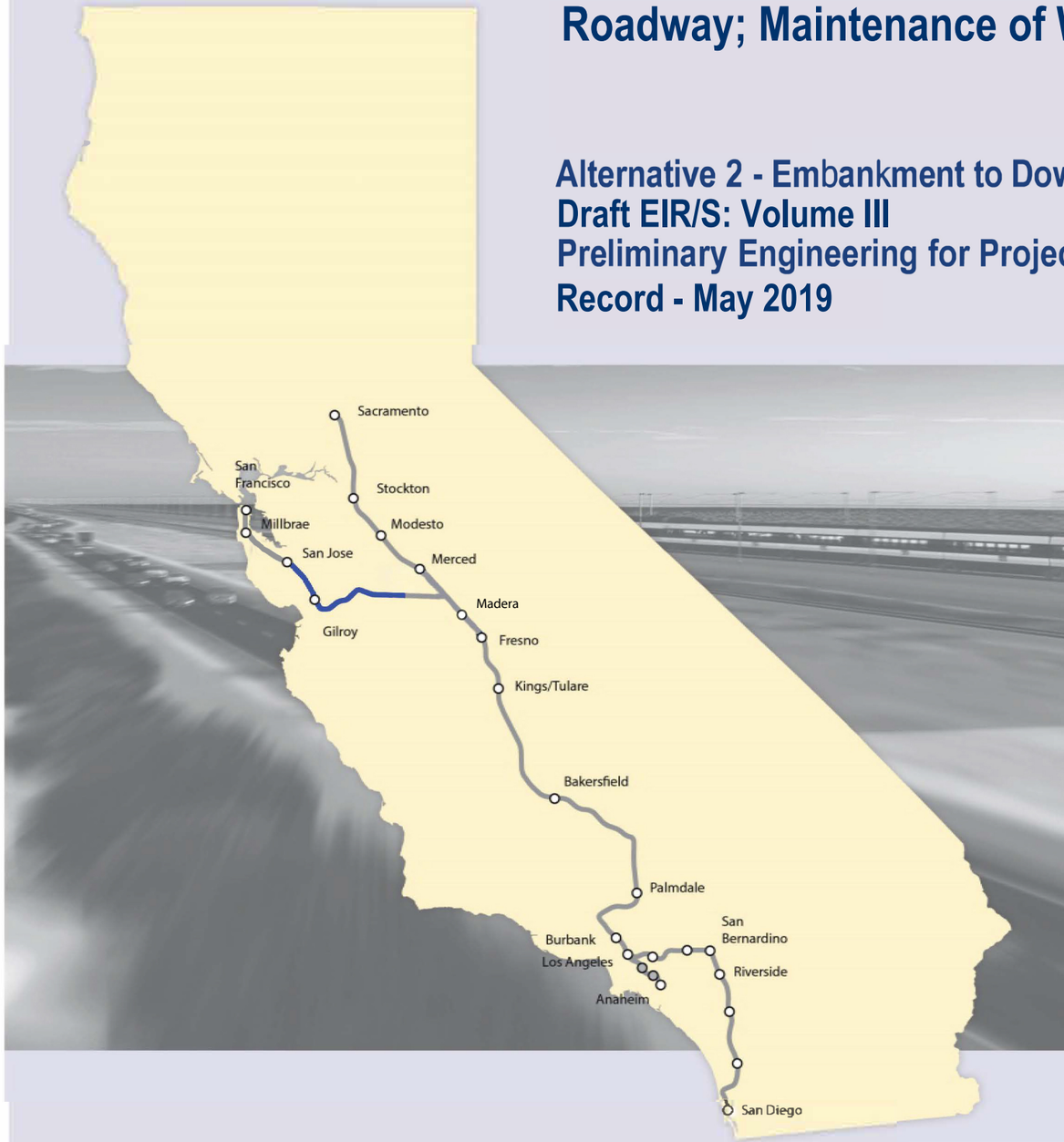
California High-Speed Rail Authority

San Jose to Merced Section: San Jose to Central Valley Wye

Roadway; Maintenance of Way; Tunnels



Alternative 2 - Embankment to Downtown Gilroy
Draft EIR/S: Volume III
Preliminary Engineering for Project Definition
Record - May 2019

SAN JOSE TO CVY EIR/S: VOLUME III
ALTERNATIVE 2
BOOK 2D
SHEET 126 - 149 of 253

CALIFORNIA High-Speed Rail Authority

ALTERNATIVE 2 - EMBANKMENT TO DOWNTOWN GILROY

BOOK	SHEET NO	DRAWING NO	SUBSECTION	GEOGRAPHIC LOCATION	ALIGNMENT OR FEATURE	SHEET DESCRIPTION	ADDITIONAL DESCRIPTION
BOOK 2D	A	COVER	SAN JOSE TO MERCED SECTION	N/A	SAN JOSE TO CENTRAL VALLEY WYE	ALTERNATIVE 2	EMABNKMENT TO DOWNTOWN GILROY
BOOK 2D	B	GE-A0205	ENTIRE ALTERNATIVE	GRADE SEPARATIONS, MAINTENANCE OF WAY, TUNNELS	INDEX OF DRAWING	SHEET 5 OF 8	
BOOK 2D	C	GE-D0201	GENERAL	ENTIRE ALTERNATIVE	KEY MAP	COMPOSITE PLAN	
BOOK 2D	D	GE-D0202	GENERAL	ENTIRE ALTERNATIVE	KEY MAP	SYSTEMS SITES	
ROADWAY							
ROADWAY-PACHECO PASS							
BOOK 2D	126	CV-S1401	PACHECO PASS	ROMERO RD, CA-152	TUNNEL	CIVIL DETAILS	
ROADWAY - SAN JOAQUIN VALLEY							
BOOK 2D	127	CV-S1601	SAN JOAQUIN VALLEY	MONTEREY RD, INGOMAR GRADE	HENRY MILLER ROAD	CIVIL DETAILS	
BOOK 2D	128	CV-T1603	SAN JOAQUIN VALLEY	VOLTA RD AT HENRY MILLER RD	HENRY MILLER ROAD	GRADE SEPARATION LAYOUT, PROFILE, & CROSS SECTIONS	HENRY MILLER ROAD
BOOK 2D	129	CV-T1604	SAN JOAQUIN VALLEY	HENRY MILLER ACCESS	HENRY MILLER ROAD	GRADE SEPARATION LAYOUT, PROFILE, & CROSS SECTIONS	HENRY MILLER ACCESS
BOOK 2D	130	CV-T1606	SAN JOAQUIN VALLEY	HENRY MILLER RD AT MERCEY SPRINGS RD	HENRY MILLER ROAD	GRADE SEPARATION LAYOUT, PROFILE, & CROSS SECTIONS	MERCEY SPRINGS ROAD
BOOK 2D	131	CV-T1609	SAN JOAQUIN VALLEY	DELTA RD	HENRY MILLER ROAD	GRADE SEPARATION LAYOUT, PROFILE, & CROSS SECTIONS	DELTA ROAD
BOOK 2D	132	CV-T1610	SAN JOAQUIN VALLEY	TURNER ISLAND RD AT HENRY MILLER RD	HENRY MILLER ROAD	GRADE SEPARATION LAYOUT, PROFILE, & CROSS SECTIONS	TURNER ROAD
BOOK 2D	133	CV-T1611	SAN JOAQUIN VALLEY	CARLUCCI RD	HENRY MILLER ROAD	GRADE SEPARATION LAYOUT, PROFILE, & CROSS SECTIONS	CARLUCCI ROAD
BOOK 2D	134	CV-T1612	SAN JOAQUIN VALLEY	HUTCHINS RD	HENRY MILLER ROAD	GRADE SEPARATION LAYOUT, PROFILE, & CROSS SECTIONS	HUTCHINS ROAD
MAINTENANCE OF WAY							
BOOK 2D	135	MY-B1007	MORGAN HILL AND GILROY	N/A	EMBANKMENT TO DOWNTOWN GILROY	MAINTENANCE OF WAY FACILITY	TYPICAL SECTIONS
BOOK 2D	136	MY-B1008	MORGAN HILL AND GILROY	N/A	EMBANKMENT TO DOWNTOWN GILROY	MAINTENANCE OF WAY FACILITY	UPRR PROFILE AND GEOMETRY FOR MOWF
TUNNELS - PACHECO PASS							
BOOK 2D	137	TN-D1404	PACHECO PASS	N/A	TUNNEL	TUNNEL 2 - PORTAL 1	
BOOK 2D	138	TN-D1405	PACHECO PASS	ACCESS RD 1	TUNNEL	TUNNEL PORTAL 2 ACCESS ROAD	
BOOK 2D	139	TN-D1406	PACHECO PASS	CALIFORNIA AQUEDUCT	TUNNEL	TUNNEL PORTAL 2 ACCESS ROAD	
BOOK 2D	140	TN-D1407	PACHECO PASS	ACCESS RD 2	TUNNEL	TUNNEL PORTAL 2 ACCESS ROAD	
BOOK 2D	141	TN-D1408	PACHECO PASS	N/A	TUNNEL	LONGITUDINAL PROFILE	
BOOK 2D	142	TN-D1409	PACHECO PASS	N/A	TUNNEL	GRADING DETAIL	
BOOK 2D	143	TN-D1410	PACHECO PASS	N/A	TUNNEL	GRADING DETAIL	
BOOK 2D	144	TN-D1411	PACHECO PASS	N/A	TUNNEL	GRADING DETAIL	
BOOK 2D	145	TN-D1412	PACHECO PASS	N/A	TUNNEL	GRADING DETAIL	
BOOK 2D	146	TN-D1413	PACHECO PASS	I-5, FAHEY RD	TUNNEL	GRADING DETAIL	
BOOK 2D	147	TN-D1414	PACHECO PASS	N/A	TUNNEL	TUNNEL 2 - PORTAL 1	SECTIONS
BOOK 2D	148	TN-D1415	PACHECO PASS	N/A	TUNNEL	TUNNEL 2 - PORTAL 2	APPROACH 1
BOOK 2D	149	TN-D1416	PACHECO PASS	N/A	TUNNEL	TUNNEL 2 - PORTAL 2	APPROACH 2

SAN JOSE TO CVY EIR/S: VOLUME III
ALTERNATIVE 2
BOOK 2D
SHEET B

$FILE$ $PLTDRVS$ $PENTBLS$ $TIME$ $DATE$ $USER$

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
DRAWN BY
CHECKED BY
IN CHARGE
DATE

RECORD PEPD SUBMITTAL

MAY 3, 2019

NOT FOR CONSTRUCTION

HNTB
1111 Broadway
9th Floor
Oakland, CA 94607

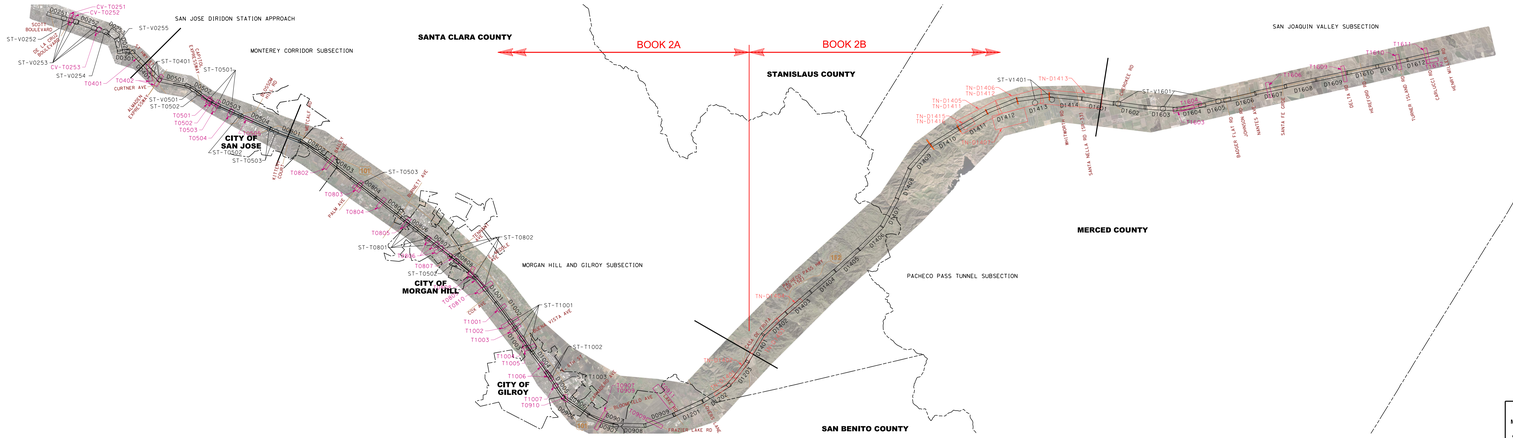
CALIFORNIA High-Speed Rail Authority

CALIFORNIA HIGH-SPEED TRAIN PROJECT
SAN JOSE TO MERCED
ALTERNATIVE 2
INDEX OF DRAWING
SHEET 5 OF 8

CONTRACT NO. HSR15-34
DRAWING NO. GE-A0205
SCALE NONE
SHEET NO.

