

c:\pwworking\hmm\external\eron.sudhausen-arup.com\d0125355\FB-CB-1130-K4.dgn 12/9/2013 5:46:28 PM



LEGEND
 + + + EXISTING FREIGHT RAILROAD
 ——— PROPOSED CHST



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
A. POLING
 DRAWN BY
P. TONKIN
 CHECKED BY
K. SEYMOUR
 IN CHARGE
R. COFFIN
 DATE
12/31/13

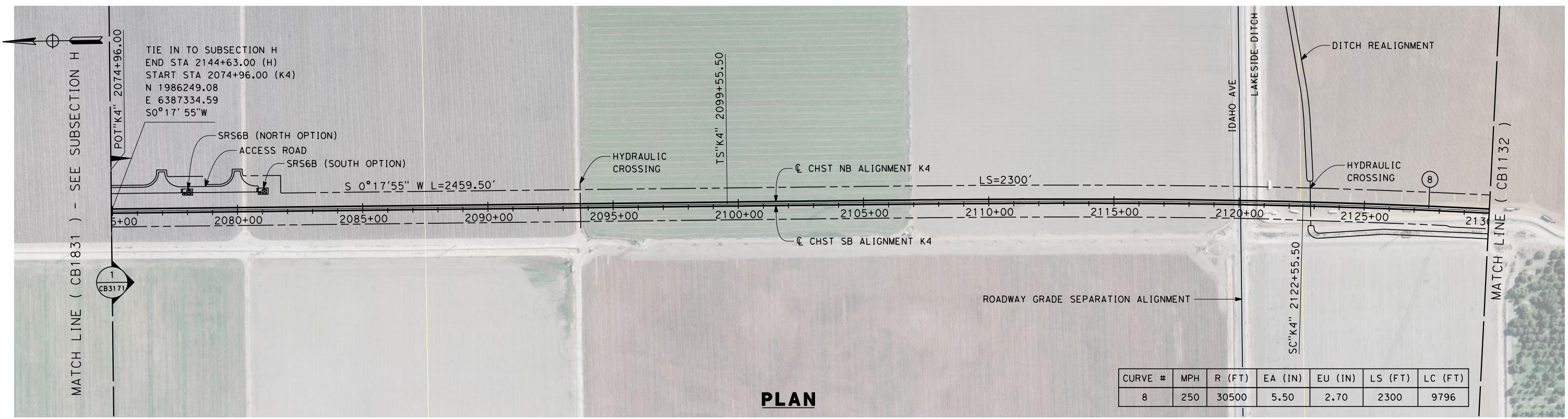
**RECORD SET 15%
 DESIGN SUBMISSION**

**NOT FOR
 CONSTRUCTION**



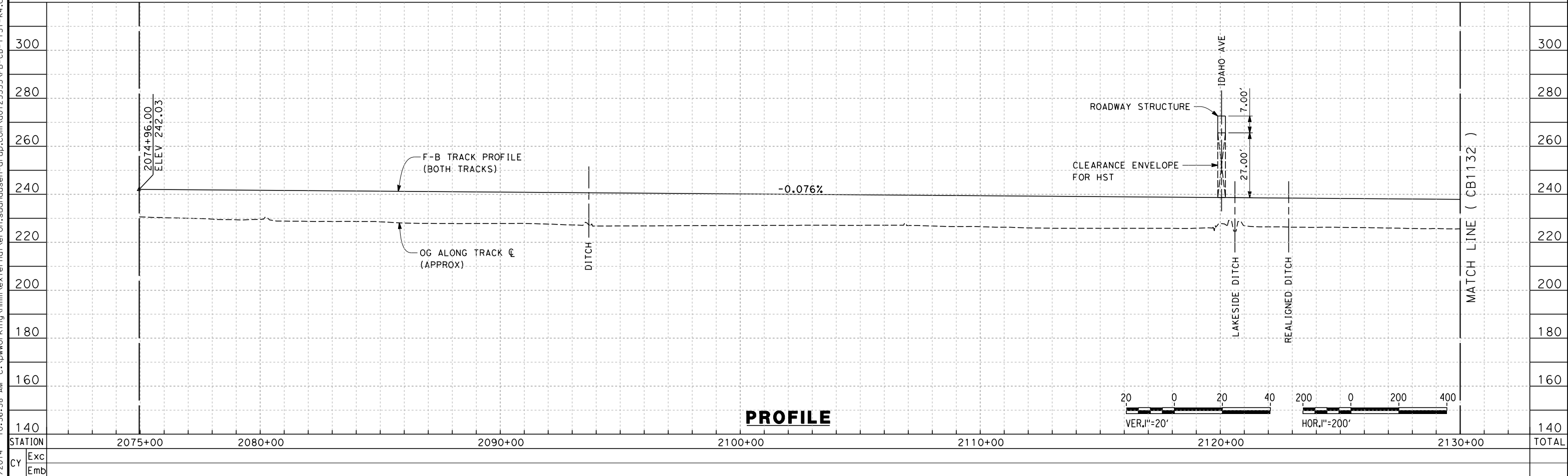
**CALIFORNIA HIGH-SPEED TRAIN PROJECT
 FRESNO TO BAKERSFIELD**
 KAWEAH SUBSECTION
 ALIGNMENT K4
 STA. 2074+96 TO 2598+60
 KEY MAP

CONTRACT NO.
HSR 06-0003
 DRAWING NO.
CB1130
 SCALE
AS SHOWN
 SHEET NO.
1 OF 15



CURVE #	MPH	R (FT)	EA (IN)	EU (IN)	LS (FT)	LC (FT)
8	250	30500	5.50	2.70	2300	9796

PLAN



PROFILE

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
A. POLING

DRAWN BY
E. TANAKA

CHECKED BY
K. SEYMOUR

IN CHARGE
R. COFFIN

DATE
03/19/13

**RECORD SET 15%
 DESIGN SUBMISSION**

**NOT FOR
 CONSTRUCTION**



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

KAWEAH SUBSECTION
 ALIGNMENT K4
 STA 2074+96 TO 2130+00
 PLAN AND PROFILE

CONTRACT NO.
HSR 06-0003

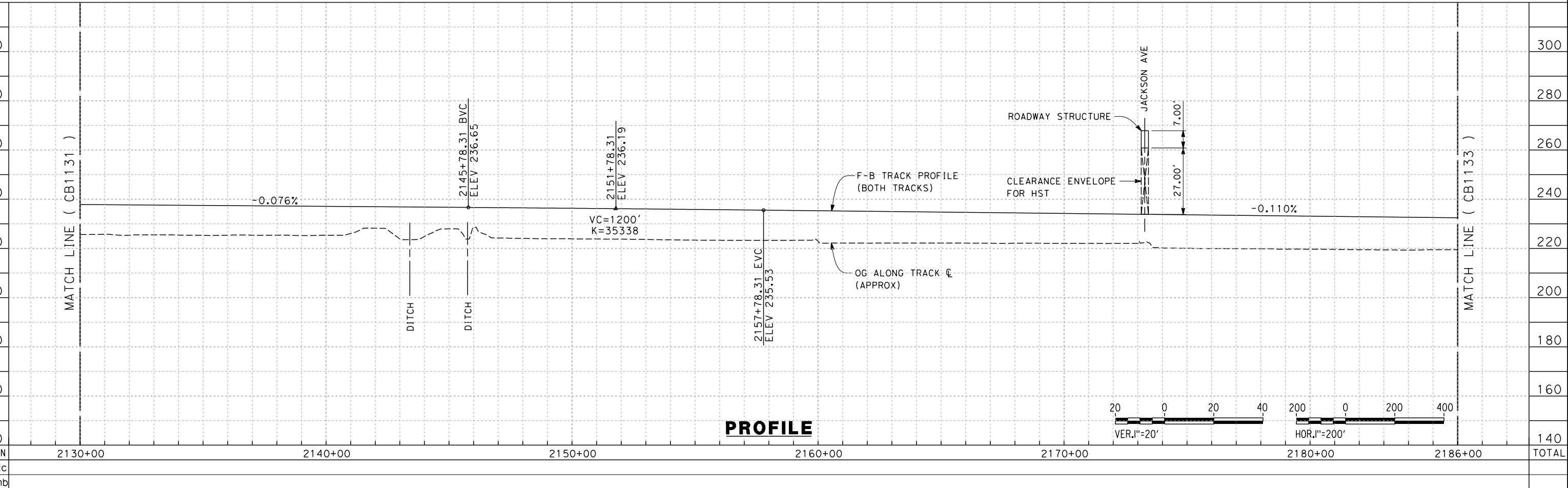
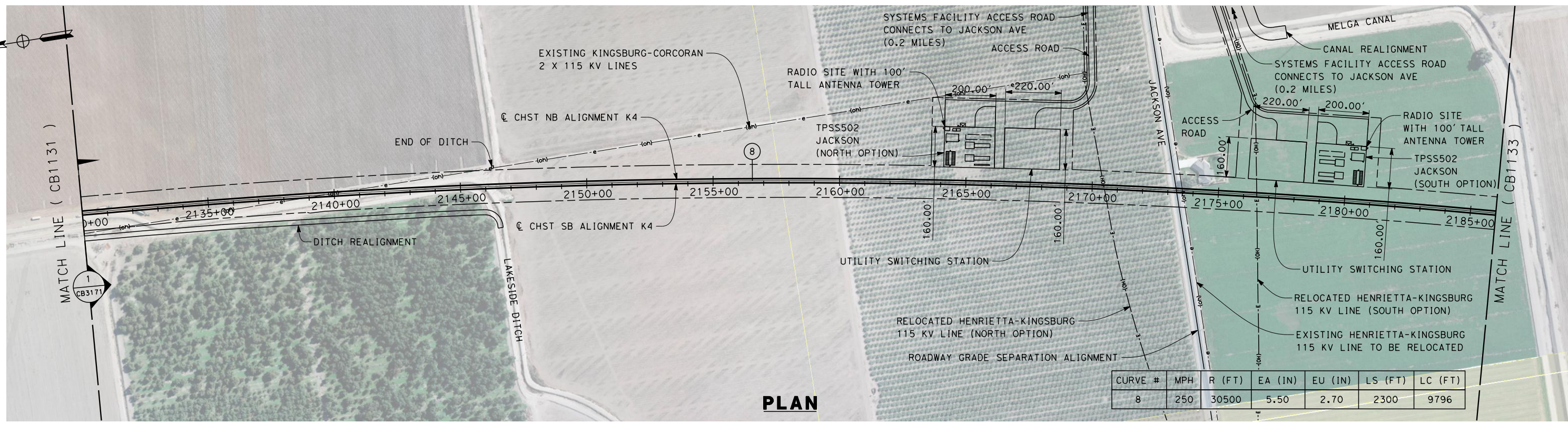
DRAWING NO.
CB1131

SCALE
AS SHOWN

SHEET NO.
2 OF 15

eron_sudhausen 3/7/2014 10:36:38 AM c:\pwworking\hmm\external\eron_sudhausen-arup.com\d0125355\FB-CB-1131-K4.dgn

3/10/2014 5:46:44 PM c:\pwworking\hmm\external\eron_sudhausen-arup.com\d0125355\FB-CB-1132-K4.dgn



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
A. POLING
 DRAWN BY
E. TANAKA
 CHECKED BY
K. SEYMOUR
 IN CHARGE
R. COFFIN
 DATE
03/19/13

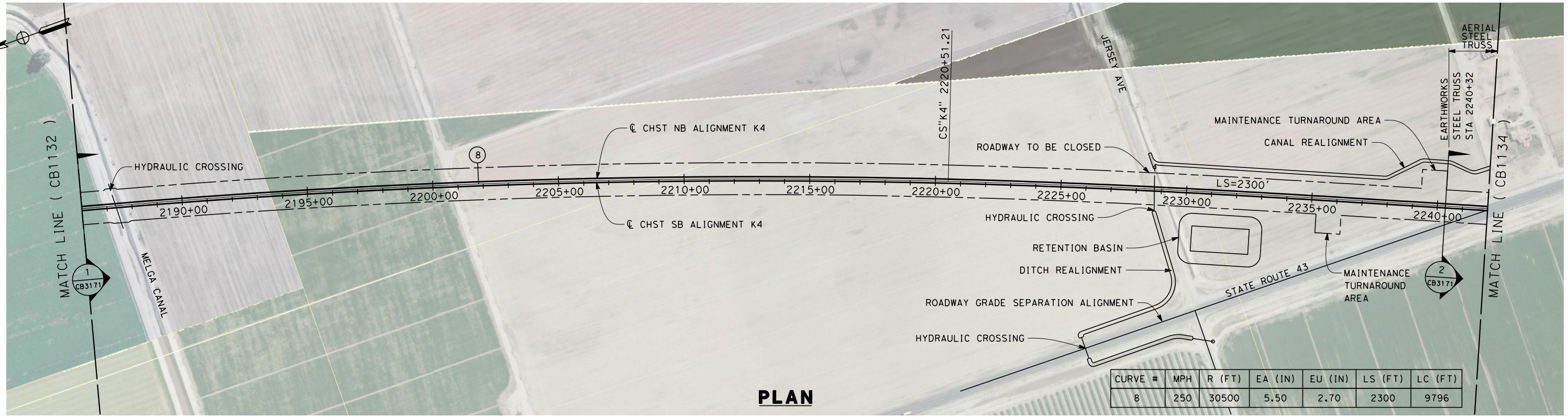
**RECORD SET 15%
DESIGN SUBMISSION**
**NOT FOR
CONSTRUCTION**



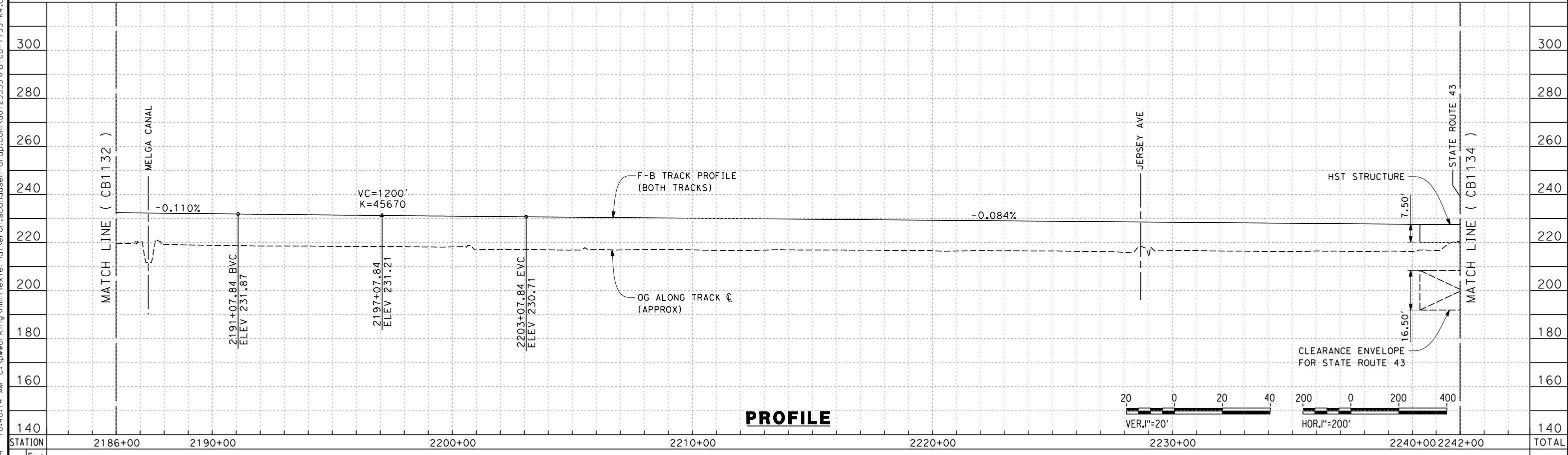
CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
 KAWEAH SUBSECTION
 ALIGNMENT K4
 STA. 2130+00 TO 2186+00
 PLAN AND PROFILE

CONTRACT NO.
HSR 06-0003
 DRAWING NO.
CB1132
 SCALE
AS SHOWN
 SHEET NO.
3 OF 15

eron_sudhausen 3/7/2014 10:40:14 AM c:\pwworking\hmm\external\eron_sudhausen-arup.com\d0125355\FB-CB-1133-K4.dgn



PLAN



PROFILE

STATION	2186+00	2190+00	2200+00	2210+00	2220+00	2230+00	2240+00	2242+00	TOTAL
Exc									
Emb									

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
A. POLING
 DRAWN BY
E. TANAKA
 CHECKED BY
K. SEYMOUR
 IN CHARGE
R. COFFIN
 DATE
03/19/13

**RECORD SET 15%
DESIGN SUBMISSION**

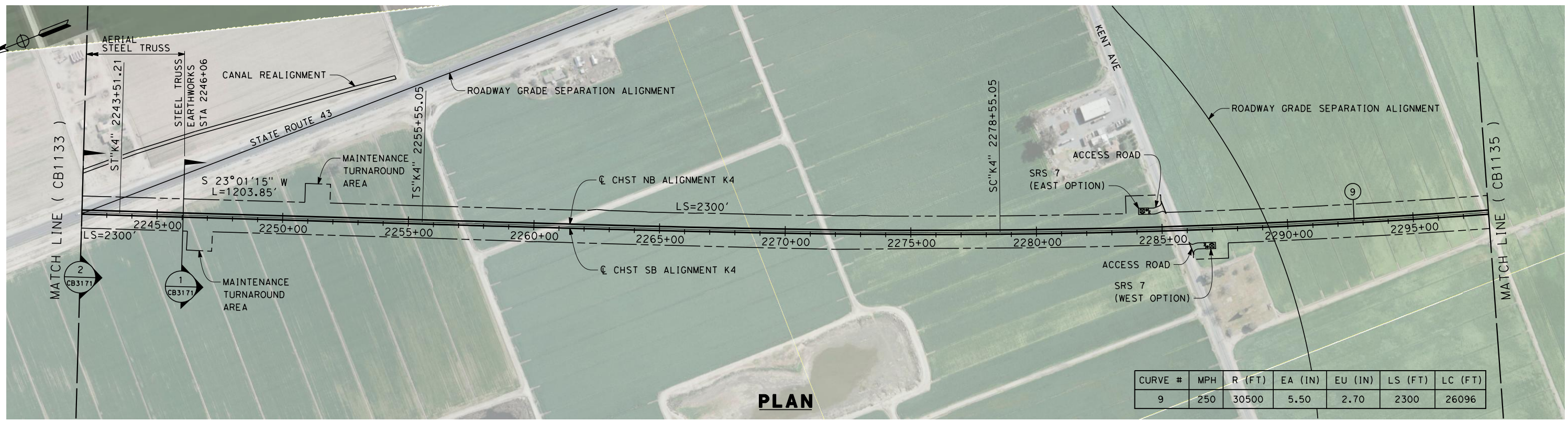
**NOT FOR
CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD**
 KAWEAH SUBSECTION
 ALIGNMENT K4
 STA. 2186+00 TP 2242+00
 PLAN AND PROFILE

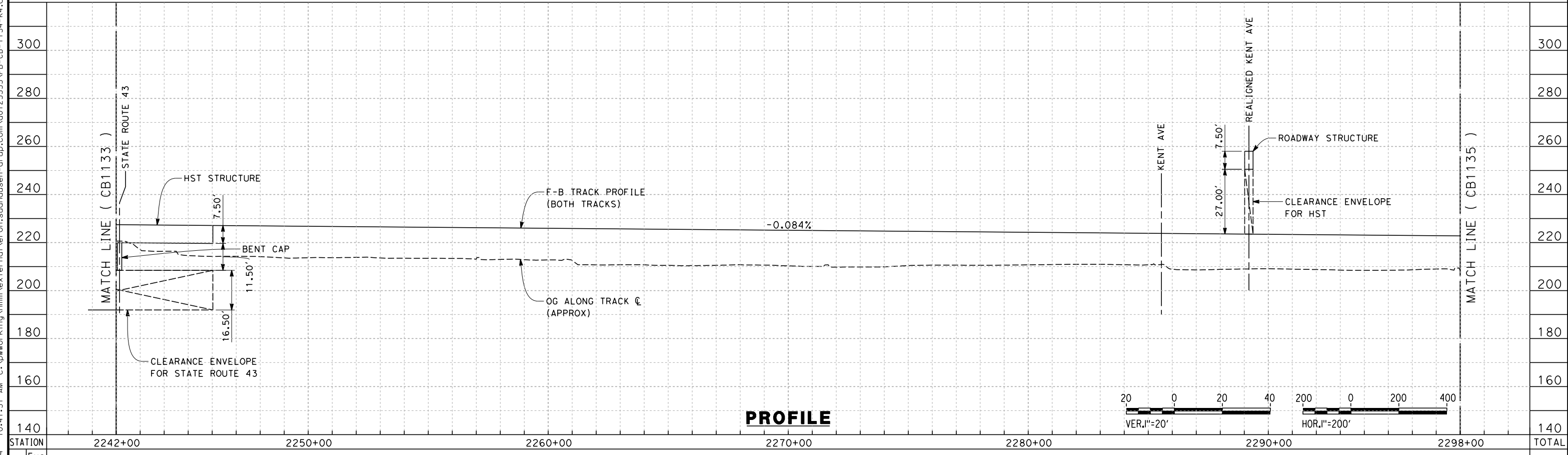
CONTRACT NO.
HSR 06-0003
 DRAWING NO.
CB1133
 SCALE
AS SHOWN
 SHEET NO.
4 OF 15

eron_sudhausen 3/7/2014 10:41:31 AM c:\pwworking\hmm\external\eron_sudhausen-arup.com\d0125355\FB-CB-1134-K4.dgn

