-A	HYBRID	AVENUE 21	TRACK PLAN AND PROFILE	STA 6258+00 TO STA 6314+00
	T2096-A	HYBRID	AVENUE 21	TRACK PLAN AND PROFILE	STA 6314+00 TO STA 6370+00
	T2097-A	HYBRID	AVENUE 21	TRACK PLAN AND PROFILE	STA 6370+00 TO STA 6426+00
	T2098-A	HYBRID	AVENUE 21	TRACK PLAN AND PROFILE	STA 6426+00 TO STA 6482+00
	T2099-A	HYBRID	AVENUE 21	TRACK PLAN AND PROFILE	STA 6482+00 TO STA 6506+32
	T1100-A	HYBRID	AVENUE 21	PLAN AND PROFILE	STA 267+40.72 TO STA 320+00
	T1101-A	HYBRID	AVENUE 21	PLAN AND PROFILE	STA 320+00 TO STA 375+00
	T1102-A	HYBRID	AVENUE 21	PLAN AND PROFILE	STA 375+00 TO STA 430+00
	T1103-A	HYBRID	AVENUE 21	PLAN AND PROFILE	STA 430+00 TO STA 485+00
	T1104-A	HYBRID	AVENUE 21	PLAN AND PROFILE	STA 485+00 TO STA 540+00
	T1105-A	HYBRID	AVENUE 21	PLAN AND PROFILE	STA 540+00 TO STA 595+00
	T1106-A	HYBRID	AVENUE 21	PLAN AND PROFILE	STA 595+00 TO STA 650+00
	T1107-A	HYBRID	AVENUE 21	PLAN AND PROFILE	STA 650+00 TO STA 705+00
	T1108-A	HYBRID	AVENUE 21	PLAN AND PROFILE	STA 705+00 TO STA 760+00
	T1109-A	HYBRID	AVENUE 21	PLAN AND PROFILE	STA 760+00 TO STA 815+00
	T1110-A	HYBRID	AVENUE 21	PLAN AND PROFILE	STA 815+00 TO STA 868+86.88
	T1111-A	HYBRID		PLAN AND PROFILE	STA 1865+00 TO STA 1920+00
	T1112-A	HYBRID		PLAN AND PROFILE	STA 1920+00 TO STA 1975+00
	T1113-A	HYBRID		PLAN AND PROFILE	STA 1975+00 TO STA 2030+00

SHT NO.	DWG NO.	DRAWING TITLE LINE 3	DRAWING TITLE LINE 4	DRAWING TITLE LINE 5	DRAWING TITLE LINE 6
	T1114-A	HYBRID		PLAN AND PROFILE	STA 2030+00 TO STA 2085+00
	T1115-A	HYBRID		PLAN AND PROFILE	STA 2085+00 TO STA 2140+00
	T1116-A	HYBRID		PLAN AND PROFILE	STA 2140+00 TO STA 2195+00
	T1117-A	HYBRID		PLAN AND PROFILE	STA 2195+00 TO STA 2250+00
	T1118-A	HYBRID		PLAN AND PROFILE	STA 2250+00 TO STA 2305+00
	T1119-A	HYBRID		PLAN AND PROFILE	STA 2305+00 TO STA 2360+00
	T1120-A	HYBRID		PLAN AND PROFILE	STA 2360+00 TO STA 2415+00
	T1121-A	HYBRID		PLAN AND PROFILE	STA 2415+00 TO STA 2470+00
	T1122-A	HYBRID		PLAN AND PROFILE	STA 2470+00 TO STA 2525+00
	T1123-A	HYBRID		PLAN AND PROFILE	STA 2525+00 TO STA 2580+00
	T1124-A	HYBRID		PLAN AND PROFILE	STA 2580+00 TO STA 2635+00
	T1125-A	HYBRID		PLAN AND PROFILE	STA 2635+00 TO STA 2690+00
	T1126-A	HYBRID		PLAN AND PROFILE	STA 2690+00 TO STA 2740+55.75
	T1127-A	HYBRID		PLAN AND PROFILE	STA 1713+98 TO STA 1748+00
	T1128-A	HYBRID		PLAN AND PROFILE	STA 1748+00 TO STA 1801+61.52
	T2197-A	HYBRID - SB MERCED CONNECTION	AVENUE 21	PLAN AND PROFILE	STA 200+20 TO STA 250+00
	T2198-A	HYBRID - SB MERCED CONNECTION	AVENUE 21	PLAN AND PROFILE	STA 250+00 TO STA 305+00
	T2199-A	HYBRID - SB MERCED CONNECTION	AVENUE 21	PLAN AND PROFILE	STA 305+00 TO STA 360+00
	T2200-A	HYBRID - SB MERCED CONNECTION	AVENUE 21	PLAN AND PROFILE	STA 360+00 TO STA 377+99.09
	T2201-A	HYBRID - NB MERCED CONNECTION	AVENUE 21	PLAN AND PROFILE	STA 500+00 TO STA 550+00
	T2202-A	HYBRID - NB MERCED CONNECTION	AVENUE 21	PLAN AND PROFILE	STA 550+00 TO STA 605+00
	T2203-A	HYBRID - NB MERCED CONNECTION	AVENUE 21	PLAN AND PROFILE	STA 605+00 TO STA 660+00
	T2204-A	HYBRID - NB MERCED CONNECTION	AVENUE 21	PLAN AND PROFILE	STA 660+00 TO STA 677+39.72=
	T2205-A	UPRR/SR 99 MERCED CONNECTION	AVENUE 21	PLAN AND PROFILE	STA 4907+26.62 TO STA 4915+00
	T2206-A	UPRR/SR 99 MERCED CONNECTION	AVENUE 21	PLAN AND PROFILE	STA 4915+00 TO STA 4970+00
	T2207-A	UPRR/SR 99 MERCED CONNECTION		PLAN AND PROFILE	STA 4970+00 TO STA 5025+00
	T2208-A	UPRR/SR 99 MERCED CONNECTION		PLAN AND PROFILE	STA 5025+00 TO STA 5080+00
	T2209-A	UPRR/SR 99 MERCED CONNECTION		PLAN AND PROFILE	STA 5080+00 TO STA 5135+00
	T2210-A	UPRR/SR 99 MERCED CONNECTION		PLAN AND PROFILE	STA 5135+00 TO STA 5190+00
	T2211-A	UPRR/SR 99 MERCED CONNECTION		PLAN AND PROFILE	STA 5190+00 TO STA 5245+00
	T2212-A	UPRR/SR 99 MERCED CONNECTION		PLAN AND PROFILE	STA 5245+00 TO STA 5300+00
	T2213-A	UPRR/SR 99 MERCED CONNECTION		PLAN AND PROFILE	STA 5300+00 TO STA 5355+00
	T2214-A	UPRR/SR 99 MERCED CONNECTION		PLAN AND PROFILE	STA 5355+00 TO STA 5410+00
	T2215-A	UPRR/SR 99 MERCED CONNECTION		PLAN AND PROFILE	STA 5410+00 TO STA 5465+00
	T2216-A	UPRR/SR 99 MERCED CONNECTION		PLAN AND PROFILE	STA 5465+00 TO STA 5520+00
	T2217-A	UPRR/SR 99 MERCED CONNECTION		PLAN AND PROFILE	STA 5520+00 TO STA 5575+00
	T2218-A	UPRR/SR 99 MERCED CONNECTION		PLAN AND PROFILE	STA 5575+00 TO STA 5630+00
	T2219-A	UPRR/SR 99 MERCED CONNECTION		PLAN AND PROFILE	STA 5630+00 TO STA 5685+00
	T2220-A	UPRR/SR 99 MERCED CONNECTION		PLAN AND PROFILE	STA 5685+00 TO STA 5740+00
	T2221-A	UPRR/SR 99 MERCED CONNECTION		PLAN AND PROFILE	STA 5740+00 TO STA 5795+00
	T2222-A	UPRR/SR 99 MERCED CONNECTION		PLAN AND PROFILE	STA 5795+00 TO STA 5850+00
	T2223-A	UPRR/SR 99 MERCED CONNECTION		PLAN AND PROFILE	STA 5850+00 TO STA 5905+00
	T2224-A	UPRR/SR 99 MERCED CONNECTION		PLAN AND PROFILE	STA 5905+00 TO STA 5960+00
	T2225-A	UPRR/SR 99 MERCED CONNECTION		PLAN AND PROFILE	STA 5960+00 TO STA 6015+00
	T2226-A	UPRR/SR 99 MERCED CONNECTION		PLAN AND PROFILE	STA 6015+00 TO STA 6066+14.09
	T2250-A	UPRR/SR 99 WYE - NB CONNECTION	AVENUE 21	PLAN AND PROFILE	STA 505+00 TO STA 555+00
	T2251-A	UPRR/SR 99 WYE - NB CONNECTION	AVENUE 21	PLAN AND PROFILE	STA 555+00 TO STA 610+00
	T2252-A	UPRR/SR 99 WYE - NB CONNECTION	AVENUE 21	PLAN AND PROFILE	STA 610+00 TO STA 665+00
	T2253-A	UPRR/SR 99 WYE - NB CONNECTION	AVENUE 21	PLAN AND PROFILE	STA 665+00 TO STA 720+00
	T2254-A	UPRR/SR 99 WYE - NB CONNECTION	AVENUE 21	PLAN AND PROFILE	STA 720+00 TO STA 775+00
	T2255-A	UPRR/SR 99 WYE - NB CONNECTION	AVENUE 21	PLAN AND PROFILE	STA 775+00 TO STA 830+00
	T2256-A	UPRR/SR 99 WYE - NB CONNECTION	AVENUE 21	PLAN AND PROFILE	STA 830+00 TO STA 846+93.43
	T2260-A	UPRR/SR 99 WYE - SB CONNECTION	AVENUE 21	PLAN AND PROFILE	STA 105+00 TO STA 125+00
	T2261-A	UPRR/SR 99 WYE - SB CONNECTION	AVENUE 21	PLAN AND PROFILE	STA 125+00 TO STA 180+00
	T2262-A	UPRR/SR 99 WYE - SB CONNECTION	AVENUE 21	PLAN AND PROFILE	STA 180+00 TO STA 235+00
	T2263-A	UPRR/SR 99 WYE - SB CONNECTION	AVENUE 21	PLAN AND PROFILE	STA 235+00 TO STA 290+00
	T2264-A	UPRR/SR 99 WYE - SB CONNECTION	AVENUE 21	PLAN AND PROFILE	STA 290+00 TO STA 345+00
	T2265-A	UPRR/SR 99 WYE - SB CONNECTION	AVENUE 21	PLAN AND PROFILE	STA 345+00 TO STA 400+00
	T2266-A	UPRR/SR 99 WYE - SB CONNECTION	AVENUE 21	PLAN AND PROFILE	STA 400+00 TO STA 416+33.89

"SEE T3000-T3017 DRAWINGS FOR TYPICAL SECTION LIMITS AND DETAILS"

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY A. SHIELDS
DRAWN BY A. SHIELDS
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IN CHARGE A. BOONE
DATE 07/27/2011

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CALIFORNIA HIGH-SPEED RAIL AUTHORITY

CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO

HYBRID ALIGNMENT
AVENUE 21
INDEX OF DRAWINGS
SHEET 1 OF 1

CONTRACT NO. HSR06-007
DRAWING NO. T0010-A
SCALE NONE
SHEET NO. OF ###

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ABBREVIATIONS

ALIGNMENT

HORIZONTAL

BC	BEGINNING OF CURVE
CS	CURVE TO SPIRAL
EC	END OF CURVE
PC	POINT OF CURVE
PCC	POINT OF COMPOUND CIRCULAR CURVES
PCS	POINT OF CURVE TO SPIRAL
PF	POINT OF FROG
PI	POINT OF INTERSECTION OF TWO TANGENTS
PITO	POINT OF INTERSECTION OF TURNOUT
POC	POINT ON CURVE
POS	POINT ON SPIRAL
POT	POINT ON TANGENT
PRC	POINT OF REVERSE CURVES
PS	POINT OF SWITCH
PSC	POINT OF SPIRAL TO CURVE
PT	POINT OF TANGENCY
R	RADIUS OF CURVATURE IN FEET
SC	SPIRAL TO CURVE
SPO	POINT OF ORIGIN OF COMPOUND SPIRAL
SS	POINT OF SPIRAL TO SPIRAL
ST	SPIRAL TO TANGENT
TS	TANGENT TO SPIRAL
V	DESIGN VELOCITY IN MILES PER HOUR

VERTICAL

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

BEG	BEGIN
BLVD	BOULEVARD
℄	CENTER LINE
CL	CENTERLINE, CLASS
CLR	CLEAR
COL	COLUMN
DWG	DRAWING
EQ	EQUATION
EXIST(E)	EXISTING
IN	INCH
LT	LEFT
MAX	MAXIMUM
MIN	MINIMUM
N	NORTH
NB	NORTH BOUND
NTS	NOT TO SCALE
OG	ORIGINAL GROUND
O/H OH	OVER HEAD
PG&E	PACIFIC GAS & ELECTRIC
PGL	PROFILE GRADE LINE
RR	RAILROAD
RD	ROAD
R/W ROW	RIGHT OF WAY
RT	RIGHT
SS	SANITARY SEWER
SHT	SHEET
ST	STREET
STD	STANDARD
SD	STORM DRAIN
STRUCT	STRUCTURE
T	TELEPHONE
	(OH) OVERHEAD LINE
	(UG) UNDERGROUND LINE
TOR	TOP OF RAIL
TK	TRACK
TO	TURNOUT
TYP	TYPICAL
TBD	TO BE DETERMINED
TF	TELECOMMUNICATIONS FIBER OPTIC
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
O	FUEL LINE
TC	TELEPHONE LINE
P12	PETROLEUM LINE (12")
(OH)	OVERHEAD
	NORTH ARRROW
	PVI
	POTENTIAL SOUND BARRIER

NOTES:

1. EXISTING ROADS TO BE GRADE SEPARATED OVER THE HIGH SPEED TRAIN (HST) RIGHT OF WAY ARE INDICATED IN THE ALIGNMENT PROFILE. ALL OTHER ROADS CROSSING THE PROPOSED HST TRACKS WILL BE CLOSED OR RELOCATED. SEE ROADWAY PLANS FOR ADDITIONAL INFORMATION.
2. SEE STRUCTURE PLANS FOR LIMITS AND DETAILS OF VIADUCTS, STREAM CROSSINGS, RETAINING WALLS AND OTHER HST STRUCTURES.
3. SEE ROADWAY PLANS FOR ROADWAY RELOCATIONS, GRADE SEPARATIONS, AND MODIFICATIONS TO STATE HIGHWAY FACILTIES.
4. UTILITIES INDICATED ON THE PLANS ARE FOR REFERENCE ONLY. SEE "UTILITIES CONFLICT MEMO" FOR ADDITIONAL INFORMATION AND PROPOSED RELOCATION CONCEPTS.
5. ROAD/LOCAL ACCESS DELINEATED FOR FURTHER EVALUATION. ADDITIONAL STUDIES WILL BE CONDUCTED DURING PRELIMINARY ENGINEERING PHASE (30% DESIGN) TO SUBSTANTIATE ITS INCLUSION OR EXCLUSION FROM THE PROPOSED IMPORVEMENTS.
6. STANDALONE RADIO SITES WILL BE PROVIDED IN BETWEEN TRACTION POWER FACILITIES (SUBSTATIONS, SWITCHING STATIONS, AND PARALLELING STATIONS). SPACING OF THESE SITES WILL VARY BETWEEN 1-1/2 AND 3 MILES. ACCESS TO THESE SITES WILL BE PROVIDED AT THE NEAREST PUBLIC ROAD THAT CROSSES THE HIGH SPEED TRAIN ALIGNMENT.

"SEE T3000-T3017 DRAWINGS FOR TYPICAL SECTION LIMITS AND DETAILS"

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REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY B. CHAN
DRAWN BY S. LEONG
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IN CHARGE J. VALSECCHI
DATE 07/27/2011

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CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO
GENERAL

ABBREVIATIONS, SYMBOLS AND NOTES

CONTRACT NO. HSR06-007
DRAWING NO. T0100-A
SCALE NO SCALE
SHEET NO. ### OF ###

"SEE T3000-T3017 DRAWINGS FOR
TYPICAL SECTION LIMITS AND DETAILS"

REV	DATE	BY	CHK	APP	DESCRIPTION
1	12/12/2011	AS			TRACK REALIGNMENT

DESIGNED BY A. SHIELDS
DRAWN BY H. SULLIVAN
CHECKED BY A. BOONE
IN CHARGE A. BOONE
DATE 07/27/2011

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CALIFORNIA HIGH-SPEED RAIL AUTHORITY

CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO
HYBRID ALIGNMENT
AVENUE 21
KEY MAP
SHEET 1 OF 3

CONTRACT NO. HSR06-007
DRAWING NO. T0101-A
SCALE NO SCALE
SHEET NO. ### OF ###

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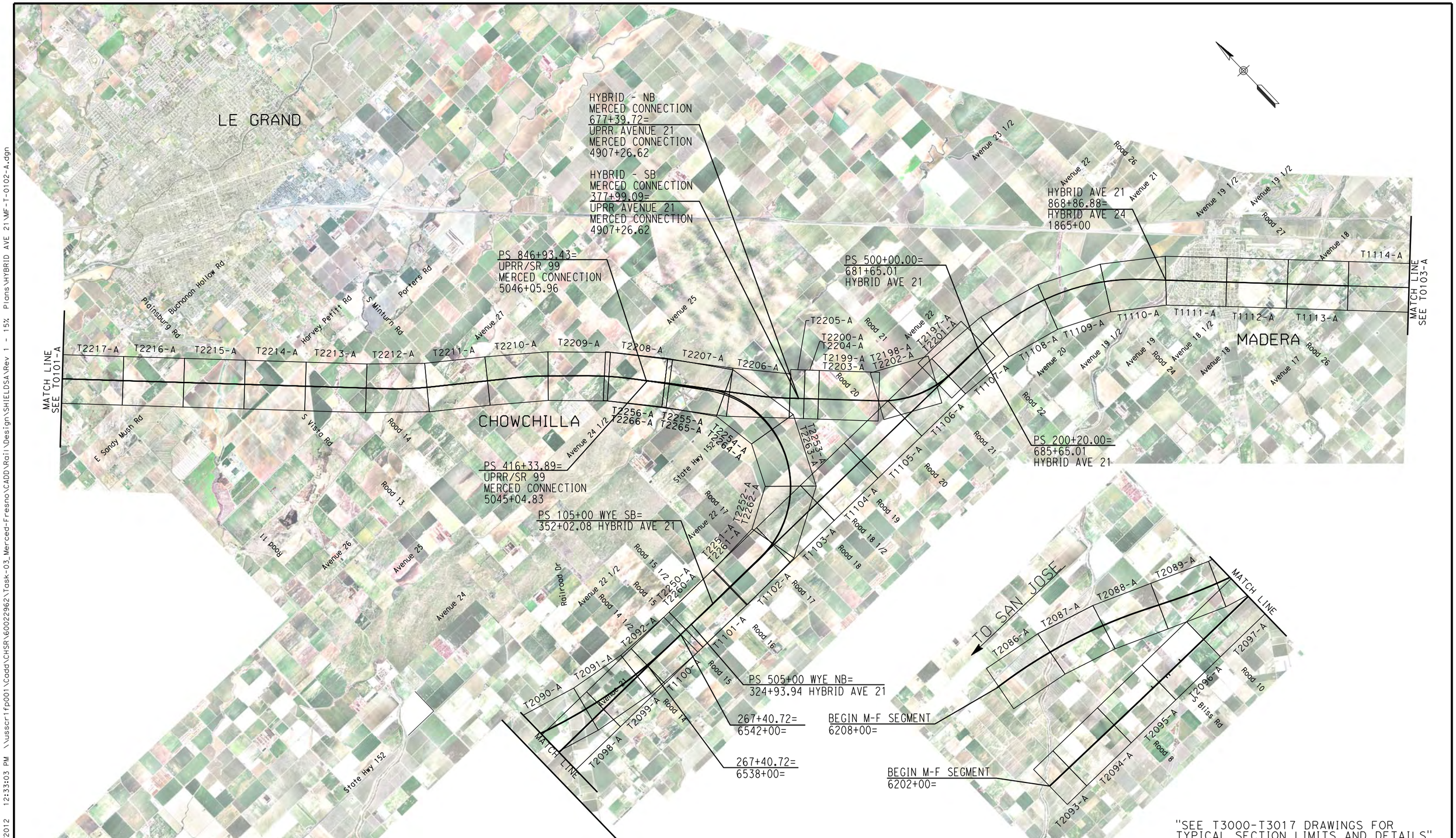

"SEE T3000-T3017 DRAWINGS FOR TYPICAL SECTION LIMITS AND DETAILS"

REV	DATE	BY	CHK	APP	DESCRIPTION
1	12/12/2011	AS			TRACK REALIGNMENT

DESIGNED BY A. SHIELDS
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IN CHARGE A. BOONE
DATE 07/27/2011

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MERCED TO FRESNO
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AVENUE 21
KEY MAP
SHEET 2 OF 3

CONTRACT NO. HSR06-007
DRAWING NO. T0102-A
SCALE NO SCALE
SHEET NO. ### OF ###

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ShieldsA

"SEE T3000-T3017 DRAWINGS FOR
TYPICAL SECTION LIMITS AND DETAILS"

REV	DATE	BY	CHK	APP	DESCRIPTION
1	12/12/2011	AS			TRACK REALIGNMENT

DESIGNED BY A. SHIELDS
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IN CHARGE A. BOONE
DATE 07/27/2011

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CALIFORNIA HIGH-SPEED RAIL AUTHORITY

CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO
HYBRID ALIGNMENT
AVENUE 21
KEY MAP
SHEET 3 OF 3

CONTRACT NO. HSR06-007
DRAWING NO. T0103-A
SCALE NO SCALE
SHEET NO. ### OF ###

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TRACK ALIGNMENT DATA SUMMARY TABLE - SOUTHBOUND TRACK

CURVE	ELEMENT	POINT TYPE	STATION	COORDINATES NORTHING	COORDINATES EASTING	RADIUS (FT)	LENGTH (FT)	DELTA, Δ	K	P	DESIGN SPEED (MPH)	ACTUAL SUPERELEVATION (EA)(IN)	UNBALANCED SUPERELEVATION (EA)(IN)	WCB (0°00'00") (TANGENT)	WCB (0°00'00") START ANGLE	WCB (0°00'00") END ANGLE
	TANGENT	POB	5367+74.09	1858039.02	6512080.45		10097.07							S 89°46'01" E		
	TANGENT	TS	5468+71.16	1857997.95	6522177.45											
	CLOTHOID	TS	5468+71.16	1857997.95	6522177.45											
	CLOTHOID	SPI	5479+71.18	1857993.48	6523277.46		1650.00	1°03'02"	824.99	2.52					S 89°46'01" E	S 88°43'00" E
	CLOTHOID	SC	5485+21.16	1857981.16	6523827.34											
	ARC	SC	5485+21.16	1857981.16	6523827.34											
SR-1-SB	ARC	PI	5543+57.72	1857850.43	6529662.42	45000.00	11608.30	14°46'49"			250	4.00	1.56		S 88°43'00" E	S 73°56'11" E
	ARC	CC		1812992.45	6522819.41											
	ARC	CS	5601+29.47	1856235.43	6535271.09											
	CLOTHOID	CS	5601+29.47	1856235.43	6535271.09											
	CLOTHOID	SPI	5606+79.48	1856083.24	6535799.63		1650.00	1°03'02"	824.99	2.52					S 73°56'11" E	S 72°53'10" E
	CLOTHOID	ST	5617+79.47	1855759.53	6536850.94											
	TANGENT	ST	5617+79.47	1855759.53	6536850.94		3900.12							S 72°53'10" E		
	TANGENT	TS	5656+79.58	1854611.83	6540578.37											
	CLOTHOID	TS	5656+79.58	1854611.83	6540578.37											
	CLOTHOID	SPI	5667+79.60	1854288.12	6541629.68		1650.00	1°03'00"	824.99	2.52					S 72°53'10" E	S 73°56'10" E
	CLOTHOID	SC	5673+29.58	1854135.93	6542158.22											
	ARC	SC	5673+29.58	1854135.93	6542158.22											
SR-2-SB	ARC	PI	5732+61.69	1852494.45	6547858.7	45016.50	11796.24	15°00'50"			250	4.00	1.55		S 73°56'10" E	S 88°57'00" E
	ARC	CC		1897394.68	6554614.76											
	ARC	CS	5791+25.83	1852385.74	6553789.81											
	CLOTHOID	CS	5791+25.83	1852385.74	6553789.81											
	CLOTHOID	SPI	5796+75.84	1852375.66	6554339.73		1650.00	1°03'00"	824.99	2.52					S 88°57'00" E	S 90°00'00" E
	CLOTHOID	ST	5807+75.83	1852375.66	6555439.75											
	TANGENT	ST	5807+75.83	1852375.66	6555439.75		28794.12							S 90°00'00" E		
	TANGENT	TS	6095+69.95	1852375.66	6584233.87											
	CLOTHOID	TS	6095+69.95	1852375.66	6584233.87											
	CLOTHOID	SPI	6106+69.97	1852375.66	6585333.89		1650.00	1°03'02"	824.99	2.52					S 90°00'00" E	S 88°56'58" E
	CLOTHOID	SC	6112+19.95	1852365.58	6585883.81											
	ARC	SC	6112+19.95	1852365.58	6585883.81											
SR-3-SB	ARC	PI	6204+28.65	1852196.76	6595090.97	45000.00	18166.59	23°07'50"			250	4.00	1.56		S 88°56'58" E	S 65°49'09" E
	ARC	CC		1807373.14	6585058.86											
	ARC	CS	6293+86.54	1848424.71	6603491.68											
	CLOTHOID	CS	6293+86.54	1848424.71	6603491.68											
	CLOTHOID	SPI	6299+36.56	1848199.41	6603993.44		1650.00	1°03'02"	824.99	2.52					S 65°49'09" E	S 64°46'07" E
	CLOTHOID	ST	6310+36.54	1847730.5	6604988.51											
	TANGENT	ST	6310+36.54	1847730.5	6604988.51		1353.50							S 64°46'07" E		
	TANGENT	TS	6323+90.04	1847153.54	6606212.88											

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY P.JACOBY
DRAWN BY ALBERT S.
CHECKED BY RESHMA C.
IN CHARGE D. WEMMER
DATE 4/15/2011

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CALIFORNIA HIGH-SPEED RAIL AUTHORITY

CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO
HYBRID
AVENUE 24/SR152/AVENUE 21
TRACK GEOMETRY DATA

CONTRACT NO. HSR08-05
DRAWING NO. TJ7401A
SCALE NO SCALE
SHEET NO.

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TRACK ALIGNMENT DATA SUMMARY TABLE - SOUTHBOUND TRACK

CURVE	ELEMENT	POINT TYPE	STATION	COORDINATES		RADIUS (FT)	LENGTH (FT)	DELTA, Δ	K	P	DESIGN SPEED (MPH)	ACTUAL SUPERELEVATION (EA)(IN)	UNBALANCED SUPERELEVATION (EA)(IN)	WCB (0°00'00") (TANGENT)	WCB (0°00'00")	
				NORTHING	EASTING										START ANGLE	END ANGLE
	CLOTHOID	TS	6323+90.04	1847153.54	6606212.88											
	CLOTHOID	SPI	6334+90.06	1846684.64	6607207.95		1650.00	1°03'00"	824.99	2.52					S 64°46'07" E	S 65°49'08" E
	CLOTHOID	SC	6340+40.04	1846459.33	6607709.7											
	ARC	SC	6340+40.04	1846459.33	6607709.7											
SR-4-SB	ARC	PI	6434+27.70	1842613.92	6616273.64	45016.50	18510.04	23°33'33"			250	4.00	1.55		S 65°49'08" E	S 89°22'40" E
	ARC	CC		1887525.83	6626149.55											
	ARC	CS	6525+50.08	1842511.99	6625660.74											
	CLOTHOID	CS	6525+50.08	1842511.99	6625660.74											
	CLOTHOID	SPI	6531+00.10	1842506.01	6626210.73		1650.00	1°03'00"	824.99	2.52					S 89°22'40" E	N 89°34'20" E
	CLOTHOID	ST	6542+00.08	1842514.23	6627310.72											

REV	DATE	BY	CHK	APP	DESCRIPTION

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CALIFORNIA HIGH-SPEED RAIL AUTHORITY

CALIFORNIA HIGH-SPEED TRAIN PROJECT
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AVENUE 24/SR152/AVENUE 21
TRACK GEOMETRY DATA

CONTRACT NO. HSR08-05
DRAWING NO. TJ7402A
SCALE NO SCALE
SHEET NO.

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TRACK ALIGNMENT DATA SUMMARY TABLE - NORTHBOUND TRACK

CURVE	ELEMENT	POINT TYPE	STATION	COORDINATES		RADIUS (FT)	LENGTH (FT)	DELTA, Δ	K	P	DESIGN SPEED (MPH)	ACTUAL SUPERELEVATION (EA)(IN)	UNBALANCED SUPERELEVATION (EA)(IN)	WCB (0°00'00") (TANGENT)	WCB (0°00'00")	
				NORTHING	EASTING										START ANGLE	END ANGLE
	TANGENT	POB	5367+74.09	1858055.52	6512080.52		10096.92							S 89°46'01" E		
	TANGENT	TS	5468+71.01	1858014.45	6522177.36											
	CLOTHOID	TS	5468+71.01	1858014.45	6522177.36											
	CLOTHOID	SPI	5479+71.23	1858009.98	6523277.57		1650.30	1°03'01"	825.14	2.52					S 89°46'01" E	S 88°43'00" E
	CLOTHOID	SC	5485+21.31	1857997.66	6523827.55											
	ARC	SC	5485+21.31	1857997.66	6523827.55											
SR-1-NB	ARC	PI	5543+60.16	1857866.9	6529664.94	45016.50	11612.86	14°46'50"			250	4.00	1.55		S 88°43'00" E	S 73°56'10" E
	ARC	CC		1812992.45	6522819.41											
	ARC	CS	5601+34.18	1856251.25	6535275.8											
	CLOTHOID	CS	5601+34.18	1856251.25	6535275.8											
	CLOTHOID	SPI	5606+84.30	1856099.02	6535804.44		1650.30	1°03'01"	825.14	2.52					S 73°56'10" E	S 72°53'10" E
	CLOTHOID	ST	5617+84.48	1855775.26	6536855.94											
	TANGENT	ST	5617+84.48	1855775.26	6536855.94		3900.12							S 72°53'10" E		
	TANGENT	TS	5656+84.59	1854627.56	6540583.37											
	CLOTHOID	TS	5656+84.59	1854627.56	6540583.37											
	CLOTHOID	SPI	5667+84.41	1854303.91	6541634.49		1649.70	1°03'01"	824.84	2.52					S 72°53'10" E	S 73°56'10" E
	CLOTHOID	SC	5673+34.29	1854151.74	6542162.93											
	ARC	SC	5673+34.29	1854151.74	6542162.93											
SR-2-NB	ARC	PI	5732+64.07	1852510.93	6547861.18	45000.00	11791.62	15°00'49"			250	4.00	1.56		S 73°56'10" E	S 88°56'59" E
	ARC	CC		1897394.68	6554614.76											
	ARC	CS	5791+25.91	1852402.24	6553789.96											
	CLOTHOID	CS	5791+25.91	1852402.24	6553789.96											
	CLOTHOID	SPI	5796+75.83	1852392.16	6554339.78		1649.70	1°03'01"	824.84	2.52					S 88°56'59" E	S 90°00'00" E
	CLOTHOID	ST	5807+75.61	1852392.16	6555439.6											
	TANGENT	ST	5807+75.61	1852392.16	6555439.6		28794.12							S 90°00'00" E		
	TANGENT	TS	6095+69.73	1852392.16	6584233.72											
	CLOTHOID	TS	6095+69.73	1852392.16	6584233.72											
	CLOTHOID	SPI	6106+69.95	1852392.16	6585333.94		1650.30	1°03'01"	825.14	2.52					S 90°00'00" E	S 88°56'59" E
	CLOTHOID	SC	6112+20.03	1852382.08	6585883.96											
	ARC	SC	6112+20.03	1852382.08	6585883.96											
SR-3-NB	ARC	PI	6204+32.27	1852213.23	6595094.66	45016.50	18173.56	23°07'51"			250	4.00	1.55		S 88°56'59" E	S 65°49'08" E
	ARC	CC		1807373.14	6585058.86											
	ARC	CS	6293+93.59	1848439.7	6603498.58											
	CLOTHOID	CS	6293+93.59	1848439.7	6603498.58											
	CLOTHOID	SPI	6299+43.71	1848214.36	6604000.42		1650.30	1°03'01"	825.14	2.52					S 65°49'08" E	S 64°46'07" E
	CLOTHOID	ST	6310+43.89	1847745.37	6604995.68											
	TANGENT	ST	6310+43.89	1847745.37	6604995.68		1353.50							S 64°46'07" E		
	TANGENT	TS	6323+97.39	1847168.41	6606220.04											

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY P.JACOBY
DRAWN BY ALBERT S.
CHECKED BY RESHMA C.
IN CHARGE D. WEMMER
DATE 4/15/2011

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CALIFORNIA HIGH-SPEED RAIL AUTHORITY

CALIFORNIA HIGH-SPEED TRAIN PROJECT
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TRACK GEOMETRY DATA

CONTRACT NO. HSR08-05
DRAWING NO. TJ7403A
SCALE NO SCALE
SHEET NO.

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TRACK ALIGNMENT DATA SUMMARY TABLE - NORTHBOUND TRACK

CURVE	ELEMENT	POINT TYPE	STATION	COORDINATES		RADIUS (FT)	LENGTH (FT)	DELTA, Δ	K	P	DESIGN SPEED (MPH)	ACTUAL SUPERELEVATION (EA)(IN)	UNBALANCED SUPERELEVATION (EA)(IN)	WCB (0°00'00") (TANGENT)	WCB (0°00'00")	
				NORTHING	EASTING										START ANGLE	END ANGLE
	CLOTHOID	TS	6323+97.39	1847168.41	6606220.04											
	CLOTHOID	SPI	6334+97.21	1846699.58	6607214.94		1649.70	1°03'01"	824.84	2.52					S 64°46'07" E	S 65°49'08" E
	CLOTHOID	SC	6340+47.09	1846474.32	6607716.6											
	ARC	SC	6340+47.09	1846474.32	6607716.6											
SR-4-NB	ARC	PI	6434+31.15	1842630.41	6616277.26	45000.00	18502.95	23°33'31"			250	4.00	1.56		S 65°49'08" E	S 89°22'40" E
	ARC	CC		1887525.83	6626149.55											
	ARC	CS	6525+50.04	1842528.49	6625660.77											
	CLOTHOID	CS	6525+50.04	1842528.49	6625660.77											
	CLOTHOID	SPI	6530+99.96	1842522.51	6626210.65		1649.70	1°03'01"	824.84	2.52					S 89°22'40" E	N 89°34'20" E
	CLOTHOID	ST	6541+99.74	1842530.73	6627310.44											

REV	DATE	BY	CHK	APP	DESCRIPTION

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TRACK GEOMETRY DATA

CONTRACT NO. HSR08-05
DRAWING NO. TJ7404A
SCALE NO SCALE
SHEET NO.

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TRACK ALIGNMENT DATA SUMMARY TABLE - SOUTHBOUND TRACK

CURVE	ELEMENT	POINT TYPE	STATION	COORDINATES NORTHING	COORDINATES EASTING	RADIUS (FT)	LENGTH (FT)	DELTA, Δ	K	P	DESIGN SPEED (MPH)	ACTUAL SUPERELEVATION (EA)(IN)	UNBALANCED SUPERELEVATION (EA)(IN)	WCB (0°00'00") (TANGENT)	WCB (0°00'00") START ANGLE	WCB (0°00'00") END ANGLE
	TANGENT	ST	A 6085+46.45	1842427.27	6581100.50		16,264.68							S 89°45'06" E		
	TANGENT	TS	A 6248+11.13	1842356.80	6597365.02											
	CLOTHOID	TS	A 6248+11.13	1842356.80	6597365.02			0°06'46"							S 89°45'06" E	
	CLOTHOID	SPI	A 6252+57.79	1842354.87	6597811.69		670.00		335	0.11						S 89°51'53" E
	CLOTHOID	SC	A 6254+81.13	1842354.34	6598035.02											
	ARC	SC	A 6254+81.13	1842354.34	6598035.02			0°14'53"							S 89°51'53" E	
V21-8	ARC	PI	A 6258+49.28	1842353.47	6598403.17	170,000.00	736.31				250	1.00	0.47			N 89°53'14" E
	ARC	CC		2012353.87	6598436.51											
	ARC	CS	A 6262+17.43	1842354.20	6598771.32											
	CLOTHOID	CS	A 6262+17.43	1842354.20	6598771.32			0°06'46"							N 89°53'14" E	
	CLOTHOID	SPI	A 6264+40.77	1842354.64	6598994.66		670.00		335	0.11						N 89°46'27" E
	CLOTHOID	ST	A 6268+87.43	1842356.40	6599441.32											
	TANGENT	ST	A 6268+87.43	1842356.40	6599441.32		12,106.35							N 89°46'27" E		
	TANGENT	TS	A 6389+93.79	1842404.10	6611547.58											
	CLOTHOID	TS	A 6389+93.79	1842404.10	6611547.58			0°02'53"							N 89°46'27" E	
	CLOTHOID	SPI	A 6394+40.45	1842405.86	6611994.24		670.00		335	0.05						N 89°43'35" E
	CLOTHOID	SC	A 6396+63.79	1842406.92	6612217.57											
	ARC	SC	A 6396+63.79	1842406.92	6612217.57			0°07'59"							N 89°43'35" E	
V21-9	ARC	PI	A 6401+27.95	1842409.14	6612681.73	400,000.00	928.33				250	0.50	0.13			N 89°35'36" E
	ARC	CC		2242402.36	6610306.54											
	ARC	CS	A 6405+92.12	1842412.43	6613145.89											
															N 89°35'36" E	
	CLOTHOID	CS	A 6405+92.12	1842412.43	6613145.89			0°02'53"	335							N 89°32'43" E
	CLOTHOID	SPI	A 6408+15.45	1842414.02	6613369.22		670.00			0.05						
	CLOTHOID	ST	A 6412+62.12	1842417.56	6613815.87											
	TANGENT	ST	A 6412+62.12	1842417.56	6613815.87		6,891.32							N 89°32'43" E		
	TANGENT	TS	A 6481+53.44	1842472.25	6620706.97											
								0°04'36"							N 89°32'43" E	
	CLOTHOID	TS	A 6481+53.44	1842472.25	6620706.97				335							
	CLOTHOID	SPI	A 6486+00.11	1842475.80	6621153.63		670.00			0.07						N 89°37'19" E
	CLOTHOID	SC	A 6488+23.44	1842477.27	6621376.96											
								0°00'10"							N 89°37'19" E	
	ARC	SC	A 6488+23.44	1842477.27	6621376.96	250,000.00										
V21-10	ARC	PI	A 6488+29.38	1842477.31	6621382.90		11.89				250	0.25	0.25			N 89°37'29" E
	ARC	CC		1592482.71	6623025.93											
	ARC	CS	A 6488+35.33	1842477.35	6621388.84											
								0°04'36"							N 89°37'29" E	
	CLOTHOID	CS	A 6488+35.33	1842477.35	6621388.84				335							
	CLOTHOID	SPI	A 6490+58.66	1842478.81	6621612.17		670.00			0.07						N 89°42'06" E
	CLOTHOID	ST	A 6495+05.33	1842481.14	6622058.83											
	TANGENT	ST	A 6495+05.33	1842481.14	6622058.83		1,126.57							N 89°42'06" E		
	TANGENT	POE	A 6506+31.89	1842487.01	6623185.38											

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY A. GURA
DRAWN BY J. PAZ
CHECKED BY S. GOOLLA
IN CHARGE D. WEMMER
DATE 4/15/2011

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TRACK GEOMERTY DATA

CONTRACT NO. HSR08-05
DRAWING NO. TJ7903
SCALE NO SCALE
SHEET NO.

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TRACK ALIGNMENT DATA SUMMARY TABLE - NORTHBOUND TRACK

CURVE	ELEMENT	POINT TYPE	STATION	COORDINATES		RADIUS (FT)	LENGTH (FT)	DELTA, Δ	K	P	DESIGN SPEED (MPH)	ACTUAL SUPERELEVATION (EA)(IN)	UNBALANCED SUPERELEVATION (EA)(IN)	WCB (0°00'00") (TANGENT)	WCB (0°00'00")	
				NORTHING	EASTING										START ANGLE	END ANGLE
	CLOTHOID	TS	6053+64.47	1842448.23	6579090.93											
	CLOTHOID	SPI	6058+04.48	1842448.18	6579530.95		660.02	0°03'33"	330.01	0.06					S 89°59'36" E	S 89°56'04" E
	CLOTHOID	SC	6060+24.49	1842447.93	6579750.95											
	ARC	SC	6060+24.49	1842447.93	6579750.95											
V21-7	ARC	PI	6063+69.30	1842447.54	6580095.76	320,016.50	689.61	0°07'24"			250	0.50	0.28		S 89°56'04" E	S 89°48'39" E
	ARC	CC		1522431.64	6579384.17											
	ARC	CS	6067+14.10	1842446.4	6580440.56											
	CLOTHOID	CS	6067+14.10	1842446.4	6580440.56											
	CLOTHOID	SPI	6069+34.11	1842445.67	6580660.57		660.02	0°03'33"	330.01	0.06					S 89°48'39" E	S 89°45'06" E
	CLOTHOID	ST	6073+74.12	1842443.77	6581100.58											
	TANGENT	ST	6073+74.12	1842443.77	6581100.58		16,264.69							S 89°45'06" E		
	TANGENT	TS	6236+38.81	1842373.30	6597365.11											
	CLOTHOID	TS	6236+38.81	1842373.30	6597365.11											
	CLOTHOID	SPI	6240+85.45	1842371.37	6597811.75		669.97	0°06'46"	334.98	0.11					S 89°45'06" E	S 89°51'53" E
	CLOTHOID	SC	6243+08.78	1842370.84	6598035.07											
	ARC	SC	6243+08.78	1842370.84	6598035.07											
V21-8	ARC	PI	6246+76.88	1842369.97	6598403.17	169,983.50	736.20	0°14'53"			250	1.00	0.47		S 89°51'53" E	N 89°53'14" E
	ARC	CC		2012353.87	6598436.51											
	ARC	CS	6250+44.98	1842370.70	6598771.28											
	CLOTHOID	CS	6250+44.98	1842370.70	6598771.28											
	CLOTHOID	SPI	6252+68.30	1842371.14	6598994.60		669.97	0°06'46"	334.98	0.11					N 89°53'14" E	N 89°46'27" E
	CLOTHOID	ST	6257+14.95	1842372.90	6599441.24											
	TANGENT	ST	6257+14.95	1842372.90	6599441.24		12,106.38							N 89°46'27" E		
	TANGENT	TS	6378+21.32	1842420.60	6611547.52											
	CLOTHOID	TS	6378+21.32	1842420.60	6611547.52											
	CLOTHOID	SPI	6382+67.98	1842422.36	6611994.17		669.99	0°02'53"	334.99	0.05					N 89°46'27" E	N 89°43'35" E
	CLOTHOID	SC	6384+91.31	1842423.42	6612217.50											
	ARC	SC	6384+91.31	1842423.42	6612217.50											
V21-9	ARC	PI	6389+55.45	1842425.64	6612681.64	399,983.50	928.28	0°07'59"			250	0.50	0.13		N 89°43'35" E	N 89°35'36" E
	ARC	CC		2242402.36	6610306.54											
	ARC	CS	6394+19.59	1842428.93	6613145.76											
	CLOTHOID	CS	6394+19.59	1842428.93	6613145.76			0°02'53"							N 89°35'36" E	N 89°32'43" E
	CLOTHOID	SPI	6396+42.92	1842430.52	6613369.09		669.99		334.99	0.05						
	CLOTHOID	ST	6400+89.57	1842434.06	6613815.73											
	TANGENT	ST	6400+89.57	1842434.06	6613815.73		6,550.38							N 89°32'43" E		
	TANGENT	TS	6466+39.96	1842486.05	6620365.91											
	CLOTHOID	TS	6466+39.96	1842486.05	6620365.91			0°02'18"							N 89°32'43" E	
	CLOTHOID	SPI	6470+86.63	1842489.59	6620812.57		670.01		335.01	0.04						N 89°37'19" E
	CLOTHOID	SC	6473+09.97	1842491.21	6621035.90											
	ARC	SC	6473+09.97	1842491.21	6621035.90			0°04'46"							N 89°37'19" E	
V21-10	ARC	PI	6476+56.87	1842493.74	6621382.79	500,016.50	693.81				250	0.25	0.25			N 89°37'29" E
	ARC	CC		1342487.91	6624668.96											
	ARC	CS	6480+03.77	1842495.77	6621729.69											
	CLOTHOID	CS	6480+03.77	1842495.77	6621729.69			0°02'18"							N 89°37'29" E	
	CLOTHOID	SPI	6482+27.11	1842497.09	6621953.02		670.01		335.01	0.04						N 89°42'06" E
	CLOTHOID	ST	6486+73.79	1842499.41	6622399.69											
	TANGENT	ST	6486+73.79	1842499.41	6622399.69		785.62							N 89°42'06" E		
	TANGENT	POE	6494+59.40	1842503.51	6623185.30											

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY A. GURA
DRAWN BY J. PAZ
CHECKED BY S. GOOLLA
IN CHARGE D. WEMMER
DATE 4/15/2011

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PARSONS

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO
HYBRID
AVENUE 21
TRACK GEOMERTY DATA
SHEET 6 OF 6

CONTRACT NO. HSR08-05
DRAWING NO. TJ7906
SCALE NO SCALE
SHEET NO.

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TRACK ALIGNMENT CURVE DATA SUMMARY TABLE-HYBRID AVE 21 MAIN LINE SB

CURVE	DESIGN SPEED (V) (MPH)	RADIUS (R) (FT)	ACTUAL SUPERELEVATION (Ea) (IN)	UNBALANCED SUPERELEVATION (Eu) (IN)	SPIRAL LENGTH (Ls) (FT)	BEGIN DRAWING
HYBRID201	220	19500	5.93	4.00	1350	T1107-A
HYBRID202	250	28000	6.00	2.93	2000	T1115-A
HYBRID203	250	28000	6.00	2.93	2000	T1118-A
HYBRID204	250	28016.5	6.00	2.93	2000	T1121-A
HYBRID205	250	28016.5	6.00	2.93	2000	T1124-A
HYBRID206	250	62000	2.75	1.28	900	T1129-A
HYBRID207	250	28000	6.00	2.93	2000	T1130-A

TRACK ALIGNMENT CURVE DATA SUMMARY TABLE-HYBRID AVE 21 MAIN LINE NB

CURVE	DESIGN SPEED (V) (MPH)	RADIUS (R) (FT)	ACTUAL SUPERELEVATION (Ea) (IN)	UNBALANCED SUPERELEVATION (Eu) (IN)	SPIRAL LENGTH (Ls) (FT)	BEGIN DRAWING
HYBRID101	220	19516.5	5.93	4.00	1350	T1107-A
HYBRID102	250	28016.5	6.00	2.93	2000	T1115-A
HYBRID103	250	28016.5	6.00	2.93	2000	T1118-A
HYBRID104	250	28000	6.00	2.93	2000	T1121-A
HYBRID105	250	28000	6.00	2.93	2000	T1124-A
HYBRID106	250	62016.5	2.75	1.28	900	T1129-A
HYBRID107	250	28016.5	6.00	2.93	2000	T1130-A

TRACK ALIGNMENT CURVE DATA SUMMARY TABLE - HYBRID AVE 21-SB MERCED CONNECTION

CURVE	DESIGN SPEED (V) (MPH)	RADIUS (R) (FT)	ACTUAL SUPERELEVATION (Ea) (IN)	UNBALANCED SUPERELEVATION (Eu) (IN)	SPIRAL LENGTH (Ls) (FT)	BEGIN STATION
HYBRID228	150	32000	0	0	220	T2197-A
HYBRID229	150	20224.46	1.25	2.50	220	T2197-A
HYBRID230	150	9200	7.00	4.00	1400	T2197-A
UPRR111	250	28016.5	6.00	2.93	2000	T2205-A
UPRR112	250	28000	6.00	2.93	2000	T2208-A
UPRR113	250	28000	6.00	2.93	2000	T2209-A
UPRR114	250	28016.5	6.00	2.93	2000	T2211-A
UPRR115	150	10000	6.00	3.00	1200	T2225-A

TRACK ALIGNMENT CURVE DATA SUMMARY TABLE - HYBRID AVE 21-NB MERCED CONNECTION

CURVE	DESIGN SPEED (V) (MPH)	RADIUS (R) (FT)	ACTUAL SUPERELEVATION (Ea) (IN)	UNBALANCED SUPERELEVATION (Eu) (IN)	SPIRAL LENGTH (Ls) (FT)	BEGIN DRAWING
HYBRID128	150	32000	0	0	220	T2201-A
HYBRID129	150	24000	1.25	2.50	220	T2201-A
HYBRID130	150	9200	7.00	4.00	1400	T2201-A
UPRR211	250	28000	6.00	2.93	2000	T2205-A
UPRR212	250	28016.5	6.00	2.93	2000	T2208-A
UPRR213	250	28016.5	6.00	2.93	2000	T2209-A
UPRR214	250	28000	6.00	2.93	2000	T2211-A
UPRR215	150	10016.5	6.00	3.00	1200	T2225-A

TRACK ALIGNMENT CURVE DATA SUMMARY TABLE - UPRR WYE-SB CONNECTION AVE 21

CURVE	DESIGN SPEED (V) (MPH)	RADIUS (R) (FT)	ACTUAL SUPERELEVATION (Ea) (IN)	UNBALANCED SUPERELEVATION (Eu) (IN)	SPIRAL LENGTH (Ls) (FT)	BEGIN DRAWING
UPRR118	150	32000	0	0	220	T2260-A
UPRR119	150	24000.00	1.25	2.50	220	T2260-A
UPRR120	140	8815.0	6.00	2.89	1200	T2261-A
UPRR121	150	32000	3.19	2.81	220	T2266-A

TRACK ALIGNMENT CURVE DATA SUMMARY TABLE - UPRR WYE-NB CONNECTION AVE 21

CURVE	DESIGN SPEED (V) (MPH)	RADIUS (R) (FT)	ACTUAL SUPERELEVATION (Ea) (IN)	UNBALANCED SUPERELEVATION (Eu) (IN)	SPIRAL LENGTH (Ls) (FT)	BEGIN DRAWING
UPRR218	150	32000	0	0	220	T2250-A
UPRR219	150	24020.25	1.25	2.50	220	T2150-A
UPRR220	140	9000	6.00	2.71	1200	T2251-A
UPRR221	150	24020.25	1.25	2.50	220	T2155-A
UPRR222	150	32000	3.19	2.81	220	T2256-A

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REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY A. SHIELDS
DRAWN BY A. SHIELDS
CHECKED BY A. BOONE
IN CHARGE A. BOONE
DATE 07/20/2011

RECORD SET
15% DESIGN SUBMITTAL

NOT FOR CONSTRUCTION

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

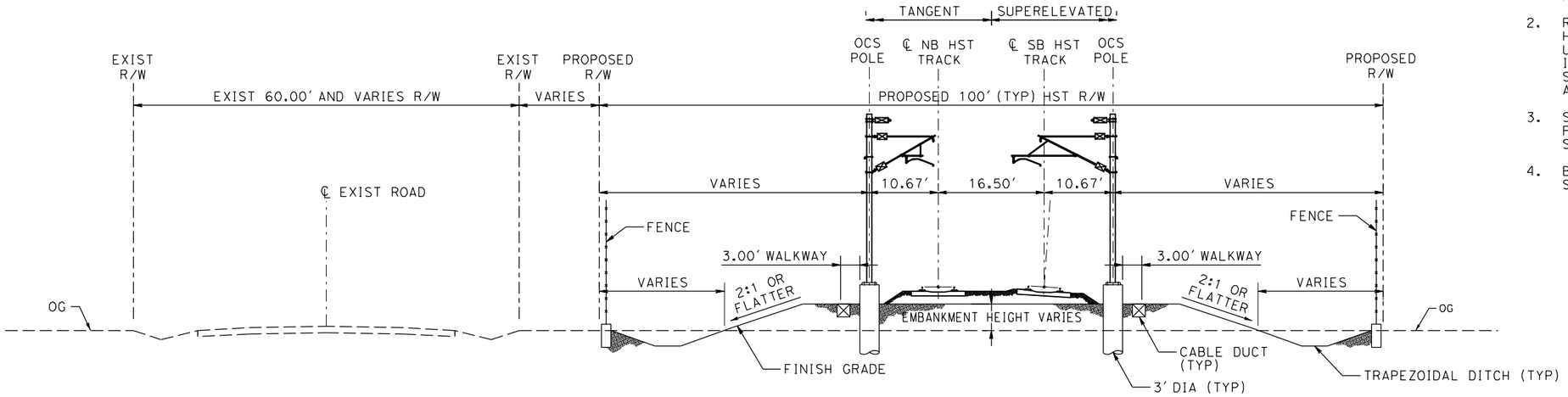
CALIFORNIA HIGH-SPEED RAIL AUTHORITY

CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO
HYBRID ALIGNMENT
AVENUE 21
TRACK GEOMETRY DATA
SHEET 1 OF 1

CONTRACT NO. HSR06-007
DRAWING NO. T0150-A
SCALE NO SCALE
SHEET NO. OF ###

GENERAL NOTES:

1. TRACK, OCS POLES AND FOUNDATIONS, CABLE DUCTS AND DRAINAGE ARE SCHEMATIC AND DO NOT REPRESENT DESIGN.
2. RIGHT-OF-WAY REQUIRED FOR THE HIGH-SPEED RAIL GUIDEWAY WILL DEPEND UPON CONDITIONS ALONG THE ALIGNMENT, INCLUDING TERRAIN, WHERE CUT/FILL SLOPES, RETAINING STRUCTURES, AND ACCESS ARE REQUIRED.
3. SEE STRUCTURES, VIADUCT AND TUNNEL PLANS FOR DETAILED CROSS SECTIONS OF STRUCTURES.
4. BALLASTED OR UNBALLASTED TRACK STRUCTURE TO BE DETERMINED.



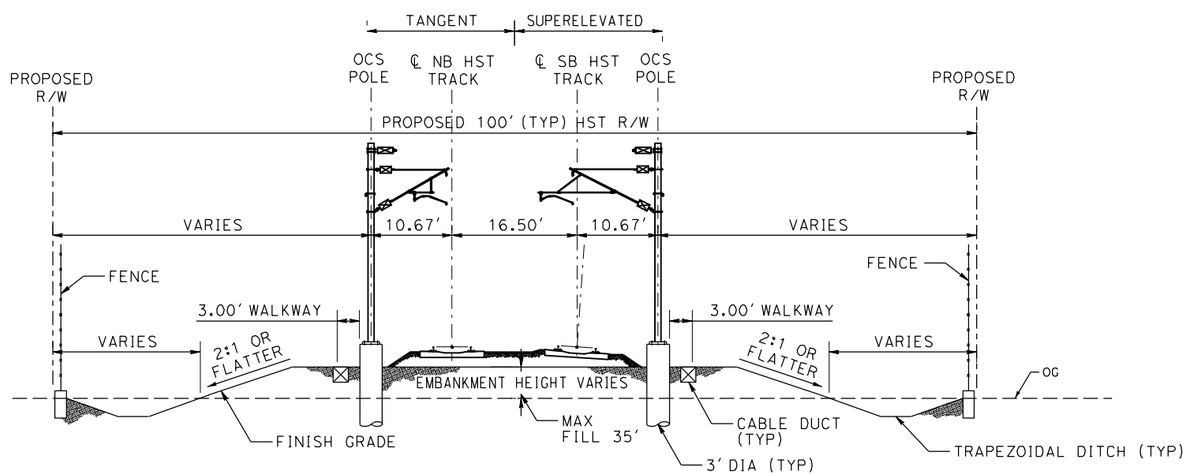
SECTION A-A
TRACK ON EMBANKMENT WITH ADJACENT ROAD

SECTION A-A
TANGENT

STATION 5367+74.09 TO 5468+71.16

SUPERELEVATED

STATION 5468+71.16 TO 5494+50.00



SECTION B-B
TANGENT

STATION 5944+30.06 TO 6095+69.95
STATION 6310+36.54 TO 6323+90.04

SUPERELEVATED

STATION 5494+50.00 TO 5582+51.76
STATION 6095+69.95 TO 6147+15.51
STATION 6277+56.72 TO 6310+30.54
STATION 6323+90.04 TO 6542+00.08

SECTION B-B
TRACK ON EMBANKMENT WITH ADJACENT ROAD

NOTE:
POTENTIAL SOUND BARRIERS NOT SHOWN IN CROSS SECTIONS. FOR THE EXTENT OF POTENTIAL SOUND BARRIERS, SEE ALIGNMENT PLAN AND PROFILE SHEETS

10 0 10 20
1"=10'

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY P. JACOBY
DRAWN BY ALBERT S.
CHECKED BY RESHMA C.
IN CHARGE D. WEMMER
DATE 4/15/2011

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PARSONS

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO
HYBRID
AVENUE 24/SR152/AVENUE 21
TYPICAL SECTION

CONTRACT NO. HSR08-05
DRAWING NO. TJ3401A
SCALE 1"=10'
SHEET NO.

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NOTE:

POTENTIAL SOUND BARRIERS NOT SHOWN IN CROSS SECTIONS. FOR THE EXTENT OF POTENTIAL SOUND BARRIERS, SEE ALIGNMENT PLAN AND PROFILE SHEETS

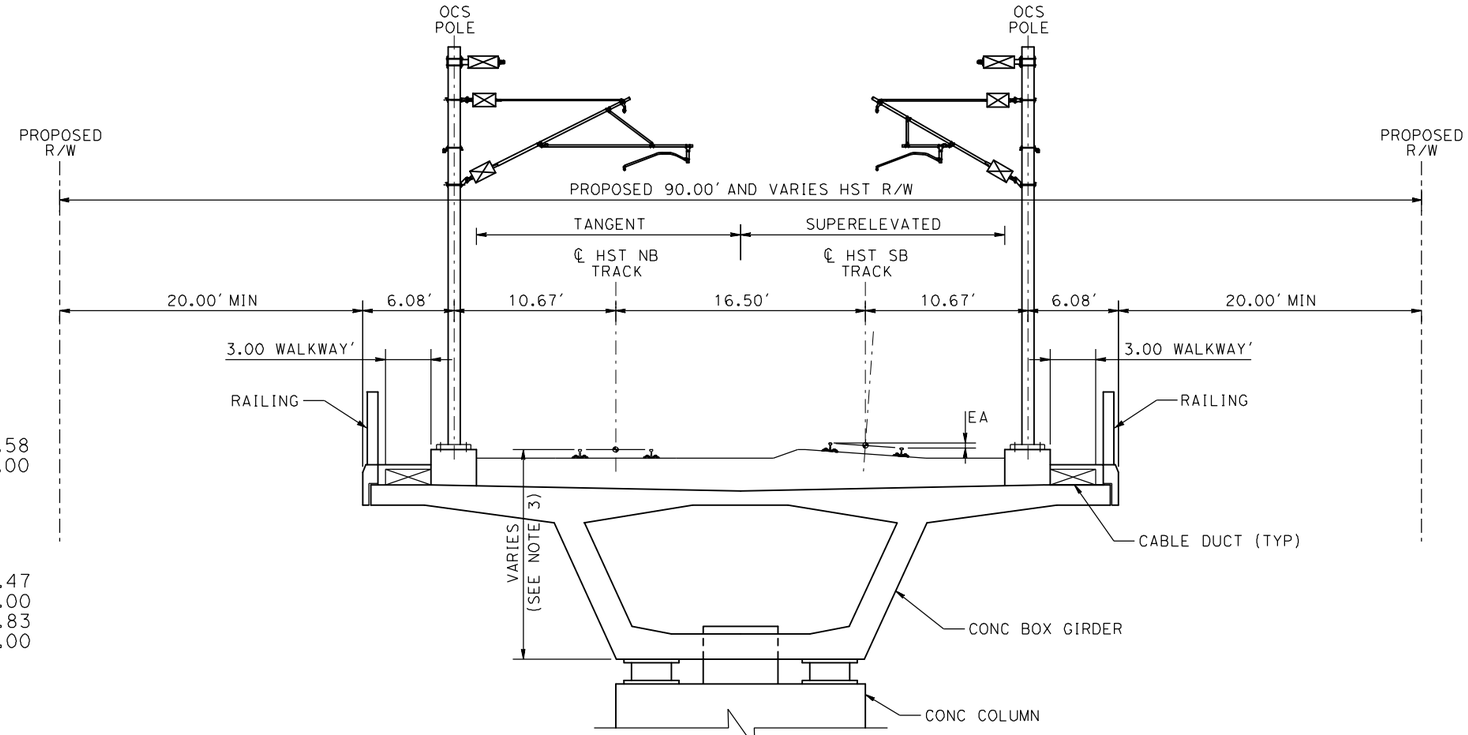
SECTION A-A

TANGENT

STATION 5617+79.47 TO 5656+79.58
STATION 5807+75.83 TO 5906+50.00

SUPERELEVATED

STATION 5617+00.00 TO 5617+79.47
STATION 5656+79.58 TO 5703+50.00
STATION 5764+00.00 TO 5807+75.83
STATION 6178+00.00 TO 6248+00.00



SECTION C-C
TRACK ON AERIAL GUIDEWAY

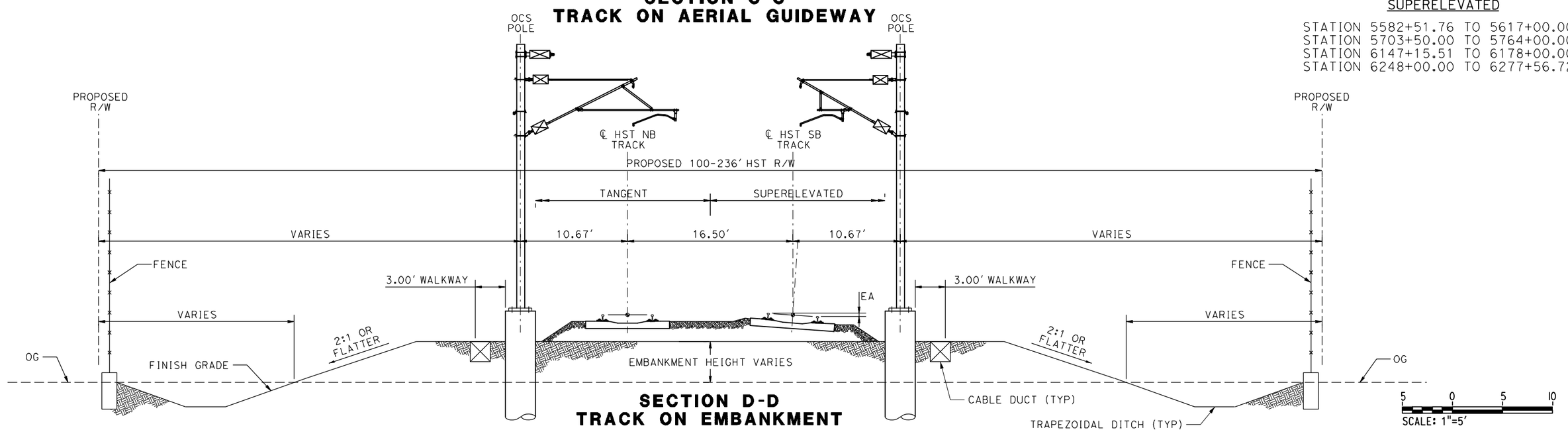
SECTION B-B

TANGENT

STATION 5906+50.00 TO 5944+30.06

SUPERELEVATED

STATION 5582+51.76 TO 5617+00.00
STATION 5703+50.00 TO 5764+00.00
STATION 6147+15.51 TO 6178+00.00
STATION 6248+00.00 TO 6277+56.72



SECTION D-D
TRACK ON EMBANKMENT

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY P. JACOBY
DRAWN BY ALBERT S.
CHECKED BY RESHMA C.
IN CHARGE D. WEMMER
DATE 4/15/2011

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CALIFORNIA HIGH-SPEED RAIL AUTHORITY

CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO
HYBRID
AVENUE 24/SR152/AVENUE 21
TYPICAL SECTION

CONTRACT NO. HSR08-05
DRAWING NO. TJ3402A
SCALE 1"=5'
SHEET NO.

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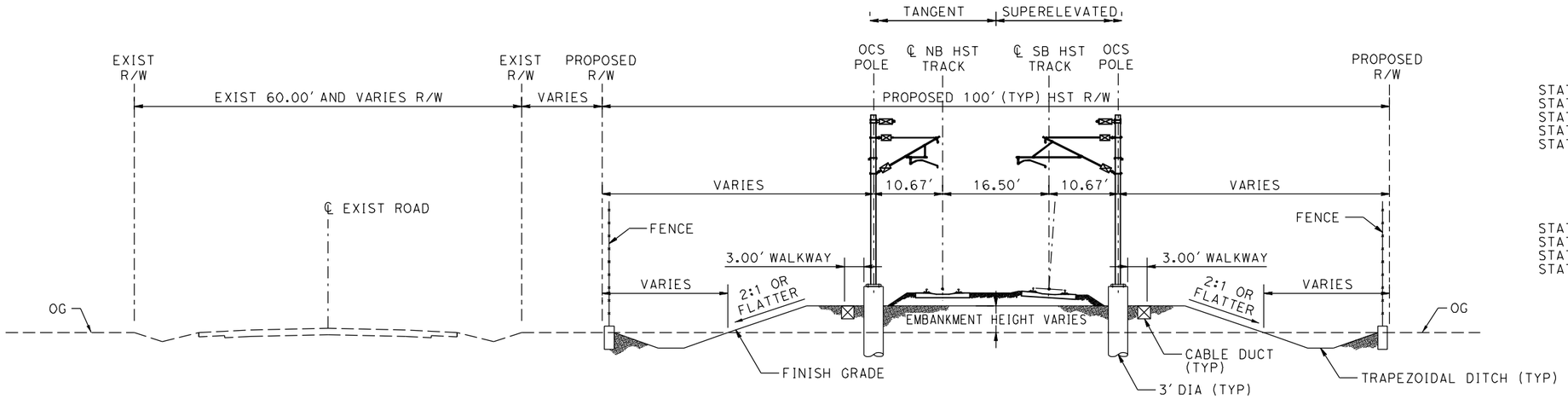
NOTE:

POTENTIAL SOUND BARRIERS NOT SHOWN IN CROSS SECTIONS. FOR THE EXTENT OF POTENTIAL SOUND BARRIERS, SEE ALIGNMENT PLAN AND PROFILE SHEETS



SECTION C-C
TRACK ON EMBANKMENT WITH ADJACENT ROAD

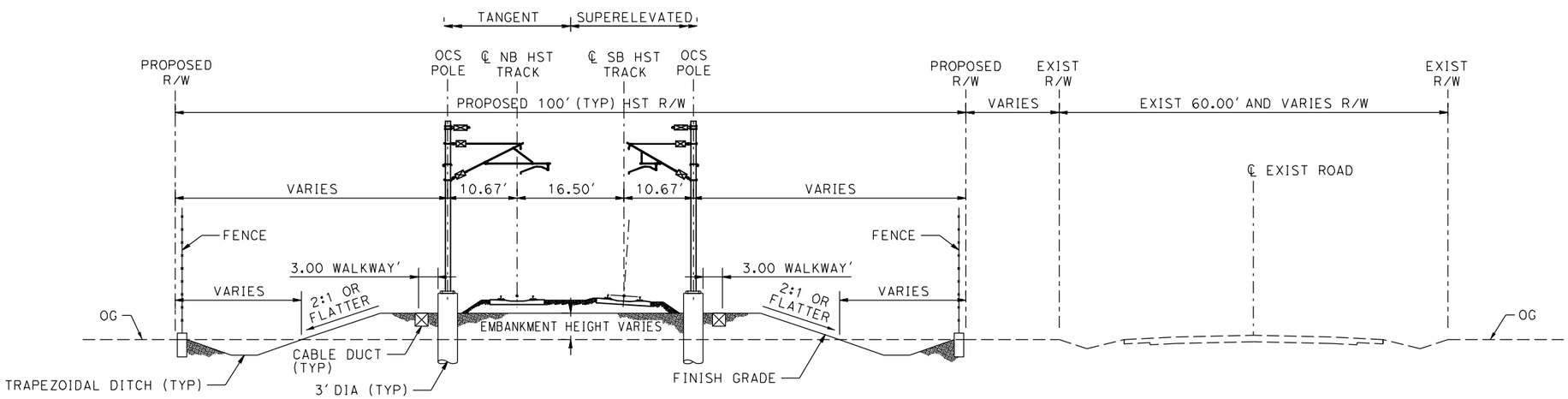
SECTION C

TANGENT

STATION A 4695+35.55 TO A 4697+25.00
STATION A 4782+00.00 TO A 4821+82.78
STATION A 4842+01.13 TO A 4956+10.00
STATION A 5038+90.00 TO A 5254+31.95
STATION A 5289+21.13 TO A 5367+74.09

SUPERELEVATED

STATION A 4663+00.00 TO A 4695+35.55
STATION A 4821+82.78 TO A 4842+01.13
STATION A 5254+31.95 TO A 5289+21.13
STATION A 5367+74.09 TO A 5400+00.00



SECTION D-D
TRACK ON EMBANKMENT WITH ADJACENT ROAD

SECTION D

TANGENT

STATION A 5953+15.11 TO A 6065+36.88
STATION A 6085+46.45 TO A 6097+25.00
STATION A 6163+75.00 TO A 6248+11.13
STATION A 6268+87.43 TO A 6389+93.79
STATION A 6412+62.12 TO A 6748+12.50
STATION A 6498+46.27 TO A 6506+31.89

SUPERELEVATED

STATION A 4639+00.00 TO A 4663+00.00
STATION A 5900+95.00 TO A 5953+15.11
STATION A 6065+36.88 TO A 6085+46.45
STATION A 6248+11.13 TO A 6268+87.43
STATION A 6389+93.79 TO A 6412+62.12
STATION A 6748+12.50 TO A 6498+46.27

10 0 10 20
SCALE: 1"=10'

REV	DATE	BY	CHK	APP	DESCRIPTION
	4/15/11				DRAFT 15% SUBMITTAL

DESIGNED BY A. GURA
DRAWN BY S. HICKS
CHECKED BY S. GOOLLA
IN CHARGE D. WEMMER
DATE 4/15/2011

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CALIFORNIA HIGH-SPEED RAIL AUTHORITY

CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO
HYBRID
AVENUE 21
TYPICAL SECTIONS
SHEET 2 OF 3

CONTRACT NO. HSR08-05
DRAWING NO. TJ3902
SCALE 1"=10'
SHEET NO.