ALTERNATIVE 2 BOOK INDEX

BOOK 2A:	COMPOSITE PLAN, PROFILE AND CROSS SECTIONS
BOOK 2B:	COMPOSITE PLAN, PROFILE AND CROSS SECTIONS, STATIONS, STRUCTURES
BOOK 2C:	ROADWAY
BOOK 2D:	ROADWAY, MAINTENANCE OF WAY, TUNNELS - PACHECO PASS
BOOK 2E:	CONSTRUCTION STAGING, ALIGNMENT DATA TABLES



NOTE:
ALTERNATIVE KEY MAP SHOWN SIDE BY SIDE FOR CLARITY.

LEGEND
KEY MAP LEGEND

- 91D-XX — AERIAL ORTHO-PHOTO
- DXXXX — COMPOSITE ROLL PLOTS
- TXXXX — GRADE SEPARATION ROLL PLOTS
- TN-DXXXX — TUNNEL ROLL PLOTS
- ST-TXXXX — STRUCTURES ROLL PLOTS
- SECTION BREAK
- CITY LIMITS
- COUNTY LINE
- ALMADEN RD — EXISTING ROAD

SAN JOSE TO CVY EIR/S: VOLUME III
ALTERNATIVE 2
BOOK 2D
SHEET C

6000 0 6000 12000
FEET

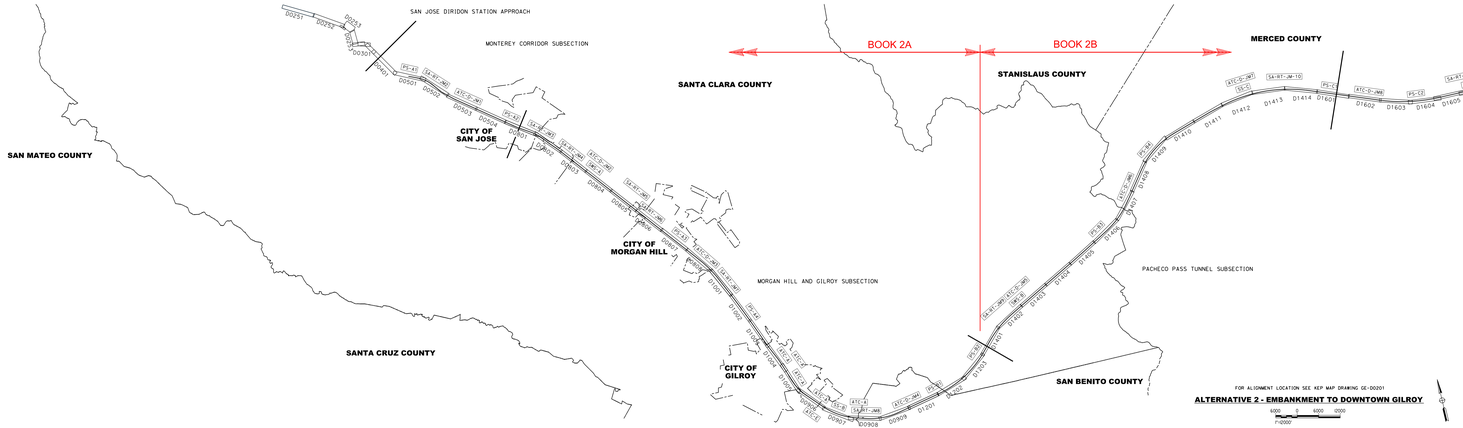
RECORD PEPD SUBMITTAL
MAY 3, 2019
NOT FOR CONSTRUCTION

MNTB
111 Broadway
Suite 1200
Oakland, CA 94607

CALIFORNIA High-Speed Rail Authority

CALIFORNIA HIGH-SPEED TRAIN PROJECT
SAN JOSE TO MERCED
ALTERNATIVE 2
KEY MAP
COMPOSITE PLAN

DRAWING NO.	HSR15-54
DESIGN NO.	CE-00201
SCALE	AS SHOWN
SHEET NO.	



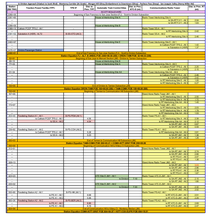
FOR ALIGNMENT LOCATION SEE KEY MAP DRAWING GE-00201

ALTERNATIVE 2 - EMBANKMENT TO DOWNTOWN GILROY

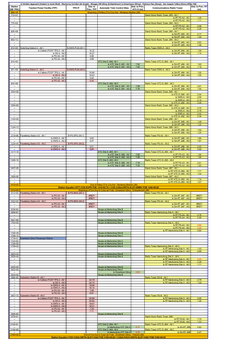
6000 0 6000 12000

1"=0000'

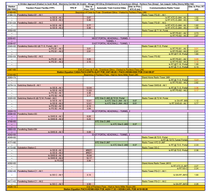
ALTERNATIVE 2



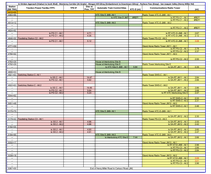
ALTERNATIVE 2 (CONTINUED)



ALTERNATIVE 2 (CONTINUED)



ALTERNATIVE 2 (CONTINUED)



SAN JOSE TO CVY EIR/S: VOLUME III
ALTERNATIVE 2
BOOK 2D
SHEET D

RECORD PEPD SUBMITTAL
MAY 3, 2019
NOT FOR CONSTRUCTION

MNTB
111 Broadway
Suite 1200
Oakland, CA 94607

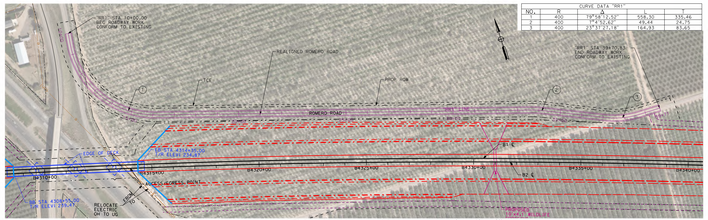
CALIFORNIA High-Speed Rail Authority

CALIFORNIA HIGH-SPEED TRAIN PROJECT
SAN JOSE TO MERCED
GENERAL
KEY MAP
SYSTEMS SITES

CONTRACT NO. HSR15-54
DRAWING NO. GE-00202
SCALE AS SHOWN
SHEET NO.

NOTE!

1. REFER TO GENERAL NOTES SHEETS GE-B0001 AND GE-B0002 FOR NOTES.

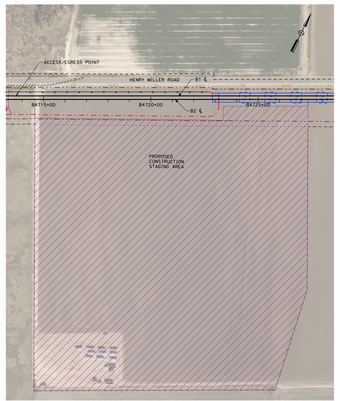


PROPOSED ACCESS ROAD TO MONTEREY ROAD
SCALE1 1"=200'

60 0 60 200
1"=200' HOR

PROPOSED ACCESS ROAD TO INGOMAR GRADE
SCALE1 1"=200'

60 0 60 200
1"=200' HOR



PROPOSED CONSTRUCTION STAGING AREA AT STA B4714+00 TO STA B4727+32
SCALE1 1"=200'

60 0 60 200
1"=200' HOR

NOTE:
1. REFER TO GENERAL NOTES SHEETS GE-B0001 AND GE-B0002 FOR NOTES.

SAN JOSE TO CVY EIR/S: VOLUME III
ALTERNATIVE 2
BOOK 2D
SHEET 127 OF 253

RECORD PDFS SUBMITTAL
MAY 3, 2019
NOT FOR CONSTRUCTION

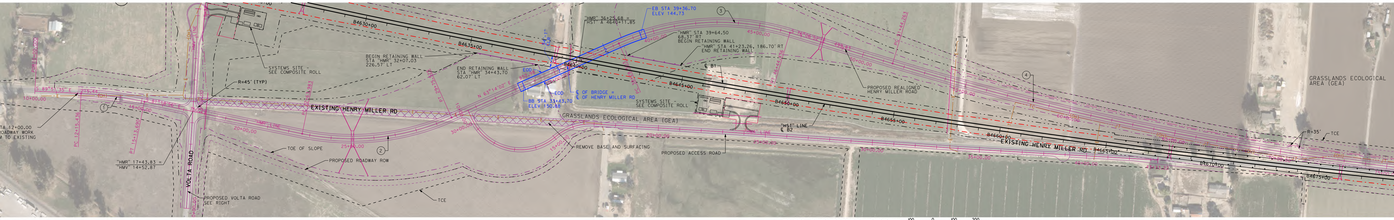
HNTB
111 Broadway
Oakland, CA 94607

CALIFORNIA High-Speed Rail Authority

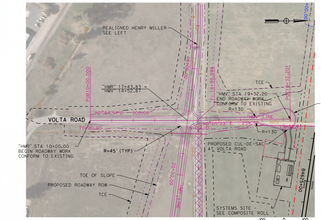
CALIFORNIA HIGH-SPEED TRAIN PROJECT
SAN JOSE TO MERCED
SAN JOAQUIN VALLEY
HENRY MILLER ROAD
CIVIL DETAILS

CONTRACT NO. HSR15-38
DRAWING NO. CV-51601
SHEET NO. AS SHOWN
DRAFT No.

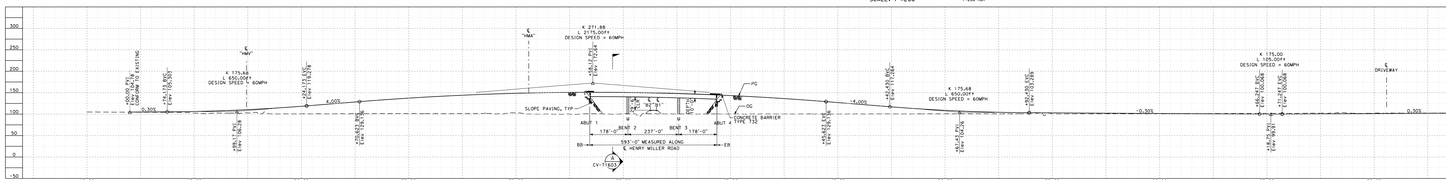
DATE PLOTTED 4/25/19



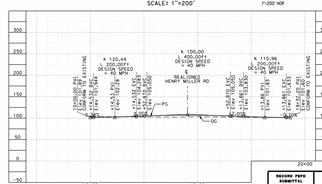
PLAN - HENRY MILLER "HMR"
SCALE: 1"=200'



PLAN - VOLTA RD TO HENRY MILLER "HMV"
SCALE: 1"=200'



PROFILE - HENRY MILLER "HMR"
SCALE: 1"=200' HOR, 1"=100' VERT

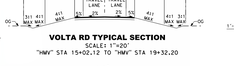


PROFILE - VOLTA RD TO HENRY MILLER "HMV"
SCALE: 1"=200' HOR, 1"=100' VERT

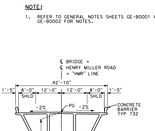
NOTE!