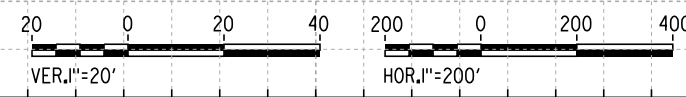


CURVE #	MPH	R (FT)	EA (IN)	EU (IN)	LS (FT)	LC (FT)
9	250	30500	5.50	2.70	2300	26096

PLAN



PROFILE



STATION	2242+00	2250+00	2260+00	2270+00	2280+00	2290+00	2298+00	TOTAL
CY	Exc							
	Emb							

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
A. POLING
 DRAWN BY
E. TANAKA
 CHECKED BY
K. SEYMOUR
 IN CHARGE
R. COFFIN
 DATE
03/19/13

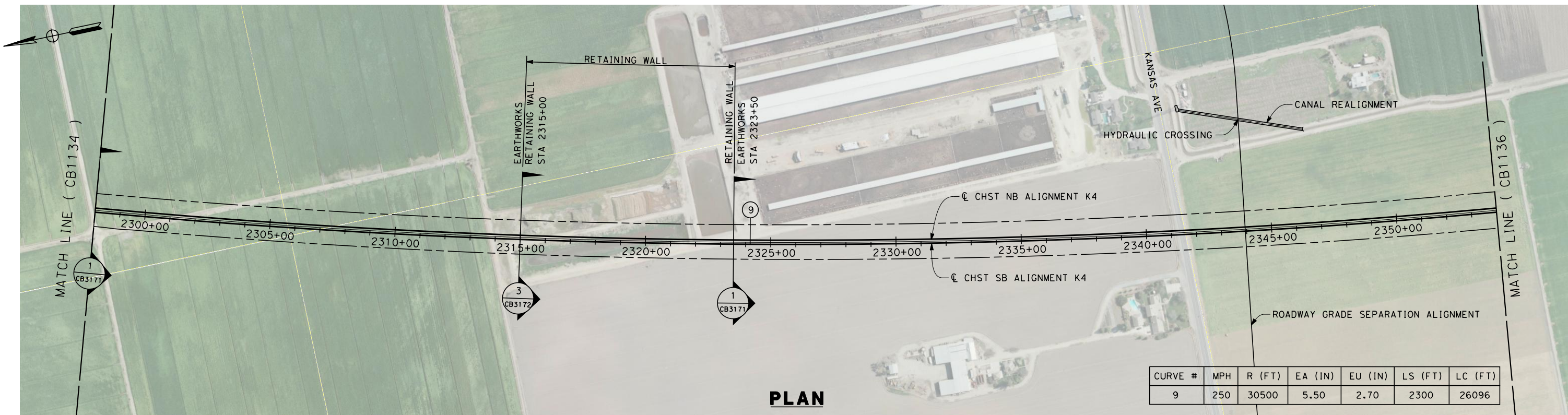
**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**

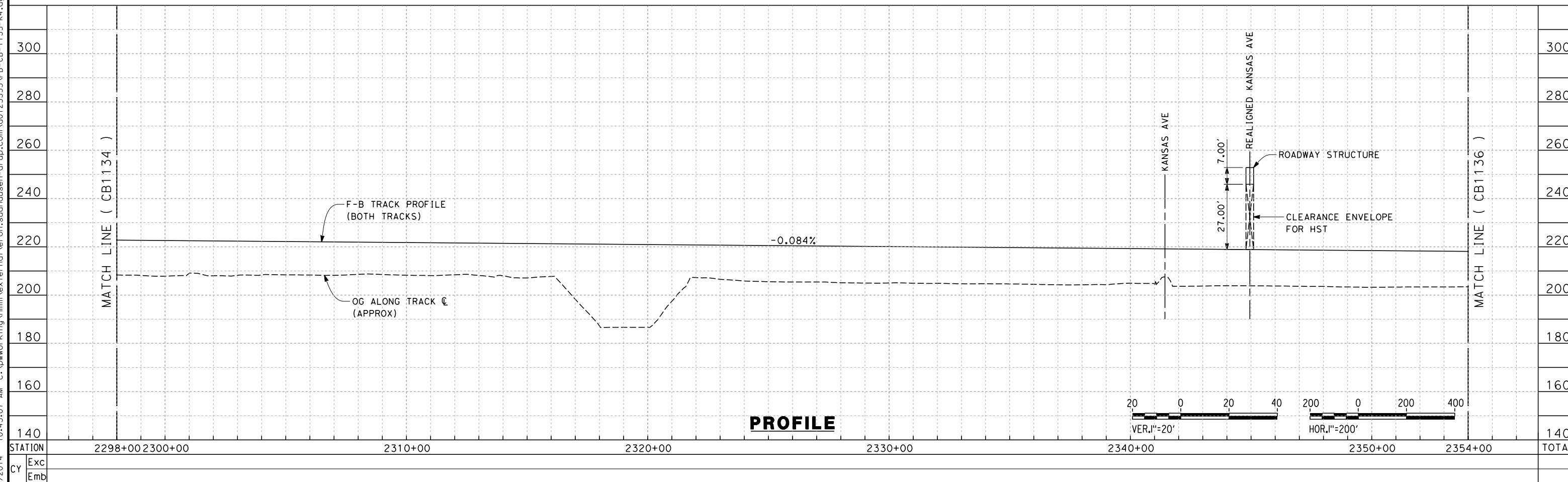


**CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD**
 KAWEAH SUBSECTION
 ALIGNMENT K4
 STA. 2242+00 TO 2298+00
 PLAN AND PROFILE

CONTRACT NO.
HSR 06-0003
 DRAWING NO.
CB1134
 SCALE
AS SHOWN
 SHEET NO.
5 OF 15



10:43:07 AM c:\pwworking\hmm\external\eron.sudhausen-arup.com\d0125355\FB-CB-1135-K4.dgn
 eron.sudhausen 3/7/2014



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
A. POLING
 DRAWN BY
E. TANAKA
 CHECKED BY
K. SEYMOUR
 IN CHARGE
R. COFFIN
 DATE
03/19/13

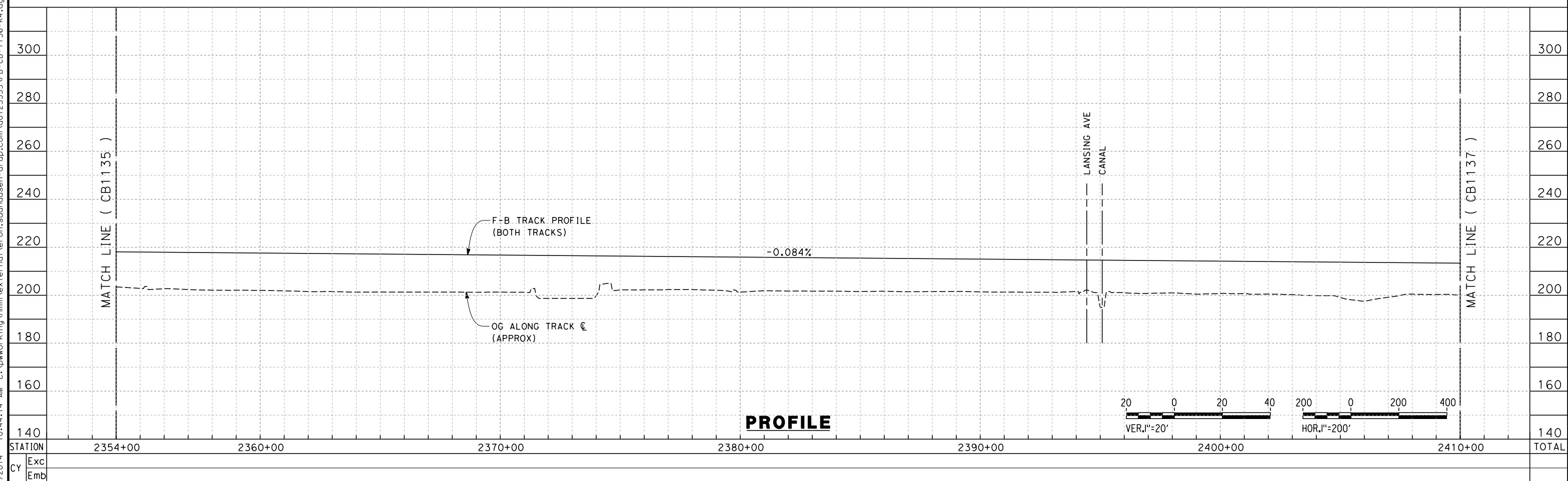
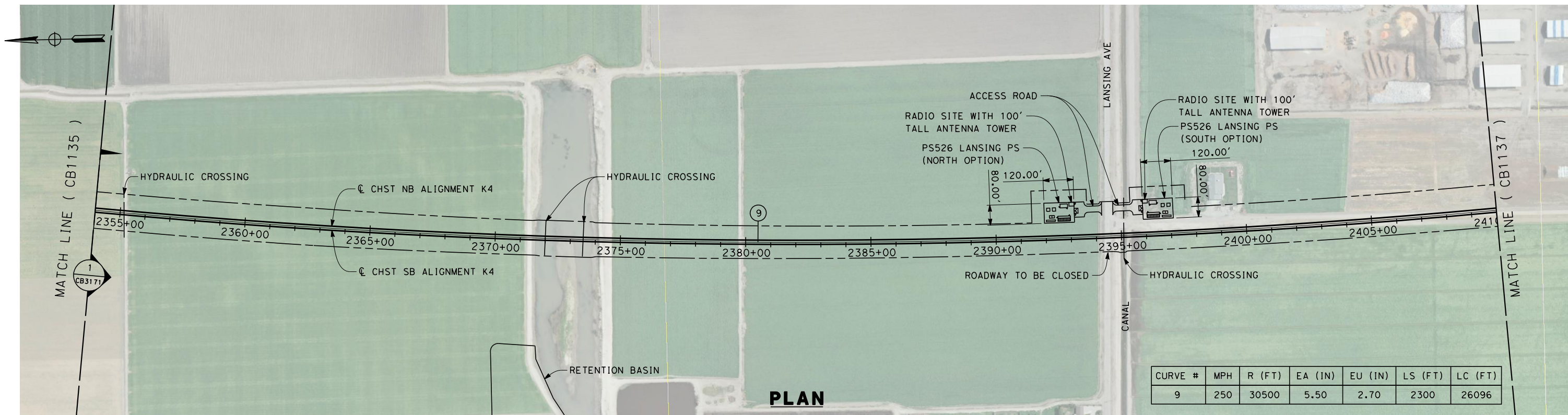
**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD**
 KAWEAH SUBSECTION
 ALIGNMENT K4
 STA. 2298+00 TO 2354+00
 PLAN AND PROFILE

CONTRACT NO.
HSR 06-0003
 DRAWING NO.
CB1135
 SCALE
AS SHOWN
 SHEET NO.
6 OF 15



3/7/2014 10:44:14 AM c:\pwworking\hmm\external\eron.sudhausen-arup.com\d0125355\FB-CB-1136-K4.dgn
 eron.sudhausen

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
A. POLING
 DRAWN BY
E. TANAKA
 CHECKED BY
K. SEYMOUR
 IN CHARGE
R. COFFIN
 DATE
03/19/13

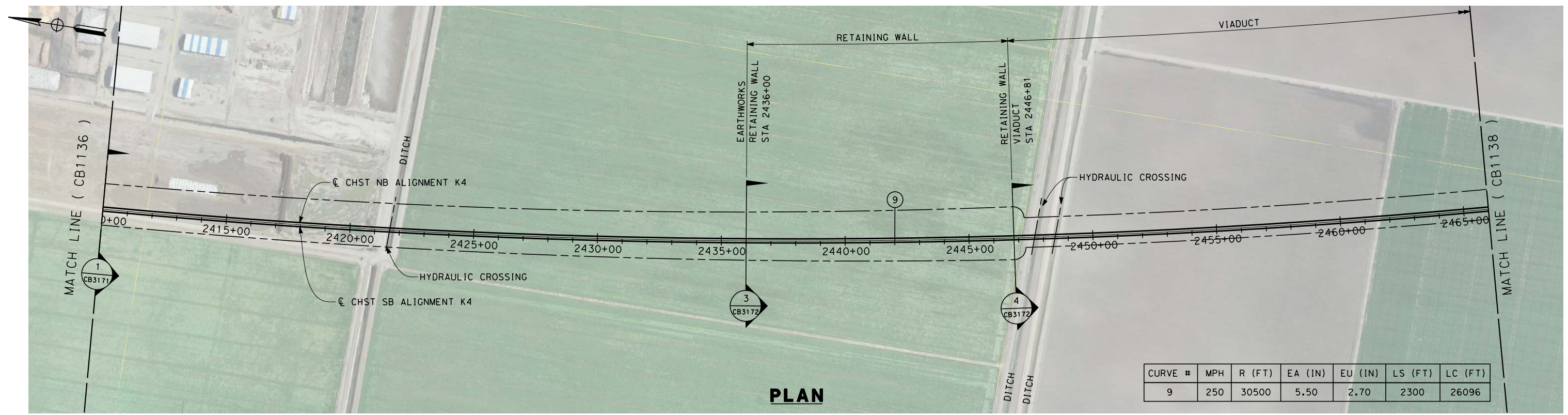
**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**



CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
 KAWEAH SUBSECTION
 ALIGNMENT K4
 STA. 2354+00 TO 2410+00
 PLAN AND PROFILE

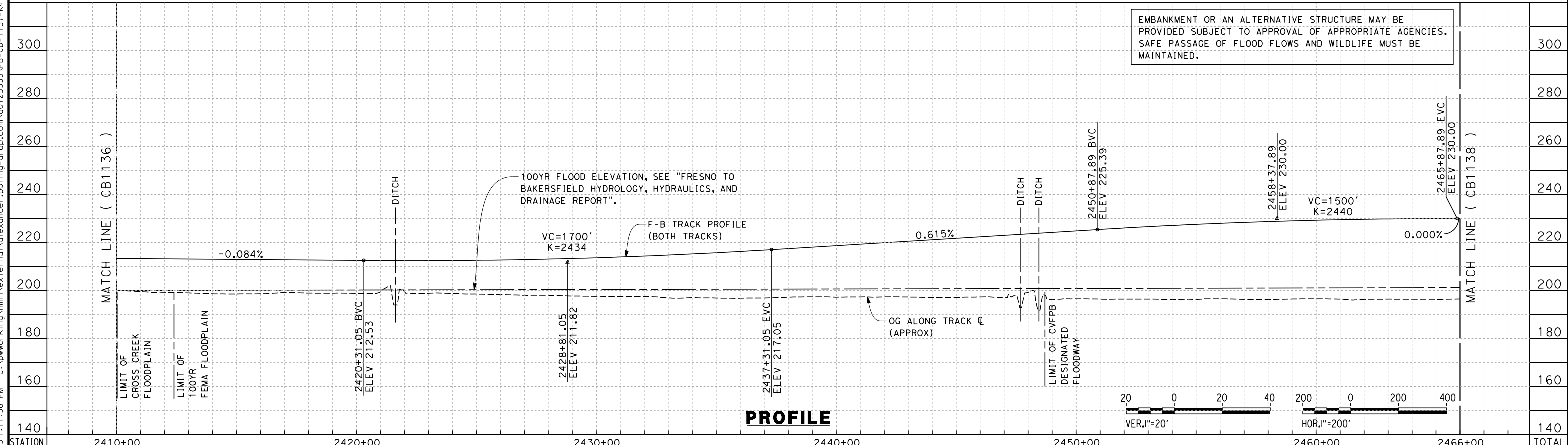
CONTRACT NO.
HSR 06-0003
 DRAWING NO.
CB1136
 SCALE
AS SHOWN
 SHEET NO.
7 OF 15



CURVE #	MPH	R (FT)	EA (IN)	EU (IN)	LS (FT)	LC (FT)
9	250	30500	5.50	2.70	2300	26096

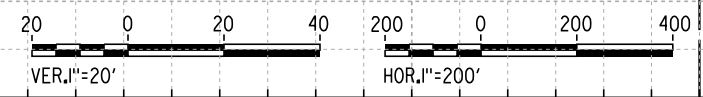
PLAN

c:\pwworking\hmm\external\alexander.poling-arup.com\d0125355\FB-CB-11137-K4.dgn



EMBANKMENT OR AN ALTERNATIVE STRUCTURE MAY BE PROVIDED SUBJECT TO APPROVAL OF APPROPRIATE AGENCIES. SAFE PASSAGE OF FLOOD FLOWS AND WILDLIFE MUST BE MAINTAINED.

PROFILE



STATION	2410+00	2420+00	2430+00	2440+00	2450+00	2460+00	2466+00	TOTAL
Exc								
Emb								

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
A. POLING
DRAWN BY
E. TANAKA
CHECKED BY
K. SEYMOUR
IN CHARGE
R. COFFIN
DATE
12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

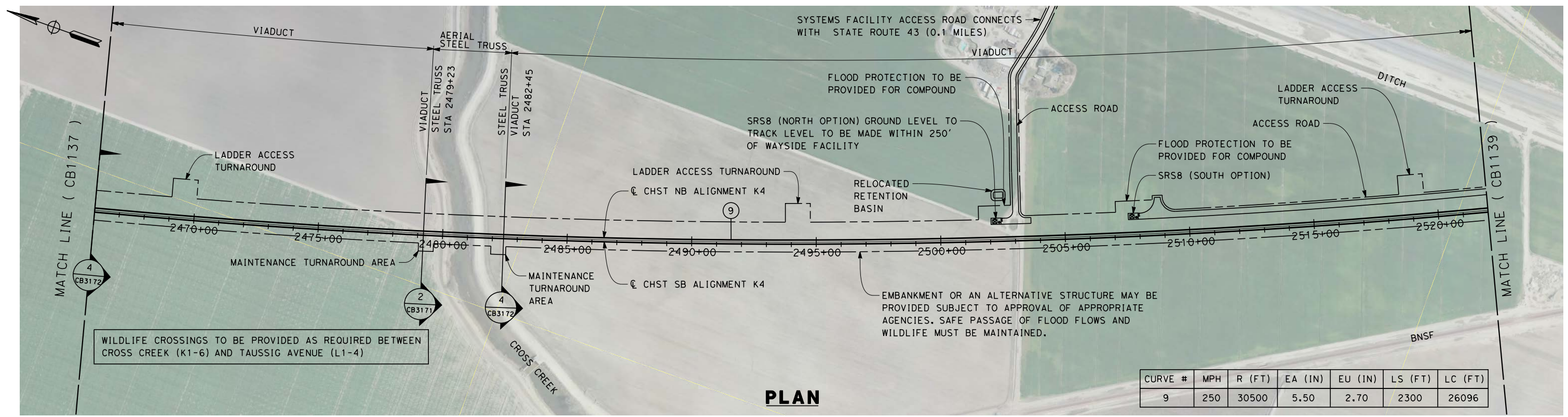
**NOT FOR
CONSTRUCTION**



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

KAWEAH SUBSECTION
ALIGNMENT K4
STA. 2410+00 TO 2466+00
PLAN AND PROFILE

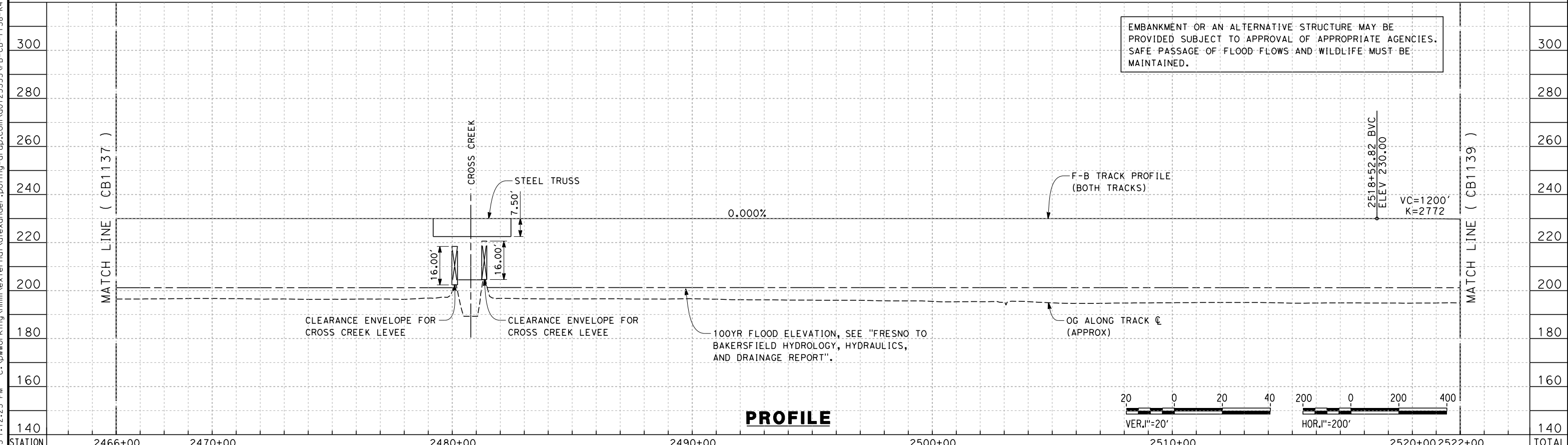
CONTRACT NO.
HSR 06-0003
DRAWING NO.
CB1137
SCALE
AS SHOWN
SHEET NO.
8 OF 15