7/21/2011 11:09:25 AM c:\pw_working\prtgpwiseb\p0037225\dms66817\JM-TJ3902.dgn
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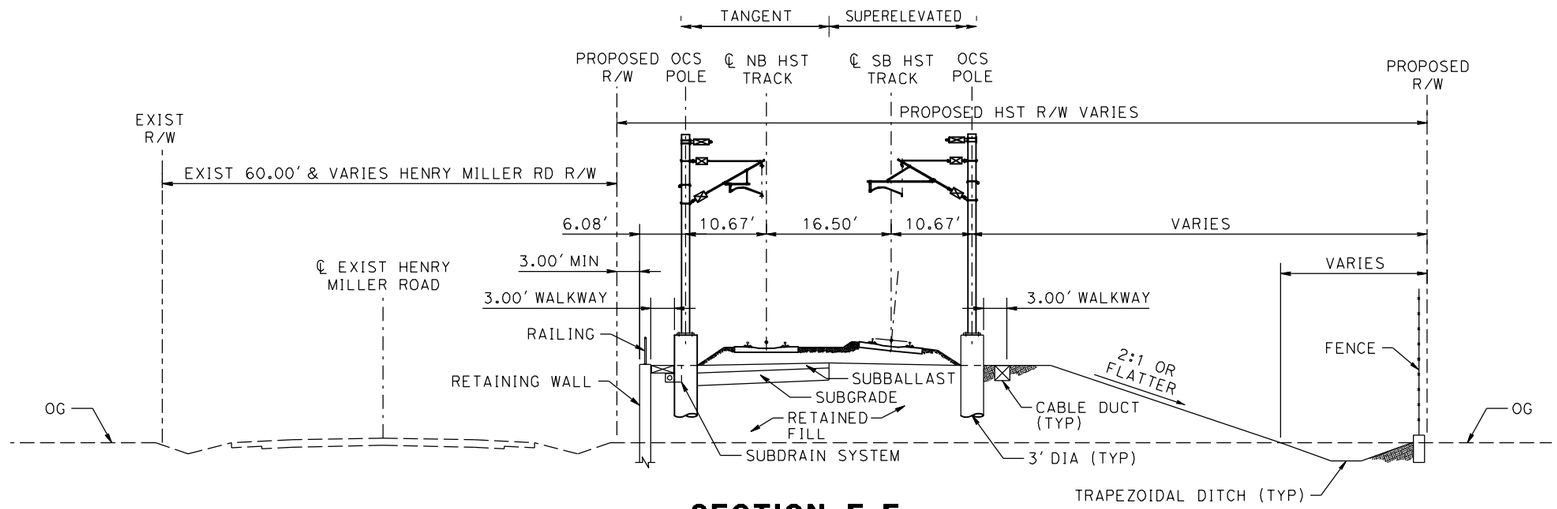
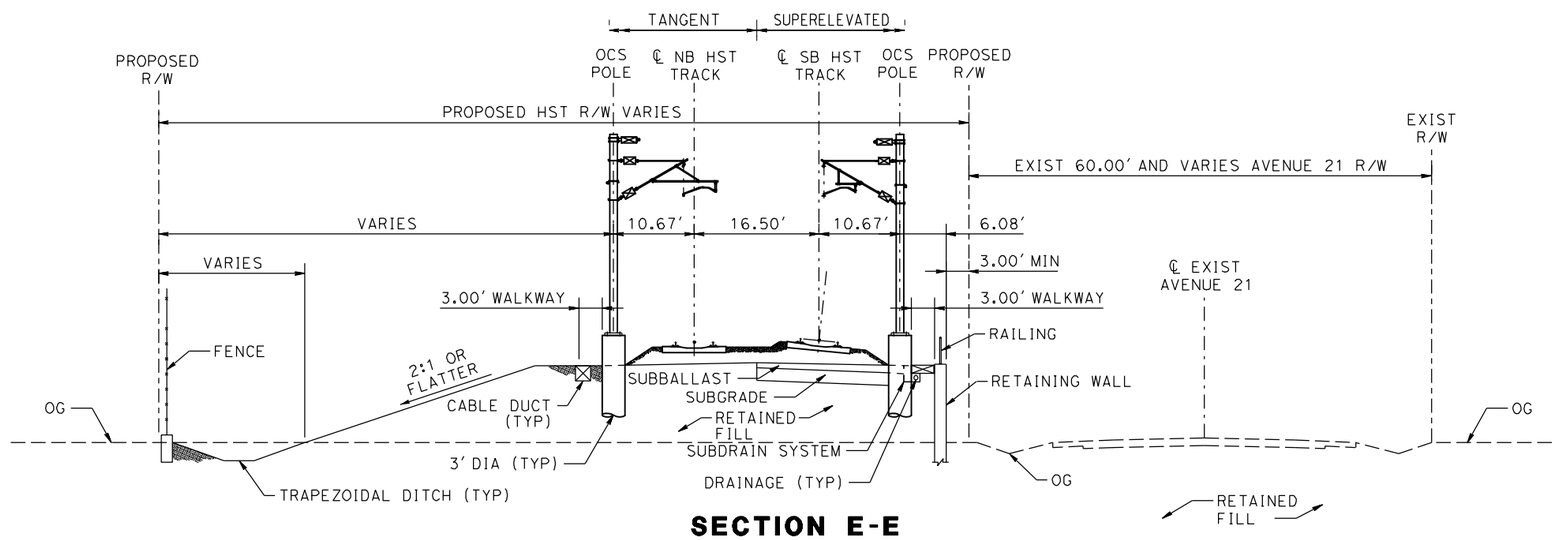
NOTE: POTENTIAL SOUND BARRIERS NOT SHOWN IN CROSS SECTIONS. FOR THE EXTENT OF POTENTIAL SOUND BARRIERS, SEE ALIGNMENT PLAN AND PROFILE SHEETS



SECTION E-E
TYPICAL SECTION WITH RETAINED FILL ON LEFT

TANGENT	SUPERELEVATED
STATION A 4697+25 TO A 4723+88 STATION A 4767+88 TO A 4782+00	N/A



SECTION E-E
TYPICAL SECTION WITH RETAINED FILL ON RIGHT

TANGENT	SUPERELEVATED
STATION A 6097+25 TO A 6116+75 STATION A 6142+00 TO A 6163+75	N/A

10 0 10 20
SCALE: 1"=10'

$FILE$ $TIME$ $DATE$ $USER$

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY A. GURA
DRAWN BY A. GURA
CHECKED BY S. GOOLLA
IN CHARGE D. WEMMER
DATE 4/15/2011

15% DRAFT SUBMITTAL FOR INTERNAL USE ONLY

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PARSONS

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO
HYBRID
AVENUE 21
TYPICAL SECTIONS
SHEET 3 OF 3

CONTRACT NO. HSR08-05
DRAWING NO. TJ3903
SCALE 1" = 10'
SHEET NO.

ALTERNATIVE HYBRID AVENUE 24

ALIGNMENT	BEGIN STATION	END STATION	SECTION
HYBRID 24	892+90	926+80	AG2
	926+80	1020+00	WYE1
	1020+00	1185+00	AG2
	1185+00	1230+00	WYE1
	1230+00	1360+00	AG2
	1360+00	1375+00	RF2
	1375+00	1435+00	EL1
	1435+00	1443+00	RF2
	1443+00	2681+00	AG2
	2681+00	2695+00	RF2
	2695+00	2731+50	EL1
	2731+50	2740+55	EL5
HYBRID-FR			
	1713+98	1737+00	EL6
	1737+00	1764+78	EL7
	1764+78	1767+00	EL8
	1767+00	1788+84	RF3
	1788+84	1843+35	AG6
	1843+35	1893+95	RF3
	1893+95	1958+00	AG6
	1958+00	2072+36	AG7
UPRR/SR 99 WCDO/HYBRID MC SB			
	5061+66	5015+00	WYE1
	5015+00	5235+00	AG4
	5235+00	5285+00	WYE 1
	5288+00	5556+91	AG2
UPRR/SR 99 WCDO/HYBRID MC NB			
	5058+80	5110+00	WYE1
	5110+00	5121+00	EL2
	5121+00	5127+00	RF2
	5127+00	5235+00	AG4
	2535+00	5285+00	WYE1
	5285+00	5597+00	AG2
UPRR/SR 99-21MC			
	5556+98	5910+00	AG1
	5910+00	5916+50	TR2
	5916+50	5917+60	CC1
	5917+60	5925+00	TR2
	5925+00	5977+70	AG1
	5977+70	5989+20	TR2
	5989+20	5990+20	CC1
	5990+20	6003+00	TR2
	6003+00	6022+00	AG1
	6022+00	6040+60	TR2
	6040+60	6042+90	CC1
	6042+90	6052+50	TR1
	6052+50	6066+20	AG5
UPRR/SR 99 WCDO/HYBRID WC NB			
	148+82	205+00	WYE1
	205+00	211+00	EL2
	211+00	219+00	RF2
	219+00	313+50	AG4
	313+50	320+00	RF2
	320+00	330+00	EL2
	330+00	382+25	WYE1
UPRR/SR 99 WCDO/HYBRID WC SB			
	524+67	570+00	WYE1
	570+00	695+00	AG4
	695+00	738+88	WYE1

ALTERNATIVE HYBRID AVENUE 21

ALIGNMENT	BEGIN STATION	END STATION	SECTION
HYBRID 21	892+90	330+00	AG2
	330+00	430+00	WYE1
	430+00	565+00	AG2
	565+00	580+00	RF2
	580+00	630+00	EL1
	630+00	640+00	RF2
	640+00	680+00	WYE1
	680+00	868+87=	AG2
	1865+00	2681+00	AG2
	2681+00	2695+00	RF2
	2695+00	2731+50	EL1
	2731+50	2740+55	EL5
HYBRID-FR			
	1713+98	1737+00	EL6
	1737+00	1764+78	EL7
	1764+78	1767+00	EL8
	1767+00	1788+84	RF3
	1788+84	1843+35	AG6
	1843+35	1893+95	RF3
	1893+95	1958+00	AG6
	1958+00	2072+36	AG7
HYBRID MC SB - 21			
	200+20	250+00	WYE1
	250+00	290+00	EL2
	290+00	377+99	EL1
HYBRID MC NB - 21			
	500+00	550+00	WYE1
	550+00	590+00	EL2
	590+00	677+40	EL1
UPRR/SR 99-21MC			
	4907+27	4975+00	EL1
	4975+00	5045+00	WYE2
	5045+00	5385+00	EL1
	5385+00	5425+00	RF2
	5425+00	5910+00	AG1
	5910+00	5915+50	TR2
	5915+50	5916+60	CC1
	5916+60	5924+00	TR2
	5924+00	5977+70	AG1
	5977+70	5989+30	TR2
	5989+30	5990+40	CC1
	5990+40	6003+00	TR2
	6003+00	6022+00	AG1
	6022+00	6040+60	TR2
	6040+60	6042+90	CC1
	6042+90	6052+50	TR1
	6052+50	6066+20	AG5
UPRR/SR 99-21WC NB			
	505+00	610+00	WYE1
	610+00	619+50	EL2
	619+50	628+35	RF1
	628+35	714+80	AG4
	714+80	724+20	RF1
	724+20	780+00	EL2
	780+00	846+94	WYE2
UPRR/SR 99-21WC SB			
	105+00	180+00	WYE1
	180+00	298+80	AG4
	298+80	313+21	RF1
	131+21	340+00	EL2
	340+00	397+52	WYE2

ALTERNATIVE BNSF AVENUE 21

ALIGNMENT	BEGIN STATION	END STATION	SECTION
BNSF-21ML	267+41	562+00	AG2
	562+00	582+61	RF2
	582+61	634+76	EL1
	634+76	665+80	RF2
	665+80	859+40	AG2
	859+40	881+05	RF2
	881+05	925+00	EL1
	925+00	985+00	WYE1
	985+00	1042+75	EL1
	1042+75	1060+00	RF2
	1060+00	1305+00	AG1
	1305+00	1685+00	AG2
	1685+00	1696+00	RF2
	1667+59	1731+50	EL1
	1731+50	1741+00	EL5
BNSF-FR			
	1713+98	1737+00	EL6
	1737+00	1764+78	EL7
	1764+78	1767+00	EL8
	1767+00	1788+84	RF3
	1788+84	1843+35	AG6
	1843+35	1893+95	RF3
	1893+95	1958+00	AG6
	1958+00	2072+36	AG7
BNSF-21WC NB			
	105+85	205+00	WYE2
	205+00	220+66	EL2
	220+66	230+00	RF1
	230+00	357+00	AG4
	357+00	371+02	RF1
	371+02	383+00	EL2
	383+00	474+09	WYE1
BNSF-21WC SB			
	500+00	550+00	WYE2
	550+00	720+00	AG4
	720+00	765+39	WYE1
BNSF-MC			
	4302+03	4345+02	EL2
	4345+02	4351+00	RF1
	4351+00	4405+00	WYE1
	4405+00	5296+45	AG1
	5269+45	5266+88	RF2
	5266+88	5352+88	EL3
	5352+88	5371+50	RF2
	5371+50	5850+85	AG1
	5850+85	5866+57	RF2
	5866+57	5960+00	EL1
	5960+00	5967+00	RF2
	5967+00	5977+70	AG1
	5977+70	5989+20	TR2
	5989+20	5990+20	CC1
	5990+20	6003+00	TR2
	6003+00	6022+00	AG1
	6022+00	6040+60	TR2
	6040+60	6042+90	CC1
	6042+90	6052+50	TR1
	6052+50	6066+20	AG5

ALTERNATIVE BNSF AVENUE 24

ALIGNMENT	BEGIN STATION	END STATION	SECTION
BNSF-24ML	892+90	1185+00	AG2
	1185+00	1235+00	WYE1
	1235+00	1332+20	AG2
	1332+20	1350+84	RF2
	1350+84	1430+00	WYE2
	1430+00	1431+49	EL1
	1431+49	1451+90	RF2
	1451+90	1864+25	AG2
	1864+25	1881+05	RF2
	1881+05	1890+17	EL1
BNSF-24WC NB			
	104+65	195+00	WYE2
	195+00	220+66	EL2
	220+66	227+55	RF1
	227+55	400+70	AG4
	400+70	438+00	RF1
	438+00	450+00	EL2
	450+00	477+55	WYE1
	477+55	508+20	RF1
	508+20	576+13	AG4
BNSF-24WC SB			
	500+00	582+14	WYE2
	582+14	592+75	RF1
	592+75	840+00	AG4
	840+00	896+06	WYE1

ALTERNATIVE UPRR/SR 99 AVENUE 21

ALIGNMENT	BEGIN STATION	END STATION	SECTION
UPRR/SR 99-21ML	270+60	604+70	AG2
	604+70	626+28	RF2
	626+28	715+00	EL1
	715+00	805+00	WYE1
	805+00	1294+33	EL1
	1294+33	1305+00	RF2
	1305+00	1570+00	AG1
	1570+00	1593+20	TR2
	1593+20	1594+10	CC1
	1594+10	1610+00	TR2
	1610+00	1615+00	AG1
	1615+00	1622+00	RF2
	1622+00	1635+00	EL1
	1635+00	1633+24	EL5
UPRR/SR 99-FR			
	1713+98	1737+00	EL6
	1737+00	1764+78	EL7
	1764+78	1767+00	EL8
	1767+00	1788+84	RF3
	1788+84	1843+35	AG6
	1843+35	1893+95	RF3
	1893+95	1958+00	AG6
	1958+00	2072+36	AG7
UPRR/SR 99-21WC NB			
	505+00	610+00	WYE1
	610+00	619+50	EL2
	619+50	628+35	RF1
	628+35	714+80	AG4
	714+80	724+20	RF1
	724+20	780+00	EL2
	780+00	846+94	WYE2
UPRR/SR 99-21WC SB			
	105+00	180+00	WYE1
	180+00	298+80	AG4
	298+80	313+21	RF1
	131+21	340+00	EL2
	340+00	397+52	WYE2
UPRR/SR 99-21MC			
	4586+50	4670+00	WYE1
	4670+00	4796+00	AG1
	4796+00	4810+00	RF2
	4810+00	4975+00	EL1
	4975+00	5045+00	WYE2
	5045+00	5385+00	EL1
	5385+00	5425+00	RF2
	5425+00	5910+00	AG1
	5910+00	5915+50	TR2
	5915+50	5916+60	CC1
	5916+60	5924+00	TR2
	5924+00	5977+70	AG1
	5977+70	5989+30	TR2
	5989+30	5990+40	CC1
	5990+40	6003+00	TR2
	6003+00	6022+00	AG1
	6022+00	6040+60	TR2
	6040+60	6042+90	CC1
	6042+90	6052+50	TR1
	6052+50	6066+20	AG5

ALTERNATIVE UPRR/SR 99 AVENUE 24

ALIGNMENT	BEGIN STATION	END STATION	SECTION
UPRR/SR 99-24ML	917+20	965+00	AG2
	965+00	1030+00	WYE1
	1030+00	1330+00	AG2
	1330+00	1380+00	RF2
	1380+00	1515+00	EL1
	1515+00	1590+00	EL5
UPRR/SR 99-24WC NB	1590+00	1753+40	EL1
	105+00	205+00	WYE1
	205+00	220+00	EL2
	220+00	227+00	RF1
	227+00	349+90	AG4
	349+90	494+12	AG2
	494+12	521+00	AG4
	521+00	527+00	RF1
	527+00	555+00	EL2
	555+00	626+90	WYE1
UPRR/SR 99-24WC SB			
	705+00	775+00	WYE1
	775+00	921+72	AG4
	921+72	1062+85	AG2
	1062+85	1130+00	AG4
	1130+00	1191+24	WYE 1
UPRR/SR 99-24MC			
	4760+15	4845+00	WYE2
	4845+00	4907+25	EL1

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY A.SHIELDS
DRAWN BY A. SHIELDS
CHECKED BY A. BOONE
IN CHARGE A. BOONE
DATE 07/20/2011

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
GENERAL

TYPICAL SECTION LIMITS

CONTRACT NO. HSR06-007
DRAWING NO. T3000-A
SCALE NO SCALE
SHEET NO. ### OF ###

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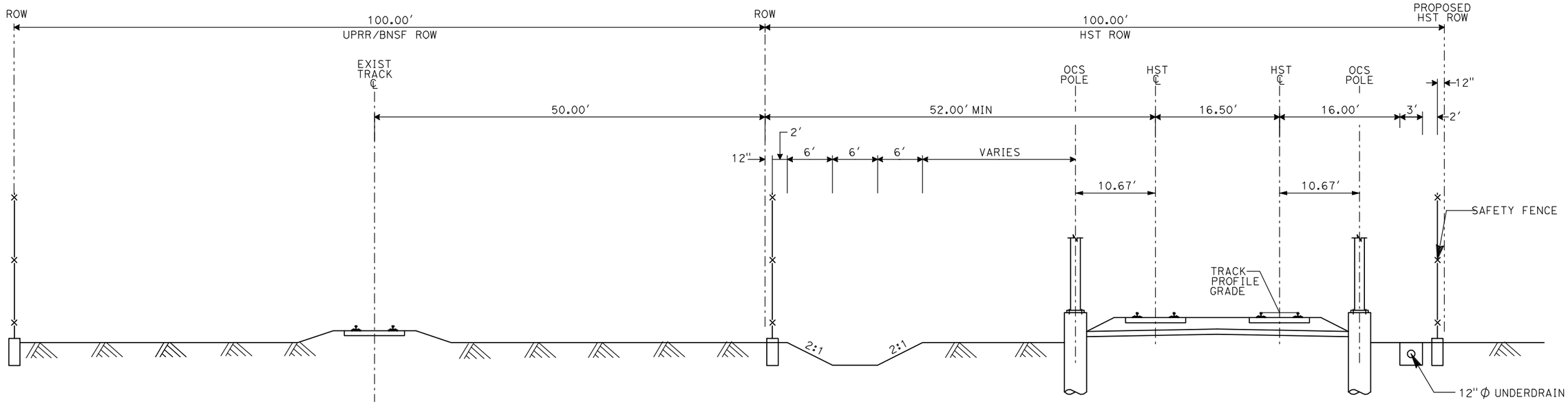
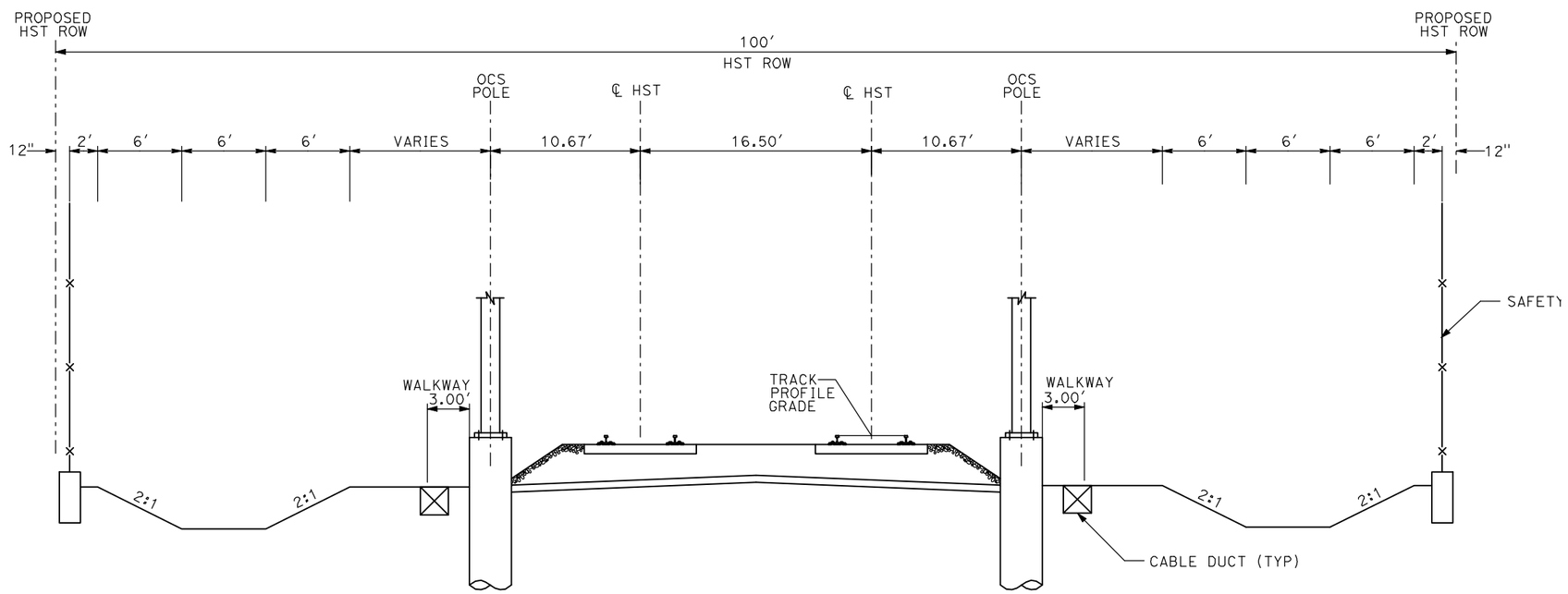


AG1- DOUBLE TRACK AT GRADE ADJACENT TO UPRR/BNSF



AG2 - DOUBLE TRACK AT GRADE

NOTES:
1. TRACK, OCS POLES AND FOUNDATIONS, CABLE DUCTS AND DRAINAGE ARE SCHEMATIC AND DO NOT REPRESENT DESIGN.
2. RIGHT-OF-WAY REQUIRED FOR THE HIGH-SPEED RAIL GUIDEWAY WILL DEPEND UPON CONDITIONS ALONG THE ALIGNMENT, INCLUDING TERRAIN, WHERE CUT/FILL SLOPES, RETAINING STRUCTURES, AND ACCESS ARE REQUIRED.
3. POTENTIAL SOUND BARRIERS NOT SHOWN IN CROSS SECTIONS. FOR THE EXTENT OF POTENTIAL SOUND BARRIERS, SEE ALIGNMENT PLAN AND PROFILE SHEETS.

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY A. SHIELDS
DRAWN BY C. VALADAO
CHECKED BY A. BOONE
IN CHARGE A. BOONE
DATE 07/20/2011

RECORD SET
15% DESIGN
SUBMITTAL

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CH2MHILL

CALIFORNIA
HIGH-SPEED RAIL AUTHORITY

CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO

TYPICAL SECTIONS
SHEET 1 OF 17

CONTRACT NO. HSR06-007
DRAWING NO. T3001-A
SCALE NO SCALE
SHEET NO. OF ###

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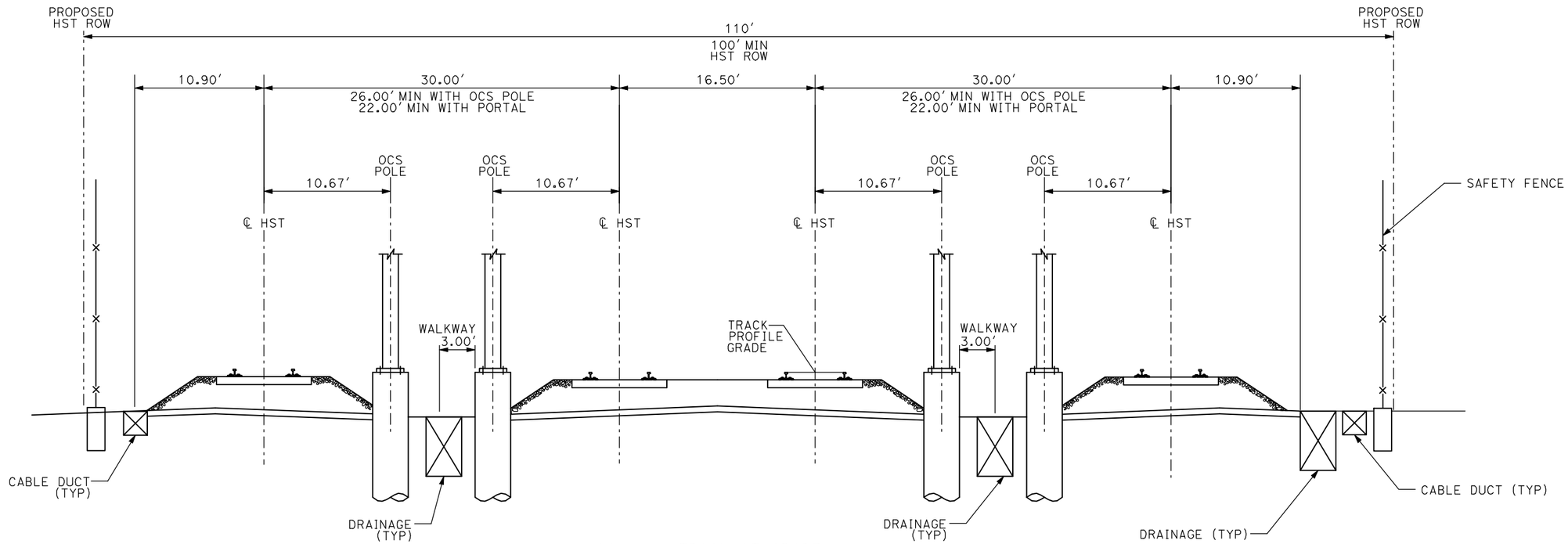
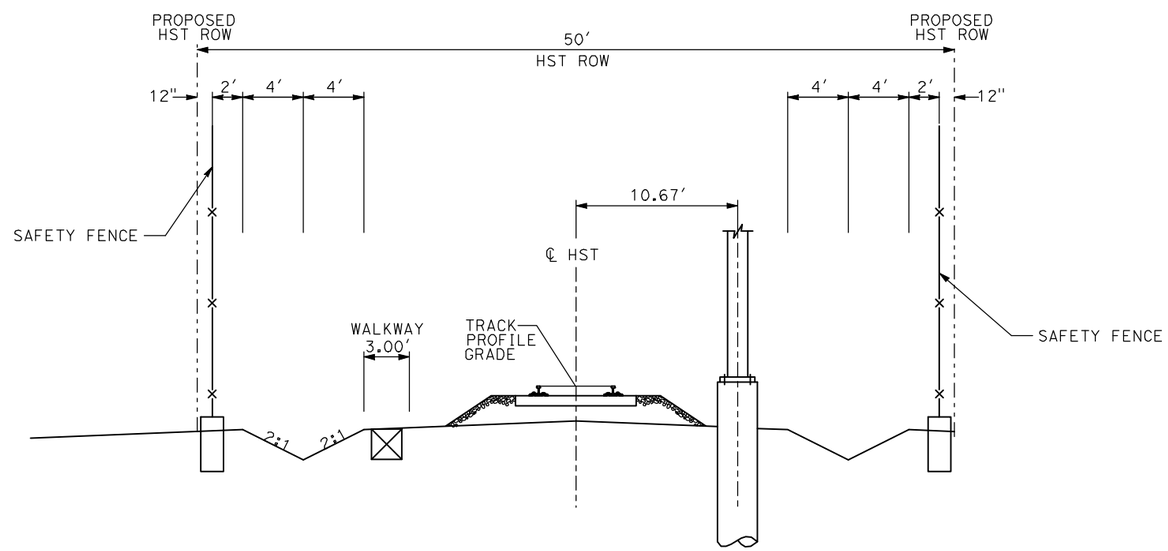


AG3 - 4 TRACK AT GRADE



AG4 - SINGLE TRACK AT GRADE

NOTES:
1. TRACK, OCS POLES AND FOUNDATIONS, CABLE DUCTS AND DRAINAGE ARE SCHEMATIC AND DO NOT REPRESENT DESIGN.
2. RIGHT-OF-WAY REQUIRED FOR THE HIGH-SPEED RAIL GUIDEWAY WILL DEPEND UPON CONDITIONS ALONG THE ALIGNMENT, INCLUDING TERRAIN, WHERE CUT/FILL SLOPES, RETAINING STRUCTURES, AND ACCESS ARE REQUIRED.
3. POTENTIAL SOUND BARRIERS NOT SHOWN IN CROSS SECTIONS. FOR THE EXTENT OF POTENTIAL SOUND BARRIERS, SEE ALIGNMENT PLAN AND PROFILE SHEETS.

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY A. SHIELDS
DRAWN BY C. VALADAO
CHECKED BY A. BOONE
IN CHARGE A. BOONE
DATE 07/20/2011

RECORD SET
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CALIFORNIA HIGH-SPEED RAIL AUTHORITY

CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO

TYPICAL SECTIONS
SHEET 2 OF 17

CONTRACT NO. HSR06-007
DRAWING NO. T3002-A
SCALE NO SCALE
SHEET NO. OF ###

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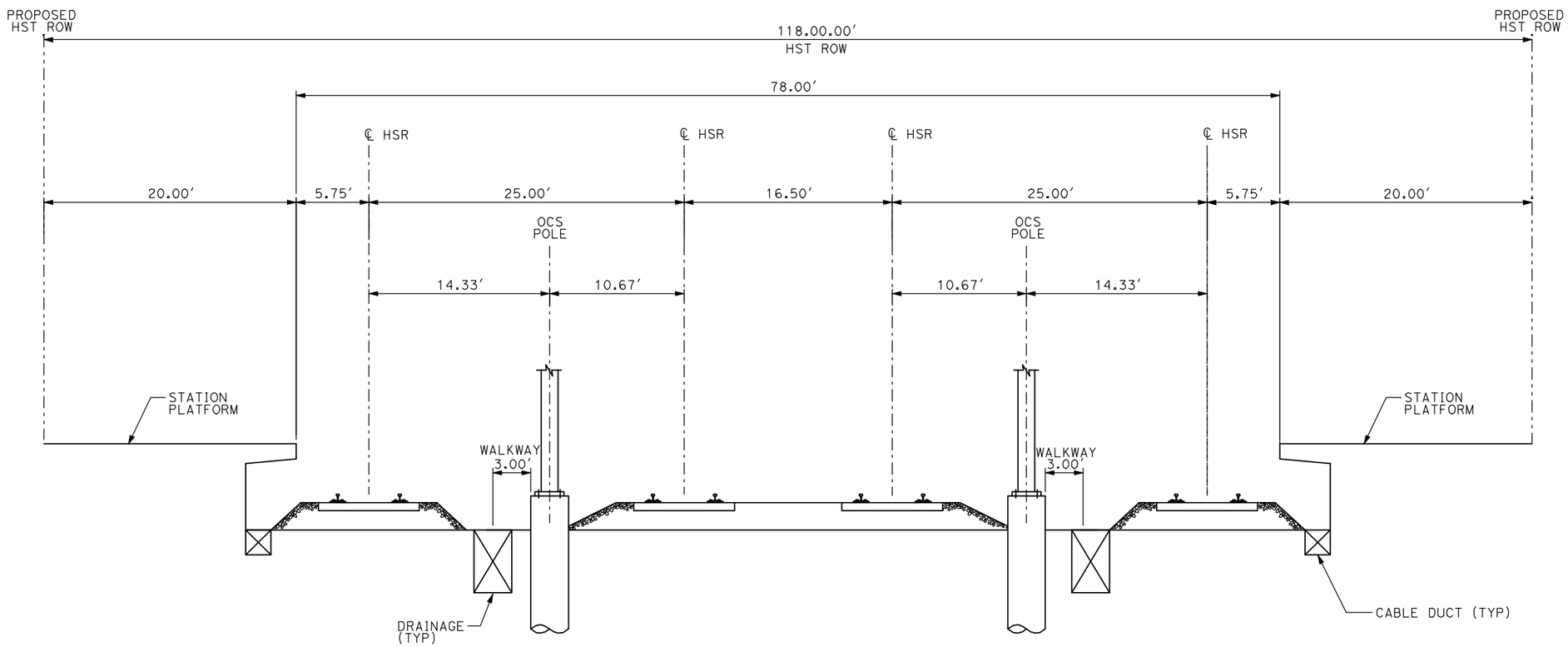

AG5 - 4 TRACK AT GRADE MERCED STATION

NOTES:
1. TRACK, OCS POLES AND FOUNDATIONS, CABLE DUCTS AND DRAINAGE ARE SCHEMATIC AND DO NOT REPRESENT DESIGN.
2. RIGHT-OF-WAY REQUIRED FOR THE HIGH-SPEED RAIL GUIDEWAY WILL DEPEND UPON CONDITIONS ALONG THE ALIGNMENT, INCLUDING TERRAIN, WHERE CUT/FILL SLOPES, RETAINING STRUCTURES, AND ACCESS ARE REQUIRED.
3. POTENTIAL SOUND BARRIERS NOT SHOWN IN CROSS SECTIONS. FOR THE EXTENT OF POTENTIAL SOUND BARRIERS, SEE ALIGNMENT PLAN AND PROFILE SHEETS.

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY A. SHIELDS
DRAWN BY C. VALADAO
CHECKED BY A. BOONE
IN CHARGE A. BOONE
DATE 07/20/2011

RECORD SET
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CALIFORNIA HIGH-SPEED RAIL AUTHORITY

CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO

TYPICAL SECTIONS
SHEET 3 OF 17

CONTRACT NO. HSR06-007
DRAWING NO. T3003-A
SCALE NO SCALE
SHEET NO. OF ###

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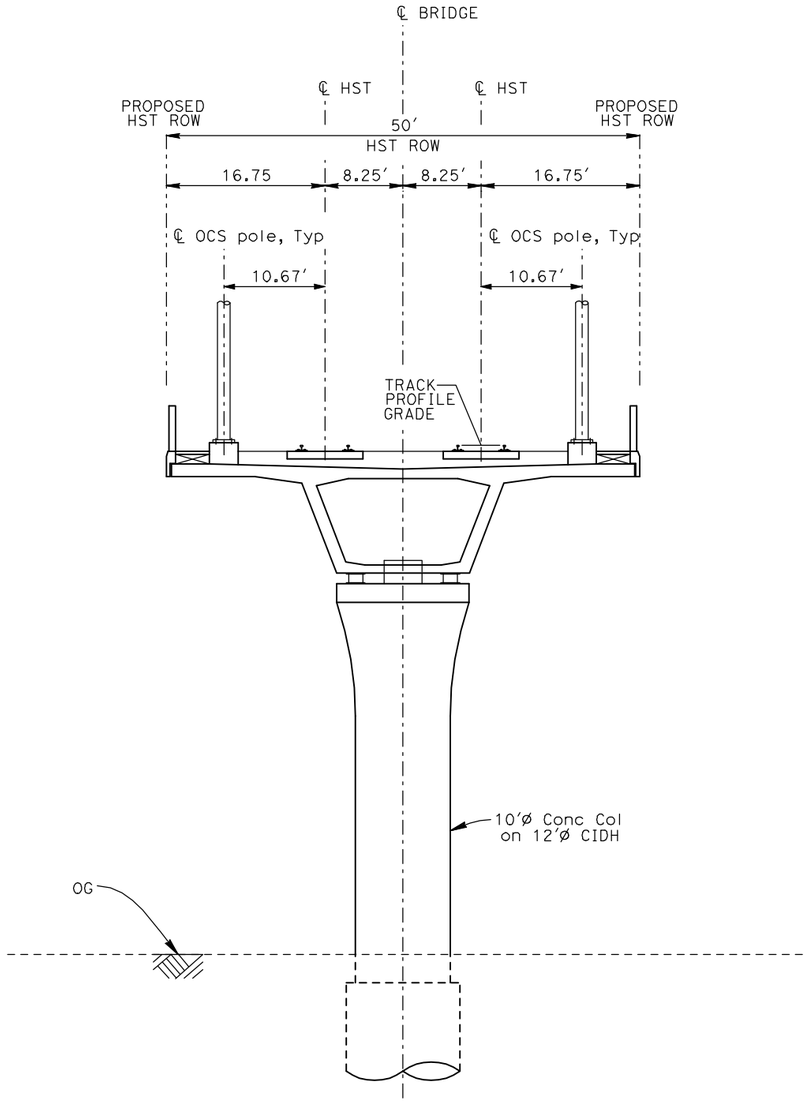
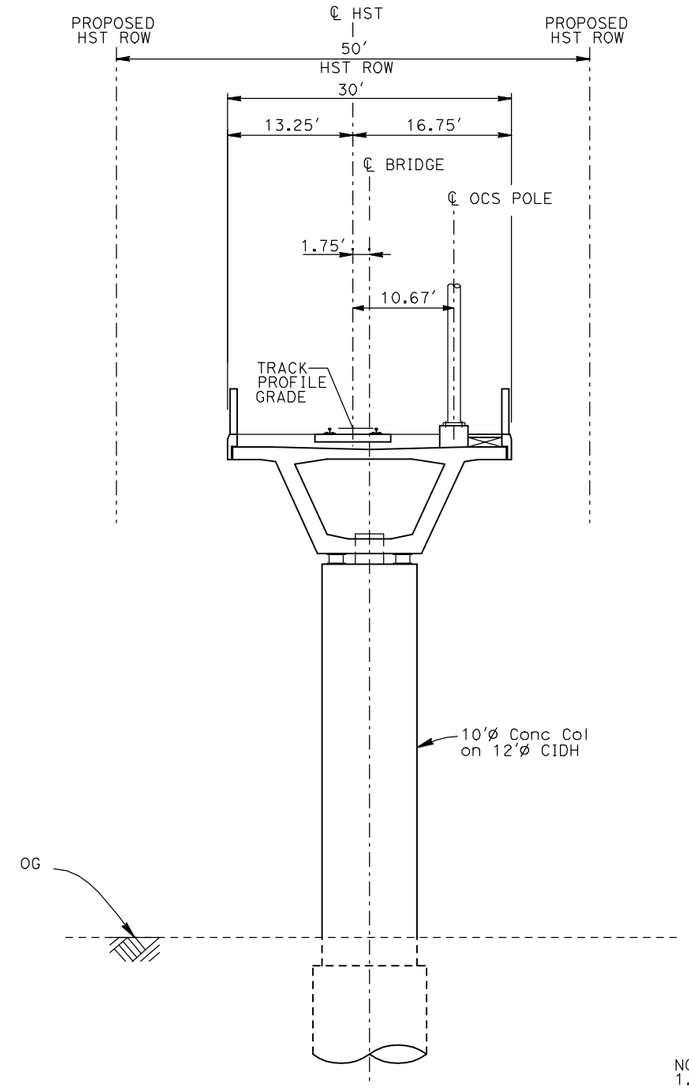


EL1 - DOUBLE TRACK ELEVATED



EL2 - SINGLE TRACK ELEVATED

NOTES:
1. TRACK, OCS POLES AND FOUNDATIONS, CABLE DUCTS AND DRAINAGE ARE SCHEMATIC AND DO NOT REPRESENT DESIGN.
2. BACK-TO-BACK CANTILEVERS ON A SINGLE POLE MAY BE PERMITTED AT PASSENGER STATIONS.
3. RIGHT-OF-WAY REQUIRED FOR THE HIGH-SPEED RAIL GUIDEWAY WILL DEPEND UPON CONDITIONS ALONG THE ALIGNMENT, INCLUDING TERRAIN, WHERE CUT/FILL SLOPES, RETAINING STRUCTURES, AND ACCESS ARE REQUIRED.
4. POTENTIAL SOUND BARRIERS NOT SHOWN IN CROSS SECTIONS. FOR THE EXTENT OF POTENTIAL SOUND BARRIERS, SEE ALIGNMENT PLAN AND PROFILE SHEETS.

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY A. SHIELDS
DRAWN BY C. VALADAO
CHECKED BY A. BOONE
IN CHARGE A. BOONE
DATE 07/20/2011

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CALIFORNIA HIGH-SPEED RAIL AUTHORITY

CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO

TYPICAL SECTIONS
SHEET 4 OF 17

CONTRACT NO. HSR06-007
DRAWING NO. T3004-A
SCALE NO SCALE
SHEET NO. OF ###

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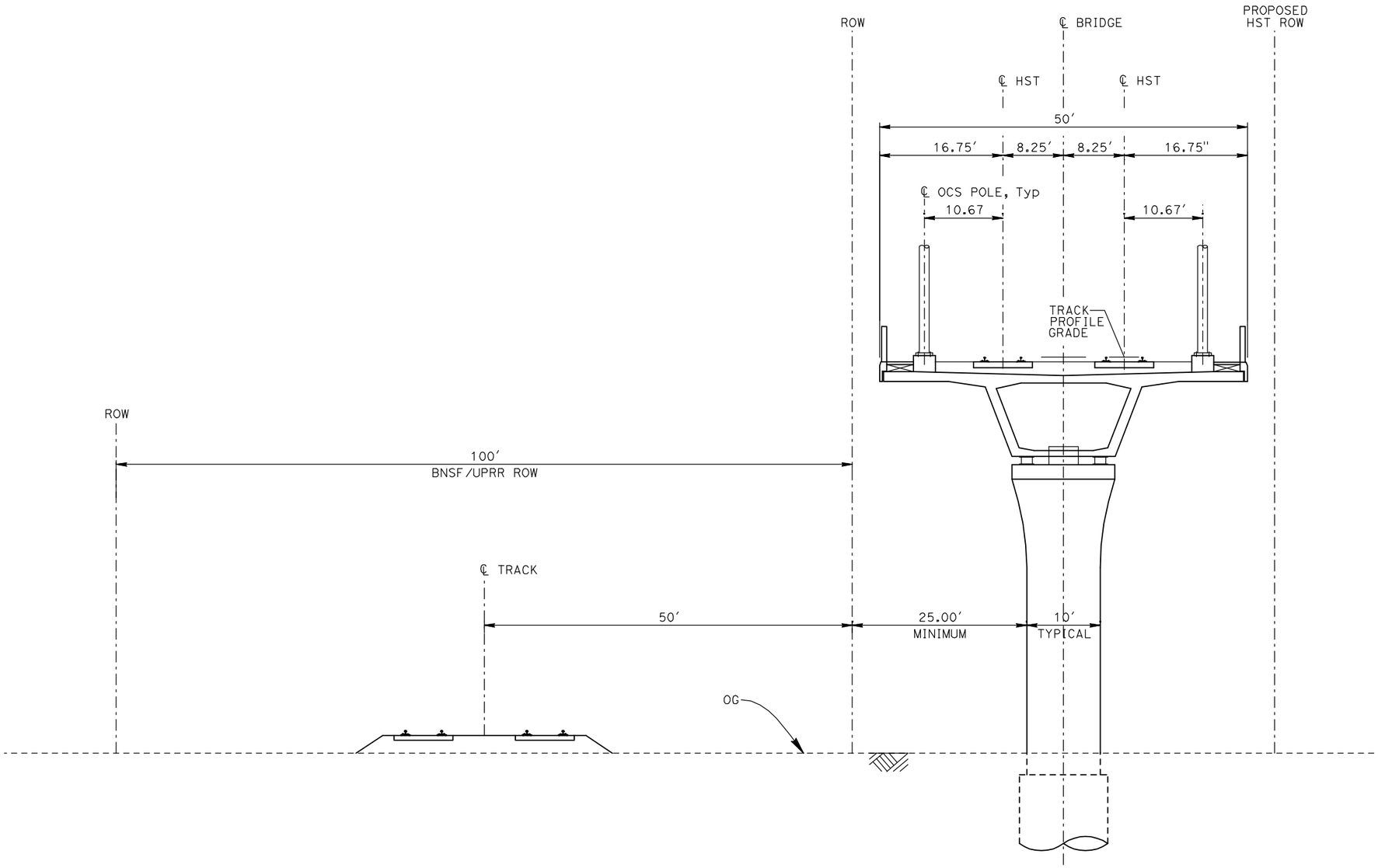

EL3 - DOUBLE TRACK ELEVATED ADJACENT TO UPRR/BNSF

NOTES:
1. TRACK, OCS POLES AND FOUNDATIONS, CABLE DUCTS AND DRAINAGE ARE SCHEMATIC AND DO NOT REPRESENT DESIGN.
2. RIGHT-OF-WAY REQUIRED FOR THE HIGH-SPEED RAIL GUIDEWAY WILL DEPEND UPON CONDITIONS ALONG THE ALIGNMENT, INCLUDING TERRAIN, WHERE CUT/FILL SLOPES, RETAINING STRUCTURES, AND ACCESS ARE REQUIRED.
3. POTENTIAL SOUND BARRIERS NOT SHOWN IN CROSS SECTIONS. FOR THE EXTENT OF POTENTIAL SOUND BARRIERS, SEE ALIGNMENT PLAN AND PROFILE SHEETS.

REV	DATE	BY	CHK	APP	DESCRIPTION

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DRAWN BY C. VALADAO
CHECKED BY A. BOONE
IN CHARGE A. BOONE
DATE 07/20/2011

RECORD SET
15% DESIGN SUBMITTAL

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CALIFORNIA HIGH-SPEED RAIL AUTHORITY

CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO

TYPICAL SECTIONS
SHEET 5 OF 17

CONTRACT NO. HSR06-007
DRAWING NO. T3005-A
SCALE NO SCALE
SHEET NO. OF ###

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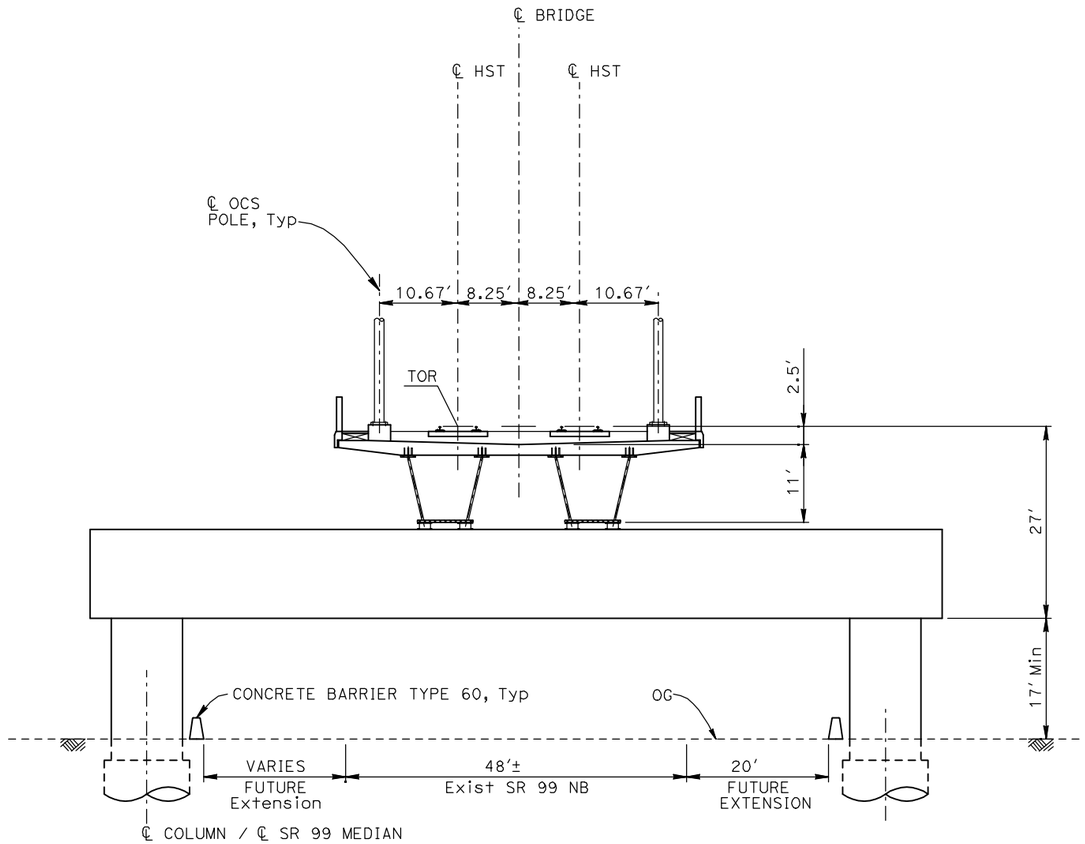
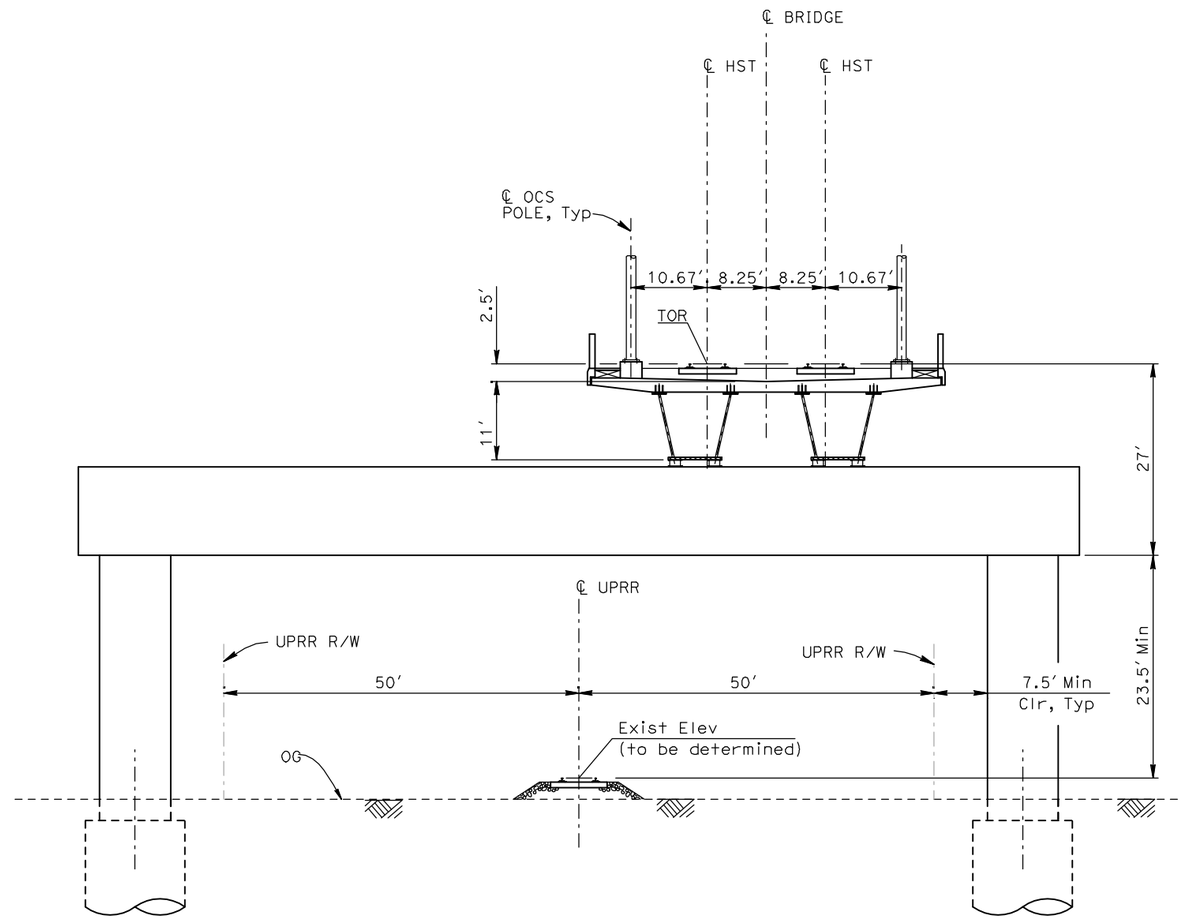


EL4 - DOUBLE TRACK ELEVATED CROSSING SR99



EL5 - DOUBLE TRACK ELEVATED CROSSING UPRR/BNSF

NOTES:
1. TRACK, OCS POLES AND FOUNDATIONS, CABLE DUCTS AND DRAINAGE ARE SCHEMATIC AND DO NOT REPRESENT DESIGN.
2. RIGHT-OF-WAY REQUIRED FOR THE HIGH-SPEED RAIL GUIDEWAY WILL DEPEND UPON CONDITIONS ALONG THE ALIGNMENT, INCLUDING TERRAIN, WHERE CUT/FILL SLOPES, RETAINING STRUCTURES, AND ACCESS ARE REQUIRED.
3. POTENTIAL SOUND BARRIERS NOT SHOWN IN CROSS SECTIONS. FOR THE EXTENT OF POTENTIAL SOUND BARRIERS, SEE ALIGNMENT PLAN AND PROFILE SHEETS.

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY A. SHIELDS
DRAWN BY C. VALADAO
CHECKED BY A. BOONE
IN CHARGE A. BOONE
DATE 07/20/2011

RECORD SET
15% DESIGN SUBMITTAL

NOT FOR CONSTRUCTION

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Sacramento, CA 95811
CH2MHILL

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO

TYPICAL SECTIONS
SHEET 6 OF 17

CONTRACT NO. HSR06-007
DRAWING NO. T3006-A
SCALE NO SCALE
SHEET NO. OF ###

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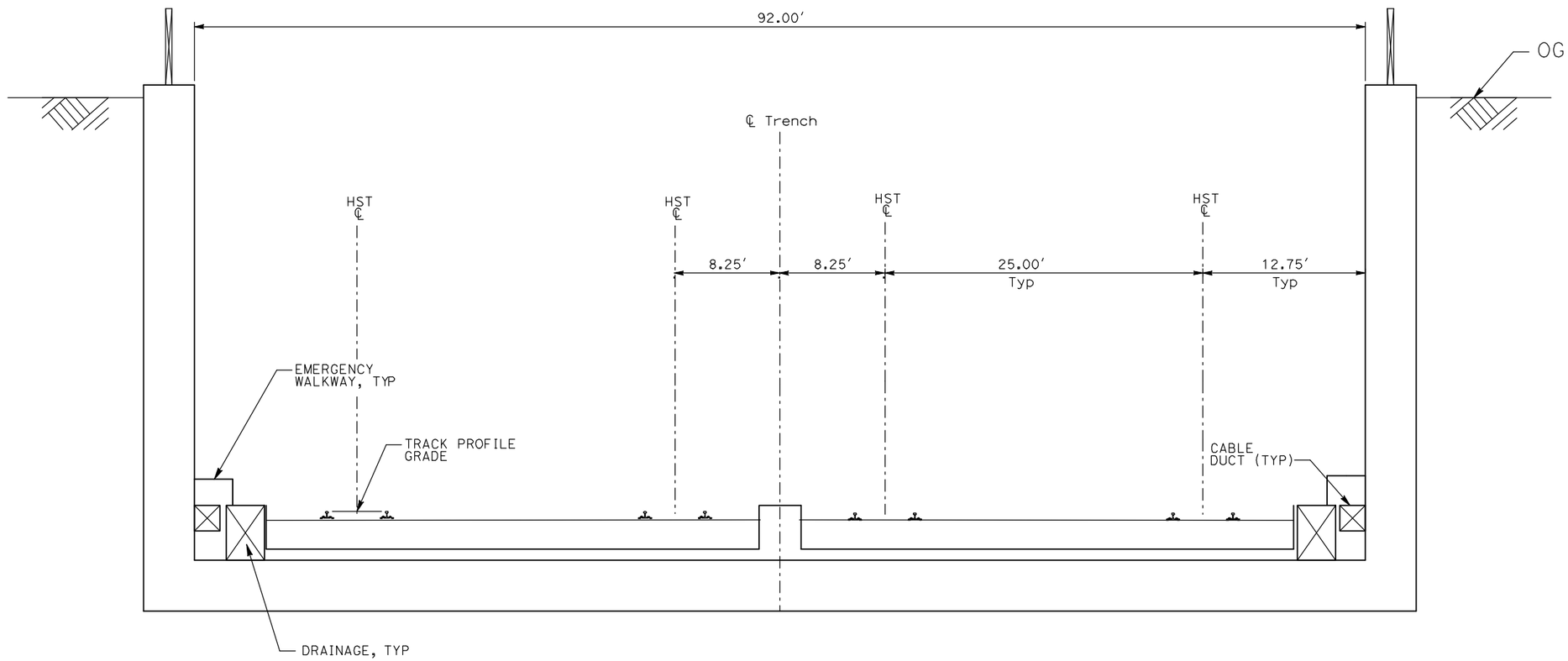

TR1 - 4 TRACK TRENCH STATION APPROACH

NOTES:
1. TRACK, OCS POLES AND FOUNDATIONS, CABLE DUCTS AND DRAINAGE ARE SCHEMATIC AND DO NOT REPRESENT DESIGN.
2. RIGHT-OF-WAY REQUIRED FOR THE HIGH-SPEED RAIL GUIDEWAY WILL DEPEND UPON CONDITIONS ALONG THE ALIGNMENT, INCLUDING TERRAIN, WHERE CUT/FILL SLOPES, RETAINING STRUCTURES, AND ACCESS ARE REQUIRED.
3. POTENTIAL SOUND BARRIERS NOT SHOWN IN CROSS SECTIONS. FOR THE EXTENT OF POTENTIAL SOUND BARRIERS, SEE ALIGNMENT PLAN AND PROFILE SHEETS.

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY A. SHIELDS
DRAWN BY C. VALADAO
CHECKED BY A. BOONE
IN CHARGE A. BOONE
DATE 07/20/2011

RECORD SET
15% DESIGN SUBMITTAL

NOT FOR CONSTRUCTION

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Sacramento, CA 95811
CH2MHILL

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO

TYPICAL SECTIONS
SHEET 7 OF 17

CONTRACT NO. HSR06-007
DRAWING NO. T3007-A
SCALE NO SCALE
SHEET NO. OF ###

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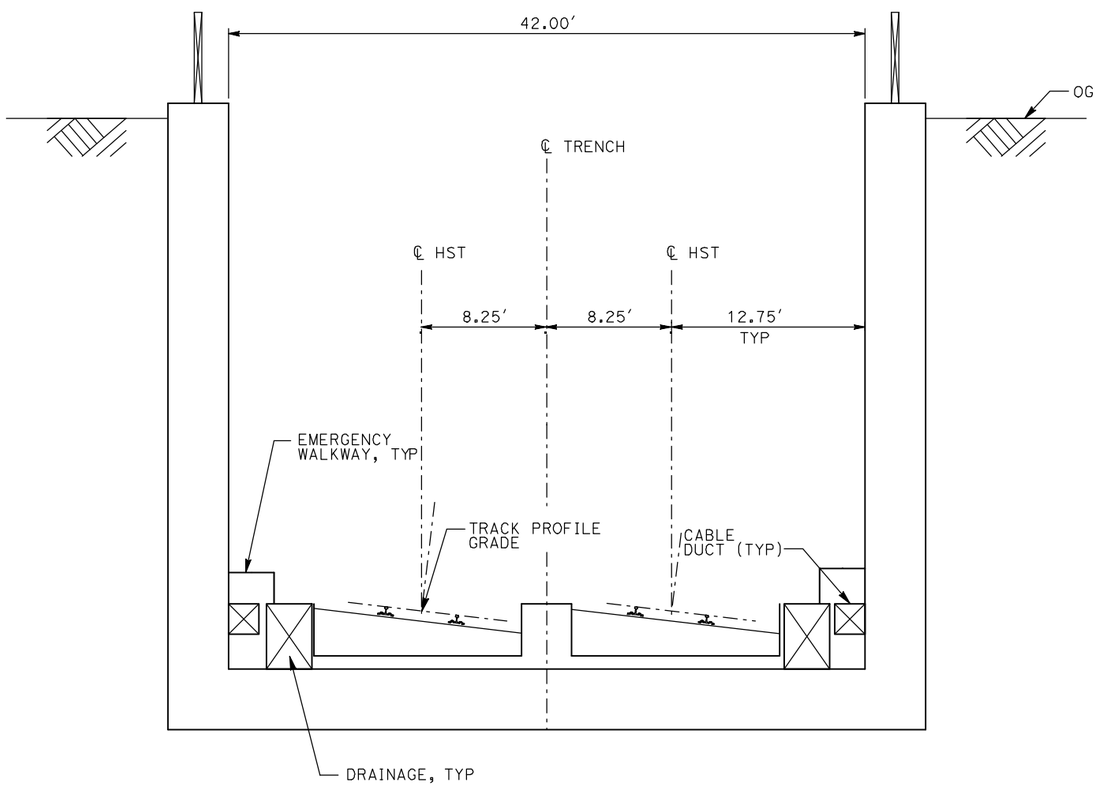
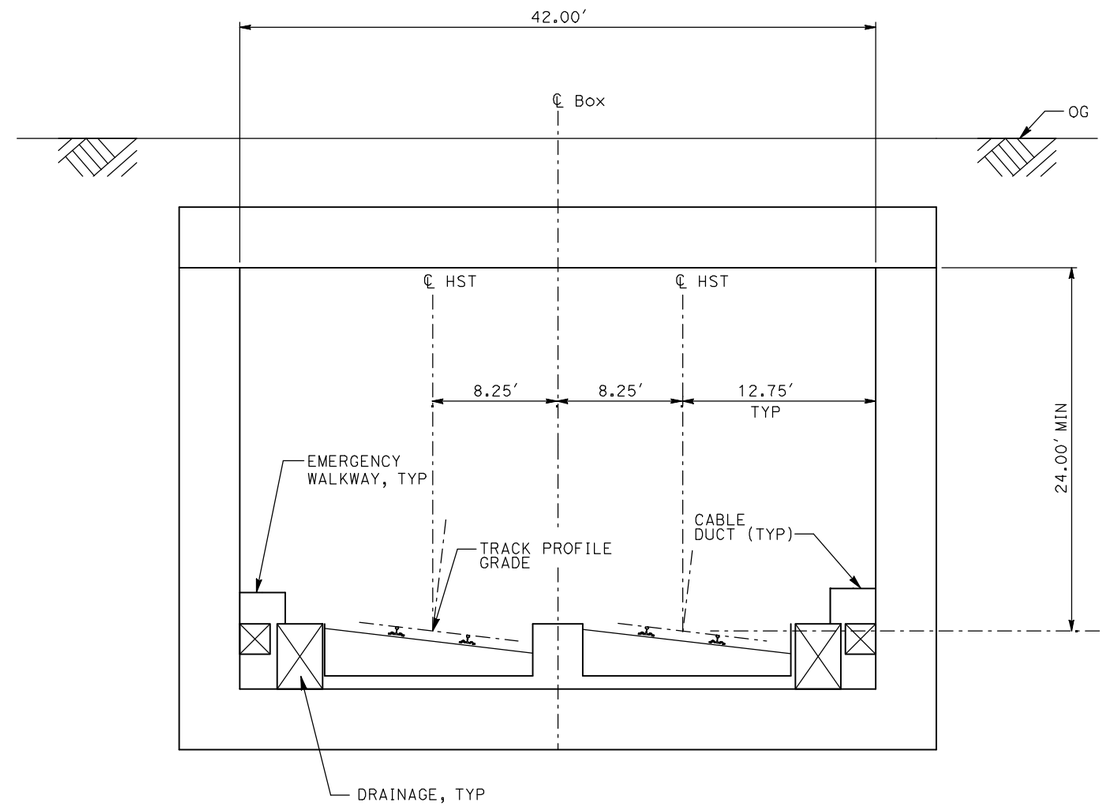
ShieldsA



TR2 - 2 TRACK TRENCH



CC1 - 2 TRACK CUT AND COVER CLOSED BOX

NOTES:
1. TRACK, OCS POLES AND FOUNDATIONS, CABLE DUCTS AND DRAINAGE ARE SCHEMATIC AND DO NOT REPRESENT DESIGN.
2. RIGHT-OF-WAY REQUIRED FOR THE HIGH-SPEED RAIL GUIDEWAY WILL DEPEND UPON CONDITIONS ALONG THE ALIGNMENT, INCLUDING TERRAIN, WHERE CUT/FILL SLOPES, RETAINING STRUCTURES, AND ACCESS ARE REQUIRED.
3. POTENTIAL SOUND BARRIERS NOT SHOWN IN CROSS SECTIONS. FOR THE EXTENT OF POTENTIAL SOUND BARRIERS, SEE ALIGNMENT PLAN AND PROFILE SHEETS.

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY A. SHIELDS
DRAWN BY C. VALADAO
CHECKED BY A. BOONE
IN CHARGE A. BOONE
DATE 07/20/2011

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

TYPICAL SECTIONS
SHEET 8 OF 17

CONTRACT NO. HSR06-007
DRAWING NO. T3008-A
SCALE NO SCALE
SHEET NO. OF ###

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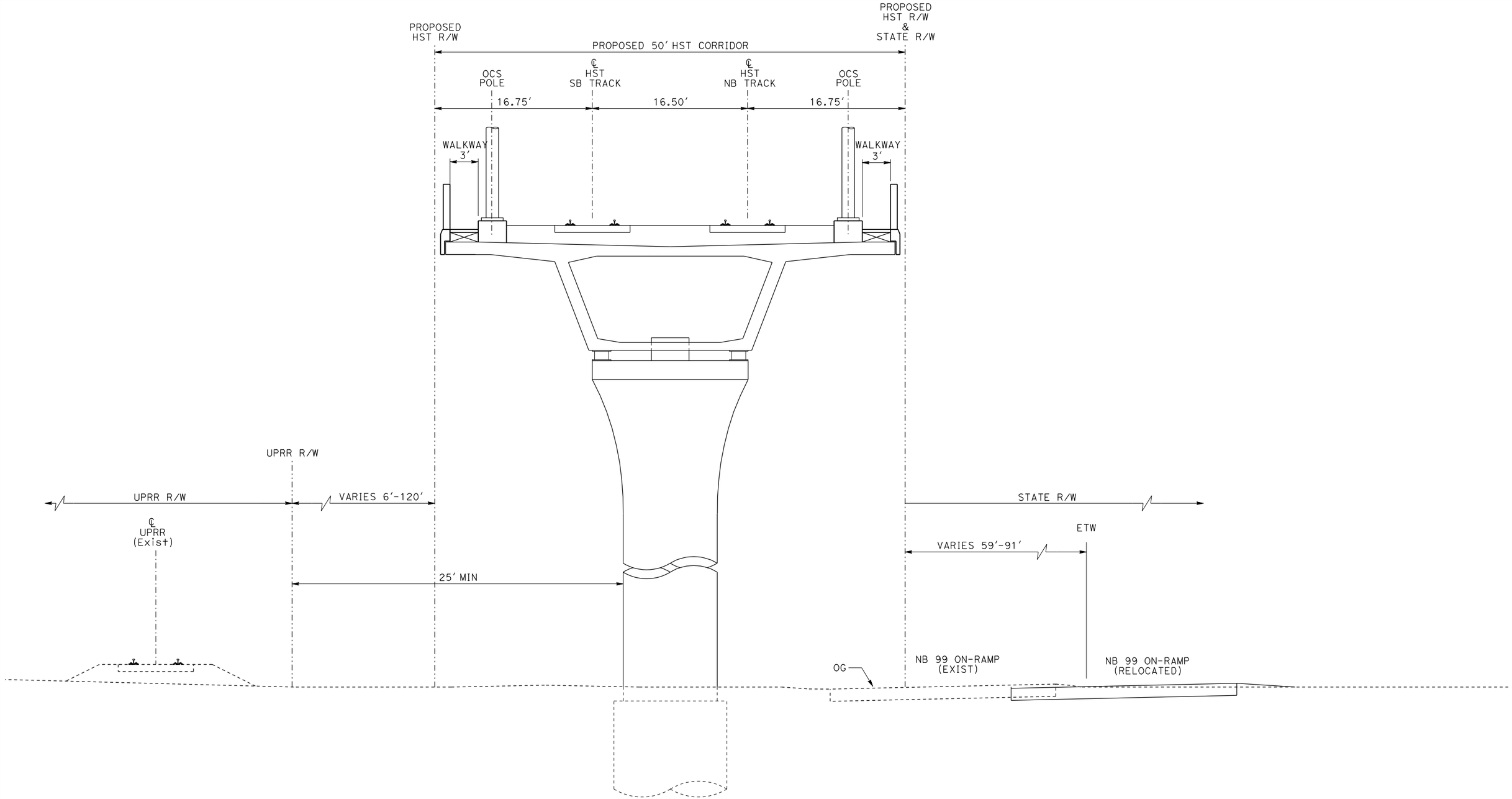

EL6 - DOUBLE TRACK ELEVATED ADJACENT TO UPRR

NOTE:

POTENTIAL SOUND BARRIERS NOT SHOWN IN CROSS SECTIONS. FOR THE EXTENT OF POTENTIAL SOUND BARRIERS, SEE ALIGNMENT PLAN AND PROFILE SHEETS.

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY L. PROCTOR
DRAWN BY S. LEONG
CHECKED BY V. CHIO
IN CHARGE J. VALSECCHI
DATE JULY 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

TYPICAL SECTIONS
SHEET 9 OF 17

CONTRACT NO. HSR06-007
DRAWING NO. T3009-A
SCALE NO SCALE
SHEET NO.

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TIME PLOTTED => 12:38

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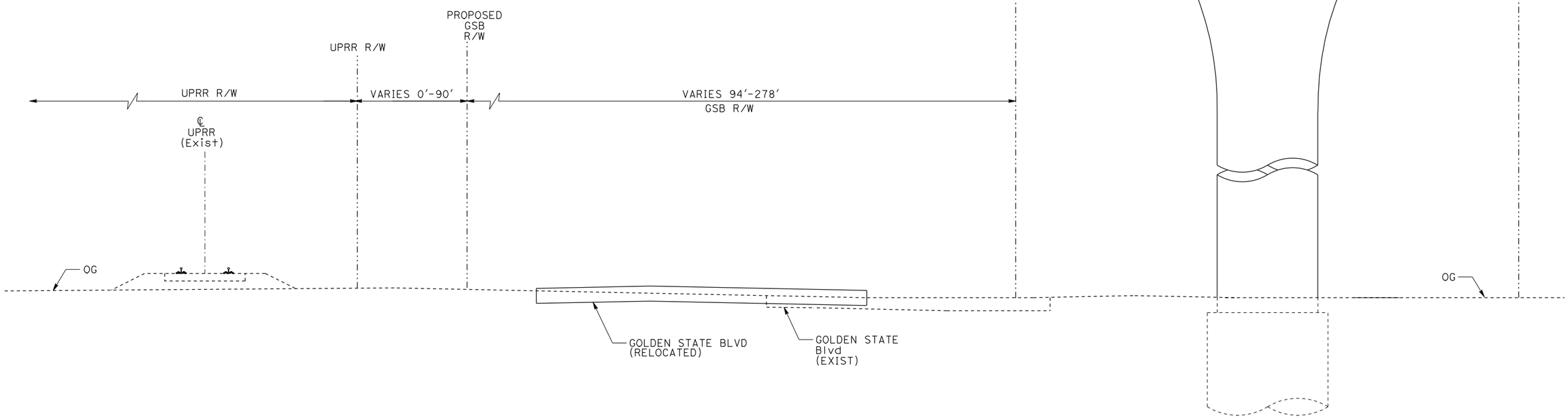

EL7 - DOUBLE TRACK ELEVATED ADJACENT TO GOLDEN STATE BOULEVARD

NOTE:

POTENTIAL SOUND BARRIERS NOT SHOWN IN CROSS SECTIONS. FOR THE EXTENT OF POTENTIAL SOUND BARRIERS, SEE ALIGNMENT PLAN AND PROFILE SHEETS.

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY L. PROCTOR
DRAWN BY S. LEONG
CHECKED BY V. CHIO
IN CHARGE J. VALSECCHI
DATE JULY 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

TYPICAL SECTIONS
SHEET 10 OF 17

CONTRACT NO. HSR06-007
DRAWING NO. T3010-A
SCALE NO SCALE
SHEET NO.

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TIME PLOTTED => 12:44

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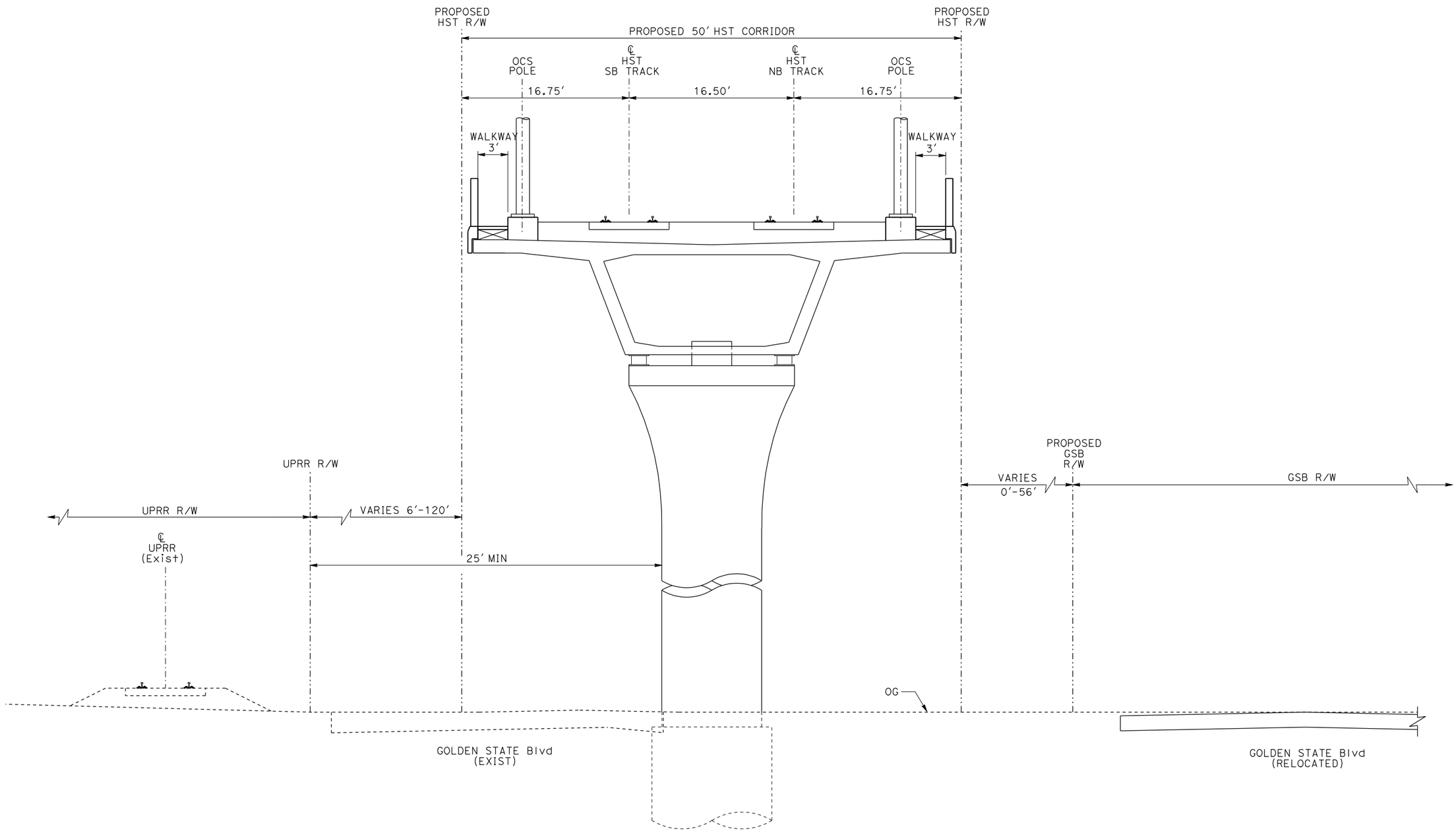

EL8 - DOUBLE TRACK ELEVATED BETWEEN UPRR AND GOLDEN STATE BOULEVARD

NOTE:

POTENTIAL SOUND BARRIERS NOT SHOWN IN CROSS SECTIONS. FOR THE EXTENT OF POTENTIAL SOUND BARRIERS, SEE ALIGNMENT PLAN AND PROFILE SHEETS.