1. REFER TO GENERAL NOTES SHEETS GE-B0001 AND GE-B0002 FOR NOTES...

VOLTA RD TYPICAL SECTION
SCALE: 1"=20'
"HMV" STA 15+02.12 TO "HMV" STA 19+32.20



VOLTA RD TYPICAL SECTION
SCALE: 1"=20'
"HMV" STA 10+00.00 to "HMV" STA 15+02.12



SECTION
SCALE: 1"=20'

HENRY MILLER RD TYPICAL SECTION
SCALE: 1"=20'
"HMR" STA 12+00.00 TO "HMR" STA 53+20.70
"HMR" STA 59+59.60 TO "HMR" STA 78+00.00

SAN JOSE TO CVY EIR/S: VOLUME III
ALTERNATIVE 2
BOOK 2D
SHEET 128 OF 253

RECORD PDFS SUBMITTAL
MAY 3, 2019
NOT FOR CONSTRUCTION

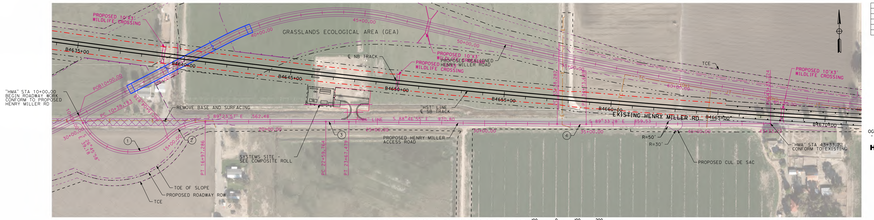
HNTB
111 Broadway
Suite 1200
Oakland, CA 94607

CALIFORNIA High-Speed Rail Authority

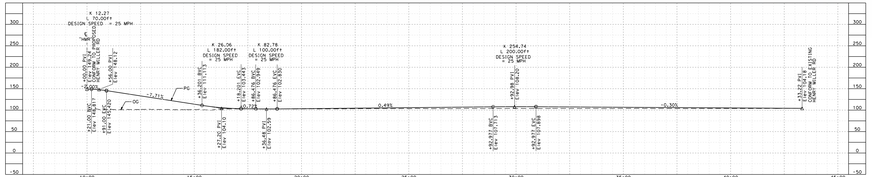
CALIFORNIA HIGH-SPEED TRAIN PROJECT
SAN JOSE TO MERCED
SAN JOAQUIN VALLEY
HENRY MILLER ROAD
GRADE SEPARATION LAYOUT, PROFILE, & CROSS SECTIONS
HENRY MILLER ROAD

DRAWING NO.: HSRR15-34
SHEET NO.: CV-T1603
AS SHOWN

C:\PROJECTS\HMR_CONFORM_CIVIL_CAD_FILES\CV-T1603.dgn 5/3/2019 7:49:37 AM

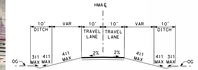


PLAN - HENRY MILLER ACCESS "HMA"
SCALE: 1"=200'



PROFILE - HENRY MILLER ACCESS "HMA"
SCALE: 1"=200' HOR, 1"=50' VERT

CURVE DATA "HMA"				
NO.	R	Δ	L	T
1	250	106°47'06.43"	465.836	328.153
2	250	43°05'17.84"	187.958	98.554
3	10000	0°53'01.19"	157.114	53.808
4	10000	1°46'32.58"	310.408	87.105



HENRY MILLER ACCESS RD TYPICAL SECTION
SCALE: 1"=20'
"HMA" STA 10+00.00 TO "HMA" STA 43+33.22

NOTE!

1. REFER TO GENERAL NOTES SHEETS GE-B0001 AND GE-B0002 FOR NOTES.

SAN JOSE TO CVY EIR/S: VOLUME III
ALTERNATIVE 2
BOOK 2D
SHEET 129 OF 253

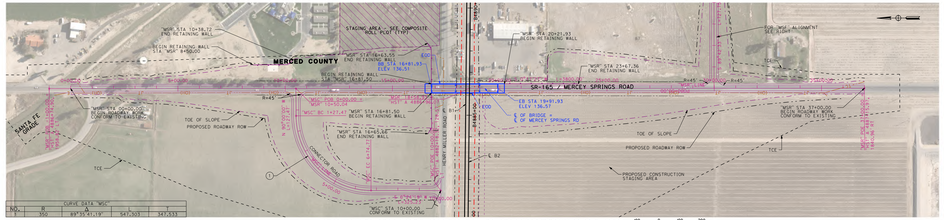
RECORD PDPO SUBMITTAL
MAY 3, 2019
NOT FOR CONSTRUCTION

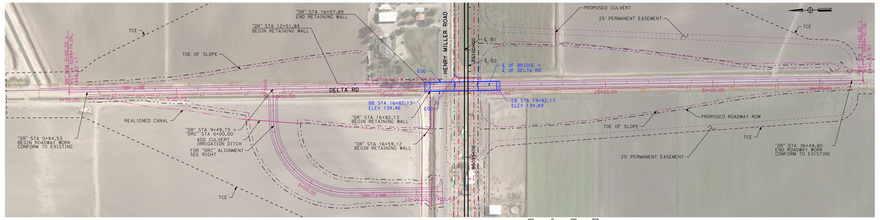
HNTB
111 Broadway
Suite 1200
Oakland, CA 94607

CALIFORNIA High-Speed Rail Authority

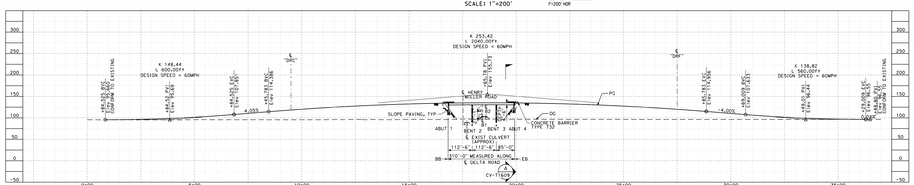
CALIFORNIA HIGH-SPEED TRAIN PROJECT
SAN JOSE TO MERCED
SAN JOAQUIN VALLEY
HENRY MILLER ROAD
GRADE SEPARATION LAYOUT, PROFILE, & CROSS SECTIONS
HENRY MILLER ACCESS

CONTRACT NO. HSR15-35
DRAWING NO. CV-T1604
SCALE AS SHOWN
SHT. NO.

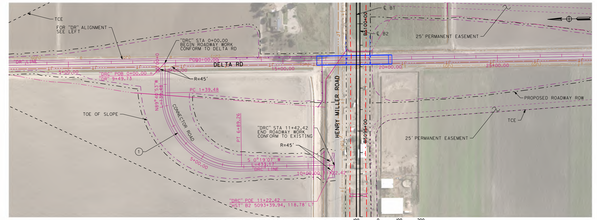

"MSR" STA 10+38.72
END RETAINING WALL
BEGIN RETAINING WALL
E14 "MSR" B450.00
"MSR" STA 27+63.50
END RETAINING WALL
MERCED COUNTY
STAGING AREA - SEE COMPOSITE
PLAN SHEET TYP.
"MSR" STA 20+21.93
BEGIN RETAINING WALL
"MSR" STA 17+17.36
END RETAINING WALL
BEGIN RETAINING WALL
E16 "MSR" B438.00
"MSR" STA 16+51.93
BEGIN RETAINING WALL
SR-165 / MERCEY SPRINGS ROAD
"MSR" STA 16+51.93
BEGIN RETAINING WALL
CONFORM TO EXISTING
"MSC" STA 10+00.00
CONFORM TO EXISTING
"MSR" STA 37+00.00
CONFORM TO EXISTING
"MSC" STA 10+00.00
CONFORM TO EXISTING
SANTA FE
TRACKS
TOE OF SLOPE
PROPOSED ROADWAY ROW
TCE
CONSTRUCTION
ROAD
HENRY MILLER ROAD
E 16
E 17
E 18
E 19
E 20
E 21
E 22
E 23
E 24
E 25
E 26
E 27
E 28
E 29
E 30
E 31
E 32
E 33
E 34
E 35
E



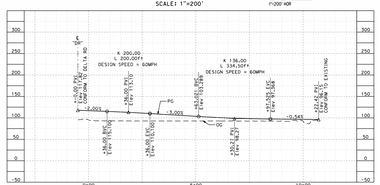
PLAN - DELTA RD "DR"
SCALE: 1"=200'



PROFILE - DELTA RD "DR"
SCALE: 1"=200' HOR, 1"=100' VERT



PLAN - DELTA RD CONNECTOR "DRC"
SCALE: 1"=200'

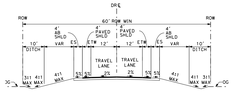


PROFILE - DELTA RD CONNECTOR "DRC"
SCALE: 1"=200' HOR, 1"=100' VERT

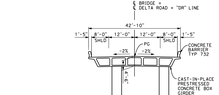
CURVE DATA "DRC"				
NO.	R	Δ	L	T
1	350'	90°00'00.00"	549.779	350.000

NOTE!

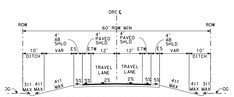
1. REFER TO GENERAL NOTES SHEETS GE-B0001 AND GE-B0002 FOR NOTES.



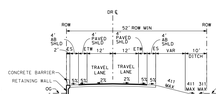
DELTA RD TYPICAL SECTION
SCALE: 1"=20'
"DR" STA 00+84.53 TO "DR" STA 13+82.15
"DR" STA 20+8.28 TO "DR" STA 36+48.80



SECTION A
SCALE: 1"=20'



DELTA RD TO HENRY MILLER RD CONNECTOR TYPICAL SECTION
SCALE: 1"=20'
"DRC" STA 00+00.00 TO "DRC" STA 11+22.42



DELTA RD TYPICAL SECTION
SCALE: 1"=20'
"DR" STA 13+82.15 TO "DR" STA 16+57.89

SAN JOSE TO CVY EIR/S: VOLUME III
ALTERNATIVE 2
BOOK 2D
SHEET 131 OF 253

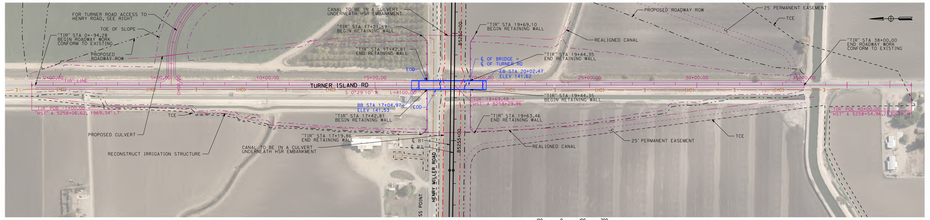
RECORD PDPO SUBMITTAL
MAY 3, 2019
NOT FOR CONSTRUCTION

MTB
Metropolitan Transportation Commission
Oakland, CA 94607

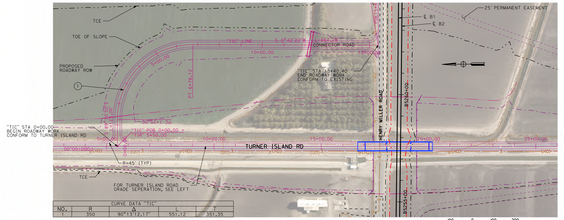
CALIFORNIA High-Speed Rail Authority

CALIFORNIA HIGH-SPEED TRAIN PROJECT
SAN JOSE TO MERCED
SAN JOAQUIN VALLEY
HENRY MILLER ROAD
GRADE SEPARATION LAYOUT, PROFILE, & CROSS SECTIONS
DELTA ROAD