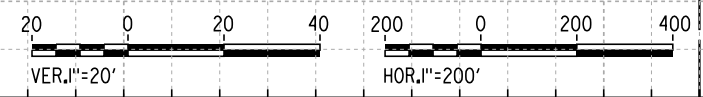
CURVE #	MPH	R (FT)	EA (IN)	EU (IN)	LS (FT)	LC (FT)
9	250	30500	5.50	2.70	2300	26096

PLAN

c:\pwworking\hmm\external\alexander.poling-arup.com\d0125355\FB-CB-1138-K4.dgn



PROFILE



STATION	2466+00	2470+00	2480+00	2490+00	2500+00	2510+00	2520+00	2522+00	TOTAL
Exc									
Emb									

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
G. WALKER
DRAWN BY
P. TONKIN
CHECKED BY
G. MEJIA
IN CHARGE
R. COFFIN
DATE
12/31/13

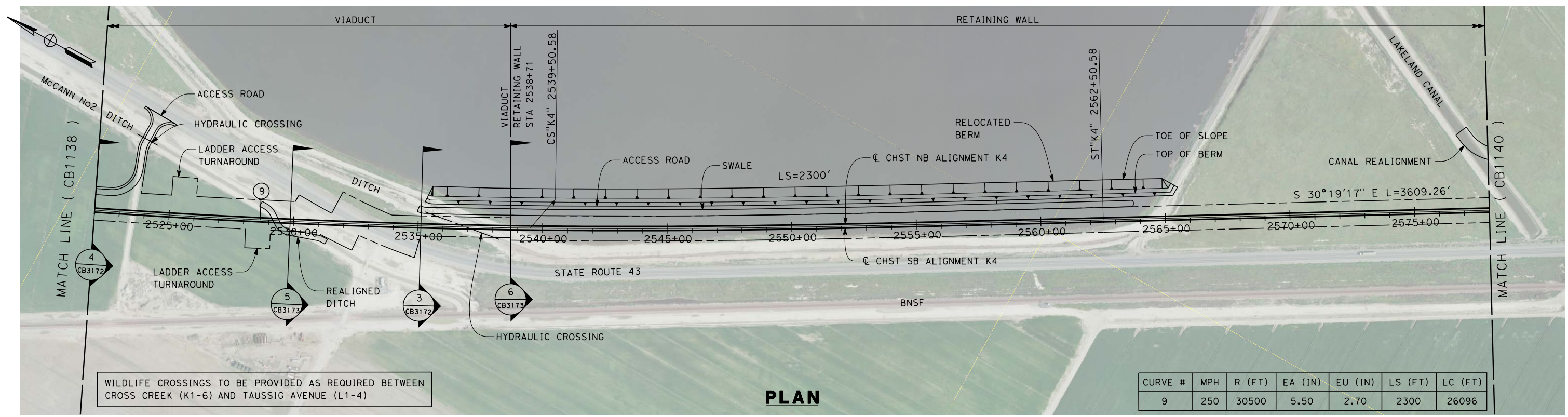
**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**



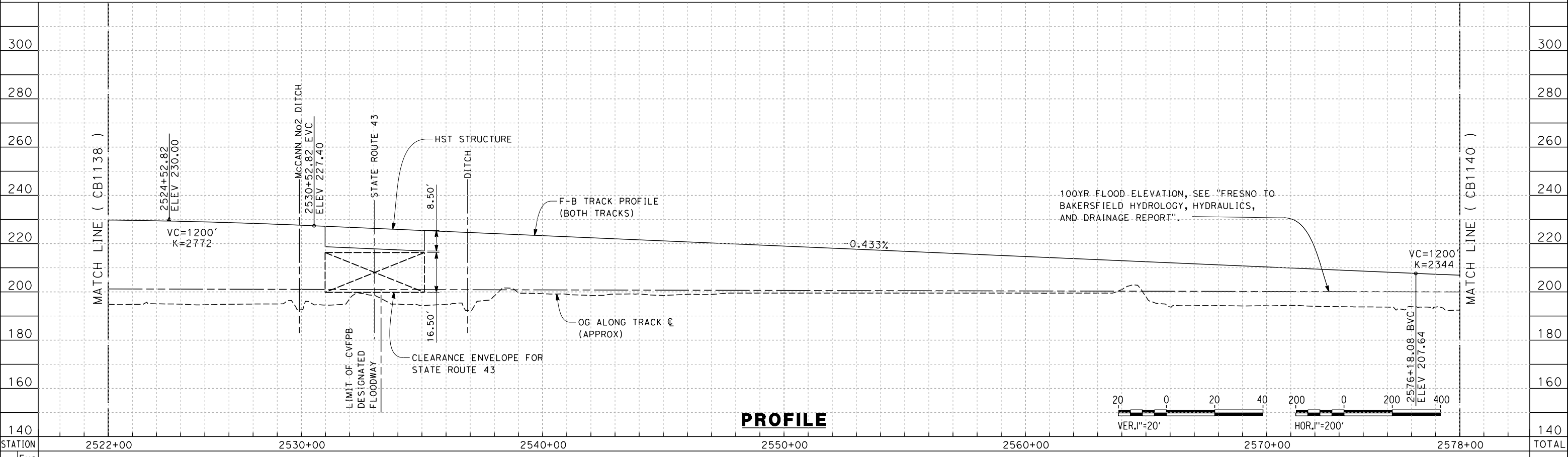
**CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD**
KAWEAH SUBSECTION
ALIGNMENT K4
STA. 2466+00 TO 2522+00
PLAN AND PROFILE

CONTRACT NO.
HSR 06-0003
DRAWING NO.
CB1138
SCALE
AS SHOWN
SHEET NO.
9 OF 13



PLAN

3/17/2014 11:13:26 AM c:\pwworking\hmm\external\veron.sudhausen-arup.com\d0125355\FB-CB-11139-K4.dgn



PROFILE

STATION	2522+00	2530+00	2540+00	2550+00	2560+00	2570+00	2578+00	TOTAL
Exc								
Emb								

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
A. POLING
 DRAWN BY
E. TANAKA
 CHECKED BY
K. SEYMOUR
 IN CHARGE
R. COFFIN
 DATE
03/19/14

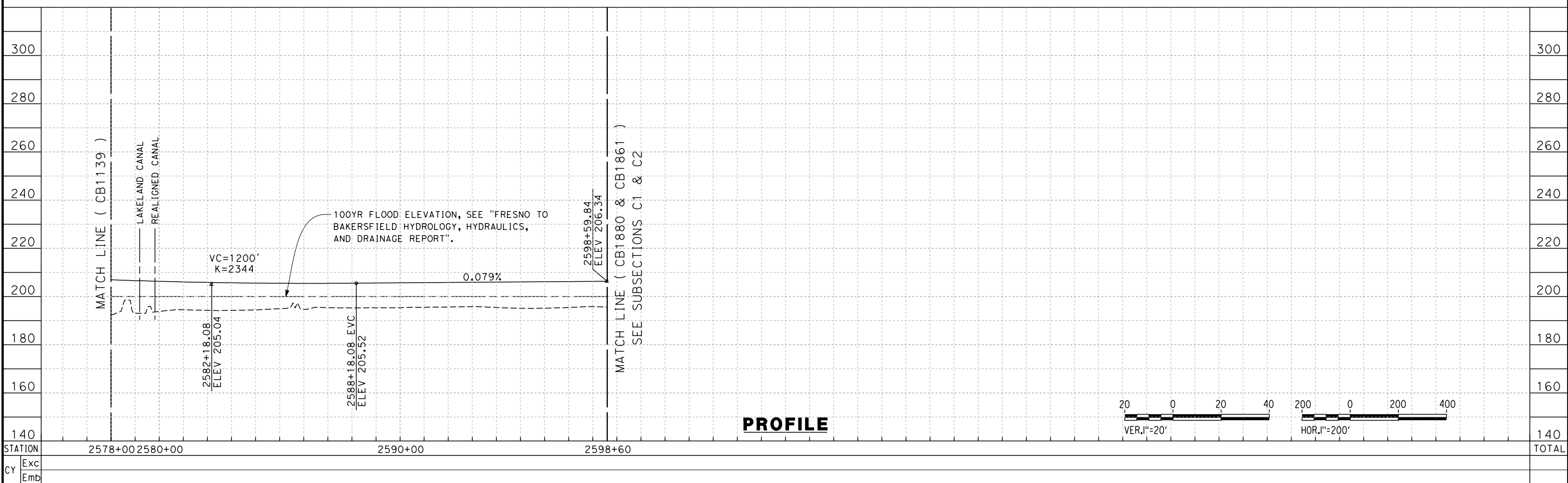
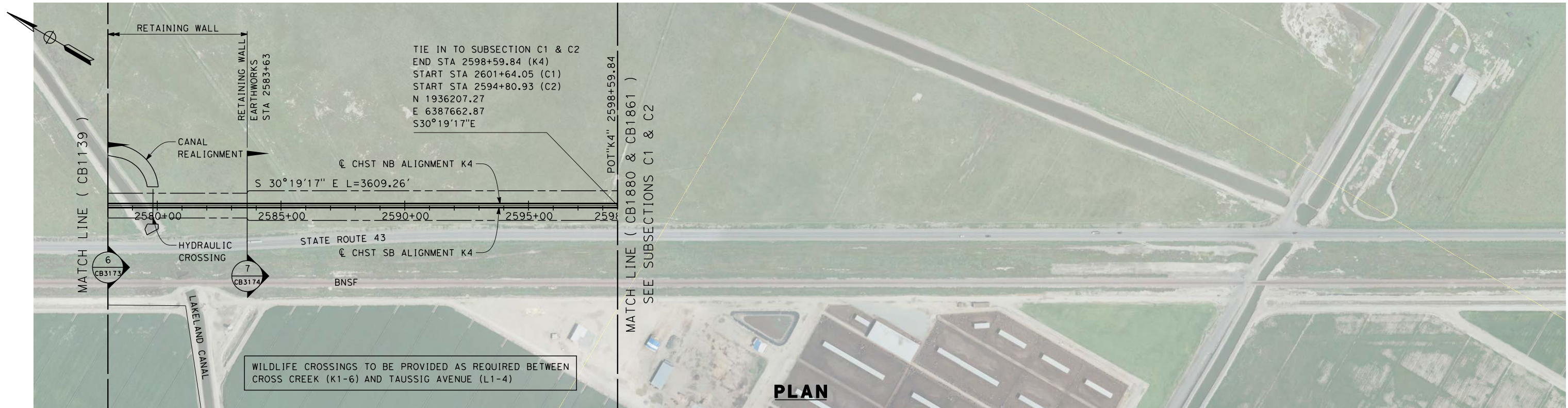
**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD**
 KAWEAH SUBSECTION
 ALIGNMENT K4
 STA. 2522+00 TO 2578+00
 PLAN AND PROFILE

CONTRACT NO.
HSR 06-0003
 DRAWING NO.
CB1139
 SCALE
AS SHOWN
 SHEET NO.
10 OF 15



12/12/2013 9:10:58 PM c:\pwworking\hmm\external\paul.tonkin01-arup.com\d0125355\FB-CB-1140-K4.dgn paul.tonkin

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
A. POLING

DRAWN BY
E. TANAKA

CHECKED BY
K. SEYMOUR

IN CHARGE
R. COFFIN

DATE
12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**



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

KAWEAH SUBSECTION
ALIGNMENT K4
STA. 2578+00 TO 2598+60
PLAN AND PROFILE

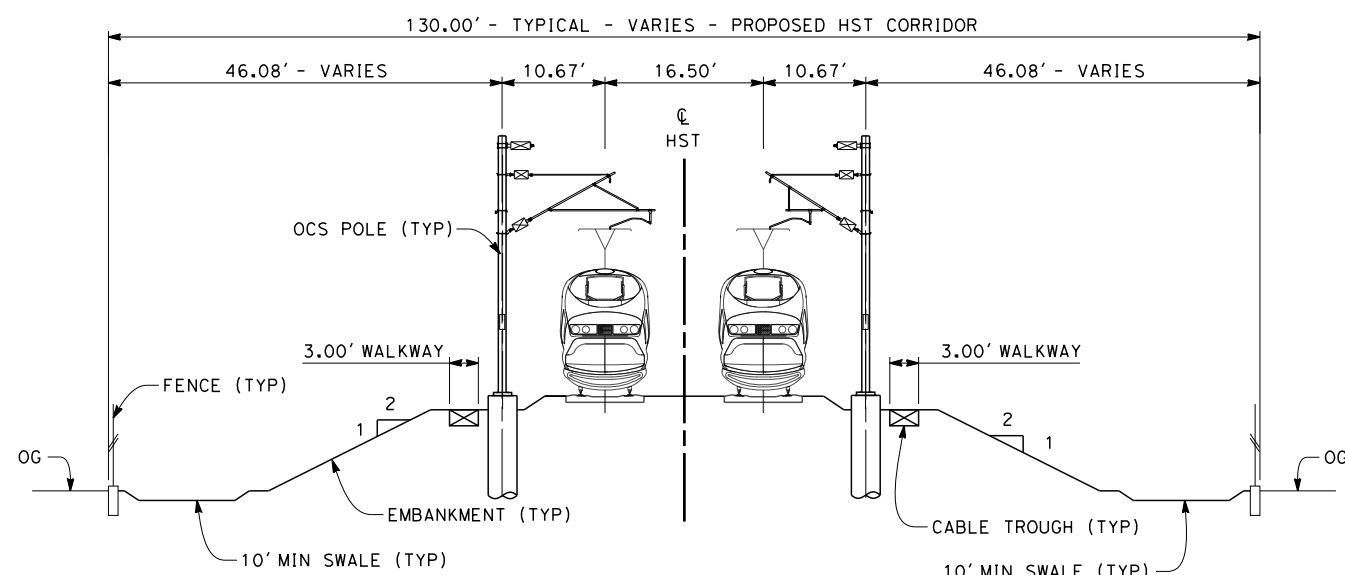
CONTRACT NO.
HSR 06-0003

DRAWING NO.
CB1140

SCALE
AS SHOWN

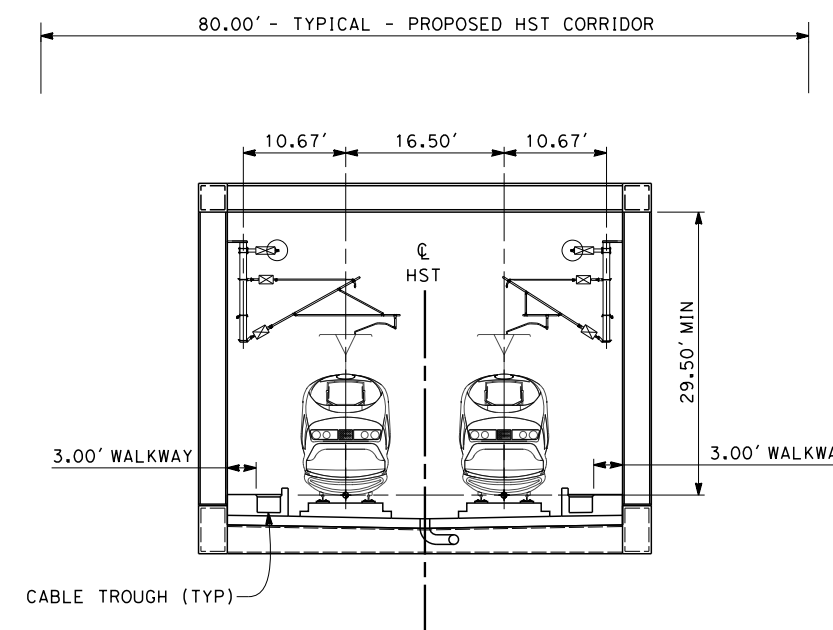
SHEET NO.
11 OF 15

- NOTES:
1. TRACKFORM SHOWN IS INDICATIVE
 2. FOR STRUCTURE DIMENSIONS SEE STRUCTURAL CROSS SECTIONS
 3. SUPERELEVATION IS NOT SHOWN. THE AMOUNT OF APPLIED SUPERELEVATION IS SHOWN IN CURVE DATA TABLES



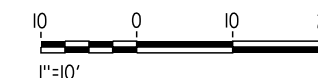
SECTION 1

TWIN TRACK - EMBANKMENT WITH OPEN DRAINAGE
 STA 2074+96 THROUGH STA 2240+32
 STA 2246+03 THROUGH STA 2315+00
 STA 2323+50 THROUGH STA 2436+00



SECTION 2

TWIN TRACK - AERIAL STEEL TRUSS
 STA 2240+32 THROUGH STA 2246+03
 STA 2479+23 THROUGH STA 2482+45



eron_sudhausen 3/10/2014 5:52:25 PM c:\pwworking\hmm\external\eron_sudhausen-arup.com\d0125355\FB-CB-3171-K4.dgn

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
A. POLING
 DRAWN BY
E. TANAKA
 CHECKED BY
K. SEYMOUR
 IN CHARGE
R. COFFIN
 DATE
03/19/13

**RECORD SET 15%
 DESIGN SUBMISSION**

**NOT FOR
 CONSTRUCTION**

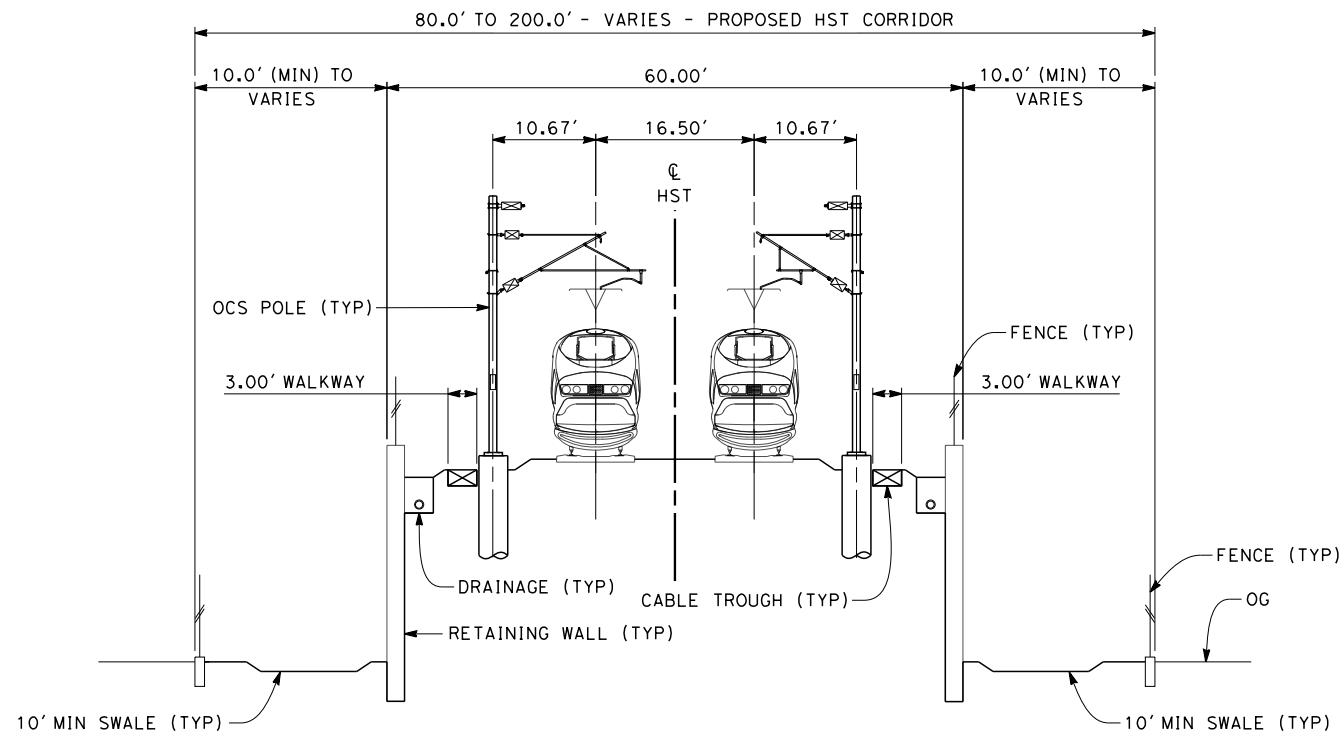


**CALIFORNIA HIGH-SPEED TRAIN PROJECT
 FRESNO TO BAKERSFIELD**
 KAWEAH SUBSECTION
 ALIGNMENT K4
 TYPICAL SECTIONS

CONTRACT NO.
 HSR 06-0003
 DRAWING NO.
 CB3171
 SCALE
 AS SHOWN
 SHEET NO.
 12 OF 15

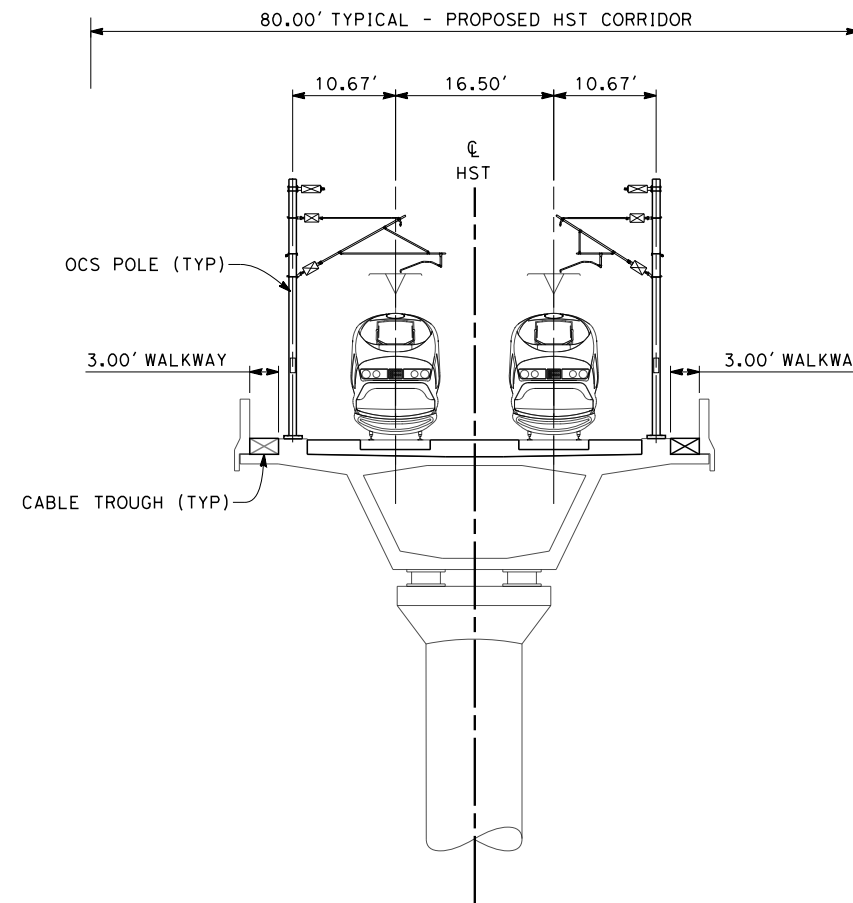
NOTES:

1. TRACKFORM SHOWN IS INDICATIVE
2. FOR STRUCTURE DIMENSIONS SEE STRUCTURAL CROSS SECTIONS
3. SUPERELEVATION IS NOT SHOWN. THE AMOUNT OF APPLIED SUPERELEVATION IS SHOWN IN CURVE DATA TABLES
4. LEFT SIDE IS RETAINED EMBANKMENT WITH OPEN DRAINAGE FROM STA 2315+00 THROUGH 2319+00 AND RIGHT SIDE IS EMBANKMENT WITH OPEN DRAINAGE FROM STA 2315+00 THROUGH 2318+50. RIGHT SIDE IS RETAINED EMBANKMENT WITH OPEN DRAINAGE FROM STA 2318+50 THROUGH 2323+50 AND LEFT SIDE IS EMBANKMENT WITH OPEN DRAINAGE FROM 2319+50 THROUGH 2323+50.