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY L. PROCTOR
DRAWN BY S. LEONG
CHECKED BY V. CHIO
IN CHARGE J. VALSECCHI
DATE JULY 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

TYPICAL SECTIONS
SHEET 11 OF 17

CONTRACT NO. HSR06-007
DRAWING NO. T3011-A
SCALE NO SCALE
SHEET NO.

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TIME PLOTTED => 12:45

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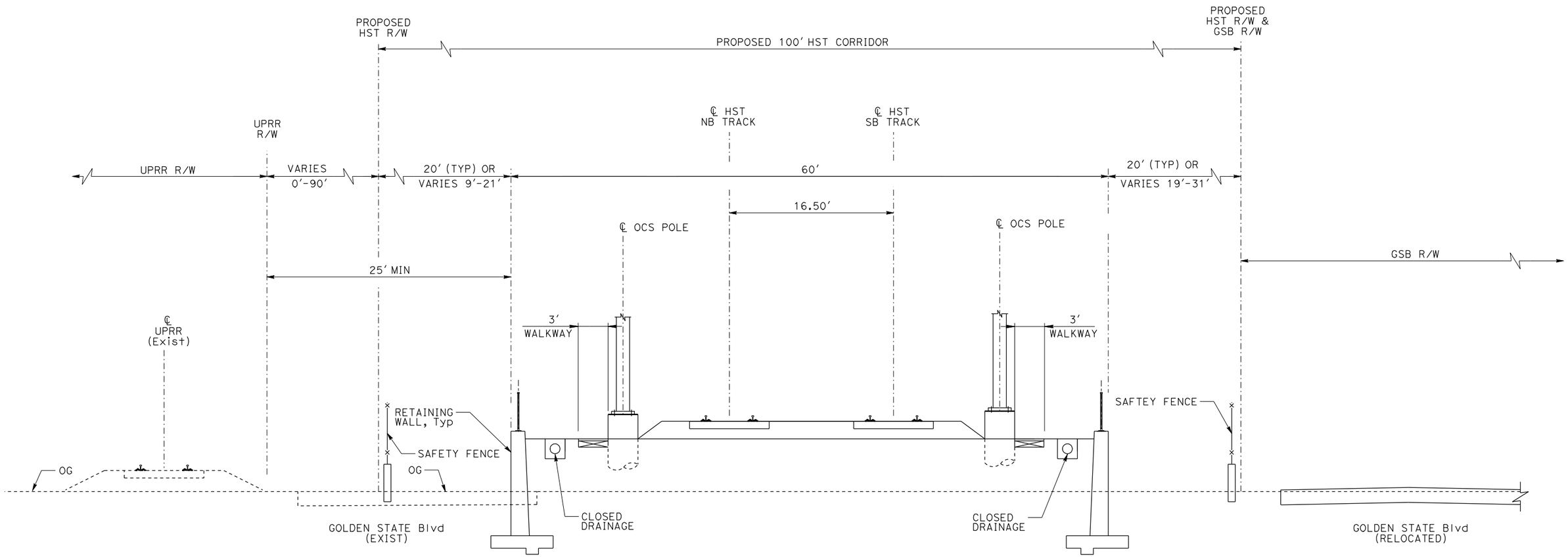

RF3 - DOUBLE TRACK BETWEEN UPRR AND GOLDEN STATE BOULEVARD

NOTE:

POTENTIAL SOUND BARRIERS NOT SHOWN IN CROSS SECTIONS. FOR THE EXTENT OF POTENTIAL SOUND BARRIERS, SEE ALIGNMENT PLAN AND PROFILE SHEETS.

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY L. PROCTOR
DRAWN BY S. LEONG
CHECKED BY V. CHIO
IN CHARGE J. VALSECCHI
DATE JULY 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

TYPICAL SECTION
SHEET 12 OF 17

CONTRACT NO. HSR06-007
DRAWING NO. T3012-A
SCALE NO SCALE
SHEET NO.

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TIME PLOTTED => 12:47

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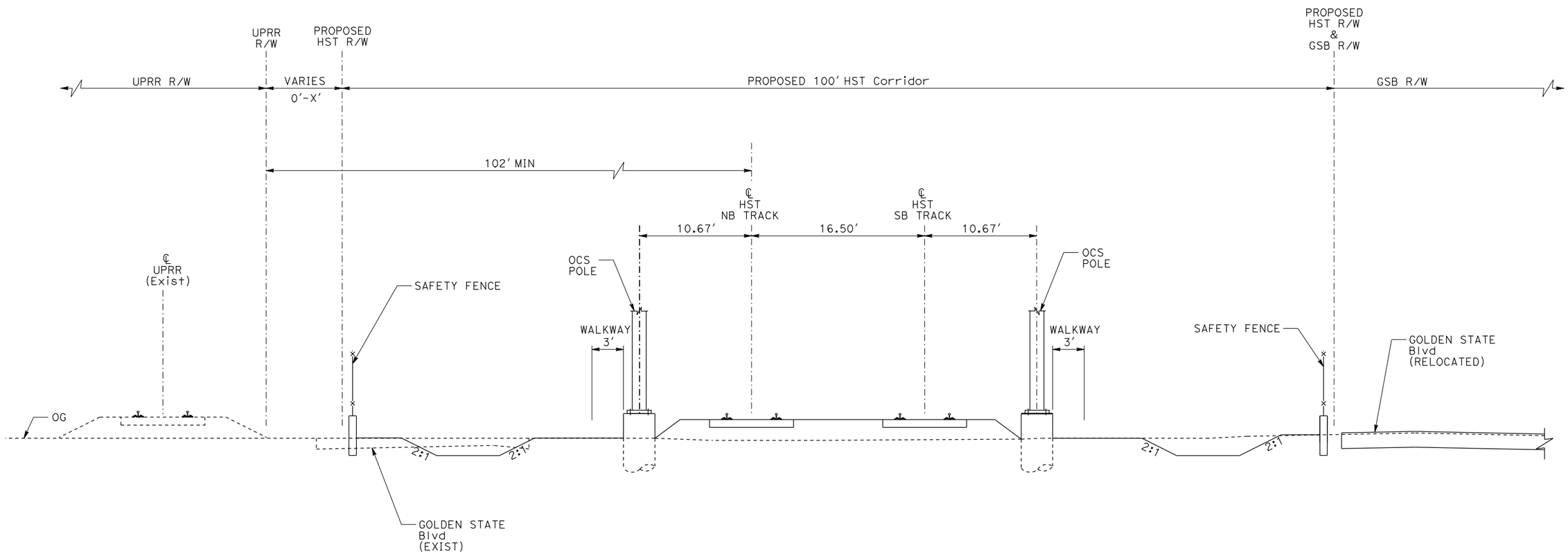


AG6 - DOUBLE TRACK BETWEEN UPRR AND GOLDEN STATE BOULEVARD

NOTE:

POTENTIAL SOUND BARRIERS NOT SHOWN IN CROSS SECTIONS. FOR THE EXTENT OF POTENTIAL SOUND BARRIERS, SEE ALIGNMENT PLAN AND PROFILE SHEETS.

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY L. PROCTOR
DRAWN BY S. LEONG
CHECKED BY V. CHIO
IN CHARGE J. VALSECCHI
DATE JULY 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

TYPICAL SECTION
SHEET 13 OF 17

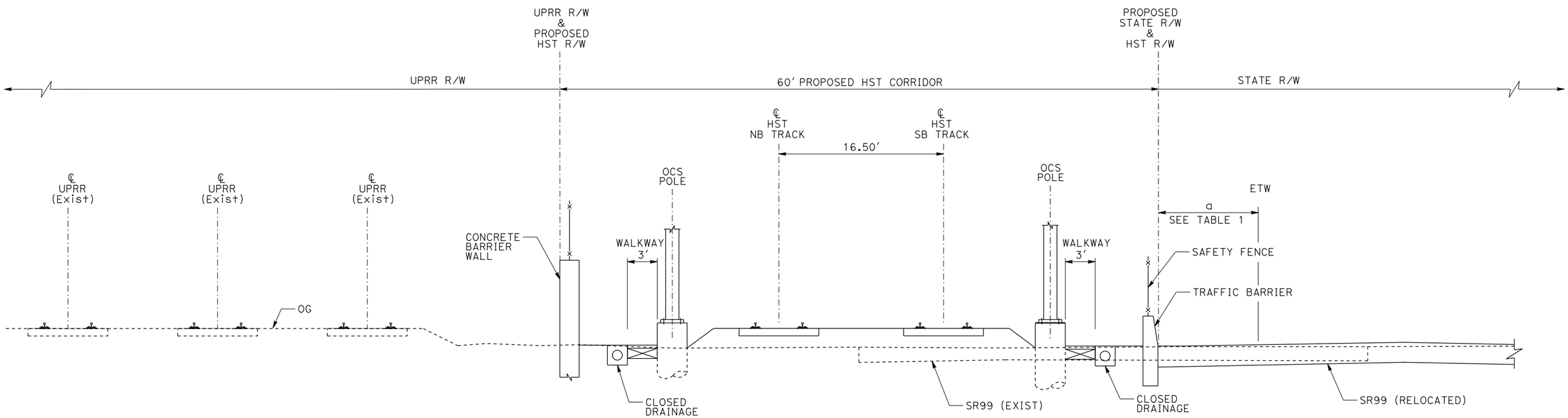
CONTRACT NO. HSR06-007
DRAWING NO. T3013-A
SCALE NO SCALE
SHEET NO.

DATE PLOTTED => 21-JUL-2011
TIME PLOTTED => 12:49

USERNAME => lwebster
DGN FILE => MF-T-3013-A1-EIR.dgn

TABLE 1

a > 30′	NO TRAFFIC BARRIER
4′ < a < 30′	TRAFFIC BARRIER



AG7 - DOUBLE TRACK BETWEEN UPRR AND STATE ROUTE 99

NOTE:

POTENTIAL SOUND BARRIERS NOT SHOWN IN CROSS SECTIONS. FOR THE EXTENT OF POTENTIAL SOUND BARRIERS, SEE ALIGNMENT PLAN AND PROFILE SHEETS.

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY L. PROCTOR
DRAWN BY S. LEONG
CHECKED BY V. CHIO
IN CHARGE J. VALSECCHI
DATE JULY 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

TYPICAL SECTION
SHEET 14 OF 17

CONTRACT NO. HSR06-007
DRAWING NO. T3014-A
SCALE NO SCALE
SHEET NO.

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TIME PLOTTED => 12:56

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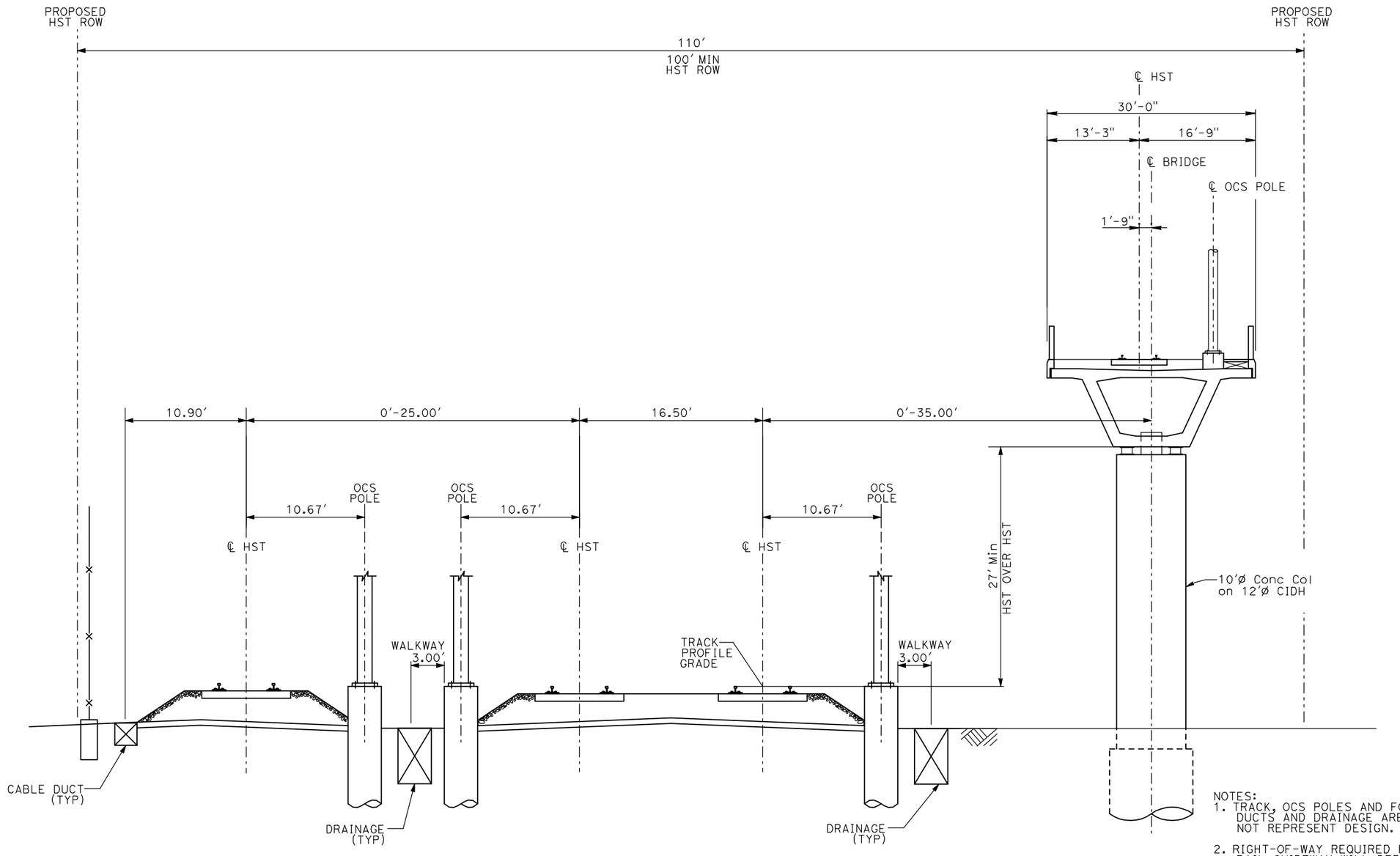
DGN FILE => MF-T-3014-A1-EIR.dgn



WYE1 - WYE CONNECTION GRADE SEPERATED

NOTES:
1. TRACK, OCS POLES AND FOUNDATIONS, CABLE DUCTS AND DRAINAGE ARE SCHEMATIC AND DO NOT REPRESENT DESIGN.
2. RIGHT-OF-WAY REQUIRED FOR THE HIGH-SPEED RAIL GUIDEWAY WILL DEPEND UPON CONDITIONS ALONG THE ALIGNMENT, INCLUDING TERRAIN, WHERE CUT/FILL SLOPES, RETAINING STRUCTURES, AND ACCESS ARE REQUIRED.
3. POTENTIAL SOUND BARRIERS NOT SHOWN IN CROSS SECTIONS. FOR THE EXTENT OF POTENTIAL SOUND BARRIERS, SEE ALIGNMENT PLAN AND PROFILE SHEETS.

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY A. SHIELDS
DRAWN BY C. VALADAO
CHECKED BY A. BOONE
IN CHARGE A. BOONE
DATE 07/20/2011

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

TYPICAL SECTIONS
SHEET 15 OF 17

CONTRACT NO. HSR06-007
DRAWING NO. T3015-A
SCALE NO SCALE
SHEET NO. OF ###

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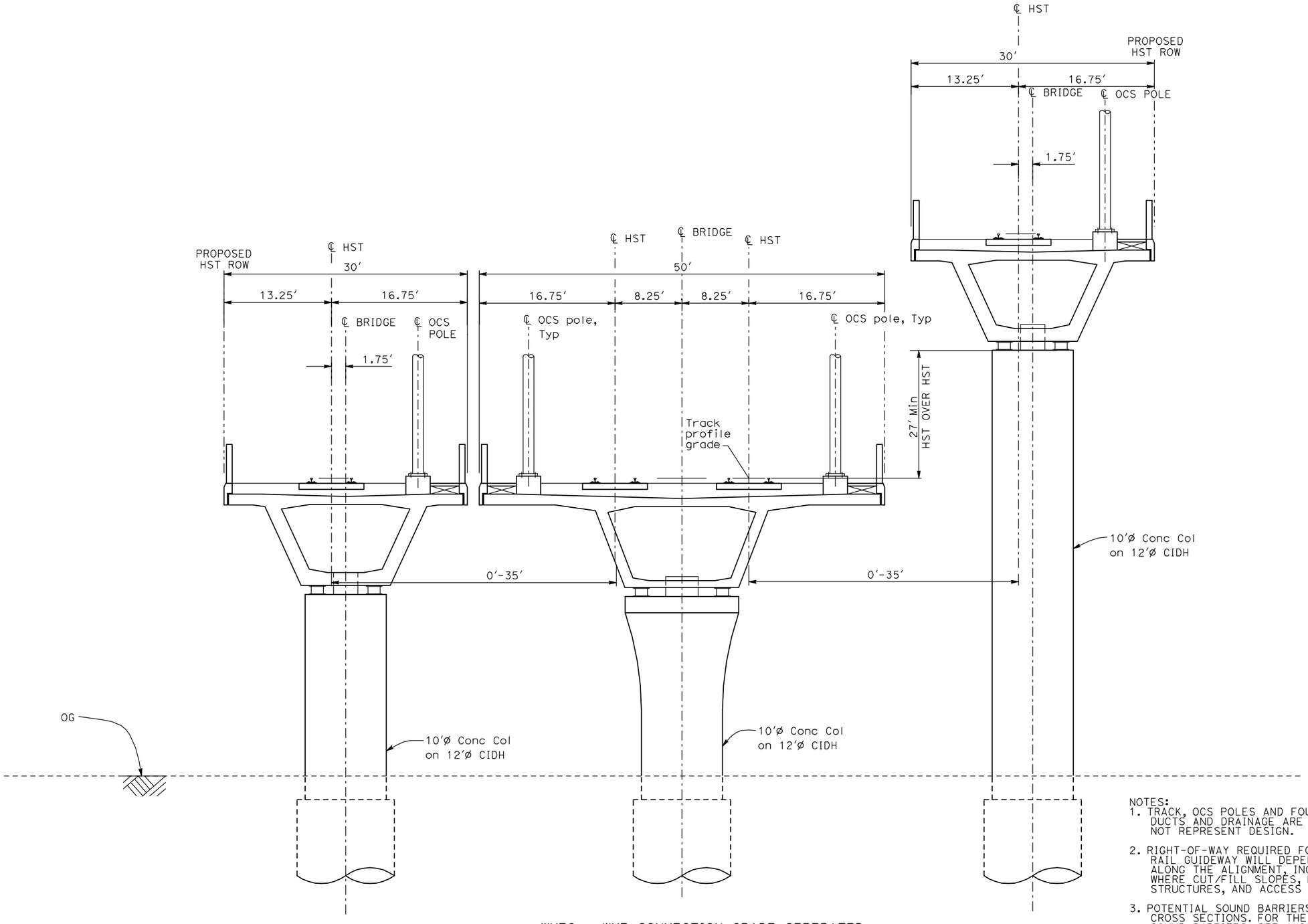
ShieldsA



WYE2 - WYE CONNECTION GRADE SEPERATED

NOTES:
1. TRACK, OCS POLES AND FOUNDATIONS, CABLE DUCTS AND DRAINAGE ARE SCHEMATIC AND DO NOT REPRESENT DESIGN.
2. RIGHT-OF-WAY REQUIRED FOR THE HIGH-SPEED RAIL GUIDEWAY WILL DEPEND UPON CONDITIONS ALONG THE ALIGNMENT, INCLUDING TERRAIN, WHERE CUT/FILL SLOPES, RETAINING STRUCTURES, AND ACCESS ARE REQUIRED.
3. POTENTIAL SOUND BARRIERS NOT SHOWN IN CROSS SECTIONS. FOR THE EXTENT OF POTENTIAL SOUND BARRIERS, SEE ALIGNMENT PLAN AND PROFILE SHEETS.

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY A. SHIELDS
DRAWN BY C. VALADAO
CHECKED BY A. BOONE
IN CHARGE A. BOONE
DATE 07/20/2011

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

TYPICAL SECTIONS
SHEET 16 OF 17

CONTRACT NO. HSR06-007
DRAWING NO. T3016-A
SCALE NO SCALE
SHEET NO. OF ###

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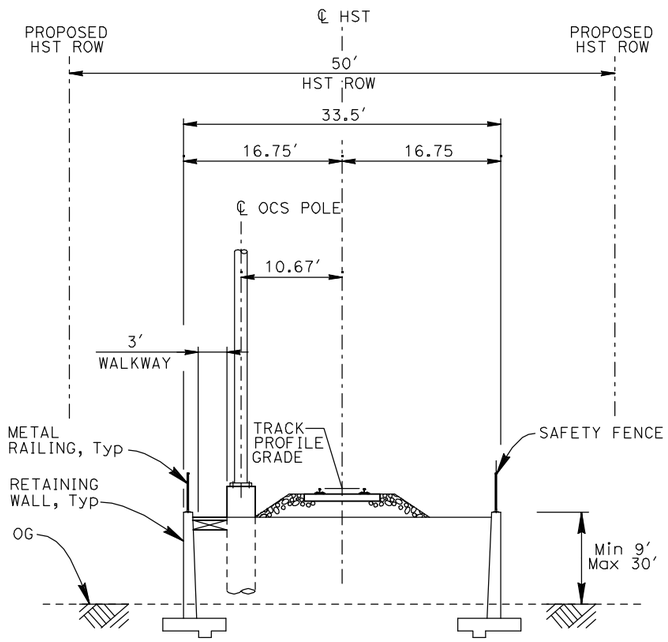
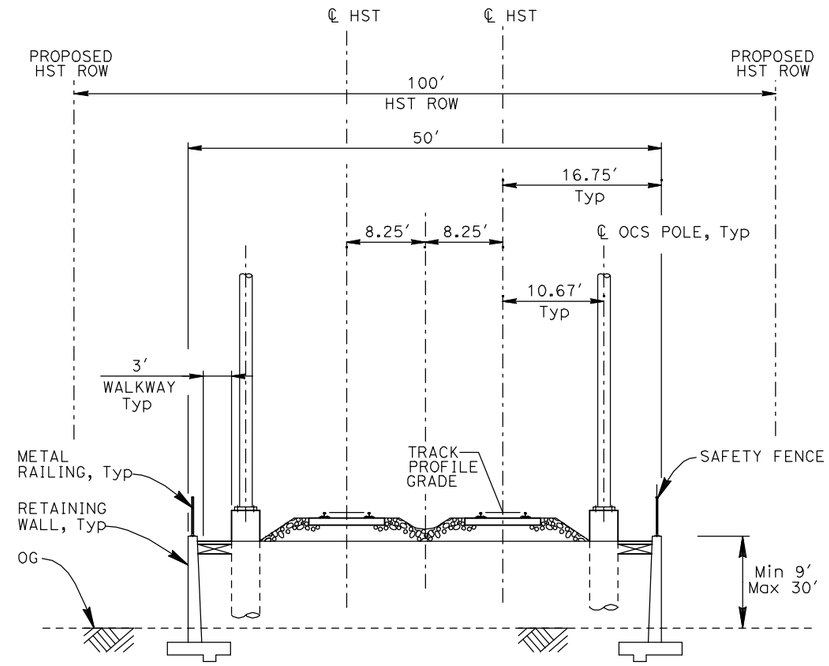
ShieldsA



RF1 - SINGLE TRACK RETAINED FILL



RF2 - DOUBLE TRACK RETAINED FILL

NOTES:
1. TRACK, OCS POLES AND FOUNDATIONS, CABLE DUCTS AND DRAINAGE ARE SCHEMATIC AND DO NOT REPRESENT DESIGN.
2. RIGHT-OF-WAY REQUIRED FOR THE HIGH-SPEED RAIL GUIDEWAY WILL DEPEND UPON CONDITIONS ALONG THE ALIGNMENT, INCLUDING TERRAIN, WHERE CUT/FILL SLOPES, RETAINING STRUCTURES, AND ACCESS ARE REQUIRED.
3. POTENTIAL SOUND BARRIERS NOT SHOWN IN CROSS SECTIONS. FOR THE EXTENT OF POTENTIAL SOUND BARRIERS, SEE ALIGNMENT PLAN AND PROFILE SHEETS.

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY A. SHIELDS
DRAWN BY C. VALADAO
CHECKED BY A. BOONE
IN CHARGE A. BOONE
DATE 07/20/2011

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

TYPICAL SECTIONS
SHEET 17 OF 17

CONTRACT NO. HSR06-007
DRAWING NO. T3017-A
SCALE NO SCALE
SHEET NO. OF ###

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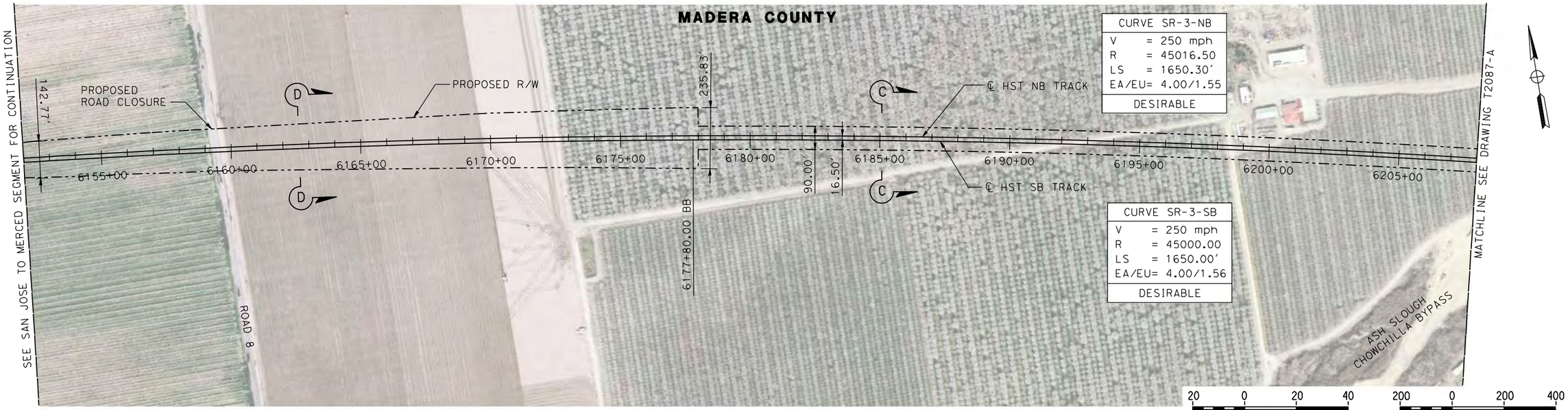
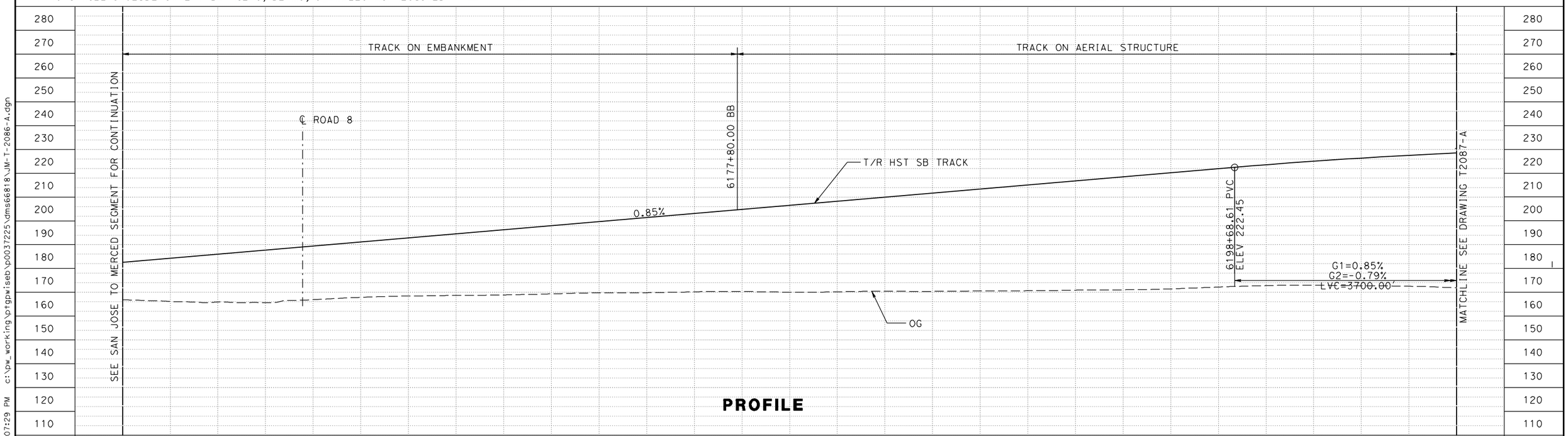


NOTE:
TRACKS CLOSER THAN 102 FT TO THE NEAREST EXISTING FREIGHT
TRACKS WILL INCLUDE SAFETY BARRIERS, BERMS, OR WALLS AS REQUIRED

PLAN



PROFILE

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY P. JACOBY
DRAWN BY ALBERT S.
CHECKED BY RESHMA C.
IN CHARGE D. WEMMER
DATE 4/15/2011

15% DRAFT SUBMITTAL FOR INTERNAL USE ONLY

NOT FOR CONSTRUCTION

PARSONS

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO
HYBRID
AVENUE 24/SR152/AVENUE 21
TRACK PLAN AND PROFILE
STA 6152+00 TO STA 6208+00

CONTRACT NO. HSR08-05
DRAWING NO. T2086-A
SCALE AS SHOWN
SHEET NO.

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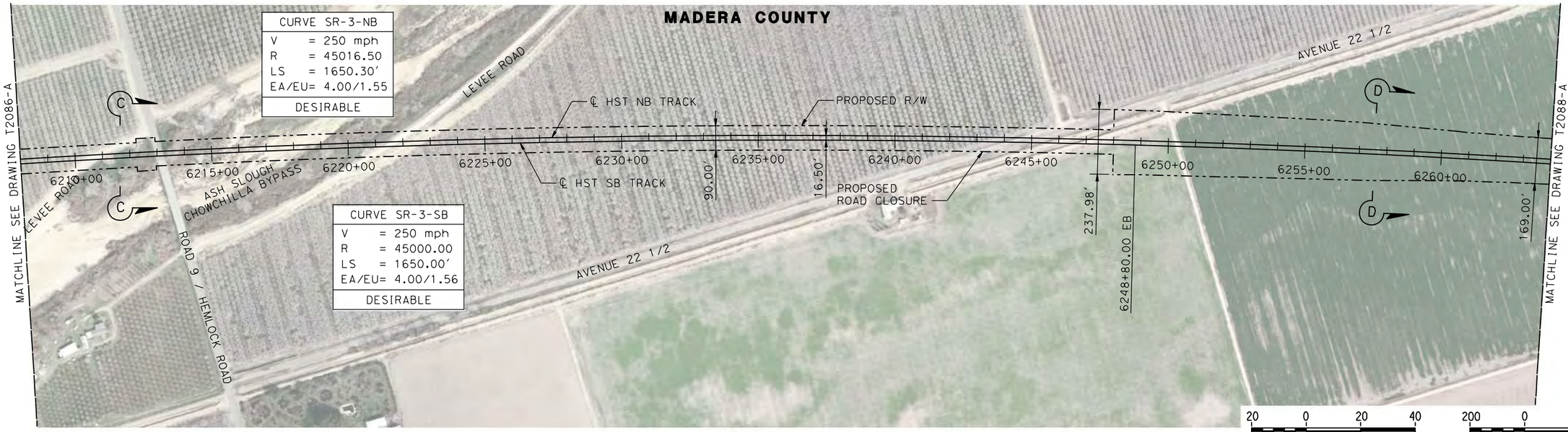
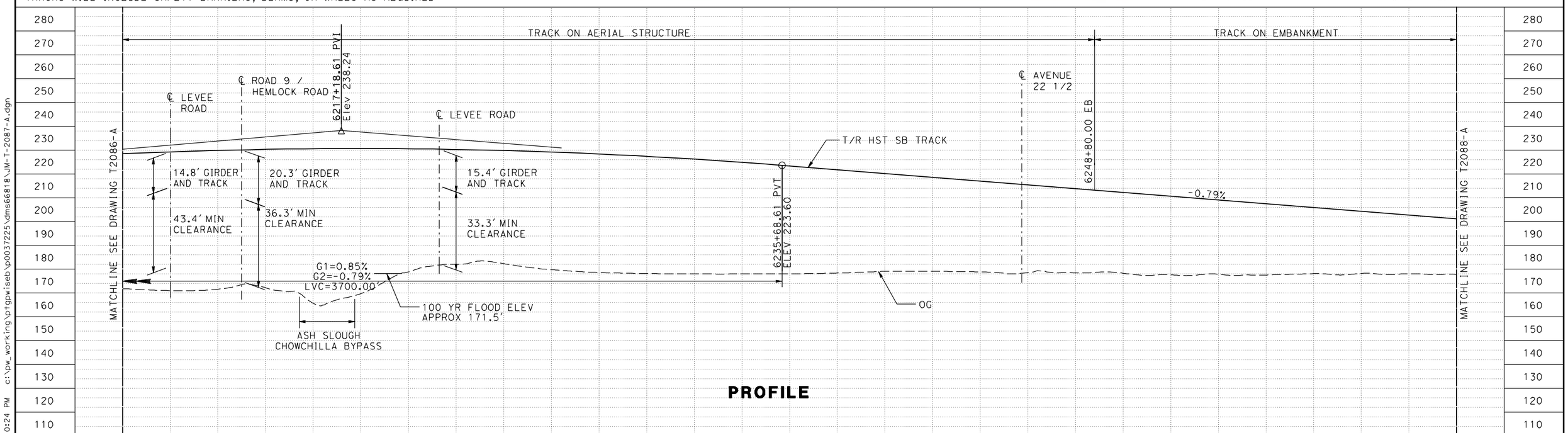


NOTE:
TRACKS CLOSER THAN 102 FT TO THE NEAREST EXISTING FREIGHT TRACKS WILL INCLUDE SAFETY BARRIERS, BERMS, OR WALLS AS REQUIRED

PLAN

VERT: 1"=20' (20 0 20 40) HORIZ: 1"=200' (200 0 200 400)



PROFILE

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY P. JACOBY
DRAWN BY ALBERT S.
CHECKED BY RESHMA C.
IN CHARGE D. WEMMER
DATE 4/15/2011

15% DRAFT SUBMITTAL FOR INTERNAL USE ONLY

NOT FOR CONSTRUCTION

PARSONS

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO
HYBRID
AVENUE 24/SR152/AVENUE 21
TRACK PLAN AND PROFILE
STA 6208+00 TO STA 6264+00

CONTRACT NO. HSR08-05
DRAWING NO. T2087-A
SCALE AS SHOWN
SHEET NO.

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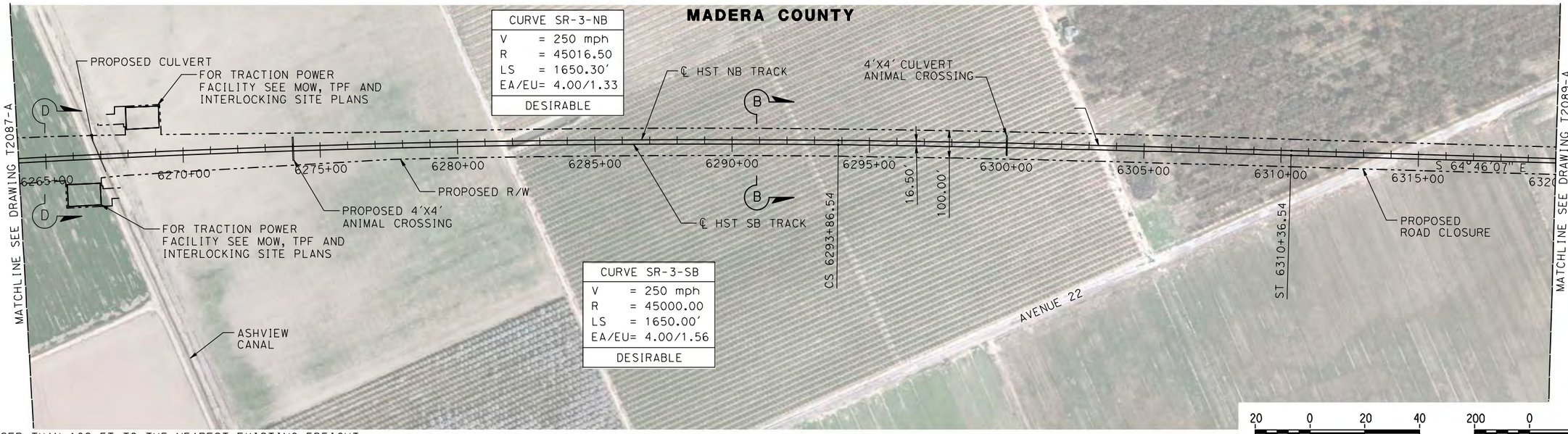
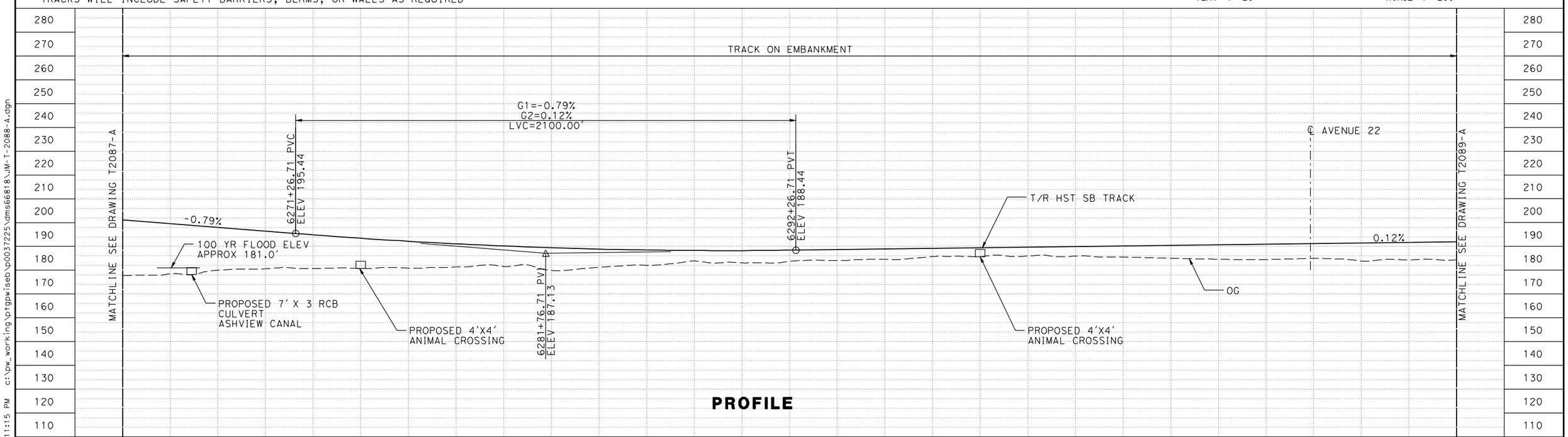


NOTE:
TRACKS CLOSER THAN 102 FT TO THE NEAREST EXISTING FREIGHT TRACKS WILL INCLUDE SAFETY BARRIERS, BERMS, OR WALLS AS REQUIRED

PLAN

20 0 20 40 — VERT: 1"=20'

200 0 200 400 — HORIZ: 1"=200'



PROFILE

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY P. JACOBY
DRAWN BY ALBERT S.
CHECKED BY RESHMA C.
IN CHARGE D. WEMMER
DATE 4/15/2011

15% DRAFT SUBMITTAL FOR INTERNAL USE ONLY

NOT FOR CONSTRUCTION

PARSONS

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO
HYBRID
AVENUE 24/SR152/AVENUE 21
TRACK PLAN AND PROFILE
STA 6264+00 TO STA 6320+00

CONTRACT NO. HSR08-05
DRAWING NO. T2088-A
SCALE AS SHOWN
SHEET NO.

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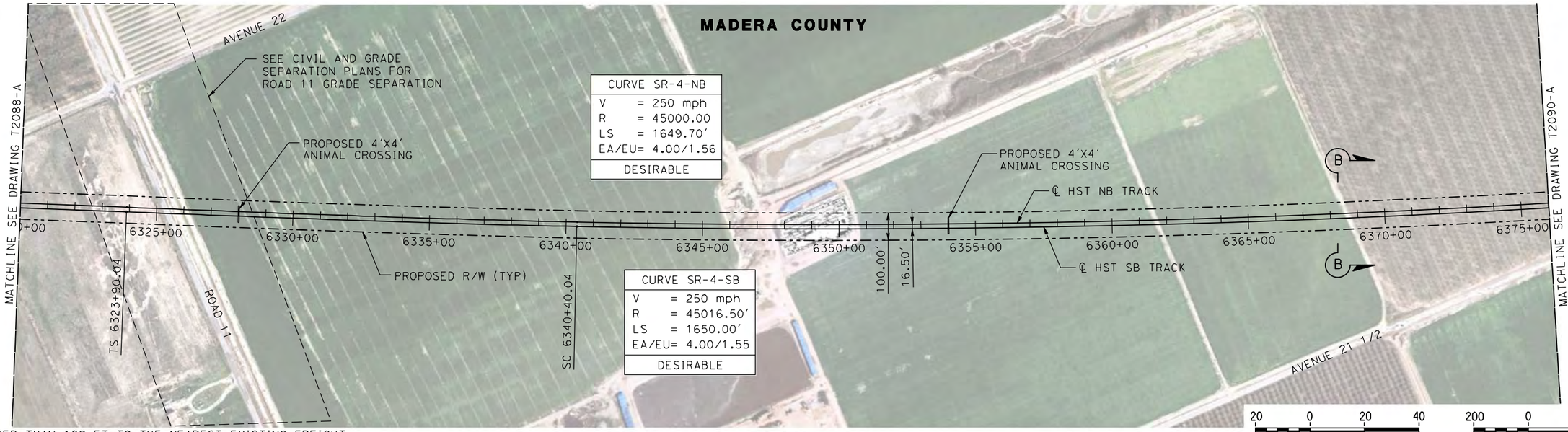


CURVE SR-4-NB
V = 250 mph
R = 45000.00
LS = 1649.70'
EA/EU= 4.00/1.56
DESIRABLE

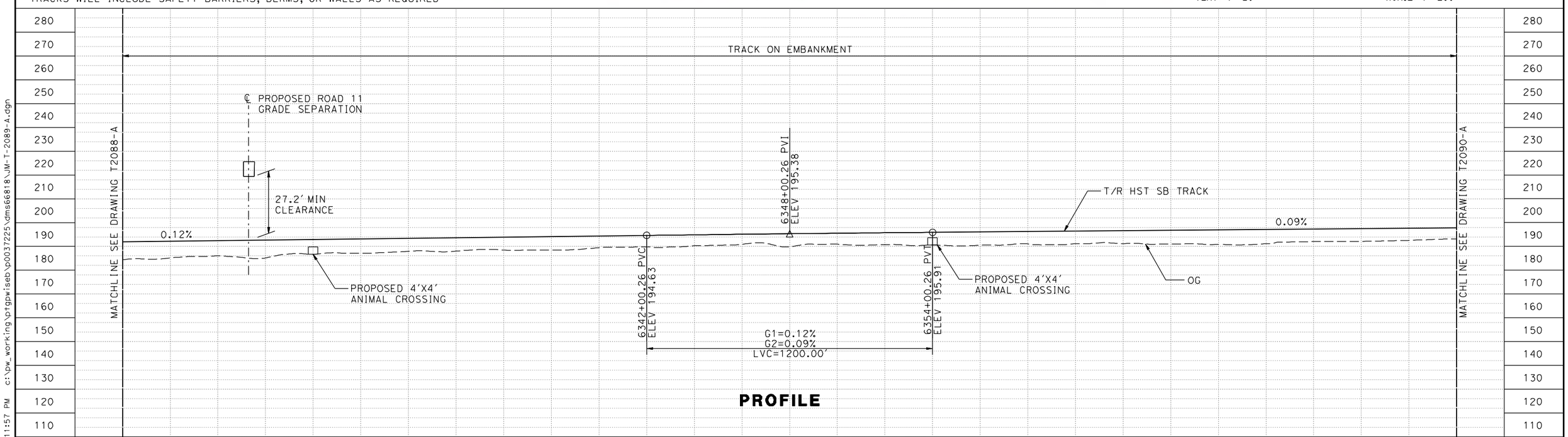
CURVE SR-4-SB
V = 250 mph
R = 45016.50'
LS = 1650.00'
EA/EU= 4.00/1.55
DESIRABLE

NOTE:
TRACKS CLOSER THAN 102 FT TO THE NEAREST EXISTING FREIGHT TRACKS WILL INCLUDE SAFETY BARRIERS, BERMS, OR WALLS AS REQUIRED

PLAN

20 0 20 40 — VERT: 1"=20'

200 0 200 400 — HORIZ: 1"=200'



PROFILE

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY P. JACOBY
DRAWN BY ALBERT S.
CHECKED BY RESHMA C.
IN CHARGE D. WEMMER
DATE 4/15/2011

15% DRAFT SUBMITTAL FOR INTERNAL USE ONLY

NOT FOR CONSTRUCTION

PARSONS

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO
HYBRID
AVENUE 24/SR152/AVENUE 21
TRACK PLAN AND PROFILE
STA 6320+00 TO STA 6376+00

CONTRACT NO. HSR08-05
DRAWING NO. T2089-A
SCALE AS SHOWN
SHEET NO.

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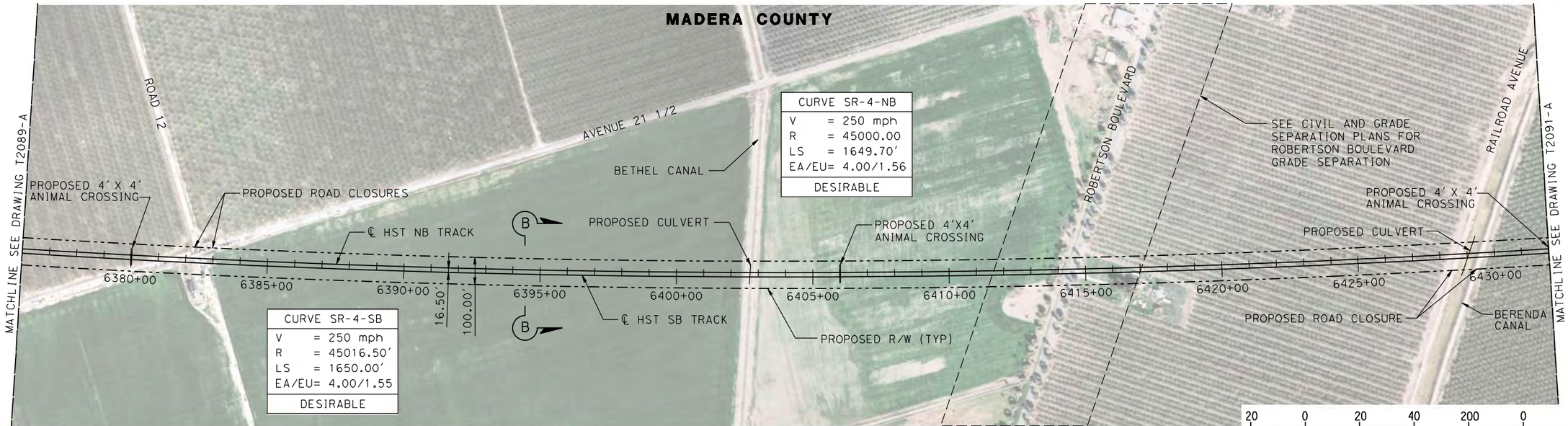
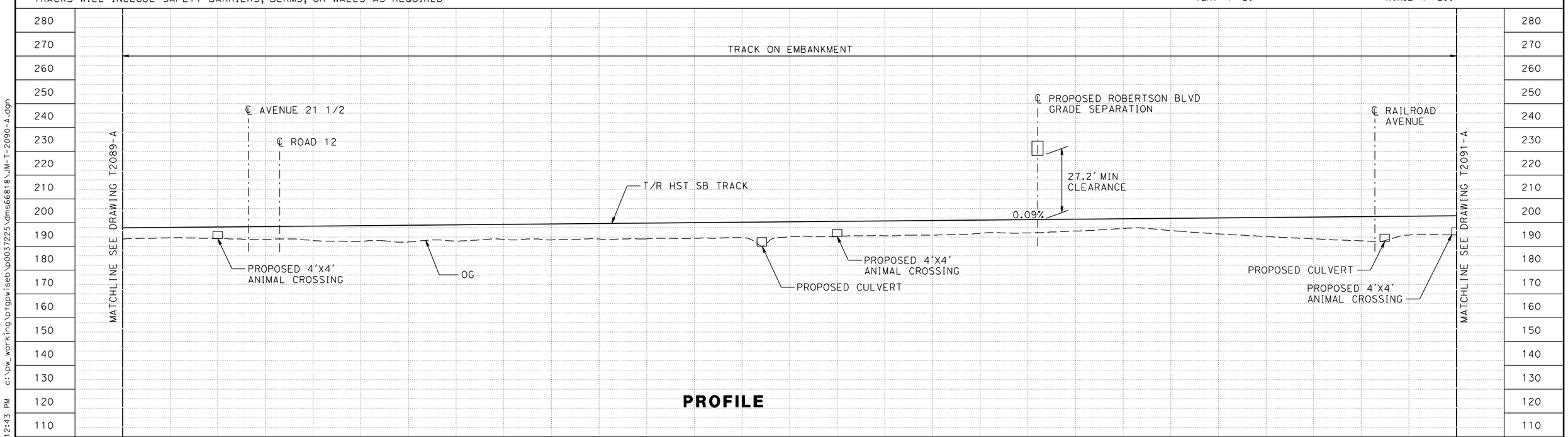


NOTE:
TRACKS CLOSER THAN 102 FT TO THE NEAREST EXISTING FREIGHT TRACKS WILL INCLUDE SAFETY BARRIERS, BERMS, OR WALLS AS REQUIRED

PLAN

20 0 20 40 — VERT: 1"=20'

200 0 200 400 — HORIZ: 1"=200'



PROFILE

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY P. JACOBY
DRAWN BY ALBERT S.
CHECKED BY RESHMA C.
IN CHARGE D. WEMMER
DATE 4/15/2011

15% DRAFT SUBMITTAL FOR INTERNAL USE ONLY

NOT FOR CONSTRUCTION

PARSONS

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO
HYBRID
AVENUE 24/SR152/AVENUE 21
TRACK PLAN AND PROFILE
STA 6376+00 TO STA 6432+00

CONTRACT NO. HSR08-05
DRAWING NO. T2090-A
SCALE AS SHOWN
SHEET NO.

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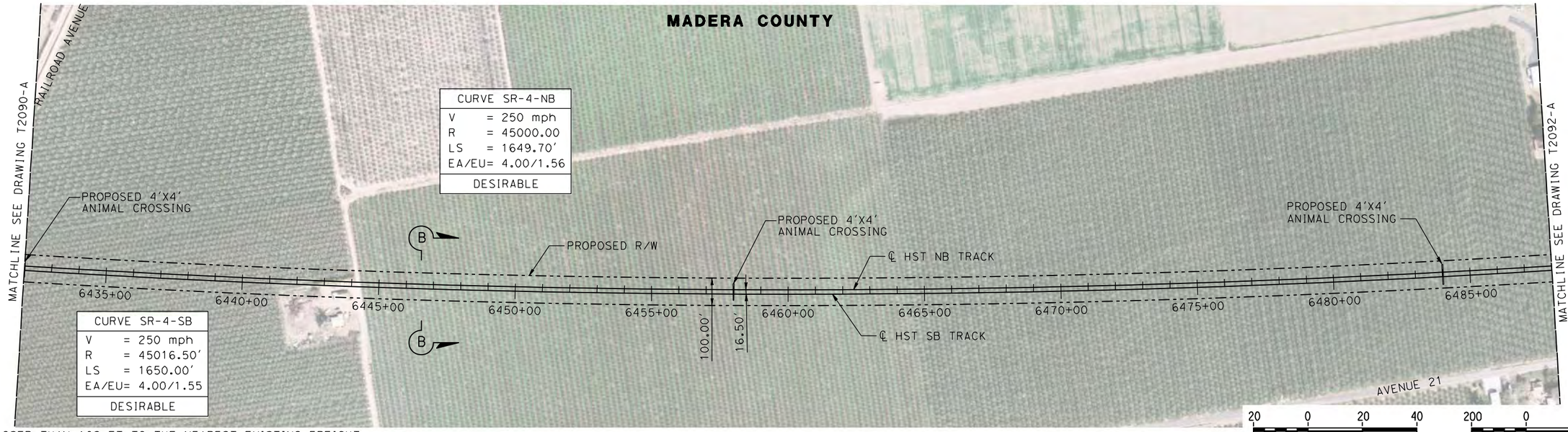
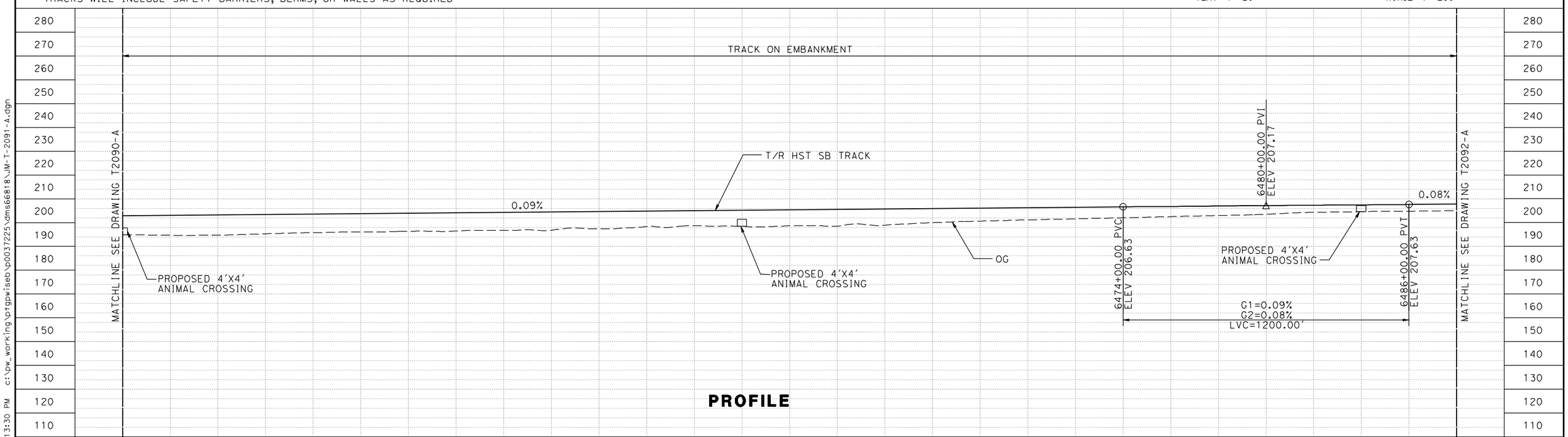


NOTE:
TRACKS CLOSER THAN 102 FT TO THE NEAREST EXISTING FREIGHT
TRACKS WILL INCLUDE SAFETY BARRIERS, BERMS, OR WALLS AS REQUIRED

PLAN

VERT: 1"=20' (20 0 20 40)
HORIZ: 1"=200' (200 0 200 400)



PROFILE

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY P. JACOBY
DRAWN BY ALBERT S.
CHECKED BY RESHMA C.
IN CHARGE D. WEMMER
DATE 4/15/2011

15% DRAFT SUBMITTAL FOR INTERNAL USE ONLY

NOT FOR CONSTRUCTION

PARSONS

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO
HYBRID
AVENUE 24/SR152/AVENUE 21
TRACK PLAN AND PROFILE
STA 6432+00 TO STA 6488+00

CONTRACT NO. HSR08-05
DRAWING NO. T2091-A
SCALE AS SHOWN
SHEET NO.

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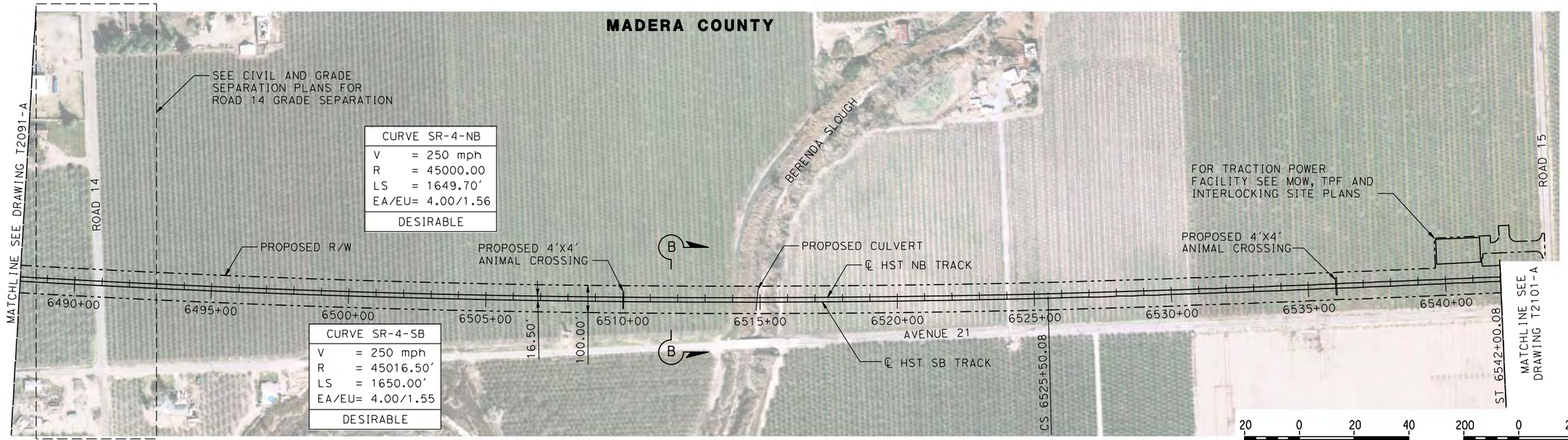
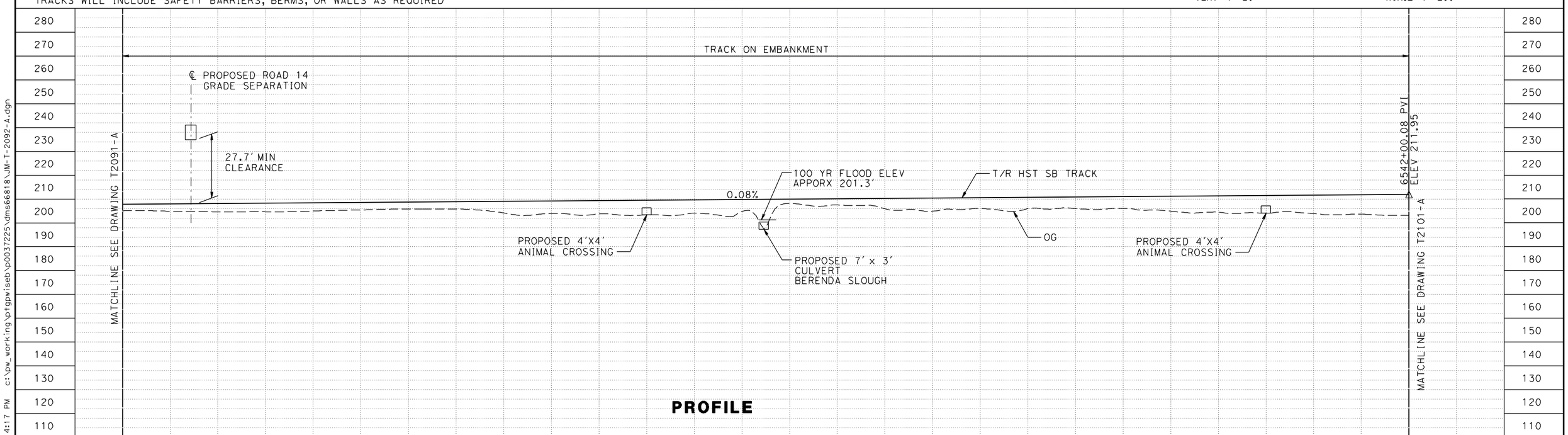


NOTE:
TRACKS CLOSER THAN 102 FT TO THE NEAREST EXISTING FREIGHT TRACKS WILL INCLUDE SAFETY BARRIERS, BERMS, OR WALLS AS REQUIRED

PLAN

VERT: 1"=20' (20 0 20 40)

HORIZ: 1"=200' (200 0 200 400)



PROFILE

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY P. JACOBY
DRAWN BY ALBERT S.
CHECKED BY RESHMA C.
IN CHARGE D. WEMMER
DATE 4/15/2011

15% DRAFT SUBMITTAL FOR INTERNAL USE ONLY

NOT FOR CONSTRUCTION

PARSONS

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO
HYBRID
AVENUE 24/SR152/AVENUE 21
TRACK PLAN AND PROFILE
6488+00 TO STA 6542+00

CONTRACT NO. HSR08-05
DRAWING NO. T2092-A
SCALE AS SHOWN
SHEET NO.

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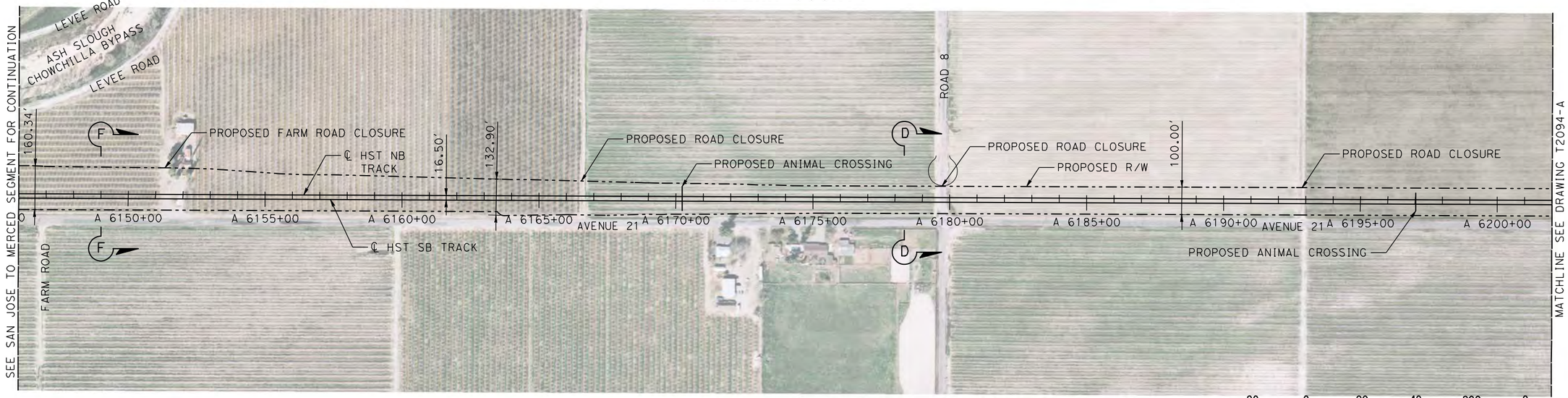
MADERA COUNTY



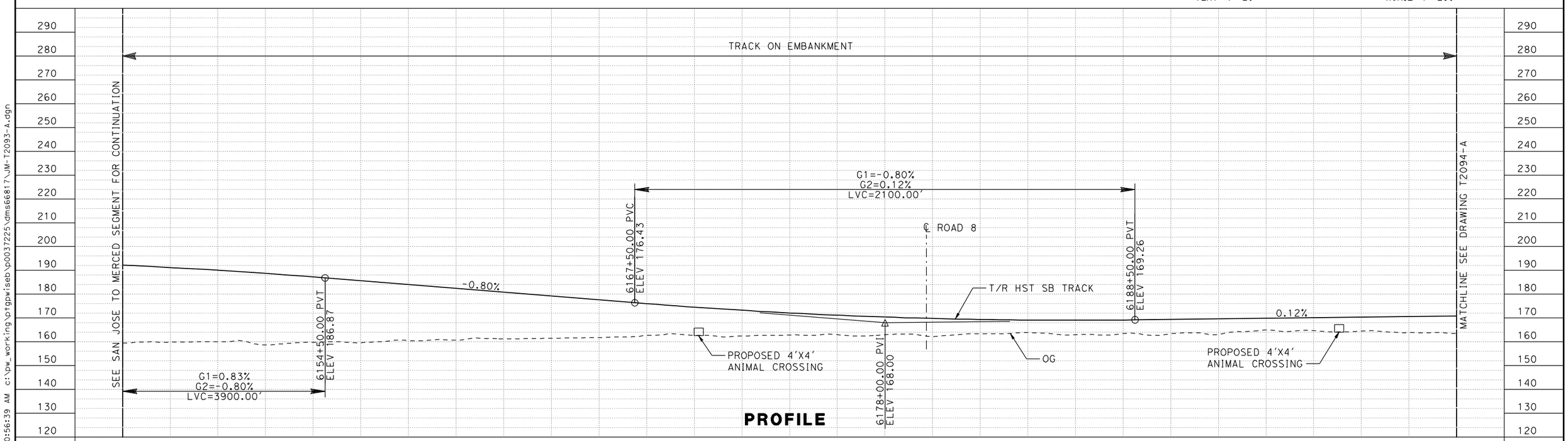
NOTE:

TRACKS CLOSER THAN 102 FT TO THE NEAREST EXISTING FREIGHT TRACKS WILL INCLUDE SAFETY BARRIERS, BERMS, OR WALLS AS REQUIRED

PLAN

20 0 20 40 — VERT: 1"=20'

200 0 200 400 — HORIZ: 1"=200'



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY A. GURA
DRAWN BY A. GURA
CHECKED BY S. GOOLLA
IN CHARGE D. WEMMER
DATE 4/15/2011

15% DRAFT SUBMITTAL FOR INTERNAL USE ONLY

NOT FOR CONSTRUCTION

PARSONS

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO
HYBRID
AVENUE 21
TRACK PLAN AND PROFILE
STA A 6146+00 TO STA A 6202+00

CONTRACT NO. HSR08-05
DRAWING NO. T2093-A
SCALE AS SHOWN
SHEET NO.

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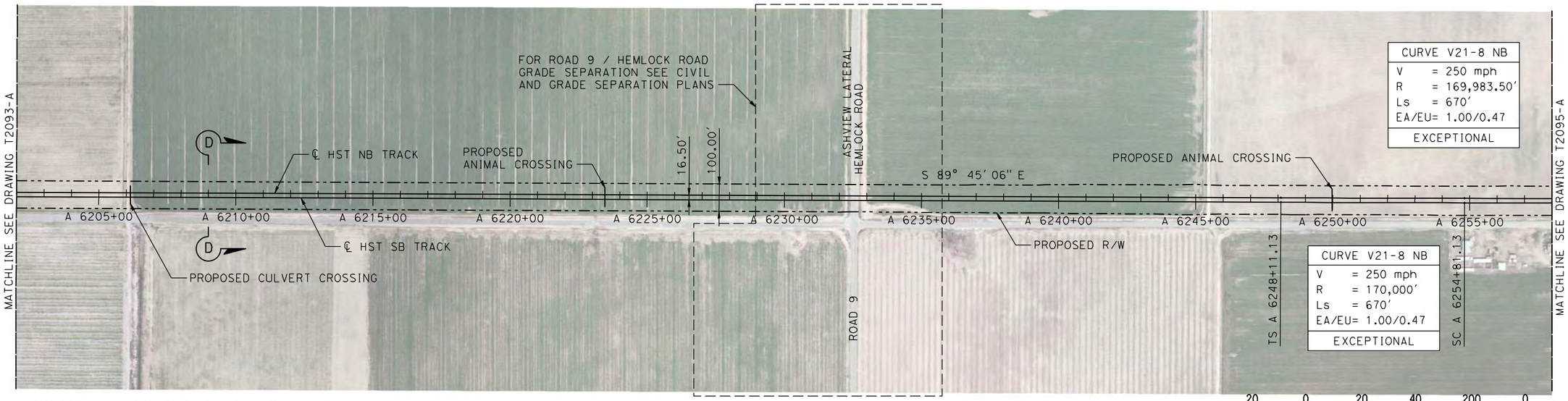
MADERA COUNTY

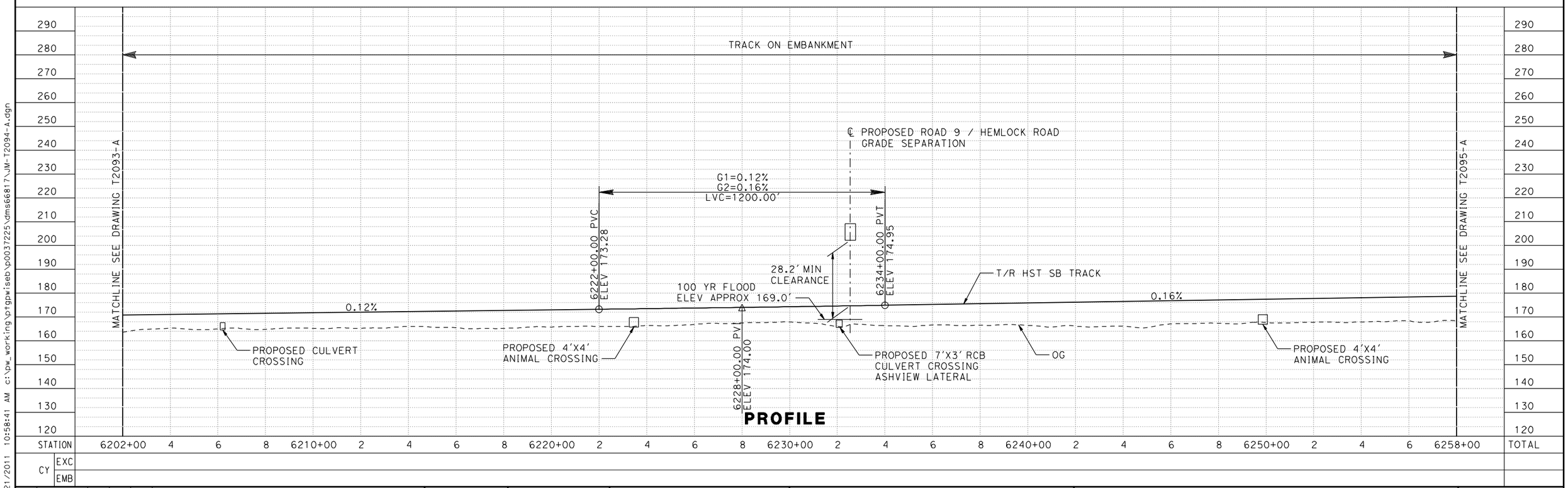


NOTE:
TRACKS CLOSER THAN 102 FT TO THE NEAREST EXISTING FREIGHT
TRACKS WILL INCLUDE SAFETY BARRIERS, BERMS, OR WALLS AS REQUIRED

PLAN

20 0 20 40 — VERT: 1"=20'

200 0 200 400 — HORIZ: 1"=200'



PROFILE

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY A. GURA
DRAWN BY A. GURA
CHECKED BY S. GOOLLA
IN CHARGE D. WEMMER
DATE 4/15/2011

15% DRAFT SUBMITTAL FOR INTERNAL USE ONLY

NOT FOR CONSTRUCTION

PARSONS

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO
HYBRID
AVENUE 21
TRACK PLAN AND PROFILE
STA A 6202+00 TO STA A 6258+00

CONTRACT NO. HSR08-05
DRAWING NO. T2094-A
SCALE AS SHOWN
SHEET NO.