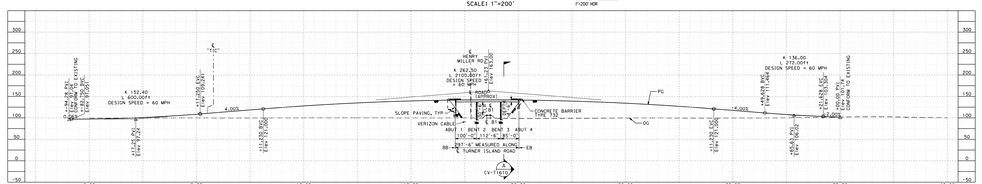
CONTRACT NO. HSR15-52
DRAWING NO. CV-T1609
SHEET NO. 1
AS SHOWN
DATE



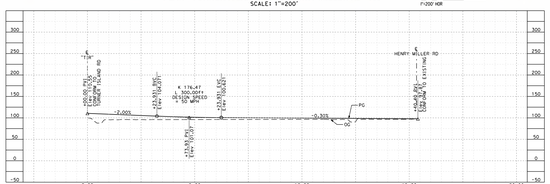
PLAN - TURNER ISLAND RD "TIR"
SCALE: 1"=200'



PLAN - TURNER ISLAND RD TO HENRY MILLER RD "TIC"
SCALE: 1"=200'



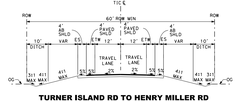
PROFILE - TURNER ISLAND RD "TIR"
SCALE: 1"=200' HOR, 1"=100' VERT



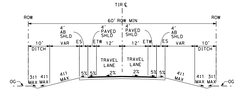
PROFILE - TURNER ISLAND RD TO HENRY MILLER RD "TIC"
SCALE: 1"=200' HOR, 1"=100' VERT

NOTE!

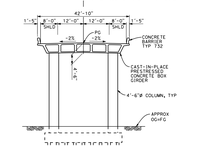
1. REFER TO GENERAL NOTES SHEETS GE-B0001 AND GE-B0002 FOR NOTES.



TURNER ISLAND RD TO HENRY MILLER RD
TYPICAL SECTION
SCALE: 1"=20'
"TIC" STA 00+00.00 TO "TIC" STA 15+40.40



TURNER ISLAND RD TYPICAL SECTION
SCALE: 1"=20'
"TIR" STA 00+94.28 TO "TIR" STA 17+04.97
"TIR" STA 20+22.47 TO "TIR" STA 38+00.00



SECTION A
SCALE: 1"=20'

SAN JOSE TO CVY EIR/S: VOLUME III
ALTERNATIVE 2
BOOK 2D
SHEET 132 OF 253

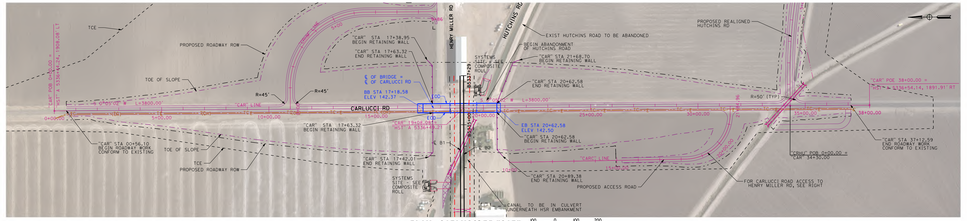
RECORD PSPD SUBMITTAL	
MAY 3, 2019	
NOT FOR CONSTRUCTION	

HNTB
111 Broadway
Suite 1200
Oakland, CA 94607

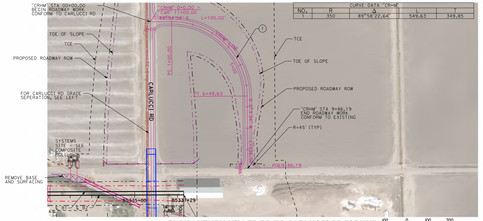
CALIFORNIA High-Speed Rail Authority

CALIFORNIA HIGH-SPEED TRAIN PROJECT
SAN JOSE TO MERCED
SAN JOAQUIN VALLEY
HENRY MILLER ROAD
GRADE SEPARATION LAYOUT, PROFILE, & CROSS SECTIONS
TURNER ROAD

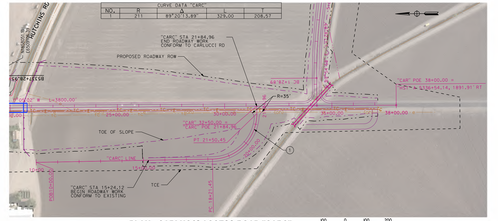
CONTRACT NO.	HSR15-34
DRAWING NO.	CV-T1610
SCALE	AS SHOWN
DATE	



PLAN - CARLUCCI RD "CAR"
SCALE: 1"=200'



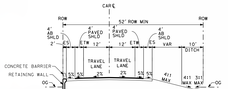
PLAN - HENRY MILLER RD TO CARLUCCI RD "CRHM"
SCALE: 1"=200'



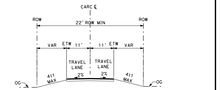
PLAN - CARLUCCI ACCESS ROAD "CARC"
SCALE: 1"=200'

NOTE!

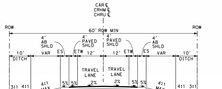
1. REFER TO GENERAL NOTES SHEETS GE-B0001 AND GE-B0002 FOR NOTES.



CARLUCCI RD TYPICAL SECTION
SCALE: 1"=20'
"CAR" STA 20+79.47 TO "CAR" STA 22+00.00

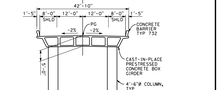


CARLUCCI ACCESS RD TYPICAL SECTION
SCALE: 1"=20'
"CARC" STA 15+24.12 TO "CARC" STA 21+84.96

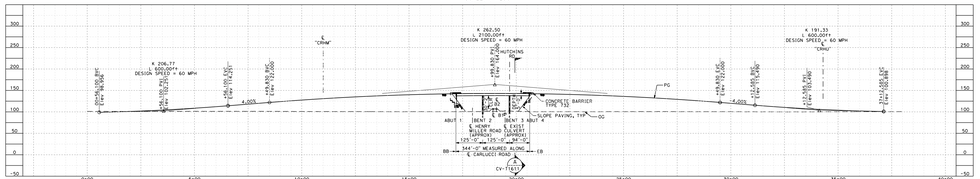


CARLUCCI RD/ HENRY MILLER TO CARLUCCI RD/ REALIGNED HUTCHINS RD TYPICAL SECTION
SCALE: 1"=20'

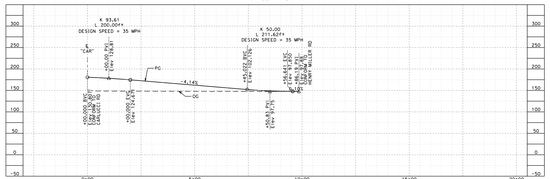
"CAR" STA 00+56.10 TO "CAR" STA 17+18.58
"CAR" STA 20+62.58 TO "CAR" STA 21+21.09
"CRHM" STA 00+00.00 TO "CRHM" STA 18+00.00
"CRHM" STA 20+81.50 TO "CRHM" STA 21+00.00



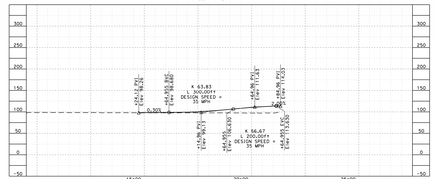
SECTION A
SCALE: 1"=20'



PROFILE - CARLUCCI RD "CAR"
SCALE: 1"=200' HOR, 1"=100' VERT



PROFILE - HENRY MILLER RD TO CARLUCCI RD "CRHM"
SCALE: 1"=200' HOR, 1"=100' VERT



PROFILE - CARLUCCI ACCESS ROAD "CARC"
SCALE: 1"=200' HOR, 1"=100' VERT

SAN JOSE TO CVY EIR/S: VOLUME III
ALTERNATIVE 2
BOOK 2D
SHEET 133 OF 253

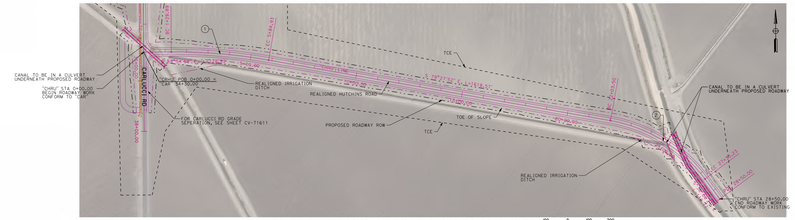
RECORD PDFD SUBMITTAL
MAY 3, 2010
NOT FOR CONSTRUCTION

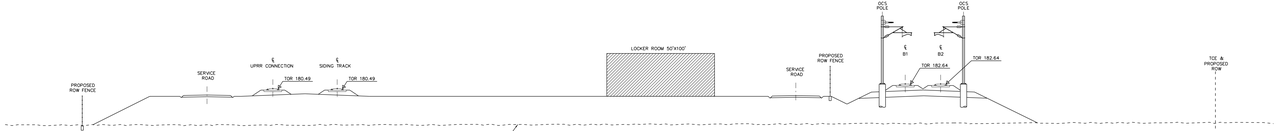
MTC MTNB 101 Howard Street, Suite 300 San Francisco, CA 94105

CALIFORNIA High-Speed Rail Authority

CALIFORNIA HIGH-SPEED TRAIN PROJECT
SAN JOSE TO MERCED
SAN JOAQUIN VALLEY
HENRY MILLER ROAD
GRADE SEPARATION LAYOUT, PROFILE, & CROSS SECTIONS
CARLUCCI ROAD

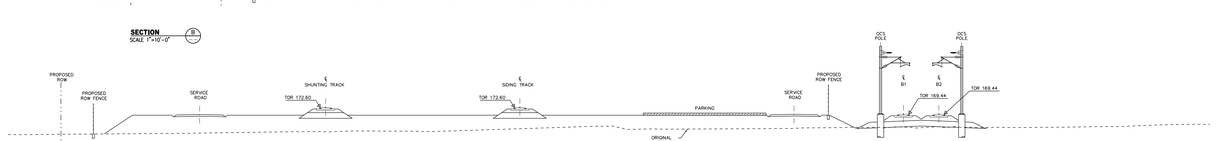
DRAWING NO. HSRIS-34
SHEET NO. CV-T1611
SCALE AS SHOWN
REV. 3


CANAL TO BE IN A CLOSED CONDUIT UNDERNEATH THE ROADWAY
"CHRU" STA 0+00.00 TIE TO EXISTING CONFORM TO "CAR"
CANAL "CHRU"
REALIGNED IRRIGATION DITCH
REALIGNED HUTCHINS ROAD
PROPOSED ROADWAY ROW
TOE OF SLOPE
TOP OF CUT
TOP OF FILL
TOP OF CUT
TOE OF SLOPE
REALIGNED IRRIGATION DITCH
CANAL TO BE IN A CLOSED CONDUIT UNDERNEATH THE PROPOSED ROADWAY
"CHRU" STA 28+50.00 TIE TO EXISTING CONFORM TO EXISTING
FOR CARLUCCI RD GRADE SEPARATION, SEE SHEET CV-T1611
TCE
TCE
TCE