SECTION 3

TWIN TRACK - RETAINED EMBANKMENT WITH OPEN DRAINAGE
 STA 2315+00 THROUGH STA 2323+50 (SEE NOTE 4)
 STA 2436+00 THROUGH STA 2446+81



SECTION 4

TWIN TRACK - AERIAL VIADUCT
 STA 2446+81 THROUGH STA 2479+23
 STA 2482+45 THROUGH STA 2529+86
 STA 2535+11 THROUGH STA 2538+71



eron_sudhausen 3/11/2014 1:03:18 PM c:\pwworking\hmm\external\eron_sudhausen-arup.com\d0125355\FB-CB-3172-K4.dgn

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY A. POLING
DRAWN BY E. TANAKA
CHECKED BY K. SEYMOUR
IN CHARGE R. COFFIN
DATE 03/19/13

**RECORD SET 15%
 DESIGN SUBMISSION**

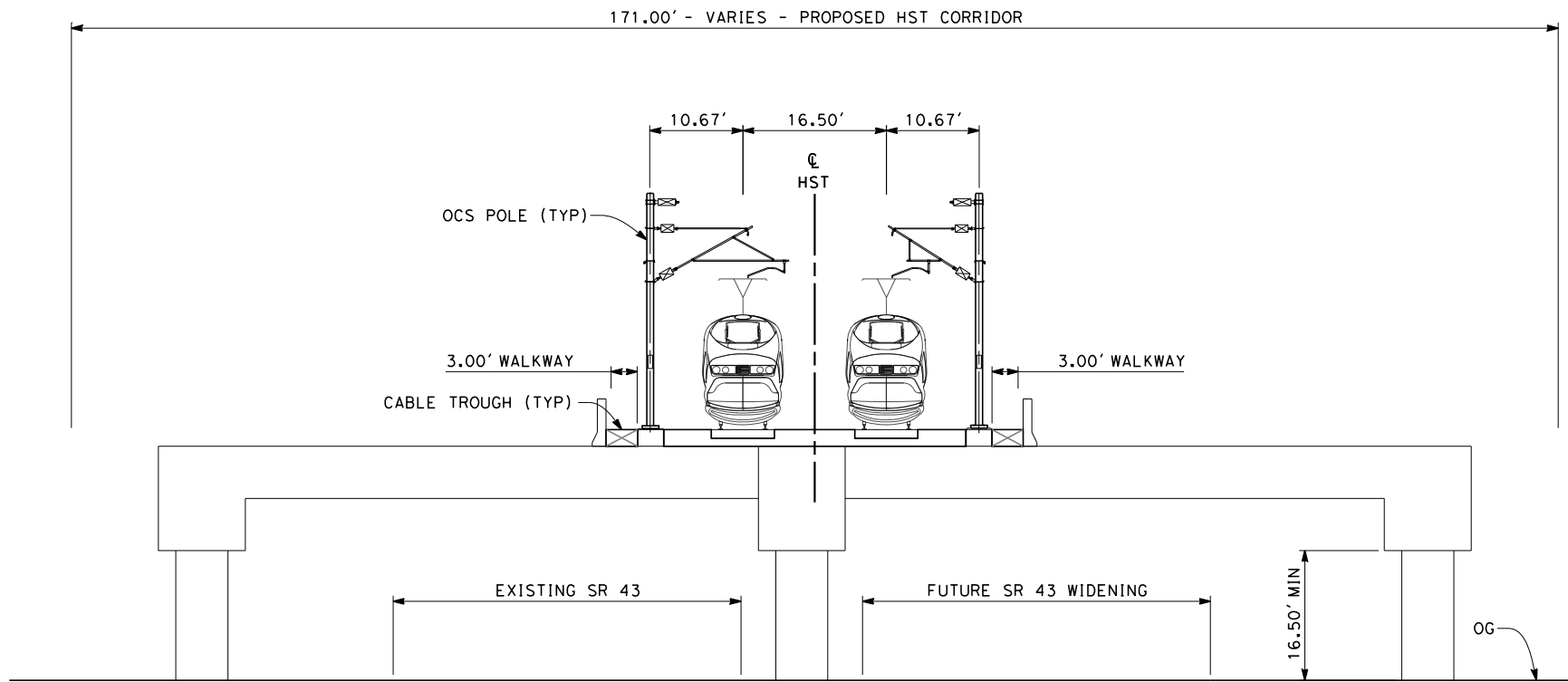
**NOT FOR
 CONSTRUCTION**



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

KAWEAH SUBSECTION
 ALIGNMENT K4
 TYPICAL SECTIONS

CONTRACT NO. HSR 06-0003
DRAWING NO. CB3172
SCALE AS SHOWN
SHEET NO. 13 OF 15

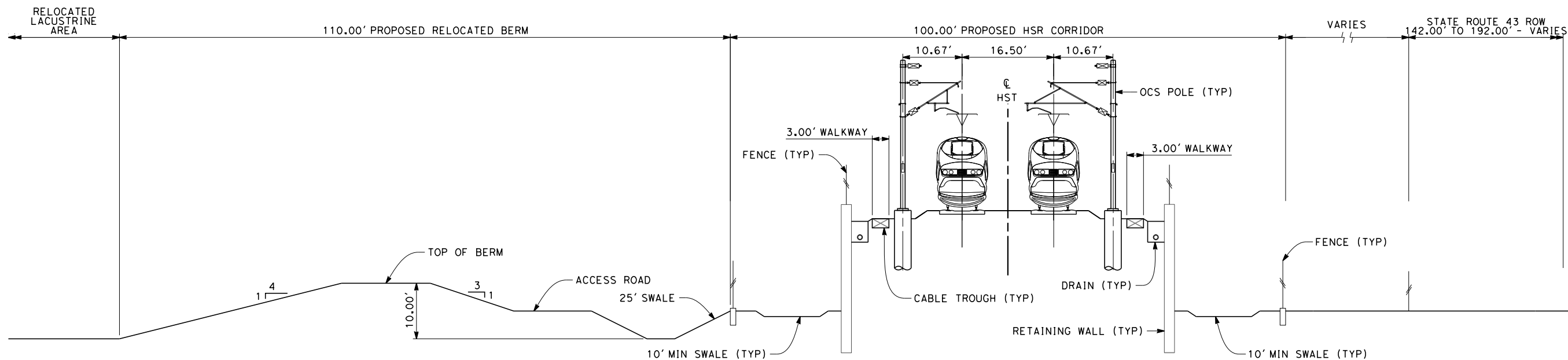


NOTES:

1. TRACKFORM SHOWN IS INDICATIVE
2. FOR STRUCTURE DIMENSIONS SEE STRUCTURAL CROSS SECTIONS
3. SUPERELEVATION IS NOT SHOWN. THE AMOUNT OF APPLIED SUPERELEVATION IS SHOWN IN CURVE DATA TABLES
4. PER CALTRANS STANDRAD, A HIGHWAY BARRIER IS REQUIRED NEXT TO A COLUMN BY THE REQUIREMENTS SET FORTH IN THE HIGHWAY DESIGN MANUAL. PIER PROTECTION REQUIRED FROM STA 2529+86 THROUGH STA 2535+11.

SECTION 5

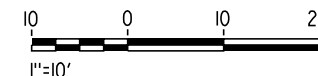
TWIN TRACK AERIAL STRUCTURE OVER SR 43
STA 2529+86 THROUGH STA 2535+11



NOTE:
RELOCATED BERM PROPOSED FROM
STA 2534+10 THROUGH 2565+80

SECTION 6

TWIN TRACK ON RETAINED EMBANKMENT ADJACENT TO SR 43
STA 2538+71 THROUGH STA 2583+63



c:\pwworking\hmm\external\alexander.poling-arup.com\d0125355\FB-CB-3173-K4.dgn

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
A. POLING
DRAWN BY
E. TANAKA
CHECKED BY
K. SEYMOUR
IN CHARGE
R. COFFIN
DATE
12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**

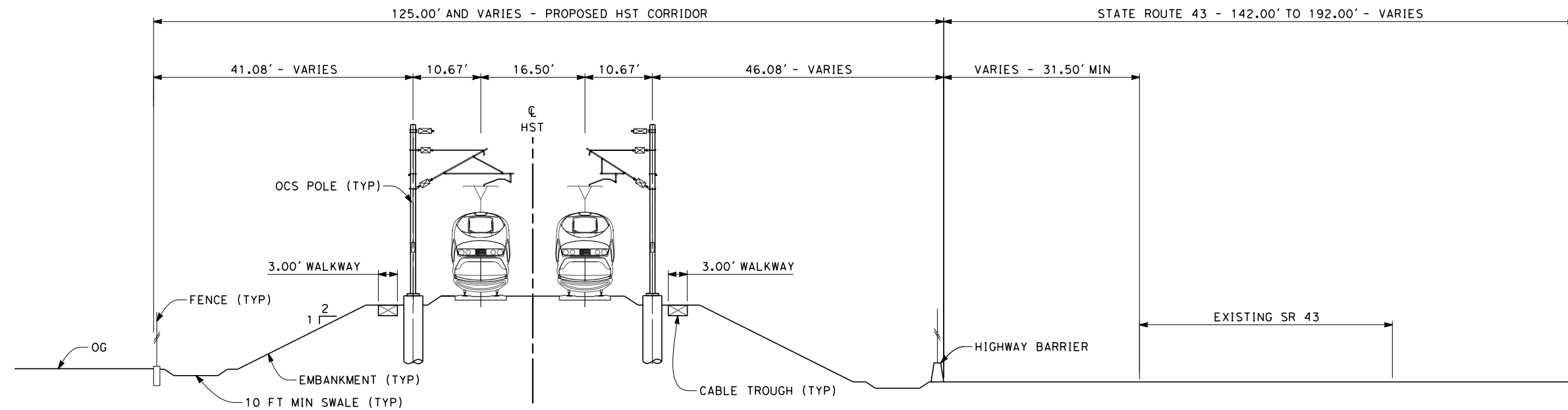


**CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD**
KAWEAH SUBSECTION
ALIGNMENT K4
TYPICAL SECTIONS

CONTRACT NO.
HSR 06-0003
DRAWING NO.
CB3173
SCALE
AS SHOWN
SHEET NO.
14 OF 15

NOTES:

1. TRACKFORM SHOWN IS INDICATIVE
2. FOR STRUCTURE DIMENSIONS SEE STRUCTURAL CROSS SECTIONS
3. SUPERELEVATION IS NOT SHOWN. THE AMOUNT OF APPLIED SUPERELEVATION IS SHOWN IN CURVE DATA TABLES



SECTION 7

TWIN TRACK - ADJACENT TO SR 43
 APPROX STA 2583+63 THROUGH STA 2598+60



c:\pwworking\hmm\external\alexander.poling-arup.com\d0125355\FB-CB-3174-K4.dgn

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
A. POLING
 DRAWN BY
E. TANAKA
 CHECKED BY
K. SEYMOUR
 IN CHARGE
R. COFFIN
 DATE
12/31/13

**RECORD SET 15%
 DESIGN SUBMISSION**

**NOT FOR
 CONSTRUCTION**



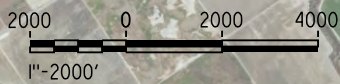
**CALIFORNIA HIGH-SPEED TRAIN PROJECT
 FRESNO TO BAKERSFIELD**
 KAWEAH SUBSECTION
 ALIGNMENT K4
 TYPICAL SECTIONS

CONTRACT NO.
HSR 06-0003
 DRAWING NO.
CB3174
 SCALE
AS SHOWN
 SHEET NO.
15 OF 15

c:\pwworking\hmm\external\eron.sudhausen-arup.com\dms70810\FB-CB-1250-K5.dgn 12/10/2013 10:41:08 AM



LEGEND
 ---+--- EXISTING FREIGHT RAILROAD
 ——— PROPOSED CHST



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
A. POLING
 DRAWN BY
P. TONKIN
 CHECKED BY
K. SEYMOUR
 IN CHARGE
R. COFFIN
 DATE
12/31/13

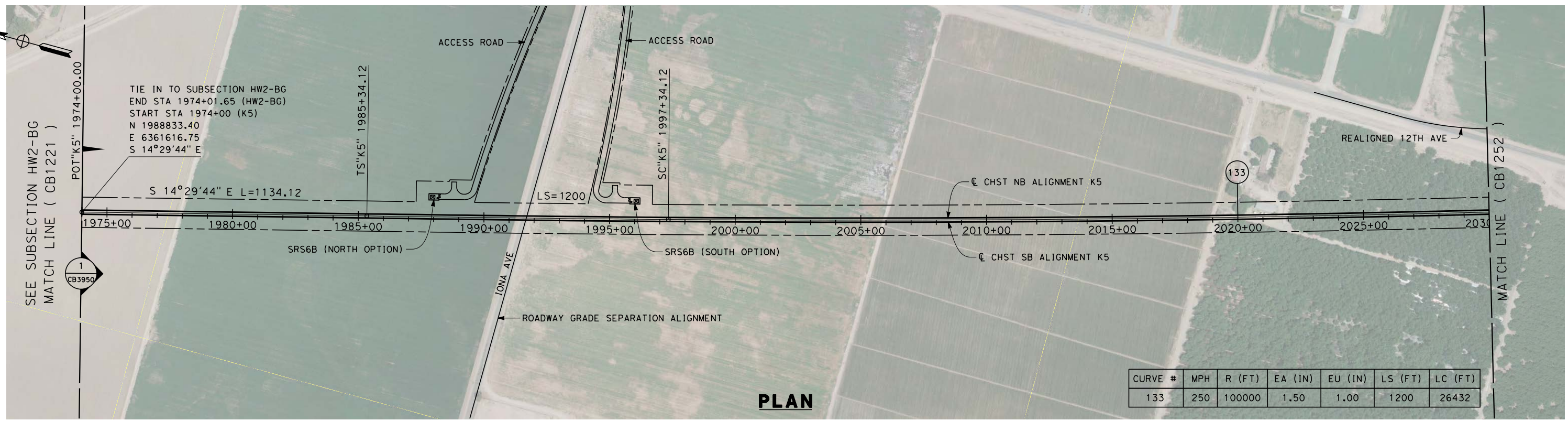
**RECORD SET 15%
 DESIGN SUBMISSION**
 NOT FOR
 CONSTRUCTION



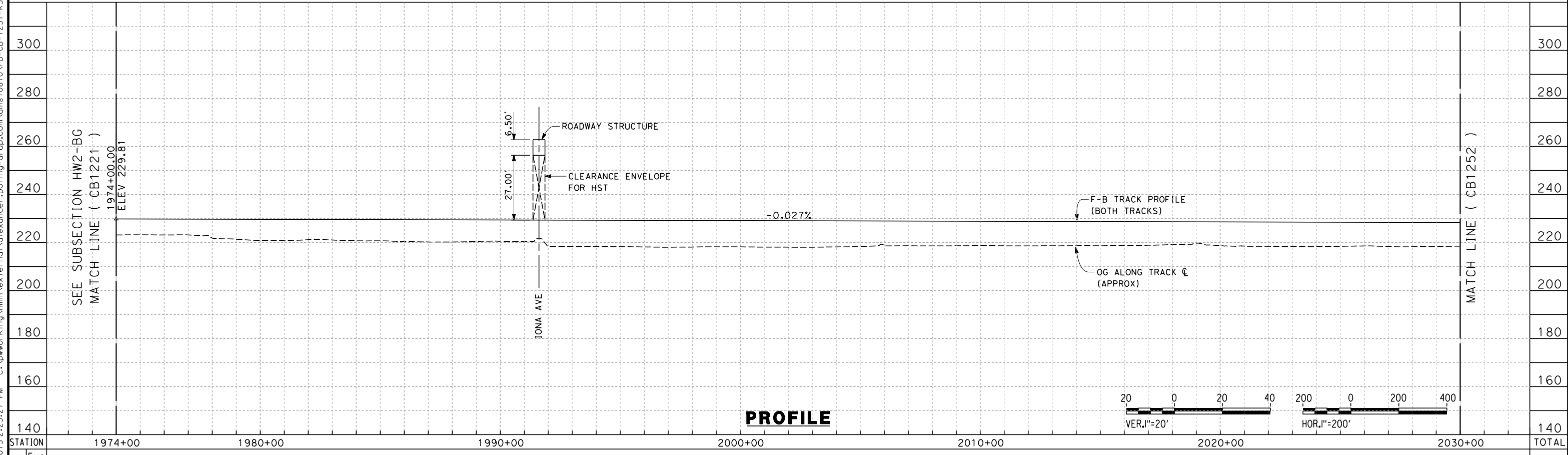
**CALIFORNIA HIGH-SPEED TRAIN PROJECT
 FRESNO TO BAKERSFIELD**
 KAWEAH SUBSECTION
 ALIGNMENT K5
 STA 1974+00 TO 2563+94
 PLAN AND PROFILE

CONTRACT NO.
HSR 06-0003
 DRAWING NO.
CB1250
 SCALE
AS SHOWN
 SHEET NO.
1 OF 17

c:\pwworking\hmm\external\alexander.poling-arup.com\dms70810\FB-CB-1251-K5.dgn alexander.poling 12/12/2013 2:25:27 PM



PLAN



PROFILE

STATION	1974+00	1980+00	1990+00	2000+00	2010+00	2020+00	2030+00	TOTAL
Exc								
Emb								

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
A. POLING
 DRAWN BY
P. TONKIN
 CHECKED BY
K. SEYMOUR
 IN CHARGE
R. COFFIN
 DATE
12/31/13