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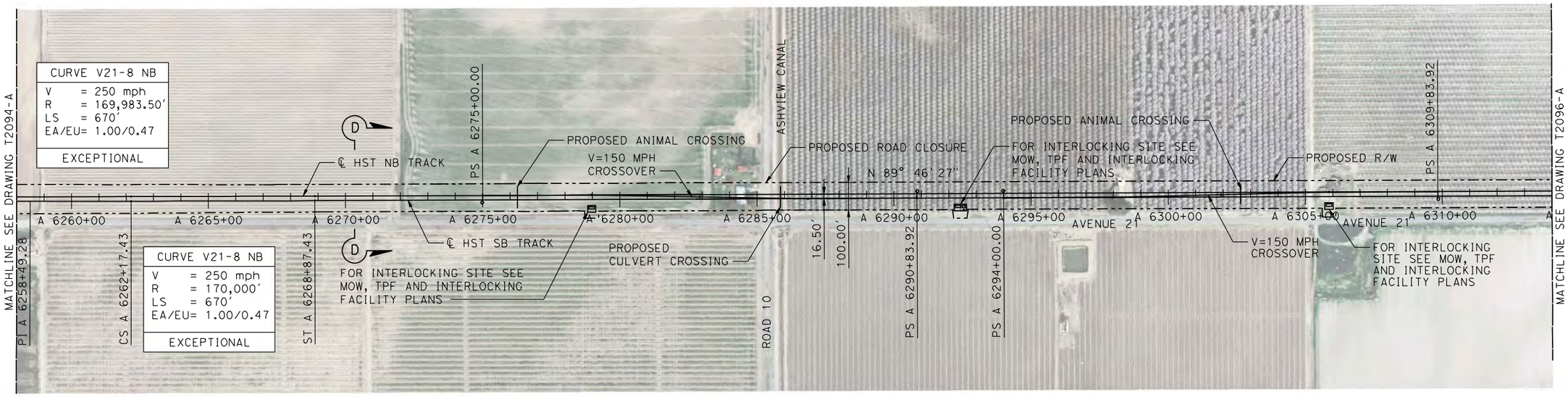
MADERA COUNTY

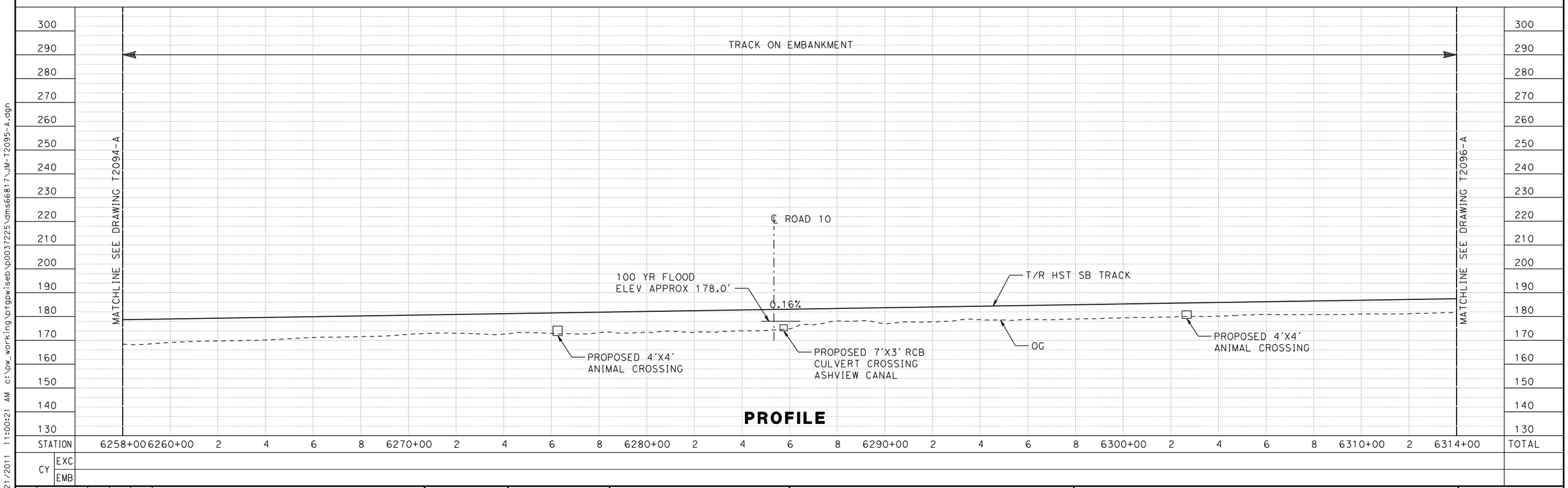


NOTE:
TRACKS CLOSER THAN 102 FT TO THE NEAREST EXISTING FREIGHT TRACKS WILL INCLUDE SAFETY BARRIERS, BERMS, OR WALLS AS REQUIRED

PLAN

20 0 20 40 — VERT: 1"=20'

200 0 200 400 — HORIZ: 1"=200'



PROFILE

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY A. GURA
DRAWN BY A. GURA
CHECKED BY S. GOOLLA
IN CHARGE D. WEMMER
DATE 4/15/2011

15% DRAFT SUBMITTAL FOR INTERNAL USE ONLY

NOT FOR CONSTRUCTION

PARSONS

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO
HYBRID
AVENUE 21
TRACK PLAN AND PROFILE
STA A 6258+00 TO STA A 6314+00

CONTRACT NO. HSR08-05
DRAWING NO. T2095-A
SCALE AS SHOWN
SHEET NO.

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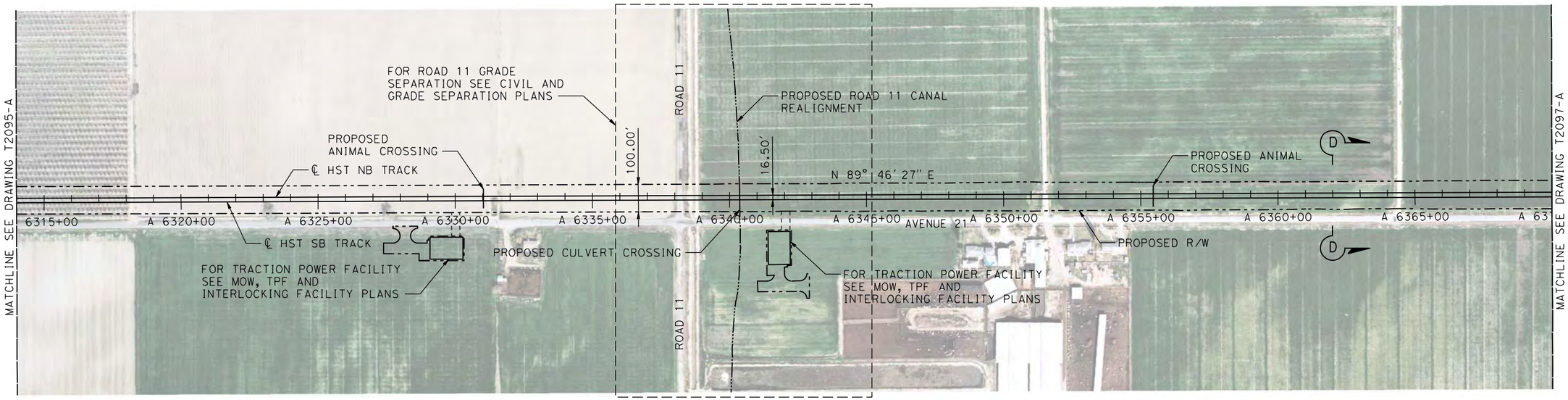
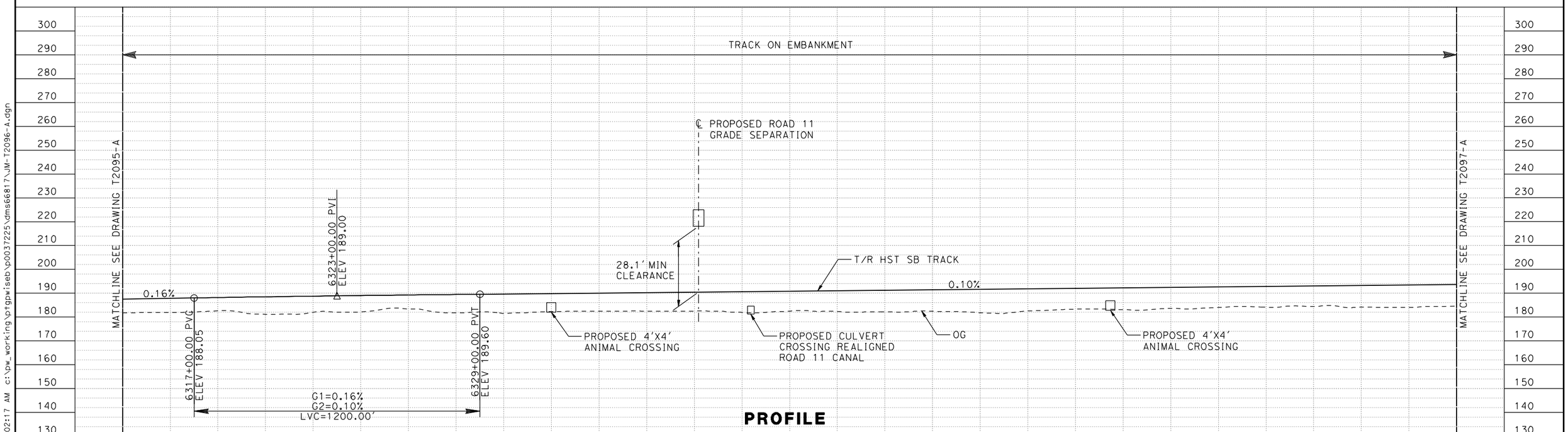


NOTE:
TRACKS CLOSER THAN 102 FT TO THE NEAREST EXISTING FREIGHT TRACKS WILL INCLUDE SAFETY BARRIERS, BERMS, OR WALLS AS REQUIRED

PLAN

20 0 20 40 — VERT: 1"=20'

200 0 200 400 — HORIZ: 1"=200'



PROFILE

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY A. GURA
DRAWN BY A. GURA
CHECKED BY S. GOOLLA
IN CHARGE D. WEMMER
DATE 4/15/2011

15% DRAFT SUBMITTAL FOR INTERNAL USE ONLY

NOT FOR CONSTRUCTION

PARSONS

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO
HYBRID
AVENUE 21
TRACK PLAN AND PROFILE
STA A 6314+00 TO STA A 6370+00

CONTRACT NO. HSR08-05
DRAWING NO. T2096-A
SCALE AS SHOWN
SHEET NO.

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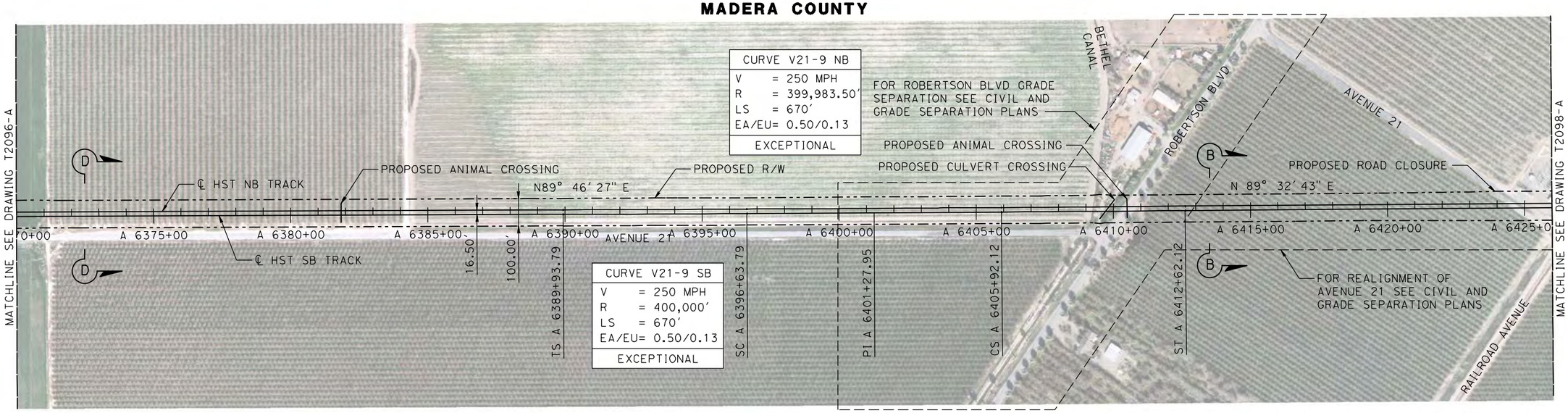
P0037225

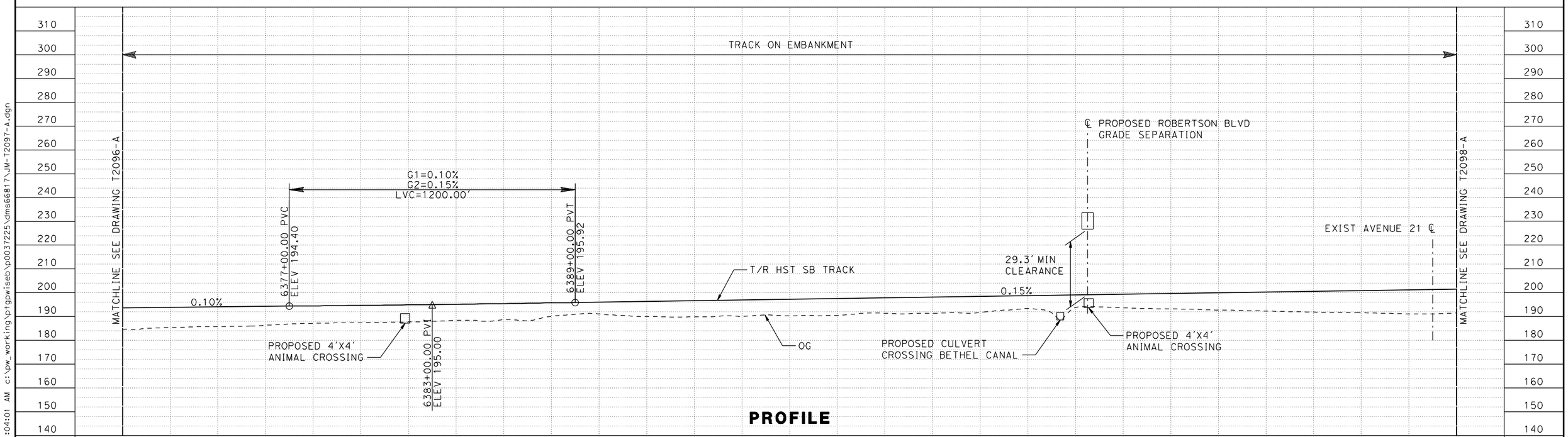
MADERA COUNTY



NOTE:
TRACKS CLOSER THAN 102 FT TO THE NEAREST EXISTING FREIGHT TRACKS WILL INCLUDE SAFETY BARRIERS, BERMS, OR WALLS AS REQUIRED

PLAN

VERT: 1"=20' HORIZ: 1"=200'



PROFILE

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY A. GURA
DRAWN BY A. GURA
CHECKED BY S. GOOLLA
IN CHARGE D. WEMMER
DATE 4/15/2011

15% DRAFT SUBMITTAL FOR INTERNAL USE ONLY

NOT FOR CONSTRUCTION

PARSONS

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO
HYBRID
AVENUE 21
TRACK PLAN AND PROFILE
STA A 6370+00 TO STA A 6426+00

CONTRACT NO. HSR08-05
DRAWING NO. T2097-A
SCALE AS SHOWN
SHEET NO.

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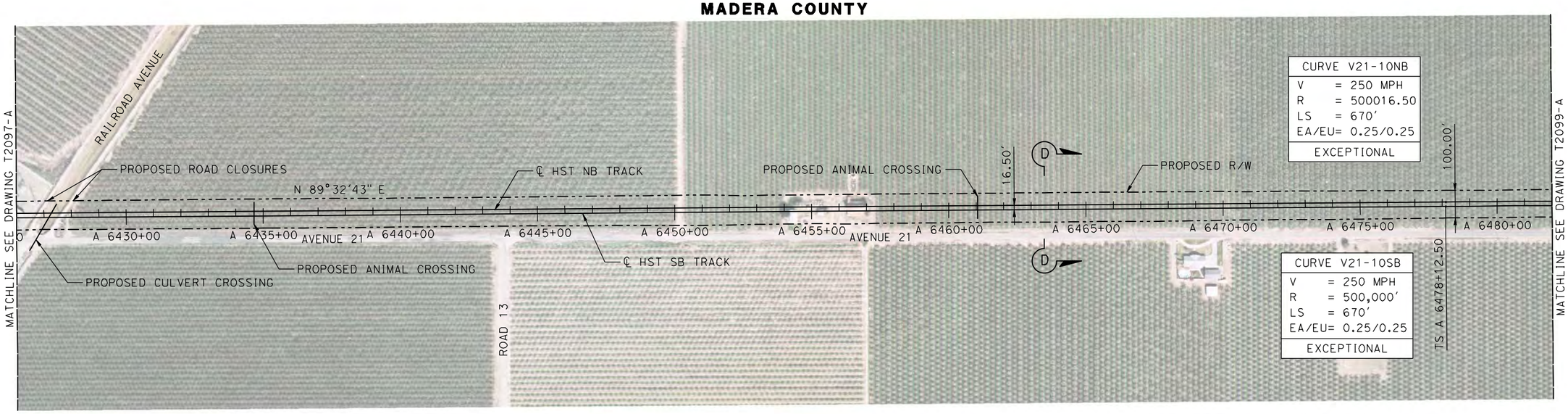
P0037225

MADERA COUNTY

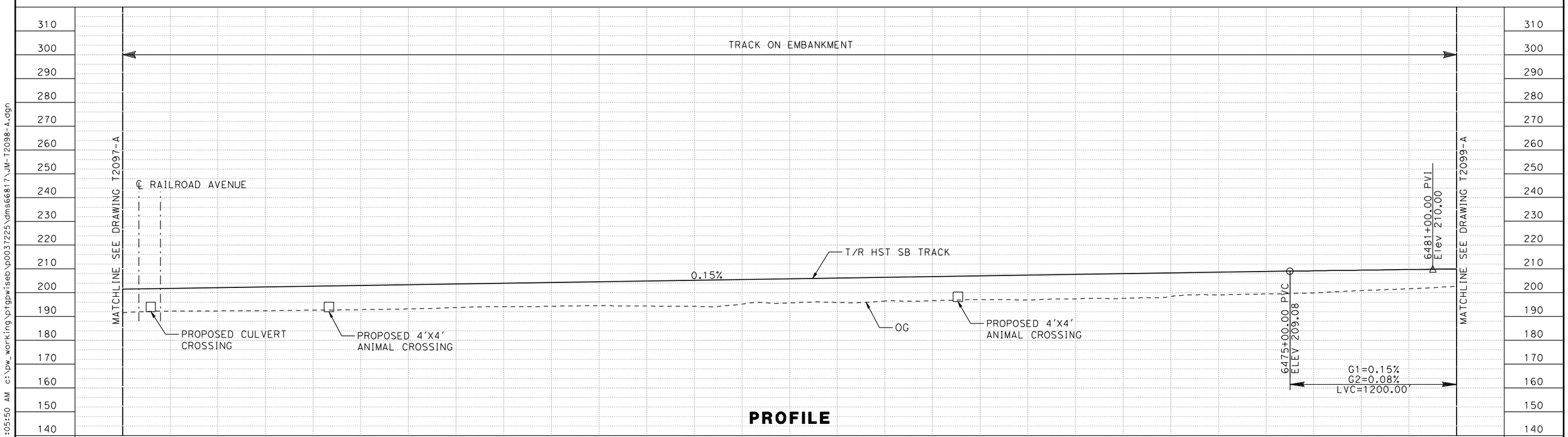


NOTE:
TRACKS CLOSER THAN 102 FT TO THE NEAREST EXISTING FREIGHT
TRACKS WILL INCLUDE SAFETY BARRIERS, BERMS, OR WALLS AS REQUIRED

PLAN

20 0 20 40 — VERT: 1"=20'

200 0 200 400 — HORIZ: 1"=200'



PROFILE

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY A. GURA
DRAWN BY A. GURA
CHECKED BY S. GOOLLA
IN CHARGE D. WEMMER
DATE 4/15/2011

15% DRAFT SUBMITTAL FOR INTERNAL USE ONLY

NOT FOR CONSTRUCTION

PARSONS

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO
HYBRID
AVENUE 21
TRACK PLAN AND PROFILE
STA A 6426+00 TO STA A 6482+00

CONTRACT NO. HSR08-05
DRAWING NO. T2098-A
SCALE AS SHOWN
SHEET NO.

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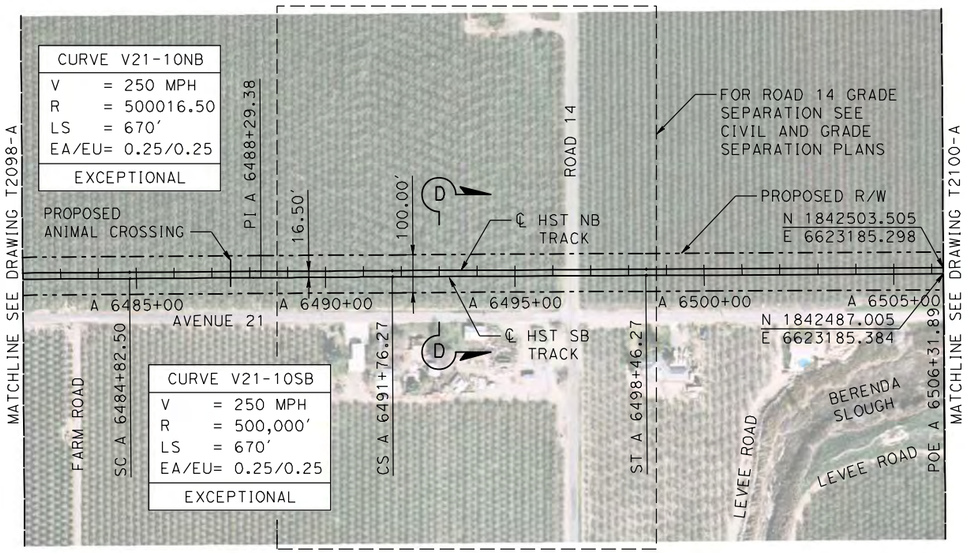
MADERA COUNTY

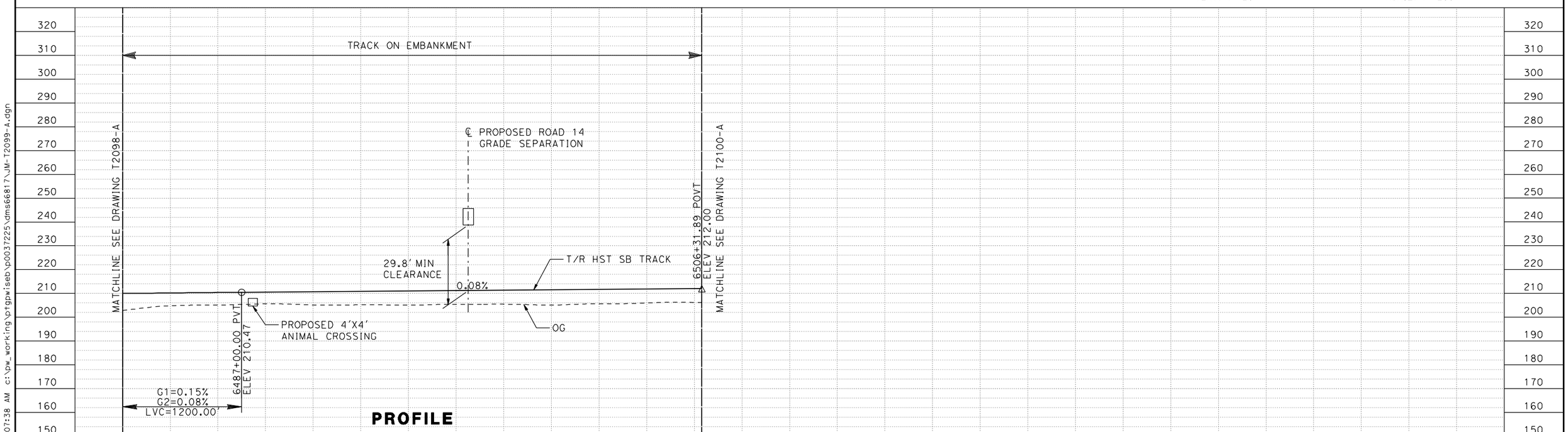


PLAN

NOTE:
TRACKS CLOSER THAN 102 FT TO THE NEAREST EXISTING FREIGHT TRACKS WILL INCLUDE SAFETY BARRIERS, BERMS, OR WALLS AS REQUIRED

20 0 20 40 — VERT: 1"=20'

200 0 200 400 — HORIZ: 1"=200'



PROFILE

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY A. GURA
DRAWN BY A. GURA
CHECKED BY S. GOOLLA
IN CHARGE D. WEMMER
DATE 4/15/2011

15% DRAFT SUBMITTAL FOR INTERNAL USE ONLY

NOT FOR CONSTRUCTION

PARSONS

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO
HYBRID
AVENUE 21
TRACK PLAN AND PROFILE
STA A 6482+00 TO STA A 6506+32

CONTRACT NO. HSR08-05
DRAWING NO. T2099-A
SCALE AS SHOWN
SHEET NO.

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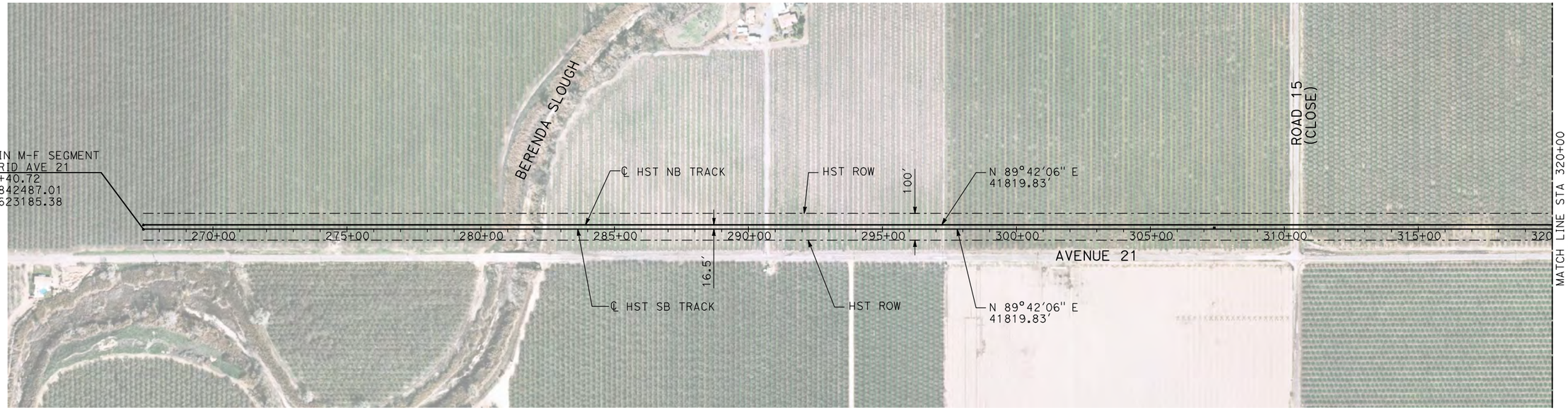
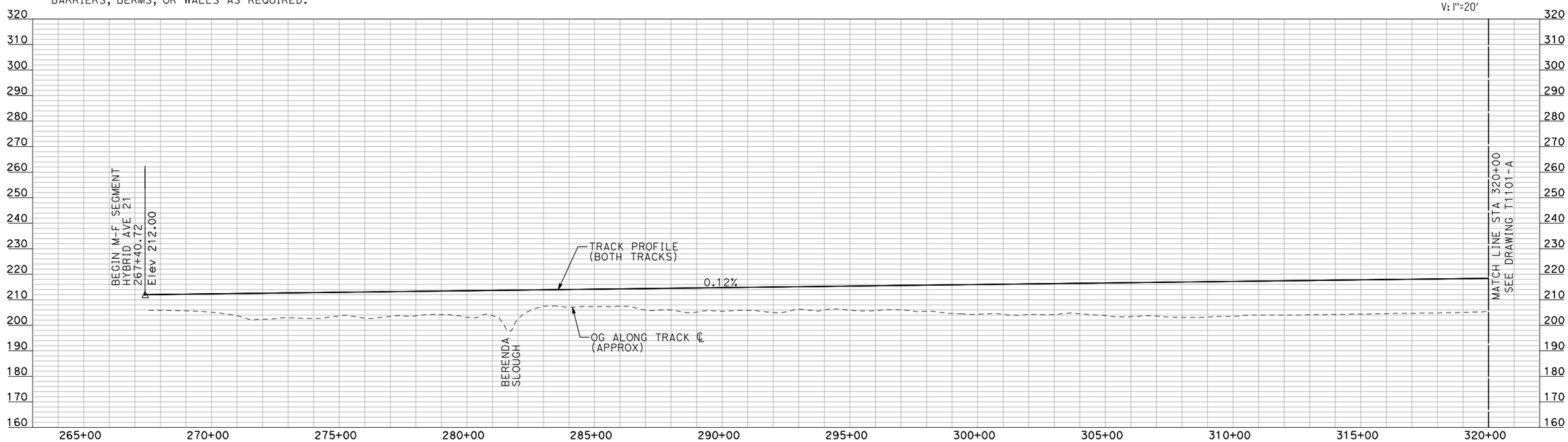


NOTES:
1. ALL UTILITIES SHOWN ARE EXISTING UTILITY LINES BASED ON RECORD DRAWINGS AND ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY.
2. TRACKS CLOSER THAN 102 FT TO THE NEAREST EXISTING FREIGHT TRACKS WILL INCLUDE SAFETY BARRIERS, BERMS, OR WALLS AS REQUIRED.

PLAN

200 0 200 400
H: 1"=200'

20 0 20 40
V: 1"=20'



PROFILE

"SEE T3000-T3017 DRAWINGS FOR TYPICAL SECTION LIMITS AND DETAILS"

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY A. SHIELDS
DRAWN BY H. SULLIVAN
CHECKED BY A. BOONE
IN CHARGE A. BOONE
DATE 07/20/2011

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

HYBRID
AVENUE 21
PLAN AND PROFILE
STA 267+40.72 TO STA 320+00

CONTRACT NO. HSR06-007
DRAWING NO. T1100-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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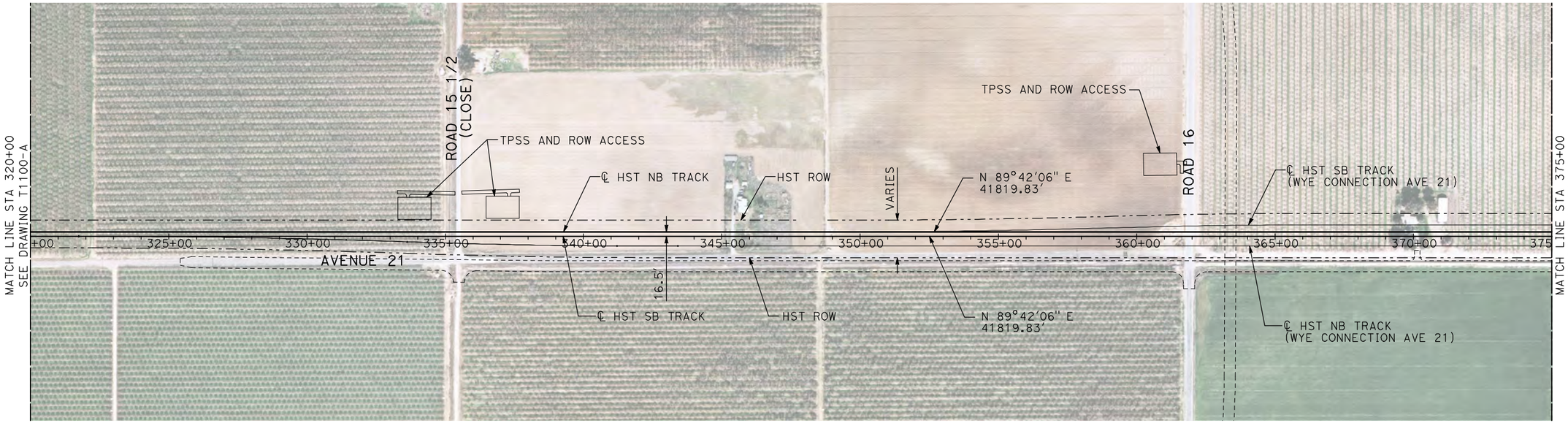
machadoe

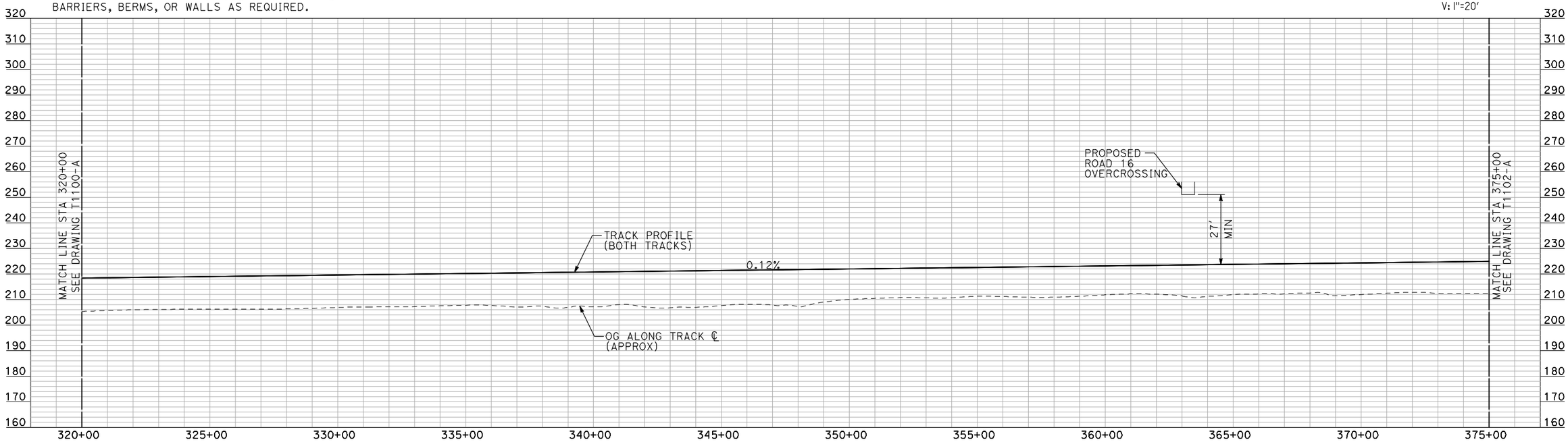


NOTES:
1. ALL UTILITIES SHOWN ARE EXISTING UTILITY LINES BASED ON RECORD DRAWINGS AND ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY.
2. TRACKS CLOSER THAN 102 FT TO THE NEAREST EXISTING FREIGHT TRACKS WILL INCLUDE SAFETY BARRIERS, BERMS, OR WALLS AS REQUIRED.

PLAN

200 0 200 400
H: 1"=200'

20 0 20 40
V: 1"=20'



PROFILE

"SEE T3000-T3017 DRAWINGS FOR TYPICAL SECTION LIMITS AND DETAILS"

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY A. SHIELDS
DRAWN BY H. SULLIVAN
CHECKED BY A. BOONE
IN CHARGE A. BOONE
DATE 07/20/2011

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

HYBRID
AVENUE 21
PLAN AND PROFILE
STA 320+00 TO STA 375+00

CONTRACT NO. HSR06-007
DRAWING NO. T1101-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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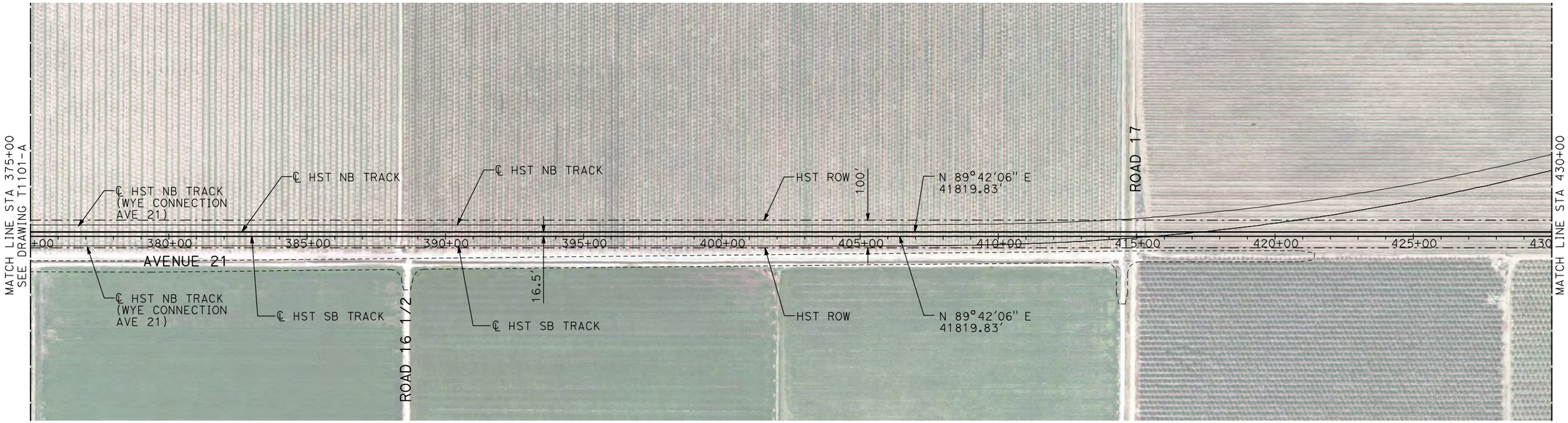
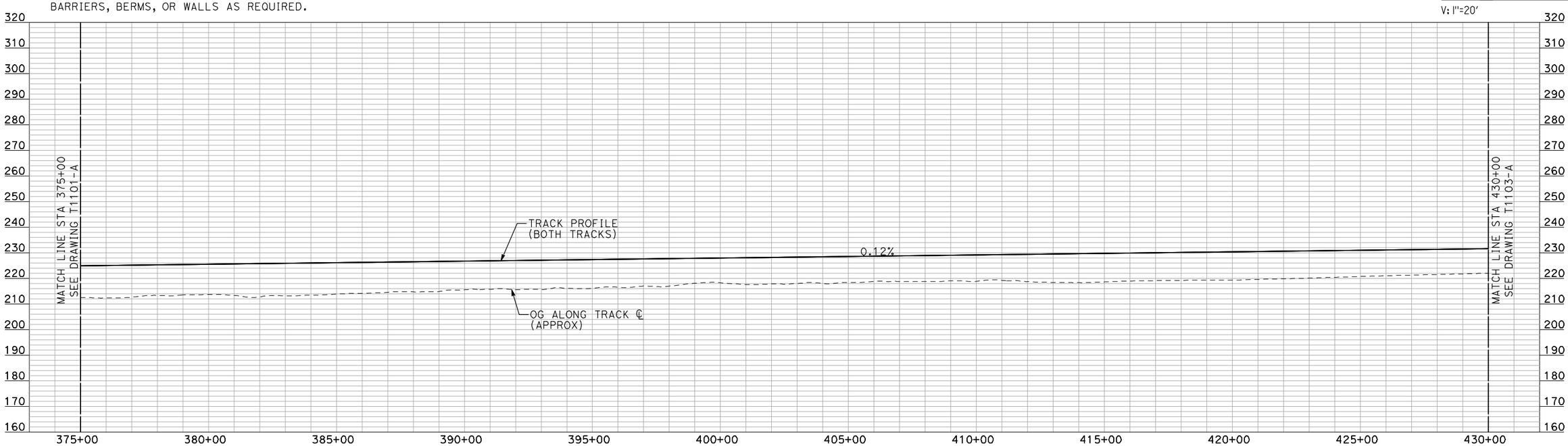


NOTES:
1. ALL UTILITIES SHOWN ARE EXISTING UTILITY LINES BASED ON RECORD DRAWINGS AND ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY.
2. TRACKS CLOSER THAN 102 FT TO THE NEAREST EXISTING FREIGHT TRACKS WILL INCLUDE SAFETY BARRIERS, BERMS, OR WALLS AS REQUIRED.

PLAN

200 0 200 400
H: 1"=200'

20 0 20 40
V: 1"=20'



PROFILE

"SEE T3000-T3017 DRAWINGS FOR TYPICAL SECTION LIMITS AND DETAILS"

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY A. SHIELDS
DRAWN BY H. SULLIVAN
CHECKED BY A. BOONE
IN CHARGE A. BOONE
DATE 07/20/2011

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

HYBRID
AVENUE 21
PLAN AND PROFILE
STA 375+00 TO STA 430+00

CONTRACT NO. HSR06-007
DRAWING NO. T1102-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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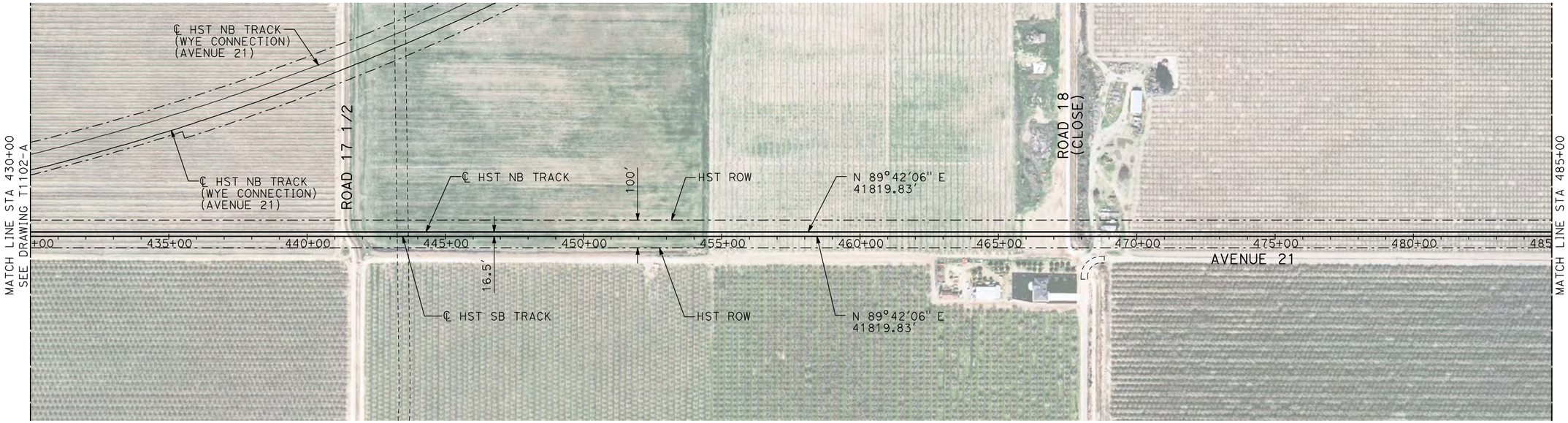
machadoe

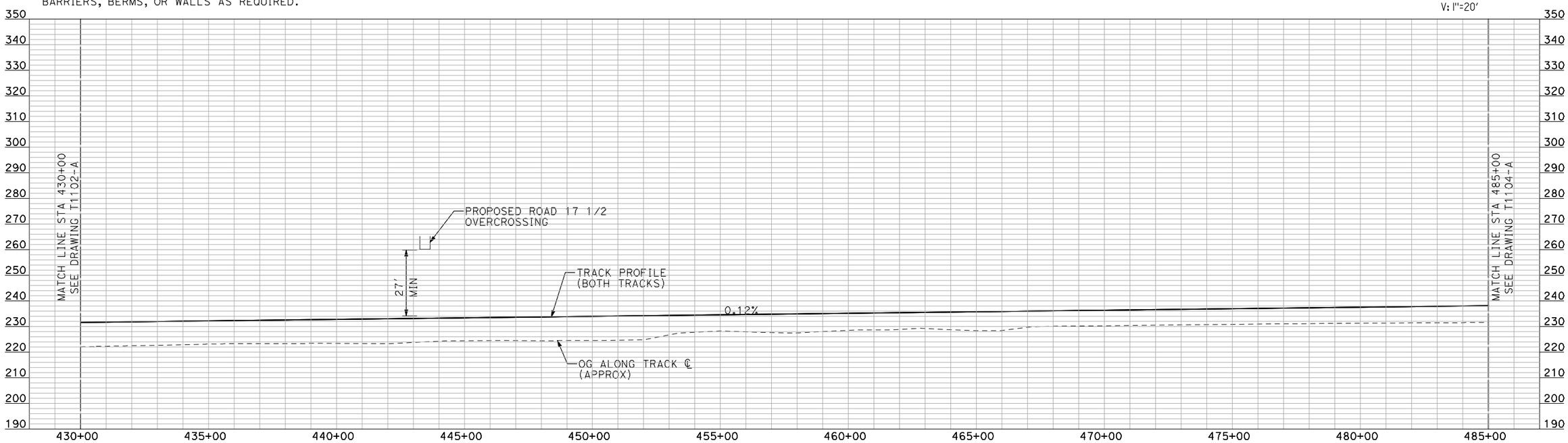


NOTES:
1. ALL UTILITIES SHOWN ARE EXISTING UTILITY LINES BASED ON RECORD DRAWINGS AND ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY.
2. TRACKS CLOSER THAN 102 FT TO THE NEAREST EXISTING FREIGHT TRACKS WILL INCLUDE SAFETY BARRIERS, BERMS, OR WALLS AS REQUIRED.

PLAN

200 0 200 400
H: 1"=200'

20 0 20 40
V: 1"=20'



PROFILE

"SEE T3000-T3017 DRAWINGS FOR TYPICAL SECTION LIMITS AND DETAILS"

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY A. SHIELDS
DRAWN BY H. SULLIVAN
CHECKED BY A. BOONE
IN CHARGE A. BOONE
DATE 07/20/2011

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

HYBRID
AVENUE 21
PLAN AND PROFILE
STA 430+00 TO STA 485+00

CONTRACT NO. HSR06-007
DRAWING NO. T1103-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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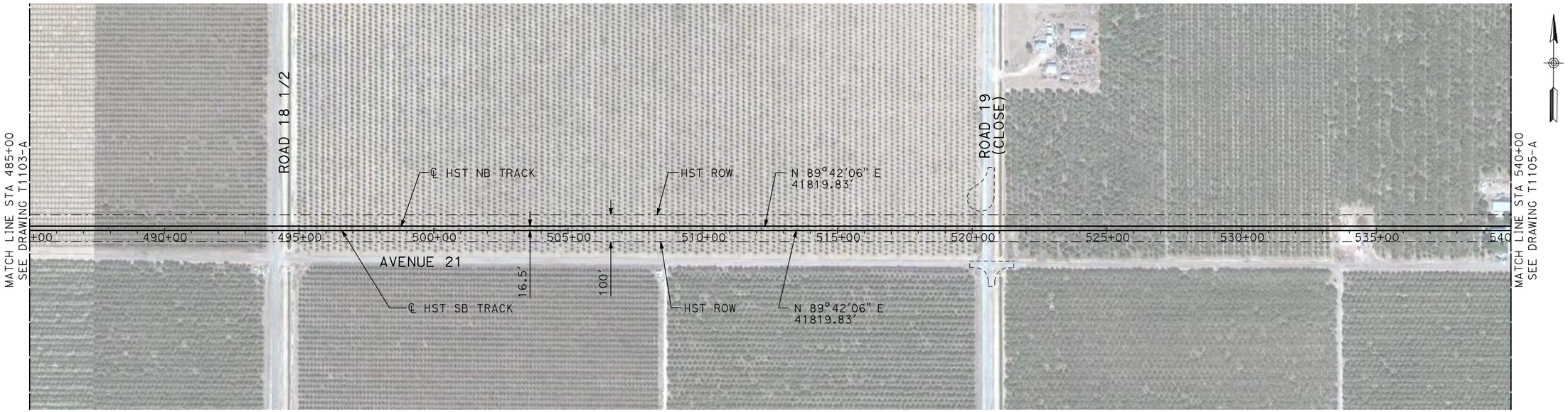
machadae

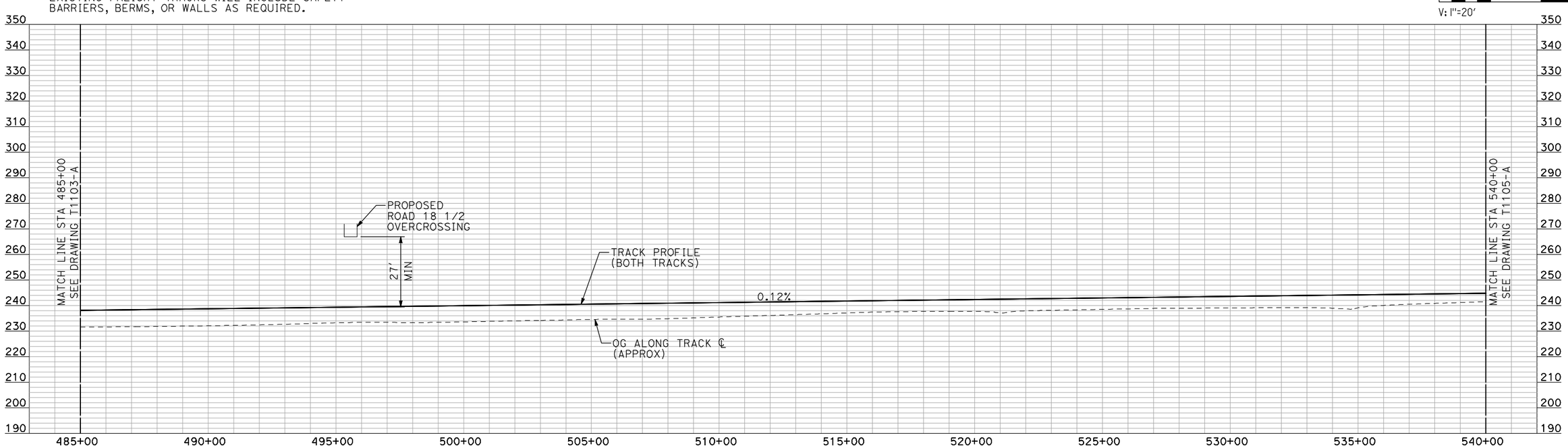


NOTES:
1. ALL UTILITIES SHOWN ARE EXISTING UTILITY LINES BASED ON RECORD DRAWINGS AND ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY.
2. TRACKS CLOSER THAN 102 FT TO THE NEAREST EXISTING FREIGHT TRACKS WILL INCLUDE SAFETY BARRIERS, BERMS, OR WALLS AS REQUIRED.

PLAN

200 0 200 400
H: 1"=200'

20 0 20 40
V: 1"=20'



PROFILE

"SEE T3000-T3017 DRAWINGS FOR TYPICAL SECTION LIMITS AND DETAILS"

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY A. SHIELDS
DRAWN BY H. SULLIVAN
CHECKED BY A. BOONE
IN CHARGE A. BOONE
DATE 07/20/2011

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

HYBRID
AVENUE 21
PLAN AND PROFILE
STA 485+00 TO STA 540+00

CONTRACT NO. HSR06-007
DRAWING NO. T1104-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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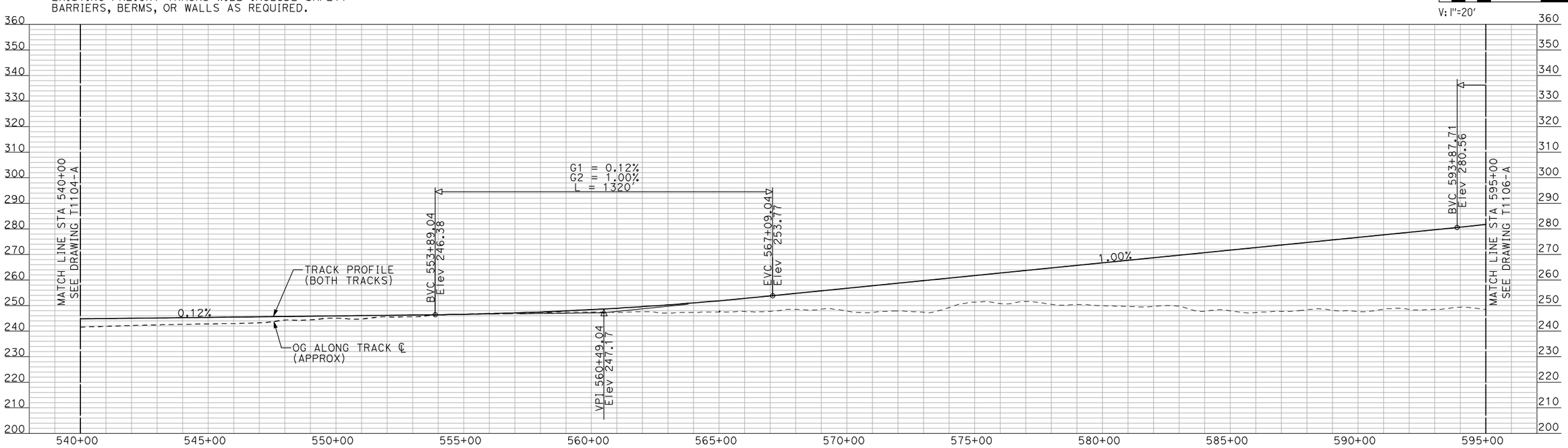
PLAN

200 0 200 400
H: 1"=200'

20 0 20 40
V: 1"=20'



PROFILE

"SEE T3000-T3017 DRAWINGS FOR TYPICAL SECTION LIMITS AND DETAILS"

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY A. SHIELDS
DRAWN BY H. SULLIVAN
CHECKED BY A. BOONE
IN CHARGE A. BOONE
DATE 07/20/2011

RECORD SET
15% DESIGN SUBMITTAL

NOT FOR CONSTRUCTION

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2020 L Street, Suite 300
Sacramento, CA 95811
CH2MHILL

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO

HYBRID
AVENUE 21
PLAN AND PROFILE
STA 540+00 TO STA 595+00

CONTRACT NO. HSR06-007
DRAWING NO. T1105-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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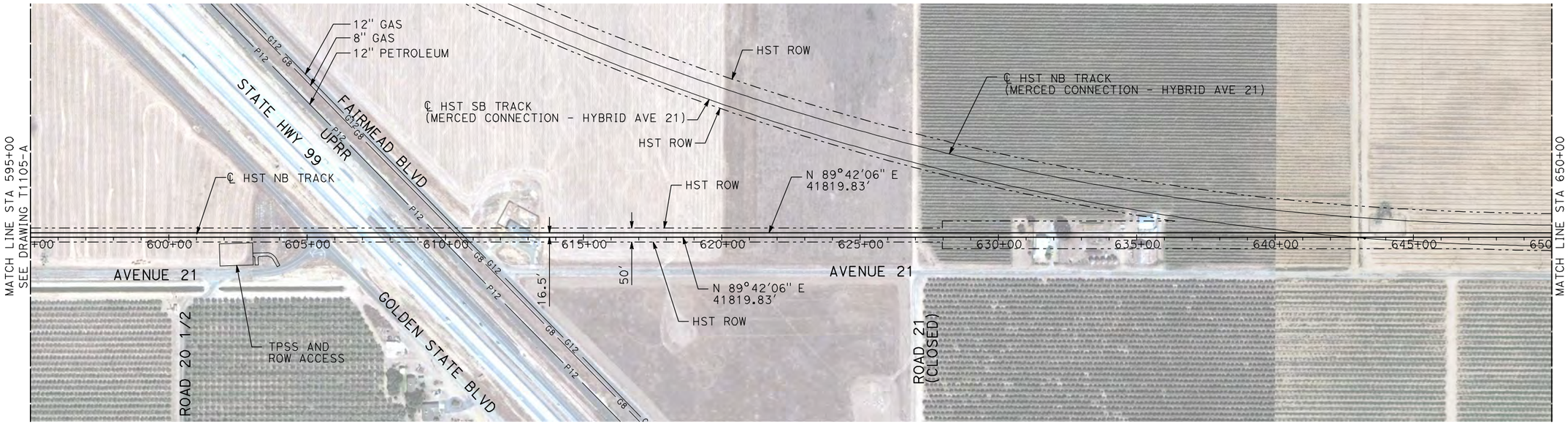

PLAN

NOTES:
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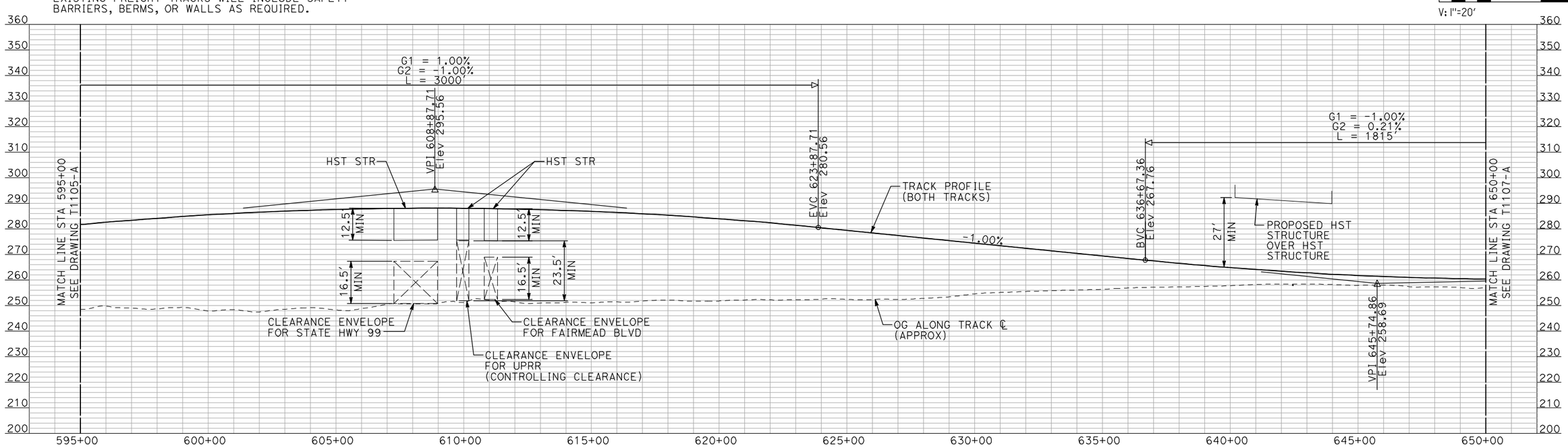
200 0 200 400
H: 1"=200'

20 0 20 40
V: 1"=20'



PROFILE

"SEE T3000-T3017 DRAWINGS FOR TYPICAL SECTION LIMITS AND DETAILS"

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY A. SHIELDS
DRAWN BY H. SULLIVAN
CHECKED BY A. BOONE
IN CHARGE A. BOONE
DATE 07/20/2011

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
HYBRID
AVENUE 21
PLAN AND PROFILE
STA 595+00 TO STA 650+00

CONTRACT NO. HSR06-007
DRAWING NO. T1106-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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NOTES:
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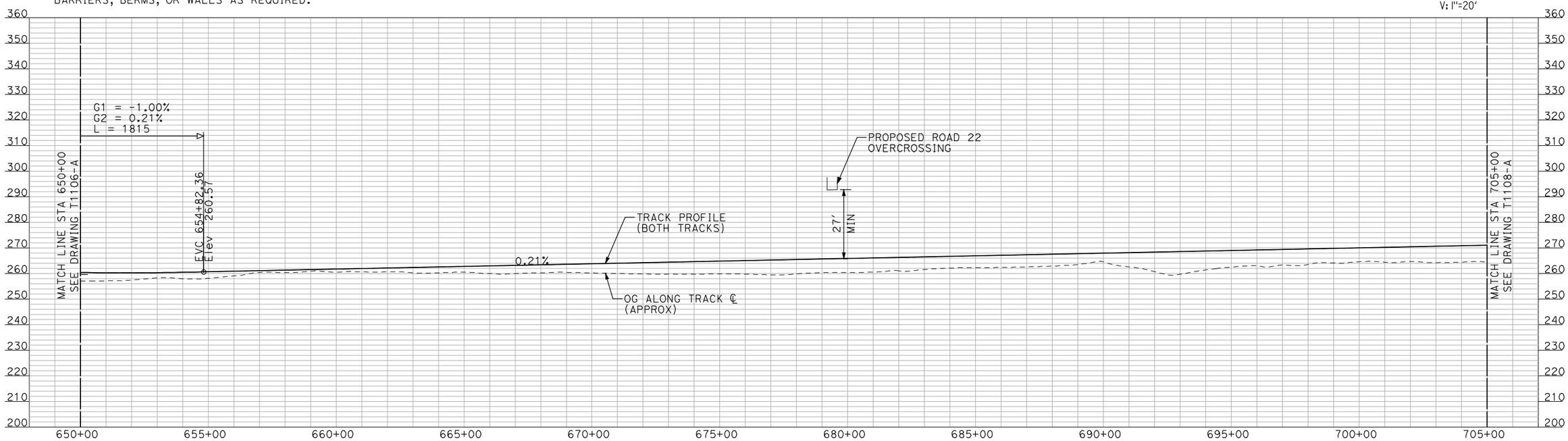
PLAN

200 0 200 400
H: 1"=200'

20 0 20 40
V: 1"=20'



PROFILE

"SEE T3000-T3017 DRAWINGS FOR TYPICAL SECTION LIMITS AND DETAILS"

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY A. SHIELDS
DRAWN BY H. SULLIVAN
CHECKED BY A. BOONE
IN CHARGE A. BOONE
DATE 07/20/2011

RECORD SET
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Sacramento, CA 95811
CH2MHILL

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO
HYBRID
AVENUE 21
PLAN AND PROFILE
STA 650+00 TO STA 705+00

CONTRACT NO. HSR06-007
DRAWING NO. T1107-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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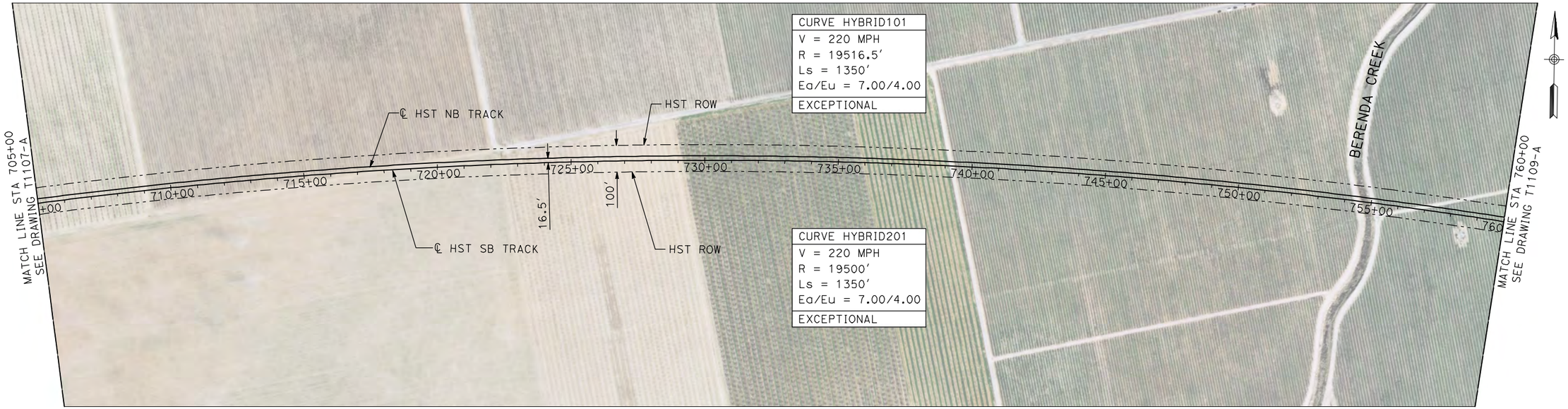

PLAN

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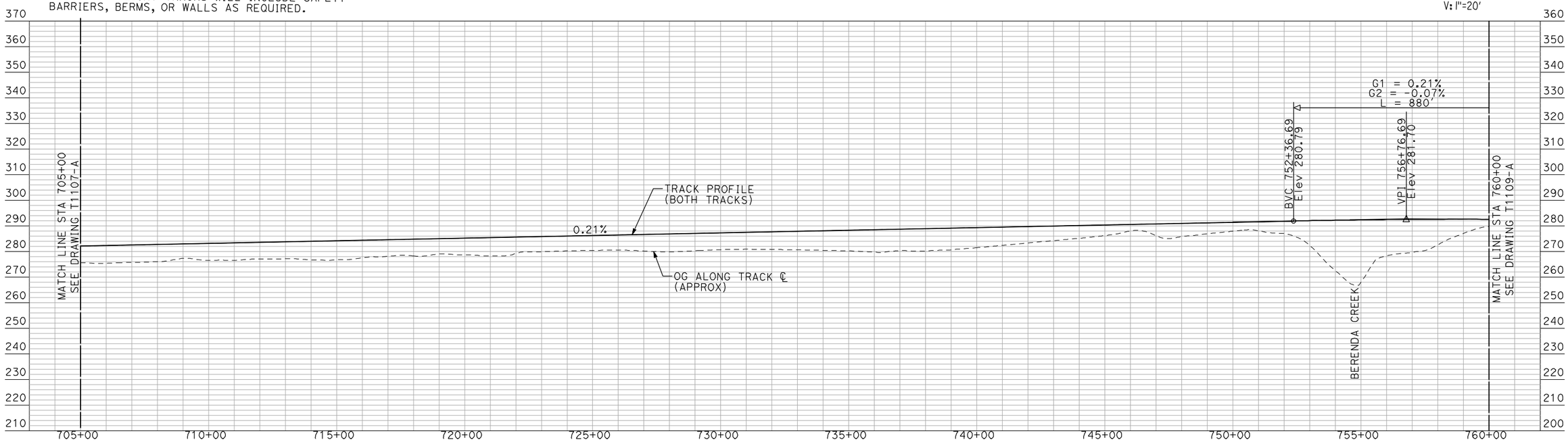
200 0 200 400
H: 1"=200'

20 0 20 40
V: 1"=20'



PROFILE

"SEE T3000-T3017 DRAWINGS FOR TYPICAL SECTION LIMITS AND DETAILS"

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY A. SHIELDS
DRAWN BY H. SULLIVAN
CHECKED BY A. BOONE
IN CHARGE A. BOONE
DATE 07/20/2011

RECORD SET
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AECOM Technical Services, Inc.
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Sacramento, CA 95811
CH2MHILL

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO
HYBRID
AVENUE 21
PLAN AND PROFILE
STA 705+00 TO STA 760+00

CONTRACT NO. HSR06-007
DRAWING NO. T1108-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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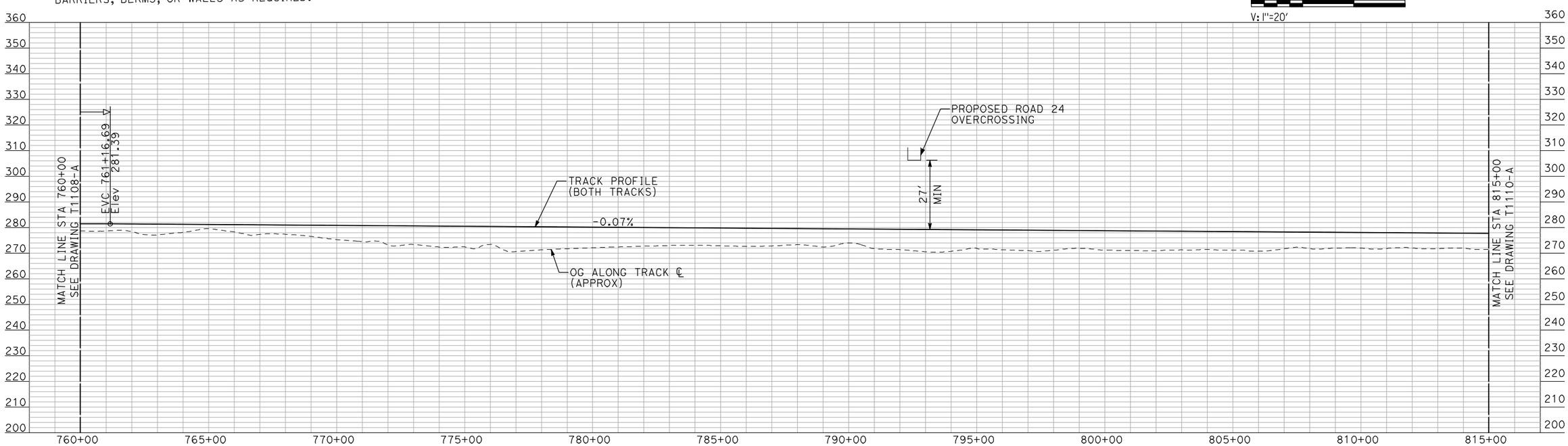
PLAN

200 0 200 400
H: 1"=200'

20 0 20 40
V: 1"=20'



PROFILE

"SEE T3000-T3017 DRAWINGS FOR TYPICAL SECTION LIMITS AND DETAILS"

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY A. SHIELDS
DRAWN BY H. SULLIVAN
CHECKED BY A. BOONE
IN CHARGE A. BOONE
DATE 07/20/2011

RECORD SET
15% DESIGN SUBMITTAL

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CH2MHILL

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO

HYBRID
AVENUE 21
PLAN AND PROFILE
STA 760+00 TO STA 815+00

CONTRACT NO. HSR06-007
DRAWING NO. T1109-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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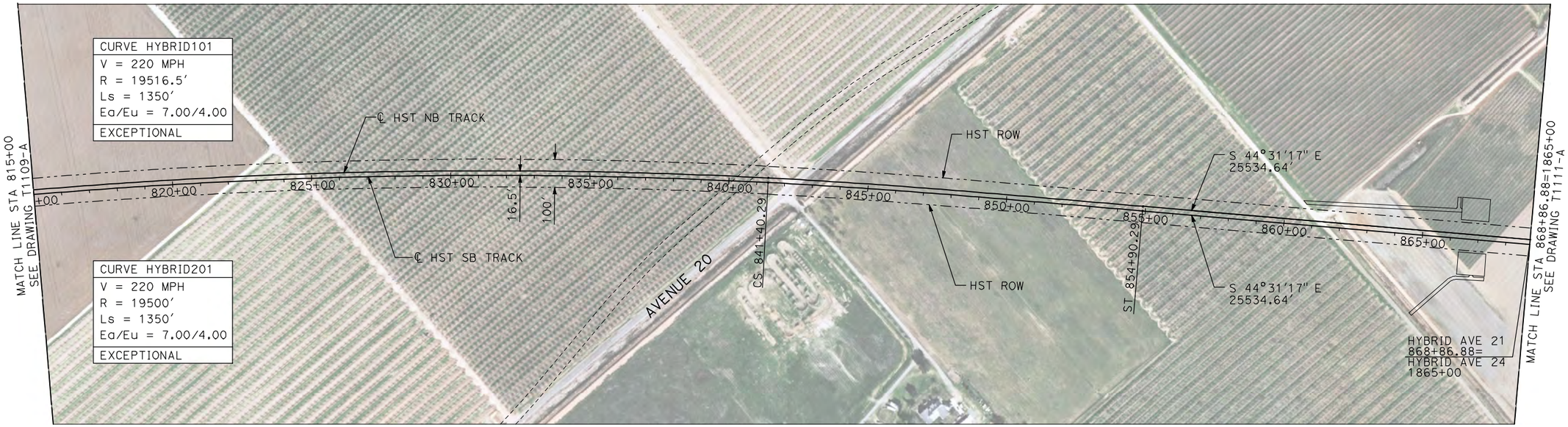
machadoe



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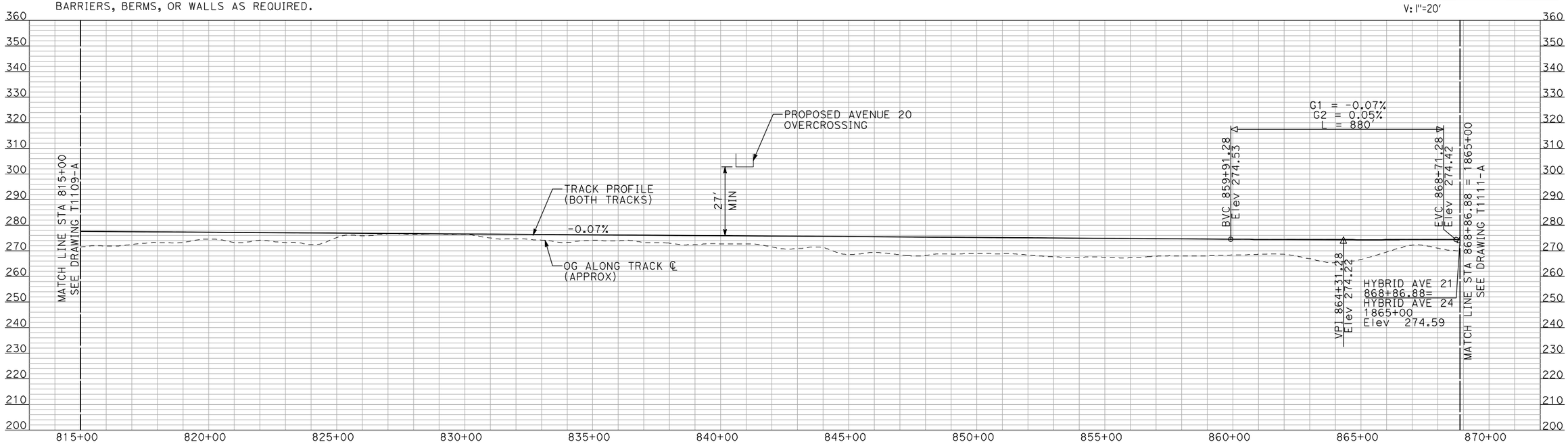
PLAN