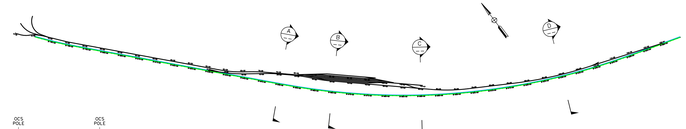


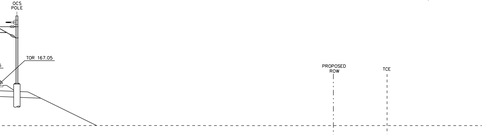
SECTION A
SCALE 1"=10'-0"

SECTION B
SCALE 1"=10'-0"



SECTION C
SCALE 1"=10'-0"





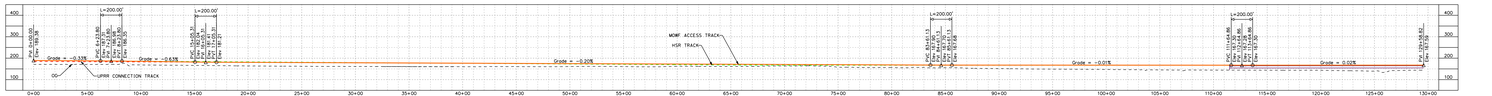
SECTION D
SCALE 1"=10'-0"

SAN JOSE TO CVY EIR/S: VOLUME III
ALT RECORD PEPD SUBMITTAL
BOX MAY 3, 2019
SHEET 135 OF 253

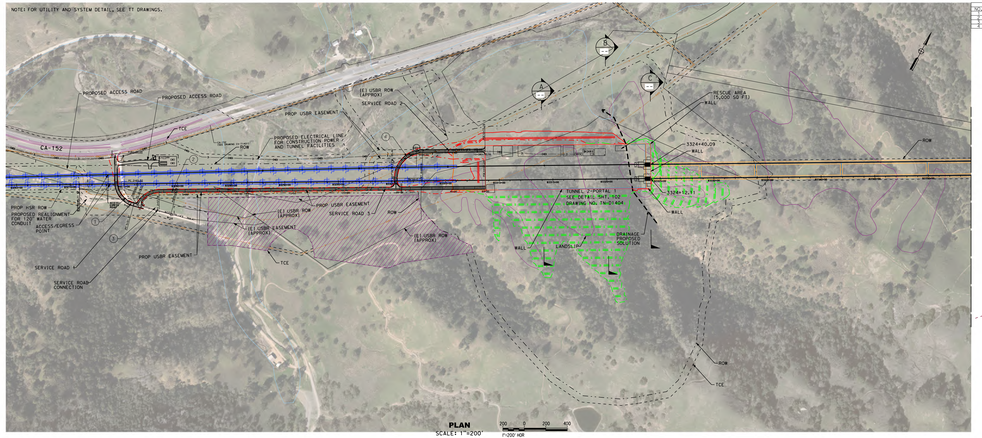
RECORD PEPD SUBMITTAL MAY 3, 2019 NOT FOR CONSTRUCTION	HNTB 111 Broadway Suite 1200 Oakland, CA 94607	CALIFORNIA High-Speed Rail Authority

CALIFORNIA HIGH-SPEED TRAIN PROJECT
SAN JOSE TO MERCED
MORGAN HILL AND GILROY
EMBANKMENT TO DOWNTOWN GILROY
MAINTENANCE OF WAY FACILITY
TYPICAL SECTIONS

CONTRACT NO. HSR15-34
DRAWING NO. M7-SY007
SCALE AS SHOWN
REV. NO.

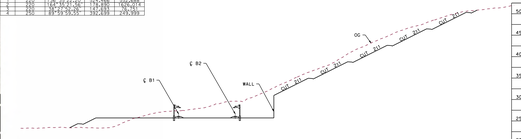

L=200.00'
L=200.00'
L=200.00'
L=200.00'
L=1000.00'
PVC 6+00.00
PVI 7+00.00
PVT 8+00.00
PVC 8+00.00
PVI 9+00.00
PVT 10+00.00
PVC 9+00.00
PVI 10+00.00
PVT 11+00.00
PVC 10+00.00
PVI 11+00.00
PVT 12+00.00
PVC 11+00.00
PVI 12+00.00
PVT 13+00.00
PVC 12+00.00
PVI 13+00.00
PVT 14+00.00
PVC 13+00.00
PVI 14+00.00
PVT 15+00.00
PVC

NOTE: FOR UTILITY AND SYSTEM DETAIL, SEE TY DRAWINGS.

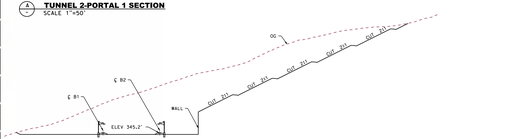


PLAN
SCALE: 1"=200'

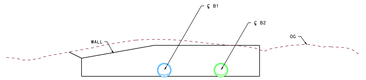
CURVE DATA - SERVICE ROAD				
SR	R	Δ	T	L
1	650	126°-47'-25"	1121.66	1434.88
2	650	126°-47'-25"	1121.66	1434.88
3	550	88°-59'-55"	1024.69	1711.13
4	550	88°-59'-55"	1024.69	2171.33



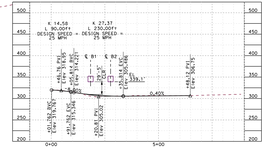
A **TUNNEL 2-PORTAL 1 SECTION**
SCALE 1"=50'



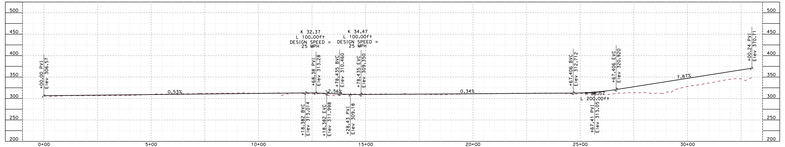
B **TUNNEL 2-PORTAL 1 SECTION**
SCALE 1"=50'



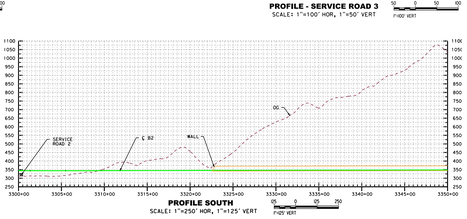
C **TUNNEL 2-PORTAL 1 SECTION**
SCALE 1"=50'



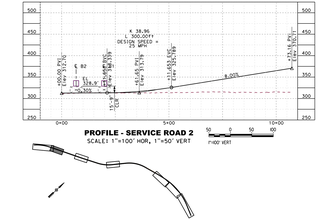
PROFILE - SERVICE ROAD 1
SCALE: 1"=100' HOR, 1"=50' VERT



PROFILE - SERVICE ROAD 3
SCALE: 1"=100' HOR, 1"=50' VERT



PROFILE SOUTH
SCALE: 1"=250' HOR, 1"=125' VERT



PROFILE - SERVICE ROAD 2
SCALE: 1"=100' HOR, 1"=50' VERT

SAN JOSE TO CVY EIR/S: VOLUME III
ALTERNATIVE 2
BOOK 2D
SHEET 137 OF 253

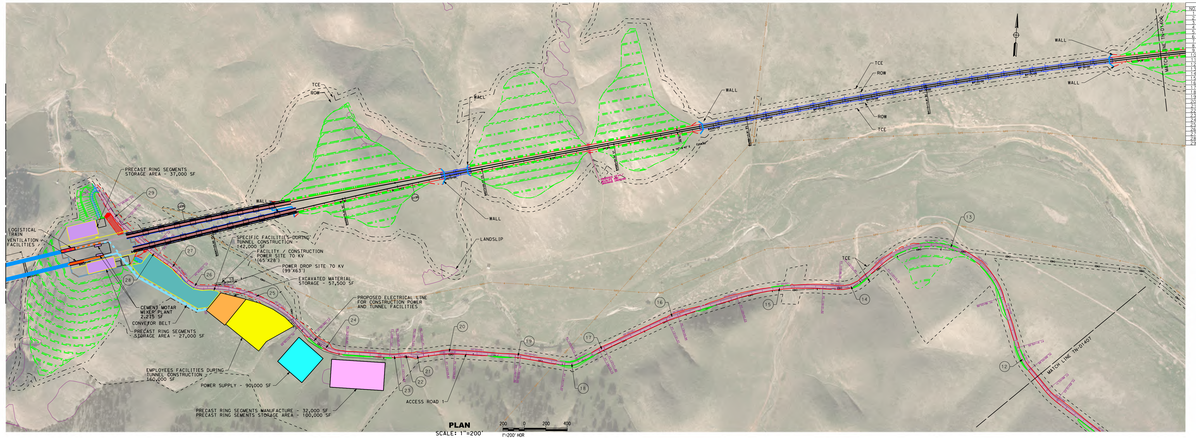
RECORD PDFD SUBMITTAL
MAY 3, 2019
NOT FOR CONSTRUCTION

HNTB
111 Broadway
Suite 1200
Oakland, CA 94607

CALIFORNIA High-Speed Rail Authority

CALIFORNIA HIGH-SPEED TRAIN PROJECT
SAN JOSE TO MERCED
PACHECO PASS
TUNNEL
TUNNEL 2 - PORTAL 1

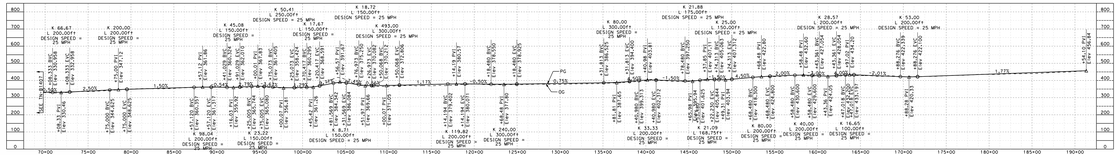
CONTRACT NO. HSR15-34
DRAWING NO. TN-01404
SCALE AS SHOWN
SHEET NO.



CURVE DATA ACCESS ROAD 1				
No	R	Δ	T	L
1	200	6°47'35.16"	84.183	41.958
2	200	6°47'35.16"	84.183	41.958
3	1,500	3°44'43.44"	49.125	98.045
4	1,500	3°44'43.44"	49.125	98.045
5	200	6°47'35.16"	84.183	41.958
6	200	6°47'35.16"	84.183	41.958
7	200	6°47'35.16"	84.183	41.958
8	200	6°47'35.16"	84.183	41.958
9	200	14°53'39.60"	60.436	29.781
10	200	14°53'39.60"	60.436	29.781
11	200	14°53'39.60"	60.436	29.781
12	200	14°53'39.60"	60.436	29.781
13	200	13°45'09.24"	53.931	26.982
14	200	14°53'39.60"	60.436	29.781
15	200	14°53'39.60"	60.436	29.781
16	200	14°53'39.60"	60.436	29.781
17	200	14°53'39.60"	60.436	29.781
18	200	14°53'39.60"	60.436	29.781
19	200	14°53'39.60"	60.436	29.781
20	200	14°53'39.60"	60.436	29.781
21	200	14°53'39.60"	60.436	29.781
22	200	14°53'39.60"	60.436	29.781
23	200	14°53'39.60"	60.436	29.781
24	1,500	3°44'43.44"	49.125	98.045
25	1,500	3°44'43.44"	49.125	98.045
26	200	6°47'35.16"	84.183	41.958
27	200	6°47'35.16"	84.183	41.958
28	200	14°53'39.60"	60.436	29.781

NOTE!