**RECORD SET 15%
 DESIGN SUBMISSION**

**NOT FOR
 CONSTRUCTION**

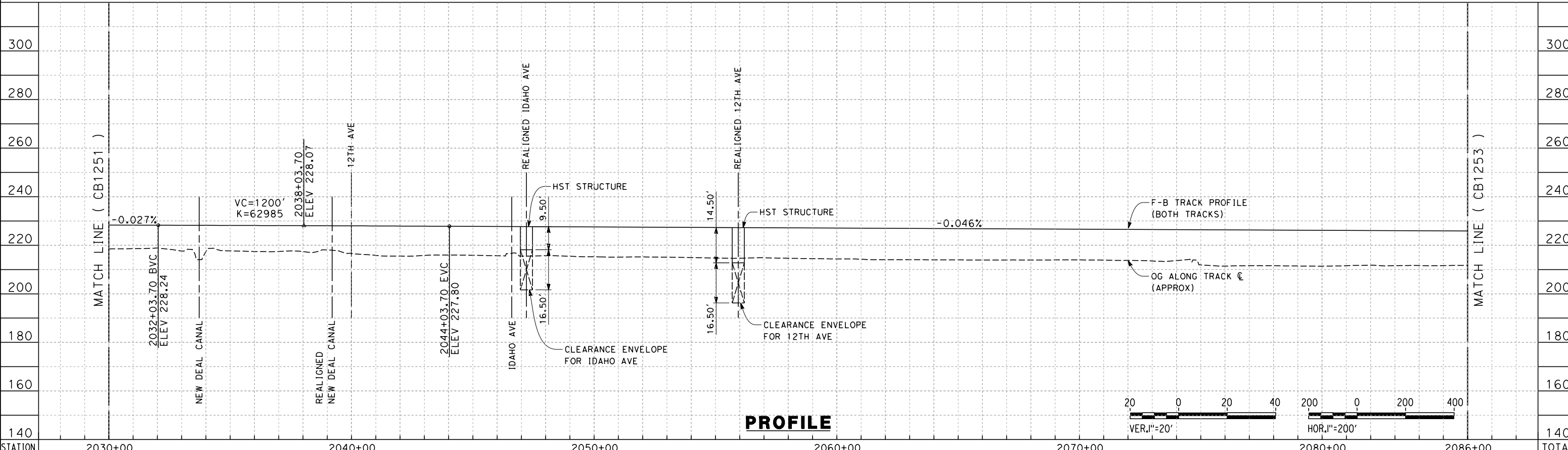
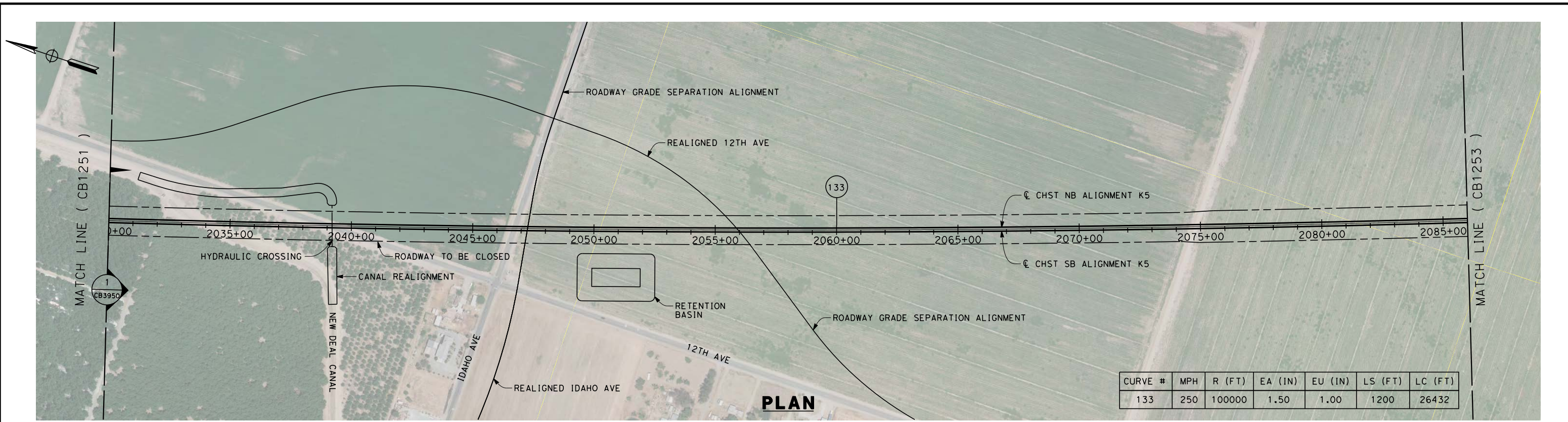


**CALIFORNIA HIGH-SPEED TRAIN PROJECT
 FRESNO TO BAKERSFIELD**

KAWEAH SUBSECTION
 ALIGNMENT K5
 STA 1974+00 TO 2030+00
 PLAN AND PROFILE

CONTRACT NO.
HSR 06-0003
 DRAWING NO.
CB1251
 SCALE
AS SHOWN
 SHEET NO.
2 OF 17

c:\pwworking\hmm\external\alexander.poling-arup.com\dms70810\FB-CB-1252-K5.dgn



STATION	2030+00	2040+00	2050+00	2060+00	2070+00	2080+00	2086+00	TOTAL
Exc								
Emb								

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
A. POLING
DRAWN BY
P. TONKIN
CHECKED BY
K. SEYMOUR
IN CHARGE
R. COFFIN
DATE
12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

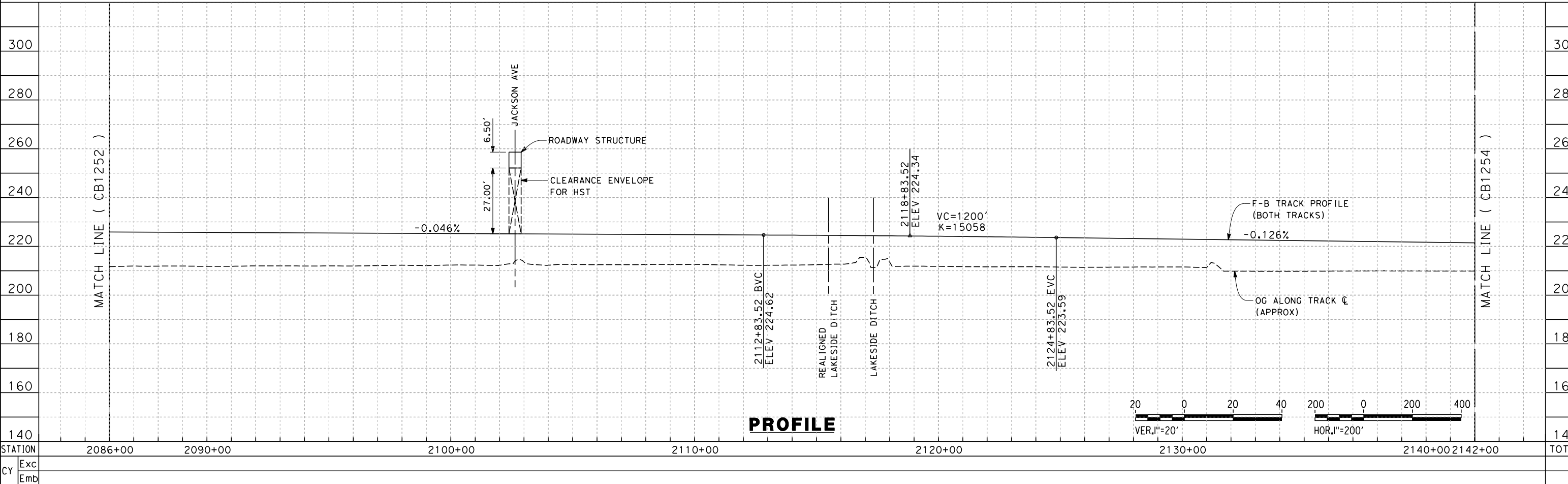
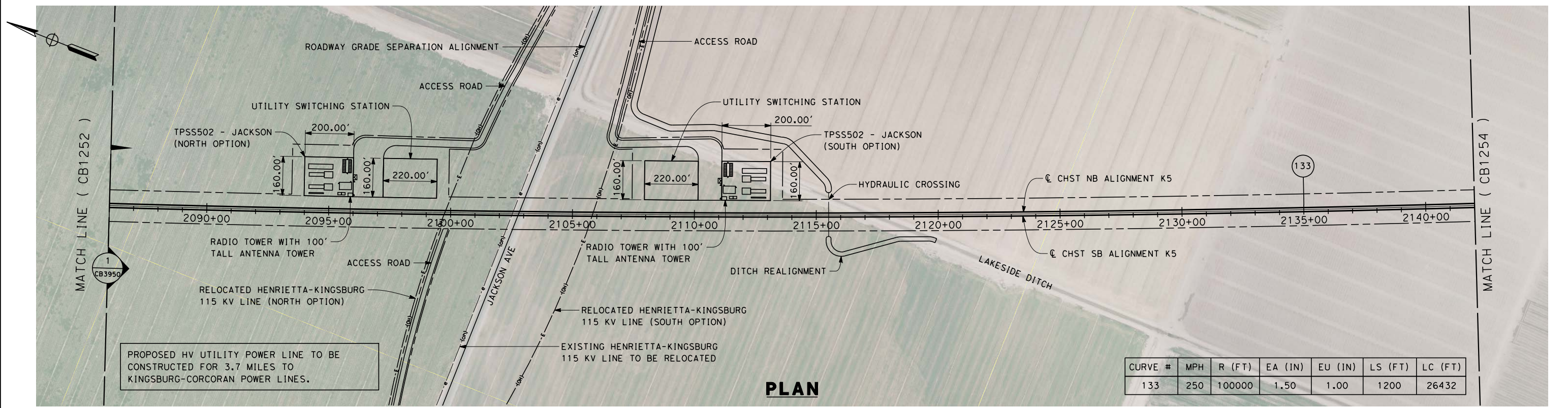
**NOT FOR
CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD**
KAWEAH SUBSECTION
ALIGNMENT K5
STA 2030+00 TO 2086+00
PLAN AND PROFILE

CONTRACT NO.
HSR 06-0003
DRAWING NO.
CB1252
SCALE
AS SHOWN
SHEET NO.
3 OF 17

12/31/2013 9:56:17 AM c:\pwworking\hmm\external\frank.palermo01-arup.com\dms70810\FB-CB-1253-K5.dgn frank.palermo



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
A. POLING
DRAWN BY
P. TONKIN
CHECKED BY
K. SEYMOUR
IN CHARGE
R. COFFIN
DATE
12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**

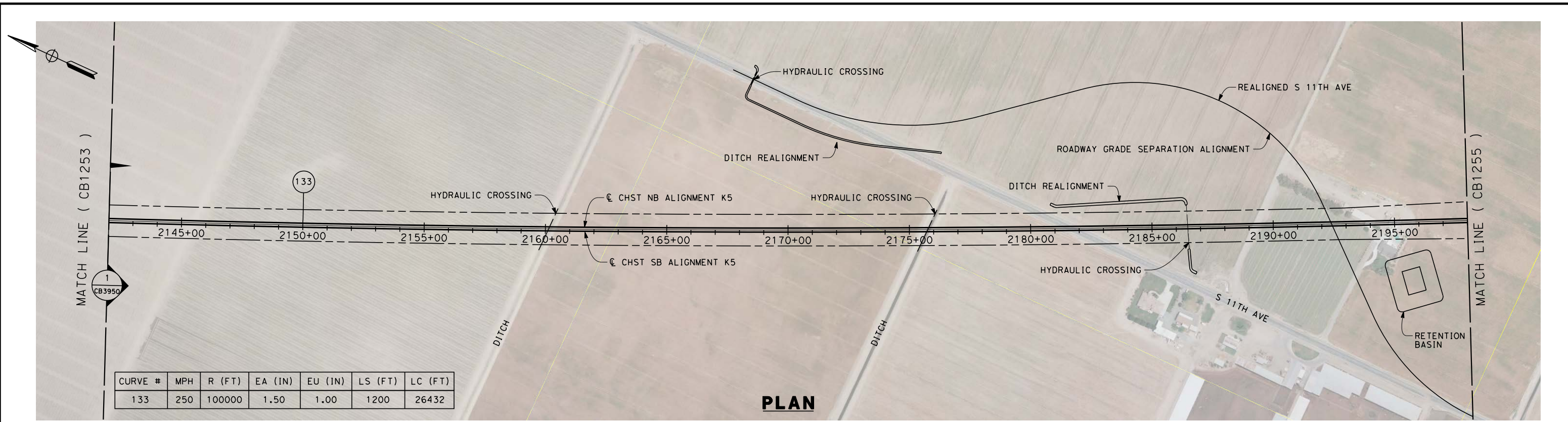


**CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD**

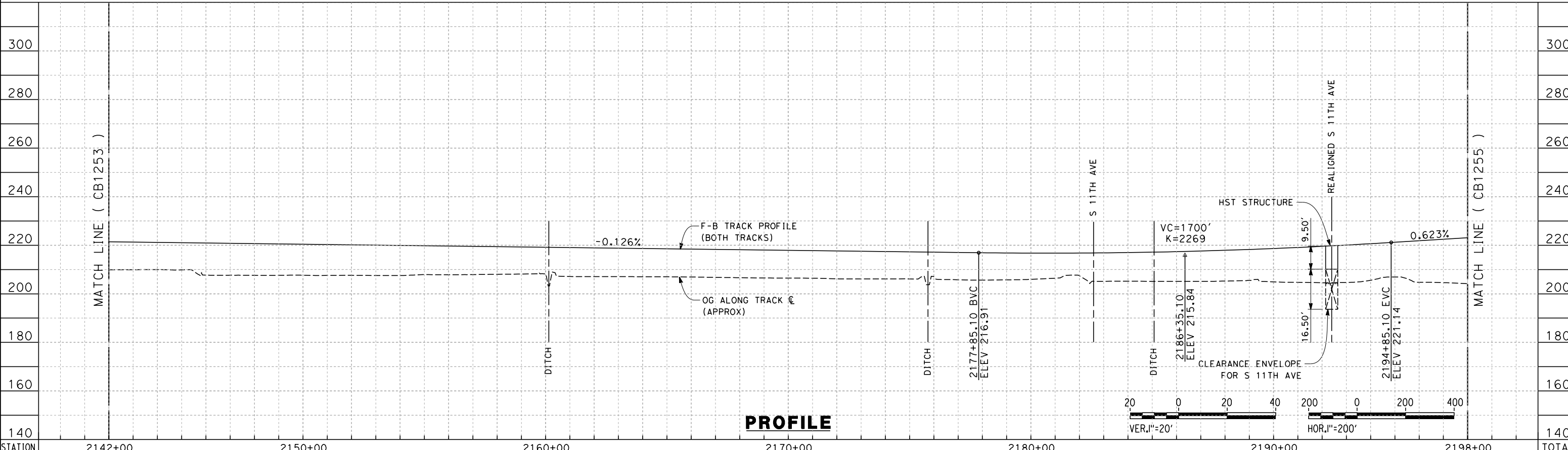
KAWEAH SUBSECTION
ALIGNMENT K5
STA 2086+00 TO 2142+00
PLAN AND PROFILE

CONTRACT NO.
HSR 06-0003
DRAWING NO.
CB1253
SCALE
AS SHOWN
SHEET NO.
4 OF 17

c:\pwworking\hmm\external\alexander.poling-arup.com\dms70810\FB-CB-1254-K5.dgn alexander.poling 12/12/2013 2:30:16 PM



PLAN



PROFILE

STATION	2142+00	2150+00	2160+00	2170+00	2180+00	2190+00	2198+00	TOTAL
Exc								
Emb								

DESIGNED BY
A. POLING
DRAWN BY
P. TONKIN
CHECKED BY
K. SEYMOUR
IN CHARGE
R. COFFIN
DATE
12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

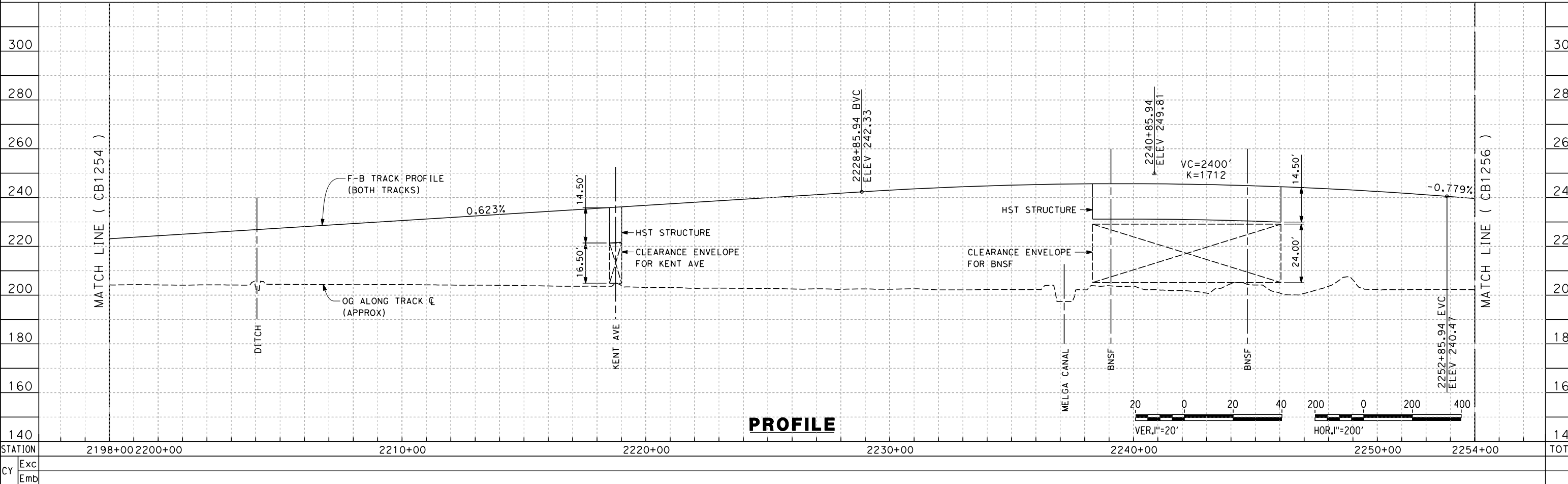
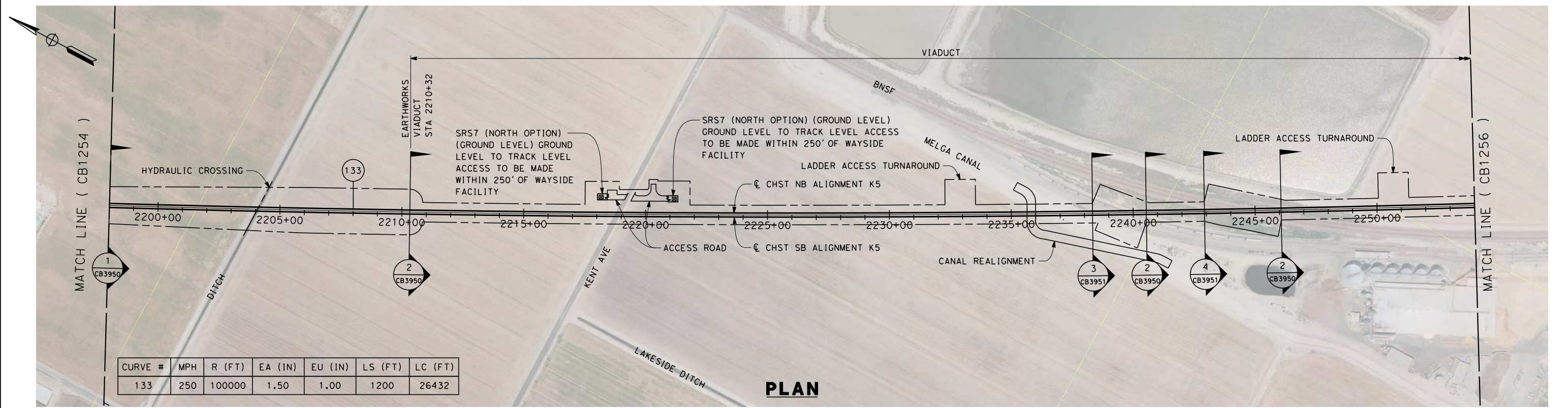
**NOT FOR
CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD**
KAWEAH SUBSECTION
ALIGNMENT K5
STA 2142+00 TO 2198+00
PLAN AND PROFILE

CONTRACT NO.
HSR 06-0003
DRAWING NO.
CB1254
SCALE
AS SHOWN
SHEET NO.
5 OF 17

c:\pwworking\hmm\external\alexander.poling-arup.com\dms70810\FB-CB-1255-K5.dgn alexander.poling 12/12/2013 2:31:57 PM



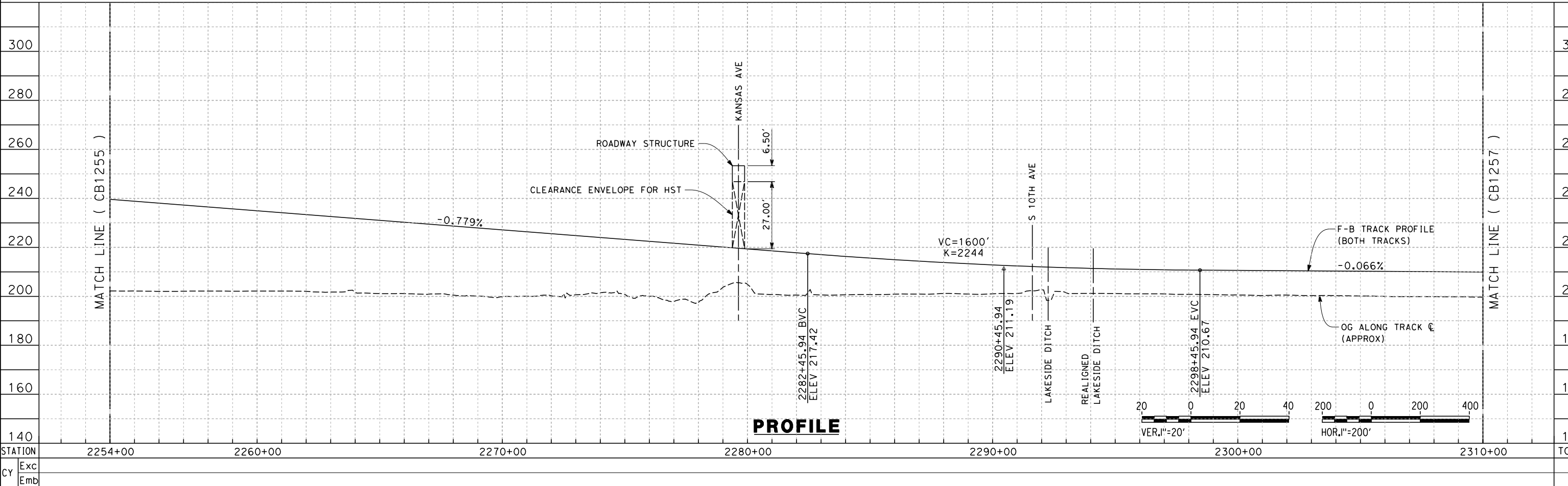
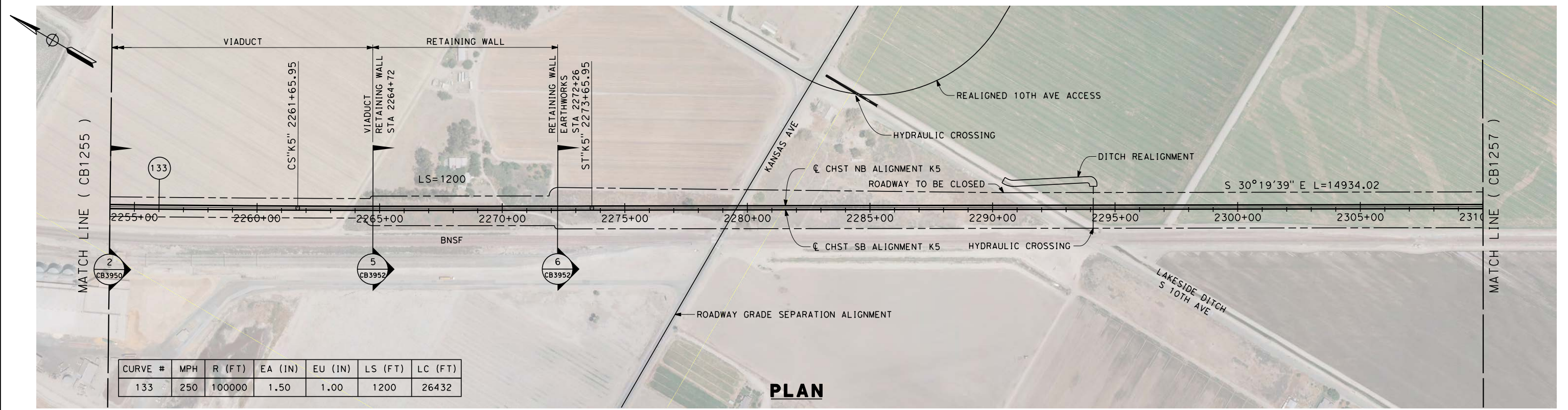
REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY A. POLING DRAWN BY P. TONKIN CHECKED BY K. SEYMOUR IN CHARGE R. COFFIN DATE 12/31/13	RECORD SET 15% DESIGN SUBMISSION NOT FOR CONSTRUCTION		
---	--	--	--