200 0 200 400
H: 1"=200'

20 0 20 40
V: 1"=20'



PROFILE

"SEE T3000-T3017 DRAWINGS FOR TYPICAL SECTION LIMITS AND DETAILS"

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY A. SHIELDS
DRAWN BY H. SULLIVAN
CHECKED BY A. BOONE
IN CHARGE A. BOONE
DATE 07/20/2011

RECORD SET 15% DESIGN SUBMITTAL

NOT FOR CONSTRUCTION

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2020 L Street, Suite 300
Sacramento, CA 95811
CH2MHILL

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO
HYBRID
AVENUE 21
PLAN AND PROFILE
STA 815+00 TO STA 868+86.88

CONTRACT NO. HSR06-007
DRAWING NO. T1110-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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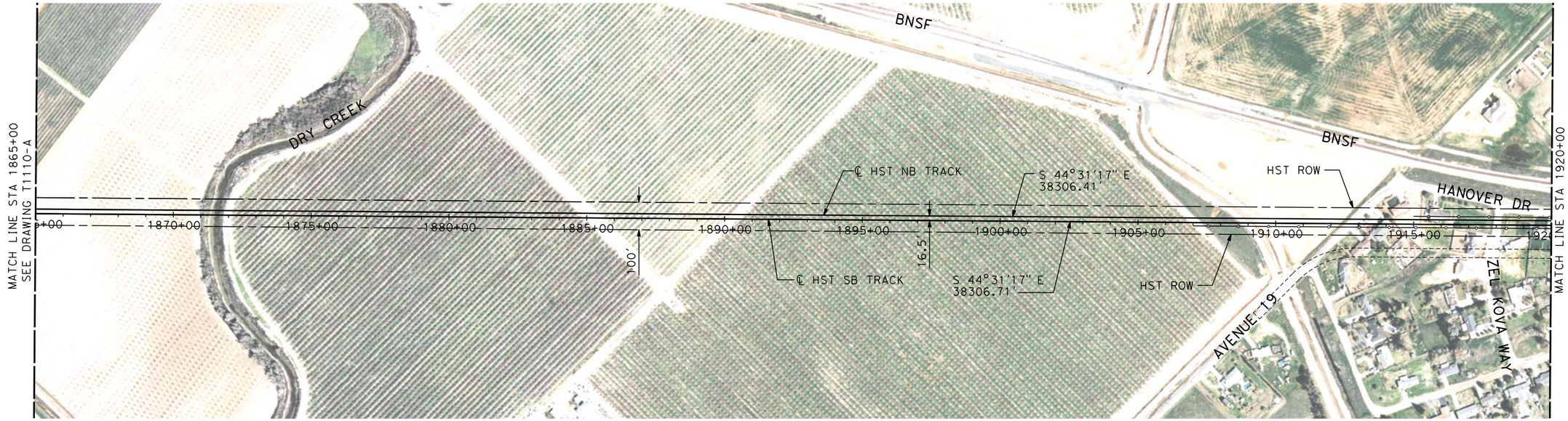
machadoe



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PLAN

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H: 1"=200'

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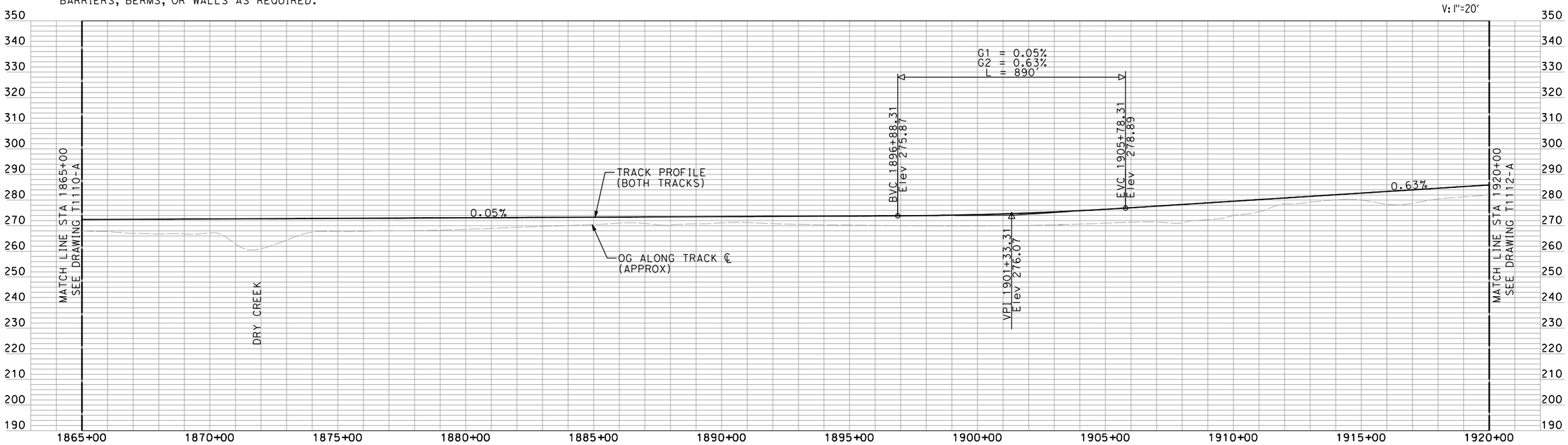
V: 1"=20'



PROFILE

"SEE T3000-T3017 DRAWINGS FOR TYPICAL SECTION LIMITS AND DETAILS"

REV	DATE	BY	CHK	APP	DESCRIPTION
1	02/21/12				NOISE BARRIER LIMITS

DESIGNED BY A. SHIELDS
DRAWN BY H. SULLIVAN
CHECKED BY A. BOONE
IN CHARGE A. BOONE
DATE 07/27/2011

RECORD SET
15% DESIGN SUBMITTAL

NOT FOR CONSTRUCTION

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2020 L Street, Suite 300
Sacramento, CA 95811
CH2MHILL

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO
HYBRID

PLAN AND PROFILE
STA 1865+00 TO STA 1920+00

CONTRACT NO. HSR06-007
DRAWING NO. T1111-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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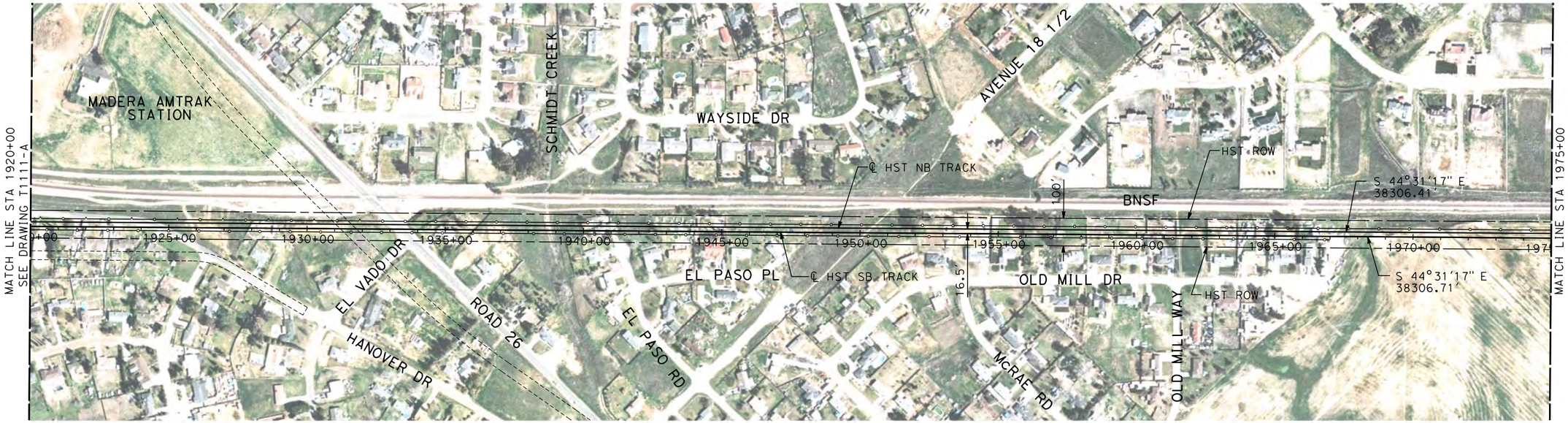

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PLAN

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H: 1"=200'

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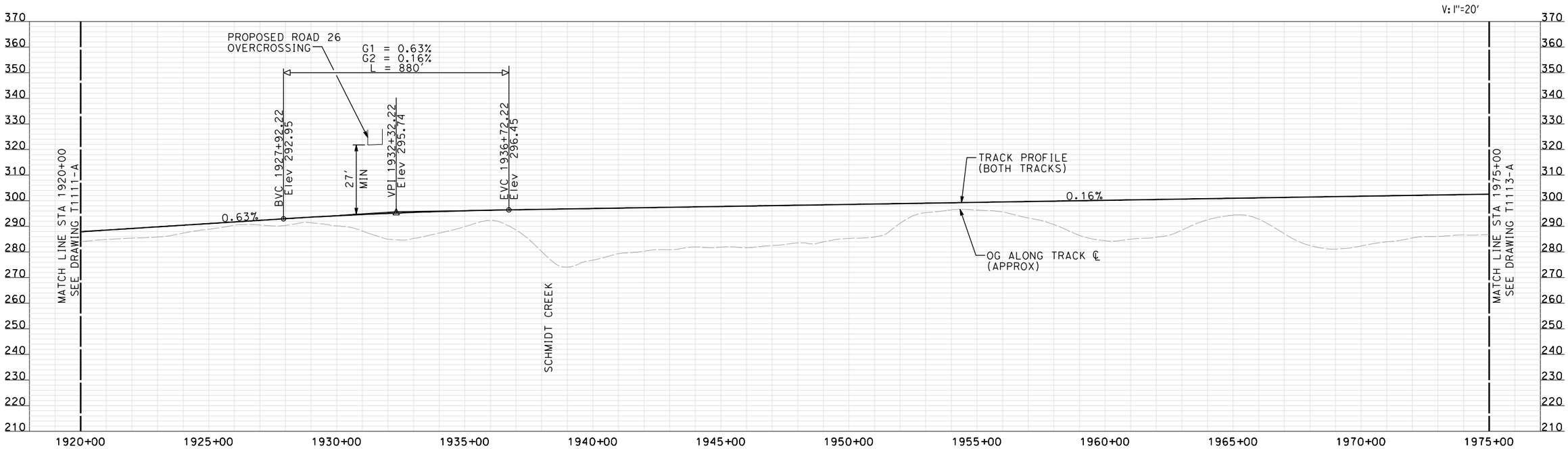
V: 1"=20'



PROFILE

"SEE T3000-T3017 DRAWINGS FOR TYPICAL SECTION LIMITS AND DETAILS"

REV	DATE	BY	CHK	APP	DESCRIPTION
					AMTRAK STATION

DESIGNED BY A. SHIELDS
DRAWN BY H. SULLIVAN
CHECKED BY A. BOONE
IN CHARGE A. BOONE
DATE 02/17/2012

RECORD SET
15% DESIGN SUBMITTAL

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AECOM Technical Services, Inc.
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Sacramento, CA 95811
CH2MHILL

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO
HYBRID

PLAN AND PROFILE
STA 1920+00 TO STA 1975+00

CONTRACT NO. HSR06-007
DRAWING NO. T1112-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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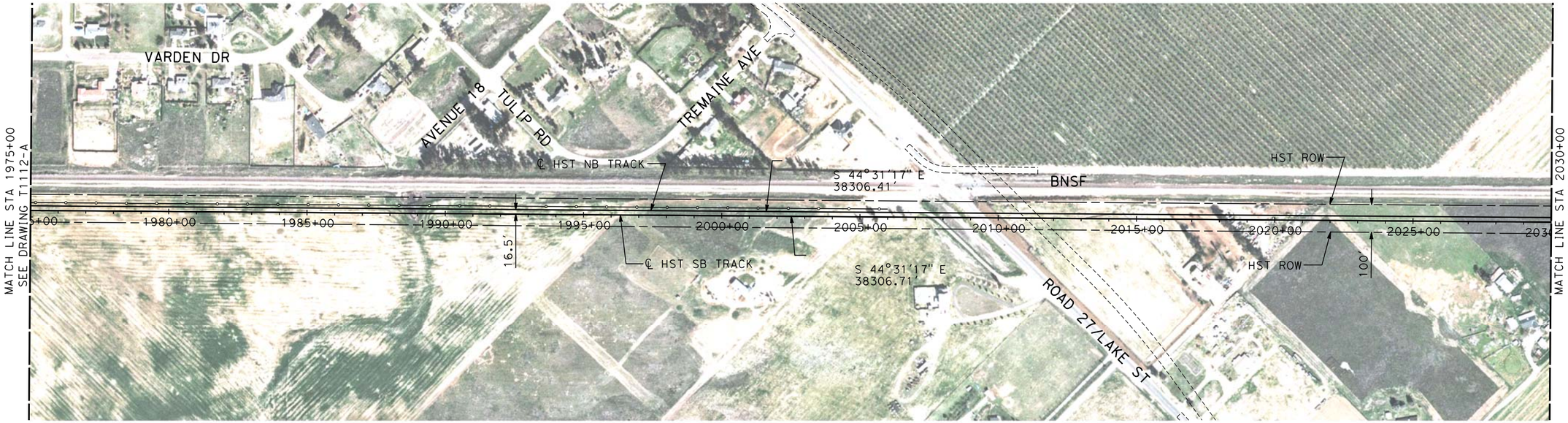

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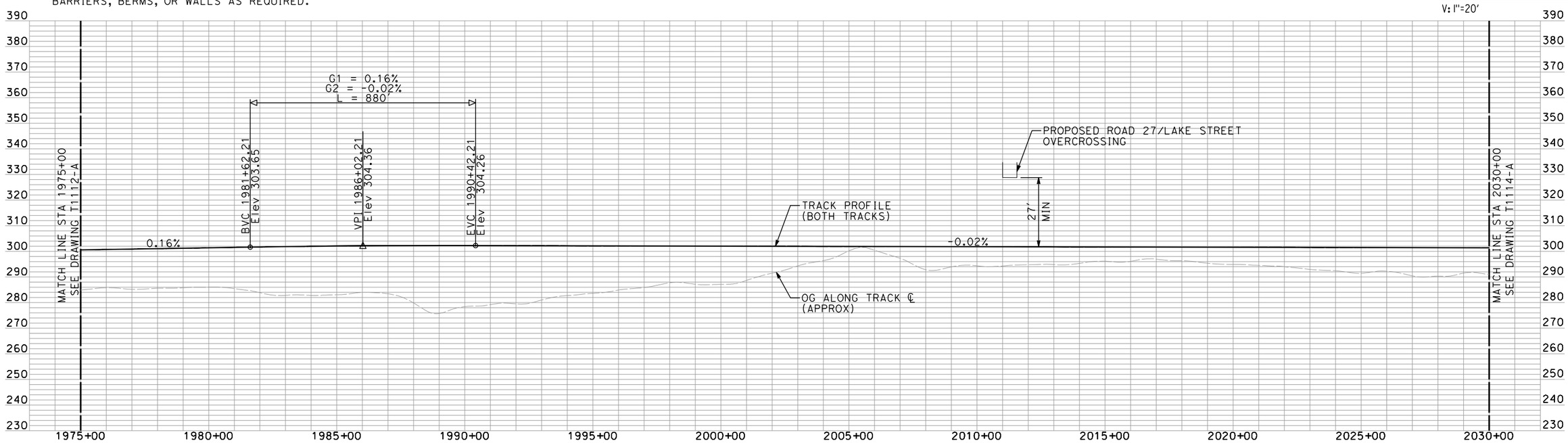
PLAN

200 0 200 400
H: 1"=200'

20 0 20 40
V: 1"=20'



PROFILE

"SEE T3000-T3017 DRAWINGS FOR TYPICAL SECTION LIMITS AND DETAILS"

REV	DATE	BY	CHK	APP	DESCRIPTION
1	02/17/12				NOISE BARRIER LIMITS

DESIGNED BY A. SHIELDS
DRAWN BY H. SULLIVAN
CHECKED BY A. BOONE
IN CHARGE A. BOONE
DATE 07/27/2011

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
HYBRID

PLAN AND PROFILE
STA 1975+00 TO STA 2030+00

CONTRACT NO. HSR06-007
DRAWING NO. T1113-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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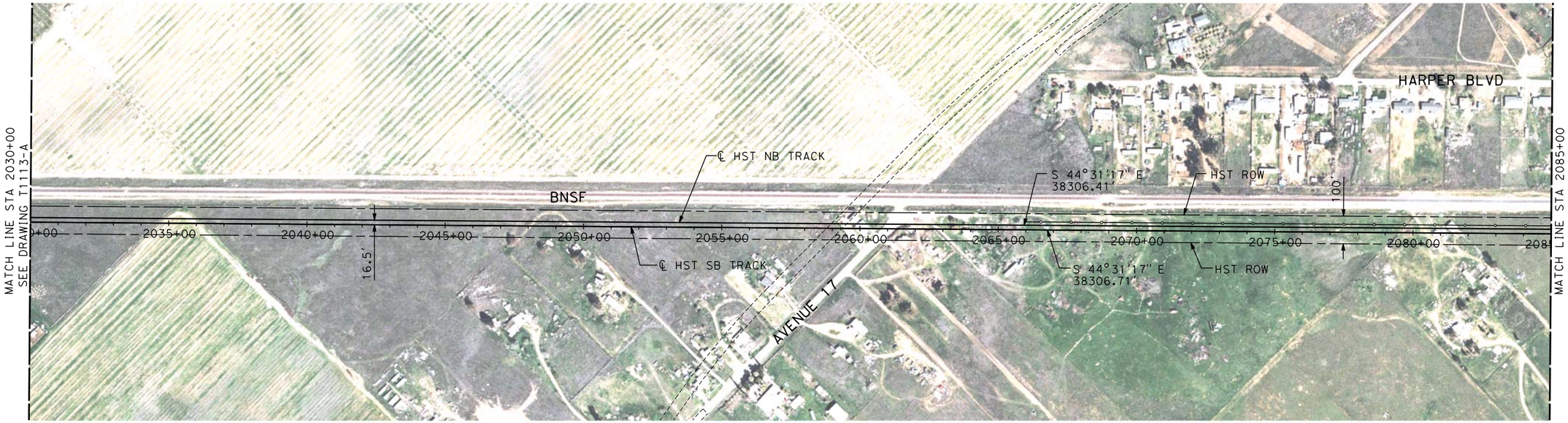
shieldsa



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PLAN

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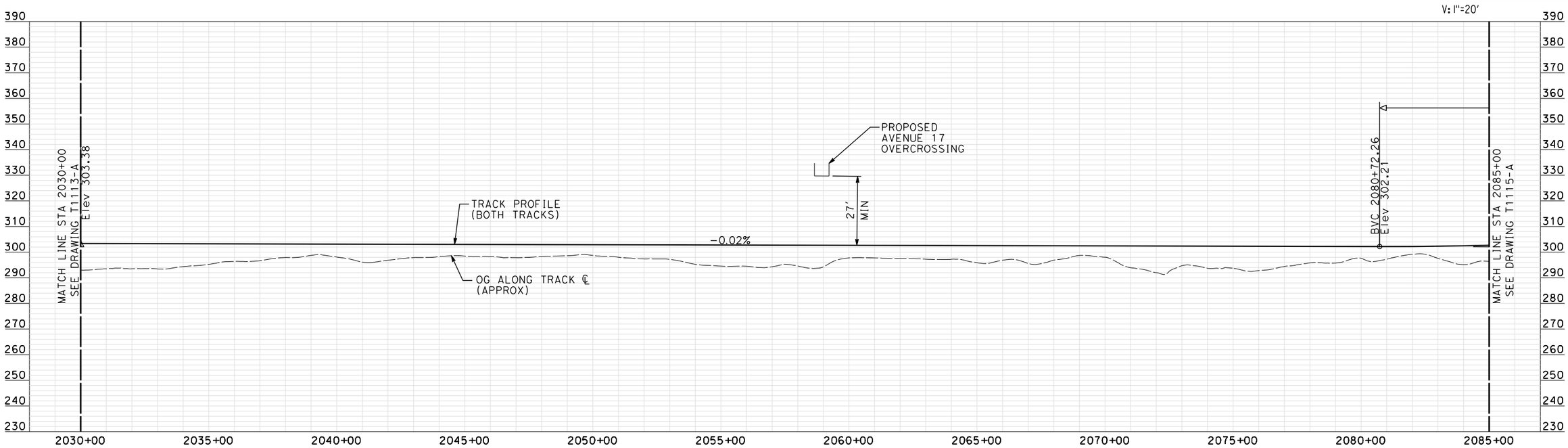
H: 1"=200'

20 0 20 40
V: 1"=20'



PROFILE

"SEE T3000-T3017 DRAWINGS FOR TYPICAL SECTION LIMITS AND DETAILS"

REV	DATE	BY	CHK	APP	DESCRIPTION
1	02/01/2012	AS			SR 145 REDESIGN

DESIGNED BY A. SHIELDS
DRAWN BY H. SULLIVAN
CHECKED BY A. BOONE
IN CHARGE A. BOONE
DATE 07/27/2011

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
HYBRID

PLAN AND PROFILE
STA 2030+00 TO STA 2085+00

CONTRACT NO. HSR06-007
DRAWING NO. T1114-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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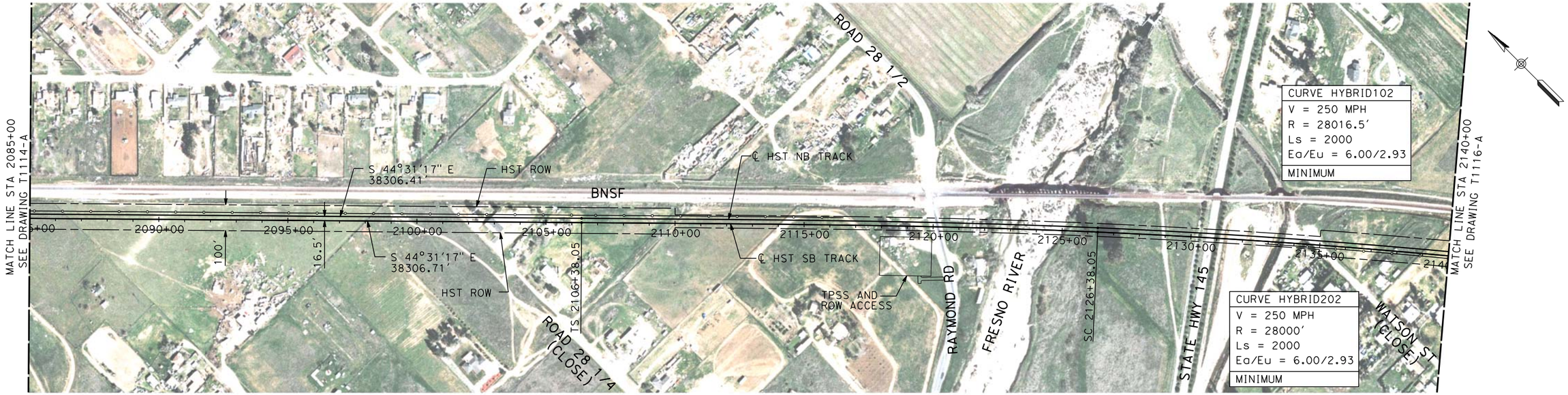
shieldsa



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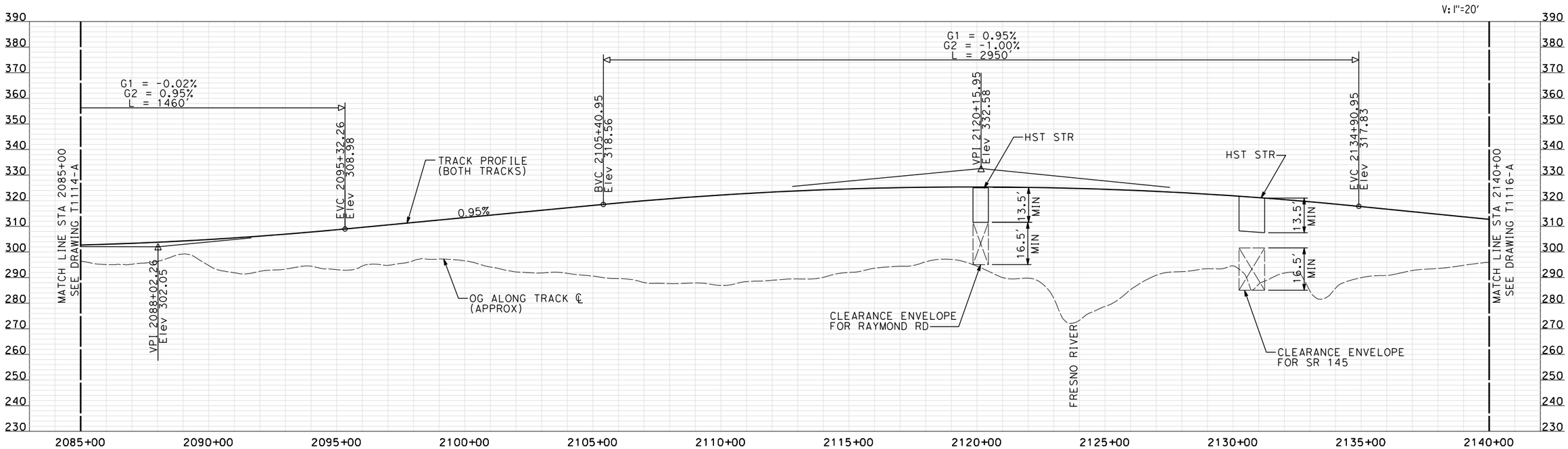
PLAN

200 0 200 400
H: 1"=200'

20 0 20 40
V: 1"=20'



PROFILE

"SEE T3000-T3017 DRAWINGS FOR TYPICAL SECTION LIMITS AND DETAILS"

REV	DATE	BY	CHK	APP	DESCRIPTION
11	02/17/2012	AS			SR 145 REDESIGN

DESIGNED BY A. SHIELDS
DRAWN BY H. SULLIVAN
CHECKED BY A. BOONE
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DATE 07/27/2011

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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
HYBRID

PLAN AND PROFILE
STA 2085+00 TO STA 2140+00

CONTRACT NO. HSR06-007
DRAWING NO. T1115-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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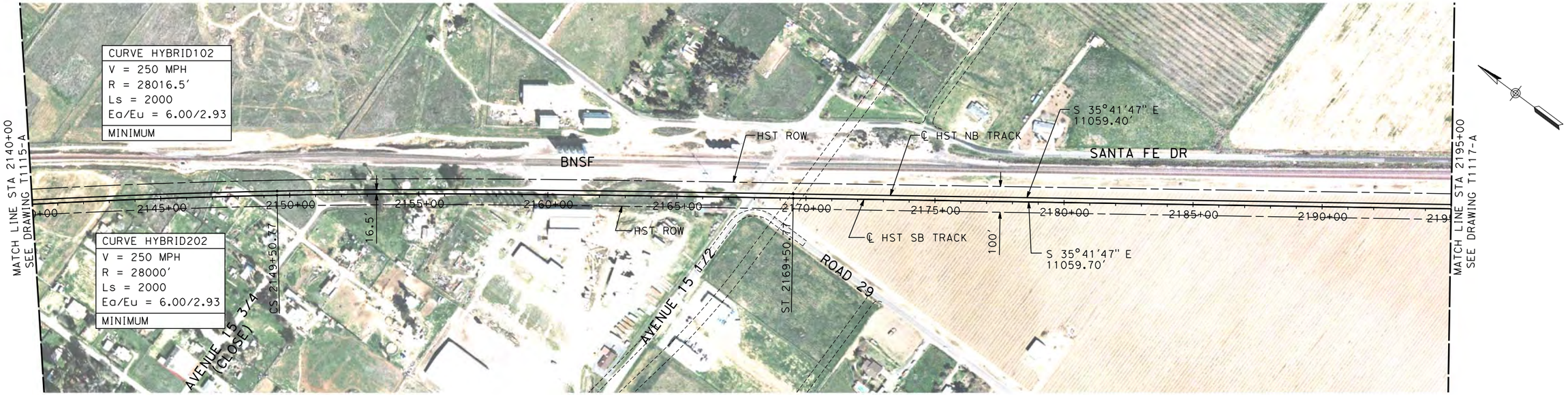
shieldsa

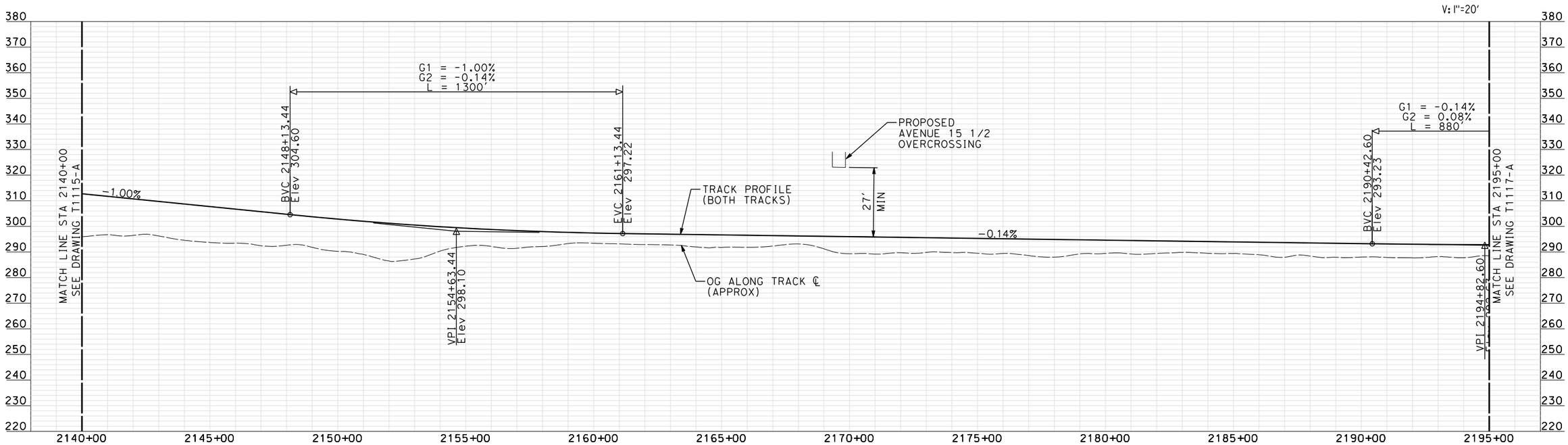


NOTE:
ALL UTILITIES SHOWN ARE EXISTING UTILITY LINES BASED ON RECORD DRAWINGS AND ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY.

PLAN

200 0 200 400
H: 1"=200'

20 0 20 40
V: 1"=20'



PROFILE

"SEE T3000-T3017 DRAWINGS FOR TYPICAL SECTION LIMITS AND DETAILS"

REV	DATE	BY	CHK	APP	DESCRIPTION
1	02/12/12				TRACK REALIGNMENT / SR 145 REDESIGN

DESIGNED BY A. SHIELDS
DRAWN BY H. SULLIVAN
CHECKED BY A. BOONE
IN CHARGE A. BOONE
DATE 02/17/2012

RECORD SET
15% DESIGN SUBMITTAL

NOT FOR CONSTRUCTION

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

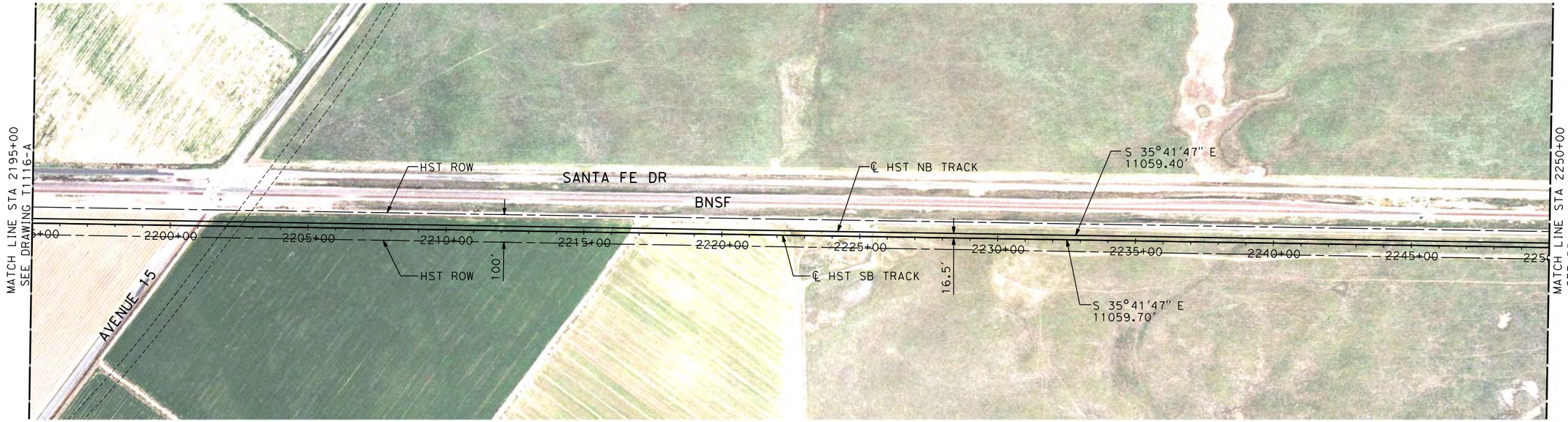
CALIFORNIA HIGH-SPEED RAIL AUTHORITY

CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO
HYBRID

PLAN AND PROFILE
STA 2140+00 TO STA 2195+00

CONTRACT NO. HSR06-007
DRAWING NO. T1116-A
SCALE AS SHOWN
SHEET NO. ### OF ###

2/21/2012 10:03:18 AM \\uscrifp001\cadd\chsr\60022962\Task-03_Merced-Fresno\CADD\Rail\Design\SHIELDSA\Rev 1 - 15% Plans\hybrid 24\MF-T-1116-A.dgn
shieldsa

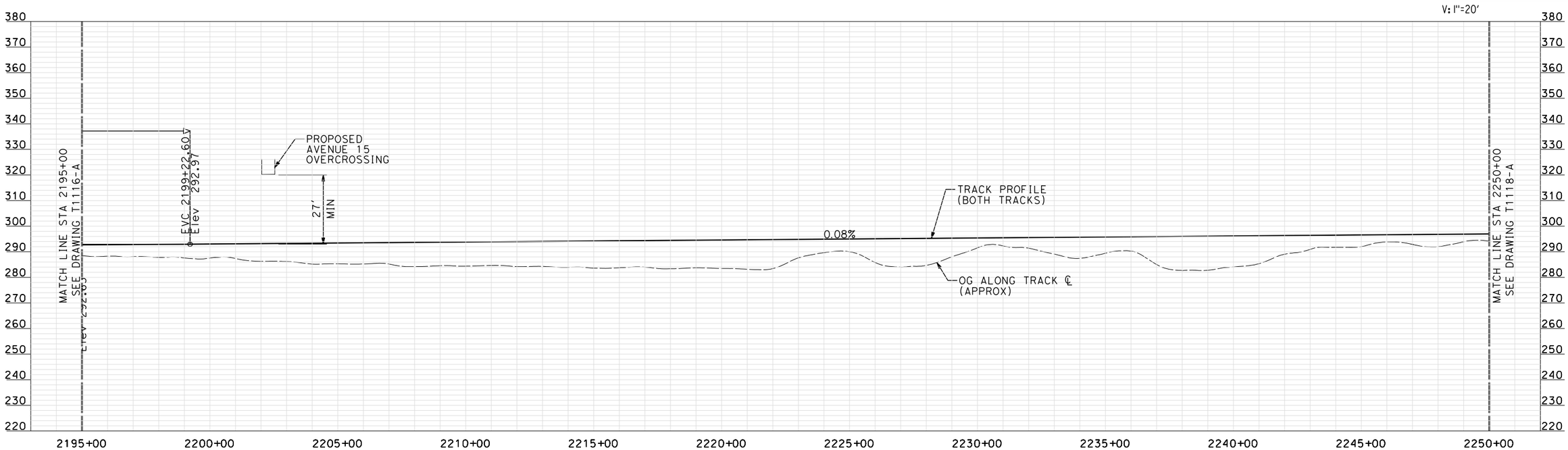


PLAN

NOTE:
ALL UTILITIES SHOWN ARE EXISTING UTILITY LINES BASED ON RECORD DRAWINGS AND ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY.

200 0 200 400
H: 1"=200'

20 0 20 40
V: 1"=20'



PROFILE

"SEE T3000-T3017 DRAWINGS FOR TYPICAL SECTION LIMITS AND DETAILS"

REV	DATE	BY	CHK	APP	DESCRIPTION
1	02/01/2012	AS			TRACK REALIGNMENT / SR 145 REDESIGN

DESIGNED BY A. SHIELDS
DRAWN BY H. SULLIVAN
CHECKED BY A. BOONE
IN CHARGE A. BOONE
DATE 07/27/2011

RECORD SET
15% DESIGN SUBMITTAL

NOT FOR CONSTRUCTION

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

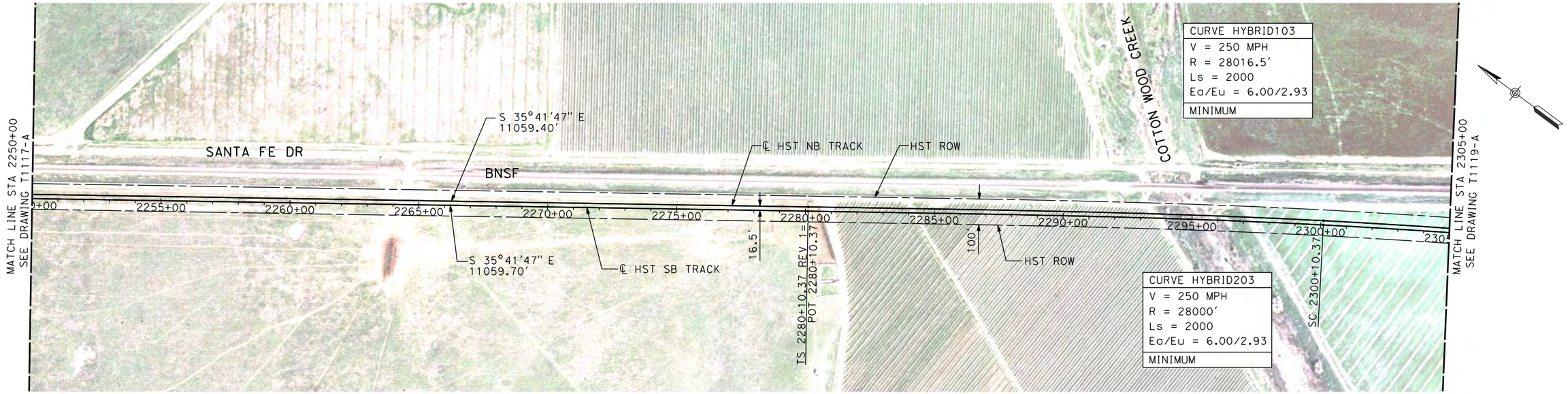
CALIFORNIA HIGH-SPEED RAIL AUTHORITY

CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO
HYBRID

PLAN AND PROFILE
STA 2195+00 TO STA 2250+00

CONTRACT NO. HSR06-007
DRAWING NO. T1117-A
SCALE AS SHOWN
SHEET NO. ### OF ###

shieldsa 2/2/2012 10:06:33 AM \\uscrifp001\cadd\chsr\60022962\Task-03_Merced-Fresno\CADD\Rail\Design\SHIELDSA\Rev 1 - 15% Plans\hybrid 24\MF-T-1117-A.dgn

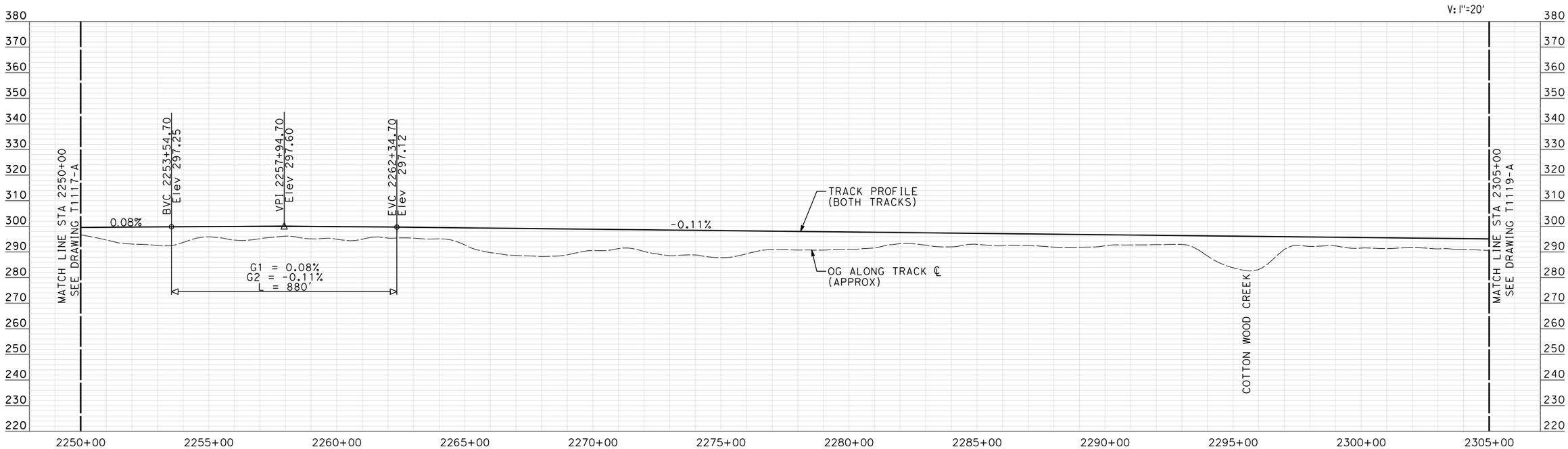


PLAN

H: 1"=200'

V: 1"=20'

NOTE:
ALL UTILITIES SHOWN ARE EXISTING UTILITY LINES BASED ON RECORD DRAWINGS AND ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY.



PROFILE

"SEE T3000-T3017 DRAWINGS FOR TYPICAL SECTION LIMITS AND DETAILS"

REV	DATE	BY	CHK	APP	DESCRIPTION
1	12/12/2011	AS			TRACK REALIGNMENT

DESIGNED BY A. SHIELDS
DRAWN BY H. SULLIVAN
CHECKED BY A. BOONE
IN CHARGE A. BOONE
DATE 07/27/2011

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

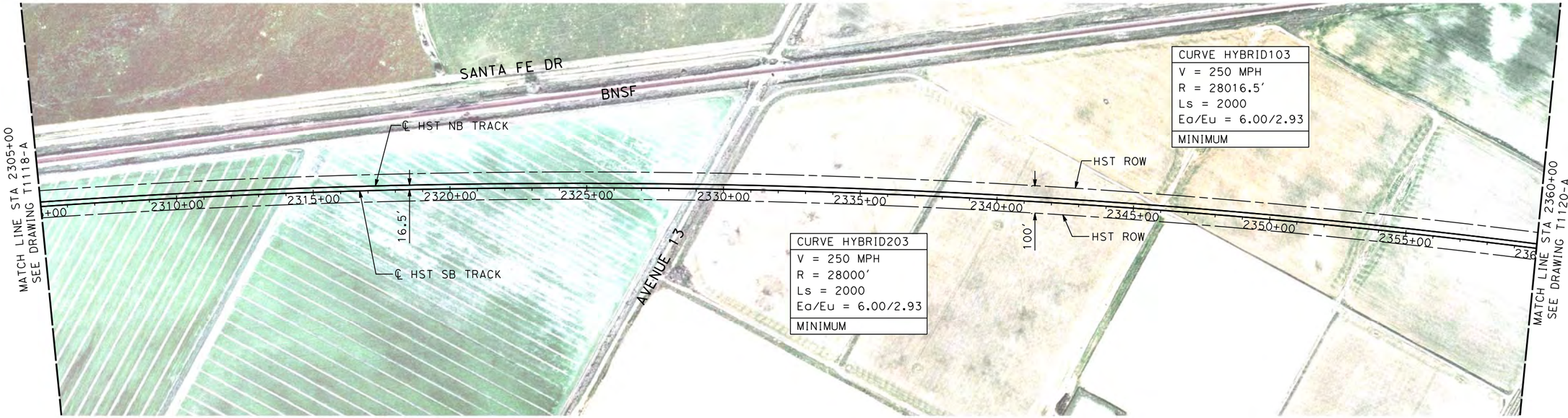
CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO

HYBRID

PLAN AND PROFILE
STA 2250+00 TO STA 2305+00

CONTRACT NO. HSR06-007
DRAWING NO. T1118-A
SCALE AS SHOWN
SHEET NO. ### OF ###

shieldsa 1/6/2012 10:50:01 AM \\uscrifp001\Cadd\CHSR\60022962\Task-03_Merced-Fresno\CADD\Rail\Design\SHIELDSA\Rev 1 - 15% Plans\hybrid 24\MF-T-1118-A.dgn

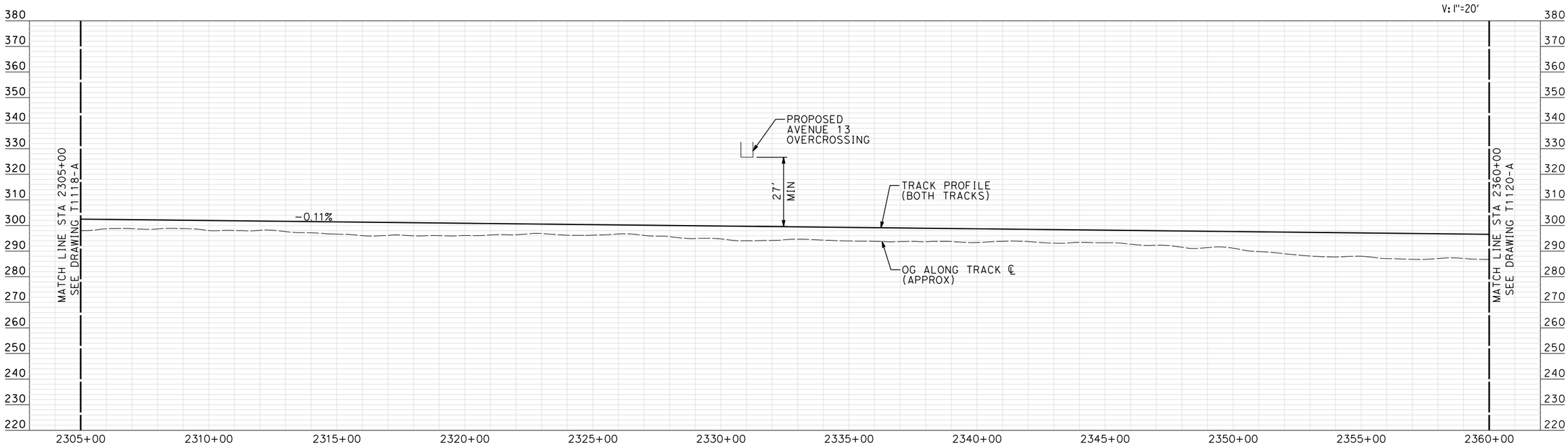


NOTE:
ALL UTILITIES SHOWN ARE EXISTING UTILITY LINES BASED ON RECORD DRAWINGS AND ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY.

PLAN

200 0 200 400
H: 1"=200'

20 0 20 40
V: 1"=20'



PROFILE

"SEE T3000-T3017 DRAWINGS FOR TYPICAL SECTION LIMITS AND DETAILS"

REV	DATE	BY	CHK	APP	DESCRIPTION
1	12/12/2011	AS			TRACK REALIGNMENT

DESIGNED BY A. SHIELDS
DRAWN BY H. SULLIVAN
CHECKED BY A. BOONE
IN CHARGE A. BOONE
DATE 07/27/2011

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
HYBRID

PLAN AND PROFILE
STA 2305+00 TO STA 2360+00

CONTRACT NO. HSR06-007
DRAWING NO. T1119-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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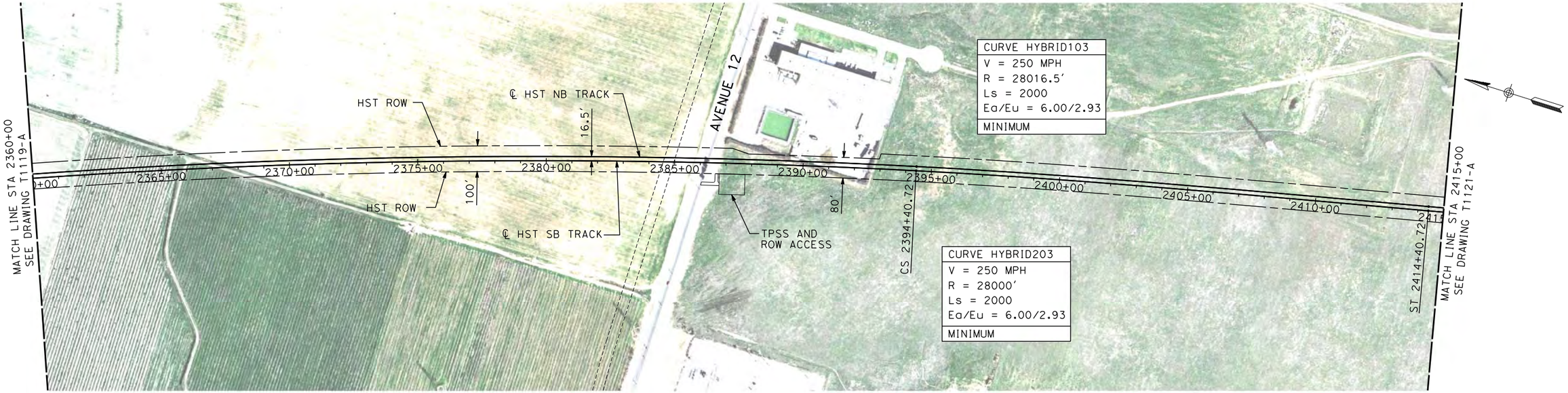
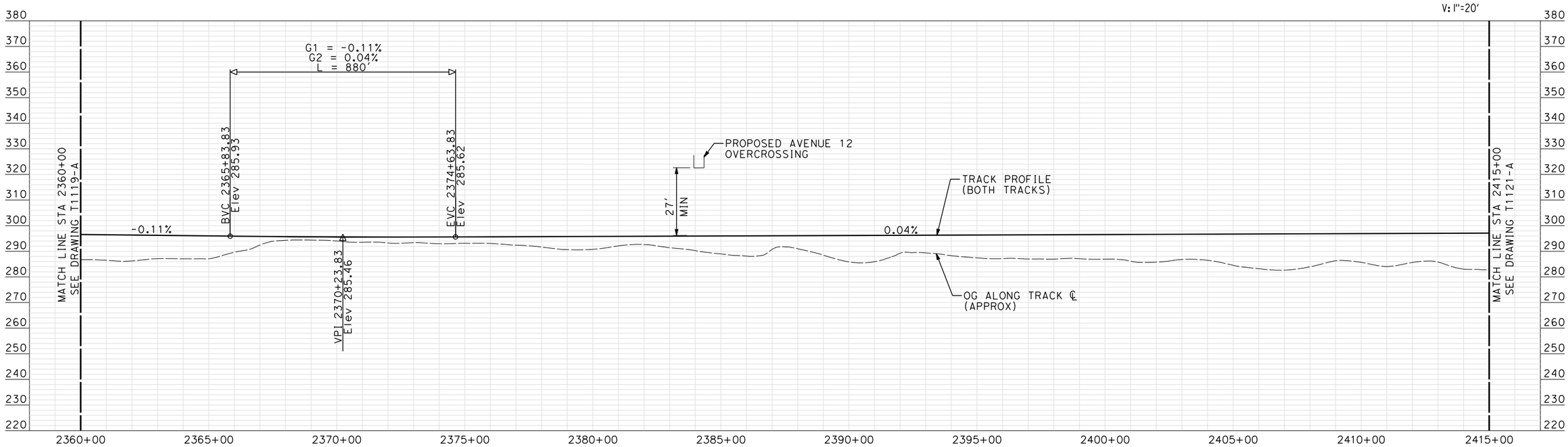


NOTE:
ALL UTILITIES SHOWN ARE EXISTING UTILITY LINES BASED ON RECORD DRAWINGS AND ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY.

PLAN

200 0 200 400
H: 1"=200'

20 0 20 40
V: 1"=20'



PROFILE

"SEE T3000-T3017 DRAWINGS FOR TYPICAL SECTION LIMITS AND DETAILS"

REV	DATE	BY	CHK	APP	DESCRIPTION
1	12/12/2011	AS			TRACK REALIGNMENT

DESIGNED BY A. SHIELDS
DRAWN BY H. SULLIVAN
CHECKED BY A. BOONE
IN CHARGE A. BOONE
DATE 07/27/2011

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
HYBRID

PLAN AND PROFILE
STA 2360+00 TO STA 2415+00

CONTRACT NO. HSR06-007
DRAWING NO. T1120-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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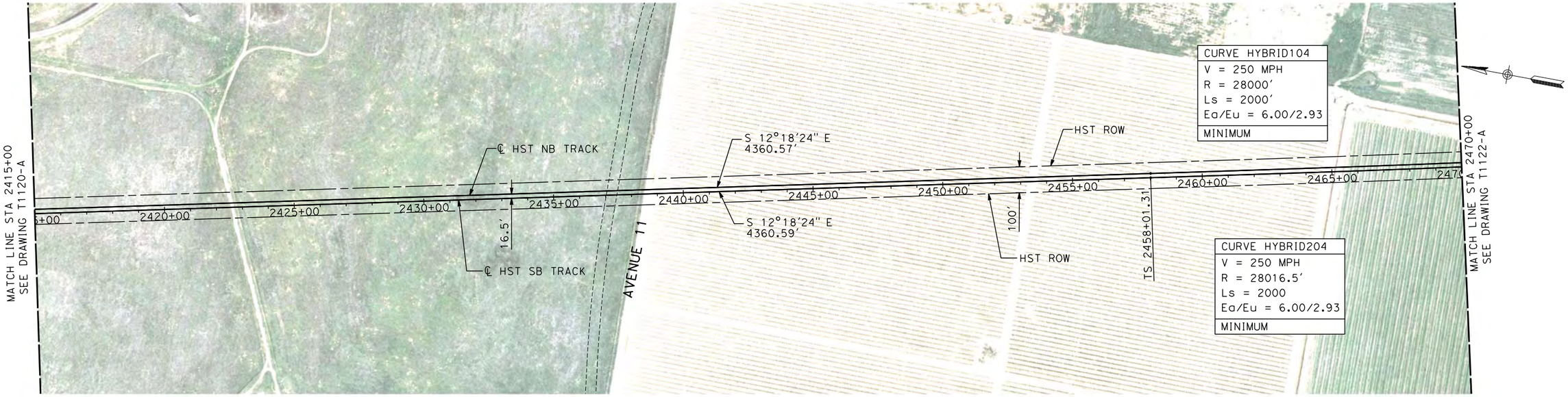

NOTE:
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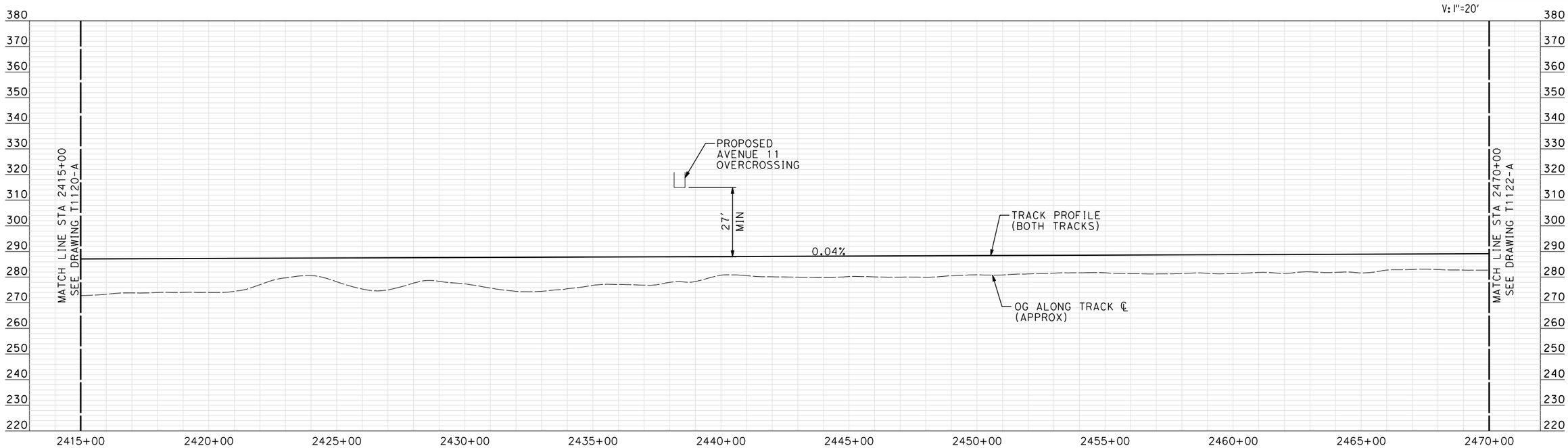
PLAN

200 0 200 400
H: 1"=200'

20 0 20 40
V: 1"=20'



PROFILE

"SEE T3000-T3017 DRAWINGS FOR TYPICAL SECTION LIMITS AND DETAILS"

REV	DATE	BY	CHK	APP	DESCRIPTION
1	12/12/2011	AS			TRACK REALIGNMENT

DESIGNED BY A. SHIELDS
DRAWN BY H. SULLIVAN
CHECKED BY A. BOONE
IN CHARGE A. BOONE
DATE 07/27/2011

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
HYBRID

PLAN AND PROFILE
STA 2415+00 TO STA 2470+00

CONTRACT NO. HSR06-007
DRAWING NO. T1121-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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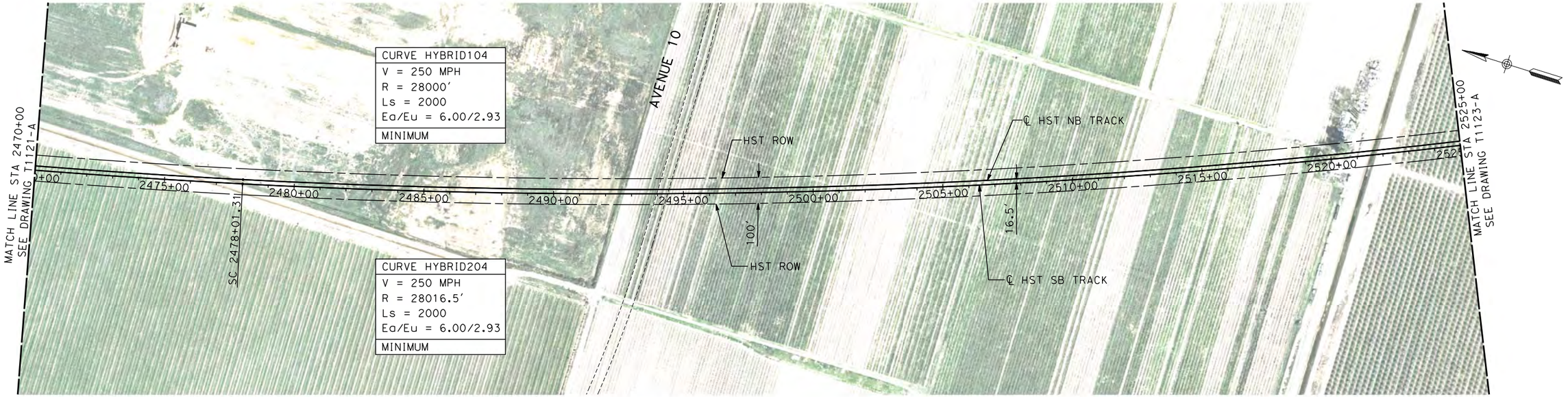

PLAN

200 0 200 400
H: 1"=200'

20 0 20 40
V: 1"=20'

NOTE:
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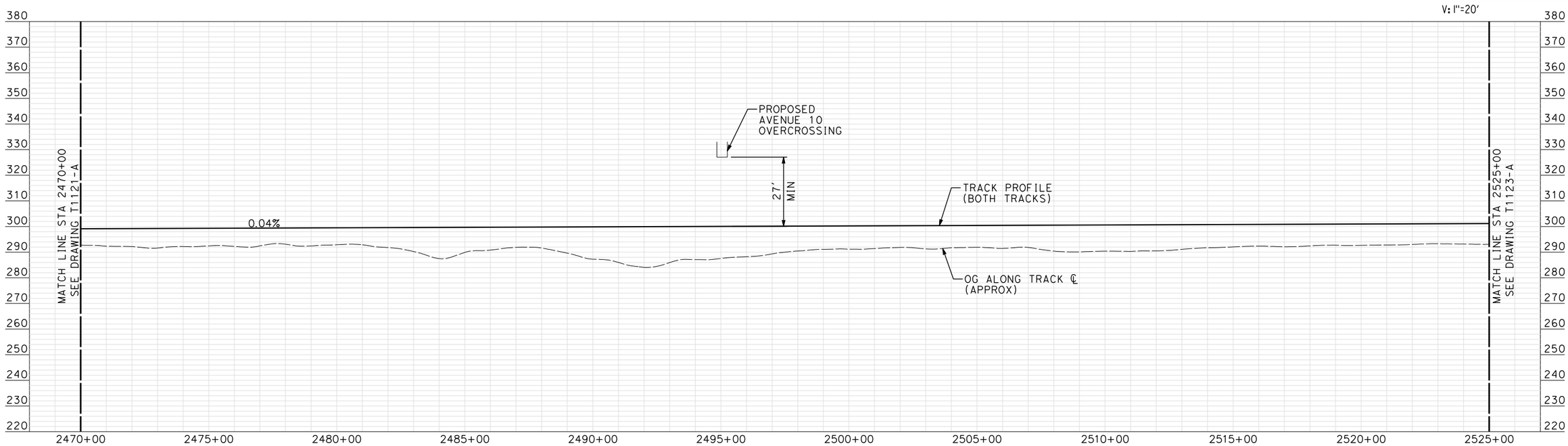

PROFILE

"SEE T3000-T3017 DRAWINGS FOR TYPICAL SECTION LIMITS AND DETAILS"

REV	DATE	BY	CHK	APP	DESCRIPTION
1	12/12/2011	AS			TRACK REALIGNMENT

DESIGNED BY A. SHIELDS
DRAWN BY H. SULLIVAN
CHECKED BY A. BOONE
IN CHARGE A. BOONE
DATE 07/27/2011

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
HYBRID

PLAN AND PROFILE
STA 2470+00 TO STA 2525+00

CONTRACT NO. HSR06-007
DRAWING NO. T1122-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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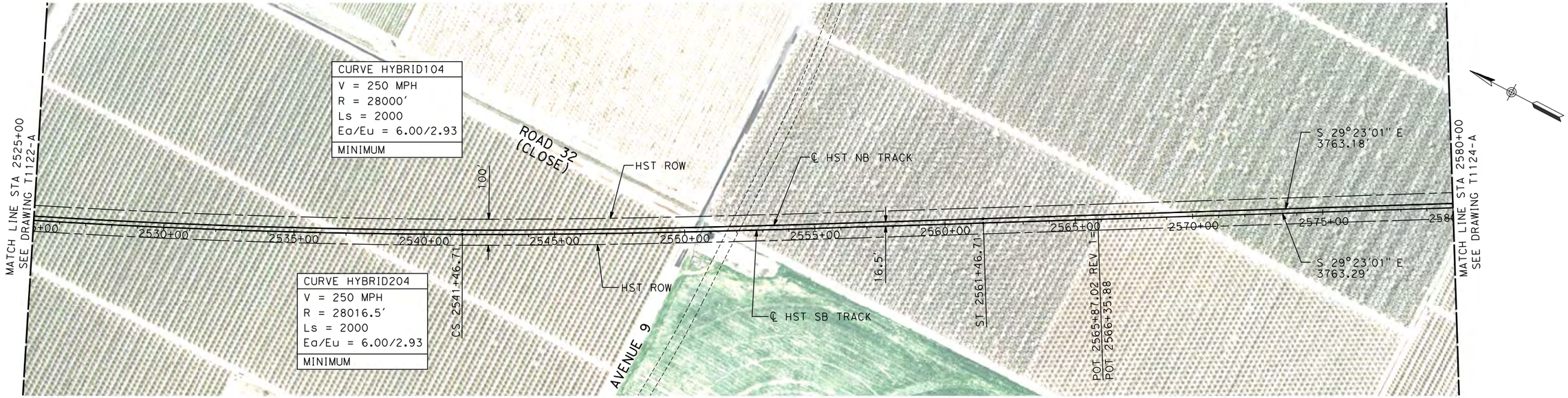

PLAN

NOTE:
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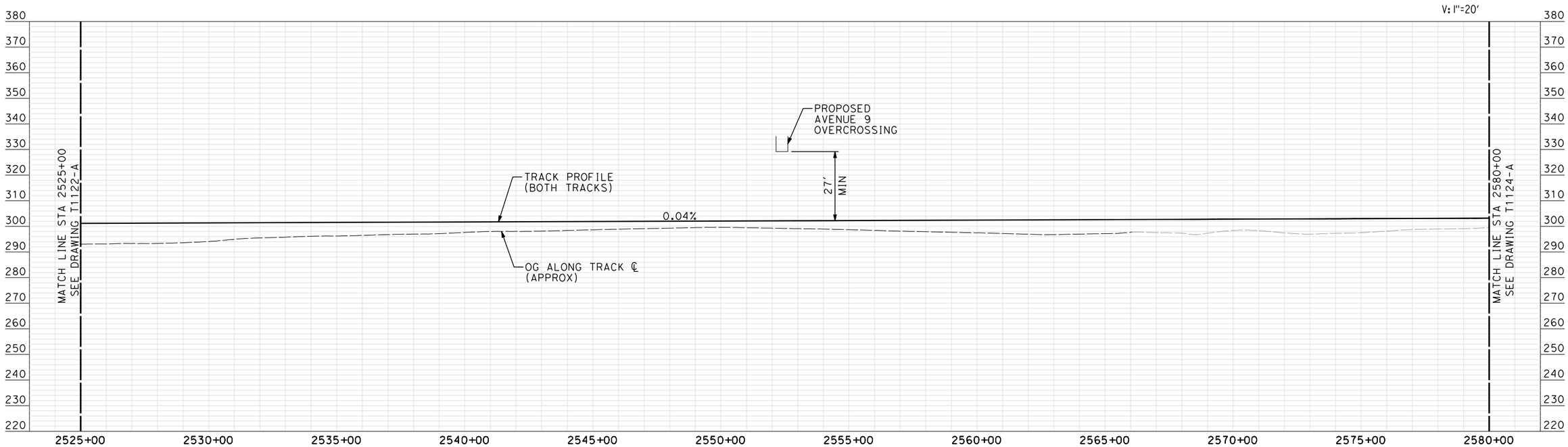
200 0 200 400
H: 1"=200'

20 0 20 40
V: 1"=20'



PROFILE

"SEE T3000-T3017 DRAWINGS FOR TYPICAL SECTION LIMITS AND DETAILS"

REV	DATE	BY	CHK	APP	DESCRIPTION
1	12/12/2011	AS			TRACK REALIGNMENT

DESIGNED BY A. SHIELDS
DRAWN BY H. SULLIVAN
CHECKED BY A. BOONE
IN CHARGE A. BOONE
DATE 07/27/2011

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
HYBRID

PLAN AND PROFILE
STA 2525+00 TO STA 2580+00

CONTRACT NO. HSR06-007
DRAWING NO. T1123-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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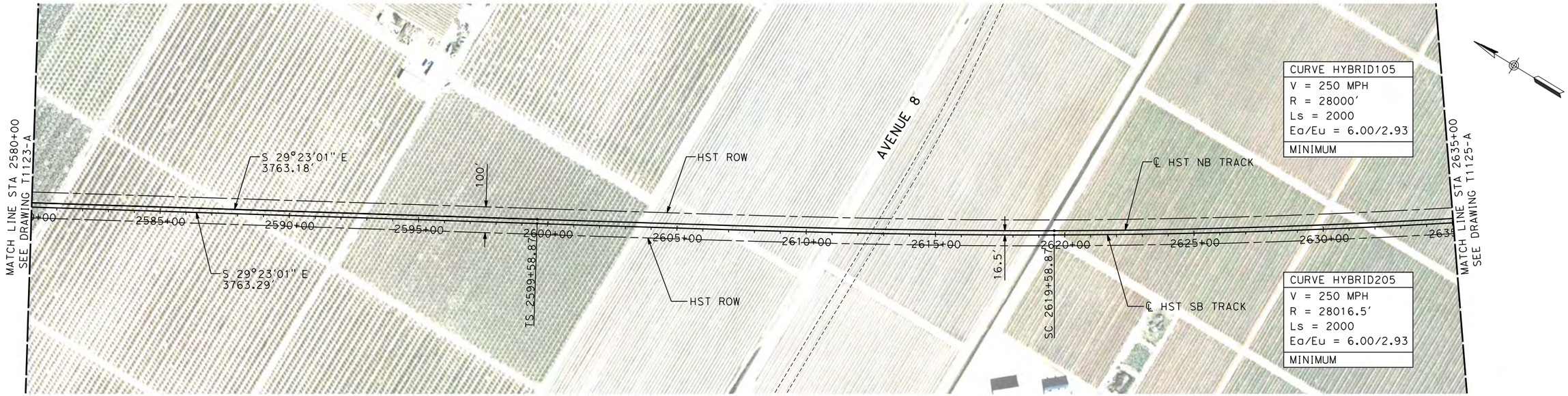
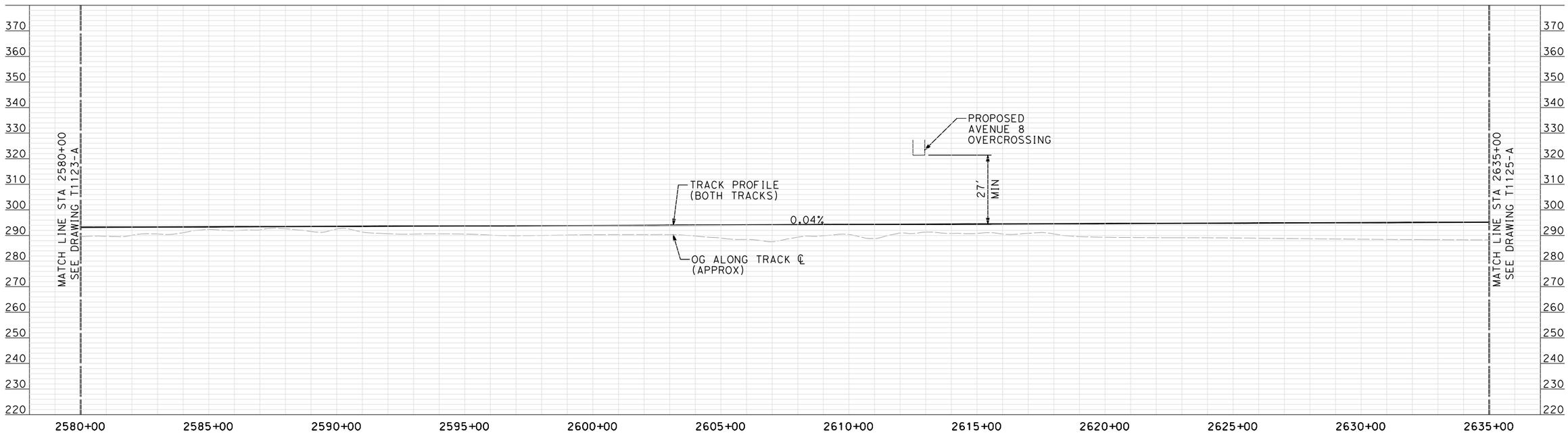


NOTES:
1. ALL UTILITIES SHOWN ARE EXISTING UTILITY LINES BASED ON RECORD DRAWINGS AND ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY.
2. TRACKS CLOSER THAN 102 FT TO THE NEAREST EXISTING FREIGHT TRACKS WILL INCLUDE SAFETY BARRIERS, BERMS, OR WALLS AS REQUIRED.