1. REFER TO GENERAL NOTES SHEETS GE-B0001 AND GE-B0002 FOR NOTES.



PROFILE ACCESS ROAD 1
SCALE: 1"=250' HOR, 1"=125' VERT

SAN JOSE TO CVY EIR/S: VOLUME III
ALTERNATIVE 2
BOOK 2D
SHEET 138 OF 253

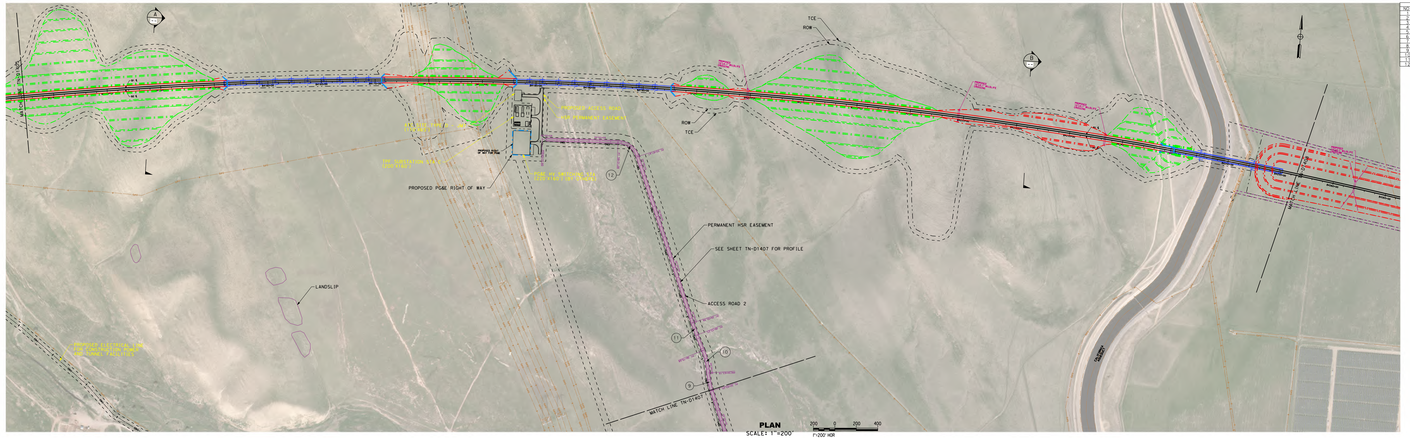
RECORD PSPD SUBMITTAL
MAY 3, 2019
NOT FOR CONSTRUCTION

HNTB
Oakland, CA 94607

CALIFORNIA High-Speed Rail Authority

CALIFORNIA HIGH-SPEED TRAIN PROJECT
SAN JOSE TO MERCED
PACHECO PASS
TUNNEL
TUNNEL PORTAL 2 ACCESS ROAD

CONTRACT NO. HSR15-34
DRAWING NO. TN-01405
SHEET NO. AS SHOWN



CURVE DATA ACCESS ROAD 2				
NO.	R	L	T	E
1	50	139.81'+/-10"	76.36'+/-	7.58'+/-
2	200	144.87'+/-10"	74.87'+/-	13.49'+/-
3	200	144.87'+/-10"	74.87'+/-	13.49'+/-
4	200	134.04'+/-10"	69.18'+/-	11.96'+/-
5	200	134.04'+/-10"	69.18'+/-	11.96'+/-
6	200	131.79'+/-10"	67.69'+/-	11.44'+/-
7	200	131.79'+/-10"	67.69'+/-	11.44'+/-
8	200	134.04'+/-10"	69.18'+/-	11.96'+/-
9	200	134.04'+/-10"	69.18'+/-	11.96'+/-
10	200	144.87'+/-10"	74.87'+/-	13.49'+/-
11	200	144.87'+/-10"	74.87'+/-	13.49'+/-
12	50	139.81'+/-10"	76.36'+/-	7.58'+/-

NOTE!

1. REFER TO GENERAL NOTES SHEETS GE-B0001 AND GE-B0002 FOR NOTES.

SAN JOSE TO CVY EIR/S: VOLUME III
ALTERNATIVE 2
BOOK 2D
SHEET 139 OF 253

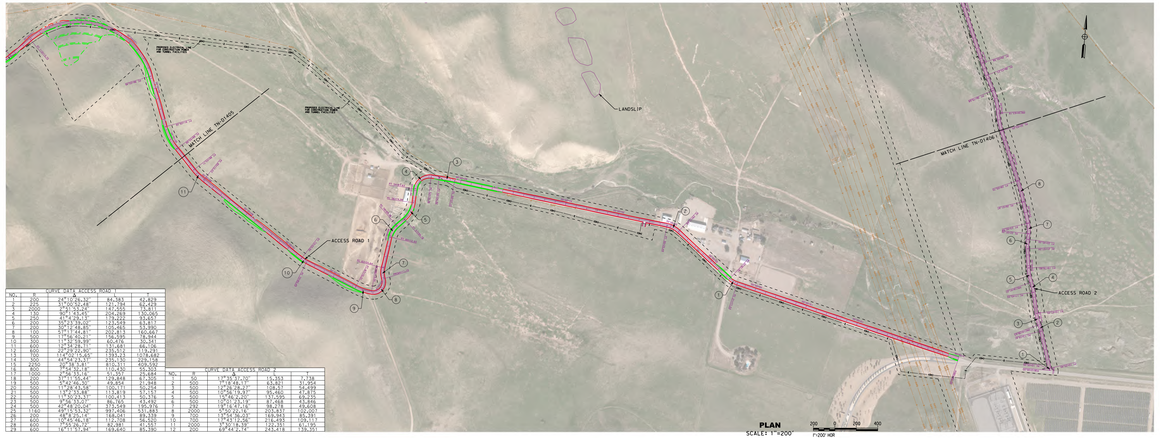
RECORD PDFS SUBMITTAL
MAY 3, 2019
NOT FOR CONSTRUCTION

HNTB
555 Twin Dolphin Drive, Suite 650
Redwood City, CA 94065

CALIFORNIA High-Speed Rail Authority

CALIFORNIA HIGH-SPEED TRAIN PROJECT
SAN JOSE TO MERCED
PACHECO PASS
TUNNEL
TUNNEL PORTAL 2 ACCESS ROAD

CONTRACT NO. HSR15-34
DRAWING NO. TN-D1406
SCALE AS SHOWN
SHEET NO.


WATCH LINE TN-01407
WATCH LINE TN-01408
LANDSLIP
ACCESS ROAD 1
ACCESS ROAD 2
PACHECO CREEK
PACHECO CREEK
PACHECO CREEK

PROFILE
SCALE: 1"=1600' HOR, 1"=100' VERT

NOTE:
REFER TO COMPOSITE DRAWINGS FOR TUNNEL PROFILE DETAILS.

SAN JOSE TO CVY EIR/S: VOLUME III
ALTERNATIVE 2
BOOK 2D
SHEET 141 OF 253

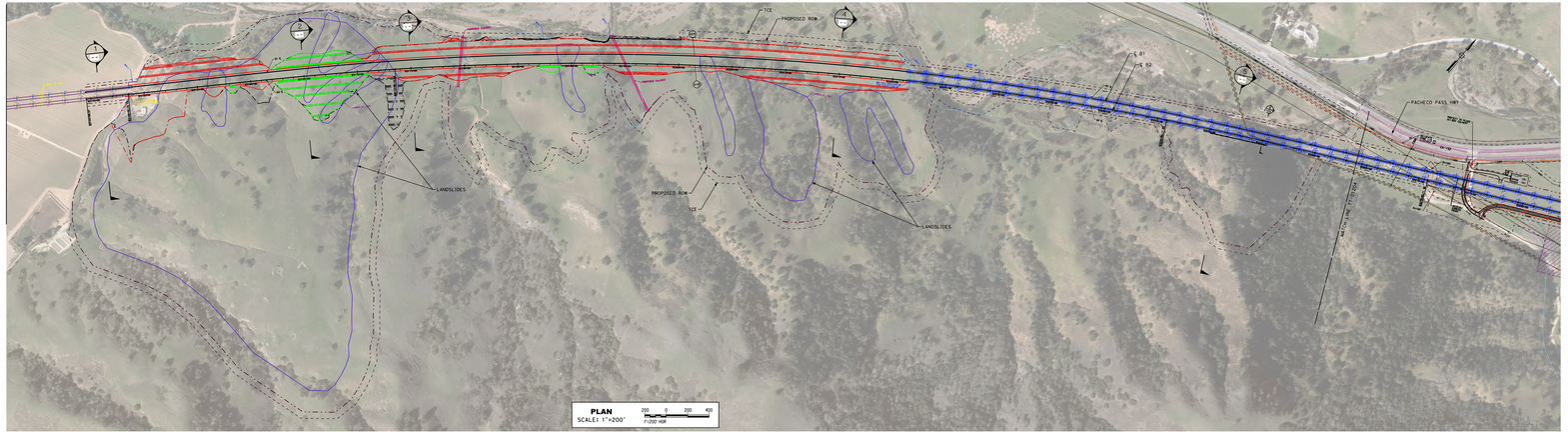
RECORD PEPD SUBMITTAL
MAY 3, 2019
NOT FOR CONSTRUCTION

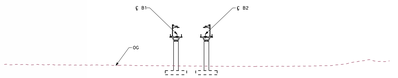
MTB
Metropolitan Transportation Commission
101 Eighth Street
Oakland, CA 94607

CALIFORNIA High-Speed Rail Authority

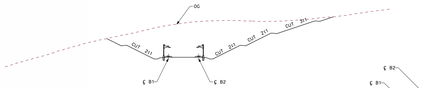
CALIFORNIA HIGH-SPEED TRAIN PROJECT
SAN JOSE TO MERCED
PACHECO PASS
TUNNEL
LONGITUDINAL PROFILE

DRAWING NO.
HSR15-34
SHEET NO.
TN-01408
SCALE
AS SHOWN
DATE
MAY 19, 2015



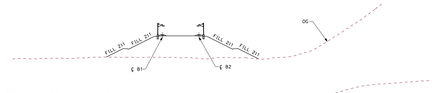


1 — **CROSS SECTION 3145+85**
SCALE 1"=50'

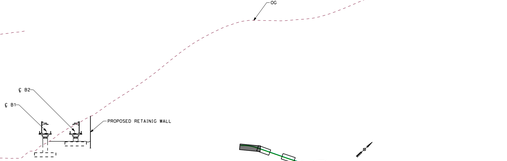


2 — **CROSS SECTION 3165+00**
SCALE 1"=50'

3 — **CROSS SECTION 3175+00**
SCALE 1"=50'



4 — **CROSS SECTION 3215+00**
SCALE 1"=50'



5 — **CROSS SECTION 3252+00**
SCALE 1"=50'

KEYMAP

SAN JOSE TO CVY EIR/S: VOLUME III
ALTERNATIVE 2
BOOK 2D
SHEET 142 OF 253

RECORD PSPD SUBMITTAL
MAY 3, 2019
NOT FOR CONSTRUCTION

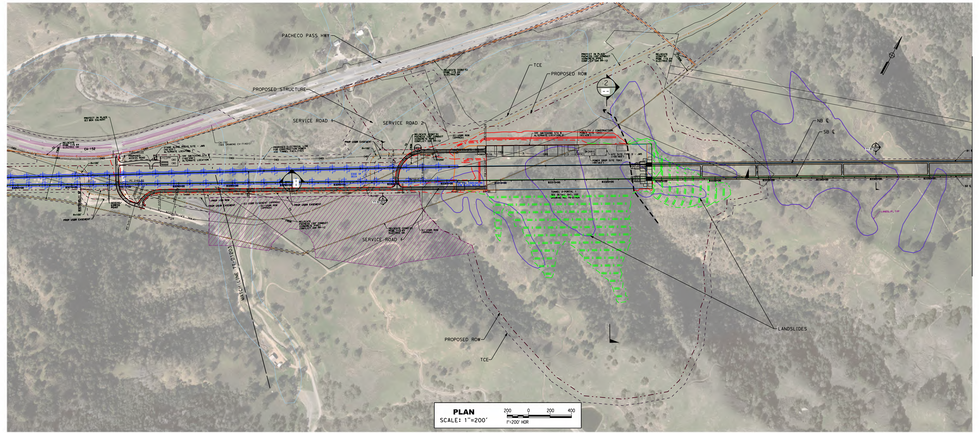
HNTB — 351 California Street, Suite 600, Oakland, CA 94612

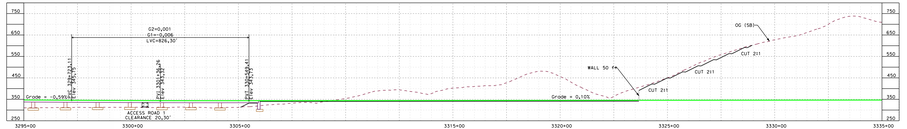
CALIFORNIA High-Speed Rail Authority

CALIFORNIA HIGH-SPEED TRAIN PROJECT
SAN JOSE TO MERCED
PACHECO PASS
TUNNEL
GRADING DETAIL

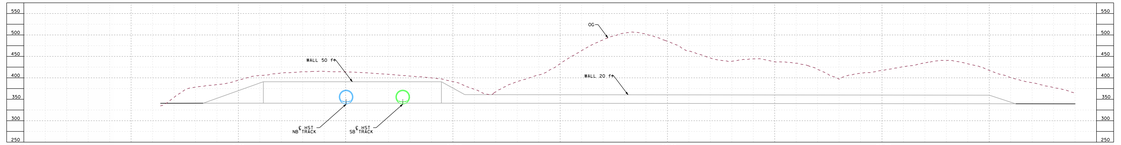
CONTRACT NO. HSR15-34
DRAWING NO. TN-01409
SCALE AS SHOWN
DATE

ACAD VERSION: 18.1 (LMS TECH) DRAWING NAME: ...\GRADING\TN-01409.DWG PLOTTED: 5/3/2019 @ 3:44:09 PM BY: ...