CALIFORNIA HIGH-SPEED TRAIN PROJECT FRESNO TO BAKERSFIELD			
KAWEAH SUBSECTION ALIGNMENT K5 STA 2198+00 TO 2254+00 PLAN AND PROFILE			

CONTRACT NO. HSR 06-0003 DRAWING NO. CB1255 SCALE AS SHOWN SHEET NO. 6 OF 17

c:\pwworking\hmm\external\alexander.poling-arup.com\dms70810\FB-CB-1256-K5.dgn alexander.poling 12/12/2013 2:33:37 PM



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
A. POLING
DRAWN BY
P. TONKIN
CHECKED BY
K. SEYMOUR
IN CHARGE
R. COFFIN
DATE
12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**

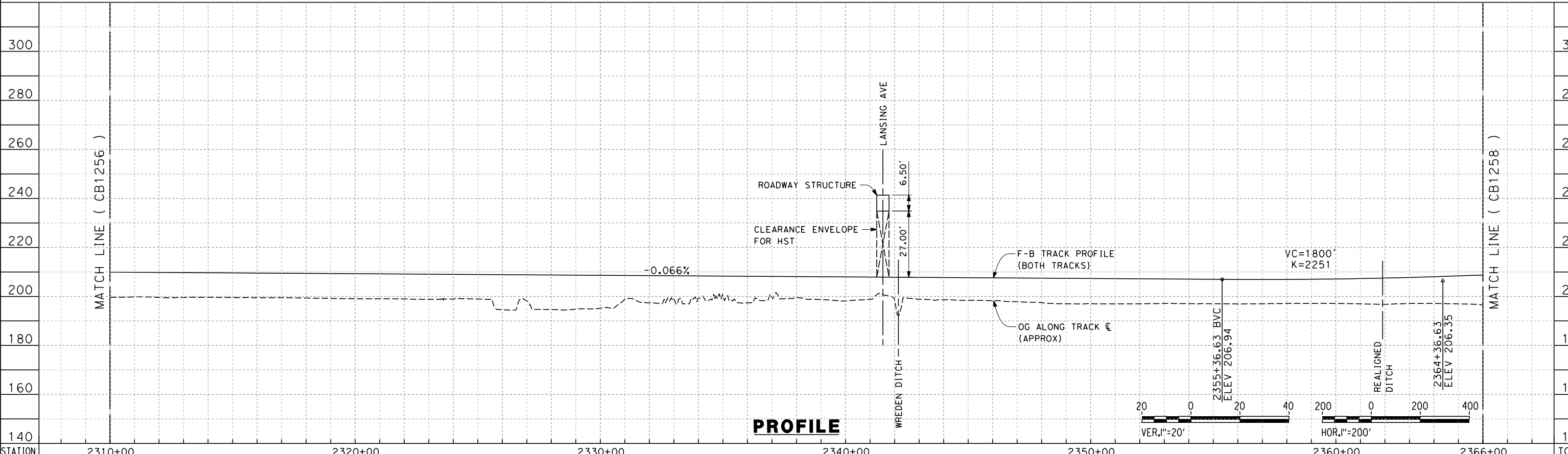
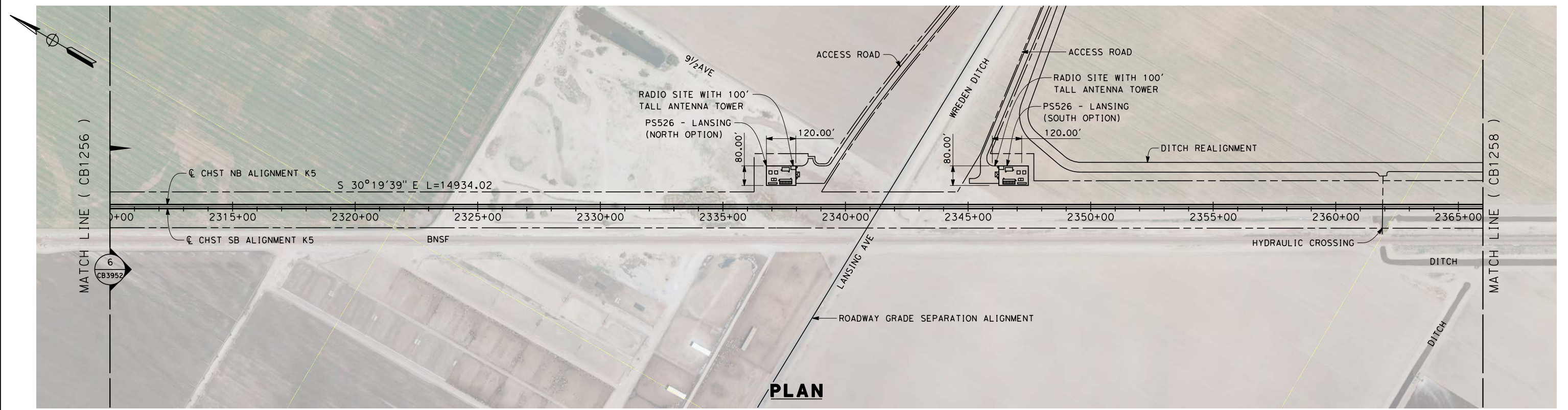


**CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD**

KAWEAH SUBSECTION
ALIGNMENT K5
STA 2254+00 TO 2310+00
PLAN AND PROFILE

CONTRACT NO.
HSR 06-0003
DRAWING NO.
CB1256
SCALE
AS SHOWN
SHEET NO.
7 OF 17

c:\pwworking\hmm\external\alexander.poling-arup.com\dms70810\FB-CB-1257-K5.dgn



STATION	2310+00	2320+00	2330+00	2340+00	2350+00	2360+00	2366+00	TOTAL
Exc								
Emb								

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
A. POLING
DRAWN BY
P. TONKIN
CHECKED BY
K. SEYMOUR
IN CHARGE
R. COFFIN
DATE
12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

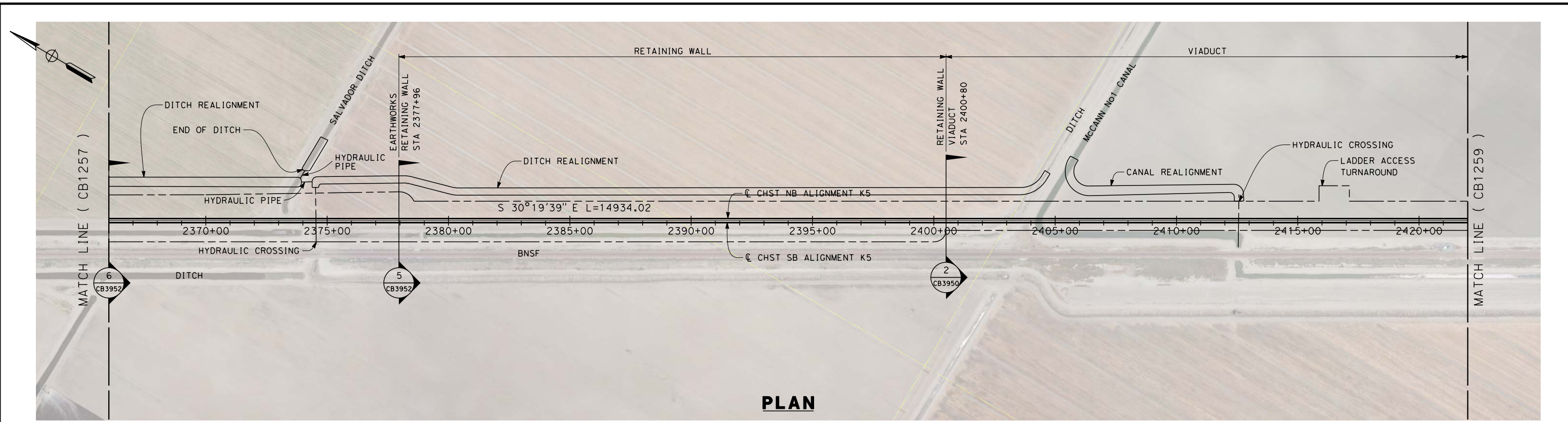
**NOT FOR
CONSTRUCTION**



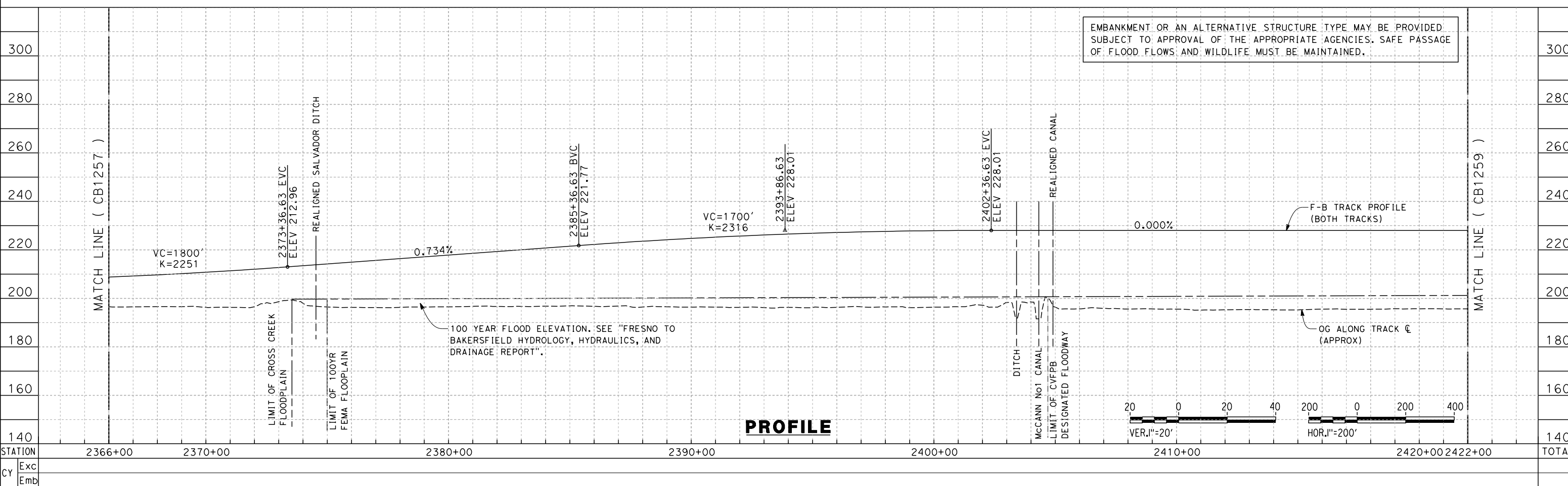
**CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD**

KAWEAH SUBSECTION
ALIGNMENT K5
STA 2310+00 TO 2366+00
PLAN AND PROFILE

CONTRACT NO.
HSR 06-0003
DRAWING NO.
CB1257
SCALE
AS SHOWN
SHEET NO.
8 OF 17



PLAN



PROFILE

EMBANKMENT OR AN ALTERNATIVE STRUCTURE TYPE MAY BE PROVIDED SUBJECT TO APPROVAL OF THE APPROPRIATE AGENCIES. SAFE PASSAGE OF FLOOD FLOWS AND WILDLIFE MUST BE MAINTAINED.

12/12/2013 9:33:11 PM c:\pwworking\hmm\external\paul.tonkin\01-arup.com\dms70810\FB-CB-1258-K5.dgn paul.tonkin

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
A. POLING
DRAWN BY
P. TONKIN
CHECKED BY
K. SEYMOUR
IN CHARGE
R. COFFIN
DATE
12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

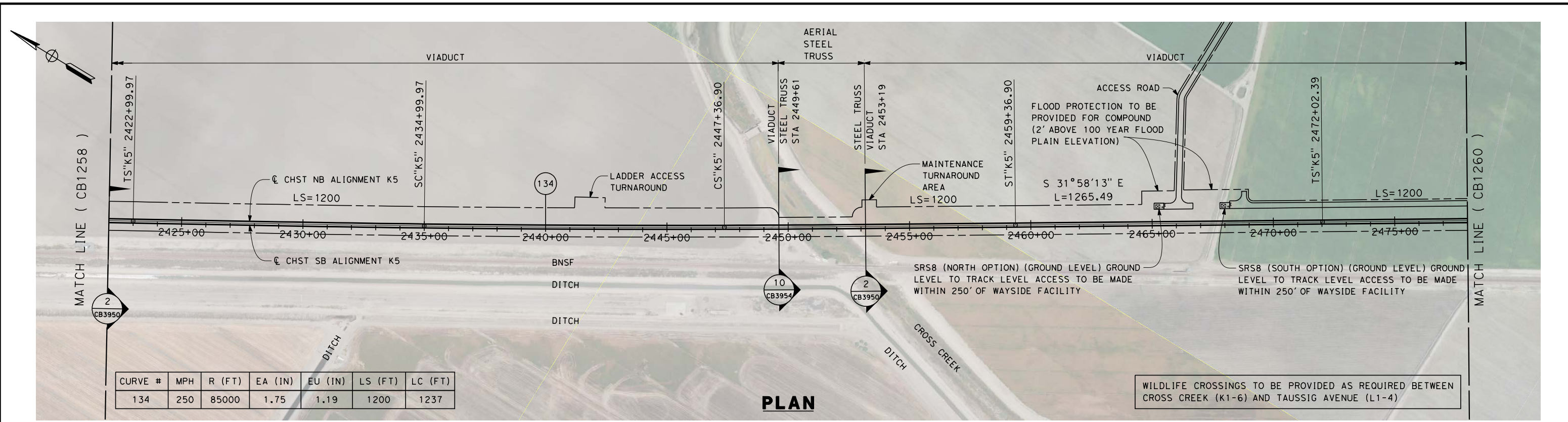
**NOT FOR
CONSTRUCTION**



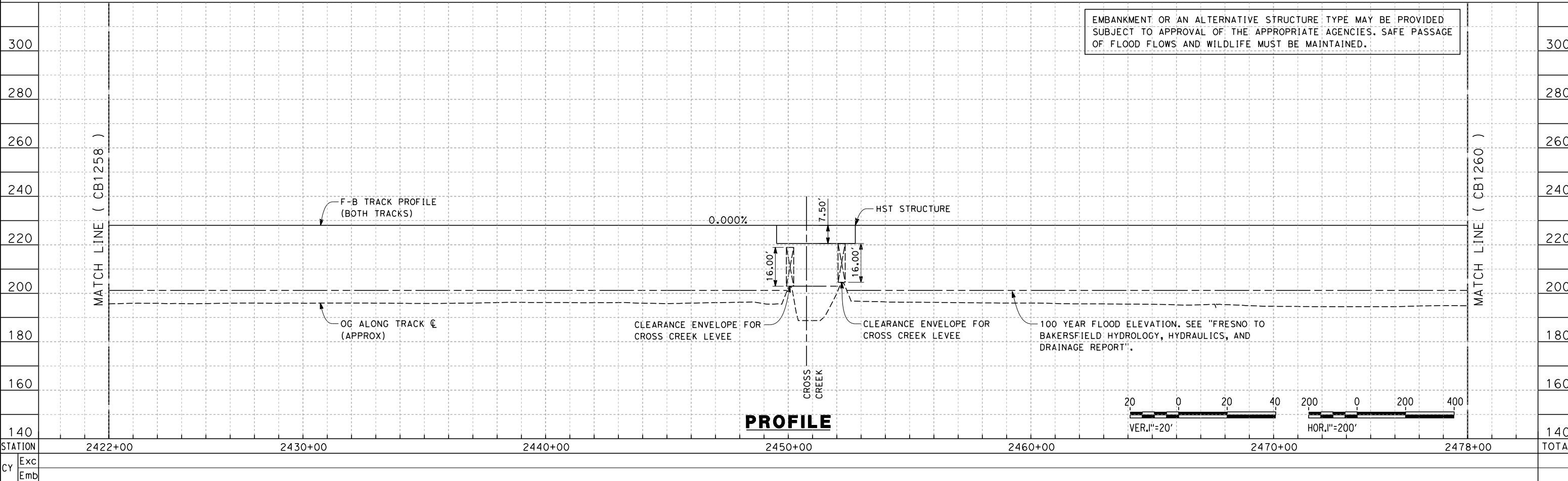
**CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD**

KAWEAH SUBSECTION
ALIGNMENT K5
STA 2366+00 TO 2422+00
PLAN AND PROFILE

CONTRACT NO.
HSR 06-0003
DRAWING NO.
CB1258
SCALE
AS SHOWN
SHEET NO.
9 OF 17

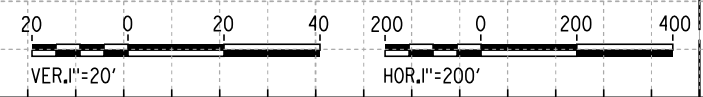


PLAN



PROFILE

EMBANKMENT OR AN ALTERNATIVE STRUCTURE TYPE MAY BE PROVIDED SUBJECT TO APPROVAL OF THE APPROPRIATE AGENCIES. SAFE PASSAGE OF FLOOD FLOWS AND WILDLIFE MUST BE MAINTAINED.



c:\pwworking\hmm\external\alexander.poling-arup.com\dms70810\FB-CB-1259-K5.dgn

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
A. POLING
DRAWN BY
P. TONKIN
CHECKED BY
K. SEYMOUR
IN CHARGE
R. COFFIN
DATE
12/31/13

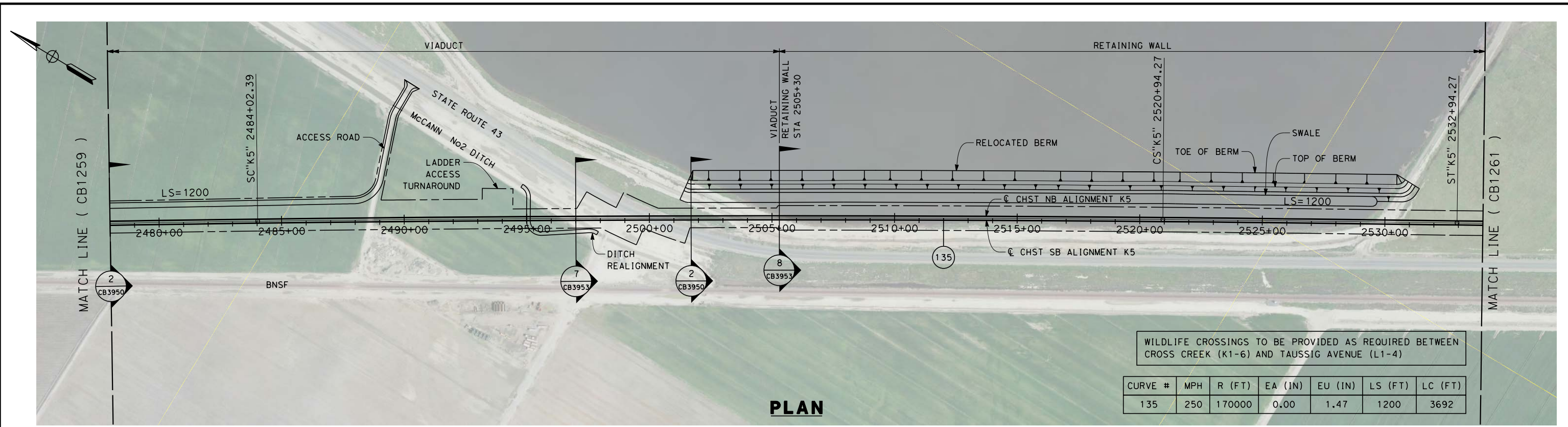
**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD**
KAWEAH SUBSECTION
ALIGNMENT K5
STA 2422+00 TO 2478+00
PLAN AND PROFILE