PLAN

200 0 200 400
H: 1"=200'

20 0 20 40
V: 1"=20'



PROFILE

"SEE T3000-T3017 DRAWINGS FOR TYPICAL SECTION LIMITS AND DETAILS"

REV	DATE	BY	CHK	APP	DESCRIPTION
1	12/12/2011	AS			TRACK REALIGNMENT

DESIGNED BY A. SHIELDS
DRAWN BY H. SULLIVAN
CHECKED BY A. BOONE
IN CHARGE A. BOONE
DATE 07/27/2011

RECORD SET
15% DESIGN SUBMITTAL

NOT FOR CONSTRUCTION

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

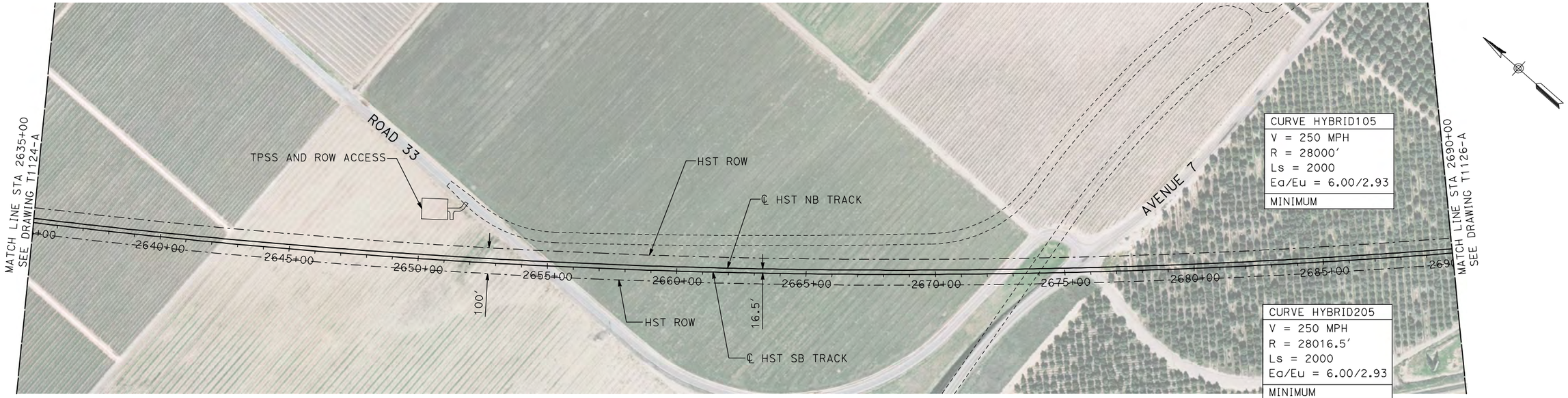
CALIFORNIA HIGH-SPEED RAIL AUTHORITY

CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO
HYBRID

PLAN AND PROFILE
STA 2580+00 TO STA 2635+00

CONTRACT NO. HSR06-007
DRAWING NO. T1124-A
SCALE AS SHOWN
SHEET NO. ### OF ###

shieldsa 1/6/2012 11:07:55 AM \\usscr1fp001\Cadd\CHSR\60022962\Task-03_Merced-Fresno\CADD\Rail\Design\SHIELDSA\Rev 1 - 15% Plans\hybrid 24\MF-T-1124-A.dgn

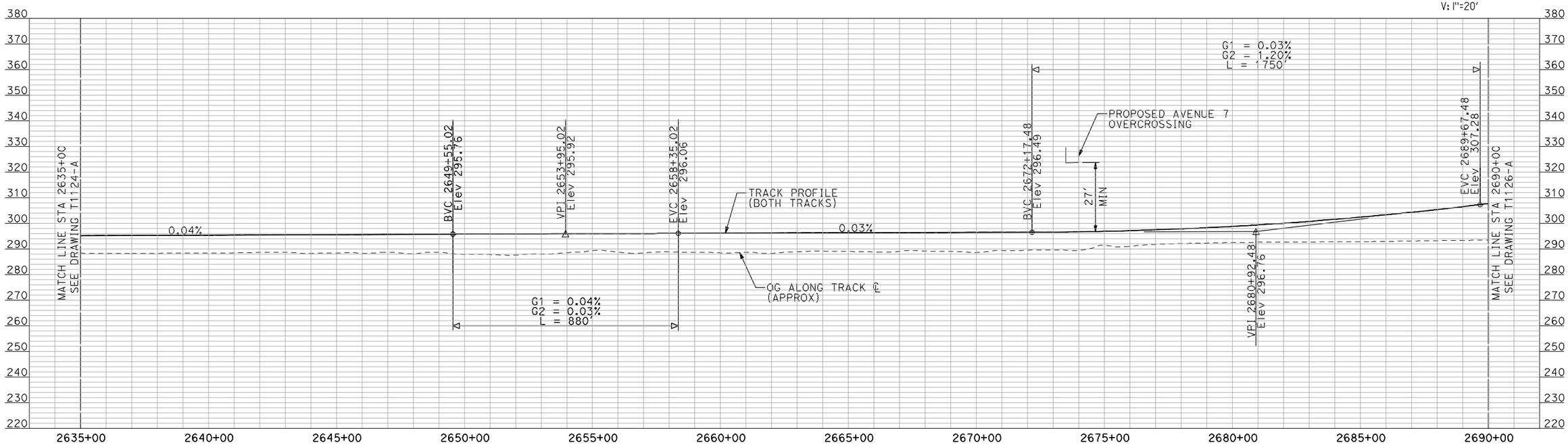


NOTES:
1. ALL UTILITIES SHOWN ARE EXISTING UTILITY LINES BASED ON RECORD DRAWINGS AND ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY.
2. TRACKS CLOSER THAN 102 FT TO THE NEAREST EXISTING FREIGHT TRACKS WILL INCLUDE SAFETY BARRIERS, BERMS, OR WALLS AS REQUIRED.

PLAN

200 0 200 400
H: 1"=200'

20 0 20 40
V: 1"=20'



PROFILE

"SEE T3000-T3017 DRAWINGS FOR TYPICAL SECTION LIMITS AND DETAILS"

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY A. SHIELDS
DRAWN BY H. SULLIVAN
CHECKED BY A. BOONE
IN CHARGE A. BOONE
DATE 07/20/2011

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
HYBRID

PLAN AND PROFILE
STA 2635+00 TO STA 2690+00

CONTRACT NO. HSR06-007
DRAWING NO. T1125-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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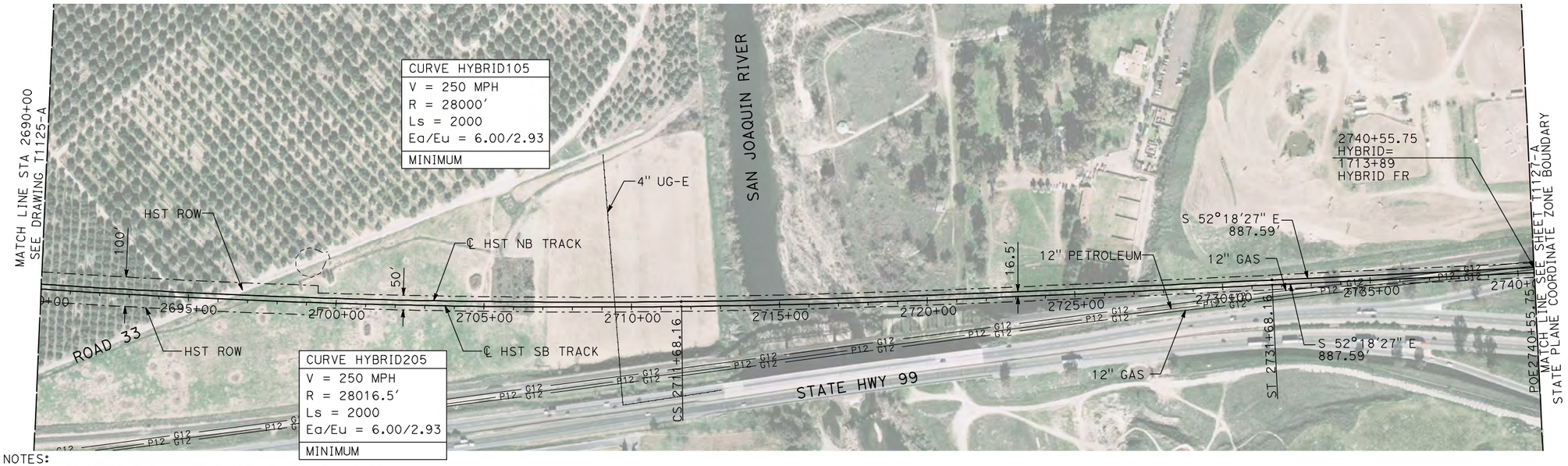
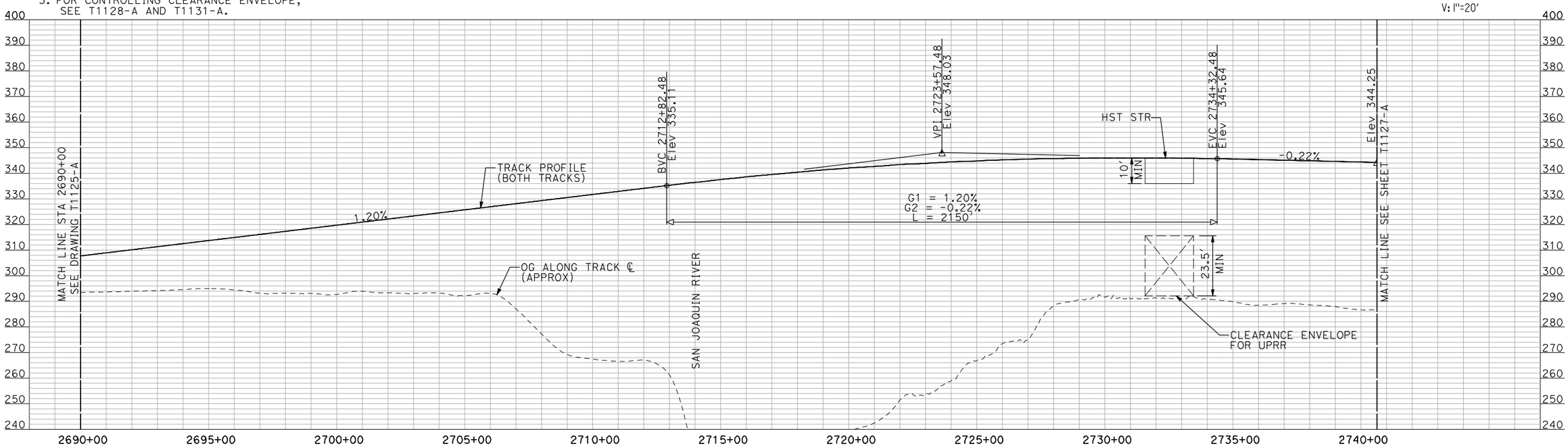


NOTES:
1. ALL UTILITIES SHOWN ARE EXISTING UTILITY LINES BASED ON RECORD DRAWINGS AND ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY.
2. TRACKS CLOSER THAN 102 FT TO THE NEAREST EXISTING FREIGHT TRACKS WILL INCLUDE SAFETY BARRIERS, BERMS, OR WALLS AS REQUIRED.
3. FOR CONTROLLING CLEARANCE ENVELOPE, SEE T1128-A AND T1131-A.

PLAN

200 0 200 400
H: 1"=200'

20 0 20 40
V: 1"=20'



PROFILE

"SEE T3000-T3017 DRAWINGS FOR TYPICAL SECTION LIMITS AND DETAILS"

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY A. SHIELDS
DRAWN BY H. SULLIVAN
CHECKED BY A. BOONE
IN CHARGE A. BOONE
DATE 07/20/2011

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
HYBRID

PLAN AND PROFILE
STA 2690+00 TO STA 2740+55.75

CONTRACT NO. HSR06-007
DRAWING NO. T1126-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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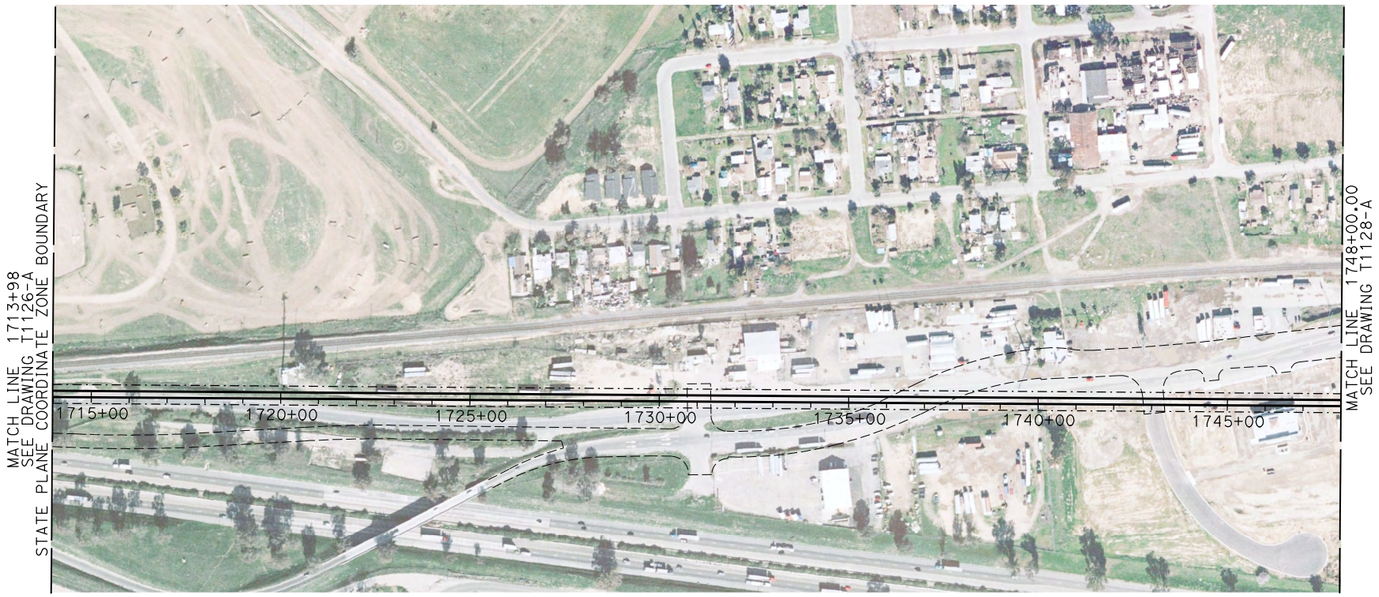


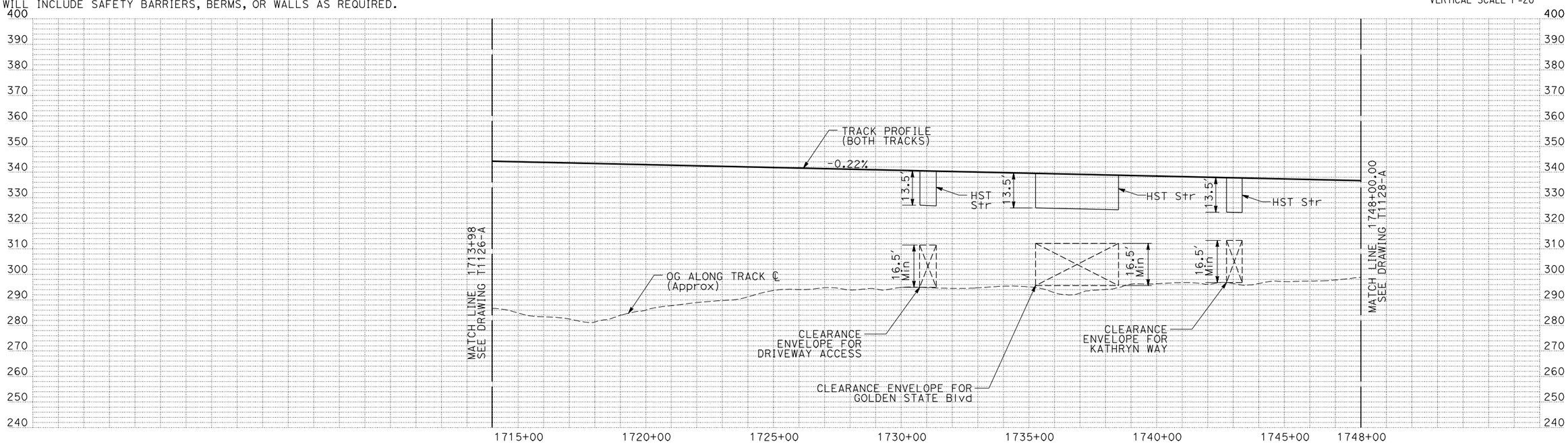
PLAN

NOTES:

1. ALL UTILITIES SHOWN ARE EXISTING UTILITY LINES BASED ON RECORD DRAWINGS AND ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY.
2. TRACKS CLOSER THAN 102 FT TO THE NEAREST EXISTING FREIGHT TRACKS WILL INCLUDE SAFETY BARRIERS, BERMS, OR WALLS AS REQUIRED.

200 0 200 400
HORIZONTAL SCALE 1"=200'

20 0 20 40
VERTICAL SCALE 1"=20'



PROFILE

"SEE T3000-T3017 DRAWINGS FOR TYPICAL SECTION LIMITS AND DETAILS"

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY C. CHIU
DRAWN BY M. McKEON
CHECKED BY V. CHIO
IN CHARGE J. VALSECCHI
DATE MAY 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

HYBRID

PLAN AND PROFILE
STA 1713+98 TO STA 1748+00

CONTRACT NO. HSR06-007
DRAWING NO. T1127-A
SCALE AS SHOWN
SHEET NO.

DATE PLOTTED => 20-JUL-2011
TIME PLOTTED => 12:59

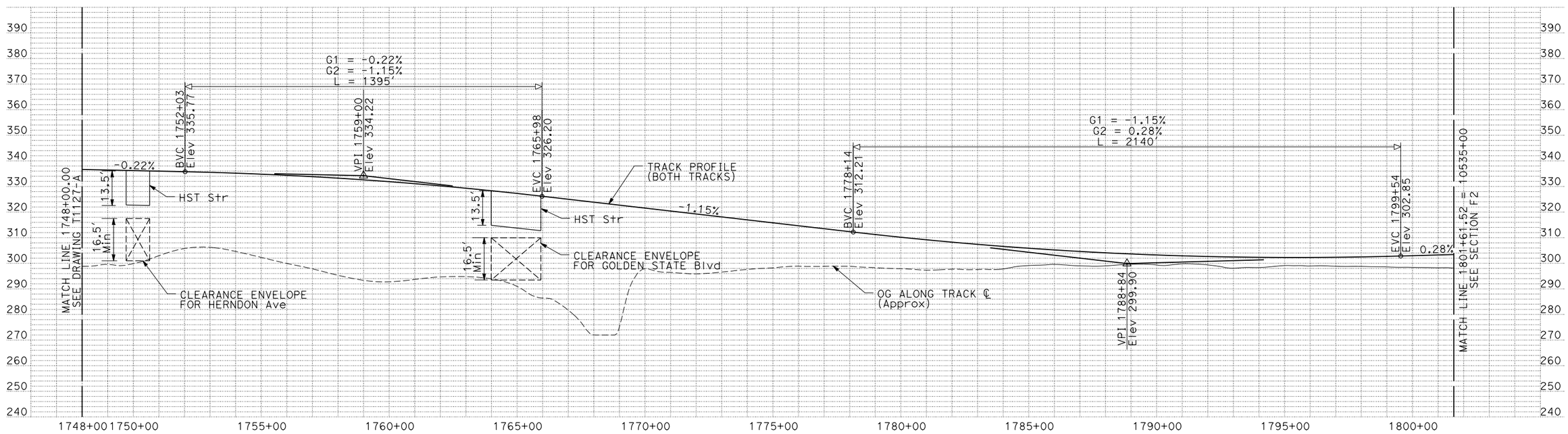
USERNAME => lwebster
DGN FILE => MF-T-1127-HYB-

NOTES:

1. ALL UTILITIES SHOWN ARE EXISTING UTILITY LINES BASED ON RECORD DRAWINGS AND ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY.
2. TRACKS CLOSER THAN 102 FT TO THE NEAREST EXISTING FREIGHT TRACKS WILL INCLUDE SAFETY BARRIERS, BERMS, OR WALLS AS REQUIRED.

PLAN

200 0 200 400
HORIZONTAL SCALE 1"=200'
20 0 20 40
VERTICAL SCALE 1"=20'



PROFILE

"SEE T3000-T3017 DRAWINGS FOR TYPICAL SECTION LIMITS AND DETAILS"

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY C. CHIU
DRAWN BY M. McKEON
CHECKED BY V. CHIO
IN CHARGE J. VALSECCHI
DATE MAY 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

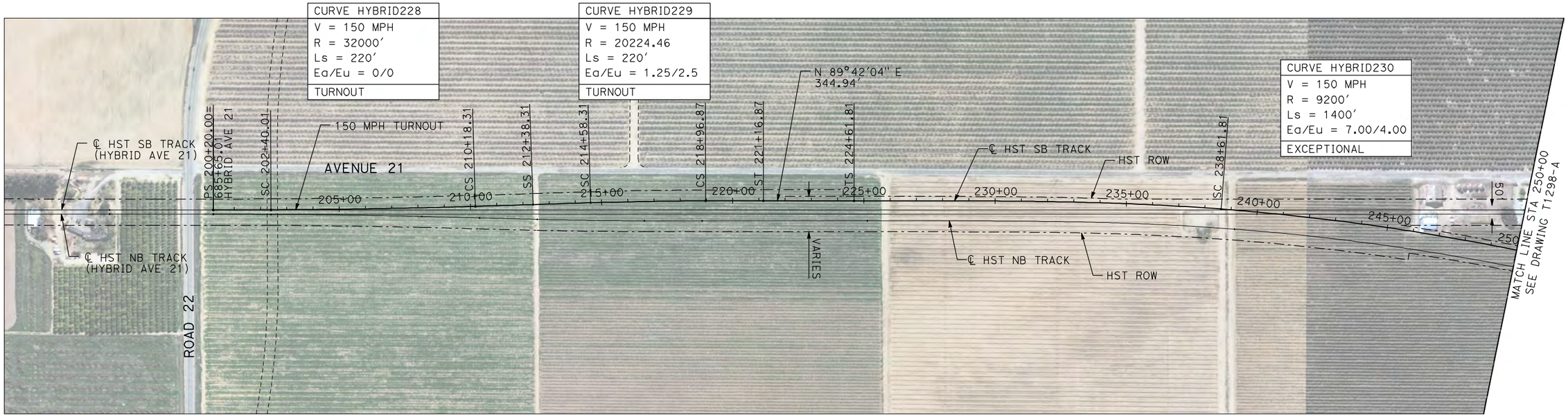
CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO

HYBRID

PLAN AND PROFILE
STA 1748+00 TO STA 1801+61.52

CONTRACT NO. HSR06-007
DRAWING NO. T1128-A
SCALE AS SHOWN
SHEET NO.

DATE PLOTTED => 05-JAN-2012
USERNAME => sleona



PLAN

NOTES:
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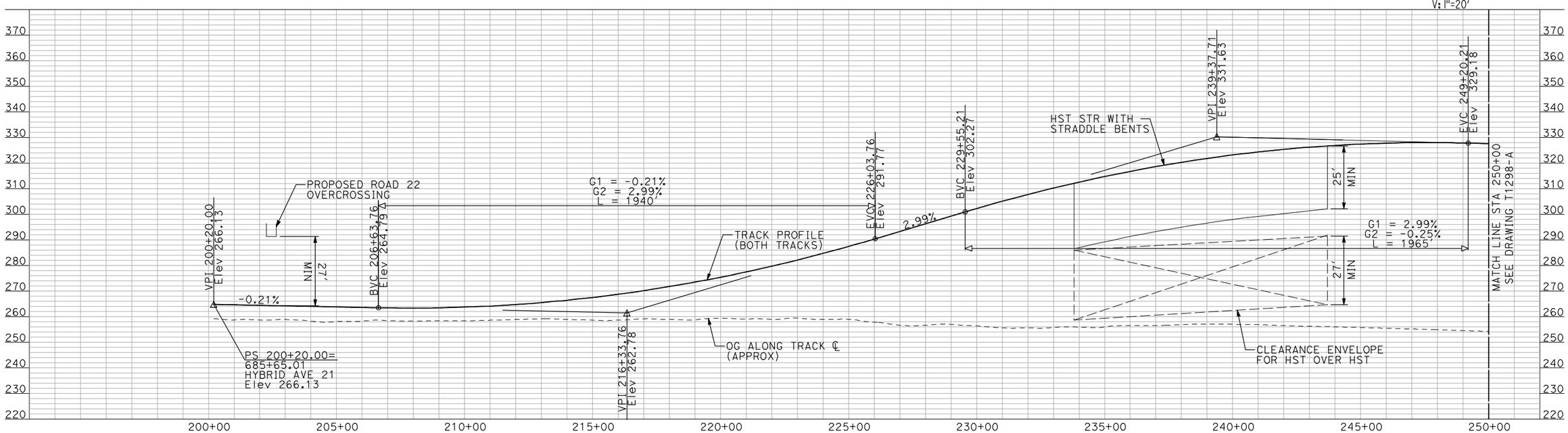
2. TRACKS CLOSER THAN 102 FT TO THE NEAREST EXISTING FREIGHT TRACKS WILL INCLUDE SAFETY BARRIERS, BERMS, OR WALLS AS REQUIRED.

200 0 200 400
H: 1"=200'

20 0 20 40
V: 1"=20'



PROFILE

"SEE T3000-T3017 DRAWINGS FOR TYPICAL SECTION LIMITS AND DETAILS"

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY A. SHIELDS
DRAWN BY H. SULLIVAN
CHECKED BY A. BOONE
IN CHARGE A. BOONE
DATE 07/20/2011

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
HYBRID - SB MERCED CONNECTION
AVENUE 21
PLAN AND PROFILE
STA 200+20 TO STA 250+00

CONTRACT NO. HSR06-007
DRAWING NO. T2197-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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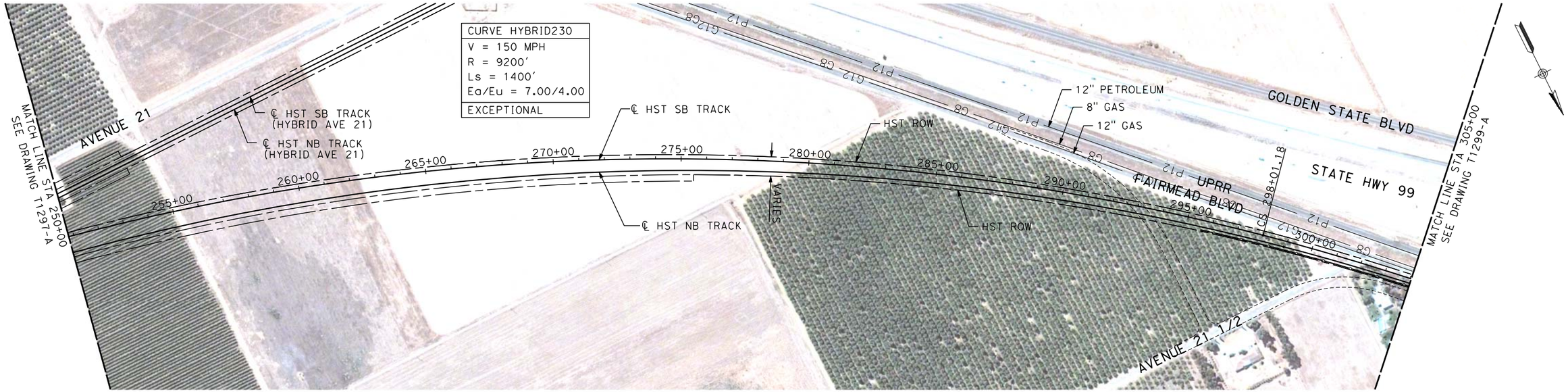

PLAN

NOTES:
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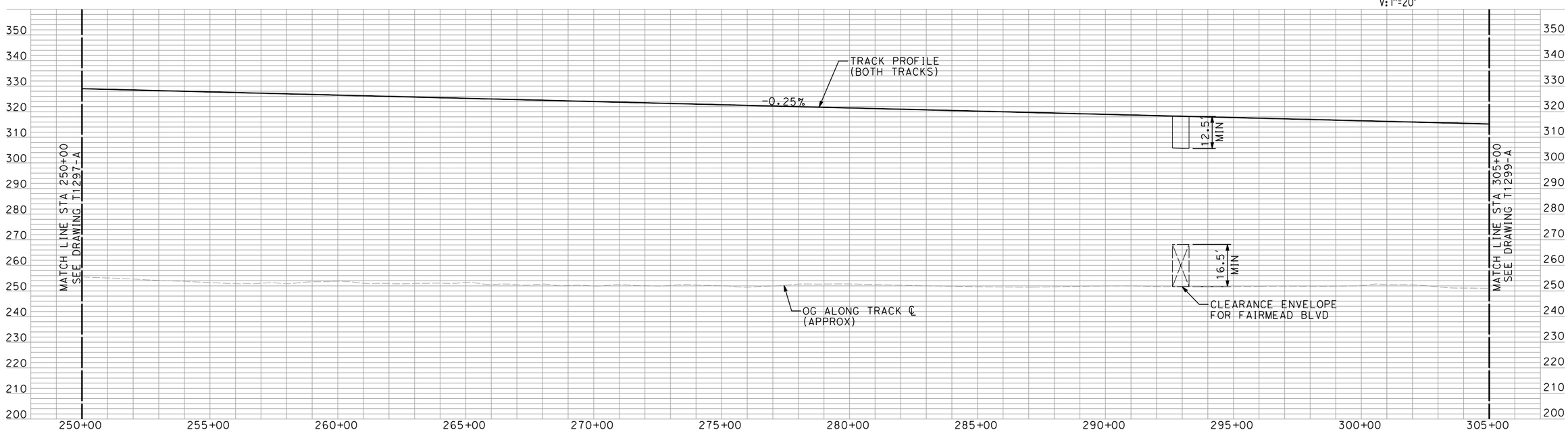
2. TRACKS CLOSER THAN 102 FT TO THE NEAREST EXISTING FREIGHT TRACKS WILL INCLUDE SAFETY BARRIERS, BERMS, OR WALLS AS REQUIRED.

200 0 200 400
H: 1"=200'

20 0 20 40
V: 1"=20'



PROFILE

"SEE T3000-T3017 DRAWINGS FOR TYPICAL SECTION LIMITS AND DETAILS"

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY A. SHIELDS
DRAWN BY H. SULLIVAN
CHECKED BY A. BOONE
IN CHARGE A. BOONE
DATE 07/27/2011

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
HYBRID - SB MERCED CONNECTION
AVENUE 21
PLAN AND PROFILE
STA 250+00 TO STA 305+00

CONTRACT NO. HSR06-007
DRAWING NO. T2198-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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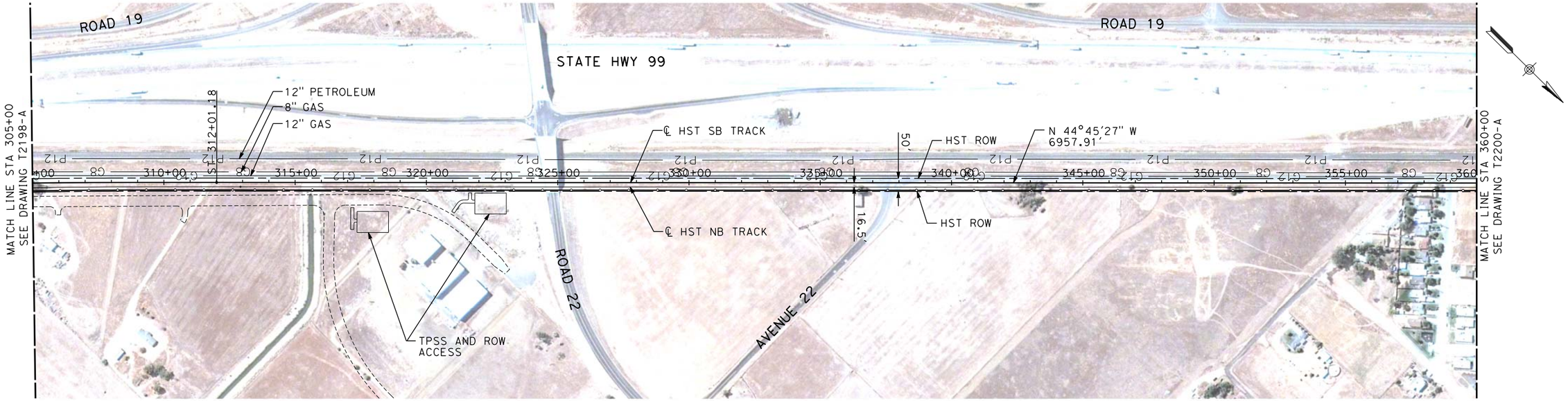

PLAN

NOTES:
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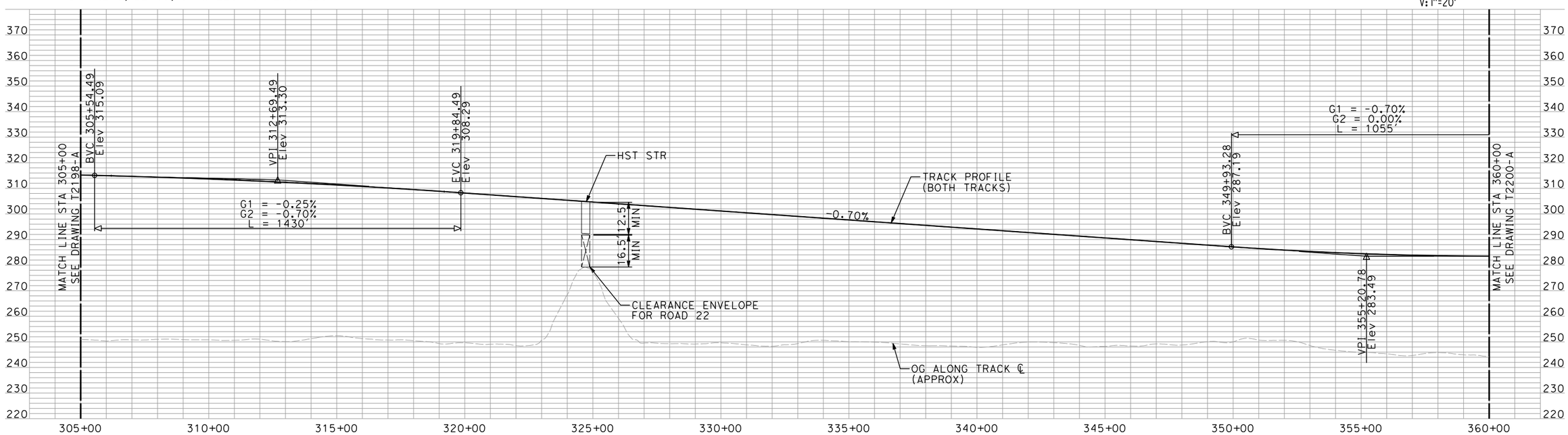
2. TRACKS CLOSER THAN 102 FT TO THE NEAREST EXISTING FREIGHT TRACKS WILL INCLUDE SAFETY BARRIERS, BERMS, OR WALLS AS REQUIRED.

200 0 200 400
H: 1"=200'

20 0 20 40
V: 1"=20'



PROFILE

"SEE T3000-T3017 DRAWINGS FOR TYPICAL SECTION LIMITS AND DETAILS"

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY A. SHIELDS
DRAWN BY H. SULLIVAN
CHECKED BY A. BOONE
IN CHARGE A. BOONE
DATE 07/27/2011

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
HYBRID - SB MERCED CONNECTION
AVENUE 21
PLAN AND PROFILE
STA 305+00 TO STA 360+00

CONTRACT NO. HSR06-007
DRAWING NO. T2199-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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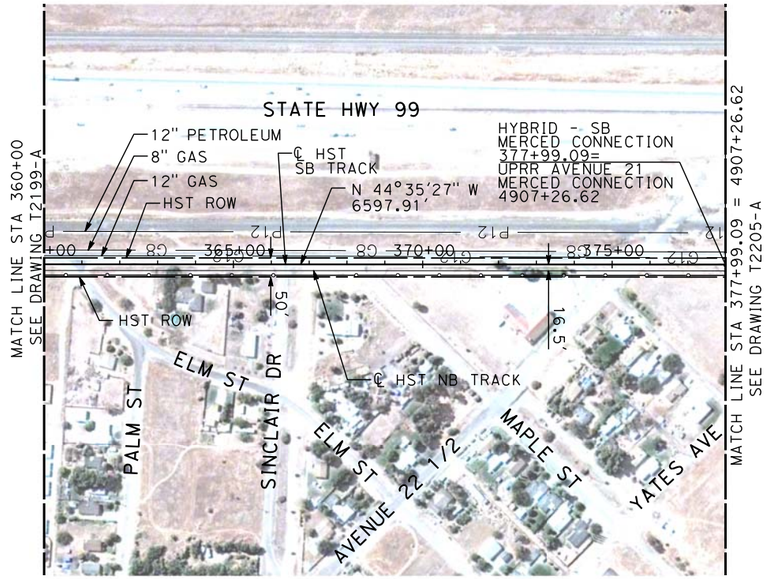

NOTES:
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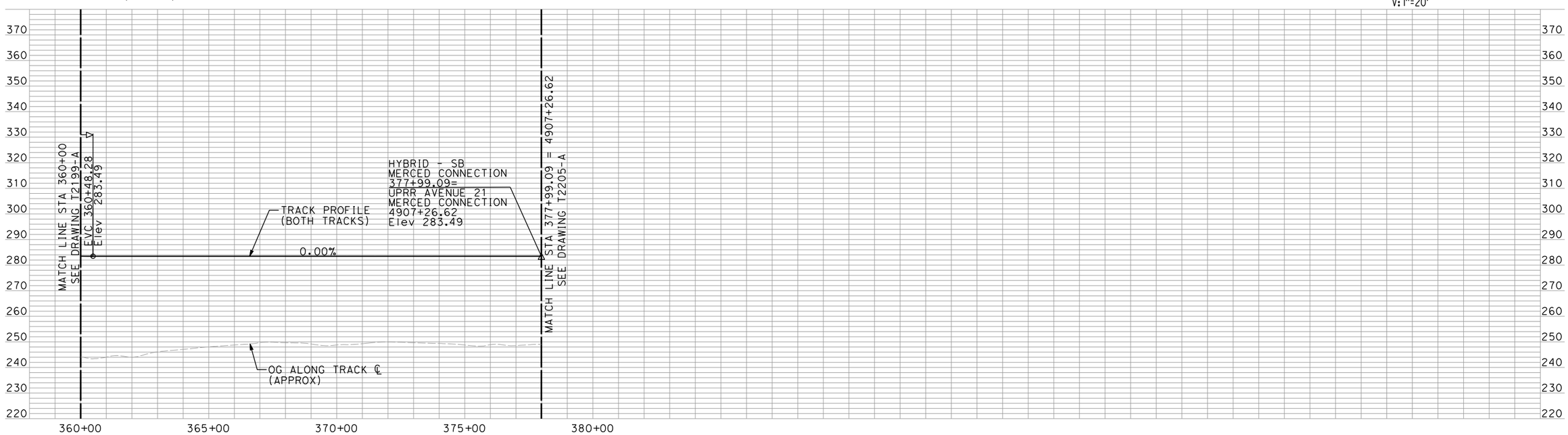
2. TRACKS CLOSER THAN 102 FT TO THE NEAREST EXISTING FREIGHT TRACKS WILL INCLUDE SAFETY BARRIERS, BERMS, OR WALLS AS REQUIRED.

PLAN

200 0 200 400
H: 1"=200'

20 0 20 40
V: 1"=20'



PROFILE

"SEE T3000-T3017 DRAWINGS FOR TYPICAL SECTION LIMITS AND DETAILS"

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY A. SHIELDS
DRAWN BY H. SULLIVAN
CHECKED BY A. BOONE
IN CHARGE A. BOONE
DATE 07/27/2011

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
HYBRID - SB MERCED CONNECTION
AVENUE 21
PLAN AND PROFILE
STA 360+00 TO STA 377+99.09

CONTRACT NO. HSR06-007
DRAWING NO. T2200-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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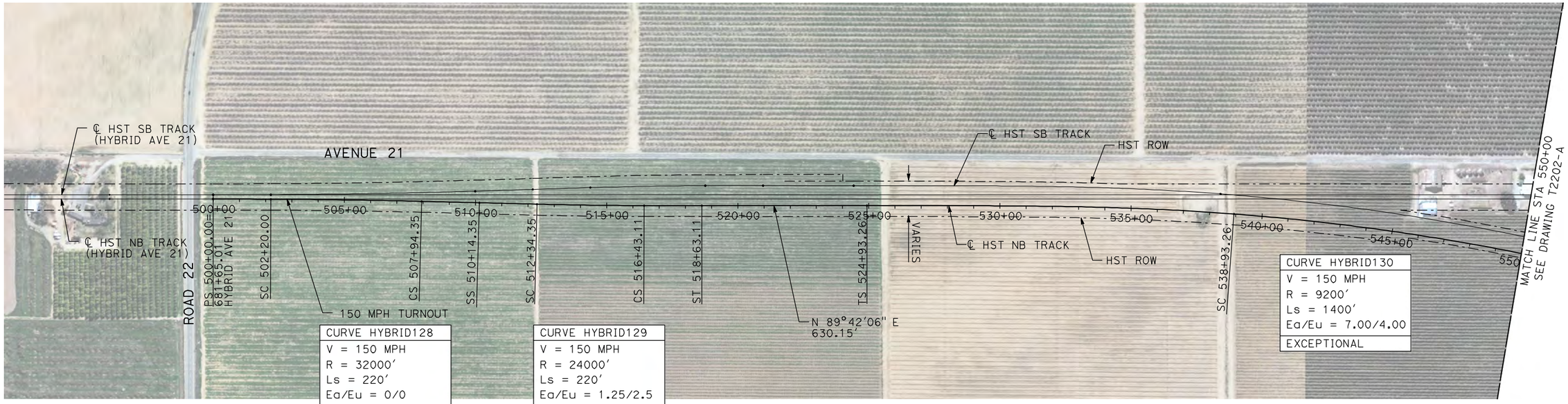

NOTES:
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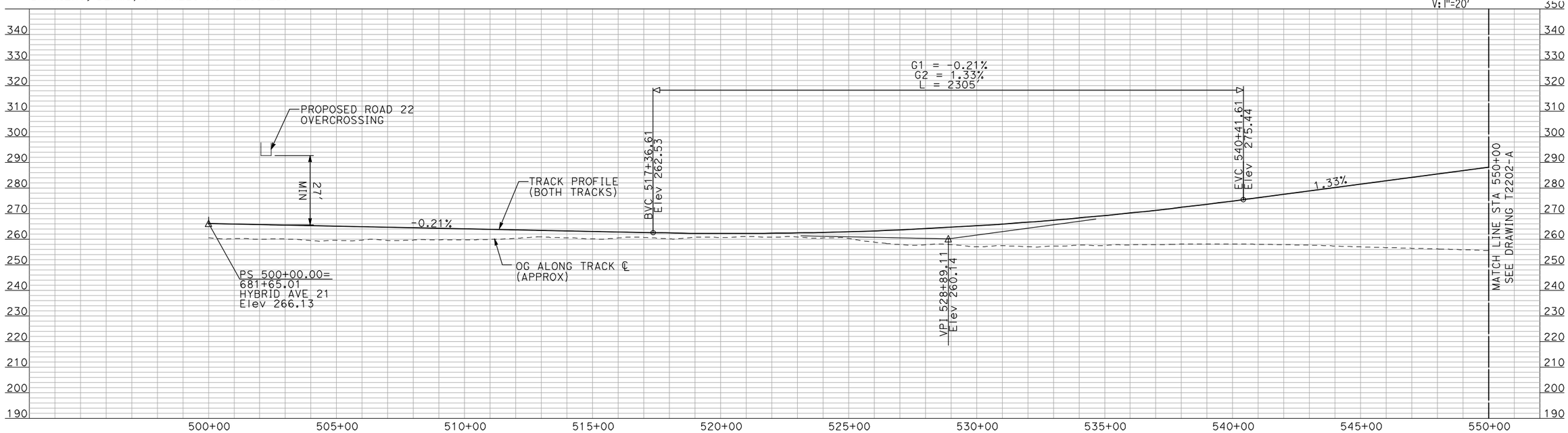
2. TRACKS CLOSER THAN 102 FT TO THE NEAREST EXISTING FREIGHT TRACKS WILL INCLUDE SAFETY BARRIERS, BERMS, OR WALLS AS REQUIRED.

PLAN

200 0 200 400
H: 1"=200'

20 0 20 40
V: 1"=20'



PROFILE

"SEE T3000-T3017 DRAWINGS FOR TYPICAL SECTION LIMITS AND DETAILS"

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY A. SHIELDS
DRAWN BY H. SULLIVAN
CHECKED BY A. BOONE
IN CHARGE A. BOONE
DATE 07/20/2011

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
HYBRID - NB MERCED CONNECTION
AVENUE 21
PLAN AND PROFILE
STA 500+00 TO STA 550+00

CONTRACT NO. HSR06-007
DRAWING NO. T2201-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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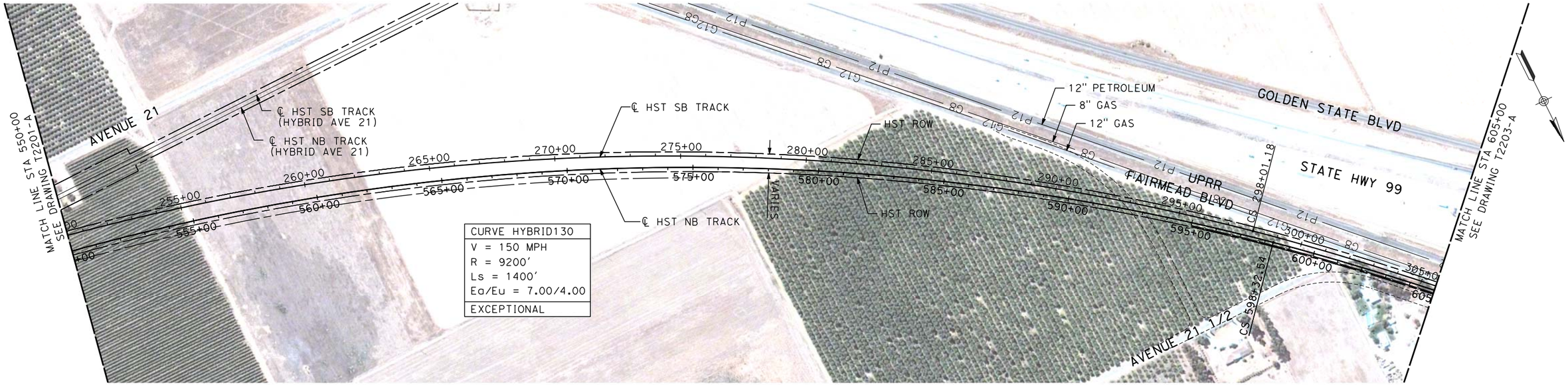

PLAN

NOTES:
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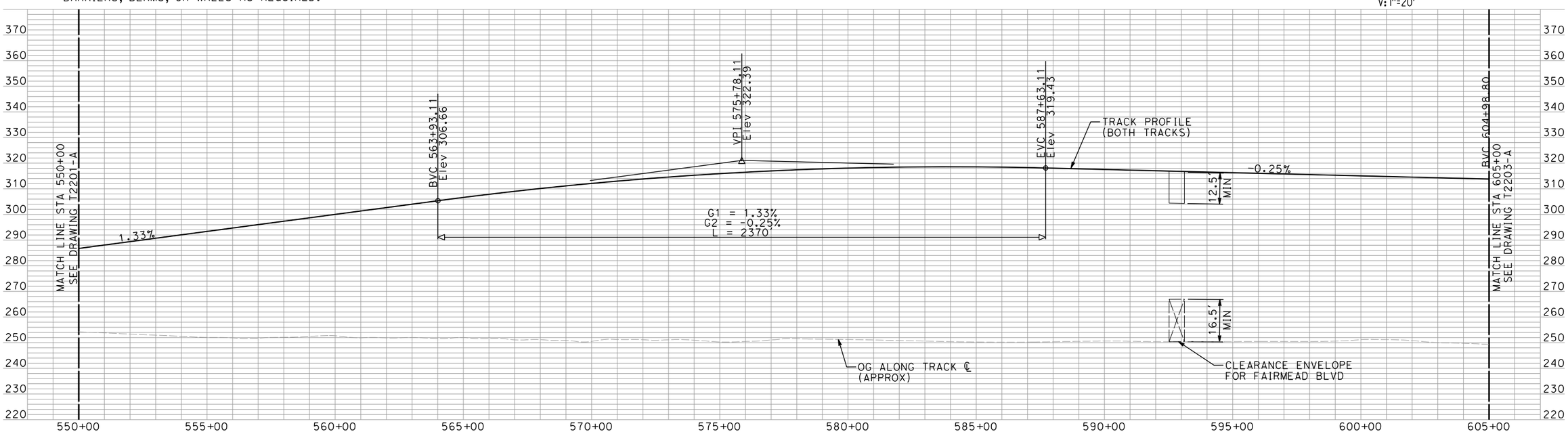
2. TRACKS CLOSER THAN 102 FT TO THE NEAREST EXISTING FREIGHT TRACKS WILL INCLUDE SAFETY BARRIERS, BERMS, OR WALLS AS REQUIRED.

200 0 200 400
H: 1"=200'

20 0 20 40
V: 1"=20'



PROFILE

"SEE T3000-T3017 DRAWINGS FOR TYPICAL SECTION LIMITS AND DETAILS"

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY A. SHIELDS
DRAWN BY H. SULLIVAN
CHECKED BY A. BOONE
IN CHARGE A. BOONE
DATE 07/27/2011

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
HYBRID - NB MERCED CONNECTION
AVENUE 21
PLAN AND PROFILE
STA 550+00 TO STA 605+00

CONTRACT NO. HSR06-007
DRAWING NO. T2202-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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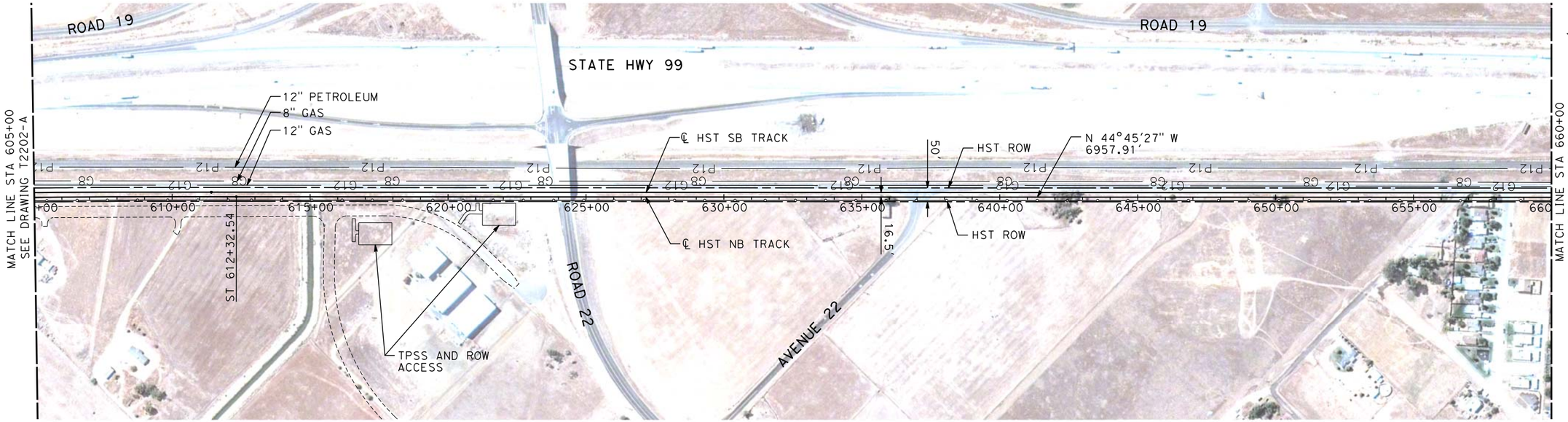

PLAN

NOTES:
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2. TRACKS CLOSER THAN 102 FT TO THE NEAREST EXISTING FREIGHT TRACKS WILL INCLUDE SAFETY BARRIERS, BERMS, OR WALLS AS REQUIRED.

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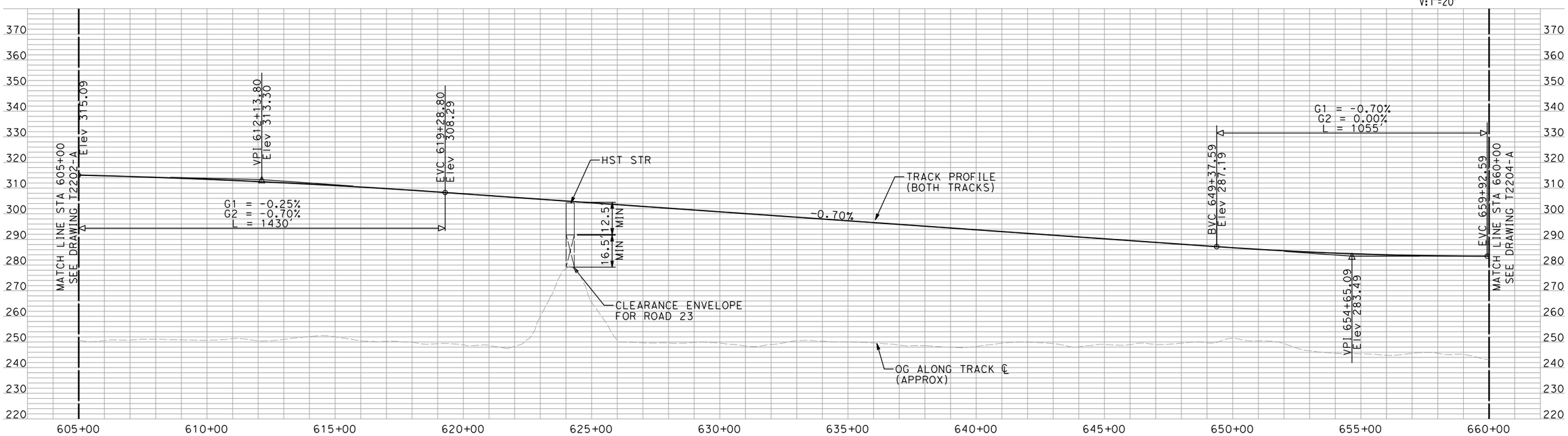
H: 1"=200'

20 0 20 40
V: 1"=20'



PROFILE

"SEE T3000-T3017 DRAWINGS FOR TYPICAL SECTION LIMITS AND DETAILS"

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY A. SHIELDS
DRAWN BY H. SULLIVAN
CHECKED BY A. BOONE
IN CHARGE A. BOONE
DATE 07/27/2011

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
HYBRID - NB MERCED CONNECTION
AVENUE 21
PLAN AND PROFILE
STA 605+00 TO STA 660+00

CONTRACT NO. HSR06-007
DRAWING NO. T2203-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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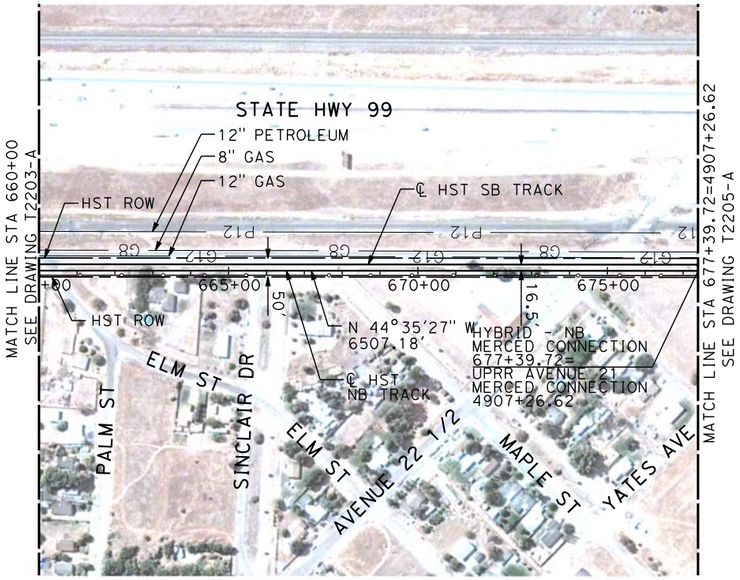

NOTES:
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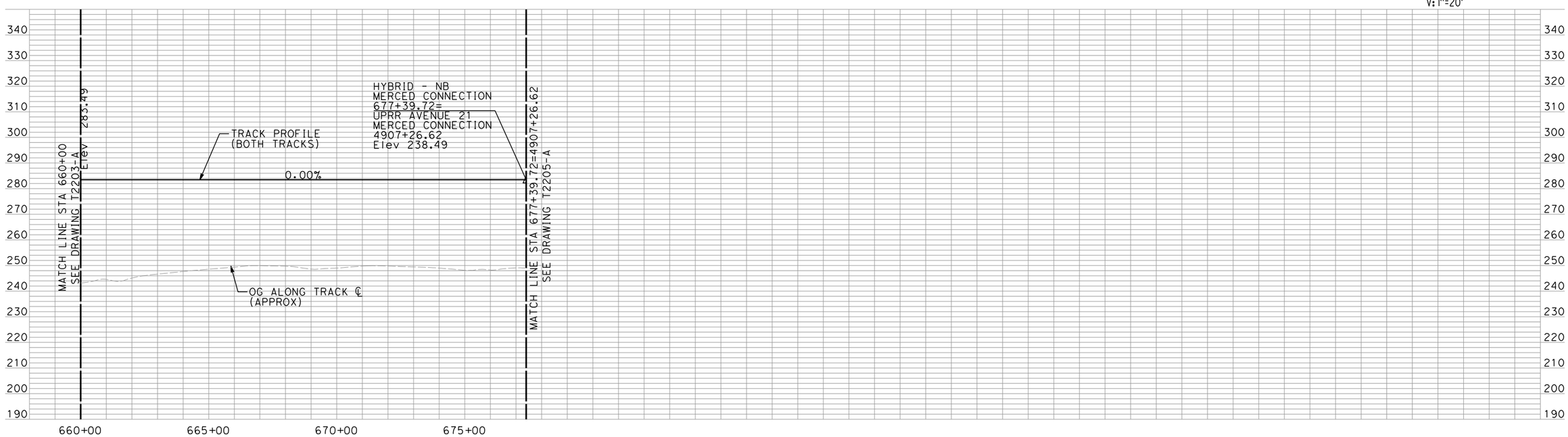
PLAN

200 0 200 400
H: 1"=200'

20 0 20 40
V: 1"=20'



PROFILE

"SEE T3000-T3017 DRAWINGS FOR TYPICAL SECTION LIMITS AND DETAILS"

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY A. SHIELDS
DRAWN BY H. SULLIVAN
CHECKED BY A. BOONE
IN CHARGE A. BOONE
DATE 07/27/2011

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
HYBRID - NB MERCED CONNECTION
AVENUE 21
PLAN AND PROFILE
STA 660+00 TO STA 677+39.72

CONTRACT NO. HSR06-007
DRAWING NO. T2204-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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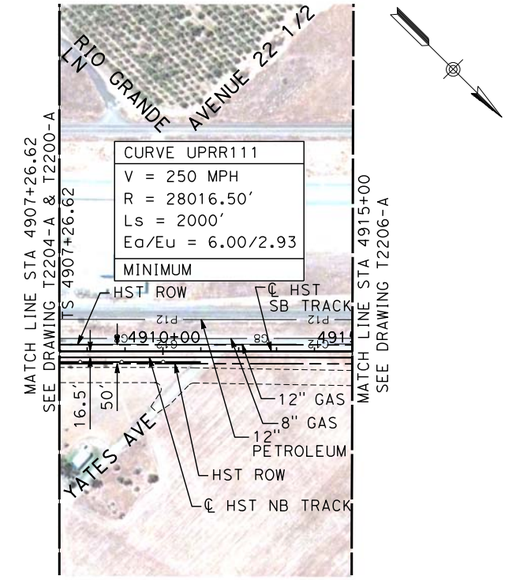
shieldsa

NOTES:
1. ALL UTILITIES SHOWN ARE EXISTING UTILITY LINES BASED ON RECORD DRAWINGS AND ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY.
2. TRACKS CLOSER THAN 102 FT TO THE NEAREST EXISTING FREIGHT TRACKS WILL INCLUDE SAFETY BARRIERS, BERMS, OR WALLS AS REQUIRED.

PLAN

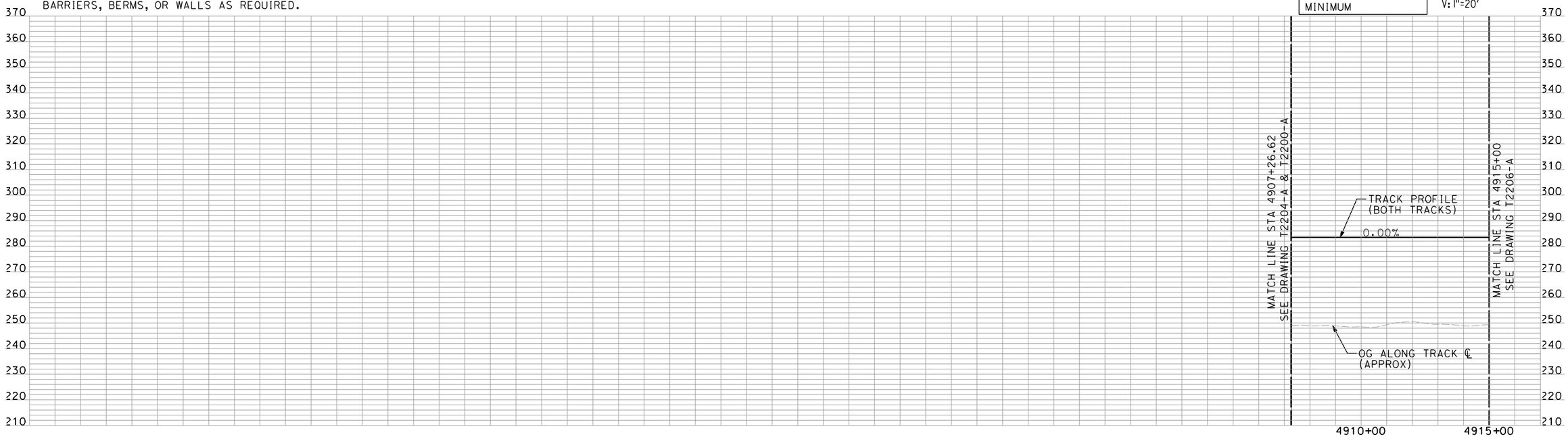


CURVE UPRR211
V = 250 MPH
R = 28000'
Ls = 2000'
Ea/Eu = 6.00/2.93
MINIMUM

200 0 200 400
H: 1"=200'

20 0 20 40
V: 1"=20'

PROFILE



"SEE T3000-T3017 DRAWINGS FOR TYPICAL SECTION LIMITS AND DETAILS"

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY A. SHIELDS
DRAWN BY H. SULLIVAN
CHECKED BY A. BOONE
IN CHARGE A. BOONE
DATE 07/27/2011

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/SR 99 MERCED CONNECTION
AVENUE 21
PLAN AND PROFILE
STA 4907+26.62 TO STA 4915+00

CONTRACT NO. HSR06-007
DRAWING NO. T2205-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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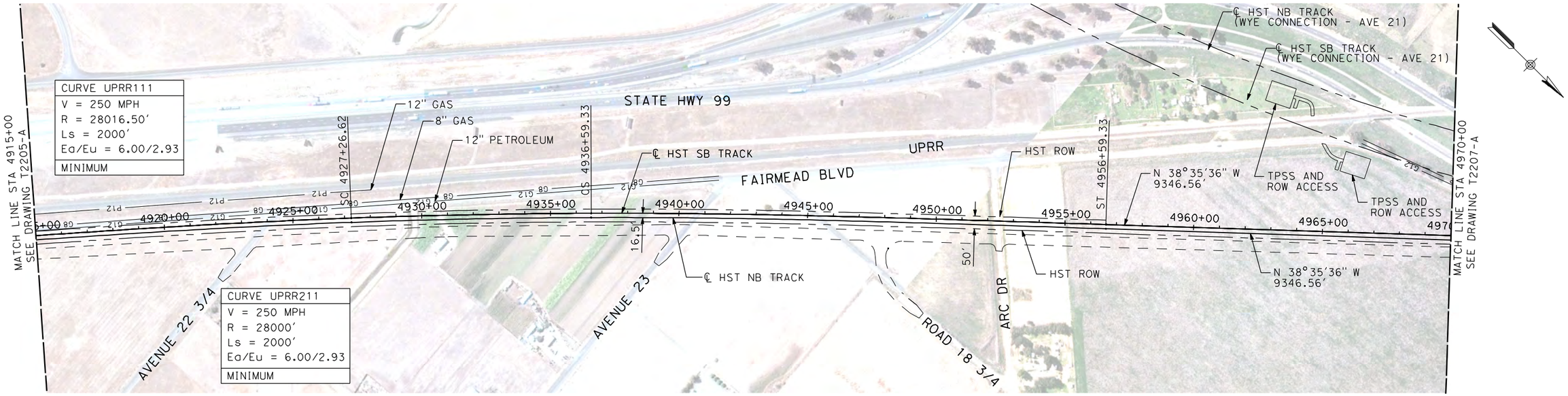
shieldsa



NOTES:

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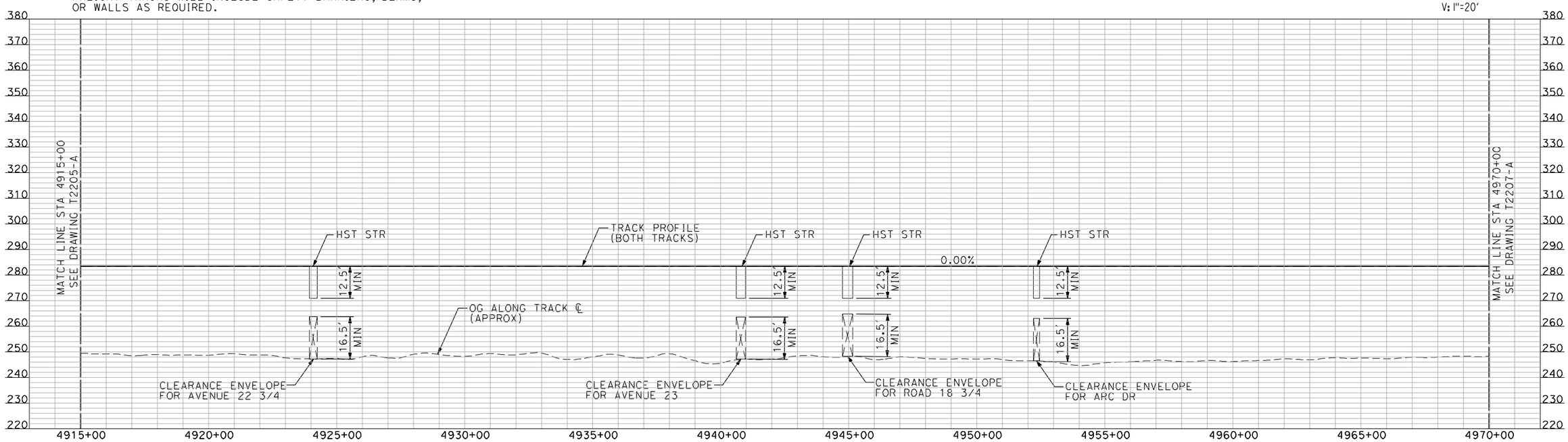
PLAN

200 0 200 400
H: 1"=200'

20 0 20 40
V: 1"=20'



PROFILE

"SEE T3000-T3017 DRAWINGS FOR TYPICAL SECTION LIMITS AND DETAILS"

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY A. SHIELDS
DRAWN BY H. SULLIVAN
CHECKED BY A. BOONE
IN CHARGE A. BOONE
DATE 07/20/2011

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/SR 99 MERCED CONNECTION
AVENUE 21
PLAN AND PROFILE
STA 4915+00 TO STA 4970+00

CONTRACT NO. HSR06-007
DRAWING NO. T2206-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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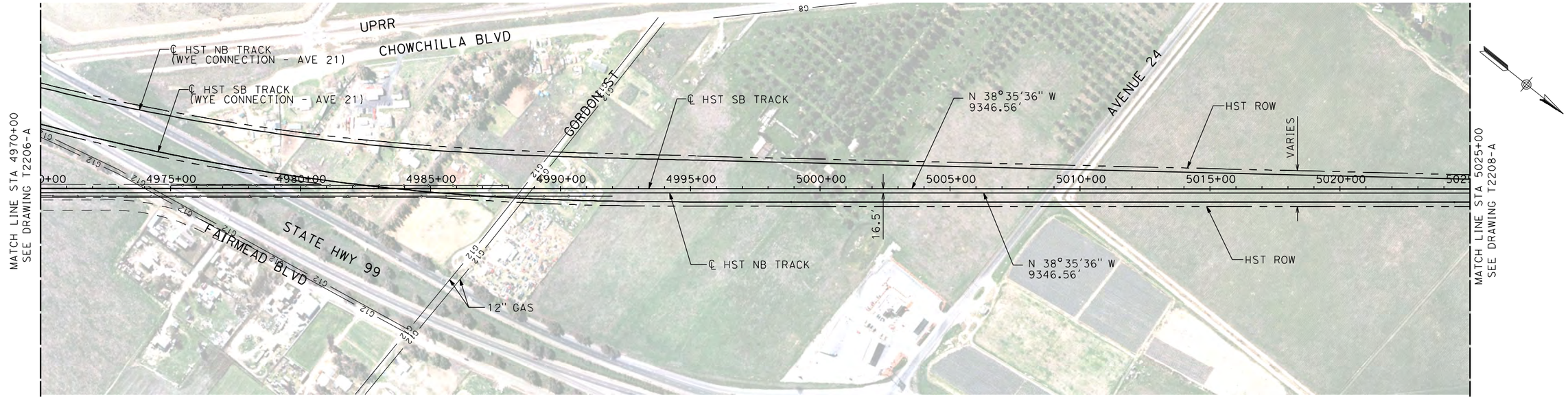

NOTES:

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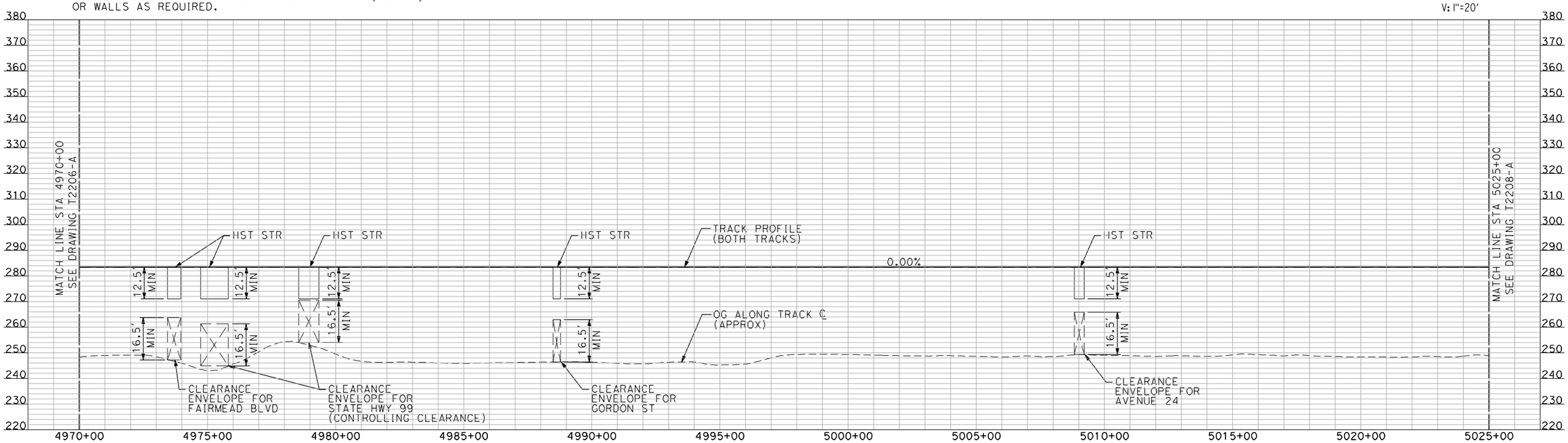
2. TRACKS CLOSER THAN 102 FT TO THE NEAREST EXISTING FREIGHT TRACKS WILL INCLUDE SAFETY BARRIERS, BERMS, OR WALLS AS REQUIRED.