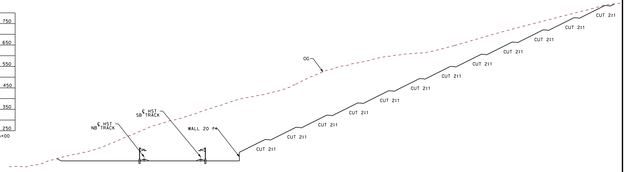




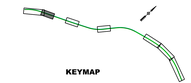
1 **SB PROFILE**
SCALE 1"=100'



3 **RETAINING WALL PROFILE**
SCALE 1"=50'



2 **CROSS SECTION 3320+00**
SCALE 1"=50'



KEYMAP

SAN JOSE TO CVY EIR/S: VOLUME III
ALTERNATIVE 2
BOOK 2D
SHEET 143 OF 253

RECORD PSPD SUBMITTAL
MAY 3, 2010
NOT FOR CONSTRUCTION

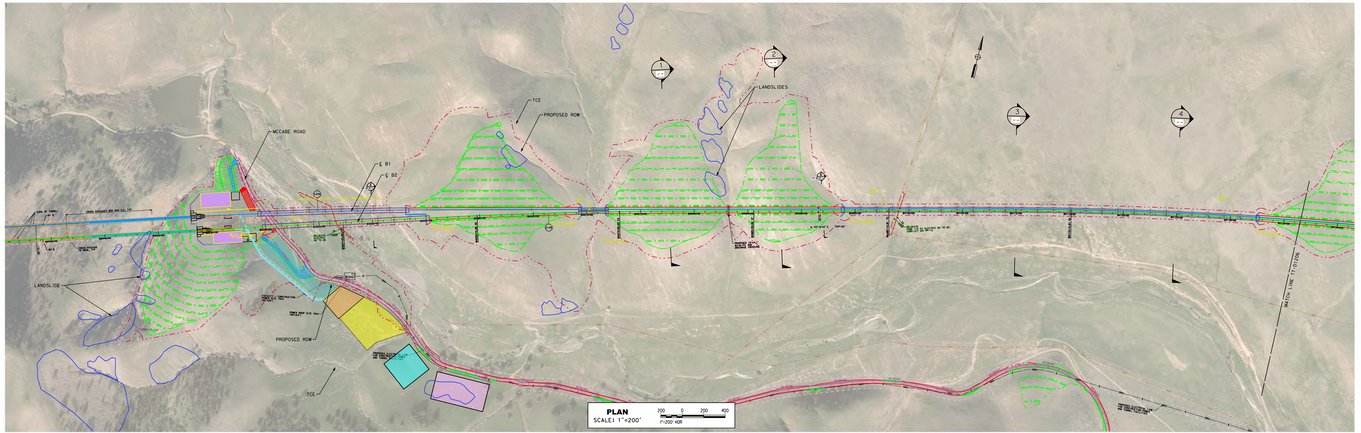
HNTB
111 I Broadway
Suite 1200
Oakland, CA 94612

CALIFORNIA High-Speed Rail Authority

CALIFORNIA HIGH-SPEED TRAIN PROJECT
SAN JOSE TO MERCED
PACHECO PASS
TUNNEL
GRADING DETAIL

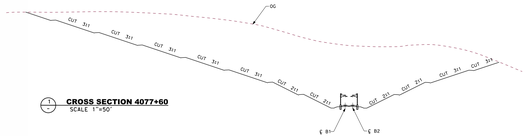
CONTRACT NO. HSR15-35
DRAWING NO. TN-01410
SCALE AS SHOWN
DATE No.

DGN: S:\CAD\TN\TN-01410.dgn DATE: 4/26/2010 TIME: 8:19:10 AM USER: mcarlson

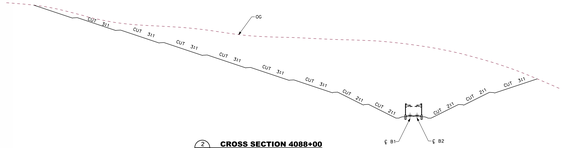


PLAN
SCALE: 1"=200'

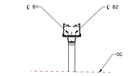
200 0 200 400
1"=200' HOR



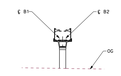
1 **CROSS SECTION 4077+60**
SCALE 1"=50'



2 **CROSS SECTION 4088+00**
SCALE 1"=50'



3 **CROSS SECTION 4110+00**
SCALE 1"=50'



4 **CROSS SECTION 4125+00**
SCALE 1"=50'

KEYMAP

SAN JOSE TO CVY EIR/S: VOLUME III
ALTERNATIVE 2
BOOK 2D
SHEET 144 OF 253

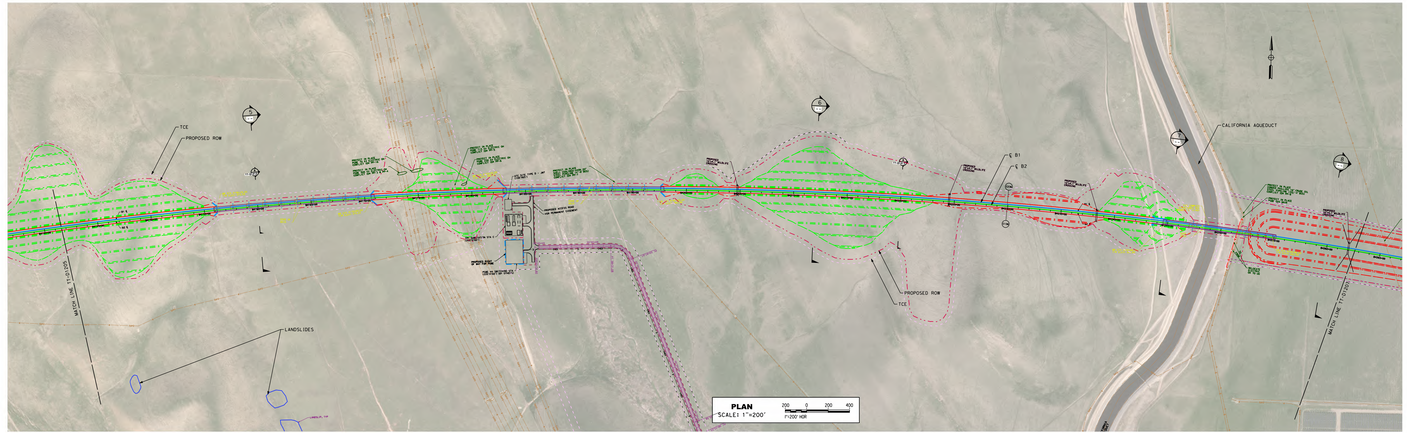
RECORD PDFO SUBMITTAL
MAY 3, 2019
NOT FOR CONSTRUCTION

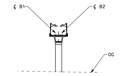
HNTB 555 Montgomery Street Oakland, CA 94607

CALIFORNIA High-Speed Rail Authority

CALIFORNIA HIGH-SPEED TRAIN PROJECT
SAN JOSE TO MERCED
PACHECO PASS
TUNNEL
GRADING DETAIL

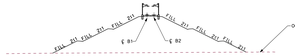
CONTRACT NO. HSR15-36
DRAWING NO. TN-01411
SCALE AS SHOWN
DATE



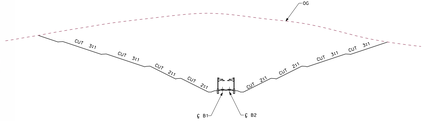


5 **CROSS SECTION 4160+00**
SCALE 1"=50'

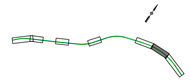
7 **CROSS SECTION 4245+00**
SCALE 1"=50'



8 **CROSS SECTION 4260+00**
SCALE 1"=50'



6 **CROSS SECTION 4212+00**
SCALE 1"=50'



KEYMAP

SAN JOSE TO CVY EIR/S: VOLUME III
ALTERNATIVE 2
BOOK 2D
SHEET 145 OF 253

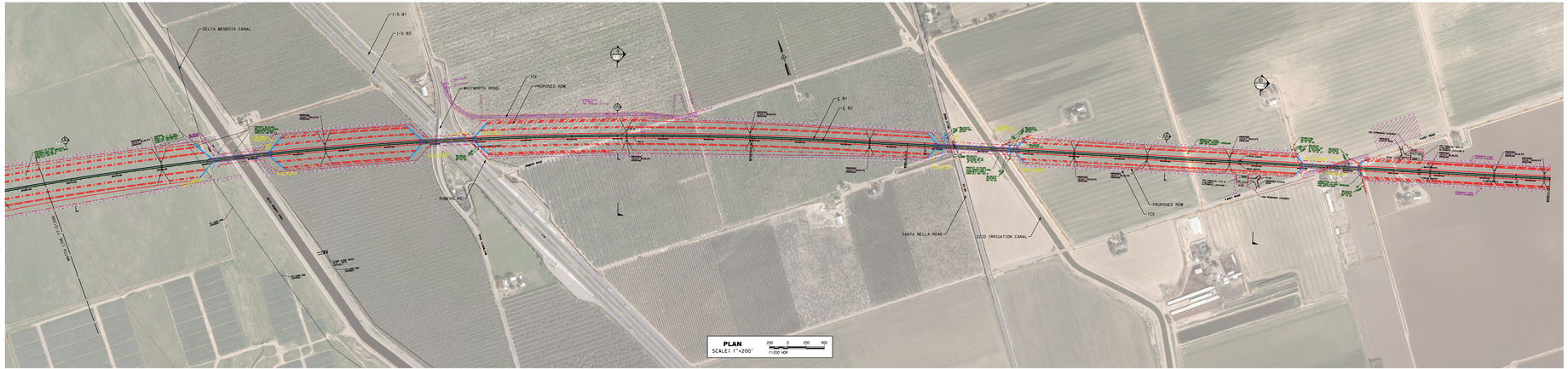
RECORD PEPD SUBMITTAL
MAY 3, 2019
NOT FOR CONSTRUCTION

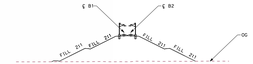
HNTB
111 Broadway
Suite 1200
Oakland, CA 94607

CALIFORNIA High-Speed Rail Authority

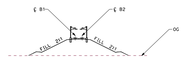
CALIFORNIA HIGH-SPEED TRAIN PROJECT
SAN JOSE TO MERCED
PACHECO PASS
TUNNEL
GRADING DETAIL

CONTRACT NO.
HSR15-37
DRAWING NO.
TN-01412
SCALE
AS SHOWN
SHEET NO.