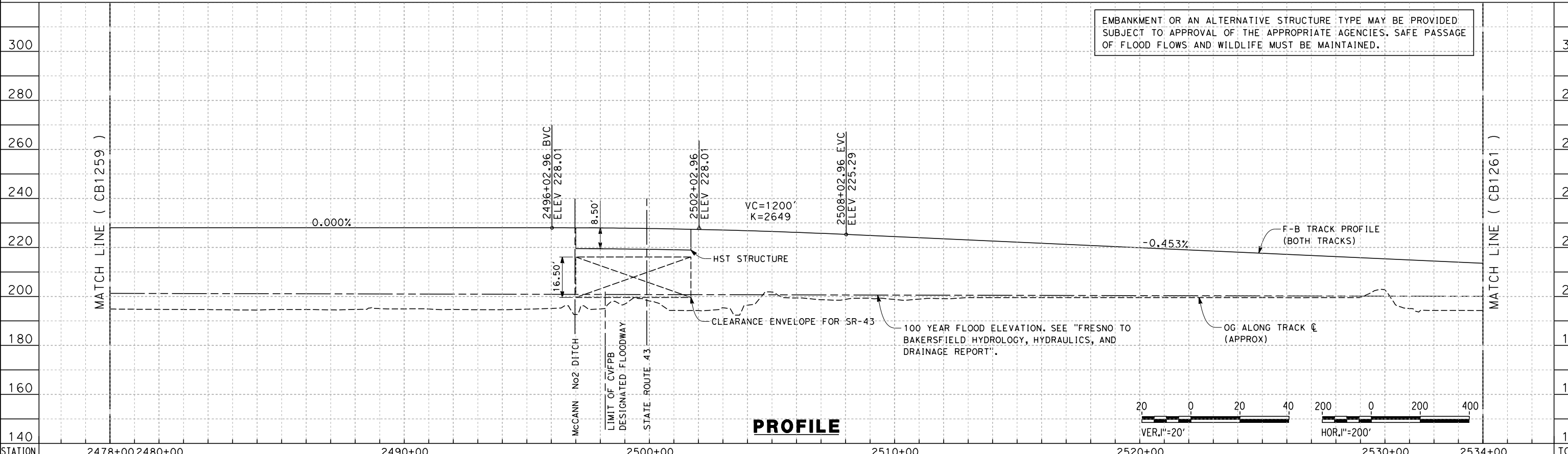
CONTRACT NO.
HSR 06-0003
DRAWING NO.
CB1259
SCALE
AS SHOWN
SHEET NO.
10 OF 17



PLAN

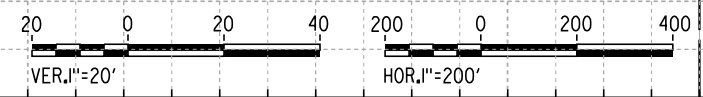
WILDLIFE CROSSINGS TO BE PROVIDED AS REQUIRED BETWEEN CROSS CREEK (K1-6) AND TAUSSIG AVENUE (L1-4)

CURVE #	MPH	R (FT)	EA (IN)	EU (IN)	LS (FT)	LC (FT)
135	250	170000	0.00	1.47	1200	3692



PROFILE

EMBANKMENT OR AN ALTERNATIVE STRUCTURE TYPE MAY BE PROVIDED SUBJECT TO APPROVAL OF THE APPROPRIATE AGENCIES. SAFE PASSAGE OF FLOOD FLOWS AND WILDLIFE MUST BE MAINTAINED.



c:\pwworking\hmm\external\alexander.poling-arup.com\dms70810\FB-CB-1260-K5.dgn alexander.poling 12/12/2013 2:39:58 PM

STATION	2478+00	2480+00	2490+00	2500+00	2510+00	2520+00	2530+00	2534+00	TOTAL
Exc									
Emb									

REV	DATE	BY	CHK	APP	DESCRIPTION
	MM/DD/YY				

DESIGNED BY
A. POLING
DRAWN BY
P. TONKIN
CHECKED BY
K. SEYMOUR
IN CHARGE
R. COFFIN
DATE
12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**

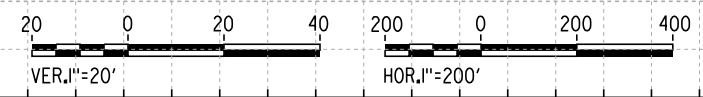
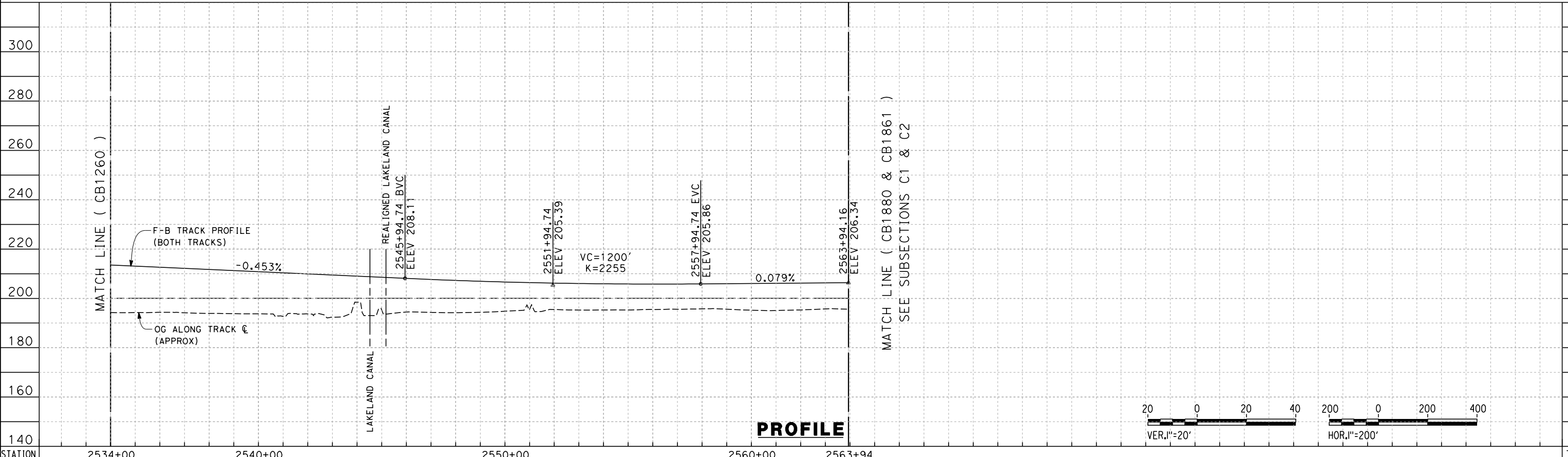
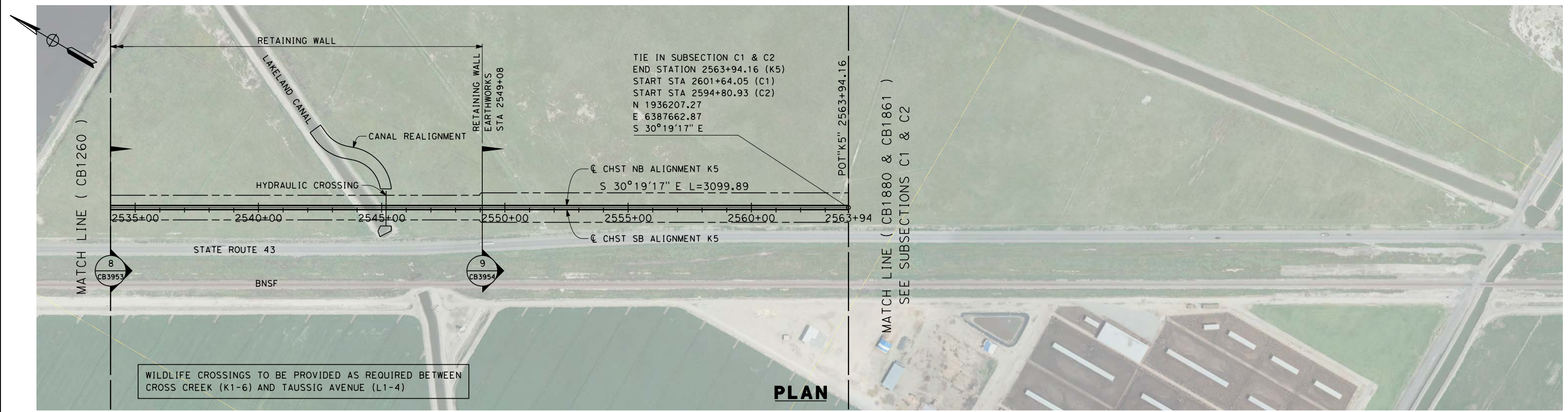


**CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD**

KAWEAH SUBSECTION
ALIGNMENT K5
STA 2478+00 TO 2534+00
PLAN AND PROFILE

CONTRACT NO.
HSR 06-0003
DRAWING NO.
CB1260
SCALE
AS SHOWN
SHEET NO.
11 OF 17

c:\pwworking\hmm\external\alexander.poling-arup.com\dms70810\FB-CB-1261-K5.dgn



STATION	2534+00	2540+00	2550+00	2560+00	2563+94	TOTAL
Exc						
Emb						

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
A. POLING
DRAWN BY
P. TONKIN
CHECKED BY
K. SEYMOUR
IN CHARGE
R. COFFIN
DATE
12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**

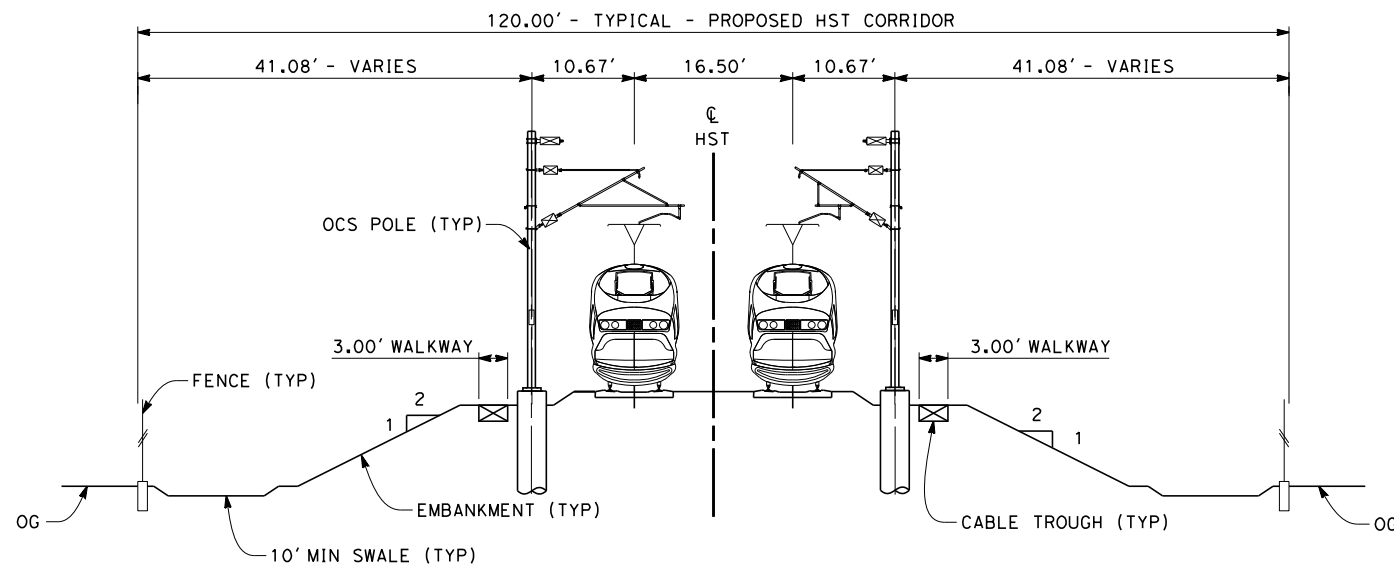


**CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD**
KAWEAH SUBSECTION
ALIGNMENT K5
STA 2534+00 TO 2563+94
PLAN AND PROFILE

CONTRACT NO.
HSR 06-0003
DRAWING NO.
CB1261
SCALE
AS SHOWN
SHEET NO.
12 OF 17

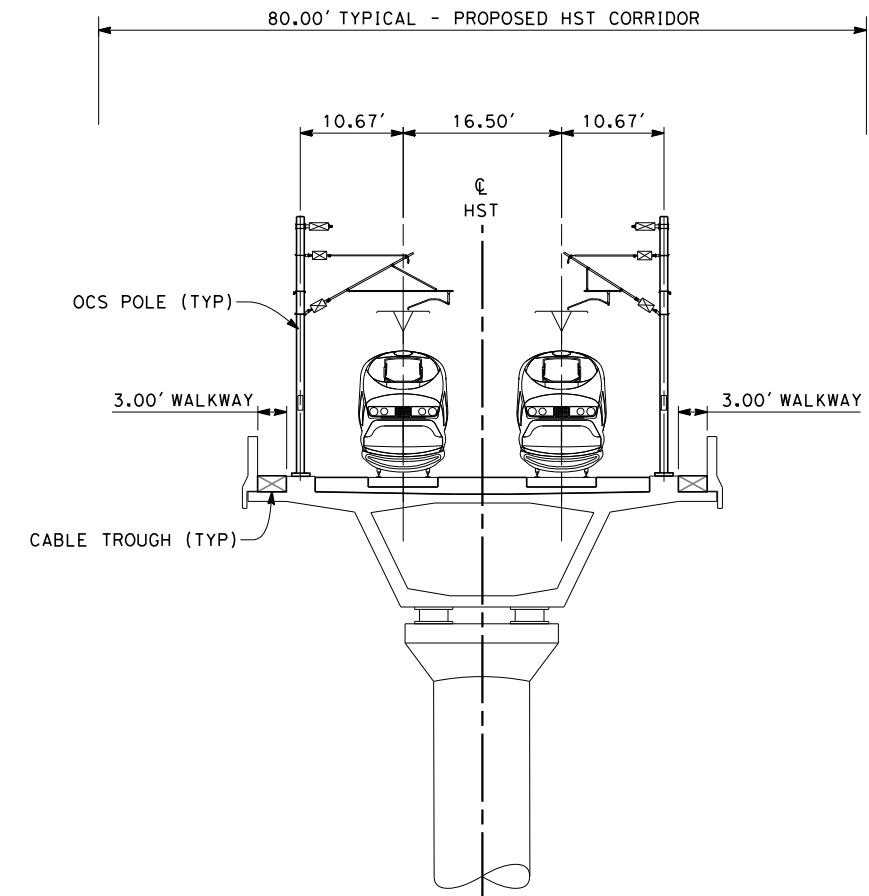
NOTES:

1. TRACKFORM SHOWN IS INDICATIVE.
2. SUPERELEVATION IS NOT SHOWN. THE AMOUNT OF APPLIED SUPERELEVATION IS SHOWN IN THE CURVE DATA TABLES.
3. FOR STRUCTURE DIMENSIONS SEE STRUCTURAL CROSS SECTIONS.



SECTION 1

TWIN TRACK - EMBANKMENT WITH OPEN DRAINAGE
STA 1974+00 THROUGH STA 2210+32



SECTION 2

TWIN TRACK AERIAL VIADUCT
STA 2210+32 THROUGH STA 2238+82
STA 2240+02 THROUGH STA 2243+32
STA 2245+72 THROUGH STA 2264+72
STA 2400+80 THROUGH STA 2449+62
STA 2453+19 THROUGH STA 2497+00
STA 2501+70 THROUGH STA 2505+30



c:\pwworking\hmm\external\alexander.poling-arup.com\dms70810\FB-CB-3950-K5.dgn \$PLTDRVS\$ \$PENTBLS\$ alexander.poling 12/20/2013 12:41:59 PM

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
A. POLING
DRAWN BY
P. TONKIN
CHECKED BY
K. SEYMOUR
IN CHARGE
R. COFFIN
DATE
12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**

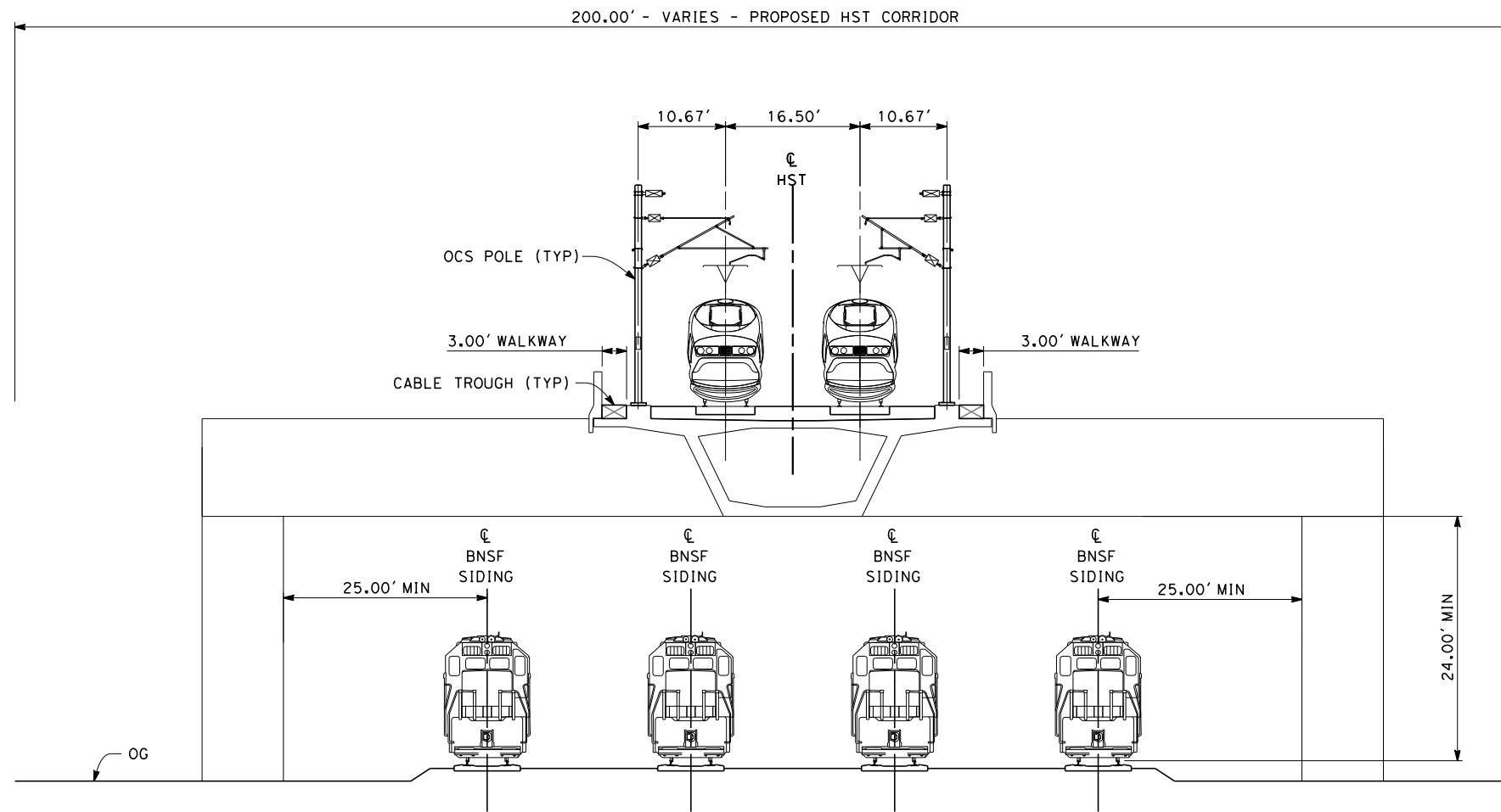


**CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD**
KAWEAH SUBSECTION
ALIGNMENT K5
TYPICAL SECTIONS

CONTRACT NO.
HSR 06-0003
DRAWING NO.
CB3950
SCALE
AS SHOWN
SHEET NO.
13 OF 17

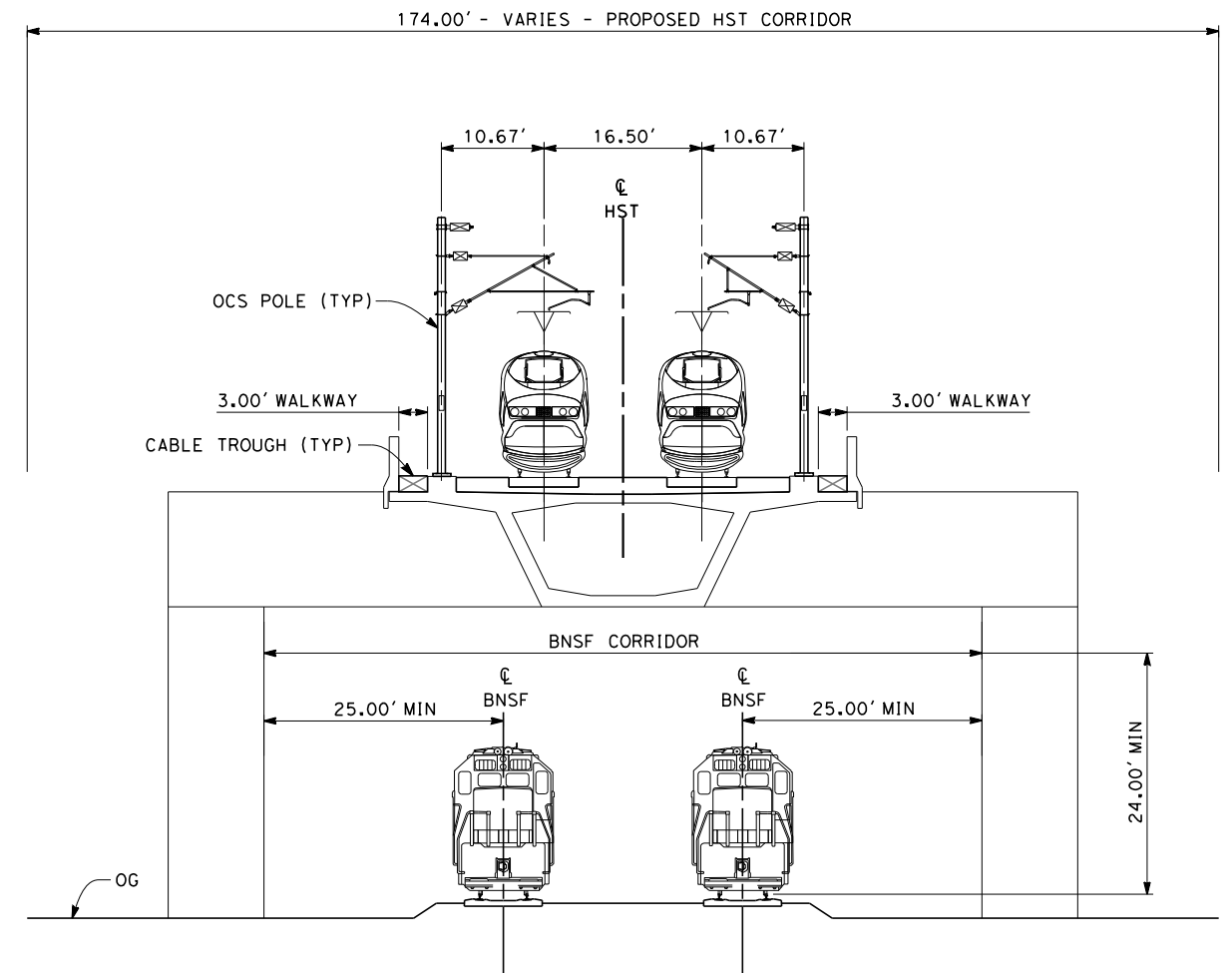
NOTES:

1. TRACKFORM SHOWN IS INDICATIVE.
2. SUPERELEVATION IS NOT SHOWN. THE AMOUNT OF APPLIED SUPERELEVATION IS SHOWN IN THE CURVE DATA TABLES.
3. FOR STRUCTURE DIMENSIONS SEE STRUCTURAL CROSS SECTIONS.