PLAN

200 0 200 400
H: 1"=200'

20 0 20 40
V: 1"=20'



PROFILE

"SEE T3000-T3017 DRAWINGS FOR TYPICAL SECTION LIMITS AND DETAILS"

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY A. SHIELDS
DRAWN BY H. SULLIVAN
CHECKED BY A. BOONE
IN CHARGE A. BOONE
DATE 07/20/2011

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/SR 99 MERCED CONNECTION

PLAN AND PROFILE
STA 4970+00 TO STA 5025+00

CONTRACT NO. HSR06-007
DRAWING NO. T2207-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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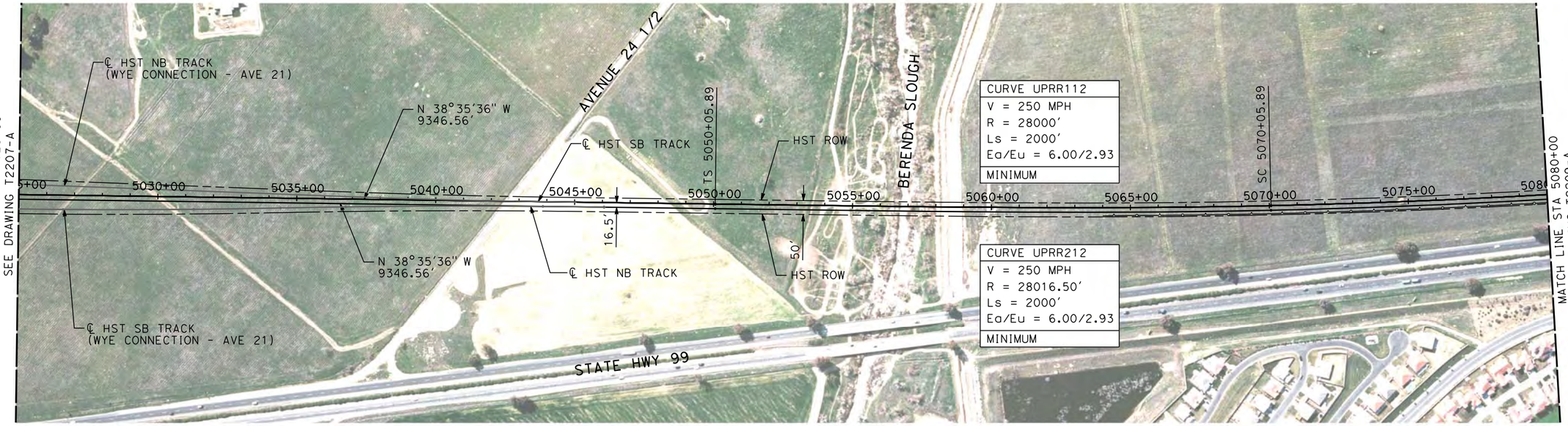

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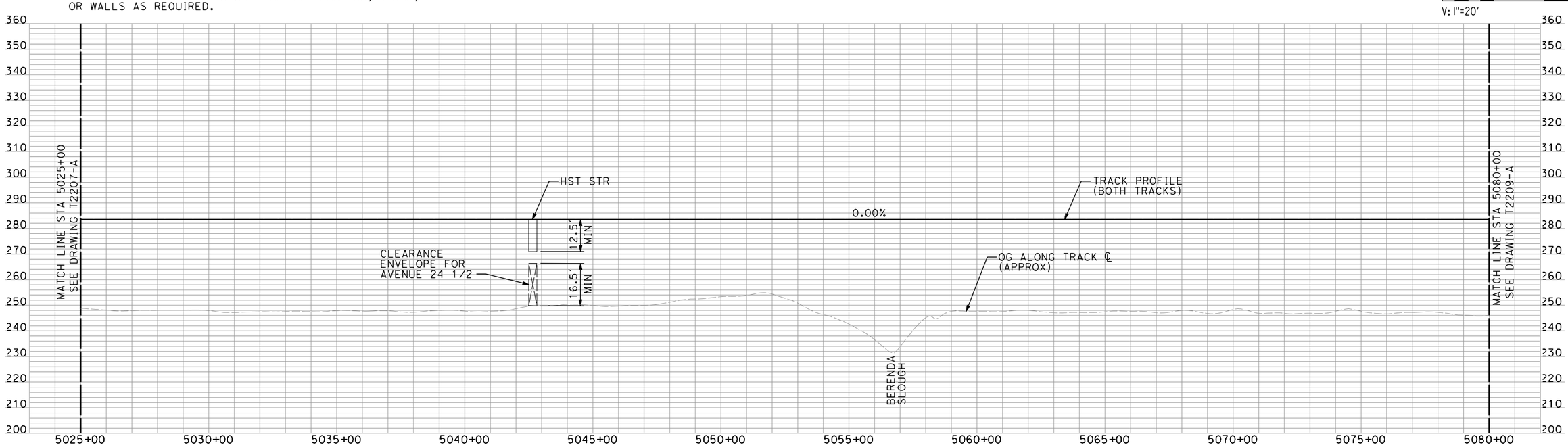
PLAN

200 0 200 400
H: 1"=200'

20 0 20 40
V: 1"=20'



PROFILE

"SEE T3000-T3017 DRAWINGS FOR TYPICAL SECTION LIMITS AND DETAILS"

REV	DATE	BY	CHK	APP	DESCRIPTION
1	02/17/12	AS			NOISE BARRIER LIMITS

DESIGNED BY A. SHIELDS
DRAWN BY H. SULLIVAN
CHECKED BY A. BOONE
IN CHARGE A. BOONE
DATE 07/27/2011

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/SR 99 MERCED CONNECTION

PLAN AND PROFILE
STA 5025+00 TO STA 5080+00

CONTRACT NO. HSR06-007
DRAWING NO. T2208-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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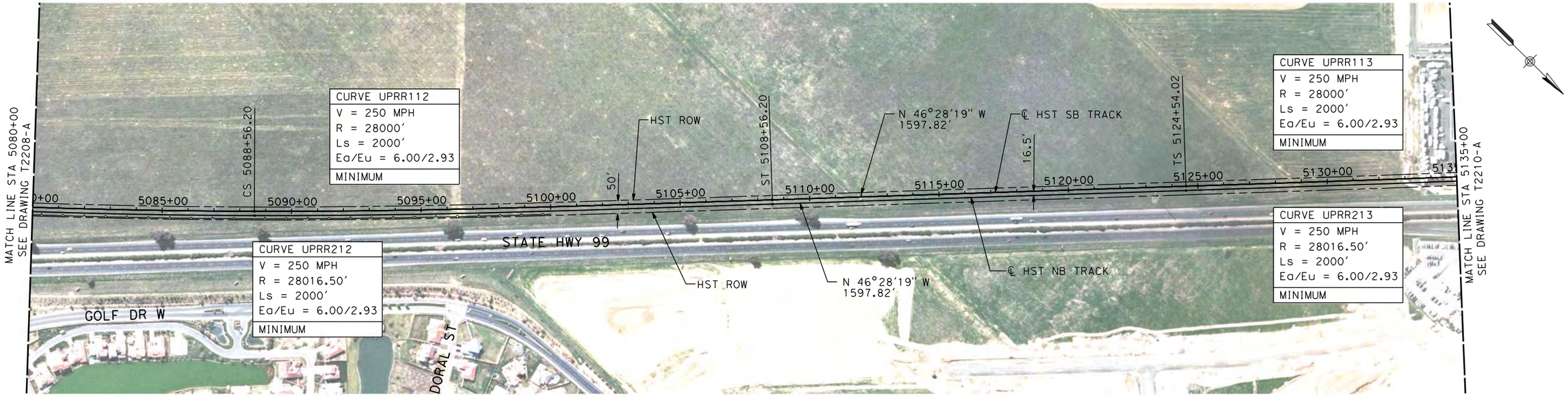
shieldsa



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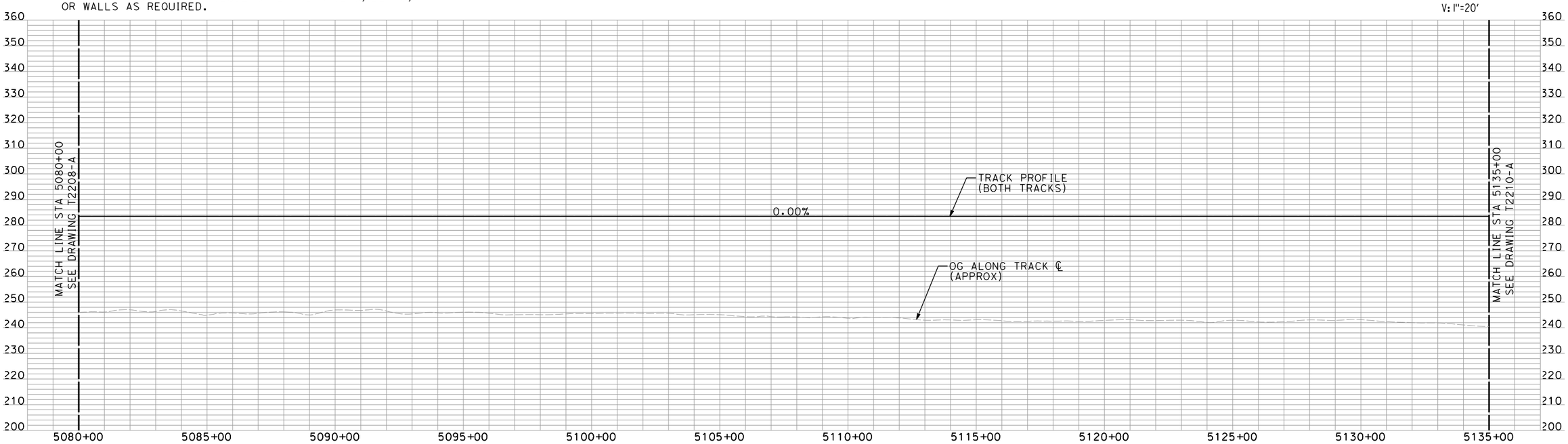
PLAN

200 0 200 400
H: 1"=200'

20 0 20 40
V: 1"=20'



PROFILE

"SEE T3000-T3017 DRAWINGS FOR TYPICAL SECTION LIMITS AND DETAILS"

REV	DATE	BY	CHK	APP	DESCRIPTION
1	02/17/12	AS			NOISE BARRIER LIMITS

DESIGNED BY A. SHIELDS
DRAWN BY H. SULLIVAN
CHECKED BY A. BOONE
IN CHARGE A. BOONE
DATE 07/27/2011

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/SR 99 MERCED CONNECTION

PLAN AND PROFILE
STA 5080+00 TO STA 5135+00

CONTRACT NO. HSR06-007
DRAWING NO. T2209-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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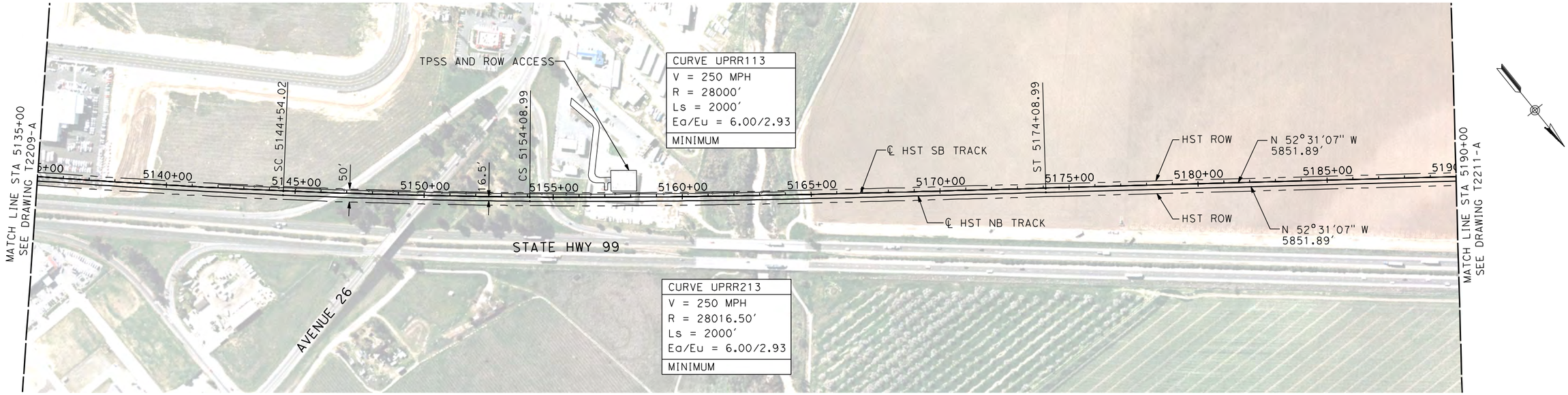

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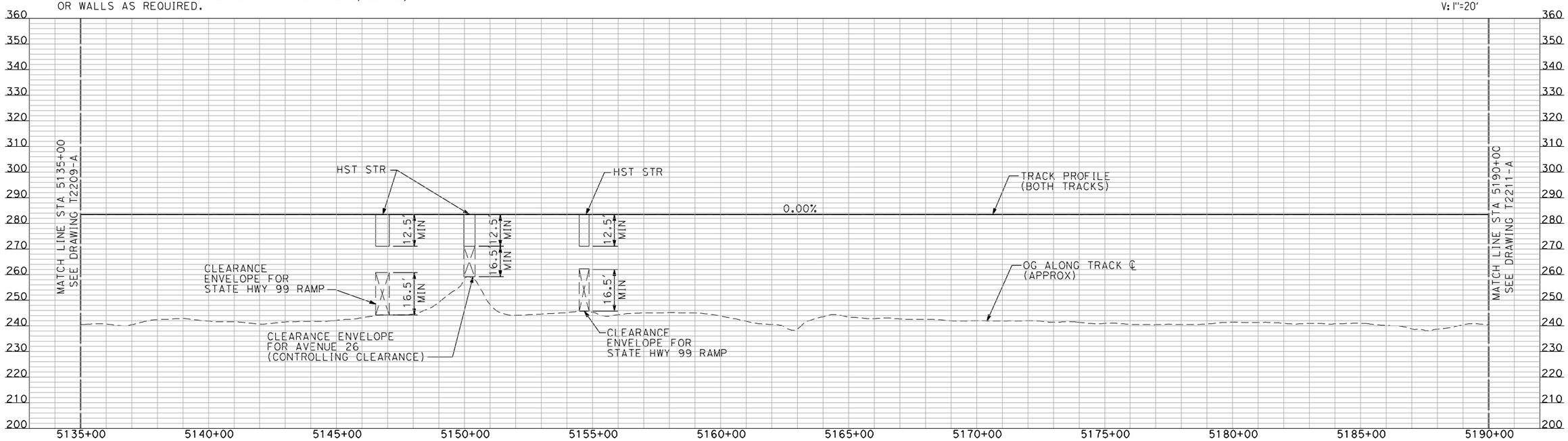
PLAN

200 0 200 400
H: 1"=200'

20 0 20 40
V: 1"=20'



PROFILE

"SEE T3000-T3017 DRAWINGS FOR TYPICAL SECTION LIMITS AND DETAILS"

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY A. SHIELDS
DRAWN BY H. SULLIVAN
CHECKED BY A. BOONE
IN CHARGE A. BOONE
DATE 07/20/2011

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/SR 99 MERCED CONNECTION

PLAN AND PROFILE
STA 5135+00 TO STA 5190+00

CONTRACT NO. HSR06-007
DRAWING NO. T2210-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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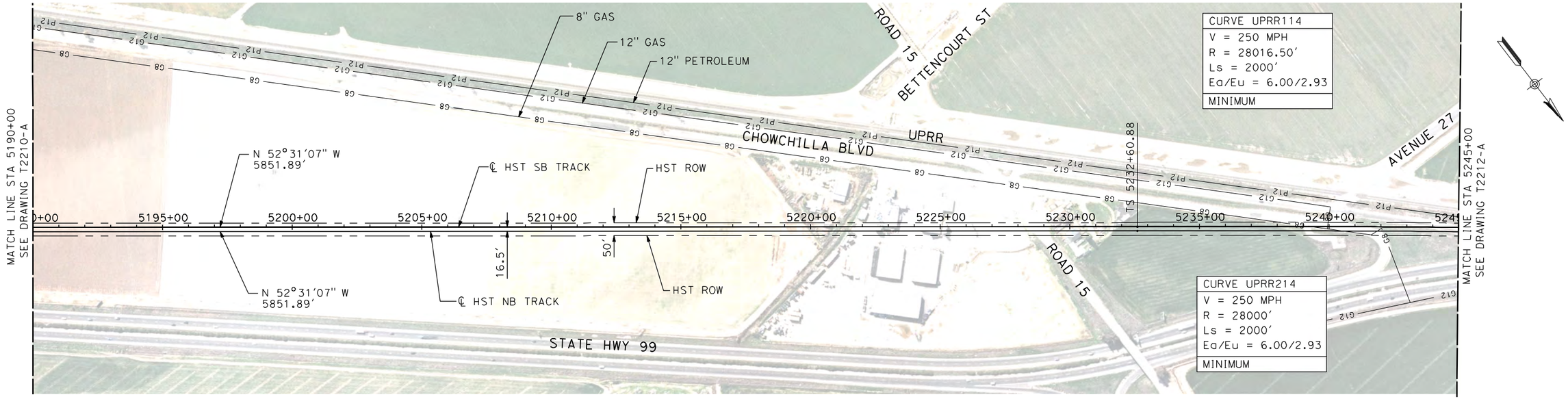

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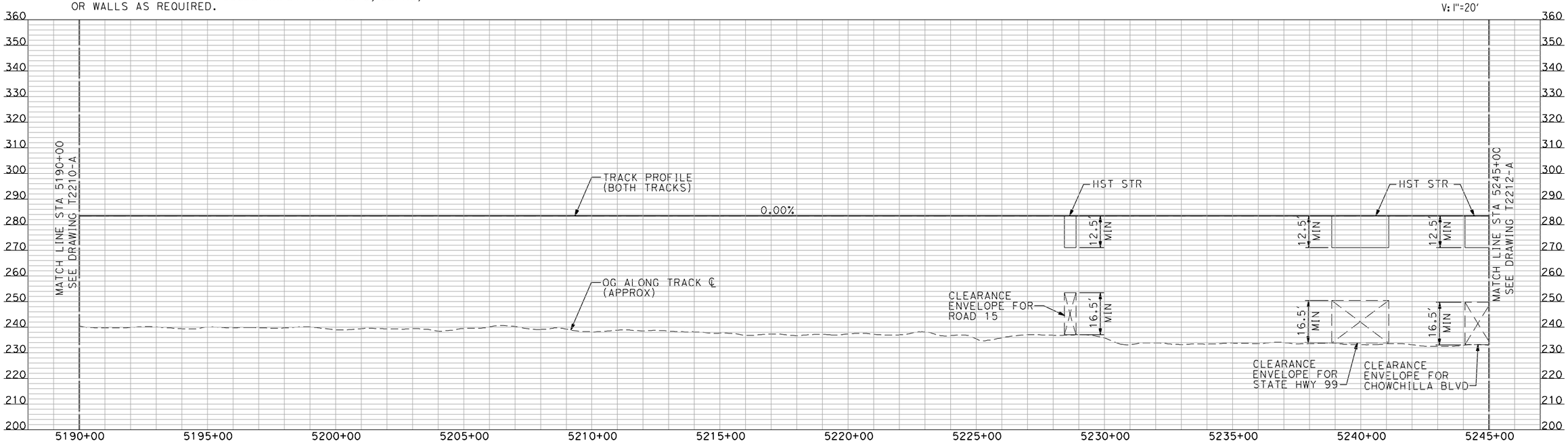
PLAN

200 0 200 400
H: 1"=200'

20 0 20 40
V: 1"=20'



PROFILE

"SEE T3000-T3017 DRAWINGS FOR TYPICAL SECTION LIMITS AND DETAILS"

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY A. SHIELDS
DRAWN BY H. SULLIVAN
CHECKED BY A. BOONE
IN CHARGE A. BOONE
DATE 07/20/2011

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/SR 99 MERCED CONNECTION

PLAN AND PROFILE
STA 5190+00 TO STA 5245+00

CONTRACT NO. HSR06-007
DRAWING NO. T2211-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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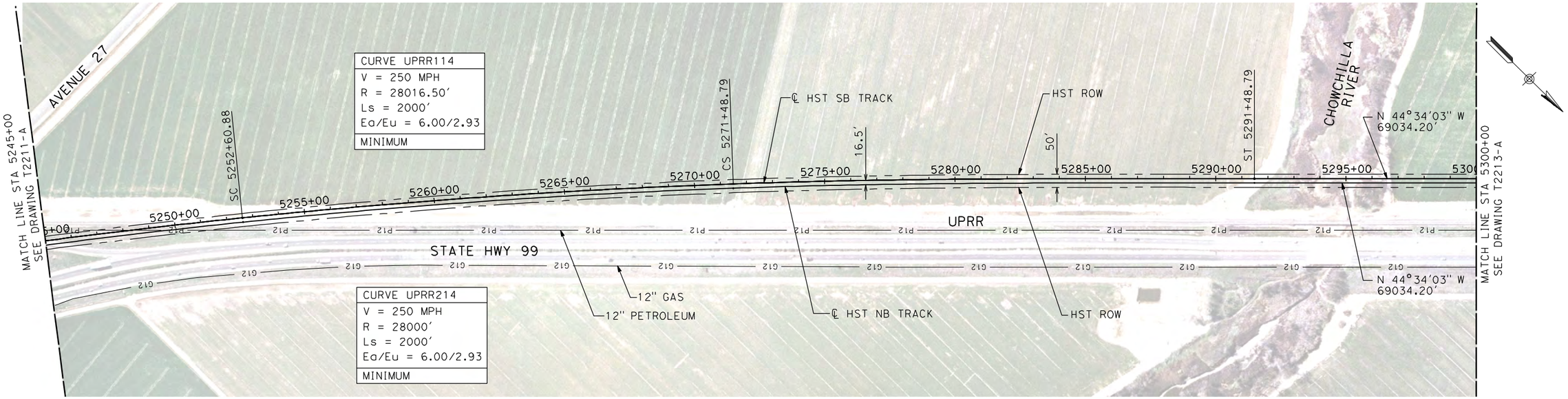

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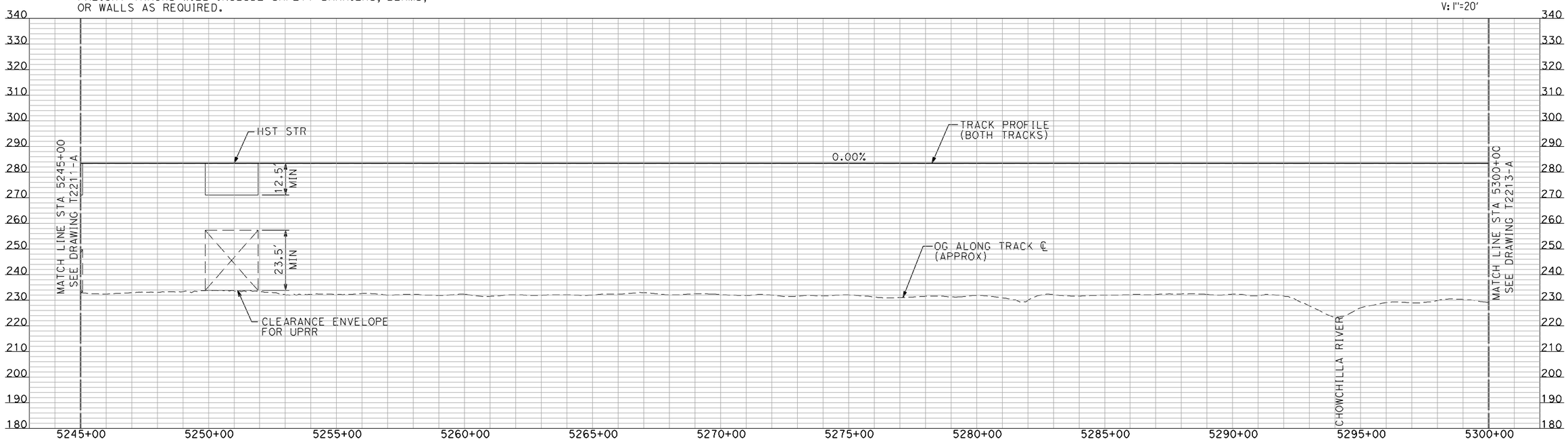
PLAN

200 0 200 400
H: 1"=200'

20 0 20 40
V: 1"=20'



PROFILE

"SEE T3000-T3017 DRAWINGS FOR TYPICAL SECTION LIMITS AND DETAILS"

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY A. SHIELDS
DRAWN BY H. SULLIVAN
CHECKED BY A. BOONE
IN CHARGE A. BOONE
DATE 07/20/2011

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/SR 99 MERCED CONNECTION

PLAN AND PROFILE
STA 5245+00 TO STA 5300+00

CONTRACT NO. HSR06-007
DRAWING NO. T2212-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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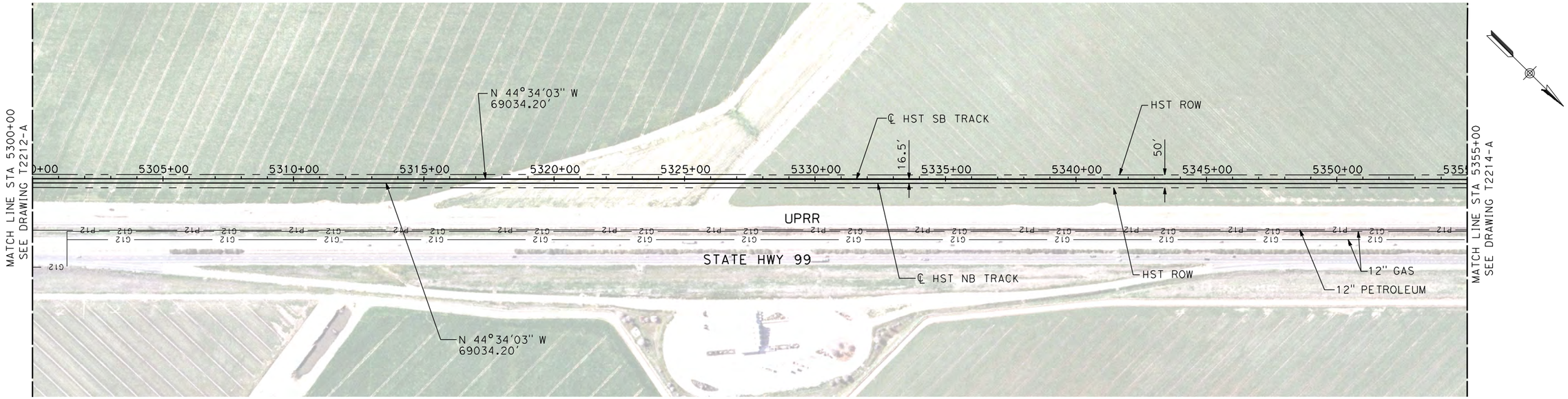

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PLAN

200 0 200 400
H: 1"=200'

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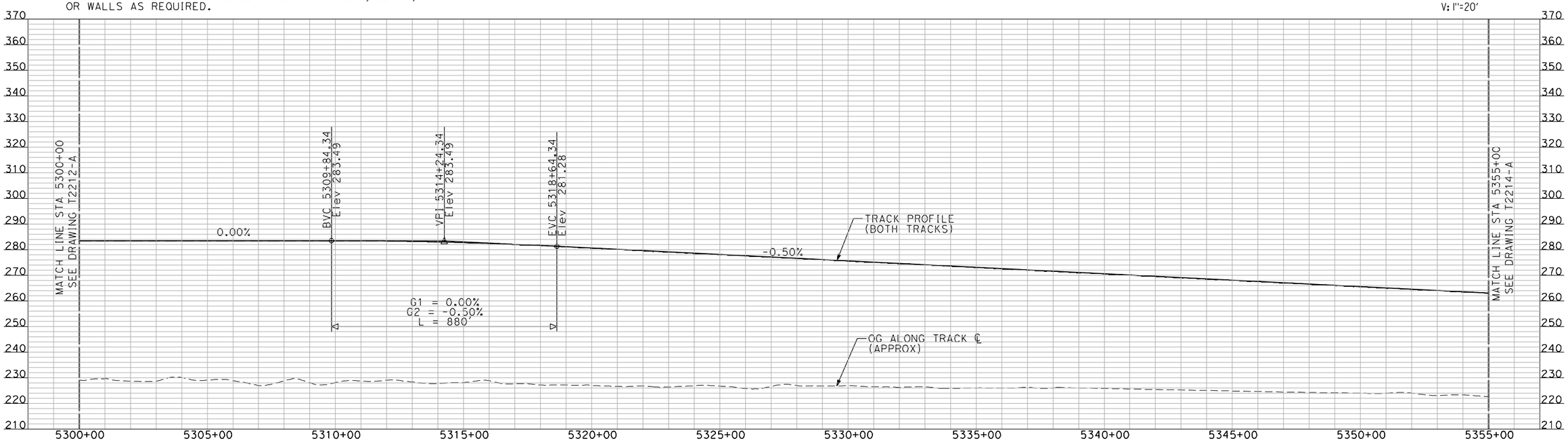
V: 1"=20'



PROFILE

"SEE T3000-T3017 DRAWINGS FOR TYPICAL SECTION LIMITS AND DETAILS"

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY A. SHIELDS
DRAWN BY H. SULLIVAN
CHECKED BY A. BOONE
IN CHARGE A. BOONE
DATE 07/20/2011

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/SR 99 MERCED CONNECTION

PLAN AND PROFILE
STA 5300+00 TO STA 5355+00

CONTRACT NO. HSR06-007
DRAWING NO. T2213-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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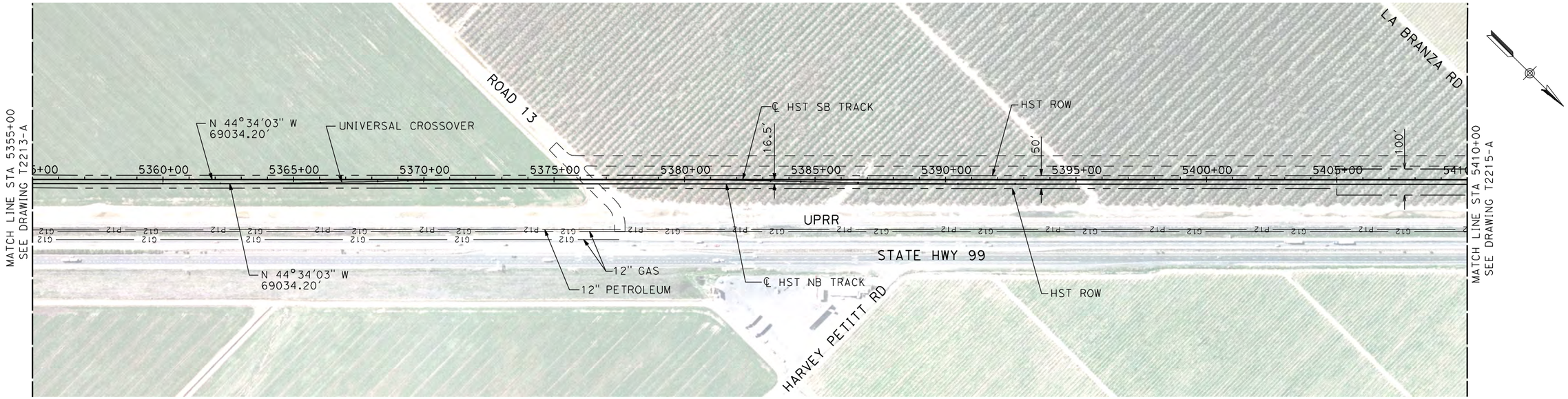

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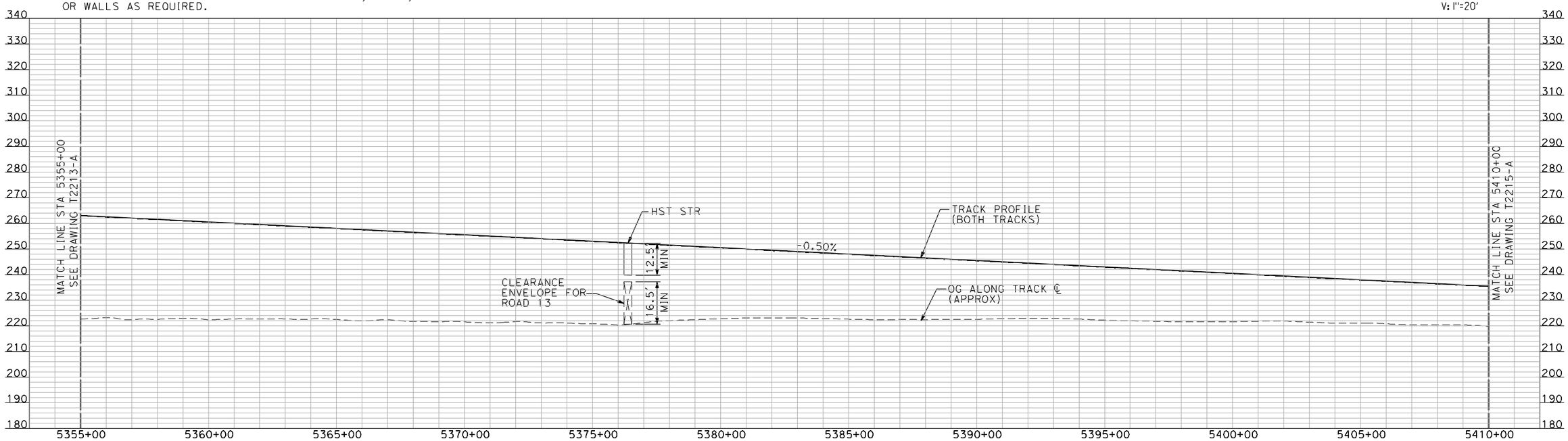
PLAN

200 0 200 400
H: 1"=200'

20 0 20 40
V: 1"=20'



PROFILE

"SEE T3000-T3017 DRAWINGS FOR TYPICAL SECTION LIMITS AND DETAILS"

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY A. SHIELDS
DRAWN BY H. SULLIVAN
CHECKED BY A. BOONE
IN CHARGE A. BOONE
DATE 07/20/2011

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/SR 99 MERCED CONNECTION

PLAN AND PROFILE
STA 5355+00 TO STA 5410+00

CONTRACT NO. HSR06-007
DRAWING NO. T2214-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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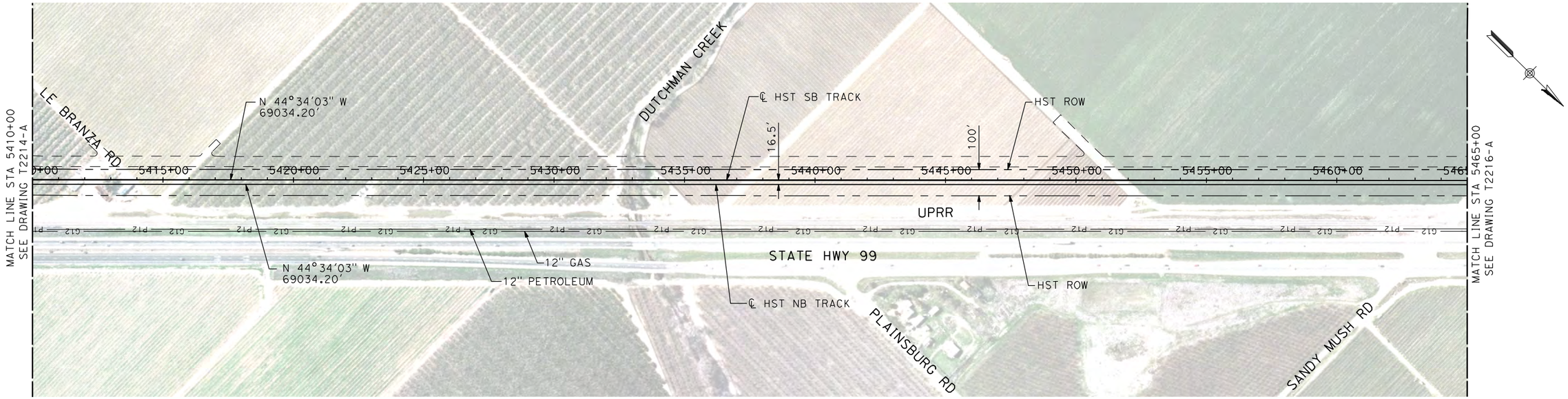

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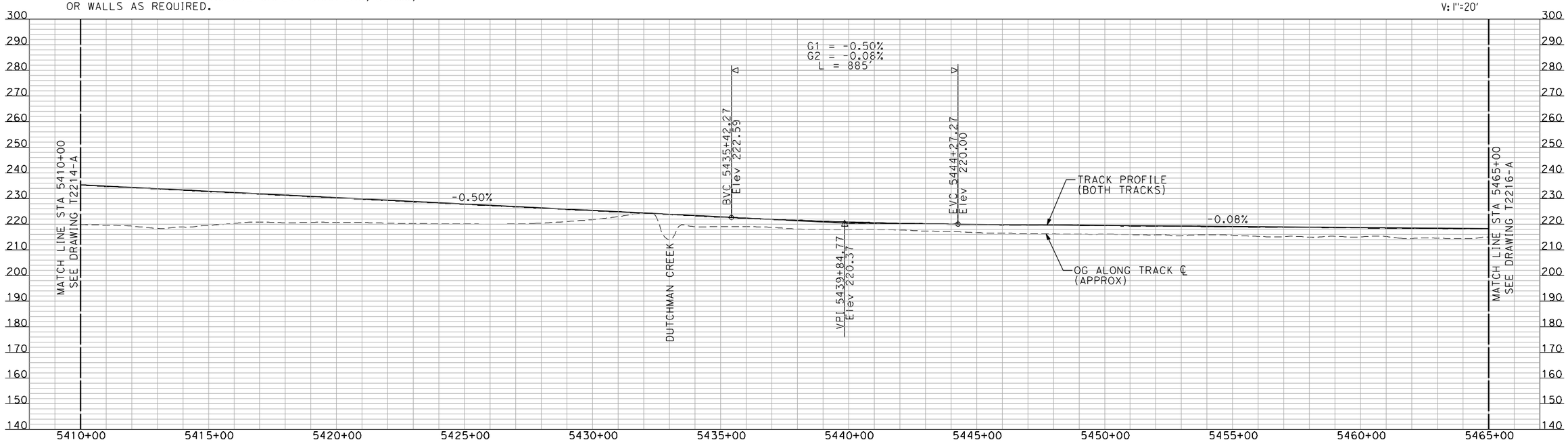
PLAN

200 0 200 400
H: 1"=200'

20 0 20 40
V: 1"=20'



PROFILE

"SEE T3000-T3017 DRAWINGS FOR TYPICAL SECTION LIMITS AND DETAILS"

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY A. SHIELDS
DRAWN BY H. SULLIVAN
CHECKED BY A. BOONE
IN CHARGE A. BOONE
DATE 07/20/2011

RECORD SET
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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/SR 99 MERCED CONNECTION

PLAN AND PROFILE
STA 5410+00 TO STA 5465+00

CONTRACT NO. HSR06-007
DRAWING NO. T2215-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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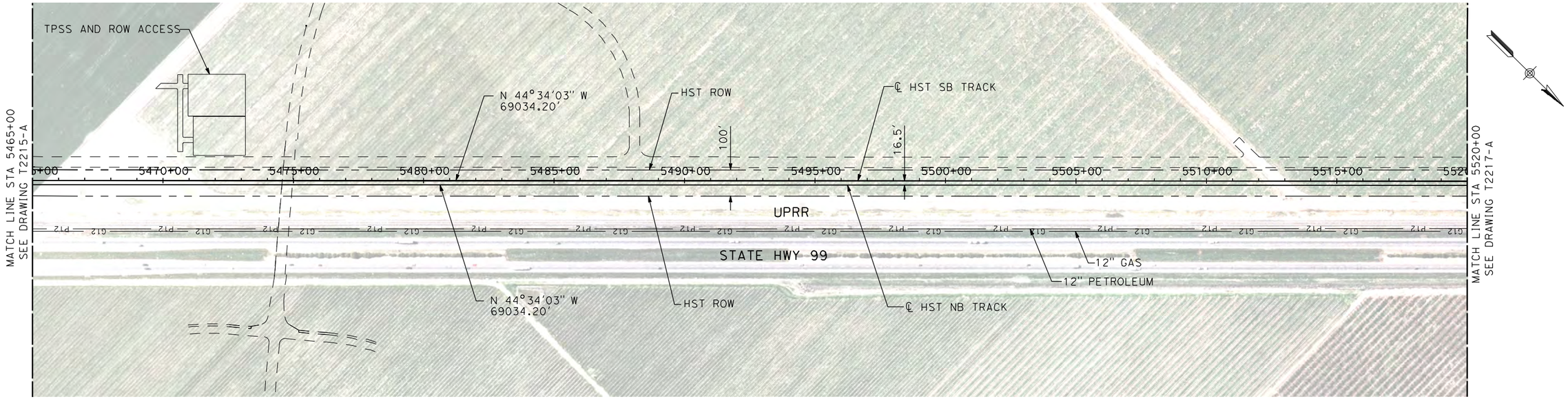

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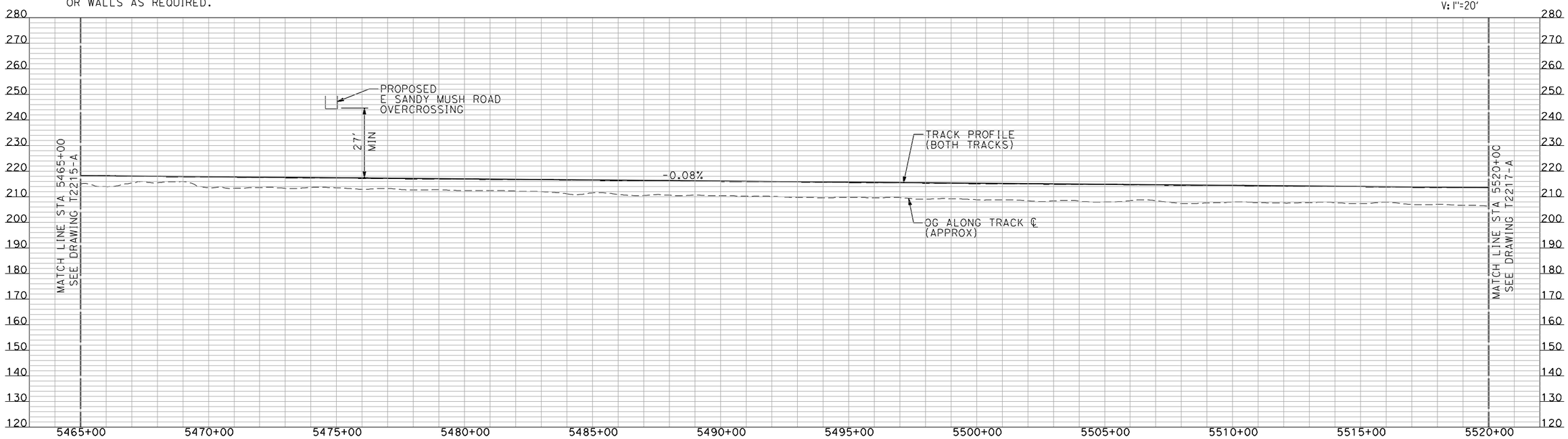
PLAN

200 0 200 400
H: 1"=200'

20 0 20 40
V: 1"=20'



PROFILE

"SEE T3000-T3017 DRAWINGS FOR TYPICAL SECTION LIMITS AND DETAILS"

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY A. SHIELDS
DRAWN BY H. SULLIVAN
CHECKED BY A. BOONE
IN CHARGE A. BOONE
DATE 07/20/2011

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/SR 99 MERCED CONNECTION

PLAN AND PROFILE
STA 5465+00 TO STA 5520+00

CONTRACT NO. HSR06-007
DRAWING NO. T2216-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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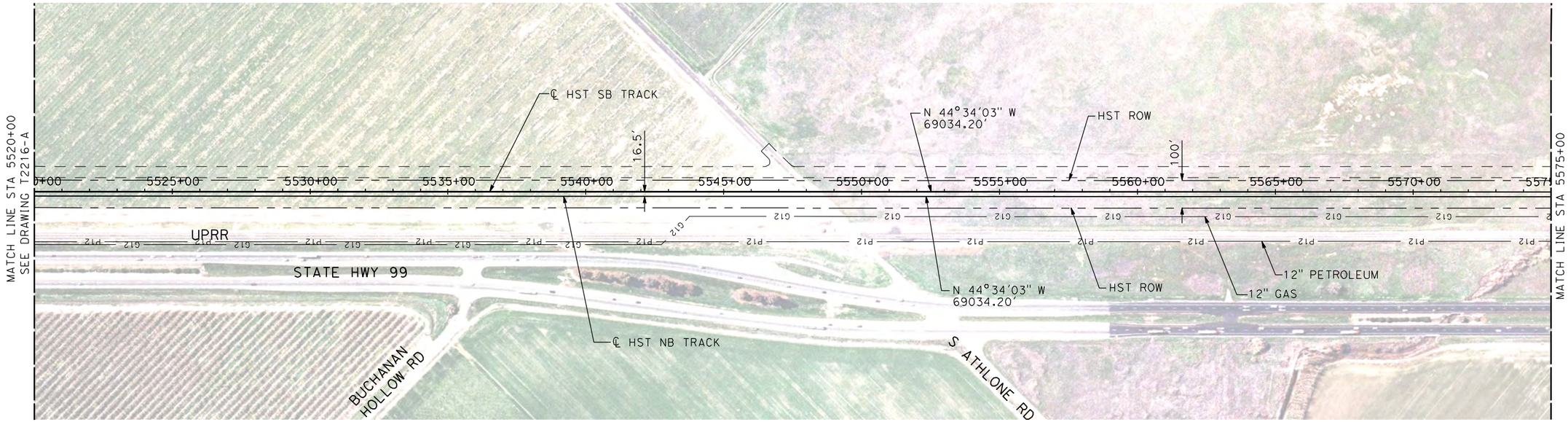

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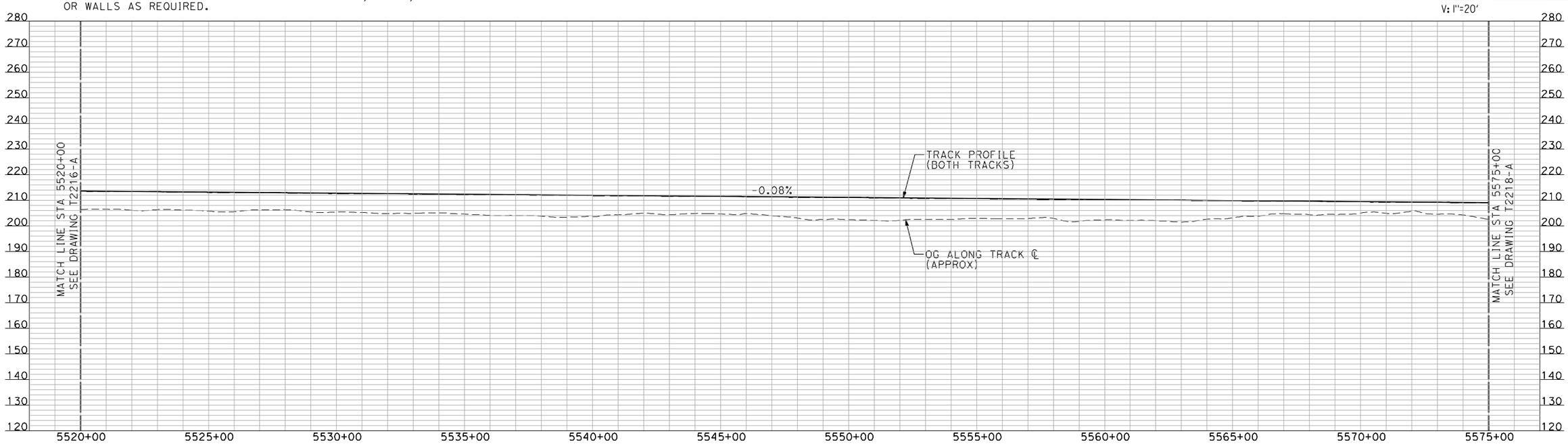
PLAN

200 0 200 400
H: 1"=200'

20 0 20 40
V: 1"=20'



PROFILE

"SEE T3000-T3017 DRAWINGS FOR TYPICAL SECTION LIMITS AND DETAILS"

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY A. SHIELDS
DRAWN BY H. SULLIVAN
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RECORD SET
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AECOM Technical Services, Inc.
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Sacramento, CA 95811
CH2MHILL

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO

UPRR/SR 99 MERCED CONNECTION

PLAN AND PROFILE
STA 5520+00 TO STA 5575+00

CONTRACT NO. HSR06-007
DRAWING NO. T2217-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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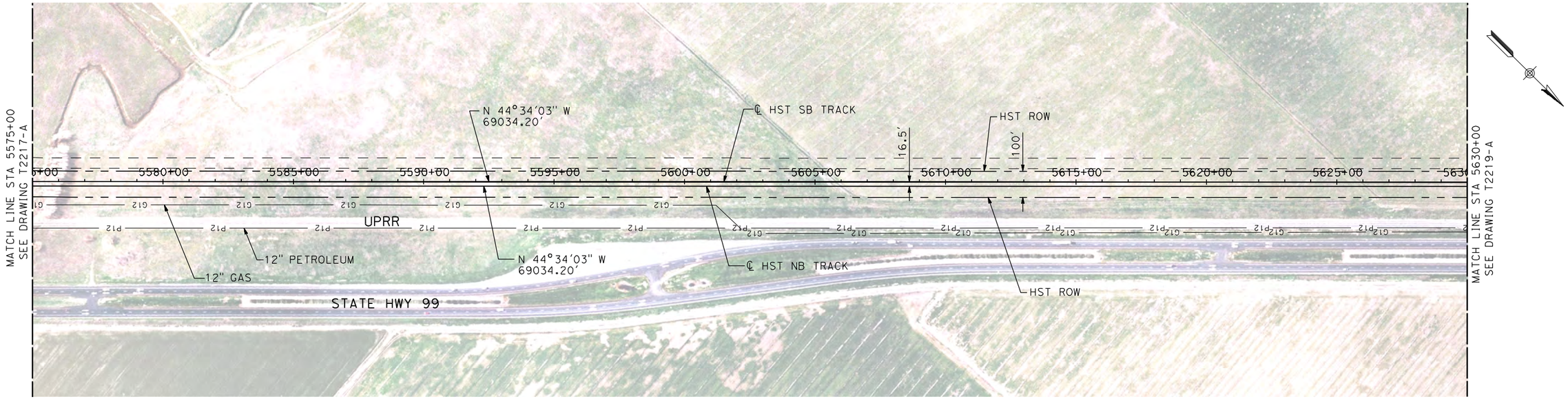


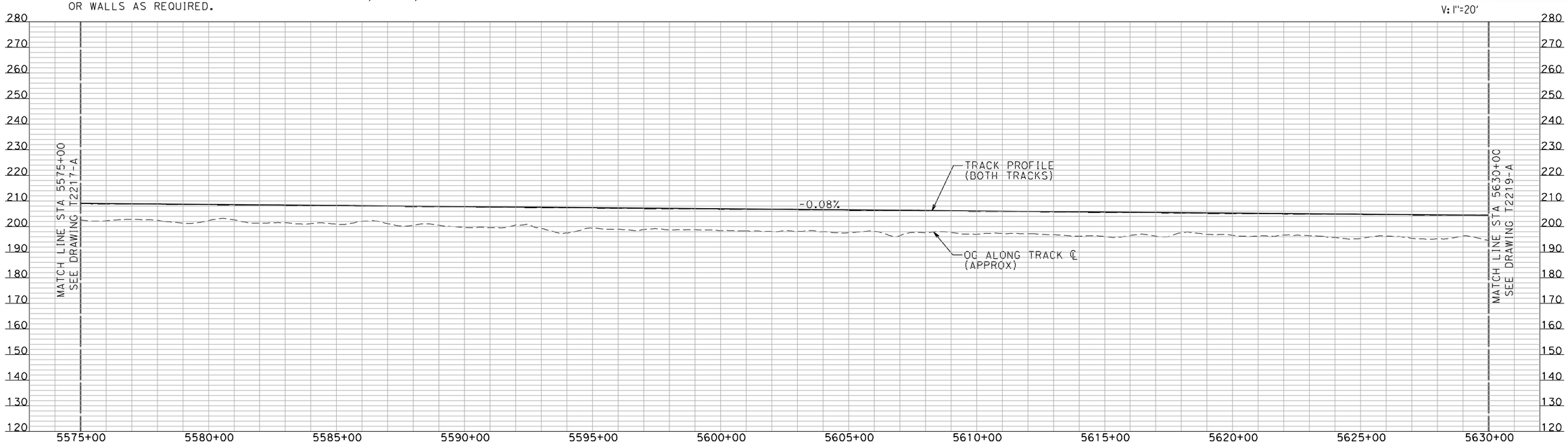
NOTES:

1. ALL UTILITIES SHOWN ARE EXISTING UTILITY LINES BASED ON RECORD DRAWINGS AND ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY.
2. TRACKS CLOSER THAN 102 FT TO THE NEAREST EXISTING FREIGHT TRACKS WILL INCLUDE SAFETY BARRIERS, BERMS, OR WALLS AS REQUIRED.

PLAN

200 0 200 400
H: 1"=200'

20 0 20 40
V: 1"=20'



PROFILE

"SEE T3000-T3017 DRAWINGS FOR TYPICAL SECTION LIMITS AND DETAILS"

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY A. SHIELDS
DRAWN BY H. SULLIVAN
CHECKED BY A. BOONE
IN CHARGE A. BOONE
DATE 07/20/2011

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

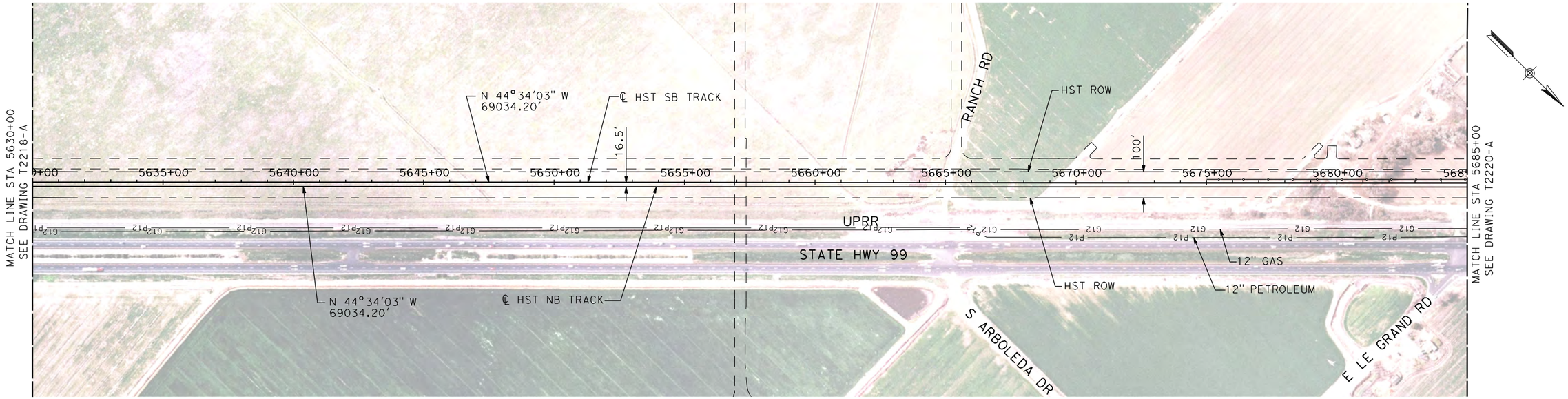
CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO

UPRR/SR 99 MERCED CONNECTION

PLAN AND PROFILE
STA 5575+00 TO STA 5630+00

CONTRACT NO. HSR06-007
DRAWING NO. T2218-A
SCALE AS SHOWN
SHEET NO. ### OF ###

SullivanH 7/19/2011 8:39:33 AM i:\chsr\60022962\task-02_merced-fresno\cadd\civil\sheet\trackwork\deir\UPRR AVE 21\MF-T-2218-A.dgn



NOTES:

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PLAN

200 0 200 400
H: 1"=200'

20 0 20 40
V: 1"=20'

PROFILE

"SEE T3000-T3017 DRAWINGS FOR TYPICAL SECTION LIMITS AND DETAILS"

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY A. SHIELDS
DRAWN BY H. SULLIVAN
CHECKED BY A. BOONE
IN CHARGE A. BOONE
DATE 07/20/2011

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/SR 99 MERCED CONNECTION

PLAN AND PROFILE
STA 5630+00 TO STA 5685+00

CONTRACT NO. HSR06-007
DRAWING NO. T2219-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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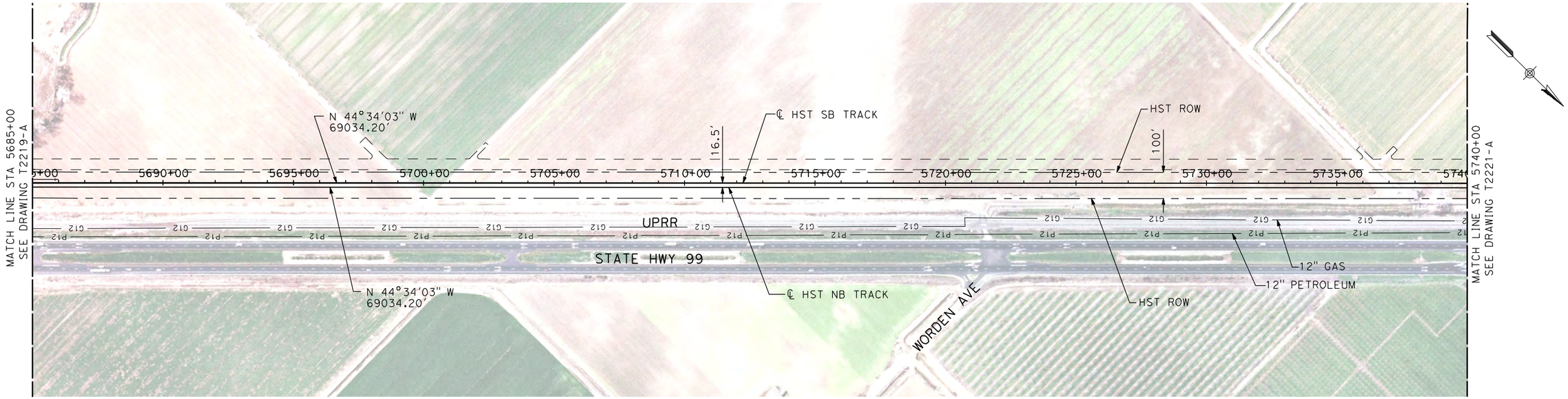

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PLAN

200 0 200 400
H: 1"=200'

20 0 20 40
V: 1"=20'

PROFILE

"SEE T3000-T3017 DRAWINGS FOR TYPICAL SECTION LIMITS AND DETAILS"

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY A. SHIELDS
DRAWN BY H. SULLIVAN
CHECKED BY A. BOONE
IN CHARGE A. BOONE
DATE 07/20/2011

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/SR 99 MERCED CONNECTION

PLAN AND PROFILE
STA 5685+00 TO STA 5740+00

CONTRACT NO. HSR06-007
DRAWING NO. T2220-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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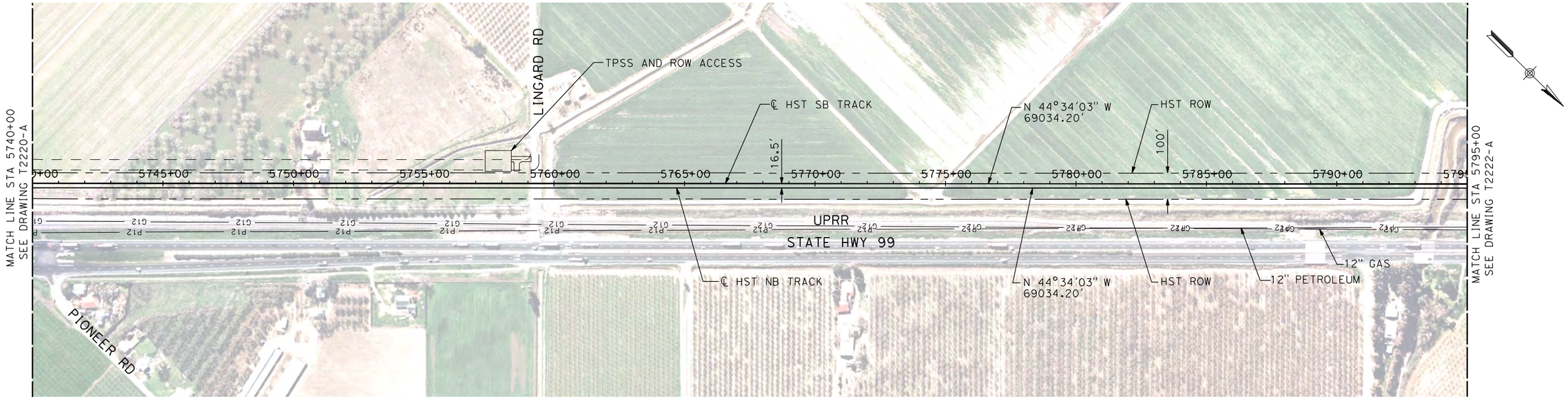

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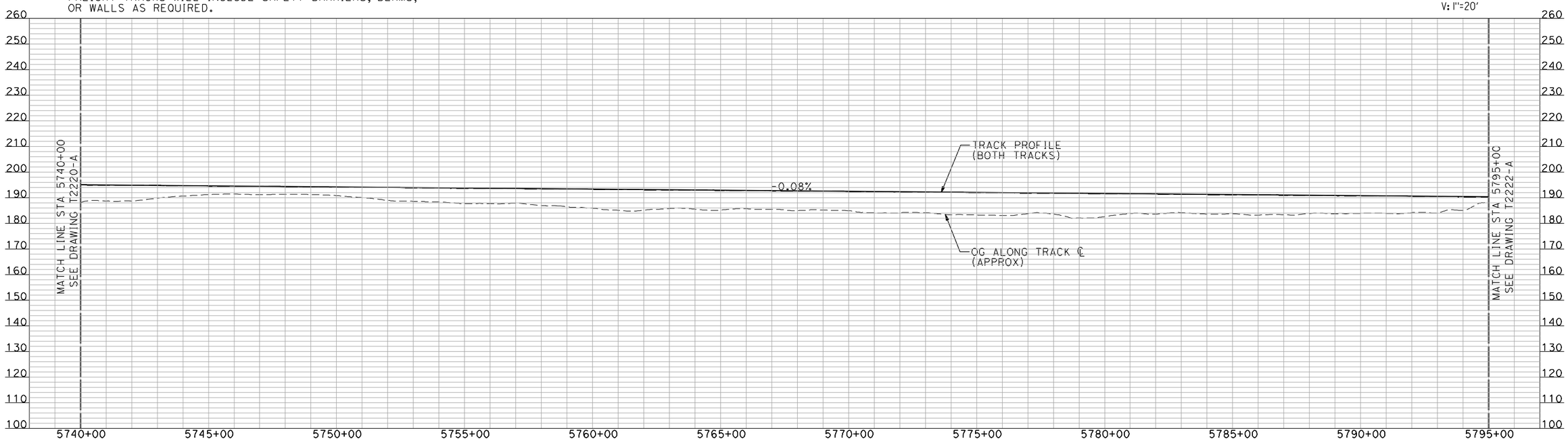
PLAN

200 0 200 400
H: 1"=200'

20 0 20 40
V: 1"=20'



PROFILE

"SEE T3000-T3017 DRAWINGS FOR TYPICAL SECTION LIMITS AND DETAILS"

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY A. SHIELDS
DRAWN BY H. SULLIVAN
CHECKED BY A. BOONE
IN CHARGE A. BOONE
DATE 07/20/2011

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/SR 99 MERCED CONNECTION

PLAN AND PROFILE
STA 5740+00 TO STA 5795+00

CONTRACT NO. HSR06-007
DRAWING NO. T2221-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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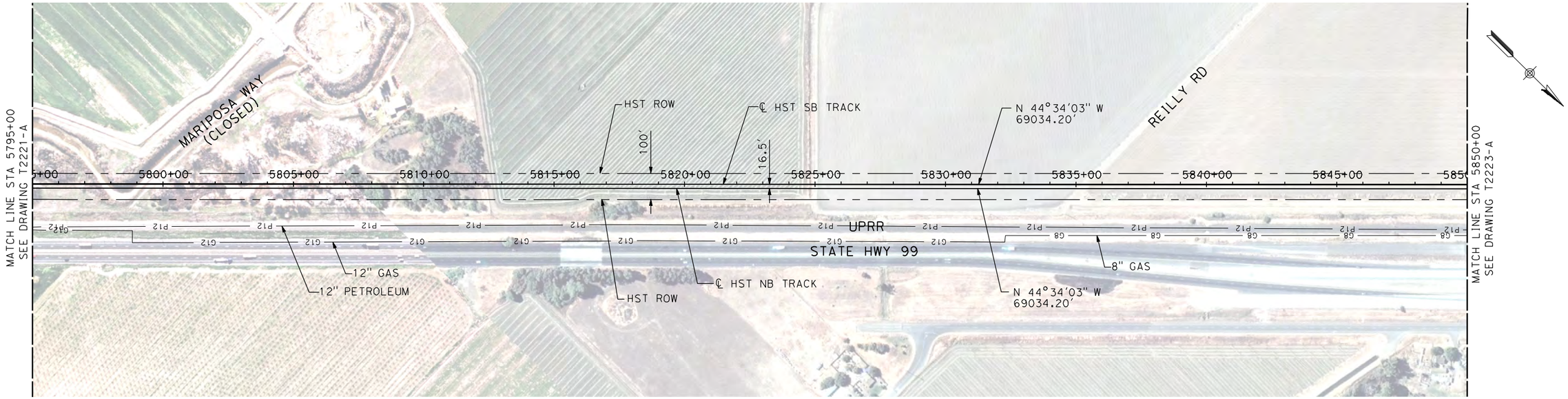

NOTES:

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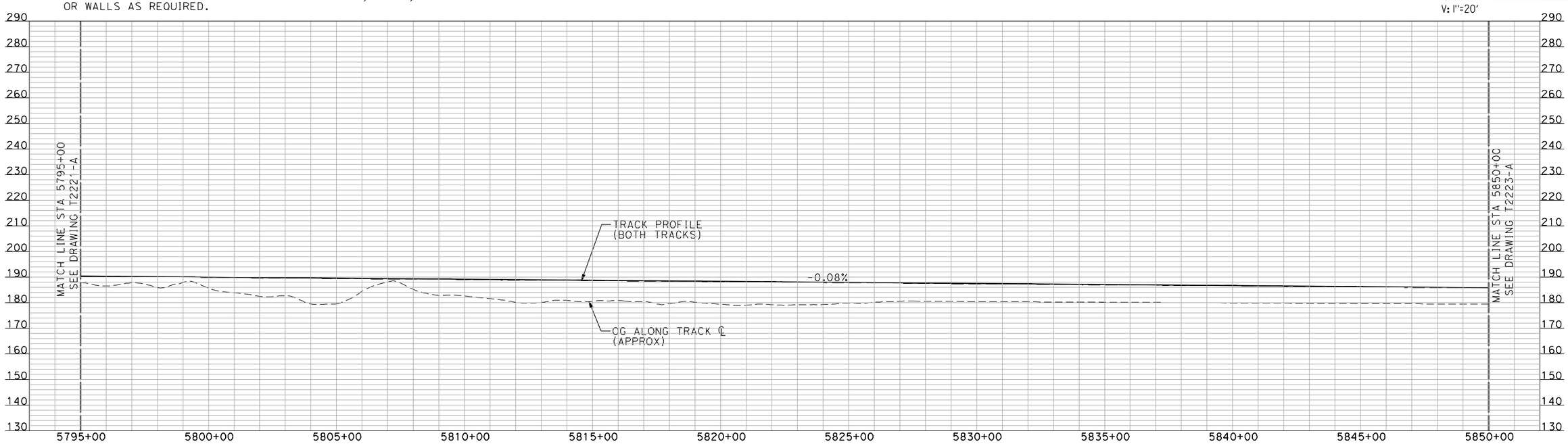
2. TRACKS CLOSER THAN 102 FT TO THE NEAREST EXISTING FREIGHT TRACKS WILL INCLUDE SAFETY BARRIERS, BERMS, OR WALLS AS REQUIRED.