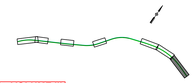




9 **CROSS SECTION 4330+00**
SCALE 1"=50'



10 **CROSS SECTION 4400+00**
SCALE 1"=50'



KEYMAP

SAN JOSE TO CVY EIR/S: VOLUME III
ALTERNATIVE 2
BOOK 2D
SHEET 146 OF 253

RECORD PDFS SUBMITTAL
MAY 3, 2019
NOT FOR CONSTRUCTION

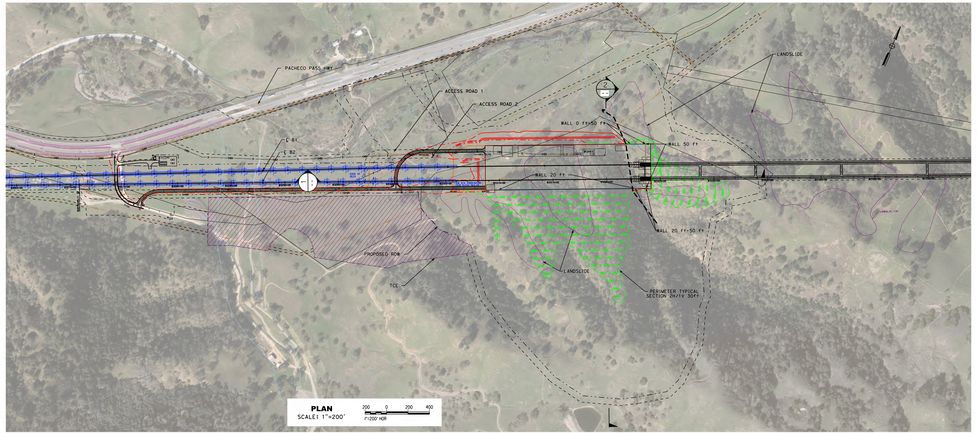
HNTB 351 California Street, Suite 1500 Oakland, CA 94611

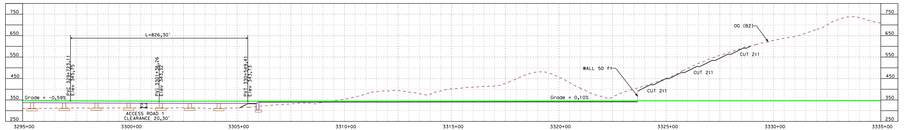
CALIFORNIA High-Speed Rail Authority

CALIFORNIA HIGH-SPEED TRAIN PROJECT
PACHECO PASS
TUNNEL
GRADING DETAIL

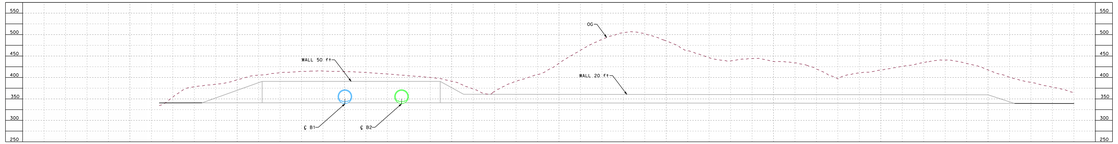
CONTRACT NO. HSR15-38
DRAWING NO. TN-01413
SCALE AS SHOWN
DATE

ECSDK: 1/30/2019 @ 2:04:49 PM, JOSEPH DAVIS, C:\DGN\TN-01413.DGN, MICROSTATION V8 XM EDITION

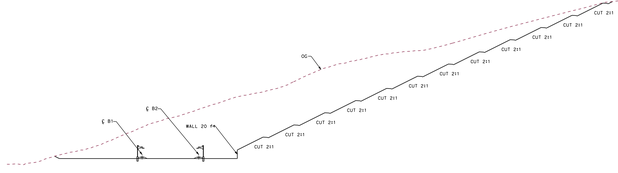




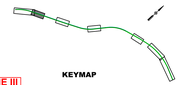
1 **B2 PROFILE**
SCALE 1"=100'



3 **RETAINING WALL PROFILE**
SCALE 1"=50'



4 **CROSS SECTION 3320+00**
SCALE 1"=50'



KEYMAP

SAN JOSE TO CVY EIR/S: VOLUME III
ALTERNATIVE 2
BOOK 2D
SHEET 147 OF 253

RECORD PDFO SUBMITTAL
MAY 3, 2019
NOT FOR CONSTRUCTION

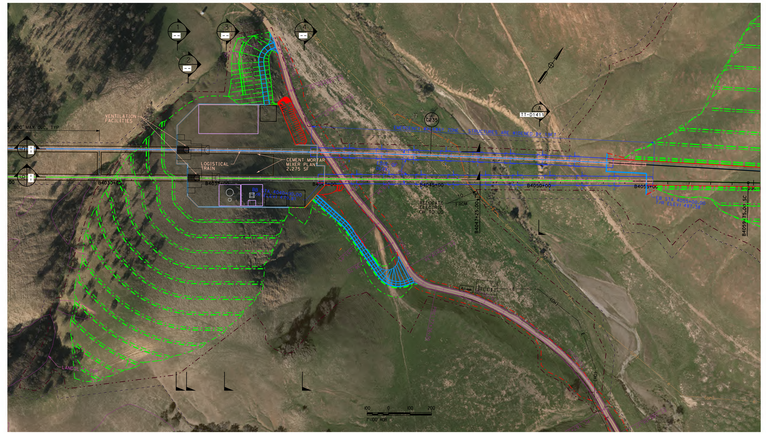
HNTB
111 Broadway Suite 1200 Oakland, CA 94607

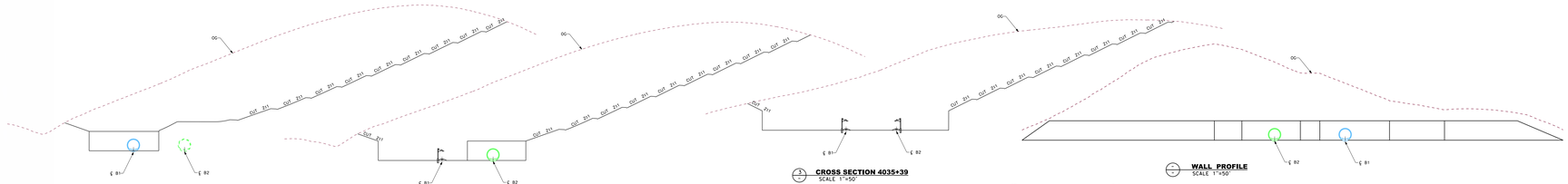
CALIFORNIA High-Speed Rail Authority

CALIFORNIA HIGH-SPEED TRAIN PROJECT
SAN JOSE TO MERCED
PACHECO PASS
TUNNEL
TUNNEL 2 - PORTAL 1
SECTIONS

CONTRACT NO. HSR15-39
DRAWING NO. TN-01414
SCALE AS SHOWN
SHEET NO.

DGN: TUNNEL 2 PORTAL 1 SECTIONS.DGN
USER: DMARTIN@HNTB.COM
PLOTTED: 5/3/2019 @ 10:49:08 AM



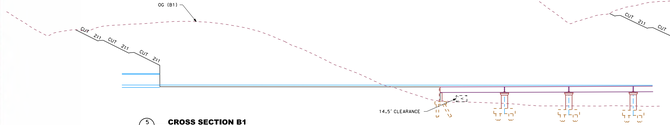


1 CROSS SECTION 4033+12
SCALE 1"=50'

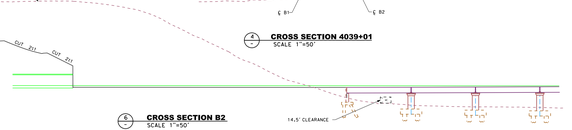
2 CROSS SECTION 4033+62
SCALE 1"=50'

3 CROSS SECTION 4035+39
SCALE 1"=50'

WALL PROFILE
SCALE 1"=50'

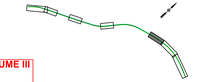


5 CROSS SECTION B1
SCALE 1"=50'



6 CROSS SECTION B2
SCALE 1"=50'

4 CROSS SECTION 4039+01
SCALE 1"=50'



SAN JOSE TO CVY EIR/S: VOLUME III
ALTERNATIVE 2
BOOK 2D
SHEET 148 OF 253

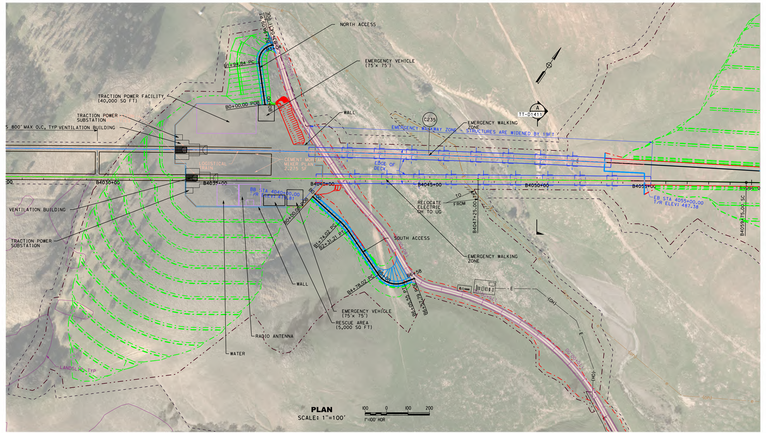
RECORD PEPD SUBMITTAL
MAY 3, 2019
NOT FOR CONSTRUCTION

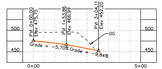
HNTB
555 Twenty-Fourth Street
Oakland, CA 94612

CALIFORNIA High-Speed Rail Authority

CALIFORNIA HIGH-SPEED TRAIN PROJECT
SAN JOSE TO MERCED
PACHECO PASS
TUNNEL
TUNNEL 2 - PORTAL 2
APPROACH 1

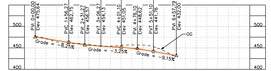
CONTRACT NO. HSR15-40
DRAWING NO. TN-01415
SCALE AS SHOWN
DATE





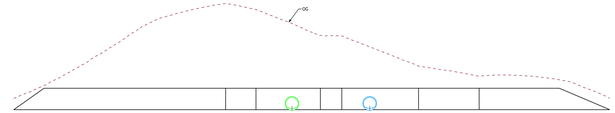
NORTH ACCESS PROFILE
SCALE: 1"=100' HOR, 1"=50' VER

50 0 50 100
1"=50' VER



SOUTH ACCESS PROFILE
SCALE: 1"=100' HOR, 1"=50' VER

50 0 50 100
1"=50' VER



WALL PROFILE
SCALE: 1"=50'

KEYMAP

SAN JOSE TO CVY EIR/S: VOLUME III
ALTERNATIVE 2
BOOK 2D
SHEET 149 OF 253

RECORD PSPD SUBMITTAL
MAY 3, 2019
NOT FOR CONSTRUCTION

HNTB
111 Broadway
Suite 1200
Oakland, CA 94607

CALIFORNIA High-Speed Rail Authority

CALIFORNIA HIGH-SPEED TRAIN PROJECT
SAN JOSE TO MERCED
PACHECO PASS
TUNNEL
TUNNEL 2 PORTAL 2
APPROACH 2

CONTRACT NO. HSR15-34
DRAWING NO. TN-D1416
SCALE AS SHOWN
DATE

C:\DATA\PROJECTS\HSR\SJ_SC\PACHECO\TUNNEL\TUNNEL 2\TN-D1416.DWG 5/3/2019 8:38:37 AM