SECTION 3

TWIN TRACK INTEGRATED STRADDLE BENT - 4 TRACK BNSF
STA 2238+82 THROUGH STA 2240+02



SECTION 4

TWIN TRACK INTEGRATED STRADDLE BENT - 2 TRACK BNSF
STA 2243+32 THROUGH STA 2245+72



c:\pwworking\hmm\external\alexander.poling-arup.com\dms70810\FB-CB-3951-K5.dgn \$PLTDRVS\$ \$PENTBLS\$ 01/20/2013 12:42:21 PM

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
A. POLING
DRAWN BY
P. TONKIN
CHECKED BY
K. SEYMOUR
IN CHARGE
R. COFFIN
DATE
12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

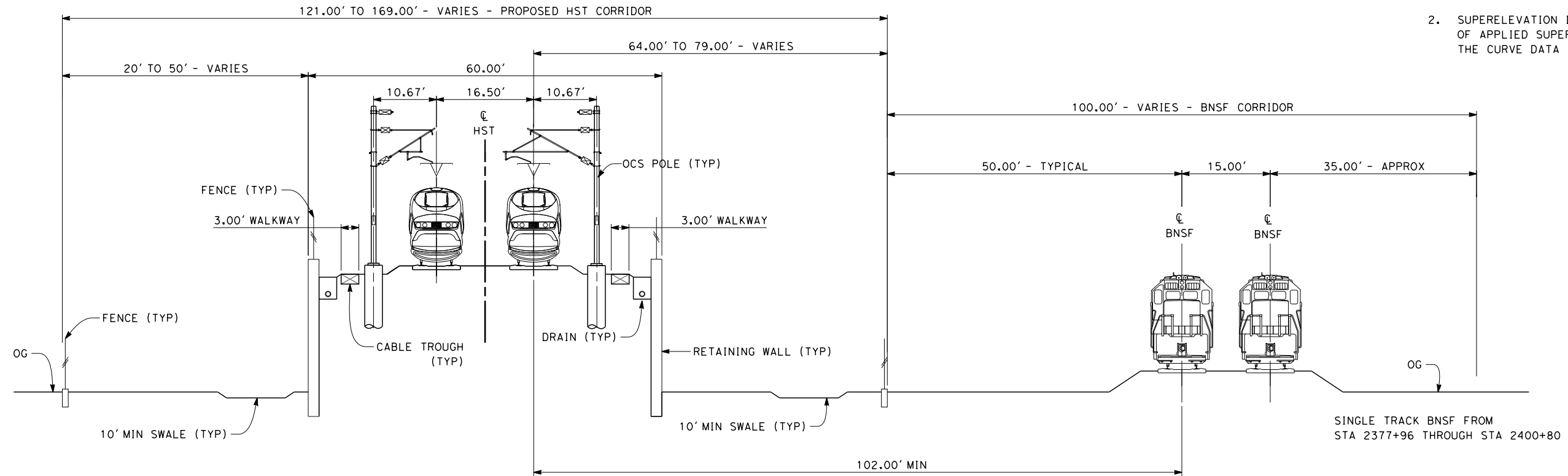
**NOT FOR
CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD**
KAWEAH SUBSECTION
ALIGNMENT K5
TYPICAL SECTIONS

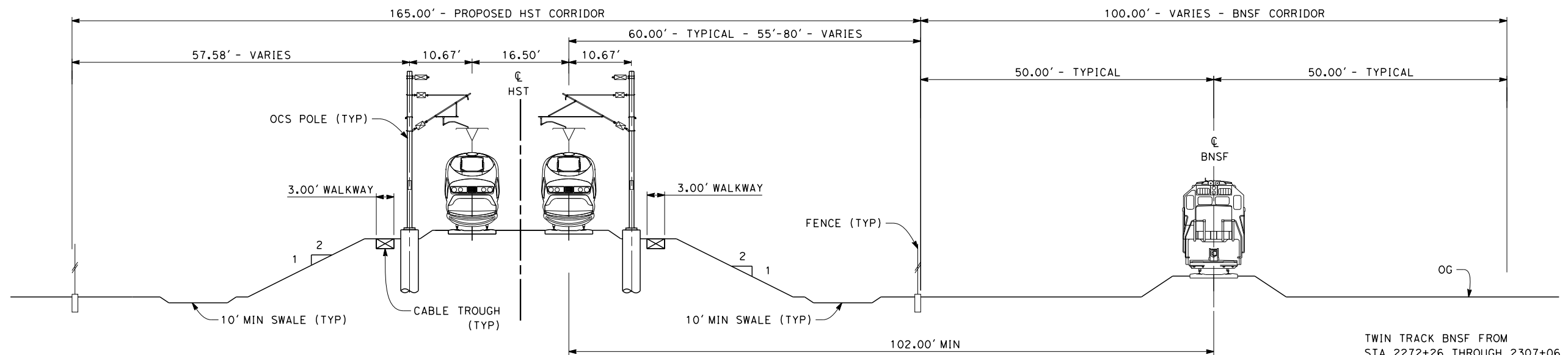
CONTRACT NO.
HSR 06-0003
DRAWING NO.
CB3951
SCALE
AS SHOWN
SHEET NO.
14 OF 17

- NOTES:
1. TRACKFORM SHOWN IS INDICATIVE.
 2. SUPERELEVATION IS NOT SHOWN. THE AMOUNT OF APPLIED SUPERELEVATION IS SHOWN IN THE CURVE DATA TABLES.



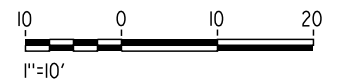
SECTION 5

TWIN TRACK - RETAINED EMBANKMENT ADJACENT TO BNSF
 STA 2264+72 THROUGH STA 2272+26
 STA 2377+96 THROUGH STA 2400+80



SECTION 6

TWIN TRACK ADJACENT TO BNSF
 STA 2272+26 THROUGH STA 2307+06



c:\pwworking\hmm\external\paul.tonkin\01-arup.com\dms70810\FB-CB-3952-K5.dgn
 \$PLTDRVS\$
 \$PENTBLS\$
 12/12/2013 10:40:12 PM
 paul.tonkin

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
A. POLING
 DRAWN BY
P. TONKIN
 CHECKED BY
K. SEYMOUR
 IN CHARGE
R. COFFIN
 DATE
12/31/13

**RECORD SET 15%
 DESIGN SUBMISSION**

**NOT FOR
 CONSTRUCTION**



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

KAWEAH SUBSECTION
 ALIGNMENT K5
 TYPICAL SECTIONS

CONTRACT NO.
HSR 06-0003

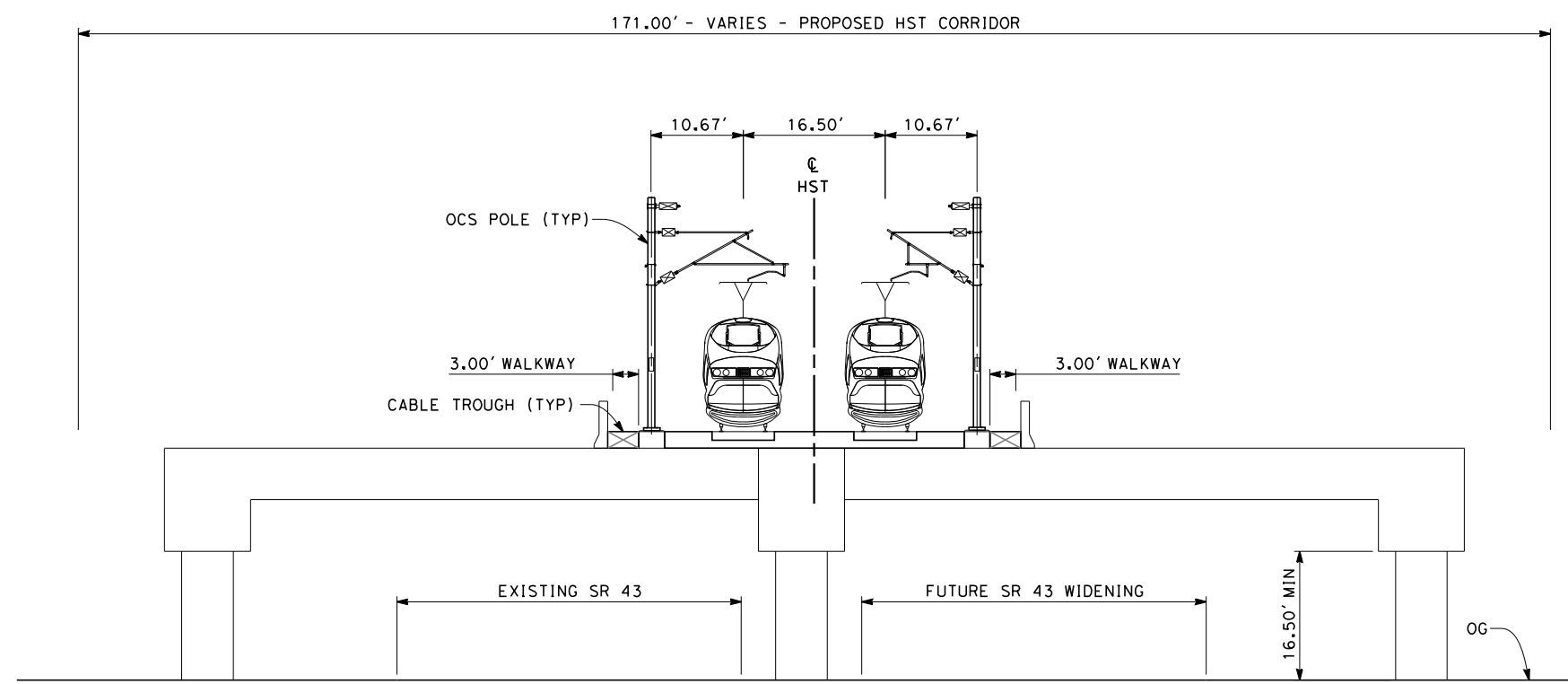
DRAWING NO.
CB3952

SCALE
AS SHOWN

SHEET NO.
15 OF 17

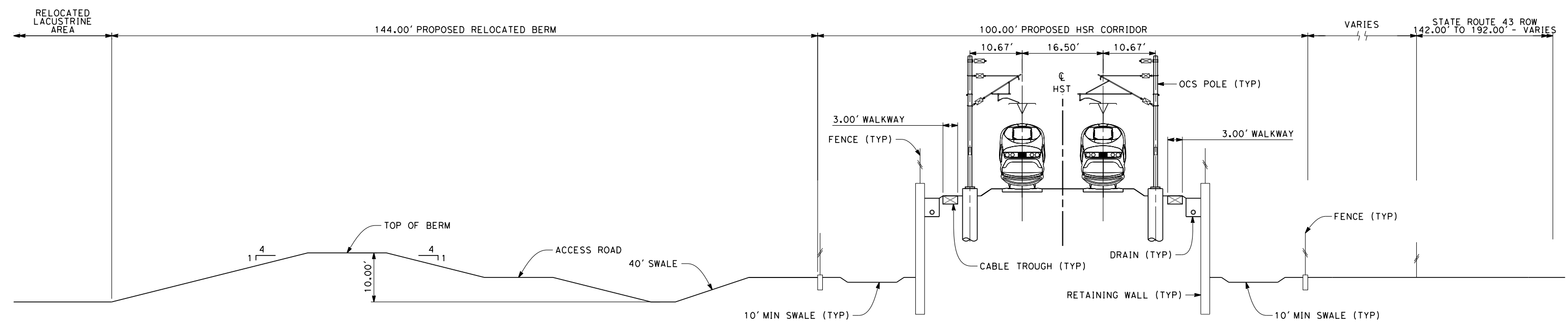
c:\pwworking\hmm\external\alexander.poling-arup.com\dms70810\FB-CB-3953-K5.dgn
 \$PLTDRVS\$
 \$PENTBLS\$
 alexander.poling/12/2013/12:43:05 PM

- NOTES:
1. TRACKFORM SHOWN IS INDICATIVE.
 2. SUPERELEVATION IS NOT SHOWN. THE AMOUNT OF APPLIED SUPERELEVATION IS SHOWN IN THE CURVE DATA TABLES.
 3. PER CALTRANS STANDARD, A HIGHWAY BARRIER IS REQUIRED NEXT TO A COLUMN BY THE REQUIREMENTS SET FORTH IN THE HIGHWAY DESIGN MANUAL. PIER PROTECTION IS REQUIRED FROM STA 2497+00 THROUGH STA 2501+70



SECTION 7

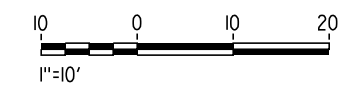
TWIN TRACK AERIAL STRUCTURE OVER SR 43
 STA 2497+00 THROUGH STA 2501+70



SECTION 8

TWIN TRACK ON RETAINED EMBANKMENT ADJACENT TO SR 43
 STA 2505+30 THROUGH STA 2549+08

NOTE:
 RELOCATED BERM PROPOSED FROM
 STA 2505+30 THROUGH 2531+00



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
A. POLING
 DRAWN BY
P. TONKIN
 CHECKED BY
K. SEYMOUR
 IN CHARGE
R. COFFIN
 DATE
12/31/13

**RECORD SET 15%
 DESIGN SUBMISSION**

**NOT FOR
 CONSTRUCTION**

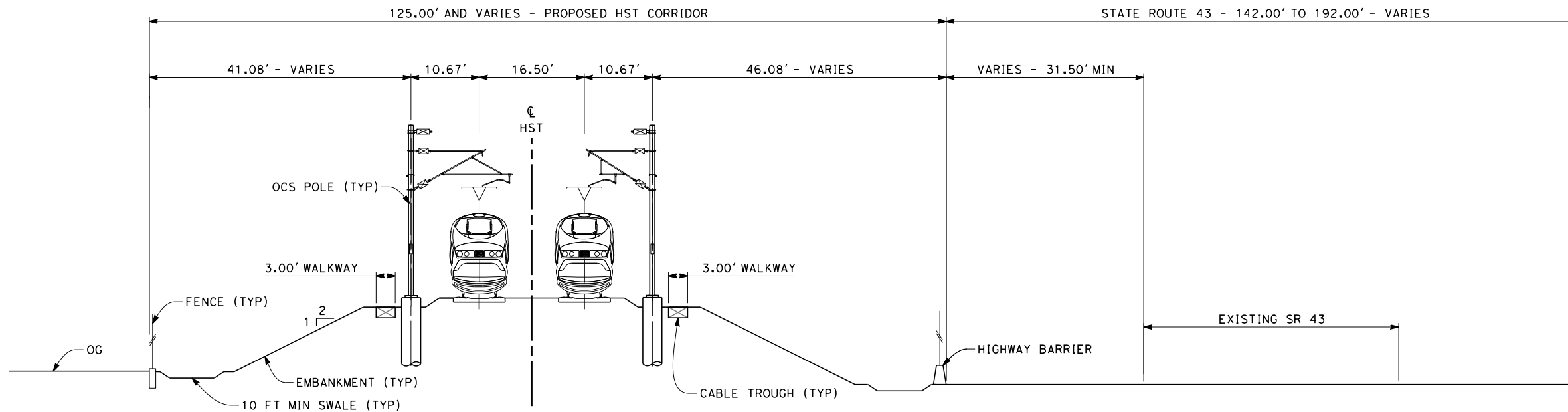


**CALIFORNIA HIGH-SPEED TRAIN PROJECT
 FRESNO TO BAKERSFIELD**
 KAWEAH SUBSECTION
 ALIGNMENT K5
 TYPICAL SECTIONS

CONTRACT NO.
HSR 06-0003
 DRAWING NO.
CB3953
 SCALE
AS SHOWN
 SHEET NO.
16 OF 17

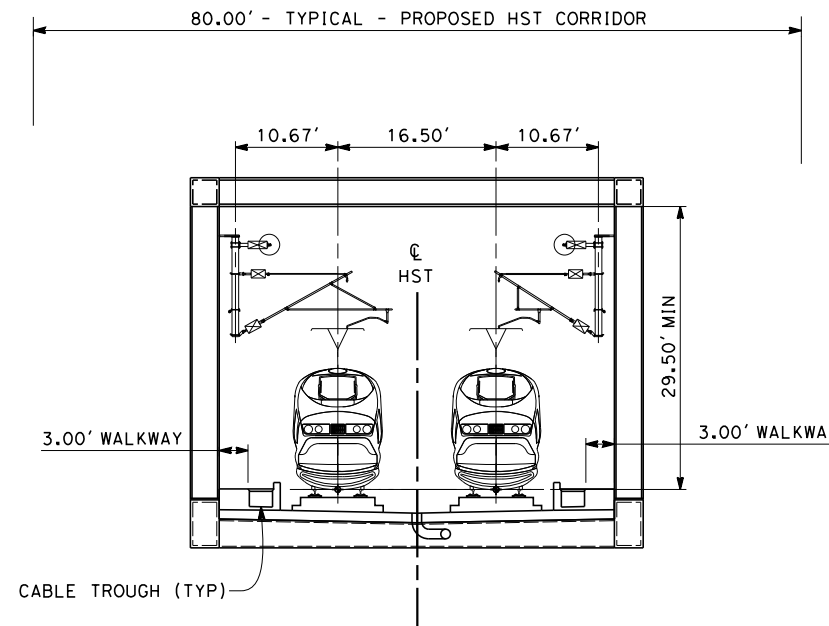
NOTES:

1. TRACKFORM SHOWN IS INDICATIVE.
2. SUPERELEVATION IS NOT SHOWN. THE AMOUNT OF APPLIED SUPERELEVATION IS SHOWN IN THE CURVE DATA TABLES.
3. PER CALTRANS STANDARD, A HIGHWAY BARRIER IS REQUIRED WHEN THE NEAREST HSR FEATURE IS WITHIN 52' OF THE HIGHWAY EDGE OF TRAVELED WAY.



SECTION 9

TWIN TRACK AT GRADE ADJACENT TO SR 43
STA 2549+08 THROUGH STA 2563+94



SECTION 10

TWIN TRACK TRUSS
STA 2449+62 THROUGH STA 2453+19



c:\pwworking\hmm\external\alexander.poling-arup.com\dms70810\FB-CB-3954-K5.dgn \$PLTDRVS\$ \$PENTBLS\$ alexander.poling 12/2013 12:43:34 PM

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
A. POLING
DRAWN BY
P. TONKIN
CHECKED BY
K. SEYMOUR
IN CHARGE
R. COFFIN
DATE
12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD**
KAWEAH SUBSECTION
ALIGNMENT K5
TYPICAL SECTIONS

CONTRACT NO.
HSR 06-0003
DRAWING NO.
CB3954
SCALE
AS SHOWN
SHEET NO.
17 OF 17