PLAN

200 0 200 400
H: 1"=200'

20 0 20 40
V: 1"=20'



PROFILE

"SEE T3000-T3017 DRAWINGS FOR TYPICAL SECTION LIMITS AND DETAILS"

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY A. SHIELDS
DRAWN BY H. SULLIVAN
CHECKED BY A. BOONE
IN CHARGE A. BOONE
DATE 07/20/2011

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/SR 99 MERCED CONNECTION

PLAN AND PROFILE
STA 5795+00 TO STA 5850+00

CONTRACT NO. HSR06-007
DRAWING NO. T2222-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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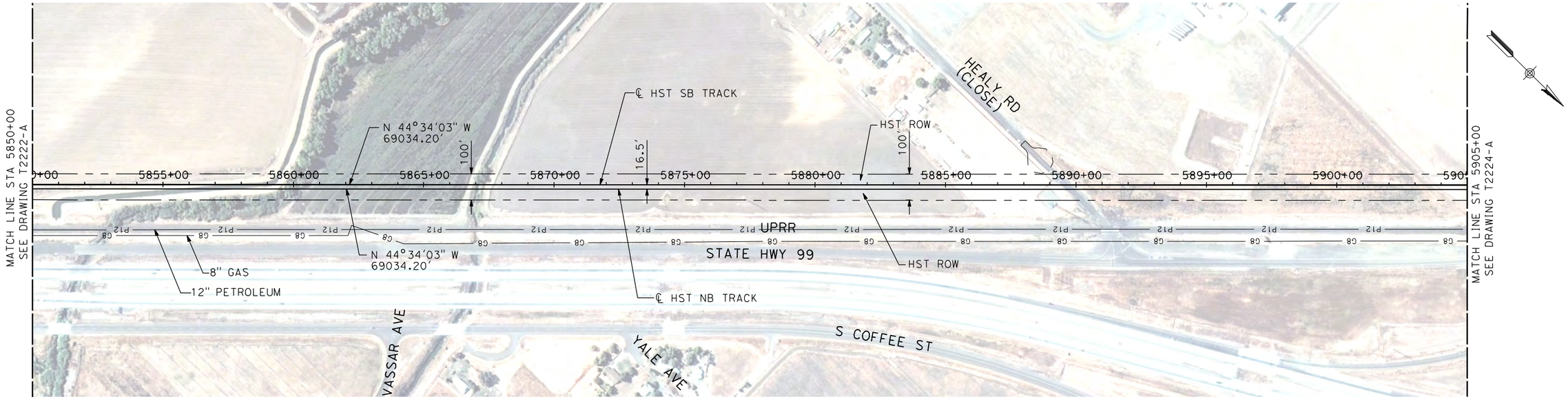

NOTES:

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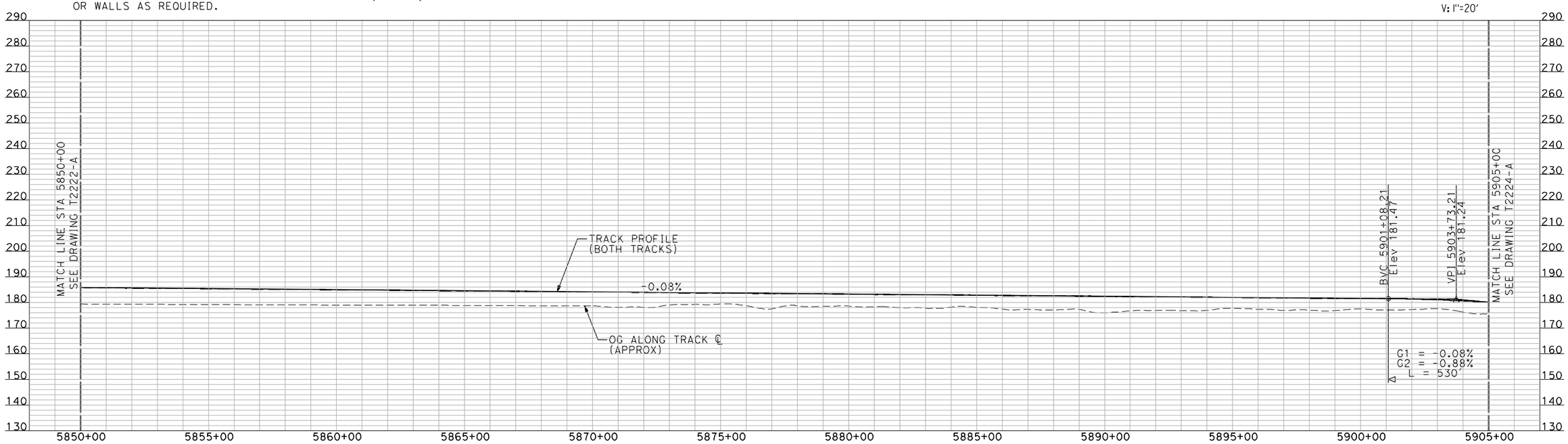
PLAN

200 0 200 400
H: 1"=200'

20 0 20 40
V: 1"=20'



PROFILE

"SEE T3000-T3017 DRAWINGS FOR TYPICAL SECTION LIMITS AND DETAILS"

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY A. SHIELDS
DRAWN BY H. SULLIVAN
CHECKED BY A. BOONE
IN CHARGE A. BOONE
DATE 07/20/2011

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/SR 99 MERCED CONNECTION

PLAN AND PROFILE
STA 5850+00 TO STA 5905+00

CONTRACT NO. HSR06-007
DRAWING NO. T2223-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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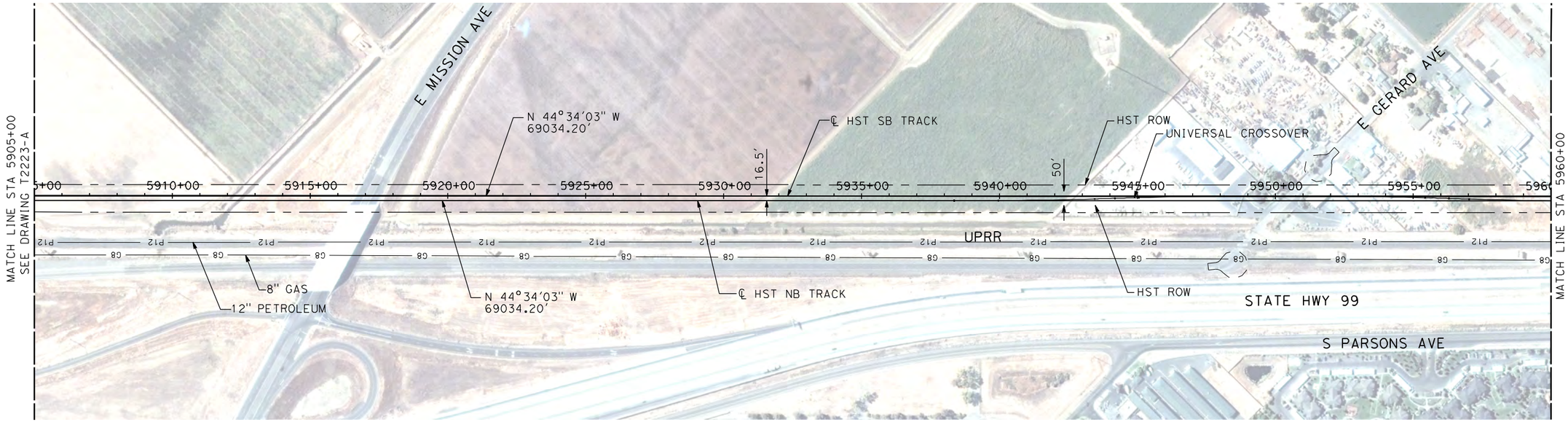

NOTES:

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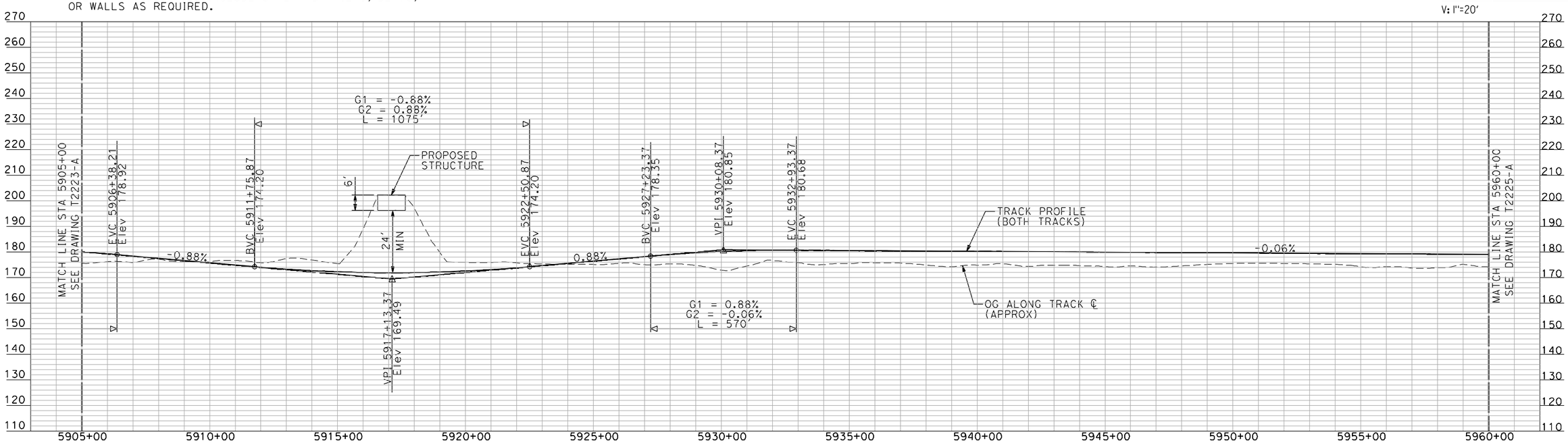
PLAN

200 0 200 400
H: 1"=200'

20 0 20 40
V: 1"=20'



PROFILE

"SEE T3000-T3017 DRAWINGS FOR TYPICAL SECTION LIMITS AND DETAILS"

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY A. SHIELDS
DRAWN BY H. SULLIVAN
CHECKED BY A. BOONE
IN CHARGE A. BOONE
DATE 07/20/2011

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/SR 99 MERCED CONNECTION

PLAN AND PROFILE
STA 5905+00 TO STA 5960+00

CONTRACT NO. HSR06-007
DRAWING NO. T2224-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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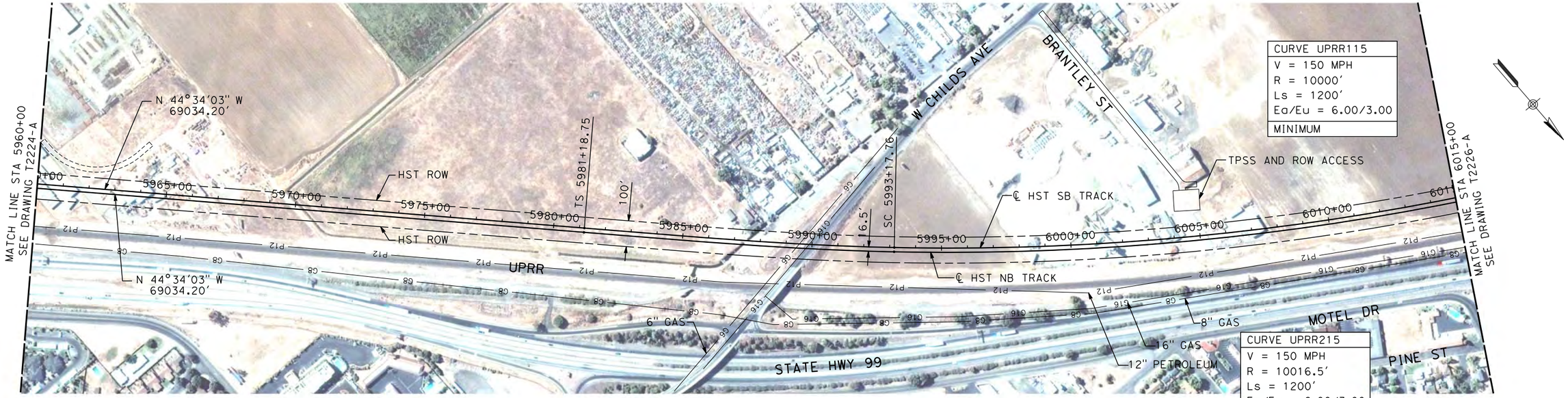

PLAN

NOTES:

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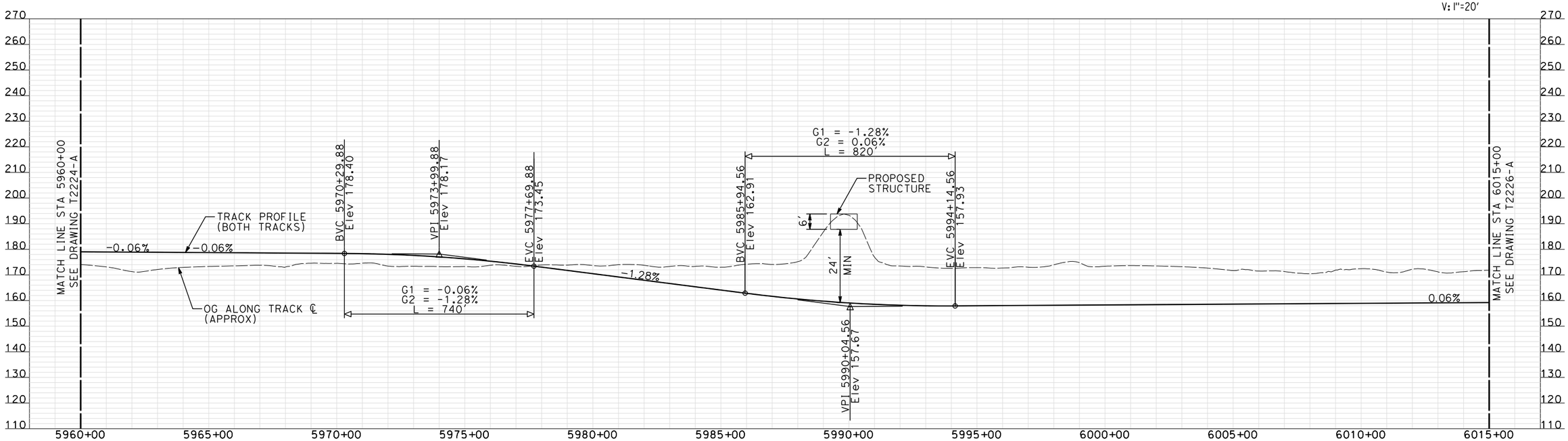
H: 1"=200'

V: 1"=20'



PROFILE

"SEE T3000-T3017 DRAWINGS FOR TYPICAL SECTION LIMITS AND DETAILS"

REV	DATE	BY	CHK	APP	DESCRIPTION
1	12/12/2011	AS			TRACK REALIGNMENT

DESIGNED BY A. SHIELDS
DRAWN BY H. SULLIVAN
CHECKED BY A. BOONE
IN CHARGE A. BOONE
DATE 07/27/2011

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/SR 99 MERCED CONNECTION

PLAN AND PROFILE
STA 5960+00 TO STA 6015+00

CONTRACT NO. HSR06-007
DRAWING NO. T2225-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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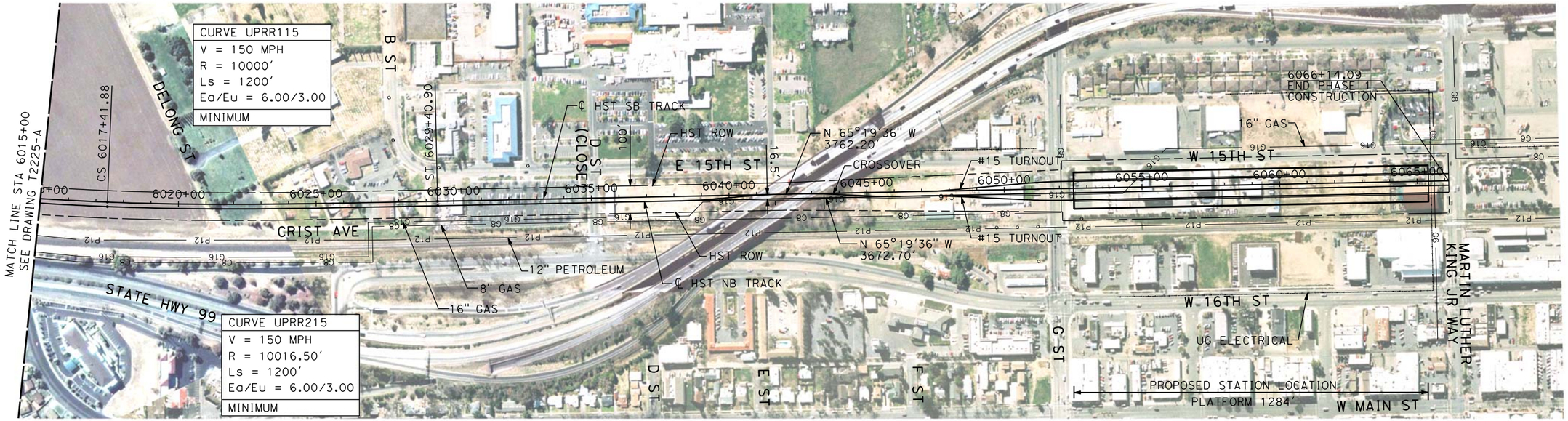
shieldsa



NOTE:
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PLAN

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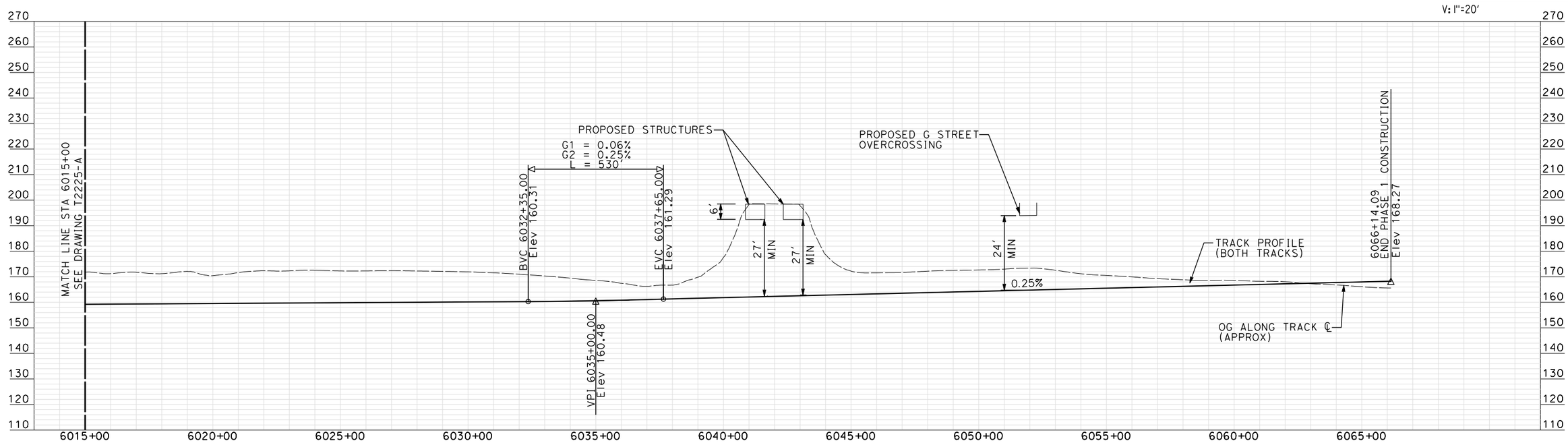
H: 1"=200'

20 0 20 40
V: 1"=20'



PROFILE

"SEE T3000-T3017 DRAWINGS FOR TYPICAL SECTION LIMITS AND DETAILS"

REV	DATE	BY	CHK	APP	DESCRIPTION
1	12/12/2011	AS			TRACK REALIGNMENT

DESIGNED BY A. SHIELDS
DRAWN BY H. SULLIVAN
CHECKED BY A. BOONE
IN CHARGE A. BOONE
DATE 07/27/2011

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/SR 99 MERCED CONNECTION

PLAN AND PROFILE
STA 6015+00 TO STA 6066+14.09

CONTRACT NO. HSR06-007
DRAWING NO. T2226-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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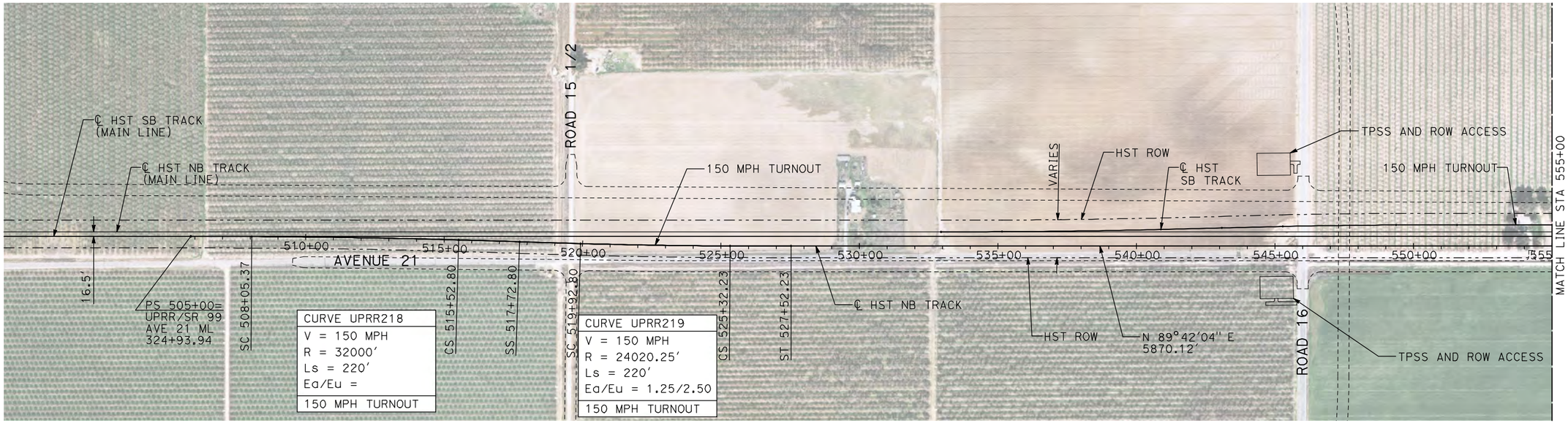
shieldsa



NOTES:

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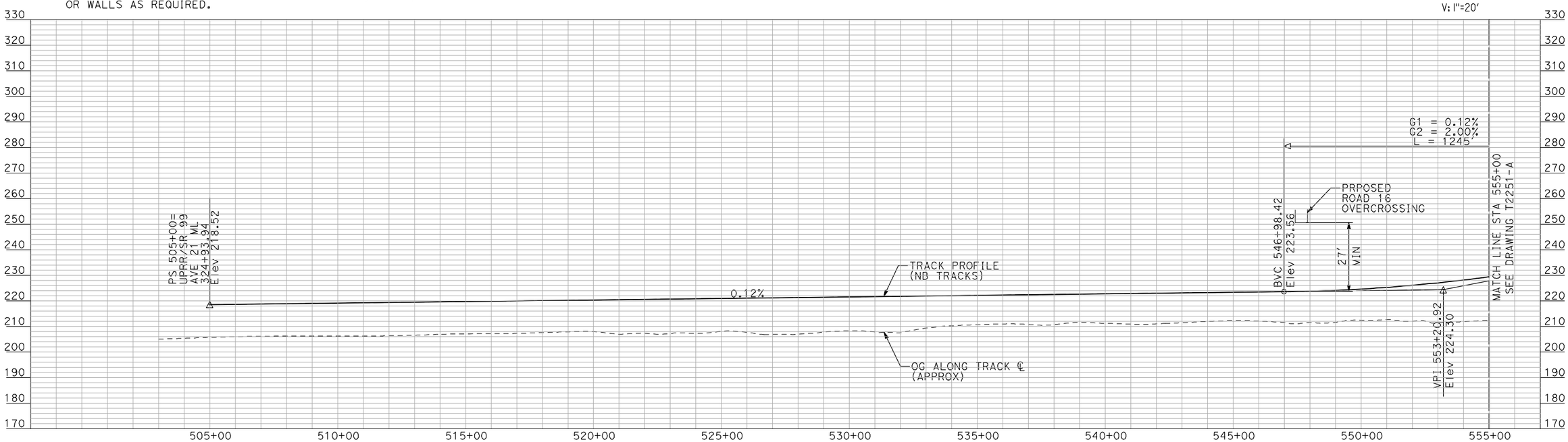
PLAN

200 0 200 400
H: 1"=200'

20 0 20 40
V: 1"=20'



PROFILE

"SEE T3000-T3017 DRAWINGS FOR TYPICAL SECTION LIMITS AND DETAILS"

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY A. SHIELDS
DRAWN BY H. SULLIVAN
CHECKED BY A. BOONE
IN CHARGE A. BOONE
DATE 07/20/2011

RECORD SET
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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/SR 99 WYE - NB CONNECTION
AVENUE 21
PLAN AND PROFILE
STA 505+00 TO STA 555+00

CONTRACT NO. HSR06-007
DRAWING NO. T2250-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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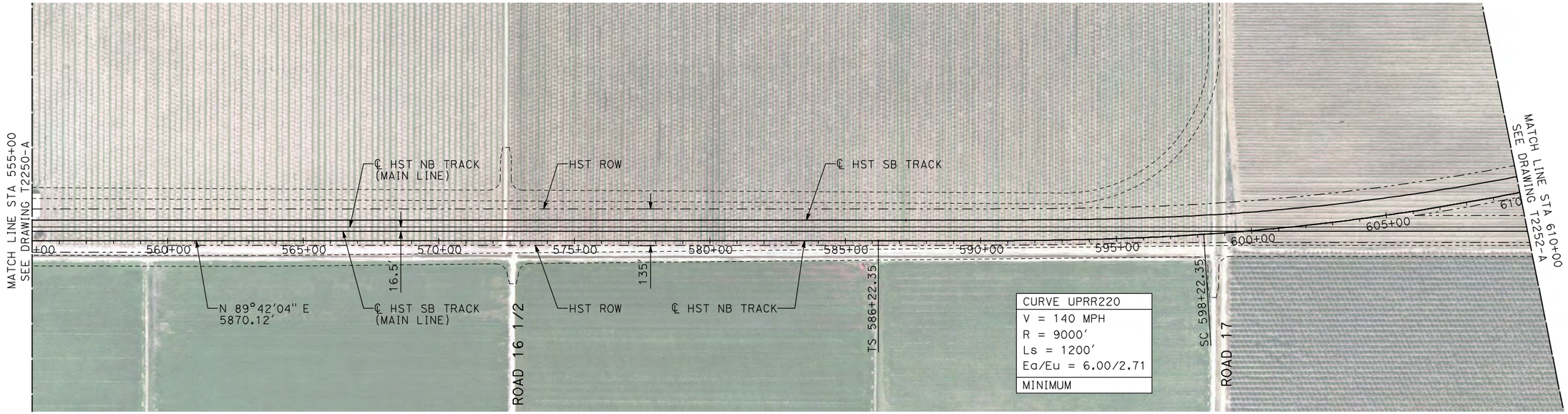
machadoe



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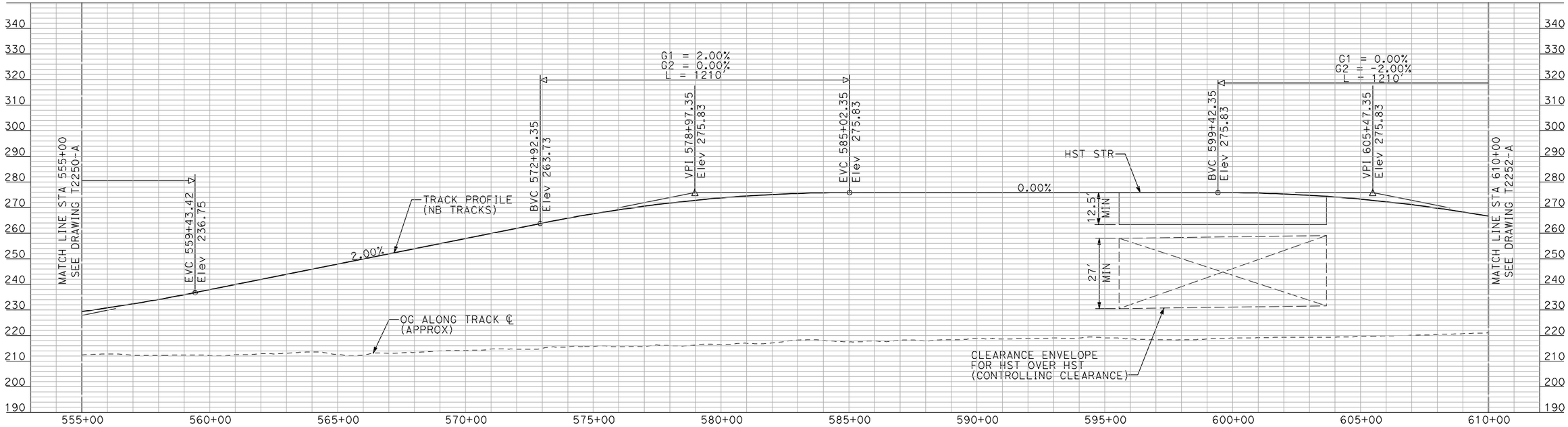
PLAN

200 0 200 400
H: 1"=200'

20 0 20 40
V: 1"=20'



PROFILE

"SEE T3000-T3017 DRAWINGS FOR TYPICAL SECTION LIMITS AND DETAILS"

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY A. SHIELDS
DRAWN BY H. SULLIVAN
CHECKED BY A. BOONE
IN CHARGE A. BOONE
DATE 07/20/2011

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/SR 99 WYE - NB CONNECTION
AVENUE 21
PLAN AND PROFILE
STA 555+00 TO STA 610+00

CONTRACT NO. HSR06-007
DRAWING NO. T2251-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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NOTES:

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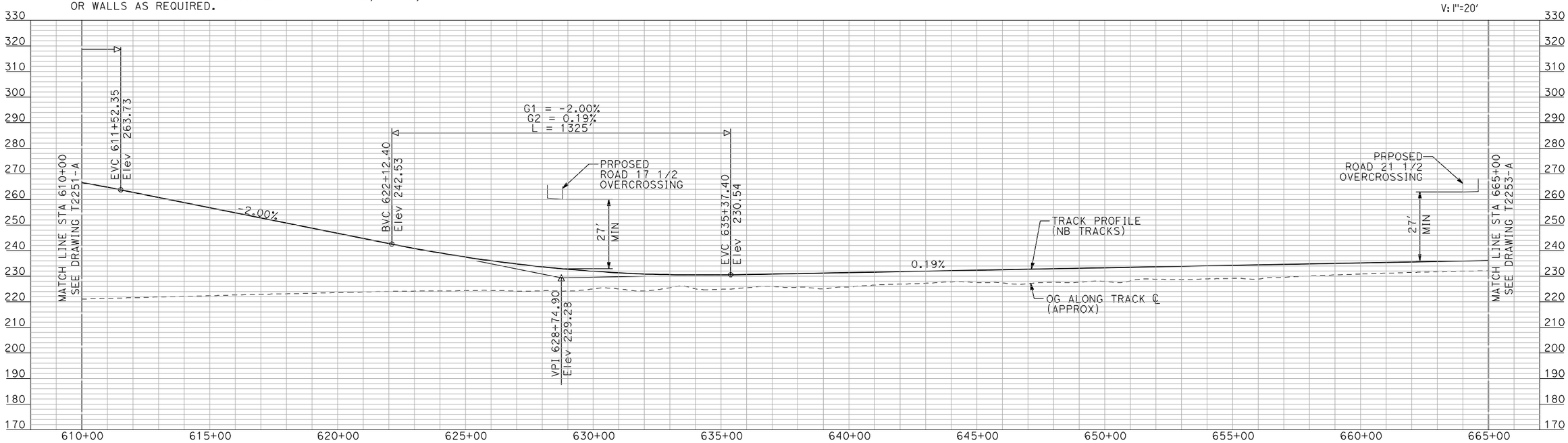
PLAN

200 0 200 400
H: 1"=200'

20 0 20 40
V: 1"=20'



PROFILE

"SEE T3000-T3017 DRAWINGS FOR TYPICAL SECTION LIMITS AND DETAILS"

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY A. SHIELDS
DRAWN BY H. SULLIVAN
CHECKED BY A. BOONE
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DATE 07/20/2011

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2020 L Street, Suite 300
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CH2MHILL

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

CALIFORNIA HIGH-SPEED TRAIN PROJECT
MERCED TO FRESNO

UPRR/SR 99 WYE - NB CONNECTION
AVENUE 21
PLAN AND PROFILE
STA 610+00 TO STA 665+00

CONTRACT NO. HSR06-007
DRAWING NO. T2252-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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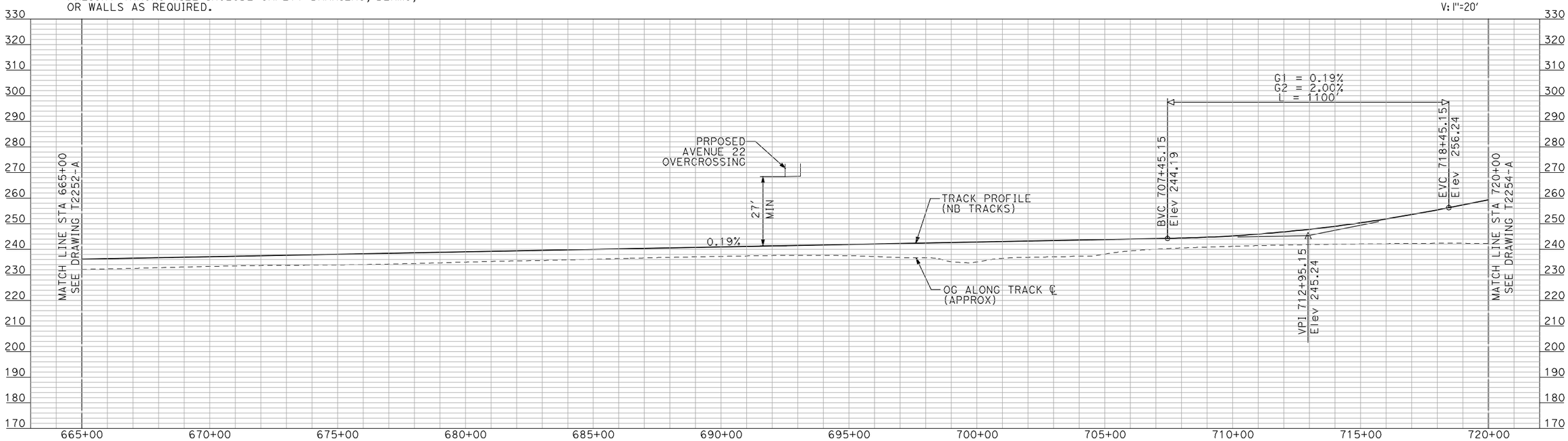
NOTES:

1. ALL UTILITIES SHOWN ARE EXISTING UTILITY LINES BASED ON RECORD DRAWINGS AND ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY.
2. TRACKS CLOSER THAN 102 FT TO THE NEAREST EXISTING FREIGHT TRACKS WILL INCLUDE SAFETY BARRIERS, BERMS, OR WALLS AS REQUIRED.

PLAN

200 0 200 400
H: 1"=200'

20 0 20 40
V: 1"=20'



PROFILE

"SEE T3000-T3017 DRAWINGS FOR TYPICAL SECTION LIMITS AND DETAILS"

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY A. SHIELDS
DRAWN BY H. SULLIVAN
CHECKED BY A. BOONE
IN CHARGE A. BOONE
DATE 07/20/2011

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/SR 99 WYE - NB CONNECTION
AVENUE 21
PLAN AND PROFILE
STA 665+00 TO STA 720+00

CONTRACT NO. HSR06-007
DRAWING NO. T2253-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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CURVE UPRR220
V = 140 MPH
R = 9000'
Ls = 1200'
Eq/Eu = 6.00/2.71
MINIMUM

NOTES:

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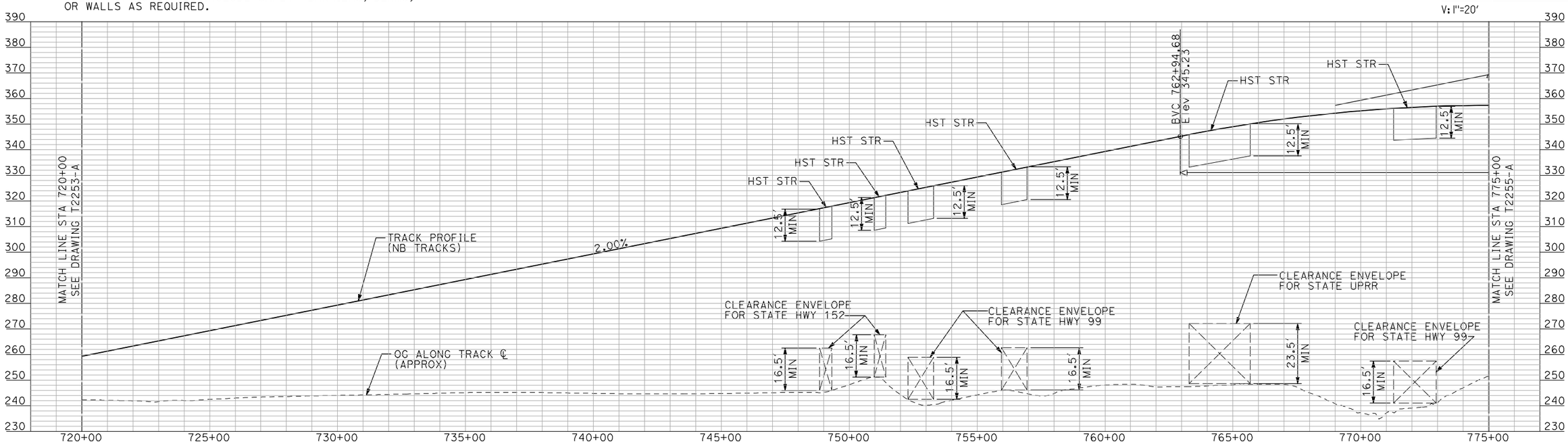
PLAN

200 0 200 400
H: 1"=200'

20 0 20 40
V: 1"=20'



PROFILE

"SEE T3000-T3017 DRAWINGS FOR TYPICAL SECTION LIMITS AND DETAILS"

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY A. SHIELDS
DRAWN BY H. SULLIVAN
CHECKED BY A. BOONE
IN CHARGE A. BOONE
DATE 07/20/2011

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/SR 99 WYE - NB CONNECTION
AVENUE 21
PLAN AND PROFILE
STA 720+00 TO STA 775+00

CONTRACT NO. HSR06-007
DRAWING NO. T2254-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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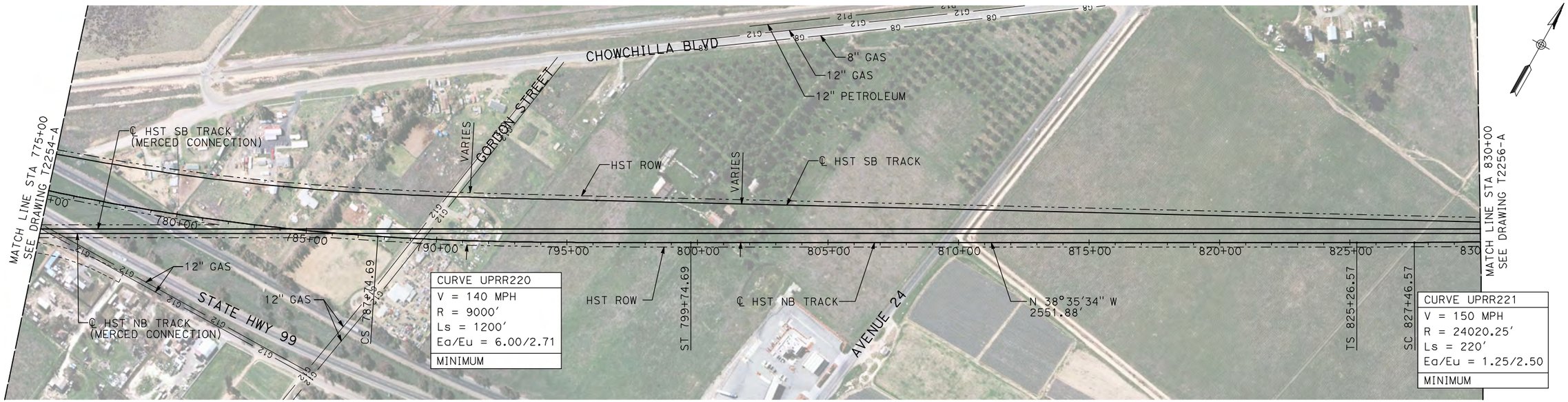

NOTES:

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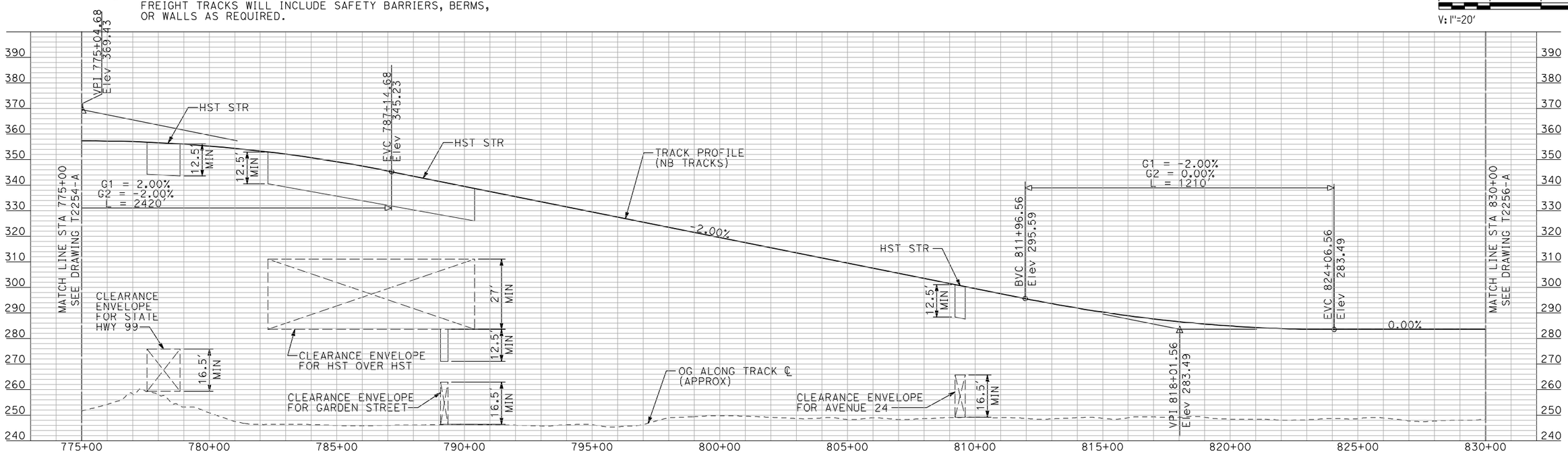
PLAN

200 0 200 400
H: 1"=200'

20 0 20 40
V: 1"=20'



PROFILE

"SEE T3000-T3017 DRAWINGS FOR TYPICAL SECTION LIMITS AND DETAILS"

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY A. SHIELDS
DRAWN BY H. SULLIVAN
CHECKED BY A. BOONE
IN CHARGE A. BOONE
DATE 07/20/2011

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/SR 99 WYE - NB CONNECTION
AVENUE 21
PLAN AND PROFILE
STA 775+00 TO STA 830+00

CONTRACT NO. HSR06-007
DRAWING NO. T2255-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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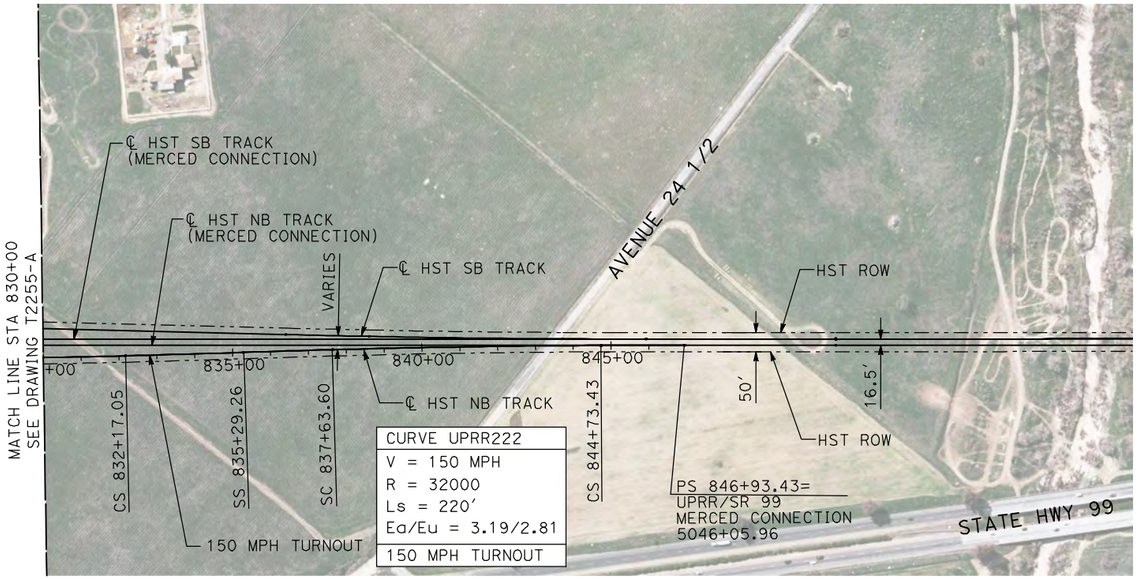

NOTES:

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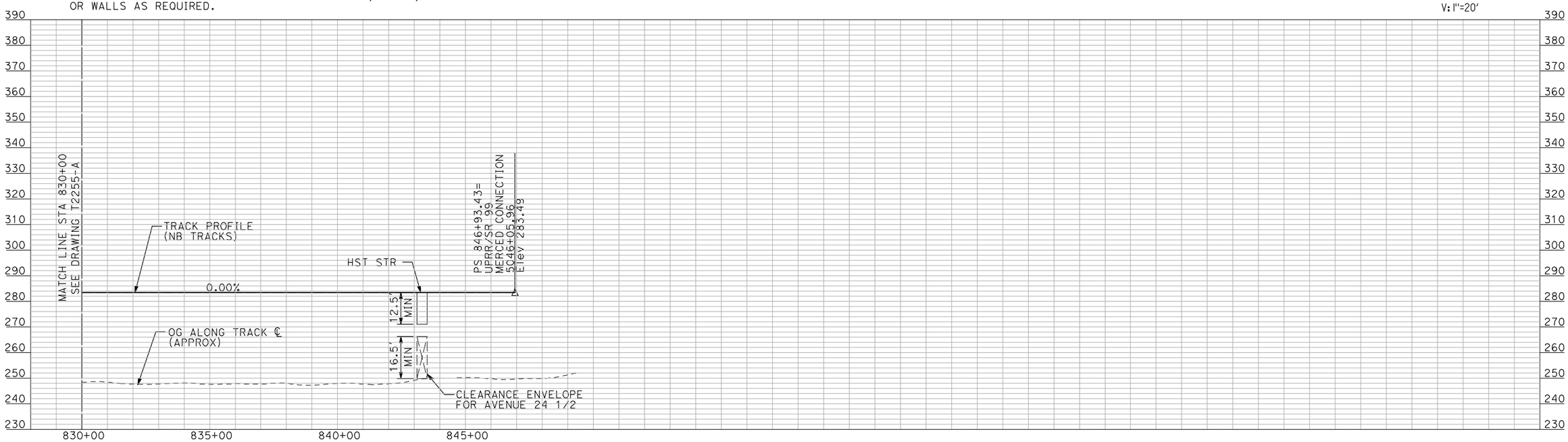
2. TRACKS CLOSER THAN 102 FT TO THE NEAREST EXISTING FREIGHT TRACKS WILL INCLUDE SAFETY BARRIERS, BERMS, OR WALLS AS REQUIRED.

PLAN

200 0 200 400
H: 1"=200'

20 0 20 40
V: 1"=20'



PROFILE

"SEE T3000-T3017 DRAWINGS FOR TYPICAL SECTION LIMITS AND DETAILS"

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY A. SHIELDS
DRAWN BY H. SULLIVAN
CHECKED BY A. BOONE
IN CHARGE A. BOONE
DATE 07/20/2011

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/SR 99 WYE - NB CONNECTION
AVENUE 21
PLAN AND PROFILE
STA 830+00 TO STA 846+93.43

CONTRACT NO. HSR06-007
DRAWING NO. T2256-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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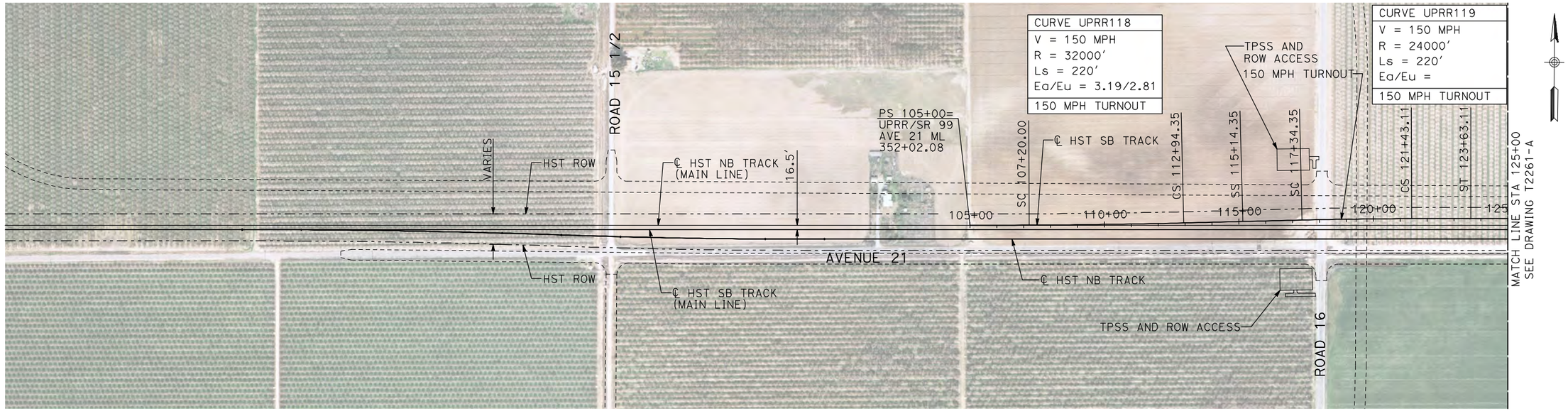

NOTES:

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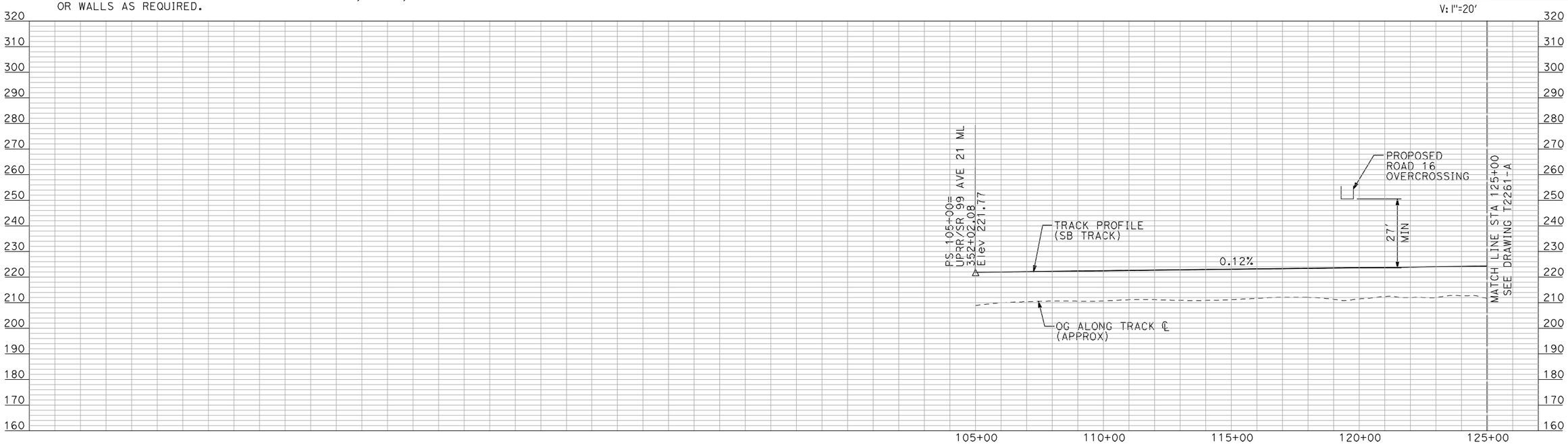
2. TRACKS CLOSER THAN 102 FT TO THE NEAREST EXISTING FREIGHT TRACKS WILL INCLUDE SAFETY BARRIERS, BERMS, OR WALLS AS REQUIRED.

PLAN

200 0 200 400
H: 1"=200'

20 0 20 40
V: 1"=20'



PROFILE

"SEE T3000-T3017 DRAWINGS FOR TYPICAL SECTION LIMITS AND DETAILS"

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY A. SHIELDS
DRAWN BY H. SULLIVAN
CHECKED BY A. BOONE
IN CHARGE A. BOONE
DATE 07/20/2011

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/SR 99 WYE - SB CONNECTION
AVENUE 21
PLAN AND PROFILE
STA 105+00 TO STA 125+00

CONTRACT NO. HSR06-007
DRAWING NO. T2260-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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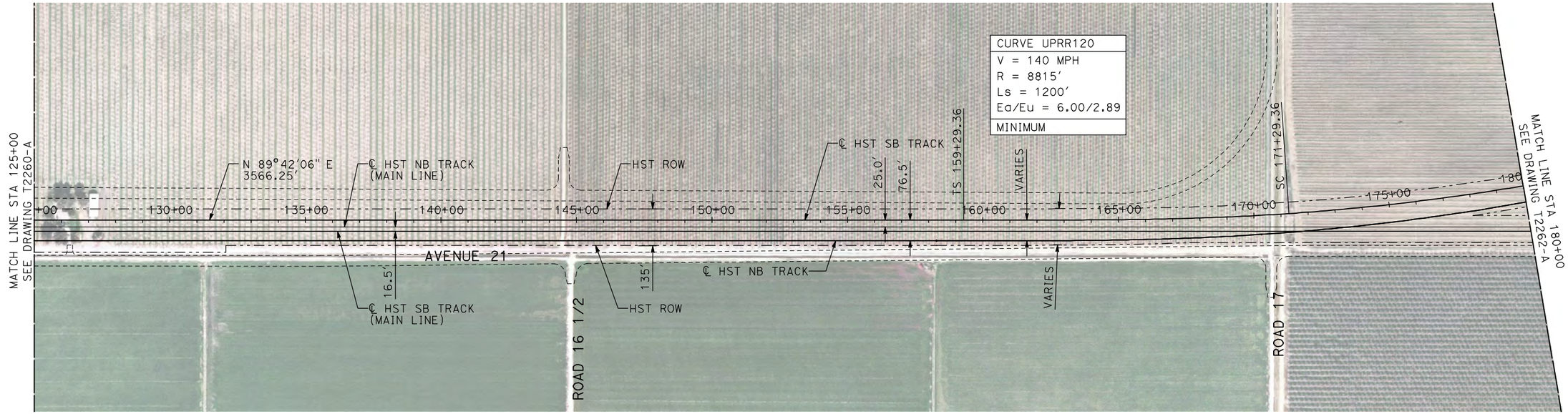

NOTES:

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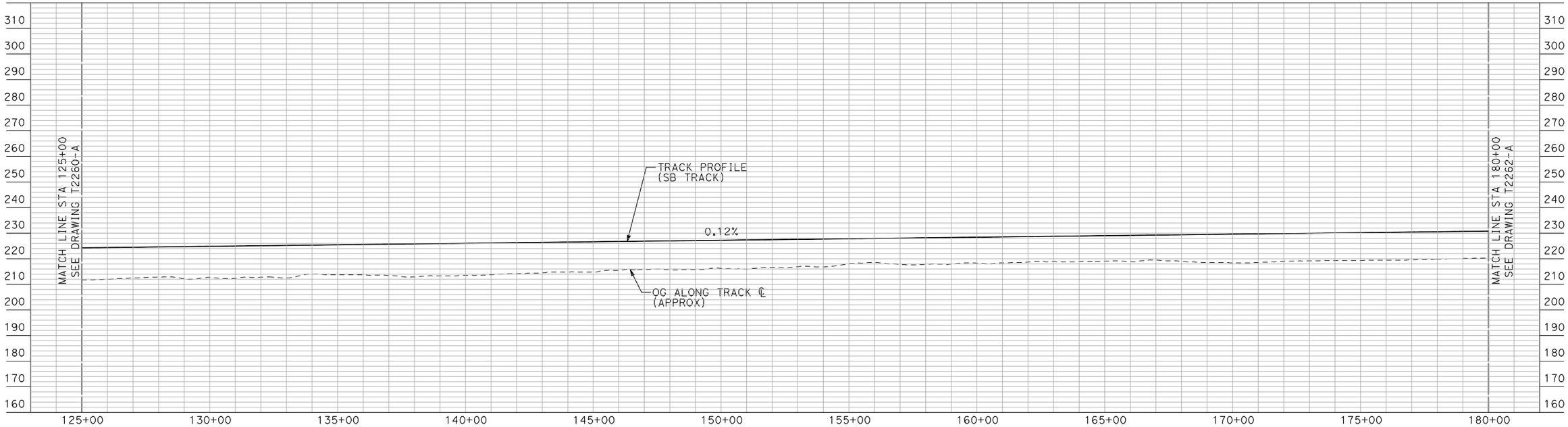
2. TRACKS CLOSER THAN 102 FT TO THE NEAREST EXISTING FREIGHT TRACKS WILL INCLUDE SAFETY BARRIERS, BERMS, OR WALLS AS REQUIRED.

PLAN

200 0 200 400
H: 1"=200'

20 0 20 40
V: 1"=20'



PROFILE

"SEE T3000-T3017 DRAWINGS FOR TYPICAL SECTION LIMITS AND DETAILS"

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY A. SHIELDS
DRAWN BY H. SULLIVAN
CHECKED BY A. BOONE
IN CHARGE A. BOONE
DATE 07/20/2011

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/SR 99 WYE - SB CONNECTION
AVENUE 21
PLAN AND PROFILE
STA 125+00 TO STA 180+00

CONTRACT NO. HSR06-007
DRAWING NO. T2261-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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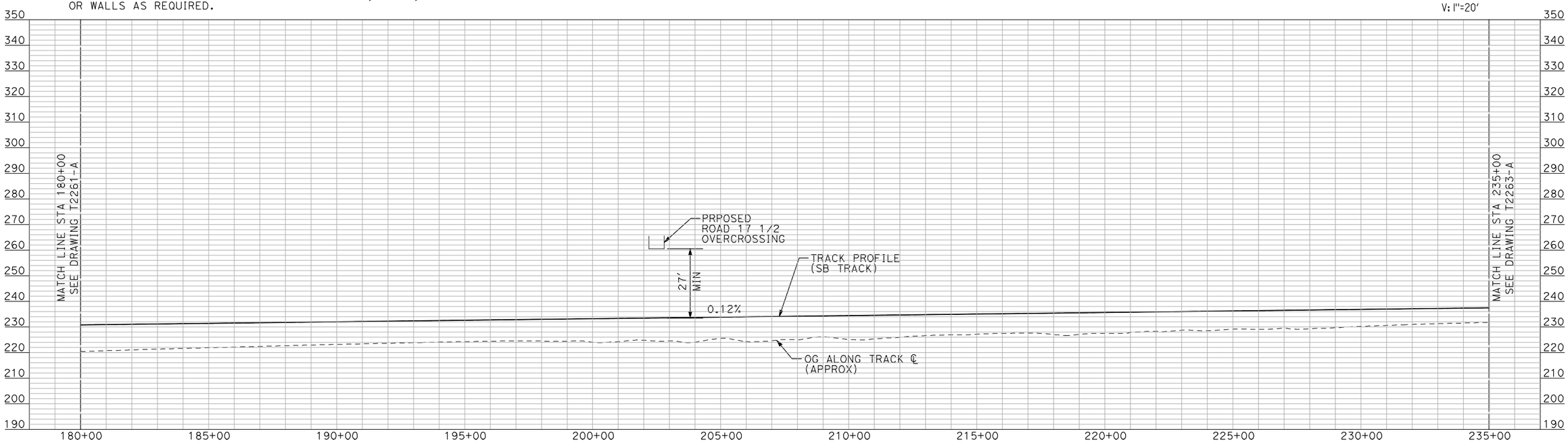
PLAN

200 0 200 400
H: 1"=200'

20 0 20 40
V: 1"=20'



PROFILE

"SEE T3000-T3017 DRAWINGS FOR TYPICAL SECTION LIMITS AND DETAILS"

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY A. SHIELDS
DRAWN BY H. SULLIVAN
CHECKED BY A. BOONE
IN CHARGE A. BOONE
DATE 07/20/2011

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/SR 99 WYE - SB CONNECTION
AVENUE 21
PLAN AND PROFILE
STA 180+00 TO STA 235+00

CONTRACT NO. HSR06-007
DRAWING NO. T2262-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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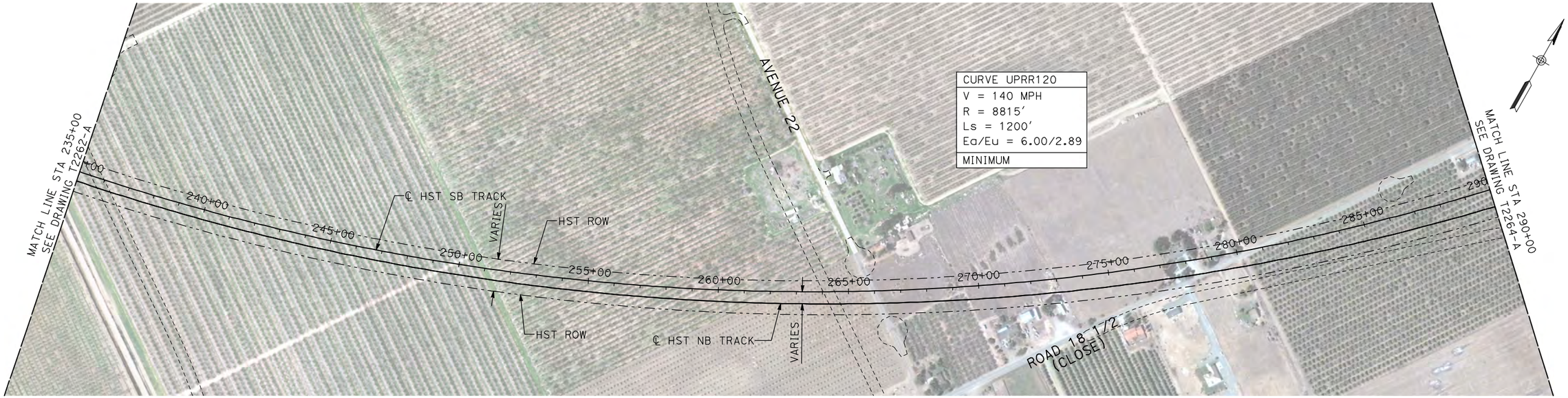

NOTES:

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PLAN

200 0 200 400
H: 1"=200'

20 0 20 40
V: 1"=20'

PROFILE

"SEE T3000-T3017 DRAWINGS FOR TYPICAL SECTION LIMITS AND DETAILS"

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY A. SHIELDS
DRAWN BY H. SULLIVAN
CHECKED BY A. BOONE
IN CHARGE A. BOONE
DATE 07/20/2011

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/SR 99 WYE - SB CONNECTION
AVENUE 21
PLAN AND PROFILE
STA 235+00 TO STA 290+00

CONTRACT NO. HSR06-007
DRAWING NO. T2263-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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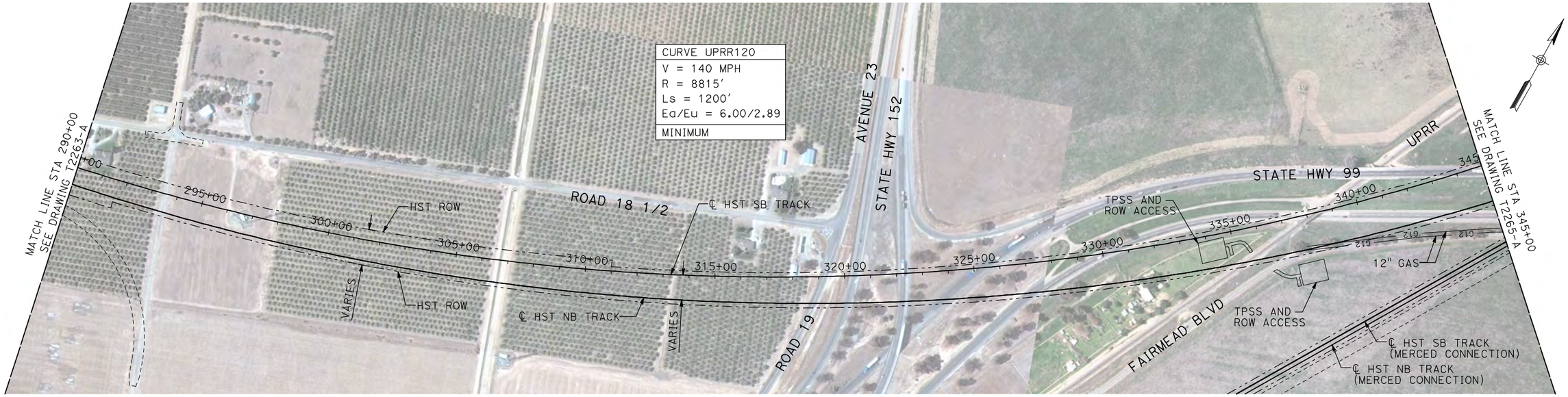

NOTES:

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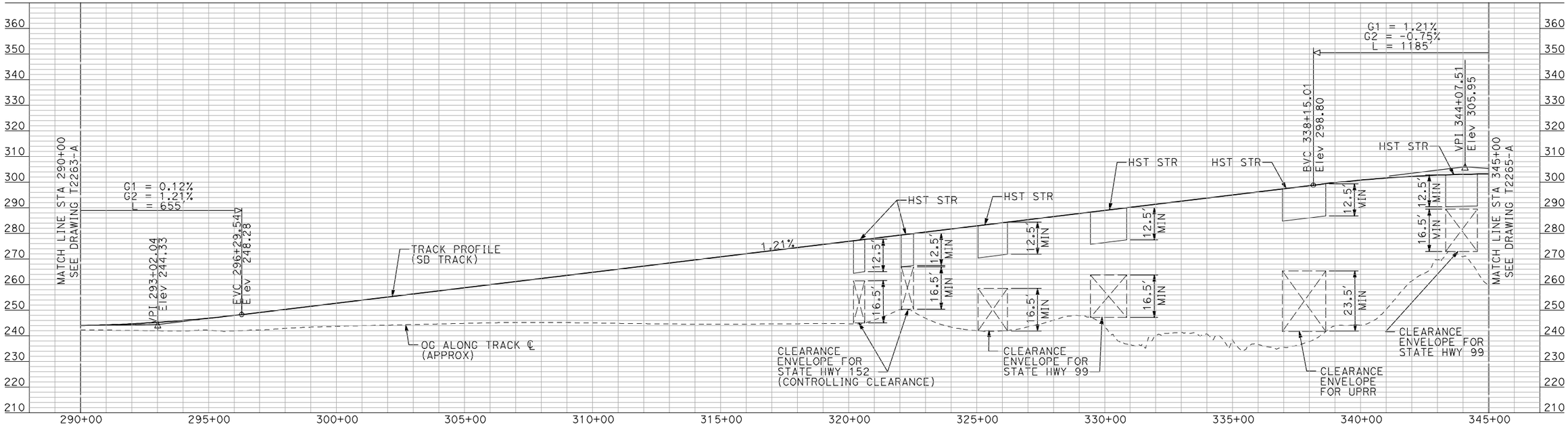
PLAN

200 0 200 400
H: 1"=200'

20 0 20 40
V: 1"=20'



PROFILE

"SEE T3000-T3017 DRAWINGS FOR TYPICAL SECTION LIMITS AND DETAILS"

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY A. SHIELDS
DRAWN BY H. SULLIVAN
CHECKED BY A. BOONE
IN CHARGE A. BOONE
DATE 07/20/2011

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/SR 99 WYE - SB CONNECTION
AVENUE 21
PLAN AND PROFILE
STA 290+00 TO STA 345+00

CONTRACT NO. HSR06-007
DRAWING NO. T2264-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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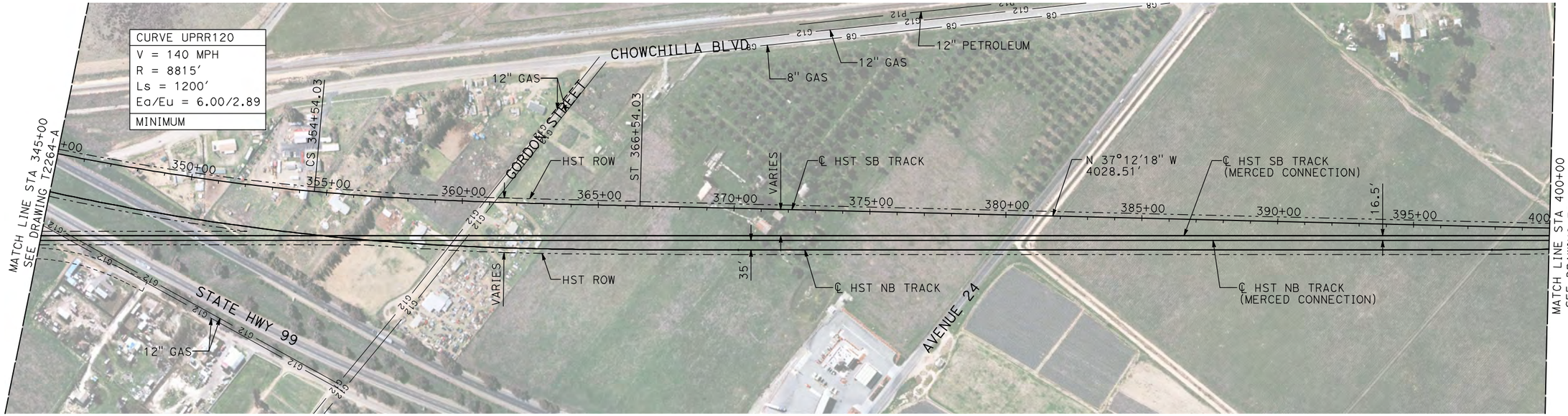

NOTES:

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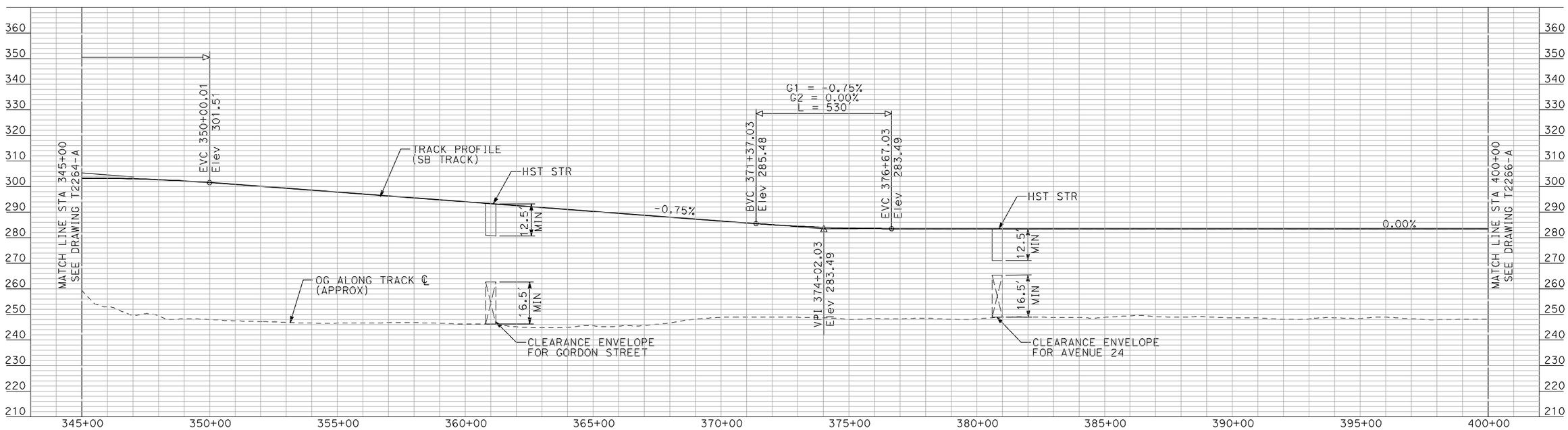
PLAN

200 0 200 400
H: 1"=200'

20 0 20 40
V: 1"=20'



PROFILE

"SEE T3000-T3017 DRAWINGS FOR TYPICAL SECTION LIMITS AND DETAILS"

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY A. SHIELDS
DRAWN BY H. SULLIVAN
CHECKED BY A. BOONE
IN CHARGE A. BOONE
DATE 07/20/2011

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/SR 99 WYE - SB CONNECTION
AVENUE 21
PLAN AND PROFILE
STA 345+00 TO STA 400+00

CONTRACT NO. HSR06-007
DRAWING NO. T2265-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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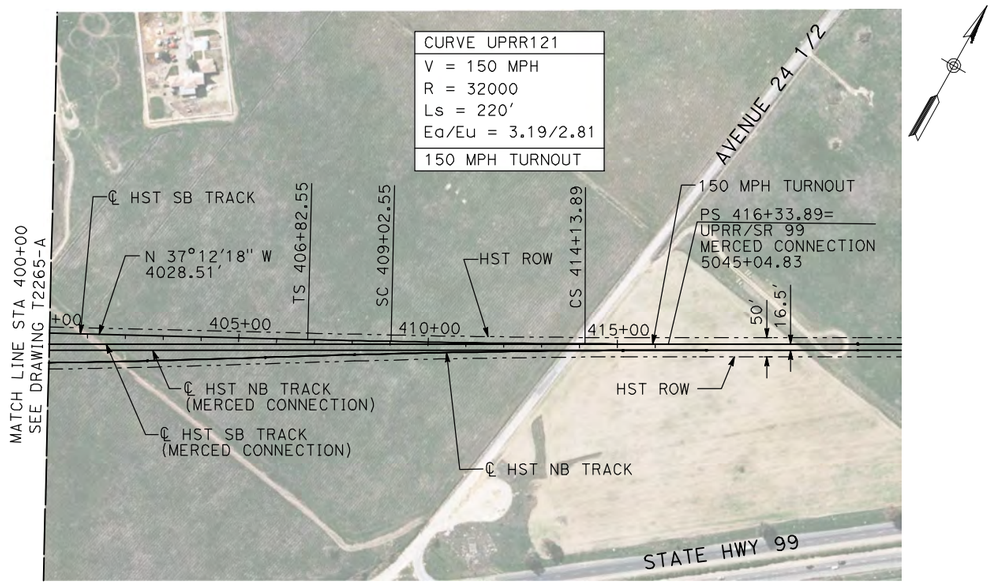

NOTES:

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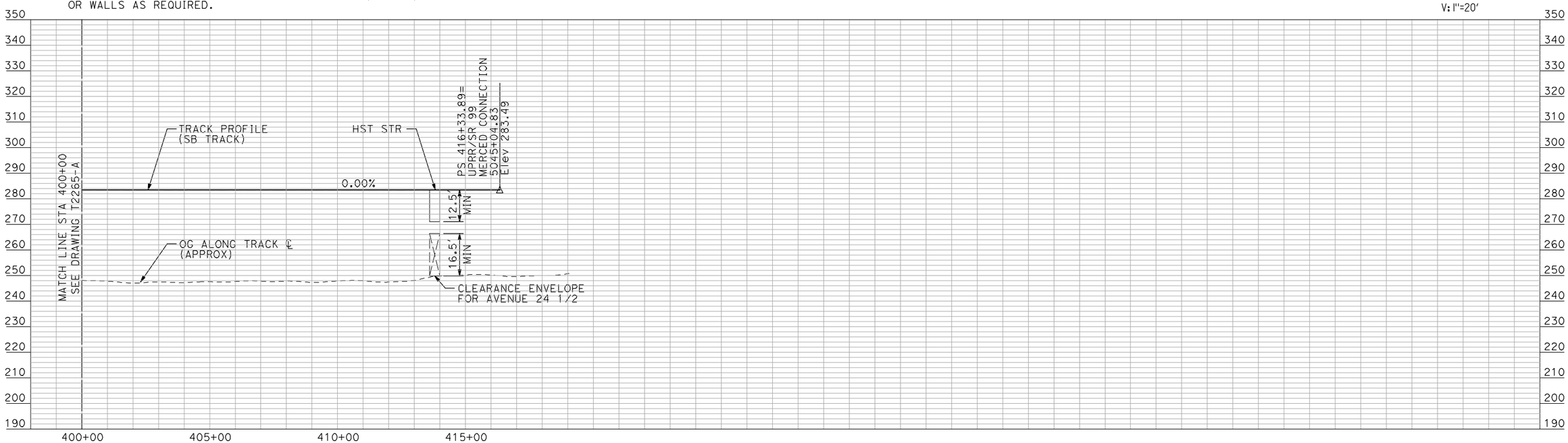
2. TRACKS CLOSER THAN 102 FT TO THE NEAREST EXISTING FREIGHT TRACKS WILL INCLUDE SAFETY BARRIERS, BERMS, OR WALLS AS REQUIRED.

PLAN

200 0 200 400
H: 1"=200'

20 0 20 40
V: 1"=20'



PROFILE

"SEE T3000-T3017 DRAWINGS FOR TYPICAL SECTION LIMITS AND DETAILS"

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY A. SHIELDS
DRAWN BY H. SULLIVAN
CHECKED BY A. BOONE
IN CHARGE A. BOONE
DATE 07/20/2011

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/SR 99 WYE - SB CONNECTION
AVENUE 21
PLAN AND PROFILE
STA 400+00 TO STA 416+33.89

CONTRACT NO. HSR06-007
DRAWING NO. T2266-A
SCALE AS SHOWN
SHEET NO. ### OF ###

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